PROJECT ID: 2250-12-70

WITH:

COUNTY: RACINE

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 996

DESIGN DESIGNATION

A.A.D.T.	2018	=	15,000
A.A.D.T.	2038	=	18,100
D.H.V.	2038	=	1,937
D.D.	2038	=	59/41
T.	2038	=	12.2%

DESIGN SPEED

STA. 306+25 - STA. 316+55	=	45 MPH
STA. 316+55 - STA. 327+00	=	40 MPH
STA. 327+00 - STA. 384+00	=	30 MPH
STA. 384+00 - STA. 404+35	=	40 MPH

ESALS = 4,380,000

CONVENTIONAL SYMBOLS

COUNTY LINE
CORPORATE LIMITS
PROPERTY LINE
LIMITED EASEMENT
EXISTING RIGHT OF WAY
PROPOSED OR NEW R/W LINE
FENCE
GUARD RAIL
SLOPE INTERCEPT
ORIGINAL GROUND
MARSH OR ROCK PROFILE (To be noted as such) — ROCK
MARSH AREA
WOODED OR SHRUB AREA
STREAM OR WATER EDGE
BUSH
PINE TREE (SIZE)
TREE (SIZE)
TRAFFIC SIGNAL CONTROL CABINET
TRAFFIC SIGNAL
TRAFFIC SIGNAL MAST-ARM
TRAFFIC SIGNAL WITH LIGHT
EXISTING PULL BOX
BOLLARD

COMBUSTIBLE FLUIDS
UNDERGROUND UTILITIES
GAS (SIZE) G
SANITARY SEWER (SIZE) SAN
STORM SEWER (SIZE) SS
WATER (SIZE) W
ELECTRIC E
TELEPHONE T
FIBER OPTIC FO
CABLE TELEVISION TV
FORCE MAIN FM
MANHOLE MH
UTILITY PEDESTAL
FIBER OPTIC HAND HOLE HH
POWER POLE
TELEPHONE POLE
RAILROAD
HYDRANT
LIGHT POLE
RAILROAD SIGNAL
SIGN
TRANSMISSION TOWER
VALVE (TYPE)
CURB STOP CS
EXISTING CULVERT (SIZE, TYPE)
PROPOSED CULVERT (Box or Pipe)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2250-12-70	WISC 2018375	1
---	---	---
---	---	---
---	---	---

MAIN STREET / 1ST STREET, VILLAGE OF WATERFORD

BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

STH 20

RACINE COUNTY

STATE PROJECT NUMBER
2250-12-70

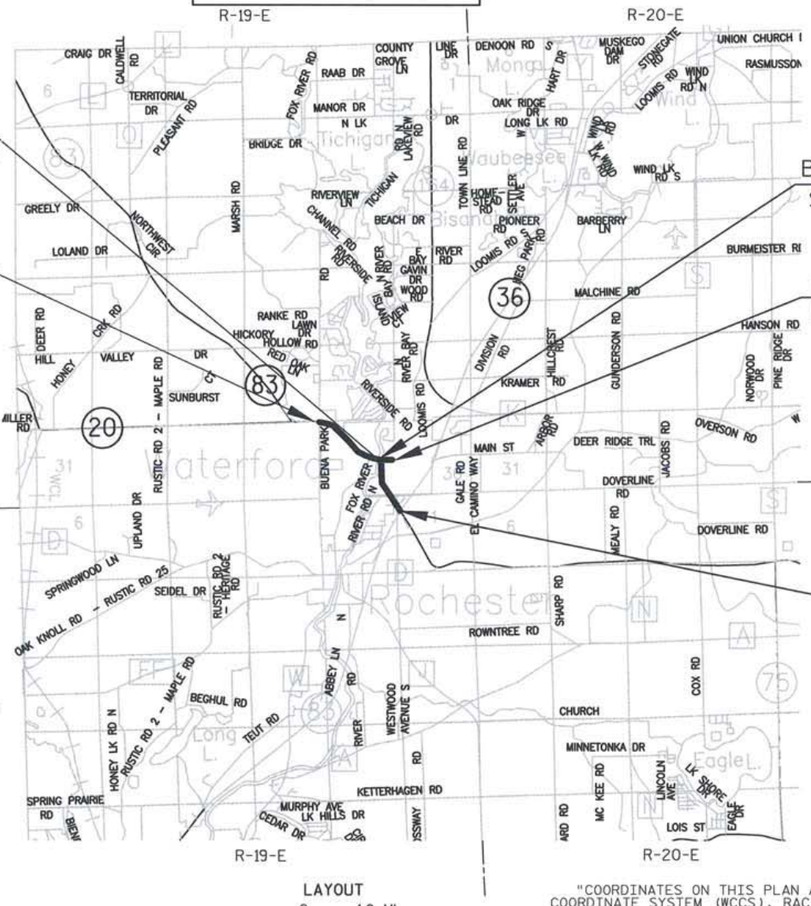
STRUCTURE B-51-150
STA 364+30.45 TO STA 365+77.45

BEGIN PROJECT 2250-12-70
STA. 306+25
Y = 202,039.33
X = 519,437.71

BEGIN E MAIN ST CONSTRUCTION
STA 103+50

END E MAIN ST CONSTRUCTION
STA 109+75

END PROJECT 2250-12-70
STA. 404+35



LAYOUT
SCALE 0 1.0 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.858 MI.

"COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), RACINE COUNTY ZONE, NAD83 (2007) ADJUSTMENT"

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD 88 (2007)

ACCEPTED FOR
VILLAGE OF WATERFORD

4/29/18 (DATE) (SIGNATURE)

raSmith
CREATIVITY BEYOND ENGINEERING
rasmith.com

WISCONSIN
JOHN A. ELKIN
E-27876
BROOKFIELD
WI
PROFESSIONAL ENGINEER

4/27/18 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NAV (raSmith)
Designer	CLM/JAE (raSmith)
Project Manager	JUSTIN SUYDAM
Regional Examiner	
Regional Supervisor	JANET CANNON
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 4-24-18 (Signature)

E

STANDARD ABBREVIATIONS

AP	ACCESS POINT	NOM	NOMINAL
ACR	ACRE	NC	NORMAL CROWN
ADJ	ADJUST	N	NORTH
AECPRC	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE	Y	NORTH GRID COORDINATE
		NB	NORTHBOUND
AH	AHEAD	NO	NUMBER
AC	ASPHALT CEMENT	OPT	OPTIONAL
ASPH	ASPHALTIC	OD	OUTSIDE DIAMETER
ACP	ASPHALTIC CONCRETE PAVEMENT	PAVT	PAVEMENT
AVG	AVERAGE	PLE	PERMANENT LIMITED EASEMENT
ADT	AVERAGE DAILY TRAFFIC	PACS	PIPE ARCH CORRUGATED STEEL
BK	BACK	PT	POINT
BAD	BASE AGGREGATE DENSE	PC	POINT OF CURVATURE
BM	BENCHMARK	PI	POINT OF INTERSECTION
CB	CATCH BASIN	PT	POINT OF TANGENCY
C/L	CENTER LINE	PVC	POINT OF VERTICAL CURVE
C/L CONST	CENTER LINE CONSTRUCTION	PVI	POINT OF VERTICAL INTERSECTION
Δ	CENTRAL ANGLE OR DELTA	PVT	POINT OF VERTICAL TANGENCY
CL	CLASS	PVC	POLYVINYL CHLORIDE
CONC	CONCRETE	PCC	PORTLAND CEMENT CONCRETE
CONST	CONSTRUCTION	LB	POUND
CMCP	CORRUGATED METAL CULVERT PIPE	PSF	POUNDS PER SQUARE FOOT
CTH	COUNTY TRUNK HIGHWAY	PSI	POUNDS PER SQUARE INCH
CABC	CRUSHED AGGREGATE BASE COURSE	PE	PRIVATE ENTRANCE
CFS	CUBIC FEET PER SECOND	PGL	PROFILE GRADE LINE
CY	CUBIC YARD	PL	PROPERTY LINE
CP	CULVERT PIPE	Q100	100-YEAR FLOW RATE
CPCS	CULVERT PIPE CORRUGATED STEEL	R	RADIUS
CPRC	CULVERT PIPE REINFORCED CONCRETE	RR	RAILROAD
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	R	RANGE
		R/L	R/L
C & G	CURB AND GUTTER	REINF	REINFORCING OR REINFORCEMENT
D	DEGREE OF CURVE	REQD	REQUIRED
DHV	DESIGN HOUR VOLUME	RT	RIGHT
DIA	DIAMETER	R/W	RIGHT-OF-WAY
DD	DIRECTIONAL DISTRIBUTION	RD	ROAD
DWY	DRIVEWAY	RDWY	ROADWAY
E	EAST	SEC	SECTION
X	EAST GRID COORDINATE	SHLDR	SHOULDER
EB	EASTBOUND	S	SOUTH
EL	ELEVATION	SB	SOUTHBOUND
ESALS	EQUIVALENT SINGLE AXLE LOADS	SQ	SQUARE
EXC	EXCAVATION	SF	SQUARE FEET
EBS	EXCAVATION BELOW SUBGRADE	SW	SIDEWALK
EXIST	EXISTING	SY	SQUARE YARD
FPS	FEET PER SECOND	SDD	STANDARD DETAIL DRAWINGS
FERT	FERTILIZE	STH	STATE TRUNK HIGHWAYS
FE	FIELD ENTRANCE	STA	STATION
FL	FLOW LINE	SS	STORM SEWER
FT	FOOT	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
GN	GRID NORTH	ST	STREET
HES	HIGH EARLY STRENGTH	STR	STRUCTURE OR STRUCTURAL
HP HW	HIGH POINT	SEC	SUPERELEVATION
HW	HIGH WATER	T	TANGENT
HMA	HOT MIX ASPHALT	TEMP	TEMPORARY
CWT	HUNDREDWEIGHT	TI	TEMPORARY INTEREST
HWD	HYDRANT	TLE	TEMPORARY LIMITED EASEMENT
INL	INLET	t	TON
ID	INSIDE DIAMETER	T	TOWN
I	INTERSECTION ANGLE	T/L	TRANSIT LINE
INV	INVERT	T	TRUCKS (PERCENT OF)
IP	IRON PIPE OR PIN	TYP	TYPICAL
JT	JOINT	USH	UNITED STATES HIGHWAY
LT	LEFT	VAR	VARIABLE
LT	LENGTH OF CURVE	V	VELOCITY OF DESIGN SPEED
LF	LINEAR FOOT	VERT	VERTICAL
LP	LOW POINT	VC	VERTICAL CURVE
LS	LUMP SUM	VOL	VOLUME
MH	MANHOLE	WM	WATERMAIN
MAX	MAXIMUM	WV	WATER VALVE
Mgal	MEGAGALLON	W	WEST
MPH	MILES PER HOUR	WB	WESTBOUND
MIN	MINIMUM	YD	YARD
MON	MONUMENT		

GENERAL NOTES

1 NO SHRUBS OR TREES ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

2 ALL OPENINGS OF HOLES BELOW SUBGRADE RESULTING FROM REMOVALS OR ABANDONMENTS SHALL BE BACKFILLED IN ACCORDANCE WITH SECTION 204 OF THE STANDARD SPECIFICATIONS. BACKFILL SHALL BE INCIDENTAL TO THE REMOVAL ITEM.

3 STATIONING, DISTANCES AND OFFSETS FOR SIGNS SHOWN ON THE PLANS ARE APPROXIMATE AND THE LOCATIONS OF SIGNS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

4 SEE SUBSURFACE EXPLORATION REPORTS FROM WISDOT, JUSTIN SUYDAM AT (262) 548-8745.

5 CURB AND GUTTER GRADES ARE AT THE FLANGE LINE UNLESS OTHERWISE NOTED. ALL CURB AND GUTTER RADII ARE MEASURED TO THE FACE OF CURB.

6 TYPICAL GUTTER SLOPE IS 6.25% UNLESS OTHERWISE NOTED IN THE PLAN.

7 THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

8 THE LOCATIONS OF SIDEWALK AND DRIVEWAY REMOVALS ARE APPROXIMATE. FINAL LOCATIONS TO BE DETERMINED BY THE ENGINEER.

9 CONTRACTOR SHALL CONTACT DIGGER'S HOTLINE AND ALL UTILITIES LISTED TO VERIFY UTILITY WORK STATUS PRIOR TO BIDDING.

10 TRAFFIC SIGNALS, LIGHT POLES, SIGN POSTS AND SIGN PLATES SHALL BE PLACED IN THE TERRACE BEYOND THE LATERAL CLEARANCE.

11 PAVEMENT CROSS SLOPE IN MARKED OR UNMARKED CROSSWALKS AT STOP CONTROLLED SIDEROADS SHALL BE 2.0% MAX.

12 DO NOT APPLY FERTILZER WITHIN 100 FEET OF A WATERBODY OR WETLAND OR WITHIN 24 HOURS OF A RUNOFF EVENT.

13 EXERCISE CARE WHEN CONSTRUCTING STORM SEWER FROM STATION 394+69 TO STATION 395+50. TOP OF PIPE IS HIGHER THAN BOTTOM OF SUBGRADE.

14 REMOVAL OF ENDWALLS CONNECTED TO STORM SEWER BEING REMOVED ARE PAID FOR AS REMOVING STORM SEWER (SIZE).

15 RECONNECTING PIPES TO NEW STORM SEWER STRUCTURES IS INCIDENTAL TO THE INSTALLATION OF THE NEW STRUCTURE.

16 FIELD VERIFY POSITIVE DRAINAGE BETWEEN THE PROPOSED CURB AND EXISTING GROUND PRIOR TO CONSTRUCTION OF THE NEW SIDEWALK. ADJUST TERRACE SLOPE WHERE NECESSARY TO

GRADATIONS:	LAYERS	DESIGNATION
4-INCH	ONE 1.75" UPPER LAYER	4 LT 58-28S
	ONE 2.25" LOWER LAYER	3 LT 58-28S
5-INCH	ONE 2" UPPER LAYER	4 LT 58-28S
	ONE 3" LOWER LAYER	3 LT 58-28S

ORDER OF SECTION 2 SHEETS

Project Overview
Typical Sections
Construction Details
Curb Ramp Details
Paving Details
Erosion Control & Drainage (On Storm Sewer Plan)
Storm Sewer
Planting Details
Signing
Lighting
Traffic Signals
Pavement Marking
Traffic Control and Construction Staging
Detour Plan
Alignment Plan

EROSION CONTROL NOTES

1 EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

2 RE-TOPSOIL OF GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. SOD AND FERTILIZE TOP-SOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL. IF GRADED AREAS ARE EXPOSED FOR MORE THAN (14) CALENDAR DAYS, SEED THOSE AREAS WITH TEMPORARY SEED AND MULCH.

3 STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS, AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THE STOCKPILE WITH TEMPORARY SEED AND MULCH.

4 EROSION CONTROL BMP'S ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS ECIP AND BY THE ENGINEER. EROSION CONTROL BMP'S SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQUIRED.

DIGGERS HOTLINE
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www.DiggersHotline.com

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PERMANENT SIGNING DESIGNER
WISDOT SE REGION
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DNR LIAISON

WISDNR
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DIGGERS HOTLINE
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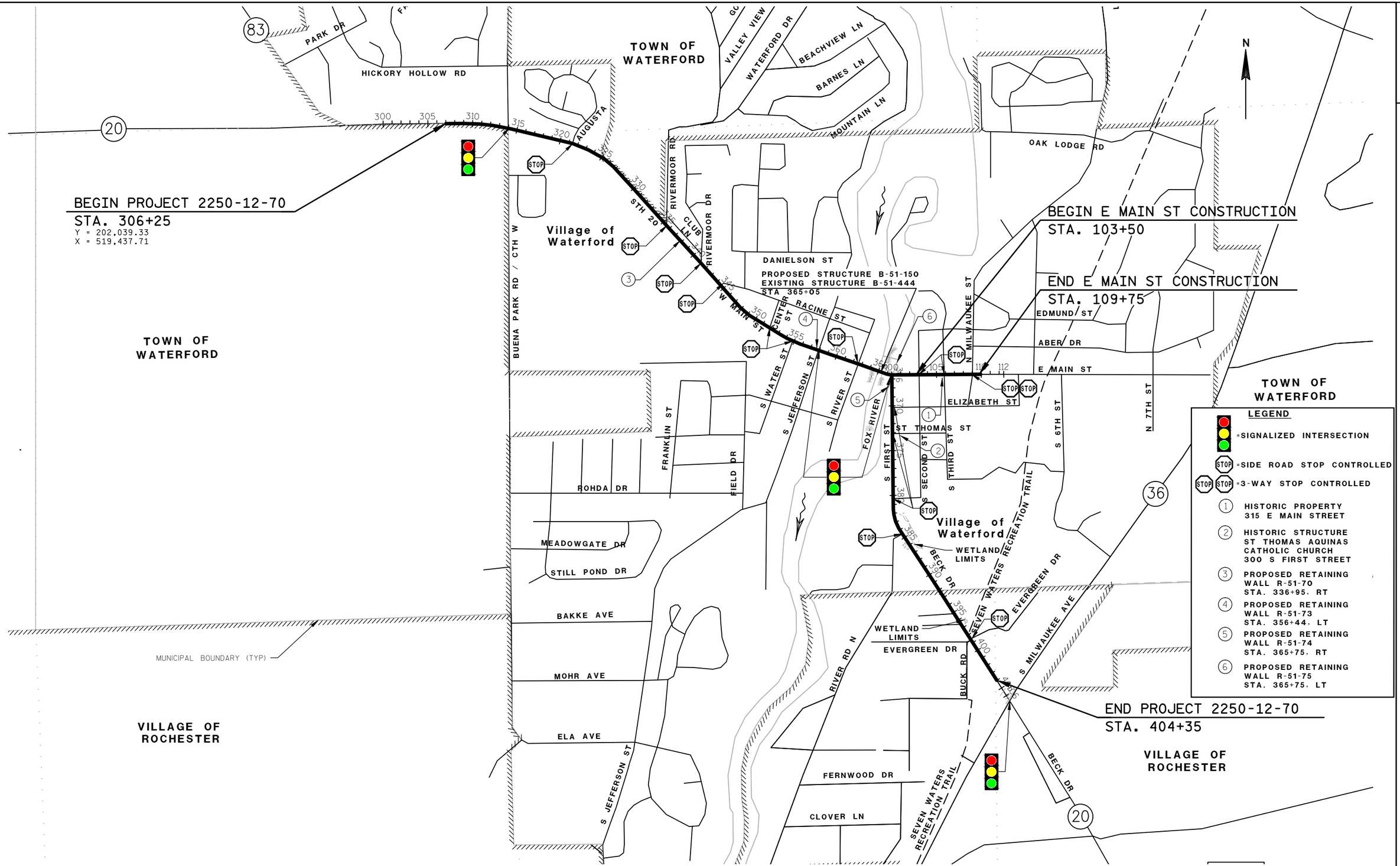
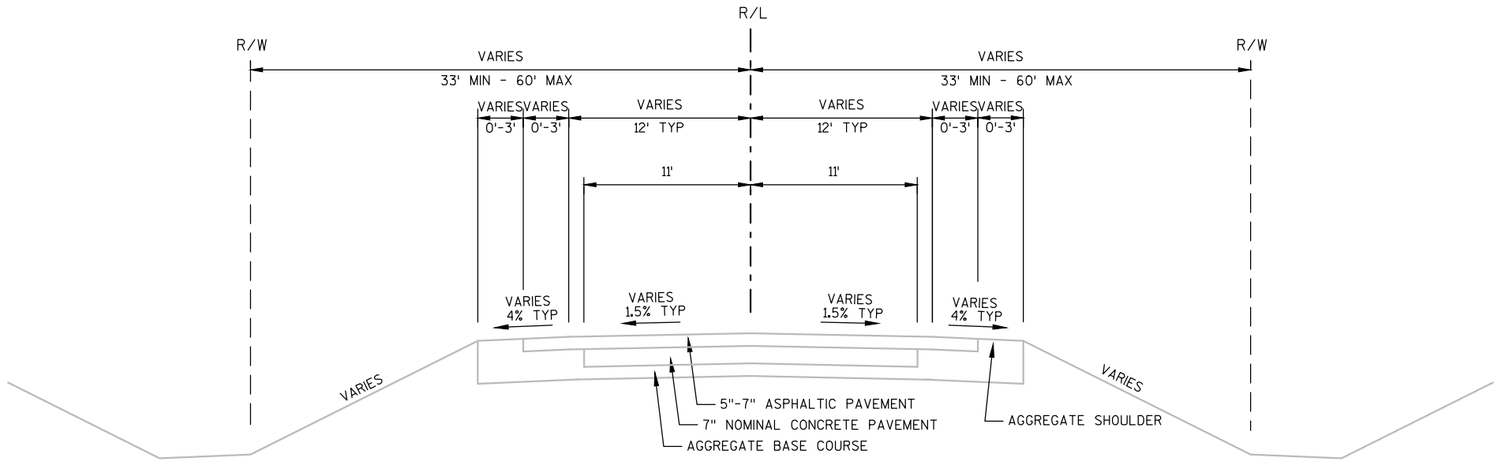
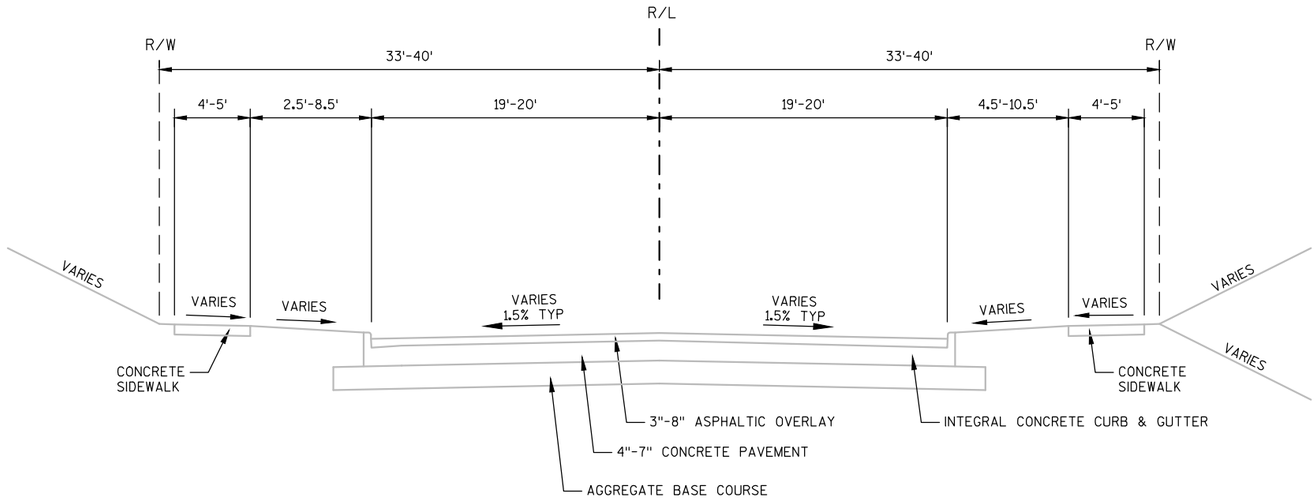


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PROJECT OVERVIEW	SHEET 4	E

2

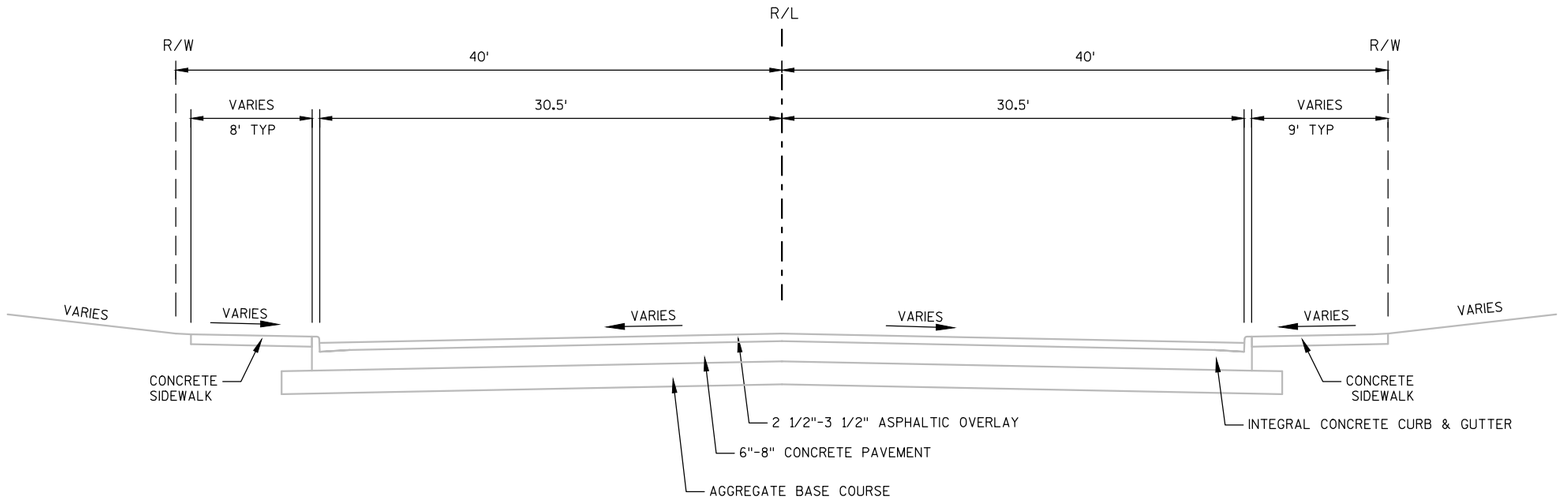


TYPICAL EXISTING SECTION
STH 20
STA 306+25 TO STA 340+75

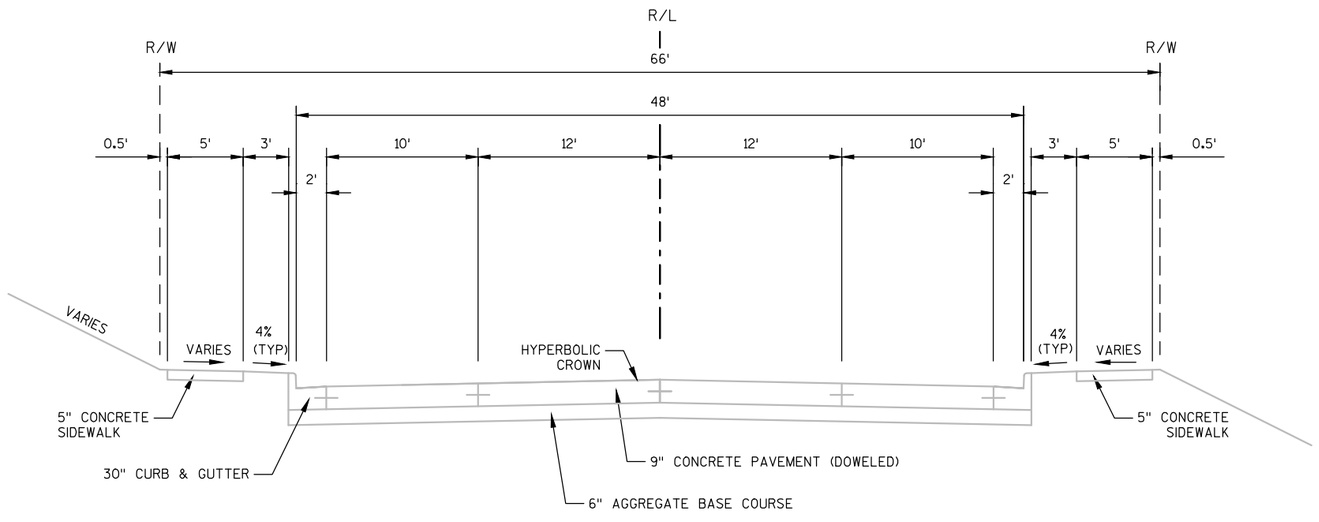


TYPICAL EXISTING SECTION
STH 20
STA 340+75 TO STA 357+89

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 5	E

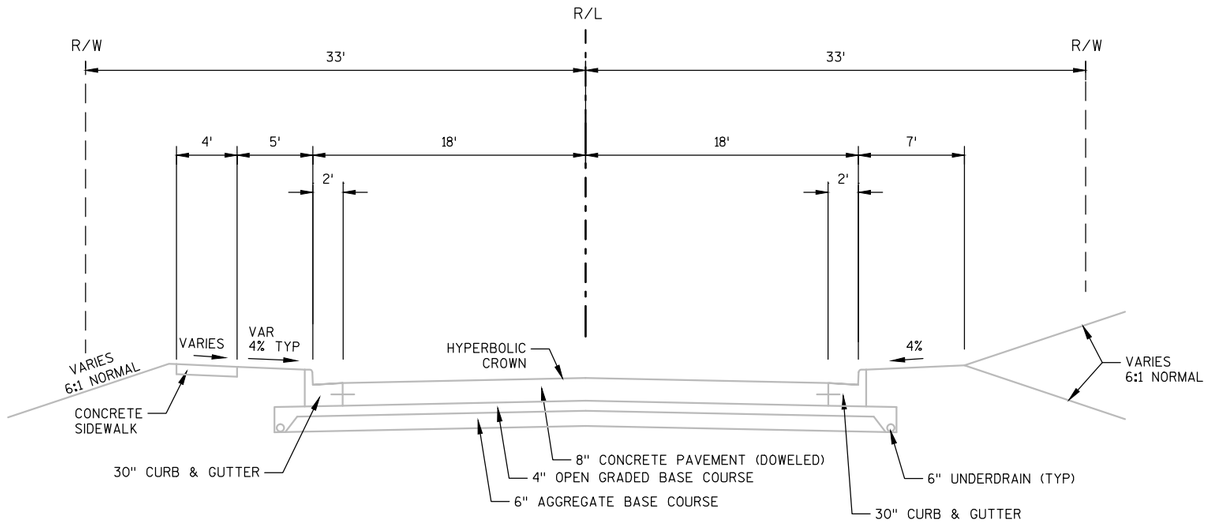


TYPICAL EXISTING SECTION
STH 20
STA 357+89 TO STA 364+25



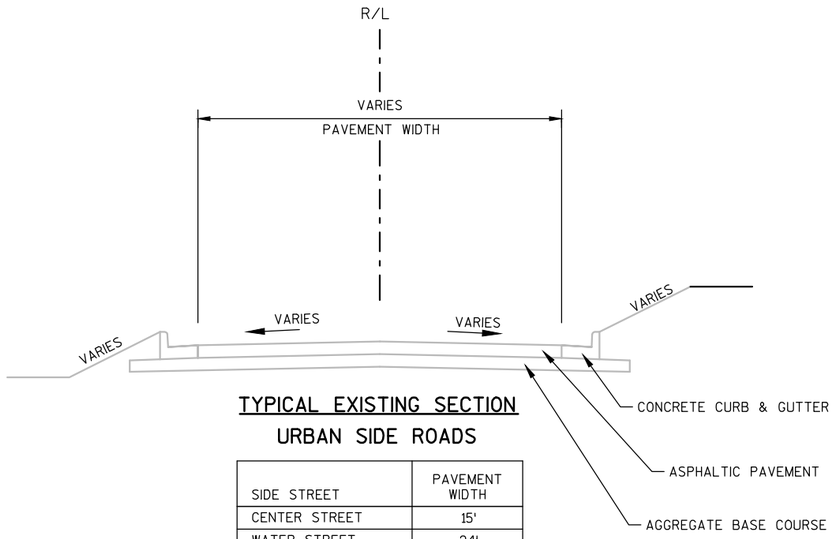
TYPICAL EXISTING SECTION
STH 20
STA 366+54.16 TO STA 384+00
E MAIN ST
STA 100+00.00 TO STA 109+75

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 6	E



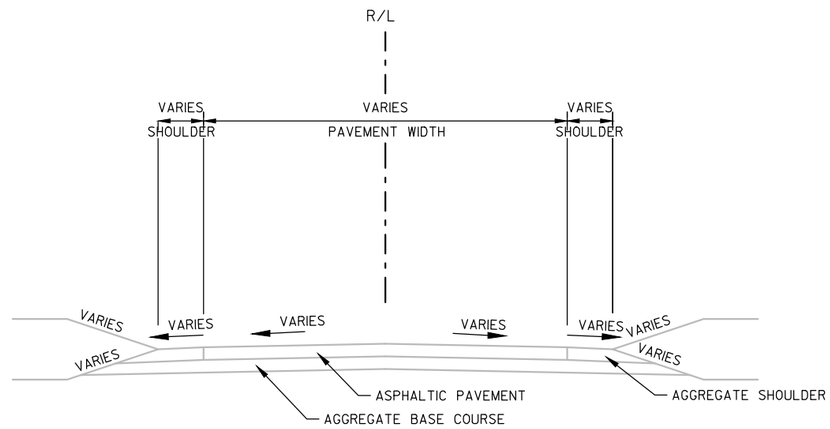
TYPICAL EXISTING SECTION
STH 20
STA 384+00 TO STA 404+35

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 7	E



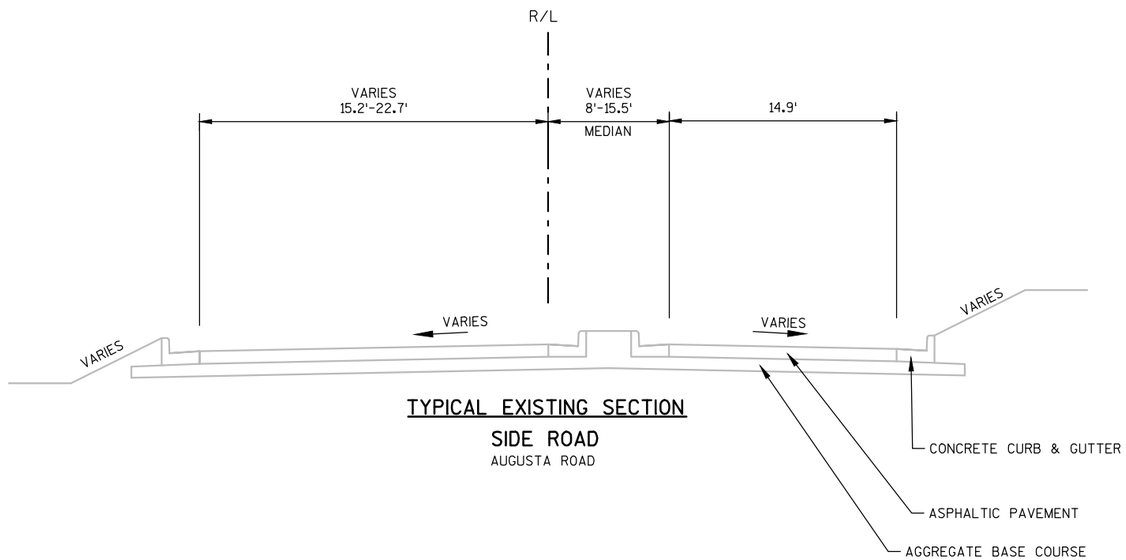
TYPICAL EXISTING SECTION
URBAN SIDE ROADS

SIDE STREET	PAVEMENT WIDTH
CENTER STREET	15'
WATER STREET	24'
JEFFERSON STREET	34'-36'
RIVER STREET	46'
ELIZABETH STREET	36.5'
ST THOMAS STREET	44'
WEBER STREET	36'
2ND STREET	44'
3RD STREET	35'-36'
N MILWAUKEE STREET	42'

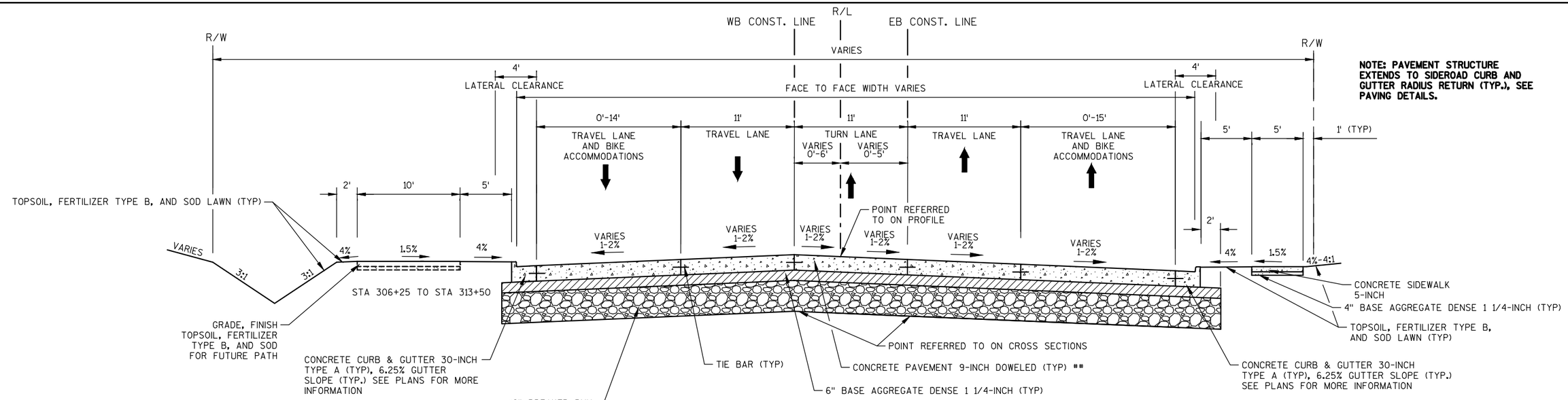


TYPICAL EXISTING SECTION
RURAL SIDE ROADS

SIDE STREET	PAVEMENT WIDTH	SHOULDER WIDTH
BUENA PARK ROAD	42'-48'	2'-5'
RIVERMOOR ROAD	22'	3'
RIVERMOOR DRIVE	24'	0'
RACINE STREET	30'	0'
N RIVER ROAD	35'	2'
EVERGREEN DRIVE	24'	0'
S MILWAUKEE STREET	20'	0'



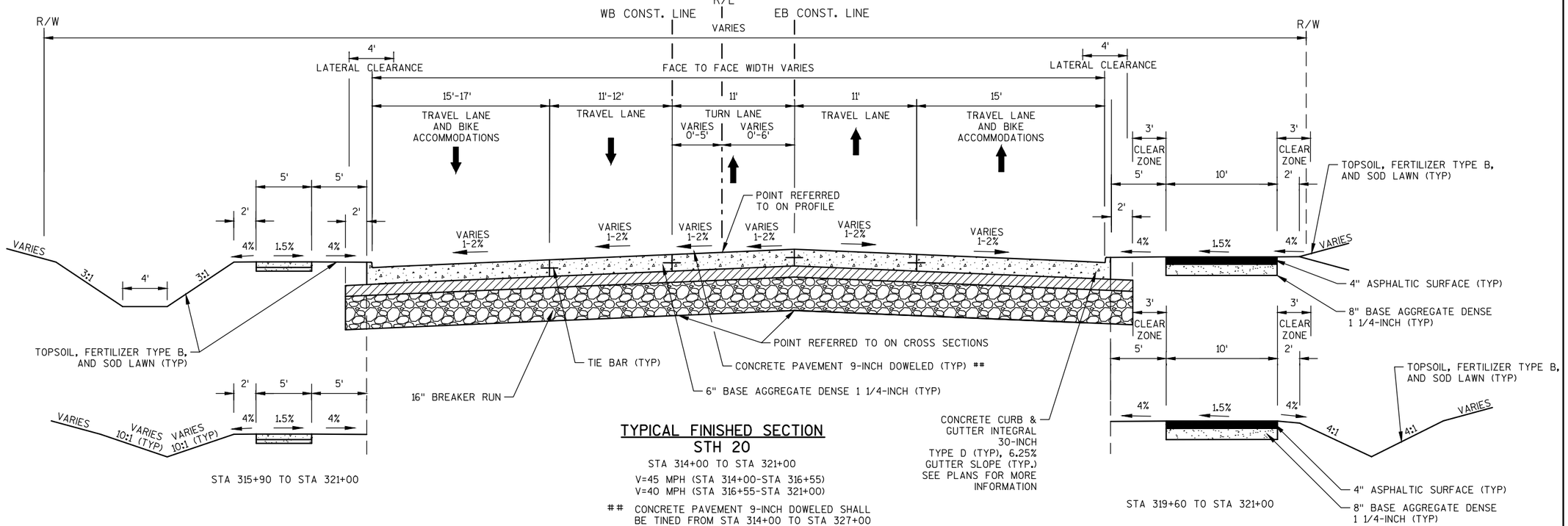
TYPICAL EXISTING SECTION
SIDE ROAD
AUGUSTA ROAD



TYPICAL FINISHED SECTION
STH 20

STA 306+25 TO STA 314+00
V=45 MPH

\#\# CONCRETE PAVEMENT 9-INCH DOWELED SHALL BE TINED FROM STA 306+25 TO STA 314+00

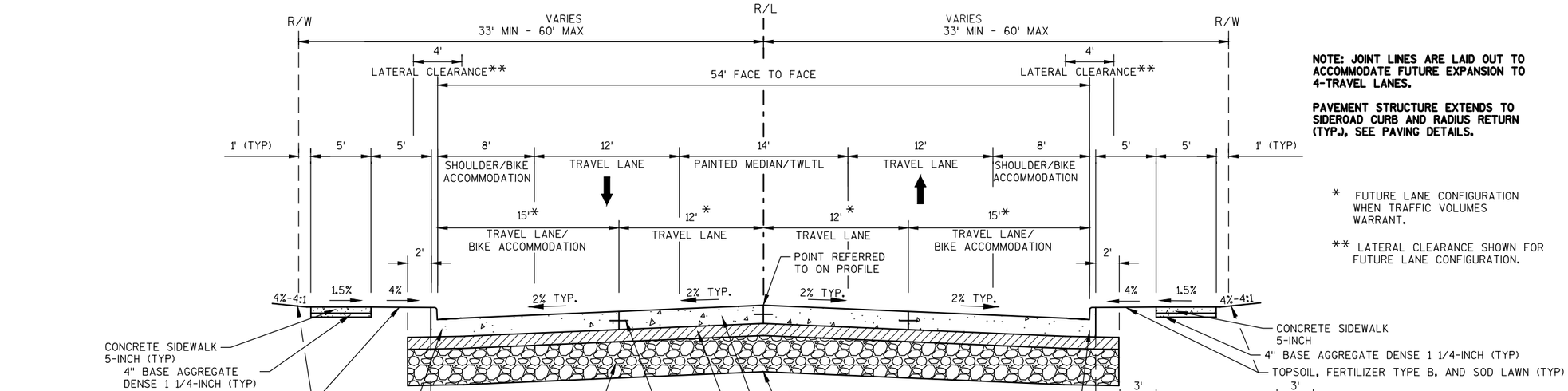


TYPICAL FINISHED SECTION
STH 20

STA 314+00 TO STA 321+00
V=45 MPH (STA 314+00-STA 316+55)
V=40 MPH (STA 316+55-STA 321+00)

\#\# CONCRETE PAVEMENT 9-INCH DOWELED SHALL BE TINED FROM STA 314+00 TO STA 327+00

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 9 E



NOTE: JOINT LINES ARE LAID OUT TO ACCOMMODATE FUTURE EXPANSION TO 4-TRAVEL LANES.

PAVEMENT STRUCTURE EXTENDS TO SIDEROAD CURB AND RADIUS RETURN (TYP.), SEE PAVING DETAILS.

* FUTURE LANE CONFIGURATION WHEN TRAFFIC VOLUMES WARRANT.

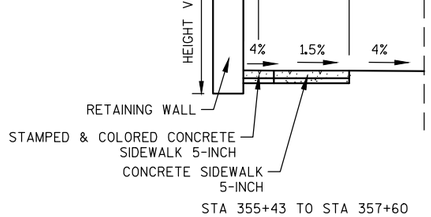
** LATERAL CLEARANCE SHOWN FOR FUTURE LANE CONFIGURATION.

TYPICAL FINISHED SECTION
STH 20

STA 321+00 TO STA 357+89

V=40 MPH (STA 321+00-STA 327+00)
V=30 MPH (STA 327+00-STA 357+89)

\# CONCRETE PAVEMENT 9-INCH DOWELED SHALL BE TINED FROM STA 306+25 TO STA 327+00



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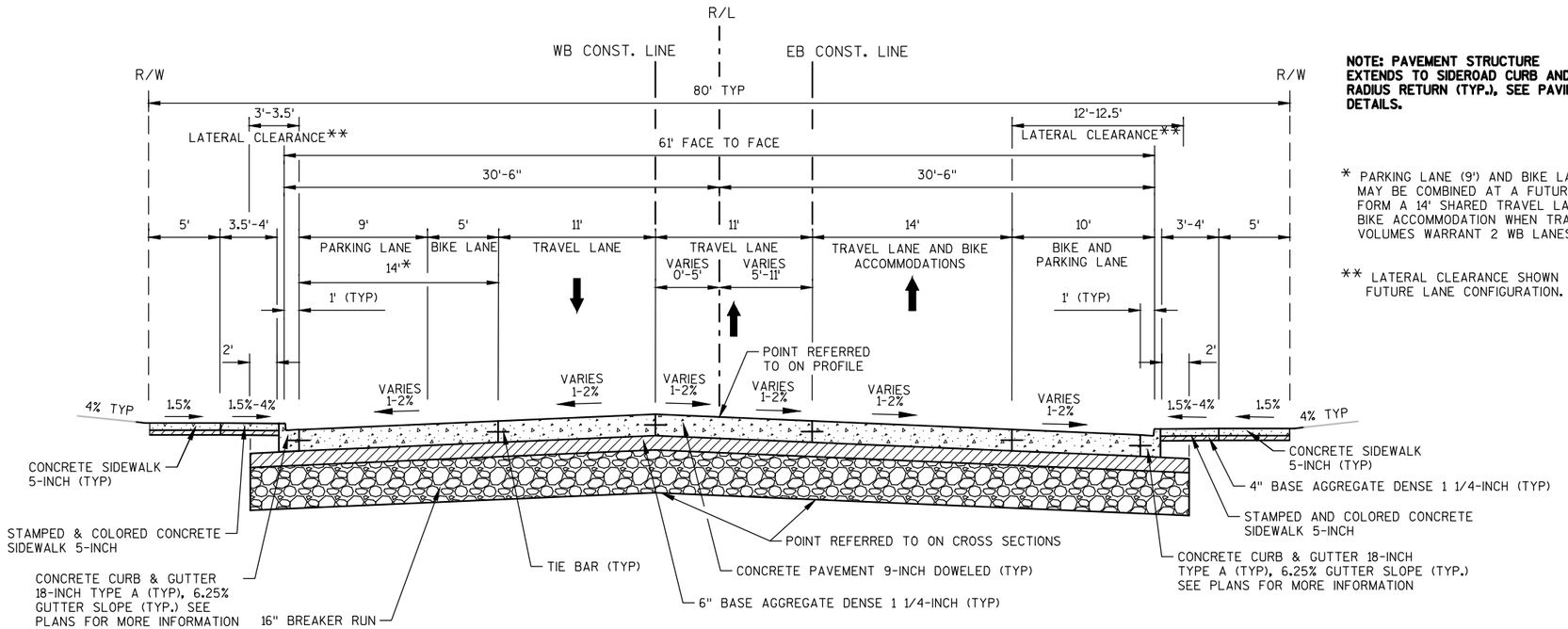


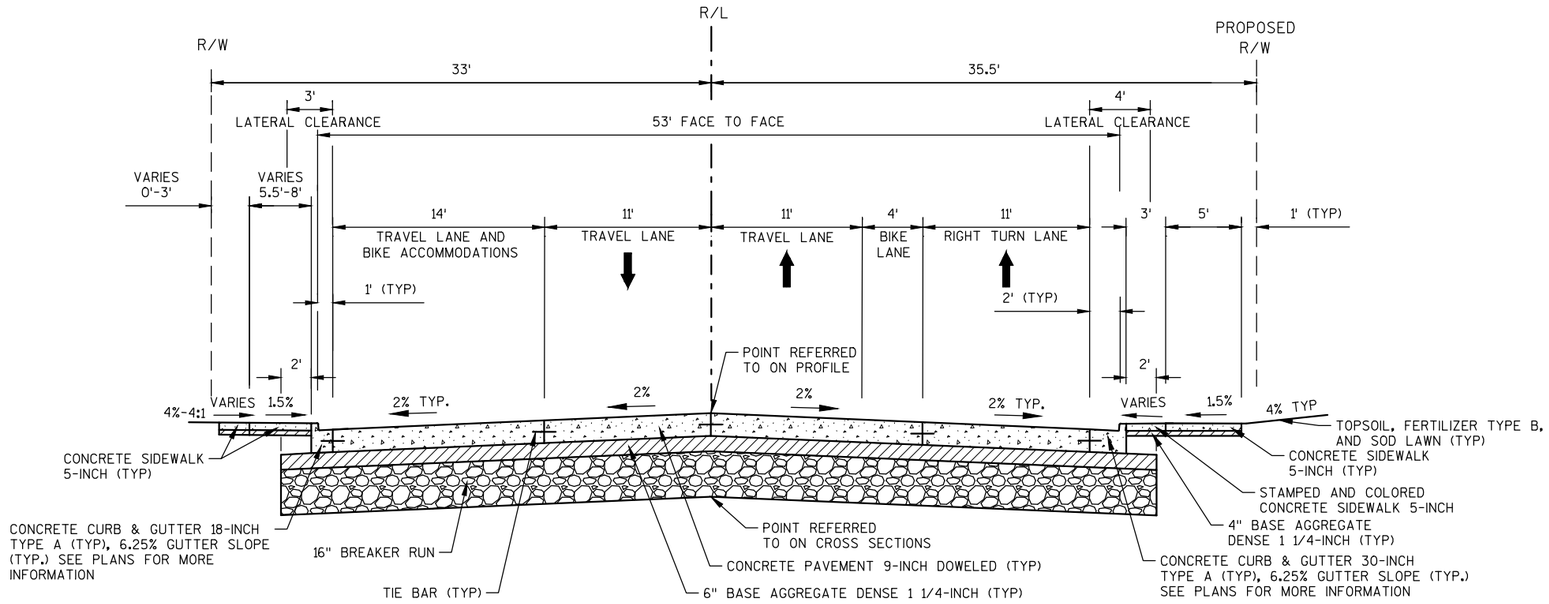
NOTE: PAVEMENT STRUCTURE EXTENDS TO SIDEROAD CURB AND RADIUS RETURN (TYP.), SEE PAVING DETAILS.

* PARKING LANE (9') AND BIKE LANE (5') MAY BE COMBINED AT A FUTURE DATE TO FORM A 14' SHARED TRAVEL LANE AND BIKE ACCOMMODATION WHEN TRAFFIC VOLUMES WARRANT 2 WB LANES.

** LATERAL CLEARANCE SHOWN FOR FUTURE LANE CONFIGURATION.

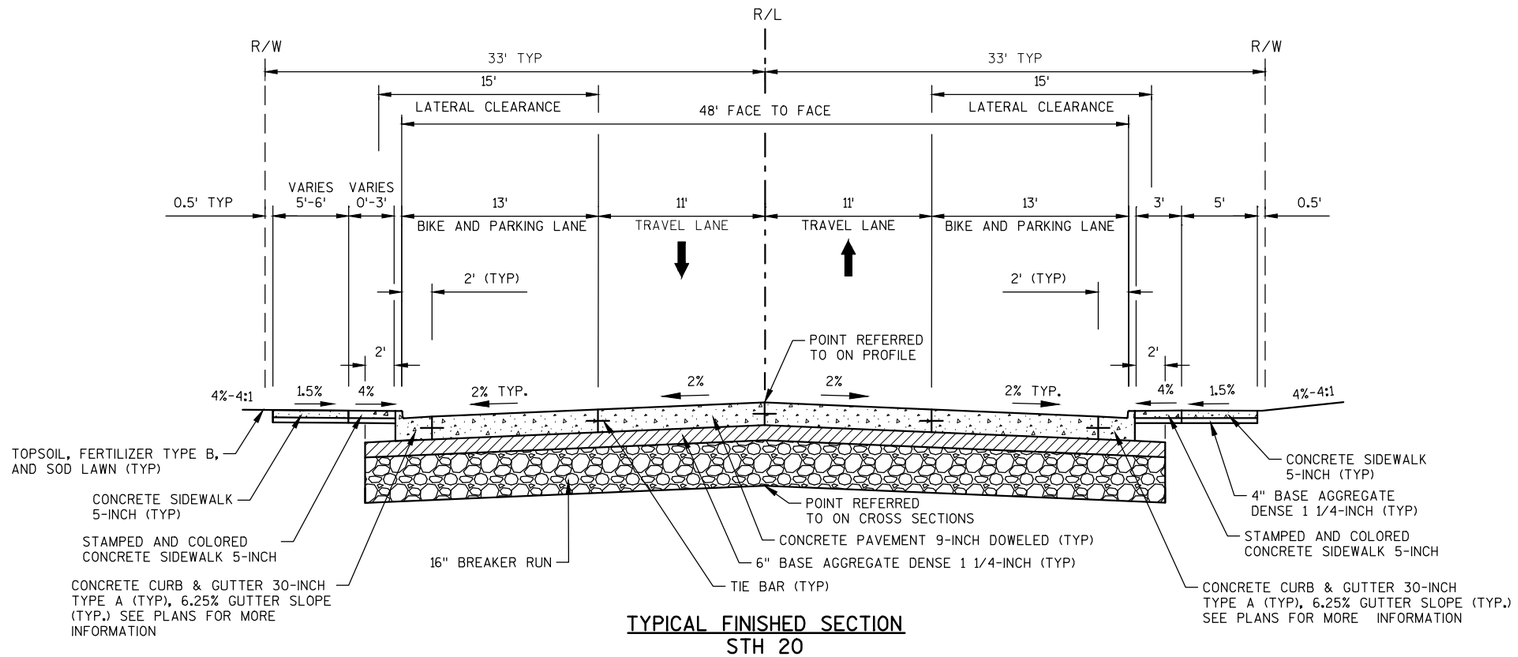
TYPICAL FINISHED SECTION
STH 20

STA 357+89 TO STA 364+30
V=30 MPH



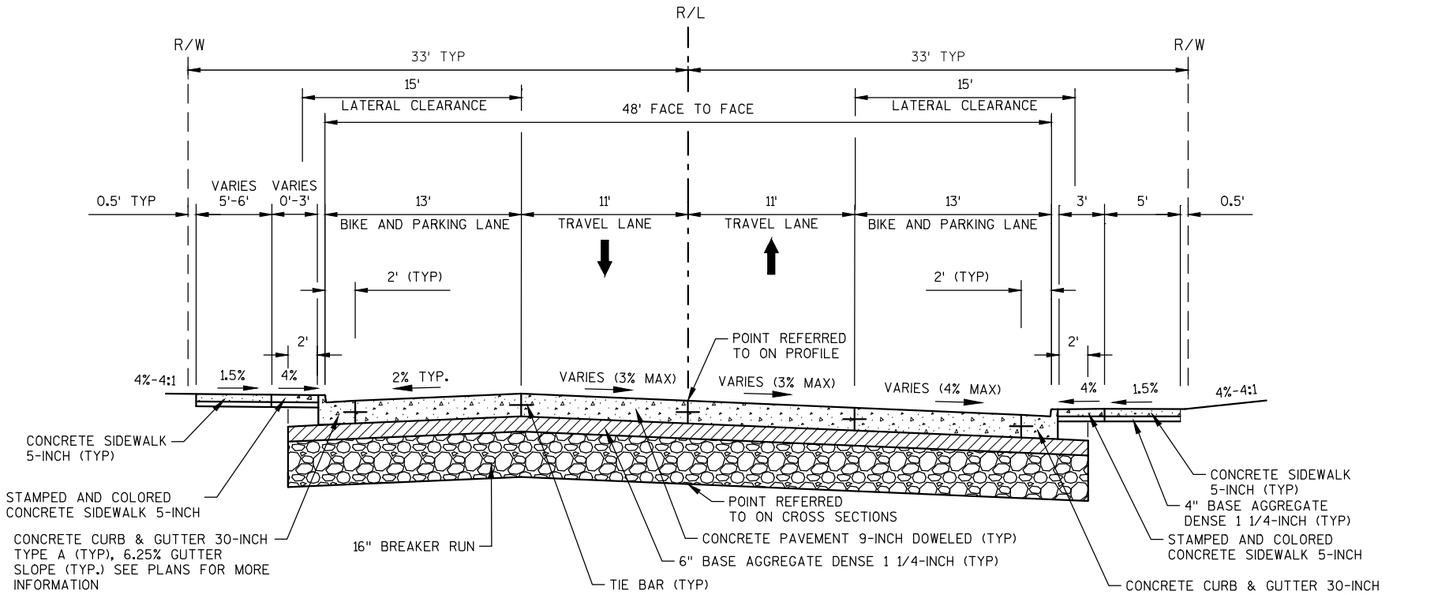
TYPICAL FINISHED SECTION
STH 20

STA 365+77 TO STA 366+54
V=30 MPH



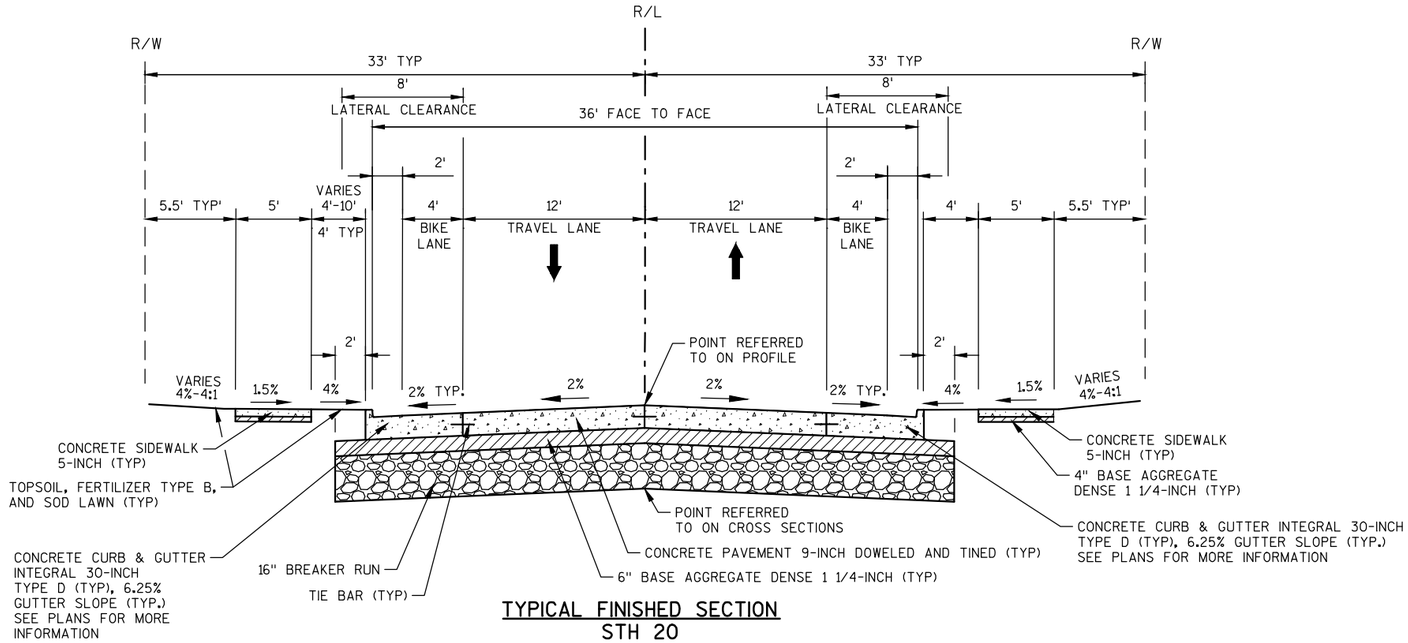
TYPICAL FINISHED SECTION
STH 20

STA 366+54 TO STA 367+65
STA 376+50 TO STA 384+00
V=30 MPH

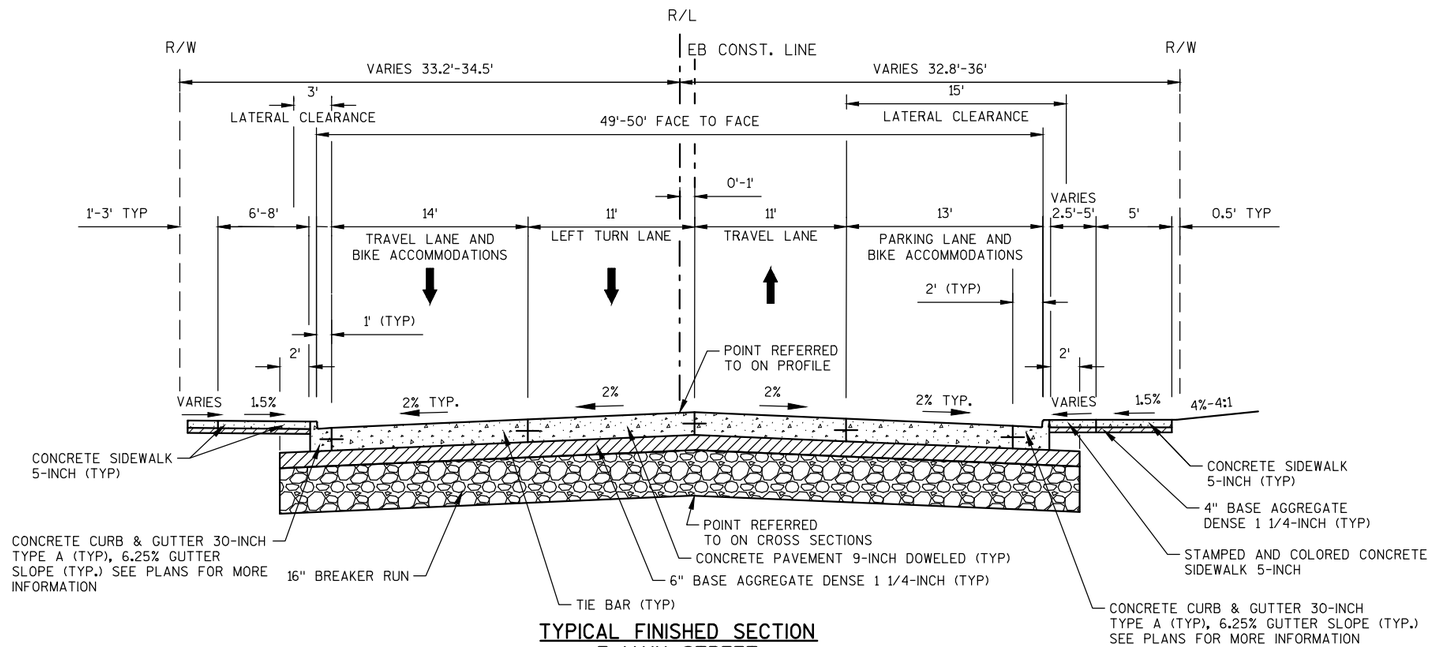


TYPICAL FINISHED SECTION
STH 20
STA 367+65 TO STA 376+50
V=30 MPH

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 13	E

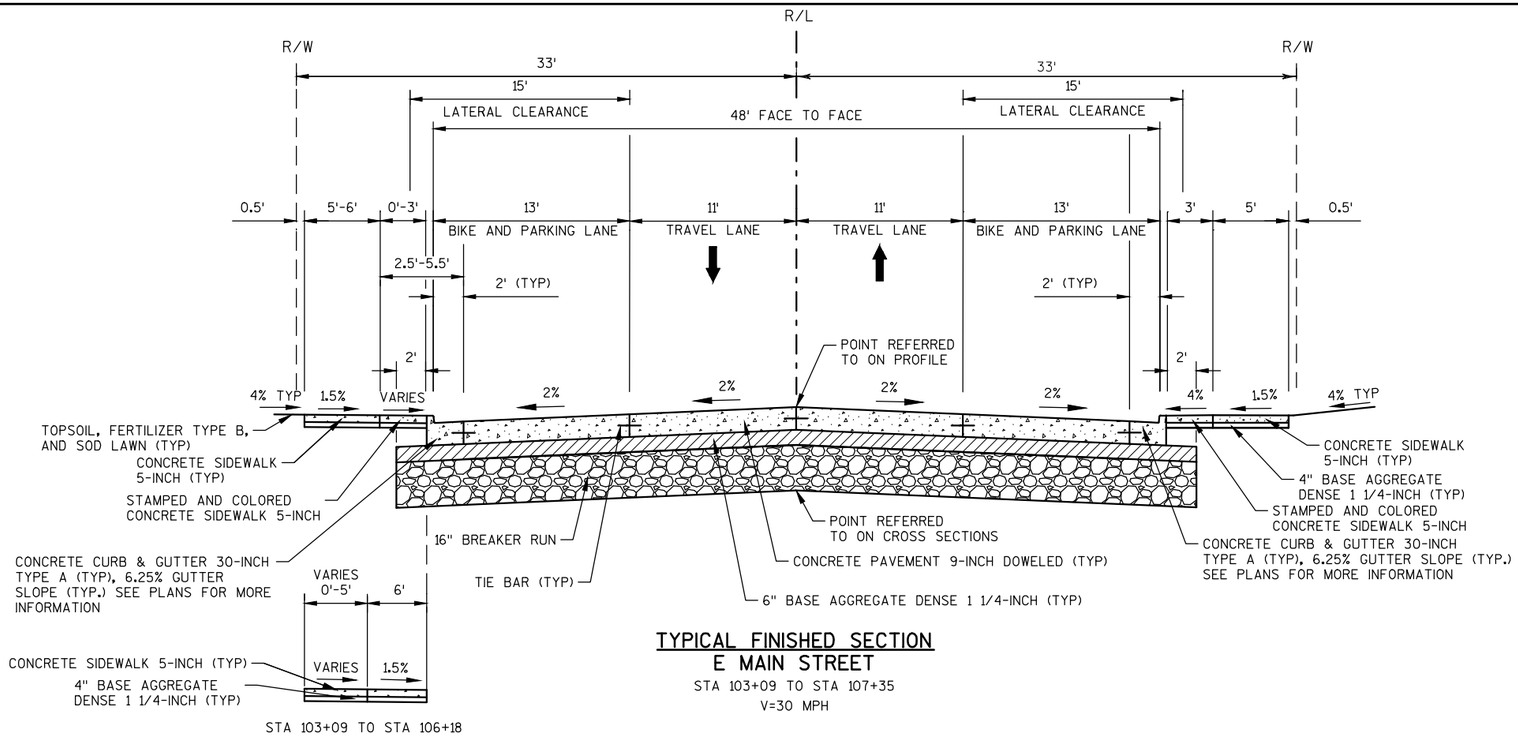


TYPICAL FINISHED SECTION
STH 20
STA 384+00 TO STA 404+35
V=40 MPH



TYPICAL FINISHED SECTION
E MAIN STREET
STA 100+00 TO STA 103+09
V=30 MPH

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 14	E

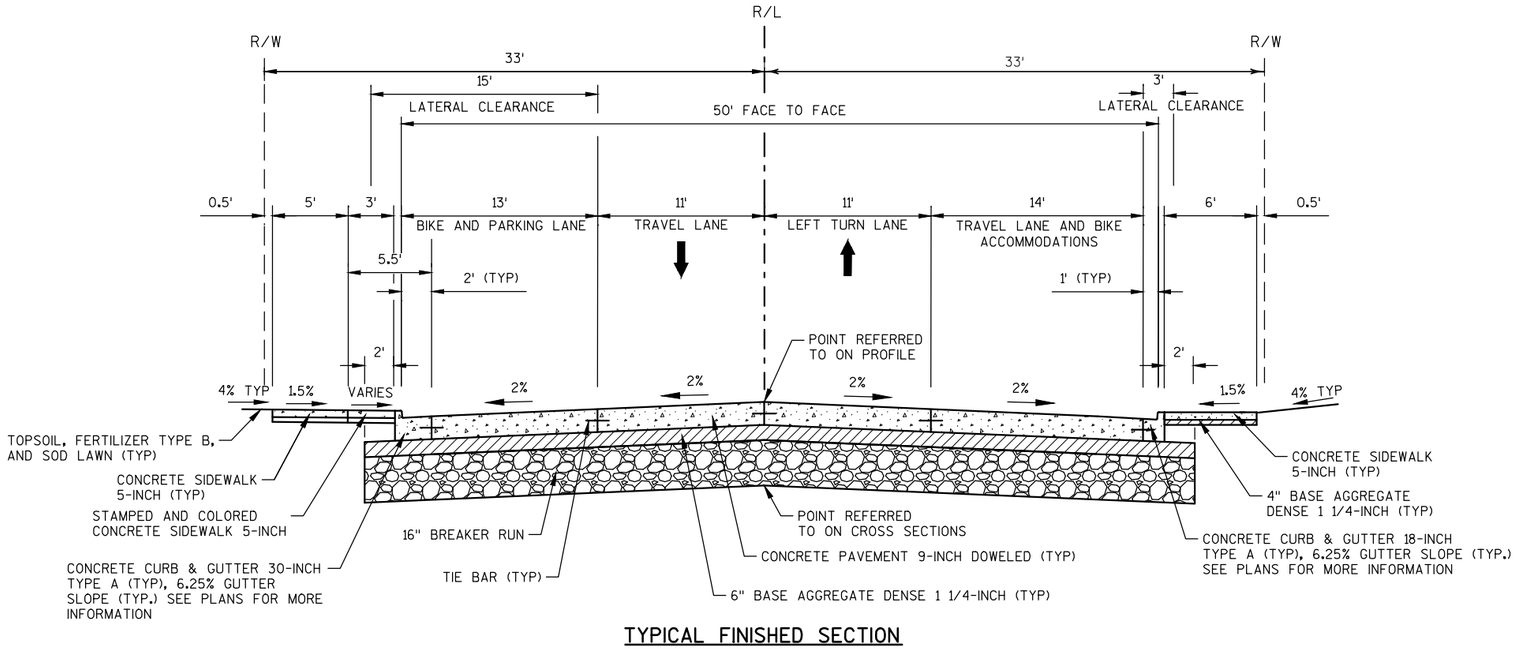


STA 103+09 TO STA 106+18

TYPICAL FINISHED SECTION
E MAIN STREET

STA 103+09 TO STA 107+35

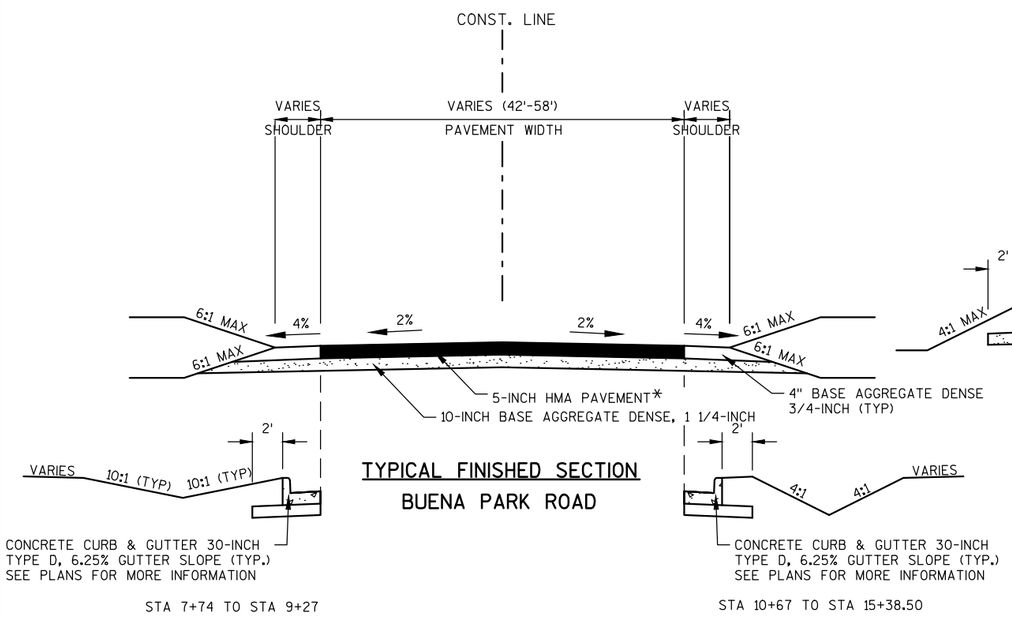
V=30 MPH



TYPICAL FINISHED SECTION
E MAIN STREET

STA 107+35 TO STA 109+75

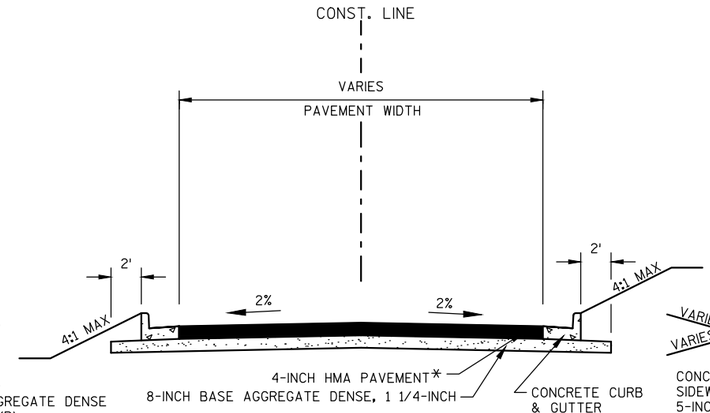
V=30 MPH



TYPICAL FINISHED SECTION
BUENA PARK ROAD

STA 7+74 TO STA 9+27

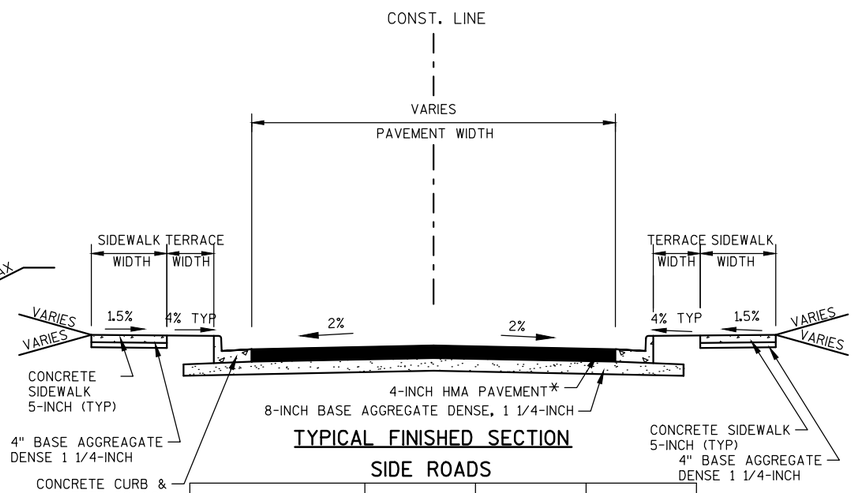
STA 10+67 TO STA 15+38.50



TYPICAL FINISHED SECTION
SIDE ROADS

SIDE STREET	PAVEMENT WIDTH
WEBER STREET	36'
N RIVER ROAD	35'
EVERGREEN DRIVE	24'
S MILWAUKEE STREET	18'

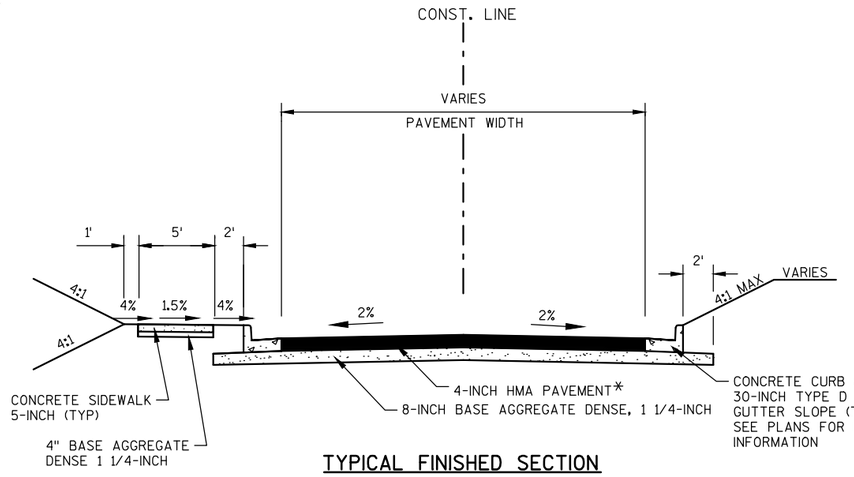
* REFER TO THE GENERAL NOTES FOR HMA PAVEMENT TYPE AND GRADATION.



TYPICAL FINISHED SECTION
SIDE ROADS

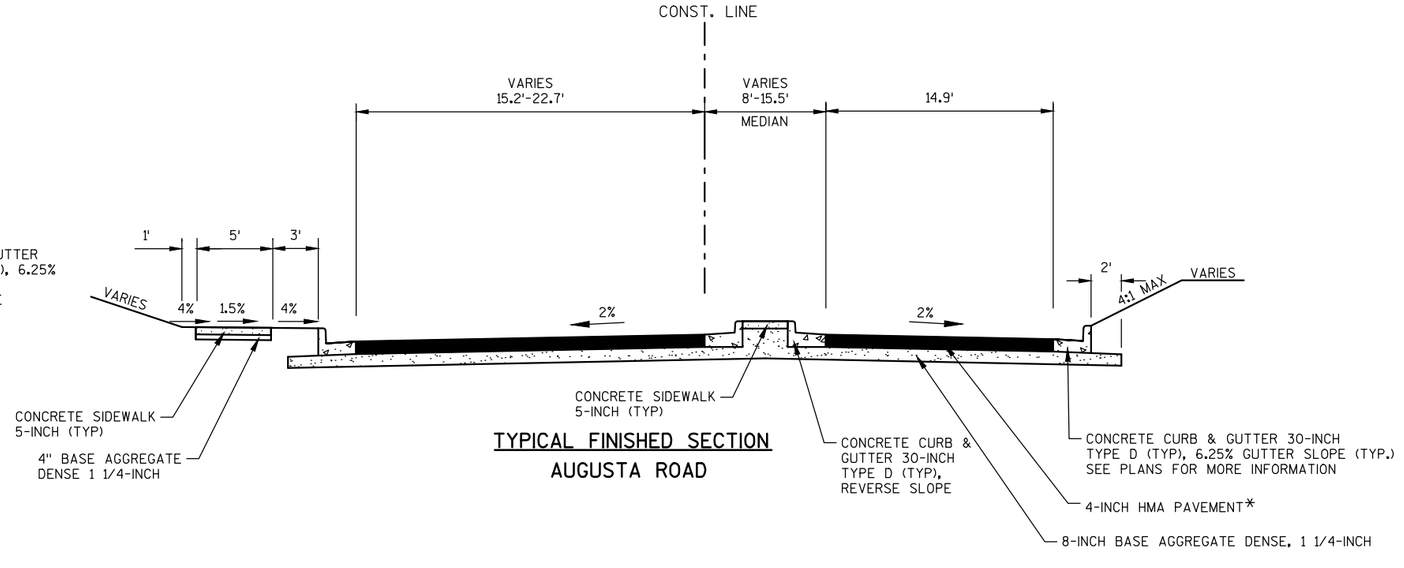
SIDE STREET	PAVEMENT WIDTH	TERRACE WIDTH	SIDEWALK WIDTH
CENTER STREET #	24'	0'	4.5'
WATER STREET	24'	5'	4.5'
JEFFERSON STREET	34'-36'	0'-5'	5'-6'
RIVER STREET	46'	0'-5.5'	3.8'-7'
ELIZABETH STREET	36.5'	3.2'-4.2'	5'
ST THOMAS STREET	44'	0'-3'	5'-8'
S. 2ND STREET	44'	0'-3'	5'-6'
N. 2ND STREET	34'	3'-8'	5'
3RD STREET	35'-36'	5.5'-7'	4'-5'
N MILWAUKEE STREET	42'	3-4.5'	5'

\# NO SIDEWALK LEFT



TYPICAL FINISHED SECTION
SIDE ROADS

SIDE STREET	PAVEMENT WIDTH	TERRACE WIDTH
RIVERMOOR ROAD	22'	3.5'
RIVERMOOR DRIVE	24'	5'
RACINE STREET	28'	5'



TYPICAL FINISHED SECTION
AUGUSTA ROAD

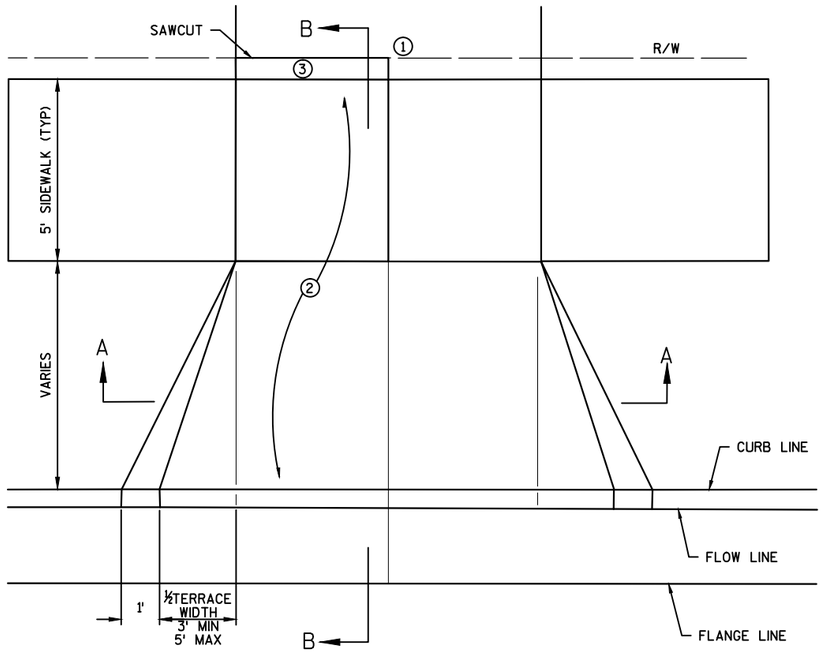
2

NOTES:

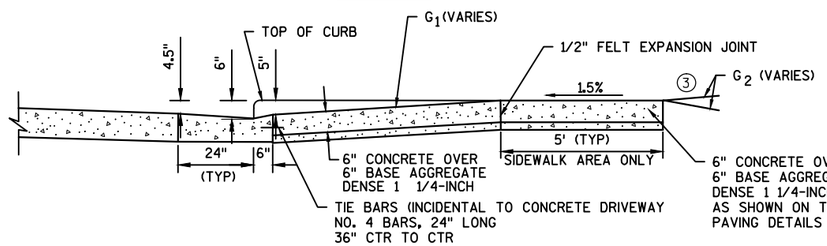
① DRIVEWAY WIDTHS
COMMERCIAL 35' MAX 12' MIN
NON-COMMERCIAL 24' MAX 12' MIN

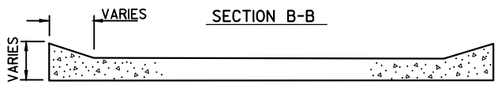
② ALL DRIVEWAY APPROACHES SHALL BE CONCRETE
DRIVEWAY 6" ON 4" BASE AGGREGATE DENSE 1 1/4-INCH,
UNLESS NOTED OTHERWISE ON PAVING DETAILS.

③ DRIVEWAY SURFACE BEYOND SIDEWALK SHALL
BE REPLACED IN-KIND WITH A MINIMUM SECTION OF:
3" ASPHALTIC SURFACE DRIVEWAYS OVER 6" BASE AGGREGATE DENSE 1¼-INCH
OR
CONCRETE DRIVEWAY 6-INCH OVER 6" BASE AGGREGATE DENSE 1¼-INCH.
OR
CONCRETE DRIVEWAY HES 6-INCH OVER 6" BASE AGGREGATE DENSE 1¼-INCH.
OR
6" BASE AGGREGATE DENSE ¾-INCH.



PLAN VIEW





SECTION B-B

SECTION A-A

RECOMMENDED MAX G_1 & G_2 = 15%
DESIRABLE MAX = 10%
MAX DIFFERENCE BETWEEN G_1 & G_2 IN FILL = 14%

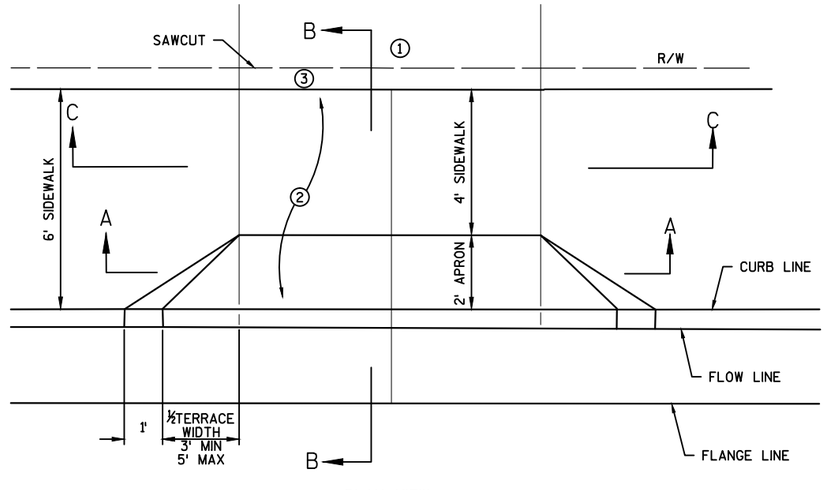
URBAN CONCRETE DRIVEWAY DETAILS

NOTES:

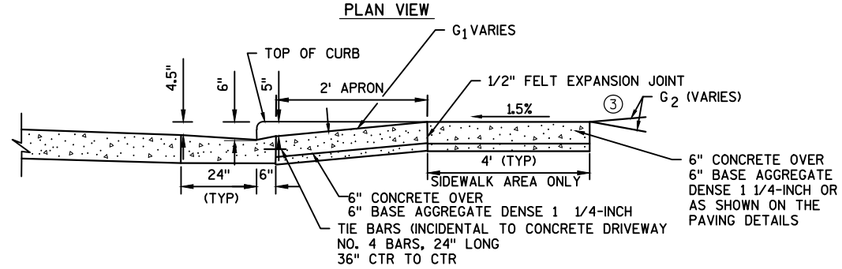
① DRIVEWAY WIDTHS
COMMERCIAL 35' MAX 12' MIN
NON-COMMERCIAL 24' MAX 12' MIN

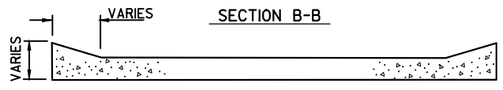
② ALL DRIVEWAY APPROACHES SHALL BE CONCRETE
DRIVEWAY 6" ON 4" BASE AGGREGATE DENSE 1 1/4-INCH,
UNLESS NOTED OTHERWISE ON PAVING DETAILS.

③ DRIVEWAY SURFACE BEYOND SIDEWALK SHALL
BE REPLACED IN-KIND WITH A MINIMUM SECTION OF:
3" ASPHALTIC SURFACE DRIVEWAYS OVER 6" BASE AGGREGATE DENSE 1¼-INCH
OR
CONCRETE DRIVEWAY 6-INCH OVER 6" BASE AGGREGATE DENSE 1¼-INCH.
OR
CONCRETE DRIVEWAY HES 6-INCH OVER 6" BASE AGGREGATE DENSE 1¼-INCH.
OR
6" BASE AGGREGATE DENSE ¾-INCH.



PLAN VIEW

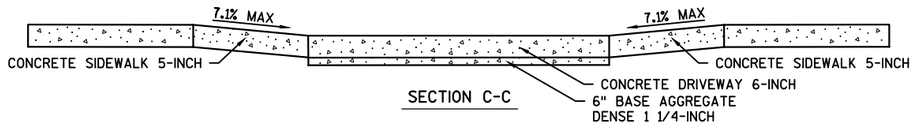




SECTION B-B

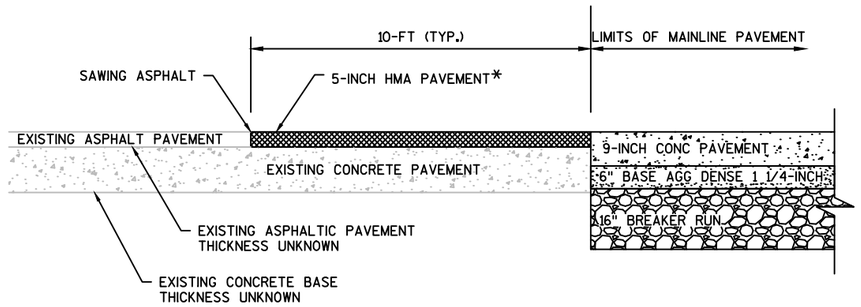
SECTION A-A

RECOMMENDED MAX G_1 & G_2 = 15%
DESIRABLE MAX = 10%
MAX DIFFERENCE BETWEEN G_1 & G_2 IN FILL = 14%



SECTION C-C

COMMERCIAL WALK CONCRETE DRIVEWAY DETAILS

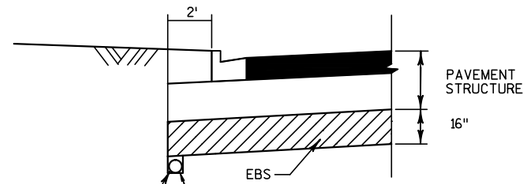


REMOVING ASPHALTIC SURFACE BUTT JOINTS, FULL DEPTH TO TOP OF UNDERLYING CONCRETE

* EXISTING ASPHALT PAVEMENT THICKNESS IS ESTIMATED AT 5-INCHES. ACTUAL THICKNESS IS UNKNOWN. REFER TO GENERAL NOTES FOR HMA PAVEMENT TYPE, GRADATION, AND LAYER THICKNESSES.

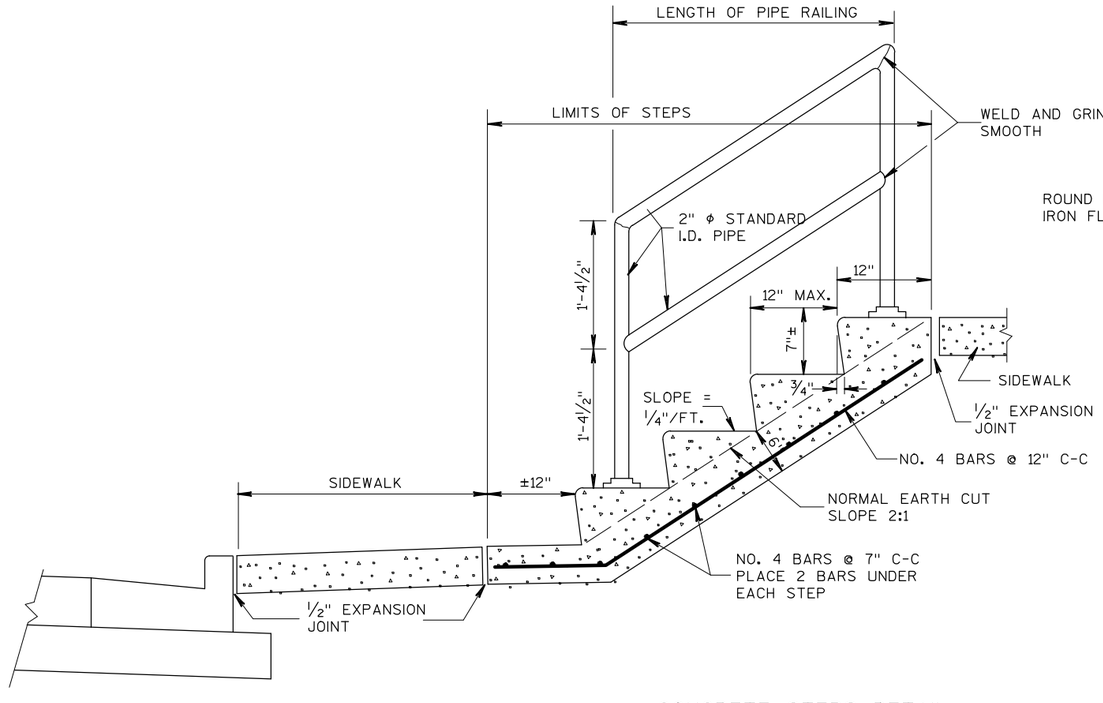
DETAIL OF ASPHALTIC SURFACE BUTT JOINT

STA. 306+15 TO STA. 306+25
STA. 404+35 TO STA. 404+45

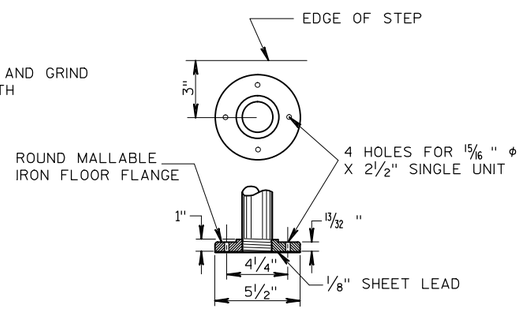


NOTES:
1. USE AS DIRECTED BY ENGINEER FOR AREAS OF UNSTABLE SUBGRADE.
2. EBS SHALL BE PAID FOR AS EXCAVATION COMMON.
3. FILL VOID WITH BREAKER RUN.
4. UNDERDRAIN TO EXTEND 50 FEET OUT FROM AVAILABLE INLETS AT LOW POINTS
5. CONNECTIONS TO STORM SEWER OUTSIDE OF EBS AREA IS TO BE MADE WITH PIPE UNDERDRAIN UNPERFORATED 6-INCH.

EXCAVATION BELOW SUBGRADE (EBS)



CONCRETE STEPS DETAIL



FLANGE DETAIL

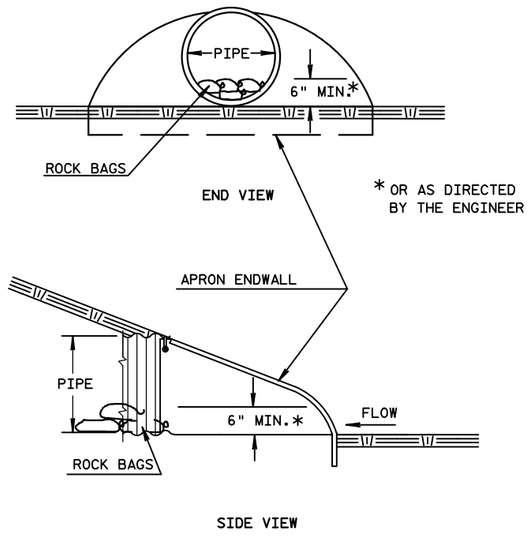
NOTE:

THE EXACT LOCATION, WIDTHS, & NUMBER OF STEPS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

STEEL REINFORCEMENT AND PIPE RAILING NOT REQUIRED ON STEPS WITH 2 RISERS OR LESS.

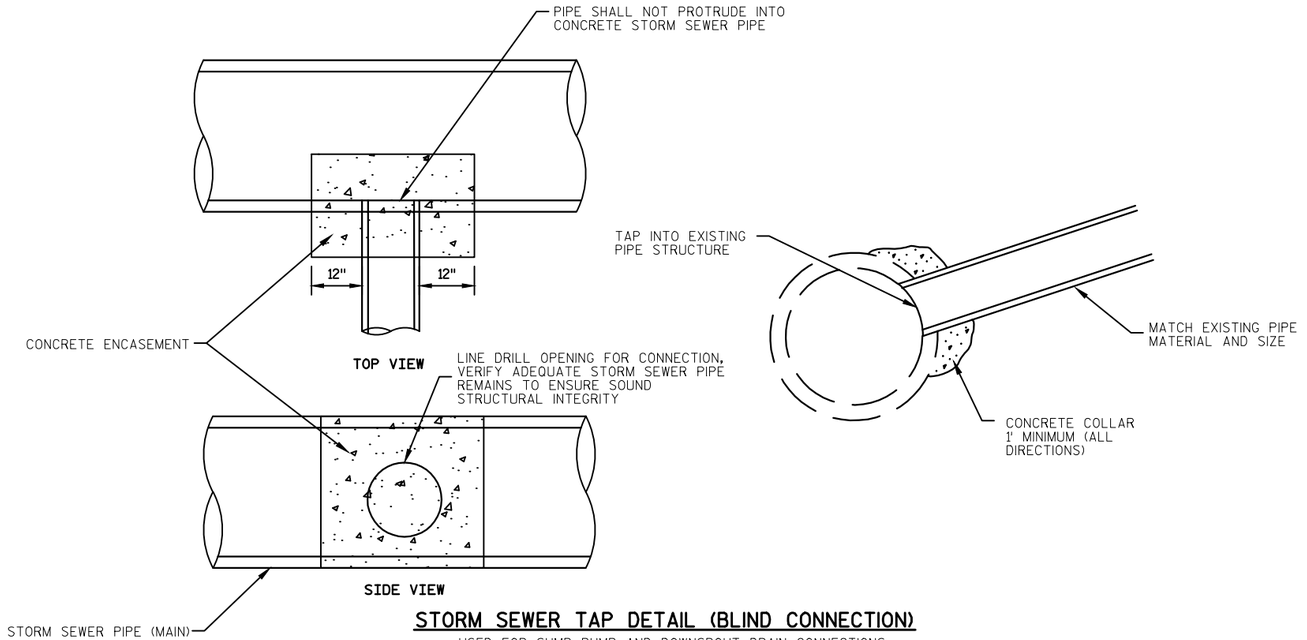
MINIMUM WIDTH OF STEP EQUALS 4 FEET.

RAILING TO BE PLACED ON LEFT ASCENDING SIDE OF STEPS ONLY.



CULVERT PIPE DITCH CHECK

PIPE SIZE	ESTIMATED NUMBER OF ROCK BAGS
12"	1
15"	2
18"	2
24"	3
30"	5
36"	7
42"	7
48"	10
54"	10
60"	13
66"	14
72"	16
13"X17"	2
20"X28"	5
19"X30"	5
24"X35"	7
24"X38"	7
29"X45"	10
34"X53"	10
38"X60"	13
48"X76"	18



STORM SEWER TAP DETAIL (BLIND CONNECTION)

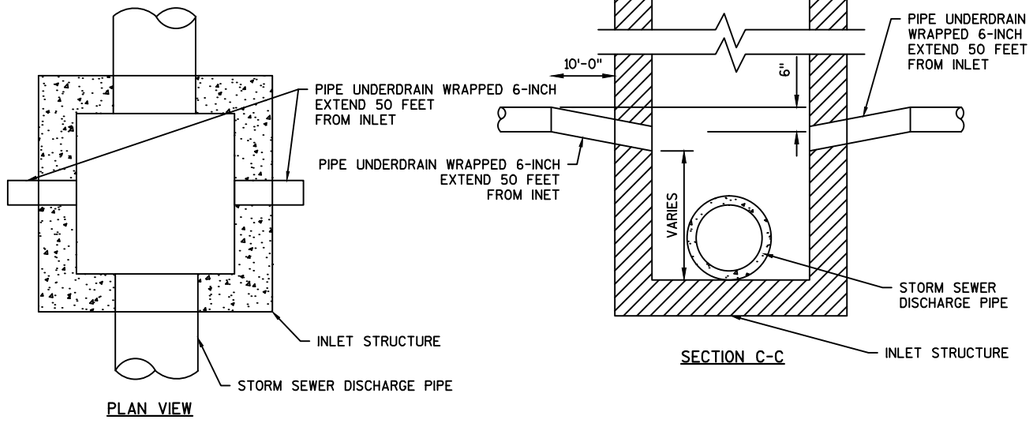
USED FOR SUMP PUMP AND DOWNSPOUT DRAIN CONNECTIONS
LOCATIONS ARE UNKNOWN
(INCIDENTAL TO PRIVATE STORM SEWER PIPE)

RUNOFF COEFFICIENT TABLE

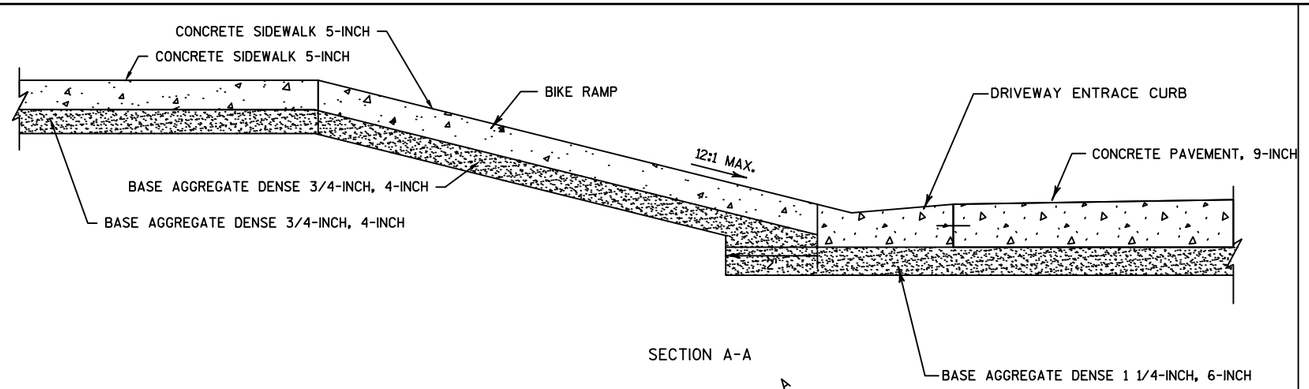
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 32.51 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 26.67 ACRES

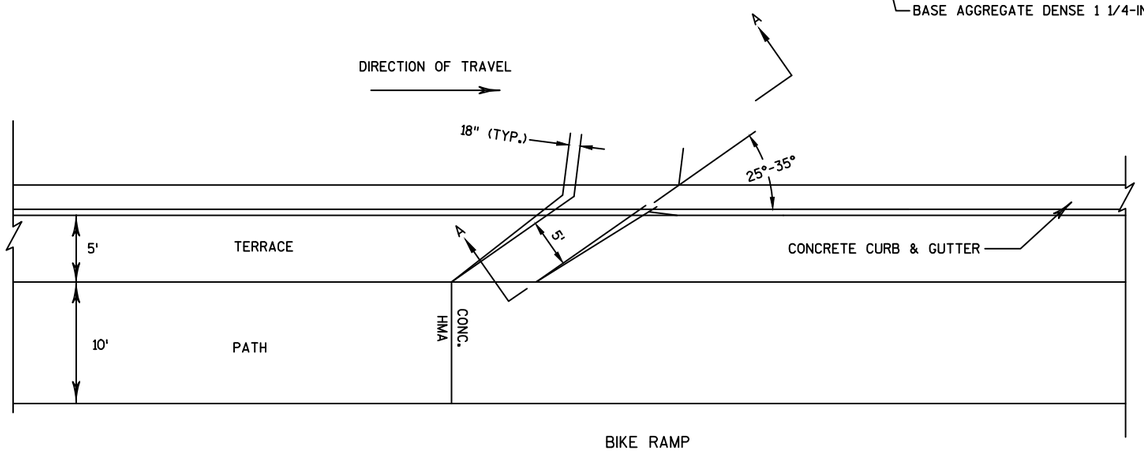
NOTES:
1. PLACE PIPE UNDERDRAIN WRAPPED 6-INCH IN TRENCH BELOW BREAKER RUN AS SHOWN ABOVE.
2. PROVIDE TWO 6" DIA. OPENINGS OR UNDERDRAIN PIPE
3. TO BE USED AT ALL LOW POINTS IN EBS AND SUBGRADE IMPROVEMENT AREAS.
4. PROVIDE PIPE UNDERDRAIN UNPERFORATED 6-INCH FOR CONNECTIONS WHEN CLOSEST STORM STRUCTURE IS OUTSIDE OF EBS AREA.



DRAINTILE OUTFALL AT INLET



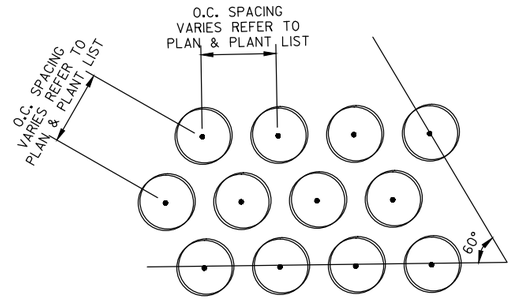
SECTION A-A



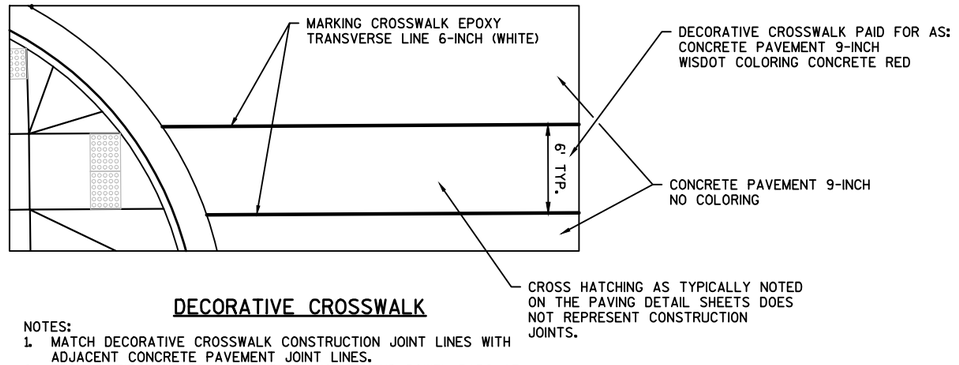
BIKE RAMP

TYPICAL BIKE RAMP DETAIL

STA 349+54, RT

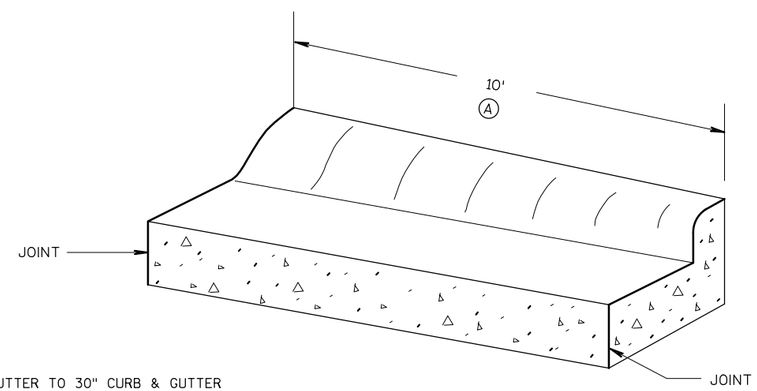


TYPICAL PERENIAL LAYOUT



DECORATIVE CROSSWALK

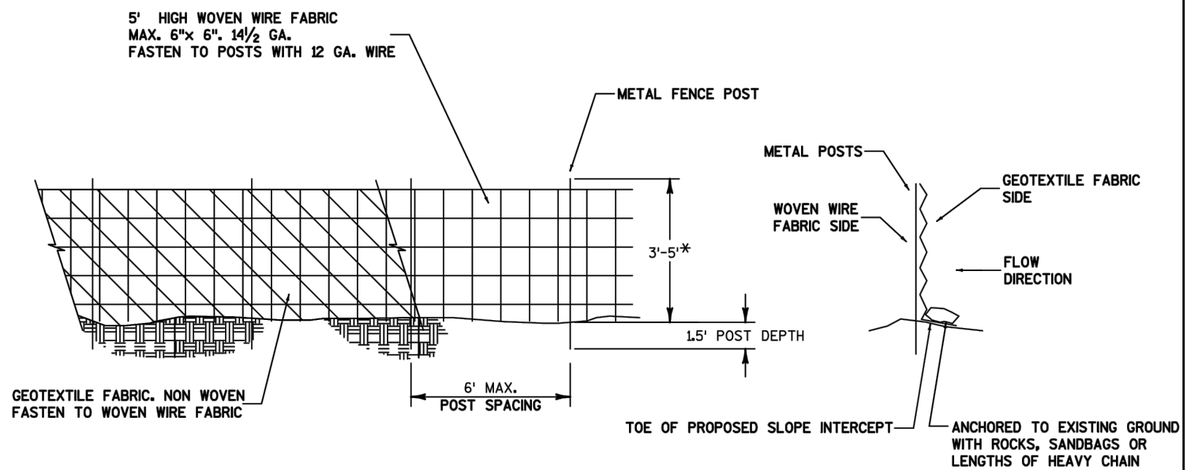
NOTES:
1. MATCH DECORATIVE CROSSWALK CONSTRUCTION JOINT LINES WITH ADJACENT CONCRETE PAVEMENT JOINT LINES.
2. TYPICAL TIE BARS AT LONGITUDINAL JOINTS AND DOWEL BARS AT TRANSVERSE JOINTS ARE INCIDENTAL TO CONCRETE PAVEMENT 9-INCH.
3. GAPPING CONCRETE PAVEMENT FOR CONSTRUCTION OF DECORATIVE CROSSWALKS IS INCIDENTAL TO CONCRETE PAVEMENT 9-INCH.



NOTE
(A) 36" CURB & GUTTER TO 30" CURB & GUTTER
(TO BE MEASURED & PAID FOR AS 36" TYPE A CURB & GUTTER)

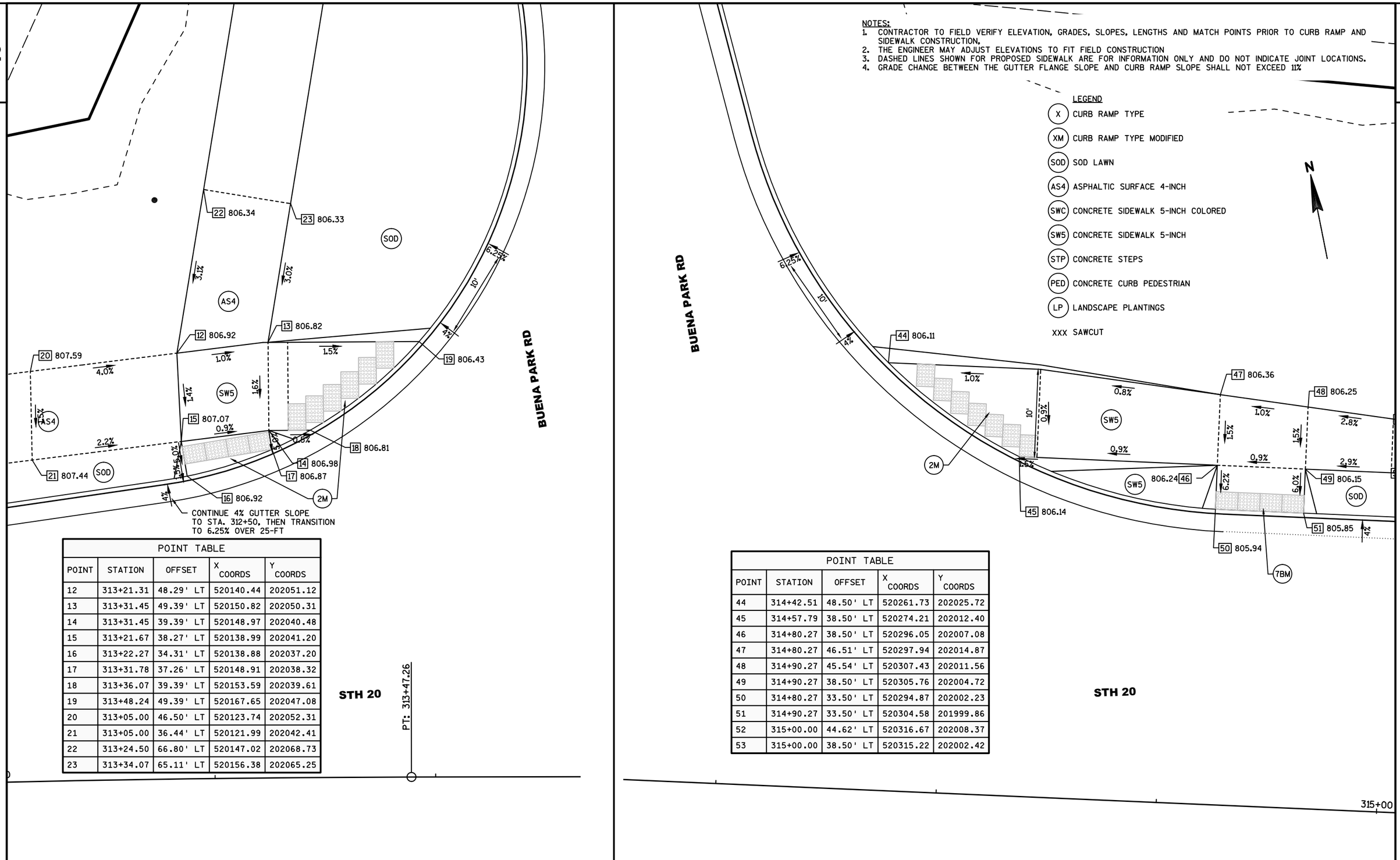
TRANSITION DETAIL

SEE PLAN DETAILS FOR LOCATIONS



HEAVY DUTY SILT FENCE DETAIL

INSTALL AS NECESSARY AS SHOWN IN THE PLANS
AND DIRECTED BY THE ENGINEER

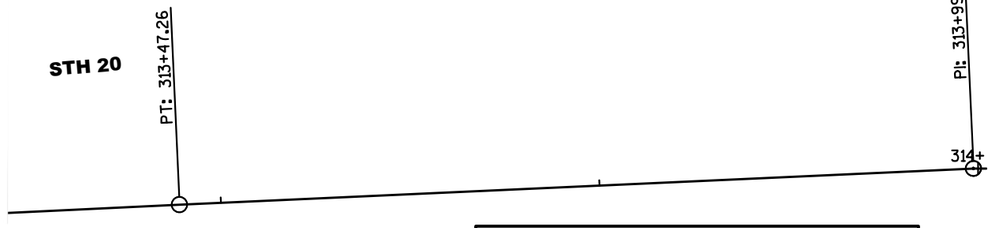


POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
12	313+21.31	48.29' LT	520140.44	202051.12
13	313+31.45	49.39' LT	520150.82	202050.31
14	313+31.45	39.39' LT	520148.97	202040.48
15	313+21.67	38.27' LT	520138.99	202041.20
16	313+22.27	34.31' LT	520138.88	202037.20
17	313+31.78	37.26' LT	520148.91	202038.32
18	313+36.07	39.39' LT	520153.59	202039.61
19	313+48.24	49.39' LT	520167.65	202047.08
20	313+05.00	46.50' LT	520123.74	202052.31
21	313+05.00	36.44' LT	520121.99	202042.41
22	313+24.50	66.80' LT	520147.02	202068.73
23	313+34.07	65.11' LT	520156.38	202065.25

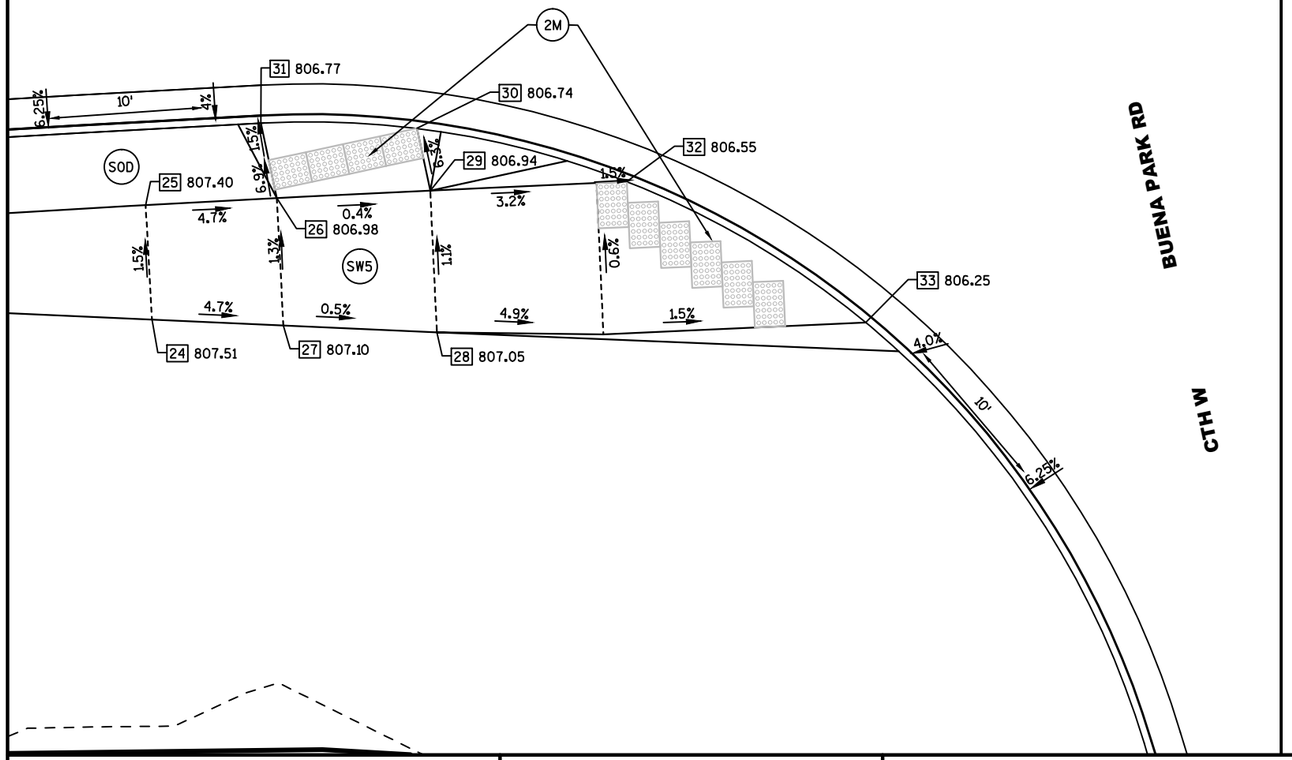
POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
44	314+42.51	48.50' LT	520261.73	202025.72
45	314+57.79	38.50' LT	520274.21	202012.40
46	314+80.27	38.50' LT	520296.05	202007.08
47	314+80.27	46.51' LT	520297.94	202014.87
48	314+90.27	45.54' LT	520307.43	202011.56
49	314+90.27	38.50' LT	520305.76	202004.72
50	314+80.27	33.50' LT	520294.87	202002.23
51	314+90.27	33.50' LT	520304.58	201999.86
52	315+00.00	44.62' LT	520316.67	202008.37
53	315+00.00	38.50' LT	520315.22	202002.42

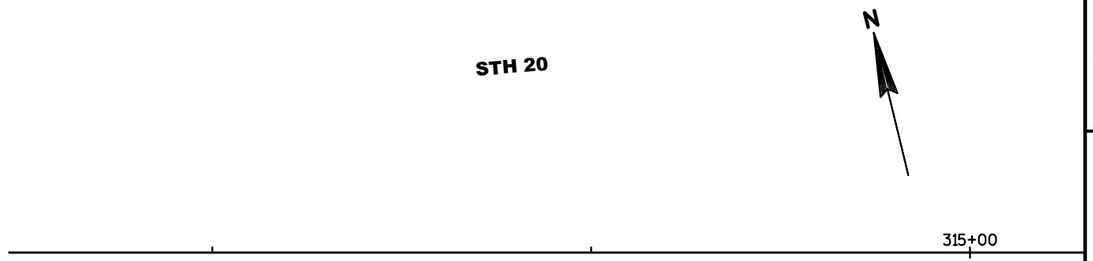
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - NORTH BUENA PARK ROAD	SHEET 21	E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%



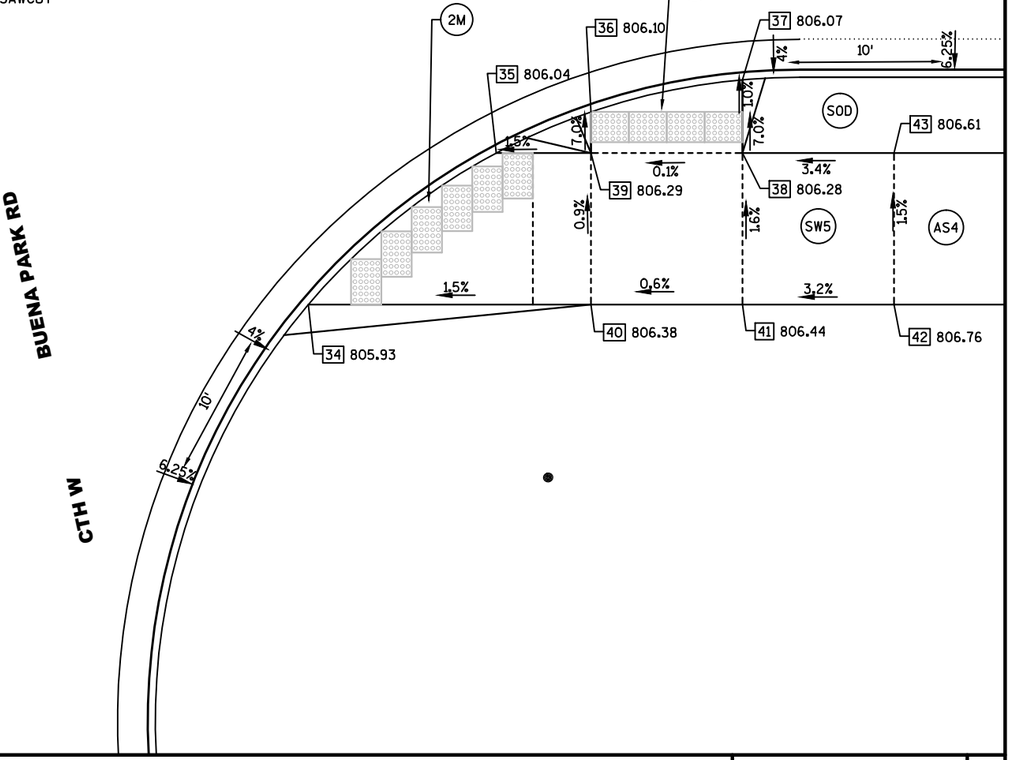
POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
24	313+25.00	46.07' RT	520126.92	201957.67
25	313+25.00	38.50' RT	520128.30	201965.10
26	313+33.81	38.50' RT	520136.83	201963.51
27	313+33.81	46.92' RT	520135.26	201955.24
28	313+44.12	47.87' RT	520144.99	201952.40
29	313+44.12	38.50' RT	520146.78	201961.60
30	313+43.42	34.36' RT	520146.89	201965.79
31	313+33.00	33.50' RT	520136.97	201968.57
32	313+57.16	38.50' RT	520159.52	201959.10
33	313+72.48	48.50' RT	520172.64	201946.35





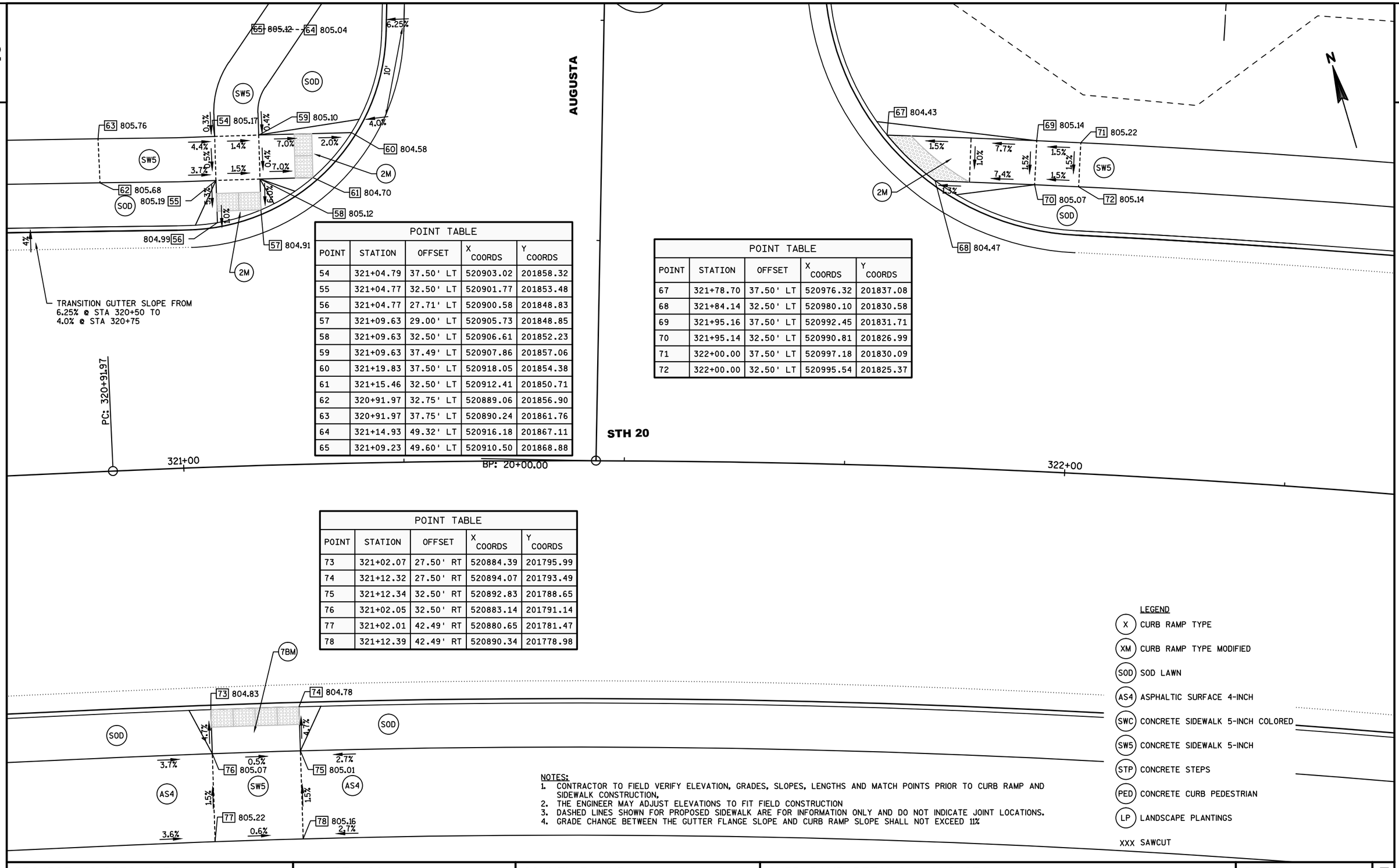
LEGEND
- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
34	314+61.62	48.50' RT	520257.37	201926.96
35	314+74.03	38.50' RT	520271.78	201933.74
36	314+80.27	35.79' RT	520278.49	201934.90
37	314+90.27	33.67' RT	520288.71	201934.60
38	314+90.27	38.50' RT	520287.56	201929.90
39	314+80.27	38.50' RT	520277.85	201932.27
40	314+80.27	48.50' RT	520275.48	201922.55
41	314+90.27	48.50' RT	520285.20	201920.19
42	315+00.27	48.50' RT	520294.92	201917.82
43	315+00.27	38.50' RT	520297.28	201927.54



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - SOUTH BUENA PARK ROAD	SHEET	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021101_ID - SHEET - (2)
PLOT DATE : 7/13/2018 3:05 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
54	321+04.79	37.50' LT	520903.02	201858.32
55	321+04.77	32.50' LT	520901.77	201853.48
56	321+04.77	27.71' LT	520900.58	201848.83
57	321+09.63	29.00' LT	520905.73	201848.85
58	321+09.63	32.50' LT	520906.61	201852.23
59	321+09.63	37.49' LT	520907.86	201857.06
60	321+19.83	37.50' LT	520918.05	201854.38
61	321+15.46	32.50' LT	520912.41	201850.71
62	320+91.97	32.75' LT	520889.06	201856.90
63	320+91.97	37.75' LT	520890.24	201861.76
64	321+14.93	49.32' LT	520916.18	201867.11
65	321+09.23	49.60' LT	520910.50	201868.88

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
67	321+78.70	37.50' LT	520976.32	201837.08
68	321+84.14	32.50' LT	520980.10	201830.58
69	321+95.16	37.50' LT	520992.45	201831.71
70	321+95.14	32.50' LT	520990.81	201826.99
71	322+00.00	37.50' LT	520997.18	201830.09
72	322+00.00	32.50' LT	520995.54	201825.37

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
73	321+02.07	27.50' RT	520884.39	201795.99
74	321+12.32	27.50' RT	520894.07	201793.49
75	321+12.34	32.50' RT	520892.83	201788.65
76	321+02.05	32.50' RT	520883.14	201791.14
77	321+02.01	42.49' RT	520880.65	201781.47
78	321+12.39	42.49' RT	520890.34	201778.98

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

LEGEND
- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - AUGUSTA	SHEET 23	E

2

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
79	334+10.92	32.50' LT	521908.24	201029.16
80	334+20.92	32.50' LT	521914.91	201021.71
81	334+10.92	37.50' LT	521911.97	201032.50
82	334+20.92	37.50' LT	521918.63	201025.05
83	334+10.92	42.50' LT	521915.69	201035.83
84	334+20.92	42.50' LT	521922.36	201028.38
85	334+27.44	37.50' LT	521922.98	201020.19
86	334+27.44	42.50' LT	521926.70	201023.53
87	334+35.44	37.50' LT	521928.31	201014.23
88	334+40.00	42.50' LT	521935.08	201014.16
89	334+10.92	47.50' LT	521919.42	201039.17
90	334+20.92	42.88' LT	521922.64	201028.63

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
105	334+80.25	42.50' LT	521961.93	200984.17
106	334+85.65	37.50' LT	521961.80	200976.81
107	334+96.46	37.50' LT	521969.01	200968.76
108	334+96.46	42.50' LT	521972.74	200972.09
109	335+01.46	37.50' LT	521972.35	200965.03
110	335+01.46	42.50' LT	521976.07	200968.37
111	335+11.46	37.50' LT	521979.02	200957.58
112	335+11.46	42.50' LT	521982.74	200960.91
113	335+01.46	32.50' LT	521968.62	200961.70
114	335+11.46	32.50' LT	521975.29	200954.25
115	335+03.96	53.50' LT	521985.93	200973.84
116	335+03.96	58.50' LT	521989.66	200977.18
117	335+08.96	58.51' LT	521993.00	200973.46
118	335+08.96	53.51' LT	521989.27	200970.12
119	335+33.24	53.53' LT	522005.49	200952.04
120	335+33.24	58.53' LT	522009.21	200955.38
121	335+38.38	58.53' LT	522012.55	200951.66
122	335+38.37	53.53' LT	522008.83	200948.32

RIVERMOOR RD

PC: 30+33.40

STH 20

BP: 30+00.00

PI: 335+34.75

335+00

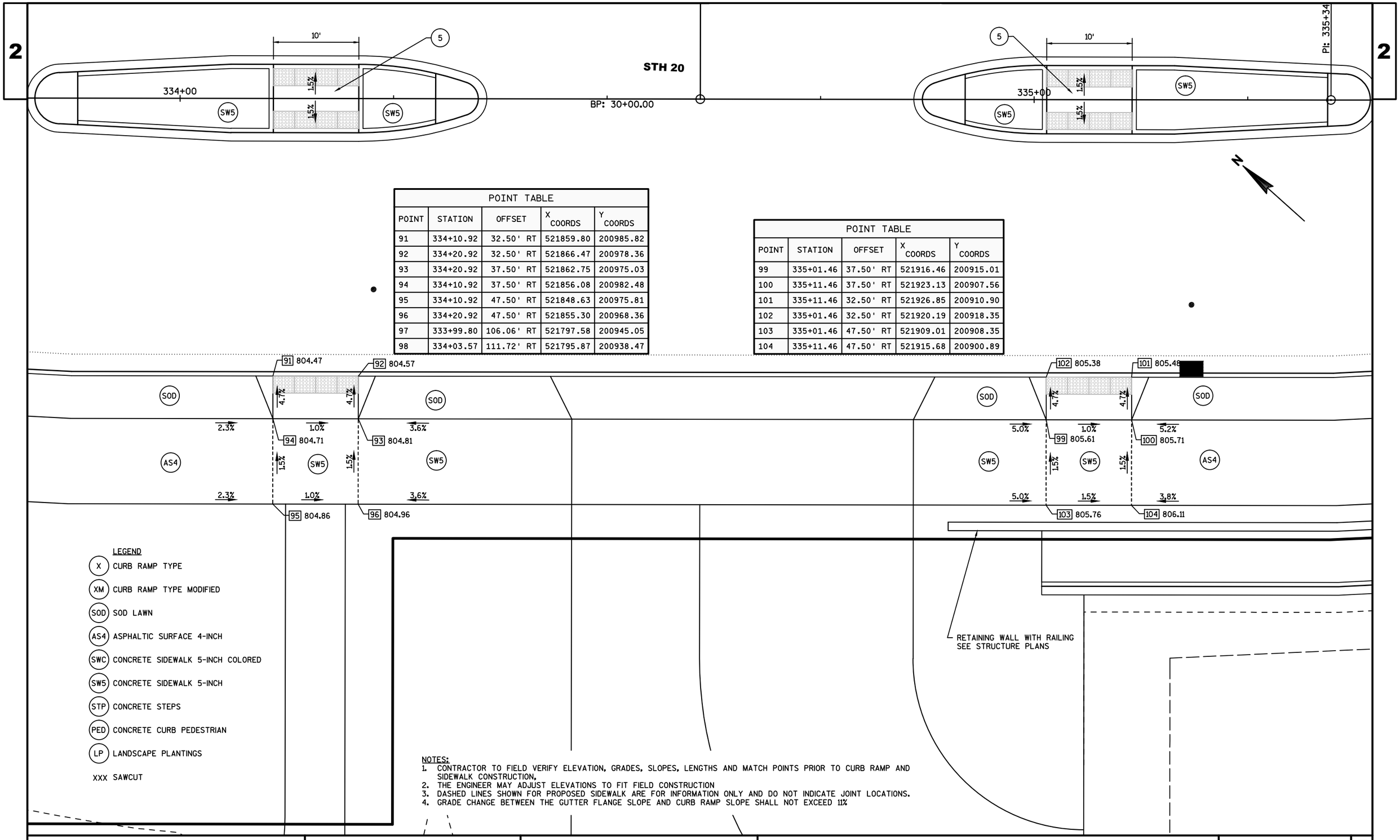
TRANSITION GUTTER SLOPE TO 6.25% IN 10-FT

LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - RIVERMOOR ROAD	SHEET 24	E



POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
91	334+10.92	32.50' RT	521859.80	200985.82
92	334+20.92	32.50' RT	521866.47	200978.36
93	334+20.92	37.50' RT	521862.75	200975.03
94	334+10.92	37.50' RT	521856.08	200982.48
95	334+10.92	47.50' RT	521848.63	200975.81
96	334+20.92	47.50' RT	521855.30	200968.36
97	333+99.80	106.06' RT	521797.58	200945.05
98	334+03.57	111.72' RT	521795.87	200938.47

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
99	335+01.46	37.50' RT	521916.46	200915.01
100	335+11.46	37.50' RT	521923.13	200907.56
101	335+11.46	32.50' RT	521926.85	200910.90
102	335+01.46	32.50' RT	521920.19	200918.35
103	335+01.46	47.50' RT	521909.01	200908.35
104	335+11.46	47.50' RT	521915.68	200900.89

LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - RIVERMOOR ROAD	SHEET 25	E

2

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
145	339+90.24	27.72' LT	522291.78	200595.06
146	339+95.24	29.02' LT	522296.09	200592.21
147	339+95.24	32.50' LT	522298.68	200594.54
148	339+90.24	32.50' LT	522295.33	200598.25
149	340+01.24	32.50' LT	522302.69	200590.07
150	340+05.81	37.50' LT	522309.46	200590.02
151	339+95.24	37.50' LT	522302.39	200597.88
152	339+90.24	37.50' LT	522299.05	200601.60
153	339+80.00	32.50' LT	522288.48	200605.87
154	339+80.00	37.50' LT	522292.20	200609.22
155	339+89.76	51.77' LT	522309.34	200611.49
156	339+94.19	54.09' LT	522314.03	200609.76
157	339+86.05	58.84' LT	522312.11	200618.99
158	339+91.86	58.52' LT	522315.76	200614.45

LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS

XXX SAWCUT

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
135	340+47.59	37.50' LT	522337.40	200558.95
136	340+53.00	32.50' LT	522337.29	200551.59
137	340+59.00	32.50' LT	522341.30	200547.13
138	340+59.00	37.50' LT	522345.02	200550.47
139	340+59.00	29.31' LT	522338.93	200545.00
140	340+64.00	27.92' LT	522341.25	200540.35
141	340+64.00	32.50' LT	522344.65	200543.41
142	340+64.00	37.50' LT	522348.37	200546.76
143	340+75.00	37.50' LT	522355.72	200538.58
144	340+75.00	32.50' LT	522352.01	200535.23

RIVERMOOR DR

STH 20

PC: 40+34.66

BP: 40+00.00

340+00

341+00

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - RIVERMOOR DRIVE	SHEET 26	E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
159	339+67.51	94.11' LT	522325.94	200656.36
160	339+70.59	98.99' LT	522331.63	200657.33
161	339+60.34	107.74' LT	522331.28	200670.80
162	339+64.43	110.71' LT	522336.22	200669.74
163	339+57.01	111.19' LT	522331.63	200675.58
164	339+60.59	114.67' LT	522336.61	200675.25

42+00

RIVERMOOR DR

164 819.81

SOD

2.0%

1.8%

819.89 163

2.0%

1.8%

162 819.70

819.79 161

SW5

9.1%

10.8%

160 818.49

2

1.2%

1.9%

159 818.38

PI: 41+11.57

41+00

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - CLUB LANE	SHEET	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021101_ID - SHEET - (7)
PLOT DATE : 7/13/2018 3:05 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

STH 20

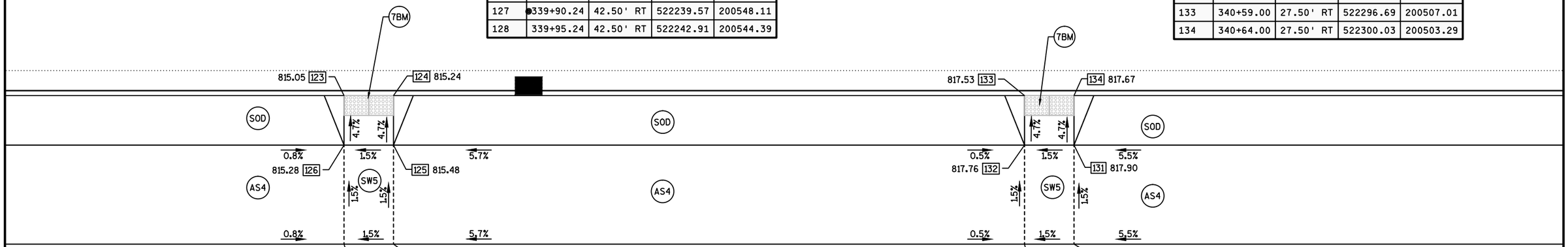
340+00

BP: 40+00.00

341+00

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
123	339+90.24	27.50' RT	522250.72	200558.14
124	339+95.24	27.50' RT	522254.06	200554.42
125	339+95.24	32.50' RT	522250.34	200551.07
126	339+90.24	32.50' RT	522247.00	200554.79
127	339+90.24	42.50' RT	522239.57	200548.11
128	339+95.24	42.50' RT	522242.91	200544.39

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
129	340+59.00	42.50' RT	522285.54	200496.98
130	340+64.00	42.50' RT	522288.88	200493.27
131	340+64.00	32.50' RT	522296.32	200499.95
132	340+59.00	32.50' RT	522292.97	200503.67
133	340+59.00	27.50' RT	522296.69	200507.01
134	340+64.00	27.50' RT	522300.03	200503.29

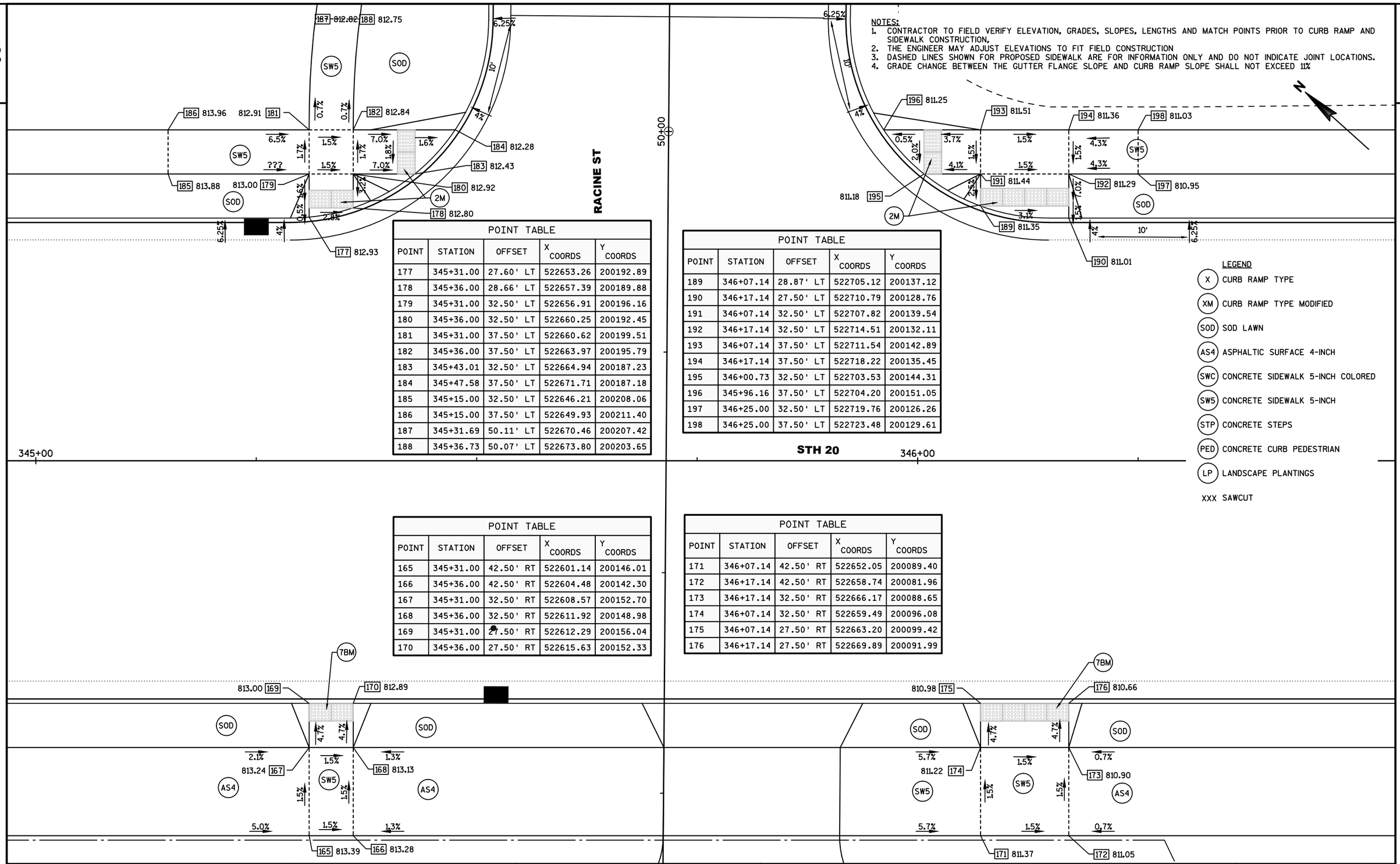


NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - RIVERMOOR DRIVE	SHEET 28	E



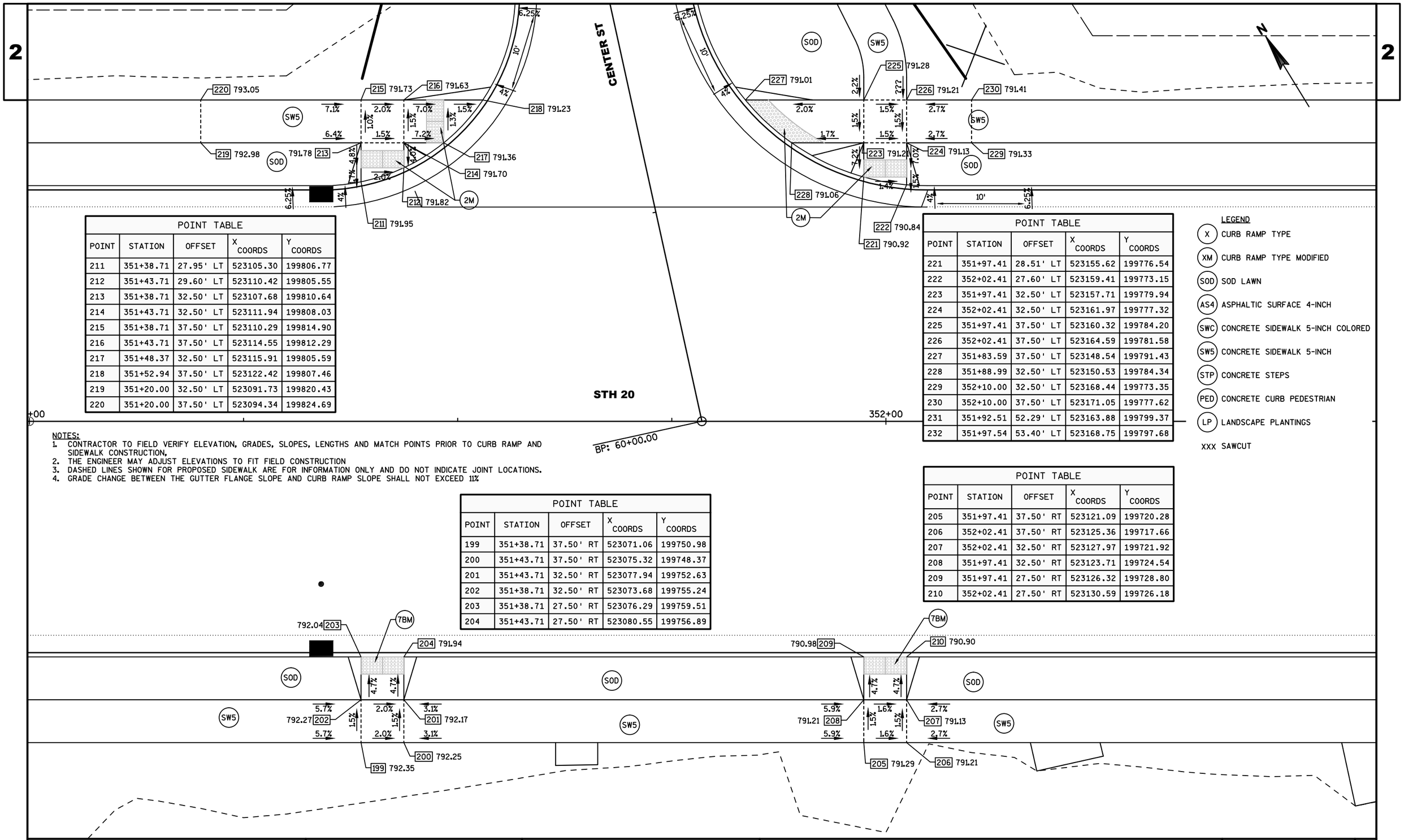
POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
177	345+31.00	27.60' LT	522653.26	200192.89
178	345+36.00	28.66' LT	522657.39	200189.88
179	345+31.00	32.50' LT	522656.91	200196.16
180	345+36.00	32.50' LT	522660.25	200192.45
181	345+31.00	37.50' LT	522660.62	200199.51
182	345+36.00	37.50' LT	522663.97	200195.79
183	345+43.01	32.50' LT	522664.94	200187.23
184	345+47.58	37.50' LT	522671.71	200187.18
185	345+15.00	32.50' LT	522646.21	200208.06
186	345+15.00	37.50' LT	522649.93	200211.40
187	345+31.69	50.11' LT	522670.46	200207.42
188	345+36.73	50.07' LT	522673.80	200203.65

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
189	346+07.14	28.87' LT	522705.12	200137.12
190	346+17.14	27.50' LT	522710.79	200128.76
191	346+07.14	32.50' LT	522707.82	200139.54
192	346+17.14	32.50' LT	522714.51	200132.11
193	346+07.14	37.50' LT	522711.54	200142.89
194	346+17.14	37.50' LT	522718.22	200135.45
195	346+00.73	32.50' LT	522703.53	200144.31
196	345+96.16	37.50' LT	522704.20	200151.05
197	346+25.00	32.50' LT	522719.76	200126.26
198	346+25.00	37.50' LT	522723.48	200129.61

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
165	345+31.00	42.50' RT	522601.14	200146.01
166	345+36.00	42.50' RT	522604.48	200142.30
167	345+31.00	32.50' RT	522608.57	200152.70
168	345+36.00	32.50' RT	522611.92	200148.98
169	345+31.00	27.50' RT	522612.29	200156.04
170	345+36.00	27.50' RT	522615.63	200152.33

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
171	346+07.14	42.50' RT	522652.05	200089.40
172	346+17.14	42.50' RT	522658.74	200081.96
173	346+17.14	32.50' RT	522666.17	200088.65
174	346+07.14	32.50' RT	522659.49	200096.08
175	346+07.14	27.50' RT	522663.20	200099.42
176	346+17.14	27.50' RT	522669.89	200091.99

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - RACINE STREET	SHEET 29 E



POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
211	351+38.71	27.95' LT	523105.30	199806.77
212	351+43.71	29.60' LT	523110.42	199805.55
213	351+38.71	32.50' LT	523107.68	199810.64
214	351+43.71	32.50' LT	523111.94	199808.03
215	351+38.71	37.50' LT	523110.29	199814.90
216	351+43.71	37.50' LT	523114.55	199812.29
217	351+48.37	32.50' LT	523115.91	199805.59
218	351+52.94	37.50' LT	523122.42	199807.46
219	351+20.00	32.50' LT	523091.73	199820.43
220	351+20.00	37.50' LT	523094.34	199824.69

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
221	351+97.41	28.51' LT	523155.62	199776.54
222	352+02.41	27.60' LT	523159.41	199773.15
223	351+97.41	32.50' LT	523157.71	199779.94
224	352+02.41	32.50' LT	523161.97	199777.32
225	351+97.41	37.50' LT	523160.32	199784.20
226	352+02.41	37.50' LT	523164.59	199781.58
227	351+83.59	37.50' LT	523148.54	199791.43
228	351+88.99	32.50' LT	523150.53	199784.34
229	352+10.00	32.50' LT	523168.44	199773.35
230	352+10.00	37.50' LT	523171.05	199777.62
231	351+92.51	52.29' LT	523163.88	199799.37
232	351+97.54	53.40' LT	523168.75	199797.68

LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS

XXX SAWCUT

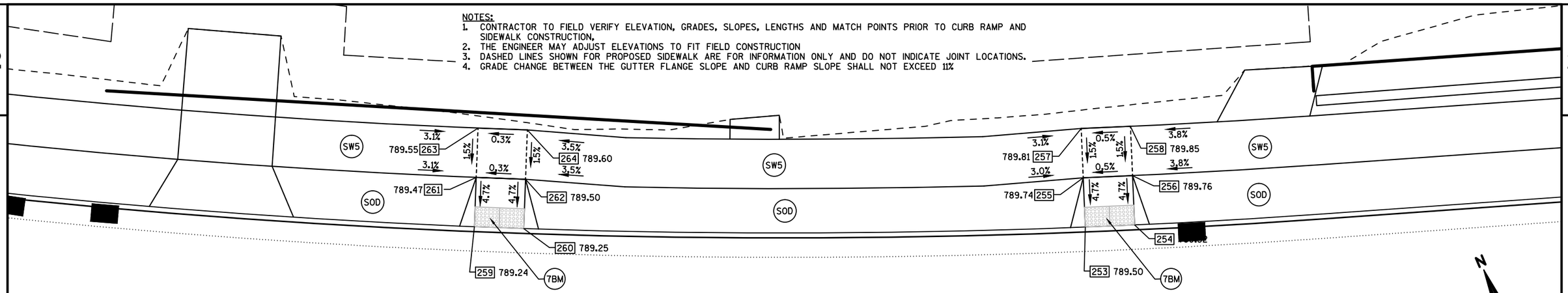
NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
199	351+38.71	37.50' RT	523071.06	199750.98
200	351+43.71	37.50' RT	523075.32	199748.37
201	351+43.71	32.50' RT	523077.94	199752.63
202	351+38.71	32.50' RT	523073.68	199755.24
203	351+38.71	27.50' RT	523076.29	199759.51
204	351+43.71	27.50' RT	523080.55	199756.89

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
205	351+97.41	37.50' RT	523121.09	199720.28
206	352+02.41	37.50' RT	523125.36	199717.66
207	352+02.41	32.50' RT	523127.97	199721.92
208	351+97.41	32.50' RT	523123.71	199724.54
209	351+97.41	27.50' RT	523126.32	199728.80
210	352+02.41	27.50' RT	523130.59	199726.18

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - CENTER STREET	SHEET 30	E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%



LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
259	354+54.76	27.50' LT	523374.07	199646.35
260	354+59.93	27.50' LT	523378.59	199644.21
261	354+54.74	32.50' LT	523376.21	199650.87
262	354+59.95	32.50' LT	523380.73	199648.73
263	354+54.72	37.50' LT	523378.35	199655.39
264	354+59.97	37.50' LT	523382.87	199653.25

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
253	355+18.90	27.50' LT	523430.99	199621.97
254	355+24.07	27.50' LT	523435.67	199620.20
255	355+18.88	32.50' LT	523432.76	199626.65
256	355+24.09	32.50' LT	523437.44	199624.88
257	355+18.86	37.50' LT	523434.53	199631.33
258	355+24.11	37.50' LT	523439.20	199629.56

STH 20

EP: 70+00.00

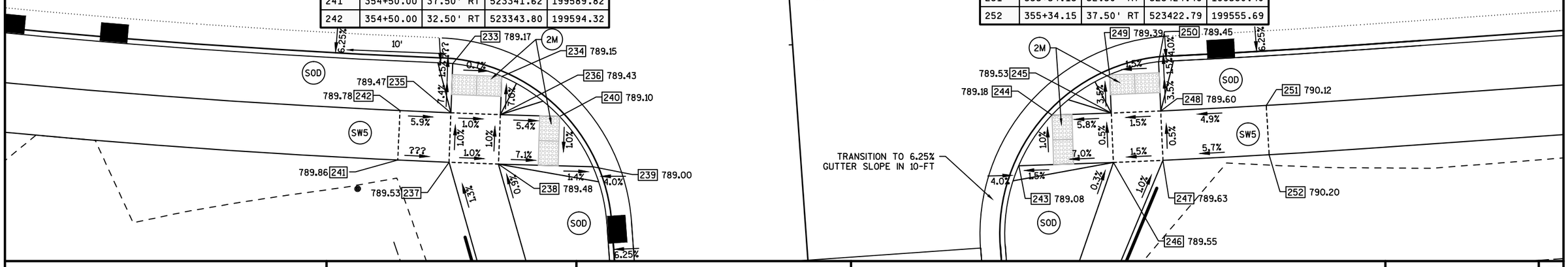
355+00

PT: 355+43.82

S WATER ST

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
233	354+54.93	27.54' RT	523350.56	199596.58
234	354+59.76	28.64' RT	523354.61	199593.45
235	354+54.94	32.50' RT	523348.44	199592.10
236	354+59.75	32.50' RT	523352.96	199589.96
237	354+54.96	37.50' RT	523346.30	199587.58
238	354+59.73	37.50' RT	523350.82	199585.44
239	354+68.85	37.50' RT	523359.49	199581.44
240	354+65.50	32.50' RT	523358.39	199587.44
241	354+50.00	37.50' RT	523341.62	199589.82
242	354+50.00	32.50' RT	523343.80	199594.32

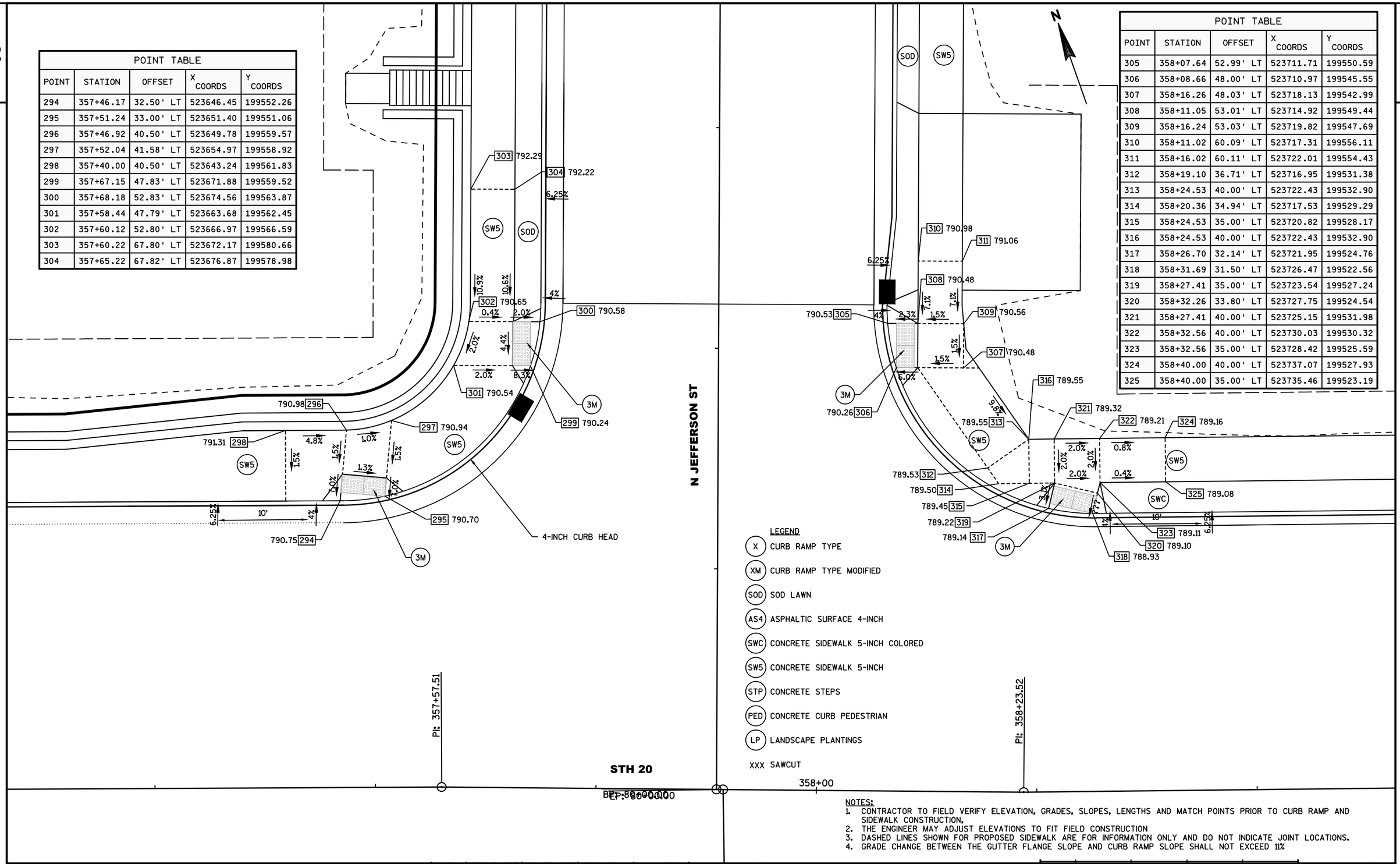
POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
243	355+09.98	37.50' RT	523399.11	199564.62
244	355+13.33	32.50' RT	523404.20	199568.00
245	355+19.08	32.50' RT	523409.78	199565.85
246	355+19.10	37.50' RT	523408.02	199561.17
247	355+23.87	37.50' RT	523412.69	199559.40
248	355+23.89	32.50' RT	523414.46	199564.08
249	355+19.07	28.64' RT	523411.15	199569.46
250	355+23.90	27.54' RT	523416.21	199568.72
251	355+34.15	32.50' RT	523424.48	199560.40
252	355+34.15	37.50' RT	523422.79	199555.69



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - S WATER STREET	SHEET 31 E

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
294	357+46.17	32.50' LT	523646.45	199552.26
295	357+51.24	33.00' LT	523651.40	199551.06
296	357+46.92	40.50' LT	523649.78	199559.57
297	357+52.04	41.58' LT	523654.97	199558.92
298	357+40.00	40.50' LT	523643.24	199561.83
299	357+67.15	47.83' LT	523671.88	199559.52
300	357+68.18	52.83' LT	523674.56	199563.87
301	357+58.44	47.79' LT	523663.68	199562.45
302	357+60.12	52.80' LT	523666.97	199566.59
303	357+60.22	67.80' LT	523672.17	199580.66
304	357+65.22	67.82' LT	523676.87	199578.98

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
305	358+07.64	52.99' LT	523711.71	199550.59
306	358+08.66	48.00' LT	523710.97	199545.55
307	358+16.26	48.03' LT	523718.13	199542.99
308	358+11.05	53.01' LT	523714.92	199549.44
309	358+16.24	53.03' LT	523719.82	199547.69
310	358+11.02	60.09' LT	523717.31	199556.11
311	358+16.02	60.11' LT	523722.01	199554.43
312	358+19.10	36.71' LT	523716.95	199531.38
313	358+24.53	40.00' LT	523722.43	199532.90
314	358+20.36	34.94' LT	523717.53	199529.29
315	358+24.53	35.00' LT	523720.82	199528.17
316	358+24.53	40.00' LT	523722.43	199532.90
317	358+26.70	32.14' LT	523721.95	199524.76
318	358+31.69	31.50' LT	523726.47	199522.56
319	358+27.41	35.00' LT	523723.54	199527.24
320	358+32.26	33.80' LT	523727.75	199524.54
321	358+27.41	40.00' LT	523725.15	199531.98
322	358+32.56	40.00' LT	523730.03	199530.32
323	358+32.56	35.00' LT	523728.42	199525.59
324	358+40.00	40.00' LT	523737.07	199527.93
325	358+40.00	35.00' LT	523735.46	199523.19



LEGEND

X	CURB RAMP TYPE
XM	CURB RAMP TYPE MODIFIED
SOD	SOD LAWN
AS4	ASPHALTIC SURFACE 4-INCH
SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
STP	CONCRETE STEPS
PED	CONCRETE CURB PEDESTRIAN
LP	LANDSCAPE PLANTINGS

XXX SAWCUT

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - N JEFFERSON STREET	SHEET 32	E

2

PI: 357+57.51

PI: 358+23.52

STH 20

BEP: 357+00.00

EP: 360+00.00

358+00

N

2

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
265	357+39.55	38.27' RT	523617.04	199487.54
266	357+44.27	41.47' RT	523620.46	199482.98
267	357+39.09	43.16' RT	523615.01	199483.08
268	357+43.80	46.48' RT	523618.37	199478.40
269	357+49.10	45.86' RT	523623.58	199477.25
270	357+52.86	50.46' RT	523625.63	199471.68
271	357+44.38	51.45' RT	523617.30	199473.51
272	357+41.01	53.57' RT	523613.41	199472.61
273	357+37.58	48.10' RT	523611.96	199478.90
274	357+36.52	47.44' RT	523611.17	199479.88
275	357+32.06	45.18' RT	523607.70	199483.47
276	357+33.99	40.57' RT	523611.03	199487.20
277	357+45.03	59.98' RT	523615.12	199465.24
278	357+51.89	55.54' RT	523623.05	199467.19

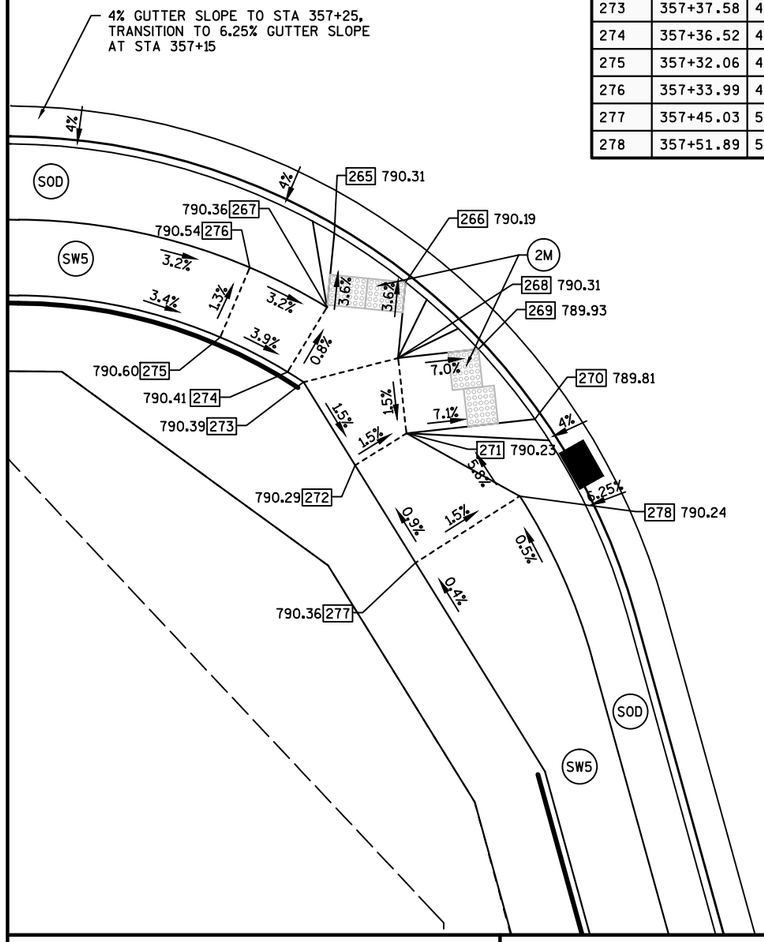
LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS

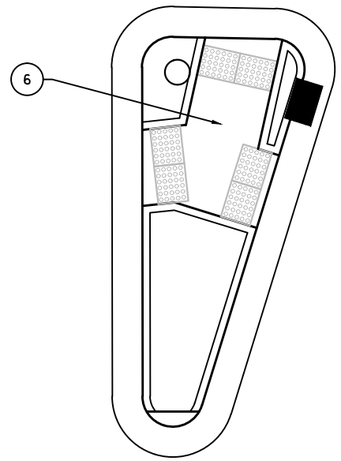
XXX SAWCUT

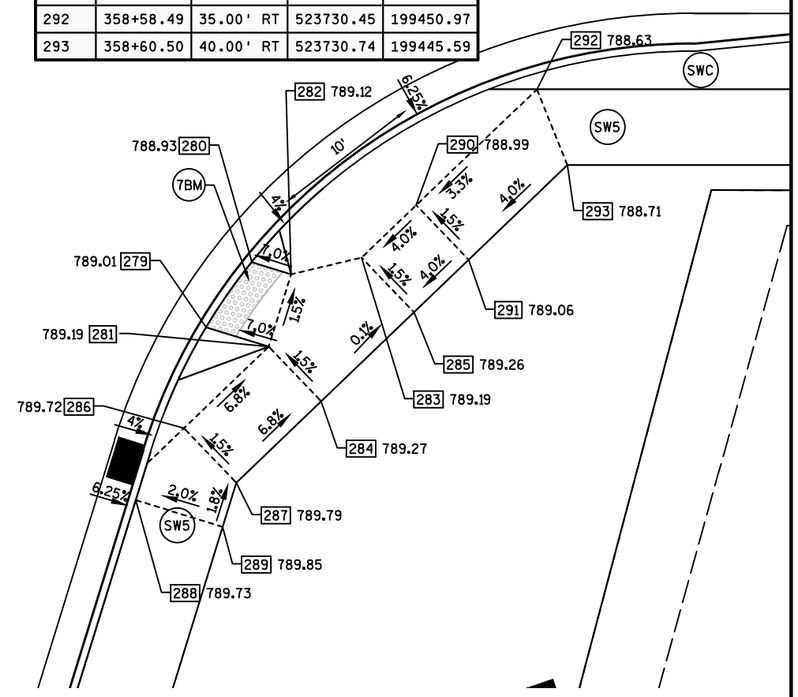
POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
279	358+36.67	50.71' RT	523704.74	199443.11
280	358+39.68	46.41' RT	523708.97	199446.21
281	358+40.79	51.99' RT	523708.23	199440.58
282	358+42.27	47.21' RT	523711.16	199444.62
283	358+46.91	46.11' RT	523715.91	199444.17
284	358+44.25	55.59' RT	523710.34	199436.05
285	358+50.38	49.72' RT	523718.03	199439.64
286	358+35.19	57.36' RT	523701.19	199437.29
287	358+38.65	60.97' RT	523703.31	199432.76
288	358+32.02	62.11' RT	523696.66	199433.81
289	358+37.75	63.88' RT	523701.52	199430.29
290	358+50.52	42.65' RT	523720.44	199446.29
291	358+53.98	46.25' RT	523722.56	199441.76
292	358+58.49	35.00' RT	523730.45	199450.97
293	358+60.50	40.00' RT	523730.74	199445.59

4% GUTTER SLOPE TO STA 357+25, TRANSITION TO 6.25% GUTTER SLOPE AT STA 357+15



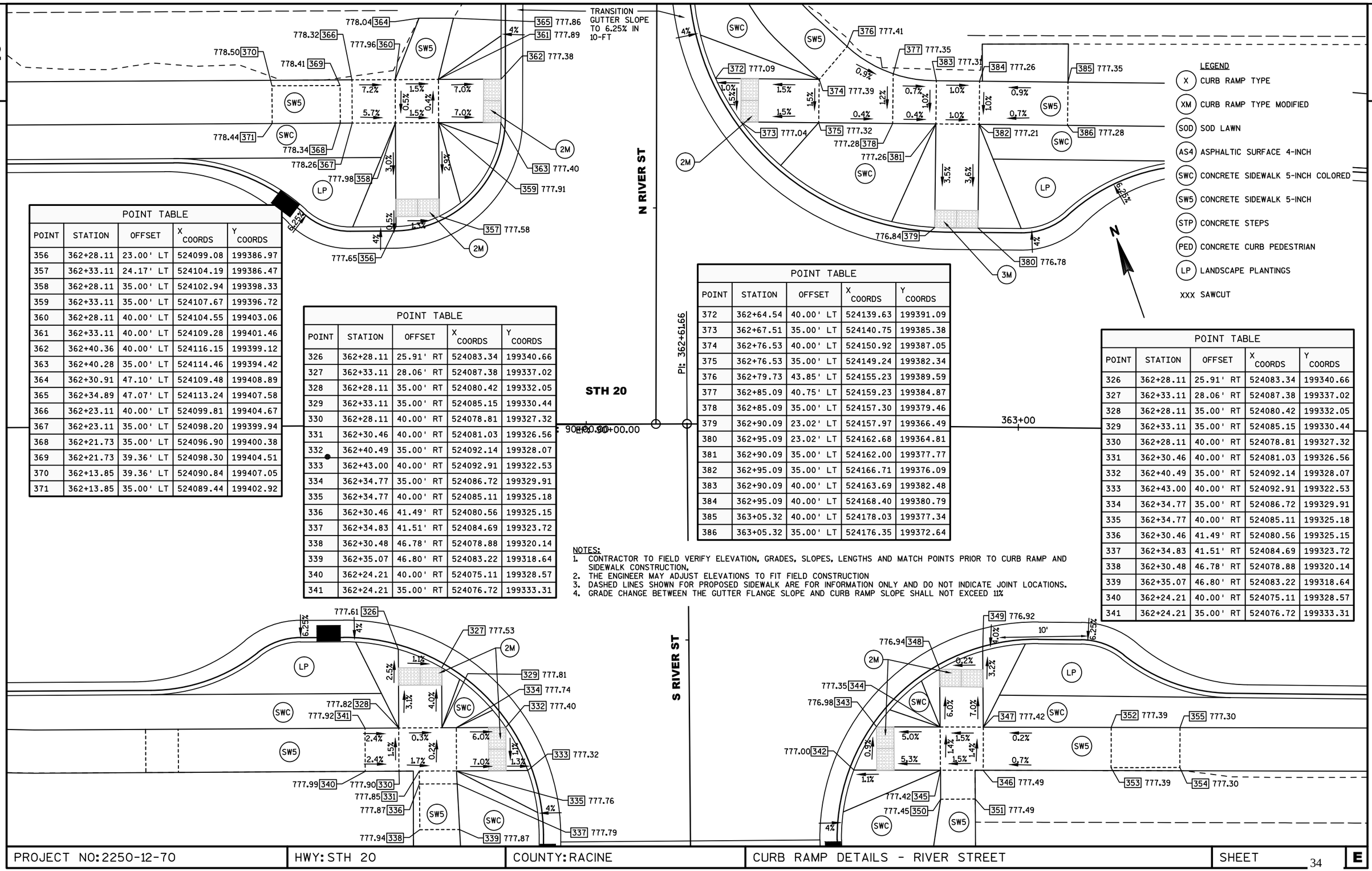
S JEFFERSON ST





NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - S JEFFERSON STREET	SHEET 33	E



POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
356	362+28.11	23.00' LT	524099.08	199386.97
357	362+33.11	24.17' LT	524104.19	199386.47
358	362+28.11	35.00' LT	524102.94	199398.33
359	362+33.11	35.00' LT	524107.67	199396.72
360	362+28.11	40.00' LT	524104.55	199403.06
361	362+33.11	40.00' LT	524109.28	199401.46
362	362+40.36	40.00' LT	524116.15	199399.12
363	362+40.28	35.00' LT	524114.46	199394.42
364	362+30.91	47.10' LT	524109.48	199408.89
365	362+34.89	47.07' LT	524113.24	199407.58
366	362+23.11	40.00' LT	524099.81	199404.67
367	362+23.11	35.00' LT	524098.20	199399.94
368	362+21.73	35.00' LT	524096.90	199400.38
369	362+21.73	39.36' LT	524098.30	199404.51
370	362+13.85	39.36' LT	524090.84	199407.05
371	362+13.85	35.00' LT	524089.44	199402.92

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
326	362+28.11	25.91' RT	524083.34	199340.66
327	362+33.11	28.06' RT	524087.38	199337.02
328	362+28.11	35.00' RT	524080.42	199332.05
329	362+33.11	35.00' RT	524085.15	199330.44
330	362+28.11	40.00' RT	524078.81	199327.32
331	362+30.46	40.00' RT	524081.03	199326.56
332	362+40.49	35.00' RT	524092.14	199328.07
333	362+43.00	40.00' RT	524092.91	199322.53
334	362+34.77	35.00' RT	524086.72	199329.91
335	362+34.77	40.00' RT	524085.11	199325.18
336	362+30.46	41.49' RT	524080.56	199325.15
337	362+34.83	41.51' RT	524084.69	199323.72
338	362+30.48	46.78' RT	524078.88	199320.14
339	362+35.07	46.80' RT	524083.22	199318.64
340	362+24.21	40.00' RT	524075.11	199328.57
341	362+24.21	35.00' RT	524076.72	199333.31

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
372	362+64.54	40.00' LT	524139.63	199391.09
373	362+67.51	35.00' LT	524140.75	199385.38
374	362+76.53	40.00' LT	524150.92	199387.05
375	362+76.53	35.00' LT	524149.24	199382.34
376	362+79.73	43.85' LT	524155.23	199389.59
377	362+85.09	40.75' LT	524159.23	199384.87
378	362+85.09	35.00' LT	524157.30	199379.46
379	362+90.09	23.02' LT	524157.97	199366.49
380	362+95.09	23.02' LT	524162.68	199364.81
381	362+90.09	35.00' LT	524162.00	199377.77
382	362+95.09	35.00' LT	524166.71	199376.09
383	362+90.09	40.00' LT	524163.69	199382.48
384	362+95.09	40.00' LT	524168.40	199380.79
385	363+05.32	40.00' LT	524178.03	199377.34
386	363+05.32	35.00' LT	524176.35	199372.64

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
326	362+28.11	25.91' RT	524083.34	199340.66
327	362+33.11	28.06' RT	524087.38	199337.02
328	362+28.11	35.00' RT	524080.42	199332.05
329	362+33.11	35.00' RT	524085.15	199330.44
330	362+28.11	40.00' RT	524078.81	199327.32
331	362+30.46	40.00' RT	524081.03	199326.56
332	362+40.49	35.00' RT	524092.14	199328.07
333	362+43.00	40.00' RT	524092.91	199322.53
334	362+34.77	35.00' RT	524086.72	199329.91
335	362+34.77	40.00' RT	524085.11	199325.18
336	362+30.46	41.49' RT	524080.56	199325.15
337	362+34.83	41.51' RT	524084.69	199323.72
338	362+30.48	46.78' RT	524078.88	199320.14
339	362+35.07	46.80' RT	524083.22	199318.64
340	362+24.21	40.00' RT	524075.11	199328.57
341	362+24.21	35.00' RT	524076.72	199333.31

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - RIVER STREET	SHEET 34 E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
414	100+39.41	25.50' LT	524534.53	199258.65
415	100+44.41	25.50' LT	524539.53	199258.70
416	100+39.41	30.50' LT	524534.48	199263.65
417	100+44.41	30.50' LT	524539.48	199263.70
418	100+39.41	34.50' LT	524534.45	199267.65
419	100+44.41	34.50' LT	524539.45	199267.70

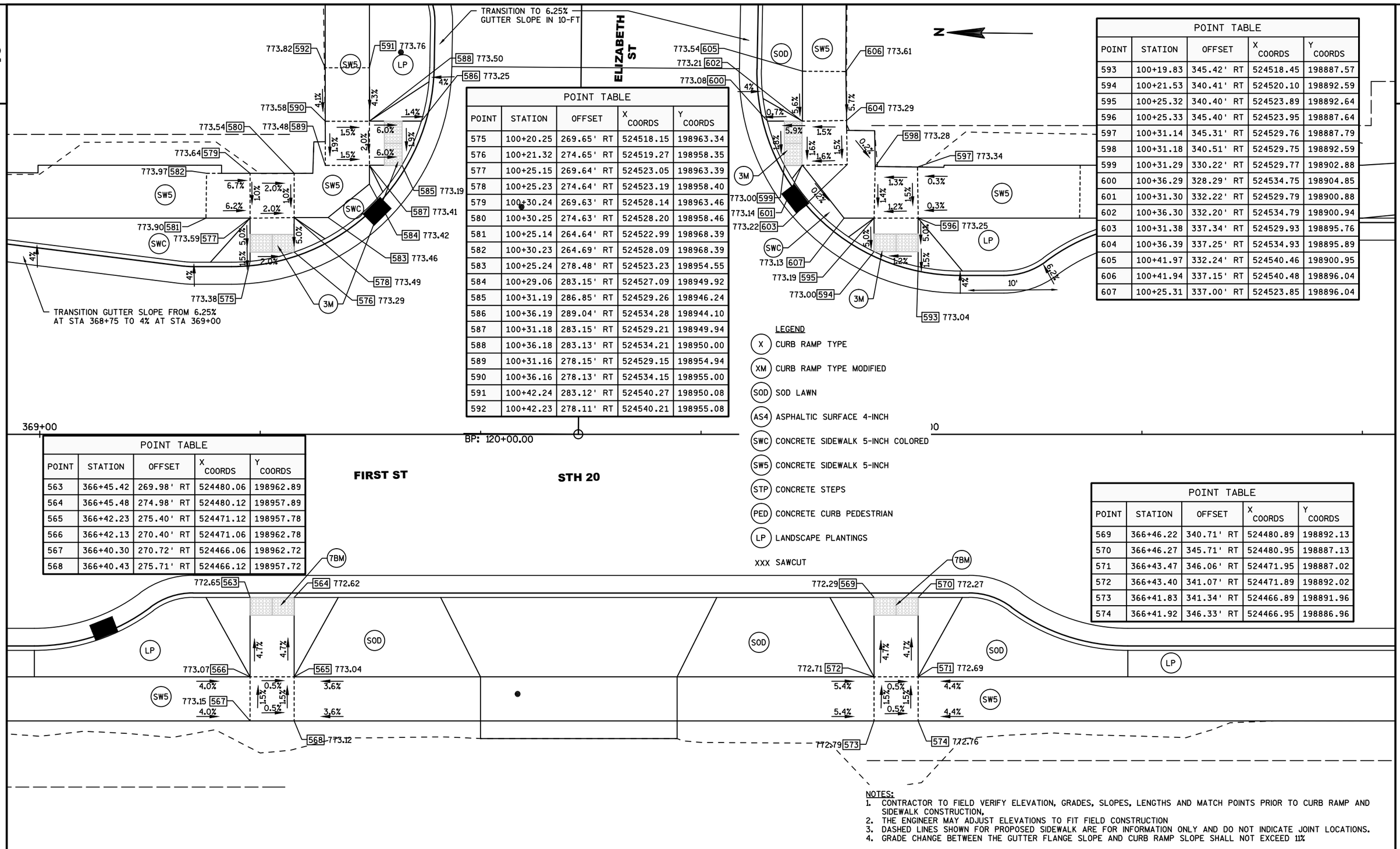
POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
391	366+31.85	53.46' RT	524467.15	199180.58
392	366+29.68	48.79' RT	524464.84	199185.55
393	366+27.85	54.19' RT	524461.73	199180.52
394	366+27.29	49.25' RT	524461.67	199185.52
395	366+23.82	55.08' RT	524456.21	199180.45
396	366+21.08	50.68' RT	524453.35	199185.42

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
397	100+25.86	51.80' RT	524521.71	199181.23
398	100+27.61	46.80' RT	524523.42	199186.25
399	100+31.48	46.79' RT	524527.29	199186.29
400	100+31.50	51.79' RT	524527.35	199181.29
401	100+33.78	46.78' RT	524529.58	199186.32
402	100+38.13	49.24' RT	524533.96	199183.91
403	100+36.21	53.46' RT	524532.08	199179.66
404	100+29.70	60.77' RT	524525.63	199172.30
405	100+34.71	60.76' RT	524530.64	199172.36
406	100+39.41	32.19' RT	524535.08	199200.97
407	100+44.41	29.18' RT	524540.05	199204.02
408	100+39.41	35.54' RT	524535.11	199197.61
409	100+44.41	35.54' RT	524540.11	199197.66
410	100+39.41	39.49' RT	524535.14	199193.66
411	100+42.88	43.09' RT	524538.65	199190.10
412	100+44.41	35.54' RT	524540.11	199197.66
413	100+47.10	39.76' RT	524542.84	199193.47

LEGEND
- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

STH 20
W MAIN ST
E MAIN ST
FIRST ST
STH 20
PC: 365+95.59
366+00
PT: 366+50.68
100+00
BP: 366+54.16
STA BACK = 366+54.16
STA AHEAD = 100+00.00
367+00
TRANSITION TO 6.25% GUTTER SLOPE IN 10-FT
TRANSITION TO 6.25% GUTTER SLOPE 10-FT

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - FIRST STREET/E MAIN STREET	SHEET 35	E



POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
575	100+20.25	269.65' RT	524518.15	198963.34
576	100+21.32	274.65' RT	524519.27	198958.35
577	100+25.15	269.64' RT	524523.05	198963.39
578	100+25.23	274.64' RT	524523.19	198958.40
579	100+30.24	269.63' RT	524528.14	198963.46
580	100+30.25	274.63' RT	524528.20	198958.46
581	100+25.14	264.64' RT	524522.99	198968.39
582	100+30.23	264.69' RT	524528.09	198968.39
583	100+25.24	278.48' RT	524523.23	198954.55
584	100+29.06	283.15' RT	524527.09	198949.92
585	100+31.19	286.85' RT	524529.26	198946.24
586	100+36.19	289.04' RT	524534.28	198944.10
587	100+31.18	283.15' RT	524529.21	198949.94
588	100+36.18	283.13' RT	524534.21	198950.00
589	100+31.16	278.15' RT	524529.15	198954.94
590	100+36.16	278.13' RT	524534.15	198955.00
591	100+42.24	283.12' RT	524540.27	198950.08
592	100+42.23	278.11' RT	524540.21	198955.08

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
593	100+19.83	345.42' RT	524518.45	198887.57
594	100+21.53	340.41' RT	524520.10	198892.59
595	100+25.32	340.40' RT	524523.89	198892.64
596	100+25.33	345.40' RT	524523.95	198887.64
597	100+31.14	345.31' RT	524529.76	198887.79
598	100+31.18	340.51' RT	524529.75	198892.59
599	100+31.29	330.22' RT	524529.77	198902.88
600	100+36.29	328.29' RT	524534.75	198904.85
601	100+31.30	332.22' RT	524529.79	198900.88
602	100+36.30	332.20' RT	524534.79	198900.94
603	100+31.38	337.34' RT	524529.93	198895.76
604	100+36.39	337.25' RT	524534.93	198895.89
605	100+41.97	332.24' RT	524540.46	198900.95
606	100+41.94	337.15' RT	524540.48	198896.04
607	100+25.31	337.00' RT	524523.85	198896.04

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
563	366+45.42	269.98' RT	524480.06	198962.89
564	366+45.48	274.98' RT	524480.12	198957.89
565	366+42.23	275.40' RT	524471.12	198957.78
566	366+42.13	270.40' RT	524471.06	198962.78
567	366+40.30	270.72' RT	524466.06	198962.72
568	366+40.43	275.71' RT	524466.12	198957.72

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
569	366+46.22	340.71' RT	524480.89	198892.13
570	366+46.27	345.71' RT	524480.95	198887.13
571	366+43.47	346.06' RT	524471.95	198887.02
572	366+43.40	341.07' RT	524471.89	198892.02
573	366+41.83	341.34' RT	524466.89	198891.96
574	366+41.92	346.33' RT	524466.95	198886.96

LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

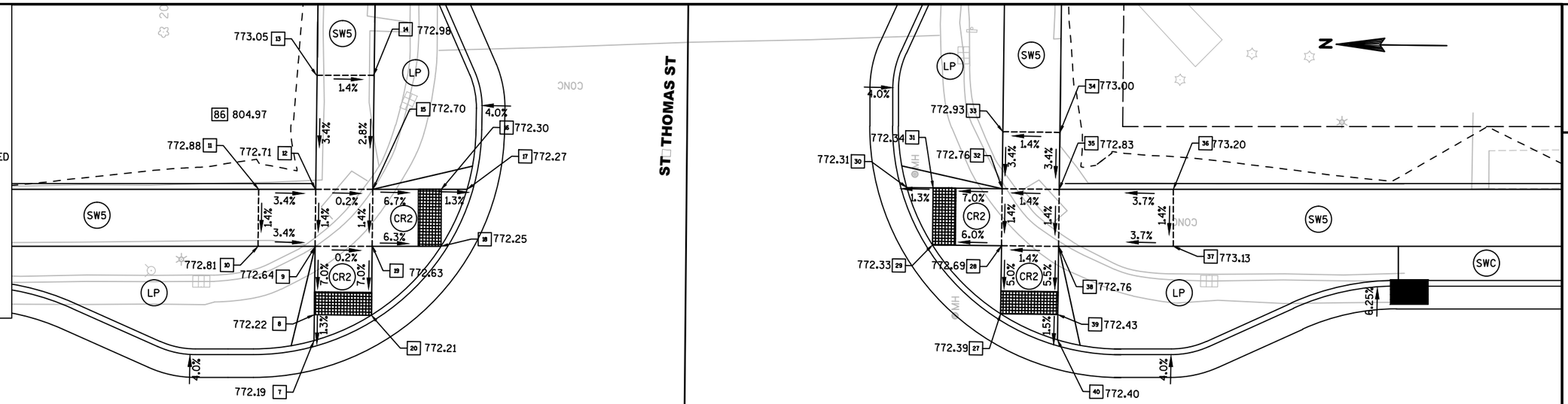
NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - ELIZABETH STREET	SHEET 36	E

LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS

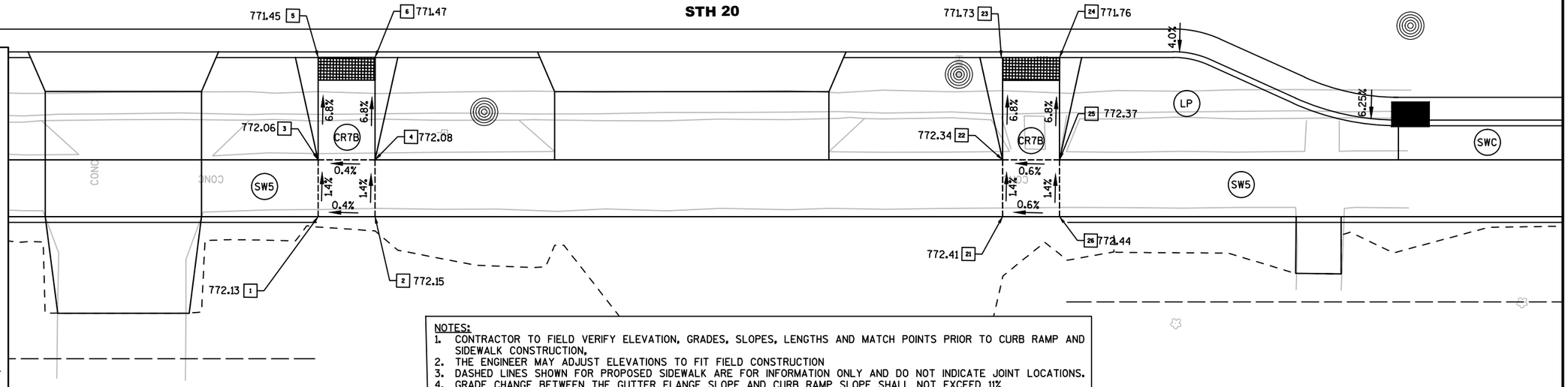
XXX SAWCUT



POINT TABLE				
POINT	STATION	OFFSET	X CORRDS	Y CORRDS
1	372+36.17	32.5' RT	524469.75	198650.44
2	372+41.17	32.5' RT	524469.81	198645.44
3	372+36.15	27.5' RT	524474.75	198650.51
4	372+41.17	27.5' RT	524474.81	198645.50
5	372+36.17	18.5' RT	524483.75	198650.60
6	372+41.17	18.5' RT	524483.81	198645.60
7	372+36.18	19.23' LT	524521.48	198651.03
8	372+36.21	21.52' LT	524523.76	198651.03
9	372+36.28	27.5' LT	524529.75	198651.03
10	372+31.28	27.5' LT	524529.69	198656.03
11	372+31.34	32.5' LT	524534.69	198656.03
12	372+36.29	32.5' LT	524534.75	198651.08
13	372+36.41	42.5' LT	524544.75	198651.08
14	372+41.40	42.5' LT	524544.81	198646.09
15	372+41.34	32.5' LT	524534.81	198646.03
16	372+47.33	32.5' LT	524534.88	198640.04
17	372+49.59	32.5' LT	524534.91	198637.78
18	372+47.32	27.5' LT	524529.88	198640.00
19	372+41.28	27.56' LT	524529.87	198646.03
20	372+41.21	21.46' LT	524523.76	198646.03
21	372+96.31	32.5' RT	524470.46	198590.30
22	372+96.37	27.5' RT	524475.46	198590.30
23	372+96.31	18.5' RT	524484.46	198590.46
24	373+01.31	18.5' RT	524484.52	198585.46
25	373+01.20	27.5' RT	524475.52	198585.46
26	373+01.31	32.5' RT	524470.52	198585.30
27	372+96.35	21.59' LT	524524.55	198590.90
28	372+96.42	27.56' LT	524530.52	198590.90
29	372+90.37	27.63' LT	524530.52	198596.94
30	372+88.13	32.66' LT	524535.52	198599.24
31	372+90.43	32.63' LT	524535.52	198596.94
32	372+96.48	32.56' LT	524535.52	198590.90
33	372+96.54	37.56' LT	524540.52	198590.90
34	373+01.54	37.50' LT	524540.52	198585.90
35	373+01.48	32.50' LT	524535.52	198585.90
36	373+11.48	32.5' LT	524535.64	198575.90
37	373+11.48	27.5' LT	524530.40	198575.84
38	373+01.42	27.5' LT	524530.52	198585.90
39	373+01.35	21.53' LT	524524.55	198585.90
40	373+01.32	19.31' LT	524522.32	198585.90

372+00

STH 20



Lakeside ENGINEERS

THIS STAMP APPLIES TO
CURB RAMP DETAILS
FROM STA. 370+50 TO STA. 406+00

(Date) (Signature)

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

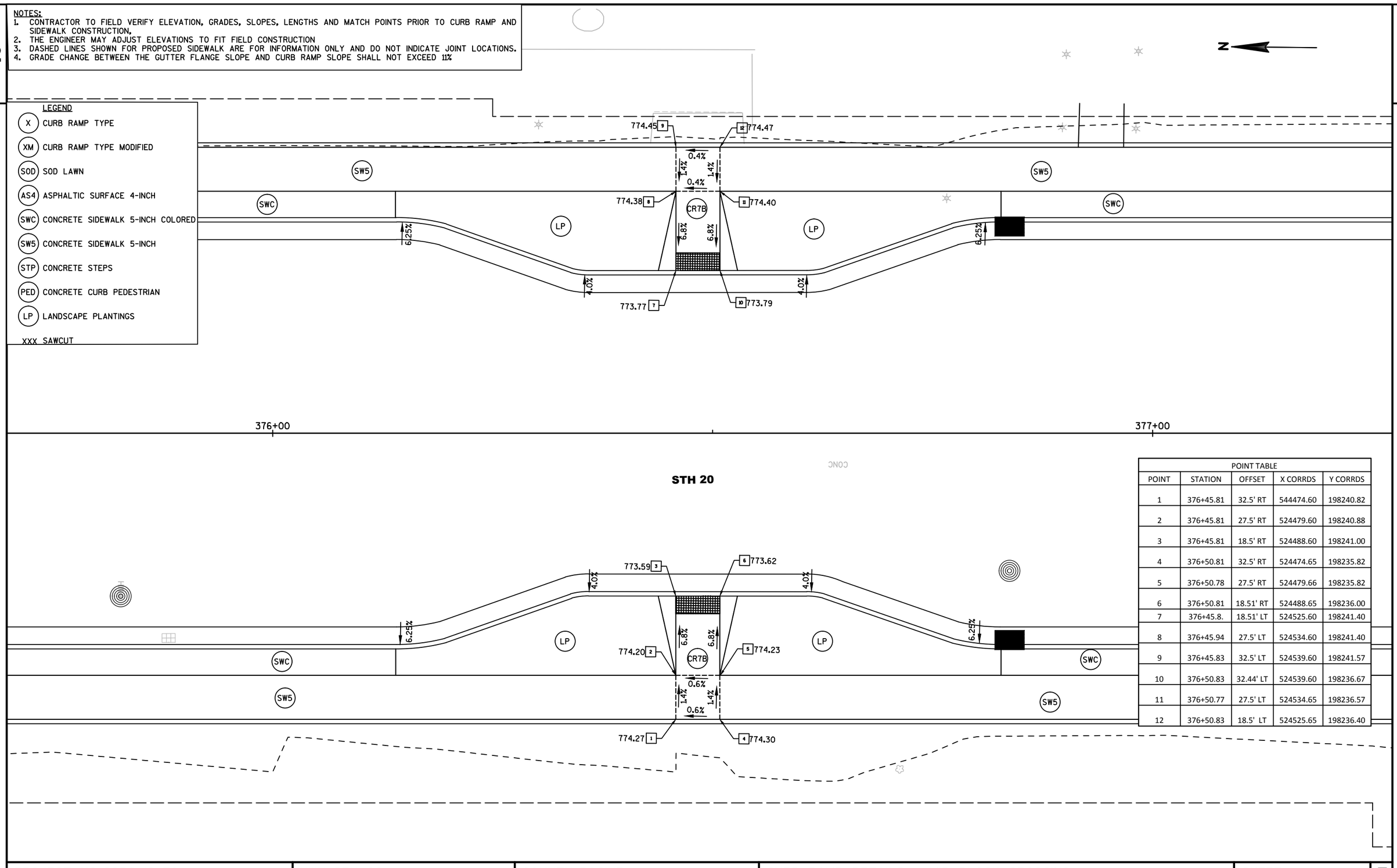
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - ST. THOMAS STREET	SHEET 37	E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS

XXX SAWCUT

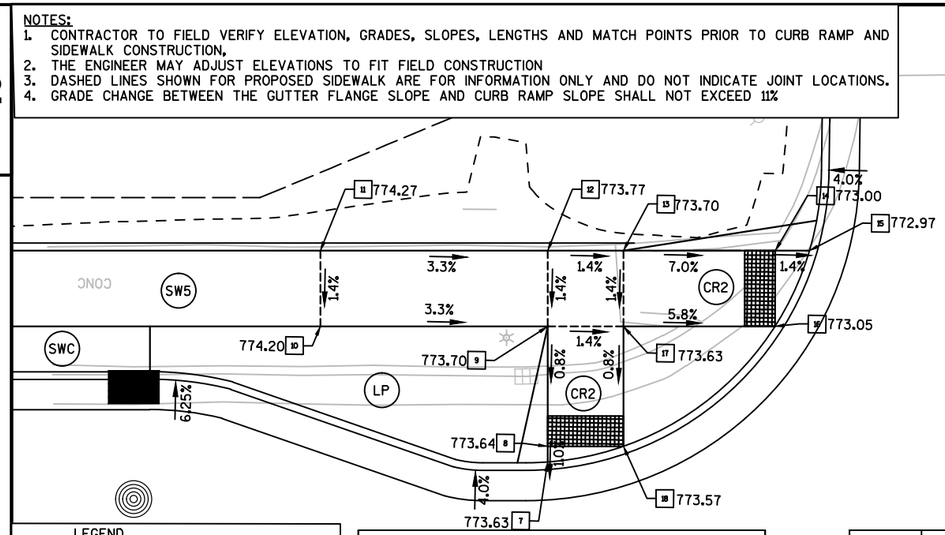


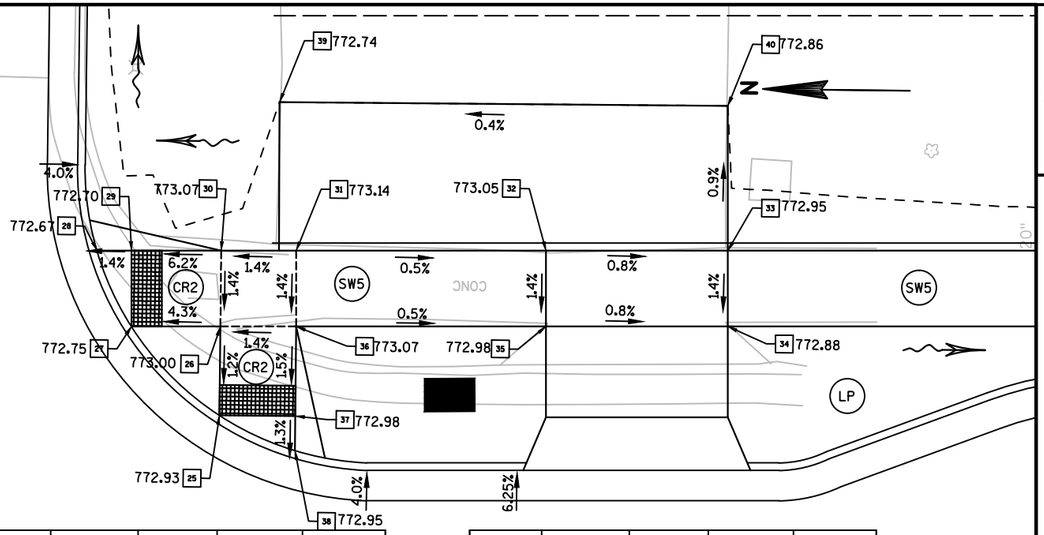
STH 20

POINT TABLE				
POINT	STATION	OFFSET	X CORRDS	Y CORRDS
1	376+45.81	32.5' RT	544474.60	198240.82
2	376+45.81	27.5' RT	524479.60	198240.88
3	376+45.81	18.5' RT	524488.60	198241.00
4	376+50.81	32.5' RT	524474.65	198235.82
5	376+50.78	27.5' RT	524479.66	198235.82
6	376+50.81	18.51' RT	524488.65	198236.00
7	376+45.8.	18.51' LT	524525.60	198241.40
8	376+45.94	27.5' LT	524534.60	198241.40
9	376+45.83	32.5' LT	524539.60	198241.57
10	376+50.83	32.44' LT	524539.60	198236.67
11	376+50.77	27.5' LT	524534.65	198236.57
12	376+50.83	18.5' LT	524525.65	198236.40

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - MID BLOCK CROSSING	SHEET 38	E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%



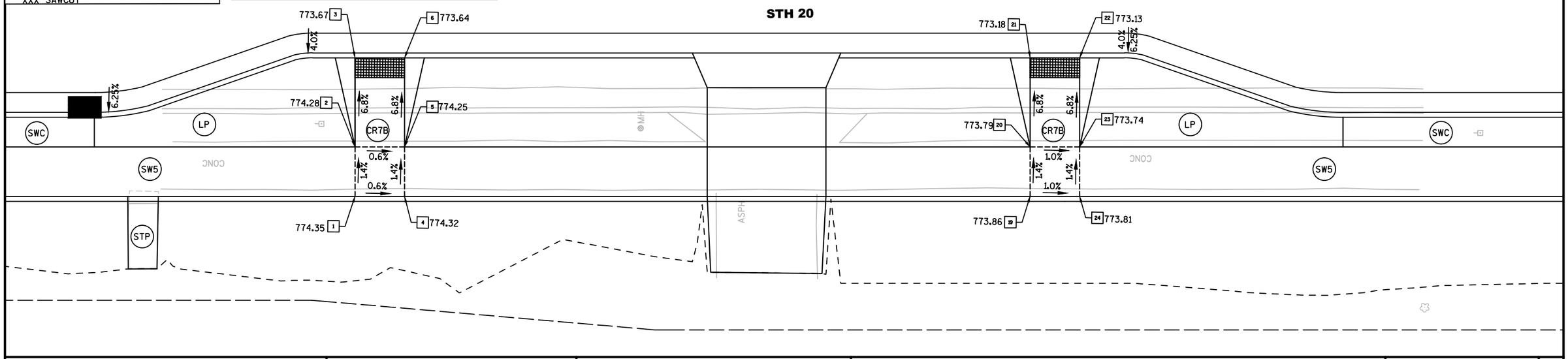


LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

POINT TABLE

POINT	STATION	OFFSET	X CORRDS	Y CORRDS
1	380+03.99	32.5' RT	524478.83	197882.67
2	380+03.99	27.5' RT	524483.83	197882.73
3	380+03.99	18.5' RT	524492.83	197882.83
4	380+08.99	32.5' RT	524478.89	197877.67
5	380+08.99	27.5' RT	524483.89	197877.73
6	380+08.99	18.5' RT	524492.89	197877.83
7	380+03.99	18.55' LT	524529.88	197883.27
8	380+04.00	19.59' LT	524530.92	197883.27
9	380+03.99	27.5' LT	524538.83	197883.38
10	379+88.99	27.5' LT	524538.65	197898.38
11	379+88.99	32.5' LT	524543.65	197898.44
12	380+03.99	32.5' LT	524543.83	197883.44
13	380+08.99	32.5' LT	524543.89	197878.44
14	380+19.00	32.5' LT	524544.00	197868.42
15	380+21.26	32.5' LT	524544.03	197866.16
16	380+18+98	27.5' LT	524539.00	197868.38
17	380+08.99	27.5'LT	524538.89	197878.38
18	380+08.99	19.59' LT	524530.98	197878.28
19	380+72.20	32.5' RT	524479.64	197814.46
20	380+72.26	27.5' RT	524484.64	197814.46
21	380+72.20	18.5' RT	524493.64	197814.63
22	380+77.20	18.5' RT	524493.69	197809.63
23	380+77.09	27.5' RT	524487.70	197809.63
24	380+77.20	32.5' RT	524479.70	197809.46
25	380+72..21	21.64' LT	524533.77	197815.09
26	380+72.27	27.5' LT	524539.63	197815.10
27	380+66.41	27.5' LT	524539.67	197820.96
28	380+64.14	32.5' LT	524544.54	197823.29
29	380+66.41	32.5' LT	524544.58	197820.02
30	380+72.32	32.5' LT	524544.63	197815.11
31	380+77.27	32.44' LT	524544.63	197810.16
32	380+93.74	32.5' LT	524544.89	197793.69
33	381+05.76	32.5' LT	524545.03	197781.67
34	381+05.70	27.5' LT	524540.03	197781.67
35	380+93.76	27.5' LT	524539.89	197793.61
36	380+77.27	27.5' LT	524539.69	197810.10
37	380+77.20	21.59' LT	524533.78	197810.10
38	380+77.18	19.32' LT	524531.51	197810.10
39	380+76.17	42.30' LT	5244554.48	197811.37
40	381+05.76	42.06' LT	524554.59	197781.79

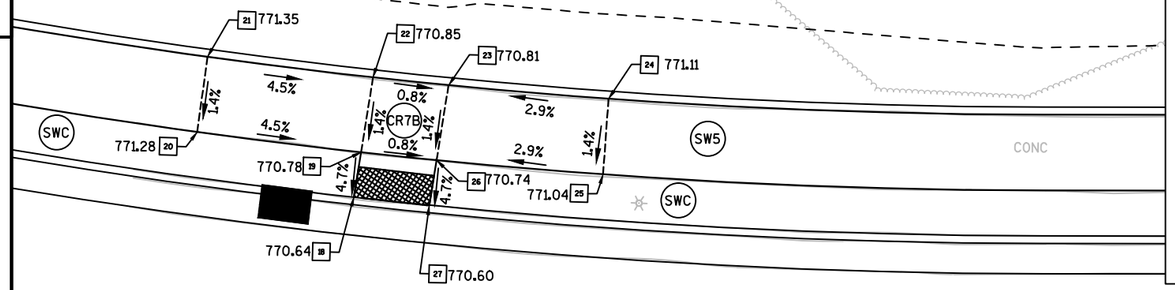


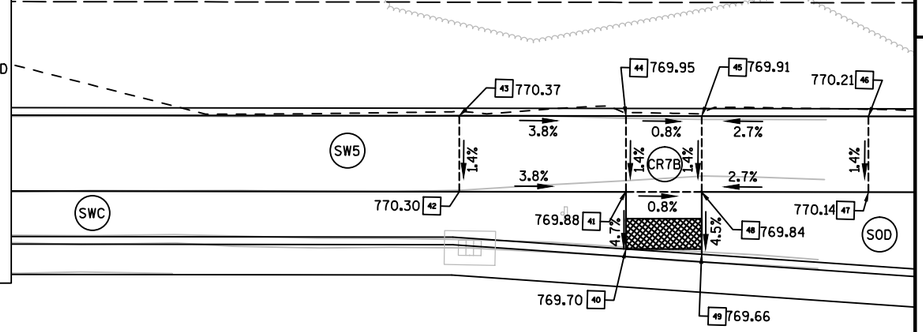
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - WEBER STREET	SHEET 39	E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

LEGEND

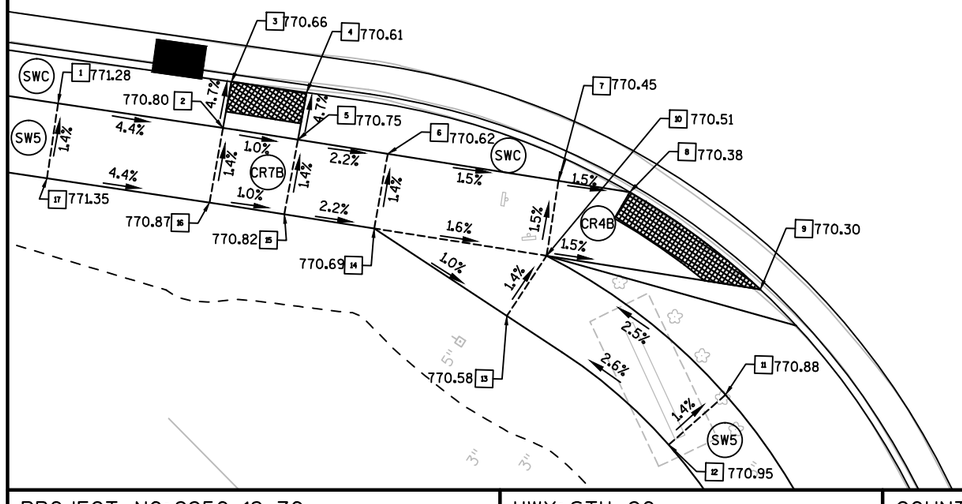
- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

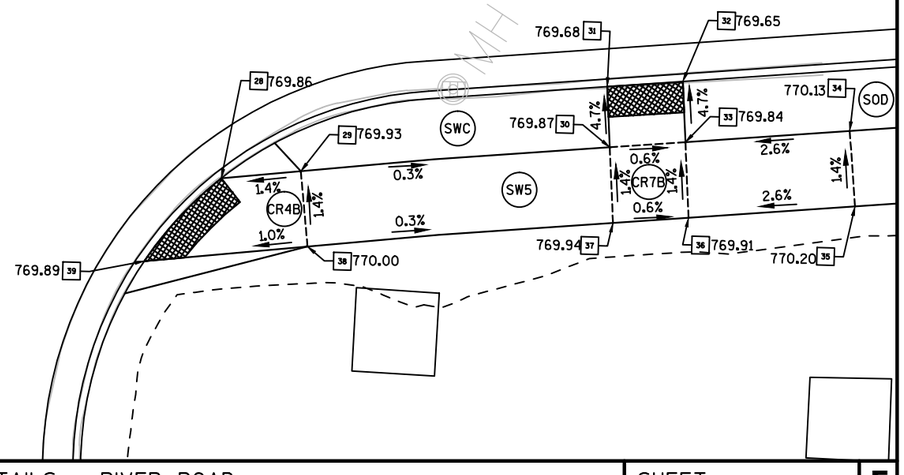




STH 20

POINT TABLE				
POINT	STATION	OFFSET	X CORRDS	Y CORRDS
1	383+40.55	27.68' RT	524530.55	197540.96
2	383+50.90	27.89' RT	524535.19	197530.98
3	383+51.09	24.81' RT	524538.03	197532.19
4	383+55.82	24.97' RT	524540.17	197527.66
5	383+55.60	28.11' RT	524537.27	197526.43
6	383+61.23	28.46' RT	524539.75	197520.96
7	383+71.90	29.33' RT	524544.46	197510.58
8	383+76.35	29.77' RT	524546.43	197506.24
9	383+84.65	35.76' RT	524545.80	197495.51
10	383+71.49	34.31' RT	524539.91	197508.51
11	383+82.81	42.80' RT	524538.74	197493.60
12	383+78.55	46.29' RT	524533.92	197494.92
13	383+69.34	38.46' RT	524535.45	197508.51
14	383+60.83	33.44' RT	524535.15	197519.00
15	383+55.25	33.10' RT	524532.67	197524.47
16	383+50.60	32.89' RT	524530.59	197529.02
17	383+40.51	32.68' RT	524526.02	197538.85
18	383+53.34	24.52' LT	524583.05	197552.49
19	383+53.49	27.5' LT	524585.77	197553.72
20	383+41.87	27.5' LT	524580.94	197563.49
21	383+41.87	32.5' LT	524585.45	197565.64
22	383+53.76	32.5' LT	524590.33	197555.78
23	383+59.17	32.5' LT	524592.64	197551.33
24	383+70.60	32.5' LT	524597.70	197542.03
25	383+70.60	27.5' LT	524593.34	197539.58
26	383+58.83	27.5' LT	524588.07	197549.28
27	383+58.64	24.47' LT	524585.31	197548.02
28	384+46.48	39.90' RT	524585.12	197445.71
29	384+51.73	29.43' RT	524588.40	197441.60
30	384+72.12	27.83' RT	524600.93	197425.43
31	384+71.94	23.83' RT	524604.18	197427.78
32	384+76.93	23.48' RT	524607.21	197423.80
33	384+77.11	27.48' RT	524603.96	197421.46
34	384+87.95	26.73' RT	524510.55	197412.80
35	384+88.30	31.72' RT	524606.57	197409.78
36	384+77.32	32.48' RT	524599.91	197418.53
37	384+72.33	32.82' RT	524596.88	197422.51
38	384+52.18	24.41' RT	524584.48	197438.48
39	384+41.41	35.39' RT	524577.75	197446.94
40	384+71.93	23.73' LT	524643.91	197453.91
41	384+71.93	27.55' LT	524647.10	197456.01
42	384+60.93	27.5' LT	524641.02	197465.17
43	384+60.93	32.5' LT	524645.2	197467.92
44	384+71.93	32.5' LT	524651.24	197458.73
45	384+76.93	32.5' LT	524653.99	197454.55
46	384+87.93	32.5' LT	524560.03	197445.36
47	384+87.93	27.5' LT	524655.85	197442.61
48	384+76.91	27.5' LT	524649.8	197451.81
49	384+76.93	23.29' LT	524646.37	197449.54

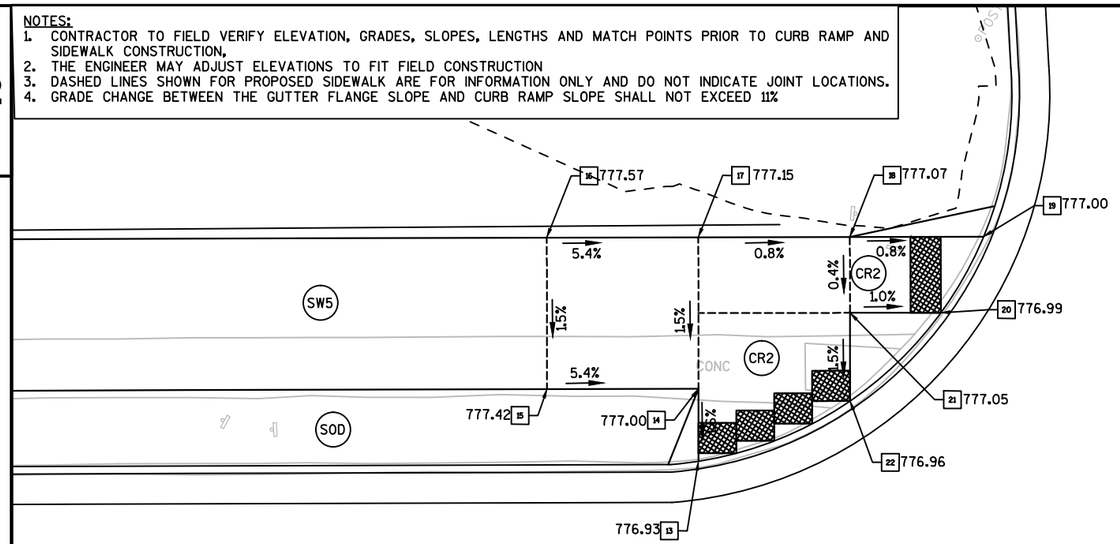




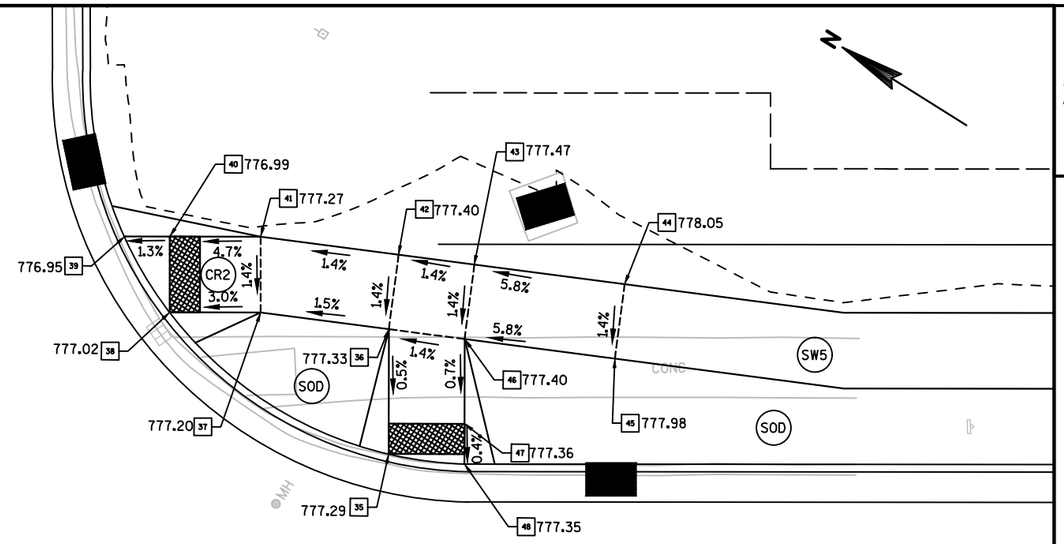
RIVER RD

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - RIVER ROAD	SHEET 40	E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%



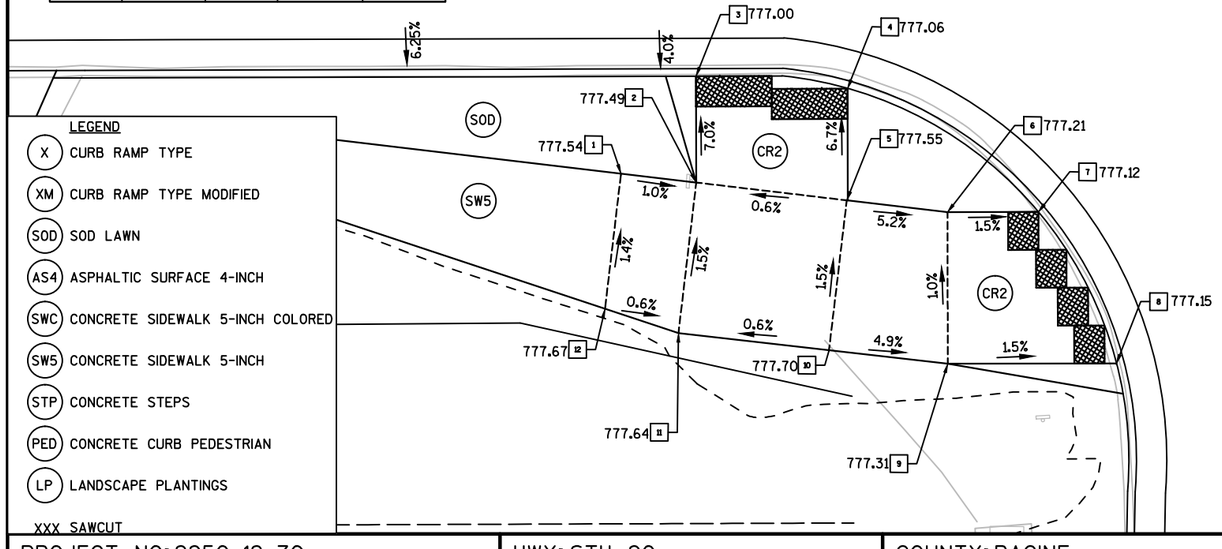
EVERGREEN DR



POINT TABLE				
POINT	STATION	OFFSET	X CORRDS	Y CORRDS
1	398+11.69	24.92' RT	525335.43	196305.78
2	398+16.66	25.52' RT	525337.57	196301.26
3	398+16.65	18.5' RT	525343.50	196305.00
4	398+26.66	19.34' RT	525348.13	196296.10
5	398+26.60	26.71' RT	525341.86	196292.22
6	398+33.25	27.5' RT	525344.73	196286.18
7	398+39.25	27.5' RT	525347.93	196281.10
8	398+44.40	37.48' RT	525342.21	196271.43
9	398+33.26	37.5' RT	525336.27	196280.84
10	398+25.41	26.60' RT	525332.86	196287.95
11	398+15.46	35.44' RT	525328.54	196296.97
12	398+10.61	33.83' RT	525327.32	196301.93
13	398+16.63	18.72' LT	525374.98	196324.87
14	398+16.64	23.5' LT	525379.03	196327.41
15	398+06.65	23.50' LT	525373.70	196335.87
16	398+06.65	33.50' LT	525382.16	196341.20
17	398+16.64	33.5' LT	525387.49	196332.74
18	398+26.62	33.5' LT	525392.82	196324.28
19	398+35.43	33.5' LT	525397.52	196316.82
20	398+32.62	28.49' LT	525391.78	196316.53
21	398+26.62	28.49' LT	525388.58	196321.61
22	398+26.62	22.67' LT	525383.66	196318.51
23	398+78.49	28.49' RT	525367.92	196247.38
24	398+84.85	28.47' RT	525371.31	196242.00
25	398+84.83	22.49' RT	525376.37	196245.19
26	398+89.82	19.99' RT	525381.14	196242.29
27	398+89.83	22.47' RT	525379.04	196240.97
28	398+89.85	27.48' RT	525374.81	196238.30
29	399+04.56	24.55' RT	525385.10	196227.39
30	399+05.52	29.36' RT	525381.54	196224.02
31	398+90.80	32.29' RT	525371.24	196234.93
32	398+84.87	33.47' RT	525367.08	196239.33
33	398+78.50	33.49' RT	525363.69	196244.71
34	398+75.64	33.5' RT	525362.16	196248.13
35	398+84.82	19.16' LT	525411.66	196267.32
36	398+84.82	27.4' LT	525418.64	196271.69
37	398+76.36	28.5' LT	525415.08	196279.44
38	398+70.37	28.5' LT	525411.90	196284.53
39	398+67.41	33.5' LT	525414.56	196289.70
40	398+70.37	33.5' LT	525416.13	196287.18
41	398+76.36	33.5' LT	525419.32	196282.10
42	398+85.46	32.32' LT	525423.15	196273.76
43	398+90.46	31.67' LT	525425.25	196269.18
44	399+00.38	30.38' LT	525429.43	196260.09
45	398+99.74	25.46' LT	525424.92	196258.02
46	398+89.82	26.75' LT	525420.75	196267.11
47	398+89.82	21.16' LT	525416.01	196264.14
48	398+89.82	18.51' LY	525413.76	196262.73

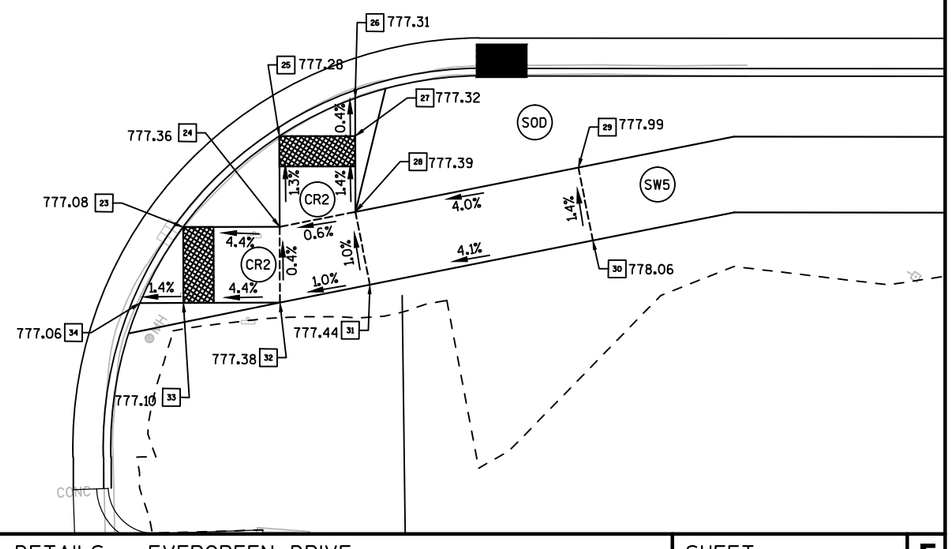
399+00

STH 20



LEGEND
- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

EVERGREEN DR

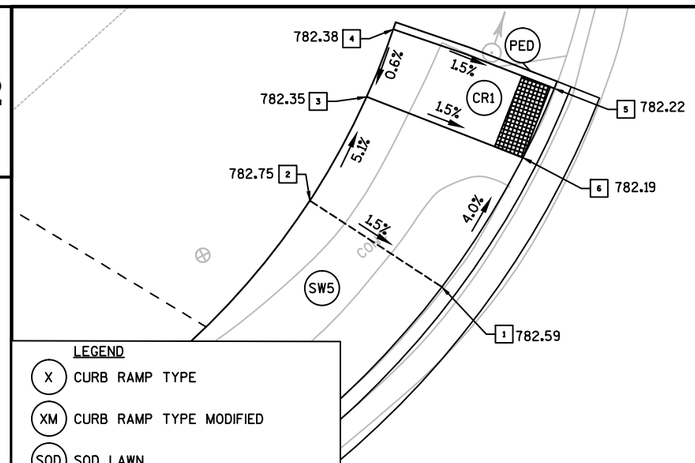


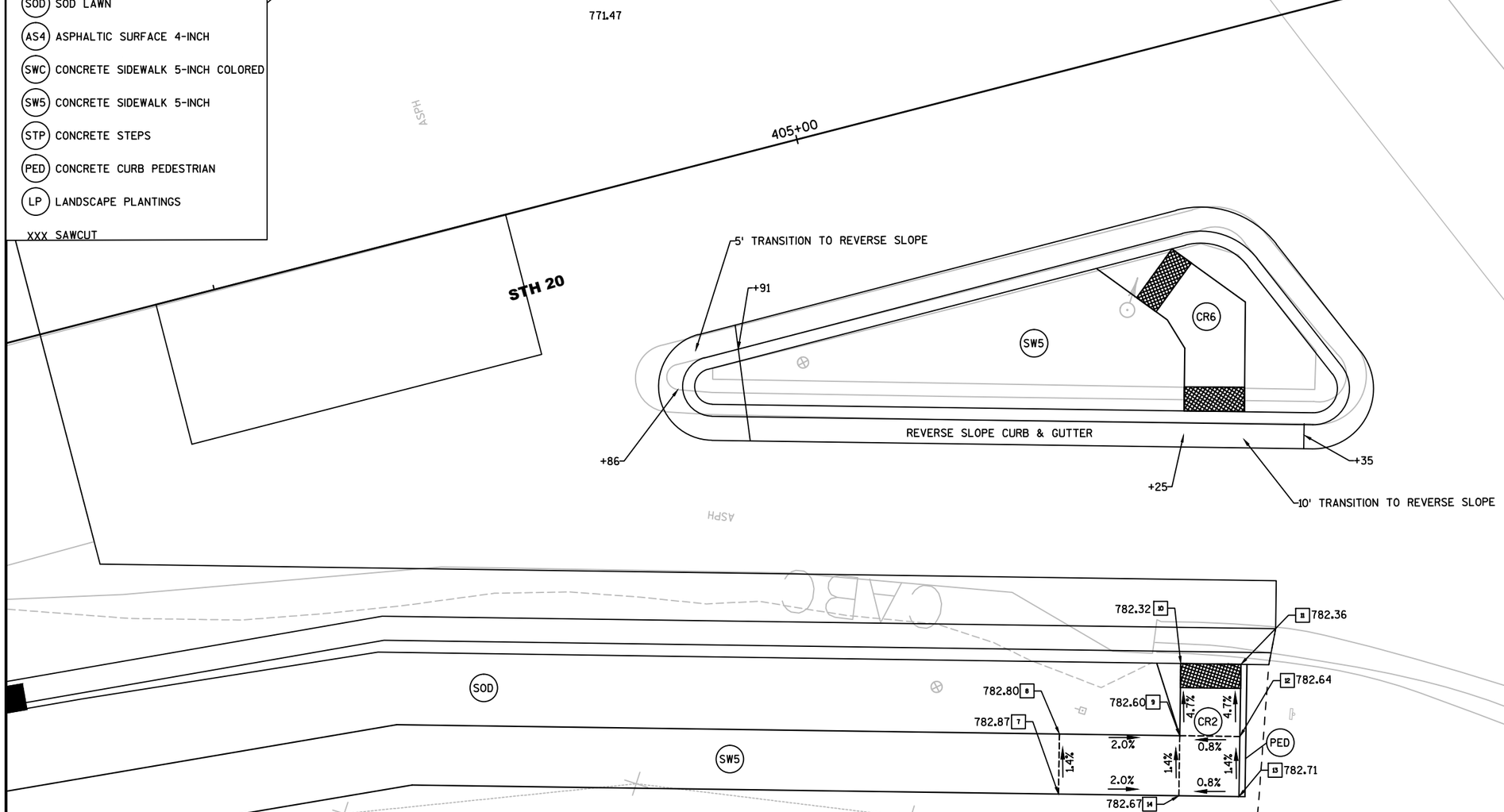
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - EVERGREEN DRIVE	SHEET 41	E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

LEGEND

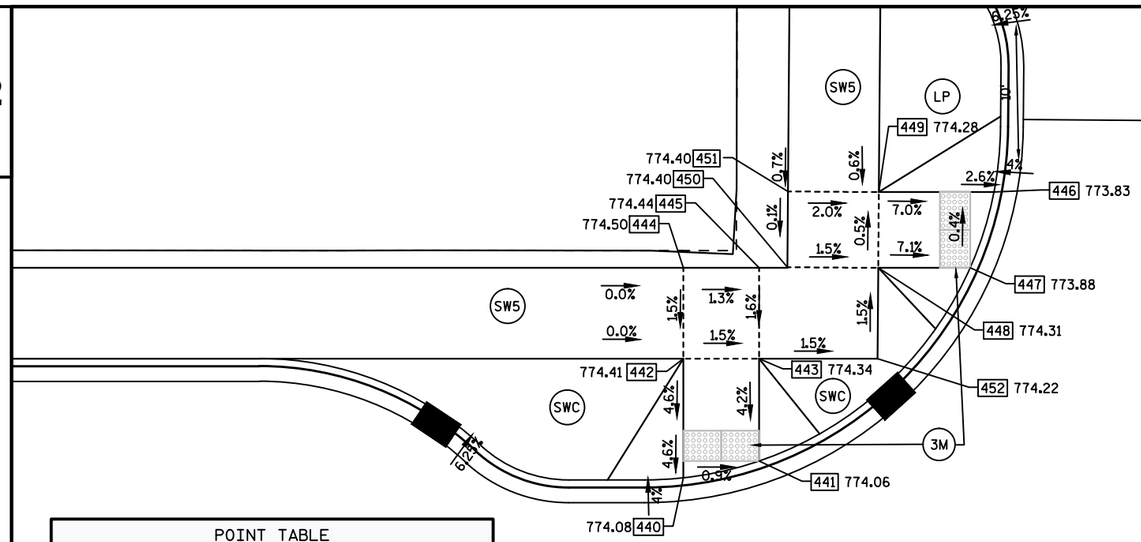
- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

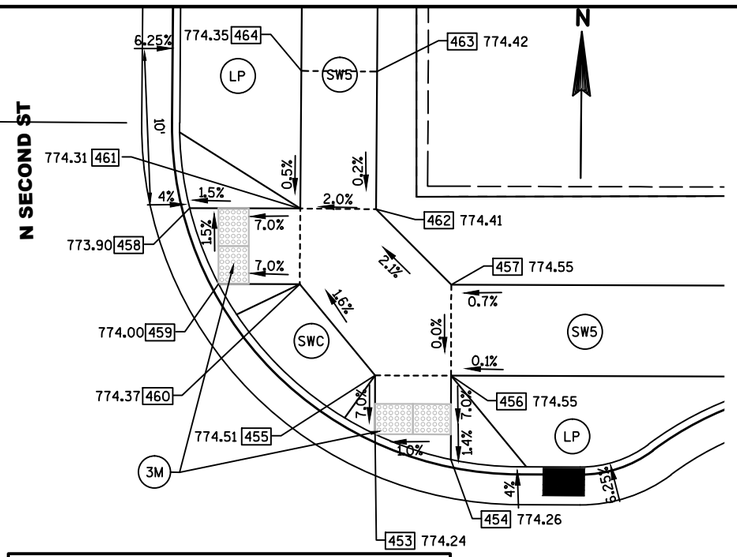




POINT TABLE				
POINT	STATION	OFFSET	X CORRDS	Y CORRDS
1	404+69.53	31.35' LT	525732.48	195778.33
2	404+62.51	39.04' LT	525735.27	195788.36
3	404+67.85	44.73' LT	525742.92	195786.86
4	404+70.66	48.60' LT	525747.70	195786.54
5	404+79.98	42.17' LT	525747.20	195775.22
6	404+76.83	38.28' LT	525742.23	195775.82
7	405+07.48	58.12' RT	525676.82	195698.67
8	405+08.79	53.30' RT	525681.60	195700.11
9	405+18.44	55.93' RT	525684.50	195690.54
10	405+20.02	50.14' RT	525690.24	195692.28
11	405+24.84	51.46' RT	525691.69	195687.49
12	405+23.26	57.25' RT	525685.94	195685.76
13	405+21.95	62.07' RT	525681.16	195684.31
14	405+17.13	60.75' RT	525678.71	195689.09

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - STH 36	SHEET 42	E





LEGEND

- X CURB RAMP TYPE
- XM CURB RAMP TYPE MODIFIED
- SOD SOD LAWN
- AS4 ASPHALTIC SURFACE 4-INCH
- SWC CONCRETE SIDEWALK 5-INCH COLORED
- SW5 CONCRETE SIDEWALK 5-INCH
- STP CONCRETE STEPS
- PED CONCRETE CURB PEDESTRIAN
- LP LANDSCAPE PLANTINGS

XXX SAWCUT

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
440	102+73.45	17.64' LT	524768.64	199253.00
441	102+78.45	18.75' LT	524773.63	199254.16
442	102+73.45	25.50' LT	524768.56	199260.86
443	102+78.45	25.50' LT	524773.56	199260.91
444	102+73.45	31.50' LT	524768.51	199266.86
445	102+78.45	31.50' LT	524773.51	199266.91
446	102+93.94	36.50' LT	524788.95	199272.05
447	102+92.37	31.50' LT	524787.43	199267.04
448	102+86.31	31.50' LT	524781.36	199266.98
449	102+86.34	36.50' LT	524781.35	199271.98
450	102+80.31	31.55' LT	524775.36	199266.97
451	102+80.35	36.55' LT	524775.35	199271.97
452	102+86.26	25.50' LT	524781.37	199260.98

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
420	102+73.45	18.77' RT	524768.98	199216.59
421	102+78.45	20.15' RT	524773.99	199215.25
422	102+73.45	27.50' RT	524769.06	199207.86
423	102+78.45	27.50' RT	524774.06	199207.91
424	102+73.45	32.50' RT	524769.11	199202.86
425	102+76.45	32.50' RT	524772.11	199202.89
426	102+87.98	27.50' RT	524783.59	199208.00
427	102+90.81	32.50' RT	524786.47	199203.03
428	102+81.43	27.50' RT	524777.04	199207.94
429	102+81.45	32.50' RT	524777.11	199202.94

E MAIN ST

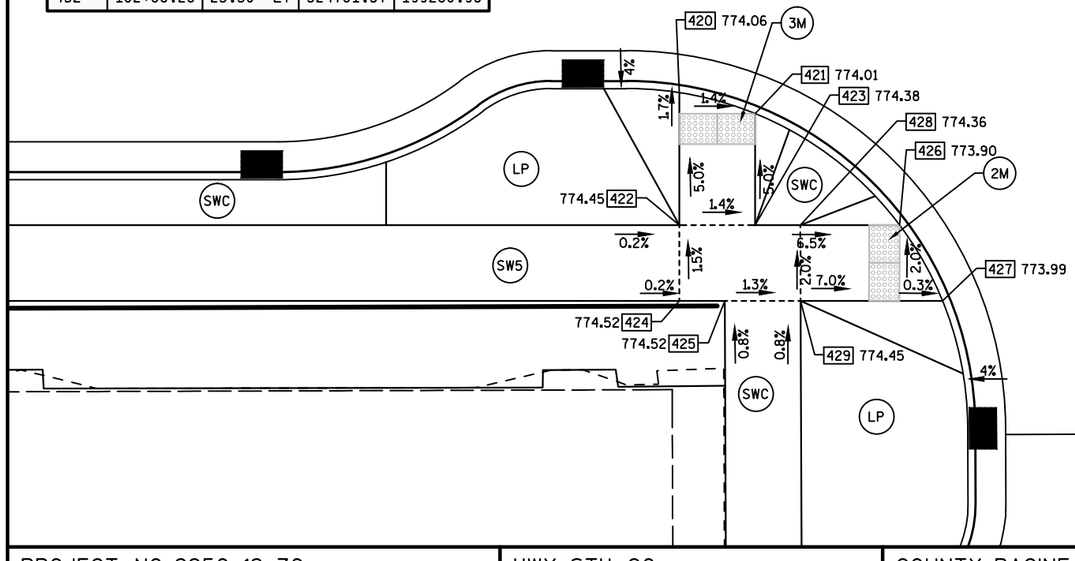
103+00

EBP: 100+00.00

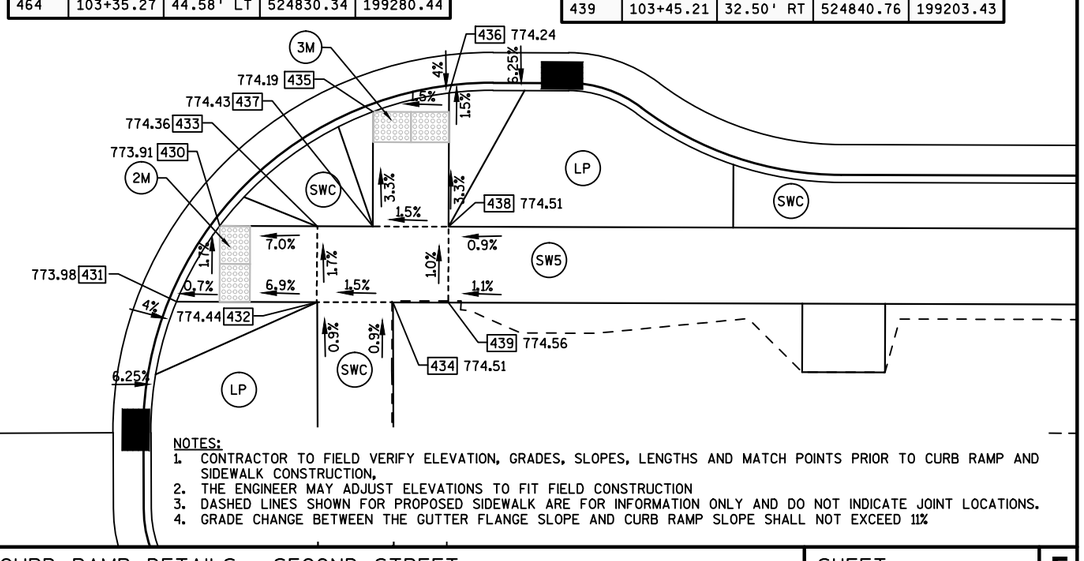
PI: 103+08.60

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
453	103+40.21	20.63' LT	524835.43	199256.52
454	103+45.21	18.96' LT	524840.44	199254.89
455	103+40.21	24.50' LT	524835.40	199260.39
456	103+45.21	24.50' LT	524840.40	199260.42
457	103+45.21	30.50' LT	524840.36	199266.42
458	103+27.94	35.50' LT	524823.07	199271.31
459	103+29.85	30.50' LT	524825.01	199266.33
460	103+35.21	30.50' LT	524830.36	199266.36
461	103+35.23	35.50' LT	524830.36	199271.36
462	103+40.23	35.47' LT	524835.36	199271.36
463	103+40.27	44.55' LT	524835.34	199280.44
464	103+35.27	44.58' LT	524830.34	199280.44

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
430	103+30.11	27.50' RT	524825.64	199208.33
431	103+27.28	32.50' RT	524822.83	199203.31
432	103+36.55	32.50' RT	524832.11	199203.37
433	103+36.55	27.50' RT	524832.08	199208.37
434	103+41.55	32.50' RT	524837.11	199203.40
435	103+40.21	19.93' RT	524835.68	199215.96
436	103+45.21	18.69' RT	524840.68	199217.24
437	103+40.21	27.50' RT	524835.73	199208.39
438	103+45.21	27.50' RT	524840.73	199208.43
439	103+45.21	32.50' RT	524840.76	199203.43



S SECOND ST

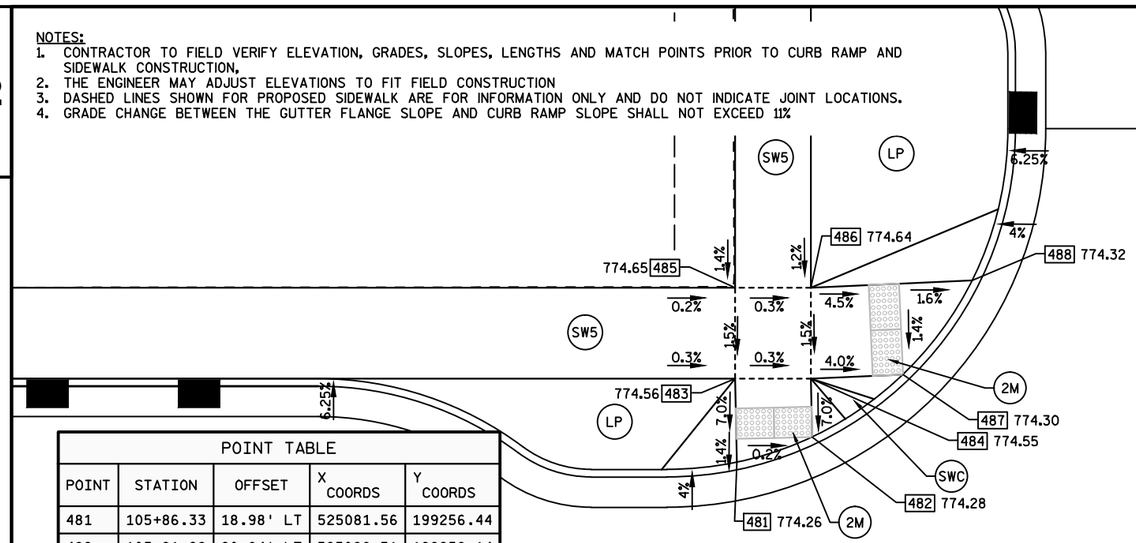


NOTES:

1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - SECOND STREET	SHEET 43	E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%



POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
481	105+86.33	18.98' LT	525081.56	199256.44
482	105+91.29	20.64' LT	525086.51	199258.14
483	105+86.21	24.50' LT	525081.40	199261.96
484	105+91.21	24.50' LT	525086.40	199261.99
485	105+86.21	30.50' LT	525081.36	199267.96
486	105+91.21	30.50' LT	525086.36	199267.99
487	105+97.29	24.77' LT	525092.48	199262.30
488	106+01.85	30.98' LT	525097.00	199268.54

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
489	106+36.44	32.09' LT	525131.67	199269.83
490	106+39.32	27.22' LT	525134.56	199264.97
491	106+44.90	32.49' LT	525140.12	199270.26
492	106+45.14	27.50' LT	525140.38	199265.27
493	106+50.12	32.50' LT	525145.35	199270.29
494	106+50.14	27.50' LT	525145.38	199265.29
495	106+45.23	21.89' LT	525140.49	199259.66
496	106+50.27	19.56' LT	525145.54	199257.35

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
465	105+87.21	19.55' RT	525082.68	199217.92
466	105+92.27	21.87' RT	525087.75	199215.63
467	105+87.40	27.50' RT	525082.92	199209.97
468	105+92.40	27.50' RT	525087.92	199210.00
469	105+88.43	32.50' RT	525083.98	199204.98
470	105+92.41	32.50' RT	525087.96	199205.00
471	105+98.43	27.50' RT	525093.95	199210.04
472	106+01.26	32.50' RT	525096.81	199205.06

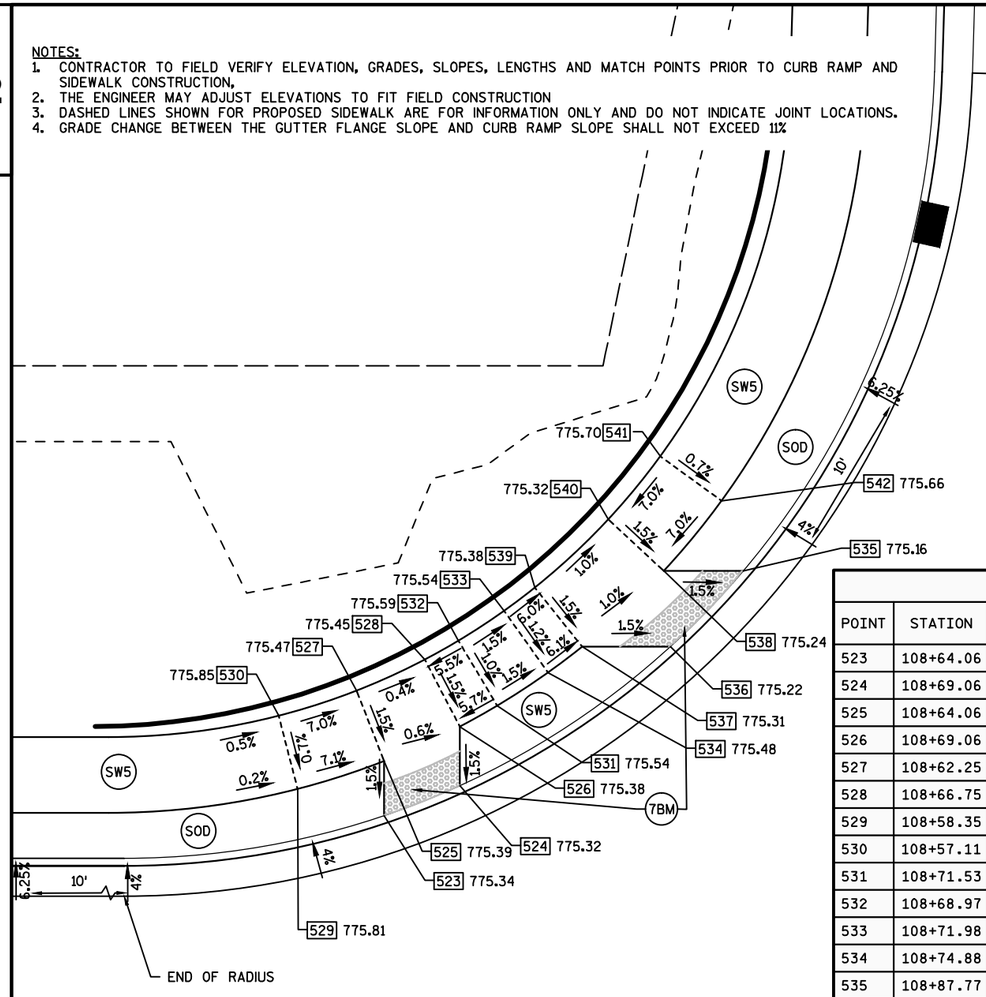
POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
473	106+35.70	32.50' RT	525131.17	199205.23
474	106+38.53	27.50' RT	525133.98	199210.24
475	106+46.07	27.50' RT	525141.52	199210.27
476	106+46.06	32.50' RT	525141.53	199205.27
477	106+51.06	32.50' RT	525146.53	199205.29
478	106+51.07	27.50' RT	525146.52	199210.29
479	106+45.96	21.14' RT	525141.39	199216.64
480	106+50.93	19.21' RT	525146.35	199218.58

LEGEND
- X CURB RAMP TYPE
- XM CURB RAMP TYPE MODIFIED
- SOD SOD LAWN
- AS4 ASPHALTIC SURFACE 4-INCH
- SWC CONCRETE SIDEWALK 5-INCH COLORED
- SW5 CONCRETE SIDEWALK 5-INCH
- STP CONCRETE STEPS
- PED CONCRETE CURB PEDESTRIAN
- LP LANDSCAPE PLANTINGS

XXX SAWCUT

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - THIRD STREET	SHEET 44	E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

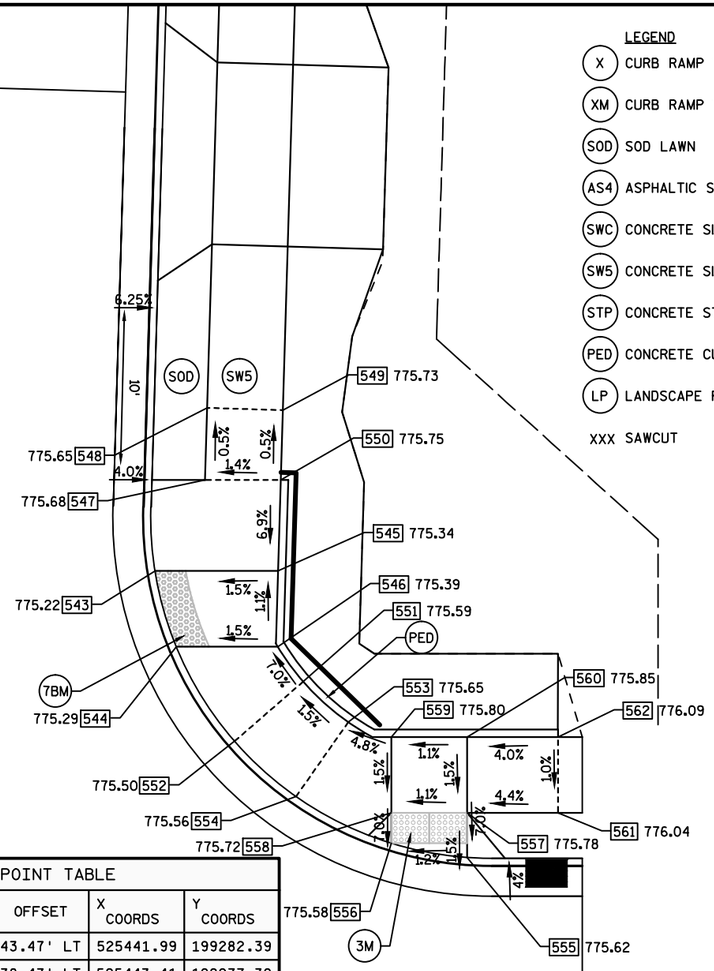


POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
523	108+64.06	27.33' LT	525359.30	199265.93
524	108+69.06	29.30' LT	525364.30	199267.93
525	108+64.06	30.92' LT	525359.29	199269.53
526	108+69.06	33.19' LT	525364.28	199271.82
527	108+62.25	35.58' LT	525357.45	199274.18
528	108+66.75	37.62' LT	525361.95	199276.24
529	108+58.35	29.08' LT	525353.59	199267.66
530	108+57.11	33.92' LT	525352.32	199272.50
531	108+71.53	34.57' LT	525366.74	199273.21
532	108+68.97	38.87' LT	525364.16	199277.49
533	108+71.98	40.84' LT	525367.17	199279.47
534	108+74.88	36.76' LT	525370.08	199275.41
535	108+87.77	43.47' LT	525382.94	199282.16
536	108+82.95	38.47' LT	525378.15	199277.15
537	108+77.14	38.47' LT	525372.33	199277.12
538	108+82.52	43.47' LT	525377.70	199282.14
539	108+74.01	42.37' LT	525369.19	199281.01
540	108+78.86	46.87' LT	525374.02	199285.53
541	108+82.29	51.04' LT	525377.44	199289.72
542	108+86.33	48.10' LT	525381.49	199286.79

E MAIN ST

109+00
EP: 150+00.00
BP: 150+00.00

N MILWAUKEE ST

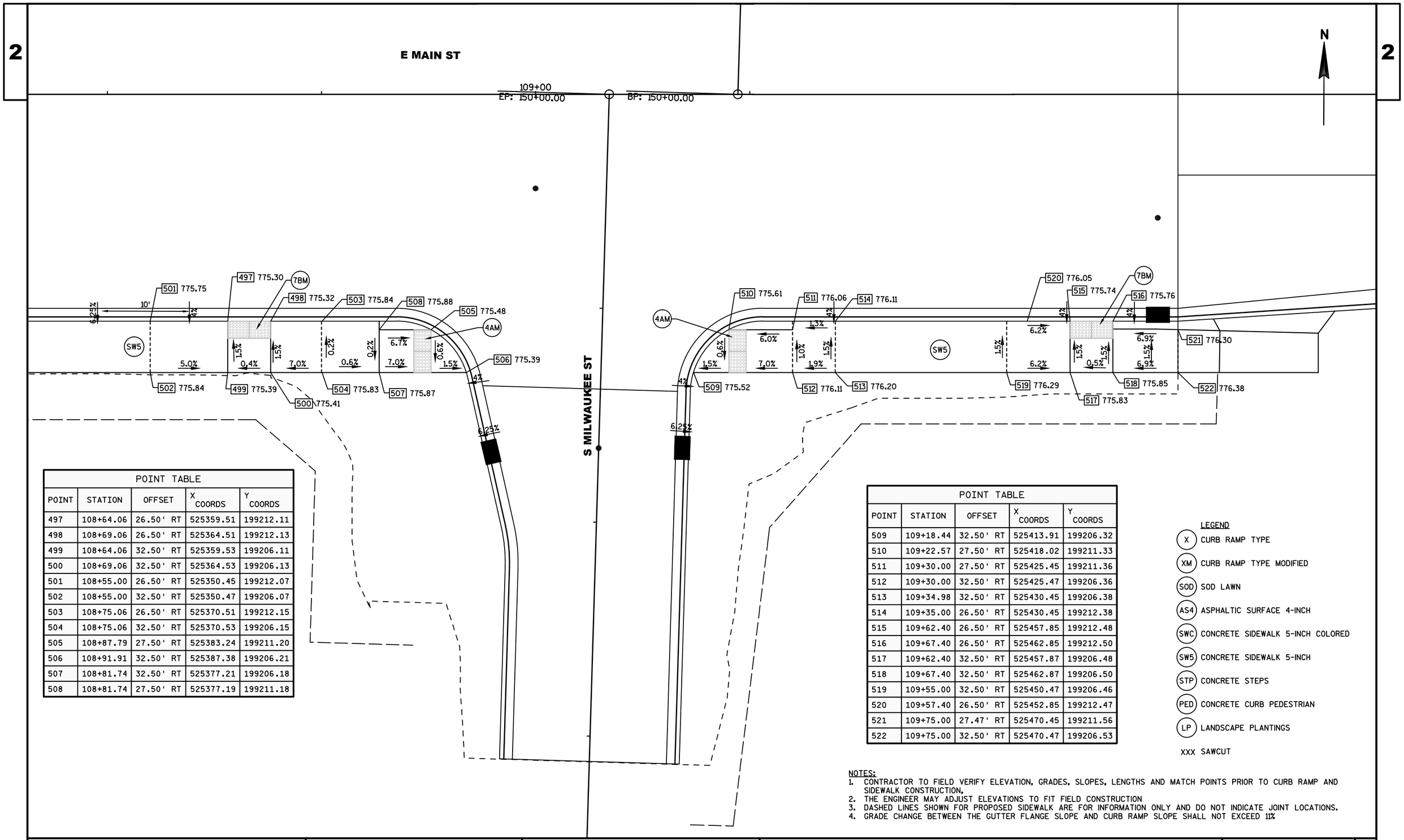


POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
543	109+46.81	43.47' LT	525441.99	199282.39
544	109+48.22	38.47' LT	525443.41	199277.39
545	109+54.92	43.47' LT	525450.10	199282.42
546	109+54.91	38.47' LT	525450.11	199277.42
547	109+50.10	49.47' LT	525445.25	199288.40
548	109+50.24	54.23' LT	525445.38	199293.17
549	109+55.24	54.08' LT	525450.38	199293.04
550	109+55.10	49.47' LT	525450.26	199288.42
551	109+56.59	36.17' LT	525451.79	199275.13
552	109+52.06	32.23' LT	525447.28	199271.18
553	109+59.56	33.49' LT	525454.77	199272.47
554	109+56.11	28.58' LT	525451.34	199267.54
555	109+67.40	24.56' LT	525462.65	199263.56
556	109+62.40	25.50' LT	525457.65	199264.48
557	109+67.40	27.50' LT	525462.64	199266.50
558	109+62.40	27.50' LT	525457.64	199266.48
559	109+62.40	32.50' LT	525457.62	199271.48
560	109+67.40	32.50' LT	525462.62	199271.50
561	109+73.40	27.50' LT	525468.64	199266.53
562	109+73.40	32.50' LT	525468.62	199271.53

LEGEND
- X CURB RAMP TYPE
- XM CURB RAMP TYPE MODIFIED
- SOD SOD LAWN
- AS4 ASPHALTIC SURFACE 4-INCH
- SWC CONCRETE SIDEWALK 5-INCH COLORED
- SW5 CONCRETE SIDEWALK 5-INCH
- STP CONCRETE STEPS
- PED CONCRETE CURB PEDESTRIAN
- LP LANDSCAPE PLANTINGS
- XXX SAWCUT

N

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - N MILWAUKEE STREET	SHEET 45	E



POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
497	108+64.06	26.50' RT	525359.51	199212.11
498	108+69.06	26.50' RT	525364.51	199212.13
499	108+64.06	32.50' RT	525359.53	199206.11
500	108+69.06	32.50' RT	525364.53	199206.13
501	108+55.00	26.50' RT	525350.45	199212.07
502	108+55.00	32.50' RT	525350.47	199206.07
503	108+75.06	26.50' RT	525370.51	199212.15
504	108+75.06	32.50' RT	525370.53	199206.15
505	108+87.79	27.50' RT	525383.24	199211.20
506	108+91.91	32.50' RT	525387.38	199206.21
507	108+81.74	32.50' RT	525377.21	199206.18
508	108+81.74	27.50' RT	525377.19	199211.18

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
509	109+18.44	32.50' RT	525413.91	199206.32
510	109+22.57	27.50' RT	525418.02	199211.33
511	109+30.00	27.50' RT	525425.45	199211.36
512	109+30.00	32.50' RT	525425.47	199206.36
513	109+34.98	32.50' RT	525430.45	199206.38
514	109+35.00	26.50' RT	525430.45	199212.38
515	109+62.40	26.50' RT	525457.85	199212.48
516	109+67.40	26.50' RT	525462.85	199212.50
517	109+62.40	32.50' RT	525457.87	199206.48
518	109+67.40	32.50' RT	525462.87	199206.50
519	109+55.00	32.50' RT	525450.47	199206.46
520	109+57.40	26.50' RT	525452.85	199212.47
521	109+75.00	27.47' RT	525470.45	199211.56
522	109+75.00	32.50' RT	525470.47	199206.53

LEGEND

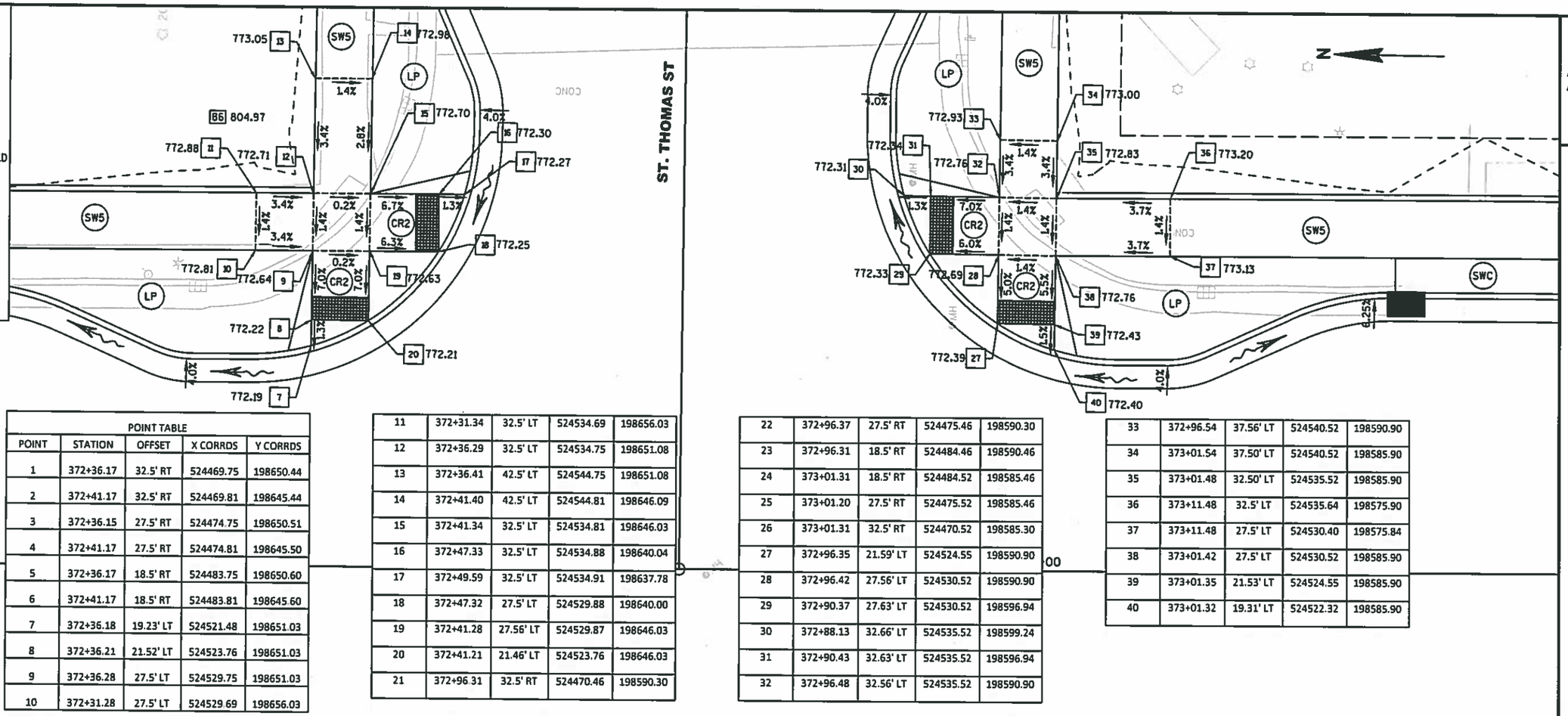
- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - S MILWAUKEE STREET	SHEET 46	E

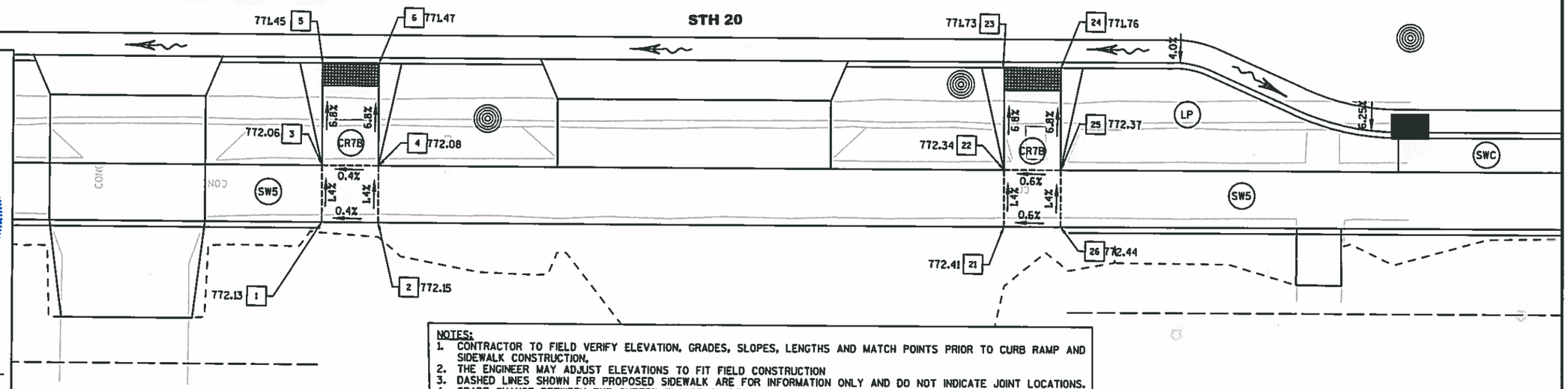
LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT



372+00

POINT TABLE				
POINT	STATION	OFFSET	X CORRDS	Y CORRDS
1	372+36.17	32.5' RT	524469.75	198650.44
2	372+41.17	32.5' RT	524469.81	198645.44
3	372+36.15	27.5' RT	524474.75	198650.51
4	372+41.17	27.5' RT	524474.81	198645.50
5	372+36.17	18.5' RT	524483.75	198650.60
6	372+41.17	18.5' RT	524483.81	198645.60
7	372+36.18	19.23' LT	524521.48	198651.03
8	372+36.21	21.52' LT	524523.76	198651.03
9	372+36.28	27.5' LT	524529.75	198651.03
10	372+31.28	27.5' LT	524529.69	198656.03
11	372+31.34	32.5' LT	524534.69	198656.03
12	372+36.29	32.5' LT	524534.75	198651.08
13	372+36.41	42.5' LT	524544.75	198651.08
14	372+41.40	42.5' LT	524544.81	198646.09
15	372+41.34	32.5' LT	524534.81	198646.03
16	372+47.33	32.5' LT	524534.88	198640.04
17	372+49.59	32.5' LT	524534.91	198637.78
18	372+47.32	27.5' LT	524529.88	198640.00
19	372+41.28	27.56' LT	524529.87	198646.03
20	372+41.21	21.46' LT	524523.76	198646.03
21	372+96.31	32.5' RT	524470.46	198590.30
22	372+96.37	27.5' RT	524475.46	198590.30
23	372+96.31	18.5' RT	524484.46	198590.46
24	373+01.31	18.5' RT	524484.52	198585.46
25	373+01.20	27.5' RT	524475.52	198585.46
26	373+01.31	32.5' RT	524470.52	198585.30
27	372+96.35	21.59' LT	524524.55	198590.90
28	372+96.42	27.56' LT	524530.52	198590.90
29	372+90.37	27.63' LT	524530.52	198596.94
30	372+88.13	32.66' LT	524535.52	198599.24
31	372+90.43	32.63' LT	524535.52	198596.94
32	372+96.48	32.56' LT	524535.52	198590.90
33	372+96.54	37.56' LT	524540.52	198590.90
34	373+01.54	37.50' LT	524540.52	198585.90
35	373+01.48	32.50' LT	524535.52	198585.90
36	373+11.48	32.5' LT	524535.64	198575.90
37	373+11.48	27.5' LT	524530.40	198575.84
38	373+01.42	27.5' LT	524530.52	198585.90
39	373+01.35	21.53' LT	524524.55	198585.90
40	373+01.32	19.31' LT	524522.32	198585.90



Lakeside ENGINEERS

WISCONSIN ANTHONY BUBLITZ 44355-6 MILWAUKEE, WI PROFESSIONAL ENGINEER

THIS SHEET TO BE SIGNED AND DATED

FROM STA. 370+50 TO STA. 406+00

4/25/18 (Date) (Signature)

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - ST. THOMAS STREET	SHEET E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - SHEET - (1)

PLOT DATE : 4/16/2018 2:35 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

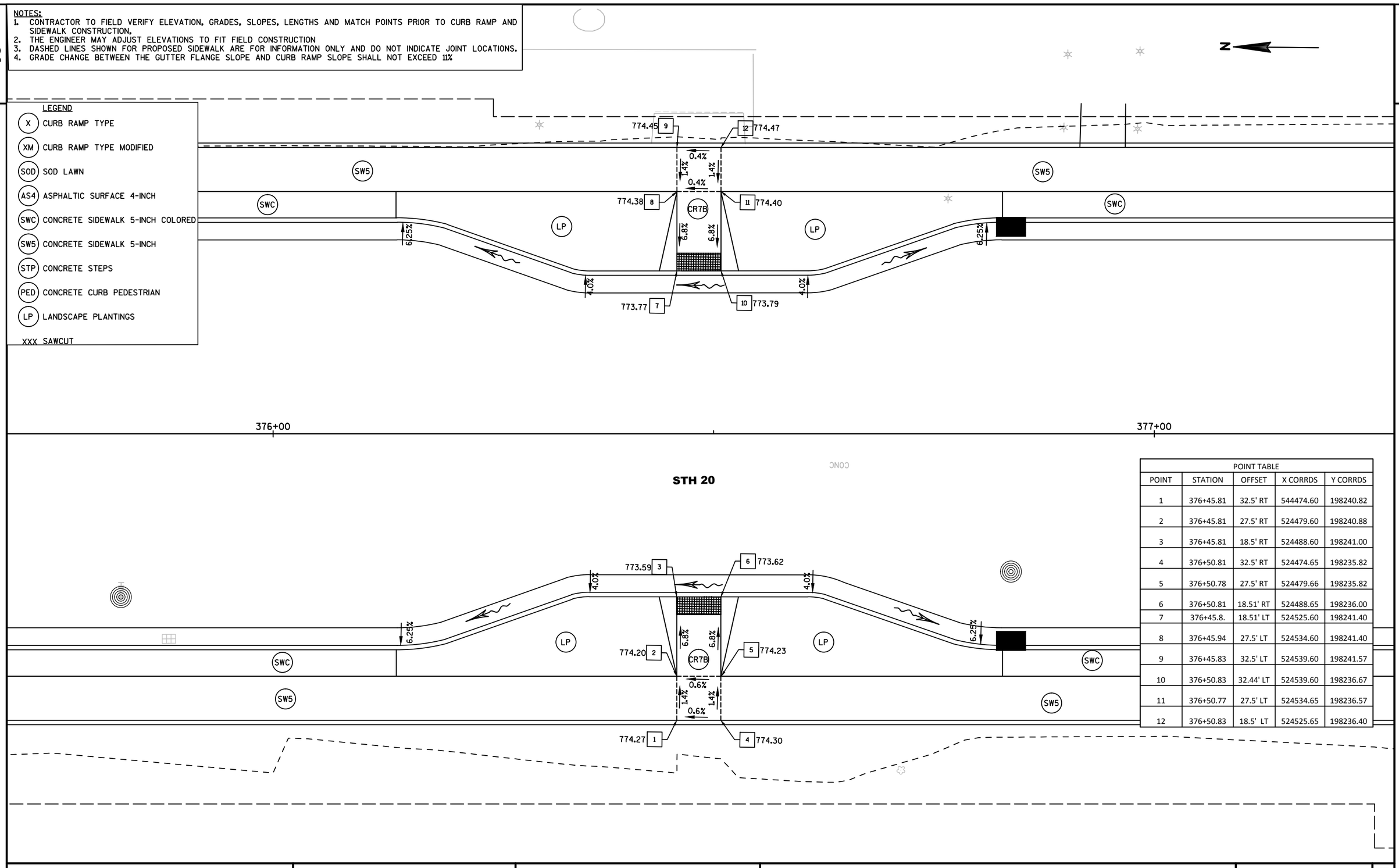
WISDOT/CADDS

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS

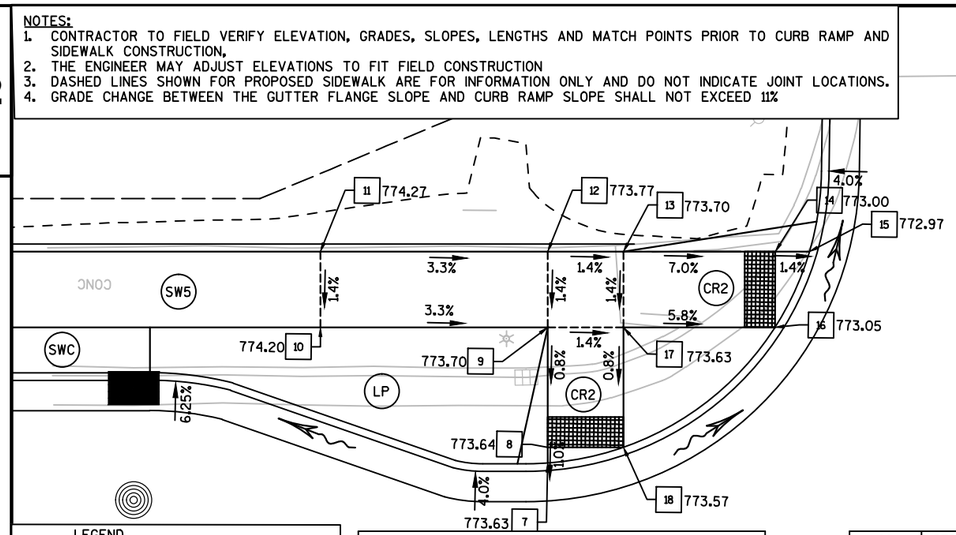
XXX SAWCUT



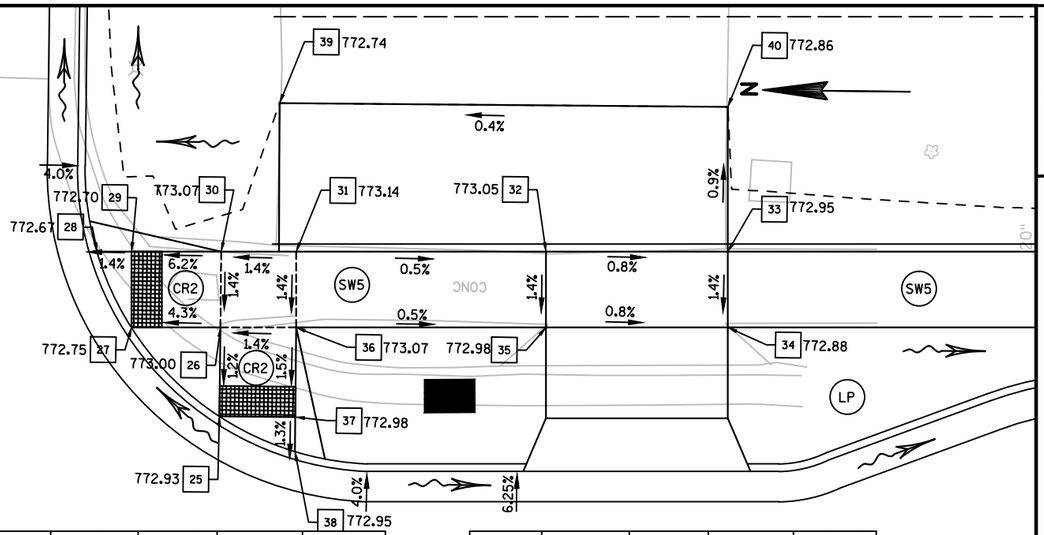
POINT TABLE				
POINT	STATION	OFFSET	X CORRDS	Y CORRDS
1	376+45.81	32.5' RT	544474.60	198240.82
2	376+45.81	27.5' RT	524479.60	198240.88
3	376+45.81	18.5' RT	524488.60	198241.00
4	376+50.81	32.5' RT	524474.65	198235.82
5	376+50.78	27.5' RT	524479.66	198235.82
6	376+50.81	18.51' RT	524488.65	198236.00
7	376+45.8.	18.51' LT	524525.60	198241.40
8	376+45.94	27.5' LT	524534.60	198241.40
9	376+45.83	32.5' LT	524539.60	198241.57
10	376+50.83	32.44' LT	524539.60	198236.67
11	376+50.77	27.5' LT	524534.65	198236.57
12	376+50.83	18.5' LT	524525.65	198236.40

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - MID BLOCK CROSSING	SHEET 48	E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%



WEBER ST

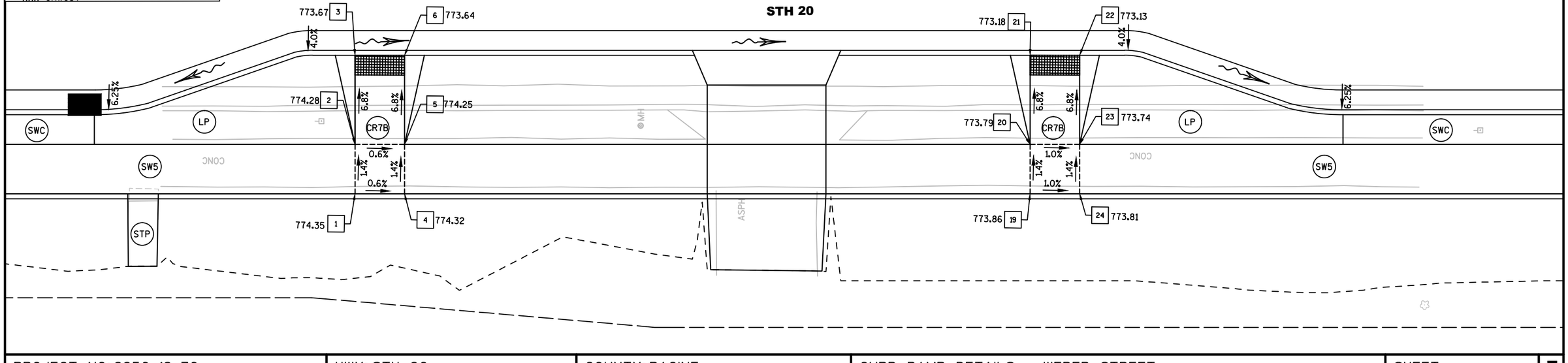


LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

POINT TABLE				
POINT	STATION	OFFSET	X CORRDS	Y CORRDS
1	380+03.99	32.5' RT	524478.83	197882.67
2	380+03.99	27.5' RT	524483.83	197882.73
3	380+03.99	18.5' RT	524492.83	197882.83
4	380+08.99	32.5' RT	524478.89	197877.67
5	380+08.99	27.5' RT	524483.89	197877.73
6	380+08.99	18.5' RT	524492.89	197877.83
7	380+03.99	18.55' LT	524529.88	197883.27
8	380+04.00	19.59' LT	524530.92	197883.27
9	380+03.99	27.5' LT	524538.83	197883.38
10	379+88.99	27.5' LT	524538.65	197898.38
11	379+88.99	32.5' LT	524543.65	197898.44
12	380+03.99	32.5' LT	524543.83	197883.44
13	380+08.99	32.5' LT	524543.89	197878.44
14	380+19.00	32.5' LT	524544.00	197868.42
15	380+21.26	32.5' LT	524544.03	197866.16
16	380+18+98	27.5' LT	524539.00	197868.38
17	380+08.99	27.5'LT	524538.89	197878.38
18	380+08.99	19.59' LT	524530.98	197878.28
19	380+72.20	32.5' RT	524479.64	197814.46
20	380+72.26	27.5' RT	524484.64	197814.46
21	380+72.20	18.5' RT	524493.64	197814.63
22	380+77.20	18.5' RT	524493.69	197809.63
23	380+77.09	27.5' RT	524487.70	197809.63
24	380+77.20	32.5' RT	524479.70	197809.46
25	380+72..21	21.64' LT	524533.77	197815.09
26	380+72.27	27.5' LT	524539.63	197815.10
27	380+66.41	27.5' LT	524539.67	197820.96
28	380+64.14	32.5' LT	524544.54	197823.29
29	380+66.41	32.5' LT	524544.58	197820.02
30	380+72.32	32.5' LT	524544.63	197815.11
31	380+77.27	32.44' LT	524544.63	197810.16
32	380+93.74	32.5' LT	524544.89	197793.69
33	381+05.76	32.5' LT	524545.03	197781.67
34	381+05.70	27.5' LT	524540.03	197781.67
35	380+93.76	27.5' LT	524539.89	197793.61
36	380+77.27	27.5' LT	524539.69	197810.10
37	380+77.20	21.59' LT	524533.78	197810.10
38	380+77.18	19.32' LT	524531.51	197810.10
39	380+76.17	42.30' LT	5244554.48	197811.37
40	381+05.76	42.06' LT	524554.59	197781.79

STH 20



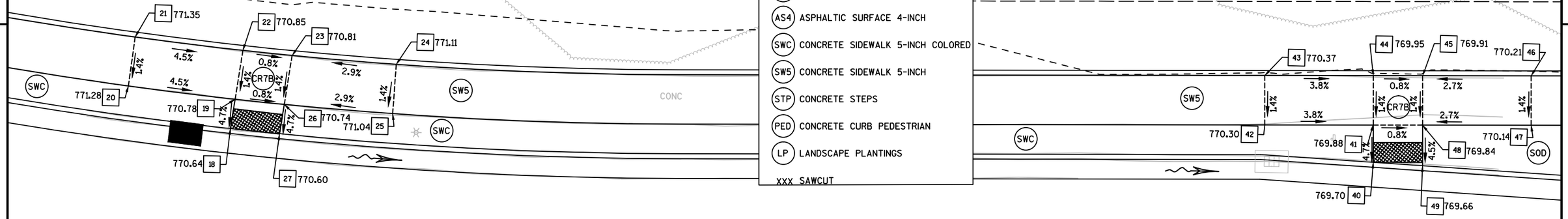
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - WEBER STREET	SHEET 49	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - SHEET - (3)
PLOT DATE : 4/16/2018 2:35 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

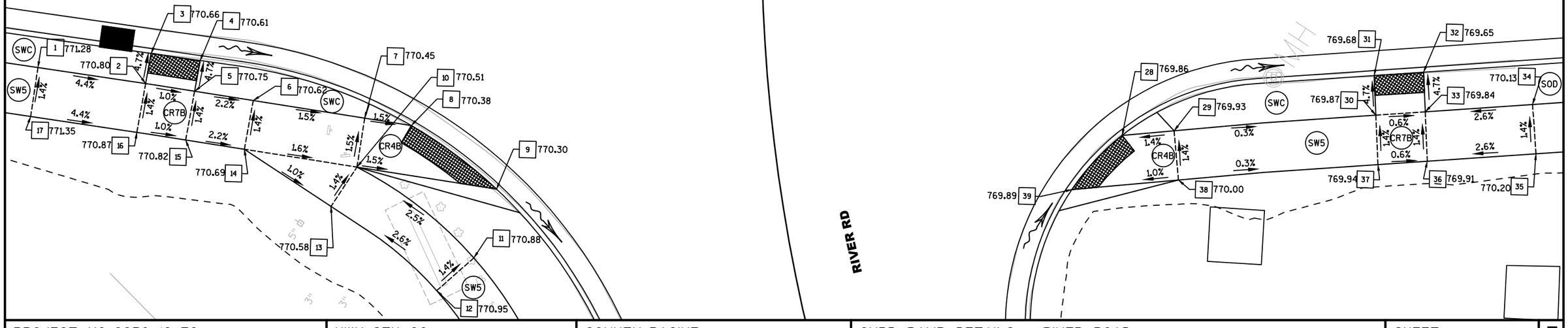
LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT



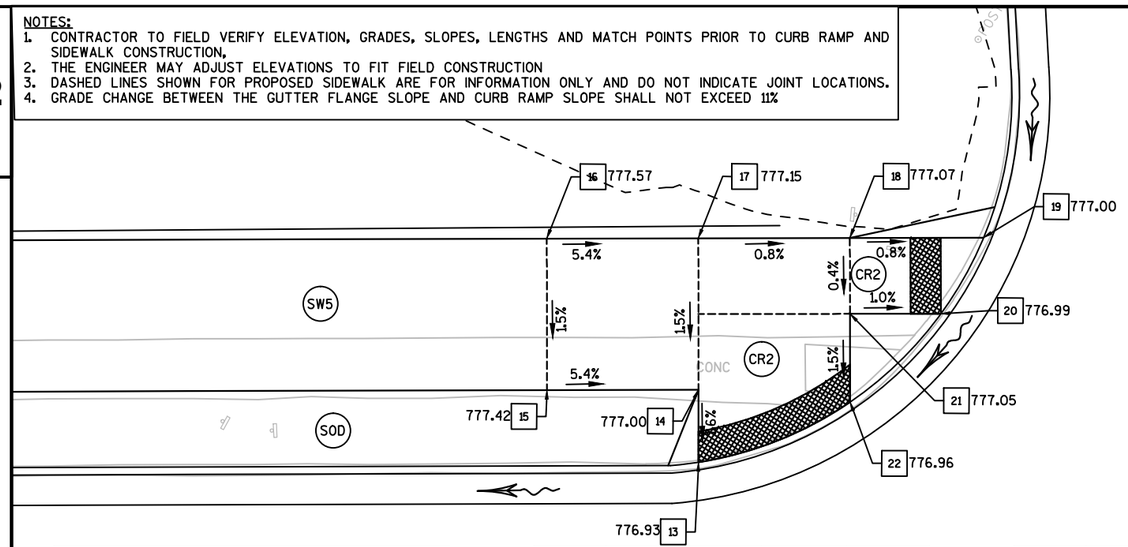
STH 20

POINT TABLE				
POINT	STATION	OFFSET	X CORRDS	Y CORRDS
1	383+40.55	27.68' RT	524530.55	197540.96
2	383+50.90	27.89' RT	524535.19	197530.98
3	383+51.09	24.81' RT	524538.03	197532.19
4	383+55.82	24.97' RT	524540.17	197527.66
5	383+55.60	28.11' RT	524537.27	197526.43
6	383+61.23	28.46' RT	524539.75	197520.96
7	383+71.90	29.33' RT	524544.46	197510.58
8	383+76.35	29.77' RT	524546.43	197506.24
9	383+84.65	35.76' RT	524545.80	197495.51
10	383+71.49	34.31' RT	524539.91	197508.51
11	383+82.81	42.80' RT	524538.74	197493.60
12	383+78.55	46.29' RT	524533.92	197494.92
13	383+69.34	38.46' RT	524535.45	197508.51
14	383+60.83	33.44' RT	524535.15	197519.00
15	383+55.25	33.10' RT	524532.67	197524.47
16	383+50.60	32.89' RT	524530.59	197529.02
17	383+40.51	32.68' RT	524526.02	197538.85
18	383+53.34	24.52' LT	524583.05	197552.49
19	383+53.49	27.5' LT	524585.77	197553.72
20	383+41.87	27.5' LT	524580.94	197563.49
21	383+41.87	32.5' LT	524585.45	197565.64
22	383+53.76	32.5' LT	524590.33	197555.78
23	383+59.17	32.5' LT	524592.64	197551.33
24	383+70.60	32.5' LT	524597.70	197542.03
25	383+70.60	27.5' LT	524593.34	197539.58
26	383+58.83	27.5' LT	524588.07	197549.28
27	383+58.64	24.47' LT	524585.31	197548.02
28	384+46.48	39.90' RT	524585.12	197445.71
29	384+51.73	29.43' RT	524588.40	197441.60
30	384+72.12	27.83' RT	524600.93	197425.43
31	384+71.94	23.83' RT	524604.18	197427.78
32	384+76.93	23.48' RT	524607.21	197423.80
33	384+77.11	27.48' RT	524603.96	197421.46
34	384+87.95	26.73' RT	524510.55	197412.80
35	384+88.30	31.72' RT	524606.57	197409.78
36	384+77.32	32.48' RT	524599.91	197418.53
37	384+72.33	32.82' RT	524596.88	197422.51
38	384+52.18	24.41' RT	524584.48	197438.48
39	384+41.41	35.39' RT	524577.75	197446.94
40	384+71.93	23.73' LT	524643.91	197453.91
41	384+71.93	27.55' LT	524647.10	197456.01
42	384+60.93	27.5' LT	524641.02	197465.17
43	384+60.93	32.5' LT	524645.2	197467.92
44	384+71.93	32.5' LT	524651.24	197458.73
45	384+76.93	32.5' LT	524653.99	197454.55
46	384+87.93	32.5' LT	524560.03	197445.36
47	384+87.93	27.5' LT	524655.85	197442.61
48	384+76.91	27.5' LT	524649.8	197451.81
49	384+76.93	23.29' LT	524646.37	197449.54

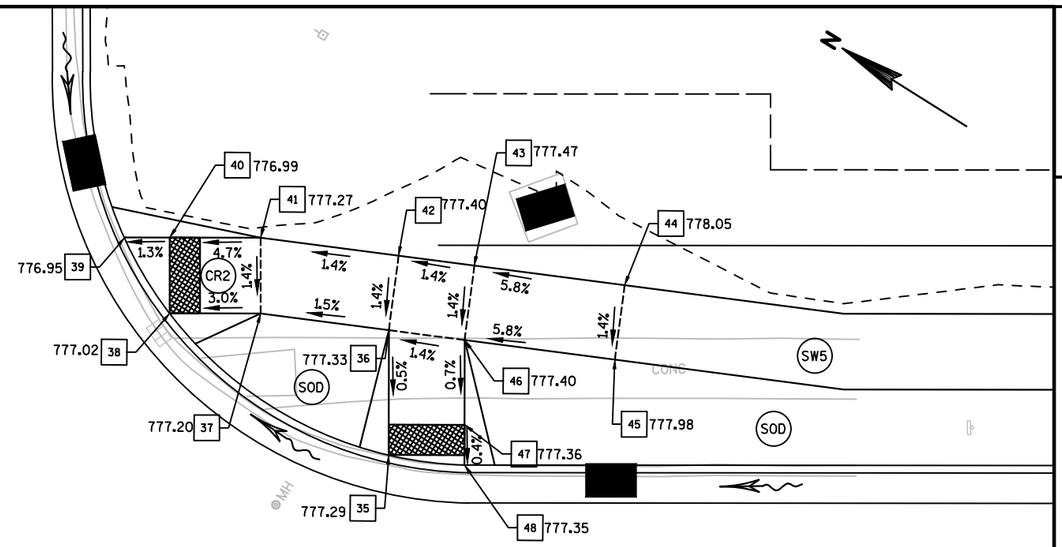


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - RIVER ROAD	SHEET 50	E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%



EVERGREEN DR

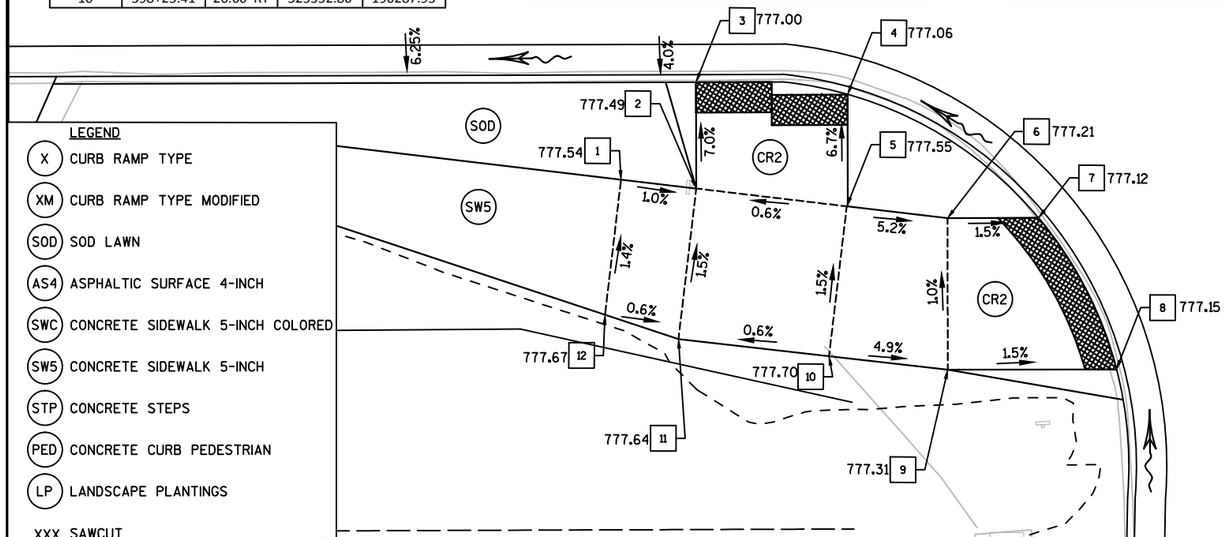


POINT TABLE				
POINT	STATION	OFFSET	X CORRDS	Y CORRDS
1	398+11.69	24.92' RT	525335.43	196305.78
2	398+16.66	25.52' RT	525337.57	196301.26
3	398+16.65	18.5' RT	525343.50	196305.00
4	398+26.66	19.34' RT	525348.13	196296.10
5	398+26.60	26.71' RT	525341.86	196292.22
6	398+33.25	27.5' RT	525344.73	196286.18
7	398+39.25	27.5' RT	525347.93	196281.10
8	398+44.40	37.48' RT	525342.21	196271.43
9	398+33.26	37.5' RT	525336.27	196280.84
10	398+25.41	26.60' RT	525332.86	196287.95
11	398+15.46	35.44' RT	525328.54	196296.97
12	398+10.61	33.83' RT	525327.32	196301.93
13	398+16.63	18.72' LT	525374.98	196324.87
14	398+16.64	23.5' LT	525379.03	196327.41
15	398+06.65	23.50' LT	525373.70	196335.87
16	398+06.65	33.50' LT	525382.16	196341.20
17	398+16.64	33.5' LT	525387.49	196332.74
18	398+26.62	33.5' LT	525392.82	196324.28
19	398+35.43	33.5' LT	525397.52	196316.82
20	398+32.62	28.49' LT	525391.78	196316.53
21	398+26.62	28.49' LT	525388.58	196321.61
22	398+26.62	22.67' LT	525383.66	196318.51
23	398+78.49	28.49' RT	525367.92	196247.38
24	398+84.85	28.47' RT	525371.31	196242.00
25	398+84.83	22.49' RT	525376.37	196245.19
26	398+89.82	19.99' RT	525381.14	196242.29
27	398+89.83	22.47' RT	525379.04	196240.97
28	398+89.85	27.48' RT	525374.81	196238.30
29	399+04.56	24.55' RT	525385.10	196227.39
30	399+05.52	29.36' RT	525381.54	196224.02
31	398+90.80	32.29' RT	525371.24	196234.93
32	398+84.87	33.47' RT	525367.08	196239.33
33	398+78.50	33.49' RT	525363.69	196244.71
34	398+75.64	33.5' RT	525362.16	196248.13
35	398+84.82	19.16' LT	525411.66	196267.32
36	398+84.82	27.4' LT	525418.64	196271.69
37	398+76.36	28.5' LT	525415.08	196279.44
38	398+70.37	28.5' LT	525411.90	196284.53
39	398+67.41	33.5' LT	525414.56	196289.70
40	398+70.37	33.5' LT	525416.13	196287.18
41	398+76.36	33.5' LT	525419.32	196282.10
42	398+85.46	32.32' LT	525423.15	196273.76
43	398+90.46	31.67' LT	525425.25	196269.18
44	399+00.38	30.38' LT	525429.43	196260.09
45	398+99.74	25.46' LT	525424.92	196258.02
46	398+89.82	26.75' LT	525420.75	196267.11
47	398+89.82	21.16' LT	525416.01	196264.14
48	398+89.82	18.51' LY	525413.76	196262.73

398+00

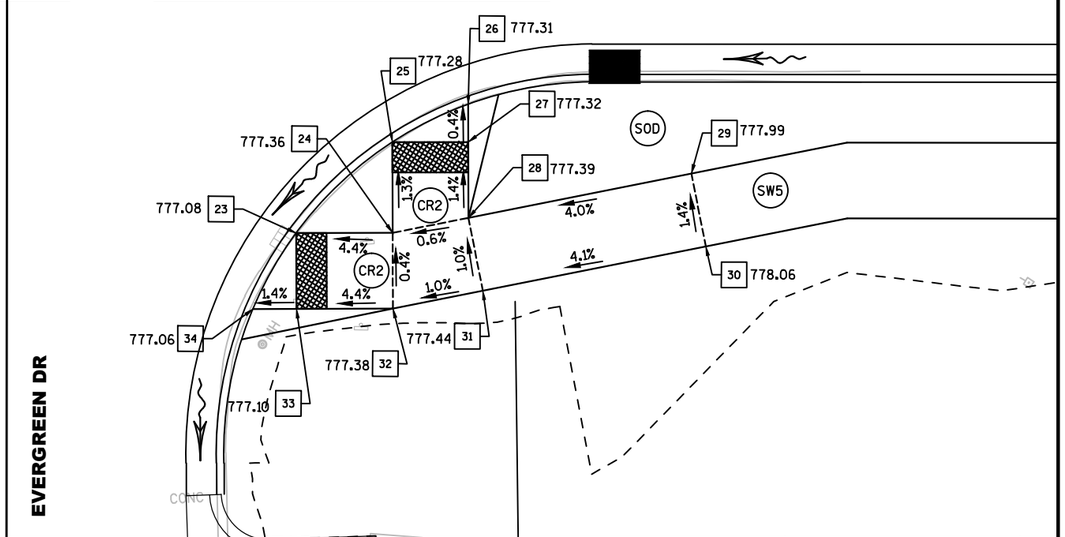
399+00

STH 20



LEGEND
- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

EVERGREEN DR



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - EVERGREEN DRIVE	SHEET 51	E

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION,
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%

LEGEND

- (X) CURB RAMP TYPE
- (XM) CURB RAMP TYPE MODIFIED
- (SOD) SOD LAWN
- (AS4) ASPHALTIC SURFACE 4-INCH
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (STP) CONCRETE STEPS
- (PED) CONCRETE CURB PEDESTRIAN
- (LP) LANDSCAPE PLANTINGS
- XXX SAWCUT

STH 36

STH 20

405+00

782.38 4 — 0.6% — 1.5% — PED

782.35 3 — 1.5% — CR1 — 5 782.22

782.75 2 — 5.1% — 4.0% — 6 782.19

1.5% — SW5 — 1 782.59

5' TRANSITION TO REVERSE SLOPE

+91

CR6

SW5

REVERSE SLOPE CURB & GUTTER

+86

+25

+35

10' TRANSITION TO REVERSE SLOPE

SOD

SW5

782.32 10 — 11 782.36

782.80 8 — 782.60 9 — 12 782.64

782.87 7 — 4.7% — 4.7% — CR2 — PED

2.0% — 0.8% — 1.4% — 1.4% — 1.4%

2.0% — 0.8% — 13 782.71

782.67 14

POINT TABLE				
POINT	STATION	OFFSET	X CORRDS	Y CORRDS
1	404+69.53	31.35' LT	525732.48	195778.33
2	404+62.51	39.04' LT	525735.27	195788.36
3	404+67.85	44.73' LT	525742.92	195786.86
4	404+70.66	48.60' LT	525747.70	195786.54
5	404+79.98	42.17' LT	525747.20	195775.22
6	404+76.83	38.28' LT	525742.23	195775.82
7	405+07.48	58.12' RT	525676.82	195698.67
8	405+08.79	53.30' RT	525681.60	195700.11
9	405+18.44	55.93' RT	525684.50	195690.54
10	405+20.02	50.14' RT	525690.24	195692.28
11	405+24.84	51.46' RT	525691.69	195687.49
12	405+23.26	57.25' RT	525685.94	195685.76
13	405+21.95	62.07' RT	525681.16	195684.31
14	405+17.13	60.75' RT	525678.71	195689.09

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CURB RAMP DETAILS - STH 36	SHEET 52	E

2

LEGEND

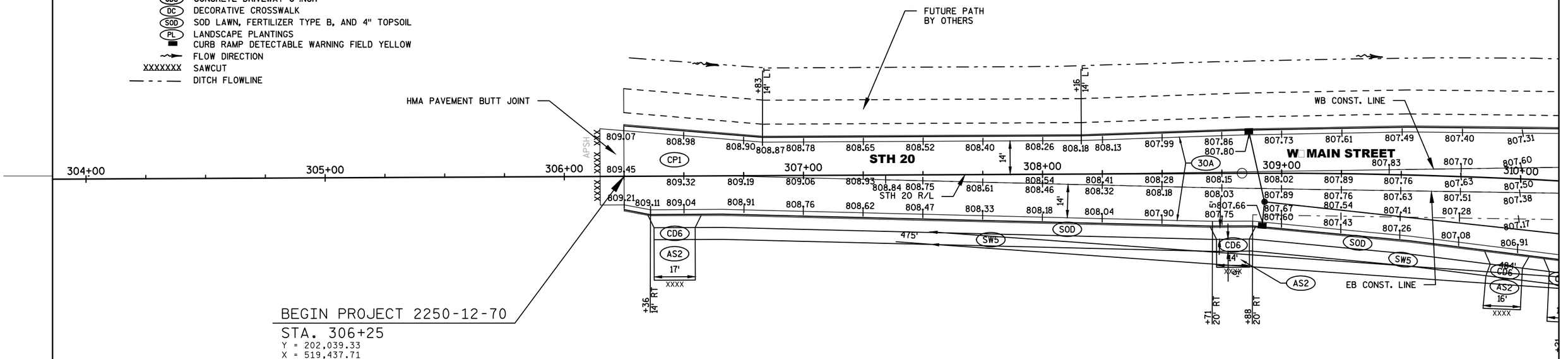
- (AP1) HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
- (AP2) HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
- (CP1) CONCRETE PAVEMENT 9-INCH
- (CPAS) CONCRETE PAVEMENT APPROACH SLAB
- (AS1) ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
- (AS2) ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
- (18A) CONCRETE CURB AND GUTTER 18-INCH TYPE A
- (18AR) CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
- (30A) CONCRETE CURB AND GUTTER 30-INCH TYPE A
- (30D) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (30I) CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
- (PED) CONCRETE CURB PEDESTRIAN
- (CM1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM2) CONCRETE MEDIAN SLOPED NOSE TYPE 2
- (CR2) CURB RAMP TYPE 2 MODIFIED
- (CR4A) CURB RAMP TYPE 4A1
- (CR4B) CURB RAMP TYPE 4B1
- (CR5) CURB RAMP TYPE 5
- (CR6) CURB RAMP TYPE 6
- (CR7) CURB RAMP TYPE 7 MODIFIED
- (CR7B) CURB RAMP TYPE 7B MODIFIED
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (CD6) CONCRETE DRIVEWAY 6-INCH
- (DC) DECORATIVE CROSSWALK
- (SOD) SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
- (PL) LANDSCAPE PLANTINGS
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- FLOW DIRECTION
- XXXXXXX SAWCUT
- DITCH FLOWLINE

NOTES:
ALL RADII ARE TO THE FACE OF CURB AND GUTTER UNLESS NOTED OTHERWISE
TRANSVERSE JOINT SPACING 15' MAX (SEE SDD)

CONCRETE PAVEMENT 9-INCH (DOWELED) SHALL BE TINED TO STA. 327+00.

CONCRETE GUTTER CROSS-SLOPE IS 6.25% UNLESS OTHERWISE NOTED ON THE CURB RAMP DETAIL OR PAVING DETAIL SHEETS.

N



BEGIN PROJECT 2250-12-70
STA. 306+25
Y = 202,039.33
X = 519,437.71

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS	SHEET 53 E

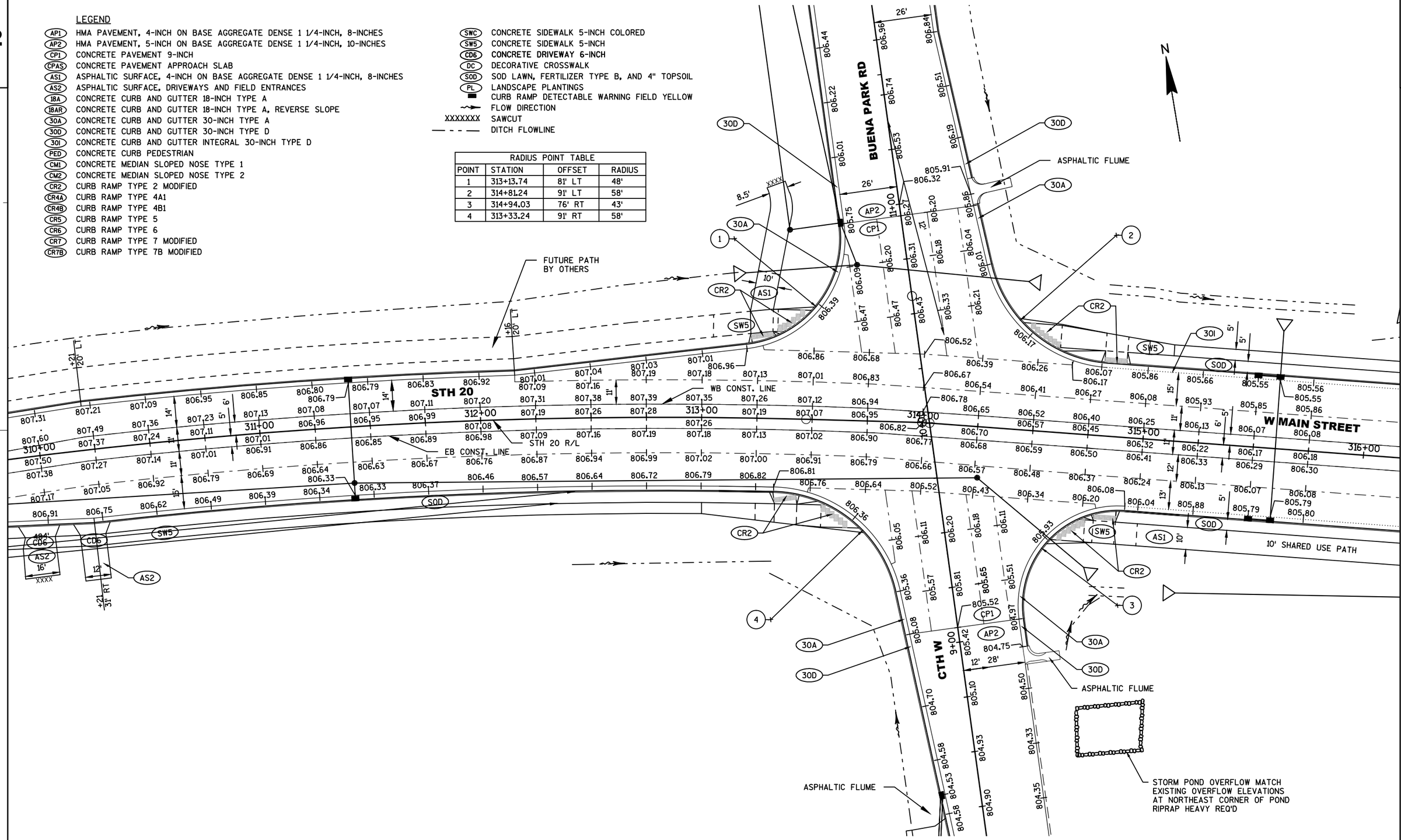
2

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED

SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
— - - —	DITCH FLOWLINE

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	313+13.74	81' LT	48'
2	314+81.24	91' LT	58'
3	314+94.03	76' RT	43'
4	313+33.24	91' RT	58'



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS	SHEET 54	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\021201_PD.DWG PLOT DATE : 2/20/2015 3:32 PM PLOT BY : MANSKE, CALEB PLOT NAME : _____ PLOT SCALE : 1" = 40'_XREF

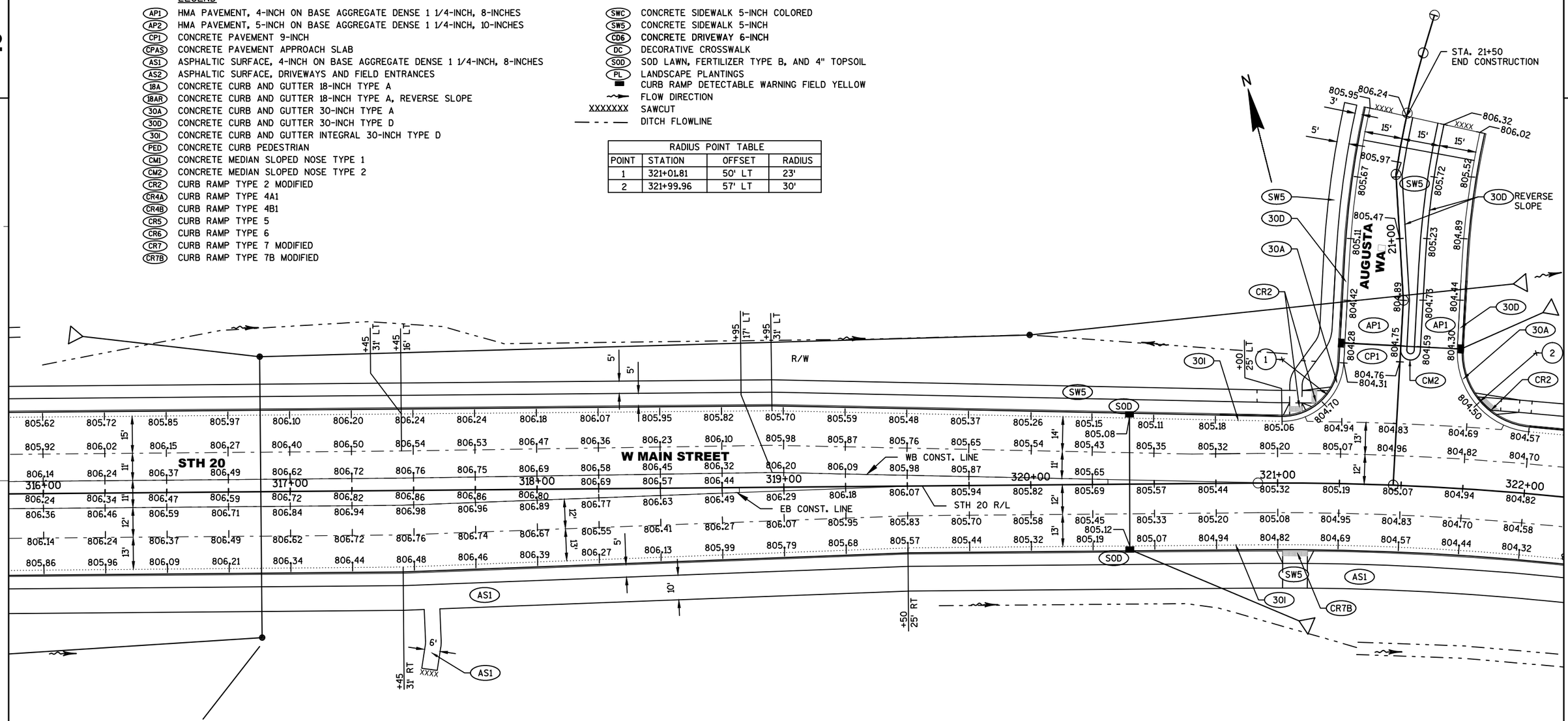
2

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED

SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
	DITCH FLOWLINE

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	321+01.81	50' LT	23'
2	321+99.96	57' LT	30'



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS	SHEET 55 E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\021201_PD.DWG PLOT DATE : 2/20/2015 3:32 PM PLOT BY : MANSKE, CALEB PLOT NAME : _____ PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

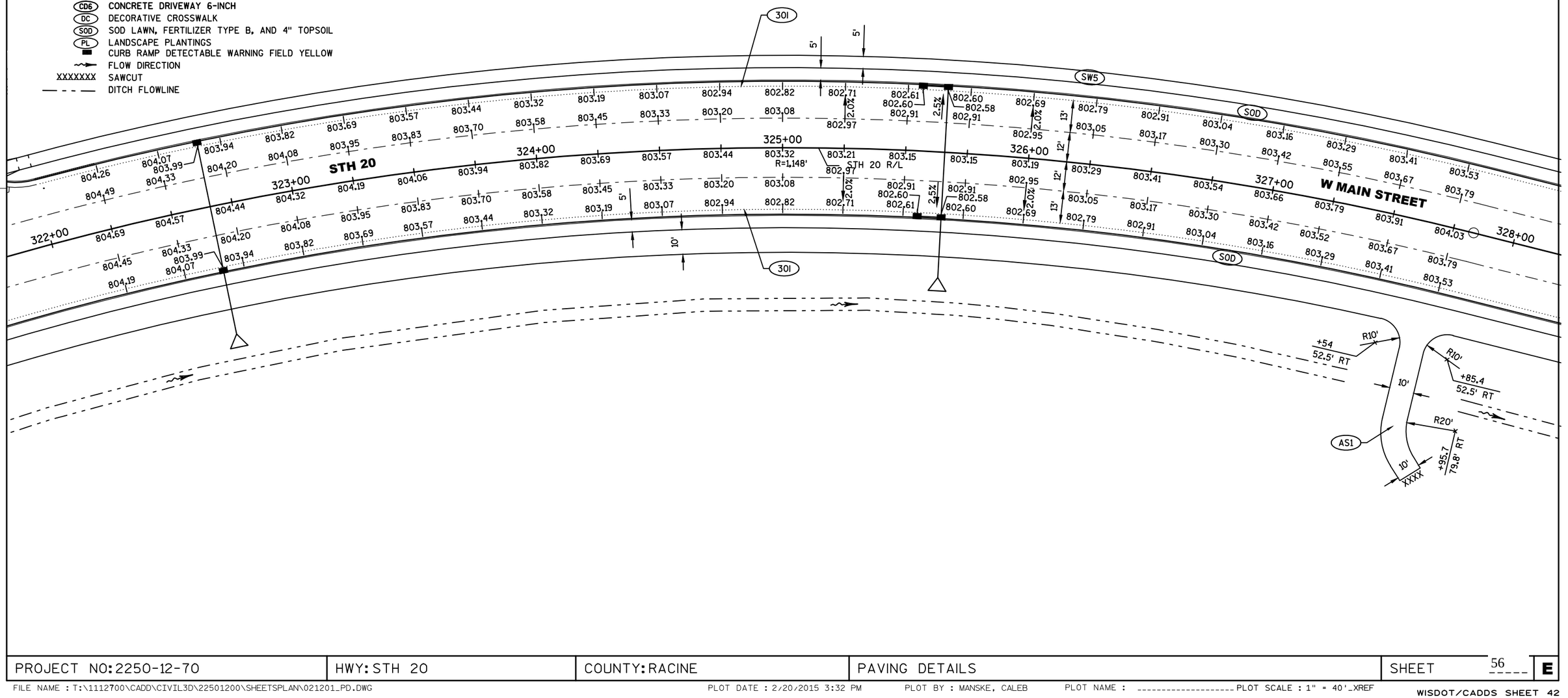
2

2

LEGEND

- (AP1) HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
- (AP2) HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
- (CP1) CONCRETE PAVEMENT 9-INCH
- (CPAS) CONCRETE PAVEMENT APPROACH SLAB
- (AS1) ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
- (AS2) ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
- (18A) CONCRETE CURB AND GUTTER 18-INCH TYPE A
- (18AR) CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
- (30A) CONCRETE CURB AND GUTTER 30-INCH TYPE A
- (30D) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (30I) CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
- (PED) CONCRETE CURB PEDESTRIAN
- (CM1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM2) CONCRETE MEDIAN SLOPED NOSE TYPE 2
- (CR2) CURB RAMP TYPE 2 MODIFIED
- (CR4A) CURB RAMP TYPE 4A1
- (CR4B) CURB RAMP TYPE 4B1
- (CR5) CURB RAMP TYPE 5
- (CR6) CURB RAMP TYPE 6
- (CR7) CURB RAMP TYPE 7 MODIFIED
- (CR7B) CURB RAMP TYPE 7B MODIFIED
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (CD6) **CONCRETE DRIVEWAY 6-INCH**
- (DC) DECORATIVE CROSSWALK
- (SOD) SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
- (PL) LANDSCAPE PLANTINGS
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- FLOW DIRECTION
- XXXXXXX SAWCUT
- DITCH FLOWLINE

N



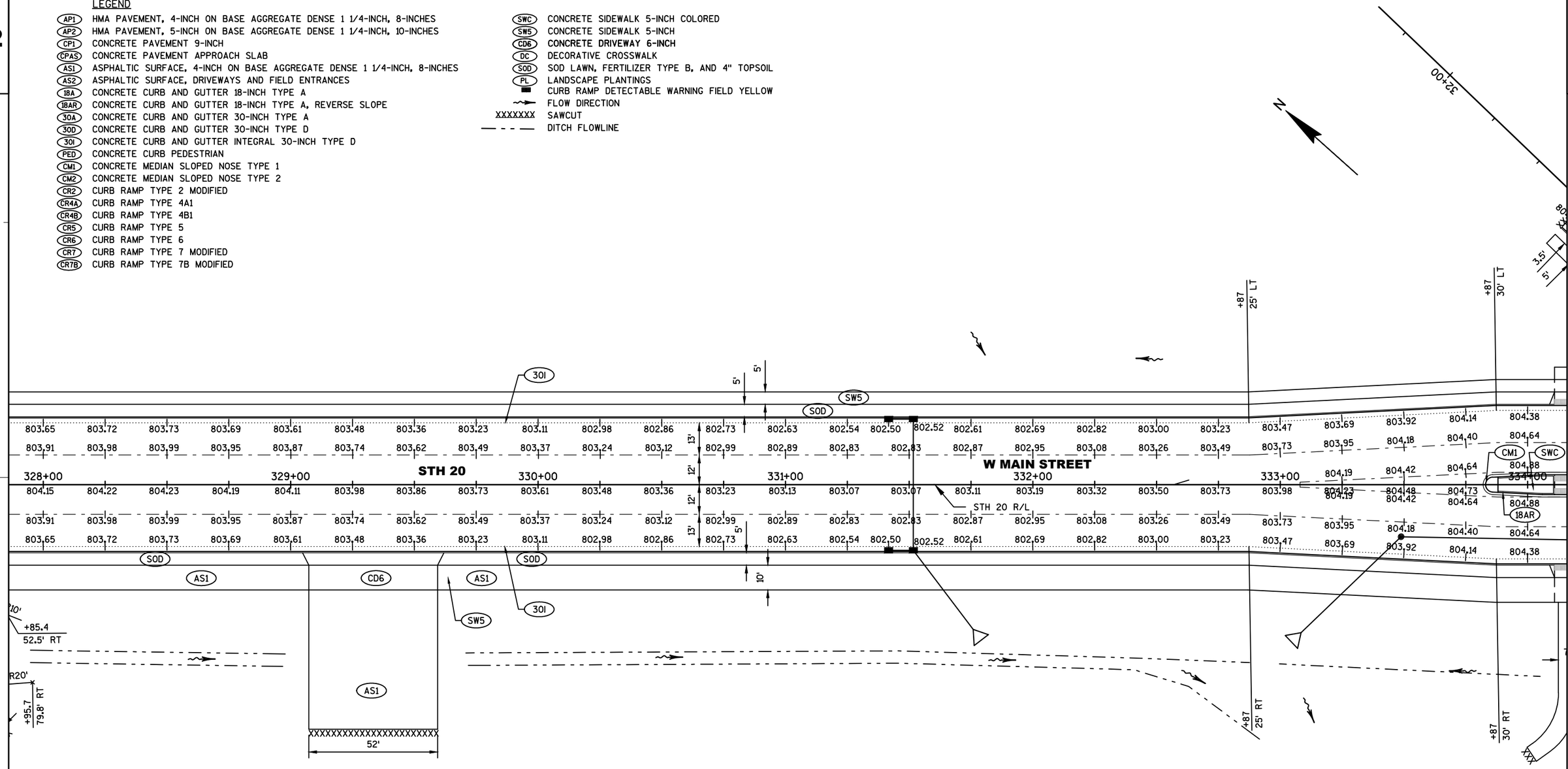
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS	SHEET 56 E

2

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED

SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
— - - —	DITCH FLOWLINE



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS	SHEET 57 E

2

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED
SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
	DITCH FLOWLINE

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	334+21.29	55' LT	23'
2	335+01.46	60' LT	28'
3	339+87.10	50' LT	23'
4	335+05.92	65.5' RT	20'
5	334+65.92	105.5' RT	20'
6	40+52.73	25.3' LT	20'
7	41+40.40	29.5' LT	20'

STA. 31+25
END CONSTRUCTION

RIVERMOOR RD

CLUB ROAD

STA. 41+75
END CONSTRUCTION

DRIVEWAY CURB

STH 20

W MAIN STREET

STH 20 R/L

10' SHARED USE PATH

6' CONCRETE SIDEWALK

MSE RETAINING WALL
R-51-70

REMOVE PATH

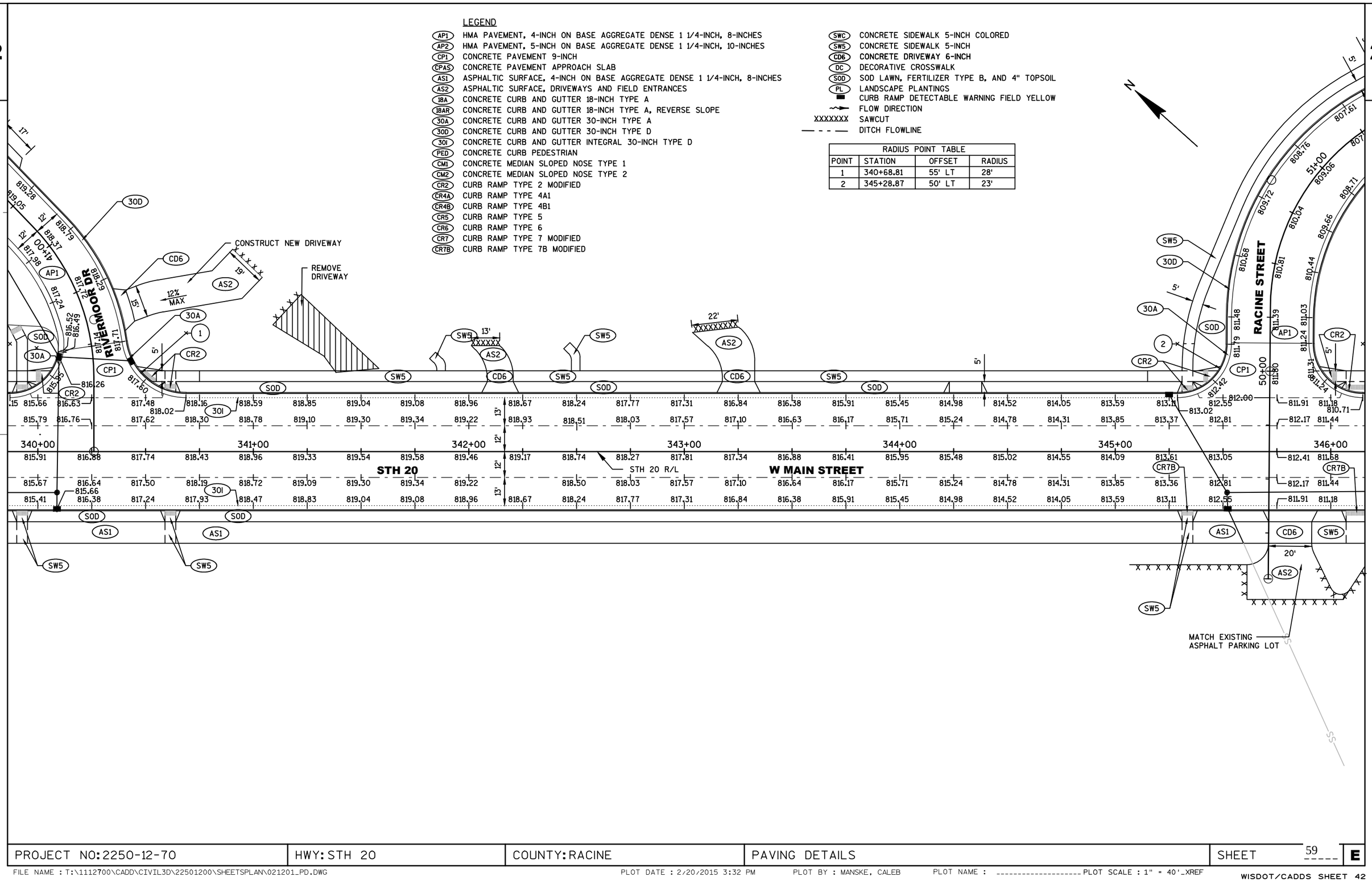
MATCH EXISTING
PATH

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS	SHEET 58 E

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED
SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
— - - —	DITCH FLOWLINE

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	340+68.81	55' LT	28'
2	345+28.87	50' LT	23'

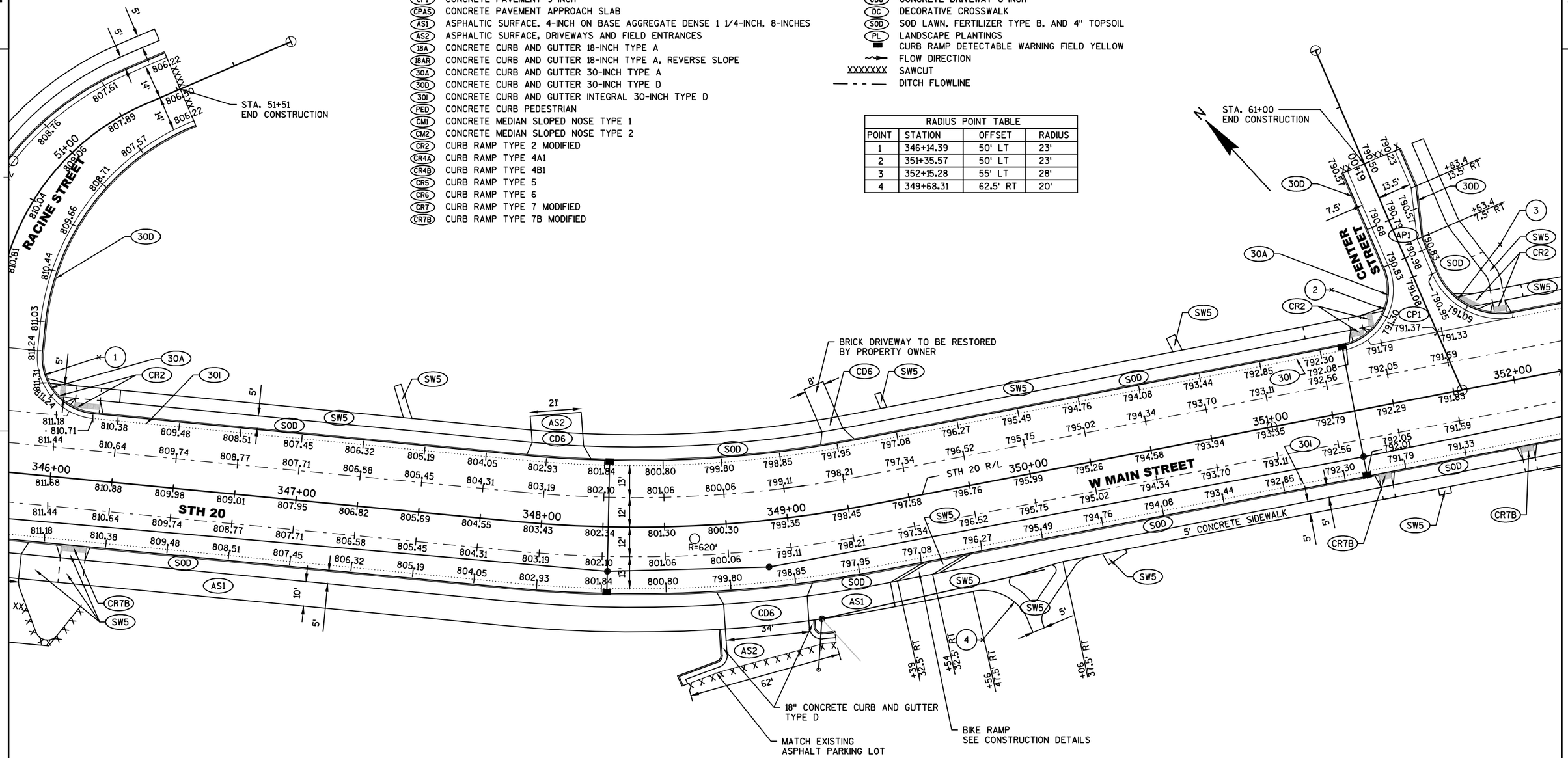


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS	SHEET 59	E

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED
SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
~→	FLOW DIRECTION
XXXXXXX	SAWCUT
— - - —	DITCH FLOWLINE

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	346+14.39	50' LT	23'
2	351+35.57	50' LT	23'
3	352+15.28	55' LT	28'
4	349+68.31	62.5' RT	20'



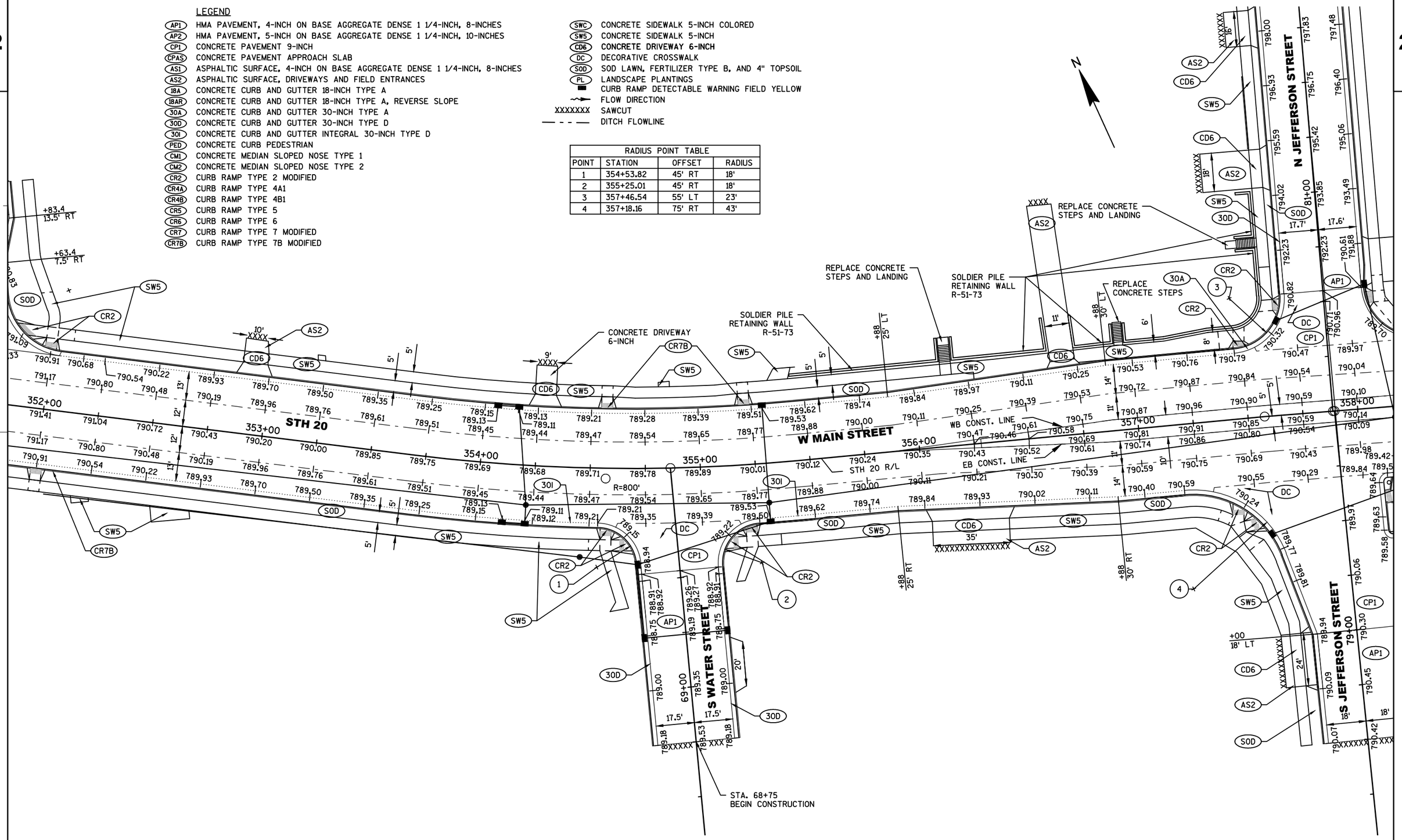
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS	SHEET 60	E

2

LEGEND

- (AP1) HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
- (AP2) HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
- (CP1) CONCRETE PAVEMENT 9-INCH
- (CPAS) CONCRETE PAVEMENT APPROACH SLAB
- (AS1) ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
- (AS2) ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
- (18A) CONCRETE CURB AND GUTTER 18-INCH TYPE A
- (18AR) CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
- (30A) CONCRETE CURB AND GUTTER 30-INCH TYPE A
- (30D) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (30I) CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
- (PED) CONCRETE CURB PEDESTRIAN
- (CM1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM2) CONCRETE MEDIAN SLOPED NOSE TYPE 2
- (CR2) CURB RAMP TYPE 2 MODIFIED
- (CR4A) CURB RAMP TYPE 4A1
- (CR4B) CURB RAMP TYPE 4B1
- (CR5) CURB RAMP TYPE 5
- (CR6) CURB RAMP TYPE 6
- (CR7) CURB RAMP TYPE 7 MODIFIED
- (CR7B) CURB RAMP TYPE 7B MODIFIED
- (SWC) CONCRETE SIDEWALK 5-INCH COLORED
- (SW5) CONCRETE SIDEWALK 5-INCH
- (CD6) **CONCRETE DRIVEWAY 6-INCH**
- (DC) DECORATIVE CROSSWALK
- (SOD) SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
- (PL) LANDSCAPE PLANTINGS
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- FLOW DIRECTION
- XXXXXXX SAWCUT
- DITCH FLOWLINE

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	354+53.82	45' RT	18'
2	355+25.01	45' RT	18'
3	357+46.54	55' LT	23'
4	357+18.16	75' RT	43'



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS	SHEET 61	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\021201_PD.DWG PLOT DATE : 2/20/2015 3:32 PM PLOT BY : MANSKE, CALEB PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

LEGEND

- AP1 HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
- AP2 HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
- CP1 CONCRETE PAVEMENT 9-INCH
- CPAS CONCRETE PAVEMENT APPROACH SLAB
- AS1 ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
- AS2 ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
- 18A CONCRETE CURB AND GUTTER 18-INCH TYPE A
- 18AR CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
- 30A CONCRETE CURB AND GUTTER 30-INCH TYPE A
- 30D CONCRETE CURB AND GUTTER 30-INCH TYPE D
- 30I CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
- PED CONCRETE CURB PEDESTRIAN
- CM1 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CM2 CONCRETE MEDIAN SLOPED NOSE TYPE 2
- CR2 CURB RAMP TYPE 2 MODIFIED
- CR4A CURB RAMP TYPE 4A1
- CR4B CURB RAMP TYPE 4B1
- CR5 CURB RAMP TYPE 5
- CR6 CURB RAMP TYPE 6
- CR7 CURB RAMP TYPE 7 MODIFIED
- CR7B CURB RAMP TYPE 7B MODIFIED
- SWC CONCRETE SIDEWALK 5-INCH COLORED
- SW5 CONCRETE SIDEWALK 5-INCH
- CD6 CONCRETE DRIVEWAY 6-INCH
- DC DECORATIVE CROSSWALK
- SOD SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
- PL LANDSCAPE PLANTINGS
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- FLOW DIRECTION
- XXXXXXX SAWCUT
- DITCH FLOWLINE

N JEFFERSON STREET

STH 20

WB CONST. LINE

EB CONST. LINE

STH 20 R/L

W MAIN STREET

N RIVER STREET

S JEFFERSON STREET

S RIVER STREET

TRANSITION CURB AND GUTTER 30" TO 18"

STA. 91+25
END CONSTRUCTION

STA. 88+80
BEGIN CONSTRUCTION

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	361+97.52	9.5' RT	20'
2	362+16.78	32.5' RT	8'
3	362+21.78	47.5' RT	23'
4	362+36.80	52.5' RT	8'
5	362+58.85	72.8' RT	22'
6	362+66.04	73.6' RT	22'
7	362+87.66	52.8' RT	8'
8	363+02.56	47.5' RT	23'
9	363+07.56	32.5' RT	8'
10	363+24.88	10.5' RT	22'
11	362+27.89	44.5' LT	14'
12	362+83.64	54.5' LT	24'
13	358+32.13	55' LT	24'
14	358+68.83	70' RT	38'

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS	SHEET 62	E

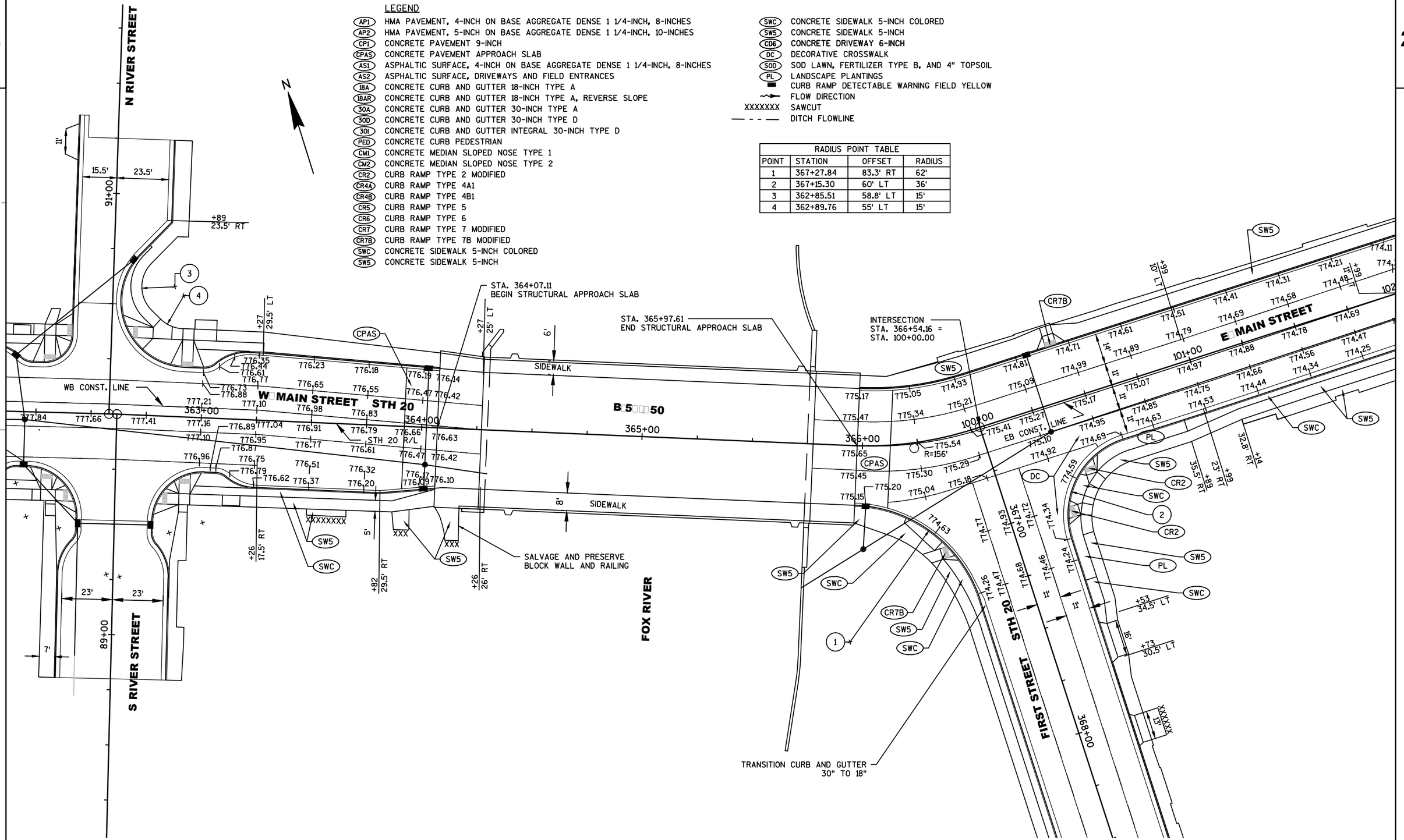
2

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED
SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH

SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
— - - —	DITCH FLOWLINE

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	367+27.84	83.3' RT	62'
2	367+15.30	60' LT	36'
3	362+85.51	58.8' LT	15'
4	362+89.76	55' LT	15'



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS	SHEET 63 E

2

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED
SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
	DITCH FLOWLINE

N

E MAIN STREET

ELIZABETH ST

FIRST STREET

FOX RIVER

STH 20

INTERSECTION
STA. 366+54.16 =
STA. 100+00.00

STA. 120+61
END CONSTRUCTION

TRANSITION CURB AND GUTTER
30" TO 18"

STH 20 R/L

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	367+27.84	83.3' RT	62'
2	367+15.30	60' LT	36'
3	368+99.39	2' RT	22'
4	369+17.39	26' RT	8'
5	370+05.39	26' RT	8'
6	370+23.39	2' RT	22'
7	369+21.74	42' LT	23'
8	369+36.83	46.7' LT	8'
9	369+63.09	61.2' LT	22'
10	370+04.35	41' LT	23'
11	370+09.35	26' LT	8'
12	370+27.35	2' LT	22'

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS FIRST STREET	SHEET 64 E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\021201_PD.DWG PLOT DATE : 2/20/2015 3:32 PM PLOT BY : MANSKE, CALEB PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

2

2

376+50.00 MATCH LINE

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED
SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
	DITCH FLOWLINE

STA 161+28
END CONSTRUCTION

ST. THOMAS STREET

STH 20

REPLACE CONCRETE STEPS AND LANDING

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	160+37.65	38' LT	20'
2	160+59.07	2' LT	22'
3	160+61.94	2' RT	22'
4	160+38.43	38' RT	20'
5	373+31.08	2' LT	22'
6	373+31.08	2' RT	22'
7	373+11.33	26' RT	8'
8	372+07.03	26' RT	8'
9	371+87.37	2' RT	22'
10	372+05.95	2' LT	22'
11	372+25.79	26' LT	8'
12	160+39.43	26' LT	8'
13	160+41.53	26' RT	8'
14	373+11.31	26' LT	8'
15	376+35.94	26' LT	8'
16	376+14.08	2' LT	22'
17	376+14.08	2' RT	22'
18	376+35.91	26' RT	8'

Lakeside ENGINEERS

WISCONSIN
MICHAEL R. ERNST
41457
WAUKESHA, WI
PROFESSIONAL ENGINEER

THIS STAMP APPLIES TO
PAVING DETAILS
FROM STA. 370+50 TO STA. 406+00

4/27/18 (Date) Michael Ernst (Signature)

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS S FIRST STREET	SHEET E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - SHEET - (1)
PLOT DATE : 4/27/2018 8:30 AM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED
SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
	DITCH FLOWLINE

N

382+50.00 MATCH LINE

171+00

STA 170+67
END CONSTRUCTION

WEBER STREET

STH 20

377+00 378+00 379+00 380+00 381+00 382+00

REPLACE CONCRETE STEPS AND LANDING

REPLACE CONCRETE STEPS AND LANDING

376+50.00 MATCH LINE

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	380+02.56	38' LT	20'
2	380+82.85	38' LT	20'
3	381+08.99	26' LT	8'
4	381+30.61	2' LT	22'
5	381+03.70	2' RT	22'
6	380+81.74	26' RT	8'
7	379+99.70	26' RT	8'
8	379+77.75	2' RT	22'
9	379+77.75	2' LT	22'
10	379+99.71	26' LT	8'
11	376+60.73	26' LT	8'
12	376+82.67	2' LT	22'
13	376+82.67	2' RT	22'
14	376+60.70	26' RT	8'

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS S FIRST STREET	SHEET 66	E

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED
SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
	DITCH FLOWLINE

382+50.00 MATCH LINE

388+50 MATCH LINE

BEGIN 6' INTEGRAL CURB & GUTTER

STH 20

RIVER ROAD

REMOVING ASPHALTIC SURFACE

STA 179+32
BEGIN CONSTRUCTION

179+41.95 0.00

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	384+61.71	49' RT	25'
2	383+57.92	72.6' RT	48'

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS	BECK DRIVE

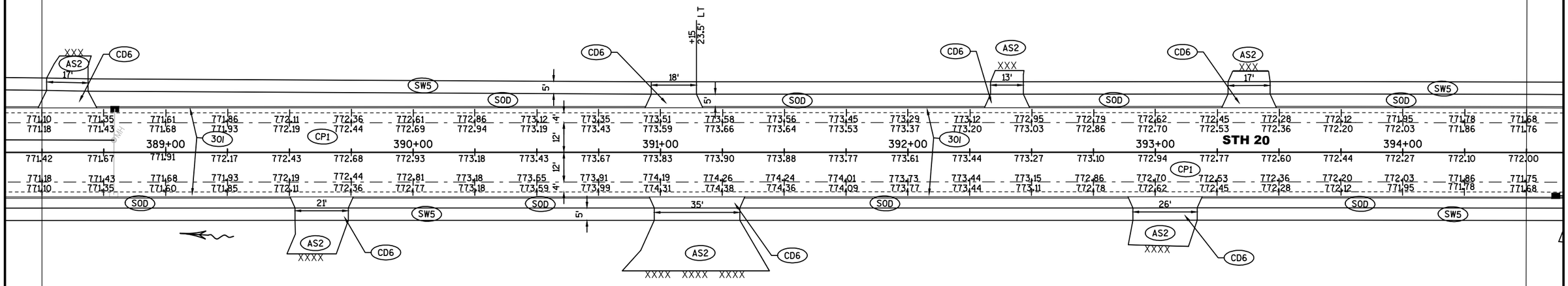
SHEET 67 E

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED
SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
	DITCH FLOWLINE

N

394+50.00 MATCH LINE

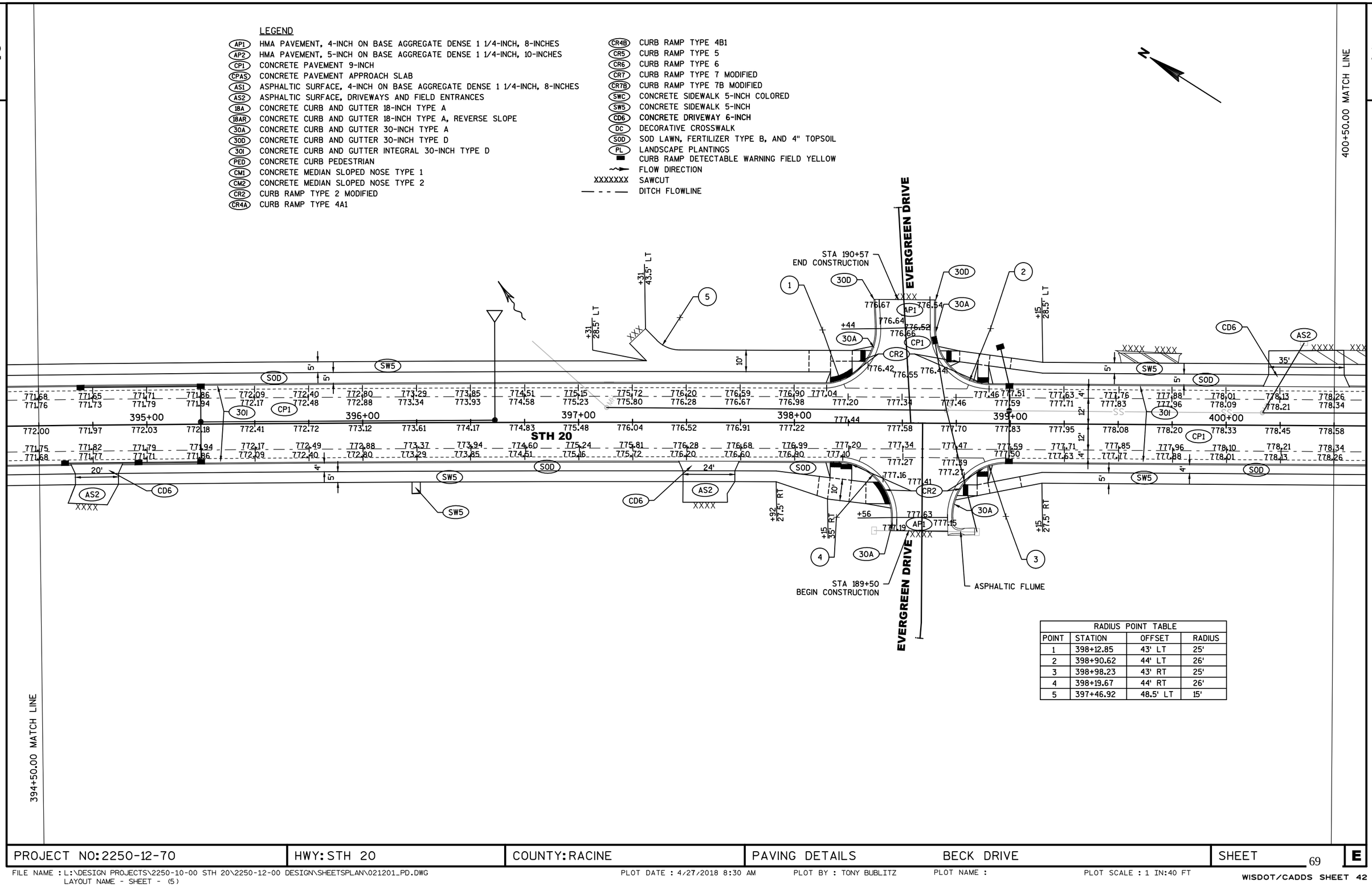


388+50 MATCH LINE

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS BECK DRIVE	SHEET 68 E

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED
SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
— - - —	DITCH FLOWLINE

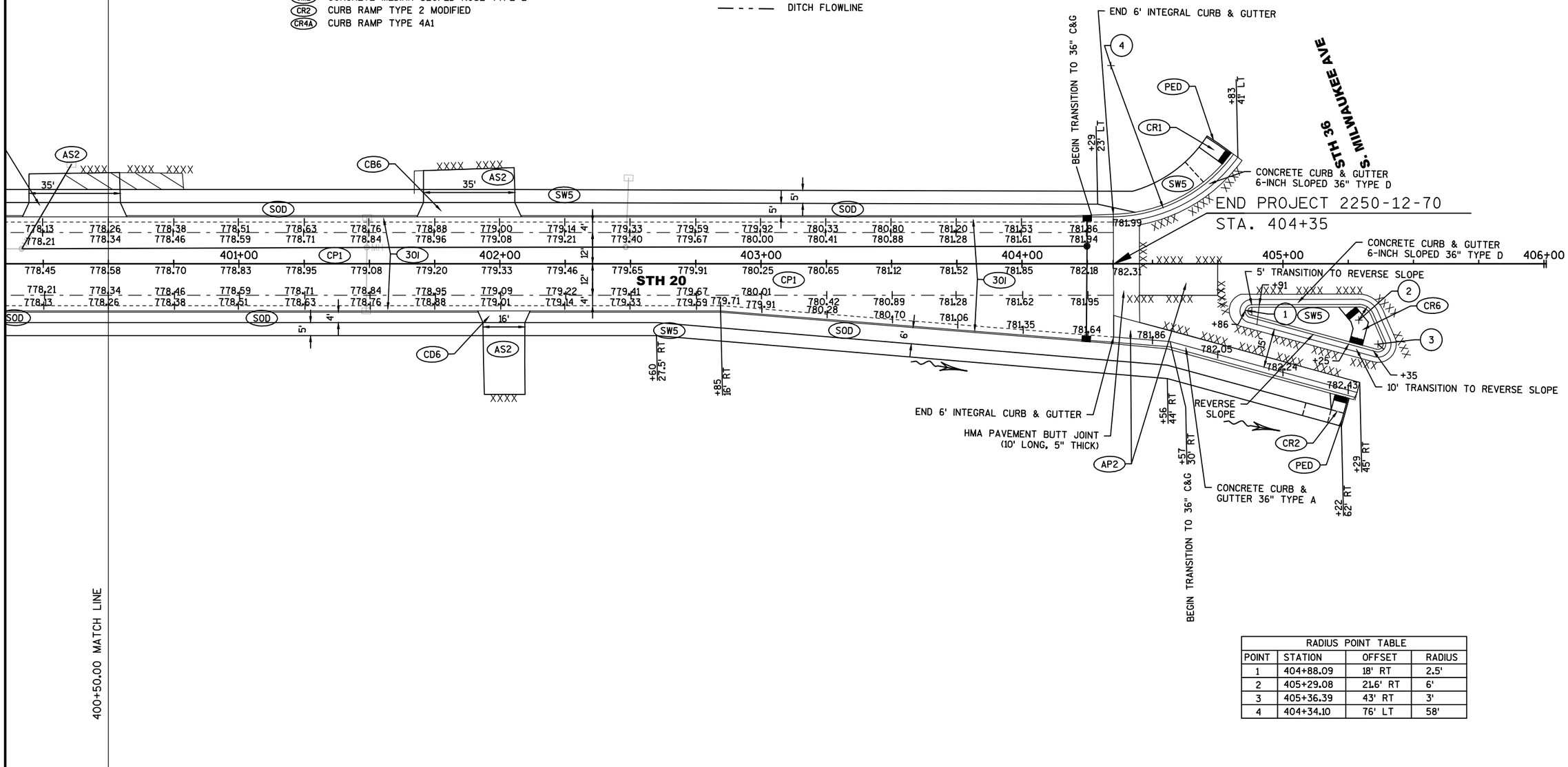


RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	398+12.85	43' LT	25'
2	398+90.62	44' LT	26'
3	398+98.23	43' RT	25'
4	398+19.67	44' RT	26'
5	397+46.92	48.5' LT	15'

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS BECK DRIVE	SHEET 69 E

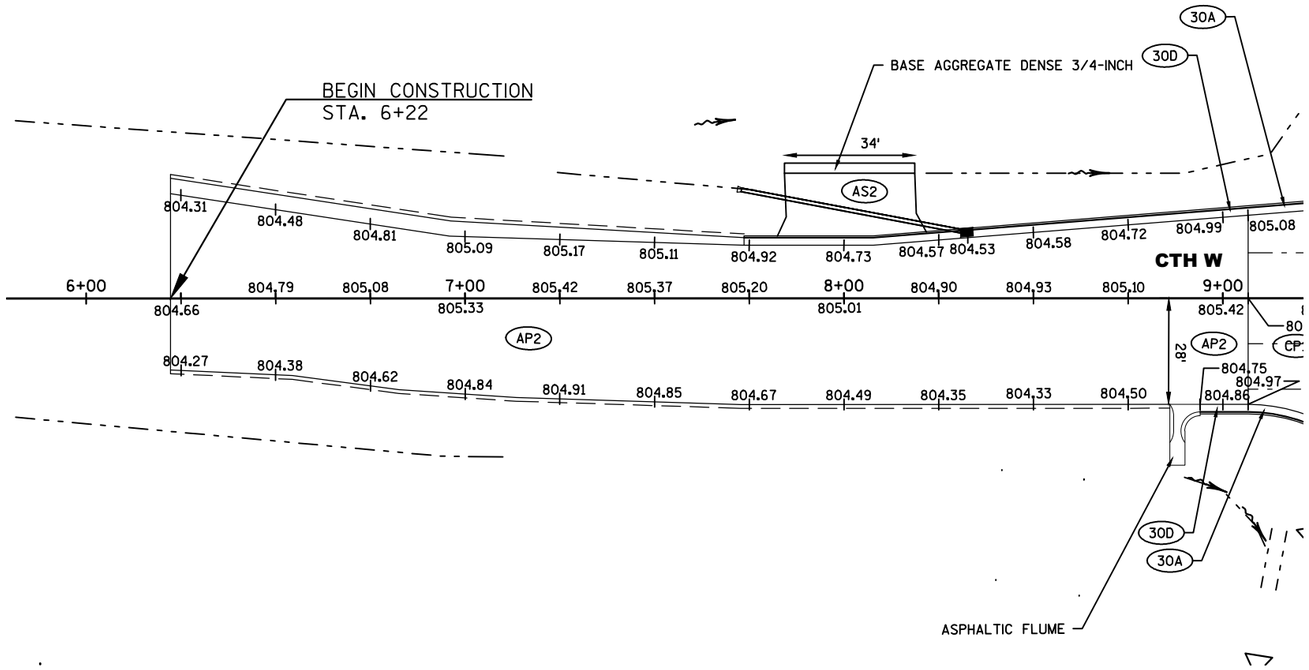
LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED
SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
— - - —	DITCH FLOWLINE



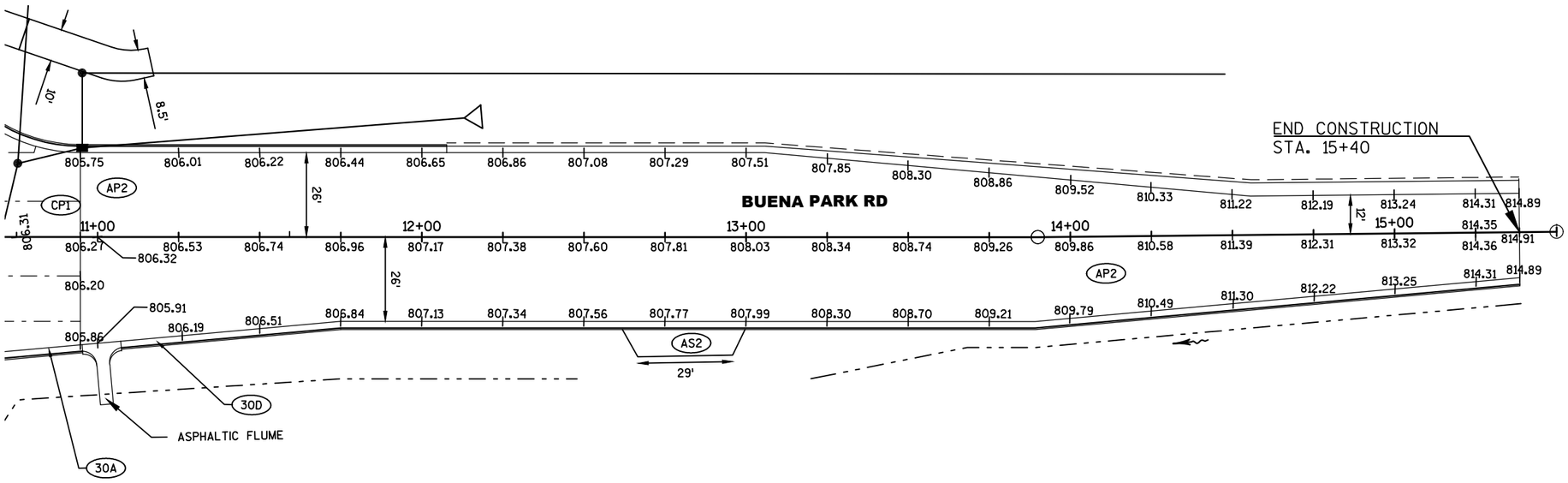
RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	404+88.09	18' RT	2.5'
2	405+29.08	21.6' RT	6'
3	405+36.39	43' RT	3'
4	404+34.10	76' LT	58'

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS BECK DRIVE	SHEET 70 E



LEGEND

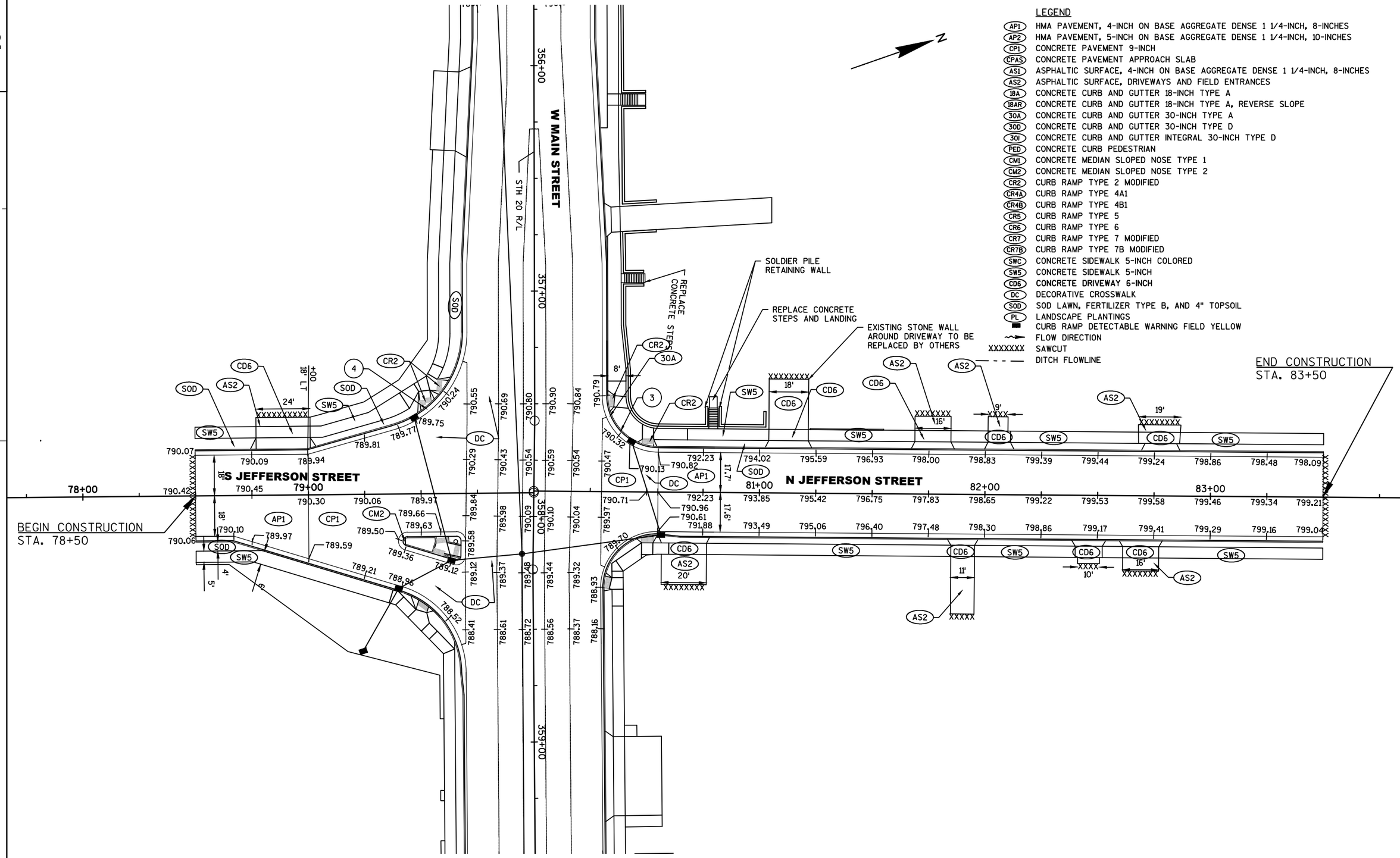
AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED
SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	**CONCRETE DRIVEWAY 6-INCH**
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
	DITCH FLOWLINE



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS - BUENA PARK ROAD	SHEET ----- E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\021202_PD.DWG PLOT DATE : 2/20/2015 3:32 PM PLOT BY : MANSKE, CALEB PLOT NAME : ---------- PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42

2



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS - JEFFERSON STREET	SHEET ----- E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\021202_PD.DWG PLOT DATE : 2/20/2015 3:32 PM PLOT BY : MANSKE, CALEB PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED

SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
— - - —	DITCH FLOWLINE

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	102+45.48	4' LT	21'
2	102+65.88	26' LT	9'
3	102+70.88	41' LT	29'
4	102+85.91	44.9' LT	9'
5	103+10.85	61.3' LT	21'
6			
7			
8	103+49.76	41' LT	23'
9	103+53.76	26' LT	8'
10	103+71.76	2' LT	22'
11	102+46.98	2' RT	22'
12	102+64.98	26' RT	8'
13	102+69.98	41' RT	23'
14	102+85.00	45.9' RT	8'
15	103+07.08	66.3' RT	22'
16	103+11.28	66.6' RT	22'
17	103+33.14	46.1' RT	8'
18	103+48.11	41' RT	23'
19	103+53.11	26' RT	8'
20	103+71.11	2' RT	22'
21	367+15.30	60' LT	36'

N

N SECOND STREET

STA. 131+00
END CONSTRUCTION

E MAIN STREET

E MAIN STREET R/L

FIRST STREET

STA. 129+00
BEGIN CONSTRUCTION

END CONSTRUCTION-STH 20
BEGIN CONSTRUCTION-E MAIN ST
STA. 103+50

GRAVEL DRIVEWAY

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS E MAIN STREET	SHEET 73 E

2

LEGEND

AP1	HMA PAVEMENT, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AP2	HMA PAVEMENT, 5-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCHES
CP1	CONCRETE PAVEMENT 9-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
AS1	ASPHALTIC SURFACE, 4-INCH ON BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCHES
AS2	ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES
18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
18AR	CONCRETE CURB AND GUTTER 18-INCH TYPE A, REVERSE SLOPE
30A	CONCRETE CURB AND GUTTER 30-INCH TYPE A
30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
30I	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH TYPE D
PED	CONCRETE CURB PEDESTRIAN
CM1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CR2	CURB RAMP TYPE 2 MODIFIED
CR4A	CURB RAMP TYPE 4A1
CR4B	CURB RAMP TYPE 4B1
CR5	CURB RAMP TYPE 5
CR6	CURB RAMP TYPE 6
CR7	CURB RAMP TYPE 7 MODIFIED
CR7B	CURB RAMP TYPE 7B MODIFIED

SWC	CONCRETE SIDEWALK 5-INCH COLORED
SW5	CONCRETE SIDEWALK 5-INCH
CD6	CONCRETE DRIVEWAY 6-INCH
DC	DECORATIVE CROSSWALK
SOD	SOD LAWN, FERTILIZER TYPE B, AND 4" TOPSOIL
PL	LANDSCAPE PLANTINGS
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	FLOW DIRECTION
XXXXXXX	SAWCUT
	DITCH FLOWLINE

N

STA. 141+25
END CONSTRUCTION

STA. 151+50
END CONSTRUCTION

N THIRD STREET

N MILWAUKEE STREET

E MAIN STREET

E MAIN STREET R/L

S THIRD STREET

S MILWAUKEE STREET

STA. 138+70
BEGIN CONSTRUCTION

STA. 149+22
BEGIN CONSTRUCTION

END CONSTRUCTION - E.MAIN ST.
STA. 109+75

TRENCH FOR
STORM SEWER REPLACEMENT

RADIUS POINT TABLE			
POINT	STATION	OFFSET	RADIUS
1	105+58.71	2' LT	22'
2	105+76.71	26' LT	8'
3	105+81.78	41' LT	23'
4	105+96.71	46' LT	8'
5	106+20.55	64' LT	22'
6	106.15+71	60' LT	22'
7	106+42.09	46' LT	8'
8	106+57.10	41' LT	23'
9	106+62.10	26' LT	8'
10	106+80.10	2' LT	22'
11	105+57.43	2' RT	22'
12	105+75.43	26' RT	8'
13	105+80.43	41' RT	23'
14	105+95.44	46' RT	8'
15	106+21.63	60.9' RT	22'
16	106+17.48	64.2' RT	22'
17	106+41.56	46.1' RT	8'
18	106+56.53	41' RT	23'
19	108+51.56	65' LT	54'
20	109+69.03	47' LT	23'
21	108+83.79	35' RT	9'
22	109+26.57	35' TY	9'

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVING DETAILS E MAIN STREET	SHEET 74 E

STORM SEWER LEGEND	
RI	REMOVING INLETS
RM	REMOVING MANHOLES
RP	REMOVING STORM SEWER PIPE

EROSION CONTROL LEGEND	
	SILT FENCE
	CULVERT PIPE CHECK
	TEMPORARY DITCH CHECK
	SURFACE WATER FLOW
	E-MAT REINFORCED SOD
X	INLET PROTECTION TYPE X

NOTE:
PLACE INLET PROTECTION TYPE A DURING GRADING OPERATIONS. PLACE RESPECTIVE INLET PROTECTION WHEN COVER IS INSTALLED.

PLACE INLET PROTECTION TYPE C ONE INLET BEYOND PROJECT LIMITS ON DOWNSTREAM SIDE ROADS.

CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE DURING ALL STORM SEWER CONSTRUCTION ACTIVITIES.

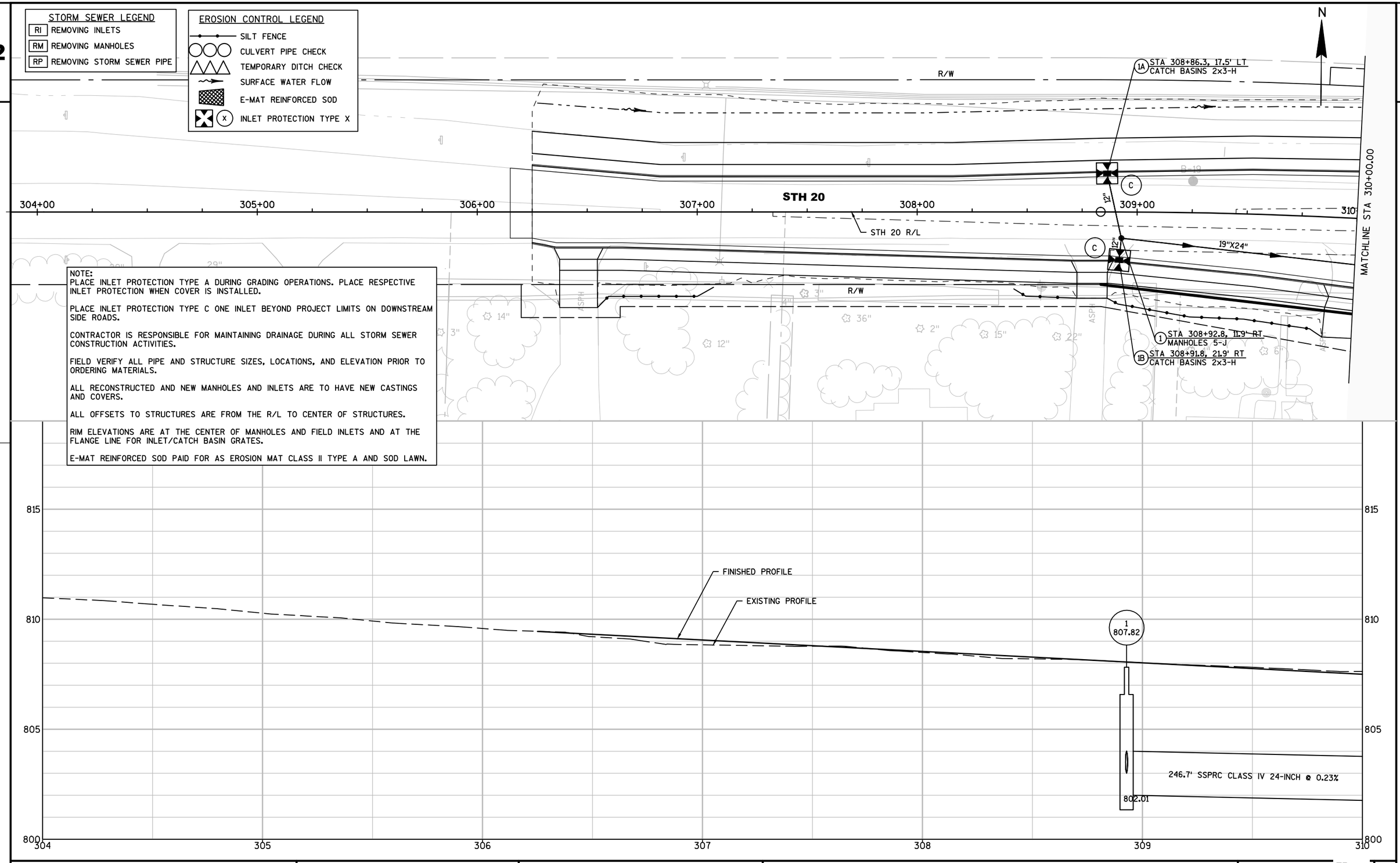
FIELD VERIFY ALL PIPE AND STRUCTURE SIZES, LOCATIONS, AND ELEVATION PRIOR TO ORDERING MATERIALS.

ALL RECONSTRUCTED AND NEW MANHOLES AND INLETS ARE TO HAVE NEW CASTINGS AND COVERS.

ALL OFFSETS TO STRUCTURES ARE FROM THE R/L TO CENTER OF STRUCTURES.

RIM ELEVATIONS ARE AT THE CENTER OF MANHOLES AND FIELD INLETS AND AT THE FLANGE LINE FOR INLET/CATCH BASIN GRATES.

E-MAT REINFORCED SOD PAID FOR AS EROSION MAT CLASS II TYPE A AND SOD LAWN.



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 75	E

STA 313+37.9, 85.5' LT
MANHOLES 4-J
38B

STA 313+19.1, 65.7' LT
APRON ENDWALLS FOR CPRCHE 19x30-INCH
38D

STA 311+41.3, 21.5' LT
CATCH BASINS 2x3-H
2A

STA 313+68.3, 70.5' LT
MANHOLES 7-J
38E

STA 311+41.3, 25.5' RT
MANHOLES 5-J
2

STA 311+41.3, 32.5' RT
CATCH BASINS 2x3-H
2B

STA 9+46
REMOVE 1-22X36-INCH RCCP

STA 314+26.4, 23.0' RT
MANHOLES 5-J
3

STA 9+27.50
1-24X38-INCH CPRCHE CLASS HE-IV
2-24X38-INCH CPRCHE AEW'S REQ'D

STA 314+43.2, 67.2' LT
APRON ENDWALLS FOR CPRCHE 29x45-INCH
38

STA 315+60.0, 53.2' LT
APRON ENDWALLS FOR CPRC 15-INCH
4

STA 315+60.0, 32.5' LT
CATCH BASINS 2x3-H
4D

STA 315+50.0, 32.5' LT
CATCH BASINS 2x3-H
4C

STA 10+64
REMOVE 1-26X42-INCH RCCP

STA 314+77.5, 59.9' RT
APRON ENDWALLS FOR CPRC 24-INCH
3A

STA 315+50.0, 32.5' RT
CATCH BASINS 2x3-H
4A

STA 315+60.0, 32.5' RT
CATCH BASINS 2x3-H
4B

STA 315+19.6, 68.5' RT
APRON ENDWALLS FOR CPRCHE 43x6
39A

STH 20
STH 20 R/L
BUENA PARK RD
CTH W
MATCHLINE STA 310+00.00
MATCHLINE STA 316+00.00
R/W
RM
RP
19"X24"
29"X45"
43"x68"
801.89
801.29

EROSION CONTROL LEGEND
- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- INLET PROTECTION TYPE X

STORM SEWER LEGEND
- RI REMOVING INLETS
- RM REMOVING MANHOLES
- RP REMOVING STORM SEWER PIPE

FINISHED PROFILE
EXISTING PROFILE

2
806.44

3
806.51

3A

246.7' SSPRC CLASS IV 24-INCH @ 0.23%
801.44
801.44

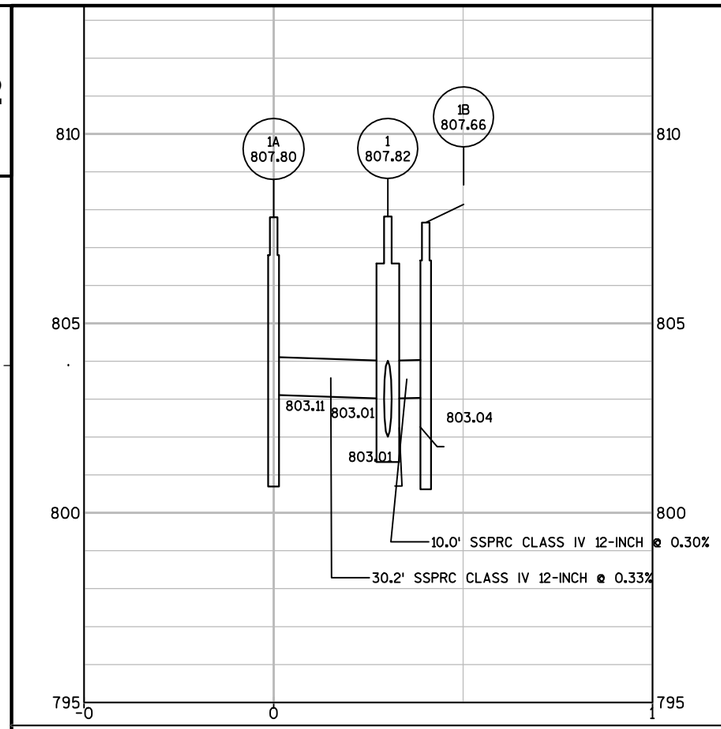
281.7' SSPRC CLASS IV 24-INCH @ 0.12%
801.10
801.10

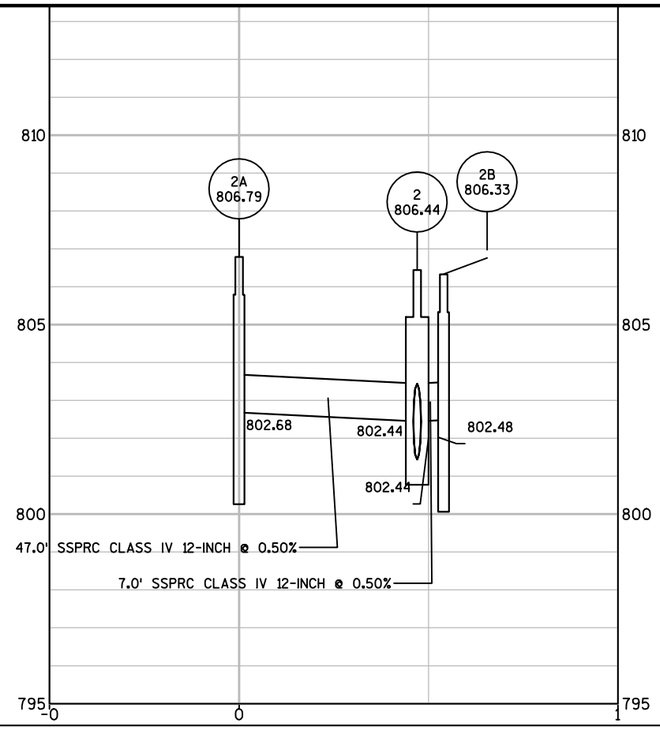
62.9' SSPRC CLASS IV 24-INCH @ 0.15%
801.01

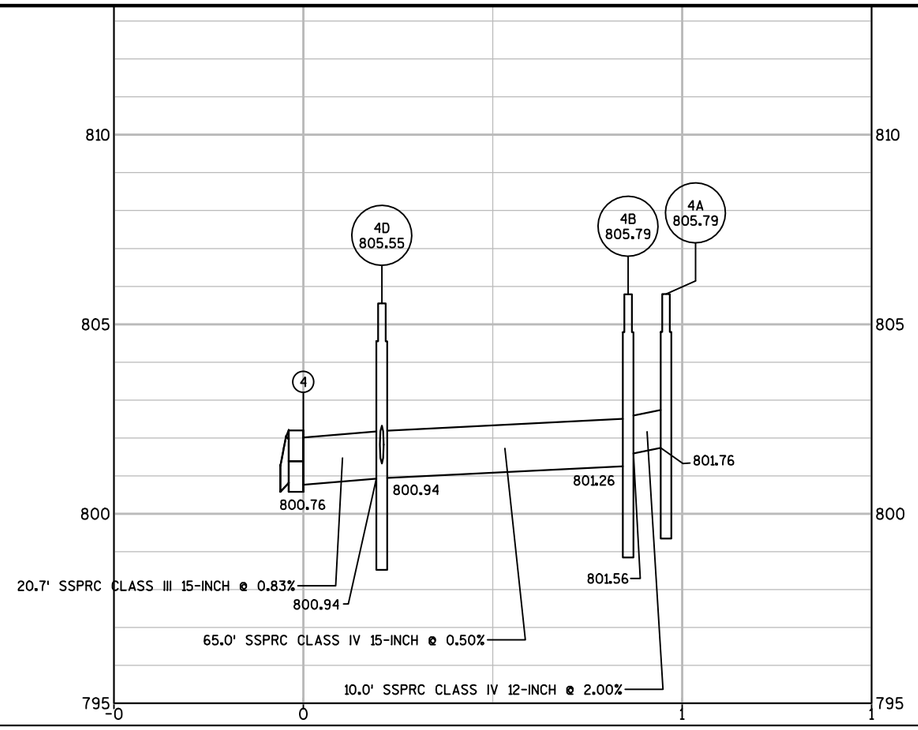
815
810
805
800
310
311
312
313
314
315
316

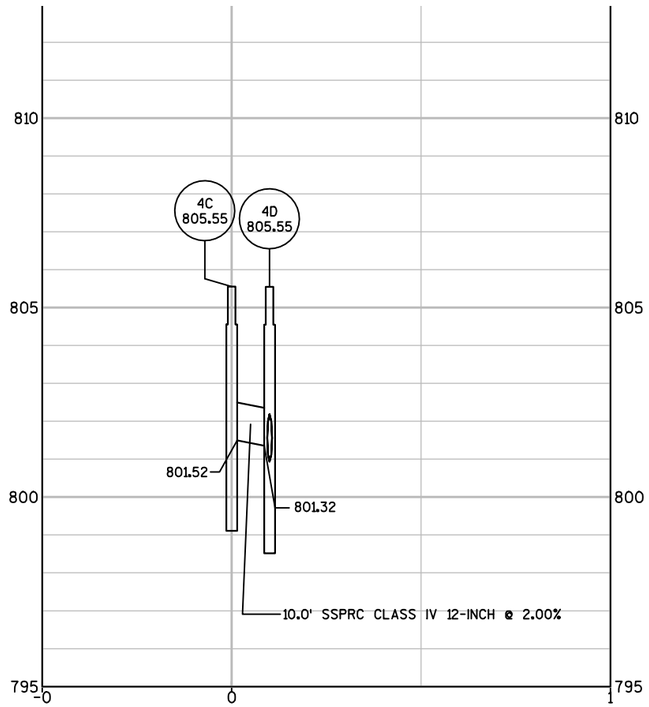
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 76	E

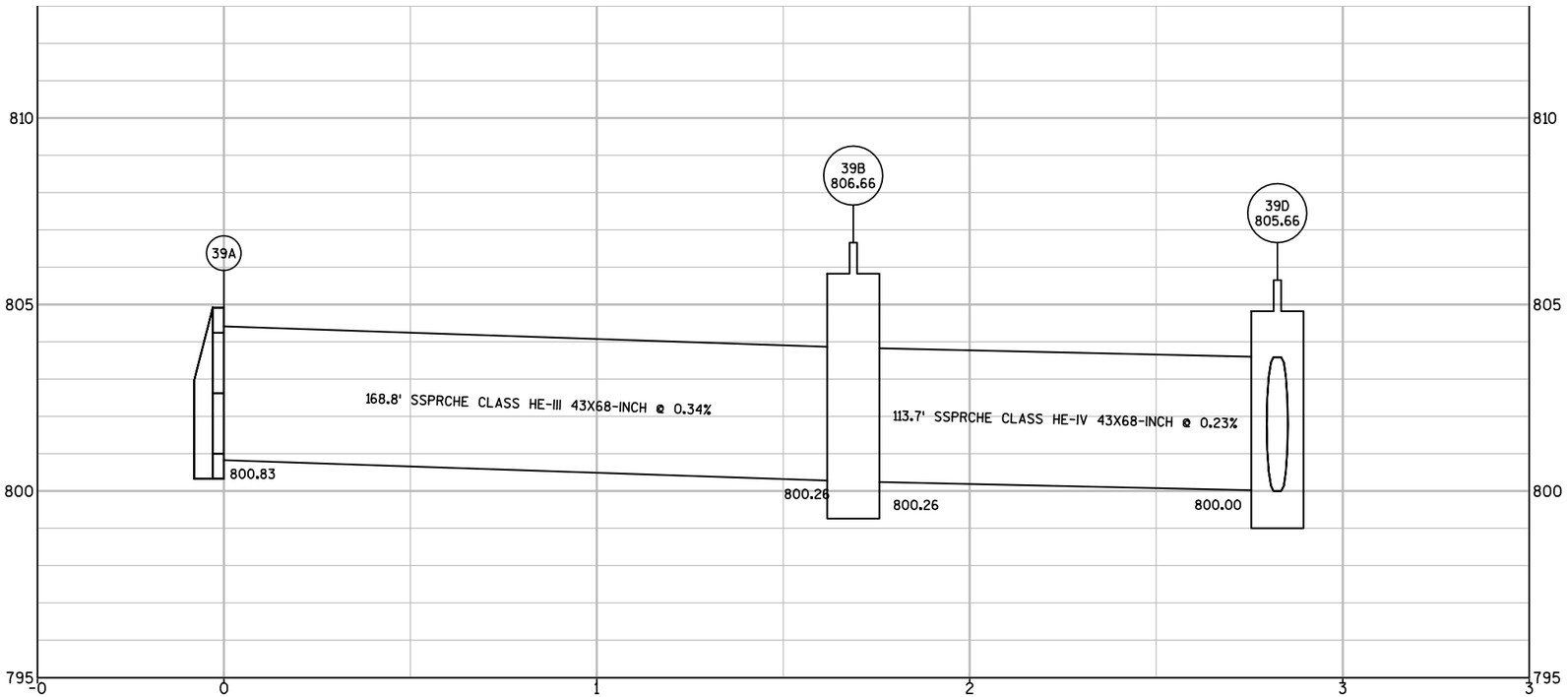
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022501_SS - SS - (2)
PLOT DATE : 7/16/2018 8:04 AM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1" = 40'_XREF











PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 77	E

2

TLE

39C STA 316+16.6, 63.5' LT
APRON ENDWALLS FOR CPRCHE 43x68-INCH

39D STA 316+88.1, 54.6' LT
MANHOLES 12-Special, R-1553 Cover

STA 320+00.0, 60.8' LT
MANHOLES 10-Special, R-2553 Cover 39E

PLE

STA. 321+44, LT
REMOVE 3-30" CMPS

AUGUSTA CT

43"x68"

STA 321+24.6, 56.9' LT
CATCH BASINS 2x3-H 6A

STA 320+40.2, 28.2' LT
CATCH BASINS 2x3-H 5A

STA 321+70.9, 56.5' LT
CATCH BASINS 4-H 6B

STA 321+89.1, 84.1' LT
APRON ENDWALLS FOR CPRCHE 43x68-INCH 39

STA 322+01.2, 73.6' LT
APRON ENDWALLS FOR CPRC 12-INCH 6

MATCHLINE STA 316+00.00

MATCHLINE STA 322+00.00

RI RP

STH 20

316+00 317+00 318+00 319+00 320+00 321+00 322

STA. 317+48, RT
REMOVE 1-15" CMPS

STH 20 R/L

15"

STA 320+39.9, 26.5' RT
CATCH BASINS 4-H 5B

R/W

STA 321+09.0, 55.8' RT
APRON ENDWALLS FOR CPRC 15-INCH 5

EXISTING 24" RCP TO REMAIN
CONNECT TO MH 39B
INVERT ELEV. = 800.26'

39B STA 316+88.1, 59.1' RT
MANHOLES 12-Special, R-1553 Cover

EROSION CONTROL LEGEND

- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

STORM SEWER LEGEND

- RI REMOVING INLETS
- RM REMOVING MANHOLES
- RP REMOVING STORM SEWER PIPE

815 810 805 800 797

316 317 318 319 320 321 322

FINISHED PROFILE

EXISTING PROFILE

39C 800.17

39D 805.66 800.00 800.00

39E 805.00 799.49 799.49

39 799.18

312.0' SSPRCHE CLASS HE-III 43X68-INCH @ 0.17%

197.0' SSPRCHE CLASS HE-III 43X68-INCH @ 0.16%

72.1' SSPRCHE CLASS HE-III 43X68-INCH @ 0.24%

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 78	E

2

7A STA 322+66.0, 26.5' LT
CATCH BASINS 2x3-H

8A STA 325+55.9, 26.5' LT
CATCH BASINS 2x3-H

8B STA 325+65.9, 26.5' LT
CATCH BASINS 2x3-H

STH 20

323+00 324+00 325+00 326+00 327+00 328

STH 20 R/L

MATCHLINE STA 322+00.00

MATCHLINE STA 328+00.00

12" 15" 12" 15" 15"

C C C D D

12" (P)

I.E.=799.46

7B STA 322+66.0, 26.5' RT
CATCH BASINS 2x3-H

7 STA 322+66.0, 52.8' RT
APRON ENDWALLS FOR CPRC 12-INCH

8C STA 325+55.9, 26.5' RT
CATCH BASINS 2x3-H

8D STA 325+65.9, 26.5' RT
CATCH BASINS 2x3-H

8 STA 325+65.9, 51.0' RT
APRON ENDWALLS FOR CPRC 15-INCH

STA 327+70, 69.5' RT
1-24-INCH CPCS
2-24-INCH CPSSDS 6:1 AEW REQ'D

RP

CUT-OFF EXISTING PIPE AND
REMOVE EXCESS TO MAINTAIN
EXISTING FLOW INTO NEW DITCH
GRADING

798.75

798.58

STORM SEWER LEGEND

RI	REMOVING INLETS
RM	REMOVING MANHOLES
RP	REMOVING STORM SEWER PIPE

EROSION CONTROL LEGEND

- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

FINISHED PROFILE

EXISTING PROFILE

810 805 800 795

322 323 324 325 326 327 328

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 79	E

2

MATCHLINE STA 328+00.00

MATCHLINE STA 334+00.00

STA 331+51.7, 26.5' LT
CATCH BASINS 2x3-H (9B)

STA 331+41.7, 26.5' LT
CATCH BASINS 2x3-H (9A)

797.40

STA 332+08.5
3-38X60-INCH CPRCHE CLASS HE-IV
3-FT SPACING (OUT-TO-OUT) TYPICAL
6-38X60-INCH CPRCHE AEW'S REQ'D
60° RHF SKEW
ALL INVERTS MATCH

STH 20

STH 20 R/L

+00 329+00 330+00 331+00 332+00 333+00 334

STA 329+35, 70.4' RT
1-24-INCH CPCS
2-24-INCH CPSSDS 6:1 AEW REQ'D

798.32

798.06

12"X18" CMP

I.E.=798.62

I.E.=798.35

STA 331+41.7, 26.5' RT
CATCH BASINS 2x3-H (9C)

STA 331+51.7, 26.5' RT
CATCH BASINS 4-H (9D)

STA 331+75.9, 58.5' RT
APRON ENDWALLS FOR CPRC 15-INCH (9)

797.25

STA 333+48.9, 21.1' RT
MANHOLES 4-J (14)

STA 333+08.4, 59.8' RT
APRON ENDWALLS FOR CPRC 24-INCH (14A)

EROSION CONTROL LEGEND
- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- INLET PROTECTION TYPE X

STORM SEWER LEGEND
- RI REMOVING INLETS
- RM REMOVING MANHOLES
- RP REMOVING STORM SEWER PIPE

FINISHED PROFILE

EXISTING PROFILE

9C 802.50

9D 802.52

14 804.05

14A

798.27

10.0' SSPRC CLASS IV 12-INCH @ 0.50%

798.22

797.92

798.26

798.26

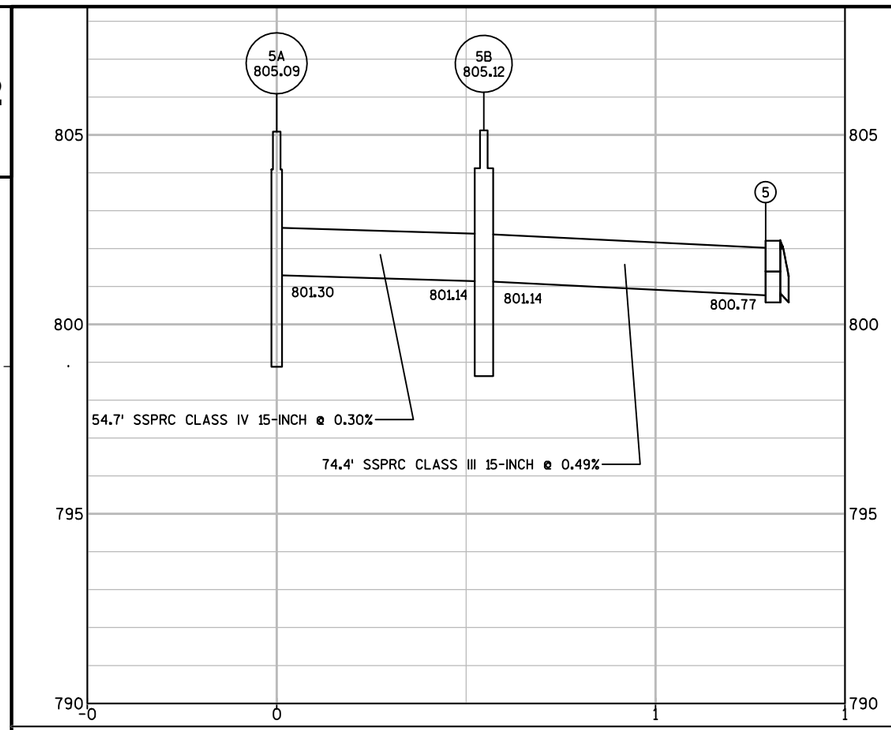
56.0' SSPRC CLASS IV 24-INCH @ 0.60%

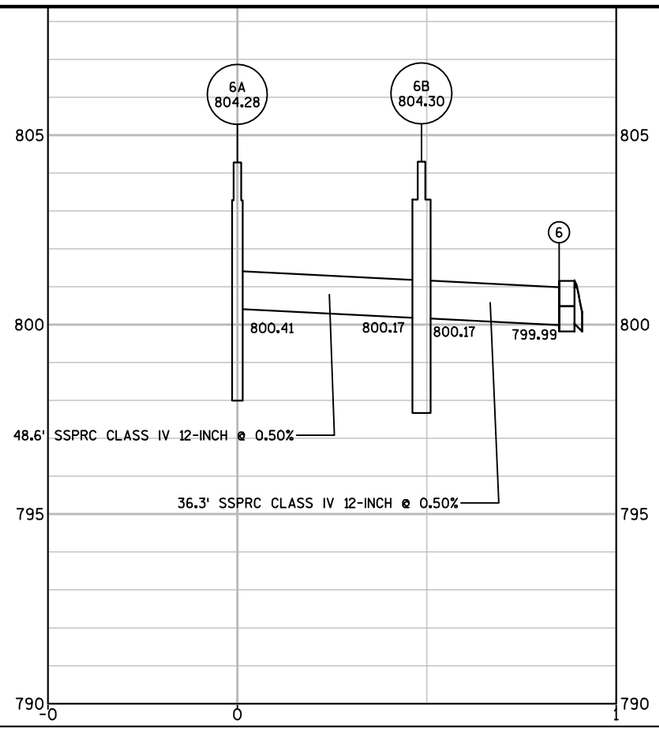
73.9' SSPRC CLASS IV 24-INCH @ 0.38%

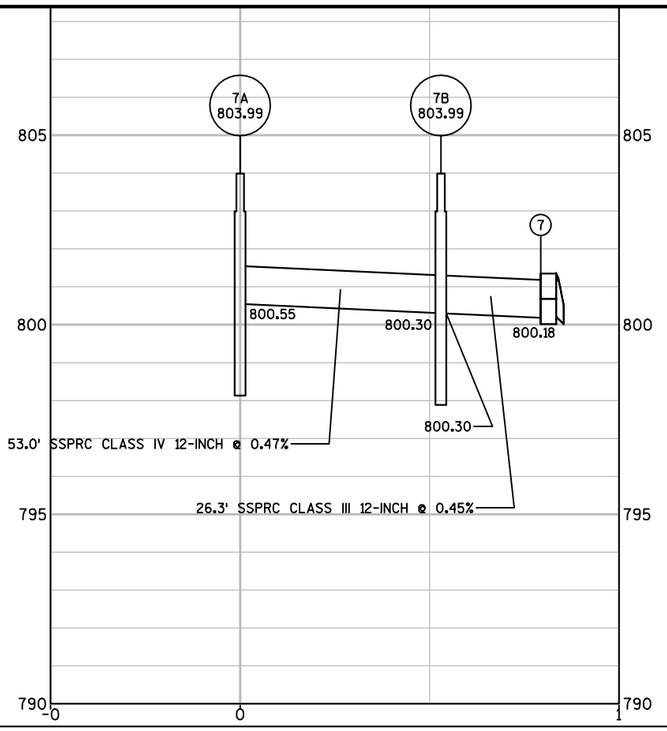
810 805 800 795

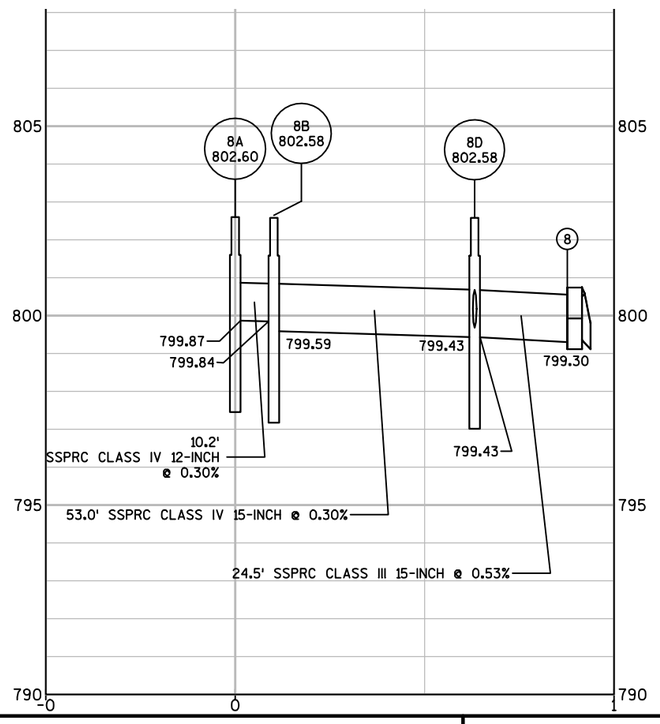
328 329 330 331 332 333 334

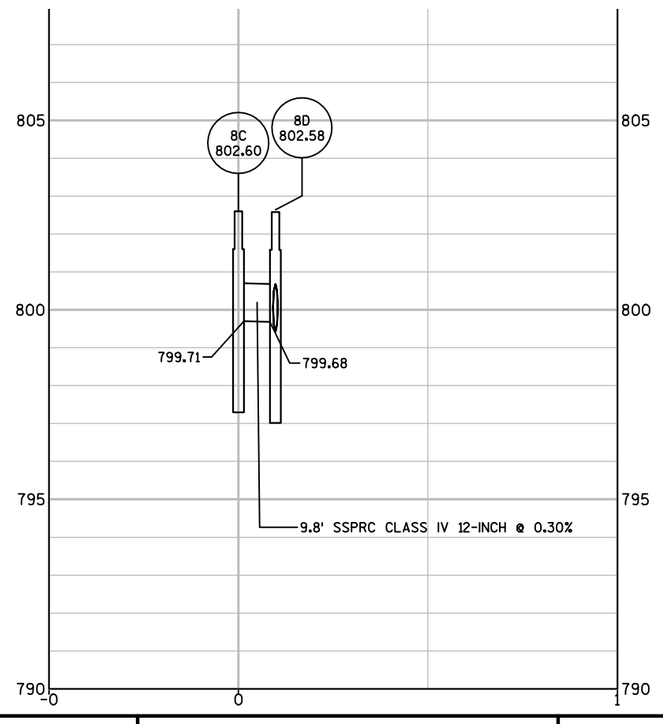
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 80	E

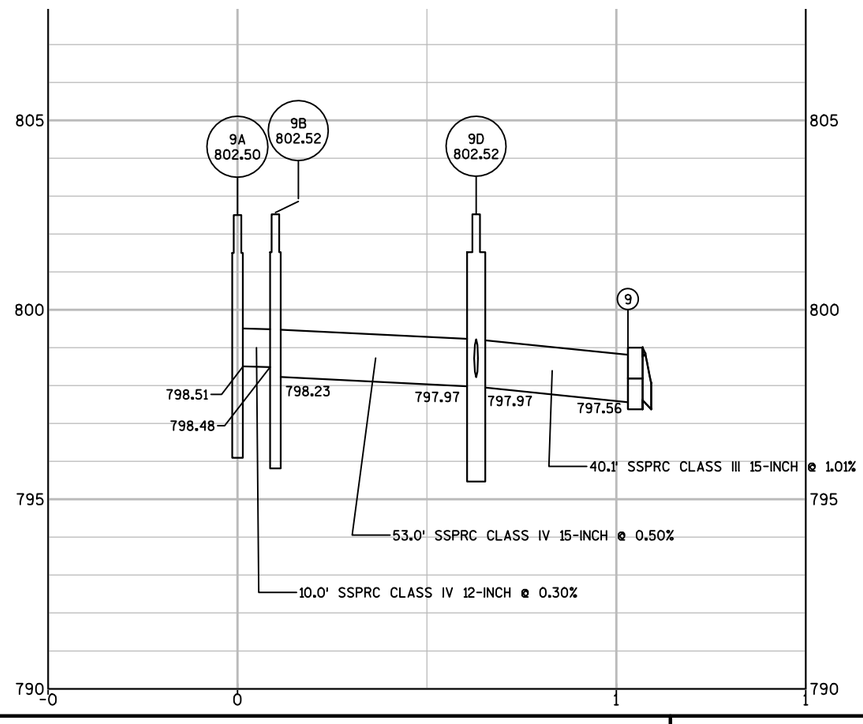












PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 81	E

2

STORM SEWER LEGEND	
RI	REMOVING INLETS
RM	REMOVING MANHOLES
RP	REMOVING STORM SEWER PIPE

EROSION CONTROL LEGEND	
	SILT FENCE
	CULVERT PIPE CHECK
	TEMPORARY DITCH CHECK
	SURFACE WATER FLOW
	E-MAT REINFORCED SOD
X	INLET PROTECTION TYPE X

RIVERMOOR RD

CLUB LANE

STH 20

STH 20 R/L

MATCHLINE STA 334+00.00

MATCHLINE STA 340+00.00

13A STA 334+75.4, 48.4' LT
CATCH BASINS 4-H

13B STA 335+18.2, 57.2' LT
MANHOLES 4-J

13C STA 335+18.5, 31.5' LT
CATCH BASINS 2x3-H

STA. 335+23
REMOVE EXISTING CMP

10A STA 334+43.8, 48.3' LT
CATCH BASINS 2x3-H

STA. 334+93
REMOVE 1-18" CMP

10 STA 334+22.7, 22.3' RT
MANHOLES 5-J

13 STA 335+18.5, 24.0' RT
MANHOLES 4-J

13D STA 335+18.5, 31.5' RT
CATCH BASINS 2x3-H

12A STA 337+26.0, 26.5' LT
CATCH BASINS 2x3-H

12 STA 337+26.0, 19.0' RT
MANHOLES 4-J

12B STA 337+26.0, 26.5' RT
CATCH BASINS 2x3-H

11D STA 339+66.6, 117.0' LT
CATCH BASINS 4-H

334+00 335+00 336+00 337+00 338+00 339+00 340

12" 18" 24" 15"

RP

D C

CABC ASPH

FINISHED PROFILE

EXISTING PROFILE

10
804.76

13
805.69

12
807.86

95.8' SSPRC CLASS IV 24-INCH @ 0.38%

798.54

798.90 798.90

207.7' SSPRC CLASS IV 24-INCH @ 0.44%

799.82 799.82

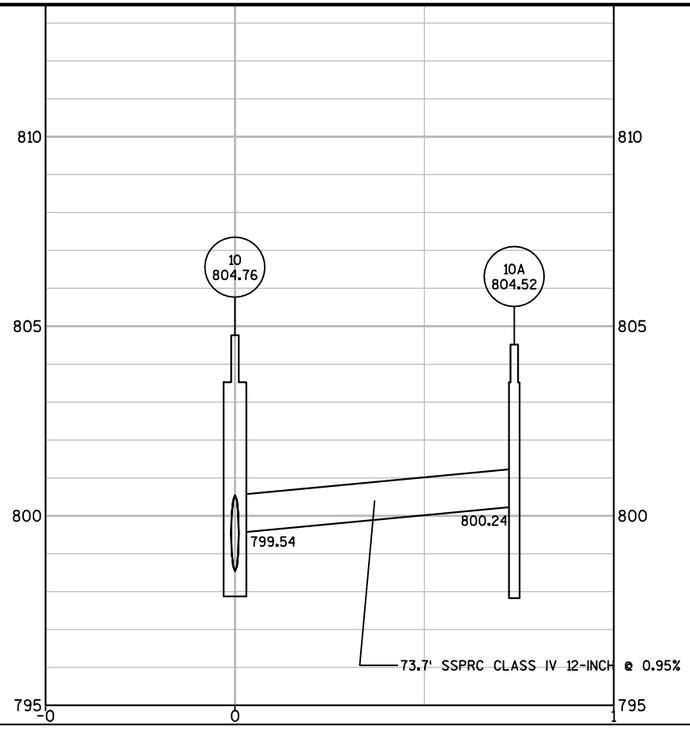
282.9' SSPRC CLASS III 24-INCH @ 3.31%

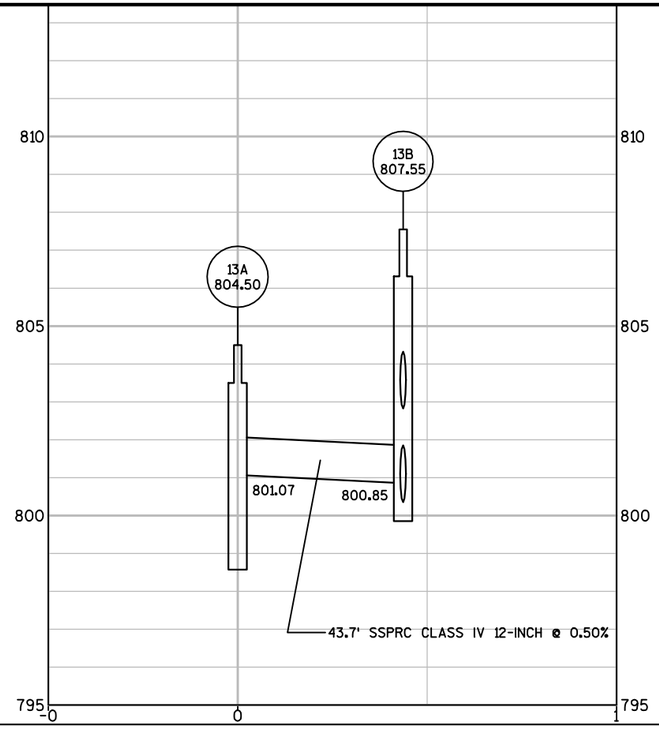
73.9' SSPRC CLASS IV 24-INCH @ 0.38%

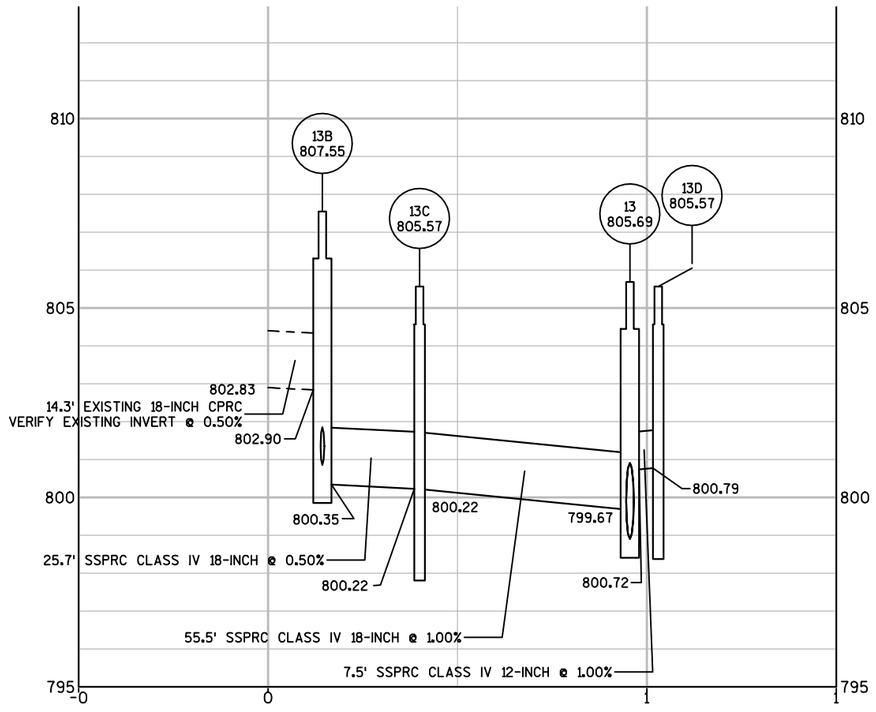
810 805 800 795

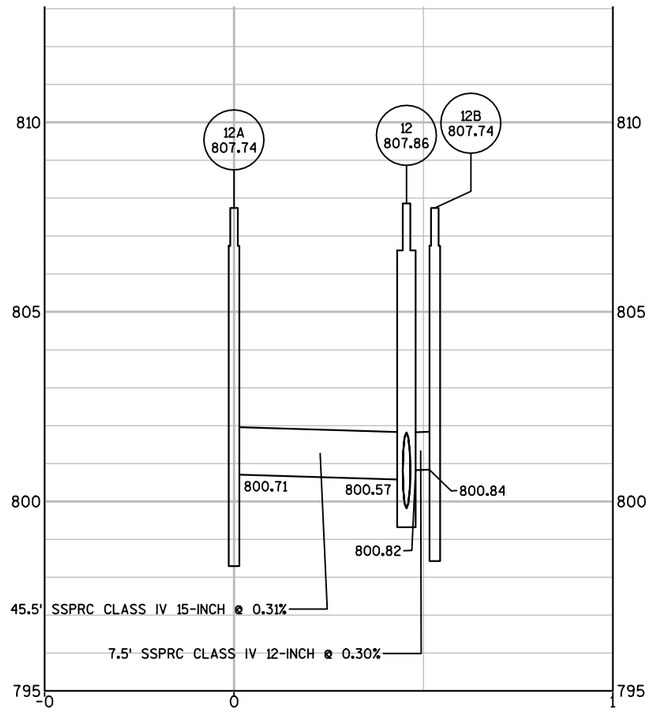
334 335 336 337 338 339 340

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 82	E









PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 83	E

2

MATCHLINE STA 340+00.00

MATCHLINE STA 346+00.00

RIVERMOOR DR

RACINE ST

STH 20

STH 20 R/L

11B STA 340+09.8, 44.0' LT
CATCH BASINS 4-H

11A STA 340+43.4, 42.1' LT
CATCH BASINS 4-H

11 STA 340+08.9, 19.0' RT
MANHOLES 4-J

11C STA 340+08.9, 26.5' RT
CATCH BASINS 2x3-H

15A STA 345+25.0, 26.5' LT
CATCH BASINS 4-H

15 STA 345+51.9, 19.0' RT
MANHOLES 5-J

15B STA 345+52.2, 26.5' RT
CATCH BASINS 4-H

CONNECT TO EXISTING PIPE CONCRETE COLLAR REQ'D

N

STORM SEWER LEGEND

RI	REMOVING INLETS
RM	REMOVING MANHOLES
RP	REMOVING STORM SEWER PIPE

EROSION CONTROL LEGEND

- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

EXISTING PROFILE

FINISHED PROFILE

11
815.87

809.18

282.9' SSPRC CLASS III 24-INCH @ 3.31%

15
812.62

804.08

276.5' SSPRC CLASS III 24-INCH

820
815
810
805
802

340 341 342 343 344 345 346

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 84	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022501_SS - SS - (7)

PLOT DATE : 7/16/2018 8:11 AM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 41

MATCHLINE STA 346+00.00

MATCHLINE STA 352+00.00

RM

RP

RI

C

16A STA 348+27.1, 26.5' LT
CATCH BASINS 4-H

STA 351+34.1, 26.5' LT
CATCH BASINS 2x3-H 18A

CENTER ST

STH 20

STH 20 R/L

346+00

347+00

348+00

349+00

350+00

351+00

352

24"

12"

15"

8" (P)

ASPH

STA 348+27.1, 18.0' RT
MANHOLES 5-J 16

STA 348+27.1, 26.5' RT
CATCH BASINS 2x3-H 16B

STA 348+90.5, 19.0' RT
MANHOLES 4-J 17

STA 349+08.1, 42.4' RT
MANHOLES 6-J, ECCENTRIC TOP
ROTATE CONE TO AVOID CURB
AND SIDEWALK 17B

STA 351+34.1, 19.0' RT
MANHOLES 4-J 18

STA 351+34.1, 26.5' RT
CATCH BASINS 2x3-H 18B

EROSION CONTROL LEGEND

- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

STORM SEWER LEGEND

- RI REMOVING INLETS
- RM REMOVING MANHOLES
- RP REMOVING STORM SEWER PIPE

FINISHED PROFILE

EXISTING PROFILE

16
801.89

17
799.33

18
792.23

276.5' SSPRC CLASS III 24-INCH @ 3.79%

65.6' SSPRC CLASS III 24-INCH @ 4.10%

245.2' SSPRC CLASS III 24-INCH @ 1.71%

288.8' SSPRC CLASS IV 24-INCH @ 0.85%

793.61

793.61

790.92

790.92

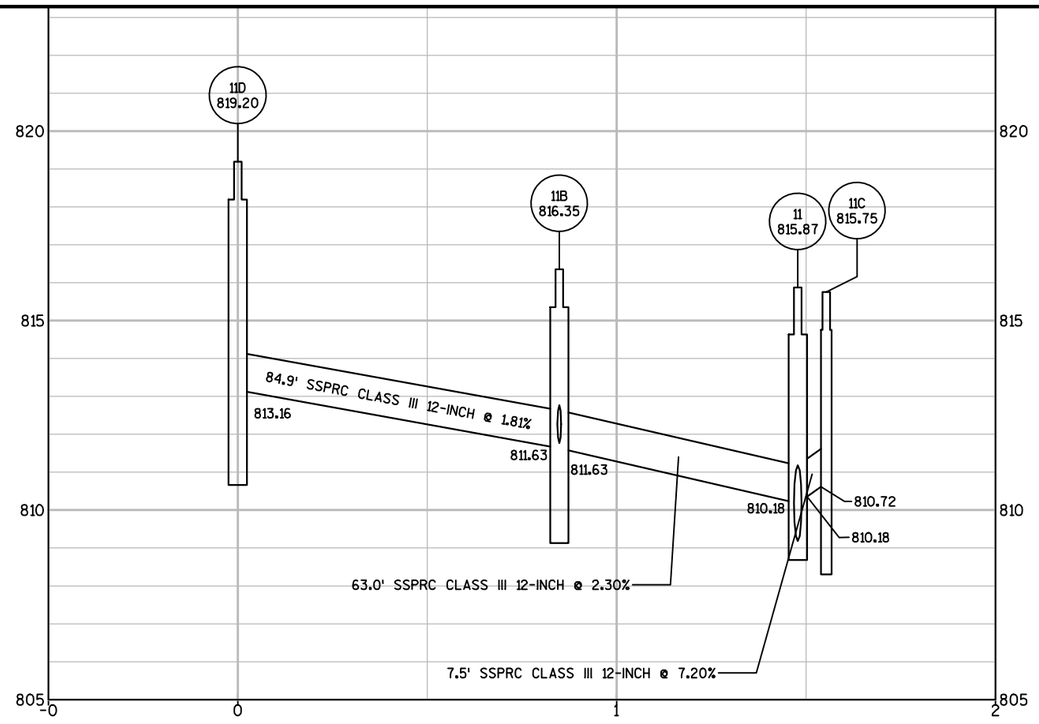
786.72

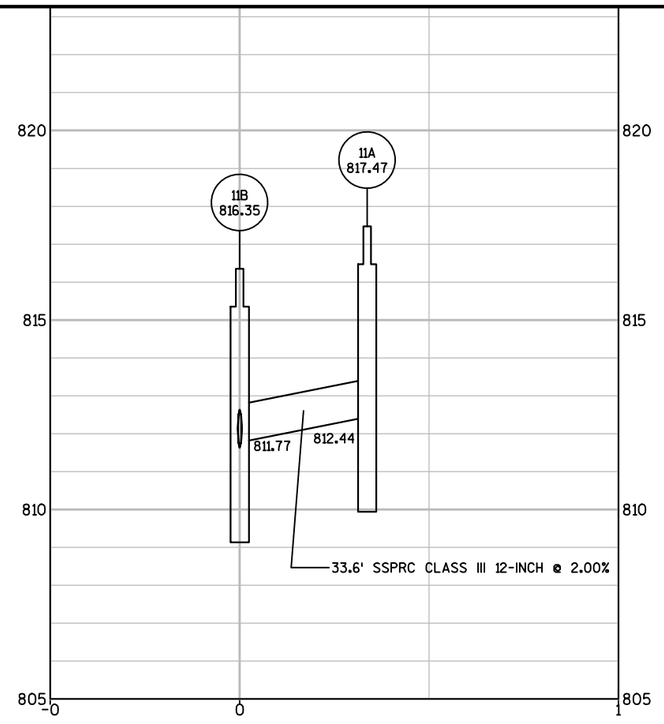
786.72

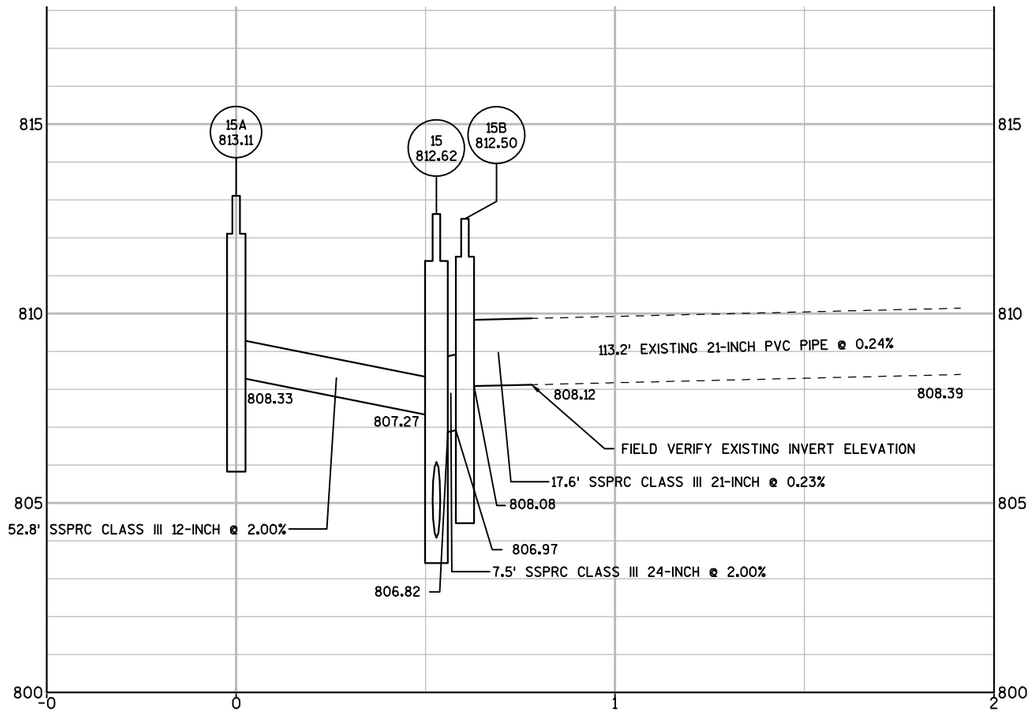
805
800
795
790
785
780

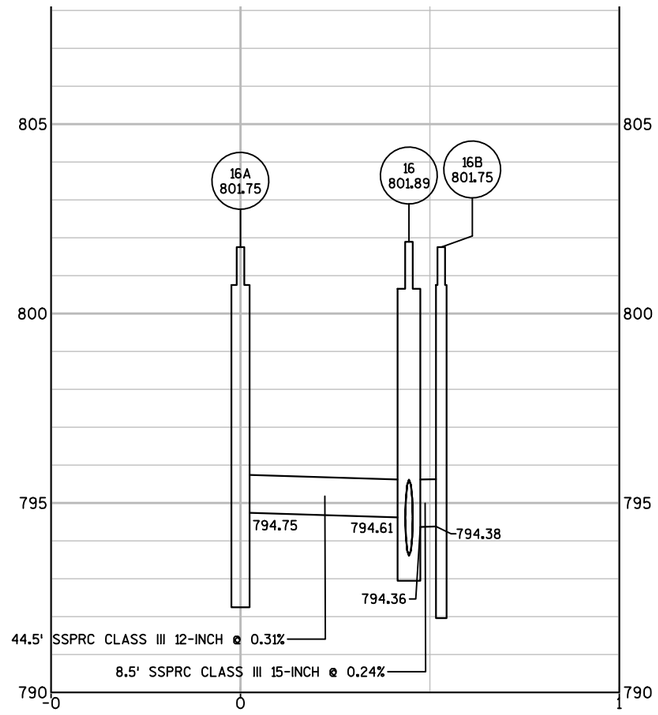
346
347
348
349
350
351
352

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 85	E

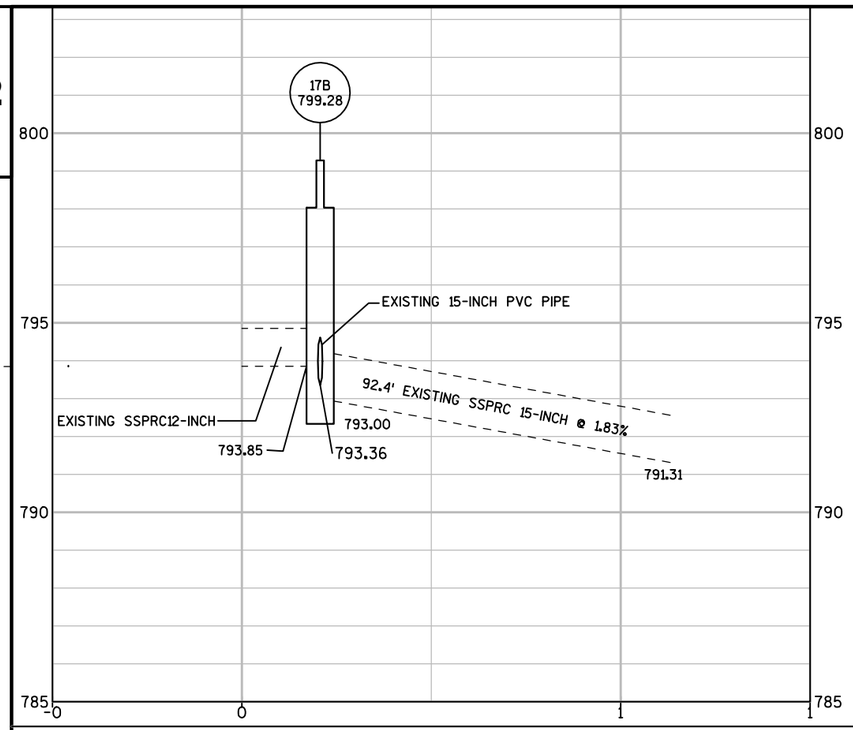


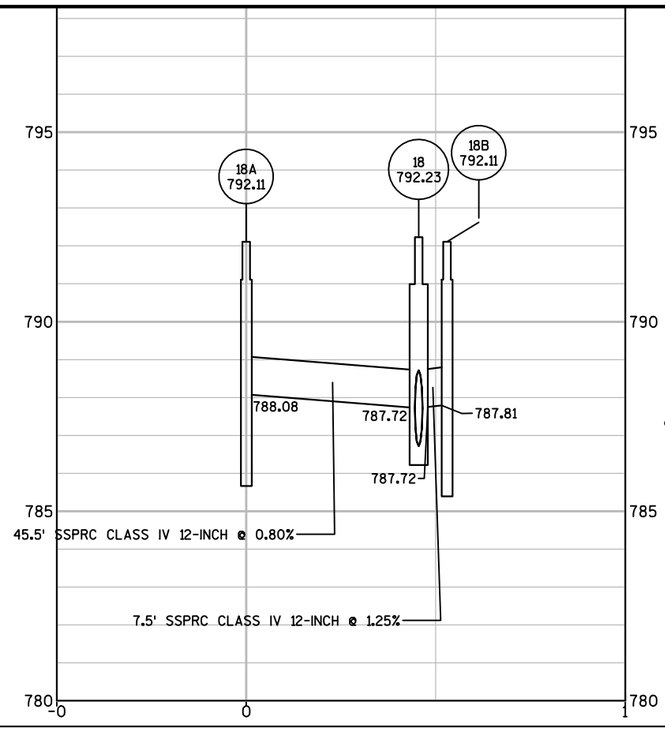


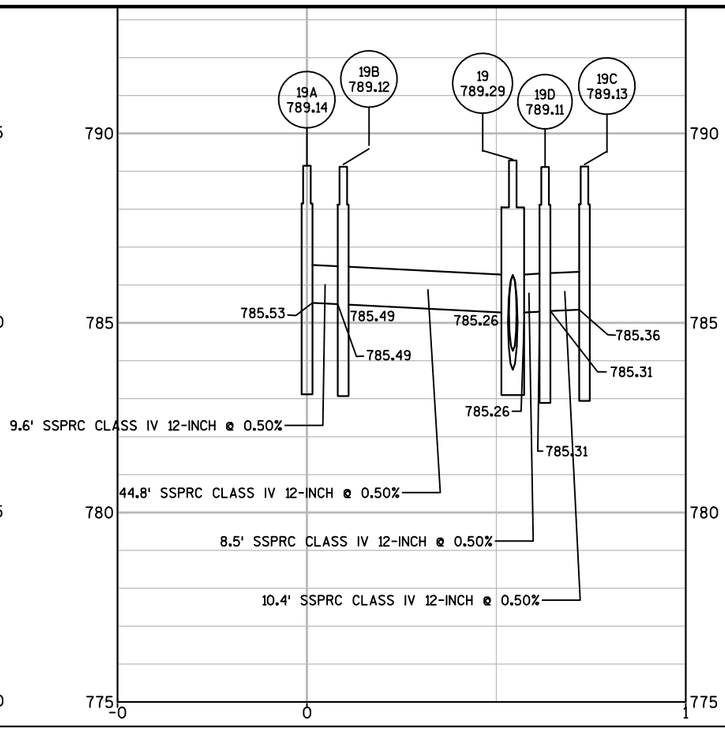


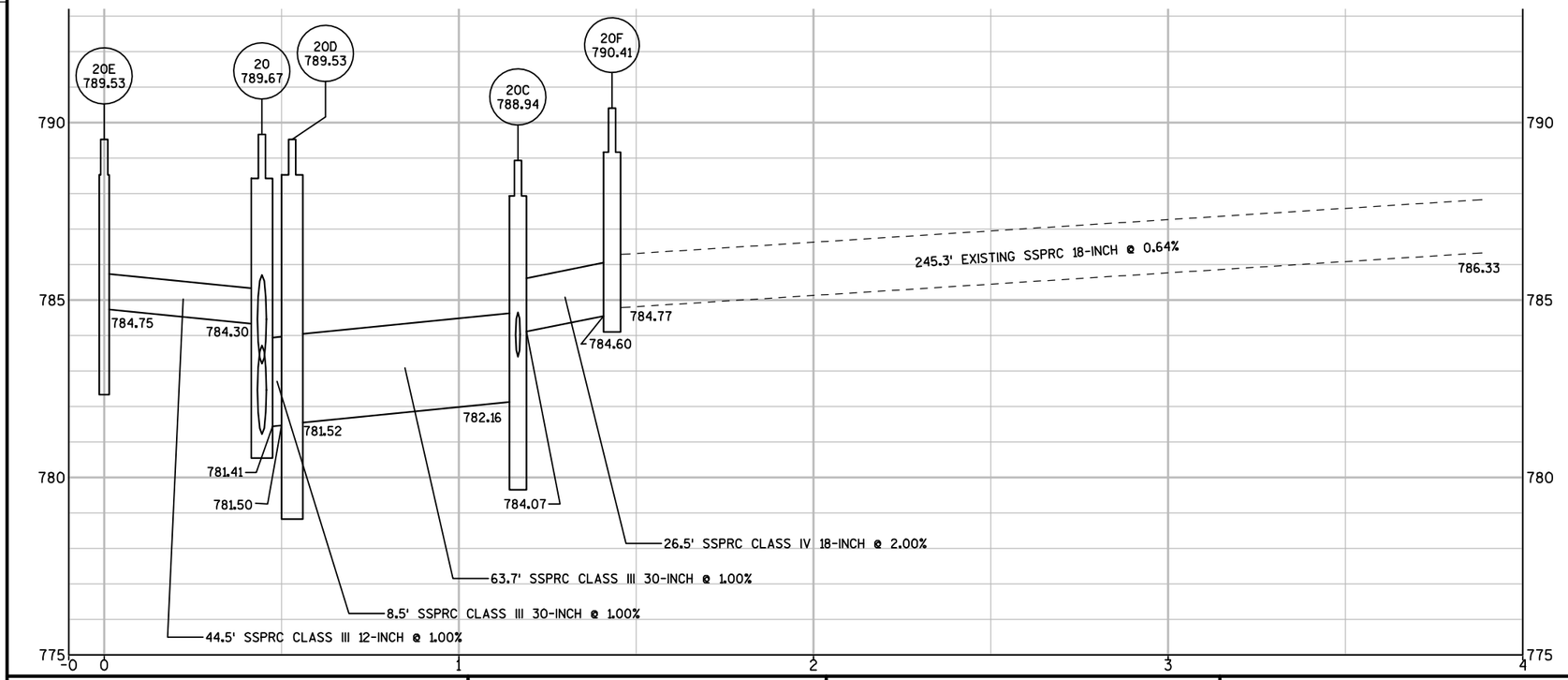


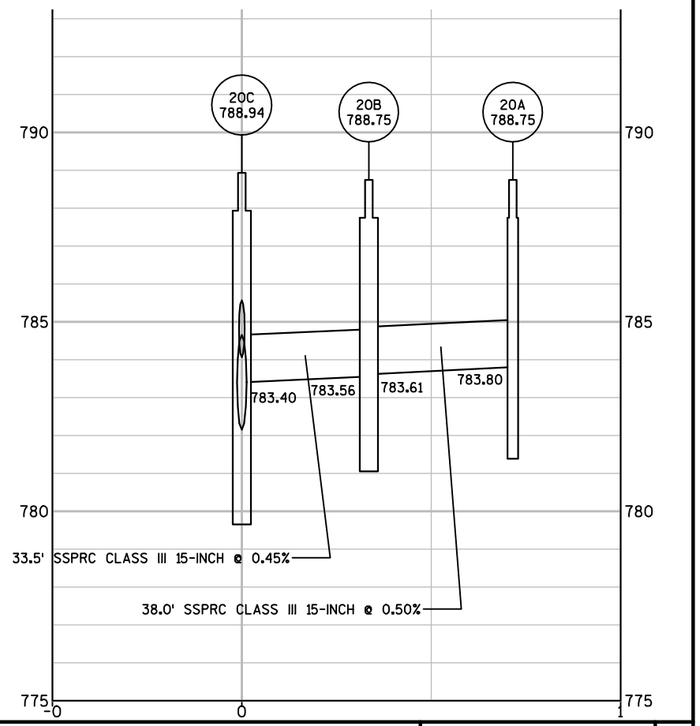
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 86	E











PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 87	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - ss-lats(16-20)
PLOT DATE : 7/16/2018 8:13 AM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 41

2

MATCHLINE STA 352+00.00

MATCHLINE STA 358+00.00

STH 20

STH 20 R/L

N JEFFERSON STREET

S JEFFERSON ST

S WATER ST

STA 354+06.1, 26.3' LT
CATCH BASINS 2x3-H 19A

19B STA 354+16.0, 26.4' LT
CATCH BASINS 2x3-H

20E STA 355+30.0, 26.5' LT
CATCH BASINS 2x3-H

STA 357+66.1, 43.1' LT
CATCH BASINS 4-H 21A

STA 354+11.6, 26.5' RT
CATCH BASINS 2x3-H 19C

STA 354+21.7, 26.5' RT
CATCH BASINS 2x3-H 19D

STA 354+21.7, 18.0' RT
MANHOLES 5-J 19

STA 354+46.3, 40.6' RT
RECONSTRUCTING MANHOLE 20F

STA 354+71.3, 43.8' RT
CATCH BASINS 4-H 20C

STA 354+74.1, 77.1' RT
CATCH BASINS 4-H 20B

20 STA 355+30.0, 18.0' RT
MANHOLES 5-J

20D STA 355+30.0, 26.5' RT
CATCH BASINS 5-H

20A STA 355+08.7, 74.6' RT
CATCH BASINS 2x3-H

STA 357+55.9, 53.4' RT
CATCH BASINS 2x3-H 21D

OVERHEAD SIGN

OVERHEAD SIGN

OVERHEAD SIGN

EROSION CONTROL LEGEND

- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

STORM SEWER LEGEND

- RI REMOVING INLETS
- RM REMOVING MANHOLES
- RP REMOVING STORM SEWER PIPE

FINISHED PROFILE

EXISTING PROFILE

19
789.29

20
789.67

288.8' SSPRC CLASS IV 24-INCH @ 0.85%

784.26

783.76

110.7' SSPRC CLASS IV 30-INCH @ 0.50%

783.21

781.22

287.1' SSPRC CLASS III 30-INCH @ 1.00%

790
785
780
775

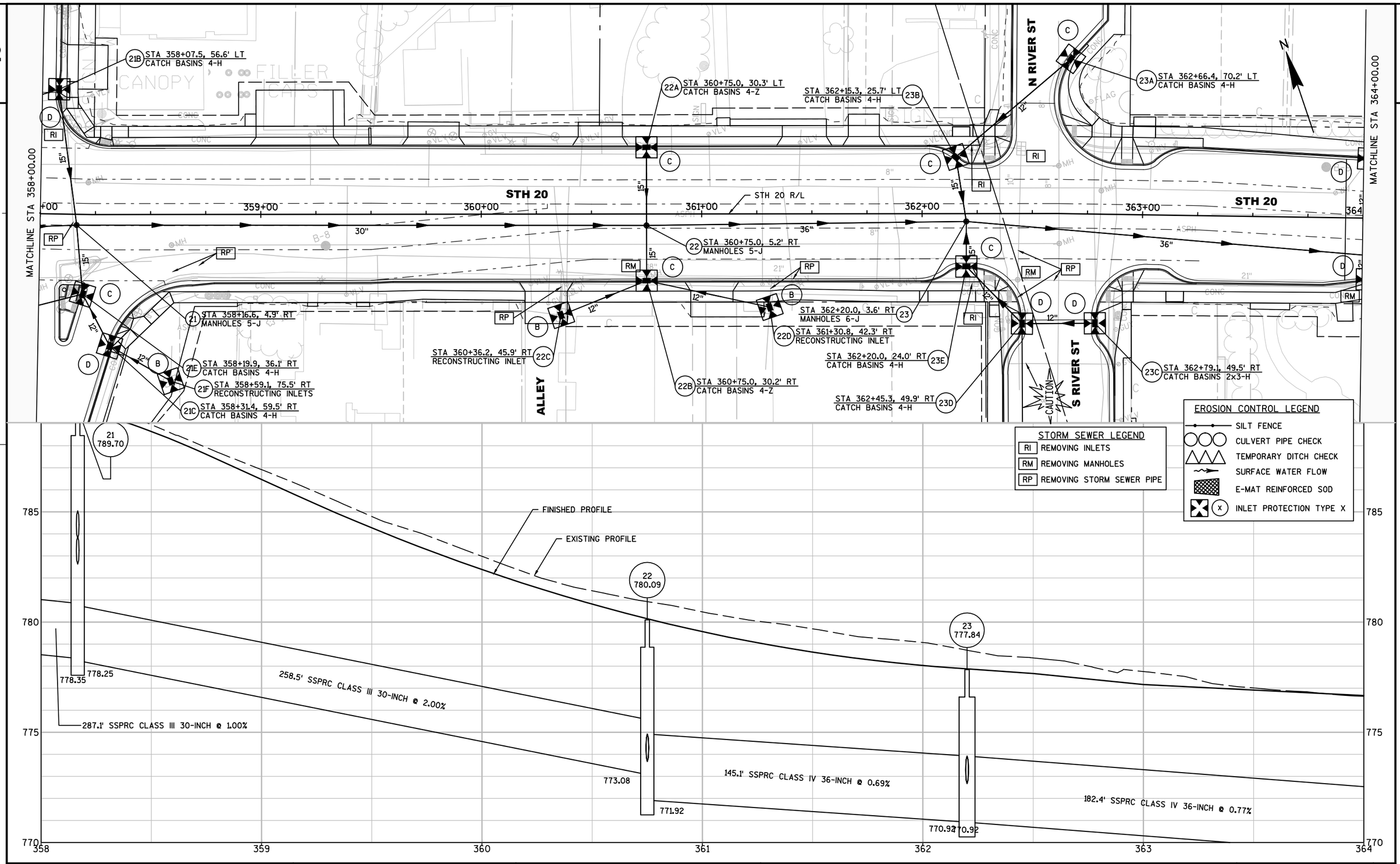
352
353
354
355
356
357
358

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 88	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022501_SS - SS - (9)

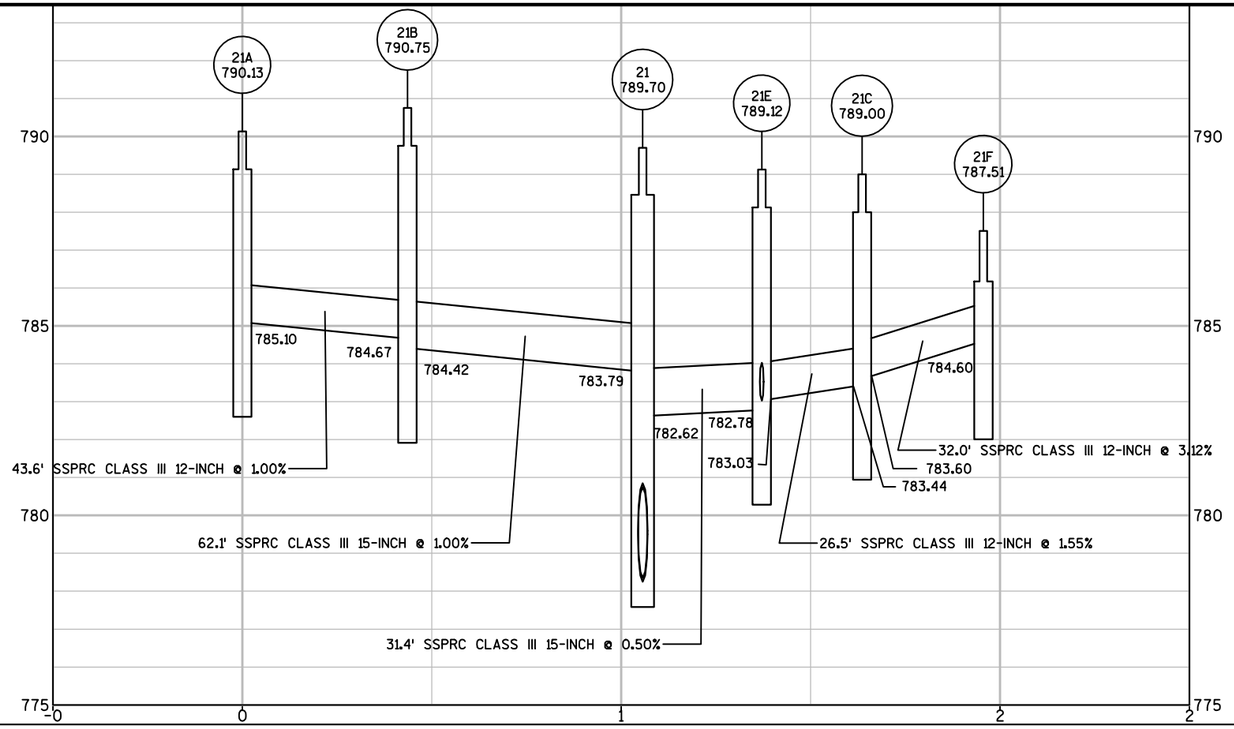
PLOT DATE : 7/16/2018 8:14 AM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1" = 40'_XREF

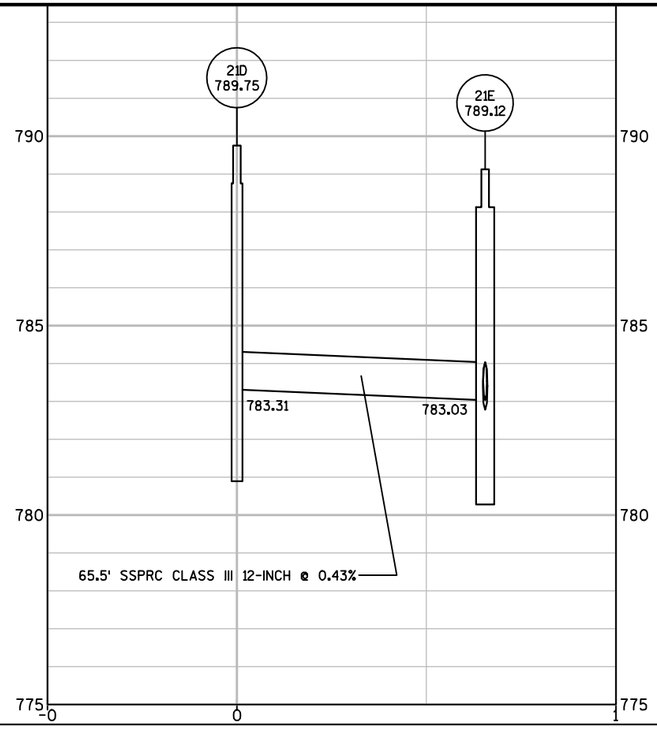
WISDOT/CADDS SHEET 41

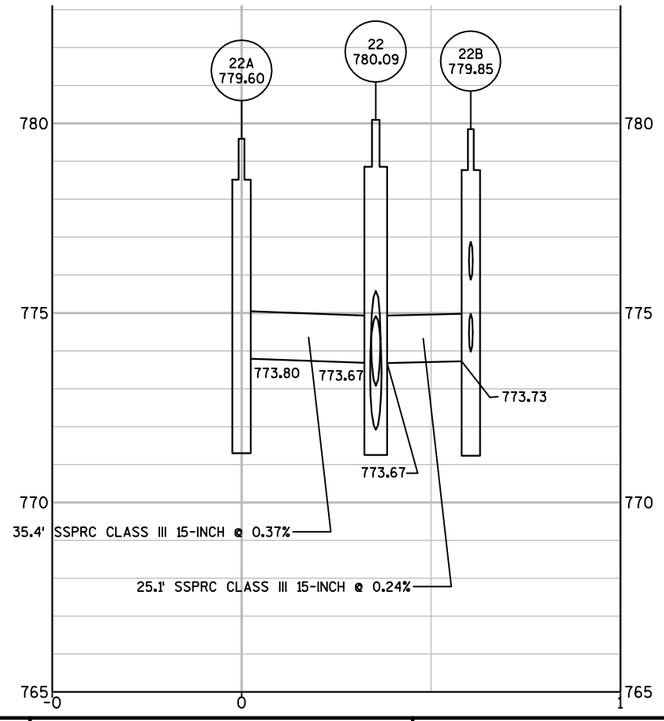


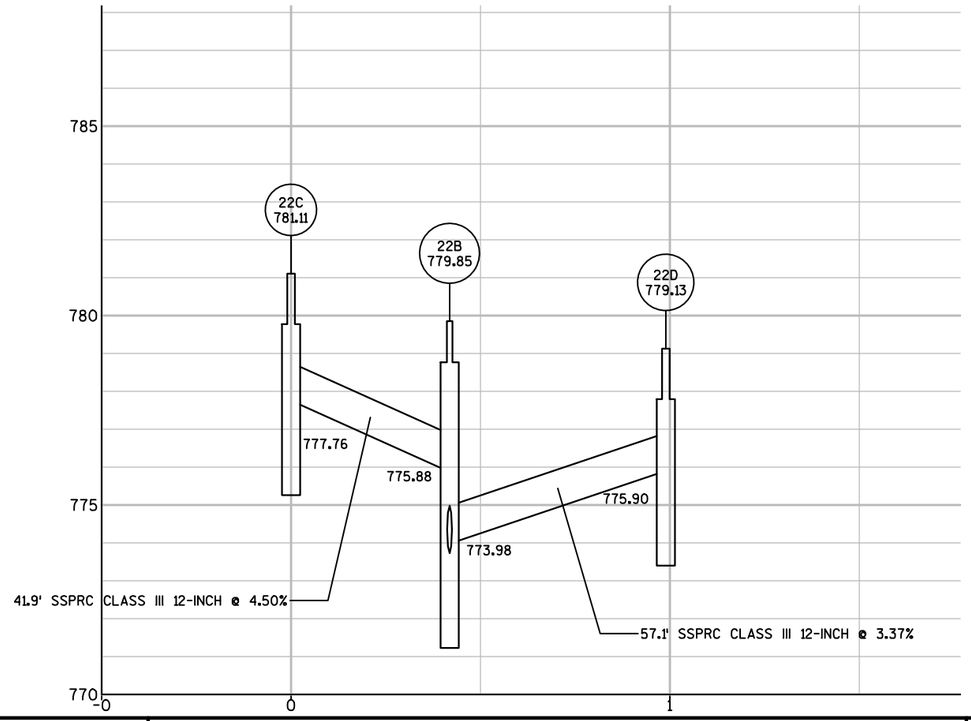
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 89	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022501_SS - SS - (10)
PLOT DATE : 7/16/2018 8:14 AM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 41

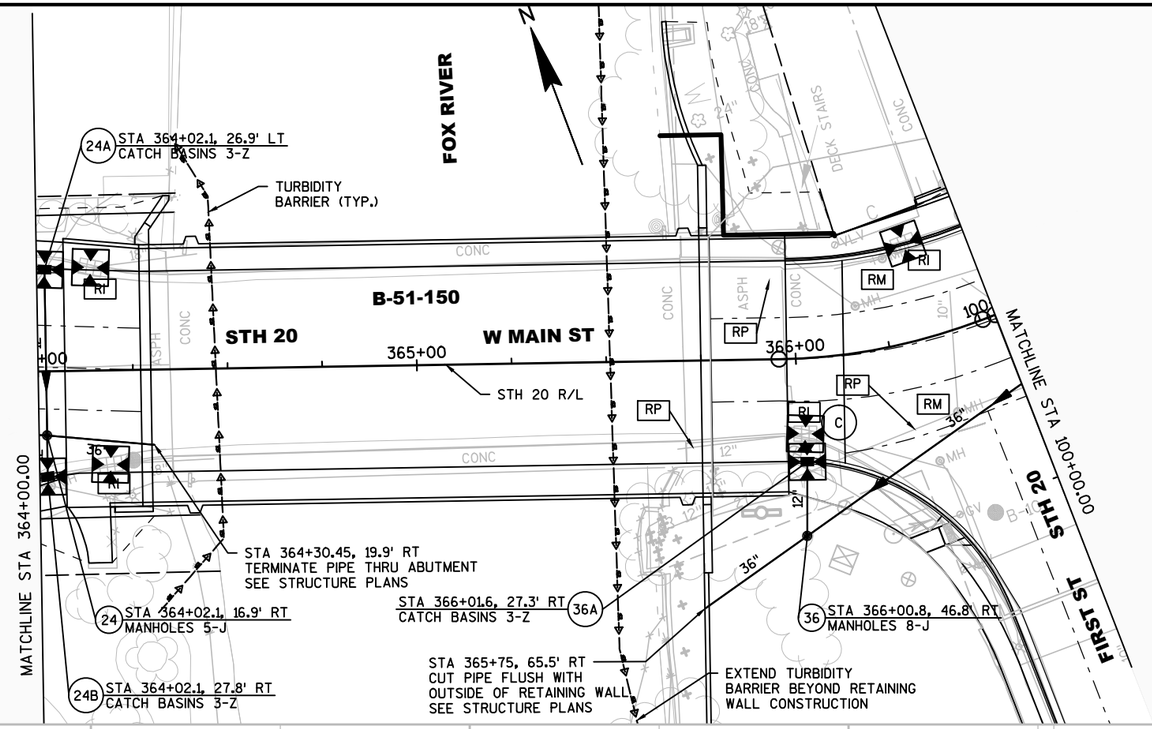








PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 90	E

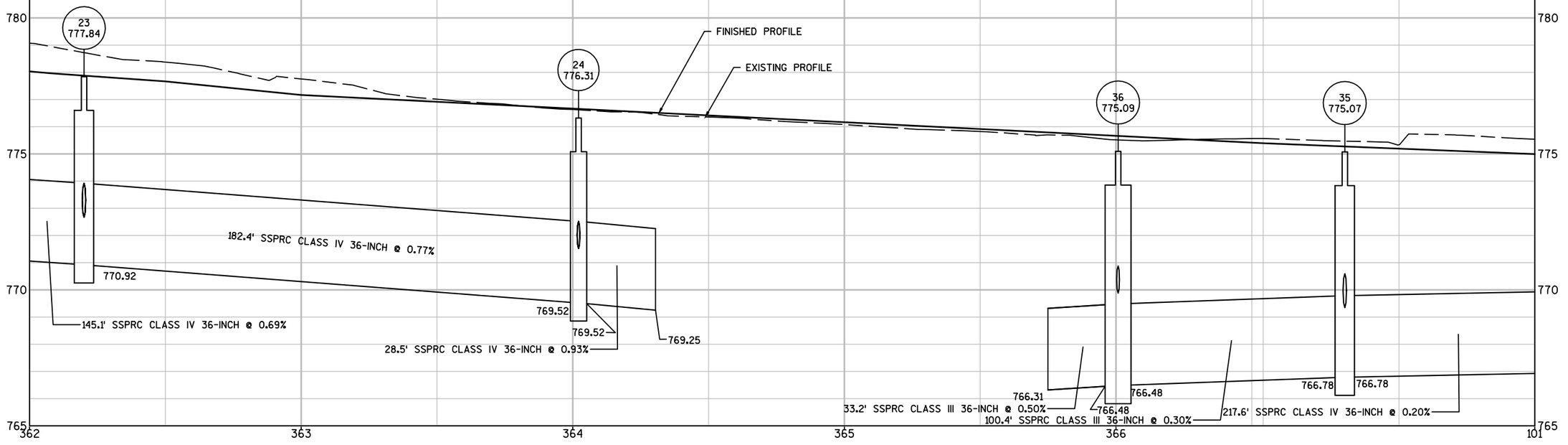


EROSION CONTROL LEGEND

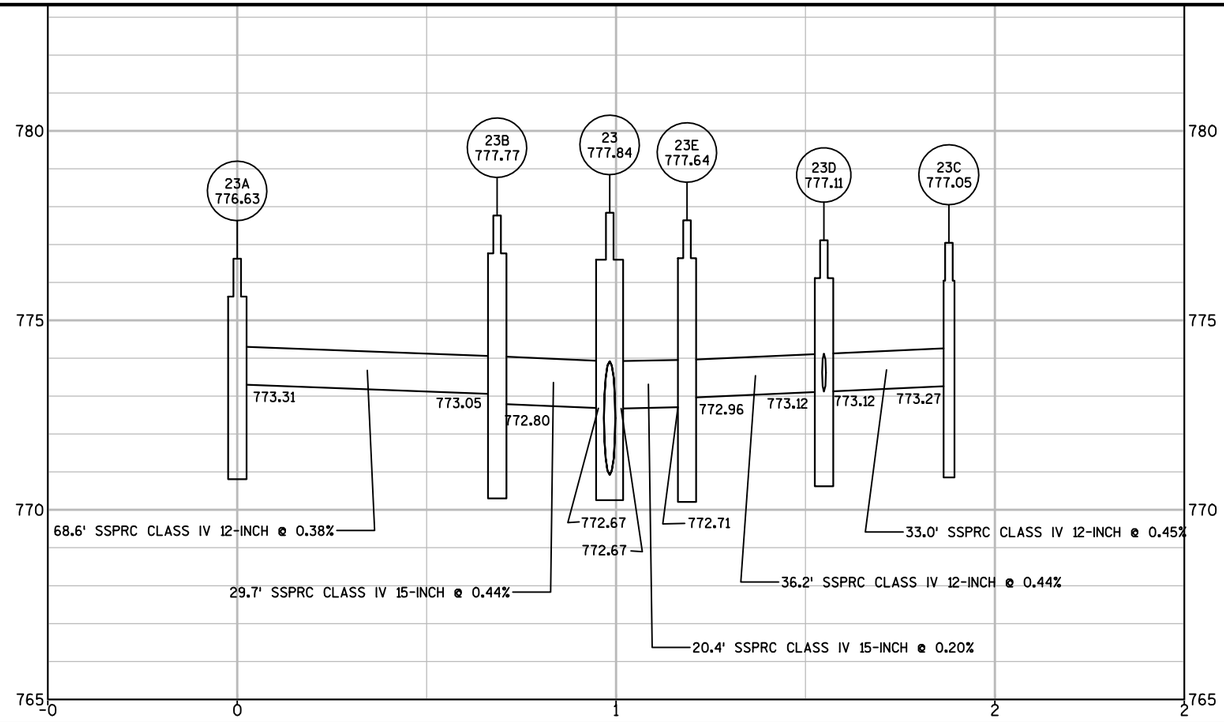
- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

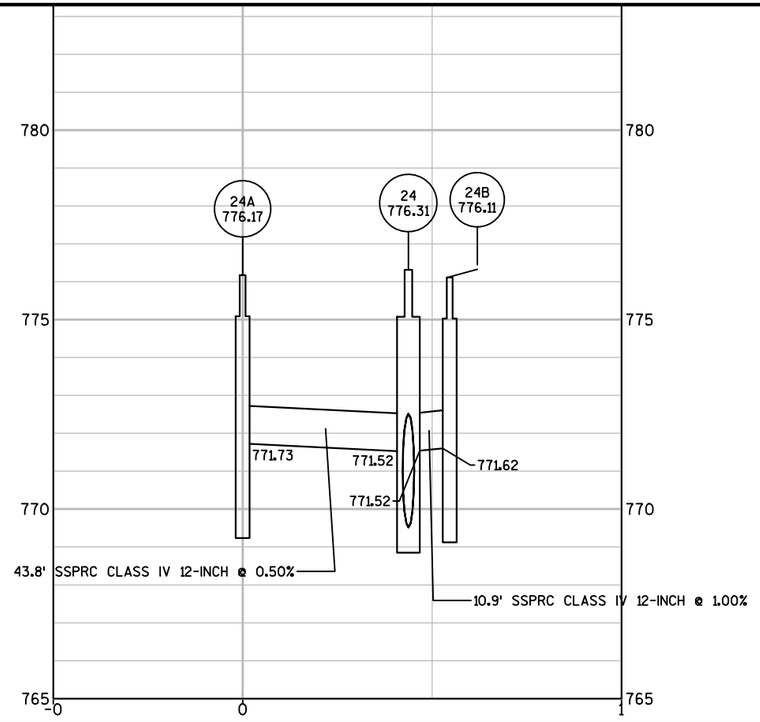
STORM SEWER LEGEND

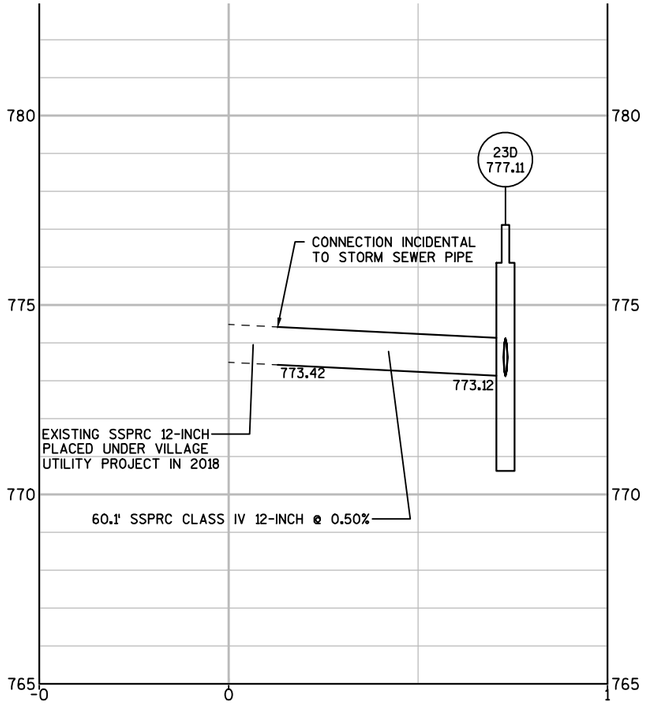
- RI REMOVING INLETS
- RM REMOVING MANHOLES
- RP REMOVING STORM SEWER PIPE

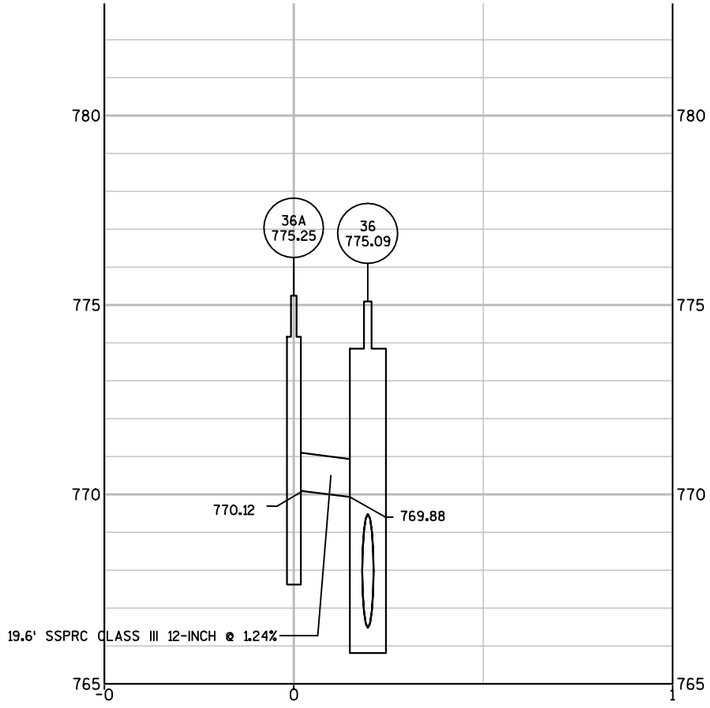


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 91	E

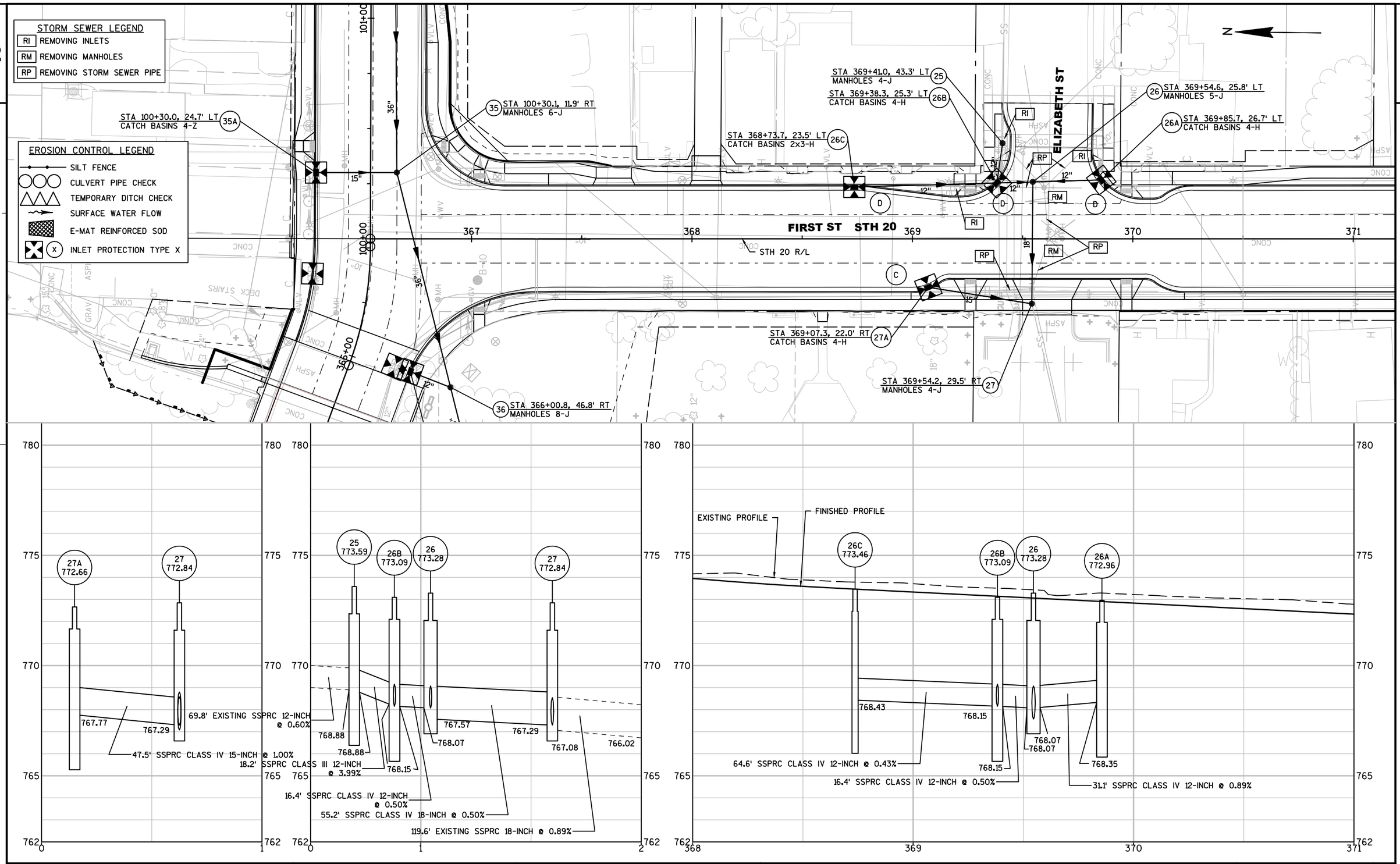




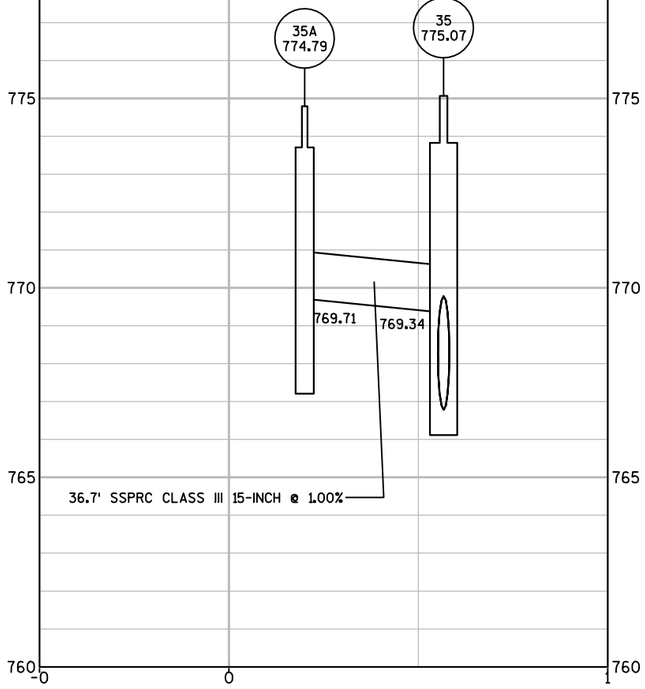




PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 92	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 93	E


35A
774.79
35
775.07
775
770
765
760
769.71
769.34
36.7' SSPRC CLASS III 15-INCH @ 1.00%
0
0
1

27A
772.66
27
772.84
775
770
765
760
767.77
767.29
47.5' SSPRC CLASS IV 15-INCH @ 1.00%
0
0
1

NOTE:
FIELD VERIFY ALL PIPE AND STRUCTURE SIZES, LOCATIONS, AND ELEVATION PRIOR TO ORDERING MATERIALS.

ALL RECONSTRUCTED AND NEW MANHOLES AND INLETS ARE TO HAVE NEW CASTINGS AND COVERS.

ALL OFFSETS TO STRUCTURES ARE FROM THE R/L TO CENTER OF STRUCTURES.

RIM ELEVATIONS ARE AT THE CENTER OF MANHOLES AND FIELD INLETS AND AT THE FLANGE LINE FOR INLET/CATCH BASIN GRATES.

E-MAT REINFORCED SOD PAID FOR AS EROSION MAT CLASS II TYPE A AND SOD LAWN.

NOTE:
PLACE INLET PROTECTION TYPE A DURING GRADING OPERATIONS. PLACE RESPECTIVE INLET PROTECTION WHEN COVER IS INSTALLED.

PLACE INLET PROTECTION TYPE C ONE INLET BEYOND PROJECT LIMITS ON DOWNSTREAM SIDE ROADS.

CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE DURING ALL STORM SEWER CONSTRUCTION ACTIVITIES.

EROSION CONTROL LEGEND
- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

STORM SEWER LEGEND
- RI REMOVING INLETS
- RM REMOVING MANHOLES
- RP REMOVING STORM SEWER PIPE

Lakeside ENGINEERS

WISCONSIN
ANTHONY BUBLITZ
44355-6
MILWAUKEE, WI
PROFESSIONAL ENGINEER

FROM STA. 370+50 TO STA. 406+00

4/25/18 (Date)

(Signature)

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - SHEET - (1)

PLOT DATE : 4/24/2018 9:53 AM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

2

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 96	E

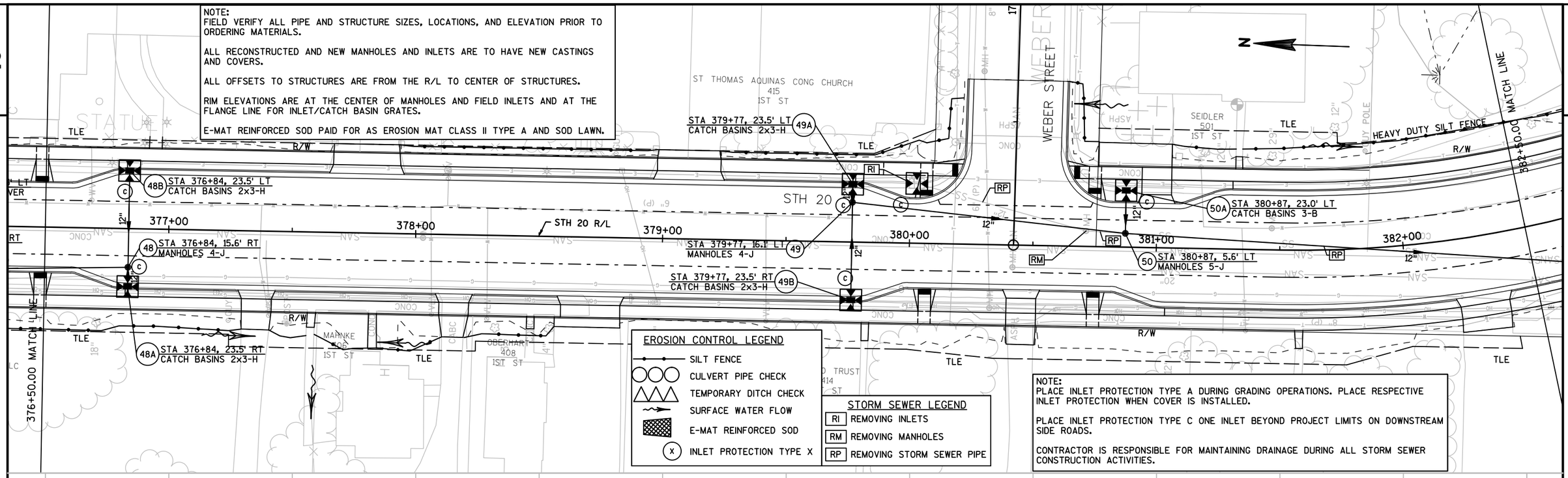
NOTE:
FIELD VERIFY ALL PIPE AND STRUCTURE SIZES, LOCATIONS, AND ELEVATION PRIOR TO ORDERING MATERIALS.

ALL RECONSTRUCTED AND NEW MANHOLES AND INLETS ARE TO HAVE NEW CASTINGS AND COVERS.

ALL OFFSETS TO STRUCTURES ARE FROM THE R/L TO CENTER OF STRUCTURES.

RIM ELEVATIONS ARE AT THE CENTER OF MANHOLES AND FIELD INLETS AND AT THE FLANGE LINE FOR INLET/CATCH BASIN GRATES.

E-MAT REINFORCED SOD PAID FOR AS EROSION MAT CLASS II TYPE A AND SOD LAWN.



EROSION CONTROL LEGEND

- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

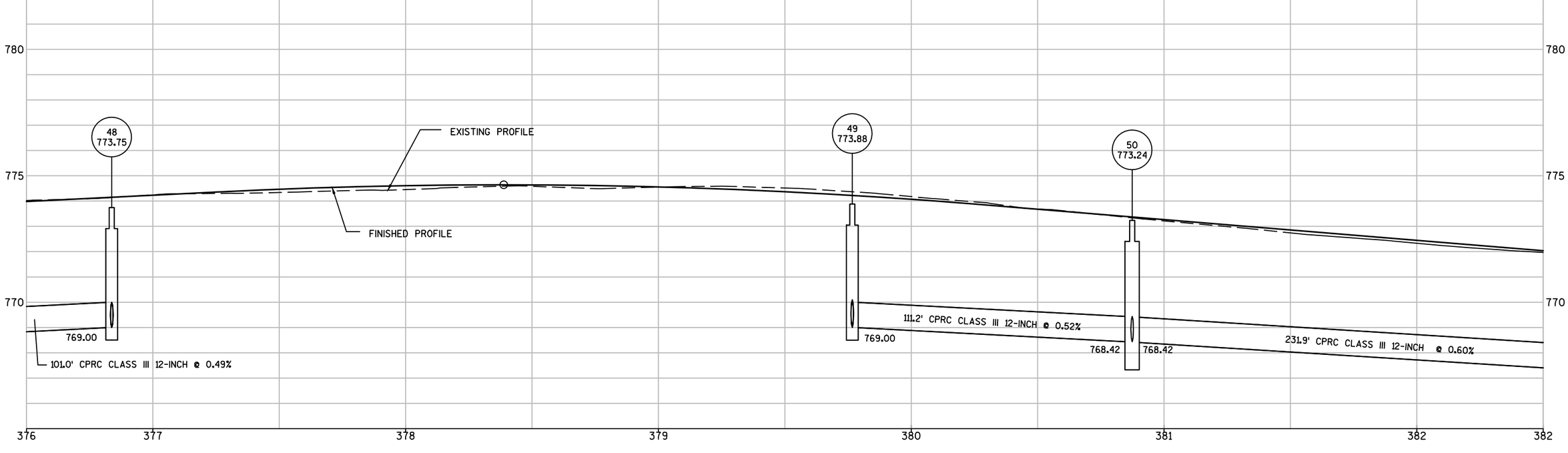
STORM SEWER LEGEND

- RI REMOVING INLETS
- RM REMOVING MANHOLES
- RP REMOVING STORM SEWER PIPE

NOTE:
PLACE INLET PROTECTION TYPE A DURING GRADING OPERATIONS. PLACE RESPECTIVE INLET PROTECTION WHEN COVER IS INSTALLED.

PLACE INLET PROTECTION TYPE C ONE INLET BEYOND PROJECT LIMITS ON DOWNSTREAM SIDE ROADS.

CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE DURING ALL STORM SEWER CONSTRUCTION ACTIVITIES.

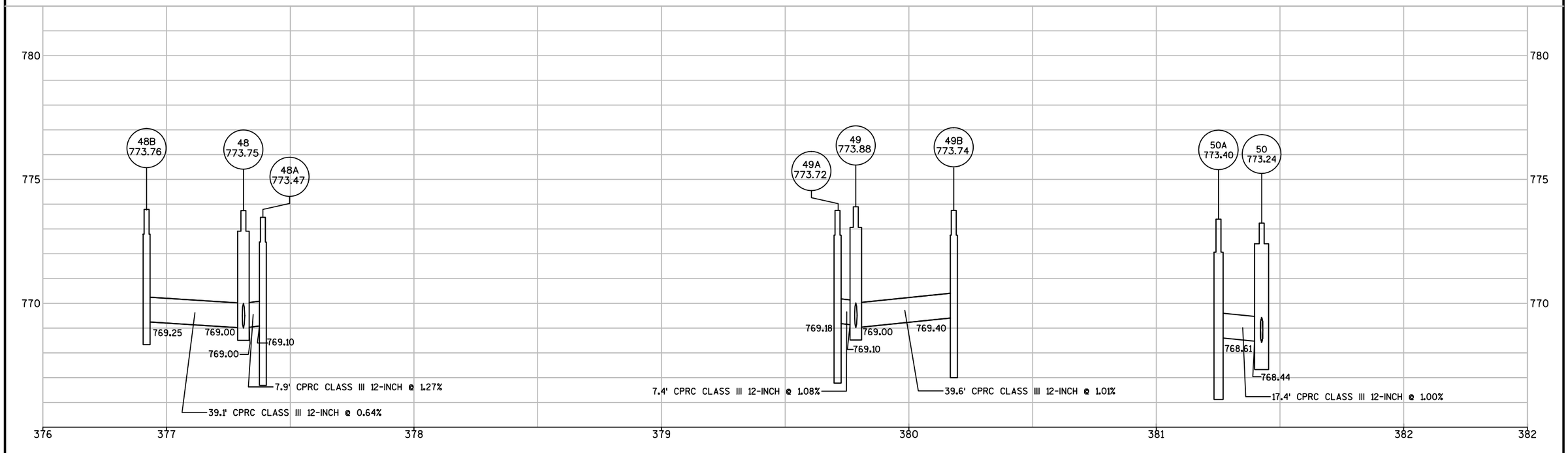


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 97	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - SHEET - (2)
PLOT DATE : 4/24/2018 9:54 AM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

2



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 98	E

STORM SEWER LEGEND	
RI	REMOVING INLETS
RM	REMOVING MANHOLES
RP	REMOVING STORM SEWER PIPE

EROSION CONTROL LEGEND	
	SILT FENCE
	CULVERT PIPE CHECK
	TEMPORARY DITCH CHECK
	SURFACE WATER FLOW
	E-MAT REINFORCED SOD
X	INLET PROTECTION TYPE X

NOTE:
PLACE INLET PROTECTION TYPE A DURING GRADING OPERATIONS. PLACE RESPECTIVE INLET PROTECTION WHEN COVER IS INSTALLED.

PLACE INLET PROTECTION TYPE C ONE INLET BEYOND PROJECT LIMITS ON DOWNSTREAM SIDE ROADS.

CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE DURING ALL STORM SEWER CONSTRUCTION ACTIVITIES.

NOTE:
FIELD VERIFY ALL PIPE AND STRUCTURE SIZES, LOCATIONS, AND ELEVATION PRIOR TO ORDERING MATERIALS.

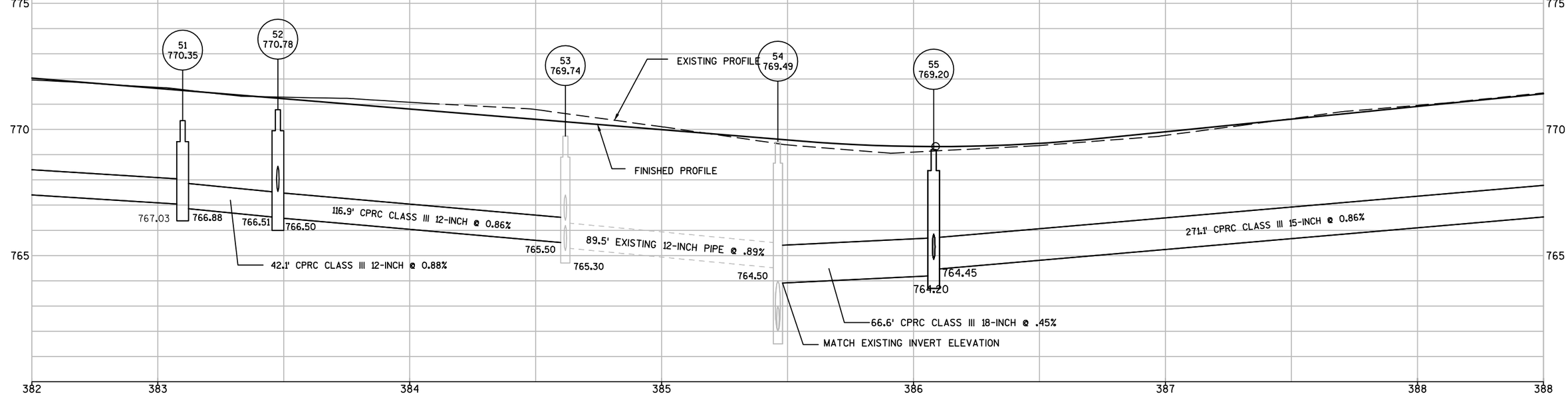
ALL RECONSTRUCTED AND NEW MANHOLES AND INLETS ARE TO HAVE NEW CASTINGS AND COVERS.

ALL OFFSETS TO STRUCTURES ARE FROM THE R/L TO CENTER OF STRUCTURES.

RIM ELEVATIONS ARE AT THE CENTER OF MANHOLES AND FIELD INLETS AND AT THE FLANGE LINE FOR INLET/CATCH BASIN GRATES.

E-MAT REINFORCED SOD PAID FOR AS EROSION MAT CLASS II TYPE A AND SOD LAWN.

51 STA 383+10, 35.8' RT MANHOLES 4-J
52 STA 383+48, 23.7' RT MANHOLES 4-INLET COVER TYPE H
52A STA 383+49, 23.5' LT CATCH BASINS 2x3-H
53 STA 384+62, 24.0' RT ADJUST INLET COVER
53A STA 384+62, 23.4' LT ADJUST INLET COVER
53B STA 384+37, 54.6' RT ADJUST INLET COVER
53C STA 179+40, 19.1' LT CATCH BASINS 2x3-H
53D STA 179+32, 32.1' LT CATCH BASINS 3-B
54 STA 385+46, 6.0' LT ADJUST MANHOLE COVER
54A STA 385+57, 36.8' RT ADJUST INLET COVER
55 STA 386+08, 5.8' LT MANHOLES 4-J
55A STA 386+08, 17.5' RT CATCH BASINS 2x3-H
55B STA 386+08, 17.5' LT CATCH BASINS 2x3-H
55C STA 386+23, 17.5' LT CATCH BASINS 2x3-H
55D STA 386+23, 17.5' RT CATCH BASINS 2x3-H

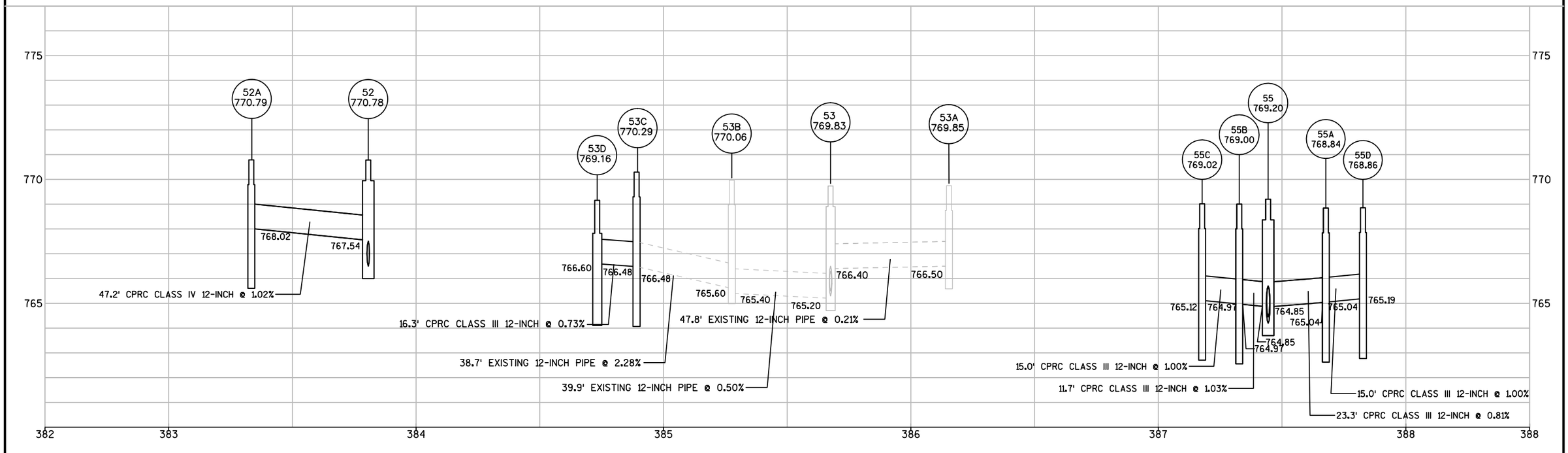


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACIANE	STORM SEWER	SHEET 99	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - SHEET - (3)
PLOT DATE : 4/24/2018 9:54 AM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

2



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 100	E

STORM SEWER LEGEND

- RI REMOVING INLETS
- RM REMOVING MANHOLES
- RP REMOVING STORM SEWER PIPE

EROSION CONTROL LEGEND

- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

56A STA 388+79, 17.5' LT
CATCH BASINS 2x3-H

56 STA 388+79, 4.9' LT
ADJUST MANHOLE COVER

56B STA 388+79, 18.0' RT
ADJUST INLET COVER

388+50.00 MATCH LINE

394+50.00 MATCH LINE

389+00 390+00 391+00 392+00 393+00 394+00

STH 20 R/L

STH 20

ST THOMAS AQUINAS CONGREGATION

ST THOMAS AQUINAS CHURCH

SEAL PIPE OPENING WITHIN STRUCTURE

TLE R/W

SNYDER-DELA CRUZ
730
1ST ST

KEN TRUST
731
ER RDT

BAUMHARDT
29414
WALNUT DR

TEUBEL

NOTE:
FIELD VERIFY ALL PIPE AND STRUCTURE SIZES, LOCATIONS, AND ELEVATION PRIOR TO ORDERING MATERIALS.

ALL RECONSTRUCTED AND NEW MANHOLES AND INLETS ARE TO HAVE NEW CASTINGS AND COVERS.

ALL OFFSETS TO STRUCTURES ARE FROM THE R/L TO CENTER OF STRUCTURES.

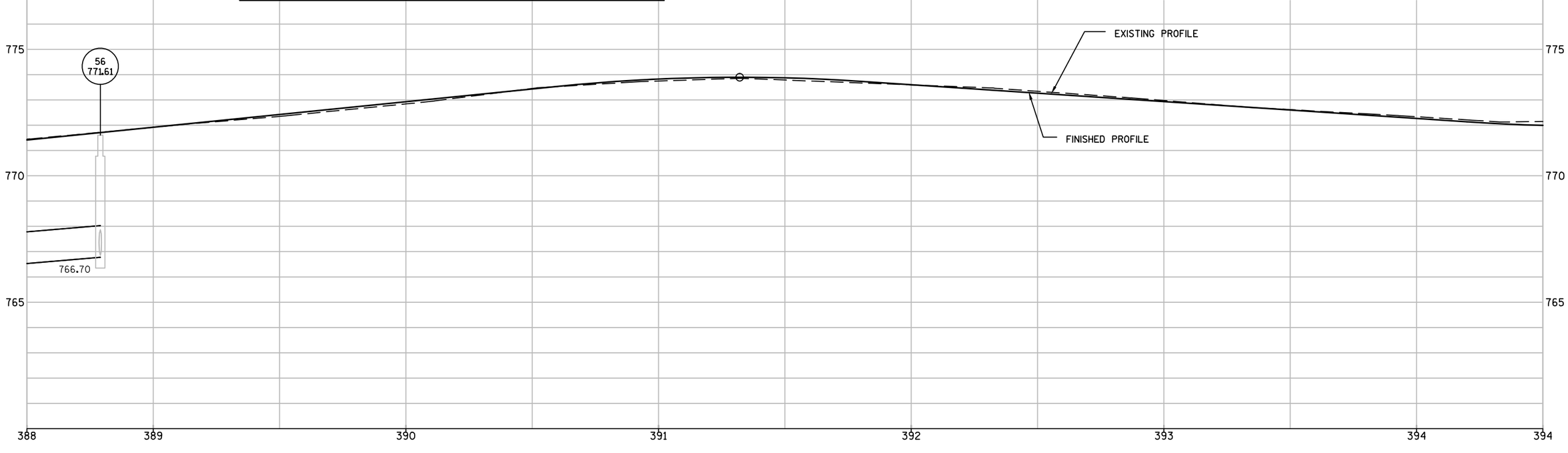
RIM ELEVATIONS ARE AT THE CENTER OF MANHOLES AND FIELD INLETS AND AT THE FLANGE LINE FOR INLET/CATCH BASIN GRATES.

E-MAT REINFORCED SOD PAID FOR AS EROSION MAT CLASS II TYPE A AND SOD LAWN.

NOTE:
PLACE INLET PROTECTION TYPE A DURING GRADING OPERATIONS. PLACE RESPECTIVE INLET PROTECTION WHEN COVER IS INSTALLED.

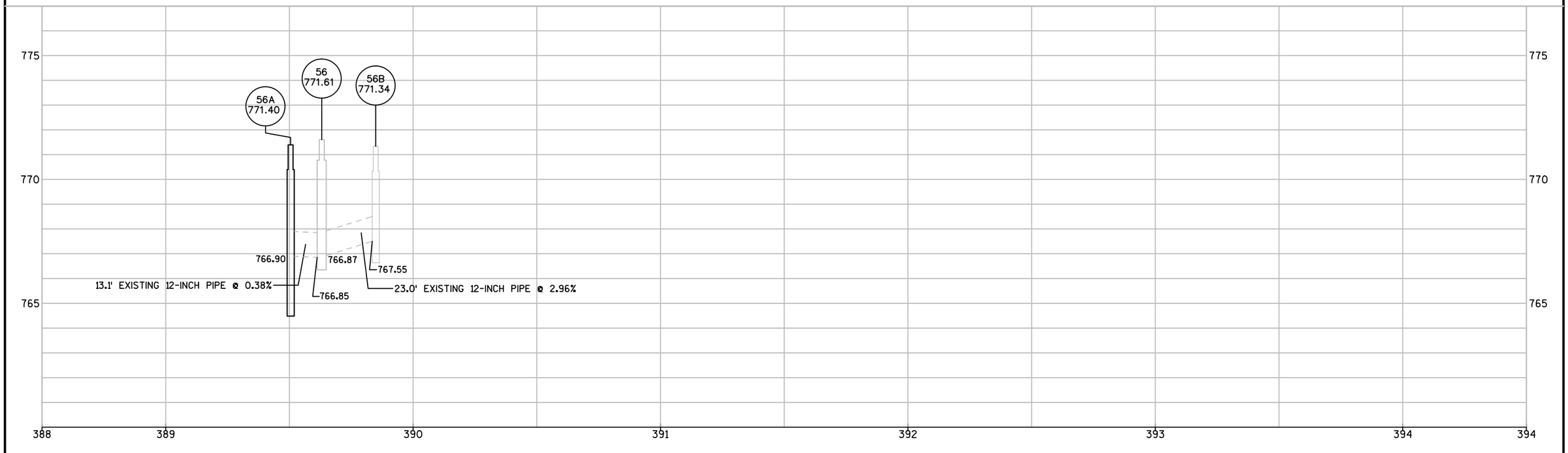
PLACE INLET PROTECTION TYPE C ONE INLET BEYOND PROJECT LIMITS ON DOWNSTREAM SIDE ROADS.

CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE DURING ALL STORM SEWER CONSTRUCTION ACTIVITIES.



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 101	E

2



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 102	E

NOTE:
FIELD VERIFY ALL PIPE AND STRUCTURE SIZES, LOCATIONS, AND ELEVATION PRIOR TO ORDERING MATERIALS.

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E-MAT REINFORCED SOD PAID FOR AS EROSION MAT CLASS II TYPE A AND SOD LAWN.

394+50.00 MATCH LINE

400+50.00 MATCH LINE

WETLAND BOUNDARY
TLE
HEAVY DUTY SILT FENCE
WISCONSIN ELECTRIC POWER COMPANY
SEVEN WATERS RECREATION TRAIL
EXISTING OUTFALL
DMZ BUNKER LLC
29224
EVERGREEN DR
EVERGREEN
LINDAU
PEKRUL
CABOT DRIVE
R/W
TLE
STH 20
STH 20 R/L
24"
18"
15"
19" x 30"
12"
395+00
396+00
397+00
398+00
399+00
400+00

58A STA 396+61, 46.4' LT
APRON ENDWALLS FOR CPRC 24-INCH

57B STA 395+25, 17.5' LT
MANHOLES 4-INLET COVER TYPE H

57A STA 394+69, 17.5' LT
CATCH BASINS 2x3-H

58 STA 396+61, 1.0' LT
MANHOLES 5-J

57E STA 394+62, 17.5' RT
CATCH BASINS 2x3-H

57 STA 395+25, 1.0' LT
MANHOLES 5-L

59 STA 397+13, 6.8' LT
ADJUST MANHOLE COVER

398+70, 6.0' LT
ADJUST MANHOLE COVER 60

60A STA 190+38, 13.2' RT
CATCH BASINS 2x3-H

61A STA 398+95, 35.5' LT
INLETS 2x2-B

61B STA 398+99, 17.5' LT
CATCH BASINS 2x3-H

61 STA 398+99, 6.0' LT
MANHOLES 4-J

400+17, 5.7' LT
ADJUST MANHOLE COVER 62

STA 400+36, 38.2' LT
EXISTING INLET TO REMAIN 62A

57C STA 395+25, 17.5' RT
MANHOLES 4-INLET COVER TYPE H

61C STA 398+99, 17.5' RT
CATCH BASINS 2x3-H

57D STA 394+96, 17.5' RT
CATCH BASINS 2x3-H

STA 189+49.7, 22.2' LT
EXISTING STRUCTURE TO REMAIN 60C

60B STA 398+85, 50.3' RT
EXISTING STRUCTURE TO REMAIN

STORM SEWER LEGEND

RI	REMOVING INLETS
RM	REMOVING MANHOLES
RP	REMOVING STORM SEWER PIPE

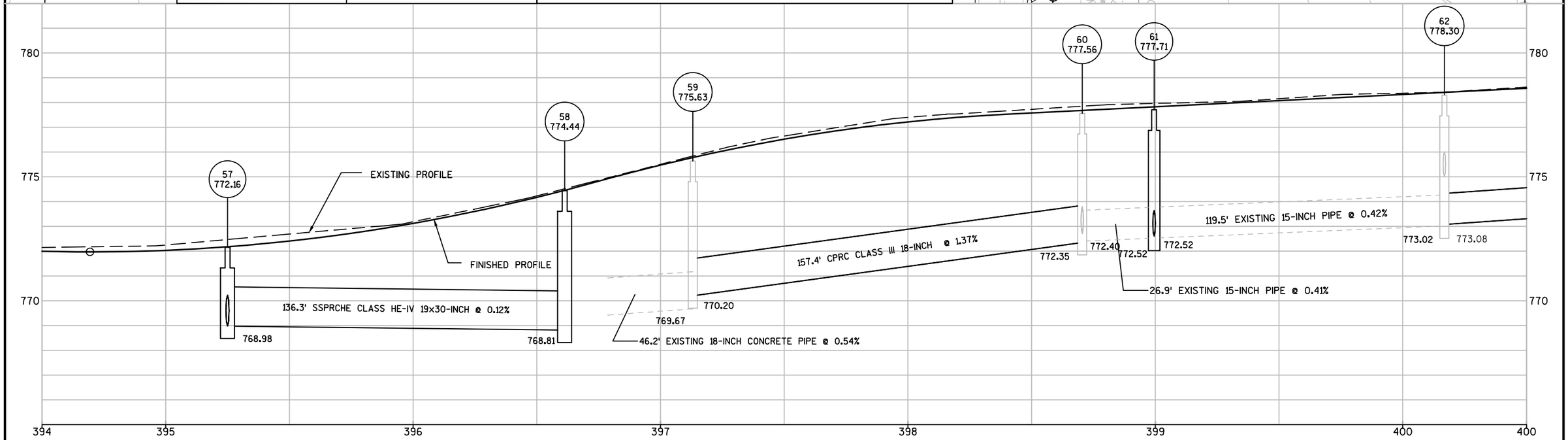
EROSION CONTROL LEGEND

- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

NOTE:
PLACE INLET PROTECTION TYPE A DURING GRADING OPERATIONS. PLACE RESPECTIVE INLET PROTECTION WHEN COVER IS INSTALLED.

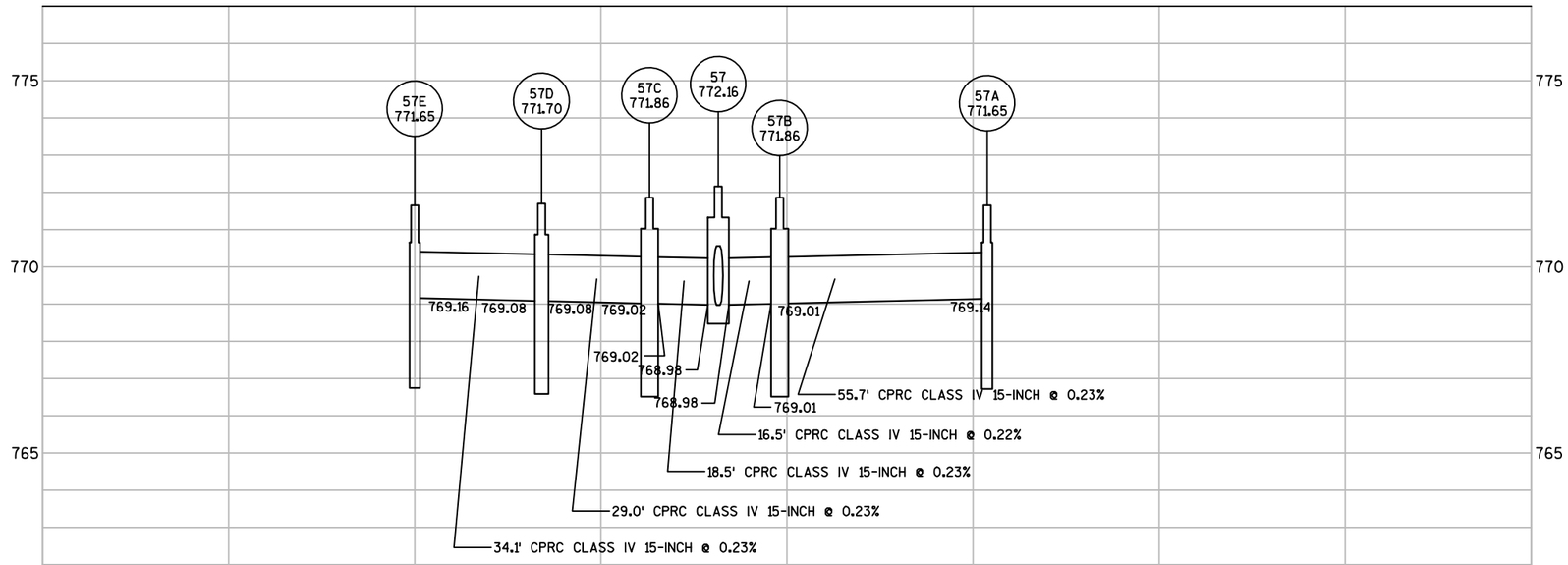
PLACE INLET PROTECTION TYPE C ONE INLET BEYOND PROJECT LIMITS ON DOWNSTREAM SIDE ROADS.

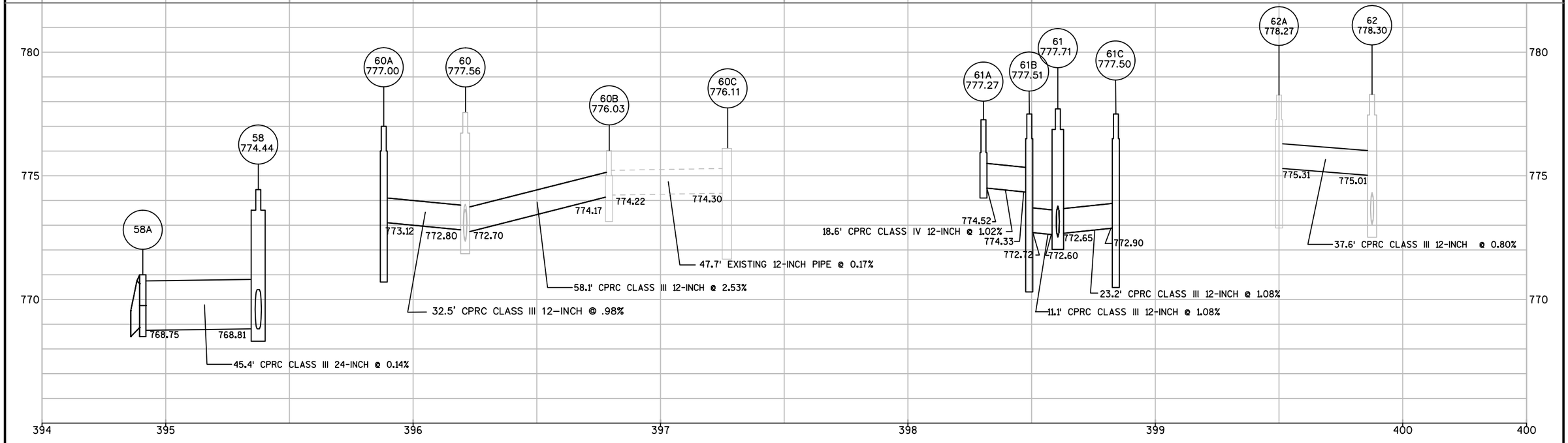
CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE DURING ALL STORM SEWER CONSTRUCTION ACTIVITIES.



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 103	E

2





PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 104	E

NOTE:
PLACE INLET PROTECTION TYPE A DURING GRADING OPERATIONS. PLACE RESPECTIVE INLET PROTECTION WHEN COVER IS INSTALLED.

PLACE INLET PROTECTION TYPE C ONE INLET BEYOND PROJECT LIMITS ON DOWNSTREAM SIDE ROADS.

CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE DURING ALL STORM SEWER CONSTRUCTION ACTIVITIES.

NOTE:
FIELD VERIFY ALL PIPE AND STRUCTURE SIZES, LOCATIONS, AND ELEVATION PRIOR TO ORDERING MATERIALS.

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RIM ELEVATIONS ARE AT THE CENTER OF MANHOLES AND FIELD INLETS AND AT THE FLANGE LINE FOR INLET/CATCH BASIN GRATES.

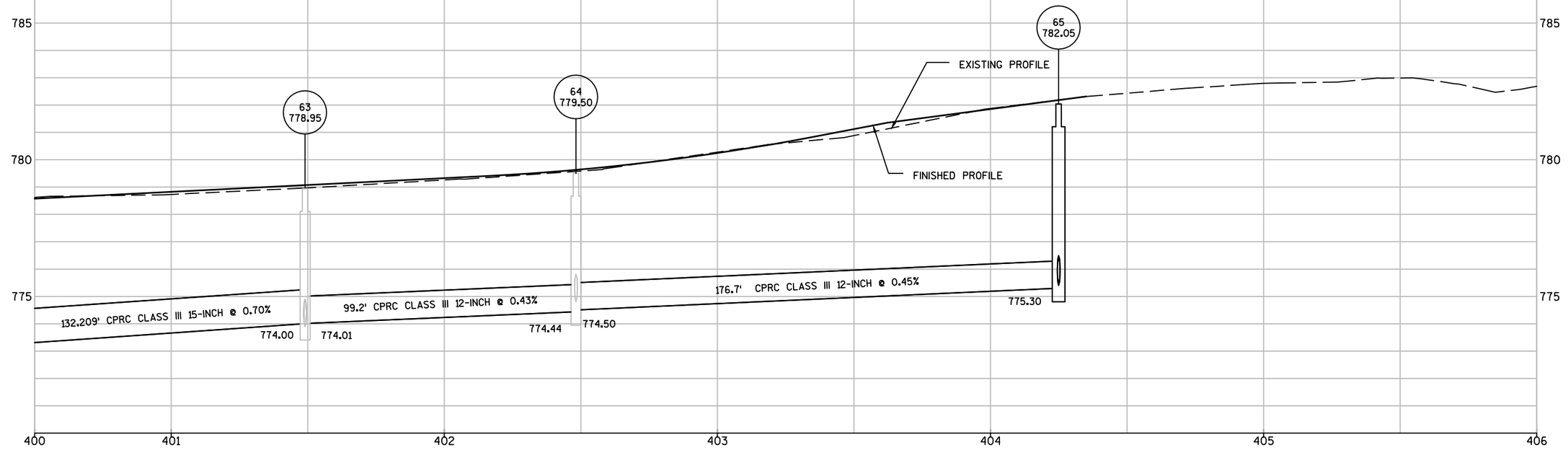
E-MAT REINFORCED SOD PAID FOR AS EROSION MAT CLASS II TYPE A AND SOD LAWN.

STORM SEWER LEGEND
- RI REMOVING INLETS
- RM REMOVING MANHOLES
- RP REMOVING STORM SEWER PIPE

EROSION CONTROL LEGEND
- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

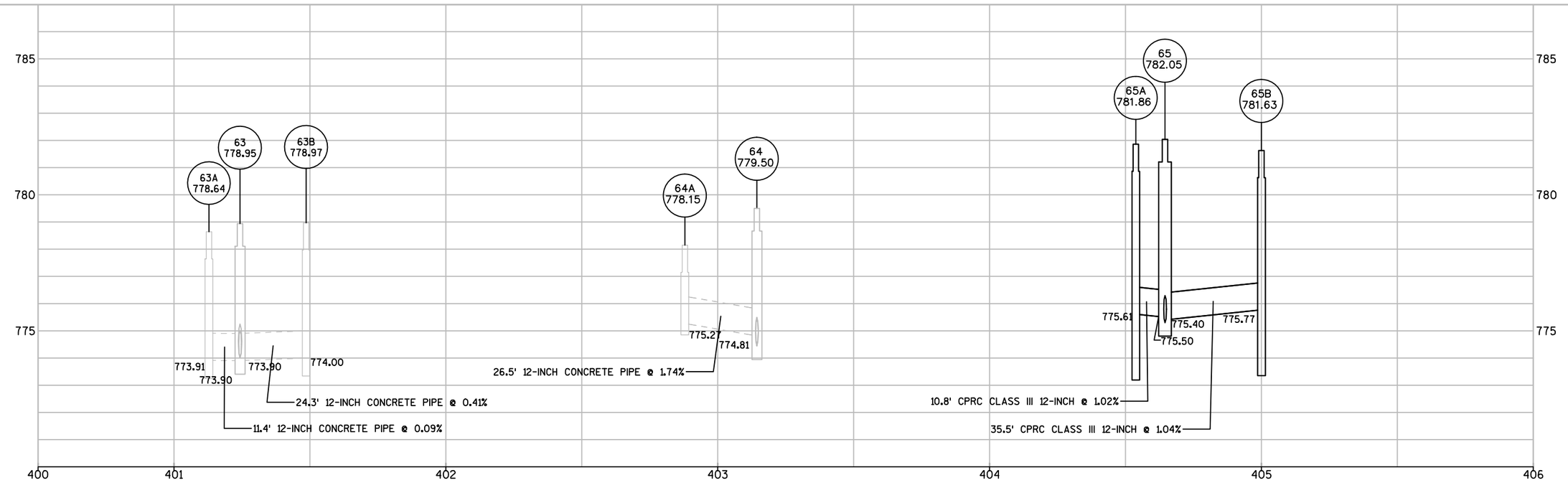
62A LT REMAIN
63A STA 401+49, 17.7' LT ADJUST INLET COVER
64A STA 402+49, 32.9' LT EXISTING INLET TO REMAIN
65A STA 404+25, 17.5' LT CATCH BASINS 2x3-H
63 STA 401+49, 6.3' LT ADJUST MANHOLE COVER
64 STA 402+48, 6.4' LT ADJUST MANHOLE COVER
65 STA 404+25, 6.7' LT MANHOLES 4-J
63B STA 401+49, 18.0' RT ADJUST INLET COVER
65B STA 404+25, 28.7' RT CATCH BASINS 2x3-H

SOUTHERN WISCONSIN FOODS 2723 BECK DR
BECK FAMILY TRUST 2728 BECK DR
STH 20
STH 36 S. MILWAUKEE AVE
400+50.00 MATCH LINE
TLE
R/W
401+00
402+00
403+00
STH 20 R/L 404+00
405+00
406+00



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 105	E

2


785
780
775
400
401
402
403
404
405
406
63
778.95
63A
778.64
63B
778.97
64
779.50
64A
778.15
65
782.05
65A
781.86
65B
781.63
773.91
773.90
773.90
774.00
775.27
774.81
775.61
775.40
775.50
775.77
24.3' 12-INCH CONCRETE PIPE @ 0.41%
11.4' 12-INCH CONCRETE PIPE @ 0.09%
26.5' 12-INCH CONCRETE PIPE @ 1.74%
10.8' CPRC CLASS III 12-INCH @ 1.02%
35.5' CPRC CLASS III 12-INCH @ 1.04%

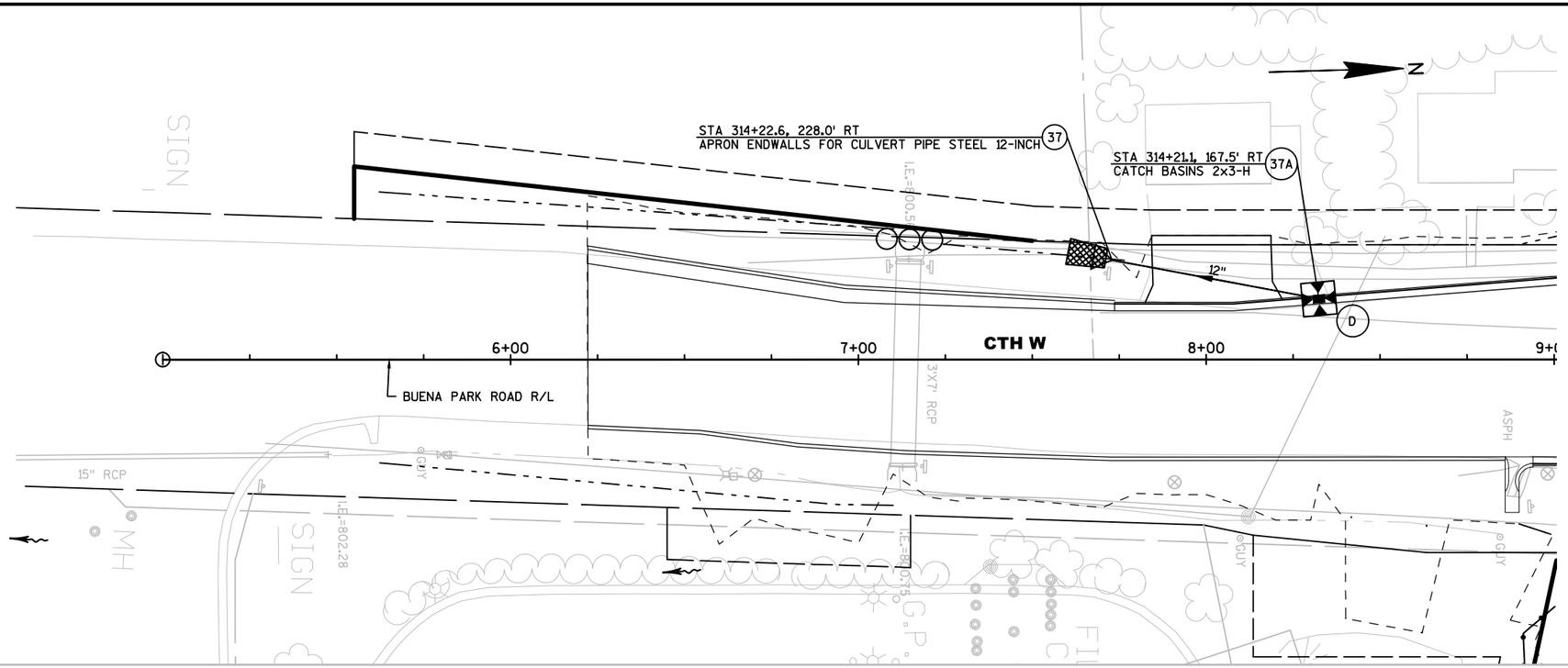
2

EROSION CONTROL LEGEND

- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

STORM SEWER LEGEND

RI	REMOVING INLETS
RM	REMOVING MANHOLES
RP	REMOVING STORM SEWER PIPE



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER - BUENA PARK ROAD	SHEET 107 E

STA 313+37.9, 85.5' LT
MANHOLES 4-J

38B

STA 313+33.1, 204.0' LT
APRON ENDWALLS FOR CPRCHE 14x23-INCH

38A

38D

STA 313+60.3, 89.3' LT
CATCH BASINS 4-H

38C

EXISTING 18"

19"x30"

RP

18"

14"x23"

14"x23"

D

RI

RP

RM

RP

11+00

12+00

13+00

14+00

15+00

BUENA PARK RD R/L

BUENA PARK RD

29"x45"

N

ASPH

SS

CABC

MH

GUY

I.E.=803.81

I.E.=802.27

I.E.=804.10

10" CPP

15"x24" RCP

I.E.=802.27

STORM SEWER LEGEND

RI	REMOVING INLETS
RM	REMOVING MANHOLES
RP	REMOVING STORM SEWER PIPE

EROSION CONTROL LEGEND

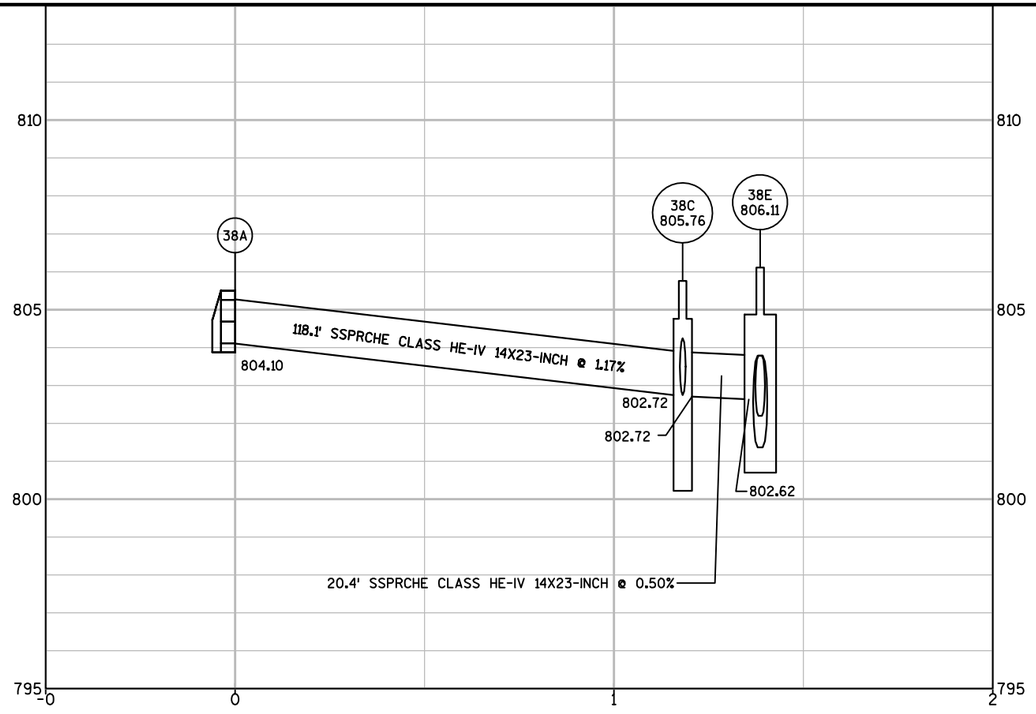
- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

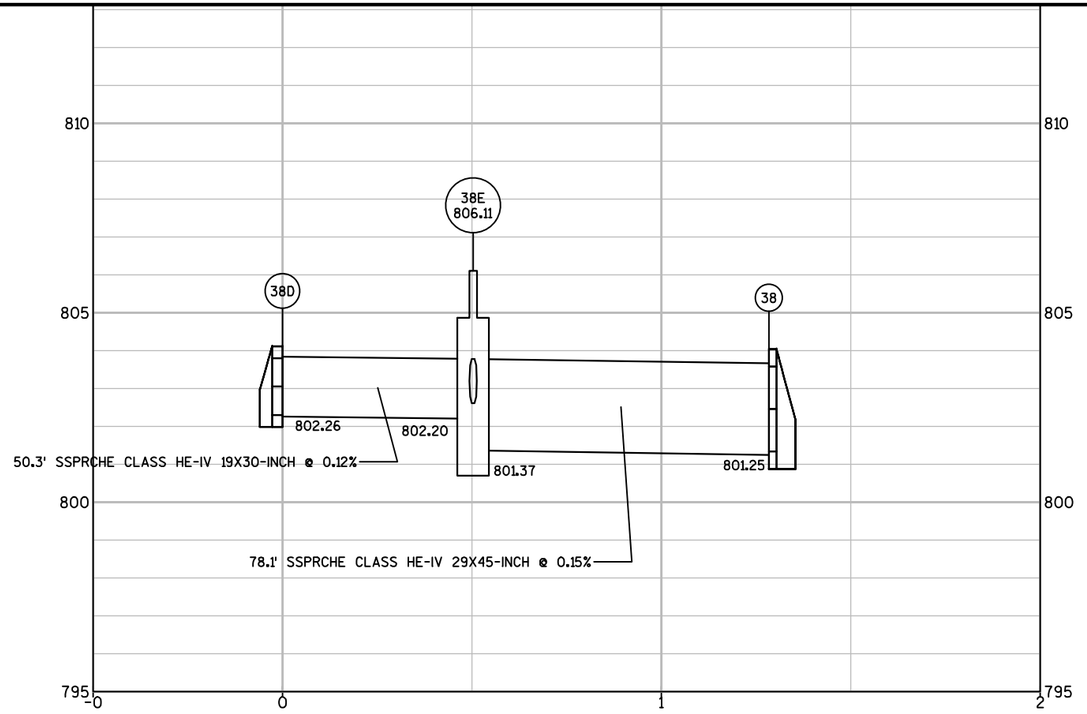
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 108	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022501_SS - SS - (BUENA-NORTH

PLOT DATE : 7/16/2018 8:06 AM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 41





2

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 109	E

EROSION CONTROL LEGEND
- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

STORM SEWER LEGEND
- RI REMOVING INLETS
- RM REMOVING MANHOLES
- RP REMOVING STORM SEWER PIPE

STA 100+30.0, 24.7' LT
CATCH BASINS 4-Z (35A)

STA 102+96.0, 81.4' LT
MANHOLES 4-J (34)

STA 102+90.4, 74.2' LT
CATCH BASINS 3-Z (34B)

STA 102+87.2, 23.0' LT
CATCH BASINS 4-Z (33A)

STA 102+57.1, 21.2' LT
CATCH BASINS 4-Z (33B)

STA 103+26.4, 74.0' LT
CATCH BASINS 2x3-H (34A)

STA 103+52.7, 17.5' LT
CATCH BASINS 2x3-H (32A)

STA 105+50.8, 23.5' LT
CATCH BASINS 2x3-H (31A)

STA 105+40.8, 23.5' LT
CATCH BASINS 2x3-H (31B)

N SECOND ST

E MAIN ST

STH 20 R/L

MATCHLINE STA 100+00.00

MATCHLINE STA 105+50.00

STA 100+30.1, 11.9' RT
MANHOLES 6-J (35)

STA 102+47.7, 10.1' RT
MANHOLES 5-J (33)

STA 102+45.9, 23.5' RT
CATCH BASINS 5-H (33C)

STA 102+67.1, 17.5' RT
CATCH BASINS 5-H (33D)

STA 102+93.5, 40.9' RT
CATCH BASINS 4-H (33E)

S SECOND ST

STA 103+52.7, 11.0' RT
MANHOLES 5-J (32)

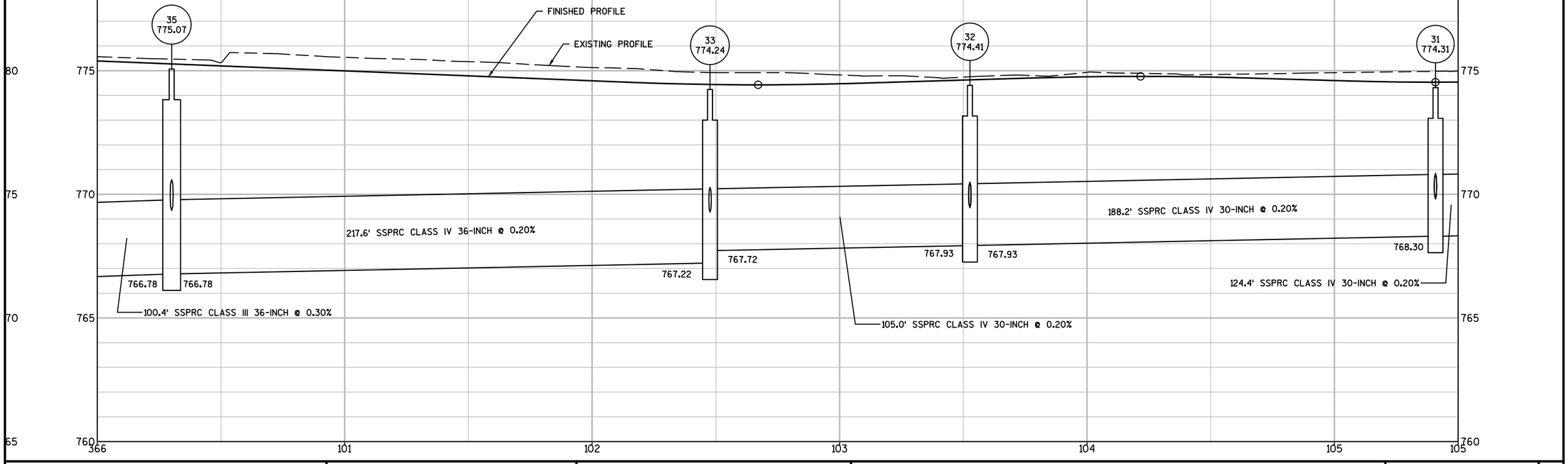
STA 103+52.7, 17.5' RT
CATCH BASINS 2x3-H (32B)

STA 103+24.6, 41.0' RT
CATCH BASINS 2x3-H (33F)

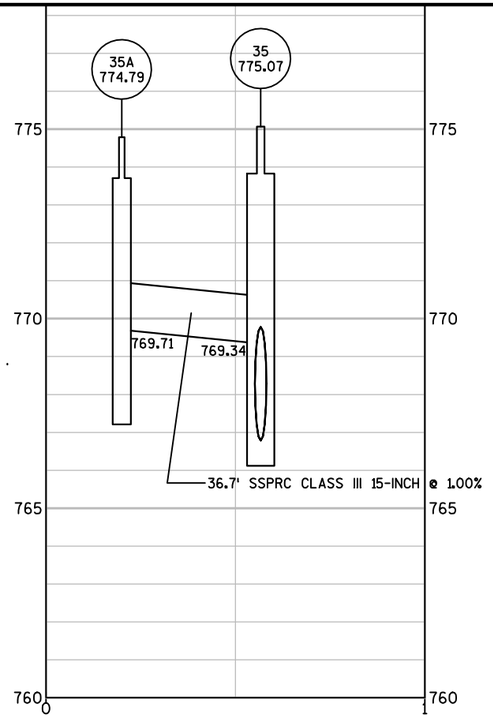
STA 105+40.8, 11.0' RT
MANHOLES 5-J (31)

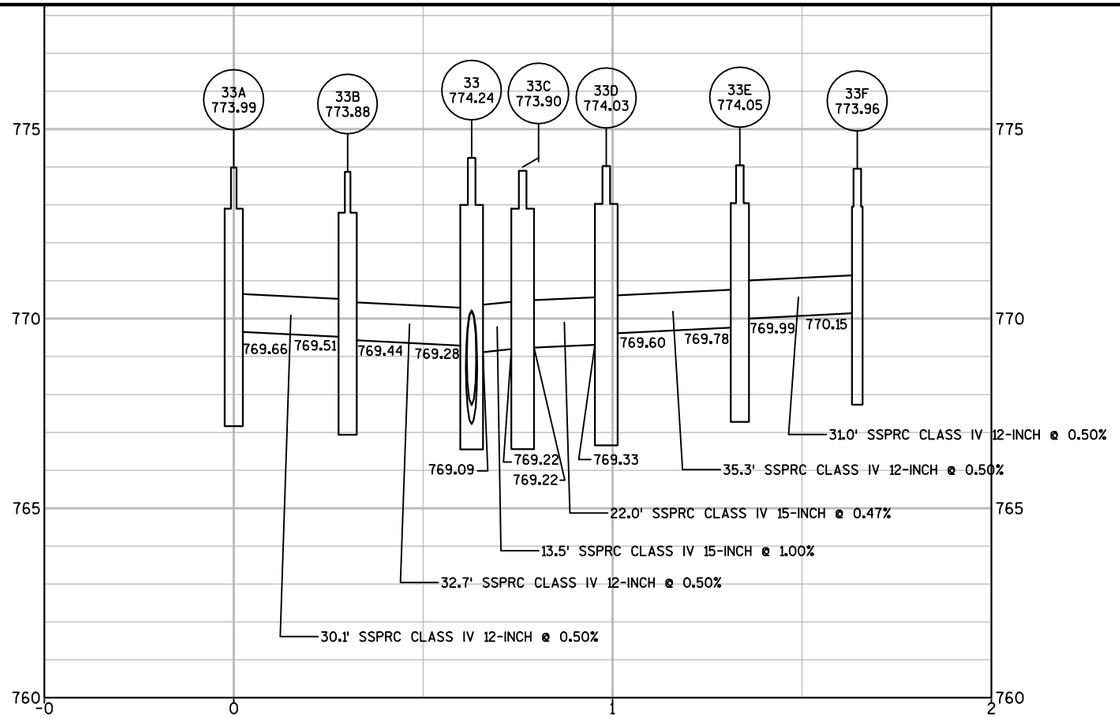
STA 105+40.8, 23.5' RT
CATCH BASINS 2x3-H (31D)

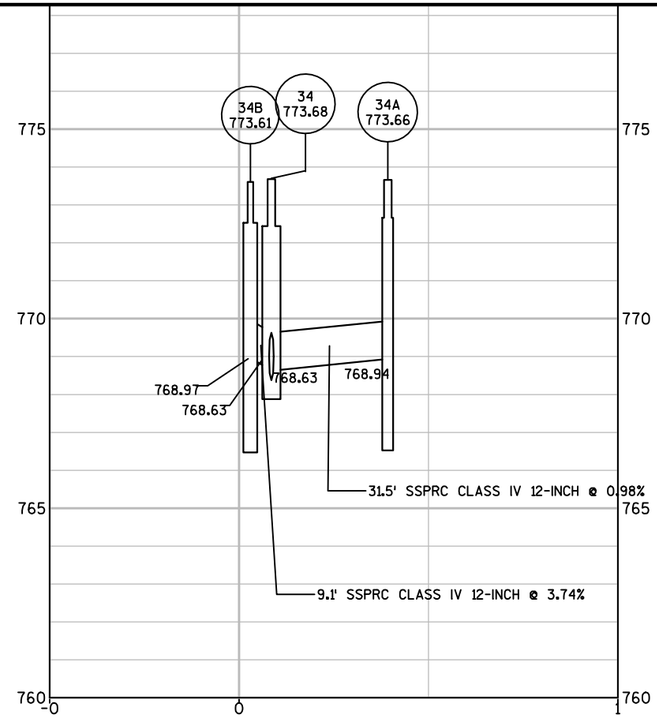
STA 105+50.8, 23.5' RT
CATCH BASINS 2x3-H (31C)

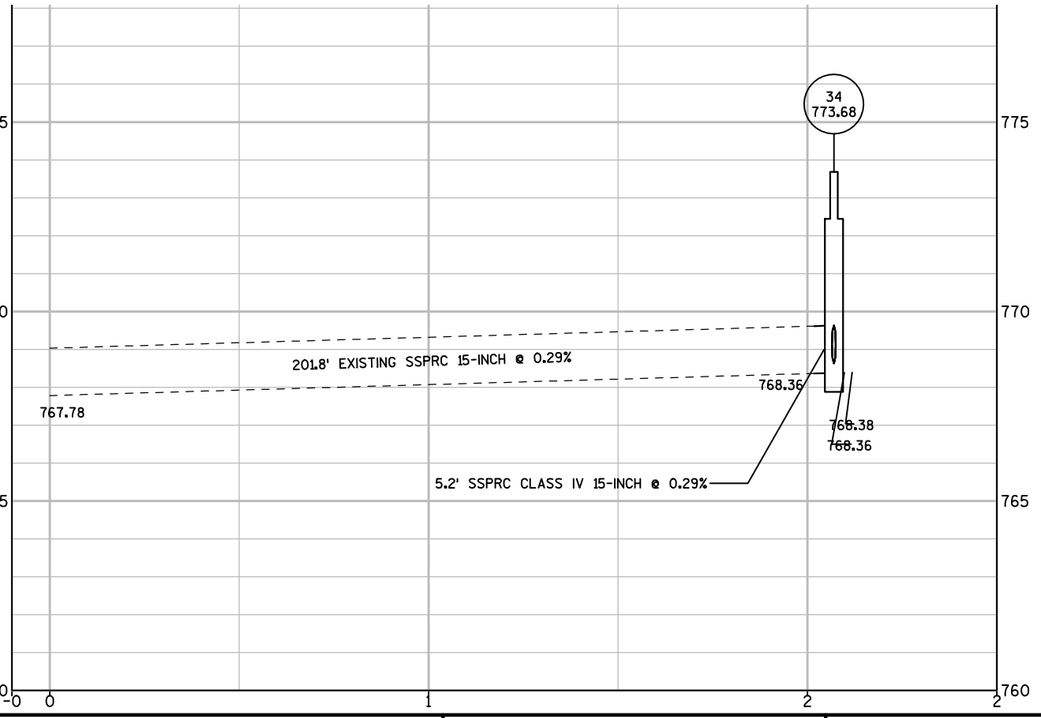


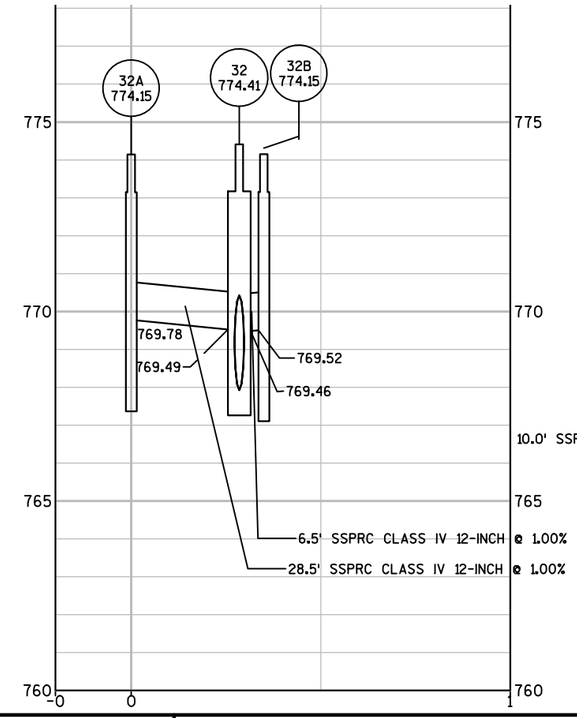
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER - E. MAIN ST	SHEET 110	E

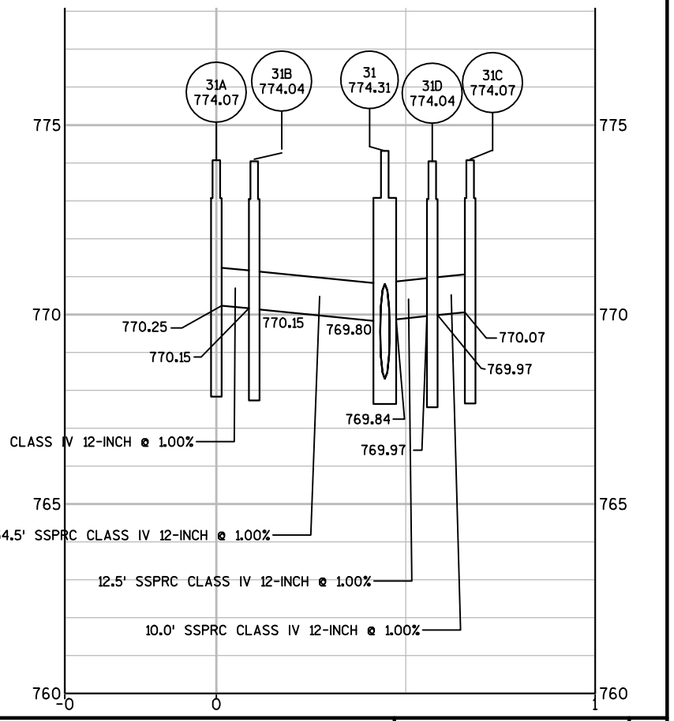




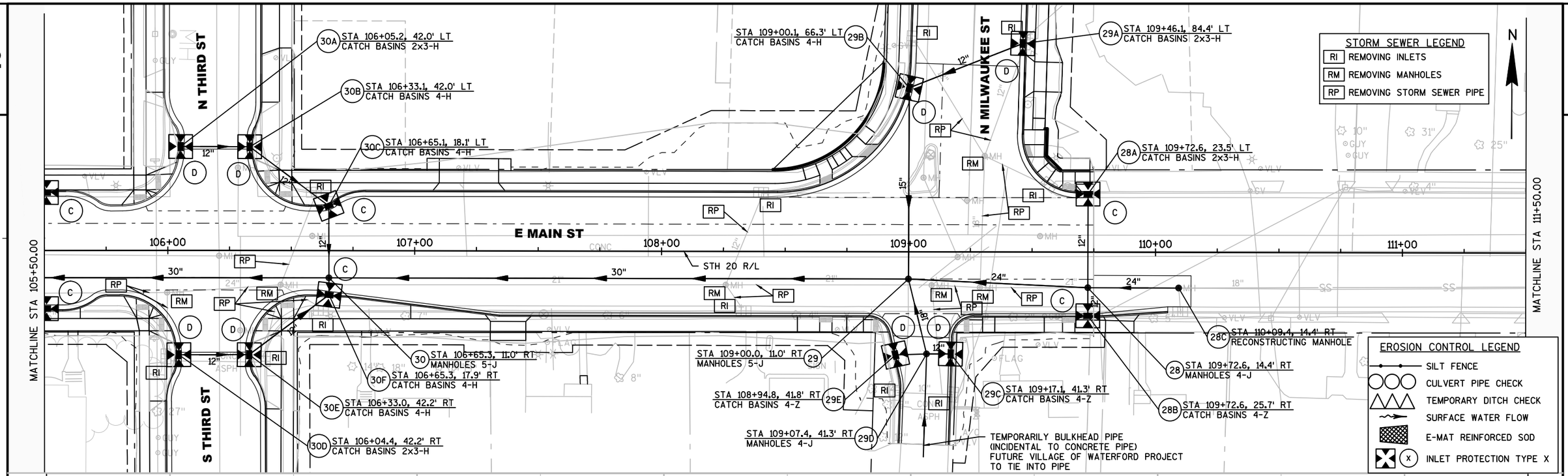


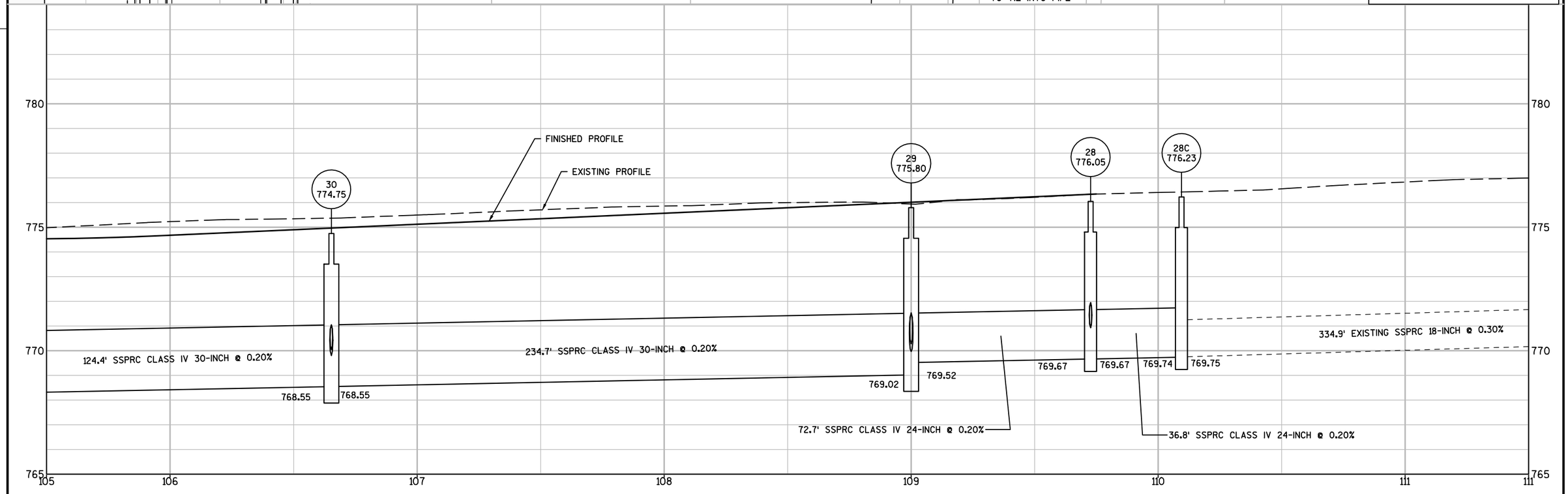




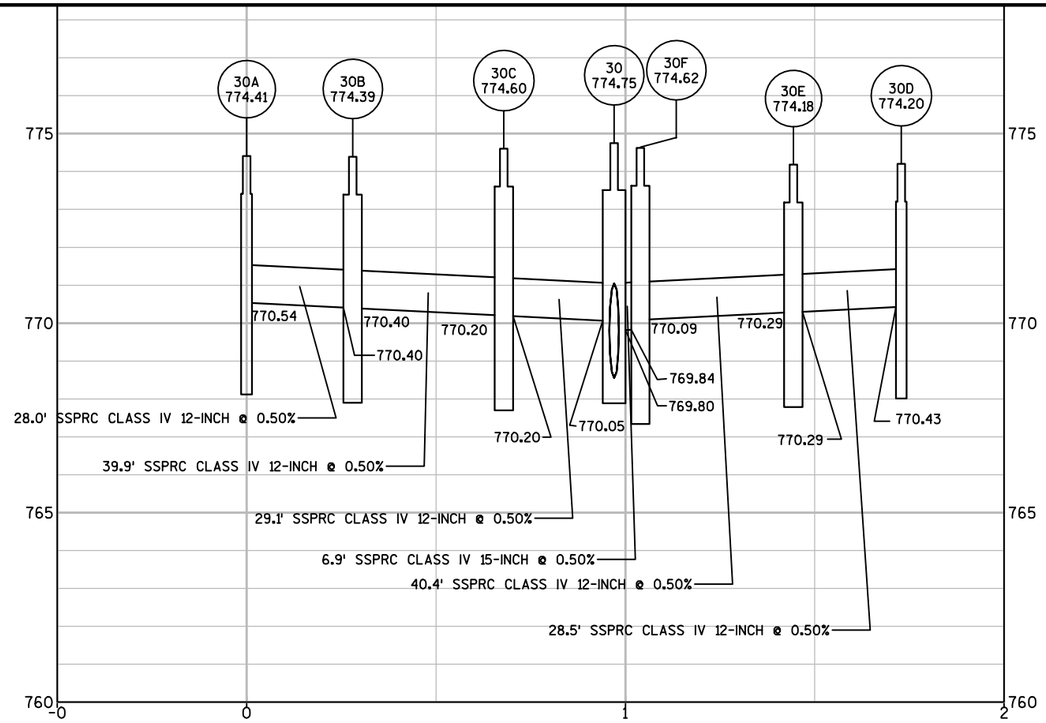


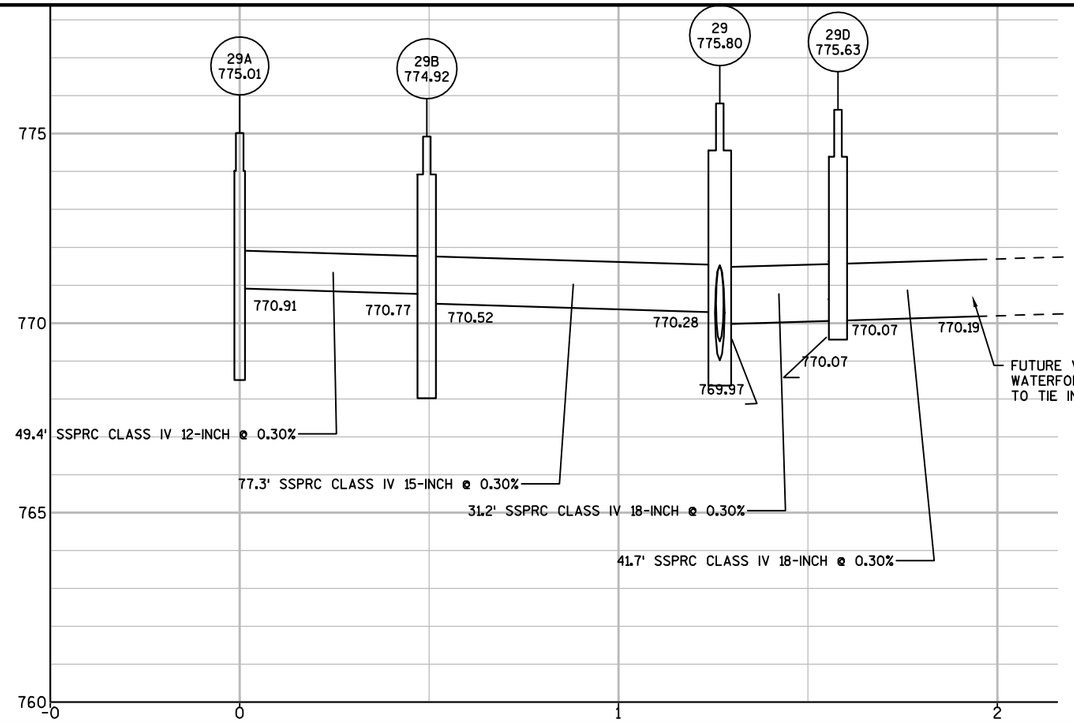
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 111	E

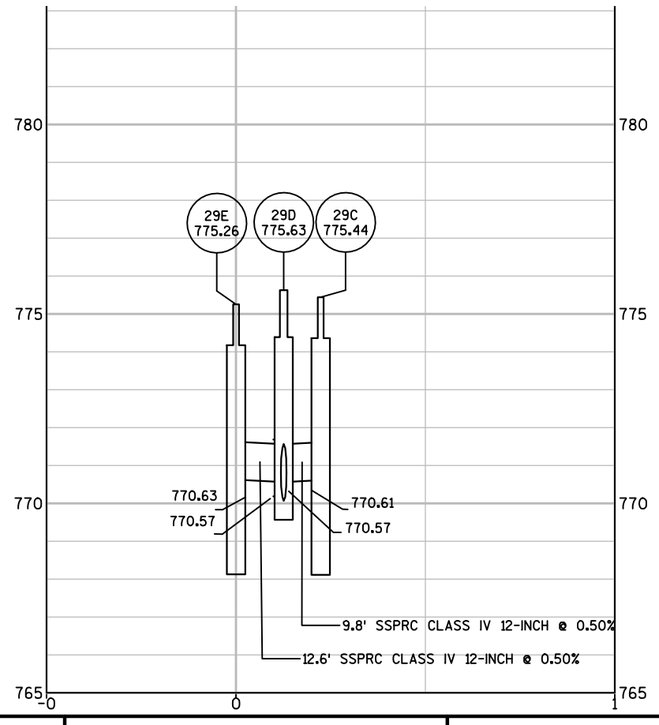


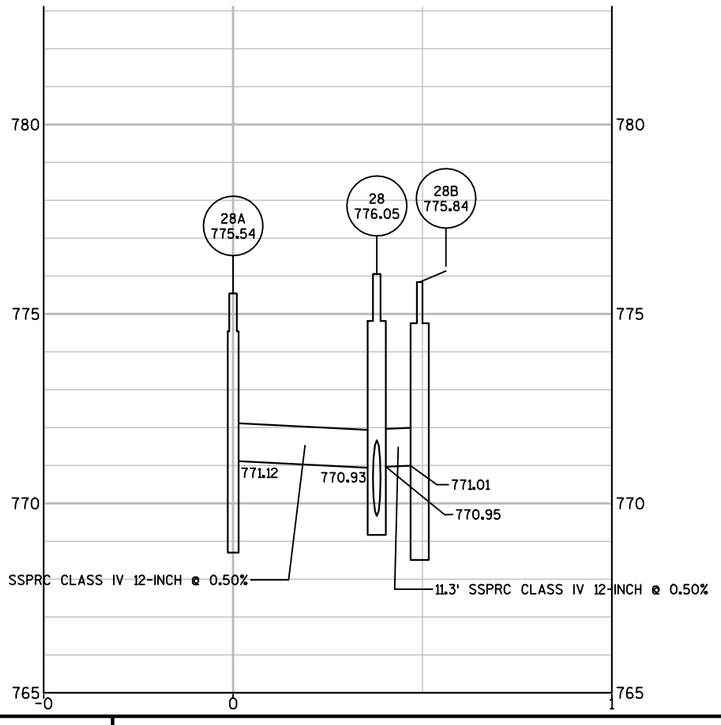


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 112 E







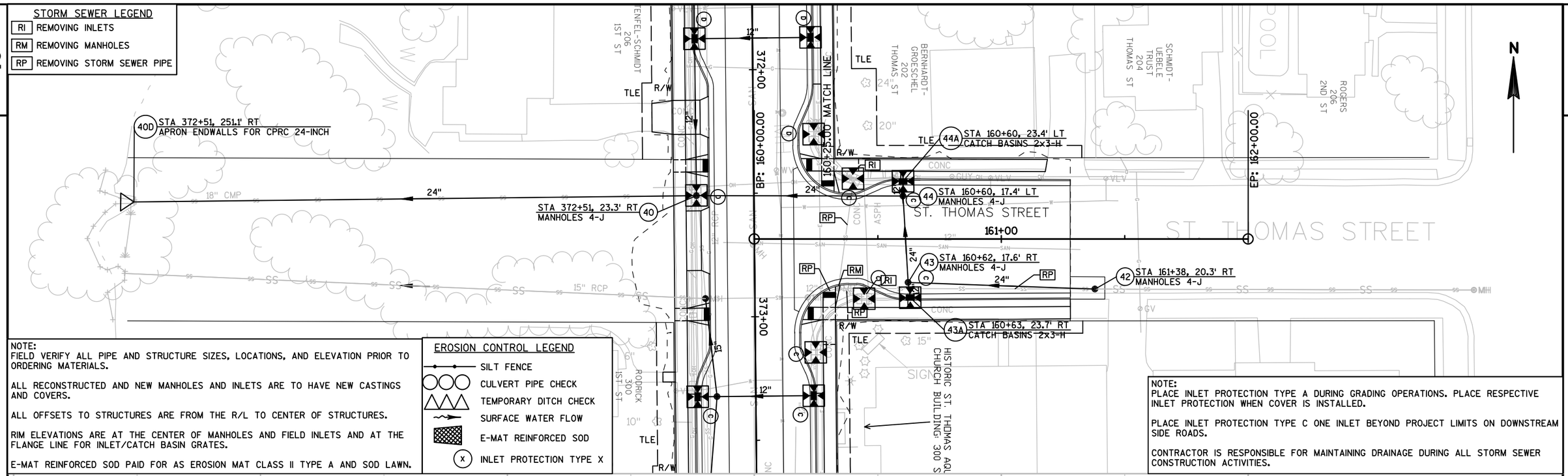


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 113	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - ss-lats(28-30)
PLOT DATE : 7/16/2018 8:19 AM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 41

STORM SEWER LEGEND

- RI REMOVING INLETS
- RM REMOVING MANHOLES
- RP REMOVING STORM SEWER PIPE



EROSION CONTROL LEGEND

- SILT FENCE
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- E-MAT REINFORCED SOD
- (X) INLET PROTECTION TYPE X

NOTE:
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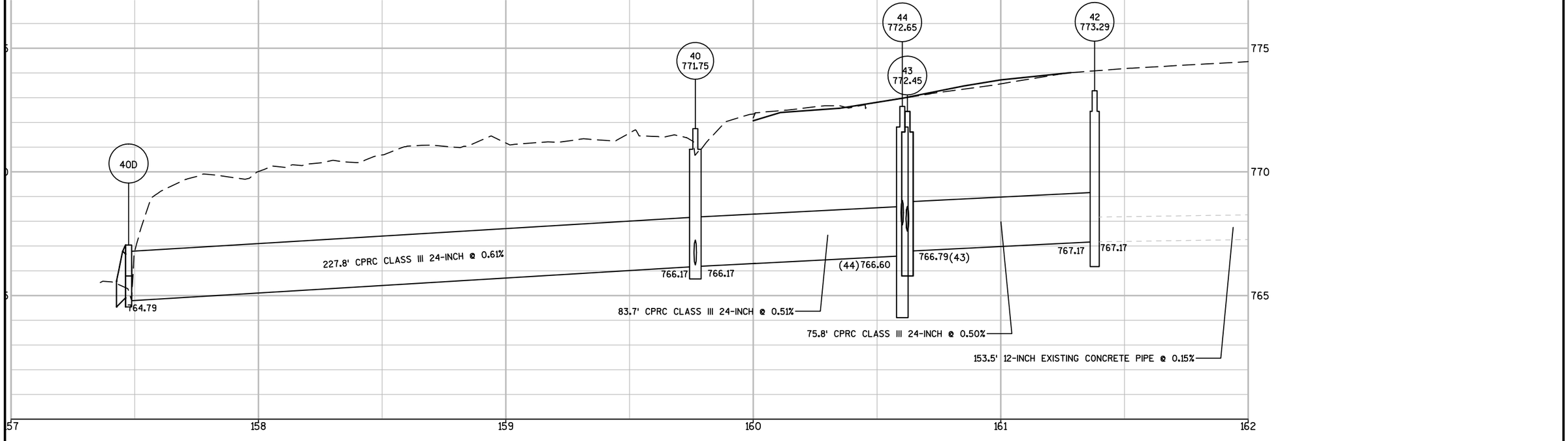
RIM ELEVATIONS ARE AT THE CENTER OF MANHOLES AND FIELD INLETS AND AT THE FLANGE LINE FOR INLET/CATCH BASIN GRATES.

E-MAT REINFORCED SOD PAID FOR AS EROSION MAT CLASS II TYPE A AND SOD LAWN.

NOTE:
PLACE INLET PROTECTION TYPE A DURING GRADING OPERATIONS. PLACE RESPECTIVE INLET PROTECTION WHEN COVER IS INSTALLED.

PLACE INLET PROTECTION TYPE C ONE INLET BEYOND PROJECT LIMITS ON DOWNSTREAM SIDE ROADS.

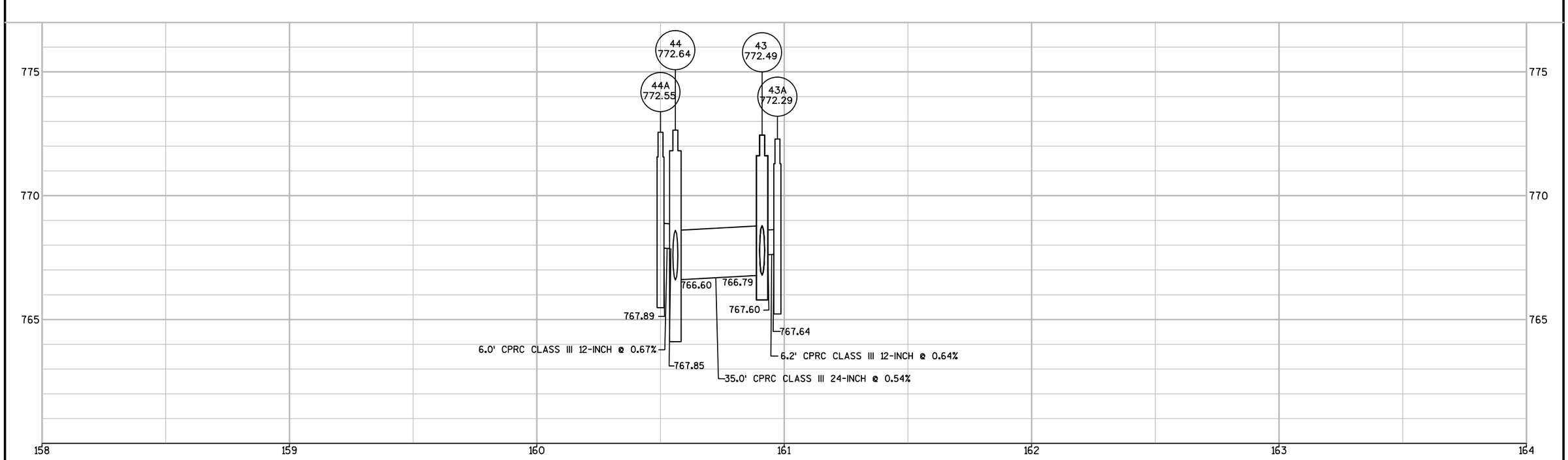
CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE DURING ALL STORM SEWER CONSTRUCTION ACTIVITIES.



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 114	E

2

2



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 115	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\022501_SS 90% ST.THOMAS.DWG
LAYOUT NAME - SHEET - (8)

PLOT DATE : 1/30/2018 7:06 PM PLOT BY : REBECCA SUTTON PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

PLANT LEGEND

TREES	CODE	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
	SMM	STATE STREET MIYABEI MAPLE	ACER MIYABEI 'MORTON' TM	3" CAL	B&B	FULL, MATCHING HEADS
	TE	TRIUMPH ELM	ULMUS X 'MORTON GLOSSY' TM	3" CAL	B&B	FULL, MATCHING HEADS
NARROW TREES	**CODE**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
	MA	AMUR MAACKIA	MAACKIA MAURENSIS	2.5" CAL	B&B	FULL, MATCHING HEADS
	MP	PINK SPARKLES CRABAPPLE	MALUS 'PINK SPARKLES' P22,482	2.5" CAL	B&B	FULL, MATCHING HEADS
	PSG	PRINCETON SENTRY GINKGO	GINKGO BILOBA 'PRINCETON SENTRY'	3" CAL	B&B	FULL, MATCHING HEADS
	TK	SWEET STREET LINDEN	TILIA AMERICANA 'KROMM'	3" CAL	B&B	FULL, MATCHING HEADS
PERENNIALS	**CODE**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
	AB	BLUE ICE BLUESTAR	AMSONIA X 'BLUE ICE'	1 GAL	CONT	24" SPACING
	AC1	PAPRIKA YARROW	ACHILLEA MILLEFOLIUM 'PAPRIKA'	1 GAL	CONT	24" SPACING
	NE1	BLUE WONDER CATMINT	NEPETA X FAASSENII 'BLUE WONDER'	1 GAL	CONT	24" SPACING
	PL	LACEY BLUE RUSSIAN SAGE	PEROVSKIA ATRIPLICIFOLIA 'LISSLITT'	1 GAL	CONT	24" SPACING
	PY2	MISS MANNERS OBEDIENT PLANT	PHYSOSTEGIA VIRGINIANA 'MISS MANNERS' TM	1 GAL	CONT	24" SPACING
	RU7	LITTLE GOLDSTAR BLACK-EYED SUSAN	RUDBECKIA FULGIDA VAR. SULLVANTII 'LITTLE GOLDSTAR'	1 GAL	CONT	24" SPACING
	SB	GOLDEN BABY GOLDENROD	SOLIDAGO X 'GOLDEN BABY'	1 GAL	CONT	24" SPACING
	SP	PURPLE EMPEROR SEDUM	SEDUM X 'PURPLE EMPEROR'	1 GAL	CONT	24" SPACING

EXISTING DECIDUOUS TREE

EXISTING EVERGREEN TREE

DECORATIVE LIGHT POLE (SEE LIGHTING PLAN)

DECORATIVE LIGHT POLE WITH MOUNTED TRASH RECEPTACLES
(SEE LIGHTING PLAN, MOUNTED TRASH RECEPTACLES BY OTHERS)

STANDARD LIGHT POLE (SEE LIGHTING PLAN)

TRASH RECEPTACLE (BY OTHERS)

BENCH (BY OTHERS)

LOW PLANTINGS

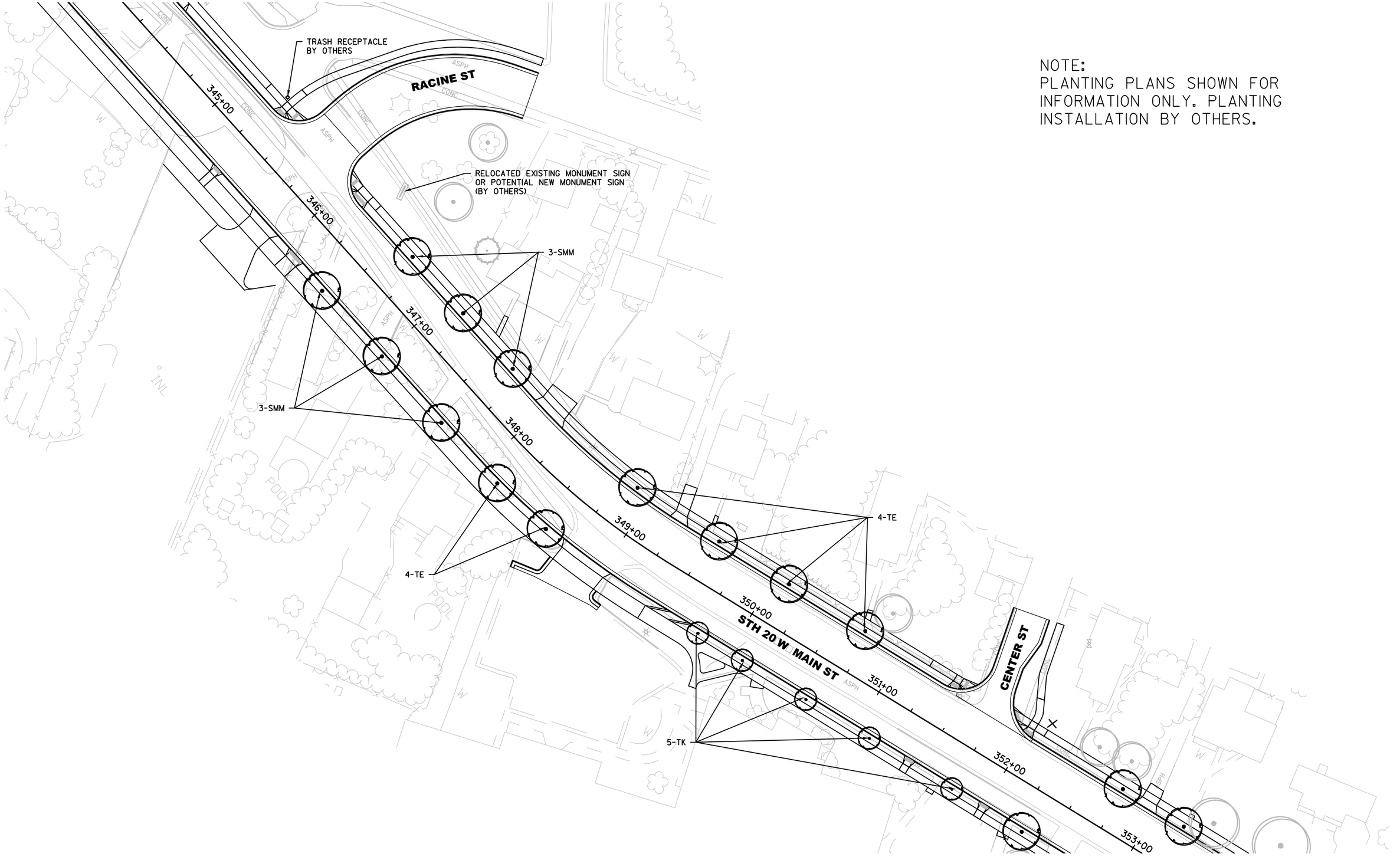
PLANTER (BY OTHERS)

BIKE RACK (BY OTHERS)

NOTE:
PLANTING PLANS SHOWN FOR INFORMATION ONLY. PLANTING INSTALLATION BY OTHERS.

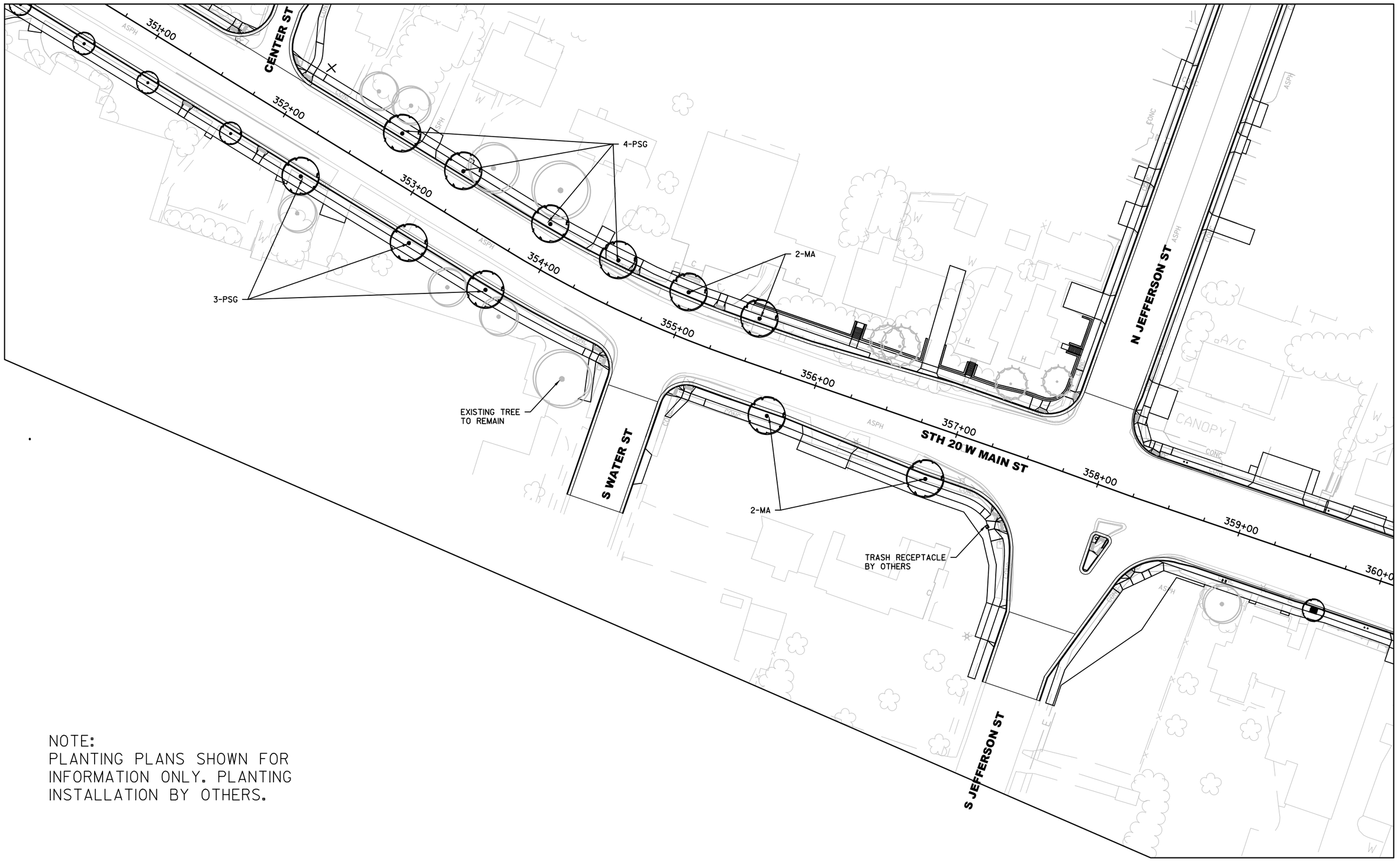
2

NOTE:
PLANTING PLANS SHOWN FOR INFORMATION ONLY. PLANTING INSTALLATION BY OTHERS.



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLANTING DETAILS	SHEET 117	E

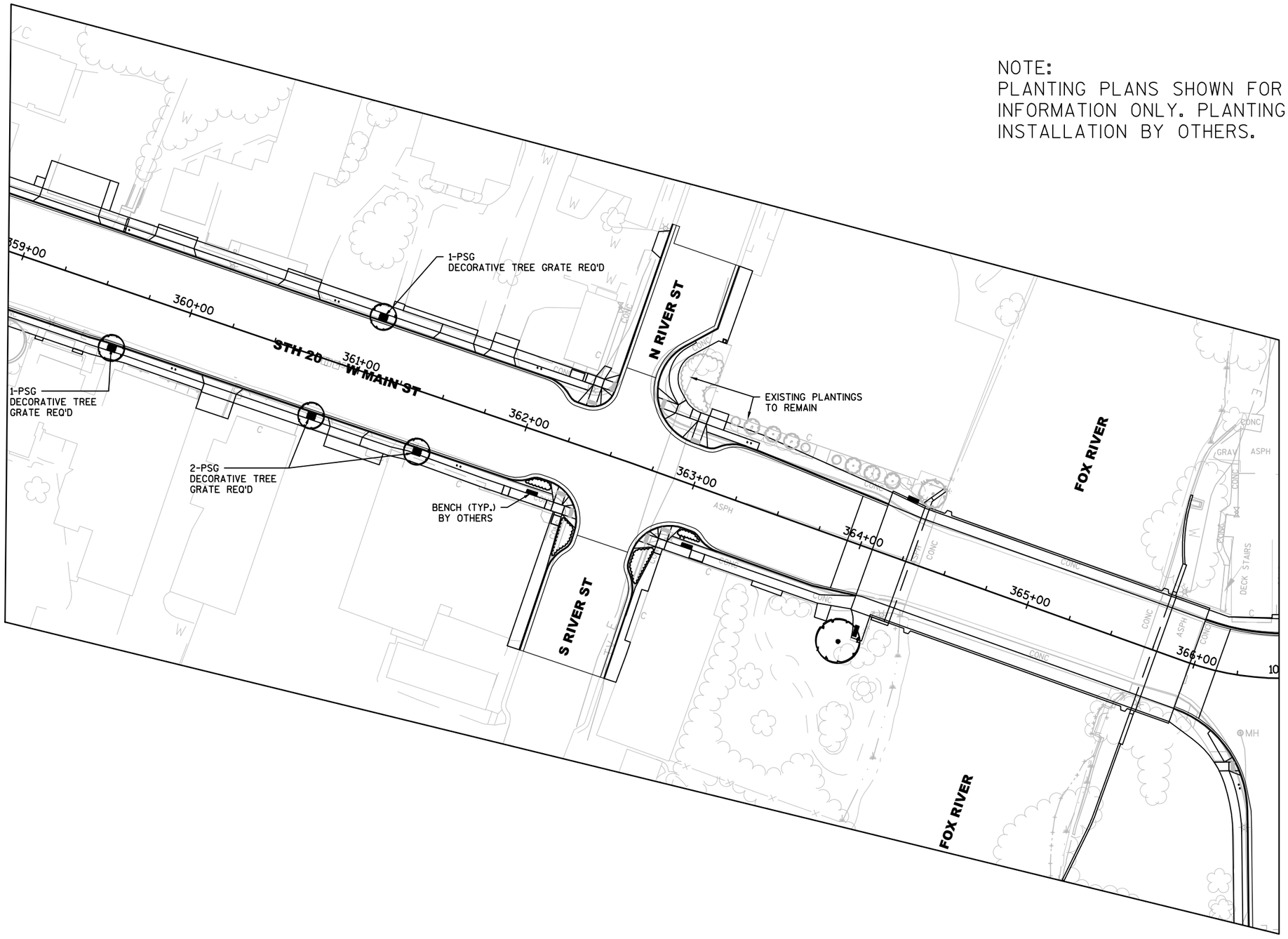
2



NOTE:
PLANTING PLANS SHOWN FOR INFORMATION ONLY. PLANTING INSTALLATION BY OTHERS.

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLANTING DETAILS	SHEET 118	E

NOTE:
PLANTING PLANS SHOWN FOR INFORMATION ONLY. PLANTING INSTALLATION BY OTHERS.



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLANTING DETAILS	SHEET E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\023101_PL.DWG PLOT DATE : 7/16/2018 12:39 PM PLOT BY : MANSKE, CALEB PLOT NAME :
WISDOT/CADDS SHEET 42

NOTE:
PLANTING PLANS SHOWN FOR INFORMATION ONLY. PLANTING INSTALLATION BY OTHERS.

N

N RIVER ST

S RIVER ST

STH 20

EXISTING PLANTINGS TO REMAIN

EXISTING PLANTINGS TO REMAIN

9-AB

24-SP

8-AB

30-RU7

EXISTING TREE TO REMAIN

PI: 362+61.66

362+00

363+00

364+00

MATCHLINE STA 364+25.00

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLANTING DETAILS	SHEET 120 E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\023201_PL.DWG
LAYOUT NAME - 023201_PL - SHEET - (1)

PLOT DATE : 7/16/2018 12:52 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

2

N

NOTE:
PLANTING PLANS SHOWN FOR INFORMATION ONLY. PLANTING INSTALLATION BY OTHERS.

MATCHLINE STA 366+00.00

STH 20

PT: 366+50.68

STA BACK = 366+54.16
STA AHEAD = 100+00.00

100+00

BP: 366+54.16,
BP: 366+54.16

101+00

E MAIN ST

MATCHLINE STA 101+98.91

DECK STAIRS

CONC

MH

VLV

WV

SS

SAN

GV

10"

20"

27"

B-10

33-AC1

BENCH (TYP)
BY OTHERS

24-PY2

STH 20 FIRST

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLANTING DETAILS	SHEET 121	E

NOTE:
PLANTING PLANS SHOWN FOR INFORMATION ONLY. PLANTING INSTALLATION BY OTHERS.

N SECOND ST

E MAIN ST

S SECOND ST

15-SP

18-PY2

12-RU7

BENCH (TYP) BY OTHERS

20-SB

20-NE1

35-PL

36-AC1

PI: 103+08.60

MATCHLINE STA 101+98.91

MATCHLINE STA 104+96.75

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLANTING DETAILS	SHEET 122	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\023201_PL.DWG
LAYOUT NAME - 023201_PL - SHEET - (4)

PLOT DATE : 7/16/2018 12:53 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

NOTE:
PLANTING PLANS SHOWN FOR INFORMATION ONLY. PLANTING INSTALLATION BY OTHERS.

N

N THIRD ST

54-SP

35-RU7

PROPOSED BENCH (TYP) BY OTHERS

21-AB

14-AB

PI: 106+19.33

E MAIN ST

MATCHLINE STA 104+96.75

105+00

106+00

107+00

22-PY2

32-AC1

36-SB

41-NE1

CONC

ASPH

S THIRD ST

EXISTING TREES TO REMAIN

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLANTING DETAILS	SHEET 123	E

2

2

N

NOTE:
PLANTING PLANS SHOWN FOR INFORMATION ONLY. PLANTING INSTALLATION BY OTHERS.

ELIZABETH ST

STH 20 FIRST ST

369+00

370+00

MATCHLINE STA 368+25.00

MATCHLINE STA 371+00.00

21-SB

12-AB

17-PL

1-MP

17-PL

EXISTING TREE TO REMAIN

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLANTING DETAILS	SHEET 124	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\023201_PL.DWG
LAYOUT NAME - 023201_PL - SHEET - (7)

PLOT DATE : 7/16/2018 12:53 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

NOTE:
PLANTING PLANS SHOWN FOR INFORMATION ONLY. PLANTING INSTALLATION BY OTHERS.

ST. THOMAS ST

STH 20 FIRST ST

BP: 160+00.00

MATCHLINE STA 371+00.00

MATCHLINE STA 374+00.00

20-SB

29-PY2

23-AC1

27-RU7

20-SP

27-SP

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLANTING DETAILS	SHEET 125	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\023201_PL.DWG
LAYOUT NAME - 023201_PL - SHEET - (8)
PLOT DATE : 7/16/2018 12:53 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

NOTE:
PLANTING PLANS SHOWN FOR INFORMATION ONLY. PLANTING INSTALLATION BY OTHERS.

33-AB

32-SB

28-AC1

1-MP

1-MP

27-NE1

STH 20 FIRST ST

375+00 376+00 377+00 378+00

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLANTING DETAILS	SHEET 126	E

2

MATCHLINE STA 379+50.00

WEBER ST

WEBER STREET

STH 20

29-PL

21-SP

20-AC1

380+00

BP: 170+00.00

381+00

382+00

PC: 381+50.55

PC: 381+50.55

STH 20 FIRST ST

29-PY2

1-MP

1-MP

20-RU7

NOTE:
PLANTING PLANS SHOWN FOR INFORMATION ONLY. PLANTING INSTALLATION BY OTHERS.

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLANTING DETAILS	SHEET	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\023201_PL.DWG
LAYOUT NAME - 023201_PL - SHEET - (11)

PLOT DATE : 7/16/2018 12:54 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

N

U/C

STH 20/83

301+00 302+00 303+00 304+00 305+00

WEST NORTH 20 83 — 1R — REMOVE

STOP — ESTR

WEST 20 — 4R — REMOVE

SPEED LIMIT 40 — 2R — REMOVE

JCT COUNTY W — 3R — REMOVE

5R — REMOVE

Signing notes

Type II aluminum signs removed under the contract shall be delivered to the County sign shop in the County the project is located in. Signs shall be carefully removed from sign supports. The signs shall be palletized for handling with a forklift (see special provision 638.3.4). The Regional sign shop (414-266-1165) shall be notified three working days prior to delivery of the signs.

When an existing stop sign support is to be removed and a new stop sign and support erected, the work shall be done concurrently. For other signs and supports that are to be removed and new signs and supports erected, the removal of the existing sign/support and erection of the new sign/support should be done as concurrently as possible. In no case shall a new sign/support be down for more than 24 hours and there shall not be more than one sign of the same legend missing in a row.

Wood posts sizes, for type II signs are estimated lengths and the actual length will be determined in the field.

Street name signs are property of the municipality (city, village or town). The municipality shall be contacted to remove their street name signs prior to construction and it is their responsibility to reinstall the old signs or replace them following construction. WisDOT does not furnish or install street name signs. The street name signs shall not be placed on top of the STOP signs.

Locate no passing pennants based on establishing no passing zones pay item. Place signs based on where the pavement marking for no passing zones begin

SHEET 1 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 128	E

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

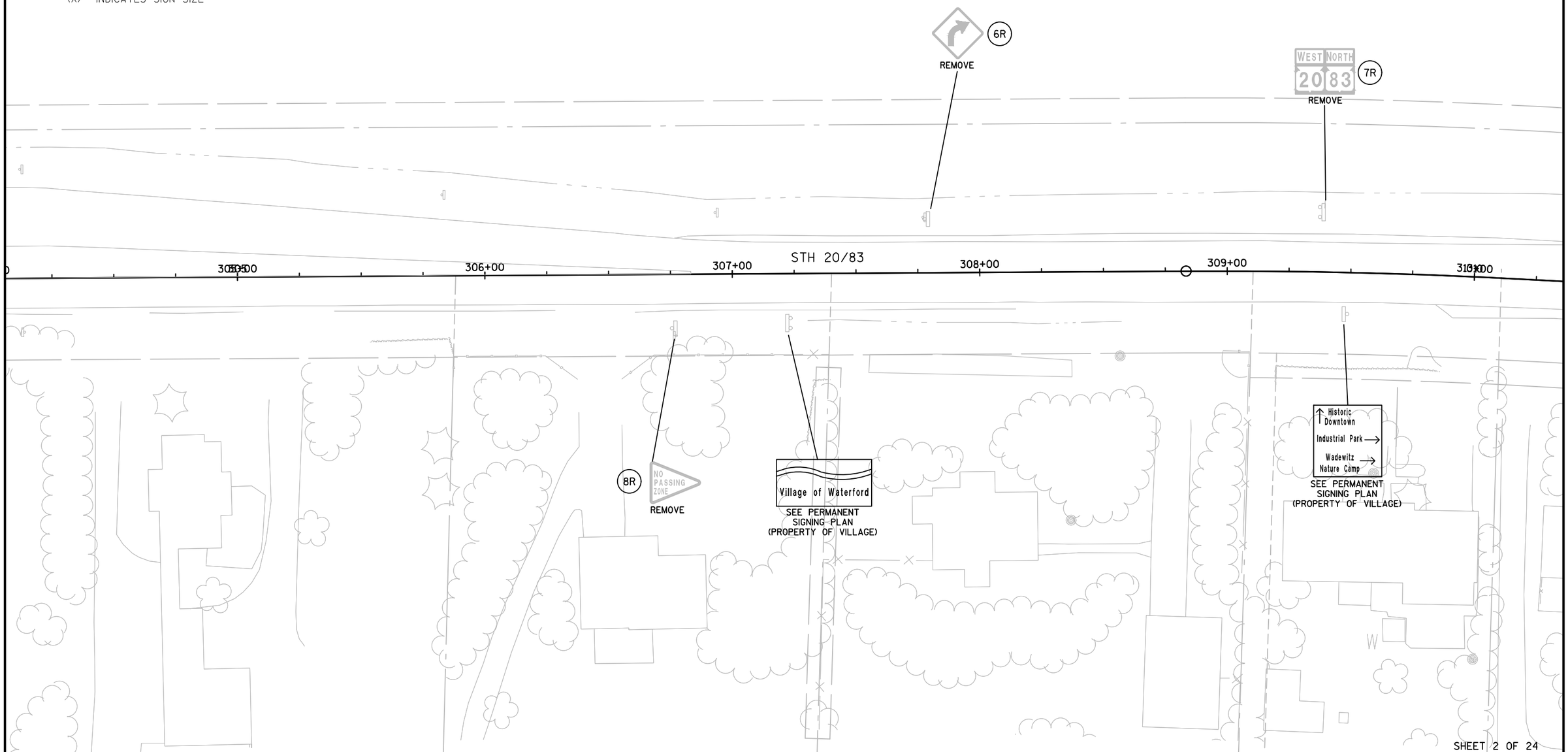
EXISTING LIGHT OR SIGNAL POLE

XXX DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

N

2



SHEET 2 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 129 E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

BUENA PARK RD

STH 20/83

11R STOP REMOVE

10R NO TURN ON RED REMOVE

9R SPEED LIMIT 40 REMOVE

155-56 MOVE SEE PERMANENT SIGNING PLAN

PI: 10+57.99

12R NO TURN ON RED REMOVE

13R NO TURN ON RED REMOVE

14R STOP REMOVE

21R ONLY ONLY ONLY REMOVE

20R SOUTH COUNTY W REMOVE

19R STOP REMOVE

16R NO TURN ON RED REMOVE

15R Waterford POPULATION 5,368 REMOVE

17R END COUNTY W REMOVE

STOP REMOVE

18R 20 83 REMOVE

SHEET 3 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 130	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023103_PS

PLOT DATE : 12/19/2017 9:32 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

PT: 21+76.49

N

PC: 21+25.99

21+00

AUGUSTA WAY

22R COUNTY W REMOVE

Industrial Park
Wadewitz Nature Camp
SEE PERMANENT SIGNING PLAN (PROPERTY OF VILLAGE)

23R STOP REMOVE

PI: 20+75.00

316+00 317+00 318+00 319+00 321+00

BP: 20+00.00

STH 20/83

BIKE PATH

27R SPEED LIMIT 35 REMOVE

26R EAST SOUTH 20 83 REMOVE

SPONSOR KNIGHTS OF COLUMBUS WATERFORD
155-56
MOVE
SEE PERMANENT SIGNING PLAN

25R AHEAD REMOVE

24R REMOVE

SIGN

SIGN

SHEET 4 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 131	E

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

N

GOLF GREEN

GOLF COURSE

28R

REMOVE

29R

JCT COUNTY W

REMOVE

30R

SPEED LIMIT 35

REMOVE

322+00

323+00

324+00

325+00

326+00

327+00

STH 20/83

SIGN

W

W

31R

SPEED LIMIT 25

REMOVE

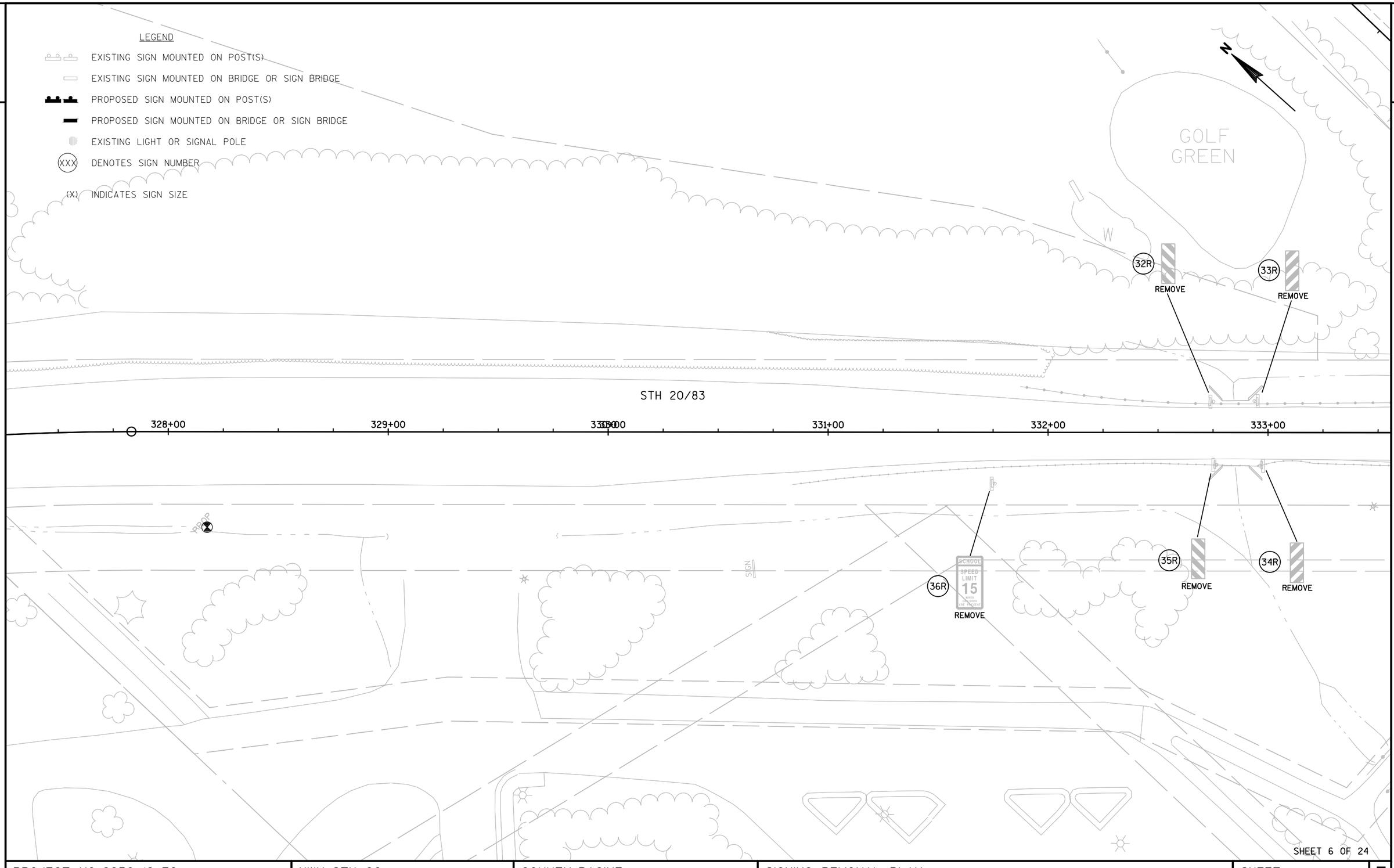
SHEET 5 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 132	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 6 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 133 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023106_PS

PLOT DATE : 12/19/2017 9:32 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

RIVERMOOR RD

32+00

31+00

PT: 31+15.74

37R STOP REMOVE

PC: 30+33.40

BP: 30+00.00

38R REMOVE FROM FLASHING BEACON POLE

REMOVE EXISTING BEACON POLE

39R SCHOOL SPEED LIMIT 15 REMOVE

334+00 335+00 336+00 337+00 338+00 339+00

STH 20/83

STH 20/83

41R REMOVE FROM FLASHING BEACON POLE

REMOVE EXISTING BEACON POLE

40R SPEED LIMIT 25 REMOVE

CABC

SIGN

W

N

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 7 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 134	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023107_PS

PLOT DATE : 12/19/2017 9:32 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

N

RIVERMOOR DR

42+00

41+00

PT: 41+11.57

42R
AHEAD
REMOVE

43R
STOP
REMOVE

POOL

PC: 40+34.66

BP: 40+00.00

STH 20/83

339+00 340+00 341+00 342+00 343+00 344+00 345+00

44R
SPEED LIMIT 25
REMOVE

161R
TREE CITY, USA
DESIGNATED WISCONSIN MAIN STREET COMMUNITY
REMOVE
ILLEGAL SIGNS
(PROPERTY OF VILLAGE)
NO PERMIT ON FILE

46R
SPEED LIMIT 25
REMOVE

45R
SPEED LIMIT 25
REMOVE

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 8 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 135	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023108_PS

PLOT DATE : 12/19/2017 9:32 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

48R REMOVE
STOP R1-1 ESTR
PT: 51+56.06
47R STOP REMOVE
RACINE ST
51+00
NO PARKING ANY TIME R7-1-D ESTR
11 HR PARKING DUE TO 4PM SNOW PKG MOVE SEE PERMANENT SIGNING PLAN
49R REMOVE
PC: 50+29.90
50+00
50R SPEED LIMIT 25 NO PARKING REMOVE
54R AHEAD NO PARKING ANY TIME REMOVE
BP: 49+03.68
DO NOT ENTER PRIVATE SIGNS OWNER TO REMOVE
53R NO PARKING ANY TIME REMOVE
52R SCHOOL SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT REMOVE
51R EAST 20 SOUTH 83 REMOVE
STH 20/83
345+00
346+00
347+00
348+00
349+00
350+00
351+00
EP: 61+50.00
N
POOL
INL
MH

SHEET 9 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 136 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023109_PS
PLOT DATE : 12/19/2017 9:33 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

N

EP: 61+50.00

CENTER ST

61+00

55R STOP REMOVE

STREET NAME

351+00

MH

352+00

BP: 60+00.00

STH 20/83

353+00

354+00

355+00

356+00

EP: 70+00.00

56R SCHOOL SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT REMOVE

57R STOP FOR PEDESTRIANS IN CROSSWALK REMOVE

58R WEST 20 NORTH 83 REMOVE

SIGNS

63R NO PARKING REMOVE

62R NO PARKING REMOVE

61R REMOVE

60R NO PARKING REMOVE

FLAG

S WATER ST

69+00

WEIGHT LIMIT 8 TONS GVWR MOVE SEE PERMANENT SIGNING PLAN

OVERHEAD SIGN

OVERHEAD SIGN

STREET NAME

59R STOP REMOVE

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 10 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023110_PS

PLOT DATE : 12/19/2017 9:33 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

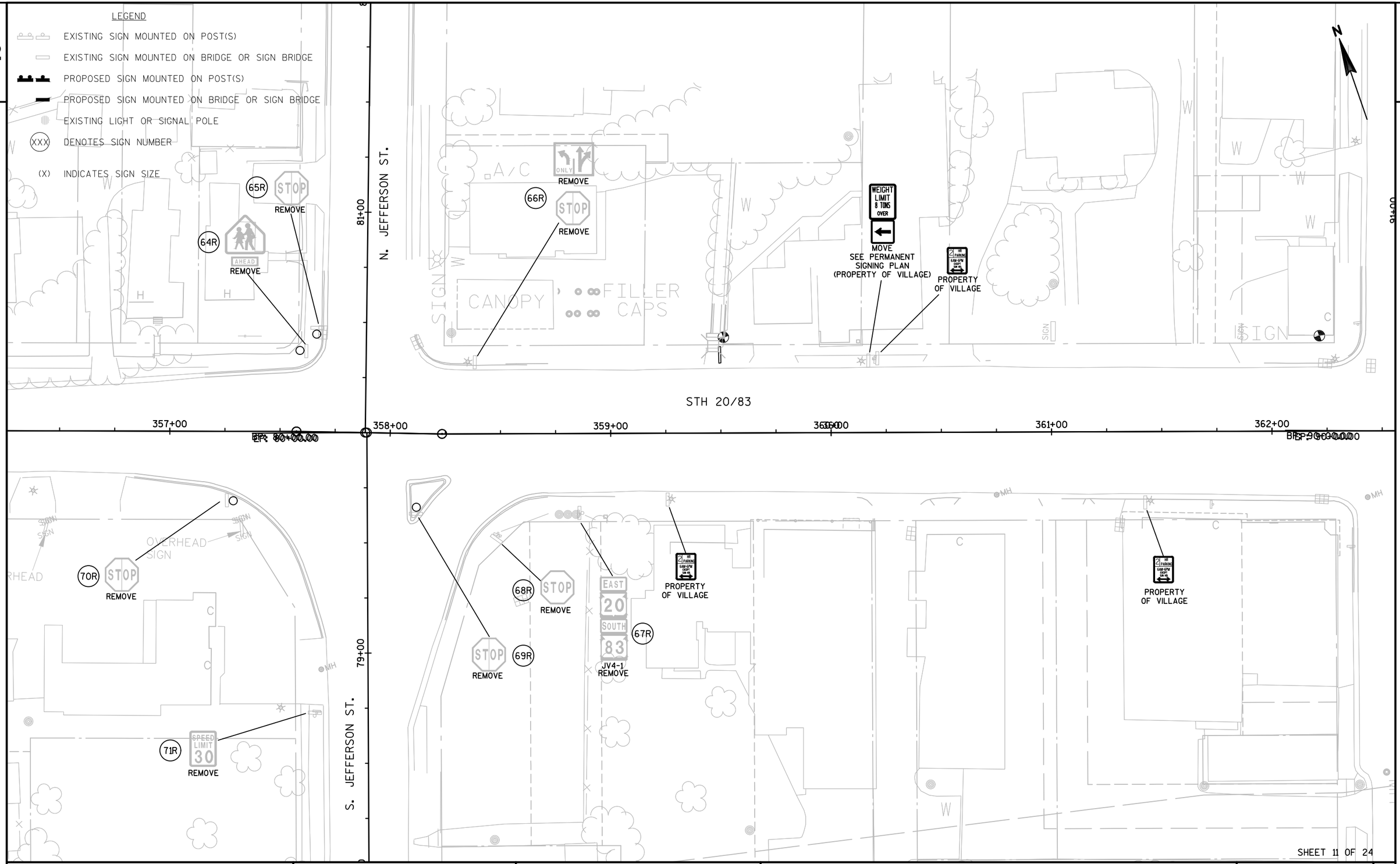
PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE



SHEET 11 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 138	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023111_PS

PLOT DATE : 12/19/2017 9:33 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

RIVER ST

91+00

72R ONE WAY / NO PARKING 4AM-6PM — REMOVE

73R RRFB — REMOVE
SEE PERMANENT SIGNING PLAN

RRFB — REMOVE
SEE PERMANENT SIGNING PLAN

PROPERTY OF VILLAGE

REMOVE

74R WEST 20 NORTH 83 — REMOVE

MOVE
SEE PERMANENT SIGNING PLAN
(PROPERTY OF VILLAGE)

75R SPEED LIMIT 25 — REMOVE

EXISTING TYPE I POLE
SEE PERMANENT SIGNING PLAN

BP: 363+00.00

363+00

364+00

STH 20/83

365+00

366+00

ONLY — ESTR

Main St — ESTR

ONLY — ESTR

NO PARKING — ESTR

STOP — ESTR

20 83 — ESTR

76R NO PARKING — REMOVE

E. MAIN ST.

101+00

BP: 366+54.16

LEFT TURN YIELD ON FLASHING YELLOW ARROW — ESTR

STA BACK = 366+54.16
STA AHEAD = 100+00.00

87R — REMOVE

MOVE
SEE PERMANENT SIGNING PLAN
(PROPERTY OF VILLAGE)

89+00

RIVER ST

85R RRFB — REMOVE
SEE PERMANENT SIGNING PLAN

RRFB — REMOVE
SEE PERMANENT SIGNING PLAN

84R — REMOVE

MOVE
SEE PERMANENT SIGNING PLAN
(PROPERTY OF VILLAGE)

82R EAST SOUTH 20 83 — REMOVE

83R ONLY ONLY — REMOVE

ONLY — ESTR

ONLY — ESTR

WOOD DECK

81R STOP — REMOVE

S 1st St — ESTR

STH 20/83 (S 1ST ST)

368+00

WEIGHT LIMIT 8 TONS GVWR
R5-2
MOVE
SEE PERMANENT SIGNING PLAN
(PROPERTY OF VILLAGE)

77R STOP — REMOVE

S 1st St — ESTR

78R NO PARKING — REMOVE

86R STOP — REMOVE

ESTR

80R EAST 20 SOUTH 83 NO PARKING — REMOVE

79R NO PARKING — REMOVE

SEE SHEET 15

88+00.00

SHEET 12 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 139 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023112_PS

PLOT DATE : 12/19/2017 9:33 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

XXX DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.

N

EP: 131+50.00

N. 2ND ST.

131+00

88R REMOVE

REMOVE

MOVE
SEE PERMANENT
SIGNING PLAN
(PROPERTY OF VILLAGE)

89R REMOVE

90R REMOVE

MOVE
SEE PERMANENT
SIGNING PLAN
(PROPERTY OF VILLAGE)

91R REMOVE

MOVE
SEE PERMANENT
SIGNING PLAN
(PROPERTY OF VILLAGE)

92R REMOVE

HW

141+00

S. 3RD ST.

PROPERTY OF
VILLAGE

E. MAIN ST.

102+00 103+00 104+00 105+00 106+00 107+00

EP: 130+00.00 EP: 140+00.00

MOVE
SEE PERMANENT
SIGNING PLAN
(PROPERTY OF VILLAGE)

R5-2

WEIGHT LIMIT 8 TONS OVER

ESTR

S. 2ND ST.

129+00

STOP 96R REMOVE

MOVE
SEE PERMANENT
SIGNING PLAN
(PROPERTY OF VILLAGE)

ESTR

MOVE
SEE PERMANENT
SIGNING PLAN
(PROPERTY OF VILLAGE)

95R REMOVE

12' VACATED ALLEY

S. 3RD ST.

139+00

94R STOP REMOVE

93R REMOVE

STOP FOR PEDESTRIANS IN CROSSWALK REMOVE

12' VA

SHEET 13 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 140 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023113_PS

PLOT DATE : 12/19/2017 9:33 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.

N. MILWAUKEE ST.

E. MAIN ST.

97R SPEED LIMIT 25 — REMOVE
2 HR PARKING 8AM-6PM EXCEPT SUN HOL — MOVE SEE PERMANENT SIGNING PLAN (PROPERTY OF VILLAGE)

98R STOP — REMOVE

99R STOP — REMOVE

100R SPEED LIMIT 25 — REMOVE
NO PARKING ANYTIME — REMOVE

101R STOP — REMOVE
ONCOMING TRAFFIC DOES NOT STOP — REMOVE

107+00 108+00 109+00 110+00 111+00 112+00 112+52

EP: 150+00.50

MH

FLAG

SIGN

PROPERTY OF VILLAGE

WEIGHT LIMIT 8 TONS GVWR — MOVE SEE PERMANENT SIGNING PLAN

102R — REMOVE

A/C

103R STOP — REMOVE

149+00

S. MILWAUKEE ST.

12' VACATED ALLEY

SHEET 14 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 141	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023114_PS

PLOT DATE : 12/19/2017 9:33 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

N

E. MAIN ST.

ELIZABETH ST.

STH 20/83

STA AHEAD = 368+00.00
STA BACK = 366+54.16

BP: 366+54.16

BP: 120+00.00

SEE SHEET 12

104R WEST 20 NORTH 83 JV3-1 REMOVE

105R ONLY ONLY REMOVE

106R STOP REMOVE

107R REMOVE

109R SPEED LIMIT 25 REMOVE

108R AHEAD REMOVE

Public Parking

SEE PERMANENT SIGNING PLAN (PROPERTY OF VILLAGE)

DECK STAIRS

WOOD DECK

SHEET 15 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 142 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023115_PS

PLOT DATE : 12/19/2017 9:33 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

111R STOP REMOVE

110R SPEED LIMIT 25 REMOVE

ST. THOMAS ST.

112R REMOVE

ONE WAY ONE WAY PRIVATE SIGNS OWNER TO REMOVE

N

2

371+00 372+00 373+00 374+00 375+00 376+00

STH 20/83

114R REMOVE

113R SPEED LIMIT 25 REMOVE

SHEET 16 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 143	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023116_PS

PLOT DATE : 12/19/2017 9:34 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

115R SCHOOL SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT
REMOVE

116R NO PASSING ZONE
REMOVE

117R AHEAD
REMOVE

118R STOP
REMOVE

WEBER ST.

119R SPEED LIMIT 25
REMOVE

MH

N

PC: 381+50.55

377+00 378+00 379+00 380+00 381+00 382+00

STH 20/83

120R 20 83
JV2-1
REMOVE

Whitford Park →
SEE PERMANENT SIGNING PLAN (PROPERTY OF VILLAGE)

2

SHEET 17 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 144	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023117_PS

PLOT DATE : 12/19/2017 9:34 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

121R — WEST 20 NORTH 83 — REMOVE

122R — NO PARKING — REMOVE

163R — ST PETER'S LUTHERAN 6TH & MAIN ST — REMOVE ILLEGAL SIGN

Historic Downtown ← Whitford Park — SEE PERMANENT SIGNING PLAN (PROPERTY OF VILLAGE)

123R — SPEED LIMIT 35 — REMOVE

124R — NO PARKING — REMOVE

PT: 384+01.60

383+00 384+00 385+00 386+00 387+00 388+00

STH 20/83

MH

162R — AGENTS SOLICITORS VENDORS LICENSE REQUIRED APPLY VILLAGE CLERK — REMOVE ILLEGAL SIGN (PROPERTY OF VILLAGE)

CABC

N. RIVER RD.

STOP — 126R — REMOVE

STREET NAME

125R — SPEED LIMIT 35 — REMOVE

SHEET 18 OF 22

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 145 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023118_PS

PLOT DATE : 12/19/2017 9:34 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

N

CEMETERY

128R
Waterford
POPULATION 5,368
REMOVE

164R
TREE CITY, USA
REMOVE
ILLEGAL SIGN

NO PARKING ANYTIME
127R
REMOVE

PC: 393+80.88

MH

+00 389+00 390+00 391+00 392+00 393+00 394+00

STH 20/83

POST

JCT 36 83
129R
REMOVE

WALNUT DR

NAME STREET

SHEET 19 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 146 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023119_PS

PLOT DATE : 12/19/2017 9:34 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

Village of Waterford
MOVE
SEE PERMANENT SIGNING PLAN
(PROPERTY OF VILLAGE)

131R STOP REMOVE

ESTR BIKE ROUTE
ESTR NO MOTOR VEHICLES

132R NO PARKING ANY TIME REMOVE

133R BIKE ROUTE REMOVE

134R STOP REMOVE

135R BIKE ROUTE REMOVE

EVERGREEN DR.

PT: 398+76.50

394+00 395+00 396+00 397+00 398+00 399+00 400+00

STH 20/83

130R SPEED LIMIT 35 REMOVE

HICKORY LN. (PRIVATE ROAD)

141R BIKE ROUTE REMOVE

NORTH EAST SOUTH SOUTH
36 20 36 83
140R REMOVE

138R BIKE ROUTE REMOVE

139R BIKE ROUTE REMOVE

137R STOP REMOVE

136R BIKE ROUTE REMOVE

EVERGREEN DR.

SHEET 20 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 147 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023120_PS

PLOT DATE : 12/19/2017 9:34 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

XXX DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

SIGN

WALL

142R NO PARKING ANY TIME REMOVE

SPEED LIMIT 35 143R REMOVE

SIGN

POST

STH 36

400+00 401+00 402+00 403+00 404+00 405+00

MH MH MH

STH 20 (BECK DR.)

146R REMOVE

Racine
Milwaukee
Burlington
145R REMOVE

NORTH SOUTH SOUTH
36 36 83
144R REMOVE

POST

CABC

ANT

2

SHEET 21 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 148	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023121_PS

PLOT DATE : 12/19/2017 9:34 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

STH 36

DO NOT ENTER ESTR

STOP ESTR

LEFT TURN YIELD ON FLASHING YELLOW ARROW ESTR

DO NOT ENTER ESTR

EP: 406+00.85

403+00 404+00 405+00 406+00

STH 20 (BECK DR.)

148R STOP REMOVE

DIVIDED HIGHWAY REMOVE

149R YIELD REMOVE

ONE WAY ESTR

DO NOT ENTER ESTR

STOP ESTR

STOP ESTR

DIVIDED HIGHWAY ESTR

ONE WAY ESTR

SOUTH 36 NORTH 83 36 ESTR

STOP ESTR

DO NOT ENTER ESTR

STH 36

STH 20 (BECK DR.)

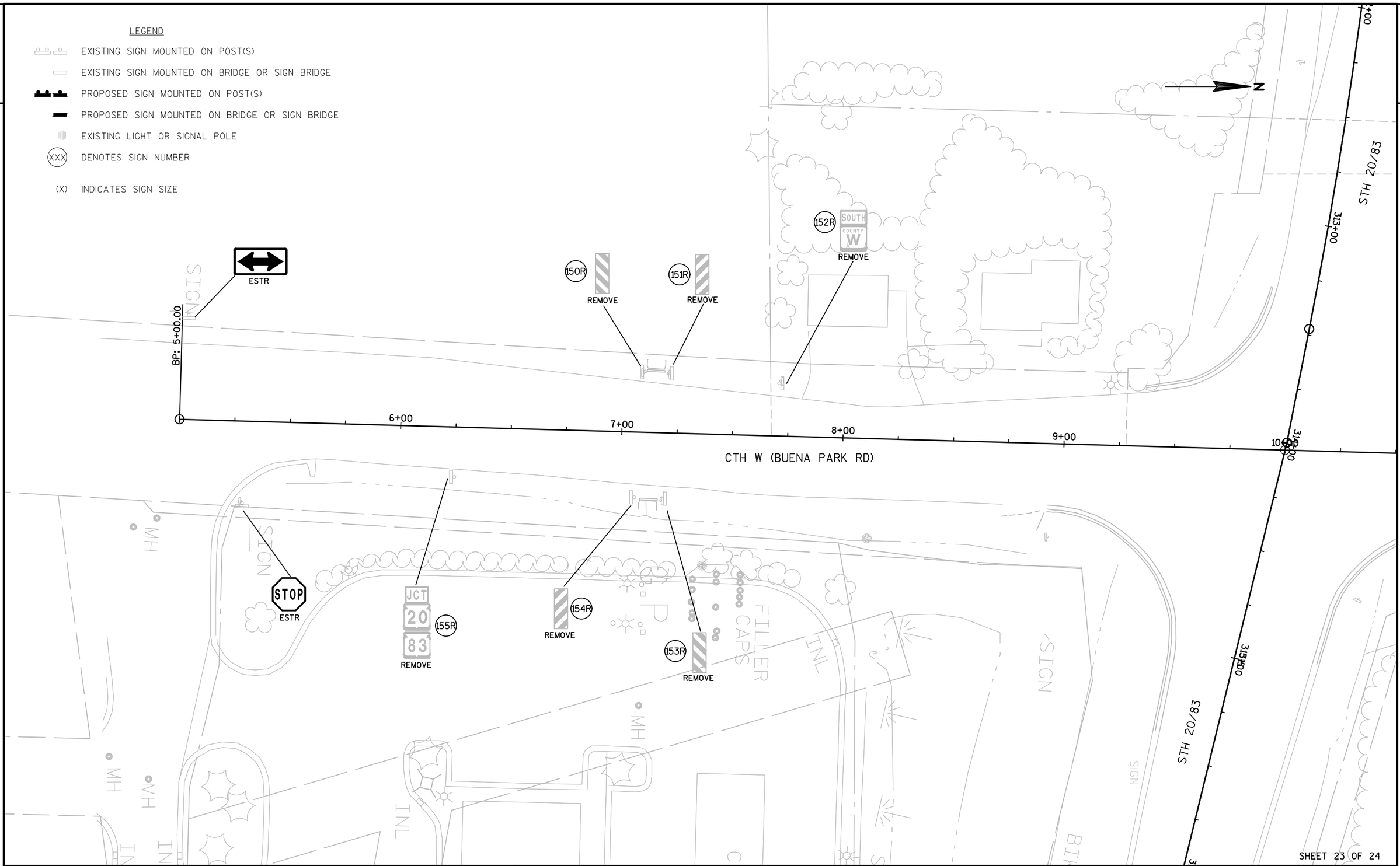
SHEET 22 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 149 E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 23 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 150 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023123_PS

PLOT DATE : 12/19/2017 9:35 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

STH 20/83

313+00

10+00

11+00

12+00

13+00

14+00

15+00

PI: 10+57.99

PI: 13+90.00

EP: 15+50.00

190'

SIGN

SIGN

SIGN

MH

MH

MH

MH

157R BIKE ROUTE
REMOVE

158R ONLY ONLY ONLY
REMOVE

159R
REMOVE

BUENA PARK RD

160R
REMOVE

SPEED LIMIT 35
REMOVE

WEIGHT LIMIT CLASS B
R12-53
MOVE
SEE PERMANENT SIGNING PLAN
(PROPERTY OF VILLAGE)

STH 20/83

SHEET 24 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 151	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023101_PS_14-16.DWG
LAYOUT NAME - 023124_PS

PLOT DATE : 12/19/2017 9:35 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

U/C

STOP
ESTR

WEST NORTH
20 83
2
J2-2 (2S)

STH 20/83

301+00 302+00 303+00 304+00 305+00

SPEED LIMIT 40
1
R2-1(2S)

JCT COUNTY W
3
J1-1(2S)

4
W3-3(2S)

Signing notes

Type II aluminum signs removed under the contract shall be delivered to the County sign shop in the County the project is located in. Signs shall be carefully removed from sign supports. The signs shall be palletized for handling with a forklift (see special provision 638.3.4). The Regional sign shop (414-266-1165) shall be notified three working days prior to delivery of the signs.

When an existing stop sign support is to be removed and a new stop sign and support erected, the work shall be done concurrently. For other signs and supports that are to be removed and new signs and supports erected, the removal of the existing sign/support and erection of the new sign/support should be done as concurrently as possible. In no case shall a new sign/support be down for more than 24 hours and there shall not be more than one sign of the same legend missing in a row.

Wood posts sizes, for type II signs are estimated lengths and the actual length will be determined in the field.

Street name signs are property of the municipality (city, village or town). The municipality shall be contacted to remove their street name signs prior to construction and it is their responsibility to reinstall the old signs or replace them following construction. WisDOT does not furnish or install street name signs. The street name signs shall not be placed on top of the STOP signs.

Locate no passing pennants based on establishing no passing zones pay item. Place signs based on where the pavement marking for no passing zones begin

SHEET 1 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 152	E

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

STH 20/83

306+00

307+00

308+00

309+00

5

W1-2R (2S)

6

WEST NORTH
20 83

J4-2 (2S)

9

SOUTH
COUNTY
W

J2-1 (2S)

10

NO PASSING ZONE

W14-3 (2S)

Village of Waterford

MOVE BY OTHERS
PROPERTY OF
VILLAGE
BY PERMIT

8

ONLY ONLY ONLY

R3-8-W (2S)

Historic Downtown
Industrial Park
Wadewitz Nature Camp

MOVE BY OTHERS
PROPERTY OF
VILLAGE
BY PERMIT

SHEET 2 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 153	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023201_PS_14-16.DWG
LAYOUT NAME - 023202_PS

PLOT DATE : 4/26/2018 2:21 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

11 — LIGHT | LOCATION SPONSOR WATERFORD W.B. F.F.A. CHAPTER
I55-56
MOVE

12 — SPEED LIMIT 40
R2-1(2S)

13 — Buena Park Rd
M1-94
ON MAST ARM

14 — NO TURN ON RED WHEN CHILDREN ARE PRESENT
R10-11S (2S)
MOUNT ON SIGNAL POLE

15 — STOP
R1-1F (3)
MOUNT ON SIGNAL POLE

16 — NO TURN ON RED WHEN CHILDREN ARE PRESENT
R10-11S (2S)
MOUNT ON SIGNAL POLE

17 — NO TURN ON RED WHEN CHILDREN ARE PRESENT
R10-11S (2S)

18 — STOP
R1-1F (3)
MOUNT ON SIGNAL POLE

19 — LEFT TURN YIELD ON FLASHING YELLOW ARROW
20 — R10-50(2S)
ON MAST ARM

21 — LEFT TURN YIELD ON FLASHING YELLOW ARROW
22 — R10-50 (2S)
ON MAST ARM

23 — NO TURN ON RED WHEN CHILDREN ARE PRESENT
R10-11S(2S)

24 — STOP
R1-1F (3)
MOUNT ON SIGNAL POLE

25 — Waterford POPULATION 5368
I2-3

26 — 20 / 83
JV13-1(2S)

27 — Buena Park Rd
M1-94
ON MAST ARM

28 — STOP
R1-1F (3)
MOUNT ON SIGNAL POLE

29 — SOUTH COUNTY W
J3-1(2S)

STH 20/83
BUENA PARK RD
SEE SHEET 24
SEE SHEET 23
10+57.99
11+00
9+00
50'
45'
55'
N

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 154 E

SHEET 3 OF 24

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023201_PS_14-16.DWG
LAYOUT NAME - 023203_PS

PLOT DATE : 4/26/2018 2:21 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

PT: 21+76.49

PC: 21+25.99

N

AUGUSTA

21+00

PI: 20+76.00

264 — COUNTY W — J13-1(2S)

Industrial Park
Wadewitz Nature Camp
MOVE BY OTHERS
PROPERTY OF
VILLAGE
BY PERMIT

31 — COUNTY W — J12-1 (2S)

32 — ONLY | ONLY | ONLY — R3-8-W(2S)

33 — SPEED LIMIT 35 — R2-1 (2M)

34 — END SCHOOL ZONE — S5-2 (2S)

35 — STOP — R1-1(2S)

316+00 317+00 318+00 319+00 320+00 321+00

BR: 20+00.00

STH 20/83

BIKE PATH

43 — SPEED LIMIT 35 — R2-1 (2S)

42 — EAST | SOUTH | 20 | 83 — J4-2 (2S)

41 — UNIT 1 (BLANK) SPONSOR KNIGHTS OF COLUMBUS WATERFORD — I55-56
MOVE
DO NOT
REPLACE

40 — W1-2R (2S)

37 — S1-1 (2S)
38 — AHEAD — S16-9P(2S)
39 — FINES HIGHER — R2-6P(2S)

36 — SCHOOL SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT — S4-51(2S)

SIGN

SIGN

SHEET 4 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 155	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023201_PS_14-16.DWG
LAYOUT NAME - 023204_PS

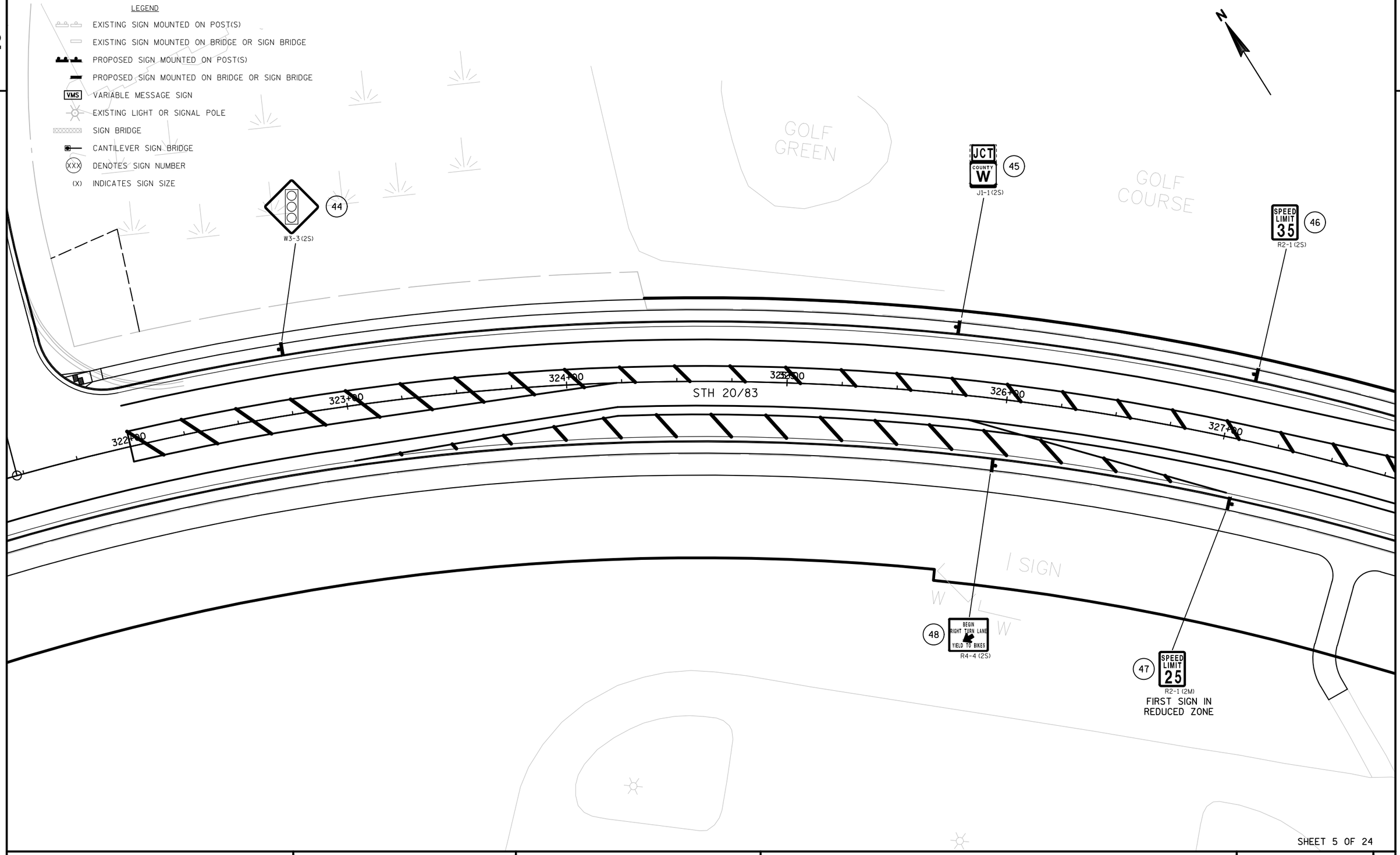
PLOT DATE : 4/26/2018 2:22 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

2



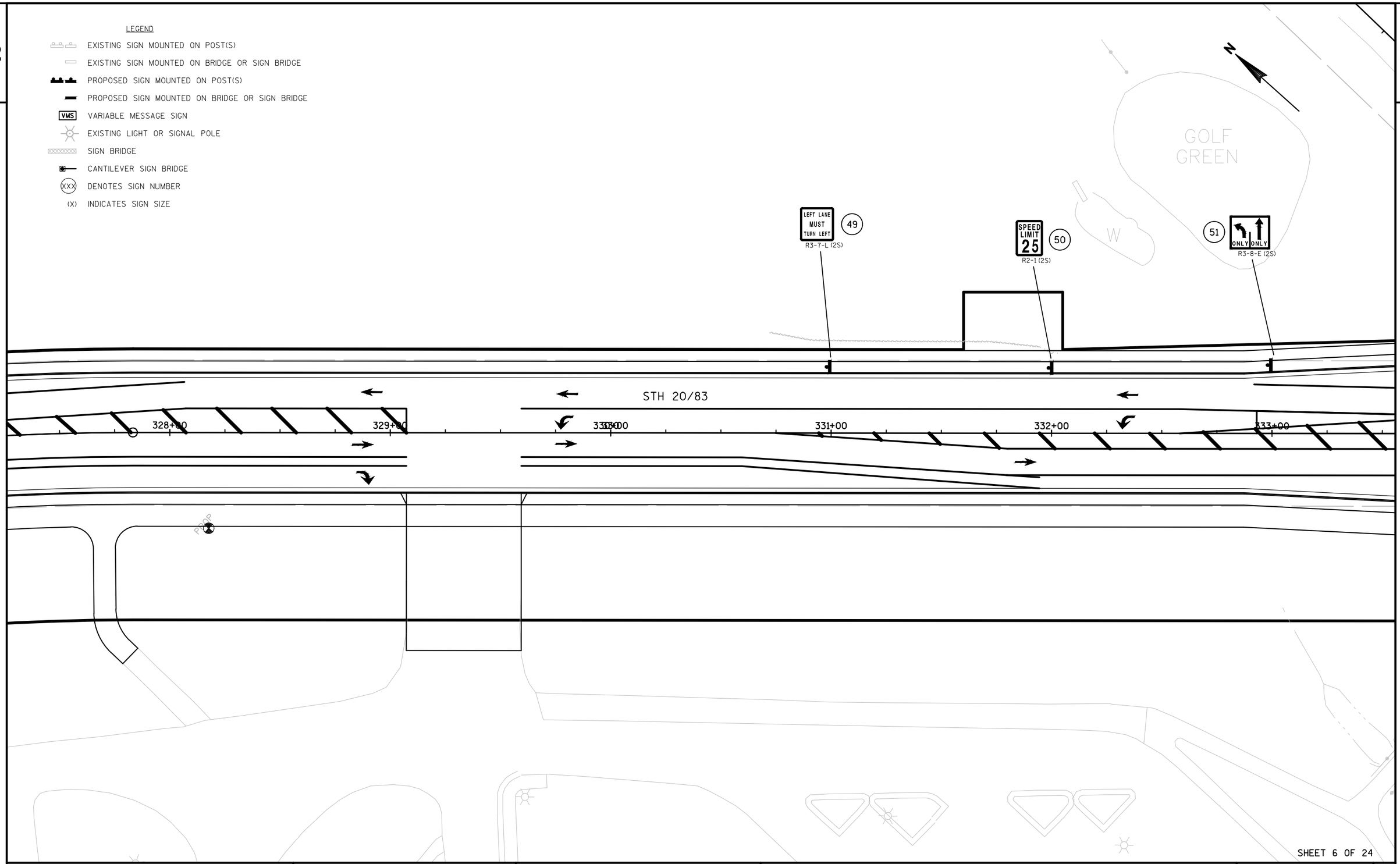
SHEET 5 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 156	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE



SHEET 6 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 157	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023201_PS_14-16.DWG
LAYOUT NAME - 023206_PS

PLOT DATE : 4/26/2018 2:22 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

RIVERMOOR RD

32+00

31+00

52 STOP R1-1(2S)

291 S1-1(2S) RRFB S16-7L(2S) 291A — RECTANGULAR RAPID FLASHING BEACON

265 W12-1R(2S) 2' MOUNT HEIGHT

PT: 31+15.74

53 S1-1(2S) RRFB S16-7L(2S) 54 — RECTANGULAR RAPID FLASHING BEACON — BLINKER SIGN

55 293 S1-1(2S) RRFB S16-7R(2S) 56 293A — RECTANGULAR RAPID FLASHING BEACON

PT: 33+33.40

END R3-9-D(2S) 58
CENTER LANE ONLY R3-9-B(2S) 59

STH 20/83

330+00 331+00 332+00 333+00 334+00 335+00 336+00 337+00 338+00 339+00

STH 20/83

268 W12-1R(2S) 2' MOUNT HEIGHT

SPEED LIMIT 25 R2-1(2S) 62

269 S1-1(2S) AHEAD S16-9P(2S) 270 FINES HIGHER R2-6P(2S) 271

60 BEGIN R3-9-C(2S)
61 CENTER LANE ONLY R3-9-B(2S)

65 292 S1-1(2S) RRFB S16-7R(2S) 66 292A — RECTANGULAR RAPID FLASHING BEACON — BLINKER SIGN

63 S1-1(2S) RRFB S16-7L(2S) 64 — RECTANGULAR RAPID FLASHING BEACON

266 R4-7(2S) 267

290 S1-1(2S) RRFB S16-7L(2S) 290A — RECTANGULAR RAPID FLASHING BEACON

SIGN

SHEET 7 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 158 E

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

RIVERMOOR DR

42+00

41+00

PT: 41+11.57

PC: 40+74.66

BP: 40+00.00

STOP 68
R1-1(2S)

S1-1(2S) 272

AHEAD 273
S16-9P(2S)

FINES HIGHER 274
R2-6P(2S)

CENTER LANE ONLY 69
R3-9-B(2S)

SPEED LIMIT 25 70
R2-1(2S)

339+00 340+00 341+00 342+00 343+00 344+00 345+00

STH 20/83

CENTER LANE ONLY 72
R3-9-B(2S)

SPEED LIMIT 25 71
R2-1(2S)

SHEET 8 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 159 E

2

2

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

EP: 61+50.00

51+36.06

STOP R1-1 ESTR

76 NO PARKING ANY TIME R7-1-D (2S)

PRVP

51+00

NO PARKING ANY TIME R7-1-D ESTR

75 STOP R1-1 (2S)

PC: 50+29.90

RACINE ST

50+00

77 NO PARKING 8AM TO 4PM SCHOOL DAYS MOVE

78 S1-1(2S)

79 S16-7L(2S)

80 NO PARKING ANY TIME R7-1-D (2S)

81 SPEED LIMIT 25 R2-1(2S)

82 CENTER LANE ONLY R3-9-B(2S)

83 NO PARKING ANY TIME R7-1-D (2S)

345+00

346+00

347+00

348+00

349+00

350+00

STH 20/83

BP: 49+03.68

89 NO PARKING ANY TIME R7-1-D (2S)

87 S1-1(2S)

88 S16-7L(2S)

86 NO PARKING ANY TIME R7-1-D (2S)

85 CENTER LANE ONLY R3-9-B(2S)

257 BIKEWAY ENDS W5-4A(MOD)

84 EAST 20 SOUTH 83 JV4-1(2S)

INL

POOL

MH

SHEET 9 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 160	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023201_PS_14-16.DWG
LAYOUT NAME - 023209_PS

PLOT DATE : 4/26/2018 2:22 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

EP: 61+50.00

61+00

ONE WAY STREET

ONE WAY CENTER ST.

90 ONE WAY R6-2-R(2S)

281 ONE WAY R6-2-L(2S)

91 S1-1(2S)

92 S16-7L(2S)

93 BEGIN R3-9-C(2S)

94 CENTER LANE ONLY R3-9-B(2S)

95 SCHOOL SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT S4-5I(2S)

96 WEST 20 NORTH 83 JV4-1(2S)

351+00

352+00

353+00

354+00

355+00

356+00

BP: 60+00.00

STH 20/83

EP: 70+00.00

106A MAY USE FULL LANE R4-11(2S)

106 NO PARKING ANY TIME R7-1-D(2S)

104 S1-1(2S)

105 S16-7L(2S)

102 END R3-9-D(2S)

103 CENTER LANE ONLY R3-9-B(2S)

101 W3-3(2S)

100 NO PARKING ANY TIME R7-1-D(2S)

69+00

S. WATER ST.

99 STOP R1-1(2S)

98 WEIGHT LIMIT 8 TONS GVWR

MOVE PERMIT SIGN WITH VILLAGE DO NOT REPLACE

97 SPEED LIMIT 25 R2-1(2S)

97A END SCHOOL ZONE S5-2(2S)

SHEET 10 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 161 E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

N. JEFFERSON ST.

81+00

111 STOP R1-1F(3) MOUNT ON SIGNAL POLE

108 S1-1(2S)
109 AHEAD S16-9P(2S)
110 FINES HIGHER R2-6P
MOUNT ON SIGNAL POLE

20 83 Main St 114 M1-94-H ON MAST ARM

STOP 115 R1-1F(3) MOUNT ON SIGNAL POLE

WEIGHT LIMIT 8 TONS OVER 116
117 MOVE PERMIT SIGN WITH VILLAGE DO NOT REPLACE

ONLY ONLY ONLY 118 R3-8-W(2S)

MAY USE FULL LANE 285 R4-11 (2S)

CANOPY
FILLER CAPS
SIGN

25'

LEFT TURN YIELD ON FLASHING YELLOW ARROW 112
113 R10-50(2S) ON MAST ARM

STH 20/83

357+00 358+00 359+00 360+00 361+00 362+00

BEP 360+00.00

107 Jefferson St M1-94H ON MAST ARM

Jefferson St 119 M1-94H ON MAST ARM

40'

30'

125 STOP R1-1F(3) MOUNT ON SIGNAL POLE

124 20 83 Main St M1-94-H ON MAST ARM

123 SPEED LIMIT 30 R2-1(2S)

S. JEFFERSON ST. 79+00

YIELD 121 R1-2(2S)

122 STOP R1-1F(3) MOUNT ON SIGNAL POLE

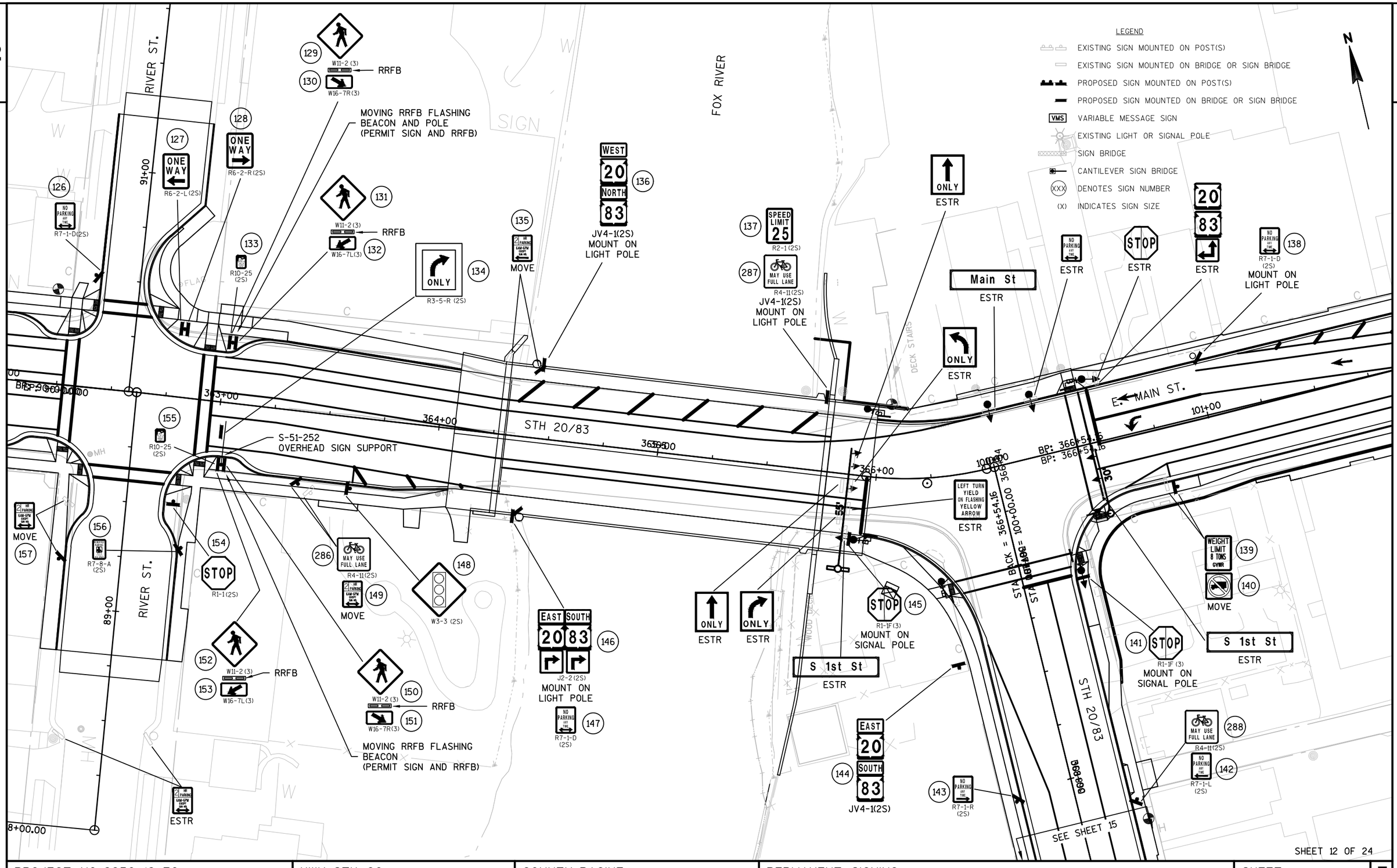
EAST 20 SOUTH 83 120 JV4-1(2S) MOUNT ON SIGNAL POLE

MAY USE FULL LANE 284 R4-11 (2S)

MH

SHEET 11 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 162	E



SHEET 12 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 163 E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

EP: 131+50.00

131+00

N. 2ND ST.

158 ONLY ONLY R3-8-E(2S)

159 NO PARKING HERE TO CORNER R7-51-L (2S)

160 2 HR PARKING 6AM-6PM EXCEPT SUN HOL MOVE

161 STOP R1-1(2S)

162 W3-3(2S) MOUNT ON LIGHT POLE

163 2 HR PARKING 6AM-6PM EXCEPT SUN HOL MOVE

289 MAY USE FULL LANE R4-11(2S)

164 2 HR PARKING 6AM-6PM EXCEPT SUN HOL MOVE

165 JCT 20 83 JV1-1(2S) MOUNT ON LIGHT POLE

166 STOP R1-1(2S)

141+00

S. 3RD ST.

102+00 | 103+00 | 104+00 | 105+00 | 106+00 | 107+00

EP: 130+00.00

E. MAIN ST.

EP: 140+00.00

MH

174 2 HR PARKING 6AM-6PM EXCEPT SUN HOL MOVE

R5-2 WEIGHT LIMIT 8 TONS OVER 2 HR PARKING 6AM-6PM EXCEPT SUN HOL ESTR

INL

129+00

S. 2ND ST.

STOP 172 R1-1(2S)

173 2 HR PARKING 6AM-6PM EXCEPT SUN HOL MOVE

2 HR PARKING 6AM-6PM EXCEPT SUN HOL ESTR

171 2 HR PARKING 6AM-6PM EXCEPT SUN HOL MOVE

170 R5-2(2S)

139+00

S. 3RD ST.

167 ONLY R3-8-A(2S)

NO PARKING 1FT 168 R7-1-D (2S)

STOP 169 R1-1(2S)

278 S1-1

AHEAD S16-9P 279

FINES HIGHER R2-6P 280

SHEET 13 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 164	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2

N. MILWAUKEE ST.

151+00

175 SPEED LIMIT 25 R2-1(2S)

176 2 HR PARKING 6AM-6PM EXCEPT SUN MOVE

177 STOP R1-1(2S)

178 SPEED LIMIT 25 R2-1(2S)

179 NO PARKING R7-1-D(2S)

180 STOP R1-1 (3)

181 ONCOMING TRAFFIC DOES NOT STOP W4-4B (3)

E. MAIN ST.

107+00 108+00 109+00 110+00 111+00 112+00 112+52

BP: 150+00.00 EP: 150+00.50

MH MH MH MH

FLAG FLAG

282 ONE WAY R6-2-L(2S)

ONE WAY STREET

185 R5-2(2S)

184 ONE WAY R6-2-R(2S)

182 WEIGHT LIMIT 8 TONS GVWR MOVE

183 R5-2(2S) MOUNT ON LIGHT POLE

149+00

S. MILWAUKEE ST.

SHEET 14 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 165 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023201_PS_14-16.DWG
LAYOUT NAME - 023214_PS

PLOT DATE : 4/26/2018 2:23 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

E. MAIN ST.

ELIZABETH ST.

186 WEST 20 NORTH 83 JV3-1(2S)

187 ONLY ONLY R3-8-F(2S) MOUNT ON LIGHT POLE

188 STOP R1-1(2S)

189 W3-3 (2S) MOUNT ON LIGHT POLE

BP: 366+54.16

STA AHEAD = 366+54.16

STA BACK = 366+54.16

101+00

121+00

368+00

369+00

370+00

371+00

BP: 120+00.00

SEE SHEET 12

STH 20/83

DECK STAIRS

366+00

365+00

193 Public Parking MOVE PROPERTY OF VILLAGE BY PERMIT

190 S1-1(2S)

191 AHEAD S16-9P(2S)

192 FINES HIGHER R2-6P(2S)

194 SPEED LIMIT 25 R2-1(2S)

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIZE

SHEET 15 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023201_PS_14-16.DWG
LAYOUT NAME - 023215_PS

PLOT DATE : 4/26/2018 2:24 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

N

195 SPEED LIMIT 25 R2-1(2S)

196 END SCHOOL ZONE S5-2(2S)

197 STOP R1-1(2S)

ST. THOMAS ST.

198 S1-1(2S)

199 S16-7L(2S)

ONE WAY ESTR

ONE WAY ESTR

371+00 372+00 373+00 374+00 375+00 376+00

STH 20/83

202 SCHOOL SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT S4-51(2S)

200 S1-1(2S)

201 S16-7L(2S)

SHEET 16 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 167 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023201_PS_14-16.DWG
LAYOUT NAME - 023216_PS

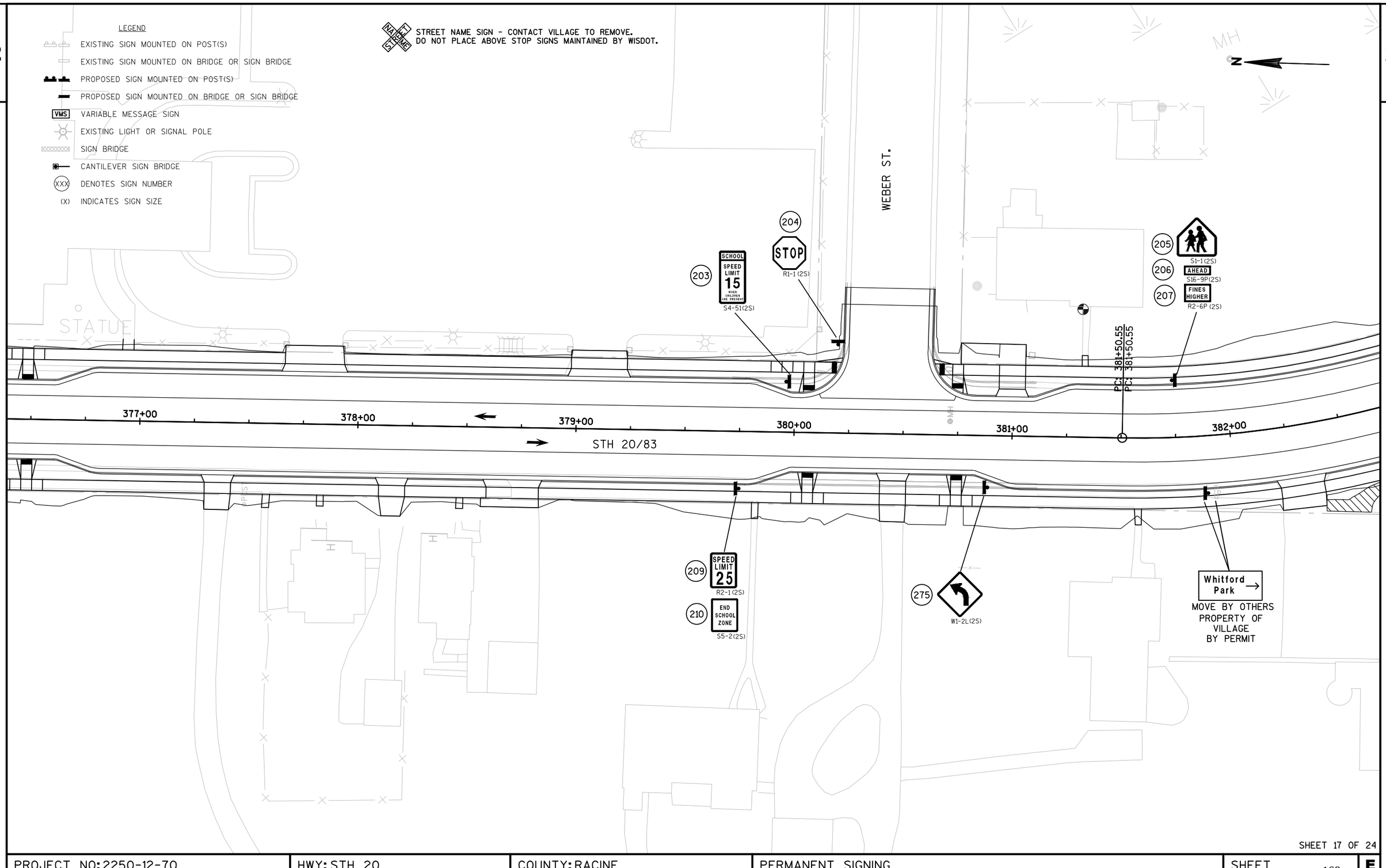
PLOT DATE : 4/26/2018 2:24 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.



SHEET 17 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 168	E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

212 SPEED LIMIT 25 R2-1(2S) — MOUNT ON LIGHT POLE

213 NO PARKING ANY TIME R7-1-R (2S)

Historic Downtown ← Whitford Park — MOVE BY OTHERS PROPERTY OF VILLAGE BY PERMIT

215 SPEED LIMIT 35 R2-1(2S)

216 NO PARKING HERE TO CORNER R7-1-D (2S)

STH 20/83

383+00 384+00 385+00 386+00 387+00 388+00

PI: 384+01.60
PI: 384+01.60

MH

FLAG

217 SPEED LIMIT 35 R2-1(2S)

218 STOP R1-1(2S)

N. RIVER RD.

SHEET 18 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 169 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023201_PS_14-16.DWG
LAYOUT NAME - 023218_PS

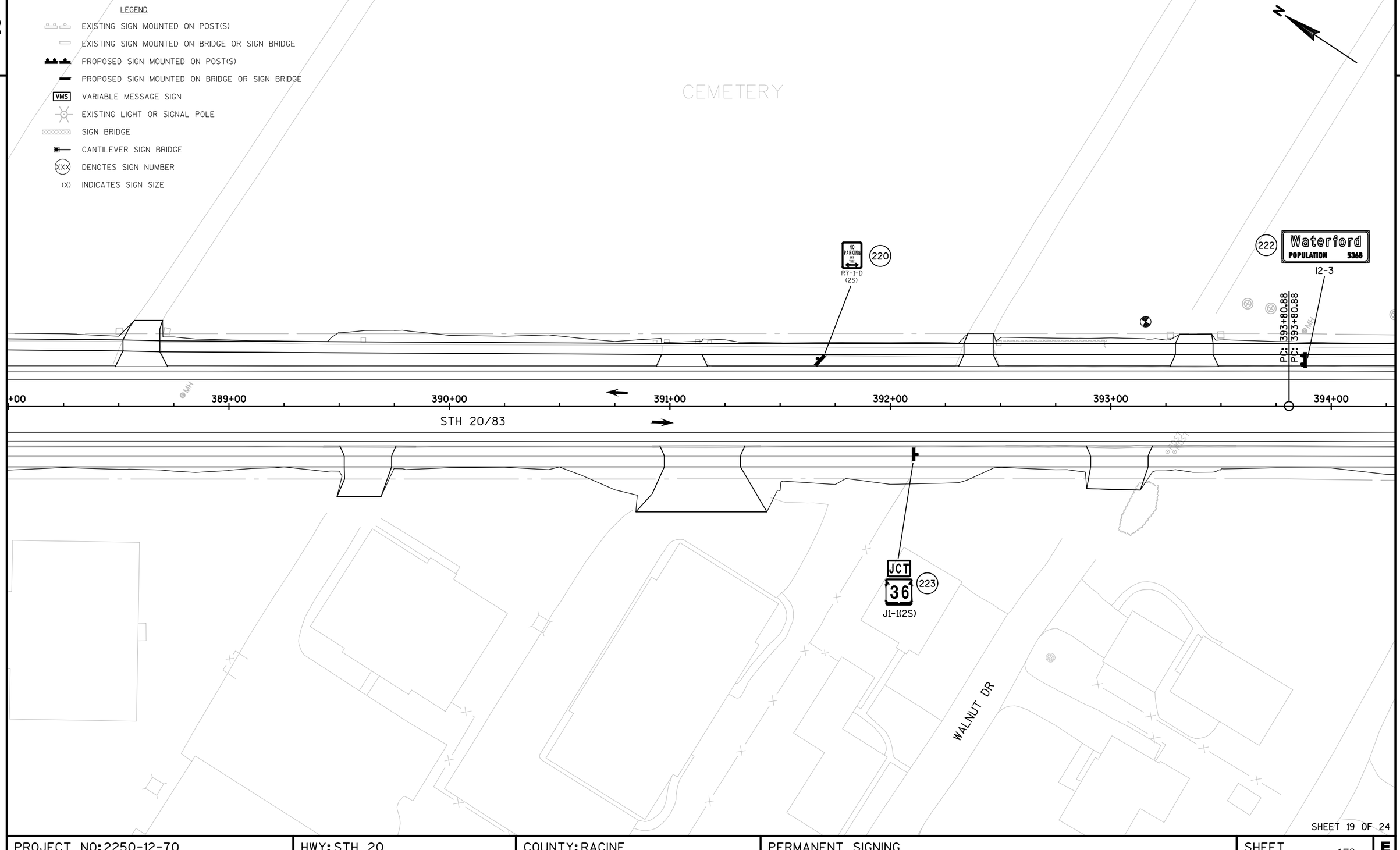
PLOT DATE : 4/26/2018 2:24 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE



SHEET 19 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 170	E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

STREET NAME SIGN - CONTACT VILLAGE TO REMOVE.
DO NOT PLACE ABOVE STOP SIGNS MAINTAINED BY WISDOT.

N

Village of Waterford
MOVE BY OTHERS
PROPERTY OF VILLAGE
BY PERMIT

225 STOP R1-1 (1)

BIKE ROUTE ESTR
NO MOTOR VEHICLES ESTR

227 W11-1 (2S)
228 W16-7L (2S)
229 STOP R1-1 (2S)
226 NO PARKING ANY TIME R7-1-D (2S)

EVERGREEN DR.

PC: 393+80.88
PT: 398+76.50
PI: 398+76.50

394+00 395+00 396+00 397+00 398+00 399+00 400+00

STH 20/83

233 BIKE ROUTE D11-1

239 SPEED LIMIT 35 R2-1 (2S)

276 W11-1 (2S)
277 AHEAD W16-9P (2S)

NORTH EAST SOUTH SOUTH
36 20 36 83
238 J2-4 (2S)

236 BIKE ROUTE D11-1 (2S)
237 M7-1 (2S)

234 W11-1 (2S)
235 W16-7L (2S)

232 STOP R1-1 (2S)
230 BIKE ROUTE D11-1 (2S)
231 M7-1 (2S)

HICKORY LN. (PRIVATE ROAD)

EVERGREEN DR.

SHEET 20 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 171 E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

240 W11-1 (2S)
241 AHEAD W16-9P (2S)
242 NO PARKING ANY TIME R7-1-D (2S)
243 SPEED LIMIT 35 R2-1 (2S)
244 NORTH 20 WEST 83 JV4-1(2S)
245 NORTH 36 SOUTH 36 SOUTH 83 J3-3 (2S)
246 Racine / Milwaukee / Burlington D1-3
247 W3-3 (2S)

400+00 401+00 402+00 403+00 404+00 405+00

STH 20 (BECK DR.)

STH 36

SIGN SIGN W POST POST MH MH MH MH ANT. N

2

SHEET 21 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 172	E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023201_PS_14-16.DWG
LAYOUT NAME - 023221_PS

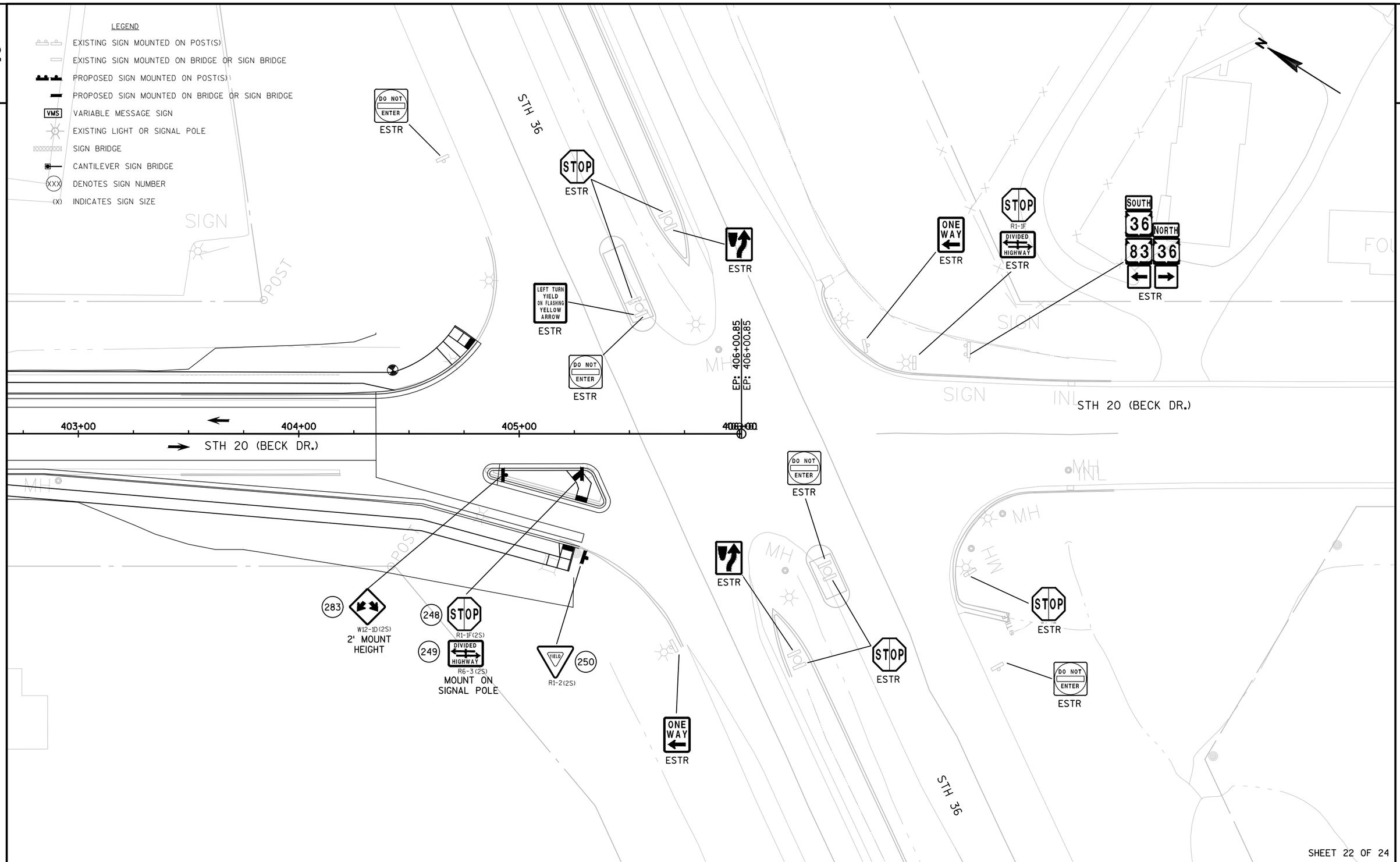
PLOT DATE : 4/26/2018 2:25 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

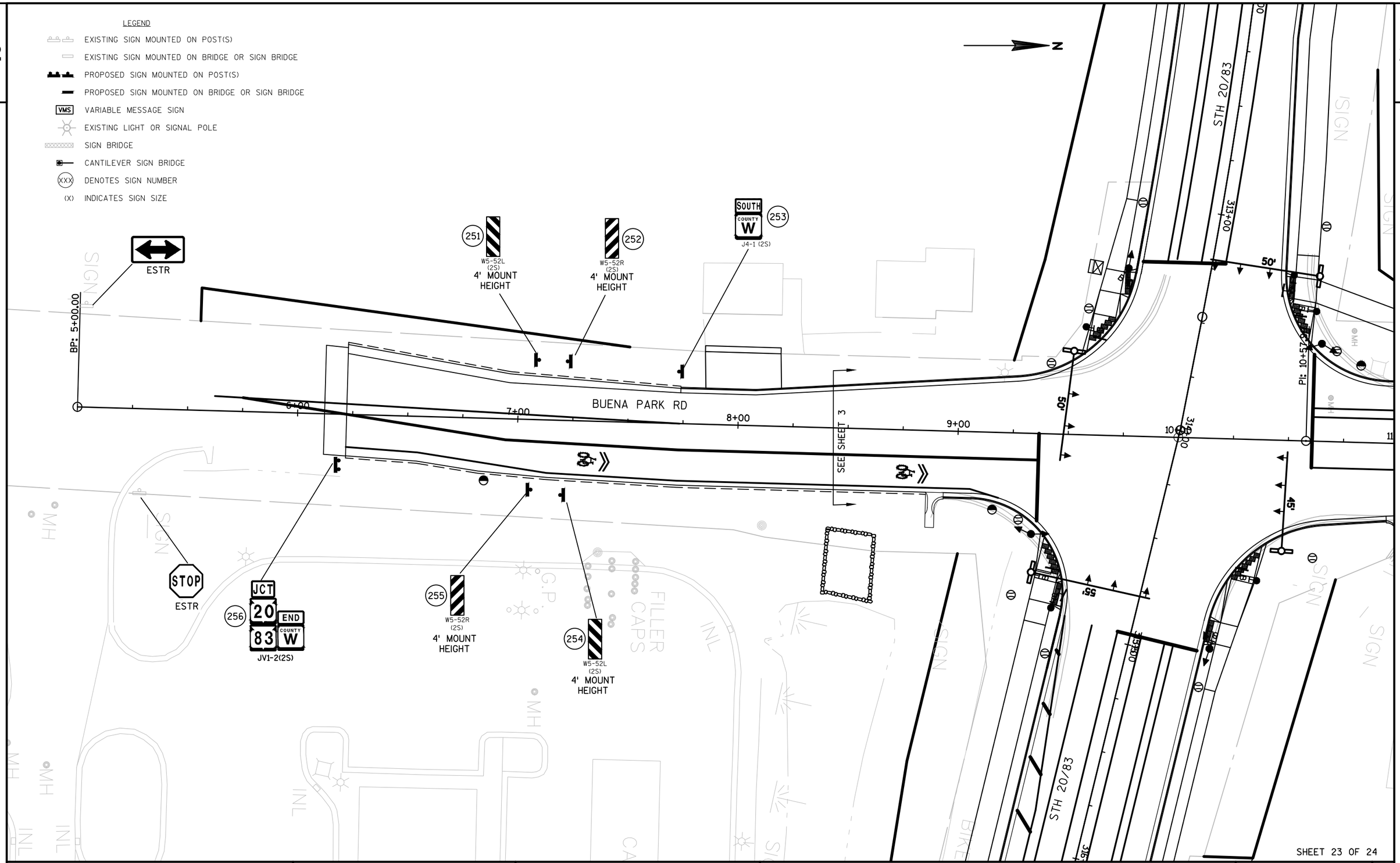


SHEET 22 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 173 E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE



SHEET 23 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 174 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023201_PS_14-16.DWG
LAYOUT NAME - 023223_PS

PLOT DATE : 4/26/2018 2:25 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

STH 20/83

313+00

50'

PI: 10+57.00

SIGN

MH

SPEED LIMIT 35 — 258 — R2-1(2S)

BIKE ROUTE — 259 — D11-1(2S)

260 — M7-5

PI: 13+90.00

ONLY ONLY ONLY — 261 — R3-8-W(2S)

262 — W3-3(2S)

EP: 15+50.00

190'

50'

10+00

11+00

12+00

13+00

14+00

15+00

SEE SHEET 3

BUENA PARK RD

45'

55'

WEIGHT LIMIT CLASS B — 263 — MOVE

STH 20/83

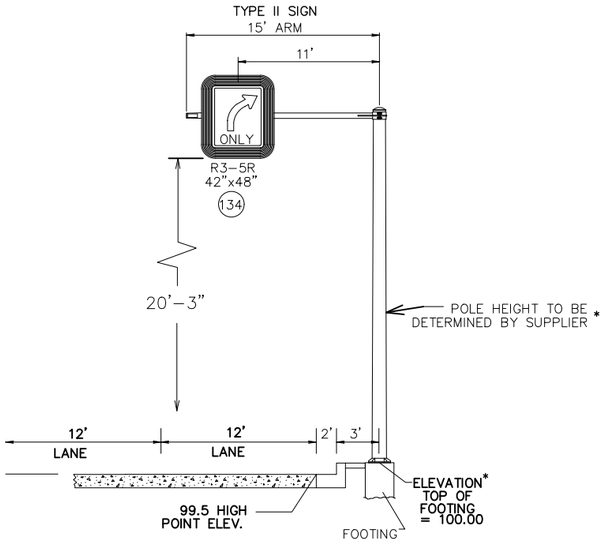
SHEET 24 OF 24

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 175 E

FILE NAME : N:\PDS\C3D\CAD\22501270\SIGN\023201_PS_14-16.DWG
LAYOUT NAME - 023224_PS

PLOT DATE : 4/26/2018 2:25 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



OVERHEAD SIGN SUPPORTS DETAIL
S-51-252
STH 20 EB
STA. 363+00

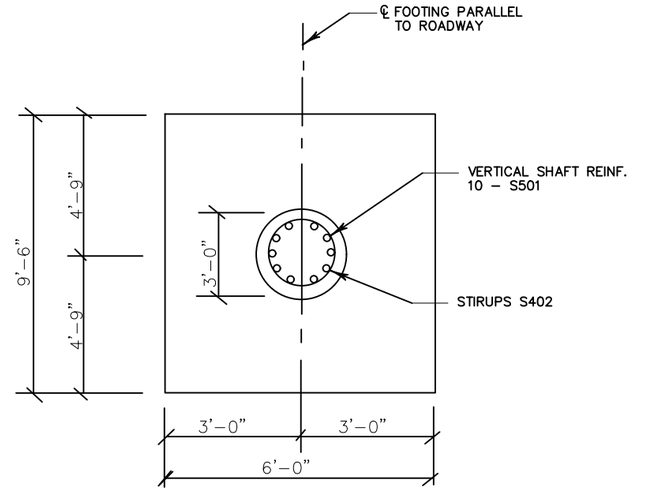
NOTE, CONTRACTOR SHALL:

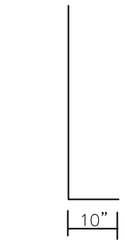
1.) SUBMIT SHOP DRAWINGS OF OVERHEAD SIGN SUPPORT. TO TOM HEYDEL SE REGION TRAFFIC & BUREAU IF STRUCTRUES. FOOTINGS IS INCIDENTAL TO OVERHEAD SIGN SUPPORT.
2.) PROVIDE DESIGN CALCULATIONS.
3.) SHOW SIGNS ON SHOP DRAWINGS.
4.) I.D. PLAQUE INCIDENTAL TO SIGN SUPPORT
5.) 6ANCHER RODS SHALL BE USED PER SDD 36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE.

CONTRACTOR TO USE	SPREAD FOOTING PER DETAIL ATTACHED INCIDENTAL TO STRUCTURE ANCHOR RODS TO BE PER SDD 36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE OR SDD 36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

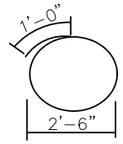
MOUNTING BRACKETS FOR SIGNS TO BE APPROVED FROM PRODUCT LIST FOR TYPE II SIGNS

SPREAD FOOTING FOR OVERHEAD SIGN SUPPORT

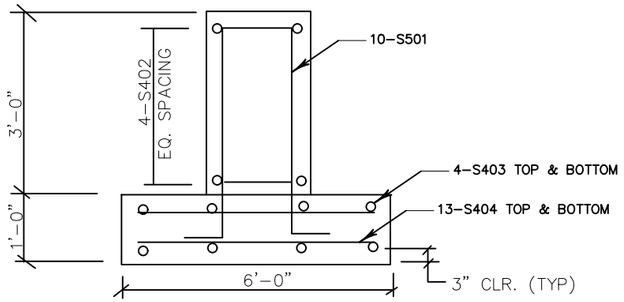




S501



S402



BILL OF BARS

BAR MARK	NO. REQ'D	LENGTH	WEIGHT
S501	10	4'-2"	43.49
S402	4	8'-11"	23.83
S403	8	9'-0"	48.10
S404	26	5'-6"	95.52
		TOTAL =	211 lb

CONCRETE = 2.9 CT

ULTIMATE DESIGN STRESSES

CONCRETE	f'c = 3,500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 psi
ALLOWABLE BEARING PRESSURE	2500 psf

SHEET 1 OF 1

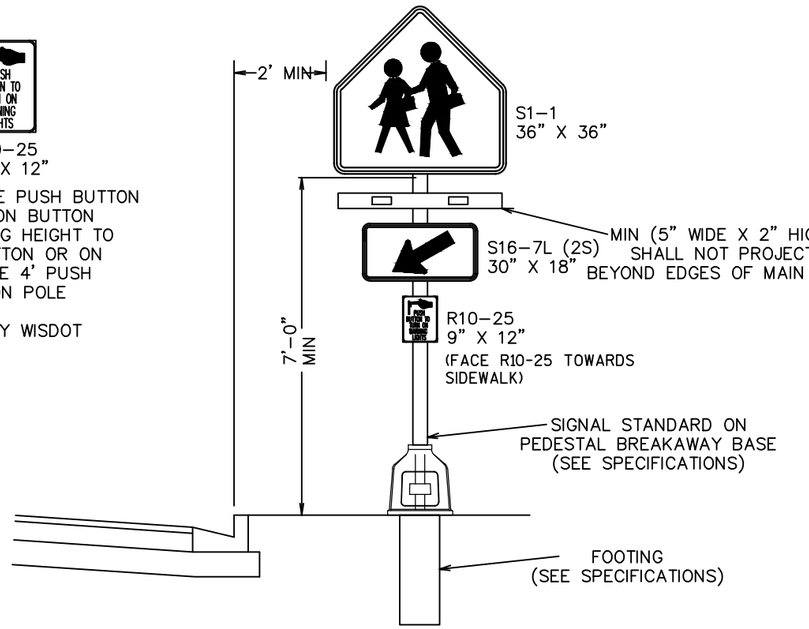
PROJECT NO: 2250-12-70	HWY: STH 20 / STH 83	COUNTY: RACINE	OVERHEAD SIGN SUPPORT S-51-252	SHEET 176	E

2

R10–25
9" X 12"

LOCATE ABOVE PUSH BUTTON ACTIVATION BUTTON
4' MOUNTING HEIGHT TO PUSH BUTTON OR ON SEPARATE 4' PUSH BUTTON POLE

SIGN BY WISDOT



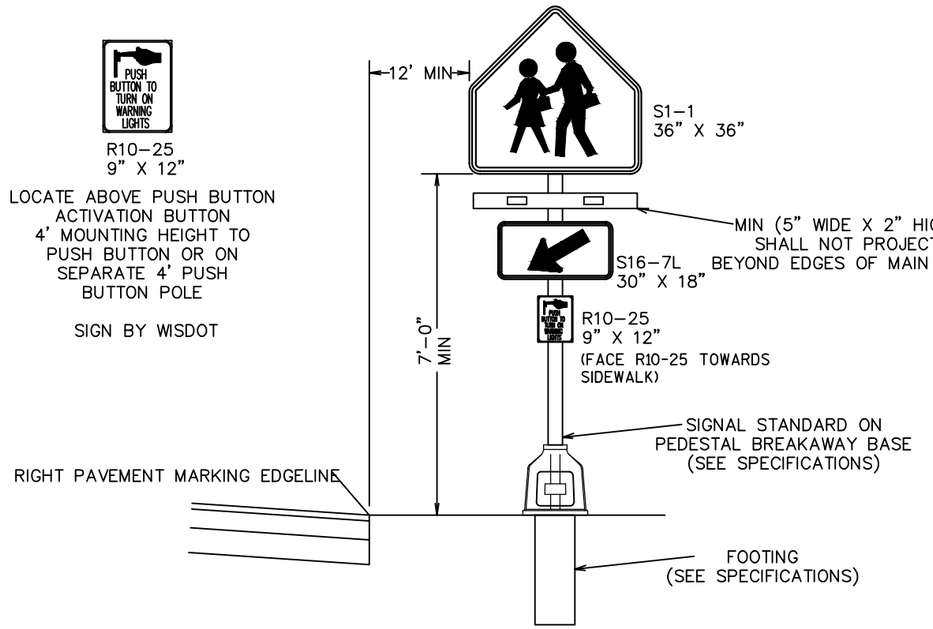
RECTANGULAR RAPID
FLASHING BEACON
URBAN LOCATION

NOTE:
USE ARROW S16–7R FOR
LEFT SIDE MOUNTING

R10–25
9" X 12"

LOCATE ABOVE PUSH BUTTON ACTIVATION BUTTON
4' MOUNTING HEIGHT TO PUSH BUTTON OR ON SEPARATE 4' PUSH BUTTON POLE

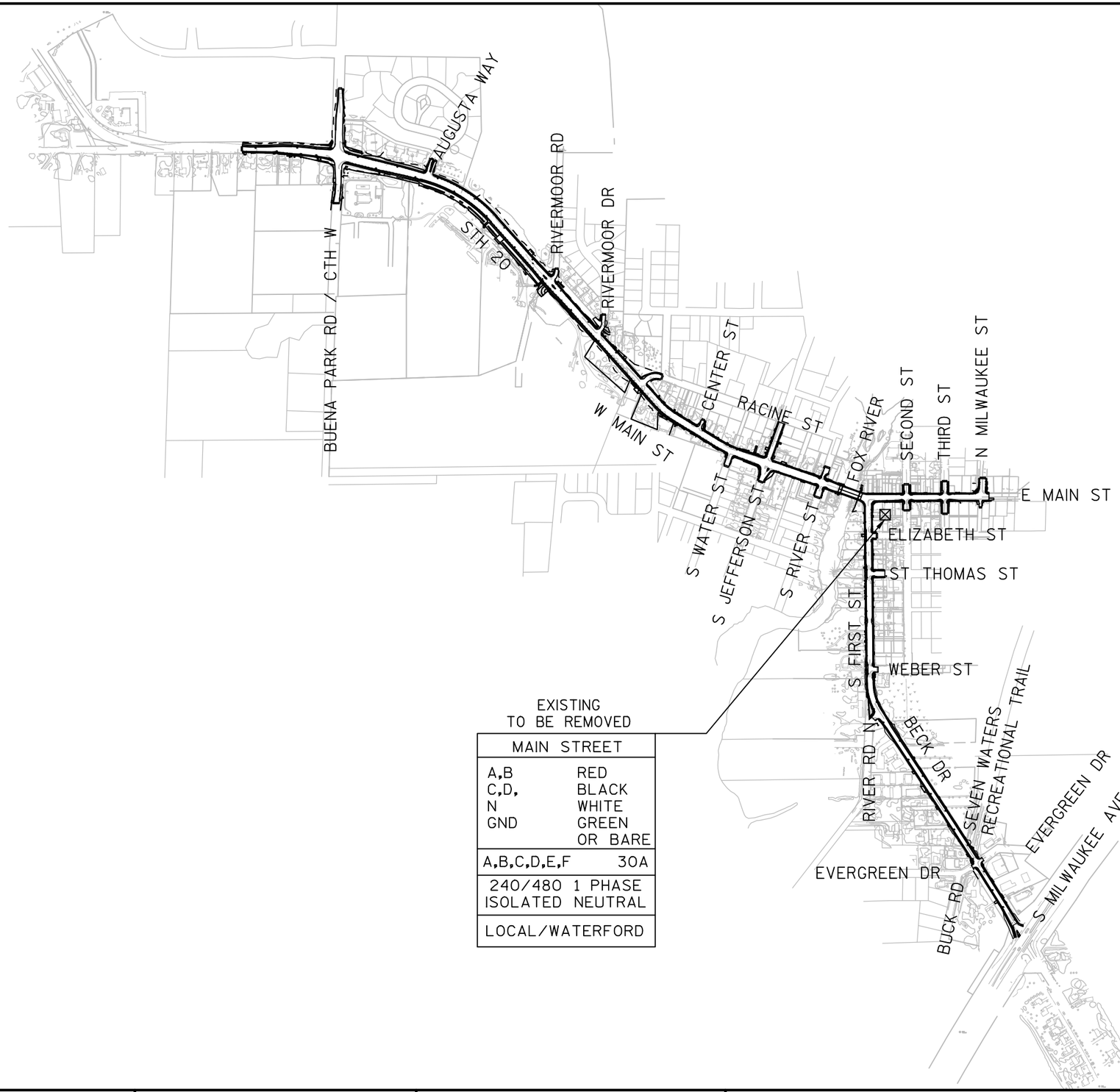
SIGN BY WISDOT



RECTANGULAR RAPID
FLASHING BEACON
RURAL LOCATION

RECTANGULAR RAPID FLASHING BEACON

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	FLASHER SIGNING ASSEMBLY	SHEET 177	E



EXISTING
TO BE REMOVED

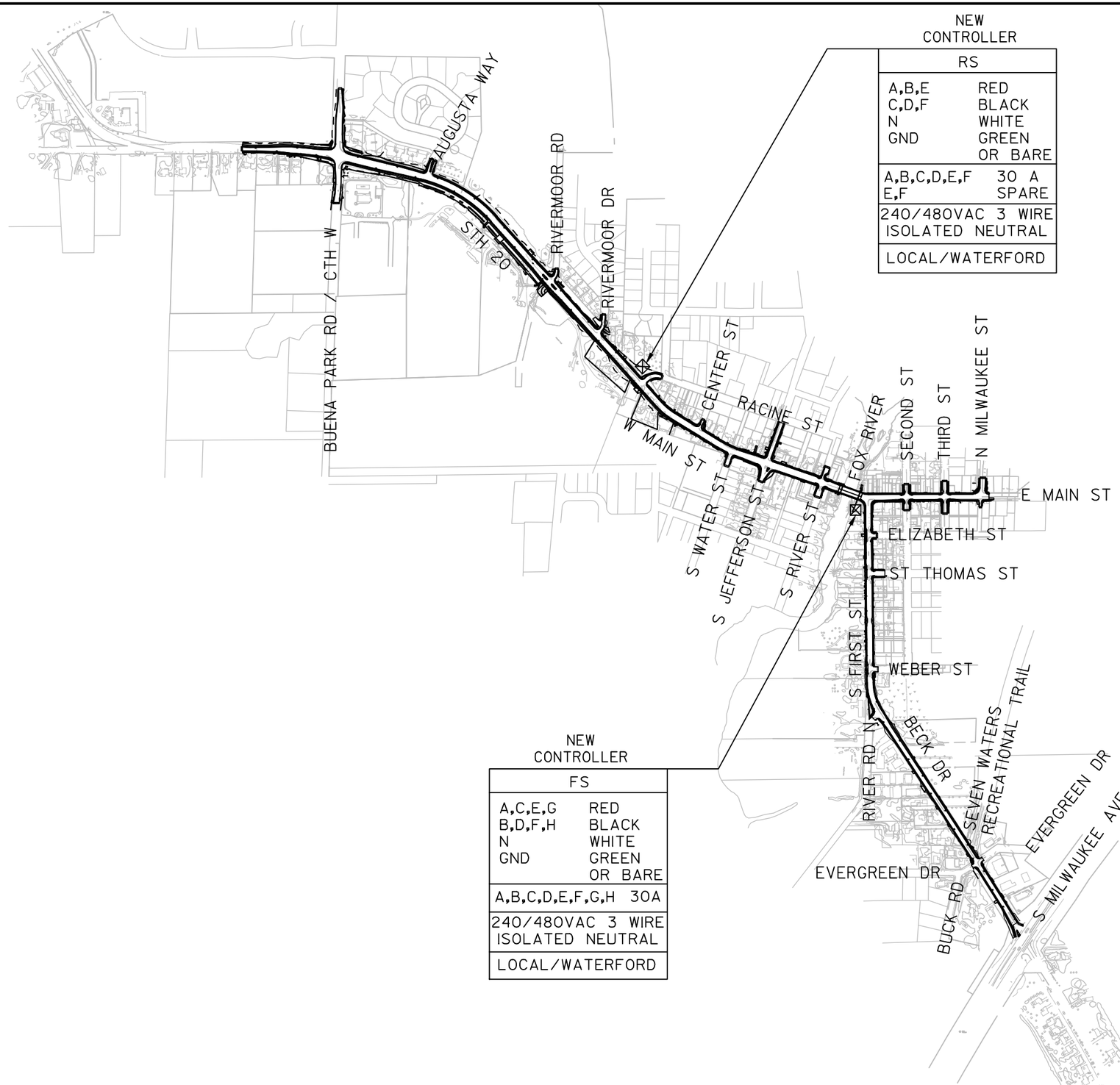
MAIN STREET	
A,B	RED
C,D,	BLACK
N	WHITE
GND	GREEN OR BARE
A,B,C,D,E,F	30A
240/480 1 PHASE ISOLATED NEUTRAL	
LOCAL/WATERFORD	

SHEET 1 OF 1

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVAL DISTRIBUTION CENTER OVERVIEW	SHEET E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023600_LP_MOD.DWG PLOT DATE : 7/16/2018 9:41 AM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:900

WISDOT/CADDS SHEET 42



SHEET 1 OF 1

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - PROPOSED DISTRIBUTION CENTER OVERVIEW	SHEET 179	E

GENERAL NOTES

DETAILS OF CONSTRUCTION MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOCATIONS OF THE PVC CONDUITS ARE IDENTIFIED IN THE PLANS WHERE THEY ARE REQUIRED. APPROPRIATE ADJUSTMENT ON CONDUIT LOCATIONS MAY BE MADE IF THE FIELD CONDITIONS ARE SUCH THAT THE CONDUIT CANNOT BE INSTALLED AT THE SPECIFIED LOCATIONS. FIELD MARK EACH CONDUIT LOCATION IN RED.

THE TRENCH SHALL NOT BE BACK FILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL CONDUITS SHALL BE CAPPED OR PLUGGED WITH ENGINEER APPROVED FITTINGS IMMEDIATELY AFTER INSTALLATION.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR IMMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON ALL CONDUITS.

PRIOR TO CONDUIT ACCEPTANCE, ALL CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND BE CAPPED WITH THE APPROPRIATE CAST PLASTIC CAP WHICH FITS SNUGGLY ON THE CONDUIT, BUT EASILY REMOVED IN THE FUTURE. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.

CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX–TO–PULL BOX OR JUNCTION BOX OR BASE–TO–BASE, ETC.) UNLESS OTHERWISE NOTED ON PLANS.

PULL ROPE (3/8–INCH NYLON) SHALL BE INSTALLED IN ALL NEW CONDUITS.

CONTRACTOR SHALL SUPPLY AS–BUILT DRAWING FOR ALL THE WORK BEING DONE.

INSTALLATION OF LATERAL UNDERGROUND CONDUIT UNDER PAVEMENT SHALL BE INSTALLED MINIMUM 30 INCHES BELOW PROPOSED GRADE. CONDUIT LATERALS SHALL BE TRENCHED UNDER PAVEMENT BEFORE PAVEMENT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ROADWAY CONSTRUCTION FOR CONDUIT LATERALS INSTALLATION.

PITCH ALL CONDUITS TOWARD PULL BOXES. INSTALL A 2" DRAIN DUCT TO STORM SEWER OR DRAIN SUMP AS REQUIRED FOR DRAINAGE. THE 2" DRAIN DUCT OR SUMP IS INCIDENTAL TO THE PULL BOX BID ITEM AND IS NOT SHOWN.

THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE, IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

HAND DIGGING MAY BE REQUIRED FOR LOCATIONS ADJACENT TO EXISTING GAS AND POWER LINES. HAND EXCAVATION SHOULD BE ANTICIPATED & WILL BE CONSIDERED INCIDENTAL TO THE CONCRETE BASES BID ITEM. COORDINATE ALL WORK NEAR GAS LINE WITH WE ENERGIES.

EXISTING CONDUIT AND CID NO LONGER BEING USED IS ABANDONED IN PLACE. THE CONTRACTOR MAY REMOVE ABANDONED WIRING AT THE CONTRACTOR'S EXPENSE. ABANDONED PULL BOX REMOVAL IS INCIDENTAL TO THE ROAD CONSTRUCTION.

ALL UNDERGROUND WIRING AND CONDUIT FOR POLES BEING REMOVED IS ABANDONED IN PLACE UNLESS NOTED OTHERWISE. CONTRACTOR MAY SALVAGE ABANDONED WIRING AT HIS OWN EXPENSE.

IF CID CONTAINS PHASE CONDUCTOR(S) THAT WILL NOT BE USED FOR FURTHER POLES, I.E. AT THE END OF A CIRCUIT, DO NOT ENERGIZE THE CONDUCTOR(S) LEAVING THE LAST POLE THE PHASE WAS UTILIZED. REMOVE EXCESS CONDUCTOR(S) IN ALL SUBSEQUENT POLES.

SEAL THE ENDS OF ALL CID RACEWAY WITH A UL RECOGNIZED CONDUIT SEALANT. PROVIDE A 1#2" NYLON ROPE EXTENDING BEYOND THE PLUG TO ASSIST IN REMOVING THE PLUG IN THE FUTURE.

SEE DETAIL "CONDUIT DETAILS AT STRUCTURE PARAPET TO ROADWAY BARRIER INTERFACE" WHEN CONDUIT EXITS TO GRADE FROM A BRIDGE PARAPET OR RETAINING WALL. RIGID METALLIC CONDUIT IN CONCRETE BARRIER IS INCIDENTAL TO THE RIGID NONMETALLIC CONDUIT.

PROVIDE MINIMUM CABLE SLACK AS NOTED BELOW:

PULL BOXES:	5–FT ONE WAY IN OR OUT
EMBEDDED JUNCTION BOXES:	3–FT
DISTRIBUTION CENTER/LOAD CENTER:	10–FT

STAGING NOTES

MAINTAIN LIGHTING AT ALL TIMES DURING CONSTRUCTION USING EXISTING LIGHTING, PROPOSED TEMPORARY, FINAL LIGHTING OR COMBINATIONS.

DO NOT REMOVE EXISTING LIGHTING UNTIL THE NEW OR TEMPORARY LIGHTING IS OPERATIONAL. REFER TO DRAWINGS FOR STAGING INFORMATION.

MAINTAINING SYSTEM CONTINUITY SHALL BE INCIDENTAL TO THE "REMOVE EXISTING STREET LIGHTS" BID ITEM.

DUE TO THE PHASING OF CONSTRUCTION SOME FINAL LIGHTING UNITS MAY BE ORPHANED UNTIL A LATER STAGE IS COMPLETE. IT IS AT THE DISCRETION OF THE CONTRACTOR TO SCHEDULE THESE ITEMS. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF THE PLACEMENT OF RACEWAY THAT SPANS TWO DIFFERENT PHASES OF CONSTRUCTION.

TEMPORARY OR FINAL LIGHTING MUST ILLUMINATE AN AREA BEFORE EXISTING LIGHTING UNITS IN AN AREA CAN BE REMOVED. THE SCHEDULING OF REMOVAL IS AT THE DISCRETION OF THE CONTRACTOR WITH THE PROVISION THAT LIGHTING OF THE ROADWAY IS PROVIDED AT ALL TIMES.

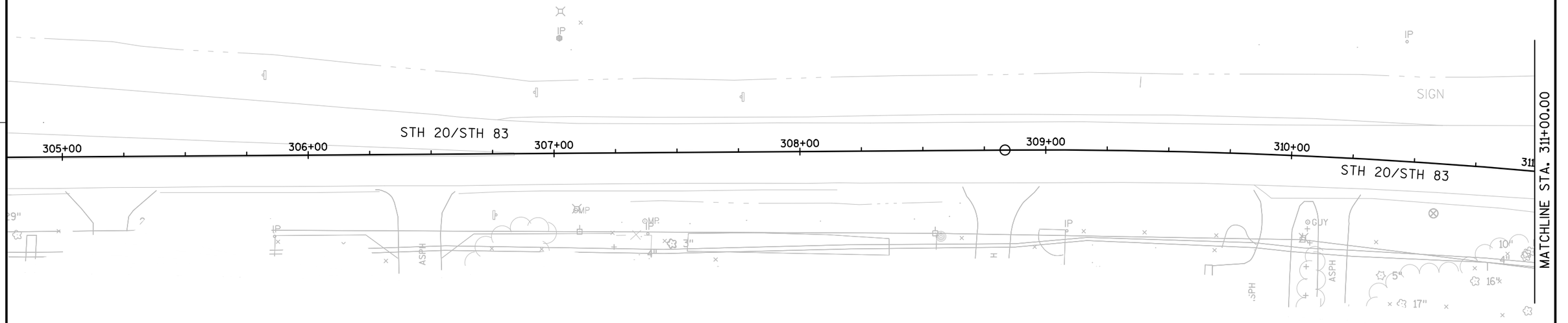
COORDINATE POLE REMOVAL WITH TRAFFIC CONTROL.

2

2

N

FOR INFORMATION ONLY



SHEET 1 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET 181	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023501_LP_MOD.DWG PLOT DATE : 7/16/2018 2:20 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

2

2

FOR INFORMATION ONLY

N

MATCHLINE STA. 311+00.00

STH 20/STH 83

312+00

313+00

314+00

315+00

316+00

317+00

MATCHLINE STA. 317+50.00

BUENA PARK RD

12+00

11+00

10+00

9+00

PI: 10+57.99

ASPH

MH

GUY

I.E.=802.17

MH

MH

26"X42" RCP

I.E.=802.21

VLV

VLV

MH

MH

ASPH

ASPH

I.E.=801.34

GV

22"X36" RCP

I.E.=801.17

ASPH

GUY

GUY

ASPH

EL=799.62

RCP

I.E.=799.81

24" RCP

I.E.=800.26

SHEET 2 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023501_LP_MOD.DWG PLOT DATE : 7/16/2018 2:21 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

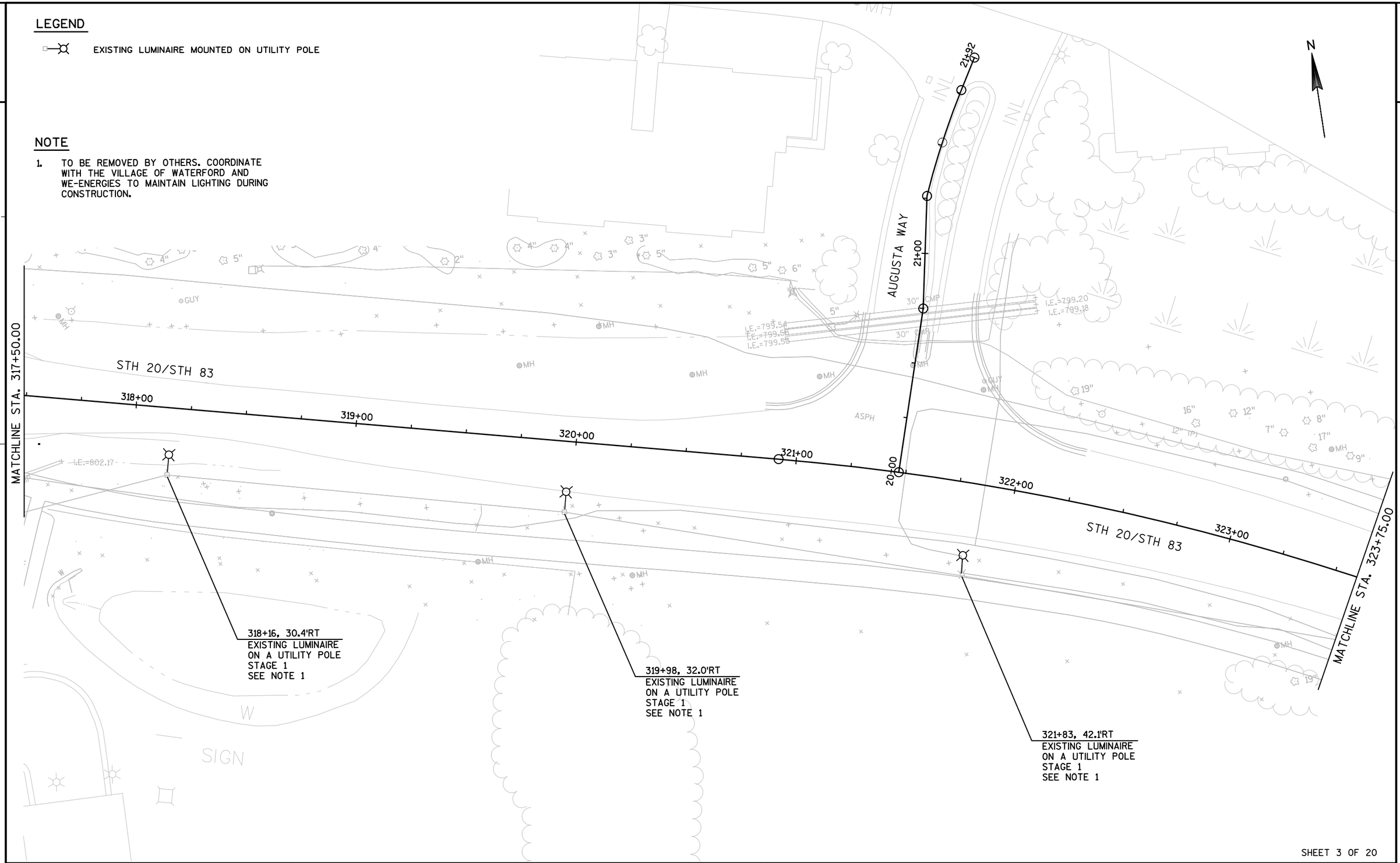
WISDOT/CADDS SHEET 42

LEGEND

EXISTING LUMINAIRE MOUNTED ON UTILITY POLE

NOTE

1. TO BE REMOVED BY OTHERS. COORDINATE WITH THE VILLAGE OF WATERFORD AND WE-ENERGIES TO MAINTAIN LIGHTING DURING CONSTRUCTION.



SHEET 3 OF 20

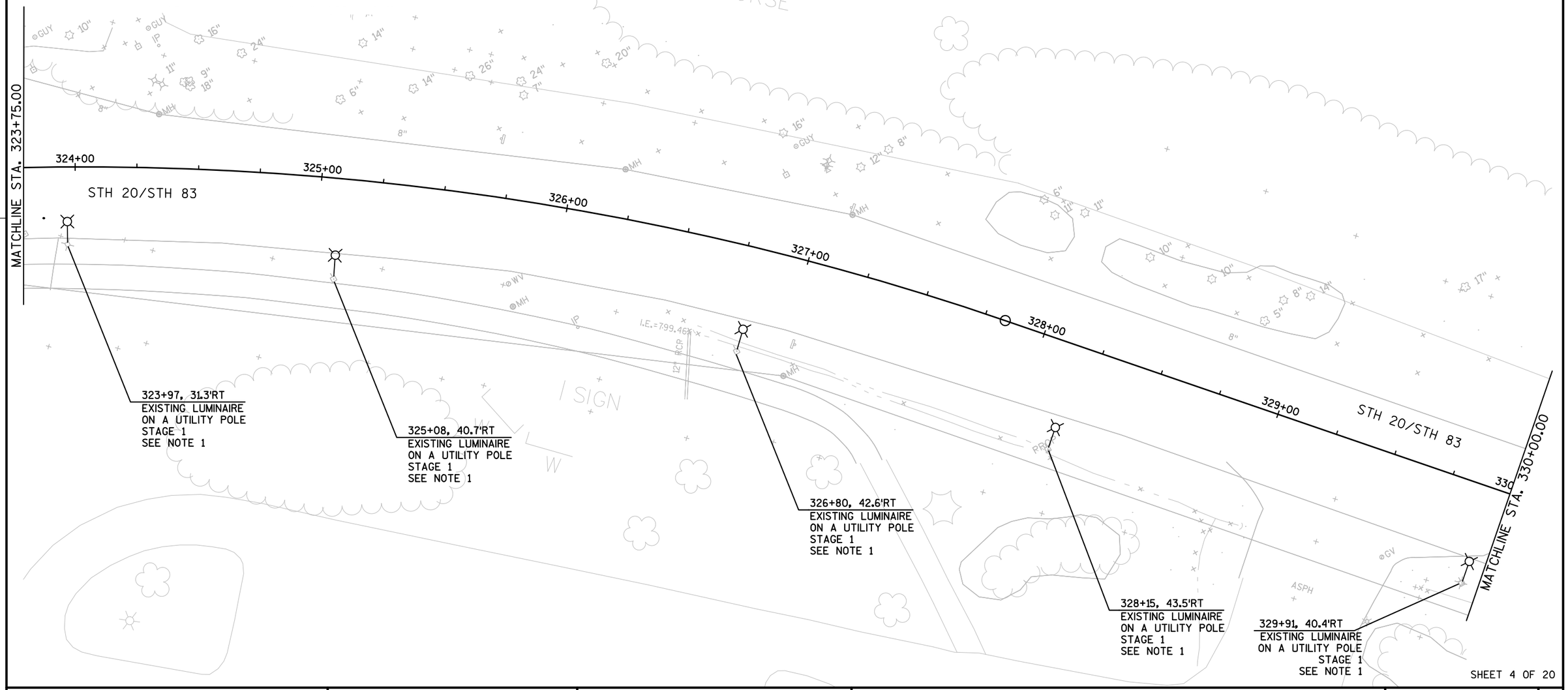
PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET 183	E

LEGEND

EXISTING LUMINAIRE MOUNTED ON UTILITY POLE

NOTE

1. TO BE REMOVED BY OTHERS. COORDINATE WITH THE VILLAGE OF WATERFORD AND WE-ENERGIES TO MAINTAIN LIGHTING DURING CONSTRUCTION.



SHEET 4 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET	E

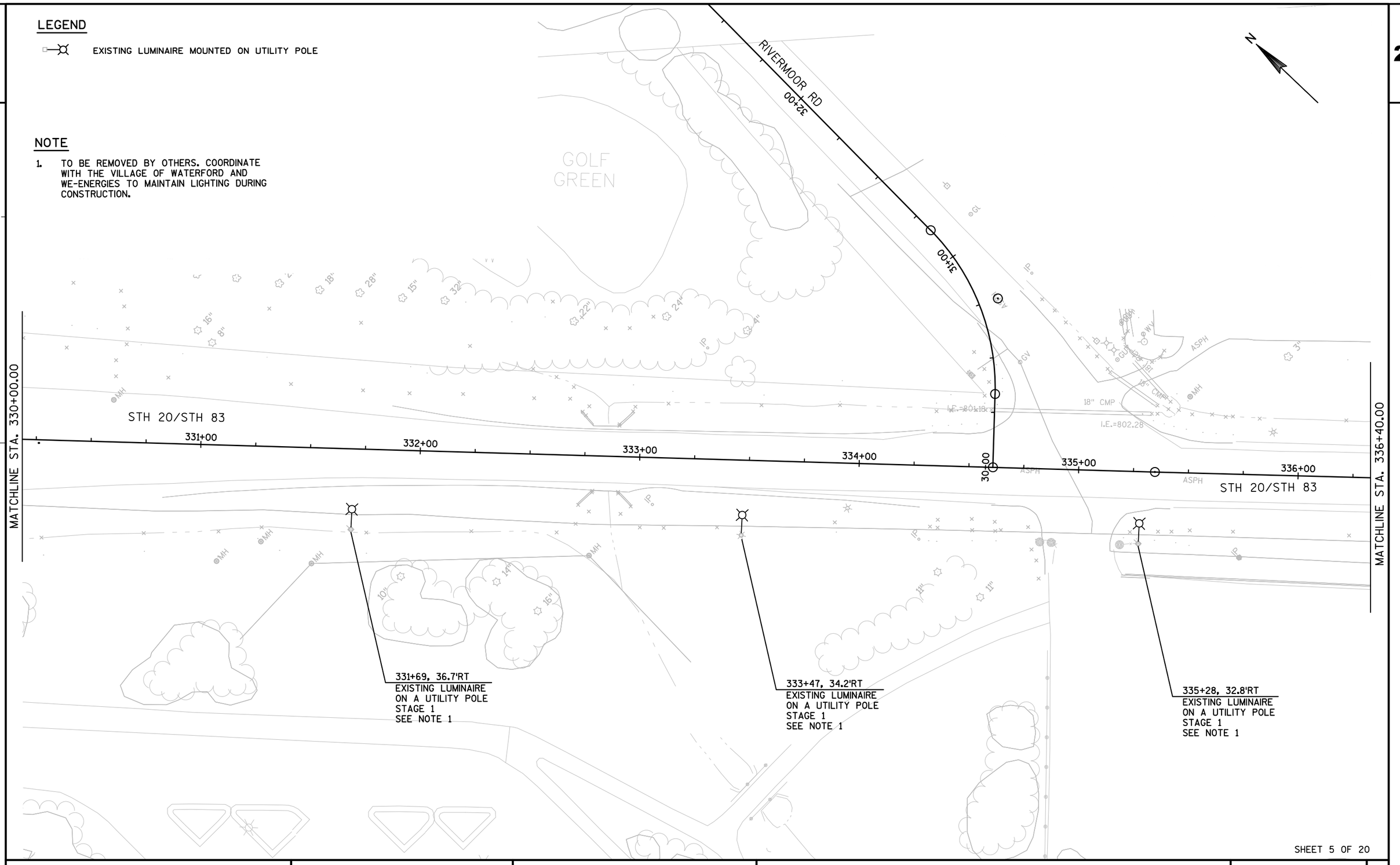
FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023501_LP_MOD.DWG PLOT DATE : 7/16/2018 2:22 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 42

LEGEND

EXISTING LUMINAIRE MOUNTED ON UTILITY POLE

NOTE

1. TO BE REMOVED BY OTHERS. COORDINATE WITH THE VILLAGE OF WATERFORD AND WE-ENERGIES TO MAINTAIN LIGHTING DURING CONSTRUCTION.



SHEET 5 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET	E

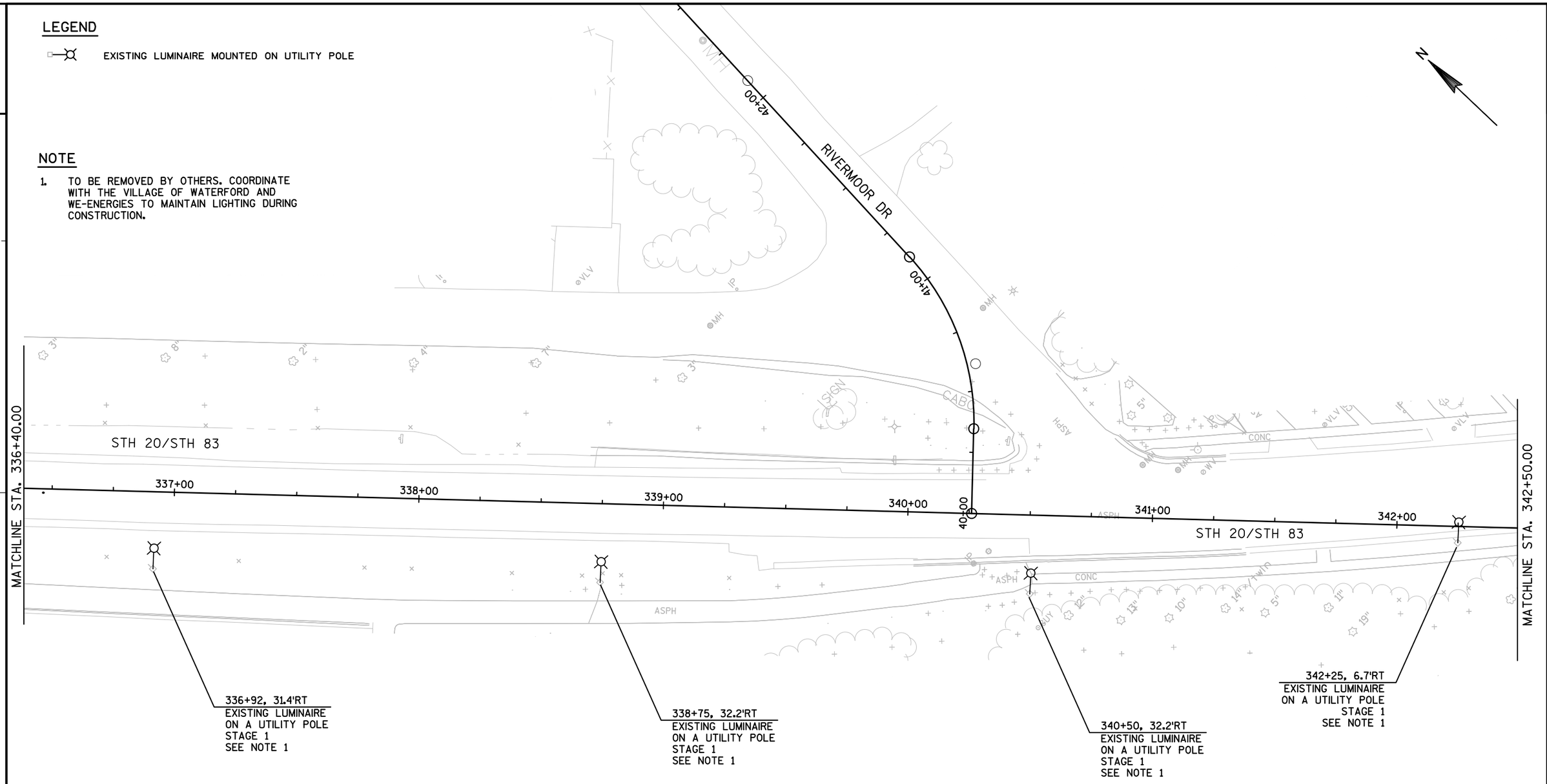
FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023501_LP_MOD.DWG PLOT DATE : 7/16/2018 2:23 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 42

LEGEND

EXISTING LUMINAIRE MOUNTED ON UTILITY POLE

NOTE

1. TO BE REMOVED BY OTHERS. COORDINATE WITH THE VILLAGE OF WATERFORD AND WE-ENERGIES TO MAINTAIN LIGHTING DURING CONSTRUCTION.



SHEET 6 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET E

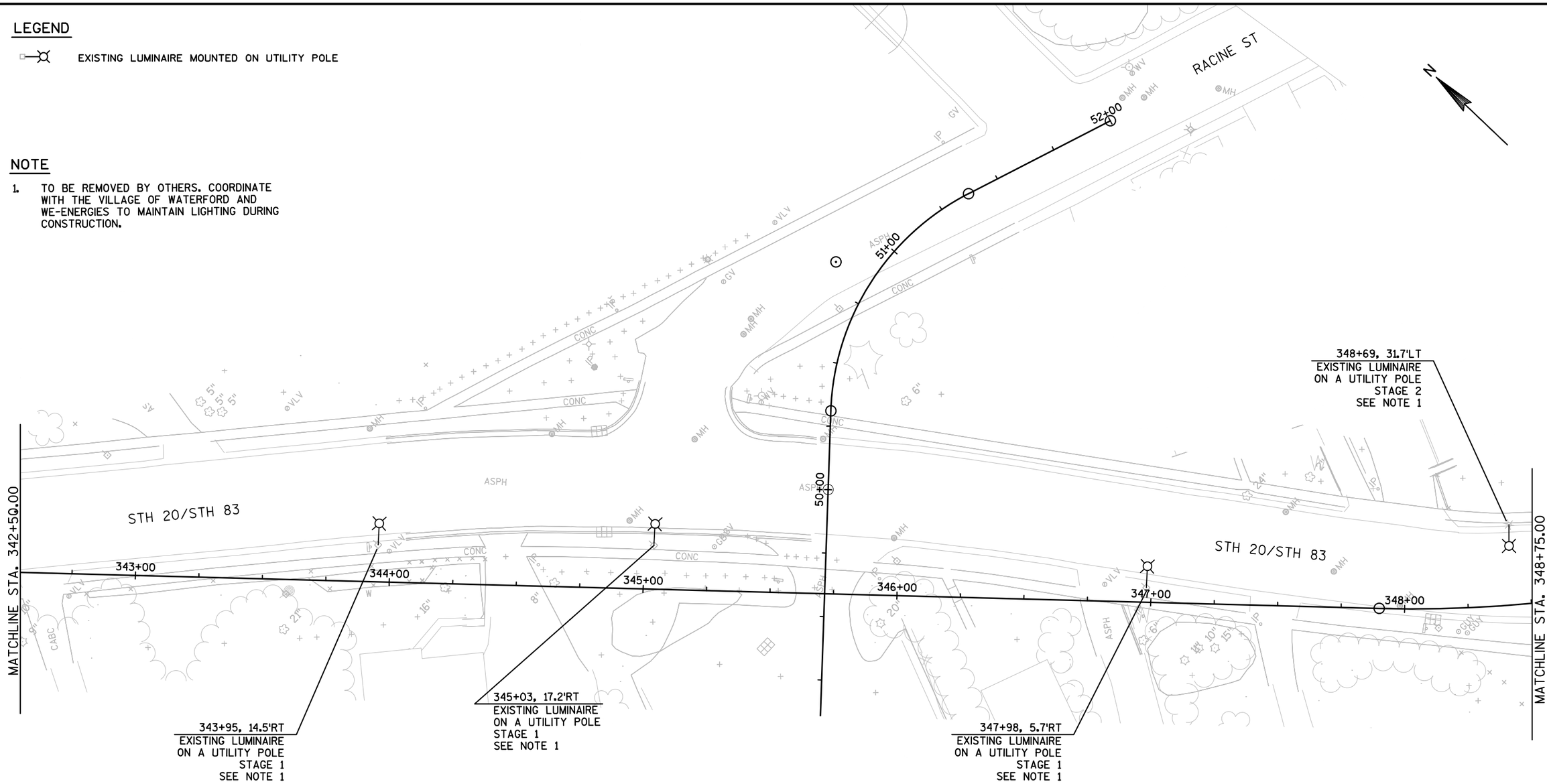
FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023501_LP_MOD.DWG PLOT DATE : 7/16/2018 2:24 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 42

LEGEND

EXISTING LUMINAIRE MOUNTED ON UTILITY POLE

NOTE

1. TO BE REMOVED BY OTHERS. COORDINATE WITH THE VILLAGE OF WATERFORD AND WE-ENERGIES TO MAINTAIN LIGHTING DURING CONSTRUCTION.

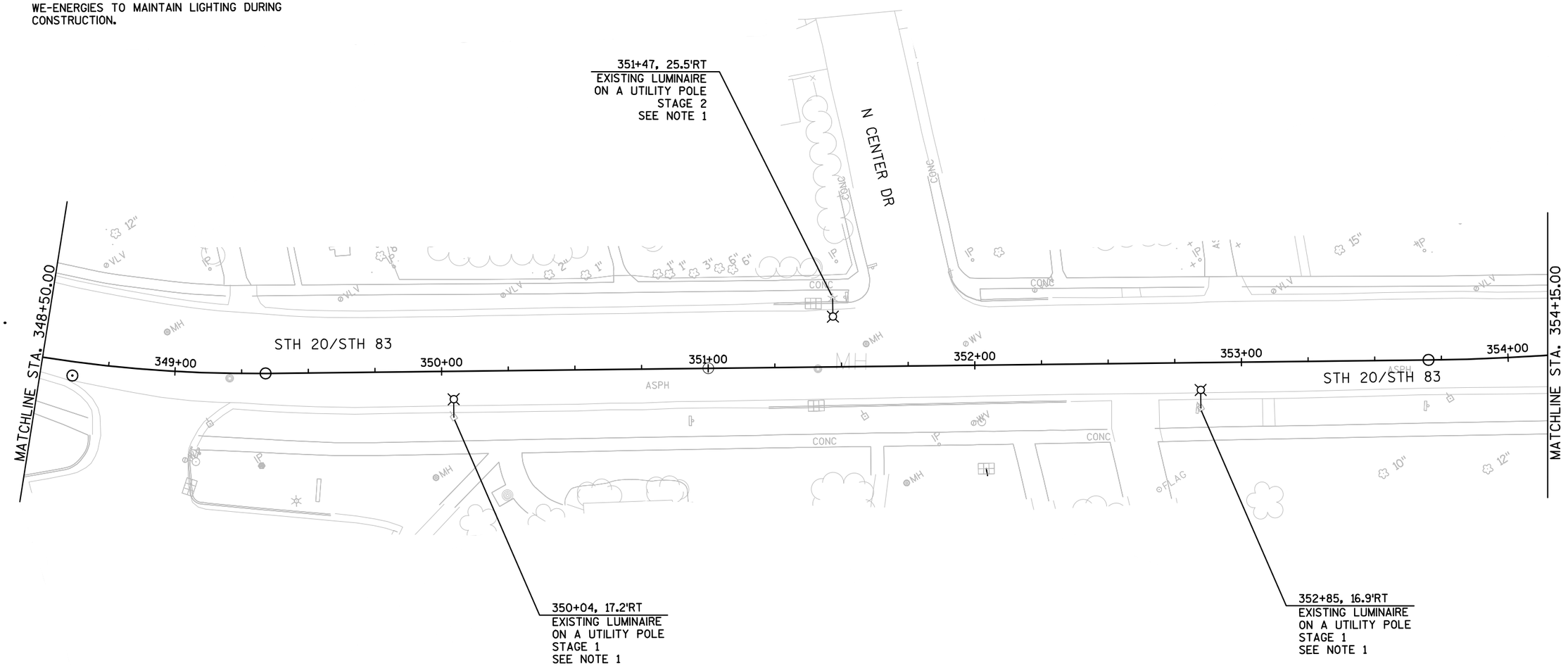


LEGEND

EXISTING LUMINAIRE MOUNTED ON UTILITY POLE

NOTE

1. TO BE REMOVED BY OTHERS. COORDINATE WITH THE VILLAGE OF WATERFORD AND WE-ENERGIES TO MAINTAIN LIGHTING DURING CONSTRUCTION.



LEGEND

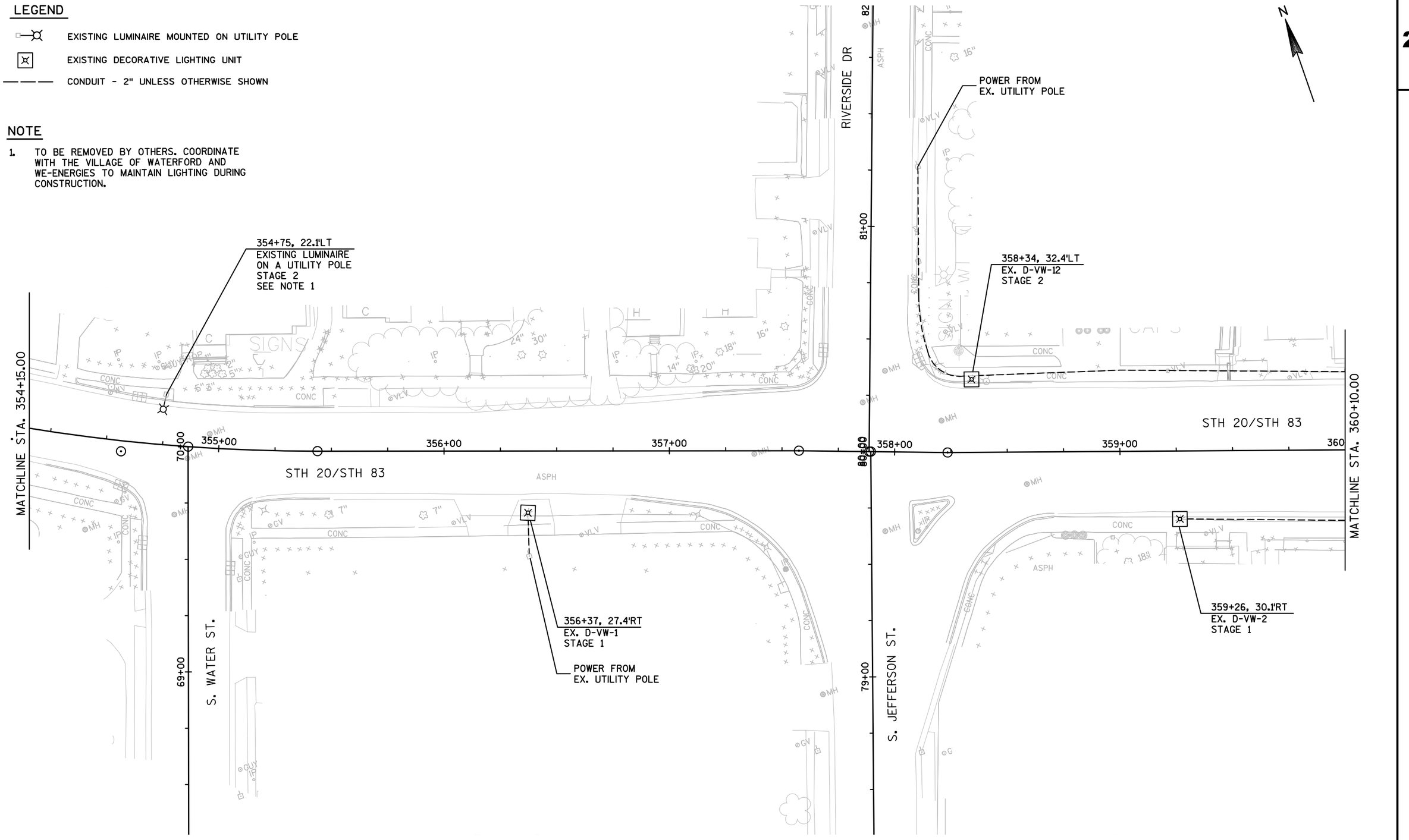
EXISTING LUMINAIRE MOUNTED ON UTILITY POLE

EXISTING DECORATIVE LIGHTING UNIT

CONDUIT - 2" UNLESS OTHERWISE SHOWN

NOTE

1. TO BE REMOVED BY OTHERS. COORDINATE WITH THE VILLAGE OF WATERFORD AND WE-ENERGIES TO MAINTAIN LIGHTING DURING CONSTRUCTION.



SHEET 9 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET E

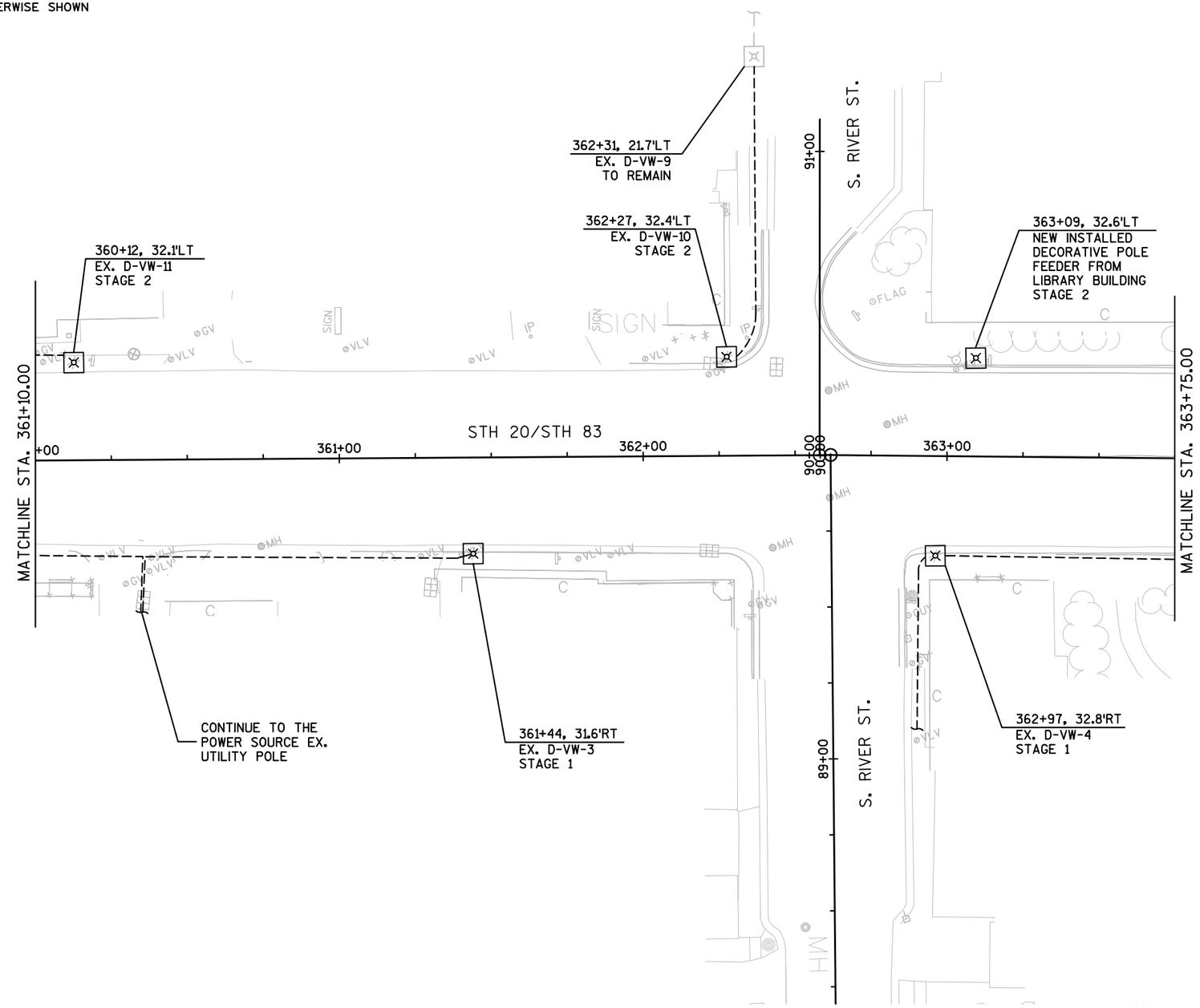
FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023501_LP_MOD.DWG PLOT DATE : 7/16/2018 2:26 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

LEGEND

EXISTING DECORATIVE LIGHTING UNIT

CONDUIT - 2" UNLESS OTHERWISE SHOWN



SHEET 10 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET 190 E

2

LEGEND

- DISTRIBUTION CENTER
- EXISTING DECORATIVE LIGHTING UNIT
- EXISTING SINGLE ARM LOCAL LIGHTING UNIT
- EXISTING LIGHTING MANHOLE
- EXISTING PULL BOX
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

N

364+03, 34.0'LT
EX. LPB-VW-1
STAGE 2

364+23, 33.0'LT
EX. D-VW-8
STAGE 2

365+80, 36.5'LT
EX. D-VW-7
STAGE 2

100+05, 27.4'LT
EX. LPB 104
STAGE 2

101+89, 26.6'LT
EVW1
STAGE 2

MATCHLINE STA. 363+75.00

364+00

365+00

366+00

STH 20/STH 83

364+22, 33.4'RT
EX. D-VW-5
STAGE 1

363+98, 97.9'RT
EX. D-VW-13
STAGE 1

365+72, 32.6'RT
EX. D-VW-6
STAGE 1

EXISTING WISDOT
SIGNAL CABINET

UTILITY POWER
SOURCE

100+00

100+54

101+00

102+00

STH 20/STH 83

E. MAIN ST.

MATCHLINE STA. 102+40.00

367+00

STH 20/STH 83

100+75, 25.6'RT
CVW1
STAGE 1

100+34, 30.9'RT
EX. LPB 103
STAGE 2

367+40, 113.7'LT
EX. LIGHTING CONTROLLER
(VILLAGE OF WATERFORD)
STAGE 2

367+96, 30.2'RT
EX. LPB 102
(ABANDONED)
STAGE 1

367+96, 25.4'LT
EX. LPB 101
STAGE 1

368+00

ABANDONED/
EMPTY CONDUIT

MATCHLINE STA. 368+25.00
(SEE SHEET 14)

SHEET 11 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023501_LP_MOD.DWG PLOT DATE : 7/17/2018 3:04 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SINGLE ARM LOCAL LIGHTING UNIT
- EXISTING LIGHTING MANHOLE
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

N

N. 2ND STREET

N. 3RD STREET

E. MAIN ST.

MATCHLINE STA. 102+40.00

MATCHLINE STA. 108+00.00

102+63, 26.1'RT
DVW1
STAGE 1

103+52, 26.2'LT
FVW1
STAGE 2

104+71, 26.6'RT
CVW2
STAGE 1

104+79, 26.0'LT
EX. LPB 105
STAGE 2

105+72, 26.2'LT
EVW2
STAGE 2

106+65, 26.5'RT
DVW2
STAGE 1

107+51, 26.2'RT
EX. LPB 106
STAGE 1

107+53, 26.4'LT
FVW2
STAGE 2

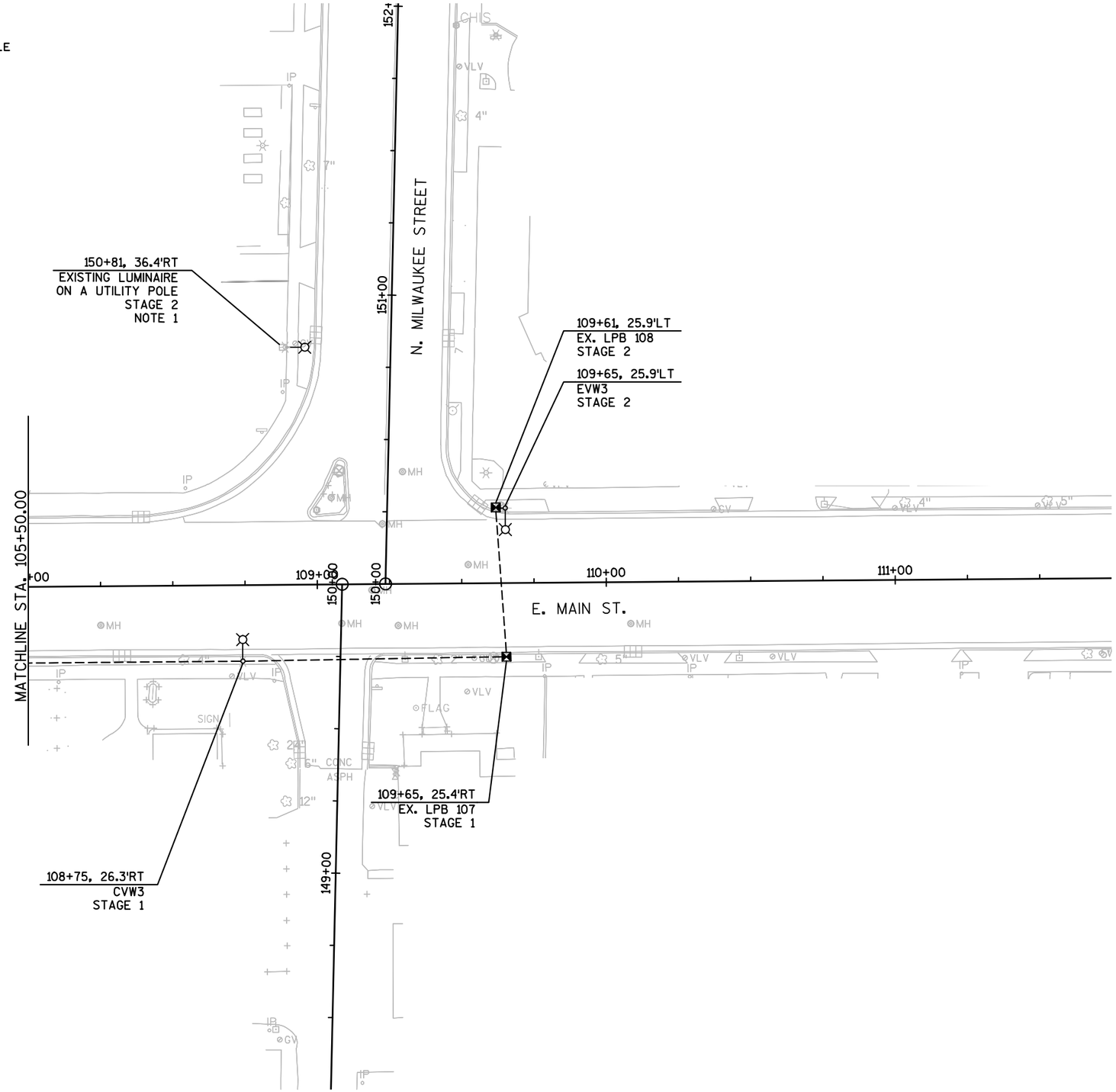
SHEET 12 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023501_LP_MOD.DWG PLOT DATE : 7/17/2018 3:05 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

LEGEND

- EXISTING LUMINAIRE MOUNTED ON UTILITY POLE
- EXISTING SINGLE ARM LOCAL LIGHTING UNIT
- EXISTING LIGHTING MANHOLE
- CONDUIT - 2" UNLESS OTHERWISE SHOWN



NOTE

1. TO BE REMOVED BY OTHERS. COORDINATE WITH THE VILLAGE OF WATERFORD AND WE-ENERGIES TO MAINTAIN LIGHTING DURING CONSTRUCTION.

SHEET 13 OF 19

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023501_LP_MOD.DWG PLOT DATE : 7/16/2018 2:29 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

LEGEND

EXISTING LUMINAIRE MOUNTED ON UTILITY POLE

EXISTING SINGLE ARM LOCAL LIGHTING UNIT

CONDUIT - 2" UNLESS OTHERWISE SHOWN

N

368+39, 25.1'LT
AVW1
STAGE 2

369+16, 24.9'LT
BVW1
STAGE 2

370+46, 25.3'LT
AVW2
STAGE 2

369+45, 55.9'LT
EXISTING LUMINAIRE
ON A UTILITY POLE
TO REMAIN

372+25, 25.3'LT
BVW2
STAGE 2

373+81, 25.6'LT
AVW3
STAGE 2

ELIZABETH ST.

E. ST. THOMAS ST.

MATCHLINE STA. 368+25.00

MATCHLINE STA. 372+75.00

369+00 370+00 371+00 372+00 373+00

120+00 121+00

STH 20/STH 83

STH 20/STH 83

SHEET 14 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET 194 E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023501_LP_MOD.DWG PLOT DATE : 7/16/2018 2:30 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

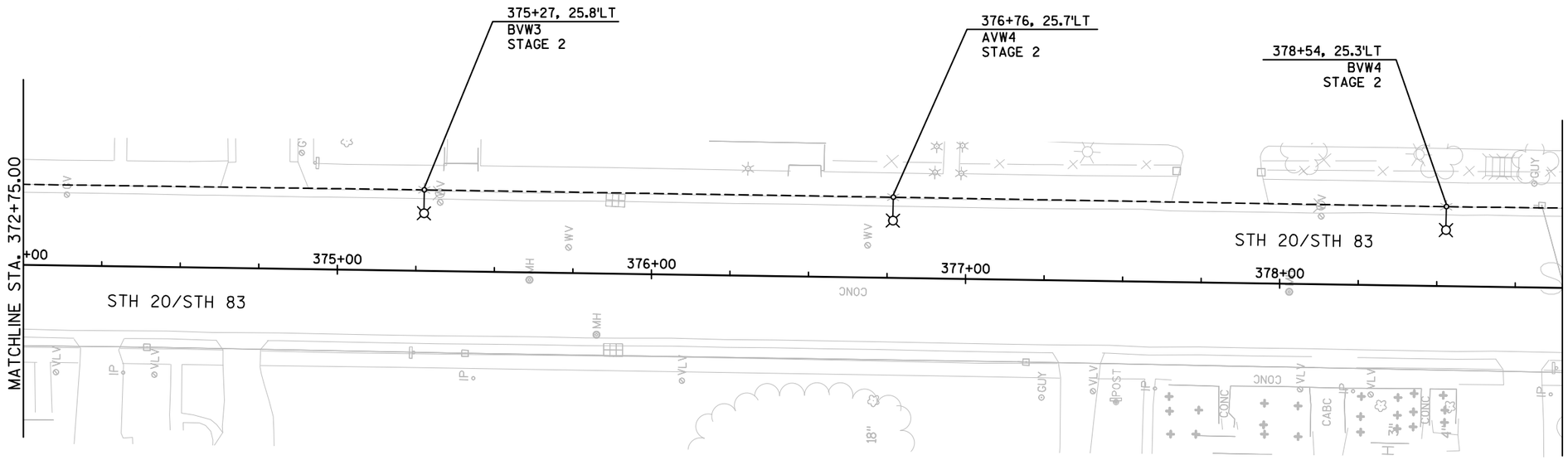
WISDOT/CADDS SHEET 42

LEGEND

EXISTING SINGLE ARM LOCAL LIGHTING UNIT

CONDUIT - 2" UNLESS OTHERWISE SHOWN

N



SHEET 15 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023501_LP_MOD.DWG PLOT DATE : 7/16/2018 2:31 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

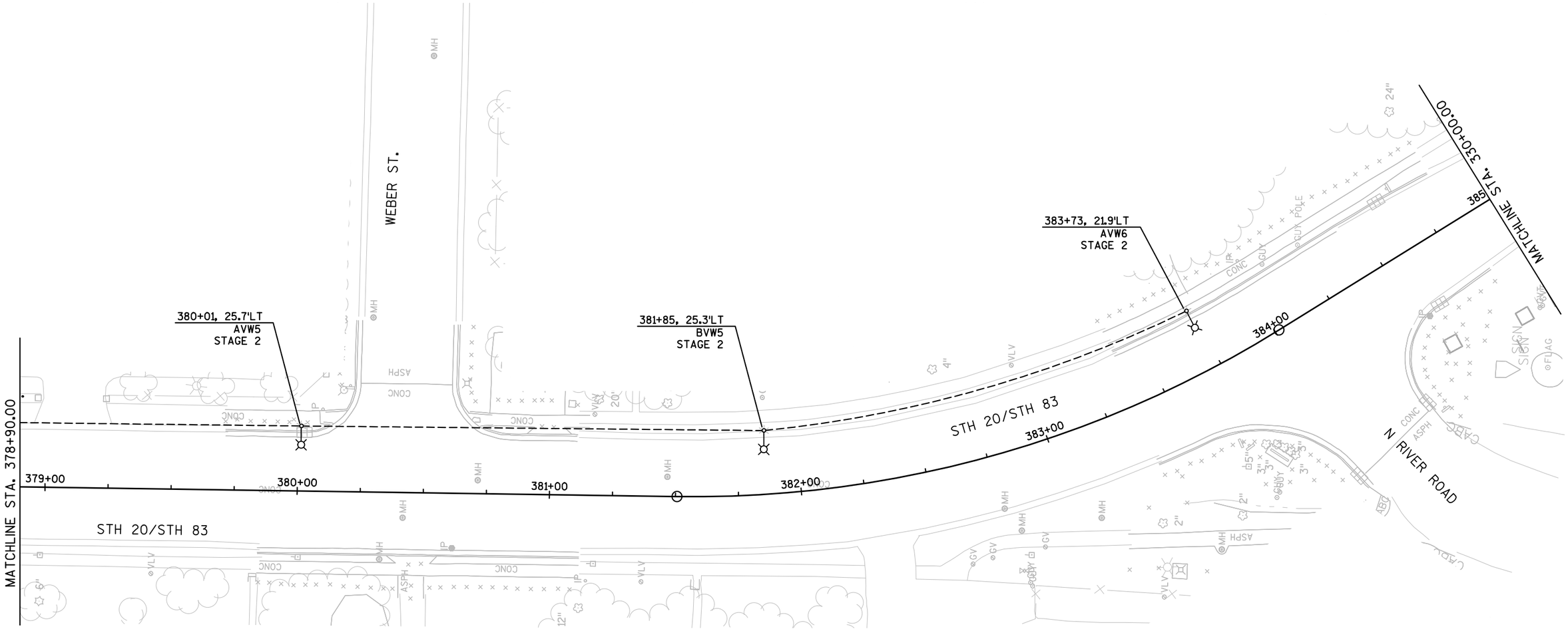
WISDOT/CADDS SHEET 42

LEGEND

EXISTING SINGLE ARM LOCAL LIGHTING UNIT

CONDUIT - 2" UNLESS OTHERWISE SHOWN

N



SHEET 16 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023501_LP_MOD.DWG PLOT DATE : 7/16/2018 2:32 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

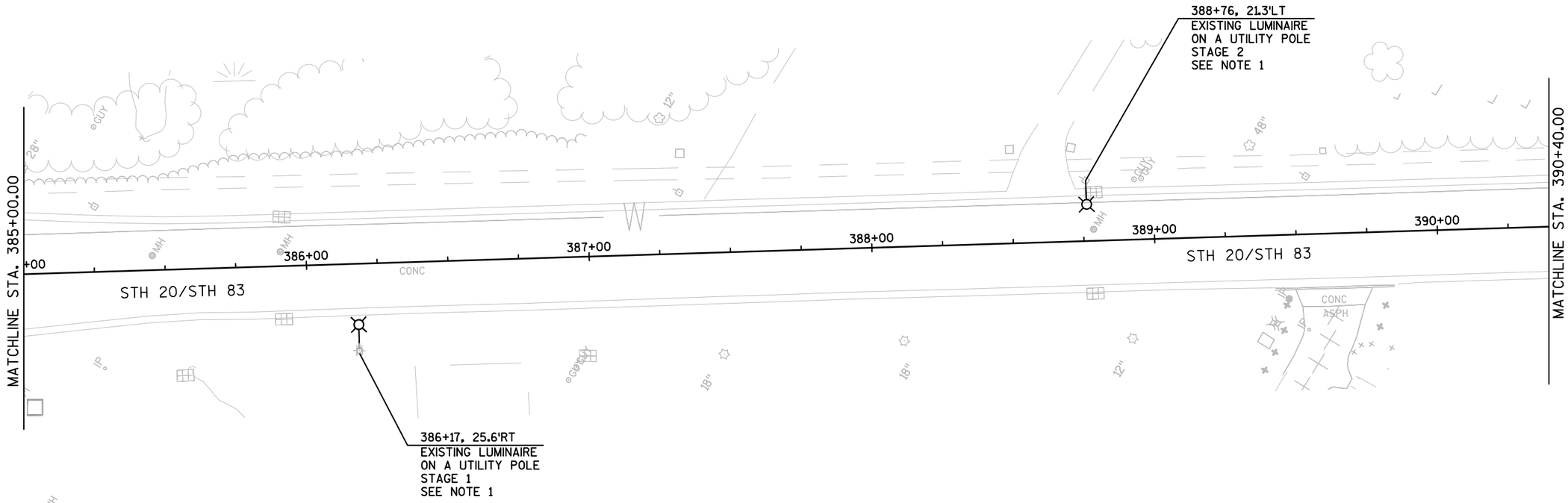
WISDOT/CADDS SHEET 42

LEGEND

EXISTING LUMINAIRE MOUNTED ON UTILITY POLE

NOTE

1. TO BE REMOVED BY OTHERS. COORDINATE WITH THE VILLAGE OF WATERFORD AND WE-ENERGIES TO MAINTAIN LIGHTING DURING CONSTRUCTION.

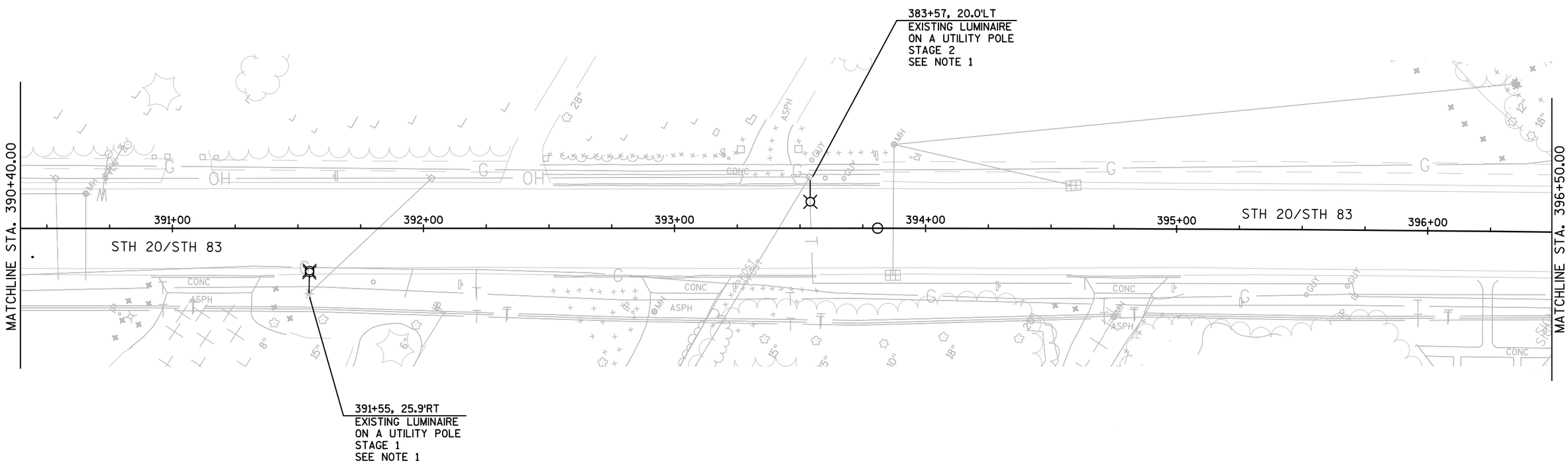


LEGEND

EXISTING LUMINAIRE MOUNTED ON UTILITY POLE

NOTE

1. TO BE REMOVED BY OTHERS. COORDINATE WITH THE VILLAGE OF WATERFORD AND WE-ENERGIES TO MAINTAIN LIGHTING DURING CONSTRUCTION.



SHEET 18 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET 198 E

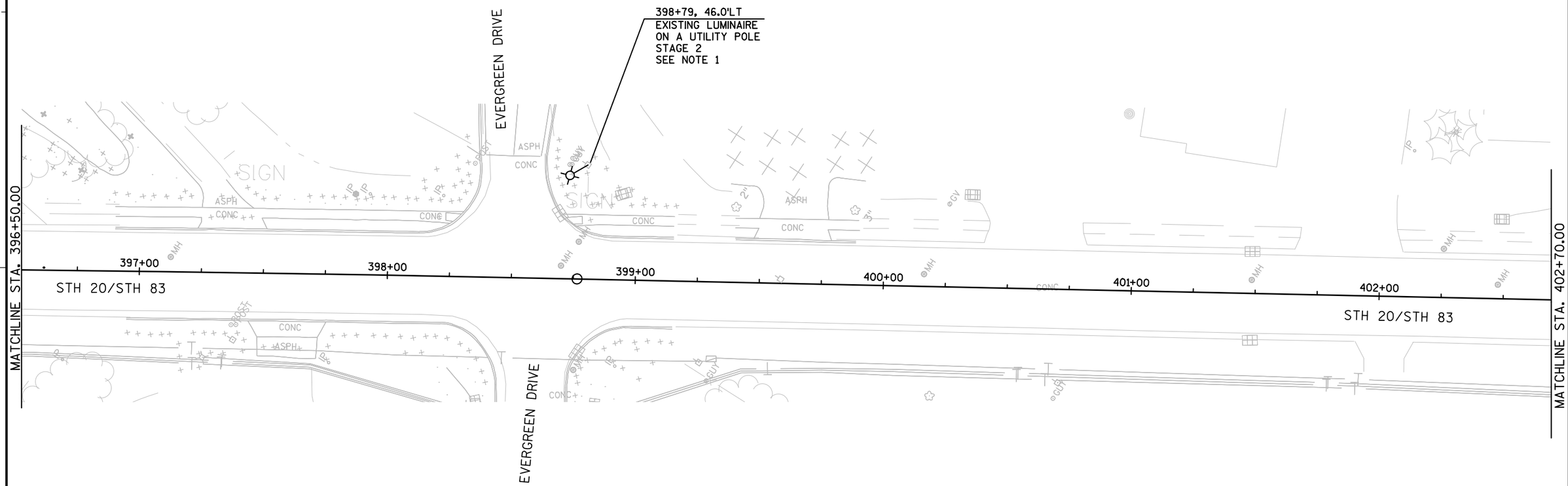
2

LEGEND

EXISTING LUMINAIRE MOUNTED ON UTILITY POLE

NOTE

1. TO BE REMOVED BY OTHERS. COORDINATE WITH THE VILLAGE OF WATERFORD AND WE-ENERGIES TO MAINTAIN LIGHTING DURING CONSTRUCTION.



SHEET 19 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET 199	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023501_LP_MOD.DWG PLOT DATE : 7/16/2018 2:34 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

2

FOR INFORMATION ONLY

STH 36 (S. MILWAUKEE AVE.)

MATCHLINE STA. 402+70.00

STH 20/STH 83

403+00 404+00 405+00 406+00

CONC ASPH ASPH

MH MH MH MH MH MH

POST POST GUY GUY GUY

SIGN SIGN INL INL HW HW

STH 20/STH 83

STH 36 (S. MILWAUKEE AVE.)

SHEET 20 OF 20

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - REMOVALS	SHEET 200	E

2

LEGEND

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

CONDUIT STUBOUT

STATION — OFFSET

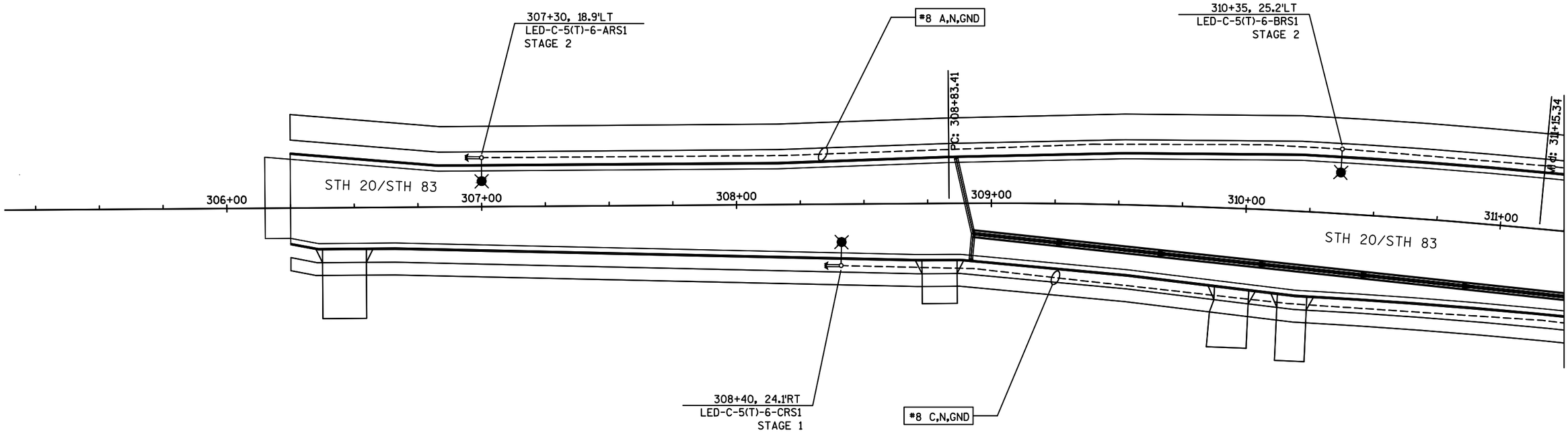
100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE #
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

N

2



SHEET 1 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 201	E

2

LEGEND

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

CONDUIT STUBOUT

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE *
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE

N

2

307+30, 18.9'LT
LED-C-5(T)-6-ARS1
STAGE 2

*8 A,N,GND

310+35, 25.2'LT
LED-C-5(T)-6-BRS1
STAGE 2

PC: 308+83.41

MA: 311+15.34

MATCHLINE STA. 311+25.00

STH 20/STH 83

306+00 307+00 308+00 309+00 310+00 311+00

STH 20/STH 83

308+40, 24.1'RT
LED-C-5(T)-6-CRS1
STAGE 1

*8 C,N,GND

SHEET 2 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:24 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

PULL BOX 24" x 42"

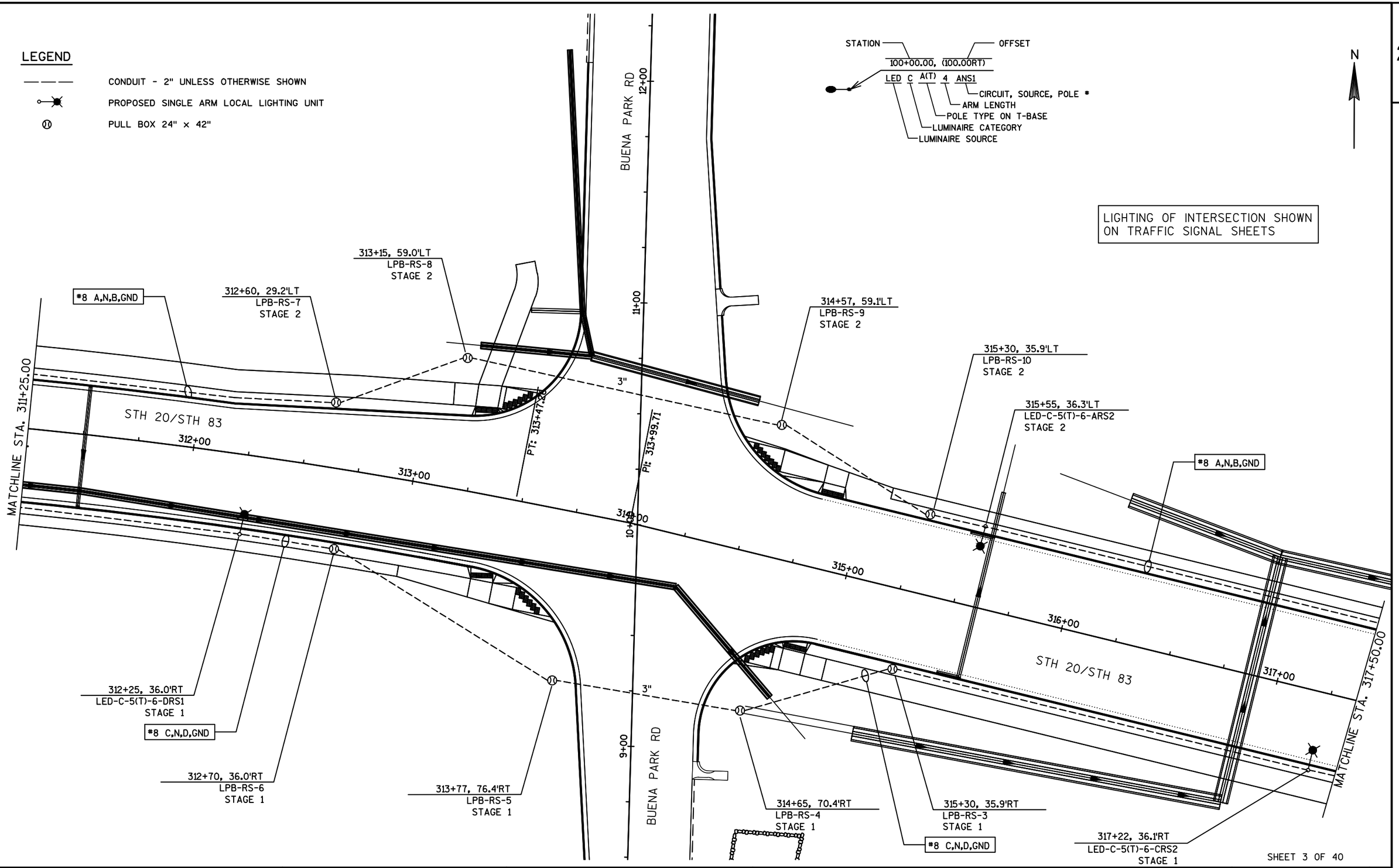
STATION — 100+00.00, (100.00RT) — OFFSET

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE #
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

N

LIGHTING OF INTERSECTION SHOWN ON TRAFFIC SIGNAL SHEETS



SHEET 3 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:24 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

PULL BOX 24" x 42"

STATION — OFFSET

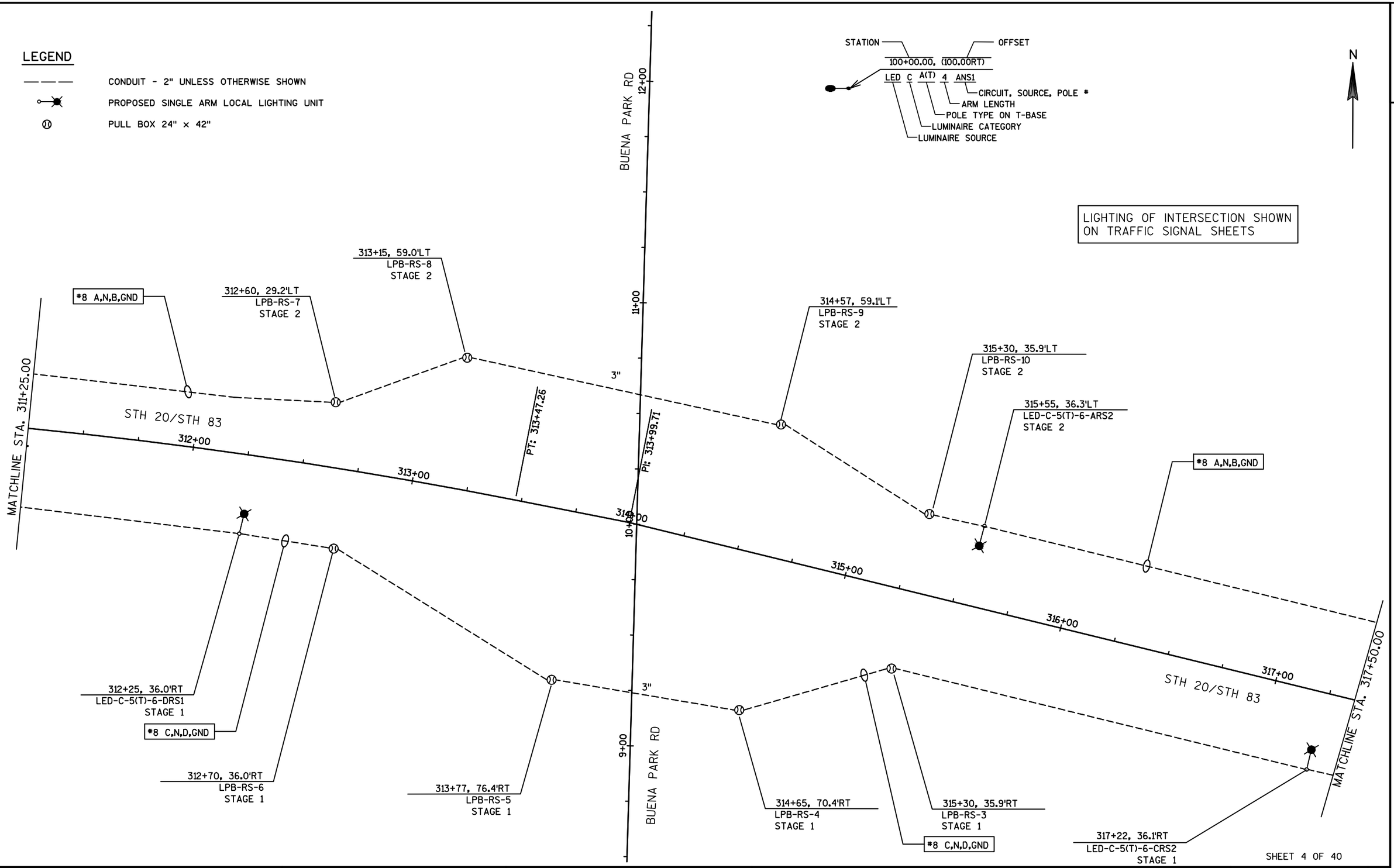
100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE #
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

N

LIGHTING OF INTERSECTION SHOWN ON TRAFFIC SIGNAL SHEETS



SHEET 4 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:24 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

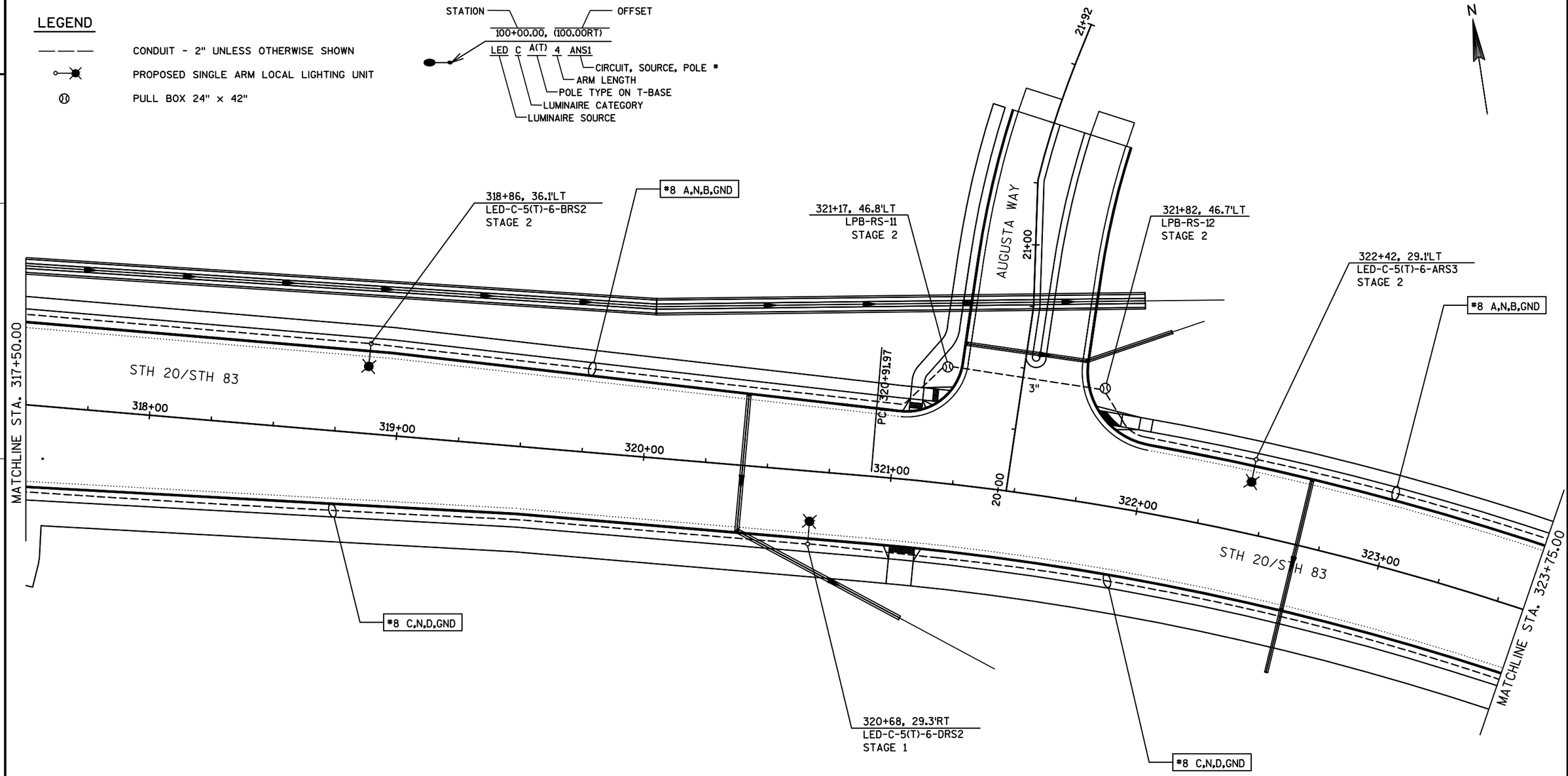
PULL BOX 24" x 42"

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE



2

SHEET 5 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:25 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

PULL BOX 24" x 42"

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

N

318+86, 36.1'LT
LED-C-5(T)-6-BRS2
STAGE 2

*8 A,N,B,GND

321+17, 46.8'LT
LPB-RS-11
STAGE 2

AUGUSTA WAY

21+92

21+00

321+82, 46.7'LT
LPB-RS-12
STAGE 2

322+42, 29.1'LT
LED-C-5(T)-6-ARS3
STAGE 2

*8 A,N,B,GND

MATCHLINE STA. 317+50.00

STH 20/STH 83

318+00

319+00

320+00

PC: 320+91.97

321+00

20+00

322+00

323+00

3"

*8 C,N,D,GND

320+68, 29.3'RT
LED-C-5(T)-6-DRS2
STAGE 1

*8 C,N,D,GND

MATCHLINE STA. 323+75.00

SHEET 6 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET 206 E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:25 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE *
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE

N

2

MATCHLINE STA. 323+75.00

Mid: 324+37.64

324+00

325+00

326+00

327+00

328+00

329+00

330

STH 20/STH 83

PT: 327+83.31

MATCHLINE STA. 330+00.00

325+79, 28.9'LT
LED-C-5(T)-6-BRS3
STAGE 2

*4 A,N,B
*8 GND

329+10, 28.3'LT
LED-C-5(T)-6-ARS4
STAGE 2

324+08, 30.0'RT
LED-C-5(T)-6-CRS3
STAGE 1

*4 C,N,D
*8 GND

327+43, 28.6'RT
LED-C-5(T)-6-DRS3
STAGE 1

SHEET 7 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 207	E

2

LEGEND

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE *
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE

N

MATCHLINE STA. 323+75.00

Mid: 324+37.64

324+00

325+00

326+00

327+00

328+00

329+00

330

STH 20/STH 83

PT: 327+83.31

325+79, 28.9'LT
LED-C-5(T)-6-BRS3
STAGE 2

*4 A,N,B
*8 GND

328+90, 28.3'LT
LED-C-5(T)-6-ARS4
STAGE 2

324+08, 30.0'RT
LED-C-5(T)-6-CRS3
STAGE 1

*4 C,N,D
*8 GND

327+43, 28.6'RT
LED-C-5(T)-6-DRS3
STAGE 1

MATCHLINE STA. 330+00.00

SHEET 8 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:26 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

PULL BOX 24" x 42"

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

N

MATCHLINE STA. 330+00.00

MATCHLINE STA. 336+40.00

STH 20/STH 83

331+00

332+00

333+00

334+00

335+00

336+00

32+00

31+00

30+00

RIVERMOOR RD

PI: 335+34.75

3"

330+78, 30.2'RT
LED-C-5(T)-6-CRS4
STAGE 1

*4 C,N,D
*8 GND

332+34, 29.8'LT
LED-C-5(T)-6-BRS4
STAGE 2

*4 A,N,B
*8 GND

333+90, 34.7'RT
LED-C-5(T)-6-DRS4
STAGE 1

334+26, 55.0'LT
LPB-RS-13
STAGE 2

334+53, 55.0'LT
LPB-RS-14
STAGE 2

335+65, 32.8'LT
LED-C-5(T)-6-ARS5
STAGE 2

*4 A,N,B
*8 GND

*4 C,N,D
*8 GND

SHEET 9 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:26 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

PULL BOX 24" x 42"

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

N

RIVERMOOR RD

32+00

31+00

30+00

STH 20/STH 83

MATCHLINE STA. 330+00.00

331+00

332+00

333+00

334+00

335+00

336+00

MATCHLINE STA. 336+40.00

PI: 335+34.75

330+78, 30.2'RT
LED-C-5(T)-6-CRS4
STAGE 1

*4 C,N,D
*8 GND

332+34, 29.8'LT
LED-C-5(T)-6-BRS4
STAGE 2

*4 A,N,B
*8 GND

333+90, 34.7'RT
LED-C-5(T)-6-DRS4
STAGE 1

334+26, 55.0'LT
LPB-RS-13
STAGE 2

3"

334+53, 55.0'LT
LPB-RS-14
STAGE 2

335+65, 32.8'LT
LED-C-5(T)-6-ARS5
STAGE 2

*4 A,N,B
*8 GND

STH 20/STH 83

*4 C,N,D
*8 GND

SHEET 10 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET 210	E

2

LEGEND

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

PULL BOX 24" x 42"

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

N

RIVERMOOR DR

42+00

41+00

40+00

3"

340+00, 48.3'LT
LPB-RS-15
STAGE 2

340+48, 48.3'LT
LPB-RS-16
STAGE 2

342+44, 29.2'LT
LED-C-5(T)-6-ARS6
STAGE 2

339+12, 28.7'LT
LED-C-5(T)-6-BRS5
STAGE 2

*4 A,N,B
*8 GND

*4 A,N,B
*8 GND

MATCHLINE STA. 336+40.00

STH 20/STH 83

337+00

338+00

339+00

340+00

341+00

342+00

STH 20/STH 83

MATCHLINE STA. 342+55.00

337+44, 30.6'RT
LED-C-5(T)-6-CRS5
STAGE 1

*4 C,N,D
*8 GND

*2 C,N,D
*8 GND

340+80, 30.7'RT
LED-C-5(T)-6-DRS5
STAGE 1

2

SHEET 11 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 211	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:27 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

PULL BOX 24" x 42"

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE #
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE

N

RIVERMOOR DR

42+00

41+00

40+00

3"

MATCHLINE STA. 336+40.00

MATCHLINE STA. 342+50.00

STH 20/STH 83

337+00 338+00 339+00 340+00 341+00 342+00

340+00, 48.3'LT
LPB-RS-15
STAGE 2

339+12, 28.7'LT
LED-C-5(T)-6-BRS5
STAGE 2

*4 A,N,B
*8 GND

340+48, 48.3'LT
LPB-RS-16
STAGE 2

342+44, 29.2'LT
LED-C-5(T)-6-ARS6
STAGE 2

*4 A,N,B
*8 GND

337+44, 30.6'RT
LED-C-5(T)-6-CRS5
STAGE 1

*4 C,N,D
*8 GND

340+80, 30.7'RT
LED-C-5(T)-6-DRS5
STAGE 1

*2 C,N,D
*8 GND

2

SHEET 12 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET 212	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:27 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

LEGEND

- DISTRIBUTION CENTER
- PROPOSED SINGLE ARM LOCAL LIGHTING UNIT
- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

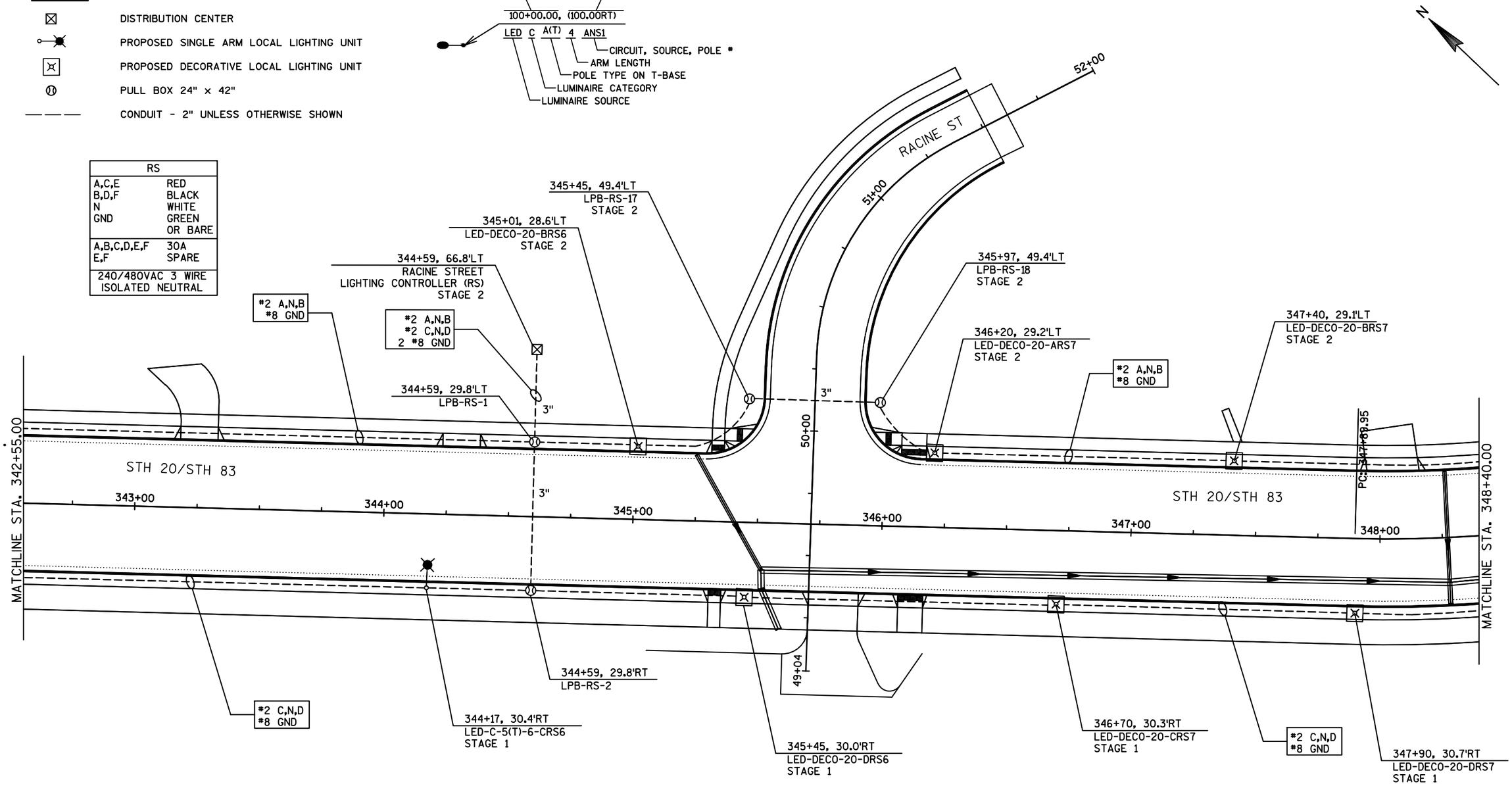
STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

RS	
A,C,E	RED
B,D,F	BLACK
N	WHITE
GND	GREEN OR BARE
A,B,C,D,E,F	30A
E,F	SPARE
240/480VAC 3 WIRE ISOLATED NEUTRAL	



SHEET 13 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 213	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:27 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

2

LEGEND

- DISTRIBUTION CENTER
- PROPOSED SINGLE ARM LOCAL LIGHTING UNIT
- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — OFFSET
100+00.00, (100.00RT)
LED C A(T) 4 ANS1
- CIRCUIT, SOURCE, POLE #
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

RS	
A,C,E	RED
B,D,F	BLACK
N	WHITE
GND	GREEN OR BARE
A,B,C,D,E,F	30A
E,F	SPARE
240/480VAC 3 WIRE ISOLATED NEUTRAL	

N

RACINE ST

51+00

52+00

50+00

49+04

MATCHLINE STA. 342+50.00

MATCHLINE STA. 348+40.00

STH 20/STH 83

343+00

344+00

345+00

346+00

347+00

348+00

3"

3"

3"

PC: 347+89.95

345+45, 49.4'LT
LPB-RS-17
STAGE 2

345+01, 28.6'LT
LED-DECO-20-BRS6
STAGE 2

344+59, 66.8'LT
RACINE STREET
LIGHTING CONTROLLER (RS)
STAGE 2

*2 A,N,B
*8 GND

*2 A,N,B
*2 C,N,D
2 *8 GND

344+59, 29.8'LT
LPB-RS-1

345+97, 49.4'LT
LPB-RS-18
STAGE 2

346+20, 29.2'LT
LED-DECO-20-ARS7
STAGE 2

*2 A,N,B
*8 GND

347+40, 29.1'LT
LED-DECO-20-BRS7
STAGE 2

*2 C,N,D
*8 GND

344+59, 29.8'RT
LPB-RS-2

344+17, 30.4'RT
LED-C-5(T)-6-CRS6
STAGE 1

345+45, 30.0'RT
LED-DECO-20-DRS6
STAGE 1

346+70, 30.3'RT
LED-DECO-20-CRS7
STAGE 1

*2 C,N,D
*8 GND

347+90, 30.7'RT
LED-DECO-20-DRS7
STAGE 1

SHEET 14 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET 214	E

2

LEGEND

- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — OFFSET
100+00.00, (100.00RT)
LED C A(T) 4 ANS1
- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

N

2

348+60, 29.2'LT
LED-DECO-20-ARS8
STAGE 2

*2 A,N,B
*8 GND

MID 348+61.94

PT 349+33.93

349+80, 29.4'LT
LED-DECO-20-BRS8
STAGE 2

351+00, 29.2'LT
LED-DECO-20-ARS9
STAGE 2

351+48, 46.4'LT
LPB-RS-19
STAGE 2

61+50

60+00

N CENTER DR

3"

351+87, 46.4'LT
LPB-RS-20
STAGE 2

352+20, 30.0'LT
LED-DECO-20-BRS9
STAGE 2

*4 A,N,B
*8 GND

353+45, 29.7'LT
LED-DECO-20-ARS10
STAGE 2

PC 353+70.16

MATCHLINE STA. 348+40.00

349+00 350+00 351+00 352+00 353+00 354+00

STH 20/STH 83

STH 20/STH 83

MATCHLINE STA. 354+40.00

349+15, 30.5'RT
LED-DECO-20-CRS8
STAGE 1

*2 A,N,B
*8 GND

350+35, 30.9'RT
LED-DECO-20-DRS8
STAGE 1

351+50, 30.0'RT
LED-DECO-20-CRS9
STAGE 1

*4 C,N,D
*8 GND

352+75, 31.1'RT
LED-DECO-20-DRS9
STAGE 1

354+00, 30.9'RT
LED-DECO-20-CRS10
STAGE 1

SHEET 15 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 215	E

2

LEGEND

- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE #
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

N

2

MATCHLINE STA. 348+40.00

348+60, 29.2'LT
LED-DECO-20-ARS8
STAGE 2

*2 A,N,B
*8 GND

Mid: 348+61.94

PT: 349+33.93

349+80, 29.4'LT
LED-DECO-20-BRS8
STAGE 2

351+00, 29.2'LT
LED-DECO-20-ARS9
STAGE 2

351+48, 46.4'LT
LPB-RS-19
STAGE 2

61+50

N CENTER DR

00+09

3"

351+87, 46.4'LT
LPB-RS-20
STAGE 2

352+20, 30.0'LT
LED-DECO-20-BRS9
STAGE 2

*4 A,N,B
*8 GND

353+45, 29.7'LT
LED-DECO-20-ARS10
STAGE 2

PC: 353+70.16

MATCHLINE STA. 354+40.00

STH 20/STH 83

349+00 350+00 351+00 352+00 353+00 354+00

STH 20/STH 83

349+15, 30.5'RT
LED-DECO-20-CRS8
STAGE 1

350+35, 30.9'RT
LED-DECO-20-DRS8
STAGE 1

*2 A,N,B
*8 GND

351+50, 30.0'RT
LED-DECO-20-CRS9
STAGE 1

*4 C,N,D
*8 GND

352+75, 31.1'RT
LED-DECO-20-DRS9
STAGE 1

354+00, 30.9'RT
LED-DECO-20-CRS10
STAGE 1

SHEET 16 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:28 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

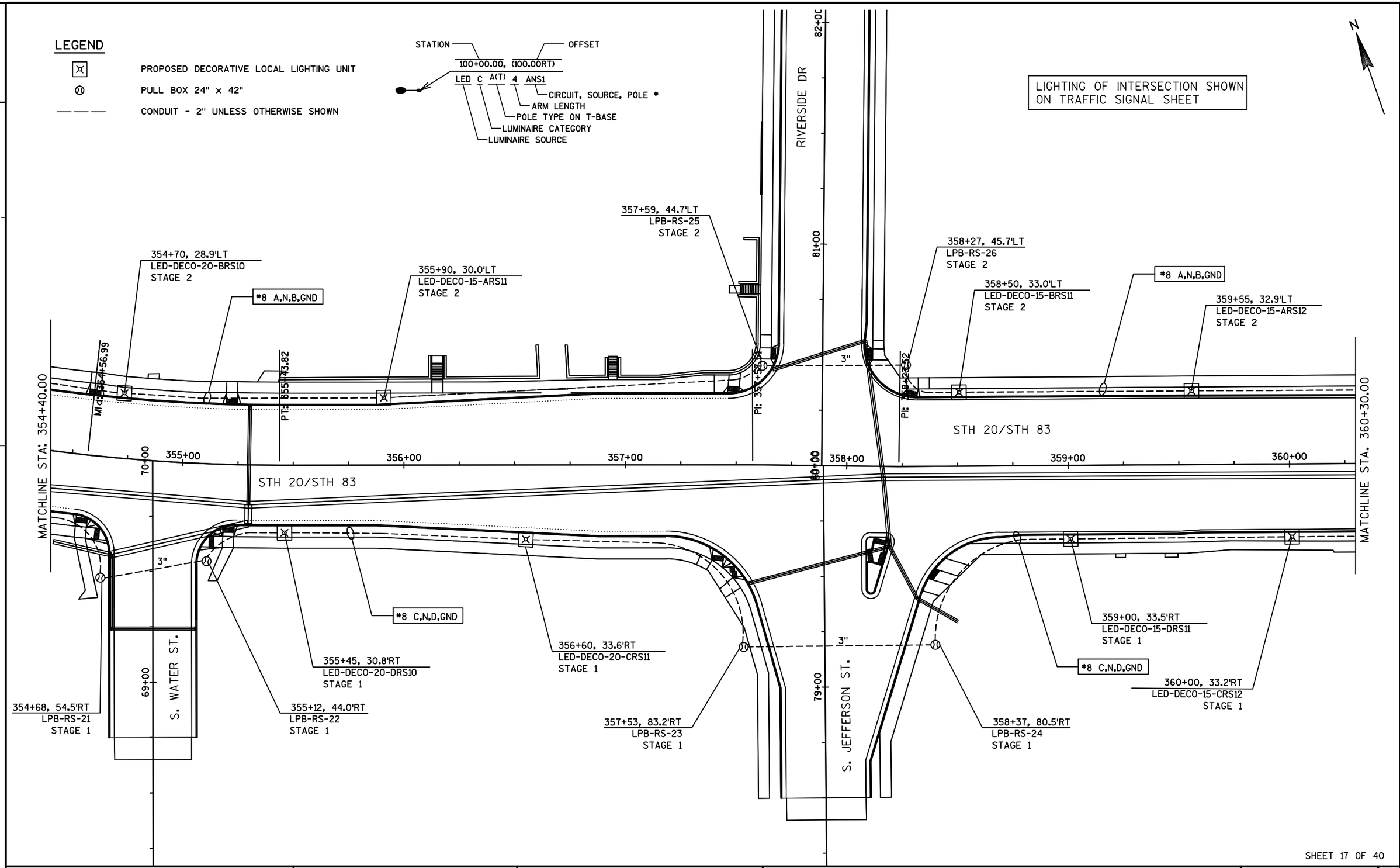
WISDOT/CADDS SHEET 42

LEGEND

- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — OFFSET
100+00.00, (100.00RT)
LED C A(T) 4 ANS1
- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

LIGHTING OF INTERSECTION SHOWN ON TRAFFIC SIGNAL SHEET



SHEET 17 OF 40

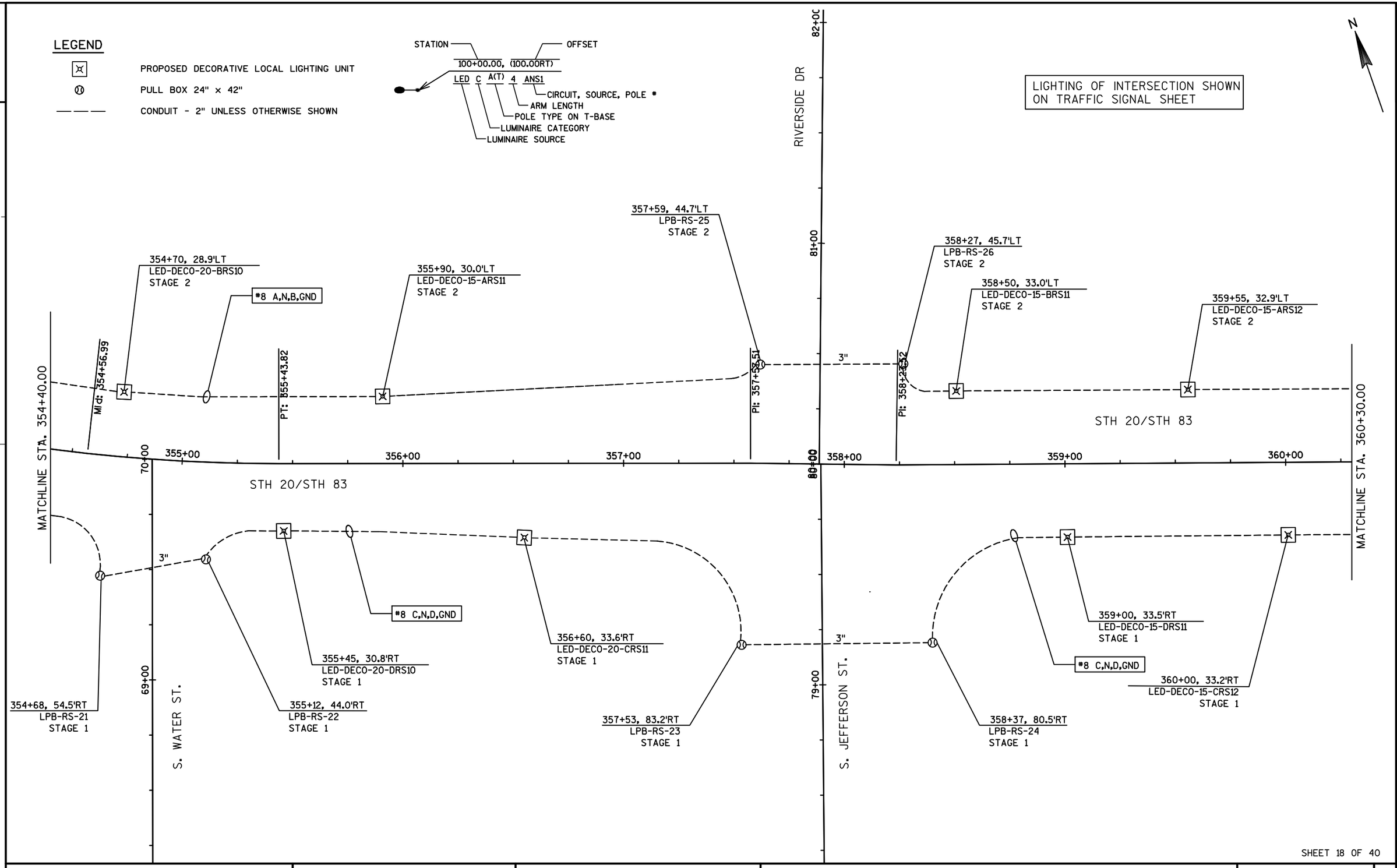
PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 217 E

LEGEND

- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — OFFSET
100+00.00, (100.00RT)
LED C A(T) 4 ANS1
- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

LIGHTING OF INTERSECTION SHOWN ON TRAFFIC SIGNAL SHEET



SHEET 18 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET 218 E

2

LEGEND

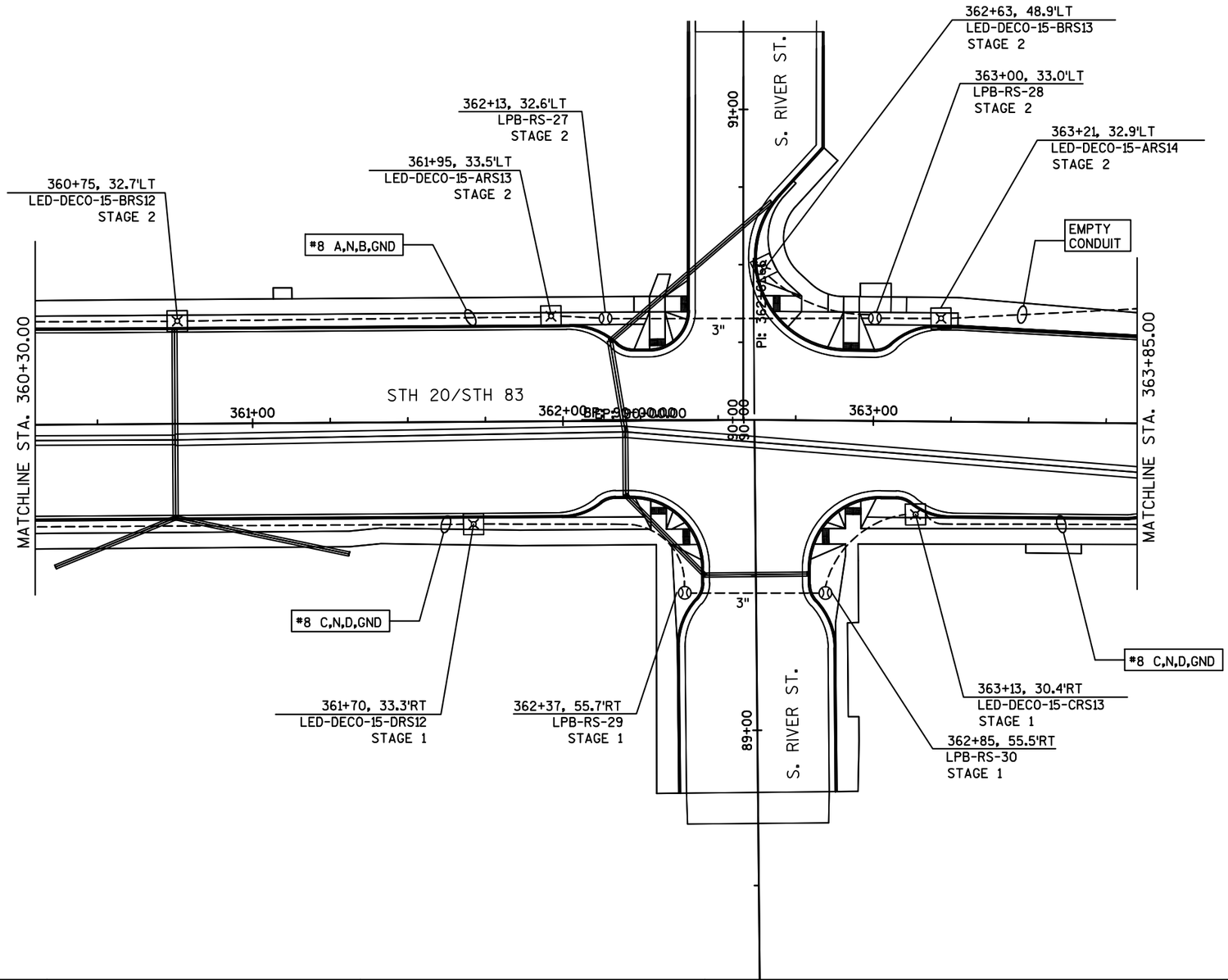
- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE #
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE



N

2

SHEET 19 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 219 E

2

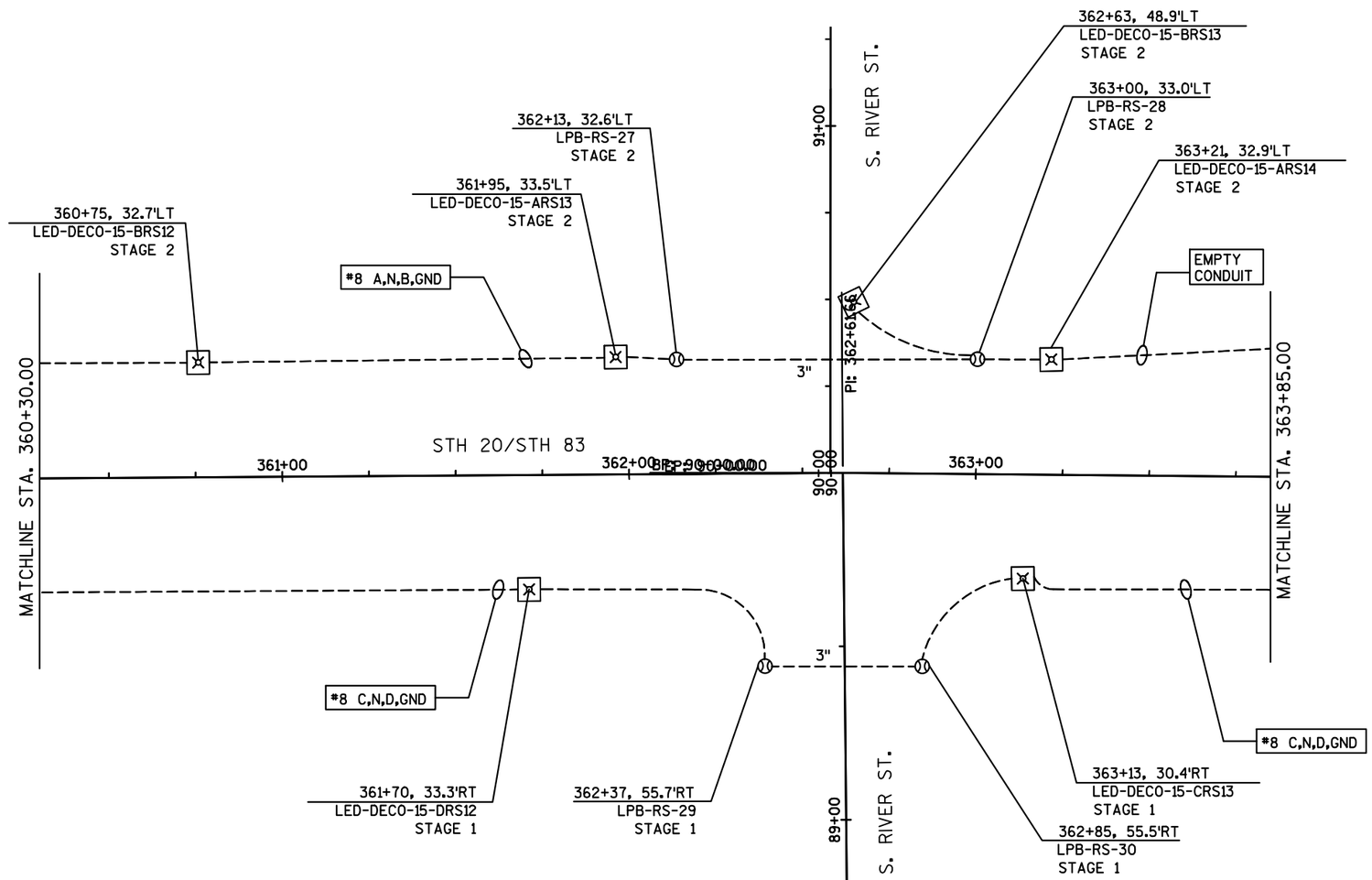
LEGEND

- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — 100+00.00, (100.00RT) — OFFSET

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE #
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE



SHEET 20 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET 220	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 2:03 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

LEGEND

- DISTRIBUTION CENTER
- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- JUNCTION BOX
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE #
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

LIGHTING OF INTERSECTION SHOWN ON TRAFFIC SIGNAL SHEET

N

364+40, 33.0'LT
LED-DECO-15-AFS1
STAGE 2

364+35, 33.0'LT
LJB-FS-3
STAGE 2

364+18, 39.0'LT
LPB-RS-32
STAGE 2

EMPTY CONDUIT

365+93, 38.1'LT
LPB-FS-8
STAGE 2

*8 A,N,B
*8 GND

365+83, 33.0'LT
LJB-FS-4
STAGE 2

365+70, 33.0'LT
LED-DECO-15-BFS1
STAGE 2

FOX RIVER

MATCHLINE STA. 363+85.00

364+00

365+00

STH 20/STH 83

368+00

3"

*8 A,N,B
*2 A,N,B
2 *8 GND

366+90, 28.1'LT
LED-DECO-15-AFS2
STAGE 2

*4 A,N,B
*8 GND

101+00, 27.6'LT
LED-DECO-15-BFS2
STAGE 2

102+25, 27.8'LT
LED-DECO-15-AFS3
STAGE 2

MP: 366+23.14

PT: 366+50.68

BP: 366+54.16

100+00

101+00

102+00

102+40.00

MATCHLINE STA. 102+40.00

E. MAIN ST.

*8 D,N,GND

364+00, 41.0'LT
LPB-RS-31
STAGE 1

EMPTY CONDUIT

363+98, 97.9'RT
LED-DECO-15-DRS13
STAGE 1

364+35, 36.0'RT
LJB-FS-2
STAGE 1

364+40, 36.0'RT
LED-DECO-15-CFS1
STAGE 1

FOX RIVER

365+70, 36.0'RT
LED-DECO-15-DFS1
STAGE 1

365+83, 36.0'RT
LJB-FS-1
STAGE 1

*8 C,N,D
*8 GND

365+93, 40.5'RT
LPB-FS-2
STAGE 1

EXISTING WISDOT SIGNAL CABINET

UTILITY POWER SOURCE

*2 A,N,B
*8 C,N,D
2 *8 GND

367+25, 54.2'RT
FIRST STREET
LIGHTING CONTROLLER (FS)
STAGE 1

*2 A,N,B
*2 C,N,D
*2 E,N,F
*2 G,N,H
4 *8 GND

367+15, 29.5'RT
LED-DECO-15-CFS2
STAGE 1

367+25, 26.8'RT
LPB-FS-1
STAGE 1

*2 E,N,F
*8 GND

*2 C,N,D
*8 GND

367+00

STH 20/STH 83

2-3"

2-3"

367+25, 26.4'LT
LPB-FS-3
STAGE 2

*2 G,N,H
*8 GND

367+50, 25.8'LT
LED-DECO-15-GFS1
STAGE 2

MATCHLINE STA. 367+75.00
(SEE SHEET 27)

*2 C,N,D
*8 GND

*4 C,N,D
*8 GND

101+50, 26.1'RT
LED-DECO-15-DFS2
STAGE 1

FS	
A,C,E,G	RED
B,D,F,H	BLACK
N	WHITE
GND	GREEN OR BARE
A,B,C,D,E,F,G,H	30A
240/480VAC 3 WIRE ISOLATED NEUTRAL	

SHEET 21 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 221	E

LEGEND

- DISTRIBUTION CENTER
- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- JUNCTION BOX
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — OFFSET
100+00.00, (100.00RT)
LED C A(T) 4 ANS1
- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

LIGHTING OF INTERSECTION SHOWN ON TRAFFIC SIGNAL SHEET

N

364+40, 33.0'LT
LED-DECO-15-AFS1
STAGE 2

364+35, 33.0'LT
LJB-FS-3
STAGE 2

364+18, 39.0'LT
LPB-RS-32
STAGE 2

EMPTY CONDUIT

365+93, 38.1'LT
LPB-FS-8
STAGE 2

*8 A,N,B
*8 GND

365+83, 33.0'LT
LJB-FS-4
STAGE 2

365+70, 33.0'LT
LED-DECO-15-BFS1
STAGE 2

FOX RIVER

MATCHLINE STA. 363+85.00

364+00

365+00

STH 20/STH 83

368+00

PC: 366+95.59

Mid: 366+23.14

PT: 366+50.68

*8 A,N,B
*2 A,N,B
2 *8 GND

366+90, 28.1'LT
LED-DECO-15-AFS2
STAGE 2

*4 A,N,B
*8 GND

101+00, 27.6'LT
LED-DECO-15-BFS2
STAGE 2

102+25, 27.8'LT
LED-DECO-15-AFS3
STAGE 2

102+40.00

MATCHLINE STA. 102+40.00

STH 20/STH 83

100+00

101+00

102+00

BP: 366+54.16

366+54

3"

*8 D,N,GND

364+00, 41.0'LT
LPB-RS-31
STAGE 1

EMPTY CONDUIT

363+98, 97.9'RT
LED-DECO-15-DRS13
STAGE 1

364+35, 36.0'RT
LJB-FS-2
STAGE 1

364+40, 36.0'RT
LED-DECO-15-CFS1
STAGE 1

FOX RIVER

365+70, 36.0'RT
LED-DECO-15-DFS1
STAGE 1

365+83, 36.0'RT
LJB-FS-1
STAGE 1

*8 C,N,D
*8 GND

365+93, 40.5'RT
LPB-FS-2
STAGE 1

EXISTING WISDOT SIGNAL CABINET

UTILITY POWER SOURCE

*2 A,N,B
*8 C,N,D
2 *8 GND

367+25, 54.2'RT
FIRST STREET
LIGHTING CONTROLLER (FS)
STAGE 1

*2 A,N,B
*2 C,N,D
*2 E,N,F
*2 G,N,H
4 *8 GND

367+15, 29.5'RT
LED-DECO-15-CFS2
STAGE 1

367+25, 26.8'RT
LPB-FS-1
STAGE 1

*2 E,N,F
*8 GND

*2 C,N,D
*8 GND

367+00

2-3"

2-3"

STH 20/STH 83

MATCHLINE STA. 367+75.00
(SEE SHEET 27)

E. MAIN ST.

*2 C,N,D
*8 GND

*4 C,N,D
*8 GND

101+50, 26.1'RT
LED-DECO-15-DFS2
STAGE 1

367+25, 26.4'LT
LPB-FS-3
STAGE 2

*2 G,N,H
*8 GND

367+50, 25.8'LT
LED-DECO-15-GFS1
STAGE 2

FS	
A,C,E,G	RED
B,D,F,H	BLACK
N	WHITE
GND	GREEN OR BARE
A,B,C,D,E,F,G,H	30A
240/480VAC 3 WIRE ISOLATED NEUTRAL	

SHEET 22 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET 222	E

LEGEND

- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — OFFSET
100+00.00, (100.00RT)
LED C A(T) 4 ANS1
- ANS1 — CIRCUIT, SOURCE, POLE #
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE

N

EP: 142+00.00

N. 2ND STREET

N. 3RD STREET

E. MAIN ST.

MATCHLINE STA. 102+40.00

MATCHLINE STA. 107+50.00

PI: 103+08.60

PI: 106+93.33

102+89, 46.1'LT
LPB-FS-9
STAGE 2

103+31, 45.7'LT
LPB-FS-10
STAGE 2

103+50, 21.3'LT
LED-DECO-15-BFS3
STAGE 2

104+30, 27.2'LT
LED-DECO-15-AFS4
STAGE 2

105+75, 21.6LRT
LED-DECO-15-BFS4
STAGE 2

105+98, 46.6'LT
LPB-FS-11
STAGE 2

106+40, 46.9'LT
LPB-FS-12
STAGE 2

106+95, 26.0'LT
LED-DECO-15-AFS5
STAGE 2

*4 A,N,B
*8 GND

3"

102+60, 24.4'RT
LED-DECO-15-CFS3
STAGE 1

102+85, 48.4'RT
LPB-FS-4
STAGE 1

103+31, 46.8'RT
LPB-FS-5
STAGE 1

104+00, 25.8'RT
LED-DECO-15-DFS3
STAGE 1

*4 C,N,D
*8 GND

105+15, 25.8'RT
LED-DECO-15-CFS4
STAGE 1

105+99, 45.6'RT
LPB-FS-6
STAGE 1

106+39, 45.2'LT
LPB-FS-7
STAGE 1

106+70, 23.7'RT
LED-DECO-15-DFS4
STAGE 1

*4 C,N,D
*8 GND

103+00 104+00 105+00 106+00 107+00

131+50 131+00 130+00 129+00 142+00 141+00 140+00 139+00

SHEET 23 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 223 E

LEGEND

PROPOSED DECORATIVE LOCAL LIGHTING UNIT

PULL BOX 24" x 42"

CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

N

EP: 142+00.00

N. 2ND STREET

N. 3RD STREET

E. MAIN ST.

MATCHLINE STA. 102+40.00

MATCHLINE STA. 107+50.00

131+50

131+00

130+00

129+00

142+00

141+00

140+00

139+00

103+00

104+00

105+00

106+00

107+00

PI: 103+08.60

PI: 106+19.33

3"

102+89, 46.1'LT
LPB-FS-9
STAGE 2

103+31, 45.7'LT
LPB-FS-10
STAGE 2

103+50, 21.3'LT
LED-DECO-15-BFS3
STAGE 2

*4 A,N,B
*8 GND

104+30, 27.2'LT
LED-DECO-15-AFS4
STAGE 2

105+75, 21.6LRT
LED-DECO-15-BFS4
STAGE 2

105+98, 46.6'LT
LPB-FS-11
STAGE 2

106+40, 46.9'LT
LPB-FS-12
STAGE 2

106+95, 26.0'LT
LED-DECO-15-AFS5
STAGE 2

*4 A,N,B
*8 GND

102+60, 24.4'RT
LED-DECO-15-CFS3
STAGE 1

102+85, 48.4'RT
LPB-FS-4
STAGE 1

103+31, 46.8'RT
LPB-FS-5
STAGE 1

104+00, 25.8'RT
LED-DECO-15-DFS3
STAGE 1

*4 C,N,D
*8 GND

105+15, 25.8'RT
LED-DECO-15-CFS4
STAGE 1

105+99, 45.6'RT
LPB-FS-6
STAGE 1

106+39, 45.2'LT
LPB-FS-7
STAGE 1

106+70, 23.7'RT
LED-DECO-15-DFS4
STAGE 1

*4 C,N,D
*8 GND

SHEET 24 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:32 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

2

LEGEND

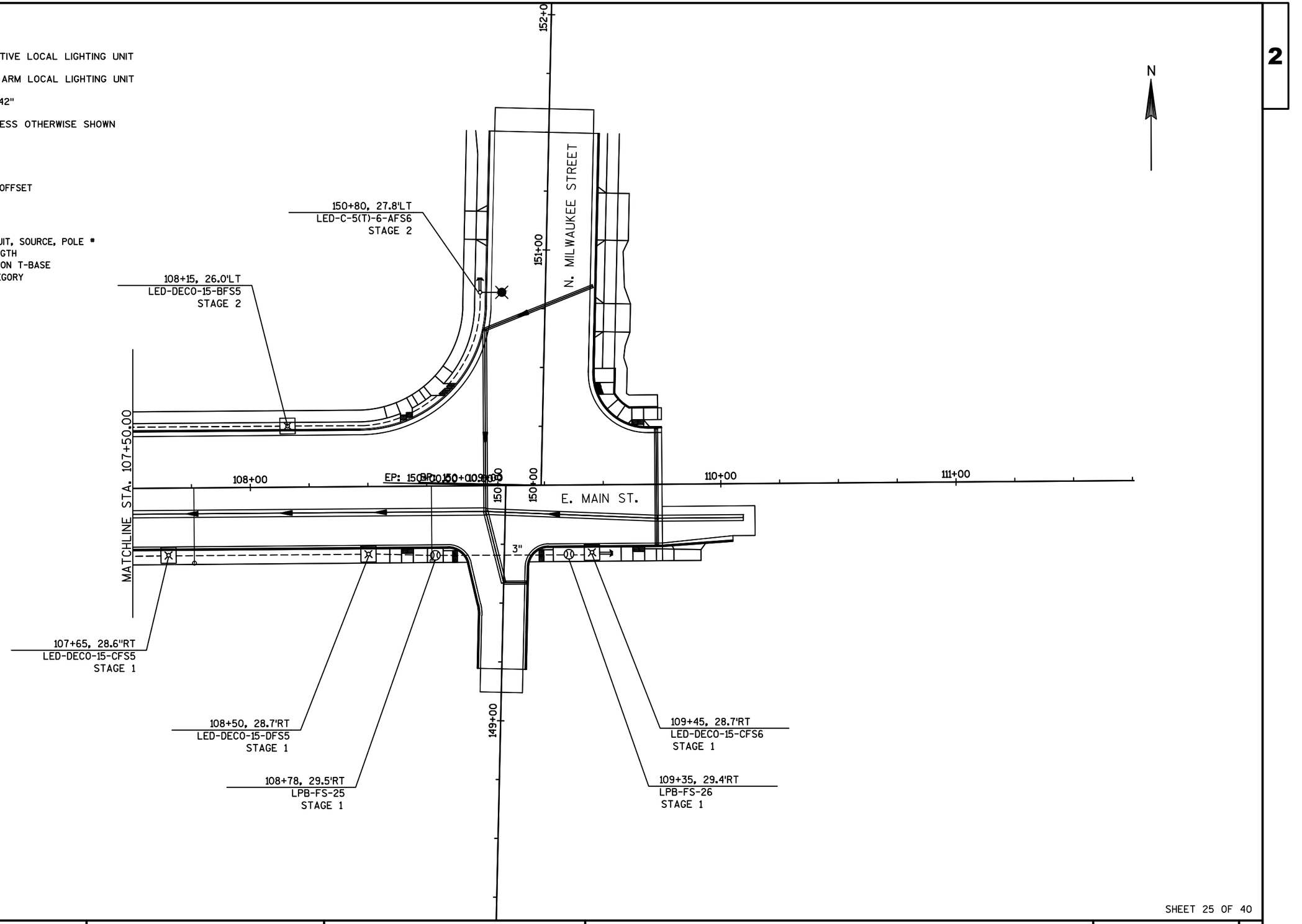
- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PROPOSED SINGLE ARM LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- CONDUIT STUBOUT

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE



SHEET 25 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 225	E

LEGEND

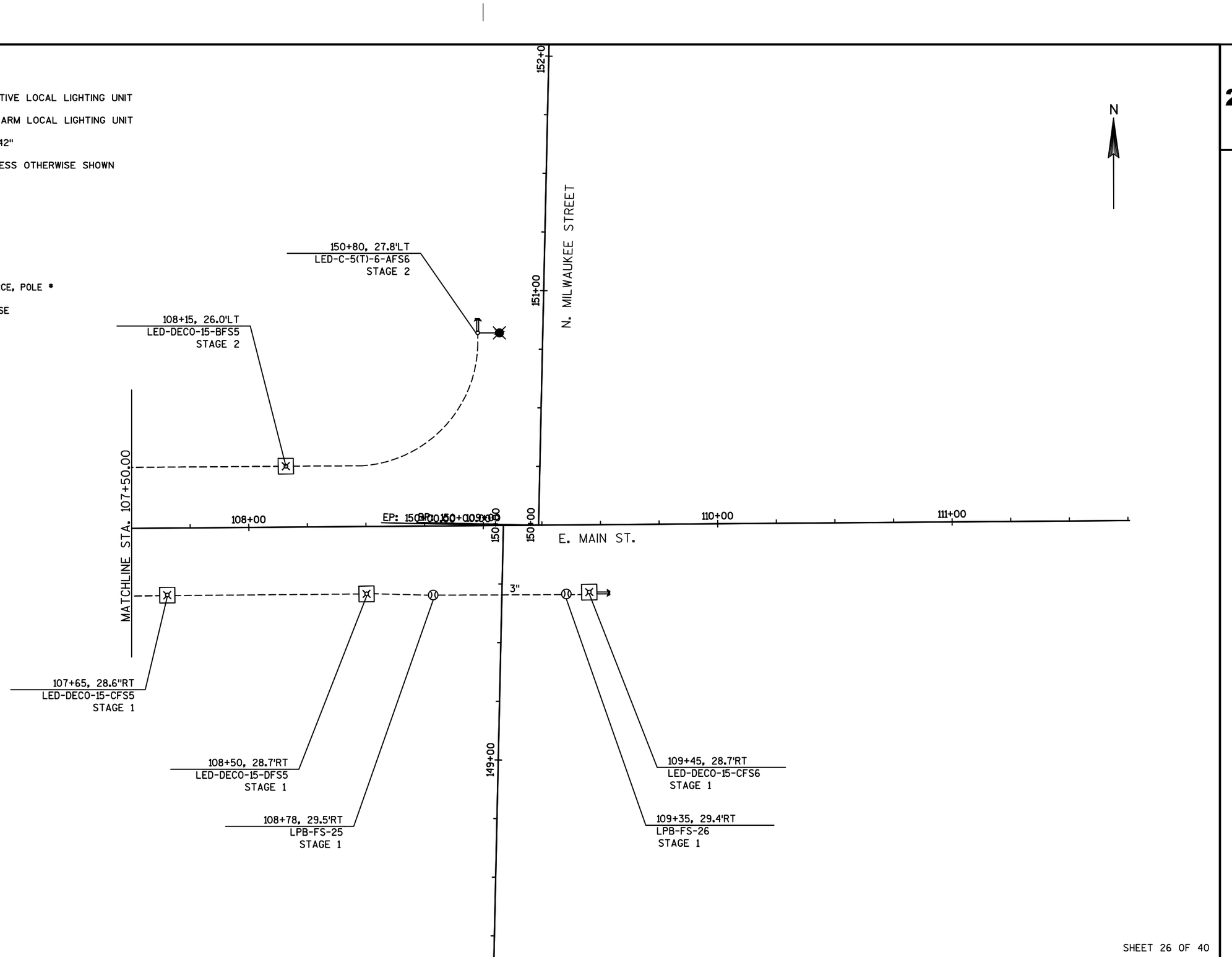
- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PROPOSED SINGLE ARM LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- CONDUIT STUBOUT

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE



SHEET 26 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:32 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

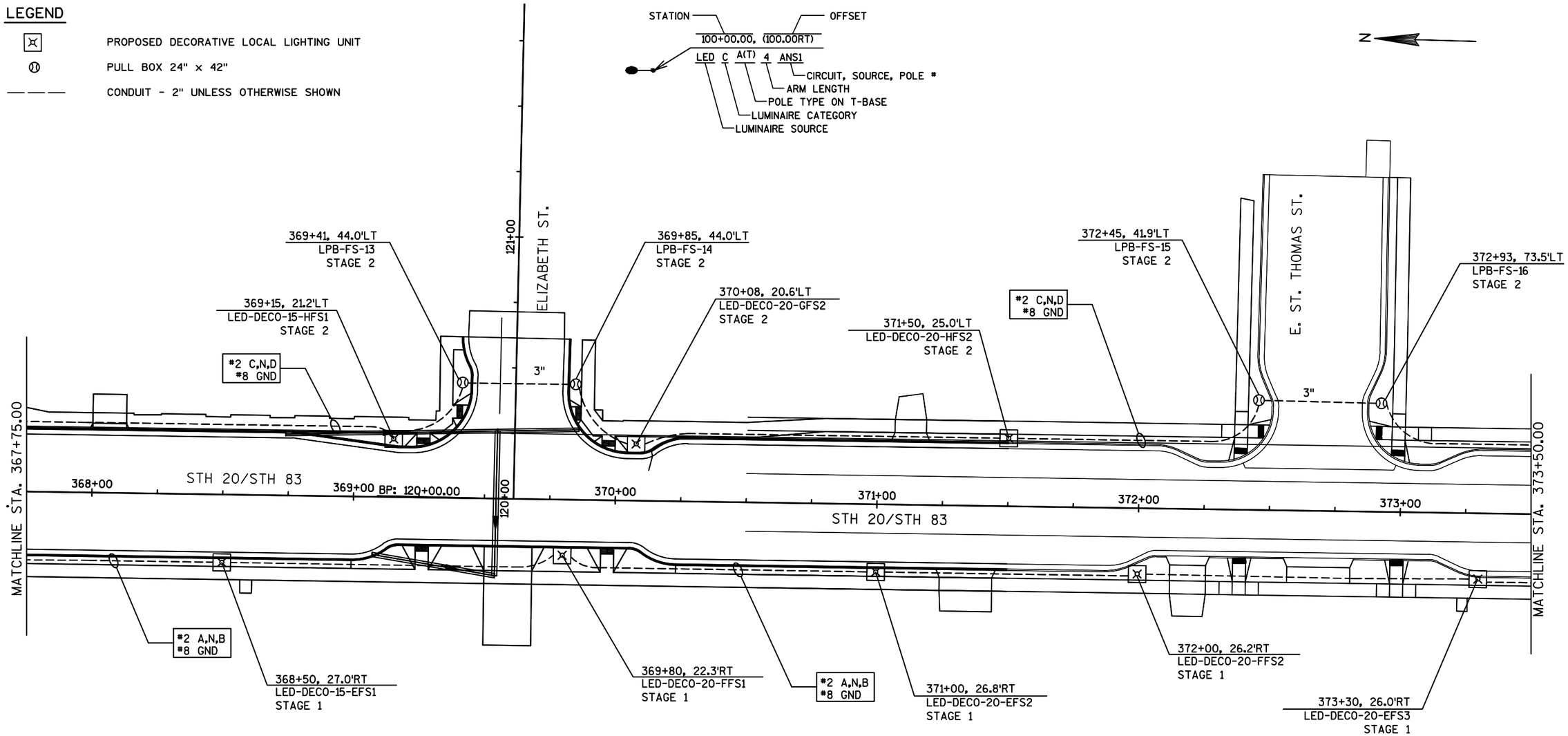
LEGEND

- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — 100+00.00, (100.00RT) — OFFSET

LED C A(T) 4 ANS1
- ANS1 — CIRCUIT, SOURCE, POLE *
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE

N



SHEET 27 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 227 E

2

LEGEND

- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE #
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

N

ELIZABETH ST.

E. ST. THOMAS ST.

121+00

120+00

3"

MATCHLINE STA. 367+75.00

MATCHLINE STA. 373+50.00

368+00 STH 20/STH 83 369+00 BP: 120+00.00 370+00 371+00 372+00 373+00 STH 20/STH 83

369+41, 44.0'LT
LPB-FS-13
STAGE 2

369+15, 21.2'LT
LED-DECO-15-HFS1
STAGE 2

*2 C,N,D
*8 GND

369+85, 44.0'LT
LPB-FS-14
STAGE 2

370+08, 20.6'LT
LED-DECO-20-GFS2
STAGE 2

371+50, 25.0'LT
LED-DECO-20-HFS2
STAGE 2

*2 C,N,D
*8 GND

372+45, 41.9'LT
LPB-FS-15
STAGE 2

372+93, 73.5'LT
LPB-FS-16
STAGE 2

*2 A,N,B
*8 GND

368+50, 27.0'RT
LED-DECO-15-EFS1
STAGE 1

369+80, 22.3'RT
LED-DECO-20-FFS1
STAGE 1

*2 A,N,B
*8 GND

371+00, 26.8'RT
LED-DECO-20-EFS2
STAGE 1

372+00, 26.2'RT
LED-DECO-20-FFS2
STAGE 1

373+30, 26.0'RT
LED-DECO-20-EFS3
STAGE 1

SHEET 28 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:33 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

PROPOSED DECORATIVE LOCAL LIGHTING UNIT

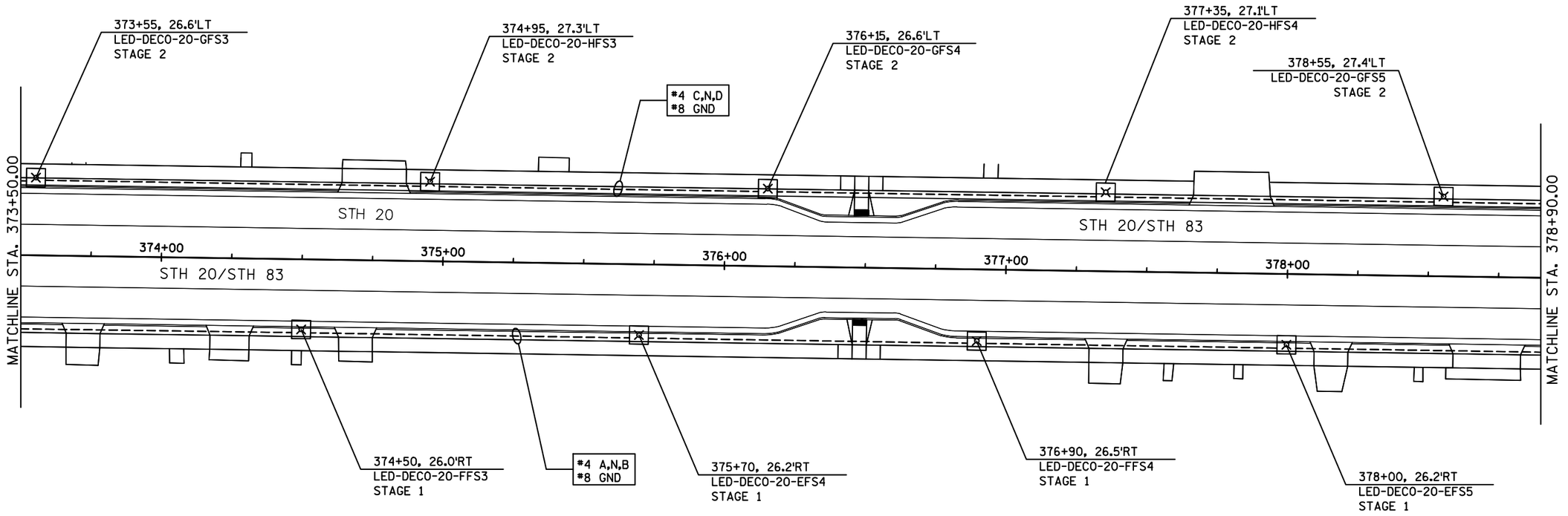
CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — 100+00.00, OFFSET — (100.00RT)

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE #
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE

N



2

SHEET 29 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 229	E

LEGEND

PROPOSED DECORATIVE LOCAL LIGHTING UNIT

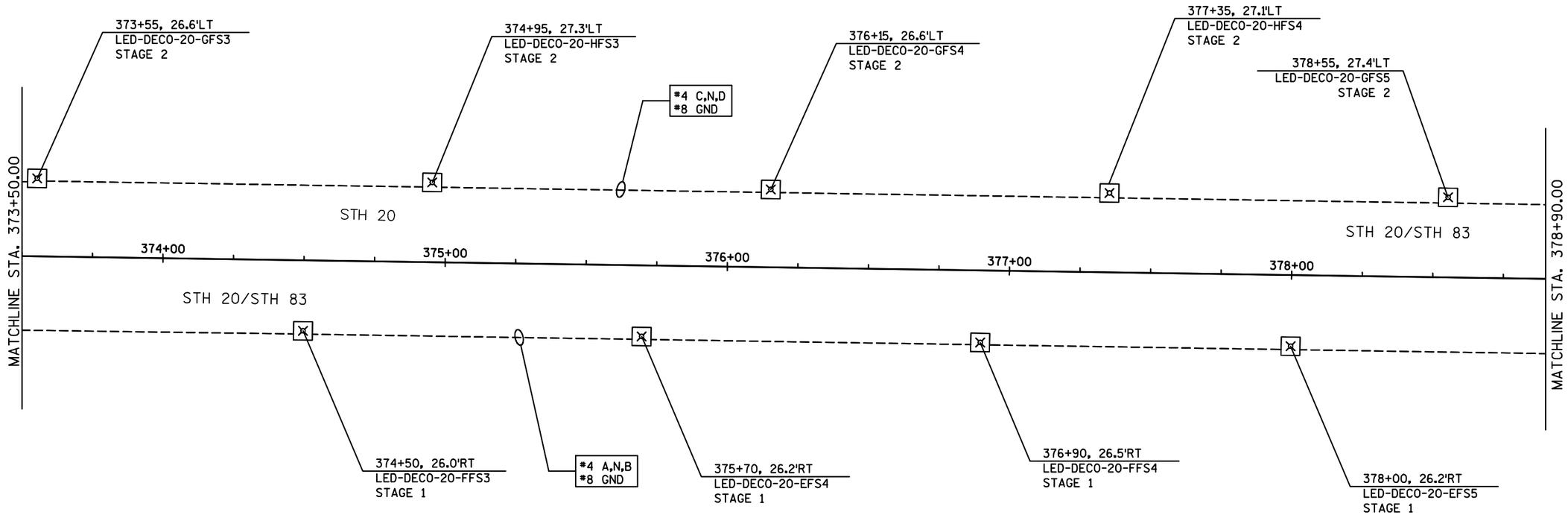
CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — 100+00.00, OFFSET — (100.00RT)

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE *
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE

N



LEGEND

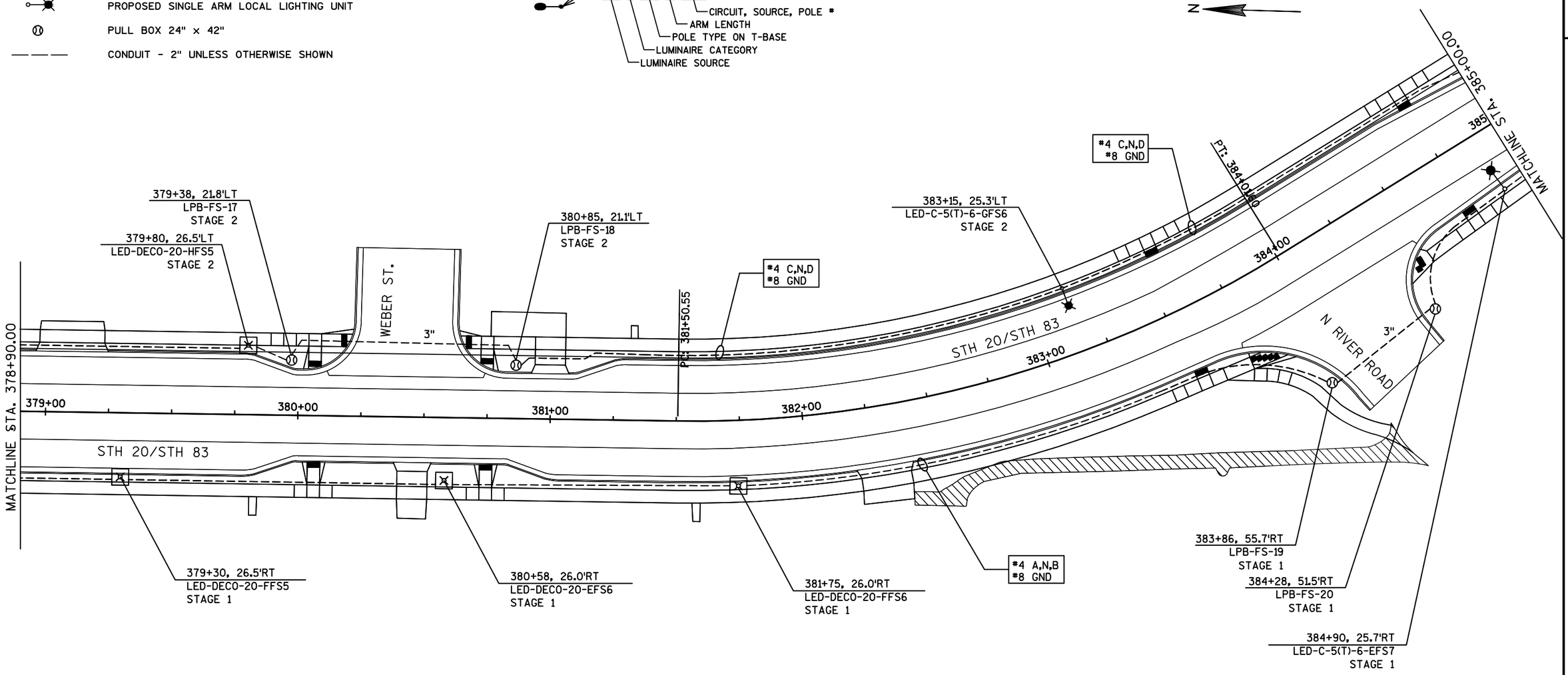
- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PROPOSED SINGLE ARM LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE #
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE



2

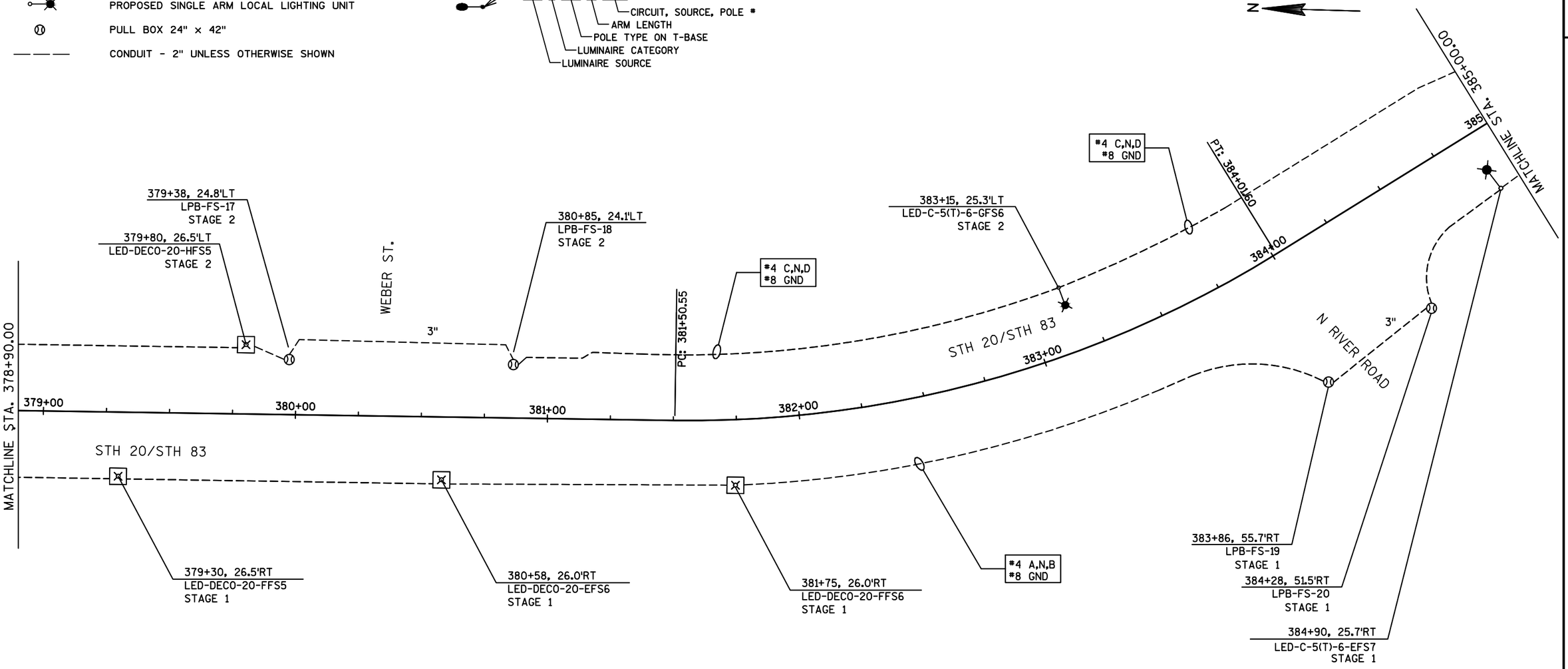
LEGEND

- PROPOSED DECORATIVE LOCAL LIGHTING UNIT
- PROPOSED SINGLE ARM LOCAL LIGHTING UNIT
- PULL BOX 24" x 42"
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — 100+00.00, (100.00RT) — OFFSET

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE #
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE



SHEET 32 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:35 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

2

LEGEND

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

CONDUIT - 2" UNLESS OTHERWISE SHOWN

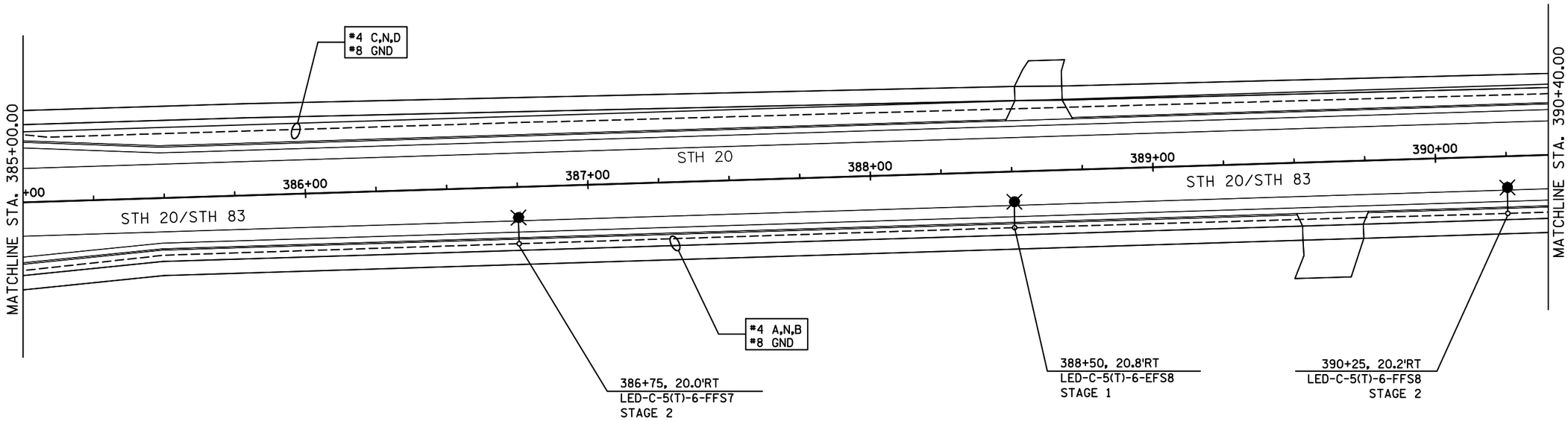
STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE *
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

N



LEGEND

- REMOTE METER PEDESTAL
- PAD MOUNT TRANSF. (WEPCO)
- DISTRIBUTION CENTER
- PHOTO CELL POLE
- PULL BOX- 24" UNLESS OTHERWISE NOTED)
- LIGHTING SYSTEM MANHOLE
- JUNCTION BOX
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- CID (CABLE IN DUCT)
- LIGHT POLE, ARM MOUNTED LUMINAIRE
- PROPOSED SINGLE ARM LOCAL LIGHTING UNIT
- CONDUIT STUBOUT

SHEET 33 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:35 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

LEGEND

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

CONDUIT - 2" UNLESS OTHERWISE SHOWN

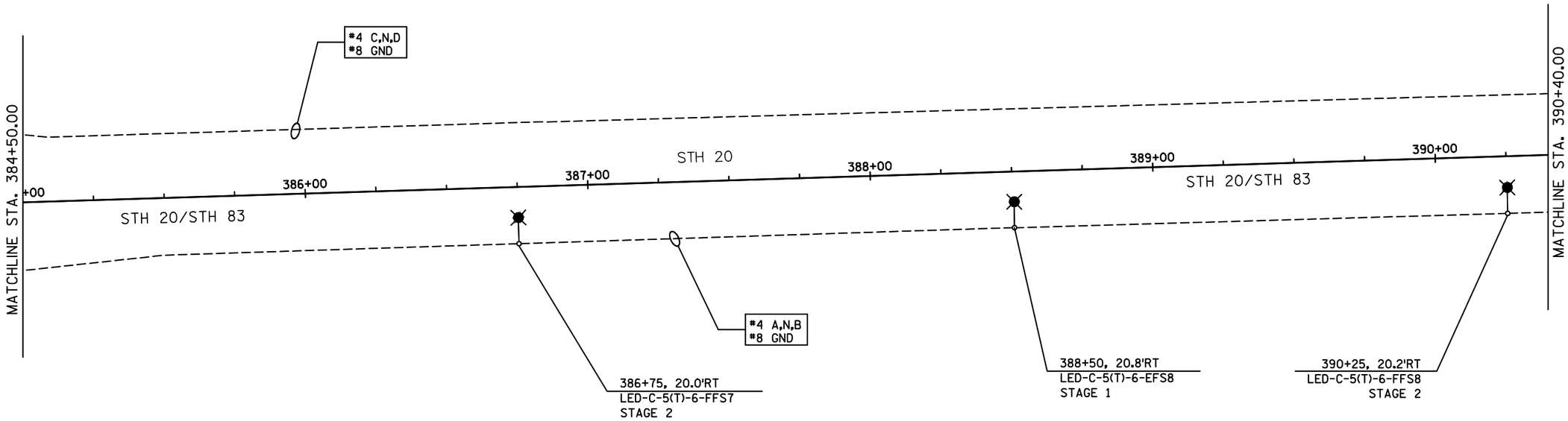
STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE #
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE

N



2

LEGEND

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

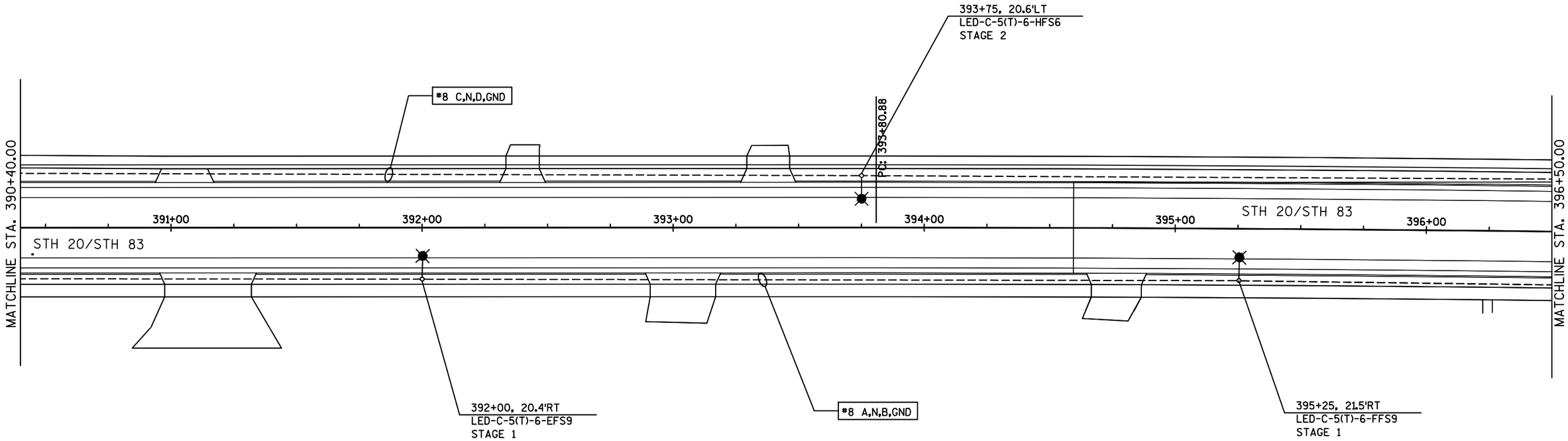
CONDUIT - 2" UNLESS OTHERWISE SHOWN

STATION — 100+00.00, (100.00RT) — OFFSET

LED C A(T) 4 ANS1

- CIRCUIT, SOURCE, POLE #
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

N



2

SHEET 35 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:36 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

CONDUIT - 2" UNLESS OTHERWISE SHOWN

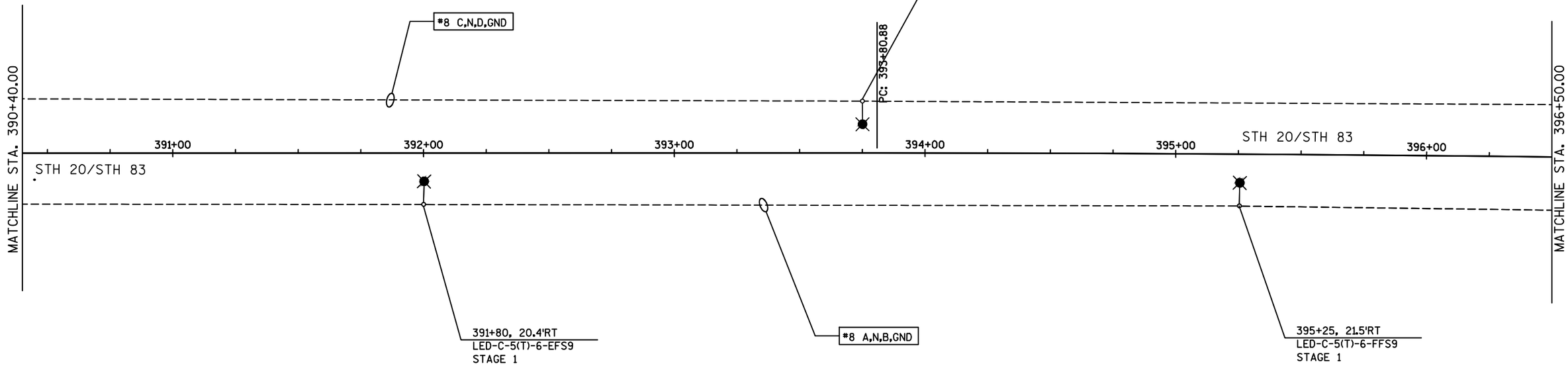
STATION — 100+00.00, (100.00RT) — OFFSET

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE #
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE

N

2



SHEET 36 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:36 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PULL BOX 24" x 42"

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE #
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE

N

396+60, 20.3'LT
LED-C-5(T)-6-GFS7
STAGE 2

*8 C,N,D,GND

398+08, 20.9'LT
LPB-FS-21
STAGE 2

399+00, 21.0'LT
LPB-FS-22
STAGE 2

399+40, 20.3'LT
LED-C-5(T)-6-HFS7
STAGE 2

*8 C,N,D,GND

EVERGREEN DRIVE

3"

PI: 398+76.50

MATCHLINE STA. 396+50.00

397+00 398+00 399+00 400+00 401+00 402+00

STH 20/STH 83

STH 20/STH 83

MATCHLINE STA. 402+70.00

EVERGREEN DRIVE

3"

*8 A,N,B,GND

398+05, 21.8'RT
LED-C-5(T)-6-EFS10
STAGE 1

398+30, 24.0'RT
LPB-FS-23
STAGE 1

*8 A,N,B,GND

398+96, 22.2'RT
LPB-FS-24
STAGE 1

401+05, 21.2'RT
LED-C-5(T)-6-FFS10
STAGE 1

402+65, 21.0'RT
LED-C-5(T)-6-EFS11
STAGE 1

SHEET 37 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 237	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:37 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

CONDUIT - 2" UNLESS OTHERWISE SHOWN

PULL BOX 24" x 42"

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- LED — LUMINAIRE SOURCE
- C — LUMINAIRE CATEGORY
- A(T) — POLE TYPE ON T-BASE
- 4 — ARM LENGTH
- ANS1 — CIRCUIT, SOURCE, POLE #

N

396+60, 20.3'LT
LED-C-5(T)-6-GFS7
STAGE 2

*8 C,N,D,GND

398+08, 20.9'LT
LPB-FS-21
STAGE 2

399+00, 21.0'LT
LPB-FS-22
STAGE 2

399+40, 20.3'LT
LED-C-5(T)-6-HFS7
STAGE 2

*8 C,N,D,GND

3"

EVERGREEN DRIVE

PT: 398+76.50

MATCHLINE STA. 396+50.00

397+00 398+00 399+00 400+00 401+00 402+00

STH 20/STH 83

MATCHLINE STA. 402+70.00

STH 20/STH 83

3"

EVERGREEN DRIVE

*8 A,N,B,GND

398+05, 21.8'RT
LED-C-5(T)-6-EFS10
STAGE 1

398+30, 24.0'RT
LPB-FS-23
STAGE 1

398+96, 22.2'RT
LPB-FS-24
STAGE 1

*8 A,N,B,GND

401+05, 21.2'RT
LED-C-5(T)-6-FFS10
STAGE 1

402+65, 21.0'RT
LED-C-5(T)-6-EFS11
STAGE 1

SHEET 38 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET	E

FILE NAME : W:\PROJECTS\15158.03 - ID 2250-12-00 STH 20 - LIGHTING\DRAWINGS\CADD SHEETS\023601_LP_MOD.DWG PLOT DATE : 7/17/2018 1:37 PM PLOT BY : JOHN ABADEZA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

CONDUIT - 2" UNLESS OTHERWISE SHOWN

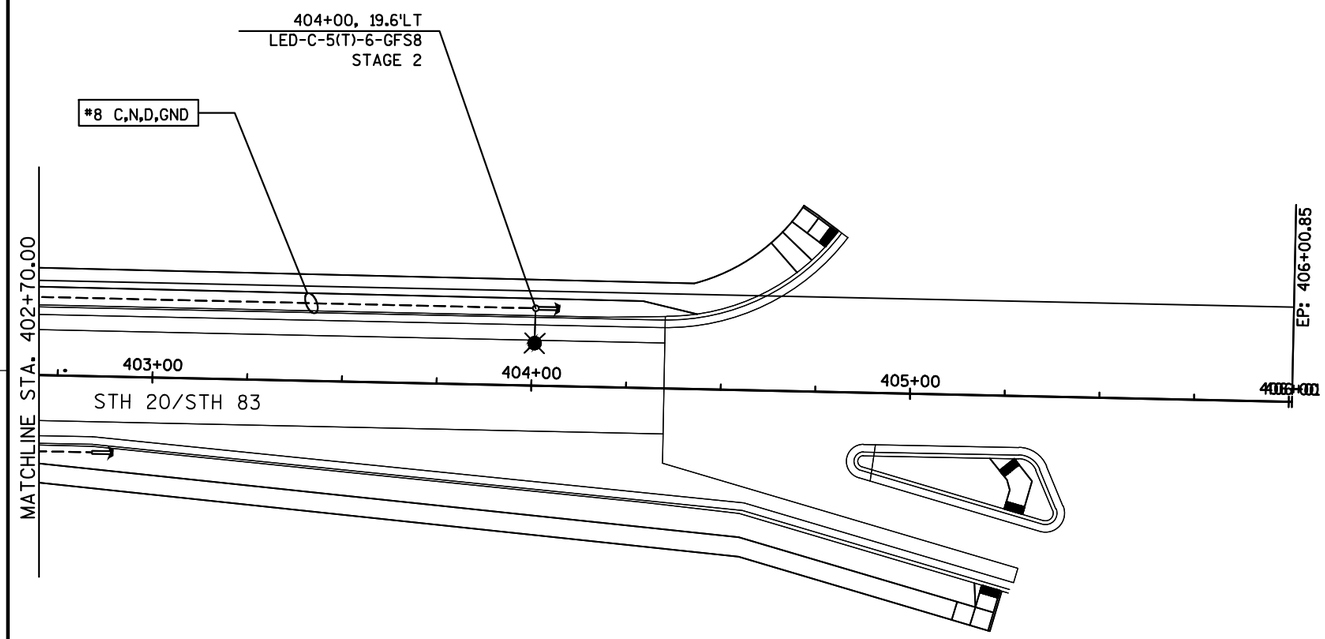
CONDUIT STUBOUT

STATION — 100+00.00, (100.00RT) — OFFSET

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE *
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE

N



SHEET 39 OF 40

PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - FINAL	SHEET 239	E

LEGEND

PROPOSED SINGLE ARM LOCAL LIGHTING UNIT

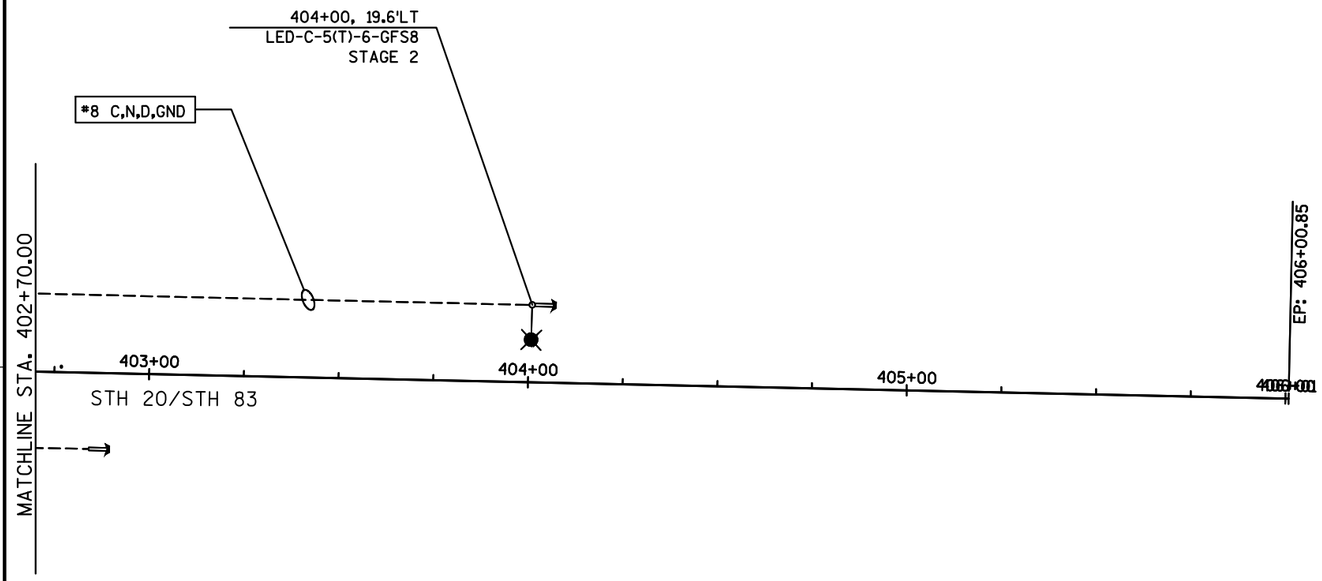
CONDUIT - 2" UNLESS OTHERWISE SHOWN

CONDUIT STUBOUT

STATION — 100+00.00, (100.00RT) — OFFSET

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE *
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE



SHEET 40 OF 40

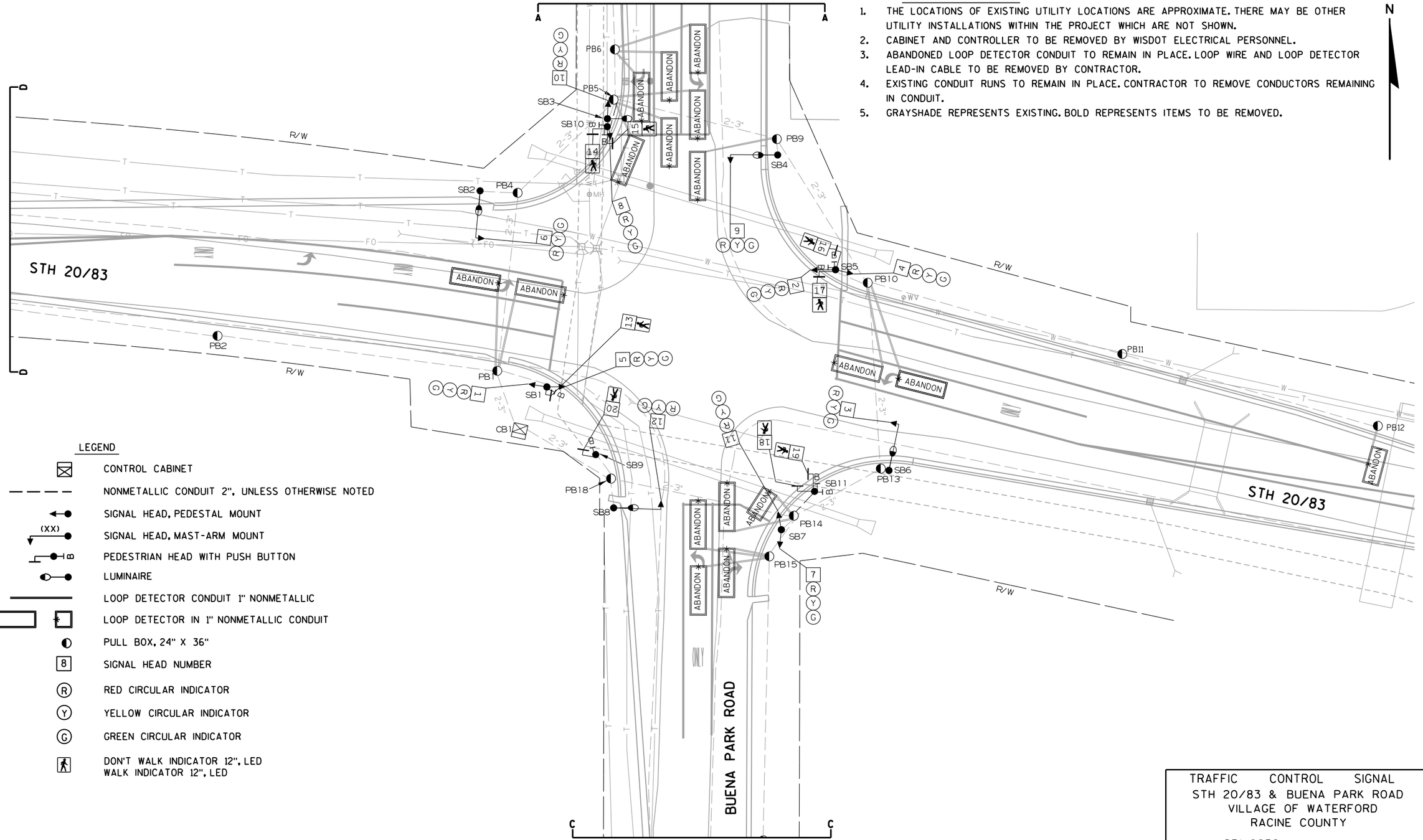
PROJECT NO: 2250-12-70	HWY: STH 20/STH 83	COUNTY: RACINE	LIGHTING PLANS - SCHEMATIC	SHEET 240	E

2

CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING UTILITY LOCATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. CABINET AND CONTROLLER TO BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
3. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP WIRE AND LOOP DETECTOR LEAD-IN CABLE TO BE REMOVED BY CONTRACTOR.
4. EXISTING CONDUIT RUNS TO REMAIN IN PLACE. CONTRACTOR TO REMOVE CONDUCTORS REMAINING IN CONDUIT.
5. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.

N



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT
- (XX) SIGNAL HEAD, MAST-ARM MOUNT
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- 8 SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- DON'T WALK INDICATOR 12", LED
  WALK INDICATOR 12", LED

TRAFFIC CONTROL SIGNAL
STH 20/83 & BUENA PARK ROAD
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-0852

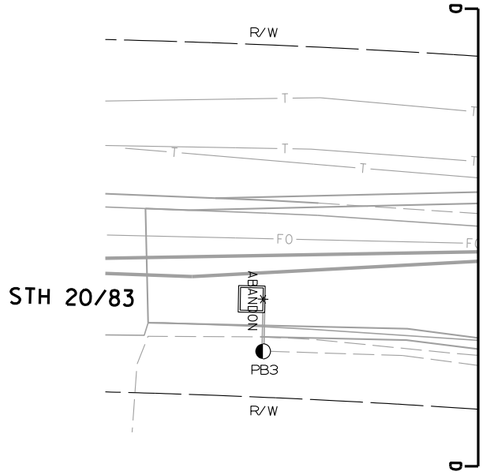
REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

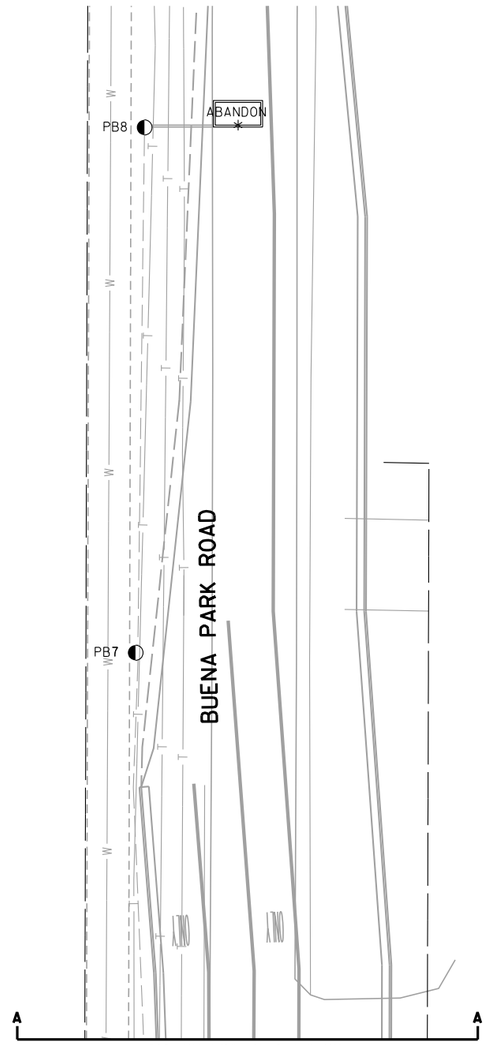
PAGE 1 OF 2

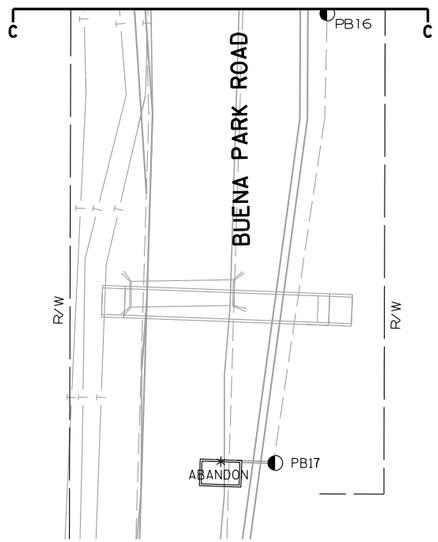
PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET E

2

N







TRAFFIC CONTROL SIGNAL
STH 20/83 & BUENA PARK ROAD
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-0852

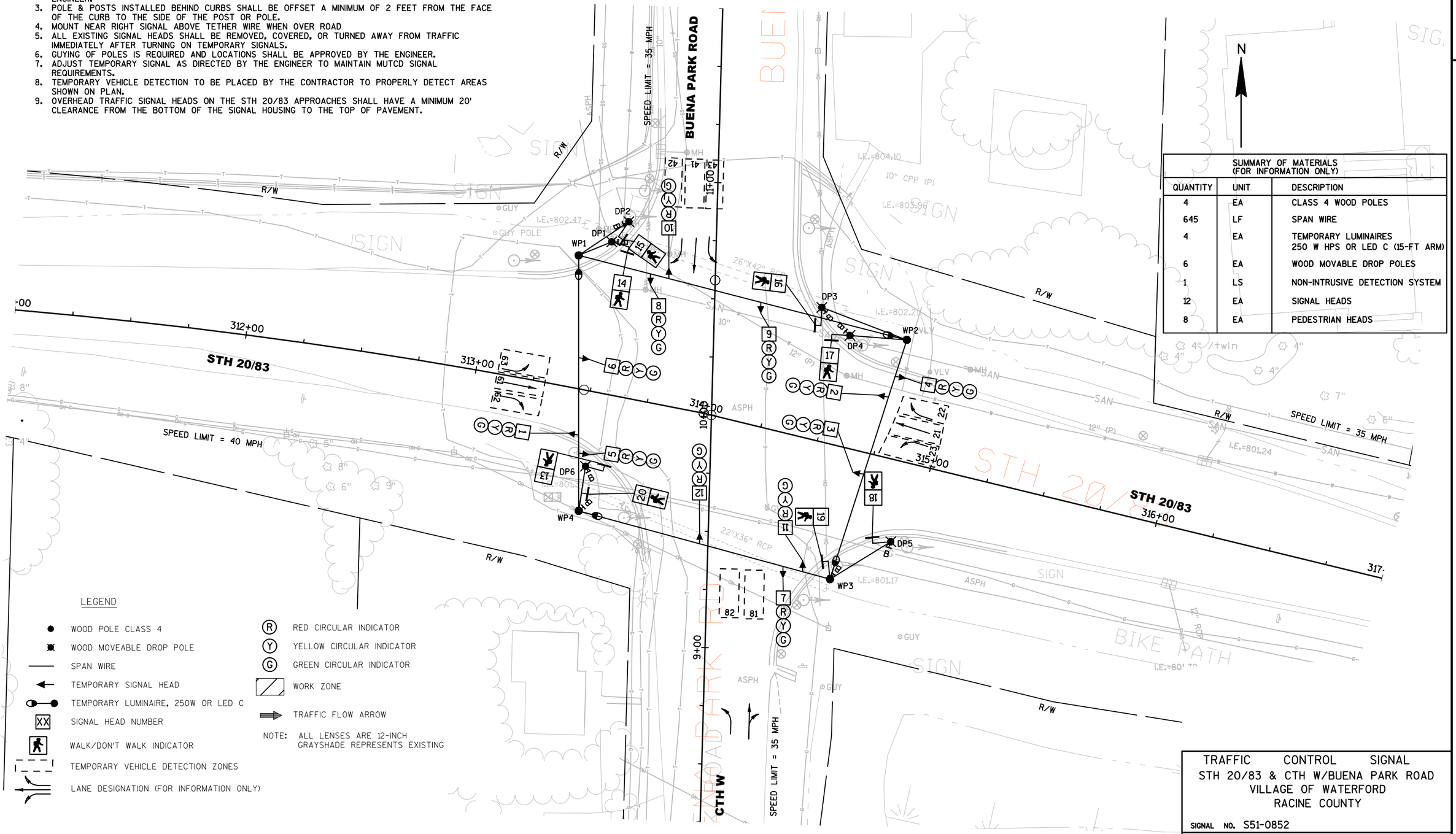
REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

PAGE 2 OF 2

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET E

CONSTRUCTION NOTES:

1. ALL LUMINAIRES ARE 250W HPS UNLESS OTHERWISE NOTED.
2. FINAL LOCATION OF SIGNAL POLES, SIGNAL HEADS, AND SIGNAL CABINET SHALL BE AS DIRECTED BY ENGINEER.
3. POLE & POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF THE CURB TO THE SIDE OF THE POST OR POLE.
4. MOUNT NEAR RIGHT SIGNAL ABOVE TETHER WIRE WHEN OVER ROAD
5. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
6. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
7. ADJUST TEMPORARY SIGNAL AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
8. TEMPORARY VEHICLE DETECTION TO BE PLACED BY THE CONTRACTOR TO PROPERLY DETECT AREAS SHOWN ON PLAN.
9. OVERHEAD TRAFFIC SIGNAL HEADS ON THE STH 20/83 APPROACHES SHALL HAVE A MINIMUM 20' CLEARANCE FROM THE BOTTOM OF THE SIGNAL HOUSING TO THE TOP OF PAVEMENT.



SUMMARY OF MATERIALS (FOR INFORMATION ONLY)		
QUANTITY	UNIT	DESCRIPTION
4	EA	CLASS 4 WOOD POLES
645	LF	SPAN WIRE
4	EA	TEMPORARY LUMINAIRES 250 W HPS OR LED C (15-FT ARM)
6	EA	WOOD MOVABLE DROP POLES
1	LS	NON-INTRUSIVE DETECTION SYSTEM
12	EA	SIGNAL HEADS
8	EA	PEDESTRIAN HEADS

LEGEND

- WOOD POLE CLASS 4
- WOOD MOVEABLE DROP POLE
- SPAN WIRE
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250W OR LED C
- XX SIGNAL HEAD NUMBER
- WALK/DON'T WALK INDICATOR
- TEMPORARY VEHICLE DETECTION ZONES
- LANE DESIGNATION (FOR INFORMATION ONLY)
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- WORK ZONE
- TRAFFIC FLOW ARROW

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
STH 20/83 & CTH W/BUENA PARK ROAD
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-0852

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

PAGE 1 OF 6

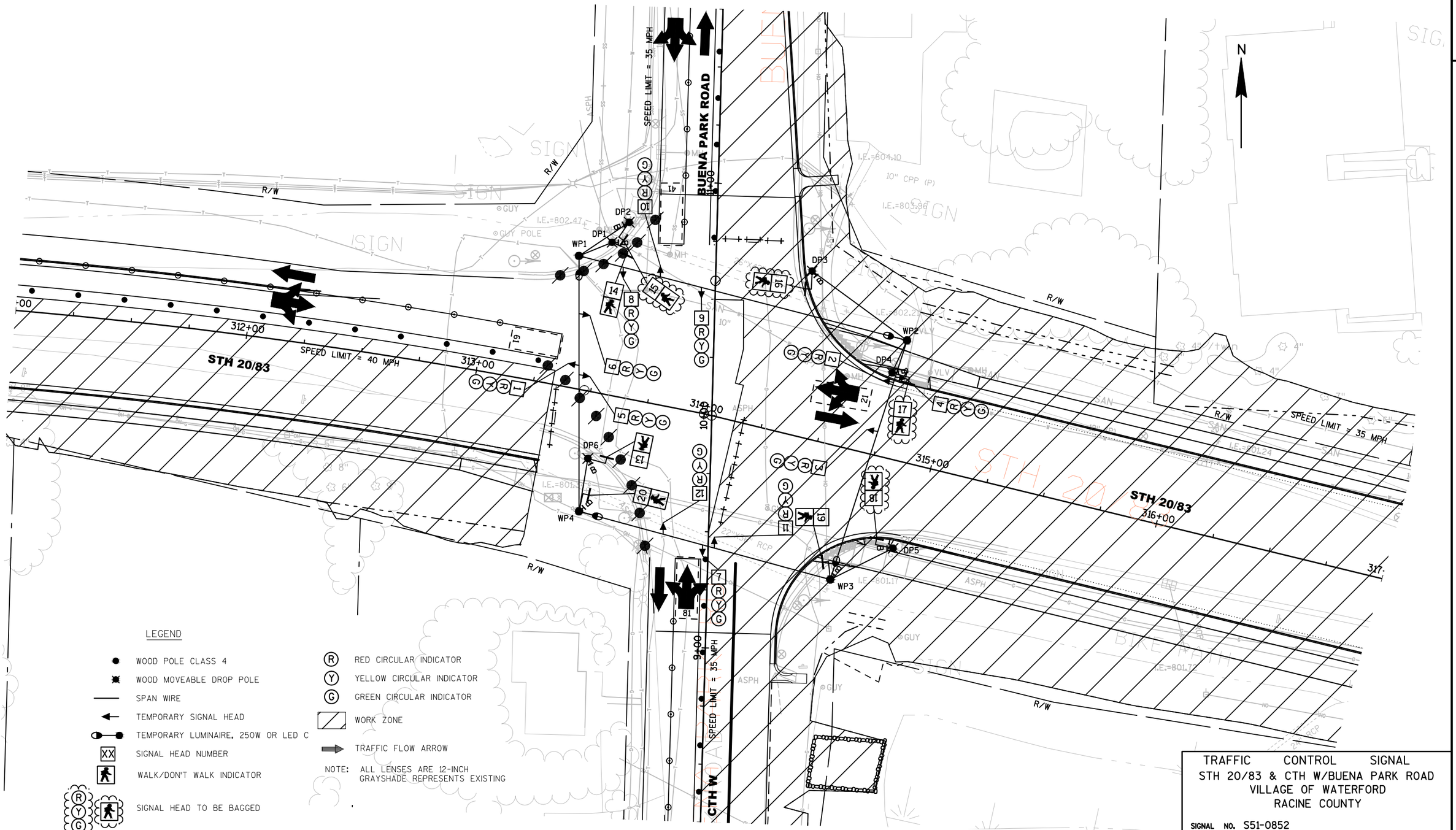
PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN-PRE-CONSTRUCTION & STAGE 1A	SHEET 243	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024101_SP-TEMP1A.DWG
LAYOUT NAME - 024101_SP-TEMP1A - STH 20&BUENA

PLOT DATE : 4/19/2018 1:48 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 42

2



LEGEND

- WOOD POLE CLASS 4
- WOOD MOVEABLE DROP POLE
- SPAN WIRE
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250W OR LED C
- XX SIGNAL HEAD NUMBER
- WALK/DON'T WALK INDICATOR
- SIGNAL HEAD TO BE BAGGED
- TEMPORARY VEHICLE DETECTION ZONES
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- WORK ZONE
- TRAFFIC FLOW ARROW

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
STH 20/83 & CTH W/BUENA PARK ROAD
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-0852

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

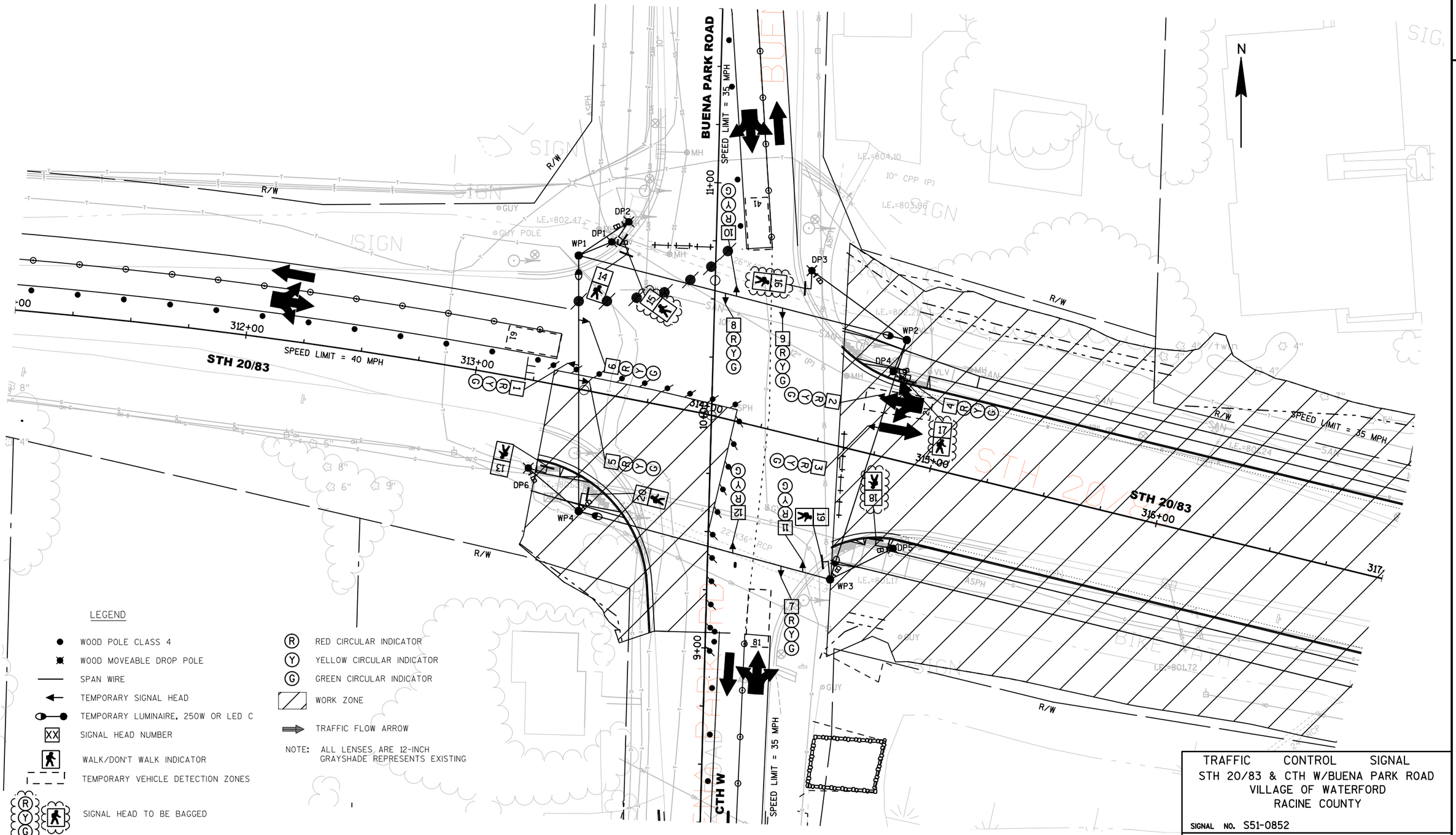
PAGE 2 OF 6

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1B	SHEET 244 E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024201_SP-TEMP1B.DWG
LAYOUT NAME - 024201_SP-TEMP1B - STH 20&BUENA

PLOT DATE : 4/20/2018 3:55 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : **********

2



N

TRAFFIC CONTROL SIGNAL
STH 20/83 & CTH W/BUENA PARK ROAD
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-0852

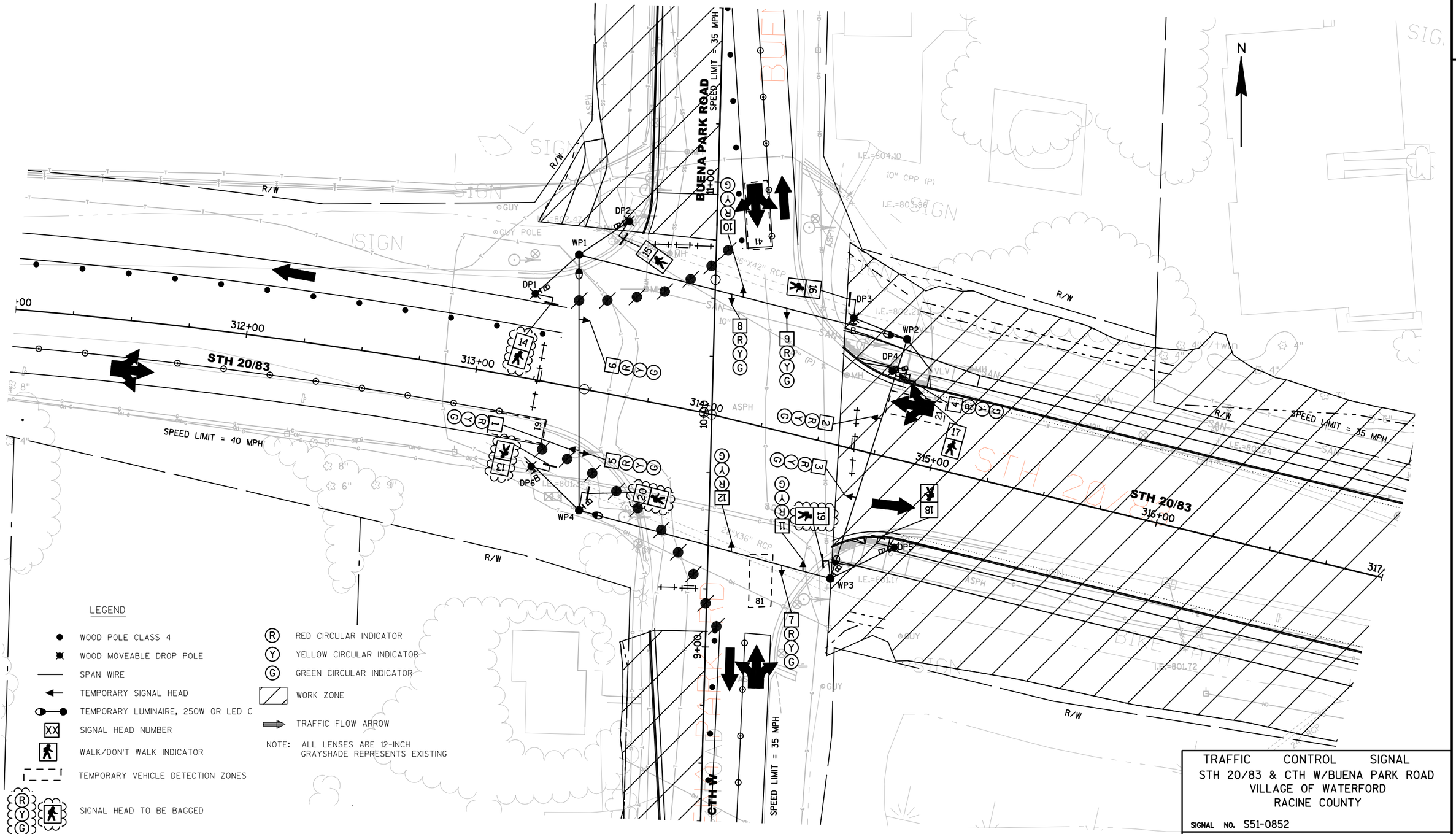
REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

PAGE 3 OF 6

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1C	SHEET 245 E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024301_SP-TEMP1C.DWG
LAYOUT NAME - 024301_SP-TEMP1C - STH 20&BUENA
PLOT DATE : 4/19/2018 1:55 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 42

2



TRAFFIC CONTROL SIGNAL
STH 20/83 & CTH W/BUENA PARK ROAD
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-0852

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

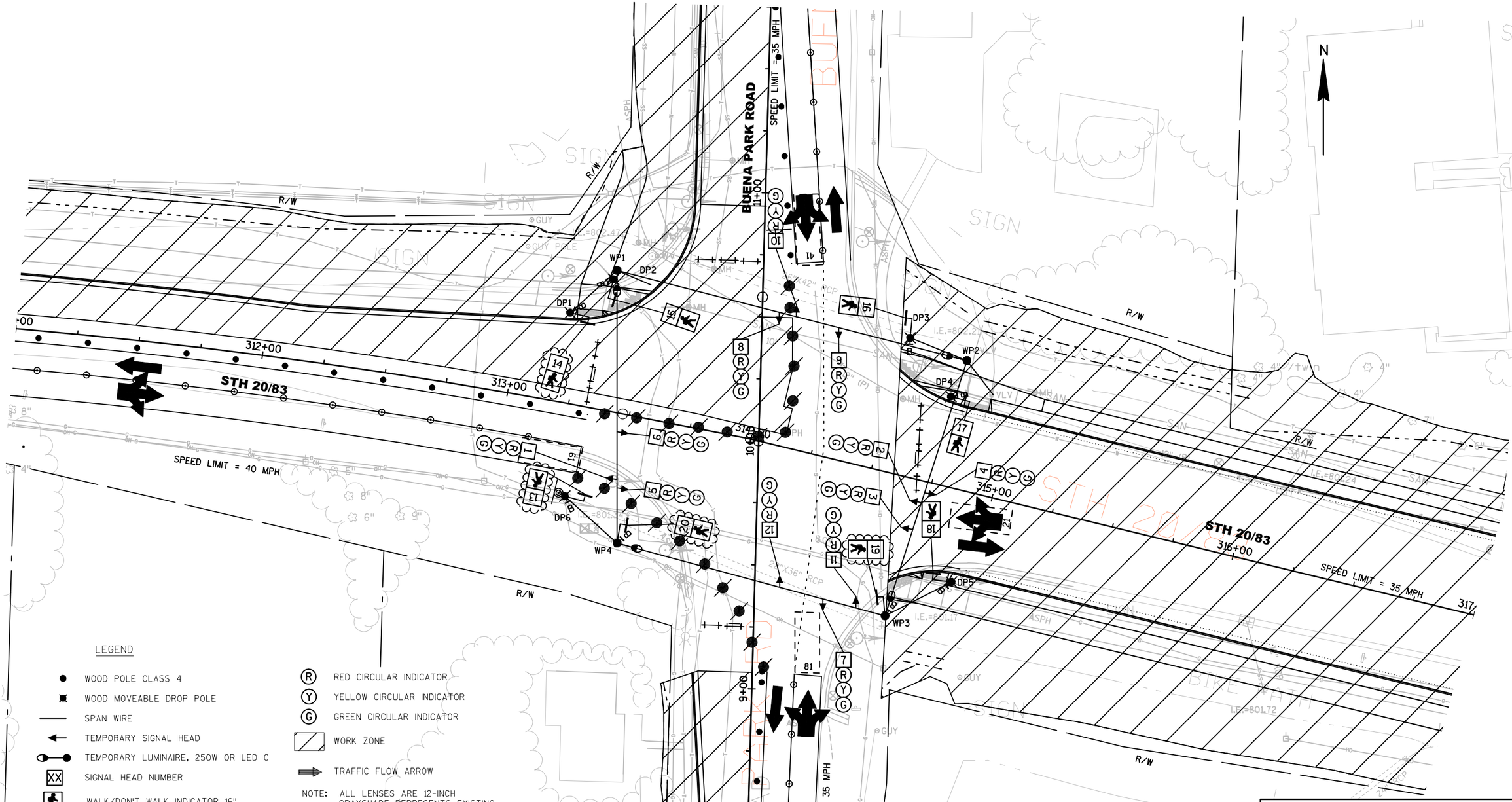
PAGE 4 OF 6

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2A	SHEET 246 E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024401_SP-TEMP2.DWG
LAYOUT NAME - 024401_SP-TEMP2 - STH 20&BUENA

PLOT DATE : 4/19/2018 1:58 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : **********

2



TRAFFIC CONTROL SIGNAL
STH 20/83 & CTH W/BUENA PARK ROAD
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-0852

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

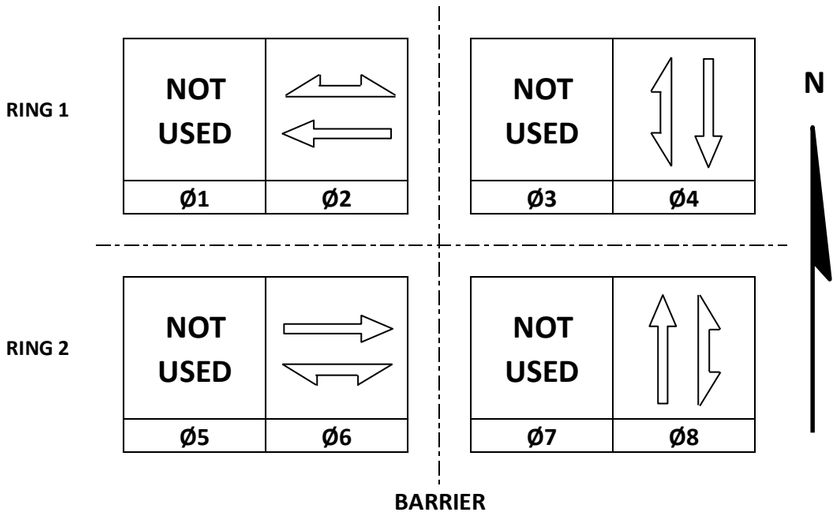
PAGE 5 OF 6

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2B	SHEET	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024407_SP-TEMP2B.DWG
LAYOUT NAME - 024407_SP-TEMP2B - STH 20&BUENA

PLOT DATE : 4/19/2018 2:01 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : **********

	HEAD NUMBERS	FLASH
Ø1		
Ø2	4,5,6	R
Ø3		
Ø4	10,11,12	R
Ø5		
Ø6	1,2,3	R
Ø7		
Ø8	7,8,9	R
Ø2P	15,16	
Ø4P	13,14	
Ø6P	19,20	
Ø8P	17,18	
OLA		
OLB		
OLC		
OLD		



DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL	DETECTOR OPERATION			PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
		CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY							
21		X			2	2					
22		X			2	2		X			
23		X			2	2					
41		X			4	4					
42		X			4	4		X			
43		X			4	4					
61		X			6	6					
62		X			6	6		X			
63		X			6	6					
81		X			8	8					
82		X			8	8					

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2	X	6	MIN	X
3				
4		8		X
5				
6	X	2	MIN	X
7				
8		4		X

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	X
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS-

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

STH 20/83 & CTH W/BUENA PARK ROAD

VILLAGE OF WATERFORD

RACINE COUNTY

SIGNAL NO: S51-0852 CABINET TYPE: TEMP

CONTROLLER TYPE: TEMP

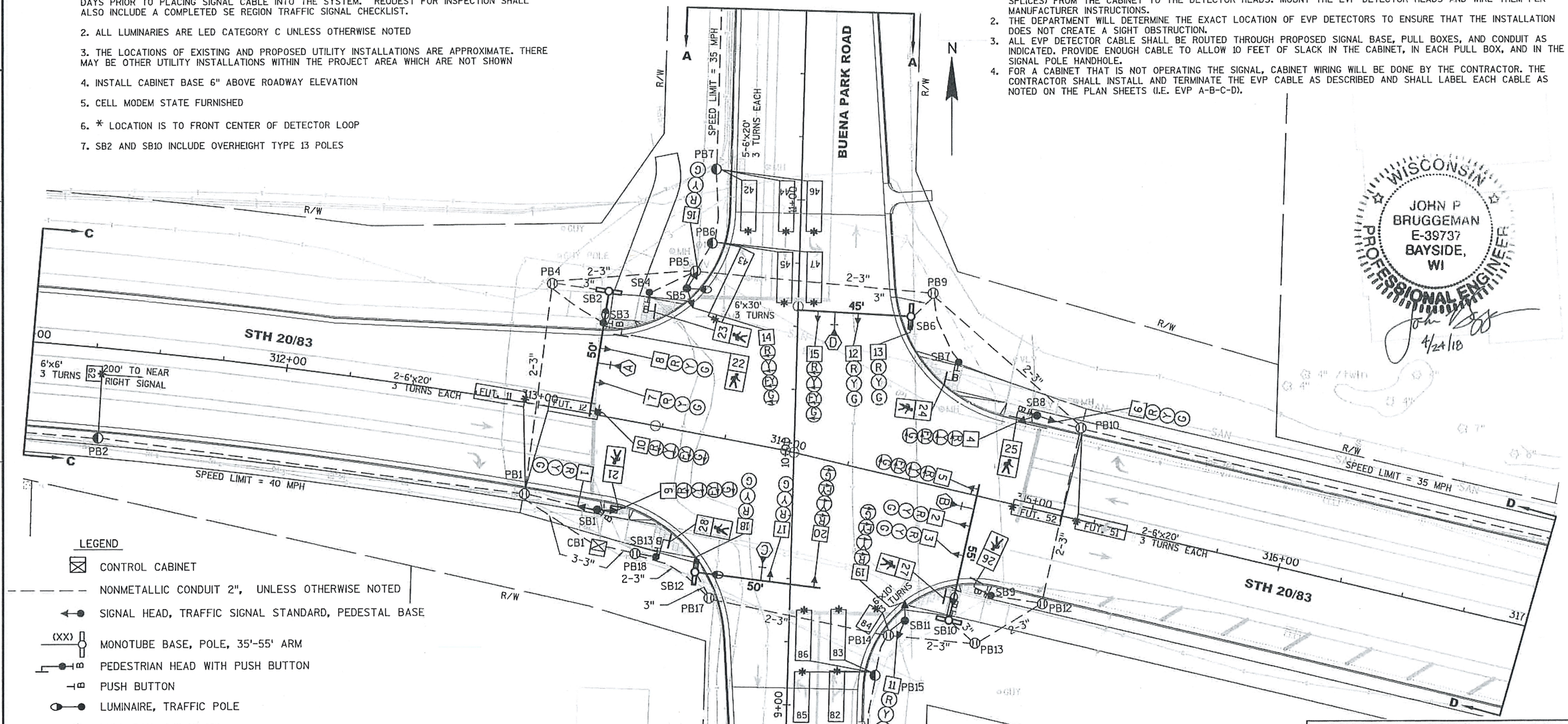
DATE: MAY 2018 PAGE NO. 6 OF 6

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM. REQUEST FOR INSPECTION SHALL ALSO INCLUDE A COMPLETED SE REGION TRAFFIC SIGNAL CHECKLIST.
2. ALL LUMINARIES ARE LED CATEGORY C UNLESS OTHERWISE NOTED
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN
4. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION
5. CELL MODEM STATE FURNISHED
6. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP
7. SB2 AND SB10 INCLUDE OVERHEIGHT TYPE 13 POLES

EVP CONSTRUCTION NOTES

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH PROPOSED SIGNAL BASE, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D).



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- B PEDESTRIAN HEAD WITH PUSH BUTTON
- B PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX NON-CONDUCTIVE, 24" X 36"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- G G GREEN ARROW

- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

MONOTUBE STRUCTURES

SB2 (OH)	= S-51-1204
SB6	= S-51-1205
SB10 (OH)	= S-51-1206
SB12	= S-51-1207

WISCONSIN
JOHN P BRUGGEMAN
E-39737
BAYSIDE, WI
PROFESSIONAL ENGINEER
4/24/18

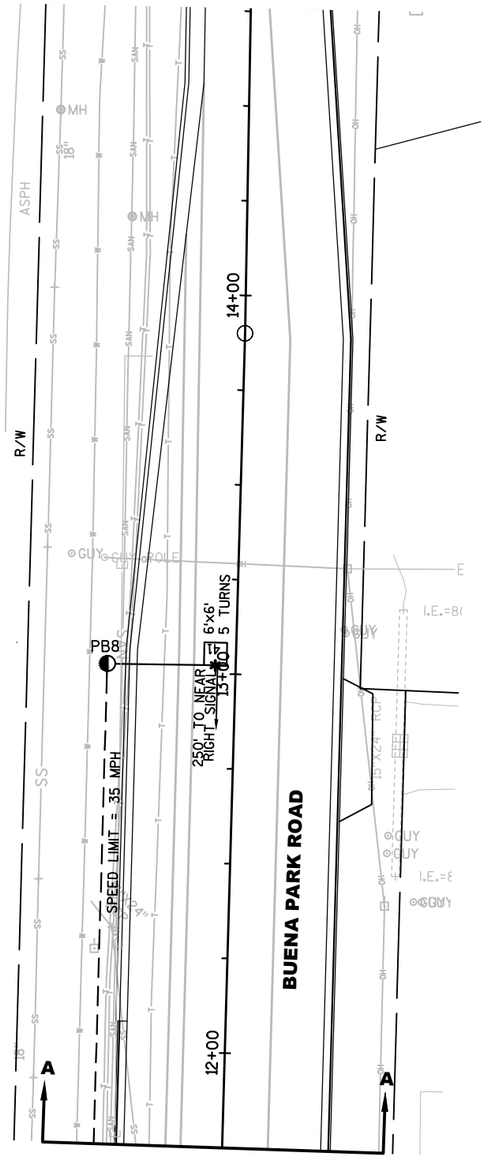
TRAFFIC CONTROL SIGNAL
STH 20/83 & CTH W/BUENA PARK ROAD
VILLAGE OF WATERFORD
RACINE COUNTY
SIGNAL NO. S51-0852
CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE

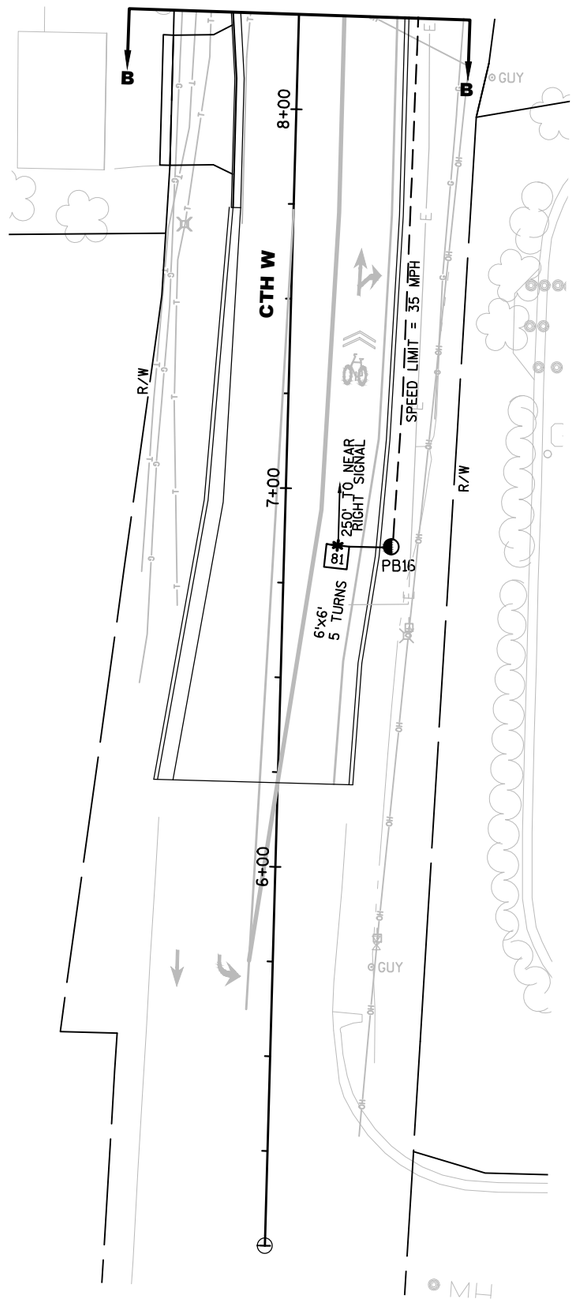
WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
DATE 4/25/18 — REGION TRAFFIC ENGINEER
APPROVED
DATE 4/30/18 — STATE TRAFFIC ENGINEER
REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:
PAGE 1 OF 3

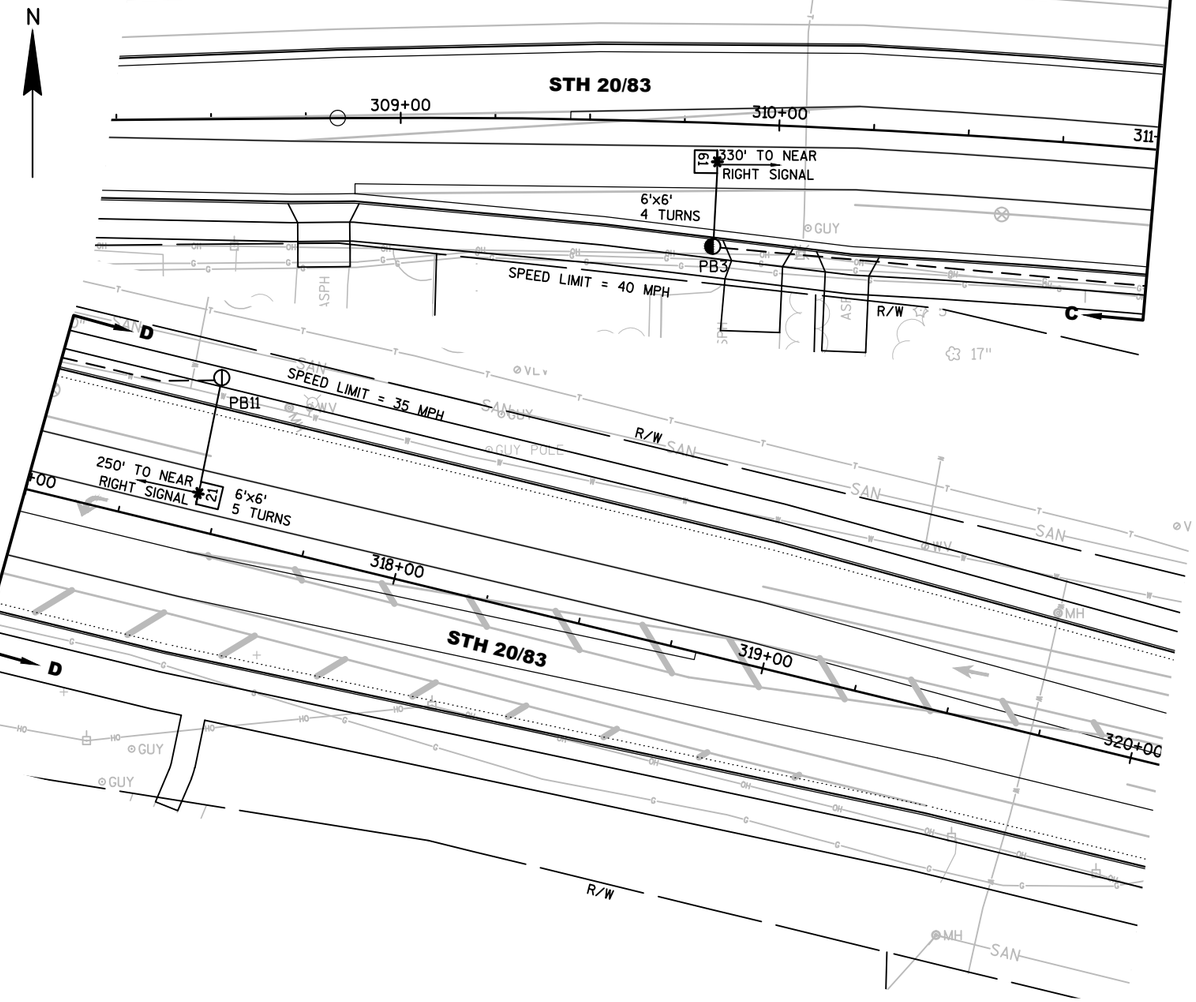
4/25/18 PSV

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 249 E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024001_SP.DWG
LAYOUT NAME - 024001_SP - STH 20&BUENA
PLOT DATE : 4/20/2018 3:47 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 42







TRAFFIC CONTROL SIGNAL
STH 20/83 & CTH W/BUENA PARK ROAD
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-0852

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

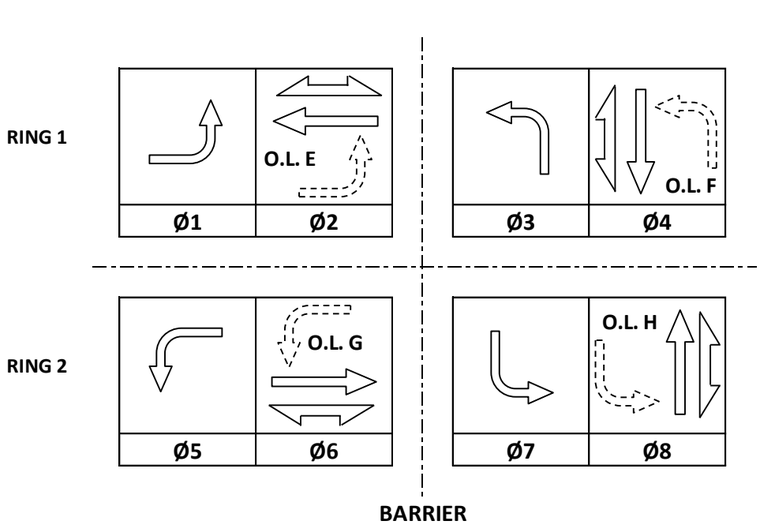
PAGE 2 OF 3

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 250	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024002_SP.DWG
LAYOUT NAME - 024002_SP - STH 20&BUENA(2)

PLOT DATE : 4/23/2018 3:47 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : **********

	HEAD NUMBERS	FLASH
Ø1	4,5	R ←
Ø2	6,7,8	R
Ø3	14,15	R ←
Ø4	16,17,18	R
Ø5	9,10	R ←
Ø6	1,2,3	R
Ø7	19,20	R ←
Ø8	11,12,13	R
Ø2P	23,24	
Ø4P	21,22	
Ø6P	27,28	
Ø8P	25,26	
OLE	4,5	-
OLF	14,15	-
OLG	9,10	-
OLH	19,20	-



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	X

TYPE OF COORDINATION	
NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	
SIGNAL SYSTEM NO: SS-	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	
TOMAR	X
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	21	42	44	46	51	61	81
CALLED PHASE	FUTURE	2	4	4	4	FUTURE	6	8
CALL OPTION		X	X	X	X		X	
DELAY TIME								
EXTENTION OPTION		X	X	X	X		X	X
EXTEND TIME								X
USE ADDED INITIAL		X					X	
CROSS SWITCH PHASE								

DETECTOR INPUT	19	17	23	21	27	25	31	29
PLAN LOOP DETECTOR*(S)	83	85						
CALLED PHASE	8	8						
CALL OPTION	X	X						
DELAY TIME	X							
EXTENTION OPTION	X	X						
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	12	41	43	45	47	52	62	82
CALLED PHASE	FUTURE	4	4	4	4	FUTURE	6	8
CALL OPTION			X	X	X		X	X
DELAY TIME			X		X			
EXTENTION OPTION		X	X	X	X		X	X
EXTEND TIME		X						
USE ADDED INITIAL							X	
CROSS SWITCH PHASE								

DETECTOR INPUT	20	18	24	22	28	26	32	30
PLAN LOOP DETECTOR*(S)	84	86						
CALLED PHASE	8	8						
CALL OPTION	X	X						
DELAY TIME	X	X						
EXTENTION OPTION	X	X						
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

STH 20/83 & CTH W/BUENA PARK ROAD
VILLAGE OF WATERFORD
RACINE COUNTY
SIGNAL NO: S51-0852 CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE
DATE: MAY 2018 PAGE NO. 3 OF 3

PROJECT ID:	**2250-12-70**
INTERSECTION:	**STH 20/83 & CTH W/Buena Park Road**

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

DATE 5/1/18

CB1 TO	JUMPER	# OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	FUTURE APS
				RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK		
SB1		15	1	RED	ORG	GRN								
			9				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
			21								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB2		12	7	RED	ORG	GRN								
			8	RED	ORG	GRN								
			10				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB3		12	22								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB4		12	23								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB5		12	14				RED	ORG	GRN	BLK/WHT				
			16	RED/BLK	ORG/BLK	GRN/BLK								
SB6		12	12	RED	ORG	GRN								
			13	RED	ORG	GRN								
			15				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB7		12	24								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB8		15	4				RED	ORG	GRN	BLK/WHT				
			6	RED/BLK	ORG/BLK	GRN/BLK								
			25								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB9		12	26								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB10		15	2	RED	ORG	GRN								
			3	RED	ORG	GRN								
			5				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
			27								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB11		12	11	RED	ORG	GRN								
			19				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB12		12	17	RED	ORG	GRN								
			18	RED	ORG	GRN								
			20				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB13		12	28								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP

FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP

FROM	TO
PB1	SB1
PB4	SB2
PB5	SB5
PB9	SB6
PB10	SB8
PB12	SB9
PB13	SB10
PB14	SB11
PB17	SB12
PB18	SB13

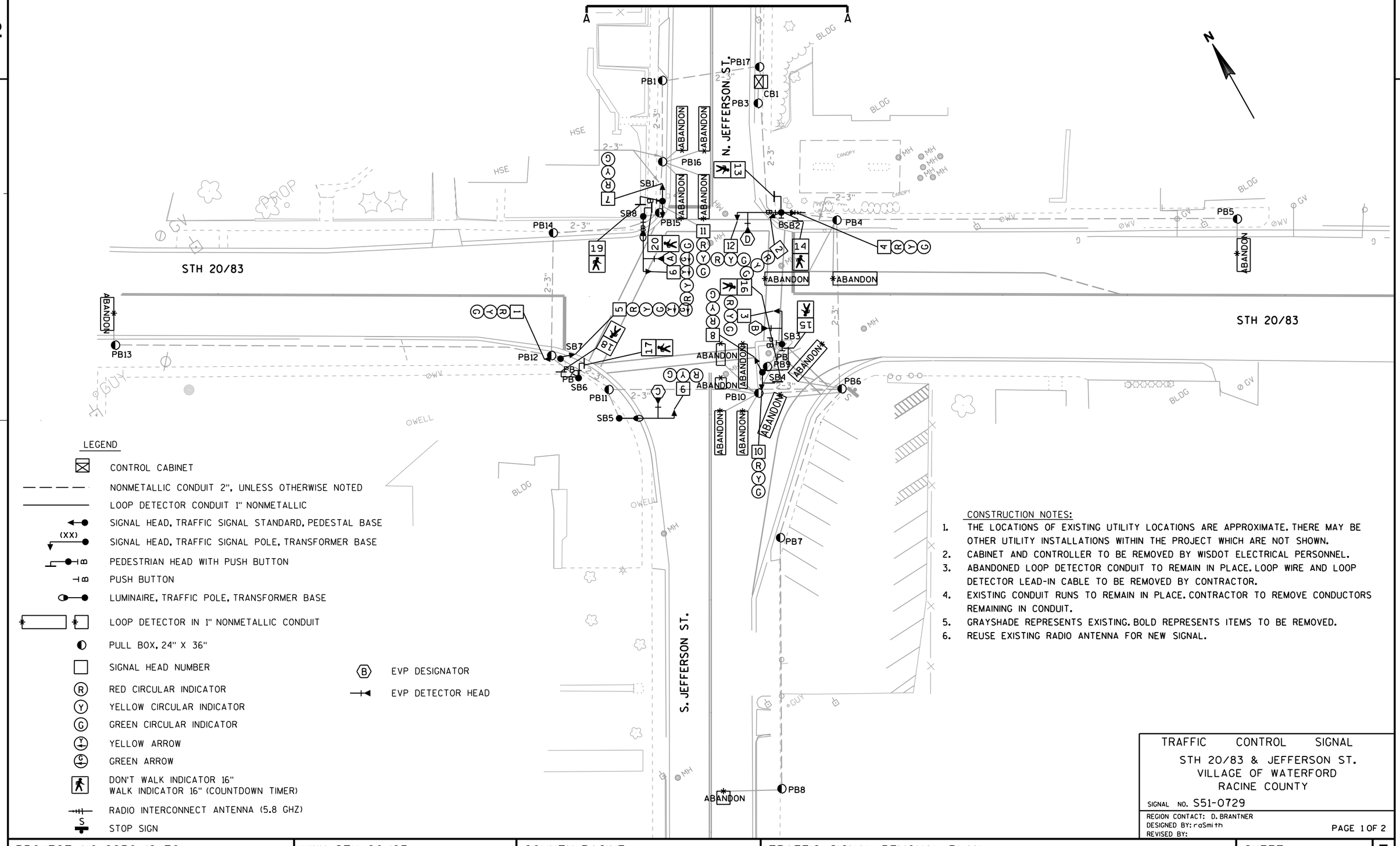
LIGHTING UF 10 AWG W/GROUND

FROM	TO
CB1	SB2
SB2	SB5
CB1	SB12
SB12	SB10

EMERGENCY VEHICLE PREEMPTION (EVP) CABLE

FROM	TO
CB1	HEAD A (SB2)
CB1	HEAD B (SB10)
CB1	HEAD C (SB12)
CB1	HEAD D (SB6)

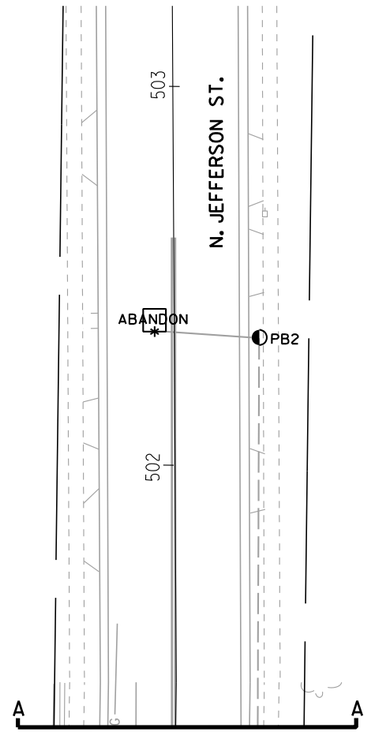
*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications
*Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the



PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET E

FILE NAME : T:\1112700\Traffic\Signal Design\150219 WisDOT Signal Plans\S0729a.DGN PLOT DATE : 4/24/2018 PLOT BY : trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2



TRAFFIC CONTROL SIGNAL
STH 20/83 & JEFFERSON ST.
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-0729

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

PAGE 2 OF 2

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET	E

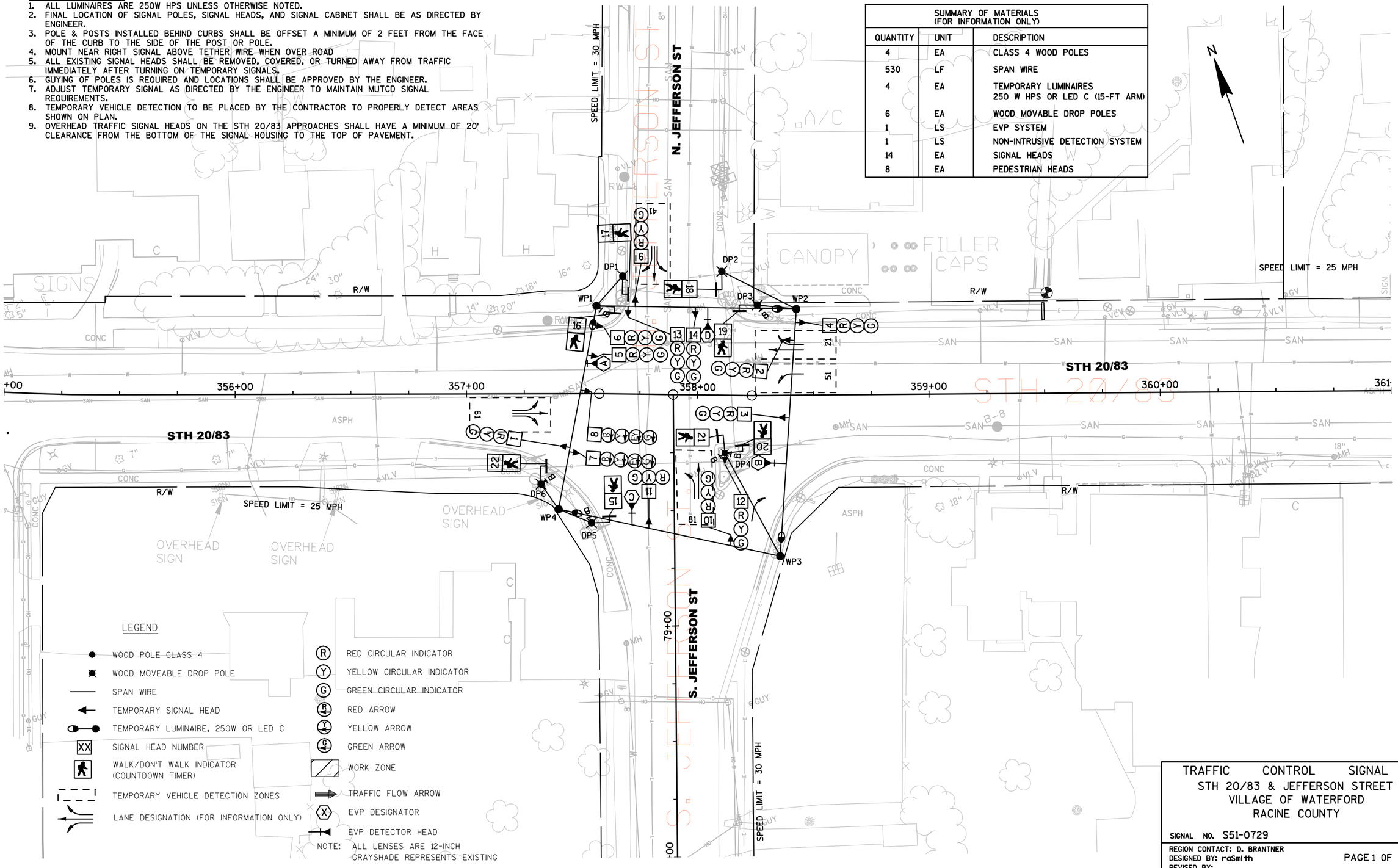
FILE NAME : T:\1112700\Traffic\Signal Design\150219 WisDOT Signal Plans\S0729a.DGN PLOT DATE : 1/3/2018 PLOT BY : trg PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. ALL LUMINAIRES ARE 250W HPS UNLESS OTHERWISE NOTED.
2. FINAL LOCATION OF SIGNAL POLES, SIGNAL HEADS, AND SIGNAL CABINET SHALL BE AS DIRECTED BY ENGINEER.
3. POLE & POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF THE CURB TO THE SIDE OF THE POST OR POLE.
4. MOUNT NEAR RIGHT SIGNAL ABOVE TETHER WIRE WHEN OVER ROAD
5. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
6. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
7. ADJUST TEMPORARY SIGNAL AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
8. TEMPORARY VEHICLE DETECTION TO BE PLACED BY THE CONTRACTOR TO PROPERLY DETECT AREAS SHOWN ON PLAN.
9. OVERHEAD TRAFFIC SIGNAL HEADS ON THE STH 20/83 APPROACHES SHALL HAVE A MINIMUM OF 20' CLEARANCE FROM THE BOTTOM OF THE SIGNAL HOUSING TO THE TOP OF PAVEMENT.

SUMMARY OF MATERIALS (FOR INFORMATION ONLY)

QUANTITY	UNIT	DESCRIPTION
4	EA	CLASS 4 WOOD POLES
530	LF	SPAN WIRE
4	EA	TEMPORARY LUMINAIRES 250 W HPS OR LED C (15-FT ARM)
6	EA	WOOD MOVABLE DROP POLES
1	LS	EVP SYSTEM
1	LS	NON-INTRUSIVE DETECTION SYSTEM
14	EA	SIGNAL HEADS
8	EA	PEDESTRIAN HEADS



LEGEND

- WOOD POLE CLASS 4
- WOOD MOVEABLE DROP POLE
- SPAN WIRE
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250W OR LED C
- SIGNAL HEAD NUMBER
- WALK/DON'T WALK INDICATOR (COUNTDOWN TIMER)
- TEMPORARY VEHICLE DETECTION ZONES
- LANE DESIGNATION (FOR INFORMATION ONLY)
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y) YELLOW ARROW
- (G) GREEN ARROW
- WORK ZONE
- TRAFFIC FLOW ARROW
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
STH 20/83 & JEFFERSON STREET
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-0729

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

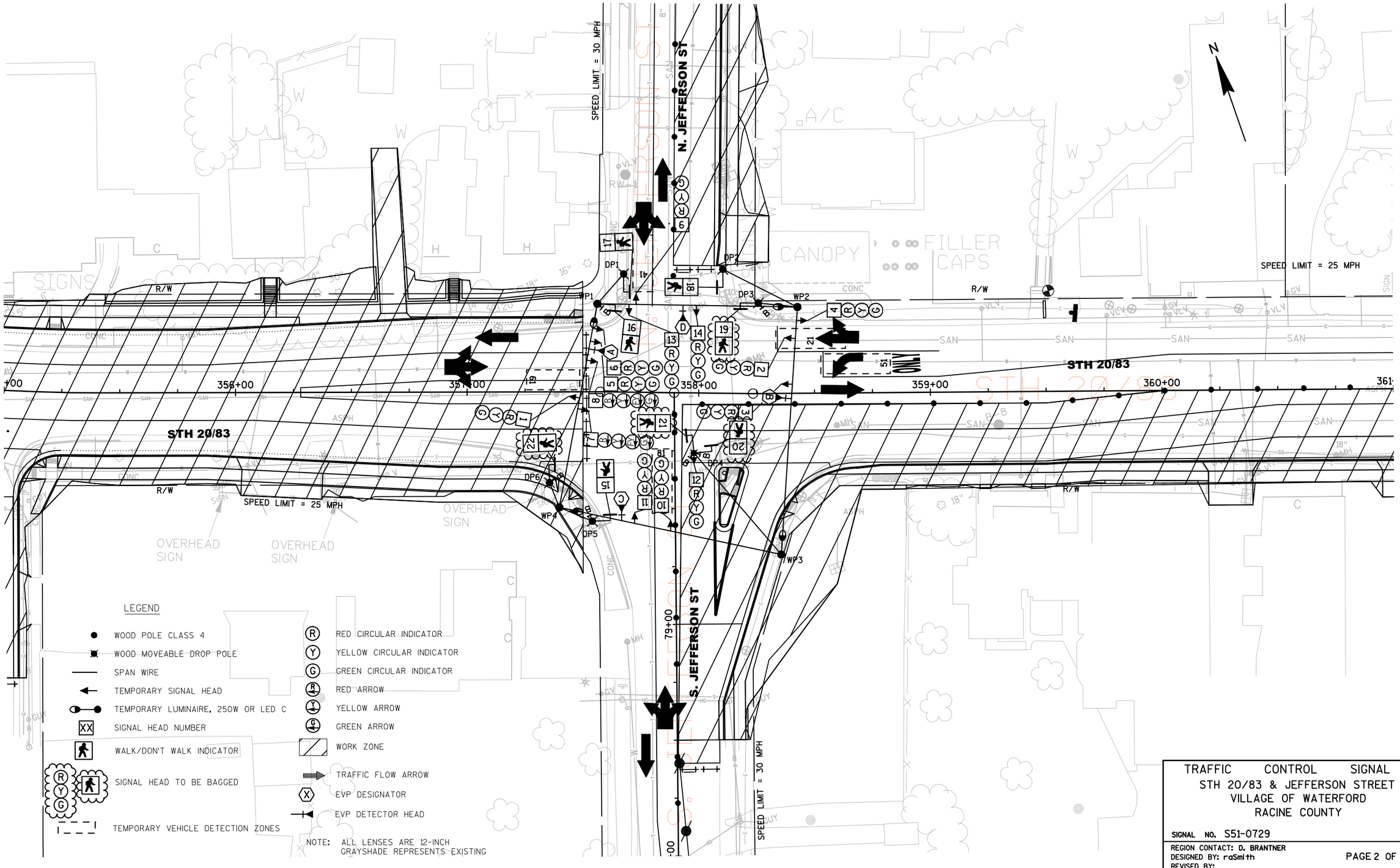
PAGE 1 OF 4

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - PRE-CONSTRUCTION	SHEET 255	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024103_SP-TEMP1A.DWG
LAYOUT NAME - 024103_SP-TEMP1A - STH 20&JEFFERSON

PLOT DATE : 4/19/2018 2:03 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : **********

2



TRAFFIC CONTROL SIGNAL
STH 20/83 & JEFFERSON STREET
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-0729

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

PAGE 2 OF 4

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1	SHEET 256 E

2

N. JEFFERSON ST

SPEED LIMIT = 30 MPH

STH 20/83

SPEED LIMIT = 25 MPH

S. JEFFERSON ST

SPEED LIMIT = 30 MPH

R/W

OVERHEAD SIGN

FILLER

CANOPY

LEGEND

WOOD POLE CLASS 4	RED CIRCULAR INDICATOR
WOOD MOVEABLE DROP POLE	YELLOW CIRCULAR INDICATOR
SPAN WIRE	GREEN CIRCULAR INDICATOR
TEMPORARY SIGNAL HEAD	RED ARROW
TEMPORARY LUMINAIRE, 250W OR LED C	YELLOW ARROW
SIGNAL HEAD NUMBER	GREEN ARROW
WALK/DON'T WALK INDICATOR	WORK ZONE
SIGNAL HEAD TO BE BAGGED	TRAFFIC FLOW ARROW
TEMPORARY VEHICLE DETECTION ZONES	EVP DESIGNATOR
	EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
STH 20/83 & JEFFERSON STREET
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-0729

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

PAGE 3 OF 4

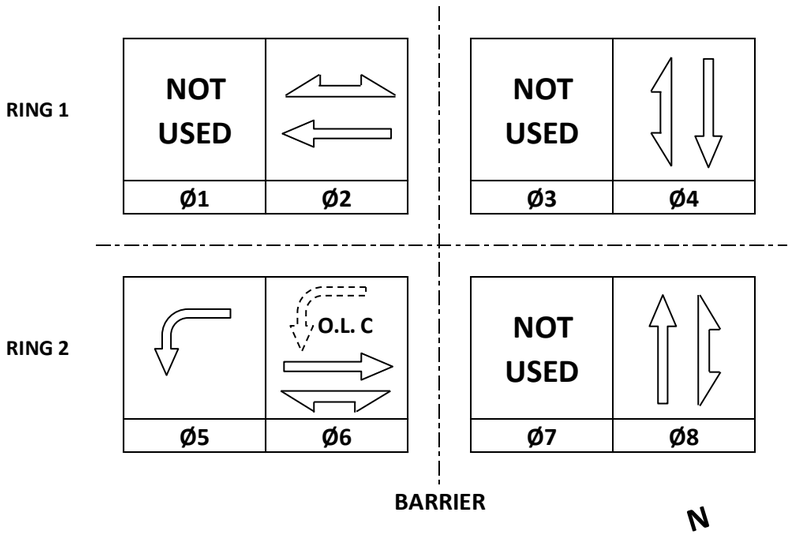
PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2	SHEET 257	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024403_SP-TEMP2.DWG
LAYOUT NAME - 024403_SP-TEMP2 - STH 20&JEFFERSON

PLOT DATE : 4/20/2018 4:23 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1		
Ø2	4,5,6	R
Ø3		
Ø4	9,10,11	R
Ø5	7,8	-
Ø6	1,2,3	R
Ø7		
Ø8	12,13,14	R
Ø2P	17,18	
Ø4P	15,16	
Ø6P	21,22	
Ø8P	19,20	
OLA		
OLB		
OLC	7,8	R ←
OLD		



DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL	DETECTOR OPERATION			PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
		CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY							
21		X			2	2					
41		X			4	4					
51		X			5	5					
61		X			6	6					
81		X			8	8					

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2	X	6	MIN	X
3				
4		8		X
5		2		X
6	X	2	MIN	X
7				
8		4		X

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	X
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS-

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
TEMP	X
LIFT BRIDGE	
QUEUE DETECTION	

EMERGENCY VEHICLE PREEMPTION SEQUENCE - PRE-CONSTRUCTION & STAGE 1

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	←	↓	↓
PHASE	2+5	6+2	4+8	8+4

AFTER PREEMPTION SEQUENCE 2+5 OR 6+2, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+8 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

GENERAL NOTES:

1. OMIT Ø5 DURING STAGE 2.

EMERGENCY VEHICLE PREEMPTION SEQUENCE - STAGE 2

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	←	↓	↓
PHASE	2+6	6+2	4+8	8+4

AFTER PREEMPTION SEQUENCE 2+6 OR 6+2, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+8 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

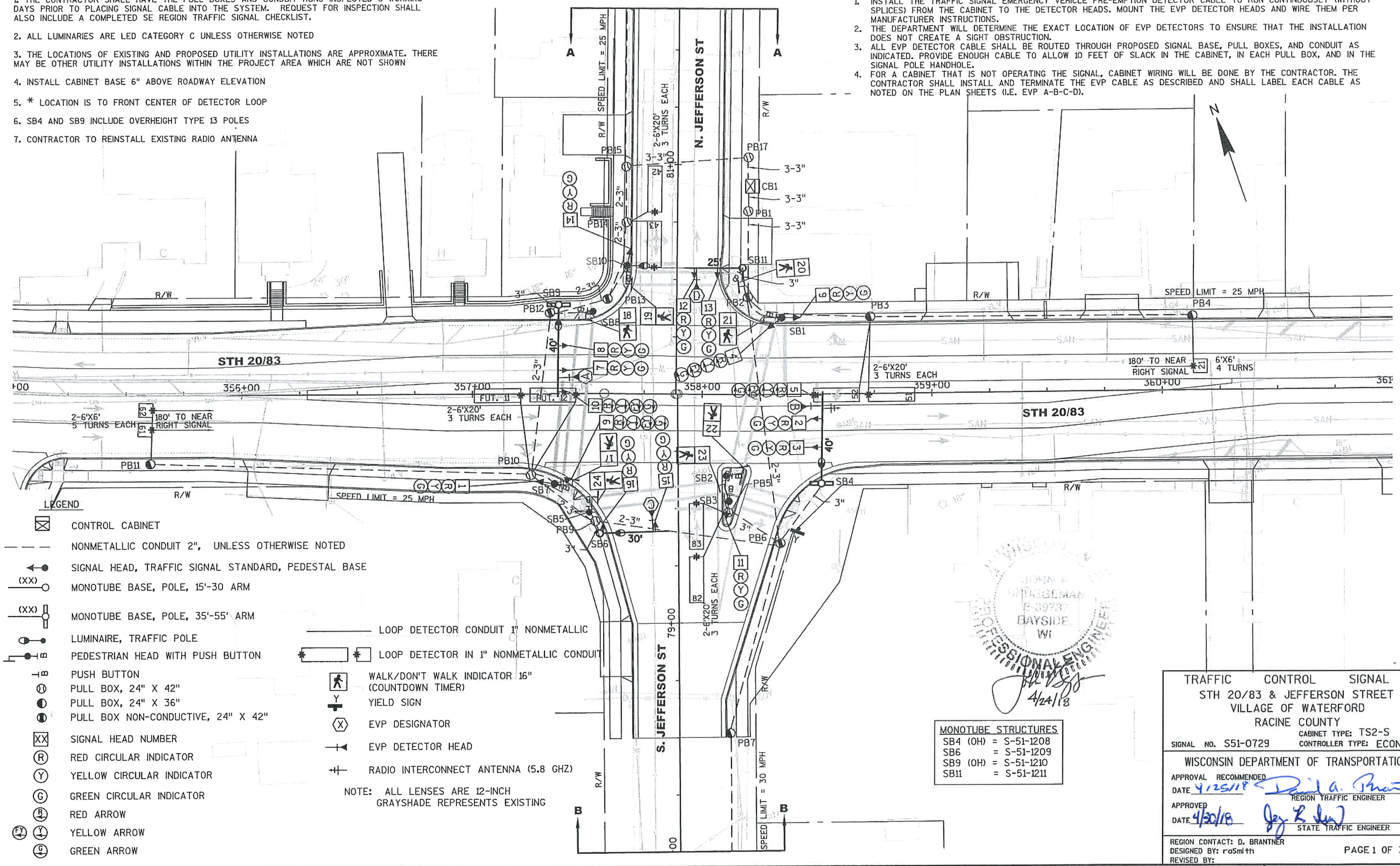
STH 20/83 & JEFFERSON STREET
VILLAGE OF WATERFORD
RACINE COUNTY
SIGNAL NO: S51-0729 CABINET TYPE: TEMP
CONTROLLER TYPE: TEMP
DATE: MAY 2018 PAGE NO. 4 OF 4

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM. REQUEST FOR INSPECTION SHALL ALSO INCLUDE A COMPLETED SE REGION TRAFFIC SIGNAL CHECKLIST.
2. ALL LUMINARIES ARE LED CATEGORY C UNLESS OTHERWISE NOTED
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN
4. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION
5. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP
6. SB4 AND SB9 INCLUDE OVERHEIGHT TYPE 13 POLES
7. CONTRACTOR TO REINSTALL EXISTING RADIO ANTENNA

EVP CONSTRUCTION NOTES

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH PROPOSED SIGNAL BASE, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D).



MONOTUBE STRUCTURES	
SB4 (OH)	= S-51-1208
SB6	= S-51-1209
SB9 (OH)	= S-51-1210
SB11	= S-51-1211

JOHN F. GRUSSEMAN E-39737 BAYSIDE WI PROFESSIONAL ENGINEER
4/24/18

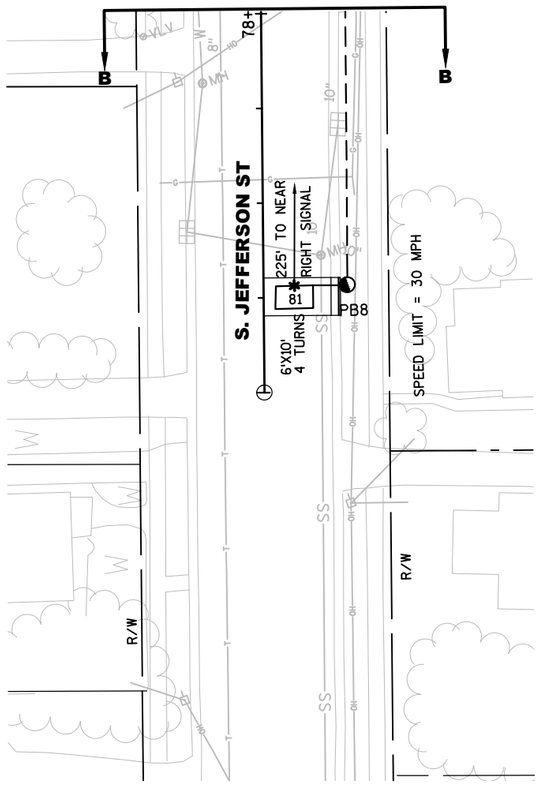
TRAFFIC CONTROL SIGNAL
STH 20/83 & JEFFERSON STREET
VILLAGE OF WATERFORD
RACINE COUNTY
CABINET TYPE: TS2-S
SIGNAL NO. S51-0729 CONTROLLER TYPE: ECONOLITE

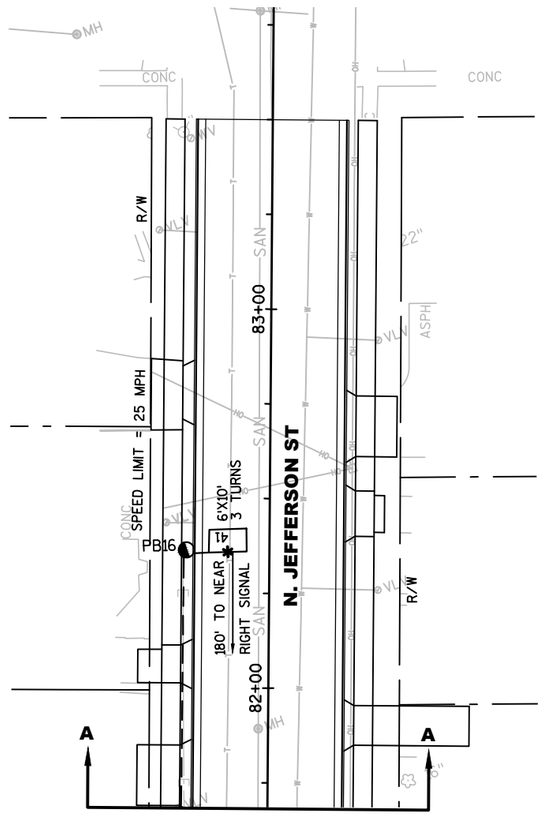
WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
DATE 4/25/18 David A. Brantner REGION TRAFFIC ENGINEER
APPROVED
DATE 4/30/18 Jay R. Lee STATE TRAFFIC ENGINEER
REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:
PAGE 1 OF 3

4/25/18 RJV

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 259 E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024003_SP.DWG
LAYOUT NAME - 024003_SP - STH 20&JEFFERSON
PLOT DATE : 4/24/2018 1:50 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 42





TRAFFIC CONTROL SIGNAL
STH 20/83 & JEFFERSON STREET
VILLAGE OF WATERFORD
RACINE COUNTY

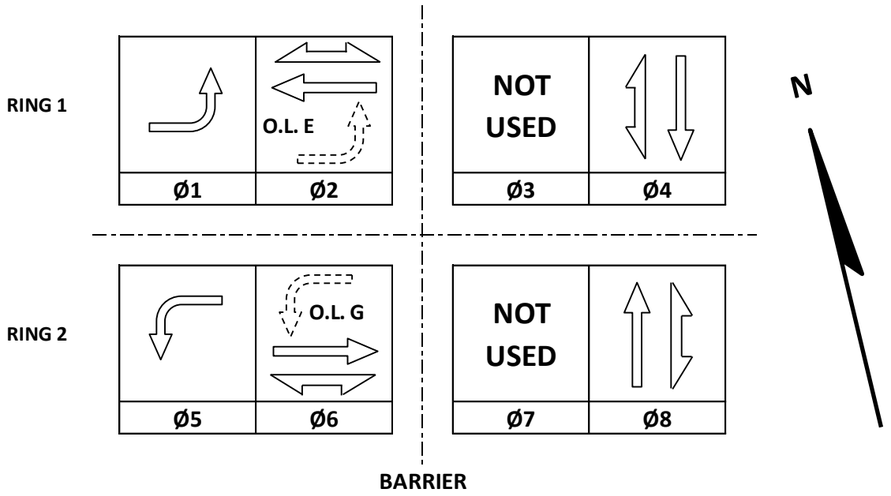
SIGNAL NO. S51-0729

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 260	E

	HEAD NUMBERS	FLASH
Ø1	4,5	R ←
Ø2	6,7,8	R
Ø3		
Ø4	14,15,16	R
Ø5	9,10	R ←
Ø6	1,2,3	R
Ø7		
Ø8	11,12,13	R
Ø2P	19,20	
Ø4P	17,18	
Ø6P	23,24	
Ø8P	21,22	
OLE	4,5	-
OLF		
OLG	9,10	-
OLH		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3				
4		8		X
5		2		X
6	X	2	MIN	X
7				
8		4		X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	→	↓↑	↓↑
PHASE	2+5	6+1	4+8	8+4

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+8 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	X
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	
SIGNAL SYSTEM NO:	SS-51-0175

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	
TOMAR	X
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	21	42	51	61	81	83	
CALLED PHASE	FUTURE	2	4	5	6	8	8	
CALL OPTION		X	X	X	X		X	
DELAY TIME								
EXTENTION OPTION		X	X	X	X	X	X	
EXTEND TIME						X		
USE ADDED INITIAL		X			X			
CROSS SWITCH PHASE				6				

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	12	41	43	52	62	82		
CALLED PHASE	FUTURE	4	4	5	6	8		
CALL OPTION			X	X	X	X		
DELAY TIME			X					
EXTENTION OPTION		X	X	X	X	X		
EXTEND TIME		X						
USE ADDED INITIAL					X			
CROSS SWITCH PHASE				6				

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

STH 20/83 & JEFFERSON ST.
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO: S51-0729	CABINET TYPE: TS2-S
	CONTROLLER TYPE: ECONOLITE
DATE: MAY 2018	PAGE NO. 3 OF 3

PROJECT ID:	2250-12-70
INTERSECTION:	STH 20/83 & Jefferson Street

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

DATE	5/1/18

CB1 TO	JUMPER	# OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	FUTURE APS
				RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK		
SB1		15	4				RED	ORG	GRN	BLK/WHT				
			6	RED/BLK	ORG/BLK	GRN/BLK								
			21								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB2		12	22								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB3		12	11	RED	ORG	GRN								
			23								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB4		12	2	RED	ORG	GRN								
			3	RED	ORG	GRN								
			5				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB5		12	24								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB6		7	15	RED	ORG	GRN								
			16	RED	ORG	GRN								
SB7		15	1	RED	ORG	GRN								
			9				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
			17								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB8		12	18								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB9		12	7	RED	ORG	GRN								
			8	RED	ORG	GRN								
			10				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB10		12	14	RED	ORG	GRN								
			19								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB11		12	12	RED	ORG	GRN								
			13	RED	ORG	GRN								
			20								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB11
SB11	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	CB1
PB2	SB11
PB5	SB3
PB6	SB4
PB9	SB6
PB10	SB7
PB12	SB9
PB13	SB10
PB14	SB10
PB15	CB1
PB17	CB1

LIGHTING UF 10 AWG W/GROUND	
FROM	TO
CB1	SB4
SB4	SB6
CB1	SB10
SB10	SB9

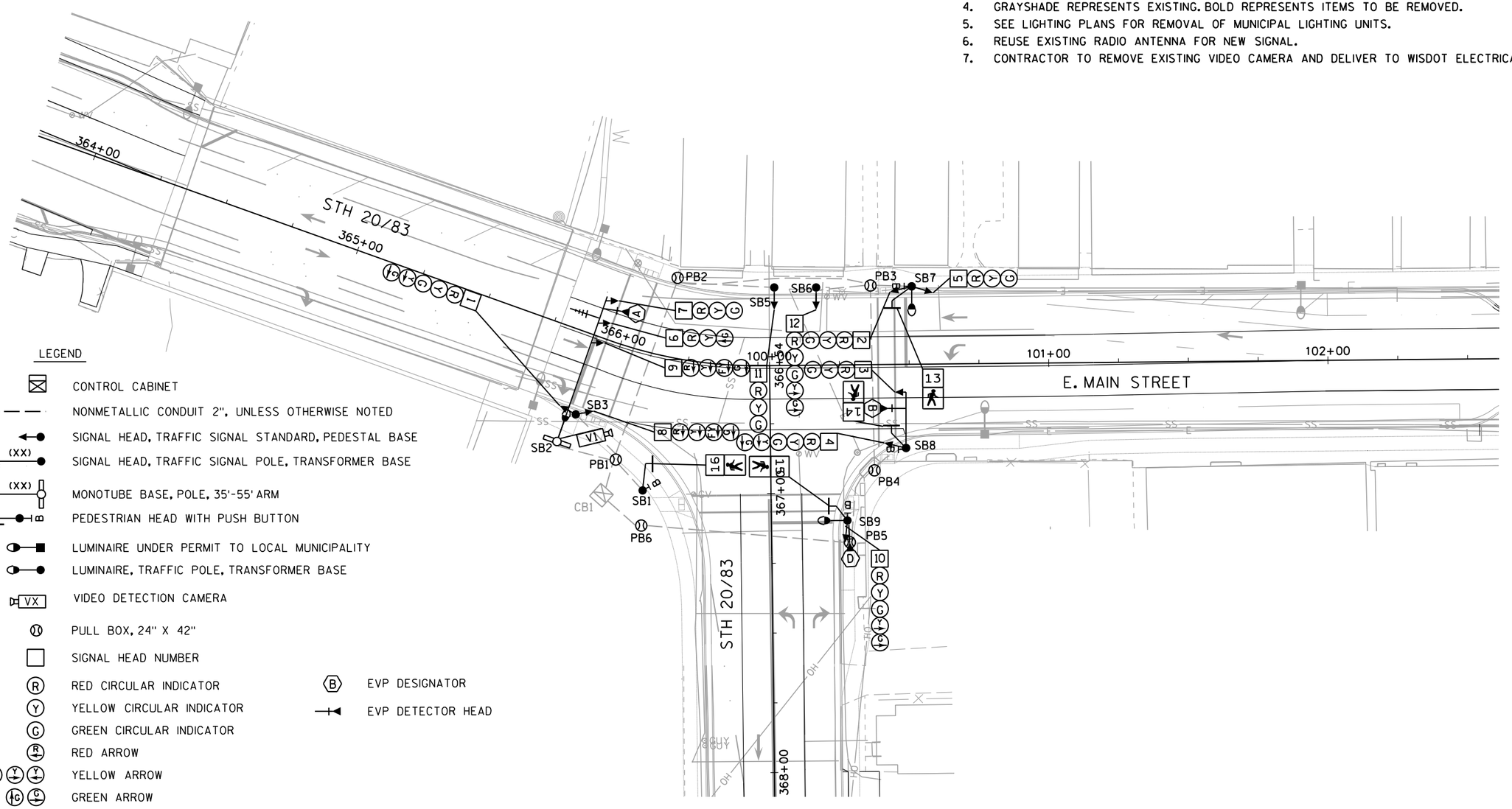
EMERGENCY VEHICLE PREEMPTION (EVP) CABLE	
FROM	TO
CB1	HEAD A (SB9)
CB1	HEAD B (SB4)
CB1	HEAD C (SB6)
CB1	HEAD D (SB11)

*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications
*Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the

CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING UTILITY LOCATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. EXISTING CABINET AND CONTROLLER TO REMAIN IN PLACE.
3. EXISTING CONDUIT RUNS TO REMAIN IN PLACE. CONTRACTOR TO REMOVE CONDUCTORS REMAINING IN CONDUIT.
4. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
5. SEE LIGHTING PLANS FOR REMOVAL OF MUNICIPAL LIGHTING UNITS.
6. REUSE EXISTING RADIO ANTENNA FOR NEW SIGNAL.
7. CONTRACTOR TO REMOVE EXISTING VIDEO CAMERA AND DELIVER TO WISDOT ELECTRICAL FIELD UNIT.

N



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- VX VIDEO DETECTION CAMERA
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- DON'T WALK INDICATOR 16"
  WALK INDICATOR 16" (COUNTDOWN TIMER)
- RADIO INTERCONNECT ANTENNA (5.8 GHZ)
- (B) EVP DESIGNATOR
- EVP DETECTOR HEAD

TRAFFIC CONTROL SIGNAL

STH 20/83 & E. MAIN STREET
VILLAGE OF WATERFORD
RACINE COUNTY

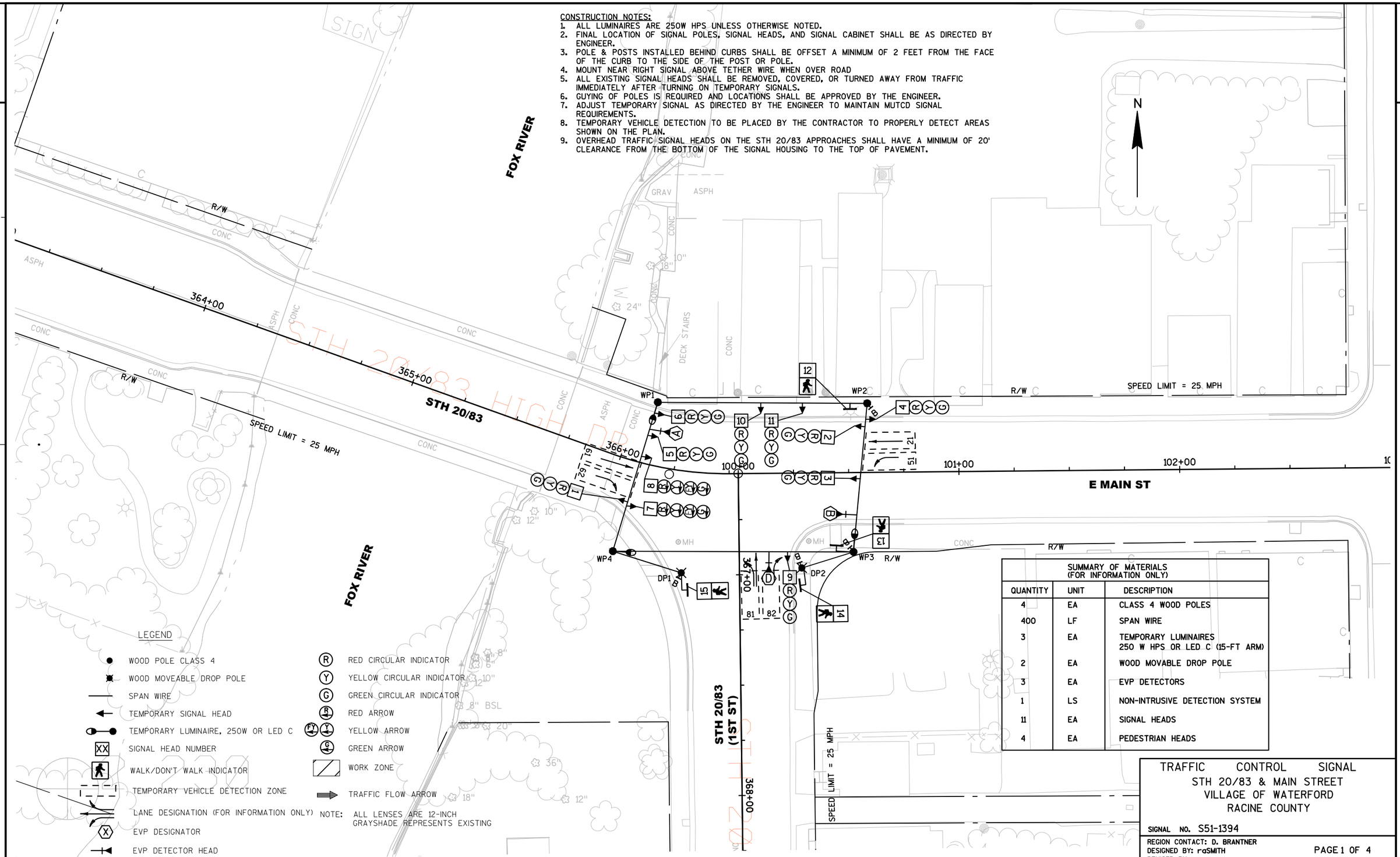
SIGNAL NO. S51-1394

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET E

CONSTRUCTION NOTES:
1. ALL LUMINAIRES ARE 250W HPS UNLESS OTHERWISE NOTED.
2. FINAL LOCATION OF SIGNAL POLES, SIGNAL HEADS, AND SIGNAL CABINET SHALL BE AS DIRECTED BY ENGINEER.
3. POLE & POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF THE CURB TO THE SIDE OF THE POST OR POLE.
4. MOUNT NEAR RIGHT SIGNAL ABOVE TETHER WIRE WHEN OVER ROAD
5. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
6. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
7. ADJUST TEMPORARY SIGNAL AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
8. TEMPORARY VEHICLE DETECTION TO BE PLACED BY THE CONTRACTOR TO PROPERLY DETECT AREAS SHOWN ON THE PLAN.
9. OVERHEAD TRAFFIC SIGNAL HEADS ON THE STH 20/83 APPROACHES SHALL HAVE A MINIMUM OF 20' CLEARANCE FROM THE BOTTOM OF THE SIGNAL HOUSING TO THE TOP OF PAVEMENT.



LEGEND

- WOOD POLE CLASS 4
- WOOD MOVEABLE DROP POLE
- SPAN WIRE
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250W OR LED C
- SIGNAL HEAD NUMBER
- WALK/DON'T WALK INDICATOR
- TEMPORARY VEHICLE DETECTION ZONE
- LANE DESIGNATION (FOR INFORMATION ONLY)
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WORK ZONE
- TRAFFIC FLOW ARROW

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

SUMMARY OF MATERIALS (FOR INFORMATION ONLY)

QUANTITY	UNIT	DESCRIPTION
4	EA	CLASS 4 WOOD POLES
400	LF	SPAN WIRE
3	EA	TEMPORARY LUMINAIRES 250 W HPS OR LED C (15-FT ARM)
2	EA	WOOD MOVABLE DROP POLE
3	EA	EVP DETECTORS
1	LS	NON-INTRUSIVE DETECTION SYSTEM
11	EA	SIGNAL HEADS
4	EA	PEDESTRIAN HEADS

TRAFFIC CONTROL SIGNAL
STH 20/83 & MAIN STREET
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-1394

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSMITH
REVISED BY:

PAGE 1 OF 4

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - PRE-CONSTRUCTION	SHEET 264	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024105_SP-TEMP1A.DWG
LAYOUT NAME - 024105_SP-TEMP1A - STH 20&MAIN
PLOT DATE : 4/19/2018 2:11 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : **********

2

FOX RIVER

STH 20/83 HIGH

STH 20/83

STH 20/83 (1ST ST)

E MAIN ST

R/W

CONC

ASPH

GRAV

DECK STAIRS

8" BSL

364+00

365+00

366+00

367+00

368+00

100+00

101+00

102+00

WP1

WP2

WP3

WP4

DP1

DP2

SPEED LIMIT = 25 MPH

N

LEGEND

- WOOD POLE CLASS 4
- WOOD MOVEABLE DROP POLE
- SPAN WIRE
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250W OR LED C
- XX SIGNAL HEAD NUMBER
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- WALK/DON'T WALK INDICATOR
- R Y G SIGNAL HEAD TO BE BAGGED
- TEMPORARY VEHICLE DETECTION ZONES

- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN ARROW
- WORK ZONE
- TRAFFIC FLOW ARROW

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
STH 20/83 & MAIN STREET
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-1394

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

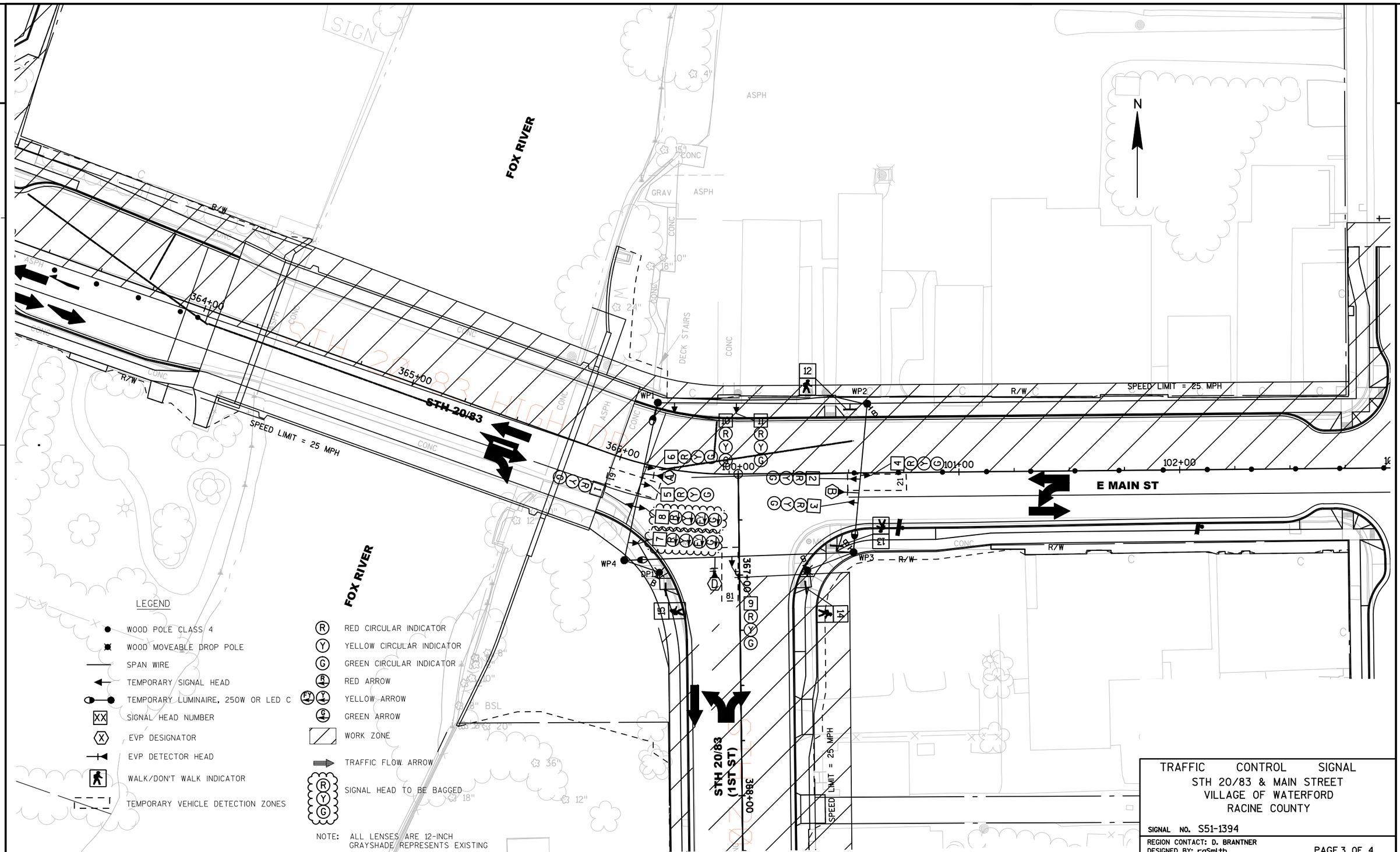
PAGE 2 OF 4

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1	SHEET 265 E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024205_SP-TEMP1B.DWG
LAYOUT NAME - 024205_SP-TEMP1B - STH 20&MAIN

PLOT DATE : 4/23/2018 2:14 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : **********

2



TRAFFIC CONTROL SIGNAL
STH 20/83 & MAIN STREET
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-1394

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

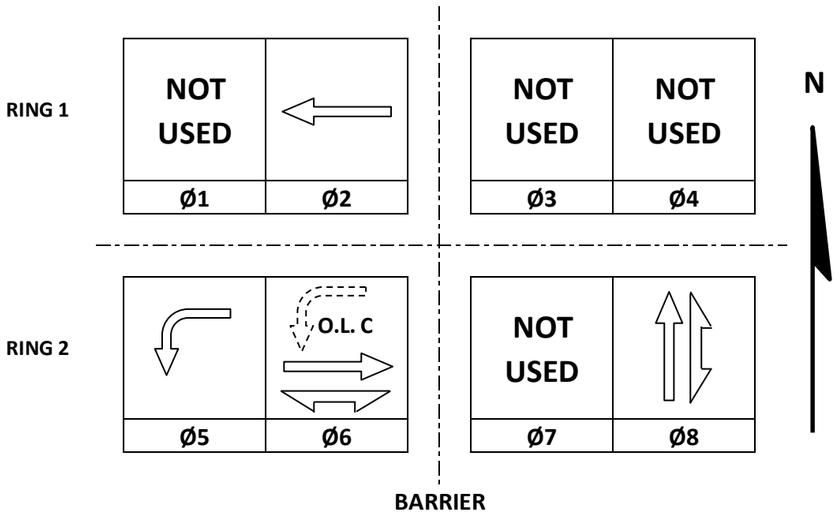
PAGE 3 OF 4

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2	SHEET 266 E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024405_SP-TEMP2.DWG
LAYOUT NAME - 024405_SP-TEMP2 - STH 20&MAIN

PLOT DATE : 4/19/2018 2:17 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : **********

	HEAD NUMBERS	FLASH
Ø1		
Ø2	4,5,6	R
Ø3		
Ø4		
Ø5	7,8	R ←
Ø6	1,2,3	R
Ø7		
Ø8	9,10,11	R
Ø2P		
Ø4P		
Ø6P	14,15	
Ø8P	12,13	
OLA		
OLB		
OLC	7,8	-
OLD		



DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL	DETECTOR OPERATION			PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
		CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY							
21		X			2	2					
51		X			5	5					
61		X			6	6					
62		X			6	6		X			
81		X			8	8					
82		X			8	8		X			

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2	X	6	MIN	X
3				
4				
5		2		X
6	X	2	MIN	X
7				
8		4		X

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	X
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS-

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
TEMP	X
LIFT BRIDGE	
QUEUE DETECTION	

EMERGENCY VEHICLE PREEMPTION SEQUENCE - PRE-CONSTRUCTION

EMERGENCY VEHICLE PREEMPTOR	A	B	D
MOVEMENT	←	← →	↑
PHASE	2+5	6+2	8

AFTER PREEMPTION SEQUENCE 2+5 OR 6+2, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 8, CONTROLLER SHALL RETURN TO PHASE 8.

GENERAL NOTES:

1. OMIT Ø5 DURING STAGE 1 & 2.

EMERGENCY VEHICLE PREEMPTION SEQUENCE - STAGES 1 & 2

EMERGENCY VEHICLE PREEMPTOR	A	B	D
MOVEMENT	← →	← →	↑
PHASE	2+6	6+2	8

AFTER PREEMPTION SEQUENCE 2+6 OR 6+2, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 8, CONTROLLER SHALL RETURN TO PHASE 8.

STH 20/83 & E. MAIN STREET
VILLAGE OF WATERFORD
RACINE COUNTY
SIGNAL NO: S51-1394 CABINET TYPE: TEMP
CONTROLLER TYPE: TEMP
DATE: MAY 2018 PAGE NO. 4 OF 4

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	SEQUENCE OF OPERATIONS – ALL STAGES	SHEET NO: 267	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

2

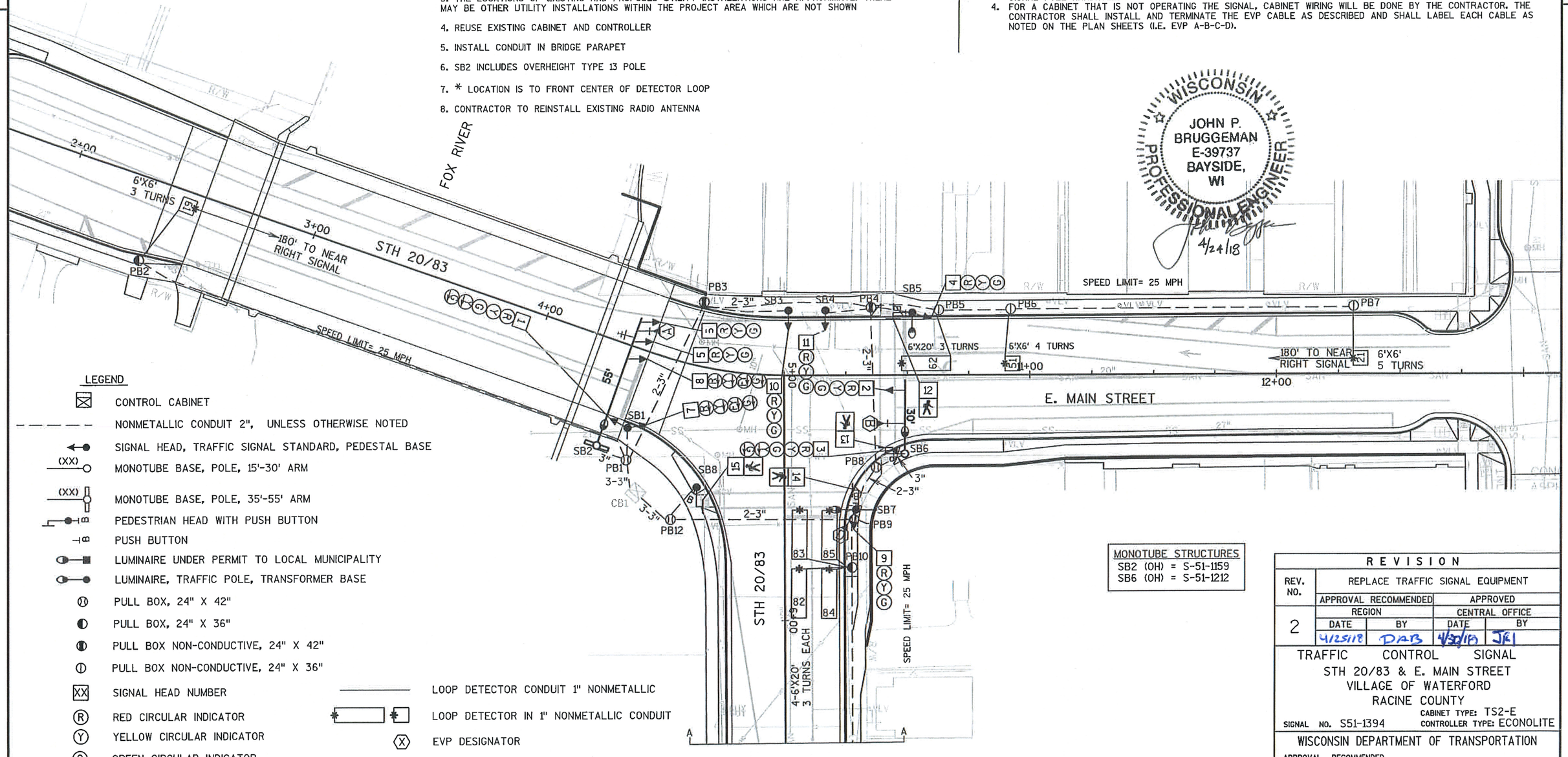
CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM. REQUEST FOR INSPECTION SHALL ALSO INCLUDE A COMPLETED SE REGION TRAFFIC SIGNAL CHECKLIST.
2. ALL LUMINARIES ARE LED CATEGORY C UNLESS OTHERWISE NOTED
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN
4. REUSE EXISTING CABINET AND CONTROLLER
5. INSTALL CONDUIT IN BRIDGE PARAPET
6. SB2 INCLUDES OVERHEIGHT TYPE 13 POLE
7. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP
8. CONTRACTOR TO REINSTALL EXISTING RADIO ANTENNA

EVP CONSTRUCTION NOTES

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH PROPOSED SIGNAL BASE, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D).

N



JOHN P. BRUGGEMAN E-39737 BAYSIDE, WI
WISCONSIN PROFESSIONAL ENGINEER
4/24/18

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX NON-CONDUCTIVE, 24" X 42"
- PULL BOX NON-CONDUCTIVE, 24" X 36"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- RADIO INTERCONNECT ANTENNA (5.8 GHZ)

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

MONOTUBE STRUCTURES

SB2 (OH) = S-51-1159
SB6 (OH) = S-51-1212

AS-BUILT PER 2250-12-75
MAY 2014

INITIAL INSTALL
2014

REVISION				
REV. NO.	REPLACE TRAFFIC SIGNAL EQUIPMENT			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY
2	4/25/18	DAB	4/25/18	JRJ

TRAFFIC CONTROL SIGNAL
STH 20/83 & E. MAIN STREET
VILLAGE OF WATERFORD
RACINE COUNTY
CABINET TYPE: TS2-E
SIGNAL NO. S51-1394 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
DATE_____ REGION TRAFFIC ENGINEER
APPROVED
DATE_____ STATE TRAFFIC ENGINEER

REGION CONTACT: D. BRANTNER
DESIGNED BY: rasmith
REVISED BY:

PAGE 1 OF 3

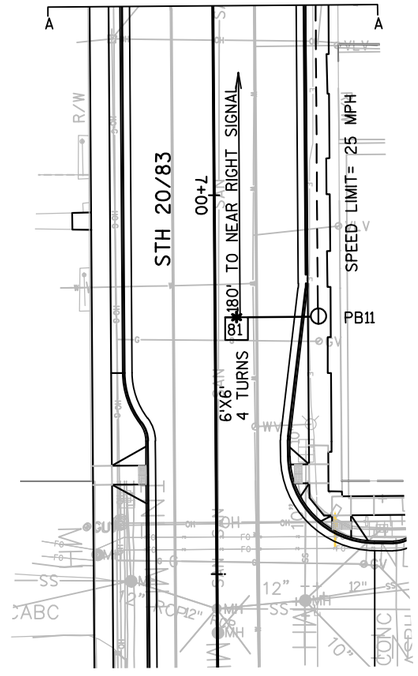
4/25/18 Rev

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 268	E

FILE NAME : T:\1112700\TRAFFIC\SIGNAL DESIGN\160620 WIS 20 & MAIN PLAN REVISION\S51-1394_B.DWG
LAYOUT NAME - S51-1394_B - S51-1394_B_PG1
PLOT DATE : 4/24/2018 1:58 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42

2

N



TRAFFIC CONTROL SIGNAL
STH 20/83 & E. MAIN STREET
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO. S51-1394

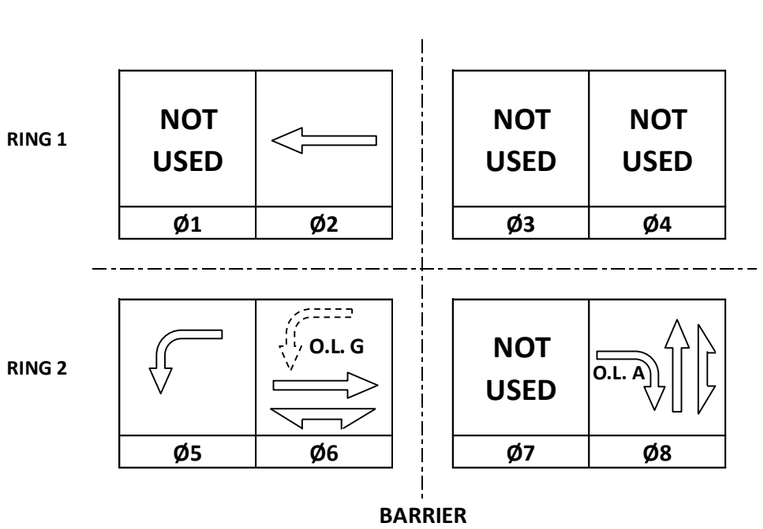
REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 269 E

FILE NAME : \\RASMITH.COM\BROOKFIELD\TRANSPORTATION\1112700\TRAFFIC\SIGNAL DESIGN\160620 WIS 20 & MAIN PLAN REVISION\S51-1394_B.DWG PLOT DATE : 4/20/2018 4:33 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : 1:40_XREF
LAYOUT NAME - S51-1394_B - S51-1394_B_PG2

	HEAD NUMBERS	FLASH
Ø1		
Ø2	4,5,6	R
Ø3		
Ø4		
Ø5	7,8	R ←
Ø6	1,2,3	R
Ø7		
Ø8	9,10,11	R
Ø2P		
Ø4P		
Ø6P	14,15	
Ø8P	12,13	
OLA	1,3	-
OLE		
OLF		
OLG	7,8	-
OLH		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2	X	6	MIN	X
3				
4				
5		2		X
6	X	2	MIN	X
7				
8				X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	D
MOVEMENT	←	⇠	↑
PHASE	2+5	6+2	8

AFTER PREEMPTION SEQUENCE 2+5 OR 6+2, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 8, CONTROLLER SHALL RETURN TO PHASE 8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	X
CELL MODEM	X

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	
SIGNAL SYSTEM NO:	SS-51-0175

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	
TOMAR	X
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	21	61	81	83	85												PLAN LOOP DETECTOR*(S)
CALLED PHASE	2	6	8	8	8												CALLED PHASE
CALL OPTION	X	X		X	X												CALL OPTION
DELAY TIME				X	X												DELAY TIME
EXTENTION OPTION	X	X	X	X	X												EXTENTION OPTION
EXTEND TIME			X														EXTEND TIME
USE ADDED INITIAL	X	X															USE ADDED INITIAL
CROSS SWITCH PHASE																	CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	51	62	82	84													PLAN LOOP DETECTOR*(S)
CALLED PHASE	5	6	8	8													CALLED PHASE
CALL OPTION	X	X	X	X													CALL OPTION
DELAY TIME	X																DELAY TIME
EXTENTION OPTION	X	X	X	X													EXTENTION OPTION
EXTEND TIME																	EXTEND TIME
USE ADDED INITIAL																	USE ADDED INITIAL
CROSS SWITCH PHASE																	CROSS SWITCH PHASE

STH 20/83 & E. MAIN STREET
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO: S51-1394 CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE
DATE: MAY 2018 PAGE NO. 3 OF 3

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

PROJECT ID:	2250-12-70
INTERSECTION:	STH 20/83 & E. Main Street

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

DATE	5/1/18

CB1 TO	JUMPER	# OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	FUTURE APS
				RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK		
SB1		15	1	RED	ORG	GRN		ORG/BLK	GRN/BLK					
			7				RED/BLK	BLU/BLK	WHT/BLK	BLK/WHT				
SB2		12	5	RED	ORG	GRN								
			6	RED	ORG	GRN								
			8				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB3		7	10	RED	ORG	GRN								
SB4		7	11	RED	ORG	GRN								
SB5		12	4	RED	ORG	GRN								
			12								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB6		12	2	RED	ORG	GRN								
			3	RED	ORG	GRN		ORG/BLK	GRN/BLK					
			13								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB7		12	9	RED	ORG	GRN								
			14								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK
SB8		12	15								BLK	BLU		
			BUTTON										WHT/BLK	BLU/BLK

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	SB2
PB3	SB3
PB4	SB4
PB8	SB6
PB9	SB7
PB12	SB8

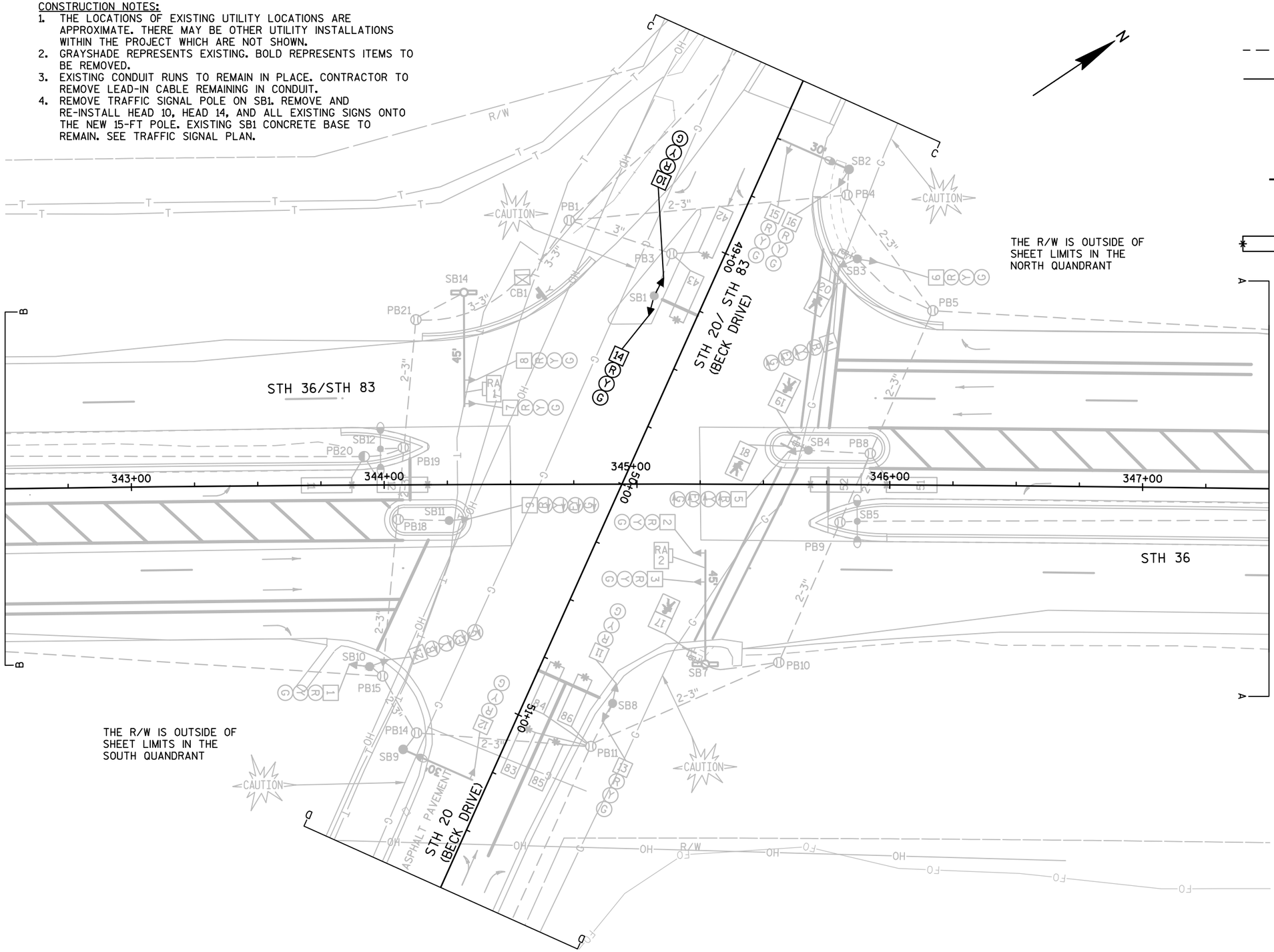
LIGHTING UF 10 AWG W/GROUND	
FROM	TO
CB1	SB2
CB1	SB7
SB7	SB6
SB6	SB5

EMERGENCY VEHICLE PREEMPTION (EVP) CABLE	
FROM	TO
CB1	HEAD A (SB2)
CB1	HEAD B (SB6)
CB1	HEAD D (SB7)

*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications
*Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the

CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING UTILITY LOCATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
3. EXISTING CONDUIT RUNS TO REMAIN IN PLACE. CONTRACTOR TO REMOVE LEAD-IN CABLE REMAINING IN CONDUIT.
4. REMOVE TRAFFIC SIGNAL POLE ON SB1. REMOVE AND RE-INSTALL HEAD 10, HEAD 14, AND ALL EXISTING SIGNS ONTO THE NEW 15-FT POLE. EXISTING SB1 CONCRETE BASE TO REMAIN. SEE TRAFFIC SIGNAL PLAN.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY YELLOW ARROW
- G GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- Y YIELD SIGN
- LANE DESIGNATION FOR INFO ONLY
- RA X RADAR DETECTOR
- RADAR DETECTION ZONE

TRAFFIC CONTROL SIGNAL
STH 36 & STH 20/83
TOWN OF ROCHESTER
RACINE COUNTY

SIGNAL NO. S51-0406

REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

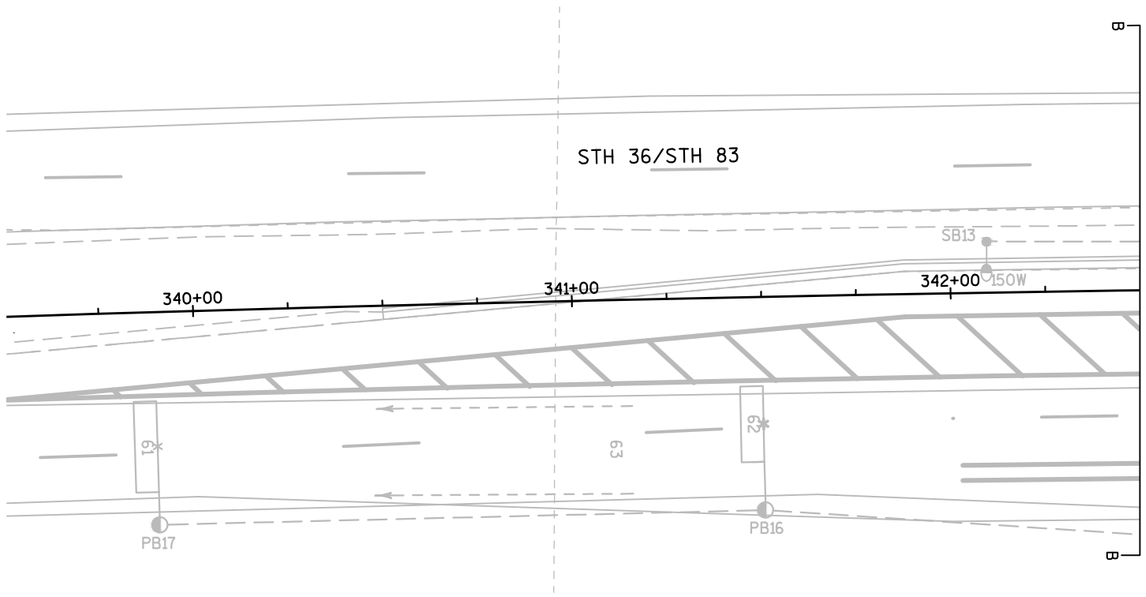
PAGE 1 OF 3

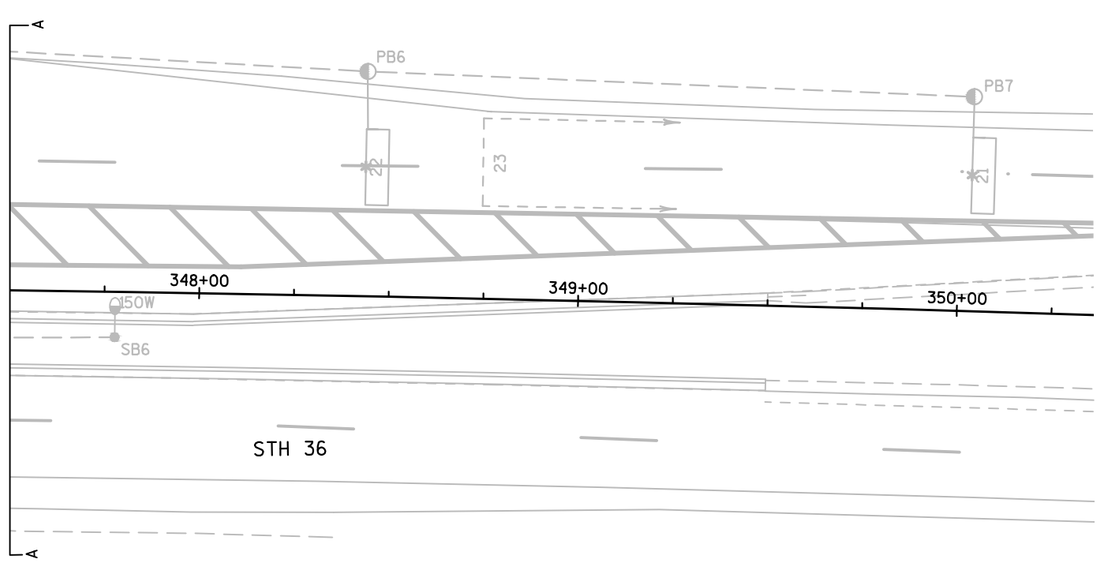
PROJECT NO: 2250-12-70	HWY: STH 36/83	COUNTY: RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 272	E

FILE NAME : T:\1112700\TRAFFIC\SIGNAL DESIGN\160606 WIS 20 & WIS 36_83 PLAN REVISION\S51-0406_G\S51-0406_SR.DWG PLOT DATE : 2/1/2018 12:16 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

2





TRAFFIC CONTROL SIGNAL
STH 36 & STH 20/83
TOWN OF ROCHESTER
RACINE COUNTY

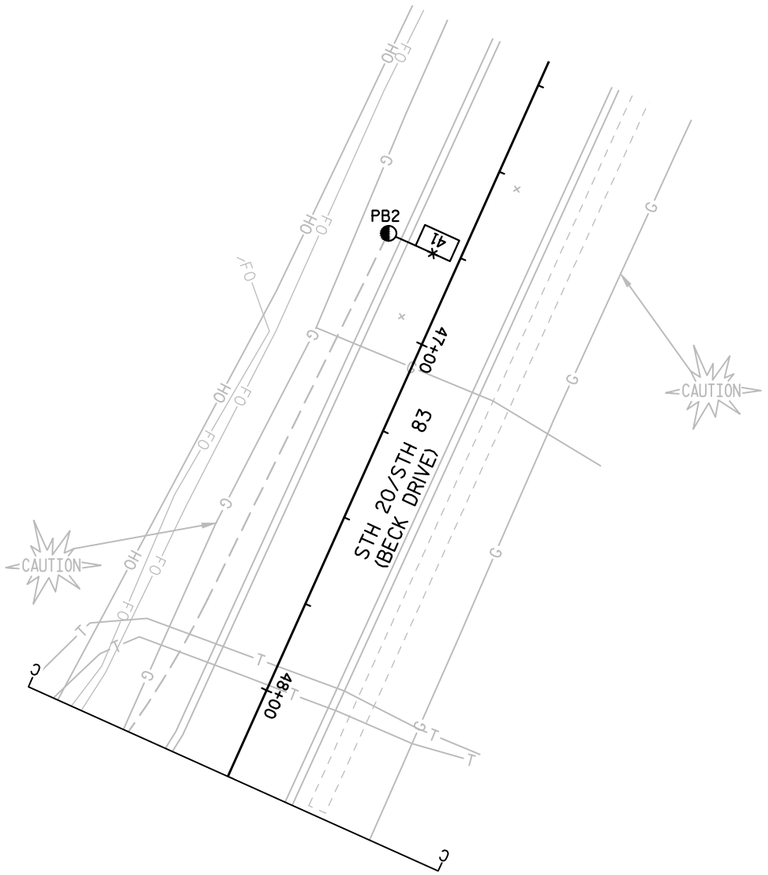
SIGNAL NO. S51-0406

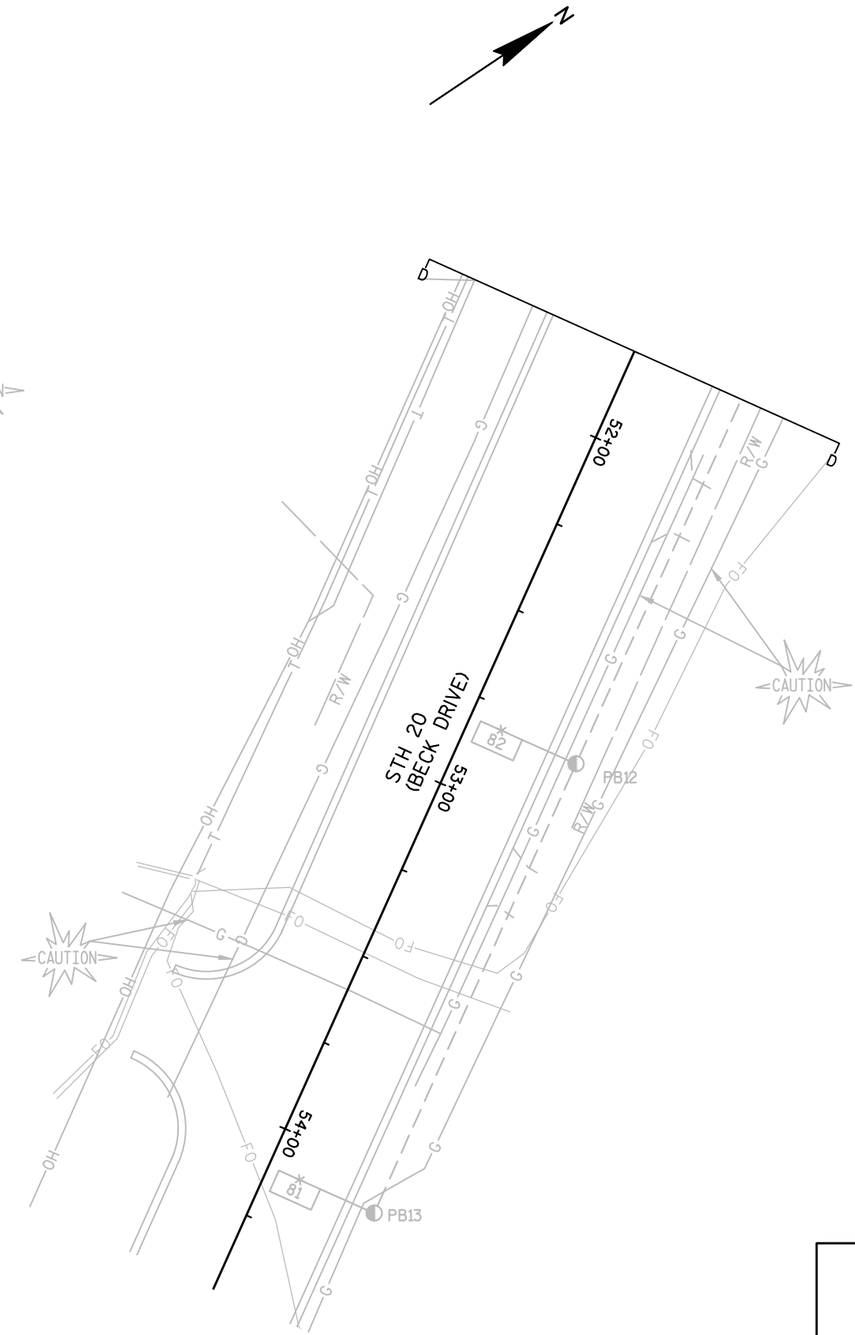
REGION CONTACT: D. BRANTNER
DESIGNED BY: raSmith
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 2250-12-70	HWY: STH 36/83	COUNTY: RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 273	E

2





TRAFFIC CONTROL SIGNAL
STH 36 & STH 20/83
TOWN OF ROCHESTER
RACINE COUNTY

SIGNAL NO. S51-0406

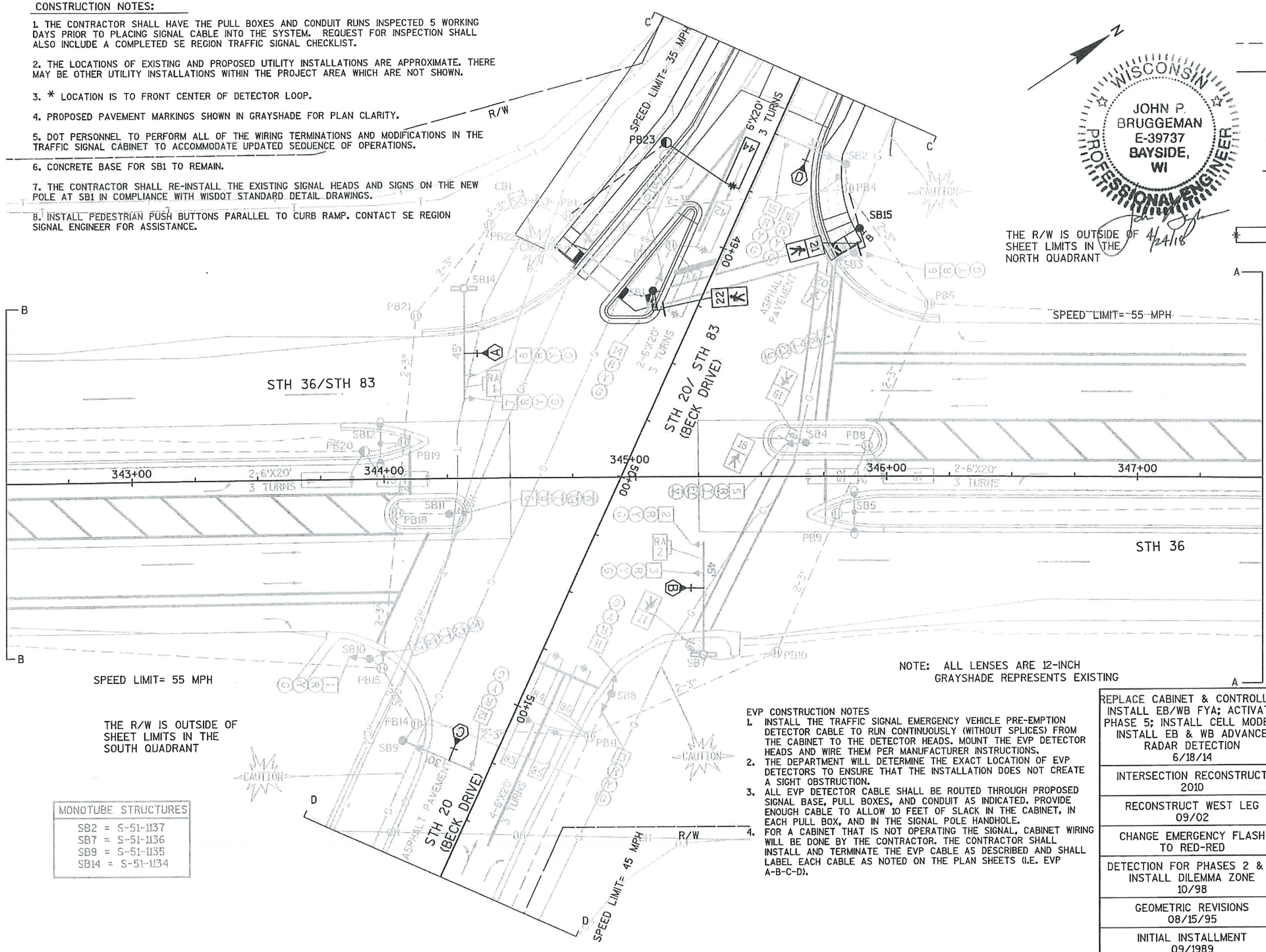
REGION CONTACT: D. BRANTNER
DESIGNED BY: rdSmith
REVISED BY:

PAGE 3 OF 3

PROJECT NO: 2250-12-70	HWY: STH 36/83	COUNTY: RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 274	E

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM. REQUEST FOR INSPECTION SHALL ALSO INCLUDE A COMPLETED SE REGION TRAFFIC SIGNAL CHECKLIST.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
3. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
4. PROPOSED PAVEMENT MARKINGS SHOWN IN GRAYSHADE FOR PLAN CLARITY.
5. DOT PERSONNEL TO PERFORM ALL OF THE WIRING TERMINATIONS AND MODIFICATIONS IN THE TRAFFIC SIGNAL CABINET TO ACCOMMODATE UPDATED SEQUENCE OF OPERATIONS.
6. CONCRETE BASE FOR SB1 TO REMAIN.
7. THE CONTRACTOR SHALL RE-INSTALL THE EXISTING SIGNAL HEADS AND SIGNS ON THE NEW POLE AT SB1 IN COMPLIANCE WITH WISDOT STANDARD DETAIL DRAWINGS.
8. INSTALL PEDESTRIAN PUSH BUTTONS PARALLEL TO CURB RAMP. CONTACT SE REGION SIGNAL ENGINEER FOR ASSISTANCE.



MONOTUBE STRUCTURES
SB2 = S-51-1137
SB7 = S-51-1136
SB9 = S-51-1135
SB14 = S-51-1134

THE R/W IS OUTSIDE OF SHEET LIMITS IN THE NORTH QUADRANT

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

EVP CONSTRUCTION NOTES
1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH PROPOSED SIGNAL BASE, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D).

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- Y YIELD SIGN
- LANE DESIGNATION FOR INFO ONLY
- RA X RADAR DETECTOR
- RADAR DETECTION ZONE

WISCONSIN — JOHN P. BRUGGEMAN E-39737 BAYSIDE, WI — PROFESSIONAL ENGINEER
4/24/18

REPLACE CABINET & CONTROLLER; INSTALL EB/WB FYA; ACTIVATE PHASE 5; INSTALL CELL MODEM; INSTALL EB & WB ADVANCE RADAR DETECTION 6/18/14
INTERSECTION RECONSTRUCT 2010
RECONSTRUCT WEST LEG 09/02
CHANGE EMERGENCY FLASH TO RED-RED
DETECTION FOR PHASES 2 & 5 INSTALL DILEMMA ZONE 10/98
GEOMETRIC REVISIONS 08/15/95
INITIAL INSTALLMENT 09/1989

REVISION

REV. NO.	REPLACE LOOP 41, ADD LOOP 44; ADD EVP; INSTALL PED SIGNALS ON NW LEG			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY
7	4/25/18	DAB	4/30/18	JBL

TRAFFIC CONTROL SIGNAL
STH 36 & STH 20/83
TOWN OF ROCHESTER
RACINE COUNTY
CABINET TYPE: TS2-E
SIGNAL NO. S51-0406 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 09/05/89 — EDWARD J. FRIEDE, REGION TRAFFIC ENGINEER

APPROVED
DATE 09/19/89 — H. O. PRICE, STATE TRAFFIC ENGINEER

REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: raSmith

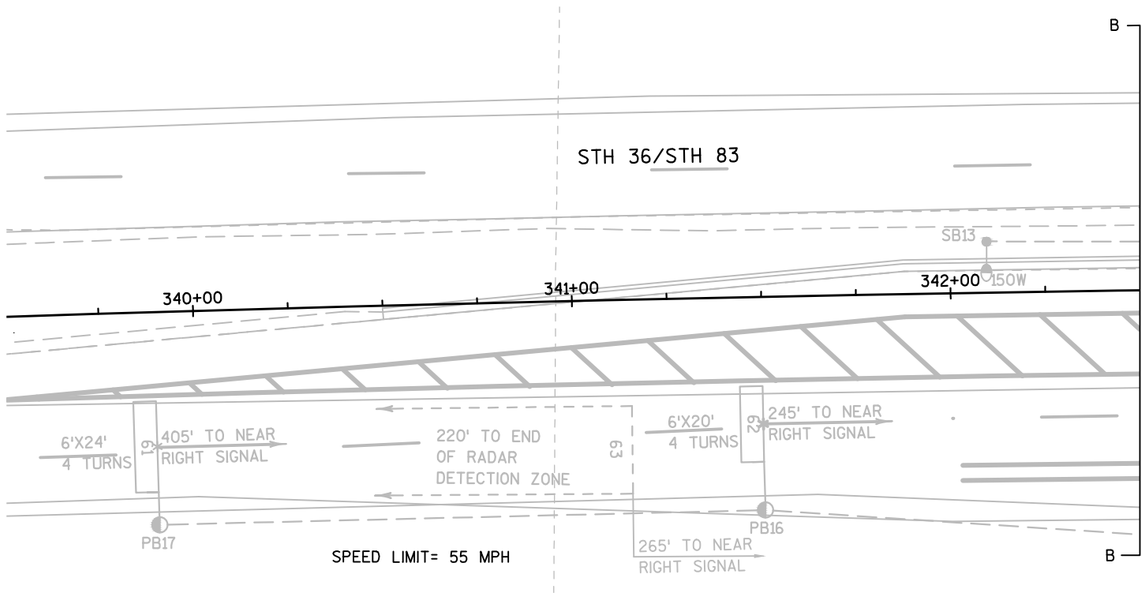
PAGE 1 OF 4

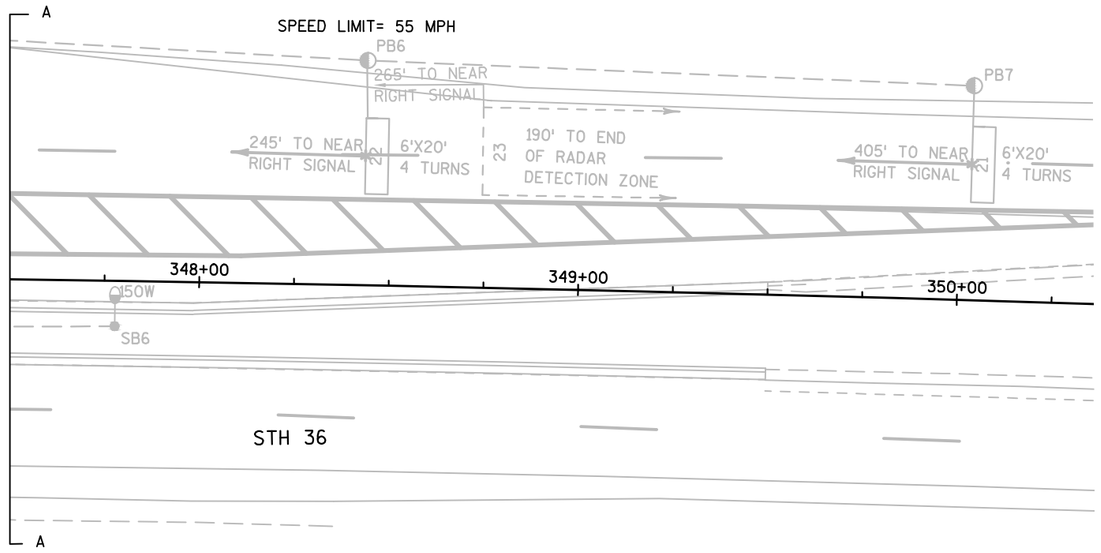
4/25/18 RSV

PROJECT NO: 2250-12-70	HWY: STH 36/83	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 275	E

FILE NAME : T:\1112700\TRAFFIC\SIGNAL DESIGN\160606 WIS 20 & WIS 36_83 PLAN REVISION\S51-0406_G.DWG
LAYOUT NAME - S51-0406_G - S51-0406_G_PG1
PLOT DATE : 4/20/2018 4:45 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 42

2





TRAFFIC CONTROL SIGNAL
STH 36 & STH 20/83
TOWN OF ROCHESTER
RACINE COUNTY

SIGNAL NO. S51-0406

REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: raSmith

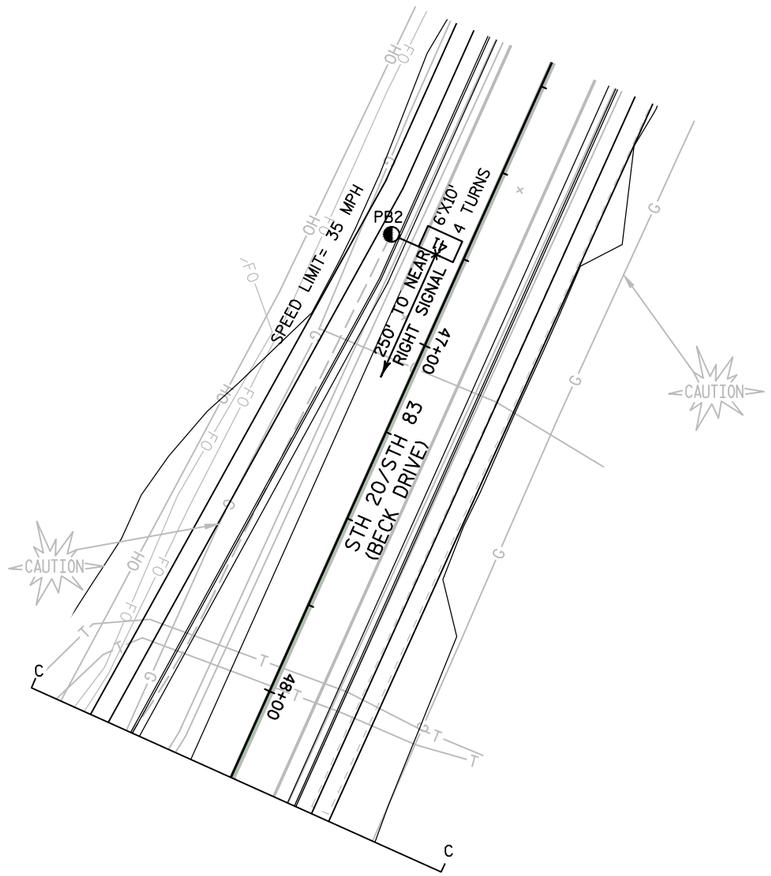
PAGE 2 OF 4

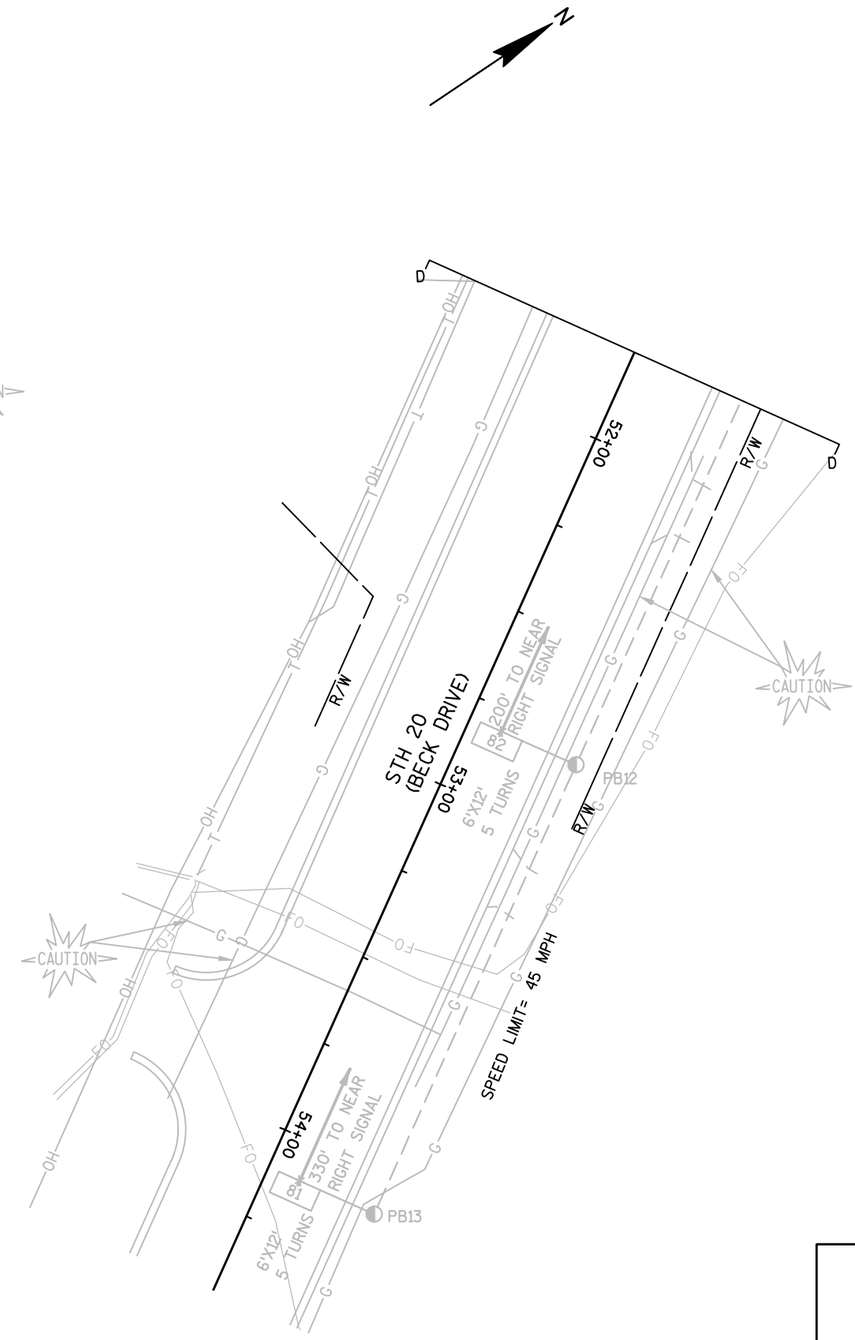
PROJECT NO: 2250-12-70	HWY: STH 36/83	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 276	E

FILE NAME : T:\1112700\TRAFFIC\SIGNAL DESIGN\160606 WIS 20 & WIS 36_83 PLAN REVISION\S51-0406_G.DWG
LAYOUT NAME - S51-0406_G - S51-0406_G_PG2

PLOT DATE : 4/23/2018 5:01 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1" = 40'_XREF

2





TRAFFIC CONTROL SIGNAL
STH 36 & STH 20/83
TOWN OF ROCHESTER
RACINE COUNTY

SIGNAL NO. S51-0406

REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: raSmith

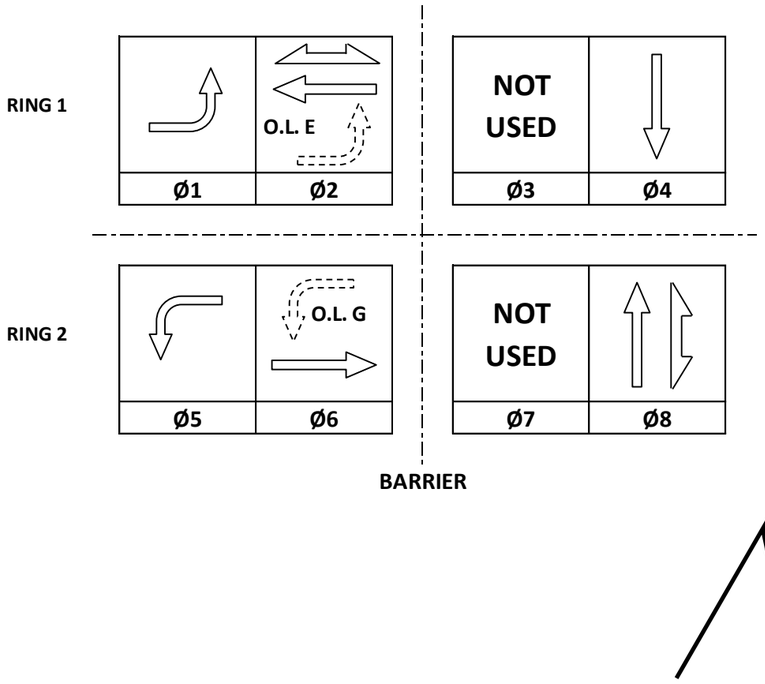
PAGE 3 OF 4

PROJECT NO: 2250-12-70	HWY: STH 36/83	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 277	E

FILE NAME : T:\1112700\TRAFFIC\SIGNAL DESIGN\160606 WIS 20 & WIS 36_83 PLAN REVISION\S51-0406_G.DWG
LAYOUT NAME - S51-0406_G - S51-0406_G_PG3

PLOT DATE : 4/23/2018 5:01 PM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1" = 40'_XREF

	HEAD NUMBERS	FLASH
Ø1	4,5	R ←
Ø2	6,7,8	R
Ø3		
Ø4	10,11,12	R
Ø5	9,21	R ←
Ø6	1,2,3	R
Ø7		
Ø8	13,14,15,16	R
Ø2P	21,22	
Ø4P		
Ø6P		
Ø8P	17,18,19,20	
OLE	4,5	-
OLF		
OLG	9,21	-
OLH		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3				
4		8		X
5		2		X
6	X	2	MIN	X
7				
8		4		X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+8	8+4

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+8 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	X

TYPE OF COORDINATION	
NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM NO: SS-	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	
TOMAR	X
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	9	15	13	19	17	23	21	27	25	49	51	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	41	11,12	83,84	61,62	51,52									23		PLAN LOOP DETECTOR*(S)
CALLED PHASE	4	1	8	6	5									2		CALLED PHASE
CALL OPTION		X	X	X	X									X		CALL OPTION
DELAY TIME			X													DELAY TIME
EXTENTION OPTION	X	X	X	X	X									X		EXTENTION OPTION
EXTEND TIME	X															EXTEND TIME
USE ADDED INITIAL				X												USE ADDED INITIAL
CROSS SWITCH PHASE		2			6											CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	10	16	14	20	18	24	22	28	26	50	52	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	42,43	21,22	85,86	81,82	44									63		PLAN LOOP DETECTOR*(S)
CALLED PHASE	4	2	8	8	4									6		CALLED PHASE
CALL OPTION	X	X	X		X									X		CALL OPTION
DELAY TIME	X		X		X											DELAY TIME
EXTENTION OPTION	X	X	X	X	X									X		EXTENTION OPTION
EXTEND TIME				X												EXTEND TIME
USE ADDED INITIAL		X														USE ADDED INITIAL
CROSS SWITCH PHASE																CROSS SWITCH PHASE

STH 36 & STH 20/83
TOWN OF ROCHESTER
RACINE COUNTY

SIGNAL NO: S51-0406 CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE
DATE: MAY 2018 PAGE NO. 4 OF 4

PROJECT NO: 2250-12-70	HWY: STH 36/83	COUNTY: RACINE	SEQUENCE OF OPERATIONS	SHEET NO: 278	E

2

CONSTRUCTION NOTES:
1. THE LOCATIONS OF EXISTING & PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITIES.

LEGEND

NON-METALLIC CONDUIT 2", UNLESS OTHERWISE NOTED

PULL BOX, 24" X 42"

PULL BOX, 24" X 36"

PULL BOX NON-CONDUCTIVE, 24" X 42"

NOTE: GRAYSHADE REPRESENTS EXISTING

S THIRD ST

MILWAUKEE ST

E MAIN ST

SPEED LIMIT = 25 MPH

R/W

PB1

PB2

PB3

PB4

PB5

2-3"

3-3"

106+00

107+00

108+00

109+00

110+00

111+00

12' VACATED ALLEY

TRAFFIC CONTROL SIGNAL
E. MAIN STREET & MILWAUKEE STREET
VILLAGE OF WATERFORD
RACINE COUNTY

SIGNAL NO.

VILLAGE CONTACT:----------
DESIGNED BY: raSmith
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	TRAFFIC SIGNAL UNDERGROUND PLAN	SHEET E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\024007_SP.DWG
LAYOUT NAME - 024005_SP - STH 20&MAIN

PLOT DATE : 7/16/2018 2:42 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : **********

Himalayan Consultants, LLC

WISCONSIN
ALLAN J. PACADA
E-43053-6
MILWAUKEE, WI
PROFESSIONAL ENGINEER

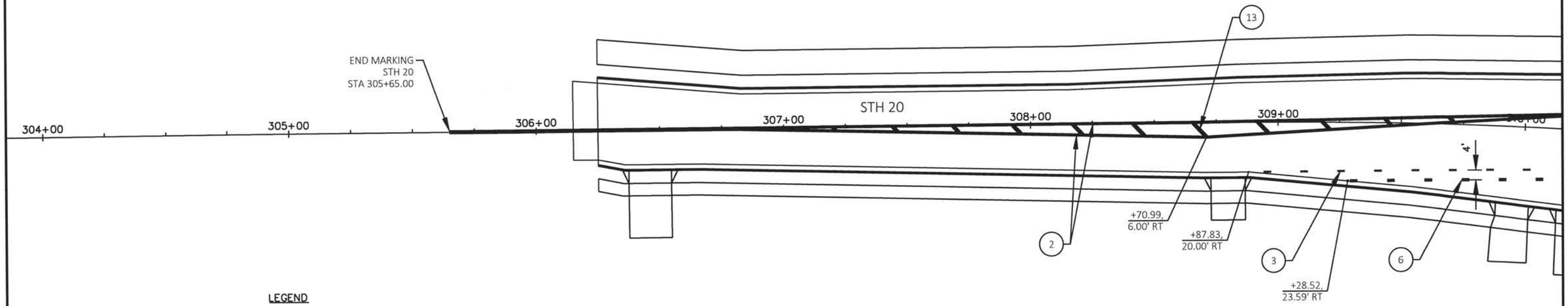
5/14/18 (DATE) (SIGNATURE)

PAVEMENT MARKINGS PREPARED BY HIMALAYAN CONSULTANTS, LLC.

NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

2



LEGEND

1	MARKING LINE EPOXY 4–INCH (WHITE)	
2	MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8–INCH (WHITE)	
6	MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	ONLY
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18–INCH (WHITE)	
11	MARKING LINE EPOXY 4–INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12–INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12–INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 280	E

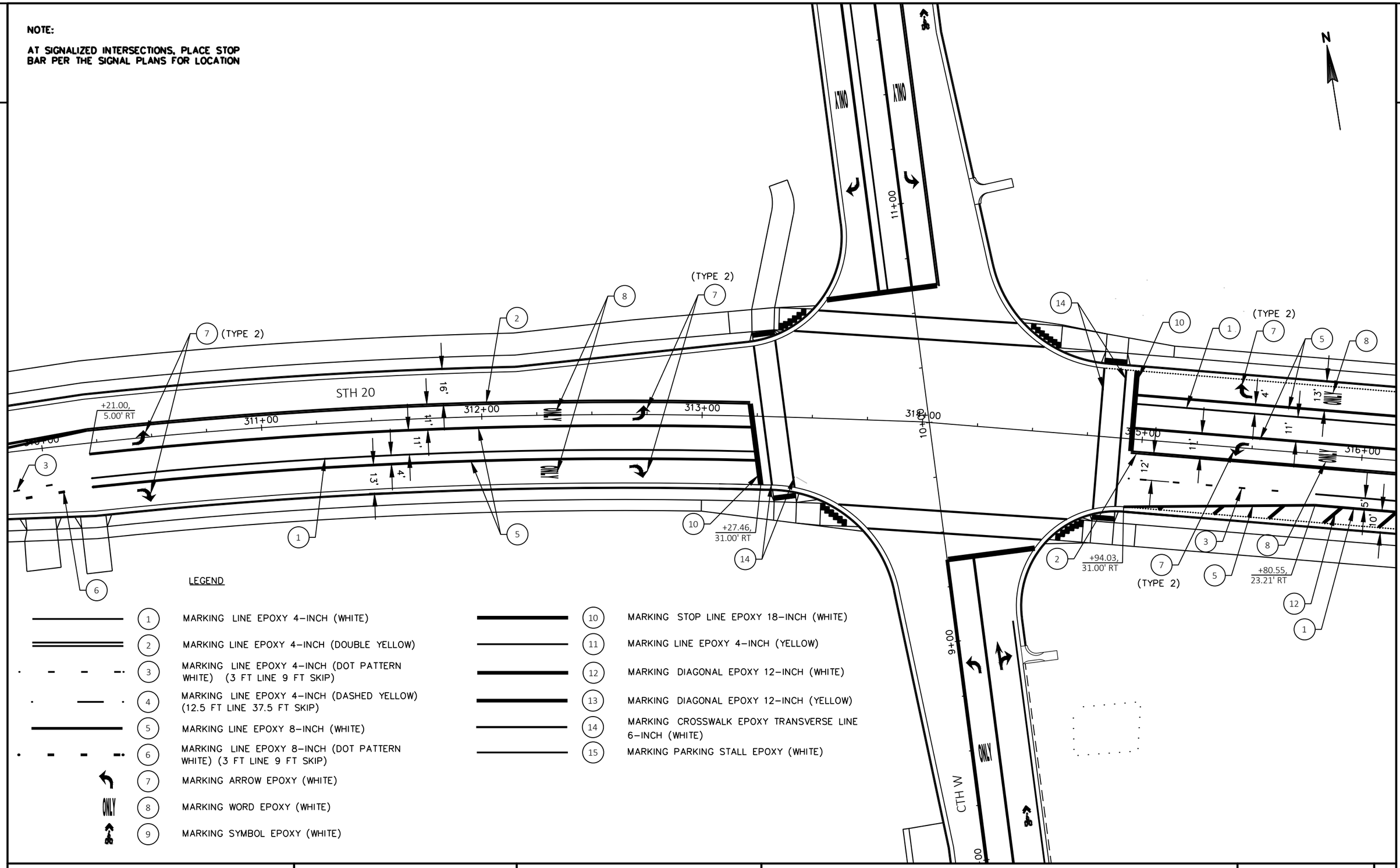
FILE NAME : Y:\PROJECTS\11031.014 STH 20 (RASN)\TRANSPORTATION\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024501

PLOT DATE : 5/14/2018 10:29 AM PLOT BY : HIMALAYAN-19 PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION



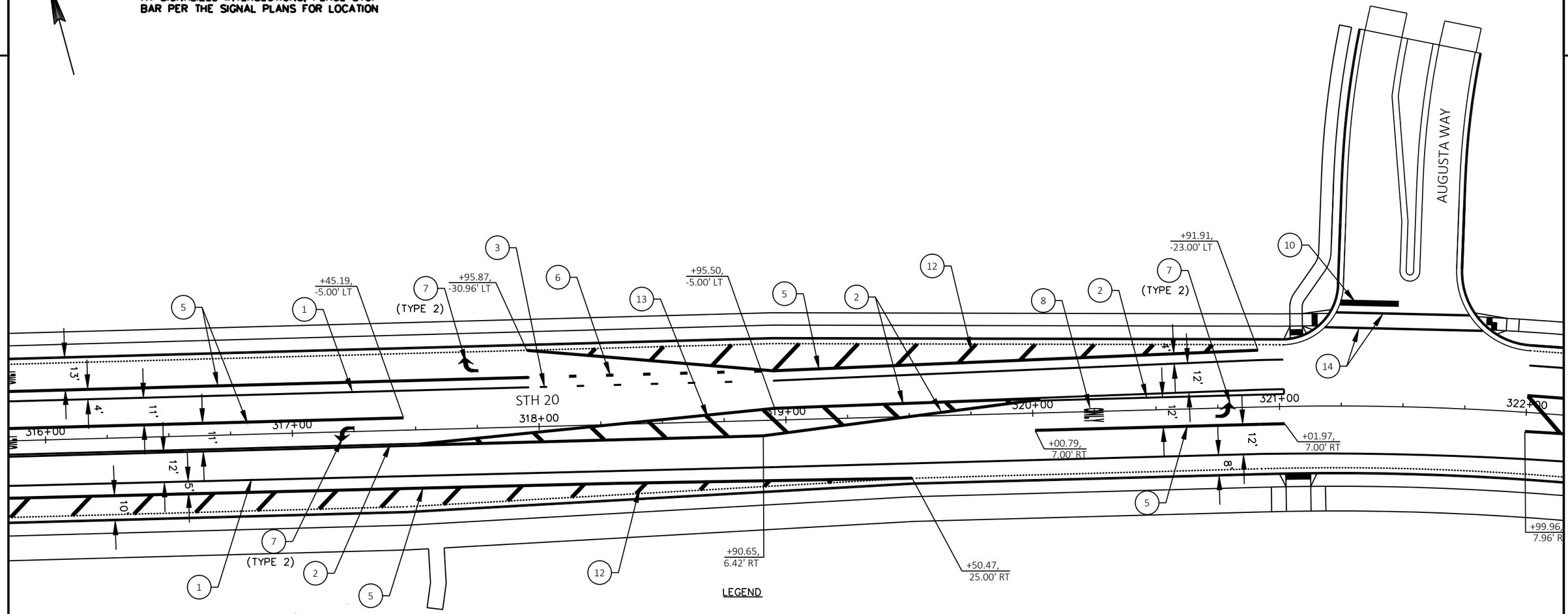
LEGEND

1	MARKING LINE EPOXY 4–INCH (WHITE)	
2	MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8–INCH (WHITE)	
6	MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18–INCH (WHITE)	
11	MARKING LINE EPOXY 4–INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12–INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12–INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 281	E

NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION



LEGEND

1	MARKING LINE EPOXY 4–INCH (WHITE)	
2	MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8–INCH (WHITE)	
6	MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18–INCH (WHITE)	
11	MARKING LINE EPOXY 4–INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12–INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12–INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 282	E

2

LEGEND

1 MARKING LINE EPOXY 4-INCH (WHITE)

2 MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)

3 MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

4 MARKING LINE EPOXY 4-INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)

5 MARKING LINE EPOXY 8-INCH (WHITE)

6 MARKING LINE EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

7 MARKING ARROW EPOXY (WHITE)

8 MARKING WORD EPOXY (WHITE)

9 MARKING SYMBOL EPOXY (WHITE)

10 MARKING STOP LINE EPOXY 18-INCH (WHITE)

11 MARKING LINE EPOXY 4-INCH (YELLOW)

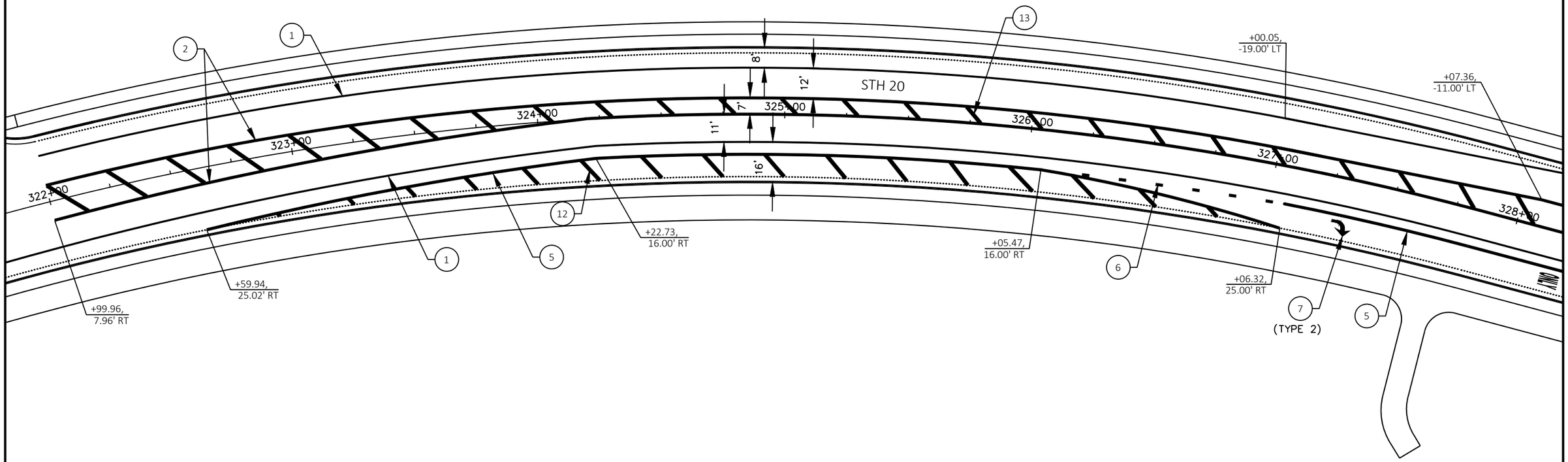
12 MARKING DIAGONAL EPOXY 12-INCH (WHITE)

13 MARKING DIAGONAL EPOXY 12-INCH (YELLOW)

14 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

15 MARKING PARKING STALL EPOXY (WHITE)

N



NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 283	E

2

LEGEND

1 MARKING LINE EPOXY 4–INCH (WHITE)

2 MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)

3 MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

4 MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)

5 MARKING LINE EPOXY 8–INCH (WHITE)

6 MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

7 MARKING ARROW EPOXY (WHITE)

8 MARKING WORD EPOXY (WHITE)

9 MARKING SYMBOL EPOXY (WHITE)

10 MARKING STOP LINE EPOXY 18–INCH (WHITE)

11 MARKING LINE EPOXY 4–INCH (YELLOW)

12 MARKING DIAGONAL EPOXY 12–INCH (WHITE)

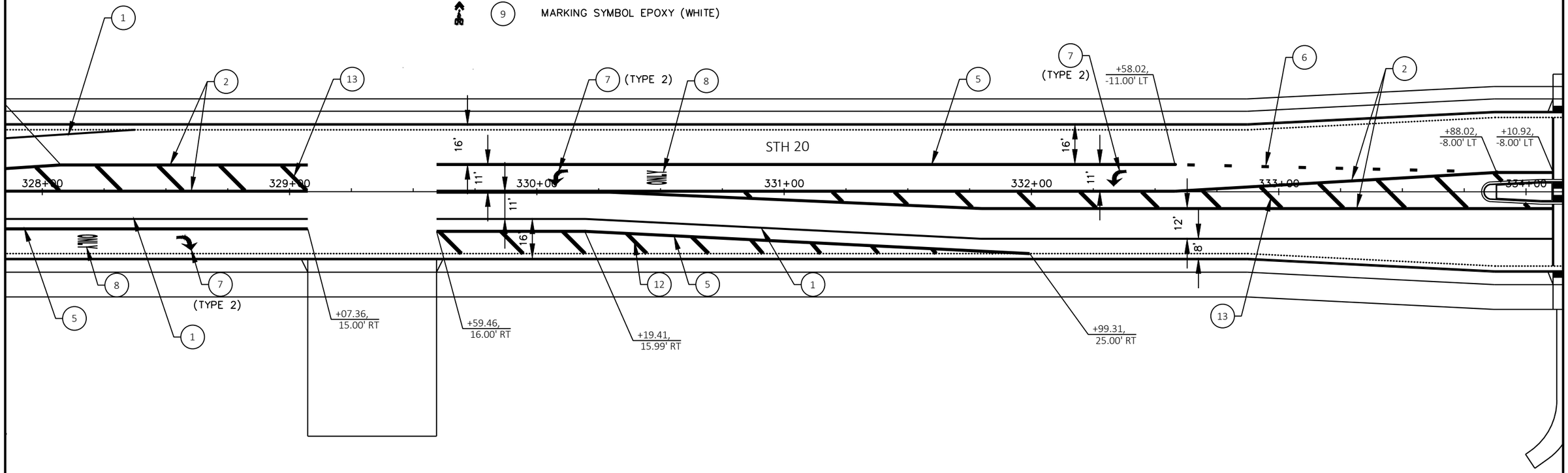
13 MARKING DIAGONAL EPOXY 12–INCH (YELLOW)

14 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)

15 MARKING PARKING STALL EPOXY (WHITE)

N

END MARKING RIVERMOOR RD STA 31+84.84



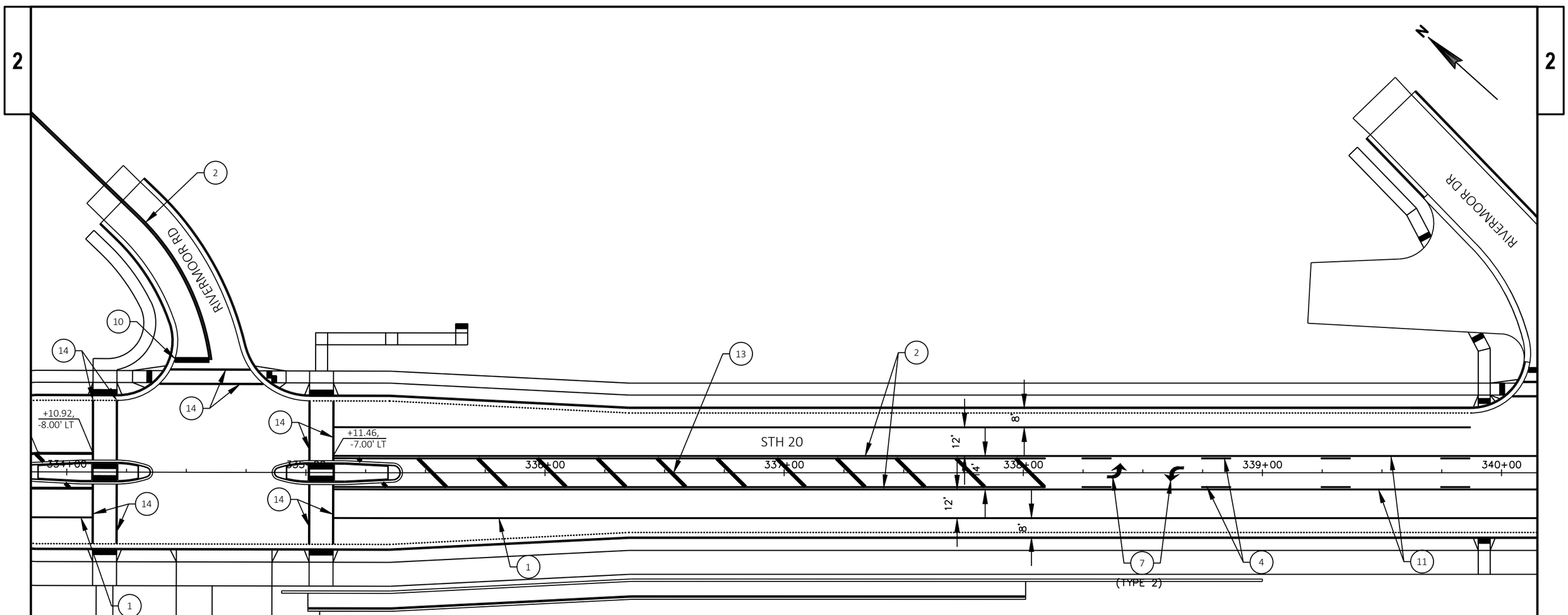
NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 284	E

FILE NAME : Y:\PROJECTS\11031.014 STH 20 (RASN)\TRANSPORTATION\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024505

PLOT DATE : 5/14/2018 10:40 AM PLOT BY : HIMALAYAN-19 PLOT NAME : PLOT SCALE : 1 IN:40 FT



LEGEND

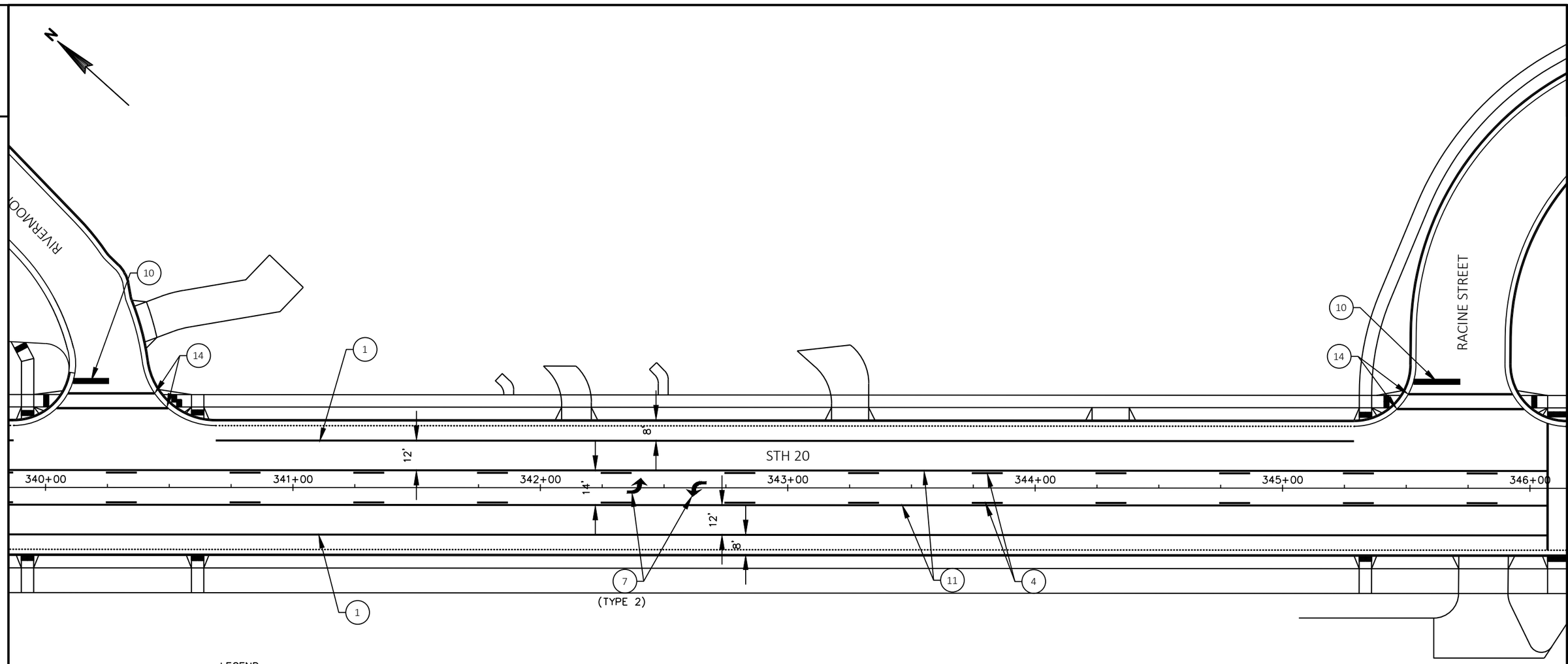
1	MARKING LINE EPOXY 4–INCH (WHITE)	
2	MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8–INCH (WHITE)	
6	MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	ONLY
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18–INCH (WHITE)	
11	MARKING LINE EPOXY 4–INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12–INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12–INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	

NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 285	E

FILE NAME : Y:\PROJECTS\11031.014 STH 20 (RASN)\TRANSPORTATION\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024506
PLOT DATE : 5/14/2018 10:40 AM PLOT BY : HIMALAYAN-19 PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



LEGEND

1	MARKING LINE EPOXY 4–INCH (WHITE)	
2	MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8–INCH (WHITE)	
6	MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	ONLY
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18–INCH (WHITE)	
11	MARKING LINE EPOXY 4–INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12–INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12–INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	

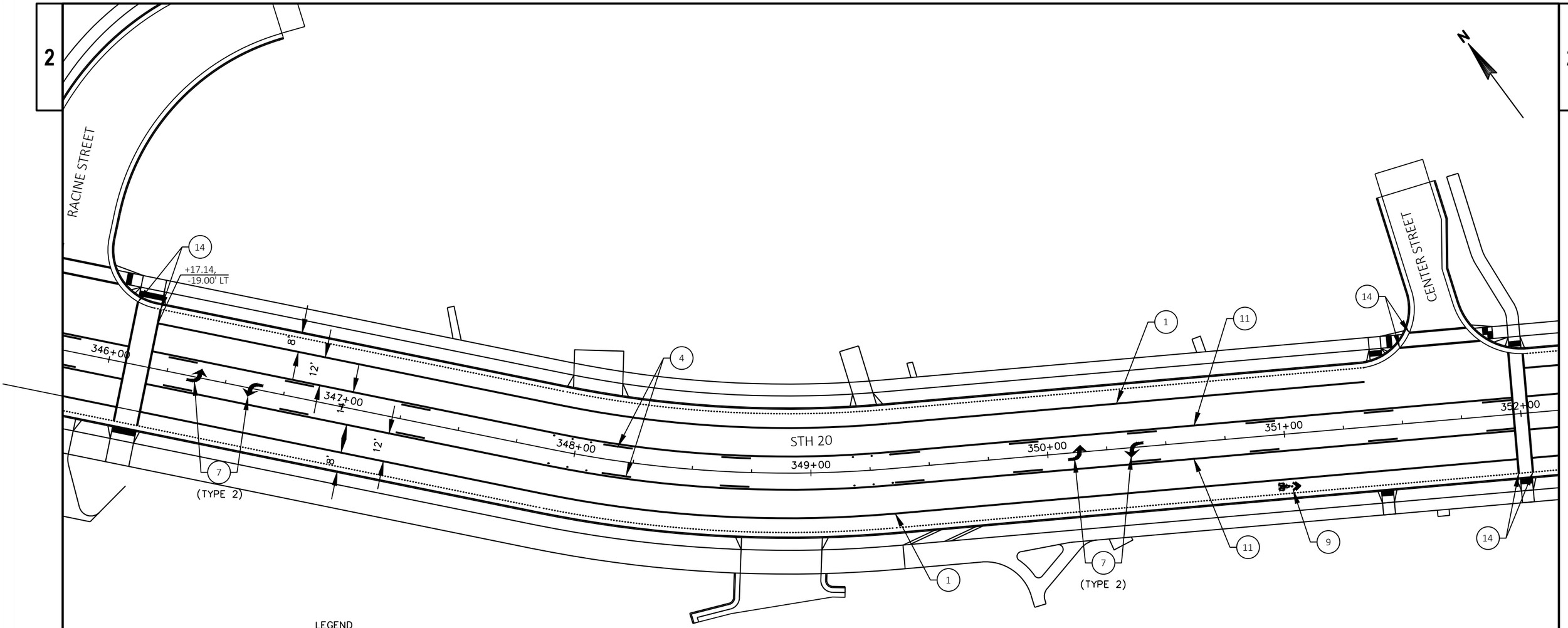
NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 286	E

FILE NAME : Y:\PROJECTS\11031.014 STH 20 (RASN)\TRANSPORTATION\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024507
PLOT DATE : 5/14/2018 10:40 AM PLOT BY : HIMALAYAN-19 PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



LEGEND

1	MARKING LINE EPOXY 4–INCH (WHITE)	
2	MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8–INCH (WHITE)	
6	MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	ONLY
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18–INCH (WHITE)	
11	MARKING LINE EPOXY 4–INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12–INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12–INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	

NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 287	E

FILE NAME : Y:\PROJECTS\11031.014 STH 20 (RASN)\TRANSPORTATION\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024508
PLOT DATE : 5/14/2018 10:40 AM PLOT BY : HIMALAYAN-19 PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

1 MARKING LINE EPOXY 4-INCH (WHITE)

2 MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)

3 MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

4 MARKING LINE EPOXY 4-INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)

5 MARKING LINE EPOXY 8-INCH (WHITE)

6 MARKING LINE EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

7 MARKING ARROW EPOXY (WHITE)

8 MARKING WORD EPOXY (WHITE)

9 MARKING SYMBOL EPOXY (WHITE)

10 MARKING STOP LINE EPOXY 18-INCH (WHITE)

11 MARKING LINE EPOXY 4-INCH (YELLOW)

12 MARKING DIAGONAL EPOXY 12-INCH (WHITE)

13 MARKING DIAGONAL EPOXY 12-INCH (YELLOW)

14 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

15 MARKING PARKING STALL EPOXY (WHITE)

N

N. JEFFERSON STREET

81+00

352+00

353+00

354+00

355+00

356+00

357+00

358+00

STH 20

S. WATER STREET

S. JEFFERSON STREET

79+00

78+00

7 (TYPE 2)

+85.91, 7.00' RT

+70.95, 19.00' RT

+04.41, 0.00'

+89.04, 0.01' RT

+88.14, 16.00' RT

4 (WHITE)

7 (TYPE 1)

7 (TYPE 3)

7 (TYPE 2)

NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 288 E

FILE NAME : Y:\PROJECTS\11031.014 STH 20 (RASN)\TRANSPORTATION\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024509

PLOT DATE : 5/14/2018 10:41 AM PLOT BY : HIMALAYAN-19 PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

1 MARKING LINE EPOXY 4–INCH (WHITE)

2 MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)

3 MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

4 MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)

5 MARKING LINE EPOXY 8–INCH (WHITE)

6 MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

7 MARKING ARROW EPOXY (WHITE)

8 MARKING WORD EPOXY (WHITE)

9 MARKING SYMBOL EPOXY (WHITE)

10 MARKING STOP LINE EPOXY 18–INCH (WHITE)

11 MARKING LINE EPOXY 4–INCH (YELLOW)

12 MARKING DIAGONAL EPOXY 12–INCH (WHITE)

13 MARKING DIAGONAL EPOXY 12–INCH (YELLOW)

14 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)

15 MARKING PARKING STALL EPOXY (WHITE)

N

N. JEFFERSON STREET

N. RIVER STREET

S. JEFFERSON STREET

S. RIVER STREET

STH 20

81+00

358+00

359+00

360+00

361+00

362+00

363+00

364+00

+36.06, -30.00' LT

+85.96, -29.82' LT (TYPE 2)

(TYPE 1)

+36.06, 4.58' RT

+49.48, 5.42' RT

+50.00, 6.50' RT

+27.61, 6.50' RT

+96.23, 6.50' RT

+26.20, 20.00' RT

(TYPE 2)

(TYPE 3)

(WHITE)

15'

11'

10'

14'

5'

NOTE:

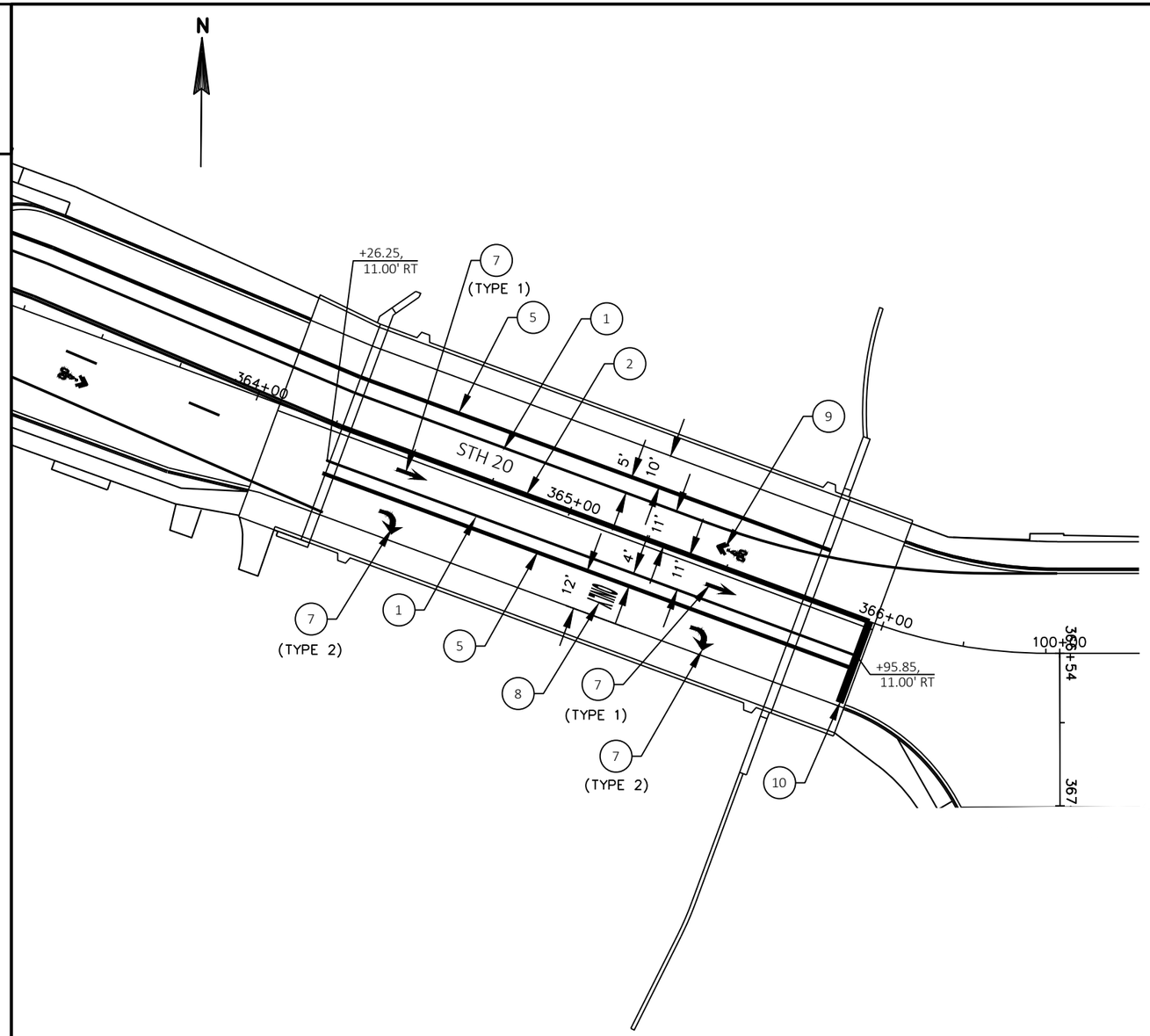
AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 289	E

FILE NAME : Y:\PROJECTS\11031.014 STH 20 (RASN)\TRANSPORTATION\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024510

PLOT DATE : 5/14/2018 10:41 AM PLOT BY : HIMALAYAN-19 PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

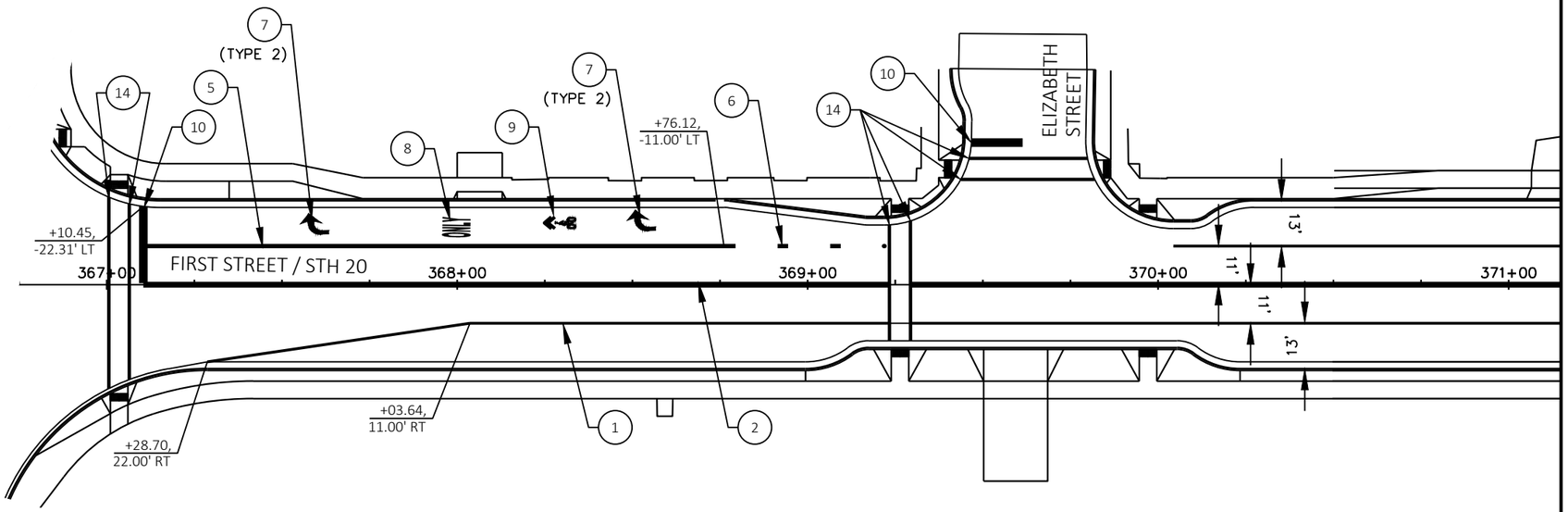


LEGEND

1	MARKING LINE EPOXY 4–INCH (WHITE)
2	MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)
3	MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
4	MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)
5	MARKING LINE EPOXY 8–INCH (WHITE)
6	MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
7	MARKING ARROW EPOXY (WHITE)
8	MARKING WORD EPOXY (WHITE)
9	MARKING SYMBOL EPOXY (WHITE)
10	MARKING STOP LINE EPOXY 18–INCH (WHITE)
11	MARKING LINE EPOXY 4–INCH (YELLOW)
12	MARKING DIAGONAL EPOXY 12–INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12–INCH (YELLOW)
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)
15	MARKING PARKING STALL EPOXY (WHITE)

NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION



LEGEND

1	MARKING LINE EPOXY 4–INCH (WHITE)	
2	MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8–INCH (WHITE)	
6	MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	ONLY
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18–INCH (WHITE)	
11	MARKING LINE EPOXY 4–INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12–INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12–INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	

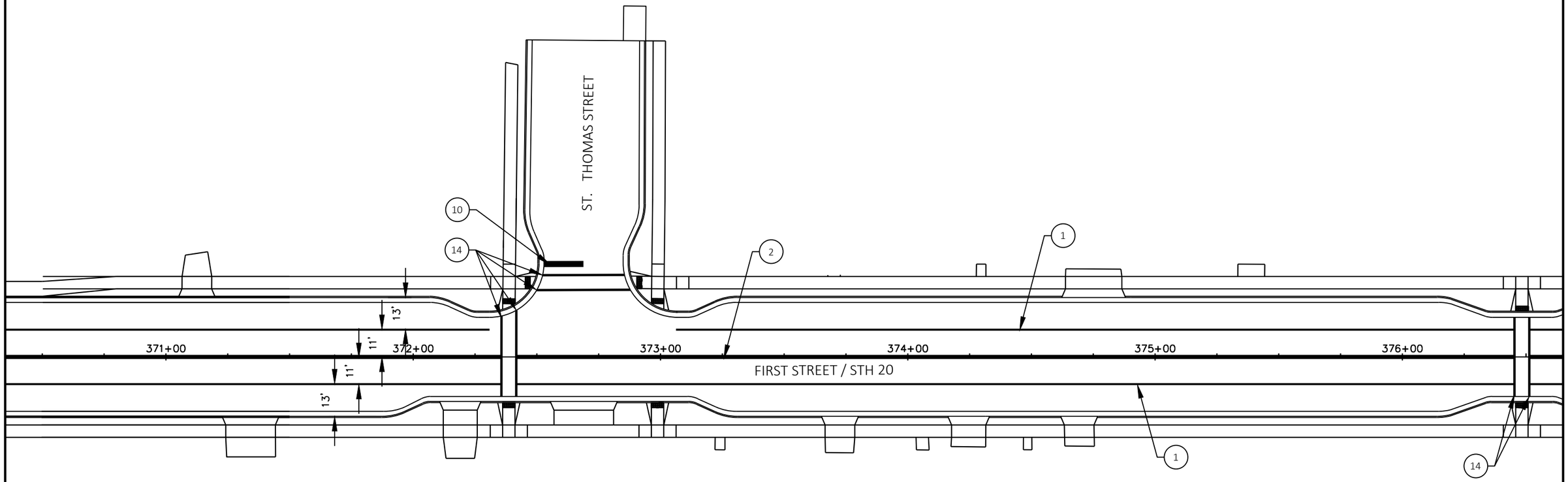
NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 291	E

NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION



LEGEND

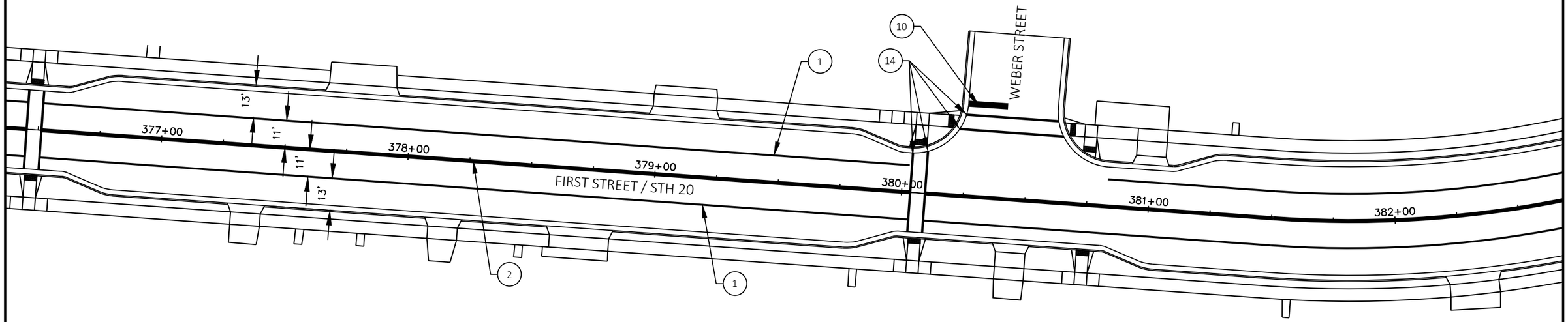
1	MARKING LINE EPOXY 4–INCH (WHITE)	
2	MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8–INCH (WHITE)	
6	MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18–INCH (WHITE)	
11	MARKING LINE EPOXY 4–INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12–INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12–INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 292	E

LEGEND

1	MARKING LINE EPOXY 4–INCH (WHITE)	
2	MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8–INCH (WHITE)	
6	MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18–INCH (WHITE)	
11	MARKING LINE EPOXY 4–INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12–INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12–INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	

N



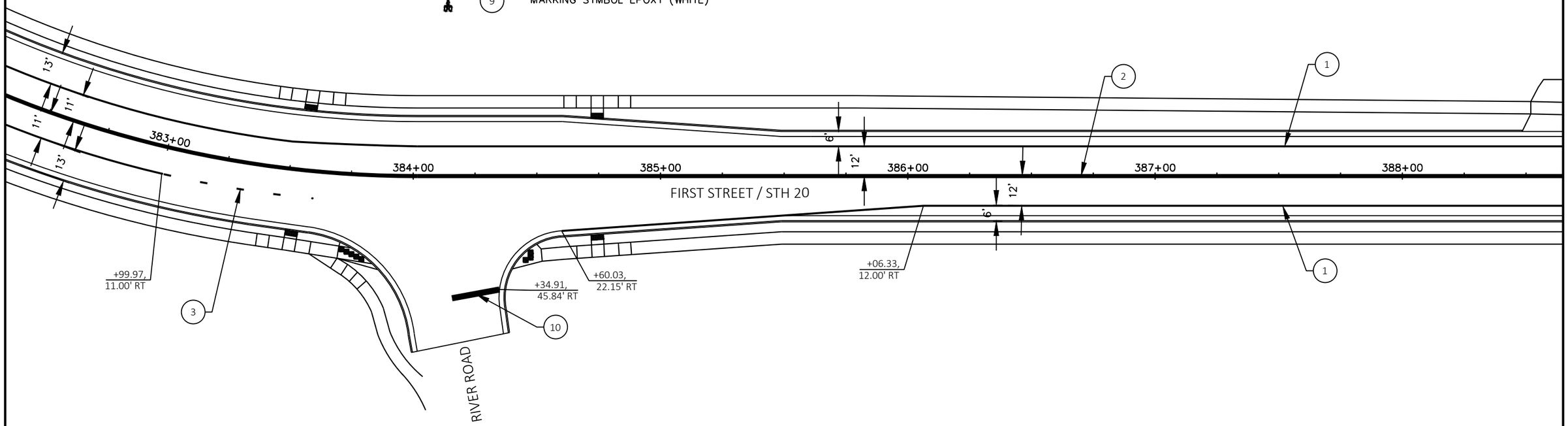
NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 293	E

LEGEND

1	MARKING LINE EPOXY 4-INCH (WHITE)	
2	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4-INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8-INCH (WHITE)	
6	MARKING LINE EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18-INCH (WHITE)	
11	MARKING LINE EPOXY 4-INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12-INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	



NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 294	E

LEGEND

1 MARKING LINE EPOXY 4–INCH (WHITE)

2 MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)

3 MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

4 MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)

5 MARKING LINE EPOXY 8–INCH (WHITE)

6 MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

7 MARKING ARROW EPOXY (WHITE)

8 MARKING WORD EPOXY (WHITE)

9 MARKING SYMBOL EPOXY (WHITE)

10 MARKING STOP LINE EPOXY 18–INCH (WHITE)

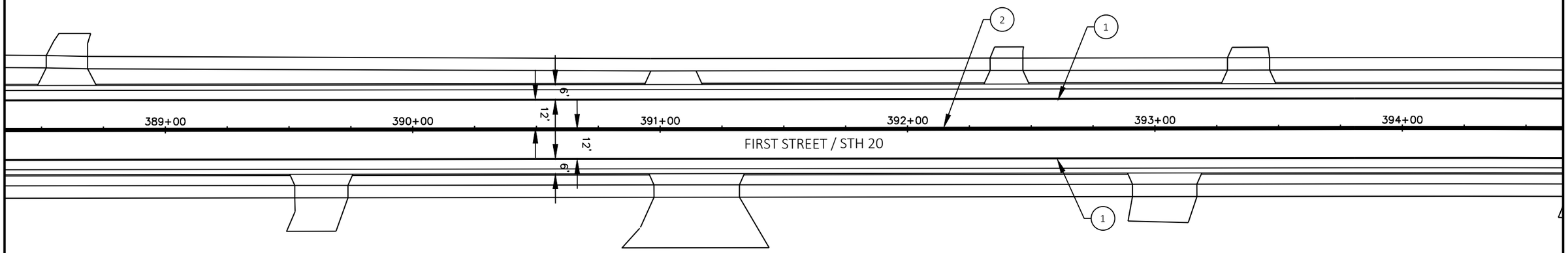
11 MARKING LINE EPOXY 4–INCH (YELLOW)

12 MARKING DIAGONAL EPOXY 12–INCH (WHITE)

13 MARKING DIAGONAL EPOXY 12–INCH (YELLOW)

14 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)

15 MARKING PARKING STALL EPOXY (WHITE)



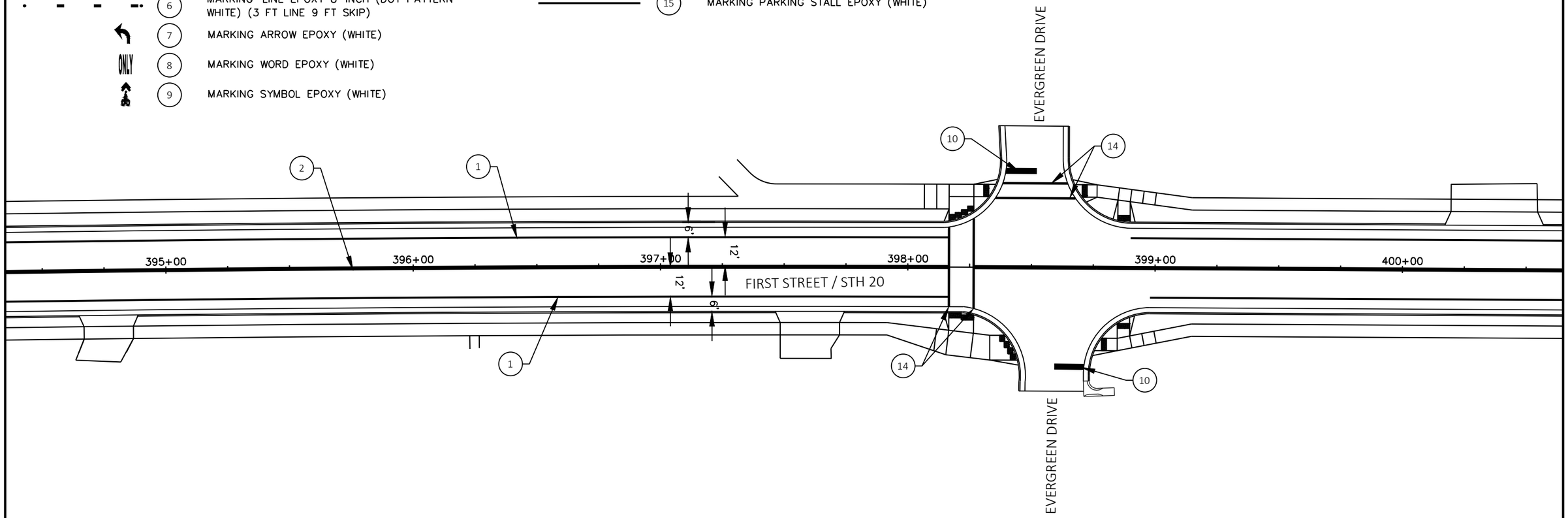
NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 295	E

LEGEND

1	MARKING LINE EPOXY 4-INCH (WHITE)	
2	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4-INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8-INCH (WHITE)	
6	MARKING LINE EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18-INCH (WHITE)	
11	MARKING LINE EPOXY 4-INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12-INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	



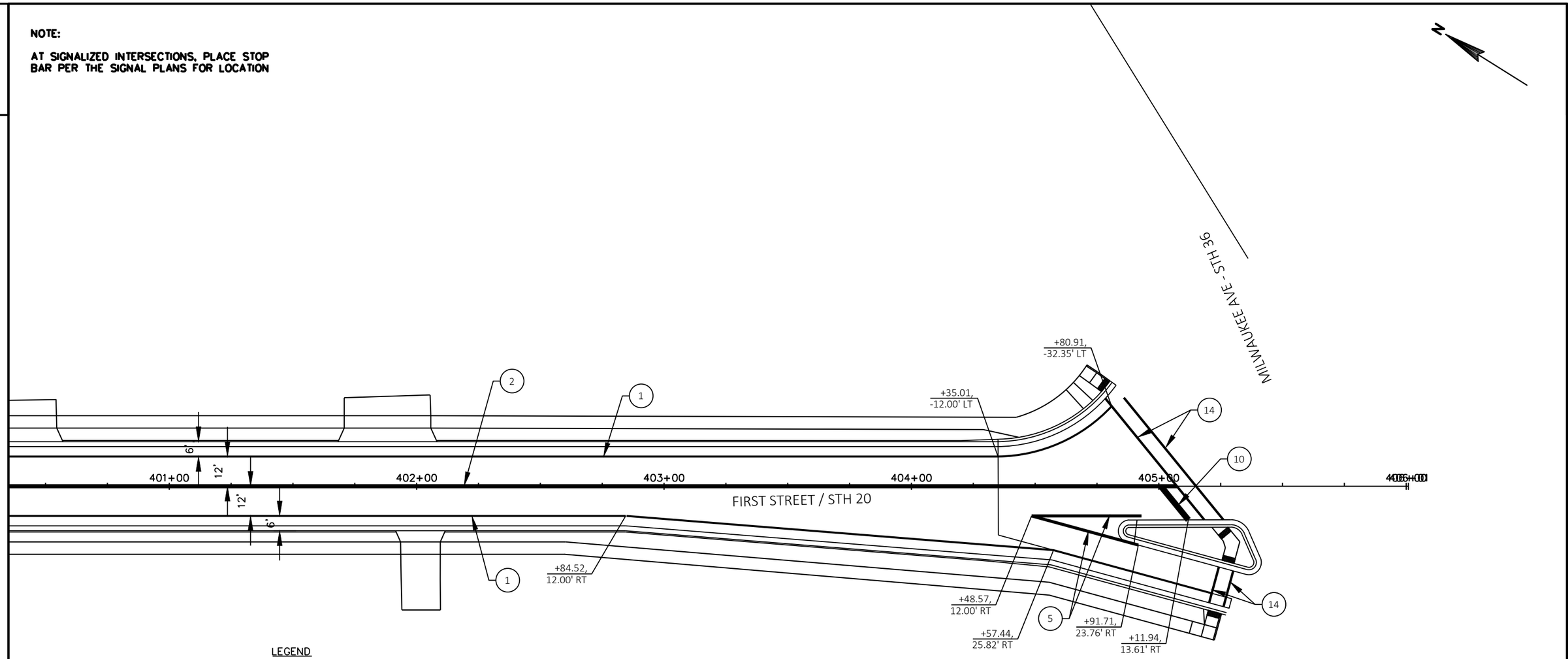
NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 296 E

NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION



LEGEND

1	MARKING LINE EPOXY 4–INCH (WHITE)	
2	MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8–INCH (WHITE)	
6	MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	ONLY
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18–INCH (WHITE)	
11	MARKING LINE EPOXY 4–INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12–INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12–INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - STH 20	SHEET 297	E

FILE NAME : Y:\PROJECTS\11031.014 STH 20 (RASN)\TRANSPORTATION\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024518

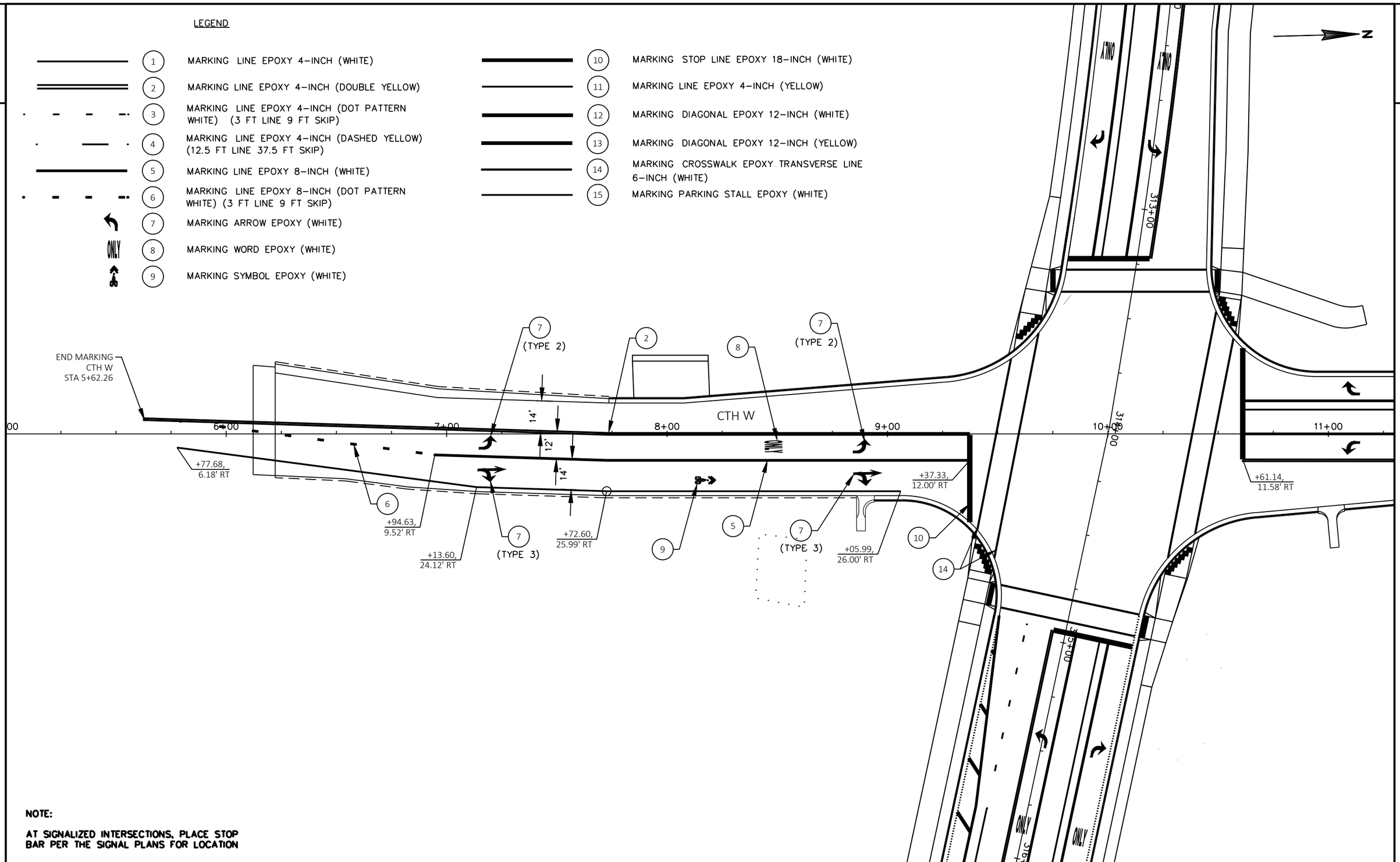
PLOT DATE : 5/14/2018 10:42 AM PLOT BY : HIMALAYAN-19 PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

1	MARKING LINE EPOXY 4–INCH (WHITE)	
2	MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8–INCH (WHITE)	
6	MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	ONLY
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18–INCH (WHITE)	
11	MARKING LINE EPOXY 4–INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12–INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12–INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	

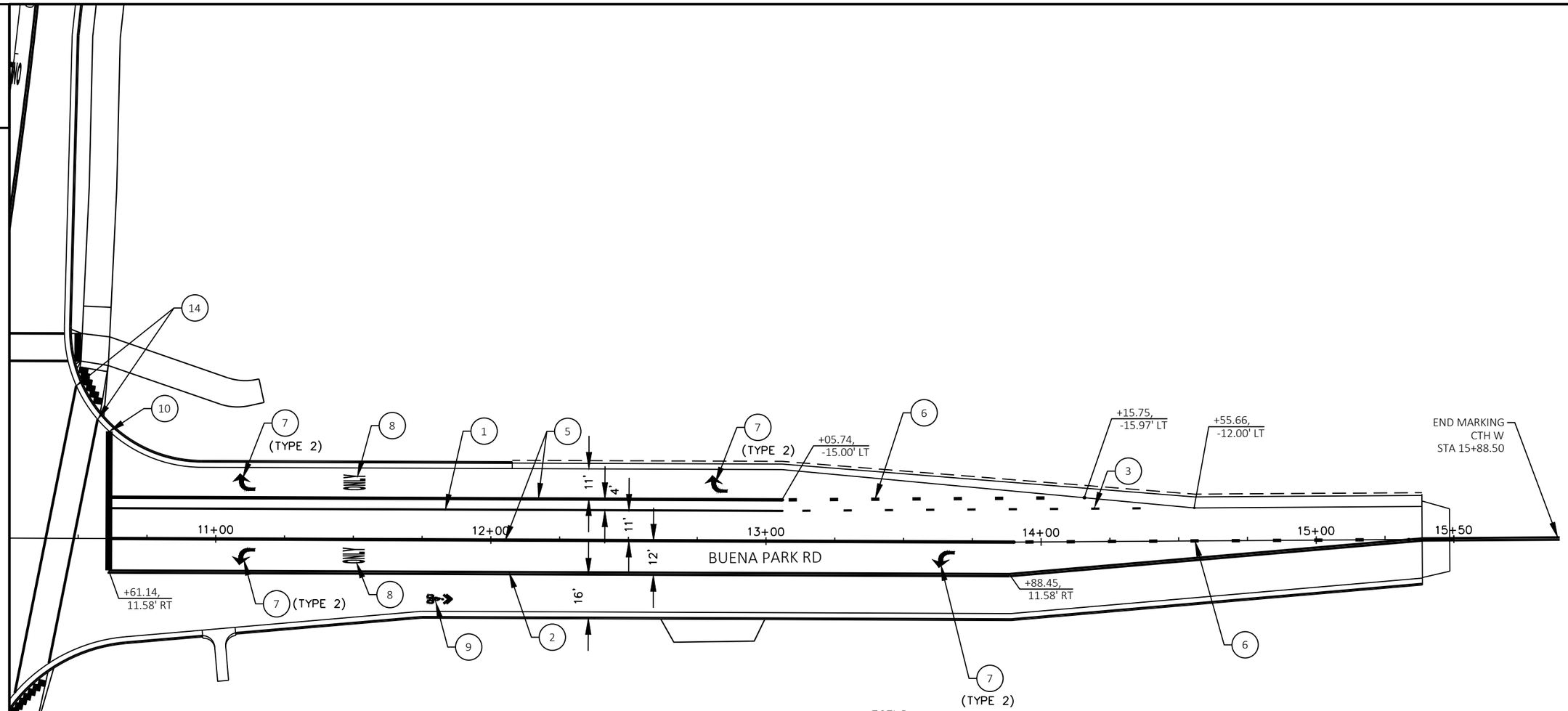


NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - BUENA PARK RD	SHEET 298	E

FILE NAME : Y:\PROJECTS\11031.014 STH 20 (RASN)\TRANSPORTATION\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024519
PLOT DATE : 5/14/2018 10:42 AM PLOT BY : HIMALAYAN-19 PLOT NAME : PLOT SCALE : 1 IN:40 FT



LEGEND

1	MARKING LINE EPOXY 4–INCH (WHITE)	
2	MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)	
3	MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
4	MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	
5	MARKING LINE EPOXY 8–INCH (WHITE)	
6	MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	
7	MARKING ARROW EPOXY (WHITE)	
8	MARKING WORD EPOXY (WHITE)	
9	MARKING SYMBOL EPOXY (WHITE)	
10	MARKING STOP LINE EPOXY 18–INCH (WHITE)	
11	MARKING LINE EPOXY 4–INCH (YELLOW)	
12	MARKING DIAGONAL EPOXY 12–INCH (WHITE)	
13	MARKING DIAGONAL EPOXY 12–INCH (YELLOW)	
14	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)	
15	MARKING PARKING STALL EPOXY (WHITE)	

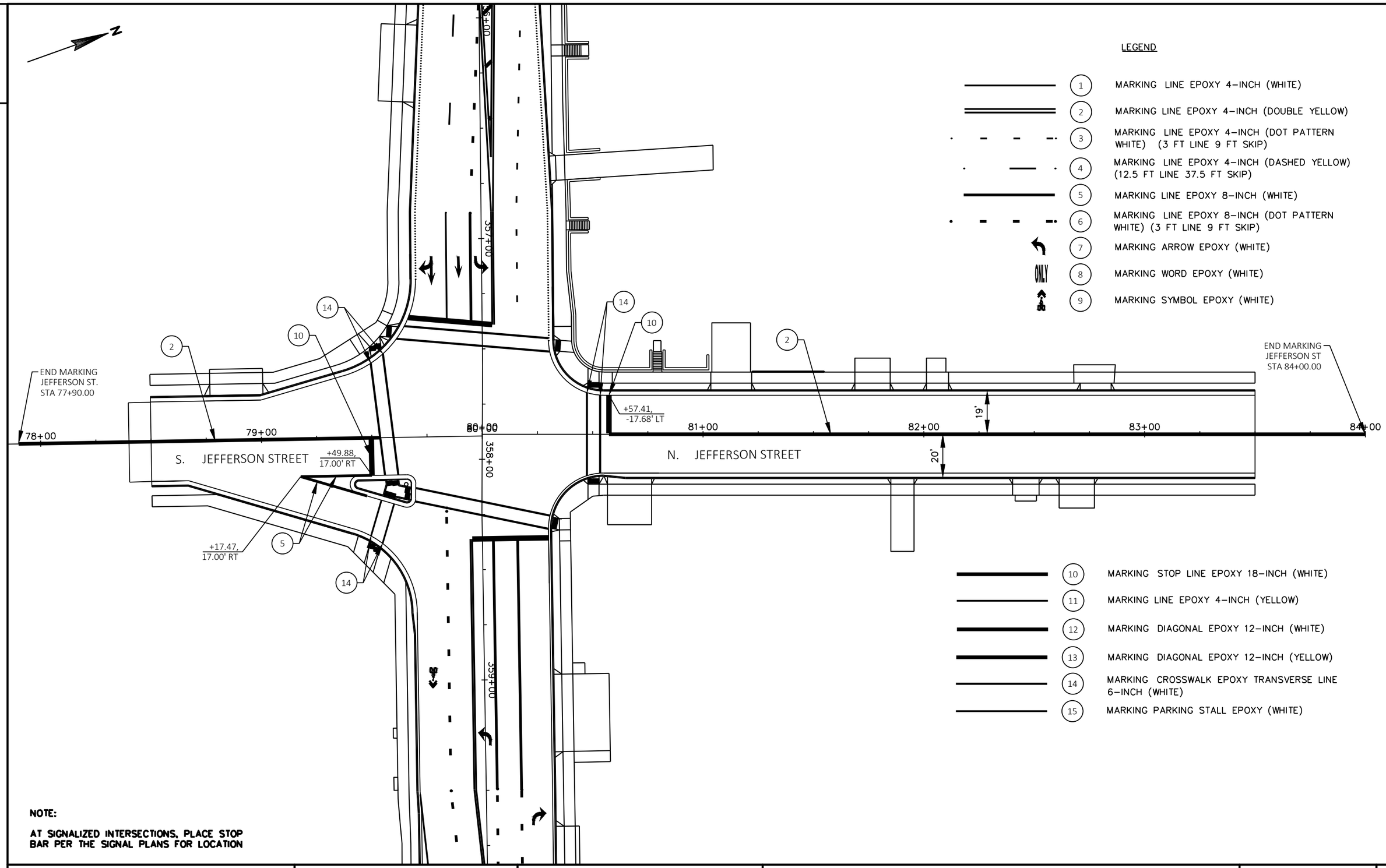
NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - BUENA PARK RD	SHEET 299	E

FILE NAME : Y:\PROJECTS\11031.014 STH 20 (RASN)\TRANSPORTATION\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024520
PLOT DATE : 5/14/2018 10:43 AM PLOT BY : HIMALAYAN-19 PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - N. JEFFERSON ST.	SHEET 300	E

FILE NAME : Y:\PROJECTS\11031.014 STH 20 (RASN)\TRANSPORTATION\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024521
PLOT DATE : 5/14/2018 10:43 AM PLOT BY : HIMALAYAN-19 PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

LEGEND

1 MARKING LINE EPOXY 4–INCH (WHITE)

2 MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)

3 MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

4 MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)

5 MARKING LINE EPOXY 8–INCH (WHITE)

6 MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

7 MARKING ARROW EPOXY (WHITE)

8 MARKING WORD EPOXY (WHITE)

9 MARKING SYMBOL EPOXY (WHITE)

10 MARKING STOP LINE EPOXY 18–INCH (WHITE)

11 MARKING LINE EPOXY 4–INCH (YELLOW)

12 MARKING DIAGONAL EPOXY 12–INCH (WHITE)

13 MARKING DIAGONAL EPOXY 12–INCH (YELLOW)

14 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)

15 MARKING PARKING STALL EPOXY (WHITE)

N

E. MAIN STREET

N. SECOND STREET

FIRST STREET / STH 20

100+00 101+00 102+00 103+00 104+00 105+00 106+00

367+54 367+00 368+00

+19.71, -24.00' LT

+98.85, -10.00' LT

+48.83, 0.58' RT

(TYPE 1)

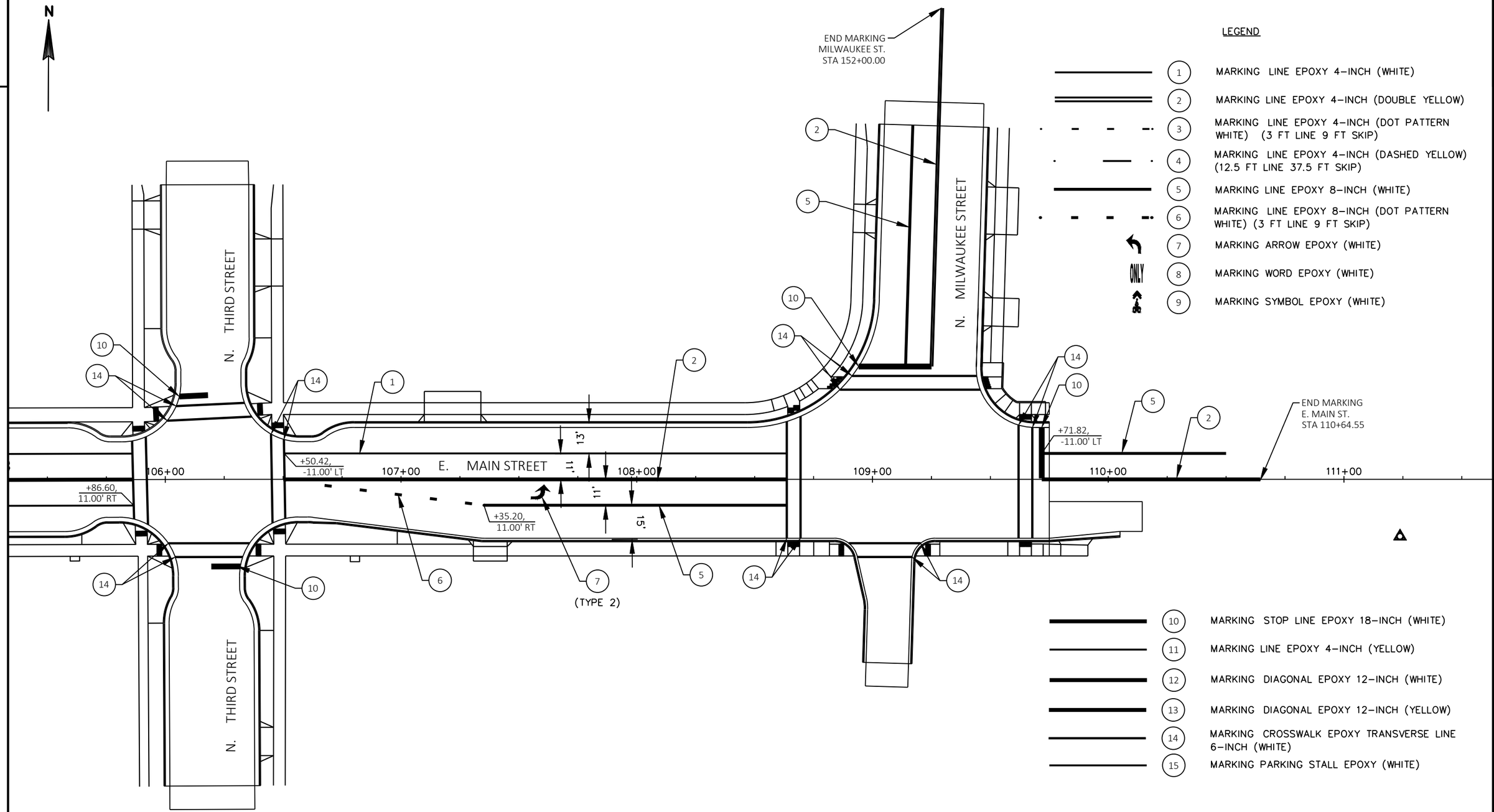
(TYPE 2)

TYP

ONLY

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - E. MAIN ST.	SHEET	E

FILE NAME : Y:\PROJECTS\11031.014 STH 20 (RASN)\TRANSPORTATION\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024522
PLOT DATE : 5/14/2018 10:43 AM PLOT BY : HIMALAYAN-19 PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



LEGEND

1. MARKING LINE EPOXY 4–INCH (WHITE)
2. MARKING LINE EPOXY 4–INCH (DOUBLE YELLOW)
3. MARKING LINE EPOXY 4–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
4. MARKING LINE EPOXY 4–INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)
5. MARKING LINE EPOXY 8–INCH (WHITE)
6. MARKING LINE EPOXY 8–INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
7. MARKING ARROW EPOXY (WHITE)
8. MARKING WORD EPOXY (WHITE) (ONLY)
9. MARKING SYMBOL EPOXY (WHITE)
10. MARKING STOP LINE EPOXY 18–INCH (WHITE)
11. MARKING LINE EPOXY 4–INCH (YELLOW)
12. MARKING DIAGONAL EPOXY 12–INCH (WHITE)
13. MARKING DIAGONAL EPOXY 12–INCH (YELLOW)
14. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6–INCH (WHITE)
15. MARKING PARKING STALL EPOXY (WHITE)

NOTE:

AT SIGNALIZED INTERSECTIONS, PLACE STOP BAR PER THE SIGNAL PLANS FOR LOCATION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING - E. MAIN ST.	SHEET 302	E

FILE NAME : Y:\PROJECTS\11031.014 STH 20 (RASN)\TRANSPORTATION\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024523
PLOT DATE : 5/14/2018 10:43 AM
PLOT BY : HIMALAYAN-19
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

INSTALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE FOLLOWING STANDARD DETAIL DRAWINGS:

(1) BARRICADES AND SIGNS FOR MAINLINE CLOSURES, DETAIL B

(2-4) BARRICADES AND SIGNS FOR SIDEROAD CLOSURES, DETAIL 4

(3) TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

(4) TRAFFIC CONTROL PEDESTRIAN ACCOMMODATION

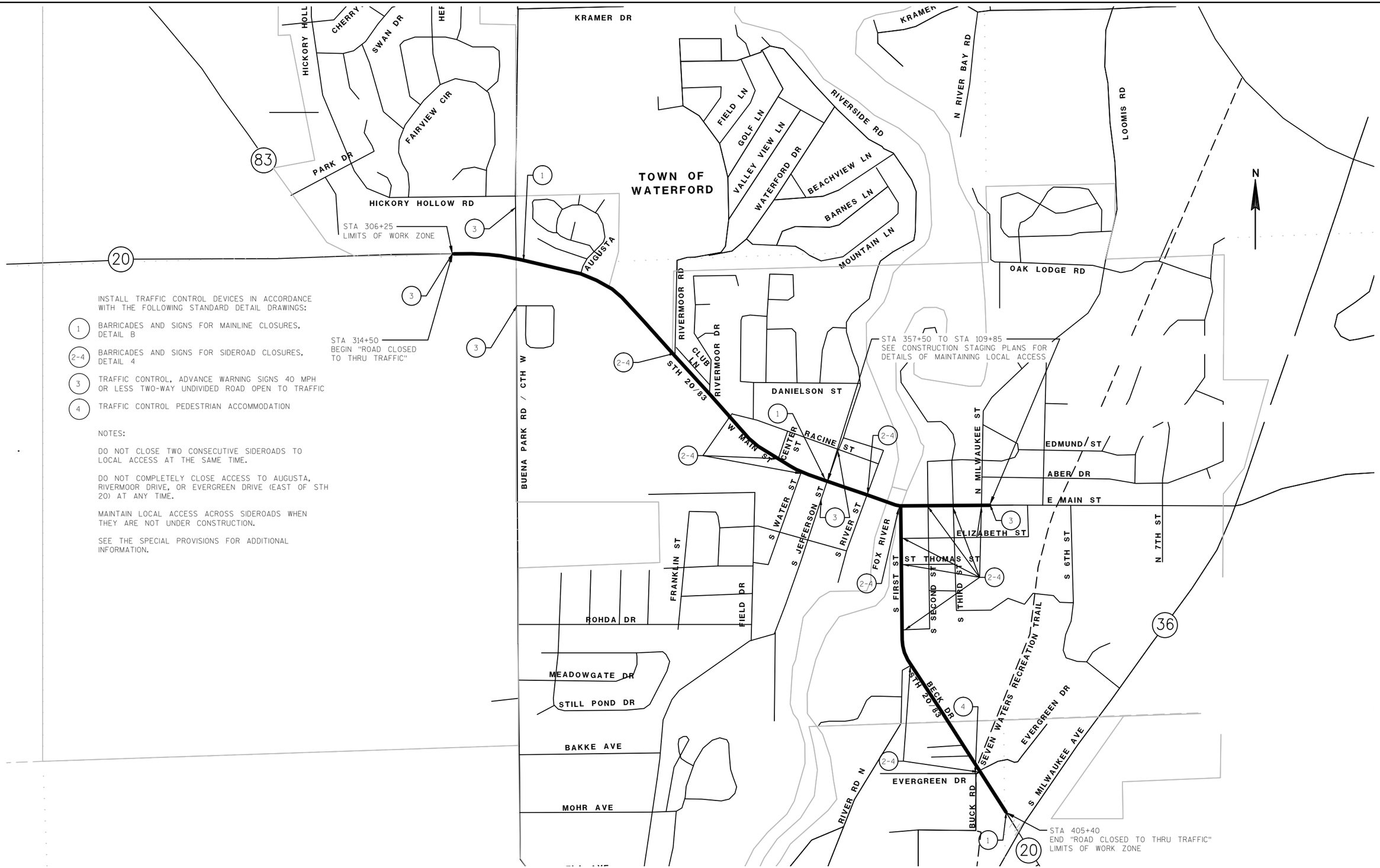
NOTES:

DO NOT CLOSE TWO CONSECUTIVE SIDEROADS TO LOCAL ACCESS AT THE SAME TIME.

DO NOT COMPLETELY CLOSE ACCESS TO AUGUSTA, RIVERMOOR DRIVE, OR EVERGREEN DRIVE (EAST OF STH 20) AT ANY TIME.

MAINTAIN LOCAL ACCESS ACROSS SIDEROADS WHEN THEY ARE NOT UNDER CONSTRUCTION.

SEE THE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

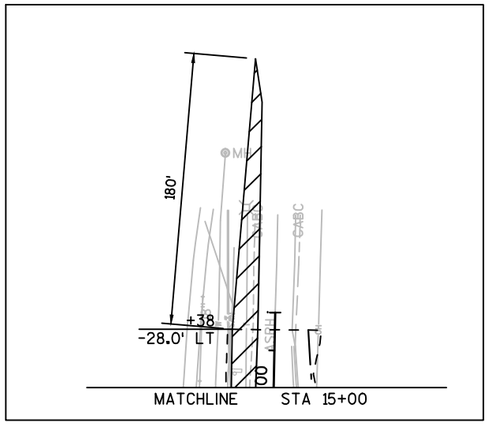


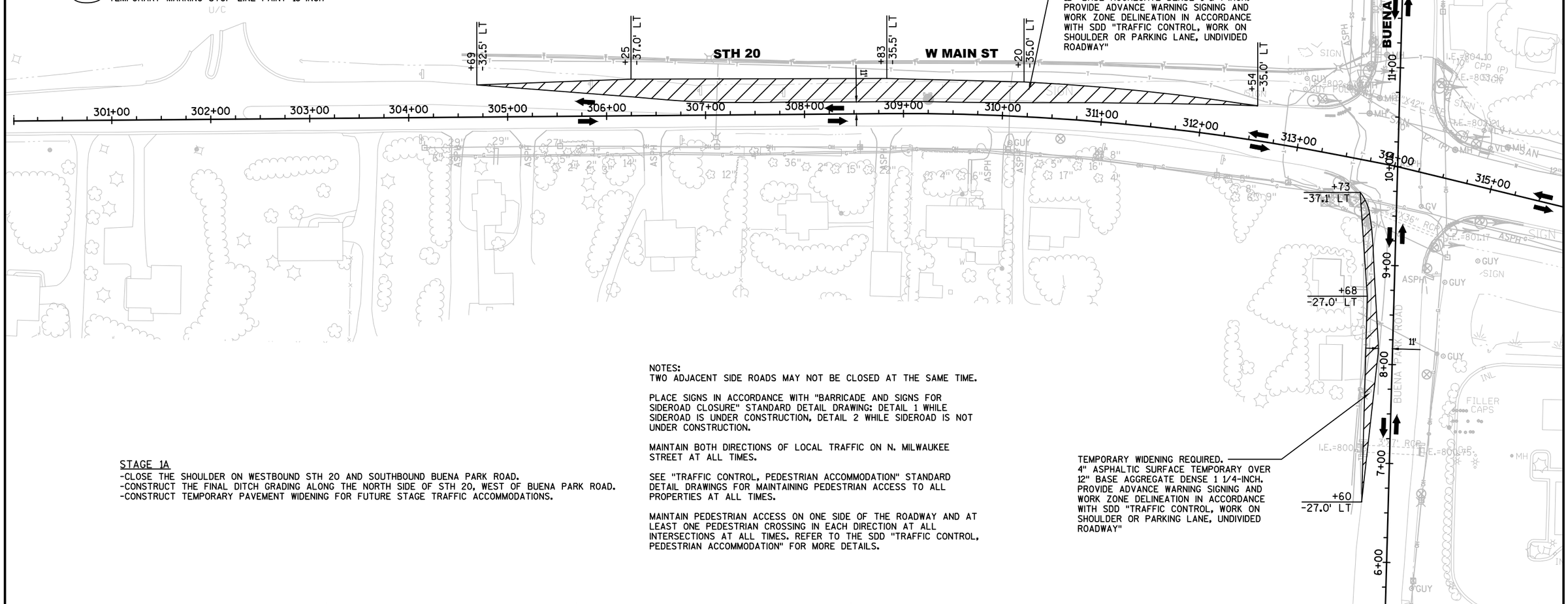
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CONSTRUCTION STAGING OVERVIEW	SHEET 303	E

2

LEGEND

- DIRECTION OF TRAFFIC
- WORK AREA
- FAST TRACK CONCRETE PAVEMENT WORK AREA
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- (T4W) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, WHITE
- (T4Y) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, YELLOW
- (P4W) TEMPORARY MARKING LINE PAINT 4-INCH, WHITE
- (P4Y) TEMPORARY MARKING LINE PAINT 4-INCH, YELLOW
- (P8W) TEMPORARY MARKING LINE PAINT 8-INCH, WHITE
- (TSL) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- (PSL) TEMPORARY MARKING STOP LINE PAINT 18-INCH





STAGE 1A
-CLOSE THE SHOULDER ON WESTBOUND STH 20 AND SOUTHBOUND BUENA PARK ROAD.
-CONSTRUCT THE FINAL DITCH GRADING ALONG THE NORTH SIDE OF STH 20, WEST OF BUENA PARK ROAD.
-CONSTRUCT TEMPORARY PAVEMENT WIDENING FOR FUTURE STAGE TRAFFIC ACCOMMODATIONS.

NOTES:
TWO ADJACENT SIDE ROADS MAY NOT BE CLOSED AT THE SAME TIME.

PLACE SIGNS IN ACCORDANCE WITH "BARRICADE AND SIGNS FOR SIDEROAD CLOSURE" STANDARD DETAIL DRAWING: DETAIL 1 WHILE SIDEROAD IS UNDER CONSTRUCTION, DETAIL 2 WHILE SIDEROAD IS NOT UNDER CONSTRUCTION.

MAINTAIN BOTH DIRECTIONS OF LOCAL TRAFFIC ON N. MILWAUKEE STREET AT ALL TIMES.

SEE "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" STANDARD DETAIL DRAWINGS FOR MAINTAINING PEDESTRIAN ACCESS TO ALL PROPERTIES AT ALL TIMES.

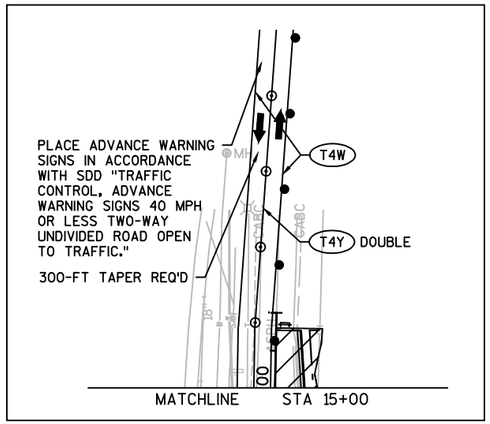
MAINTAIN PEDESTRIAN ACCESS ON ONE SIDE OF THE ROADWAY AND AT LEAST ONE PEDESTRIAN CROSSING IN EACH DIRECTION AT ALL INTERSECTIONS AT ALL TIMES. REFER TO THE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR MORE DETAILS.

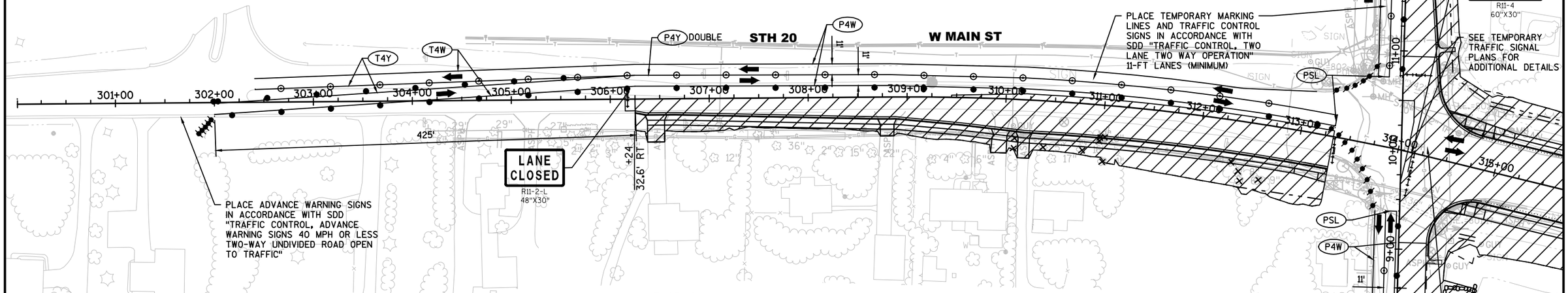
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CONSTRUCTION STAGE 1A - BUENA PARK ROAD INTERSECTION	SHEET 304 E

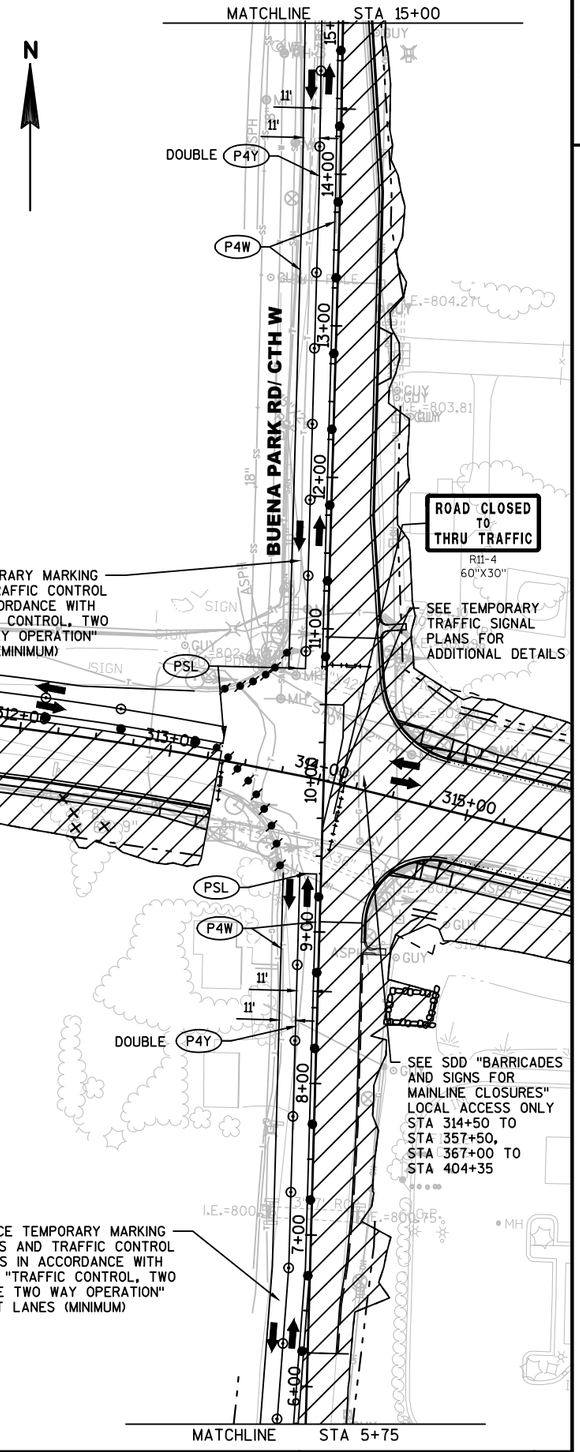
2

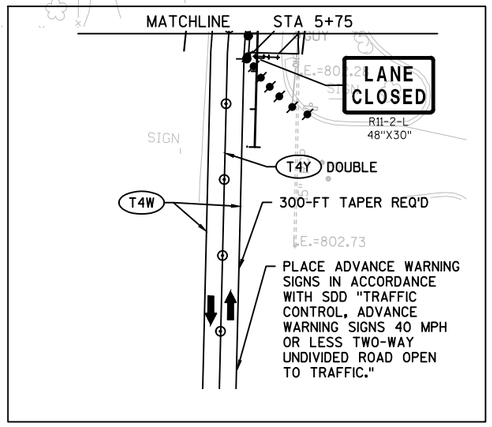
LEGEND

- DIRECTION OF TRAFFIC
- WORK AREA
- FAST TRACK CONCRETE PAVEMENT WORK AREA
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- (T4W) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, WHITE
- (T4Y) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, YELLOW
- (P4W) TEMPORARY MARKING LINE PAINT 4-INCH, WHITE
- (P4Y) TEMPORARY MARKING LINE PAINT 4-INCH, YELLOW
- (P8W) TEMPORARY MARKING LINE PAINT 8-INCH, WHITE
- (TSL) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- (PSL) TEMPORARY MARKING STOP LINE PAINT 18-INCH









STAGE 1B

-CLOSE STH 20 TO THRU TRAFFIC FROM BUENA PARK ROAD TO MILWAUKEE AVENUE. MAINTAIN LOCAL ACCESS.
-SHIFT TRAFFIC ONTO THE TEMPORARY PAVEMENT CONSTRUCTED IN STAGE 1A AND THE EXISTING WESTBOUND AND SOUTHBOUND LANES.
-CONSTRUCT THE SOUTH HALF OF STH 20, WEST OF BUENA PARK ROAD.
-CONSTRUCT THE EAST HALF OF BUENA PARK ROAD.

NOTES:
TWO ADJACENT SIDE ROADS MAY NOT BE CLOSED AT THE SAME TIME.

PLACE SIGNS IN ACCORDANCE WITH "BARRICADE AND SIGNS FOR SIDEROAD CLOSURE" STANDARD DETAIL DRAWING: DETAIL 1 WHILE SIDEROAD IS UNDER CONSTRUCTION, DETAIL 2 WHILE SIDEROAD IS NOT UNDER CONSTRUCTION.

MAINTAIN BOTH DIRECTIONS OF LOCAL TRAFFIC ON N. MILWAUKEE STREET AT ALL TIMES.

SEE "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" STANDARD DETAIL DRAWINGS FOR MAINTAINING PEDESTRIAN ACCESS TO ALL PROPERTIES AT ALL TIMES.

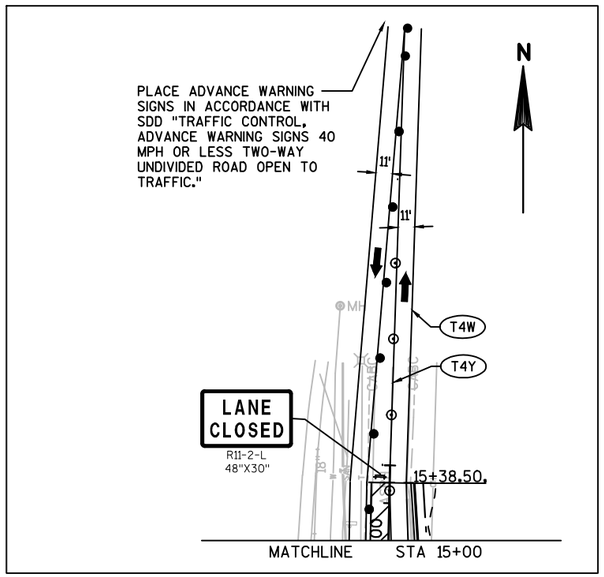
MAINTAIN PEDESTRIAN ACCESS ON ONE SIDE OF THE ROADWAY AND AT LEAST ONE PEDESTRIAN CROSSING IN EACH DIRECTION AT ALL INTERSECTIONS AT ALL TIMES. REFER TO THE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR MORE DETAILS.

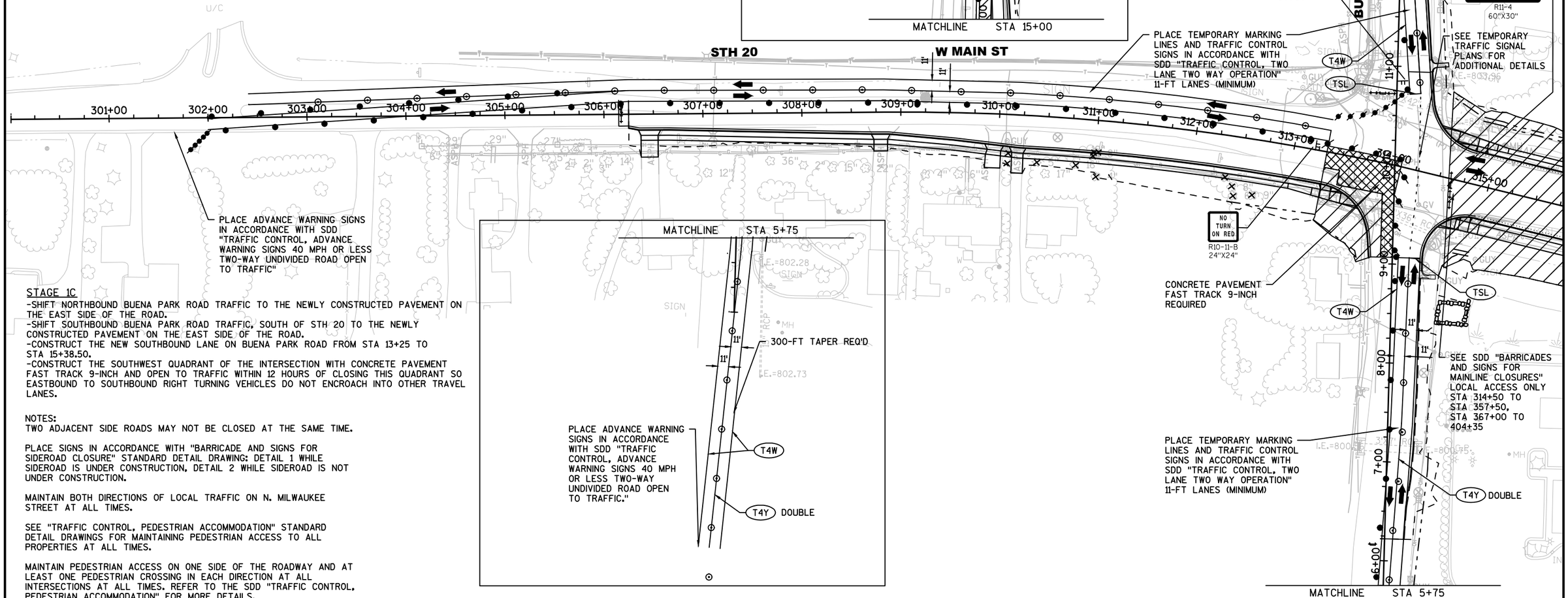
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CONSTRUCTION STAGE 1B - BUENA PARK ROAD INTERSECTION	SHEET 305	E

2

LEGEND

- DIRECTION OF TRAFFIC
- WORK AREA
- FAST TRACK CONCRETE PAVEMENT WORK AREA
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- (T4W) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, WHITE
- (T4Y) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, YELLOW
- (P4W) TEMPORARY MARKING LINE PAINT 4-INCH, WHITE
- (P4Y) TEMPORARY MARKING LINE PAINT 4-INCH, YELLOW
- (P8W) TEMPORARY MARKING LINE PAINT 8-INCH, WHITE
- (TSL) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- (PSL) TEMPORARY MARKING STOP LINE PAINT 18-INCH





STAGE 1C

-SHIFT NORTHBOUND BUENA PARK ROAD TRAFFIC TO THE NEWLY CONSTRUCTED PAVEMENT ON THE EAST SIDE OF THE ROAD.
-SHIFT SOUTHBOUND BUENA PARK ROAD TRAFFIC, SOUTH OF STH 20 TO THE NEWLY CONSTRUCTED PAVEMENT ON THE EAST SIDE OF THE ROAD.
-CONSTRUCT THE NEW SOUTHBOUND LANE ON BUENA PARK ROAD FROM STA 13+25 TO STA 15+38.50.
-CONSTRUCT THE SOUTHWEST QUADRANT OF THE INTERSECTION WITH CONCRETE PAVEMENT FAST TRACK 9-INCH AND OPEN TO TRAFFIC WITHIN 12 HOURS OF CLOSING THIS QUADRANT SO EASTBOUND TO SOUTHBOUND RIGHT TURNING VEHICLES DO NOT ENCROACH INTO OTHER TRAVEL LANES.

NOTES:
TWO ADJACENT SIDE ROADS MAY NOT BE CLOSED AT THE SAME TIME.

PLACE SIGNS IN ACCORDANCE WITH "BARRICADE AND SIGNS FOR SIDEROAD CLOSURE" STANDARD DETAIL DRAWING: DETAIL 1 WHILE SIDEROAD IS UNDER CONSTRUCTION, DETAIL 2 WHILE SIDEROAD IS NOT UNDER CONSTRUCTION.

MAINTAIN BOTH DIRECTIONS OF LOCAL TRAFFIC ON N. MILWAUKEE STREET AT ALL TIMES.

SEE "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" STANDARD DETAIL DRAWINGS FOR MAINTAINING PEDESTRIAN ACCESS TO ALL PROPERTIES AT ALL TIMES.

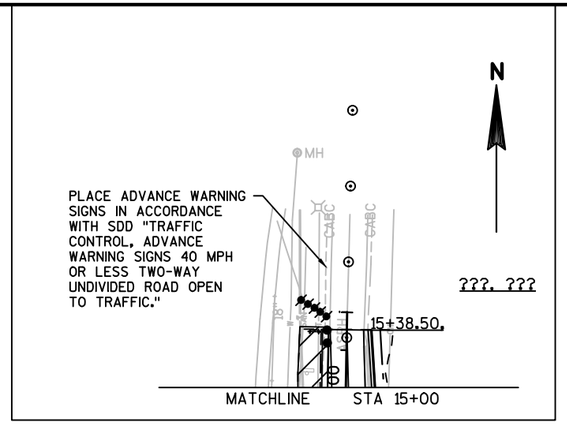
MAINTAIN PEDESTRIAN ACCESS ON ONE SIDE OF THE ROADWAY AND AT LEAST ONE PEDESTRIAN CROSSING IN EACH DIRECTION AT ALL INTERSECTIONS AT ALL TIMES. REFER TO THE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR MORE DETAILS.

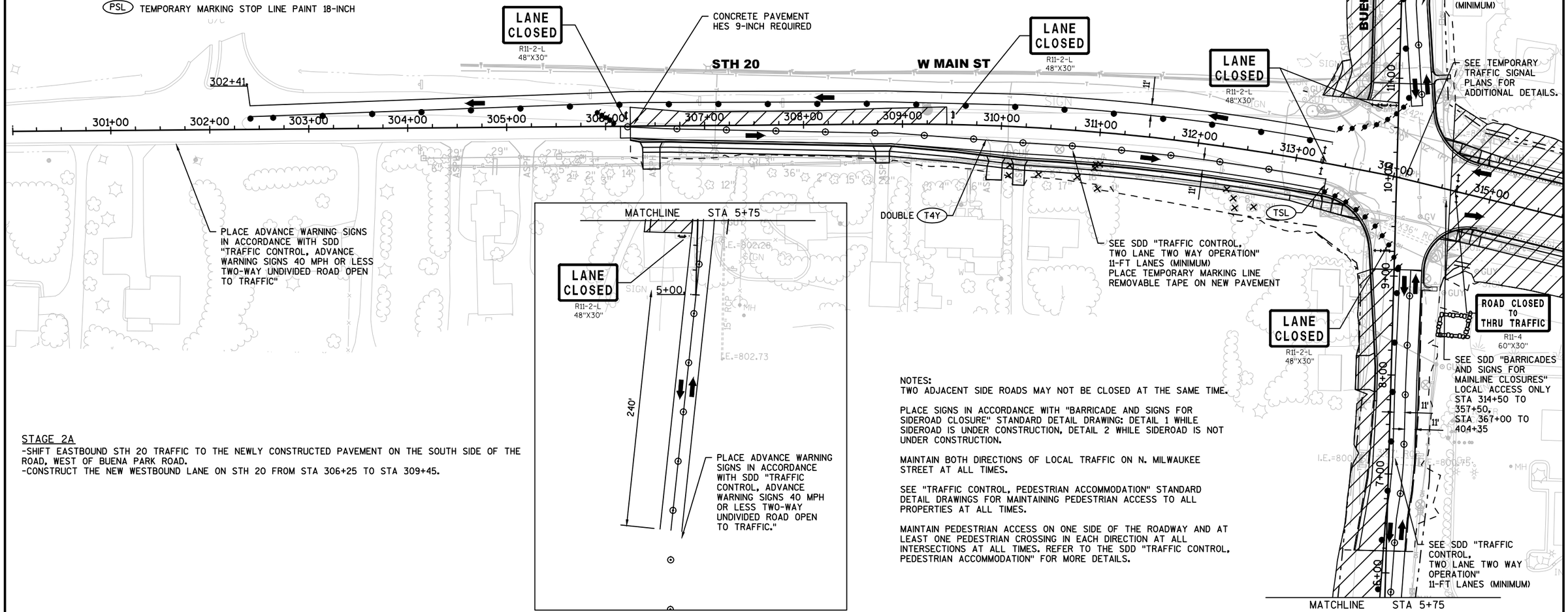
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CONSTRUCTION STAGE 1C - BUENA PARK ROAD INTERSECTION	SHEET 306	E

2

LEGEND

- DIRECTION OF TRAFFIC
- WORK AREA
- FAST TRACK CONCRETE PAVEMENT WORK ZONE
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- (T4W) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, WHITE
- (T4Y) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, YELLOW
- (P4W) TEMPORARY MARKING LINE PAINT 4-INCH, WHITE
- (P4Y) TEMPORARY MARKING LINE PAINT 4-INCH, YELLOW
- (P8W) TEMPORARY MARKING LINE PAINT 8-INCH, WHITE
- (TSL) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- (PSL) TEMPORARY MARKING STOP LINE PAINT 18-INCH





STAGE 2A

-SHIFT EASTBOUND STH 20 TRAFFIC TO THE NEWLY CONSTRUCTED PAVEMENT ON THE SOUTH SIDE OF THE ROAD, WEST OF BUENA PARK ROAD.
-CONSTRUCT THE NEW WESTBOUND LANE ON STH 20 FROM STA 306+25 TO STA 309+45.

NOTES:
TWO ADJACENT SIDE ROADS MAY NOT BE CLOSED AT THE SAME TIME.

PLACE SIGNS IN ACCORDANCE WITH "BARRICADE AND SIGNS FOR SIDEROAD CLOSURE" STANDARD DETAIL DRAWING: DETAIL 1 WHILE SIDEROAD IS UNDER CONSTRUCTION, DETAIL 2 WHILE SIDEROAD IS NOT UNDER CONSTRUCTION.

MAINTAIN BOTH DIRECTIONS OF LOCAL TRAFFIC ON N. MILWAUKEE STREET AT ALL TIMES.

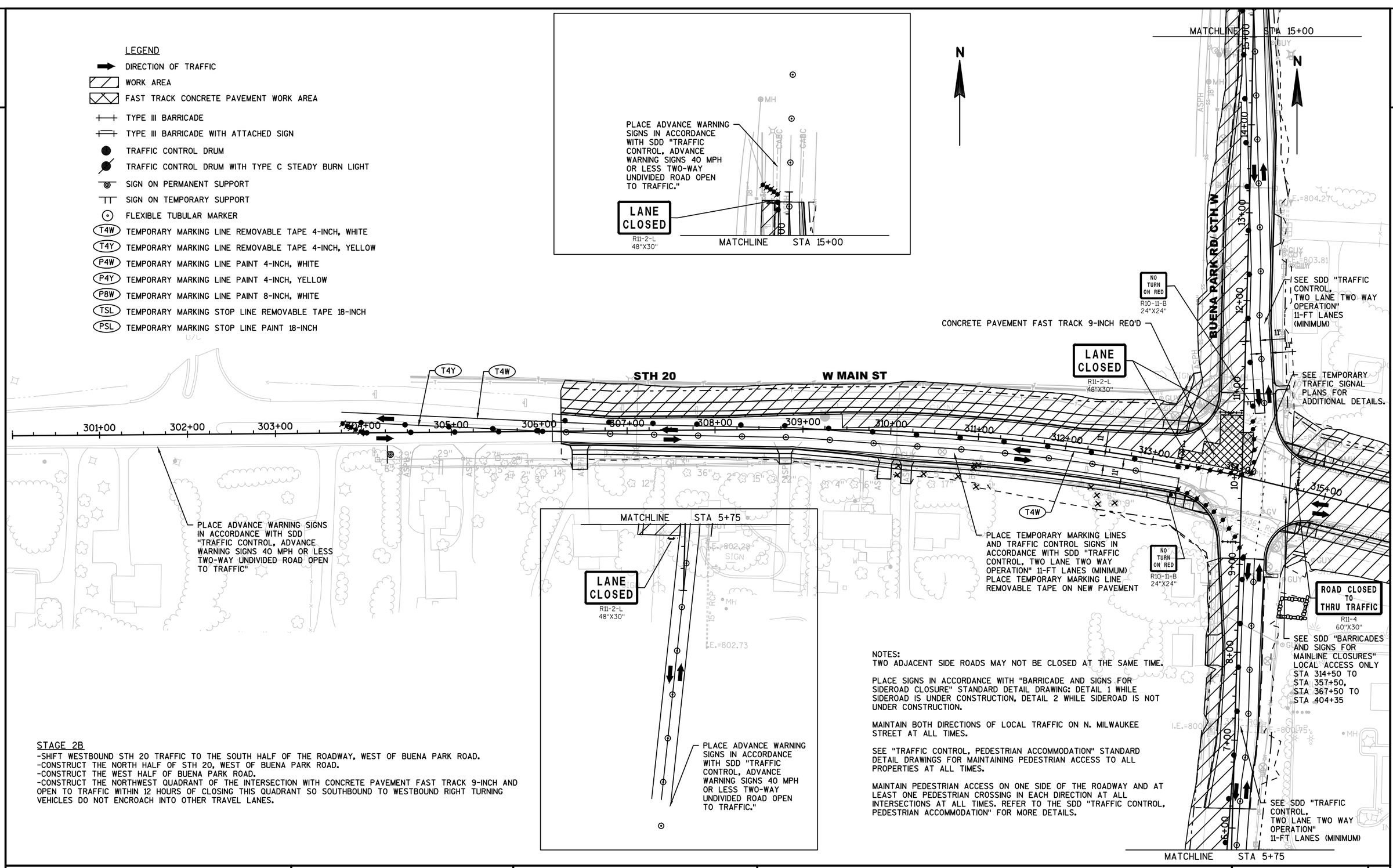
SEE "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" STANDARD DETAIL DRAWINGS FOR MAINTAINING PEDESTRIAN ACCESS TO ALL PROPERTIES AT ALL TIMES.

MAINTAIN PEDESTRIAN ACCESS ON ONE SIDE OF THE ROADWAY AND AT LEAST ONE PEDESTRIAN CROSSING IN EACH DIRECTION AT ALL INTERSECTIONS AT ALL TIMES. REFER TO THE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR MORE DETAILS.

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CONSTRUCTION STAGE 2A- BUENA PARK ROAD INTERSECTION	SHEET 307	E

LEGEND

- DIRECTION OF TRAFFIC
- WORK AREA
- FAST TRACK CONCRETE PAVEMENT WORK AREA
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- (T4W) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, WHITE
- (T4Y) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, YELLOW
- (P4W) TEMPORARY MARKING LINE PAINT 4-INCH, WHITE
- (P4Y) TEMPORARY MARKING LINE PAINT 4-INCH, YELLOW
- (P8W) TEMPORARY MARKING LINE PAINT 8-INCH, WHITE
- (TSL) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- (PSL) TEMPORARY MARKING STOP LINE PAINT 18-INCH



STAGE 2B

-SHIFT WESTBOUND STH 20 TRAFFIC TO THE SOUTH HALF OF THE ROADWAY, WEST OF BUENA PARK ROAD.
-CONSTRUCT THE NORTH HALF OF STH 20, WEST OF BUENA PARK ROAD.
-CONSTRUCT THE WEST HALF OF BUENA PARK ROAD.
-CONSTRUCT THE NORTHWEST QUADRANT OF THE INTERSECTION WITH CONCRETE PAVEMENT FAST TRACK 9-INCH AND OPEN TO TRAFFIC WITHIN 12 HOURS OF CLOSING THIS QUADRANT SO SOUTHBOUND TO WESTBOUND RIGHT TURNING VEHICLES DO NOT ENCROACH INTO OTHER TRAVEL LANES.

NOTES:
TWO ADJACENT SIDE ROADS MAY NOT BE CLOSED AT THE SAME TIME.

PLACE SIGNS IN ACCORDANCE WITH "BARRICADE AND SIGNS FOR SIDEROAD CLOSURE" STANDARD DETAIL DRAWING: DETAIL 1 WHILE SIDEROAD IS UNDER CONSTRUCTION, DETAIL 2 WHILE SIDEROAD IS NOT UNDER CONSTRUCTION.

MAINTAIN BOTH DIRECTIONS OF LOCAL TRAFFIC ON N. MILWAUKEE STREET AT ALL TIMES.

SEE "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" STANDARD DETAIL DRAWINGS FOR MAINTAINING PEDESTRIAN ACCESS TO ALL PROPERTIES AT ALL TIMES.

MAINTAIN PEDESTRIAN ACCESS ON ONE SIDE OF THE ROADWAY AND AT LEAST ONE PEDESTRIAN CROSSING IN EACH DIRECTION AT ALL INTERSECTIONS AT ALL TIMES. REFER TO THE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR MORE DETAILS.

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CONSTRUCTION STAGE 2B- BUENA PARK ROAD INTERSECTION	SHEET 308	E

2

LEGEND

- DIRECTION OF TRAFFIC
- WORK AREA
- FAST TRACK CONCRETE PAVEMENT WORK AREA
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- (T4W) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, WHITE
- (T4Y) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, YELLOW
- (P4W) TEMPORARY MARKING LINE PAINT 4-INCH, WHITE
- (P4Y) TEMPORARY MARKING LINE PAINT 4-INCH, YELLOW
- (P8W) TEMPORARY MARKING LINE PAINT 8-INCH, WHITE
- (TSL) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- (PSL) TEMPORARY MARKING STOP LINE PAINT 18-INCH

STAGE 1
-MAINTAIN ACCESS TO LOCAL BUSINESSES AND RESIDENCES ON A HARD PAVEMENT SURFACE (EXISTING) FROM JEFFERSON STREET TO MILWAUKEE STREET ON THE NORTH SIDE OF THE ROADWAY.
-CONSTRUCT THE SOUTH HALF OF THE ROADWAY.
-DO NOT CONSTRUCT BUMP-OUT CURB AND GUTTER OR SIDEWALK ON THE SOUTH SIDE OF THE ROADWAY.
-CONSTRUCT TEMPORARY PAVEMENT IN PLACE OF BUMP-OUTS. SLOPE TEMPORARY PAVEMENT TO DRAIN.

PLACE ADVANCE WARNING SIGNS IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC."

DOUBLE P4Y

LANE CLOSED
R11-2-L
48"X30"

STH 20 CLOSED TO THROUGH TRAFFIC WEST OF S JEFFERSON STREET. MAINTAIN LOCAL ACCESS.

SEE TEMPORARY TRAFFIC SIGNAL PLANS FOR ADDITIONAL DETAILS

P8W
STH 20
PSL

W MAIN ST
P4W
P4Y DOUBLE

SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" 11-FT LANES (MINIMUM)

NO PARKING ANY TIME
R7-1-D
18"X24"

MOUNT ON TOP OF PARALLEL CONCRETE BARRIER.

W5-52R
12"X36"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

ROAD CLOSED
R11-2
48"X30"

S WATER ST

SEE TEMP SIGNAL PLANS FOR ADDITIONAL INFORMATION.

CONCRETE PAVEMENT FAST TRACK 9-INCH REQ'D

S JEFFERSON ST

LANE CLOSED
R11-2-L
48"X30"

100' TAPER

P4W

PLACE ADVANCE WARNING SIGNS IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC."

BUMP OUT AREAS (TYP):
DO NOT CONSTRUCT BUMP-OUT CURB AND GUTTER ON STH 20 OR FINAL CURB RAMPS. TEMPORARILY PAVE BUMP-OUT AREAS WITH 4" ASPHALTIC SURFACE TEMPORARY OVER 12" BASE AGGREGATE DENSE 1 1/4-INCH. EXTEND TEMP PAVING OUT TO FLANGE-LINE EXTENDED THRU THE INTERSECTION. GRADE TEMPORARY PAVEMENT TO DRAIN TO NEAREST INLET.

S RIVER ST

ROAD CLOSED
R11-2
48"X30"

CONCRETE BARRIER TEMPORARY PRECAST 6:1 TAPER ON END TO 16' WIDTH (MIN)

FOX RIVER

S FIRST ST

NOTES:
TWO ADJACENT SIDE ROADS MAY NOT BE CLOSED AT THE SAME TIME.

PLACE SIGNS IN ACCORDANCE WITH "BARRICADE AND SIGNS FOR SIDEROAD CLOSURE" STANDARD DETAIL DRAWING: DETAIL 1 WHILE SIDEROAD IS UNDER CONSTRUCTION, DETAIL 2 WHILE SIDEROAD IS NOT UNDER CONSTRUCTION.

MAINTAIN BOTH DIRECTIONS OF LOCAL TRAFFIC ON N. MILWAUKEE STREET AT ALL TIMES.

SEE "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" STANDARD DETAIL DRAWINGS FOR MAINTAINING PEDESTRIAN ACCESS TO ALL PROPERTIES AT ALL TIMES.

MAINTAIN PEDESTRIAN ACCESS ON ONE SIDE OF THE ROADWAY AND AT LEAST ONE PEDESTRIAN CROSSING IN EACH DIRECTION AT ALL INTERSECTIONS AT ALL TIMES. REFER TO THE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR MORE DETAILS.

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CONSTRUCTION STAGE 1 - STH 20	SHEET 309	E

2

2

LEGEND

- DIRECTION OF TRAFFIC
- WORK AREA
- FAST TRACK CONCRETE PAVEMENT WORK AREA
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- (T4W) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, WHITE
- (T4Y) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, YELLOW
- (P4W) TEMPORARY MARKING LINE PAINT 4-INCH, WHITE
- (P4Y) TEMPORARY MARKING LINE PAINT 4-INCH, YELLOW
- (P8W) TEMPORARY MARKING LINE PAINT 8-INCH, WHITE
- (TSL) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- (PSL) TEMPORARY MARKING STOP LINE PAINT 18-INCH

STAGE 1

-MAINTAIN ACCESS TO LOCAL BUSINESSES AND RESIDENCES ON A HARD PAVEMENT SURFACE (EXISTING) FROM JEFFERSON STREET TO MILWAUKEE STREET ON THE NORTH SIDE OF THE ROADWAY.
-CONSTRUCT THE SOUTH HALF OF THE ROADWAY.
-DO NOT CONSTRUCT BUMP-OUT CURB AND GUTTER OR SIDEWALK ON THE SOUTH SIDE OF THE ROADWAY.
-CONSTRUCT TEMPORARY PAVEMENT IN PLACE OF BUMP-OUTS. SLOPE TEMPORARY PAVEMENT TO DRAIN.

N

CONCRETE BARRIER TEMPORARY PRECAST 4:1 TAPER ON END TO 16' WIDTH (MIN)

CONCRETE PAVEMENT FAST TRACK 9-INCH REQUIRED

NO PARKING ANY TIME R7-1-D 18"X24"

E MAIN ST

(P4W) (P4Y) DOUBLE (T4Y)

365+00 366+00 100+00 101+00 102+00 103+00 104+00 105+00 106+00 107+00 108+00 109+00 110+00 111+00 112+00 112+52

131+00 141+00 151+00 152+00

FOX RIVER

S FIRST ST 368+00 369+00 370+00 374+00

S SECOND ST 128+00 129+00

S THIRD ST 138+00 139+00

S MILWAUKEE ST 147+00 148+00 149+00

ROAD CLOSED R11-2 48"X30"

SEE TEMPORARY TRAFFIC SIGNAL PLANS FOR ADDITIONAL DETAILS

SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" 11-FT LANES (MINIMUM)

BUMP OUT AREAS (TYP.) - DO NOT CONSTRUCT BUMP-OUT CURB AND GUTTER ON E. MAIN STREET OR FINAL CURB RAMPS. TEMPORARILY PAVE BUMP-OUT AREAS WITH 4" ASPHALTIC SURFACE TEMPORARY OVER 12" BASE AGGREGATE DENSE 1 1/4-INCH. EXTEND TEMP PAVING OUT TO FLANGE-LINE EXTENDED THRU THE INTERSECTION. GRADE TEMPORARY PAVEMENT TO DRAIN TO NEAREST INLET.

PLACE W1-4R SIGN ON RIGHT SIDE OF ROAD, 100-FR IN ADVANCE OF SHIFTING TAPER.

W1-4R 30"X30"

100' TAPER 155' BUFFER 100' TAPER

LANE CLOSED R11-2-L 48"X30"

PLACE ADVANCE WARNING SIGNS IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC."

NOTES:
TWO ADJACENT SIDE ROADS MAY NOT BE CLOSED AT THE SAME TIME.

PLACE SIGNS IN ACCORDANCE WITH "BARRICADE AND SIGNS FOR SIDEROAD CLOSURE" STANDARD DETAIL DRAWING: DETAIL 1 WHILE SIDEROAD IS UNDER CONSTRUCTION, DETAIL 2 WHILE SIDEROAD IS NOT UNDER CONSTRUCTION.

MAINTAIN BOTH DIRECTIONS OF LOCAL TRAFFIC ON N. MILWAUKEE STREET AT ALL TIMES.

SEE "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" STANDARD DETAIL DRAWINGS FOR MAINTAINING PEDESTRIAN ACCESS TO ALL PROPERTIES AT ALL TIMES.

MAINTAIN PEDESTRIAN ACCESS ON ONE SIDE OF THE ROADWAY AND AT LEAST ONE PEDESTRIAN CROSSING IN EACH DIRECTION AT ALL INTERSECTIONS AT ALL TIMES. REFER TO THE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR MORE DETAILS.

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CONSTRUCTION STAGE 1 - STH 20	SHEET 310	E

2

LEGEND

- DIRECTION OF TRAFFIC
- WORK AREA
- FAST TRACK CONCRETE PAVEMENT WORK AREA
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- T4W TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, WHITE
- T4Y TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, YELLOW
- P4W TEMPORARY MARKING LINE PAINT 4-INCH, WHITE
- P4Y TEMPORARY MARKING LINE PAINT 4-INCH, YELLOW
- P8W TEMPORARY MARKING LINE PAINT 8-INCH, WHITE
- TSL TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- PSL TEMPORARY MARKING STOP LINE PAINT 18-INCH

STAGE 2

-SHIFT BOTH DIRECTIONS OF TRAFFIC TO THE SOUTH SIDE OF THE ROADWAY TO MAINTAIN LOCAL ACCESS ON THE FINISHED PAVEMENT AND TEMPORARY PAVEMENT SURFACES.
-CONSTRUCT THE NORTH HALF OF THE ROADWAY, INCLUDING FINISHED BUMP-OUT AREAS.
-ONCE CONSTRUCTION OF THE NORTH HALF OF THE ROADWAY IS COMPLETE, SHIFT TRAFFIC BACK TO EXISTING TRAVEL LANES AND CONSTRUCT THE BUMP-OUT AREAS ON THE SOUTH HALF OF THE ROADWAY.

PLACE ADVANCE WARNING SIGNS IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC."

LANE CLOSED
R11-2-L
48"X30"

SEE TEMP SIGNAL PLANS FOR ADDITIONAL INFORMATION

STH 20 CLOSED TO THROUGH TRAFFIC WEST OF S JEFFERSON STREET. MAINTAIN LOCAL ACCESS.

CONCRETE PAVEMENT FAST TRACK 9-INCH REQUIRED

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

SEE TEMP SIGNAL PLANS FOR ADDITIONAL INFORMATION

STH 20

W MAIN ST

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

ROAD CLOSED
R11-2
48"X30"

S WATER ST

LANE CLOSED
R11-2-L
48"X30"

S JEFFERSON ST

T4Y DOUBLE

T4W

DOUBLE T4Y

NO PARKING ANY TIME
R7-1-D
18"X24"

S RIVER ST

CONCRETE BARRIER TEMPORARY PRECAST 6:1 ON END TO 16' WIDTH (MIN)

DO NOT CONSTRUCT FINAL BUMP OUT AREAS UNTIL AFTER STAGE 2 AND TRAFFIC IS RESTORED TO NORMAL TRAVEL LANES

FOX RIVER

W5-52R
12"X36"
MOUNT ON TOP OF PARALLEL CONCRETE BARRIER

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

S FIRST ST

SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" 11-FT LANES (MINIMUM)

PLACE ADVANCE WARNING SIGNS IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC."

100' TAPER
155' BUFFER
100' TAPER

NOTES:
TWO ADJACENT SIDE ROADS MAY NOT BE CLOSED AT THE SAME TIME.

PLACE SIGNS IN ACCORDANCE WITH "BARRICADE AND SIGNS FOR SIDEROAD CLOSURE" STANDARD DETAIL DRAWING: DETAIL 1 WHILE SIDEROAD IS UNDER CONSTRUCTION, DETAIL 2 WHILE SIDEROAD IS NOT UNDER CONSTRUCTION.

MAINTAIN BOTH DIRECTIONS OF LOCAL TRAFFIC ON N. MILWAUKEE STREET AT ALL TIMES.

SEE "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" STANDARD DETAIL DRAWINGS FOR MAINTAINING PEDESTRIAN ACCESS TO ALL PROPERTIES AT ALL TIMES.

MAINTAIN PEDESTRIAN ACCESS ON ONE SIDE OF THE ROADWAY AND AT LEAST ONE PEDESTRIAN CROSSING IN EACH DIRECTION AT ALL INTERSECTIONS AT ALL TIMES. REFER TO THE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR MORE DETAILS.

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CONSTRUCTION STAGE 2 - STH 20	SHEET 311	E

2

LEGEND

- DIRECTION OF TRAFFIC
- WORK AREA
- FAST TRACK CONCRETE PAVEMENT WORK AREA
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLEXIBLE TUBULAR MARKER
- (T4W) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, WHITE
- (T4Y) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, YELLOW
- (P4W) TEMPORARY MARKING LINE PAINT 4-INCH, WHITE
- (P4Y) TEMPORARY MARKING LINE PAINT 4-INCH, YELLOW
- (P8W) TEMPORARY MARKING LINE PAINT 8-INCH, WHITE
- (TSL) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- (PSL) TEMPORARY MARKING STOP LINE PAINT 18-INCH

STAGE 2

-SHIFT BOTH DIRECTIONS OF TRAFFIC TO THE SOUTH SIDE OF THE ROADWAY TO MAINTAIN LOCAL ACCESS ON THE FINISHED PAVEMENT AND TEMPORARY PAVEMENT SURFACES.
-CONSTRUCT THE NORTH HALF OF THE ROADWAY, INCLUDING FINISHED BUMP-OUT AREAS.
-ONCE CONSTRUCTION OF THE NORTH HALF OF THE ROADWAY IS COMPLETE, SHIFT TRAFFIC BACK TO EXISTING TRAVEL LANES AND CONSTRUCT THE BUMP-OUT AREAS ON THE SOUTH HALF OF THE ROADWAY.

N

CONCRETE BARRIER TEMPORARY PRECAST 6:1 TAPER ON END TO 15' WIDTH (MIN)

SEE TEMP SIGNAL PLANS FOR ADDITIONAL INFORMATION

E MAIN ST

ROAD CLOSED
R11-2
48"X30"

LANE CLOSED
R11-2-L
48"X30"

PLACE ADVANCE WARNING SIGNS IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC."

PLACE W1-4L SIGN ON RIGHT SIDE OF ROAD, 100-FT IN ADVANCE OF SHIFTING TAPER.

W1-4L
30"X30"

100'
TAPER

FOX RIVER

S FIRST ST

S SECOND ST

S THIRD ST

S MILWAUKEE ST

T4W

T4Y
DOUBLE

NO PARKING ANY TIME
R7-1-D
18"X24"

DO NOT CONSTRUCT FINAL BUMP OUT AREAS UNTIL AFTER STAGE 2 AND TRAFFIC IS RESTORED TO NORMAL TRAVEL LANES.

CONCRETE PAVEMENT FAST TRACK 9-INCH REQ'D ON HALF OF N. MILWAUKEE STREET

SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" 11-FT LANES (MINIMUM)

NOTES:
TWO ADJACENT SIDE ROADS MAY NOT BE CLOSED AT THE SAME TIME.

PLACE SIGNS IN ACCORDANCE WITH "BARRICADE AND SIGNS FOR SIDEROAD CLOSURE" STANDARD DETAIL DRAWING: DETAIL 1 WHILE SIDEROAD IS UNDER CONSTRUCTION, DETAIL 2 WHILE SIDEROAD IS NOT UNDER CONSTRUCTION.

MAINTAIN BOTH DIRECTIONS OF LOCAL TRAFFIC ON N. MILWAUKEE STREET AT ALL TIMES.

SEE "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" STANDARD DETAIL DRAWINGS FOR MAINTAINING PEDESTRIAN ACCESS TO ALL PROPERTIES AT ALL TIMES.

MAINTAIN PEDESTRIAN ACCESS ON ONE SIDE OF THE ROADWAY AND AT LEAST ONE PEDESTRIAN CROSSING IN EACH DIRECTION AT ALL INTERSECTIONS AT ALL TIMES. REFER TO THE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR MORE DETAILS.

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CONSTRUCTION STAGE 2 - STH 20	SHEET 312	E

NOTES:
1. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
2. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES.
3. THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
4. ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.
5. "WO" SIGNS ARE THE SAME AS "W" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
6. ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK ORANGE PANEL.
7. PLACE PORTABLE CHANGEABLE MESSAGE SIGNS FOR 14 DAYS PRIOR TO START OF CONSTRUCTION.

LEGEND

WORK ZONE

DETOUR ROUTE

PROPOSED DETOUR SIGN ON POST(S)

1: EAST M3-2 24"X12" / SOUTH M3-3 24"X12"; 20 M1-6 24"X24" / 83 M1-6 24"X24"; DETOUR AHEAD W20-2-A

2: DETOUR M4-8 24"X12"; EAST M3-2 24"X12"; 20 M1-6 24"X24"

3: DETOUR M4-8 24"X12"; WEST M3-4 24"X12"; 20 M1-6 24"X24"

4: DETOUR M4-8 36"X18"; WEST M3-4 36"X18"; 20 M1-6 36"X36"

5: DETOUR M4-8 36"X18"; NORTH M3-1 36"X18"; 83 M1-6 36"X36"

6: DETOUR M4-8 24"X12"; NORTH M3-1 24"X12"; 83 M1-6 24"X24"

7: DETOUR M4-8 24"X12"; SOUTH M3-3 24"X12"; 83 M1-6 24"X24"

A: M05-1R 21"X21"

B: M06-1 21"X21"

C: M06-1 21"X21"

D: M05-1L 21"X21"

E: M06-1 21"X21"

F: M06-1 30"X30"

G: M05-1R 30"X30"

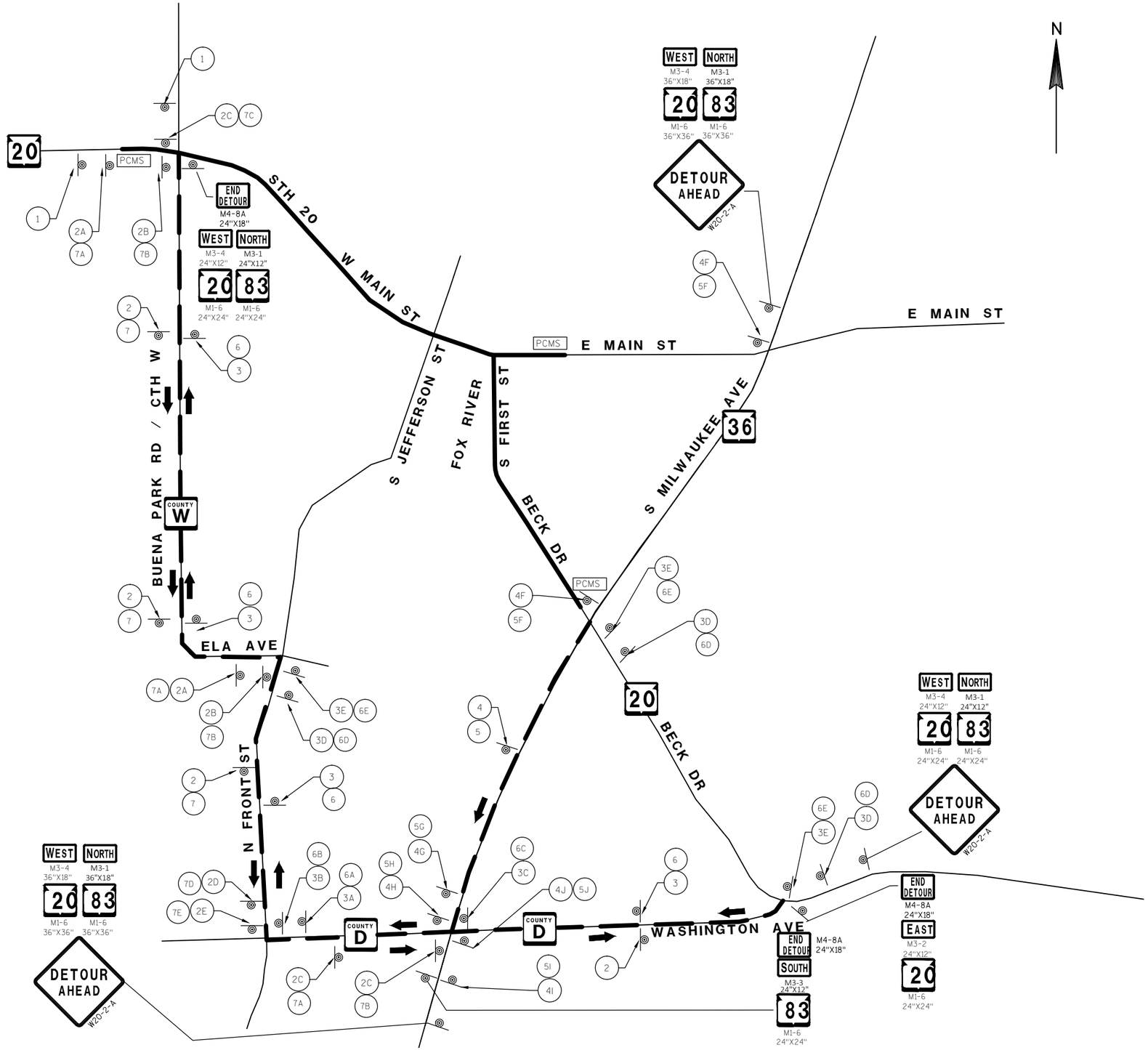
H: M06-1 30"X30"

I: M05-1L 30"X30"

J: M06-1 30"X30"

PCMS MESSAGE

STH 20	STARTING
TO	ON
CLOSE	MM/DD



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	DETOUR PLAN	SHEET 313	E

2

Village of Waterford

TOWN OF WATERFORD

BUENA PARK RD

CTH W

AUGUSTA CT

STH 20

W MAIN ST

RIVERMOOR RD

RIVERMOOR DR

RACINE ST

CENTER ST

WATER ST

JEFFERSON ST

RIVER RD

FOX RIVER

SECOND ST

THIRD ST

MILWAUKEE ST

MAIN ST

ELIZABETH ST

ST THOMAS ST

S FIRST ST

STH 20

WEBER STREET

RIVER ROAD

EVERGREEN DRIVE

Village of Rochester

TOWN OF WATERFORD

Village of Waterford

Village of Rochester

MATCHLINE STA 380+00

MATCHLINE STA 380+00

N

Y=202045.880
X=520213.590

Y=202113.758
X=525490.629

Y=196814.901
X=525352.808

Y=196815.313
X=525379.244

Y=199432.215
X=522780.113

CP134

CP11210

CP11376

CP11699

CP12412

CP352

STA 314+03.11 STH 20=
STA 10+00.00 BUENA PARK RD
Y=201987.91
X=520211.98

STA 321+46.79 STH 20=
STA 20+00.00 AUGUSTA CT
Y=201810.86
X=520934.25

STA 334+60.92 STH 20=
STA 30+00.00 RIVERMOOR RD
Y=200970.23
X=521917.37

STA 340+26.00 STH 20=
STA 40+00.00 RIVERMOOR DR
Y=200549.94
X=522295.07

STA 345+71.48 STH 20=
STA 49+62.68 RACINE ST
Y=200144.33
X=522659.81

STA 351+84.05 STH 20=
STA ??? CENTER ST
Y=199759.23
X=523129.32

STA 354+86.39 STH 20=
STA 70+00.00
Y=199608.48
X=523391.06

STA 357+88.68 STH 20=
STA 80+00.00 N JEFFERSON ST
Y=199507.22
X=523675.84

STA 357+89.43 STH 20=
STA 80+00.00 S JEFFERSON ST
Y=199506.96
X=523676.55

STA 362+58.06 STH 20=
STA 90+00.00 N RIVER ST
Y=199355.55
X=524120.04

STA 362+61.66 STH 20=
STA 90+00.00 S RIVER ST
Y=199354.40
X=524123.45

STA 100+00.00 STH 20=
STA 366+54.16 FIRST ST
Y=199232.78
X=524495.37

STA 103+09.56 STH 20=
STA 130+00.00 N 2ND ST
Y=199235.70
X=524804.91

STA 103+08.83 STH 20=
STA 130+00.00 S 2ND ST
Y=199235.69
X=524804.18

STA 106+18.20 STH 20=
STA 140+00.00 N 3RD ST
Y=199237.66
X=525113.55

STA 106+19.33 STH 20=
STA 140+00.00 S 3RD ST
Y=199237.67
X=525114.68

STA 109+23.61 STH 20=
STA 150+00.00 N MILWAUKEE ST
Y=199238.84
X=525418.95

STA 109+08.60 STH 20=
STA 150+00.00 S MILWAUKEE ST
Y=199238.78
X=525403.95

STA 369+61.09 FIRST ST=
STA 120+00.00 ELIZABETH ST
Y=198925.88
X=524499.00

STA 372+68.52 FIRST ST=
STA 160+00.00 ST THOMAS ST
Y=198618.46
X=524502.63

STA 380+42.17 FIRST ST=
STA 170+00.00 WEBER ST
Y=197844.87
X=524511.78

STA 384+10.30 FIRST ST=
STA 180+00.00 RIVER ROAD
Y=197492.38
X=524590.23

STA 398+59.39 FIRST ST=
STA 189+99.67 EVERGREEN DR WEST
Y=196278.69
X=525381.91

STA 398+53.92 FIRST ST=
STA 190+00.00 EVERGREEN DR EAST
Y=196283.32
X=525379.00

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	ALIGNMENT PLAN	SHEET 314 E

2

Village of
Waterford

BUENA PARK RD

L15

N

T 4 N
R E
2.7 2.6
3.4 3.5
1.9

Y=202045.880
X=520213.590

CP134

WB CONST LINE

EB CONST LINE

STH 20 W MAIN ST

307 307'EB' L60 308 308'EB' 309 309'WB' 309'EB' L61 L47 310 310'WB' 310'EB' 311 311'WB' 311'EB' C = 1 312 312'WB' 312'EB' C = 14 C = 13 313 313'WB' 313'EB' L2 314 314'WB' 314'EB' L62 L48 5' 315 315'WB' 315'EB' L49 5' 316 316'WB' 316'EB' L63 317 317'WB' 317'EB' L3 318 318'WB' 318'EB' L64 L50 319 319'WB' 319'EB' L51 320 320'WB' 321 321'WB' 322

STA 314+03.11 STH 20 R/L=
STA 10+00.00 BUENA PARK RD
Y=201987.91
X=520211.98

TOWN OF
WATERFORD

CTH W

L14

AUGUSTA CT

L19

C = 6

L18

L17

CP11210

STA 321+46.79 STH 20 R/L=
STA 20+00.00 AUGUSTA CT
Y=201810.86
X=520934.25

PROJECT NO:2250-12-70	HWY: STH 20	COUNTY: RACINE	ALIGNMENT PLAN	SHEET 315 E

2

2

Village of
Waterford

N

WATER ST

JEFFERSON ST

RIVER RD

FOX RIVER

I STH 20 W MAIN ST

E MAIN ST

FIRST ST

ELIZABETH ST

WB CONST LINE

EB CONST LINE

STH 20 R/L

E MAIN ST R/L

STA 357+88.68 STH 20 R/L=
STA 80+00.00 N JEFFERSON ST
Y=199507.22
X=523675.84

STA 357+89.43 STH 20 R/L=
STA 80+00.00 S JEFFERSON ST
Y=199506.96
X=523676.55

STA 362+58.06 STH 20 R/L=
STA 90+00.00 N RIVER ST
Y=199355.55
X=524120.04

STA 362+61.66 STH 20 R/L=
STA 90+00.00 S RIVER ST
Y=199354.40
X=524123.45

STA 100+00.00 STH 20=
STA 366+54.16 FIRST ST
Y=199232.78
X=524495.37

Village of
Waterford

PROJECT NO:2250-12-70	HWY: STH 20	COUNTY: RACINE	ALIGNMENT PLAN	SHEET 316 E

Alignment-STH20-Main St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L1	300+01.00	308+83.41	202034.07 518813.73	202041.51 519696.12						882.42'						N89°30'59.4"E
C = 1					311+16.13	202043.48 519928.82	11°33'18"	2°29'28"	232.71'	463.85'	11.74'	2300.00'	308+83.41	313+47.26	N89°30'59.4"E	S78°55'42.5"E
L2	313+47.26	313+99.71	201998.79 520157.20	201988.72 520208.68						52.45'						S78°55'42.5"E
L3	313+99.71	320+91.97	201988.72 520208.68	201825.08 520881.32						692.26'						S76°19'37.4"E
C = 2					324+48.48	201740.81 521227.72	34°29'58"	4°59'25"	356.51'	691.34'	54.07'	1148.16'	320+91.97	327+83.31	S76°19'37.4"E	S41°49'39.9"E
L4	327+83.31	335+34.75	201475.16 521465.47	200915.22 521966.60						751.44'						S41°49'39.9"E
L5	335+34.75	347+89.95	200915.22 521966.60	199981.88 522805.89						1255.20'						S41°57'46.0"E
C = 3					348+62.44	199927.98 522854.36	16°29'56"	11°27'33"	72.49'	143.98'	5.23'	500.00'	347+89.95	349+33.93	S41°57'46.0"E	S58°27'42.0"E
L6	349+33.93	353+70.16	199890.06 522916.14	199661.88 523287.94						436.23'						S58°27'42.0"E
C = 4					354+57.33	199616.28 523362.24	12°26'17"	7°09'43"	87.18'	173.67'	4.74'	800.00'	353+70.16	355+43.82	S58°27'42.0"E	S70°53'59.3"E
L7	355+43.82	357+57.51	199587.76 523444.61	199517.83 523646.53						213.68'						S70°53'59.3"E
L8	357+57.51	358+23.52	199517.83 523646.53	199495.36 523708.60						66.01'						S70°05'29.2"E
L9	358+23.52	362+61.66	199495.36 523708.60	199354.40 524123.45						438.15'						S71°13'58.5"E
L10	362+61.66	365+95.59	199354.40 524123.45	199241.87 524437.85						333.93'						S70°18'25.4"E
C = 5					366+23.43	199232.49 524464.05	20°13'58"	36°43'41"	27.83'	55.09'	2.46'	156.00'	365+95.59	366+50.68	S70°18'25.4"E	N89°27'36.6"E
L11	366+50.68	103+08.60	199232.75 524491.89	199235.69 524803.95						312.08'						N89°27'36.6"E
L12	103+08.60	106+19.33	199235.69 524803.95	199237.67 525114.68						310.74'						N89°38'06.0"E
L13	106+19.33	112+51.54	199237.67 525114.68	199240.09 525746.88						632.21'						N89°46'50.7"E

Alignment-BuenaParkRd																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L14	5+00.00	10+57.99	201488.11 520198.07	202045.88 520213.59						557.99'						N1°35'38.5"E
L15	10+57.99	13+90.00	202045.88 520213.59	202377.76 520222.89						332.01'						N1°36'19.6"E
L16	13+90.00	15+50.00	202377.76 520222.89	202537.74 520225.70						160.00'						N1°00'26.0"E

Alignment-Augusta																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L17	20+00.00	20+75.00	201810.86 520934.25	201882.45 520956.58						75.00'						N17°19'15.6"E
L18	20+75.00	21+25.99	201882.45 520956.58	201932.55 520966.11						50.99'						N10°45'59.7"E
C = 6					21+51.28	201955.87 520975.91	8°01'36"	15°53'42"	25.29'	50.50'	0.89'	360.47'	21+25.99	21+76.49	N22°47'47.0"E	N30°49'22.5"E
L19	21+76.49	21+92.40	201977.58 520988.87	201991.24 520997.02						15.91'						N30°49'22.5"E

Alignment-Rivermoor Road																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L20	30+00.00	30+33.40	200970.23 521917.37	200992.50 521942.25						33.40'						N48°10'20.1"E
C = 7					30+76.95	201021.55 521974.71	46°11'36"	56°05'50"	43.56'	82.35'	8.90'	102.14'	30+33.40	31+15.74	N48°10'20.1"E	N1°58'44.0"E
L21	31+15.74	33+33.63	201065.08 521976.21	201282.84 521983.74						217.88'						N1°58'44.0"E

Alignment-Rivermoor Drive																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L22	40+00.00	40+34.66	200549.94 522295.07	200573.11 522320.85						34.66'						N48°02'14.0"E
C = 8					40+75.13	200600.17 522350.94	44°03'53"	57°17'45"	40.47'	76.91'	7.88'	100.00'	40+34.66	41+11.57	N48°02'14.0"E	N3°58'21.2"E
L23	41+11.57	44+14.42	200640.54 522353.74	200942.66 522374.72						302.85'						N3°58'21.2"E

Alignment-Racine St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L24	49+03.68	50+29.90	200105.22 522615.64	200188.89 522710.15						126.22'						N48°28'59.9"E
C = 9					50+88.60	200227.79 522754.10	60°49'29"	57°17'45"	58.70'	106.16'	15.95'	100.00'	50+29.90	51+36.06	N48°28'59.9"E	S70°41'31.0"E
L25	51+36.06	52+00.00	200208.39 522809.50	200187.25 522869.84						63.94'						S70°41'31.0"E

2

Alignment-Center St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L26	60+00.00	61+50.00	199762.12 523124.60	199903.85 523173.74						150.00'						N19°07'28.7"E

Alignment-S Water St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L27	67+00.00	70+00.00	199324.96 523293.00	199608.48 523391.06						300.00'						N19°04'43.8"E

Alignment-N Jefferson St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L28	80+00.00	84+00.00	199507.22 523675.84	199883.87 523810.50						400.00'						N19°40'21.6"E

Alignment-S Jefferson St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L29	77+00.00	80+00.00	199222.77 523580.46	199506.96 523676.55						300.00'						N18°40'48.7"E

Alignment-N River St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L30	90+00.00	92+00.00	199355.55 524120.04	199544.44 524185.79						200.00'						N19°11'36.4"E

Alignment-S River St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L31	88+00.00	90+00.00	199164.86 524059.59	199354.40 524123.45						200.00'						N18°37'12.5"E

Alignment-N 2nd St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L32	130+00.00	131+50.00	199235.70 524804.91	199385.70 524804.68						150.00'						N0°05'24.0"W

Alignment-S 2nd St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L33	127+50.00	130+00.00	198985.71 524807.47	199235.69 524804.18						250.00'						N0°45'10.8"W

Alignment-N 3rd St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L34	140+00.00	142+00.00	199237.66 525113.55	199437.66 525112.29						200.00'						N0°21'37.5"W

Alignment-S 3rd St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L35	137+50.00	140+00.00	198987.68 525116.84	199237.67 525114.68						250.00'						N0°29'43.6"W

Alignment-N Milwaukee St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L36	150+00.00	152+50.00	199238.84 525418.95	199488.75 525425.46						250.00'						N1°29'32.1"E

Alignment-S Milwaukee St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L37	146+00.00	150+00.00	198838.91 525393.53	199238.78 525403.95						400.00'						N1°29'32.1"E

2

Alignment-STH20-1st St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L38	366+54.16	381+50.55	199232.78 524495.37	197736.50 524513.06						1496.39'						S0°40'39.3"E
C = 10					382+79.58	197607.48 524514.59	32°38'10"	13°00'00"	129.03'	251.05'	18.50'	440.74'	381+50.55	384+01.60	S0°40'39.3"E	S33°18'49.0"E
L39	384+01.60	393+80.88	197499.65 524585.45	196681.28 525123.30						979.28'						S33°18'49.0"E
C = 11					396+28.70	196474.19 525259.41	1°14'21"	0°15'00"	247.82'	495.62'	1.34'	22918.32'	393+80.88	398+76.50	S33°18'49.0"E	S32°04'28.5"E
L40	398+76.50	406+00.85	196264.20 525391.00	195650.41 525775.65						724.35'						S32°04'28.5"E

Alignment-Elizabeth St																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L41	120+00.00	123+00.00	198925.88 524499.00	198927.25 524798.99						300.00'						N89°44'16.8"E

St. Thomas St - Best Fit																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L42	160+00.00	162+00.00	198618.46 524502.63	198618.99 524702.63						200.00'						N89°50'57.0"E

Weber St - Best Fit																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L43	170+00.00	172+00.00	197844.87 524511.78	197844.96 524711.78						200.00'						N89°58'28.0"E

River Road - Best Fit																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
C = 12					179+30.05	197452.16 524521.02	49°32'13"	33°01'27"	80.05'	150.00'	17.58'	173.50'	178+50.00	180+00.00	N10°18'16.7"E	N59°50'30.0"E

Evergreen Drive West - Best Fit																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L44	189+00.00	189+07.30	196226.23 525297.17	196229.65 525303.62						7.30'						N62°03'54.6"E
L45	189+07.30	189+99.67	196229.65 525303.62	196278.69 525381.91						92.37'						N57°56'16.8"E

Evergreen Drive East - Best Fit																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L46	190+00.00	191+00.00	196283.32 525379.00	196341.69 525460.21						100.00'						N54°17'41.0"E

Control Points

Number	Station/offset	Y	X	Description
CP 134	11+11.66, 35.79' RT	202,098.53	520,250.87	CHISELED X ON CURB, NE CORNER OF BUENA PARK INTERSECTION
CP 11210	321+51.77, 54.6' LT	201,861.75	520,954.68	CHISELED CROSS ON TIP OF ISLAND AT AUGUSTA INTERSECTION
CP 11376	328+17.72, 43.42' RT	201,420.56	521,456.06	SET 8" SPIKE ON SOUTH SIDE OF POWER POLE #02-04710
CP 11699	335+28.09, 31.52' RT	200,899.16	521,938.67	SET 8" SPIKE ON NORTH SIDE OF POWER POLE #02-00490
CP 12412	345+22.76, 131.18' LT	200,268.35	522,724.70	SET 8" SPIKE ON SOUTH SIDE OF POWER POLE #02-04775
CP 352	389+47.45, 21.83' RT	197,031.50	524,867.01	8" SPIKE

WB CONST LINE-Buena Park																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L47	308+16.28	310+21.28	202040.95 519628.99	202044.55 519833.95						205.00'						N88°59'32.3"E
C = 13					311+99.95	202035.38 520012.38	8°51'38"	2°29'05"	178.67'	356.62'	6.91'	2306.00'	310+21.28	313+77.90	S87°03'22.1"E	S78°11'43.7"E
L48	313+77.90	314+28.98	201998.83 520187.27	201986.98 520236.96						51.08'						S76°35'31.3"E
L49	314+28.98	317+46.64	201986.98 520236.96	201911.89 520545.62						317.66'						S76°19'37.4"E
L50	317+46.64	318+96.64	201911.89 520545.62	201877.41 520691.61						150.00'						S76°42'32.5"E
L51	318+96.64	321+01.73	201877.41 520691.61	201823.09 520889.37						205.09'						S74°38'32.0"E

EB CONST LINE-Buena Park																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L60	306+66.00	308+71.08	202039.68 519478.71	202035.41 519683.74						205.08'						S88°48'29.3"E
L61	308+71.08	310+20.74	202035.41 519683.74	202033.57 519833.39						149.66'						S89°17'35.3"E
C = 14					311+99.55	202024.38 520011.96	8°54'36"	2°29'48"	178.81'	356.90'	6.96'	2295.00'	310+20.74	313+77.64	S87°03'22.1"E	S78°08'45.6"E
L62	313+77.64	314+28.73	201987.65 520186.96	201975.74 520236.65						51.10'						S76°30'50.0"E
L63	314+28.73	317+44.04	201975.74 520236.65	201901.20 520543.02						315.31'						S76°19'37.4"E
L64	317+44.04	319+49.13	201901.20 520543.02	201858.58 520743.63						205.09'						S78°00'12.7"E

WB CONST LINE-Jefferson																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L52	355+88.14	356+88.26	199573.25 523486.49	199545.26 523582.62						100.12'						S73°45'44.0"E
L53	356+88.26	357+57.67	199545.26 523582.62	199522.55 523648.20						69.40'						S70°53'59.3"E
L54	357+57.67	358+23.66	199522.55 523648.20	199500.08 523710.25						65.99'						S70°05'29.2"E
L55	358+23.66	359+50.09	199500.08 523710.25	199459.40 523829.96						126.43'						S71°13'58.5"E
L56	359+50.09	360+50.09	199459.40 523829.96	199426.75 523924.49						100.00'						S70°56'47.2"E
L57	360+50.09	362+61.79	199426.75 523924.49	199358.65 524124.93						211.70'						S71°13'58.5"E
L58	362+61.79	363+26.62	199358.65 524124.93	199336.80 524185.96						64.83'						S70°18'25.4"E
L59	363+26.62	364+26.76	199336.80 524185.96	199298.85 524278.64						100.14'						S67°43'53.5"E

EB CONST LINE-Jefferson																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L65	355+88.14	356+88.26	199573.25 523486.49	199535.81 523579.35						100.12'						S68°02'14.7"E
L66	356+88.26	357+57.60	199535.81 523579.35	199513.12 523644.86						69.33'						S70°53'59.3"E
L67	357+57.60	358+23.62	199513.12 523644.86	199490.64 523706.94						66.02'						S70°05'29.2"E
L68	358+23.62	359+50.15	199490.64 523706.94	199449.93 523826.75						126.53'						S71°13'58.5"E
L69	359+50.15	360+50.60	199449.93 523826.75	199426.75 523924.49						100.45'						S76°39'35.0"E

EB CONST LINE-First																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L70	365+77.45	365+98.49	199247.98 524420.76	199240.89 524440.57						21.04'						S70°18'25.4"E
C = 15					366+26.32	199231.51 524466.78	20°13'58"	36°43'41"	27.83'	55.09'	2.46'	156.00'	365+98.49	366+53.57	S70°18'25.4"E	N89°27'36.6"E
L71	366+53.57	367+53.25	199231.78 524494.61	199232.72 524594.28						99.68'						N89°27'36.6"E
L72	367+53.25	368+53.25	199232.72 524594.28	199234.66 524694.26						100.00'						N88°53'14.0"E

2250-12-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	37.000	37.000
0004	201.0120	Clearing	ID	105.000	105.000
0006	201.0205	Grubbing	STA	37.000	37.000
0008	201.0220	Grubbing	ID	105.000	105.000
0010	203.0100	Removing Small Pipe Culverts	EACH	8.000	8.000
0012	203.0200	Removing Old Structure (station) 01. 317+13	LS	1.000	1.000
0014	203.0200	Removing Old Structure (station) 02. C-51-21	LS	1.000	1.000
0016	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 365+02	LS	1.000	1.000
0018	204.0100	Removing Pavement	SY	48,090.000	48,090.000
0020	204.0110	Removing Asphaltic Surface	SY	350.000	350.000
0022	204.0115	Removing Asphaltic Surface Butt Joints	SY	165.000	165.000
0024	204.0150	Removing Curb & Gutter	LF	5,085.000	5,085.000
0026	204.0155	Removing Concrete Sidewalk	SY	8,730.000	8,730.000
0028	204.0170	Removing Fence	LF	100.000	100.000
0030	204.0195	Removing Concrete Bases	EACH	51.000	51.000
0032	204.0210	Removing Manholes	EACH	33.000	33.000
0034	204.0220	Removing Inlets	EACH	62.000	62.000
0036	204.0245	Removing Storm Sewer (size) 01. 10-Inch	LF	1,010.000	1,010.000
0038	204.0245	Removing Storm Sewer (size) 02. 12-Inch	LF	2,990.000	2,990.000
0040	204.0245	Removing Storm Sewer (size) 03. 15-Inch	LF	55.000	55.000
0042	204.0245	Removing Storm Sewer (size) 04. 18-Inch	LF	1,572.000	1,572.000
0044	204.0245	Removing Storm Sewer (size) 05. 21-Inch	LF	774.000	774.000
0046	204.0245	Removing Storm Sewer (size) 06. 24-Inch	LF	475.000	475.000
0048	204.0245	Removing Storm Sewer (size) 07. 27-Inch	LF	480.000	480.000
0050	204.0245	Removing Storm Sewer (size) 08. 30-Inch	LF	130.000	130.000
0052	204.0280	Sealing Pipes	EACH	13.000	13.000
0054	204.9060.S	Removing (item description) 101. Distribution Center	EACH	1.000	1.000
0056	204.9060.S	Removing (item description) 102. Lighting Units	EACH	34.000	34.000
0058	204.9105.S	Removing (item description) 01. Traffic Signals (STH 20 & CTH W/Buena Park Rd)	LS	1.000	1.000
0060	204.9105.S	Removing (item description) 02. Traffic Signals (STH 20 & Jefferson St)	LS	1.000	1.000
0062	204.9105.S	Removing (item description) 03. Traffic Signals (STH 20 & E. Main St)	LS	1.000	1.000
0064	204.9105.S	Removing (item description) 04. Loop Detector Wire and Lead-In Cable (STH 20 & STH W/Buena Park Rd)	LS	1.000	1.000
0066	204.9105.S	Removing (item description) 05. Loop Detector Wire and Lead-In Cable (STH 20 & Jefferson St)	LS	1.000	1.000
0068	204.9105.S	Removing (item description) 06. Loop Detector Wire and Lead-In Cable (STH 36 & STH 20)	LS	1.000	1.000

2250-12-70

Line	Item	Item Description	Unit	Total	Qty
0070	204.9105.S	Removing (item description) 07. Traffic Signals (STH 36 & STH 20)	LS	1.000	1.000
0072	205.0100	Excavation Common	CY	78,011.000	78,011.000
0074	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	5,900.000	5,900.000
0076	206.1000	Excavation for Structures Bridges (structure) 01. B-51-150	LS	1.000	1.000
0078	206.3000	Excavation for Structures Retaining Walls (structure) 01. R-51-0073	LS	1.000	1.000
0080	206.3000	Excavation for Structures Retaining Walls (structure) 02. R-51-0074	LS	1.000	1.000
0082	206.3000	Excavation for Structures Retaining Walls (structure) 03. R-51-0075	LS	1.000	1.000
0084	209.1500	Backfill Granular Grade 1	TON	450.000	450.000
0086	210.1500	Backfill Structure Type A	TON	740.000	740.000
0088	213.0100	Finishing Roadway (project) 01. 2250-12-70	EACH	1.000	1.000
0090	305.0110	Base Aggregate Dense 3/4-Inch	TON	55.000	55.000
0092	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	37,000.000	37,000.000
0094	310.0110	Base Aggregate Open-Graded	TON	160.000	160.000
0096	311.0110	Breaker Run	TON	63,625.000	63,625.000
0098	405.0100	Coloring Concrete WisDOT Red	CY	442.000	442.000
0100	415.0090	Concrete Pavement 9-Inch	SY	55,530.000	55,530.000
0102	415.0210	Concrete Pavement Gaps	EACH	14.000	14.000
0104	415.0410	Concrete Pavement Approach Slab	SY	180.000	180.000
0106	415.1150.S	Concrete Pavement Fast Track (inch) 01. 9-Inch	SY	2,695.000	2,695.000
0108	415.4100	Concrete Pavement Joint Filling	SY	50,280.000	50,280.000
0110	415.5110.S	Concrete Pavement Joint Layout	LS	1.000	1.000
0112	416.0160	Concrete Driveway 6-Inch	SY	1,875.000	1,875.000
0114	416.0260	Concrete Driveway HES 6-Inch	SY	250.000	250.000
0116	416.0610	Drilled Tie Bars	EACH	1,015.000	1,015.000
0118	416.0620	Drilled Dowel Bars	EACH	145.000	145.000
0120	455.0605	Tack Coat	GAL	705.000	705.000
0122	460.2000	Incentive Density HMA Pavement	DOL	2,450.000	2,450.000
0124	460.5223	HMA Pavement 3 LT 58-28 S	TON	1,555.000	1,555.000
0126	460.5224	HMA Pavement 4 LT 58-28 S	TON	1,145.000	1,145.000
0128	465.0105	Asphaltic Surface	TON	1,000.000	1,000.000
0130	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	420.000	420.000
0132	465.0125	Asphaltic Surface Temporary	TON	575.000	575.000
0134	465.0315	Asphaltic Flumes	SY	27.000	27.000
0136	502.0100	Concrete Masonry Bridges	CY	877.000	877.000
0138	502.0110.S	Concrete Masonry Soldier Pile Footings	CY	114.000	114.000

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Line	Item	Item Description	Unit	Total	Qty
0140	502.3200	Protective Surface Treatment	SY	1,480.000	1,480.000
0142	502.3210	Pigmented Surface Sealer	SY	152.000	152.000
0144	503.0137	Prestressed Girder Type I 36W-Inch	LF	1,190.000	1,190.000
0146	504.0500	Concrete Masonry Retaining Walls	CY	115.000	115.000
0148	505.0400	Bar Steel Reinforcement HS Structures	LB	16,540.000	16,540.000
0150	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	149,120.000	149,120.000
0152	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	2,830.000	2,830.000
0154	505.0904	Bar Couplers No. 4	EACH	22.000	22.000
0156	505.0905	Bar Couplers No. 5	EACH	539.000	539.000
0158	505.0906	Bar Couplers No. 6	EACH	54.000	54.000
0160	505.0907	Bar Couplers No. 7	EACH	8.000	8.000
0162	505.0908	Bar Couplers No. 8	EACH	24.000	24.000
0164	506.0605	Structural Steel HS	LB	91,600.000	91,600.000
0166	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	32.000	32.000
0168	506.3009	Welded Stud Shear Connectors 3/4x5-Inch	EACH	646.000	646.000
0170	506.4000	Steel Diaphragms (structure) 01. B-51-0150	EACH	14.000	14.000
0172	511.1200	Temporary Shoring (structure) 01. B-51-0150	SF	620.000	620.000
0174	513.2050.S	Railing Pipe	LF	28.000	28.000
0176	513.7021	Railing Steel Type C4 01. B-51-0150	LF	370.000	370.000
0178	513.8021	Railing Steel Pedestrian Type C4 01. B-51-0150	LF	38.000	38.000
0180	513.8021	Railing Steel Pedestrian Type C4 02. R-51-0070	LF	410.000	410.000
0182	513.8021	Railing Steel Pedestrian Type C4 03. R-51-0073	LF	324.000	324.000
0184	513.8021	Railing Steel Pedestrian Type C4 04. R-51-0074	LF	84.000	84.000
0186	513.8021	Railing Steel Pedestrian Type C4 05. R-51-0075	LF	39.000	39.000
0188	516.0500	Rubberized Membrane Waterproofing	SY	37.000	37.000
0190	517.1050.S	Architectural Surface Treatment (structure) 01. B-51-0150	SF	991.000	991.000
0192	517.1050.S	Architectural Surface Treatment (structure) 02. R-51-0073	SF	910.000	910.000
0194	517.1050.S	Architectural Surface Treatment (structure) 03. R-51-0074	SF	490.000	490.000
0196	517.1050.S	Architectural Surface Treatment (structure) 04. R-51-0075	SF	200.000	200.000
0198	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	1.000	1.000
0200	521.1524	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 24-Inch 6 to 1	EACH	4.000	4.000
0202	521.3112	Culvert Pipe Corrugated Steel 12-Inch	LF	61.000	61.000
0204	521.3124	Culvert Pipe Corrugated Steel 24-Inch	LF	135.000	135.000
0206	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	2.000	2.000
0208	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete	EACH	4.000	4.000

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Line	Item	Item Description	Unit	Total	Qty
		15-Inch			
0210	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	4.000	4.000
0212	522.2424	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	LF	100.000	100.000
0214	522.2614	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch	EACH	1.000	1.000
0216	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	1.000	1.000
0218	522.2624	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch	EACH	2.000	2.000
0220	522.2629	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch	EACH	1.000	1.000
0222	522.2638	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 38x60-Inch	EACH	6.000	6.000
0224	522.2643	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 43x68-Inch	EACH	3.000	3.000
0226	550.0020	Pre-Boring Rock or Consolidated Materials	LF	848.000	848.000
0228	550.1120	Piling Steel HP 12-Inch X 53 Lb	LF	660.000	660.000
0230	550.2126	Piling CIP Concrete 12 3/4 X 0.375-Inch	LF	400.000	400.000
0232	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	1,795.000	1,795.000
0234	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	465.000	465.000
0236	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	11,825.000	11,825.000
0238	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	4,060.000	4,060.000
0240	601.0452	Concrete Curb & Gutter Integral 30-Inch Type D	LF	8,025.000	8,025.000
0242	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	75.000	75.000
0244	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	180.000	180.000
0246	601.0600	Concrete Curb Pedestrian	LF	95.000	95.000
0248	602.0410	Concrete Sidewalk 5-Inch	SF	120,205.000	120,205.000
0250	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	1,395.000	1,395.000
0252	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	187.000	187.000
0254	602.1500	Concrete Steps	SF	202.000	202.000
0256	603.8000	Concrete Barrier Temporary Precast Delivered	LF	450.000	450.000
0258	603.8125	Concrete Barrier Temporary Precast Installed	LF	450.000	450.000
0260	603.8505	Anchoring Concrete Barrier on Bridge Decks	LF	200.000	200.000
0262	606.0300	Riprap Heavy	CY	269.000	269.000
0264	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	2,388.000	2,388.000
0266	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	874.000	874.000
0268	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	224.000	224.000

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Line	Item	Item Description	Unit	Total	Qty
0270	608.0321	Storm Sewer Pipe Reinforced Concrete Class III 21-Inch	LF	18.000	18.000
0272	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	1,352.000	1,352.000
0274	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	618.000	618.000
0276	608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	134.000	134.000
0278	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	1,541.000	1,541.000
0280	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	650.000	650.000
0282	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	259.000	259.000
0284	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	1,424.000	1,424.000
0286	608.0430	Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	LF	764.000	764.000
0288	608.0436	Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch	LF	574.000	574.000
0290	608.2343	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 43x68-Inch	LF	864.000	864.000
0292	608.2414	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 14x23-Inch	LF	139.000	139.000
0294	608.2419	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	187.000	187.000
0296	608.2429	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch	LF	79.000	79.000
0298	611.0420	Reconstructing Manholes	EACH	2.000	2.000
0300	611.0430	Reconstructing Inlets	EACH	3.000	3.000
0302	611.0530	Manhole Covers Type J	EACH	50.000	50.000
0304	611.0545	Manhole Covers Type L	EACH	1.000	1.000
0306	611.0606	Inlet Covers Type B	EACH	3.000	3.000
0308	611.0624	Inlet Covers Type H	EACH	112.000	112.000
0310	611.0666	Inlet Covers Type Z	EACH	10.000	10.000
0312	611.1003	Catch Basins 3-FT Diameter	EACH	6.000	6.000
0314	611.1004	Catch Basins 4-FT Diameter	EACH	38.000	38.000
0316	611.1005	Catch Basins 5-FT Diameter	EACH	3.000	3.000
0318	611.1230	Catch Basins 2x3-FT	EACH	76.000	76.000
0320	611.2004	Manholes 4-FT Diameter	EACH	27.000	27.000
0322	611.2005	Manholes 5-FT Diameter	EACH	22.000	22.000
0324	611.2006	Manholes 6-FT Diameter	EACH	2.000	2.000

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Line	Item	Item Description	Unit	Total	Qty
0326	611.2007	Manholes 7-FT Diameter	EACH	1.000	1.000
0328	611.2008	Manholes 8-FT Diameter	EACH	1.000	1.000
0330	611.3220	Inlets 2x2-FT	EACH	1.000	1.000
0332	611.8110	Adjusting Manhole Covers	EACH	9.000	9.000
0334	611.8115	Adjusting Inlet Covers	EACH	9.000	9.000
0336	611.8120.S	Cover Plates Temporary	EACH	10.000	10.000
0338	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	440.000	440.000
0340	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	4,383.000	4,383.000
0342	618.0100	Maintenance And Repair of Haul Roads (project) 01. 2250-12-70	EACH	1.000	1.000
0344	619.1000	Mobilization	EACH	1.000	1.000
0346	620.0300	Concrete Median Sloped Nose	SF	172.000	172.000
0348	623.0200	Dust Control Surface Treatment	SY	53,320.000	53,320.000
0350	624.0100	Water	MGAL	670.000	670.000
0352	625.0100	Topsoil	SY	39,770.000	39,770.000
0354	627.0200	Mulching	SY	11,440.000	11,440.000
0356	628.1104	Erosion Bales	EACH	100.000	100.000
0358	628.1504	Silt Fence	LF	6,360.000	6,360.000
0360	628.1520	Silt Fence Maintenance	LF	22,220.000	22,220.000
0362	628.1905	Mobilizations Erosion Control	EACH	15.000	15.000
0364	628.1910	Mobilizations Emergency Erosion Control	EACH	10.000	10.000
0366	628.2021	Erosion Mat Class II Type A	SY	220.000	220.000
0368	628.6005	Turbidity Barriers	SY	285.000	285.000
0370	628.6510	Soil Stabilizer Type B	ACRE	2.000	2.000
0372	628.7005	Inlet Protection Type A	EACH	185.000	185.000
0374	628.7010	Inlet Protection Type B	EACH	13.000	13.000
0376	628.7015	Inlet Protection Type C	EACH	114.000	114.000
0378	628.7020	Inlet Protection Type D	EACH	73.000	73.000
0380	628.7504	Temporary Ditch Checks	LF	45.000	45.000
0382	628.7555	Culvert Pipe Checks	EACH	19.000	19.000
0384	628.7560	Tracking Pads	EACH	10.000	10.000
0386	628.7570	Rock Bags	EACH	50.000	50.000
0388	629.0210	Fertilizer Type B	CWT	29.200	29.200
0390	630.0200	Seeding Temporary	LB	320.000	320.000
0392	631.0300	Sod Water	MGAL	907.000	907.000
0394	631.1000	Sod Lawn	SY	39,770.000	39,770.000
0396	633.5200	Markers Culvert End	EACH	4.000	4.000
0398	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	119.000	119.000
0400	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	2.000	2.000
0402	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	59.000	59.000

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Line	Item	Item Description	Unit	Total	Qty
0404	636.0050.S	Foundation Drilling (diameter) 01. 24-Inch	LF	959.000	959.000
0406	637.2210	Signs Type II Reflective H	SF	1,123.460	1,123.460
0408	637.2215	Signs Type II Reflective H Folding	SF	82.060	82.060
0410	637.2230	Signs Type II Reflective F	SF	397.685	397.685
0412	638.2102	Moving Signs Type II	EACH	23.000	23.000
0414	638.2602	Removing Signs Type II	EACH	162.000	162.000
0416	638.3000	Removing Small Sign Supports	EACH	116.000	116.000
0418	641.8100	Overhead Sign Support (structure) 0001. S-51-252	LS	1.000	1.000
0420	643.0300	Traffic Control Drums	DAY	33,000.000	33,000.000
0422	643.0420	Traffic Control Barricades Type III	DAY	26,140.000	26,140.000
0424	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	220.000	220.000
0426	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	220.000	220.000
0428	643.0705	Traffic Control Warning Lights Type A	DAY	33,980.000	33,980.000
0430	643.0715	Traffic Control Warning Lights Type C	DAY	6,410.000	6,410.000
0432	643.0900	Traffic Control Signs	DAY	35,136.000	35,136.000
0434	643.1050	Traffic Control Signs PCMS	DAY	122.000	122.000
0436	643.5000	Traffic Control	EACH	1.000	1.000
0438	644.1410.S	Temporary Pedestrian Surface Asphalt	SF	8,000.000	8,000.000
0440	644.1420.S	Temporary Pedestrian Surface Plywood	SF	8,000.000	8,000.000
0442	644.1601.S	Temporary Curb Ramp	EACH	122.000	122.000
0444	644.1616.S	Temporary Pedestrian Safety Fence	LF	3,200.000	3,200.000
0446	645.0111	Geotextile Type DF Schedule A	SY	1,711.000	1,711.000
0448	645.0120	Geotextile Type HR	SY	524.000	524.000
0450	646.1020	Marking Line Epoxy 4-Inch	LF	45,261.000	45,261.000
0452	646.3020	Marking Line Epoxy 8-Inch	LF	5,971.000	5,971.000
0454	646.5020	Marking Arrow Epoxy	EACH	47.000	47.000
0456	646.5120	Marking Word Epoxy	EACH	12.000	12.000
0458	646.5220	Marking Symbol Epoxy	EACH	9.000	9.000
0460	646.6120	Marking Stop Line Epoxy 18-Inch	LF	670.000	670.000
0462	646.7120	Marking Diagonal Epoxy 12-Inch	LF	1,262.000	1,262.000
0464	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	4,060.000	4,060.000
0466	646.8305	Marking Parking Stall Paint	LF	218.000	218.000
0468	646.9000	Marking Removal Line 4-Inch	LF	5,405.000	5,405.000
0470	646.9100	Marking Removal Line 8-Inch	LF	465.000	465.000
0472	646.9200	Marking Removal Line Wide	LF	330.000	330.000
0474	646.9300	Marking Removal Special Marking	EACH	5.000	5.000
0476	649.0105	Temporary Marking Line Paint 4-Inch	LF	23,220.000	23,220.000
0478	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	32,470.000	32,470.000
0480	649.0205	Temporary Marking Line Paint 8-Inch	LF	80.000	80.000
0482	649.0505	Temporary Marking Arrow Paint	EACH	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0484	649.0605	Temporary Marking Word Paint	EACH	1.000	1.000
0486	649.0805	Temporary Marking Stop Line Paint 18-Inch	LF	135.000	135.000
0488	649.0850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	155.000	155.000
0490	650.4000	Construction Staking Storm Sewer	EACH	197.000	197.000
0492	650.4500	Construction Staking Subgrade	LF	16,373.000	16,373.000
0494	650.5000	Construction Staking Base	LF	5,588.000	5,588.000
0496	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	4,705.000	4,705.000
0498	650.6000	Construction Staking Pipe Culverts	EACH	4.000	4.000
0500	650.6500	Construction Staking Structure Layout (structure) 01. B-51-150	LS	1.000	1.000
0502	650.6500	Construction Staking Structure Layout (structure) 02. R-51-70	LS	1.000	1.000
0504	650.6500	Construction Staking Structure Layout (structure) 03. R-51-73	LS	1.000	1.000
0506	650.6500	Construction Staking Structure Layout (structure) 04. R-51-74	LS	1.000	1.000
0508	650.6500	Construction Staking Structure Layout (structure) 05. R-51-75	LS	1.000	1.000
0510	650.7000	Construction Staking Concrete Pavement	LF	10,785.000	10,785.000
0512	650.8500	Construction Staking Electrical Installations (project) 01. 2250-12-70	LS	1.000	1.000
0514	650.9000	Construction Staking Curb Ramps	EACH	130.000	130.000
0516	650.9910	Construction Staking Supplemental Control (project) 01. 2250-12-70	LS	1.000	1.000
0518	650.9920	Construction Staking Slope Stakes	LF	16,373.000	16,373.000
0520	652.0125	Conduit Rigid Metallic 2-Inch	LF	30.000	30.000
0522	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	23,383.000	23,383.000
0524	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	5,898.000	5,898.000
0526	652.0700.S	Install Conduit into Existing Item	EACH	3.000	3.000
0528	652.0800	Conduit Loop Detector	LF	3,730.000	3,730.000
0530	653.0135	Pull Boxes Steel 24x36-Inch	EACH	18.000	18.000
0532	653.0140	Pull Boxes Steel 24x42-Inch	EACH	80.000	80.000
0534	653.0154	Pull Boxes Non-Conductive 24x36-Inch	EACH	5.000	5.000
0536	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	9.000	9.000
0538	653.0222	Junction Boxes 18x12x6-Inch	EACH	8.000	8.000
0540	653.0905	Removing Pull Boxes	EACH	52.000	52.000
0542	654.0101	Concrete Bases Type 1	EACH	19.000	19.000
0544	654.0102	Concrete Bases Type 2	EACH	4.000	4.000
0546	654.0105	Concrete Bases Type 5	EACH	37.000	37.000
0548	654.0110	Concrete Bases Type 10	EACH	3.000	3.000
0550	654.0111	Concrete Bases Type 11	EACH	72.000	72.000

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Line	Item	Item Description	Unit	Total	Qty
0552	654.0113	Concrete Bases Type 13	EACH	7.000	7.000
0554	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	2.000	2.000
0556	654.0230	Concrete Control Cabinet Bases Type L30	EACH	2.000	2.000
0558	655.0230	Cable Traffic Signal 5-14 AWG	LF	1,870.000	1,870.000
0560	655.0240	Cable Traffic Signal 7-14 AWG	LF	1,541.000	1,541.000
0562	655.0260	Cable Traffic Signal 12-14 AWG	LF	4,480.000	4,480.000
0564	655.0270	Cable Traffic Signal 15-14 AWG	LF	1,124.000	1,124.000
0566	655.0320	Cable Type UF 2-10 AWG Grounded	LF	1,607.000	1,607.000
0568	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	4,174.000	4,174.000
0570	655.0610	Electrical Wire Lighting 12 AWG	LF	10,530.000	10,530.000
0572	655.0615	Electrical Wire Lighting 10 AWG	LF	4,560.000	4,560.000
0574	655.0620	Electrical Wire Lighting 8 AWG	LF	45,427.000	45,427.000
0576	655.0630	Electrical Wire Lighting 4 AWG	LF	27,588.000	27,588.000
0578	655.0635	Electrical Wire Lighting 2 AWG	LF	16,019.000	16,019.000
0580	655.0640	Electrical Wire Lighting 1 AWG	LF	36.000	36.000
0582	655.0700	Loop Detector Lead In Cable	LF	9,556.000	9,556.000
0584	655.0800	Loop Detector Wire	LF	8,430.000	8,430.000
0586	655.0900	Traffic Signal EVP Detector Cable	LF	3,875.000	3,875.000
0588	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STH 20/83 & CTH W/Buena Park Rd	LS	1.000	1.000
0590	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. STH 20/83 & Jefferson St	LS	1.000	1.000
0592	656.0400	Electrical Service Main Lugs Only Meter Pedestal (location) 001. RC STA 344+59 66.8' LT	LS	1.000	1.000
0594	656.0400	Electrical Service Main Lugs Only Meter Pedestal (location) 002. VW STA 367+45 111.8' LT	LS	1.000	1.000
0596	657.0100	Pedestal Bases	EACH	20.000	20.000
0598	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	41.000	41.000
0600	657.0310	Poles Type 3	EACH	4.000	4.000
0602	657.0322	Poles Type 5-Aluminum	EACH	37.000	37.000
0604	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	5.000	5.000
0606	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	7.000	7.000
0608	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	10.000	10.000
0610	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	4.000	4.000
0612	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	37.000	37.000
0614	657.1345	Install Poles Type 9	EACH	1.000	1.000
0616	657.1350	Install Poles Type 10	EACH	1.000	1.000
0618	657.1355	Install Poles Type 12	EACH	1.000	1.000
0620	657.1360	Install Poles Type 13	EACH	1.000	1.000
0622	657.1450	Install Poles Over Height Type 10	EACH	1.000	1.000
0624	657.1460	Install Poles Over Height Type 13	EACH	5.000	5.000

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Line	Item	Item Description	Unit	Total	Qty
0626	657.1525	Install Monotube Arms 25-FT	EACH	1.000	1.000
0628	657.1530	Install Monotube Arms 30-FT	EACH	2.000	2.000
0630	657.1540	Install Monotube Arms 40-FT	EACH	2.000	2.000
0632	657.1545	Install Monotube Arms 45-FT	EACH	1.000	1.000
0634	657.1550	Install Monotube Arms 50-FT	EACH	2.000	2.000
0636	657.1555	Install Monotube Arms 55-FT	EACH	2.000	2.000
0638	657.1815	Install Luminaire Arms Steel 15-FT	EACH	8.000	8.000
0640	657.6005	Anchor Assemblies Light Poles on Structures	EACH	4.000	4.000
0642	658.0173	Traffic Signal Face 3S 12-Inch	EACH	31.000	31.000
0644	658.0174	Traffic Signal Face 4S 12-Inch	EACH	14.000	14.000
0646	658.0175	Traffic Signal Face 5S 12-Inch	EACH	2.000	2.000
0648	658.0416	Pedestrian Signal Face 16-Inch	EACH	22.000	22.000
0650	658.0500	Pedestrian Push Buttons	EACH	22.000	22.000
0652	658.5069	Signal Mounting Hardware (location) 01. STH 20 & CTH W/Buena Park Rd	LS	1.000	1.000
0654	658.5069	Signal Mounting Hardware (location) 02. STH 20 & Jefferson St	LS	1.000	1.000
0656	658.5069	Signal Mounting Hardware (location) 03. STH 20 & E. Main St	LS	1.000	1.000
0658	658.5069	Signal Mounting Hardware (location) 04. STH 36 & STH 20	LS	1.000	1.000
0660	659.1125	Luminaires Utility LED C	EACH	49.000	49.000
0662	659.2230	Lighting Control Cabinets 240/480 30-Inch	EACH	2.000	2.000
0664	661.0200	Temporary Traffic Signals for Intersections (location) 01. STH 20 & CTH W/Buena Park Rd	LS	1.000	1.000
0666	661.0200	Temporary Traffic Signals for Intersections (location) 02. STH 20 & Jeffernson St	LS	1.000	1.000
0668	661.0200	Temporary Traffic Signals for Intersections (location) 03. STH 20 & E. Main St	LS	1.000	1.000
0670	678.0700	Install Wireless Antennas	EACH	2.000	2.000
0672	690.0150	Sawing Asphalt	LF	5,608.000	5,608.000
0674	690.0250	Sawing Concrete	LF	6,636.000	6,636.000
0676	715.0415	Incentive Strength Concrete Pavement	DOL	17,430.000	17,430.000
0678	715.0502	Incentive Strength Concrete Structures	DOL	5,300.000	5,300.000
0680	715.0710	Optimized Aggregate Gradation Incentive	DOL	43,730.000	43,730.000
0682	999.1500.S	Crack and Damage Survey	LS	1.000	1.000
0684	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	3,000.000	3,000.000
0686	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	6,500.000	6,500.000
0688	SPV.0060	Special 01. Manholes 10-Foot Diameter	EACH	1.000	1.000
0690	SPV.0060	Special 02. Manholes 12-Foot Diameter	EACH	2.000	2.000
0692	SPV.0060	Special 03. Inlet Covers Special	EACH	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0694	SPV.0060	Special 04. Manhole Covers Special	EACH	2.000	2.000
0696	SPV.0060	Special 05. Field Office Type T	EACH	1.000	1.000
0698	SPV.0060	Special 06. Moving Solar RRFB and Pole Westbound Right on STH 20 at River Street	EACH	1.000	1.000
0700	SPV.0060	Special 07. Moving Solar RRFB Eastbound Right on STH 20 at River Street	EACH	1.000	1.000
0702	SPV.0060	Special 08. Sanitary Manhole Frame and Grate, Special	EACH	4.000	4.000
0704	SPV.0060	Special 09. Sanitary Chimney Seals, 10-Inch	EACH	4.000	4.000
0706	SPV.0060	Special 10. Sanitary Manhole Exterior Joint Protection	EACH	4.000	4.000
0708	SPV.0060	Special 101. Decorative Lighting Units LED 15-FT	EACH	34.000	34.000
0710	SPV.0060	Special 102. Decorative Lighting Units LED 20-FT	EACH	40.000	40.000
0712	SPV.0060	Special 11. Adjusting Sanitary Manhole Covers	EACH	50.000	50.000
0714	SPV.0060	Special 12. Adjust Existing Water Valve Boxes and Water Manholes	EACH	130.000	130.000
0716	SPV.0060	Special 13. Adjust Fire Hydrant	EACH	4.000	4.000
0718	SPV.0060	Special 14. Decorative Tree Grates	EACH	4.000	4.000
0720	SPV.0090	Special 01. Culvert Pipe Reinforced Concrete Horizontal Ellipical Class HE-IV 38x60-Inch	LF	338.000	338.000
0722	SPV.0090	Special 02. Construction Staking Concrete Sidewalk	LF	24,000.000	24,000.000
0724	SPV.0090	Special 03. Heavy Duty Silt Fence	LF	1,050.000	1,050.000
0726	SPV.0090	Special 04. Private Storm Sewer Concrete Pipe	LF	150.000	150.000
0728	SPV.0090	Special 05. Private Storm Sewer PVC Pipe	LF	150.000	150.000
0730	SPV.0105	Special 01. Temporary EVP System (STH 20 & Jefferson St)	LS	1.000	1.000
0732	SPV.0105	Special 02. Temporary EVP System (STH 20 & E. Main St)	LS	1.000	1.000
0734	SPV.0105	Special 03.Temporary Vehicle Detection System (STH 20 & CTH W/Buena Park Rd)	LS	1.000	1.000
0736	SPV.0105	Special 04. Temporary Vehicle Detection System (STH 20 & Jefferson St)	LS	1.000	1.000
0738	SPV.0105	Special 05.Temporary Vehicle Detection System (STH 20 & E. Main St)	LS	1.000	1.000
0740	SPV.0105	Special 06. Trans & Install State Furn Traffic Signal Cab (STH 20 & CTH W)	LS	1.000	1.000
0742	SPV.0105	Special 07. Trans & Install State Furn Traffic Signal Cab (STH 20 & Jefferson St)	LS	1.000	1.000
0744	SPV.0105	Special 08. Trans Signal Lighting Material (STH 20 & CTH W/Buena Park Rd)	LS	1.000	1.000
0746	SPV.0105	Special 09. Trans Signal Lighting Material (STH 20 & Jefferson St)	LS	1.000	1.000
0748	SPV.0105	Special 10. Trans Signal Lighting Material (STH 20 & E. Main St)	LS	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0750	SPV.0105	Special 11. Trans & Install State Furn Emergency EVP Det Heads (STH 20 & CTH W)	LS	1.000	1.000
0752	SPV.0105	Special 12. Trans & Install State Furn Emergency EVP Det Heads (STH 20 & Jefferson St)	LS	1.000	1.000
0754	SPV.0105	Special 13. Trans & Install State Furn Emergency EVP Det Heads (STH 20 & E Main St)	LS	1.000	1.000
0756	SPV.0105	Special 14. Trans & Install State Furn Emergency EVP Det Heads (STH 36 & STH 20)	LS	1.000	1.000
0758	SPV.0105	Special 15. Removing Geodetic Survey Monument	LS	1.000	1.000
0760	SPV.0105	Special 16. Salvage and Preserve Block Wall and Railing (Sta. 364+19, RT)	LS	1.000	1.000
0762	SPV.0105	Special 17. Rectangular Rapid Flash Beacon E Crossing Rt WB STH 20 at Rivermoor Rd	LS	1.000	1.000
0764	SPV.0105	Special 18. Rectangular Rapid Flash Beacon E Crossing Lt Med WB STH 20 at Rivermoor Rd	LS	1.000	1.000
0766	SPV.0105	Special 19. Rectangular Rapid Flash Beacon E Crossing Rt EB STH 20 at Rivermoor Rd	LS	1.000	1.000
0768	SPV.0105	Special 20. Rectangular Rapid Flash Beacon E Crossing Lt Med EB STH 20 at Rivermoor Rd	LS	1.000	1.000
0770	SPV.0105	Special 21. Rectangular Rapid Flash Beacon W Crossing Rt WB STH 20 at Rivermoor Rd	LS	1.000	1.000
0772	SPV.0105	Special 22. Rectangular Rapid Flash Beacon W Crossing Lt Med WB STH 20 at Rivermoor Rd	LS	1.000	1.000
0774	SPV.0105	Special 23. Rectangular Rapid Flash Beacon W Crossing Rt EB STH 20 at Rivermoor Rd	LS	1.000	1.000
0776	SPV.0105	Special 24. Rectangular Rapid Flash Beacon W Crossing Lt Med EB STH 20 at Rivermoor Rd	LS	1.000	1.000
0778	SPV.0110	Special 01. Timber Lagging	MBM	7.100	7.100
0780	SPV.0165	Special 01. Wall Modular Block Mechanically Stabilized Earth (R-51-0070)	SF	2,535.000	2,535.000
0782	SPV.0165	Special 02. Geocomposite Drain Board	SF	2,354.000	2,354.000

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CLEARING & GRUBBING

CATEGORY	LOCATION	STATION	TO	STATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
0010	STH 20	309+00	-	311+00	2	2
		312+00	-	313+00	1	1
		316+00	-	318+00	2	2
		322+00	-	333+00	11	11
		334+00	-	335+00	1	1
		340+00	-	348+00	8	8
		350+00	-	358+00	8	8
		365+00	-	366+00	1	1
	RIVERMOOR DRIVE	40+00	-	41+00	1	1
		CATEGORY 0010 SUBTOTAL			35	35
0150	THIRD STREET	139+00	-	14+00	1	1
	MILWAUKEE STREET	149+00	-	150+00	1	1
		CATEGORY 0150 SUBTOTAL			2	2
		PROJECT TOTAL			**37**	**37**

REMOVING OLD STRUCTURE

CATEGORY	ROADWAY	STATION	203.0200.01 (Sta. 317+13) LS	203.0200.02 (C-51-21) LS
0010	STH 20	317+13	1	--
		332+85	--	1
		PROJECT TOTAL	1	1

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CLEARING & GRUBBING

CATEGORY	LOCATION	STATION	OFFSET	SIDE	201.0120 CLEARING ID	201.0220 GRUBBING ID
0010	STH 20	315+00	71'	LT	4	4
		333+48	60'	LT	4	4
		389+40	33'	LT	48	48
	AUGUSTA WAY	20+61	39'	LT	5	5
	RACINE STREET	50+45	29'	RT	6	6
		CATEGORY 0010 SUBTOTAL			67	67
0150	E. MAIN STREET	104+56	26'	RT	6	6
		105+46	26'	RT	6	6
		106+96	26'	RT	7	7
		107+78	26'	RT	6	6
		108+55	26'	RT	4	4
		109+42	26'	RT	2	2
	MILWAUKEE STREET	151+44	28'	LT	7	7
		CATEGORY 0150 SUBTOTAL			38	38
		PROJECT TOTAL			**105**	**105**

REMOVING SMALL PIPE CULVERTS

CATEGORY	LOCATION	STATION	SIDE	* DESCRIPTION	* LENGTH	203.0100 REMOVING SMALL PIPE CULVERTS EACH
0010	STH 20	314+15	RT	22" x 36" RCP	112'	1
		317+48	RT	15" CMCP	52'	1
		321+44	LT	3 - 30" CMCP	115'	3
		329+38	RT	12" x 18" CMCP	79'	1
		334+93	LT	18" CMCP	73'	1
		335+23	LT	18" CMCP	27'	1
				CATEGORY 0010 SUBTOTAL		8
				PROJECT TOTAL		**8**

* FOR INFORMATION ONLY

ALL ITEMS CATEGORY 0010 UNLESS NOTED

REMOVALS

CATEGORY	LOCATION	STATION	TO	STATION	# 204.0100 REMOVING PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY
0010	STH 20	306+25	-	310+00	920	---	35	---	---
		310+00	-	316+00	1,480	---	---	575	---
		316+00	-	322+00	1,470	---	---	400	---
		322+00	-	328+00	1,470	---	---	35	---
		328+00	-	334+00	1,470	---	---	---	---
		334+00	-	340+00	1,470	---	---	320	---
		340+00	-	346+00	2,770	---	---	100	475
		346+00	-	352+00	2,670	---	---	120	600
		352+00	-	358+00	3,450	---	---	---	760
		358+00	-	364+27	4,910	45	---	55	970
		366+78	-	370+50	3,250	---	---	---	830
		370+50	-	376+50	3,410	---	---	155	805
		376+50	-	382+50	3,380	20	---	30	760
		382+50	-	388+50	3,020	125	---	10	290
		388+50	-	394+50	2,550	---	---	---	270
		394+50	-	400+50	2,790	15	---	15	250
		400+50	-	406+00	1,630	25	130	180	195
	BUENA PARK ROAD	5+62	-	9+50	---	---	---	---	---
		10+75	-	15+49	---	---	---	550	---
	AUGUSTA WAY	20+25	-	21+50	---	---	---	370	---
	RIVERMOOR ROAD	30+30	-	31+25	---	---	---	---	---
	RIVERMOOR DRIVE	40+30	-	41+75	---	---	---	---	---
	RACINE STREET	50+00	-	51+51	---	---	---	---	145
	CENTER STREET	60+30	-	61+00	---	---	---	---	55
	WATER STREET	68+75	-	69+70	20	---	---	175	20
	JEFFERSON STREET	77+20	-	79+60	20	20	---	120	55
		80+40	-	83+00	110	---	---	595	280
	RIVER STREET	88+80	-	89+75	---	---	---	145	110
		90+25	-	81+25	---	---	---	180	30
	E. MAIN STREET	100+60	-	103+50	1,840	25	---	---	575
	ELIZABETH STREET	120+25	-	120+65	30	---	---	30	35
	SECOND STREET	129+00	-	129+75	---	---	---	115	105
		130+25	-	131+00	---	---	---	110	115
		CATEGORY 0010 SUBTOTAL			44,130	275	165	4,385	7,730
0150	E. MAIN STREET	103+50	-	105+50	1,120	10	---	0	280
		105+50	-	109+75	2,610	65	---	0	480
	THIRD STREET	138+70	-	139+75	20	---	---	175	90
		140+25	-	141+25	50	---	---	175	80
	MILWAUKEE STREET	149+22	-	149+75	110	---	---	15	0
		150+30	-	151+50	50	---	---	335	70
		CATEGORY 0150 SUBTOTAL			3,960	75	0	700	1,000
# CATEGORY 0020 ITEM.				**PROJECT TOTAL**	**48,090**	**350**	**165**	**5,085**	**8,730**

REMOVING FENCE

CATEGORY	ROADWAY	204.0170 EACH
0010	UNDISTRIBUTED	50
	CATEGORY 0010 SUBTOTAL	50
0150	UNDISTRIBUTED	50
	CATEGORY 0150 SUBTOTAL	50
	PROJECT TOTAL	**100**

ALL ITEMS CATEGORY 0010 UNLESS NOTED

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REMOVING MANHOLES

CATEGORY	ROADWAY	STATION	SIDE	204.0210 EACH
0010	STH 20	344+95	LT	1
		345+99	LT	1
		347+99	LT	1
		354+83	RT	1
		358+16	RT	1
		360+75	RT	1
		362+43	RT	1
		364+03	RT	1
		366+28	LT	1
		366+38	RT	1
		369+54	RT	1
		369+60	LT	1
		369+62	LT	1
		372+92	LT	1
		372+93	RT	1
		375+83	RT	1
		380+71	LT	1
		383+10	RT	1
		385+92	LT	1
	BUENA PARK ROAD	10+69	LT	1
		10+79	LT	1
		11+13	LT	1
	E. MAIN STREET	102+86	RT	1
		103+31	RT	1
	ST. THOMAS STREET	160+34	RT	1
	SECOND STREET	103+38	LT	1
		CATEGORY 0010 SUBTOTAL		26
0150	E. MAIN STREET	104+30	RT	1
		106+00	RT	1
		106+46	RT	1
		108+26	RT	1
		109+09	RT	1
		109+29	RT	1
	MILWAUKEE STREET	150+39	RT	1
		CATEGORY 0150 SUBTOTAL		7
		PROJECT TOTAL		**33**

REMOVING INLETS

CATEGORY	ROADWAY	STATION	SIDE	204.0220 EACH
0010	STH 20	316+12	RT	1
		316+14	LT	1
		344+82	LT	1
		344+85	LT	1
		345+50	RT	1
		348+12	RT	1
		349+08	RT	1
		351+41	LT	1
		351+41	RT	1
		354+60	RT	1
		354+64	LT	1
		362+23	RT	1
		362+24	LT	1
		362+45	LT	1
		364+14	LT	1
		364+19	RT	1
		366+01	RT	1
		366+36	LT	1
		369+20	LT	1
		369+32	RT	1
		372+26	LT	1
		372+44	RT	1
		372+51	RT	1
		373+14	LT	1
		375+88	RT	1
		380+02	LT	1
		385+92	RT	1
		385+92	LT	1
		388+79	LT	1
		393+90	RT	1
		394+60	LT	1
		398+70	LT	1
		398+90	RT	1
		398+95	LT	1

REMOVING INLETS

CATEGORY	ROADWAY	STATION	SIDE	204.0220 EACH
0010	BUENA PARK ROAD	11+13	LT	1
	WATER STREET	69+46	RT	1
		69+58	LT	1
	JEFFERSON STREET	80+41	RT	1
		80+45	LT	1
	E. MAIN STREET	102+67	LT	1
		102+67	RT	1
	ST. THOMAS STREET	160+45	RT	1
	RIVER ROAD	179+32	LT	1
		179+40	LT	1
	SECOND STREET	129+60	RT	1
		129+61	LT	1
		130+79	RT	1
	ELIZABETH STREET	120+44	LT	1
		120+44	RT	1
		CATEGORY 0010 SUBTOTAL		49
0150	E. MAIN STREET	103+52	LT	1
		104+35	RT	1
		106+59	LT	1
		106+62	RT	1
		108+33	RT	1
		108+40	LT	1
		109+57	LT	1
	THIRD STREET	139+57	RT	1
		139+58	LT	1
	MILWAUKEE STREET	149+43	LT	1
		149+43	RT	1
		151+84	LT	1
		151+84	RT	1
		CATEGORY 0150 SUBTOTAL		13
		PROJECT TOTAL		**62**

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ALL ITEMS CATEGORY 0010 UNLESS NOTED

REMOVING STORM SEWER

CATEGORY	ROADWAY	STATION	-	STATION	204.0245.01 10-INCH LF	204.0245.02 12-INCH LF	204.0245.03 15-INCH LF	204.0245.04 18-INCH LF	204.0245.05 21-INCH LF	204.0245.06 24-INCH LF	204.0245.07 27-INCH LF	204.0245.08 30-INCH LF
0010	STH 20	316+00	-	322+00	---	40	---	---	---	---	---	---
		322+00	-	328+00	---	36	---	---	---	---	---	---
		334+00	-	340+00	---	---	---	32	---	---	---	---
		340+00	-	346+00	66	149	---	---	24	---	---	---
		346+00	-	352+00	108	277	---	---	---	---	---	---
		352+00	-	358+00	68	---	---	371	---	---	---	---
		358+00	-	364+27	124	106	---	364	328	---	---	---
		365+78	-	370+50	92	170	---	---	---	---	163	---
		370+50	-	376+50	23	455	---	228	---	---	---	---
		376+50	-	382+50	---	319	---	---	---	---	---	---
		382+50	-	388+50	---	422	---	45	---	---	---	---
		388+50	-	394+50	---	125	---	---	---	---	---	---
		394+50	-	400+50	---	145	---	157	---	---	---	---
		400+50	-	406+00	---	99	---	132	---	---	---	---
	BUENA PARK ROAD	10+75	-	15+49	---	---	---	61	---	130	---	119
	WATER STREET	68+75	-	69+70	41	--	--	--	--	--	---	--
	JEFFERSON STREET	80+40	-	83+00	41	--	--	--	--	--	---	--
	RIVER STREET	88+80	-	89+75	---	90	---	---	---	---	---	---
	E. MAIN STREET	100+60	-	103+50	132	---	---	---	19	---	271	---
	ST. THOMAS STREET	160+38		161+28	---	114	---	---	---	---		---
	RIVER ROAD	179+32	-	179+62	---	13	---	---	---	---	---	---
	SECOND STREET	130+25	-	131+00	38	---	49	---	---	---	---	---
				SUBTOTAL	733	2,560	49	1,390	371	130	434	119
	UNDISTRIBUTED				72	230	6	122	39	15	46	11
		CATEGORY 0010 SUBTOTAL			805	2,790	55	1,512	410	145	480	130
0150	E. MAIN STREET	103+50	-	105+50	8	---	---	---	---	200	---	---
		105+50	-	109+75	111	76	---	54	364	96	---	---
	MILWAUKEE STREET	149+22	-	149+75	66	---	---	---	---	---	---	---
		150+30	-	151+50	---	102	---	---	---	---	---	---
				SUBTOTAL	185	178	0	54	364	296	0	0
	UNDISTRIBUTED				20	22	0	6	0	34	0	0
		CATEGORY 0150 SUBTOTAL			205	200	0	60	364	330	0	0
		PROJECT TOTAL			**1,010**	**2,990**	**55**	**1,572**	**774**	**475**	**480**	**130**

SEALING PIPES

CATEGORY	ROADWAY	STATION	OFFSET	SIDE	204.0280 EACH
0010	STH 20	351+42	37'	RT	1
		393+88	34'	LT	2
				SUBTOTAL	3
				UNDISTRIBUTED	5
				CATEGORY 0010 SUBTOTAL	8
0150				UNDISTRIBUTED	5
				CATEGORY 0150 SUBTOTAL	5
				PROJECT TOTAL	**13**

ALL ITEMS CATEGORY 0010 UNLESS NOTED

EARTHWORK SUMMARY			A	B	C	D	E	F	G	H	I	J	K
Category	From/To Station	Location	205.0100 Common Excavation (CY) (1) Cut (2)	205.0100 Common Excavation (CY) (1) EBS Excavation (3)	Petroleum Contaminated Soil (CY) (4)	Salvaged/Unusable Pavement Material (CY)	Available Material (CY) (5)	Expanded EBS Backfill 310.0110 Breaker Run (Ton) (6) Factor 1.80	Unexpanded Fill (CY)	Expanded Fill (CY) (7) Factor 1.20	Mass Ordinate (CY) +/- (8)	Waste (CY) (9)	208.0100 Borrow (CY)
0010	306+25 - 366+54	STH 20 (W Main St)	45,378	---	1,675	7,880	35,823	0	12,436	14,924	20,899	20,899	0
	367+00 - 404+35	STH 20 (First St)	18,308	---	0	4,450	13,858	0	228	273	13,585	13,585	0
	Undistributed EBS		0	2,700	0	0	0	4,860	0	0	0	2,700	0
		STH 20 Subtotal	63,686	2,700	1,675	12,330	49,680	4,860	12,664	15,197	34,484	37,184	0
0010	6+22 - 9+07	S. Buena Park Road	752	---	0	170	582	0	29	35	547	547	0
	10+95 - 15+39	N. Buena Park Road	981	---	0	250	731	0	76	91	640	640	0
	20+57 - 21+50	Augusta	551	---	0	40	511	0	4	4	506	506	0
	30+67 - 31+25	Rivermoor Road	54	---	0	20	34	0	87	104	-70	0	0
	40+49 - 41+75	Rivermoor Drive	291	---	0	90	201	0	9	11	190	190	0
	50+13 - 51+51	Racine Street	569	---	0	60	509	0	1	2	507	507	0
	60+58 - 61+00	Center Street	63	---	0	10	53	0	8	9	44	44	0
	68+75 - 69+53	Water Street	189	---	0	40	149	0	0	0	149	149	0
	78+50 - 79+00	S. Jefferson Street	417	---	0	30	387	0	0	0	387	387	0
	80+55 - 83+50	N. Jefferson Street	866	---	0	130	736	0	7	8	728	728	0
	88+80 - 89+52	S. River Street	203	---	0	50	153	0	0	0	153	153	0
	90+50 - 91-25	N. River Street	191	---	0	30	161	0	0	0	161	161	0
	100+00 - 103+50	E. Main Street	1,752	---	81	410	1,261	0	0	0	1,261	1,261	0
	120+42 - 120+61	Elizabeth Street	54	---	0	10	44	0	0	0	44	44	0
	160+20 - 161+28	St. Thomas Street	350	---	0	50	300	0	0	0	300	300	0
	170+39 - 170+67	Weber Street	172	---	0	20	152	0	0	0	152	152	0
	179+32 - 179+50	River Road	249	---	0	10	239	0	2	3	236	236	0
	189+50 - 190+57	Evergreen Street	295	---	0	10	285	0	0	0	285	285	0
	129+00 - 129+59	S. Second Street	145	---	0	40	105	0	0	0	105	105	0
	130+41 - 131+00	N. Second Street	164	---	0	30	134	0	0	0	134	134	0
	Undistributed EBS		0	1,660	0	0	0	2,990	0	0	0	1,660	
		Sideroad Subtotal	8,307	1,660	81	1,500	6,726	2,990	222	266	6,459	8,189	0
		Subtotal:	**71,992**	**4,360**	**1,756**	**13,830**	**56,406**	**7,850**	**12,886**	**15,463**	**40,943**	**45,372**	**0**
		Category 0010 Subtotal:		**74,596**									
		Side Roads											
0150	103+50 - 109+75	E. Main Street	3,541	---	1,396	830	1,315	0	1	1	1,313	1,313	0
	138+70 - 139+59	S. Third Street	236	---	0	40	196	0	0	0	196	196	0
	140+41 - 141+25	N. Third Street	197	---	0	40	157	0	0	0	156	156	0
	149+22 - 149+66	S. Milwaukee Street	104	---	0	30	74	0	0	0	74	74	0
	150+76 - 151+50	N. Milwaukee Street	383	---	0	40	343	0	1	1	342	342	0
	Undistributed EBS		0	350	0	0	0	630	0	0	0	350	0
		Subtotal:	4,461	350	1,396								
		Category 0150 Subtotal:		**3,415**		**980**	**2,085**	**630**	**3**	**3**	**2,082**	**2,432**	**0**
			76,454	4,710	3,153	14,810	58,491	8,480	12,889	15,466	43,025	47,804	0
	Total Common Excavation			**78,011**									

Notes:

(1) Total Common Excavation is the sum of the Cut (A) and EBS (B) Excavation columns minus the Petroleum Contaminated Soil (C) column. Item number 205.0100

(2) Salvaged/Unusable Pavement Material (D) is included in Cut (A). This assumes the existing pavement is salvaged or wasted by the contractor.

(3) EBS Excavation is Undistributed and to be used at the direction of the engineer, backfilled with and paid for as Breaker Run material, Item 311.0110. It is assumed all EBS will be wasted.

(4) Petroleum Contaminated Soil (D) quantities are included in the Cut (A) since they are part of the average end area calculations shown on the Earthwork Data Sheets. Additional location and bid item information is shown elsewhere.

(5) Available Material (E)= Cut (A) - Salvaged/Unusable Pavement Material (D) - Petroleum Contaminated Soil ©

(6) Expanded EBS Backfill (F) to be filled with Breaker Run, 1.8 Tons per CY. Breaker Run is Category 0020. Additional quantities shown elsewhere.

(7) Expanded Fill (H) = Unexpanded Fill (G) x Fill Factor (1.2)

(8) The Mass Ordinate (I) + or - Qty calculated for the roadway segment. Plus quantity indicates an excess of material within the roadway segment. Minus indicates a shortage of material within the roadway segment.

9) Waste (J) = EBS (B) + Mass Ordinate (I) and excludes salvaged/unusable pavement material (D) and Petroleum Contaminated Soil (D).

3

CONTAMINATED SOIL REMOVAL

CATEGORY	ROADWAY	STATION		STATION	LOCATION	205.0501.S EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL TON
0010	STH 20	343+05	-	343+80	RT	197
		360+00	-	361+30	RT	238
		361+30	-	361+75	RT	277
		361+30	-	362+60	LT	842
		361+75	-	362+60	RT	753
		363+45	-	364+30	LT	381
		363+80	-	364+30	RT	160
	E. MAIN STREET	102+30	-	102+70	RT	50
		103+25	-	103+55	RT	88
				SUBTOTAL		2,986
				UNDISTRIBUTED (10%)		300
				CATEGORY 0010 SUBTOTAL		3,286
0150	E. MAIN STREET	104+30	-	105+00	RT	298
		105+00	-	105+75	RT	100
		105+30	-	106+20	LT	325
		105+75	-	107+50	RT	964
		108+85	-	109+50	RT	502
		109+50	-	110+15	RT	185
				SUBTOTAL		2,374
				UNDISTRIBUTED (10%)		240
				CATEGORY 0150 SUBTOTAL		2,614
				PROJECT TOTALS		**5,900**

BASE AGGREGATE DENSE

CATEGORY	ROADWAY	STATION		STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	# 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	# 311.0110* BREAKER RUN TON	623.0200** DUST CONTROL SURFACE TREATMENT SY	624.0100*** WATER MGAL
0010	STH 20	306+25	-	310+00	---	815	610	1,460	---	20
		310+00	-	316+00	---	400	1,825	4,375	1,140	30
		316+00	-	322+00	---	370	1,520	3,645	4,560	20
		322+00	-	328+00	---	400	1,315	3,150	3,940	20
		328+00	-	334+00	---	485	1,335	3,205	4,010	20
		334+00	-	340+00	---	665	1,430	3,435	4,290	30
		340+00	-	346+00	---	425	1,385	3,325	4,160	20
		346+00	-	352+00	---	330	1,350	3,230	4,040	20
		352+00	-	358+00	---	255	1,540	3,695	4,620	20
		358+00	-	364+27	---	445	1,605	3,850	---	30
		365+78	-	370+50	---	190	1,080	2,590	2,400	20
		370+50	-	376+50	---	245	1,150	2,760	3,450	20
		376+50	-	382+50	---	240	1,155	2,765	3,460	20
		382+50	-	388+50	---	180	1,095	2,630	3,290	20
		388+50	-	394+50	---	140	915	2,190	2,740	20
		394+50	-	400+50	---	170	990	2,370	2,960	20
		400+50	-	406+00	---	120	680	1,630	2,040	10
	BUENA PARK ROAD	5+62	-	9+50	25	1,235	---	---	---	20
		10+75	-	15+49	20	2,035	---	---	---	30
	AUGUSTA WAY	20+25	-	21+50	---	255	---	---	540	10
	RIVERMOOR ROAD	30+30	-	31+25	---	100	---	---	200	10
	RIVERMOOR DRIVE	40+30	-	41+75	---	385	---	---	760	10
	RACINE STREET	50+00	-	51+51	---	310	---	---	---	10
	CENTER STREET	60+30	-	61+00	---	70	---	---	---	10
	WATER STREET	68+75	-	69+70	---	180	---	---	---	10
	JEFFERSON STREET	78+50	-	79+60	---	155	---	---	---	10
		80+40	-	83+00	---	790	---	---	---	10
	RIVER STREET	88+80	-	89+75	---	210	---	---	---	10
		90+25	-	81+25	---	165	---	---	---	10
	E. MAIN STREET	100+60	-	103+50	---	145	610	1,460	---	10
	ELIZABETH STREET	120+25	-	120+65	---	50	---	---	---	10
	ST. THOMAS STREET	160+38	-	161+28		220	---	---	---	10
	WEBER STREET	170+38	-	170+67	---	50	---	---	---	10
	RIVER ROAD	179+32	-	179+62	10	15	---	---	50	10
	EVERGREEN DRIVE	188+50	-	189+54	---	5	---	---	20	10
		190+44	-	190+57	---	20	---	---	50	10
	SECOND STREET	129+00	-	129+75	---	170	---	---	330	10
		130+25	-	131+00	---	160	---	---	270	10
				CATEGORY 0010 SUBTOTAL	55	12,600	21,590	51,765	53,320	600
0150	E. MAIN STREET	103+50	-	105+50	---	475	---	935	---	10
		105+50	-	109+75	---	1,155	---	2,445	---	20
	THIRD STREET	138+70	-	139+75	---	220	---	---	---	10
		140+25	-	141+25	---	220	---	---	---	10
	MILWAUKEE STREET	149+22	-	149+75	---	60	---	---	---	10
		150+30	-	151+50	---	240	---	---	---	10
				CATEGORY 0150 SUBTOTAL	0	2,370	---	3,380	0	70
				PROJECT TOTAL	**55**	**36,560**		**55,145**	**53,320**	**670**

CATEGORY 0020 ITEMS.
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.
**DUST CONTROL SURFACE TREATMENT INTENDED FOR DUST CONTROL IN BASE AGGREGATE AREAS THAT ARE OPEN TO LOCAL TRAFFIC.
***WATER INTENDED FOR COMPACTION OF BASE AGGREGATE MATERIAL.

ALL ITEMS CATEGORY 0010 UNLESS NOTED

3

CONCRETE PAVEMENT

CATEGORY	ROADWAY	STATION	-	STATION	# 415.0090 9-INCH SY	415.1150.S FAST TRACK 9-INCH SY	* 405.0100 COLORING CONCRETE WISDOT RED CY	415.4100 JOINT FILLING SY
0010	STH 20	306+25	-	310+00	920	540	---	---
		310+00	-	316+00	3,950	915	---	---
		316+00	-	322+00	3,960	---	---	---
		322+00	-	328+00	3,340	---	---	620
		328+00	-	334+00	3,390	---	---	3,740
		334+00	-	340+00	3,590	---	---	4,060
		340+00	-	346+00	3,570	---	---	3,900
		346+00	-	352+00	3,430	---	---	3,790
		352+00	-	358+00	4,050	105	35	4,490
		358+00	-	364+27	3,840	320	40	4,530
		365+78	-	370+50	2,130	550	20	2,960
		370+50	-	376+50	2,860	---	---	3,200
		376+50	-	382+50	2,870	---	---	3,210
		382+50	-	388+50	2,680	---	---	3,020
		388+50	-	394+50	2,140	---	---	2,480
		394+50	-	400+50	2,360	---	---	2,700
		400+50	-	406+00	1,520	---	---	1,840
	E. MAIN STREET	100+60	-	103+50	1,570	---	25	1,740
		CATEGORY 0010 SUBTOTAL			52,170	2,430	0	46,280
0150	E. MAIN STREET	103+50	-	105+50	970	---	---	1,090
		105+50	-	109+75	2,390	265	55	2,910
		CATEGORY 0150 SUBTOTAL			3,360	265	175	4,000
		PROJECT TOTAL			**55,530**	**2,695**	**175**	**50,280**

CATEGORY 0020 ITEM.

* ALL COLORING CONCRETE WISDOT RED IS CATEGORY 0150.

CONCRETE PAVEMENT GAPS

CATEGORY	ROADWAY	415.0210 EACH
0010	UNDISTRIBUTED	10
	CATEGORY 0010 SUBTOTAL	10
0150	UNDISTRIBUTED	4
	CATEGORY 0150 SUBTOTAL	4
	PROJECT TOTAL	**14**

CONCRETE PAVEMENT APPROACH SLAB

CATEGORY	ROADWAY	STATION	-	STATION	415.0410 SY
0010	STH 20	363+92	-	364+07	90
		365+98	-	367+13	90
		CATEGORY 0010 SUBTOTAL			180
		PROJECT TOTAL			**180**

3

CONCRETE DRIVEWAY 6-INCH

CATEGORY	LOCATION	STATION	-	STATION	416.0160 SY	416.0260 HES SY
0010	STH 20	306+25	-	310+00	65	---
		310+00	-	316+00	15	---
		328+00	-	334+00	90	---
		334+00	-	340+00	70	---
		340+00	-	346+00	80	---
		346+00	-	352+00	100	---
		352+00	-	358+00	95	---
		358+00	-	364+27	---	185
		365+78	-	370+50	70	---
		370+50	-	376+50	185	---
		376+50	-	382+50	160	---
		388+50	-	394+50	180	---
		394+50	-	400+50	95	---
		400+50	-	406+00	145	---
	BUENA PARK ROAD	5+62	-	9+50	65	---
		10+75	-	15+49	35	---
	RIVERMOOR DRIVE	40+30	-	41+75	10	---
	WATER STREET	68+75	-	69+70	15	---
	JEFFERSON STREET	78+50	-	79+60	30	---
		80+40	-	83+00	155	50
	RIVER STREET	90+25	-	81+25	10	---
		CATEGORY 0010 SUBTOTAL			1,670	235
0150	E. MAIN STREET	103+50	-	105+50	35	15
		105+50	-	109+75	50	---
	THIRD STREET	138+70	-	139+75	20	---
		140+25	-	141+25	50	---
	MILWAUKEE STREET	150+30	-	151+50	50	---
		CATEGORY 0150 SUBTOTAL			205	15
		PROJECT TOTALS			**1,875**	**250**

ALL ITEMS CATEGORY 0010 UNLESS NOTED

3

DRILLED BARS

CATEGORY	ROADWAY	STATION		STATION	416.0610 TIE BARS EACH	416.0620 DOWEL BARS EACH
0010	STH 20	352+00	-	358+00	43	100
		358+00	-	364+27	244	---
		365+78	-	371+00	195	---
	E. MAIN STREET	100+60	-	103+50	116	---
				SUBTOTAL	598	100
	UNDISTRIBUTED				122	20
				CATEGORY 0010 SUBTOTAL	720	120
0150	E. MAIN STREET	103+50	-	105+50	80	---
		105+50	-	109+75	186	22
				SUBTOTAL	266	22
				UNDISTRIBUTED	29	3
				CATEGORY 0150 SUBTOTAL	295	25
				PROJECT TOTAL	**1,015**	**145**

ASPHALTIC FLUMES

CATEGORY	ROADWAY	STATION	SIDE	465.0315 SY
0010	BUENA PARK ROAD	8+88	RT	9
		11+03	RT	12
	EVERGREEN DRIVE	189+54	RT	6
		CATEGORY 0010 SUBTOTAL		27
		PROJECT TOTALS		**27**

HOT MIX ASPHALT ITEMS

CATEGORY	ROADWAY	STATION		STATION	455.0605 TACK COAT GAL	460.5223 HMA PAVEMENT 3 LT 58-28 S TONS	460.5224 HMA PAVEMENT 4 LT 58-28 S TONS
0010	STH 20	306+25	-	310+00	5	10	5
		400+50	-	406+00	20	25	15
	BUENA PARK ROAD	5+62	-	9+50	90	250	170
		10+75	-	15+49	145	410	275
	AUGUSTA WAY	20+25	-	21+50	25	45	35
	RIVERMOOR ROAD	30+30	-	31+25	10	20	15
	RIVERMOOR DRIVE	40+30	-	41+75	40	85	65
	RACINE STREET	50+00	-	51+51	35	70	55
	CENTER STREET	60+30	-	61+00	10	15	10
	WATER STREET	68+75	-	69+70	20	40	35
	JEFFERSON STREET	77+20	-	79+60	15	35	25
		80+40	-	83+00	70	150	120
	RIVER STREET	88+80	-	89+75	25	45	35
		90+25	-	81+25	20	35	30
	ELIZABETH STREET	120+25	-	120+65	5	10	10
	ST. THOMAS STREET	160+38	-	161+28	30	55	45
	WEBER STREET	170+38	-	170+67	10	20	15
	RIVER ROAD	179+32	-	179+62	5	10	5
	EVERGREEN DRIVE	188+50	-	189+54	5	5	5
		190+44	-	190+57	5	5	5
	SECOND STREET	129+00	-	129+75	20	35	30
		130+25	-	131+00	15	30	25
		CATEGORY 0010 SUBTOTAL			625	1,405	1,030
0150	THIRD STREET	138+70	-	139+75	25	45	35
		140+25	-	141+25	20	45	35
	MILWAUKEE STREET	149+22	-	149+75	10	15	10
		150+30	-	151+50	25	45	35
		CATEGORY 0150 SUBTOTAL			80	150	115
		PROJECT TOTAL			**705**	**1,555**	**1,145**

ALL ITEMS CATEGORY 0010 UNLESS NOTED

ASPHALTIC PAVEMENT ITEMS

CATEGORY	ROADWAY	STATION	-	STATION	465.0105 ASPHALTIC SURFACE TONS	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TONS	465.0125 ASPHALTIC SURFACE TEMPORARY TONS
0010	STH 20	306+25	-	310+00	---	15	255
		310+00	-	316+00	30	5	85
		316+00	-	322+00	155	---	---
		322+00	-	328+00	170	---	---
		328+00	-	334+00	145	60	---
		334+00	-	340+00	175	80	---
		340+00	-	346+00	145	30	---
		346+00	-	352+00	80	15	---
		352+00	-	358+00	25	25	---
		358+00	-	364+27	50	25	10
		365+78	-	370+50	---	5	---
		370+50	-	376+50	---	10	---
		376+50	-	382+50	---	20	---
		388+50	-	394+50	---	40	---
		394+50	-	400+50	---	15	---
		400+50	-	406+00	---	15	---
	BUENA PARK ROAD	5+62	-	9+50	---	---	65
		10+75	-	15+49	15	---	130
	RIVERMOOR DRIVE	40+30	-	41+75	---	20	---
	JEFFERSON STREET	78+50	-	79+60	---	5	---
		80+40	-	83+00	---	15	---
	E. MAIN STREET	100+60	-	103+50	---	---	10
		CATEGORY 0010 SUBTOTAL			990	400	555
0150	E. MAIN STREET	103+50	-	105+50	---	10	5
		105+50	-	109+75	5	5	15
	THIRD STREET	140+25	-	141+25	5	---	---
	MILWAUKEE STREET	150+30	-	151+50	10	5	---
		CATEGORY 0150 SUBTOTAL			10	20	20
		PROJECT TOTAL			**1,000**	**420**	**575**

CULVERT PIPES & ENDWALLS

CATEGORY	ROADWAY	INLET STATION	INLET OFFSET	INLET SIDE	INLET ELEV.	OUTLET STATION	OUTLET OFFSET	OUTLET SIDE	OUTLET ELEV.	SLOPE (%)	521.3124 CULVERT PIPE CORRUGATED STEEL 24-INCH LF	521.1524 APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 24-INCH 6 TO 1 EACH	522.2424 SPV.0090.01 CULVERT PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS IV 24X38-INCH LF	522.2424 SPV.0090.01 CULVERT PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS IV 38X60-INCH LF	522.2624 APRON ENDWALLS FOR CULVERT PIPE REINFORCED HORIZONTAL ELLIPTICAL 24X38-INCH EACH	522.2638 APRON ENDWALLS FOR CULVERT PIPE REINFORCED HORIZONTAL ELLIPTICAL 38X60-INCH EACH	633.5200 MARKERS CULVERT ENDS EACH	* JOINT TIES EACH
0010	STH 20	313+61	67.1'	RT	801.89	314+64	72.7'	RT	801.29	0.60	---	---	100	---	2	---	2	12
		327+43	68.5'	RT	798.75	327+96	69.9'	RT	798.58	0.33	52	2	---	---	---	---	---	---
		328+94	70.7'	RT	798.32	329+76	70.2'	RT	798.06	0.32	83	2	---	---	---	---	2	---
		331+73	43.0'	LT	797.40	332+29	54.0'	RT	797.25	0.13	---	---	---	112	---	2	---	12
		331+84	43.1'	LT	797.40	332+40	54.3'	RT	797.25	0.13	---	---	---	113	---	2	---	12
		331+94	43.2'	LT	797.40	332+50	54.6'	RT	797.25	0.13	---	---	---	113	---	2	---	12
									CATEGORY 0010 SUBTOTAL		135	4	100	338	2	6	4	48
									PROJECT TOTAL		**135**	**4**	**100**	**338**	**2**	**6**	**4**	**48**

*NON-BID ITEM: FOR INFORMATION ONLY

ALL ITEMS CATEGORY 0010 UNLESS NOTED

CONCRETE CURB & GUTTER ITEMS

CATEGORY	ROADWAY	STATION		STATION	601.0405 18-INCH TYPE A LF	601.0407 18-INCH TYPE D LF	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	601.0452 INTEGRAL 30-INCH TYPE D LF	601.0555 6-INCH SLOPED 36-INCH TYPE A LF	601.0557 6-INCH SLOPED 36-INCH TYPE D LF
0010	STH 20	306+25	-	310+00	---	---	755	---	---	---	---
		310+00	-	316+00	---	---	1,005	---	225	---	---
		316+00	-	322+00	---	---	90	---	1,100	---	---
		322+00	-	328+00	---	---	---	---	1,205	---	---
		328+00	-	334+00	25	---	---	---	1,205	---	---
		334+00	-	340+00	150	305	115	---	1,110	---	---
		340+00	-	346+00	---	---	120	---	1,065	---	---
		346+00	-	352+00	---	---	100	50	1,125	---	---
		352+00	-	358+00	---	---	200	---	990	---	---
		358+00	-	364+27	900	---	425	---	---	---	---
		365+78	-	370+50	175	---	820	---	---	---	---
		370+50	-	376+50	---	---	1,195	---	---	---	---
		376+50	-	382+50	---	---	1,190	---	---	---	---
		382+50	-	388+50	---	---	1,200	---	---	---	---
		388+50	-	394+50	---	---	1,200	---	---	---	---
		394+50	-	400+50	---	---	1,210	---	---	---	---
		400+50	-	406+00	---	---	865	---	---	75	180
	BUENA PARK ROAD	5+62	-	9+50	---	---	---	150	---	---	---
		10+75	-	15+49	---	---	---	550	---	---	---
	AUGUSTA WAY	20+25	-	21+50	---	---	---	375	---	---	---
	RIVERMOOR ROAD	30+30	-	31+25	---	---	---	115	---	---	---
	RIVERMOOR DRIVE	40+30	-	41+75	---	---	---	255	---	---	---
	RACINE STREET	50+00	-	51+51	---	---	---	280	---	---	---
	CENTER STREET	60+30	-	61+00	---	---	---	85	---	---	---
	WATER STREET	68+75	-	69+70	---	---	---	160	---	---	---
	JEFFERSON STREET	77+20	-	79+60	---	10	---	105	---	---	---
		80+40	-	83+00	---	---	---	595	---	---	---
	RIVER STREET	88+80	-	89+75	---	---	---	150	---	---	---
		90+25	-	81+25	---	---	---	160	---	---	---
	E. MAIN STREET	100+60	-	103+50	255	---	325	---	---	---	---
	ELIZABETH STREET	120+25	-	120+65	---	---	---	45	---	---	---
	ST. THOMAS STREET	160+38	-	161+28	---	---	---	185	---	---	---
	WEBER STREET	170+38	-	170+67	---	---	---	60	---	---	---
	RIVER ROAD	179+32	-	179+62	---	---	---	20	---	---	---
	EVERGREEN DRIVE	188+50	-	189+54				5		---	---
		190+44	-	190+57				30		---	---
	SECOND STREET	129+00	-	129+75	---	---	---	125	---	---	---
		130+25	-	131+00	---	60	---	60	---	---	---
	CATEGORY 0010 SUBTOTAL				1,505	375	10,815	3,560	8,025	75	180
0150	E. MAIN STREET	103+50	-	105+50	---	---	405	---	---	---	---
		105+50	-	109+75	290	---	605	---	---	---	---
	THIRD STREET	138+70	-	139+75	---	---	---	180	---	---	---
		140+25	-	141+25	---	---	---	170	---	---	---
	MILWAUKEE STREET	149+22	-	149+75	---	90	---	---	---	---	---
		150+30	-	151+50	---	---	---	150	---	---	---
	CATEGORY 0150 SUBTOTAL				290	90	1,010	500	0	0	0
	PROJECT TOTAL				**1,795**	**465**	**11,825**	**4,060**	**8,025**	**75**	**180**

CONCRETE SIDEWALK ITEMS

CATEGORY	ROADWAY	STATION		STATION	601.0600 CONCRETE CURB PEDESTRIAN LF	602.0410 CONCRETE SIDEWALK 5-INCH SF	* 405.0100 COLORING CONCRETE WISDOT RED CY	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF
0010	STH 20	306+25	-	310+00	---	1,660	---	---	---
		310+00	-	316+00	---	3,890	---	223	---
		316+00	-	322+00	---	2,915	---	40	16
		322+00	-	328+00	---	3,090	---	---	---
		328+00	-	334+00	---	3,075	2	---	---
		334+00	-	340+00	---	6,470	5	210	16
		340+00	-	346+00	---	2,830	---	50	16
		346+00	-	352+00	---	5,120	---	100	16
		352+00	-	358+00	---	5,990	---	100	---
		358+00	-	364+27	---	9,340	50	130	11
		365+78	-	370+50	---	6,465	20	100	---
		370+50	-	376+50	---	9,335	60	80	---
		376+50	-	382+50	---	9,220	60	60	---
		382+50	-	388+50	---	6,890	20	40	31
		388+50	-	394+50	---	5,265	---	---	---
		394+50	-	400+50	---	6,410	---	70	45
		400+50	-	406+00	25	4,990	---	40	---
	AUGUSTA WAY	20+25	-	21+50	---	605	---	---	---
	RIVERMOOR ROAD	30+30	-	31+25	---	400	---	---	---
	RIVERMOOR DRIVE	40+30	-	41+75	---	360	---	20	---
	RACINE STREET	50+00	-	51+51	---	905	---	---	---
	CENTER STREET	60+30	-	61+00	---	345	---	---	---
	WATER STREET	68+75	-	69+70	---	210	---	---	---
	JEFFERSON STREET	78+50	-	79+60	35	940	---	---	---
		80+40	-	83+00	---	2,405	---	---	---
	RIVER STREET	88+80	-	89+75	---	945	---	---	---
		90+25	-	81+25	---	300	---	---	---
	E. MAIN STREET	100+60	-	103+50	---	5,115	10	---	---
	ELIZABETH STREET	120+25	-	120+65	---	265	---	---	---
	ST. THOMAS STREET	160+38	-	161+28	---	1,570	15	---	---
	WEBER STREET	170+38	-	170+67	---	---	---	---	---
	RIVER ROAD	179+32	-	179+62	---	355	---	---	---
	EVERGREEN DRIVE	188+50	-	189+54	---	---	---	---	---
	SECOND STREET	129+00	-	129+75	---	880	---	---	---
		130+25	-	131+00	---	1,565	---	---	---
	CATEGORY 0010 SUBTOTAL				60	110,120	0	1,263	151
0150	E. MAIN STREET	103+50	-	105+50	35	2,915	10	---	---
		105+50	-	109+75	---	4,790	15	132	36
	THIRD STREET	138+70	-	139+75	---	820	---	---	---
		140+25	-	141+25	---	770	---	---	---
	MILWAUKEE STREET	150+30	-	151+50	---	790	---	---	---
	CATEGORY 0150 SUBTOTAL				35	10,085	267	132	36
	PROJECT TOTAL				**95**	**120,205**	**267**	**1,395**	**187**

*CONCRETE SIDEWALK IN TERRACE AREAS. ALL COLORING CONCRETE WISDOT RED IS CATEGORY 0150.

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER PIPES

FROM	-	TO	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	521.3112 Culvert Pipe Corrugated Steel 12-Inch LF	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch LF	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch LF	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch LF	608.0321 Storm Sewer Pipe Reinforced Concrete Class III 21-Inch LF	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch LF	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch LF	609.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch LF	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch LF	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch LF	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch LF	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch LF	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch LF	608.0436 Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch LF	608.2343 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 43x68-Inch LF	608.2414 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 14x23-Inch LF	608.2419 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch LF	608.2429 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch LF	JOINT TIES* EACH
1A	-	1	803.11	803.01	0.0033	---	---	---	---	---	---	---	---	30.2	---	---	---	---	---	---	---	---	---	---
1B	-	1	803.04	803.01	0.0030	---	---	---	---	---	---	---	---	10.0	---	---	---	---	---	---	---	---	---	---
1	-	2	802.01	801.44	0.0023	---	---	---	---	---	---	---	---	---	---	---	246.7	---	---	---	---	---	---	---
2A	-	2	802.68	802.44	0.0050	---	---	---	---	---	---	---	---	47.0	---	---	---	---	---	---	---	---	---	---
2B	-	2	802.48	802.44	0.0050	---	---	---	---	---	---	---	---	7.0	---	---	---	---	---	---	---	---	---	---
2	-	3	801.44	801.10	0.0012	---	---	---	---	---	---	---	---	---	---	---	281.7	---	---	---	---	---	---	---
3	-	3A	801.10	801.01	0.0015	---	---	---	---	---	---	---	---	---	---	---	62.9	---	---	---	---	---	---	6
4A	-	4B	801.76	801.56	0.0200	---	---	---	---	---	---	---	---	10.0	---	---	---	---	---	---	---	---	---	---
4B	-	4D	801.26	800.94	0.0049	---	---	---	---	---	---	---	---	---	65.0	---	---	---	---	---	---	---	---	---
4C	-	4D	801.52	801.32	0.0200	---	---	---	---	---	---	---	---	10.0	---	---	---	---	---	---	---	---	---	---
4D	-	4	800.94	800.76	0.0087	---	---	20.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6
5A	-	5B	801.30	801.14	0.0029	---	---	---	---	---	---	---	---	---	54.7	---	---	---	---	---	---	---	---	---
5B	-	5	801.14	800.77	0.0050	---	---	74.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6
6A	-	6B	800.41	800.17	0.0049	---	---	---	---	---	---	---	---	48.6	---	---	---	---	---	---	---	---	---	---
6B	-	6	800.17	799.99	0.0050	---	---	---	---	---	---	---	---	36.3	---	---	---	---	---	---	---	---	---	6
7A	-	7B	800.55	800.30	0.0047	---	---	---	---	---	---	---	---	53.0	---	---	---	---	---	---	---	---	---	---
7B	-	7	800.30	800.18	0.0046	---	26.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6
8A	-	8B	799.87	799.84	0.0029	---	---	---	---	---	---	---	---	10.2	---	---	---	---	---	---	---	---	---	---
8B	-	8D	799.59	799.43	0.0030	---	---	---	---	---	---	---	---	---	53.0	---	---	---	---	---	---	---	---	---
8C	-	8D	799.71	799.68	0.0031	---	---	---	---	---	---	---	---	9.8	---	---	---	---	---	---	---	---	---	---
8D	-	8	799.43	799.30	0.0053	---	---	24.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6
9A	-	9B	798.51	798.48	0.0030	---	---	---	---	---	---	---	---	10.0	---	---	---	---	---	---	---	---	---	---
9B	-	9D	798.23	797.97	0.0049	---	---	---	---	---	---	---	---	---	53.0	---	---	---	---	---	---	---	---	---
9C	-	9D	798.27	798.22	0.0050	---	---	---	---	---	---	---	---	10.0	---	---	---	---	---	---	---	---	---	---
9D	-	9	797.97	797.56	0.0102	---	---	40.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6
10A	-	10	800.24	799.54	0.0095	---	---	---	---	---	---	---	---	73.7	---	---	---	---	---	---	---	---	---	6
10	-	14	798.54	798.26	0.0038	---	---	---	---	---	---	---	---	---	---	---	73.9	---	---	---	---	---	---	---
11A	-	11B	812.44	811.77	0.0199	---	33.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11B	-	11	811.63	810.18	0.0230	---	63.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11C	-	11	810.72	810.18	0.0720	---	7.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11D	-	11B	813.16	811.63	0.0180	---	84.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11	-	12	809.18	799.82	0.0331	---	---	---	---	---	282.9	---	---	---	---	---	---	---	---	---	---	---	---	---
12A	-	12	800.71	800.57	0.0031	---	---	---	---	---	---	---	---	---	45.5	---	---	---	---	---	---	---	---	---
12B	-	12	800.84	800.82	0.0027	---	---	---	---	---	---	---	---	7.5	---	---	---	---	---	---	---	---	---	---
12	-	13	799.82	798.90	0.0044	---	---	---	---	---	---	---	---	---	---	---	207.7	---	---	---	---	---	---	---
13A	-	13B	801.07	800.85	0.0050	---	---	---	---	---	---	---	---	43.7	---	---	---	---	---	---	---	---	---	---
13B	-	13C	800.35	800.22	0.0051	---	---	---	---	---	---	---	---	---	---	25.7	---	---	---	---	---	---	---	---
13C	-	13	800.22	799.67	0.0099	---	---	---	---	---	---	---	---	---	---	55.5	---	---	---	---	---	---	---	---
13D	-	13	800.79	800.72	0.0093	---	---	---	---	---	---	---	---	7.5	---	---	---	---	---	---	---	---	---	---
13	-	10	798.90	798.54	0.0038	---	---	---	---	---	---	---	---	---	---	---	95.8	---	---	---	---	---	---	---
14	-	14A	798.26	797.92	0.0061	---	---	---	---	---	---	---	---	---	---	---	56.0	---	---	---	---	---	---	---
15A	-	15	808.33	807.27	0.0201	---	52.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
EXIST	-	15B	808.12	808.08	0.0023	---	---	---	---	17.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
15B	-	15	806.97	806.82	0.0200	---	---	---	---	---	7.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
15	-	16	804.08	793.61	0.0379	---	---	---	---	---	276.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---

NOTES:

* NON-BID ITEM: FOR INFORMATION ONLY

1. PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES

2. JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL REINFORCED CONCRETE APRON ENDWALL LOCTIONS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE REINFORCED CONCRETE STORM SEWER PIPE

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER PIPES

FROM		TO	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	521.3112 Culvert Pipe Corrugated Steel 12-Inch LF	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch LF	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch LF	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch LF	608.0321 Storm Sewer Pipe Reinforced Concrete Class III 21-Inch LF	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch LF	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch LF	609.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch LF	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch LF	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch LF	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch LF	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch LF	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch LF	608.0436 Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch LF	608.2343 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 43x68-Inch LF	608.2414 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 14x23-Inch LF	608.2419 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch LF	608.2429 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch LF	JOINT TIES* EACH
16A	-	16	794.75	794.61	0.0031	---	44.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
16B	-	16	794.38	794.36	0.0024	---	---	8.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
16	-	17	793.61	790.92	0.0410	---	---	---	---	---	65.6	---	---	---	---	---	---	---	---	---	---	---	---	---
17	-	18	790.92	786.72	0.0171	---	---	---	---	---	245.2	---	---	---	---	---	---	---	---	---	---	---	---	---
18A	-	18	788.08	787.72	0.0079	---	---	---	---	---	---	---	---	45.5	---	---	---	---	---	---	---	---	---	---
18B	-	18	787.81	787.72	0.0120	---	---	---	---	---	---	---	---	7.5	---	---	---	---	---	---	---	---	---	---
18	-	19	786.72	784.26	0.0085	---	---	---	---	---	---	---	---	---	---	---	288.8	---	---	---	---	---	---	---
19A	-	19B	785.53	785.49	0.0042	---	---	---	---	---	---	---	---	9.6	---	---	---	---	---	---	---	---	---	---
19B	-	19	785.49	785.26	0.0051	---	---	---	---	---	---	---	---	44.8	---	---	---	---	---	---	---	---	---	---
19C	-	19D	785.36	785.31	0.0048	---	---	---	---	---	---	---	---	10.4	---	---	---	---	---	---	---	---	---	---
19D	-	19	785.31	785.26	0.0059	---	---	---	---	---	---	---	---	8.5	---	---	---	---	---	---	---	---	---	---
19	-	20	783.76	783.21	0.0050	---	---	---	---	---	---	---	---	---	---	---	---	110.7	---	---	---	---	---	---
20A	-	20B	783.80	783.61	0.0050	---	---	38.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
20B	-	20C	783.56	783.40	0.0048	---	---	33.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
20C	-	20D	782.16	781.52	0.0100	---	---	---	---	---	---	63.7	---	---	---	---	---	---	---	---	---	---	---	---
20D	-	20	781.50	781.41	0.0106	---	---	---	---	---	---	8.5	---	---	---	---	---	---	---	---	---	---	---	---
20E	-	20	784.75	784.30	0.0101	---	44.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
20F	-	20C	784.60	784.07	0.0200	---	---	---	---	---	---	---	---	---	---	26.5	---	---	---	---	---	---	---	---
20	-	21	781.22	778.35	0.0100	---	---	---	---	---	---	287.1	---	---	---	---	---	---	---	---	---	---	---	---
21A	-	21B	785.10	784.67	0.0099	---	43.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
21B	-	21	784.42	783.79	0.0101	---	---	62.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
21C	-	21E	783.44	783.03	0.0155	---	26.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
21D	-	21E	783.31	783.03	0.0043	---	65.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
21E	-	21	782.78	782.62	0.0051	---	---	31.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
21F	-	21C	784.60	783.60	0.0313	---	32.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
21	-	22	778.25	773.08	0.0200	---	---	---	---	---	---	258.5	---	---	---	---	---	---	---	---	---	---	---	---
22A	-	22	773.80	773.67	0.0037	---	---	35.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
22B	-	22	773.73	773.67	0.0024	---	---	25.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
22C	-	22B	777.76	775.88	0.0449	---	41.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
22D	-	22B	775.90	773.98	0.0336	---	57.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
22	-	23	771.92	770.92	0.0069	---	---	---	---	---	---	---	---	---	---	---	---	---	145.1	---	---	---	---	---
23A	-	23B	773.31	773.05	0.0038	---	---	---	---	---	---	---	---	68.6	---	---	---	---	---	---	---	---	---	---
23B	-	23	772.80	772.67	0.0044	---	---	---	---	---	---	---	---	---	29.7	---	---	---	---	---	---	---	---	---
23C	-	23D	773.27	773.12	0.0045	---	---	---	---	---	---	---	---	33.0	---	---	---	---	---	---	---	---	---	---
23D	-	23E	773.12	772.96	0.0044	---	---	---	---	---	---	---	---	36.2	---	---	---	---	---	---	---	---	---	---
23E	-	23	772.71	772.67	0.0020	---	---	---	---	---	---	---	---	---	20.4	---	---	---	---	---	---	---	---	---
23	-	24	770.92	769.52	0.0077	---	---	---	---	---	---	---	---	---	---	---	---	---	182.4	---	---	---	---	---
24A	-	24	771.73	771.52	0.0048	---	---	---	---	---	---	---	---	43.8	---	---	---	---	---	---	---	---	---	---
24B	-	24	771.62	771.52	0.0092	---	---	---	---	---	---	---	---	10.9	---	---	---	---	---	---	---	---	---	---
24	-	OUTFALL	769.52	769.25	0.0095	---	---	---	---	---	---	---	---	---	---	---	---	---	28.5	---	---	---	---	---
25	-	26B	768.88	768.15	0.0401	---	18.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
26A	-	26	768.35	768.07	0.0090	---	---	---	---	---	---	---	---	31.1	---	---	---	---	---	---	---	---	---	---
26B	-	26	768.15	768.07	0.0049	---	---	---	---	---	---	---	---	16.4	---	---	---	---	---	---	---	---	---	---
26C	-	26B	768.43	768.15	0.0043	---	---	---	---	---	---	---	---	64.6	---	---	---	---	---	---	---	---	---	---
26	-	27	767.57	767.29	0.0051	---	---	---	---	---	---	---	---	---	---	55.2	---	---	---	---	---	---	---	---

NOTES:

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ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER PIPES

FROM	-	TO	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	521.3112 Culvert Pipe Corrugated Steel 12-Inch LF	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch LF	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch LF	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch LF	608.0321 Storm Sewer Pipe Reinforced Concrete Class III 21-Inch LF	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch LF	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch LF	609.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch LF	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch LF	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch LF	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch LF	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch LF	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch LF	608.0436 Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch LF	608.2343 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 43x68-Inch LF	608.2414 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 14x23-Inch LF	608.2419 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch LF	608.2429 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch LF	JOINT TIES* EACH
27A	-	27	767.77	767.29	0.0101	---	---	---	---	---	---	---	---	---	47.5	---	---	---	---	---	---	---	---	---	
32	-	33	767.93	767.72	0.0020	---	---	---	---	---	---	---	---	---	---	---	---	---	105.0	---	---	---	---	---	---	
33A	-	33B	769.66	769.51	0.0050	---	---	---	---	---	---	---	---	30.1	---	---	---	---	---	---	---	---	---	---	---	
33B	-	33	769.44	769.28	0.0049	---	---	---	---	---	---	---	---	32.7	---	---	---	---	---	---	---	---	---	---	---	
33C	-	33	769.22	769.09	0.0096	---	---	---	---	---	---	---	---	---	13.5	---	---	---	---	---	---	---	---	---	---	
33D	-	33C	769.33	769.22	0.0050	---	---	---	---	---	---	---	---	---	22.0	---	---	---	---	---	---	---	---	---	---	
33E	-	33D	769.78	769.60	0.0051	---	---	---	---	---	---	---	---	35.3	---	---	---	---	---	---	---	---	---	---	---	
33F	-	33E	770.15	769.99	0.0052	---	---	---	---	---	---	---	---	31.0	---	---	---	---	---	---	---	---	---	---	---	
33	-	35	767.22	766.78	0.0020	---	---	---	---	---	---	---	---	---	---	---	---	---	---	217.6	---	---	---	---	---	
34A	-	34	768.94	768.63	0.0098	---	---	---	---	---	---	---	---	31.5	---	---	---	---	---	---	---	---	---	---	---	
34B	-	34	768.97	768.63	0.0374	---	---	---	---	---	---	---	---	9.1	---	---	---	---	---	---	---	---	---	---	---	
34	-	EXIST	768.38	768.36	0.0038	---	---	---	---	---	---	---	---	---	5.2	---	---	---	---	---	---	---	---	---	---	
35A	-	35	769.71	769.34	0.0101	---	---	36.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
35	-	36	766.78	766.48	0.0030	---	---	---	---	---	---	---	100.4	---	---	---	---	---	---	---	---	---	---	---	---	
36A	-	36	770.12	769.88	0.0122	---	19.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
36	-	OUTFALL	766.48	766.31	0.0051	---	---	---	---	---	---	---	33.2	---	---	---	---	---	---	---	---	---	---	---	---	
37A	-	37	802.35	802.18	0.0028	60.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6
38A	-	38C	804.10	802.72	0.0117	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	118.1	---	---	---	6
38B	-	38C	802.86	802.74	0.0052	---	---	---	---	---	---	---	---	---	---	23.0	---	---	---	---	---	---	---	---	---	
38C	-	38E	802.72	802.62	0.0049	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	20.4	---	---	---	
38D	-	38E	802.26	802.20	0.0012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	50.3	---	---	6
38E	-	38	801.37	801.25	0.0015	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	78.1	---	6
39A	-	39B	800.83	800.26	0.0034	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	168.8	---	---	---	---	6
39B	-	39D	800.26	800.00	0.0023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	113.7	---	---	---	---	---
39C	-	39D	800.17	800.00	0.0024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	72.1	---	---	---	---	6
39D	-	39E	800.00	799.49	0.0016	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	312.0	---	---	---	---	---
39E	-	39	799.49	799.18	0.0016	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	197	---	---	---	---	6
40A	-	40B	767.40	766.89	0.0109	---	47	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
40B	-	40	766.87	766.24	0.0099	---	64	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
40C	-	40B	767.02	766.89	0.0053	---	24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
40	-	40D	766.17	764.79	0.0061	---	---	---	---	---	228	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6
42	-	43	767.17	766.79	0.0050	---	---	---	---	---	76	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
43A	-	43	767.64	767.60	0.0064	---	6	---	---	---		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
43	-	44	766.79	766.60	0.0054	---	---	---	---	---	35	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
44A	-	44	767.89	767.85	0.0067	---	6	---	---	---		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
44	-	40	766.60	766.17	0.0051	---	---	---	---	---	84	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
45A	-	45	767.35	767.28	0.0093	---	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
45B	-	45	767.62	767.28	0.0087	---	39	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
45	-	41	767.00	766.37	0.0158	---	---	40	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
46	-	45	767.58	767.25	0.0077	---	43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
47	-	46	768.50	767.58	0.0044	---	208	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
48A	-	48	769.10	769.00	0.0127	---	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
48B	-	48	769.25	769.00	0.0064	---	39	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
48	-	47	769.00	768.50	0.0049	---	101	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
49A	-	49	769.18	769.10	0.0108	---	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
49B	-	49	769.40	769.00	0.0101	---	40	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER PIPES

FROM		TO	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	521.3112 Culvert Pipe Corrugated Steel 12-Inch LF	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch LF	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch LF	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch LF	608.0321 Storm Sewer Pipe Reinforced Concrete Class III 21-Inch LF	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch LF	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch LF	609.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch LF	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch LF	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch LF	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch LF	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch LF	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch LF	608.0436 Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch LF	608.2343 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 43x68-Inch LF	608.2414 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 14x23-Inch LF	608.2419 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch LF	608.2429 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch LF	JOINT TIES* EACH
49	-	50	769.00	768.42	0.0052	---	111	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
50A	-	50	768.61	768.44	0.0100	---	17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
50	-	51	768.42	767.03	0.0060	---	232	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
51	-	52	766.88	766.51	0.0088	---	42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
52A	-	52	768.02	767.54	0.0102	---	---	---	---	---	---	---	---	47	---	---	---	---	---	---	---	---	---	---
52	-	53	766.50	765.50	0.0086	---	117	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
53D	-	53C	766.60	766.48	0.0073	---	16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
55D	-	55A	765.19	765.04	0.0100	---	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
55A	-	55	765.04	764.85	0.0081	---	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
55C	-	55B	765.12	764.97	0.0100	---	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
55B	-	55	764.97	764.85	0.0103	---	12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
55	-	54	764.20	Match Exist	0.0045	---	---	---	67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
56	-	55	766.70	764.45	0.0086	---	---	271	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
57A	-	57B	769.14	769.01	0.0023	---	---	---	---	---	---	---	---	---	56	---	---	---	---	---	---	---	---	---
57B	-	57	769.01	768.98	0.0022	---	---	---	---	---	---	---	---	---	17	---	---	---	---	---	---	---	---	---
57C	-	57	769.02	768.98	0.0023	---	---	---	---	---	---	---	---	---	19	---	---	---	---	---	---	---	---	---
57D	-	57C	769.08	769.02	0.0023	---	---	---	---	---	---	---	---	---	29	---	---	---	---	---	---	---	---	---
57E	-	57D	769.16	769.08	0.0023	---	---	---	---	---	---	---	---	---	34	---	---	---	---	---	---	---	---	---
57	-	58	768.98	768.81	0.0012	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	136	---
58	-	58A	768.81	768.75	0.0012	---	---	---	---	---	51	---	---	---	---	---	---	---	---	---	---	---	---	6
60A	-	60	773.12	772.80	0.0098	---	33	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
60B	-	60	774.17	772.70	0.0253	---	58	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
60	-	59	772.35	770.20	0.0137	---	---	---	157	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
61A	-	61B	774.52	774.33	0.0102	---	---	---	---	---	---	---	---	19	---	---	---	---	---	---	---	---	---	---
61B	-	61	772.72	772.60	0.0108	---	11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
61C		61	772.90	772.65	0.0108	---	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
62A	-	62	775.31	775.01	0.0080	---	38	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
63		62	774.00	773.08	0.0070	---	---	132	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
64		63	774.44	774.01	0.0043	---	99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
65A		65	775.61	775.50	0.0102	---	11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
65B		65	775.77	775.40	0.0104	---	36	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
65		64	775.30	774.50	0.0045	---	177	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
CATEGORY 0010 SUBTOTAL:						61	2388	874	224	18	1352	618	134	1092	565	186	1314	216	574	864	139	187	79	102

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ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER PIPES

CATEGORY 0150					521.3112	608.0312	608.0315	608.0318	608.0321	608.0324	608.0330	609.0336	608.0412	608.0415	608.0418	608.0424	608.0430	608.0436	608.2343	608.2414	608.2419	608.2429	
					Culvert Pipe Corrugated Steel	Storm Sewer Pipe Reinforced Concrete Class III							Storm Sewer Pipe Reinforced Concrete Class IV						Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV			JOINT TIES*
FROM	-	TO	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	12-Inch LF	12-Inch LF	15-Inch LF	18-Inch LF	21-Inch LF	24-Inch LF	30-Inch LF	36-Inch LF	12-Inch LF	15-Inch LF	18-Inch LF	24-Inch LF	30-Inch LF	36-Inch LF	43x68-Inch LF	14x23-Inch LF	19x30-Inch LF	29x45-Inch LF	EACH
23D	-	EXIST	773.42	773.12	0.0050	---	---	---	---	---	---	---	---	60.1	---	---	---	---	---	---	---	---	---	---
28A	-	28	771.12	770.93	0.0050	---	---	---	---	---	---	---	---	37.9	---	---	---	---	---	---	---	---	---	---
28B	-	28	771.01	770.95	0.0053	---	---	---	---	---	---	---	---	11.3	---	---	---	---	---	---	---	---	---	---
28	-	29	769.67	769.52	0.0021	---	---	---	---	---	---	---	---	---	---	---	72.7	---	---	---	---	---	---	---
28C	-	28	769.74	769.67	0.0019	---	---	---	---	---	---	---	---	---	---	---	36.8	---	---	---	---	---	---	---
29A	-	29B	770.91	770.77	0.0028	---	---	---	---	---	---	---	---	49.4	---	---	---	---	---	---	---	---	---	---
29B	-	29	770.52	770.28	0.0031	---	---	---	---	---	---	---	---	---	77.3	---	---	---	---	---	---	---	---	---
29C	-	29D	770.61	770.57	0.0041	---	---	---	---	---	---	---	---	9.8	---	---	---	---	---	---	---	---	---	---
FUTURE	-	29D	770.19	770.07	0.0029	---	---	---	---	---	---	---	---	---	---	41.7	---	---	---	---	---	---	---	---
29D	-	29	770.07	769.97	0.0032	---	---	---	---	---	---	---	---	---	---	31.2	---	---	---	---	---	---	---	---
29E	-	29D	770.63	770.57	0.0048	---	---	---	---	---	---	---	---	12.6	---	---	---	---	---	---	---	---	---	---
29	-	30	769.02	768.55	0.0020	---	---	---	---	---	---	---	---	---	---	---	---	234.7	---	---	---	---	---	---
30A	-	30B	770.54	770.40	0.0050	---	---	---	---	---	---	---	---	28.0	---	---	---	---	---	---	---	---	---	---
30B	-	30C	770.40	770.20	0.0050	---	---	---	---	---	---	---	---	39.9	---	---	---	---	---	---	---	---	---	---
30C	-	30	770.20	770.05	0.0052	---	---	---	---	---	---	---	---	29.1	---	---	---	---	---	---	---	---	---	---
30D	-	30E	770.43	770.29	0.0049	---	---	---	---	---	---	---	---	28.5	---	---	---	---	---	---	---	---	---	---
30E	-	30F	770.29	770.09	0.0050	---	---	---	---	---	---	---	---	40.4	---	---	---	---	---	---	---	---	---	---
30F	-	30	769.84	769.80	0.0058	---	---	---	---	---	---	---	---	---	6.9	---	---	---	---	---	---	---	---	---
30	-	31	768.55	768.30	0.0020	---	---	---	---	---	---	---	---	---	---	---	---	124.4	---	---	---	---	---	---
31A	-	31B	770.25	770.15	0.0100	---	---	---	---	---	---	---	---	10.0	---	---	---	---	---	---	---	---	---	---
31B	-	31	770.15	769.80	0.0101	---	---	---	---	---	---	---	---	34.5	---	---	---	---	---	---	---	---	---	---
31C	-	31D	770.07	769.97	0.0100	---	---	---	---	---	---	---	---	10.0	---	---	---	---	---	---	---	---	---	---
31D	-	31	769.97	769.84	0.0104	---	---	---	---	---	---	---	---	12.5	---	---	---	---	---	---	---	---	---	---
31	-	32	768.30	767.93	0.0020	---	---	---	---	---	---	---	---	---	---	---	---	188.2	---	---	---	---	---	---
32A	-	32	769.78	769.49	0.0102	---	---	---	---	---	---	---	---	28.5	---	---	---	---	---	---	---	---	---	---
32B	-	32	769.52	769.46	0.0092	---	---	---	---	---	---	---	---	6.5	---	---	---	---	---	---	---	---	---	---
CATEGORY 0150 SUBTOTAL						0	0	0	0	0	0	0	0	449	85	73	110	548	0	0	0	0	0	0
PROJECT TOTALS:						**61**	**2388**	**874**	**224**	**18**	**1352**	**618**	**134**	**1541**	**650**	**259**	**1424**	**764**	**574**	**864**	**139**	**187**	**79**	**102**

NOTES:

* NON-BID ITEM: FOR INFORMATION ONLY

1. PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES
2. JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL REINFORCED CONCRETE APRON ENDWALL LOCTIONS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE REINFORCED CONCRETE STORM SEWER PIPE.

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER APRON ENDWALLS

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	INVERT ELEVATION	DEPTH FT	521.1012 Apron Endwalls for Culvert Pipe Steel 12-Inch EACH	522.1012 Apron Endwall for Culver Pipe Reinforced Concrete 12-Inch EACH	522.1015 15-Inch EACH	522.1024 24-Inch EACH	522.2614 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch EACH	522.2619 19x30-Inch EACH	522.2629 29x45-Inch EACH	522.2643 43x68-Inch EACH
1A	STH 20	308+86.3	17.5' LT	807.80	801.11	7.69	---	---	---	---	---	---	---	---
1B	STH 20	308+91.8	21.9' RT	807.66	801.04	7.62	---	---	---	---	---	---	---	---
1	STH 20	308+92.8	11.9' RT	807.82	802.01	4.56	---	---	---	---	---	---	---	---
2A	STH 20	311+41.3	21.5' LT	806.79	800.68	7.11	---	---	---	---	---	---	---	---
2B	STH 20	311+41.3	32.5' RT	806.33	800.48	6.85	---	---	---	---	---	---	---	---
2	STH 20	311+41.3	25.5' RT	806.44	801.44	3.75	---	---	---	---	---	---	---	---
3A	STH 20	314+79.5	61.4' RT		801.01	---	---	---	---	1	---	---	---	---
3	STH 20	314+26.4	23.0' RT	806.51	801.10	4.16	---	---	---	---	---	---	---	---
4A	STH 20	315+50.0	32.5' RT	805.79	799.76	7.03	---	---	---	---	---	---	---	---
4B	STH 20	315+60.0	32.5' RT	805.79	799.26	7.53	---	---	---	---	---	---	---	---
4C	STH 20	315+50.0	32.5' LT	805.55	799.52	7.03	---	---	---	---	---	---	---	---
4D	STH 20	315+60.0	32.5' LT	805.55	798.94	7.61	---	---	---	---	---	---	---	---
4	STH 20	315+60.0	53.2' LT		802.20	---	---	---	1	---	---	---	---	---
5A	STH 20	320+40.2	28.2' LT	805.09	799.30	6.79	---	---	---	---	---	---	---	---
5B	STH 20	320+39.9	26.5' RT	805.12	799.14	6.98	---	---	---	---	---	---	---	---
5	STH 20	321+09.0	55.8' RT		802.21	---	---	---	1	---	---	---	---	---
6A	STH 20	321+24.6	56.9' LT	804.28	798.41	6.87	---	---	---	---	---	---	---	---
6B	STH 20	321+70.9	56.5' LT	804.30	798.17	7.13	---	---	---	---	---	---	---	---
6	STH 20	322+01.2	73.6' LT		799.99	---	---	1	---	---	---	---	---	---
7A	STH 20	322+66.0	26.5' LT	803.99	798.55	6.44	---	---	---	---	---	---	---	---
7B	STH 20	322+66.0	26.5' RT	803.99	798.30	6.69	---	---	---	---	---	---	---	---
7	STH 20	322+66.0	52.8' RT		800.18	---	---	1	---	---	---	---	---	---
8A	STH 20	325+55.9	26.5' LT	802.65	797.87	5.78	---	---	---	---	---	---	---	---
8B	STH 20	325+65.9	26.5' LT	802.64	797.59	6.05	---	---	---	---	---	---	---	---
8C	STH 20	325+55.9	26.5' RT	802.65	797.71	5.94	---	---	---	---	---	---	---	---
8D	STH 20	325+65.9	26.5' RT	802.64	797.43	6.21	---	---	---	---	---	---	---	---
8	STH 20	325+65.9	51.0' RT		799.30	---	---	---	1	---	---	---	---	---
9A	STH 20	331+41.7	26.5' LT	802.56	796.51	7.05	---	---	---	---	---	---	---	---
9B	STH 20	331+51.7	26.5' LT	802.57	796.23	7.34	---	---	---	---	---	---	---	---
9C	STH 20	331+41.7	26.5' RT	802.56	796.27	7.29	---	---	---	---	---	---	---	---
9D	STH 20	331+51.7	26.5' RT	802.57	795.97	7.60	---	---	---	---	---	---	---	---
9	STH 20	331+75.9	58.5' RT		797.56	---	---	---	1	---	---	---	---	---
10A	STH 20	334+43.8	48.3' LT	804.64	798.24	7.40	---	---	---	---	---	---	---	---
10	STH 20	334+22.7	22.3' RT	804.76	798.54	4.97	---	---	---	---	---	---	---	---
11A	STH 20	340+43.4	42.1' LT	817.47	810.44	8.03	---	---	---	---	---	---	---	---
11B	STH 20	340+09.8	44.0' LT	816.35	809.63	7.72	---	---	---	---	---	---	---	---
11C	STH 20	340+08.9	26.5' RT	815.75	808.72	8.03	---	---	---	---	---	---	---	---
11D	STH 20	339+66.6	117.0' LT	819.20	811.16	9.04	---	---	---	---	---	---	---	---
11	STH 20	340+08.9	19.0' RT	815.87	809.18	5.44	---	---	---	---	---	---	---	---
12A	STH 20	337+26.0	26.5' LT	807.74	798.71	10.03	---	---	---	---	---	---	---	---
12B	STH 20	337+26.0	26.5' RT	807.74	798.84	9.90	---	---	---	---	---	---	---	---
12	STH 20	337+26.0	19.0' RT	807.86	799.82	6.79	---	---	---	---	---	---	---	---
13A	STH 20	334+75.4	48.4' LT	804.88	799.07	6.81	---	---	---	---	---	---	---	---
13B	STH 20	335+18.2	57.2' LT	807.55	800.35	5.95	---	---	---	---	---	---	---	---
13C	STH 20	335+18.5	31.5' LT	805.57	798.22	8.35	---	---	---	---	---	---	---	---

NOTES:

1. STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
2. RIM ELEVATIONS ARE AT THE CENTER OF MANHOLES AND FIELD INLETS AND AT THE FLANGE LINE FOR INLET/CATCH BASIN GRATES
3. FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER APRON ENDWALLS

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	INVERT ELEVATION	DEPTH FT	521.1012 Apron Endwalls for Culvert Pipe Steel 12-Inch EACH	522.1012 Apron Endwall for Culver Pipe Reinforced Concrete 12-Inch EACH	522.1015 Apron Endwall for Culver Pipe Reinforced Concrete 15-Inch EACH	522.1024 Apron Endwall for Culver Pipe Reinforced Concrete 24-Inch EACH	522.2614 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch EACH	522.2619 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch EACH	522.2629 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch EACH	522.2643 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 43x68-Inch EACH
13D	STH 20	335+18.5	31.5' RT	805.57	798.79	7.78	---	---	---	---	---	---	---	---
13	STH 20	335+18.5	24.0' RT	805.69	798.90	5.54	---	---	---	---	---	---	---	---
14A	STH 20	333+08.4	59.8' RT		800.17	---	---	---	---	1	---	---	---	---
14	STH 20	333+48.9	21.1' RT	804.05	798.26	4.54	---	---	---	---	---	---	---	---
15A	STH 20	345+25.0	26.5' LT	813.11	806.33	7.78	---	---	---	---	---	---	---	---
15B	STH 20	345+52.2	26.5' RT	812.50	804.97	8.53	---	---	---	---	---	---	---	---
15	STH 20	345+51.9	19.0' RT	812.62	804.08	7.29	---	---	---	---	---	---	---	---
16A	STH 20	348+27.1	26.5' LT	801.75	792.75	10.00	---	---	---	---	---	---	---	---
16B	STH 20	348+27.1	26.5' RT	801.75	792.38	10.37	---	---	---	---	---	---	---	---
16	STH 20	348+27.1	18.0' RT	801.89	793.61	7.03	---	---	---	---	---	---	---	---
17B	STH 20	349+08.1	42.4' RT	799.28	793.00	5.03	---	---	---	---	---	---	---	---
17	STH 20	348+90.5	19.0' RT	799.33	790.92	7.16	---	---	---	---	---	---	---	---
18A	STH 20	351+34.1	26.5' LT	792.11	786.08	7.03	---	---	---	---	---	---	---	---
18B	STH 20	351+34.1	26.5' RT	792.11	785.81	7.30	---	---	---	---	---	---	---	---
18	STH 20	351+34.1	19.0' RT	792.23	786.72	4.26	---	---	---	---	---	---	---	---
19A	STH 20	354+06.1	26.3' LT	789.19	783.53	6.66	---	---	---	---	---	---	---	---
19B	STH 20	354+16.0	26.4' LT	789.18	783.49	6.69	---	---	---	---	---	---	---	---
19C	STH 20	354+11.6	26.5' RT	789.18	783.36	6.82	---	---	---	---	---	---	---	---
19D	STH 20	354+21.7	26.5' RT	789.18	783.31	6.87	---	---	---	---	---	---	---	---
19	STH 20	354+21.7	18.0' RT	789.32	783.76	4.31	---	---	---	---	---	---	---	---
20A	STH 20	355+08.7	74.6' RT	788.83	781.80	8.03	---	---	---	---	---	---	---	---
20B	STH 20	354+74.1	77.1' RT	788.83	781.56	8.27	---	---	---	---	---	---	---	---
20C	STH 20	354+71.3	43.8' RT	788.94	780.16	9.78	---	---	---	---	---	---	---	---
20D	STH 20	355+30.0	26.5' RT	789.53	779.50	11.03	---	---	---	---	---	---	---	---
20E	STH 20	355+30.0	26.5' LT	789.53	782.75	7.78	---	---	---	---	---	---	---	---
20F	STH 20	354+46.3	40.6' RT	790.41	784.60	5.31	---	---	---	---	---	---	---	---
20	STH 20	355+30.0	18.0' RT	789.67	781.22	7.20	---	---	---	---	---	---	---	---
21A	STH 20	357+66.1	43.1' LT	790.13	783.10	8.03	---	---	---	---	---	---	---	---
21B	STH 20	358+07.5	56.6' LT	790.75	782.42	9.33	---	---	---	---	---	---	---	---
21C	STH 20	358+31.4	59.5' RT	789.35	781.44	8.91	---	---	---	---	---	---	---	---
21D	STH 20	357+55.9	53.4' RT	789.75	781.31	9.44	---	---	---	---	---	---	---	---
21E	STH 20	358+19.9	36.1' RT	789.34	780.78	9.56	---	---	---	---	---	---	---	---
21F	STH 20	358+59.1	75.5' RT	787.51	784.60	2.41	---	---	---	---	---	---	---	---
21	STH 20	358+16.6	4.9' RT	789.70	778.25	10.20	---	---	---	---	---	---	---	---
22A	STH 20	360+75.0	30.3' LT	779.60	771.80	9.30	---	---	---	---	---	---	---	---
22B	STH 20	360+75.0	30.2' RT	779.85	771.73	9.62	---	---	---	---	---	---	---	---
22C	STH 20	360+36.2	45.9' RT	781.11	775.76	4.85	---	---	---	---	---	---	---	---
22D	STH 20	361+30.8	42.3' RT	779.13	773.90	4.73	---	---	---	---	---	---	---	---
22	STH 20	360+75.0	5.2' RT	780.09	771.92	6.92	---	---	---	---	---	---	---	---
23A	STH 20	362+66.4	70.2' LT	776.63	771.31	6.32	---	---	---	---	---	---	---	---
23B	STH 20	362+15.3	25.7' LT	777.77	770.80	7.97	---	---	---	---	---	---	---	---
23C	STH 20	362+79.1	49.5' RT	777.05	771.27	6.78	---	---	---	---	---	---	---	---
23D	STH 20	362+45.3	49.9' RT	777.10	771.12	6.98	---	---	---	---	---	---	---	---
23E	STH 20	362+20.0	24.0' RT	777.65	770.71	7.94	---	---	---	---	---	---	---	---
23	STH 20	362+20.0	3.6' RT	777.84	770.92	5.67	---	---	---	---	---	---	---	---

NOTES:

1. STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
2. RIM ELEVATIONS ARE AT THE CENTER OF MANHOLES AND FIELD INLETS AND AT THE FLANGE LINE FOR INLET/CATCH BASIN GRATES
3. FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER APRON ENDWALLS

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	INVERT ELEVATION	DEPTH FT	521.1012 Apron Endwalls for Culvert Pipe Steel 12-Inch EACH	522.1012 Apron Endwall for Culver Pipe Reinforced Concrete 12-Inch EACH	522.1015 Apron Endwall for Culver Pipe Reinforced Concrete 15-Inch EACH	522.1024 Apron Endwall for Culver Pipe Reinforced Concrete 24-Inch EACH	522.2614 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch EACH	522.2619 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch EACH	522.2629 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch EACH	522.2643 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 43x68-Inch EACH
24A	STH 20	364+02.1	26.9' LT	776.17	769.73	7.36	---	---	---	---	---	---	---	---
24B	STH 20	364+02.1	27.8' RT	776.11	769.62	7.41	---	---	---	---	---	---	---	---
24	STH 20	364+02.1	16.9' RT	776.31	769.52	5.54	---	---	---	---	---	---	---	---
25	STH 20	369+41.0	43.3' LT	773.71	766.88	5.58	---	---	---	---	---	---	---	---
26A	STH 20	369+85.7	26.7' LT	772.96	766.35	7.61	---	---	---	---	---	---	---	---
26B	STH 20	369+38.3	25.3' LT	773.14	766.15	7.99	---	---	---	---	---	---	---	---
26C	STH 20	368+73.7	23.5' LT	773.46	766.43	8.03	---	---	---	---	---	---	---	---
26	STH 20	369+54.6	25.8' LT	773.31	767.57	4.49	---	---	---	---	---	---	---	---
27A	STH 20	369+07.3	22.0' RT	772.66	765.77	7.89	---	---	---	---	---	---	---	---
27	STH 20	369+54.2	29.5' RT	772.87	767.08	4.54	---	---	---	---	---	---	---	---
33A	STH 20	102+87.2	23.0' LT	773.99	767.66	7.25	---	---	---	---	---	---	---	---
33B	STH 20	102+57.1	21.2' LT	774.02	767.44	7.50	---	---	---	---	---	---	---	---
33C	STH 20	102+45.9	23.5' RT	774.00	767.22	7.78	---	---	---	---	---	---	---	---
33D	STH 20	102+67.1	17.5' RT	774.11	767.33	7.78	---	---	---	---	---	---	---	---
33E	STH 20	102+93.5	40.9' RT	774.16	767.78	7.38	---	---	---	---	---	---	---	---
33F	STH 20	103+24.6	41.0' RT	774.17	768.15	7.02	---	---	---	---	---	---	---	---
33	STH 20	102+47.7	10.1' RT	774.24	767.22	5.77	---	---	---	---	---	---	---	---
34A	STH 20	103+26.4	74.0' LT	773.66	766.94	7.72	---	---	---	---	---	---	---	---
34B	STH 20	102+90.4	74.2' LT	773.61	766.97	7.56	---	---	---	---	---	---	---	---
34	STH 20	102+96.0	81.4' LT	773.68	768.38	4.05	---	---	---	---	---	---	---	---
35A	STH 20	100+30.0	24.7' LT	774.79	767.71	8.00	---	---	---	---	---	---	---	---
35	STH 20	100+30.1	11.9' RT	775.07	766.78	7.04	---	---	---	---	---	---	---	---
36A	STH 20	366+01.6	27.3' RT	775.11	768.12	7.91	---	---	---	---	---	---	---	---
36	STH 20	366+00.8	46.8' RT	775.09	766.48	7.36	---	---	---	---	---	---	---	---
37A	STH 20	314+21.1	167.5' RT	804.52	800.35	5.17	---	---	---	---	---	---	---	---
37	STH 20	314+22.6	228.0' RT		802.18	---	1	---	---	---	---	---	---	---
38A	STH 20	313+33.1	204.0' LT		804.10	---	---	---	---	---	1	---	---	---
38B	STH 20	313+37.9	85.5' LT	806.64	802.86	2.53	---	---	---	---	---	---	---	---
38C	STH 20	313+60.3	89.3' LT	805.76	802.72	4.04	---	---	---	---	---	---	---	---
38D	STH 20	313+19.1	65.7' LT		802.26	---	---	---	---	---	---	1	---	---
38E	STH 20	313+68.3	70.5' LT	806.11	801.37	3.49	---	---	---	---	---	---	---	---
38	STH 20	314+43.2	67.2' LT		801.25	---	---	---	---	---	---	---	1	---
39A	STH 20	315+19.6	68.5' RT		800.83	---	---	---	---	---	---	---	---	1
39B	STH 20	316+88.1	59.1' RT	806.66	800.26	6.15	---	---	---	---	---	---	---	---
39C	STH 20	316+16.6	63.5' LT		800.17	---	---	---	---	---	---	---	---	1
39D	STH 20	316+88.1	54.6' LT	805.66	800.00	5.41	---	---	---	---	---	---	---	---
39E	STH 20	320+00.0	60.8' LT	805.00	799.49	5.26	---	---	---	---	---	---	---	---
39	STH 20	321+89.1	84.1' LT		799.18	---	---	---	---	---	---	---	---	1
40A	STH 20	371+87	23.5' LT	771.98	765.40	7.58	---	---	---	---	---	---	---	---
40B	STH 20	371+87	23.5' RT	771.36	764.87	7.49	---	---	---	---	---	---	---	---
40C	STH 20	371+63	23.5' RT	771.43	765.02	7.41	---	---	---	---	---	---	---	---
40D	STH 20	372+51	251.1' RT		764.79	---	---	---	---	1	---	---	---	---
40	STH 20	372+51	23.3' RT	771.75	766.17	4.33	---	---	---		---	---	---	---
41	STH 20	372+92	20.0' RT	772.16	766.37	4.54	---	---	---	---	---	---	---	---
42	ST. THOMAS STREET	161+38	20.3' RT	773.29	767.17	4.87	---	---	---	---	---	---	---	---

NOTES:

1. STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
2. RIM ELEVATIONS ARE AT THE CENTER OF MANHOLES AND FIELD INLETS AND AT THE FLANGE LINE FOR INLET/CATCH BASIN GRATES
3. FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER APRON ENDWALLS

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	INVERT ELEVATION	DEPTH FT	521.1012 Apron Endwalls for Culvert Pipe Steel 12-Inch EACH	522.1012 Apron Endwall for Culver Pipe Reinforced Concrete 12-Inch EACH	522.1015 Apron Endwall for Culver Pipe Reinforced Concrete 15-Inch EACH	522.1024 Apron Endwall for Culver Pipe Reinforced Concrete 24-Inch EACH	522.2614 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch EACH	522.2619 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch EACH	522.2629 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch EACH	522.2643 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 43x68-Inch EACH
43A	ST. THOMAS STREET	160+63	23.7' RT	772.29	765.64	7.65	---	---	---	---	---	---	---	---
43	ST. THOMAS STREET	160+62	17.6' RT	772.49	766.79	4.45	---	---	---	---	---	---	---	---
44A	ST. THOMAS STREET	160+60	23.4' LT	772.55	765.89	7.66	---	---	---	---	---	---	---	---
44	ST. THOMAS STREET	160+60	17.4' LT	772.64	766.60	4.79	---	---	---	---	---	---	---	---
45A	STH 20	373+32	23.5' RT	771.84	765.35	7.49	---	---	---	---	---	---	---	---
45B	STH 20	373+32	23.5' LT	772.53	765.62	7.91	---	---	---	---	---	---	---	---
45	STH 20	373+32	15.7' RT	771.97	767.00	3.72	---	---	---	---	---	---	---	---
46	STH 20	373+75	19.3' RT	772.13	EXIST	---	---	---	---	---	---	---	---	---
47A	STH 20	375+88	23.3' LT	773.53	EXIST	---	---	---	---	---	---	---	---	---
47	STH 20	375+83	18.5' RT	773.28	768.50	3.53	---	---	---	---	---	---	---	---
48A	STH 20	376+84	23.5' RT	773.49	767.10	7.39	---	---	---	---	---	---	---	---
48B	STH 20	376+84	23.5' LT	773.76	767.25	7.51	---	---	---	---	---	---	---	---
48	STH 20	376+84	15.6' RT	773.75	769.00	3.50	---	---	---	---	---	---	---	---
49A	STH 20	379+77	23.5' LT	773.72	767.18	7.54	---	---	---	---	---	---	---	---
49B	STH 20	379+77	23.5' RT	773.79	767.40	7.39	---	---	---	---	---	---	---	---
49	STH 20	379+77	16.1' LT	773.90	769.00	3.65	---	---	---	---	---	---	---	---
50A	STH 20	380+87	23.0' LT	773.40	766.61	7.62	---	---	---	---	---	---	---	---
50	STH 20	380+87	5.6' LT	773.22	768.42	3.55	---	---	---	---	---	---	---	---
51	STH 20	383+10	35.8' RT	770.35	766.88	2.22	---	---	---	---	---	---	---	---
52A	STH 20	383+49	23.5' LT	770.79	766.02	5.77	---	---	---	---	---	---	---	---
52	STH 20	383+48	23.7' RT	770.79	766.50	3.29	---	---	---	---	---	---	---	---
53A	STH 20	384+62	23.4' LT	770.25	EXIST	---	---	---	---	---	---	---	---	---
53B	RIVER ROAD	384+37	54.6' RT	770.06	EXIST	---	---	---	---	---	---	---	---	---
53C	RIVER ROAD	179+40	19.1' LT	770.24	764.48	6.76	---	---	---	---	---	---	---	---
53D	RIVER ROAD	179+32	32.1' LT	769.16	764.60	5.39	---	---	---	---	---	---	---	---
53	STH 20	384+62	24.0' RT	770.16	EXIST	---	---	---	---	---	---	---	---	---
54A	STH 20	385+57	36.8' RT	765.79	EXIST	---	---	---	---	---	---	---	---	---
54	STH 20	385+46	6.0' LT	769.49	EXIST	---	---	---	---	---	---	---	---	---
55A	STH 20	386+08	17.5' RT	768.82	763.04	6.78	---	---	---	---	---	---	---	---
55B	STH 20	386+08	17.5' LT	768.98	762.97	7.01	---	---	---	---	---	---	---	---
55C	STH 20	386+23	17.5' LT	769.02	765.12	4.90	---	---	---	---	---	---	---	---
55D	STH 20	386+23	17.5' LT	768.86	765.19	4.67	---	---	---	---	---	---	---	---
55	STH 20	386+08	5.8' LT	769.20	764.20	3.75	---	---	---	---	---	---	---	---
56A	STH 20	388+79	17.5' LT	771.40	764.90	7.50	---	---	---	---	---	---	---	---
56B	STH 20	388+79	18.0' RT	771.34	EXIST	---	---	---	---	---	---	---	---	---
56	STH 20	388+79	4.9' LT	771.61	EXIST	---	---	---	---	---	---	---	---	---
57A	STH 20	394+69	17.5' LT	771.65	767.14	5.51	---	---	---	---	---	---	---	---
57B	STH 20	395+25	17.5' LT	771.86	767.01	3.85	---	---	---	---	---	---	---	---
57C	STH 20	395+25	17.5' RT	771.86	766.98	3.88	---	---	---	---	---	---	---	---
57D	STH 20	394.96	17.5' RT	771.70	767.08	5.62	---	---	---	---	---	---	---	---
57E	STH 20	394+62	17.5' RT	771.65	767.16	5.49	---	---	---	---	---	---	---	---
57	STH 20	395+25	1.0' LT	772.16	768.98	2.68	---	---	---	---	---	---	---	---
58A	STH 20	396+61	52.4' LT		768.75	---	---	---	---	1	---	---	---	---
58	STH 20	396+61	1.0' LT	774.44	768.81	4.38	---	---	---	---	---	---	---	---
59	STH 20	397+13	6.8' LT	775.63	EXIST	---	---	---	---	---	---	---	---	---

NOTES:

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4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER APRON ENDWALLS

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	INVERT ELEVATION	DEPTH FT	521.1012 Apron Endwalls for Culvert Pipe Steel 12-Inch EACH	522.1012 Apron Endwall for Culver Pipe Reinforced Concrete 12-Inch EACH	522.1015 15-Inch EACH	522.1024 24-Inch EACH	522.2614 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch EACH	522.2619 19x30-Inch EACH	522.2629 29x45-Inch EACH	522.2643 43x68-Inch EACH
60A	EVERGREEN DRIVE	190+38	13.2' RT	777.08	771.12	6.96	---	---	---	---	---	---	---	---
60B	EVERGREEN DRIVE	398+85	50.5' RT	776.03	EXIST	---	---	---	---	---	---	---	---	---
60C	EVERGREEN DRIVE	398+37	49.9' RT	776.72	EXIST	---	---	---	---	---	---	---	---	---
60	STH 20	389+70	6.0' LT	777.56	EXIST	---	---	---	---	---	---	---	---	---
61A	STH 20	398+95	35.5' LT	777.31	774.52	1.62	---	---	---	---	---	---	---	---
61B	STH 20	398+99	17.5' LT	777.51	770.72	7.79	---	---	---	---	---	---	---	---
61C	STH 20	398+99	17.5' RT	777.50	770.90	7.60	---	---	---	---	---	---	---	---
61	STH 20	398+99	6.0' LT	777.71	772.52	3.94	---	---	---	---	---	---	---	---
62A	STH 20	400+36	38.2' LT	778.27	EXIST	---	---	---	---	---	---	---	---	---
62	STH 20	400+17	5.7' LT	778.30	EXIST	---	---	---	---	---	---	---	---	---
63A	STH 20	401+49	17.7' LT	778.64	EXIST	---	---	---	---	---	---	---	---	---
63B	STH 20	401+49	18.0' RT	778.64	EXIST	---	---	---	---	---	---	---	---	---
63	STH 20	401+49	6.3' LT	778.95	EXIST	---	---	---	---	---	---	---	---	---
64A	STH 20	402+49	32.9' LT	778.15	EXIST	---	---	---	---	---	---	---	---	---
64	STH 20	402+48	6.4' LT	779.50	EXIST	---	---	---	---	---	---	---	---	---
65A	STH 20	404+25	17.5' LT	781.86	773.61	9.25	---	---	---	---	---	---	---	---
65B	STH 20	404+25	28.7' RT	781.63	773.77	8.86	---	---	---	---	---	---	---	---
65	STH 20	404+25	6.7' LT	782.05	775.30	5.50	---	---	---	---	---	---	---	---
66	STH 20	373+75	15.4' LT	772.85	EXIST	---	---	---	---	---	---	---	---	---
					CATEGORY 0010 SUBTOTAL		1	2	4	4	1	1	1	3

NOTES:

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   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER STRUCTURES

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	INVERT ELEVATION	DEPTH FT	611.0420 RECONSTRUCTING MANHOLES EACH	611.0430 RECONSTRUCTING INLETS EACH	611.1003 CATCH BASINS 3-FT DIAMETER EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.1230 CATCH BASINS 2x3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH	SPV.0060.01 MANHOLES 10-FT DIAMETER EACH	SPV.0060.02 MANHOLES 12-FT DIAMETER EACH	611.3220 INLETS 2x2-FT EACH	NOTES
1A	STH 20	308+86.3	17.5' LT	807.80	801.11	5.69	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
1B	STH 20	308+91.8	21.9' RT	807.66	801.04	5.62	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
1	STH 20	308+92.8	11.9' RT	807.82	802.01	4.56	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
2A	STH 20	311+41.3	21.5' LT	806.79	800.68	5.11	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
2B	STH 20	311+41.3	32.5' RT	806.33	800.48	4.85	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
2	STH 20	311+41.3	25.5' RT	806.44	801.44	3.75	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
3A	STH 20	314+79.5	61.4' RT		801.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
3	STH 20	314+26.4	23.0' RT	806.51	801.10	4.16	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
4A	STH 20	315+50.0	32.5' RT	805.79	799.76	5.03	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
4B	STH 20	315+60.0	32.5' RT	805.79	799.26	5.53	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
4C	STH 20	315+50.0	32.5' LT	805.55	799.52	5.03	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
4D	STH 20	315+60.0	32.5' LT	805.55	798.94	5.61	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
4	STH 20	315+60.0	53.2' LT		802.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5A	STH 20	320+40.2	28.2' LT	805.09	799.30	4.79	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
5B	STH 20	320+39.9	26.5' RT	805.12	799.14	4.98	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
5	STH 20	321+09.0	55.8' RT		802.21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
6A	STH 20	321+24.6	56.9' LT	804.28	798.41	4.87	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
6B	STH 20	321+70.9	56.5' LT	804.30	798.17	5.13	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
6	STH 20	322+01.2	73.6' LT		799.99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
7A	STH 20	322+66.0	26.5' LT	803.99	798.55	4.44	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
7B	STH 20	322+66.0	26.5' RT	803.99	798.30	4.69	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
7	STH 20	322+66.0	52.8' RT		800.18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
8A	STH 20	325+55.9	26.5' LT	802.65	797.87	3.78	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
8B	STH 20	325+65.9	26.5' LT	802.64	797.59	4.05	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
8C	STH 20	325+55.9	26.5' RT	802.65	797.71	3.94	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
8D	STH 20	325+65.9	26.5' RT	802.64	797.43	4.21	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
8	STH 20	325+65.9	51.0' RT		799.30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
9A	STH 20	331+41.7	26.5' LT	802.56	796.51	5.05	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
9B	STH 20	331+51.7	26.5' LT	802.57	796.23	5.34	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
9C	STH 20	331+41.7	26.5' RT	802.56	796.27	5.29	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
9D	STH 20	331+51.7	26.5' RT	802.57	795.97	5.60	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
9	STH 20	331+75.9	58.5' RT		797.56	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
10A	STH 20	334+43.8	48.3' LT	804.64	798.24	5.40	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
10	STH 20	334+22.7	22.3' RT	804.76	798.54	4.97	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
11A	STH 20	340+43.4	42.1' LT	817.47	810.44	6.03	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
11B	STH 20	340+09.8	44.0' LT	816.35	809.63	5.72	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
11C	STH 20	340+08.9	26.5' RT	815.75	808.72	6.03	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
11D	STH 20	339+66.6	117.0' LT	819.20	811.16	7.04	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
11	STH 20	340+08.9	19.0' RT	815.87	809.18	5.44	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
12A	STH 20	337+26.0	26.5' LT	807.74	798.71	8.03	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
12B	STH 20	337+26.0	26.5' RT	807.74	798.84	7.90	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
12	STH 20	337+26.0	19.0' RT	807.86	799.82	6.79	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
13A	STH 20	334+75.4	48.4' LT	804.88	799.07	4.81	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
13B	STH 20	335+18.2	57.2' LT	807.55	800.35	5.95	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
13C	STH 20	335+18.5	31.5' LT	805.57	798.22	6.35	---	---	---	---	---	1	---	---	---	---	---	---	---	---	

NOTES:

1. STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
2. RIM ELEVATIONS ARE AT THE CENTER OF MANHOLES AND FIELD INLETS AND AT THE FLANGE LINE FOR INLET/CATCH BASIN GRATES
3. FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER STRUCTURES

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	INVERT ELEVATION	DEPTH FT	611.0420 RECONSTRUCTING MANHOLES EACH	611.0430 RECONSTRUCTING INLETS EACH	611.1003 CATCH BASINS 3-FT DIAMETER EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.1230 CATCH BASINS 2x3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH	SPV.0060.01 MANHOLES 10-FT DIAMETER EACH	SPV.0060.02 MANHOLES 12-FT DIAMETER EACH	611.3220 INLETS 2x2-FT EACH	NOTES
13D	STH 20	335+18.5	31.5' RT	805.57	798.79	5.78	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
13	STH 20	335+18.5	24.0' RT	805.69	798.90	5.54	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
14A	STH 20	333+08.4	59.8' RT		800.17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
14	STH 20	333+48.9	21.1' RT	804.05	798.26	4.54	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
15A	STH 20	345+25.0	26.5' LT	813.11	806.33	5.78	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
15B	STH 20	345+52.2	26.5' RT	812.50	804.97	6.53	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
15	STH 20	345+51.9	19.0' RT	812.62	804.08	7.29	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
16A	STH 20	348+27.1	26.5' LT	801.75	792.75	8.00	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
16B	STH 20	348+27.1	26.5' RT	801.75	792.38	8.37	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
16	STH 20	348+27.1	18.0' RT	801.89	793.61	7.03	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
17B	STH 20	349+08.1	42.4' RT	799.28	793.00	5.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	ECCENTRIC TOP ROTATE CONE TO AVOID CURB AND SIDEWALK
17	STH 20	348+90.5	19.0' RT	799.33	790.92	7.16	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
18A	STH 20	351+34.1	26.5' LT	792.11	786.08	5.03	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
18B	STH 20	351+34.1	26.5' RT	792.11	785.81	5.30	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
18	STH 20	351+34.1	19.0' RT	792.23	786.72	4.26	---	---	---	---	---		1	---	---	---	---	---	---	---	
19A	STH 20	354+06.1	26.3' LT	789.19	783.53	4.66	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
19B	STH 20	354+16.0	26.4' LT	789.18	783.49	4.69	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
19C	STH 20	354+11.6	26.5' RT	789.18	783.36	4.82	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
19D	STH 20	354+21.7	26.5' RT	789.18	783.31	4.87	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
19	STH 20	354+21.7	18.0' RT	789.32	783.76	4.31	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
20A	STH 20	355+08.7	74.6' RT	788.83	781.80	6.03	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
20B	STH 20	354+74.1	77.1' RT	788.83	781.56	6.27	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
20C	STH 20	354+71.3	43.8' RT	788.94	780.16	7.78	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
20D	STH 20	355+30.0	26.5' RT	789.53	779.50	9.03	---	---	---	---	1	---	---	---	---	---	---	---	---	---	
20E	STH 20	355+30.0	26.5' LT	789.53	782.75	5.78	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
20F	STH 20	354+46.3	40.6' RT	790.41	784.60	5.31	1	---	---	---	---	---	---	---	---	---	---	---	---	---	
20	STH 20	355+30.0	18.0' RT	789.67	781.22	7.20	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
21A	STH 20	357+66.1	43.1' LT	790.13	783.10	6.03	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
21B	STH 20	358+07.5	56.6' LT	790.75	782.42	7.33	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
21C	STH 20	358+31.4	59.5' RT	789.35	781.44	6.91	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
21D	STH 20	357+55.9	53.4' RT	789.75	781.31	7.44	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
21E	STH 20	358+19.9	36.1' RT	789.34	780.78	7.56	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
21F	STH 20	358+59.1	75.5' RT	787.51	784.60	2.41	---	1	---	---	---	---	---	---	---	---	---	---	---	---	
21	STH 20	358+16.6	4.9' RT	789.70	778.25	10.20	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
22A	STH 20	360+75.0	30.3' LT	779.60	771.80	7.30	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
22B	STH 20	360+75.0	30.2' RT	779.85	771.73	7.62	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
22C	STH 20	360+36.2	45.9' RT	781.11	775.76	4.85	---	1	---	---	---	---	---	---	---	---	---	---	---	---	
22D	STH 20	361+30.8	42.3' RT	779.13	773.90	4.73	---	1	---	---	---	---	---	---	---	---	---	---	---	---	
22	STH 20	360+75.0	5.2' RT	780.09	771.92	6.92	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
23A	STH 20	362+66.4	70.2' LT	776.63	771.31	4.32	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
23B	STH 20	362+15.3	25.7' LT	777.77	770.80	5.97	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
23C	STH 20	362+79.1	49.5' RT	777.05	771.27	4.78	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
23D	STH 20	362+45.3	49.9' RT	777.10	771.12	4.98	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
23E	STH 20	362+20.0	24.0' RT	777.65	770.71	5.94	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
23	STH 20	362+20.0	3.6' RT	777.84	770.92	5.67	---	---	---	---	---	---	---	---	1	---	---	---	---	---	

NOTES:

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4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER STRUCTURES

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	INVERT ELEVATION	DEPTH FT	611.0420 RECONSTRUCTING MANHOLES EACH	611.0430 RECONSTRUCTING INLETS EACH	611.1003 CATCH BASINS 3-FT DIAMETER EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.1230 CATCH BASINS 2x3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH	SPV.0060.01 MANHOLES 10-FT DIAMETER EACH	SPV.0060.02 MANHOLES 12-FT DIAMETER EACH	611.3220 INLETS 2x2-FT EACH	NOTES
24A	STH 20	364+02.1	26.9' LT	776.17	769.73	5.36	---	---	1	---	---	---	---	---	---	---	---	---	---	---	
24B	STH 20	364+02.1	27.8' RT	776.11	769.62	5.41	---	---	1	---	---	---	---	---	---	---	---	---	---	---	
24	STH 20	364+02.1	16.9' RT	776.31	769.52	5.54	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
25	STH 20	369+41.0	43.3' LT	773.71	766.88	5.58	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
26A	STH 20	369+85.7	26.7' LT	772.96	766.35	5.61	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
26B	STH 20	369+38.3	25.3' LT	773.14	766.15	5.99	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
26C	STH 20	368+73.7	23.5' LT	773.46	766.43	6.03	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
26	STH 20	369+54.6	25.8' LT	773.31	767.57	4.49	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
27A	STH 20	369+07.3	22.0' RT	772.66	765.77	5.89	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
27	STH 20	369+54.2	29.5' RT	772.87	767.08	4.54	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
33A	STH 20	102+87.2	23.0' LT	773.99	767.66	5.25	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
33B	STH 20	102+57.1	21.2' LT	774.02	767.44	5.50	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
33C	STH 20	102+45.9	23.5' RT	774.00	767.22	5.78	---	---	---	---	1	---	---	---	---	---	---	---	---	---	
33D	STH 20	102+67.1	17.5' RT	774.11	767.33	5.78	---	---	---	---	1	---	---	---	---	---	---	---	---	---	
33E	STH 20	102+93.5	40.9' RT	774.16	767.78	5.38	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
33F	STH 20	103+24.6	41.0' RT	774.17	768.15	5.02	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
33	STH 20	102+47.7	10.1' RT	774.24	767.22	5.77	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
34A	STH 20	103+26.4	74.0' LT	773.66	766.94	5.72	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
34B	STH 20	102+90.4	74.2' LT	773.61	766.97	5.56	---	---	1	---	---	---	---	---	---	---	---	---	---	---	
34	STH 20	102+96.0	81.4' LT	773.68	768.38	4.05	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
35A	STH 20	100+30.0	24.7' LT	774.79	767.71	6.00	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
35	STH 20	100+30.1	11.9' RT	775.07	766.78	7.04	---	---	---	---	---	---	---	---	1	---	---	---	---	---	
36A	STH 20	366+01.6	27.3' RT	775.11	768.12	5.91	---	---	1	---	---	---	---	---	---	---	---	---	---	---	
36	STH 20	366+00.8	46.8' RT	775.09	766.48	7.36	---	---	---	---	---	---	---	---	---	---	1	---	---	---	
37A	STH 20	314+21.1	167.5' RT	804.52	800.35	3.17	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
37	STH 20	314+22.6	228.0' RT		802.18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
38A	STH 20	313+33.1	204.0' LT		804.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
38B	STH 20	313+37.9	85.5' LT	806.64	802.86	2.53	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
38C	STH 20	313+60.3	89.3' LT	805.76	802.72	2.04	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
38D	STH 20	313+19.1	65.7' LT		802.26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
38E	STH 20	313+68.3	70.5' LT	806.11	801.37	3.49	---	---	---	---	---	---	---	---	---	1	---	---	---	---	
38	STH 20	314+43.2	67.2' LT		801.25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
39A	STH 20	315+19.6	68.5' RT		800.83	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
39B	STH 20	316+88.1	59.1' RT	806.66	800.26	5.65	---	---	---	---	---	---	---	---	---	---	---	---	1	---	Special Flat Slab Top Design Req'd, minimal adjustment
39C	STH 20	316+16.6	63.5' LT		800.17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
39D	STH 20	316+88.1	54.6' LT	805.66	800.00	4.91	---	---	---	---	---	---	---	---	---	---	---	---	1	---	Special Flat Slab Top Design Req'd, minimal adjustment
39E	STH 20	320+00.0	60.8' LT	805.00	799.49	4.76	---	---	---	---	---	---	---	---	---	---	---	1	---	---	Special Flat Slab Top Design Req'd, minimal adjustment
39	STH 20	321+89.1	84.1' LT		799.18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
40A	STH 20	371+87	23.5' LT	771.98	765.40	5.58	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
40B	STH 20	371+87	23.5' RT	771.36	764.87	5.49	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
40C	STH 20	371+63	23.5' RT	771.43	765.02	5.41	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
40D	STH 20	372+51	251.1' RT		764.79	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
40	STH 20	372+51	23.3' RT	771.75	766.17	4.33	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
41	STH 20	372+92	20.0' RT	772.16	766.37	4.54	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
42	ST. THOMAS STREET	161+38	20.3' RT	773.29	767.17	4.87	---	---	---	---	---	---	1	---	---	---	---	---	---	---	

NOTES:

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3. FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER STRUCTURES

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	INVERT ELEVATION	DEPTH FT	611.0420 RECONSTRUCTING MANHOLES EACH	611.0430 RECONSTRUCTING INLETS EACH	611.1003 CATCH BASINS 3-FT DIAMETER EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.1230 CATCH BASINS 2x3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH	SPV.0060.01 MANHOLES 10-FT DIAMETER EACH	SPV.0060.02 MANHOLES 12-FT DIAMETER EACH	611.3220 INLETS 2x2-FT EACH	NOTES
43A	ST. THOMAS STREET	160+63	23.7' RT	772.29	765.64	5.65	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
43	ST. THOMAS STREET	160+62	17.6' RT	772.49	766.79	4.45	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
44A	ST. THOMAS STREET	160+60	23.4' LT	772.55	765.89	5.66	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
44	ST. THOMAS STREET	160+60	17.4' LT	772.64	766.60	4.79	---	---	---	---	---	---	1		---	---	---	---	---	---	
45A	STH 20	373+32	23.5' RT	771.84	765.35	5.49	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
45B	STH 20	373+32	23.5' LT	772.53	765.62	5.91	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
45	STH 20	373+32	15.7' RT	771.97	767.00	3.72	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
46	STH 20	373+75	19.3' RT	772.13	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
47A	STH 20	375+88	23.3' LT	773.53	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
47	STH 20	375+83	18.5' RT	773.28	768.50	3.53	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
48A	STH 20	376+84	23.5' RT	773.49	767.1	5.39	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
48B	STH 20	376+84	23.5' LT	773.76	767.25	5.51	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
48	STH 20	376+84	15.6' RT	773.75	769.00	3.50	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
49A	STH 20	379+77	23.5' LT	773.72	767.18	5.54	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
49B	STH 20	379+77	23.5' RT	773.79	767.40	5.39	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
49	STH 20	379+77	16.1' LT	773.9	769	3.65	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
50A	STH 20	380+87	23.0' LT	773.40	766.61	5.62	---	---	1	---	---	---	---	---	---	---	---	---	---	---	
50	STH 20	380+87	5.6' LT	773.22	768.42	3.55	---	---		---	---	---	---	1	---	---	---	---	---	---	
51	STH 20	383+10	35.8' RT	770.35	766.88	2.22	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
52A	STH 20	383+49	23.5' LT	770.79	766.02	3.77	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
52	STH 20	383+48	23.7' RT	770.79	766.5	3.29	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
53A	STH 20	384+62	23.4' LT	770.25	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
53B	RIVER ROAD	384+37	54.6' RT	770.06	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
53C	RIVER ROAD	179+40	19.1' LT	770.24	764.48	4.76	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
53D	RIVER ROAD	179+32	32.1' LT	769.16	764.60	3.39	---	---	1	---	---	---	---	---	---	---	---	---	---	---	
53	STH 20	384+62	24.0' RT	770.16	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
54A	STH 20	385+57	36.8' RT	765.79	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
54	STH 20	385+46	6.0' LT	769.49	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
55A	STH 20	386+08	17.5' RT	768.82	763.04	4.78	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
55B	STH 20	386+08	17.5' LT	768.98	762.97	5.01	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
55C	STH 20	386+23	17.5' LT	769.02	765.12	2.9	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
55D	STH 20	386+23	17.5' LT	768.86	765.19	2.67	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
55	STH 20	386+08	5.8' LT	769.20	764.20	3.75	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
56A	STH 20	388+79	17.5' LT	771.40	764.90	5.50	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
56B	STH 20	388+79	18.0' RT	771.34	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
56	STH 20	388+79	4.9' LT	771.61	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
57A	STH 20	394+69	17.5' LT	771.65	767.14	3.51	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
57B	STH 20	395+25	17.5' LT	771.86	767.01	3.85	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
57C	STH 20	395+25	17.5' RT	771.86	766.98	3.88	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
57D	STH 20	394.96	17.5' RT	771.70	767.08	3.62	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
57E	STH 20	394+62	17.5' RT	771.65	767.16	3.49	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
57	STH 20	395+25	1.0' LT	772.16	768.98	2.68	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
58A	STH 20	396+61	52.4' LT	0.00	768.75	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
58	STH 20	396+61	1.0' LT	774.44	768.81	4.38	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
59	STH 20	397+13	6.8' LT	775.63	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	

NOTES:

1. STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
2. RIM ELEVATIONS ARE AT THE CENTER OF MANHOLES AND FIELD INLETS AND AT THE FLANGE LINE FOR INLET/CATCH BASIN GRATES
3. FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER STRUCTURES

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	INVERT ELEVATION	DEPTH FT	611.0420 RECONSTRUCTING MANHOLES EACH	611.0430 RECONSTRUCTING INLETS EACH	611.1003 CATCH BASINS 3-FT DIAMETER EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.1230 CATCH BASINS 2x3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH	SPV.0060.01 MANHOLES 10-FT DIAMETER EACH	SPV.0060.02 MANHOLES 12-FT DIAMETER EACH	611.3220 INLETS 2x2-FT EACH	NOTES
60A	EVERGREEN DRIVE	190+38	13.2' RT	777.08	771.12	4.96	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
60B	EVERGREEN DRIVE	398+85	50.5' RT	776.03	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
60C	EVERGREEN DRIVE	398+37	49.9' RT	776.72	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
60	STH 20	389+70	6.0' LT	777.56	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
61A	STH 20	398+95	35.5' LT	777.31	774.52	1.62	---	---	---	---	---	---	---	---	---	---	---	---	---	1	
61B	STH 20	398+99	17.5' LT	777.51	770.72	5.79	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
61C	STH 20	398+99	17.5' RT	777.50	770.90	5.60	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
61	STH 20	398+99	6.0' LT	777.71	772.52	3.94	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
62A	STH 20	400+36	38.2' LT	778.27	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
62	STH 20	400+17	5.7' LT	778.30	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
63A	STH 20	401+49	17.7' LT	778.64	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
63B	STH 20	401+49	18.0' RT	778.64	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
63	STH 20	401+49	6.3' LT	778.95	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
64A	STH 20	402+49	32.9' LT	778.15	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
64	STH 20	402+48	6.4' LT	779.50	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
65A	STH 20	404+25	17.5' LT	781.86	773.61	7.25	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
65B	STH 20	404+25	28.7' RT	781.63	773.77	6.86	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
65	STH 20	404+25	6.7' LT	782.05	775.30	5.50	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
66	STH 20	373+75	15.4' LT	772.85	EXIST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
					CATEGORY 0010 SUBTOTAL		1	3	6	30	3	66	25	18	2	1	1	1	2	1	

NOTES:

1. STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
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ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER STRUCTURES

CATEGORY 0150							611.0420	611.0430	611.1003	611.1004	611.1005	611.1230	611.2004	611.2005	611.2006	611.2007	611.2008	SPV.0060.01	SPV.0060.02	611.3220	
									CATCH BASINS				MANHOLES								
							RECONSTRUCTING		3-FT	4-FT	5-FT		4-FT	5-FT	6-FT	7-FT	8-FT	10-FT	12-FT	INLETS	
				RIM	INVERT	DEPTH	MANHOLES	INLETS	DIAMETER	DIAMETER	DIAMETER	2x3-FT	DIAMETER	DIAMETER	DIAMETER	DIAMETER	DIAMETER	DIAMETER	DIAMETER	2x2-FT	
STRUCTURE	ROADWAY	STATION	OFFSET	ELEVATION	ELEVATION	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	NOTES
28A	E. MAIN STREET	109+72.6	23.5' LT	775.54	769.12	5.42	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
28B	E. MAIN STREET	109+72.6	25.7' RT	775.84	769.01	5.75	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
28C	E. MAIN STREET	110+09.4	14.4' RT	776.23	769.74	5.99	1	---	---	---	---	---	---	---	---	---	---	---	---	---	
28	E. MAIN STREET	109+72.6	14.4' RT	776.05	769.67	5.13	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
29A	E. MAIN STREET	109+46.1	84.4' LT	775.10	768.91	5.19	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
29B	E. MAIN STREET	109+00.1	66.3' LT	774.96	768.52	5.44	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
29C	E. MAIN STREET	109+17.1	41.3' RT	775.44	768.61	5.75	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
29D	E. MAIN STREET	109+07.4	41.3' RT	775.63	770.07	4.31	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
29E	E. MAIN STREET	108+94.8	41.8' RT	775.25	768.63	5.54	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
29	E. MAIN STREET	109+00.0	11.0' RT	775.80	769.02	5.53	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
30A	E. MAIN STREET	106+05.2	42.0' LT	774.40	768.54	4.86	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
30B	E. MAIN STREET	106+33.1	42.0' LT	774.39	768.40	4.99	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
30C	E. MAIN STREET	106+65.1	18.1' LT	774.63	768.20	5.43	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
30D	E. MAIN STREET	106+04.4	42.2' RT	774.68	768.43	5.25	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
30E	E. MAIN STREET	106+33.0	42.2' RT	774.18	768.29	4.89	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
30F	E. MAIN STREET	106+65.3	17.9' RT	774.64	767.84	5.80	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
30	E. MAIN STREET	106+65.3	11.0' RT	774.75	768.55	4.95	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
31A	E. MAIN STREET	105+50.8	23.5' LT	774.10	768.25	4.85	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
31B	E. MAIN STREET	105+40.8	23.5' LT	774.09	768.15	4.94	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
31C	E. MAIN STREET	105+50.8	23.5' RT	774.10	768.07	5.03	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
31D	E. MAIN STREET	105+40.8	23.5' RT	774.09	767.97	5.12	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
31	E. MAIN STREET	105+40.8	11.0' RT	774.31	768.30	4.76	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
32A	E. MAIN STREET	103+52.7	17.5' LT	774.31	767.78	5.53	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
32B	E. MAIN STREET	103+52.7	17.5' RT	774.31	767.52	5.79	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
32	E. MAIN STREET	103+52.7	11.0' RT	774.41	767.93	5.23	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
					CATEGORY 0150 SUBTOTAL		1	0	0	8	0	10	2	4	0	0	0	0	0	0	
					PROJECT TOTAL		**2**	**3**	**6**	**38**	**3**	**76**	**27**	**22**	**2**	**1**	**1**	**1**	**2**	**1**	

NOTES:

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ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER STRUCTURES

CATEGORY 0150							611.0420	611.0430	611.1003	611.1004	611.1005	611.1230	611.2004	611.2005	611.2006	611.2007	611.2008	SPV.0060.01	SPV.0060.02	611.3220	
									CATCH BASINS				MANHOLES								
							RECONSTRUCTING		3-FT	4-FT	5-FT		4-FT	5-FT	6-FT	7-FT	8-FT	10-FT	12-FT	INLETS	
				RIM	INVERT	DEPTH	MANHOLES	INLETS	DIAMETER	DIAMETER	DIAMETER	2x3-FT	DIAMETER	DIAMETER	DIAMETER	DIAMETER	DIAMETER	DIAMETER	DIAMETER	2x2-FT	
STRUCTURE	ROADWAY	STATION	OFFSET	ELEVATION	ELEVATION	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	NOTES
28A	E. MAIN STREET	109+72.6	23.5' LT	775.54	769.12	7.42	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
28B	E. MAIN STREET	109+72.6	25.7' RT	775.84	769.01	7.75	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
28C	E. MAIN STREET	110+09.4	14.4' RT	776.23	769.74	5.99	1	---	---	---	---	---	---	---	---	---	---	---	---	---	
28	E. MAIN STREET	109+72.6	14.4' RT	776.05	769.67	5.13	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
29A	E. MAIN STREET	109+46.1	84.4' LT	775.10	768.91	7.19	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
29B	E. MAIN STREET	109+00.1	66.3' LT	774.96	768.52	7.44	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
29C	E. MAIN STREET	109+17.1	41.3' RT	775.44	768.61	7.75	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
29D	E. MAIN STREET	109+07.4	41.3' RT	775.63	770.07	4.31	---	---	---	---	---	---	1	---	---	---	---	---	---	---	
29E	E. MAIN STREET	108+94.8	41.8' RT	775.25	768.63	7.54	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
29	E. MAIN STREET	109+00.0	11.0' RT	775.80	769.02	5.53	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
30A	E. MAIN STREET	106+05.2	42.0' LT	774.40	768.54	6.86	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
30B	E. MAIN STREET	106+33.1	42.0' LT	774.39	768.40	6.99	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
30C	E. MAIN STREET	106+65.1	18.1' LT	774.63	768.20	7.43	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
30D	E. MAIN STREET	106+04.4	42.2' RT	774.68	768.43	7.25	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
30E	E. MAIN STREET	106+33.0	42.2' RT	774.18	768.29	6.89	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
30F	E. MAIN STREET	106+65.3	17.9' RT	774.64	767.84	7.80	---	---	---	1	---	---	---	---	---	---	---	---	---	---	
30	E. MAIN STREET	106+65.3	11.0' RT	774.75	768.55	4.95	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
31A	E. MAIN STREET	105+50.8	23.5' LT	774.10	768.25	6.85	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
31B	E. MAIN STREET	105+40.8	23.5' LT	774.09	768.15	6.94	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
31C	E. MAIN STREET	105+50.8	23.5' RT	774.10	768.07	7.03	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
31D	E. MAIN STREET	105+40.8	23.5' RT	774.09	767.97	7.12	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
31	E. MAIN STREET	105+40.8	11.0' RT	774.31	768.30	4.76	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
32A	E. MAIN STREET	103+52.7	17.5' LT	774.31	767.78	7.53	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
32B	E. MAIN STREET	103+52.7	17.5' RT	774.31	767.52	7.79	---	---	---	---	---	1	---	---	---	---	---	---	---	---	
32	E. MAIN STREET	103+52.7	11.0' RT	774.41	767.93	5.23	---	---	---	---	---	---	---	1	---	---	---	---	---	---	
					CATEGORY 0150 SUBTOTAL		1	0	0	8	0	10	2	4	0	0	0	0	0	0	
					PROJECT TOTAL		**2**	**3**	**6**	**38**	**3**	**76**	**27**	**22**	**2**	**1**	**1**	**1**	**2**	**1**	

NOTES:

1. STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
2. RIM ELEVATIONS ARE AT THE CENTER OF MANHOLES AND FIELD INLETS AND AT THE FLANGE LINE FOR INLET/CATCH BASIN GRATES
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4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER COVERS

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	611.0530 MANHOLE COVERS TYPE J EACH	611.0545 MANHOLE COVERS TYPE L EACH H	611.0606 INLET COVERS TYPE B EACH	611.0624 INLET COVERS TYPE H EACH	611.0666 INLET COVERS TYPE Z EACH	SPV.0060.03 INLET COVERS SPECIAL EACH	SPV.0060.04 MANHOLES COVERS SPECIAL EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH
1A	STH 20	308+86.3	17.5' LT	807.80	---	- -	---	1	---	---	---	---	---
1B	STH 20	308+91.8	21.9' RT	807.66	---	- -	---	1	---	---	---	---	---
1	STH 20	308+92.8	11.9' RT	807.82	1	1 -	---	---	---	---	---	---	---
2A	STH 20	311+41.3	21.5' LT	806.79	---	- -	---	1	---	---	---	---	---
2B	STH 20	311+41.3	32.5' RT	806.33	---	- -	---	1	---	---	---	---	---
2	STH 20	311+41.3	25.5' RT	806.44	1	1 -	---	---	---	---	---	---	---
3A	STH 20	314+79.5	61.4' RT		---	- -	---	---	---	---	---	---	---
3	STH 20	314+26.4	23.0' RT	806.51	1	1 -	---	---	---	---	---	---	---
4A	STH 20	315+50.0	32.5' RT	805.79	---	- -	---	1	---	---	---	---	---
4B	STH 20	315+60.0	32.5' RT	805.79	---	- -	---	1	---	---	---	---	---
4C	STH 20	315+50.0	32.5' LT	805.55	---	- -	---	1	---	---	---	---	---
4D	STH 20	315+60.0	32.5' LT	805.55	---	- -	---	1	---	---	---	---	---
4	STH 20	315+60.0	53.2' LT		---	- -	---	---	---	---	---	---	---
5A	STH 20	320+40.2	28.2' LT	805.09	---	- -	---	1	---	---	---	---	---
5B	STH 20	320+39.9	26.5' RT	805.12	---	- -	---	1	---	---	---	---	---
5	STH 20	321+09.0	55.8' RT	0.00	---	- -	---	---	---	---	---	---	---
6A	STH 20	321+24.6	56.9' LT	804.28	---	- -	---	1	---	---	---	---	---
6B	STH 20	321+70.9	56.5' LT	804.30	---	- -	---	1	---	---	---	---	---
6	STH 20	322+01.2	73.6' LT		---	- -	---	---	---	---	---	---	---
7A	STH 20	322+66.0	26.5' LT	803.99	---	- -	---	1	---	---	---	---	---
7B	STH 20	322+66.0	26.5' RT	803.99	---	- -	---	1	---	---	---	---	---
7	STH 20	322+66.0	52.8' RT		---	- -	---	---	---	---	---	---	---
8A	STH 20	325+55.9	26.5' LT	802.65	---	- -	---	1	---	---	---	---	---
8B	STH 20	325+65.9	26.5' LT	802.64	---	- -	---	1	---	---	---	---	---
8C	STH 20	325+55.9	26.5' RT	802.65	---	- -	---	1	---	---	---	---	---
8D	STH 20	325+65.9	26.5' RT	802.64	---	- -	---	1	---	---	---	---	---
8	STH 20	325+65.9	51.0' RT		---	- -	---	---	---	---	---	---	---
9A	STH 20	331+41.7	26.5' LT	802.56	---	- -	---	1	---	---	---	---	---
9B	STH 20	331+51.7	26.5' LT	802.57	---	- -	---	1	---	---	---	---	---
9C	STH 20	331+41.7	26.5' RT	802.56	---	- -	---	1	---	---	---	---	---
9D	STH 20	331+51.7	26.5' RT	802.57	---	- -	---	1	---	---	---	---	---
9	STH 20	331+75.9	58.5' RT		---	- -	---	---	---	---	---	---	---
10A	STH 20	334+43.8	48.3' LT	804.64	---	- -	---	1	---	---	---	---	---
10	STH 20	334+22.7	22.3' RT	804.76	1	1 -	---	---	---	---	---	---	---
11A	STH 20	340+43.4	42.1' LT	817.47	---	- -	---	1	---	---	---	---	---
11B	STH 20	340+09.8	44.0' LT	816.35	---	- -	---	1	---	---	---	---	---
11C	STH 20	340+08.9	26.5' RT	815.75	---	- -	---	1	---	---	---	---	---
11D	STH 20	339+66.6	117.0' LT	819.20	---	- -	---	1	---	---	---	---	---
11	STH 20	340+08.9	19.0' RT	815.87	1	1 -	---	---	---	---	---	---	---
12A	STH 20	337+26.0	26.5' LT	807.74	---	- -	---	1	---	---	---	---	---
12B	STH 20	337+26.0	26.5' RT	807.74	---	- -	---	1	---	---	---	---	---
12	STH 20	337+26.0	19.0' RT	807.86	1	1 -	---	---	---	---	---	---	---
13A	STH 20	334+75.4	48.4' LT	804.88	---	- -	---	1	---	---	---	---	---
13B	STH 20	335+18.2	57.2' LT	807.55	1	1 -	---	---	---	---	---	---	---
13C	STH 20	335+18.5	31.5' LT	805.57	---	- -	---	1	---	---	---	---	---

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4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER COVERS

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	611.0530 MANHOLE COVERS TYPE J EACH	611.0545 MANHOLE COVERS TYPE L EACH H	611.0606 INLET COVERS TYPE B EACH	611.0624 INLET COVERS TYPE H EACH	611.0666 INLET COVERS TYPE Z EACH	SPV.0060.03 INLET COVERS SPECIAL EACH	SPV.0060.04 MANHOLES COVERS SPECIAL EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH
13D	STH 20	335+18.5	31.5' RT	805.57	---	---	---	1	---	---	---	---	---
13	STH 20	335+18.5	24.0' RT	805.69	1	---	---	---	---	---	---	---	---
14A	STH 20	333+08.4	59.8' RT		---	---	---	---	---	---	---	---	---
14	STH 20	333+48.9	21.1' RT	804.05	1	---	---	---	---	---	---	---	---
15A	STH 20	345+25.0	26.5' LT	813.11	---	---	---	1	---	---	---	---	---
15B	STH 20	345+52.2	26.5' RT	812.50	---	---	---	1	---	---	---	---	---
15	STH 20	345+51.9	19.0' RT	812.62	1	---	---	---	---	---	---	---	---
16A	STH 20	348+27.1	26.5' LT	801.75	---	---	---	1	---	---	---	---	---
16B	STH 20	348+27.1	26.5' RT	801.75	---	---	---	1	---	---	---	---	---
16	STH 20	348+27.1	18.0' RT	801.89	1	---	---	---	---	---	---	---	---
17B	STH 20	349+08.1	42.4' RT	799.28	1	---	---	---	---	---	---	---	---
17	STH 20	348+90.5	19.0' RT	799.33	1	---	---	---	---	---	---	---	---
18A	STH 20	351+34.1	26.5' LT	792.11	---	---	---	1	---	---	---	---	---
18B	STH 20	351+34.1	26.5' RT	792.11	---	---	---	1	---	---	---	---	---
18	STH 20	351+34.1	19.0' RT	792.23	1	---	---	---	---	---	---	---	---
19A	STH 20	354+06.1	26.3' LT	789.19	---	---	---	1	---	---	---	---	---
19B	STH 20	354+16.0	26.4' LT	789.18	---	---	---	1	---	---	---	---	---
19C	STH 20	354+11.6	26.5' RT	789.18	---	---	---	1	---	---	---	---	---
19D	STH 20	354+21.7	26.5' RT	789.18	---	---	---	1	---	---	---	---	---
19	STH 20	354+21.7	18.0' RT	789.32	1	---	---	---	---	---	---	---	---
20A	STH 20	355+08.7	74.6' RT	788.83	---	---	---	1	---	---	---	---	---
20B	STH 20	354+74.1	77.1' RT	788.83	---	---	---	1	---	---	---	---	---
20C	STH 20	354+71.3	43.8' RT	788.94	---	---	---	1	---	---	---	---	---
20D	STH 20	355+30.0	26.5' RT	789.53	---	---	---	1	---	---	---	---	---
20E	STH 20	355+30.0	26.5' LT	789.53	---	---	---	1	---	---	---	---	---
20F	STH 20	354+46.3	40.6' RT	790.41	---	---	---	---	---	---	---	---	---
20	STH 20	355+30.0	18.0' RT	789.67	1	---	---	---	---	---	---	---	---
21A	STH 20	357+66.1	43.1' LT	790.13	---	---	---	1	---	---	---	---	---
21B	STH 20	358+07.5	56.6' LT	790.75	---	---	---	1	---	---	---	---	---
21C	STH 20	358+31.4	59.5' RT	789.35	---	---	---	1	---	---	---	---	---
21D	STH 20	357+55.9	53.4' RT	789.75	---	---	---	1	---	---	---	---	---
21E	STH 20	358+19.9	36.1' RT	789.34	---	---	---	1	---	---	---	---	---
21F	STH 20	358+59.1	75.5' RT	787.51	---	---	---	---	---	---	---	---	---
21	STH 20	358+16.6	4.9' RT	789.70	1	---	---	---	---	---	---	---	---
22A	STH 20	360+75.0	30.3' LT	779.60	---	---	---	---	---	---	---	---	---
22B	STH 20	360+75.0	30.2' RT	779.85	---	---	---	---	---	---	---	---	---
22C	STH 20	360+36.2	45.9' RT	781.11	---	---	---	---	---	---	---	---	---
22D	STH 20	361+30.8	42.3' RT	779.13	---	---	---	---	---	---	---	---	---
22	STH 20	360+75.0	5.2' RT	780.09	1	---	---	---	---	---	---	---	---
23A	STH 20	362+66.4	70.2' LT	776.63	---	---	---	1	---	---	---	---	---
23B	STH 20	362+15.3	25.7' LT	777.77	---	---	---	1	---	---	---	---	---
23C	STH 20	362+79.1	49.5' RT	777.05	---	---	---	1	---	---	---	---	---
23D	STH 20	362+45.3	49.9' RT	777.10	---	---	---	1	---	---	---	---	---
23E	STH 20	362+20.0	24.0' RT	777.65	---	---	---	1	---	---	---	---	---
23	STH 20	362+20.0	3.6' RT	777.84	1	---	---	---	---	---	---	---	---

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4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER COVERS

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	611.0530 MANHOLE COVERS TYPE J EACH	611.0545 MANHOLE COVERS TYPE L EACH H	611.0606 INLET COVERS TYPE B EACH	611.0624 INLET COVERS TYPE H EACH	611.0666 INLET COVERS TYPE Z EACH	SPV.0060.03 INLET COVERS SPECIAL EACH	SPV.0060.04 MANHOLES COVERS SPECIAL EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH
24A	STH 20	364+02.1	26.9' LT	776.17	---	---	---	---	1	---	---	---	---
24B	STH 20	364+02.1	27.8' RT	776.11	---	---	---	---	1	---	---	---	---
24	STH 20	364+02.1	16.9' RT	776.31	1	---	---	---	---	---	---	---	---
25	STH 20	369+41.0	43.3' LT	773.71	1	---	---	---	---	---	---	---	---
26A	STH 20	369+85.7	26.7' LT	772.96	---	---	---	1	---	---	---	---	---
26B	STH 20	369+38.3	25.3' LT	773.14	---	---	---	1	---	---	---	---	---
26C	STH 20	368+73.7	23.5' LT	773.46	---	---	---	1	---	---	---	---	---
26	STH 20	369+54.6	25.8' LT	773.31	1	---	---	---	---	---	---	---	---
27A	STH 20	369+07.3	22.0' RT	772.66	---	---	---	1	---	---	---	---	---
27	STH 20	369+54.2	29.5' RT	772.87	1	---	---	---	---	---	---	---	---
33A	STH 20	102+87.2	23.0' LT	773.99	---	---	---	---	1	---	---	---	---
33B	STH 20	102+57.1	21.2' LT	774.02	---	---	---	---	1	---	---	---	---
33C	STH 20	102+45.9	23.5' RT	774.00	---	---	---	1	---	---	---	---	---
33D	STH 20	102+67.1	17.5' RT	774.11	---	---	---	1	---	---	---	---	---
33E	STH 20	102+93.5	40.9' RT	774.16	---	---	---	1	---	---	---	---	---
33F	STH 20	103+24.6	41.0' RT	774.17	---	---	---	1	---	---	---	---	---
33	STH 20	102+47.7	10.1' RT	774.24	1	---	---	---	---	---	---	---	---
34A	STH 20	103+26.4	74.0' LT	773.66	---	---	---	1	---	---	---	---	---
34B	STH 20	102+90.4	74.2' LT	773.61	---	---	---	---	1	---	---	---	---
34	STH 20	102+96.0	81.4' LT	773.68	1	---	---	---	---	---	---	---	---
35A	STH 20	100+30.0	24.7' LT	774.79	---	---	---	---	1	---	---	---	---
35	STH 20	100+30.1	11.9' RT	775.07	1	---	---	---	---	---	---	---	---
36A	STH 20	366+01.6	27.3' RT	775.11	---	---	---	---	1	---	---	---	---
36	STH 20	366+00.8	46.8' RT	775.09	1	---	---	---	---	---	---	---	---
37A	STH 20	314+21.1	167.5' RT	804.52	---	---	---	1	---	---	---	---	---
37	STH 20	314+22.6	228.0' RT		---	---	---	---	---	---	---	---	---
38A	STH 20	313+33.1	204.0' LT		---	---	---	---	---	---	---	---	---
38B	STH 20	313+37.9	85.5' LT	806.64	1	---	---	---	---	---	---	---	---
38C	STH 20	313+60.3	89.3' LT	805.76	---	---	---	1	---	---	---	---	---
38D	STH 20	313+19.1	65.7' LT		---	---	---	---	---	---	---	---	---
38E	STH 20	313+68.3	70.5' LT	806.11	1	---	---	---	---	---	---	---	---
38	STH 20	314+43.2	67.2' LT		---	---	---	---	---	---	---	---	---
39A	STH 20	315+19.6	68.5' RT		---	---	---	---	---	---	---	---	---
39B	STH 20	316+88.1	59.1' RT	806.66	---	---	---	---	---	---	1	---	---
39C	STH 20	316+16.6	63.5' LT		---	---	---	---	---	---	---	---	---
39D	STH 20	316+88.1	54.6' LT	805.66	---	---	---	---	---	---	1	---	---
39E	STH 20	320+00.0	60.8' LT	805.00	---	---	---	---	---	1	---	---	---
39	STH 20	321+89.1	84.1' LT		---	---	---	---	---	---	---	---	---
40A	STH 20	371+87	23.5' LT	771.98	---	---	---	1	---	---	---	---	---
40B	STH 20	371+87	23.5' RT	771.36	---	---	---	1	---	---	---	---	---
40C	STH 20	371+63	23.5' RT	771.43	---	---	---	1	---	---	---	---	---
40D	STH 20	372+51	251.1' RT		---	---	---	---	---	---	---	---	---
40	STH 20	372+51	23.3' RT	771.75	1	---	---	---	---	---	---	---	---
41	STH 20	372+92	20.0' RT	772.16	1	---	---	---	---	---	---	---	---
42	ST. THOMAS STREET	161+38	20.3' RT	773.29	1	---	---	---	---	---	---	---	---

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4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER COVERS

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	611.0530 MANHOLE COVERS TYPE J EACH	611.0545 MANHOLE COVERS TYPE L EACH H	611.0606 INLET COVERS TYPE B EACH	611.0624 INLET COVERS TYPE H EACH	611.0666 INLET COVERS TYPE Z EACH	SPV.0060.03 INLET COVERS SPECIAL EACH	SPV.0060.04 MANHOLES COVERS SPECIAL EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH
43A	ST. THOMAS STREET	160+63	23.7' RT	772.29	---	---	---	1	---	---	---	---	---
43	ST. THOMAS STREET	160+62	17.6' RT	772.49	1	---	---	---	---	---	---	---	---
44A	ST. THOMAS STREET	160+60	23.4' LT	772.55	---	---	---	1	---	---	---	---	---
44	ST. THOMAS STREET	160+60	17.4' LT	772.64	1	---	---		---	---	---	---	---
45A	STH 20	373+32	23.5' RT	771.84	---	---	---	1	---	---	---	---	---
45B	STH 20	373+32	23.5' LT	772.53	---	---	---	1	---	---	---	---	---
45	STH 20	373+32	15.7' RT	771.97	1	---	---	---	---	---	---	---	---
46	STH 20	373+75	19.3' RT	772.13	---	---	---	---	---	---	---	1	---
47A	STH 20	375+88	23.3' LT	773.53		---	---	---	---	---	---	---	1
47	STH 20	375+83	18.5' RT	773.28	1	---	---	---	---	---	---	---	---
48A	STH 20	376+84	23.5' RT	773.49	---	---	---	1	---	---	---	---	---
48B	STH 20	376+84	23.5' LT	773.76	---	---	---	1	---	---	---	---	---
48	STH 20	376+84	15.6' RT	773.75	1	---	---	---	---	---	---	---	---
49A	STH 20	379+77	23.5' LT	773.72	---	---	---	1	---	---	---	---	---
49B	STH 20	379+77	23.5' RT	773.79	---	---	---	1	---	---	---	---	---
49	STH 20	379+77	16.1' LT	773.90	1	---	---	---	---	---	---	---	---
50A	STH 20	380+87	23.0' LT	773.40	---	---	1	---	---	---	---	---	---
50	STH 20	380+87	5.6' LT	773.22	1	---	---	---	---	---	---	---	---
51	STH 20	383+10	35.8' RT	770.35	1	---	---	---	---	---	---	---	---
52A	STH 20	383+49	23.5' LT	770.79	---	---	---	1	---	---	---	---	---
52	STH 20	383+48	23.7' RT	770.79	---	---	---	1	---	---	---	---	---
53A	STH 20	384+62	23.4' LT	770.25	---	---	---	---	---	---	---	---	1
53B	RIVER ROAD	384+37	54.6' RT	770.06	---	---	---	---	---	---	---	---	1
53C	RIVER ROAD	179+40	19.1' LT	770.24	---	---	---	1	---	---	---	---	---
53D	RIVER ROAD	179+32	32.1' LT	769.16	---	---	1	---	---	---	---	---	---
53	STH 20	384+62	24.0' RT	770.16	---	---	---	---	---	---	---	---	1
54A	STH 20	385+57	36.8' RT	765.79	---	---	---	---	---	---	---	---	1
54	STH 20	385+46	6.0' LT	769.49	---	---	---	---	---	---	---	1	---
55A	STH 20	386+08	17.5' RT	768.82	---	---	---	1	---	---	---	---	---
55B	STH 20	386+08	17.5' LT	768.98	---	---	---	1	---	---	---	---	---
55C	STH 20	386+23	17.5' LT	769.02	---	---	---	1	---	---	---	---	---
55D	STH 20	386+23	17.5' LT	768.86	---	---	---	1	---	---	---	---	---
55	STH 20	386+08	5.8' LT	769.20	1	---	---	---	---	---	---	---	---
56A	STH 20	388+79	17.5' LT	771.40	---	---	---	1	---	---	---	---	---
56B	STH 20	388+79	18.0' RT	771.34	---	---	---	---	---	---	---	---	1
56	STH 20	388+79	4.9' LT	771.61	---	---	---	---	---	---	---	1	---
57A	STH 20	394+69	17.5' LT	771.65	---	---	---	1	---	---	---	---	---
57B	STH 20	395+25	17.5' LT	771.86	---	---	---	1	---	---	---	---	---
57C	STH 20	395+25	17.5' RT	771.86	---	---	---	1	---	---	---	---	---
57D	STH 20	394.96	17.5' RT	771.70	---	---	---	1	---	---	---	---	---
57E	STH 20	394+62	17.5' RT	771.65	---	---	---	1	---	---	---	---	---
57	STH 20	395+25	1.0' LT	772.16	---	1	---	---	---	---	---	---	---
58A	STH 20	396+61	52.4' LT	0.00	---	---	---	---	---	---	---	---	---
58	STH 20	396+61	1.0' LT	774.44	1	---	---	---	---	---	---	---	---
59	STH 20	397+13	6.8' LT	775.63	---	---	---	---	---	---	---	1	---

NOTES:

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3. FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

3

STORM SEWER COVERS

STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	611.0530 MANHOLE COVERS TYPE J EACH	611.0545 MANHOLE COVERS TYPE L EACH H	611.0606 INLET COVERS TYPE B EACH	611.0624 INLET COVERS TYPE H EACH	611.0666 INLET COVERS TYPE Z EACH	SPV.0060.03 INLET COVERS SPECIAL EACH	SPV.0060.04 MANHOLES COVERS SPECIAL EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH
60A	EVERGREEN DRIVE	190+38	13.2' RT	777.08	---	---	---	1	---	---	---	---	---
60B	EVERGREEN DRIVE	398+85	50.5' RT	776.03	---	---	---	---	---	---	---	---	---
60C	EVERGREEN DRIVE	398+37	49.9' RT	776.72	---	---	---	---	---	---	---	---	---
60	STH 20	389+70	6.0' LT	777.56	---	---	---	---	---	---	---	1	---
61A	STH 20	398+95	35.5' LT	777.31	---	---	1	---	---	---	---	---	---
61B	STH 20	398+99	17.5' LT	777.51	---	---	---	1	---	---	---	---	---
61C	STH 20	398+99	17.5' RT	777.50	---	---	---	1	---	---	---	---	---
61	STH 20	398+99	6.0' LT	777.71	1	---	---	---	---	---	---	---	---
62A	STH 20	400+36	38.2' LT	778.27	---	---	---	---	---	---	---	---	1
62	STH 20	400+17	5.7' LT	778.30	---	---	---	---	---	---	---	1	---
63A	STH 20	401+49	17.7' LT	778.64	---	---	---	---	---	---	---	---	1
63B	STH 20	401+49	18.0' RT	778.64	---	---	---	---	---	---	---	---	1
63	STH 20	401+49	6.3' LT	778.95	---	---	---	---	---	---	---	1	---
64A	STH 20	402+49	32.9' LT	778.15	---	---	---	---	---	---	---	---	---
64	STH 20	402+48	6.4' LT	779.50	---	---	---	---	---	---	---	1	---
65A	STH 20	404+25	17.5' LT	781.86	---	---	---	1	---	---	---	---	---
65B	STH 20	404+25	28.7' RT	781.63	---	---	---	1	---	---	---	---	---
65	STH 20	404+25	6.7' LT	782.05	1	---	---	---	---	---	---	---	---
66	STH 20	373+75	15.4' LT	772.85	---	---	---	---	---	---	---	1	---
			CATEGORY 0010 SUBTOTAL		44	1	3	97	7	1	2	9	9

NOTES:

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4. DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
   CASTING HEIGHT = 9" FOR TYPE J COVERS, 7" FOR TYPE Z COVERS, 6" FOR TYPE H COVERS, 3" FOR INLET COVERS SPECIAL, 3" FOR MANHOLE COVERS SPECIAL, 8" FOR TYPE B COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER COVERS

CATEGORY 0150					611.0530	611.0545	611.0606	611.0624	611.0666	SPV.0060.03	SPV.0060.04	611.8110	611.8115
					MANHOLE COVERS		INLET COVERS				MANHOLES COVERS	ADJUSTING MANHOLE	ADJUSTING INLET
STRUCTURE	ROADWAY	STATION	OFFSET	RIM ELEVATION	TYPE J EACH	TYPE L EACH H	TYPE B EACH	TYPE H EACH	TYPE Z EACH	SPECIAL EACH	SPECIAL EACH	COVERS EACH	COVERS EACH
28A	E. MAIN STREET	109+72.6	23.5' LT	775.54	---	---	---	1	---	---	---	---	---
28B	E. MAIN STREET	109+72.6	25.7' RT	775.84	---	---	---	---	1	---	---	---	---
28C	E. MAIN STREET	110+09.4	14.4' RT	776.23	---	---	---	---	---	---	---	---	---
28	E. MAIN STREET	109+72.6	14.4' RT	776.05	1	---	---	---	---	---	---	---	---
29A	E. MAIN STREET	109+46.1	84.4' LT	775.10	---	---	---	1	---	---	---	---	---
29B	E. MAIN STREET	109+00.1	66.3' LT	774.96	---	---	---	1	---	---	---	---	---
29C	E. MAIN STREET	109+17.1	41.3' RT	775.44	---	---	---	---	1	---	---	---	---
29D	E. MAIN STREET	109+07.4	41.3' RT	775.63	1	---	---	---	---	---	---	---	---
29E	E. MAIN STREET	108+94.8	41.8' RT	775.25	---	---	---	---	1	---	---	---	---
29	E. MAIN STREET	109+00.0	11.0' RT	775.80	1	---	---	---	---	---	---	---	---
30A	E. MAIN STREET	106+05.2	42.0' LT	774.40	---	---	---	1	---	---	---	---	---
30B	E. MAIN STREET	106+33.1	42.0' LT	774.39	---	---	---	1	---	---	---	---	---
30C	E. MAIN STREET	106+65.1	18.1' LT	774.63	---	---	---	1	---	---	---	---	---
30D	E. MAIN STREET	106+04.4	42.2' RT	774.68	---	---	---	1	---	---	---	---	---
30E	E. MAIN STREET	106+33.0	42.2' RT	774.18	---	---	---	1	---	---	---	---	---
30F	E. MAIN STREET	106+65.3	17.9' RT	774.64	---	---	---	1	---	---	---	---	---
30	E. MAIN STREET	106+65.3	11.0' RT	774.75	1	---	---	---	---	---	---	---	---
31A	E. MAIN STREET	105+50.8	23.5' LT	774.10	---	---	---	1	---	---	---	---	---
31B	E. MAIN STREET	105+40.8	23.5' LT	774.09	---	---	---	1	---	---	---	---	---
31C	E. MAIN STREET	105+50.8	23.5' RT	774.10	---	---	---	1	---	---	---	---	---
31D	E. MAIN STREET	105+40.8	23.5' RT	774.09	---	---	---	1	---	---	---	---	---
31	E. MAIN STREET	105+40.8	11.0' RT	774.31	1	---	---	---	---	---	---	---	---
32A	E. MAIN STREET	103+52.7	17.5' LT	774.31	---	---	---	1	---	---	---	---	---
32B	E. MAIN STREET	103+52.7	17.5' RT	774.31	---	---	---	1	---	---	---	---	---
32	E. MAIN STREET	103+52.7	11.0' RT	774.41	1	---	---	---	---	---	---	---	---
				CATEGORY 0150 SUBTOTAL	6	0	0	15	3	0	0	0	0
				PROJECT TOTAL	**50**	**1**	**3**	**112**	**10**	**1**	**2**	**9**	**9**

NOTES:

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ALL ITEMS CATEGORY 0010 UNLESS NOTED

STAIRWAY ITEMS

CATEGORY	ROADWAY	STATION		STATION	602.1500 CONCRETE STEPS SF	513.2050.S RAILING PIPE LF
0010	STH 20	352+00	-	358+00	88	18
		370+50	-	376+50	54	---
		376+50	-	382+50	19	---
	JEFFERSON STREET	80+40	-	83+00	41	10
				CATEGORY 0010 SUBTOTAL	202	28
				PROJECT TOTAL	**202**	**28**

COVER PLATES TEMPORARY

CATEGORY	ROADWAY	STRUCTURE	STATION	OFFSET	SIDE	611.8120.S EACH
0010	STH 20	23E	362+20.0	24.0'	RT	1
	E. MAIN STREET	33D	102+67.1	17.5'	RT	1
					SUBTOTAL	2
					UNDISTRIBUTED	4
					CATEGORY 0010 SUBTOTAL	6
0150	E.MAIN STREET	32B	103+52.7	17.5'	RT	1
		30F	106+65.3	17.9'	RT	1
					SUBTOTAL	2
					UNDISTRIBUTED	2
					CATEGORY 0150 SUBTOTAL	4
					PROJECT TOTAL	**10**

RIP RAP HEAVY

CATEGORY	ROADWAY	STATION	SIDE	606.0300 CY
0010	AUGUSTA	20+80	RT	16
	BUENA PARK ROAD	8+53	RT	49
			CATEGORY 0010 SUBTOTAL	49
			PROJECT TOTAL	**49**

CONCRETE BARRIER TEMPORARY PRECAST

CATEGORY	STAGE	603.8000 DELIVERED LF	603.8125 INSTALLED LF	603.8505 ANCHORING LF	NOTES
0010	STAGE 1A	425	---	200	ANCHORED INTO EXISTING DECK B-51-444
	STAGE 2A	---	425	---	UN-ANCHORED ON NEW DECK B-51-150
	UNDISTRIBUTED	25	25	---	
	CATEGORY 0010 SUBTOTAL	450	450	200	
	PROJECT TOTAL	**450**	**450**	**200**	

SUBGRADE IMPROVEMENT DRAINAGE

CATEGORY	ROADWAY	STATION		STATION	310.0110 BASE AGGREGATE OPEN GRADED TON	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	612.0406 PIPE UNDERDRAIN WRAPPED 6-INCH LF	645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY
0010	STH 20	310+91	-	311+91	5	---	100	38
		315+10	-	316+10	5	---	100	38
		325+15	-	326+15	5	---	100	38
		330+92	-	331+92	5	---	100	38
		353+71	-	354+71	5	---	100	38
		371+60	-	372+60	5	---	100	38
		385+59	-	386+59	5	---	100	38
		394+20	-	395+20	5	---	100	38
	E. MAIN STREET	102+17	-	103+17	5	---	100	38
		104+91	-	105+91	5	---	100	38
				SUBTOTAL	50	---	1,000	380
				UNDISTRIBUTED	100	400	2,000	750
				CATEGORY 0010 SUBTOTAL	150	400	3,000	1,130
0150				UNDISTRIBUTED	10	40	200	75
				CATEGORY 0150 SUBTOTAL	10	40	200	75
				PROJECT TOTAL	**160**	**440**	**3,200**	**1,205**

ALL ITEMS CATEGORY 0010 UNLESS NOTED

MOBILIZATION

CATEGORY	PROJECT	619.1000 EACH
0010	2250-12-70	0.95
CATEGORY 0010 SUBTOTAL:		0.95
0150	2250-12-70	0.05
CATEGORY 0150 SUBTOTAL:		0.05
PROJECT TOTAL:		**1**

CONCRETE MEDIAN SLOPED NOSE

CATEGORY	LOCATION	STATION	-	STATION	620.0300 TYPE 1 SF	620.0300 TYPE 2 SF
0010	STH 20	328+00	-	334+00	41	---
		334+00	-	340+00	113	---
	JEFFERSON STREET	78+50	-	79+60	---	18
		CATEGORY 0010 SUBTOTAL			154	18
		PROJECT TOTAL			**172**	

ALL ITEMS CATEGORY 0010 UNLESS NOTED

RESTORATION ITEMS

CATEGORY	ROADWAY	STATION	-	STATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0200 SEEDING TEMPORARY LB	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
0010	STH 20	306+25	-	310+00	1,300	---	0.9	---	30	1,300
		310+00	-	316+00	3,260	---	2.1	---	73	3,260
		316+00	-	322+00	3,650	---	2.3	---	82	3,650
		322+00	-	328+00	4,730	---	3.0	---	107	4,730
		328+00	-	334+00	4,810	---	3.1	---	108	4,810
		334+00	-	340+00	1,870	---	1.2	---	42	1,870
		340+00	-	346+00	2,750	---	1.8	---	62	2,750
		346+00	-	352+00	1,640	---	1.1	---	37	1,640
		352+00	-	358+00	790	---	0.5	---	18	790
		358+00	-	364+27	150	---	0.1	---	4	150
		365+78	-	370+50	870	---	0.6	---	20	870
		370+50	-	376+00	210	---	0.2	---	5	210
		376+00	-	382+00	480	---	0.4	---	11	480
		382+00	-	388+00	1,320	---	0.9	---	30	1,320
		388+00	-	394+00	830	---	0.6	---	19	830
		394+00	-	400+00	970	---	0.7	---	22	970
		400+00	-	404+35	1,090	---	0.7	---	25	1,090
	BUENA PARK ROAD	5+62	-	9+50	1,030	---	0.7	---	23	1,030
		10+75	-	15+49	1,610	---	1.1	---	36	1,610
	AUGUSTA WAY	20+25	-	21+50	230	---	0.2	---	6	230
	RIVERMOOR ROAD	30+30	-	31+25	190	---	0.2	---	5	190
	RIVERMOOR DRIVE	40+30	-	41+75	330	---	0.3	---	8	330
	RACINE STREET	50+00	-	51+51	630	---	0.4	---	14	630
	CENTER STREET	60+30	-	61+00	160	---	0.1	---	4	160
	WATER STREET	68+75	-	69+70	100	---	0.1	---	3	100
	JEFFERSON STREET	78+50	-	79+60	30	---	0.1	---	1	30
		80+40	-	83+00	320	---	0.2	---	8	320
	RIVER STREET	88+80	-	89+75	0	---	0.0	---	0	0
		90+25	-	81+25	50	---	0.1	---	1	50
	E. MAIN STREET	100+60	-	103+50	30	---	0.1	---	1	30
	ELIZABETH STREET	120+25	-	120+65	20	---	0.1	---	1	20
	ST. THOMAS STREET	160+38	-	161+28	30	---	0.1	---	1	30
	SECOND STREET	129+00	-	129+75	0	---	0.0	---	0	0
		130+25	-	131+00	0	---	0.0	---	0	0
				SUBTOTAL	35,480	0	24.0	0	807	35,480
				BORROW SITE	0	2,400	2.0	70	0	0
				UNDISTRIBUTED	3,550	8,870	2.4	240	81	3,550
		CATEGORY 0010 SUBTOTAL			39,030	11,270	28.4	310	888	39,030
0150	E. MAIN STREET	103+50	-	105+50	50	---	0.1	---	1	50
		105+50	-	109+75	210	---	0.2	---	5	210
	THIRD STREET	138+70	-	139+75	120	---	0.1	---	3	120
		140+25	-	141+25	80	---	0.1	---	2	80
	MILWAUKEE STREET	149+22	-	149+75	100	---	0.1	---	3	100
		150+30	-	151+50	110	---	0.1	---	3	110
				SUBTOTAL	670	0	0.7	0	17	670
				UNDISTRIBUTED	70	170	0.1	10	2	70
		CATEGORY 0150 SUBTOTAL			740	170	0.8	10	19	740
				PROJECT TOTAL	**39,770**	**11,440**	**29.2**	**320**	**907**	**39,770**

EROSION CONTROL

CATEGORY	ROADWAY	STATION		STATION	628.1104 EROSION BALES	628.1504 SILT FENCE	SPV.0090.03 HEAVY DUTY SILT FENCE	628.1520 SILT FENCE MAINTENANCE	628.1905 MOBILIZATIONS EROSION CONTROL	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL	628.2021 EROSION MAT CLASS II TYPE A	628.6005 TURBIDITY BARRIER	628.6510 SOIL STABILIZER TYPE B	628.7005 INLET PROTECTION TYPE A	628.7010 INLET PROTECTION TYPE B	628.7015 INLET PROTECTION TYPE C	628.7020 INLET PROTECTION TYPE D	628.7504 TEMPORARY DITCH CHECKS	628.7555 CULVERT PIPE CHECKS	628.7560 TRACKING PADS	628.7570 ROCK BAGS
					EACH	LF	LF	LF	EACH	EACH	SY	SY	ACRE	EACH	EACH	EACH	EACH	LF	EACH	EACH	EACH
0010	STH 20	306+25	-	310+00	---	190	---	570	---	---	---	---	---	2	---	2	---	---	---	---	---
		310+00	-	316+00	---	340	---	1,020	---	---	50	---	---	6	---	4	2	---	3	---	---
		316+00	-	322+00	---	240	---	720	---	---	10	---	---	3	---	2	1	---	4	---	---
		322+00	-	328+00	---	180	---	540	---	---	20	---	---	6	---	4	2	18	1	---	---
		328+00	-	334+00	---	80	---	240	---	---	95	---	---	4	---	2	2	18	5	---	---
		334+00	-	340+00	---	135	---	405	---	---	---	---	---	6	---	4	2	---	---	---	---
		340+00	-	346+00	---	130	---	390	---	---	---	---	---	7	---	5	2	---	---	---	---
		346+00	-	352+00	---	1,280	---	3,840	---	---	---	---	---	4	---	4	---	---	---	---	---
		352+00	-	358+00	---	---	---	---	---	---	---	---	---	10	---	6	4	---	---	---	---
		358+00	-	364+27	---	---	---	---	---	---	---	---	---	14	3	8	3	---	---	---	---
		365+78	-	370+50	---	---	---	---	---	---	---	---	---	8	---	5	3	---	---	---	---
		370+50	-	376+50	---	180	---	540	---	---	---	---	---	8	---	9	4	---	---	---	---
		376+50	-	382+50	---	469	106	1,725	---	---	---	---	---	4	---	5	---	---	---	---	---
		382+50	-	388+50	---	660	590	3,750	---	---	---	---	---	12	2	7	4	---	---	---	---
		388+50	-	394+50	---	415	---	1,245	---	---	---	---	---	2	---	3	---	---	---	---	---
		394+50	-	400+50	---	166	144	930	---	---	---	---	---	10	4	4	6	---	---	---	---
		400+50	-	406+00	---	620	---	1,860	---	---	---	---	---	5	1	4	---	---	---	---	---
	BUENA PARK ROAD	5+62	-	9+50	---	---	---	---	---	---	---	---	---	1	---	---	1	---	1	---	---
		10+75	-	15+49	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---
	AUGUSTA WAY	20+25	-	21+50	---	---	---	---	---	---	---	---	---	2	---	---	2	---	---	---	---
	RIVERMOOR ROAD	30+30	-	31+25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	RIVERMOOR DRIVE	40+30	-	41+75	---	---	---	---	---	---	---	---	---	1	---	1	---	---	---	---	---
	RACINE STREET	50+00	-	51+51	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CENTER STREET	60+30	-	61+00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	WATER STREET	68+75	-	69+70	---	---	---	---	---	---	---	---	---	3	---	1	2	---	---	---	---
	JEFFERSON STREET	78+50	-	79+60	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		80+40	-	83+00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	RIVER STREET	88+80	-	89+75	---	---	---	---	---	---	---	---	---	2	---	---	2	---	---	---	---
		90+25	-	81+25	---	---	---	---	---	---	---	---	---	1	---	1	---	---	---	---	---
	E. MAIN STREET	100+60	-	103+50	---	---	---	---	---	---	---	---	---	4	---	---	4	---	---	---	---
	ELIZABETH STREET	120+25	-	120+65	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	ST. THOMAS STREET	160+38	-	161+28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	SECOND STREET	129+00	-	129+75	---	---	---	---	---	---	---	---	---	2	---	---	2	---	---	---	---
		130+25	-	131+00	---	---	---	---	---	---	---	---	---	2	---	2	---	---	---	---	---
				SUBTOTAL	---	5,085	840	17,775	---	---	175	---	---	129	10	83	48	36	15	---	---
				UNDISTRIBUTED	100	1,275	210	4,445	12	8	45	285	1.5	33	3	21	12	9	4	8	50
				CATEGORY 0010 SUBTOTAL	100	6,360	1,050	22,220	12	8	220	285	1.5	162	13	104	60	45	19	8	50
0150	E. MAIN STREET	103+50	-	105+50	---	---		---	---	---	---	---	---	4	---	2	2	---	---	---	---
		105+50	-	109+75	---	---	---	---	---	---	---	---	---	6	---	6	---	---	---	---	---
	THIRD STREET	138+70	-	139+75	---	---	---	---	---	---	---	---	---	2	---	---	2	---	---	---	---
		140+25	-	141+25	---	---	---	---	---	---	---	---	---	2	---	---	2	---	---	---	---
	MILWAUKEE STREET	149+22	-	149+75	---	---	---	---	---	---	---	---	---	2	---	---	2	---	---	---	---
		150+30	-	151+50	---	---	---	---	---	---	---	---	---	2	---	---	2	---	---	---	---
				SUBTOTAL	---	---	---	---	---	---	---	---	---	18	---	8	10	---	---	---	---
				UNDISTRIBUTED	---	---	---	---	3	2	---	---	0.5	5	---	2	3	---	---	2	---
				CATEGORY 0150 SUBTOTAL	0	0	0	0	3	2	0	0	0.5	23	0	10	13	0	0	2	0
				PROJECT TOTAL	**100**	**6,360**	**1,050**	**22,220**	**15**	**10**	**220**	**285**	**2.0**	**185**	**13**	**114**	**73**	**45**	**19**	**10**	**50**

ALL ITEMS CATEGORY 0010 UNLESS NOTED

TRAFFIC CONTROL ITEMS

CATEGORY	STAGE	* DURATION DAYS	643.0300 TRAFFIC CONTROL DRUMS * DRUMS	643.0300 TRAFFIC CONTROL DRUMS DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III * BARRICADES	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A * LIGHTS	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C * LIGHTS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS	643.0900 TRAFFIC CONTROL SIGNS * SIGNS	643.0900 TRAFFIC CONTROL SIGNS DAYS	643.1050 TRAFFIC CONTROL SIGNS PCMS * SIGNS	643.1050 TRAFFIC CONTROL SIGNS PCMS DAYS
0010	STAGE 1A	7	54	378	---	---	---	---	---	---	---	---	10	70	2	28
	STAGE 1B	84	140	11,760	110	9,240	52	52	125	10,500	36	3,024	129	10,836	---	---
	STAGE 1C	14	136	1,904	106	1,484	53	53	119	1,666	30	420	129	1,806	---	---
	STAGE 2A	14	117	1,638	100	1,400	46	46	110	1,540	32	448	120	1,680	---	---
	STAGE 2B	91	110	10,010	99	9,009	46	46	108	9,828	5	455	118	10,738	---	---
	SUBTOTAL	---	---	25,690	---	21,133	197	197	---	23,534	---	4,347	---	25,130	--	28
	UNDISTRIBUTED	---	---	2,570	---	2,117	23	23	---	2,356	---	443	---	2,496	7	70
	CATEGORY 0010 SUBTOTAL	---	---	28,260	---	23,250	220	220	---	25,890	---	4,790	---	27,626	.	98
0150	STAGE 1A	7	19	133	21	147	---	---	32	224	5	35	32	224	1	14
	STAGE 1B	84	19	1,596	21	1,764	---	---	32	2,688	5	420	32	2,688	---	---
	STAGE 1C	14	19	266	21	294	---	---	32	448	5	70	32	448	---	---
	STAGE 2A	14	22	308	4	56	---	---	38	532	9	126	33	462	---	---
	STAGE 2B	91	22	2,002	4	364	---	---	38	3,458	9	819	33	3,003	---	---
	SUBTOTAL	---	---	4,305	---	2,625	---	---	---	7,350	---	1,470	---	6,825	--	14
	UNDISTRIBUTED	---	---	435	---	265	---	---	---	740	---	150	---	685	1	10
	CATEGORY 0150 SUBTOTAL	---	---	4,740	---	2,890	0	0	---	8,090	---	1,620	---	7,510	---	24
	PROJECT TOTAL	**---**	**---**	**33,000**	**---**	**26,140**	**220**	**220**	**---**	**33,980**	**---**	**6,410**	**---**	**35,136**	**---**	**122**

*FOR INFORMATION ONLY

TEMPORARY PEDESTRIAN ACCOMODATIONS

CATEGORY	ROADWAY	644.1410.S TEMPORARY PEDESTRIAN SURFACE ASPHALT SF	644.1420.S TEMPORARY PEDESTRIAN SURFACE PLYWOOD SF	644.1601.S TEMPORARY CURB RAMP EACH	644.1616.S TEMPORARY PEDESTRIAN SAFETY FENCE LF
0010	UNDISTRIBUTED	5,000	5,000	106	2,000
	CATEGORY 0010 SUBTOTAL	5,000	5,000	106	2,000
0150	UNDISTRIBUTED	3,000	3,000	16	1,200
	CATEGORY 0150 SUBTOTAL	3,000	3,000	16	1,200
	PROJECT TOTAL	**8,000**	**8,000**	**122**	**3,200**

GEOTEXTILE TYPE HR

CATEGORY	ROADWAY	STATION	SIDE	645.0120 SY
0010	BUENA PARK ROAD	8+53	RT	73
	CATEGORY 0010 SUBTOTAL			73
	PROJECT TOTAL			**73**

ALL ITEMS CATEGORY 0010 UNLESS NOTED

PAVEMENT MARKING ITEMS

CATEGORY	ROADWAY	STATION		STATION	646.1020 MARKING LINE EPOXY 4-INCH (SOLID WHITE) LF	(DASHED WHITE 3-FT LINE 9-FT SKIP) LF	(SOLID YELLOW) LF	(DOUBLE YELLOW) LF	(DASHED YELLOW 12.5-FT LINE 37.5-FT SKIP) LF	(DASHED WHITE 12.5-FT LINE 37.5-FT SKIP) LF	646.3020 MARKING LINE EPOXY 8-INCH (SOLID WHITE) LF	(DASHED WHITE 3-FT LINE 9-FT SKIP) LF	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.5220 MARKING SYMBOL EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH (WHITE) LF	(YELLOW) LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH LF	646.8320 MARKING PARKING STALL EPOXY LF
0010	STH 20	306+25	-	310+00	---	33	---	1,594	---	---	---	23	---	---	---	---	---	---	---	---
		310+00	-	316+00	427	21	---	812	---	---	919	---	6	4	---	75	---	---	256	---
		316+00	-	322+00	1,000	25	---	1,510	---	---	1,088	25	3	1	---	24	213	73	118	---
		322+00	-	328+00	1,681	---	---	1,214	---	---	533	25	1	---	---	---	152	275	---	---
		328+00	-	334+00	985	---	---	1,932	---	---	240	33	3	2	---	---	80	125	---	---
		334+00	-	340+00	986	---	382	1,486	96	---	---	---	2	---	---	15	---	191	278	---
		340+00	-	346+00	1,032	---	1,200	---	300	---	---	---	2	---	---	34	---	---	173	---
		346+00	-	352+00	1,131	---	1,200	---	300	---	---	---	4	---	1	---	---	---	260	---
		352+00	-	358+00	504	73	170	1,704	43	72	50	25	5	---	---	57	---	117	216	---
		358+00	-	366+54	1,184	---	---	1,384	---	---	1,099	117	8	1	4	77	---	---	417	---
		366+54	-	370+50	368	---	---	680	---	---	166	12	2	1	1	37	---	---	244	---
		370+50	-	376+50	1,125	---	---	1,200	---	---	---	---	---	---	---	16	---	---	203	---
		376+50	-	382+50	1,120	---	---	1,202	---	---	---	---	---	---	---	16	---	---	144	---
		382+50	-	388+50	1,036	16	---	1,200	---	---	---	---	---	---	---	20	---	---	---	---
		388+50	-	394+50	1,200	---	---	1,200	---	---	---	---	---	---	---	---	---	---	---	---
		394+50	-	400+50	1,048	---	---	1,200	---	---	---	---	---	---	---	25	---	---	126	---
		400+50	-	406+00	911	---	---	914	---	---	89	---	---	---	---	18	---	---	156	---
	BUENA PARK ROAD	5+62	-	9+50	---	---	---	752	---	---	242	29	4	1	1	40	---	---	184	---
		10+75	-	15+49	574	38	---	1,058	---	---	574	65	4	2	1	51	---	---	204	---
	AUGUSTA WAY	20+25	-	21+50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	RIVERMOOR ROAD	30+30	-	31+25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	RIVERMOOR DRIVE	40+30	-	41+75	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	RACINE STREET	50+00	-	51+51	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CENTER STREET	60+30	-	61+00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	WATER STREET	68+75	-	69+70	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	JEFFERSON STREET	78+50	-	79+60	---	---	---	326	---	---	63	---	---	---	---	17	---	---	142	---
		80+40	-	83+00	---	---	---	686	---	---	---	---	---	---	---	18	---	---	74	---
	RIVER STREET	88+80	-	89+75	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		90+25	-	81+25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	E. MAIN STREET	100+60	-	103+50	409	---	---	456	---	---	203	26	2	---	---	53	36	---	303	---
	ELIZABETH STREET	120+25	-	120+65	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	ST. THOMAS STREET	160+38	-	161+28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	WEBER STREET	170+38	-	170+67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	RIVER ROAD	179+32	-	179+62	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	EVERGREEN DRIVE	188+50	-	189+54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		190+44	-	190+57	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	SECOND STREET	129+00	-	129+75	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	218
		130+25	-	131+00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CATEGORY 0010 SUBTOTAL				16,721	206	2,952	22,510	739	72	5,266	380	46	12	8	593	481	781	3,498	218
0150	E. MAIN STREET	103+50	-	105+50	400	---	---	400	---	---	---	---	---	---	1	---	---	---	---	---
		105+50	-	109+75	281	---	---	676	---	---	202	21	1	---	---	77	---	---	562	---
	THIRD STREET	138+70	-	139+75	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		140+25	-	141+25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	MILWAUKEE STREET	149+22	-	149+75	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		150+30	-	151+50	---	---	---	304	---	---	102	---	---	---	---	---	---	---	---	---
	CATEGORY 0150 SUBTOTAL				681	0	0	1,380	0	0	304	21	1	0	1	77	0	0	562	0
	PROJECT TOTAL							**45,261**				**5,971**	**47**	**12**	**9**	**670**		**1,262**	**4,060**	**218**

ALL ITEMS CATEGORY 0010 UNLESS NOTED

TEMPORARY MARKING AND MARKING REMOVAL

CATEGORY	ROADWAY	STAGE	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH (WHITE) LF	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW) LF	649.0205 TEMPORARY MARKING LINE PAINT 8-INCH (WHITE) LF	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE) LF	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW) LF	649.0505 TEMPORARY MARKING ARROW PAINT EACH	649.0605 TEMPORARY MARKING WORD PAINT EACH	649.0805 TEMPORARY MARKING STOP LINE PAINT 18-INCH LF	649.0850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF	646.9300 MARKING REMOVAL SPECIAL MARKING EACH
0010	STH 20	1B	5,910	5,770	70	750	740	1	1	70	---	2,110	---	270	2
		1C	160	---	---	60	---	---	---	---	---	---	---	---	---
		2A	---	---	---	5,070	4,920	---	---	---	70	---	---	---	---
		2B	---	---	---	1,100	1,530	---	---	---	---	---	---	30	---
	BUENA PARK ROAD	1B	1,870	1,780	---	1,030	1,120	---	---	30	---	2,530	320	---	3
		1C	140	80	---	2,240	2,240	---	---	---	30	---	100	---	---
		2A	---	---	---	370	370	---	---	---	---	---	---	---	---
		2B	---	---	---	---	---	---	---	---	---	270	---	---	---
	JEFFERSON STREET	1B	890	890	---	250	250	---	---	20	---	---	---	---	---
		2A	---	---	---	1,180	1,160	---	---	---	40	---	---	---	---
	E. MAIN STREET	1B	500	580	---	---	---	---	---	---	---	---	---	---	---
		2A	---	---	---	540	580	---	---	---	---	---	---	---	---
		SUBTOTAL	9,470	9,100	70	12,590	12,910	1	1	120	140	4,910	420	300	5
		UNDISTRIBUTED	950	910	10	1,260	1,295	---	---	15	15	495	45	30	---
	CATEGORY 0010 SUBTOTAL		20,430		80	28,055		1	1	135	155	5,405	465	330	5
0150	E. MAIN STREET	1B	1,160	1,370	---	340	340			---	---	---	---	---	---
		2A	---	---	---	1,620	1,710			---	---	---	---	---	---
		SUBTOTAL	1,160	1,370	0	1,960	2,050	0	0	0	0	0	0	0	0
		UNDISTRIBUTED	120	140		200	205	---	---	0	0	0	0	0	---
	CATEGORY 0150 SUBTOTAL		2,790		0	4,415		0	0	0	0	0	0	0	0
	PROJECT TOTAL		**23,220**		**80**	**32,470**		**1**	**1**	**135**	**155**	**5,405**	**465**	**330**	**5**

CONSTRUCTION STAKING

CATEGORY	650.4000 STORM SEWER EACH	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB GUTTER AND CURB & GUTTER LF	650.6000 PIPE CULVERTS EACH	650.6500.01 STRUCTURE LAYOUTS B-51-150 LS	650.6500.02 STRUCTURE LAYOUTS R-51-70 LS	650.6500.03 STRUCTURE LAYOUTS R-51-73 LS	650.6500.04 STRUCTURE LAYOUTS R-51-74 LS	650.6500.05 STRUCTURE LAYOUTS R-51-75 LS	650.7000 CONCRETE PAVEMENT LF	650.8500 ELECTRICAL INSTALLATIONS LS	650.9000 CURB RAMPS EACH	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF	SPV.0090.02 CONCRETE SIDEWALK LF
0010	173	15,457	5,297	4,115	4	---	---	---	---	---	10,160	1	114	1	15,457	22,000
0100	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---
0110	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---
0120	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---
0130	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---
0140	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---
0150	24	916	291	590	---	---	---	---	---	---	625	---	16	---	916	2,000
PROJECT TOTAL	**197**	**16,373**	**5,588**	**4,705**	**4**	**1**	**1**	**1**	**1**	**1**	**10,785**	**1**	**130**	**1**	**16,373**	**24,000**

ALL ITEMS CATEGORY 0010 UNLESS NOTED

SAWING

CATEGORY	ROADWAY	STATION	TO	STATION	SIDE	690.0150 SAWING ASPHALT LF	690.0200 SAWING CONCRETE LF	COMMENTS
0010	STH 20	306+25	-	310+00	RT	144	22	
		310+00	-	316+00	RT	12	---	
		316+00	-	322+00	RT	7	---	
		322+00	-	328+00	RT	10	---	
		328+00	-	334+00	RT	53	---	
		334+00	-	340+00	LT/RT	398	---	
		340+00	-	346+00	LT/RT	90	8	
		346+00	-	352+00	LT/RT	113	33	
		352+00	-	358+00	LT/RT	337	64	
		358+00	-	364+27	LT/RT	336	181	
		366+78	-	370+50	LT/RT	35	---	
		370+50		376+50	LT/RT	74	42	
		376+50		382+50	LT/RT	169	---	
		382+50		388+50	LT/RT	--	---	
		388+50		394+50	LT/RT	160	---	
		394+50		400+50	LT/RT	96	---	
		400+50		406+00	LT/RT	397	---	
	BUENA PARK ROAD	5+62	-	9+50	LT/RT	50	---	
		10+75	-	15+49	LT/RT	61	---	
	AUGUSTA WAY	20+25	-	21+50	LT/RT	31	10	
	RIVERMOOR ROAD	30+30	-	31+25	LT/RT	22	---	
	RIVERMOOR DRIVE	40+30	-	41+75	LT/RT	107	---	
	RACINE STREET	50+00	-	51+51	LT/RT	30	11	
	CENTER STREET	60+30	-	61+00	LT/RT	21	11	
	WATER STREET	68+75	-	69+70	LT/RT	35	14	
	JEFFERSON STREET	77+20	-	79+60	LT/RT	82	19	
		80+40	-	83+00	LT/RT	101	84	
	RIVER STREET	88+80	-	89+75	LT/RT	46	20	
		90+25	-	81+25	LT/RT	40	27	
	E. MAIN STREET	100+60	-	103+50		---	---	
	ELIZABETH STREET	120+25	-	120+65	LT/RT	36	19	
	ST. THOMAS STREET	160+38		161+28	LT/RT	45	---	
	WEBER STREET	170+38		170+67	LT/RT	36	---	
	RIVER ROAD	179+32		179+62	LT/RT	36	---	
	EVERGREEN DRIVE	188+50		189+54	LT/RT	24	---	
		190+44		190+57	LT/RT	24	---	
	SECOND STREET	129+00	-	129+75	LT/RT	45	21	
		130+25	-	131+00	LT/RT	34	17	
	UNDRISTRIBUTED					1,732	5,886	SAWING FOR STAGING
				CATEGORY 0010 SUBTOTAL		5,069	6,489	
0150	E. MAIN STREET	103+50	-	105+50	LT/RT	53	---	
		105+50	-	109+75	LT/RT	127	103	
	THIRD STREET	138+70	-	139+75	LT/RT	37	15	
		140+25	-	141+25	LT/RT	128	14	
	MILWAUKEE STREET	149+22	-	149+75	LT/RT	18	---	
		150+30	-	151+50	LT/RT	176	15	
	UNDISTRIBUTED					---	625	SAWING FOR STAGING
				CATEGORY 0150 SUBTOTAL		539	147	
				PROJECT TOTAL		**5,608**	**6,636**	

ALL ITEMS CATEGORY 0010 UNLESS NOTED

TREE GRATES

CATEGORY	ROADWAY	LOCATION		SPV.0060.14 DECORATIVE TREE GRATE EACH
0150	STH 20	359+64	RT	1
		360+83	RT	1
		361+04	LT	1
		361+46	RT	1
	CATEGORY 0150 SUBTOTAL			4
	PROJECT TOTAL			**4**

SANITARY ITEMS

CATEGORY	SPV.0060.08 MAHOLE FRAME AND GRATE SPECIAL EACH	SPV.0060.09 CHIMNEY SEALS 10-INCH EACH	SPV.0060.10 MANHOLE EXTERIOR JOINT PROTECTION EACH	SPV.0060.11 ADJUSTING SANITARY MANHOLE COVERS EACH
0160	2	2	2	---
0170	2	2	2	---
0150	---	---	---	50
PROJECT TOTAL	**4**	**4**	**4**	**50**

WATER ITEMS

CATEGORY		SPV.0060.12 ADJUST EXISTING WATER VALVE BOXES AND WATER MANHOLES EACH	SPV.0060.13 ADJUST FIRE HYDRANT EACH
0150	UNDISTRIBUTED	130	4
	PROJECT TOTAL	**130**	**4**

3

PRIVATE STORM SEWER PIPE CONNECTIONS

CATEGORY	ROADWAY	STATION - STATION	SPV.0090.04 PRIVATE STORM SEWER CONCRETE PIPE LF	SPV.0090.05 PRIVATE STORM SEWER PVC PIPE LF
0010		UNDISTRIBUTED	100	100
		CATEGORY 0010 SUBTOTAL	100	100
0150		UNDISTRIBUTED	50	50
		CATEGORY 0150 SUBTOTAL	50	50
		PROJECT TOTAL	**150**	**150**

REMOVING GEODETIC SURVEY MONUMENT

CATEGORY	SPV.0105.15 LS
0010	1
PROJECT TOTAL	**1**

SALVAGE AND PRESERVE BLOCK WALL AND RAILING (STA. 364+19, RT)

CATEGORY	SPV.0105.16 LS
0010	1
PROJECT TOTAL	**1**

ALL ITEMS CATEGORY 0010 UNLESS NOTED

3

SUMMARY OF STATE FURNISHED MATERIALS

QUANTITY	UNIT	DESCRIPTION
1	EACH	POLES TYPE 12
1	EACH	POLES TYPE 13
2	EACH	OVER HEIGHT POLES TYPE 13
1	EACH	MONOTUBE ARMS 45-FT
2	EACH	MONOTUBE ARMS 50-FT
1	EACH	MONOTUBE ARMS 55-FT
3	EACH	LUMINAIRE ARMS STEEL 15-FT
1	EACH	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8-PHASE
1	EACH	TRAFFIC SIGNAL CABINET
4	EACH	EVP DETECTOR HEADS
1	EACH	CELL MODEM
1	EACH	ETHERNET SWITCH

NOTE: THIS TABLE IS FOR INFORMATION ONLY.

3

REMOVAL QUANTITIES

LOCATION	ITEM NO.	204.0195 REMOVING CONCRETE BASES EACH	653.0905 REMOVING PULL BOXES EACH
STH 20 & CTH W/BUENA PARK RD	SB1	1	--
	SB2	1	--
	SB3	1	--
	SB4	1	--
	SB5	1	--
	SB6	1	--
	SB7	1	--
	SB8	1	--
	SB9	1	--
	SB10	1	--
	SB11	1	--
	PB1	--	1
	PB2	--	1
	PB3	--	1
	PB4	--	1
	PB5	--	1
	PB6	--	1
	PB7	--	1
	PB8	--	1
	PB9	--	1
	PB10	--	1
	PB11	--	1
	PB12	--	1
	PB13	--	1
	PB14	--	1
	PB15	--	1
	PB16	--	1
	PB17	--	1
	PB18	--	1
	CB1	1	--
INTERSECTION TOTAL		12	18

PULL BOXES

LOCATION	PULL BOX NO.	ALIGNMENT	STATION	OFFSET	653.0135 PULL BOXES STEEL 24" x 36" EACH	653.0140 PULL BOXES STEEL 24" x 42" EACH	653.0154 PULL BOXES NON-CONDUCTIVE 24" x 36" EACH
STH 20 & CTH W/BUENA PARK RD	PB1	STH 20	313+01	35.8' RT	--	1	--
	PB2	STH 20	311+29	35.8' RT	1	--	--
	PB3	STH 20	309+84	32.6' RT	1	--	--
	PB4	STH 20	312+97	48.1' LT	--	1	--
	PB5	STH 20	313+51	63.0' LT	--	1	--
	PB6	STH 20	313+55	75.1' LT	1	--	--
	PB7	BUENA PARK RD	11+12	34.1' LT	1	--	--
	PB8	BUENA PARK RD	13+02	33.8' LT	1	--	--
	PB9	STH 20	314+42	74.1' LT	--	1	--
	PB10	STH 20	315+11	35.7' LT	--	1	--
	PB11	STH 20	317+43	36.5' LT	--	--	1
	PB12	STH 20	315+13	35.7' RT	--	1	--
	PB13	STH 20	314+91	56.9' RT	--	1	--
	PB14	STH 20	314+57	61.8' RT	--	1	--
	PB15	STH 20	314+55	78.4' RT	1	--	--
	PB16	BUENA PARK RD	6+85	28.3' RT	1	--	--
	PB17	STH 20	313+81	63.2' RT	--	1	--
	PB18	STH 20	313+49	51.3' RT	--	1	--
INTERSECTION TOTAL					7	10	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 &
CTH W/BUENA PARK ROAD

SIGNAL NO: S51-0852

PLOT DATE : 4/26/2018 12:33 PM PLOT BY : PLOT NAME : 030201_mq PLOT SCALE : 1.000000:1.000000 WISDOT / CADDS SHEET 42

3

SIGNAL BASES AND POLES

LOCATION	SIG. BASE NO.	657.0100 PEDESTAL BASE EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 INCH EACH	657.0310 POLES TYPE 3 EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT EACH	657.1355 INSTALL POLES TYPE 12 EACH	657.1360 INSTALL POLES TYPE 13 EACH	657.1460 INSTALL POLES OVER HEIGHT TYPE 13 EACH	657.1545 INSTALL MONOTUBE ARMS 45-FT EACH	657.1550 INSTALL MONOTUBE ARMS 50-FT EACH	657.1555 INSTALL MONOTUBE ARMS 55-FT EACH	657.1815 INSTALL LUMINAIRE ARMS STEEL 15-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	659.1125 LUMINAIRES UTILITY LED C EACH
STH 20 & CTH W/BUENA PARK RD	SB1	1	--	--	1	--	--	--	--	--	--	--	--	--	1	--
	SB2	--	--	--	--	--	--	--	--	1	--	1	--	1	--	1
	SB3	1	--	--	--	1	--	--	--	--	--	--	--	--	1	--
	SB4	1	--	--	--	1	--	--	--	--	--	--	--	--	1	--
	SB5	--	1	1	--	--	1	--	--	--	--	--	--	--	--	1
	SB6	--	--	--	--	--	--	1	--	--	1	--	--	--	--	--
	SB7	1	--	--	--	1	--	--	--	--	--	--	--	--	1	--
	SB8	1	--	--	1	--	--	--	--	--	--	--	--	--	1	--
	SB9	1	--	--	--	1	--	--	--	--	--	--	--	--	1	--
	SB10	--	--	--	--	--	--	--	--	1	--	--	1	1	1	1
	SB11	1	--	--	1	--	--	--	--	--	--	--	--	--	--	--
	SB12	--	--	--	--	--	--	--	1	--	--	1	--	1	--	1
	SB13	1	--	--	--	1	--	--	--	--	--	--	--	--	1	--
INTERSECTION TOTAL		8	1	1	3	5	1	1	1	2	1	2	1	3	8	4

3

ELECTRICAL SERVICE METER BREAKER PEDESTAL

LOCATION	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL (STH 20 & CTH W/BUENA PARK RD) L.S.
STH 20 & CTH W/BUENA PARK RD	1
TOTAL	1

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.01 TRAFFIC SIGNAL MOUNTING HARDWARE (STH 20 & CTH W/BUENA PARK RD) L.S.
STH 20 & CTH W/BUENA PARK RD	1
TOTAL	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 &
CTH W/BUENA PARK ROAD

SIGNAL NO: S51-0852

LOCATION	SIG. BASE NO.	SIG. HEAD NO.	TYPE OF MOUNT	SIGNAL FACES 658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	* BCKPLT 3-SEC. EACH	* BCKPLT 4-SEC. EACH	* LED RED BALL EACH	* LED YELLOW BALL EACH	* LED GREEN BALL EACH	* LED RED ARROW EACH	* LED YELLOW ARROW EACH	* LED GREEN ARROW EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	** PEDESTRIAN COUNTDOWN TIMER 16" EACH
STH 20 & CTH W/BUENA PARK RD	SB1	1	POST MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		9	POST MOUNT VERTICAL	--	1	--	1	--	--	--	1	2	1	--	--
		21	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB2	7	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		8	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		10	MONOTUBE ARM MOUNT VERTICAL	--	1	--	1	--	--	--	1	2	1	--	--
	SB3	22	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB4	23	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB5	14	POST MOUNT VERTICAL	--	1	--	1	--	--	--	1	2	1	--	--
		16	POST MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
	SB6	12	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		13	MONOTUBE POLE MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		15	MONOTUBE ARM MOUNT VERTICAL	--	1	--	1	--	--	--	1	2	1	--	--
	SB7	24	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB8	4	POST MOUNT VERTICAL	--	1	--	1	--	--	--	1	2	1	--	--
		6	POST MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		25	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB9	26	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB10	2	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		3	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		5	MONOTUBE ARM MOUNT VERTICAL	--	1	--	1	--	--	--	1	2	1	--	--
		27	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB11	11	POST MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		19	POST MOUNT VERTICAL	--	1	--	1	--	--	--	1	2	1	--	--
	SB12	17	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		18	MONOTUBE POLE MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		20	MONOTUBE ARM MOUNT VERTICAL	--	1	--	1	--	--	--	1	2	1	--	--
	SB13	28	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
INTERSECTION TOTAL				12	8	12	8	12	12	12	8	16	8	8	8

*INCIDENTAL TO 658.0173 OR 658.0174
**INCIDENTAL TO 658.0416

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 &
CTH W/BUENA PARK ROAD

SIGNAL NO: S51-0852

3

CONCRETE BASES

LOCATION	SIGNAL BASE NO.	ALIGNMENT	STATION	OFFSET	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	654.0217 CONCRETE CONTROL CABINET BASE TYPE 9 SPECIAL EACH
STH 20 & CTH W/BUENA PARK RD	CB1	STH 20	313+34	50.7' RT	--	--	--	1
	SB1	STH 20	313+31	36.9' RT	1	--	--	--
	SB2	STH 20	313+19	49.0' LT	--	--	1	--
	SB3	STH 20	313+20	36.3' LT	1	--	--	--
	SB4	STH 20	313+35	50.4' LT	1	--	--	--
	SB5	STH 20	313+49	55.7' LT	--	1	--	--
	SB6	STH 20	314+35	63.1' LT	--	--	1	--
	SB7	STH 20	314+58	49.8' LT	1	--	--	--
	SB8	STH 20	314+93	36.4' LT	1	--	--	--
	SB9	STH 20	314+92	37.1' RT	1	--	--	--
	SB10	STH 20	314+78	50.5' RT	--	--	1	--
	SB11	STH 20	314+62	54.7' RT	1	--	--	--
	SB12	STH 20	313+74	54.1' RT	--	--	1	--
	SB13	STH 20	313+58	50.9' RT	1	--	--	--
INTERSECTION TOTAL					8	1	4	1

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0200.01 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS (STH 20 & CTH W/BUENA PARK RD) L.S.
STH 20 & CTH W/BUENA PARK RD	1
TOTAL	1

CONDUIT ITEMS

LOCATION	FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF.
STH 20 & CTH W/BUENA PARK RD	CB1	PB1	--	99
	PB1	SB1	30	--
	PB1	PB2	169	--
	PB2	PB3	143	--
	PB1	PB4	--	168
	PB4	SB2	--	23
	PB4	SB3	26	--
	PB4	PB5	--	114
	PB5	SB4	19	--
	PB5	SB5	8	--
	PB5	PB6	13	--
	PB6	PB7	29	--
	PB7	PB8	191	--
	PB5	PB9	--	190
	PB9	SB6	--	16
	PB9	SB7	30	--
	PB9	PB10	--	158
	PB10	SB8	18	--
	PB10	PB11	233	--
	PB10	PB12	--	142
	PB12	SB9	21	--
	PB12	PB13	--	62
	PB13	SB10	--	14
	PB13	PB14	--	68
	PB14	SB11	9	--
	PB14	PB15	17	--
	PB15	PB16	227	--
	PB14	PB17	--	146
	PB17	SB12	--	12
	PB17	PB18	--	70
	PB18	SB13	9	--
	PB18	CB1	--	36
INTERSECTION TOTAL			1192	1318

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 &
CTH W/BUENA PARK ROAD

SIGNAL NO: S51-0852

TRAFFIC SIGNAL CABLE

LOCATION	LOC.	TO	LOC.	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF.	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG LF.	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.	655.0700^ LOOP DETECTOR LEAD-IN CABLE L.F.	655.0900 EVP DETECTOR CABLE L.F.
STH 20 & CTH W/BUENA PARK RD	CB1		SB1	--	--	--	87	--	87	--	--	--
	CB1		SB2	--	--	170	--	170	--	--	--	245
	CB1		SB3	--	--	181	--	--	--	--	--	--
	CB1		SB4	--	--	240	--	--	--	--	--	--
	CB1		SB5	--	--	228	--	--	--	--	--	--
	CB1		SB6	--	--	336	--	--	--	--	--	406
	CB1		SB7	--	--	355	--	--	--	--	--	--
	CB1		SB8	--	--	--	353	--	--	--	--	--
	CB1		SB9	--	--	274	--	--	--	--	--	--
	CB1		SB10	--	--	--	223	--	--	--	--	303
	CB1		SB11	--	--	174	--	--	--	--	--	--
	CB1		SB12	--	--	92	--	92	--	--	--	167
	CB1		SB13	--	--	43	--	--	43	--	--	--
	SB1		SB2	--	--	--	--	--	162	--	--	--
	SB2		SB3	--	--	--	--	--	66	--	--	--
	SB2		SB5	--	--	--	--	127	--	--	--	--
	SB3		SB4	--	--	--	--	--	136	--	--	--
	SB4		SB5	--	--	--	--	--	47	--	--	--
	SB5		SB6	--	--	--	--	--	143	--	--	--
	SB6		SB7	--	--	--	--	--	58	--	--	--
	SB7		SB8	--	--	--	--	--	156	--	--	--
	SB8		SB9	--	--	--	--	--	142	--	--	--
	SB9		SB10	--	--	--	--	--	96	--	--	--
	SB10		SB11	--	--	--	--	--	86	--	--	--
	SB10		SB12	--	--	--	--	172	--	--	--	--
	SB11		SB12	--	--	--	--	--	123	--	--	--
	SB12		SB13	--	--	--	--	--	84	--	--	--
	PB1		SB1	--	--	--	--	--	47	--	--	--
	PB4		SB2	--	--	--	--	--	35	--	--	--
	PB5		SB5	--	--	--	--	--	25	--	--	--
	PB9		SB6	--	--	--	--	--	27	--	--	--
	PB10		SB8	--	--	--	--	--	36	--	--	--
	PB12		SB9	--	--	--	--	--	39	--	--	--
	PB13		SB10	--	--	--	--	--	30	--	--	--
	PB14		SB11	--	--	--	--	--	26	--	--	--
	PB17		SB12	--	--	--	--	--	28	--	--	--
	PB18		SB13	--	--	--	--	--	25	--	--	--

(CONTINUED ON NEXT PAGE)

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

^ADDITIONAL QUANTITIES SHOWN ELSEWHERE

STH 20 &
CTH W/BUENA PARK ROAD

SIGNAL NO: S51-0852

TRAFFIC SIGNAL CABLE (CONTINUED FROM PREVIOUS PAGE)

LOCATION	LOC.	TO	LOC.	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF.	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG LF.	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.	655.0700^ LOOP DETECTOR LEAD-IN CABLE L.F.	655.0900 EVP DETECTOR CABLE L.F.
STH 20 & CTH W/BUENA PARK RD	SB1		HEAD 1	19	--	--	--	--	--	--	--	--
	SB1		HEAD 9	--	22	--	--	--	--	--	--	--
	SB1		HEAD 21	15	--	--	--	--	--	--	--	--
	SB1		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB2		HEAD 7	75	--	--	--	--	--	--	--	--
	SB2		HEAD 8	75	--	--	--	--	--	--	--	--
	SB2		HEAD 10	--	76	--	--	--	--	--	--	--
	SB2		LUMINAIRE	--	--	--	--	--	--	144	--	--
	SB3		HEAD 22	15	--	--	--	--	--	--	--	--
	SB3		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB4		HEAD 23	15	--	--	--	--	--	--	--	--
	SB4		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB5		HEAD 14	--	22	--	--	--	--	--	--	--
	SB5		HEAD 16	19	--	--	--	--	--	--	--	--
	SB5		LUMINAIRE	--	--	--	--	--	--	117	--	--
	SB6		HEAD 12	70	--	--	--	--	--	--	--	--
	SB6		HEAD 13	70	--	--	--	--	--	--	--	--
	SB6		HEAD 15	--	71	--	--	--	--	--	--	--
	SB7		HEAD 24	15	--	--	--	--	--	--	--	--
	SB7		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB8		HEAD 4	--	22	--	--	--	--	--	--	--
	SB8		HEAD 6	19	--	--	--	--	--	--	--	--
	SB8		HEAD 25	15	--	--	--	--	--	--	--	--
	SB8		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB9		HEAD 26	15	--	--	--	--	--	--	--	--
	SB9		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB10		HEAD 2	80	--	--	--	--	--	--	--	--
	SB10		HEAD 3	80	--	--	--	--	--	--	--	--
	SB10		HEAD 5	--	81	--	--	--	--	--	--	--
	SB10		HEAD 27	15	--	--	--	--	--	--	--	--
	SB10		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB10		LUMINAIRE	--	--	--	--	--	--	144	--	--
	SB11		HEAD 11	19	--	--	--	--	--	--	--	--
	SB11		HEAD 19	--	22	--	--	--	--	--	--	--
	SB12		HEAD 17	75	--	--	--	--	--	--	--	--
	SB12		HEAD 18	75	--	--	--	--	--	--	--	--
	SB12		HEAD 20	--	76	--	--	--	--	--	--	--
	SB12		LUMINAIRE	--	--	--	--	--	--	144	--	--
	SB13		HEAD 28	15	--	--	--	--	--	--	--	--
	SB13		PUSH BUTTON	--	--	--	--	--	--	--	6	--
INTERSECTION TOTAL				796	392	2093	663	561	1747	549	48	1121

^ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 &
CTH W/BUENA PARK ROAD

SIGNAL NO: S51-0852

3

3

TRAFFIC DETECTOR LOOPS

LOCATION	LOOP NO.	HOME RUN PB	STATION/OFFSET*	SIZE	SDD INSTALLATION REFERENCE	NO. OF TURNS	PAVEMENT TYPE	652.0800 CONDUIT LOOP DETECTOR LF	655.0700^ LOOP DETECTOR LEAD-IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
STH 20 & CTH W/BUENA PARK RD	11 (FUTURE)	PB1	312+94, 1' LT	6'x20'	9F15-4b	3	CONCRETE	122	41	238
	12 (FUTURE)	PB1	313+24, 1' LT	6'x20'	9F15-4b	3	CONCRETE	122	41	238
	21	PB11	317+44, 10' LT	6'x6'	9F15-4b	5	CONCRETE	80	496	188
	41	PB8	313+48, 297' LT	6'x6'	9F15-4b	5	ASPHALT	74	415	182
	42	PB7	313+68, 82' LT	6'x20'	9F15-4a	3	ASPHALT	74	224	190
	43	PB6	313+62, 46' LT	6'x30'	9F15-4a	3	ASPHALT	94	195	190
	44	PB7	313+83, 85 LT	6'x20'	9F15-4b	3	ASPHALT	104	224	220
	45	PB6	313+88, 57' LT	6'x20'	9F15-4b	3	ASPHALT	104	195	220
	46	PB7	313+94, 87' LT	6'x20'	9F15-4b	3	ASPHALT	126	224	242
	47	PB6	313+99, 60' LT	6'x20'	9F15-4b	3	ASPHALT	128	195	244
	51 (FUTURE)	PB10	315+18, 1' RT	6'x20'	9F15-4b	3	CONCRETE	120	264	236
	52 (FUTURE)	PB10	314+92, 1' RT	6'x20'	9F15-4b	3	CONCRETE	120	264	236
	61	PB3	309+84, 10' RT	6'x6'	9F15-4b	4	CONCRETE	62	353	146
	62	PB2	311+28, 11' RT	6'x6'	9F15-4b	3	CONCRETE	70	210	130
	81	PB16	314+83, 305' RT	6'x6'	9F15-4a	5	ASPHALT	46	371	154
	82	PB15	314+40, 80' RT	6'x20'	9F15-4a	3	ASPHALT	76	144	192
	83	PB15	314+35, 56' RT	6'x20'	9F15-4a	3	ASPHALT	78	144	194
	84	PB14	314+49, 53' RT	6'x10'	9F15-4a	3	ASPHALT	50	127	126
	85	PB15	314+27, 84' RT	6'x20'	9F15-4b	3	ASPHALT	104	144	220
	86	PB15	314+22, 60' RT	6'x20'	9F15-4b	3	ASPHALT	104	144	220
INTERSECTION TOTAL								1858	4415	4006

^ADDITIONAL QUANTITIES SHOWN ELSEWHERE

*LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.

NOTES: FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
THE STH 20-MAIN ALIGNMENT IS REFERENCED FOR STATION/OFFSET.
S.D.D. 9F15-4a: LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
S.D.D. 9F15-4b: LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

REMOVING TRAFFIC SIGNALS

LOCATION	204.9105.S.01 REMOVING TRAFFIC SIGNALS (STH 20 & CTH W/BUENA PARK RD) L.S.
STH 20 & CTH W/BUENA PARK RD	1
TOTAL	1

REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	204.9105.S.04 REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE (STH 20 & CTH W/BUENA PARK RD) L.S.
STH 20 & CTH W/BUENA PARK RD	1
TOTAL	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 &
CTH W/BUENA PARK ROAD

SIGNAL NO: S51-0852

PLOT DATE : 4/24/2018 11:23 AM PLOT BY : PLOT NAME : 030201_mq PLOT SCALE : 1.000000:1.000000 WISDOT / CADDS SHEET 42

3

TEMPORARY VEHICLE DETECTION STH 20 & CTH W/BUENA PARK ROAD

LOCATION	SPV.0105.03 TEMPORARY VEHICLE DETECTION SYSTEM (STH 20 & CTH W/BUENA PARK RD) L.S.
STH 20 & CTH W/BUENA PARK RD	1
TOTAL	1

TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET

LOCATION	SPV.0105.06 TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET (STH 20 & CTH W/BUENA PARK RD) L.S.
STH 20 & CTH W/BUENA PARK RD	1
TOTAL	1

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TRANSPORT SIGNAL AND LIGHTING MATERIALS

LOCATION	SPV.0105.08 TRANSPORT SIGNAL AND LIGHTING MATERIALS (STH 20 & CTH W/BUENA PARK RD) L.S.
STH 20 & CTH W/BUENA PARK RD	1
TOTAL	1

TRANSPORT AND INSTALL STATE FURNISHED
EMERGENCY VEHICLE PREEMPTION (EVP) DETECTOR HEADS

LOCATION	SPV.0105.11 TRANSPORT & INSTALL STATE FURNISHED EVP DETECTOR HEADS L.S.
STH 20 & CTH W/BUENA PARK RD	1
TOTAL	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

**STH 20 &
CTH W/BUENA PARK ROAD**

SIGNAL NO: S51-0852

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SUMMARY OF STATE FURNISHED MATERIALS

QUANTITY	UNIT	DESCRIPTION
1	EACH	POLES TYPE 9
1	EACH	POLES TYPE 10
2	EACH	OVER HEIGHT POLES TYPE 13
1	EACH	MONOTUBE ARMS 25-FT
1	EACH	MONOTUBE ARMS 30-FT
2	EACH	MONOTUBE ARMS 40-FT
3	EACH	LUMINAIRE ARMS STEEL 15-FT
1	EACH	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8-PHASE
1	EACH	TRAFFIC SIGNAL CABINET
4	EACH	EVP DETECTOR HEADS
1	EACH	ETHERNET SWITCH

NOTE: THIS TABLE IS FOR INFORMATION ONLY.

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REMOVAL QUANTITIES

LOCATION	ITEM NO.	204.0195 REMOVING CONCRETE BASES EACH	653.0905 REMOVING PULL BOXES EACH
STH 20 & JEFFERSON ST	SB1	1	--
	SB2	1	--
	SB3	1	--
	SB4	1	--
	SB5	1	--
	SB6	1	--
	SB7	1	--
	SB8	1	--
	PB1	--	1
	PB2	--	1
	PB3	--	1
	PB4	--	1
	PB5	--	1
	PB6	--	1
	PB7	--	1
	PB8	--	1
	PB9	--	1
	PB10	--	1
	PB11	--	1
	PB12	--	1
	PB13	--	1
	PB14	--	1
	PB15	--	1
	PB16	--	1
	PB17	--	1
	CB1	1	--
INTERSECTION TOTAL		9	17

PULL BOXES

LOCATION	PULL BOX NO.	ALIGNMENT	STATION	OFFSET	653.0135 PULL BOXES STEEL 24" x 36" EACH	653.0140 PULL BOXES STEEL 24" x 42" EACH	653.0164 PULL BOXES NON-CONDUCTIVE 24" x 42" EACH
STH 20 & JEFFERSON ST	PB1	STH 20	358+19	80.0' LT	--	1	--
	PB2	STH 20	358+19	42.4' LT	--	--	1
	PB3	STH 20	358+74	33.6' LT	1	--	--
	PB4	STH 20	360+13	32.4' LT	1	--	--
	PB5	STH 20	358+12	51.6' RT	--	1	--
	PB6	STH 20	358+34	65.1' RT	--	--	1
	PB7	S JEFFERSON ST	78+52	22.1' RT	1	--	--
	PB8	S JEFFERSON ST	77+28	22.1' RT	1	--	--
	PB9	STH 20	357+54	55.7' RT	--	1	--
	PB10	STH 20	357+25	35.5' RT	--	1	--
	PB11	STH 20	355+60	30.0' RT	1	--	--
	PB12	STH 20	357+34	35.3' LT	--	--	1
	PB13	STH 20	357+58	41.2' LT	--	--	1
	PB14	STH 20	357+66	74.7' LT	--	1	--
	PB15	N JEFFERSON ST	80+99	22.4' LT	--	1	--
	PB16	N JEFFERSON ST	82+36	21.9' LT	1	--	--
	PB17	N JEFFERSON ST	81+03	30.6' RT	--	1	--
INTERSECTION TOTAL					6	7	4

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 &
JEFFERSON STREET

SIGNAL NO: S51-0729

3

SIGNAL BASES AND POLES

LOCATION	SIG. BASE NO.	657.0100 PEDESTAL BASE EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 INCH EACH	657.0310 POLES TYPE 3 EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT EACH	657.1345 INSTALL POLES TYPE 9 EACH	657.1350 INSTALL POLES TYPE 10 EACH	657.1460 INSTALL POLES OVER HEIGHT TYPE 13 EACH	657.1525 INSTALL MONOTUBE ARMS 25-FT EACH	657.1530 INSTALL MONOTUBE ARMS 30-FT EACH	657.1540 INSTALL MONOTUBE ARMS 40-FT EACH	657.1815 INSTALL LUMINAIRE ARMS STEEL 15-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	659.1125 LUMINAIRES UTILITY LED C EACH
STH 20 & JEFFERSON ST	SB 1	1	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--
	SB 2	1	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--
	SB 3	1	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--
	SB 4	--	--	--	--	--	--	--	--	--	1	--	--	1	1	--	1
	SB 5	1	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--
	SB 6	--	--	--	--	--	--	--	--	1	--	--	1	--	1	--	1
	SB 7	1	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--
	SB 8	1	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--
	SB 9	--	--	--	--	--	--	--	--	--	1	--	--	1	1	--	1
	SB 10	--	1	1	--	--	--	1	--	--	--	--	--	--	--	1	1
	SB 11	--	--	--	--	--	--	--	1	--	--	1	--	--	--	1	--
INTERSECTION TOTAL		6	1	1	1	2	3	1	1	1	2	1	1	2	3	8	4

3

ELECTRICAL SERVICE METER BREAKER PEDESTAL

LOCATION	656.0200.02 ELECTRICAL SERVICE METER BREAKER PEDESTAL (STH 20 & JEFFERSON ST) L.S.
STH 20 & JEFFERSON ST	1
TOTAL	1

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.02 TRAFFIC SIGNAL MOUNTING HARDWARE (STH 20 & JEFFERSON ST) L.S.
STH 20 & JEFFERSON ST	1
TOTAL	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 & JEFFERSON STREET

SIGNAL NO: S51-0729

				SIGNAL FACES											
LOCATION	SIG. BASE NO.	SIG. HEAD NO.	TYPE OF MOUNT	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	* BCKPLT 3-SEC. EACH	* BCKPLT 4-SEC. EACH	* LED RED BALL EACH	* LED YELLOW BALL EACH	* LED GREEN BALL EACH	* LED RED ARROW EACH	* LED YELLOW ARROW EACH	* LED GREEN ARROW EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	** PEDESTRIAN COUNTDOWN TIMER 16" EACH
STH 20 & JEFFERSON ST	SB1	4	POST MOUNT VERTICAL	--	1	--	1	--	--	--	1	2	1	--	--
		6	POST MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		21	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB2	22	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB3	11	POST MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		23	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB4	2	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		3	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		5	MONOTUBE ARM MOUNT VERTICAL	--	1	--	1	--	--	--	1	2	1	--	--
	SB5	24	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB6	15	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		16	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
	SB7	1	POST MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		9	POST MOUNT VERTICAL	--	1	--	1	--	--	--	1	2	1	--	--
		17	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB8	18	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB9	7	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		8	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		10	MONOTUBE ARM MOUNT VERTICAL	--	1	--	1	--	--	--	1	2	1	--	--
	SB10	14	POST MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		19	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
	SB11	12	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		13	MONOTUBE ARM MOUNT VERTICAL	1	--	1	--	1	1	1	--	--	--	--	--
		20	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	1	1
INTERSECTION TOTAL				12	4	12	4	12	12	12	4	8	4	8	8

*INCIDENTAL TO 658.0173 OR 658.0174
**INCIDENTAL TO 658.0416

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

**STH 20 &
JEFFERSON STREET**

SIGNAL NO: S51-0729

3

CONCRETE BASES

LOCATION	SIGNAL BASE NO.	ALIGNMENT	STATION	OFFSET	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	654.0217 CONCRETE CONTROL CABINET BASE TYPE 9 SPECIAL EACH
STH 20 & JEFFERSON ST	CB1	STH 20	358+20	90.8' LT	--	--	--	--	1
	SB1	STH 20	358+35	33.5' LT	1	--	--	--	--
	SB2	STH 20	358+11	35.5' RT	1	--	--	--	--
	SB3	STH 20	358+12	46.7' RT	1	--	--	--	--
	SB4	STH 20	358+52	39.1' RT	--	--	--	1	--
	SB5	STH 20	357+51	51.9' RT	1	--	--	--	--
	SB6	STH 20	357+56	61.1' RT	--	--	1	--	--
	SB7	STH 20	357+36	39.2' RT	1	--	--	--	--
	SB8	STH 20	357+53	35.9' LT	1	--	--	--	--
	SB9	STH 20	357+37	38.8' LT	--	--	--	1	--
	SB10	STH 20	357+67	55.8' LT	--	1	--	--	--
	SB11	STH 20	358+17	55.2' LT	--	--	1	--	--
INTERSECTION TOTAL					6	1	2	2	1

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0200.02 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS (STH 20 & JEFFERSON ST) L.S.
STH 20 & JEFFERSON ST	1
TOTAL	1

CONDUIT ITEMS

LOCATION	FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF.
STH 20 & JEFFERSON ST	CB1	PB1	--	24
	PB1	PB2	--	114
	PB2	SB1	19	--
	PB2	SB11	--	18
	PB2	PB3	56	--
	PB2	PB6	--	216
	PB3	PB4	140	--
	PB5	PB6	--	26
	PB5	SB2	16	--
	PB5	SB3	5	--
	PB6	SB4	--	32
	PB6	PB7	85	--
	PB7	PB8	123	--
	PB6	PB9	--	162
	PB9	SB5	5	--
	PB9	SB6	--	5
	PB9	PB10	--	70
	PB10	PB11	165	--
	PB10	SB7	11	--
	PB10	PB12	--	142
	PB12	SB8	19	--
	PB12	SB9	--	5
	PB12	PB13	--	62
	PB13	SB10	12	--
	PB13	PB14	--	62
	PB14	PB15	--	48
	PB15	PB16	137	--
	PB15	PB17	--	159
	PB17	CB1	--	30
INTERSECTION TOTAL			793	1175

3

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 & JEFFERSON STREET

SIGNAL NO: S51-0729

3

TRAFFIC SIGNAL CABLE

LOCATION	LOC.	TO	LOC.	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF.	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG LF.	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.	655.0700^ LOOP DETECTOR LEAD-IN CABLE L.F.	655.0900 EVP DETECTOR CABLE L.F.
STH 20 & JEFFERSON ST	CB1		SB1	--	--	--	99	--	--	--	--	--
	CB1		SB2	--	--	203	--	--	--	--	--	--
	CB1		SB3	--	--	193	--	--	--	--	--	--
	CB1		SB4	--	--	247	--	247	--	--	--	312
	CB1		SB5	--	--	262	--	--	--	--	--	--
	CB1		SB6	--	262	--	--	--	--	--	--	317
	CB1		SB7	--	--	--	313	--	--	--	--	--
	CB1		SB8	--	--	236	--	--	--	--	--	--
	CB1		SB9	--	--	224	--	--	--	--	--	289
	CB1		SB10	--	--	187	--	187	187	--	--	--
	CB1		SB11	--	--	93	--	--	93	--	--	143
	SB1		SB2	--	--	--	--	--	151	--	--	--
	SB1		SB11	--	--	--	--	--	57	--	--	--
	SB2		SB3	--	--	--	--	--	45	--	--	--
	SB3		SB4	--	--	--	--	--	89	--	--	--
	SB4		SB5	--	--	--	--	--	158	--	--	--
	SB4		SB6	--	--	--	--	159	--	--	--	--
	SB5		SB6	--	--	--	--	--	35	--	--	--
	SB6		SB7	--	--	--	--	--	86	--	--	--
	SB7		SB8	--	--	--	--	--	134	--	--	--
	SB8		SB9	--	--	--	--	--	47	--	--	--
	SB9		SB10	--	--	--	--	82	82	--	--	--
	PB1		CB1	--	--	--	--	--	29	--	--	--
	PB2		SB11	--	--	--	--	--	25	--	--	--
	PB5		SB3	--	--	--	--	--	25	--	--	--
	PB6		SB4	--	--	--	--	--	48	--	--	--
	PB9		SB6	--	--	--	--	--	25	--	--	--
	PB10		SB7	--	--	--	--	--	30	--	--	--
	PB12		SB9	--	--	--	--	--	25	--	--	--
	PB13		SB10	--	--	--	--	--	30	--	--	--
	PB14		SB10	--	--	--	--	--	72	--	--	--
	PB15		CB1	--	--	--	--	--	95	--	--	--
	PB17		CB1	--	--	--	--	--	31	--	--	--

(CONTINUED ON NEXT PAGE)

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

^ADDITIONAL QUANTITIES SHOWN ELSEWHERE

STH 20 &
JEFFERSON STREET

SIGNAL NO: S51-0729

TRAFFIC SIGNAL CABLE **(CONTINUED FROM PREVIOUS PAGE)**

LOCATION	LOC.	TO	LOC.	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF.	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG LF.	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.	655.0700^ LOOP DETECTOR LEAD-IN CABLE L.F.	655.0900 EVP DETECTOR CABLE L.F.
STH 20 & JEFFERSON ST	SB1		HEAD 4	--	22	--	--	--	--	--	--	--
	SB1		HEAD 6	19	--	--	--	--	--	--	--	--
	SB1		HEAD 21	15	--	--	--	--	--	--	--	--
	SB1		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB2		HEAD 22	15	--	--	--	--	--	--	--	--
	SB2		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB3		HEAD 11	19	--	--	--	--	--	--	--	--
	SB3		HEAD 23	15	--	--	--	--	--	--	--	--
	SB3		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB4		HEAD 2	65	--	--	--	--	--	--	--	--
	SB4		HEAD 3	65	--	--	--	--	--	--	--	--
	SB4		HEAD 5	--	66	--	--	--	--	--	--	--
	SB4		LUMINAIRE	--	--	--	--	--	--	144	--	--
	SB5		HEAD 24	15	--	--	--	--	--	--	--	--
	SB5		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB6		HEAD 15	55	--	--	--	--	--	--	--	--
	SB6		HEAD 16	55	--	--	--	--	--	--	--	--
	SB6		LUMINAIRE	--	--	--	--	--	--	144	--	--
	SB7		HEAD 1	19	--	--	--	--	--	--	--	--
	SB7		HEAD 9	--	22	--	--	--	--	--	--	--
	SB7		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB8		HEAD 18	15	--	--	--	--	--	--	--	--
	SB8		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB9		HEAD 7	65	--	--	--	--	--	--	--	--
	SB9		HEAD 8	65	--	--	--	--	--	--	--	--
	SB9		HEAD 10	--	66	--	--	--	--	--	--	--
	SB9		LUMINAIRE	--	--	--	--	--	--	144	--	--
	SB10		HEAD 14	19	--	--	--	--	--	--	--	--
	SB10		HEAD 19	15	--	--	--	--	--	--	--	--
	SB10		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB10		LUMINAIRE	--	--	--	--	--	--	117	--	--
	SB11		HEAD 12	50	--	--	--	--	--	--	--	--
	SB11		HEAD 13	50	--	--	--	--	--	--	--	--
	SB11		HEAD 20	15	--	--	--	--	--	--	--	--
	SB11		PUSH BUTTON	--	--	--	--	--	--	--	6	--
INTERSECTION TOTAL				651	438	1645	412	675	1401	549	48	1061

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

^ADDITIONAL QUANTITIES SHOWN ELSEWHERE

STH 20 & JEFFERSON STREET

SIGNAL NO: S51-0729

3

3

TRAFFIC DETECTOR LOOPS

LOCATION	LOOP NO.	HOME RUN PB	STATION/OFFSET*	SIZE	SDD INSTALLATION REFERENCE	NO. OF TURNS	PAVEMENT TYPE	652.0800 CONDUIT LOOP DETECTOR LF	655.0700^ LOOP DETECTOR LEAD-IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
STH 20 & JEFFERSON ST	11 (FUTURE)	PB10	357+21, 1' RT	6'x20'	9F15-4b	3	CONCRETE	116	228	232
	12 (FUTURE)	PB10	357+45, 1' RT	6'x20'	9F15-4b	3	CONCRETE	126	228	242
	21	PB4	360+13, 10' LT	6'x6'	9F15-4b	4	CONCRETE	62	248	146
	41	PB16	357+77, 236' LT	6'x10'	9F15-4a	3	ASPHALT	44	208	120
	42	PB14	357+78, 79' LT	6'x20'	9F15-4a	3	ASPHALT	72	95	188
	43	PB14	357+78, 55' LT	6'x20'	9F15-4a	3	ASPHALT	70	95	186
	51	PB3	358+73, 1' RT	6'x20'	9F15-4b	3	CONCRETE	114	109	230
	52	PB3	358+49, 1' RT	6'x20'	9F15-4b	3	CONCRETE	114	109	230
	61	PB11	355+61, 15' RT	6'x6'	9F15-4a	5	CONCRETE	48	393	156
	62	PB11	355+61, 6' RT	6'x6'	9F15-4b	5	CONCRETE	66	393	174
	81	PB8	358+03, 272' RT	6'x10'	9F15-4a	4	ASPHALT	50	371	158
	82	PB5	357+99, 71' RT	6'x20'	9F15-4a	3	ASPHALT	96	188	212
	83	PB5	357+99, 48' RT	6'x20'	9F15-4a	3	ASPHALT	78	188	194
INTERSECTION TOTAL								1056	2853	2468

*LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.

^ADDITIONAL QUANTITIES SHOWN ELSEWHERE

NOTES: FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
THE STH 20-MAIN ALIGNMENT IS REFERENCED FOR STATION/OFFSET.
S.D.D. 9F15-4a: LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
S.D.D. 9F15-4b: LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF RAODWAY (OPTION 2)

REMOVING TRAFFIC SIGNALS

LOCATION	204.9105.S.02 REMOVING TRAFFIC SIGNALS (STH 20 & JEFFERSON ST) L.S.
STH 20 & JEFFERSON ST	1
TOTAL	1

REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	204.9105.S.05 REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE (STH 20 & JEFFERSON ST) L.S.
STH 20 & JEFFERSON ST	1
TOTAL	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 & JEFFERSON STREET

SIGNAL NO: S51-0729

PLOT DATE : 4/24/2018 2:01 PM PLOT BY : PLOT NAME : 030201_mq PLOT SCALE : 1.000000:1.000000
WISDOT / CADDS SHEET 42

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TEMPORARY EVP SYSTEM

LOCATION	SPV.0105.01 TEMPORARY EVP SYSTEM (STH 20 & JEFFERSON ST) L.S.
STH 20 & JEFFERSON ST	1
TOTAL	1

TEMPORARY VEHICLE DETECTION STH 20 & JEFFERSON STREET

LOCATION	SPV.0105.04 TEMPORARY VEHICLE DETECTION SYSTEM (STH 20 & JEFFERSON ST) L.S.
STH 20 & JEFFERSON ST	1
TOTAL	1

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TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET

LOCATION	SPV.0105.07 TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET (STH 20 & JEFFERSON ST) L.S.
STH 20 & JEFFERSON ST	1
TOTAL	1

TRANSPORT SIGNAL AND LIGHTING MATERIALS

LOCATION	SPV.0105.09 TRANSPORT SIGNAL AND LIGHTING MATERIALS (STH 20 & JEFFERSON ST) L.S.
STH 20 & JEFFERSON ST	1
TOTAL	1

TRANSPORT AND INSTALL STATE FURNISHED
EMERGENCY VEHICLE PREEMPTION (EVP) DETECTOR HEADS

LOCATION	SPV.0105.12 TRANSPORT & INSTALL STATE FURNISHED EVP DETECTOR HEADS L.S.
STH 20 & JEFFERSON ST	1
TOTAL	1

INSTALL WIRELESS ANTENNAS

LOCATION	678.0700 INSTALL WIRELESS ANTENNAS EACH
CB1 (S51-0729)	1
TOTAL	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

**STH 20 &
JEFFERSON STREET**

SIGNAL NO: S51-0729

3

3

SUMMARY OF STATE FURNISHED MATERIALS

QUANTITY	UNIT	DESCRIPTION
1	EACH	OVER HEIGHT POLES TYPE 10
1	EACH	OVER HEIGHT POLES TYPE 13
1	EACH	MONOTUBE ARMS 30-FT
1	EACH	MONOTUBE ARMS 55-FT
2	EACH	LUMINAIRE ARMS STEEL 15-FT
1	EACH	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8-PHASE
3	EACH	EVP DETECTOR HEADS
1	EACH	ETHERNET SWITCH

NOTE: THIS TABLE IS FOR INFORMATION ONLY.

REMOVAL QUANTITIES

LOCATION	ITEM NO.	204.0195 REMOVING CONCRETE BASES EACH	653.0905 REMOVING PULL BOXES EACH
STH 20 & E. MAIN ST	SB1	1	--
	SB2	1	--
	SB3	1	--
	SB5	1	--
	SB6	1	--
	SB7	1	--
	SB8	1	--
	SB9	1	--
	PB1	--	1
	PB2	--	1
	PB3	--	1
	PB4	--	1
	PB5	--	1
	PB6	--	1
INTERSECTION TOTAL		8	6

PULL BOXES

LOCATION	PULL BOX NO.	ALIGNMENT	STATION	OFFSET	653.0135 PULL BOXES STEEL 24" x 36" EACH	653.0140 PULL BOXES STEEL 24" x 42" EACH	653.0154 PULL BOXES NON-CONDUCTIVE 24" x 36" EACH	653.0164 PULL BOXES NON-CONDUCTIVE 24" x 42" EACH
STH 20 & E. MAIN ST	PB1	STH 20/83	4+49	44.8' RT	--	1	--	--
	PB2	STH 20/83	2+36	33.3' RT	1	--	--	--
	PB3	STH 20/83	4+60	25.9' LT	--	--	--	1
	PB4	E. MAIN ST	10+35	27.7' LT	--	--	--	1
	PB5	E. MAIN ST	10+51	26.5' LT	--	--	1	--
	PB6	E. MAIN ST	10+92	26.9' LT	--	--	1	--
	PB7	E. MAIN ST	12+31	27.7' LT	--	--	1	--
	PB8	E. MAIN ST	10+37	37.6' RT	--	1	--	--
	PB9	E. MAIN ST	10+29	58.9' RT	--	1	--	--
	PB10	STH 20/83	5+79	27.3' LT	1	--	--	--
	PB11	STH 20/83	7+21	27.3' LT	--	--	1	--
	PB12	STH 20/83	5+58	46.6' RT	--	1	--	--
INTERSECTION TOTAL					2	4	4	2

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 &
E. Main Street

SIGNAL NO: S51-1394

3

SIGNAL BASES AND POLES

LOCATION	SIG. BASE NO.	657.0100 PEDESTAL BASE EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 INCH EACH	657.0310 POLES TYPE 3 EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT EACH	657.1450 INSTALL POLES OVER HEIGHT TYPE 10 EACH	657.1460 INSTALL POLES OVER HEIGHT TYPE 13 EACH	657.1530 INSTALL MONOTUBE ARMS 30-FT EACH	657.1555 INSTALL MONOTUBE ARMS 55-FT EACH	657.1815 INSTALL LUMINAIRE ARMS STEEL 15-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	659.1125 LUMINAIRES UTILITY LED C EACH
STH 20 & E. MAIN ST	SB1	1	--	--	--	1	--	--	--	--	--	--	--	--	--
	SB2	--	--	--	--	--	--	--	--	1	--	1	1	--	1
	SB3	1	--	--	1	--	--	--	--	--	--	--	--	--	--
	SB4	1	--	--	1	--	--	--	--	--	--	--	--	--	--
	SB5	--	1	1	--	--	--	1	--	--	--	--	--	1	1
	SB6	--	--	--	--	--	--	--	1	--	1	--	1	1	1
	SB7	--	1	1	--	--	--	1	--	--	--	--	--	1	1
	SB8	1	--	--	--	--	1	--	--	--	--	--	--	1	--
INTERSECTION TOTAL		4	2	2	2	1	1	2	1	1	1	1	2	4	4

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.03 TRAFFIC SIGNAL MOUNTING HARDWARE (STH 20 & E. MAIN ST) L.S.
STH 20 & E. MAIN ST	1
TOTAL	1

REMOVING TRAFFIC SIGNALS

LOCATION	204.9105.S.03 REMOVING TRAFFIC SIGNALS (STH 20 & E. MAIN ST) L.S.
STH 20 & E. MAIN ST	1
TOTAL	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 &
E. Main Street

SIGNAL NO: S51-1394

PLOT DATE : 4/24/2018 2:02 PM PLOT BY : PLOT NAME : 030201_mq PLOT SCALE : 1.000000:1.000000 WISDOT / CADDS SHEET 42

SIGNAL FACES

LOCATION	SIG. BASE NO.	SIG. HEAD NO.	TYPE OF MOUNT	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0175 TRAFFIC SIGNAL FACE 5S 12-INCH EACH	* BCKPLT 3-SEC. EACH	* BCKPLT 4-SEC. EACH	* BCKPLT 5-SEC. EACH	* LED RED BALL EACH	* LED YELLOW BALL EACH	* LED GREEN BALL EACH	* LED RED ARROW EACH	* LED YELLOW ARROW EACH	* LED GREEN ARROW EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	** PEDESTRIAN COUNTDOWN TIMER 16" EACH
STH 20 & E. MAIN ST	SB1	1	POST MOUNT VERTICAL	--	--	1	--	--	1	1	1	1	--	1	1	--	--
		7	POST MOUNT VERTICAL	--	1	--	--	1	--	--	--	--	1	2	1	--	--
	SB2	5	MONOTUBE ARM MOUNT VERTICAL	1	--	--	1	--	--	1	1	1	--	--	--	--	--
		6	MONOTUBE ARM MOUNT VERTICAL	1	--	--	1	--	--	1	1	1	--	--	--	--	--
		8	MONOTUBE ARM MOUNT VERTICAL	--	1	--	--	1	--	--	--	--	1	2	1	--	--
	SB3	10	POST MOUNT VERTICAL	1	--	--	1	--	--	1	1	1	--	--	--	--	--
	SB4	11	POST MOUNT VERTICAL	1	--	--	1	--	--	1	1	1	--	--	--	--	--
	SB5	4	POST MOUNT VERTICAL	1	--	--	1	--	--	1	1	1	--	--	--	--	--
		12	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	--	--	1	1
	SB6	2	MONOTUBE ARM MOUNT VERTICAL	1	--	--	1	--	--	1	1	1	--	--	--	--	--
		3	MONOTUBE UPRIGHT VERTICAL	--	--	1	--	--	1	1	1	1	--	1	1	--	--
		13	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	--	--	1	1
	SB7	9	POST MOUNT VERTICAL	1	--	--	1	--	--	1	1	1	--	--	--	--	--
		14	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	--	--	1	1
	SB8	15	PEDESTRIAN	--	--	--	--	--	--	--	--	--	--	--	--	1	1
INTERSECTION TOTAL				7	2	2	7	2	2	9	9	9	2	6	4	4	4

*INCIDENTAL TO 658.0173, 658.0174, OR 658.0175
**INCIDENTAL TO 658.0416

CONCRETE BASES

LOCATION	SIGNAL BASE NO.	ALIGNMENT	STATION	OFFSET	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0113 CONCRETE BASES TYPE 13 EACH
STH 20 & E. MAIN ST	SB1	STH 20/83	4+46	33.5' RT	1	--	--	--
	SB2	STH 20/83	4+37	43.2' RT	--	--	--	1
	SB3	E. MAIN ST	10+02	26.5' LT	1	--	--	--
	SB4	E. MAIN ST	10+17	26.4' LT	1	--	--	--
	SB5	E. MAIN ST	10+52	25.4' LT	--	1	--	--
	SB6	E. MAIN ST	10+49	32.2' RT	--	--	1	--
	SB7	E. MAIN ST	10+29	54.9' RT	--	1	--	--
	SB8	STH 20/83	5+45	36.0' RT	1	--	--	--
INTERSECTION TOTAL					4	2	1	1

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0200.03 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS (STH 20 & E. MAIN ST) L.S.
STH 20 & E. MAIN ST	1
TOTAL	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 &
E. Main Street

SIGNAL NO: S51-1394

3

3

TRAFFIC DETECTOR LOOPS

LOCATION	LOOP NO.	HOME RUN PB	ALIGNMENT	STATION/OFFSET*	SIZE	SDD INSTALLATION REFERENCE	NO. OF TURNS	PAVEMENT TYPE	652.0800 CONDUIT LOOP DETECTOR LF	655.0700^ LOOP DETECTOR LEAD-IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
STH 20 & E. MAIN ST	21	PB7	E. MAIN ST	12+31, 6' LT	6'x6'	9F15-4b	5	CONCRETE	60	382	168
	51	PB6	E. MAIN ST	10+90, 5' LT	6'x6'	9F15-4b	4	CONCRETE	62	243	146
	61	PB2	STH 20/83	2+51, 6' RT	6'x6'	9F15-4b	3	CONCRETE	76	236	136
	62	PB5	E. MAIN ST	10+48, 5' LT	6'x20'	9F15-4b	3	CONCRETE	90	214	206
	81	PB11	STH 20/83	7+32, 6' LT	6'x6'	9F15-4b	4	CONCRETE	62	271	146
	82	PB10	STH 20/83	5+80, 6' LT	6'x20'	9F15-4b	3	CONCRETE	88	117	204
	83	PB10	STH 20/83	5+55, 6' LT	6'x20'	9F15-4b	3	CONCRETE	90	117	206
	84	PB10	STH 20/83	5+79, 18' LT	6'x20'	9F15-4a	3	CONCRETE	64	117	180
	85	PB10	STH 20/83	5+55, 18' LT	6'x20'	9F15-4a	3	CONCRETE	66	117	182
INTERSECTION TOTAL									658	1814	1574

^ADDITIONAL QUANTITIES SHOWN ELSEWHERE

*LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.

NOTES: FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

S.D.D. 9F15-4a: LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)

S.D.D. 9F15-4b: LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

CONDUIT ITEMS

LOCATION	FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF.
STH 20 & E. MAIN ST	CB1	PB1	--	33
	PB1	SB1	13	--
	PB1	SB2	--	13
	PB1	PB2	217	--
	PB1	PB3	--	144
	PB3	SB3	36	--
	PB3	PB4	--	138
	PB4	SB4	18	--
	PB4	SB5	17	--
	PB4	PB5	28	--
	PB5	PB6	29	--
	PB6	PB7	139	--
	PB4	PB8	--	130
	PB8	SB6	--	13
	PB8	PB9	--	46
	PB9	SB7	5	--
	PB9	PB10	20	--
	PB10	PB11	154	--
	PB9	PB12	--	150
	PB12	SB8	17	--
	PB12	CB1	--	45
INTERSECTION TOTAL			693	712

INSTALL CONDUIT INTO EXISTING ITEM

LOCATION	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH
STH 20 & E. MAIN ST	1
TOTAL	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 &
E. Main Street

SIGNAL NO: S51-1394

TRAFFIC SIGNAL CABLE

LOCATION	LOC.	TO	LOC.	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF.	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG LF.	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.	655.0700^ LOOP DETECTOR LEAD-IN CABLE L.F.	655.0900 EVP DETECTOR CABLE L.F.
STH 20 & E. MAIN ST	CB1		SB1	--	--	--	49	--	47	--	--	--
	CB1		SB2	--	--	49	--	49	--	--	--	103
	CB1		SB3	--	155	--	--	--	--	--	--	--
	CB1		SB4	--	216	--	--	--	--	--	--	--
	CB1		SB5	--	--	213	--	--	--	--	--	--
	CB1		SB6	--	--	170	--	--	--	--	--	194
	CB1		SB7	--	--	132	--	132	--	--	--	151
	CB1		SB8	--	--	54	--	--	51	--	--	--
	SB1		SB2	--	--	--	--	--	47	--	--	--
	SB2		SB3	--	--	--	--	--	153	--	--	--
	SB3		SB4	--	--	--	--	--	153	--	--	--
	SB4		SB5	--	--	--	--	--	52	--	--	--
	SB5		SB6	--	--	--	--	122	122	--	--	--
	SB6		SB7	--	--	--	--	68	68	--	--	--
	SB7		SB8	--	--	--	--	--	129	--	--	--
	PB1		SB2	--	--	--	--	--	31	--	--	--
	PB3		SB3	--	--	--	--	--	54	--	--	--
	PB4		SB4	--	--	--	--	--	32	--	--	--
	PB8		SB6	--	--	--	--	--	29	--	--	--
	PB9		SB7	--	--	--	--	--	25	--	--	--
	PB12		SB8	--	--	--	--	--	33	--	--	--
	SB1		HEAD 1	--	23	--	--	--	--	--	--	--
	SB1		HEAD 7	--	22	--	--	--	--	--	--	--
	SB2		HEAD 5	80	--	--	--	--	--	--	--	--
	SB2		HEAD 6	80	--	--	--	--	--	--	--	--
	SB2		HEAD 8	--	81	--	--	--	--	--	--	--
	SB2		LUMINAIRE	--	--	--	--	--	--	144	--	--
	SB3		HEAD 10	19	--	--	--	--	--	--	--	--
	SB4		HEAD 11	19	--	--	--	--	--	--	--	--
	SB5		HEAD 4	19	--	--	--	--	--	--	--	--
	SB5		HEAD 12	15	--	--	--	--	--	--	--	--
	SB5		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB5		LUMINAIRE	--	--	--	--	--	--	117	--	--
	SB6		HEAD 2	55	--	--	--	--	--	--	--	--
	SB6		HEAD 3	--	23	--	--	--	--	--	--	--
	SB6		HEAD 13	15	--	--	--	--	--	--	--	--
	SB6		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB6		LUMINAIRE	--	--	--	--	--	--	144	--	--
	SB7		HEAD 9	19	--	--	--	--	--	--	--	--
	SB7		HEAD 14	15	--	--	--	--	--	--	--	--
	SB7		PUSH BUTTON	--	--	--	--	--	--	--	6	--
	SB7		LUMINAIRE	--	--	--	--	--	--	117	--	--
	SB8		HEAD 15	15	--	--	--	--	--	--	--	--
	SB8		PUSH BUTTON	--	--	--	--	--	--	--	6	--
INTERSECTION TOTAL				351	520	618	49	371	1026	522	24	448

^ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 &
E. Main Street

SIGNAL NO: S51-1394

3

TEMPORARY EVP SYSTEM

LOCATION	SPV.0105.02 TEMPORARY EVP SYSTEM (STH 20 & E. MAIN ST) L.S.
STH 20 & E. MAIN ST	1
TOTAL	1

TEMPORARY VEHICLE DETECTION STH 20 & JEFFERSON STREET

LOCATION	SPV.0105.05 TEMPORARY VEHICLE DETECTION SYSTEM (STH 20 & E. MAIN ST) L.S.
STH 20 & E. MAIN ST	1
TOTAL	1

3

TRANSPORT SIGNAL AND LIGHTING MATERIALS

LOCATION	SPV.0105.10 TRANSPORT SIGNAL AND LIGHTING MATERIALS (STH 20 & E. MAIN ST) L.S.
STH 20 & E. MAIN ST	1
TOTAL	1

TRANSPORT AND INSTALL STATE FURNISHED EMERGENCY VEHICLE PREEMPTION (EVP) DETECTOR HEADS

LOCATION	SPV.0105.13 TRANSPORT & INSTALL STATE FURNISHED EVP DETECTOR HEADS L.S.
STH 20 & E. MAIN ST	1
TOTAL	1

INSTALL WIRELESS ANTENNAS

LOCATION	678.0700 INSTALL WIRELESS ANTENNAS EACH
CB1 (S51-1394)	1
TOTAL	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 20 &
E. Main Street

SIGNAL NO: S51-1394

3

SUMMARY OF STATE FURNISHED MATERIALS

QUANTITY	UNIT	DESCRIPTION
4	EACH	EVP DETECTOR HEADS

NOTE: THIS TABLE IS FOR INFORMATION ONLY.

TRAFFIC DETECTOR LOOPS

LOCATION	LOOP NO.	HOME RUN PB	ALIGNMENT	STATION/OFFSET*	SIZE	SDD INSTALLATION REFERENCE	NO. OF TURNS	PAVEMENT TYPE	652.0800 CONDUIT LOOP DETECTOR LF	655.0700^ LOOP DETECTOR LEAD-IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
STH 36 & STH 20	41	PB2	STH 20	46+77; 7' RT	6'x10'	9F15-4a	4	CONCRETE	48	267	156
	44	PB23	STH 20	48+76; 6' RT	6x20'	9F15-4b	3	ASPHALT	110	75	226
INTERSECTION TOTAL									158	342	382

*LOCATION IS TO FRONT CENTER OF DETECTOR LOOP

^ADDITIONAL QUANTITIES SHOWN ELSEWHERE

NOTES: FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
S.D.D. 9F15-4a: LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
S.D.D. 9F15-4b: LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

3

CONDUIT ITEMS

LOCATION	FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF.	652.0700.S INSTALL CONDUIT INTO EXISTING EACH
STH 36 & STH 20	PB1	PB23	49	1
	PB4	SB15	17	1
	INTERSECTION TOTAL		66	2

REMOVAL QUANTITIES

LOCATION	ITEM NO.	653.0905 REMOVING PULL BOXES
STH 36 & STH 20	PB2	1
INTERSECTION TOTAL		1

PULL BOXES

LOCATION	PULL BOX NO.	ALIGNMENT	STATION	OFFSET	653.0135 PULL BOXES STEEL 24" x 36" EACH
STH 36 & STH 20	PB2	STH 20	46+77	20' RT	1
	PB23	STH 20	48+71	38' RT	1
INTERSECTION TOTAL					2

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 36 & STH 20

SIGNAL NO: S51-0406

3

3

TRAFFIC SIGNAL CABLE

LOCATION	LOC.	TO	LOC.	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0700^ LOOP DETECTOR LEAD-IN CABLE L.F.	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE (STH 36 & STH 20/83) L.F.
STH 36 & STH 20	CB1		SB1	--	--	124	--	--
	CB1		SB2	--	--	--	--	229
	CB1		SB7	--	--	--	--	517
	CB1		SB9	--	--	--	--	367
	CB1		SB14	--	--	--	--	132
	CB1		SB15	--	191	--	--	--
	SB1		HEAD 10	21	--	--	--	--
	SB1		HEAD 14	21	--	--	--	--
	SB1		HEAD 22	15	--	--	--	--
	SB1		PUSH BUTTON	--	--	--	6	--
	SB15		HEAD 21	15	--	--	--	--
	SB15		PUSH BUTTON	--	--	--	6	--
INTERSECTION TOTAL				72	191	124	12	1245

^ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SIGNAL BASES AND POLES

LOCATION	SIG. BASE NO.	657.0100 PEDESTAL BASE EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH
STH 36 & STH 20	SB1	1	1	--
	SB15	1	--	1
INTERSECTION TOTAL		2	1	1

SIGNAL FACES

LOCATION	SIG. BASE NO.	SIG. HEAD NO.	TYPE OF MOUNT	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	** PEDESTRIAN COUNTDOWN TIMER 16" EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH
STH 36 & STH 20	SB1	22	PEDESTRIAN	1	1	1
	SB3	21	PEDESTRIAN	1	1	1
INTERSECTION TOTAL				2	2	2

**INCIDENTAL TO 658.0416

CONCRETE BASES

LOCATION	SIGNAL BASE NO.	ALIGNMENT	STATION	OFFSET	654.0101 CONCRETE BASES TYPE 1 EACH
STH 36 & STH 20	SB15	STH 20	48+71	46.4' LT	1
INTERSECTION TOTAL					1

SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.04 SIGNAL MOUNTING HARDWARE (STH 36 & STH 20/83) L.S.
STH 36 & STH 20	1
TOTAL	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 36 & STH 20

SIGNAL NO: S51-0406

3

REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	204.9105.S.06 REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE (STH 36 & STH 20/83) L.S.
STH 36 & STH 20	1
TOTAL	1

REMOVING TRAFFIC SIGNALS

LOCATION	204.9105.S.07 REMOVING TRAFFIC SIGNALS (STH 36 & STH 20) L.S.
STH 36 & STH 20	1
TOTAL	1

3

TRANSPORT AND INSTALL STATE FURNISHED EMERGENCY VEHICLE PREEMPTION (EVP) DETECTOR HEADS

LOCATION	SPV.0105.14 TRANSPORT & INSTALL STATE FURNISHED EVP DETECTOR HEADS L.S.
STH 36 & STH 20	1
TOTAL	1

ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED

STH 36 & STH 20

SIGNAL NO: S51-0406

3

3

CONDUIT ITEMS

LOCATION	FROM	TO	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF.
E. MAIN ST & MILWAUKEE ST	PB1	PB2	42
	PB2	PB3	126
	PB2	PB5	146
	PB3	PB4	162
	PB4	PB5	122
	INTERSECTION TOTAL		598

PULL BOXES

LOCATION	PULL BOX NO.	ALIGNMENT	STATION	OFFSET	653.0135 PULL BOXES STEEL 24" x 36" EACH	653.0140 PULL BOXES STEEL 24" x 42" EACH	653.0164 PULL BOXES NON-CONDUCTIVE 24" x 42" EACH
E. MAIN ST & MILWAUKEE ST	PB1	STH 20-MAIN ST	108+90	36.1' RT	1	--	--
	PB2	STH 20-MAIN ST	108+79	28.6' RT	--	--	1
	PB3	STH 20-MAIN ST	108+74	34.1' LT	--	1	--
	PB4	STH 20-MAIN ST	109+55	31.5' LT	--	--	1
	PB5	STH 20-MAIN ST	109+52	29.0' RT	--	--	1
INTERSECTION TOTAL					1	1	3

ALL ITEMS CATEGORY 0150 UNLESS OTHERWISE NOTED

E. MAIN STREET & MILWAUKEE STREET

SIGNAL NO:

3

MOVING SOLAR RRFB

2250-12-70

LOCATION	MOVING SOLAR RRFB AND POLE WESTBOUND RIGHT ON STH 20 AT RIVER STREET EACH SPV.0060.06	MOVING SOLAR RRFB EASTBOUND RIGHT ON STH 20 AT RIVER STREET EACH SPV.0060.07	NOTES
STH 20 WESTBOUND RIGHT AT RIVER STREET	1		
STH 20 EASTBOUND RIGHT AT RIVER STREET		1	RRFB TO BE MOUNTED ON UPRIGHT OF OVERHEAD SIGN SUPPORT S-51-252
TOTAL	1	1	

3

SHEET 1 OF 1

Rectangular Rapid Flash Beacon - MISC QUANTITIES								2250-12-70 STH 20
LOCATION	Rectangular Rapid Flashing Beacon	Rectangular Rapid Flashing Beacon	Rectangular Rapid Flashing Beacon	Rectangular Rapid Flashing Beacon	Rectangular Rapid Flashing Beacon	Rectangular Rapid Flashing Beacon	Rectangular Rapid Flashing Beacon	Rectangular Rapid Flashing Beacon
	East Crossing Right WB STH 20	East Crossing Left Median WB STH 20	East Crossing Right EB STH 20	East Crossing Left Median EB STH 20	West Crossing Right WB STH 20	West crossing left meidan WB STH 20	West Crossing Right EB STH 20	West Crossing Left Median EB STH 20
	at Rivermoor Rd	at Rivermoor Rd	at Rivermoor Rd	at Rivermoor Road	at Rivermoor Rd	at Rivermoor Rd	at Rivermoor Rd	at Rivermoor Rd
	L.S	L.S	L.S	L.S	L.S	L.S	L.S	L.S
	SPV.0105.17	SPV.0105.18	SPV.0105.19	SPV.0105.20	SPV.0105.21	SPV.0105.22	SPV.0105.23	SPV.0105.24
East Crossing Right WB STH 20 at Rivermoor Rd	1							
East Crossing Left Median WB STH 20 at Rivermoor Rd		1						
East Crossing Right EB STH 20 at Rivermoor Rd			1					
East Crossing Left Median EB STH 20 at Rivermoor Road				1				
West Crossing Right WB STH 20 at Rivermoor Rd					1			
West crossing left meidan WB STH 20 at Rivermoor Rd						1		
West Crossing Right EB STH 20 at Rivermoor Rd							1	
West Crossing Right EB STH 20 at Rivermoor Rd								1
TOTAL	1	1	1	1	1	1	1	1

SHEET: 1 OF 1

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	MISCELLANEOUS QUANTITIES – RAPID RECTANGULAR FLASH BEACON	SHEET: 401	E

FILE NAME : N:\SPO\Operations\Signing\Miscellaneous Quantities\2250-12-70\030202_MQ.pptx PLOT DATE : 4/27/2018 PLOT BY : DOTTAH PLOT NAME : 030202_MQ.pdf PLOT SCALE : 1:1

TYPE II SIGN REMOVAL **2250-12-70 STH 20/83**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	REMARKS / SIGN LOCATION
1R	J2-2	--	1	1	--
2R	R2-1	40 MPH	1	1	--
3R	J1-1	--	1	1	--
4R	J4-1	--	1	1	--
5R	W3-3	--	1	1	--
6R	W1-2R	--	1	1	--
7R	J4-2	--	1	1	--
8R	W14-3	--	1	1	--
9R	R2-1	40 MPH	1	1	--
10R	R10-11S	--	1	--	ON SIGNAL POLE
11R	R1-1F	--	1	--	ON SIGNAL POLE
12R	R10-11S	--	1	--	ON SIGNAL POLE
13R	R10-11S	--	1	1	--
14R	R1-1F	--	1	--	ON SIGNAL POLE
15R	I2-3	WATERFORD POPULATION	1	1	--
16R	R10-11S	--	1	--	ON SIGNAL POLE
17R	J1-1	--	1	--	ALSO REMOVE R1-1F ON SIGNAL POLE
18R	J13-1	--	1	1	--
19R	R1-1F	--	1	--	ON SIGNAL POLE
20R	J3-1	--	1	1	--
21R	R3-8W	--	1	2	--
22R	J3-1	--	1	1	--
23R	R1-1	--	1	1	--
24R	W1-2R	--	1	1	--
25R	S1-1	--	1	1	ALSO REMOVE S16-9P
26R	J4-1	--	1	2	--
27R	R2-1	35 MPH	1	1	--
28R	W3-3	--	1	1	--
29R	J1-1	--	1	1	--
30R	R2-1	35 MPH	1	1	--
31R	R2-1	25 MPH	1	1	--
32R	W5-52L	--	1	1	--
33R	W5-52R	--	1	1	--
34R	W5-52L	--	1	1	--
35R	W5-52R	--	1	1	--

TYPE II SIGN REMOVAL **2250-12-70 STH 20/83**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	REMARKS / SIGN LOCATION
36R	S4-51	15 MPH	1	1	--
37R	R1-1	--	1	1	--
38R	S1-1	--	1	--	ALSO REMOVE S16-7L ON FLASHING BEACON POLE
39R	S4-51	--	1	1	--
40R	R2-1	25 MPH	1	1	--
41R	S1-1	--	1	--	ALSO REMOVE S16-7L ON FLASHING BEACON POLE
42R	S1-1	--	1	1	ALSO REMOVE S16-9P
43R	R1-1	--	1	1	--
44R	R2-1	25 MPH	1	--	ON POWER POLE
45R	R2-1	25 MPH	1	1	--
46R	R2-1	25 MPH	1	--	ON POWER POLE
47R	R1-1	--	1	1	--
48R	R7-1D	--	1	--	ON POWER POLE
49R	R7-1D	--	1	1	--
50R	R2-1	25 MPH	1	--	ALSO REMOVE R7-1D ON LIGHT POLE
51R	JV4-1	--	1	--	ON POWER POLE
52R	S4-51	15 MPH	1	1	--
53R	R7-1D	--	1	--	ON POWER POLE
54R	S1-1	--	1	--	ALSO REMOVE S16-9P & R7-1D ON POWER POLE
55R	R1-1	--	1	1	--
56R	S4-51	15 MPH	1	--	ON POWER POLE
57R	--	STOP FOR PED IN CROSSWALK	1	1	--
58R	JV4-1	--	1	1	--
59R	R1-1	--	1	1	--
60R	R7-1D	--	1	1	--
61R	W3-3	--	1	1	--
62R	R7-2D	--	1	1	--
63R	R7-1D	--	1	1	--
64R	S1-1	--	1	--	ON SIGNAL POLE
65R	R1-1F	--	1	--	ON SIGNAL POLE
66R	R3-8A	--	1	--	ALSO REMOVE R1-1F ON SIGNAL POLE
67R	JV4-1	--	1	1	--
68R	R1-1	--	1	1	--
69R	R1-1F	--	1	--	ON SIGNAL POLE
70R	R1-1F	--	1	--	ON SIGNAL POLE

TYPE II SIGN REMOVAL **2250-12-70 STH 20/83**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	REMARKS / SIGN LOCATION
71R	R2-1	30 MPH	1	1	--
72R	R6-2R	--	1	1	ALSO REMOVE R7-1D
73R	W11-2	--	1	--	ON TYPE I POLE
74R	JV4-1	--	1	--	ON POLE
75R	R2-1	25 MPH	1	--	--
76R	R7-1D	--	1	1	--
77R	R1-1F	--	1	--	ON SIGNAL POLE
78R	R7-1L	--	1	1	--
79R	R7-1D	--	1	--	ON LIGHT POLE
80R	JV4-1	--	1	1	ALSO REMOVE R7-51R
81R	R1-1F	--	1	--	ON SIGNAL POLE
82R	J2-2	--	1	--	ON POLE
83R	R3-8D	--	1	--	ON LIGHT POLE
84R	W3-3	--	1	--	--
85R	W11-2	--	1	--	ON LIGHT POLE
86R	R1-1	--	1	1	--
87R	R7-8	--	1	--	ON POWER POLE
88R	R3-8E	--	1	--	ALSO REMOVE NO PARKING ON LIGHT POLE
89R	R1-1	--	1	1	--
90R	W3-3	--	1	--	ON LIGHT POLE
91R	JV1-1	--	1	--	ON LIGHT POLE
92R	R1-1	--	1	1	--
93R	S1-1	--	1	1	--
94R	R1-1	--	1	1	--
95R	R5-2	--	1	1	--
96R	R1-1	--	1	1	--
97R	R2-1	25 MPH	1	--	ON LIGHT POLE
98R	R1-1	--	1	1	--
99R	R1-1	--	1	1	--
100R	R2-1	25 MPH	1	--	ON LIGHT POLE
101R	R1-1	--	1	--	ALSO REMOVE W4-4B ON LIGHT POLE
102R	R5-2	--	1	--	ON POWER POLE
103R	R1-1	--	1	--	ALSO REMOVE R5-2
104R	JV3-1	--	1	--	ON LIGHT POLE
105R	R3-8F	--	1	--	ON LIGHT POLE

TYPE II SIGN REMOVAL **2250-12-70 STH 20/83**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	REMARKS / SIGN LOCATION
106R	R1-1	--	1	1	--
107R	W3-3	--	1	--	ON LIGHT POLE
108R	S1-1	--	1	1	ALSO REMOVE S16-9P
109R	R2-1	25 MPH	1	--	ON POWER POLE
110R	R2-1	25 MPH	1	--	ON LIGHT POLE
111R	R1-1	--	1	--	ON LIGHT POLE
112R	S1-1	--	1	--	ALSO REMOVE S16-7L ON LIGHT POLE
113R	R2-1	25 MPH	1	1	--
114R	S1-1	--	1	--	ALSO REMOVE S16-7L ON POWER POLE
115R	S4-51	--	1	--	ON LIGHT POLE
116R	W14-3	--	1	--	ON LIGHT POLE
117R	S1-1	--	1	--	ALSO REMOVE S16-9P ON LIGHT POLE
118R	R1-1	--	1	1	--
119R	R2-1	25 MPH	1	--	ON LIGHT POLE
120R	JV2-1	--	1	1	--
121R	JV4-1	--	1	--	ON LIGHT POLE
122R	R7-1R	--	1	1	--
123R	R2-1	35 MPH	1	1	--
124R	R7-1D	--	1	1	--
125R	R2-1	35 MPH	1	1	--
126R	R1-1	--	1	1	--
127R	R7-1D	--	1	1	--
128R	I2-3	WATERFORD POPULATION	1	1	--
129R	JV1-1	--	1	1	--
130R	R2-1	35 MPH	1	1	--
131R	R1-1	--	1	1	--
132R	R7-1D	--	1	1	--
133R	W11-1	--	1	1	ALSO REMOVE W16-7L
134R	R1-1	--	1	1	--
135R	W11-1	--	1	1	--
136R	D11-1	--	1	1	ALSO REMOVE ARROW SIGN
137R	R1-1	--	1	1	--
138R	D11-1	--	1	1	--
139R	D11-1	--	1	1	ALSO REMOVE ARROW SIGN
140R	J2-4	--	1	2	--

TYPE II SIGN REMOVAL **2250-12-70 STH 20/83**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	REMARKS / SIGN LOCATION
141R	W11-1	--	1	1	ALSO REMOVE W16-7L
142R	R7-1D	--	1	1	--
143R	R2-1	35 MPH	1	1	--
144R	J3-3	--	1	2	--
145R	D1-3	--	1	2	--
146R	W3-3	--	1	1	--
147R	NOT USED	--	--	--	--
148R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
149R	R1-2	--	1	1	--
150R	W5-52L	--	1	1	--
151R	W5-52R	--	1	1	--
152R	J4-1	--	1	1	--
153R	W5-52L	--	1	1	--
154R	W5-52R	--	1	1	--
155R	JV1-1	--	1	1	--
156R	NOT USED	--	--	--	--
157R	D11-1	--	1	--	ON POWER POLE
158R	R3-8W	--	1	2	--
159R	W3-3	--	1	1	--
160R	W4-2R	--	1	1	ALSO REMOVE R2-1
161R	--	TREE CITY/MAIN STREET COMM	1	1	REMOVE ILLEGAL SIGN - SHEET 8
162R	--	AGENTS SOLICITORS…	1	1	REMOVE ILLEGAL SIGN - SHEET 18
163R	--	ST PETER'S LUTHERAN…	1	--	REMOVE ILLEGAL SIGN - SHEET 18
164R	--	TREE CITY	1	--	REMOVE ILLEGAL SIGN - SHEET 19
--	--	--	--	--	--
TOTALS			162	110 *	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634-0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1	R2-1(2S)	40 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
2	J2-2(2S)	--	48	x	57	19.000	--	--	--	1	--	--	--	--	--
	M3-4	--	24	x	12										
	M1-6	STH 20	24	x	24										
	M5-1L	--	21	x	21										
	M3-1	--	24	x	12										
	M1-6	STH 83	24	x	24										
	M5-2R	--	21	x	21										
3	J1-1(2S)	--	24	x	39	6.500	--	--	--	1	--	--	--	--	--
	M2-1	--	21	x	15										
	M1-5A	CTH W	24	x	24										
4	W3-3(2S)	--	36	x	36	--	9.000	--	--	1	--	--	--	--	--
5	W1-2R(2S)	--	30	x	30	--	6.250	--	--	1	--	--	--	--	--
6	J4-2(2S)	--	48	x	36	12.000	--	--	--	1	--	--	--	--	--
	M3-4	--	24	x	12										
	M1-6	STH 20	24	x	24										
	M3-1	--	24	x	12										
	M1-6	STH 83	24	x	24										
7	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
8	R3-8W(2S)	--	54	x	30	11.250	--	--	--	2	--	--	--	--	--
9	J2-1(2S)	--	24	x	57	9.500	--	--	--	1	--	--	--	--	--
	M3-3	--	24	x	12										
	M1-5A	CTH W	24	x	24										
	M5-1R	--	21	x	21										
10	W14-3(2S)	--	48	x	36	--	5.560	--	--	1	--	--	--	--	--
11	I55-56	--	--	x	--	--	--	--	1	1	--	--	1	--	--
12	R2-1(2S)	40 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
13	M1-94H	BUENA PARK RD	84	x	18	10.500	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
14	R10-11S(2S)	--	24	x	36	6.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
15	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
16	R10-11S(2S)	--	24	x	36	6.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
17	R10-11S(2S)	--	24	x	36	6.000	--	--	--	1	--	--	--	--	--
18	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
19	R10-50(2S)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM

3

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634-0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
20	R10-50(2S)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
21	R10-50(2S)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
22	R10-50(2S)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
23	R10-11S(2S)	--	24	x	36	6.000	--	--	--	1	--	--	--	--	--
24	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
25	I2-3	WATERFORD POPULATION 5,368	66	x	24	11.000	--	--	--	2	--	--	--	--	--
26	JV13-1(2S)	--	24	x	69	11.500	--	--	--	1	--	--	--	--	--
	M1-6	STH 20	24	x	24										
	M1-6	STH 83	24	x	24										
	M6-4	--	21	x	21										
27	M1-94H	BUENA PARK RD	84	x	18	10.500	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
28	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
29	J3-1(2S)	--	24	x	57	9.500	--	--	--	1	--	--	--	--	--
	M3-3	--	24	x	12										
	M1-5A	CTH W	24	x	24										
	M6-1	--	21	x	21										
30	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
31	J12-1(2S)	--	24	x	45	7.500	--	--	--	1	--	--	--	--	--
	M1-5A	CTH W	24	x	24										
	M5-1L	--	21	x	21										
32	R3-8W(2S)	--	54	x	30	11.250	--	--	--	2	--	--	--	--	--
33	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
34	S5-2(2S)	--	24	x	30	5.000	--	--	--	--	--	--	--	#33	--
35	R1-1(2S)	--	30	x	30	5.180	--	--	--	1	--	--	--	--	--
36	S4-51(2S)	15 MPH	24	x	48	8.000	--	--	--	1	--	--	--	--	--
37	S1-1(2S)	--	36	x	36	--	6.750	--	--	--	--	--	--	--	--
38	S16-9P(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#37	--
39	R2-6P(2S)	--	24	x	18	3.000	--	--	--	--	--	--	--	#37	--
40	W1-2R(2S)	--	30	x	30	--	6.250	--	--	1	--	--	--	--	--
41	I55-56	--	--	x	--	--	--	--	1	1	--	--	1	--	--
42	J4-2(2S)	--	48	x	36	12.000	--	--	--	1	--	--	--	--	--
	M3-2	--	24	x	12										
	M1-6	STH 20	24	x	24										
	M3-3	--	24	x	12										
	M1-6	STH 83	24	x	24										

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634-0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
43	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
44	W3-3(2S)	--	36	x	36	--	9.000	--	--	1	--	--	--	--	--
45	J1-1(2S)	--	24	x	39	6.500	--	--	--	1	--	--	--	--	--
	M2-1	--	21	x	15										
	M1-5A	CTH W	24	x	24										
46	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
47	R4-4(2S)	--	36	x	30	7.500	--	--	--	1	--	--	--	--	--
48	R2-1(2M)	25 MPH	30	x	36	7.500	--	--	--	1	--	--	--	--	--
49	R3-7L(2S)	--	30	x	30	6.250	--	--	--	1	--	--	--	--	--
50	R2-1(2S)	25 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
51	R3-8E(2S)	--	36	x	30	7.500	--	--	--	1	--	--	--	--	--
52	R1-1(2S)	--	30	x	30	5.180	--	--	--	1	--	--	--	--	--
53	S1-1(2S)	--	36	x	36	--	6.750	--	--	1	--	--	--	--	--
54	S16-7L(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#53	--
55	S1-1(2S)	--	36	x	36	--	6.750	--	--	1	--	--	--	--	--
56	S16-7R(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#55	--
57	NOT USED	--					--	--	--		--	--	--	--	--
58	R3-9D(2S)	--	24	x	6	1.000	--	--	--	--	--	--	--	#59	--
59	R3-9B(2S)	--	24	x	36	6.000	--	--	--	1	--	--	--	--	--
60	R3-9C(2S)	--	24	x	6	1.000	--	--	--	--	--	--	--	#61	--
61	R3-9B(2S)	--	24	x	36	6.000	--	--	--	1	--	--	--	--	--
62	R2-1(2S)	25 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
63	S1-1(2S)	--	36	x	36	--	6.750	--	--	1	--	--	--	--	--
64	S16-7L(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#63	--
65	S1-1(2S)	--	36	x	36	--	6.750	--	--	1	--	--	--	--	--
66	S16-7L(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#65	--
67	NOT USED	--					--	--	--		--	--	--	--	--
68	R1-1(2S)	--	30	x	30	5.180	--	--	--	1	--	--	--	--	--
69	R3-9B(2S)	--	24	x	36	6.000	--	--	--	1	--	--	--	--	--
70	R2-1(2S)	25 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
71	R2-1(2S)	25 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
72	R3-9B(2S)	--	24	x	36	6.000	--	--	--	1	--	--	--	--	--
73	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
74	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
75	R1-1(2S)	--	30	x	30	5.180	--	--	--	1	--	--	--	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634-0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
76	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
77	--	1 HR PARKING…	--	x	--	--	--	--	1	--	--	1	1	--	--
78	S1-1(2S)	--	36	x	36	--	9.000	--	--	1	--	--	--	--	--
79	S16-7L(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#78	--
80	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
81	R2-1(2S)	25 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
82	R3-9B(2S)	--	24	x	36	6.000	--	--	--	--	--	--	--	#81	--
83	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
84	JV4-1(2S)	--	24	x	72	12.000	--	--	--	1	--	--	--	--	--
	M3-2	--	24	x	12										
	M1-6	STH 20	24	x	24										
	M3-3	--	24	x	12										
	M1-6	STH 83	24	x	24										
85	R3-9B(2S)	--	24	x	36	6.000	--	--	--	1	--	--	--	--	--
86	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
87	S1-1(2S)	--	36	x	36	--	6.750	--	--	1	--	--	--	--	--
88	S16-7L(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#87	--
89	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
90	R6-2R(2S)	--	24	x	30	5.000	--	--	--	1	--	--	--	--	--
91	S1-1(2S)	--	36	x	36	--	6.750	--	--	1	--	--	--	--	--
92	S16-7L(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#91	--
93	R3-9C(2S)	--	24	x	6	1.000	--	--	--	--	--	--	--	#94	--
94	R3-9B(2S)	--	24	x	36	6.000	--	--	--	1	--	--	--	--	--
95	S4-51(2S)	15 MPH	24	x	36	6.000	--	--	--	1	--	--	--	--	--
96	JV4-1(2S)	--	24	x	72	12.000	--	--	--	1	--	--	--	--	--
	M3-4	--	24	x	12										
	M1-6	STH 20	24	x	24										
	M3-1	--	24	x	12										
	M1-6	STH 83	24	x	24										
97	R2-1(2S)	25 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
97A	S5-2(2S)	--	24	x	30	5.000	--	--	--	--	--	--	--	#97	--
98	--	WEIGHT LIMIT 8 TONS….	--	x	--	--	--	--	1	1	--	--	2	--	--
99	R1-1(2S)	--	30	x	30	5.180	--	--	--	1	--	--	--	--	--
100	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634-0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
101	W3-3(2S)	--	36	x	36	--	9.000	--	--	1	--	--	--	--	--
102	R3-9D(2S)	--	24	x	6	1.000	--	--	--	--	--	--	--	#103	--
103	R3-9B(2S)	--	24	x	36	6.000	--	--	--	1	--	--	--	--	--
104	S1-1(2S)	--	36	x	36	--	6.750	--	--	1	--	--	--	--	--
105	S16-7L(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#104	--
106	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
106A	R4-11(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	#106	--
107	M1-94H	JEFFERSON ST	72	x	18	9.000	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
108	S1-1(2S)	--	36	x	36	--	6.750	--	--	1	--	--	--	--	--
109	S16-9P(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#108	--
110	R2-6P(2S)	--	24	x	18	3.000	--	--	--	--	--	--	--	#108	--
111	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
112	R10-50(2S)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
113	R10-50(2S)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
114	M1-94H	[20][83] MAIN ST	66	x	18	8.250	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
115	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
116	--	WEIGHT LIMIT 8 TONS….	--	x	--	--	--	--	--	1	--	--	1	--	MOVE FROM POWER POLE
117	--	LEFT ARROW	--	x	--	--	--	--	--	--	--	--	1	#116	MOVE FROM POWER POLE
118	R3-8W(2S)	--	54	x	30	11.250	--	--	--	--	--	--	--	#116	ABOVE SIGN #116
119	M1-94H	JEFFERSON ST	72	x	18	9.000	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
120	JV4-1(2S)	--	24	x	72	12.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
	M3-2	--	24	x	12										
	M1-6	STH 20	24	x	24										
	M3-3	--	24	x	12										
	M1-6	STH 83	24	x	24										
121	R1-2(2S)	--	36	x	31	3.880	--	--	--	1	--	--	--	--	--
122	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
123	R2-1(2S)	30 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
124	M1-94H	[20][83] MAIN ST	66	x	18	8.250	--	--	--	--	--	--	--	--	MOUNT ON MAST ARM
125	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
126	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
127	R6-2L(2S)	--	24	x	30	5.000	--	--	--	--	--	1	--	--	--
128	R6-2R(2S)	--	24	x	30	5.000	--	--	--	--	--	--	--	#127	--
129	W11-2(3)	--	36	x	36	--	9.000	--	--	--	--	--	--	--	MOUNT ON RRFB POLE

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634-0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
130	W16-7R(3)	--	30	x	18	--	3.750	--	--	--	--	--	--	#129	--
131	W11-2(3)	--	36	x	36	--	9.000	--	--	--	--	--	--	--	MOUNT ON RRFB POLE
132	W16-7L(3)	--	30	x	18	--	3.750	--	--	--	--	--	--	#131	--
133	R10-25(2S)	--	9	x	12	0.750	--	--	--	--	--	--	--	#129	--
134	R3-5R(2S)	--	42	x	48	14.000	--	--	--	--	--	--	--	--	OVERHEAD SIGN SUPPORT S-51-252
135	--	2 HOUR PARKING…	--	x	--	--	--	--	--	--	--	--	1	--	MOUNT ON LIGHT POLE
136	JV4-1(2S)	--	24	x	72	12.000	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE
	M3-4	--	24	x	12										
	M1-6	STH 20	24	x	24										
	M3-1	--	24	x	12										
	M1-6	STH 83	24	x	24										
137	R2-1(2S)	25 MPH	24	x	30	5.000	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE
138	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE
139	--	WEIGHT LIMIT 8 TONS….	--	x	--	--	--	--	--	--	--	1	1	--	MOVE FROM LIGHT POLE
140	R5-2	--	--	x	--	--	--	--	--	--	--	--	1	#139	MOVE FROM LIGHT POLE
141	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
142	R7-1L(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
143	R7-1R(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
144	JV4-1(2S)	--	24	x	72	12.000	--	--	--	--	--	1	--	--	--
	M3-2	--	24	x	12										
	M1-6	STH 20	24	x	24										
	M3-3	--	24	x	12										
	M1-6	STH 83	24	x	24										
145	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
146	J2-2(2S)	--	48	x	57	19.000	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE
	M3-2	--	24	x	12										
	M1-6	STH 20	24	x	24										
	M5-1R	--	21	x	21										
	M3-3	--	24	x	12										
	M1-6	STH 83	24	x	24										
	M5-1R	--	21	x	21										
147	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	--	--	--	--
148	W3-3(2S)	--	36	x	36	--	9.000	--	--	--	--	1	--	--	--
149	--	2 HOUR PARKING…	--	x	--	--	--	--	1	--	--	1	1	--	--
150	W11-2(3)	--	36	x	36	--	9.000	--	--	--	--	--	--	--	S-51-252

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634-0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
151	W16-7R(3)	--	30	x	18	--	3.750	--	--	--	--	--	--	#150	--
152	W11-2(3)	--	36	x	36	--	9.000	--	--	--	--	--	--	--	S-51-252
153	W16-7L(3)	--	30	x	18	--	3.750	--	--	--	--	--	--	#152	--
154	R1-1(2S)	--	30	x	30	5.180	--	--	--	--	1	--	--	--	--
155	R10-25(2S)	--	9	x	12	0.750	--	--	--	--	--	--	--	#152	--
156	R7-8A(2S)	--	12	x	18	1.500	--	--	--	--	--	1	--	--	--
157	--	2 HOUR PARKING…	--	x	--	--	--	--	1	--	--	1	1	--	--
158	R3-8E(2S)	--	36	x	30	7.500	--	--	--	--	--	1	--	--	--
159	R7-51L(2S)	--	18	x	24	3.000	--	--	--	--	--	--	--	#158	--
160	--	2 HOUR PARKING…	--	x	--	--	--	--	--	--	--	--	1	#158	MOVE FROM LIGHT POLE
161	R1-1(2S)	--	30	x	30	5.180	--	--	--	--	--	1	--	--	--
162	W3-3(2S)	--	36	x	36	--	9.000	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE
163	--	2 HOUR PARKING…	--	x	--	--	--	--	--	--	--	1	1	--	MOVE FROM LIGHT POLE
164	--	2 HOUR PARKING…	--	x	--	--	--	--	--	--	--	1	1	--	MOVE FROM LIGHT POLE
165	JV1-1(2S)	--	24	x	63	10.500	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE
	M2-1	--	21	x	15										
	M1-6	STH 20	24	x	24										
	M1-6	STH 83	24	x	24										
166	R1-1(2S)	--	30	x	30	5.180	--	--	--	--	--	1	--	--	--
167	R3-8A(2S)	--	36	x	30	7.500	--	--	--	--	--	1	--	--	--
168	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	--	--	#167	--
169	R1-1(2S)	--	30	x	30	5.180	--	--	--	--	--	1	--	--	--
170	R5-2(2S)	--	24	x	24	4.000	--	--	--	--	--	1	--	--	--
171	--	2 HOUR PARKING…	--	x	--	--	--	--	--	--	--	1	1	--	MOVE FROM LIGHT POLE
172	R1-1(2S)	--	30	x	30	5.180	--	--	--	--	--	1	--	--	--
173	--	2 HOUR PARKING…	--	x	--	--	--	--	--	--	--	1	1	--	MOVE FROM POWER POLE
174	--	2 HOUR PARKING…	--	x	--	--	--	--	--	--	--	1	1	--	MOVE FROM LIGHT POLE
175	R2-1(2S)	25 MPH	24	x	30	5.000	--	--	--	--	--	1	--	--	--
176	--	2 HOUR PARKING…	--	x	--	--	--	--	--	--	--	--	1	#175	--
177	R1-1(2S)	--	30	x	30	5.180	--	--	--	--	--	1	--	--	--
178	R2-1(2S)	25 MPH	24	x	30	5.000	--	--	--	--	--	1	--	--	--
179	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	--	--	#178	--
180	R1-1(3)	--	36	x	36	7.460	--	--	--	--	--	1	--	--	--
181	W4-4B(3)	--	42	x	15	--	4.375	--	--	--	--	--	--	#180	--
182	--	WEIGHT LIMIT 8 TONS….	--	x	--	--	--	--	--	--	--	--	1	--	MOUNT ON LIGHT POLE
183	R5-2(2S)	--	24	x	24	4.000	--	--	--	--	--	--	1	--	MOUNT ON LIGHT POLE
184	R6-2R(2S)	--	24	x	30	5.000	--	--	--	--	--	1	--	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634-0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
185	R5-2(2S)	--	24	x	24	4.000	--	--	--	--	--	--	--	#184	--
186	JV3-1(2S)	--	24	x	93	15.500	--	--	--	--	1	--	--	--	--
	M3-4	--	24	x	12										
	M1-6	STH 20	24	x	24										
	M3-1	--	24	x	12										
	M1-6	STH 83	24	x	24										
	M6-1	--	21	x	21										
187	R3-8F(2S)	--	36	x	30	7.500	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE
188	R1-1(2S)	--	30	x	30	5.180	--	--	--	--	--	1	--	--	--
189	W3-3(2S)	--	36	x	36	--	9.000	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE
190	S1-1(2S)	--	36	x	36	--	6.750	--	--	--	--	2	--	--	--
191	S16-9P(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#190	--
192	R2-6P(2S)	--	24	x	18	3.000	--	--	--	--	--	--	--	#190	--
193	--	PUBLIC PARKING [A]	--	x	--	--	--	--	--	--	--	1	1	--	MOVE FROM POWER POLE
194	R1-2(2S)	25 MPH	24	x	30	5.000	--	--	--	--	--	1	--	--	--
195	R2-1(2S)	25 MPH	24	x	30	5.000	--	--	--	--	--	1	--	--	--
196	S5-2(2S)	--	24	x	30	5.000	--	--	--	--	--	--	--	#195	--
197	R1-1(2S)	--	30	x	30	5.180	--	--	--	--	--	1	--	--	--
198	S1-1(2S)	--	36	x	36	--	6.750	--	--	--	--	1	--	--	--
199	S16-7L(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#198	--
200	S1-1(2S)	--	36	x	36	--	6.750	--	--	--	--	1	--	--	--
201	S16-7L(2S)	--	30	x	18	-	3.750	--	--	--	--	--	--	#200	--
202	S4-51(2S)	15 MPH	24	x	36	6.000	--	--	--	--	--	1	--	--	--
203	S4-51(2S)	15 MPH	24	x	36	6.000	--	--	--	--	--	1	--	--	--
204	R1-1(2S)	--	30	x	30	5.180	--	--	--	--	--	1	--	--	--
205	S1-1(2S)	--	36	x	36	--	6.750	--	--	1	--	--	--	--	--
206	S16-9P(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#205	--
207	R2-6P(2S)	--	24	x	18	3.000	--	--	--	--	--	--	--	#205	--
208	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
209	R2-1(2S)	25 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
210	S5-2(2S)	--	24	x	30	5.000	--	--	--	--	--	--	--	#209	--
211	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634-0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
212	R2-1(2S)	25 MPH	24	x	30	5.000	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE
213	R7-1R(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
214	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
215	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
216	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
217	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
218	R1-1(2S)	--	30	x	30	5.180	--	--	--	--	--	--	--	--	--
219	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
220	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
221	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
222	J1-1(2S)	--	24	x	39	6.500	--	--	--	1	--	--	--	--	--
	M2-1	--	21	x	15										
	M1-6	STH 36	24	x	24										
223	I2-3	WATERFORD POPULATION 5,368	66	x	24	11.000	--	--	--	2	--	--	--	--	--
224	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
225	R1-1(2S)	--	30	x	30	5.180	--	--	--	1	--	--	--	--	--
226	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
227	W11-1(2S)	--	30	x	30	--	6.250	--	--	--	--	1	--	--	--
228	W16-7L(2S)	--	24	x	12	--	2.000	--	--	--	--	--	--	#227	--
229	R1-1(2S)	--	30	x	30	5.180	--	--	--	1	--	--	--	--	--
230	D11-1(2S)	--	24	x	18	3.000	--	--	--	--	--	1	--	--	--
231	M7-1(2S)	--	12	x	9	0.750	--	--	--	--	--	--	--	#230	--
232	R1-1(2S)	--	30	x	30	5.180	--	--	--	1	--	--	--	--	--
233	D11-1(2S)	--	24	x	18	3.000	--	--	--	--	--	1	--	--	--
234	W11-1(2S)	--	30	x	30	--	6.250	--	--	1	--	--	--	--	--
235	W16-7L(2S)	--	24	x	12	--	2.000	--	--	--	--	--	--	#234	--
236	D11-1(2S)	--	24	x	18	3.000	--	--	--	--	--	1	--	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634-0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
237	M7-1(2S)	--	12	x	9	0.750	--	--	--	--	--	--	--	--	--
238	J2-4(2S)	--	96	x	57	38.000	--	--	--	2	--	--	--	--	--
	M3-1	--	24	x	12										
	M1-6	STH 36	24	x	24										
	M5-1L	--	21	x	21										
	M3-2	--	24	x	12										
	M1-6	STH 20	24	x	24										
	M6-1	--	21	x	21										
	M3-4	--	24	x	12										
	M1-6	STH 36	24	x	24										
	M5-1R	--	21	x	21										
	M3-3	--	24	x	12										
	M1-6	STH 83	24	x	24										
	M5-1R	--	21	x	21										
239	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
240	W11-1(2S)	--	30	x	30	--	6.250	--	--	1	--	--	--	--	--
241	W16-9P(2S)	--	24	x	12	--	2.000	--	--	--	--	--	--	#240	--
242	R7-1D(2S)	--	18	x	24	3.000	--	--	--	--	--	1	--	--	--
243	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
244	JV4-1(2S)	--	24	x	72	12.000	--	--	--	1	--	--	--	--	--
	M3-1	--	24	x	12										
	M1-6	STH 20	24	x	24										
	M3-4	--	24	x	12										
	M1-6	STH 83	24	x	24										
245	J3-3(2S)	--	72	x	57	28.500	--	--	--	2	--	--	--	--	--
	M3-1		24	x	12										
	M1-6		24	x	24										
	M6-1		21	x	21										
	M3-3		24	x	12										
	M1-6		24	x	24										
	M6-1		21	x	21										
	M3-3		24	x	12										
	M1-6		24	x	24										
	M6-1		21	x	21										

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634-0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
246	D1-3	[UA] RACINE [LA] MILWAUKEE BURLINGTON [RA]	78	x	42	22.750	--	--	--	2	--	--	--	--	--
247	W3-3(2S)	--	36	x	36	--	9.000	--	--	1	--	--	--	--	--
248	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
249	R6-3(2S)	--	30	x	24	5.000	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
250	R1-2(2S)	--	36	x	31	3.880	--	--	--	1	--	--	--	--	--
251	W5-52L(2S)	--	12	x	36	--	3.000	--	--	1	--	--	--	--	4 FT MOUNT HEIGHT
252	W5-52R(2S)	--	12	x	36	--	3.000	--	--	1	--	--	--	--	4 FT MOUNT HEIGHT
253	J4-1(2S)	--	24	x	36	6.000	6.000	--	--	1	--	--	--	--	--
	M3-3	--	24	x	12										
	M1-5A	CTH W	24	x	24										
254	W5-52L(2S)	--	12	x	36	--	3.000	--	--	1	--	--	--	--	4 FT MOUNT HEIGHT
255	W5-52R(2S)	--	12	x	36	--	3.000	--	--	1	--	--	--	--	4 FT MOUNT HEIGHT
256	J1-2(2S)	--	48	x	63	21.000	--	--	--	2	--	--	--	--	--
	M2-1	--	21	x	15										
	M1-6	STH 20	24	x	24										
	M1-6	STH 83	24	x	24										
	M4-5	--	24	x	12										
	M1-6	CTH W	24	x	24										
257	W5-4A (MOD)	BIKEWAY ENDS	18	X	18		2.250			1					
258	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	1	--	--	--	--	--
259	D11-1(2S)	--	24	x	18	3.000	--	--	--	1	--	--	--	--	--
260	M7-5(2S)	--	12	x	9	0.750	--	--	--	--	--	--	--	#259	--
261	R3-8W(2S)	--	54	x	30	11.250	--	--	--	2	--	--	--	--	--
262	W3-3(2S)	--	36	x	36	--	9.000	--	--	1	--	--	--	--	--
263	--	WEIGHT LIMIT CLASS B	--	x	--	--	--	--	--	1	--	--	1	--	MOVE FROM POWER POLE
264	J13-1(2S)	--	24	x	45	7.500	--	--	--	1	--	--	--	--	SHEET 4
	M1-5A	CTH W	24	x	24										
	M6-1	--	21	x	21										
265	W12-1R(2S)	--	24	x	24	--	4.000	--	--	1	--	--	--	--	2 FT MOUNTING HEIGHT - SHEET 7
266	R4-7(2S)	--	24	x	30	5.000	--	--	--	1	--	--	--	--	SHEET 7
267	R4-7(2S)	--	24	x	30	5.000	--	--	--	1	--	--	--	--	SHEET 7
268	W12-1R(2S)	--	24	x	24	--	4.000	--	--	1	--	--	--	--	2 FT MOUNTING HEIGHT - SHEET 7
269	S1-1(2S)	--	36	x	36	--	6.750	--	--	1	--	--	--	--	SHEET 7

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634-0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
270	S16-9P(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#269	SHEET 7
271	R2-6P(2S)	--	24	x	18	3.000	--	--	--	--	--	--	--	#269	SHEET 7
272	S1-1(2S)	--	36	x	36	--	6.750	--	--	1	--	--	--	--	SHEET 8
273	S16-9P(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#272	SHEET 8
274	R2-6P(2S)	--	24	x	18	3.000	--	--	--	--	--	--	--	#272	SHEET 8
275	W1-2L(2S)	--	30	x	30	--	6.250	--	--	1	--	--	--	--	SHEET 17
276	W11-1(2S)	--	30	x	30	--	6.250	--	--	1	--	--	--	--	SHEET 20
277	W16-9P(2S)	--	24	x	12	--	2.000	--	--	--	--	--	--	#276	SHEET 20
278	S1-1(2S)	--	36	x	36	--	6.750	--	--	1	--	--	--	--	SHEET 13
279	S16-9P(2S)	--	30	x	18	--	3.750	--	--	--	--	--	--	#278	SHEET 13
280	R2-6P(2S)	--	24	x	18	3.000	--	--	--	--	--	--	--	#278	SHEET 13
281	R6-2L(2S)	--	24	x	30	5.000	--	--	--	1	--	--	--	--	SHEET 10
282	R6-2L(2S)	--	24	x	30	5.000	--	--	--	--	--	1	--	--	SHEET 14
283	W12-1D(2S)	--	24	x	24	--	4.000	--	--	1	--	--	--	--	2' MOUNT HEIGHT - SHEET 22
284	R4-11(2S)	--	30	x	30	6.250	--	--	--	--	--	1	--	--	SHEET 11
285	R4-11(2S)	--	30	x	30	6.250	--	--	--	--	--	1	--	--	SHEET 11
286	R4-11(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	#149	SHEET 12
287	R4-11(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	#137	MOUNT ON LIGHT POLE - SHEET 12
288	R4-11(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	#142	SHEET 12
289	R4-11(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	#164	SHEET 13
	TOTALS					1123.460	397.685	82.060	6 *	119	2	59	23		

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

ERHEAD SIGN SUPPORTS - MISC QUANTITIES				STH 20	2250-12-70		
LOCATION		OVERHEAD SIGN					
		SUPPORT STRUCTURE					
		S-51-252					
		L.S.					
		641.8100.0001					
STH 20 at River St		1					
TOTAL		1					

3

LIGHTING - REMOVALS

204.0195	REMOVING CONCRETE BASES
204.9060.S.101	REMOVING DISTRIBUTION CENTER
204.9060.S.102	REMOVING LIGHTING UNITS
653.0905	REMOVING PULL BOXES

CATEGORY	STAGE	SYSTEM	DESCRIPTION / SEQUENCE	LOCATION STATION	LOCATION OFFSET	204.0195 REMOVING CONCRETE BASES	204.9060.S.101 REMOVING DISTRIBUTION CENTER	204.9060.S.102 REMOVING LIGHTING UNITS	653.0905 REMOVING PULL BOXES	COMMENTS
						EACH	EACH	EACH	EACH	
0030	1	WE ENERGIES	EX. D-VW-1	356+37	27.4' RT	--	--	1	--	EXISTING DECORATIVE LIGHTING UNIT
			EX. D-VW-2	359+26	30.1' RT	--	--	1	--	"
			EX. D-VW-3	361+44	31.6' RT	--	--	1	--	"
			EX. D-VW-13	362+03	97.8' RT	--	--	1	--	PARK AREA - SOUTH OF THE BRIDGE
			EX. D-VW-4	362+97	32.8' RT	--	--	1	--	"
			EX. D-VW-5	364+22	33.4' RT	--	--	1	--	"
			EX. D-VW-6	365+72	32.6' RT	--	--	1	--	"
		WE ENERGIES			SUBTOTAL	0	0	7	0	
		VW	CVW1	100+75	25.6' RT	1	--	1	--	EXISTING STANDARD LIGHTING UNIT
			DVW1	102+63	26.1' RT	1	--	1	--	"
			CVW2	104+71	26.6' RT	1	--	1	--	"
			DVW2	106+65	26.5' RT	1	--	1	--	"
			CVW3	108+75	26.3' RT	1	--	1	--	"
			EX. LPB 101	367+96	25.4' LT	--	--	--	1	EXISTING LIGHTING PULL BOX
			EX. LPB 102	367+96	30.2' RT	--	--	--	1	"
		VW			SUBTOTAL	5	0	5	2	
	1				SUBTOTAL STAGE 1	5	0	12	2	

LIGHTING - REMOVALS CONTINUED

204.0195 REMOVING CONCRETE BASES
204.9060.S.101 REMOVING DISTRIBUTION CENTER
204.9060.S.102 REMOVING LIGHTING UNITS
653.0905 REMOVING PULL BOXES

CATEGORY	STAGE	SYSTEM	DESCRIPTION / SEQUENCE	LOCATION STATION	LOCATION OFFSET	204.0195 REMOVING CONCRETE BASES EACH	204.9060.S.101 REMOVING DISTRIBUTION CENTER EACH	204.9060.S.102 REMOVING LIGHTING UNITS EACH	653.0905 REMOVING PULL BOXES EACH	COMMENTS
0030	2	WE ENERGIES	UTILITY POLES	--	--	--	--	--	--	DROP DOWNS TRANSFORMER
			EX. D-VW-12	358+34	32.4' LT	--	--	1	--	EXISTING DECORATIVE LIGHTING UNIT
			EX. D-VW-11	360+12	32.1' LT	--	--	1	--	"
			EX. D-VW-10	362+27	32.4' LT	--	--	1	--	"
			EX. D-VW-9	363+09	32.6' LT	--	--	1	--	"
			EX. D-RC-8	364+23	33.0' LT	--	--	1	--	"
			EX. D-RC-7	365+80	36.5' LT	--	--	1	--	"
		WE ENERGIES			SUBTOTAL	0	0	6	0	
		VW	EX. LPB 103	100+34	30.9' RT	--	--	--	1	EXISTING LIGHTING PULL BOX
			EX. LPB 104	100+05	27.4' LT	--	--	--	1	"
			EVW1	101+89	26.6' LT	1	--	1	--	STANDARD LIGHTING UNIT
			FVW1	103+52	26.2' LT	1	--	1	--	"
			EX. LPB 105	104+79	26.0' LT	--	--	--	1	EXISTING LIGHTING PULL BOX
			EVW2	105+72	26.2' LT	1	--	1	--	STANDARD LIGHTING UNIT
			EX. LPB 106	106+65	26.5' LT	--	--	--	1	EXISTING LIGHTING PULL BOX
			FVW2	107+53	26.4' LT	1	--	1	--	"
			EX. LPB 108	109+61	25.9' LT	--	--	--	1	EXISTING LIGHTING PULL BOX
			EVW3	109+65	25.9' LT	1	--	1	--	"
			EX. LPB 107	109+65	25.4' RT	--	--	--	1	EXISTING LIGHTING PULL BOX
			EX. LPD-VW-1	364+03	34.0' LT	--	--	--	1	"
			VW	367+40	113.7' LT	1	1	--	--	EXISTING DISTRIBUTION CENTER
			EX. LJB 101	367+96	25.4' LT	--	--	--	1	EXISTING LIGHTING JUNCTION BOX
			AVW1	368+39	25.1' LT	1	--	1	--	STANDARD LIGHTING UNIT
			BVW1	369+16	24.9' LT	1	--	1	--	"
			AVW2	370+46	25.3' LT	1	--	1	--	"
			BVW2	372+25	25.3' LT	1	--	1	--	"
			AVW3	373+81	25.6' LT	1	--	1	--	"
			BVW3	375+27	25.8' LT	1	--	1	--	"
			AVW4	376+76	25.7' LT	1	--	1	--	"
			BVW4	378+54	25.3' LT	1	--	1	--	"
			AVW5	380+01	25.7' LT	1	--	1	--	"
			BVW5	381+85	25.3' LT	1	--	1	--	"
			AVW6	383+73	21.9' LT	1	--	1	--	"
		VW			SUBTOTAL	17	1	16	8	
	2				SUBTOTAL STAGE 2	17	1	22	8	
0030					TOTALS	22	1	34	10	

PROJECT NO: 2250-12-70	HWY: STH 20 / STH 83	COUNTY: RACINE	MISCELLANEOUS QUANTITIES	SHEET:	E

LIGHTING - PULL BOXES

653.0140 PULL BOXES STEEL 24X42-INCH
653.0222 JUNCTION BOXES 18X12X6-INCH
655.0615 ELECTRICAL WIRE LIGHTING 10 AWG

CATEGORY	STAGE	SYSTEM	DESCRIPTION / SEQUENCE	STATION	OFFSET	LOCATION FROM	TO	653.0140 PULL BOXES STEEL 24X42-INCH	653.0222 JUNCTION BOXES 18X12X6-INCH	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG	COMMENTS
								EACH	EACH	LF	
0030	1	RS	LPB-RS-2	344+59	29.8' RT	CRS6	LPB-RS-2	1	--	40	--
			LPB-RS-3	315+30	35.9' RT	CRS2	LPB-RS-3	1	--	185	--
			LPB-RS-4	314+65	70.4' RT	CRS2	LPB-RS-4	1	--	255	--
			LPB-RS-5	313+77	76.4' RT	DRS1	LPB-RS-5	1	--	150	--
			LPB-RS-6	312+70	36.0' RT	DRS1	LPB-RS-6	1	--	40	--
			LPB-RS-21	354+68	54.5' RT	CRS10	LPB-RS-21	1	--	80	--
			LPB-RS-22	355+12	44.0' RT	DRS10	LPB-RS-22	1	--	40	--
			LPB-RS-23	357+53	83.2' RT	CRS11	LPB-RS-23	1	--	85	--
			LPB-RS-24	358+37	80.5' RT	DRS11	LPB-RS-24	1	--	80	--
			LPB-RS-29	362+37	55.7' RT	DRS12	LPB-RS-29	1	--	70	--
			LPB-RS-30	362+85	55.5' LT	CRS13	LPB-RS-30	1	--	40	--
			LPB-RS-31	364+00	41.0' RT	CRS13	LPB-RS-31	1	--	90	--
		RS					SUBTOTAL	12	0	1155	
		FS	LJB-FS-2	364+35	36.0' RT	CFS1	LJB-FS-2	--	1	20	JUNCTION BOX ON BRIDGE
			LJB-FS-1	365+83	36.0' RT	DFS1	LJB-FS-1	--	1	20	"
			LPB-FS-2	365+93	40.5' RT	DFS1	LPB-FS-2	1	--	30	--
			LPB-FS-1	367+25	26.8' RT	CFS2	LPB-FS-1	1	--	20	--
			LPB-FS-4	102+85	48.4' RT	CFS3	LPB-FS-4	1	--	30	--
			LPB-FS-5	103+31	46.8' RT	DFS3	LPB-FS-5	1	--	75	--
			LPB-FS-6	105+99	45.6' RT	CFS4	LPB-FS-6	1	--	75	--
			LPB-FS-7	106+39	45.2' RT	DFS4	LPB-FS-7	1	--	30	--
			LPB-FS-25	108+78	29.5' RT	DFS5	LPB-FS-25	1	--	30	--
			LPB-FS-26	109+35	29.4' RT	CFS6	LPB-FS-26	1	--	20	--
			LPB-FS-19	383+86	55.7' RT	EFS7	LPB-FS-19	1	--	110	--
			LPB-FS-20	384+28	51.5' RT	EFS7	LPB-FS-20	1	--	60	--
			LPB-FS-23	398+30	24.0' RT	EFS10	LPB-FS-23	1	--	30	--
			LPB-FS-24	398+96	22.2' RT	EFS10	LPB-FS-24	1	--	90	--
		FS					SUBTOTAL	12	2	640	
1							SUBTOTAL STAGE 1	24	2	1,795	

LIGHTING - PULL BOXES CONTINUED

653.0140 PULL BOXES STEEL 24X42-INCH
653.0222 JUNCTION BOXES 18X12X6-INCH
655.0615 ELECTRICAL WIRE LIGHTING 10 AWG

CATEGORY	STAGE	SYSTEM	DESCRIPTION / SEQUENCE	STATION	OFFSET	LOCATION FROM	TO	653.0140 PULL BOXES STEEL 24X42-INCH	653.0222 JUNCTION BOXES 18X12X6-INCH	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG	COMMENTS
								EACH	EACH	LF	
0030	2	RS	LPB-RS-7	312+60	29.2' LT	BRS1	LPB-RS-7	1	--	215	--
			LPB-RS-8	313+15	59.0' LT	BRS1	LPB-RS-8	1	--	275	--
			LPB-RS-9	314+57	59.1' LT	ARS2	LPB-RS-9	1	--	105	--
			LPB-RS-10	315+30	35.9' LT	ARS2	LPB-RS-10	1	--	25	--
			LPB-RS-11	321+17	46.8' LT	ARS3	LPB-RS-11	1	--	130	--
			LPB-RS-12	321+82	46.7' LT	ARS3	LPB-RS-12	1	--	75	--
			LPB-RS-13	334+26	55.0' LT	ARS5	LPB-RS-13	1	--	130	--
			LPB-RS-14	334+53	55.0' LT	ARS5	LPB-RS-14	1	--	95	--
			LPB-RS-15	340+00	48.3' LT	BRS5	LPB-RS-15	1	--	95	--
			LPB-RS-16	340+48	48.3' LT	ARS6	LPB-RS-16	1	--	200	--
			LPB-RS-1	344+59	29.8' LT	BRS6	LPB-RS-1	1	--	40	--
			LPB-RS-17	345+45	49.4' LT	BRS6	LPB-RS-17	1	--	60	--
			LPB-RS-18	345+97	49.4' LT	ARS7	LPB-RS-18	1	--	35	--
			LPB-RS-19	351+48	46.4' LT	ARS9	LPB-RS-19	1	--	60	--
			LPB-RS-20	351+87	46.4' LT	BRS9	LPB-RS-20	1	--	40	--
			LPB-RS-25	357+59	44.7' LT	BRS11	LPB-RS-25	1	--	100	--
			LPB-RS-26	358+27	45.7' LT	ARS12	LPB-RS-26	1	--	40	--
			LPB-RS-27	362+13	32.6' LT	BRS13	LPB-RS-27	1	--	20	--
			LPB-RS-28	363+00	33.0' LT	BRS14	LPB-RS-28	1	--	20	--
			LPB-RS-32	364+18	39.0' LT	ARS14	LPB-RS-32	1	--	100	--
		RS					SUBTOTAL	20	0	1,860	
		FS	LJB-FS-3	364+35	33.0' LT	AFS1	LJB-FS-3	--	1	20	JUNCTION BOX ON BRIDGE
			LJB-FS-4	365+83	33.0' LT	BFS1	LJB-FS-4	--	1	20	"
			LPB-FS-8	365+93	38.1' LT	BFS1	LPB-FS-8	1	--	30	--
			LPB-FS-9	102+89	46.1' LT	AFS3	LPB-FS-9	1	--	80	--
			LPB-FS-10	103+31	45.7' LT	BFS3	LPB-FS-10	1	--	40	--
			LPB-FS-11	105+98	46.6' LT	BFS4	LPB-FS-11	1	--	50	--
			LPB-FS-12	106+40	46.9' LT	AFS5	LPB-FS-12	1	--	70	--
			LPB-FS-3	367+25	26.4' LT	GFS1	LPB-FS-3	1	--	30	--
			LPB-FS-13	369+41	44.0' LT	HFS1	LPB-FS-13	1	--	40	--
			LPB-FS-14	369+85	44.0' LT	GFS2	LPB-FS-14	1	--	40	--
			LPB-FS-15	372+45	41.9' LT	HFS2	LPB-FS-15	1	--	100	--
			LPB-FS-16	372+93	73.5' LT	GFS3	LPB-FS-16	1	--	80	--
			LPB-FS-17	379+38	24.8' LT	HFS5	LPB-FS-17	1	--	20	--
			LPB-FS-18	380+85	24.1' LT	HFS5	LPB-FS-18	1	--	100	--
			LPB-FS-21	398+08	20.9' LT	GFS6	LPB-FS-21	1	--	145	--
			LPB-FS-22	399+00	20.3' LT	HFS6	LPB-FS-22	1	--	40	--
		FS					SUBTOTAL	14	2	905	
							SUBTOTAL STAGE 2	34	2	2,765	
0030							TOTALS	58	4	4,560	

LIGHTING - CONDUIT AND WIRE

652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
655.0620 ELECTRICAL WIRE LIGHTING 8 AWG
655.0630 ELECTRICAL WIRE LIGHTING 4 AWG
655.0635 ELECTRICAL WIRE LIGHTING 2 AWG

CATEGORY	STAGE	SYSTEM	CIRSUIT	LOCATION FROM	LOCATION TO	652.0225 CONDUIT 2-INCH SCHEDULE 40	652.0235 CONDUIT 3-INCH SCHEDULE 40	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG	655.0635 ELECTRICAL WIRE LIGHTING 2 AWG	COMMENTS
						LF	LF	LF	LF	LF	
0030	1	RS	C/N/D/GND	STUBOUT WEST	CRS1	15	--	--	--	--	--
				CRS1	DRS1	380	--	1,158	--	--	--
				DRS1	LPB-RS-6	43	--	216	--	--	--
				LPB-RS-6	LPB-RS-5	115	--	500	--	--	--
				LPB-RS-5	LPB-RS-4	--	85	380	--	--	--
				LPB-RS-4	LPB-RS-3	70	--	320	--	--	--
				LPB-RS-3	CRS2	195	--	772	--	--	--
				CRS2	DRS2	345	--	1,404	--	--	--
				DRS2	CRS3	332	--	1,352	--	--	--
				CRS3	DRS3	326	--	332	996	--	--
				DRS3	CRS4	333	--	339	1,017	--	--
				CRS4	DRS4	300	--	300	900	--	--
				DRS4	CRS5	354	--	354	1,062	--	--
				CRS5	DRS5	325	--	325	975	--	--
				DRS5	CRS6	337	--	337	--	1,011	--
				CRS6	LPB-RS-2	40	--	40	--	120	--
				LPB-RS-2	LPB-RS-1	--	60	60	--	180	--
				LPB-RS-1	CONTROLLER - RS	--	40	40	--	120	--
				CONTROLLER - RS	LPB-RS-1	--	--	40	--	120	--
				LPB-RS-1	LPB-RS-2	--	--	60	--	180	--
				LPB-RS-2	DRS6	85	--	85	--	255	--
				DRS6	CRS7	125	--	125	--	375	--
				CRS7	DRS7	120	--	120	--	360	--
				DRS7	CRS8	125	--	125	--	375	--
				CRS8	DRS8	120	--	120	--	360	--
				DRS8	CRS9	115	--	120	--	360	--
				CRS9	DRS9	120	--	120	360	--	--
				DRS9	CRS10	120	--	120	360	--	--
				CRS10	LPB-RS-21	80	--	80	240	--	--
				LPB-RS-21	LPB-RS-22	--	45	45	135	--	--
				LPB-RS-22	DRS10	40	--	160	--	--	--
				DRS10	CRS11	130	--	520	--	--	--
				CRS11	LPB-RS-23	85	--	340	--	--	--
				LPB-RS-23	LPB-RS-24	--	90	360	--	--	--
				LPB-RS-24	DRS11	80	--	320	--	--	--
				DRS11	CRS12	100	--	400	--	--	--
				CRS12	DRS12	170	--	680	--	--	--
				DRS12	LPB-RS-29	70	--	280	--	--	--
				LPB-RS-29	LPB-RS-30	--	45	180	--	--	--
				LPB-RS-30	CRS13	40	--	160	--	--	--
				CRS13	LPB-RS-31	90	--	270	--	--	--
				LPB-RS-31	DRS13	60	--	180	--	--	--
				LPB-RS-31	LJB-FS-2	40	--	--	--	--	EMPTY CONDUIT
RS					SUBTOTAL	5,425	365	13,239	6,045	3,816	

LIGHTING - CONDUIT AND WIRE CONTINUED

652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
655.0620 ELECTRICAL WIRE LIGHTING 8 AWG
655.0630 ELECTRICAL WIRE LIGHTING 4 AWG
655.0635 ELECTRICAL WIRE LIGHTING 2 AWG

CATEGORY	STAGE	SYSTEM	CIRCUIT	LOCATION FROM	LOCATION TO	652.0225 CONDUIT 2-INCH SCHEDULE 40	652.0235 CONDUIT 3-INCH SCHEDULE 40	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG	655.0635 ELECTRICAL WIRE LIGHTING 2 AWG	COMMENTS
						LF	LF	LF	LF	LF	
0030	1	FS	C/N/D/GND	LJB-FS-2	CFS1	10	–	10	--	--	EMBEDED CONDUIT
				CFS1	DFS1	125	–	375	--	--	EMBEDED CONDUIT
				DFS1	LJB-FS-1	32	–	32	--	128	EMBEDED CONDUIT
				LJB-FS-1	LPB-FS-2	20	–	80	--	--	--
				LPB-FS-2	CFS2	60	–	240	--	180	--
				CFS2	LPB-FS-1	10	–	10	--	30	--
				LPB-FS-1	CONTROLLER - FS	--	60	60	--	180	--
				CONTROLLER - FS	LPB-FS-1	--	60	60	--	180	--
				LPB-FS-1	LPB-FS-3	--	80	80	--	240	--
				LPB-FS-3	DFS2	190	–	190	--	570	--
				DFS2	CFS3	105	–	105	--	315	--
				CFS3	LPB-FS-4	40	–	40	--	120	--
				LPB-FS-4	LPB-FS-5	--	45	45	--	135	--
				LPB-FS-5	DFS3	100	–	100	--	300	--
				DFS3	CFS4	110	–	110	330	--	--
				CFS4	LPB-FS-6	100	–	100	300	--	--
				LPB-FS-6	LPB-FS-7	--	45	45	135	--	--
				LPB-FS-7	DFS4	50	–	50	150	--	--
				DFS4	CFS5	90	–	90	270	--	--
				CFS5	DFS5	85	–	85	255	--	--
				DFS5	LPB-FS-25	30	–	30	90	--	--
				LPB-FS-25	LPB-FS-26	--	60	60	180	--	--
				LPB-FS-26	CFS6	10	–	10	30	--	--
				CFS6	STUBOUT EAST	15	–	15	--	--	--
			E/N/F/GND	CONTROLLER - FS	LPB-FS-1	--	60	60	--	180	--
				LPB-FS-1	EFS1	125	–	125	--	375	--
				EFS1	FFS1	130	–	130	--	390	--
				FFS1	EFS2	120	–	120	--	360	--
				EFS2	FFS2	100	–	100	--	300	--
				FFS2	EFS3	130	–	130	--	390	--
				EFS3	FFS3	120	–	120	--	360	--
				FFS3	EFS4	120	–	120	360	--	--
				EFS4	FFS4	120	–	120	360	--	--
				FFS4	EFS5	110	–	110	330	--	--
				EFS5	FFS5	130	–	130	390	210	--
				FFS5	EFS6	125	–	125	375	--	--
				EFS6	FFS6	115	–	115	345	--	--
				FFS6	LPB-FS-19	230	–	230	690	--	--
				LPB-FS-19	LPB-FS-20	--	50	50	150	--	--
				LPB-FS-20	EFS7	70	–	70	210	--	--
				EFS7	FFS7	180	–	180	540	--	--
				FFS7	EFS8	170	–	170	510	--	--
				EFS8	FFS8	170	–	170	510	--	--
				FFS8	EFS9	175	–	175	525	--	--
				EFS9	FFS9	315	–	1,260	--	--	--
				FFS9	EFS10	270	–	1,080	--	--	--
				EFS10	LPB-FS-23	25	–	100	--	--	--
				LPB-FS-23	LPB-FS-24	--	65	260	--	--	--
				LPB-FS-24	FFS10	205	–	820	--	--	--
				FFS10	EFS11	155	–	465	--	--	--
				EFS11	STUBOUT SE	15	–	15	--	--	--
		FS			SUBTOTAL	4,607	525	8,572	7,035	4,943	
	1				SUBTOTAL STAGE 1	10,032	890	21,811	13,080	8,759	

LIGHTING - CONDUIT AND WIRE CONTINUED

652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
655.0620 ELECTRICAL WIRE LIGHTING 8 AWG
655.0630 ELECTRICAL WIRE LIGHTING 4 AWG
655.0635 ELECTRICAL WIRE LIGHTING 2 AWG

CATEGORY	STAGE	SYSTEM	CIRSUIT	LOCATION FROM	LOCATION TO	652.0225 CONDUIT 2-INCH SCHEDULE 40	652.0235 CONDUIT 3-INCH SCHEDULE 40	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG	655.0635 ELECTRICAL WIRE LIGHTING 2 AWG	COMMENTS
						LF	LF	LF	LF	LF	
0030	2	RS	A/N/B/GND	STUBOUT WEST	ARS1	15	--	--	--	--	--
				ARS1	BRS1	325	--	975	--	--	--
				BRS1	LPB-RS-7	225	--	900	--	--	--
				LPB-RS-7	LPB-RS-8	60	--	240	--	--	--
				LPB-RS-8	LPB-RS-9	--	140	560	--	--	--
				LPB-RS-9	LPB-RS-10	80	--	320	--	--	--
				LPB-RS-10	ARS2	25	--	100	--	--	--
				ARS2	BRS2	330	--	1,320	--	--	--
				BRS2	LPB-RS-11	230	--	920	--	--	--
				LPB-RS-11	LPB-RS-12	--	70	280	--	--	--
				LPB-RS-12	ARS3	90	--	360	--	--	--
				ARS3	BRS3	330	--	1,320	--	--	--
				BRS3	ARS4	320	--	320	960	--	--
				ARS4	BRS4	324	--	324	972	--	--
				BRS4	LPB-RS-13	210	--	210	630	--	--
				LPB-RS-13	LPB-RS-14	--	50	50	150	--	--
				LPB-RS-14	ARS5	100	--	100	300	--	--
				ARS5	BRS5	347	--	347	1,041	--	--
				BRS5	LPB-RS-15	100	--	100	300	--	--
				LPB-RS-15	LPB-RS-16	--	50	50	150	--	--
				LPB-RS-16	ARS6	210	--	210	630	--	--
				ARS6	LPB-RS-1	215	--	215	--	645	--
				LPB-RS-1	CONTROLLER - RS	--	40	40	--	120	--
				CONTROLLER RS	LPB-RS-1	--	--	40	--	120	--
				LPB-RS-1	BRS6	40	--	40	--	120	--
				BRS6	LPB-RS-17	60	--	60	--	180	--
				LPB-RS-17	LPB-RS-18	--	60	60	--	180	--
				LPB-RS-18	ARS7	40	--	40	--	120	--
				ARS7	BRS7	120	--	120	--	360	--
				BRS7	ARS8	115	--	115	--	345	--
				ARS8	BRS8	120	--	120	--	360	--
				BRS8	ARS9	120	--	120	--	360	--
				ARS9	LPB-RS-19	60	--	60	--	180	--
				LPB-RS-19	LPB-RS-20	--	45	45	--	135	--
				LPB-RS-20	BRS9	45	--	45	--	135	--
				BRS9	ARS10	120	--	120	360	--	--
				ARS10	BRS10	120	--	120	360	--	--
				BRS10	ARS11	120	--	480	--	--	--
				ARS11	LPB-RS-25	170	--	680	--	--	--
				LPB-RS-25	LPB-RS-26	--	65	260	--	--	--
				LPB-RS-26	BRS11	40	--	160	--	--	--
				BRS11	ARS12	105	--	600	--	--	--
				ARS12	BRS12	120	--	480	--	--	--
				BRS12	ARS13	120	--	480	--	--	--
				ARS13	LPB-RS-27	20	--	80	--	--	--
				LPB-RS-27	LPB-RS-28	--	90	360	--	--	--
				LPB-RS-28	ARS14	20	--	140	--	--	--
				ARS14	LPB-RS-28	20	--	140	--	--	--
				LPB-RS-28	BRS13	30	--	90	--	--	--
				ARS14	LPB-RS-32	100	--	100	--	--	EMPTY CONDUIT
				LPB-RS-32	LPB-FS-4	30	--	30	--	--	EMPTY CONDUIT
RS					SUBTOTAL	5,391	610	14,446	5,853	3,360	

LIGHTING - CONDUIT AND WIRE CONTINUED

652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
655.0620 ELECTRICAL WIRE LIGHTING 8 AWG
655.0630 ELECTRICAL WIRE LIGHTING 4 AWG
655.0635 ELECTRICAL WIRE LIGHTING 2 AWG

CATEGORY	STAGE	SYSTEM	CIRCUIT	LOCATION FROM	LOCATION TO	652.0225 CONDUIT 2-INCH SCHEDULE 40	652.0235 CONDUIT 3-INCH SCHEDULE 40	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG	655.0635 ELECTRICAL WIRE LIGHTING 2 AWG	COMMENTS
						LF	LF	LF	LF	LF	
0030	2	FS	A/N/B/GND	LPB-FS-3	AFS1	10	--	10	--	--	EMBEDED CONDUIT
				AFS1	BFS1	125	--	375	--	--	EMBEDED CONDUIT
				BFS1	LPB-FS-4	10	--	10	--	30	–
				LPB-FS-4	LPB-FS-8	30	--	30	--	90	–
				LPB-FS-8	LPB-FS-2	--	90	90	--	270	–
				LPB-FS-2	CFS2	50	--	250	--	150	–
				CFS2	LPB-FS-1	10	--	10	--	30	–
				LPB-FS-1	CONTROLLER - FS	60	--	60	--	180	–
				LPB-FS-8	AFS2	65	--	325	--	195	–
				AFS2	BFS2	110	--	110	330	--	–
				BFS2	AFS3	120	--	120	360	--	–
				AFS3	LPB-FS-9	80	--	80	240	--	–
				LPB-FS-9	LPB-FS-10	--	45	45	135	--	–
				LPB-FS-10	BFS3	40	--	40	120	--	–
				BFS3	AFS4	80	--	80	240	--	–
				AFS4	BFS4	145	--	145	435	--	–
				BFS4	LPB-FS-11	50	--	50	150	--	–
				LPB-FS-11	LPB-FS-12	--	45	45	135	--	–
				LPB-FS-12	AFS5	70	--	70	210	--	–
				AFS5	BFS5	115	--	115	345	--	–
				BFS5	AFS6	135	--	135	405	--	–
				AFS6	STUBOUT NORTH	15	--	--	--	--	–
			G/N/H/GND	CONTROLLER - FS	LPB-FS-1	--	60	60	--	180	–
				LPB-FS-1	LPB-FS-3	--	80	80	--	240	–
				LPB-FS-3	GFS1	45	--	45	--	135	–
				GFS1	HFS1	160	--	160	--	480	–
				HFS1	LPB-FS-13	40	--	40	--	120	–
				LPB-FS-13	LPB-FS-14	--	45	45	--	135	–
				LPB-FS-14	GFS2	40	--	40	--	120	–
				GFS2	HFS2	140	--	140	--	420	–
				HFS2	LPB-FS-15	120	--	120	--	360	–
				LPB-FS-15	LPB-FS-16	--	50	50	--	150	–
				LPB-FS-16	GFS3	70	--	70	--	210	–
				GFS3	HFS3	135	--	135	--	405	–
				HFS3	GFS4	120	--	120	360		–
				GFS4	HFS4	120	--	120	360	--	–
				HFS4	GFS5	120	--	120	360	--	–
				GFS5	HFS5	125	--	125	375	--	–
				HFS5	LPB-FS-17	20	--	20	60	--	–
				LPB-FS-17	LPB-FS-18	--	90	90	270	--	–
				LPB-FS-18	GFS6	210	--	210	630	--	–
				GFS6	HFS6	1,045	--	1,045	3,135	--	–
				HFS6	GFS7	330	--	1,320	--	--	–
				GFS7	LPB-FS-21	115	--	460	--	--	–
				LPB-FS-21	LPB-FS-22	--	90	360	--	--	–
				LPB-FS-22	HFS7	40	--	160	--	--	–
				HFS7	GFS8	460	--	1,840	--	--	–
				GFS8	STUBOUT SE	15	--	--	--	--	–
		FS			SUBTOTAL	4,790	595	9,170	8,655	3,900	
	2				SUBTOTAL STAGE 2	10,181	1,205	23,616	14,508	7,260	
0030					TOTALS	20,213	2,095	45,427	27,588	16,019	

PROJECT NO: 2250-12-70	HWY: STH 20 / STH 83	COUNTY: RACINE	MISCELLANEOUS QUANTITIES	SHEET:	E

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LIGHTING - LUMINAIRE ARMS AND POLES

654.0105 CONCRETE BASES TYPE 5
654.0111 CONCRETE BASES TYPE 11
655.0610 ELECTRICAL WIRE LIGHTING 12 AWG
658.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 - INCH BOLT CIRCLE
657.0322 POLES TYPE 5 - ALUMINUM
657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT
SPV.0060.101 DECORATIVE LIGHTING UNITS LED 15-FT
SPV.0060.102 DECORATIVE LIGHTING UNITS LED 20-FT
659.1125 LUMINAIRES UTILITY LED C

CATEGORY	STAGE	SYSTEM	DESCRIPTION / SEQUENCE	LOCATION STATION	LOCATION OFFSET	654.0105 CONCRETE BASES TYPE 5	654.0111 CONCRETE BASES TYPE 11	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 - INCH BOLT CIRCLE	657.0322 POLES TYPE 5 ALUMINUM	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT	SPV.0060.101 DECORATIVE LIGHTING UNITS LED 15-FT	SPV.0060.102 DECORATIVE LIGHTING UNITS LED 20-FT	659.1125 LUMINAIRES UTILITY LED C	COMMENTS
						EACH	EACH	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	
0030	1	RS	CRS1	308+40	24.1' RT	1	--	117	1	1	1	--	--	1	STANDARD LIGHTING UNIT
			DRS1	312+25	36.0' RT	1	--	117	1	1	1	--	--	1	"
			CRS2	317+22	36.1' RT	1	--	117	1	1	1	--	--	1	"
			DRS2	320+68	29.3' RT	1	--	117	1	1	1	--	--	1	"
			CRS3	324+08	30.0' RT	1	--	117	1	1	1	--	--	1	"
			DRS3	327+43	28.6' RT	1	--	117	1	1	1	--	--	1	"
			CRS4	330+78	30.2' RT	1	--	117	1	1	1	--	--	1	"
			DRS4	333+90	34.7' RT	1	--	117	1	1	1	--	--	1	"
			CRS5	337+44	30.6' RT	1	--	117	1	1	1	--	--	1	"
			DRS5	340+80	30.7' RT	1	--	117	1	1	1	--	--	1	"
			CRS6	344+17	30.4' RT	1	--	117	1	1	1	--	--	1	"
		RS			SUBTOTAL	11	0	1,287	11	11	11	0	0	11	STANDARD LIGHTING UNIT
0030	1	RS	DRS6	345+45	30.0' RT	--	1	69	--	--	--	--	1	--	DECORATIVE LIGHTING UNIT - 20-FT
			CRS7	346+70	30.3' RT	--	1	69	--	--	--	--	1	--	--
			DRS7	347+90	30.7' RT	--	1	69	--	--	--	--	1	--	--
			CRS8	349+15	30.5' RT	--	1	69	--	--	--	--	1	--	--
			DRS8	350+35	30.9' RT	--	1	69	--	--	--	--	1	--	--
			CRS9	351+50	30.0' RT	--	1	69	--	--	--	--	1	--	--
			DRS9	352+75	31.1' RT	--	1	69	--	--	--	--	1	--	--
			CRS10	354+00	30.9' RT	--	1	69	--	--	--	--	1	--	--
			DRS10	355+45	30.8' RT	--	1	69	--	--	--	--	1	--	--
			CRS11	356+60	33.6' RT	--	1	69	--	--	--	--	1	--	--
			DRS11	359+00	33.5' RT	--	1	54	--	--	--	1	--	--	DECORATIVE LIGHTING UNIT - 15-FT
			CRS12	360+00	33.2' RT	--	1	54	--	--	--	1	--	--	--
			DRS12	361+70	33.3' RT	--	1	54	--	--	--	1	--	--	--
			CRS13	363+13	30.4' RT	--	1	54	--	--	--	1	--	--	--
			DRS13	362+03	97.8' RT	--	1	54	--	--	--	1	--	--	PARK AREA - SOUTH OF THE BRIDGE
		RS			SUBTOTAL	0	15	960	0	0	0	5	10	0	DECORATIVE LIGHTING UNIT

LIGHTING - LUMINAIRE ARMS AND POLES CONTINUED

654.0105 CONCRETE BASES TYPE 5
654.0111 CONCRETE BASES TYPE 11
655.0610 ELECTRICAL WIRE LIGHTING 12 AWG
658.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 - INCH BOLT CIRCLE
657.0322 POLES TYPE 5 - ALUMINUM
657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT
SPV.0060.101 DECORATIVE LIGHTING UNITS LED 15-FT
SPV.0060.102 DECORATIVE LIGHTING UNITS LED 20-FT
659.1125 LUMINAIRES UTILITY LED C

CATEGORY	STAGE	SYSTEM	DESCRIPTION / SEQUENCE	LOCATION STATION	LOCATION OFFSET	654.0105 CONCRETE BASES TYPE 5	654.0111 CONCRETE BASES TYPE 11	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 - INCH BOLT CIRCLE	657.0322 POLES TYPE 5 ALUMINUM	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT	SPV.0060.101 DECORATIVE LIGHTING UNITS LED 15-FT	SPV.0060.102 DECORATIVE LIGHTING UNITS LED 20-FT	659.1125 LUMINAIRES UTILITY LED C	COMMENTS
						EACH	EACH	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	
0030	1	FS	CFS1	364+40	36.0' RT	--	--	54	--	--	--	1	--	--	STRUCTURE MOUNTED
			DFS1	365+70	36.0' RT	--	--	54	--	--	--	1	--	--	"
			CFS2	367+15	29.5' RT	--	1	54	--	--	--	1	--	--	DECORATIVE LIGHTING UNIT - 15-FT
			DFS2	101+50	26.1' RT	--	1	54	--	--	--	1	--	--	"
			CFS3	102+60	24.4' RT	--	1	54	--	--	--	1	--	--	"
			DFS3	104+00	25.8' RT	--	1	54	--	--	--	1	--	--	"
			CFS4	105+15	25.8' RT	--	1	54	--	--	--	1	--	--	"
			DFS4	106+70	23.7' RT	--	1	54	--	--	--	1	--	--	"
			CFS5	107+65	28.6' RT	--	1	54	--	--	--	1	--	--	"
			DFS5	108+50	28.7' RT	--	1	54	--	--	--	1	--	--	"
			CFS6	109+45	28.7' RT	--	1	54	--	--	--	1	--	--	"
			EFS1	368+50	27.0' RT	--	1	54	--	--	--	1	--	--	"
			FFS1	369+80	22.3' RT	--	1	69	--	--	--	--	1	--	DECORATIVE LIGHTING UNIT - 20-FT
			EFS2	371+00	26.8' RT	--	1	69	--	--	--	--	1	--	"
			FFS2	372+00	26.2' RT	--	1	69	--	--	--	--	1	--	"
			EFS3	373+30	26.0' RT	--	1	69	--	--	--	--	1	--	"
			FFS3	374+50	26.0' RT	--	1	69	--	--	--	--	1	--	"
			EFS4	375+70	26.2' RT	--	1	69	--	--	--	--	1	--	"
			FFS4	376+90	26.5' RT	--	1	69	--	--	--	--	1	--	"
			EFS5	378+00	26.2' RT	--	1	69	--	--	--	--	1	--	"
			FFS5	379+30	26.5' RT	--	1	69	--	--	--	--	1	--	"
			EFS6	380+58	26.0' RT	--	1	69	--	--	--	--	1	--	"
			FFS6	381+75	26.0' RT	--	1	69	--	--	--	--	1	--	"
		FS			SUBTOTAL	0	21	1,407	0	0	0	12	11	0	DECORATIVE LIGHTING UNIT
0030	1	FS	EFS7	384+90	25.7' RT	1	--	117	1	1	1	--	--	1	STANDARD LIGHTING UNIT
			FFS7	386+75	20.0' RT	1	--	117	1	1	1	--	--	1	"
			EFS8	388+50	20.8' RT	1	--	117	1	1	1	--	--	1	"
			FFS8	390+25	20.2' RT	1	--	117	1	1	1	--	--	1	"
			EFS9	392+00	20.4' RT	1	--	117	1	1	1	--	--	1	"
			FFS9	395+25	21.5' RT	1	--	117	1	1	1	--	--	1	"
			EFS10	398+05	21.8' RT	1	--	117	1	1	1	--	--	1	"
			FFS10	401+05	21.2' RT	1	--	117	1	1	1	--	--	1	"
			EFS11	402+65	21.0' RT	1	--	117	1	1	1	--	--	1	"
		FS			SUBTOTAL	9	0	1,053	9	9	9	0	0	9	STANDARD LIGHTING UNIT
	1				SUBTOTAL STAGE 1	20	0	2,340	20	20	20	0	0	20	STANDARD LIGHTING UNIT
	1				SUBTOTAL STAGE 1	0	36	2,367	0	0	0	17	21	0	DECORATIVE LIGHTING UNIT

LIGHTING - LUMINAIRE ARMS AND POLES CONTINUED

654.0105 CONCRETE BASES TYPE 5
654.0111 CONCRETE BASES TYPE 11
655.0610 ELECTRICAL WIRE LIGHTING 12 AWG
658.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 - INCH BOLT CIRCLE
657.0322 POLES TYPE 5 - ALUMINUM
657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT
SPV.0060.101 DECORATIVE LIGHTING UNITS LED 15-FT
SPV.0060.102 DECORATIVE LIGHTING UNITS LED 20-FT
659.1125 LUMINAIRES UTILITY LED C

CATEGORY	STAGE	SYSTEM	DESCRIPTION / SEQUENCE	LOCATION STATION	LOCATION OFFSET	654.0105 CONCRETE BASES TYPE 5	654.0111 CONCRETE BASES TYPE 11	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 - INCH BOLT CIRCLE	657.0322 POLES TYPE 5 ALUMINUM	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT	SPV.0060.101 DECORATIVE LIGHTING UNITS LED 15-FT	SPV.0060.102 DECORATIVE LIGHTING UNITS LED 20-FT	659.1125 LUMINAIRES UTILITY LED C	COMMENTS
						EACH	EACH	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	
0030	2	RS	ARS1	307+30	18.9' LT	1	--	117	1	1	1	--	--	1	STANDARD LIGHTING UNIT
			BRS1	310+35	25.2' LT	1	--	117	1	1	1	--	--	1	"
			ARS2	315+55	36.3' LT	1	--	117	1	1	1	--	--	1	"
			BRS2	318+86	36.1' LT	1	--	117	1	1	1	--	--	1	"
			ARS3	322+42	29.1' LT	1	--	117	1	1	1	--	--	1	"
			BRS3	325+79	28.9' LT	1	--	117	1	1	1	--	--	1	"
			ARS4	329+10	28.3' LT	1	--	117	1	1	1	--	--	1	"
			BRS4	332+34	29.8' LT	1	--	117	1	1	1	--	--	1	"
			ARS5	335+65	32.8' LT	1	--	117	1	1	1	--	--	1	"
			BRS5	339+12	28.7' LT	1	--	117	1	1	1	--	--	1	"
			ARS6	342+44	29.2' LT	1	--	117	1	1	1	--	--	1	"
		RS			SUBTOTAL	11	0	1,287	11	11	11	0	0	11	STANDARD LIGHTING UNIT
0030	2		BRS6	345+01	28.6' LT	--	1	69	--	--	--	--	1	--	DECORATIVE LIGHTING UNIT - 20-FT
			ARS7	346+20	29.2' LT	--	1	69	--	--	--	--	1	--	"
			BRS7	347+40	29.1' LT	--	1	69	--	--	--	--	1	--	"
			ARS8	348+60	29.2' LT	--	1	69	--	--	--	--	1	--	"
			BRS8	349+80	29.4' LT	--	1	69	--	--	--	--	1	--	"
			ARS9	351+00	29.2' LT	--	1	69	--	--	--	--	1	--	"
			BRS9	352+20	30.0' LT	--	1	69	--	--	--	--	1	--	"
			ARS10	353+45	29.7' LT	--	1	69	--	--	--	--	1	--	"
			BRS10	354+70	28.9' LT	--	1	69	--	--	--	--	1	--	"
			ARS11	355+90	30.0' LT	--	1	69	--	--	--	--	1	--	"
			BRS11	358+50	33.0' LT	--	1	54	--	--	--	--	1	--	DECORATIVE LIGHTING UNIT - 15-FT
			ARS12	359+55	32.9' LT	--	1	54	--	--	--	1	--	--	"
			BRS12	360+75	32.7' LT	--	1	54	--	--	--	1	--	--	"
			ARS13	361+95	33.5' LT	--	1	54	--	--	--	1	--	--	"
			BRS13	362+63	48.9' LT	--	1	54	--	--	--	1	--	--	"
			ARS14	363+21	32.9' LT	--	1	54	--	--	--	1	--	--	"
		RS			SUBTOTAL	0	16	1,014	0	0	0	5	11	0	DECORATIVE LIGHTING UNIT

LIGHTING - LUMINAIRE ARMS AND POLES CONTINUED

654.0105 CONCRETE BASES TYPE 5
654.0111 CONCRETE BASES TYPE 11
655.0610 ELECTRICAL WIRE LIGHTING 12 AWG
658.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 - INCH BOLT CIRCLE
657.0322 POLES TYPE 5 - ALUMINUM
657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT
SPV.0060.101 DECORATIVE LIGHTING UNITS LED 15-FT
SPV.0060.102 DECORATIVE LIGHTING UNITS LED 20-FT
659.1125 LUMINAIRES UTILITY LED C

CATEGORY	STAGE	SYSTEM	DESCRIPTION / SEQUENCE	LOCATION STATION	LOCATION OFFSET	654.0105 CONCRETE BASES TYPE 5	654.0111 CONCRETE BASES TYPE 11	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 - INCH BOLT CIRCLE	657.0322 POLES TYPE 5 ALUMINUM	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT	SPV.0060.101 DECORATIVE LIGHTING UNITS LED 15-FT	SPV.0060.102 DECORATIVE LIGHTING UNITS LED 20-FT	659.1125 LUMINAIRES UTILITY LED C	COMMENTS
						EACH	EACH	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	
0030	2	FS	AFS1	364+40	33.0' LT	--	1	54	--	--	--	1	--	--	STRUCTURE MOUNTED
			BFS1	365+70	33.0' LT	--	1	54	--	--	--	1	--	--	"
			AFS2	366+90	28.1' LT	--	1	54	--	--	--	1	--	--	DECORATIVE LIGHTING UNIT - 15-FT
			BFS2	101+00	27.6' LT	--	1	54	--	--	--	1	--	--	"
			AFS3	102+25	27.8' LT	--	1	54	--	--	--	1	--	--	"
			BFS3	103+50	21.3' LT	--	1	54	--	--	--	1	--	--	"
			AFS4	104+30	27.2' LT	--	1	54	--	--	--	1	--	--	"
			BFS4	105+75	21.6' LT	--	1	54	--	--	--	1	--	--	"
			AFS5	106+95	26.0' LT	--	1	54	--	--	--	1	--	--	"
			BFS5	108+15	26.0' LT	--	1	54	--	--	--	1	--	--	"
			GFS1	367+50	25.8' LT	--	1	54	--	--	--	1	--	--	"
			HFS1	369+15	21.2' LT	--	1	54	--	--	--	1	--	--	"
			GFS2	370+08	20.6' LT	--	1	69	--	--	--	--	1	--	DECORATIVE LIGHTING UNIT - 20-FT
			HFS2	371+50	25.0' LT	--	1	69	--	--	--	--	1	--	"
			GFS3	373+55	26.6' LT	--	1	69	--	--	--	--	1	--	"
			HFS3	374+95	27.3' LT	--	1	69	--	--	--	--	1	--	"
			GFS4	376+15	26.6' LT	--	1	69	--	--	--	--	1	--	"
			HFS4	377+35	27.1' LT	--	1	69	--	--	--	--	1	--	"
			GFS5	378+55	27.4' LT	--	1	69	--	--	--	--	1	--	"
			HFS5	379+80	26.5' LT	--	1	69	--	--	--	--	1	--	"
		FS			SUBTOTAL	0	20	1,200	0	0	0	12	8	0	DECORATIVE LIGHTING UNIT
0030	2	FS	AFS6	150+80	27.8' LT	1	--	117	1	1	1	--	--	1	STANDARD LIGHTING UNIT
			GFS6	383+15	25.3' LT	1	--	117	1	1	1	--	--	1	"
			HFS6	393+75	20.6' LT	1	--	117	1	1	1	--	--	1	"
			GFS7	396+60	20.3' LT	1	--	117	1	1	1	--	--	1	"
			HFS7	399+40	21.0' LT	1	--	117	1	1	1	--	--	1	"
			GFS8	404+00	19.6' LT	1	--	117	1	1	1	--	--	1	"
		FS			SUBTOTAL	6	0	702	6	6	6	0	0	6	STANDARD LIGHTING UNIT
	2				SUBTOTAL STAGE 2	17	0	1,989	17	17	17	0	0	17	STANDARD LIGHTING UNIT
	2				SUBTOTAL STAGE 2	0	36	2,214	0	0	0	17	19	0	DECORATIVE LIGHTING UNIT
					TOTALS	37	0	4,329	37	37	37	0	0	37	STANDARD LIGHTING UNIT
					TOTALS	0	72	4,581	0	0	0	34	40	0	DECORATIVE LIGHTING UNIT
0030					PROJECT TOTALS	37	72	8,910	37	37	37	34	40	37	

3

LIGHTING - CONTROL AND SERVICES
240/480 VAC 3-WIRE

654.0230 CONCRETE CONTROL CABINET BASES TYPE L30
655.0640 ELECTRICAL WIRE LIGHTING 1 AWG
656.0400.001 ELECTRICAL SERVICE MAIN LUGS ONLY METER PEDESTAL (RS)
656.0400.002 ELECTRICAL SERVICE MAIN LUGS ONLY METER PEDESTAL (FS)
659.2230 LIGHTING CONTROL CABINETS 240/480 30-INCH

CATEGORY	STAGE	DESCRIPTION / SEQUENCE	LOCATION STATION	LOCATION OFFSET	654.0230 CONCRETE CONTROL CABINET BASES TYPE L30	655.0640 ELECTRICAL WIRE LIGHTING 1 AWG	656.0400.001 ELECTRICAL SERVICE MAIN LUGS ONLY METER PEDESTAL (RS)	656.0400.002 ELECTRICAL SERVICE MAIN LUGS ONLY METER PEDESTAL (FS)	659.2230 LIGHTING CONTROL CABINETS 240/480 30-INCH	COMMENTS
					EACH	LF	LS	LS	EACH	
0030	1	RS	344+59	66.8' LT	1	18	1	--	1	RACINE STREET - NW CORNER WITH STH 20 / STH 83
		FS	367+25	54.2' RT	1	18	--	1	1	FIRST STREET - SW CORNER WITH MAIN STREET / STH 20
0030				TOTALS	2	36	1	1	2	

PLAQUE TEXT LIGHTING CONTROL
RACINE STREET
2 - 480 VAC WARNING (2 REQUIRED PER LOCATION; METER PEDESTAL AND CABINET DOOR)

PLAQUE TEXT LIGHTING CONTROL
FIRST STREET
2 - 480 VAC WARNING (2 REQUIRED PER LOCATION; METER PEDESTAL AND CABINET DOOR)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 2250-12-20

BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)
STH 20
RACINE COUNTY

CONVENTIONAL ABBREVIATIONS

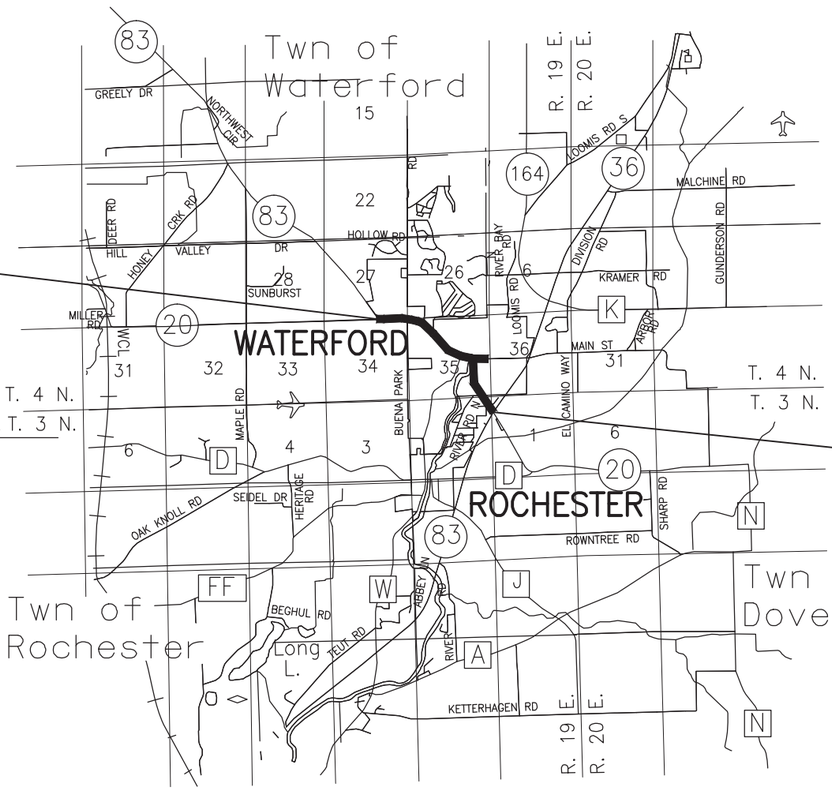
ACCESS POINT/ DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS	ROR
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	RIGHT	RT.
BUILDING	BLDG	SECTION	SEC.
CENTERLINE	C/L	SOUTHEAST	SE
CERTIFIED SURVEY MAP	CSM	SOUTHWEST	SW
CORNER	COR.	STATION	STA.
DOCUMENT	DOC.	TEMPORARY LIMITED EASEMENT	TLE
EASEMENT	EASE.	VOLUME	V.
HIGHWAY EASEMENT	H.E.	**CURVE DATA**	
LAND CONTRACT	LC	LONG CHORD	LCH
LEFT	LT.	LONG CHORD BEARING	LCB
LIFE ESTATE	LE	RADIUS	R
MONUMENT	MON.	DEGREE OF CURVE	D
NORTHEAST	NE	CENTRAL ANGLE OR DELTA	DELTA
NORTHWEST	NW	LENGTH OF CURVE	L
PAGE	P.	TANGENT	TAN
PERMANENT LIMITED EASEMENT	PLE	POINT OF CURVATURE	PC
PROPERTY LINE	PL	POINT OF INTERSECTION	PI
RECORDED AS	(100')	POINT OF TANGENCY	PT
REFERENCE LINE	R/L		

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	● (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	⊙ ●(SET)	PROPERTY LINE	
R/W STANDARD	△ ▲(SET)	LOT & TIE LINES	
SIGN	ISIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		NO ACCESS (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
HIGHWAY EASEMENT		QUARTER LINE	
R/W BOUNDARY POINT	RWB20	SIXTEENTH LINE	
PARCEL NUMBER	102	EXISTING CENTERLINE	
UTILITY NUMBER	92	PROPOSED REFERENCE LINE	
SIGN NUMBER (OFF PREMISE)	21-1	PARALLEL OFFSET	
BUILDING			

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES ELECTRIC	OH / E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
GUY ANCHOR		
ELECTRIC TOWER		
GAS VALVE	GV	



LAYOUT
NO SCALE

GN

BEGIN RELOCATION ORDER
STA.306+20.00
15.72' NORTH AND 1862.47 EAST OF THE SOUTH 1/4 CORNER OF SECTION 27, T4N, R19E, RACINE COUNTY

END RELOCATION ORDER
STA.404+55.00
1040.90' SOUTH AND 345.39' EAST OF THE SW CORNER OF SECTION 36, T4N, R19E, RACINE COUNTY

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A.SMITH NATIONAL

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 20 ESTABLISHED FROM PREVIOUS PROJECTS; HIGHWAY DIVISION JOB-2775, DOT ID T064-1(32), ID 2340-01-20, AND EXISTING SUBDIVISIONS, AND CERTIFIED SURVEY MAPS.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLE'S ARE TO EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A **PERMANENT LIMITED EASEMENT** (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A **HIGHWAY EASEMENT** (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

ORIGINAL PLAT PREPARED BY
R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

TPP PROJECT NUMBER 2250-12-20 - 4.01
SHEET 2 OF 2

FILE NAME: S:/5165144/PLAT/TPP100-STH20.DWG

STH 20, 2250-12-20 - 4.00

TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.01 AMENDMENT NO: 1

REVISES UTILITY NUMBERS 201, 206 & 207, ELIMINATES PARCEL 2, AND ADDS PARCELS 105 & 106 OF TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.01 RECORDED AS DOCUMENT NUMBER 2434189.

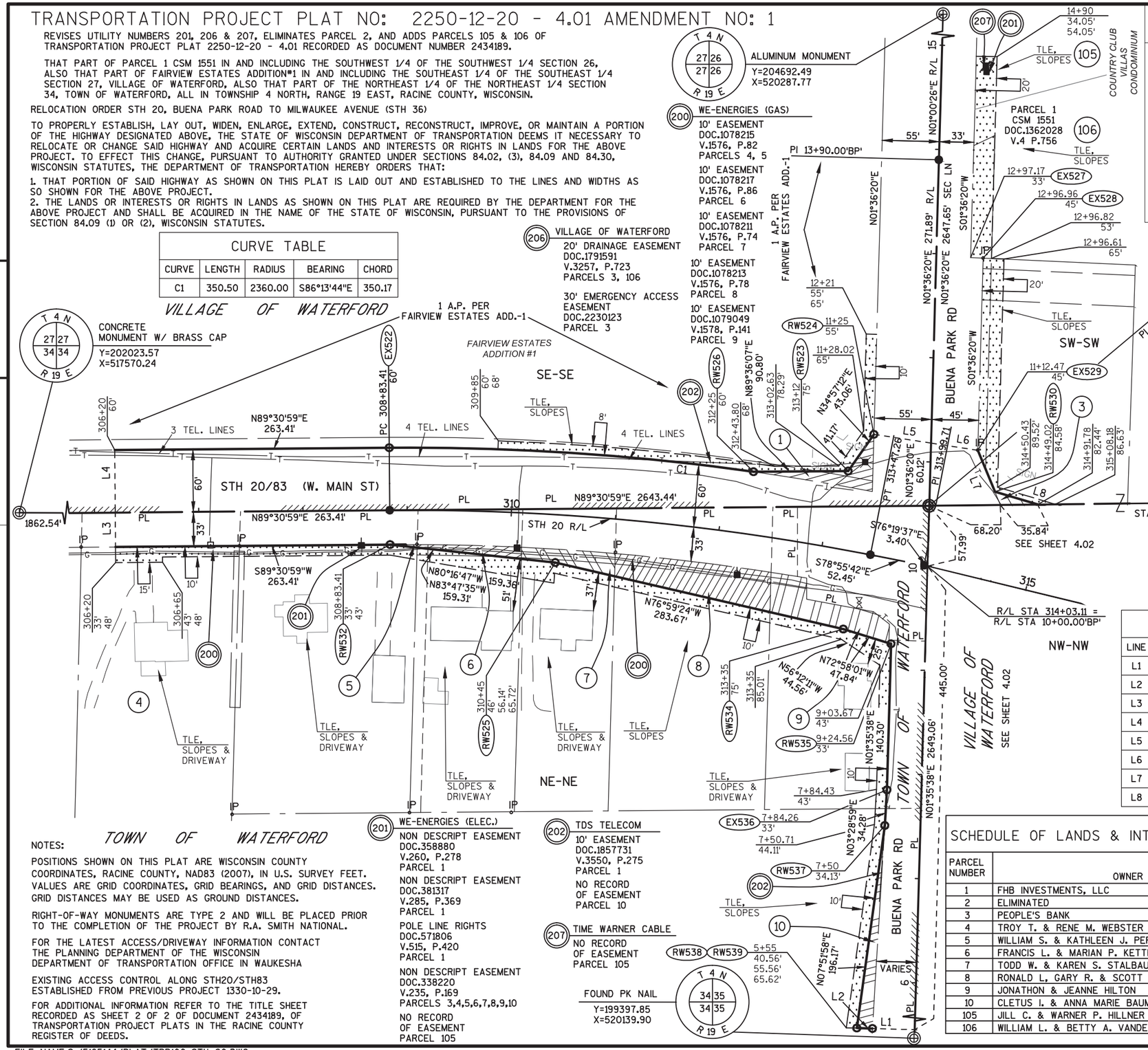
THAT PART OF PARCEL 1 CSM 1551 IN AND INCLUDING THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 SECTION 26, ALSO THAT PART OF FAIRVIEW ESTATES ADDITION#1 IN AND INCLUDING THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 SECTION 27, VILLAGE OF WATERFORD, ALSO THAT PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 SECTION 34, TOWN OF WATERFORD, ALL IN TOWNSHIP 4 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

CURVE TABLE				
CURVE	LENGTH	RADIUS	BEARING	CHORD
C1	350.50	2360.00	S86°13'44"E	350.17



PI	Y	X
10+57.99'BP'	202,045.88	520,213.59
13+90.00'BP'	202,377.76	520,222.89
313+99.71	201,988.72	520,208.67

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N88°24'22"W	40.56
L2	N88°24'22"W	15.00
L3	N0°29'01"W	33.00
L4	N0°29'01"W	60.00
L5	S81°15'05"E	55.43
L6	S81°15'05"E	45.35
L7	S22°28'36"E	43.11
L8	S73°27'52"E	42.82

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	FAIRVIEW ESTATES ADDITION 1	60'	1998
BUENA PARK RD	CSM 2782	80'	2006
BUENA PARK RD	CSM 1551	100'&88'	
STH 83	HIGHWAY DIVISION JOB-2775	VARIES	1928

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
200	WE-ENERGIES (GAS)	RELEASE OF RIGHTS
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS
202	TDS TELECOM	RELEASE OF RIGHTS
206	VILLAGE OF WATERFORD	RELEASE OF RIGHTS
207	TIME WARNER CABLE	RELEASE OF RIGHTS

NOTES:

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RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

EXISTING ACCESS CONTROL ALONG STH20/STH83 ESTABLISHED FROM PREVIOUS PROJECT 1330-10-29.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

201 WE-ENERGIES (ELEC.)
NON DESCRIPT EASEMENT DOC.358880 V.260, P.278 PARCEL 1
NON DESCRIPT EASEMENT DOC.381317 V.285, P.369 PARCEL 1
POLE LINE RIGHTS DOC.571806 V.515, P.420 PARCEL 1
NON DESCRIPT EASEMENT DOC.338220 V.235, P.169 PARCELS 3,4,5,6,7,8,9,10
NO RECORD OF EASEMENT PARCEL 105

202 TDS TELECOM
10' EASEMENT DOC.1857731 V.3550, P.275 PARCEL 1
NO RECORD OF EASEMENT PARCEL 10

207 TIME WARNER CABLE
NO RECORD OF EASEMENT PARCEL 105

FOUND PK NAIL
Y=199397.85
X=520139.90

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
1	FHB INVESTMENTS, LLC	FEE, TLE	0.034	-	0.034	0.087	-
2	ELIMINATED		-	-	-	-	-
3	PEOPLE'S BANK	FEE, TLE	0.005	-	0.005	0.100	-
4	TROY T. & RENE M. WEBSTER	FEE, TLE	-	0.115	0.115	0.032	-
5	WILLIAM S. & KATHLEEN J. PERSON	FEE, TLE	0.001	0.129	0.130	0.040	-
6	FRANCIS L. & MARIAN P. KETTERHAGEN IRREV. TRUST	FEE, TLE	0.017	0.079	0.096	0.034	-
7	TODD W. & KAREN S. STALBAUM	FEE, TLE	0.032	0.082	0.114	0.027	-
8	RONALD L, GARY R. & SCOTT B. LEWIS	FEE, TLE	0.107	0.179	0.286	0.035	-
9	JONATHON & JEANNE HILTON	FEE, TLE	0.072	0.158	0.230	0.068	-
10	CLETUS I. & ANNA MARIE BAUMEISTER	FEE, TLE	0.034	0.180	0.214	0.049	-
105	JILL C. & WARNER P. HILLNER	TLE	-	-	-	0.022	-
106	WILLIAM L. & BETTY A. VANDERHOOF	TLE	-	-	-	0.067	-

TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.01

THAT PART OF PARCEL 1 CSM 1551 IN AND INCLUDING THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 SECTION 26, ALSO THAT PART OF FAIRVIEW ESTATES ADDITION#1 IN AND INCLUDING THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 SECTION 27, VILLAGE OF WATERFORD, ALSO THAT PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 SECTION 34, TOWN OF WATERFORD, ALL IN TOWNSHIP 4 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

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CURVE TABLE				
CURVE	LENGTH	RADIUS	BEARING	CHORD
C1	350.50	2360.00	S86°13'44"E	350.17

VILLAGE OF WATERFORD

TOWN OF WATERFORD

CONCRETE MONUMENT W/ BRASS CAP
Y=202023.57
X=517570.24

ALUMINUM MONUMENT
Y=204692.49
X=520287.77

CONCRETE MONUMENT W/ BRASS CAP
Y=202045.88
X=520213.59

CONCRETE MONUMENT W/ BRASS CAP
Y=202075.85
X=522860.20

FOUND PK NAIL
Y=199397.85
X=520139.90

1 A.P. PER FAIRVIEW ESTATES ADD.-1

FAIRVIEW ESTATES ADDITION #1

SE-SE

NE-NE

PARCEL 1
CSM 1551
DOC.1362028
V.4 P.756

COUNTRY CLUB VILLAS CONDOMINIUM

BUENA PARK RD

STH 20/83 (W. MAIN ST)

STH 20 R/L

R/L STH 20
CURVE DATA
PI = 311+16.13
Y = 202,043.48
X = 519,928.82
DELTA = 11°33'18" RT.
BACK = S89°30'59"W
AHEAD = S78°55'42"E
D = 02°29'28"
TAN = 232.71'
L = 463.85'
R = 2,300.00'

SEE SHEET 4.02

SEE SHEET 4.02

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Robert L. Duffeck — PRINT NAME — SIGNATURE — 05/03/16 — DATE:

R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 – 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

05/03/2016

NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL

Document #: 2434189
Date: 05-09-2016 Time: 09:00 AM Pages: 2
Fee: $25.00 County: RACINE State: WI
Recording Path: WiDotSeRacineWaukesha
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 – 4.01
AMENDMENT NO:____

THIS PLAT IS A COPY. THE ORIGINAL IS IN THE REGISTER OF DEEDS OFFICE.

SCALE, FEET
0 50 100

GN

LOCATION MAP
NOT TO SCALE

PROJECT LOCATION

SHEET LOCATION

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N88°24'22"W	40.56
L2	N88°24'22"W	15.00
L3	N0°29'01"W	33.00
L4	N0°29'01"W	60.00
L5	S81°15'05"E	55.43
L6	S81°15'05"E	45.35
L7	S22°28'36"E	43.11
L8	S73°27'52"E	42.82

PI	Y	X
10+57.99'BP'	202,045.88	520,213.59
13+90.00'BP'	202,377.76	520,222.89
313+99.71	201,988.72	520,208.67

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	FAIRVIEW ESTATES ADDITION 1	60'	1998
BUENA PARK RD	CSM 2782	80'	2006
BUENA PARK RD	CSM 1551	100'&88'	
STH 83	HIGHWAY DIVISION JOB-2775	VARIES	1928

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
200	WE-ENERGIES (GAS)	RELEASE OF RIGHTS
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS
202	TDS TELECOM	RELEASE OF RIGHTS
206	VILLAGE OF WATERFORD	RELEASE OF RIGHTS
207	TIME WARNER CABLE	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
1	FHB INVESTMENTS, LLC	FEE, TLE	0.034	-	0.034	0.087	-
2	COUNTRY CLUB VILLAS CONDOMINIUMS	TLE	-	-	-	0.089	-
3	PEOPLE'S BANK	FEE, TLE	0.005	-	0.005	0.100	-
4	TROY T. & RENE M. WEBSTER	FEE, TLE	-	0.115	0.115	0.032	-
5	WILLIAM S. & KATHLEEN J. PERSON	FEE, TLE	0.001	0.129	0.130	0.040	-
6	FRANCIS L. & MARIAN P. KETTERHAGEN IRREV. TRUST	FEE, TLE	0.017	0.079	0.096	0.034	-
7	TODD W. & KAREN S. STALBAUM	FEE, TLE	0.032	0.082	0.114	0.027	-
8	RONALD L, GARY R. & SCOTT B. LEWIS	FEE, TLE	0.107	0.179	0.286	0.035	-
9	JONATHON & JEANNE HILTON	FEE, TLE	0.072	0.158	0.230	0.068	-
10	CLETUS I. & ANNA MARIE BAUMEISTER	FEE, TLE	0.034	0.180	0.214	0.049	-

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

EXISTING ACCESS CONTROL ALONG STH20/STH83 ESTABLISHED FROM PREVIOUS PROJECT 1330-10-29.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF THIS DOCUMENT.

(200) WE-ENERGIES (GAS)
10' EASEMENT DOC.1078215 V.1576, P.82 PARCELS 4, 5
10' EASEMENT DOC.1078217 V.1576, P.86 PARCEL 6
10' EASEMENT DOC.1078211 V.1576, P.74 PARCEL 7
10' EASEMENT DOC.1078213 V.1576, P.78 PARCEL 8
10' EASEMENT DOC.1079049 V.1578, P.141 PARCEL 9

(201) WE-ENERGIES (ELEC.)
NON DESCRIPT EASEMENT DOC.358880 V.260, P.278 PARCEL 1
NON DESCRIPT EASEMENT DOC.381317 V.285, P.369 PARCEL 1
POLE LINE RIGHTS DOC.571806 V.515, P.420 PARCEL 1
NON DESCRIPT EASEMENT DOC.338220 V.235, P.169 PARCELS 3,4,5,6,7,8,9,10

(202) TDS TELECOM
10' EASEMENT DOC.1857731 V.3550, P.275 PARCEL 1

(206) VILLAGE OF WATERFORD
20' DRAINAGE EASEMENT DOC.1791591 V.3257, P.723 PARCELS 2, 3
30' EMERGENCY ACCESS EASEMENT DOC.2230123 PARCEL 3

TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.02 AMENDMENT NO: 1

REVISES UTILITY NUMBERS 201, 202, 206 & 207, ELIMINATES PARCEL 2, AND ADDS PARCELS 107 & 108 OF TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.02 RECORDED AS DOCUMENT NUMBER 2439022.

THAT PART OF PARCEL 3 CSM 1551, OUTLOT 1 CSM 2782, LOT 2 CSM 2782 IN AND INCLUDING THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 SECTION 35, VILLAGE OF WATERFORD, ALSO THAT PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 SECTION 35, TOWN OF WATERFORD, ALL IN TOWNSHIP 4 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

(201) WE-ENERGIES (ELEC.)
NON DESCRIPT EASEMENT
DOC.338318
V.235, P.167
PARCELS 13, 14

NON DESCRIPT EASEMENT
DOC.338323 V.235, P.172
DOC.338316 V.235, P.165
PARCEL 16

NON DESCRIPT
EASEMENT
DOC.715048
V.666, P.423
PARCEL 12

NON DESCRIPT
EASEMENT
DOC.338317
V.235, P.166
PARCELS 11, 107 & 108

NON DESCRIPT
EASEMENT
DOC.338317 V.235, P.423
DOC.351501 V.251, P.361
PARCEL 12

LOCATION MAP NOT TO SCALE

R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.02 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

03/02/2017

NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL

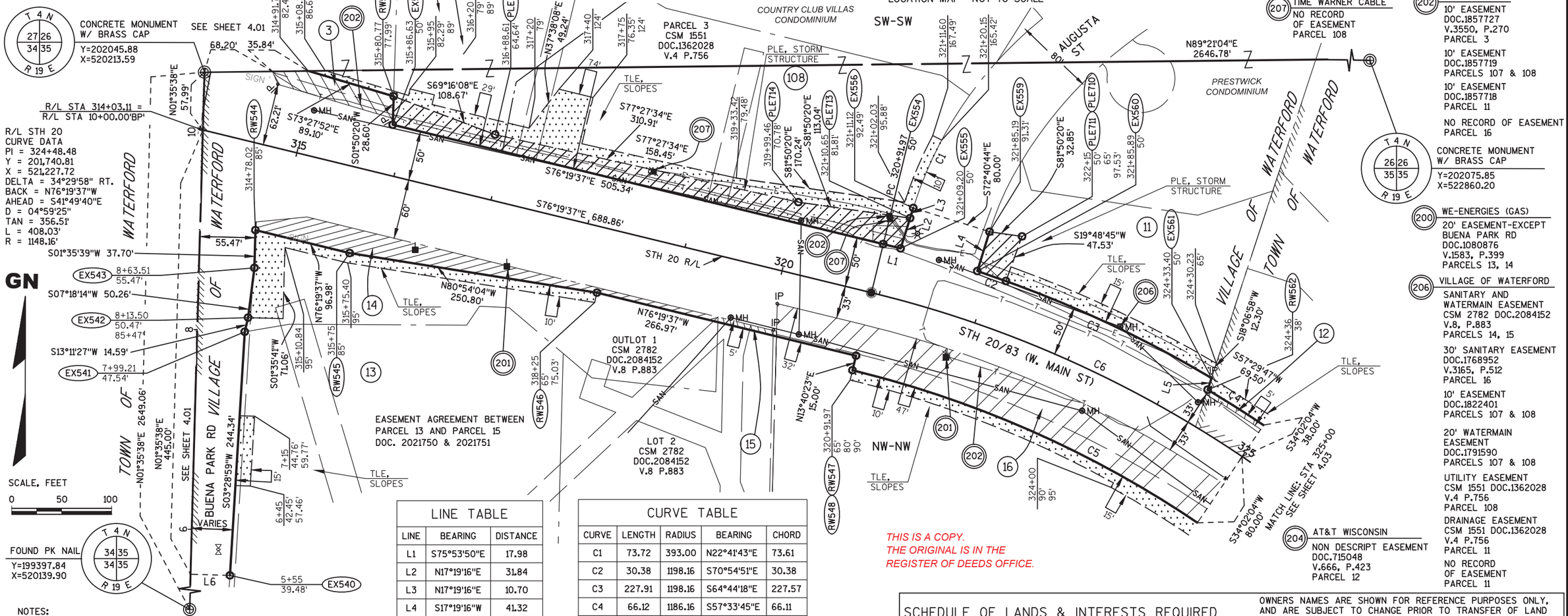
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Robert L. Dufeck — 03/07/17
PRINT NAME — SIGNATURE — DATE:

Document #: 2459256
Date: 03-09-2017 Time: 10:30 AM Pages: 1
Fee: $25.00 County: RACINE State: WI
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WIDotSeReg_RWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.02
AMENDMENT NO:1



(207) TIME WARNER CABLE
NO RECORD OF EASEMENT
PARCEL 108

(202) TDS TELECOM
10' EASEMENT
DOC.1857727
V.3550, P.270
PARCEL 3

10' EASEMENT
DOC.1857719
PARCELS 107 & 108

10' EASEMENT
DOC.1857718
PARCEL 11

NO RECORD OF EASEMENT
PARCEL 16

CONCRETE MONUMENT W/ BRASS CAP
Y=202075.85
X=522860.20

(200) WE-ENERGIES (GAS)
20' EASEMENT-EXCEPT BUENA PARK RD
DOC.1080876
V.1583, P.399
PARCELS 13, 14

(206) VILLAGE OF WATERFORD
SANITARY AND WATERMAIN EASEMENT
CSM 2782 DOC.2084152
V.8, P.883
PARCELS 14, 15

30' SANITARY EASEMENT
DOC.1768952
V.3165, P.512
PARCEL 16

10' EASEMENT
DOC.1822401
PARCELS 107 & 108

20' WATERMAIN EASEMENT
DOC.1791590
PARCELS 107 & 108

UTILITY EASEMENT
CSM 1551 DOC.1362028
V.4 P.756
PARCEL 108

DRAINAGE EASEMENT
CSM 1551 DOC.1362028
V.4 P.756
PARCEL 11

NO RECORD OF EASEMENT
PARCEL 11

(204) AT&T WISCONSIN
NON DESCRIPT EASEMENT
DOC.715048
V.666, P.423
PARCEL 12

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION IN WAUKESHA

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

LINE TABLE

LINE	BEARING	DISTANCE
L1	S75°53'50"E	17.98
L2	N17°19'16"E	31.84
L3	N17°19'16"E	10.70
L4	S17°19'16"W	41.32
L5	S18°06'58"W	12.30
L6	N88°24'22"W	39.48

CURVE TABLE

CURVE	LENGTH	RADIUS	BEARING	CHORD
C1	73.72	393.00	N22°41'43"E	73.61
C2	30.38	1198.16	S70°54'51"E	30.38
C3	227.91	1198.16	S64°44'18"E	227.57
C4	66.12	1186.16	S57°33'45"E	66.11
C5	379.60	1068.16	N66°08'47"W	377.60
C6	408.03	1148.16	S66°08'47"E	405.89

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
200	WE-ENERGIES (GAS)	RELEASE OF RIGHTS
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS
202	TDS TELECOM	RELEASE OF RIGHTS
204	AT&T WISCONSIN	RELEASE OF RIGHTS
206	VILLAGE OF WATERFORD	RELEASE OF RIGHTS
207	TIME WARNER CABLE	RELEASE OF RIGHTS

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	CSM 2782	110'	2006
STH 20/83	CSM 1551	110'&83'	
BUENA PARK RD	CSM 2782	80'	2006
BUENA PARK RD	CSM 1551	100'&88'	
AUGUSTA ST	CSM 1551	80'	
STH 83	HIGHWAY DIVISION JOB-2775	VARIES	1928

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
2	ELIMINATED		-	-	-	-	-
3	PEOPLE'S BANK	FEE, TLE	0.057	-	0.057	0.009	-
11	PRESTWICK CONDOMINIUMS	FEE, PLE, TLE	-	0.046	0.046	0.078	0.032
12	RIVERMOOR, LLC	FEE, TLE	0.008	-	0.008	0.018	-
13	FAIRVIEW SHELL, LLC	TLE	-	-	-	0.024	-
14	FAIRVIEW STATION ASSOCIATION, INC	FEE, TLE	0.147	-	0.147	0.134	-
15	BIELINSKI COMMERCIAL, LLC	FEE	0.007	-	0.007	-	-
16	WATERFORD GRADED SCHOOL DISTRICT	FEE, TLE	0.481	-	0.481	0.097	-
107	LESLIE ANN CARTWRIGHT	PLE, TLE	-	-	-	0.029	0.055
108	MARGARET HEGEMAN	PLE, TLE	-	-	-	0.181	0.[illegible]

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THE ORIGINAL IS IN THE
REGISTER OF DEEDS OFFICE.

FILE NAME:S:/5165144/PLAT/TPP100-STH 20.DWG

STH 20 2250-12-20 - 4.02 AMENDMENT NO: 1

TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.02

THAT PART OF PARCEL 3 CSM 1551, OUTLOT 1 CSM 2782, LOT 2 CSM 2782 IN AND INCLUDING THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 SECTION 35, VILLAGE OF WATERFORD, ALSO THAT PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 SECTION 35, TOWN OF WATERFORD, ALL IN TOWNSHIP 4 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

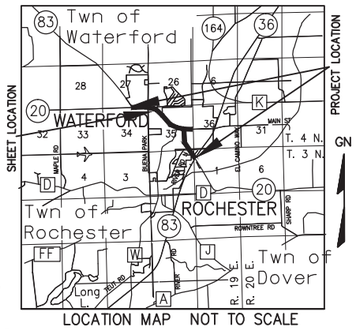
(201) WE-ENERGIES (ELEC.)
NON DESCRIPT EASEMENT
DOC.338318
V.235, P.167
PARCELS 13, 14

NON DESCRIPT EASEMENT
DOC.338317
V.235, P.166
PARCELS 2, 11

NON DESCRIPT EASEMENT
DOC.338323 V.235, P.172
DOC.338316 V.235, P.165
PARCEL 16

NON DESCRIPT EASEMENT
DOC.715048
V.666, P.423
PARCEL 12

NON DESCRIPT EASEMENT
DOC.338317 V.235, P.423
DOC.351501 V.251, P.361
PARCEL 12



LOCATION MAP NOT TO SCALE

R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

07/01/2016
NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Robert L. Duffeck — PRINT NAME
07/06/16 — SIGNATURE DATE:

Document #: **2439022**
Date: 07-07-2016 Time: 11:03 AM Pages: 1
Fee: $25.00 County: RACINE State: WI
Requesting Party: WiDotSeRegionWaukesha
RACINE COUNTY REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.02
AMENDMENT NO: ___

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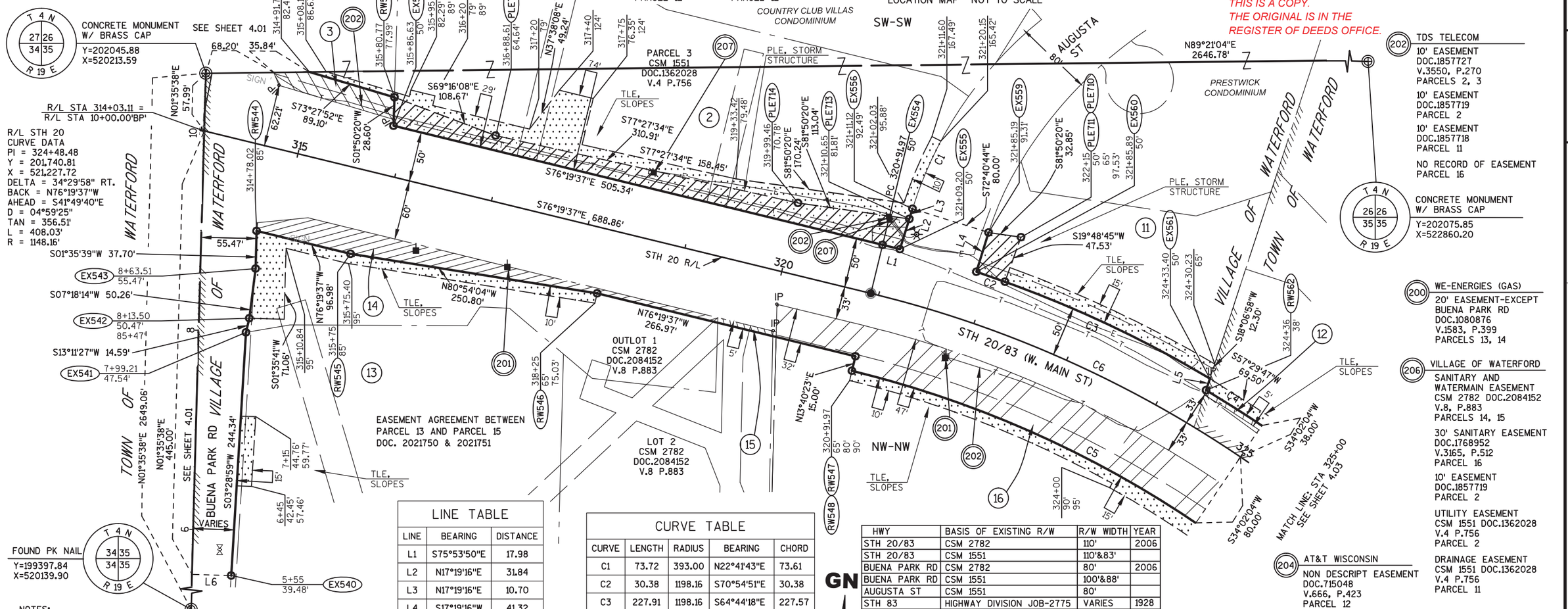
REGISTER OF DEEDS OFFICE.



(202) TDS TELECOM
10' EASEMENT
DOC.1857727
V.3550, P.270
PARCELS 2, 3

10' EASEMENT
DOC.1857719
PARCEL 2

10' EASEMENT
DOC.1857718
PARCEL 11

NO RECORD OF EASEMENT
PARCEL 16

CONCRETE MONUMENT
W/ BRASS CAP
Y=202075.85
X=522860.20

(200) WE-ENERGIES (GAS)
20' EASEMENT-EXCEPT
BUENA PARK RD
DOC.1080876
V.1583, P.399
PARCELS 13, 14

(206) VILLAGE OF WATERFORD
SANITARY AND WATERMAIN EASEMENT
CSM 2782 DOC.2084152
V.8, P.883
PARCELS 14, 15

30' SANITARY EASEMENT
DOC.1768952
V.3165, P.512
PARCEL 16

10' EASEMENT
DOC.1857719
PARCEL 2

UTILITY EASEMENT
CSM 1551 DOC.1362028
V.4 P.756
PARCEL 2

DRAINAGE EASEMENT
CSM 1551 DOC.1362028
V.4 P.756
PARCEL 11

(204) AT&T WISCONSIN
NON DESCRIPT EASEMENT
DOC.715048
V.666, P.423
PARCEL 12

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CURVE TABLE				
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C4	66.12	1186.16	S57°33'45"E	66.11
C5	379.60	1068.16	N66°08'47"W	377.60
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BUENA PARK RD	CSM 1551	100'&88'	
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STH 83	HIGHWAY DIVISION JOB-2775	VARIES	1928

NOTES:

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RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
200	WE-ENERGIES (GAS)	RELEASE OF RIGHTS
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS
202	TDS TELECOM	RELEASE OF RIGHTS
204	AT&T WISCONSIN	RELEASE OF RIGHTS
206	VILLAGE OF WATERFORD	RELEASE OF RIGHTS
207	TIME WARNER CABLE	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
2	COUNTRY CLUB VILLAS CONDOMINIUMS	PLE, TLE	-	-	-	0.210	0.244
3	PEOPLE'S BANK	FEE, TLE	0.057	-	0.057	0.009	-
11	PRESTWICK CONDOMINIUMS	FEE, PLE, TLE	-	0.046	0.046	0.078	0.032
12	RIVERMOOR, LLC	FEE, TLE	0.008	-	0.008	0.018	-
13	FAIRVIEW SHELL, LLC	TLE	-	-	-	0.024	-
14	FAIRVIEW STATION ASSOCIATION, INC	FEE, TLE	0.147	-	0.147	0.134	-
15	BIELINSKI COMMERCIAL, LLC	FEE	0.007	-	0.007	-	-
16	WATERFORD GRADED SCHOOL DISTRICT	FEE, TLE	0.481	-	0.481	0.097	-

FILE NAME:S:/5165144/PLAT/TPP100-STH 20.DWG

STH 20 2250-12-20 - 4.02

TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.03 AMENDMENT NO: 1

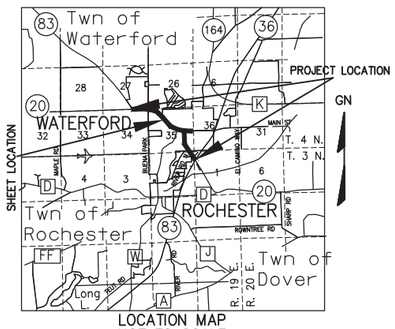
REVISES UTILITY NUMBER 206, PARCEL NUMBERS 12, 16 AND 18 OF TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.03 RECORDED AS DOCUMENT NUMBER 2439023.

THAT PART OF LOT 48 OF RIVERMOOR COUNTRY CLUB ESTATES IN AND INCLUDING THE NORTHEAST 1/4 OF THE NORTHWEST 1/4, ALSO THAT PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 SECTION 35, VILLAGE OF WATERFORD, ALSO THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 AND THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 SECTION 35, TOWN OF WATERFORD, ALL IN TOWNSHIP 4 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



LOCATION MAP
NOT TO SCALE

R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.03 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

03/02/2017

NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL

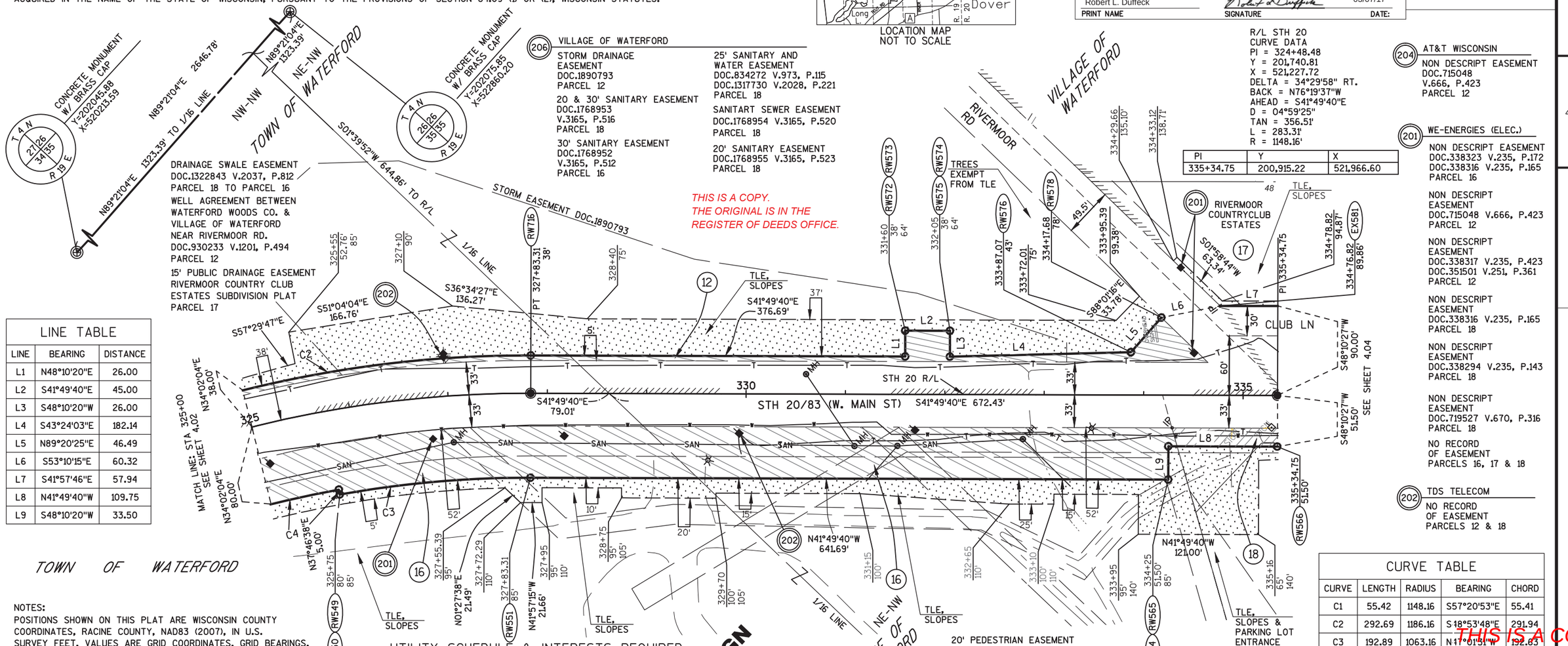
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Robert L. Duffeck		03/07/17
PRINT NAME	SIGNATURE	DATE:

Document #: **2459257**
Date: 03-09-2017 Time: 10:30 AM Pages: 1
Fee: $25.00 County: RACINE State: WI
Recording Party: WiDotSeRegionWaukesha
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.03
AMENDMENT NO:1



TOWN OF WATERFORD

R/L STH 20
CURVE DATA
PI = 324+48.48
Y = 201,740.81
X = 521,227.72
DELTA = 34°29'58" RT.
BACK = N76°19'37"W
AHEAD = S41°49'40"E
D = 04°59'25"
TAN = 356.51'
L = 283.31'
R = 1148.16'

PI	Y	X
335+34.75	200,915.22	521,966.60

204 AT&T WISCONSIN
NON DESCRIPT EASEMENT DOC.715048 V.666, P.423 PARCEL 12

201 WE-ENERGIES (ELEC.)
NON DESCRIPT EASEMENT DOC.338323 V.235, P.172 DOC.338316 V.235, P.165 PARCEL 16
NON DESCRIPT EASEMENT DOC.715048 V.666, P.423 PARCEL 12
NON DESCRIPT EASEMENT DOC.338317 V.235, P.423 DOC.351501 V.251, P.361 PARCEL 12
NON DESCRIPT EASEMENT DOC.338316 V.235, P.165 PARCEL 18
NON DESCRIPT EASEMENT DOC.338294 V.235, P.143 PARCEL 18
NON DESCRIPT EASEMENT DOC.719527 V.670, P.316 PARCEL 18
NO RECORD OF EASEMENT PARCELS 16, 17 & 18

202 TDS TELECOM
NO RECORD OF EASEMENT PARCELS 12 & 18

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N48°10'20"E	26.00
L2	S41°49'40"E	45.00
L3	S48°10'20"W	26.00
L4	S43°24'03"E	182.14
L5	N89°20'25"E	46.49
L6	S53°10'15"E	60.32
L7	S41°57'46"E	57.94
L8	N41°49'40"W	109.75
L9	S48°10'20"W	33.50

CURVE TABLE				
CURVE	LENGTH	RADIUS	BEARING	CHORD
C1	55.42	1148.16	S57°20'53"E	55.41
C2	292.69	1186.16	S18°53'48"E	291.94
C3	192.89	1063.16	N11°01'51"W	192.63
C4	69.77	1068.16	N3[illegible]	[illegible]

20' PEDESTRIAN EASEMENT DOC.1765303 V.3150, P.678 DOC.1768965 V.3165, P.564 PARCEL 18

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS
202	TDS TELECOM	RELEASE OF RIGHTS
204	AT&T WISCONSIN	RELEASE OF RIGHTS
206	VILLAGE OF WATERFORD	RELEASE OF RIGHTS

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	STATE STATUTES	66'	
RIVERMOOR RD	RIVERMOOR COUNTRY CLUB ESTATES	49.5'	1964
CLUB LANE	RIVERMOOR COUNTRY CLUB ESTATES	30'	1964
STH 83	HIGHWAY DIVISION JOB-2775	VARIES	1928

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY. AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
12	RIVERMOOR, LLC	FEE, TLE	0.184	0.863	1.047	0.781	-
16	WATERFORD GRADED SCHOOL DISTRICT	FEE, TLE	1.081	-	1.081	0.398	-
17	DEBORAH A. HEGEMANN	TLE	-	-	-	0.014	-
18	WATERFORD UNION HIGH SCHOOL DISTRICT	FEE, TLE	0.044	0.084	0.128	0.147	

THIS IS A COPY. THE ORIGINAL IS IN THE REGISTER OF DEEDS OFFICE.

FILE NAME:S:/5165144/PLAT/TPP100-STH 20.DWG

STH 20 2250-12-20 - 4.03 AMENDMENT NO: 1

TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.03

THAT PART OF LOT 48 OF RIVERMOOR COUNTRY CLUB ESTATES IN AND INCLUDING THE NORTHEAST 1/4 OF THE NORTHWEST 1/4, ALSO THAT PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 SECTION 35, VILLAGE OF WATERFORD, ALSO THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 AND THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 SECTION 35, TOWN OF WATERFORD, ALL IN TOWNSHIP 4 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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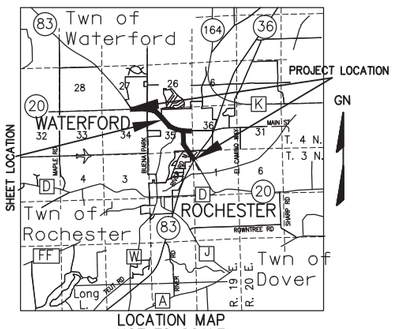


LOCATION MAP
NOT TO SCALE

R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

07/01/2016

NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL

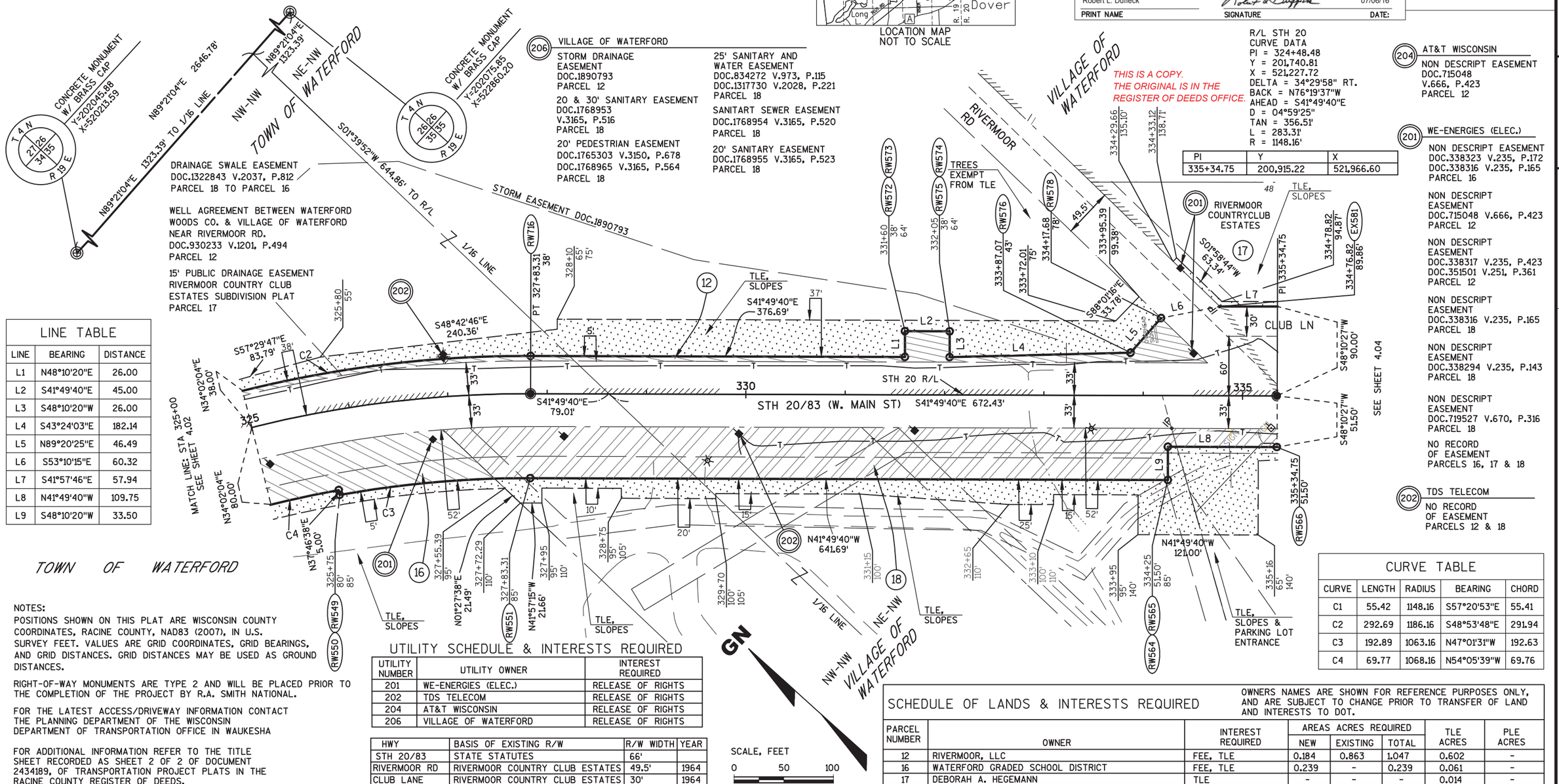
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Robert L. Duffeck		07/06/16
PRINT NAME	SIGNATURE	DATE:

Document #: **2439023**
Date: 07-07-2016 Time: 11:04 AM Pages: 1
Fee: $25.00 County: RACINE State: WI
Recording Party: WiDotSeRegion/Waukesha
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegion/Waukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.03
AMENDMENT NO:____

THIS IS A COPY.
THE ORIGINAL IS IN THE
REGISTER OF DEEDS OFFICE.



TOWN OF WATERFORD

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N48°10'20"E	26.00
L2	S41°49'40"E	45.00
L3	S48°10'20"W	26.00
L4	S43°24'03"E	182.14
L5	N89°20'25"E	46.49
L6	S53°10'15"E	60.32
L7	S41°57'46"E	57.94
L8	N41°49'40"W	109.75
L9	S48°10'20"W	33.50

CURVE TABLE				
CURVE	LENGTH	RADIUS	BEARING	CHORD
C1	55.42	1148.16	S57°20'53"E	55.41
C2	292.69	1186.16	S48°53'48"E	291.94
C3	192.89	1063.16	N47°01'31"W	192.63
C4	69.77	1068.16	N54°05'39"W	69.76

204 AT&T WISCONSIN
NON DESCRIPT EASEMENT DOC.715048 V.666, P.423 PARCEL 12

201 WE-ENERGIES (ELEC.)
NON DESCRIPT EASEMENT DOC.338323 V.235, P.172 DOC.338316 V.235, P.165 PARCEL 16
NON DESCRIPT EASEMENT DOC.715048 V.666, P.423 PARCEL 12
NON DESCRIPT EASEMENT DOC.338317 V.235, P.423 DOC.351501 V.251, P.361 PARCEL 12
NON DESCRIPT EASEMENT DOC.338316 V.235, P.165 PARCEL 18
NON DESCRIPT EASEMENT DOC.338294 V.235, P.143 PARCEL 18
NON DESCRIPT EASEMENT DOC.719527 V.670, P.316 PARCEL 18
NO RECORD OF EASEMENT PARCELS 16, 17 & 18

202 TDS TELECOM
NO RECORD OF EASEMENT PARCELS 12 & 18

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS
202	TDS TELECOM	RELEASE OF RIGHTS
204	AT&T WISCONSIN	RELEASE OF RIGHTS
206	VILLAGE OF WATERFORD	RELEASE OF RIGHTS

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	STATE STATUTES	66'	
RIVERMOOR RD	RIVERMOOR COUNTRY CLUB ESTATES	49.5'	1964
CLUB LANE	RIVERMOOR COUNTRY CLUB ESTATES	30'	1964
STH 83	HIGHWAY DIVISION JOB-2775	VARIES	1928

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
12	RIVERMOOR, LLC	FEE, TLE	0.184	0.863	1.047	0.602	-
16	WATERFORD GRADED SCHOOL DISTRICT	FEE, TLE	0.239	-	0.239	0.061	-
17	DEBORAH A. HEGEMANN	TLE	-	-	-	0.014	-
18	WATERFORD UNION HIGH SCHOOL DISTRICT	FEE, TLE	0.887	0.084	0.971	0.484	

TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.04

THAT PART OF LOT 44 AND 48 OF RIVERMOOR COUNTRY CLUB ESTATES IN AND INCLUDING THE NORTHEAST 1/4 OF THE NORTHWEST 1/4, ALSO THAT PART OF OUTLOT A CSM 1076, OUTLOT 1 CSM 2563, LOT 2 CSM 1881, BLOCK 35 OF VILLAGE OF WATERFORD IN AND INCLUDING THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4, ALSO THAT PART OF LOT 2 CSM 1881 IN THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4, ALL IN SECTION 35, VILLAGE OF WATERFORD, TOWNSHIP 4 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LOCATION MAP
NOT TO SCALE

R/L RACINE ST
CURVE DATA
PI = 50+89.75
Y = 200,230.99
X = 522,757.71
DELTA = 60°49'29" RT.
BACK = N48°29'00"E
AHEAD = S70°41'31"E
D = 57°17'45"
TAN = 58.70'
L = 106.16'
R = 100.00'

CONCRETE MONUMENT W/ BRASS CAP
Y=202075.85
X=522860.20

T 4 N, R 19 E, SECTIONS 26, 35, 35, 35

N01°44'07"E 2644.85'

R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

Nathan A Vaughn 07/07/2016

NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Robert L. Duffeck — Robert L Duffeck — 07/12/16
PRINT NAME — SIGNATURE — DATE:

Document #: **2439479**
Date: 07-13-2015 Time: 09:17 AM Pages: 1
Fee: $25.00 County: RACINE State: WI
Requesting Party: WiDotSeRegionWaukesha
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.04
AMENDMENT NO:...

(201) WE-ENERGIES (ELEC.)

NON DESCRIPT EASEMENT DOC.338316 V.235, P.165 PARCEL 12

NON DESCRIPT EASEMENT DOC.338294 V.235, P.143 PARCEL 18

NON DESCRIPT EASEMENT DOC.719527 V.670, P.316 PARCEL 18

NON DESCRIPT POLE LINE RIGHTS DOC.346214 V.245, P.28 DOC.530665 V.839,P.317 PARCEL 19

NON DESCRIPT EASEMENT DOC.530665 V.469, P.317 DOC.346214 V.245, P.28 PARCEL 20

NON DESCRIPT EASEMENT DOC.338323 V.235, P.172 PARCELS 1, 2 OF EARLY ACQUISITION PLAT 2250-12-22

VILLAGE OF WATERFORD

RIVERMOOR COUNTRYCLUB ESTATES

RIVERMOOR DR 66'

FOXHORN DR 66'

PT 51+37.21

STA 51+27.50

SW-NE

NE-NW

SE-NW

BLOCK 35

OUTLOT A

LOT 2 CSM 1076 DOC.1170497 V.3 P.185-186

OUTLOT 1 CSM 2563 DOC.1937747 V.8 P.22

LOT 2 CSM 1881 DOC.1551789 V.5 P.727

NO ACCESS PER CSM 2563

RACINE ST

CLUB LN

STH 20 R/L

STH 20/83 (W. MAIN ST)

PC 50+31.05

S41°57'46"E 393.77'

S51°09'34"E 111.48'

S68°57'45"E 15.42'

S01°40'13"W 120.72'

S70°41'43"E 229.29'

S48°00'07"E 289.05'

S41°57'46"E 1242.00'

S33°28'44"E 110.39'

S01°44'07"W 131.67'

S01°44'07"W 85.08'

SEE SHEET 4.03

SEE SHEET 4.05

EXISTING C/L

R/L STA 345+71.48=
R/L STA 49+59.00'R'

PK NAIL Y=199432.21 X=522780.11

N01°44'07"E TO R/L 559.74'

151.24'

N48°10'27"E 90.00'

N48°10'27"E 51.50'

N44°30'16"W 101.47'

N41°57'46"W 422.46'

N41°57'46"W 143.39'

N48°15'20"W 435.93'

N67°55'18"W 228.65'

S21°54'40"W 110.61'

N22°29'00"E 159.18'

N22°29'00"E 66.26'

S67°10'00"E 0.72'

1/16 LINE

TLE, SLOPES

TLE, SLOPES & DRIVEWAY

PARCEL PURCHASED BY PROJECT 2250-12-22. PARCEL 1

PARCEL PURCHASED BY PROJECT 2250-12-22. PARCEL 2

PARCEL PURCHASED BY PROJECT 2250-12-22. PARCEL 3

PARCEL PURCHASED BY PROJECT 2250-12-22. PARCEL 4

(206) VILLAGE OF WATERFORD
25' SANITARY AND WATER EASEMENT DOC.834272 V.973, P.115 DOC.1317730 V.2028, P.221 PARCEL 18
30' SANITARY EASEMENT DOC.1768953 V.3165, P.516 PARCEL 18

(200) WE-ENERGIES (GAS)
10' EASEMENT DOC.777698 V.839, P.79 PARCEL 19
11.5' EASEMENT DOC.771510 V.824, P.447 PARCEL 20

PI	Y	X
335+34.75	200,915.22	521,966.60

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	STATE STATUTES	66'	
RIVERMOOR DR	RIVERMOOR COUNTRY CLUB ESTATES	66'	1964
CLUB LANE	RIVERMOOR COUNTRY CLUB ESTATES	30'	1964
RACINE ST	CSM 2563	66'	2003
RACINE ST	CSM 1881	66'	1996
STH 83	HIGHWAY DIVISION JOB-2775	VARIES	1928

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
200	WE-ENERGIES (GAS)	RELEASE OF RIGHTS
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS
202	TDS TELECOM	RELEASE OF RIGHTS
206	VILLAGE OF WATERFORD	RELEASE OF RIGHTS

SCALE, FEET
0 50 100

LINE TABLE

LINE	BEARING	DISTANCE
L1	S4°22'41"W	66.09
L2	S41°57'46"E	19.17
L3	S1°40'20"W	30.36
L4	S50°23'36"W	23.32
L5	S50°23'36"W	4.46
L6	S50°23'36"W	35.60
L7	S55°29'18"W	41.63

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

THIS IS A COPY. THE ORIGINAL IS IN THE REGISTER OF DEEDS OFFICE.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
17	DEBORAH A. HEGEMANN	TLE	-	-	-	0.001	-
18	WATERFORD UNION HIGH SCHOOL DISTRICT	FEE, TLE	0.345	0.500	0.845	0.271	-
19	MICHAEL H. & CHRISTINE A. HEINZEN	TLE	-	-	-	0.001	-
20	JAMES J. & MEG L. RUPLINGER	FEE, TLE	-	0.056	0.056	0.080	-
21	CAROL A. SMITH	FEE, TLE	-	0.054	0.054	0.009	-
22	~~ROBERT B. TINDALL~~ Robert B. Tindall et.al	TLE	-	-	-	0.015	-
23	CHARLES TINDALL, ETAL	TLE	-	-	-	0.010	-
24	GILBERT J. WATERS & SUE KERSHEFSKI-WATERS	TLE	-	-	-	0.017	-
25	VILLAGE OF WATERFORD	FEE, TLE	0.026	-	0.026	0.016	-

FILE NAME:S:/5165144/PLAT/TPP100-STH 20.DWG

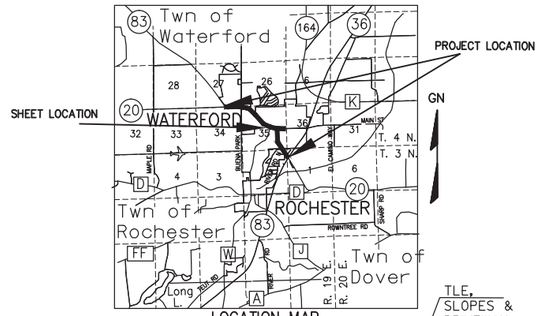
TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.05

THAT PART OF BLOCK 35 AND LOTS 4, 5, 6 OF BLOCK 36 VILLAGE OF WATERFORD PLAT, AND LOTS 4, 5, 6 OF BLOCK 18 VILLAGE OF WATERFORD PLAT ALL IN AND INCLUDING THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4, ALL IN SECTION 35, VILLAGE OF WATERFORD, TOWNSHIP 4 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.05 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

07/01/2016

NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

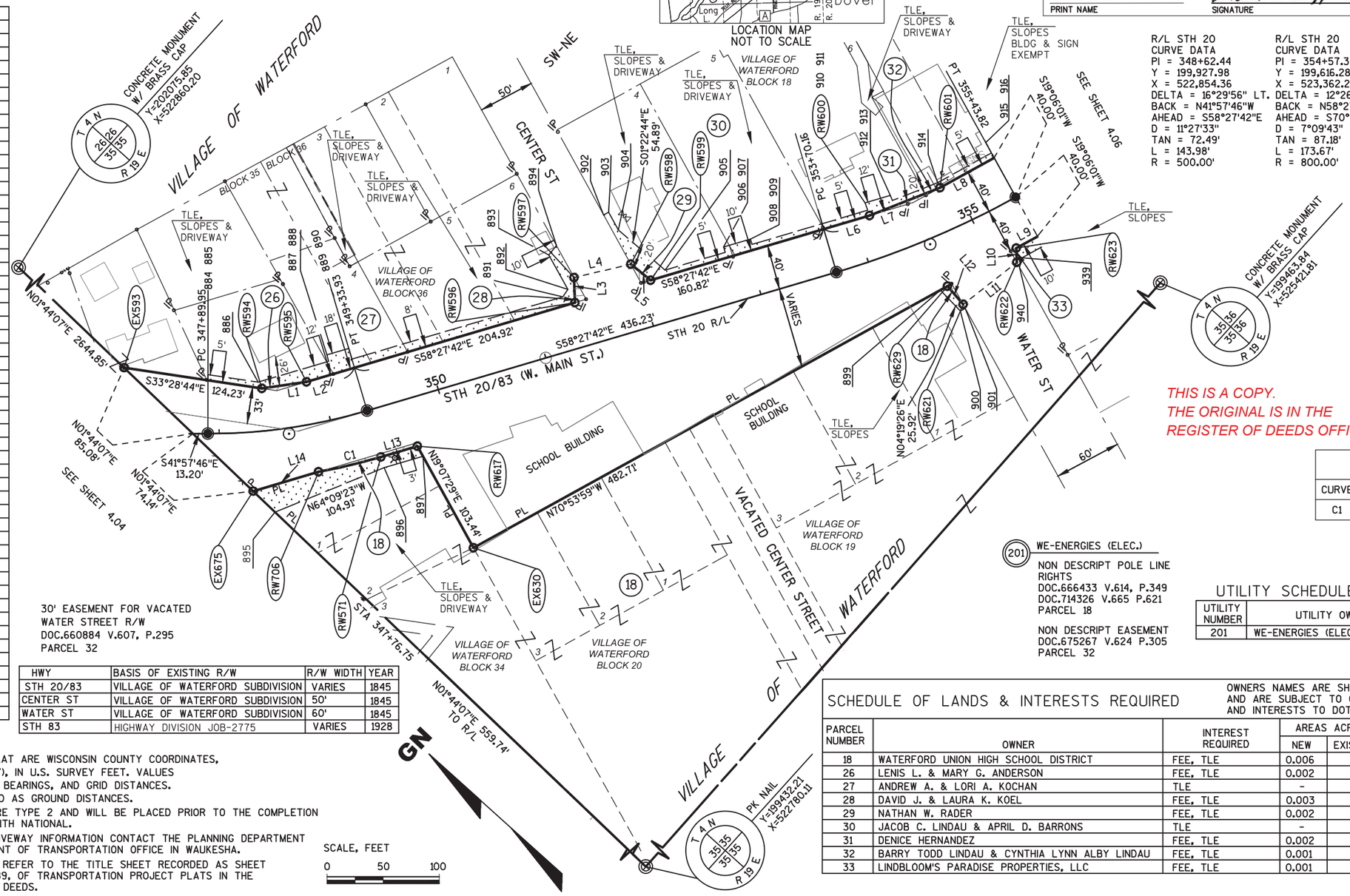
Robert L. Duffeck — PRINT NAME
SIGNATURE — DATE: 07/06/16

Document #: **2439024**
Date: 07-07-2016 Time: 11:04 AM Pages: 1
Fee: $25.00 County: RACINE State: WI
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WiDotRegMWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.05
AMENDMENT NO:____

POINT	STATION	OUT
EX593	347+15.24	58.78'
884	347+89.95	47.64'
885	347+89.95	52.69'
886	348+39.07	43.82'
RW594	348+42.16	37.93'
RW595	348+85.72	37.85'
887	349+11	51.53'
888	349+11	57.53'
889	349+33.93	48'
890	349+33.93	58'
891	351+30	48'
892	351+36.09	53.15'
RW596	351+38.84	40'
RW597	351+44.47	61.63'
893	351+28.57	87.34'
894	351+37.46	93.49'
902	351+85.53	107.67'
903	351+90.41	108.75'
904	351+94.30	91.07'
RW598	351+96.31	58.71'
RW599	352+09.33	40'
905	352+24.13	45'
906	352+80	45'
907	352+80	50'
908	353+05	45'
909	353+05	50'
RW600	354+15	38.80'
910	354+15	43.81'
911	354+15	50.82'
912	354+40	44.20'
913	354+40	49.14'
914	354+85.81	43.01'
RW601	354+85.85	38'
915	355+43.82	45'
916	355+43.82	55.50'
RW623	355+23.17	40.28'
RW622	355+18.12	51.75'
939	355+23.77	50.27'
940	355+18.27	56.74'
901	354+63.31	69.46'
900	354+58.73	69.98'
RW621	354+62.93	65.42'
RW629	354+56.78	45'
899	354+50	45.81'
RW630	349+90.09	144.02'
RW617	349+67.86	43'
897	349+70.06	53'
RW571	349+33.93	43'
896	349+33.93	53'
RW706	348+81.34	43'
895	348+42.32	73'
EX675	348+26.53	52.70'



LINE TABLE		
LINE	BEARING	DISTANCE
L1	S50°19'38"E	40.24
L2	S58°27'42"E	44.49
L3	N46°06'57"E	22.35
L4	S55°14'18"E	51.92
L5	S3°18'32"E	22.80
L6	S58°27'42"E	42.65
L7	S63°31'40"E	67.43
L8	S70°53'59"E	55.17
L9	N70°53'59"W	21.69
L10	S45°44'07"W	12.65
L11	N80°04'36"W	60.77
L12	N7°15'59"E	21.46
L13	N58°27'42"W	33.93
L14	N58°27'42"W	60.80

R/L STH 20 CURVE DATA
PI = 348+62.44
Y = 199,927.98
X = 522,854.36
DELTA = 16°29'56" LT.
BACK = N41°57'46"W
AHEAD = S58°27'42"E
D = 11°27'33"
TAN = 72.49'
L = 143.98'
R = 500.00'

R/L STH 20 CURVE DATA
PI = 354+57.33
Y = 199,616.28
X = 523,362.23
DELTA = 12°26'17" LT.
BACK = N58°27'42"W
AHEAD = S70°53'59"E
D = 7°09'43"
TAN = 87.18'
L = 173.67'
R = 800.00'

THIS IS A COPY. THE ORIGINAL IS IN THE REGISTER OF DEEDS OFFICE.

CURVE TABLE				
CURVE	LENGTH	RADIUS	BEARING	CHORD
C1	57.11	543.00	N55°26'56"W	57.08

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	VILLAGE OF WATERFORD SUBDIVISION	VARIES	1845
CENTER ST	VILLAGE OF WATERFORD SUBDIVISION	50'	1845
WATER ST	VILLAGE OF WATERFORD SUBDIVISION	60'	1845
STH 83	HIGHWAY DIVISION JOB-2775	VARIES	1928

(201) WE-ENERGIES (ELEC.)

NON DESCRIPT POLE LINE RIGHTS
DOC.666433 V.614, P.349
DOC.714326 V.665 P.621
PARCEL 18

NON DESCRIPT EASEMENT
DOC.675267 V.624 P.305
PARCEL 32

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
18	WATERFORD UNION HIGH SCHOOL DISTRICT	FEE, TLE	0.006	-	0.006	0.057	-
26	LENIS L. & MARY G. ANDERSON	FEE, TLE	0.002	-	0.002	0.020	-
27	ANDREW A. & LORI A. KOCHAN	TLE	-	-	-	0.018	-
28	DAVID J. & LAURA K. KOEL	FEE, TLE	0.003	-	0.003	0.038	-
29	NATHAN W. RADER	FEE, TLE	0.002	-	0.002	0.026	-
30	JACOB C. LINDAU & APRIL D. BARRONS	TLE	-	-	-	0.012	-
31	DENICE HERNANDEZ	FEE, TLE	0.002	-	0.002	0.014	-
32	BARRY TODD LINDAU & CYNTHIA LYNN ALBY LINDAU	FEE, TLE	0.001	-	0.001	0.008	-
33	LINDBLOOM'S PARADISE PROPERTIES, LLC	FEE, TLE	0.001	-	0.001	0.006	-

TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.06

THAT PART OF LOTS 4, 5, 6 OF THE VILLAGE OF WATERFORD PLAT BLOCK 17 AND PART OF BLOCK 15 AND BLOCK 9 ALL IN AND INCLUDING THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4, THAT PART OF THE VILLAGE OF WATERFORD BLOCK 8 AND BLOCK 9 BOTH IN AND INCLUDING THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, ALL IN SECTION 35, VILLAGE OF WATERFORD, TOWNSHIP 4 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
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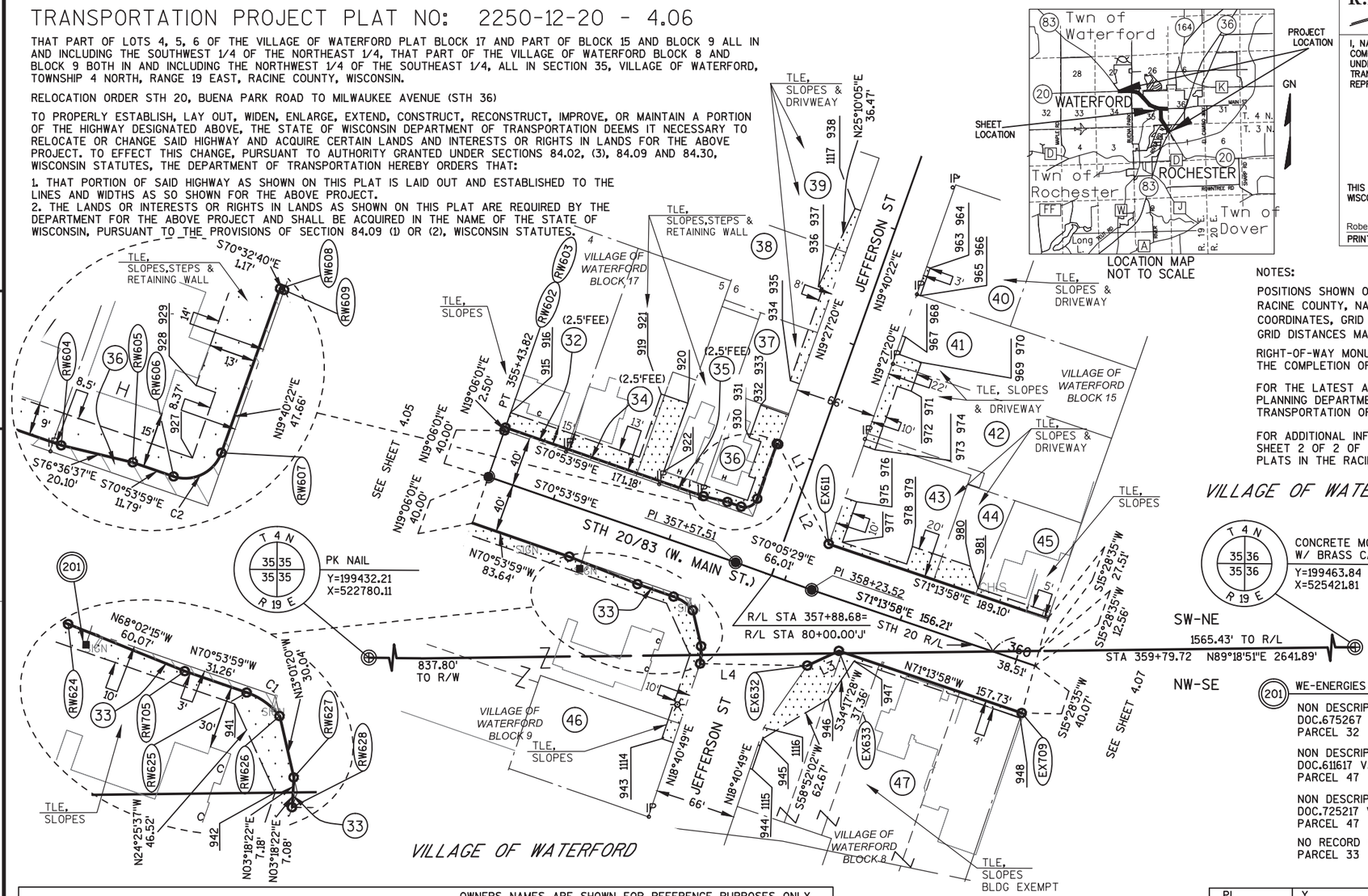


R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.06 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

07/01/2016
NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Robert L. Duffeck — PRINT NAME
07/06/16 — DATE:

Document #: 2439025
Date: 07-07-2016 Time: 11:05 AM Pages: 1
Fee: $25.00 County: RACINE State: WI
Recording Area: WiDotSeRegionWaukesha
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.06
AMENDMENT NO:___

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

...CONTINUED

POINT	STATION	OUT
EX633	358+60.50	40'
947	358+75	44'
946	358+65	80'
EX632	358+40.01	59.67'
1116	358+23.52	119'
945	358+24.63	127.94'
944	358+24.67	154.27'
1115	358+23.52	154.27'
1114	357+59.76	155.67'
943	357+47.57	155.76'
RW628	357+58.30	87.62'
RW627	357+53.19	73.91'
942	357+47.04	83.73'
RW926	357+37.21	48.46'
RW925	357+18.73	43'
941	357+15	50'
RW705	356+87.47	43'
RW624	356+27.47	40'

POINT	STATION	OUT
RW602	355+43.82	40'
RW603	355+43.82	42.50'
915	355+43.82	45'
916	355+43.82	55.50'
919	356+55	55.50'
921	356+55	110'
922	356+77.67	51'
920	356+78.03	110'
RW604	357+15.00	42.50'
RW605	357+35.00	42.50'
RW606	357+46.79	44.50'
RW607	80+55.02	32.18'
RW608	81+02.68	32.18'
RW609	81+02.68	31.01'
927	357+50	51'
928	80+70	35.89'
929	80+70	44.89'
930	81+00	45'
931	81+00	55'
932	81+28	31.11'
933	81+28	55.11'
934	81+55	31.21'
935	81+55	39.21'
936	82+35	39.51'
937	82+35	43.51'
1117	83+05	31.78'
938	83+05	36.78'
963	82+80	34.32'
964	82+80	37.32'
965	82+56	34.41'
966	82+56	37.41'
967	82+20	34.54'
968	82+20	37.54'
969	82+05	37.60'
970	82+05	56.60'
971	81+80	44.70'
972	81+80	56.70'
973	81+25	34.90'
974	81+25	44.90'
975	80+80	35.07'
976	80+80	45.07'
EX611	358+24.53	40'
977	358+34.59	45'
978	358+90	45'
979	358+90	60'
980	359+40	60'
981	359+51.66	45'
EX709	360+18.23	40'
948	360+18.23	44'

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
32	BARRY TODD LINDAU & CYNTHIA LYNN ALBY LINDAU	FEE, TLE	0.003	-	0.003	0.016	-
33	LINDBLOOM'S PARADISE PROPERTIES, LLC.	FEE, TLE	0.006	-	0.006	0.064	-
34	MARK KNOEDLER	FEE, TLE	0.005	-	0.005	0.053	-
35	JESSICA A. JERDE	FEE, TLE	0.002	-	0.002	0.007	-
36	JAQUELINE SATTER	FEE, TLE	0.006	-	0.006	0.034	-
37	WALTER L. & KIMBERLY S. BLOEDEL	TLE	-	-	-	0.008	-
38	JOHN H. CLAY & JANE L. KOHL-CLAY	TLE	-	-	-	0.015	-
39	BRIAN J. & CHRISTINE A. BLAWAT	TLE	-	-	-	0.006	-
40	DAMIAN N. & JULIE M. DRISCOLL	TLE	-	-	-	0.002	-
41	JULIE A. HOUSTON & CHERYL J. HOUSTON	TLE	-	-	-	0.006	-
42	BRUCE R. & DAWN M. HANKE	TLE	-	-	-	0.019	-
43	MAWI PROPERTIES, LLC.	TLE	-	-	-	0.028	-
44	HANKE INVESTMENT PROPERTIES, LLC.	TLE	-	-	-	0.015	-
45	LINDA M. REINKE	TLE	-	-	-	0.007	-
46	WILLIAM R. & SUSAN E. LINDBLOOM	TLE	-	-	-	0.004	-
47	JOSEPH M. & LONE M. KOJIS SUPPLEMENTAL TRUST	TLE	-	-	-	0.058	-

201 WE-ENERGIES (ELEC.)

NON DESCRIPT EASEMENT
DOC.675267 V.624 P.305
PARCEL 32

NON DESCRIPT EASEMENT
DOC.611617 V.555 P.194
PARCEL 47

NON DESCRIPT EASEMENT
DOC.725217 V.712 P.208
PARCEL 47

NO RECORD OF EASEMENT
PARCEL 33

20' DRIVEWAY EASEMENT
AGREEMENT
DOC.2099043
PARCELS 34, 35

NON DESCRIPT WELL
AGREEMENT
V.104, P.399
PARCELS 35-38

NON DESCRIPT R/W AGREEMENT
DOC.660002 V.606, P.339
WITHIN PARCEL 47

NON DESCRIPT R/W AGREEMENT
DOC.315091
WITHIN PARCEL 47

PEDESTRIAN R/W EASEMENT
DOC.546852 V.488, P.363
DOC.676011 V.2891 P.171
WITHIN PARCEL 42

NON DESCRIPT PARTY WALL RIGHTS
PARCELS 44, 45

PI	Y	X
357+57.51	199,517.83	523,646.53
358+23.52	199,495.36	523,708.60

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S26°50'51"E	42.74
L2	S26°50'51"E	48.55
L3	S64°56'28"W	28.40
L4	N88°56'26"W	87.59

CURVE TABLE				
CURVE	LENGTH	RADIUS	BEARING	CHORD
C1	19.54	34.00	N54°25'59"W	19.28
C2	16.14	10.50	N63°42'01"E	14.60

GN

SCALE, FEET
0 50 100

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	VILLAGE OF WATERFORD SUBDIVISION	80'	1845
JEFFERSON ST	VILLAGE OF WATERFORD SUBDIVISION	66'	1845
JEFFERSON ST	WARRANTY DEED DOC.1718582 V.3006 P.504	N/A	
STH 83	HIGHWAY DIVISION JOB-2775	VARIES	1928

THIS IS A COPY.
THE ORIGINAL IS IN THE
REGISTER OF DEEDS OFFICE.

TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.07

THAT PART OF THE VILLAGE OF WATERFORD PLAT BLOCK 8 IN AND INCLUDING THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, THAT PART OF THE VILLAGE OF WATERFORD BLOCK 15 IN AND INCLUDING THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4, AND THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4, ALL IN SECTION 35, VILLAGE OF WATERFORD, TOWNSHIP 4 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SIGN EASEMENT
DOC.1420951 V.2260, P.480
PARCEL 50

3.7' R/W EASEMENT
DOC.4470491 V.366, P.97
WITHIN PARCEL 51

8' INGRESS EGRESS EASEMENT
DOC.1420950 V.2260, P.474
PARCELS 49, 50

12' R/W EASEMENT
DOC.6133414 V.556, P.640
PARCELS 49, 50

NON DESCRIPT PARTY WALL RIGHTS
PARCEL 48 &
PARCEL 45 SHEET 4.06

20' INGRESS EGRESS EASEMENT
DOC.2200044 DOC.2215365 &
DOC.2005524
PARCELS 52, 53

15' INGRESS EGRESS EASEMENT
DOC.1773248 V.3182, P.906
PARCEL 54, 55

(201) WE-ENERGIES (ELEC.)
NON DESCRIPT EASEMENT
DOC.725218 V.712 P.209
PARCELS 52, 53

POINT	STATION	OUT
984	361+05	45'
985	361+05	48'
RW612	362+28.36	40'
986	362+28.42	48'
987	362+93.67	45.27'
EX615	362+93.71	40.27'
988	364+36.88	46.46'
EX616	364+36.62	41.46'
RW644	364+42.36	38.49'
EX502	365+66.95	53.84'
RW645	365+65.10	59.54'
962	364+47.22	53.45'
961	364+80	54.01'
960	364+80	45.01'
RW643	362+95.41	39.72'
959	362+95.52	45.72'
956	362+96.40	92.34'
957	362+98.39	92.29'
958	362+99.01	125.29'
1119	362+97.02	125.34'
1118	362+28.98	125.40'
955	362+26.98	125.42'
EX640	362+28.76	40'
956	362+26.77	42'
RW637	360+38.23	40'
949	360+38.23	51'
948	360+18.23	44'
EX709	360+18.23	40'
954	362+26.79	51'

UTILITY SCHEDULE & INTERESTS REQUIRED

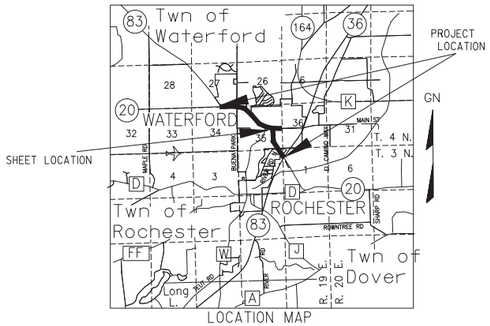
UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	VILLAGE OF WATERFORD SUBDIVISION	80'	1845
LIBERTY ALLEY	VILLAGE OF WATERFORD SUBDIVISION	20'	1845
RIVER RD	VILLAGE OF WATERFORD SUBDIVISION	66'	1845
STH 83	HIGHWAY DIVISION JOB-2775	VARIES	1928

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
48	JOHN M., HONG S., & MICHAEL W. BRANNEN	TLE	-	-	-	0.005	-
49	RIVERDALE PROPERTIES, LLC	TLE	-	-	-	0.017	-
50	STEPHEN F. & OLIVE ANN DIRKS	TLE	-	-	-	0.012	-
51	VILLAGE OF WATERFORD	TLE	-	-	-	0.016	-
52	WEBB RENTAL PROPERTIES, LLC.	TLE	-	-	-	0.016	-
53	RICHARD W. HUENING JR & MARCIA HUENING REV. TRUST	TLE	-	-	-	0.035	-
54	TRITTIN PROPERTIES, LLC.	TLE	-	-	-	0.007	-
55	VILLAGE OF WATERFORD, A MUNICAPAL CORP.	TLE	-	-	-	0.029	-



LOCATION MAP
NOT TO SCALE

R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.07 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

07/07/2016
NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

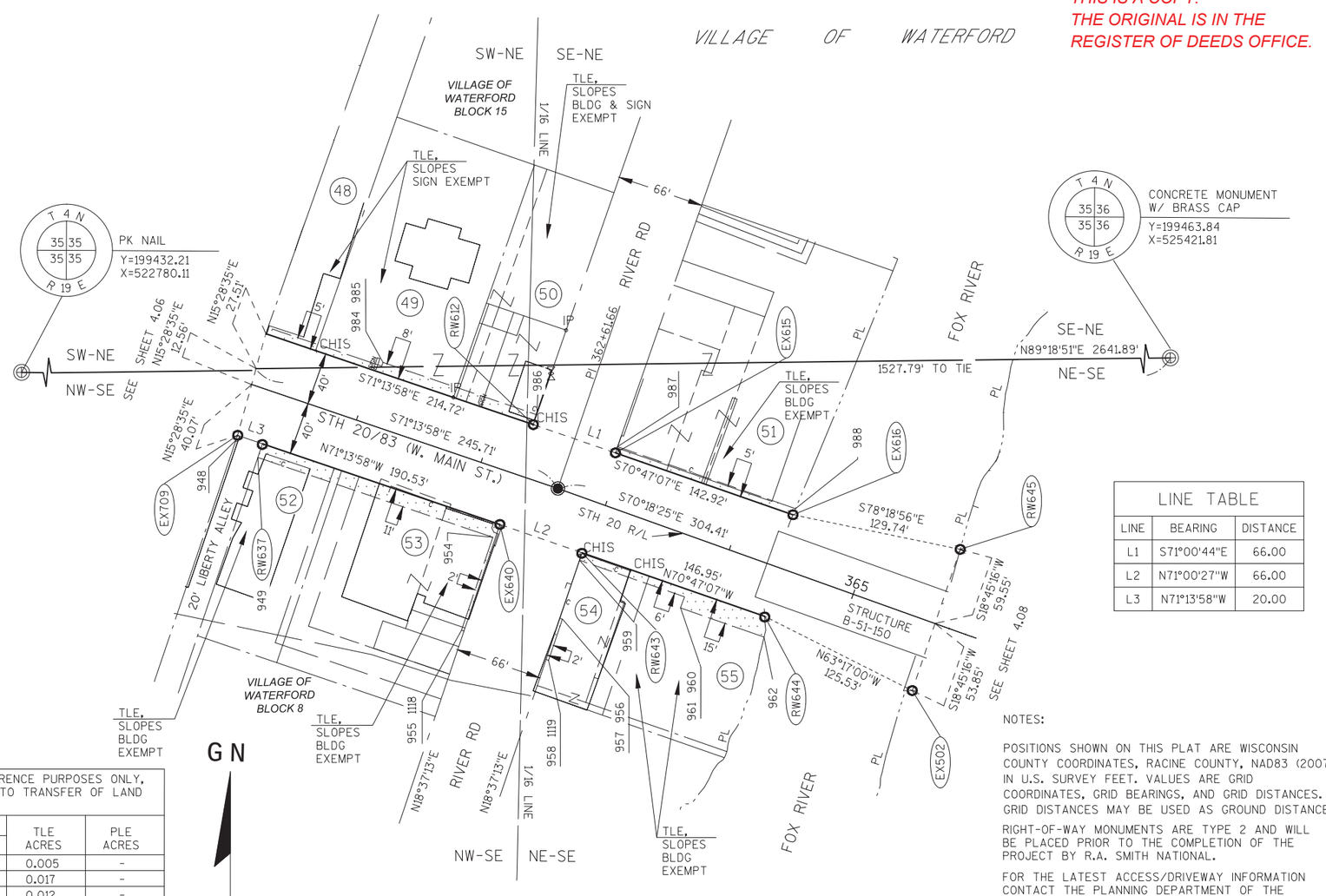
Robert L. Dufteck — 07/12/16
PRINT NAME — SIGNATURE — DATE:

Document #: **2439480**
Date: 07-13-2016 Time: 09:18 AM Pages: 1
Fee: $25.00 County: RACINE State: WI
Requesting Party: WIDotSeRegionWaukesha
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WIDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.07
AMENDMENT NO:___

THIS IS A COPY.
THE ORIGINAL IS IN THE
REGISTER OF DEEDS OFFICE.



LINE TABLE		
LINE	BEARING	DISTANCE
L1	S71°00'44"E	66.00
L2	N71°00'27"W	66.00
L3	N71°13'58"W	20.00

PI	Y	X
362+61.66	199,354.40	524,123.45

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

FILE NAME:S:/5165144/PLAT/TPP100-STH 20.DWG

TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.08

THAT PART OF LOTS 7, 8, 9 OF VILLAGE OF WATERFORD PLAT BLOCK 3 AND LOTS 1, 2, 3 OF BLOCK 4, AND LOTS 1, 2, 3, 4 BLOCK 5, AND LOT 3 BLOCK 6, ALSO THAT PART OF LOT 2 CSM 2470, ALL IN AND INCLUDING THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4, SECTION 35, VILLAGE OF WATERFORD, TOWNSHIP 4 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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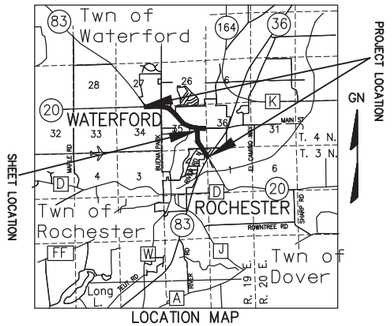
SCALE, FEET
0 50 100

GN



LOCATION MAP
NOT TO SCALE

T 4 N
35 35
35 35
R 19 E

PK NAIL
Y=199432.21
X=522780.11

T 4 N
35 36
35 36
R 19 E

CONCRETE MONUMENT
W/ BRASS CAP
Y=199463.84
X=525421.81

VILLAGE OF WATERFORD

1712.77' TO STH 20 R/L EXTENDED NORTH

S89°18'51"E 2641.89'

S89°18'51"E 122.30' TO R/W POINT

TLE, SLOPES & WALL. BLDG EXEMPT FROM TLE

BUILDINGS EXEMPT FROM TLE'S
TLE, SLOPES

NE-SE

FOX RIVER

SECOND ST

LOT 1 CSM 2470
V.7 P.682
DOC.1880257

LOT 2 CSM 2470
V.7 P.682
DOC.1880257

R/L STH 20
CURVE DATA
PI = 366+23.43
Y = 199,232.49
X = 524,464.05
DELTA = 20°13'58" LT.
BACK = N70°18'25"W
AHEAD = N89°27'37"E
D = 36°43'41"
TAN = 27.83'
L = 55.09'
R = 156.00'

STH-20

STRUCTURE B-51-150

STH-20 365

STH 20 R/L

E. MAIN ST

S89°27'37"W 312.08'

S89°38'06"W 113.95'

E. MAIN ST R/L

STA BACK 366+54.16 =
STA AHEAD 100+00.00

STH 20/83 (FIRST ST)

S00°40'39"E 273.93'

ALLEY

TLE, SLOPES BLDGS EXEMPT

VILLAGE OF WATERFORD BLOCK 4

VILLAGE OF WATERFORD BLOCK 5

VILLAGE OF WATERFORD BLOCK 6

ELIZABETH ST

(201) WE-ENERGIES (ELEC.)
NON DESCRIPT EASEMENT
DOC.718978 V.669 P.677
PARCELS 58-60

NON DESCRIPT EASEMENT
DOC.634574 V.577 P.722
PARCEL 60

NON DESCRIPT 6' EASEMENT
DOC.719521 V.670 P.310
PARCELS 61, 62

NON DESCRIPT EASEMENT
DOC.720863 V.701 P.636
PARCEL 65

NO RECORD OF EASEMENT
PARCEL 56

(206) VILLAGE OF WATERFORD
10' PEDESTRIAN EASEMENT
DOC.1688977 V.2928, P.362
DOC.1699347 V.2955, P895
PARCEL 57

15' ACCESS EASEMENT
DOC.1694259 V.2942, P.434
PARCEL 59

NON DESCRIPT DRIVEWAY EASEMENT
DOC.504105 V.439, P.271
PARCELS 56 & 57

NON DESCRIPT PARTY WALL RIGHTS
PARCELS 56-60, 63

10' DRIVEWAY EASEMENT
DOC.662129 V.134, P.509
DOC.1715371 V.2997 P.976
PARCELS 56 & 57

ENCROACHMENT EASEMENT FOR STAIRWAYS
DOC.2242564
PARCEL 72

PARTY WALL AGREEMENT
DOC.289645 V.194, P.350
PARCELS 61, 62

21' DRIVEWAY AGREEMENT
DOC.889040
PARCEL 64 WITH PARCEL TO THE NORTH

SEE SHEET 4.07

SEE SHEET 4.09

CURVE TABLE				
CURVE	LENGTH	RADIUS	BEARING	CHORD
C1	41.69	26.50	S44°23'28"W	37.52

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S89°38'06"W	80.70
L2	S89°41'12"W	66.00
L3	S89°16'51"W	161.53
L4	S0°40'39"E	37.99
L5	S0°40'39"E	12.00
L6	S0°40'39"E	115.22
L7	N0°40'39"W	161.62
L8	S89°44'25"W	95.00
L9	N16°32'54"E	84.42
L10	N18°45'16"E	53.85
L11	N18°45'16"E	59.55
L12	S70°18'25"E	16.15
L15	S0°15'36"E	0.76
L16	N89°44'24"W	307.75

LINE TABLE		
LINE	BEARING	DISTANCE
L17	N89°41'15"E	66.00
L18	N89°38'06"E	80.70
L19	N70°18'25"W	29.52

POINT	STATION	OUT
989	366+44	34.44'
990	366+44	36.44'
991	101+95	33.56'
992	101+95	35.56'
1003	101+30	38.81'
1004	101+30	43.81'
1007	367+75	36'
1008	367+75	42'
1009	367+98	36'
1010	368+01.18	43'
1011	368+20	34'
1012	368+13.18	42.91'
EX667	368+01.11	33'
EX668	368+13.11	33'

PI	Y	X
103+08.60	199,235.69	524,803.95
106+19.33	199,237.67	525,114.68

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	VILLAGE OF WATERFORD SUBDIVISION	66'	1845
E MAIN ST	VILLAGE OF WATERFORD SUBDIVISION	66'	1845
SECOND ST	VILLAGE OF WATERFORD SUBDIVISION	66'	1845

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS
206	VILLAGE OF WATERFORD	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
56	JAMES, GRANT I. & GREGORY H. FOAT	FEE, TLE	0.018+/-	-	0.018+/-	0.042+/-	-
57	WATERFORD PROPERTIES	TLE	-	-	-	0.002	-
58	G & D TESS PROPERTIES, LLC	TLE	-	-	-	0.001	-
59	VILLAGE OF WATERFORD, A MUNICIPAL CORPORATION	TLE	-	-	-	0.001	-
60	SANDRA A. DUBIS	TLE	-	-	-	0.001	-
61	COLLEEN WEBBER-RUTHERFORD	TLE	-	-	-	0.001	-
62	PAUL & JONGDEE BOUNYONG, SCOTT J. & JODI L. FOOTE	TLE	-	-	-	0.002	-
63	BAYVIEW LOAN SERVICING, LLC	TLE	-	-	-	0.001	-
64	ROBERT B. RUTHERFORD & COLLEEN WEBER-RUTHERFORD	TLE	-	-	-	0.009	-
65	VILLAGE OF WATERFORD	TLE	-	-	-	0.054	-
66	JEANNE W. ARFSTEN TRUST	TLE	-	-	-	0.002	-
67	HELEN I. SPESAK REVOCABLE TRUST	TLE	-	-	-	0.001	-
68	PATRICIA M. WINSKI TRUST	TLE	-	-	-	0.002	-
69	HONEY O-HARE-PROPERTIES, LLC.	FEE, TLE	0.014	-	0.014	0.027	-
70	JOHN F. & PATRICIA M. FOLEY	FEE, TLE	0.002	-	0.002	0.014	-
71	GARY B. & GREGORY H. FOAT	FEE, TLE	0.001	-	0.001	0.012	-
72	MICHAEL WEIER	TLE	-	-	-	0.019	-

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.08 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

08/03/2016

NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Robert L. Duffeck — 08/16/16
PRINT NAME — SIGNATURE — DATE:

Document #: **2442944**
Date: 08-22-2016 Time: 11:44 AM Pages: 1
Fee: $25.00 County: RACINE State: WI
Recording Party: WiDotSeRegionWaukesha
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.08
AMENDMENT NO:____

THIS IS A COPY.
THE ORIGINAL IS IN THE
REGISTER OF DEEDS OFFICE.

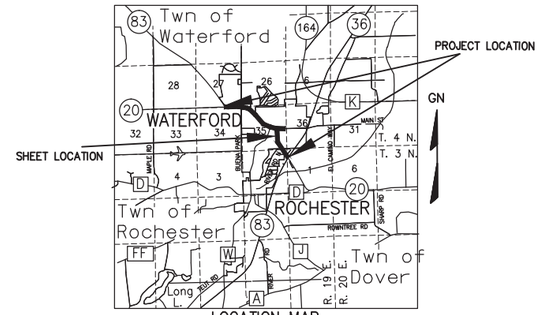
TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.09

THAT PART OF LOTS 1, 2, 3 OF VILLAGE OF WATERFORD PLAT BLOCK 22, AND LOTS 1, 2, 3 BLOCK 30, AND LOTS 3 AND 4 BLOCK 23, AND LOTS 3 AND 4 BLOCK 29, ALSO LOTS 3 AND 4 OF SAMUEL C. RUSS'S ADDITION BLOCK 37, ALL IN AND INCLUDING THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4, ALSO THAT PART OF LOT 4 OF SAMUEL C. RUSS'S ADDITION BLOCK 37, AND LOT 3 OF SAMUEL C. RUSS'S ADDITION BLOCK 42 IN AND INCLUDING THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4, ALL IN SECTION 35, VILLAGE OF WATERFORD, TOWNSHIP 4 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



LOCATION MAP
NOT TO SCALE

R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.09 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

08/03/2016
NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Robert L. Duffeck — 08/16/16
PRINT NAME — SIGNATURE — DATE:

Document #: **2442945**
Date: 08-22-2016 Time: 11:44 AM Pages: 1
Fee: $25.00 County: RACINE State: WI
Recording Area: WiDotSeRegion-Waukesha
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegion-Waukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.09
AMENDMENT NO: ____

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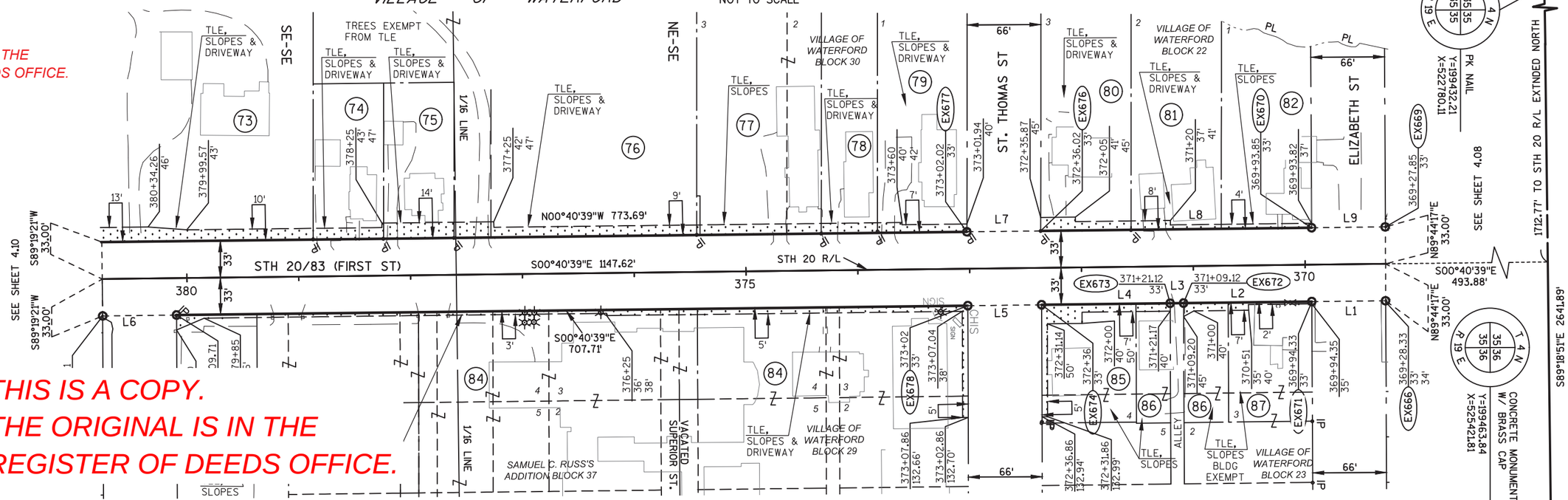


LINE TABLE		
LINE	BEARING	DISTANCE
L1	S0°40'39"E	66.00
L2	S0°40'39"E	114.78
L3	S0°40'39"E	12.00
L4	S0°40'39"E	114.88
L5	S0°40'39"E	66.00
L6	S0°40'39"E	66.00
L7	N0°40'39"W	66.00
L8	N0°40'39"W	242.17
L9	N0°40'39"W	66.00

THIS IS A COPY.
THE ORIGINAL IS IN THE
REGISTER OF DEEDS OFFICE.

(201) WE-ENERGIES (ELEC.)
3' EASEMENT
DOC.720864 V.701 P.640
PARCEL 77

NON DESCRIPT EASEMENT
DOC.723744 V.708 P.385
PARCEL 84

(204) AT&T WISCONSIN
NON DESCRIPT EASEMENT
DOC.723744 V.708 P.385
PARCEL 84

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	VILLAGE OF WATERFORD SUBDIVISION	66'	1845
STH 20/83	SAMUEL C. RUSS'S ADDITION	66'	
ELIZABETH ST	VILLAGE OF WATERFORD SUBDIVISION	66'	1845
ST THOMAS ST	VILLAGE OF WATERFORD SUBDIVISION	66'	1845
WEBER ST	SAMUEL C. RUSS'S ADDITION	66'	

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS
204	AT&T WISCONSIN	RELEASE OF RIGHTS

33' ACCESS EASEMENT
DOC.570678 V.514, P.188
PARCELS 75, 76

GN

SCALE, FEET
0 50 100

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
73	VITO & MARGARET M. COLANO REVOCABLE TRUST	TLE	-	-	-	0.047	-
74	CARL R. OBERHART	TLE	-	-	-	0.015	-
75	GREGORY P. MAHNKE	TLE	-	-	-	0.020	-
76	SUSAN M, KEIM, SHARON A. SOLOMON, STEVEN R., KRISTINE N. & NANCIANN HUENING & DENIS J. OWENS	TLE	-	-	-	0.049	-
77	GEORGE R. & HEIDIMARIE V. CASTRO	TLE	-	-	-	0.023	-
78	TIMOTHY M. FELDSCHER	TLE	-	-	-	0.010	-
79	MICHAEL J. & KATHLEEN M. RODRICK	TLE	-	-	-	0.014	-
80	ANN MARIE, RANDY J., LAWRENCE A. & GARY TENFEL & MARILYN A. SCHMIDT	TLE	-	-	-	0.018	-
81	MARTHA SCHANEN	TLE	-	-	-	0.011	-
82	JASON J. BEST	TLE	-	-	-	0.007	-
83	ST THOMAS AQUINAS CHURCH	TLE	-	-	-	0.008	-
84	ST. THOMAS AQUINAS CONGREGATION OF WATERFORD, AND ST. THOMAS AQUINAS PARISH	TLE	-	-	-	0.069	-
85	KENNETH J. BERNHARDT & KAREN S. GROESCHEL	TLE	-	-	-	0.031	-
86	JOHN J. & LAUREL KRYGIEL	TLE	-	-	-	0.012	-
87	JUANITA K. OTTO & DENNIS W. RATZ	TLE	-	-	-	0.006	-

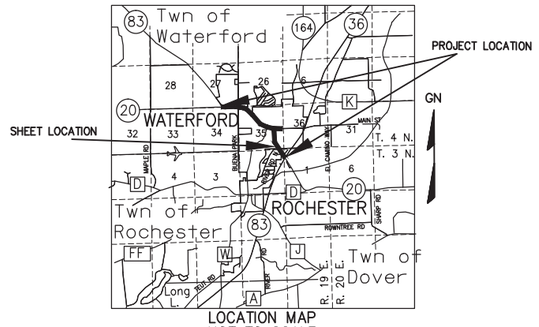
TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.10

THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4, SECTION 35, VILLAGE OF WATERFORD, TOWNSHIP 4 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



LOCATION MAP
NOT TO SCALE

R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.10 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL — 08/03/2016

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Robert L. Duffeck — PRINT NAME
SIGNATURE — DATE: 08/04/16

Document #: **2442946**
Date: 08-22-2016 Time: 11:44 AM Pages: 1
Fee: $25.00 County: RACINE State: WI
Recording Party: WiDotSeRegion/Waukesha
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegion/Waukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.10
AMENDMENT NO: ____

(201) WE-ENERGIES (ELEC.)
NON DESCRIPT EASEMENT
DOC.663884 V.611 P.170
PARCEL 91

NON DESCRIPT EASEMENT
DOC.470365 V.399 P.90
PARCELS 73, 91

NON DESCRIPT EASEMENT
DOC.592720 V.536 P.457
PARCEL 73

10' EASEMENT
DOC.519541 V.456 P.18
PARCEL 92

(202) TDS TELECOM
NON DESCRIPT EASEMENT
DOC.1008742 V.1397 P.398
PARCEL 91

NON DESCRIPT EASEMENT
DOC.1008743 V.1397 P.399
PARCEL 73

NO RECORD
OF EASEMENT
PARCELS 73, 88, 90 & 91

(206) VILLAGE OF WATERFORD
10' SANITARY & WATERMAIN EASEMENT
DOC.880089 V.1081 P.58
PARCEL 89

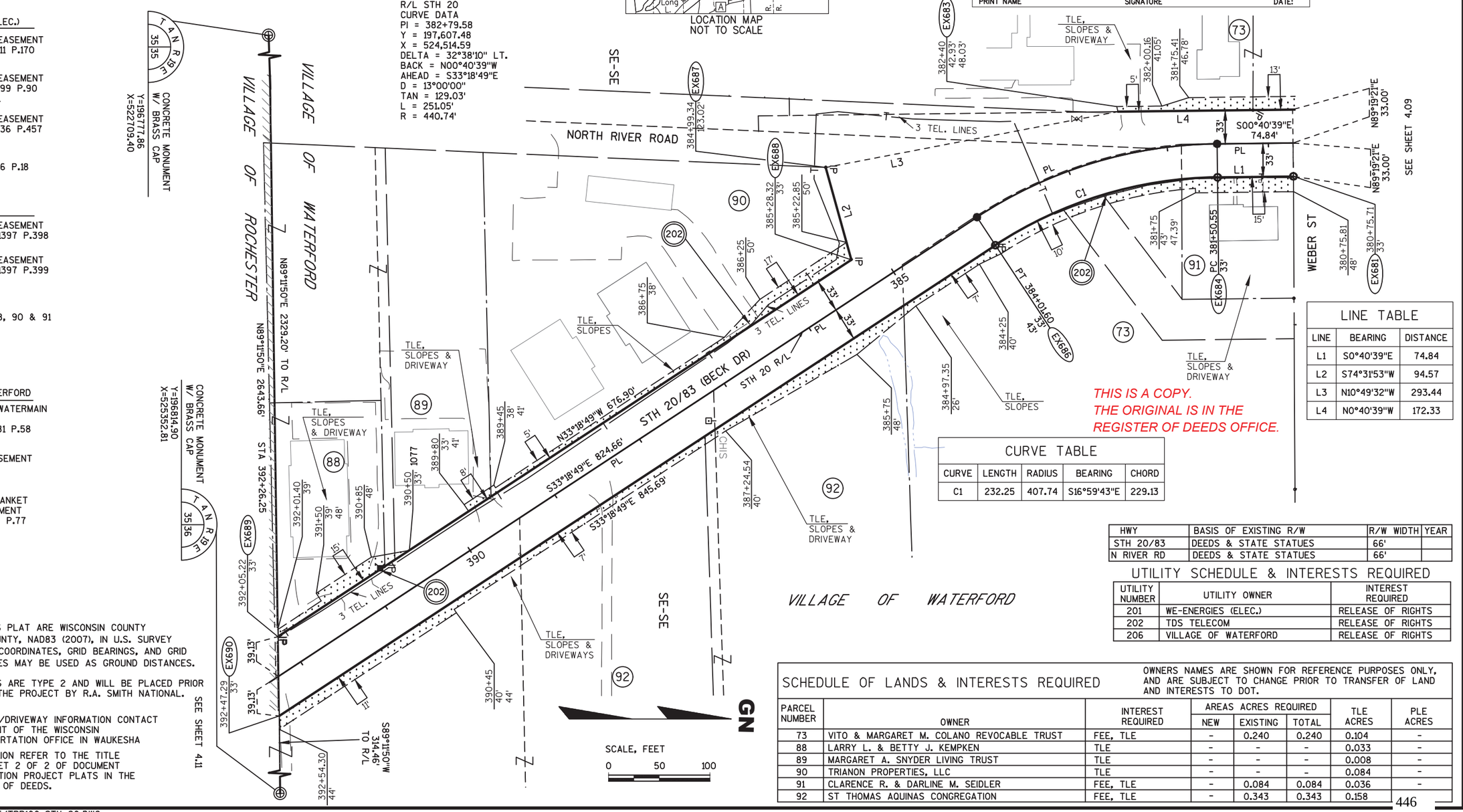
40' SANITARY EASEMENT
DOC.2019879
PARCEL 73

NON-DESCRIPT BLANKET EASEMENT AGREEMENT
DOC.982171 V.1332 P.77
PARCEL 90

CONCRETE MONUMENT W/ BRASS CAP
T 4 N R 19 E
35 | 36
Y=196777.86
X=522709.40

CONCRETE MONUMENT W/ BRASS CAP
T 4 N R 19 E
35 | 36
Y=196814.90
X=525352.81

R/L STH 20
CURVE DATA
PI = 382+79.58
Y = 197,607.48
X = 524,514.59
DELTA = 32°38'10" LT.
BACK = N00°40'39"W
AHEAD = S33°18'49"E
D = 13°00'00"
TAN = 129.03'
L = 251.05'
R = 440.74'



VILLAGE OF WATERFORD

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S0°40'39"E	74.84
L2	S74°31'53"W	94.57
L3	N10°49'32"W	293.44
L4	N0°40'39"W	172.33

CURVE TABLE				
CURVE	LENGTH	RADIUS	BEARING	CHORD
C1	232.25	407.74	S16°59'43"E	229.13

THIS IS A COPY.
THE ORIGINAL IS IN THE
REGISTER OF DEEDS OFFICE.

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	DEEDS & STATE STATUES	66'	
N RIVER RD	DEEDS & STATE STATUES	66'	

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS
202	TDS TELECOM	RELEASE OF RIGHTS
206	VILLAGE OF WATERFORD	RELEASE OF RIGHTS

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
73	VITO & MARGARET M. COLANO REVOCABLE TRUST	FEE, TLE	-	0.240	0.240	0.104	-
88	LARRY L. & BETTY J. KEMPKEN	TLE	-	-	-	0.033	-
89	MARGARET A. SNYDER LIVING TRUST	TLE	-	-	-	0.008	-
90	TRIANON PROPERTIES, LLC	TLE	-	-	-	0.084	-
91	CLARENCE R. & DARLINE M. SEIDLER	FEE, TLE	-	0.084	0.084	0.036	-
92	ST THOMAS AQUINAS CONGREGATION	FEE, TLE	-	0.343	0.343	0.158	-

TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.11 - AMENDMENT NO. 1

AMENDS PARCEL NUMBERS 92 & 100, UTILITY NUMBER 201 AND ADDS UTILITY NUMBER 209 OF TRANSPORTATION PROJECT PLAT 2250-12-20-4.11 RECORDED AS DOCUMENT NUMBER 2442947.

THAT PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4, SECTION 2, AND THE NORTHWEST 1/4 OF THE NORTHWEST 1/4, SECTION 1, ALL IN THE VILLAGE OF ROCHESTER, TOWNSHIP 3 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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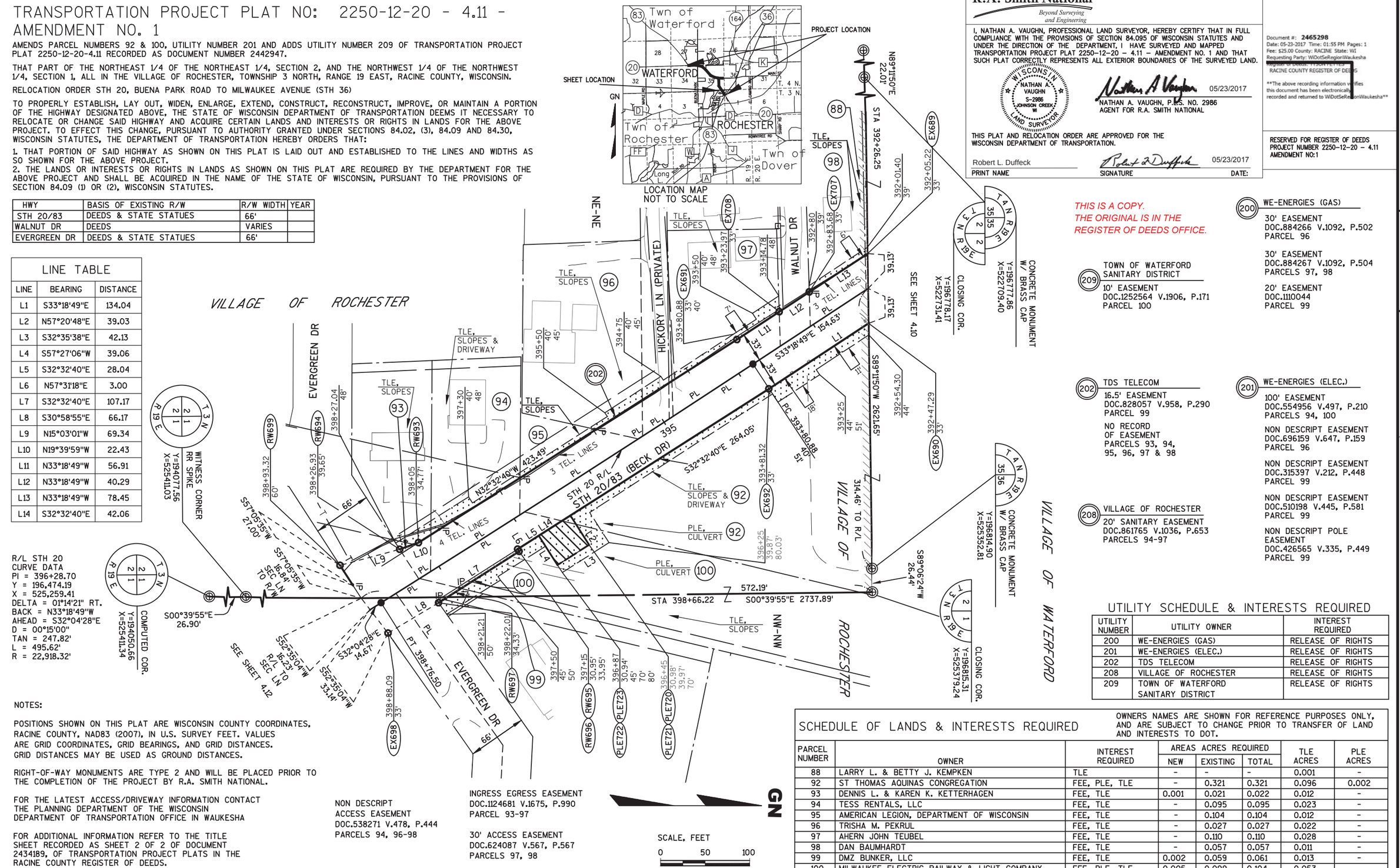
HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	DEEDS & STATE STATUES	66'	
WALNUT DR	DEEDS	VARIES	
EVERGREEN DR	DEEDS & STATE STATUES	66'	

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S33°18'49"E	134.04
L2	N57°20'48"E	39.03
L3	S32°35'38"E	42.13
L4	S57°27'06"W	39.06
L5	S32°32'40"E	28.04
L6	N57°31'18"E	3.00
L7	S32°32'40"E	107.17
L8	S30°58'55"E	66.17
L9	N15°03'01"W	69.34
L10	N19°39'59"W	22.43
L11	N33°18'49"W	56.91
L12	N33°18'49"W	40.29
L13	N33°18'49"W	78.45
L14	S32°32'40"E	42.06



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

R/L STH 20
CURVE DATA
PI = 396+28.70
Y = 196,474.19
X = 525,259.41
DELTA = 01°14'21" RT.
BACK = N33°18'49"W
AHEAD = S32°04'28"E
D = 00°15'00"
TAN = 247.82'
L = 495.62'
R = 22,918.32'

NON DESCRIPT ACCESS EASEMENT DOC.538271 V.478, P.444 PARCELS 94, 96-98

INGRESS EGRESS EASEMENT DOC.1124681 V.1675, P.990 PARCEL 93-97

30' ACCESS EASEMENT DOC.624087 V.567, P.567 PARCEL 97, 98

R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.11 - AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

05/23/2017
NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Robert L. Duffeck — PRINT NAME
05/23/2017 — SIGNATURE DATE:

Document #: **2465298**
Date: 05-23-2017 Time: 01:55 PM Pages: 1
Fee: $25.00 County: RACINE State: WI
Requesting Party: WiDotSeRegionWaukesha
Register of Deeds: TIMOTHY N. ...
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.11
AMENDMENT NO:1

THIS IS A COPY. THE ORIGINAL IS IN THE REGISTER OF DEEDS OFFICE.

(200) WE-ENERGIES (GAS)
30' EASEMENT DOC.884266 V.1092, P.502 PARCEL 96
30' EASEMENT DOC.884267 V.1092, P.504 PARCELS 97, 98
20' EASEMENT DOC.1110044 PARCEL 99

(209) TOWN OF WATERFORD SANITARY DISTRICT
10' EASEMENT DOC.1252564 V.1906, P.171 PARCEL 100

(202) TDS TELECOM
16.5' EASEMENT DOC.828057 V.958, P.290 PARCEL 99
NO RECORD OF EASEMENT PARCELS 93, 94, 95, 96, 97 & 98

(201) WE-ENERGIES (ELEC.)
100' EASEMENT DOC.554956 V.497, P.210 PARCELS 94, 100
NON DESCRIPT EASEMENT DOC.696159 V.647, P.159 PARCEL 96
NON DESCRIPT EASEMENT DOC.315397 V.212, P.448 PARCEL 99
NON DESCRIPT EASEMENT DOC.510198 V.445, P.581 PARCEL 99
NON DESCRIPT POLE EASEMENT DOC.426565 V.335, P.449 PARCEL 99

(208) VILLAGE OF ROCHESTER
20' SANITARY EASEMENT DOC.861765 V.1036, P.653 PARCELS 94-97

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
200	WE-ENERGIES (GAS)	RELEASE OF RIGHTS
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS
202	TDS TELECOM	RELEASE OF RIGHTS
208	VILLAGE OF ROCHESTER	RELEASE OF RIGHTS
209	TOWN OF WATERFORD SANITARY DISTRICT	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
88	LARRY L. & BETTY J. KEMPKEN	TLE	-	-	-	0.001	-
92	ST THOMAS AQUINAS CONGREGATION	FEE, PLE, TLE	-	0.321	0.321	0.096	0.002
93	DENNIS L. & KAREN K. KETTERHAGEN	FEE, TLE	0.001	0.021	0.022	0.012	-
94	TESS RENTALS, LLC	FEE, TLE	-	0.095	0.095	0.023	-
95	AMERICAN LEGION, DEPARTMENT OF WISCONSIN	FEE, TLE	-	0.104	0.104	0.012	-
96	TRISHA M. PEKRUL	FEE, TLE	-	0.027	0.027	0.022	-
97	AHERN JOHN TEUBEL	FEE, TLE	-	0.110	0.110	0.028	-
98	DAN BAUMHARDT	FEE, TLE	-	0.057	0.057	0.011	-
99	DMZ BUNKER, LLC	FEE, TLE	0.002	0.059	0.061	0.013	-
100	MILWAUKEE ELECTRIC RAILWAY & LIGHT COMPANY	FEE, PLE, TLE	0.005	0.099	0.104	0.053	-

FILE NAME:S:/5165144/PLAT/TPP100-STH 20.DWG

STH 20 2250-12-20 - 4.11 - AMENDMENT NO. 1

TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.11

THAT PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4, SECTION 2, AND THE NORTHWEST 1/4 OF THE NORTHWEST 1/4, SECTION 1, ALL IN THE VILLAGE OF ROCHESTER, TOWNSHIP 3 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	DEEDS & STATE STATUES	66'	
WALNUT DR	DEEDS	VARIES	
EVERGREEN DR	DEEDS & STATE STATUES	66'	

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S33°18'49"E	134.04
L2	N57°31'18"E	3.00
L3	S32°32'40"E	107.17
L4	S30°58'55"E	66.17
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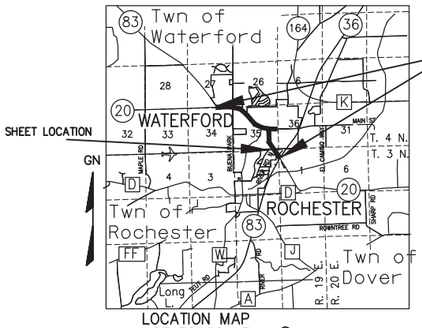
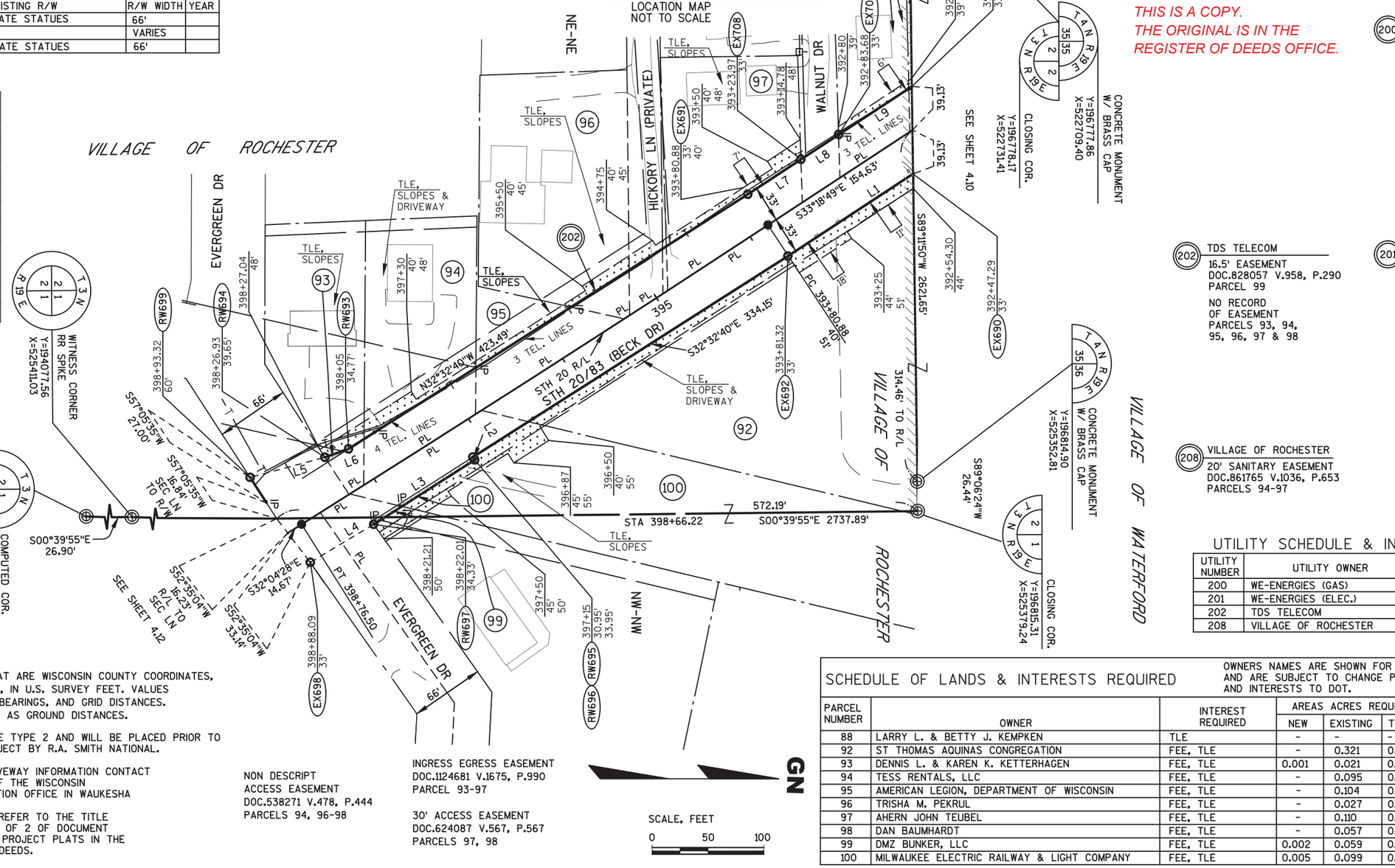
L6	N19°39'59"W	22.43
L7	N33°18'49"W	56.91
L8	N33°18'49"W	40.29
L9	N33°18'49"W	78.45





NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES. GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

NON DESCRIPT ACCESS EASEMENT
DOC.538271 V.478, P.444
PARCELS 94, 96-98

INGRESS EGRESS EASEMENT
DOC.1124681 V.1675, P.990
PARCEL 93-97

30' ACCESS EASEMENT
DOC.624087 V.567, P.567
PARCELS 97, 98

SCALE, FEET
0 50 100

R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.11 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

NATHAN A. VAUGHN, P.L.S. NO. 2986
AGENT FOR R.A. SMITH NATIONAL — 08/03/2016

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Robert L. Duffeck — PRINT NAME
SIGNATURE — DATE: 08/16/16

Document #: **2442947**
Date: 08-22-2016 Time: 11:45 AM Pages: 1
Fee: $25.00 County: RACINE State: WI
Requesting Party: WiDotSeRegionWaukesha
Register of Deeds: Jonathan Delagrave
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.11
AMENDMENT NO: ___

THIS IS A COPY.
THE ORIGINAL IS IN THE REGISTER OF DEEDS OFFICE.

(200) WE-ENERGIES (GAS)
30' EASEMENT
DOC.884266 V.1092, P.502
PARCEL 96

30' EASEMENT
DOC.884267 V.1092, P.504
PARCELS 97, 98

20' EASEMENT
DOC.1110044
PARCEL 99

(202) TDS TELECOM
16.5' EASEMENT
DOC.828057 V.958, P.290
PARCEL 99

NO RECORD OF EASEMENT
PARCELS 93, 94, 95, 96, 97 & 98

(201) WE-ENERGIES (ELEC.)
100' EASEMENT
DOC.554956 V.497, P.210
PARCELS 94, 100

NON DESCRIPT EASEMENT
DOC.696159 V.647, P.159
PARCEL 96

10' EASEMENT
DOC.1252564 V.1906, P.171
PARCELS 92, 99, 100

NON DESCRIPT EASEMENT
DOC.315397 V.212, P.448
PARCEL 99

NON DESCRIPT EASEMENT
DOC.510198 V.445, P.581
PARCEL 99

NON DESCRIPT POLE EASEMENT
DOC.426565 V.335, P.449
PARCEL 99

(208) VILLAGE OF ROCHESTER
20' SANITARY EASEMENT
DOC.861765 V.1036, P.653
PARCELS 94-97

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
200	WE-ENERGIES (GAS)	RELEASE OF RIGHTS
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS
202	TDS TELECOM	RELEASE OF RIGHTS
208	VILLAGE OF ROCHESTER	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
88	LARRY L. & BETTY J. KEMPKEN	TLE	-	-	-	0.001	-
92	ST THOMAS AQUINAS CONGREGATION	FEE, TLE	-	0.321	0.321	0.092	-
93	DENNIS L. & KAREN K. KETTERHAGEN	FEE, TLE	0.001	0.021	0.022	0.012	-
94	TESS RENTALS, LLC	FEE, TLE	-	0.095	0.095	0.023	-
95	AMERICAN LEGION, DEPARTMENT OF WISCONSIN	FEE, TLE	-	0.104	0.104	0.012	-
96	TRISHA M. PEKRUL	FEE, TLE	-	0.027	0.027	0.022	-
97	AHERN JOHN TEUBEL	FEE, TLE	-	0.110	0.110	0.028	-
98	DAN BAUMHARDT	FEE, TLE	-	0.057	0.057	0.011	-
99	DMZ BUNKER, LLC	FEE, TLE	0.002	0.059	0.061	0.013	-
100	MILWAUKEE ELECTRIC RAILWAY & LIGHT COMPANY	FEE, TLE	0.005	0.099	0.104	0.051	-

FILE NAME:S:/5165144/PLAT/TPP100-STH 20.DWG

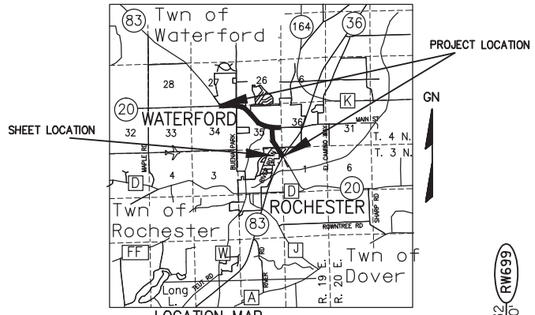
TRANSPORTATION PROJECT PLAT NO: 2250-12-20 - 4.12

THAT PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4, SECTION 2, AND THE NORTHWEST 1/4 OF THE NORTHWEST 1/4, SECTION 1, ALL IN THE VILLAGE OF ROCHESTER, TOWNSHIP 3 NORTH, RANGE 19 EAST, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER STH 20, BUENA PARK ROAD TO MILWAUKEE AVENUE (STH 36)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



R.A. Smith National
Beyond Surveying and Engineering

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2250-12-20 - 4.12 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

NATHAN A. VAUGHN, P.L.S. NO. 2986 — 08/03/2016 DATE
AGENT FOR R.A. SMITH NATIONAL

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

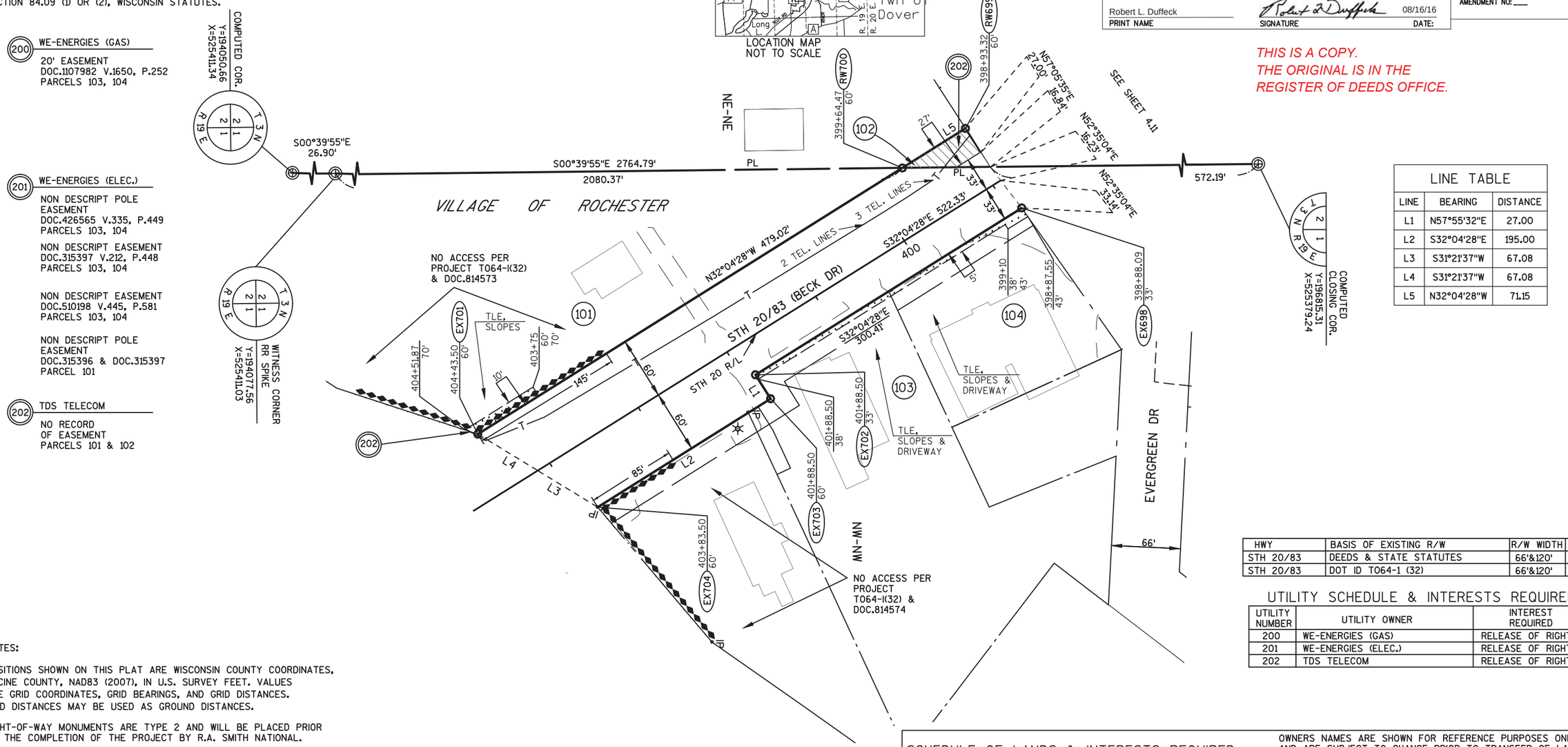
Robert L. Duffeck — PRINT NAME
SIGNATURE — 08/16/16 DATE:

Document #: **2442948**
Date: 08-22-2016 Time: 11:45 AM Pages: 1
Fee: $25.00 County: RACINE State: WI
Requesting Party: WiDotSeRacineWaukesha
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2250-12-20 - 4.12
AMENDMENT NO:____

THIS IS A COPY.
THE ORIGINAL IS IN THE
REGISTER OF DEEDS OFFICE.



LINE TABLE		
LINE	BEARING	DISTANCE
L1	N57°55'32"E	27.00
L2	S32°04'28"E	195.00
L3	S31°21'37"W	67.08
L4	S31°21'37"W	67.08
L5	N32°04'28"W	71.15

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 20/83	DEEDS & STATE STATUTES	66'&120'	
STH 20/83	DOT ID T064-1 (32)	66'&120'	1965

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
200	WE-ENERGIES (GAS)	RELEASE OF RIGHTS
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS
202	TDS TELECOM	RELEASE OF RIGHTS

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY R.A. SMITH NATIONAL.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 2434189, OF TRANSPORTATION PROJECT PLATS IN THE RACINE COUNTY REGISTER OF DEEDS.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
101	ROBERT & BERNICE BECK REVOCABLE TRUST	TLE	-	-	-	0.017	-
102	MERVEL E. & CHERYL D. MILLER	FEE	0.031	0.005	0.036	-	-
103	WILLIAM C. & CATHERINE A. MAAS	TLE	-	-	-	0.017	-
104	BARRY T. & CYNTHIA L. LINDAU	TLE	-	-	-	0.020	-

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	PROPERTY LINE	PL
ACCESS RIGHTS	AR	RECORDED AS	(100')
ACRES	AC	REFERENCE LINE	R/L
AHEAD	AH	RELEASE OF RIGHTS	ROR
ALUMINUM	ALUM.	REFERENCE	REF
AND OTHERS	ET.AL.	REMAINING	REM
BACK	BK	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC
CERTIFIED SURVEY MAP	CSM	SQUARE FEET	SQ. FT.
CHISELED CROSS	CHIS	SOUTHEAST	SE
CONCRETE	CONC	SOUTHWEST	SW
CORNER	COR	STATE TRUNK HIGHWAY	STH
CONVEYANCE OF RIGHTS	CR	STATION	STA
DOCUMENT	DOC	TEMPORARY LIMITED EASEMENT	TLE
EASEMENT	EASE	VOLUME	V
HIGHWAY EASEMENT	HE		
IRON PIPE	IP		
IRON ROD	IR		
LAND CONTRACT	LC		
MONUMENT	MON		
NORTHEAST	NE		
NORTHWEST	NW		
PAGE	P		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF CURVE	PC		
POINT OF INTERSECTION	PI		
POINT OF TANGENCY	PT		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

- FOUND IRON PIPE/PIN (1" UNLESS NOTED)
- R/W MONUMENT ○ ●(SET)
- R/W STANDARD △ ▲(SET)
- SIGN ISIGN
- SECTION CORNER MONUMENT
- SECTION CORNER SYMBOL
- FEE (HATCH VARIES)
- TEMPORARY LIMITED EASEMENT
- PERMANENT LIMITED EASEMENT
- R/W BOUNDARY POINT RW20
- PARCEL NUMBER 102
- UTILITY PARCEL NUMBER 92
- SIGN NUMBER (OFF PREMISE) 21-1
- BUILDING
- PROPOSED R/W LINE
- EXISTING H.E. LINE
- PROPERTY LINE
- LOT & TIE LINES
- SLOPE INTERCEPTS
- CORPORATE LIMITS
- ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)
- ACCESS RESTRICTED (BY ACQUISITION)
- NO ACCESS (BY STATUTORY AUTHORITY)
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- EXISTING CENTERLINE
- PROPOSED REFERENCE LINE
- PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD	OH	
TRANSMISSION LINES ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES	AREAS ACRES REQUIRED			TOTAL REMAINING	TLE ACRES	PLE ACRES
				NEW	EXISTING	TOTAL			
1	MARLENE F. CAREW	FEE	0.16±	0.16±	-	0.16±	-	-	-

R/W PROJECT NUMBER 2250-12-21		SHEET NUMBER	TOTAL SHEETS
FEDERAL PROJECT NUMBER		4.1	1

PLAT OF RIGHT OF WAY REQUIRED FOR

STH 20

VILLAGE OF WATERFORD

STH 20 RACINE CO.

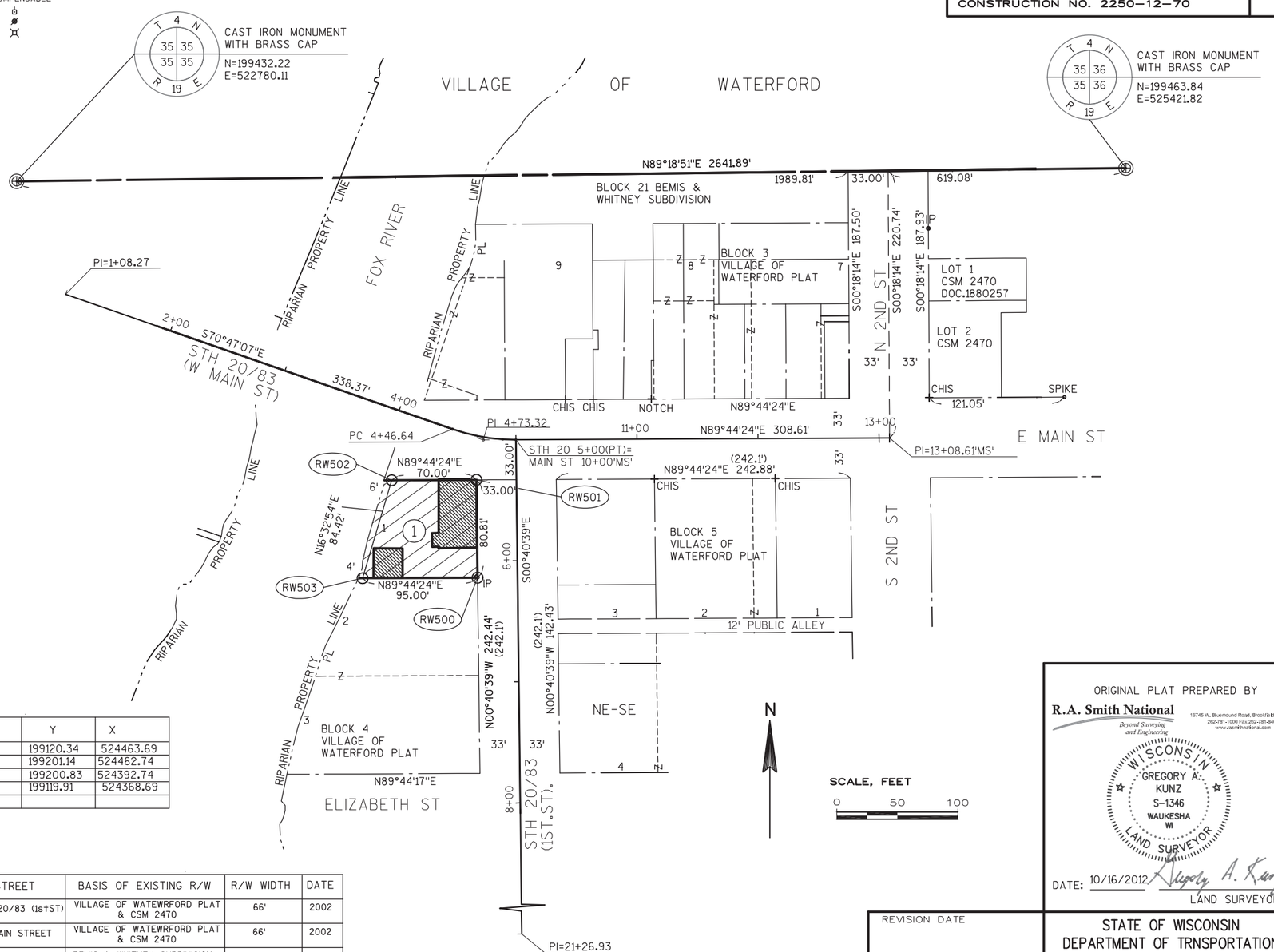
CONSTRUCTION NO. 2250-12-70

R/L STH 20
CURVE DATA
PI=4+73.32
Y=199234.17
X=524468.41
PC=4+46.64
PT=5+00.00
DELTA=19°28'29"
BACK=S70°47'07"E
AHEAD=N89°44'24"E
D=36°29'56"
T=26.94
L=53.36
R=156.98

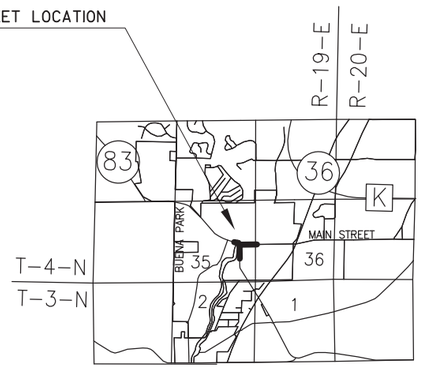
PI=1+08.27
Y=199354.40
X=524123.45

PI=21+26.93
Y=197607.47
X=524514.59

PI=13+08.61'MS'
Y=199235.69
X=524803.95



SHEET LOCATION



PNT	STATION	OUT	Y	X
RW500	6+13.57	33.00'	199120.34	524463.69
RW501	5+32.76	33.00'	199201.14	524462.74
RW502	4+13.10	56.39'	199200.83	524392.74
RW503	6+12.88	128.00'	199119.91	524368.69

NOTES

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY ZONE, NAD83 (2007) ADJUSTMENT. THE COORDINATES SHOWN ARE GROUND COORDINATES AND ARE TO BE USED AS GROUND VALUES ON THIS PLAT.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS TYPICALLY 3/4" X 24" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT, BY WISDOT.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE OF U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

STREET	BASIS OF EXISTING R/W	R/W WIDTH	DATE
STH 20/83 (1st ST)	VILLAGE OF WATEWRFORD PLAT & CSM 2470	66'	2002
E. MAIN STREET	VILLAGE OF WATEWRFORD PLAT & CSM 2470	66'	2002
N 2ND STREET	BEMIS & WHITNEY SUBDIVISION, VILLAGE OF WATEWRFORD PLAT, & CSM 2470	66'	2002

ORIGINAL PLAT PREPARED BY

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

WISCONSIN GREGORY A. KUNZ S-1346 WAUKESHA WI LAND SURVEYOR

DATE: 10/16/2012 Gregory A. Kunz
LAND SURVEYOR

REVISION DATE

STATE OF WISCONSIN
DEPARTMENT OF TRNSPORTATION

APPROVED FOR DISTRICT OFFICE:

DATE: _____ _____
(Signature)

E

FILE NAME : S:\5165144\PLAT\SP100\SP100P01.DWG

R/W PROJECT NUMBER 2250-12-22	SHEET NUMBER	TOTAL SHEETS
FEDERAL PROJECT NUMBER	4.1	

PLAT OF RIGHT OF WAY REQUIRED FOR

STH 20

VILLAGE OF WATERFORD

STH 20 RACINE CO.

CONSTRUCTION NO. 2250-12-70

CONVENTIONAL ABBREVIATIONS

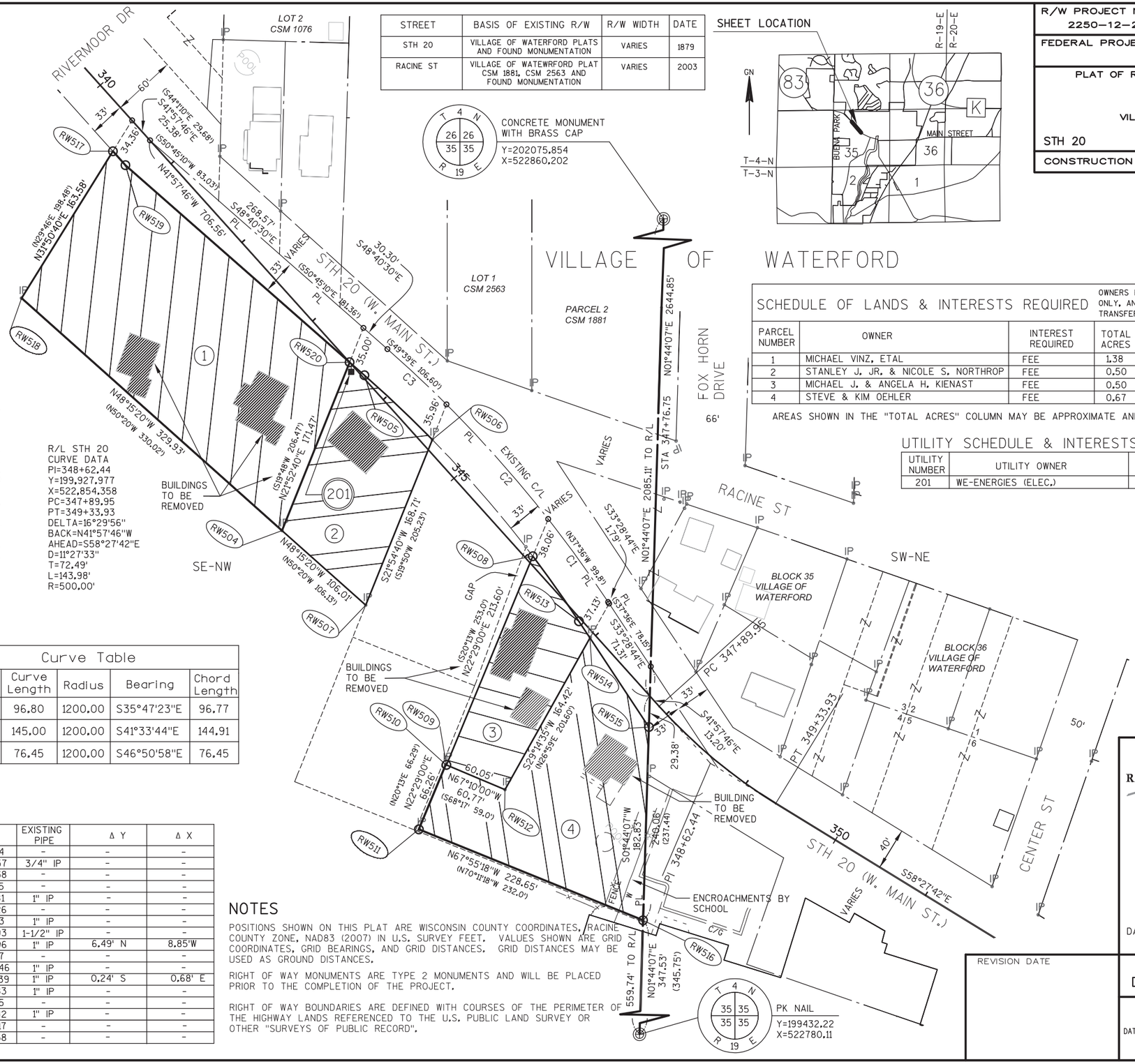
ACCESS POINT	AP	PROPERTY LINE	PL
ACCESS RIGHTS	AR	RECORDED AS	(100')
ACRES	AC	REFERENCE LINE	R/L
AHEAD	AH	RELEASE OF RIGHTS	ROR
ALUMINUM	ALUM.	REFERENCE	REF
AND OTHERS	ET.AL.	REMAINING	REM
BACK	BK	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC
CERTIFIED SURVEY MAP	CSM	SQUARE FEET	SQ. FT.
CHISELED CROSS	CHIS	SOUTHEAST	SE
CONCRETE	CONC	SOUTHWEST	SW
CORNER	COR	STATE TRUNK HIGHWAY	STH
CONVEYANCE OF RIGHTS	CR	STATION	STA
DOCUMENT	DOC	TEMPORARY LIMITED EASEMENT	TLE
EASEMENT	EASE	VOLUME	V
HIGHWAY EASEMENT	HE		
IRON PIPE	IP	CURVE DATA	
IRON ROD	IR	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON	RADIUS	R
NORTHEAST	NE	DEGREE OF CURVE	D
NORTHWEST	NW	CENTRAL ANGLE OR DELTA	DELTA
PAGE	P	LENGTH OF CURVE	L
PERMANENT LIMITED EASEMENT	PLE	TANGENT	TAN
POINT OF CURVE	PC		
POINT OF INTERSECTION	PI		
POINT OF TANGENCY	PT		

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	IP (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	●(SET)	PROPERTY LINE	
R/W STANDARD	▲(SET)	LOT & TIE LINES	
SIGN	ISIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS RESTRICTED (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RW20	QUARTER LINE	
PARCEL NUMBER	02	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	
RECORDED DEED BOUNDARY COURSE	(N XX-XX-XX E XXX.XX')		

STREET	BASIS OF EXISTING R/W	R/W WIDTH	DATE
STH 20	VILLAGE OF WATERFORD PLATS AND FOUND MONUMENTATION	VARIES	1879
RACINE ST	VILLAGE OF WATEWRFORD PLAT CSM 1881, CSM 2563 AND FOUND MONUMENTATION	VARIES	2003

SHEET LOCATION



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TOTAL REMAINING
1	MICHAEL VINZ, ETAL	FEE	1.38	1.16	0.22	1.38	-
2	STANLEY J. JR. & NICOLE S. NORTHROP	FEE	0.50	0.42	0.08	0.50	-
3	MICHAEL J. & ANGELA H. KIENAST	FEE	0.50	0.42	0.08	0.50	-
4	STEVE & KIM OEHLER	FEE	0.67	0.61	0.06	0.67	-

AREAS SHOWN IN THE "TOTAL ACRES" COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM THE TAX ROLLS.

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	REQUIRED
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS

(201) WE-ENERGIES (ELEC.)

NON DESCRIPT
EASEMENT
DOC.338323 V.235, P.172
PARCEL: 1 & 2

NON DESCRIPT
EASEMENT
DOC.338316 V.235, P.165
PARCEL: 1 & 2

NON DESCRIPT
EASEMENT
DOC.719527 V.670, P.316
PARCEL: 1 & 2

Curve Table				
Curve #	Curve Length	Radius	Bearing	Chord Length
C1	96.80	1200.00	S35°47'23"E	96.77
C2	145.00	1200.00	S41°33'44"E	144.91
C3	76.45	1200.00	S46°50'58"E	76.45

PNT	STATION	OUT	Y	X	EXISTING PIPE	Δ Y	Δ X
RW517	340+53.83	33.00'	200507.18	522289.14	-	-	-
RW518	340+99.67	190.66'	200367.67	522202.57	3/4" IP	-	-
RW519	340+76.61	33.00'	200490.24	522304.38	-	-	-
RW520	343+51.94	0.49'	200307.24	522512.65	-	-	-
RW504	344+27.60	154.38'	200148.10	522448.81	1" IP	-	-
RW505	343+79.18	2.72'	200289.14	522533.26	-	-	-
RW506	344+58.37	9.22'	200234.60	522591.03	1" IP	-	-
RW507	345+32.96	142.72'	200077.54	522527.93	1-1/2" IP	-	-
RW508	345+93.58	7.23'	200132.73	522679.96	1" IP	6.49' N	8.85'W
RW509	346+58.67	116.66'	200001.49	522631.37	-	-	-
RW510	346+94.25	190.21'	199925.86	522600.46	1" IP	-	-
RW511	347+23.11	249.88'	199864.50	522575.39	1" IP	0.24' S	0.68' E
RW512	347+48.82	163.48'	199903.15	522656.83	1" IP	-	-
RW513	346+73.86	1.78'	200067.01	522726.95	-	-	-
RW514	346+98.02	5.38'	200046.64	522740.42	1" IP	-	-
RW515	347+97.67	20.36'	199962.33	522796.17	-	-	-
RW516	348+97.48	163.11'	199777.81	522790.58	-	-	-

NOTES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER "SURVEYS OF PUBLIC RECORD".

ORIGINAL PLAT PREPARED BY

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

WISCONSIN
GREGORY A. KUNZ
S-1346
WAUKESHA
WI
LAND SURVEYOR

DATE: 11/12/2014 Gregory A. Kunz
LAND SURVEYOR

REVISION DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR DISTRICT OFFICE:

DATE: _____ _____
(Signature)

451

E

FILE NAME : S:\5165144\PLAT\EARLYACQ PLAT\SP-EARLY.DWG

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
2250-12-23	4.1	1
FEDERAL PROJECT NUMBER		

PLAT OF RIGHT OF WAY REQUIRED FOR

EAST MAIN STREET

2ND STREET TO MILWAUKEE STREET

EAST MAIN STREET — RACINE CO.

CONSTRUCTION NO. 2250-12-70

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	SQUARE FEET	S.F.
CORNER	COR.	STATION	STA.
DOCUMENT	DOC.	TEMPORARY LIMITED EASEMENT	TLE
EASEMENT	EASE.	VOLUME	V.
HIGHWAY EASEMENT	H.E.	**CURVE DATA**	
LAND CONTRACT	LC	LONG CHORD	LCH
MARKER POST	MP	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (1" UNLESS NOTED)
R/W MONUMENT (SET)
R/W STANDARD (SET)
SIGN (SIGN)
SECTION CORNER MONUMENT
SECTION CORNER SYMBOL
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT (RWB20)
PARCEL NUMBER (103)
UTILITY PARCEL NUMBER (92)
SIGN NUMBER (OFF PREMISE) (21-)
BUILDING

PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
LOT & TIE LINES
SLOPE INTERCEPTS
CORPORATE LIMITS
RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL)
RESTRICTED ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER	—W—	
GAS	—G—	
TELEPHONE	—T—	
OVERHEAD TRANSMISSION LINES	—OH—	
ELECTRIC	—E—	
CABLE TELEVISION	—TV—	
FIBER OPTIC	—FO—	
SANITARY SEWER	—SAN—	
STORM SEWER	—SS—	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

(4) 3' EASEMENT FOR R/W PURPOSES PER DOC 606752 V 524 P 504

(5) NON DESCRIPT INGRESS AND EGRESS EASEMENT PER DOC 2118556

(10) (11) NON DESCRIPT INGRESS AND EGRESS EASEMENT PER DOC 2118556

PI	Y	X
103+08.60	199,235.69	524,803.95
106+19.33	199,237.671	525,114.680
112+51.54	199,240.09	525,746.88

PK NAIL
Y=199432.21
X=522780.11

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
201	WE-ENERGIES (ELEC.)	RELEASE OF RIGHTS

DETAIL NOT TO SCALE

CONCRETE MONUMENT W/ BRASS CAP
Y=199463.84
X=525421.81

Twn of Waterford
Twn of Rochester
Twn of Dover
SHEET LOCATION

COMPUTED
Y=199503.18
X=528075.29

N89°18'51"E 2641.89'
N89°09'03"E 2653.77'

GN
SCALE, FEET 0 50 100

BP:103+08.60
PI:106+19.33
EP:112+51.54

BLOCK 21 NEMIS & WHITNEY SUBDIVISION
BUILDINGS EXEMPT FROM TLE

NORTH 3RD STREET
SOUTH 3RD STREET
NORTH MILWAUKEE STREET
SOUTH MILWAUKEE STREET
EAST MAIN STREET
VILLAGE OF WATERFORD

BLOCK 2
BLOCK 1
BLOCK 6
BLOCK 7

TLE, SLOPES & DRIVEWAY
TLE, SLOPES
ORIGINAL PLAT
VILLAGE OF WATERFORD

N00°43'55"W 33.00'
S88°30'28"E 33.00'
S01°29'32"W 33.02'
S30°09'39"E 39.05'
S01°29'32"W 2649.84'
155.09' TO R/L
70.01'

R/L=N89°38'06"E 310.74'
R/L=N89°46'51"E 301.28'
R/L=N89°46'51"E 281.32'
R/L=49.61'

3/4" IRON ROD

DETAIL NOT TO SCALE

CONCRETE MONUMENT W/ BRASS CAP
Y=196814.90
X=525352.81

(201) WE-ENERGIES (ELEC.)
VARIABLE WIDTH EASEMENT
DOC.719519
V.670 P.308
PARCEL 12

SIGN
EDGE OF CONC WALK

TLE STATION/OFFSET TABLE		
POINT	STATION	OUT
1127	109+68.22	153.74' LT
1128	109+65.38	58.78' LT
1129	109+80.00	45.55' LT
1130	109+80.00	33.33' LT
1131	109+79.46	38.50' RT
1132	109+38.00	38.50' RT
1133	109+27.32	50.58' RT
1134	109+23.06	85.47' RT
1135	109+18.06	85.32' RT
1136	108+85.67	64.34' RT
1137	108+73.68	63.99' RT
1138	108+74.27	43.99' RT
1139	108+67.32	38.00' RT
1140	107+64.00	38.00' RT

POINT	STATION	OUT
1141	107+64.00	41.00' RT
1142	107+20.00	41.00' RT
1143	107+20.00	38.00' RT
1144	106+57.52	38.00' RT
1145	106+57.98	134.81' RT
1146	106+52.98	134.83' RT
1147	105+86.64	135.07' RT
1148	105+83.64	135.07' RT
1149	105+83.44	45.07' RT
1150	105+75.00	38.00' RT
1151	105+15.00	38.00' RT
1152	105+15.00	46.00' RT
1153	104+80.00	46.00' RT
1154	104+80.00	41.00' RT
1155	104+22.81	41.00' RT
1156	104+22.33	34.00' LT
1157	104+47.03	34.00' LT
1158	104+47.04	41.00' LT
1159	104+80.00	41.00' LT
1160	104+80.00	36.00' LT
1161	105+05.23	36.00' LT
1162	105+05.22	33.00' LT
1163	105+82.21	33.00' LT
1164	105+82.21	130.00' LT
1165	105+85.21	130.00' LT
1166	106+50.88	130.08' LT
1167	106+53.88	130.09' LT
1168	106+54.10	41.00' LT
1169	107+85.00	41.00' LT
1170	108+20.00	57.00' LT
1171	108+78.50	57.00' LT
1172	108+87.61	100.93' LT
1173	108+89.26	156.10' LT

RW STATION/OFFSET TABLE		
POINT	STATION	OUT
718	109+55.12	49.97' LT
719	109+56.12	49.94' LT
720	109+55.79	39.00' LT
721	109+61.63	33.30' LT
722	109+79.63	32.67' RT
723	109+19.63	32.77' RT
724	108+86.62	32.72' RT
725	106+52.49	33.13' RT
726	105+86.41	33.00' RT
727	104+22.76	33.00' RT
728	104+22.33	33.00' LT
729	105+85.21	33.00' LT
730	106+51.12	32.87' LT
731	108+44.99	33.21' LT
732	108+89.89	76.86' LT
733	108+92.26	156.01' LT
734	109+58.23	154.03' LT

CURVE TABLE				
CURVE	CURVE LENGTH	RADIUS	L.C. BEARING	L.C. LENGTH
731-732	69.26'	45.00'	N45°35'10"E	62.63'

LINE TABLE		
LINE	BEARING	DISTANCE
734-718	S1°29'32"W	104.12'
718-719	S88°30'28"E	1.00'
719-720	S1°29'32"W	10.94'
720-721	S45°52'48"E	8.16'
722-723	S89°41'16"W	60.00'
723-724	S89°52'03"W	33.01'
724-725	S89°40'49"W	234.12'

LINE TABLE		
LINE	BEARING	DISTANCE
725-726	S89°49'14"W	66.00'
726-727	S89°38'06"W	163.65'
728-729	N89°38'06"E	162.87'
729-730	N89°49'11"E	66.00'
730-731	N89°40'49"E	193.87'
732-733	N1°29'32"E	79.18'

NOTES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS TYPICALLY 3/4" X 24" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT, BY WISDOT.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE OF U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

AREAS SHOWN IN THE ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM THE TAX ROLLS OR OTHER AVAILABLE SOURCES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TOTAL REMAINING	TLE ACRES	PLE ACRES
1	NEBOJSA & TATJANA STEVANOVIC	TLE	0.107	-	-	-	0.107	0.004	-
2	PETRUSICH PROPERTIES, LLC.	TLE	0.108	-	-	-	0.108	0.005	-
3	DAVID P. & JANET L. KOTT	TLE	0.052	-	-	-	0.052	5 SQ.FT.	-
4	SPIERING BROTHERS, LLC	TLE	0.163	-	-	-	0.163	0.007	-
5	HANS R. & SUSHMA SHARMA	FEE, TLE	0.762	0.001	-	0.001	0.761	0.083	-
6	GRANT I. FOAT 1/2 INTEREST YOUR AUTO WASH, LLC. 1/2 INTEREST	FEE, TLE	0.608	0.001	0.130	0.131	0.477	0.033	-
7	THOMAS C. & SHARON S. VINEY	TLE	0.224	-	-	-	0.224	0.017	-
8	CHRISTOPHER C. JONES	TLE	0.231	-	-	-	0.231	0.019	-
9	RICHARD M. OTTO	TLE	0.218	-	-	-	0.218	0.021	-
10	DEAN JOHN SCHMIDT	TLE	0.224	-	-	-	0.224	0.012	-
11	WILLIAM B. & CAROL L. CZAJA	TLE	0.203	-	-	-	0.203	0.017	-
12	KJ RENTALS, LLC.	TLE	0.238	-	0.045	0.045	0.193	0.017	-

REVISION DATE:

ORIGINAL PLAT PREPARED BY
R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

DATE: 8/9/2016 Nathan A Vaughn
LAND SURVEYOR

APPROVED FOR VILLAGE OF WATERFORD:
DATE: 8/11/2016 (Signature)

E

FILE NAME:S/5165144/PLAT/SPP300 - VILLAGE PLAT/SPP300.DWG

FHB INVESTMENTS LLC

N

GRADE FOR FUTURE 10' PATH

R/W

TLE

93'

304+00 305+00 306+00 307+00 308+00 309+00 310+00

STH 20

14'

PC: 306+83.41

W. MAIN STREET

WB CONST. LINE

STH 20 R/L

14'

EB CONST. LINE

12"

24"

CONCRETE SIDEWALK 5-INCH

R/W

TLE

SLOPE INTERCEPT

CAUTION

TLE

BEGIN PROJECT 2250-12-70
STA. 306+25
N = 202,039.33
E = 519,437.71

KRUSE 31232 HIGH DR

WEBSTER 31218 HIGH DR

PERSON 31206 HIGH DR

KULICK 31132 HIGH DR

5

5

STA 306+25.00
EL 809.45

FINISHED PROFILE

-0.52%

EXISTING PROFILE

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

815.00
810.00
805.00
800.00

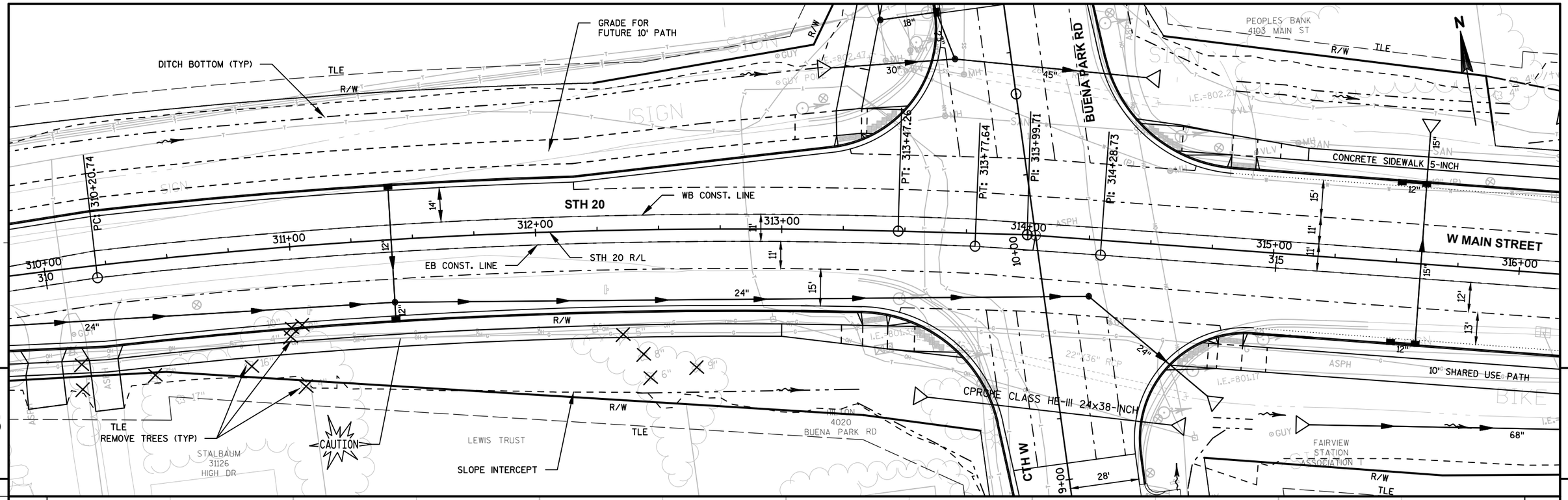
304 305 306 307 308 309 310

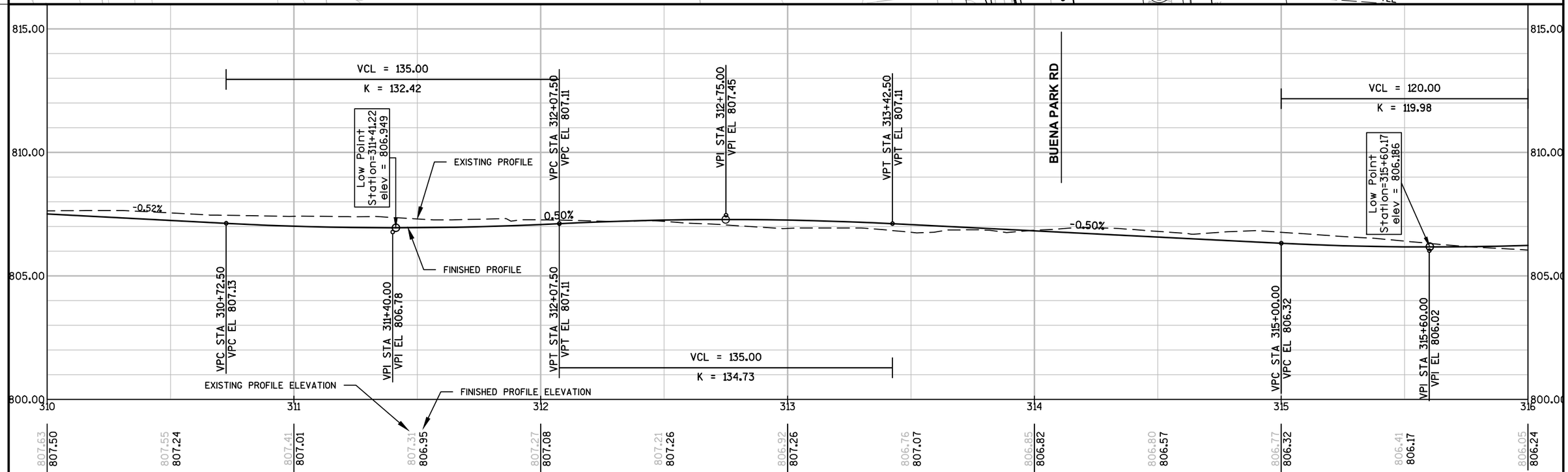
810.98 810.68 810.28 809.92 809.58 809.21 809.32 808.84 809.06 808.78 808.80 808.49 808.54 808.20 808.28 808.02 808.02 807.82 807.76 807.63 807.50

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 453	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\050101_PP.DWG PLOT DATE : 4/26/2018 2:42 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44





PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 454	E

STA 317+13
REMOVING OLD STRUCTURE
REMOVE EXISTING BOX CULVERT
AFTER ALL NEW 43X68" PIPES ARE IN
PLACE. SEE STORM SEWER DETAIL SHEETS

SLOPE INTERCEPT

DITCH SWALE BOTTOM
BUILT OVER STORM SEWER PIPES

FIELD INLET
SEE STORM SEWER DETAILS

TLE

PLE

68"

68"

68"

R/W

CONCRETE SIDEWALK 5-INCH

STH 20

W MAIN STREET

EB CONST. LINE

EB CONST. LINE

STH 20 R/L

316+00

317+00

318+00

319+00

320+00

321+00

322+00

PC: 320+91.97

20+00

AUGUSTA WAY

80'

BM 11210

17'
11'
11'
12'
15'

13'
12'
12'
15'

115'

15"

15"

10' SHARED USE PATH

BIKE PATH

I.E.=801.24

I.E.=799.62

I.E.=799.54

I.E.=799.55

I.E.=799.81

I.E.=801.72

I.E.=801.47

I.E.=800.26

I.E.=802.17

24" RCP

BM 11118

RELOCATE EXISTING
EMERGENCY OVERFLOW
TO EAST SIDE OF POND

TLE

SLOPE INTERCEPT

R/W

R/W

R/W

TLE

CAUTION

BENCHMARK

NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
BM 11118	316+64.03, 90.80 RT	804.83	CHISELED SQUARE ON TOP OF CONC. OVERFLOW AT SHELL APPROXIMATELY 200' EAST OF BUENA PARK ROAD
BM 11210	321+51.77, 54.60 LT	806.69	CHISELED CROSS ON TIP OF ISLAND AT AUGUSTA AND S.T.H. 20 INTERSECTION

VCL = 120.00
K = 119.98

VPC STA 317+00.00
VPC EL 806.72

VPI STA 317+60.00
VPI EL 807.02

VPT STA 318+20.00
VPT EL 806.72

VPT STA 316+20.00
VPT EL 806.32

0.50%

FINISHED PROFILE

EXISTING PROFILE

-0.50%

VCL = 120.00
K = 120.24

EXISTING BOX CULVERT
4-FT.x10-FT.
TO BE REMOVED

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

AUGUSTA WAY

810.00
805.00
800.00
797.00

316 317 318 319 320 321 322

806.05	806.24	806.12	806.47	806.18	806.72	806.19	806.86	805.71	806.80	805.50	806.57	805.46	806.32	805.29	806.07	805.23	805.82	805.15	805.57	805.16	805.32	805.09	805.07	805.09	804.82

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 455	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\050103_PP.DWG PLOT DATE : 4/26/2018 2:53 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

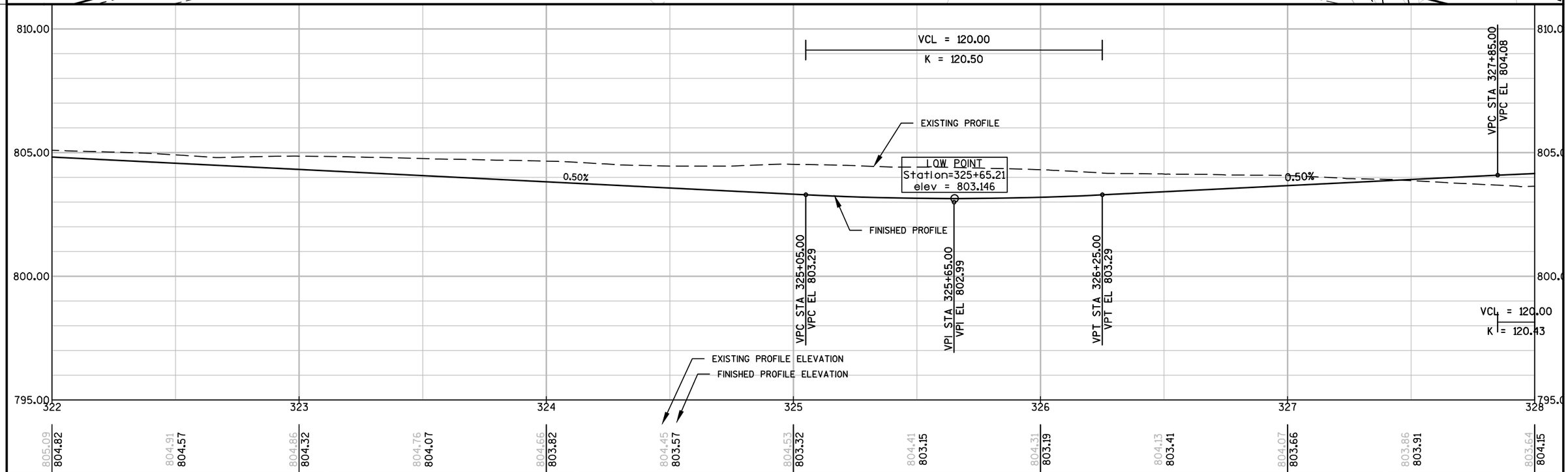
CLEARING AND GRUBBING WITHIN SLOPE INTERCEPTS
STA 322+00 TO STA 333+00, LT

HILTON
4020
BUENA PARK RD

RIVERMOOR LLC
30802
WATERFORD DR

WATERFORD
GRADED SCHOOL
DISTRICT
405 MAIN ST

TLE
R/W
CONCRETE SIDEWALK 5-INCH
STH 20
E MAIN STREET
STH 20 R/L
10' SHARED USE PATH
SLOPE INTERCEPT
CAUTION
CPCS 24-INCH
PI: 347+83.31
322+00
323+00
324+00
325+00
326+00
327+00
328+00
130'
123'
12"
15"
12" (P)



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 456	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\050104_PP.DWG PLOT DATE : 4/26/2018 2:59 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

CLEARING AND GRUBBING WITHIN SLOPE INTERCEPT
STA 322+00 TO STA 323+00, LT

RIVERMOOR LLC
30802
WATERFORD DR

TLE

PLE

STA 332+85
REMOVING OLD STRUCTURE
(C-51-21)
LEAVE IN PLACE UNTIL DRAINAGE
ACROSS STH 20 IS MAINTAINED
IN TRIPLE 38X60" CPRCHE

R/W

CONCRETE SIDEWALK 5-INCH

328+00 329+00 330+00 331+00 332+00 333+00 334+00

STH 20

W MAIN STREET

STH 20 R/L

15' 12' 12' 15'

123'

12"

15"

24"

10' SHARED USE PATH

STA 329+38
REMOVE 1-12"X18" CMP

12"X18" CMP

I.E.=798.62

I.E.=798.35

ASPH
CPCS 24-INCH

WATERFORD
GRADED SCHOOL
DISTRICT
405 MAIN ST

SLOPE INTERCEPT

CAUTION

5

5

VPI STA 328+45.00
VPI EL 804.38

VPT STA 329+05.00
VPT EL 804.08

VCL = 200.00
K = 133.29

VPI STA 331+75.00
VPI EL 802.73

RAISED MEDIAN VARIABLE PROFILE
SEE PAVING DETAILS AND CROSS SECTIONS

FINISHED PROFILE

-0.50%

1.00%

LOW POINT
Station=331+41.78
elev = 803.063

EXISTING PROFILE

(3)CPRCHE CLASS HE-IV 38x60-INCH

VPC STA 330+75.00
VPC EL 803.23

VPT STA 332+75.00
VPT EL 803.73

STA 332+85
EXISTING BOX CULVERT
3-FT.x12-FT.
TO BE REMOVED

VCL = 120.00
K = 120.43

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

810.00 805.00 800.00 795.00

328 329 330 331 332 333 334

803.64	804.15
803.39	804.23
803.32	804.11
803.11	803.86
803.06	803.61
802.89	803.36
802.85	803.13
802.76	803.07
802.86	803.19
803.25	803.50
803.59	803.98
803.93	804.48
804.30	804.98

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 457 E

CLUB LANE

HEGEMANN 788 CLUB LN | HENNING 770 CLUB LN | KOJIS 752 CLUB LN | SULLIVAN 734 CLUB LN | HEINZEN 712 CLUB LN

RIVERMOOR RD

RIVERMOOR DR

STH 20

W MAIN STREET

PT: 314+15.74

PC: 30+33.40

BP: 30+00.00

PI: 335+34.75

CONCRETE SIDEWALK 5-INCH

10' SHARED USE PATH

STH 20 R/L

TLE

MSE RETAINING WALL R-51-70

SLOPE INTERCEPT

CONCRETE SIDEWALK 5-INCH

CONCRETE CURB AND GUTTER 18-INCH TYPE D, REVERSE SLOPE

MATCH EXISTING ASPHALT PARKING LOT

RELOCATE EXISTING SCHOOL PARKING LOT ENTRANCE

WATERFORD UNION HIGH SCHOOL 405 MAIN ST

CAUTION

R/W

I.E.=801.18

I.E.=802.28

I.E.=802.86

I.E.=801.71

RIVERMOOR RD

RAISED MEDIAN VARIABLE PROFILE
SEE PAVING DETAILS AND CROSS SECTIONS

FINISHED PROFILE

EXISTING PROFILE

VCL = 200.00

K = 69.04

1.00%

3.90%

VPC STA 337+30.00
VPC EL 808.28

VPI STA 338+30.00
VPI EL 809.28

VPT STA 339+30.00
VPT EL 813.18

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

334	335	336	337	338	339	340
804.30 / 804.98	804.63 / 805.48	805.08 / 805.98	805.48 / 806.48	805.93 / 806.98	806.17 / 807.48	806.63 / 807.98
807.19 / 808.51	807.87 / 809.34	809.30 / 810.52	811.00 / 812.07	813.35 / 813.96	815.86 / 815.91	

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 458	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\050106_PP.DWG PLOT DATE : 4/26/2018 3:09 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

SAWCUT ASPHALT
REMOVE EXISTING DRIVEWAY
SAVE 46" OAK TREE
CONSTRUCT NEW ASPHALT DRIVEWAY 12.0% MAX.
CONCRETE APRON
CONCRETE SIDEWALK 5-INCH
CAUTION
RIVERMOOR DR
RACINE STREET
STH 20
W MAIN STREET
STH 20 R/L
10' SHARED USE PATH
PETROLEUM-CONTAMINATED SOIL
1' TO 14' BELOW GROUND SURFACE
STA 343+05 TO STA 343+80
BEGINS 60-FT RT
SLOPE INTERCEPT
VACANT
RAZED STRUCTURE
(BY OTHERS)
RUPLINGER 622 MAIN ST
SMITH 620 MAIN ST
TINDALL 618 MAIN ST
VINZ 619 MAIN ST
NORTHROP 615 MAIN ST
WATERFORD UNION HIGH SCHOOL 611 MAIN ST
R/W
TLE

VPC STA 340+20.00
VPC EL 816.68
VPI STA 341+30.00
VPI EL 820.97
VPT STA 342+40.00
VPT EL 818.92
VPC STA 345+10.00
VPC EL 813.90
EXISTING PROFILE
FINISHED PROFILE
-1.86%
VCL = 220.00
K = 38.21
VCL = 200.00
K = 74.72
EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

815.86	817.93	819.55	820.03	819.71
815.91	817.74	818.96	819.54	819.46

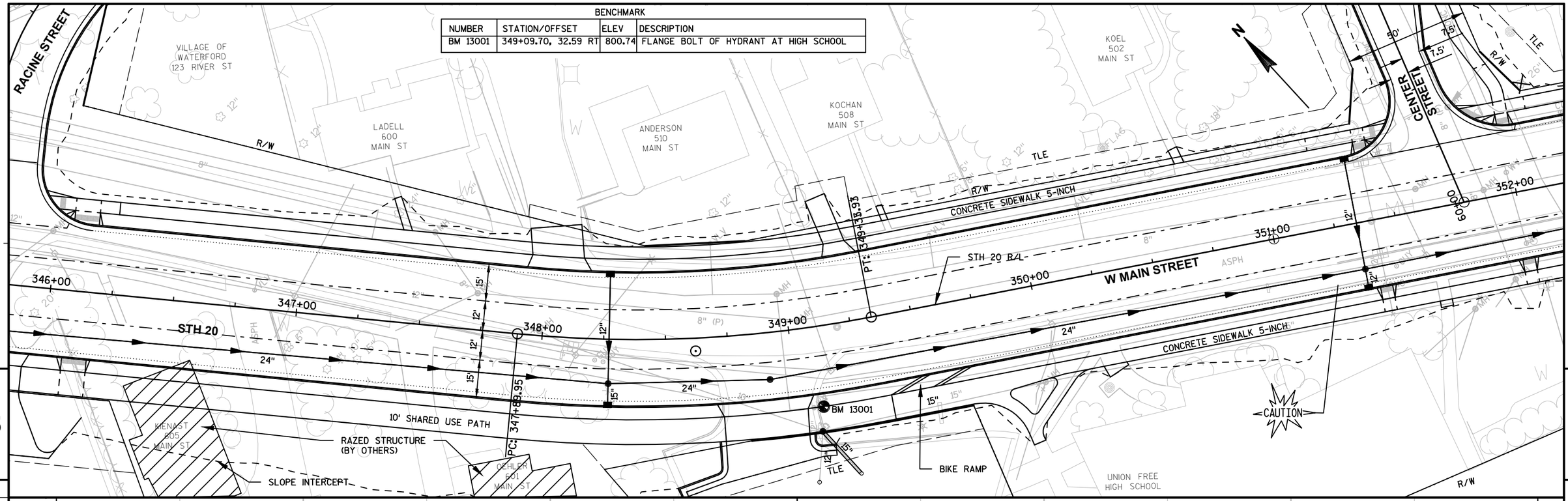
819.16	818.92	822.62	821.74	816.51
818.74	817.81	816.88	815.95	815.02

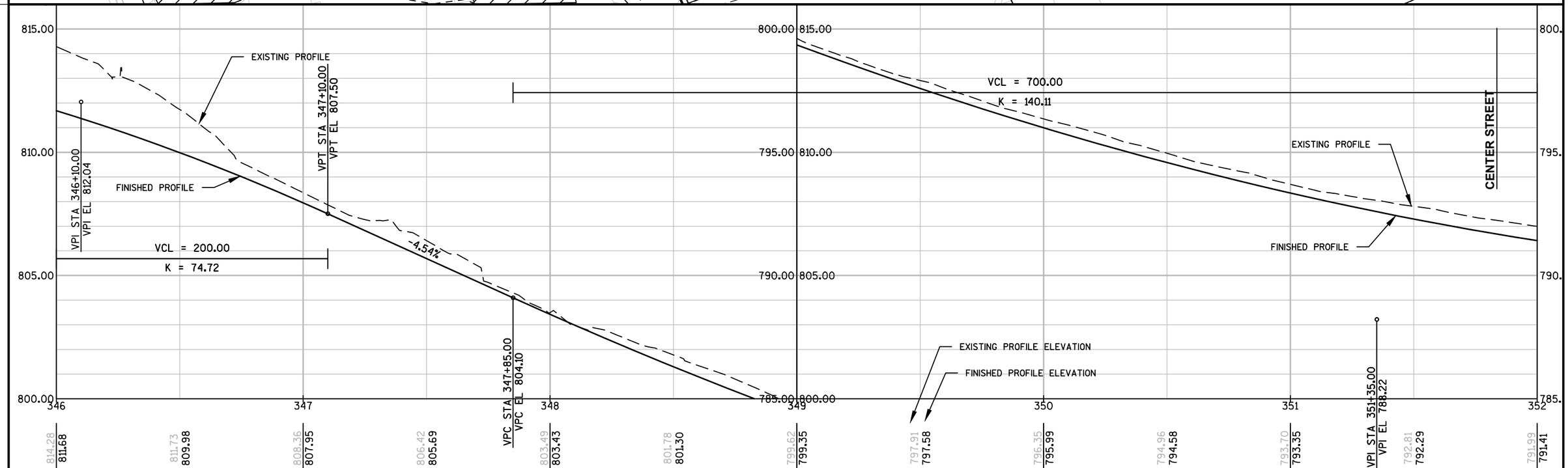
814.99	814.08	814.28		
814.09	813.05	811.68		

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 459 E

BENCHMARK

NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
BM 13001	349+09.70, 32.59 RT	800.74	FLANGE BOLT OF HYDRANT AT HIGH SCHOOL



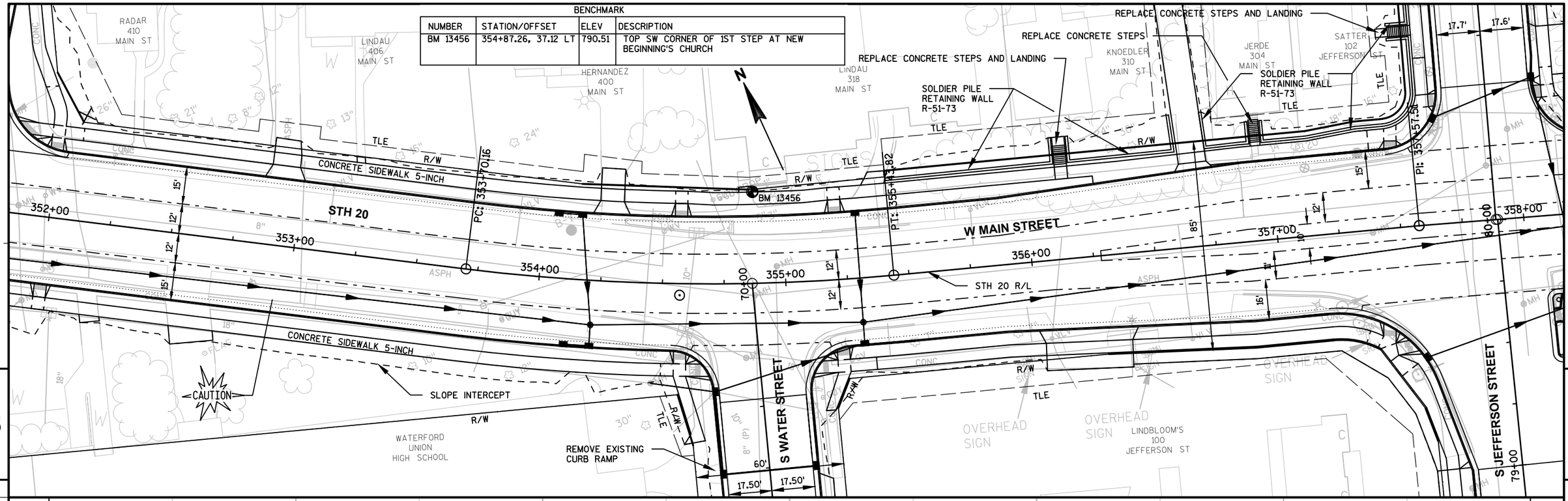


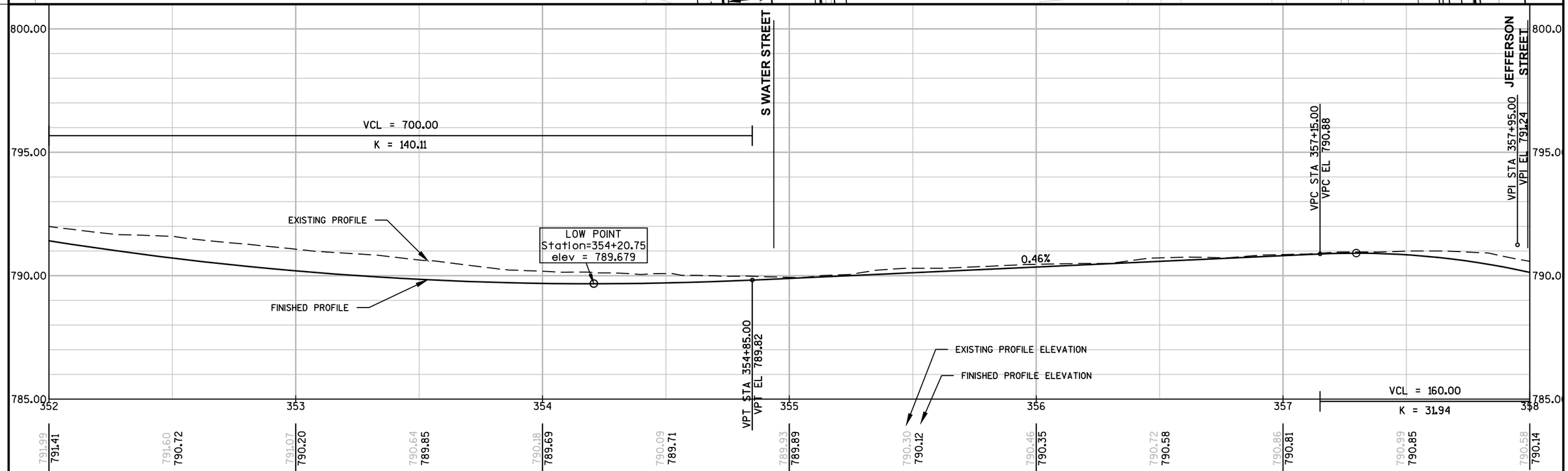
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 460	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\050108_PP.DWG PLOT DATE : 4/26/2018 3:20 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

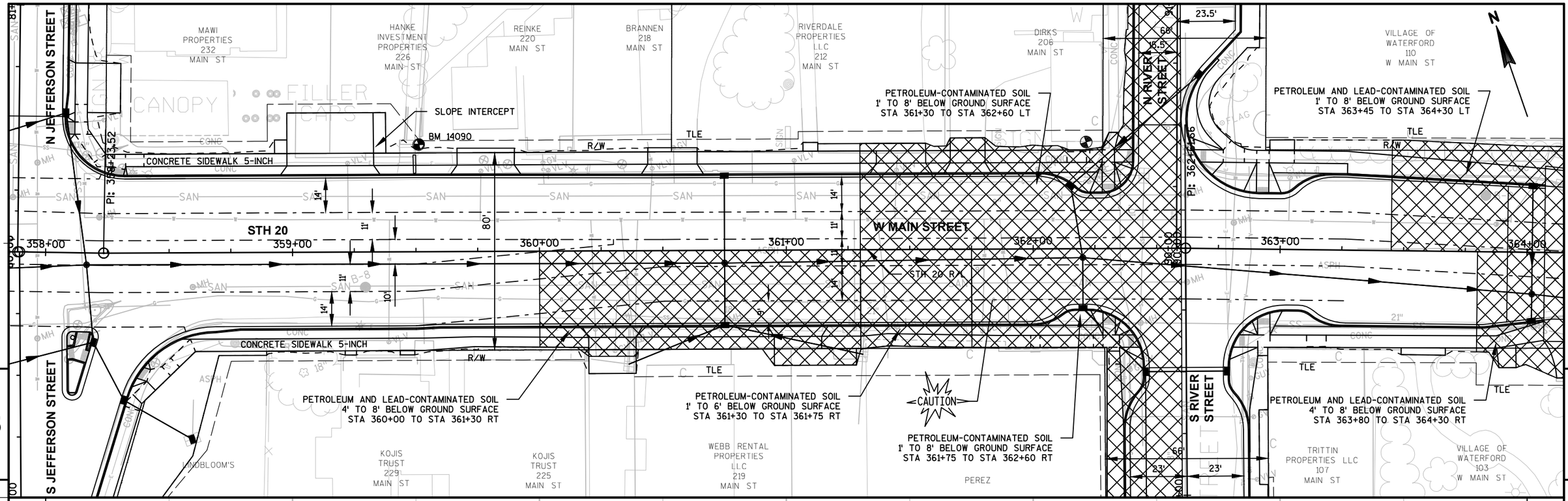
BENCHMARK			
NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
BM 13456	354+87.26, 37.12 LT	790.51	TOP SW CORNER OF 1ST STEP AT NEW BEGINNING'S CHURCH

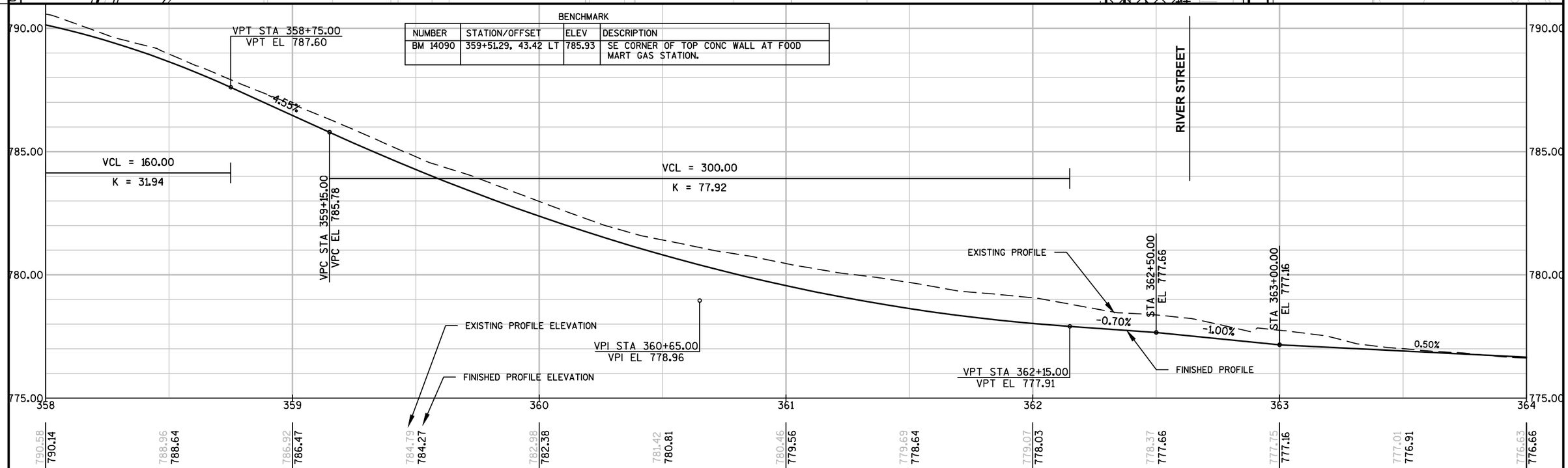




PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE:	SHEET	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\050109_PP.DWG PLOT DATE : 4/26/2018 3:25 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 44





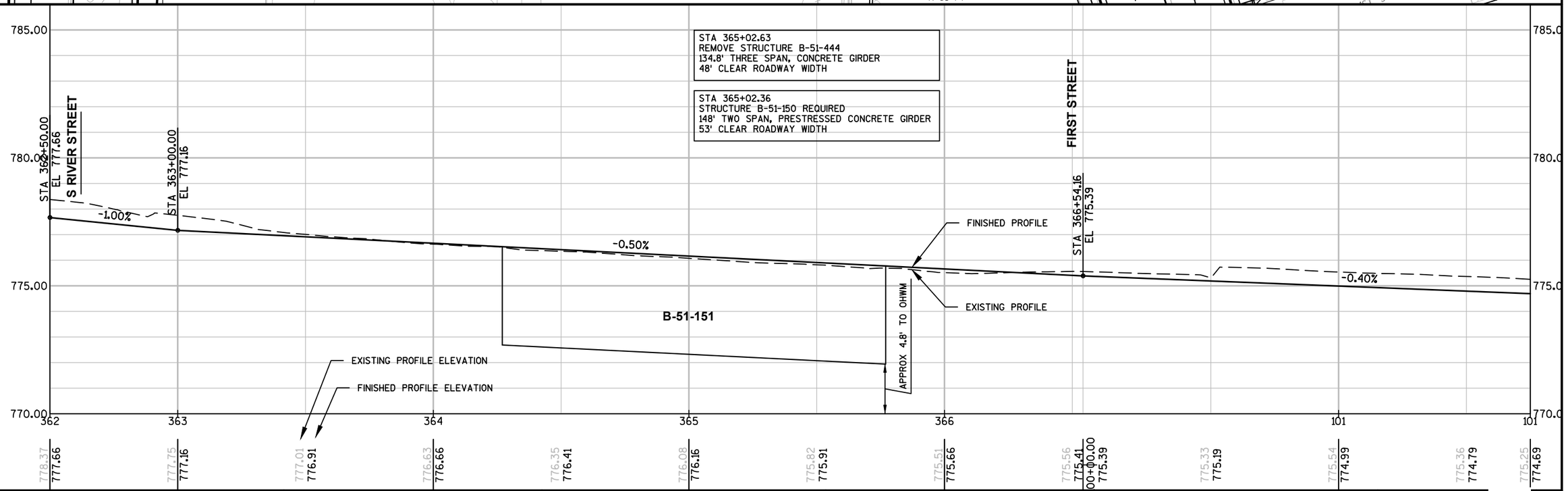
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 462	E

BENCHMARK			
NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
BM 16400	366+05.50, 33.64 LT	777.52	DISK IN TOP OF EAST END OF NORTH PARAPET WALL ON BRIDGE (B-51-444).

WATERFORD PUBLIC LIBRARY
VILLAGE OF WATERFORD 110 W MAIN ST
N RIVER STREET
S RIVER STREET
W. MAIN STREET
STH 20
E. MAIN STREET
FIRST STREET
PI: 362+61.86
PC: 365+95.59
PT: 366+50.68
BP: 366+54.16
EP: 366+54.54
STA. 364+27.11
STA. 365+77.61
145.17' - FACE TO FACE OF ABUTMENTS
B-51-150
RETAINING WALL R-51-75
RETAINING WALL R-51-74
BM16400
PETROLEUM AND LEAD-CONTAMINATED SOIL 1' TO 8' BELOW GROUND SURFACE STA 363+45 TO STA 364+30 LT
PETROLEUM AND LEAD-CONTAMINATED SOIL 4' TO 8' BELOW GROUND SURFACE STA 363+80 TO STA 364+30 RT
SLOPE INTERCEPT
MATCH EXISTING RETAINING WALL
REMOVE EXISTING 18-INCH PVC STORM SEWER OUTLET
EXISTING RAMP AND STEPS TO REMAIN
RIVER BEND PARK (6f)
FOX RIVER
WETLAND (TYP)
CAUTION
INTERSECTION STA 366+54.16 = STA 100+00.00
TRITTIN PROPERTIES LLC 107 MAIN ST
VILLAGE OF WATERFORD 103 W MAIN ST
WIS. DEPT. OF TRANSPORTATION 101 E MAIN ST
HONEY-O-HARE PROPERTIES LLC 201 MAIN ST
WINSKI TRUST 109 FIRST ST
SIDEWALK
TLE
R/W
CONC
ASPH

STA 365+02.63
REMOVE STRUCTURE B-51-444
134.8' THREE SPAN, CONCRETE GIRDER
48' CLEAR ROADWAY WIDTH

STA 365+02.36
STRUCTURE B-51-150 REQUIRED
148' TWO SPAN, PRESTRESSED CONCRETE GIRDER
53' CLEAR ROADWAY WIDTH

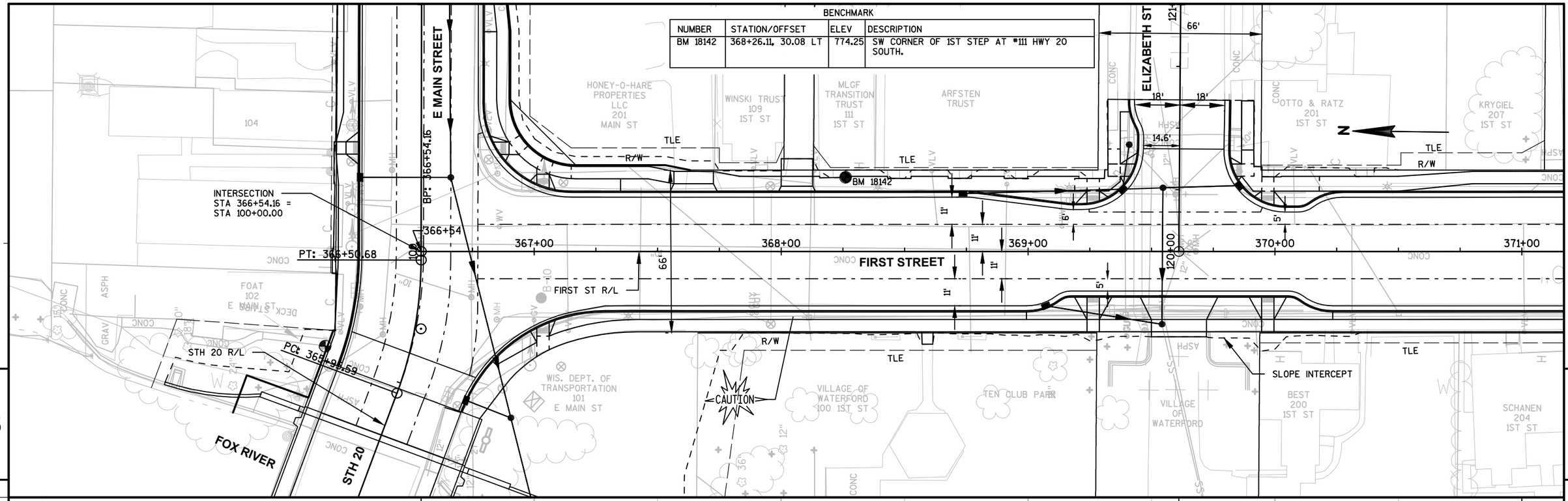


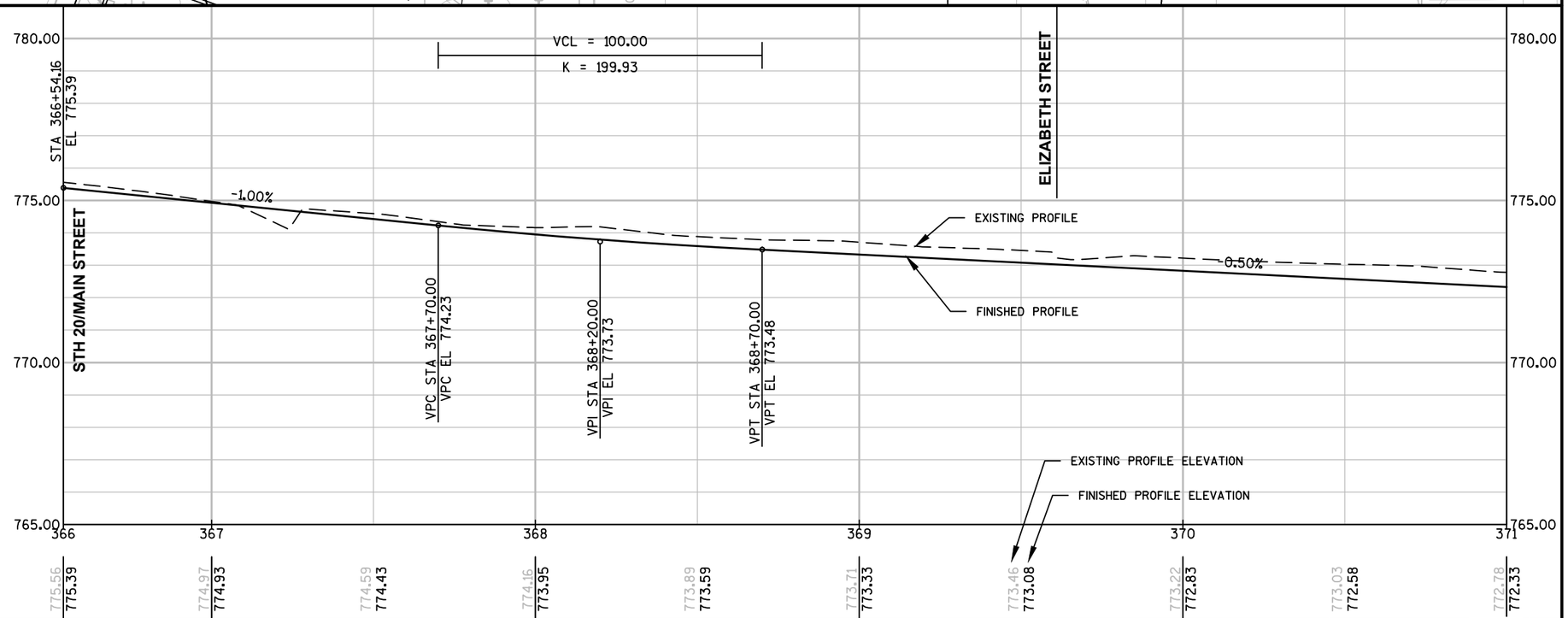
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 463	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\050111_PP.DWG PLOT DATE : 4/26/2018 3:36 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

BENCHMARK			
NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
BM 18142	368+26.11, 30.08 LT	774.25	SW CORNER OF 1ST STEP AT #111 HWY 20 SOUTH.





PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 464	E

BENCHMARK

NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
BM 7963	375+33.58, 35.43 LT	774.39	N CORNER OF 1ST STEP AT CHURCH SOUTH OF ST. THOMAS STREET.

KRYGIEL 207 1ST ST

BERNHARDT-GROESCHEL 202 THOMAS ST

SLOPE INTERCEPT

ST. THOMAS

ST THOMAS AQUINAS CONG CHURCH 305 1ST ST

SLOPE INTERCEPT

BM 7963

TLE

R/W

STH 20

S. FIRST STREET

371+00 372+00 BP: 160+00.00 373+00 374+00 375+00 376+00

SCHANEN 204 1ST ST

TENFEL-SCHMIDT 206 1ST ST

CAUTION

RODRICK 300 1ST ST

FELDSCHER 304 1ST ST

CASTRO 306 1ST ST

CAUTION

SLOPE INTERCEPT

WATERFORD LAND LLC

5

5

785.00
780.00
775.00
770.00

VCL = 90:00
K = 89.93

VPC STA 371+65.00
VPC EL 772.00

VPI STA 372+10.00
VPI EL 771.78

VPT STA 372+55.00
VPT EL 772.01

-0.50%

0.50%

EXISTING PROFILE

FINISHED PROFILE

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

370 371 372 373 374 375 376

773.03	772.58	772.78	772.33	772.54	772.08	772.36	771.90	772.35	771.98	772.33	772.23	772.88	772.48	773.13	772.73	773.32	772.98	773.56	773.23	773.63	773.48	773.83	773.73	774.02	773.98

Lakeside ENGINEERS

WISCONSIN
MICHAEL R. ERNST
41457
WAUKESHA, WI
PROFESSIONAL ENGINEER

PLAN AND PROFILES
FROM STA. 370+50 TO STA. 406+00

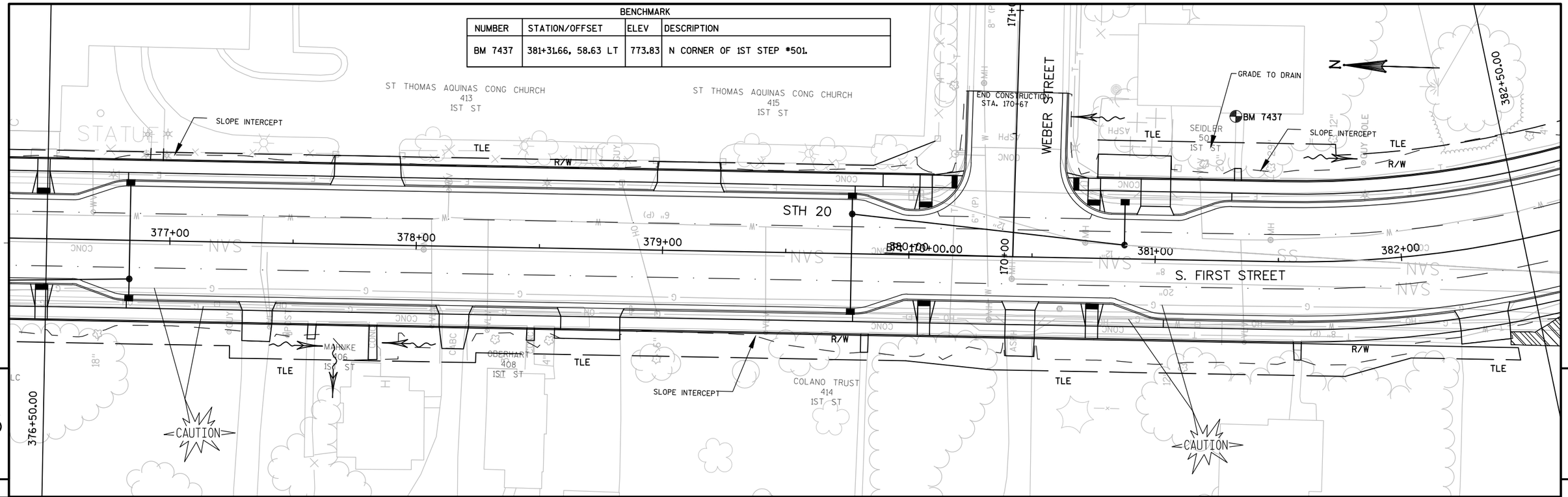
1/25/18 (Date) Michael Ernst (Signature)

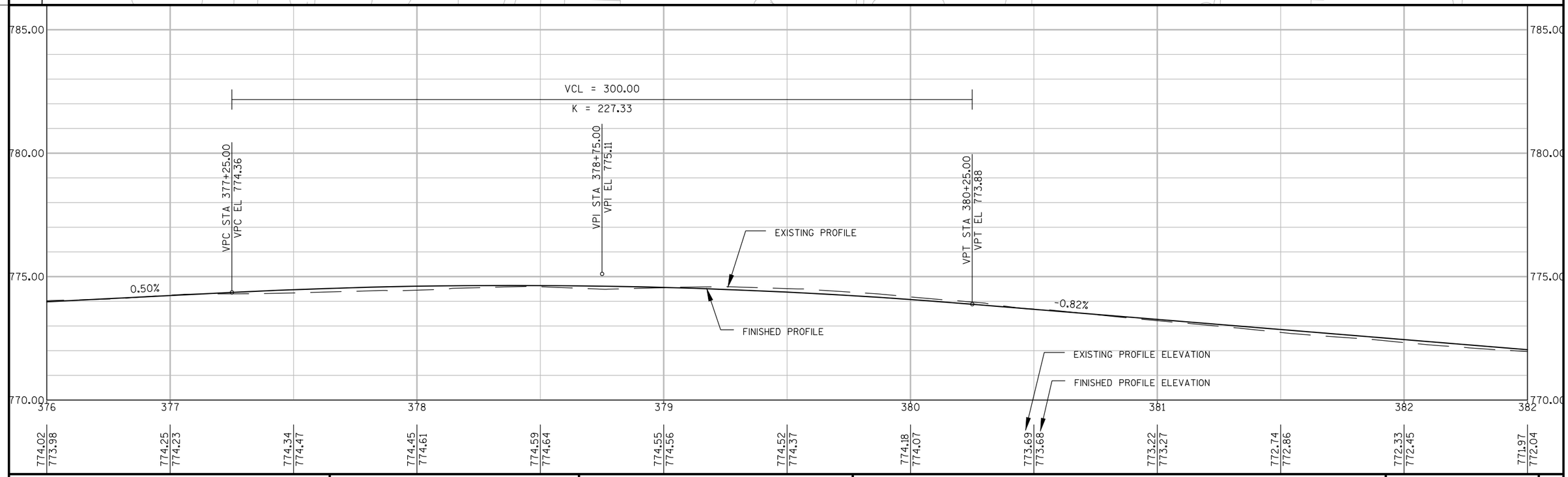
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\050201_PP 90%.DWG PLOT DATE : 1/30/2018 6:08 PM PLOT BY : REBECCA SUTTON PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS

BENCHMARK			
NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
BM 7437	381+31.66, 58.63 LT	773.83	N CORNER OF 1ST STEP #501.

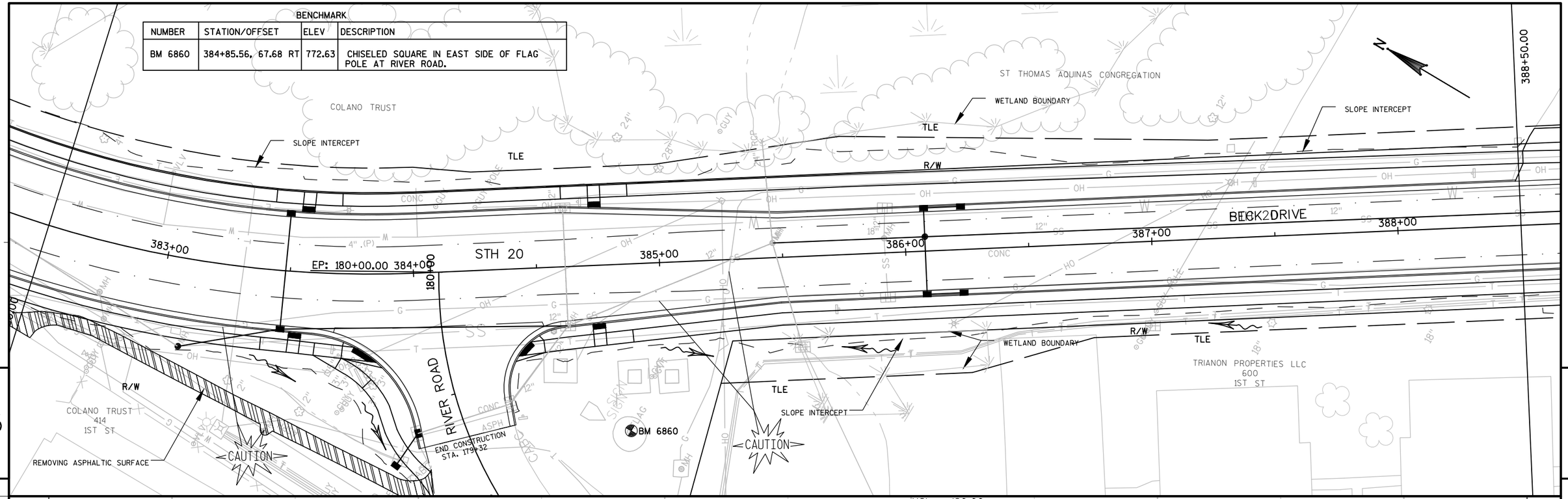


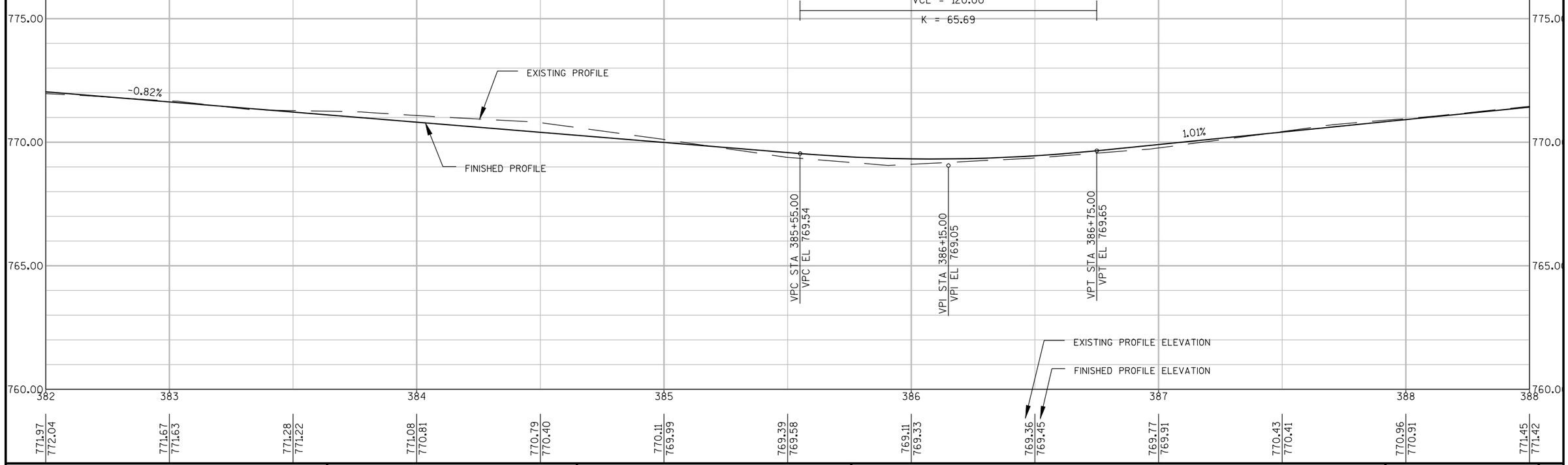


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 466	E

BENCHMARK

NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
BM 6860	384+85.56, 67.68 RT	772.63	CHISELED SQUARE IN EAST SIDE OF FLAG POLE AT RIVER ROAD.



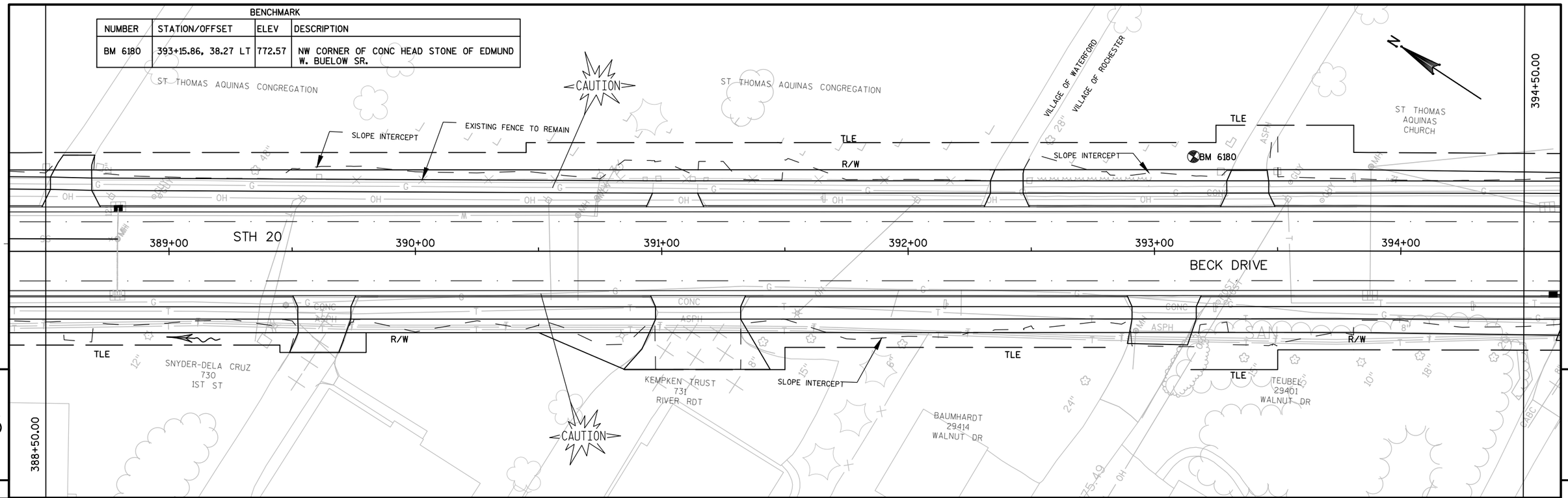


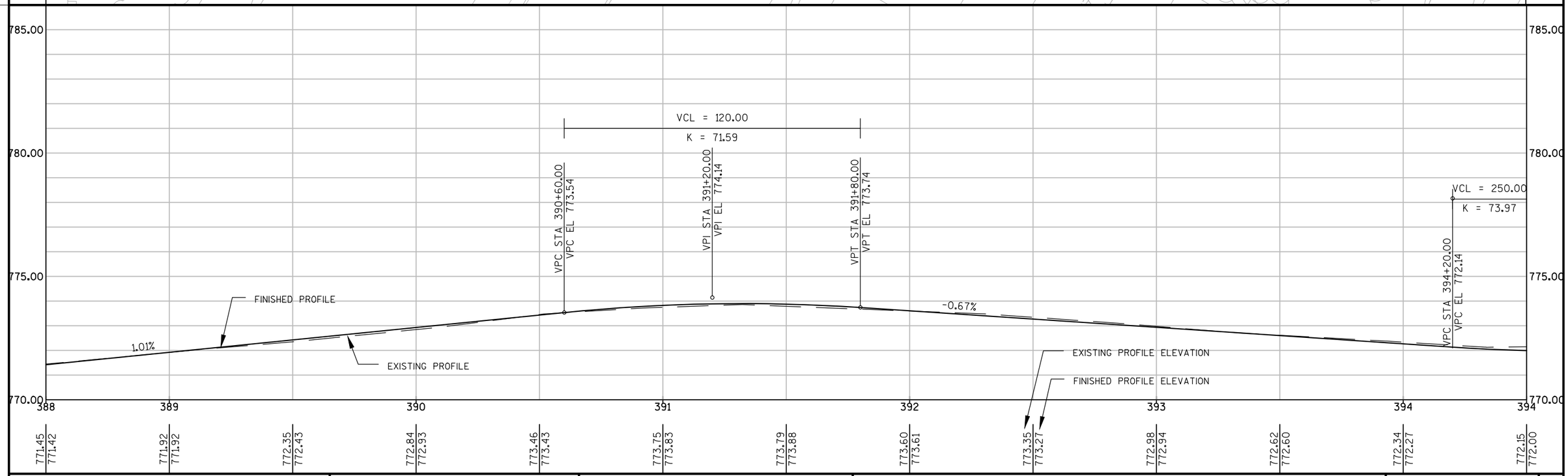
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 467	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\050201_PP 90%.DWG PLOT DATE : 1/30/2018 6:09 PM PLOT BY : REBECCA SUTTON PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

BENCHMARK			
NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
BM 6180	393+15.86, 38.27 LT	772.57	NW CORNER OF CONC HEAD STONE OF EDMUND W. BUELOW SR.





PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 468	E

BENCHMARK

NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
BM 8981	397+50.01, 95.25 LT	775.95	MOST WESTERLY CORNER OF CONCRETE OF FLAG POLE AT THE BUNKER.

BM 8981

DMZ BUNKER LLC
29224
EVERGREEN DR

WISCONSIN ELECTRIC POWER COMPANY

WETLAND BOUNDARY

CONCRETE POST TO REMAIN

TLE

PLE

SLOPE INTERCEPT

R/W

STH 20

395+00

396+00

397+00

398+00

EP: 189+99.67

BP: 190+00.00

399+00

400+00

394+50.00

400+50.00

190+00

EVERGREEN DRIVE

END CONSTRUCTION
STA. 190+57

CAUTION

REMOVE ASPHALTIC SURFACE

LINDAU

BECK DRIVE

END CONSTRUCTION
STA. 189+50

PEKRUL
2926
BECK DR

TESS RENTALS LLC
2914
BECK DR

KETTERHAGEN
2906
BECK DR

PI: 189+07.30

BP: 189+00.00

5

5

785.00
780.00
775.00
770.00

VCL = 160.00
K = 72.31

VCL = 250.00
K = 73.97

VPI STA 395+45.00
VPI EL 771.30

VPC STA 396+80.00
VPC EL 774.96

VPT STA 396+70.00
VPT EL 774.69

VPI STA 397+60.00
VPI EL 777.13

VPT STA 398+40.00
VPT EL 777.53

2.71%

0.50%

EXISTING PROFILE

FINISHED PROFILE

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

394 395 396 397 398 399 400

772.15 772.00 | 772.25 772.03 | 772.69 772.41 | 773.19 773.12 | 774.23 774.17 | 775.51 775.48 | 776.65 776.52 | 777.40 777.22 | 777.73 777.58 | 777.96 777.83 | 778.16 778.08 | 778.38 778.33 | 778.63 778.58

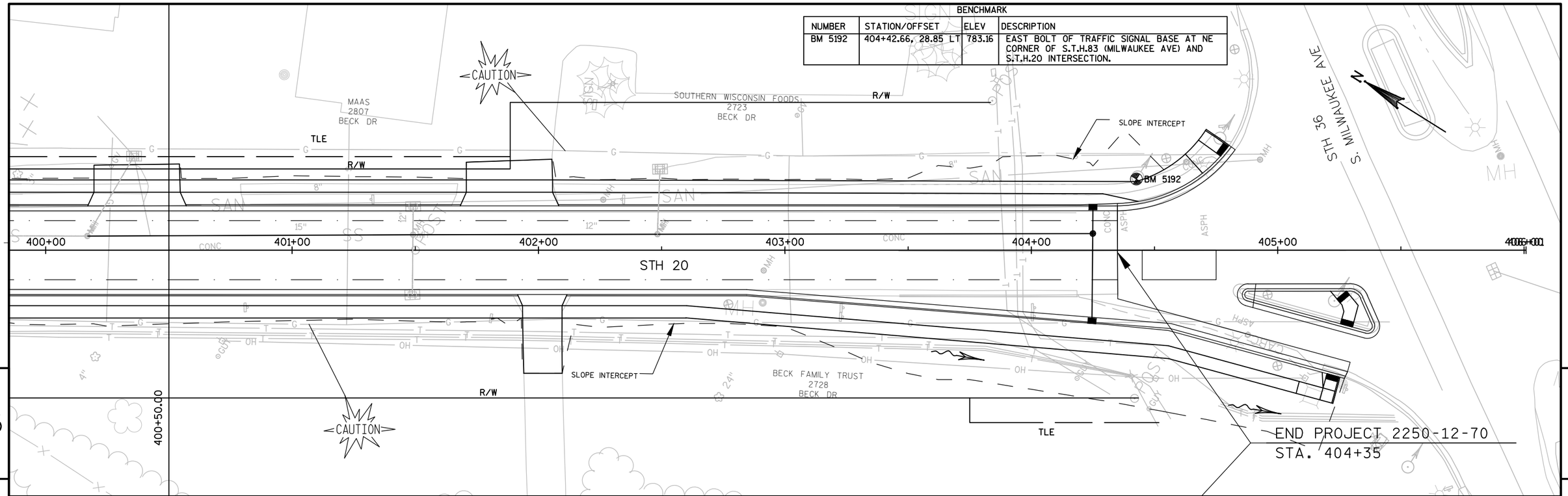
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 469 E

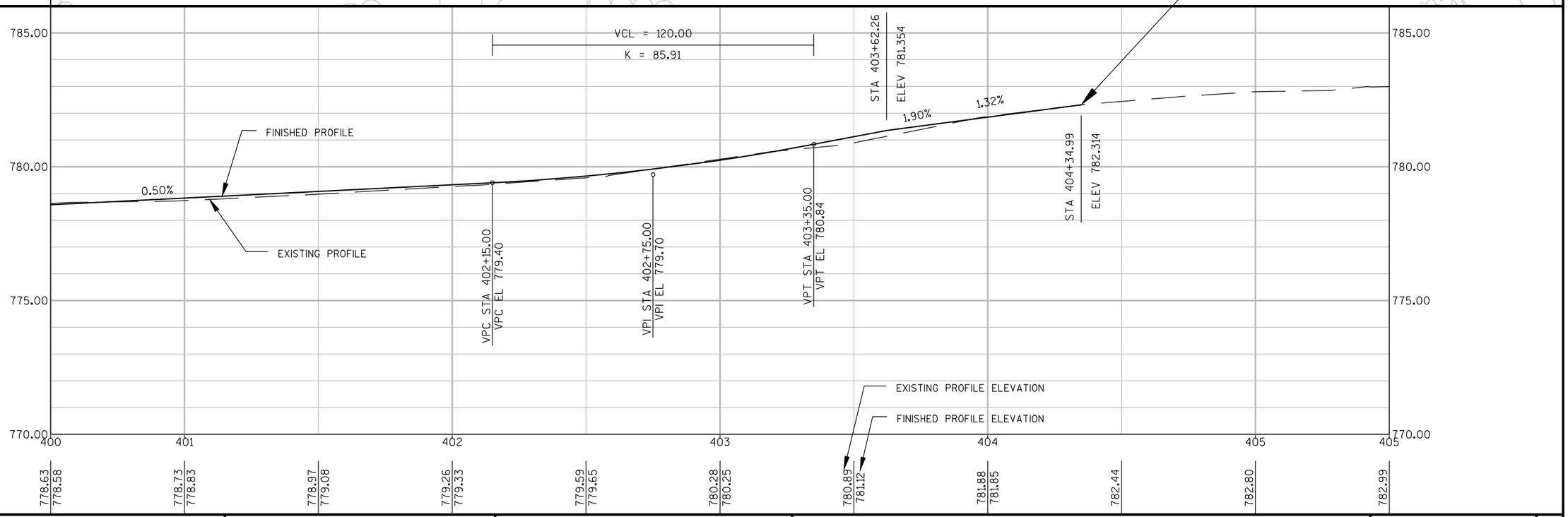
FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\050201_PP 90%.DWG PLOT DATE : 1/30/2018 6:11 PM PLOT BY : REBECCA SUTTON PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

BENCHMARK

NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
BM 5192	404+42.66, 28.85 LT	783.16	EAST BOLT OF TRAFFIC SIGNAL BASE AT NE CORNER OF S.T.H.83 (MILWAUKEE AVE) AND S.T.H.20 INTERSECTION.





PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: STH 20	SHEET 470	E

BEGIN CONSTRUCTION
STA. 6+22

BP: 5+00.00

EXISTING BOX CULVERT TO REMAIN

BUENA PARK ROAD CONST. LINE

CTH W

BUENA PARK ROAD

STH 20

SLOPE INTERCEPT

ASPHALTIC FLUME

CONSTRUCT STORM POND OVERFLOW
MATCH EXISTING OVERFLOW ELEVATIONS
AT NORTHEAST CORNER OF POND
RIPRAP HEAVY REQUIRED

CAUTION

HILTON
4020
BUENA PARK RD

FAIRVIEW SHELL LLC
991 MAIN ST

FAIRVIEW STATION ASSOCIATION I

PEOPLES BANK
4103 MAIN ST

PT: 313+47.26

PI: 10+53.99

PI: 313+99.71

VCL = 80.00
K = 41.33

VCL = 100.00
K = 43.20

STA 6+22.00
ELEV 804.65

VPC STA 6+80.00
VPC EL 805.14

VPI STA 7+20.00
VPI EL 805.61

7+29.00
805.43

VPT STA 7+60.00
VPT EL 805.31

VPC STA 8+00.00
VPC EL 805.01

LP
8+32.40
804.89

VPI STA 8+50.00
VPI EL 804.64

VPT STA 9+00.00
VPT EL 805.42

STA 9+68.30
ELEV 806.49

LP
STA 10+90.00
ELEV 806.23

0.50%
1.19%
-0.75%
1.56%
1.01%
-0.90%
-0.50%

FINISHED PROFILE

EXISTING PROFILE

EXISTING BOX CULVERT TO REMAIN

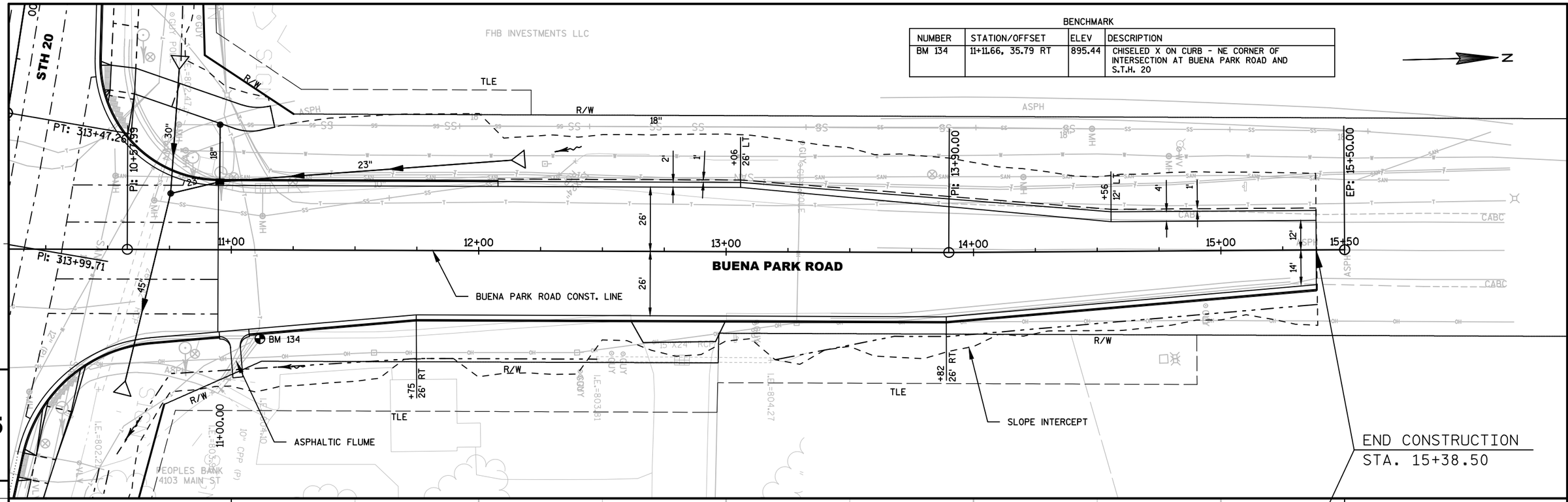
EXISTING PROFILE ELEVATION

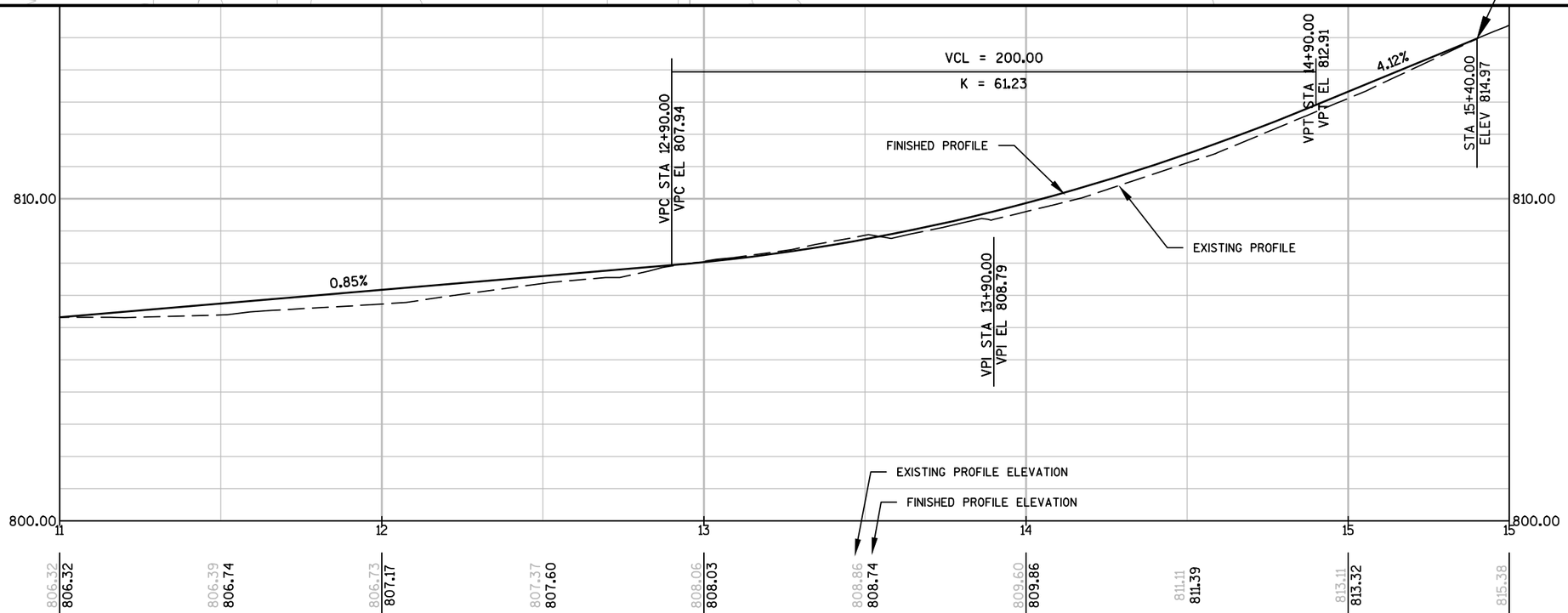
FINISHED PROFILE ELEVATION

| | | |

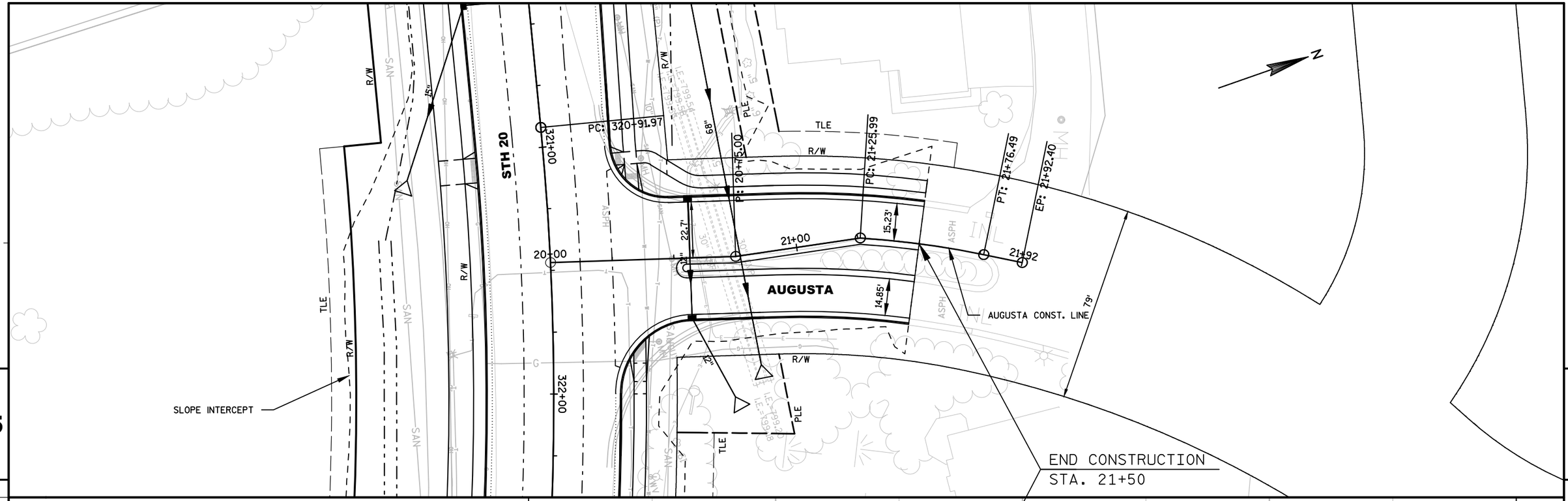
BENCHMARK

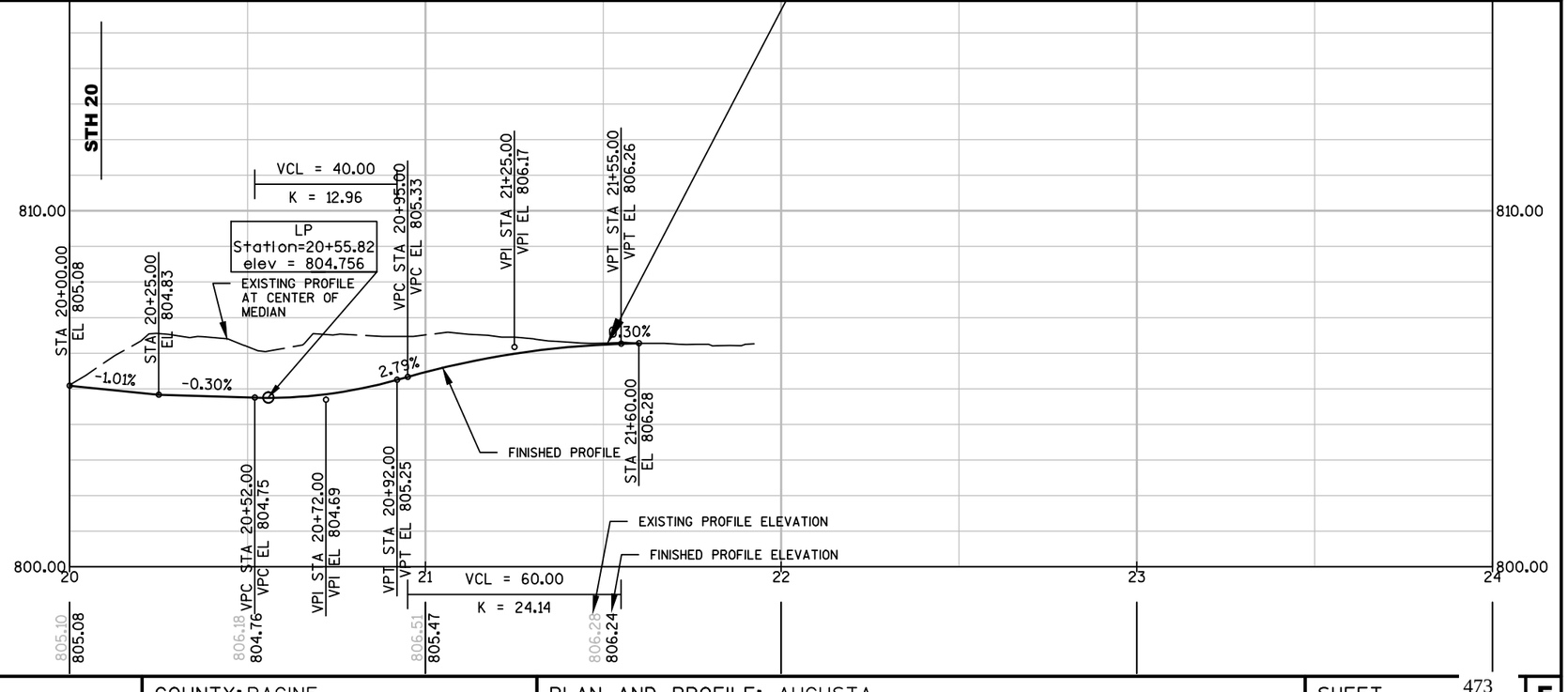
NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
BM 134	11+11.66, 35.79 RT	895.44	CHISELED X ON CURB - NE CORNER OF INTERSECTION AT BUENA PARK ROAD AND S.T.H. 20





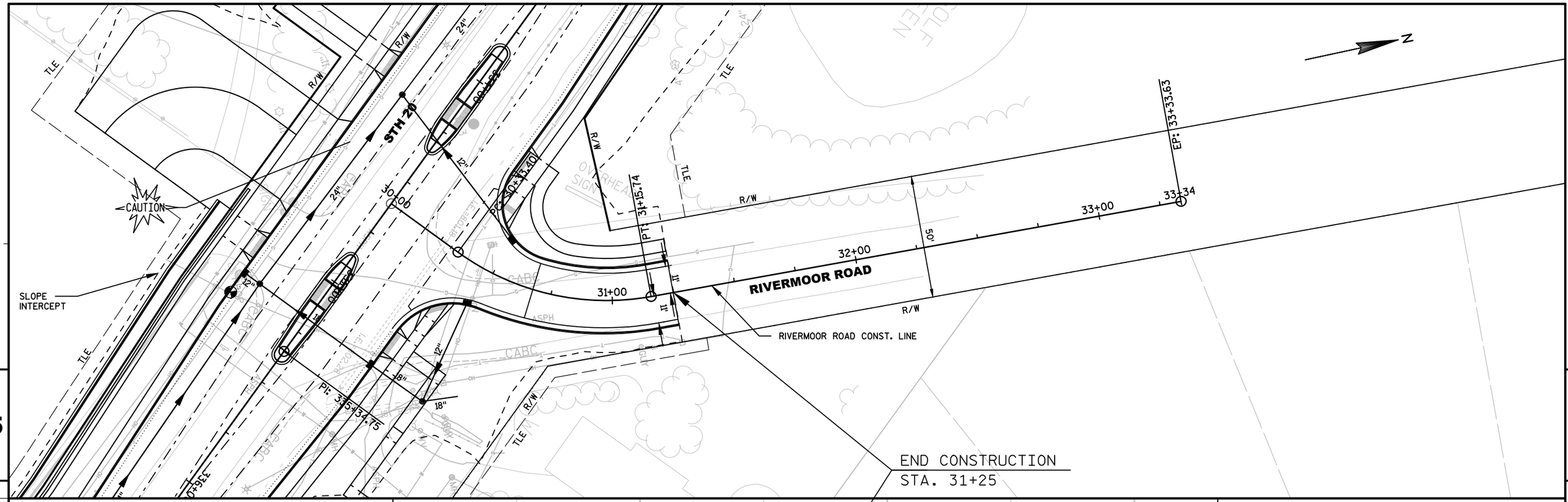
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: BUENA PARK ROAD	SHEET 472 E

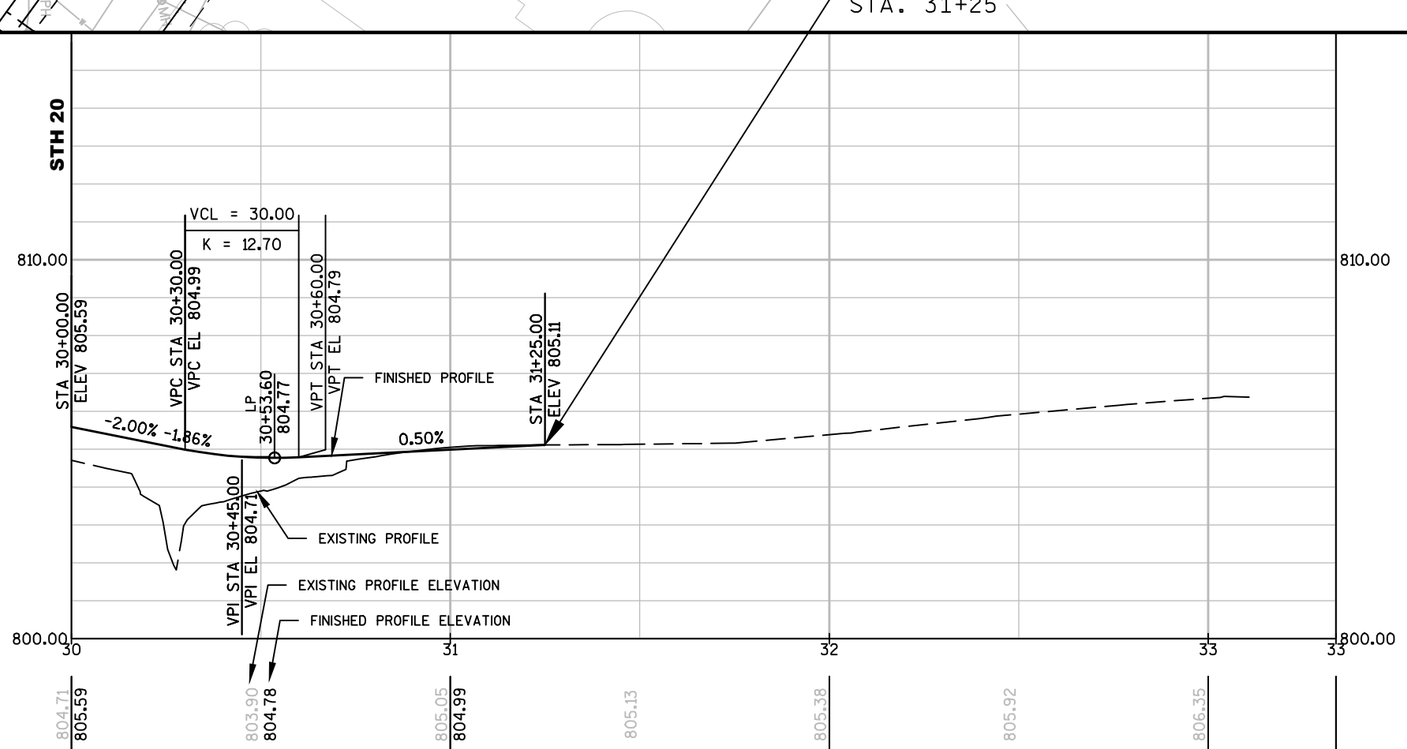




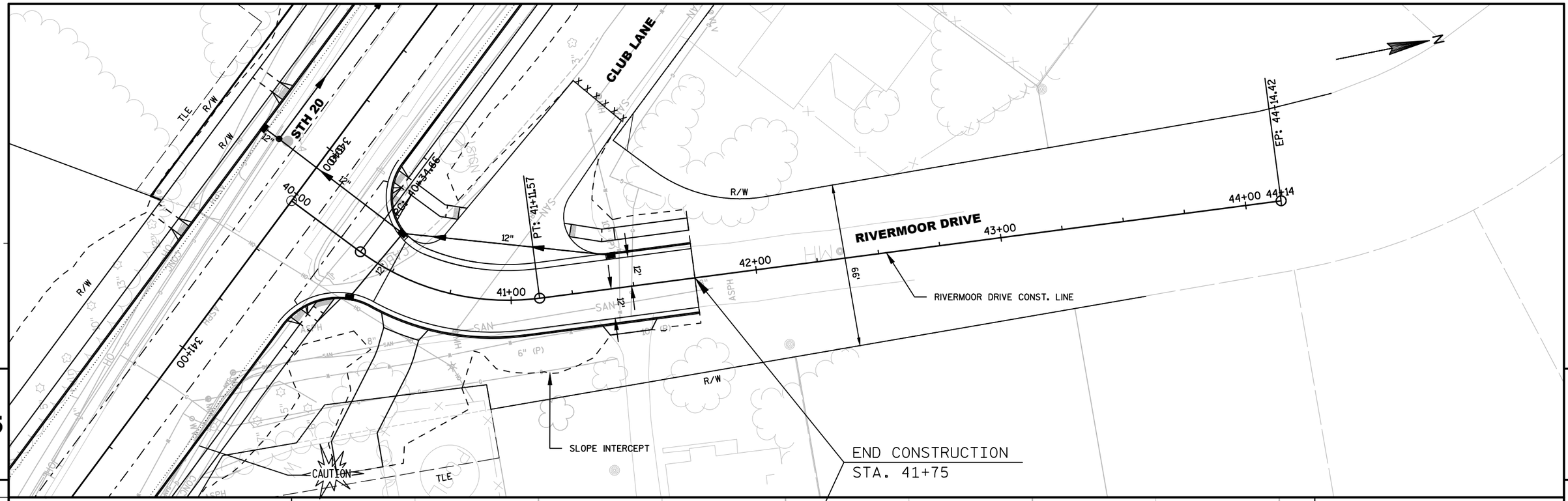
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: AUGUSTA	SHEET 473	E

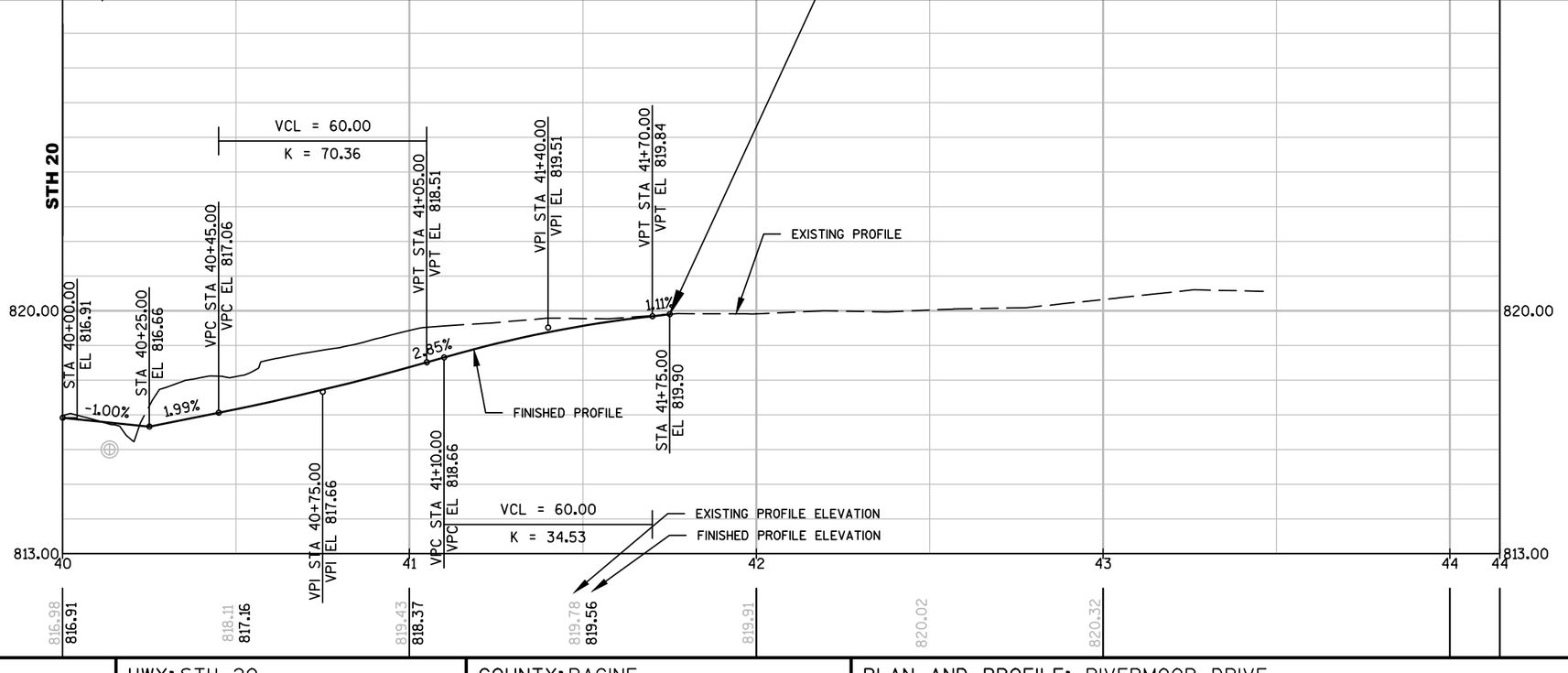
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\050116_PP_SIDE ROADS.DWG PLOT DATE : 4/26/2018 4:07 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : 1" = 40'_XREF





PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: RIVERMOOR ROAD	SHEET 474 E

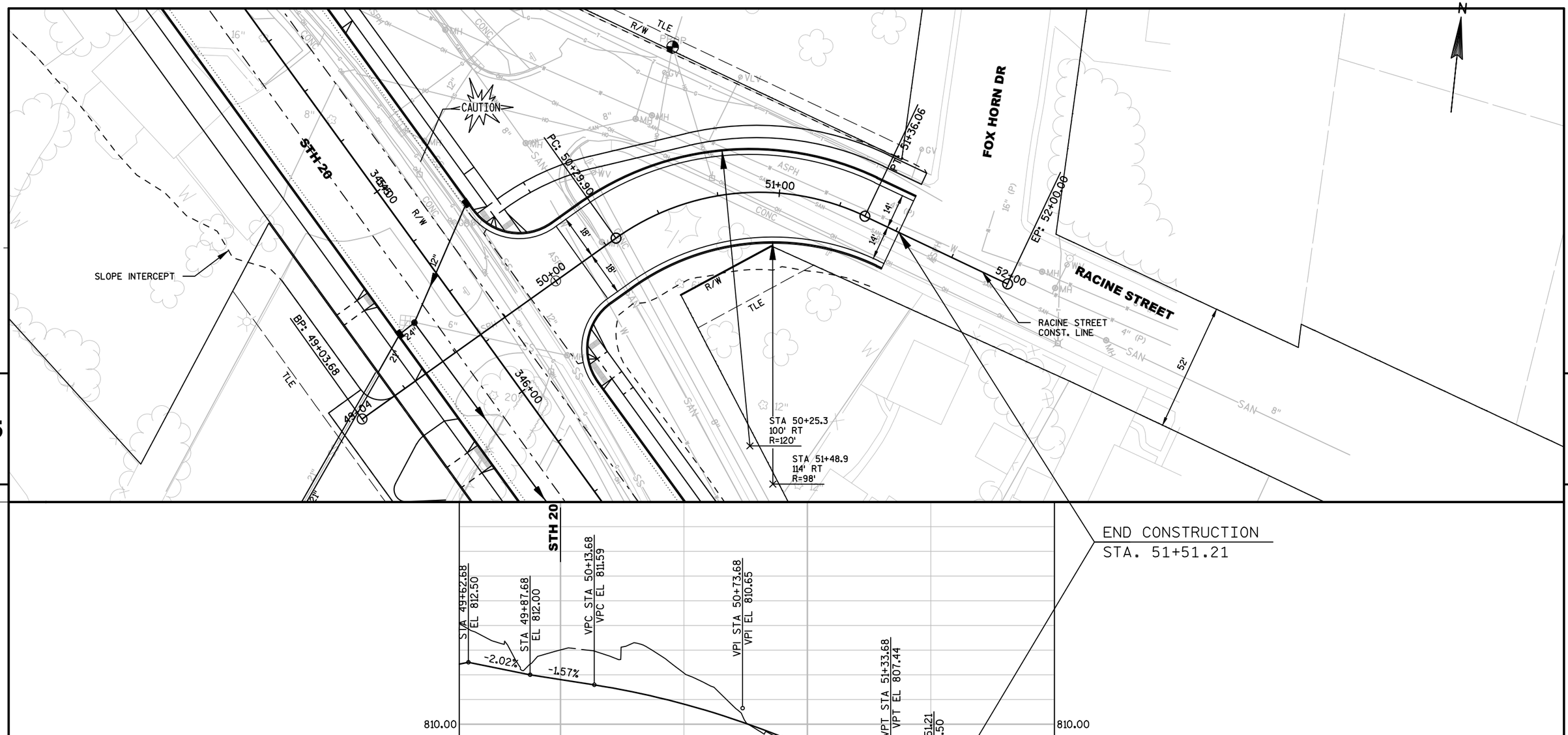




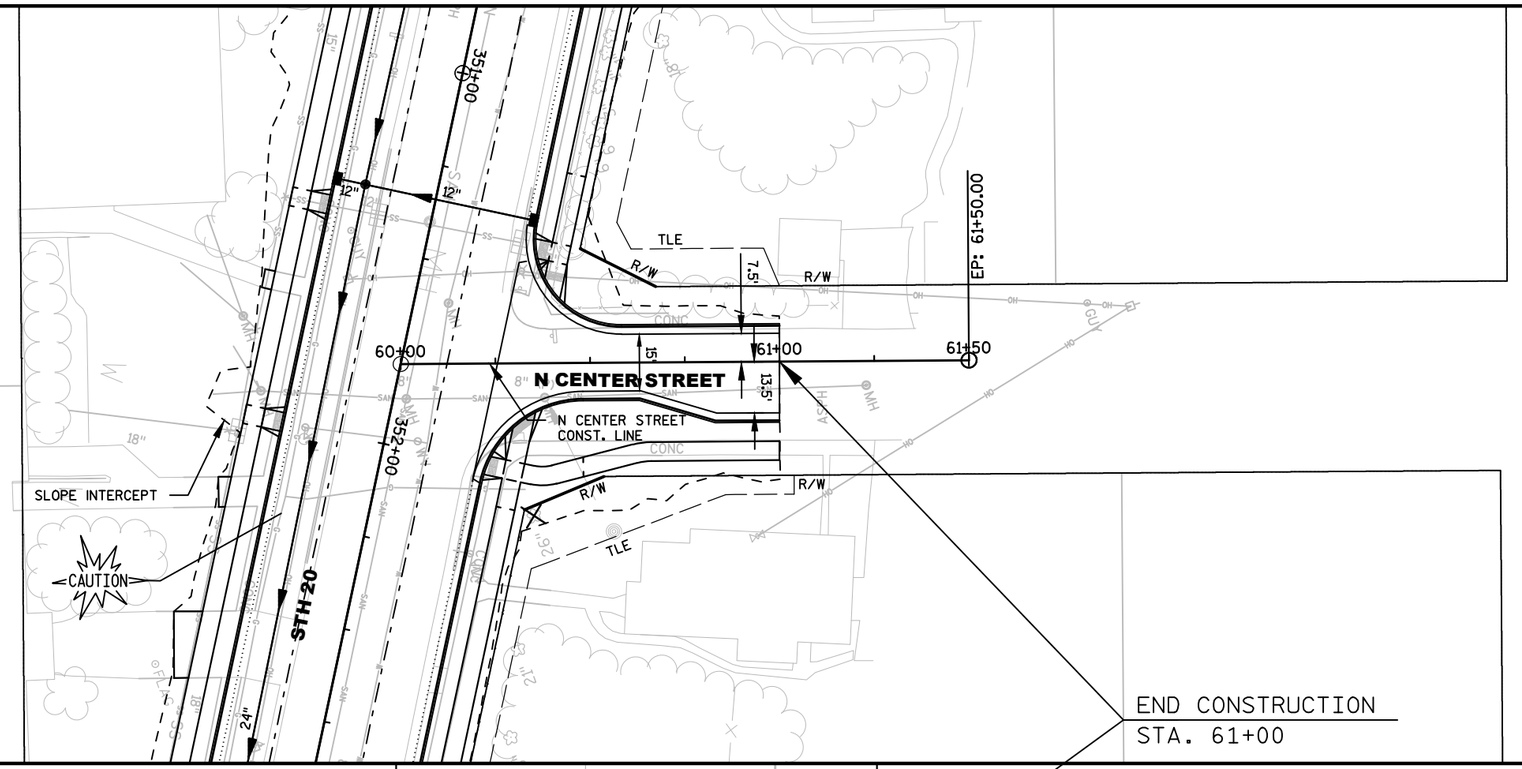
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: RIVERMOOR DRIVE	SHEET 475 E

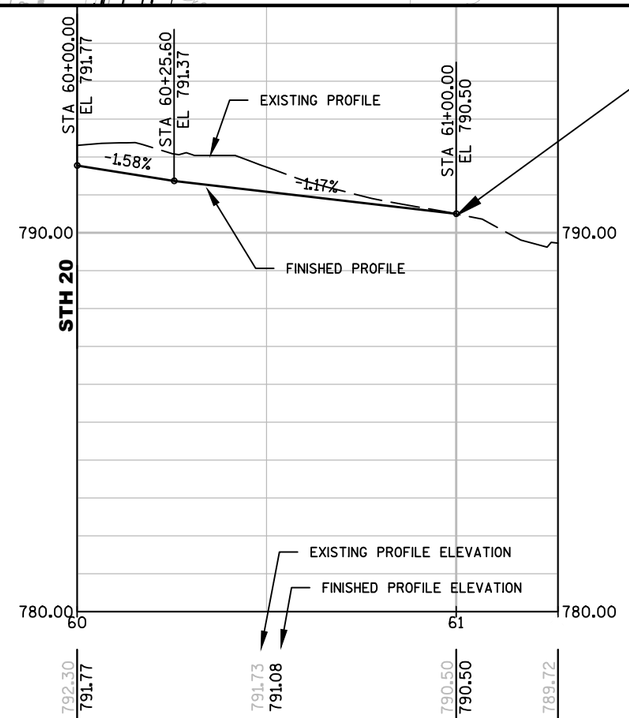
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\050116_PP_SIDE ROADS.DWG PLOT DATE : 4/26/2018 4:09 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

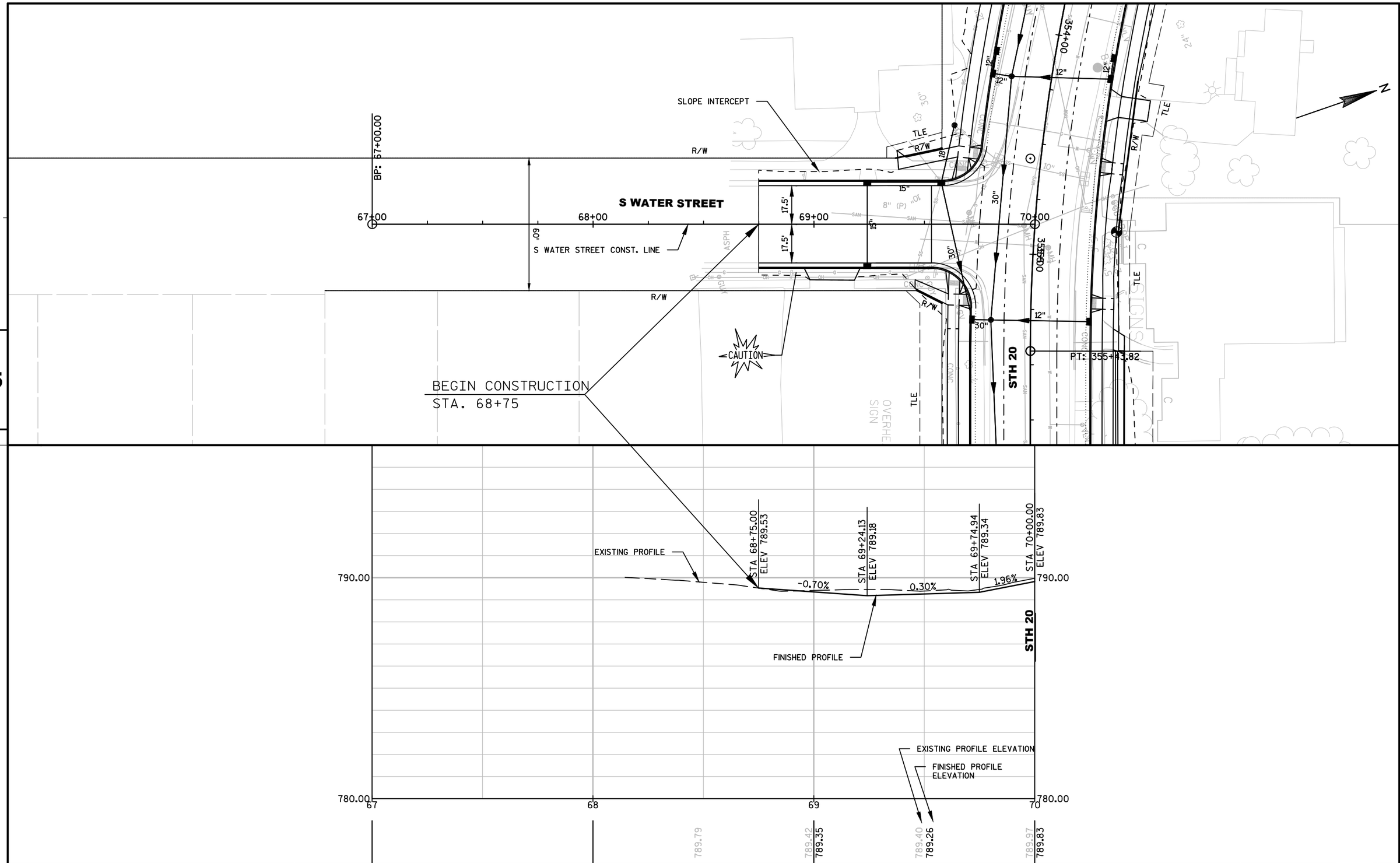


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: RACINE STREET	SHEET 476 E

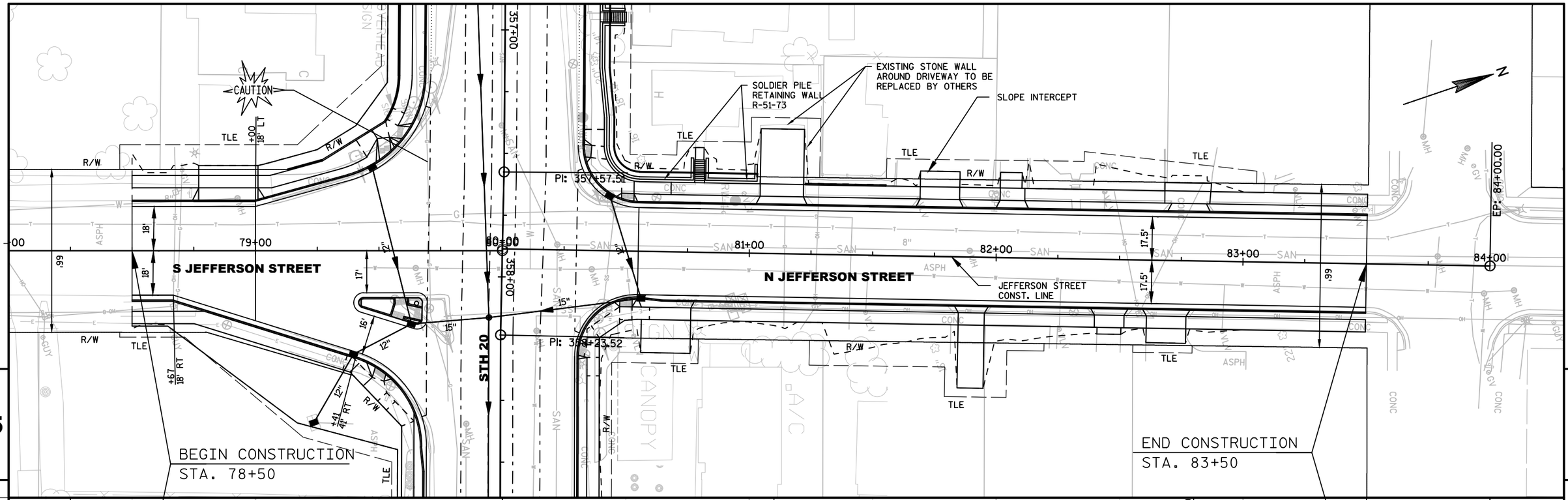




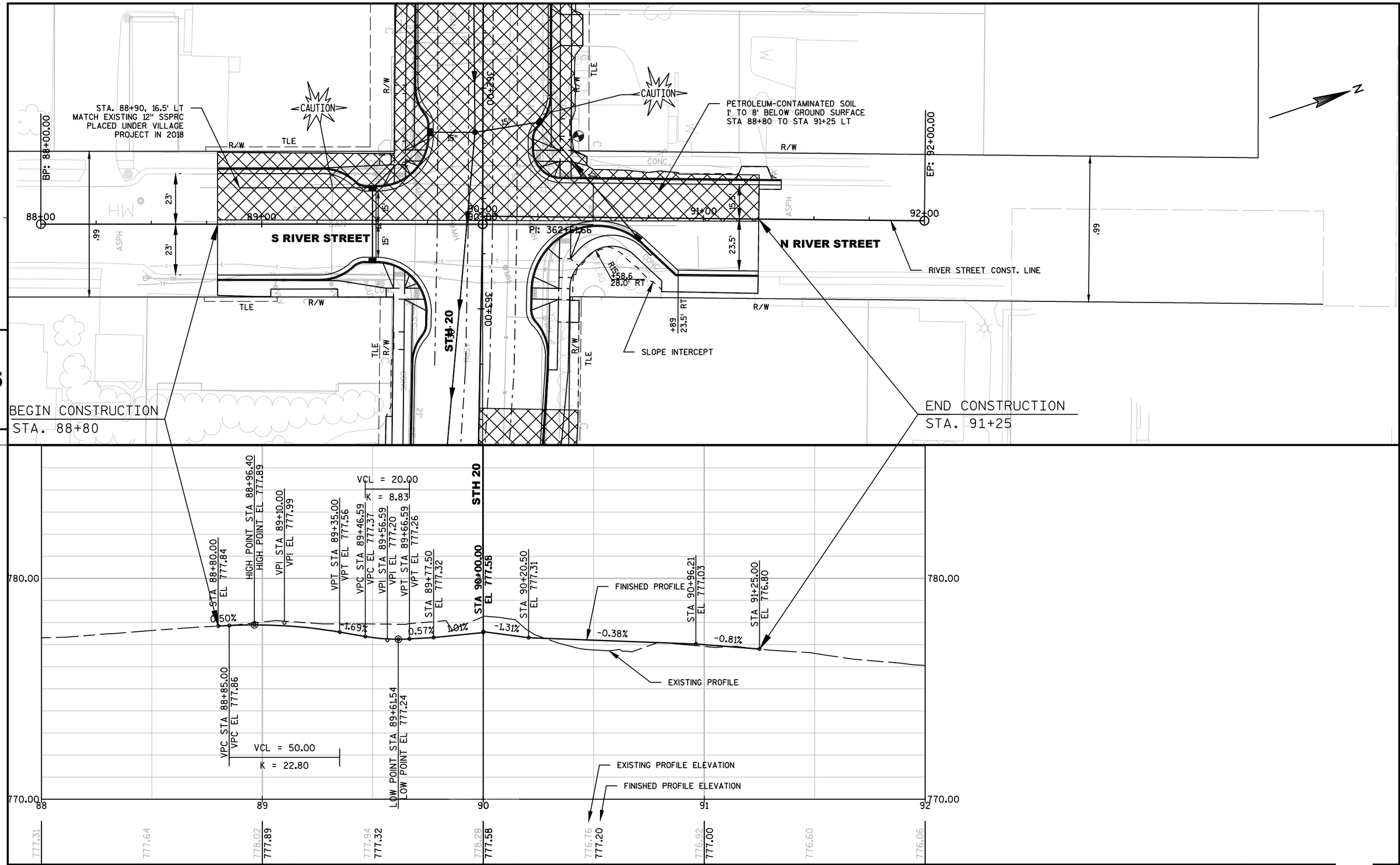
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: N. CENTER STREET	SHEET 477	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: S. WATER STREET	SHEET 478 E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: JEFFERSON STREET	SHEET 479 E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: RIVER STREET	SHEET 480 E

BENCHMARK			
NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
BM 20001	102+71.30, 32.61 LT	776.58	CORNER OF WATER TABLE AT NW CORNER OF 2ND STREET AND MAIN STREET (BLDG*238)

N

E MAIN STREET

N SECOND STREET

FIRST STREET

BM 20001

BP: 366+54.16

E MAIN STREET R/L

TLE

R/W

LEAD-CONTAMINATED SOIL
1' TO 6' BELOW GROUND SURFACE
STA 102+30 TO STA 102+70 RT

END CONSTRUCTION-STH 20

BEGIN CONSTRUCTION-E MAIN ST
STA. 103+50

LEAD-CONTAMINATED SOIL
1' TO 6' BELOW GROUND SURFACE
STA 103+25 TO STA 103+55 RT

PETROLEUM-CONTAMINATED SOIL
1' TO 8' BELOW GROUND SURFACE
STA 104+30 TO STA 105+00 RT

SLOPE INTERCEPT

PETROLEUM-CONTAMINATED SOIL
4' TO 8' BELOW GROUND SURFACE
STA 105+00 TO STA 105+75 RT

PETROLEUM-CONTAMINATED SOIL
1' TO 8' BELOW GROUND SURFACE
STA 105+30 TO STA 106+20 LT

HISTORIC PROPERTY
315 E. MAIN STREET

CAUTION

HONEY-O-HARE PROPERTIES LLC
201 MAIN ST

MAIN ST BUILDING LLC
2ND ST

WEIER
105
2ND ST

WINEY
307 E MAIN ST

CHARLES & LOUISE NOLL HOUSE
315 E MAIN ST

WEBER-RUTHERFORD
300
E MAIN ST

COLLINS
306
E MAIN ST

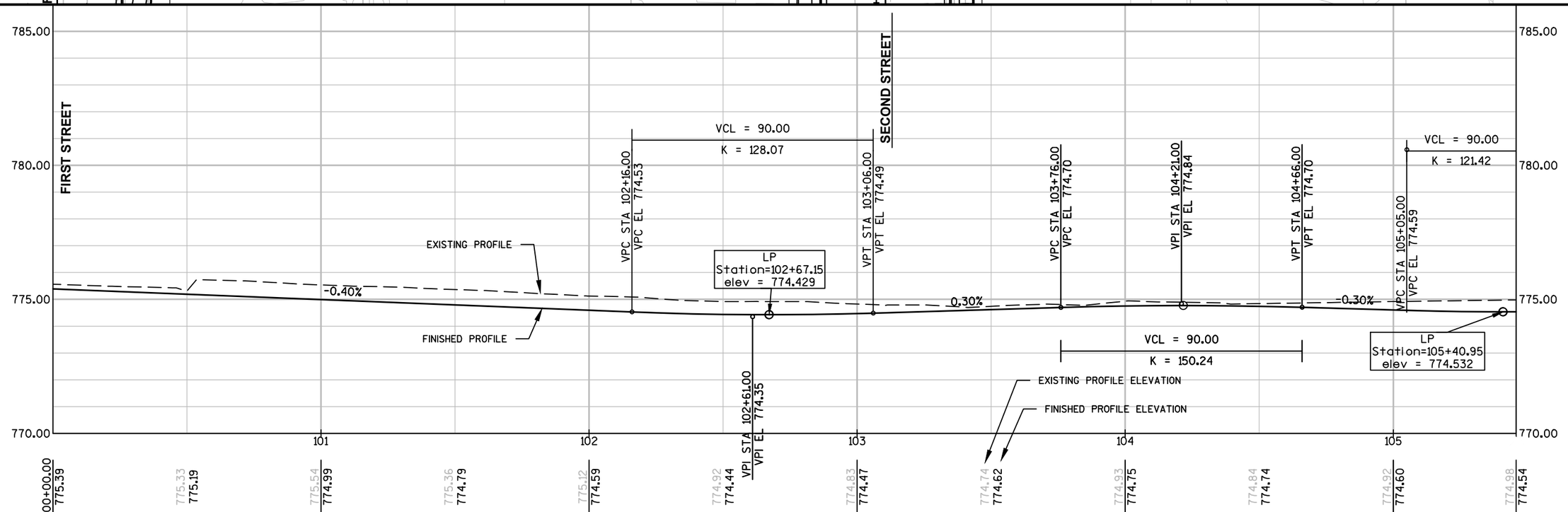
FEYRER
308
E MAIN ST

TICHIGAN LAKE INVESTERS LLC
314
E MAIN ST

BERENS
316
E MAIN ST

SPIERING BROTHERS LLC
320
E MAIN ST

FOLEY



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: E MAIN STREET	SHEET 481 E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\050113_PP.DWG PLOT DATE : 4/26/2018 3:46 PM PLOT BY : GUILLAMA, TINA PLOT NAME : PLOT SCALE : 1:40_XREF

N THIRD STREET

SLOPE INTERCEPT

CAUTION

N MILWAUKEE STREET

E MAIN STREET

E MAIN STREET R/L

PI: 106+13.53

PETROLEUM-CONTAMINATED SOIL
1' TO 8' BELOW GROUND SURFACE
STA 105+75 TO STA 107+50 RT

PETROLEUM-CONTAMINATED SOIL
1' TO 8' BELOW GROUND SURFACE
STA 108+85 TO STA 109+50 RT

PETROLEUM-CONTAMINATED SOIL
4' TO 8' BELOW GROUND SURFACE
STA 109+50 TO STA 110+15 RT

TRENCH FOR STORM
SEWER REPLACEMENT

HISTORIC PROPERTY
315 E. MAIN STREET

S MILWAUKEE STREET

N MILWAUKEE STREET

END CONSTRUCTION
STA. 109+75

THIRD STREET

VCL = 90.00
K = 121.42

EXISTING PROFILE

FINISHED PROFILE

0.45%

STA 109+75.00
EL 776.35

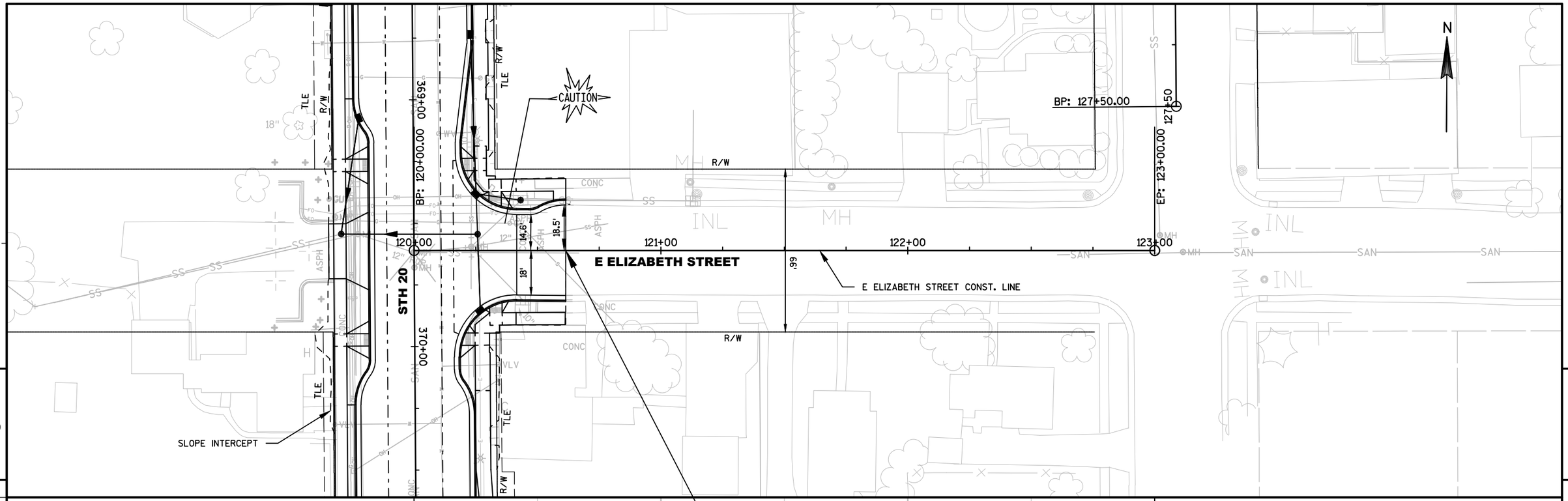
VPT STA 105+50.00
VPI EL 774.45

VPT STA 105+95.00
VPI EL 774.65

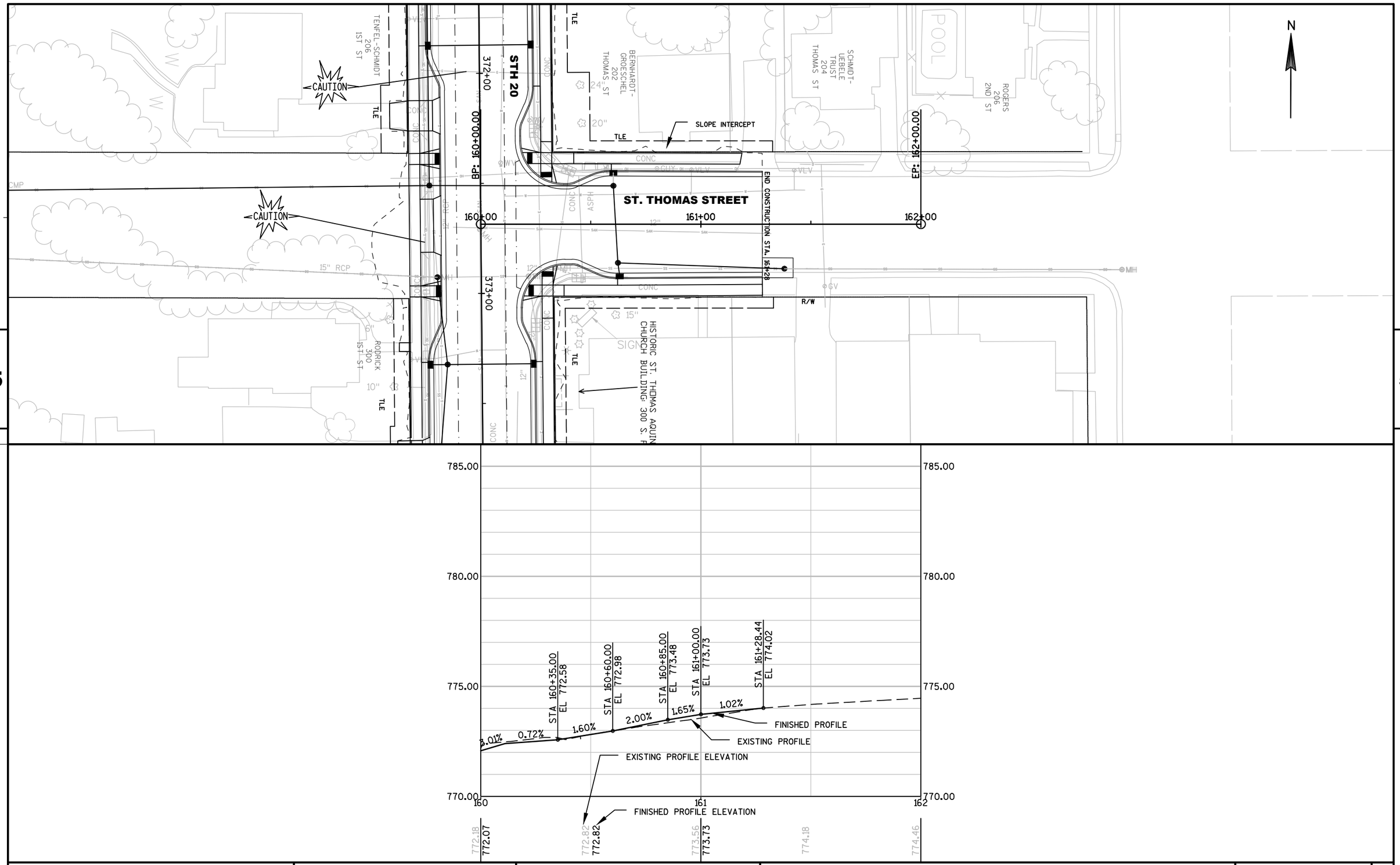
EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

| | | |

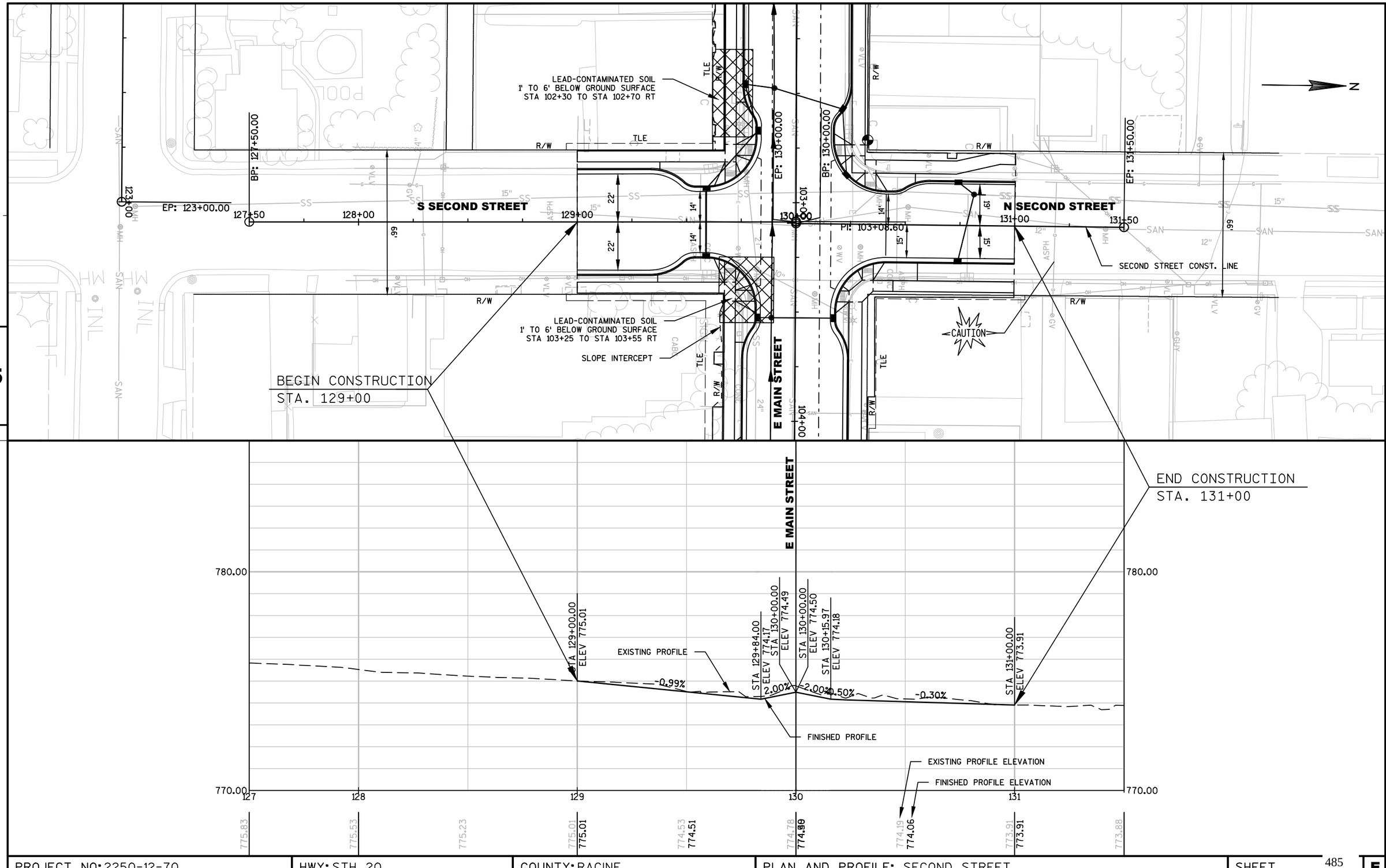


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: E. ELIZABETH STREET	SHEET 483 E

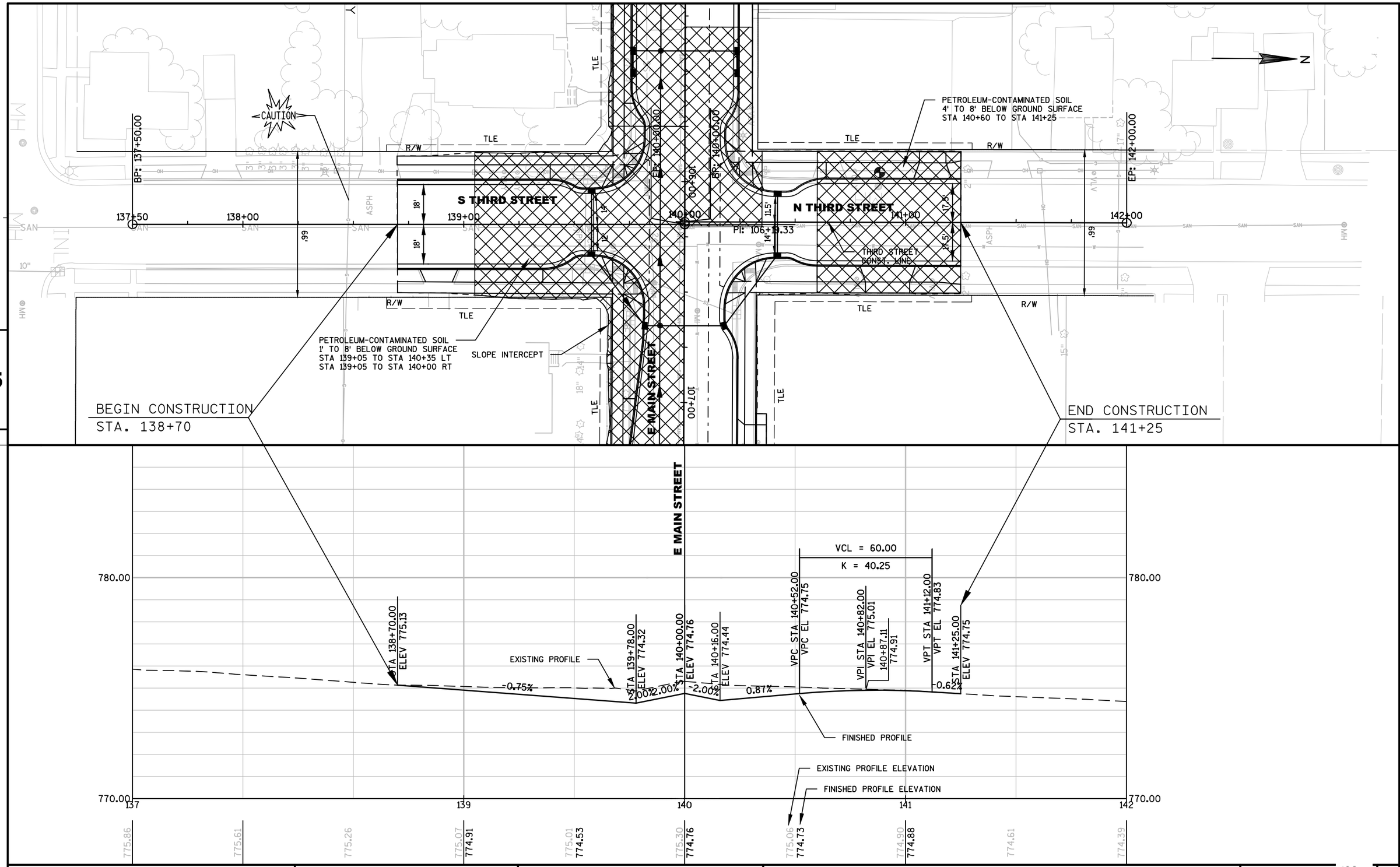


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: ST. THOMAS STREET	SHEET 484	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\050201_PP 90% ST.THOMAS.DWG PLOT DATE : 1/30/2018 6:12 PM PLOT BY : REBECCA SUTTON PLOT NAME : PLOT SCALE : 1:40_XREF



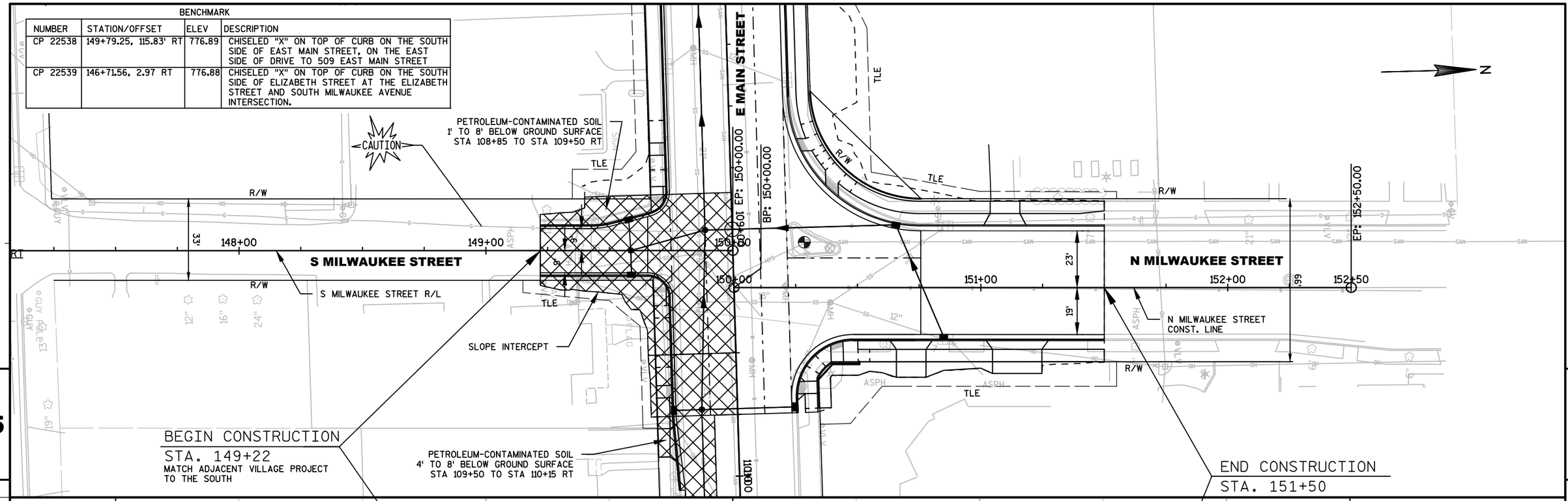
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: SECOND STREET	SHEET 485 E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: THIRD STREET	SHEET 486 E

BENCHMARK

NUMBER	STATION/OFFSET	ELEV	DESCRIPTION
CP 22538	149+79.25, 115.83' RT	776.89	CHISELED "X" ON TOP OF CURB ON THE SOUTH SIDE OF EAST MAIN STREET, ON THE EAST SIDE OF DRIVE TO 509 EAST MAIN STREET
CP 22539	146+71.56, 2.97 RT	776.88	CHISELED "X" ON TOP OF CURB ON THE SOUTH SIDE OF ELIZABETH STREET AT THE ELIZABETH STREET AND SOUTH MILWAUKEE AVENUE INTERSECTION.



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PLAN AND PROFILE: MILWAUKEE STREET	SHEET 487 E

Standard Detail Drawing List

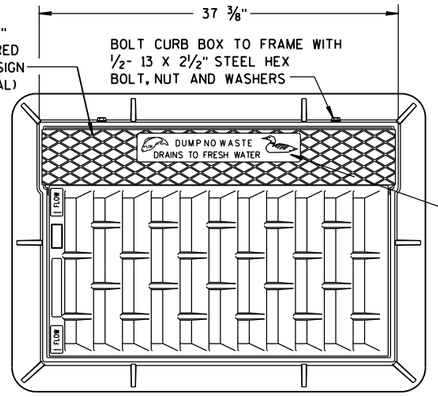
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08A09-02	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-19F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-19G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D18-02	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08D19-02	DRIVEWAY AND SIDEWALK RAMPS TYPE Z
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS
09B02-10	CONDUIT
09B04-11	PULL BOX
09B16-01	PULL BOX NON-CONDUCTIVE
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-10	CONCRETE BASE TYPE 10
09C12-09A	CONCRETE BASE TYPE 13
09C12-09B	CONCRETE BASE TYPE 13
09C14-02	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09D05-01	L30 LIGHTING CONTROL CABINET 240/480 VOLT
09E01-14B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E04-06	WALKWAY LIGHTING UNIT AND CONCRETE BASE, TYPE 11
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-08A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-08B	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-08C	TYPE 12 POLE 35'-55' MONOTUBE ARM
09E08-08D	TYPE 13 POLE 35'-55' MONOTBE ARM
09E08-08E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09E12-01B	OVER HEIGHT TYPE 10 POLE 15'-30' MONOTUBE ARM
09E12-01D	OVER HEIGHT TYPE 13 POLE 35'-55' MONOTBE ARM
09E12-01E	GENERAL NOTES AND HARDWARE DETAILS FOR OVER HEIGHT TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F15-04A	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
09G01-04A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09H16-01	INSTALL WIRELESS ANTENNA
10A01-03	ELECTRICAL HANDHOLE WIRING
10A02-03	IDENTIFICATION PLAQUES LIGHT POLES
10A05-02	ELECTRICAL DETAILS GROUND MOUNT LIGHT POLES ISOLATED NEUTRAL SYSTEMS
10A08-02	ELECTRICAL DETAILS STRUCTURE MOUNT LIGHT POLES ISOLATED NEUTRAL SYSTEMS

6

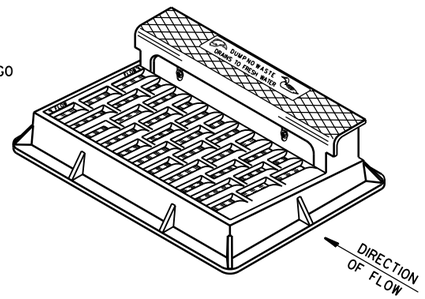
Standard Detail Drawing List

10A18-05A	LUMINAIRE ARMS, SINGLE MEMBER 6-INCH CLAMP
11B02-02	CONCRETE MEDIAN NOSE
12A03-10	NAME PLATE (STRUCTURES)
13B02-08A	CONCRETE PAVEMENT APPROACH SLAB
13B02-08B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-09	URBAN DOWELED CONCRETE PAVEMENT
13C14-07A	BASE PATCHING CONCRETE
13C14-07B	BASE PATCHING CONCRETE
13C14-07C	BASE PATCHING CONCRETE
13C18-06A	CONCRETE PAVEMENT JOINTING
13C18-06B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-06C	CONCRETE PAVEMENT JOINT TYPES
13C18-06D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-04	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-04	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-14A	PAVEMENT MARKING SYMBOLS
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C07-14E	PAVEMENT MARKING FOR BIKE LANES
15C08-18A	LONGITUDINAL MARKING (MAINLINE)
15C08-18B	PAVEMENT MARKING (TURN LANES)
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-04	MEDIAN ISLAND MARKING
15C24-04	36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE
15C27-02A	DOUBLE ARROW WARNING SIGN PLACEMENT
15C27-02B	PAVEMENT MARKING (ISLANDS)
15C29-05A	BICYCLE LANE MARKING
15C29-05B	PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-02A	PAVEMENT MARKING (INTERSECTIONS)
15D06-03	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

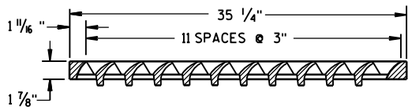
6

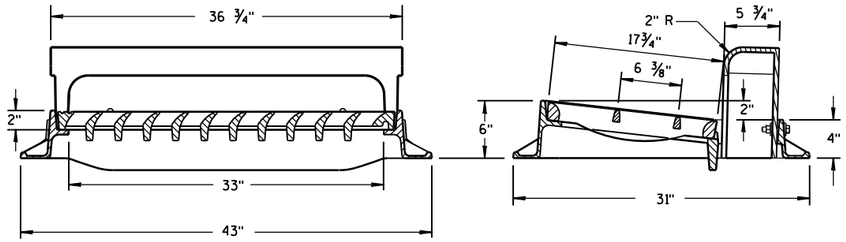


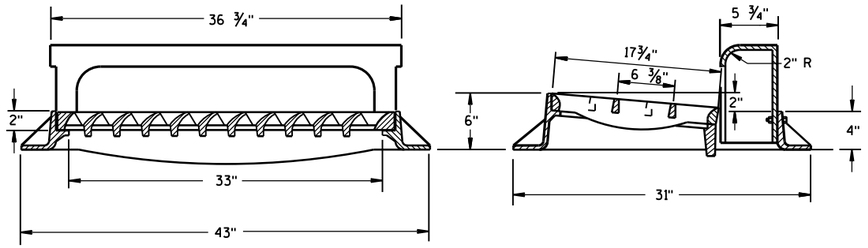
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

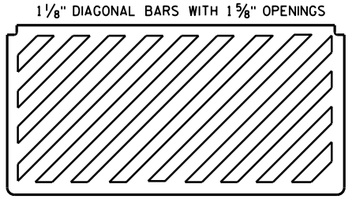






TYPE "H"

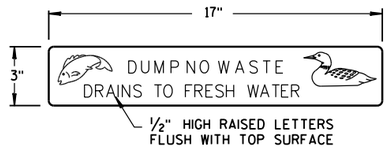
NOTE: EITHER CASTING IS ACCEPTABLE



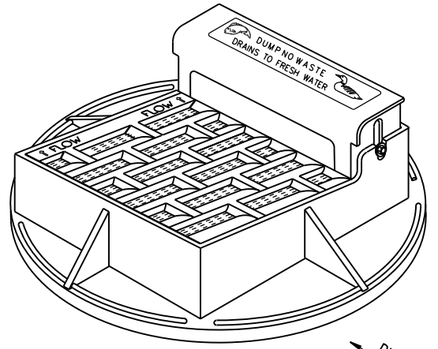
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

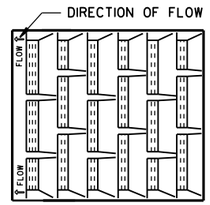
NOTE:
GRATE IS REVERSIBLE.

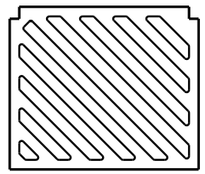
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

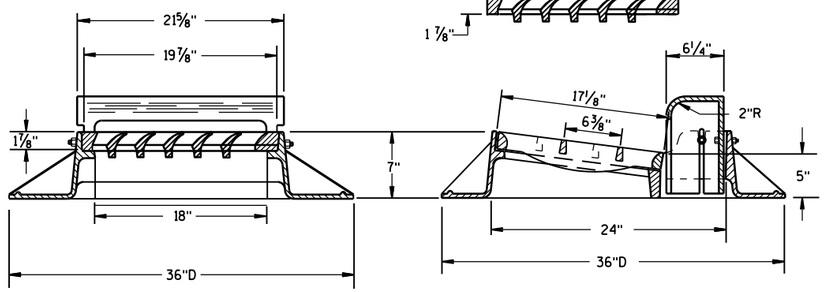




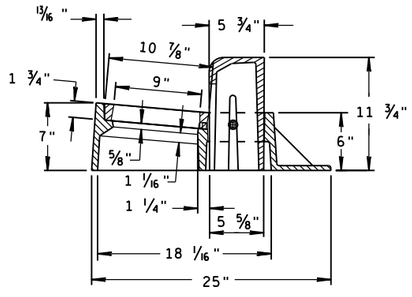
SPECIAL GRATE FOR TYPE "A" COVER

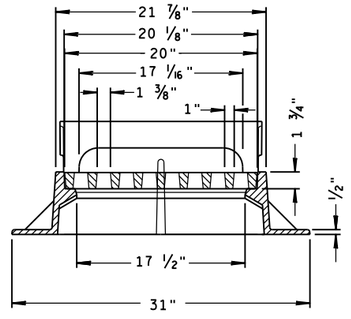
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"





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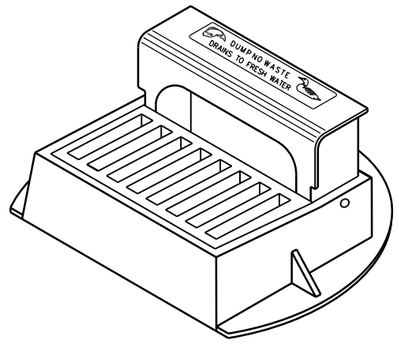

INLET COVERS
TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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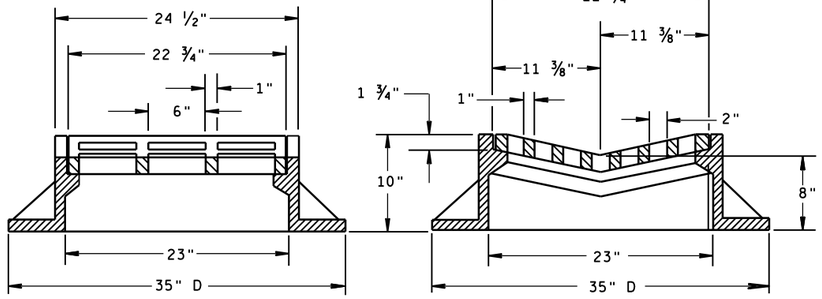
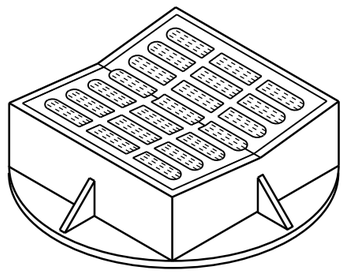
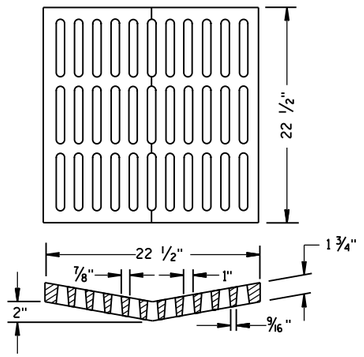
S.D.D. 8 A 5-19a



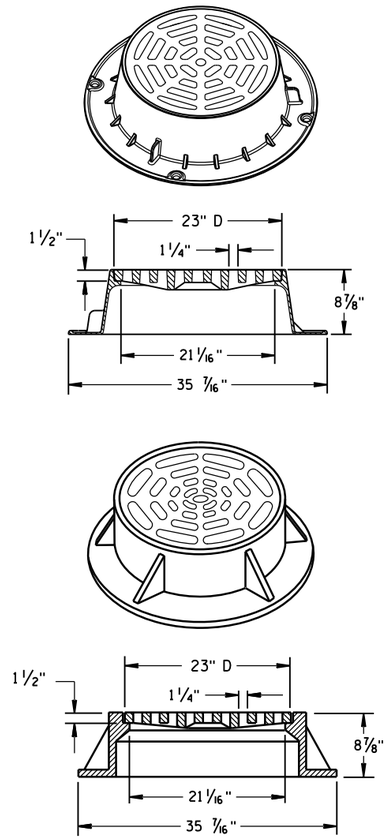


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

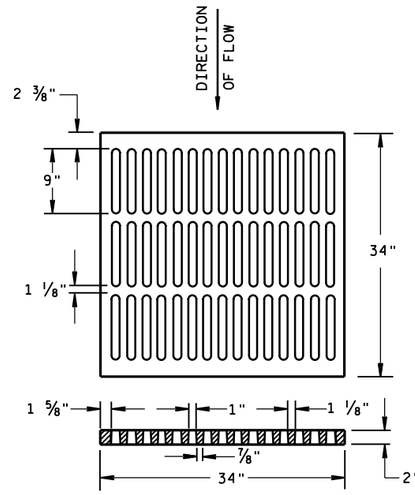
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

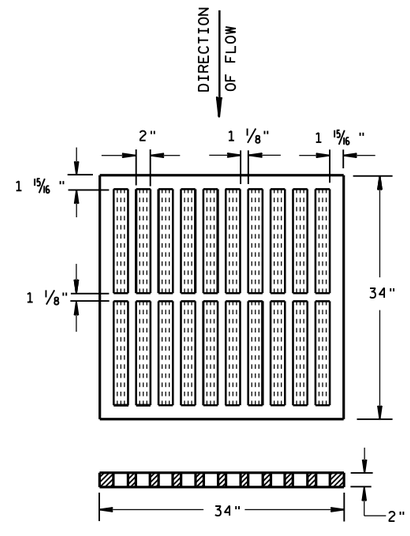
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



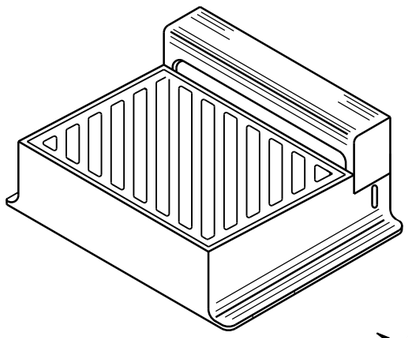
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

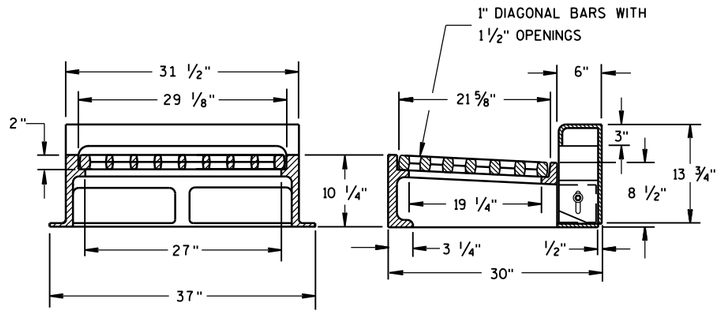


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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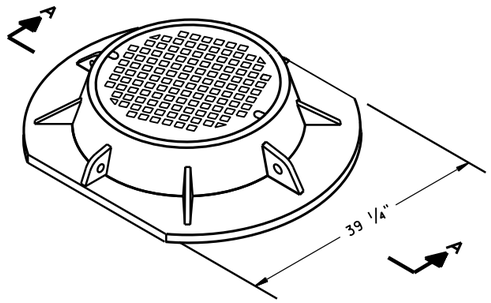
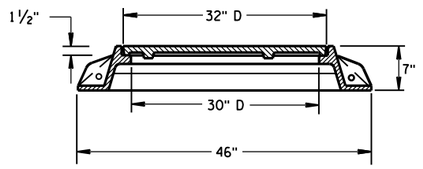
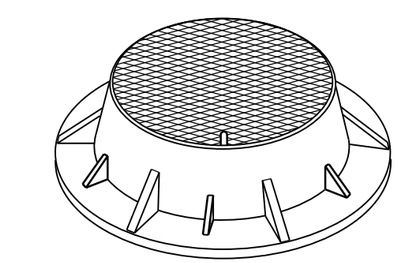
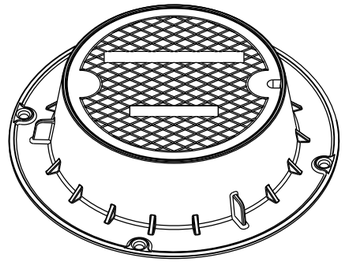
S.D.D. 8 A 5-19b

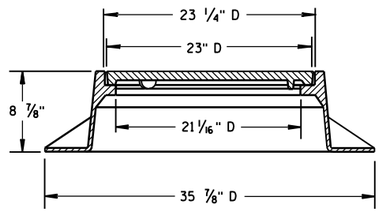


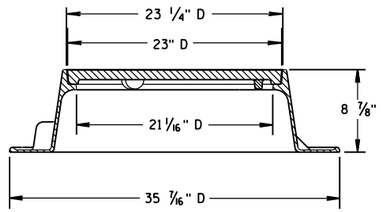


SECTION A-A
TYPE "K"









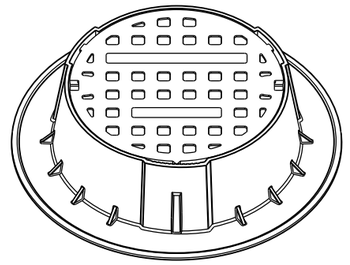
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

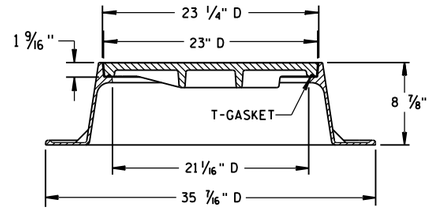
GENERAL NOTES

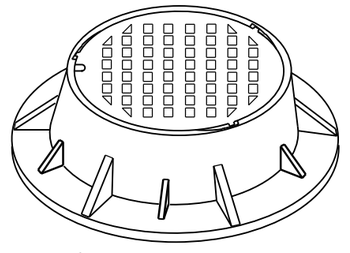
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

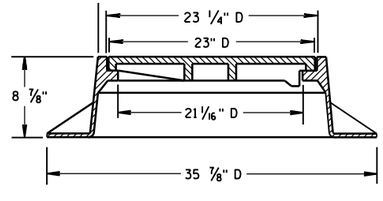
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

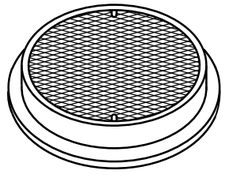


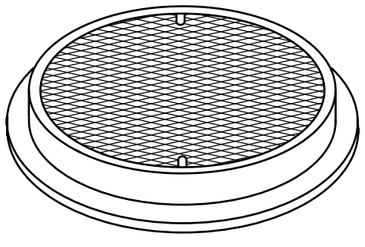


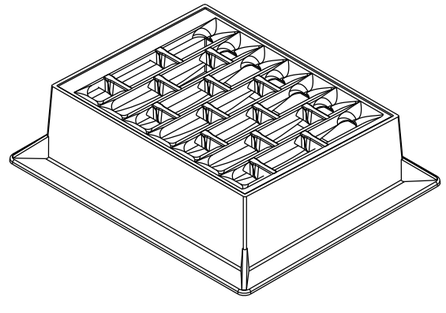


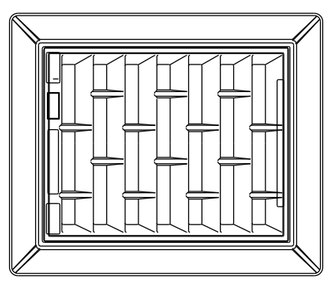


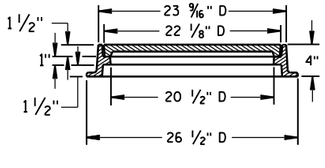
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



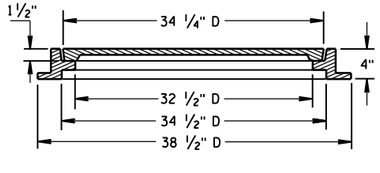




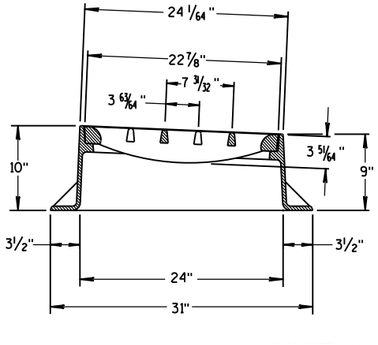


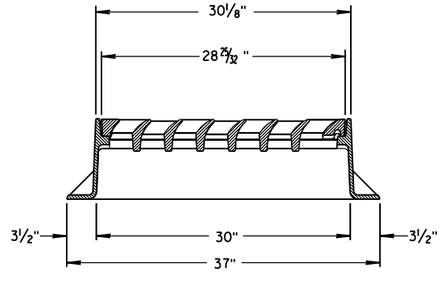


TYPE "L"



TYPE "M"





INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

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S.D.D. 8 A 5-19d

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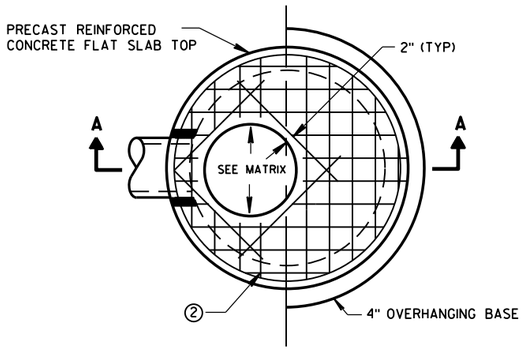
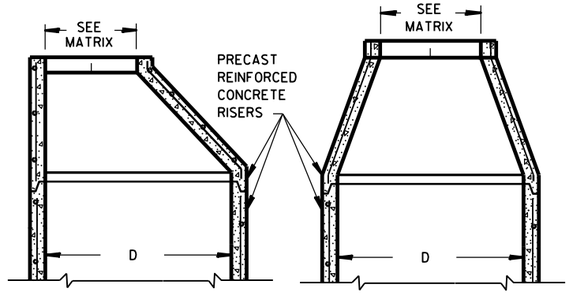
S.D.D. 8 A 5-19d

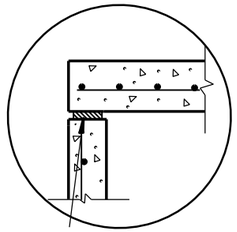


PLAN VIEW CIRCULAR OPENING

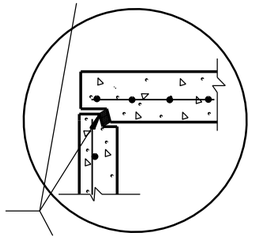


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

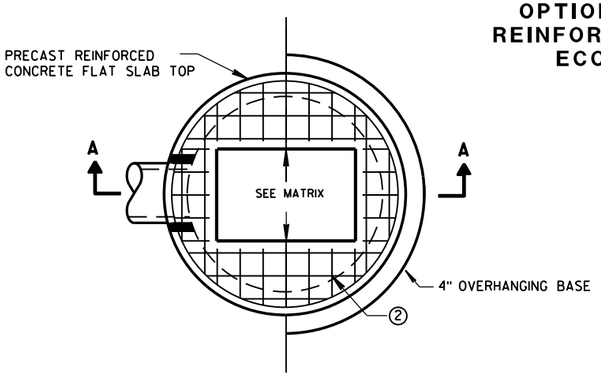
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



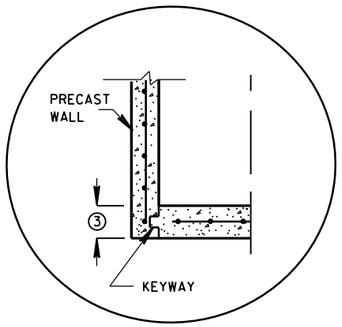
TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT

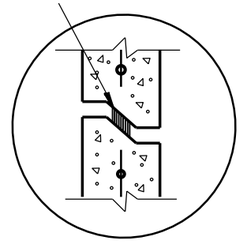


PLAN VIEW RECTANGULAR OPENING



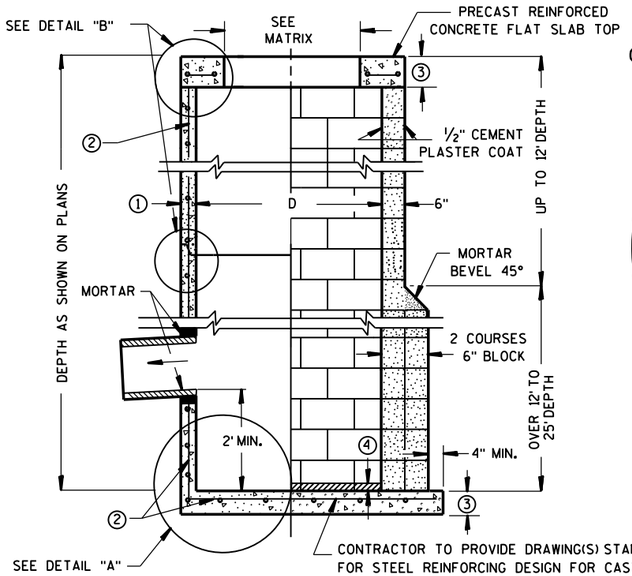
PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



RISER WITH TONGUE AND GROOVE JOINT

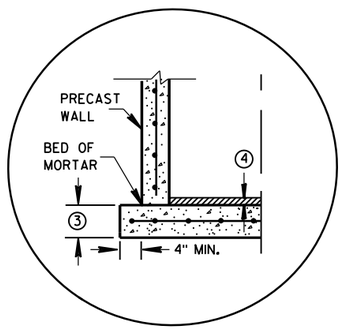
DETAIL "B"



SECTION A-A

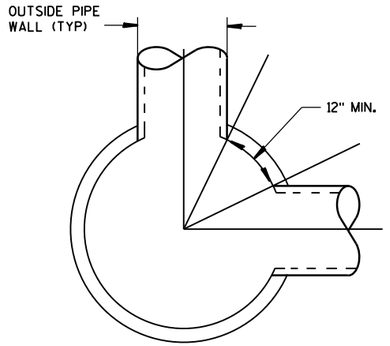
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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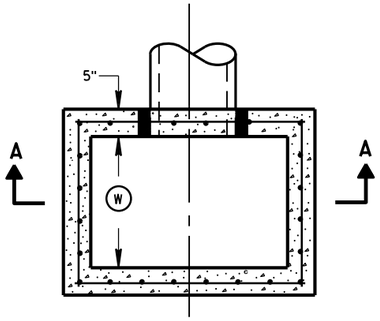
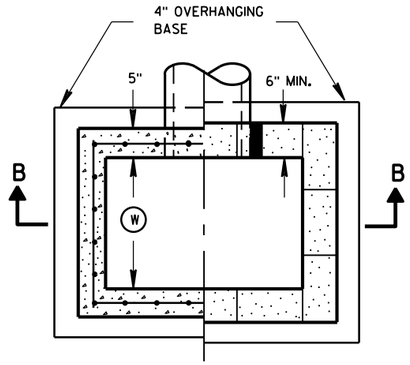
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVI
FHWA

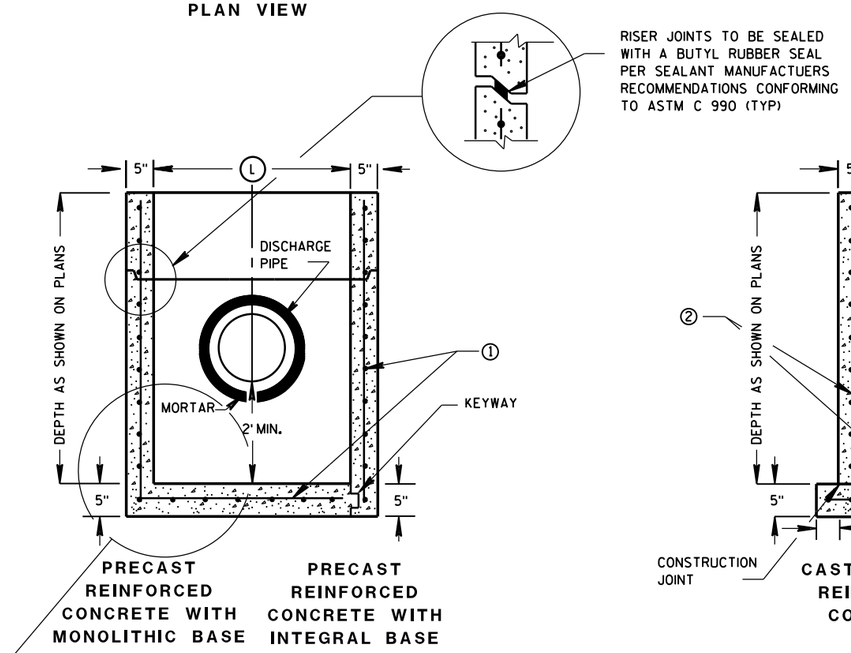
S.D.D. 8 A 8-2



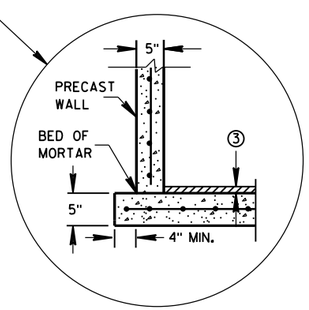
PLAN VIEW



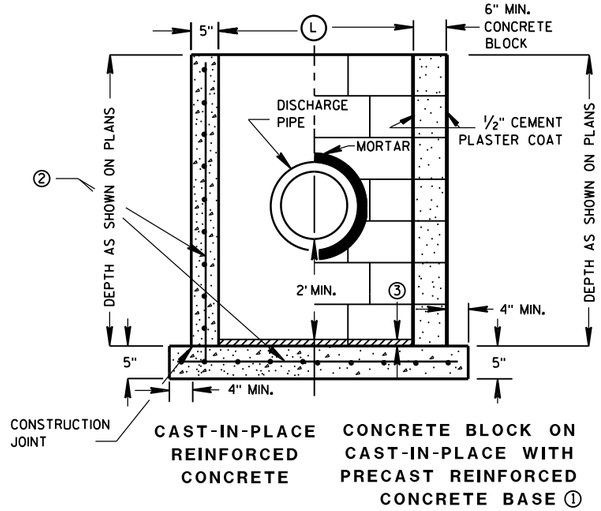
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST CATCH BASIN UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

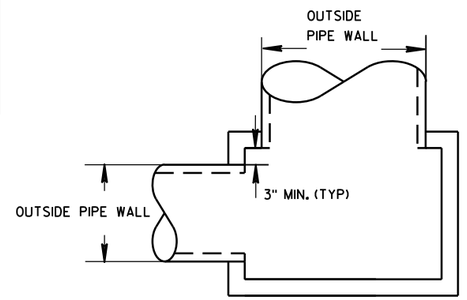
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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ROADWAY STANDARDS UNIT SUPERVISOR
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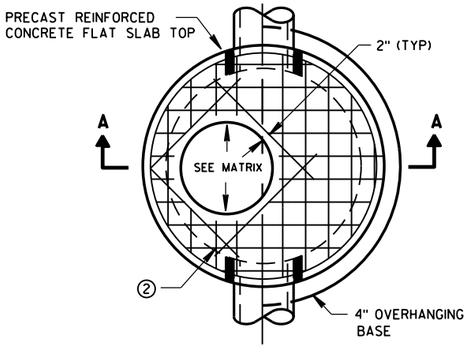
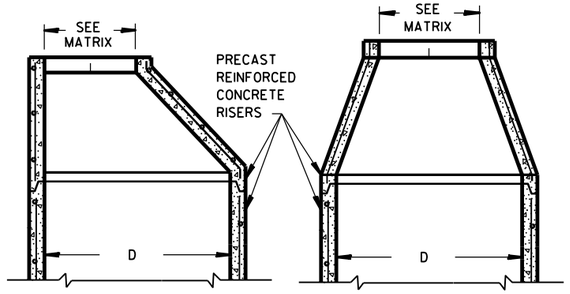
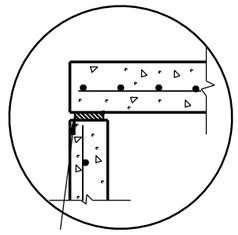


PLAN VIEW CIRCULAR OPENING

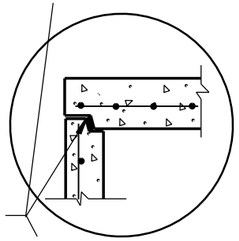


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

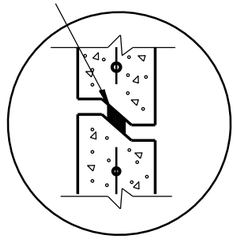


TOP WITH PLAIN END JOINT



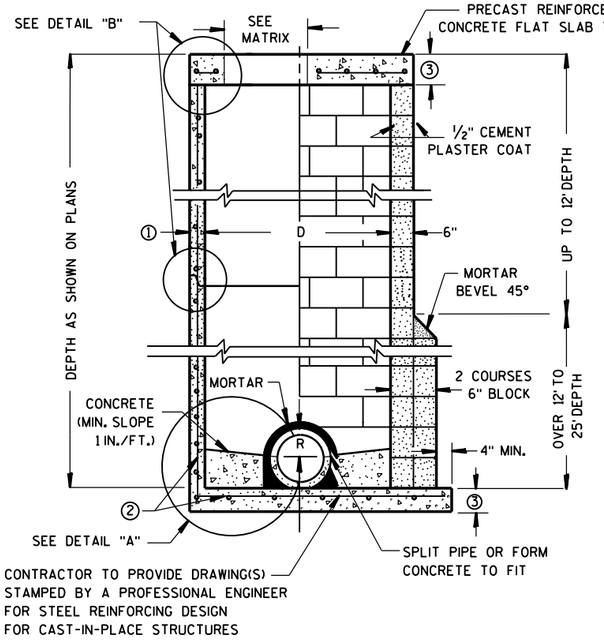
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



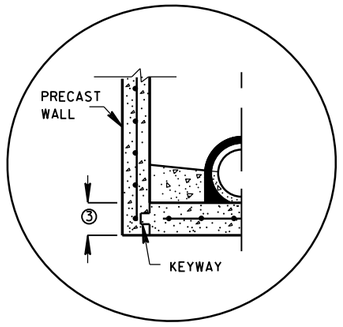
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

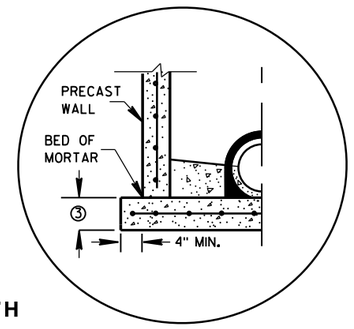


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

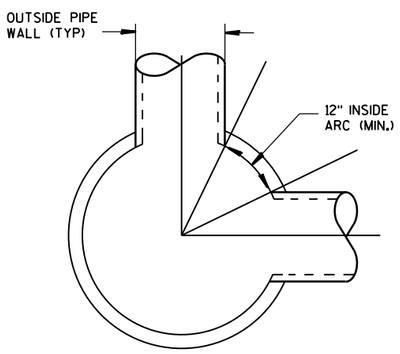


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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Sept., 2016
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
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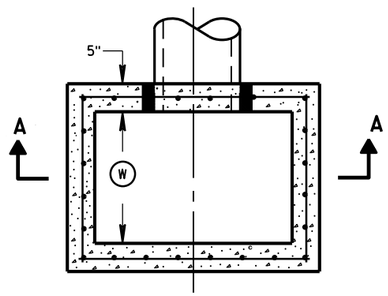
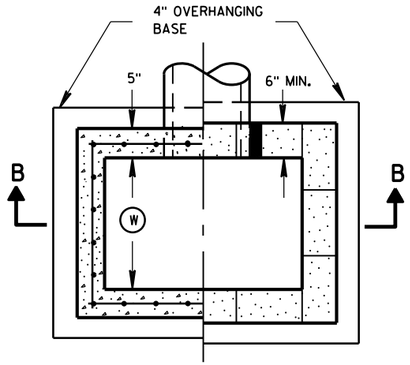
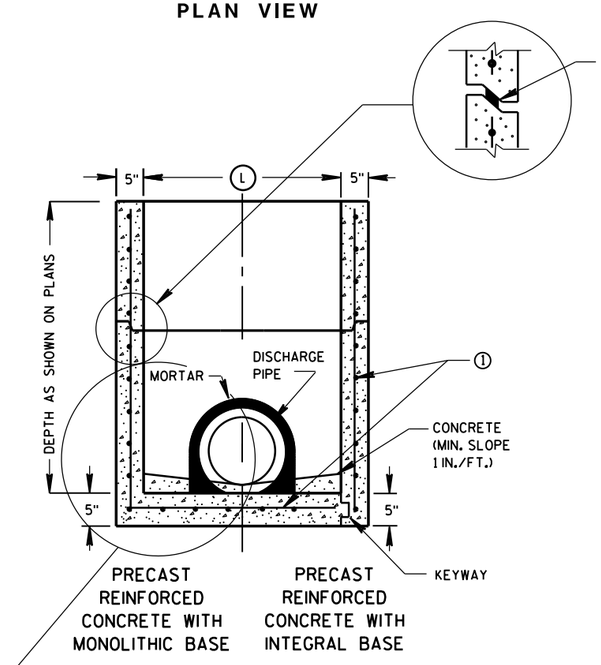


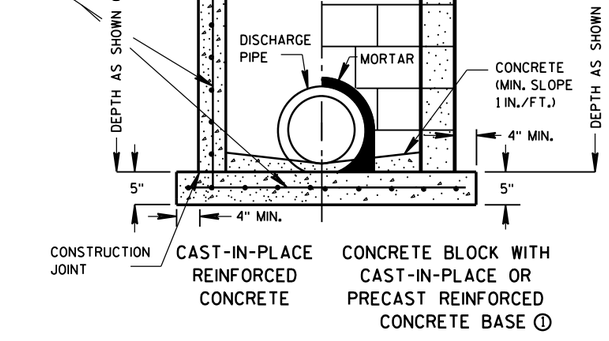
PLAN VIEW



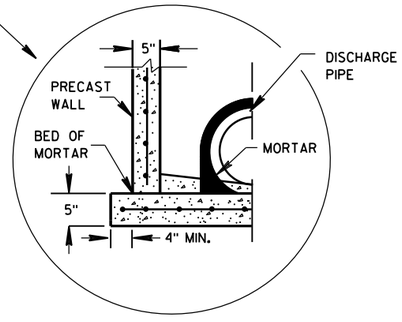
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

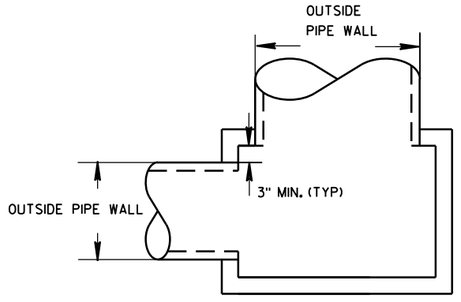
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH Ⓦ (FT)	LENGTH Ⓛ (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



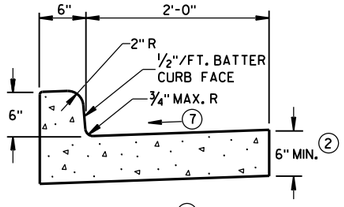
DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

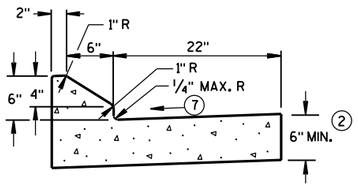
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT
UNIT SUPERVIS
FHWA

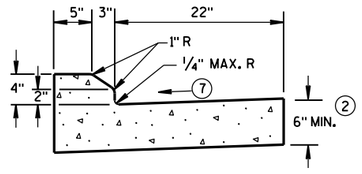
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT



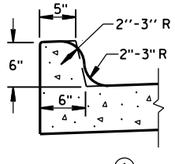
TYPES A (1) & D



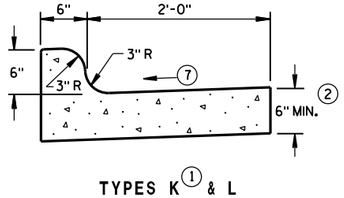
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

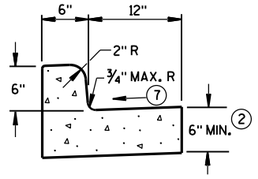


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



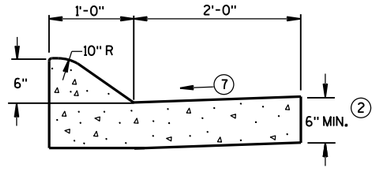
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

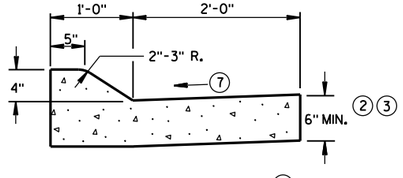


TYPES A (1) & D

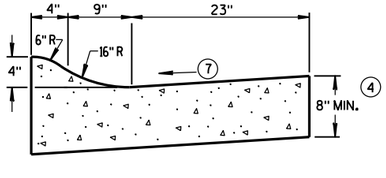
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

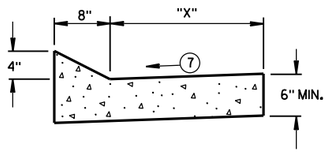


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

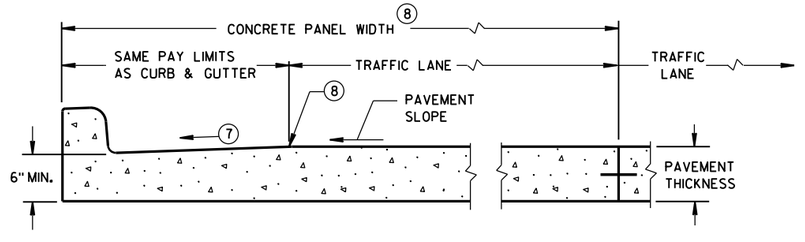
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

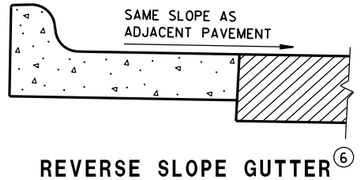
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB & GUTTER

* BIKE LANE IS NOT SHOWN.



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6

S.D.D. 8 D 1-20a

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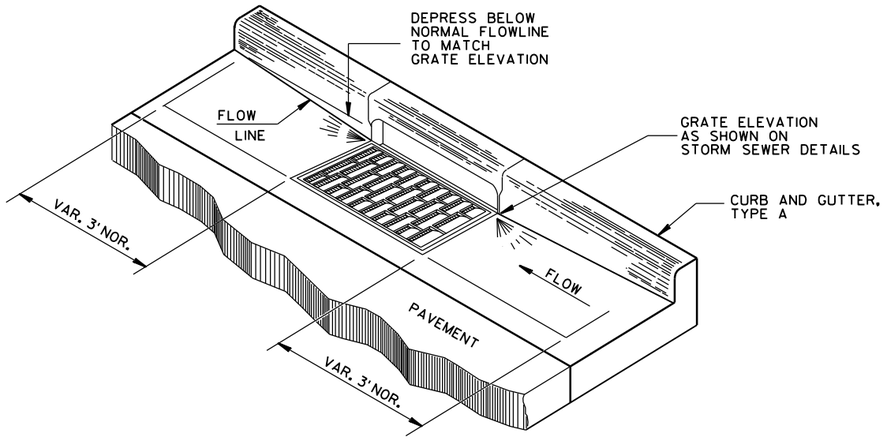
S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

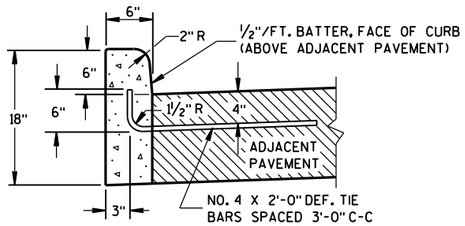
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

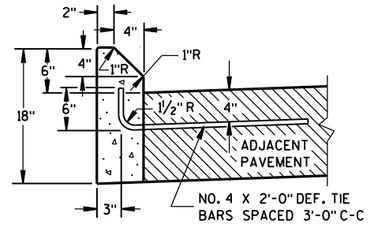
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

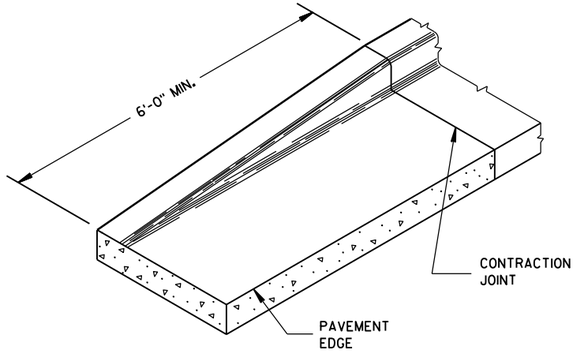


TYPES A(1) & D

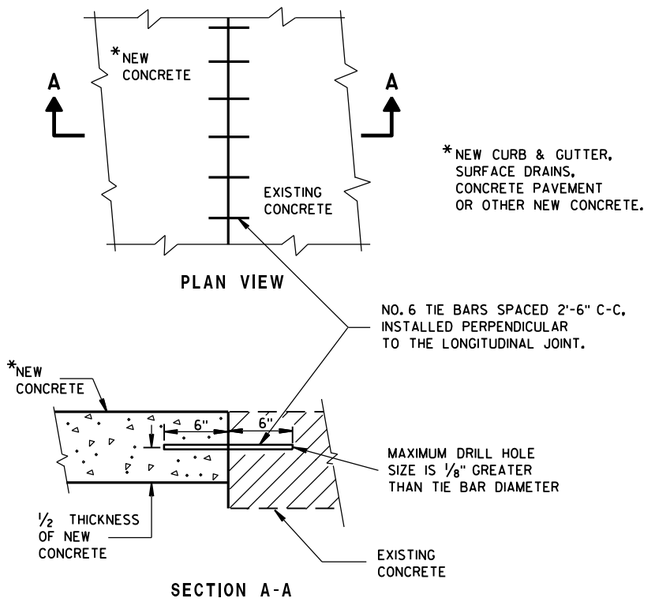


TYPES G(1) & J

CONCRETE CURB



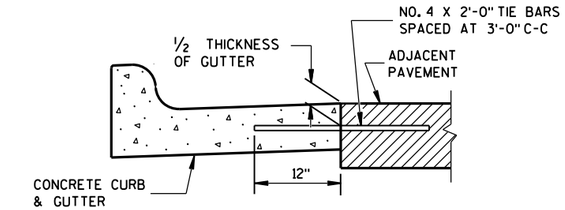
END SECTION CURB & GUTTER



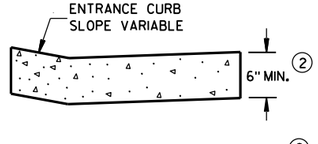
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR
498
ENT
FHWA

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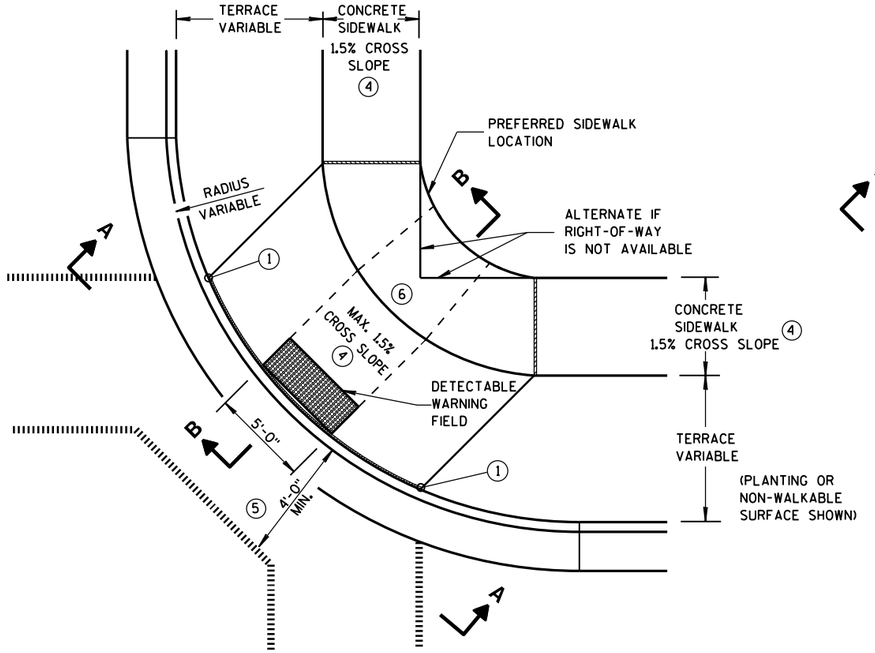
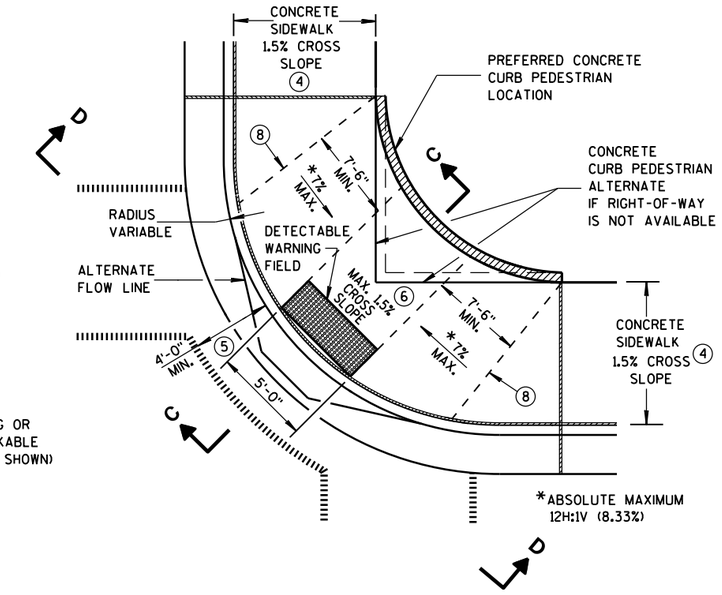
S.D.D. 8 D 1-20b



PLAN VIEW

TYPE 1 RAMP

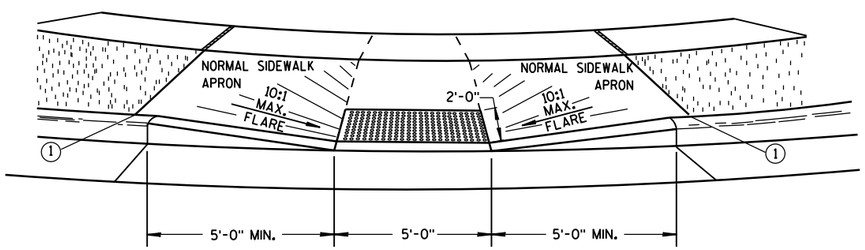
(CENTER OF CORNER RADIUS)



PLAN VIEW

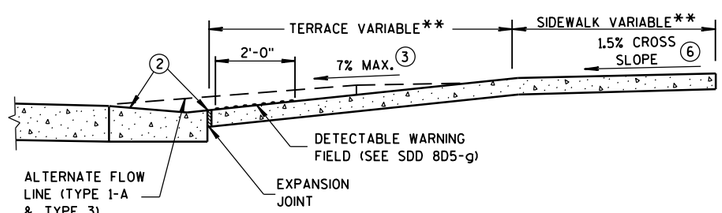
TYPE 1-A RAMP

(NO TERRACE)

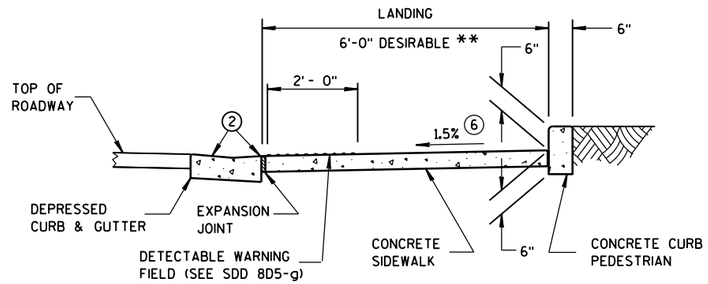


VIEW A-A

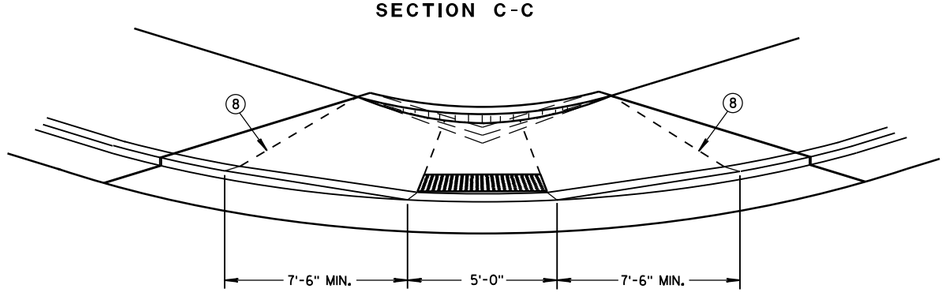
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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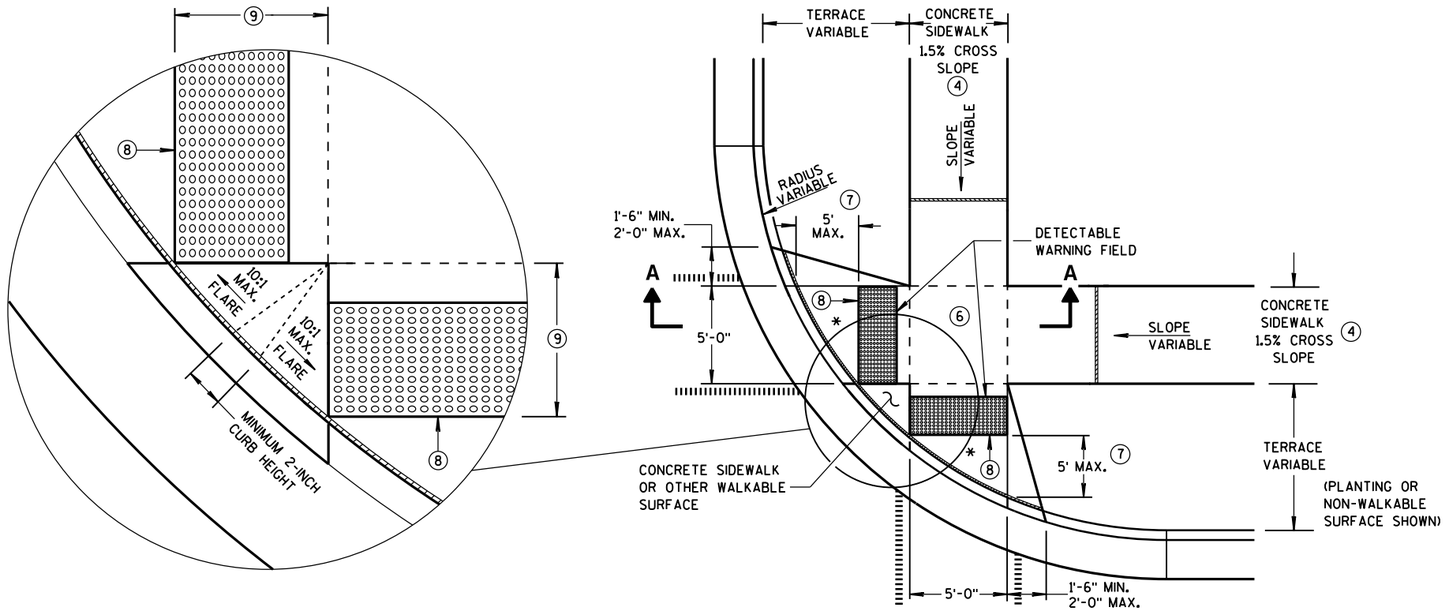
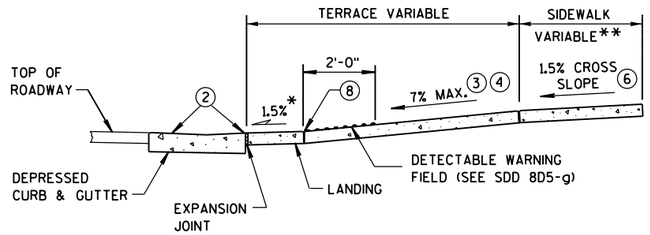
S.D.D. 8 D 5-19a



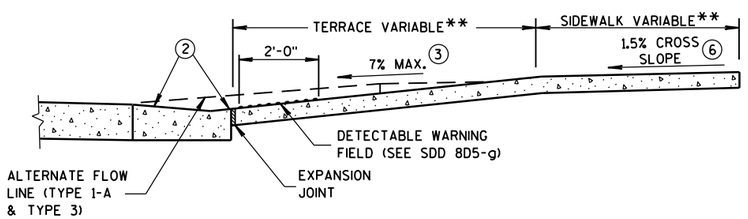
PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

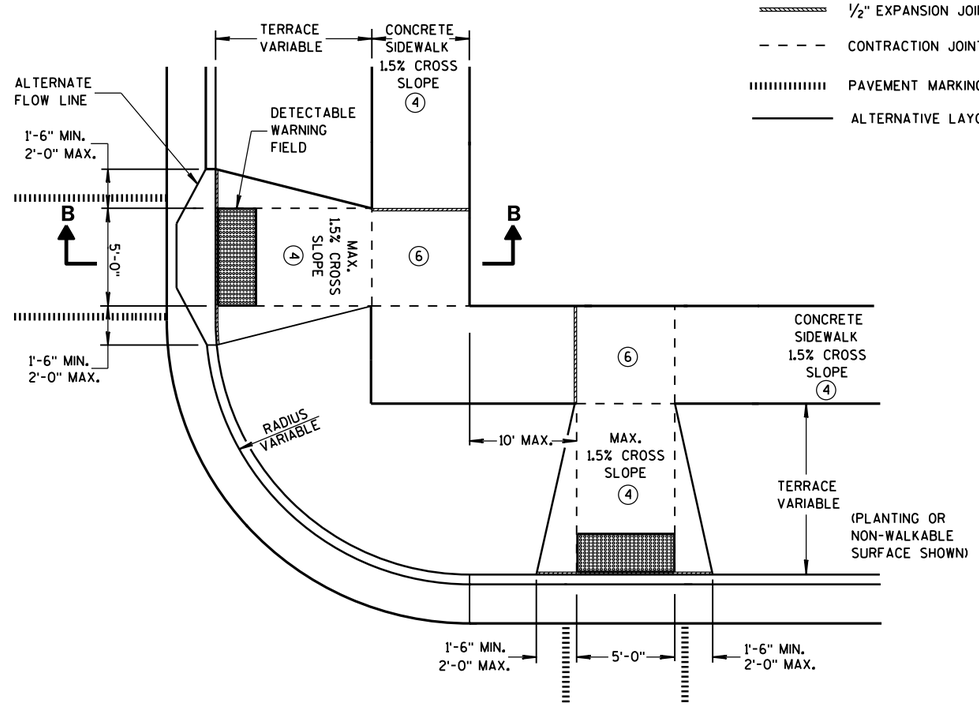


SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

LEGEND

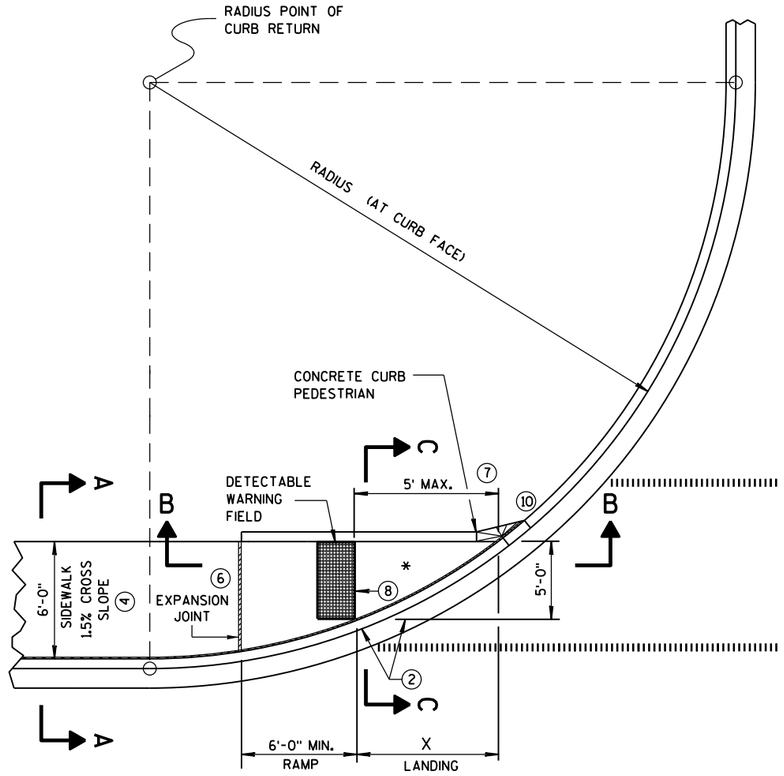
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 500

6

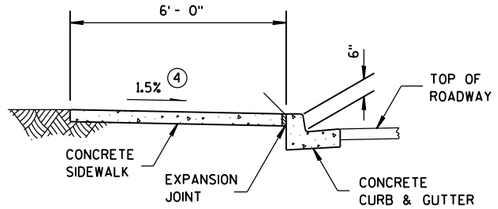
S.D.D. 8 D 5-19b



CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X
10 FEET	4'-7"
15 FEET	6'-5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

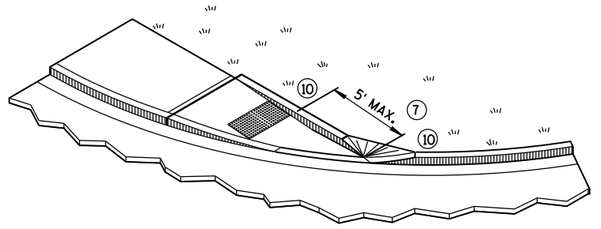
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

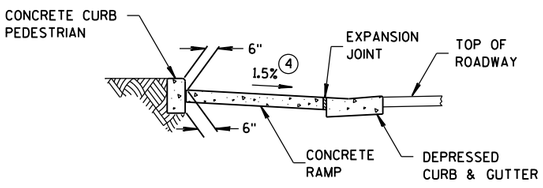
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

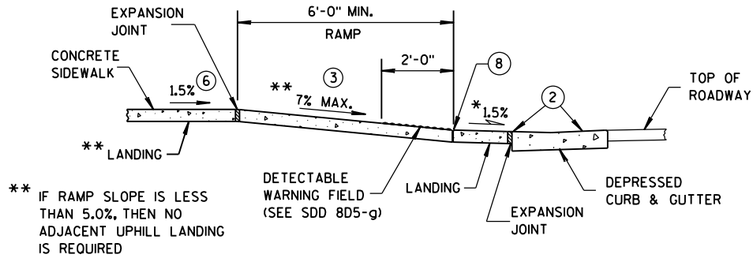
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4A



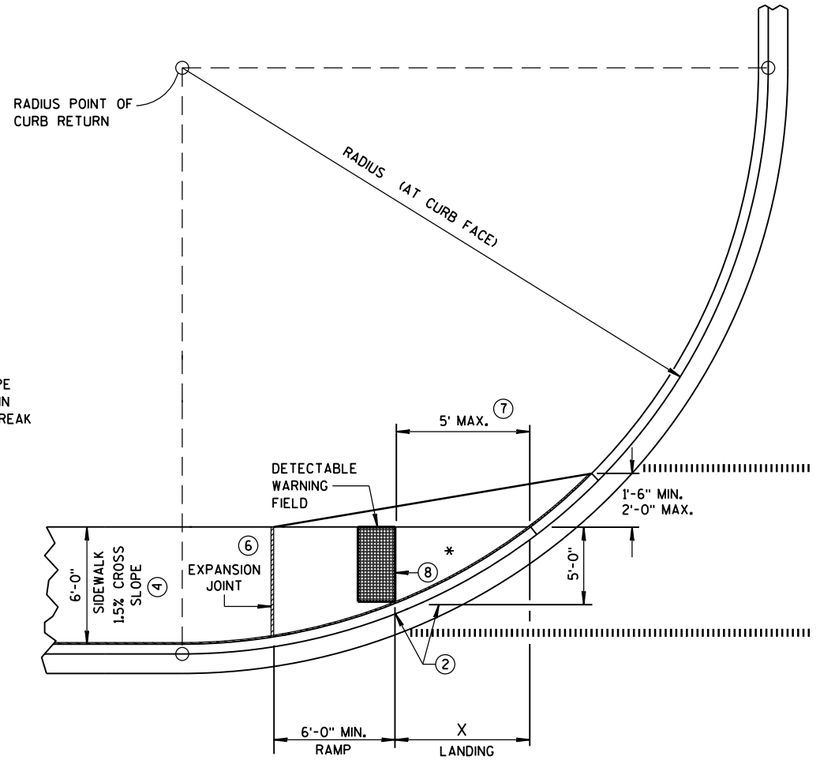
SECTION C-C FOR TYPE 4A



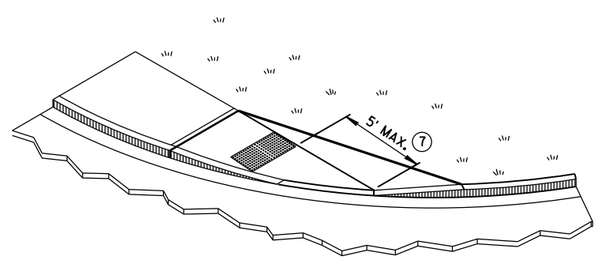
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

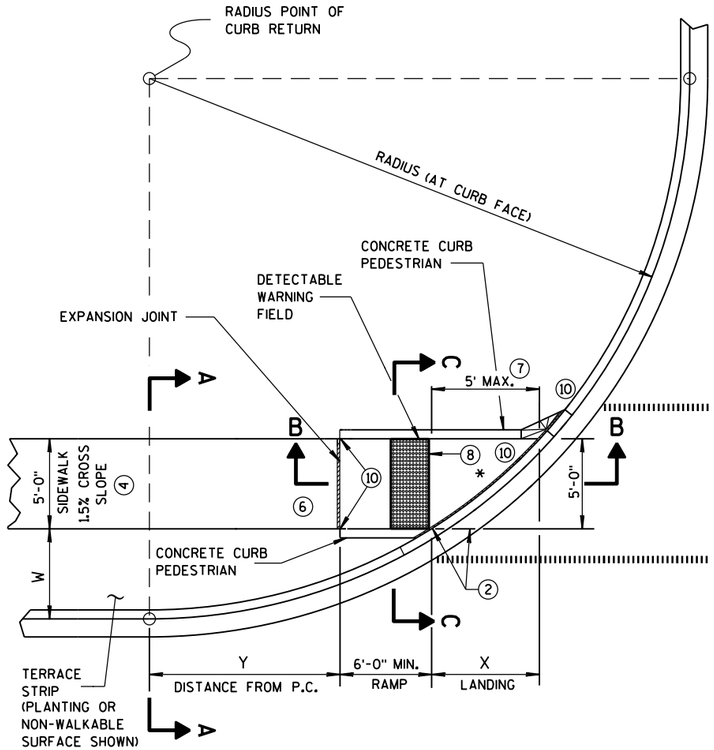
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

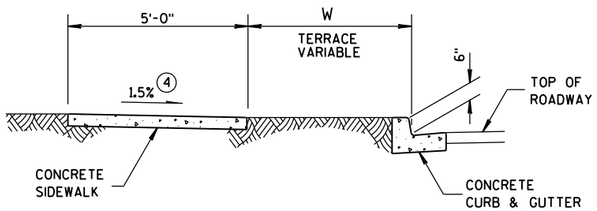
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

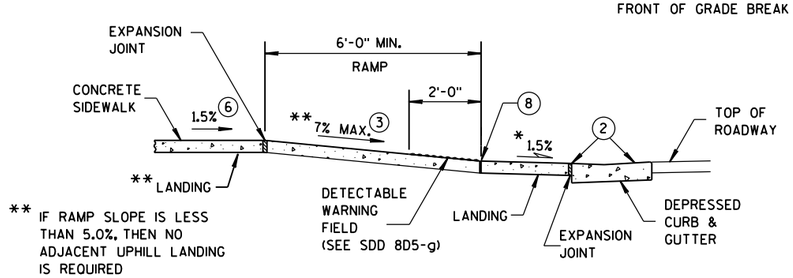
S.D.D. 8 D 5-19c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



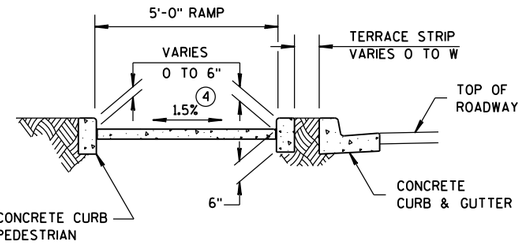
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"		W = 8'-0"		W = 9'-0"		W = 10'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2'-10¼"	0'-5"	2'-1"	1'-4½"	1'-5"	2'-1"	0'-10"	2'-7½"	0'-3¼"	3'-0¼"						
15 FEET	4'-6¾"	2'-1¾"	3'-9"	3'-5¼"	3'-1¼"	4'-6"	2'-6¾"	5'-4½"	2'-1"	6'-1"	1'-8"	6'-8½"	1'-3¼"	7'-2½"	0'-10¾"	7'-7¼"
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-7"	3'-3"	8'-6½"	2'-10"	9'-4½"	2'-5½"	10'-1¼"	2'-1¼"	10'-9"
30 FEET			6'-9¼"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"	4'-5½"	13'-7¾"	4'-0¾"	14'-8½"	3'-8½"	15'-8¼"
40 FEET									6'-1¾"	15'-8½"	5'-8"	17'-2"	5'-3"	18'-5¾"	4'-10¾"	19'-8¼"
50 FEET															5'-10¼"	23'-2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C-C FOR TYPE 4B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

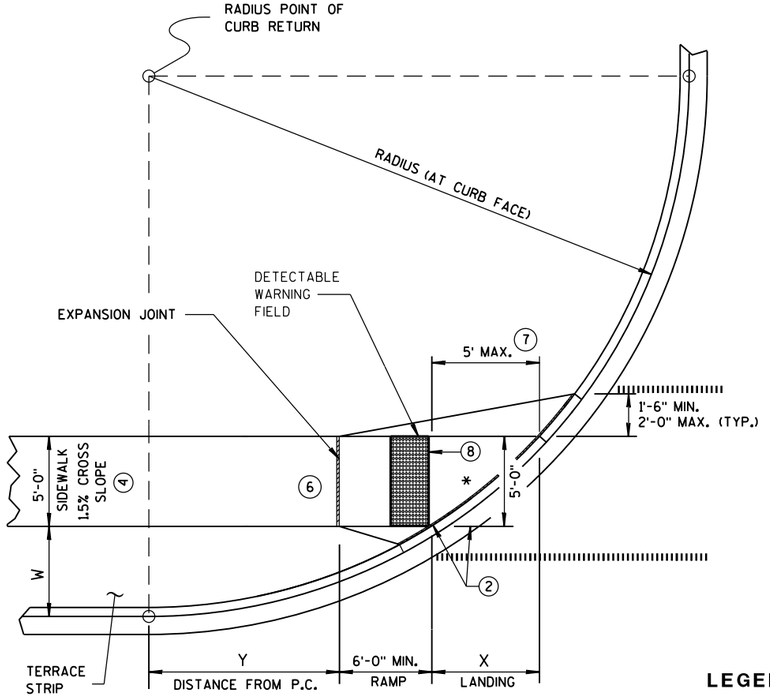
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

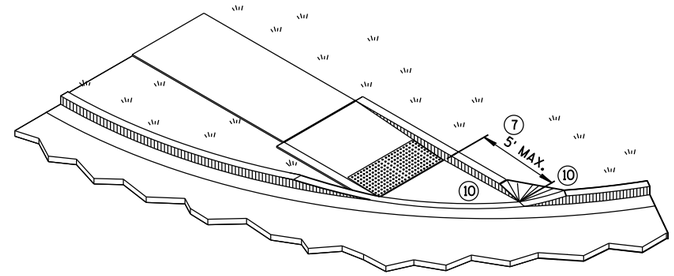
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

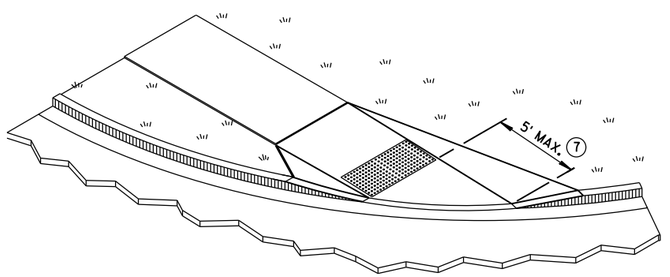
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

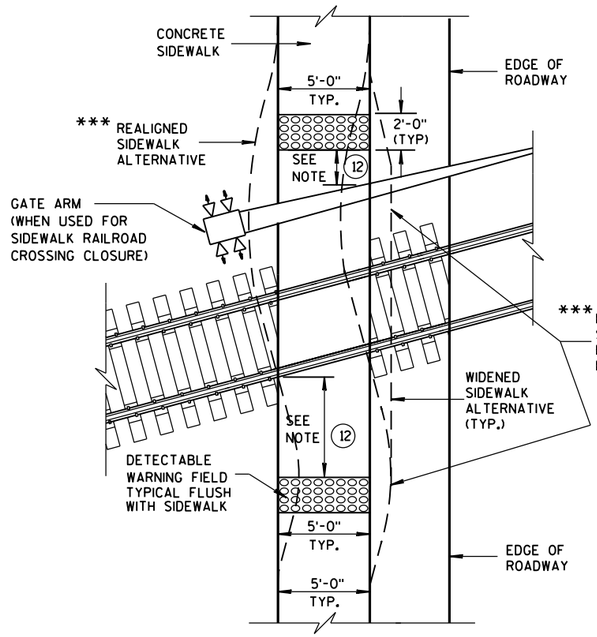
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

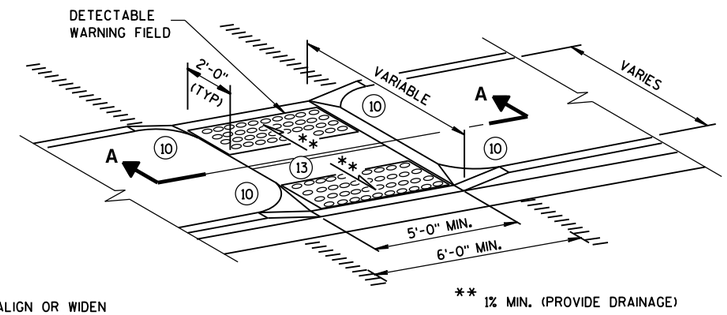
6

S.D.D. 8 D 5-19d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING

*** DETAILS TO BE DETERMINED BY DESIGNER



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING
TYPE 5

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

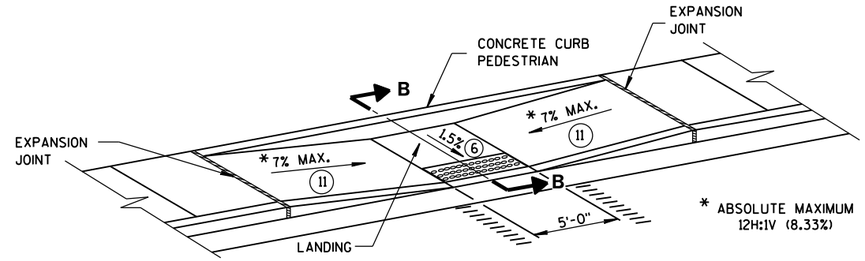
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

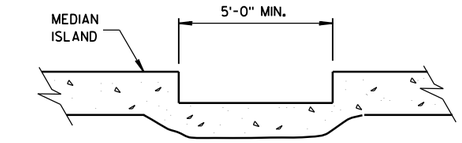
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

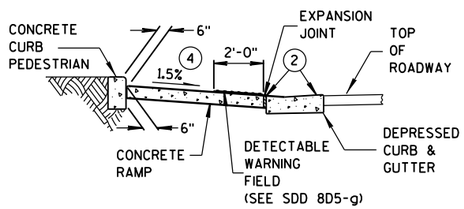
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.



MID-BLOCK CROSSING
TYPE 7A

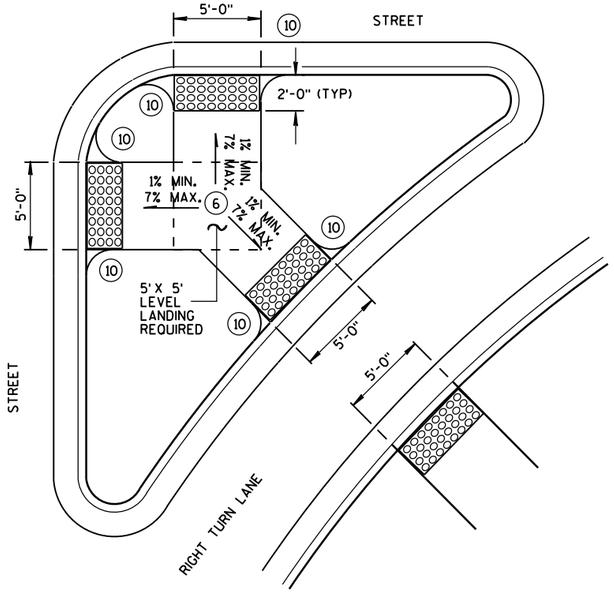


SECTION A-A

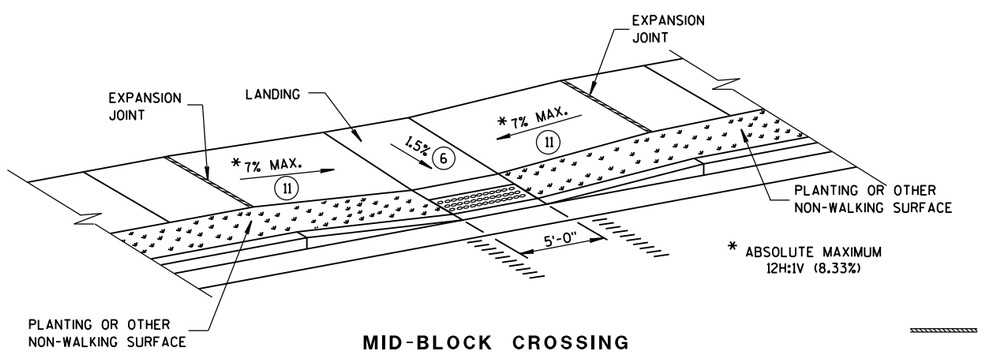


SECTION B-B

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

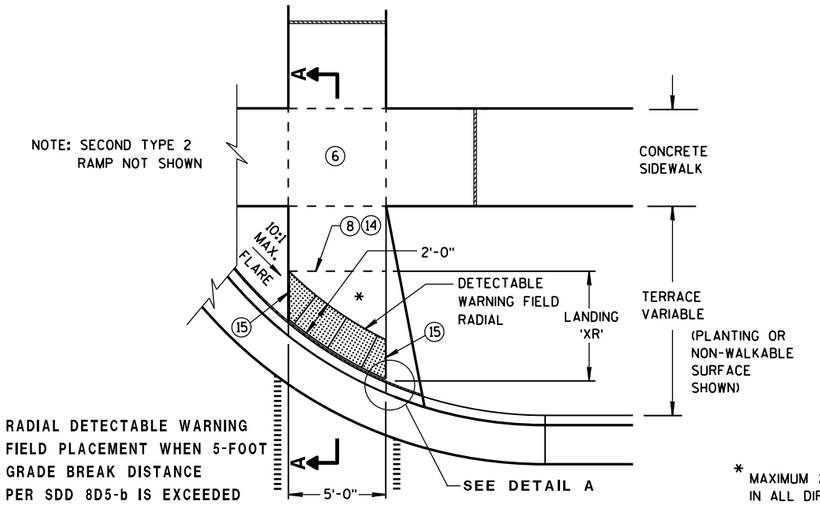
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-19e
S.D.D. 8 D 5-19e

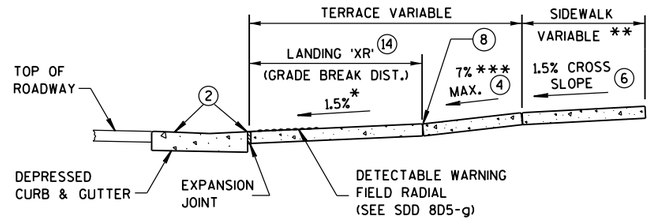


TYPE 2 RAMP
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

LEGEND

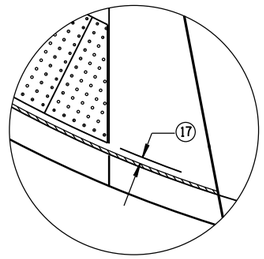
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



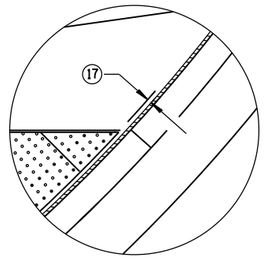
** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

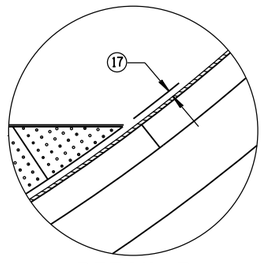
SECTION A-A



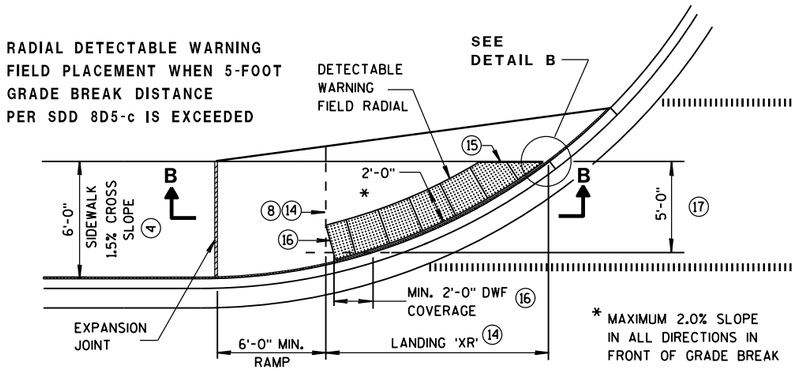
DETAIL A



DETAIL C

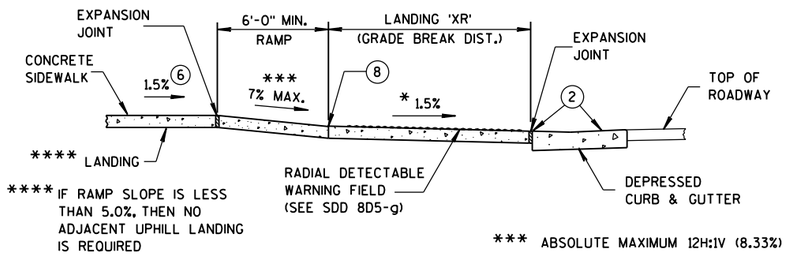


DETAIL B



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

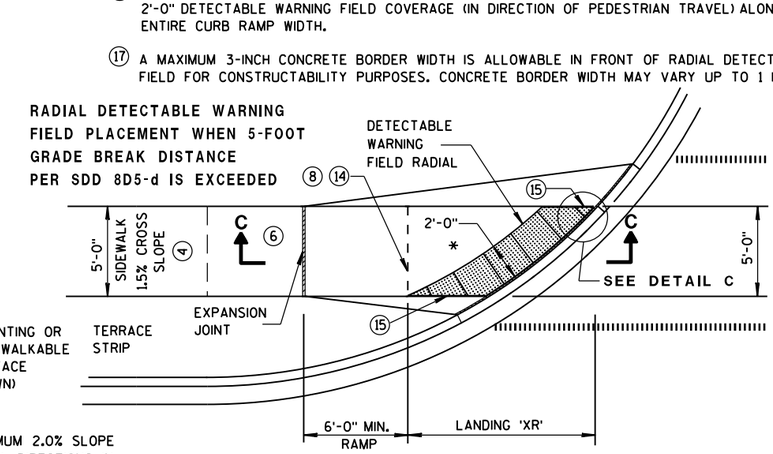
CURB RAMP TYPE 4A1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

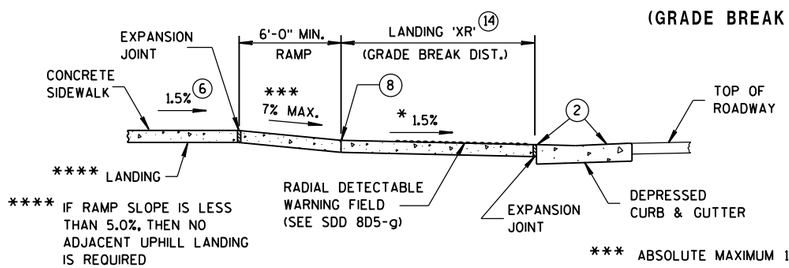
*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION B-B FOR TYPE 4A1



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

CURB RAMP TYPE 4B1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION C-C FOR TYPE 4B1

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS (DWFs) THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION 'XR') REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

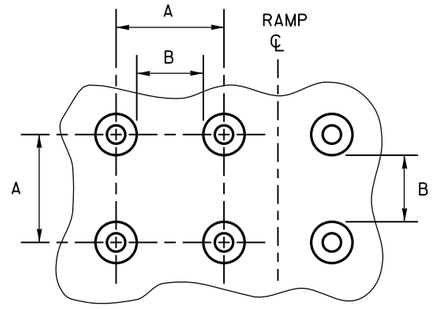
(16) USE 1'X 2' RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2'-0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3-INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

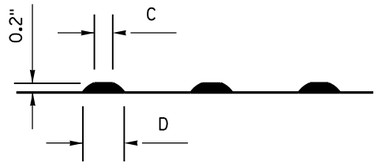
CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES

DETECTABLE WARNING PATTERN DETAIL

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

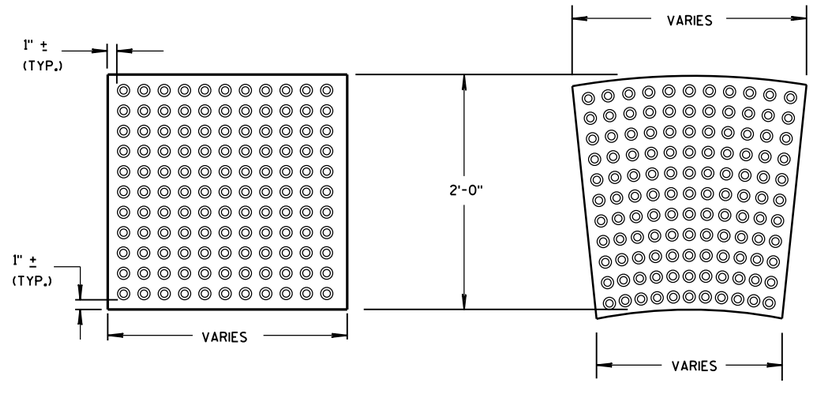
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGES IN COMBINATION WITH SQUARE PANELS ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

⑮ FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

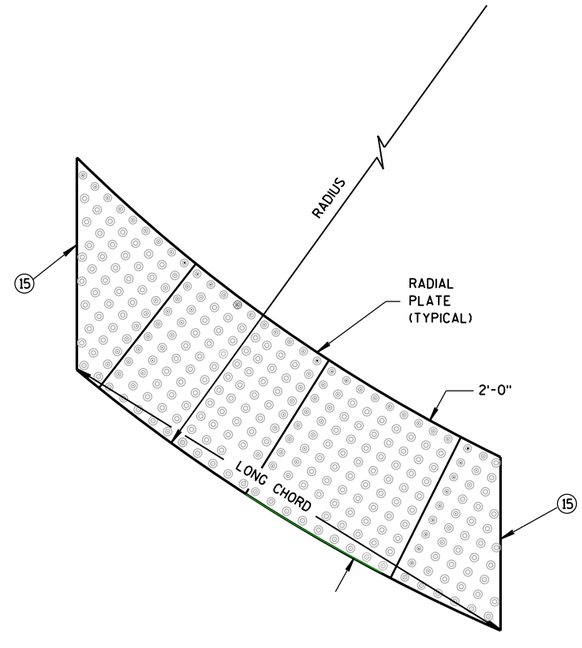


RECTANGULAR PLATES

RADIAL PLATES

DETECTABLE WARNING FIELDS (TYPICAL)

PLAN VIEW



RADIAL DETECTABLE WARNING FIELD ATTRIBUTES

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERV

505

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S.D.D. 8 D 5-19g

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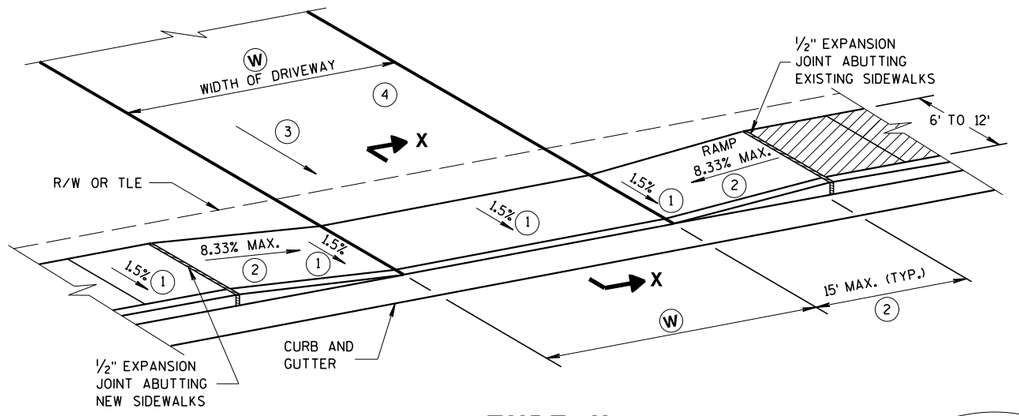
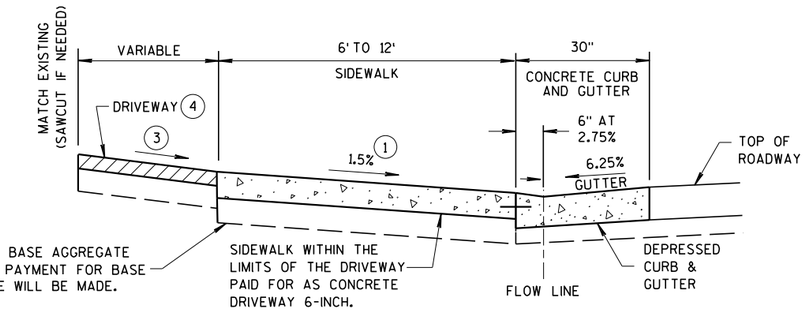
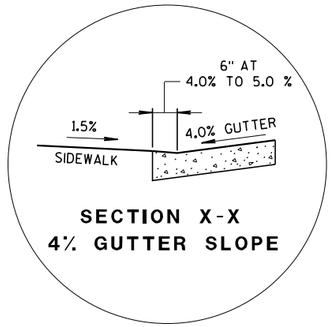
S.D.D. 8 D 5-19g



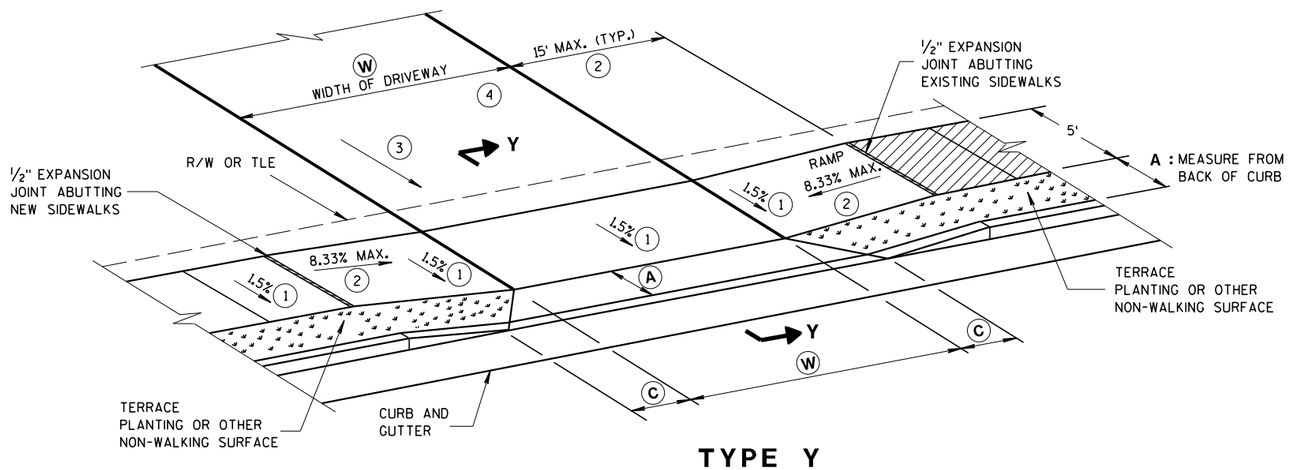
TYPE X
SIDEWALK ABUTS CURB & GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X-X



SECTION X-X
4% GUTTER SLOPE



TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET

(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)
16' MIN. - 35' MAX. COMMERCIAL (CE)

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

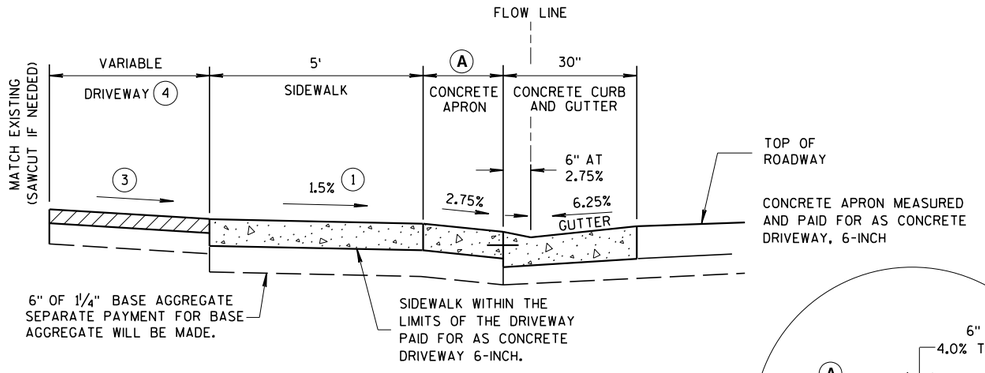
OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

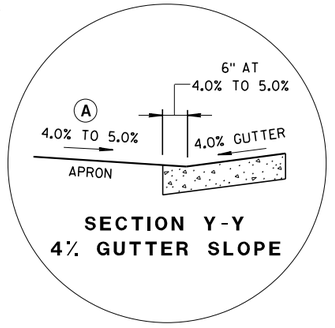
(4) DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)



NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y-Y

DRIVEWAY DETAIL
WITH CONCRETE CURB & GUTTER
(URBAN AND SUBURBAN)



SECTION Y-Y
4% GUTTER SLOPE

TABLE Y

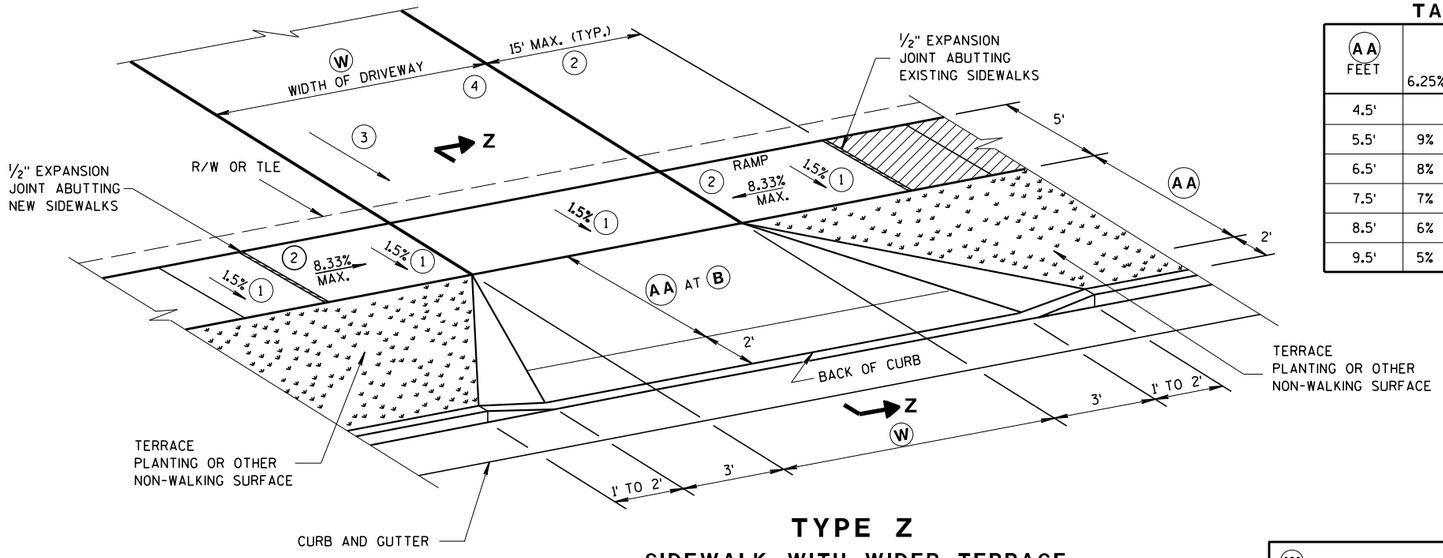
(A) FEET	(C) FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

NOT TO SCALE

DRIVEWAY AND SIDEWALK RAMPS
TYPES X & Y

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA



TYPE Z

SIDEWALK WITH WIDER TERRACE

TERRACE VARIES 7 TO 12 FEET

TABLE Z

(AA) FEET	(B) % 6.25% GUTTER	(B) % 4% GUTTER
4.5'	11.5%	9% TO 11.5%
5.5'	9% TO 11.5%	8% TO 11.5%
6.5'	8% TO 11.5%	6% TO 11.5%
7.5'	7% TO 11.5%	6% TO 11.5%
8.5'	6% TO 11.5%	5% TO 11.5%
9.5'	5% TO 11.5%	4% TO 11.5%

(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.

(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM

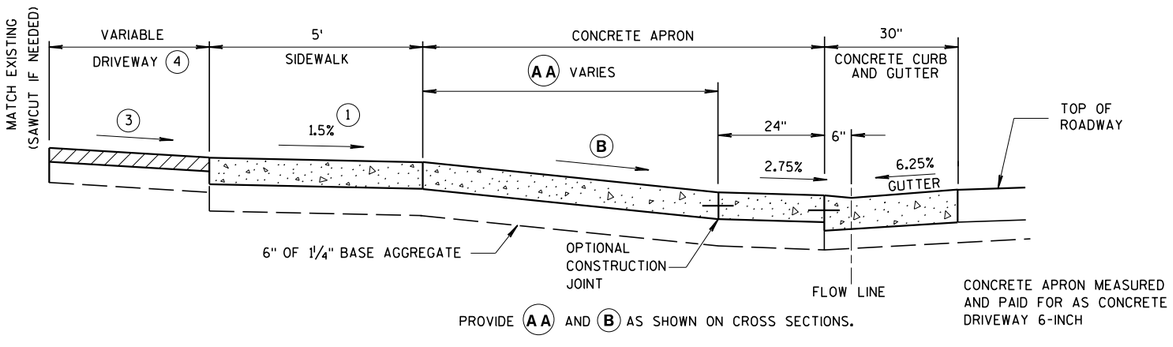
10.5% UP AWAY FROM SIDEWALK (SAG)

8.5% DOWN AWAY FROM SIDEWALK (CREST)

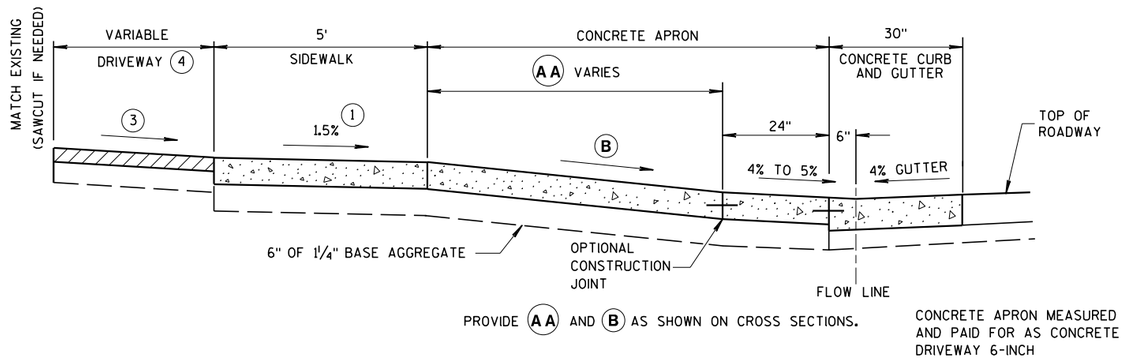
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

(4) DRIVEWAY TYPES

- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)



6.25% GUTTER SLOPE



4% GUTTER SLOPE

NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS FOR **B** VALUES NOT SHOWN IN TABLE Z.

SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY 6-INCH.

SEPARATE PAYMENT FOR BASE AGGREGATE WILL BE MADE.

SECTION Z-Z

DRIVEWAY DETAIL WITH CONCRETE CURB & GUTTER

(URBAN AND SUBURBAN)

NOT TO SCALE

DRIVEWAY AND SIDEWALK RAMPS TYPE Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

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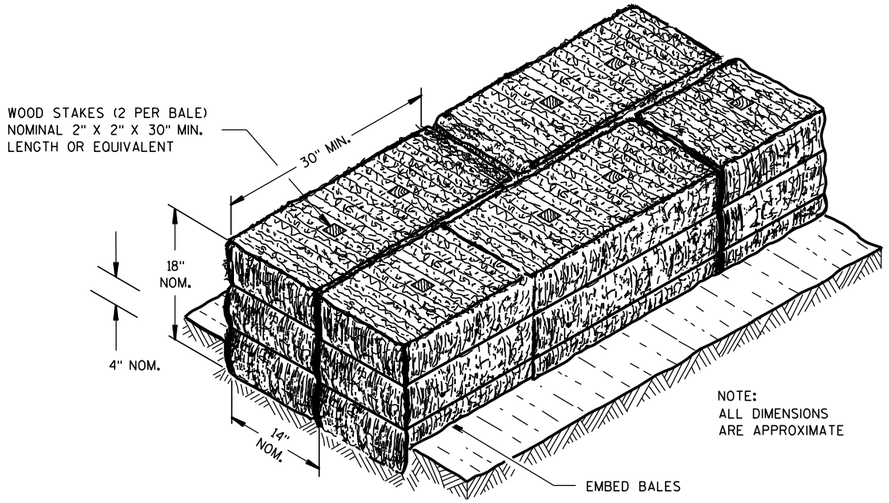
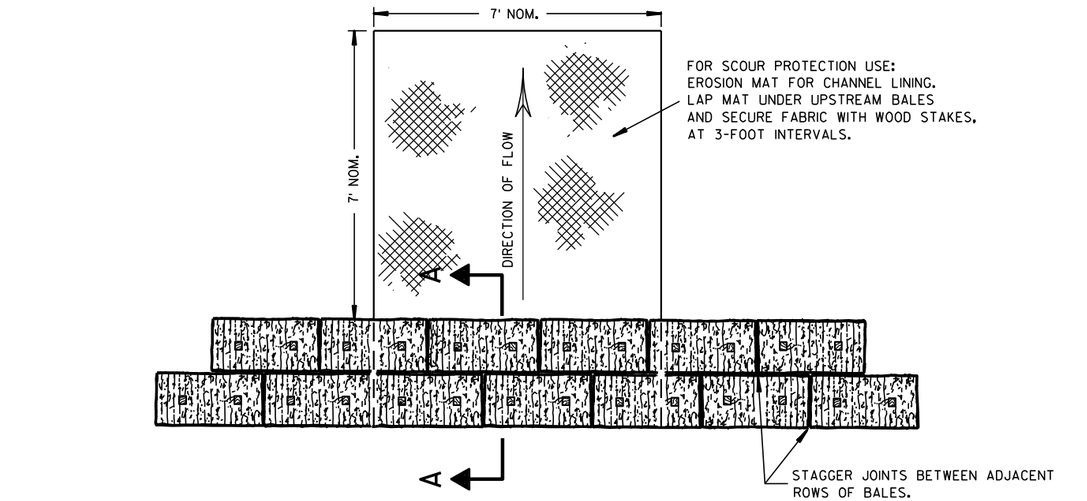
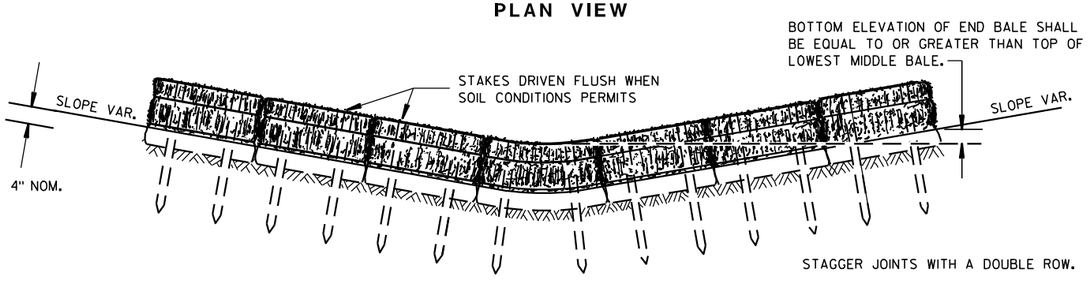
S.D.D. 8 D 19-2



SECTION A-A



PLAN VIEW



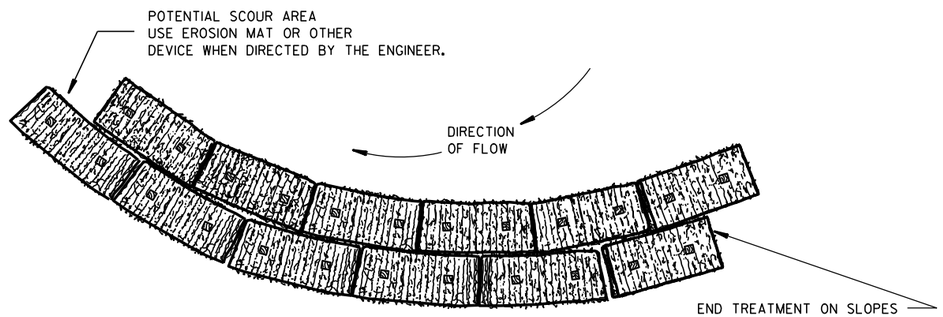
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

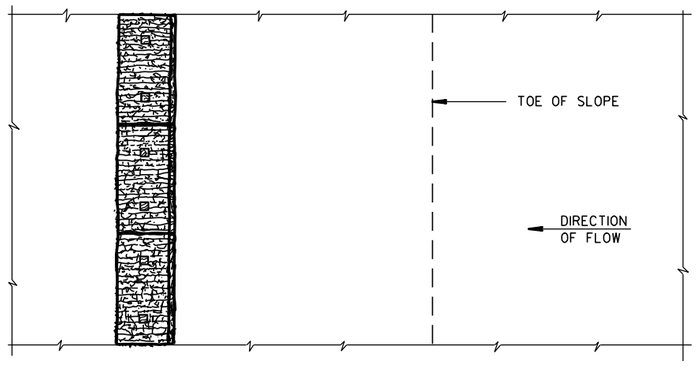
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

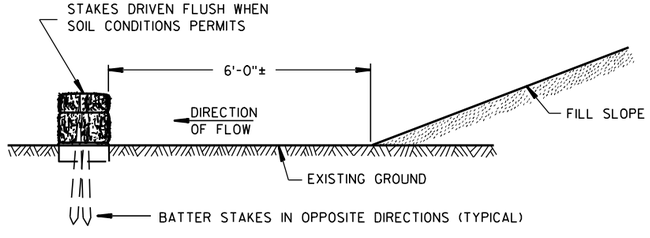


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 DATE — /S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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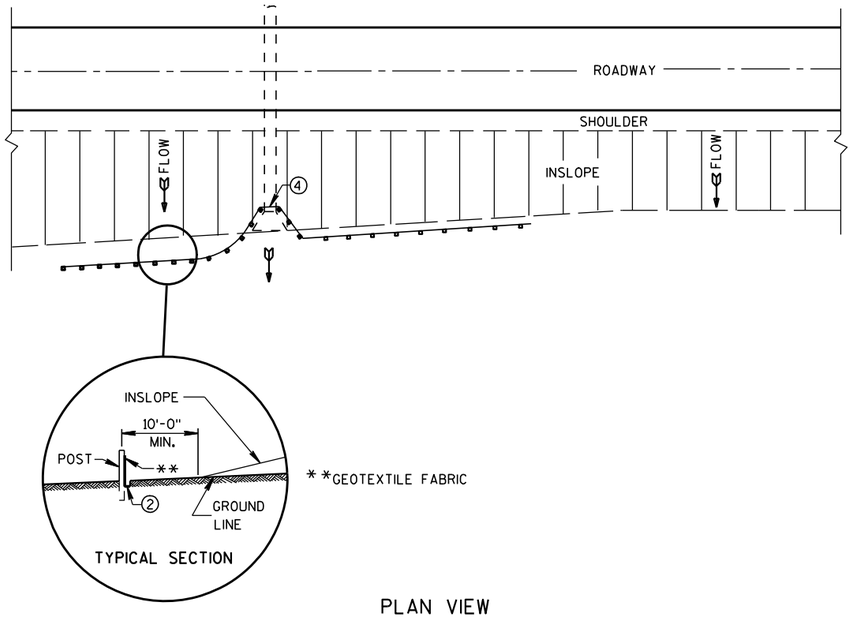
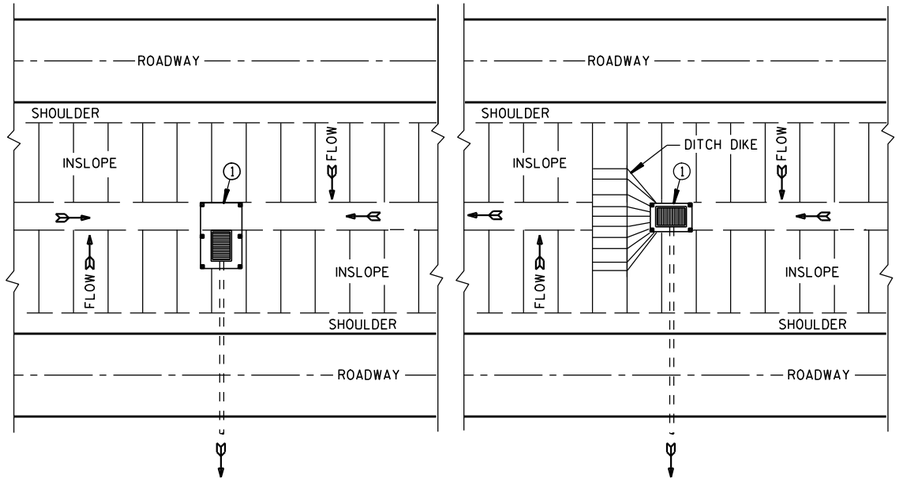
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



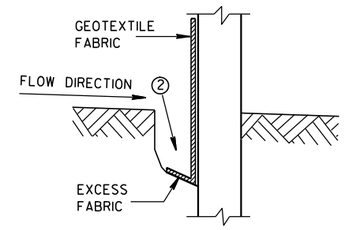
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

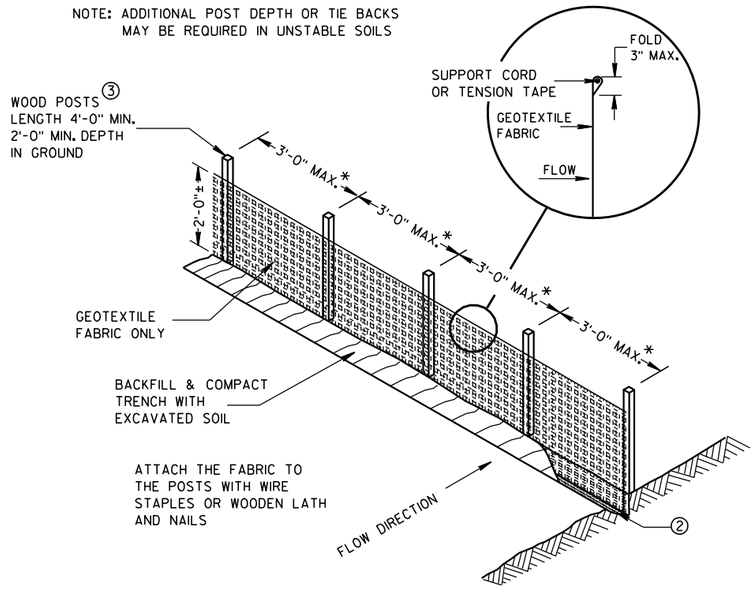
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

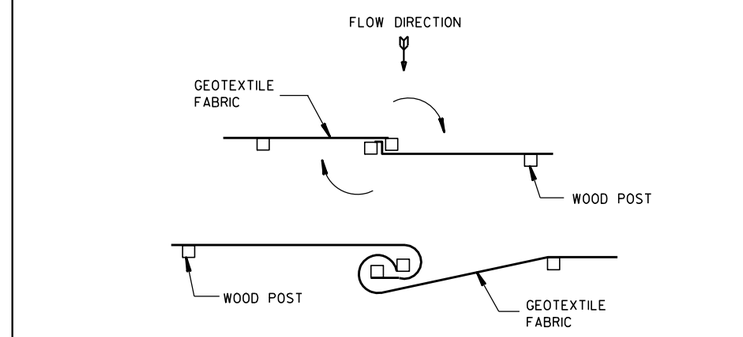
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



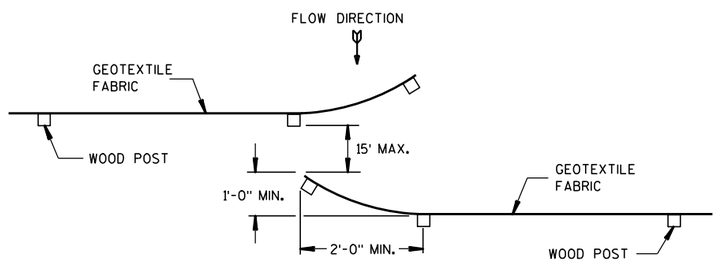
TRENCH DETAIL



SILT FENCE

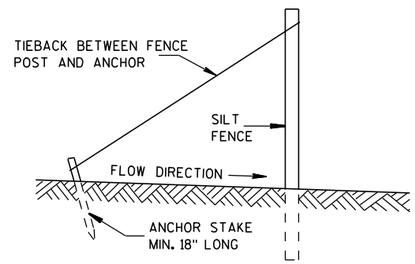


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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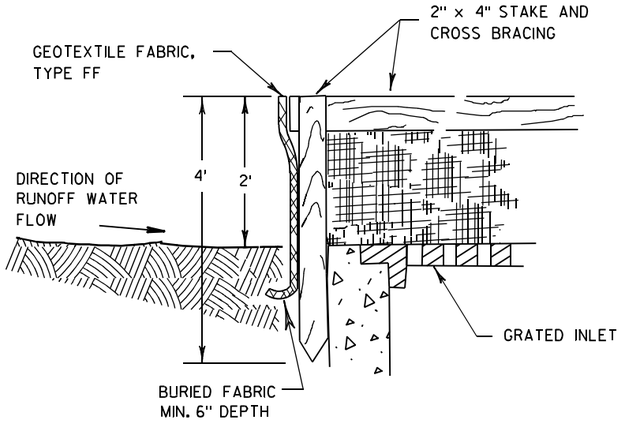
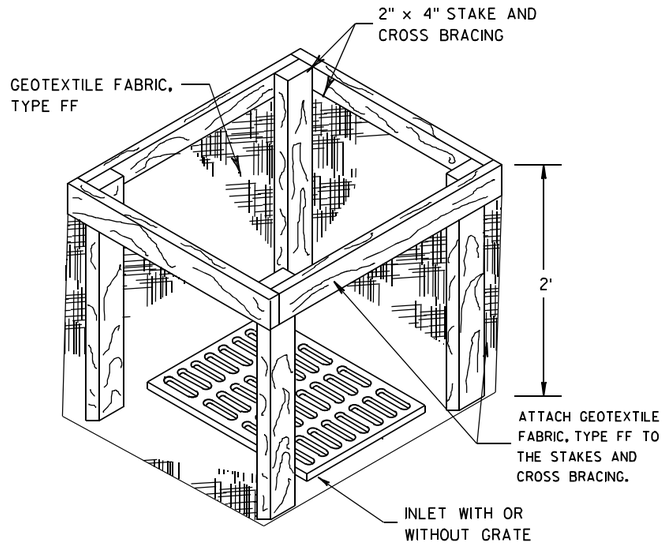
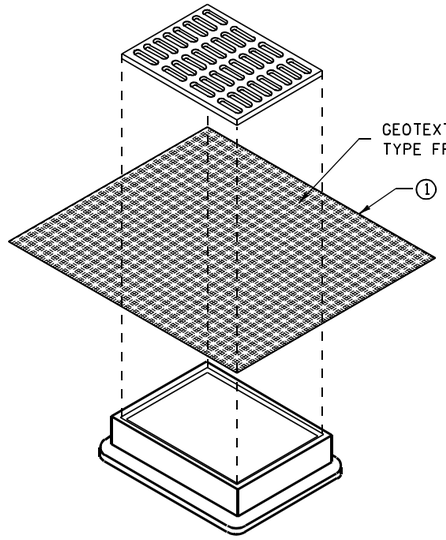
S.D.D. 8 E 9-6



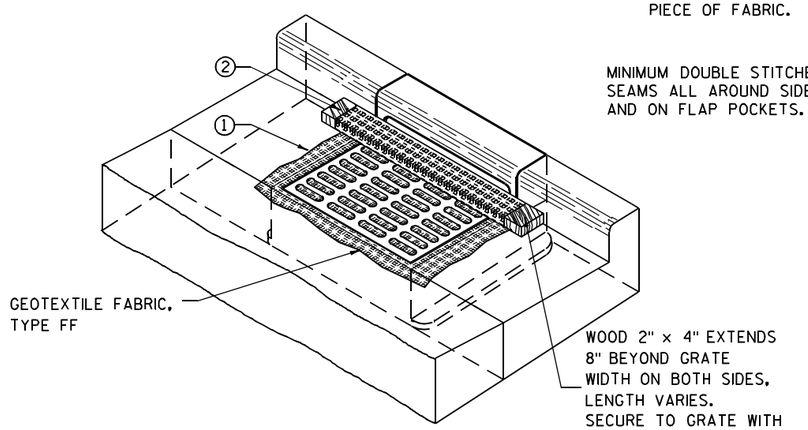


INLET PROTECTION, TYPE A

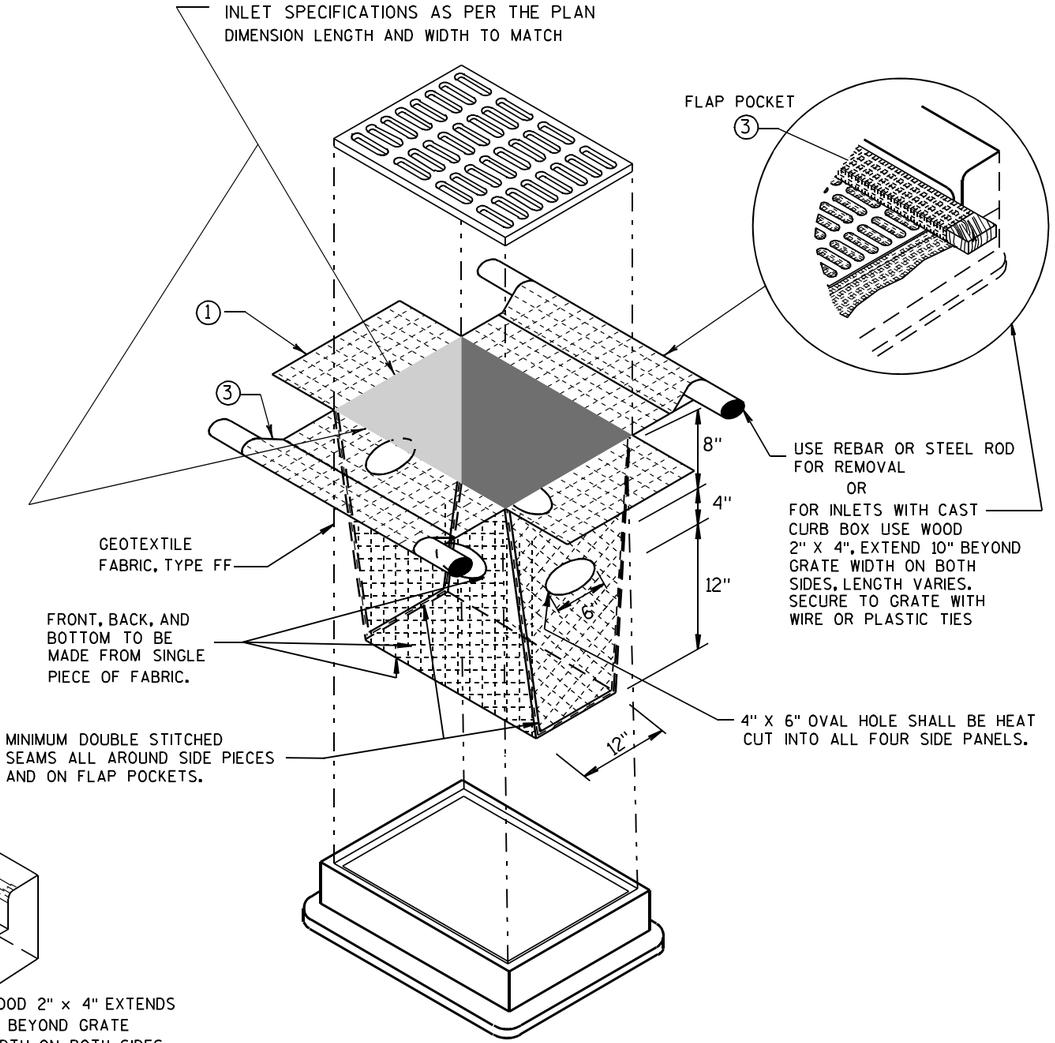


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 E 10-2

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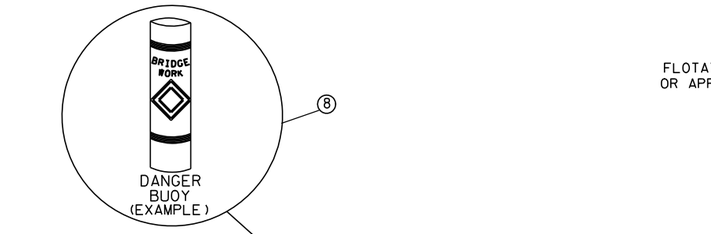
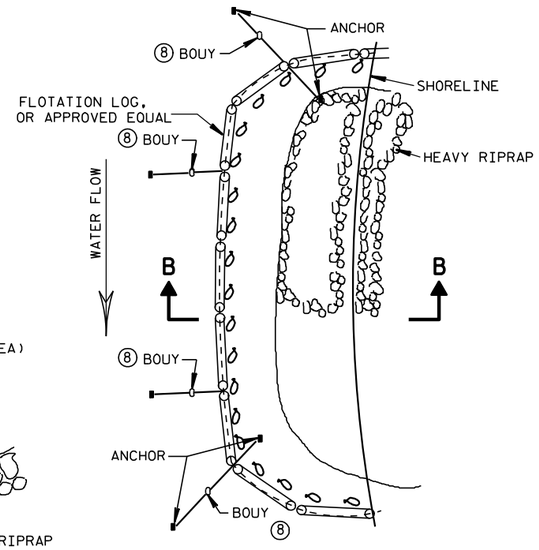
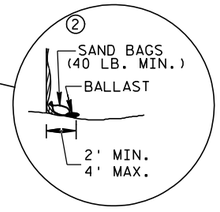
S.D.D. 8 E 10-2

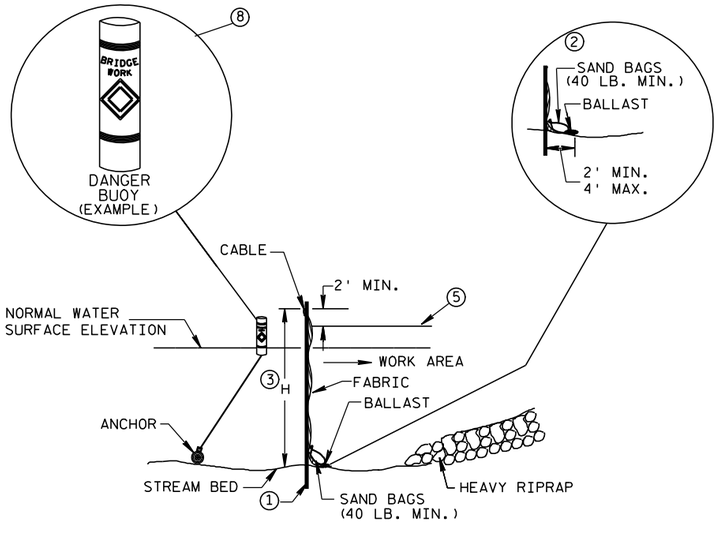


SECTION B-B

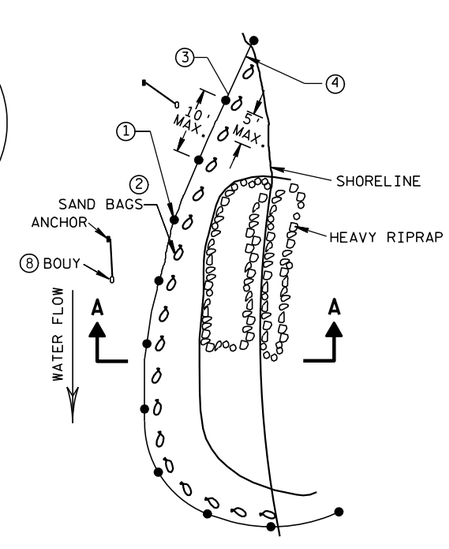




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.

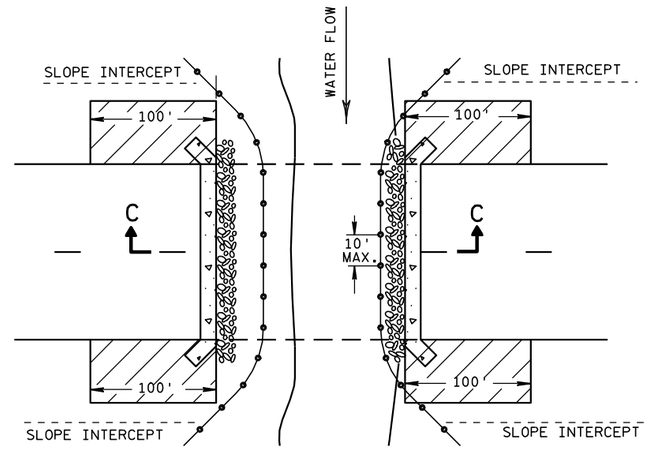
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE 02 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

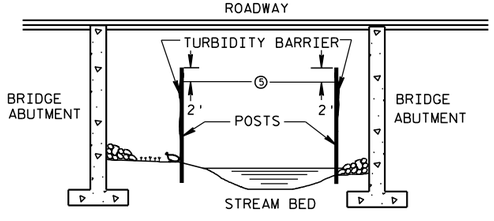
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 11-2

6

S.D.D. 8 E 11-2

METAL APRON ENDWALLS

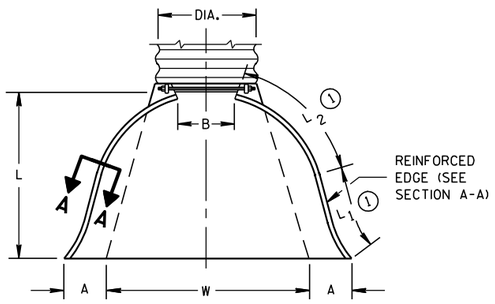
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

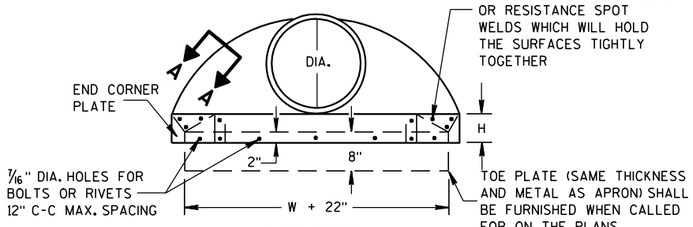
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

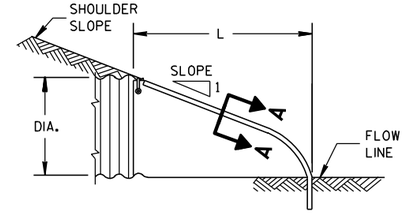
* MINIMUM
** MAXIMUM



PLAN VIEW

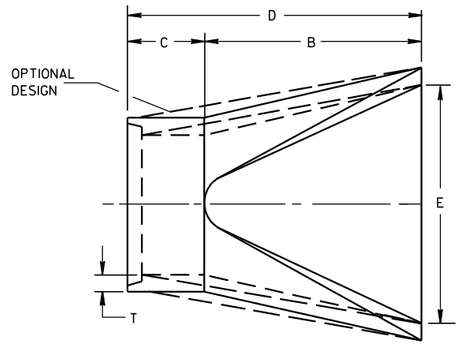


END VIEW

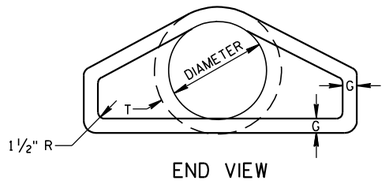


SIDE ELEVATION

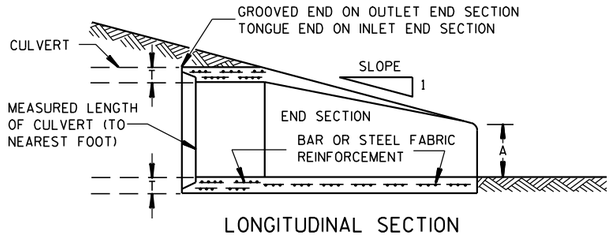
METAL ENDWALLS



PLAN

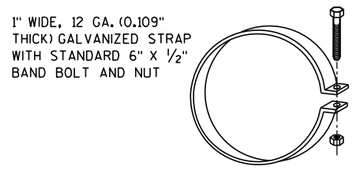


END VIEW



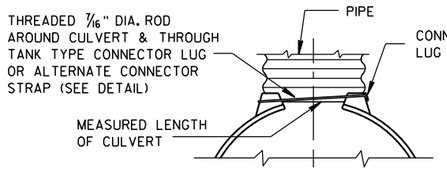
LONGITUDINAL SECTION

CONCRETE ENDWALLS

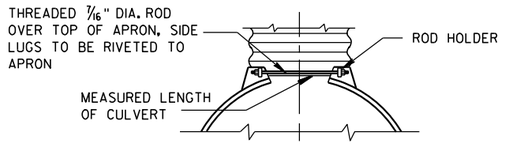


ALTERNATE FOR TYPE 1 CONNECTION

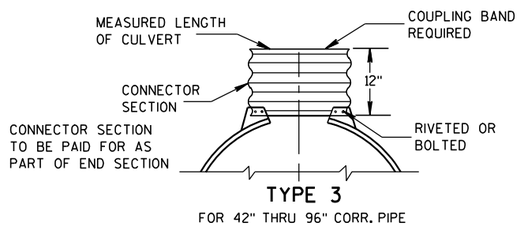
END SECTION CONNECTOR STRAP



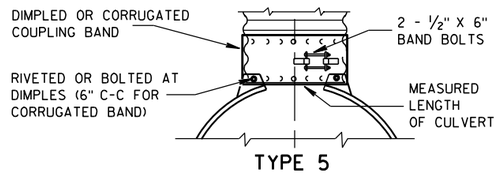
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

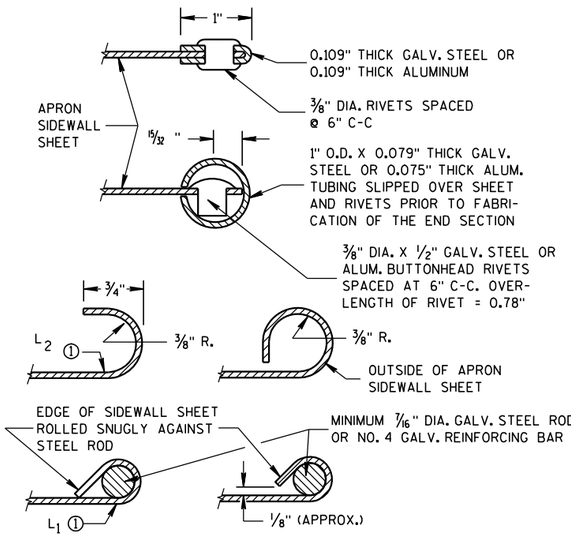
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

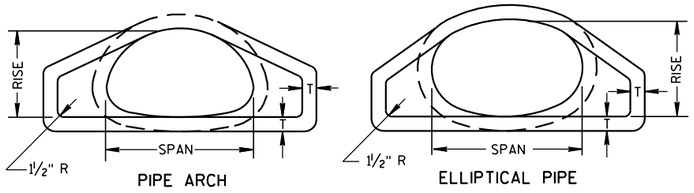
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

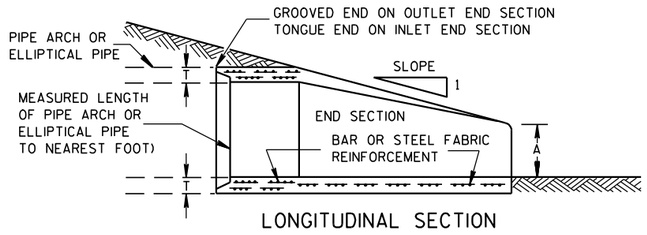
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

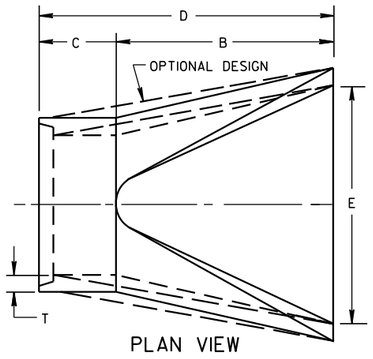
6
S.D.D. 8 F 1-11



END VIEW

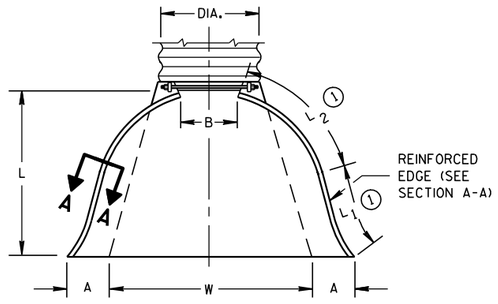


LONGITUDINAL SECTION

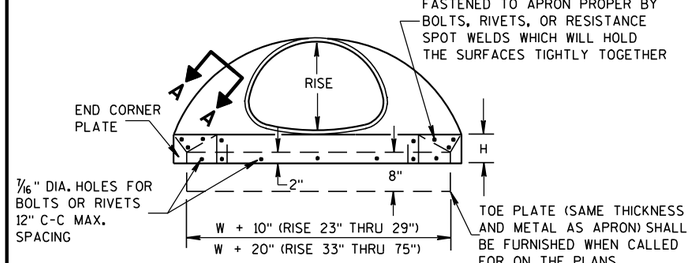


PLAN VIEW

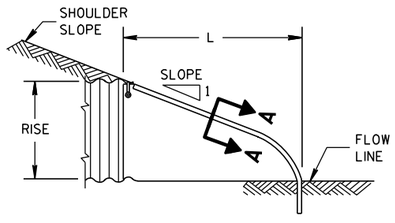
CONCRETE ENDWALLS



PLAN VIEW

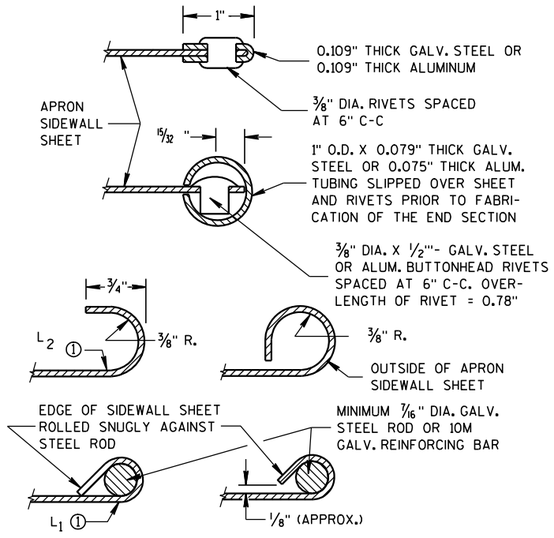


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

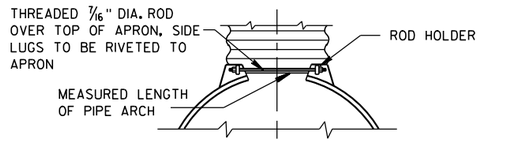
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

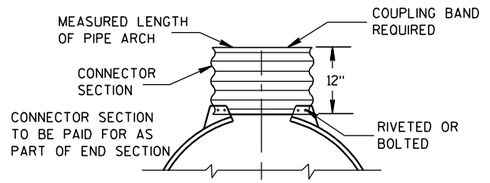
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



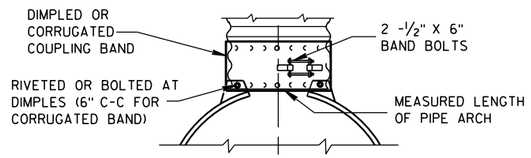
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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S.D.D. 8 F 2-1

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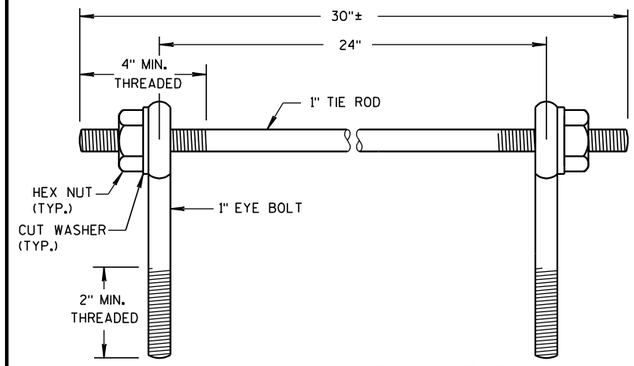
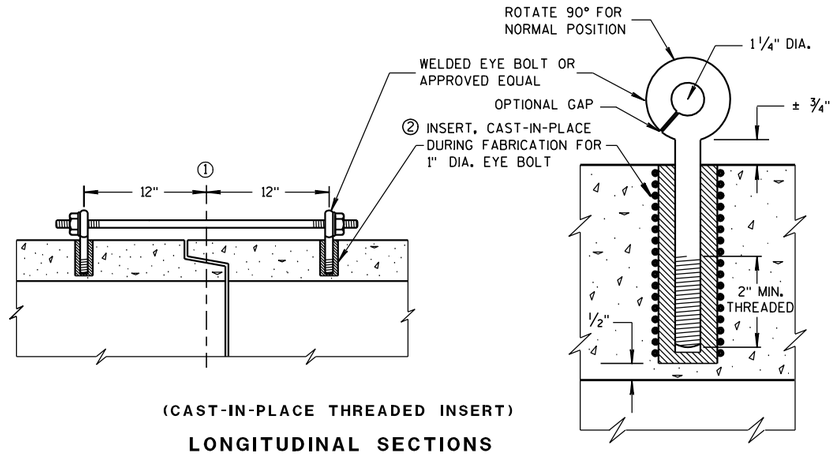
S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

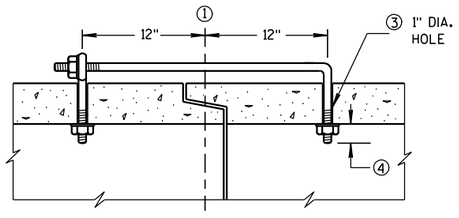
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

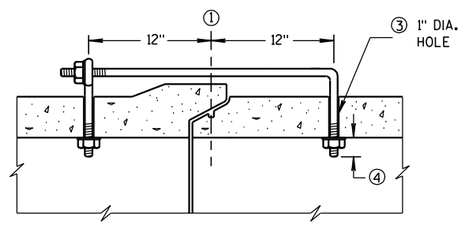
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

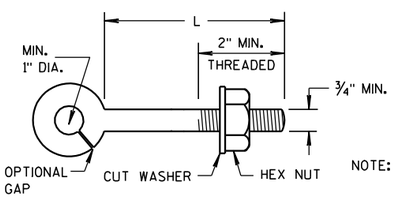


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

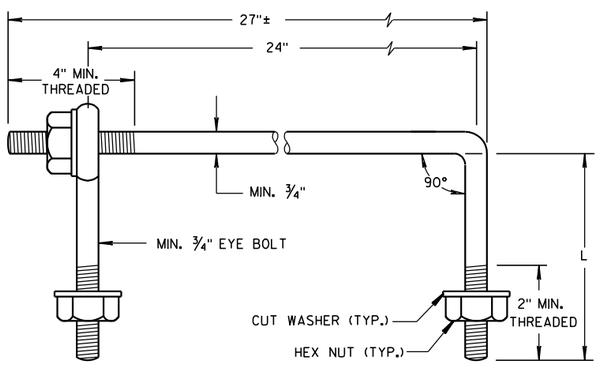
EYE BOLT DIMENSION TABLE

PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

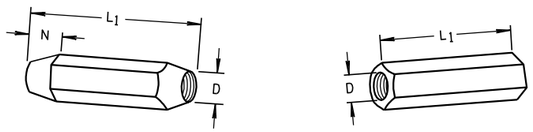
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

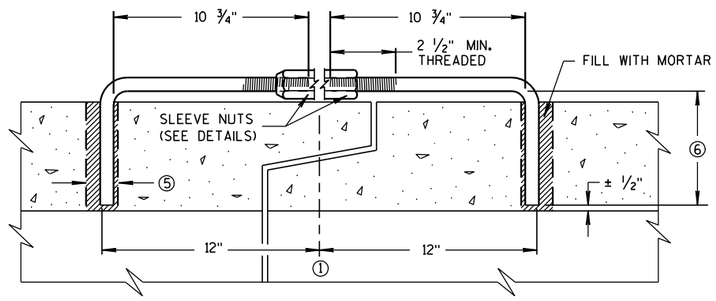
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

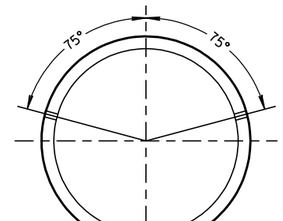
SLEEVE NUTS



LONGITUDINAL SECTION

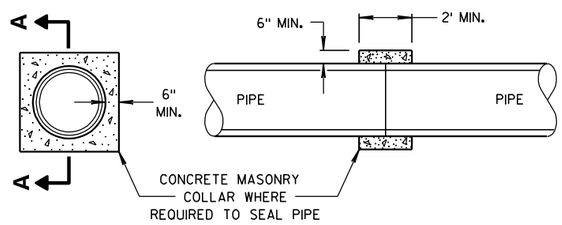
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
514
FHWA

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S.D.D. 8 F 4-7

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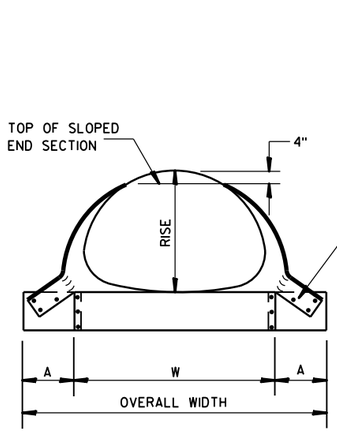
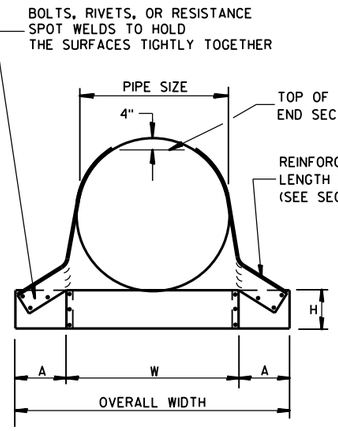
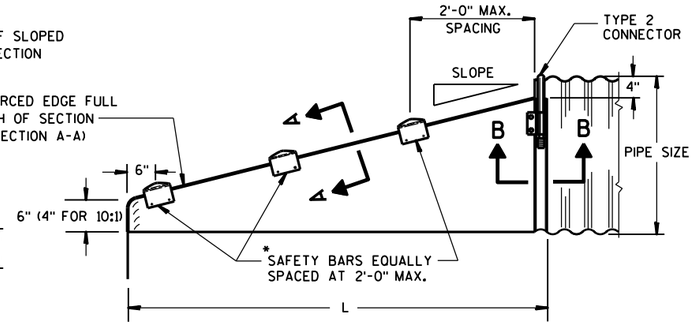
S.D.D. 8 F 4-7



FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

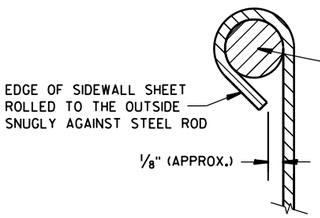
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE
SLOPED SIDE DRAINS

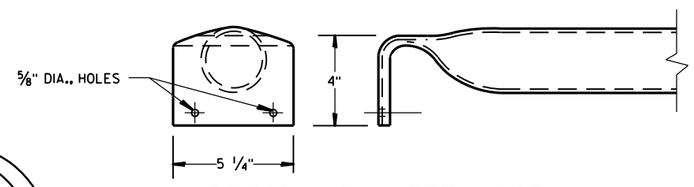
PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	6:1	300	——	——



SECTION A-A

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.

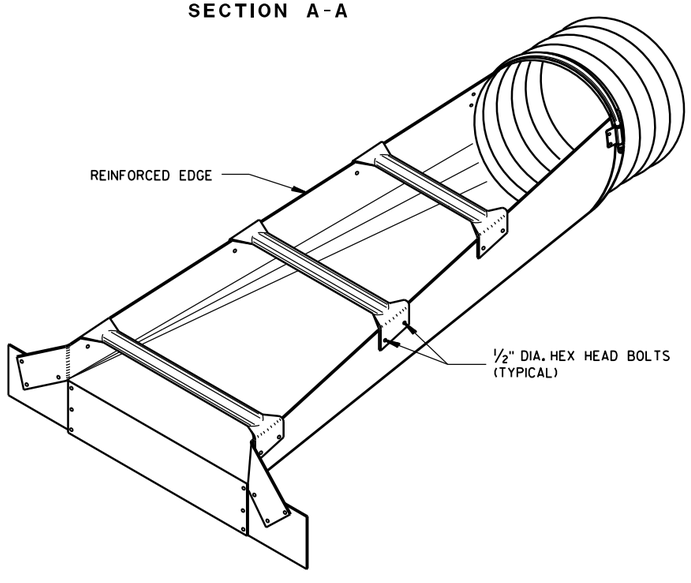


DETAIL OF SAFETY BAR

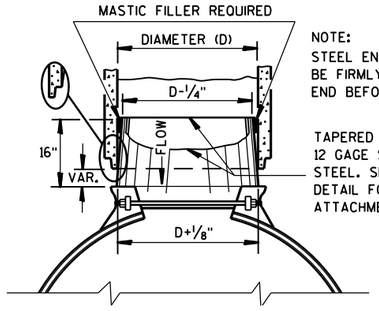
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

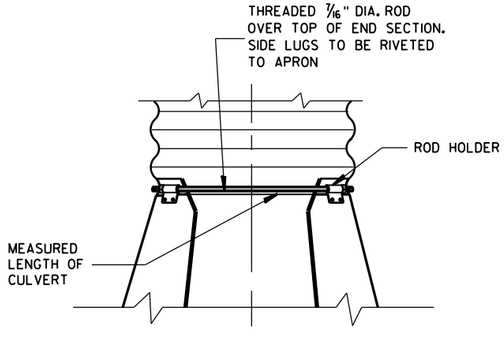
① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



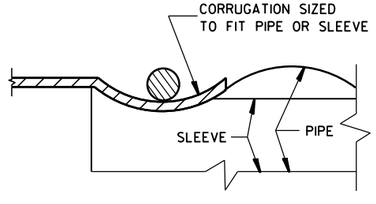
ISOMETRIC VIEW



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



TYPE 2
CONNECTION DETAIL



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/14/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 F 7-5

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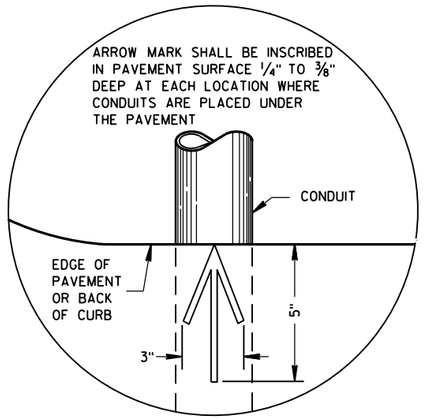
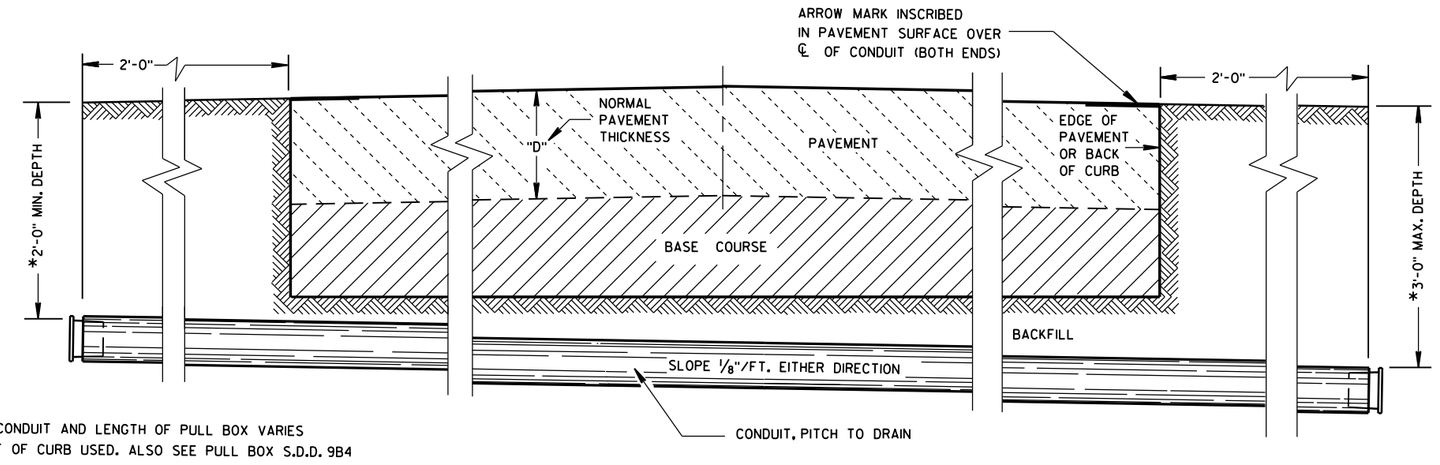
S.D.D. 8 F 7-5



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

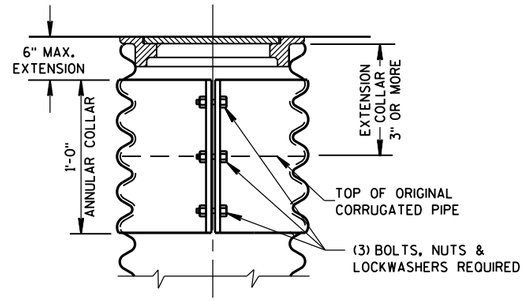
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

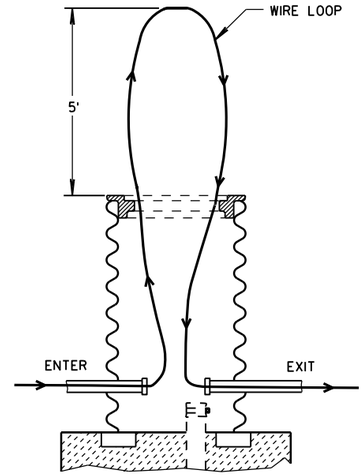
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

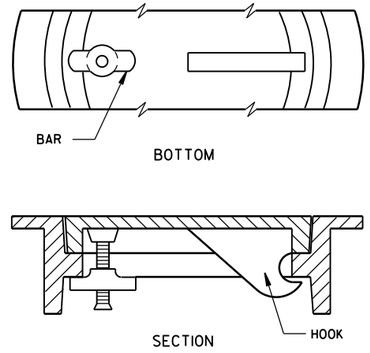
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

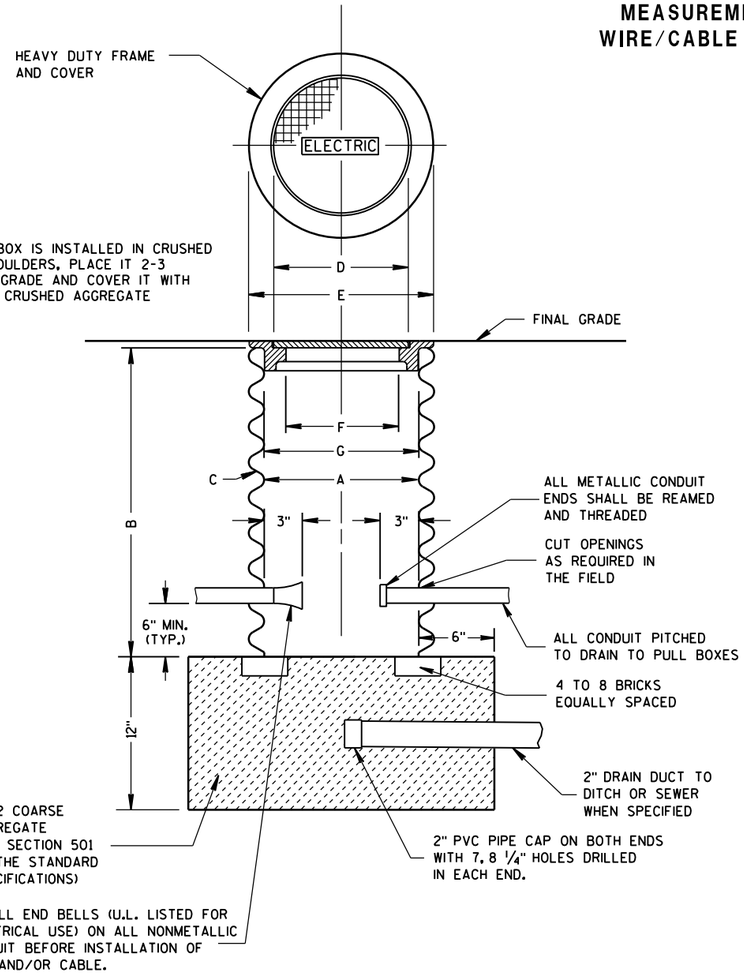


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



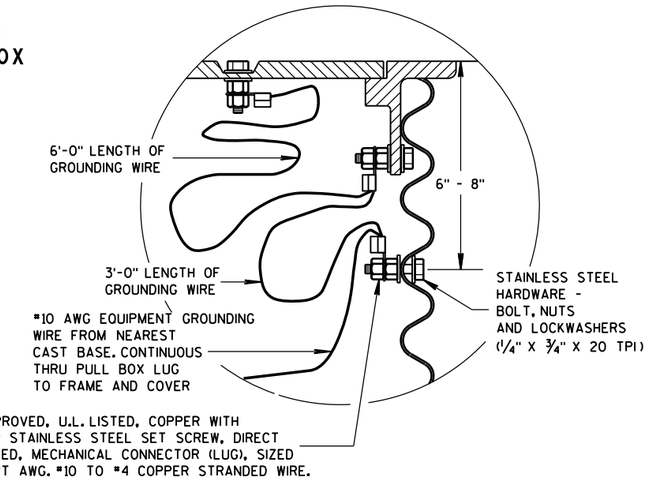
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

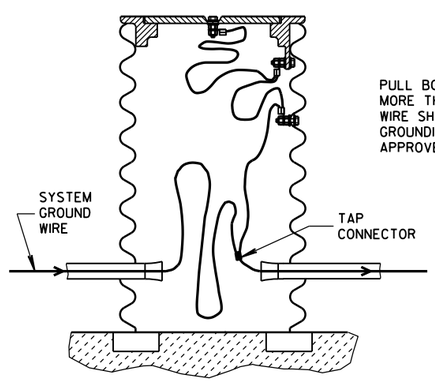


WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		NON-CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 1/2	22 1/2
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

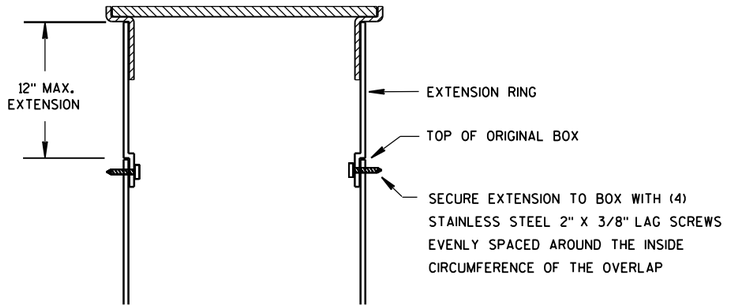
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

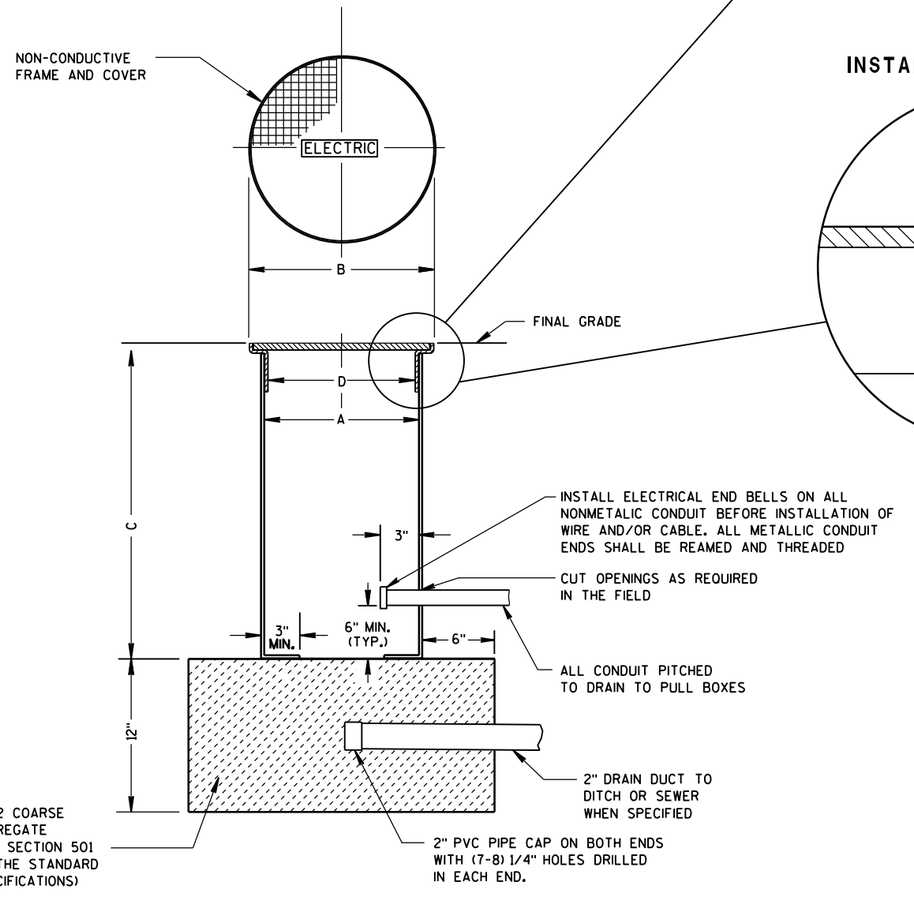
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.

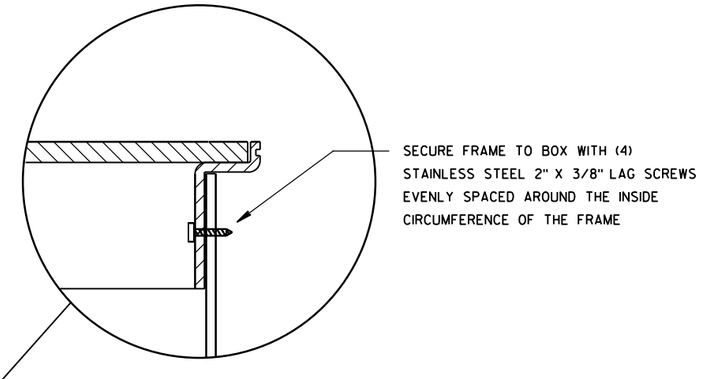


BOX EXTENSION

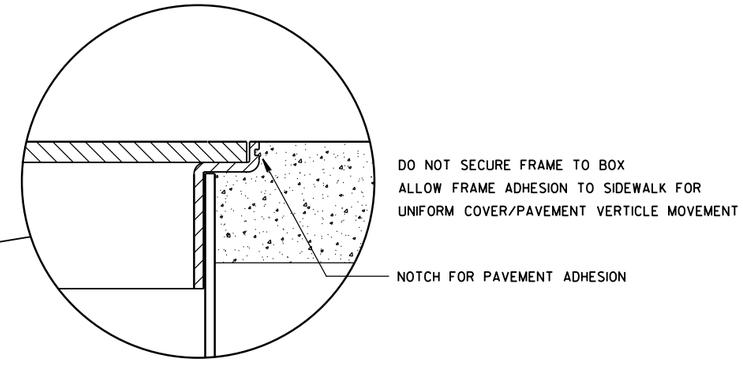


NON-CONDUCTIVE PULL BOX

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



PULL BOX NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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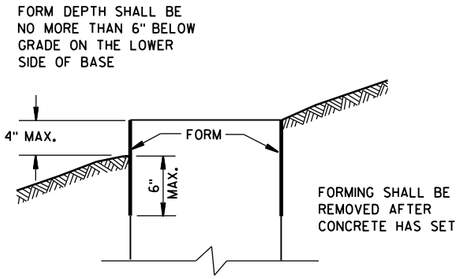
S.D.D. 9 B 16-1



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

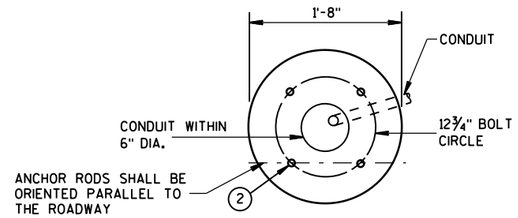
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

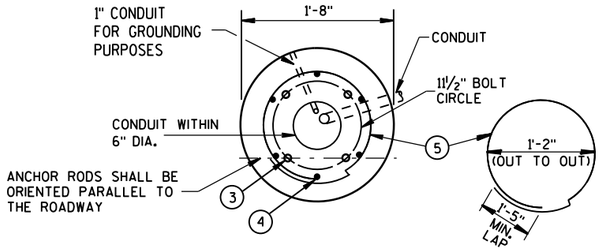
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

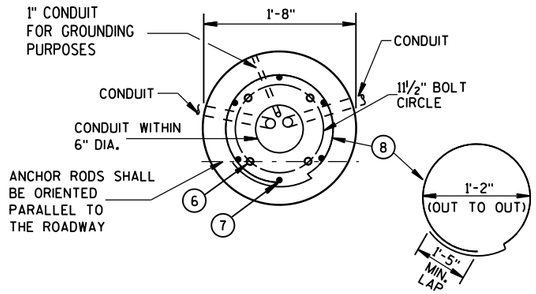
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

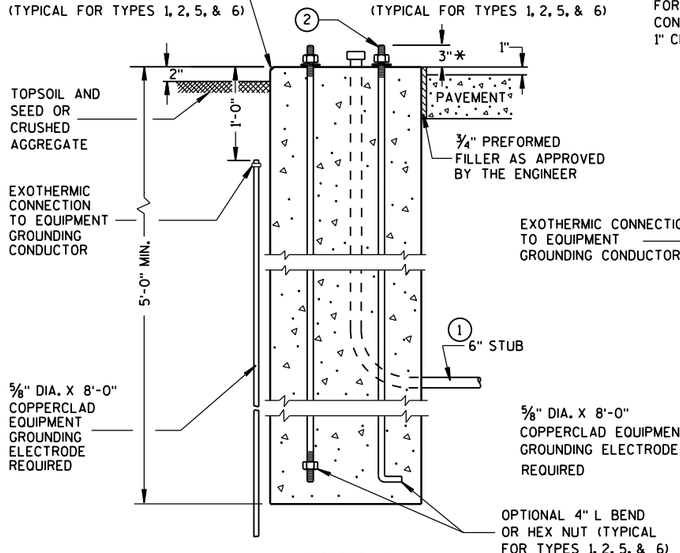




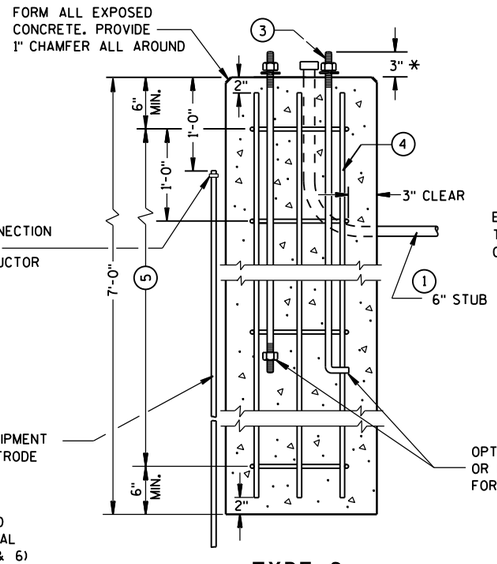


HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5, & 6)

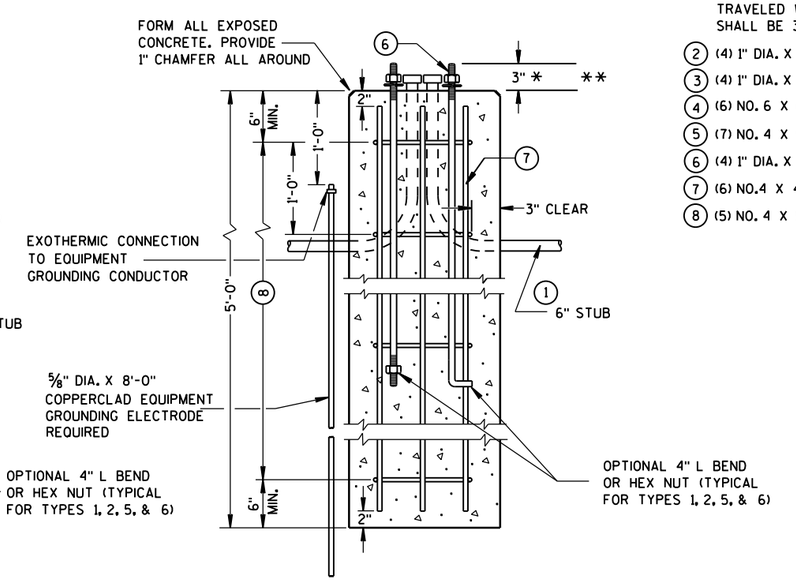
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 519

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GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

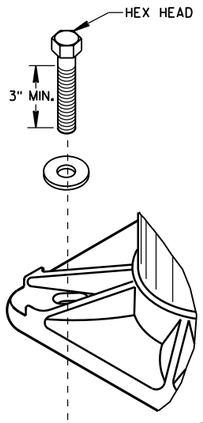
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

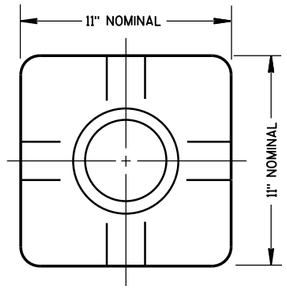
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

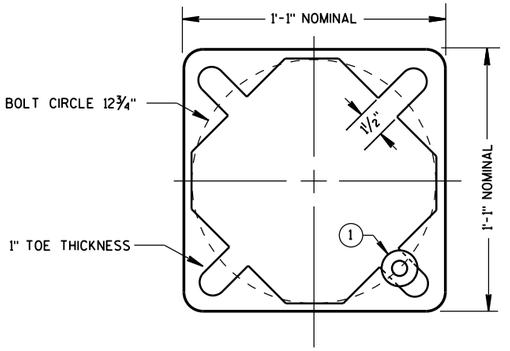
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

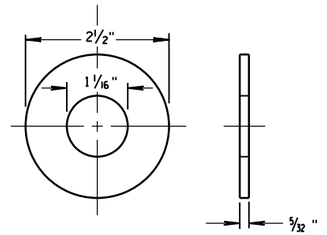




TOP VIEW
(PEDESTAL BASE)

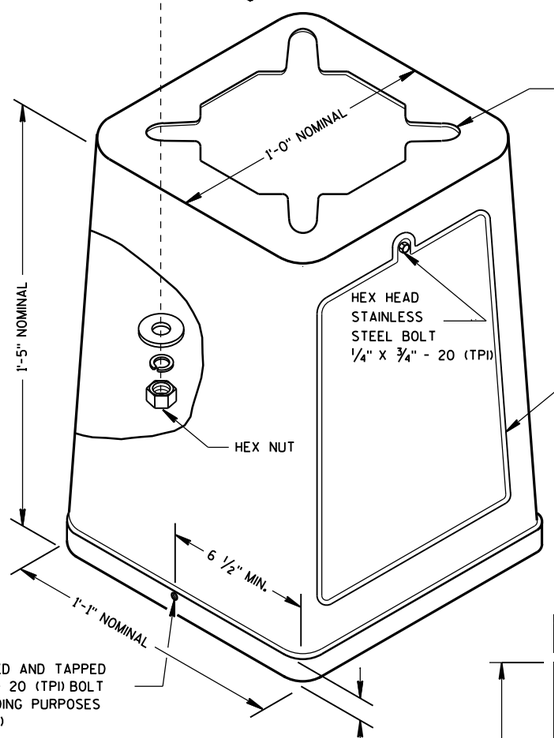


BOTTOM VIEW
(PEDESTAL BASE)

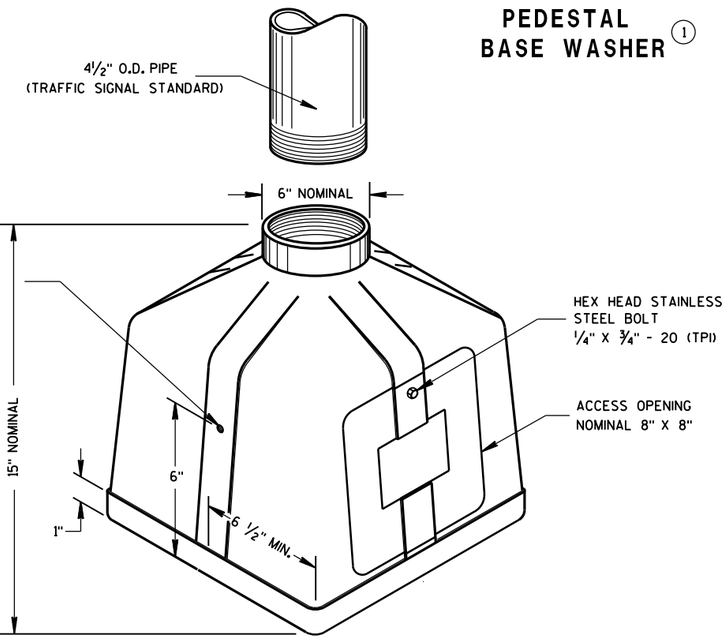


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

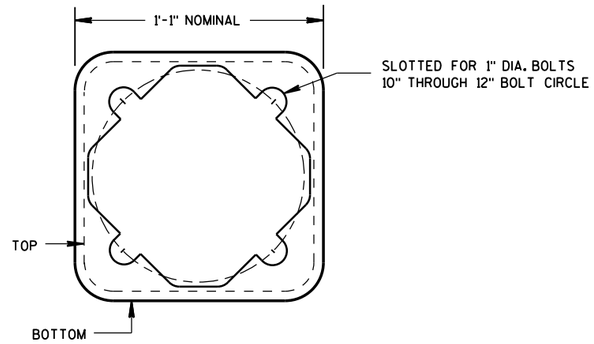


ISOMETRIC VIEW

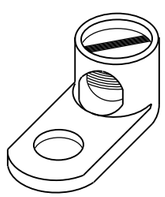


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

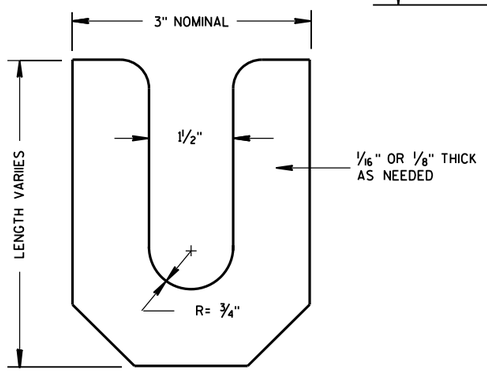


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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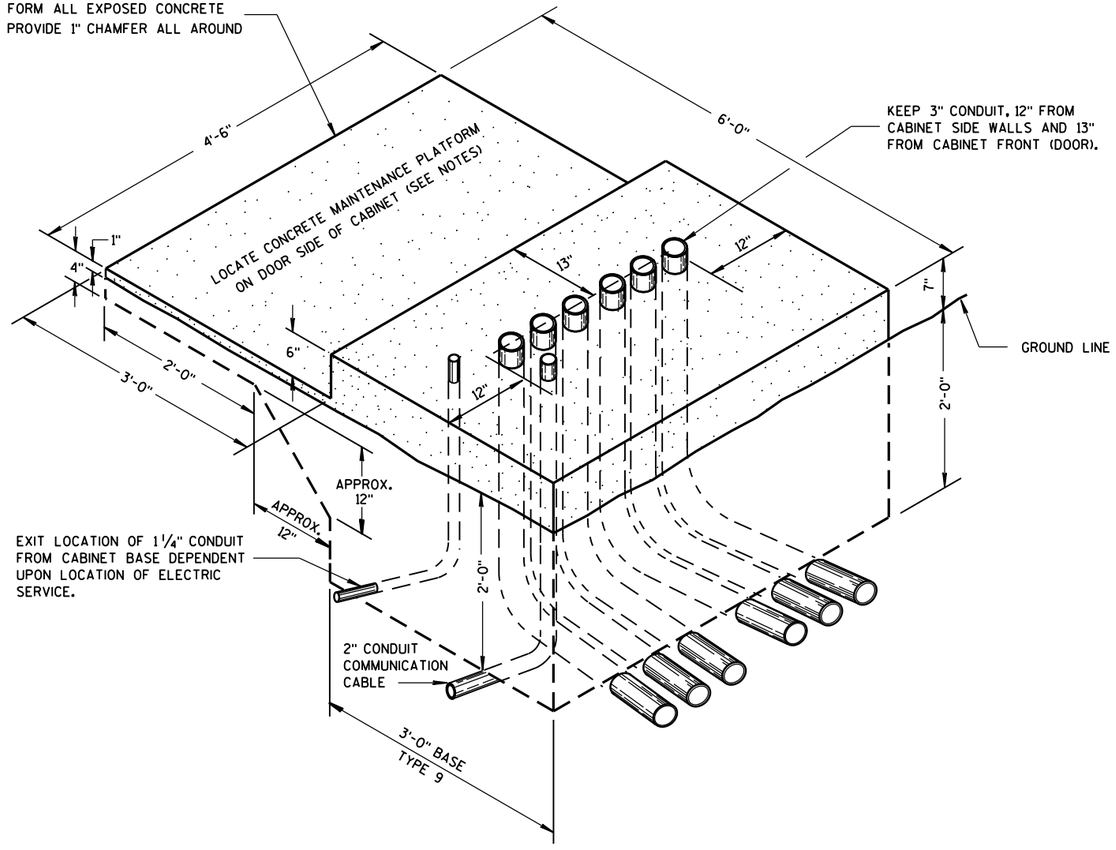
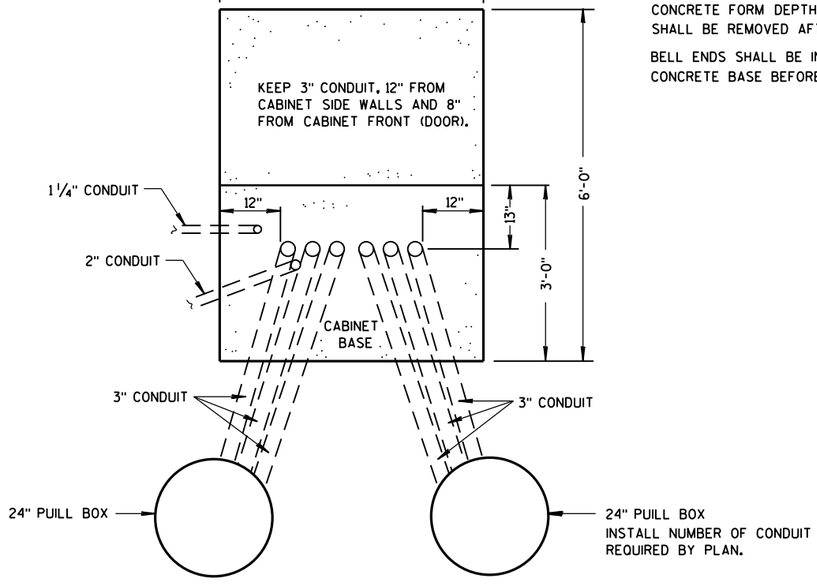


ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 521
FHWA

6
S.D.D. 9 C 6-7

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUIT IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

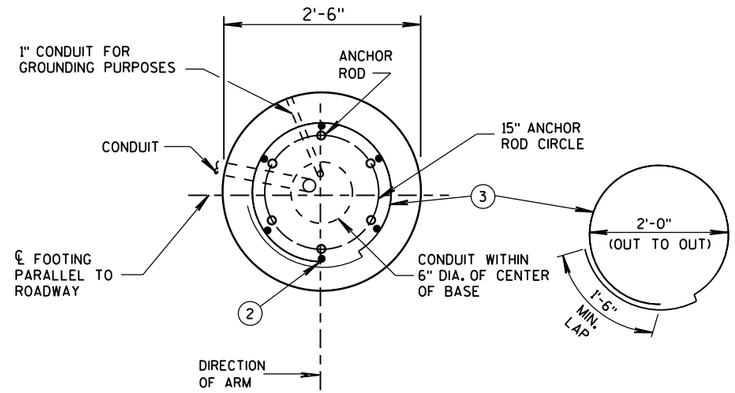
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

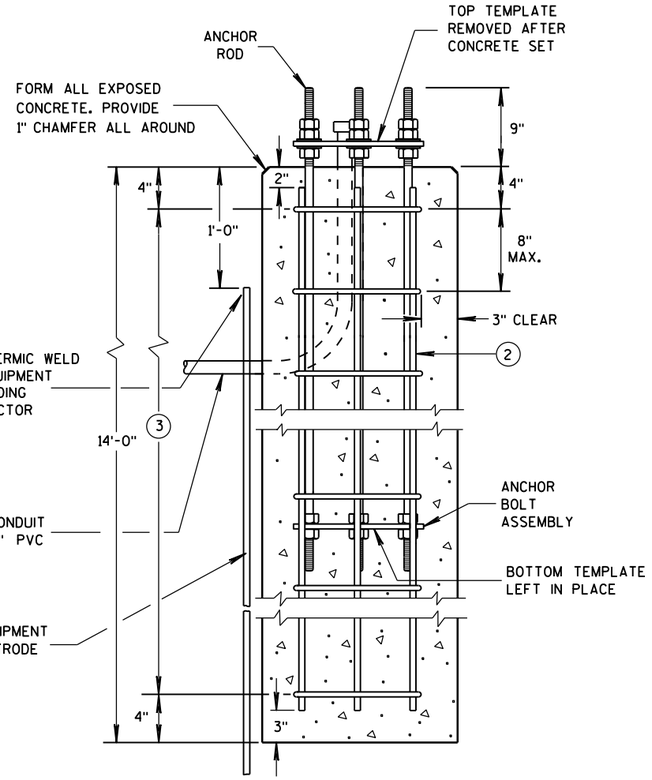
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES. (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATION)	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.

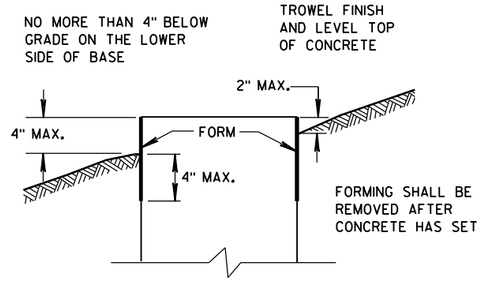




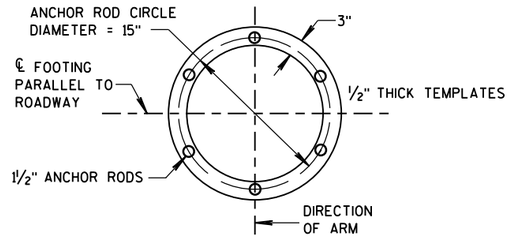
CONCRETE BASE TYPE 10

(FOR TYPE 9 & 10 & OVER HEIGHT (OH) POLES)

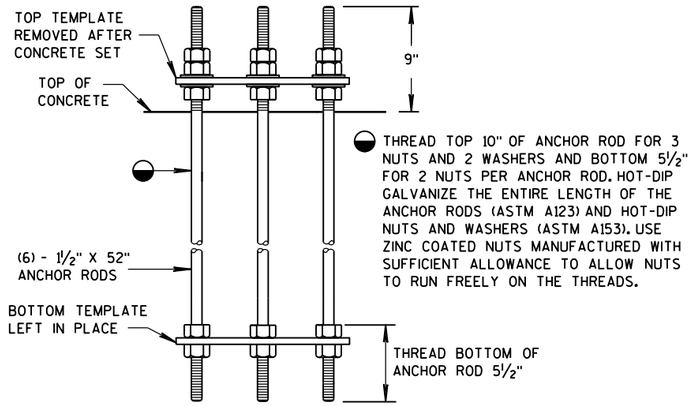
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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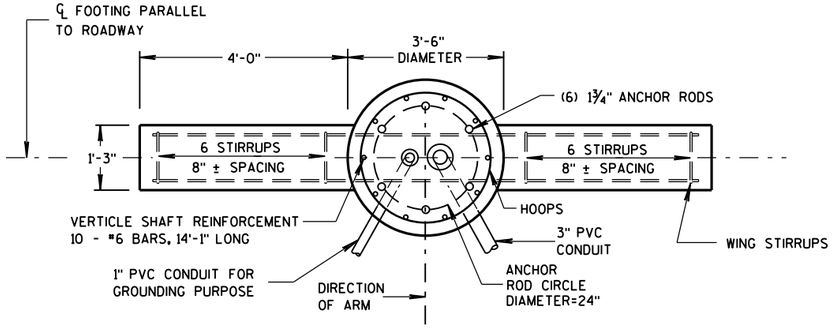
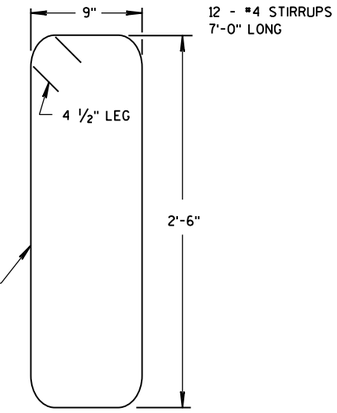
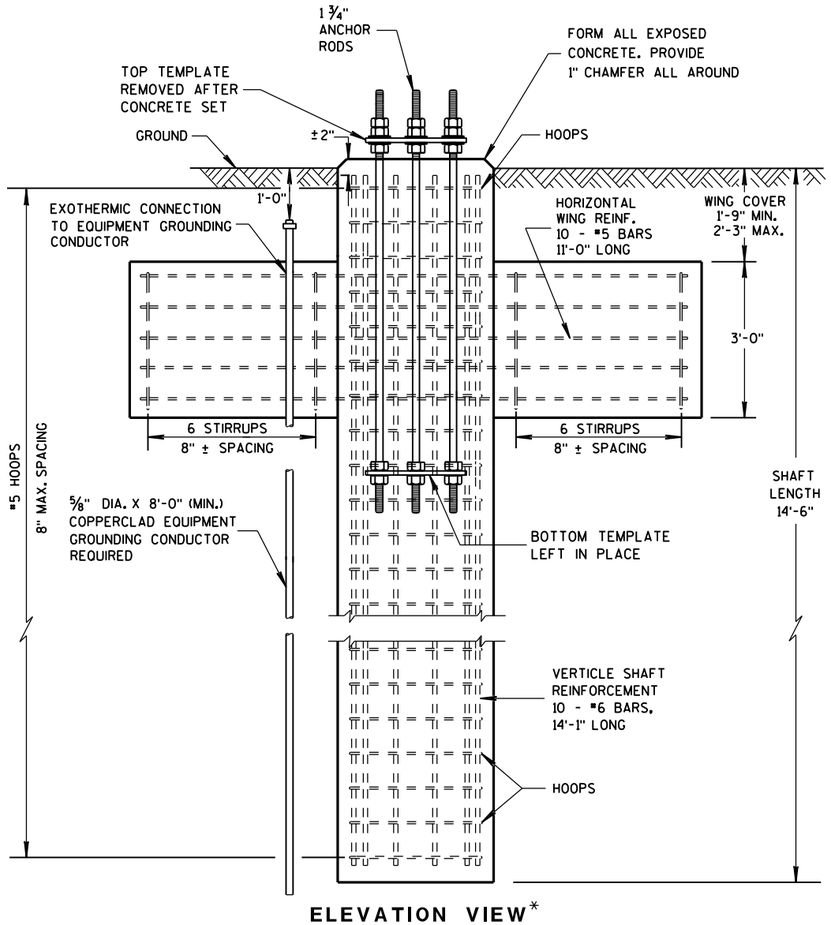
S.D.D. 9 C 11-10



PLAN VIEW

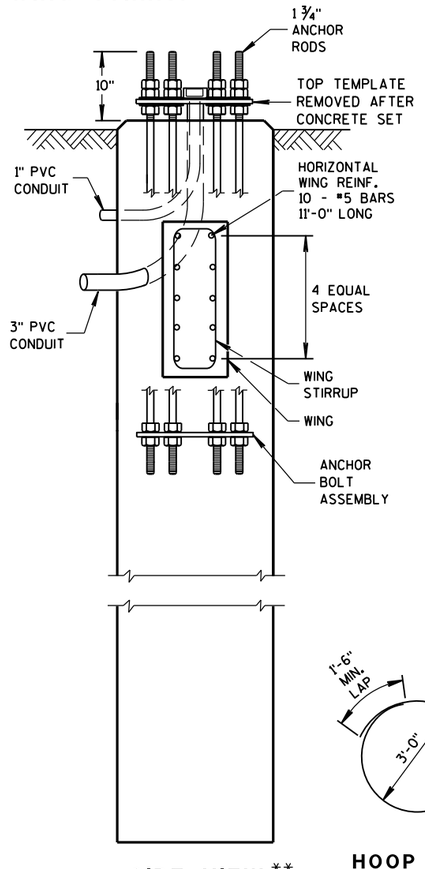


WING STIRRUP



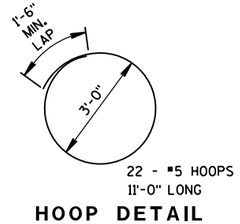
ELEVATION VIEW*

* CONDUITS ARE NOT SHOWN ON THIS VIEW FOR CLARITY



SIDE VIEW**

** HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY



HOOP DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF THE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1-INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4-FOOT COIL OF WIRE ABOVE THE CONCRETE BASE, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL WAY SHALL BE 24-INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36-INCHES, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATIONS	fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36	fy=36,000 p.s.i.

(FOR TYPE 12 & 13 & OVER HEIGHT (OH) POLES)

CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 635 LBS.

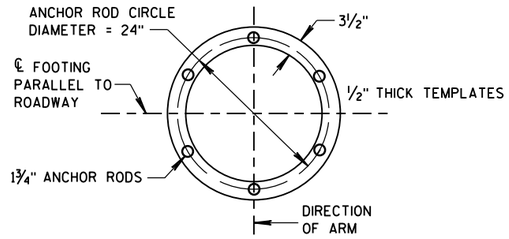
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.
SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 13

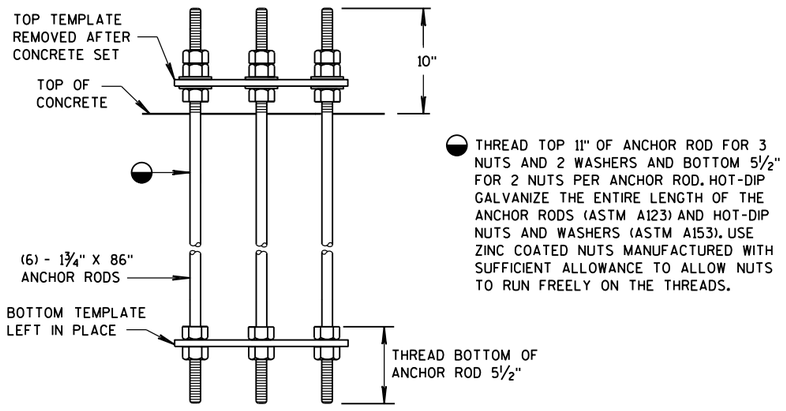
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 9 C 12-9a

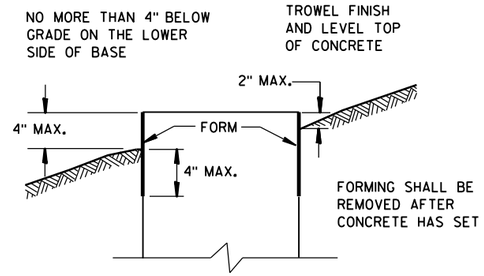


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



FORMING DETAIL

6

6

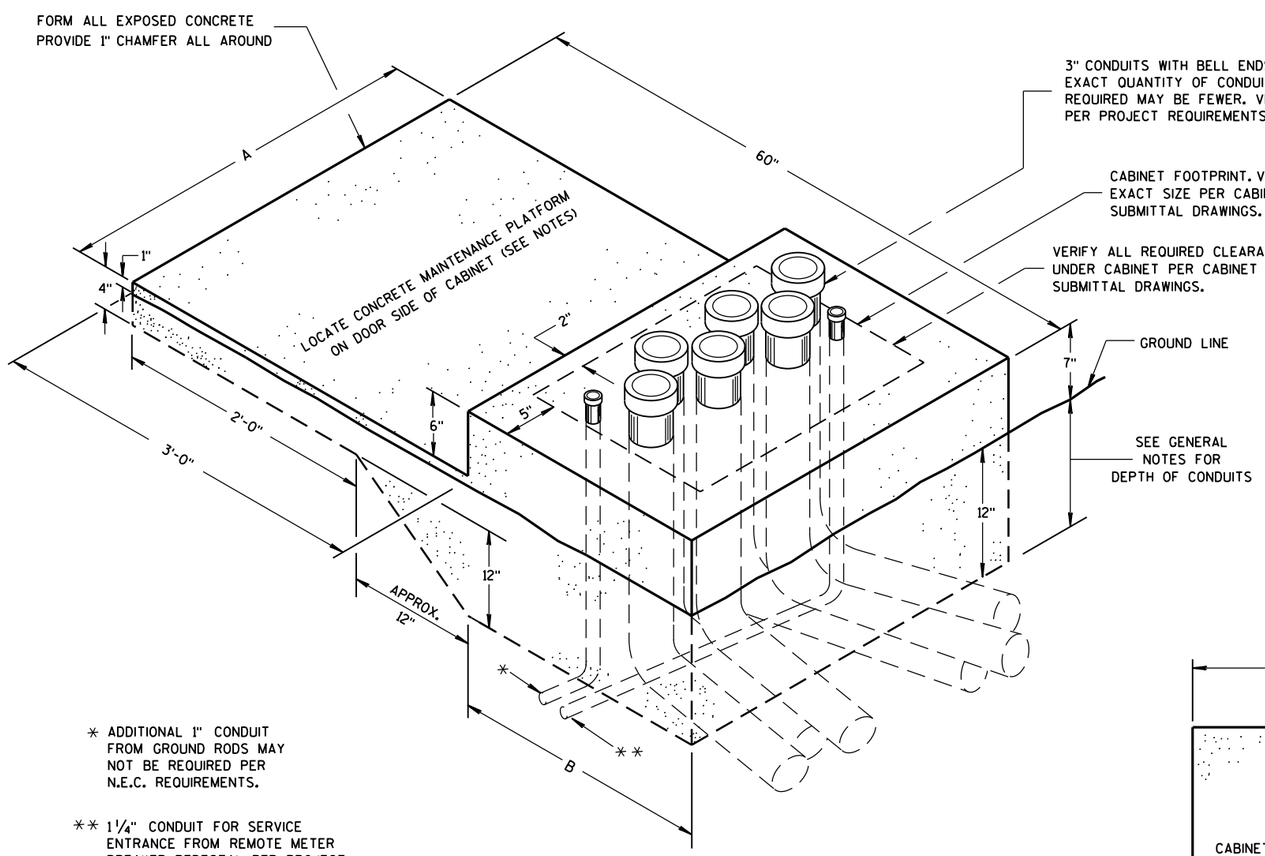
S.D.D. 9 C 12-9b

S.D.D. 9 C 12-9b

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

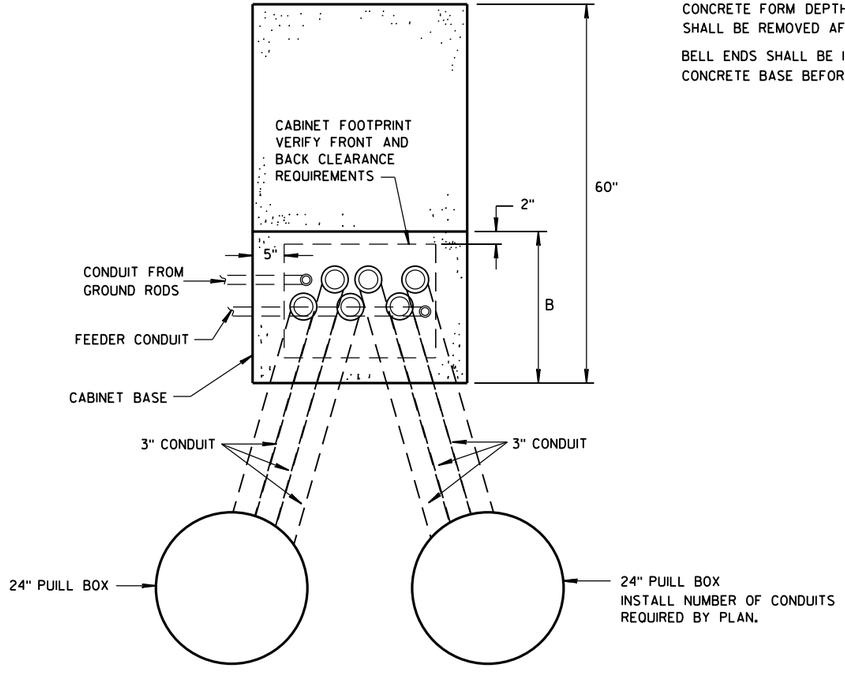
** 1¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

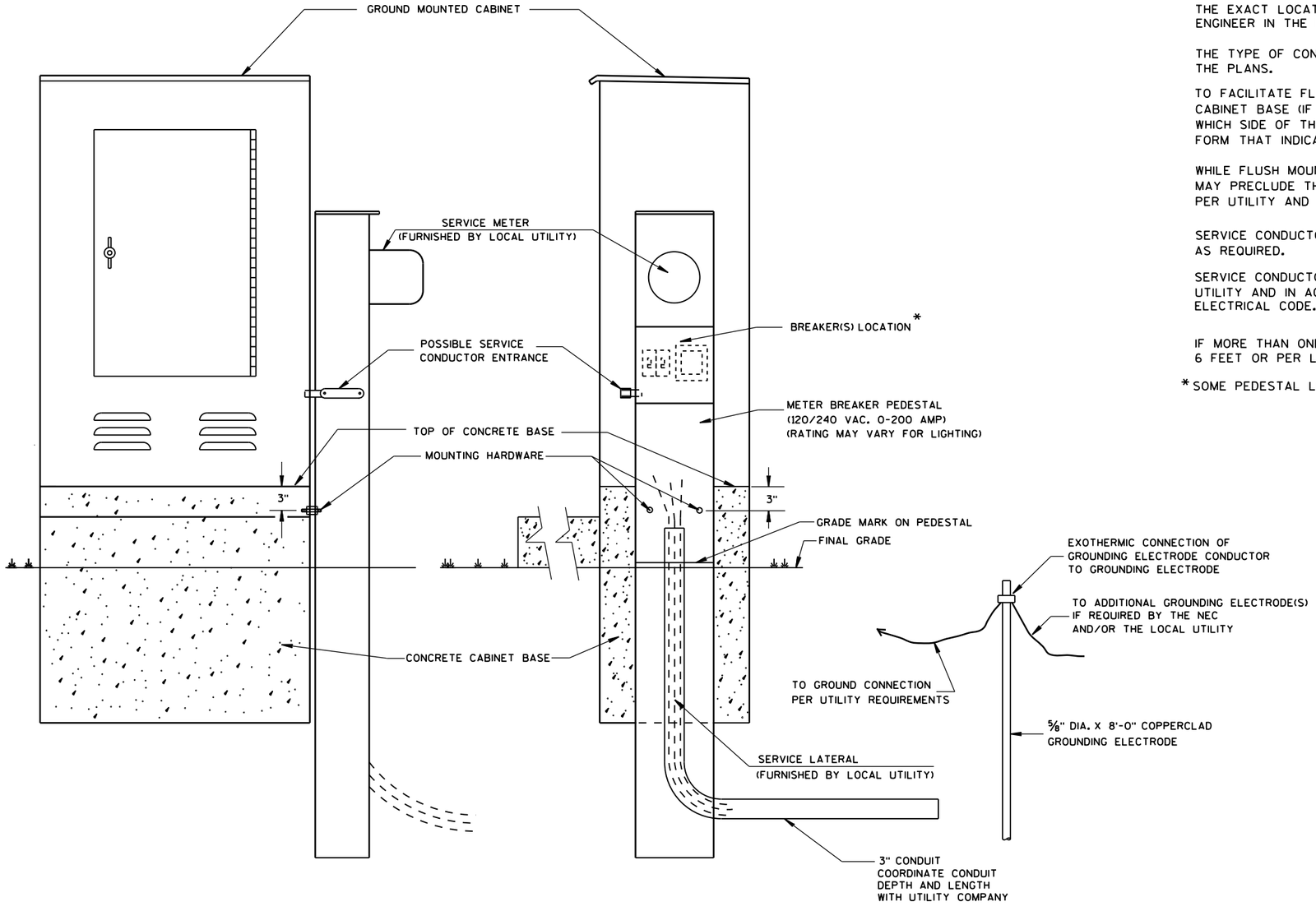
APPROVED
Nov. 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINE
525 — WYS
FHWA

6

S.D.D. 9 C 14-2

6

S.D.D. 9 C 14-2



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

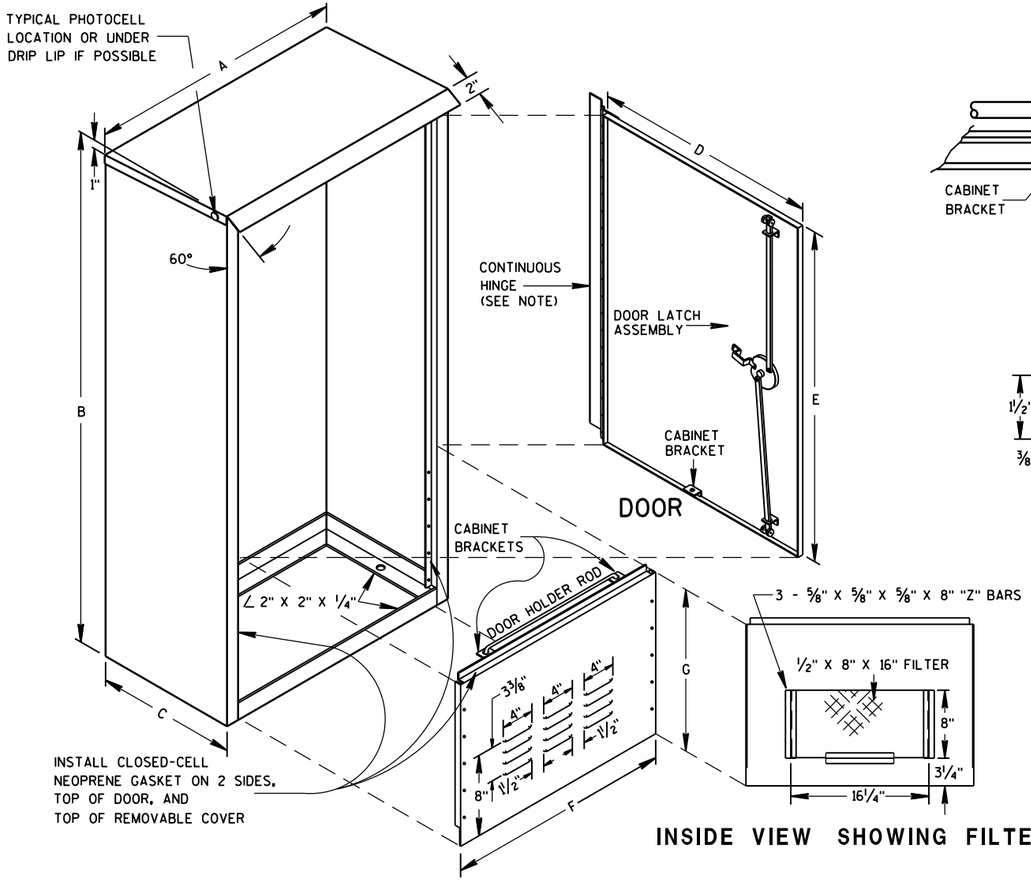
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

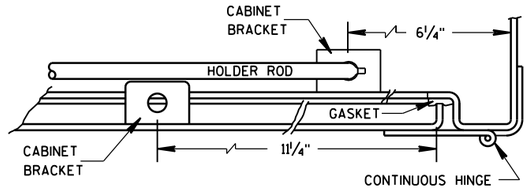
6

S.D.D. 9 D 1-5

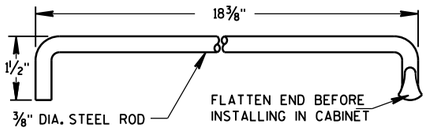


REMOVABLE COVER

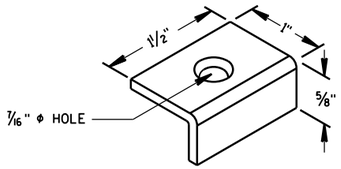
INSIDE VIEW SHOWING FILTER



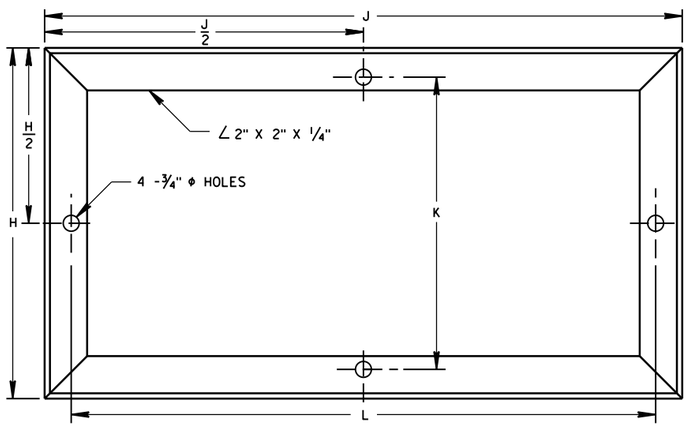
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

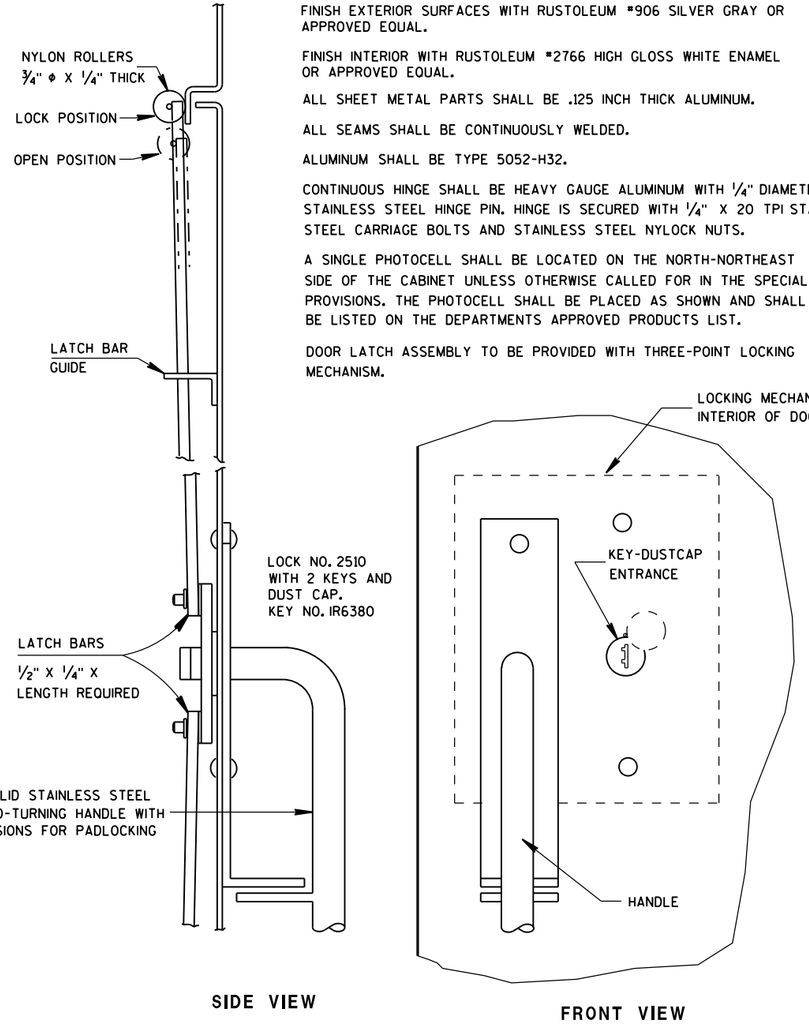
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

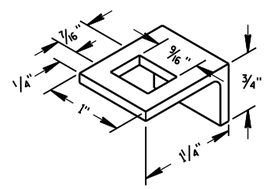
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL 527
FHWA

6

S.D.D. 9 D 2-3

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S.D.D. 9 D 2-3

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

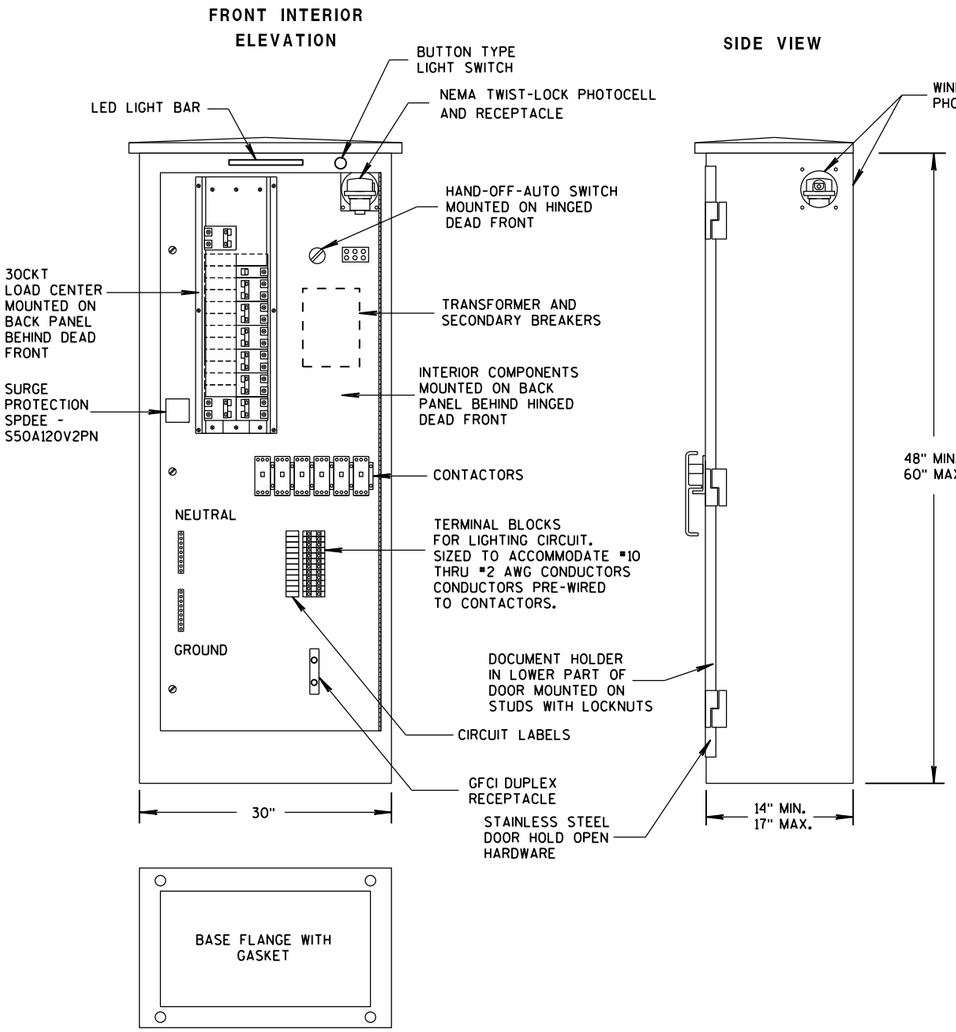
ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

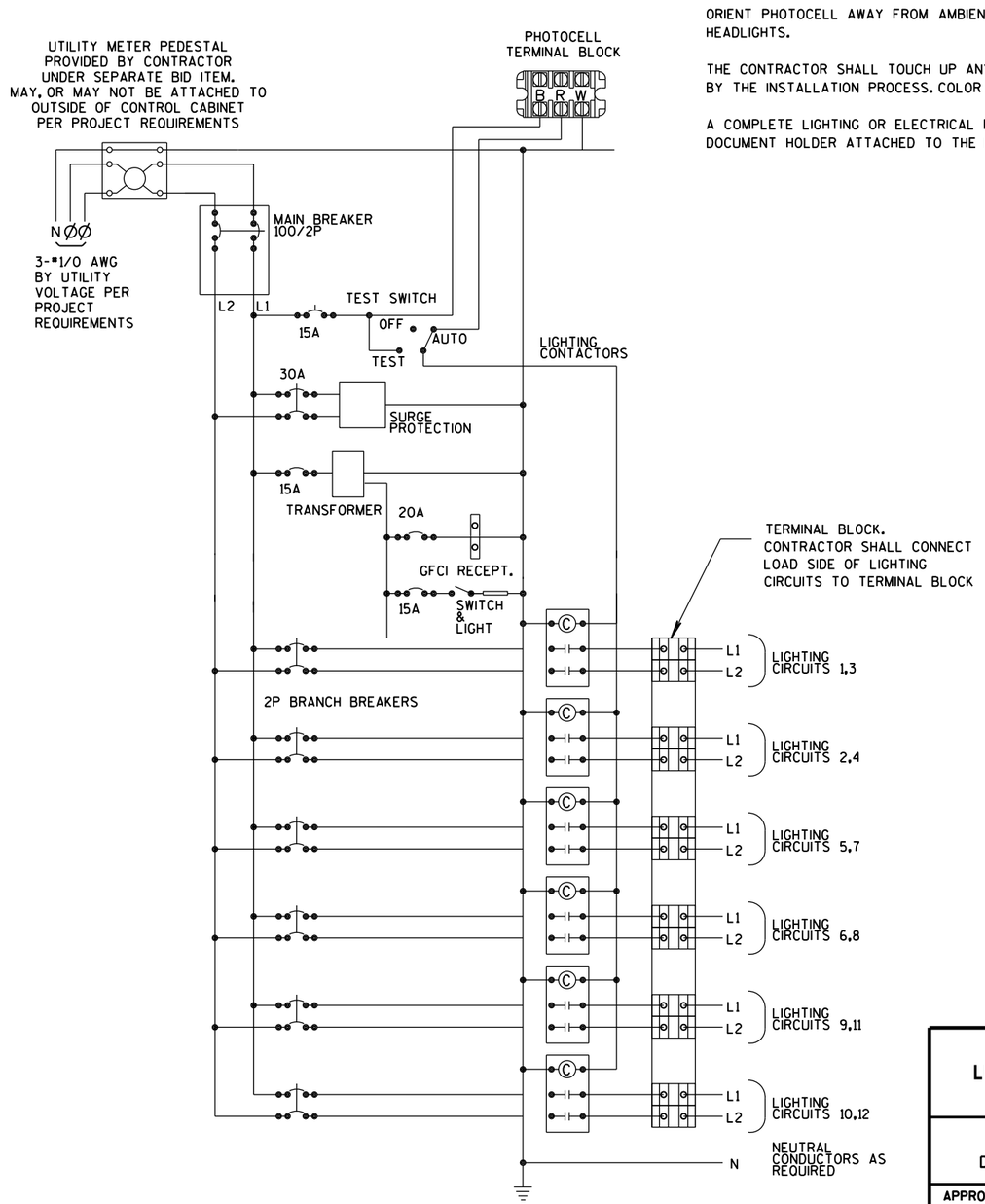
ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.



LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

L30
LIGHTING CONTROL CABINET
240/480 VOLT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

/S/ Thomas Gonring — STATE LIGHTING ENGINEER

528

NYS.

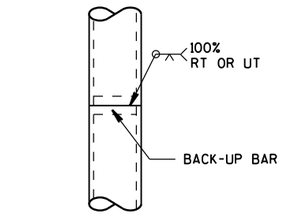
FHWA

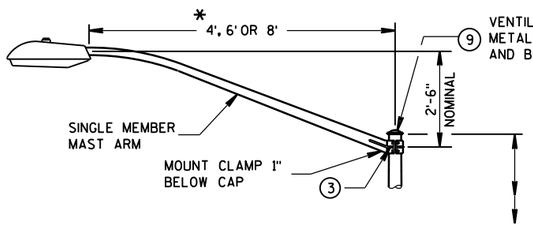
6
S.D.D. 9 D 5-1

FOR MANUFACTURERS USE ONLY

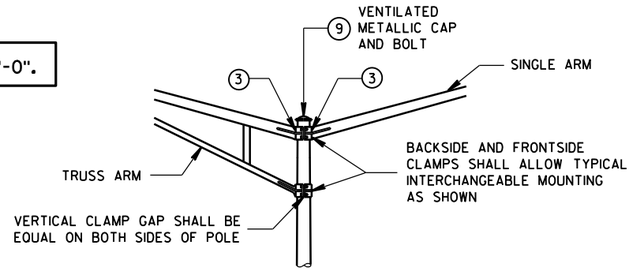
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.

*RISE FOR 4' ARM SHALL BE 2'-0".





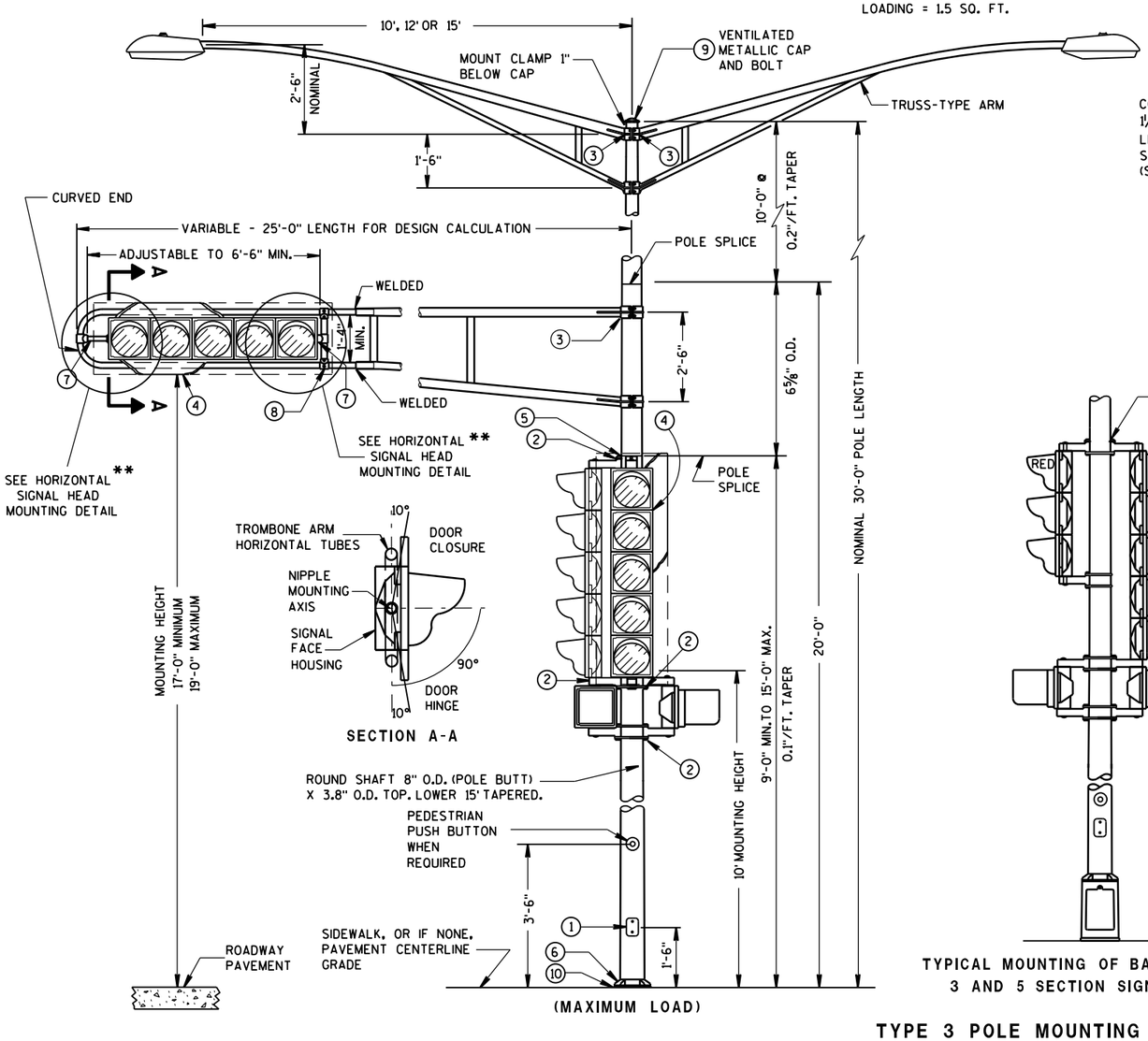
POLE SPLICE DETAIL

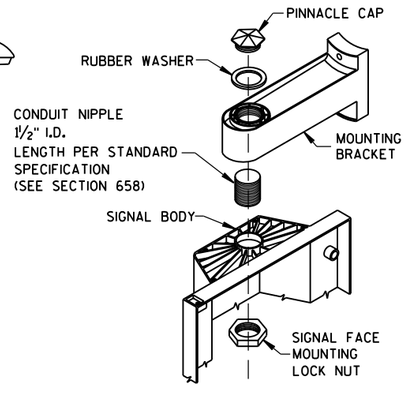


INTERCHANGEABLE MOUNTING DETAIL

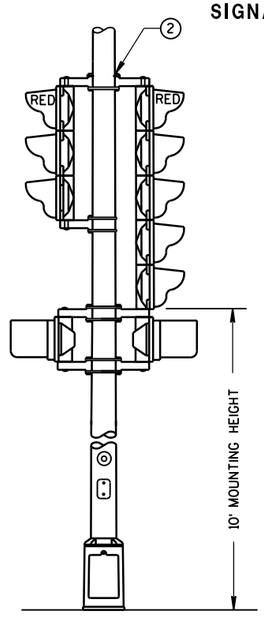
LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

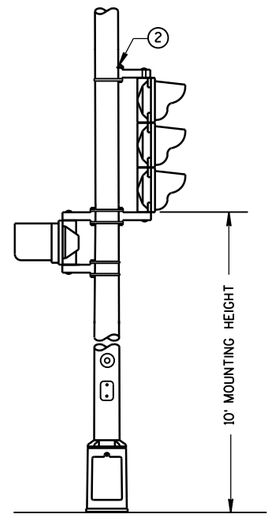




SIGNAL FACE MOUNTING DETAIL
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK
3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION
SIGNAL FACE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652, SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) TYPE 3 POLE CONFIGURATIONS SHALL BE MOUNTED DIRECTLY TO THEIR CONCRETE BASES.

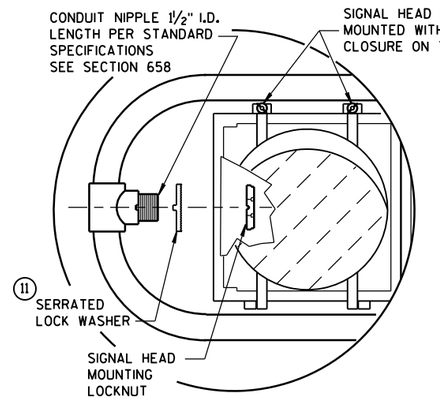
(7) MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658)

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4 " X ¾" -20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.



HORIZONTAL SIGNAL HEAD MOUNTING DETAIL **

** SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR

TYPE 3 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR
TRAFFIC SIGNALS AND
LIGHTING UNITS, TYPE 3
(HEAVY DUTY)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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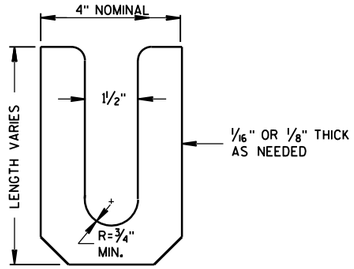
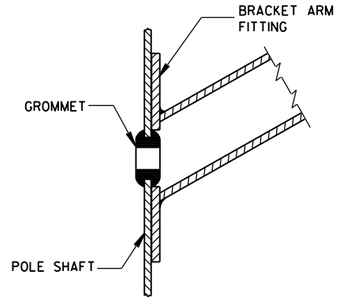
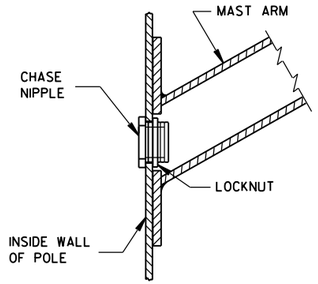


LEVELING SHIM (13)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

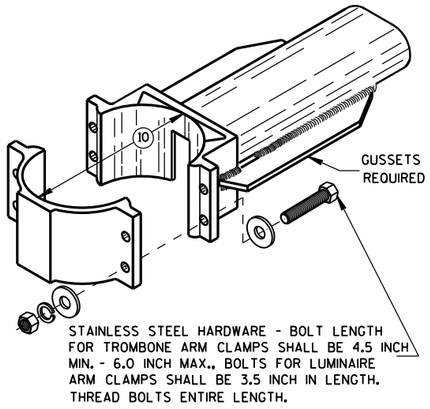
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

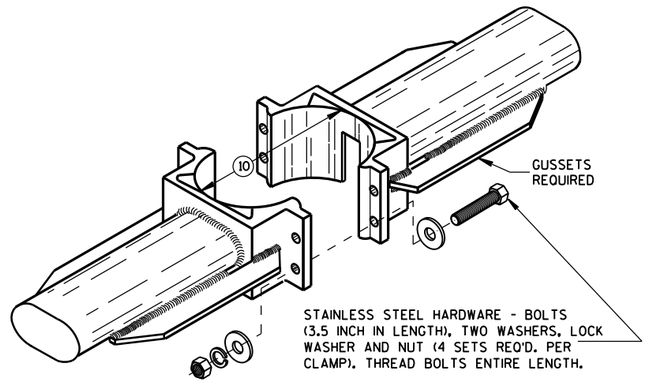
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

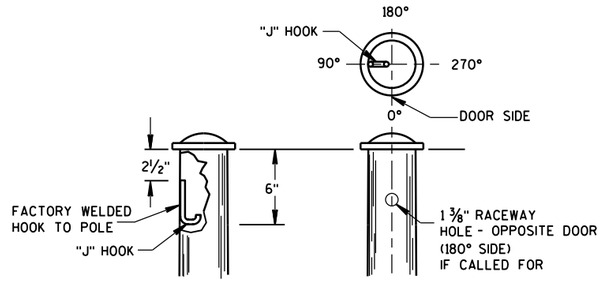
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



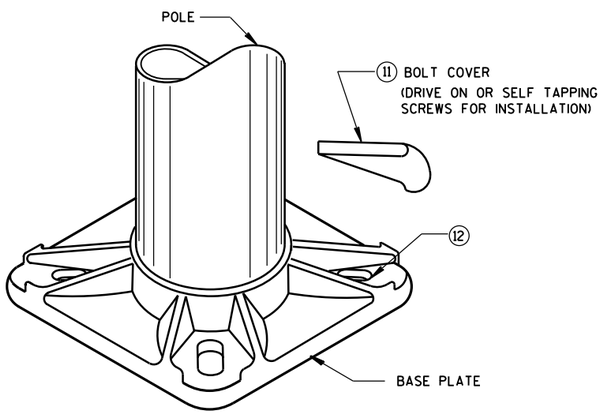
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



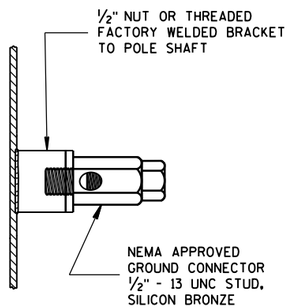
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

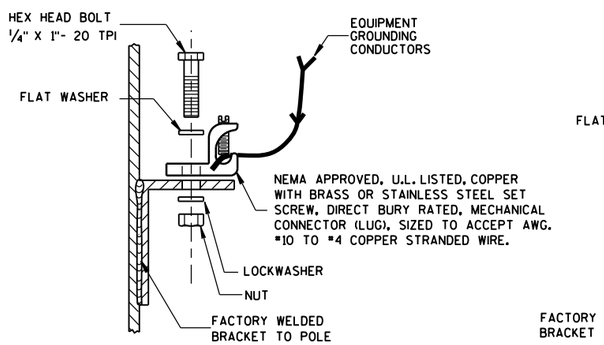


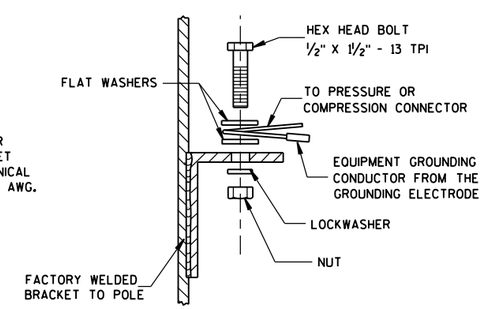
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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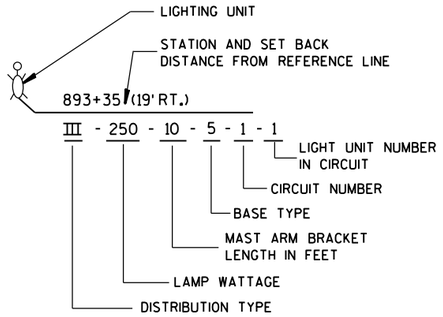
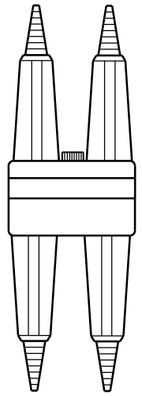
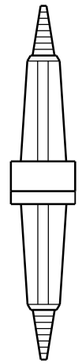
S.D.D. 9 E 1-14g



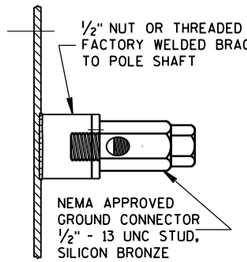
LIGHTING UNIT CODE
(TYPICAL)

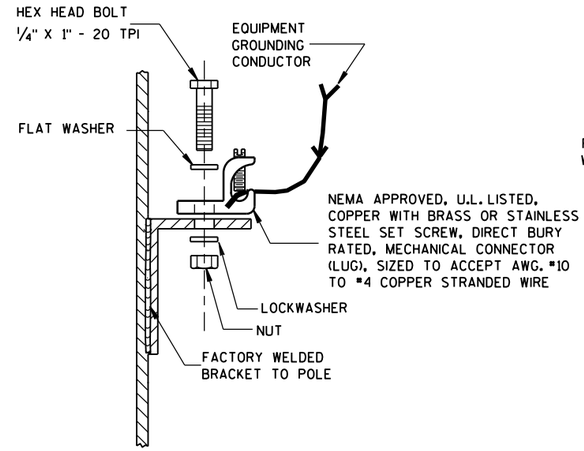


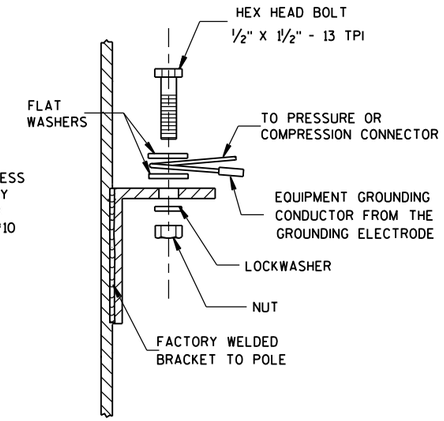
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



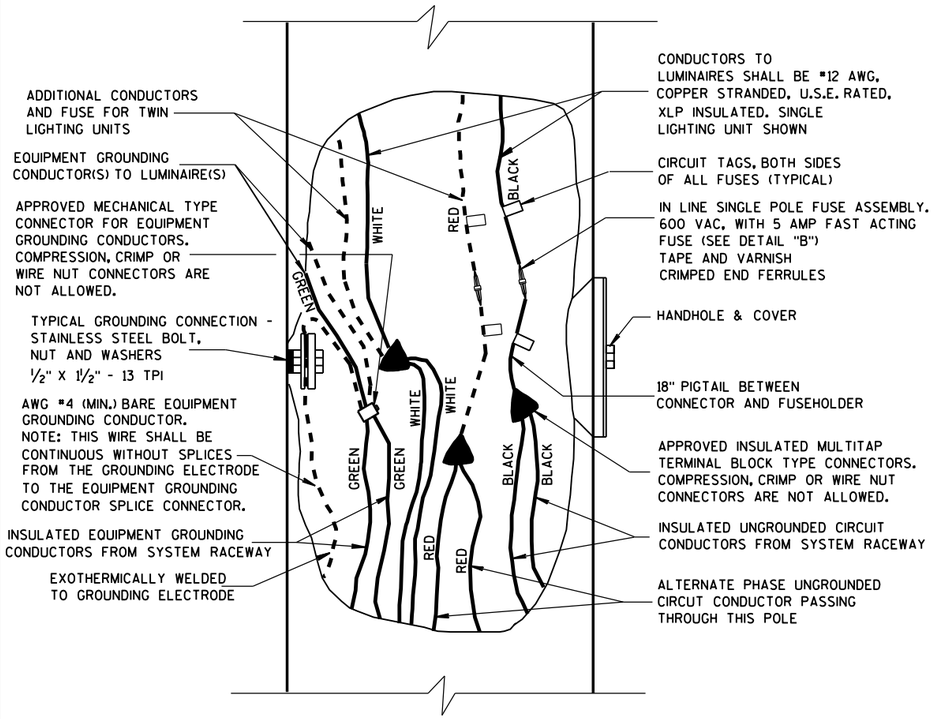
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



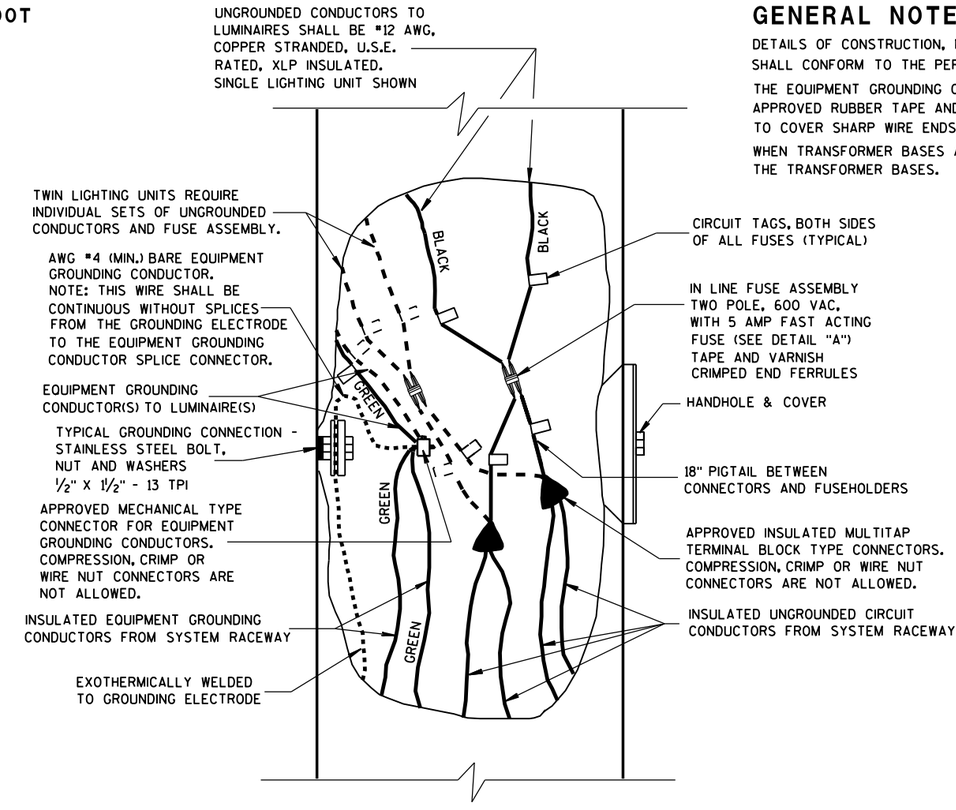




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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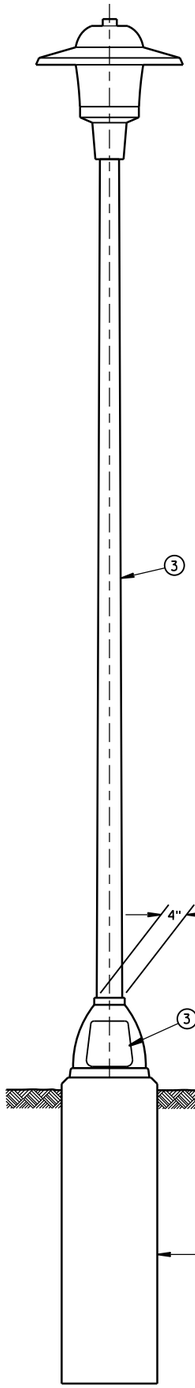
S.D.D. 9 E 3-5

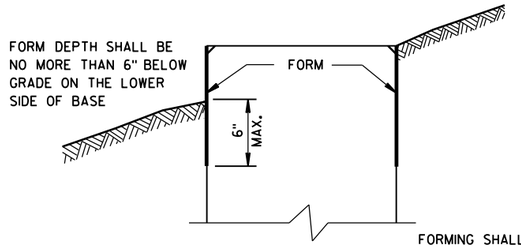


LUMINAIRE

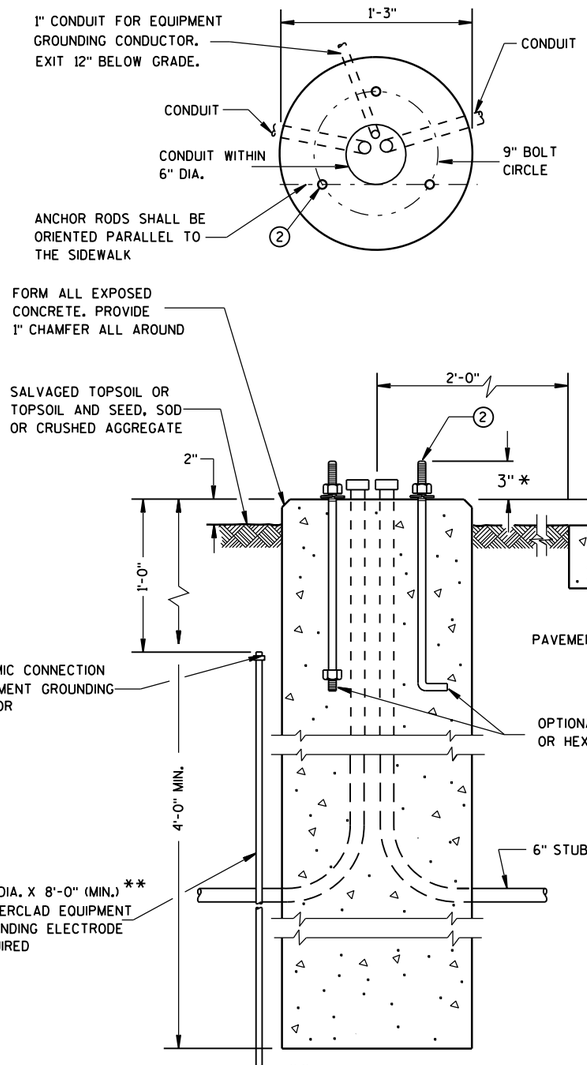
WT. = 50 LBS.
EFFECTIVE PROJECTED AREA
FOR WIND LOADING = 1.5 SQ. FT.

USE LUMINAIRE FROM DEPARTMENT APPROVED PRODUCTS LIST OR ENGINEER APPROVED EQUAL.

WALKWAY LIGHTING UNIT DETAIL



FORMING DETAIL



** GROUNDING ELECTRODE LENGTH MAY VARY, SEE SPECIAL PROVISIONS.

CONCRETE BASE, TYPE 11

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

CONCRETE BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT RUNS, NUMBER OF CONDUITS IN EACH CONCRETE BASE AND CONDUIT SIZE IS AS SHOWN ON THE PLANS. THE 1-INCH CONDUIT IS USED IN ALL BASES.

MINIMUM BENDING RADIUS OF CONDUIT SHALL BE SIX TIMES THE DIAMETER OF THE CONDUIT.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1-INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE AND BEFORE INSTALLATION OF CABLE OR WIRE.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A CONCRETE BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE CONCRETE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1-FOOT OR LESS.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NO. 4 AWG, BARE, STRANDED COPPER. IT SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED LEAVING A 2-FOOT LENGTH OF WIRE ABOVE THE CONCRETE BASE. THE 2-FOOT LENGTH OF EQUIPMENT GROUNDING CONDUCTOR ABOVE THE BASE SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL PER SECTION 5.17.6.3, AASHTO 2001 4TH EDITION STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS.

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

GENERAL NOTES (CONTINUED)

(1) DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24-INCHES MIN. DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES MIN. DEPTH OF ALL CONDUITS SHALL NOT EXCEED 36-INCHES.

(2) THREE - ¾-INCH DIA. X 15-INCH ANCHOR RODS OR ¾-INCH DIA. X 19-INCH ANCHOR RODS INCLUDING THE 4-INCH "L" BEND. THE "L" BEND SHALL NOT BE THREADED. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS.

(3) PEDESTAL BASE-STANDARD:

THE PEDESTAL BASE-STANDARD SHALL BE A ONE PIECE WELDED UNIT, WITH AN OVERALL HEIGHT OF TEN FEET.

THE POLE SHALL BE ROUND, TAPERED, ALUMINUM WITH A 3-INCH OUTSIDE DIAMETER TOP AND 0.125 INCH WALL THICKNESS.

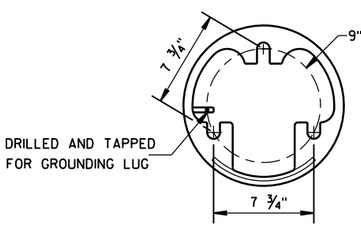
THE BELL SHAPED BASE SHALL BE 12 ½ INCHES IN DIAMETER AND HAVE A 9-INCH BOLT CIRCLE. ANCHOR RODS SHALL BE INCLUDED WITH THE BASE.

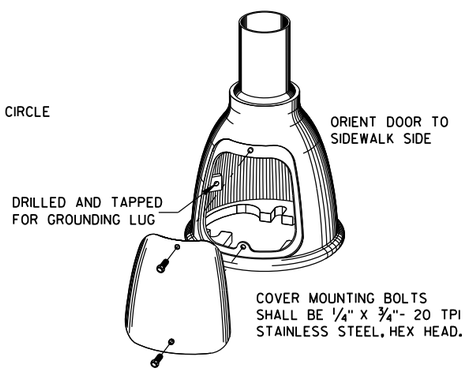
THE ACCESS DOOR OPENING SHALL BE APPROXIMATELY 7½ X 5¼ X 7½-INCHES.

THE FIXTURE AND PEDESTAL BASE-STANDARD SHALL BE PAINTED WITH AN EARTH COLORED THERMOSET POWDER COAT, ACRYLIC ENAMEL. THE ENAMEL SHALL BE FORMULATED TO SHOW NO APPRECIABLE FADING WITHIN FIVE YEARS.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED BRASS OR COPPER TYPE. CONNECTION HARDWARE SHALL BE STAINLESS STEEL (BOLT, NUT, LOCKWASHER - ¼" X ¾" - 20 TPI).

ALL NONMETALLIC CONDUIT CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES. (SEE NEC 347.5)





WALKWAY PEDESTAL BASE STANDARD DETAIL

WALKWAY LIGHTING UNIT AND CONCRETE BASE, TYPE 11

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

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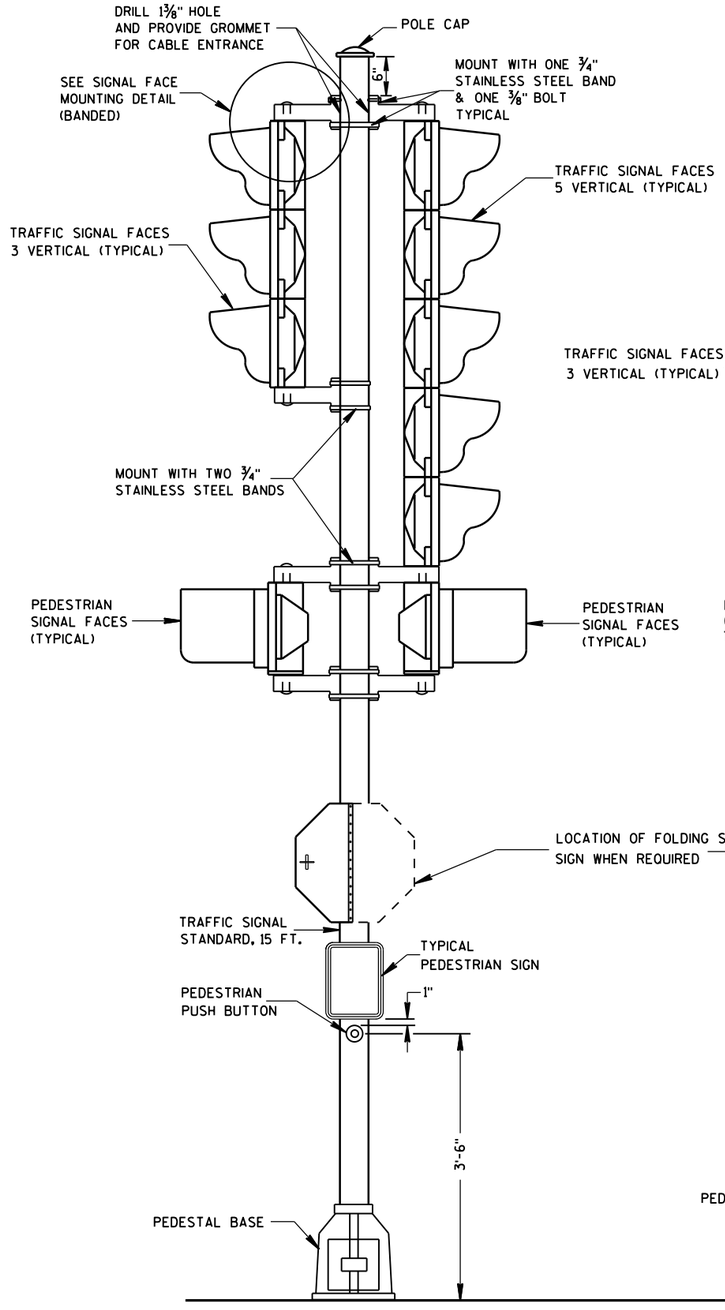
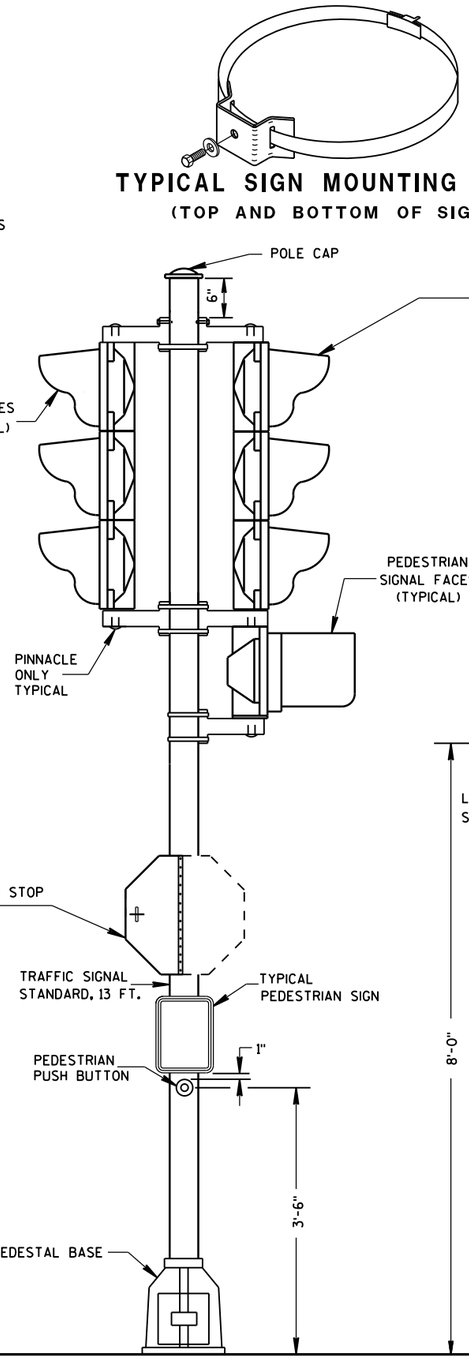
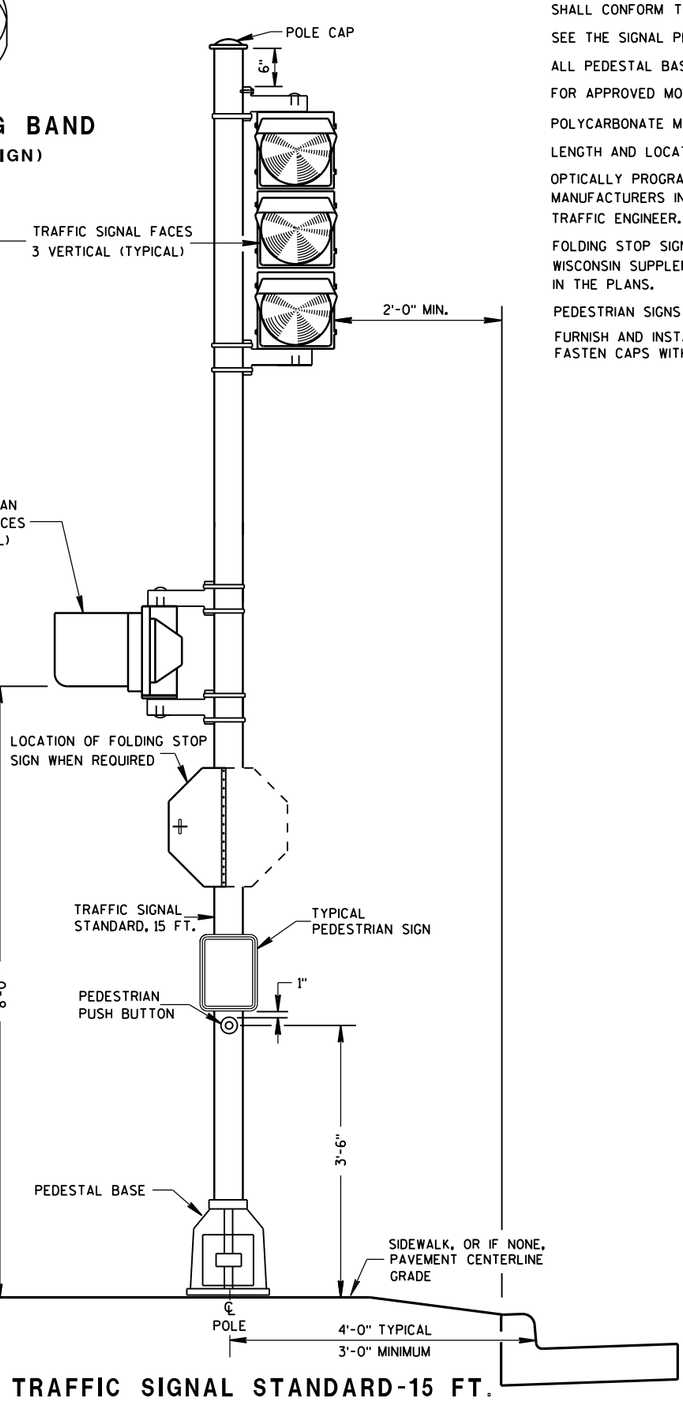


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

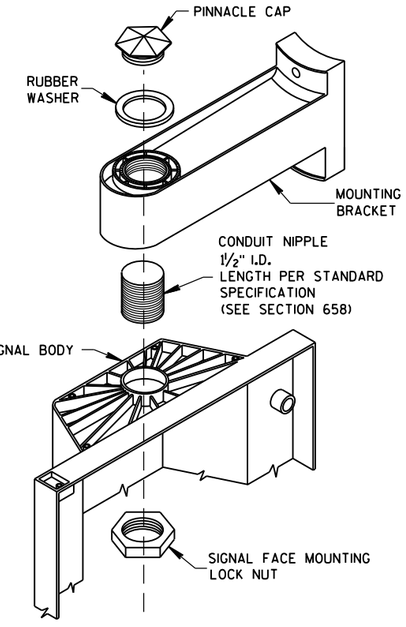
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SIGNAL FACE MOUNTING DETAIL
(BANDED)

TRAFFIC SIGNAL STANDARD
POLY BRACKET MOUNTINGS
(TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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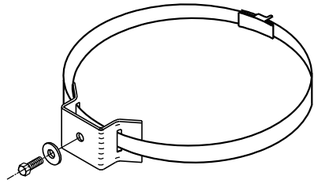
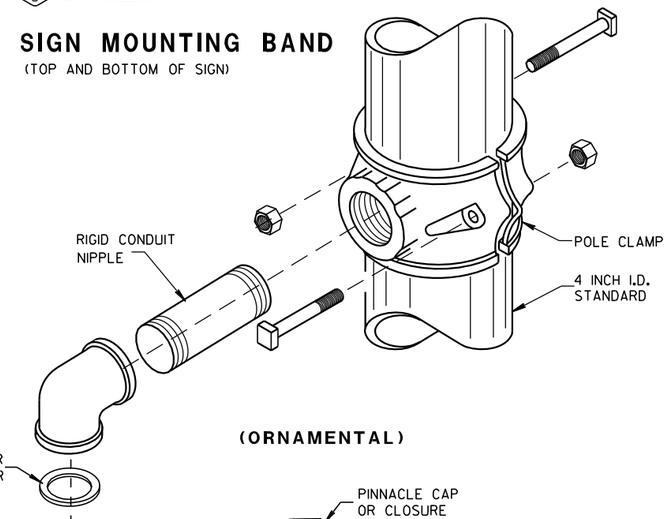


TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



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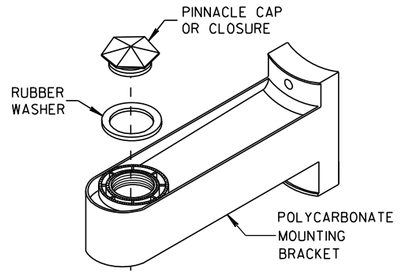

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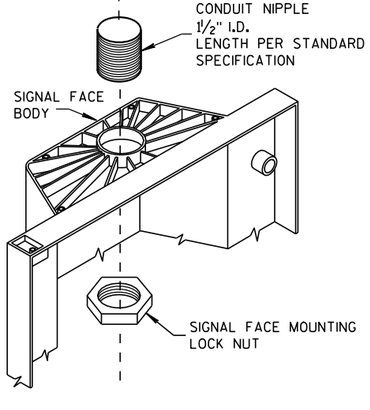
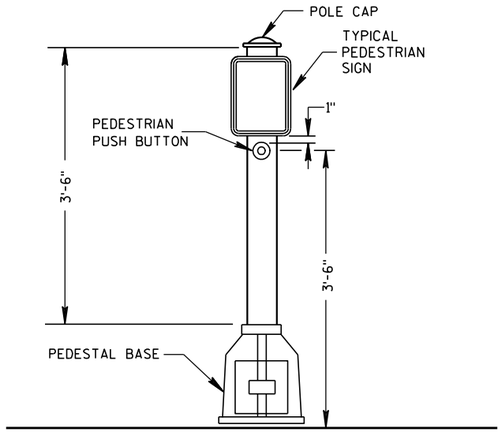


SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

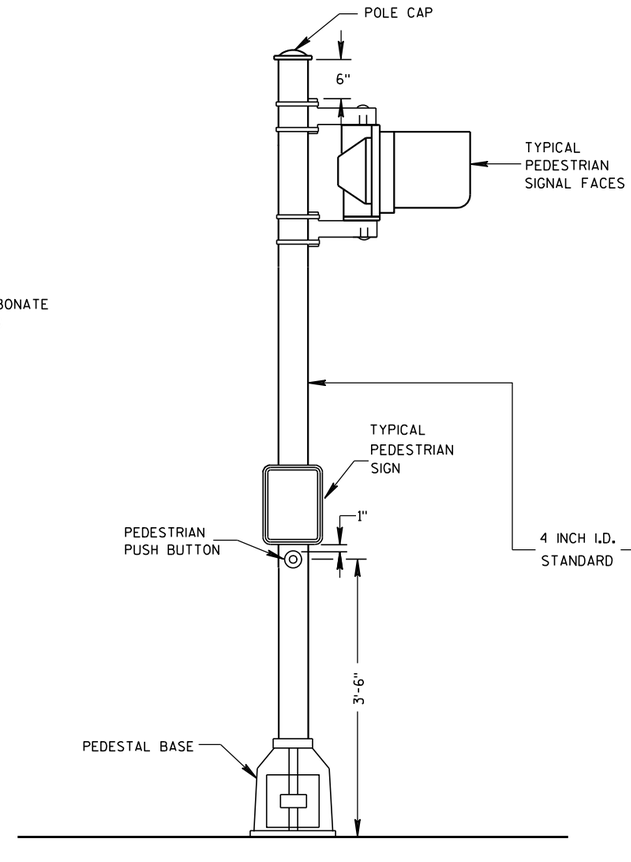
POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

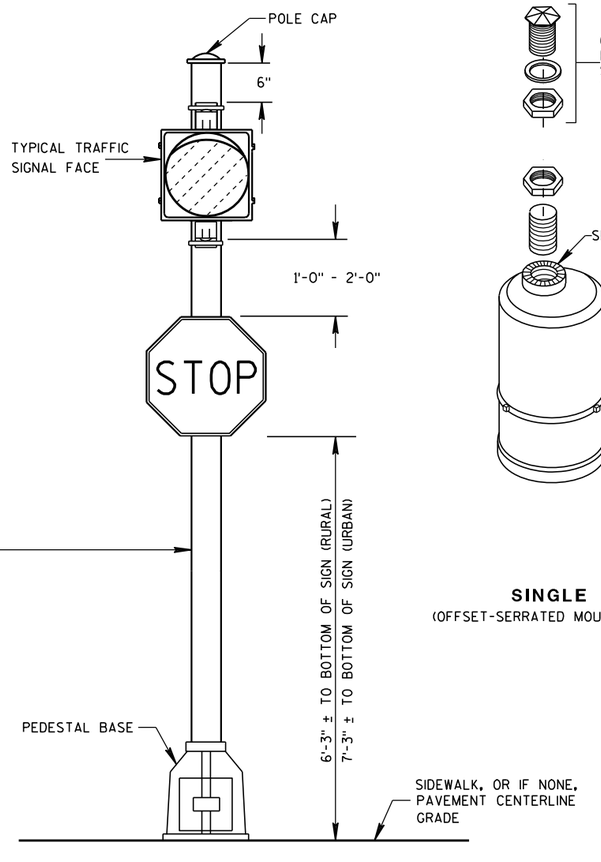
MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

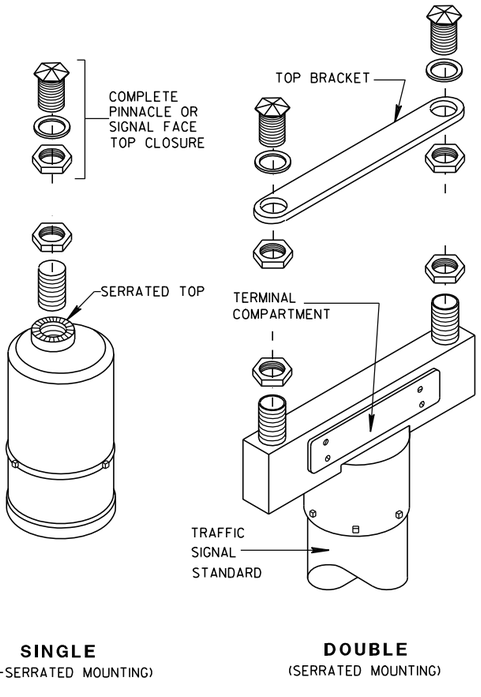
FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



PEDESTRIAN FACE STANDARD-10 FT.
(WALK-DON'T WALK)



STANDARD FLASHER.
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET-SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/11/10
DATE

/S/ John Corbin
STATE ELECTRICAL ENGI

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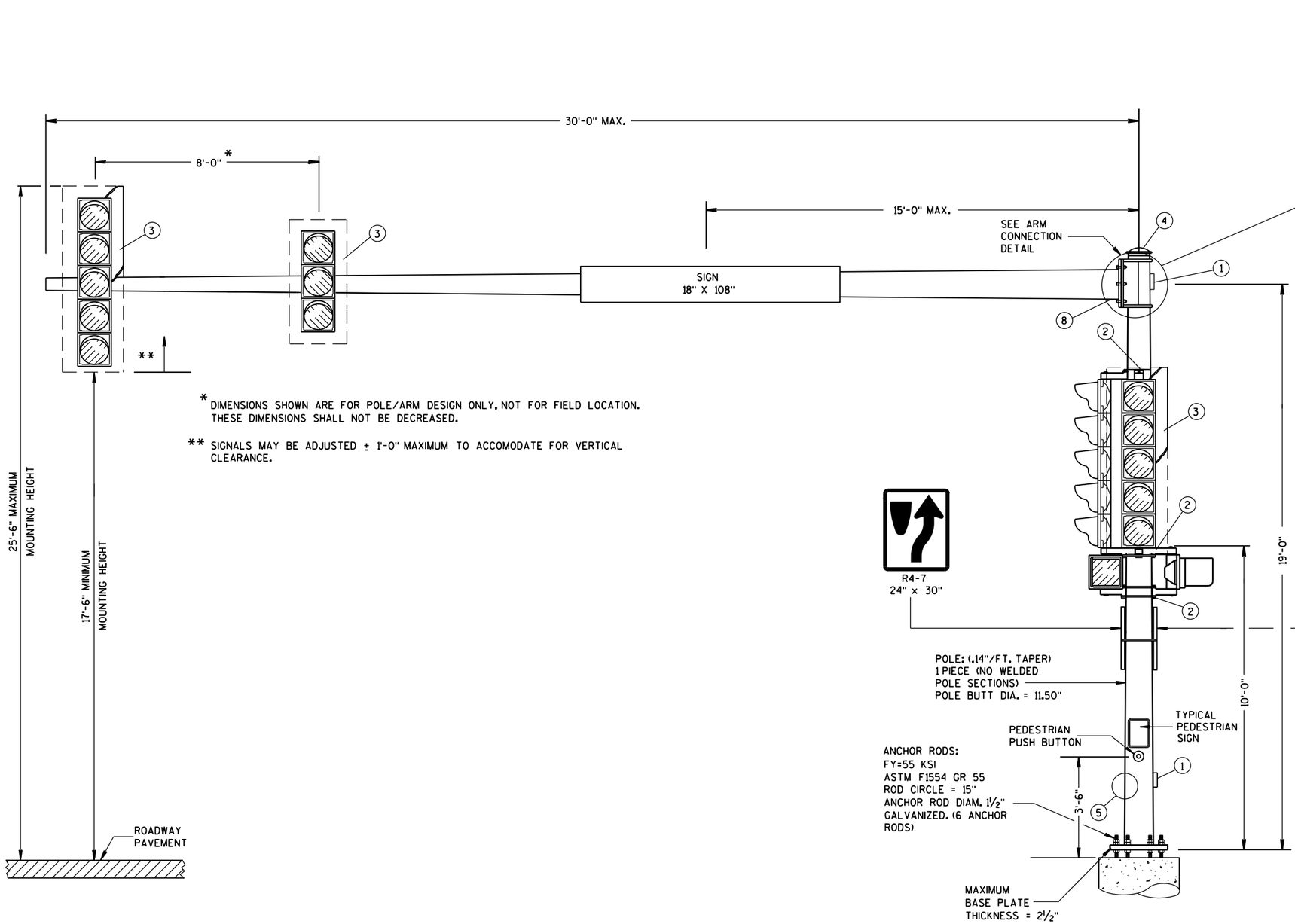
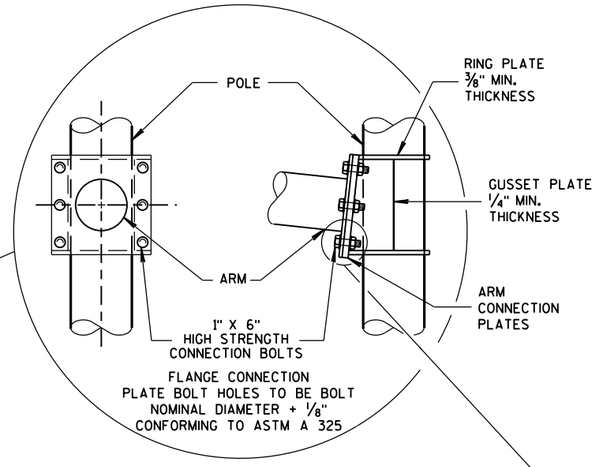
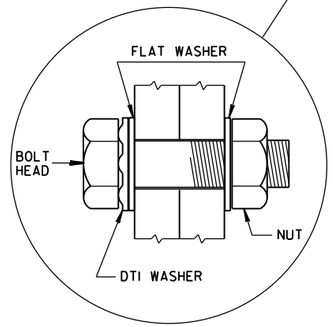


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

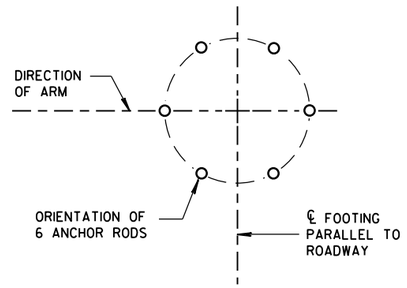
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

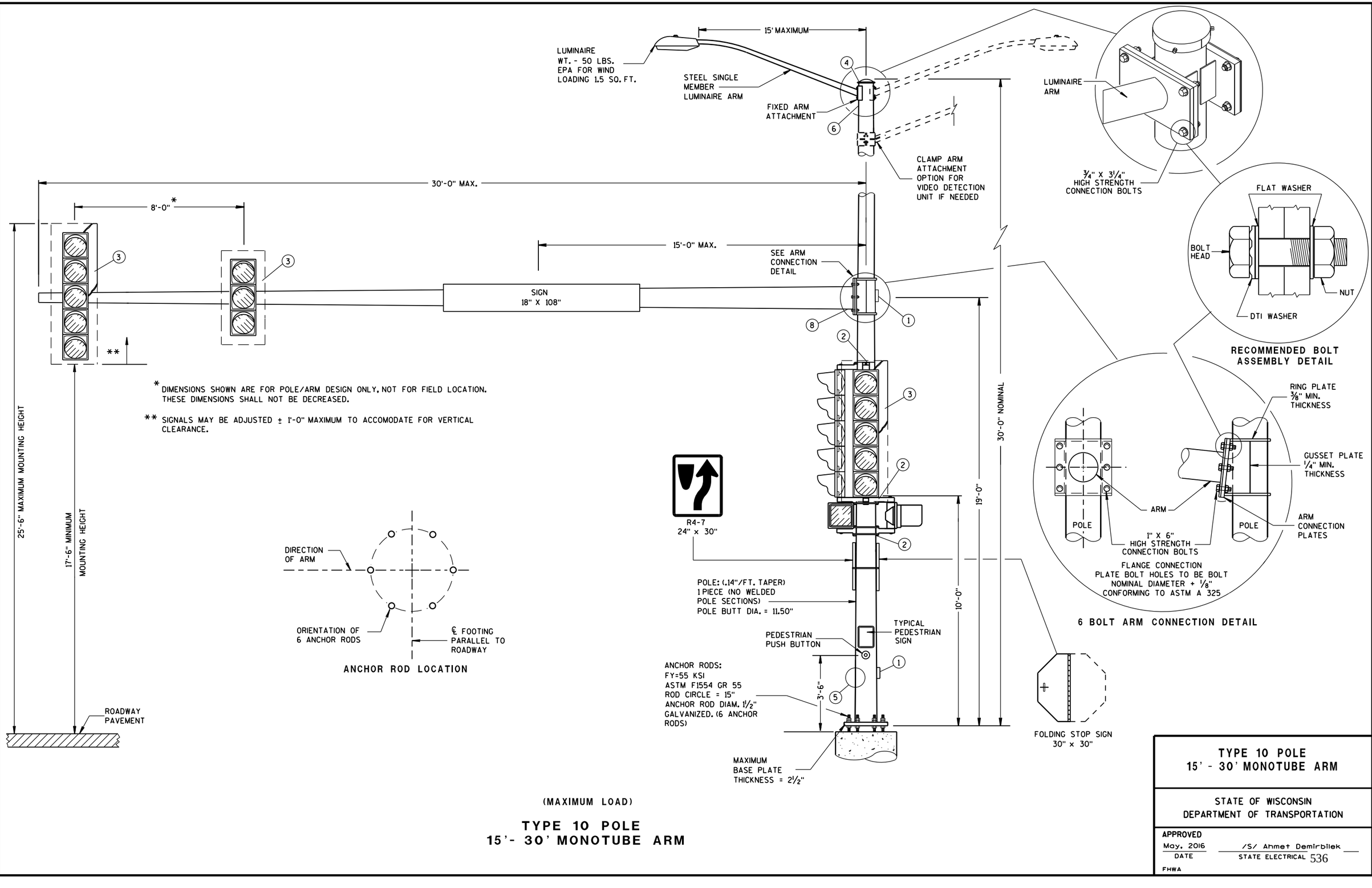


ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 9 POLE 15'- 30' MONOTUBE ARM

TYPE 9 POLE 15' - 30' MONOTUBE ARM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May, 2016 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL 535
FHWA	



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** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

(MAXIMUM LOAD)

TYPE 10 POLE
15'- 30' MONOTUBE ARM

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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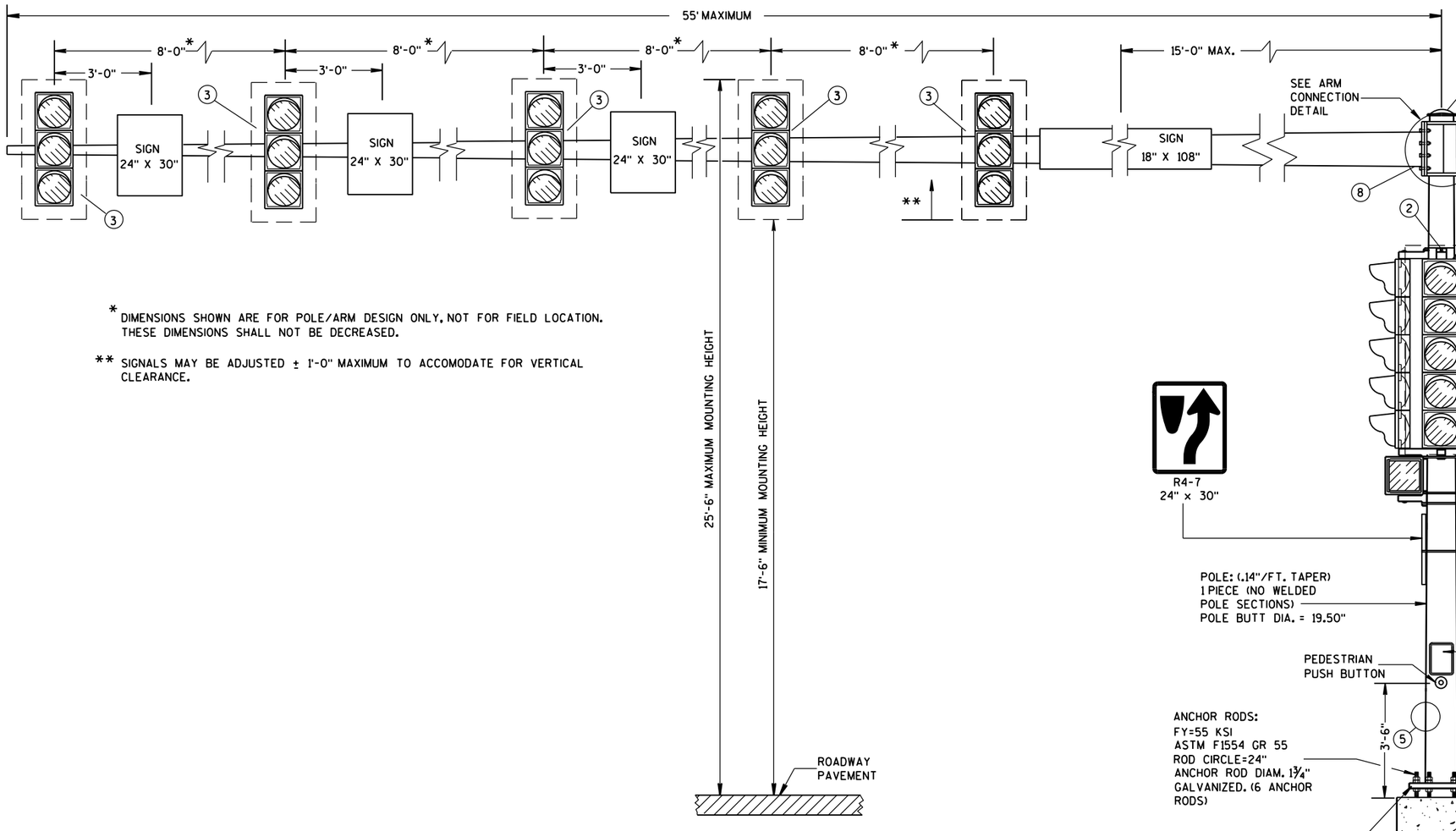

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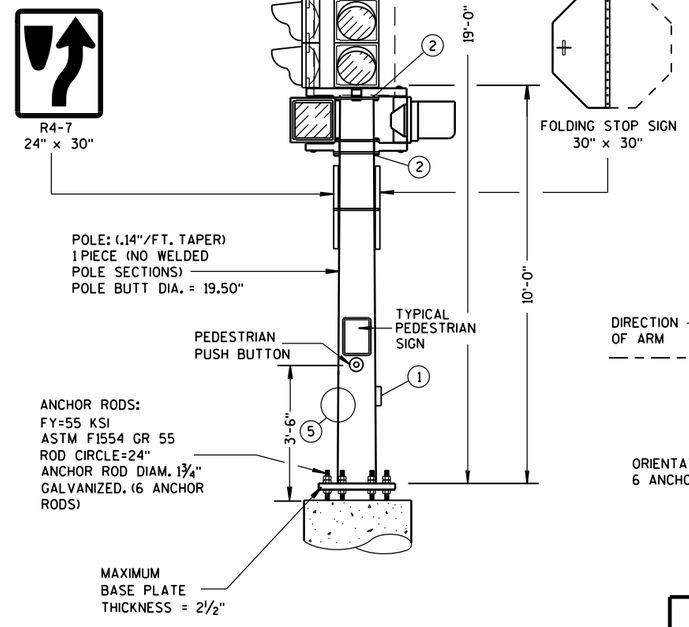
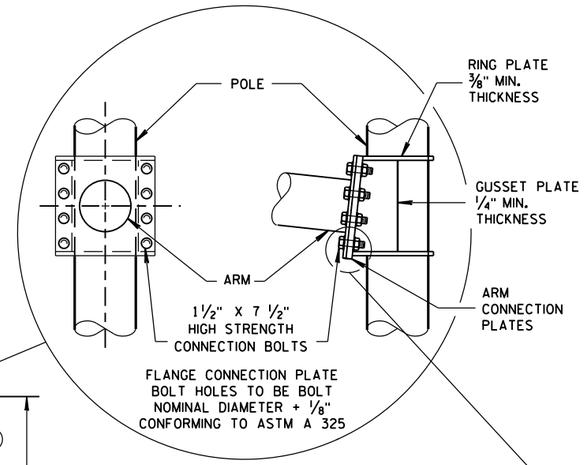
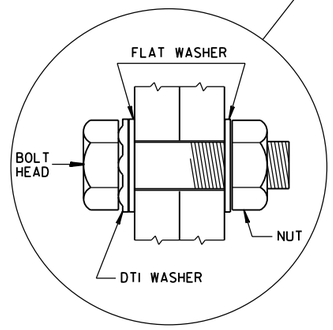
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

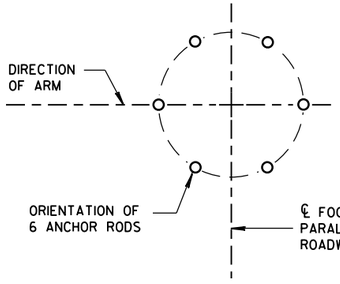




8 BOLT ARM CONNECTION DETAIL



RECOMMENDED
BOLT ASSEMBLY
DETAIL



ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 12 POLE 35'- 55' MONOTUBE ARM

TYPE 12 POLE
35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2015
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL 537

FHWA

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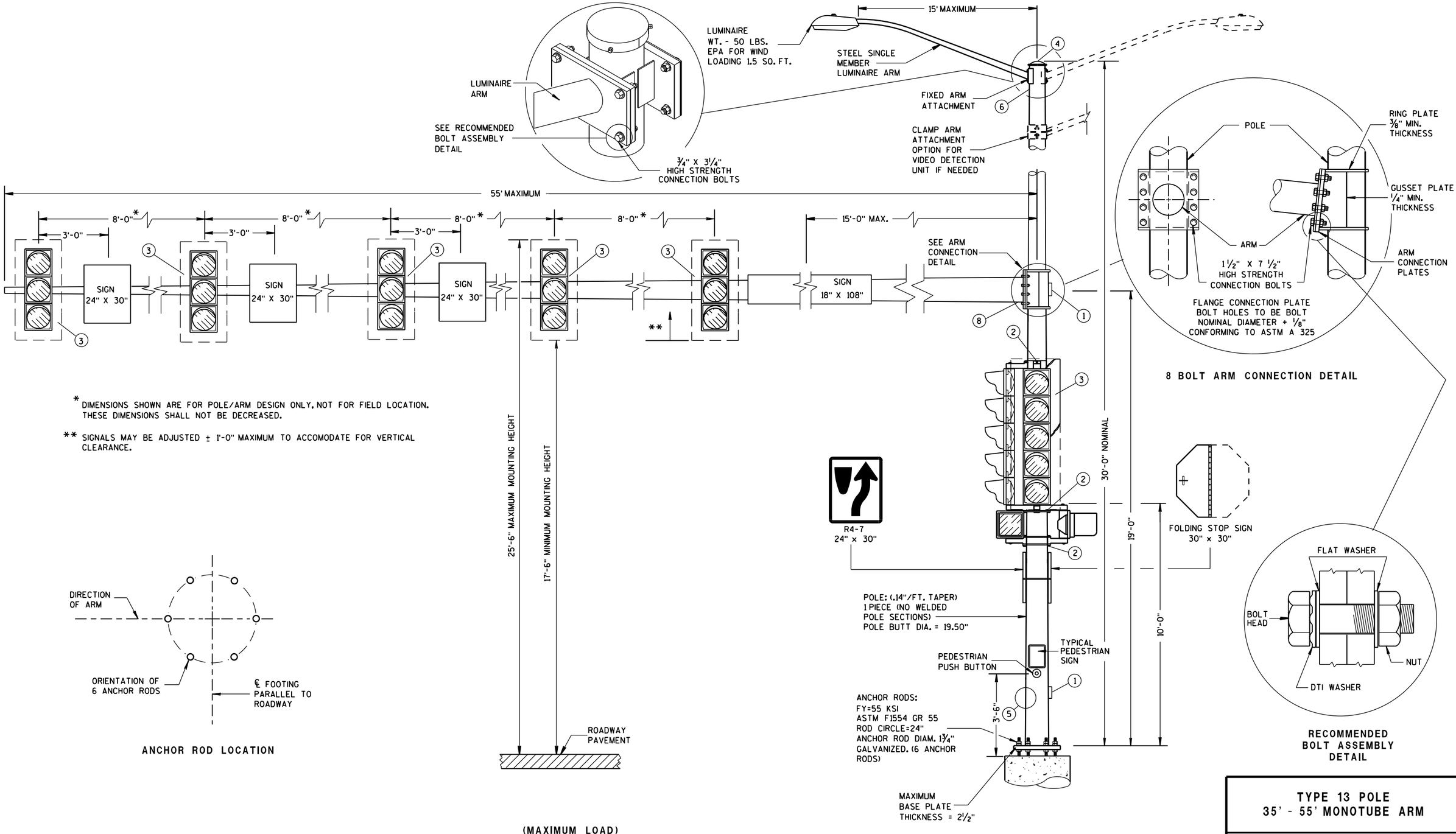

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** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

8 BOLT ARM CONNECTION DETAIL

RECOMMENDED BOLT ASSEMBLY DETAIL

ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 13 POLE 35'- 55' MONOTUBE ARM

TYPE 13 POLE
35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 E 8-8d

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

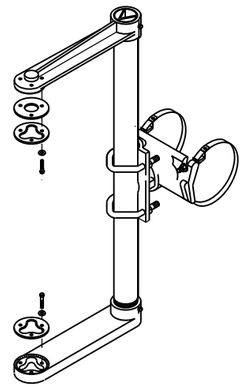
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

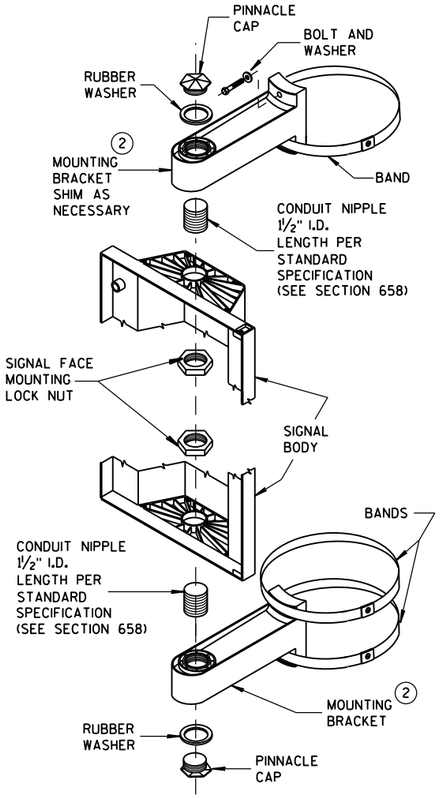
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

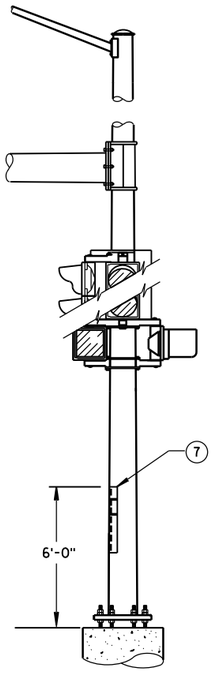


SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM

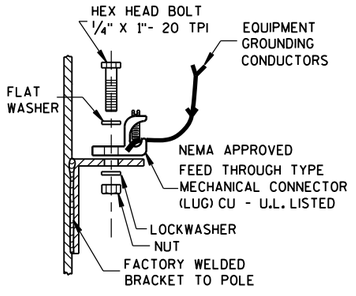
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE
VERTICAL MOUNTING DETAIL

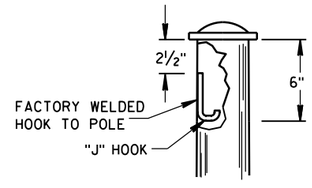


STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL
BE STAINLESS STEEL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL 539

FHWA

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S.D.D. 9 E 8-8e

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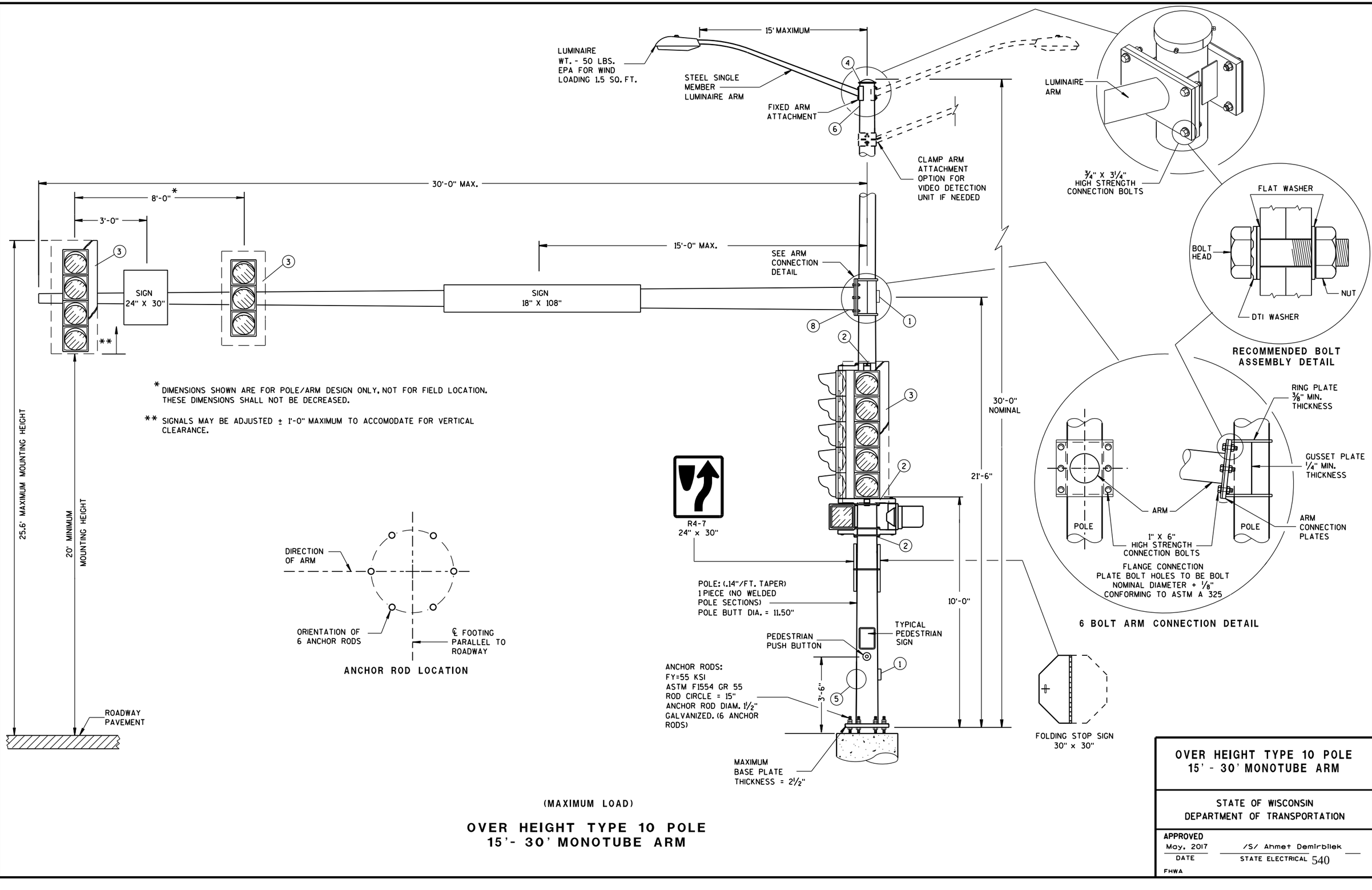
S.D.D. 9 E 8-8e



* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

ANCHOR ROD LOCATION

(MAXIMUM LOAD)

OVER HEIGHT TYPE 10 POLE 15'- 30' MONOTUBE ARM

OVER HEIGHT TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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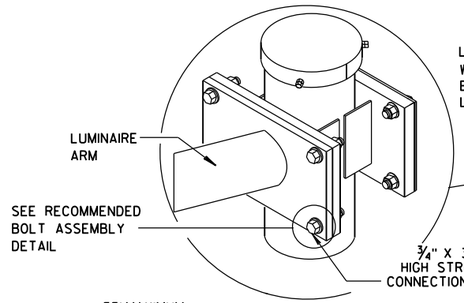
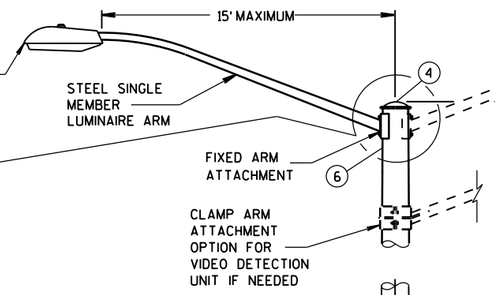
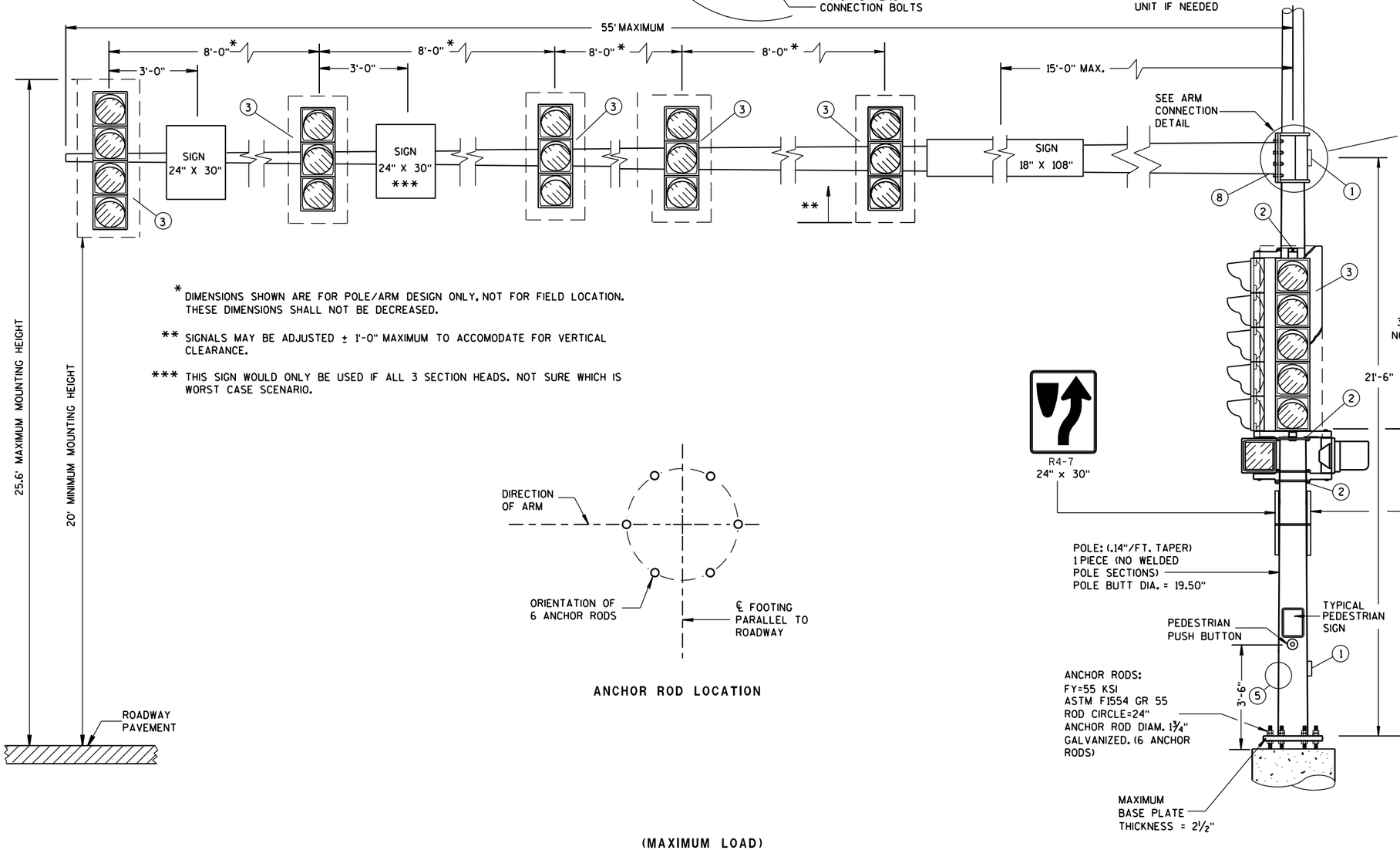
S.D.D. 9 E 12-1b



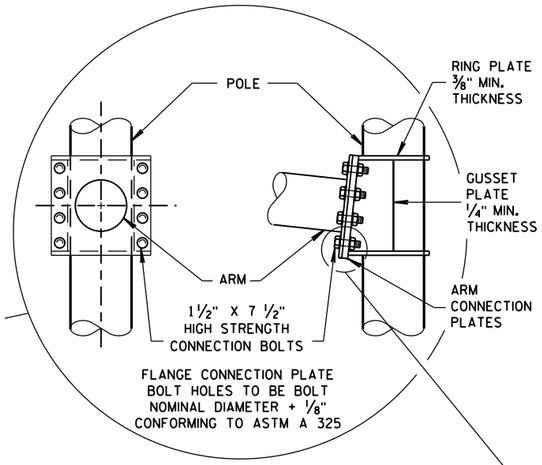




* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY. NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

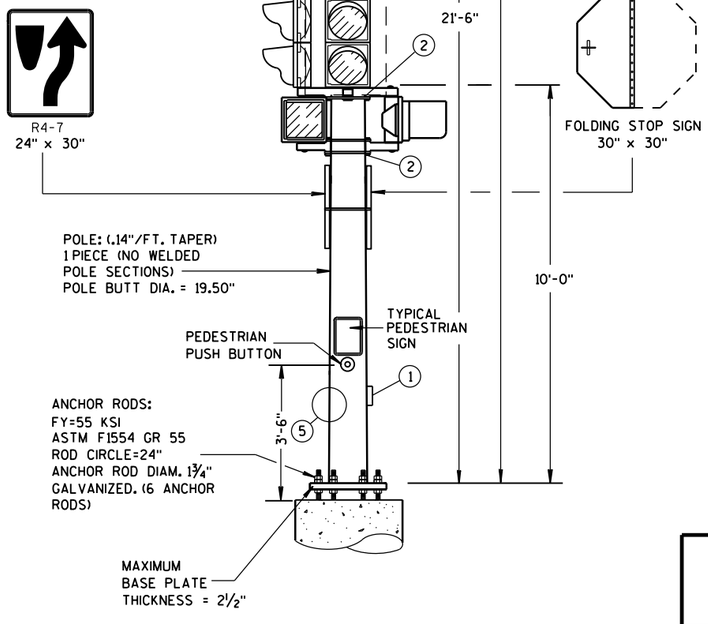
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

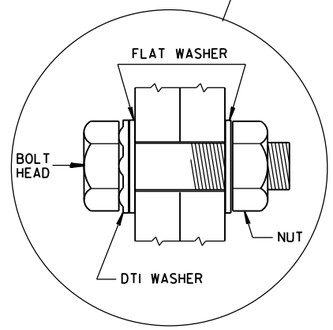
*** THIS SIGN WOULD ONLY BE USED IF ALL 3 SECTION HEADS. NOT SURE WHICH IS WORST CASE SCENARIO.



8 BOLT ARM CONNECTION DETAIL

ANCHOR ROD LOCATION





RECOMMENDED BOLT ASSEMBLY DETAIL

(MAXIMUM LOAD)

OVER HEIGHT TYPE 13 POLE 35'- 55' MONOTUBE ARM

OVER HEIGHT TYPE 13 POLE 35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

OVER HEIGHT POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

OVER HEIGHT POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING 2017 INTERIM REVISIONS) AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

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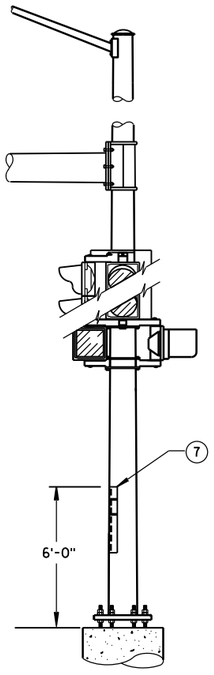
(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

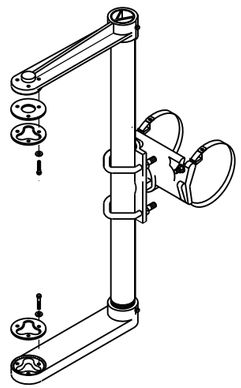
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

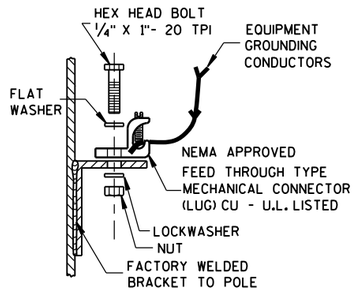


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



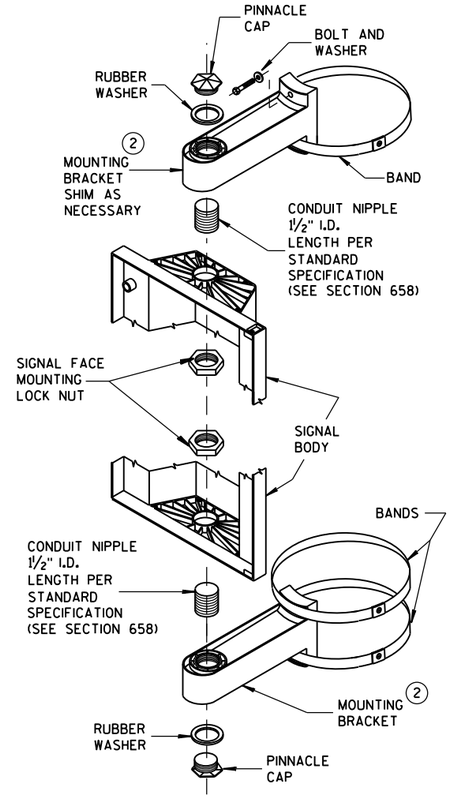
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANUFACTURER'S RECOMMENDATION)

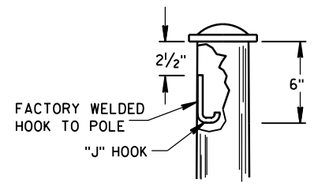


TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR OVER HEIGHT TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 E 12-1e

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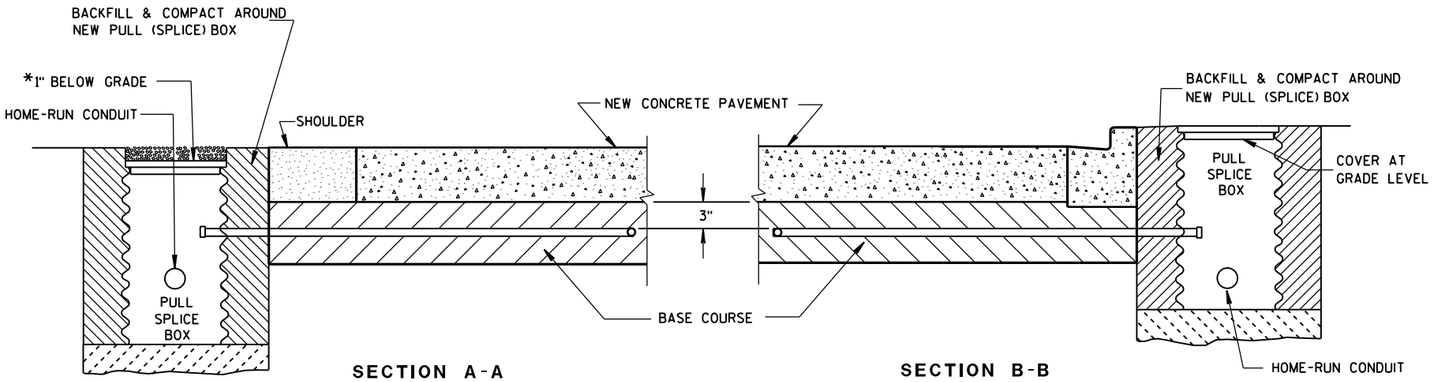


SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

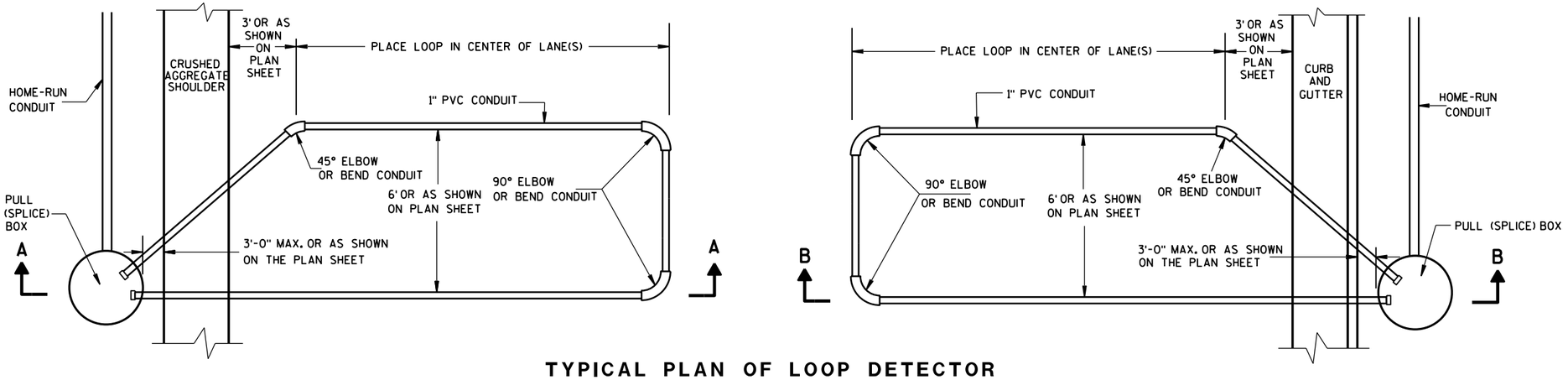
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICE CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE, SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 18" OR 24" PULL (SPLICE) BOX

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

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S.D.D. 9 F 15-4a

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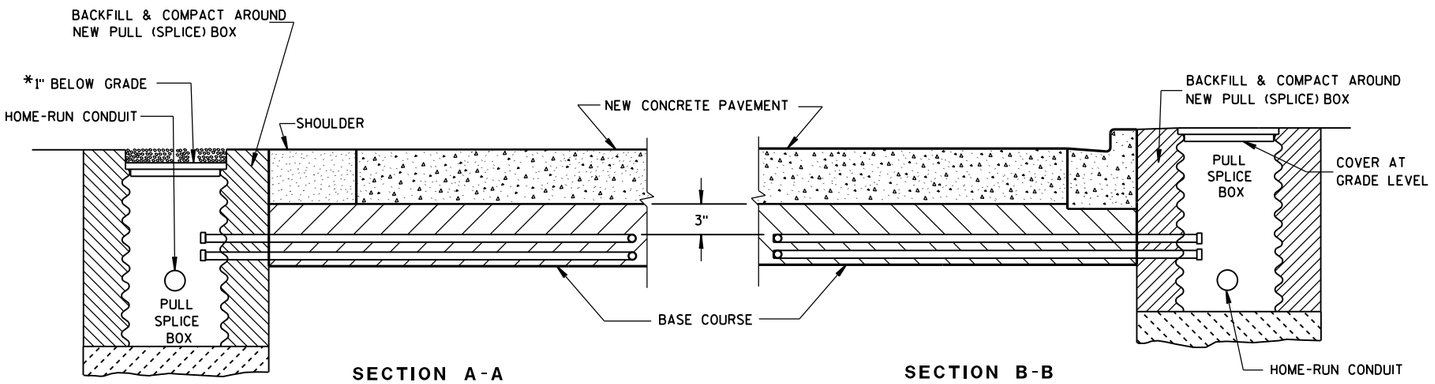


SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

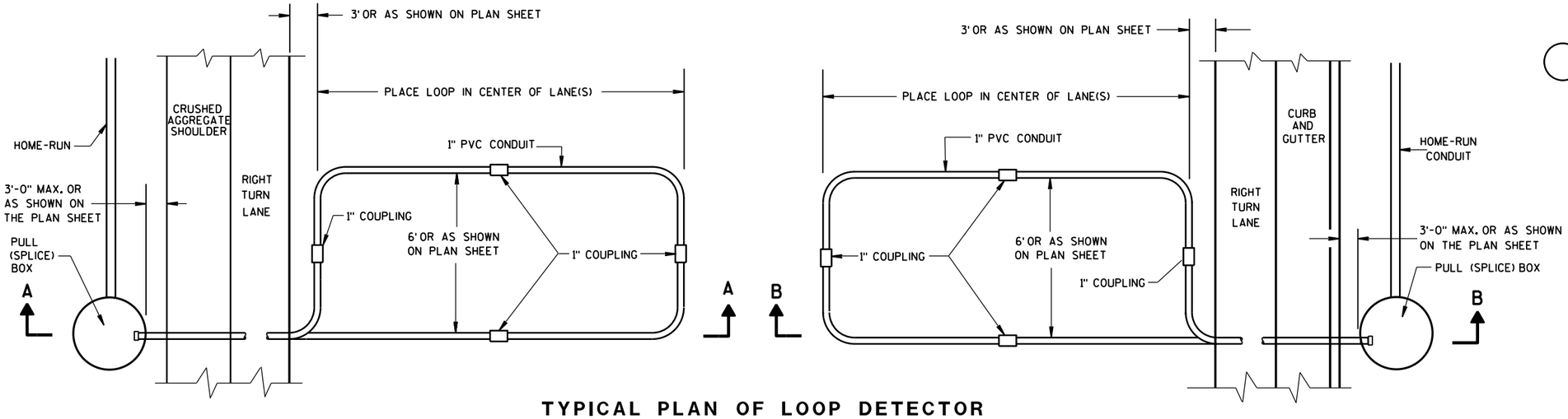
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

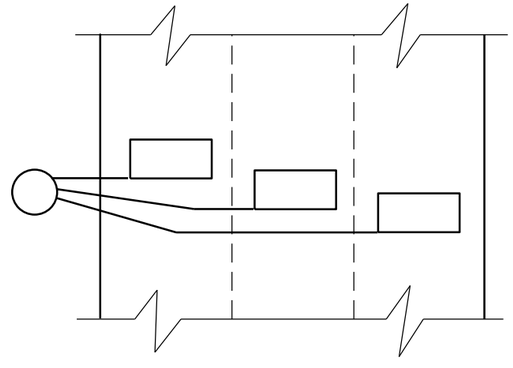
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



MULTI-LANE INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

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S.D.D. 9 F 15-4b

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S.D.D. 9 F 15-4b

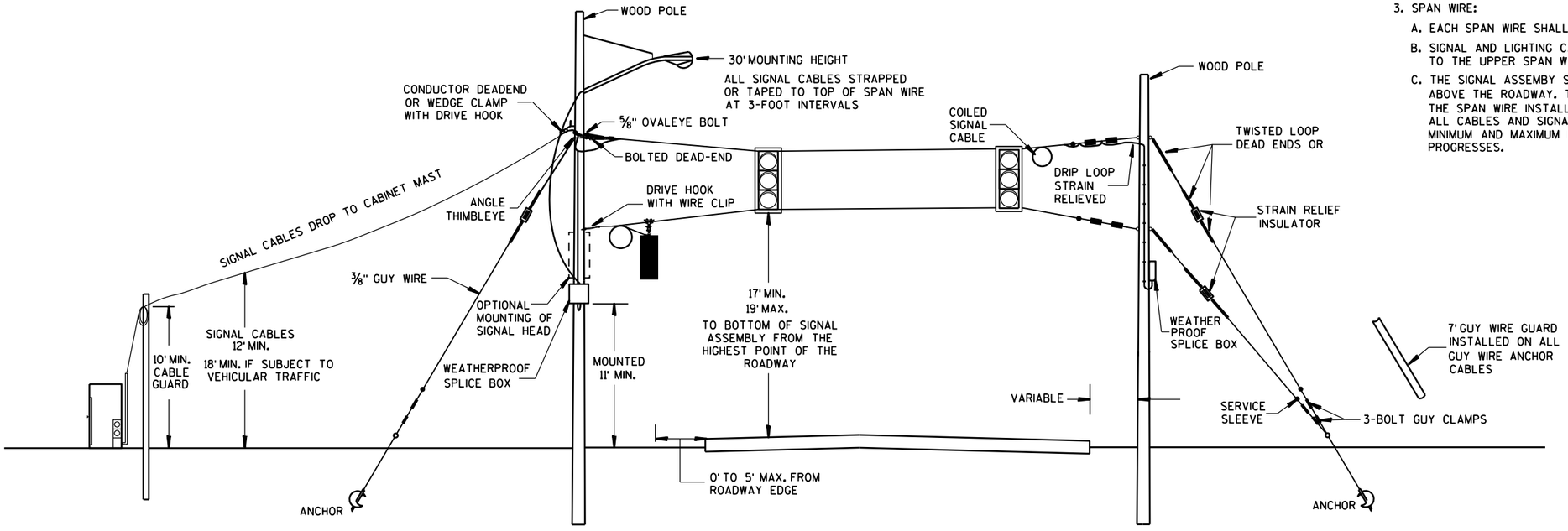
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



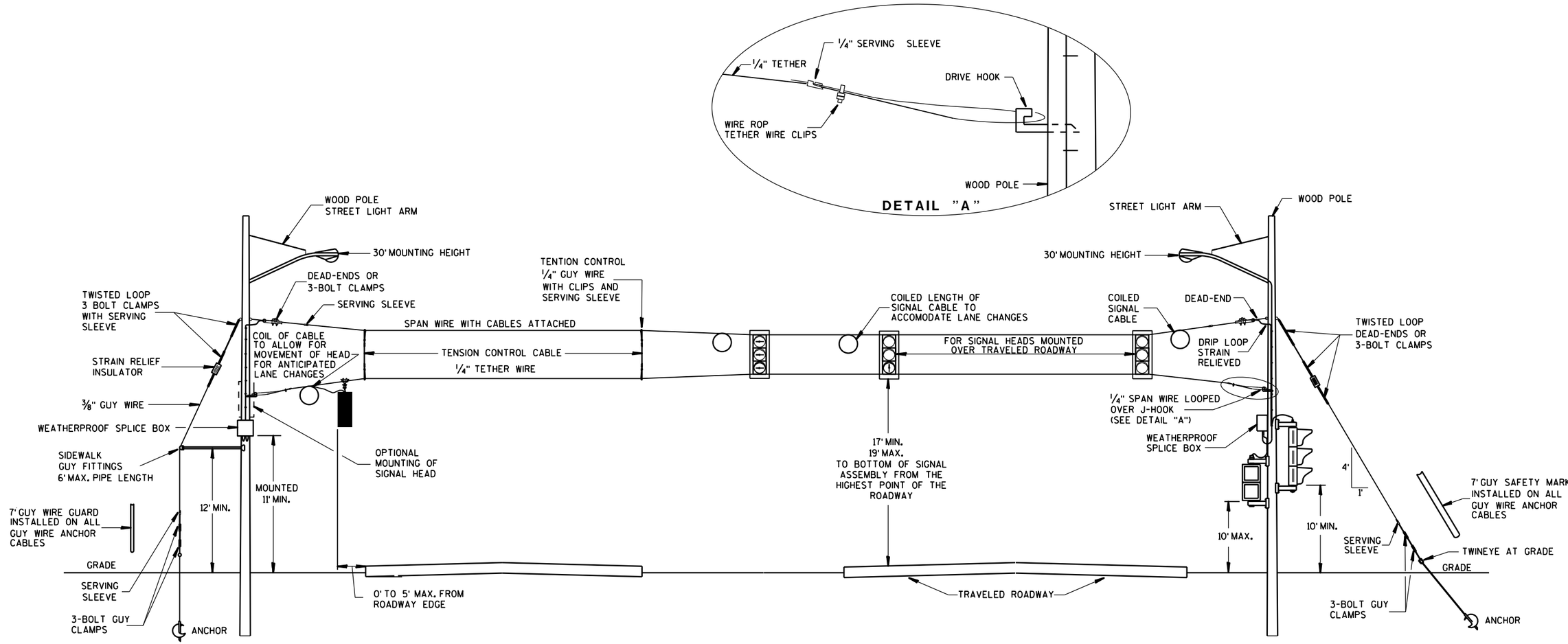
SPAN WIRE
TEMPORARY SIGNALS

MINIMUM POLE LENGTHS	POLE BURIEL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 545
FHWA



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

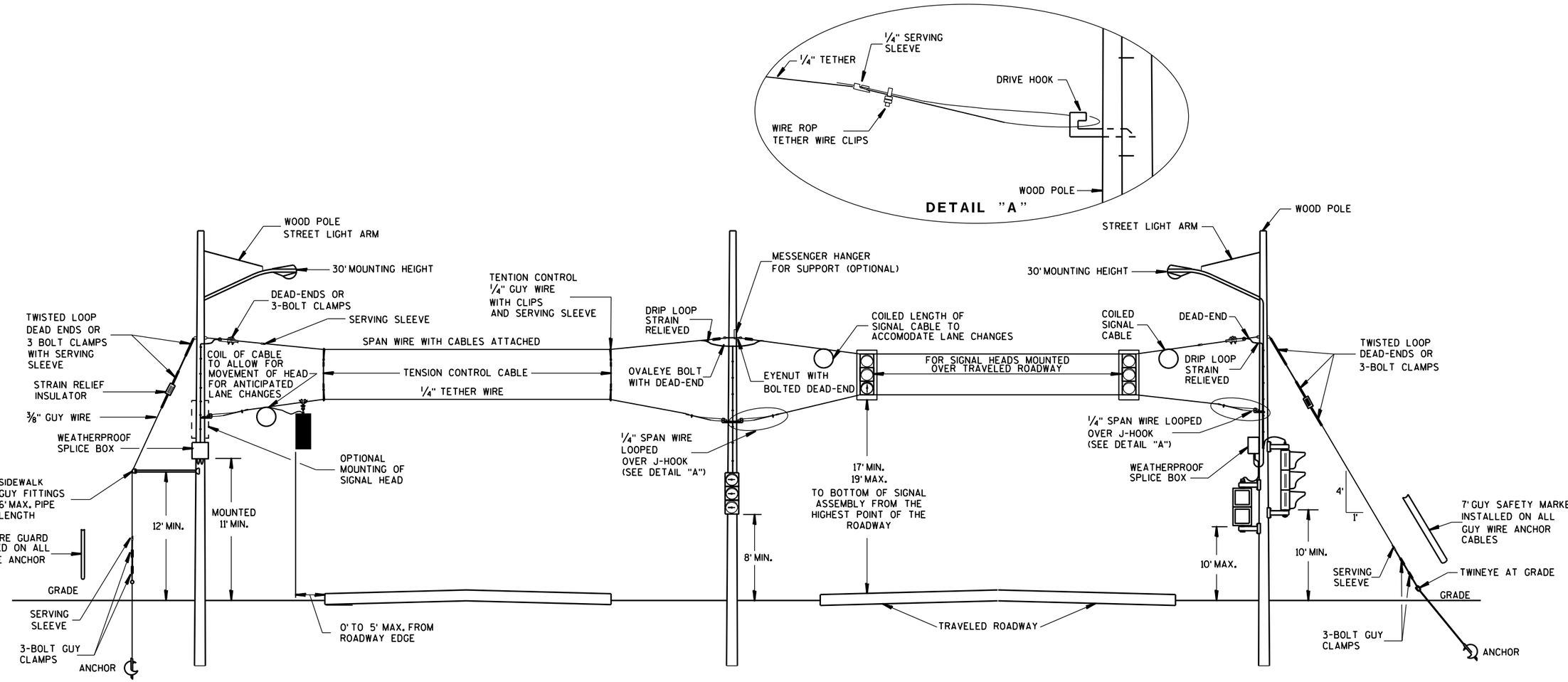
SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 G 1-4b



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June. 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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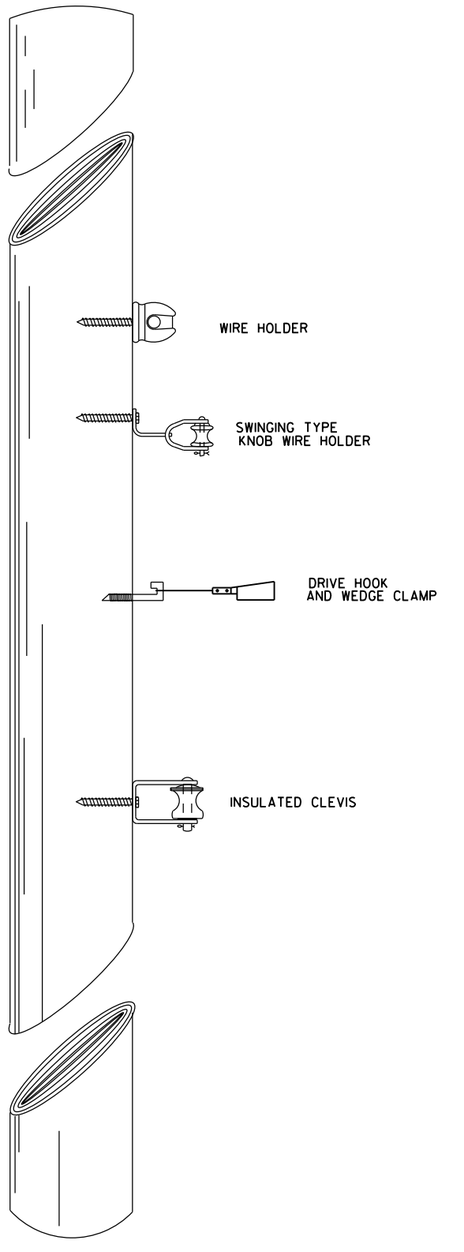
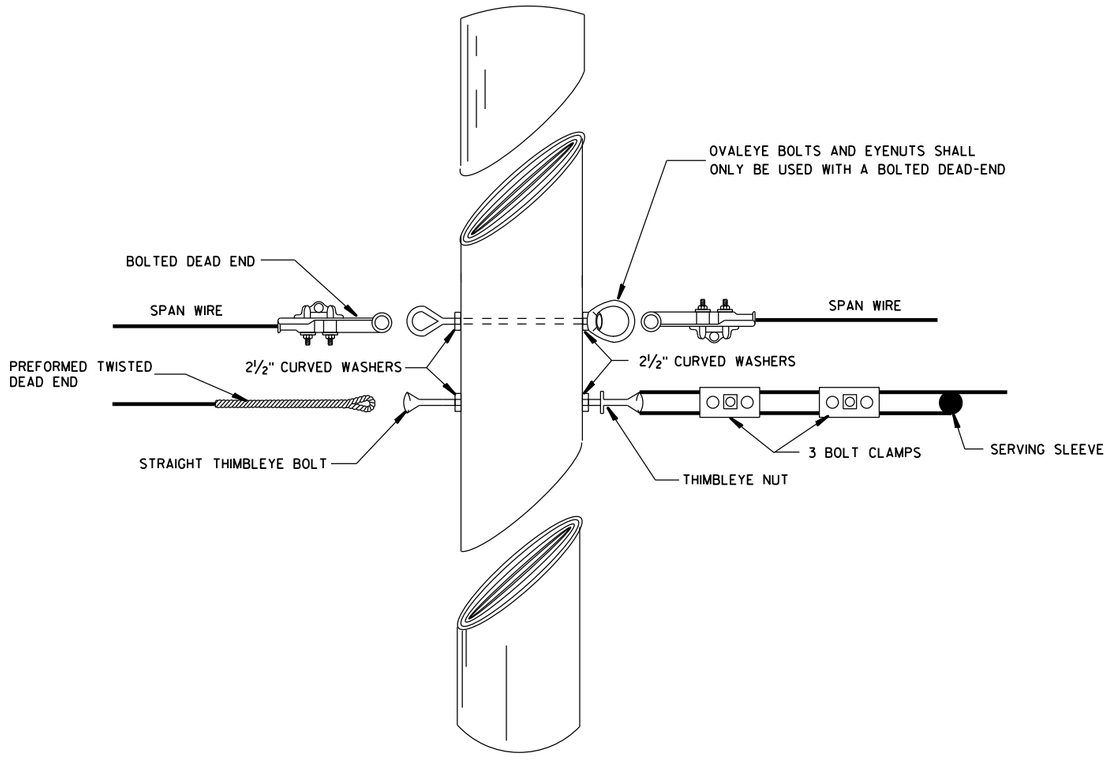
S.D.D. 9 G 1-4c



TYPICAL CABLE HANGERS



TYPICAL DEAD-ENDING

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2015
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

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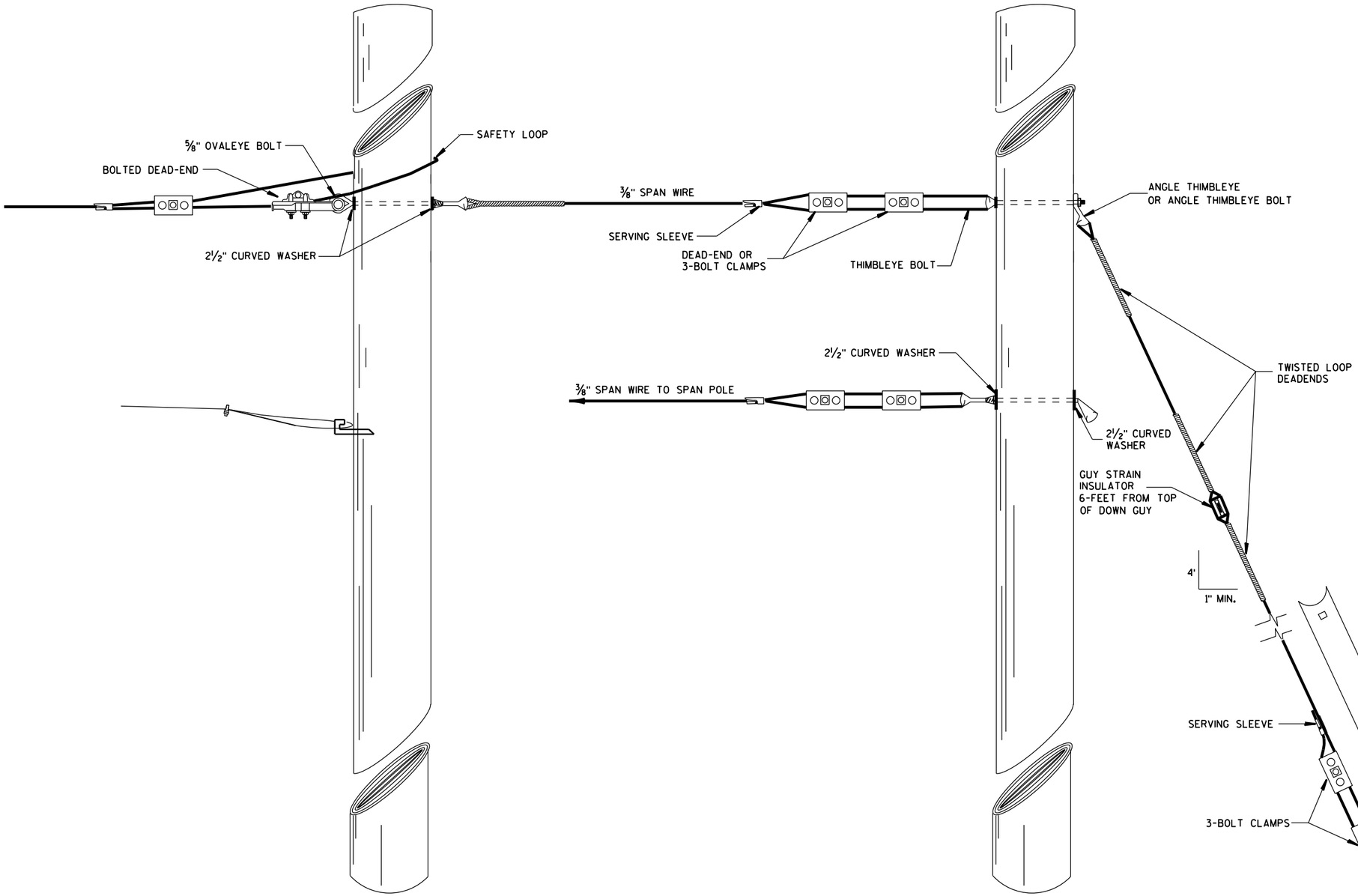
S.D.D. 9 G 1-4d

GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR ⅝" BOLTS.
2. SAFTY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE

GUY POLE

TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June. 2015 — DATE

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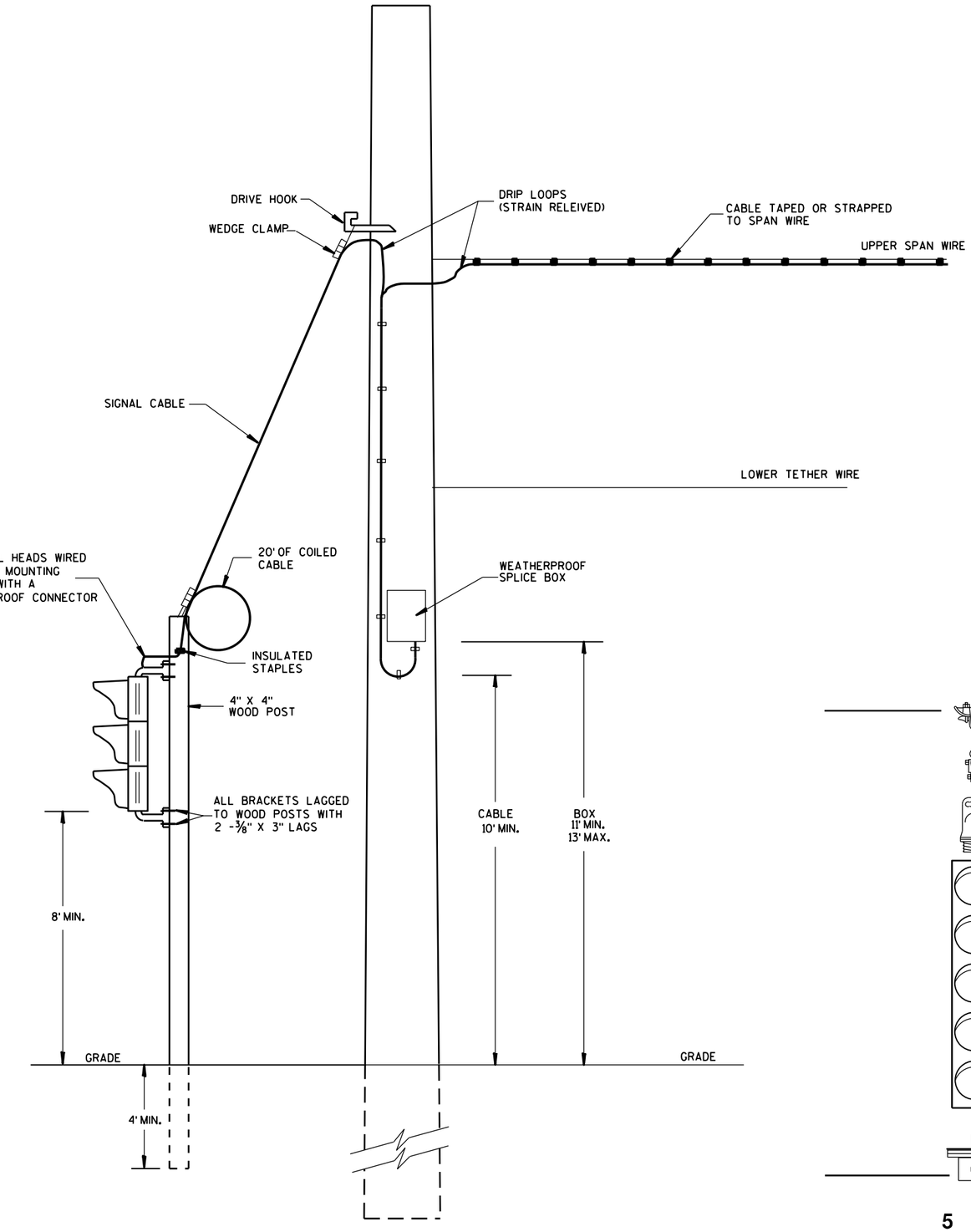
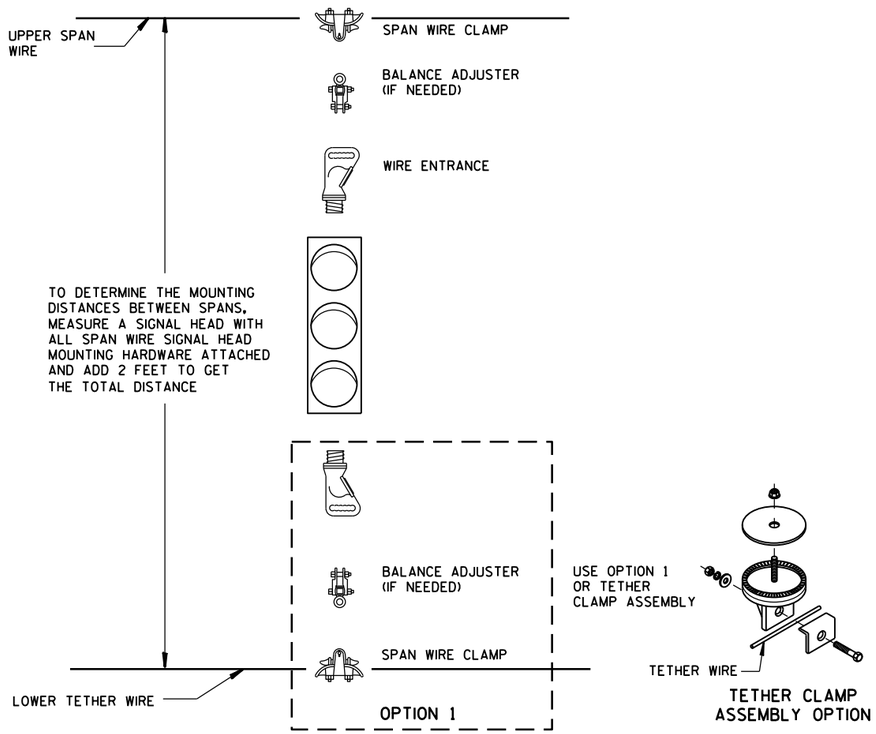
S.D.D. 9 G 1-4e

S.D.D. 9 G 1-4e

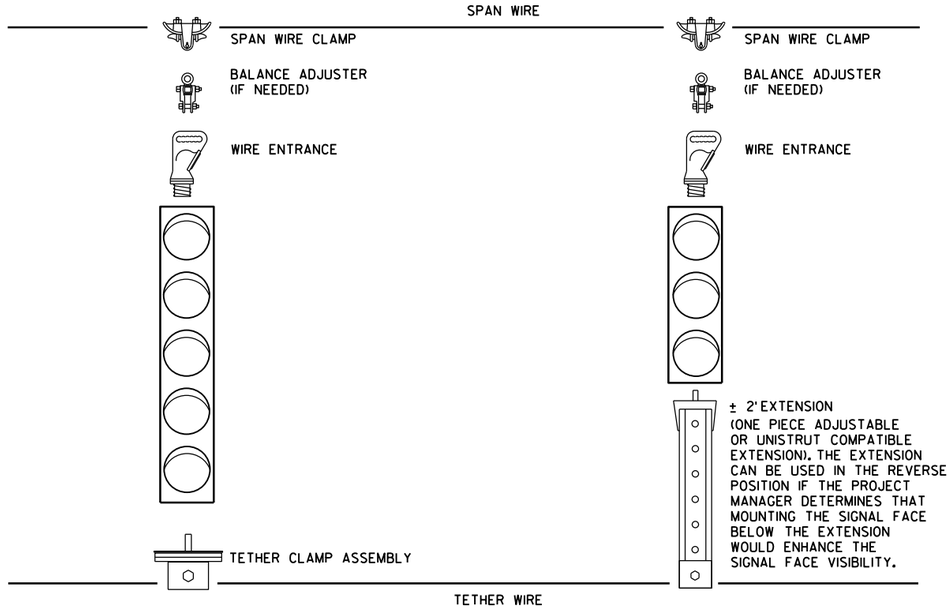


TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



TETHER CLAMP ASSEMBLY OPTION

TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June. 2015
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

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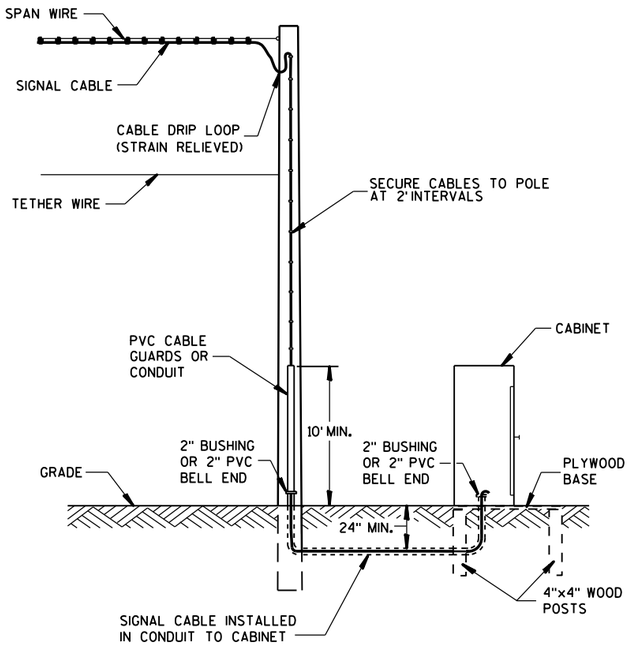
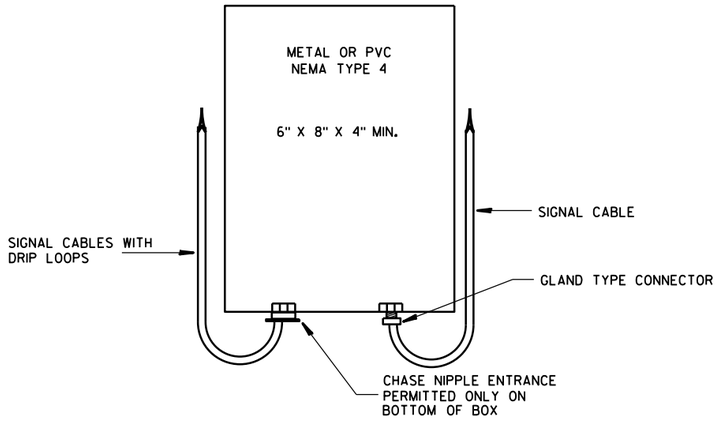
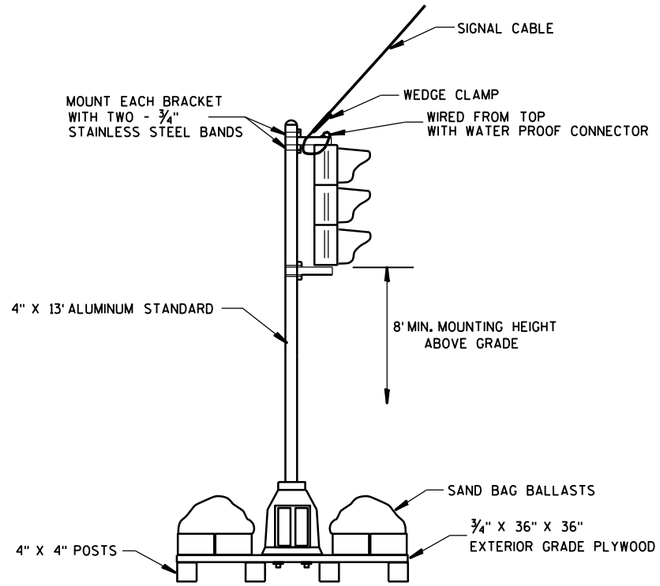
S.D.D. 9 G 1-4f

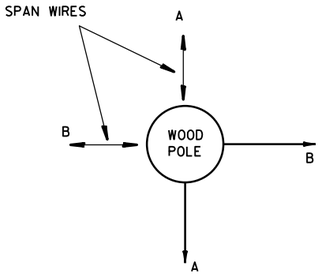




SPLICE BOX

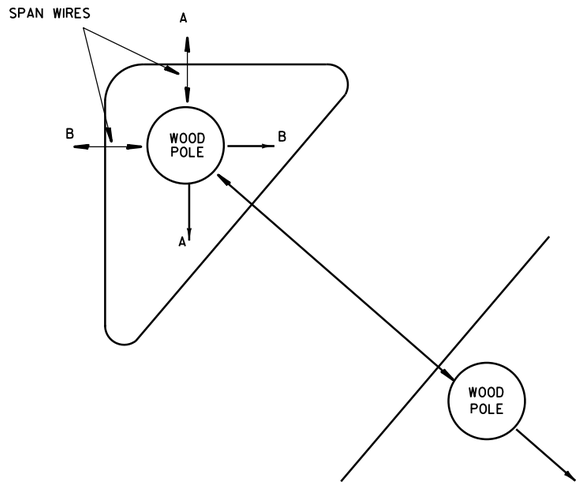


TYPICAL SKID TYPE TEMPORARY

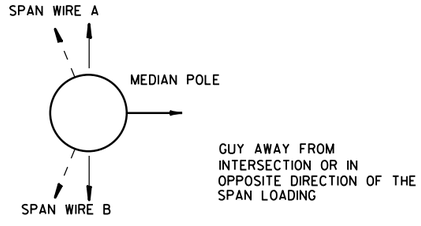


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



MEDIAN POLES

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 G 1-4g

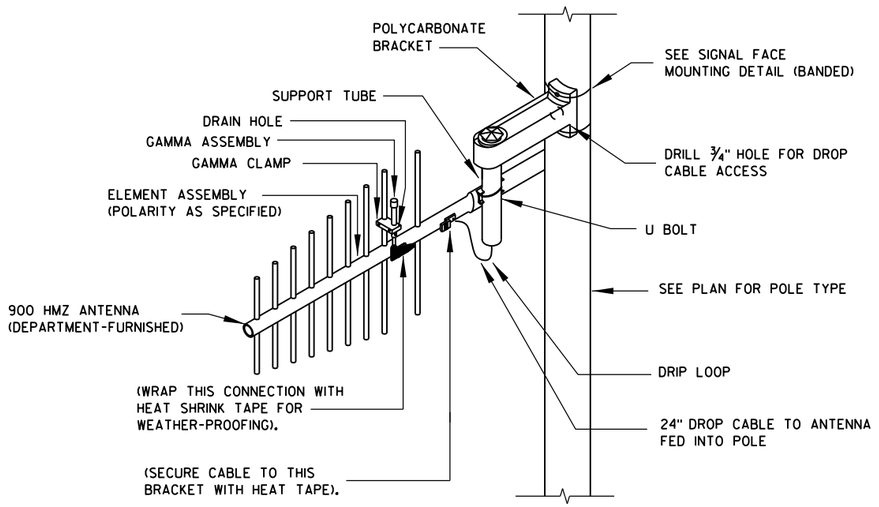
6

S.D.D. 9 G 1-4g

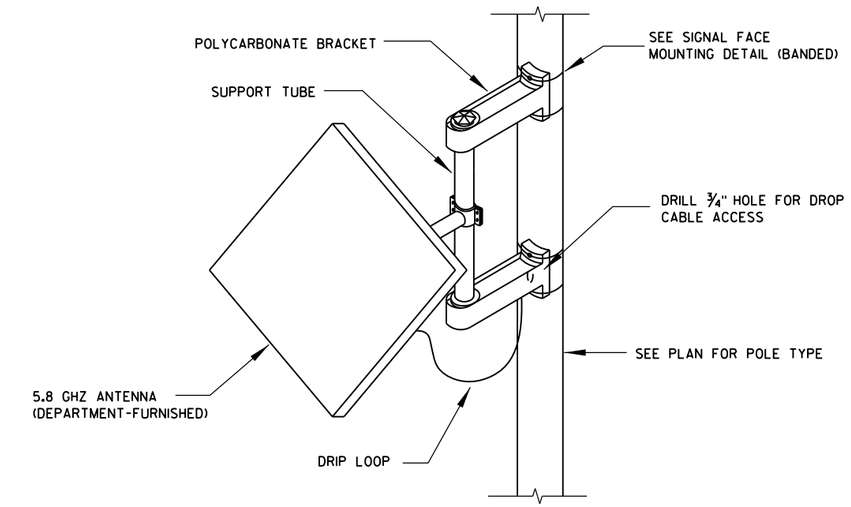
GENERAL NOTES

INSTALL DRIP LOOPS ON LOOSE CABLES TO PREVENT
WATER FROM FLOWING ON CABLE AND ENTERING POLES/ENCLOSURES.

ALL MOUNTING EQUIPMENT REQUIRED IS INCIDENTIAL TO BID ITEM
"INSTALL WIRELESS ANTENNA".



900 MHZ ANTENNA



5.8 GHZ ANTENNA

INSTALL WIRELESS ANTENNA

INSTALL WIRELESS ANTENNA	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2017 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA	

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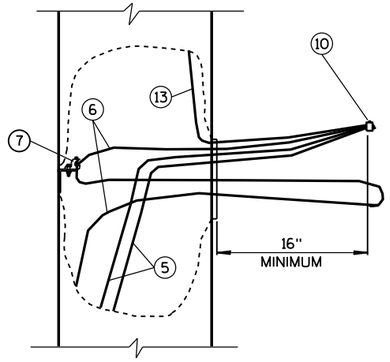
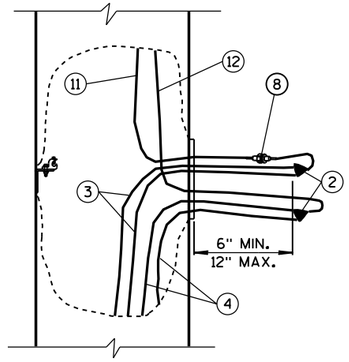
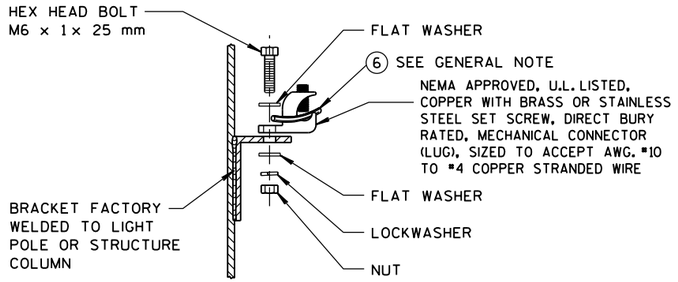


EQUIPMENT GROUNDING CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK (AND GROUNDED NEUTRAL SLACK IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES



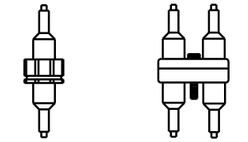
HANDHOLE GROUNDING LUG

(NUT, BOLT, WASHERS, AND LOCK WASHERS SHALL BE STAINLESS STEEL)

CONDUCTOR COLOR CODES

KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	*
4	GROUNDED LINE WIRE	WHITE
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	BARE
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING, USE BLACK FOR SINGLE LUMINAIRE POLES; BLACK AND RED FOR TWIN LUMINAIRE POLES.



FUSE ASSEMBLIES

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

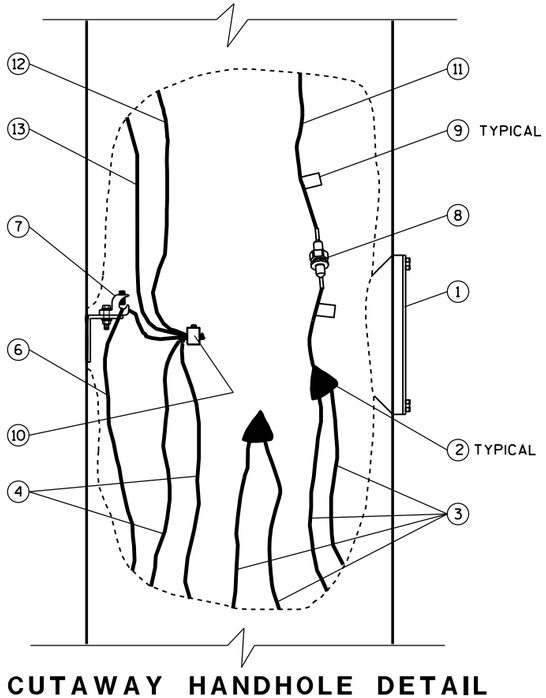
USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

THREE POLE WIRES ARE SHOWN FOR A SINGLE LUMINAIRE LIGHT POLE. THREE ADDITIONAL POLE WIRES REQUIRED FOR TWIN LUMINAIRE LIGHT POLES ARE OMITTED FROM THE DRAWING FOR CLARITY. IN THE TWIN POLE CASE, BUNDLE EACH SET OF THREE WIRES WITH A NYLON CABLE TIE.

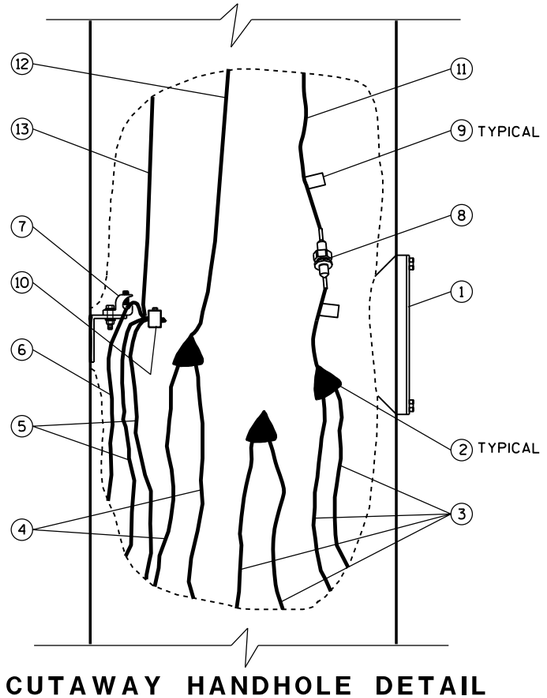
IN 3-PHASE SYSTEMS, THERE WILL BE ONE MORE UNGROUNDED LINE WIRE, WHICH IS OMITTED FROM THE DRAWING FOR CLARITY.

CIRCUIT TAGS SHALL BE INSTALLED ONLY WHERE REQUIRED IN THE SPECIAL PROVISIONS.



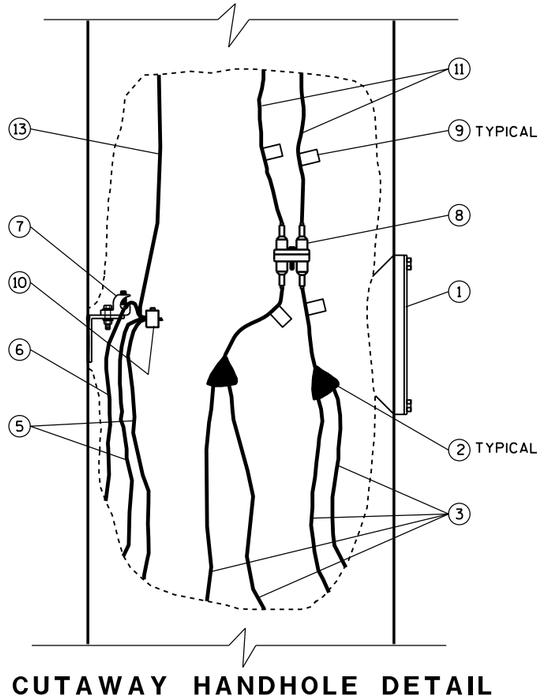
CUTAWAY HANDHOLE DETAIL

GROUNDED NEUTRAL SYSTEMS
1-Φ



CUTAWAY HANDHOLE DETAIL

ISOLATED NEUTRAL SYSTEMS
1-Φ SHOWN; 3-Φ WYE SIMILAR
(SEE GENERAL NOTE)



CUTAWAY HANDHOLE DETAIL

PHASE-TO-PHASE SYSTEMS
1-Φ SHOWN; 3-Φ DELTA SIMILAR
(SEE GENERAL NOTE)

NOTE: REQUIRED CONDUCTOR SLACK NOT SHOWN ON "CUTAWAY HAND HOLE" DETAILS FOR DRAWING CLARITY, SEE "TYPICAL CONDUCTOR SLACK AT HANDHOLES" ON THIS SHEET.

(1) HANDHOLE AND COVER
(2) INSULATED SPLICE
(3) UNGROUNDED LINE WIRE
(4) GROUNDED LINE WIRE
(5) SYSTEM GROUNDING LINE WIRE
(6) GROUNDING ELECTRODE CONDUCTOR
(7) HANDHOLE GROUNDING LUG
(8) FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
(9) CIRCUIT TAG (SEE GENERAL NOTE)
(10) REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
(11) UNGROUNDED POLE WIRE
(12) GROUNDED POLE WIRE
(13) EQUIPMENT GROUNDING POLE WIRE

ELECTRICAL HANDHOLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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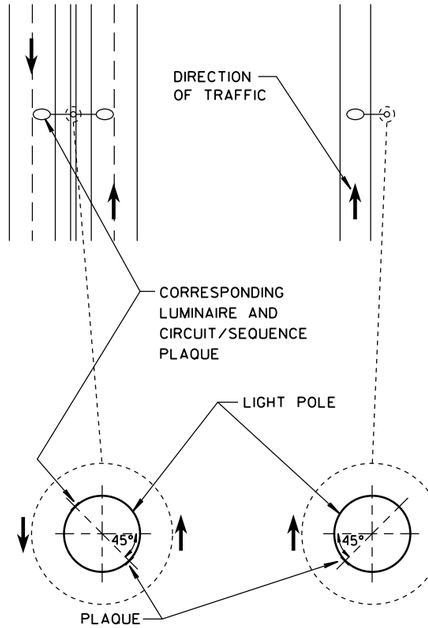
S.D.D. 10 A 1-3



MEDIAN POLE SINGLE ARM POLE

LOCATION OF LIGHT POLE CIRCUIT/SEQUENCE PLAQUE

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

WHERE SHOWN IN THE PLANS, REPLACEMENT PLAQUES WILL BE MEASURED AND PAID SEPARATELY.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETRORFLECTIVE

LINES - BLACK, 1/2" WIDE, SELF-ADHESIVE

CHARACTERS - BLACK, SELF-ADHESIVE, SERIES "D", SIZE AS SHOWN

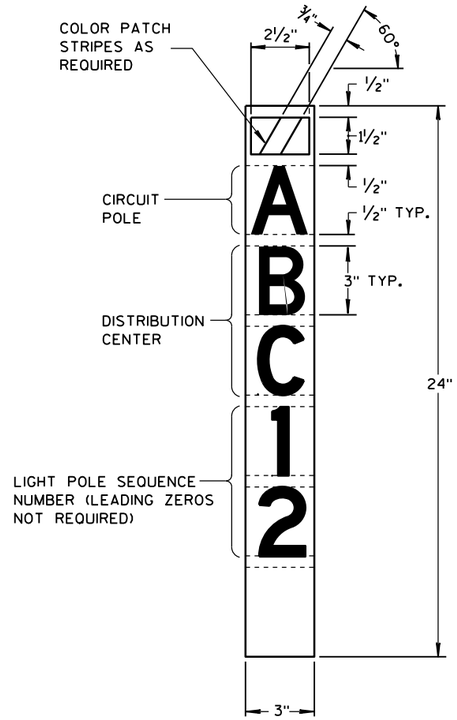
COLOR PATCHES - VARIOUS COLORS, SELF-ADHESIVE VINYL SHEETING

WITH THE APPROVAL OF THE ENGINEER, THE BASE MATERIAL MAY BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE SURFACE, IN CASES SUCH AS SMOOTH, CLEAN ALUMINUM POLES.

ALTERNATIVE COMPUTER-GENERATED SIGN LETTERING MAY BE ACCEPTED IF THE ENGINEER FINDS IT TO BE EQUIVALENT.

COLOR PATCH CODE FOR HPS AND LED LUMINAIRES

HPS	LED	COLOR PATCH CODE
1000 WATT		NO PATCH
400 WATT	CATEGORY D	ORANGE
310 WATT		BLUE
250 WATT	CATEGORY C	ORANGE WITH WHITE STRIPE
200 WATT		RED
150 WATT	CATEGORY B	GREEN
100 WATT	CATEGORY A	BROWN
70 WATT	CATEGORY UDL	BROWN WITH WHITE STRIPE



LIGHT POLE CIRCUIT/SEQUENCE PLAQUE

IDENTIFICATION PLAQUES LIGHT POLES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 DATE
/S/ Ahmet Demirbilek STATE ELECTRICAL
554
FHWA

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

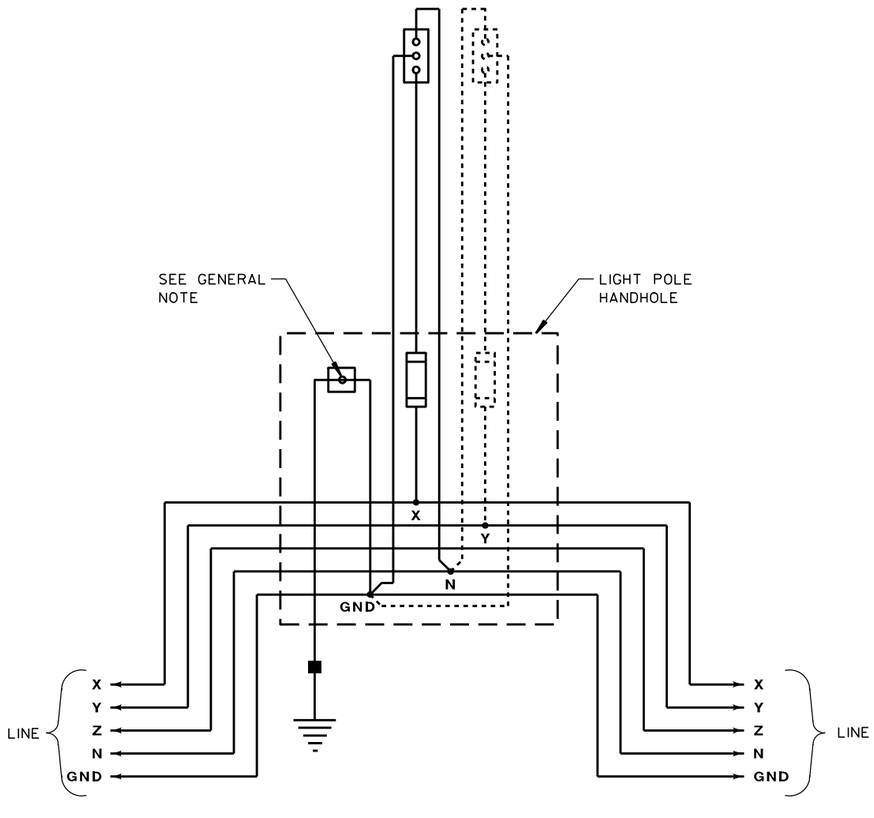
THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

HANDHOLE FUSE SCHEDULES

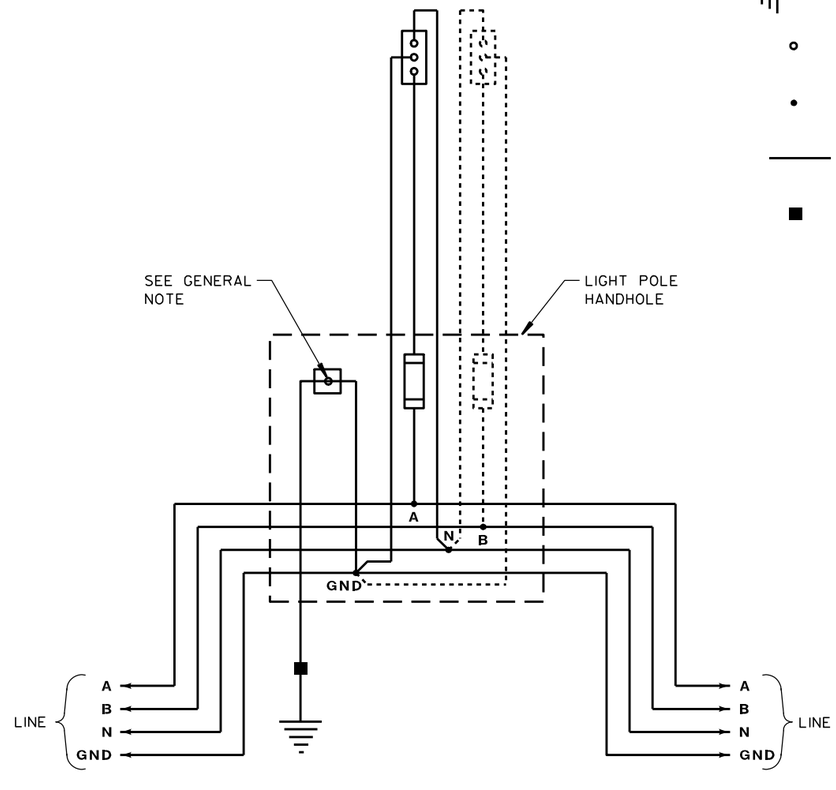
LINE VOLTAGE	BALLAST WATTAGE	
φ-GROUND	70-200 W	250-400 W
120 VAC	5 A	10 A
240 VAC	5 A	5 A
277 VAC	5 A	5 A
480 VAC	3 A	5 A

LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
φ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	SINGLE-POLE (1P) FUSE ASSEMBLY
	TWO-POLE (2P) FUSE ASSEMBLY
	UNFUSED LUMINAIRE
	EQUIPMENT GROUNDING ELECTRODE
	TERMINAL
	SPLICE
	CONDUCTOR
	EXOTHERMIC WELD



TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
3-φ 208Y/120VAC OR 480Y/277VAC 4 WIRE



TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
1-φ 120/240VAC OR 240/480VAC 3 WIRE

ELECTRICAL DETAILS
GROUND MOUNT LIGHT POLES
ISOLATED NEUTRAL SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/25/2010 DATE
/S/ John Corbin
STATE ELECTRICAL ENGI 555
FHWA HWYS

HANDHOLE FUSE SCHEDULES

LINE VOLTAGE φ-GROUND	BALLAST WATTAGE	
	70-200 W	250-400 W
120 VAC	5 A	10 A
240 VAC	5 A	5 A
277 VAC	5 A	5 A
480 VAC	3 A	5 A

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

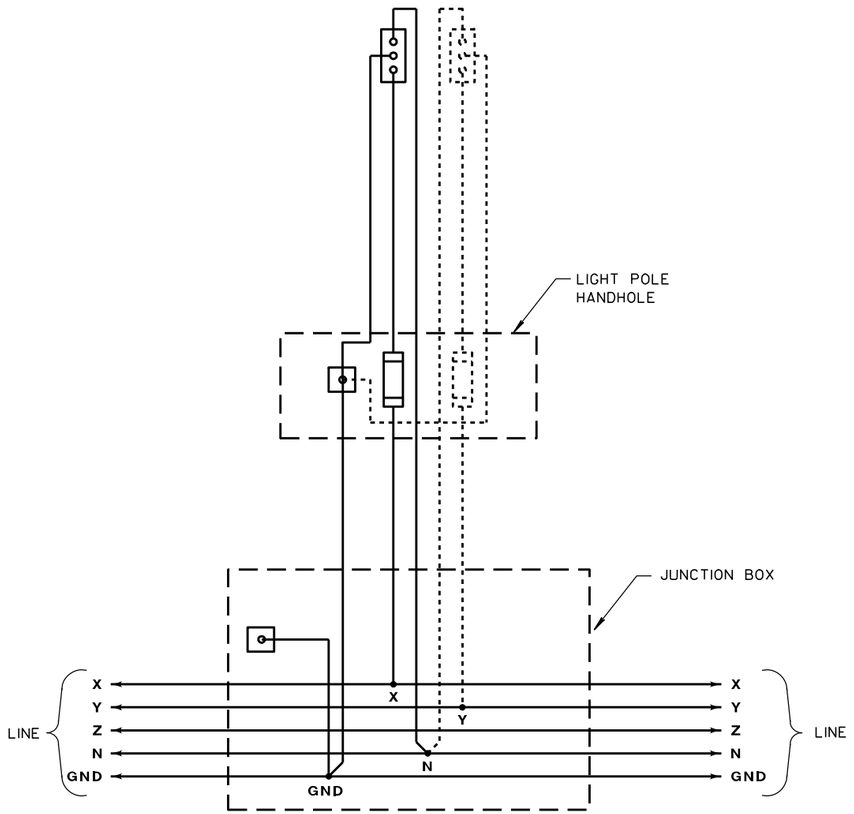
THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

WIRE SIZE FROM THE JUNCTION BOX TO THE POLE HANDHOLE SHALL EQUAL THE SIZE OF THE POLE WIRE.

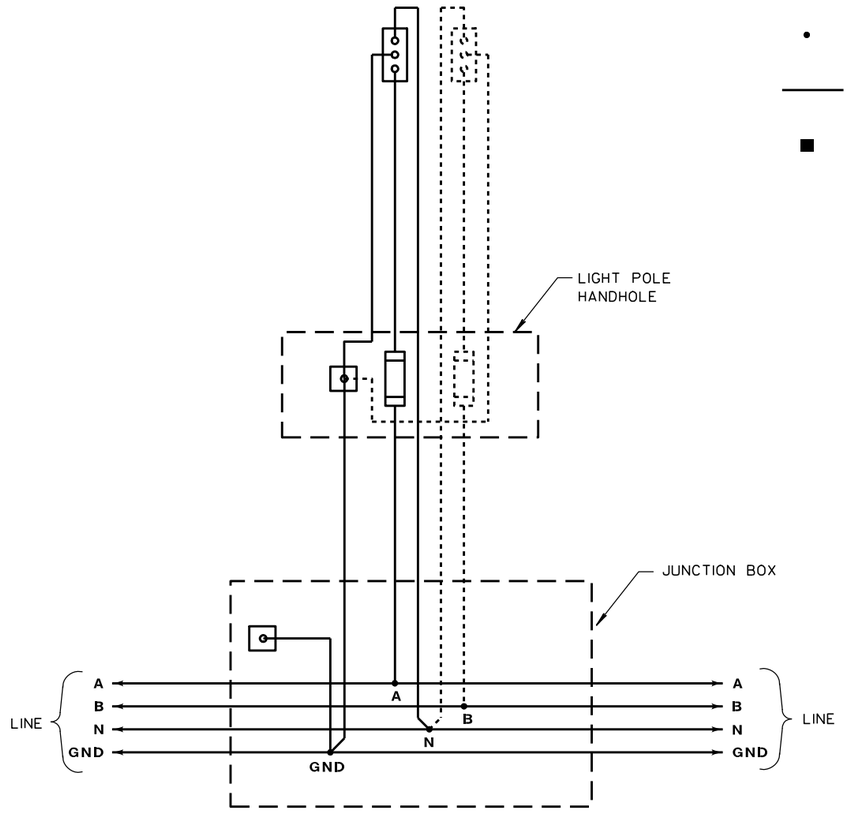
THE INTENT OF JUNCTION BOX SPLICES AS SHOWN IN THIS DETAIL IS FOR LIGHTING SYSTEMS WITH HEAVY LINE WIRE TOO LARGE TO PULL THROUGH THE CONDUIT INTO THE POLE HANDHOLE, DUE TO CONDUIT FILL REQUIREMENTS OF N.E.C., AND/OR THE STIFFNESS OF THE WIRE COMPARED TO THE NUMBER OF BENDS IN THE CONDUIT. IN CASES WHERE LINE WIRE IS LIGHTER, SUCH AS SMALLER SYSTEMS OR TOWARD THE FURTHEST END OF A LARGER SYSTEM, PULL THE LINE WIRE INTO THE POLE HANDHOLE FOR SPLICING.

LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
φ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	SINGLE-POLE (1P) FUSE ASSEMBLY
	TWO-POLE (2P) FUSE ASSEMBLY
	UNFUSED LUMINAIRE
	EQUIPMENT GROUNDING ELECTRODE
	TERMINAL
	SPLICE
	CONDUCTOR
	EXOTHERMIC WELD



TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
3-φ 208Y/120VAC OR 480Y/277VAC 4 WIRE



TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
1-φ 120/240VAC OR 240/480VAC 3 WIRE

ELECTRICAL DETAILS
STRUCTURE MOUNT LIGHT POLES
ISOLATED NEUTRAL SYSTEMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/25/2010 — DATE
/S/ John Corbin — STATE ELECTRICAL ENGI
556
HWYS
FHWA

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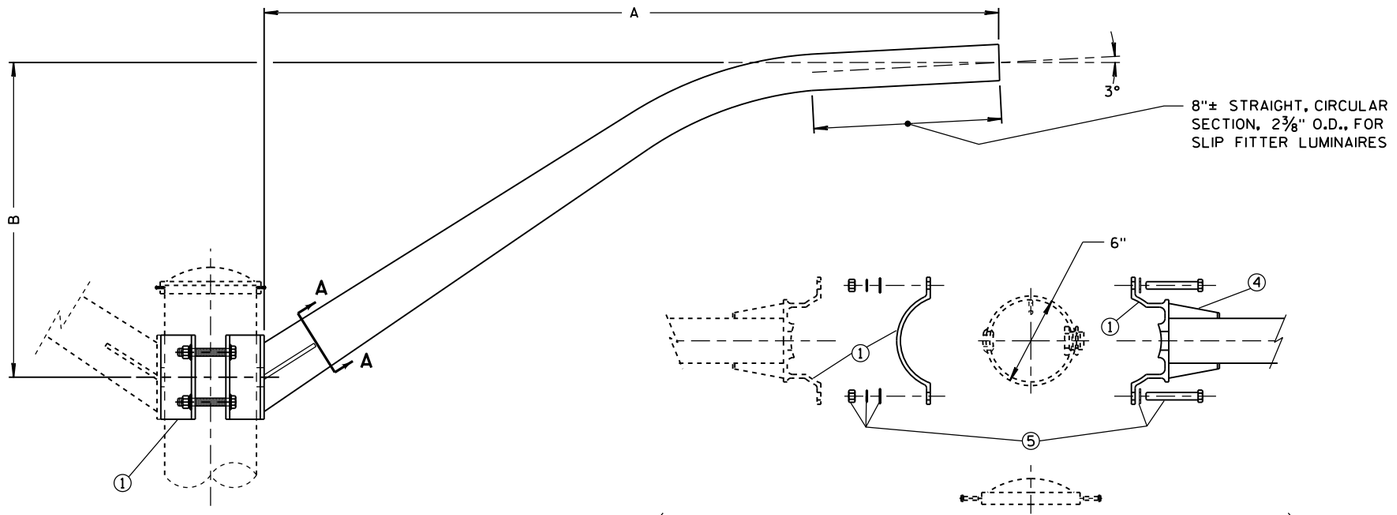
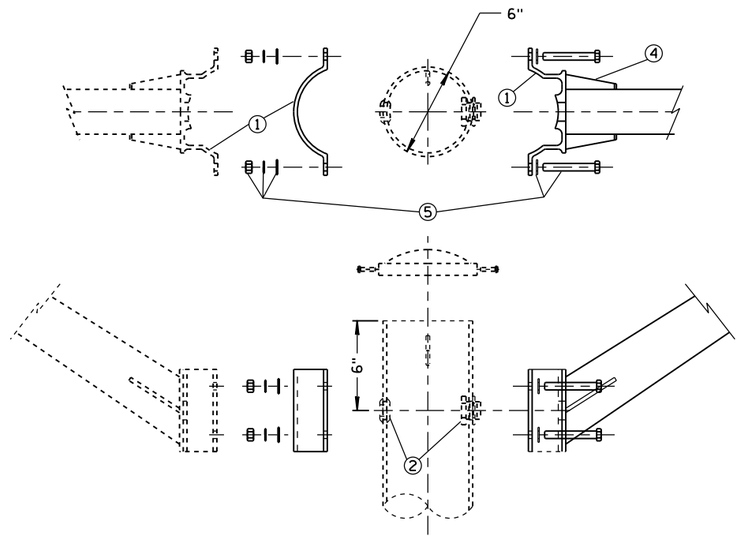
S.D.D. 10 A 8-2



LUMINAIRE ARMS, SINGLE MEMBER, 6-INCH CLAMP - FOR POLES, TYPE 7, A OR E

VARIOUS LENGTHS (SEE TABLE)



CLAMP ASSEMBLY

SINGLE MEMBER CLAMP SHOWN

TYPE	DIM. A NOMINAL ARM LENGTH (FT)	DIM. B APPROX. RISE (FT)
SINGLE MEMBER	4.0	2.0
SINGLE MEMBER	8.0	3.0
SINGLE MEMBER	10.0	3.0
SINGLE MEMBER	15.0	3.0

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ARMS AND CLAMP EXTRUSIONS SHALL BE CONSTRUCTED OF NATURAL FINISH 6063-T6 ALUMINUM.

HEAT TREATMENT OF WELDS IN STRUCTURAL AREAS IS REQUIRED.

ALL THREADED FASTENER COMPONENTS SHALL BE STAINLESS STEEL. NUTS SHALL BE HEX NUTS. BOLTS SHALL BE HEX HEAD. ALL THREADED SURFACES SHALL BE COATED WITH ANTI-SEIZE COMPOUND PRIOR TO INSTALLATION.

LUMINAIRE LOADING FOR DESIGN CALCULATION SHALL BE 50 LBS. IN WEIGHT AND 1.5 SQ. FT. FOR E.P.A..

① CLAMPS SHALL BE EXTRUDED ALUMINUM.

② RACE WAY: 1 3/8" FIELD DRILLED HOLE WITH 1" CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET) PER EACH REQUIRED LUMINAIRE ARM. PROVIDE 1 1/2" HOLE IN CLAMP EXTRUSION TO CONTINUE RACEWAY.

③ STIFFENER

④ GUSSETS REQUIRED.

⑤ CLAMP BOLT ASSEMBLY (BOLT - 1/2"-13 UNC, 2 EACH - FLAT WASHER, LOCK WASHER, NUT) - 4 EACH PER CLAMP.

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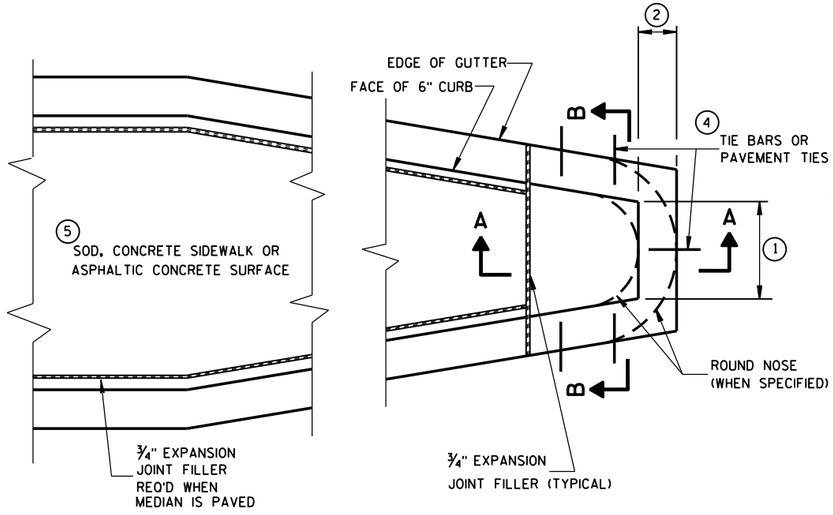
S.D.D. 10 A 18-5a

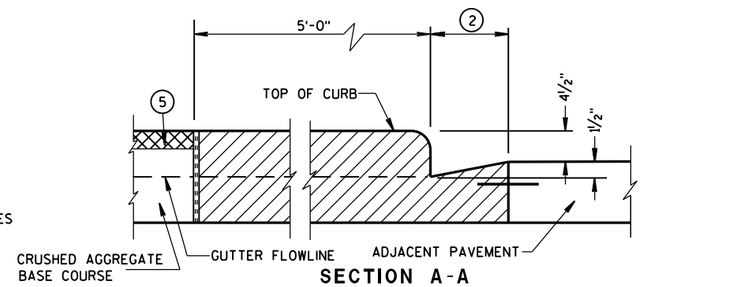
S.D.D. 10 A 18-5a

LUMINAIRE ARMS, SINGLE MEMBER 6-INCH CLAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA





CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

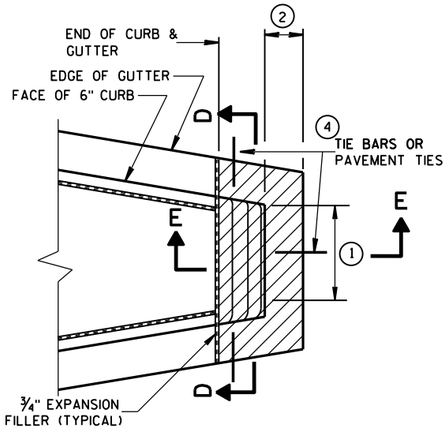
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

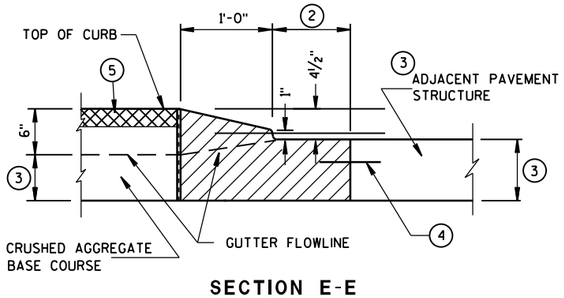
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

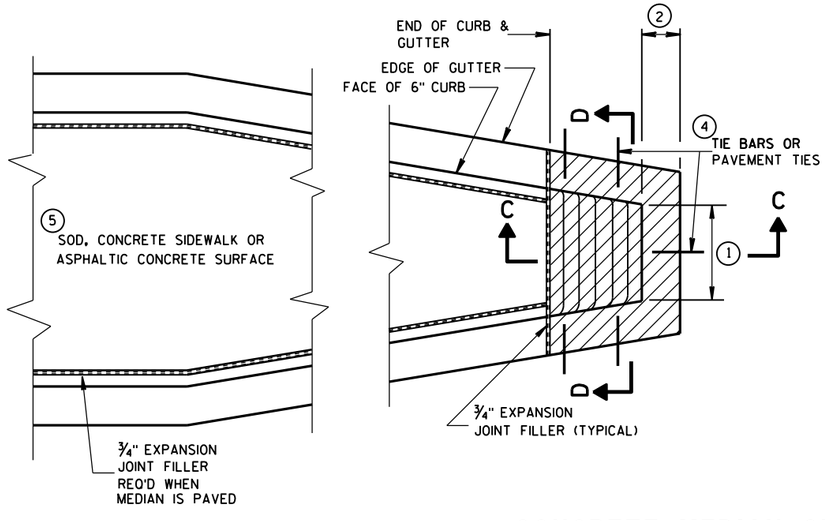
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

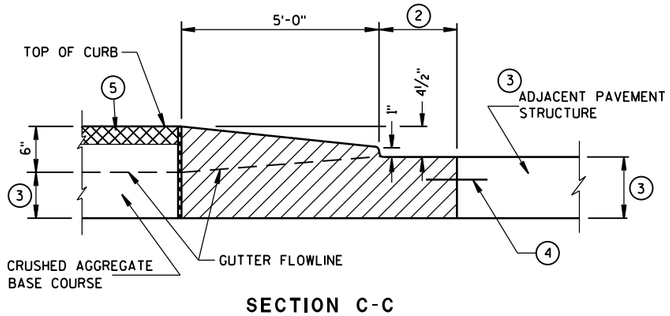




SECTION E-E

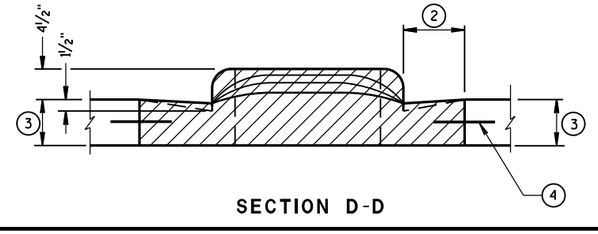
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

558

FHWA

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S.D.D. 11 B 2-2

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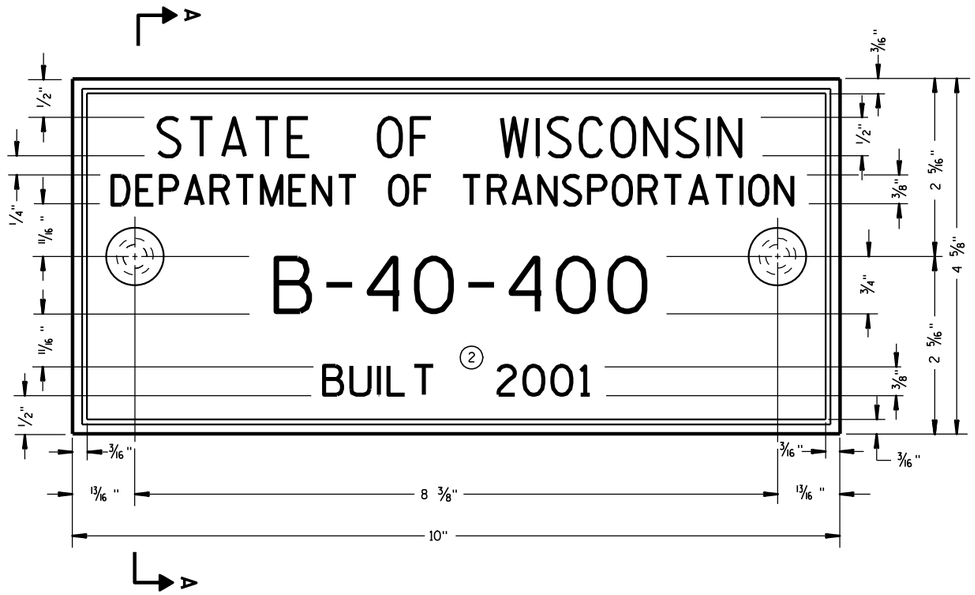
S.D.D. 11 B 2-2



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

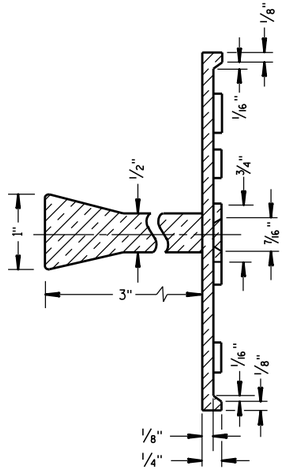
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

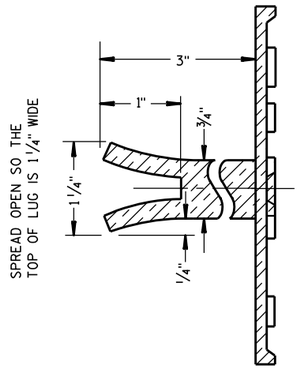
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

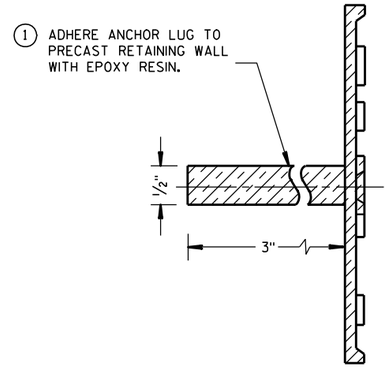
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP 559 ENGINEER

FHWA

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S.D.D. 12 A 3-10

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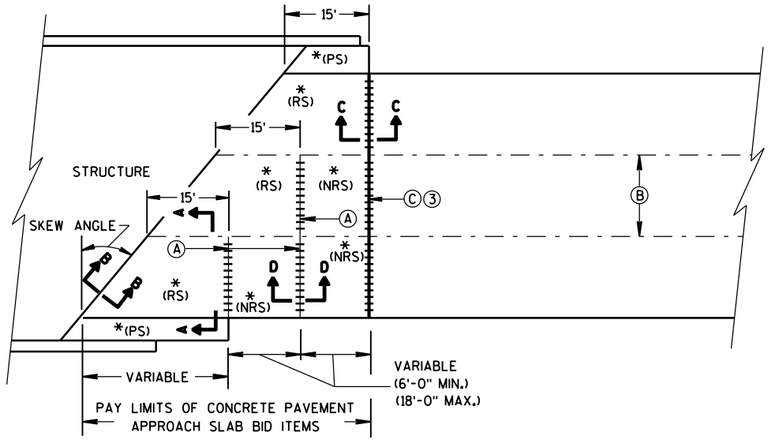
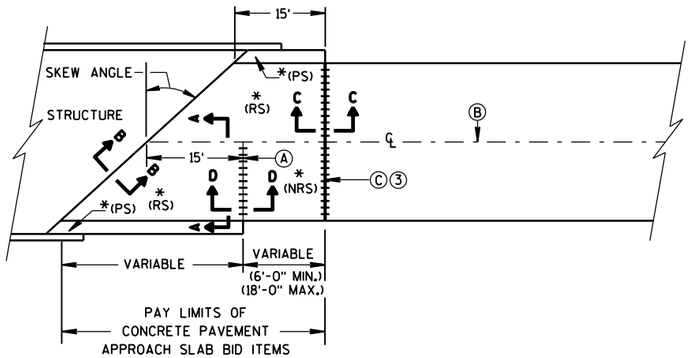
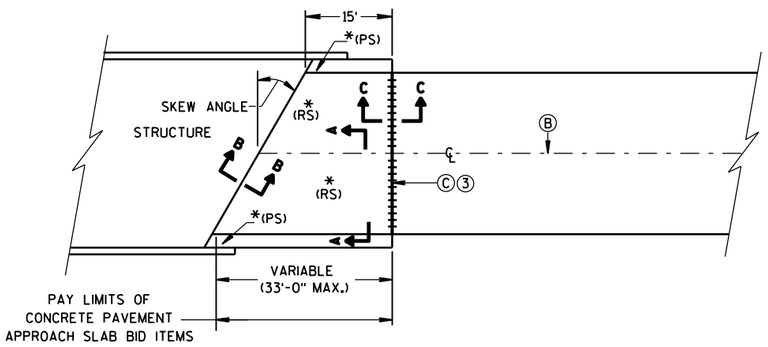
S.D.D. 12 A 3-10



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >20°
(PAVEMENT WIDTH ≤30')



SKEWS ≤20°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

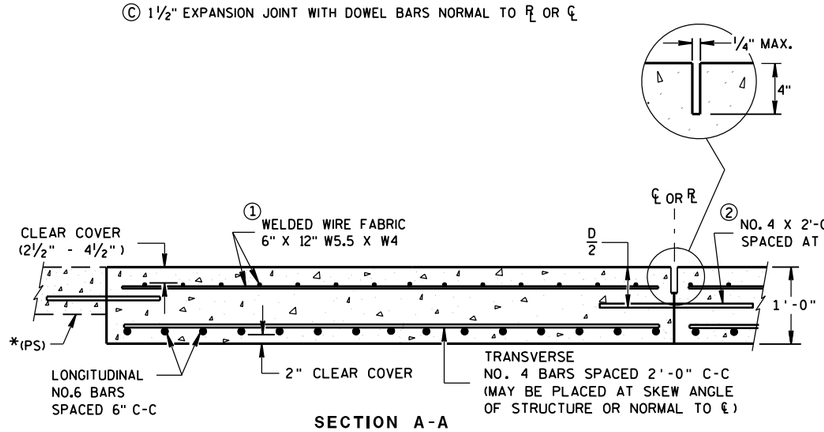
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

***STANDARD DOWEL BAR DIAMETER
(SEE SDD 13C11, & SDD 13C13)

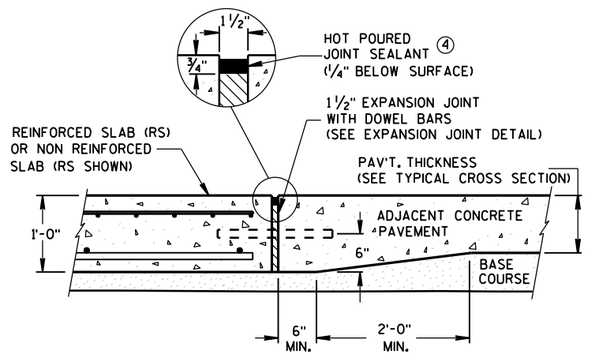
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄

Ⓑ STANDARD LONGITUDINAL JOINT WITH TIE BARS.

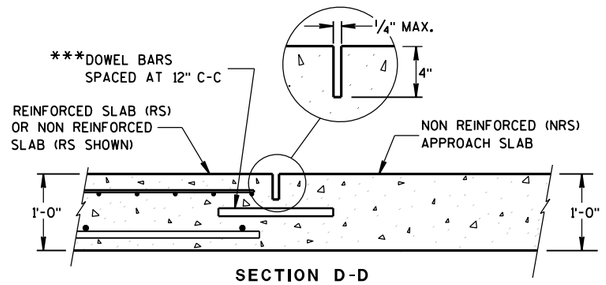
Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

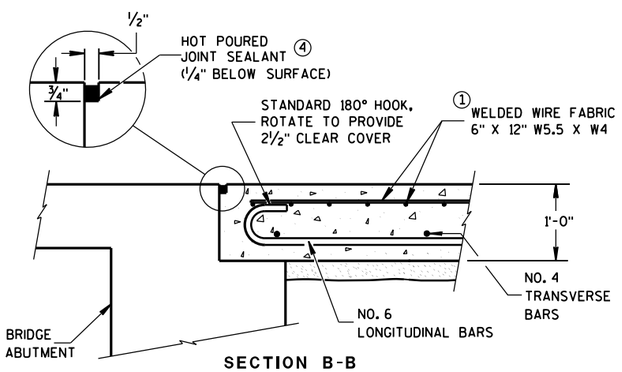
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

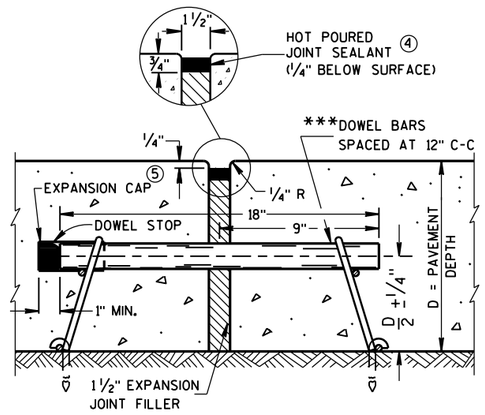
③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

④ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.

⑤ PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

560

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S.D.D. 13 B 2-8a

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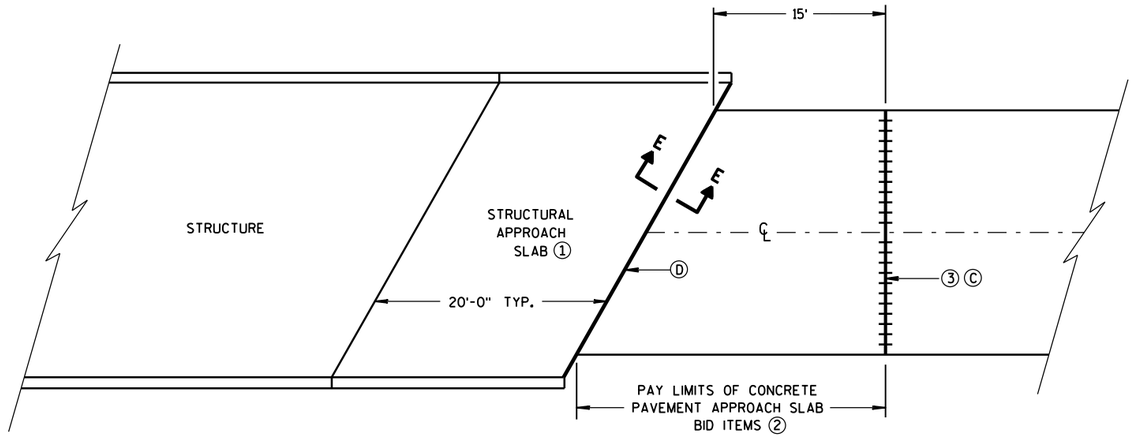
S.D.D. 13 B 2-8a

BRIDGE APPROACHES



GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

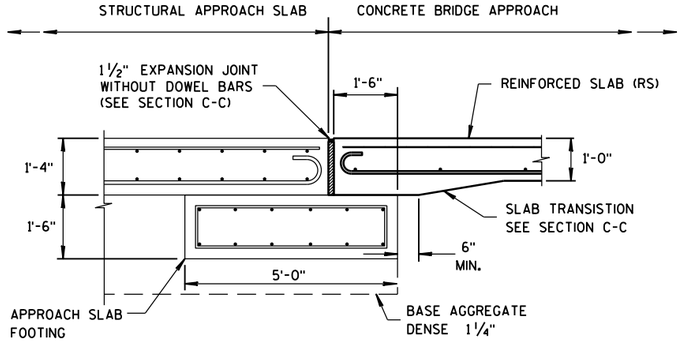
① SEE BRIDGE PLAN.

② CONFORM TO SHEET 13 B 2(A) FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS.

③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄

Ⓓ 1½" EXPANSION JOINT (NO DOWELS)



SECTION E-E

FOOTING DETAIL

STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPERV
FHWA

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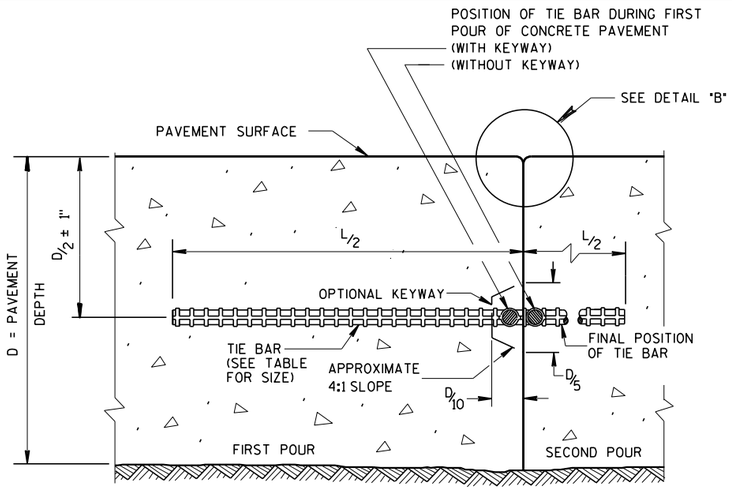
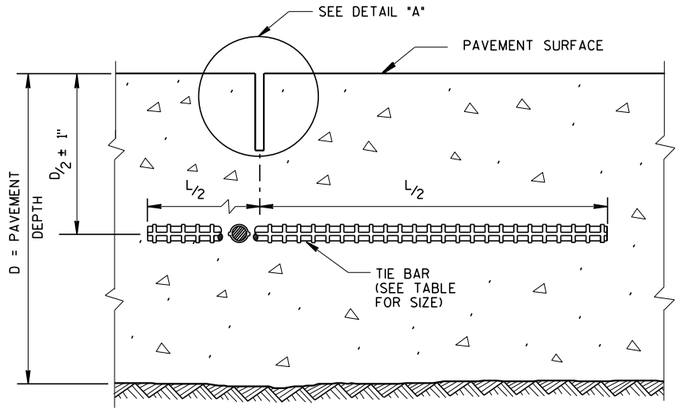
S.D.D. 13 B 2-8b



CONSTRUCTION JOINT



SAWED JOINT

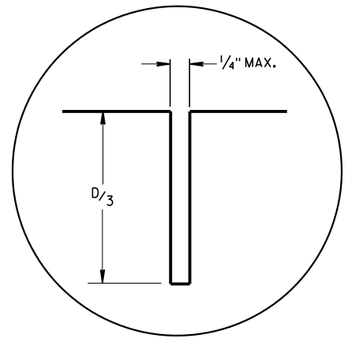
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

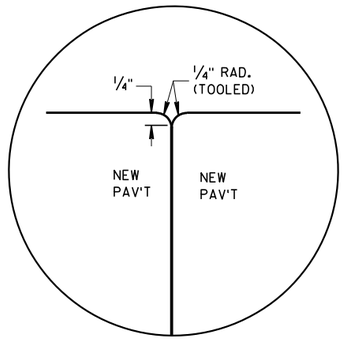
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

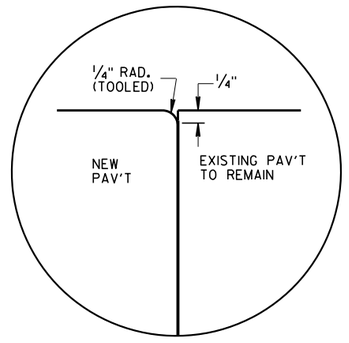
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



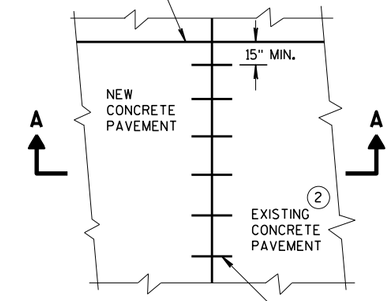
DETAIL "A"



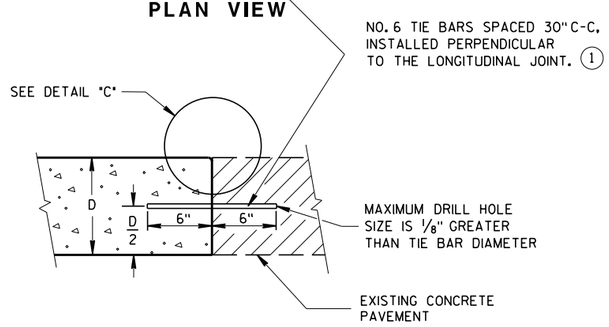
DETAIL "B"



DETAIL "C"



PLAN VIEW



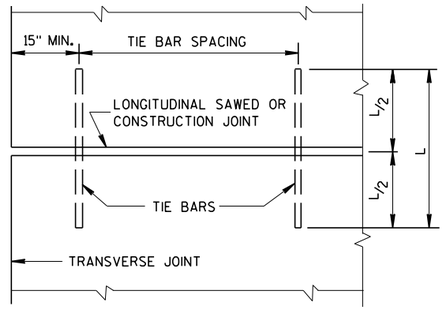
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp — PAVEMENT SUPE
FHWA

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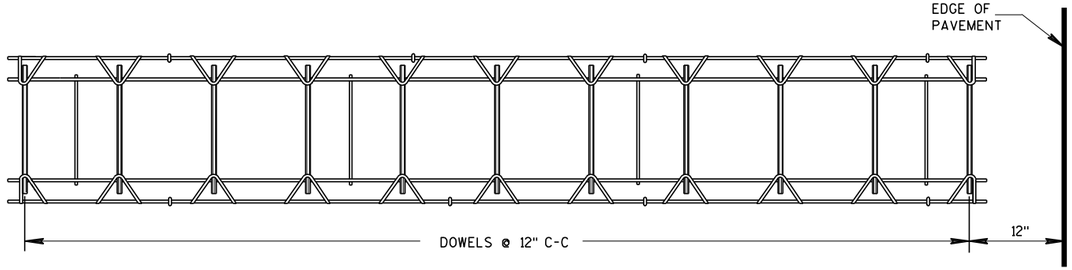
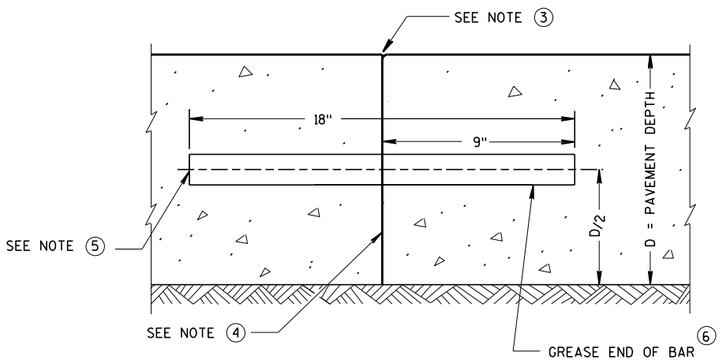


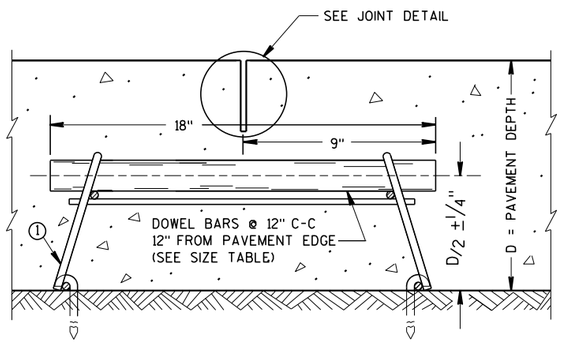
PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



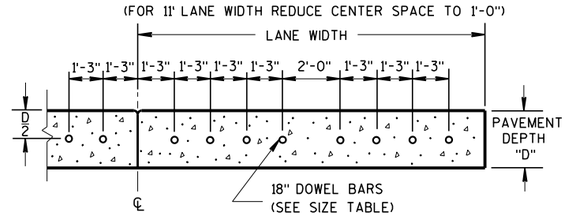
TRANSVERSE CONSTRUCTION JOINT



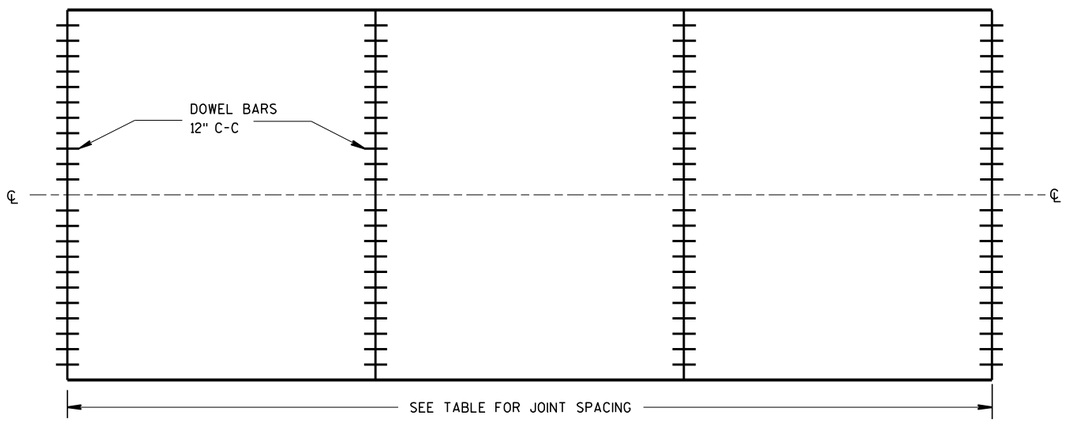
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

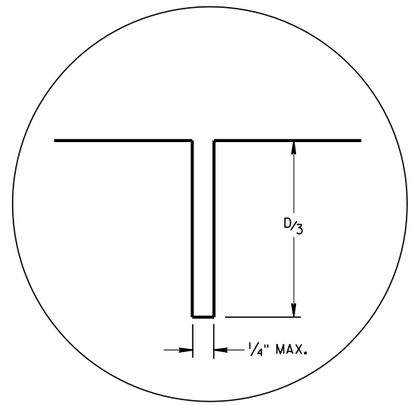
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUP 563

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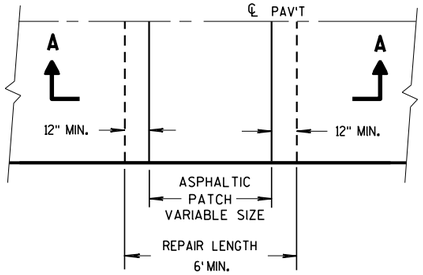
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

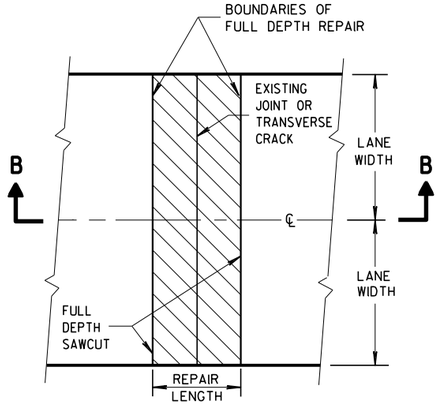
PROVIDE 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

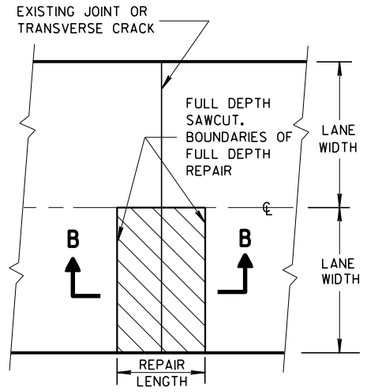
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

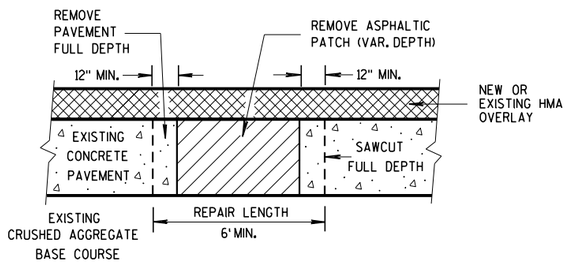


PLAN VIEW
(DOUBLE LANE REPAIR)



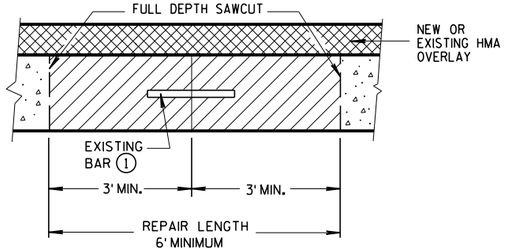
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 13 C 14-7a

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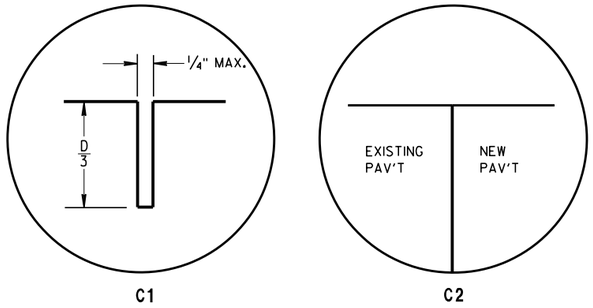
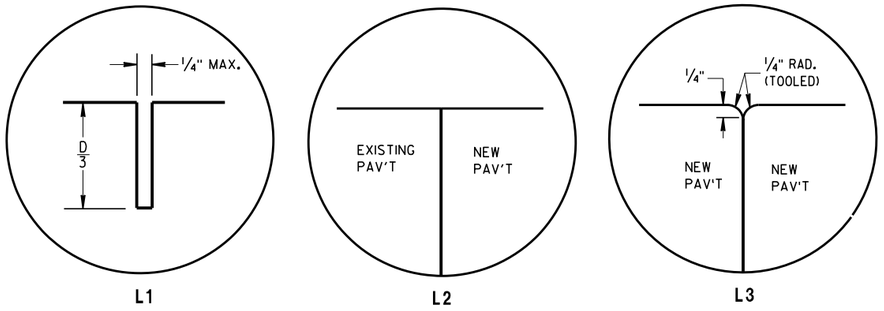
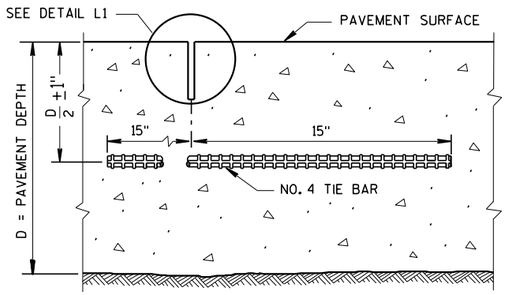


TRANSVERSE JOINTS

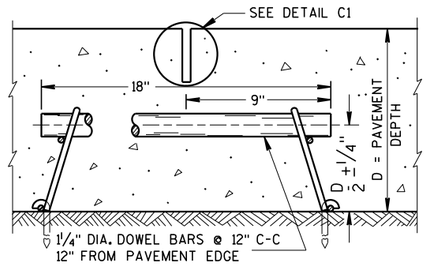


LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT



SECTION F-F

CONTRACTION JOINT

GENERAL NOTES

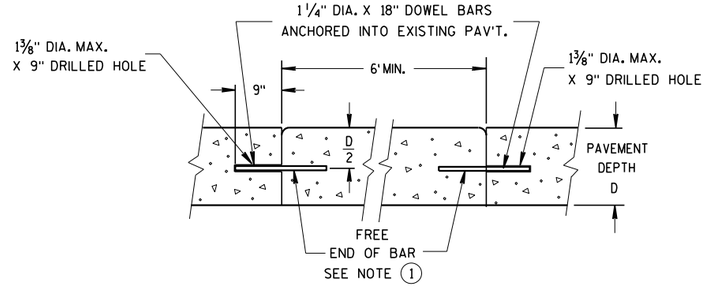
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE BASE PATCHES OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

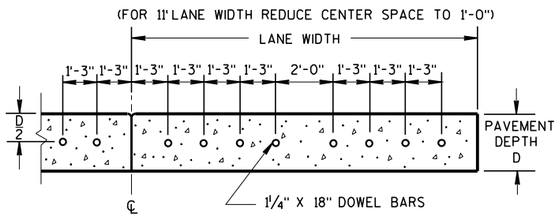
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

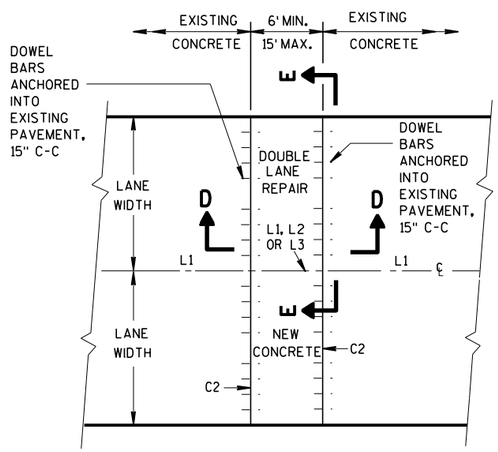


SECTION D-D



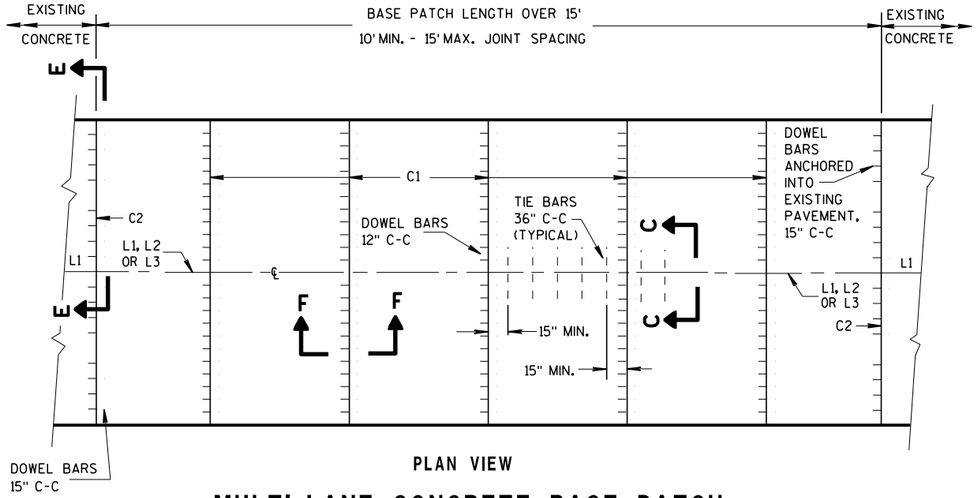
SECTION E-E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

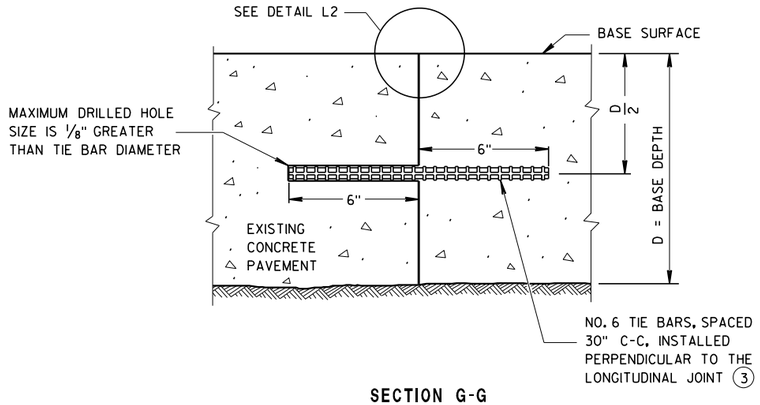
BASE PATCHING CONCRETE

GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE BASE PATCHES UP TO 15 FEET IN LENGTH.

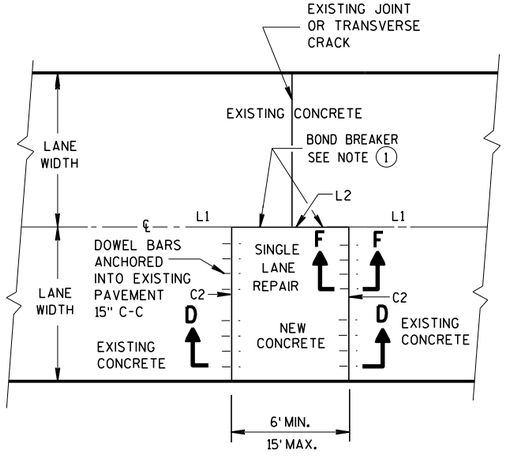
(2) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, DRILLED TIE BARS MAY BE INSTALLED ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



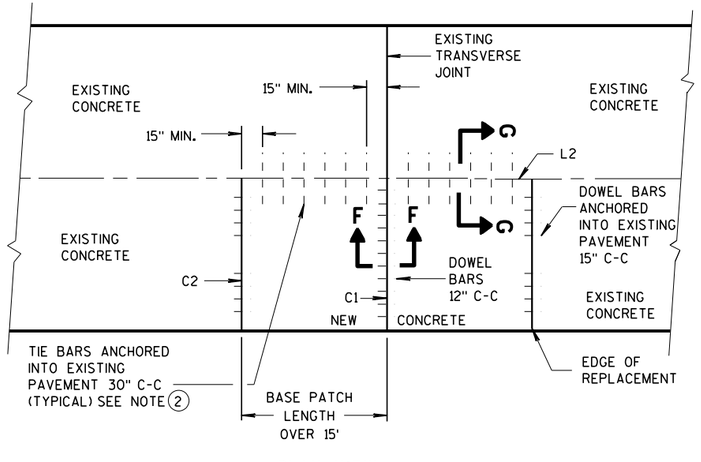
SECTION G-G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPERVISOR
FHWA

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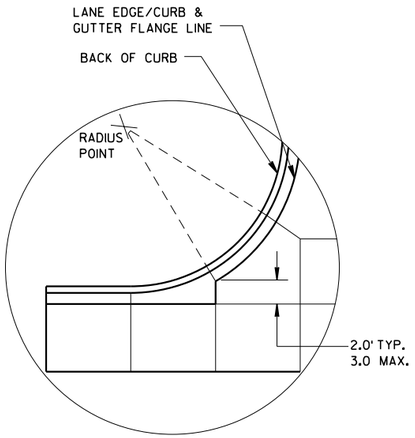
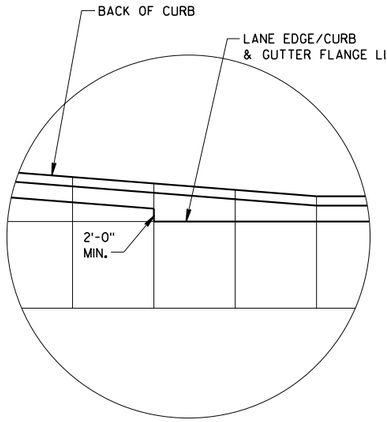
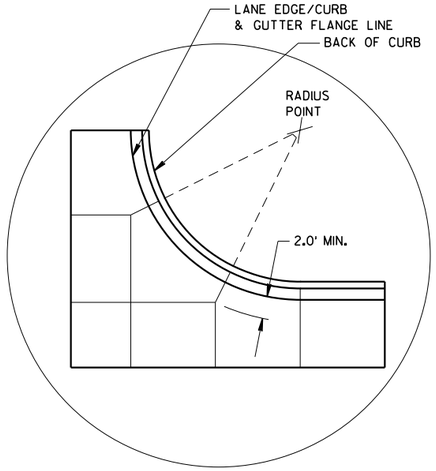


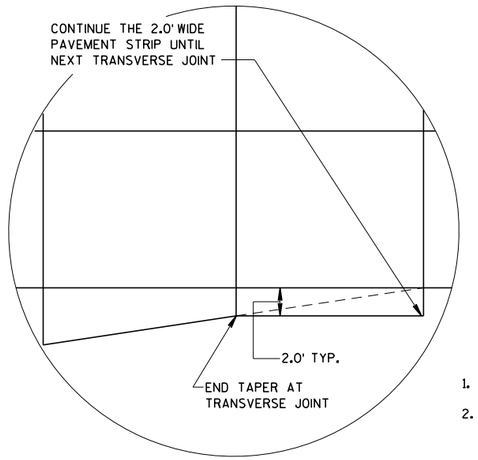
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

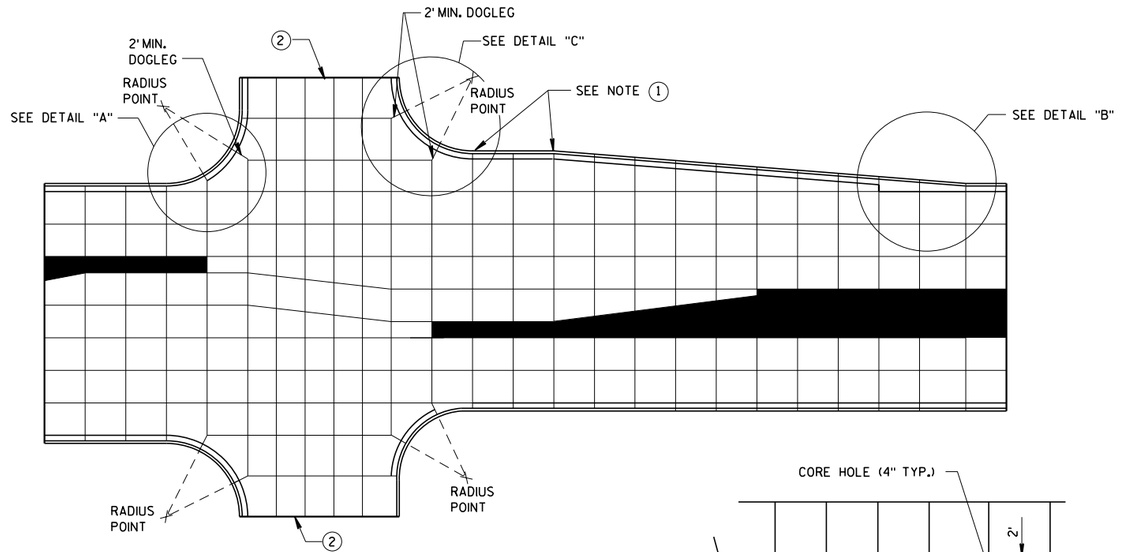
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

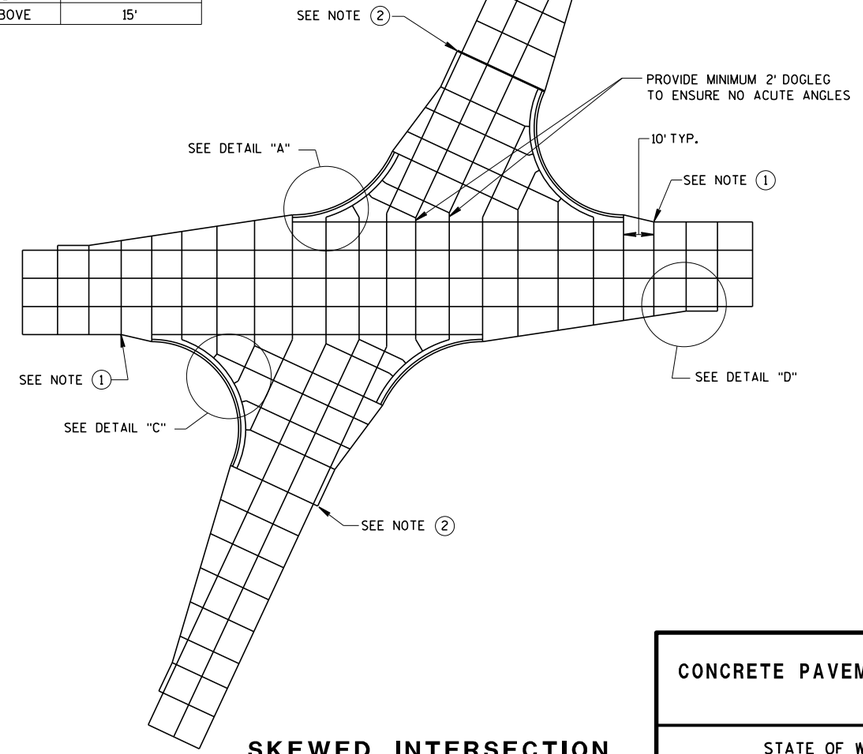
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



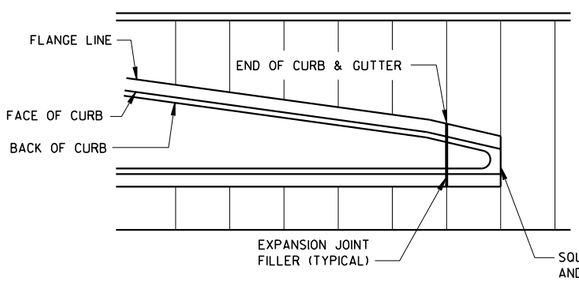
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

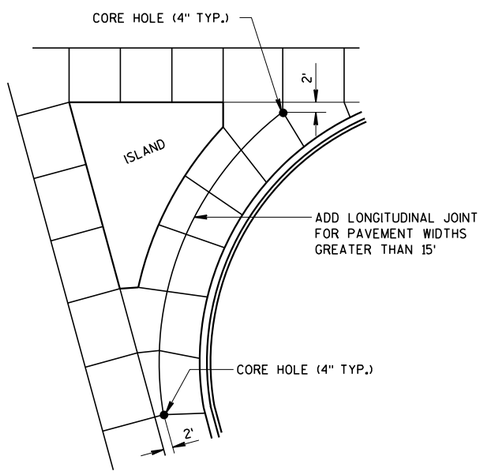
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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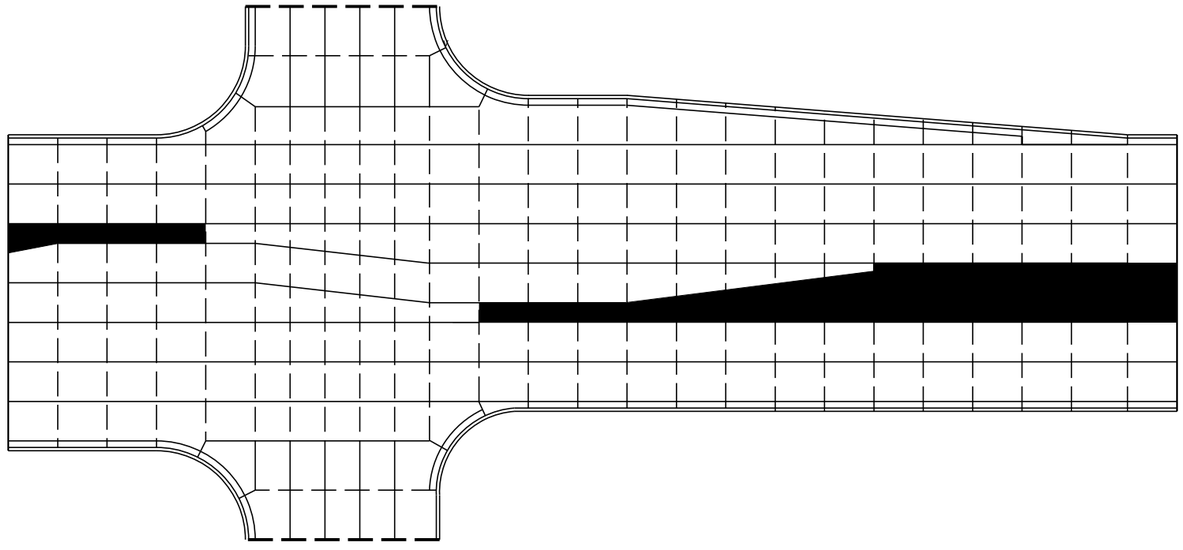
LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

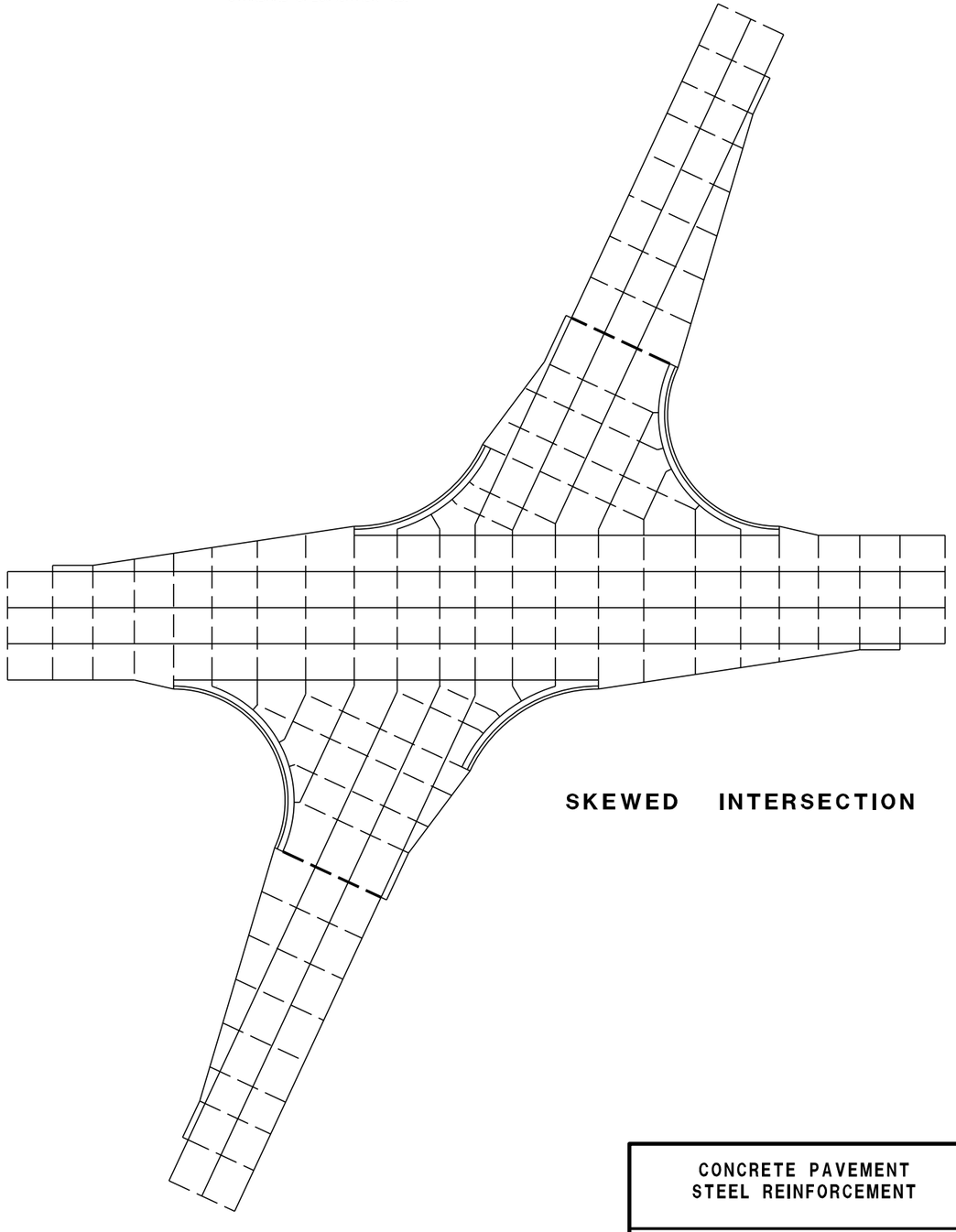
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

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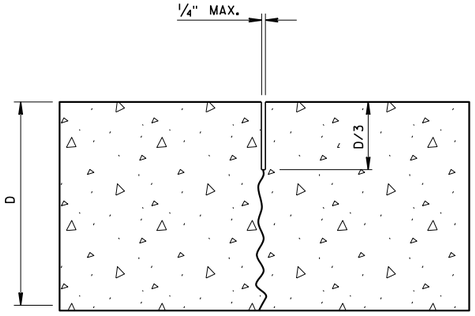
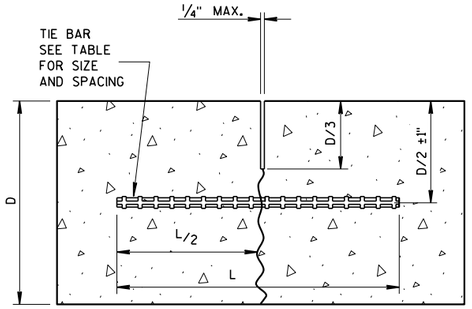
S.D.D. 13 C 18-6b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

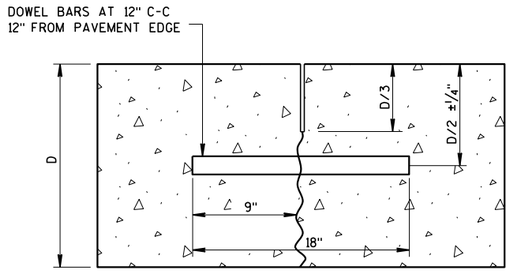
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

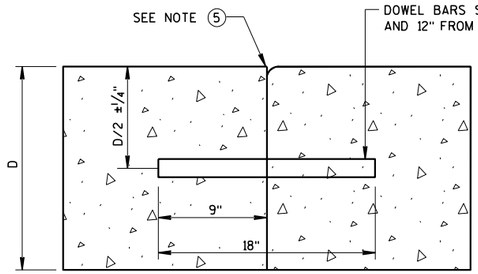
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



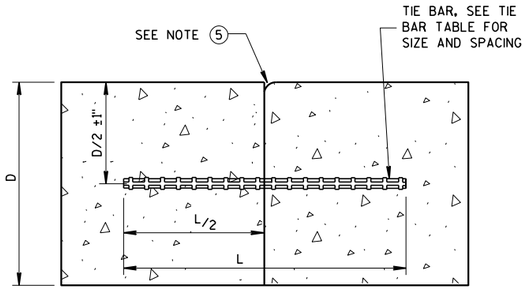
DOWELED-TRANSVERSE

CONTRACTION JOINTS

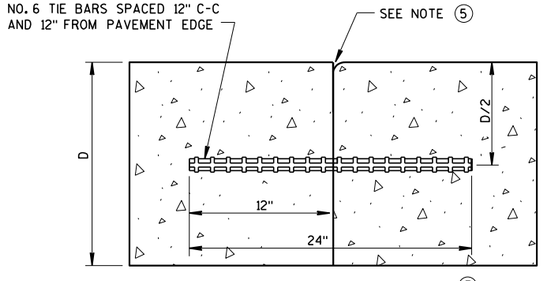
SEE NOTE (2)



DOWELED TRANSVERSE (3)

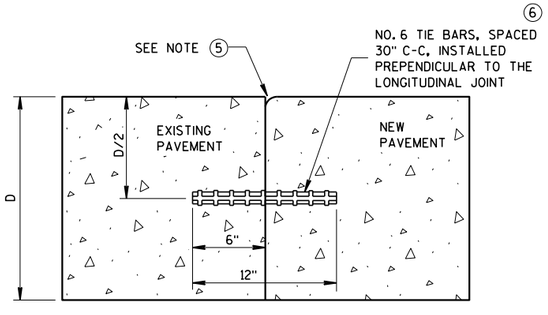


TIED LONGITUDINAL



TIED TRANSVERSE (3)

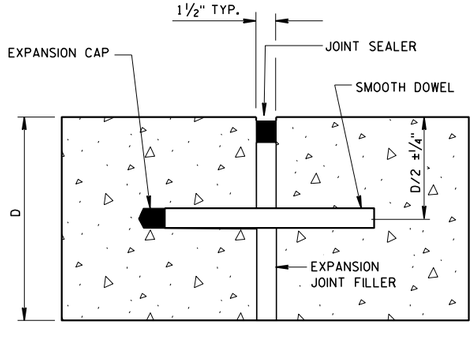
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

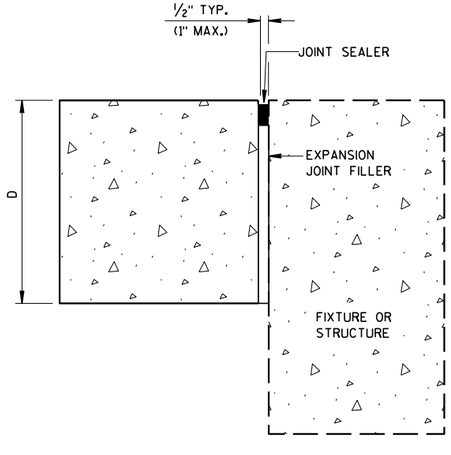
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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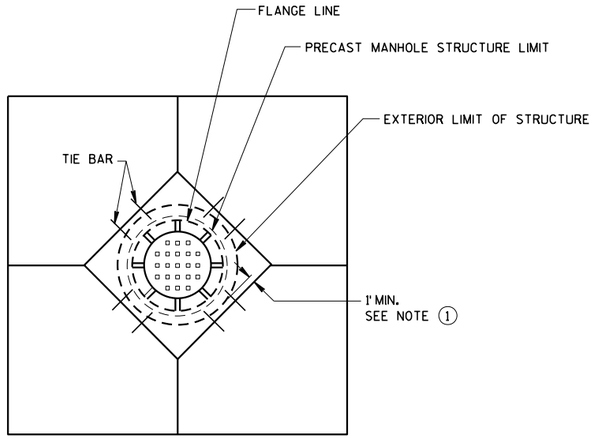
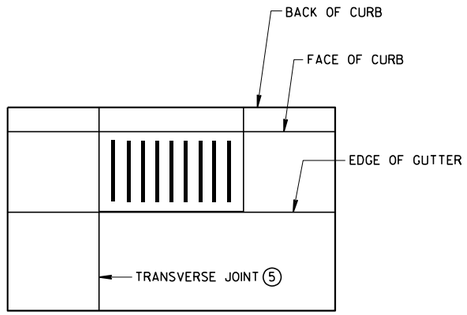
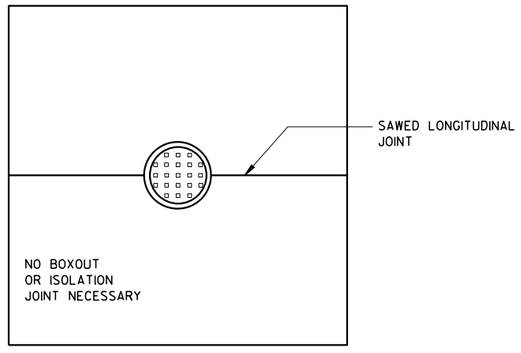


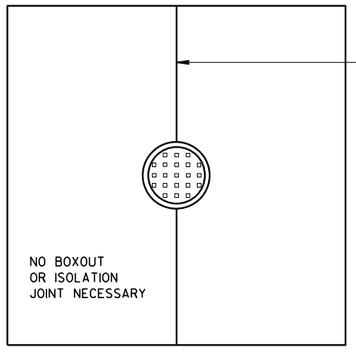
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



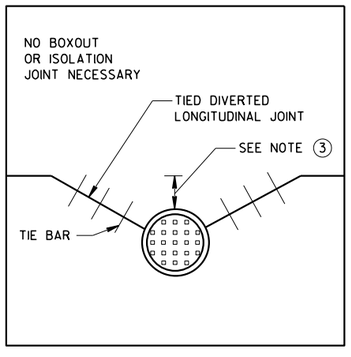
INLET WITH TRANSVERSE JOINT



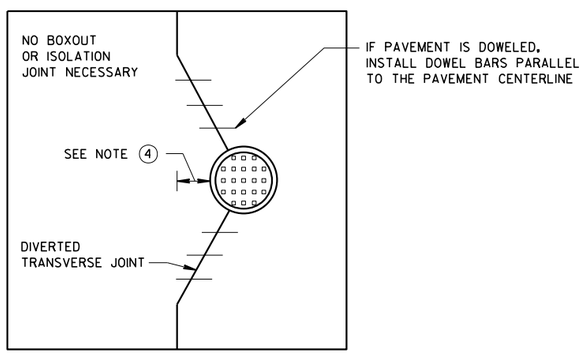
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter K[illegible] P.E. — PAVEMENT SUPE
FHWA

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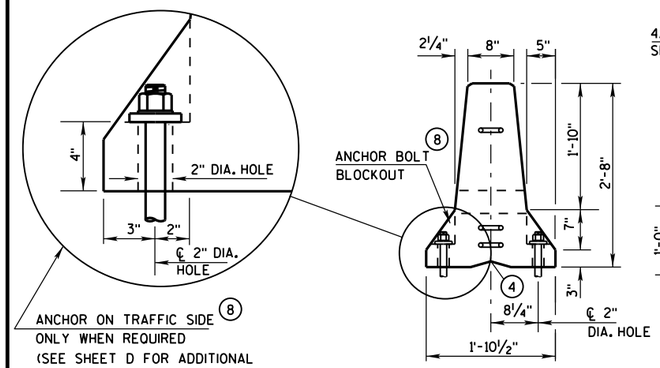
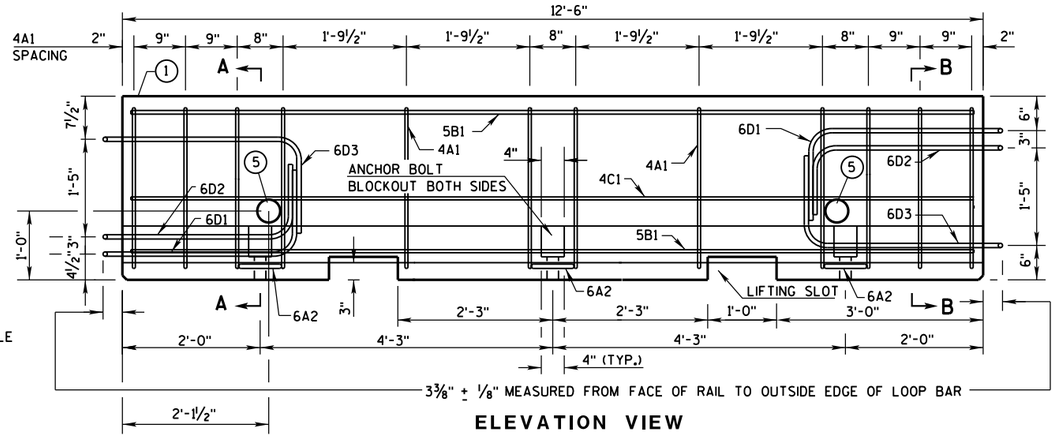
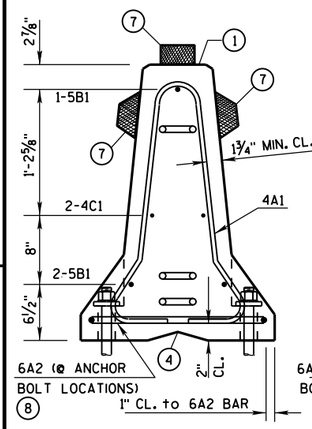


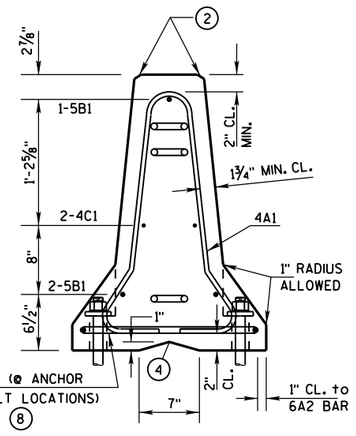
END VIEW



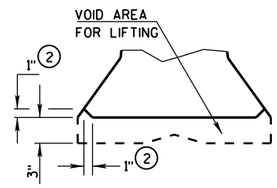
ELEVATION VIEW



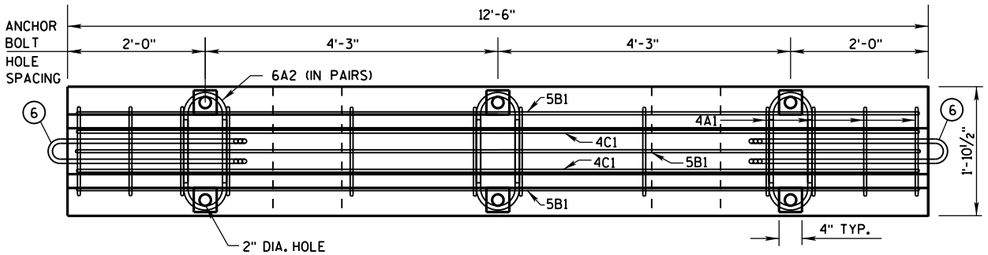
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

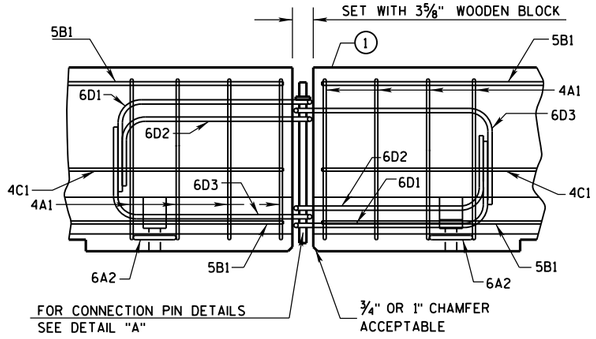


DETAIL "B"
LIFTING SLOT DETAIL

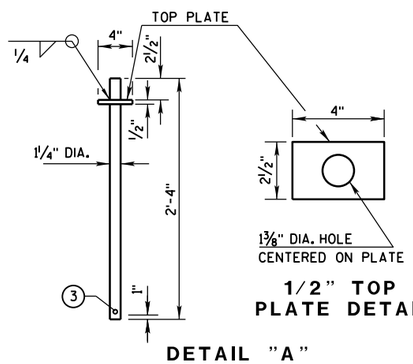


PLAN VIEW

DETAILS OF BARRIER SECTION

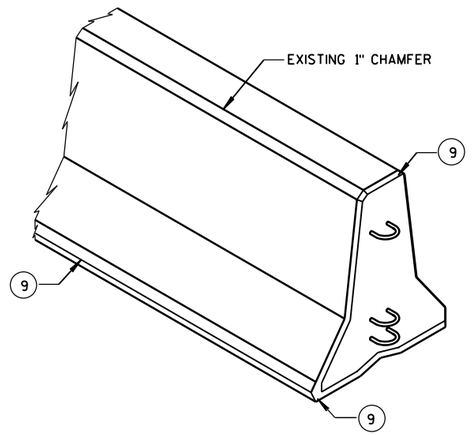


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-15(a) THRU 14B7-15(i).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

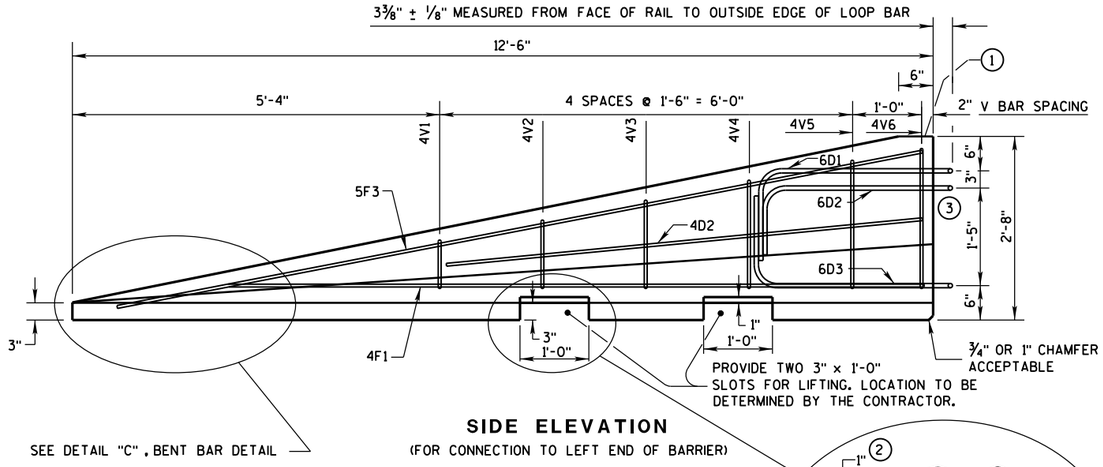
(8) SEE SHEET D FOR HOW TO ANCHOR BARRIER. SEE SHEET E FOR WHEN TO ANCHOR BARRIER.

(9) 1" CHAMFER OPTIONAL.

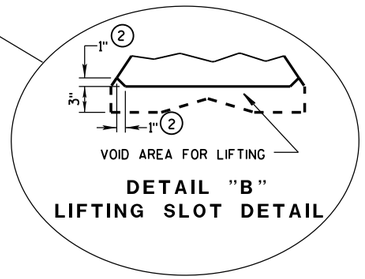
f'c = 4,000 psi

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

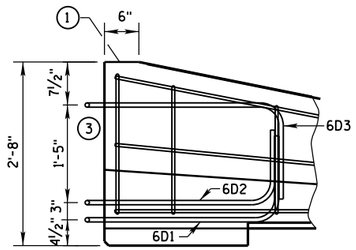
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 571



SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



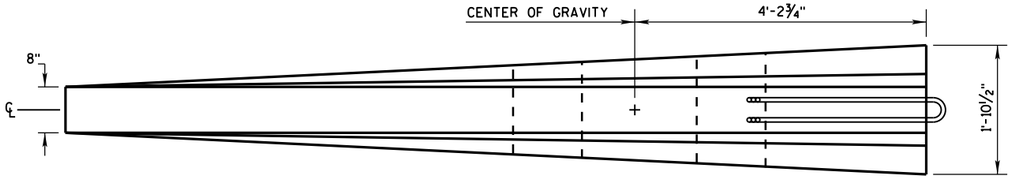
DETAIL "B"
LIFTING SLOT DETAIL



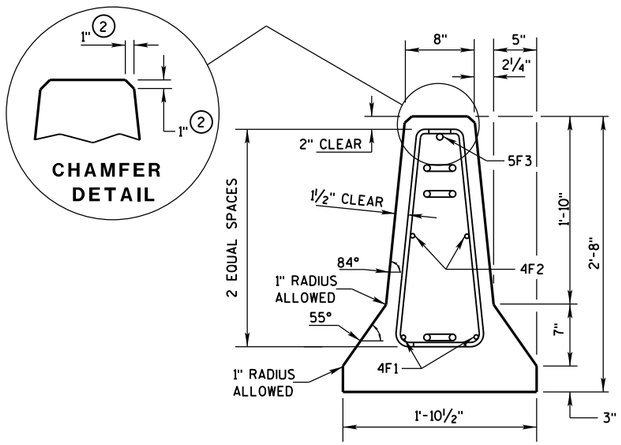
SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

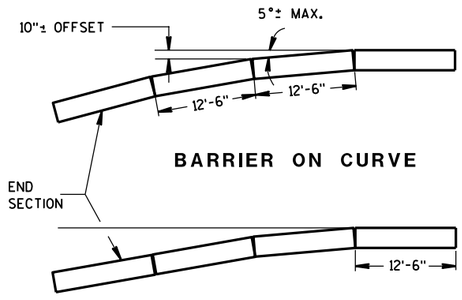
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



PLAN VIEW



END SECTION **FRONT ELEVATION**



BARRIER ON CURVE

FLARE AT BARRIER END

POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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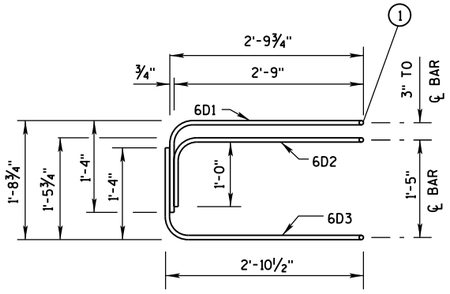
S.D.D. 14 B 7-15b

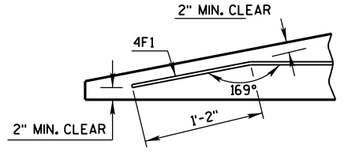
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

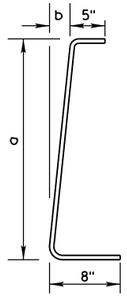
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

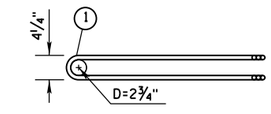
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

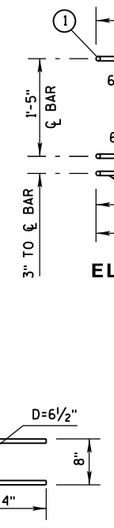
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"

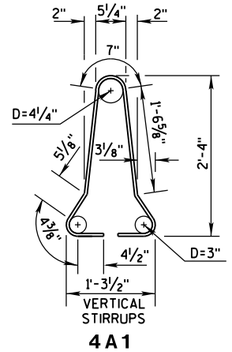


PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2

ELEVATION VIEW



4A1

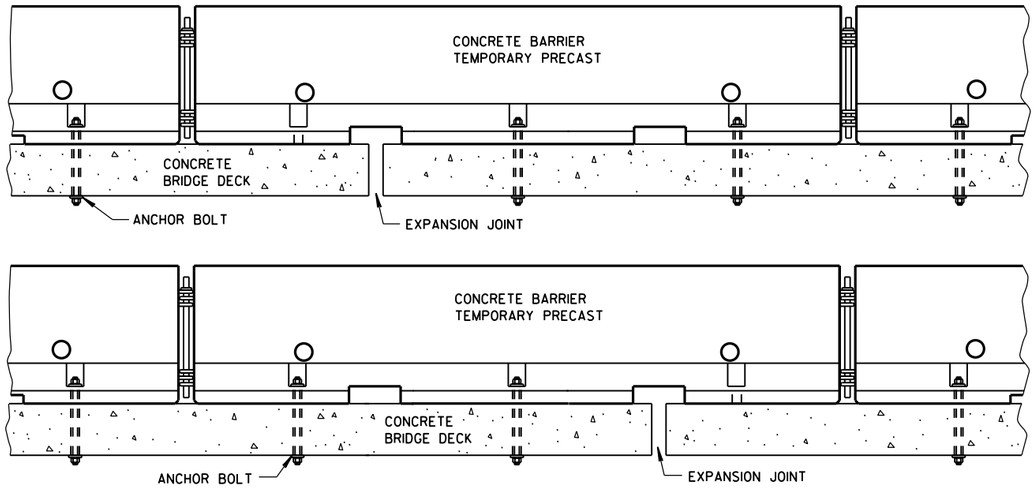
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 7-15c



TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)

GENERAL NOTES

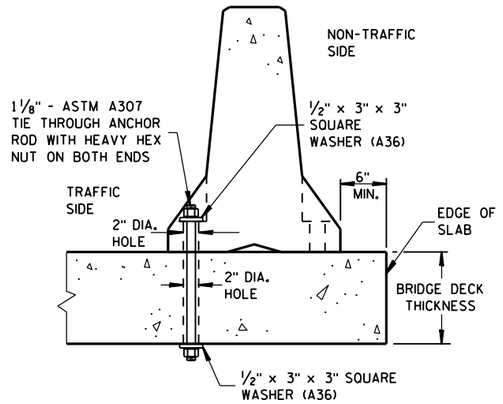
SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERICAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

(1) 1⅛" DIAMENTER A307 THREADED ROD. ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL. ASTM A563A HEAVY HEX NUT.

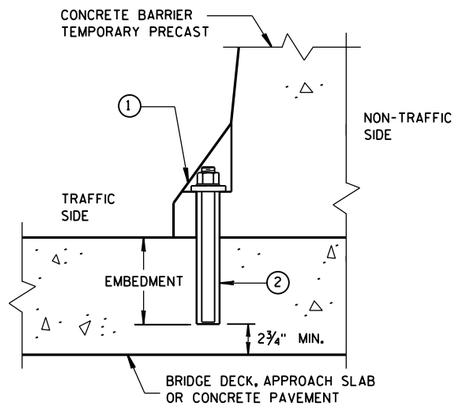
(2) ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

(3) ASPHALT SURFACE SHOWN. CONTRACTOR MAY DRILL THROUGH CONCRETE PAVEMENT AND THAN DRIVE ASPHALT ANCHOR PIN.



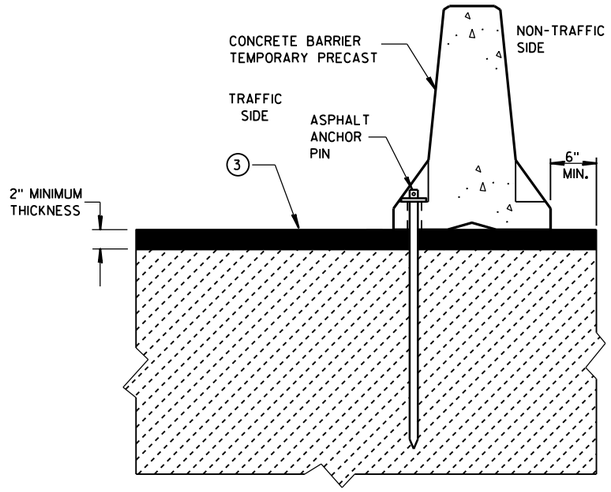
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)

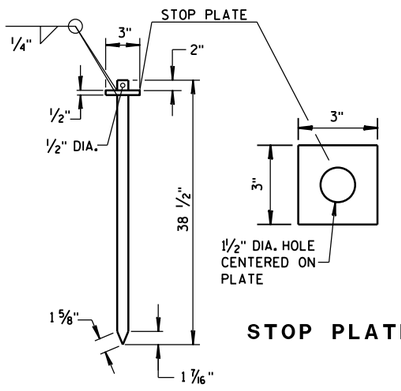


REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



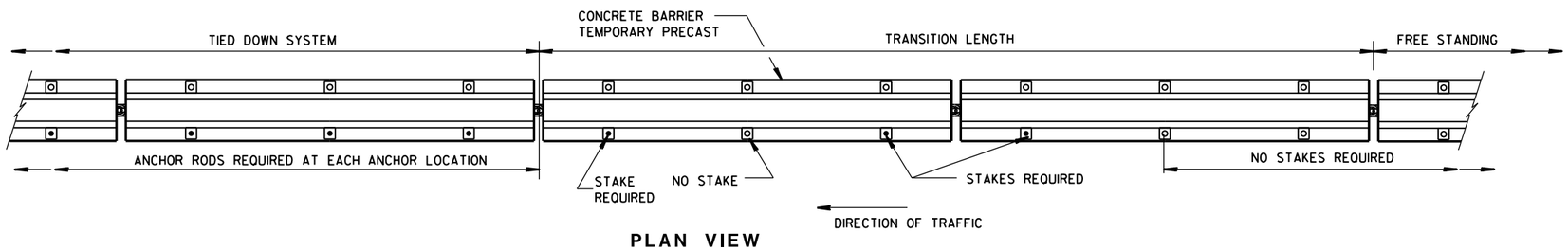
STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE



STOP PLATE

ASPHALT ANCHOR PIN

(ASTM A36 STEEL)



PLAN VIEW

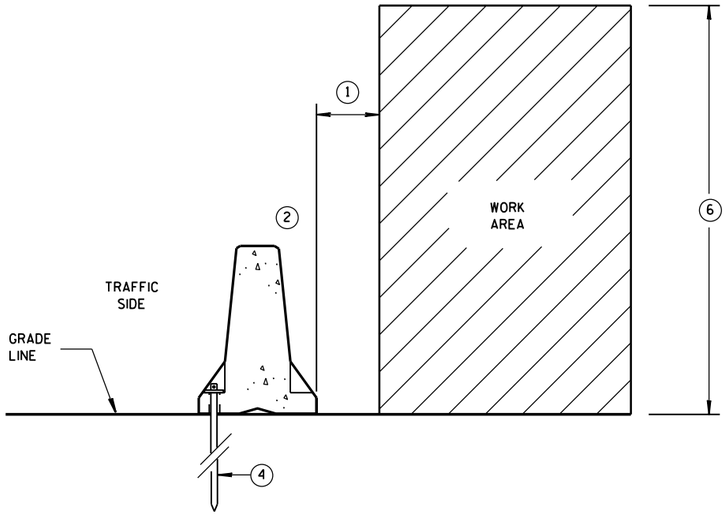
FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

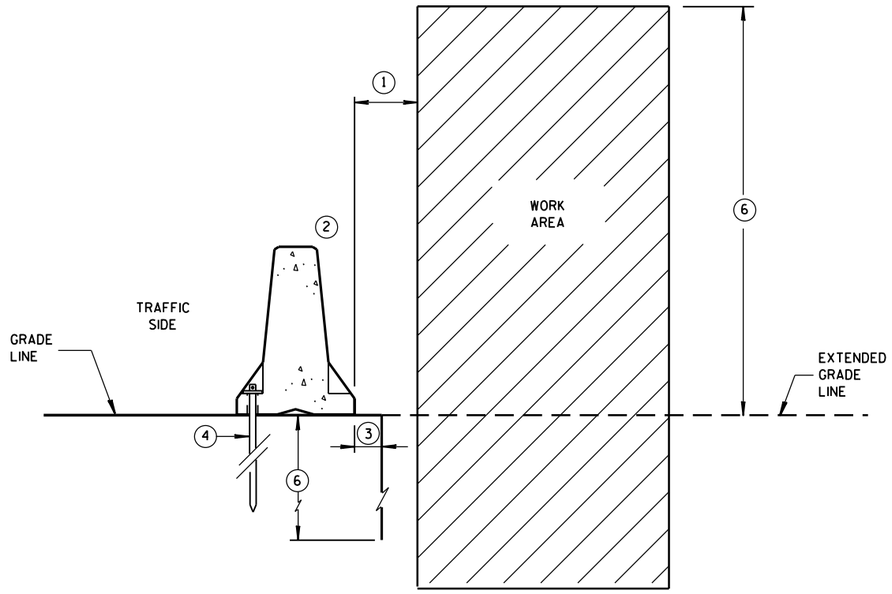
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-15d



ANCHORED BARRIER SPACE REQUIREMENTS FOR HAZARDS EXTENDED ABOVE THE GRADE LINE

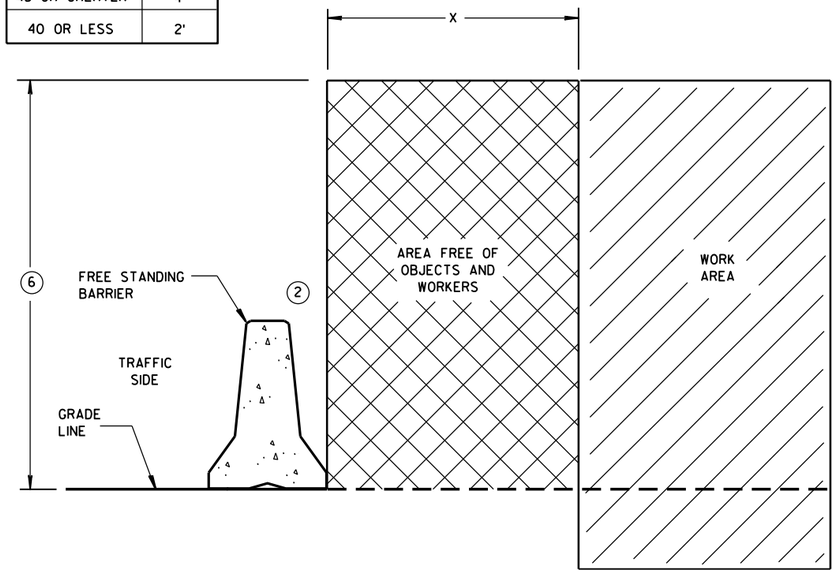


ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS

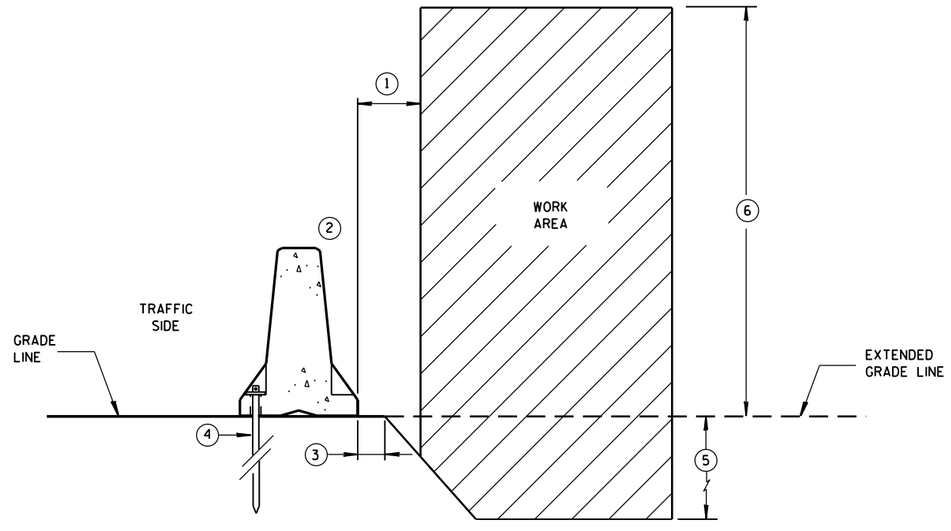
GENERAL NOTES

1. WHEN OBJECTS EXTEND ABOVE THE GRADE, A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT. SEE OTHER DETAILS FOR FOR THE MINIMUM OFFSET FROM BACK OF BARRIER TO SLOPES OR VERTICAL DROPS.
2. OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR LEANED AGAINST THE BARRIER WITHOUT PERMISSION OF THE PROJECT ENGINEER.
3. SEE OTHER DETAIL ON SHEET "D" FOR SPACE REQUIREMENTS.
4. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR A STAKE DOWN FOR ASPHALTIC SURFACE TREATMENT DETAILS. ASPHALTIC ANCHOR SHOWN.
5. DEPTH OF 3 FEET OR MORE.
6. Y = 6'-6".

POSTED SPEED MPH	X
45 OR GREATER	4'
40 OR LESS	2'



FREE STANDING BARRIER SPACE REQUIREMENTS



ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 575

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S.D.D. 14 B 7-15e

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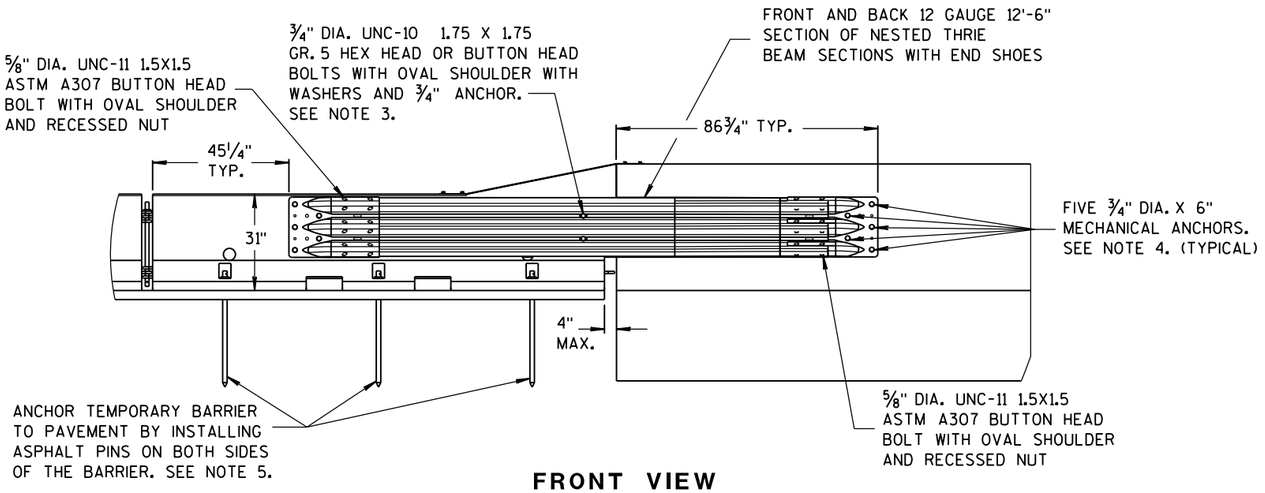
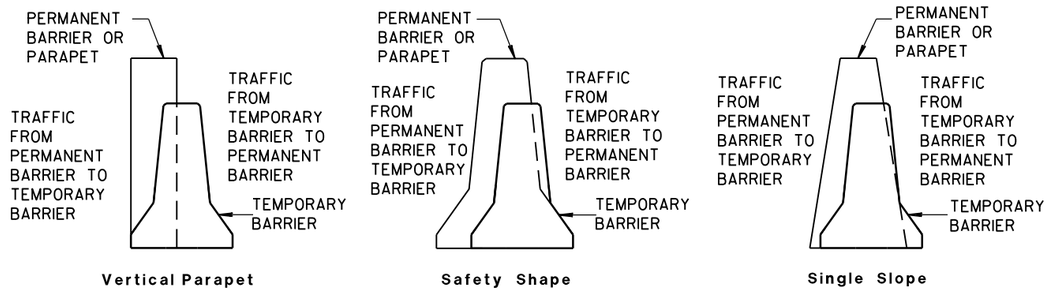
S.D.D. 14 B 7-15e



FRONT VIEW

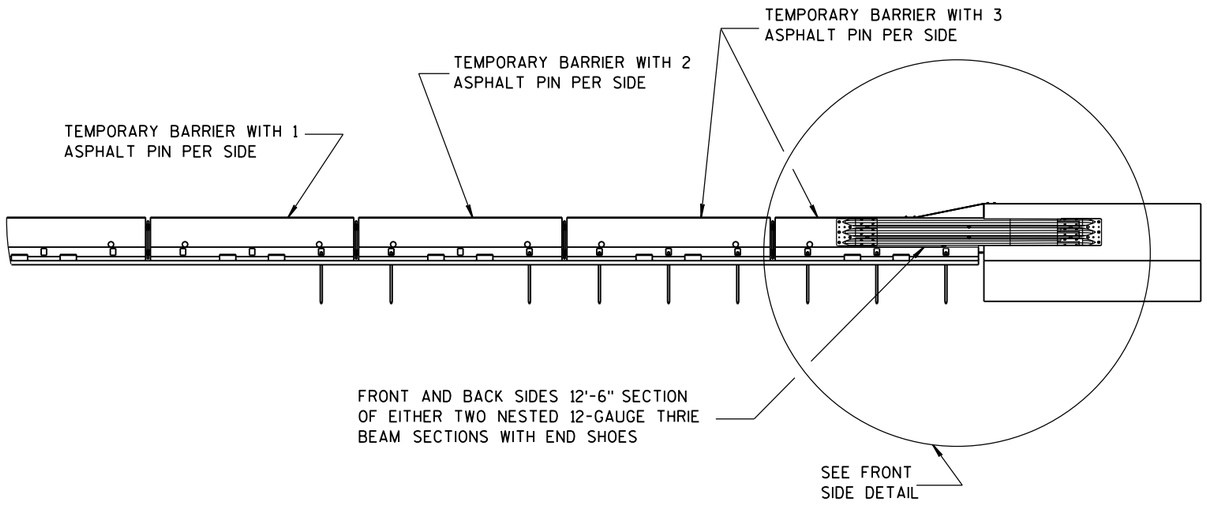


TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

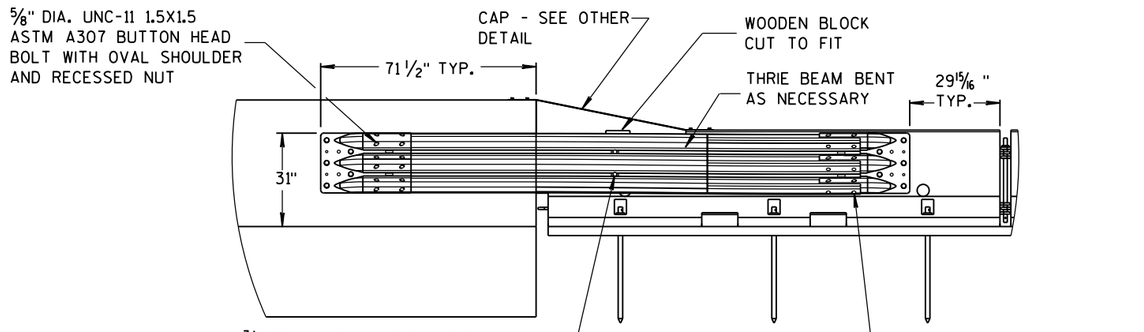
NOTES

NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS REGARDLESS OF TRAFFIC.

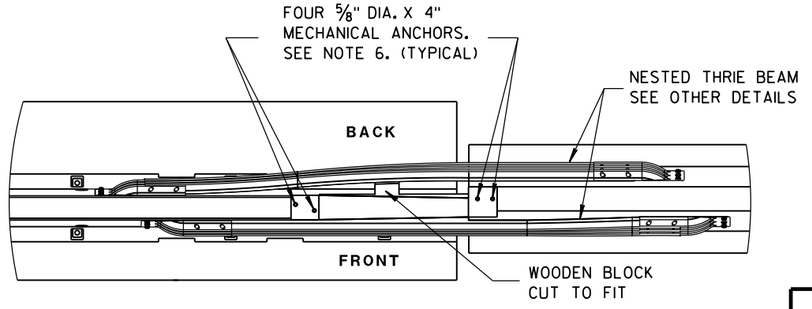
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



FRONT VIEW



BACK VIEW



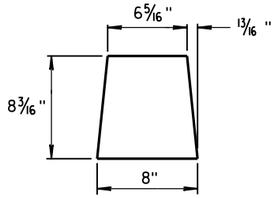
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

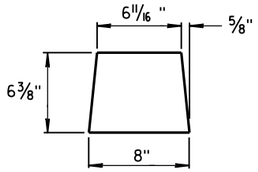
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

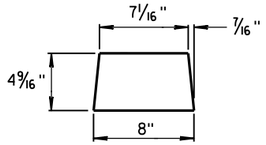
6
S.D.D. 14 B 7-15f



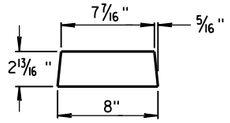
GUSSET 1



GUSSET 2

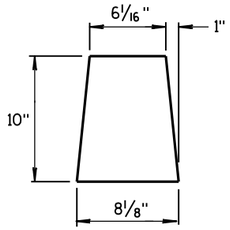


GUSSET 3

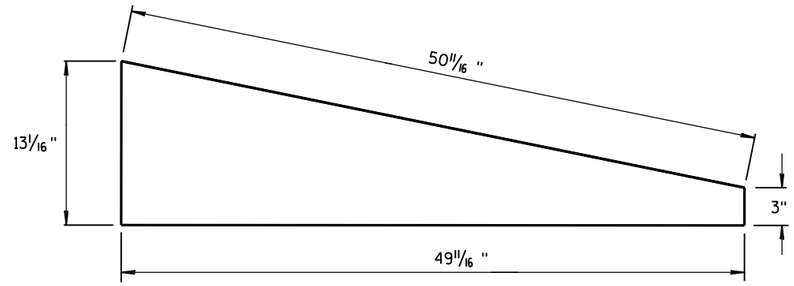


GUSSET 4

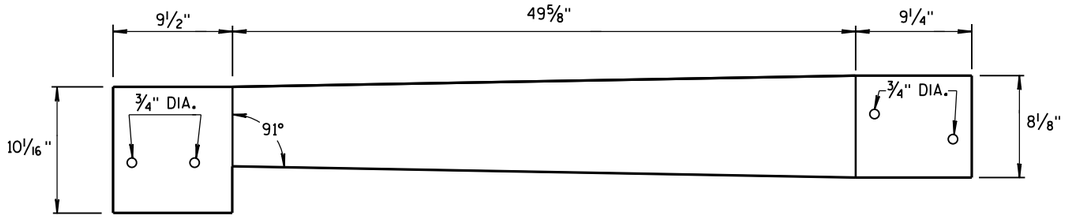
GUSSETS

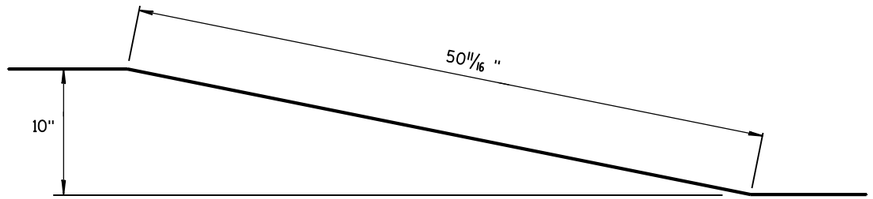


END PLATE



SIDE PLATE

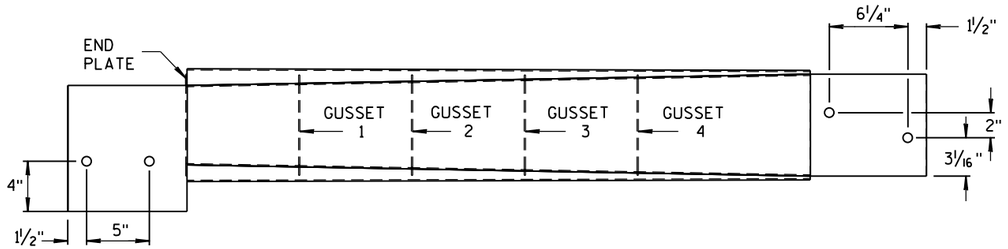


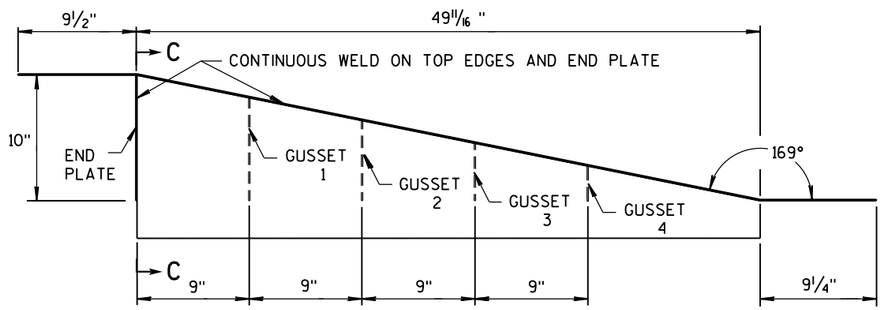


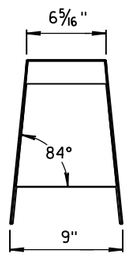
TOP PLATE

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.







SECTION C-C

NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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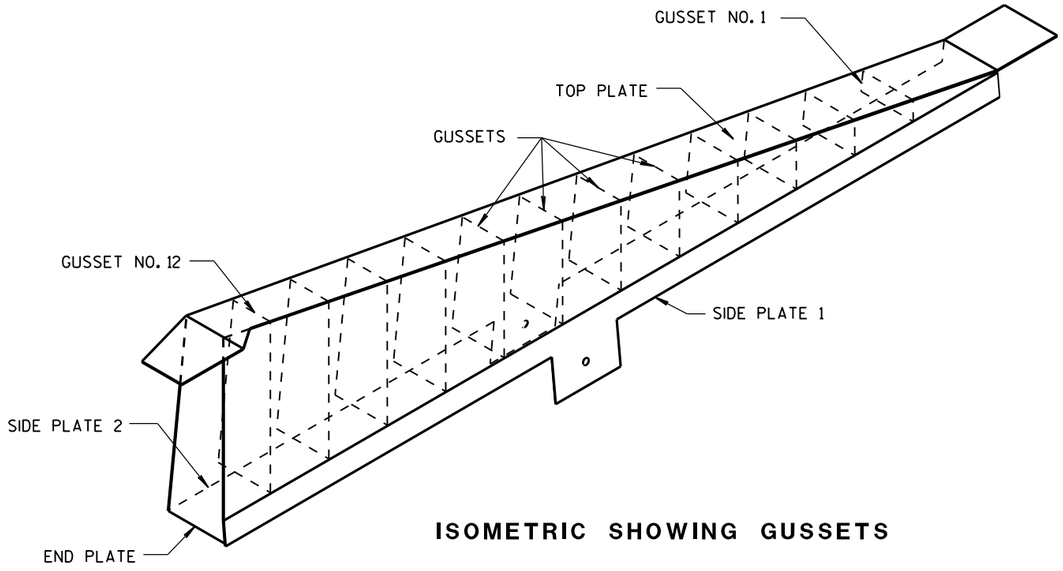
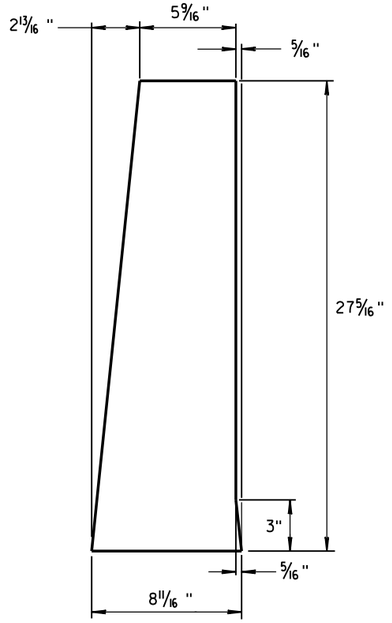
S.D.D. 14 B 7-15g

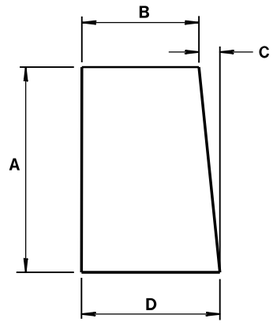


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



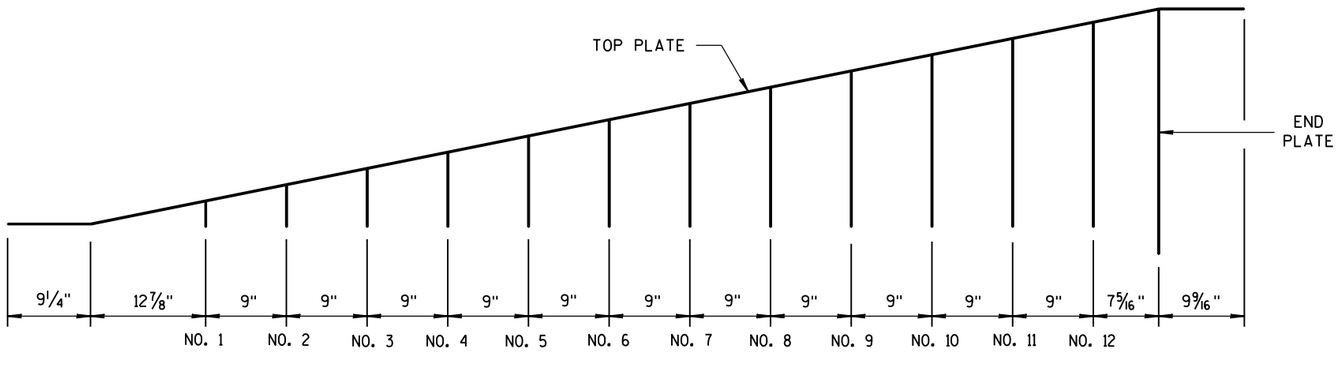
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

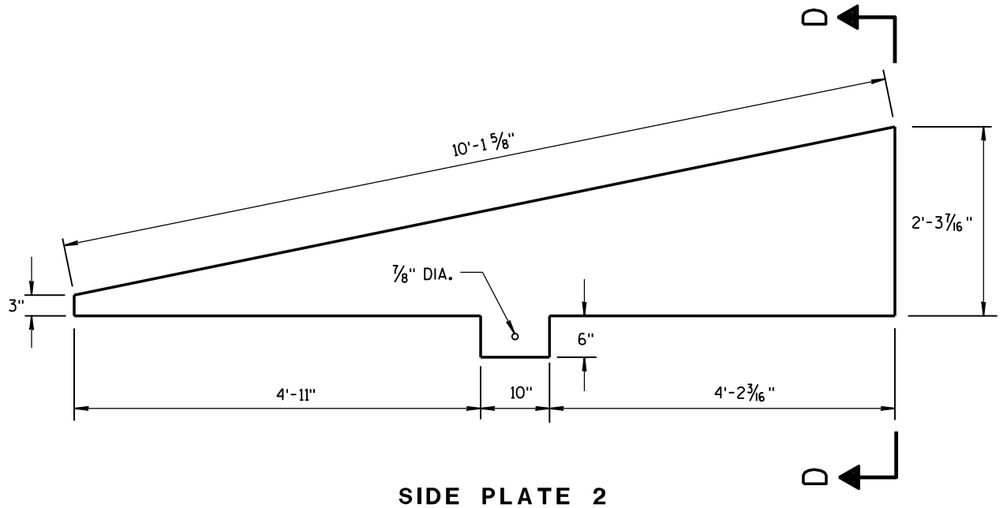
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

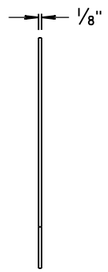
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

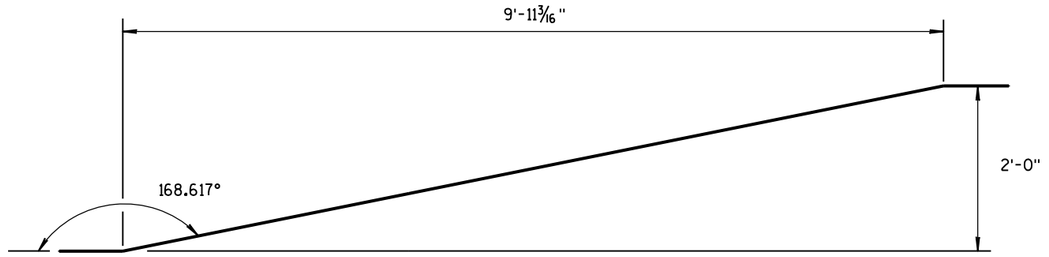
S.D.D. 14 B 7-15h



SIDE PLATE 2

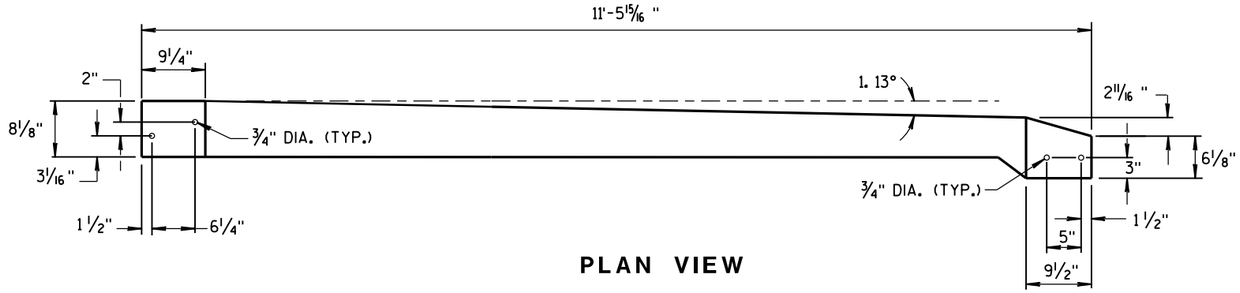


END VIEW



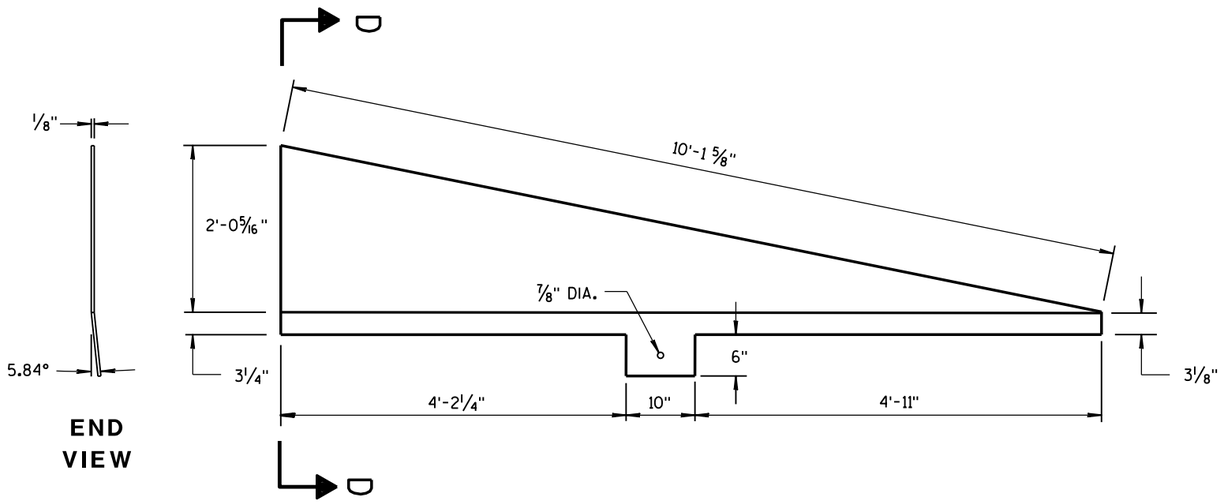
SIDE VIEW

TOP PLATE



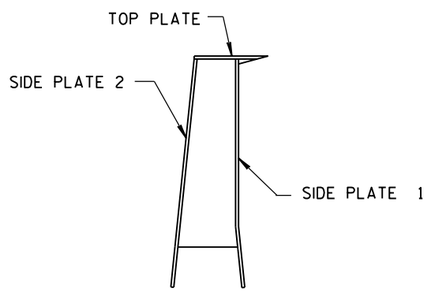
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

579

6

S.D.D. 14 B 7-15i

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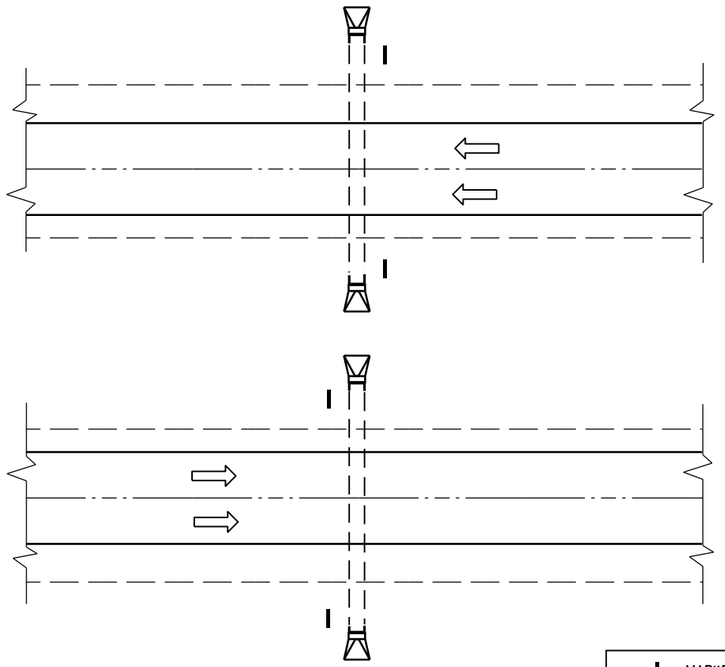
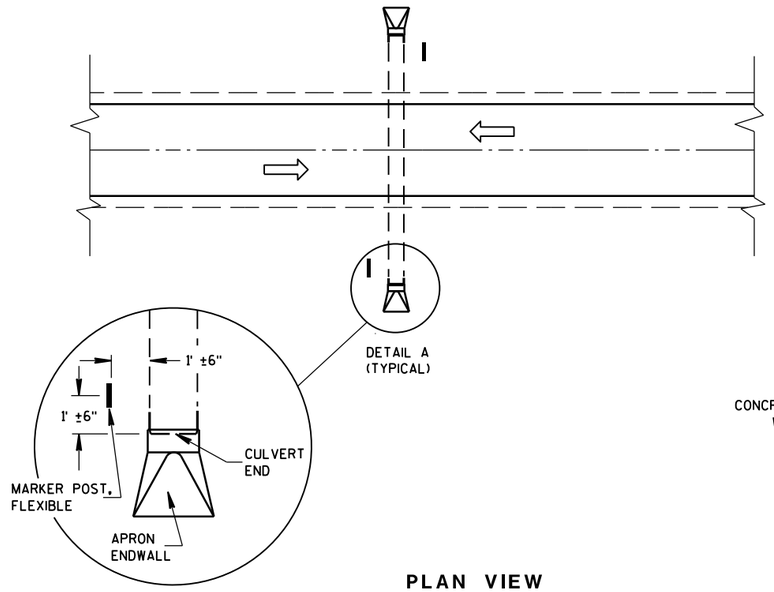
S.D.D. 14 B 7-15i



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

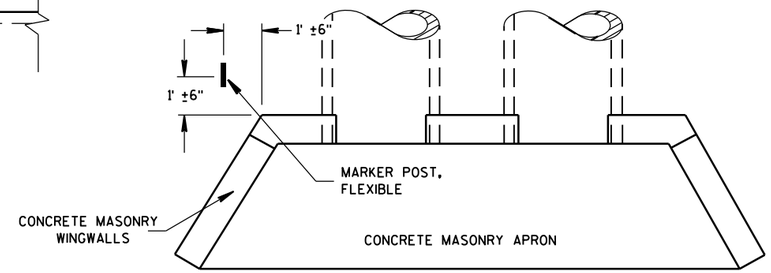
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

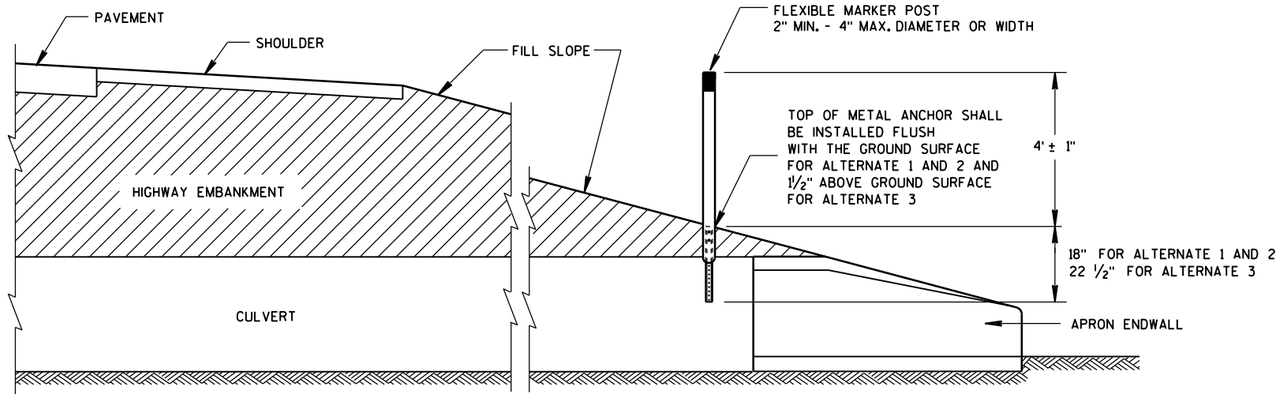
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 A 3-2a

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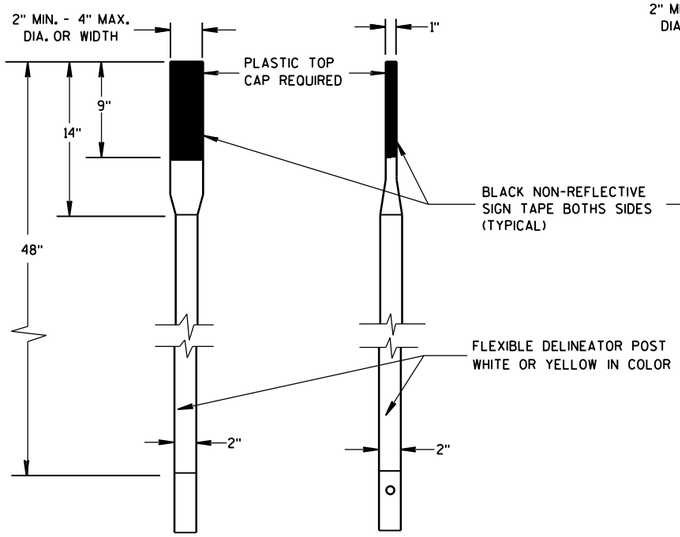
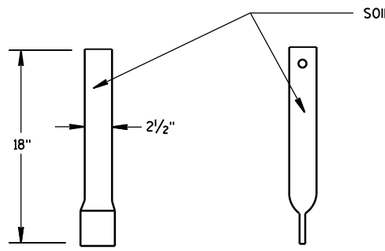
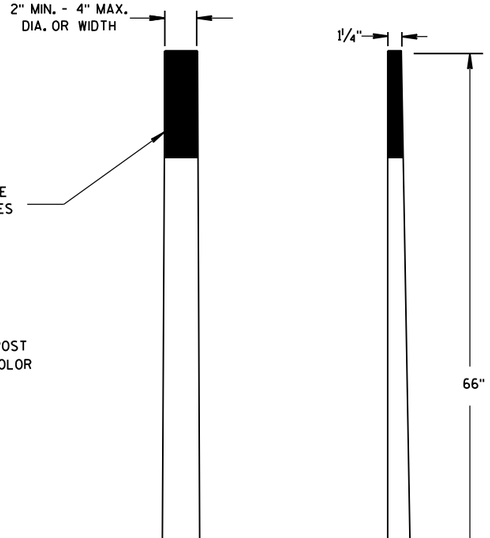
S.D.D. 15 A 3-2a





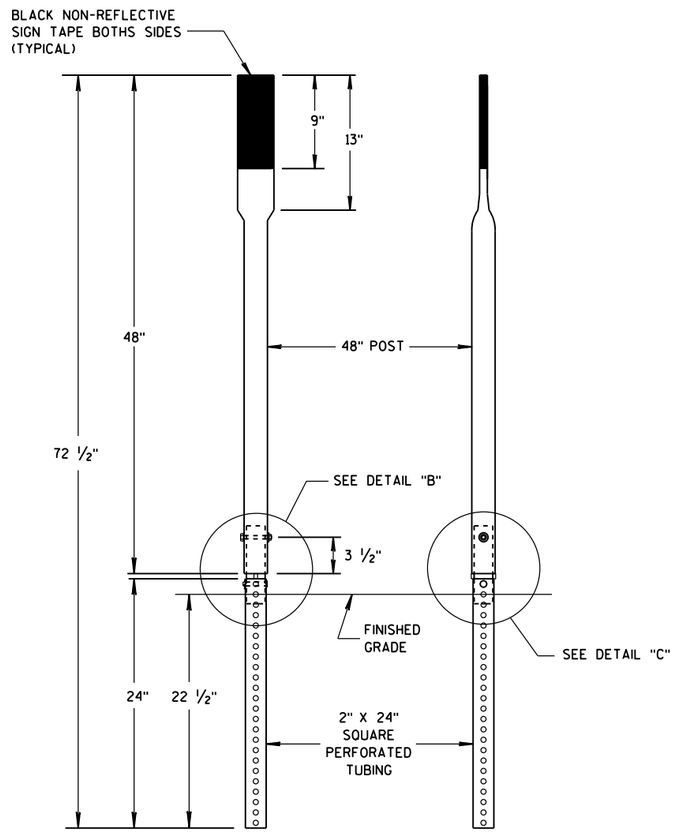
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

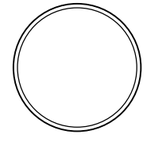
ALTERNATE 2



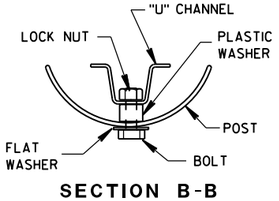
FRONT VIEW SIDE VIEW

ALTERNATE 3

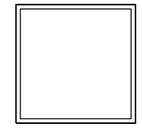
FLEXIBLE MARKER POSTS



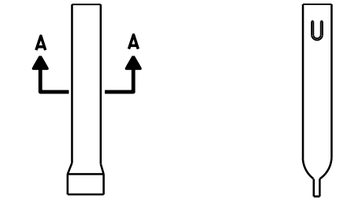
SECTION A-A



SECTION B-B

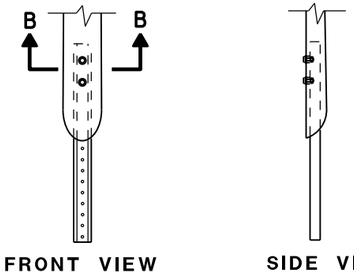


SECTION C-C



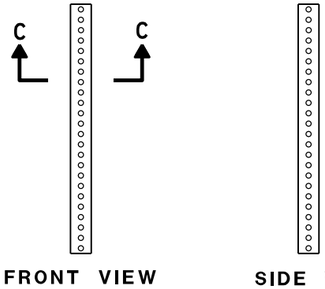
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

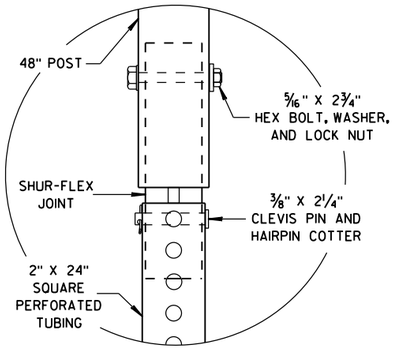
ALTERNATE 2



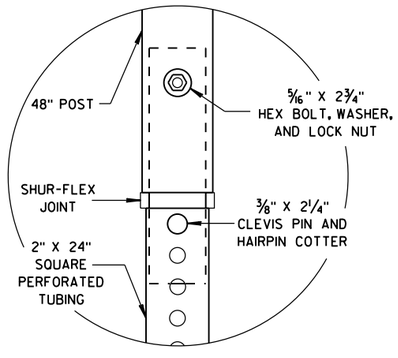
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

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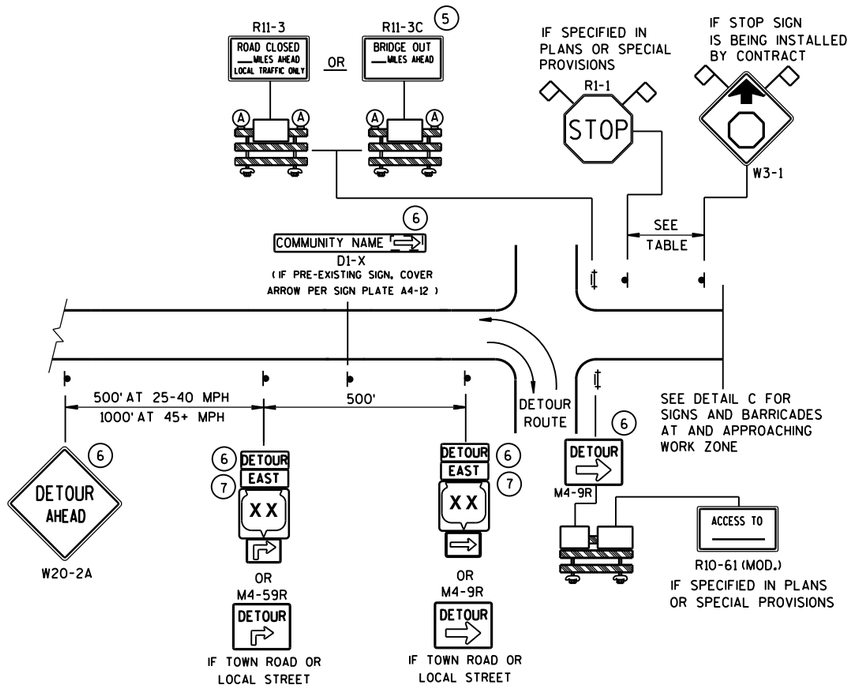
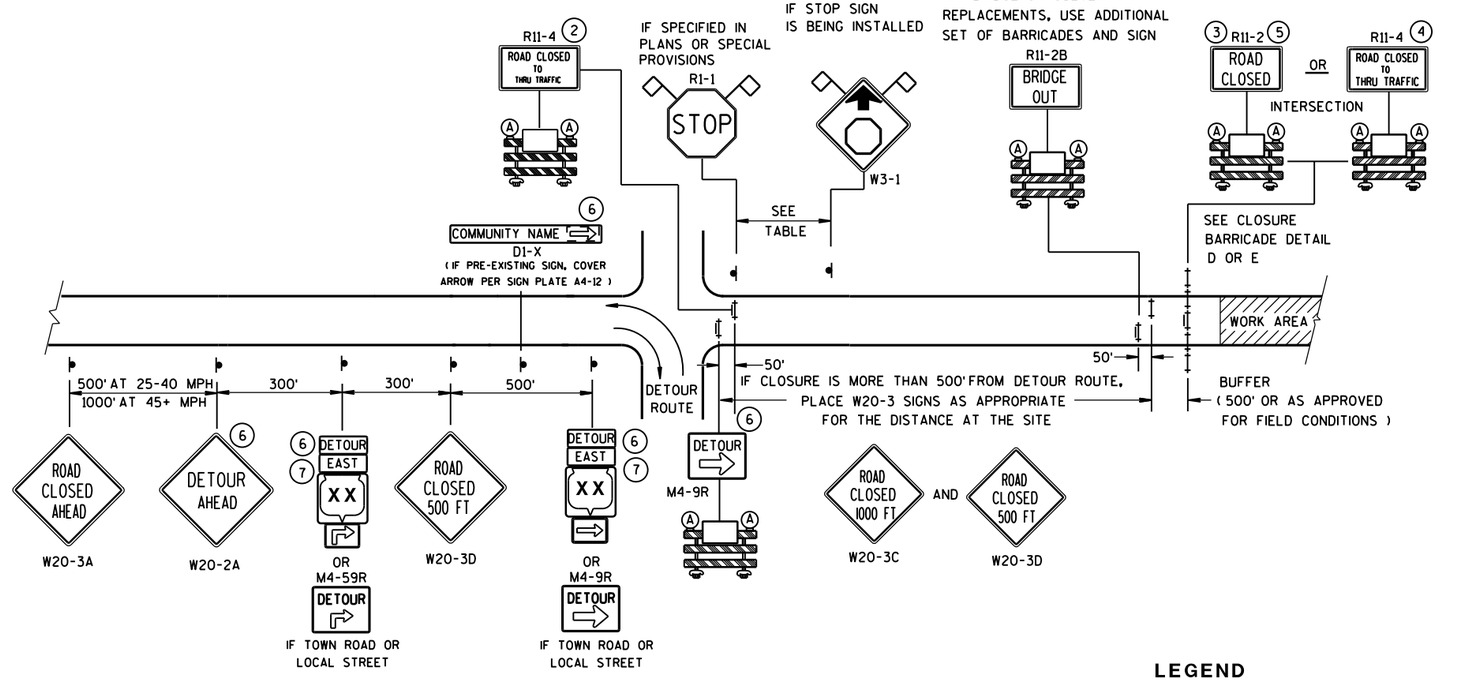
S.D.D. 15 A 3-2b



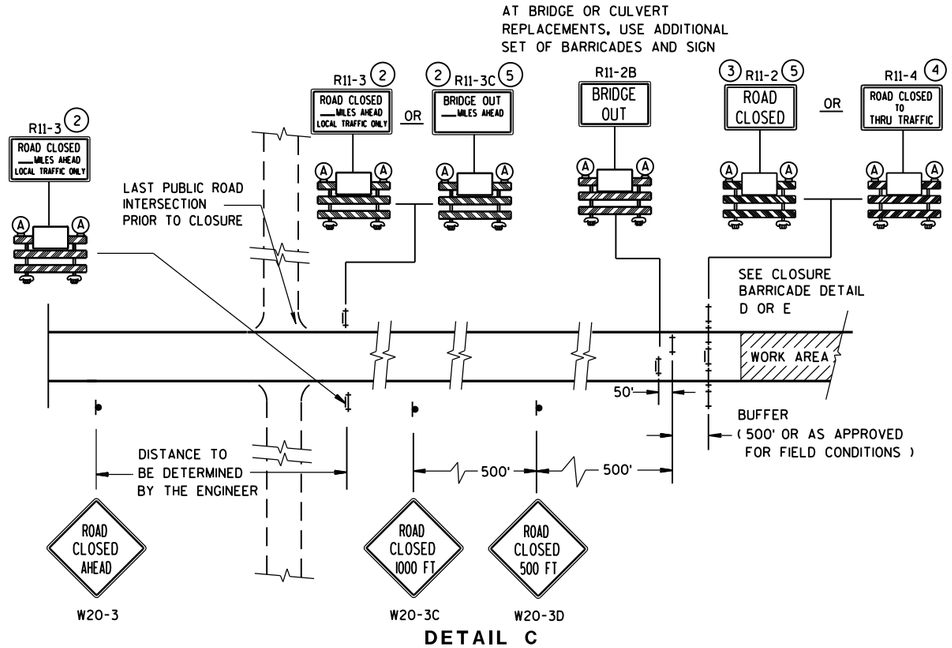
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**"
FOR GENERAL NOTES
AND FOOTNOTES (1) THROUGH (7)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

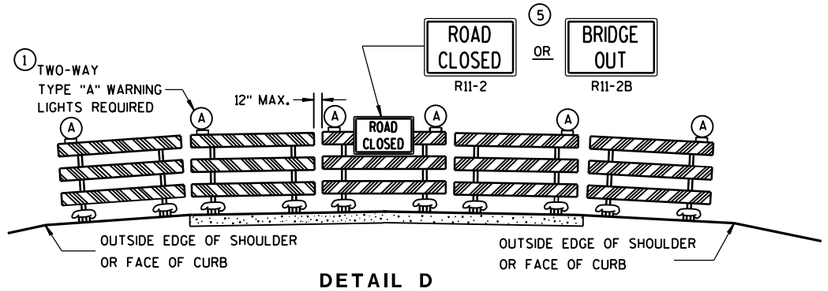
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

S.D.D. 15 C 2-6a

6

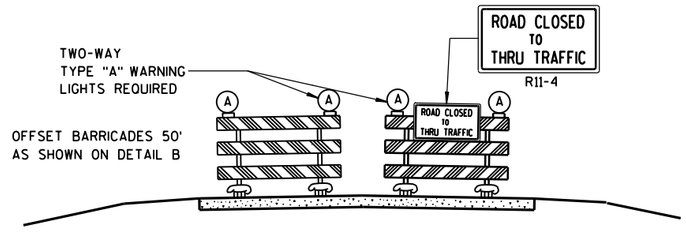
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI — FIC

FHWA

6

S.D.D. 15 C 2-6b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

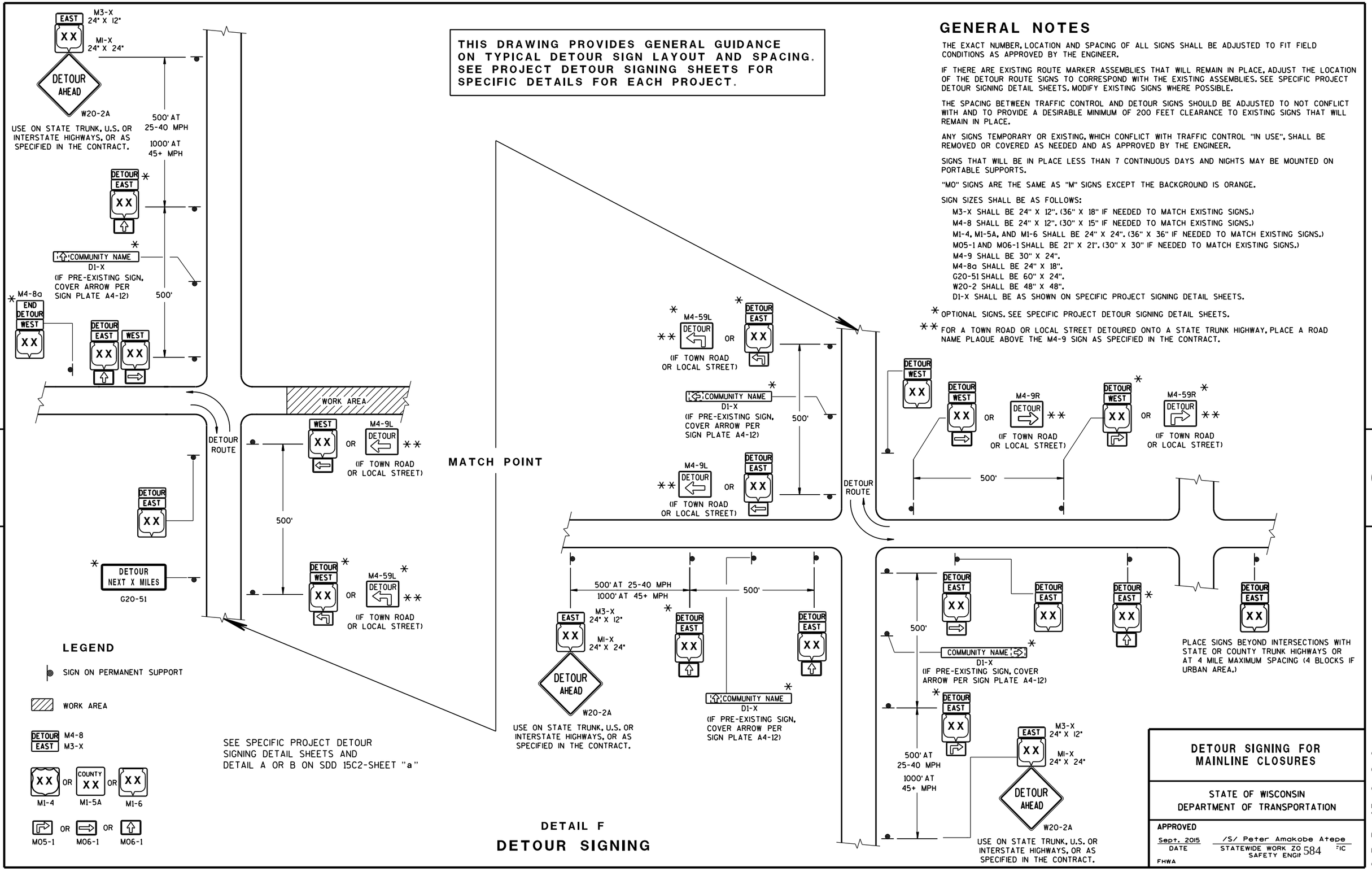
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8 / M3-X
- XX OR COUNTY XX OR XX — M1-4 / M1-5A / M1-6
- MO5-1 OR MO6-1 OR MO6-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

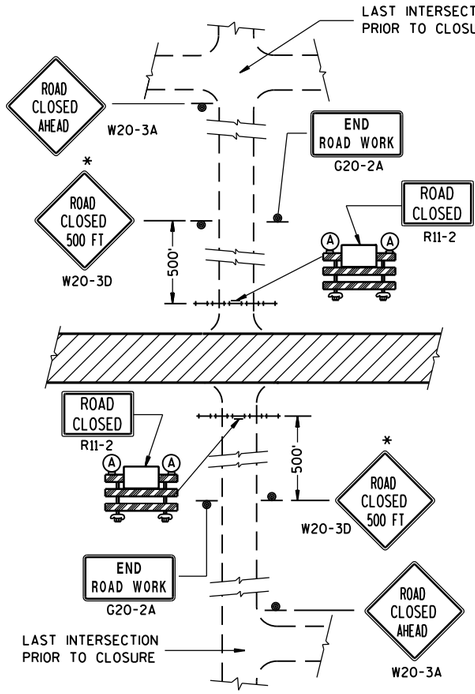
APPROVED

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO... SAFETY ENGI... FIC

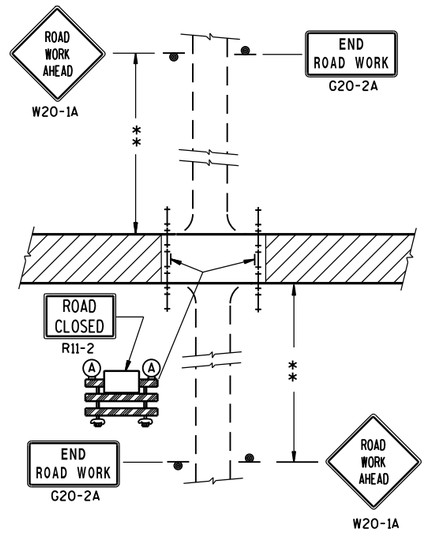
FHWA

6 S.D.D. 15 C 2-6c



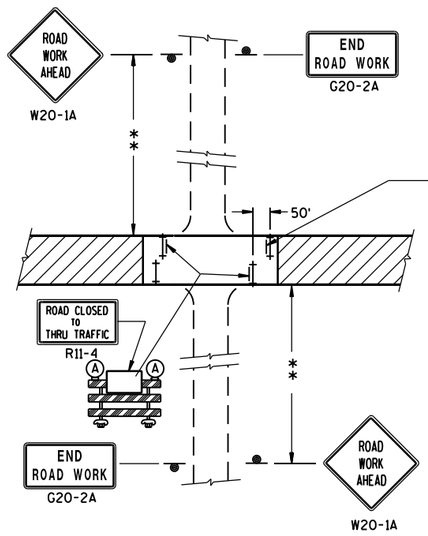
DETAIL 1

(NO ACCESS TO PROJECT)



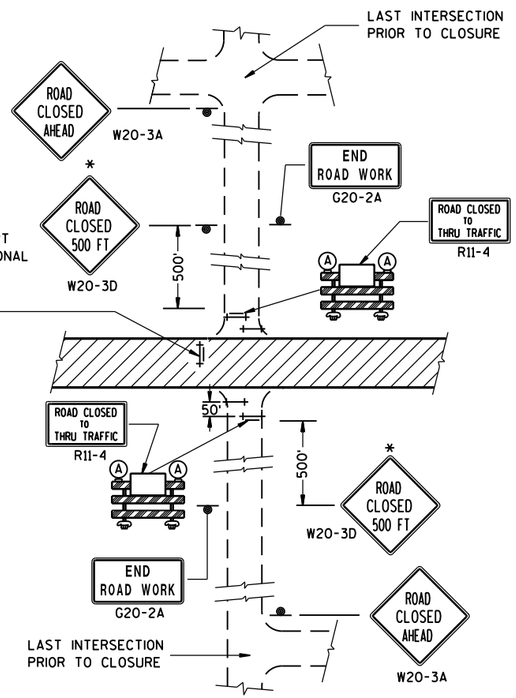
DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2017 — DATE

/S/ Andrew Heidtke — WORK ZONE ENG

FHWA

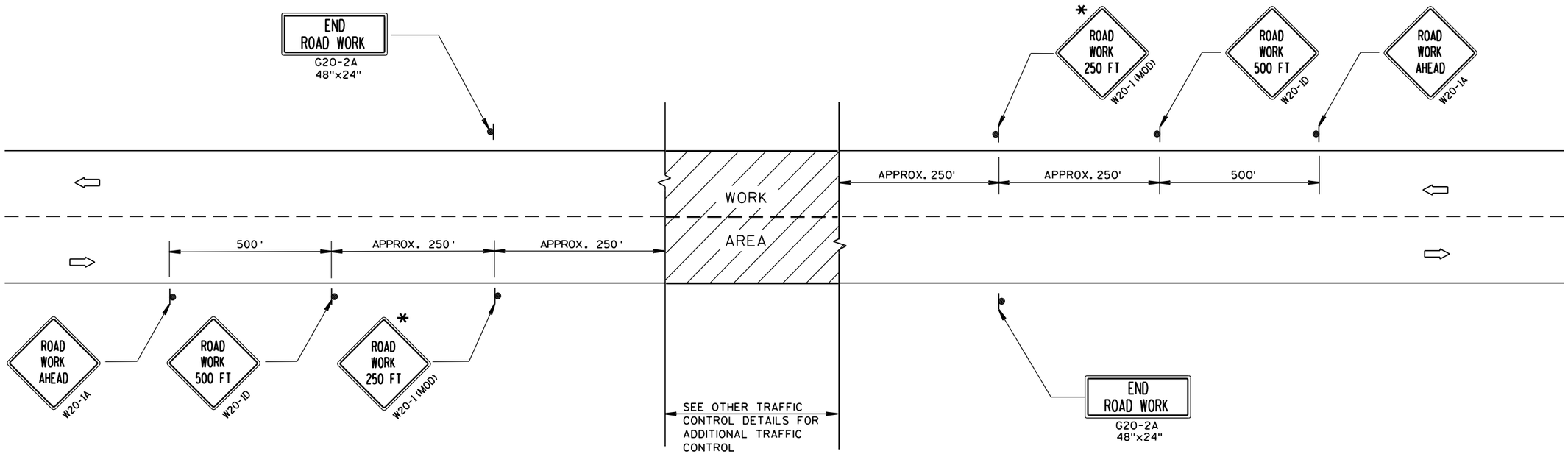
6

S.D.D. 15 C 3-4

6

S.D.D. 15 C 3-4

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

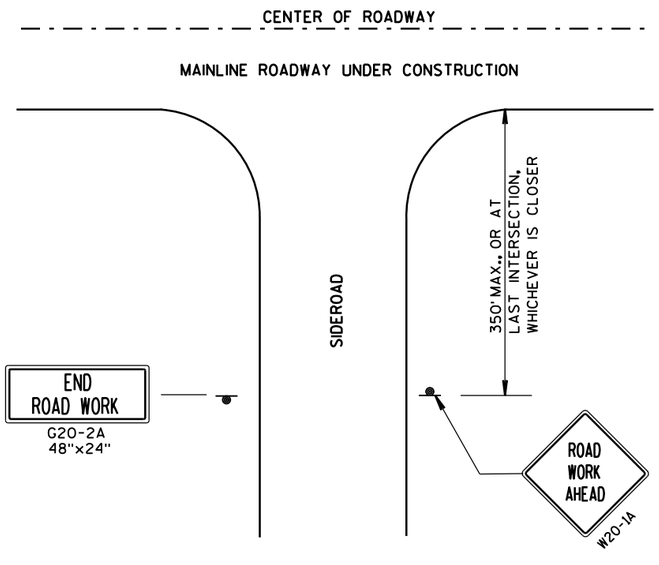
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

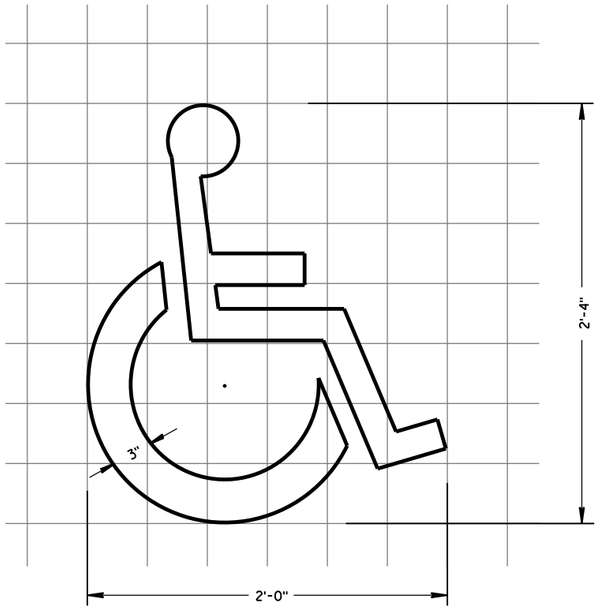
APPROVED
Sept. 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENG
FHWA

6

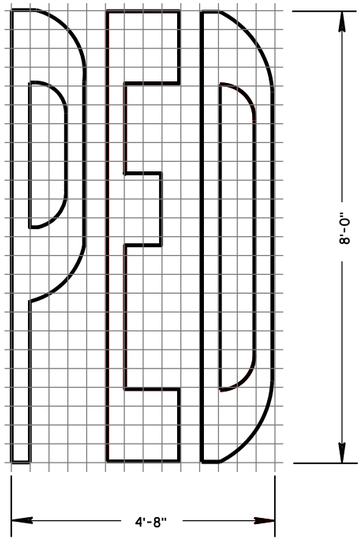
S.D.D. 15 C 5-4

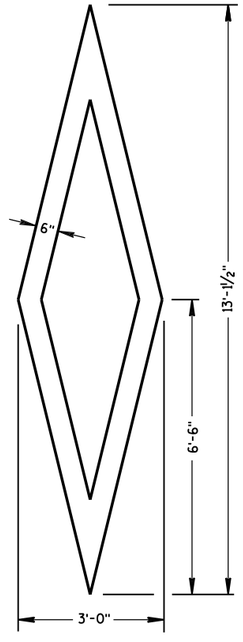
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



HANDICAP SYMBOL





PREFERENTIAL LANE SYMBOL

6

6

S.D.D. 15 C 7-14a

S.D.D. 15 C 7-14a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

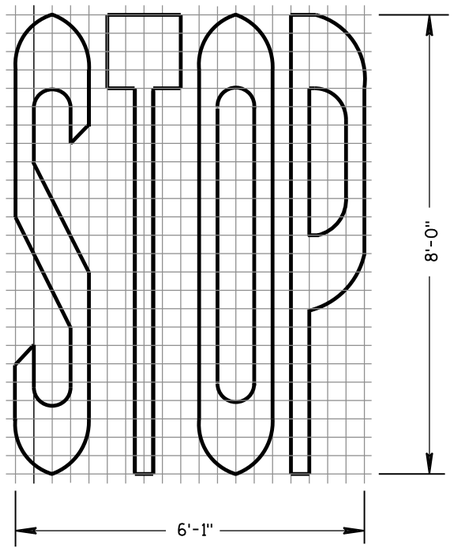
June 2017 — DATE

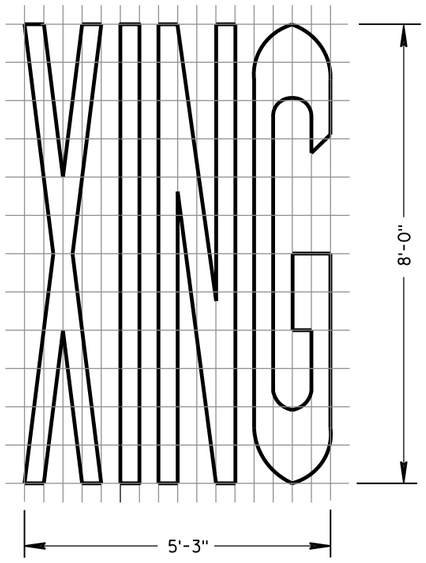
/S/ Matthew R. Rauch — STATE SIGNING AND MARK EER

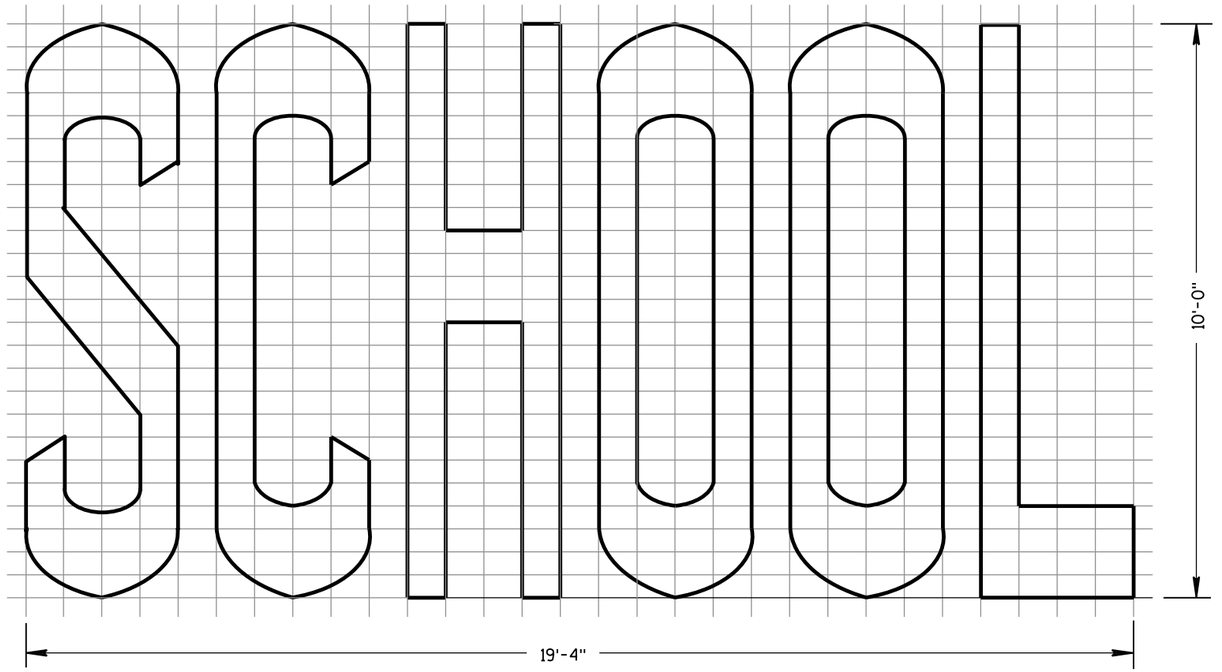
FHWA

GENERAL NOTES

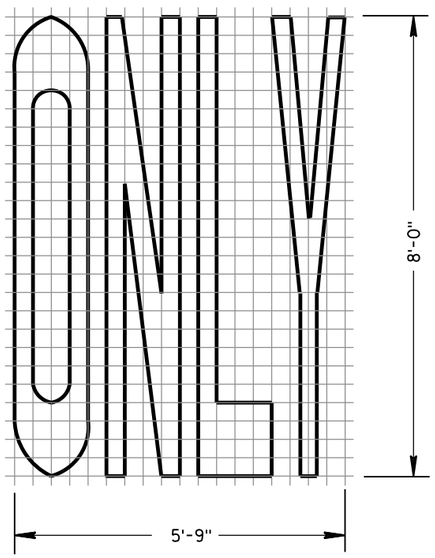
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

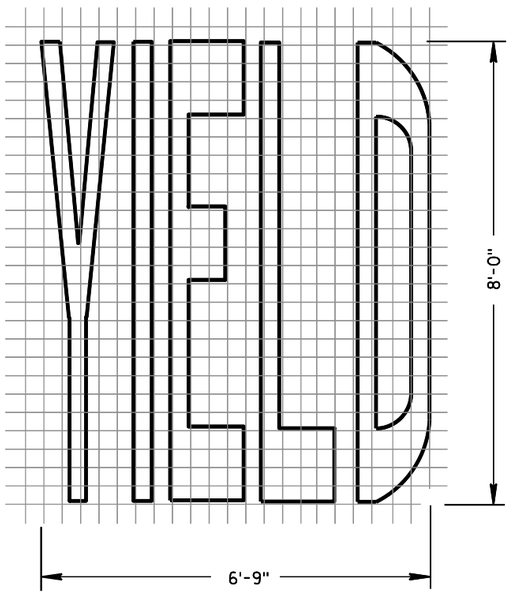


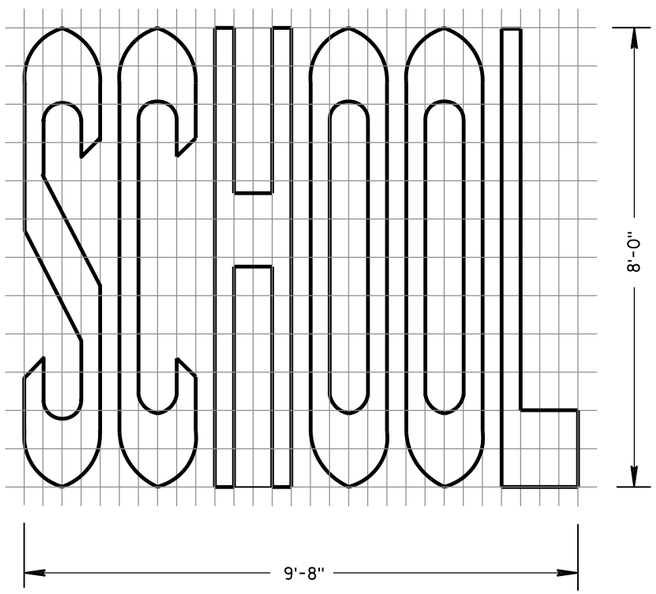




TWO-LANE







SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
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6

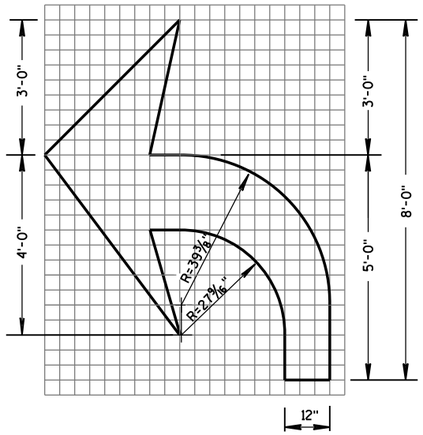
S.D.D. 15 C 7-14b

6

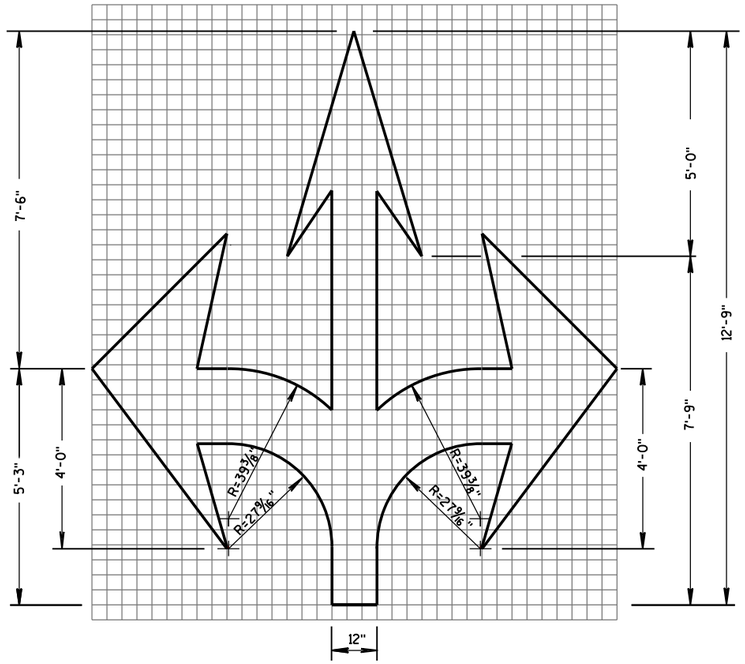
S.D.D. 15 C 7-14b

GENERAL NOTES

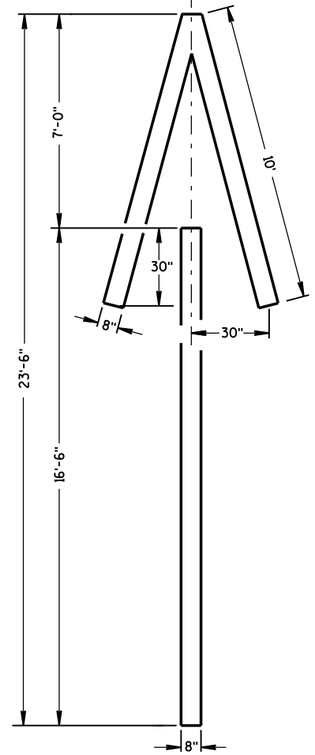
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



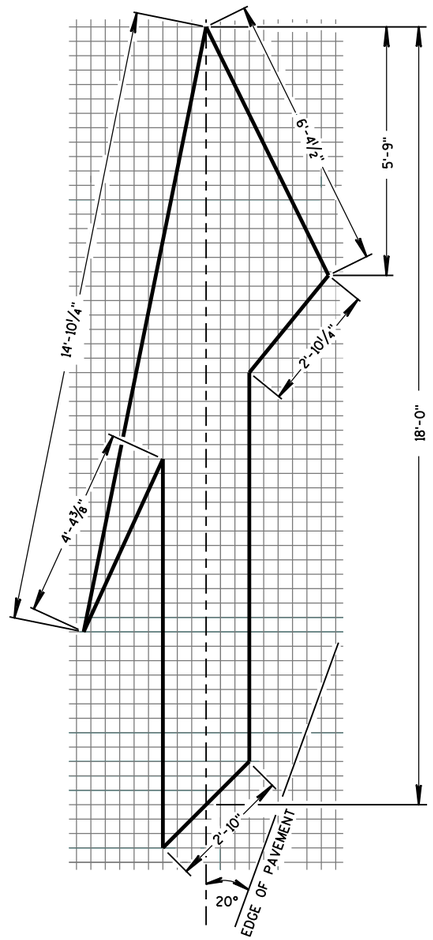
TYPE 2



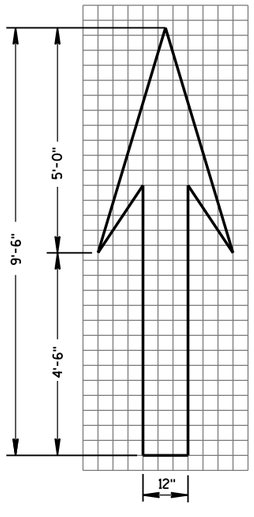
TYPE 6



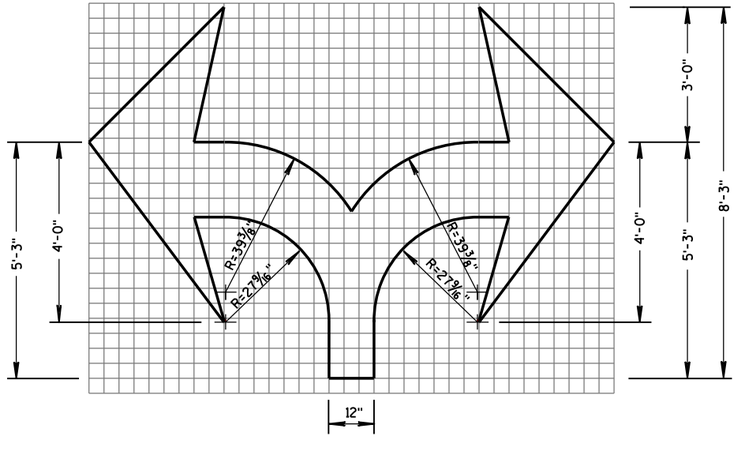
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 1



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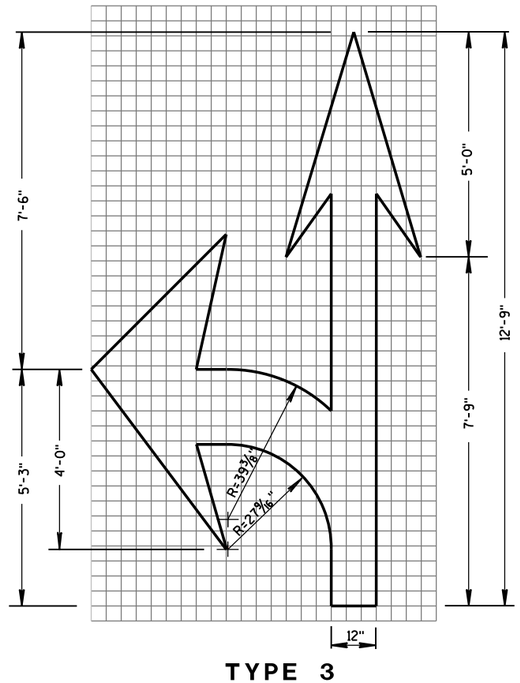

TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 15 C 7-14c

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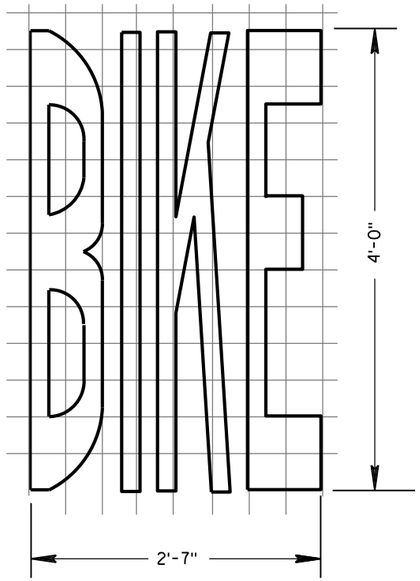
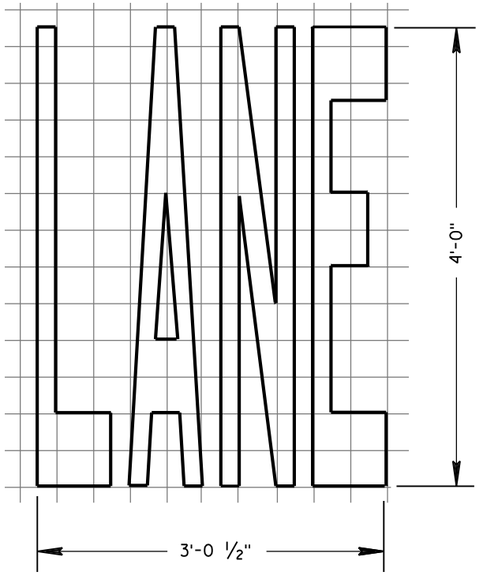
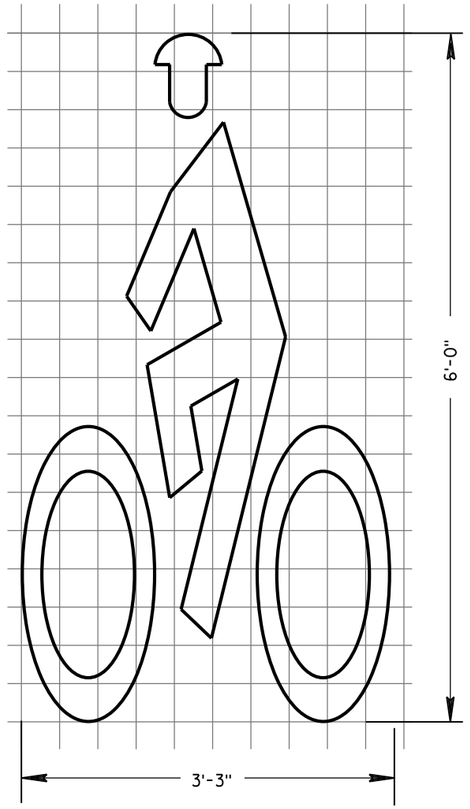
S.D.D. 15 C 7-14c

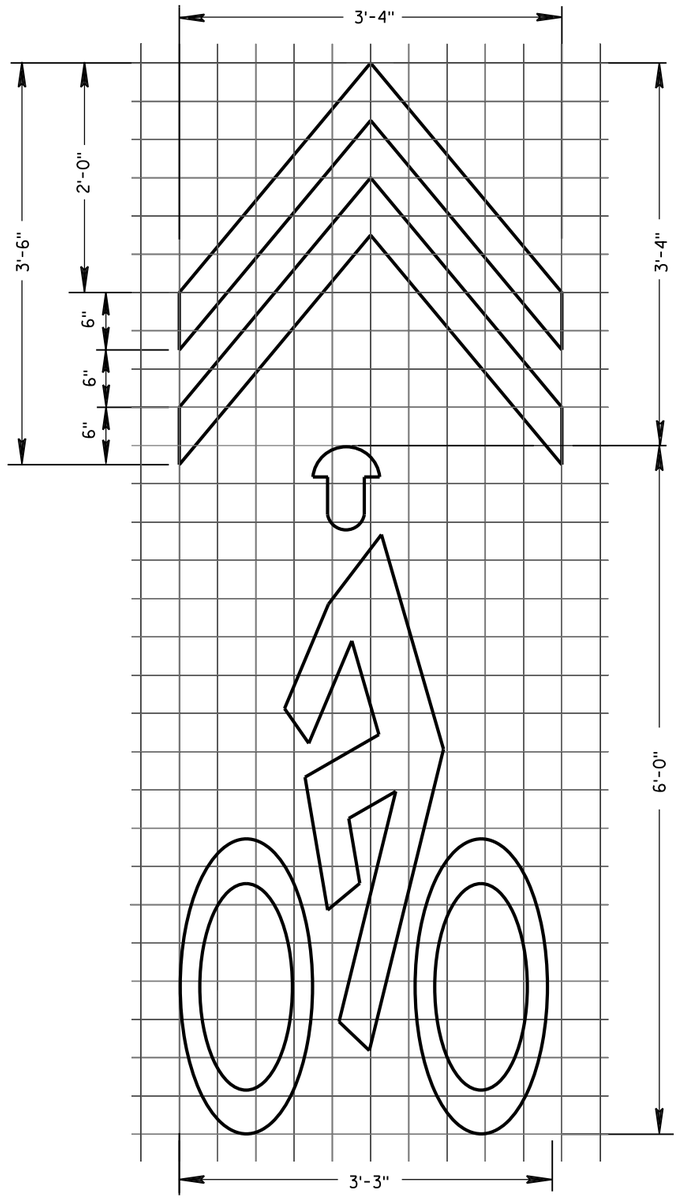




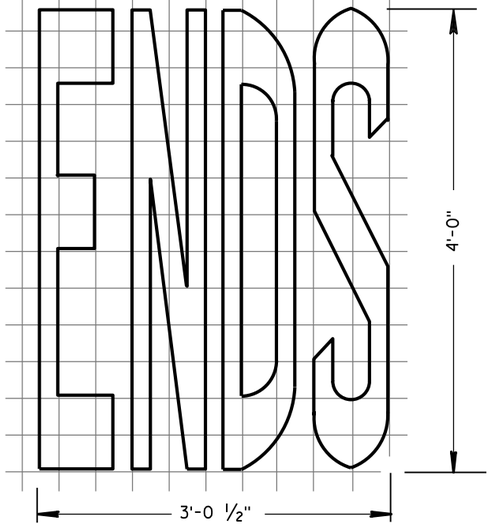
BIKE LANE WORDS



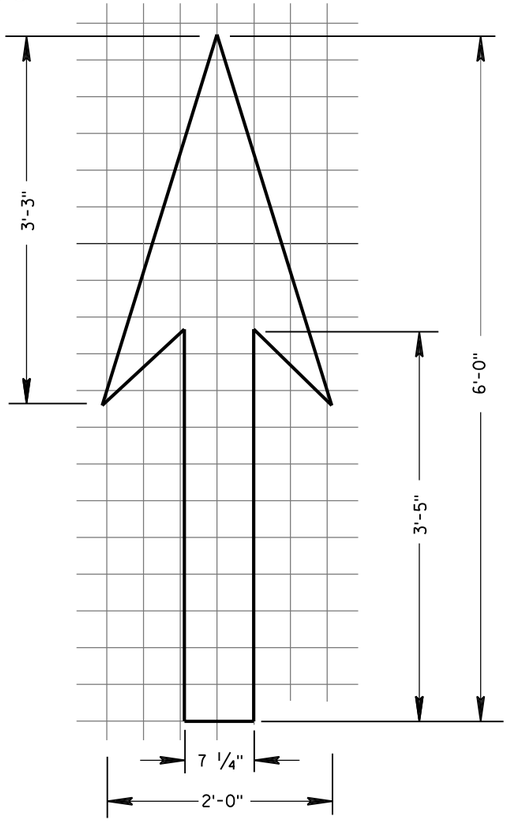
BIKE LANE SYMBOL



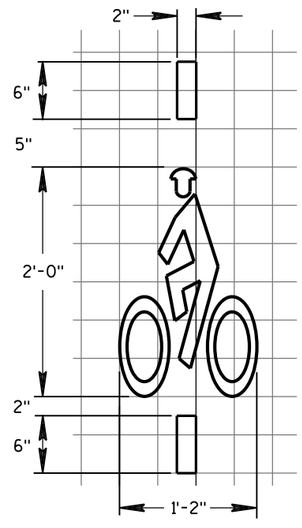
BIKE SYMBOL FOR SHARED LANE



BIKE LANE WORDS



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING

GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
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S.D.D. 15 C 7-14e

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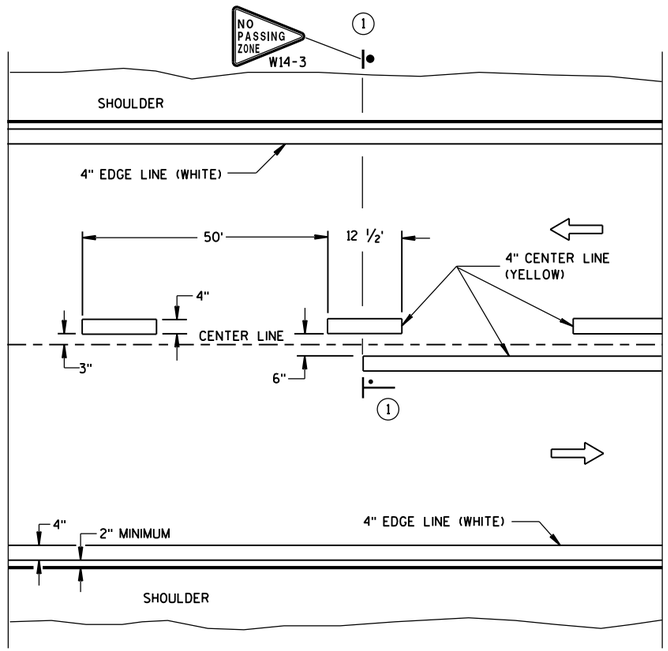
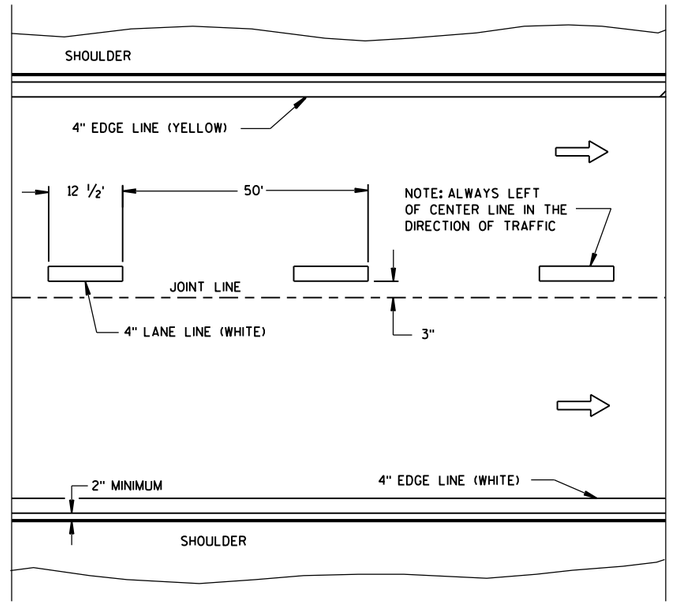
S.D.D. 15 C 7-14e



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

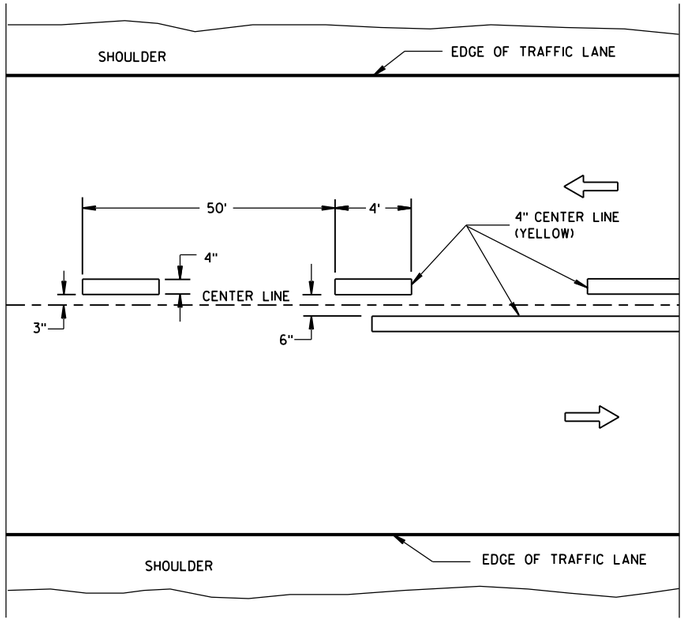
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

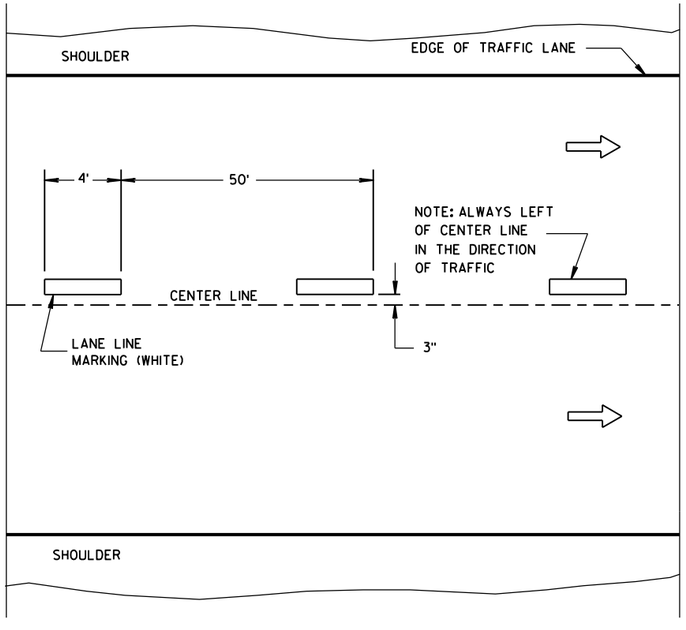
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
June 2017 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MAR[illegible]INEER
FHWA	

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S.D.D. 15 C 8-18a

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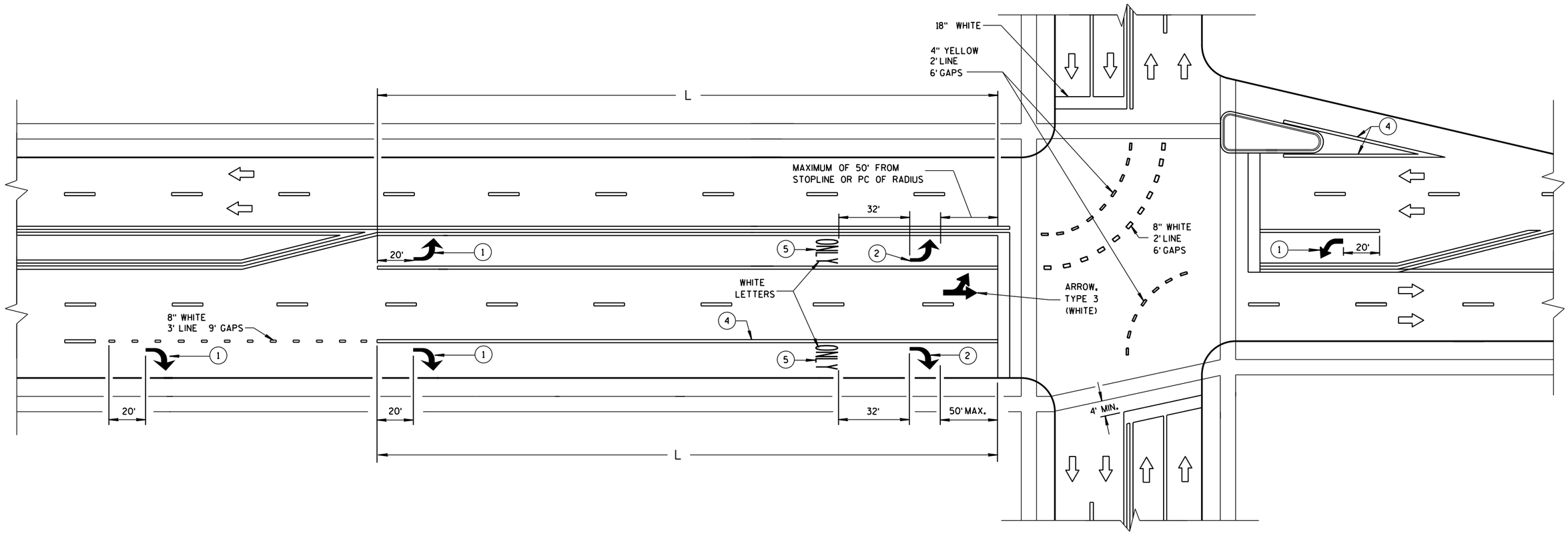
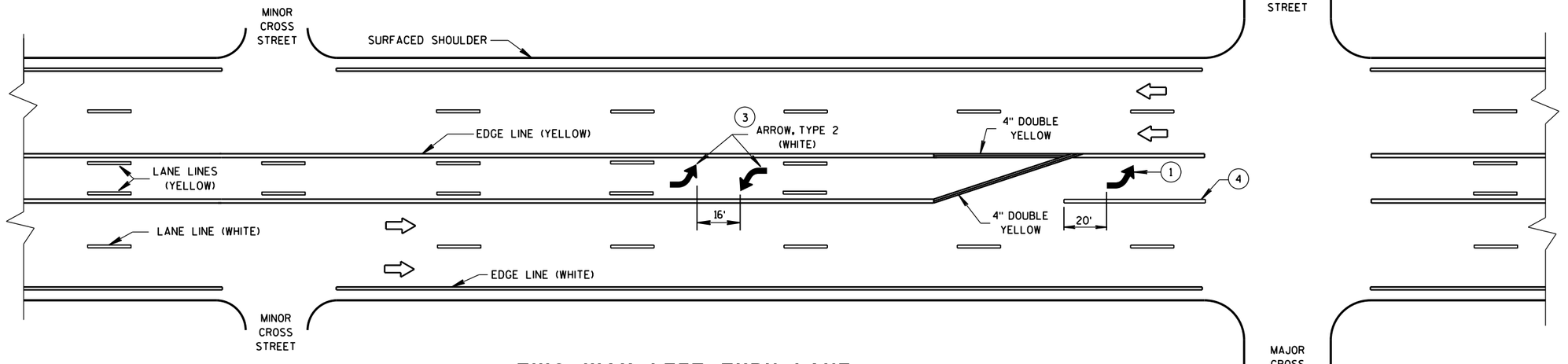
S.D.D. 15 C 8-18a





GENERAL NOTES

(1) REQUIRED ARROW, TYPE 2 (WHITE).

(2) REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.

(3) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(4) 8" WHITE

(5) REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

L = LENGTH OF TURN BAY

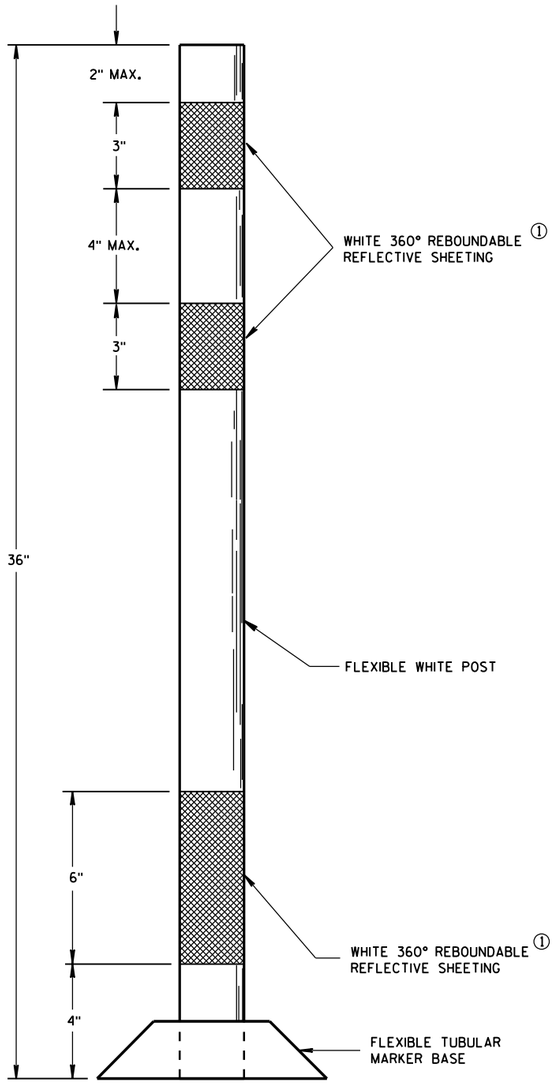
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

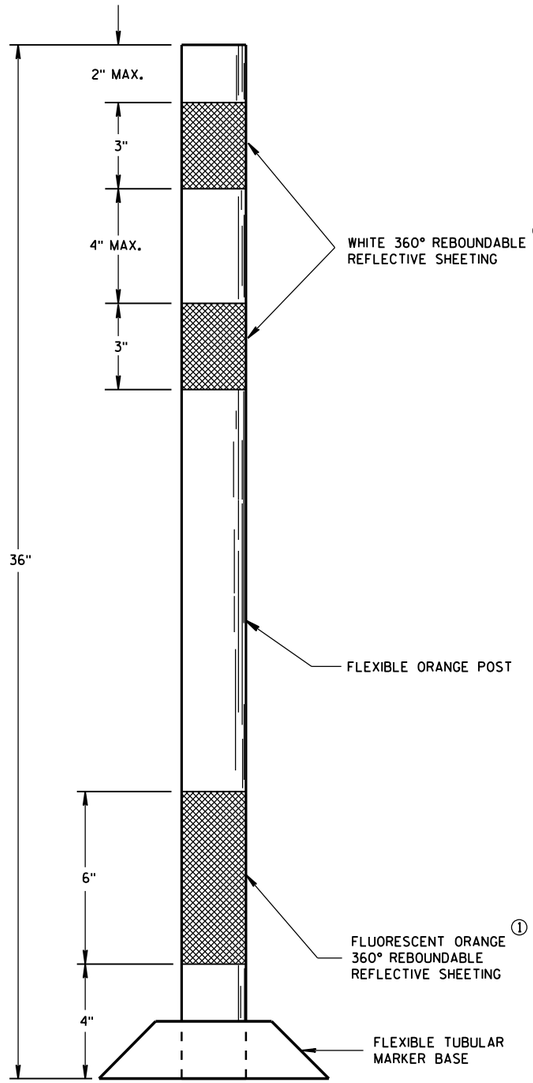
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 C 8-18b



FLEXIBLE
TUBULAR MARKER POST
PERMANENT CROSSOVER



FLEXIBLE
TUBULAR MARKER POST
WORK ZONE

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
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S.D.D. 15 C 11-7a

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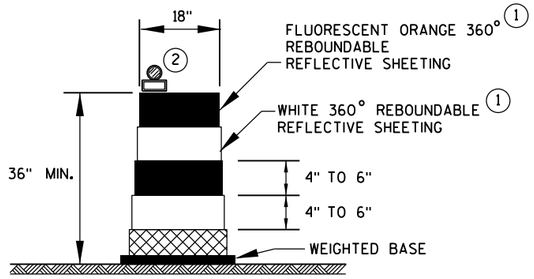
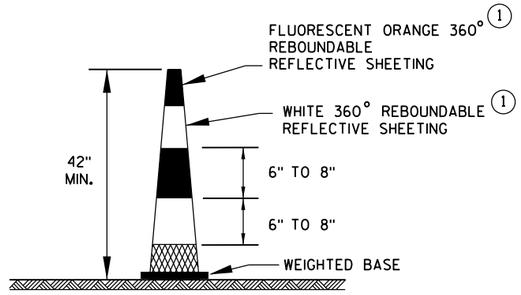
S.D.D. 15 C 11-7a



DRUM

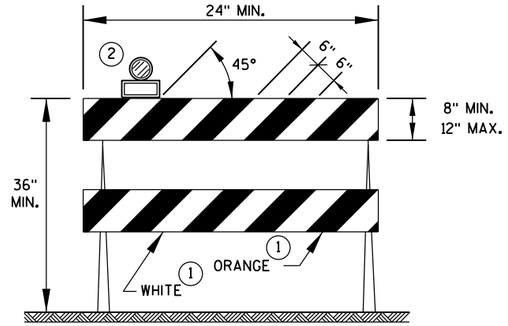


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

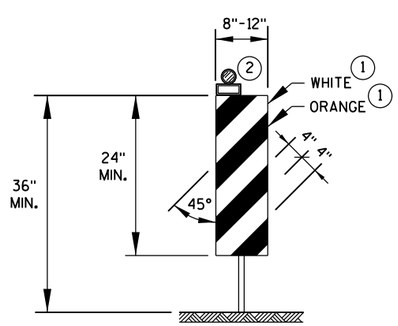
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



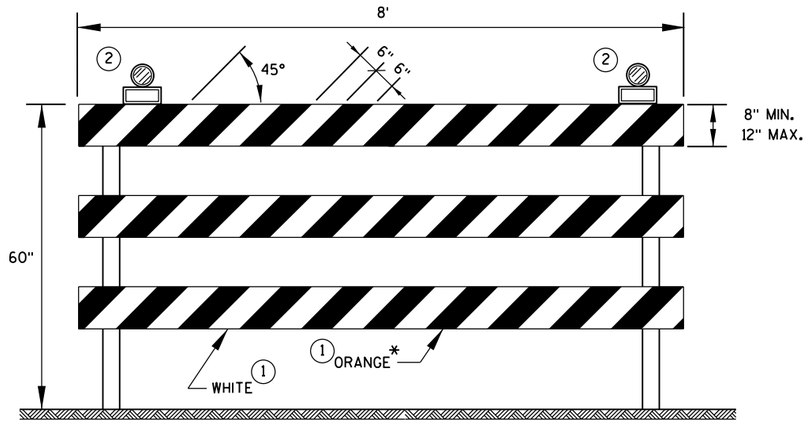
TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE 3 BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017 — DATE

/S/ Andrew Heidtke — WORK ZONE ENG

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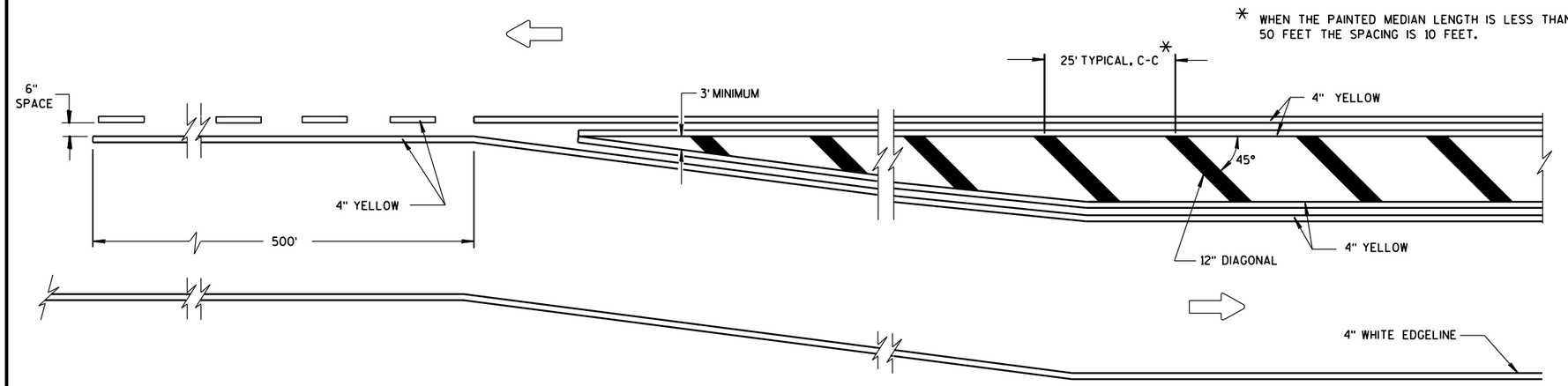
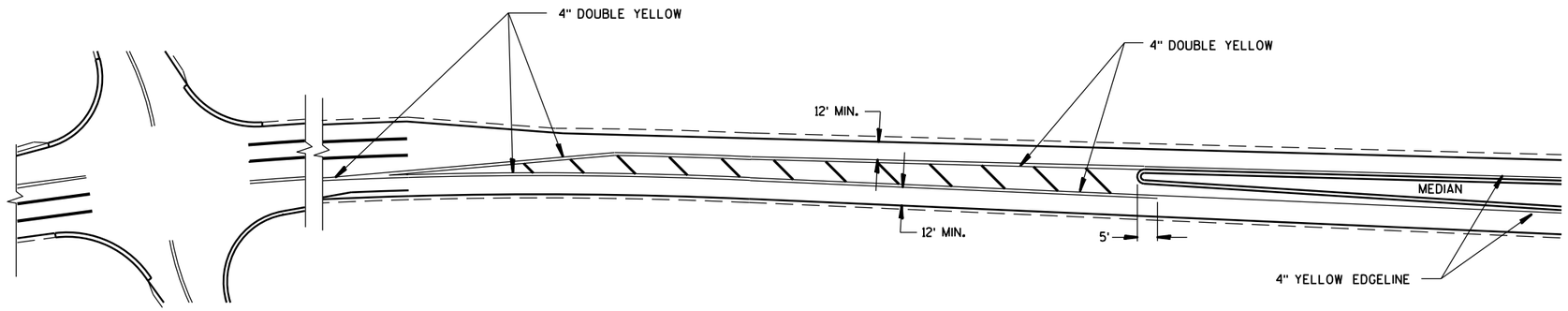


MEDIAN ISLAND DETAIL

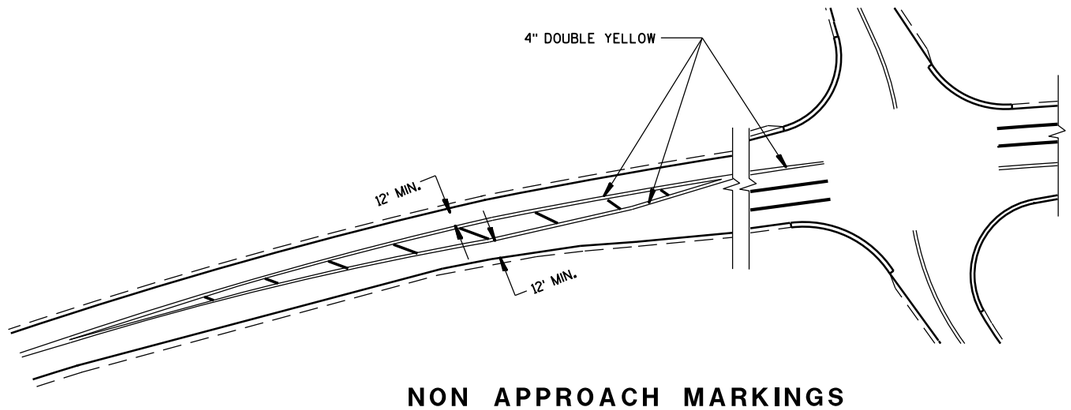
GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE FHWA	/S/ Matthew Rauch STATE SIGNING AND MARK 595 EER

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S.D.D. 15 C 18-4

6

S.D.D. 15 C 18-4

GENERAL NOTES

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER FABRICATION DRAWING.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

SIGN SUPPORTS SHALL BE LOCATED NORMAL TO ROADWAY.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR CAGE TO BE ASSEMBLED USING TIE WIRES ONLY, NO WELDING.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACK FILLING AROUND THE BASE. ANY REQUIRED BACKFILL SHALL BE WELL COMPACTED IN LAYERS OF 1 FOOT OR LESS. COMPACTION SHALL BE BY MECHANICAL MEANS. CARE SHALL BE TAKEN SO NO DAMAGE OCCURS TO THE CONCRETE BASE DURING COMPACTION.

EXCAVATION OF MATERIALS NOT OCCUPIED BY CONCRETE SHALL BE MINIMIZED TO REDUCE DISTURBANCE OF THE SURROUNDING SOILS.

THE BOTTOM OF THE DRILLED HOLE SHALL BE FIRM AND THOROUGHLY CLEANED SO NO LOOSE OR COMPRESSIBLE MATERIALS ARE PRESENT AT THE TIME OF THE CONCRETE PLACEMENT.

IF THE DRILLED HOLE CONTAINS STANDING WATER, THE CONCRETE SHALL BE PLACED USING A TREMIE TO DISPLACE THE WATER.

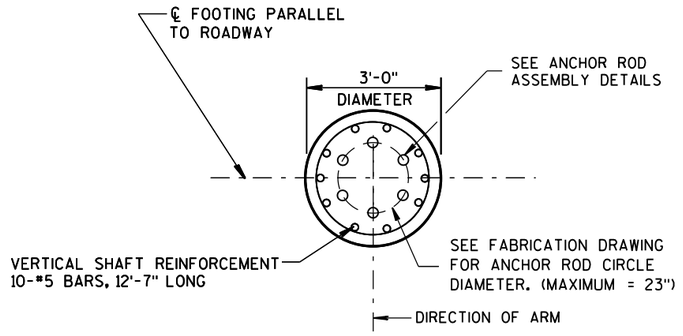
THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

FORM ALL EXPOSED CONCRETE CORNERS WITH ¾" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

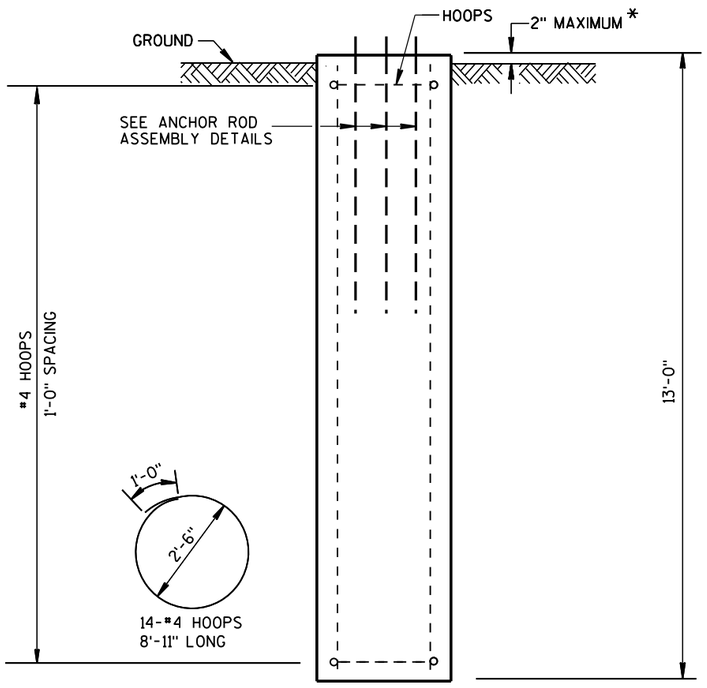
ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554, GRADE 55	fy=55,000 p.s.i.
ASTM A563A HEAVY HEX NUTS, AND ASTM F436 WASHERS.	
PLATES, ASTM A709, GRADE 36	fy=36,000 p.s.i.

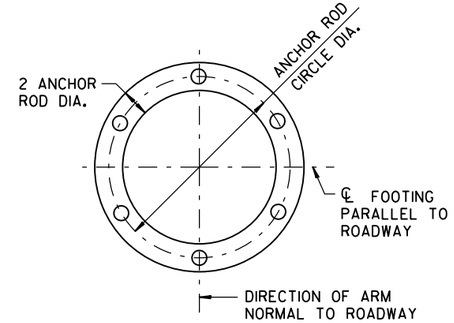
THIS FOOTING HAS BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 20 DEGREES (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 350 PSF (COHESIVE SOILS).



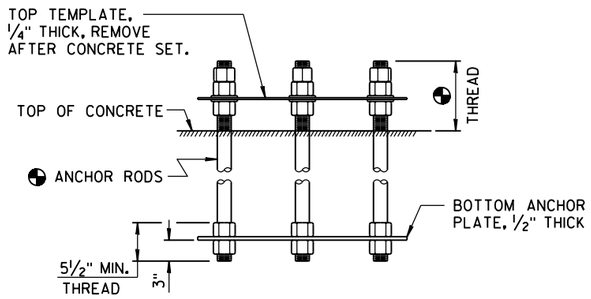
PLAN VIEW



ELEVATION VIEW



TOP TEMPLATE AND BOTTOM ANCHOR PLATE



ANCHOR ROD ASSEMBLY DETAILS

⊕ MINIMUM OF 6 ANCHOR RODS, EXACT NUMBER, SIZE, DIMENSION AND ORIENTATION AS SHOWN ON FABRICATION DRAWING.

* FOR OVERHEAD SIGN SUPPORTS THAT ARE INSTALLED ADJACENT TO SIDEWALKS, THE TOP OF THE BASE SHALL BE POURED FLUSH WITH THE GROUND.

CONCRETE - 3.4 C.Y. PER FOOTING
H.S. REINFORCEMENT - 215 LBS. PER FOOTING

36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Vu Thao — WIND LOADED STRU PROGRAM LEAD
FHWA

6

S.D.D. 15 C 24-4

6

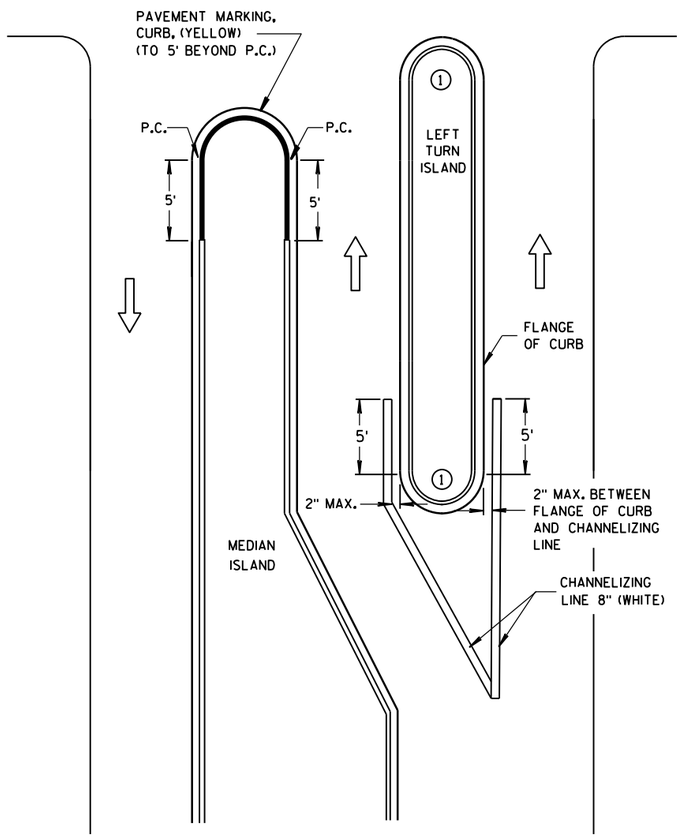
S.D.D. 15 C 24-4

GENERAL NOTE

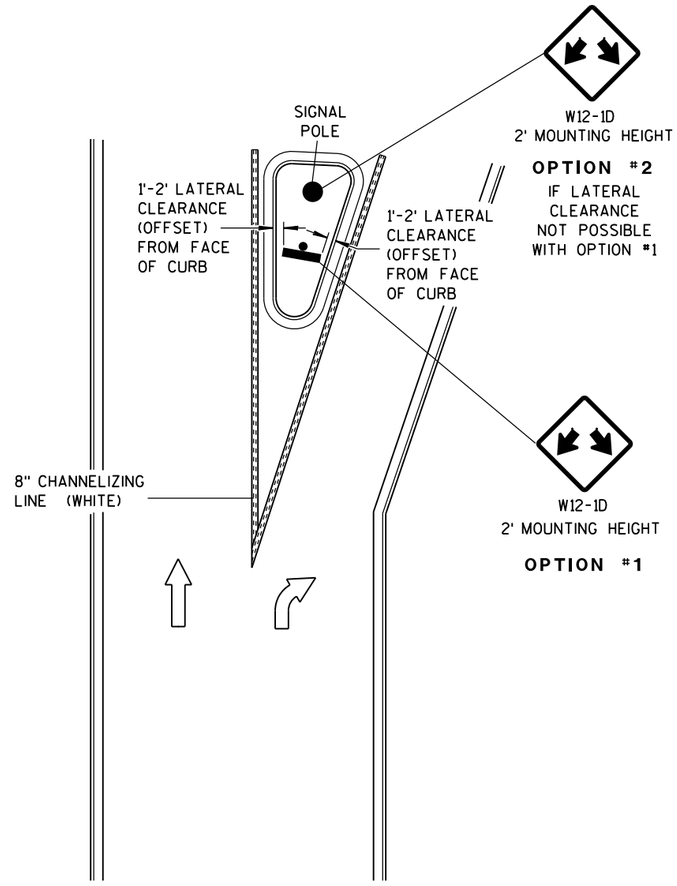
APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

DIRECTION OF TRAVEL



LEFT TURN & MEDIAN ISLAND



RIGHT TURN ISLAND

DOUBLE ARROW
WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

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S.D.D. 15 C 27-2a

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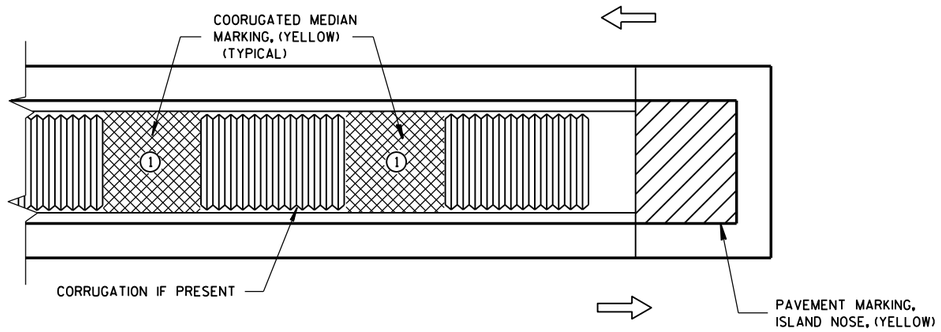
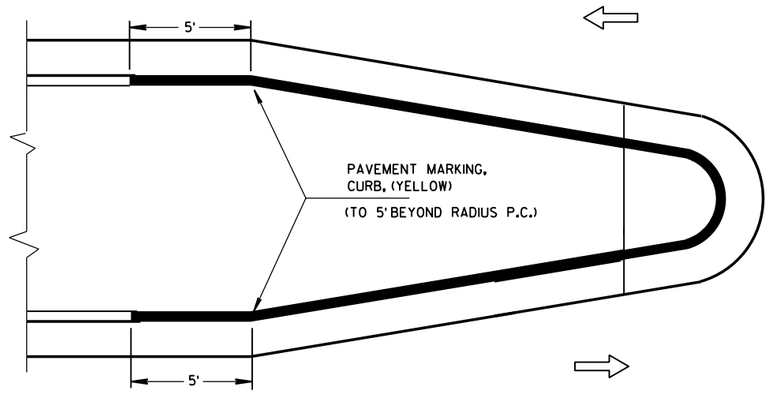
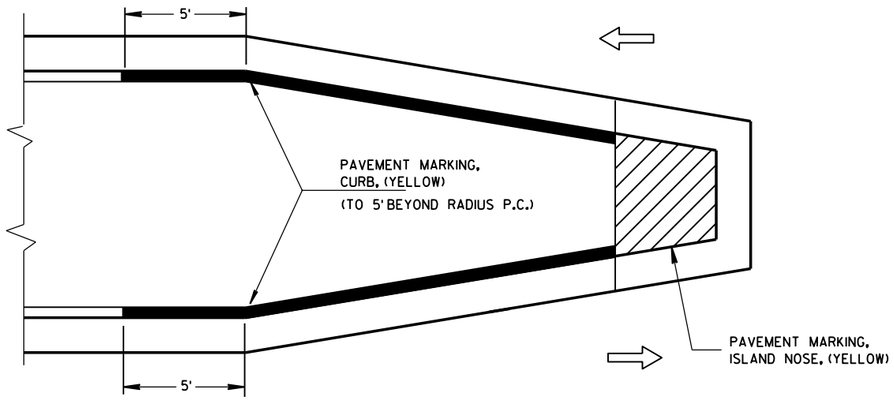
S.D.D. 15 C 27-2a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

(1) WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Matthew Rauch
STATE SIGNING AND MARK 598 EER
FHWA

6

S.D.D. 15 C 27-2b

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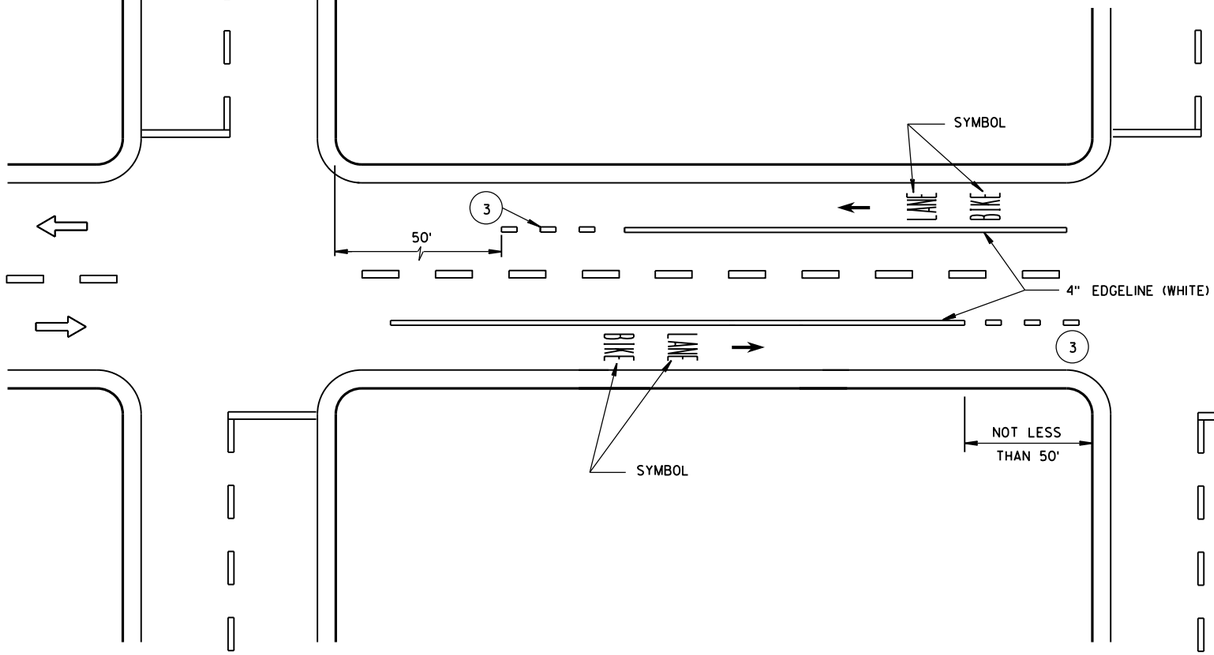
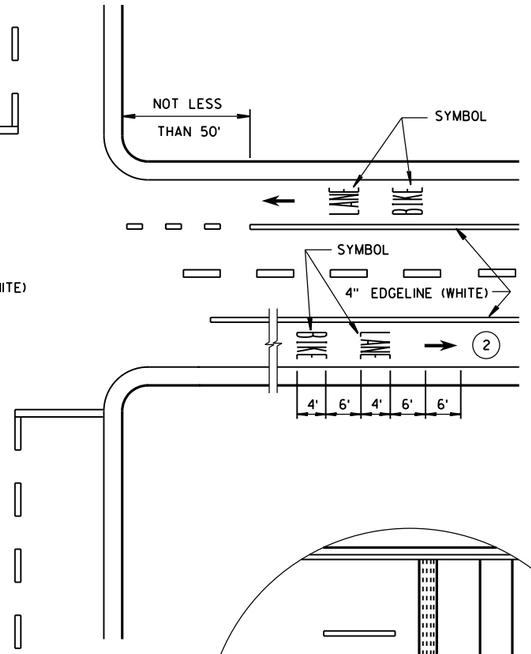
S.D.D. 15 C 27-2b



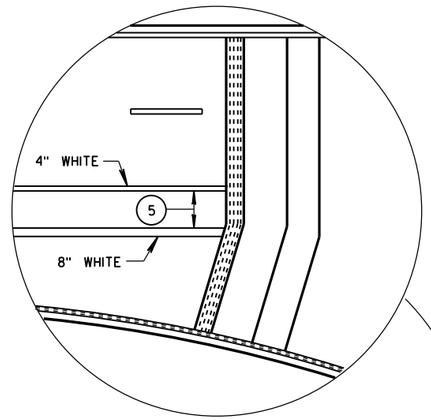


DESIGNATED BICYCLE LANE
NO PARKING

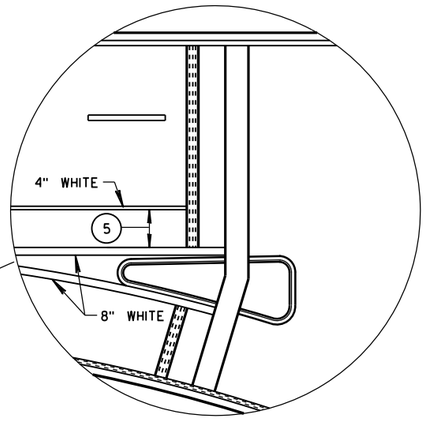
GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3'LINE, 9'GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMODATION FOR CONCRETE PAVEMENT IS 5 FEET WIDE. BIKE ACCOMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4 FEET. USE 5 FEET AT ≥45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FEET WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

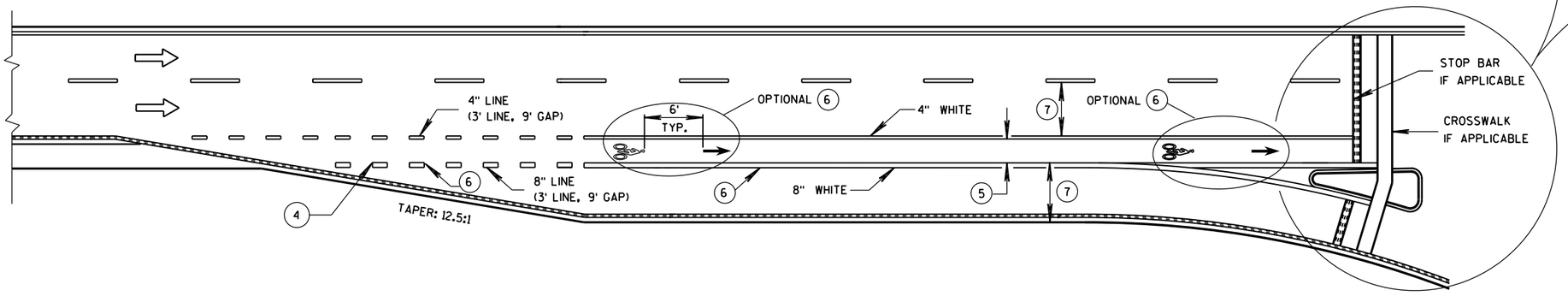
⇨ DIRECTION OF TRAVEL



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS
(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12-2016 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER
FHWA

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S.D.D. 15 C 29-5a

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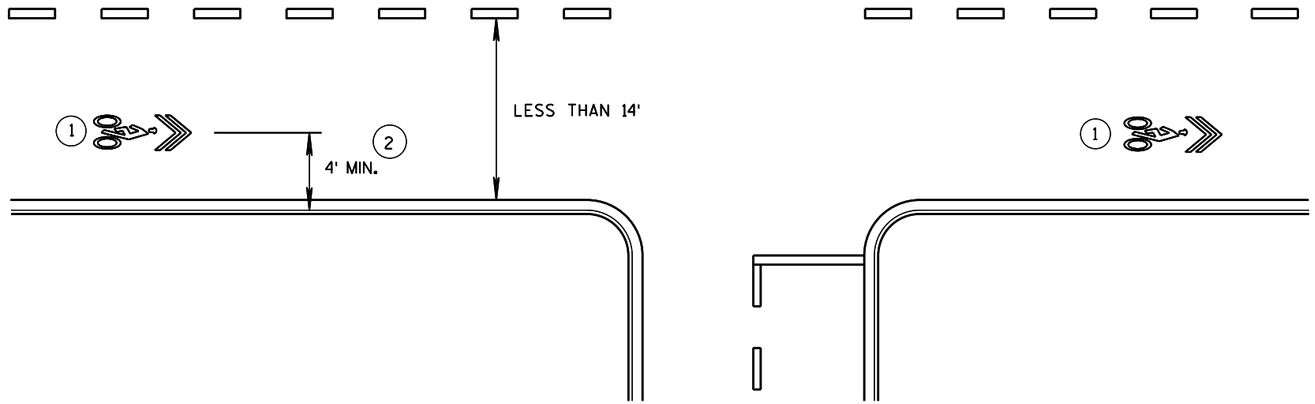
S.D.D. 15 C 29-5a

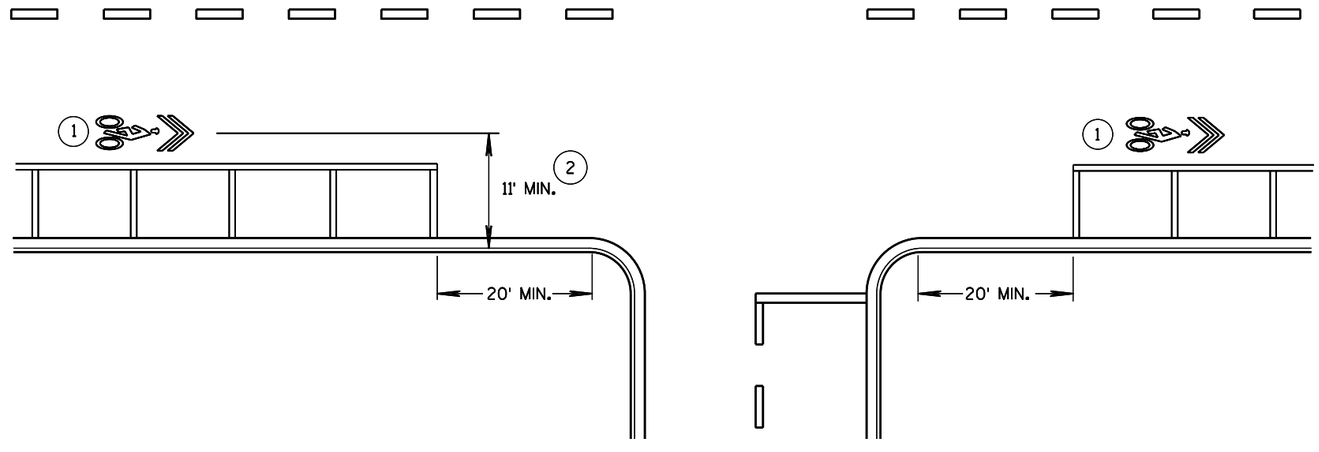
GENERAL NOTES

(1) MINIMUM OF ONE PER BLOCK, MAXIMUM OF 250 FEET.

(2) OR TO EDGE OF PAVEMENT WITHOUT CURB.



WITHOUT PARKING



WITH PARKING

PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12-2016 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER
FHWA

600

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S.D.D. 15 C 29-5b

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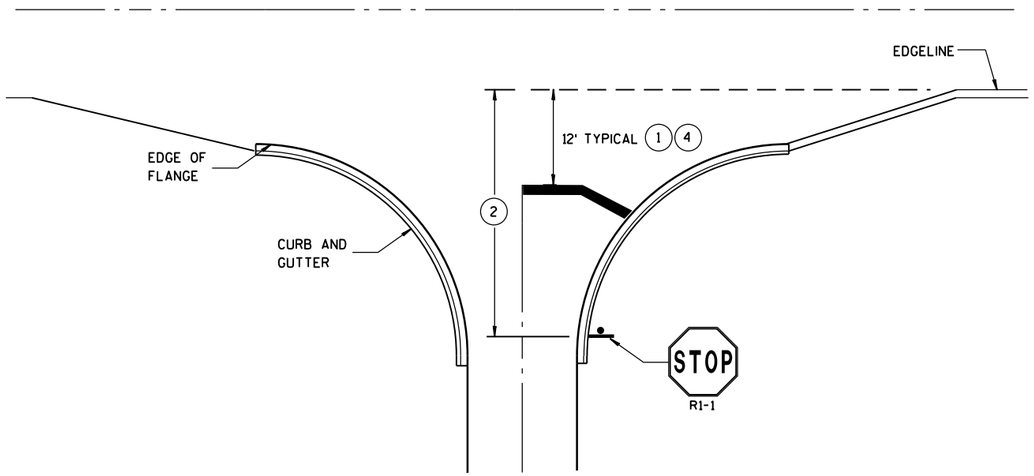
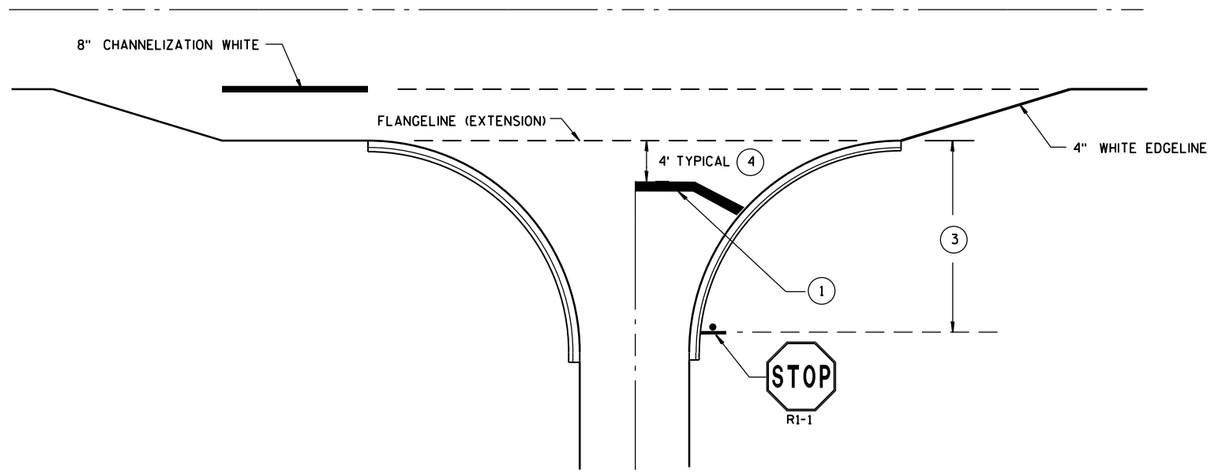
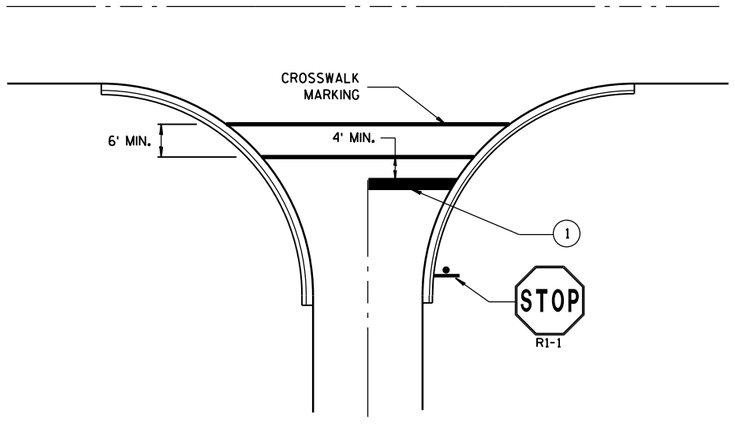
S.D.D. 15 C 29-5b



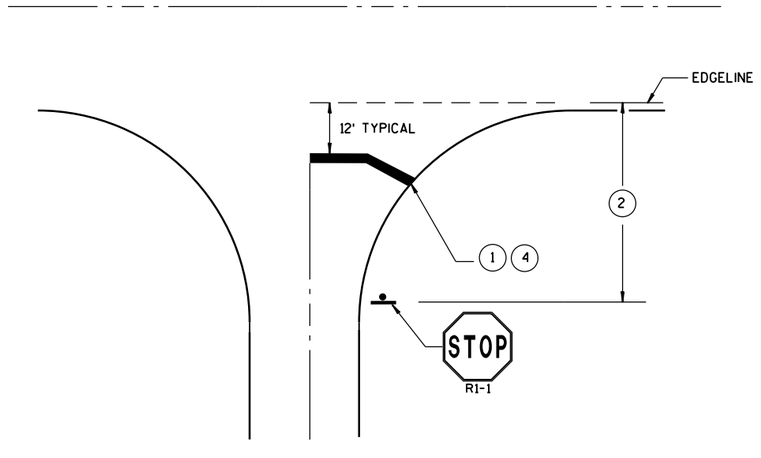
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

(1) 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

(2) IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.

(3) IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.

(4) MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]NEER

FHWA

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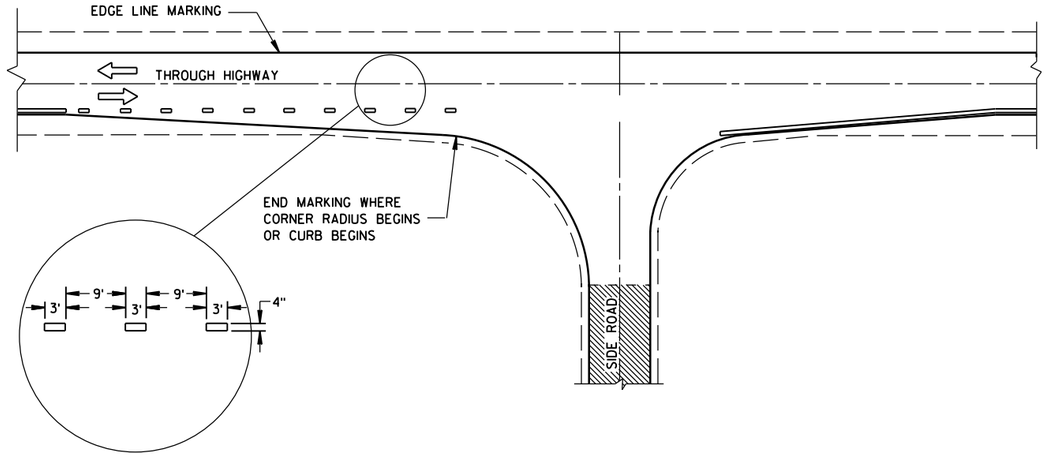
S.D.D. 15 C 33-3



MINOR INTERSECTION

GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

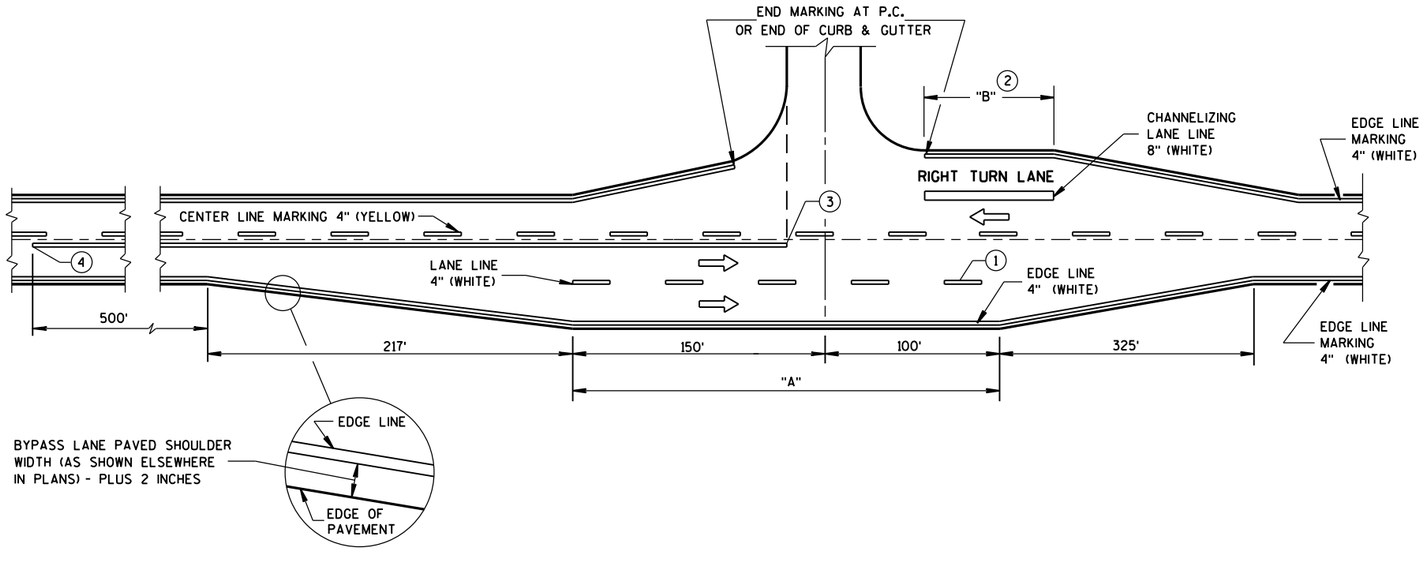
(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(4) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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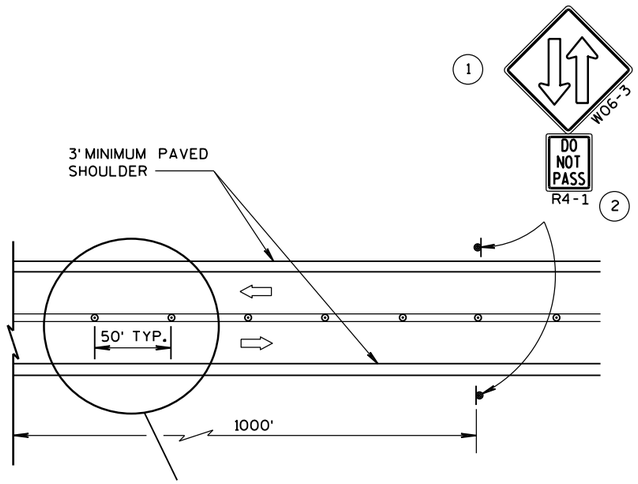
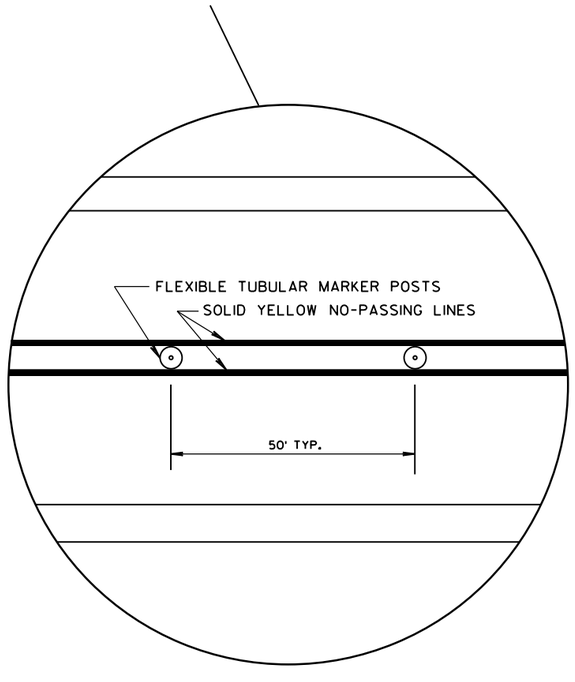
S.D.D. 15 C 35-2a



TWO LANE, TWO WAY OPERATION



LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"x48" UNLESS OTHERS NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50-FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW.

THE W06-3 WITH THE W057-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND/OR 500 FEET BEYOND ANY SIDEROAD. THE W06-3 WITH THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE W06-3 AND THE W057-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN W06-3 SIGNS.

(2) CONVENTIONAL: 24"x30"
FREEWAY AND EXPRESSWAY: 36"x48"

TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 DATE
/S/ Travis Feltes STATE TRAFFIC ENGINEER
SIGN
FHWA

6

S.D.D. 15 D 6-3

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

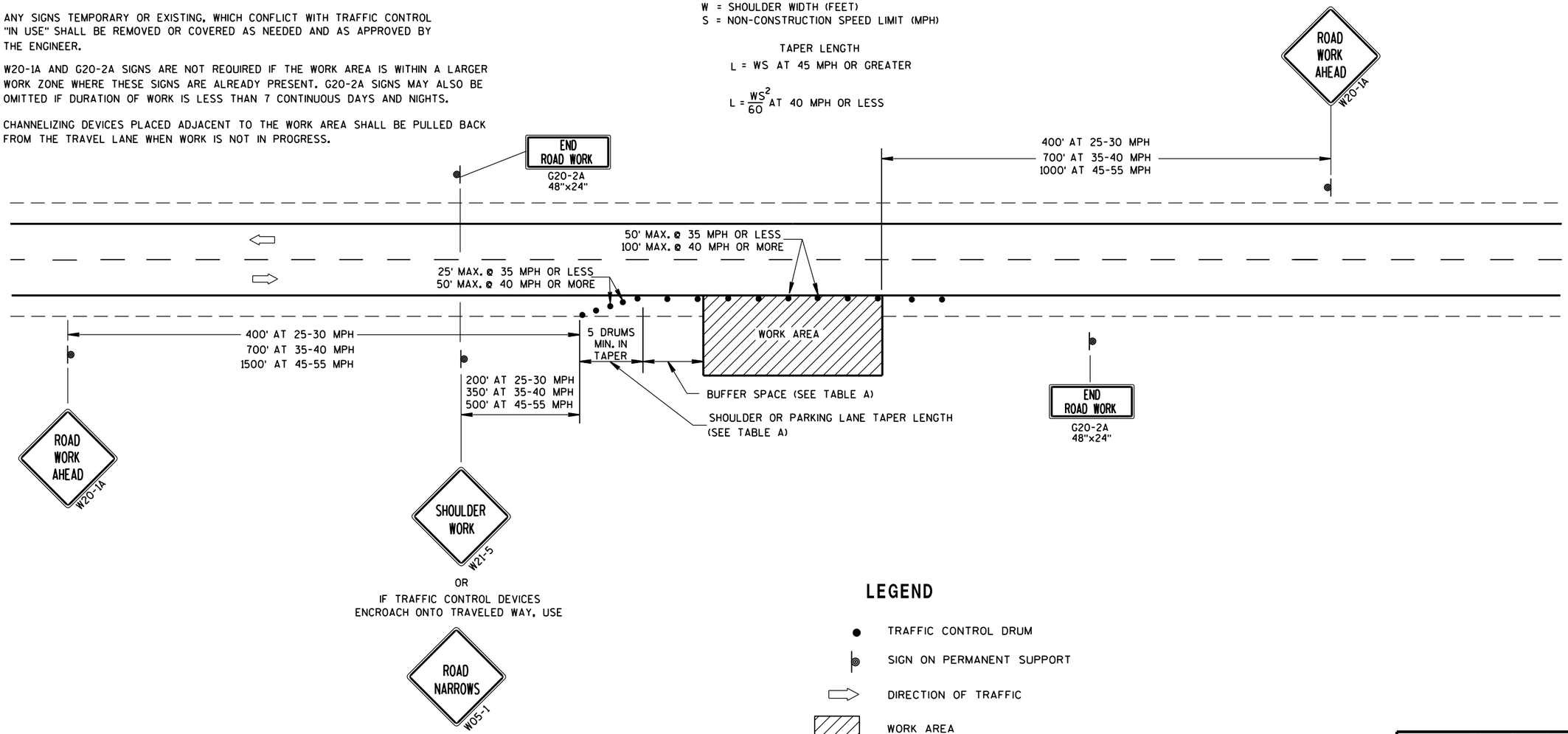
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

July 14, 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGII FIC

FHWA

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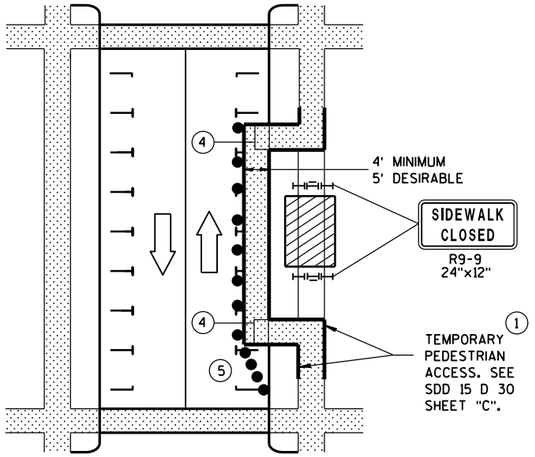
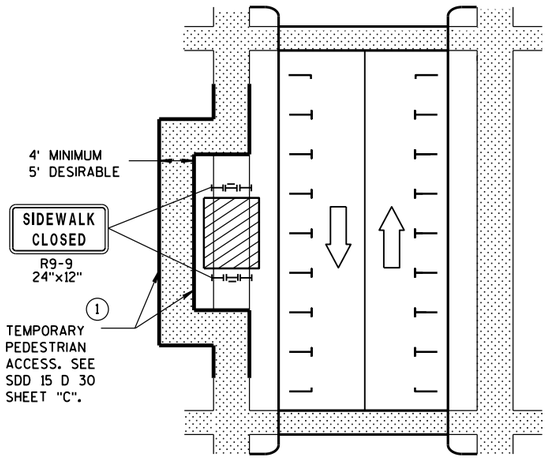
S.D.D. 15 D 28-3

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

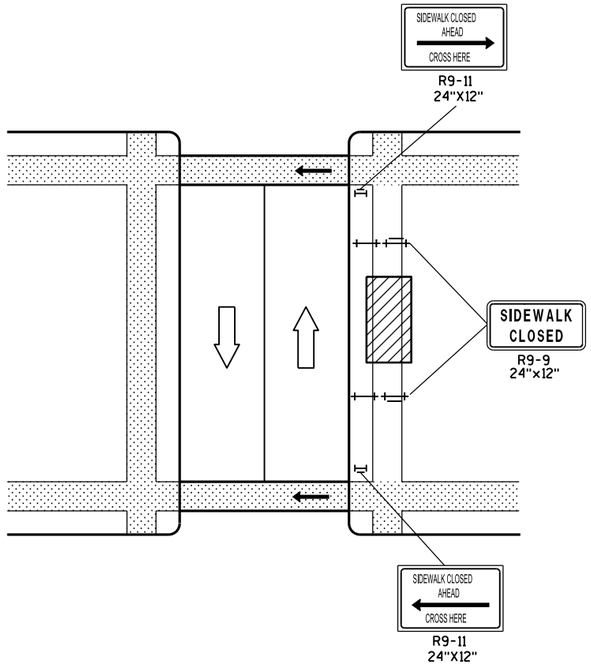


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

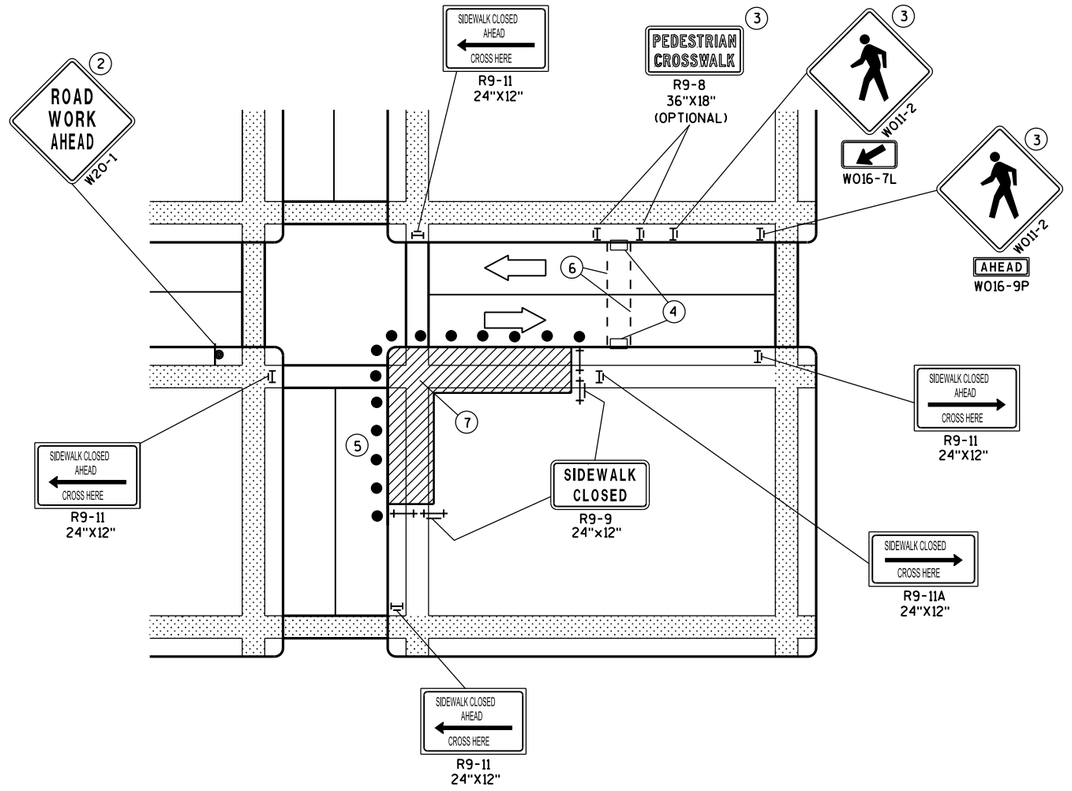
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

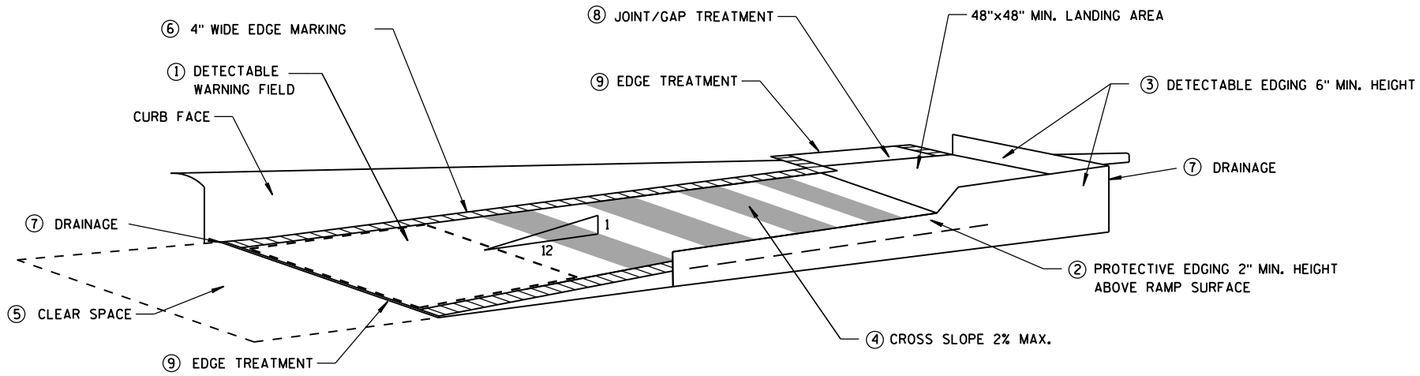
- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 30-3a



TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".

② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

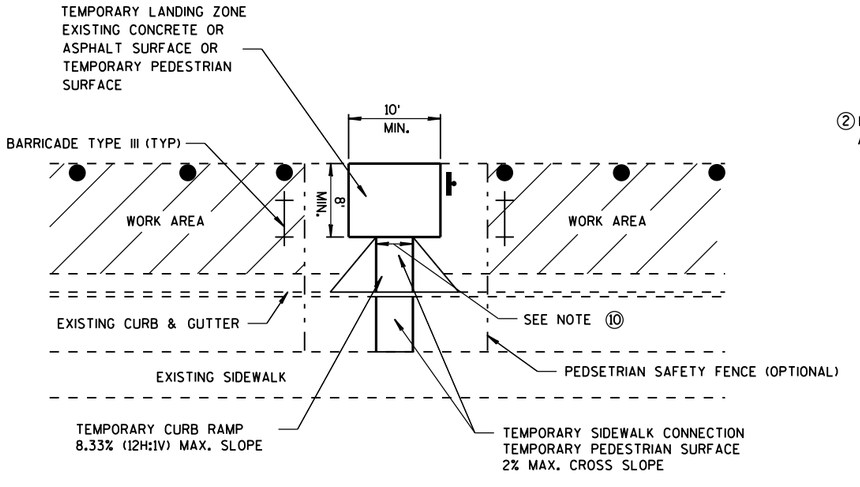
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

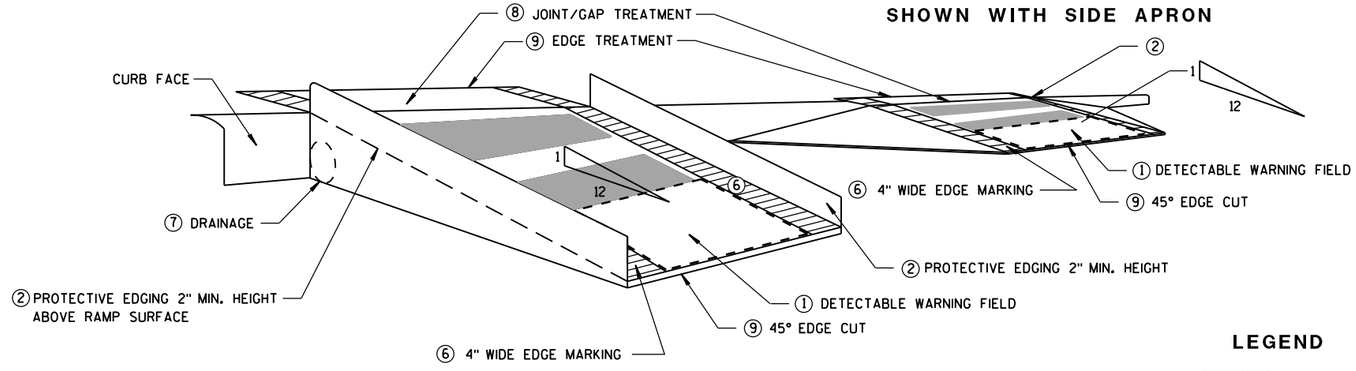
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO[illegible] SAFETY ENGIN[illegible]

FHWA

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S.D.D. 15 D 30-3b

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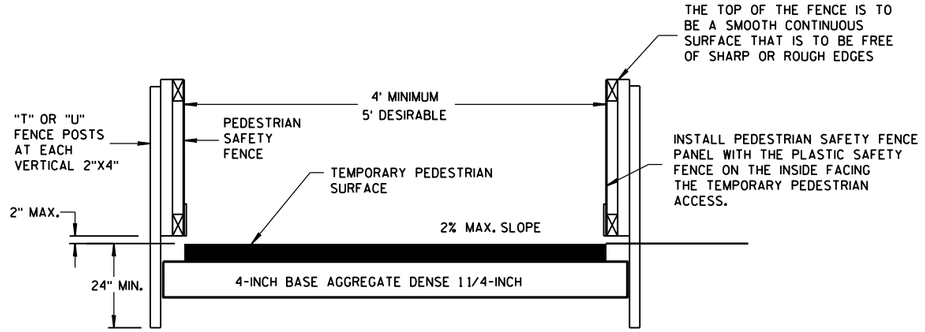
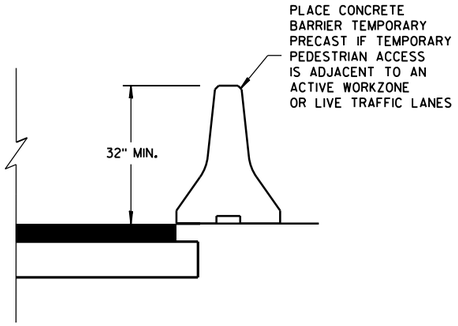
S.D.D. 15 D 30-3b

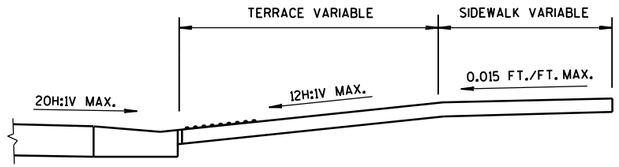




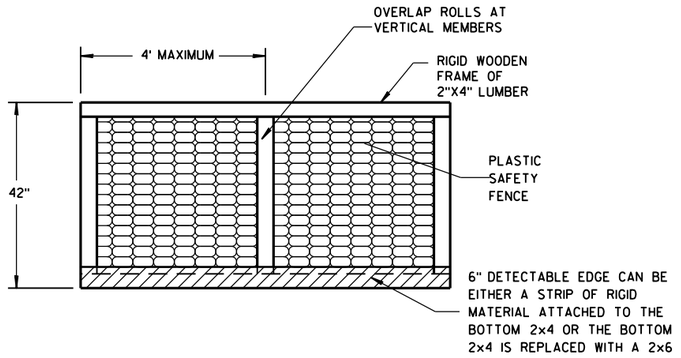
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

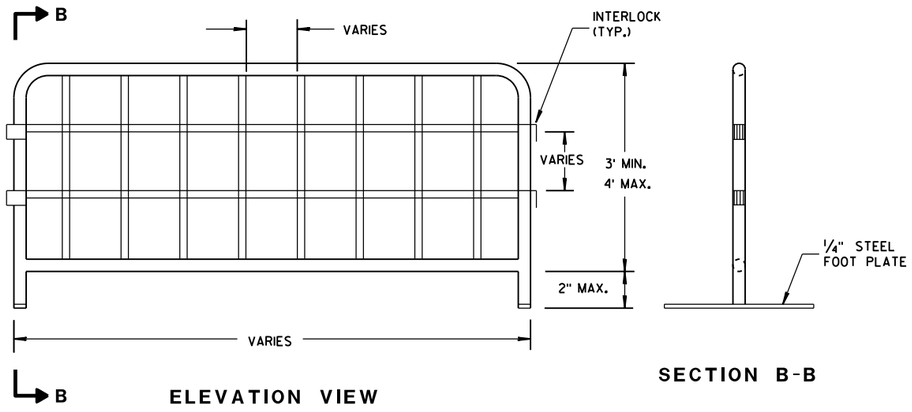
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



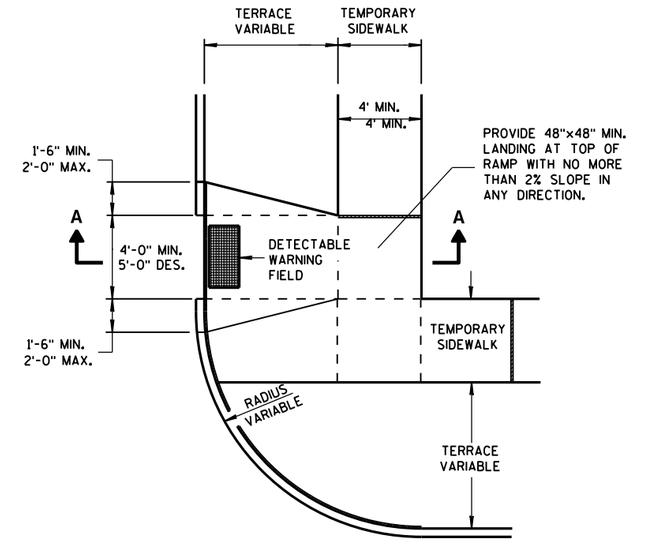
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

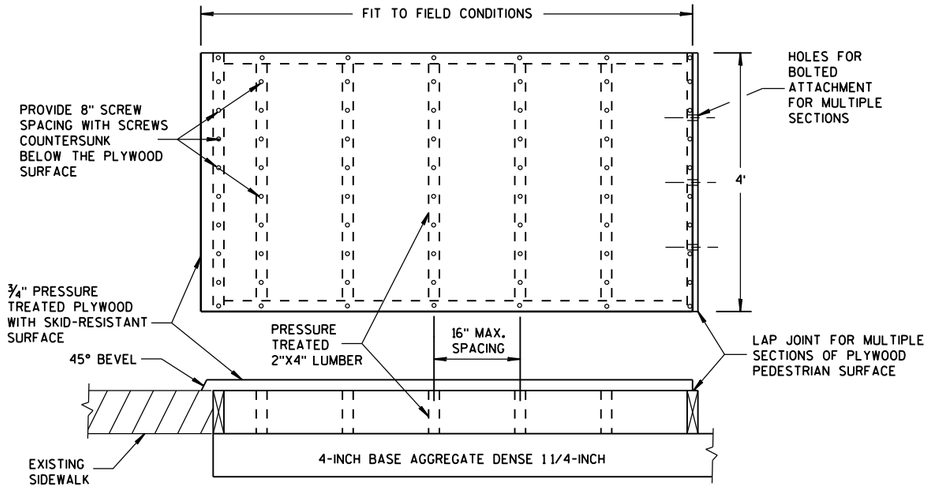
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



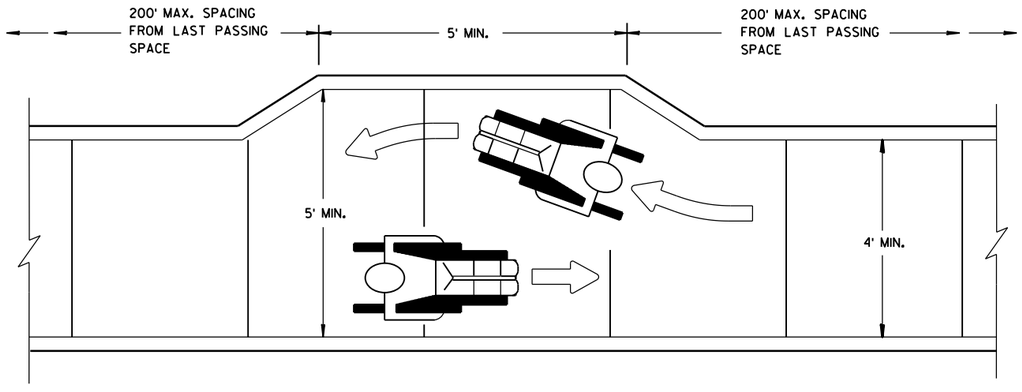
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016
DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON SAFETY ENGIN IC
FHWA

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S.D.D. 15 D 30-3c

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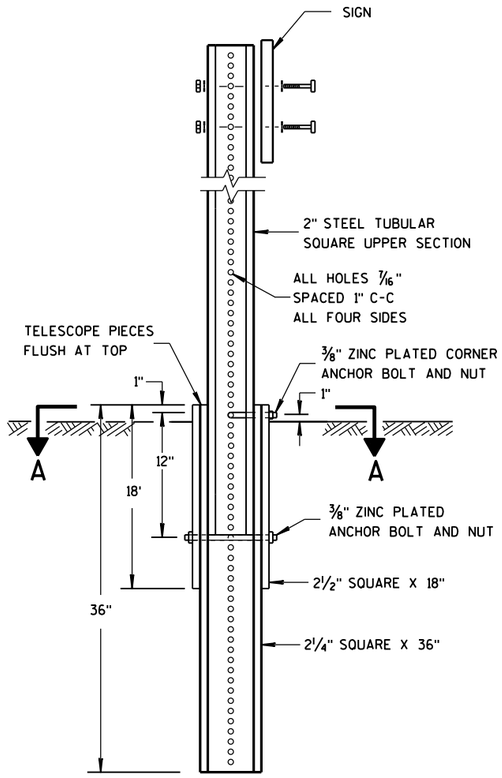
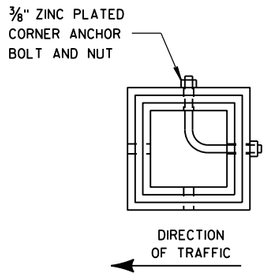
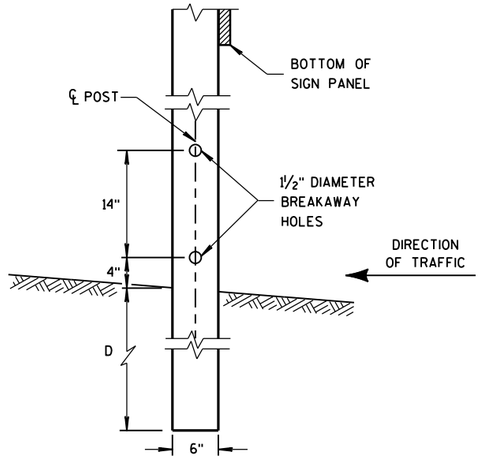
S.D.D. 15 D 30-3c



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



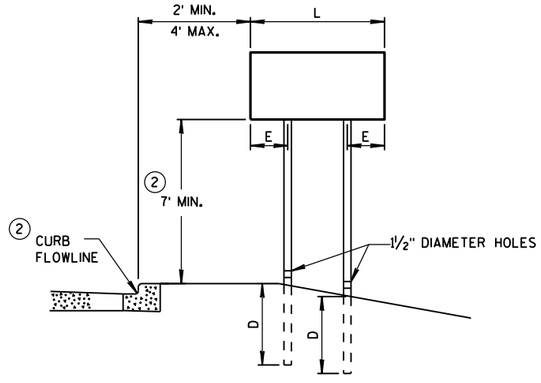
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

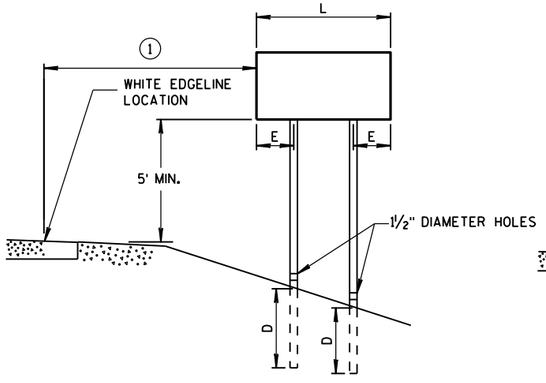
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

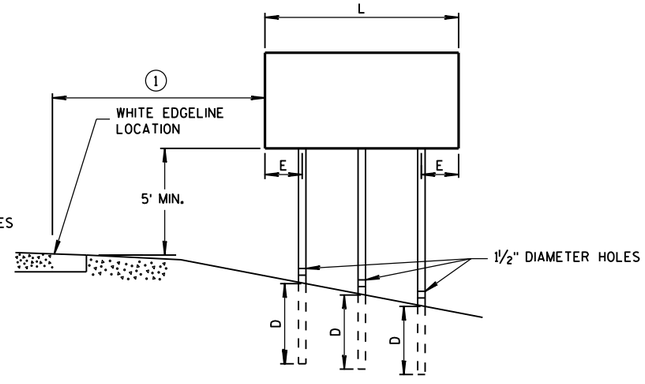
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

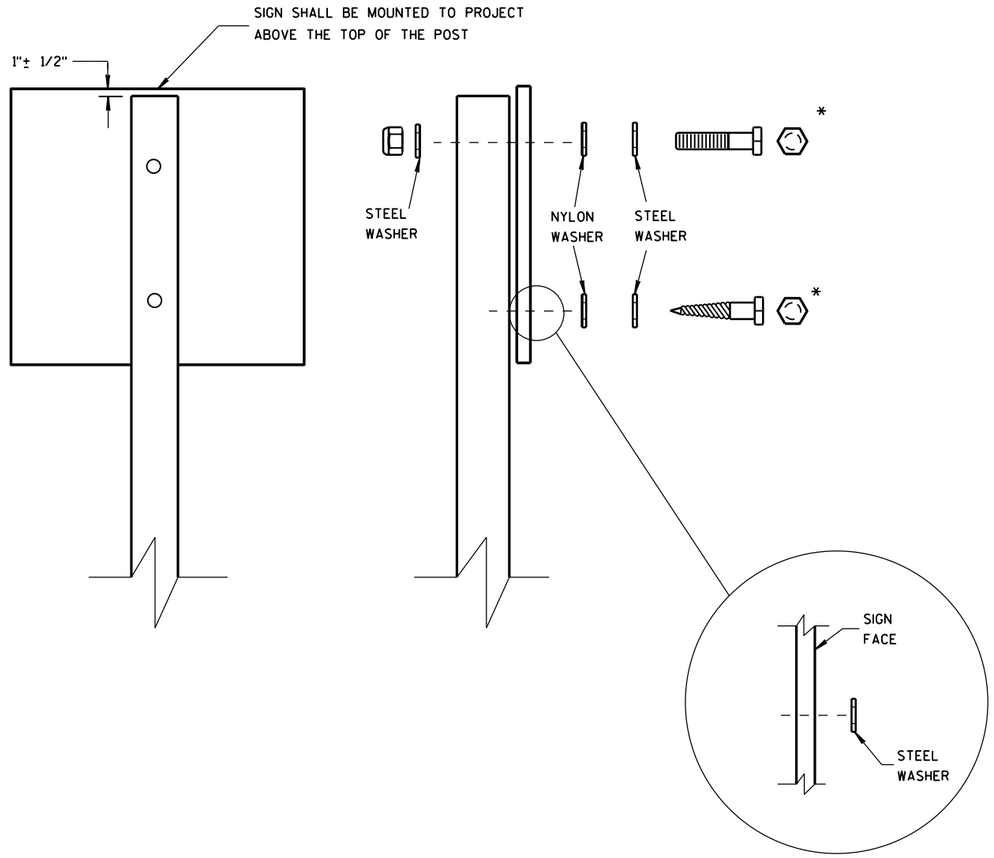
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

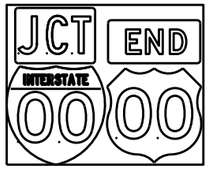
June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

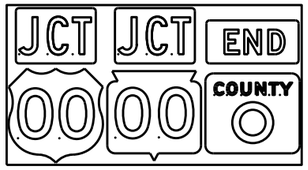
FHWA

TYPICAL ASSEMBLIES

J1-1

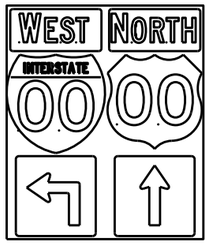


J1-2



J1-3

J2-1



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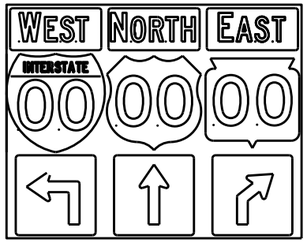
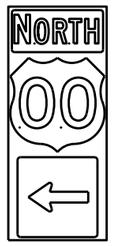


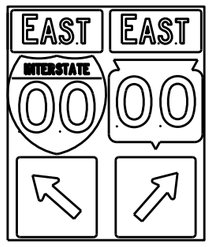
J2-3

JV

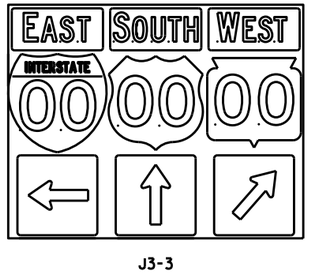
(Typical Vertical J-Assembly
See Note 10 and 11)



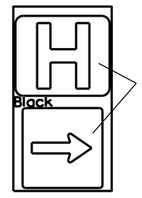
J3-1



J3-2

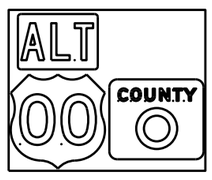


J3-3



JH-1

J4-1



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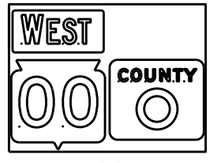

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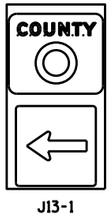


J13-1

J12-1

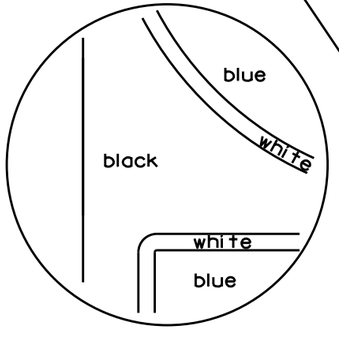
J32-1

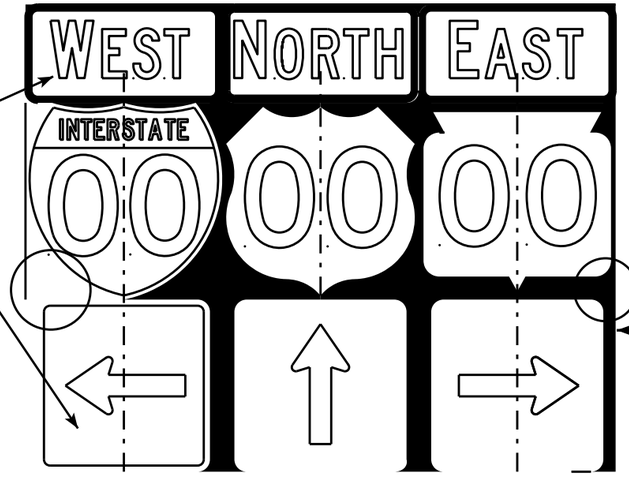
J33-1

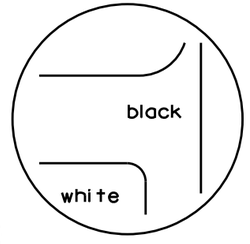
J23-1

J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

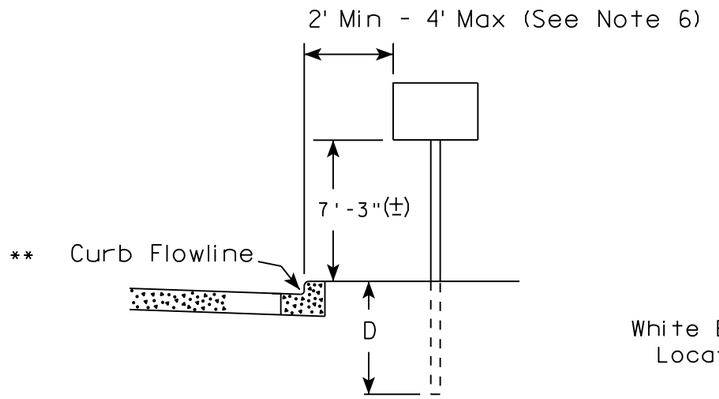
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

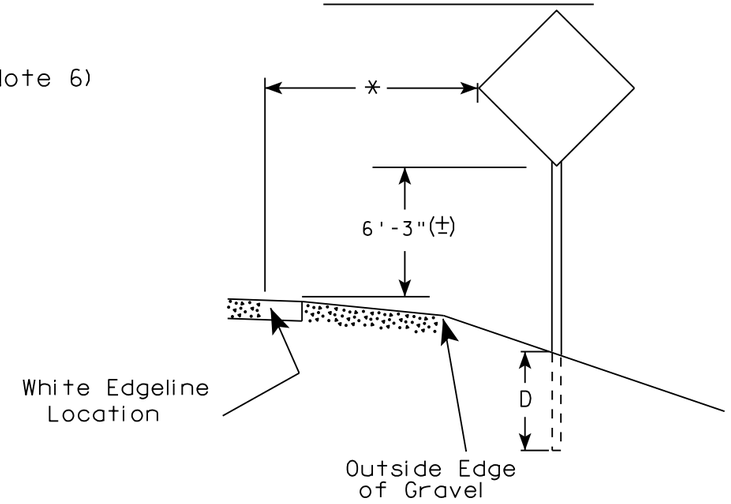
PROJECT NO: SHEET NO: E

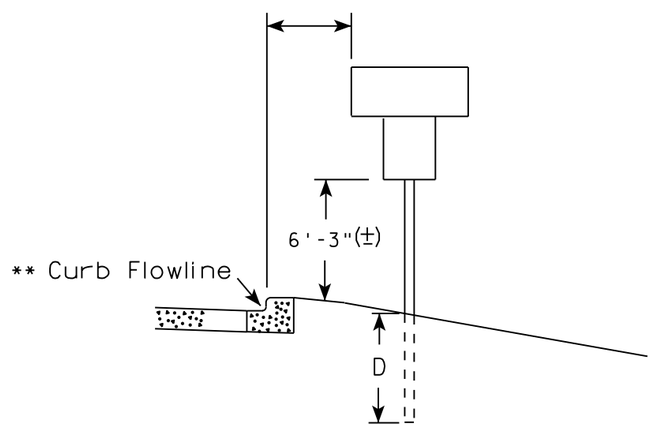
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :
WISDOT/CADDS SHEET 42

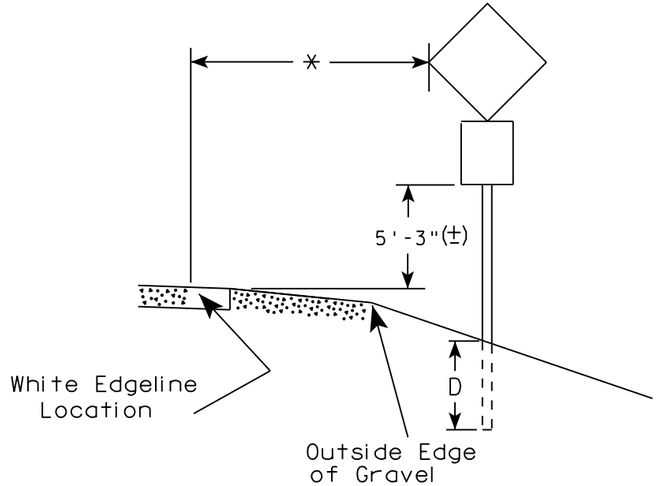
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

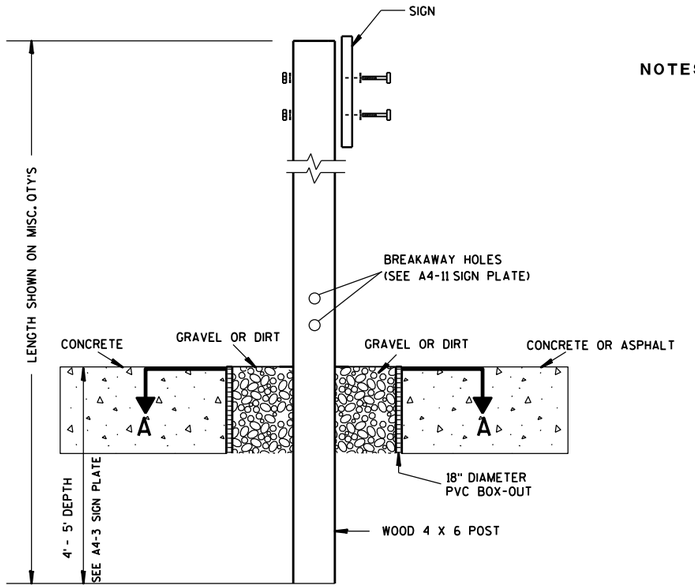
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

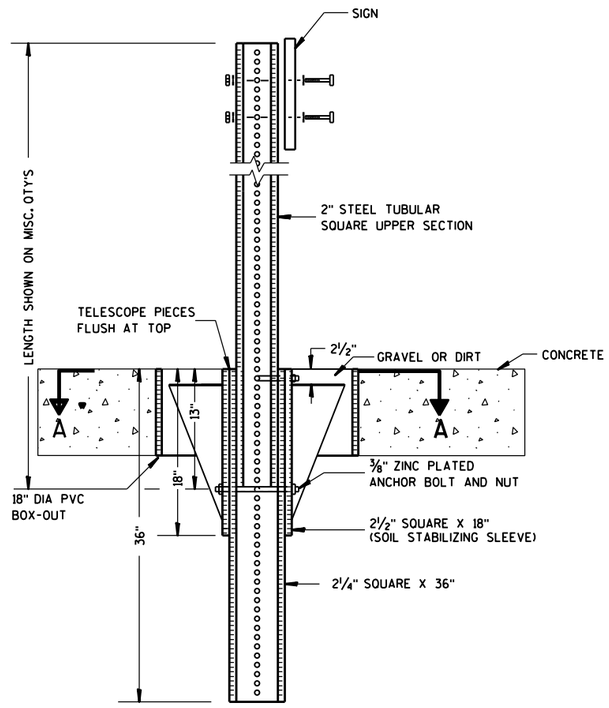
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 611	E



ELEVATION VIEW

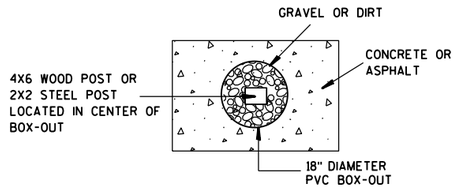
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

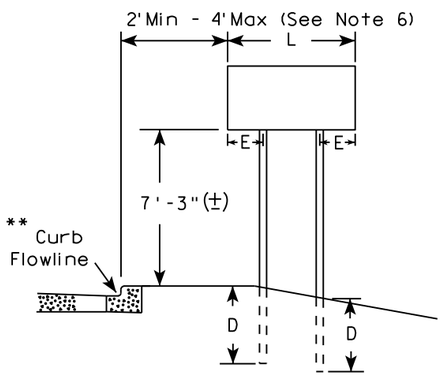
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

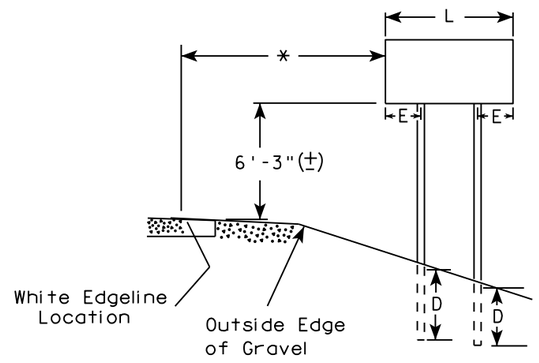
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

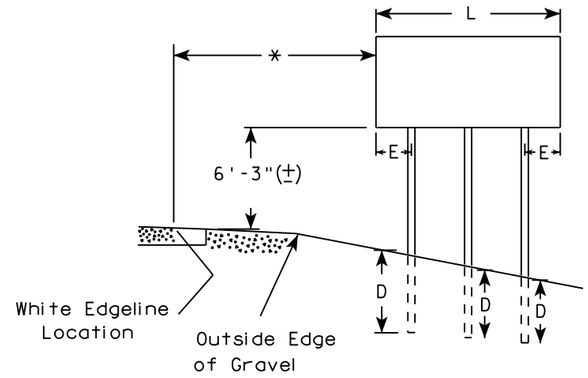
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

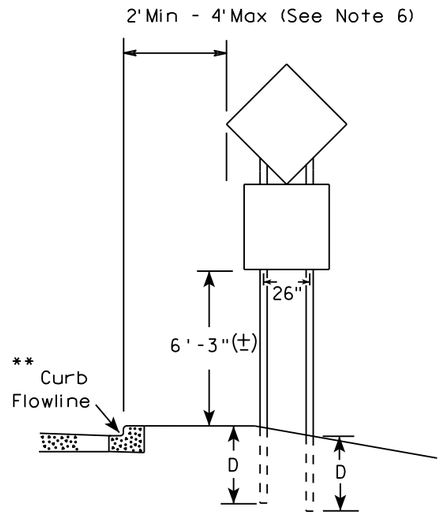
URBAN AREA



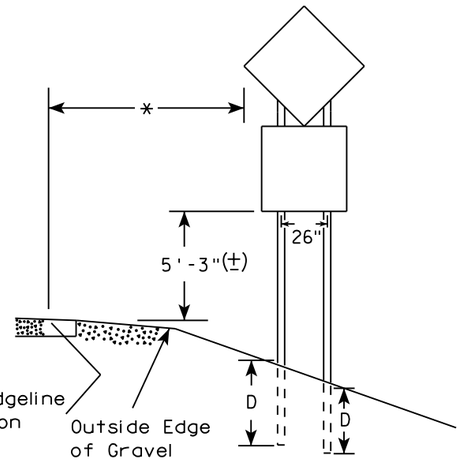
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

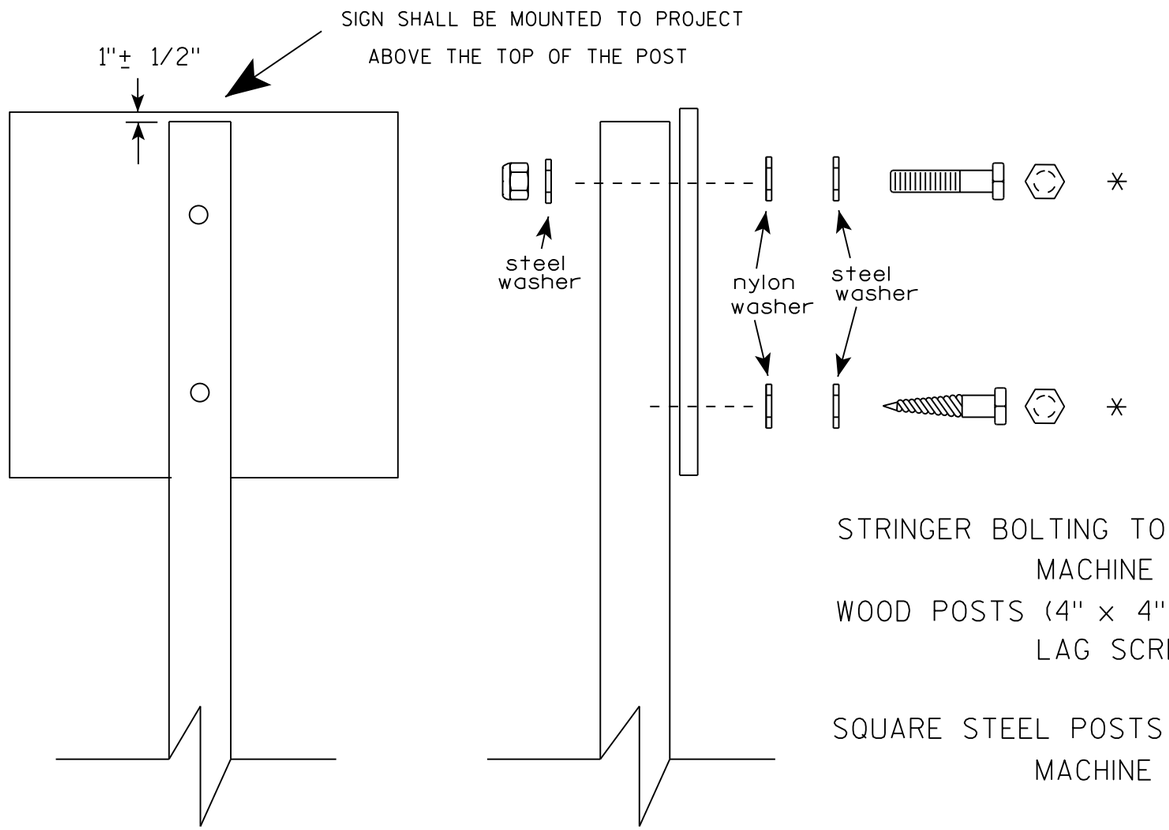
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 613	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

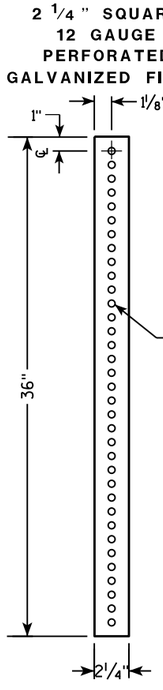
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

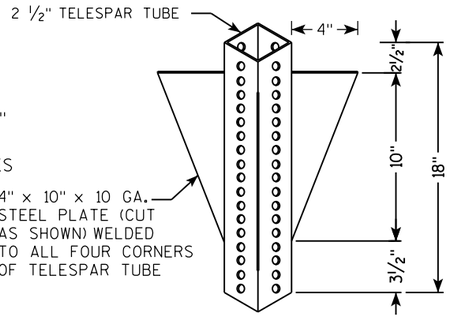
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

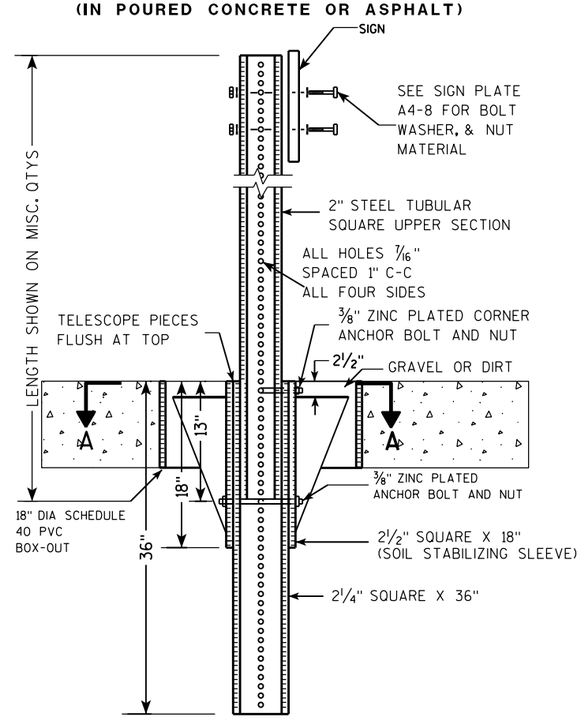
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



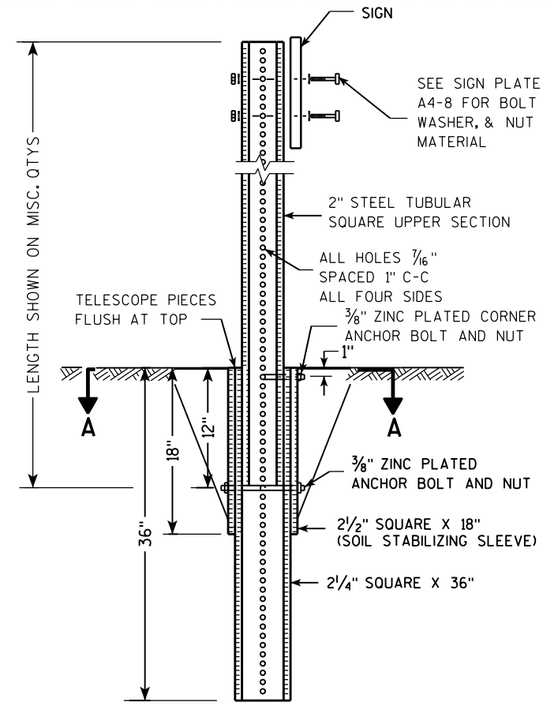
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

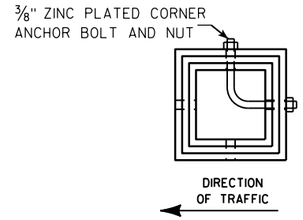


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

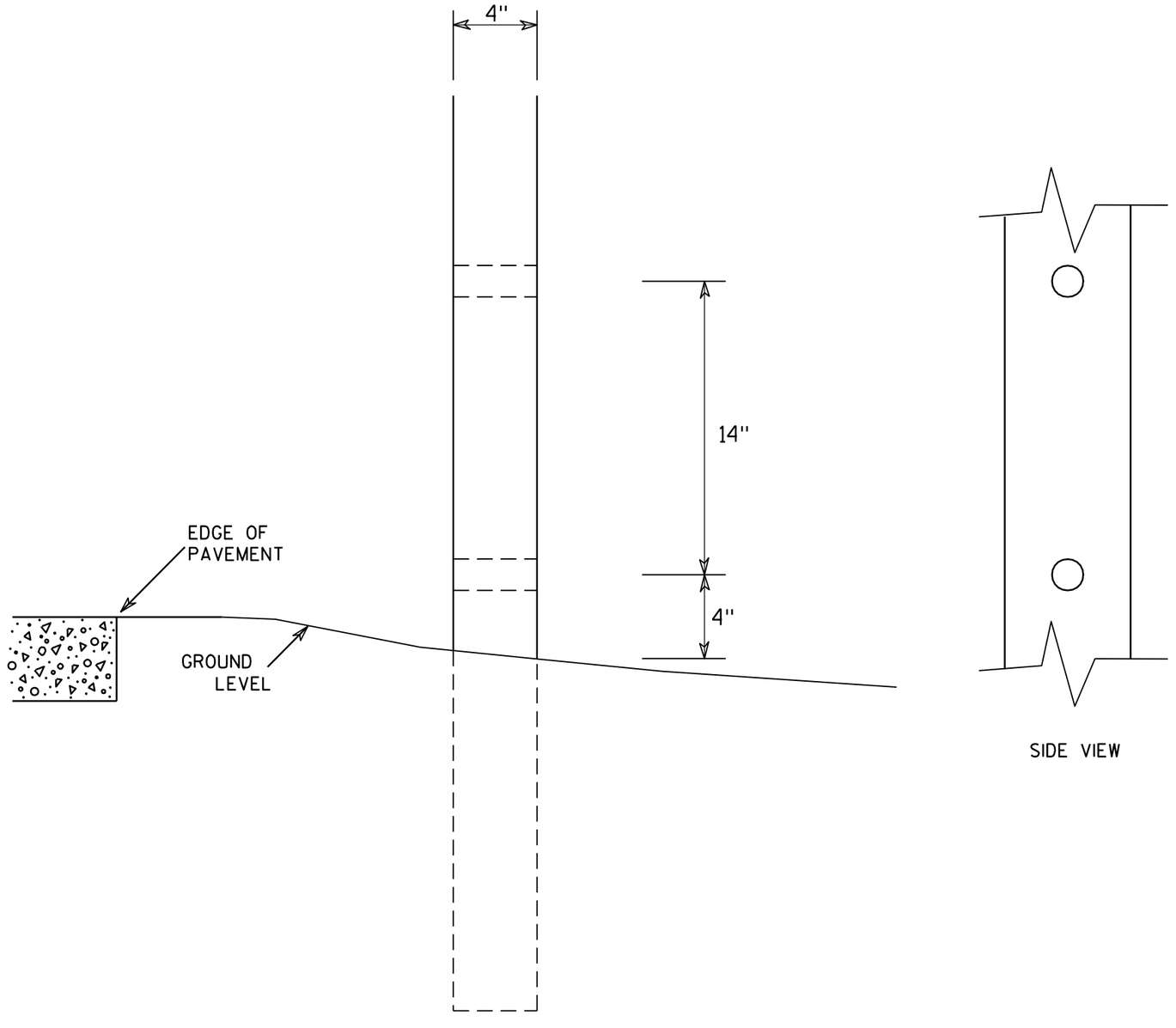
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 615 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

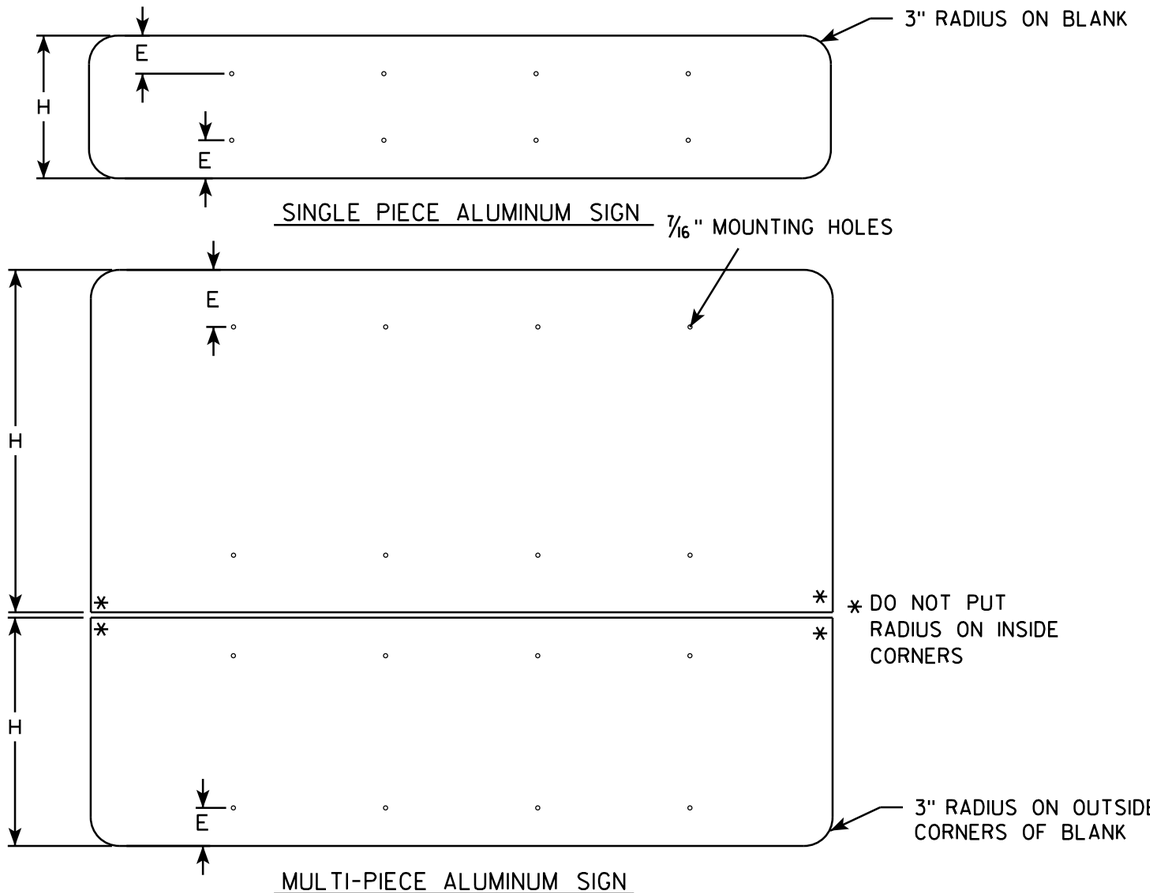
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

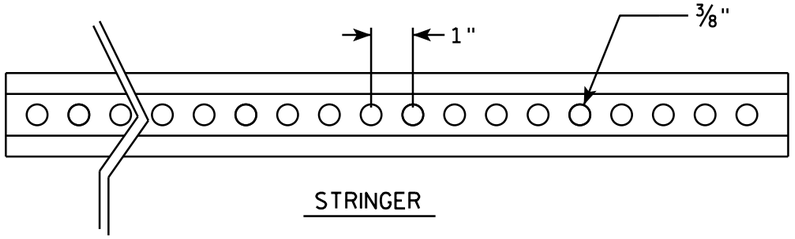
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 616	E



GENERAL NOTES

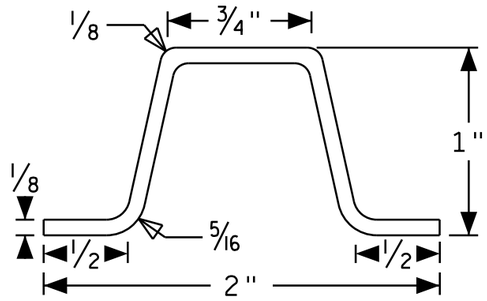
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

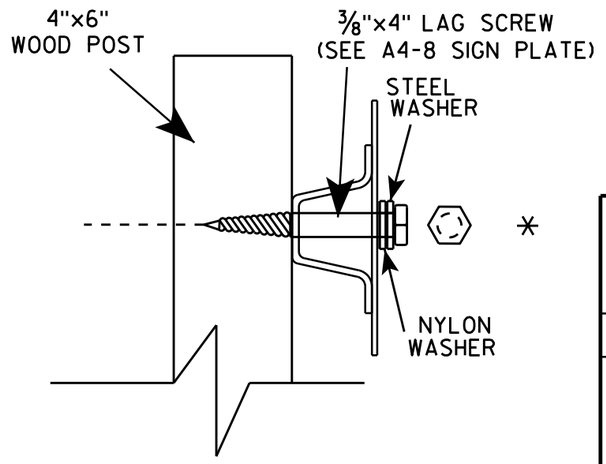


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

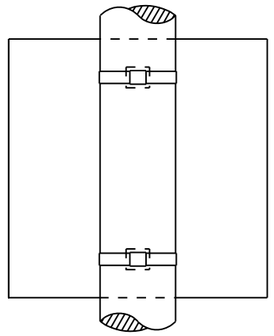
DATE 4/26/16 PLATE NO A4-18.1

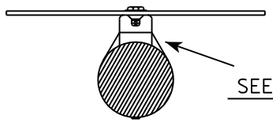
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

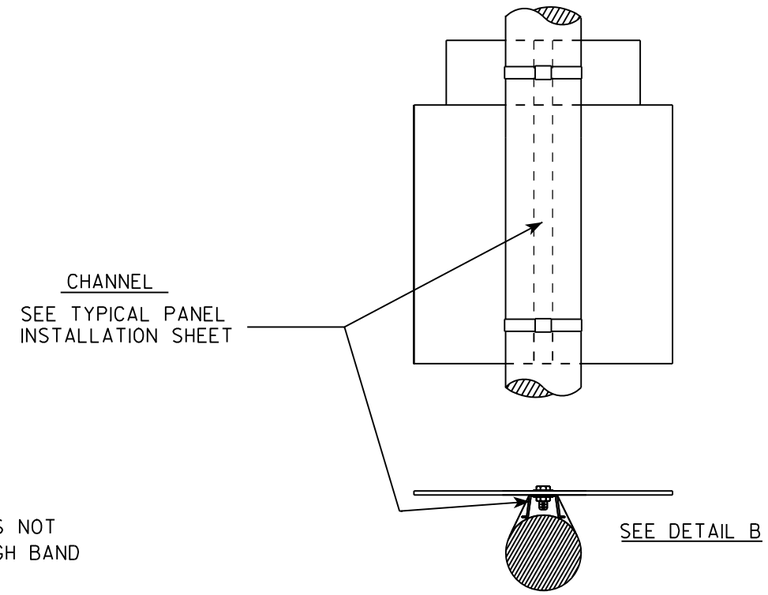
BANDING

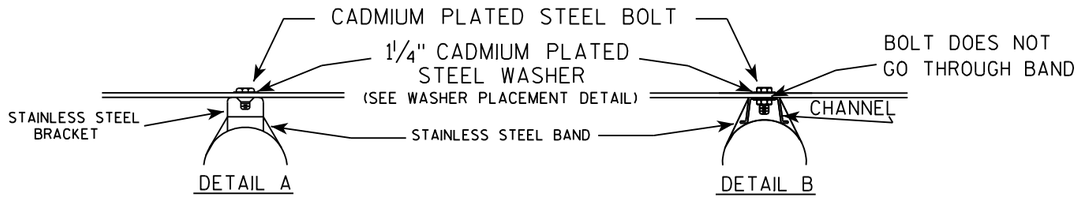
SINGLE SIGN



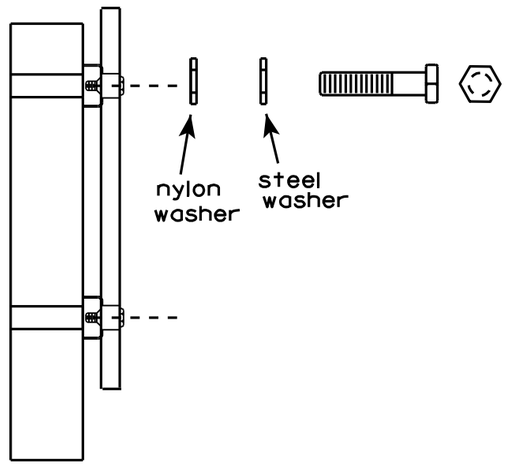


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

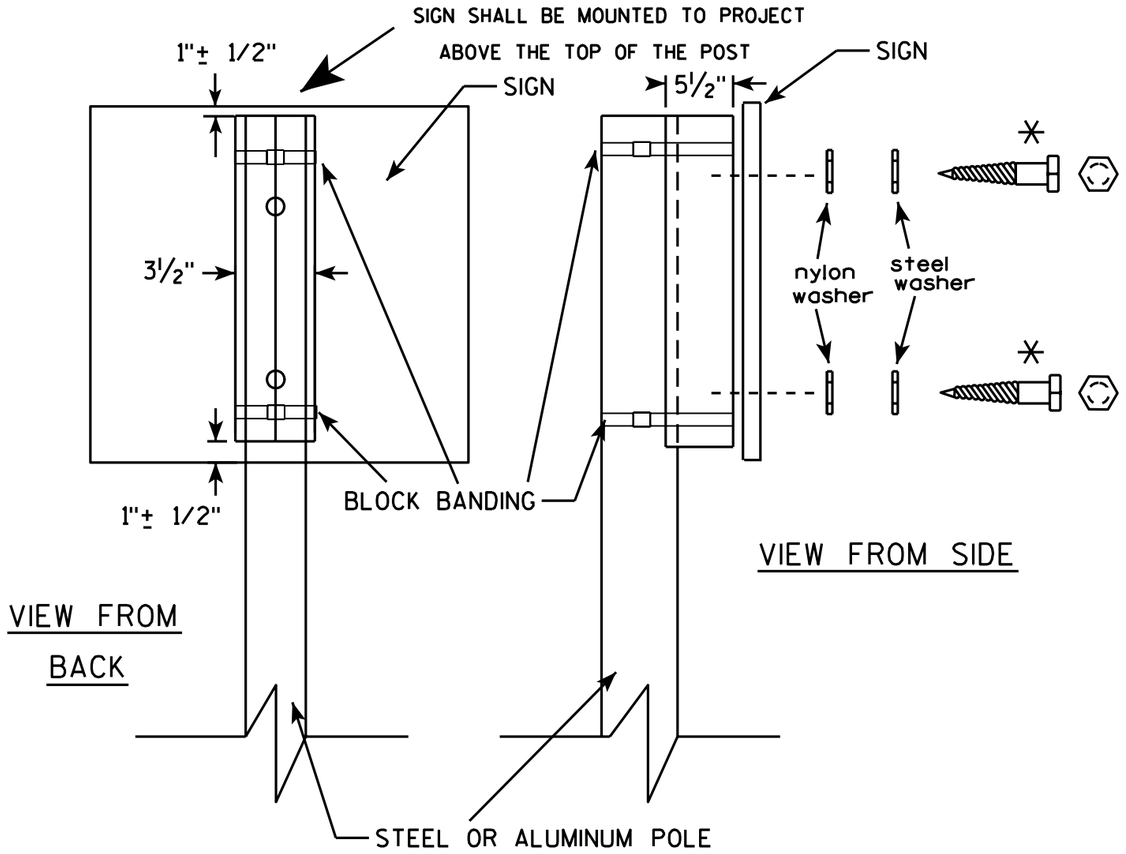
STANDARD SIGN
SIGN BANDING DETAILS

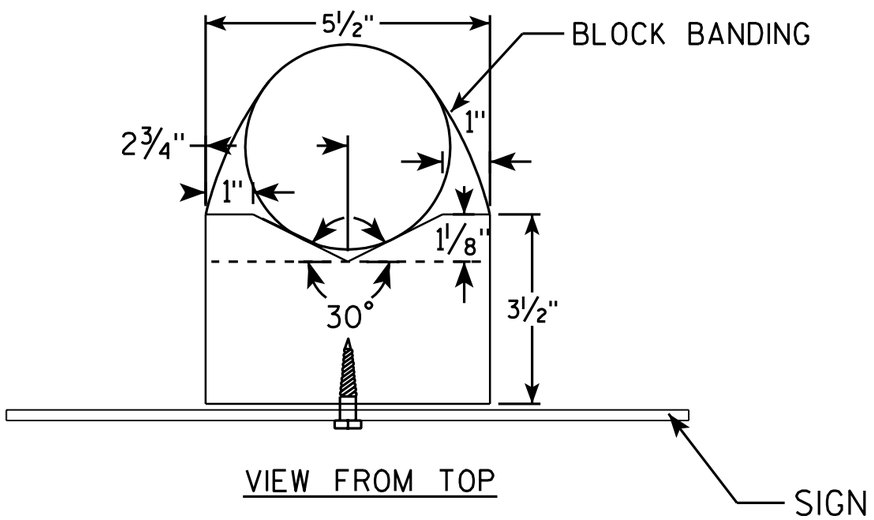
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 618	E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

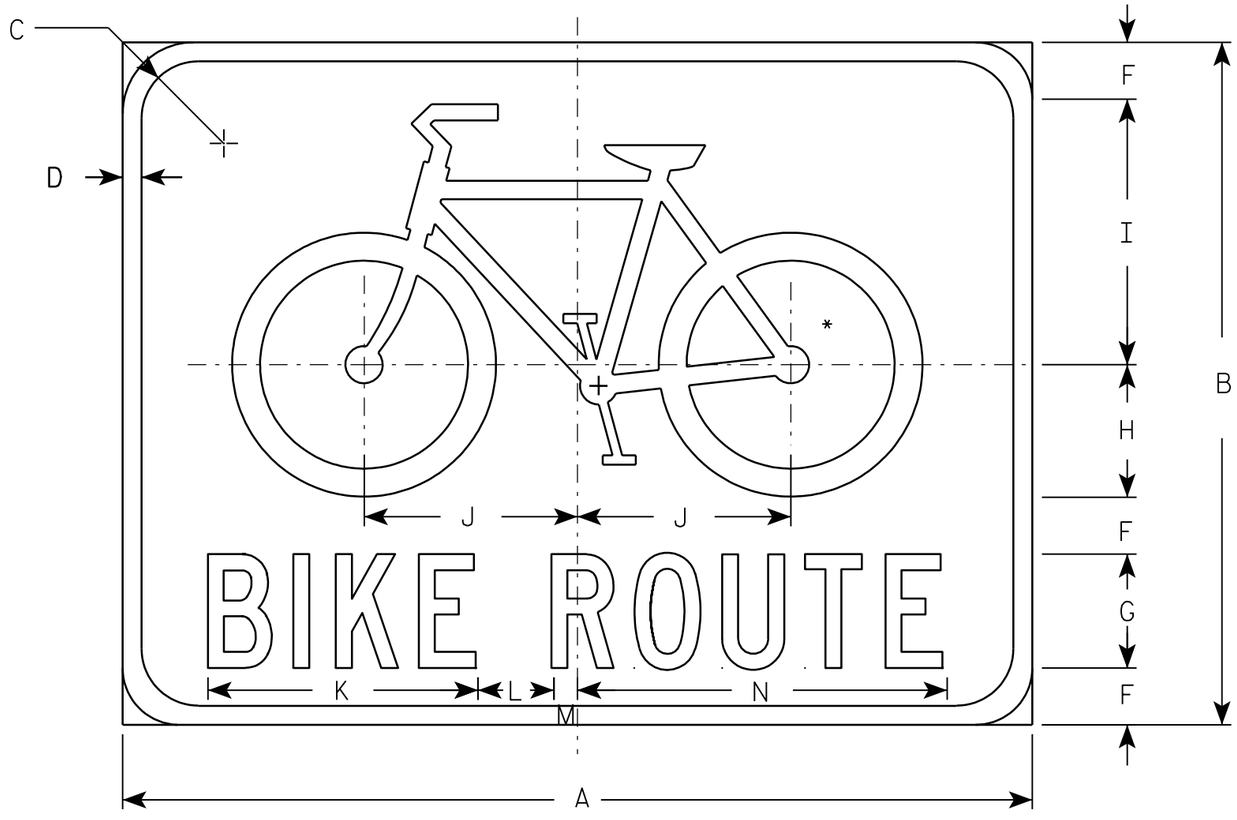
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 619 E



D11-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

* See W11-1 for symbol design

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 450 mm
3	750 mm X 600 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	18	1 1/2	1/2		1 1/2	3	3 1/2	7	5 5/8	7 1/8	2	5/8	9 3/4													3.0	0.27
3	30	24	1 1/4	5/8		2	4	4 3/4	9 1/4	7 1/2	9 1/2	2 5/8	7/8	13													5.0	0.45
4																												
5																												

STANDARD SIGN
D11-1

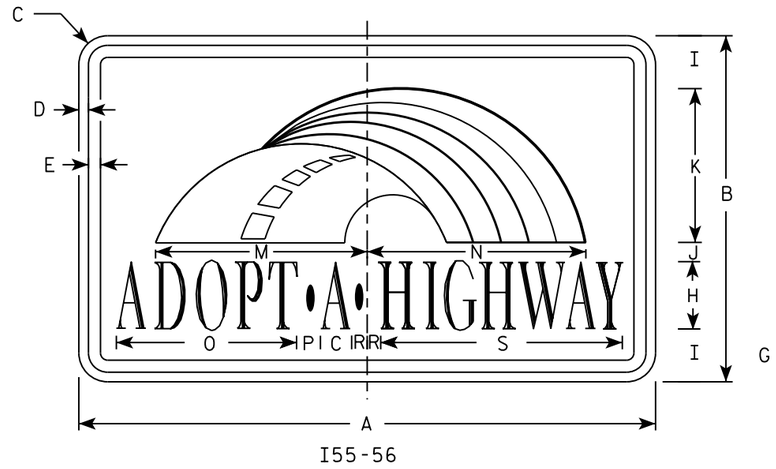
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

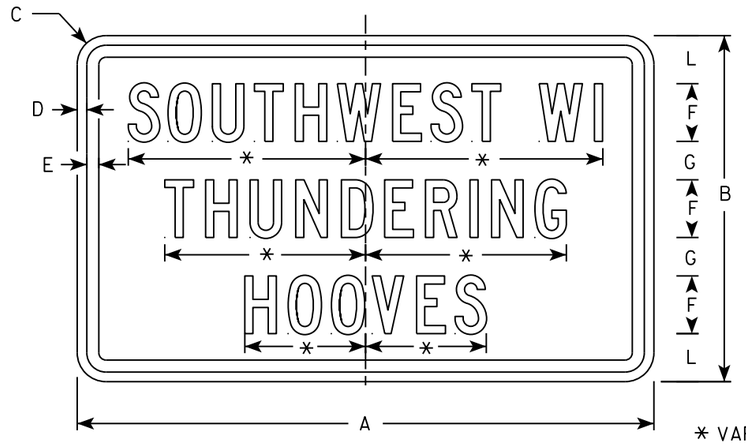
DATE 3/24/04 PLATE NO. D11-1.1

PROJECT NO:

SHEET NO: 620 E



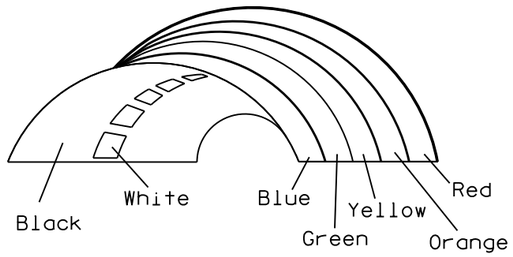
I55-56



I55-56P

* VARIES

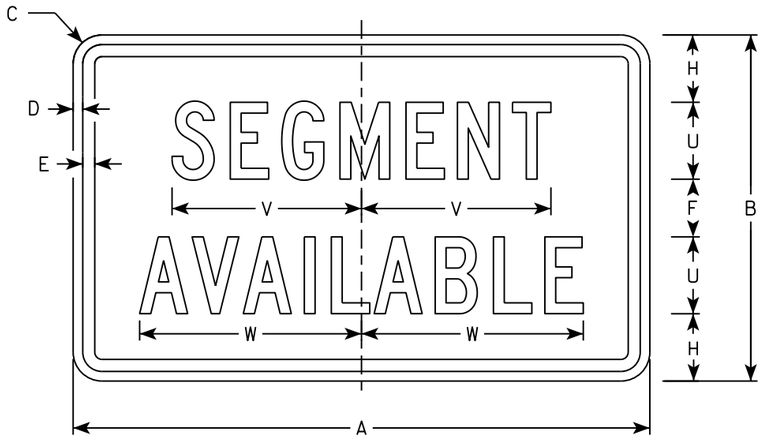
Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - (See Note 4)
3. Message Series - (See Note 5)
4. Border - Blue
   Adopt a Highway - Red
   All other Text - Blue
5. Adopt a Highway - Dutch 8011L
   All other Text - Series C
6. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.



I55-56S

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	18	1 1/2	1/2	5/8	3	2	3 1/2	2 3/4	1	8	2 1/2	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2	4	9 7/8	11 1/2				3.75
3																											
4																											
5																											

STANDARD SIGN
I55-56

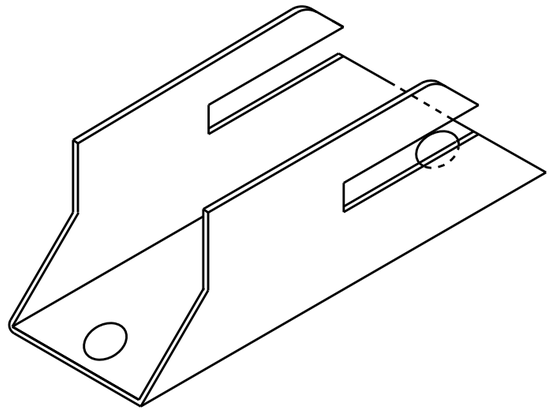
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

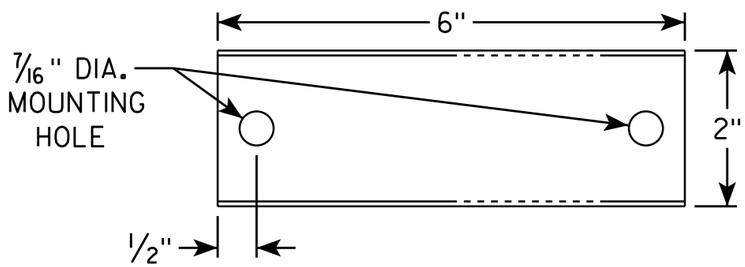
DATE 2/20/18 PLATE NO. I55-56.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 621 | E

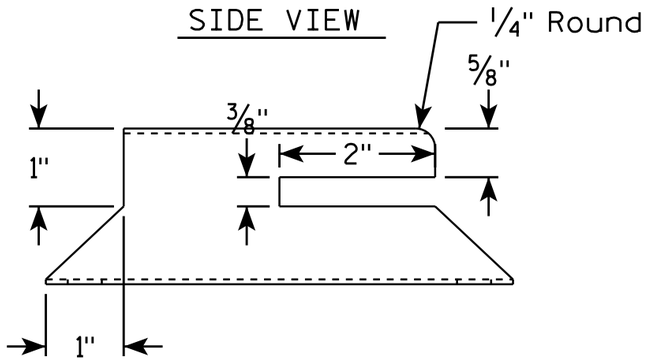
ISOMETRIC VIEW



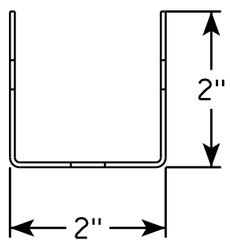
TOP VIEW



SIDE VIEW



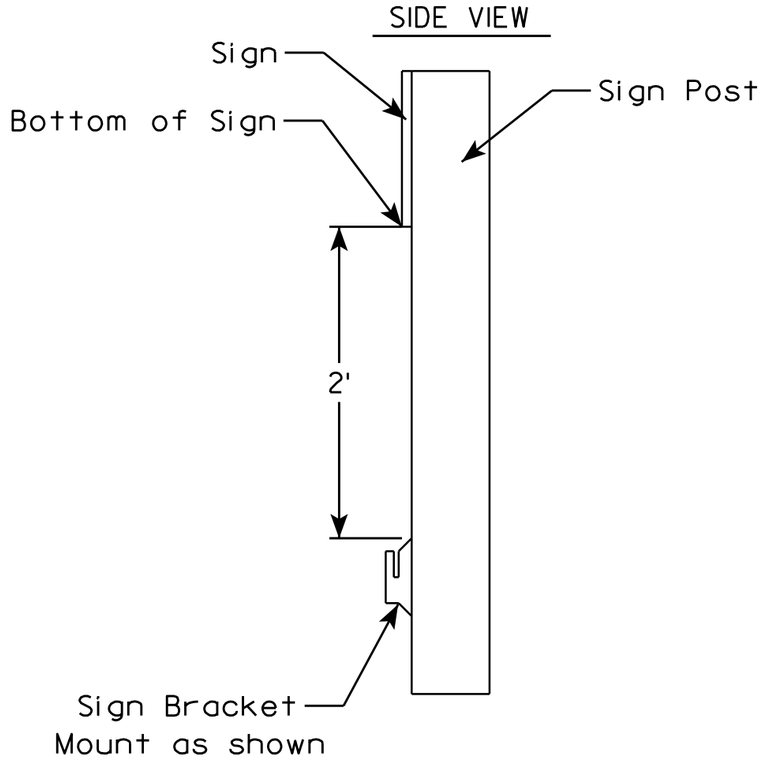
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

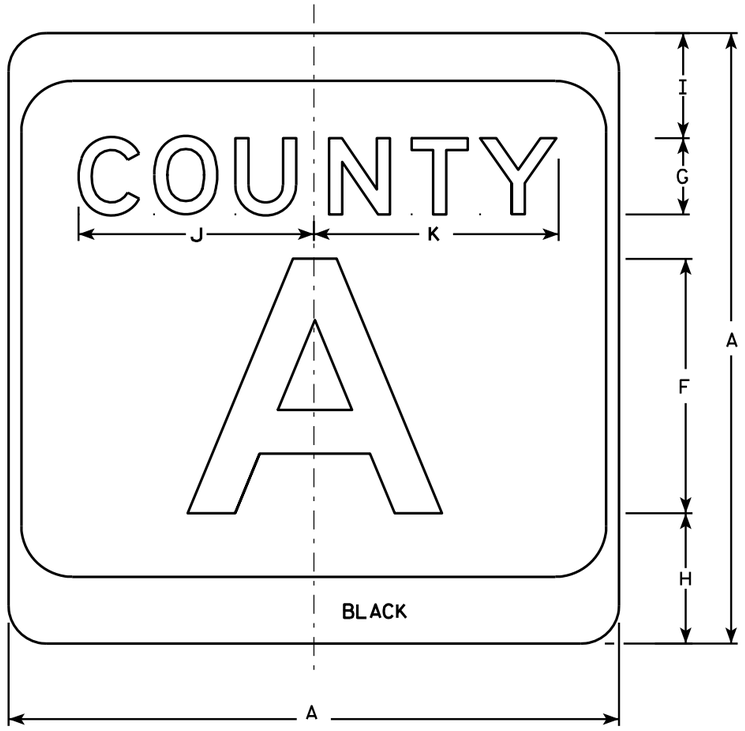
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/26/16 PLATE I55-56B.2

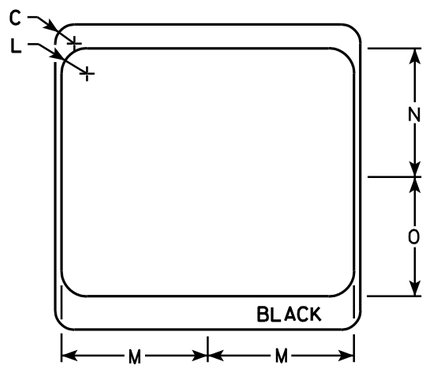
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

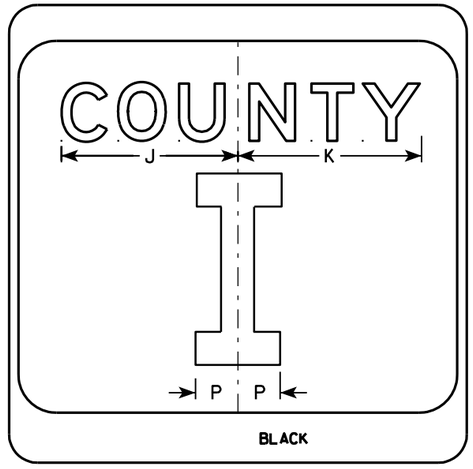
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\I5556B.DGN PLOT DATE : 26-APR-2016 17:29 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 1.945842:1.000000

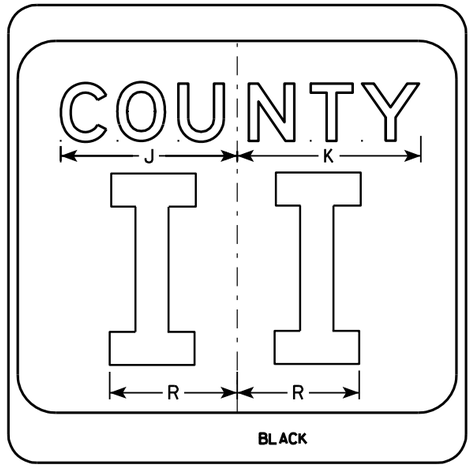
WISDOT/CADDS SHEET 42



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

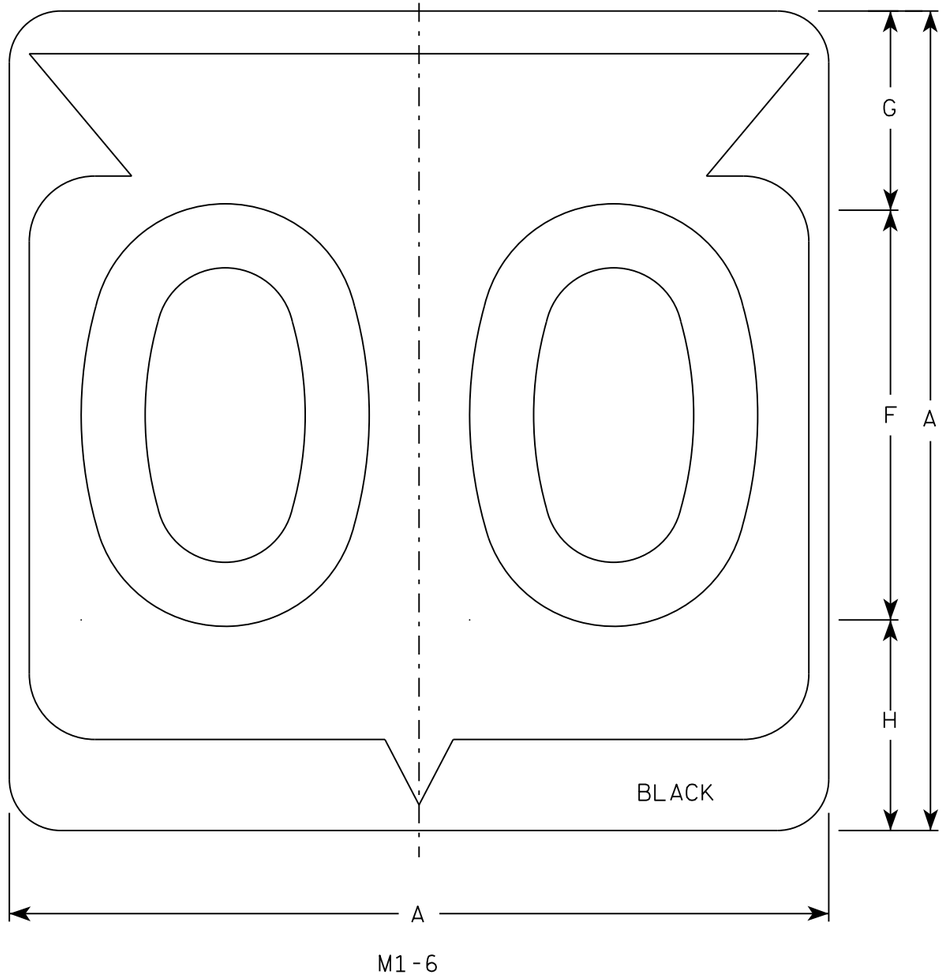
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

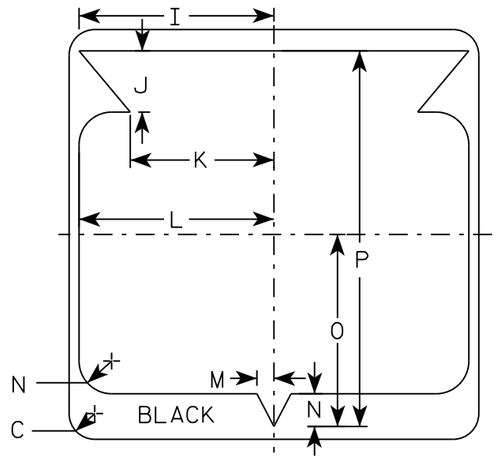
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 623	E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

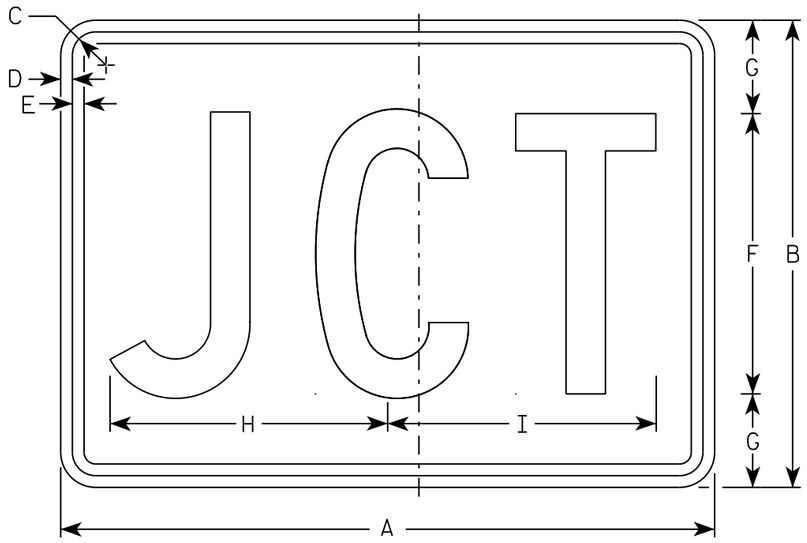
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

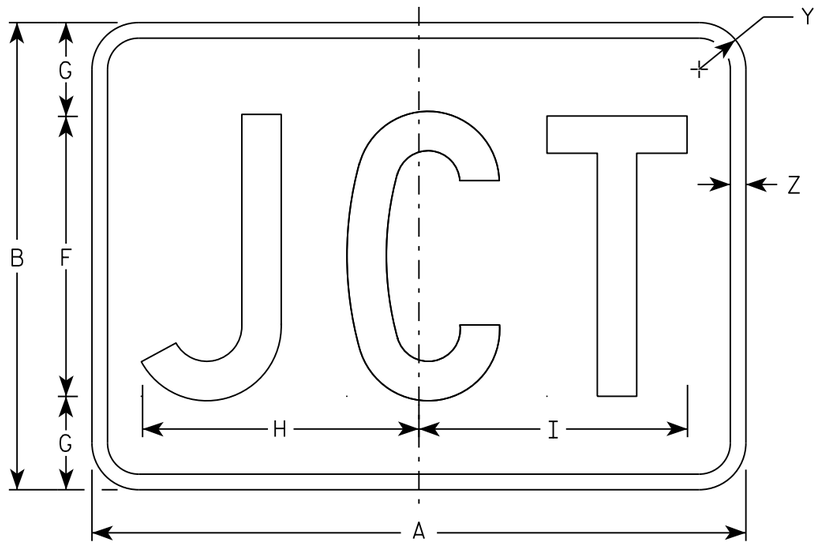
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 624	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

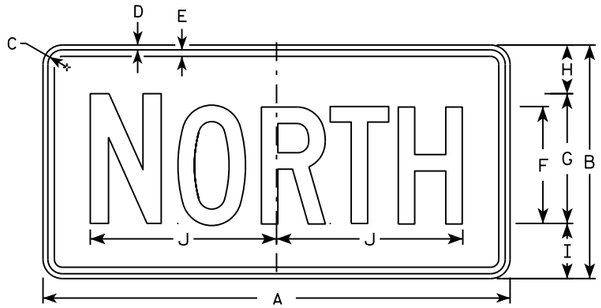
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

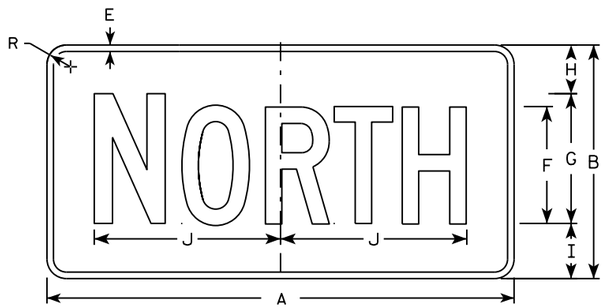
DATE 10/15/15 PLATE 625 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



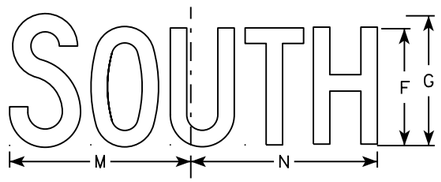
M3-1
MM3-1
MP3-1



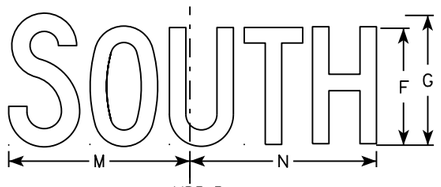
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

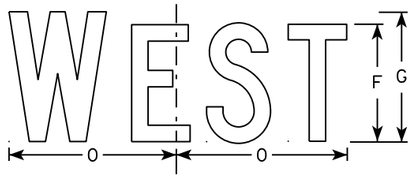
MB3-2
MK3-2
MN3-2



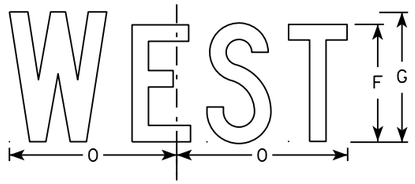
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

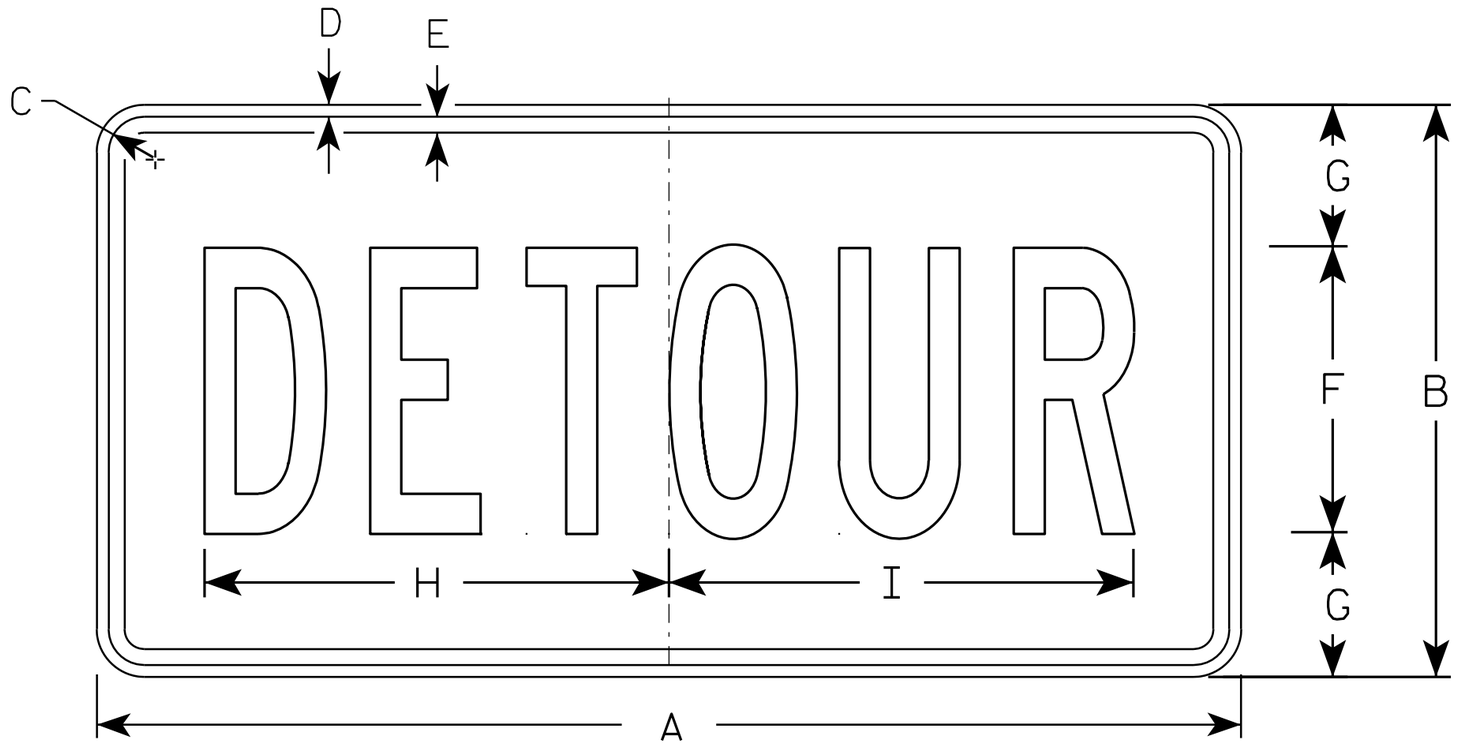
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

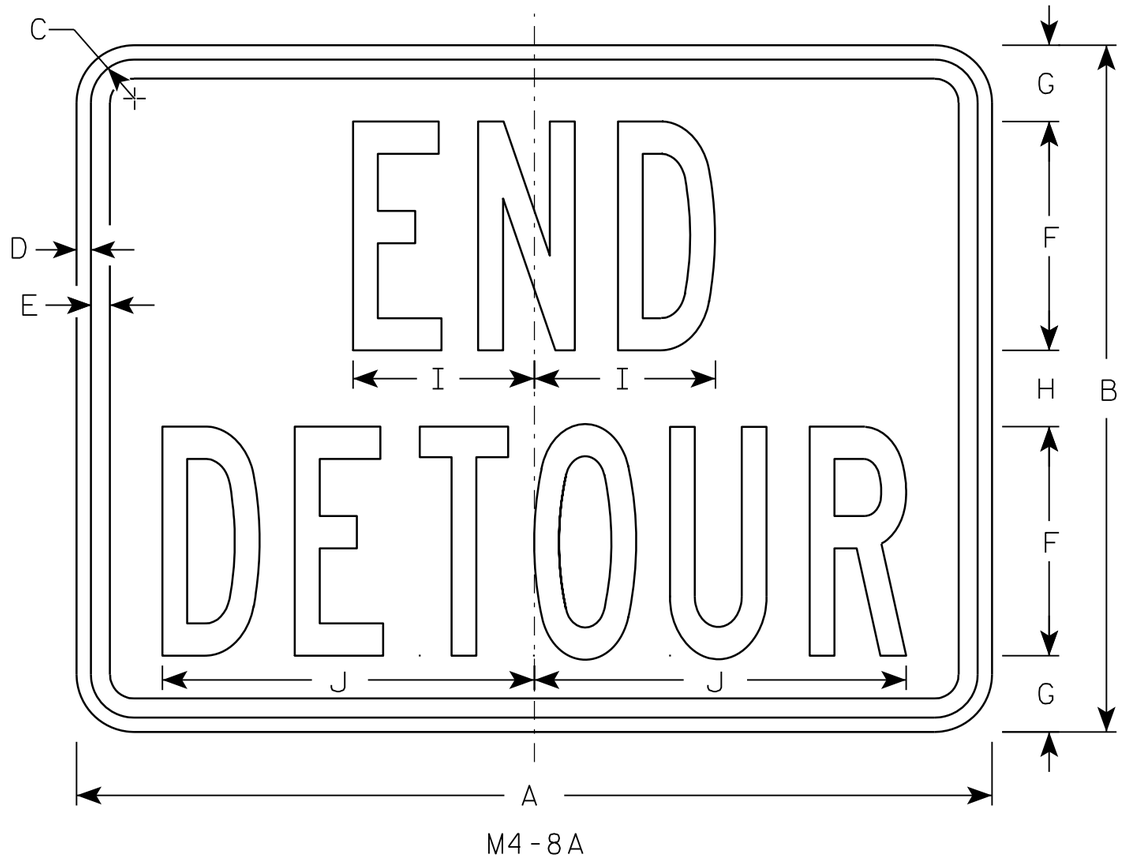
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 627	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

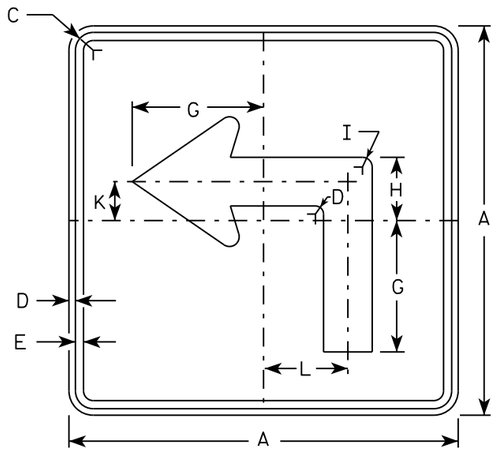
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

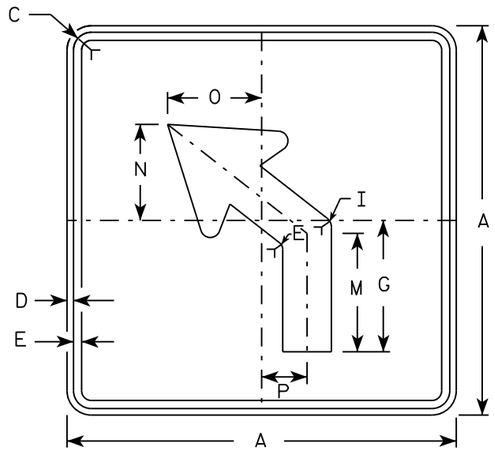
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

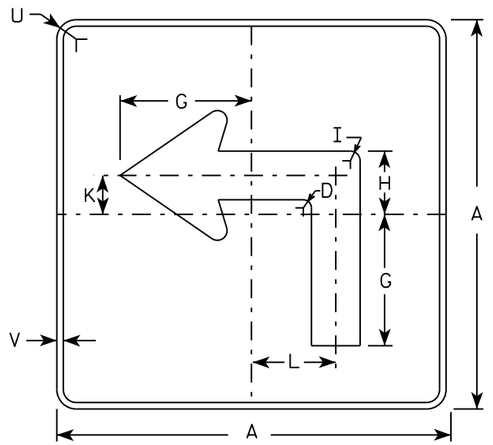
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 628	E



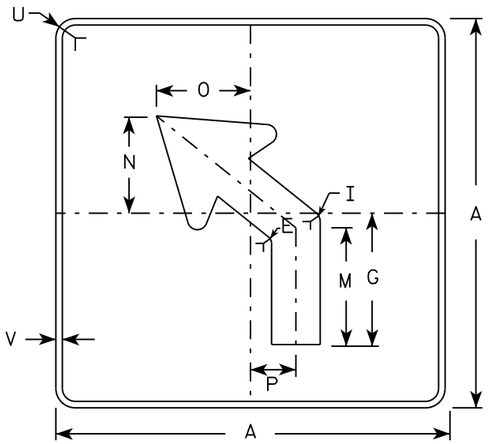
M5-1L
MM5-1L
MO5-1L
MP5-1L



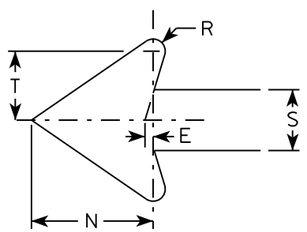
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

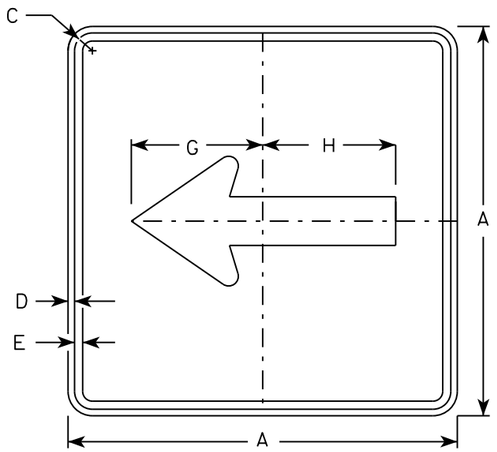
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

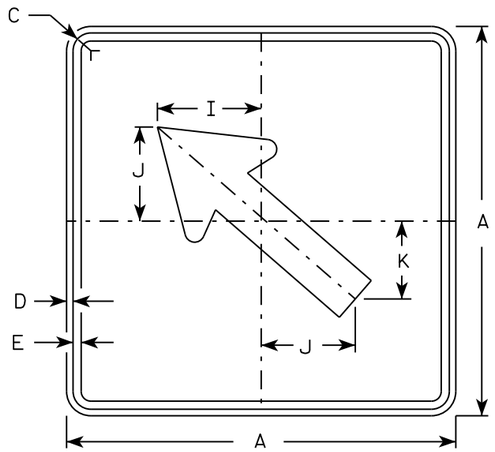
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



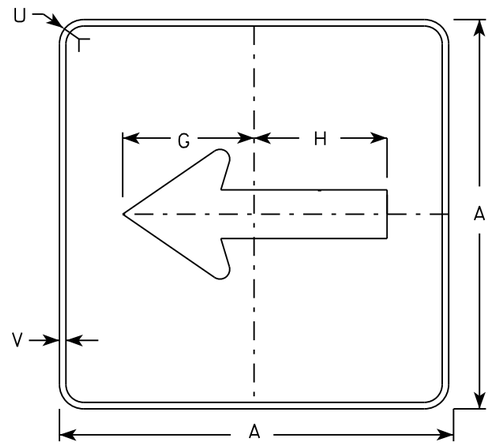
M6-1
MM6-1
MO6-1
MP6-1



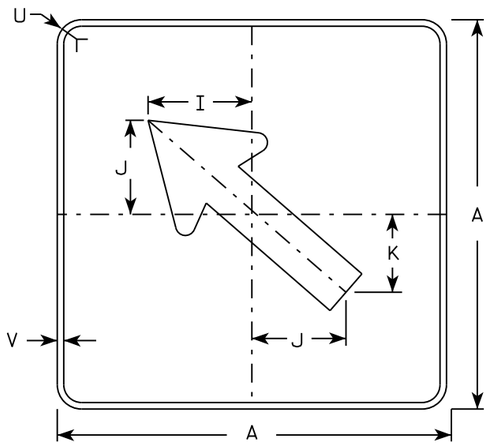
M6-2
MM6-2
MO6-2
MP6-2

NOTES

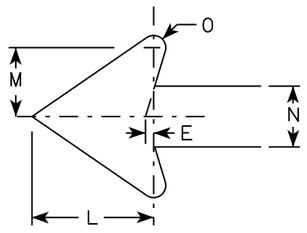
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

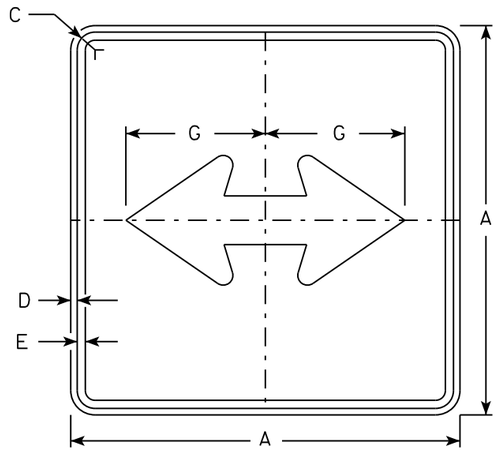
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

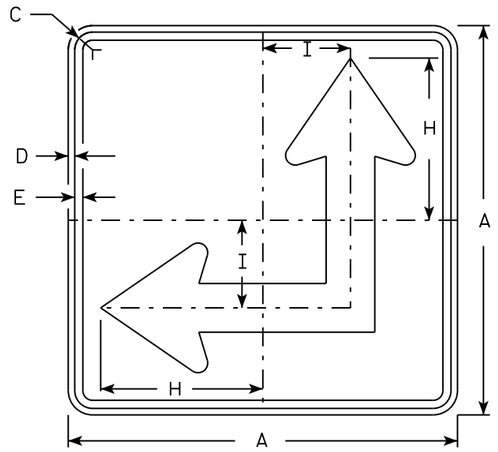
DATE 10/15/15 PLATE 630 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



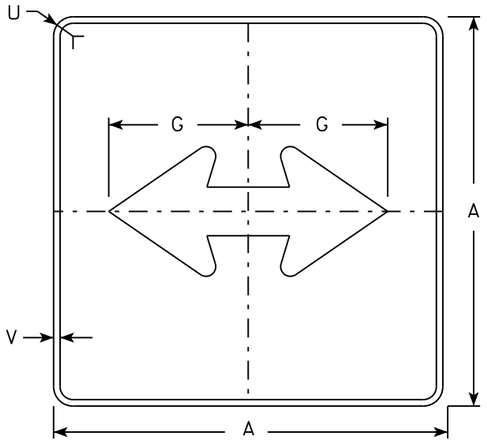
M6-4
MM6-4
MO6-4
MP6-4



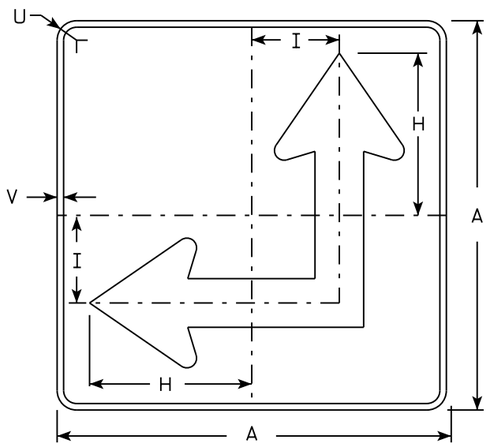
M6-6
MM6-6
MO6-6
MP6-6

NOTES

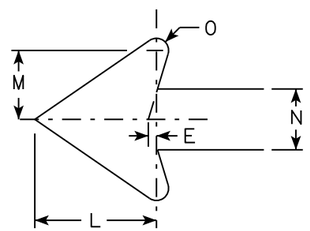
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

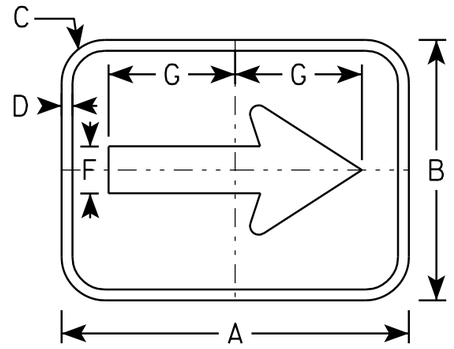
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

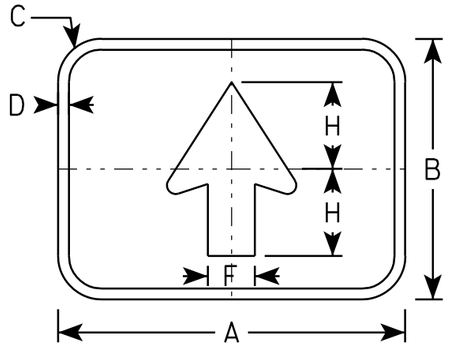
DATE 10/15/15 PLATE 631 M6-4.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

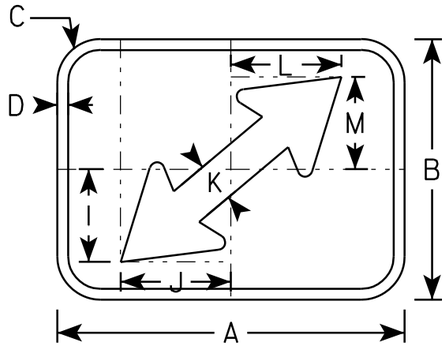
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



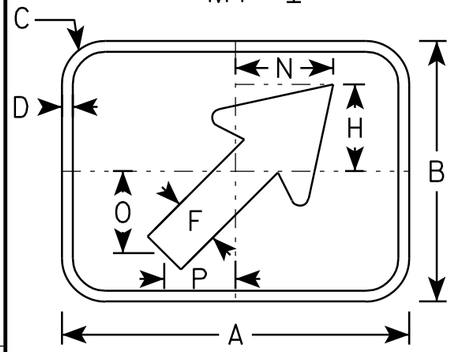
M7-1



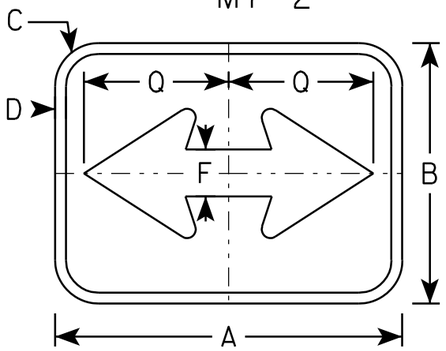
M7-2



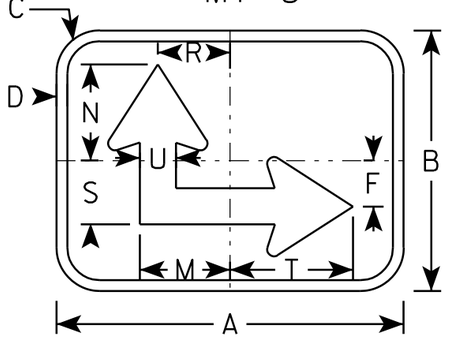
M7-3



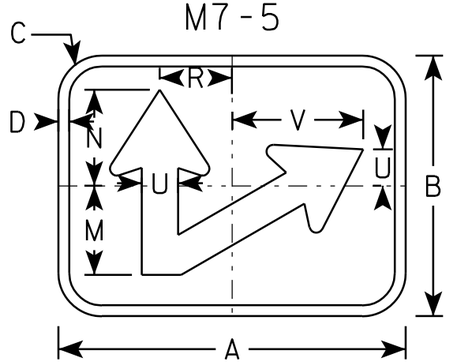
M7-4



M7-5



M7-6



M7-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message -White
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	12	9	1 1/2	3/8		1 5/8	4 3/8	3	3 1/4	3 3/4	1 3/8	3 7/8	3 1/8	3 3/8	2 7/8	2 1/2	5	2 1/2	2 1/4	4 1/4	1 1/4	4 1/2					.75
3																											
4																											
5																											

STANDARD SIGN
M7 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 05/04/10 PLATE NO. M7-1.1

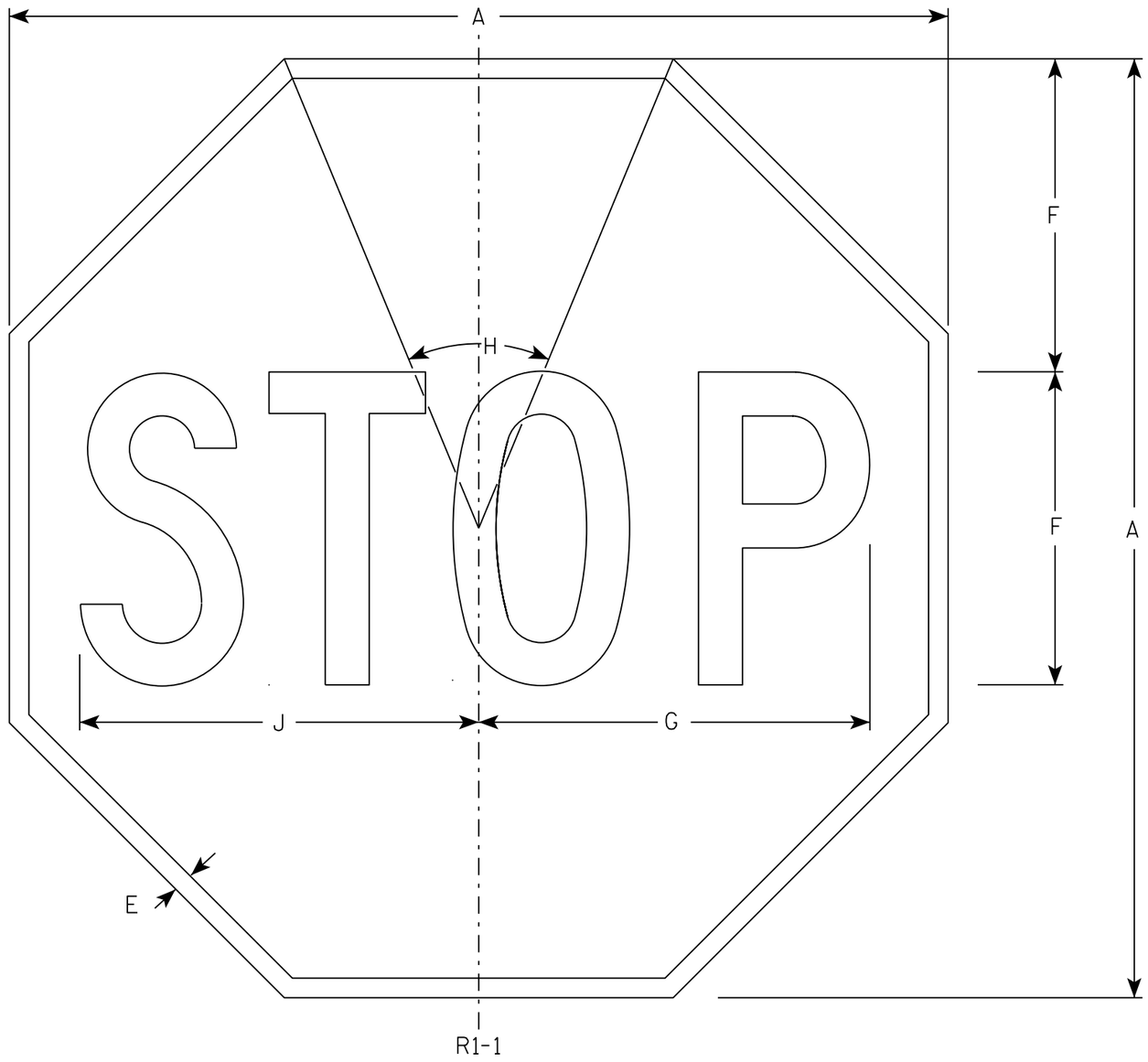
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 632	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M71.DGN PLOT DATE : 28-MAY-2010 08:14 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 5.237442:1.000000

WISDOT/CADDS SHEET 42

7

7



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

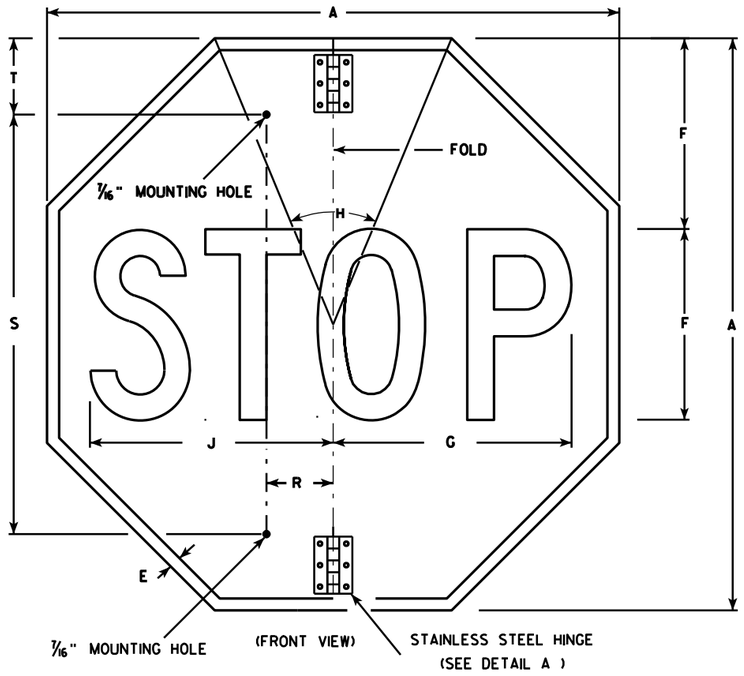
STANDARD SIGN
R1-1

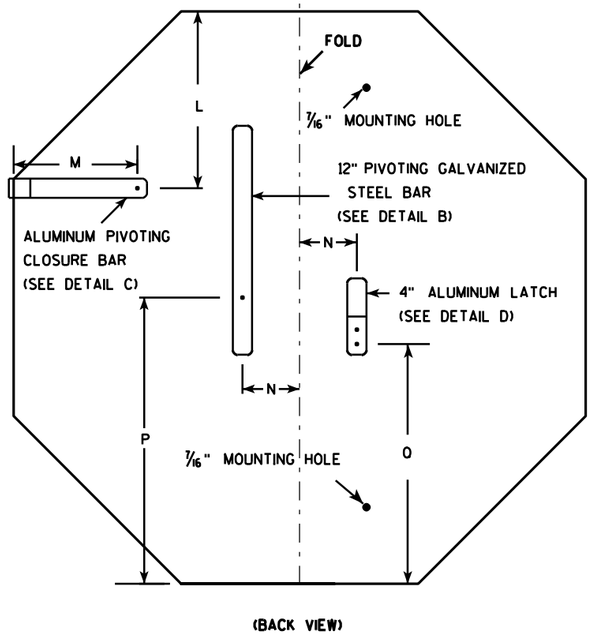
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

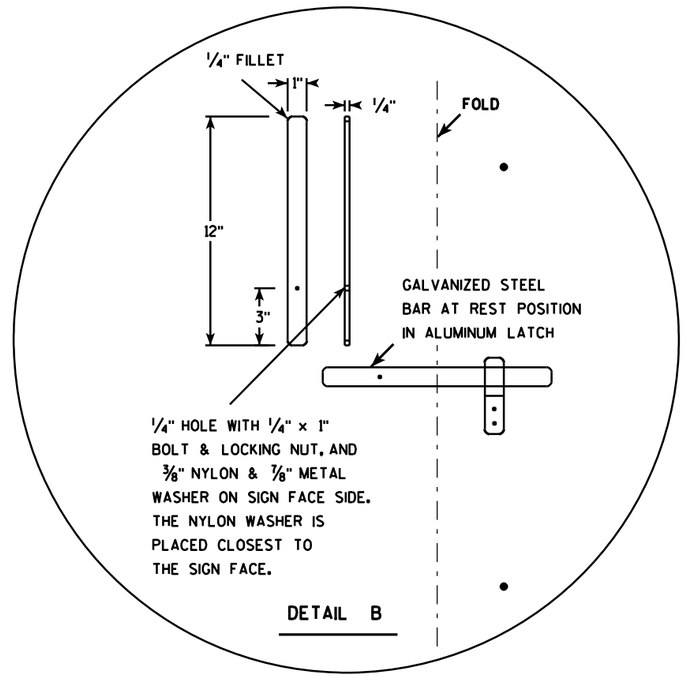
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 633	E



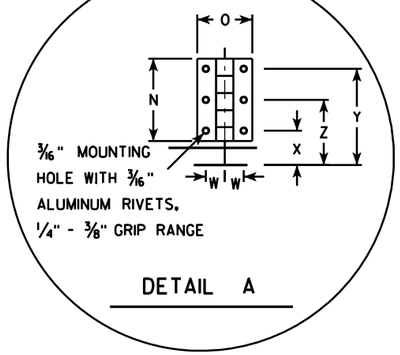


NOTES

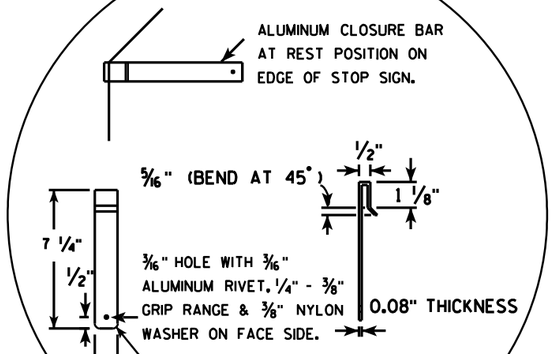
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



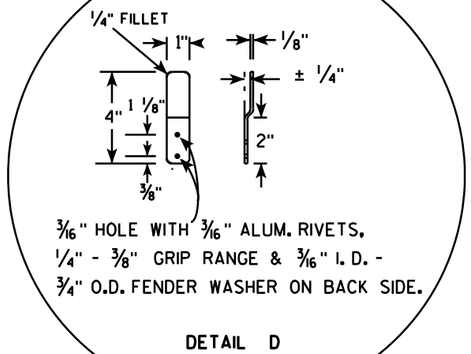
DETAIL B



DETAIL A



DETAIL C



DETAIL D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

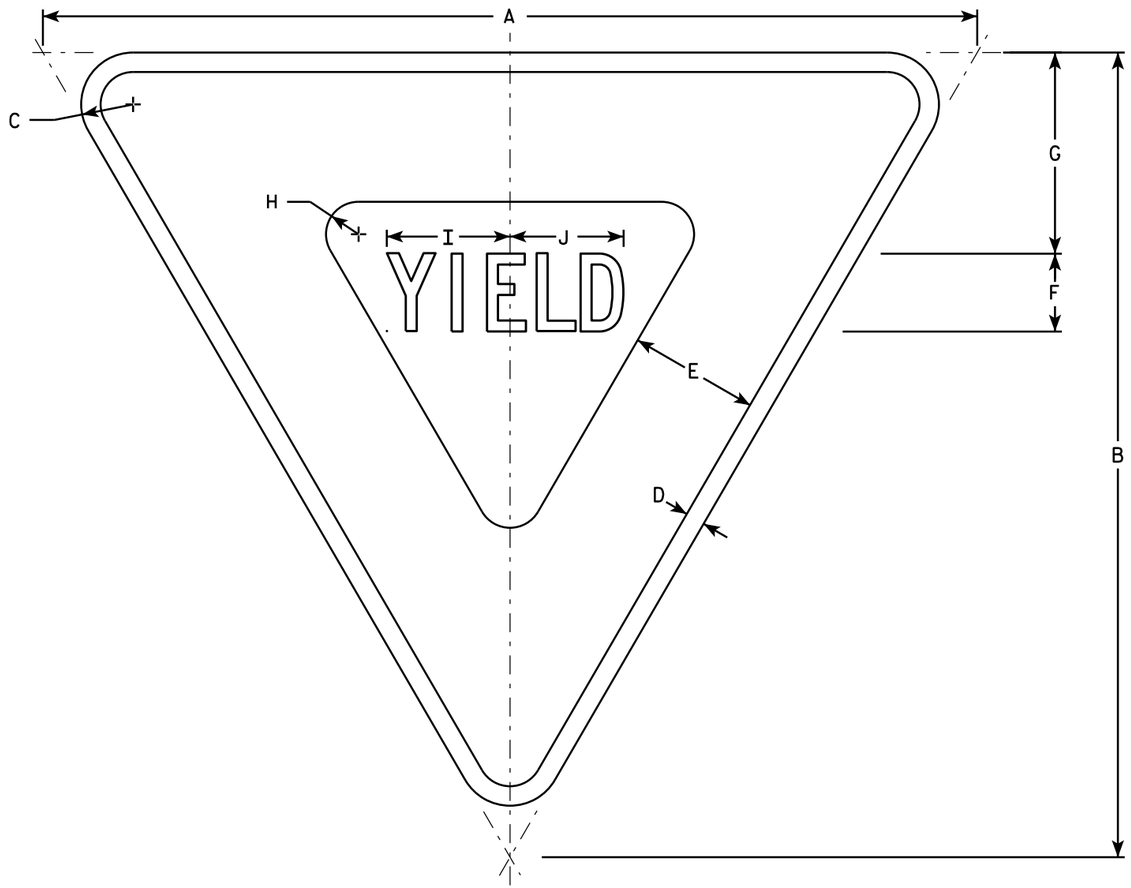
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 634 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R11F.DGN PLOT DATE : 02-DEC-2010 15:26 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 7.945391:1.000000

WISDOT/CADDS SHEET 42

7

7



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

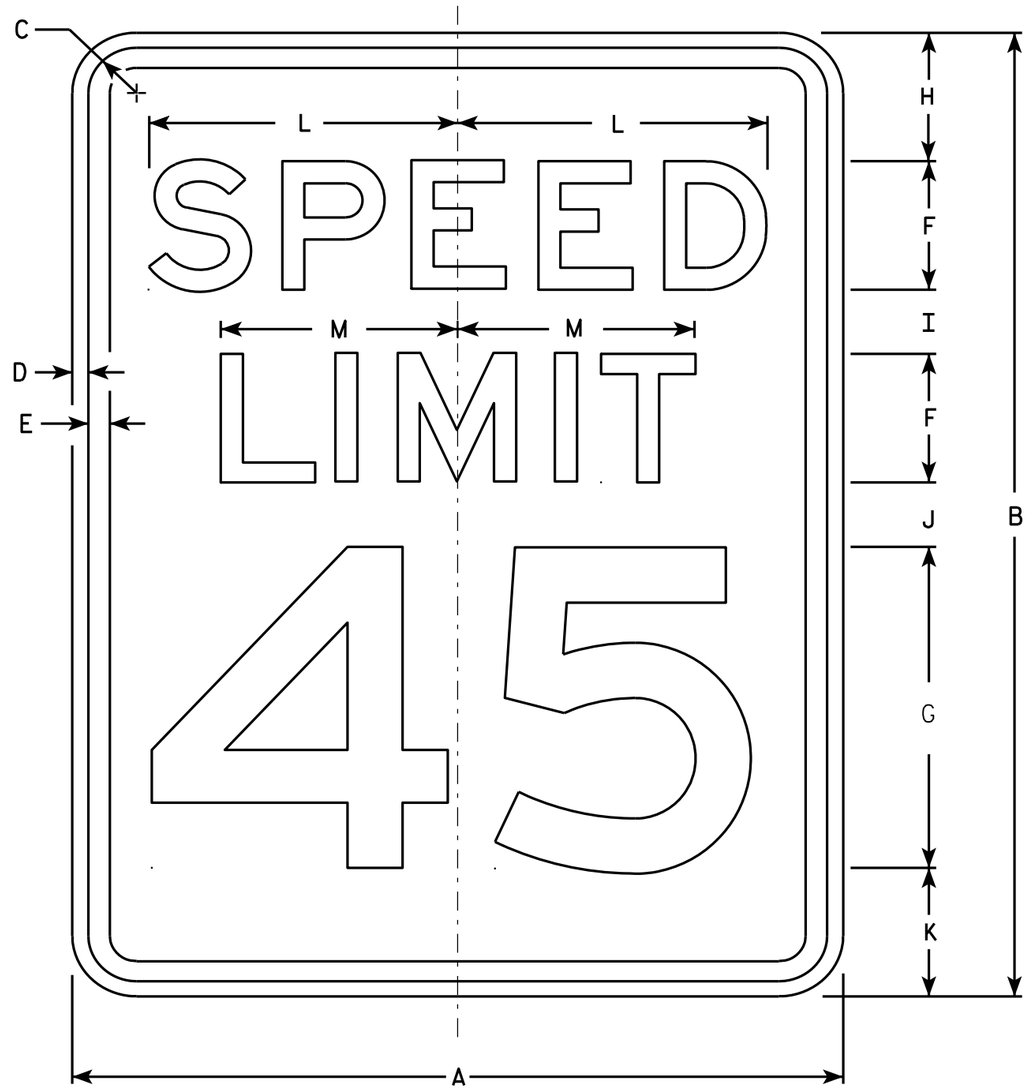
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE P1-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

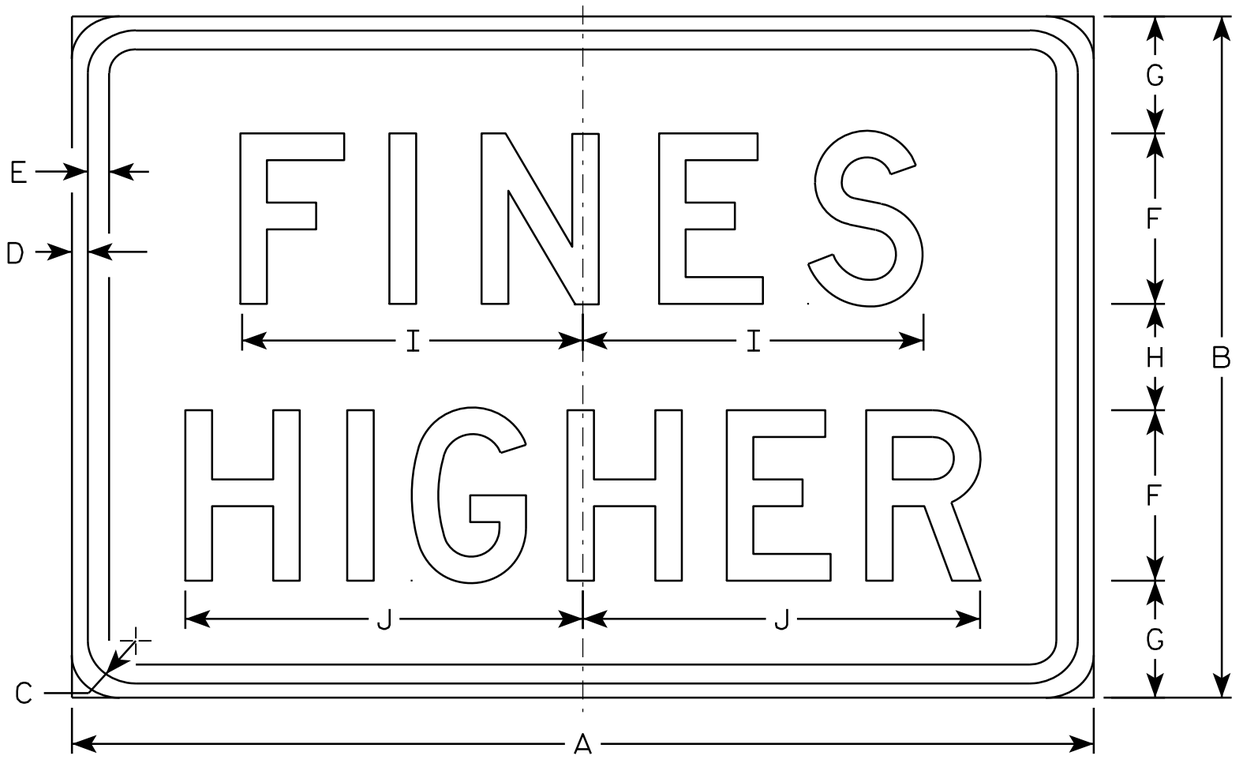
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 636	E



R2-6P

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

STANDARD SIGN
R2-6P

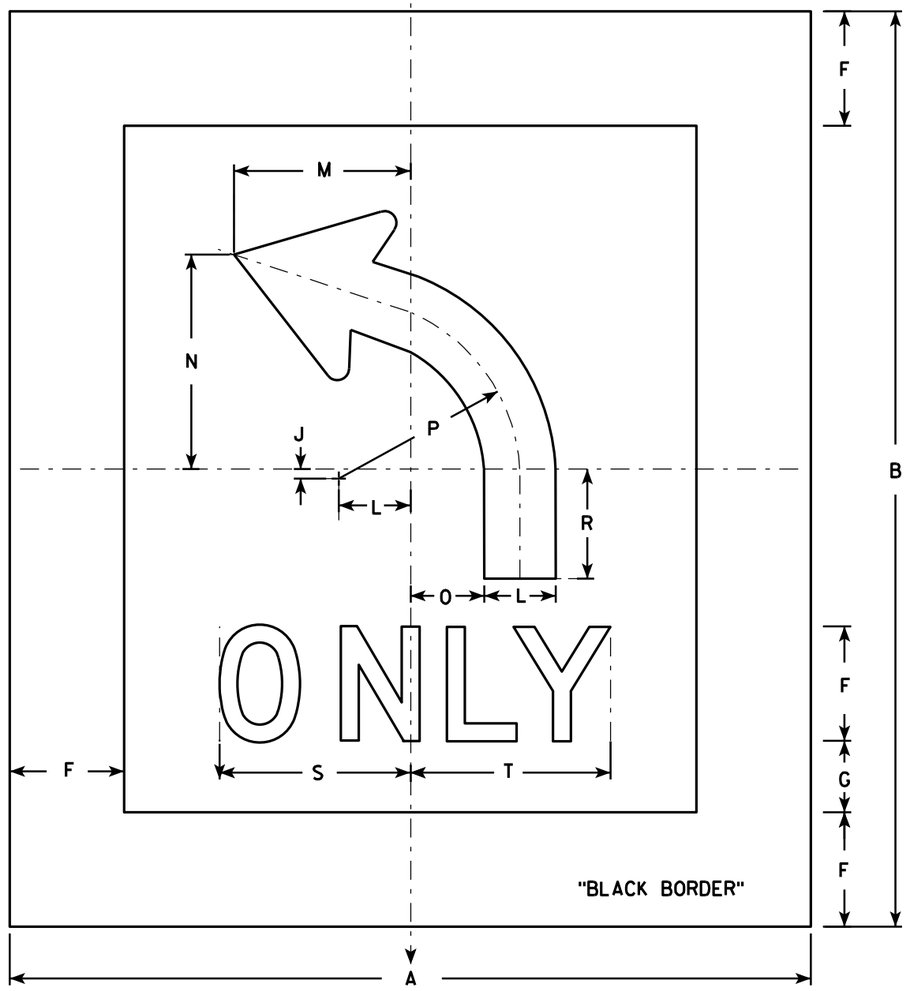
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 637 | E

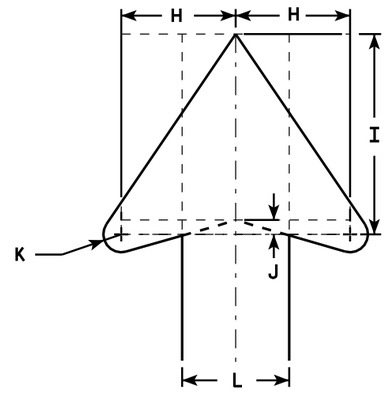
7



R3-5L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
5. R3-5R is the same as R3-5L except curved portion of arrow points right.
6. The 6" border is non-reflective black.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	42	48				6	3 3/4	4	7	1/2	5/8	3 3/4	9 1/4	11 1/4	3 7/8	9 1/2		5 3/4	10	10 1/2							1.26
2M	42	48				6	3 3/4	4	7	1/2	5/8	3 3/4	9 1/4	11 1/4	3 7/8	9 1/2		5 3/4	10	10 1/2							1.26
3																											
4																											
5																											

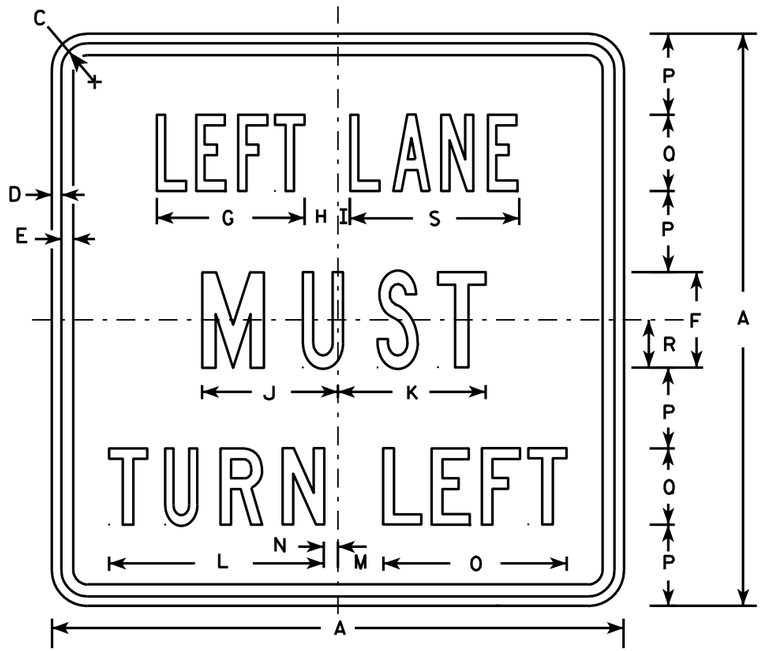
STANDARD SIGN
R3-5

WISCONSIN DEPT OF TRANSPORTATION

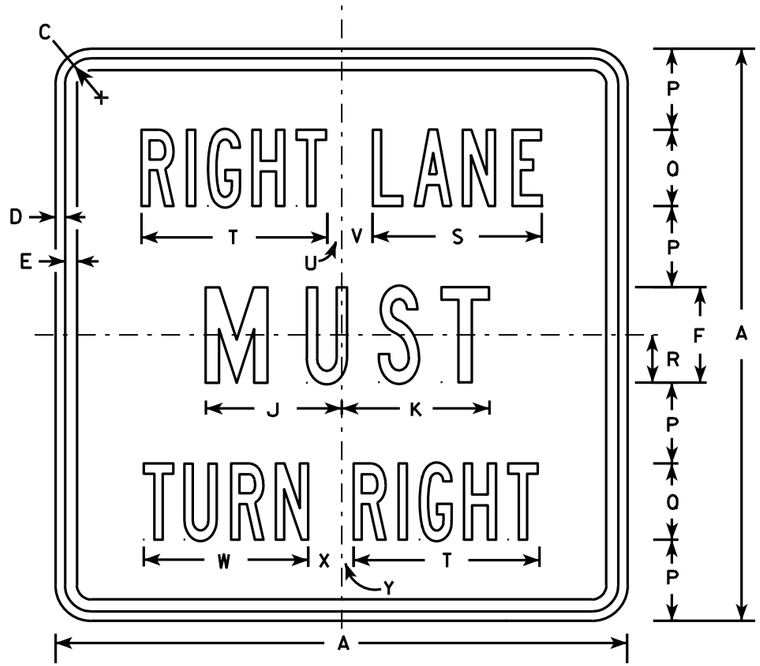
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/24/11 PLATE NO. R3-5.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 638 | E



R3-7L



R3-7R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

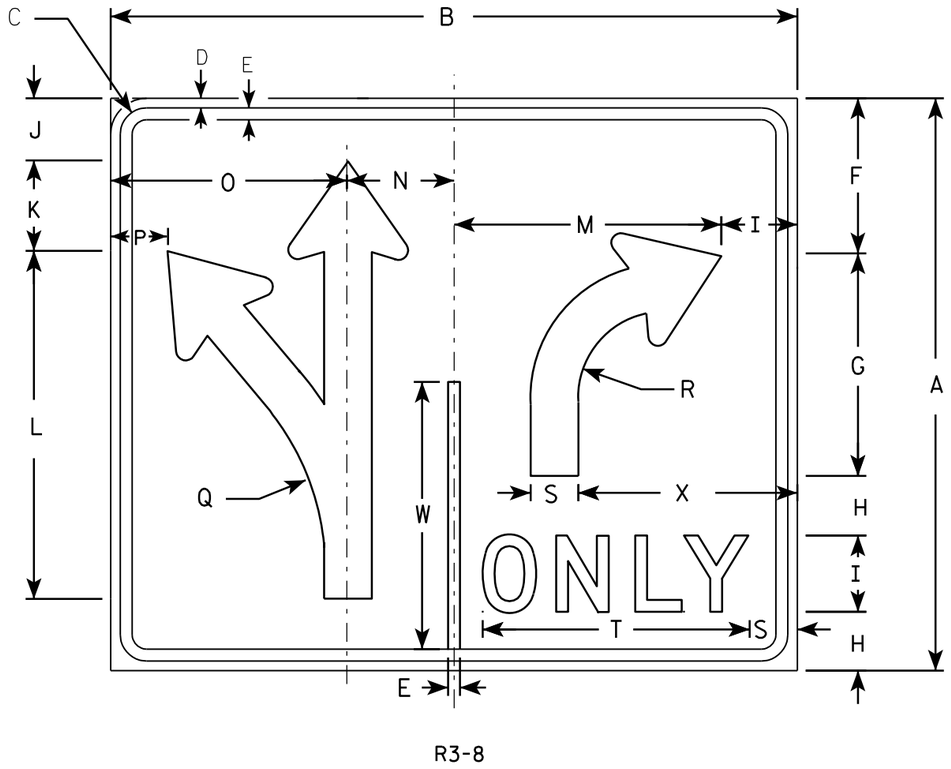
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

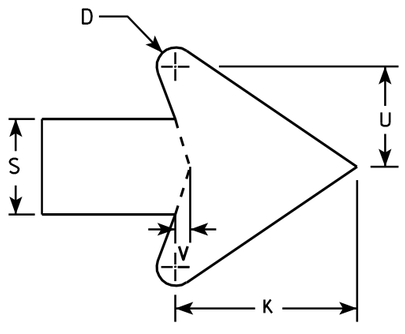
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 639 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R37.DGN PLOT DATE : 18-MAR-2011 09:43 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 7.945391:1.000000

WISDOT/CADDS SHEET 42



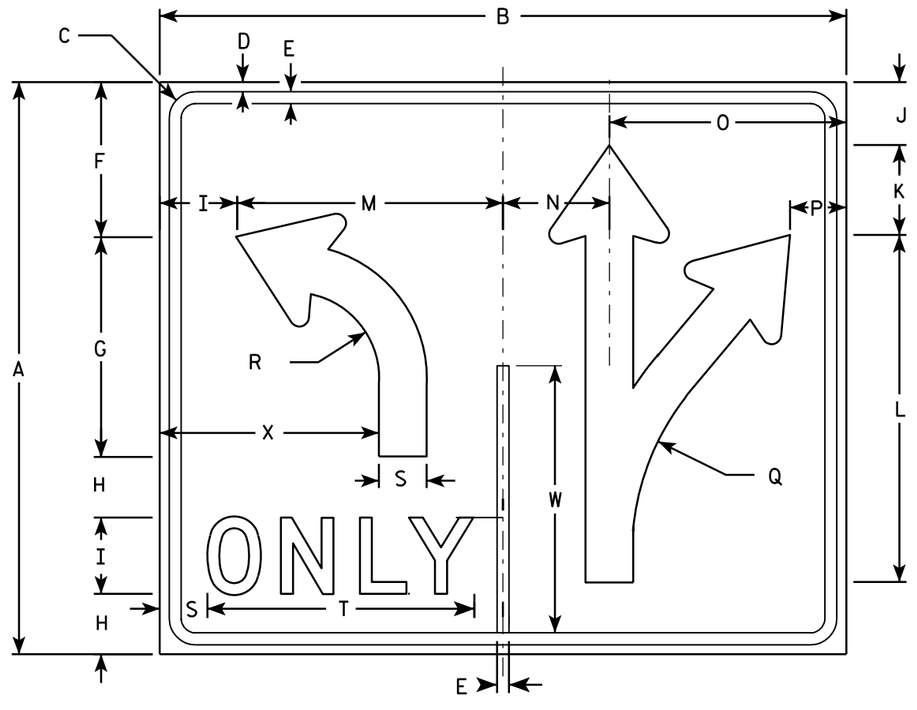
R3-8



ARROW DETAIL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-8A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0

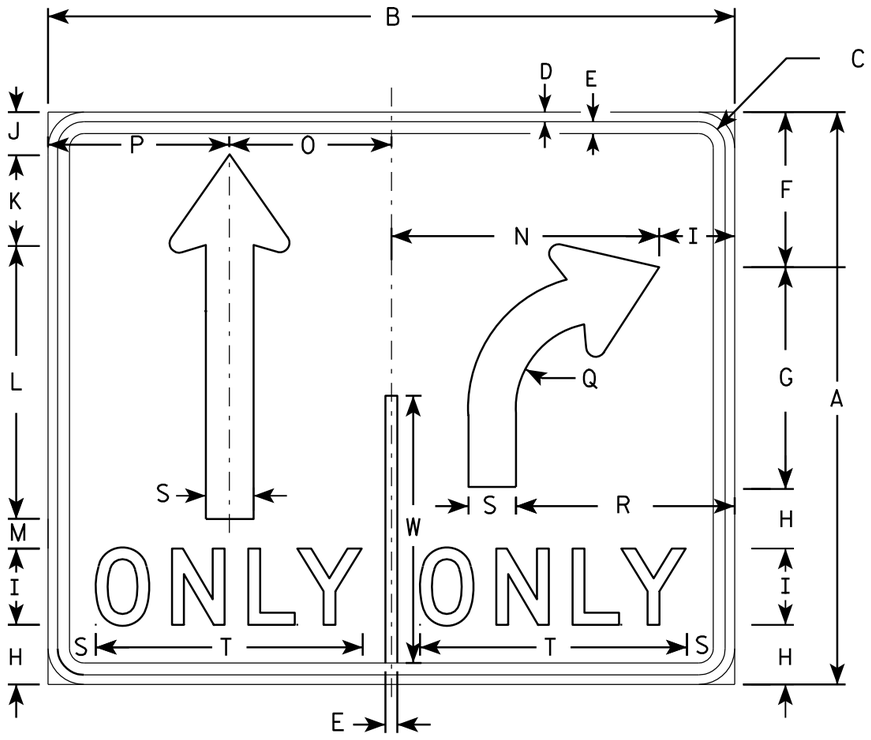
STANDARD SIGN
R3-8 & R3-8A

WISCONSIN DEPT OF TRANSPORTATION

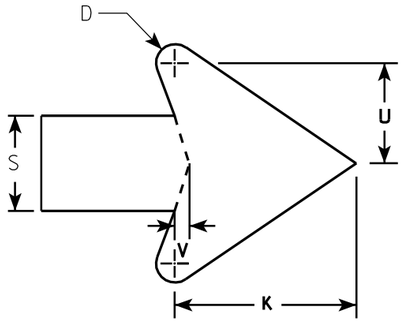
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 640	E



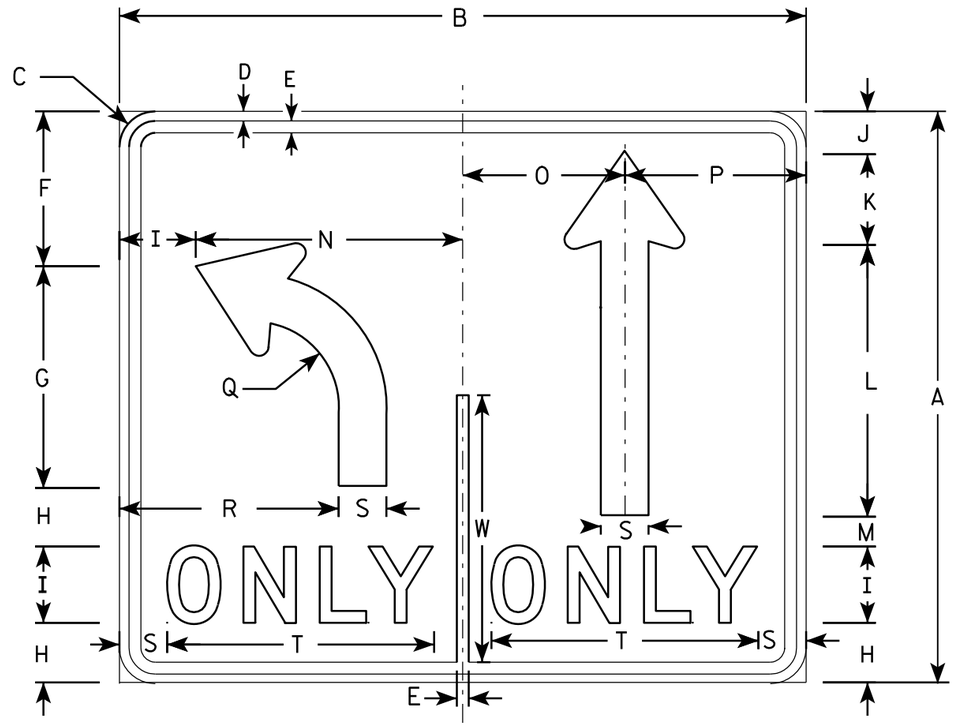
R3-8D



ARROW DETAIL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-8E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	14	8 1/2	9 1/2	4 1/2	11 1/2	2 1/2	14	2 5/8	3/8	14				7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	14	8 1/2	9 1/2	4 1/2	11 1/2	2 1/2	14	2 5/8	3/8	14				7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7 1/8	21 1/2	4 3/4	21	12 3/4	14 1/4	7 1/4	17 1/8	3 3/4	20 5/8	4	5/8	22 3/8				18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7 1/8	21 1/2	4 3/4	21	12 3/4	14 1/4	7 1/4	17 1/8	3 3/4	20 5/8	4	5/8	22 3/8				18.0

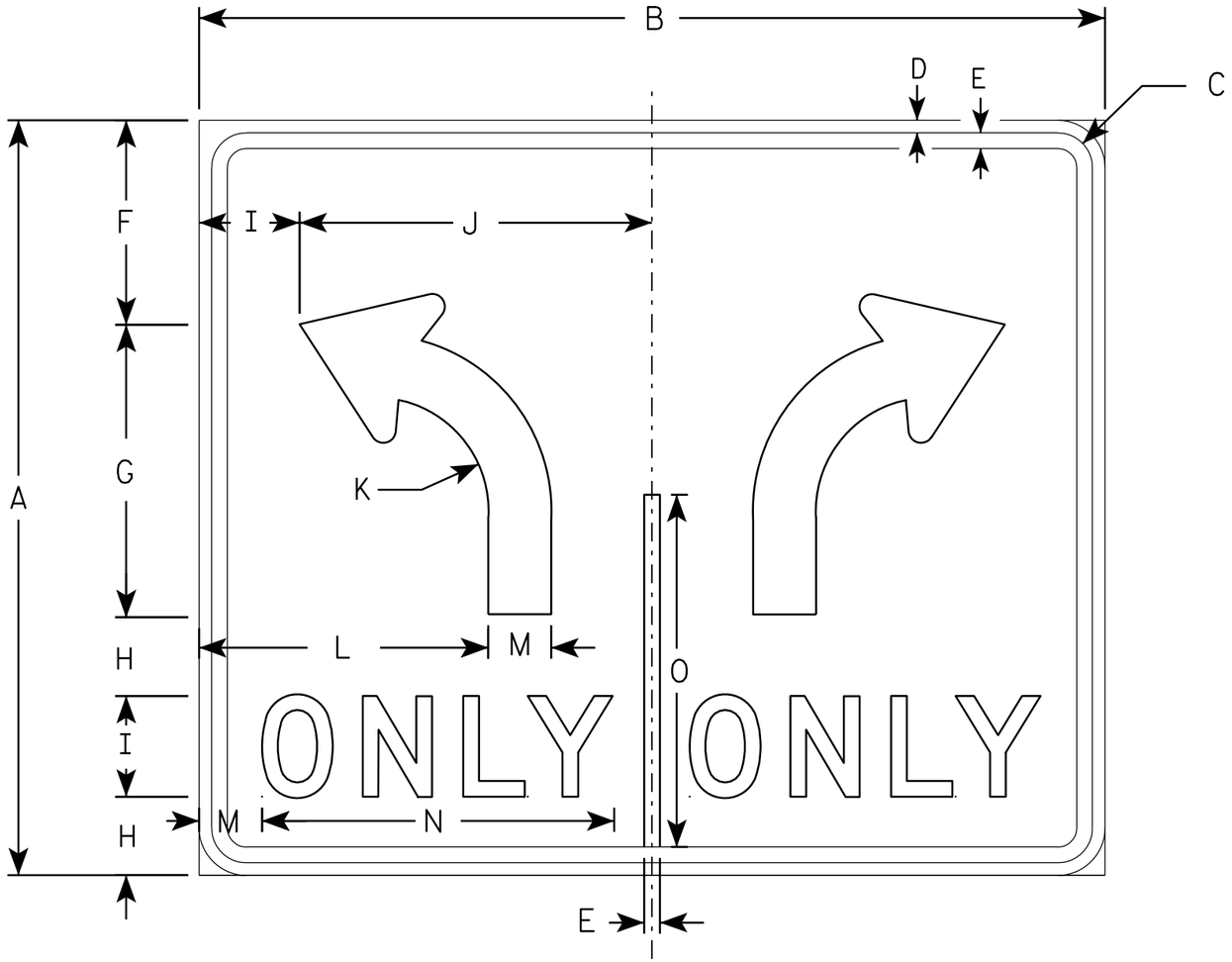
STANDARD SIGN
R3-8D & R3-8E

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8D.2

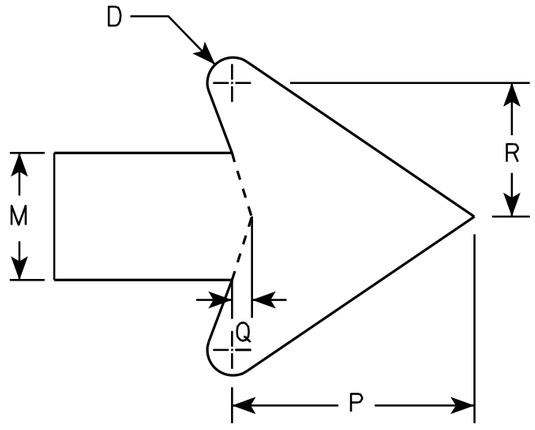
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 641	E



R3-8F

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	14	4 1/2	11 1/2	2 1/2	14	14	4 3/4	3/8	2 5/8									7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	14	4 1/2	11 1/2	2 1/2	14	14	4 3/4	3/8	2 5/8									7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	21	7 1/4	17 1/4	3 3/4	20 5/8	22 3/8	7 1/8	5/8	4									18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	21	7 1/4	17 1/4	3 3/4	20 5/8	22 3/8	7 1/8	5/8	4									18.0

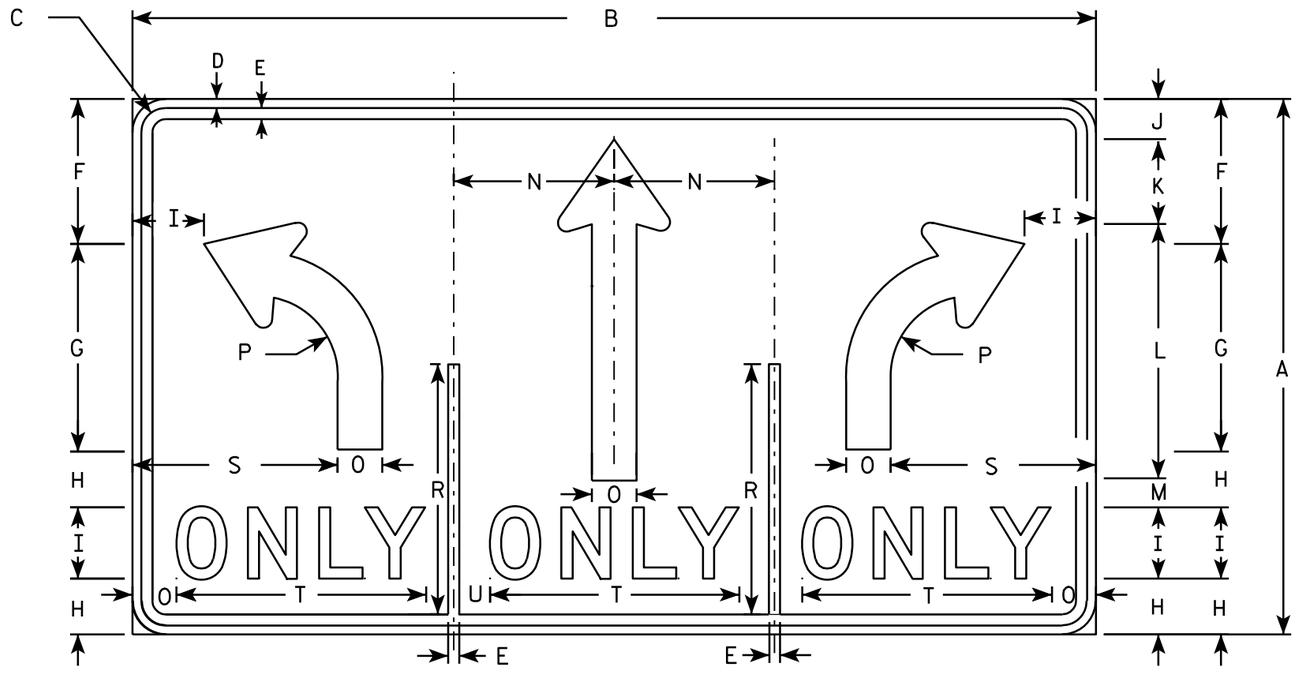
STANDARD SIGN
R3-8F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8F.2

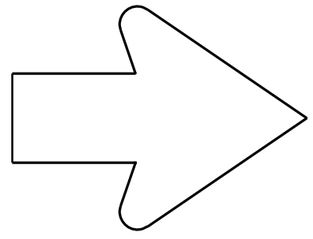
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 642 | E



R3-8W

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SEE R3-8 FOR ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
3																											
4	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 3/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0
5	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 7/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0

STANDARD SIGN
R3-8W

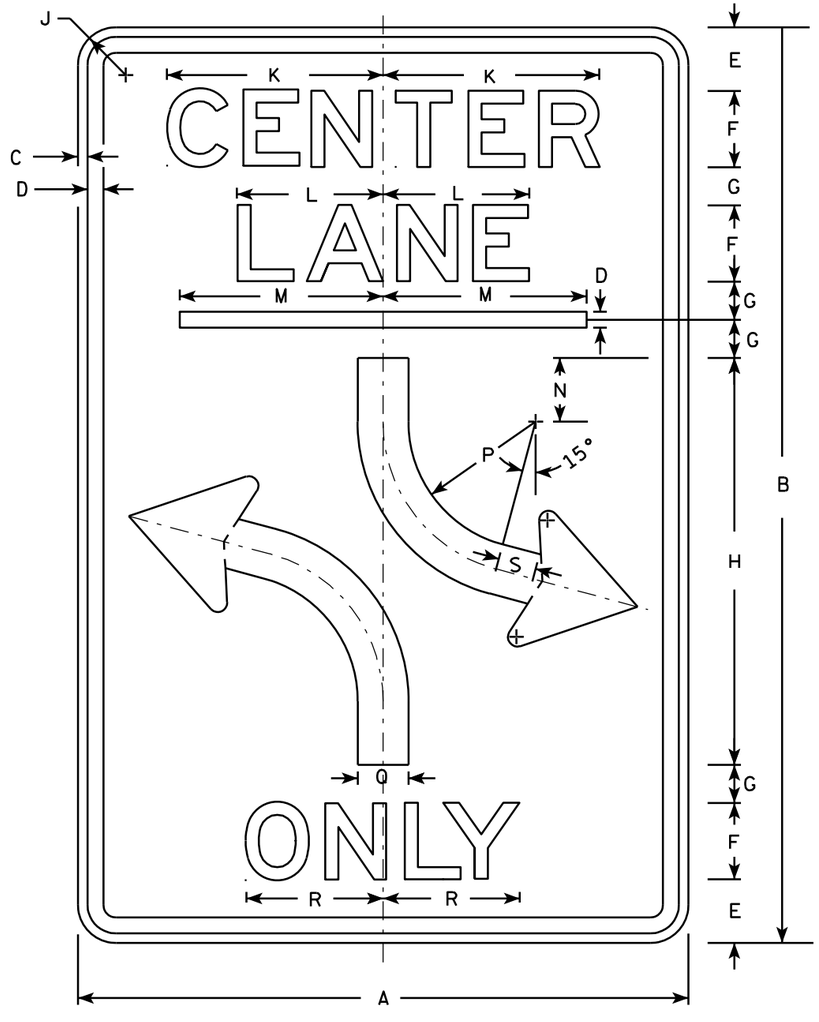
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8W.4

PROJECT NO:

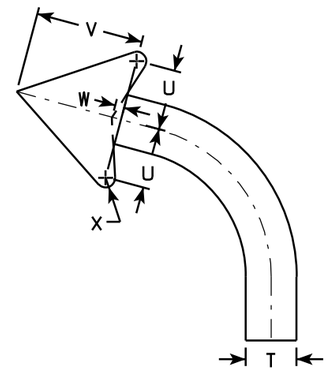
SHEET NO: 643 E



R3-9B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	3/8	1/2	2 1/2	3	1 1/2	16		1 1/2	8 1/2	5 3/4	8	2 1/2		6	2	5 1/8	1 1/2		2 3/8	4 3/8	3/8				6.0
2M	24	36	3/8	1/2	2 1/2	3	1 1/2	16		1 1/2	8 1/2	5 3/4	8	2 1/2		6	2	5 1/8	1 1/2		2 3/8	4 3/8	3/8				6.0
3	36	48	5/8	7/8	3 1/2	5	1 1/2	20		2 1/4	14 1/8	9 1/2	12	3		4	3	9 7/8	2		3 1/2	6 1/8	1/2				12.0
4																											
5																											

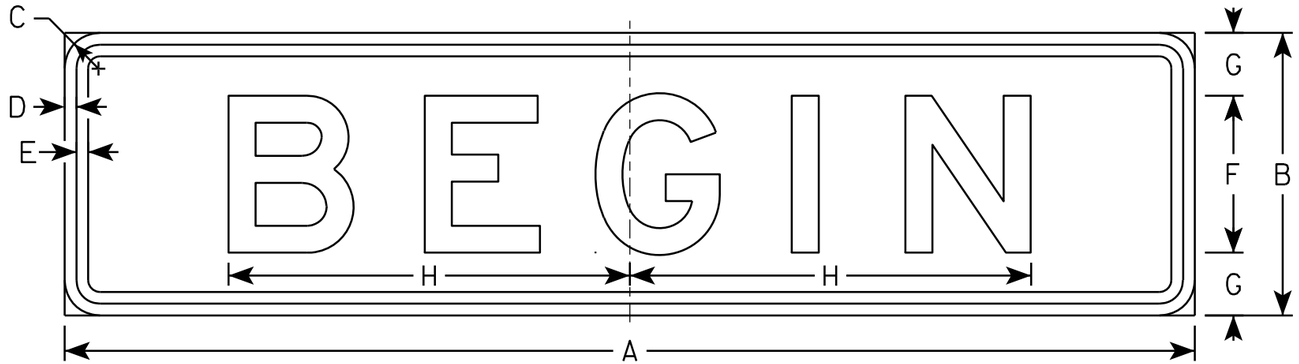
STANDARD SIGN
R3-9B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-9B.5

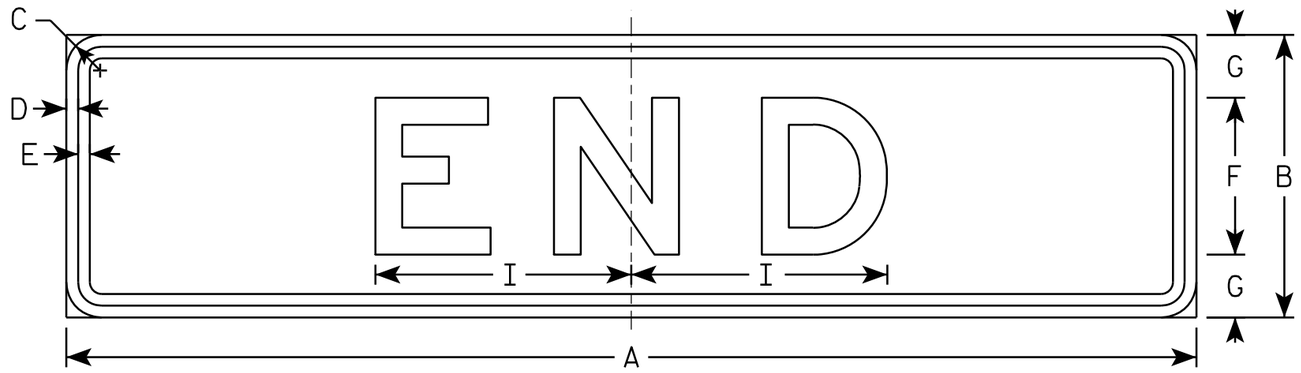
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 644	E



R3-9C

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-9D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	6	1 1/8	3/8	3/8	3	1 1/2	7 3/4	4 7/8																		1.0
2M	24	6	1 1/8	3/8	3/8	3	1 1/2	7 3/4	4 7/8																		1.0
3	36	9	1 1/8	3/8	3/8	5	2	12 3/4	8 1/8																		1.86
4																											
5																											

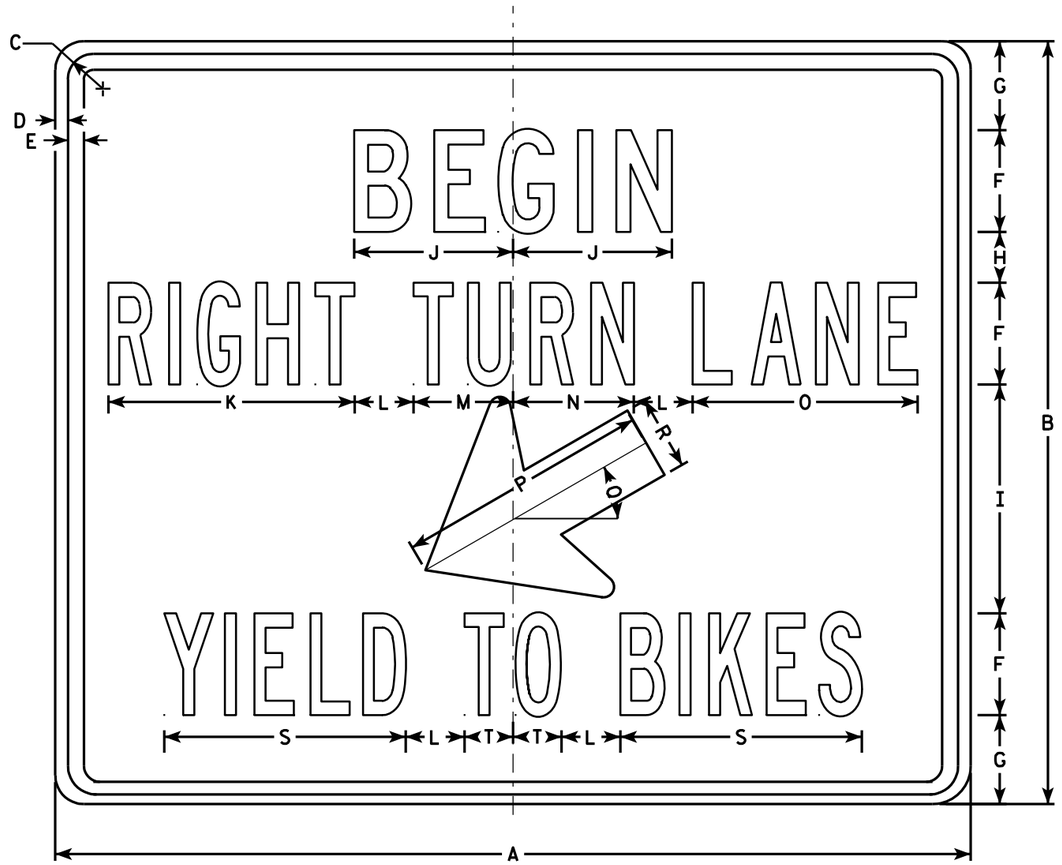
STANDARD SIGN
R3-9C & R3-9D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-9C.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 645	E



R4-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C
   Lines 2 & 3 are Series B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	30	1 3/8	1/2	5/8	4	3 1/2	2	9	6 1/4	9 3/4	2 3/8	3 7/8	4 3/4	8 7/8	10	30°	2 7/8	9 1/2	1 7/8							7.5
2M	36	30	1 3/8	1/2	5/8	4	3 1/2	2	9	6 1/4	9 3/4	2 3/8	3 7/8	4 3/4	8 7/8	10	30°	2 7/8	9 1/2	1 7/8							7.5
3																											
4																											
5																											

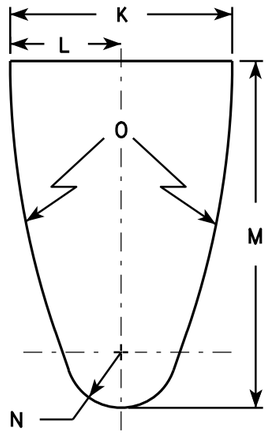
STANDARD SIGN
R4-4

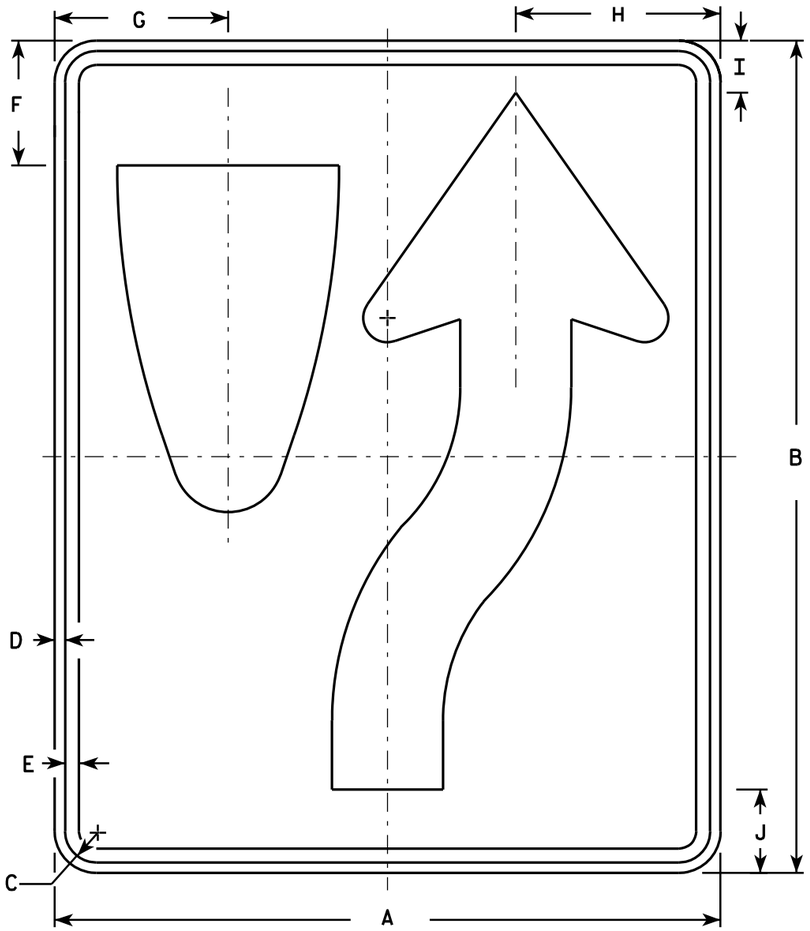
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew L Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-4.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 646 | E

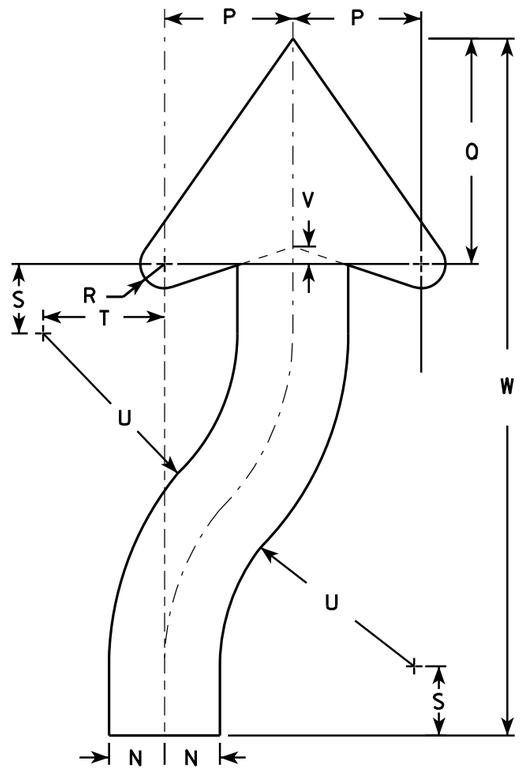




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 647	E

R4-11

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 3/8	1/2	5/8	4	3 1/8	10	2 1/2	3 7/8	8 5/8	8 3/4	8 1/2	1 1/4	1 3/4	7 7/8		10 3/8	2	1	11 1/4						6.25
2M	30		1 3/8	1/2	5/8	4	3 1/8	10	2 1/2	3 7/8	8 5/8	8 3/4	8 1/2	1 1/4	1 3/4	7 7/8		10 3/8	2	1	11 1/4						6.25
3																											
4																											
5																											

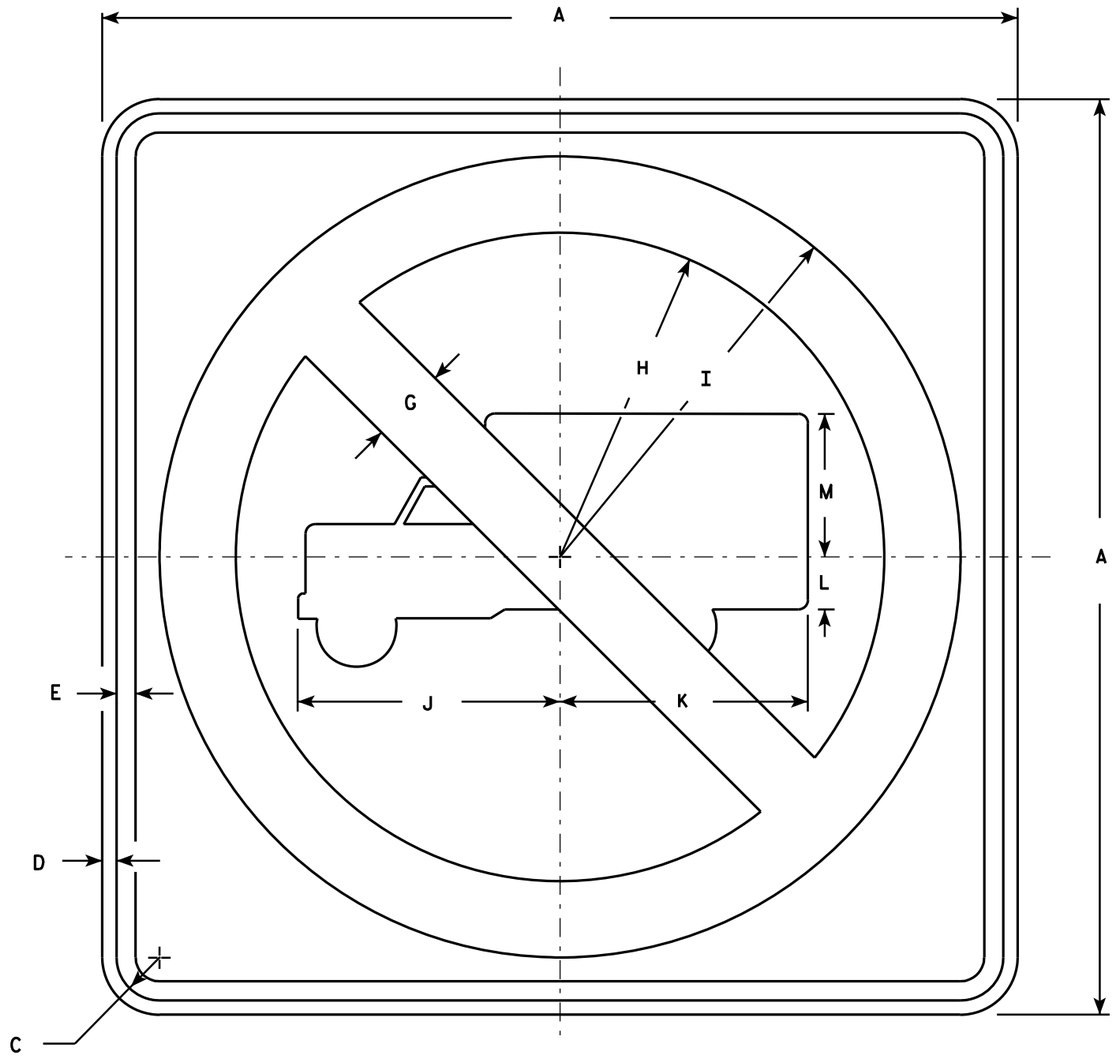
STANDARD SIGN
R4-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/16/15 PLATE R4-11.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



R5-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Circle & Diagonal - Reflective red.
   Truck Symbol & Border - Non-reflective black.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
2M	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
3	30		1 3/8	1/2	5/8		2 1/2	10 5/8	13 1/8	8 1/2	8 1/8	1 5/8	4 3/4														6.25
4	36		1 5/8	5/8	3/4		3	12 3/4	15 3/4	10 1/4	9 3/4	2	5 3/4														9.0
5	48		2 1/4	3/4	1		4	17	21	13 5/8	13	2 5/8	7 5/8														16.0

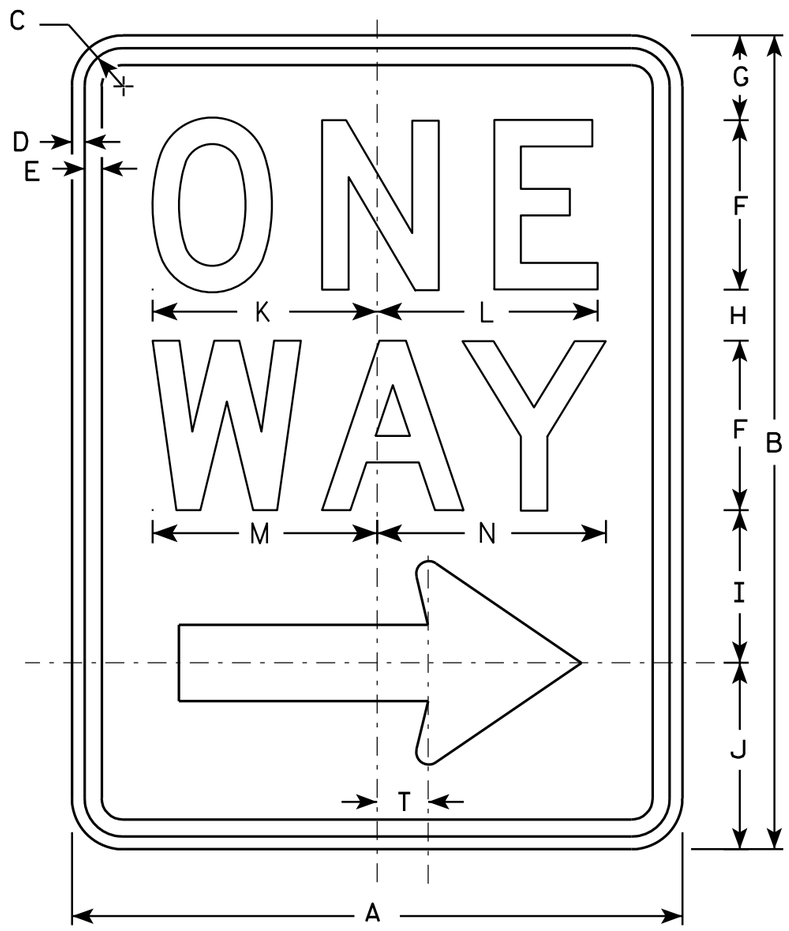
STANDARD SIGN
R5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-2.6

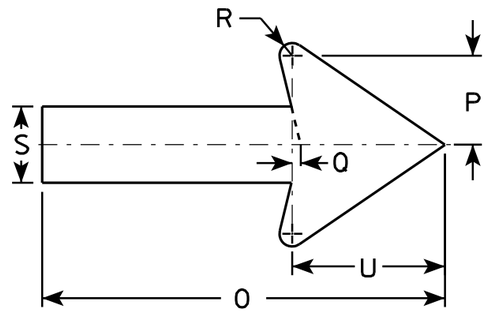
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 649	E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

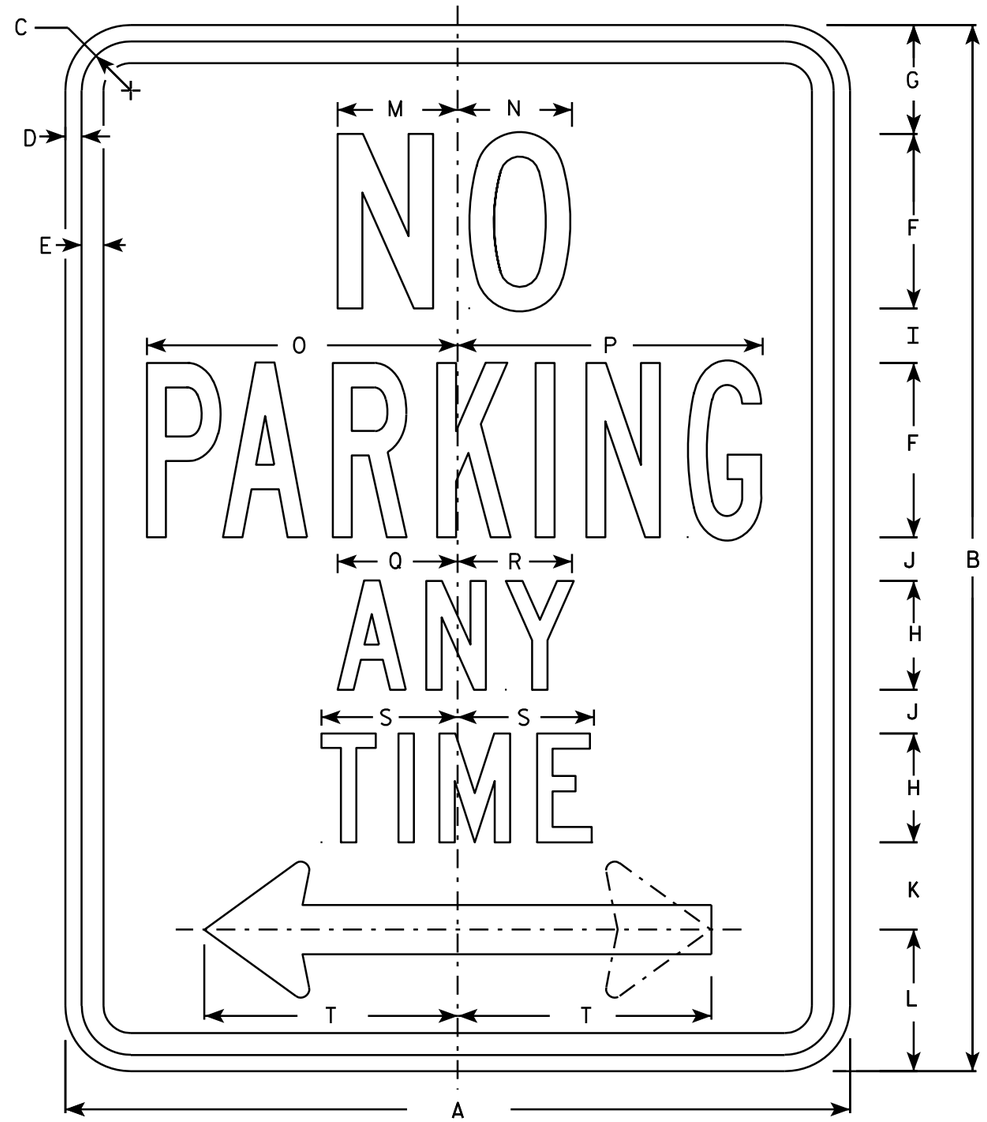
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

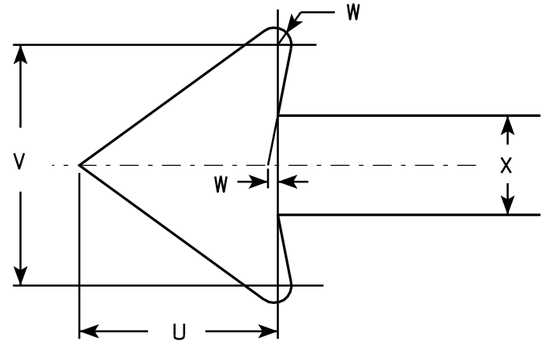
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 650	E



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

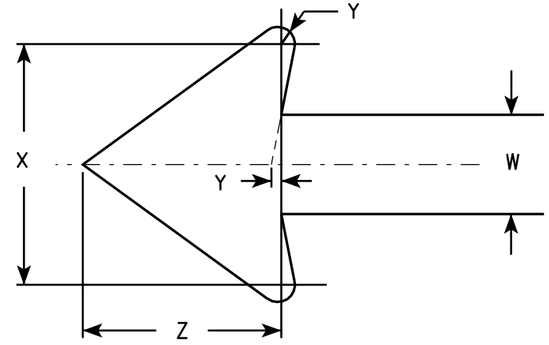
DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 651 | E

R7-51

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R7-51D (double arrow)
   R7-51R (right arrow)
   R7-51L (left arrow)
6. Lines 1, 3 and 4 are Series C.
   Line 2 is Series B.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	4 7/8	5/8	1 3/4	2 1/2	4 3/8	3 7/8	3/4	1 3/4	1/8	1 1/2	1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	5 3/4	1 1/8	1 1/2	3 1/8	5 1/2	5 7/8	1 1/8	2 5/8	1/4	2 1/4	3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
4																											
5																											

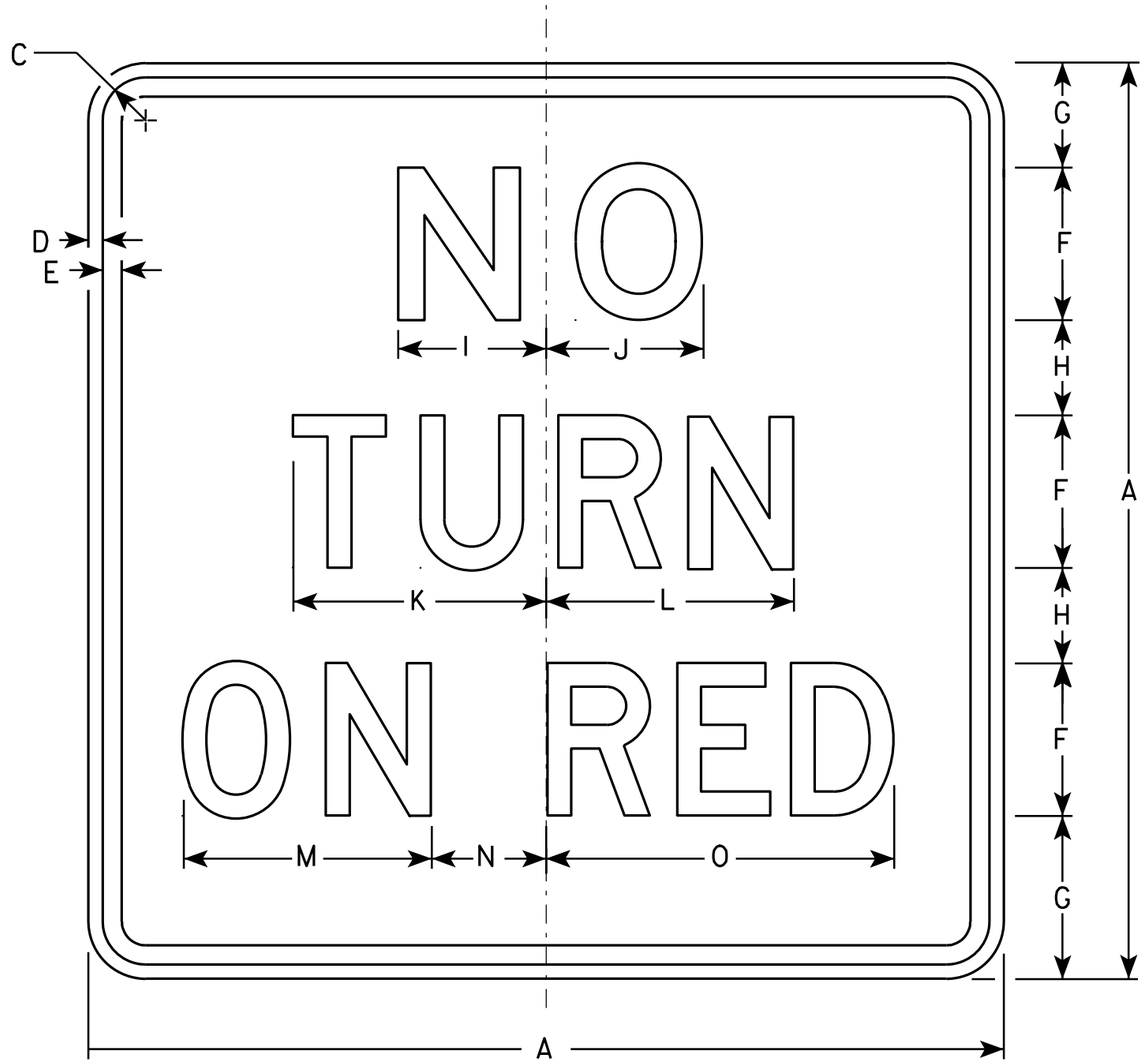
STANDARD SIGN
R7-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-51.6

PROJECT NO:	HWY:	COUNTY:			SHEET NO: 652	E



R10-11B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 5.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series E.
   Lines 2 and 3 are Series D.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8	3/8	3/8	3	2 3/4	1 3/4	3	3 1/8	5	4 7/8	5 1/4	1 7/8	7 1/8												2.25
2S	24		1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 7/8	4 1/8	6 5/8	6 1/2	6 1/2	3	9 1/8												4.0
2M	24		1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 7/8	4 1/8	6 5/8	6 1/2	6 1/2	3	9 1/8												4.0
3	30		1 3/8	1/2	5/8	5	4 1/2	3	4 7/8	5 1/4	8 1/4	8 1/8	7 3/4	4 1/8	11 7/8												6.25
4																											
5																											

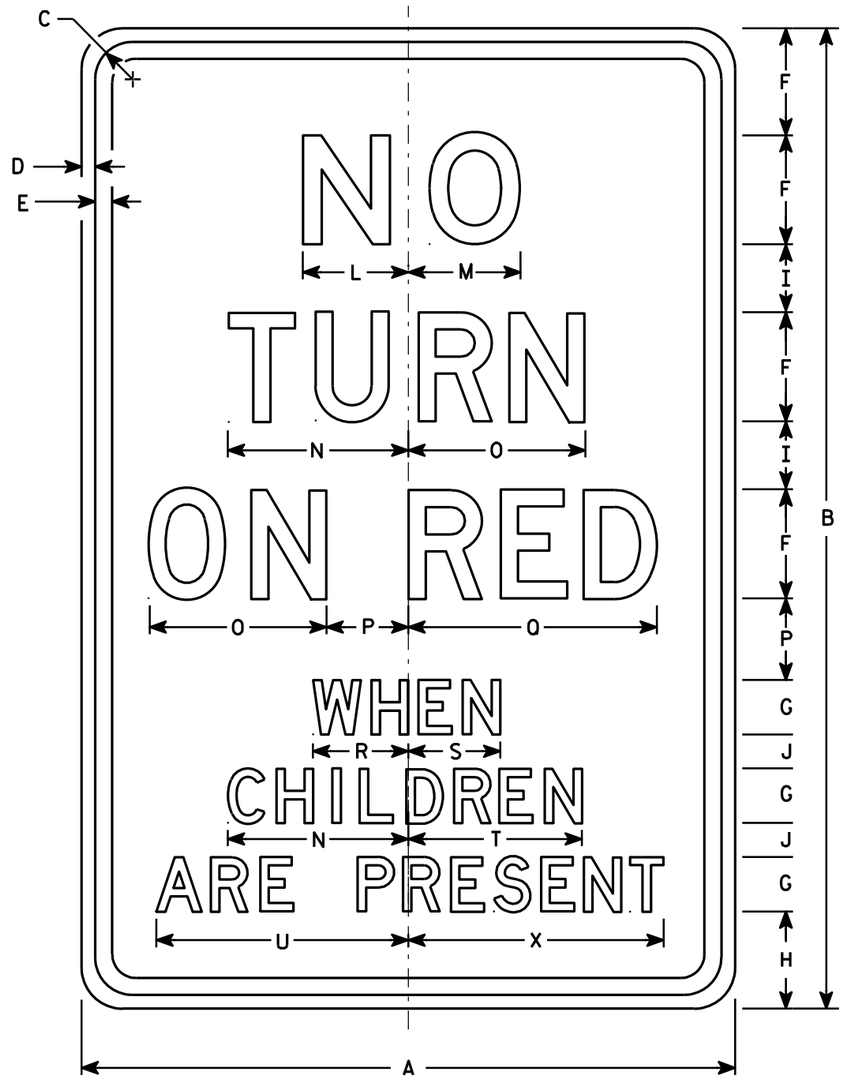
STANDARD SIGN
R10-11B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/5/11 PLATE NO. R10-11B.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 653 | E



R10-11S

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series E.
   Lines 2 thru 6 are Series D.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	2	3 1/2	2 1/2	1 1/4	4 1/2	3 7/8	4 1/8	6 5/8	6 1/2	3	9 1/8	3 1/2	3 3/8	6 3/8	9 1/4			9 3/8			6.0
2M	24	36	1 1/8	3/8	1/2	4	2	3 1/2	2 1/2	1 1/4	4 1/2	3 7/8	4 1/8	6 5/8	6 1/2	3	9 1/8	3 1/2	3 3/8	6 3/8	9 1/4			9 3/8			6.0
3																											
4																											
5																											

STANDARD SIGN
R10-11S

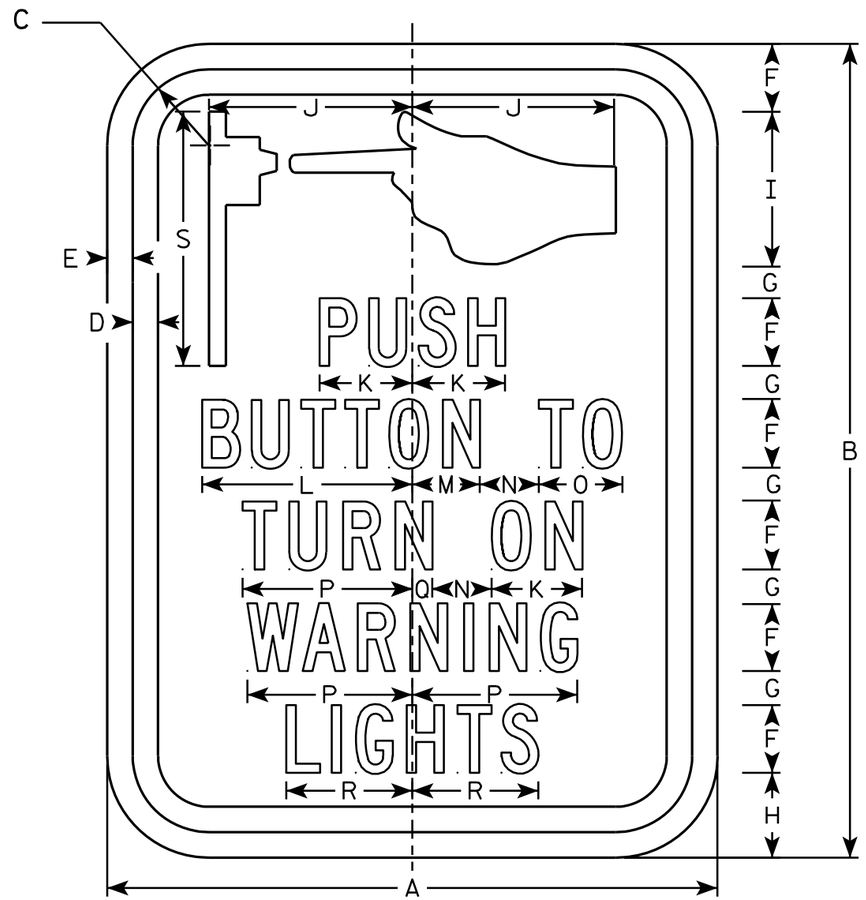
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-11S.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 654 | E



R10-25

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Size (1) comes as a decal only.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	6	9	1 1/8	3/8	3/8	3/4	3/8	1	1 3/4	2	7/8	2 1/8	5/8	5/8	7/8	1 5/8	1/4	1 1/4	2 7/8								.38
2S	9	12	1 1/8	3/8	3/8	1	1/2	1 1/4	2 1/4	3	1 3/8	3 1/8	1	7/8	1 1/4	2 1/2	1/4	1 7/8	3 3/4								.75
2M	9	12	1 1/8	3/8	3/8	1	1/2	1 1/4	2 1/4	3	1 3/8	3 1/8	1	7/8	1 1/4	2 1/2	1/4	1 7/8	3 3/4								.75
3																											
4																											
5																											

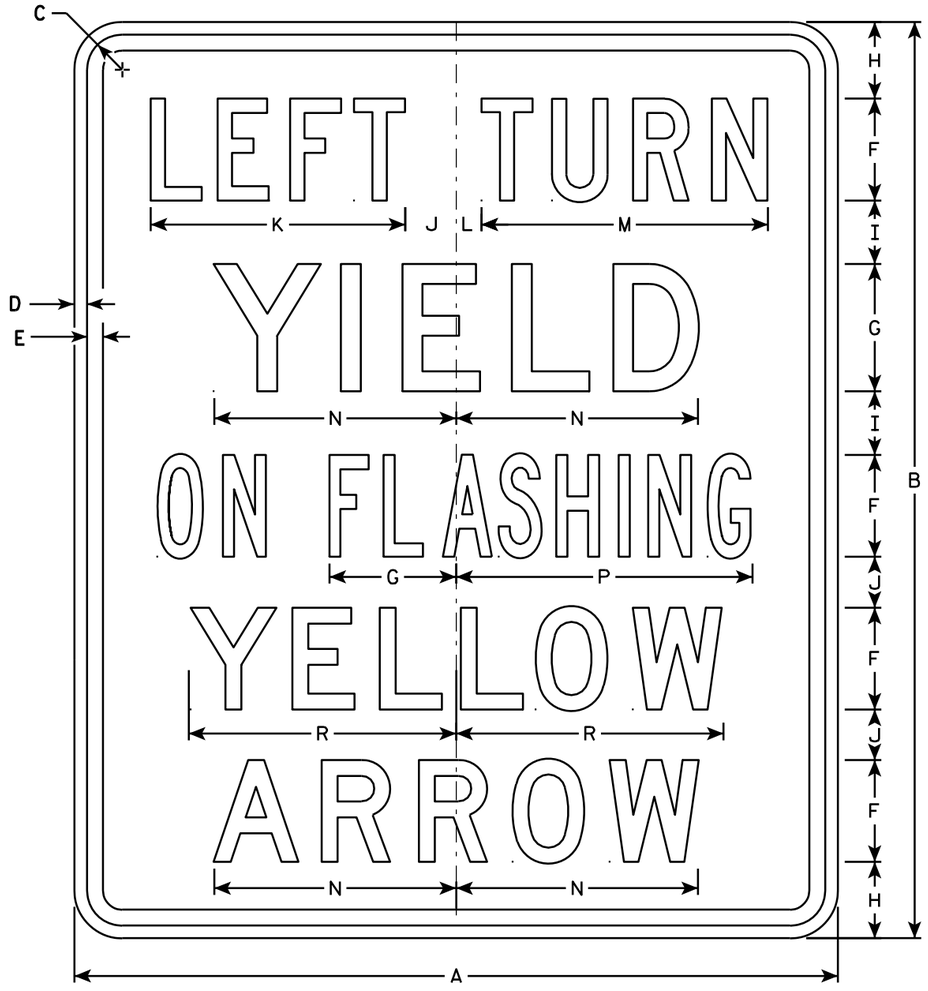
STANDARD SIGN
R10-25

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/10 PLATE NO. R10-25.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 655	E

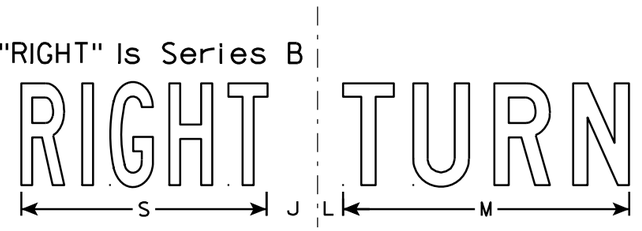


R10-50L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C.
   Lines 2, 4 and 5 are Series D.
   Line 3 is Series B.

"RIGHT" Is Series B



R10-50R

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
2M	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
3																											
4																											
5																											

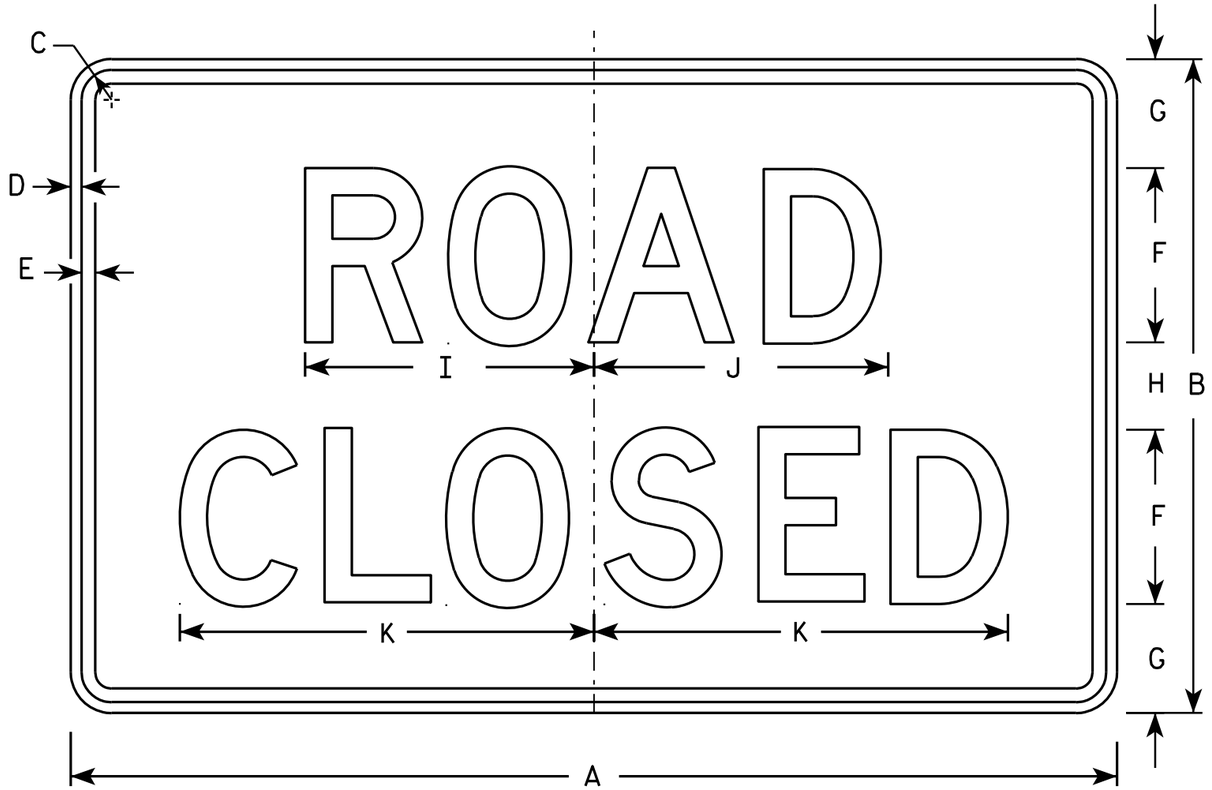
STANDARD SIGN
R10-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/11/13 PLATE NO. R10-50.2

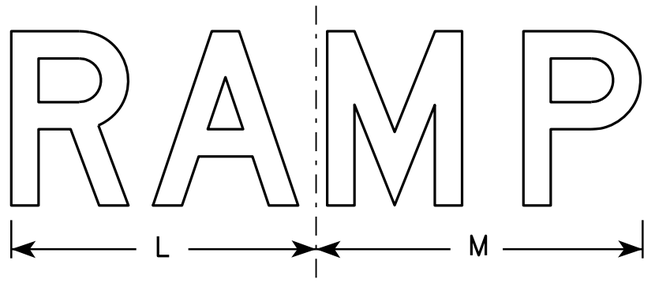
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 656	E



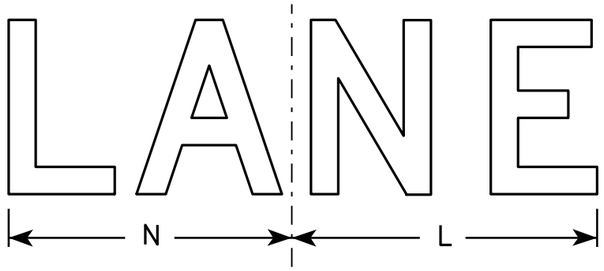
R11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

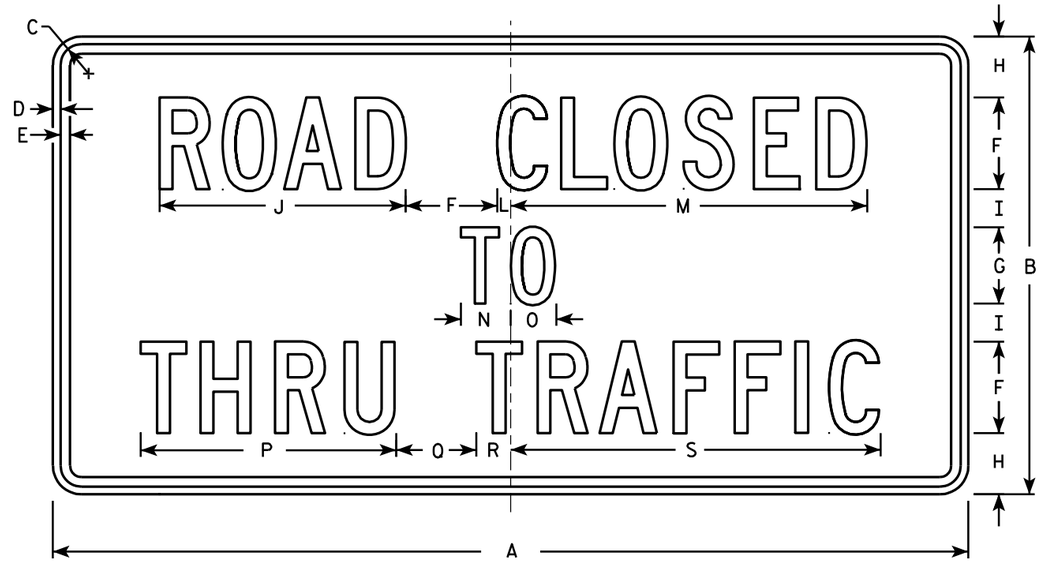
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 657	E



R11-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

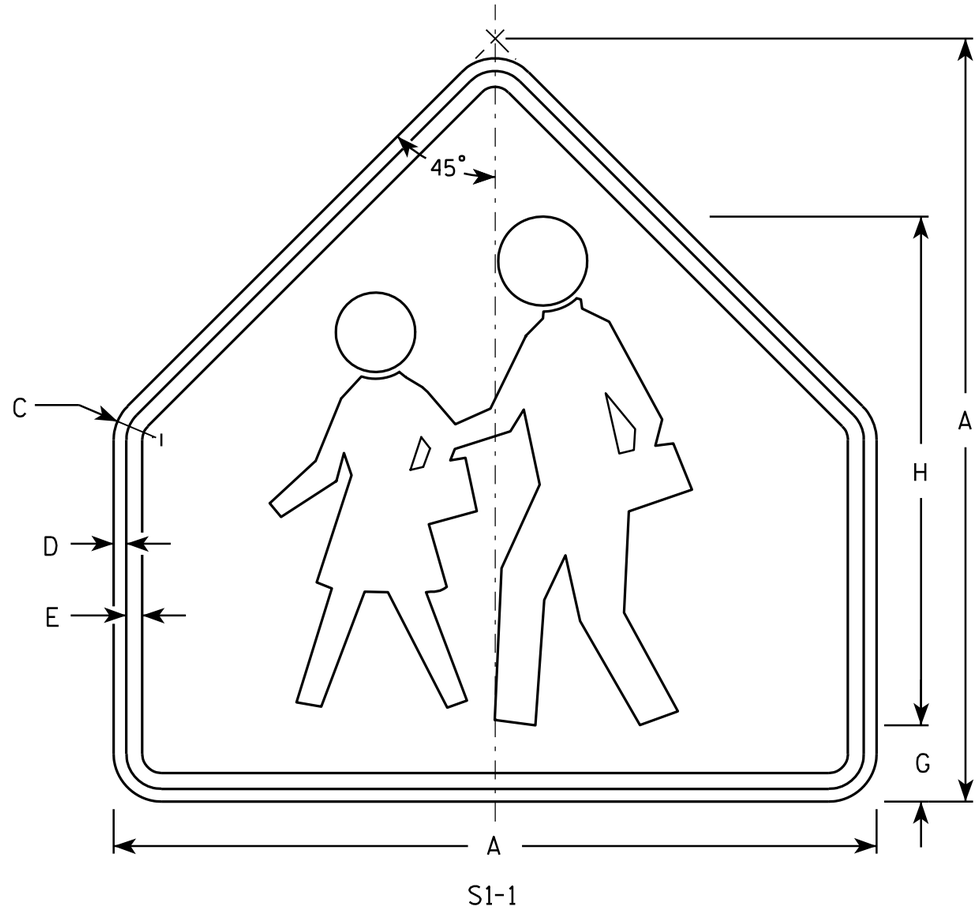
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 658	E



S1-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

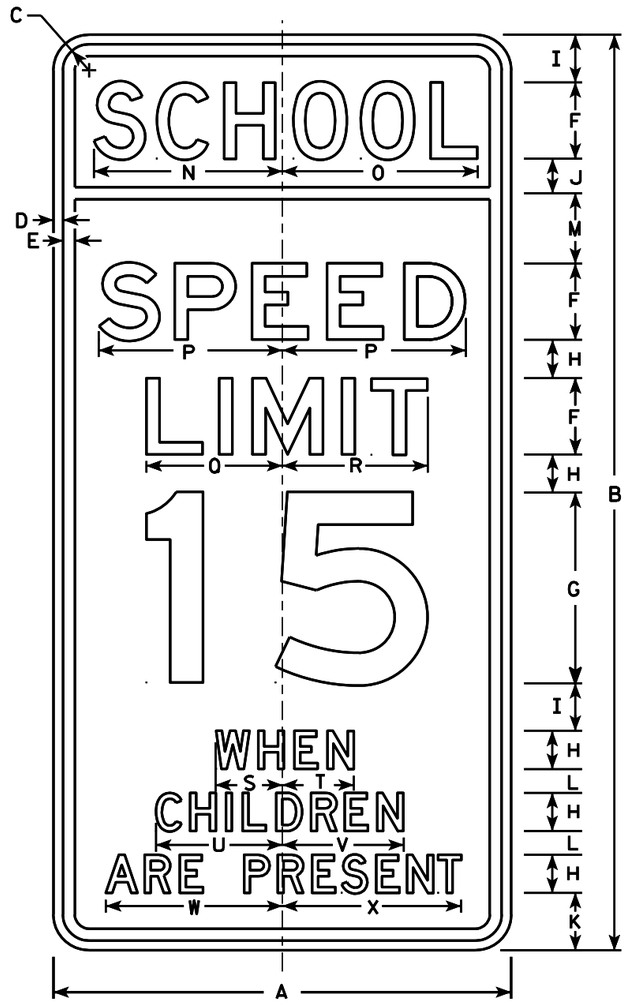
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 659	E



S4-51

NOTES

1. Sign is Type II - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. (See note 5).
2. Color:
   Background - See note 5
   Message - Black
3. Message Series - See note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Top panel (SCHOOL) background - Yellow Green -Type F Reflective.
   Lower panel background - White -Type H Reflective.
6. From top to bottom:
   Lines 1, 5, 6 & 7 are series D
   Lines 2, 3 & 4 are series E
7. Line 4 substitute appropriate numerals and adjust spacing to achieve proper balance.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 1200 mm
3	900 mm X 1800 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	48	1 3/8	1/2	5/8	4	10	2	2 1/2	1 3/4	3	1 1/4	3 3/4	9 7/8	10 1/4	9 5/8	7 1/8	7 5/8	3 1/2	3 3/8	6 5/8	6 3/8	9 1/4	9 3/8			8.00	0.72
3	36	72	2 1/4	3/4	1	6	15	3	3 3/4	2 3/4	4 1/2	1 7/8	5 1/2	15	15 1/4	14 1/2	11 1/4	11 1/2	5 1/2	5 3/4	10	9 3/4	14	14 1/8			18.00	1.62
4																												
5																												

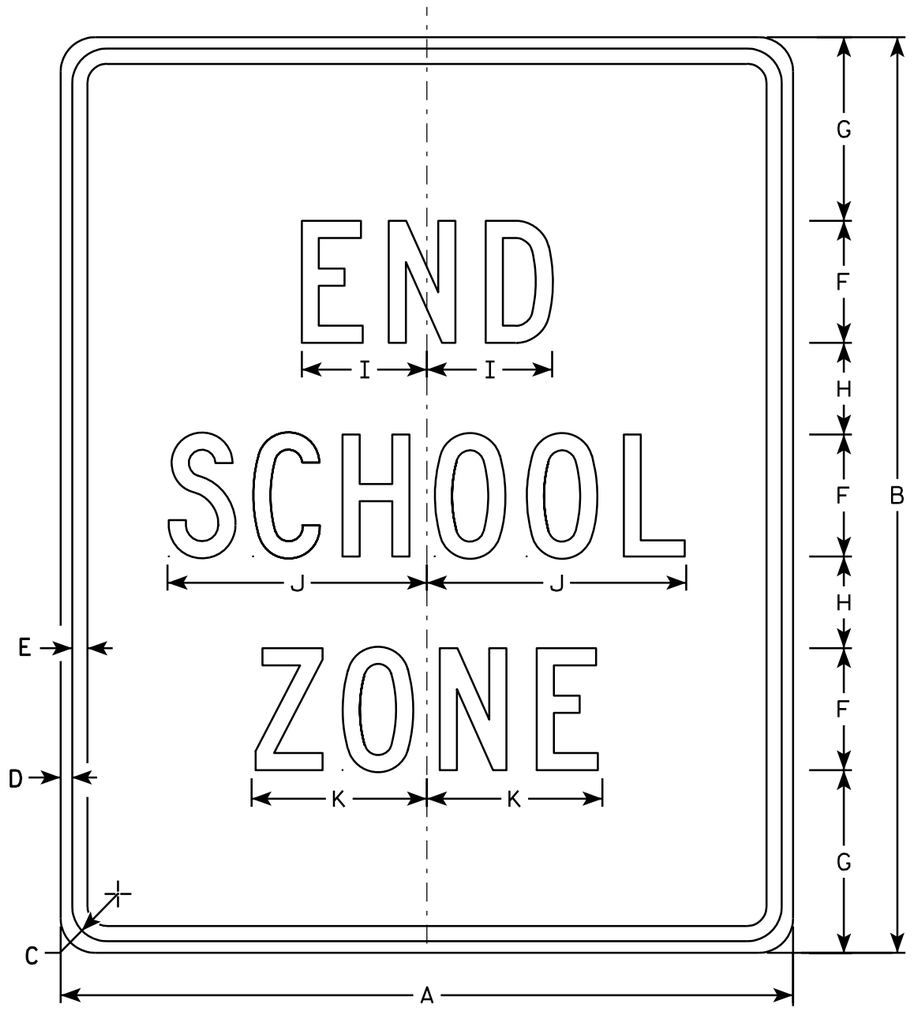
STANDARD SIGN
S4-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/26/10 PLATE NO. S4-51.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 660 | E



S5-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	30	1 1/8	3/8	1/2	4	6	3	4 1/8	8 1/2	5 3/4																5.0
3	36	42	1 5/8	5/8	3/4	6	7	5	6 1/8	12 5/8	8 5/8																10.5
4																											
5																											

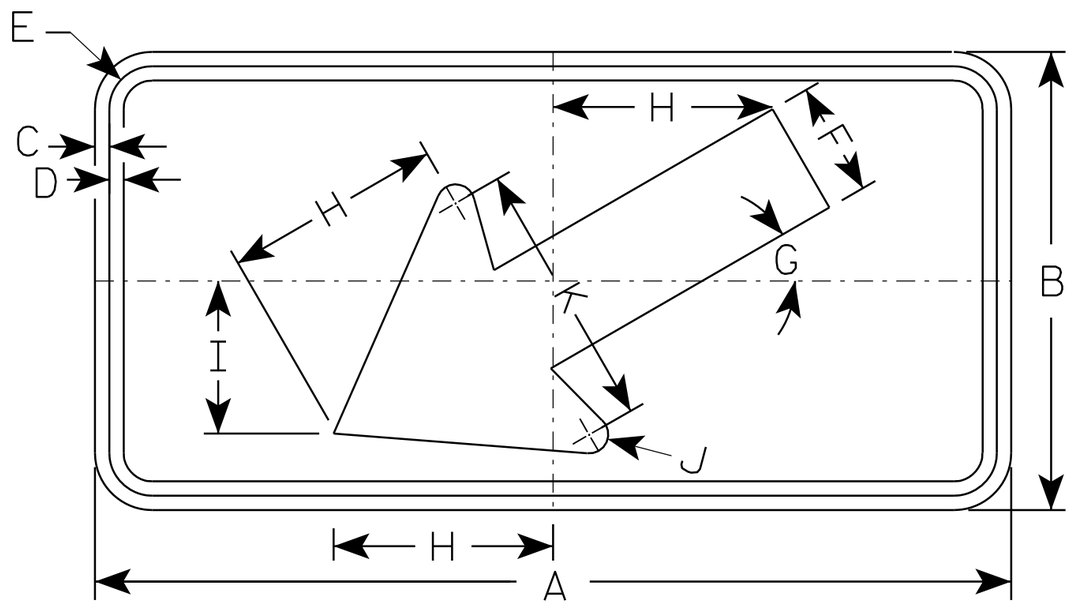
STANDARD SIGN
S5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/8/11 PLATE NO. S5-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 661 | E



S16-7L

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. S16-7R are the same as S16-7L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

STANDARD SIGN
S16-7

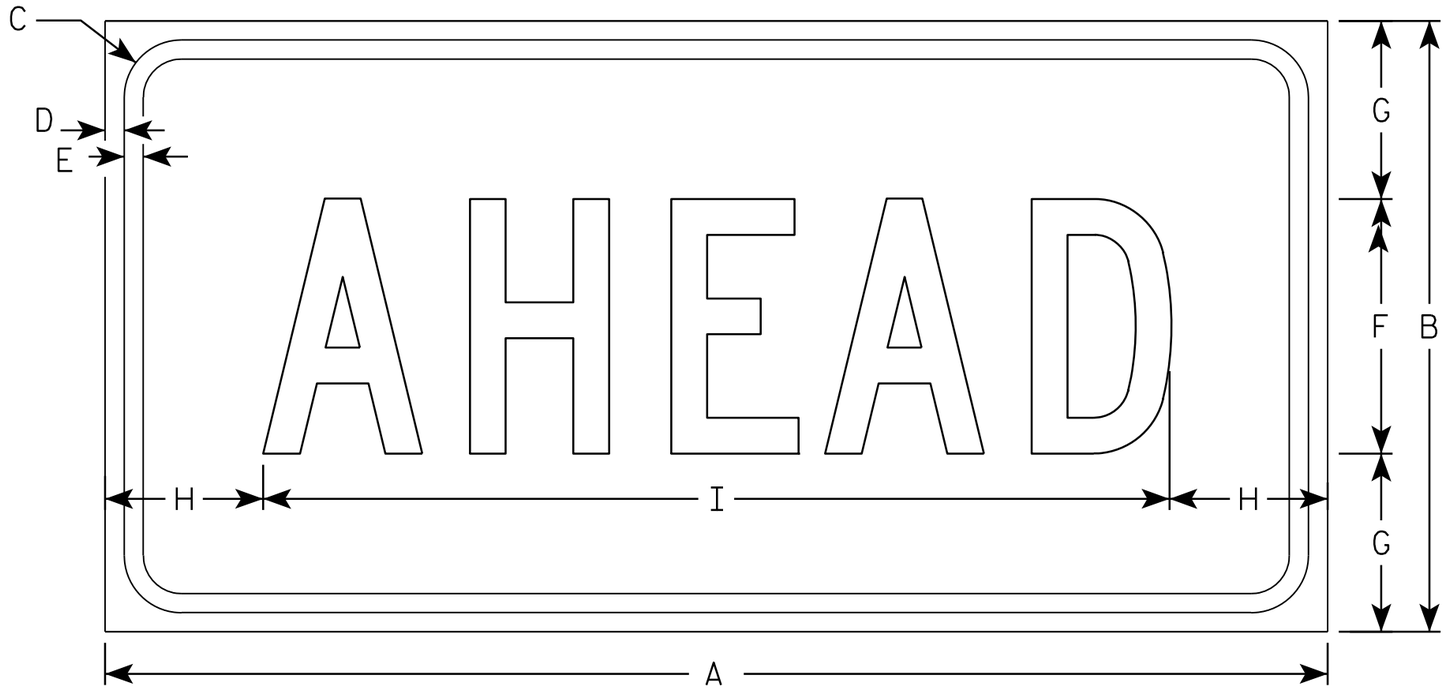
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-7.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 662 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\S167.dgn PLOT DATE : 19-AUG-2013 14:55 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 3.969517:1.000000



S16-9P

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
S16-9P

WISCONSIN DEPT OF TRANSPORTATION

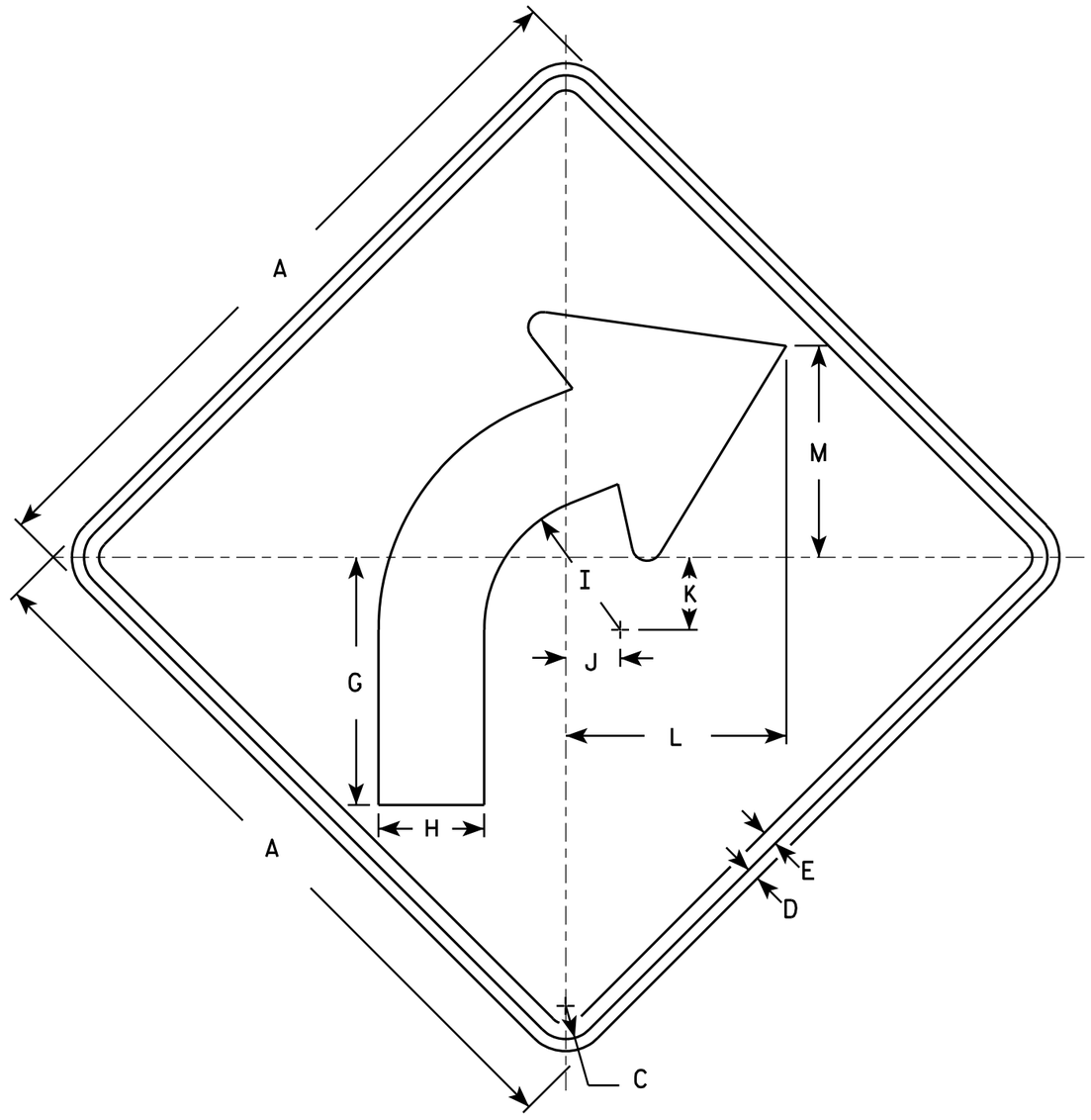
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

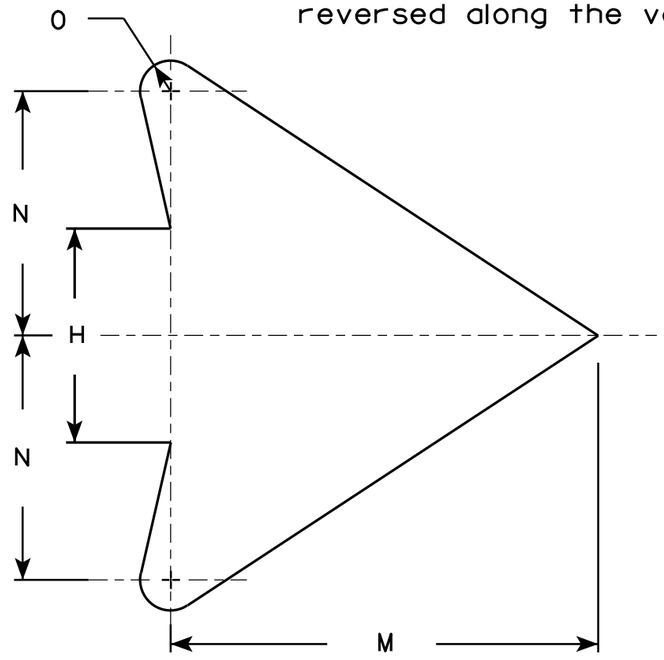
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 663 | E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

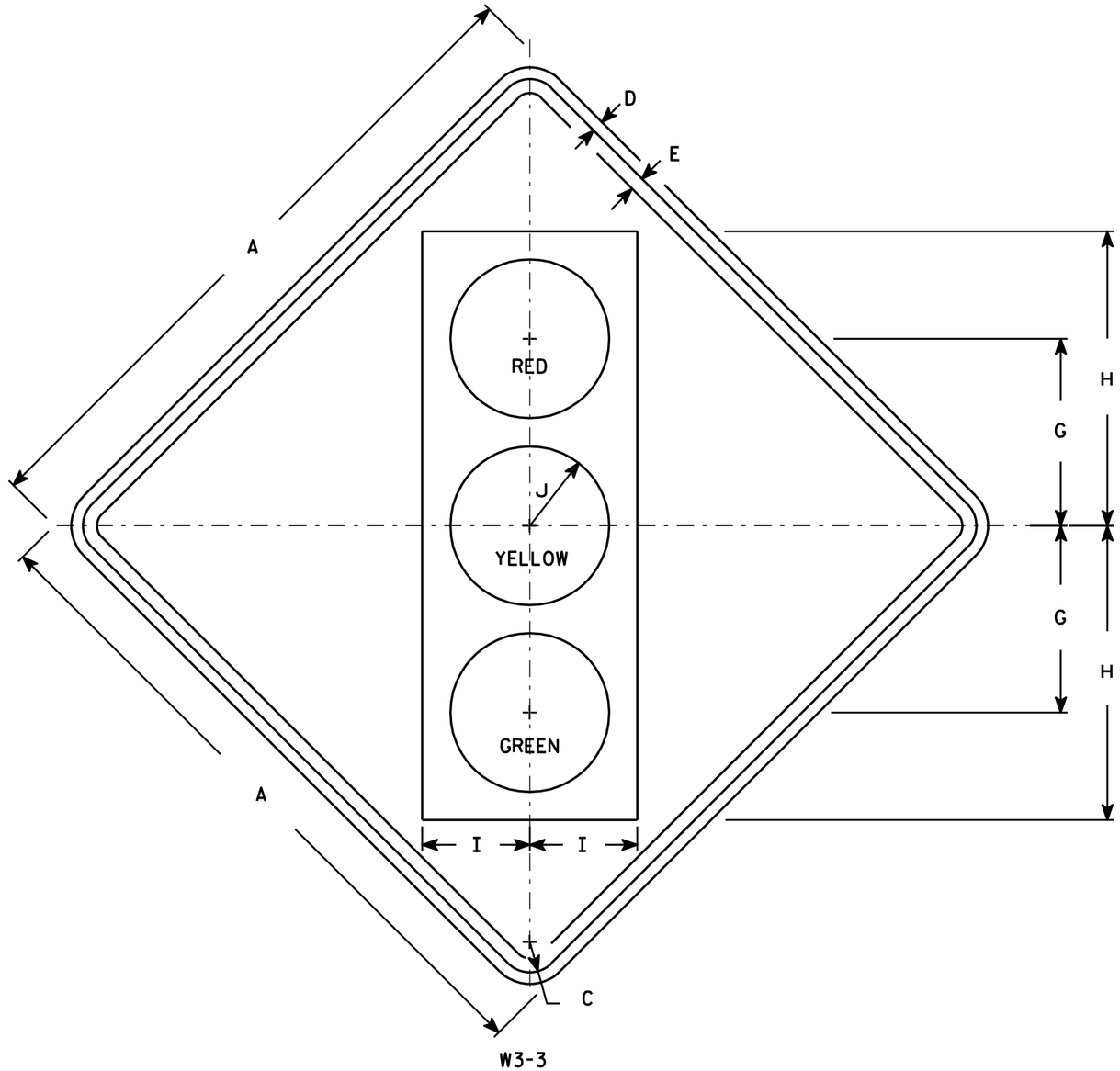
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 664	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

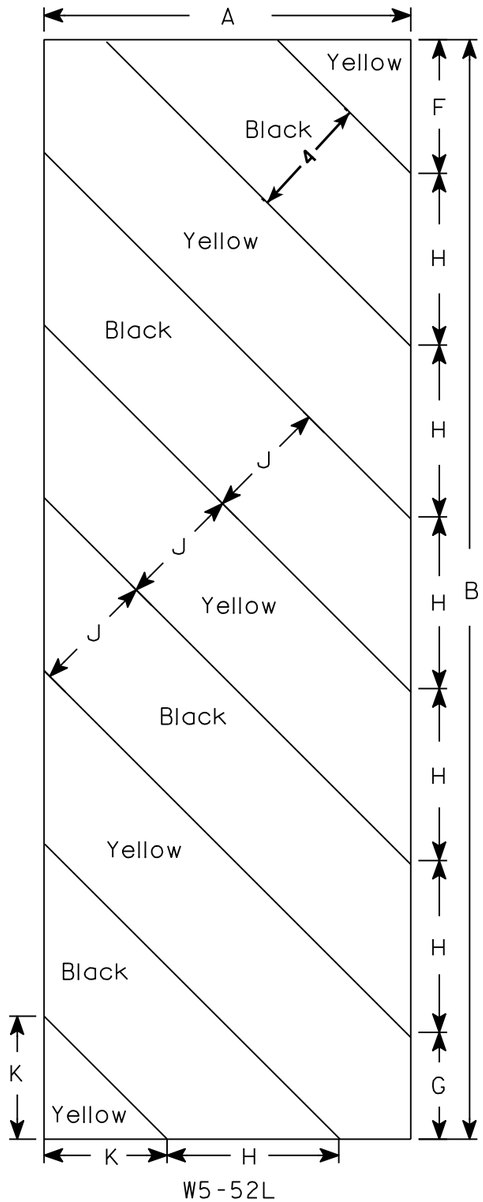
STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

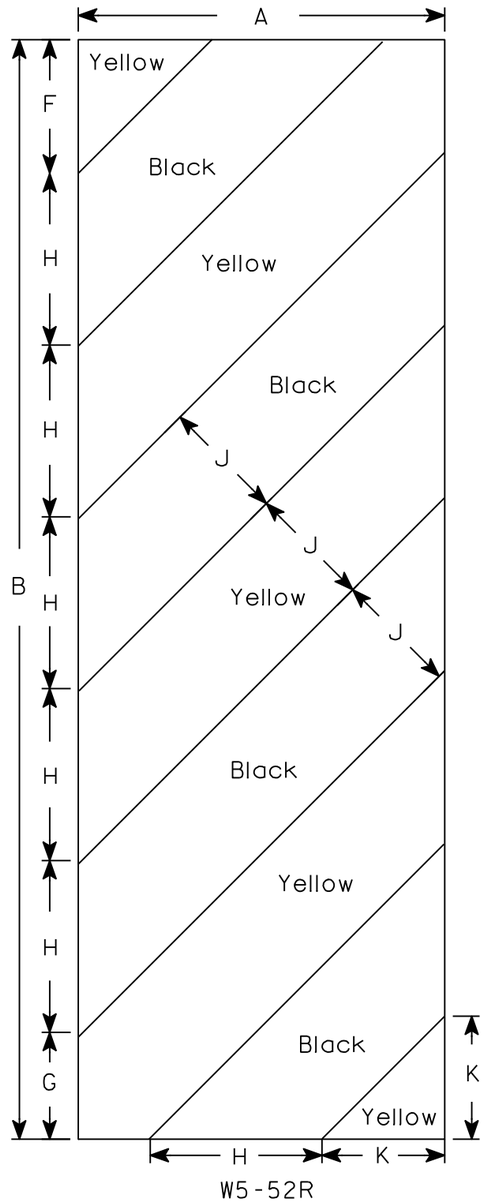
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 665 | E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

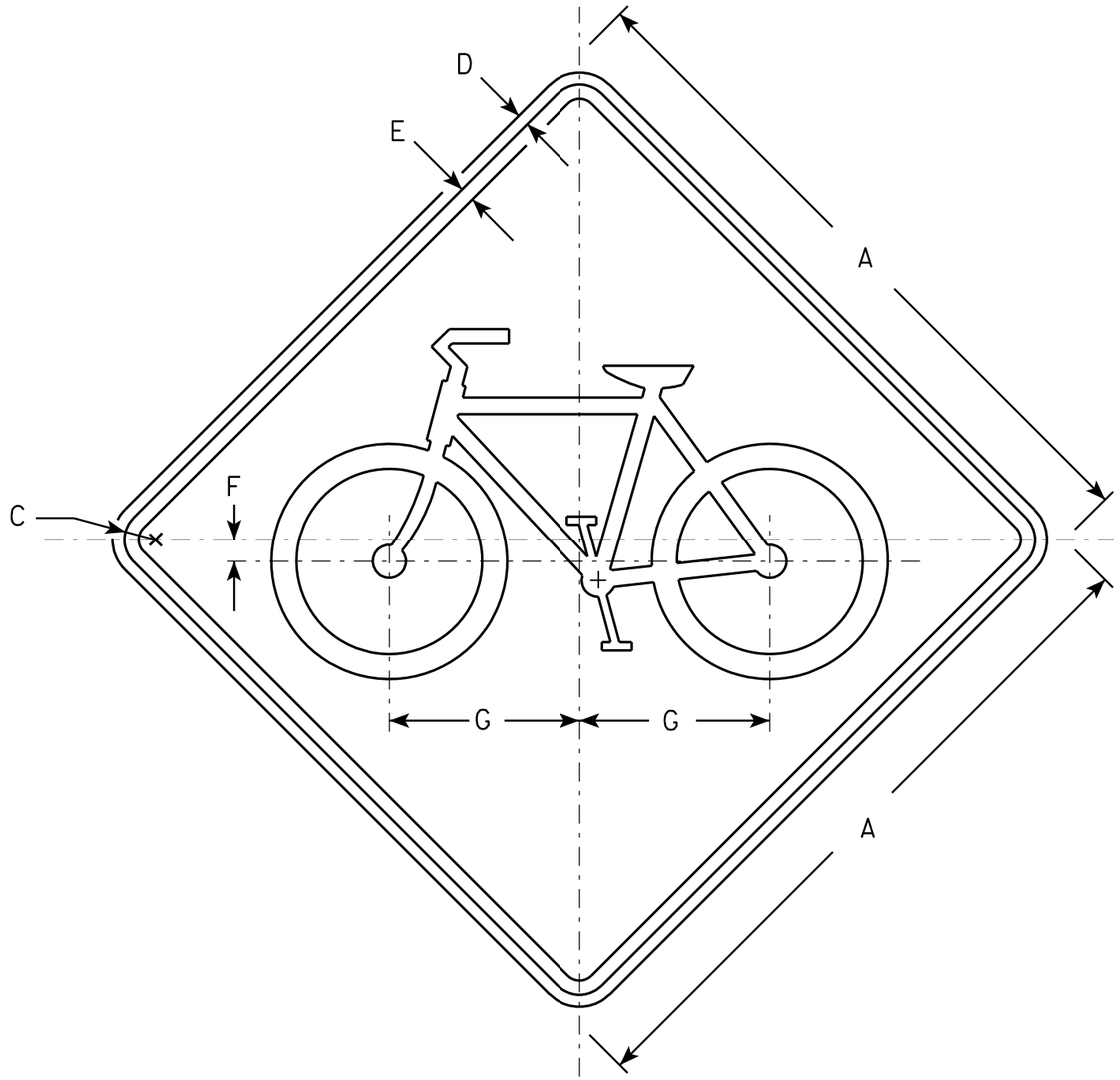
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 666	E



W11-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/4	1/2	3/4	6 5/8																				4.0
2S	30		1 3/8	1/2	5/8	1	8 1/2																				6.25
2M	36		1 5/8	5/8	3/4	1 1/4	10																				9.0
3	36		1 5/8	5/8	3/4	1 1/4	10																				9.0
4	48		2 1/4	3/4	1	1 5/8	13 3/8																				16.0
5																											16.0

STANDARD SIGN
W11-1

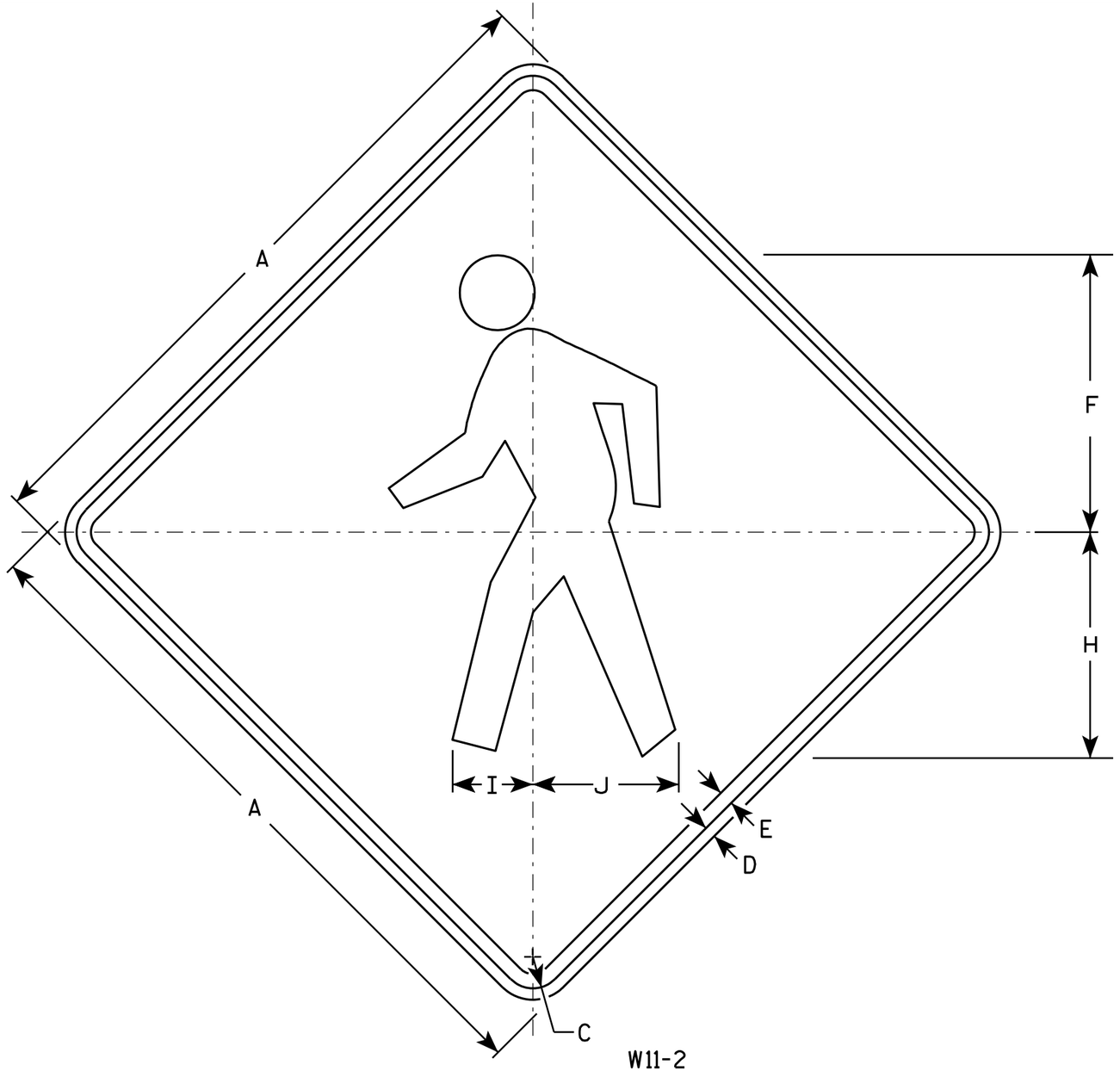
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/21/10 PLATE NO. W11-1.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 667 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W111.DGN PLOT DATE : 21-DEC-2010 10:08 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 7.945391:1.000000
WISDOT/CADDS SHEET 42



W11-2

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

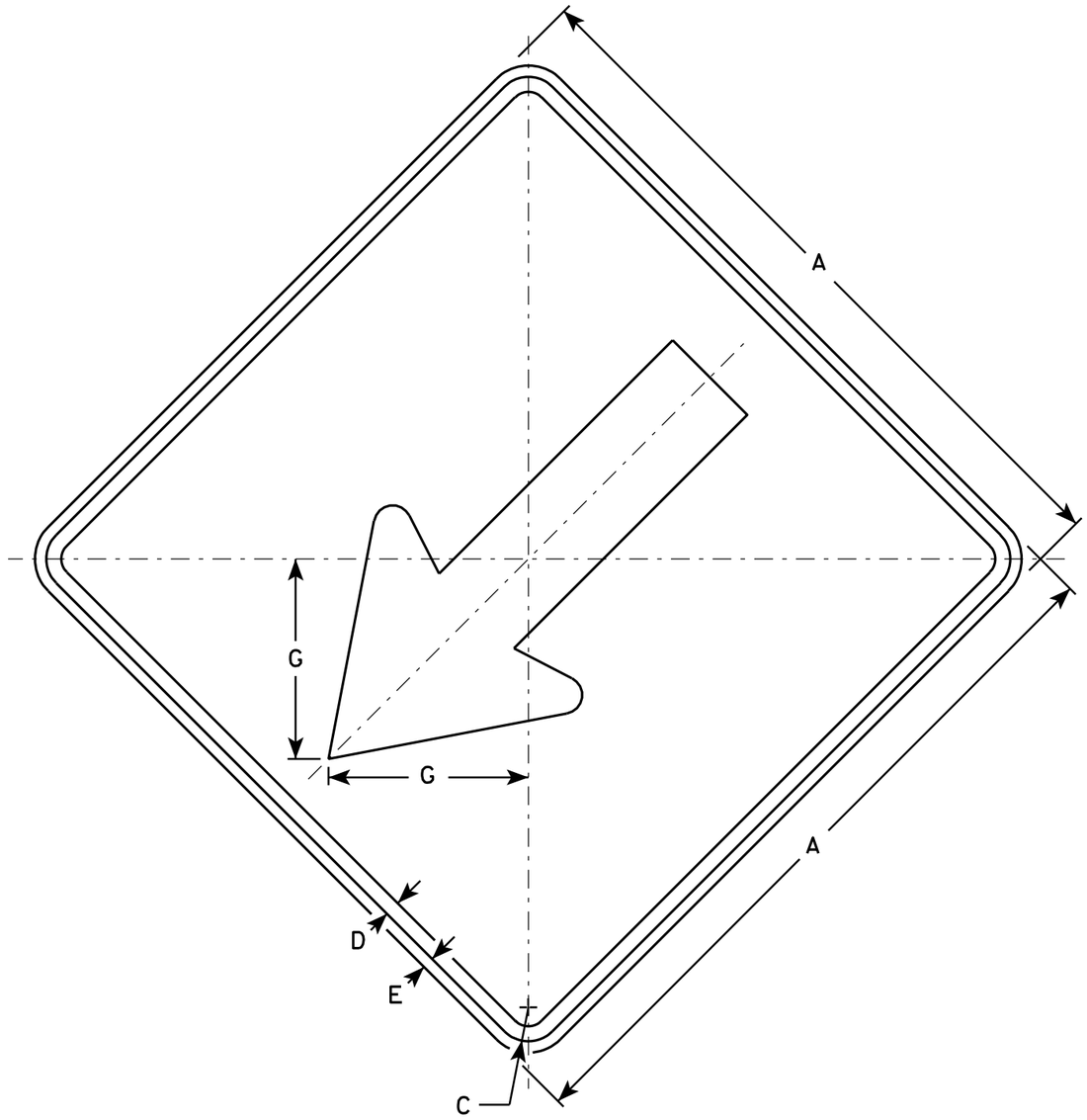
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

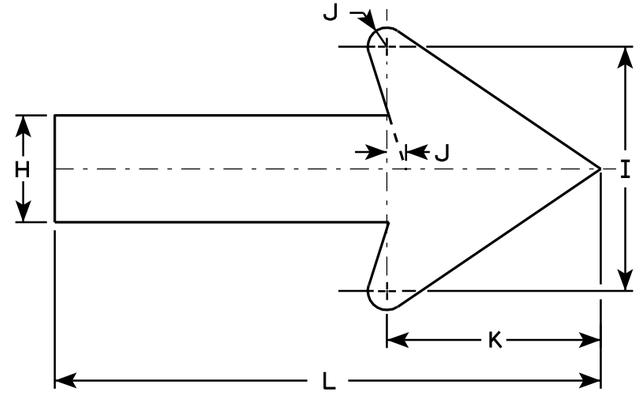
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 668	E



W12-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		6 5/8	3 1/2	8	5/8	7	18															4
2M	24		1 1/8	1/2	3/8		6 5/8	3 1/2	8	5/8	7	18															4
3	30		1 3/8	5/8	1/2		8 1/4	4 3/8	10	3/4	8 3/4	22 3/8															6.25
4	36		1 3/4	3/4	5/8		10 3/8	5 1/2	12 1/2	1	11	27 7/8															9.0
5	48		2 1/4	3/4	1		12 1/2	6 5/8	15	1 1/4	13 1/4	33 1/2															16

STANDARD SIGN
W12-1

WISCONSIN DEPT OF TRANSPORTATION

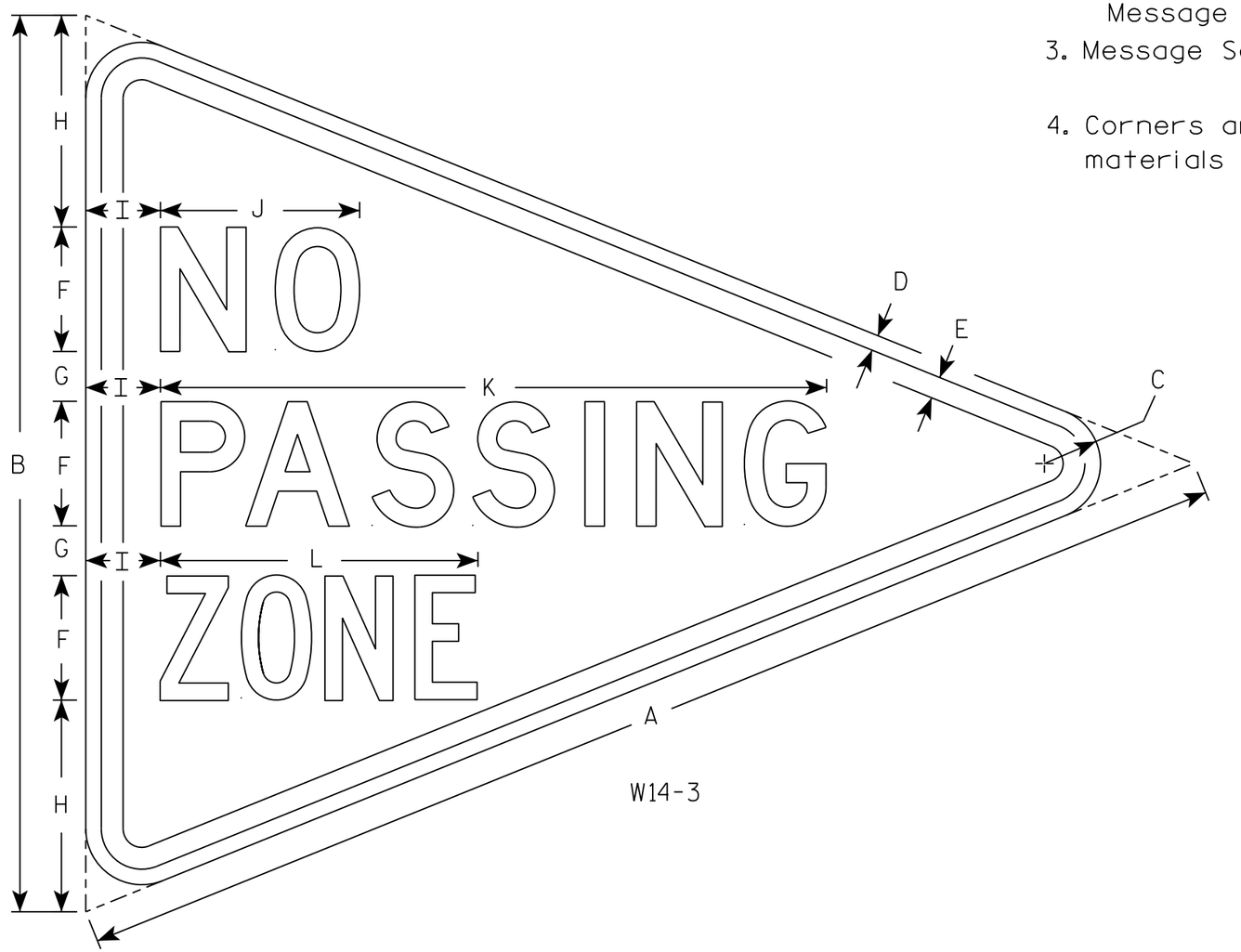
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 669 | E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

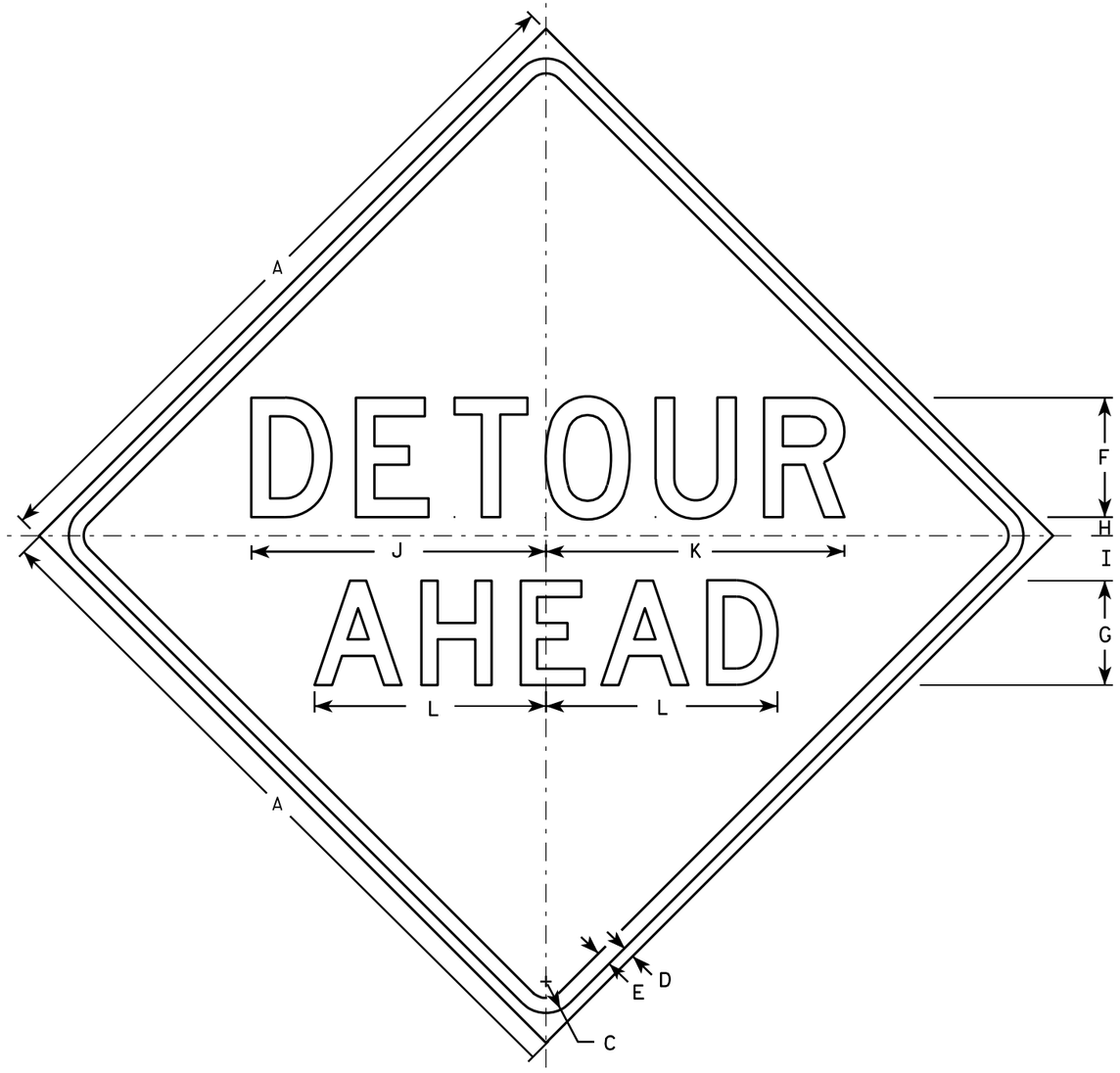
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

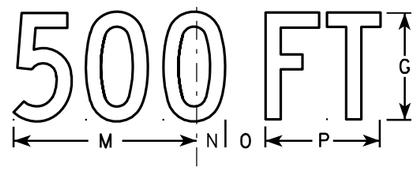
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

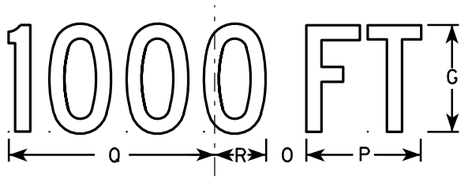
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 670	E



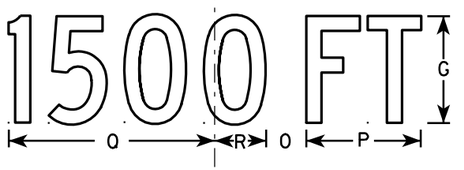
W20-2A



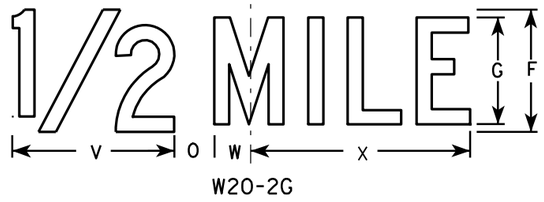
W20-2D



W20-2C



W20-2B



W20-2G

W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

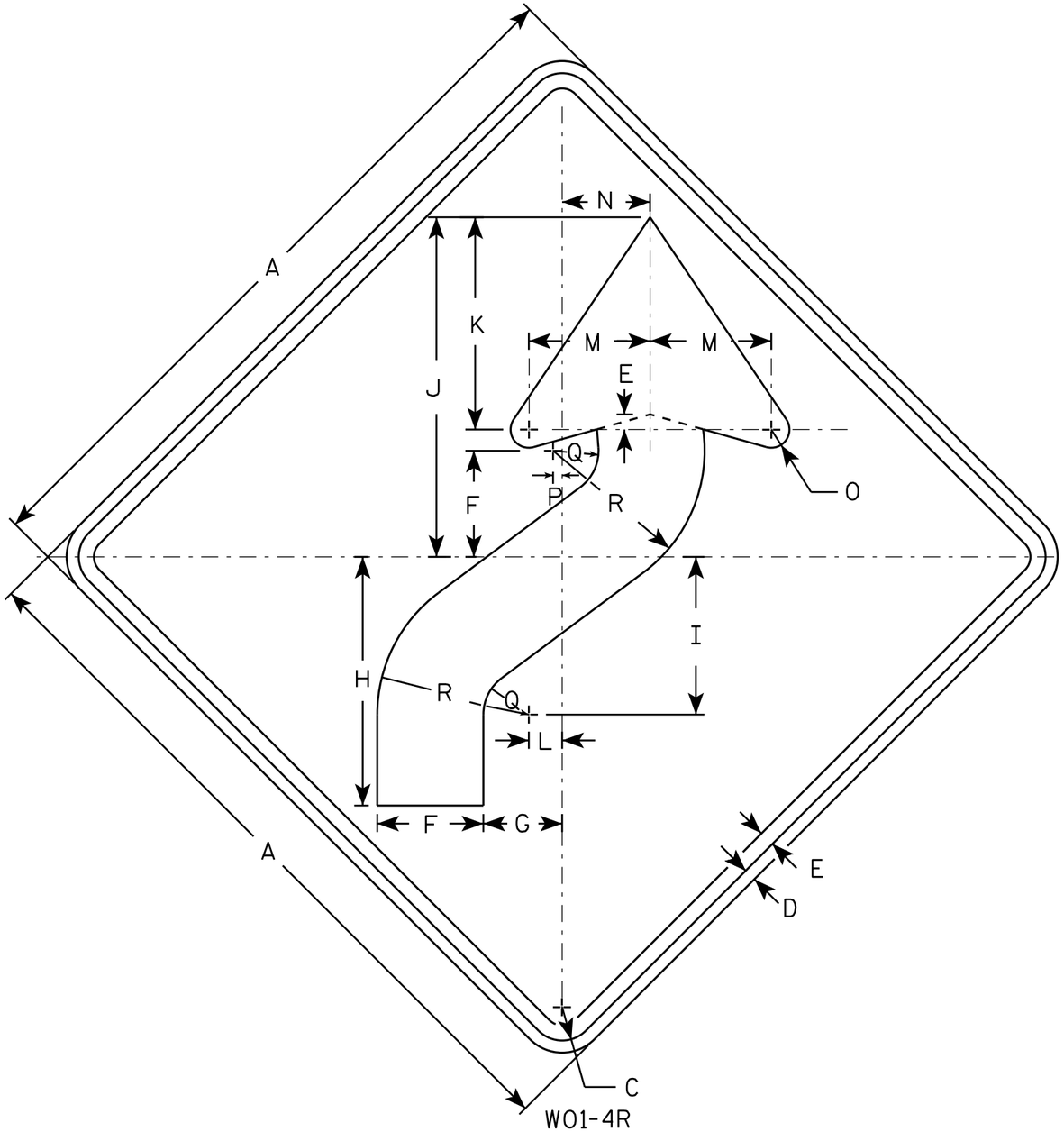
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 671 | E



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

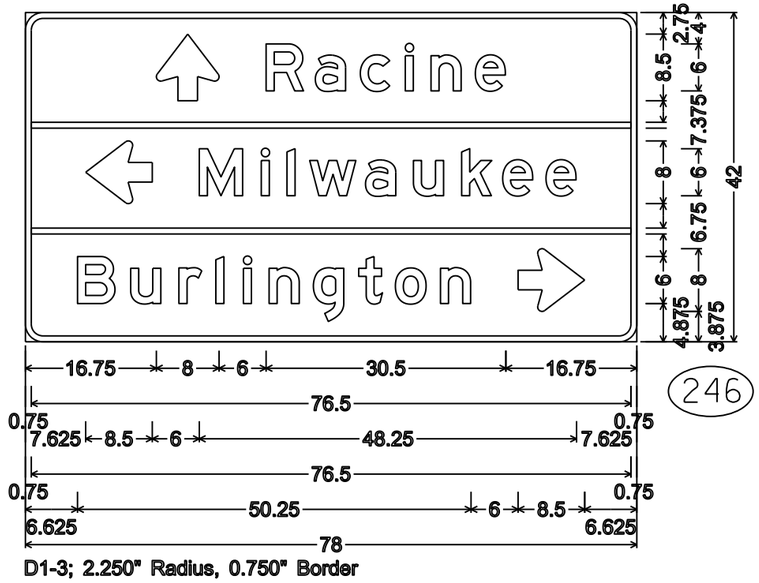
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

672

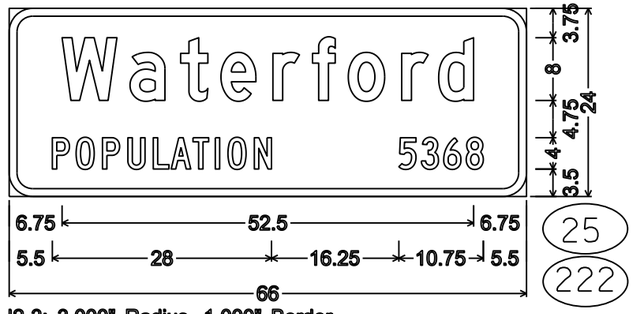
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



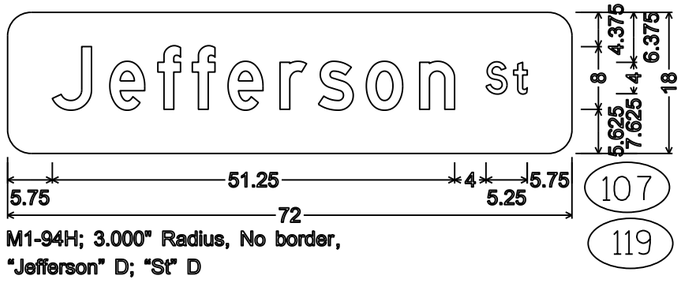
D1-3; 2.250" Radius, 0.750" Border

NOTES

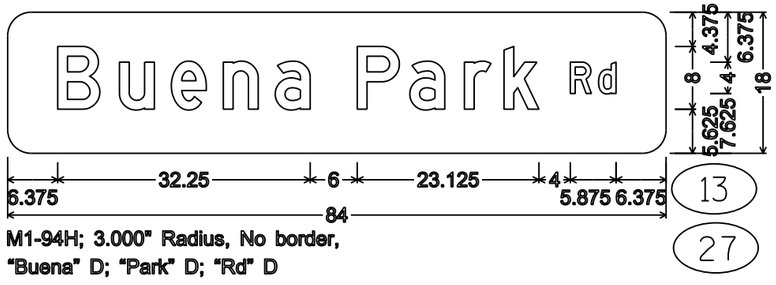
1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted
4. M1-94H and M1-94S base material is .125" aluminum



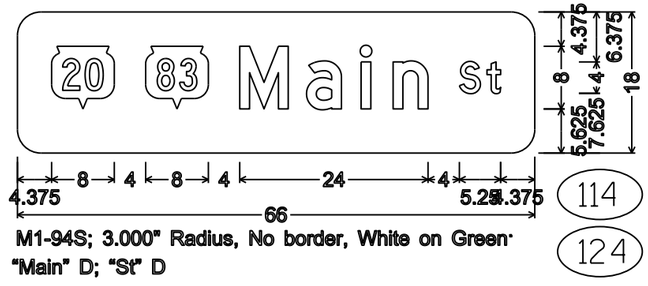
I2-3; 3.000" Radius, 1.000" Border,
"Waterford" D; "POPULATION" C; "5368" C



M1-94H; 3.000" Radius, No border,
"Jefferson" D; "St" D



M1-94H; 3.000" Radius, No border,
"Buena" D; "Park" D; "Rd" D



M1-94S; 3.000" Radius, No border, White on Green
"Main" D; "St" D

7

7

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET NO: 673	E

GENERAL NOTES:

1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.

2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE II".

3. UNLESS OTHERWISE NOTED, TYPE II SIGNS ON THIS SHEET SHALL HAVE "TYPE H REFLECTIVE SHEETING" AND, "TYPE H MESSAGE MATERIAL". TYPE I SIGNS SHALL HAVE TYPE SH REFLECTIVE SHEETING.

4. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A GREEN BACKGROUND AND WHITE MESSAGE.

5. TYPE II SIGNS ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E. ALL LOWER CASE MESSAGE WITH AN INITIAL UPPER CASE LETTER SHALL BE "SERIES E.

6. TYPE I SIGNS - ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE SERIES "E" MODIFIED. ALL LOWER CASE MESSAGE WITH AN INITIAL UPPER CASE LETTER SHALL BE SERIES "E" MODIFIED. ALL CAP WORDS ARE "SERIES E"

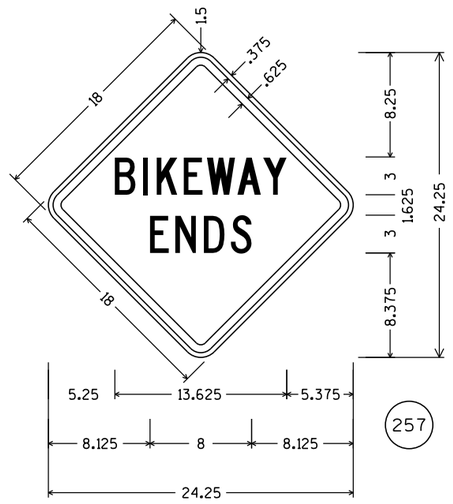
7. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.

8. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.

9. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.

10. NUMBER FRACTIONS FOR INTERCHANGE SEQUENCE SIGNS SHALL BE SERIES "E" PER PLATES A11-7 AND A11-10

11. DO NOT SCALE.



W5-4A (MODIFIED)
SERIES C LETTERS
YELLOW BACKGROUND/BLACK MESSAGE
FLUORESCENT SHEETING

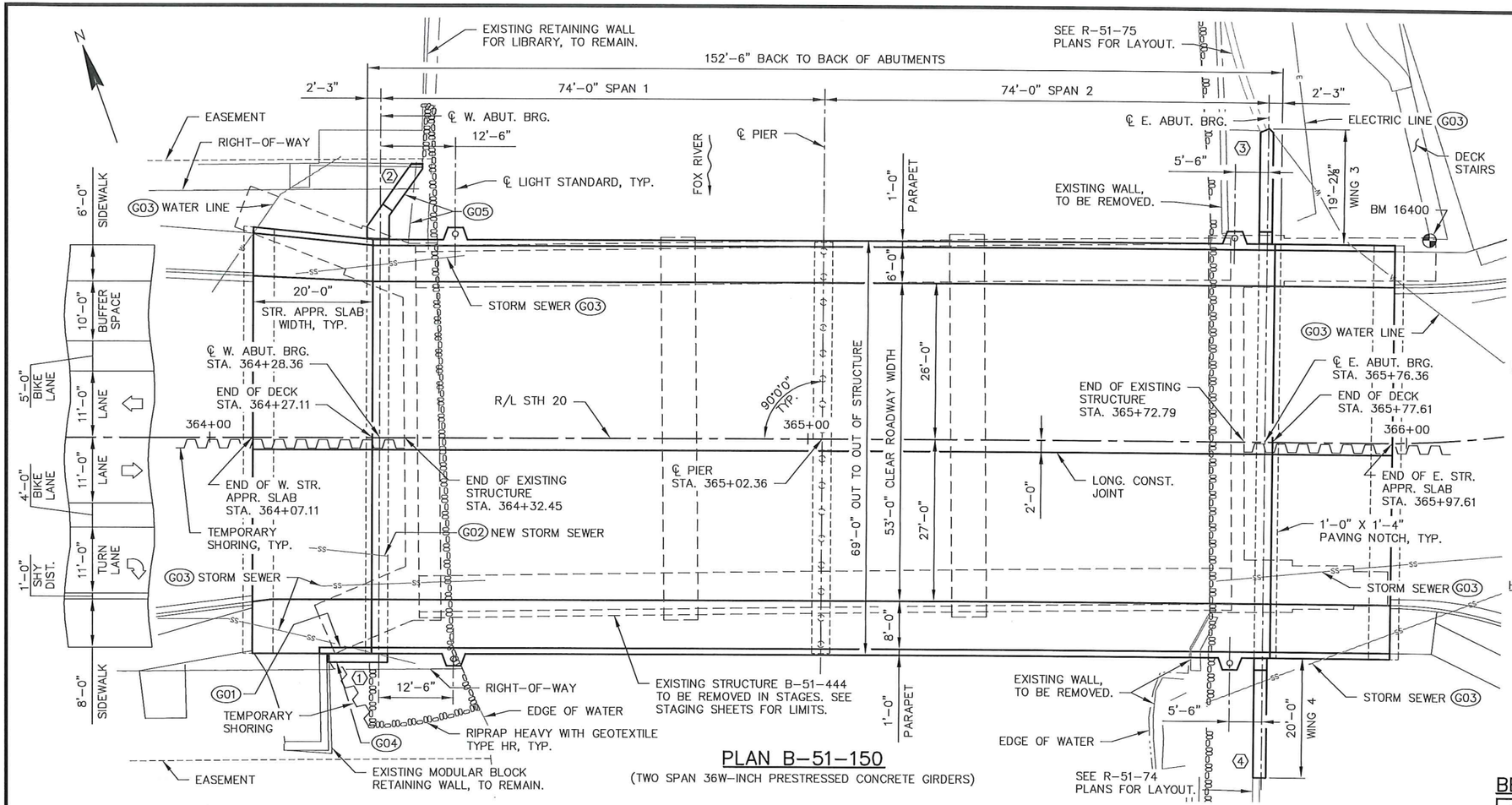
7

7

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	SIGNING DETAIL - TYPE II SIGNS	SCALE: 0 ½" 1"	SHEET 674	E

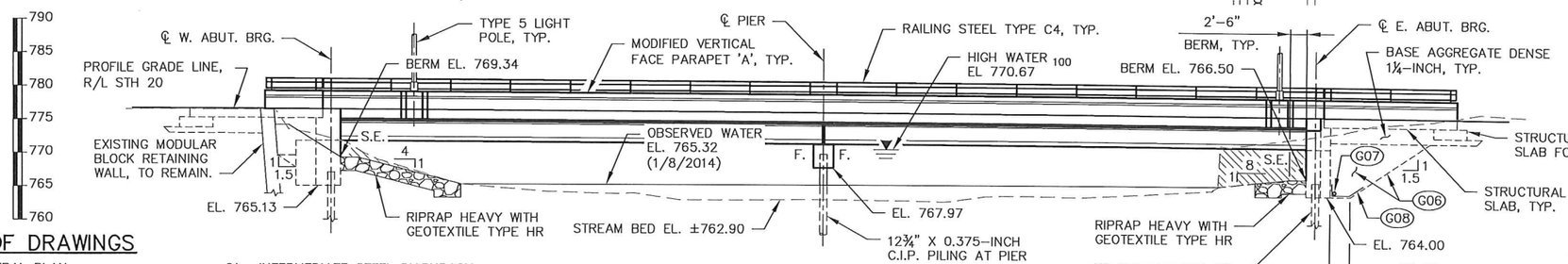
STATE PROJECT NUMBER

2250-12-70



PLAN B-51-150

(TWO SPAN 36W-INCH PRESTRESSED CONCRETE GIRDERS)



ELEVATION

(NORMAL TO FOX RIVER, LOOKING NORTH)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING	HL-93
INVENTORY RATING FACTOR	RF=1.18
OPERATING RATING FACTOR	RF=1.53
WISCONSIN STANDARD PERMIT VEHICLE RATING (WIS.-SPV):	250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY, DECK & SUPERSTRUCTURE	$f'c$ = 4,000 P.S.I.
ALL OTHER	$f'c$ = 3,500 P.S.I.
HIGH-STRENGTH BAR STEEL REINFORCEMENT	f_y = 60,000 P.S.I.
36W-INCH PRESTRESSED GIRDERS CONCRETE MASONRY	$f'c$ = 8,000 P.S.I.
STRANDS - 0.6" DIAMETER WITH AN ULTIMATE TENSILE STRENGTH OF	f_u = 270,000 P.S.I.

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON STEEL HP 12-INCH X 53 LB PILING AND THE PIER TO BE SUPPORTED ON 12¾" X 0.375-INCH C.I.P. PILING. PILING AT EACH SUBSTRUCTURE UNIT SHALL BE PRE-BORED INTO THE EXISTING BEDROCK AND SHALL EXTEND A MINIMUM OF 3-FT. INTO THE BEDROCK. THE PIER PRE-BORED HOLES SHALL BE A MINIMUM OF 18-INCH IN DIAMETER. ESTIMATE 25 FT. PILE LENGTHS AT THE WEST ABUTMENT, 30 FT. PILE LENGTHS AT THE EAST ABUTMENT AND 25 FT. PILE LENGTHS AT THE PIER.

ALL PILES NEED TO BE PRE-BORED INTO THE BEDROCK TO AVOID DAMAGE TO THE SURROUNDING BUILDINGS. THE PRE-BORED HOLES INTO THE BEDROCK SHALL BE FREE OF CRUSHED AND SMEARED ROCK AND A CLEAN BASE. THE PRE-BORED HOLES SHOULD BE FILLED WITH CONCRETE. THE MAXIMUM FACTORED AXIAL COMPRESSION DESIGN LOAD IS 108 TONS PER PILE AT THE ABUTMENTS AND 97 TONS PER PILE AT THE PIER.

HYDRAULIC DATA:

Q_{100}	3,754 C.F.S.
Q_{100} (THRU BRIDGE)	3,754 C.F.S.
Q_{100} (ROAD)	N/A
BRIDGE WATER AREA	848 SQ. FT.
BRIDGE VELOCITY	4.4 F.P.S.
OVERTOPPING ROADWAY	N/A
HIGH WATER 100 EL.	770.67 FT.
DRAINAGE AREA	357 SQ. MI.
SCOUR CRITICAL CODE	5
Q_2	920 C.F.S.
Q_2 ELEVATION	767.75 FT.
Q_2 VELOCITY	2.03 F.P.S.

BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEVATION
16400	366+05.50, 33.64' LT.	DISK IN TOP OF EAST END OF NORTH PARAPET WALL ON BRIDGE	777.52

HORIZONTAL DATUM AND ADJUSTMENT: NAD 83 (2007)
VERTICAL DATUM AND ADJUSTMENT: NAVD 88 (2007)
COORDINATE REFERENCE SYSTEM: WCCS RACINE CO.

STH 20 TRAFFIC DATA:
A.A.D.T. (2018) — 15,000
A.A.D.T. (2038) — 18,100
DESIGN SPEED — 30 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION, GENERAL NOTES AND QUANTITIES
3. CONSTRUCTION STAGING #1
4. CONSTRUCTION STAGING #2
5. SUBSURFACE EXPLORATION #1
6. SUBSURFACE EXPLORATION #2
7. SUBSURFACE EXPLORATION #3
8. WEST ABUTMENT
9. WEST ABUTMENT DETAILS
10. WEST ABUTMENT WINGS
11. WEST ABUTMENT REINFORCEMENT
12. EAST ABUTMENT
13. EAST ABUTMENT DETAILS
14. EAST ABUTMENT WINGS
15. EAST ABUTMENT REINFORCEMENT
16. PIER - STAGE 1
17. PIER - STAGE 2
18. BEAM SEAT DETAILS
19. 36W-INCH PRESTRESSED GIRDER
20. 36W-INCH PRESTRESSED GIRDER DETAILS
21. INTERMEDIATE STEEL DIAPHRAGM
22. SUPERSTRUCTURE PLAN
23. SUPERSTRUCTURE - STAGE 1
24. SUPERSTRUCTURE - STAGE 2
25. DIAPHRAGM REINFORCEMENT AT PIER
26. DIAPHRAGM REINFORCEMENT AT ABUTMENTS
27. SUPERSTRUCTURE REINFORCEMENT
28. MODIFIED VERTICAL FACE PARAPET 'A'
29. LIGHT STANDARD DETAILS
30. CONDUIT DETAILS
31. STEEL RAILING ON SUPERSTRUCTURE
32. STEEL RAILING ON WINGS
33. WEST STRUCTURAL APPROACH SLAB
34. WEST STRUCTURAL APPROACH SLAB DETAILS
35. EAST STRUCTURAL APPROACH SLAB
36. EAST STRUCTURAL APPROACH SLAB DETAILS
37. AESTHETIC DETAILS
38. RIPRAP LAYOUT
39. BAR COUPLERS

LEGEND

- ⬡ INDICATES WING NUMBER
- ▨ EXCAVATION AS INDICATED, TO BE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-51-150".
- (G01) NAME PLATE - FOR LOCATION SEE "MODIFIED VERTICAL FACE PARAPET 'A'" SHEET.
- (G02) NEW PROPOSED UTILITIES.
- (G03) UTILITIES SHOWN ARE TO BE RELOCATED.
- (G04) WING 1 SHALL EXTEND BACK, PARALLEL WITH THE ROADWAY, TO THE FRONT FACE OF THE EXISTING MODULAR BLOCK RETAINING WALL.
- (G05) WING 2 SHALL SKEW AT A 35° ANGLE AND EXTEND TO THE FRONT FACE OF EXISTING LIBRARY RETAINING WALL.
- (G06) STRUCTURE BACKFILL, TYPE A
- (G07) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE.
- (G08) "GEOTEXTILE TYPE DF SCHEDULE A" LIMITS. EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

BRIDGE OFFICE CONTACT
WILLIAM DREHER, P.E.
(608) 266-8489

CONSULTANT CONTACT
ANDY KNUTSON, P.E., S.E.
(608) 588-7866

WISCONSIN
ANDREW C. KNUTSON
E-34662
SPRING GREEN, WI
5.14.18
PROFESSIONAL ENGINEER

NO.	DATE	REVISION	BY

WESTBROOK Associated Engineers, Inc.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WI 53588
PHONE (608) 588-7866
FAX (608) 588-7954

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 05/14/18
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-51-150

STH 20/83 OVER FOX RIVER

COUNTY: RACINE	~~TOWN/CITY~~/VILLAGE: WATERFORD		
DESIGN SPEC.: AASHTO LRFD DESIGN SPEC.			
DESIGNED BY: JDO	DESIGN CK'D.: CDS	DRAWN BY: CDS	PLANS CK'D.: ACK

GENERAL PLAN — SHEET 1 OF 39 — 675

I.D. 2250-12-70

PLOT DATE: May 08, 2018

FILE: 01-B510150_fsh.dwg
PLOT SCALE:

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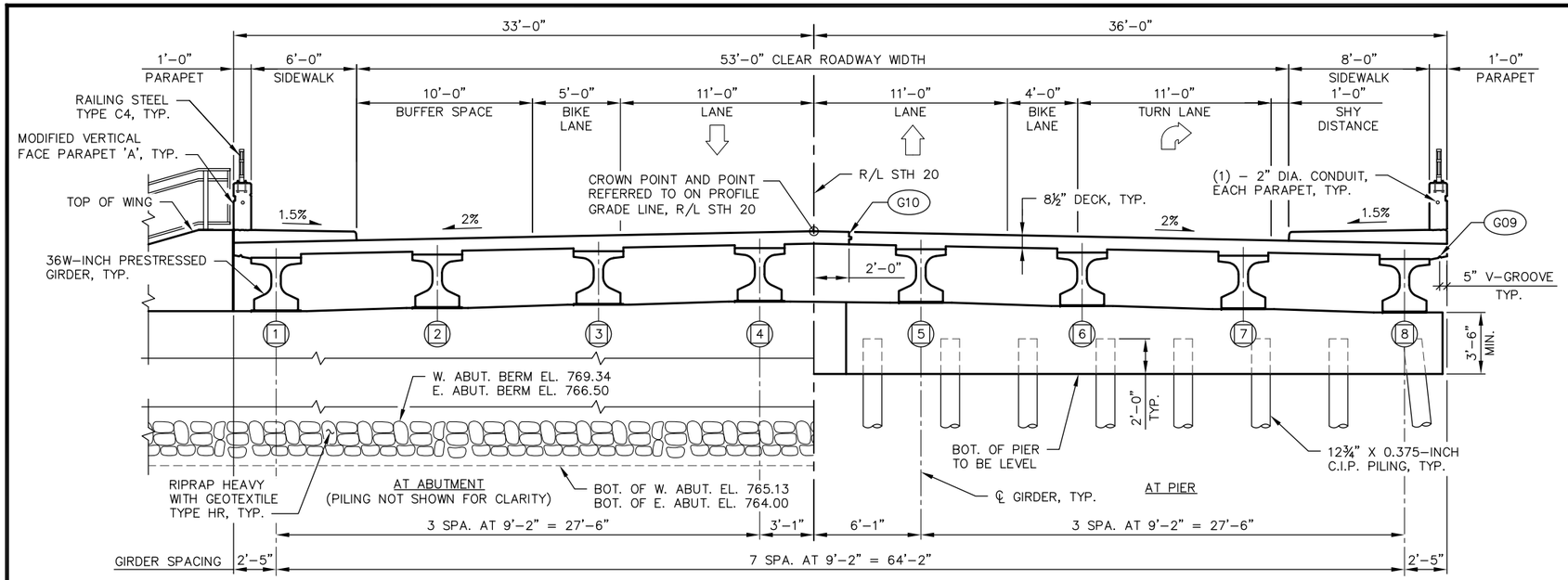
STATE PROJECT NUMBER
2250–12–70



CROSS SECTION THRU ROADWAY

(LOOKING EAST)

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	W. STR. APPRO. SLAB	W. ABUT.	PIER	E. ABUT.	E. STR. APPRO. SLAB	SUPER.	TOTALS
203.0600.S.01	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 365+02	LS	---	---	---	---	---	---	1
206.1000.01	EXCAVATION FOR STRUCTURES BRIDGES B–51–150	LS	---	---	---	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	---	340	---	400	---	---	740
305.0120	BASE AGGREGATE DENSE 1 1/4–INCH	TON	---	220	---	220	---	---	440
502.0100	CONCRETE MASONRY BRIDGES	CY	100	85	28	101	99	464	877
502.3200	PROTECTIVE SURFACE TREATMENT	SY	155	---	---	---	152	1173	1480
502.3210	PIGMENTED SURFACE SEALER	SY	12	---	---	---	17	123	152
503.0137	PRESTRESSED GIRDER TYPE I 36W–INCH	LF	---	---	---	---	---	1190	1190
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	4780	6390	5370	---	---	16540
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	15890	1490	90	2950	15720	96320	132460
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	---	---	---	---	---	2830	2830
505.0904	BAR COUPLERS NO. 4	EACH	---	6	6	6	---	4	22
505.0905	BAR COUPLERS NO. 5	EACH	42	---	4	---	42	451	539
505.0906	BAR COUPLERS NO. 6	EACH	---	18	---	20	---	16	54
505.0907	BAR COUPLERS NO. 7	EACH	---	---	8	---	---	---	8
505.0908	BAR COUPLERS NO. 8	EACH	12	---	---	---	12	---	24
506.2605	BEARING PADS ELASTOMERIC NON–LAMINATED	EACH	---	8	16	8	---	---	32
506.4000.01	STEEL DIAPHRAGMS B–51–150	EACH	---	---	---	---	---	14	14
511.1200.01	TEMPORARY SHORING B–51–150	SF	---	340	---	280	---	---	620
513.7021.01	RAILING STEEL TYPE C4 B–51–150	LF	---	---	---	---	---	370	370
513.8021.01	RAILING STEEL PEDESTRIAN TYPE C4 B–51–150	LF	---	---	---	38	---	---	38
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	18	---	18	---	1	37
517.1050.S.01	ARCHITECTURAL SURFACE TREATMENT B–51–150	SF	---	333	---	658	---	---	991
550.0020	PRE–BORING ROCK OR CONSOLIDATED MATERIALS	LF	---	252	◑ 272	324	---	---	848
550.1120	PILING STEEL HP 12–INCH X 53 LB	LF	---	300	---	360	---	---	660
550.2126	PILING CIP CONCRETE 12 3/4 X 0.375–INCH	LF	---	---	400	---	---	---	400
606.0300	RIPRAP HEAVY	CY	---	77	---	143	---	---	220
612.0406	PIPE UNDERDRAIN WRAPPED 6–INCH	LF	---	105	---	125	---	---	230
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	---	73	---	73	---	---	146
645.0120	GEOTEXTILE TYPE HR	SY	---	156	---	295	---	---	451
652.0125	CONDUIT RIGID METALLIC 2–INCH	LF	15	---	---	---	15	---	30
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2–INCH	LF	63	---	---	---	63	300	426
653.0220	JUNCTION BOXES 18X6X6–INCH	EACH	---	---	---	---	---	4	4
657.6005	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	---	---	---	---	---	4	4
(NON–BID ITEM)	FILLER	SIZE	---	---	---	---	---	---	½" & ¾"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

AT THE BACK FACE OF THE ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TYPE A.

AT SUBSTRUCTURES, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE ABUTMENTS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON THE "GENERAL PLAN" AND "RIPRAP LAYOUT" SHEETS.

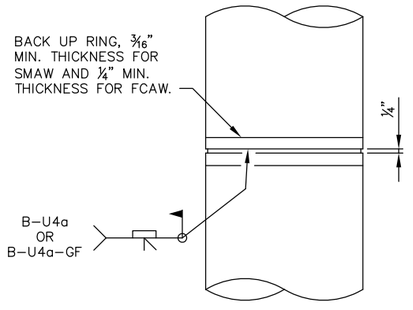
THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "36W–INCH PRESTRESSED GIRDER DETAILS" SHEET.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE SUPERSTRUCTURE DECK, SIDEWALKS AND STRUCTURAL APPROACH SLABS PER THE STANDARD SPECIFICATION. PIGMENTED SURFACE SEALER TO BE APPLIED TO THE PARAPETS PER THE STANDARD SPECIFICATION. SEE "CONSTRUCTION STAGING #2" SHEET FOR PROTECTIVE SURFACE TREATMENT AND PIGMENTED SURFACE SEALER LIMITS.

FORMLINER ON THE FRONT FACES OF ABUTMENTS SHALL BE FORMED PER THE DETAILS SHOWN ON THE "AESTHETIC DETAILS" SHEET AND SHALL BE PAID FOR AS "ARCHITECTURAL SURFACE TREATMENT B–51–150". FORMLINER AREAS WILL NOT RECEIVE ANY CONCRETE STAINING.

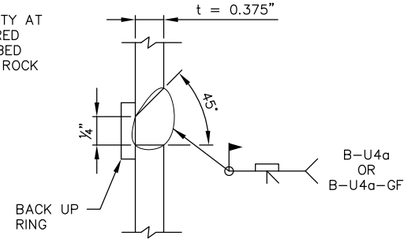
THE EXISTING STRUCTURE B–51–444 IS A THREE SPAN PRESTRESSED CONCRETE DECK GIRDER BRIDGE WITH AN OVERALL LENGTH OF 136'–0" AND A CLEAR ROADWAY WIDTH OF 48'–0". SUPERSTRUCTURE, PIERS AND ABUTMENTS SHALL BE REMOVED IN ACCORDANCE WITH THE SPECIFICATIONS AND AS DETAILED IN THE PLANS.



CAST–IN–PLACE 'PIPE PILE'

NOTE: CAST–IN–PLACE PILE SHELL MATERIAL SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATION.

◑ PRE–BORING QUANTITY AT THE PIER IS MEASURED FROM THE STREAM BED TO THE BOTTOM OF ROCK PRE–BORED HOLE.



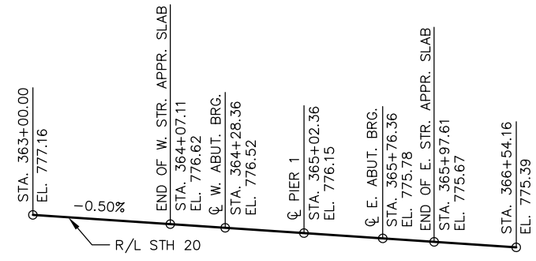
C.I.P. PILE WELD DETAIL

LEGEND

(G09) ¾" V–GROOVE. EXTEND V–GROOVE TO 6" FROM FRONT FACE OF ABUTMENT DIAPHRAGM. V–GROOVE ARE REQUIRED.

(G10) LONGITUDINAL CONSTRUCTION JOINT. USE BAR COUPLERS TO RUN STEEL THRU JOINT. SEE "BAR COUPLERS" SHEET FOR DETAILS.

(#) INDICATES GIRDER LINE DESIGNATION



PROFILE GRADE LINE, R/L STH 20

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY CDS | PLANS CK'D ACK

CROSS SECTION, GENERAL NOTES AND QUANTITIES

SHEET 2 OF 39

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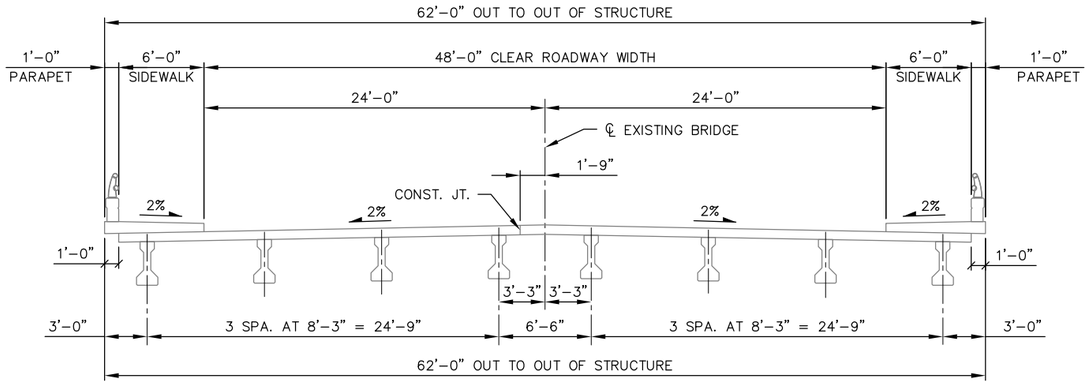
FILE: 02–04–B510150_crs.dwg
PLOT SCALE:

I.D. 2250–12–70

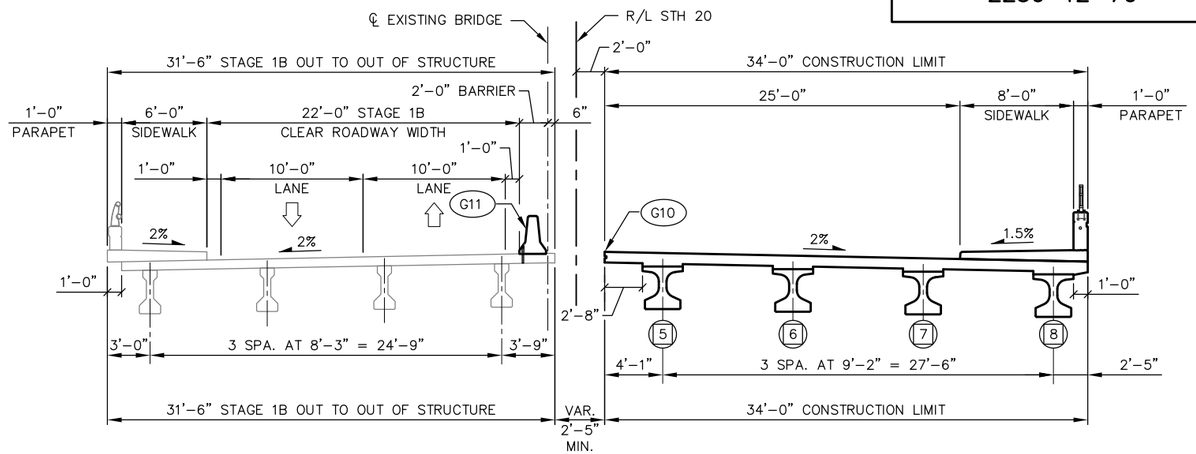
PLOT DATE: May 08, 2018

STATE PROJECT NUMBER
2250–12–70



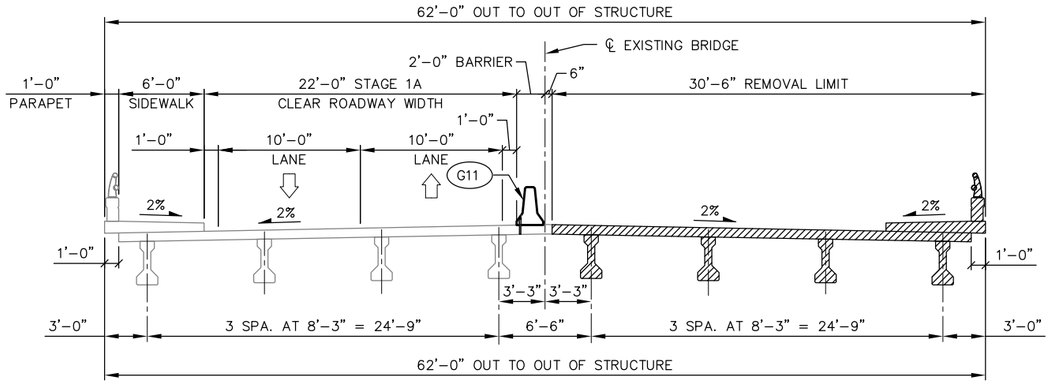
EXISTING LAYOUT

(LOOKING EAST)



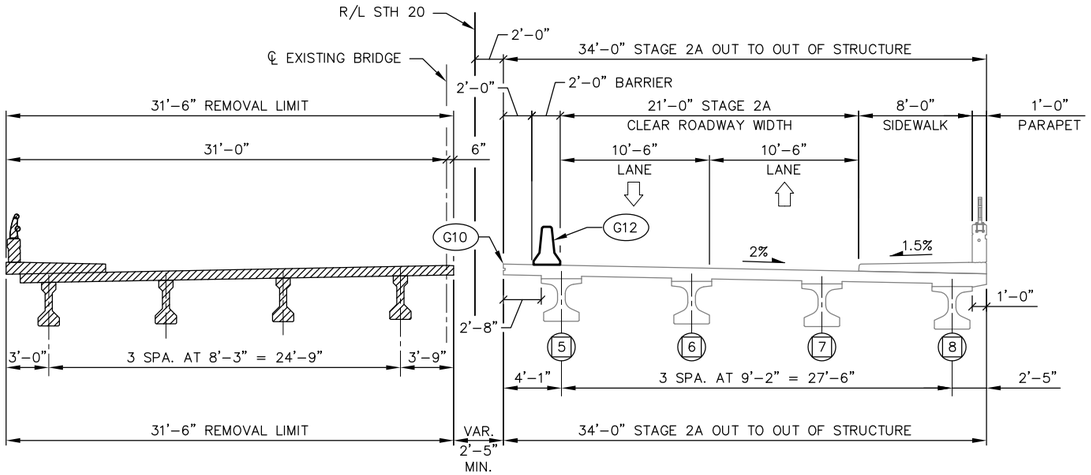
STAGE 1B – CONSTRUCT PARTIAL STRUCTURE B–51–150 TO THE SOUTH

(LOOKING EAST)



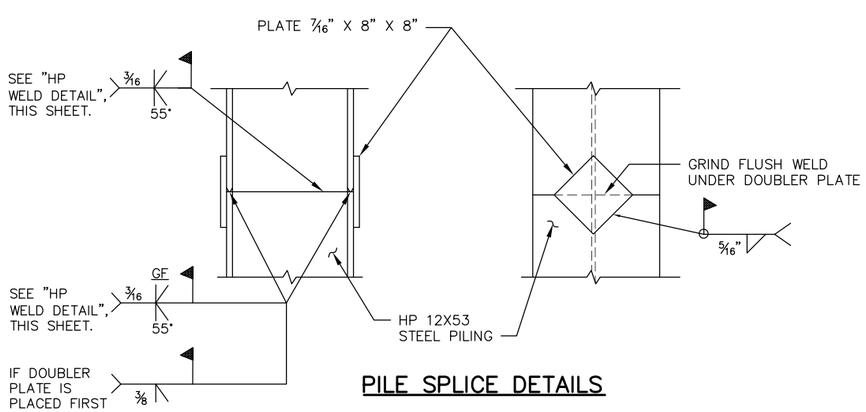
STAGE 1A – REMOVE PARTIAL EXISTING STRUCTURE B–51–444

(LOOKING EAST)

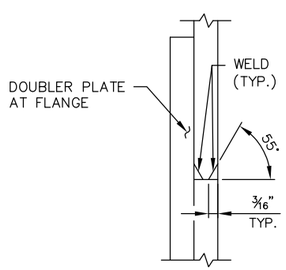


STAGE 2A – REMOVE REMAINING EXISTING STRUCTURE B–51–444

(LOOKING EAST)



PILE SPLICE DETAILS



HP WELD DETAIL

(FLANGE SHOWN, WEB SIMILAR)

LEGEND

- (G10) LONGITUDINAL CONSTRUCTION JOINT. USE BAR COUPLERS TO RUN STEEL THRU JOINT. SEE "BAR COUPLERS" SHEET FOR DETAILS.
- (G11) TEMPORARY PRECAST CONCRETE BARRIER, ANCHORED INTO EXISTING DECK. SEE ROADWAY PLANS FOR QUANTITIES.
- (G12) TEMPORARY PRECAST CONCRETE BARRIER, UN–ANCHORED. SEE ROADWAY PLANS FOR QUANTITIES.
- (#) INDICATES GIRDER LINE DESIGNATION
- REMOVAL LIMITS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY CDS | PLANS CK'D ACK

CONSTRUCTION STAGING #1

SHEET 3 OF 39

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I.D. 2250–12–70

PLOT DATE: May 01, 2018

FILE: 02–04–B510150_crs.dwg
PLOT SCALE:

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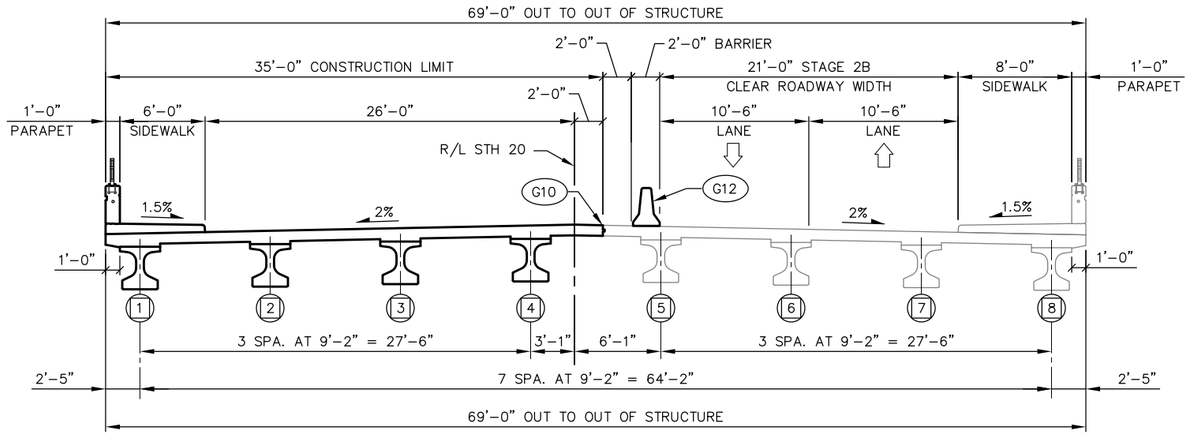
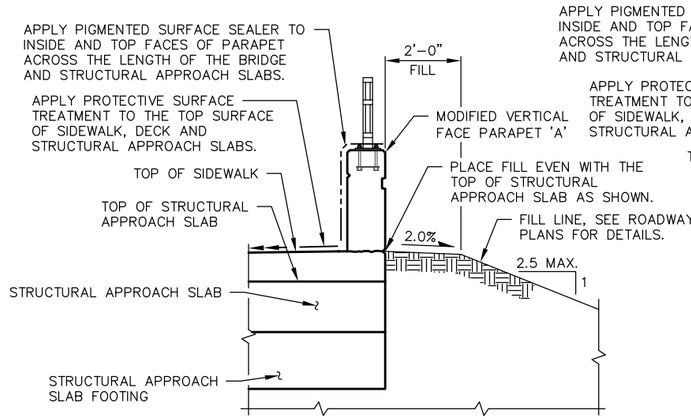
STATE PROJECT NUMBER
2250–12–70

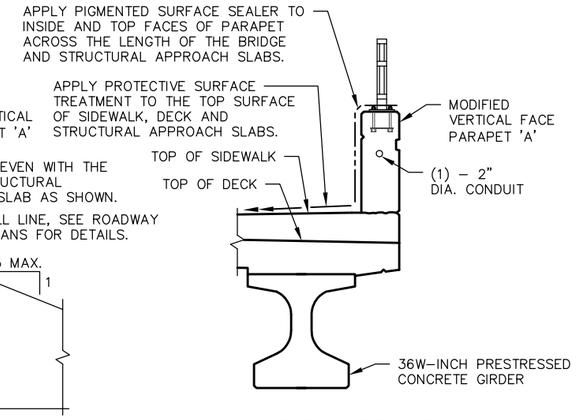


STAGE 2B – CONSTRUCT PARTIAL STRUCTURE B–51–150 TO THE NORTH

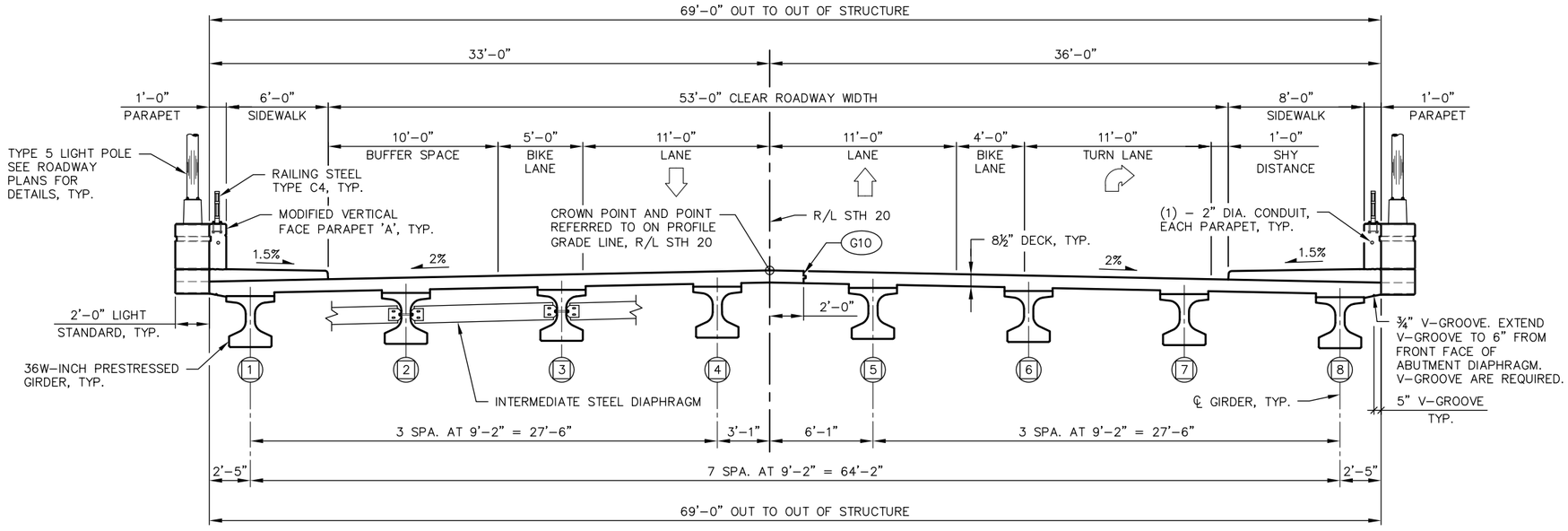
(LOOKING EAST)



TYPICAL FILL SECTION AT END OF STRUCTURAL APPROACH SLABS



CONCRETE SURFACE TREATMENT DETAILS IN SPAN



FINAL LAYOUT – CROSS SECTION IN SPAN

(LOOKING EAST)

LEGEND

- (G10) LONGITUDINAL CONSTRUCTION JOINT. USE BAR COUPLERS TO RUN STEEL THRU JOINT. SEE "BAR COUPLERS" SHEET FOR DETAILS.
- (G12) TEMPORARY PRECAST CONCRETE BARRIER, UN–ANCHORED. SEE ROADWAY PLANS FOR QUANTITIES.
- (#) INDICATES GIRDER LINE DESIGNATION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY CDS | PLANS CK'D ACK

CONSTRUCTION STAGING #2

SHEET 4 OF 39

678

I.D. 2250–12–70

PLOT DATE: May 01, 2018

FILE: 02–04–B510150_crs.dwg
PLOT SCALE:

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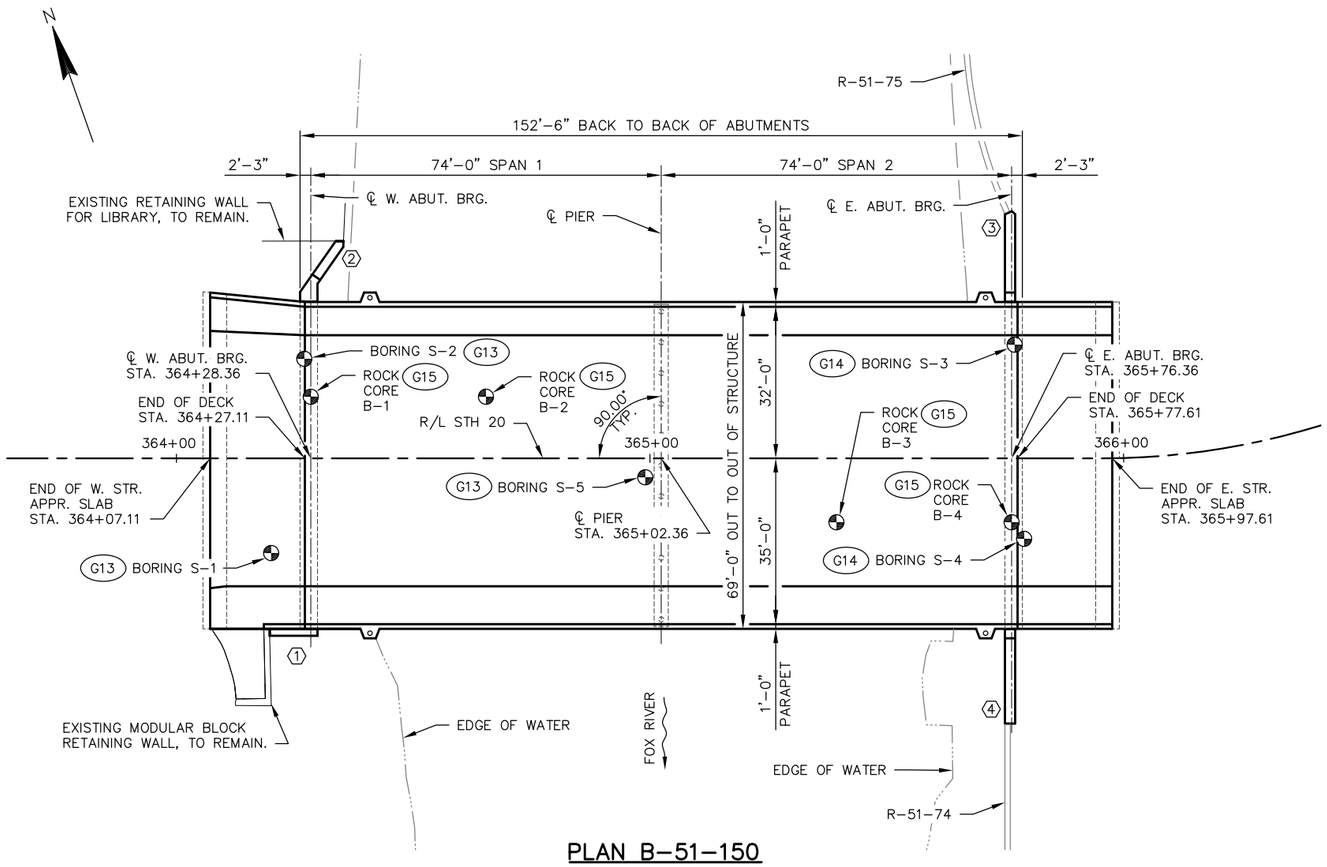
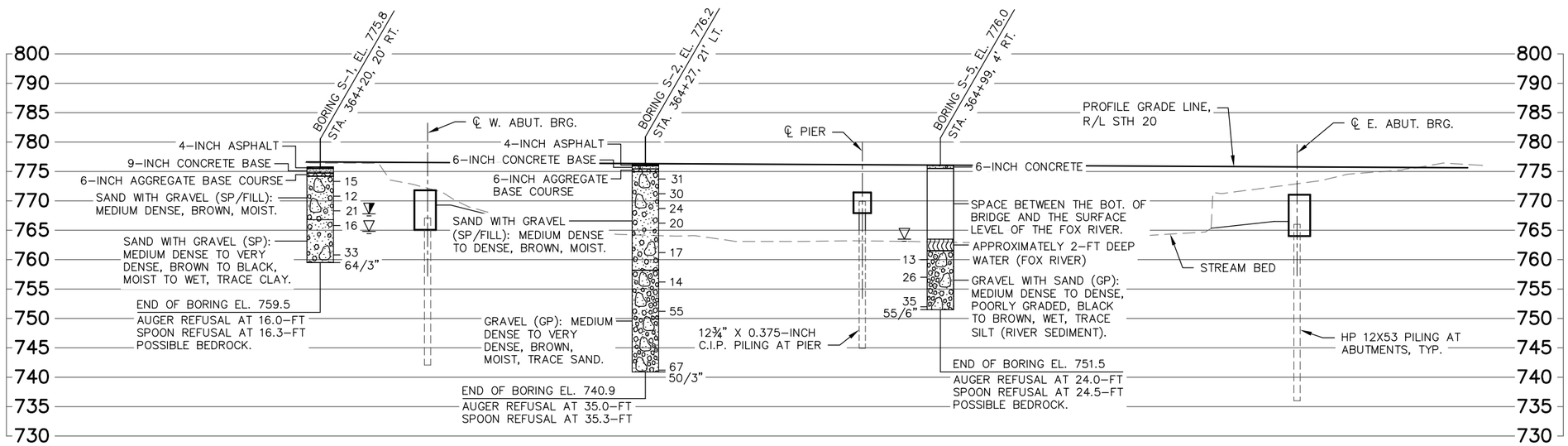


PLAN B-51-150



STH 20

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BORING S-1	11/1/2013	199288.64	524227.75
BORING S-2	10/29/2013	199318.45	524286.19
BORING S-3	10/30/2013	199270.73	524428.43
BORING S-4	11/1/2013	199231.45	524416.50
BORING S-5	11/4/2013	199270.65	524345.56
ROCK CORE B-1	12/2/2014	199310.46	524284.78
ROCK CORE B-2	12/3/2014	199298.00	524319.62
ROCK CORE B-3	12/4/2014	199248.10	524380.36
ROCK CORE B-4	12/3/2014	199235.64	524415.19

BORINGS COMPLETED BY: HIMALAYAN CONSULTANTS, LLC

SUBSURFACE INVESTIGATION REPORT: HIMALAYAN CONSULTANTS, LLC

ALL COORDINATES REFERENCED TO WCCS NAD 83(07) RACINE COUNTY

LEGEND

- ⬡ INDICATES WING NUMBER
- (G13) BORINGS SHOWN ON "SUBSURFACE EXPLORATION #1" SHEET.
- (G14) BORINGS SHOWN ON "SUBSURFACE EXPLORATION #2" SHEET.
- (G15) ROCK CORES SHOWN ON "SUBSURFACE EXPLORATION #3" SHEET.

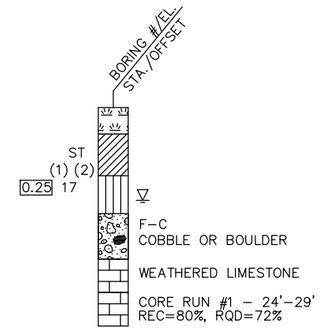
STATE PROJECT NUMBER

2250-12-70

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING



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(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- ▽ AT TIME OF DRILLING
- ▼ END OF DRILLING
- ▽ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY CDS | PLANS CK'D ACK

SUBSURFACE EXPLORATION #1

SHEET 5 OF 39

679

I.D. 2250-12-70

PLOT DATE: May 08, 2018

FILE: 05-07-B510150_bor.dwg
PLOT SCALE:

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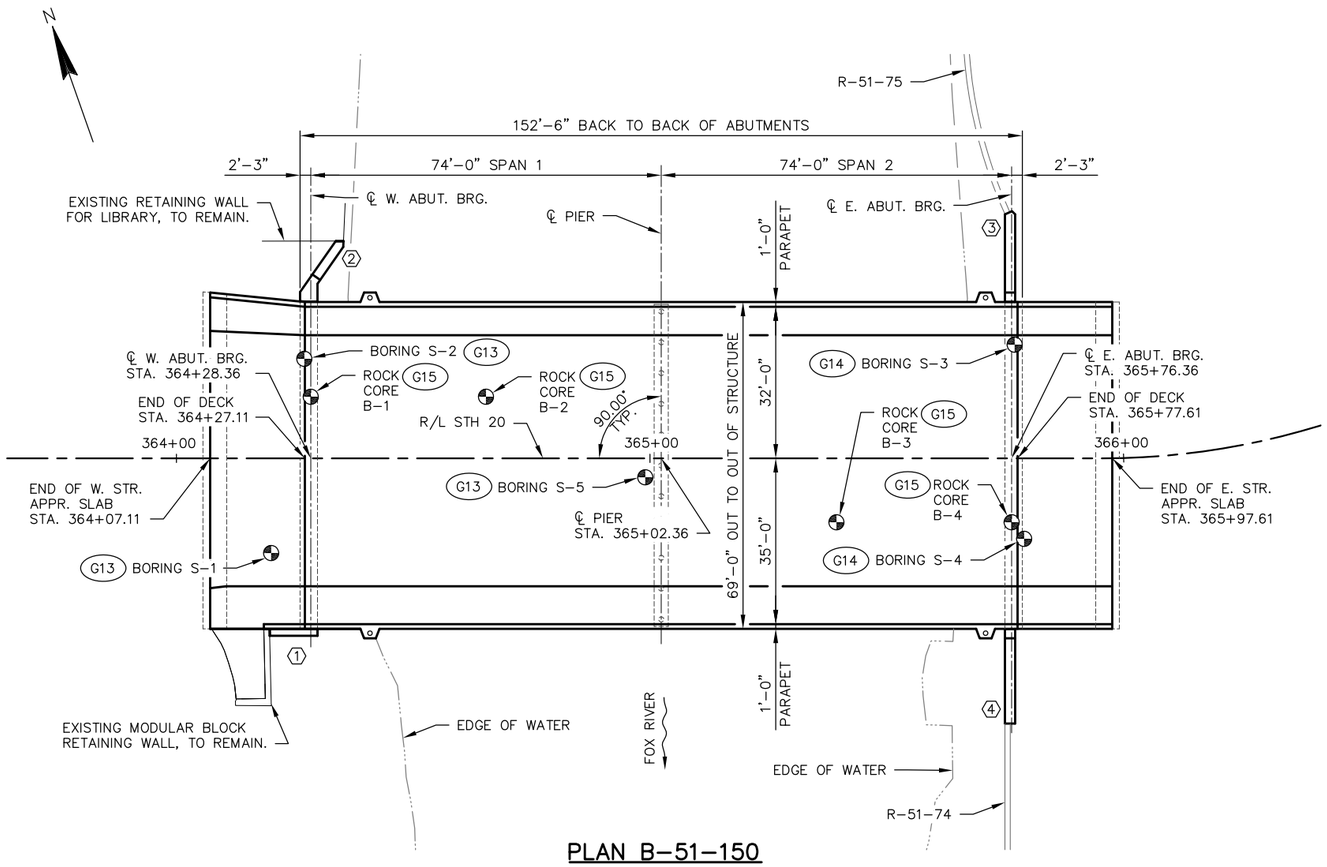
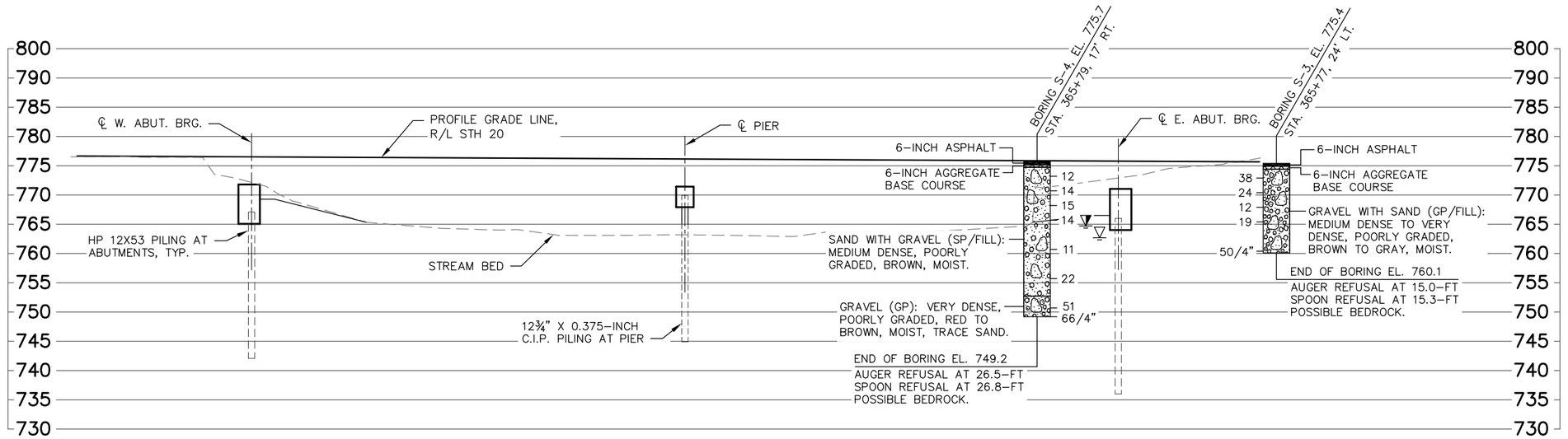


PLAN B-51-150



STH 20

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BORING S-1	11/1/2013	199288.64	524227.75
BORING S-2	10/29/2013	199318.45	524286.19
BORING S-3	10/30/2013	199270.73	524428.43
BORING S-4	11/1/2013	199231.45	524416.50
BORING S-5	11/4/2013	199270.65	524345.56
ROCK CORE B-1	12/2/2014	199310.46	524284.78
ROCK CORE B-2	12/3/2014	199298.00	524319.62
ROCK CORE B-3	12/4/2014	199248.10	524380.36
ROCK CORE B-4	12/3/2014	199235.64	524415.19

BORINGS COMPLETED BY: HIMALAYAN CONSULTANTS, LLC

SUBSURFACE INVESTIGATION REPORT: HIMALAYAN CONSULTANTS, LLC

ALL COORDINATES REFERENCED TO WCCS NAD 83(07) RACINE COUNTY

LEGEND

- ⬡ INDICATES WING NUMBER
- (G13) BORINGS SHOWN ON "SUBSURFACE EXPLORATION #1" SHEET.
- (G14) BORINGS SHOWN ON "SUBSURFACE EXPLORATION #2" SHEET.
- (G15) ROCK CORES SHOWN ON "SUBSURFACE EXPLORATION #3" SHEET.

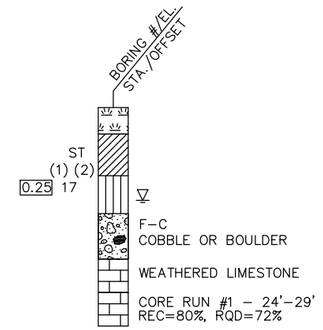
STATE PROJECT NUMBER

2250-12-70

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING



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GROUND WATER ELEVATION

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ABBREVIATIONS

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SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY CDS | PLANS CK'D ACK

SUBSURFACE EXPLORATION #2

SHEET 6 OF 39

680

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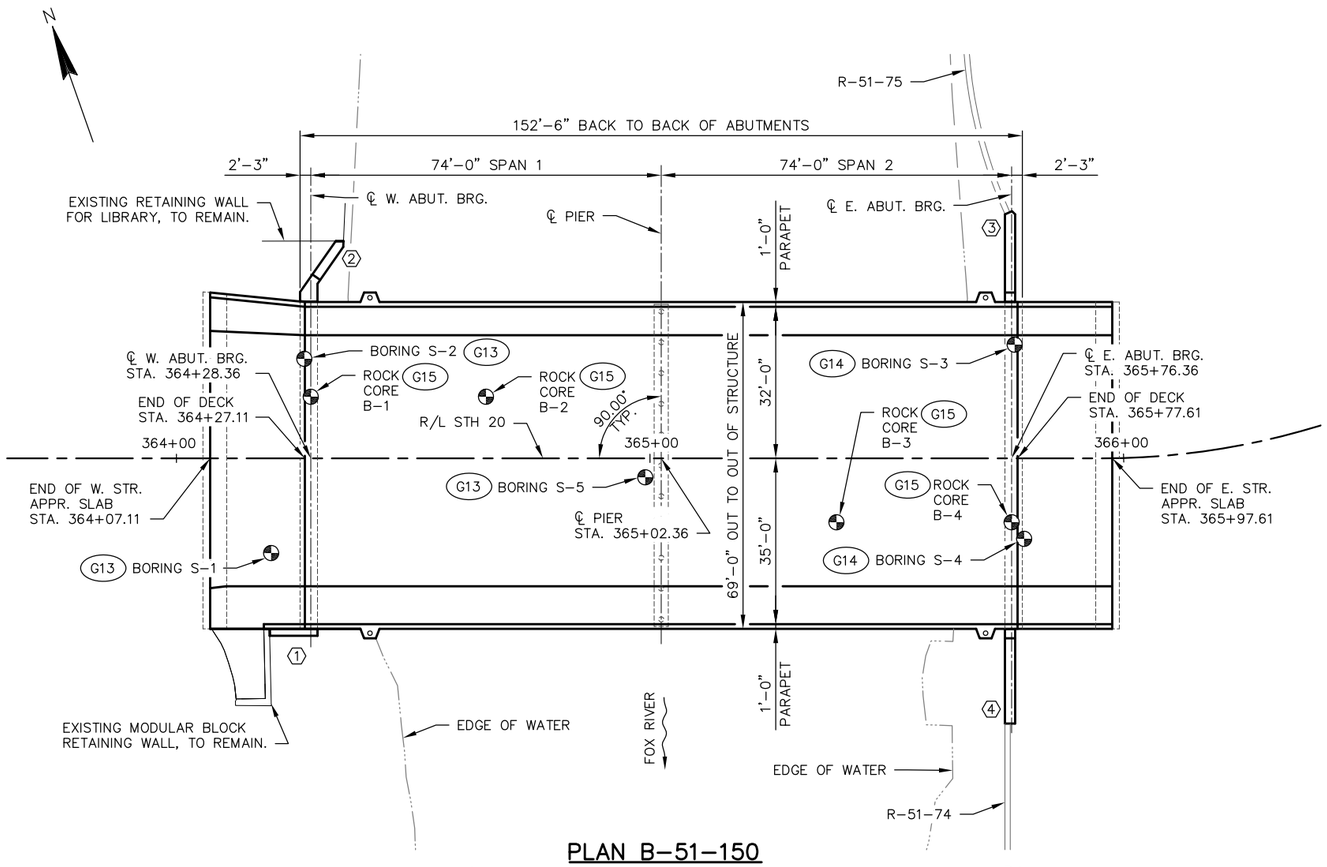
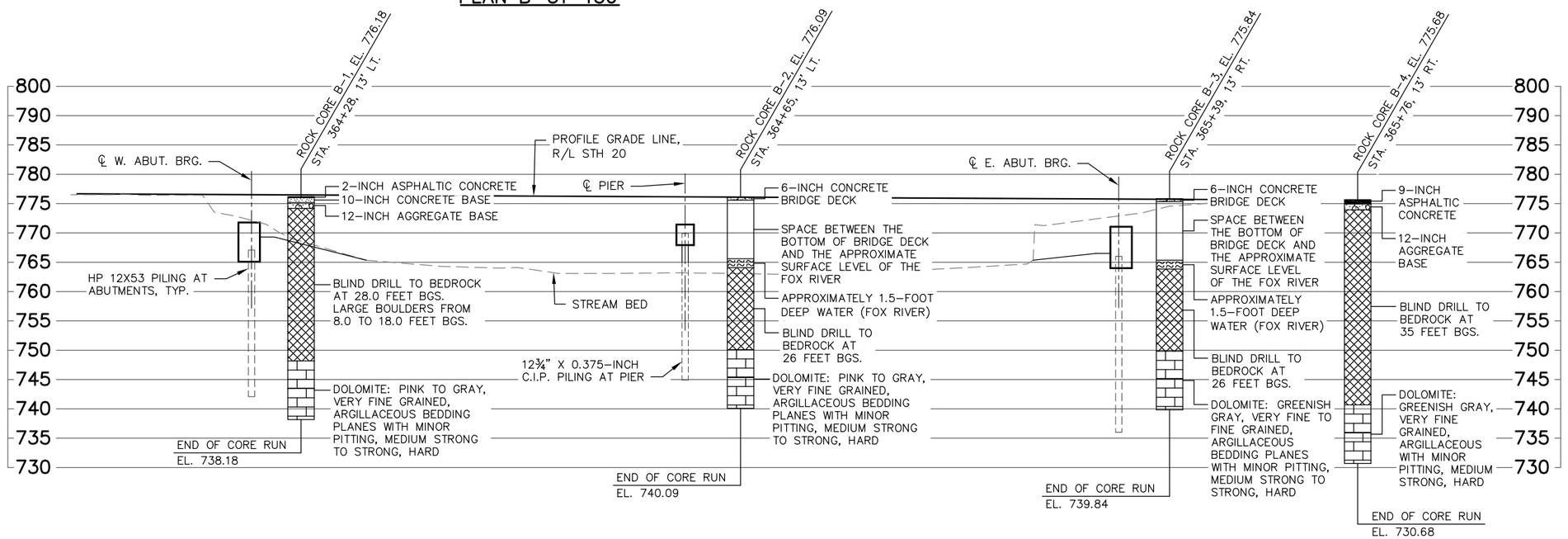
I.D. 2250-12-70

PLOT DATE: May 08, 2018

FILE: 05-07-B510150_bor.dwg
PLOT SCALE:



PLAN B-51-150



STH 20

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BORING S-1	11/1/2013	199288.64	524227.75
BORING S-2	10/29/2013	199318.45	524286.19
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BORINGS COMPLETED BY: HIMALAYAN CONSULTANTS, LLC

SUBSURFACE INVESTIGATION REPORT: HIMALAYAN CONSULTANTS, LLC

ALL COORDINATES REFERENCED TO WCCS NAD 83(07) RACINE COUNTY

LEGEND

- ⬡ INDICATES WING NUMBER
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- (G14) BORINGS SHOWN ON "SUBSURFACE EXPLORATION #2" SHEET.
- (G15) ROCK CORES SHOWN ON "SUBSURFACE EXPLORATION #3" SHEET.

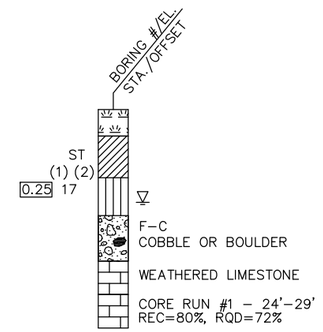
STATE PROJECT NUMBER

2250-12-70

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY CDS | PLANS CK'D ACK

SUBSURFACE EXPLORATION #3

SHEET 7 OF 39

681

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I.D. 2250-12-70

PLOT DATE: May 08, 2018

FILE: 05-07-B510150_bor.dwg
PLOT SCALE:

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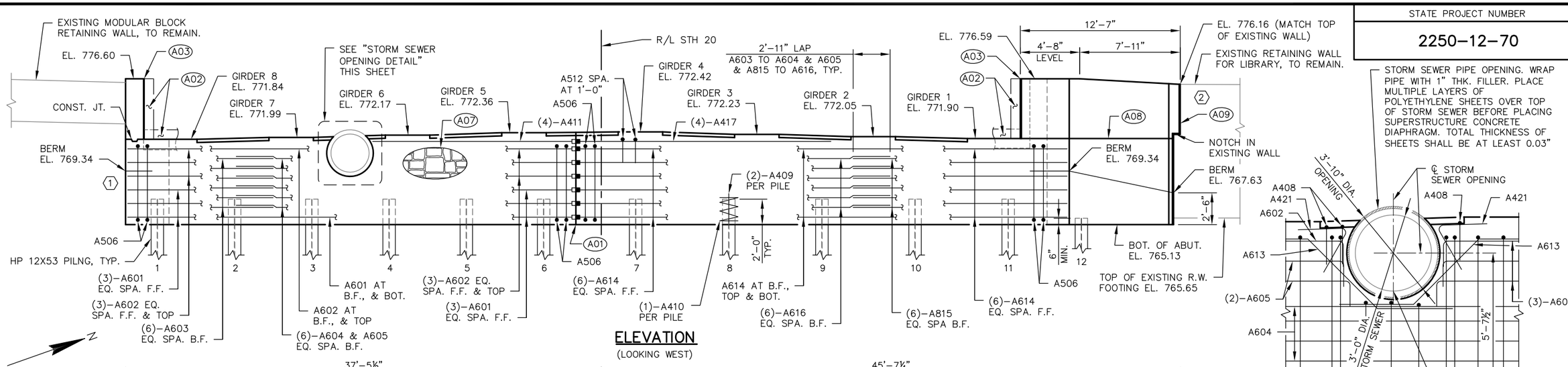
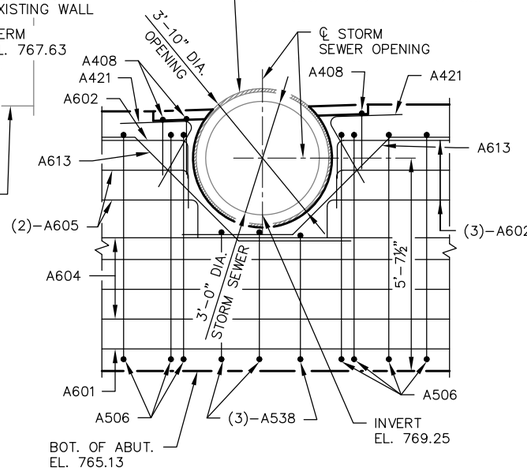


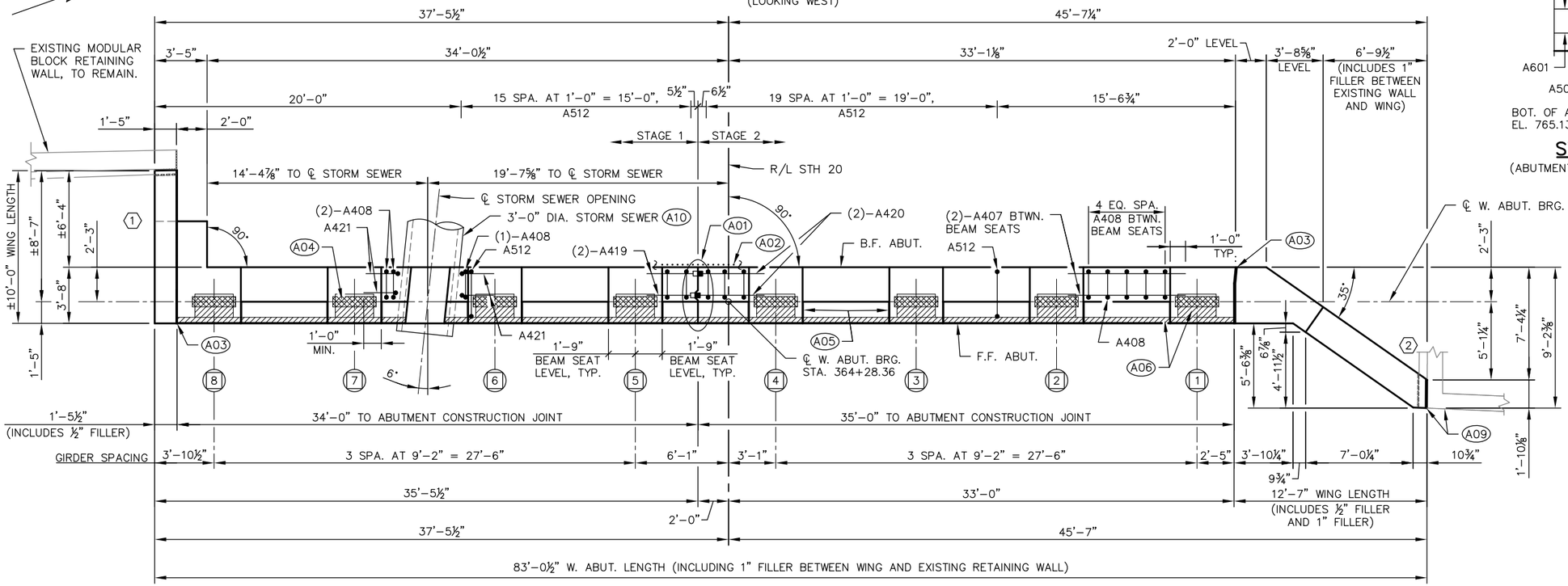
ELEVATION

(LOOKING WEST)



STORM SEWER OPENING DETAIL

(ABUTMENT DIAPHRAGM REINFORCEMENT NOT SHOWN FOR CLARITY)
(ABUTMENT PILING NOT SHOWN FOR CLARITY)
(B.F. STEEL SHOWN)



PLAN

⬡ INDICATES WING NUMBER

(#) INDICATES GIRDER LINE DESIGNATION

F.F. – FRONT FACE
B.F. – BACK FACE

NOTES

FOR TYPICAL SECTION THRU ABUTMENT BODY AND PILE LAYOUT, SEE "WEST ABUTMENT DETAILS" SHEET.

WEST ABUTMENT TO BE SUPPORTED ON HP 12X53 PILING PRE-BORED INTO THE EXISTING BEDROCK. THE PRE-BORED HOLES SHOULD EXTEND A MINIMUM OF 3-FT. INTO THE BEDROCK. ESTIMATED 25 FT. PILE LENGTHS AT THE WEST ABUTMENT.

SEE "CONSTRUCTION STAGING #1" SHEET FOR HP 12X53 PILE SPLICE DETAILS.

(A01) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8". USE BAR COUPLERS TO RUN STEEL THRU JOINT. SEE "BAR COUPLERS" SHEET FOR DETAILS. SEE "DETAIL B" ON "WEST ABUTMENT DETAILS" SHEET.

(A02) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

(A03) SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING, GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE. ½" FILLER TO EXTEND FROM BRIDGE SEAT TO TOP OF WING.

(A04) ½" X 8 X 2'-10" NON-LAMINATED ELASTOMERIC BEARING PAD, TYP. SEE "BEAM SEAT DETAILS" SHEET.

(A05) ¾" CORK FILLER ON VERTICAL BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER, TYP.

(A06) ¾" PREFORMED FILLER, TYP. SEE "BEAM SEAT DETAILS" SHEET.

(A07) SEE "AESTHETIC DETAILS" SHEET FOR FORMLINER PATTERN LIMITS ON FRONT FACE OF ABUTMENT BODY AND WING.

(A08) OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6".

(A09) EXISTING RETAINING WALL FOR LIBRARY, TO REMAIN. PLACE 1" FILLER BETWEEN WALL AND WING TIP. SEAL ALL EXPOSED SURFACES OF 1" FILLER WITH NON-STAINING, GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

(A10) SEE ROADWAY PLANS FOR STORM SEWER DESIGNATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY JDO | PLANS CK'D ACK

WEST ABUTMENT

SHEET 8 OF 39

682

I.D. 2250-12-70

PLOT DATE: May 08, 2018

FILE: 08-15-B510150_abut.dwg
PLOT SCALE:

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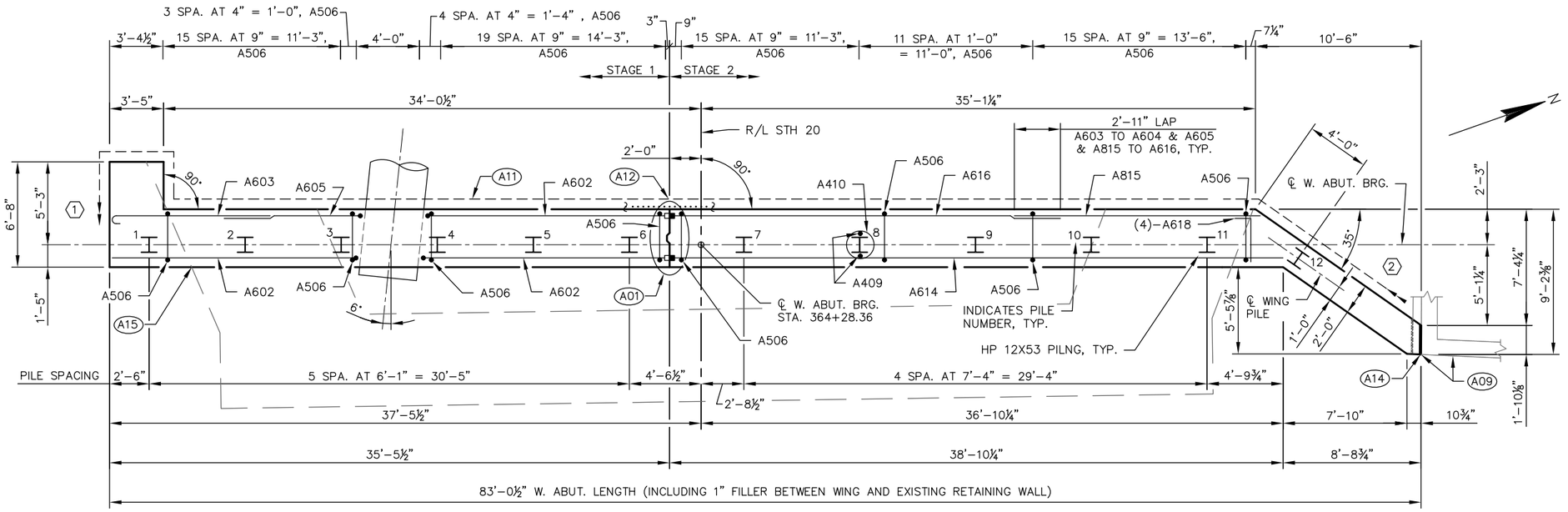
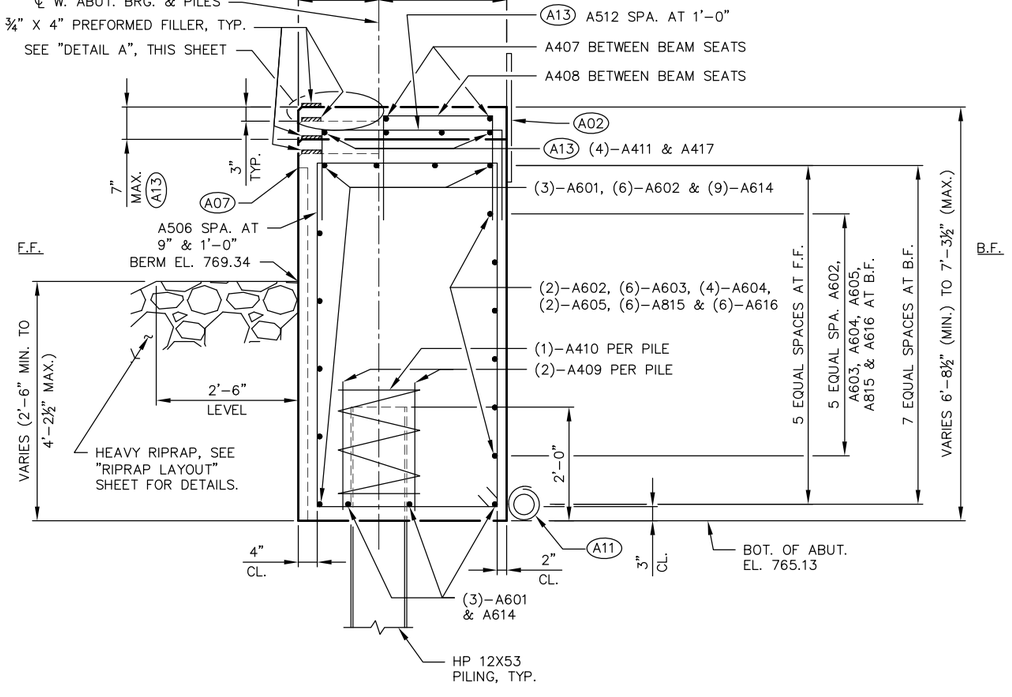
STATE PROJECT NUMBER
2250–12–70



PILE LAYOUT



TYPICAL SECTION THRU ABUTMENT BODY

NOTES

WEST ABUTMENT TO BE SUPPORTED ON HP 12X53 PILING PRE–BORED INTO THE EXISTING BEDROCK. THE PRE–BORED HOLES SHOULD EXTEND A MINIMUM OF 3–FT. INTO THE BEDROCK. ESTIMATED 25 FT. PILE LENGTHS AT THE WEST ABUTMENT.

(A01) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8". USE BAR COUPLERS TO RUN STEEL THRU JOINT. SEE "BAR COUPLERS" SHEET FOR DETAILS. SEE "DETAIL B" THIS SHEET.

(A02) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

(A07) SEE "AESTHETIC DETAILS" SHEET FOR 2" DEEP FORMLINER PATTERN LIMITS ON FRONT FACE OF ABUTMENT BODY AND WING.

(A09) EXISTING RETAINING WALL FOR LIBRARY, TO REMAIN. PLACE 1" FILLER BETWEEN WALL AND WING TIP.

(A11) PIPE UNDERDRAIN WRAPPED (6–INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED IN "EAST ABUTMENT DETAILS" SHEET. RODENT SHIELD IS INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6–INCH".

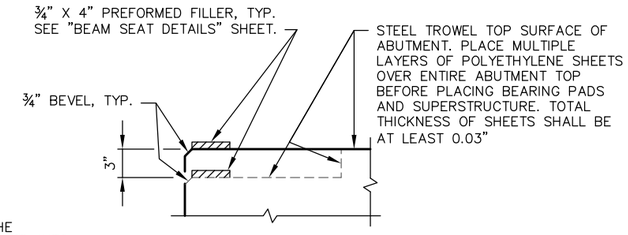
(A12) TEMPORARY CAP END OF PIPE UNDERDRAIN WRAPPED (6–INCH). NORTH SIDE OF PIPE UNDERDRAIN WRAPPED (6–INCH) TO BE CONNECTED WITH THE PIPE UNDERDRAIN WRAPPED (6–INCH) FROM STAGE 2 CONSTRUCTION OF THE WEST ABUTMENT.

(A13) A411, A417, & A512 REQUIRED WHERE DIMENSION EXCEEDS 4".

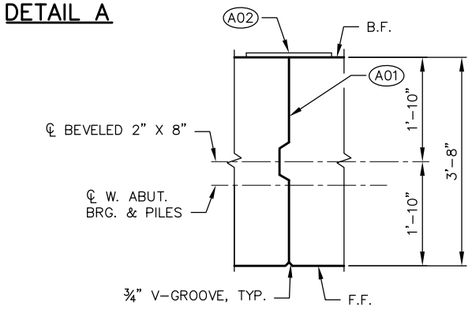
(A14) SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1" FILLER WITH NON–STAINING, GRAY NON–BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE. 1" FILLER BETWEEN WING AND EXISTING RETAINING WALL. FILLER TO EXTEND FROM BOTTOM OF WING TO TOP OF WING.

(A15) EXISTING ABUTMENT IS TO BE REMOVED TO THE TYPICAL STANDARD SPECIFICATION. EXISTING ABUTMENT WINGS ARE TO BE REMOVED FULLY WHERE EXISTING ABUTMENT WINGS ARE IN CONFLICT WITH THE NEW ABUTMENT. REMOVE ANY EXISTING TIMBER PILES FULLY THAT ARE IN CONFLICT WITH THE NEW ABUTMENT PILES.

⬡ INDICATES WING NUMBER



DETAIL A



DETAIL B

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

WEST ABUTMENT DETAILS

SHEET 9 OF 39

683

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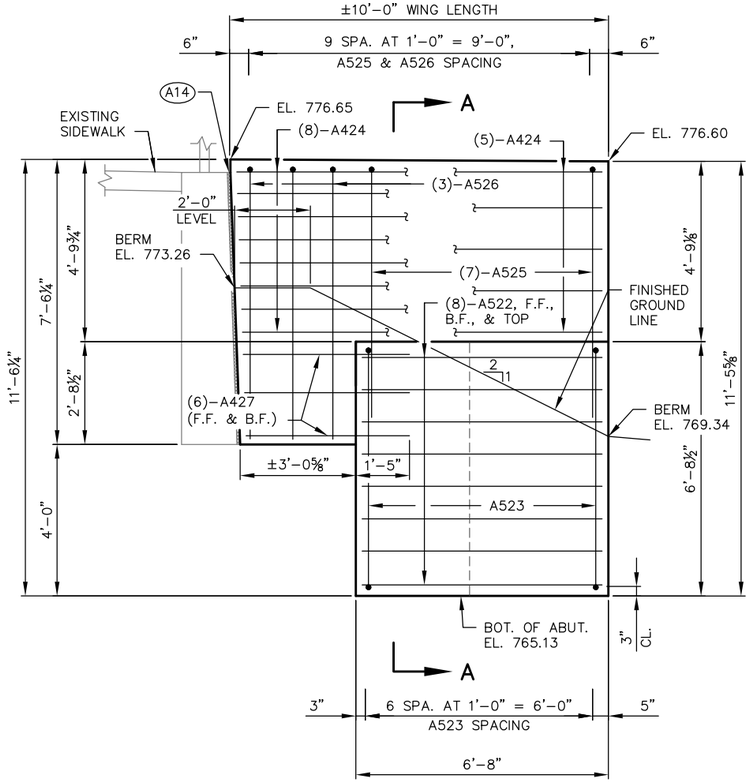
I.D. 2250–12–70

PLOT DATE: May 08, 2018

FILE: 08–15–B510150_abut.dwg
PLOT SCALE:

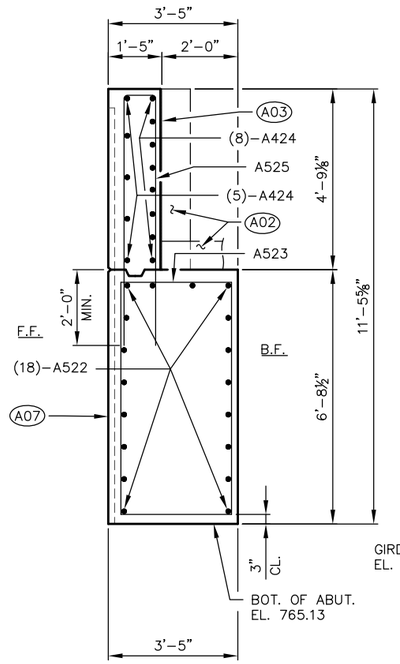
STATE PROJECT NUMBER

2250–12–70

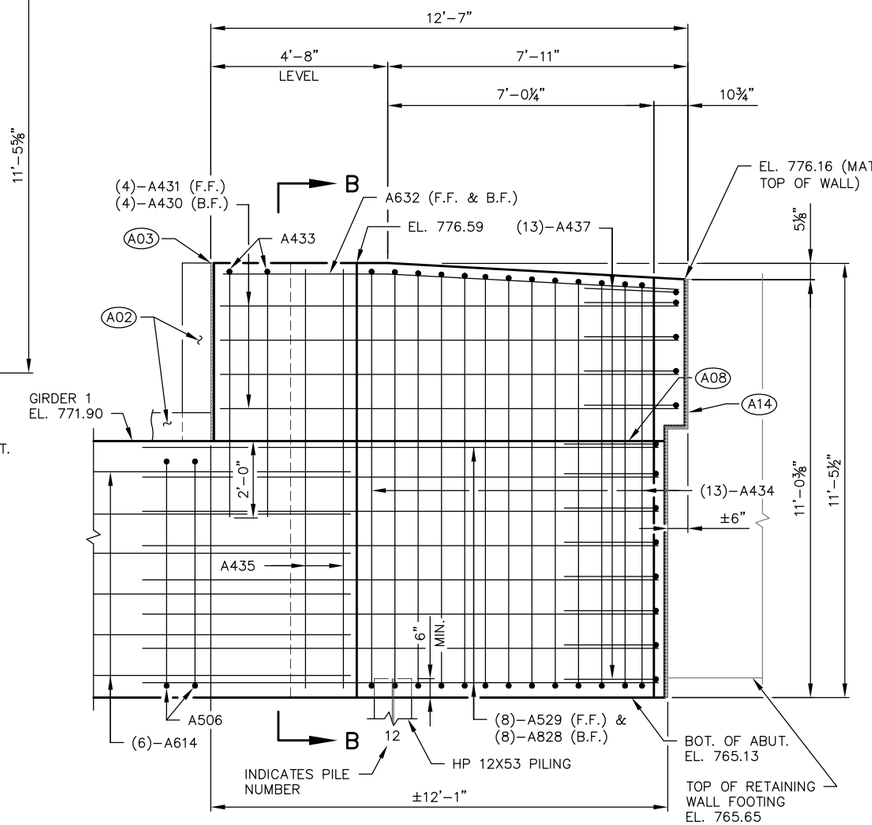


WING 1 ELEVATION

(F.F. LOOKING NORTH)

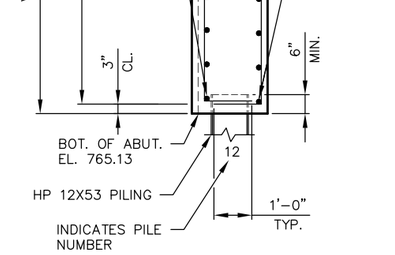


SECTION A–A

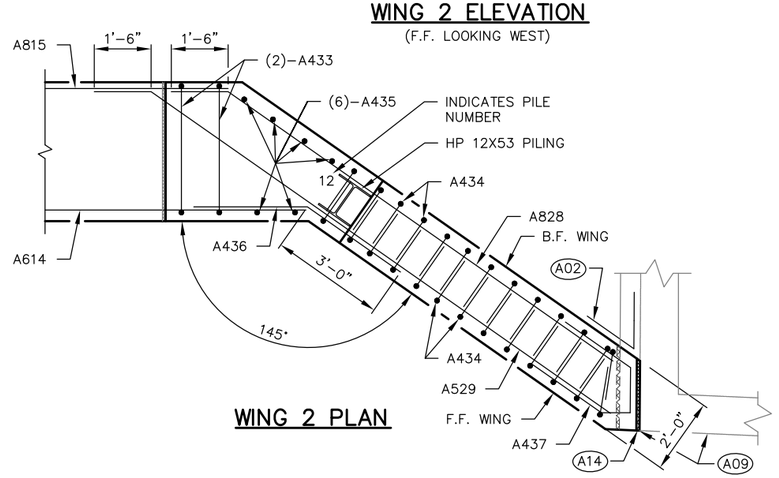


WING 2 ELEVATION

(F.F. LOOKING WEST)



SECTION B–B



WING 2 PLAN

NOTES

(A02) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

(A03) 1" FILLER BETWEEN END OF BRIDGE WING AND RETAINING WALL. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON–STAINING, NON–BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

(A07) SEE "AESTHETIC DETAILS" SHEET FOR FORMLINER PATTERN LIMITS ON FRONT FACE OF ABUTMENT BODY AND WING.

(A08) OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6".

(A09) EXISTING RETAINING WALL FOR LIBRARY, TO REMAIN. PLACE 1" FILLER BETWEEN WALL AND WING TIP.

(A14) SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1" FILLER WITH NON–STAINING, GRAY NON–BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE. 1" FILLER BETWEEN WING AND EXISTING RETAINING WALL. FILLER TO EXTEND FROM BOTTOM OF WING TO TOP OF WING.

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

WEST ABUTMENT WINGS

SHEET 10 OF 39

684

I.D. 2250–12–70

PLOT DATE: May 02, 2018

FILE: 08–15–B510150_abut.dwg
PLOT SCALE:

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STATE PROJECT NUMBER

2250-12-70

BILL OF BARS
WEST ABUTMENT

COATED = 1,490 LBS.
UNCOATED = 4,780 LBS.

	MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION	
(A16)	A601		6	35'-3"			BODY - F.F., TOP & BOTTOM - STAGE 1	HORIZ.
(A16)	A602		14	16'-3"	X		BODY - F.F., TOP & B.F. - STAGE 1	HORIZ.
	A603		6	10'-8"	X		BODY - B.F. SOUTH SIDE - STAGE 1	HORIZ.
(A16)	A604		4	28'-2"			BODY - B.F. BOT. SOUTH SIDE - STAGE 1	HORIZ.
	A605		2	9'-4"	X		BODY - B.F. SOUTH SIDE OF PIPE - STAGE 1	HORIZ.
	A506		90	19'-0"	X		BODY - STIRRUP	VERT.
	A407		10	7'-8"			BODY - TOP BTWN BEAM SEATS	HORIZ.
	A408		33	4'-3"	X		BODY - TOP BTWN BEAM SEATS	VERT.
	A409		22	2'-3"			BODY - BOTTOM AT PILES	VERT.
	A410		11	28'-0"	X		BODY - BOTTOM AT PILES	HORIZ.
(A16)	A411		4	16'-0"			BODY - TOP - STAGE 1	HORIZ.
	A512		36	6'-2"	X		BODY - TOP	HORIZ.
	A613		8	9'-6"	X		BODY - TOP AT STORM SEWER - STAGE 1	HORIZ.
(A16)	A614		12	38'-10"			BODY - F.F., TOP & BOTTOM - STAGE 2	HORIZ.
	A815		6	15'-6"			BODY - B.F. NORTH SIDE - STAGE 2	HORIZ.
(A16)	A616		6	24'-9"			BODY - B.F. - STAGE 2	HORIZ.
(A16)	A417		4	20'-1"			BODY - TOP - STAGE 2	HORIZ.
	A618		4	4'-0"	X		BODY - NORTH SIDE - STAGE 2	HORIZ.
(A16)	A419		2	3'-4"			BODY - BTWN BEAM SEAT SOUTH SIDE - STAGE 1	HORIZ.
(A16)	A420		2	4'-4"			BODY - BTWN BEAM SEAT NORTH SIDE - STAGE 2	HORIZ.
	A421		4	3'-10"	X		BODY - BTWN BEAM SEAT AT STORM SEWER - STAGE 1	HORIZ.
	A522	18		6'-2"			WING 1 - F.F., B.F., & TOP	HORIZ.
	A523	7		18'-6"	X		WING 1 - STIRRUP	VERT.
	A424	13		9'-1"			WING 1 - F.F., B.F., & TOP	HORIZ.
	A525	7		14'-0"	X		WING 1 - TOP STIRRUP	VERT.
	A526	3		15'-0"	X		WING 1 - TOP STIRRUP	VERT.
	A427	6		4'-6"			WING 1 - F.F. & B.F.	HORIZ.
	A828	8		13'-4"	X		WING 2 - B.F.	HORIZ.
	A529	8		16'-9"	X		WING 2 - F.F.	HORIZ.
	A430	4		14'-0"	X		WING 2 - B.F.	HORIZ.
	A431	4		13'-5"	X		WING 2 - F.F.	HORIZ.
	A632	2		12'-8"	X		WING 2 - TOP B.F. & F.F.	HORIZ.
	A433	2		16'-2"	X		WING 2 - STIRRUP	VERT.
	A434	26		13'-4"	X	⚠	WING 2 - STIRRUP	VERT.
	A435	6		11'-0"			WING 2 - VERTICAL BARS	VERT.
	A436	13		6'-0"	X		WING 2 - F.F.	HORIZ.
	A437	13		6'-7"	X		WING 2 - END	HORIZ.
	A538	3		13'-8"	X		BODY - STIRRUP UNDER STORM SEWER - STAGE 1	VERT.

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

⚠ LENGTH SHOWN FOR BARS IN SERIES IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE "BAR SERIES TABLE" FOR ACTUAL LENGTHS.

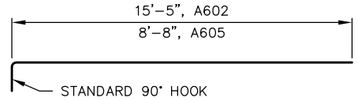
NOTE

(A16) BAR REQUIRES BAR COUPLER. SEE "BAR COUPLERS" SHEET FOR DETAILS.

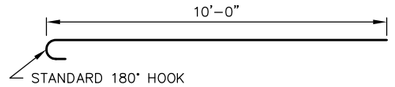
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
A434	2 SERIES OF 13	13'-1" TO 13'-6"

BUNDLE AND TAG EACH SERIES SEPARATELY.



A602, A605



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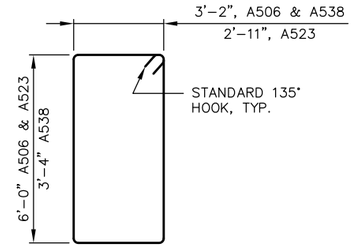
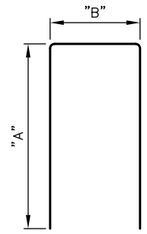
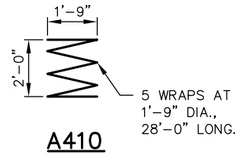


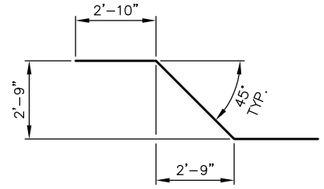
A506, A523 & A538



A408, A512, A525, A526 & A433



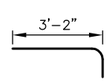
A410



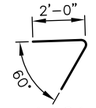
A613

BAR BEND DIMENSIONS

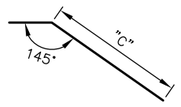
MARK	"A"	"B"
A408	1'-3"	1'-11"
A512	1'-8"	3'-2"
A525	6'-8"	0'-11"
A526	7'-2"	0'-11"
A433	6'-7"	3'-2"



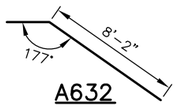
A618



A421



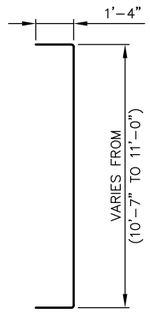
A828, A529, A430, & A431



A632

BAR BEND DIMENSIONS

MARK	"C"
A828	11'-10"
A529	15'-3"
A430	12'-4"
A431	10'-0"



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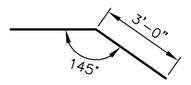

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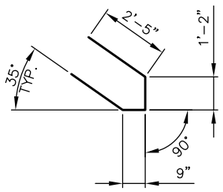


A437

F.F. - FRONT FACE
B.F. - BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY JDO | PLANS CK'D ACK

WEST ABUTMENT REINFORCEMENT

SHEET 11 OF 39

685

I.D. 2250-12-70

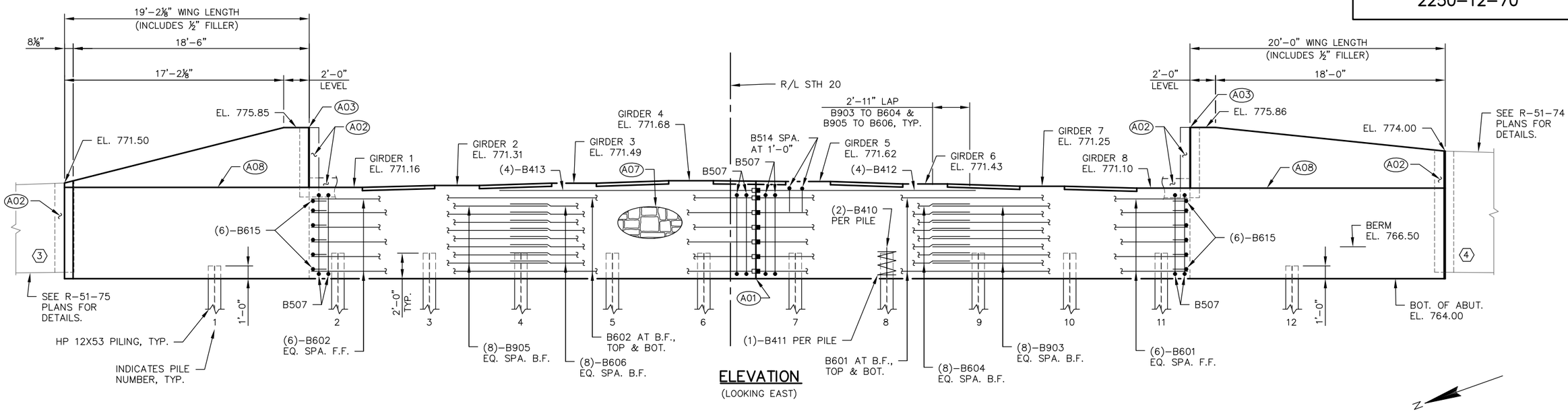
PLOT DATE: May 02, 2018

FILE: 08-15-B510150_abut.dwg
PLOT SCALE:

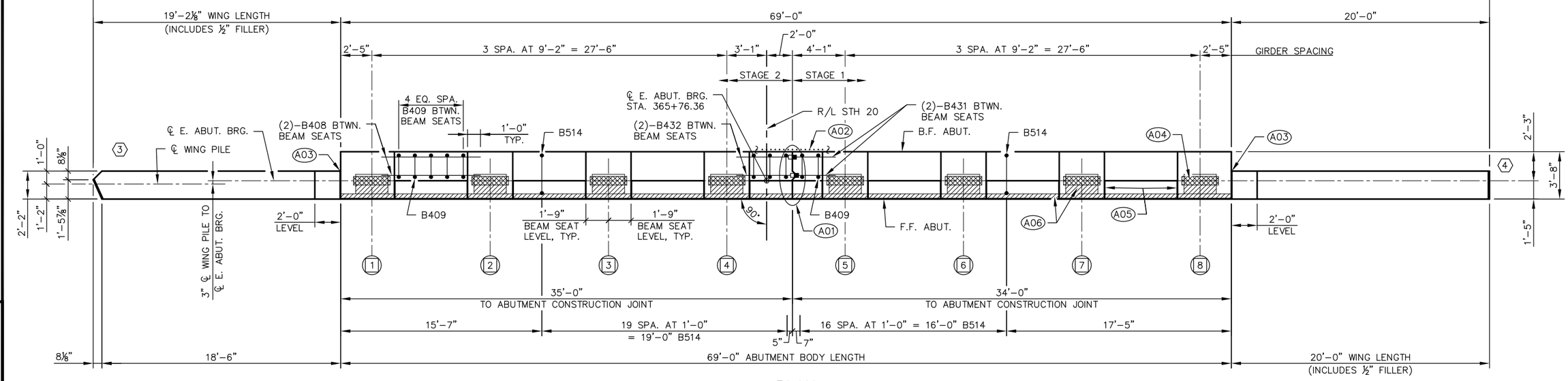
8

8

STATE PROJECT NUMBER
2250–12–70



ELEVATION
(LOOKING EAST)



PLAN

NOTES

FOR TYPICAL SECTION THRU ABUTMENT BODY AND PILE LAYOUT, SEE "EAST ABUTMENT DETAILS" SHEET.

EAST ABUTMENT TO BE SUPPORTED ON HP 12X53 PILING PRE–BORED INTO THE EXISTING BEDROCK. THE PRE–BORED HOLES SHOULD EXTEND A MINIMUM OF 3–FT. INTO THE BEDROCK. ESTIMATED 30 FT. PILE LENGTHS AT THE EAST ABUTMENT.

SEE "CONSTRUCTION STAGING #1" SHEET FOR HP 12X53 PILE SPLICE DETAILS.

(A01) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8". USE BAR COUPLERS TO RUN STEEL THRU JOINT. SEE "BAR COUPLERS" SHEET FOR DETAILS. SEE "DETAIL B" ON "EAST ABUTMENT DETAILS" SHEET.

(A02) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

(A03) SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON–STAINING, GRAY NON–BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE. ½" FILLER TO EXTEND FROM BRIDGE SEAT TO TOP OF WING.

(A04) ½" X 8 X 2'–10" NON–LAMINATED ELASTOMERIC BEARING PAD, TYP. SEE "BEAM SEAT DETAILS" SHEET.

(A05) ¾" CORK FILLER ON VERTICAL BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER, TYP.

(A06) ¾" PREFORMED FILLER, TYP. SEE "BEAM SEAT DETAILS" SHEET.

(A07) SEE "AESTHETIC DETAILS" SHEET FOR FORMLINER PATTERN LIMITS ON FRONT FACE OF ABUTMENT BODY AND WING.

(A08) OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6"

⬡ INDICATES WING NUMBER

(#) INDICATES GIRDER LINE DESIGNATION

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

EAST ABUTMENT

SHEET 12 OF 39

686

I.D. 2250–12–70

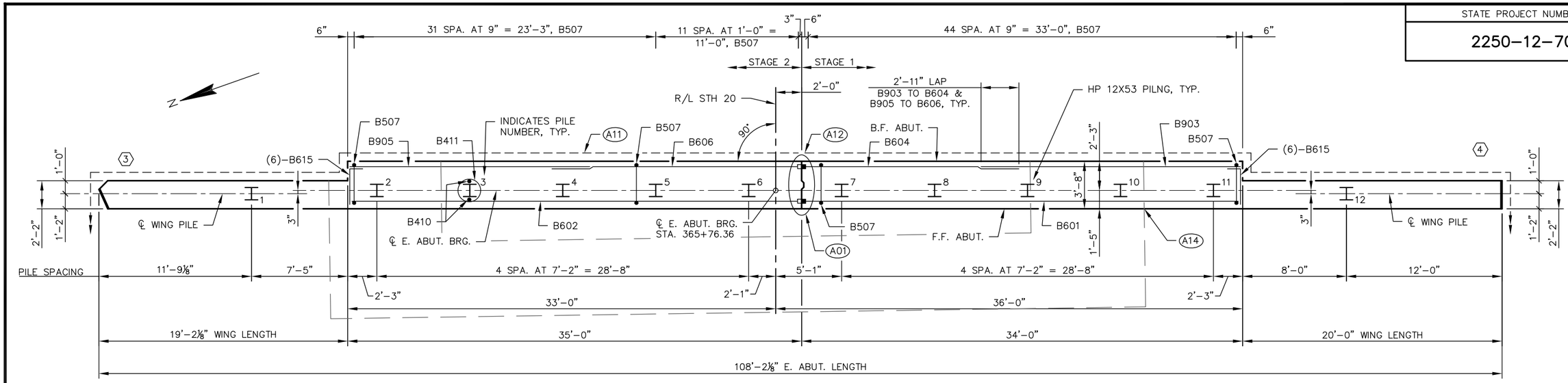
PLOT DATE: May 08, 2018

FILE: 08–15–B510150_abut.dwg
PLOT SCALE:

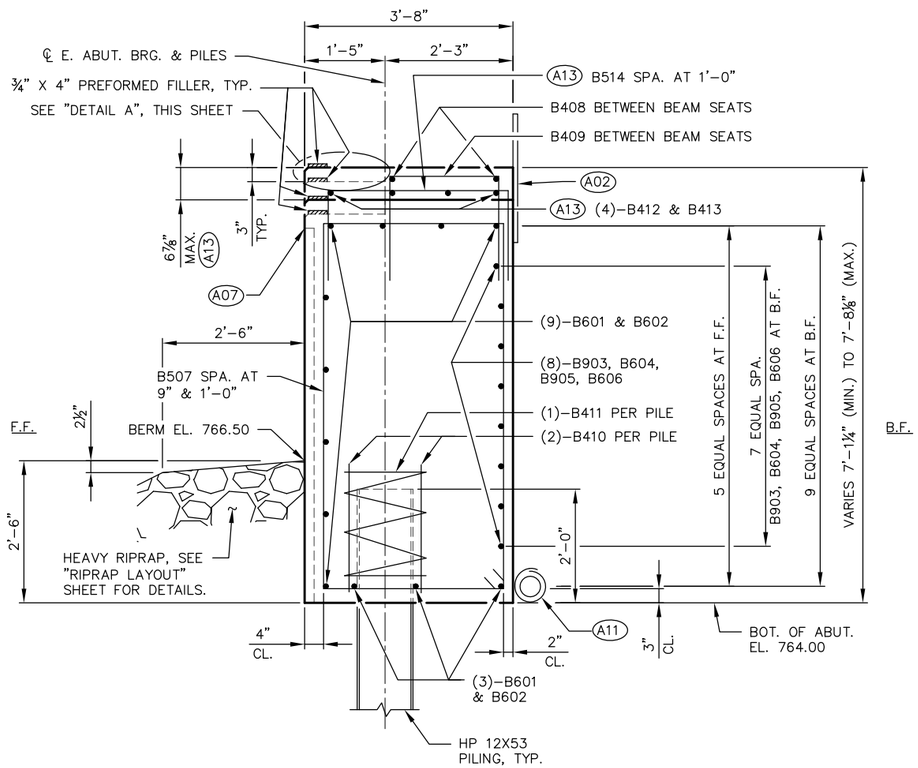
8

8

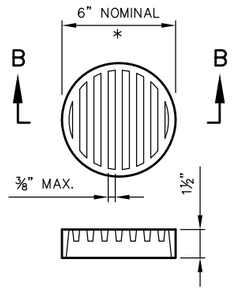
STATE PROJECT NUMBER
2250–12–70



PILE LAYOUT



TYPICAL SECTION THRU ABUTMENT BODY



SECTION B–B

RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1–INCH STAINLESS STEEL SHEET METAL SCREWS.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6–INCH".

NOTES

EAST ABUTMENT TO BE SUPPORTED ON HP 12X53 PILING PRE–BORED INTO THE EXISTING BEDROCK. THE PRE–BORED HOLES SHOULD EXTEND A MINIMUM OF 3–FT. INTO THE BEDROCK. ESTIMATED 30 FT. PILE LENGTHS AT THE EAST ABUTMENT.

(A01) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2" X 8". USE BAR COUPLERS TO RUN STEEL THRU JOINT. SEE "BAR COUPLERS" SHEET FOR DETAILS. SEE "DETAIL B" THIS SHEET.

(A02) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

(A07) SEE "AESTHETIC DETAILS" SHEET FOR 2" DEEP FORMLINER PATTERN LIMITS ON FRONT FACE OF ABUTMENT BODY AND WING.

(A11) PIPE UNDERDRAIN WRAPPED (6–INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET. RODENT SHIELD IS INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6–INCH".

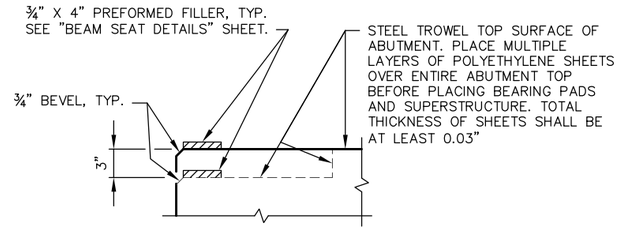
(A12) TEMPORARY CAP END OF PIPE UNDERDRAIN WRAPPED (6–INCH). NORTH SIDE (HIGH END) OF PIPE UNDERDRAIN WRAPPED (6–INCH) TO BE CONNECTED WITH THE PIPE UNDERDRAIN WRAPPED (6–INCH) FROM STAGE 2 CONSTRUCTION OF THE EAST ABUTMENT.

(A13) B412, B413, & B514 REQUIRED WHERE DIMENSION EXCEEDS 4".

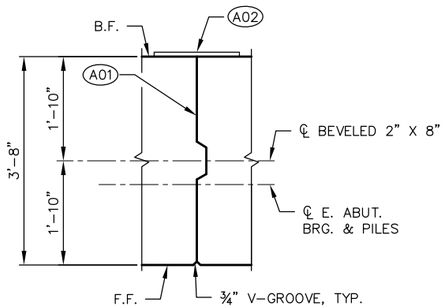
(A14) EXISTING ABUTMENT IS TO BE REMOVED TO THE TYPICAL STANDARD SPECIFICATION. EXISTING ABUTMENT WINGS ARE TO BE REMOVED FULLY WHERE EXISTING ABUTMENT WINGS ARE IN CONFLICT WITH THE NEW ABUTMENT. REMOVE ANY EXISTING TIMBER PILES FULLY THAT ARE IN CONFLICT WITH THE NEW ABUTMENT PILES.

⬡ INDICATES WING NUMBER

F.F. – FRONT FACE
B.F. – BACK FACE



DETAIL A



DETAIL B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

EAST ABUTMENT DETAILS

SHEET 13 OF 39

687

8

8

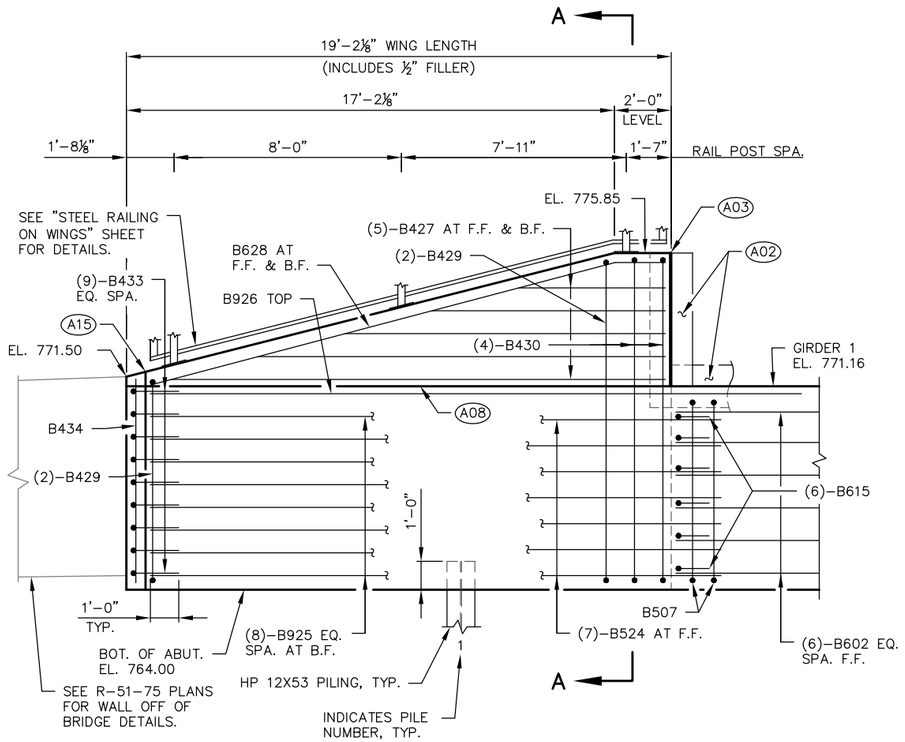
FILE: 08–15–B510150_abut.dwg
PLOT SCALE:

I.D. 2250–12–70

PLOT DATE: May 08, 2018

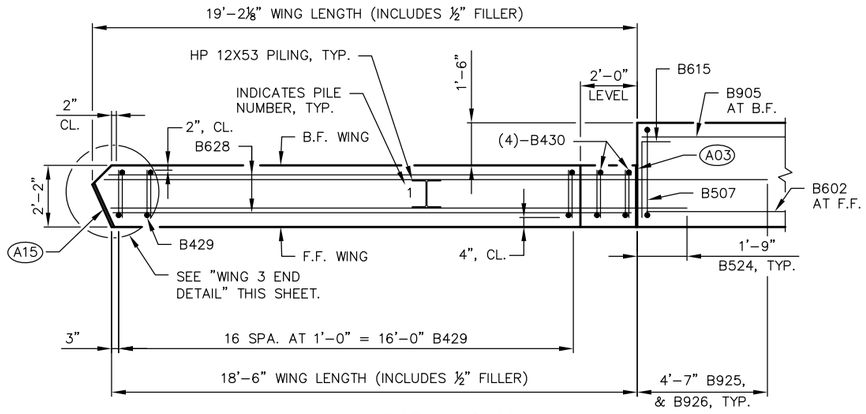
STATE PROJECT NUMBER

2250–12–70



WING 3 ELEVATION

(LOOKING EAST)



WING 3 PLAN

NOTES

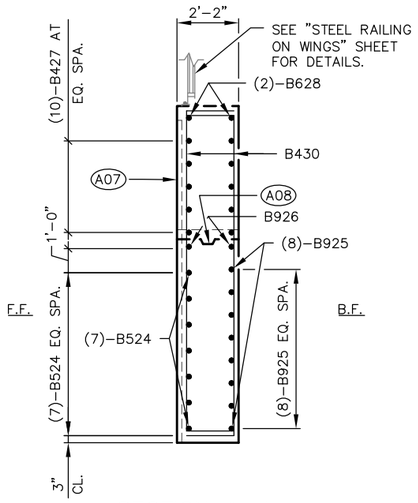
(A02) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

(A03) SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON–STAINING, GRAY NON–BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE. ½" FILLER TO EXTEND FROM BRIDGE SEAT TO TOP OF WING.

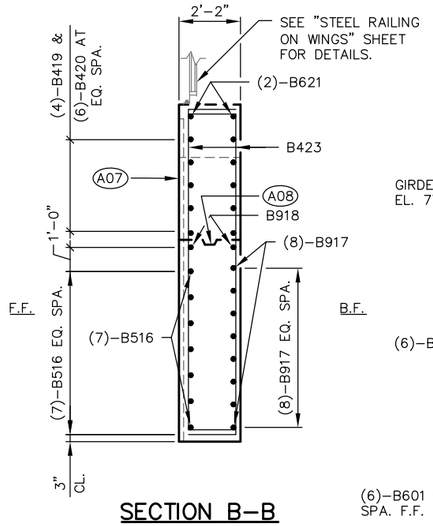
(A07) SEE "AESTHETIC DETAILS" SHEET FOR FORMLINER PATTERN LIMITS ON FRONT FACE OF ABUTMENT BODY AND WING.

(A08) OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6".

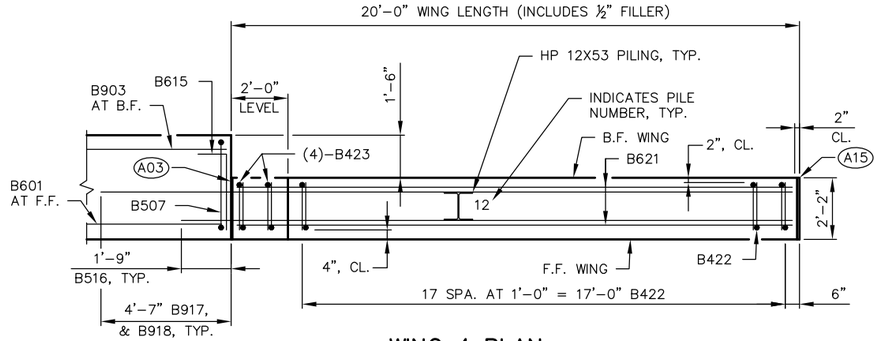
(A15) 1" FILLER BETWEEN END OF BRIDGE WING AND RETAINING WALL. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1" FILLER WITH NON–STAINING, GRAY NON–BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).



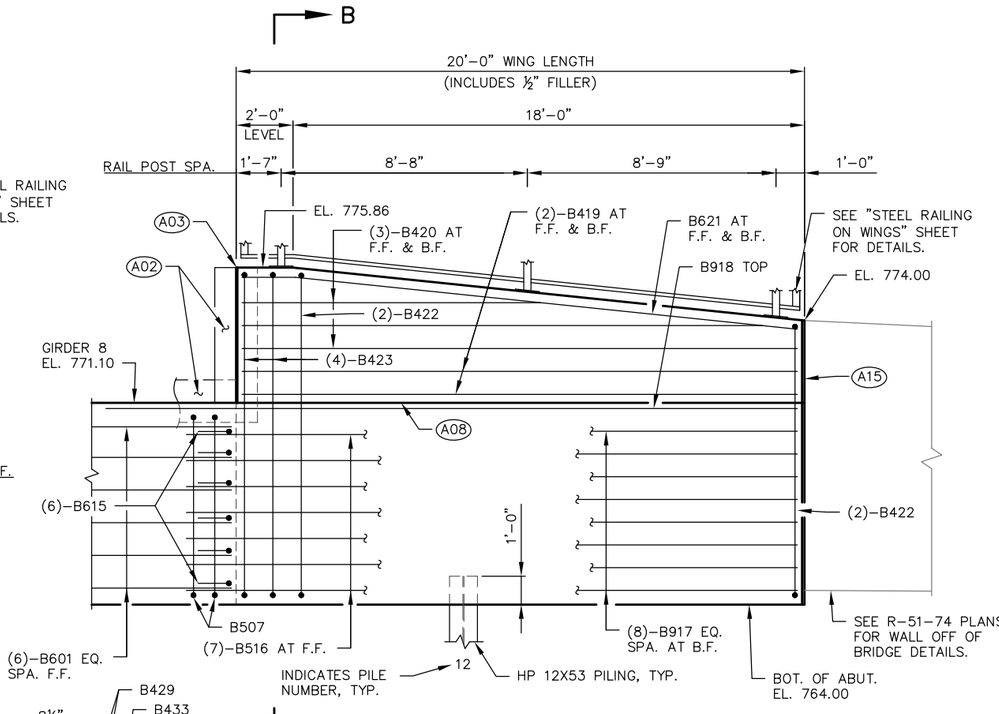
SECTION A–A



SECTION B–B

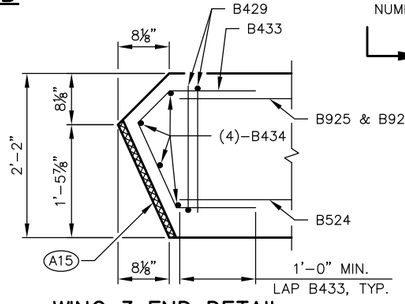


WING 4 PLAN



WING 4 ELEVATION

(LOOKING EAST)



WING 3 END DETAIL

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

EAST ABUTMENT WINGS

SHEET 14 OF 39

688

8

8

I.D. 2250–12–70

PLOT DATE: May 01, 2018

FILE: 08–15–B510150_abut.dwg
PLOT SCALE:

STATE PROJECT NUMBER

2250–12–70

BILL OF BARS
EAST ABUTMENT

COATED = 2,950 LBS.
UNCOATED = 5,370 LBS.

	MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION	
(A16)	B601		12	33'–10"			BODY – F.F., TOP & BOTTOM SOUTH SIDE – STAGE 1	HORIZ.
(A16)	B602		12	34'–10"			BODY – F.F., TOP & BOTTOM NORTH SIDE – STAGE 2	HORIZ.
	B903		8	20'–0"			BODY – B.F. SOUTH SIDE – STAGE 1	HORIZ.
(A16)	B604		8	16'–9"			BODY – B.F. – STAGE 1	HORIZ.
	B905		8	18'–6"			BODY – B.F. NORTH SIDE – STAGE 2	HORIZ.
(A16)	B606		8	19'–3"			BODY – B.F. – STAGE 2	HORIZ.
	B507		88	19'–10"	X		BODY – STIRRUP	VERT.
	B408		12	7'–8"			BODY – TOP BTWN. BEAM SEATS	HORIZ.
	B409		35	5'–5"	X		BODY – TOP BTWN. BEAM SEATS	VERT.
	B410		20	2'–3"			BODY – BOTTOM AT PILES	VERT.
	B411		10	28'–0"	X		BODY – BOTTOM AT PILES	HORIZ.
(A16)	B412		4	17'–2"			BODY – TOP – STAGE 1	HORIZ.
(A16)	B413		4	20'–1"			BODY – TOP – STAGE 2	HORIZ.
	B514		37	6'–3"	X		BODY – TOP	VERT.
	B615		12	4'–0"	X		BODY – AT WINGS	HORIZ.
	B516	7		21'–7"			WING 4 – F.F.	HORIZ.
	B917	8		24'–5"			WING 4 – B.F.	HORIZ.
	B918	2		24'–5"			WING 4 – F.F. & B.F.	HORIZ.
	B419	4		19'–7"			WING 4 – F.F. & B.F.	HORIZ.
	B420	6		15'–1"		⚠	WING 4 – F.F. & B.F.	HORIZ.
	B621	2		19'–8"	X		WING 4 – TOP F.F. & B.F.	HORIZ.
	B422	36		13'–8"	X	⚠	WING 4 – STIRRUP	VERT.
	B423	4		14'–7"	X		WING 4 – STIRRUP	VERT.
	B524	7		20'–1"			WING 3 – F.F.	HORIZ.
	B925	8		22'–11"			WING 3 – B.F.	HORIZ.
	B926	2		22'–11"			WING 3 – F.F. & B.F.	HORIZ.
	B427	10		11'–7"		⚠	WING 3 – F.F. & B.F.	HORIZ.
	B628	2		18'–8"	X		WING 3 – TOP F.F. & B.F.	HORIZ.
	B429	34		12'–4"	X	⚠	WING 3 – STIRRUP	VERT.
	B430	4		14'–7"	X		WING 3 – STIRRUP	VERT.
(A16)	B431		2	3'–4"			BODY – BTWN. BEAM SEATS – STAGE 1	HORIZ.
(A16)	B432		2	4'–4"			BODY – BTWN. BEAM SEATS – STAGE 2	HORIZ.
	B433	9		3'–10"	X		WING 3 – END STIRRUP	HORIZ.
	B434	4		7'–1"			WING 3 – VERTICAL END BAR	VERT.

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

⚠ LENGTH SHOWN FOR BARS IN SERIES IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE "BAR SERIES TABLE" FOR ACTUAL LENGTHS.

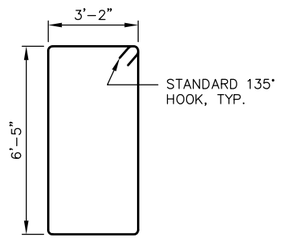
NOTE

(A16) BAR REQUIRES BAR COUPLER. SEE "BAR COUPLERS" SHEET FOR DETAILS.

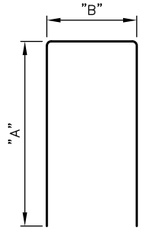
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
B420	2 SERIES OF 3	10'–6" TO 19'–7"
B422	2 SERIES OF 18	12'–9" TO 14'–6"
B427	2 SERIES OF 5	5'–1" TO 18'–0"
B429	2 SERIES OF 17	10'–3" TO 14'–6"

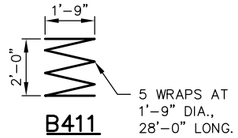
BUNDLE AND TAG EACH SERIES SEPARATELY.



B507



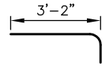
B409, B514



B411

BAR BEND DIMENSIONS

MARK	"A"	"B"
B409	1'–10"	1'–11"
B514	1'–8"	3'–2"



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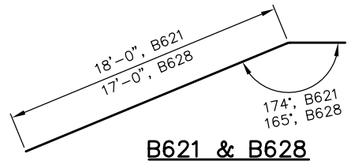
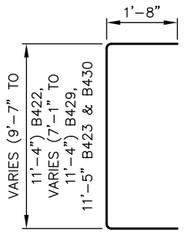
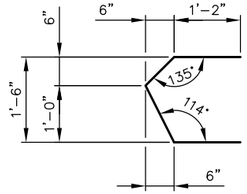


B621 & B628



B422, B423, B429 & B430



B433

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

EAST ABUTMENT REINFORCEMENT

SHEET 15 OF 39

689

I.D. 2250–12–70

PLOT DATE: May 01, 2018

FILE: 08–15–B510150_abut.dwg
PLOT SCALE:

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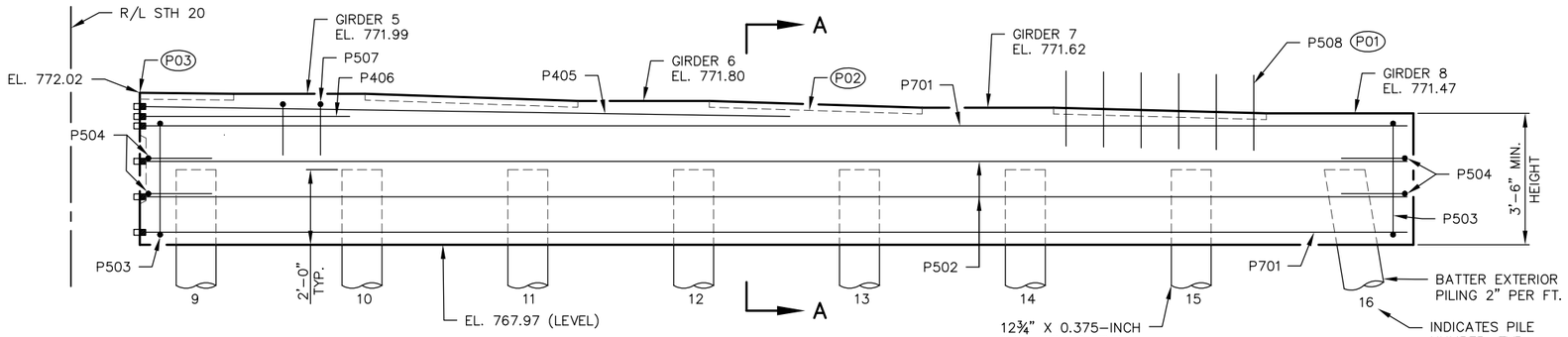
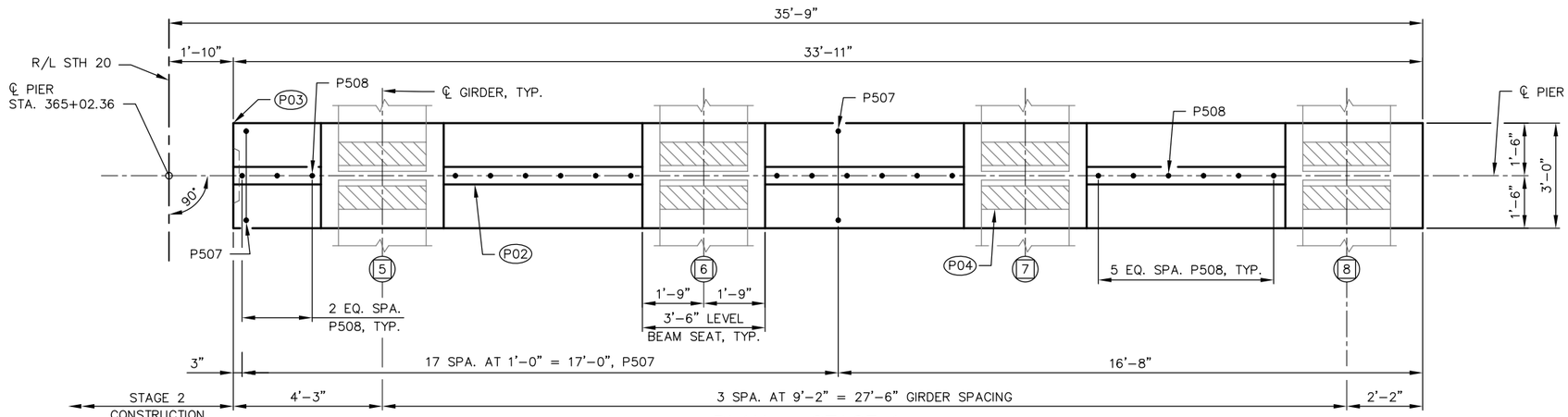
STATE PROJECT NUMBER

2250–12–70

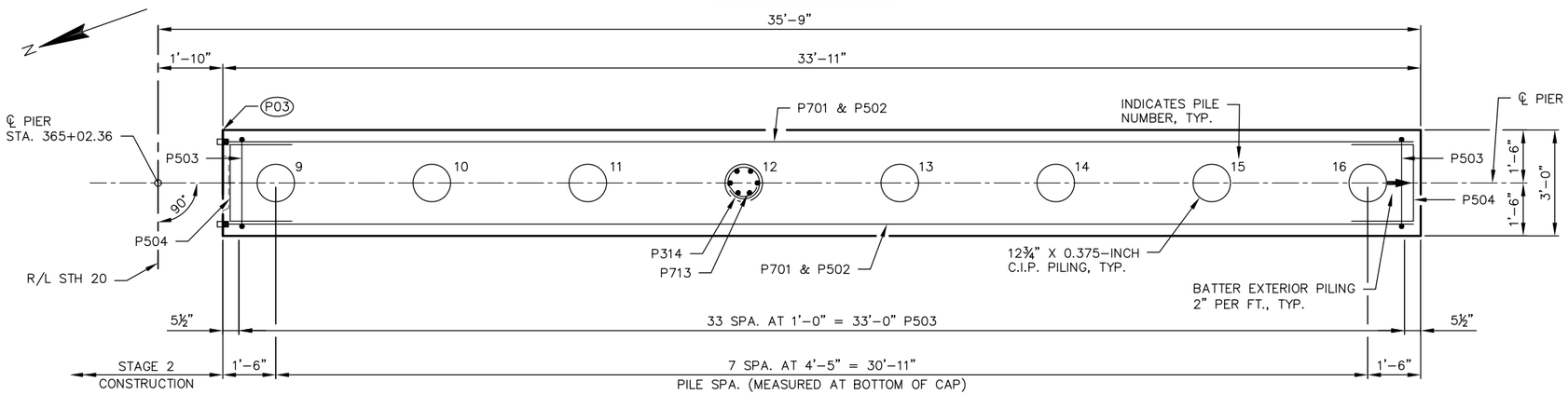


ELEVATION – STAGE 1

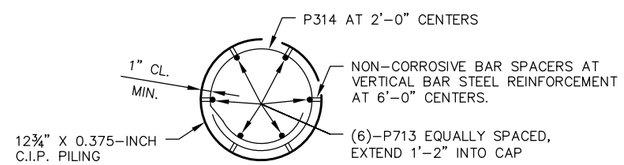
(LOOKING EAST)



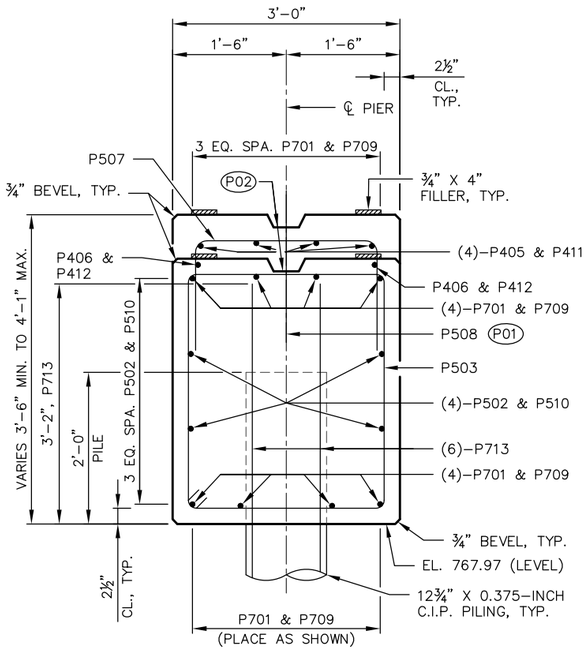
PLAN – STAGE 1



PILE AND REINFORCEMENT PLAN – STAGE 1



SECTION THRU CONCRETE CAST–IN–PLACE PILING AT PIER



SECTION A–A

NOTES

PIER TO BE SUPPORTED ON 12¾" X 0.375" C.I.P. PILING PRE–BORED INTO THE EXISTING BEDROCK. THE PRE–BORED HOLES SHOULD EXTEND A MINIMUM OF 3–FT. INTO THE BEDROCK AND SHALL BE A MINIMUM OF 18–INCHES IN DIAMETER. EXTEND DRILLING CASING TO THE BOTTOM OF THE ROCK PRE–BORED HOLE AND REMOVE CASING DURING CONCRETE PLACEMENT. FILL PRE–BORED HOLE WITH CONCRETE UP TO THE DREDGE LINE OF THE STREAM BED. ESTIMATE 25 FT. PILE LENGTHS AT THE PIER.

PRE–BORED PAY LIMITS EXTEND FROM THE STREAM BED ELEVATION TO BOTTOM OF ROCK PRE–BORED HOLE.

FOR PILE SPLICE DETAILS SEE "CROSS SECTION, GENERAL NOTES & QUANTITIES" SHEET.

(P01) P508 BARS MAY BE PLACED AFTER CONCRETE IS PLACED, BUT BEFORE INITIAL SET HAS TAKEN PLACE.

(P02) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"x6".

(P03) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 1'–10" X 1'–7" X 2" KEYWAY. USE BAR COUPLERS TO RUN STEEL THRU JOINT. SEE "BAR COUPLERS" SHEET FOR DETAILS.

(P04) NON–LAMINATED ELASTOMERIC BEARING PAD, TYP. SEE "BEAM SEAT DETAILS" SHEET.

(#) INDICATES GIRDER LINE DESIGNATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

PIER – STAGE 1

SHEET 16 OF 39

690

I.D. 2250–12–70

PLOT DATE: May 08, 2018

FILE: 16–17_B510150_pier.dwg
PLOT SCALE:

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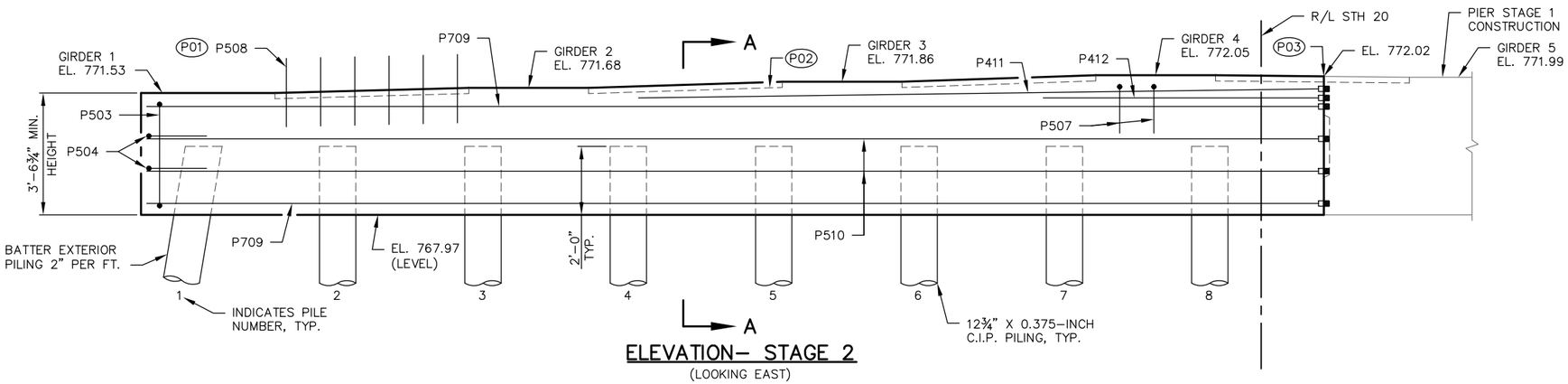
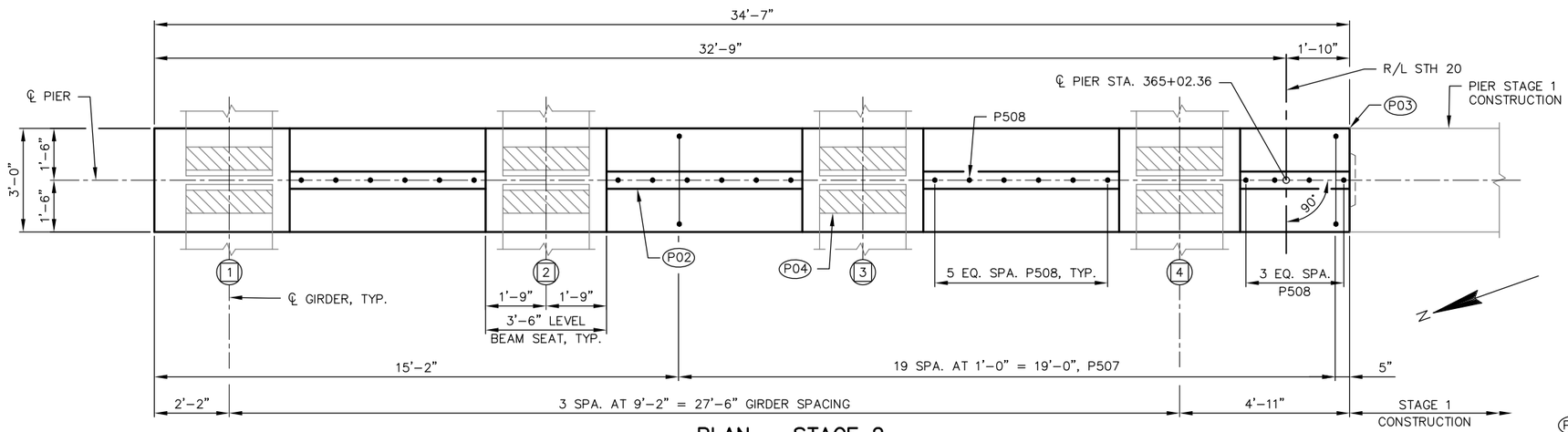
STATE PROJECT NUMBER

2250-12-70

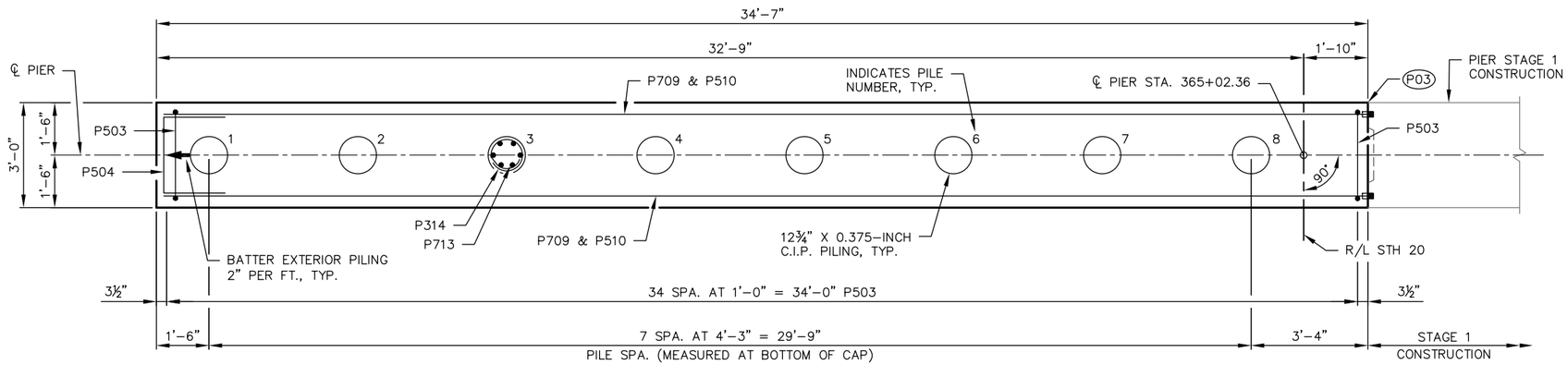


ELEVATION- STAGE 2

(LOOKING EAST)



PLAN - STAGE 2



PILE AND REINFORCEMENT PLAN - STAGE 2

NOTES

PIER TO BE SUPPORTED ON 12¾" X 0.375" C.I.P. PILING PRE-BORED INTO THE EXISTING BEDROCK. THE PRE-BORED HOLES SHOULD EXTEND A MINIMUM OF 3-FT. INTO THE BEDROCK AND SHALL BE A MINIMUM OF 18-INCHES IN DIAMETER. EXTEND DRILLING CASING TO THE BOTTOM OF THE ROCK PRE-BORED HOLE AND REMOVE CASING DURING CONCRETE PLACEMENT. FILL PRE-BORED HOLE WITH CONCRETE UP TO THE DREDGE LINE OF THE STREAM BED. ESTIMATE 25 FT. PILE LENGTHS AT THE PIER.

PRE-BORED PAY LIMITS EXTEND FROM THE STREAM BED ELEVATION TO BOTTOM OF ROCK PRE-BORED HOLE.

FOR PILE SPLICE DETAILS SEE "CROSS SECTION, GENERAL NOTES & QUANTITIES" SHEET.

SEE "PIER - STAGE 1" SHEET FOR SECTION A-A.

(P01) P508 BARS MAY BE PLACED AFTER CONCRETE IS PLACED, BUT BEFORE INITIAL SET HAS TAKEN PLACE.

(P02) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"x6".

(P03) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 1'-10" X 1'-7" X 2" KEYWAY. USE BAR COUPLERS TO RUN STEEL THRU JOINT. SEE "BAR COUPLERS" SHEET FOR DETAILS.

(P04) NON-LAMINATED ELASTOMERIC BEARING PAD, TYP. SEE "BEAM SEAT DETAILS" SHEET.

(P05) BAR REQUIRES BAR COUPLER. SEE "BAR COUPLERS" SHEET FOR DETAILS.

(#) INDICATES GIRDER LINE DESIGNATION.

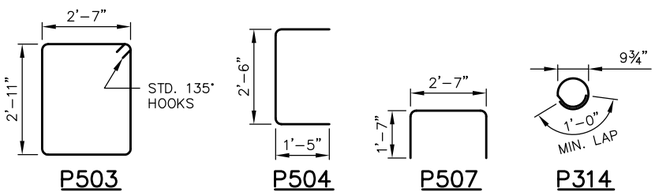
BILL OF BARS
PIER

COATED = 90 LBS.
UNCOATED = 6,390 LBS

	MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION	
(P05)	P701		8	33'-9"			PIER CAP - TOP & BOTTOM STAGE 1	HORIZ.
(P05)	P502		4	33'-9"			PIER CAP - SIDES STAGE 1	HORIZ.
	P503		69	11'-8"	X		PIER CAP - STIRRUP	VERT.
	P504		6	5'-1"	X		PIER CAP - END STIRRUP	HORIZ.
(P05)	P405		4	17'-8"			PIER CAP - TOP STAGE 1	HORIZ.
(P05)	P406		2	5'-8"			PIER CAP - TOP STAGE 1	HORIZ.
	P507		38	5'-6"	X		PIER CAP - TOP STIRRUP	VERT.
	P508	43		2'-0"			PIER CAP - DOWELS	VERT.
(P05)	P709		8	34'-5"			PIER CAP - TOP & BOTTOM STAGE 2	HORIZ.
(P05)	P510		4	34'-5"			PIER CAP - SIDES STAGE 2	HORIZ.
(P05)	P411		4	20'-1"			PIER CAP - TOP STAGE 2	HORIZ.
(P05)	P412		2	8'-3"			PIER CAP - TOP STAGE 2	HORIZ.
	P713		96	18'-3"			PILE VERT.	VERT.
	P314		144	3'-7"	X		PILE TIES	HORIZ.

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY JDO | PLANS CK'D ACK

PIER - STAGE 2

SHEET 17 OF 39

691

I.D. 2250-12-70

PLOT DATE: May 08, 2018

FILE: 16-17_B510150_pier.dwg
PLOT SCALE:

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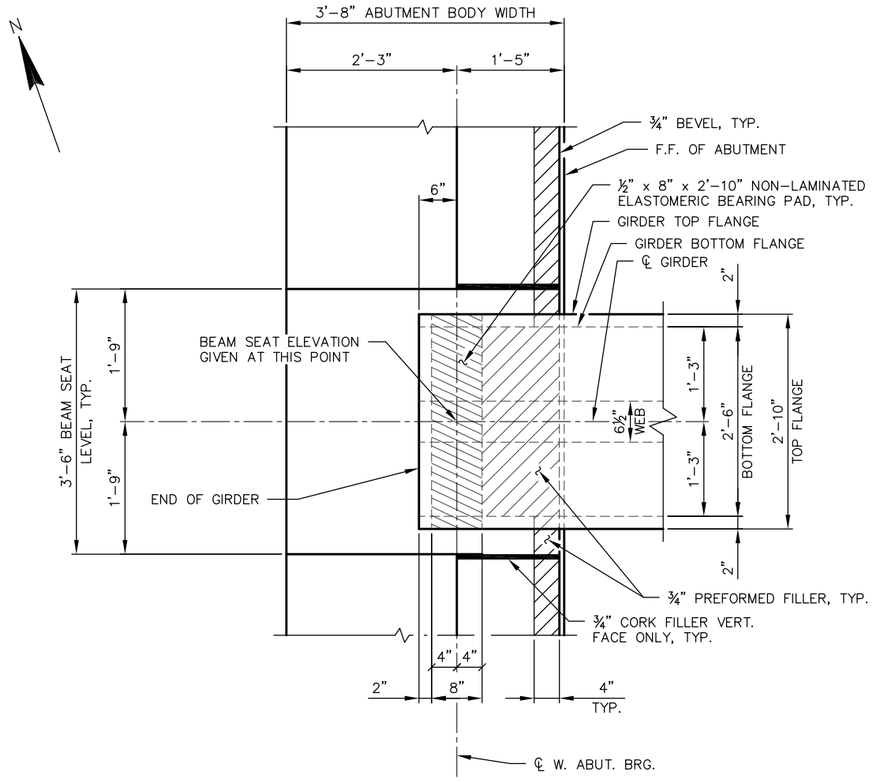
STATE PROJECT NUMBER

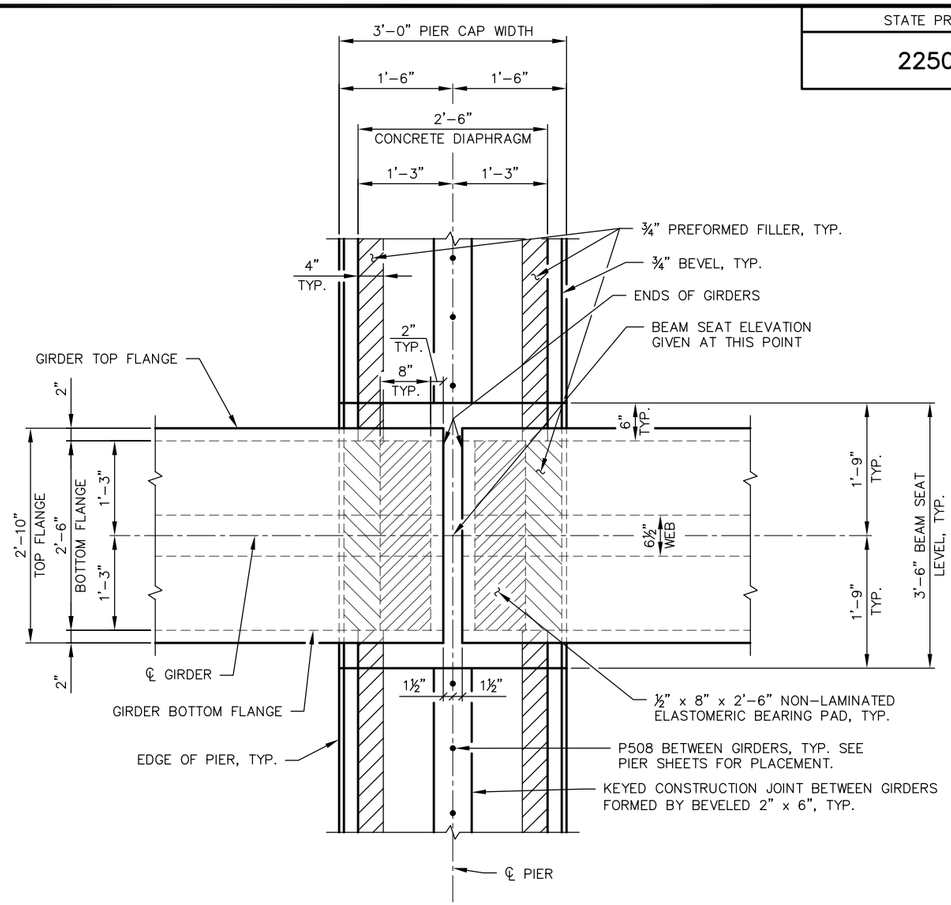
2250–12–70

F.F. – FRONT FACE
B.F. – BACK FACE



ABUTMENT BEAM SEAT DETAIL

(WEST ABUTMENT SHOWN, EAST ABUTMENT SIMILAR)



PIER BEAM SEAT DETAIL

TOP OF DECK ELEVATIONS

SPAN 1

	℄ W. ABUT. BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ PIER
N. DECK EDGE AFTER SIDEWALK	776.59	776.55	776.51	776.48	776.44	776.40	776.37	776.33	776.29	776.26	776.22
N. DECK EDGE BEFORE SIDEWALK	775.86	775.82	775.78	775.75	775.71	775.67	775.64	775.60	775.56	775.53	775.49
∗ GIRDER 1	775.91	775.87	775.83	775.80	775.76	775.72	775.69	775.65	775.61	775.58	775.54
CURB FACE OF N. SIDEWALK	776.00	775.96	775.92	775.89	775.85	775.81	775.78	775.74	775.70	775.67	775.63
GIRDER 2	776.09	776.05	776.01	775.98	775.94	775.90	775.87	775.83	775.79	775.76	775.72
GIRDER 3	776.28	776.24	776.20	776.17	776.13	776.09	776.06	776.02	775.98	775.95	775.91
GIRDER 4	776.46	776.42	776.38	776.35	776.31	776.27	776.24	776.20	776.16	776.13	776.09
CROWN POINT	776.52	776.48	776.44	776.41	776.37	776.33	776.30	776.26	776.22	776.19	776.15
CONST. JOINT	776.48	776.44	776.40	776.37	776.33	776.29	776.26	776.22	776.18	776.15	776.11
GIRDER 5	776.40	776.36	776.32	776.29	776.25	776.21	776.18	776.14	776.10	776.07	776.03
GIRDER 6	776.22	776.18	776.14	776.11	776.07	776.03	776.00	775.96	775.92	775.89	775.85
GIRDER 7	776.03	775.99	775.95	775.92	775.88	775.84	775.81	775.77	775.73	775.70	775.66
CURB FACE OF S. SIDEWALK	775.98	775.94	775.90	775.87	775.83	775.79	775.76	775.72	775.68	775.65	775.61
∗ GIRDER 8	775.85	775.81	775.77	775.74	775.70	775.66	775.63	775.59	775.55	775.52	775.48
S. DECK EDGE BEFORE SIDEWALK	775.80	775.76	775.72	775.69	775.65	775.61	775.58	775.54	775.50	775.47	775.43
S. DECK EDGE AFTER SIDEWALK	776.60	776.56	776.52	776.49	776.45	776.41	776.38	776.34	776.30	776.27	776.23

SPAN 2

	℄ PIER	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	℄ E. ABUT. BRG.
N. DECK EDGE AFTER SIDEWALK	776.22	776.18	776.14	776.11	776.07	776.03	776.00	775.96	775.92	775.89	775.85
N. DECK EDGE BEFORE SIDEWALK	775.49	775.45	775.41	775.38	775.34	775.30	775.27	775.23	775.19	775.16	775.12
∗ GIRDER 1	775.54	775.50	775.46	775.43	775.39	775.35	775.32	775.28	775.24	775.21	775.17
CURB FACE OF N. SIDEWALK	775.63	775.59	775.55	775.52	775.48	775.44	775.41	775.37	775.33	775.30	775.26
GIRDER 2	775.72	775.68	775.64	775.61	775.57	775.53	775.50	775.46	775.42	775.39	775.35
GIRDER 3	775.91	775.87	775.83	775.80	775.76	775.72	775.69	775.65	775.61	775.58	775.54
GIRDER 4	776.09	776.05	776.01	775.98	775.94	775.90	775.87	775.83	775.79	775.76	775.72
CROWN POINT	776.15	776.11	776.07	776.04	776.00	775.96	775.93	775.89	775.85	775.82	775.78
CONST. JOINT	776.11	776.07	776.03	776.00	775.96	775.92	775.89	775.85	775.81	775.78	775.74
GIRDER 5	776.03	775.99	775.95	775.92	775.88	775.84	775.81	775.77	775.73	775.70	775.66
GIRDER 6	775.85	775.81	775.77	775.74	775.70	775.66	775.63	775.59	775.55	775.52	775.48
GIRDER 7	775.66	775.62	775.58	775.55	775.51	775.47	775.44	775.40	775.36	775.33	775.29
CURB FACE OF S. SIDEWALK	775.61	775.57	775.53	775.50	775.46	775.42	775.39	775.35	775.31	775.28	775.24
∗ GIRDER 8	775.48	775.44	775.40	775.37	775.33	775.29	775.26	775.22	775.18	775.15	775.11
S. DECK EDGE BEFORE SIDEWALK	775.43	775.39	775.35	775.32	775.28	775.24	775.21	775.17	775.13	775.10	775.06
S. DECK EDGE AFTER SIDEWALK	776.23	776.19	776.15	776.12	776.08	776.04	776.01	775.97	775.93	775.90	775.86

∗ ELEVATIONS PRIOR TO SIDEWALK CONSTRUCTION

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

BEAM SEAT DETAILS

SHEET 18 OF 39

692

I.D. 2250–12–70

PLOT DATE: May 01, 2018

FILE: 18–B510150_beam.dwg
PLOT SCALE:

STATE PROJECT NUMBER

2250-12-70

STIRRUP SPACING TABLE					
SPAN	GIRDER	GIRDER LENGTH "L"	"S1"	"S2"	"S3"
1	1-8	74'-4½"	5¾"	10 SPA. AT 9" = 7'-6"	29 SPA. AT 1'-6" = 43'-6"
2	1-8	74'-4½"	5¾"	10 SPA. AT 9" = 7'-6"	29 SPA. AT 1'-6" = 43'-6"

GIRDER NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECTION 503.3.3 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH THE END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, ENDS OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

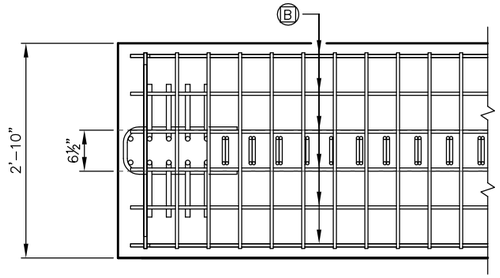
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS, SEE "INTERMEDIATE STEEL DIAPHRAGM" SHEET.

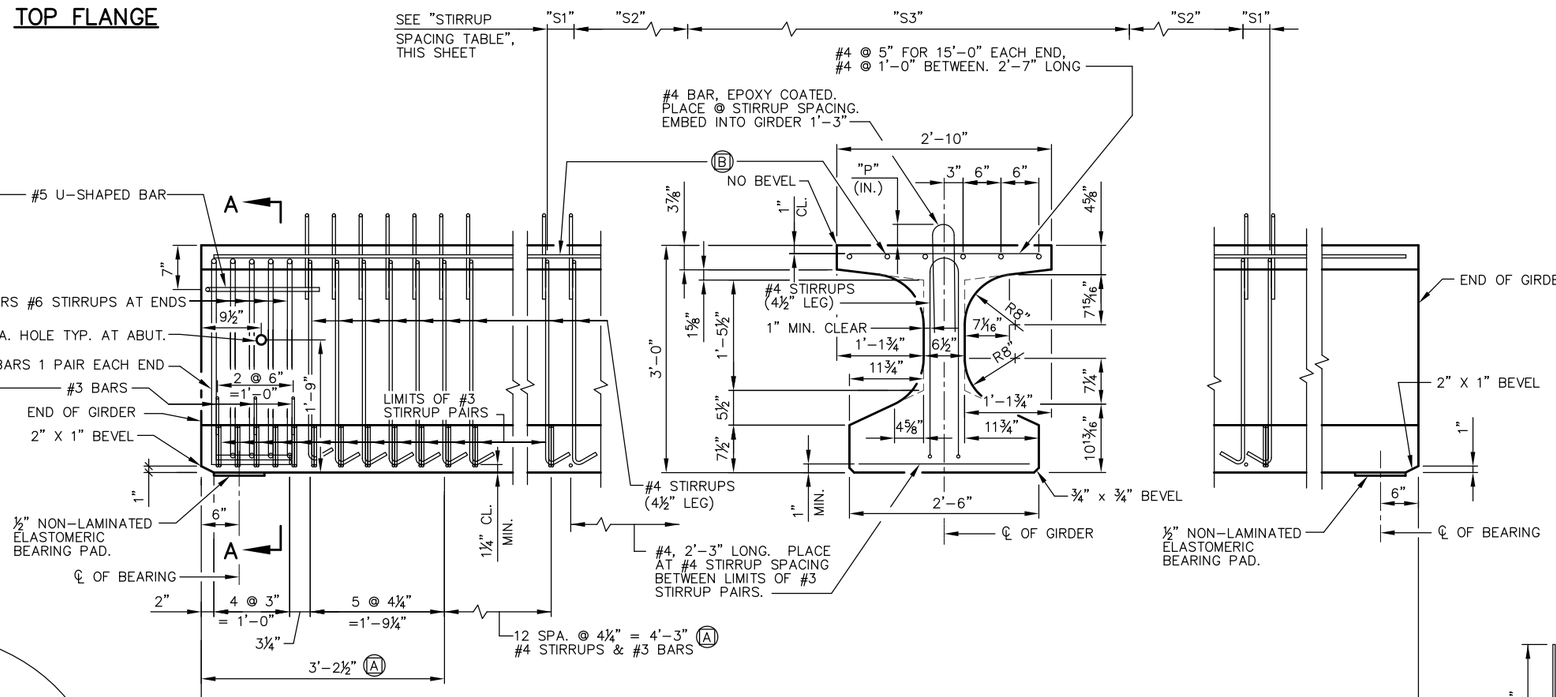
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

PRESTRESSING STRANDS SHALL BE 0.6" DIA. – 7 – WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.



TOP FLANGE

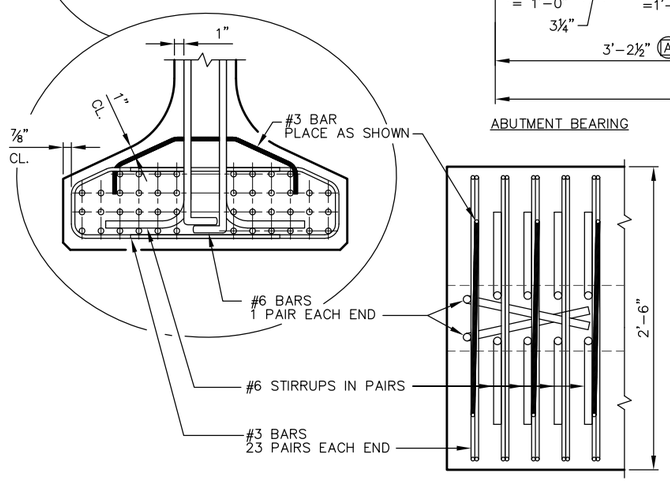


SIDE VIEW & TYPICAL SECTION IN SPAN

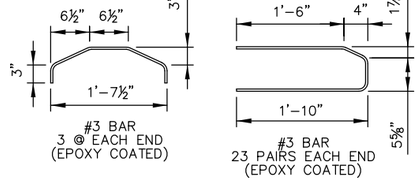
Ⓐ DETAIL TYP. AT EACH END

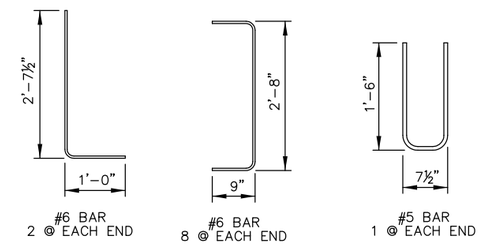
Ⓑ (6) – #4 BARS, FULL LENGTH, MIN. LAP = 1'-11" (SPANS 1 & 2)

SECTION A-A



BOTTOM FLANGE





*MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFLECTION (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CONC. STRGTH. f'c (psi)	"P" 1st ⅓ OF GIRDER	"P" MID ⅓ OF GIRDER	"P" END ⅓ OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (psi) *	(IN.) "A"	"B" MIN	"B" MAX	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (psi) *
1	1 & 8	74'-4½"	0.3	0.6	0.8	0.9	1.0	0.9	0.8	0.6	0.3	8,000	7.0"	6.0"	7.0"	0.6	24	6,800	32	11	14	4	---	---
1	2-7	74'-4½"	0.4	0.7	1.0	1.2	1.2	1.2	1.0	0.7	0.4	8,000	7.5"	6.5"	7.5"	0.6	24	6,800	32	11	14	4	---	---
2	1 & 8	74'-4½"	0.3	0.6	0.8	0.9	1.0	0.9	0.8	0.6	0.3	8,000	7.0"	6.0"	7.0"	0.6	24	6,800	32	11	14	4	---	---
2	2-7	74'-4½"	0.4	0.7	1.0	1.2	1.2	1.2	1.0	0.7	0.4	8,000	7.5"	6.5"	7.5"	0.6	24	6,800	32	11	14	4	---	---

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY JDO | PLANS CK'D ACK

36W-INCH PRESTRESSED GIRDER

SHEET 19 OF 39

693

I.D. 2250-12-70

PLOT DATE: May 01, 2018

FILE: 19-20-B510150_girder.dwg
PLOT SCALE:

8

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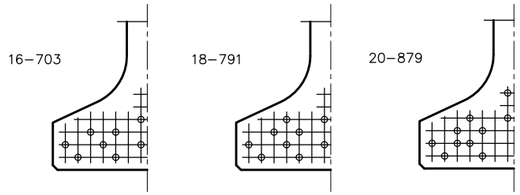
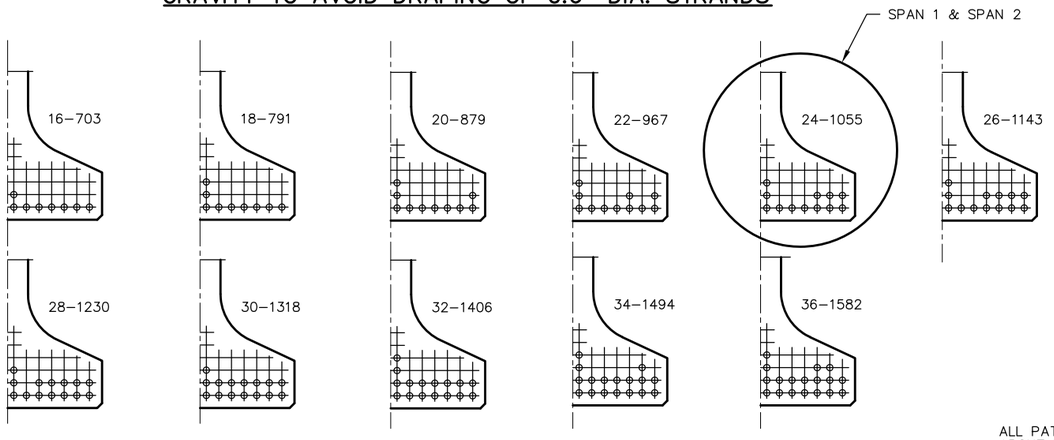
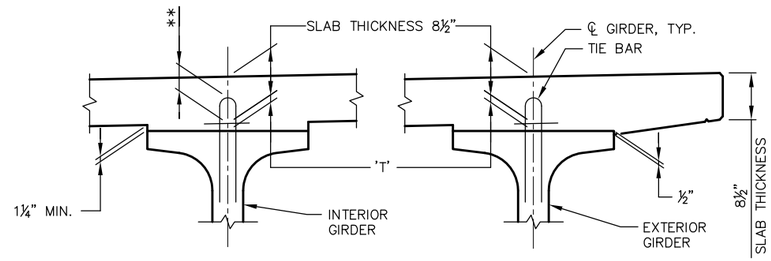


STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF 0.6" DIA. STRANDS



ARRANGEMENT AT ℄ SPAN – FOR GIRDERS WITH DRAPED 0.6" DIA. STRANDS



SLAB HAUNCH DETAIL

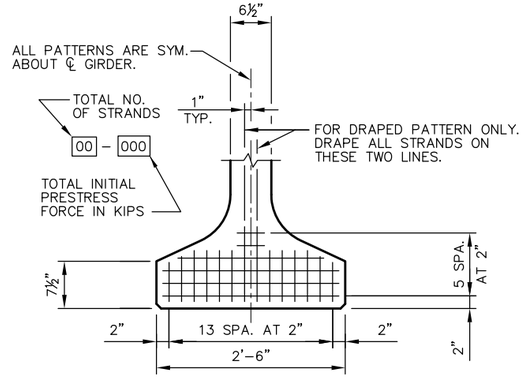
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

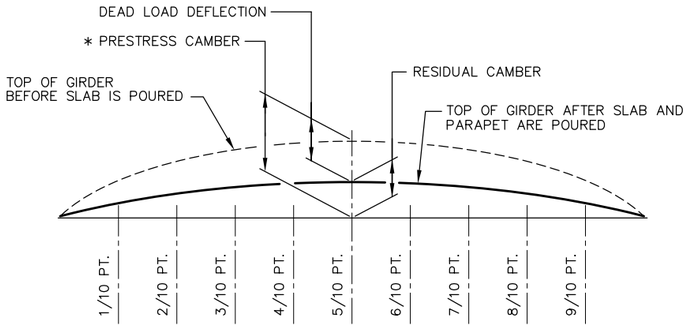
TO DETERMINE 'T', ELEVATIONS OF TOP OF GIRDERS AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEVATION AT FINAL GRADE (SEE "BEAM SEAT DETAILS" SHEET)
– TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
– SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 2.70" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

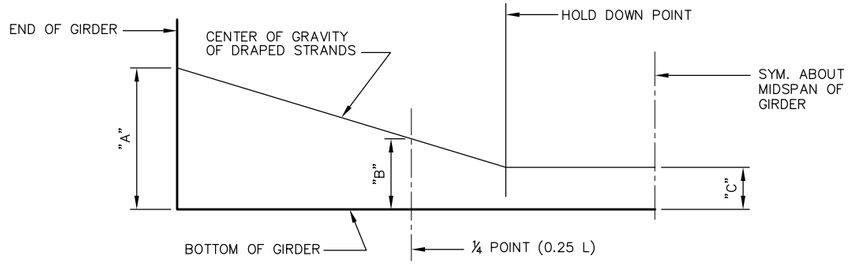


TYPICAL STRAND PATTERN



DEAD LOAD DEFLECTION AND CAMBER DIAGRAM

(SEE GIRDER DATA TABLE ON "36W–INCH PRESTRESSED GIRDER" SHEET)



DRAPED STRAND PROFILE

(SEE GIRDER DATA TABLE ON "36W–INCH PRESTRESSED GIRDER" SHEET)

* THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.)*
1	2.3
2	2.3

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.
THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

36W–INCH PRESTRESSED GIRDER DETAILS

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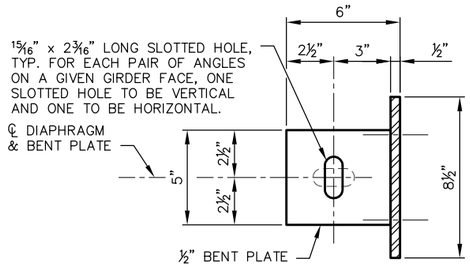
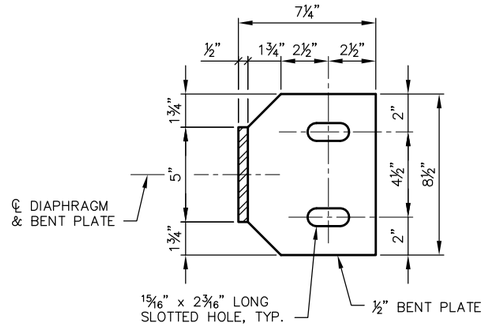
I.D. 2250–12–70 PLOT DATE: May 01, 2018

FILE: 19–20–B510150_girder.dwg
PLOT SCALE:

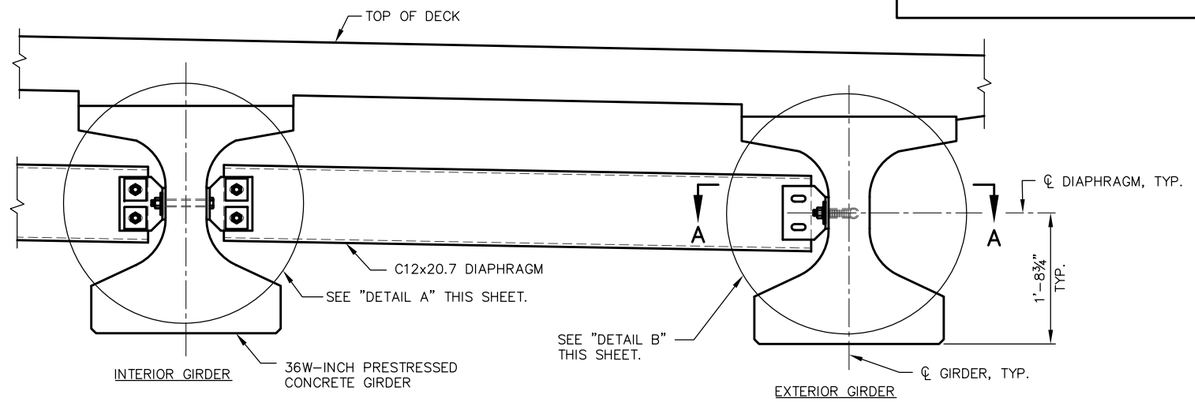
STATE PROJECT NUMBER
2250–12–70



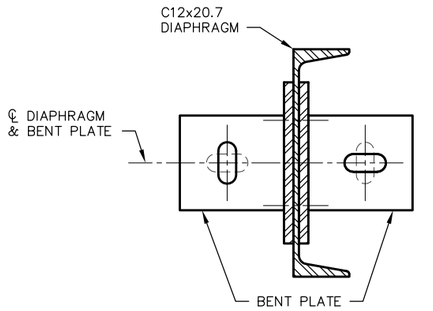
BENT PLATE AT GIRDER FACE



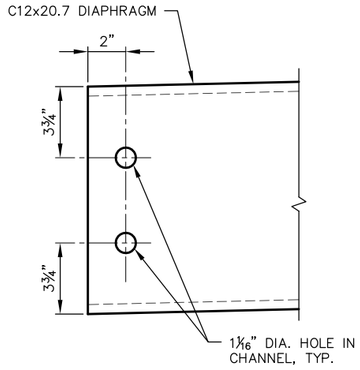
BENT PLATE AT DIAPHRAGM FACE



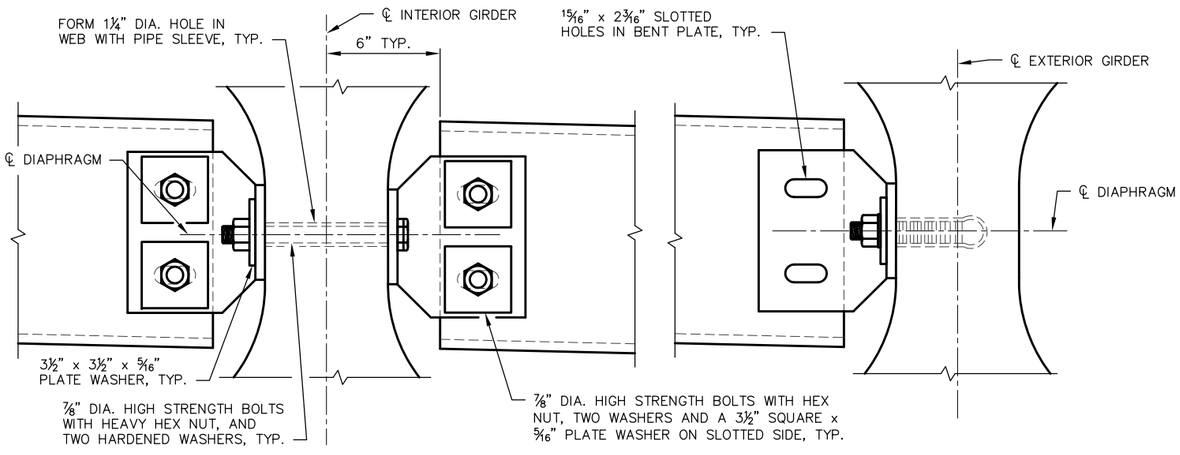
PART TRANSVERSE SECTION AT DIAPHRAGM



BENT PLATE ATTACHMENT TO CHANNEL

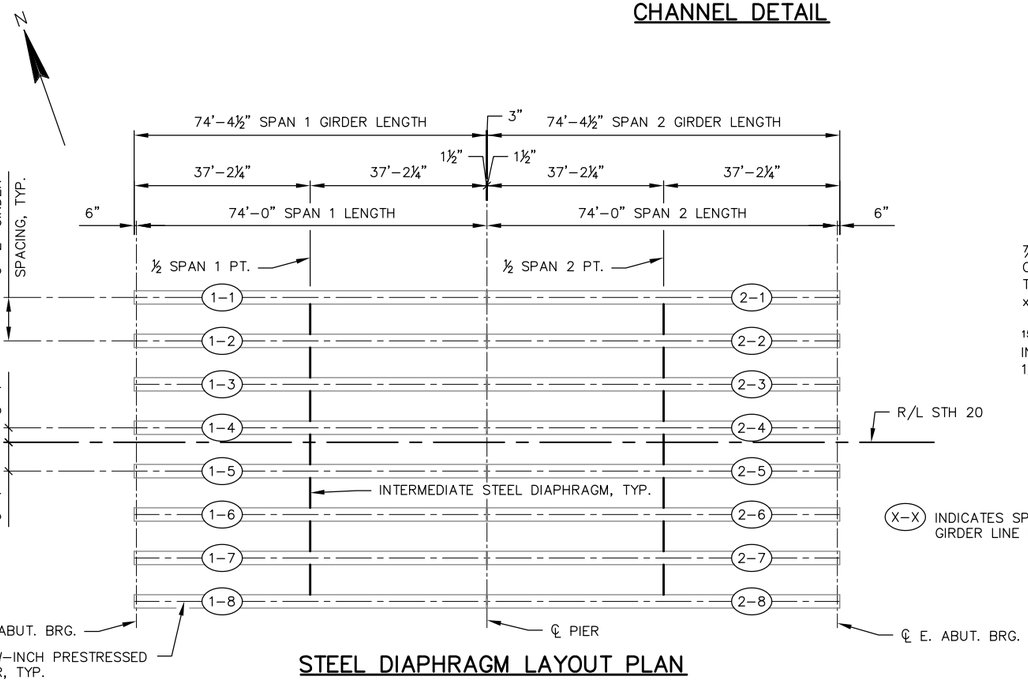


CHANNEL DETAIL

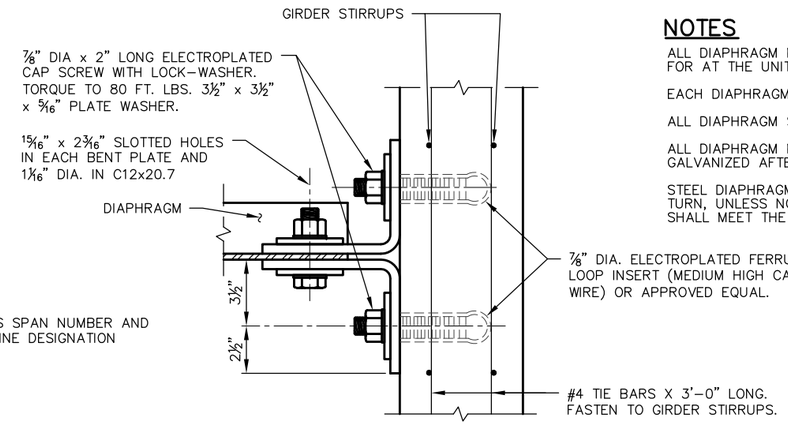


DETAIL A

DETAIL B



STEEL DIAPHRAGM LAYOUT PLAN



SECTION A–A
(FOR EXTERIOR ATTACHMENT)

NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B–51–150", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG–TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

INTERMEDIATE STEEL DIAPHRAGM

SHEET 21 OF 39

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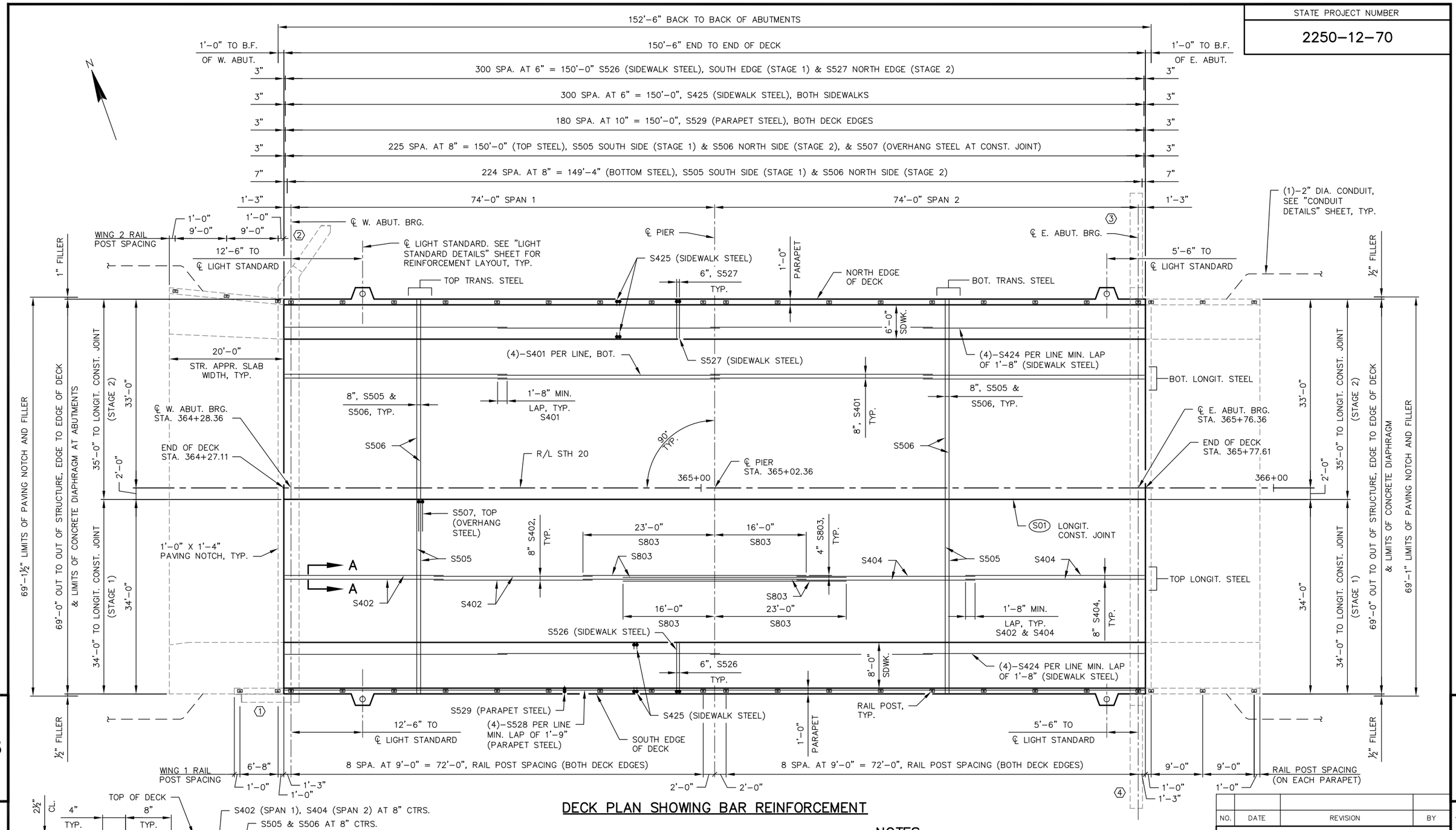
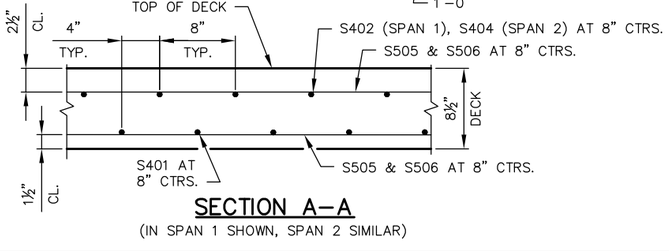
I.D. 2250–12–70

PLOT DATE: May 01, 2018

FILE: 21–B510150_dia.dwg
PLOT SCALE:

STATE PROJECT NUMBER
2250–12–70





SECTION A–A
(IN SPAN 1 SHOWN, SPAN 2 SIMILAR)

DECK PLAN SHOWING BAR REINFORCEMENT

F.F. – FRONT FACE
B.F. – BACK FACE

NOTES

⬡ INDICATES WING NUMBER

(S01) LONGITUDINAL CONSTRUCTION JOINT, SEE "SUPERSTRUCTURE REINFORCEMENT" SHEET FOR DETAILS. USE BAR COUPLERS BETWEEN BARS S505 & S506, SEE "BAR COUPLERS" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

SUPERSTRUCTURE PLAN

SHEET 22 OF 39

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I.D. 2250–12–70

PLOT DATE: May 01, 2018

FILE: 22–27–B510150_super.dwg
PLOT SCALE:

8

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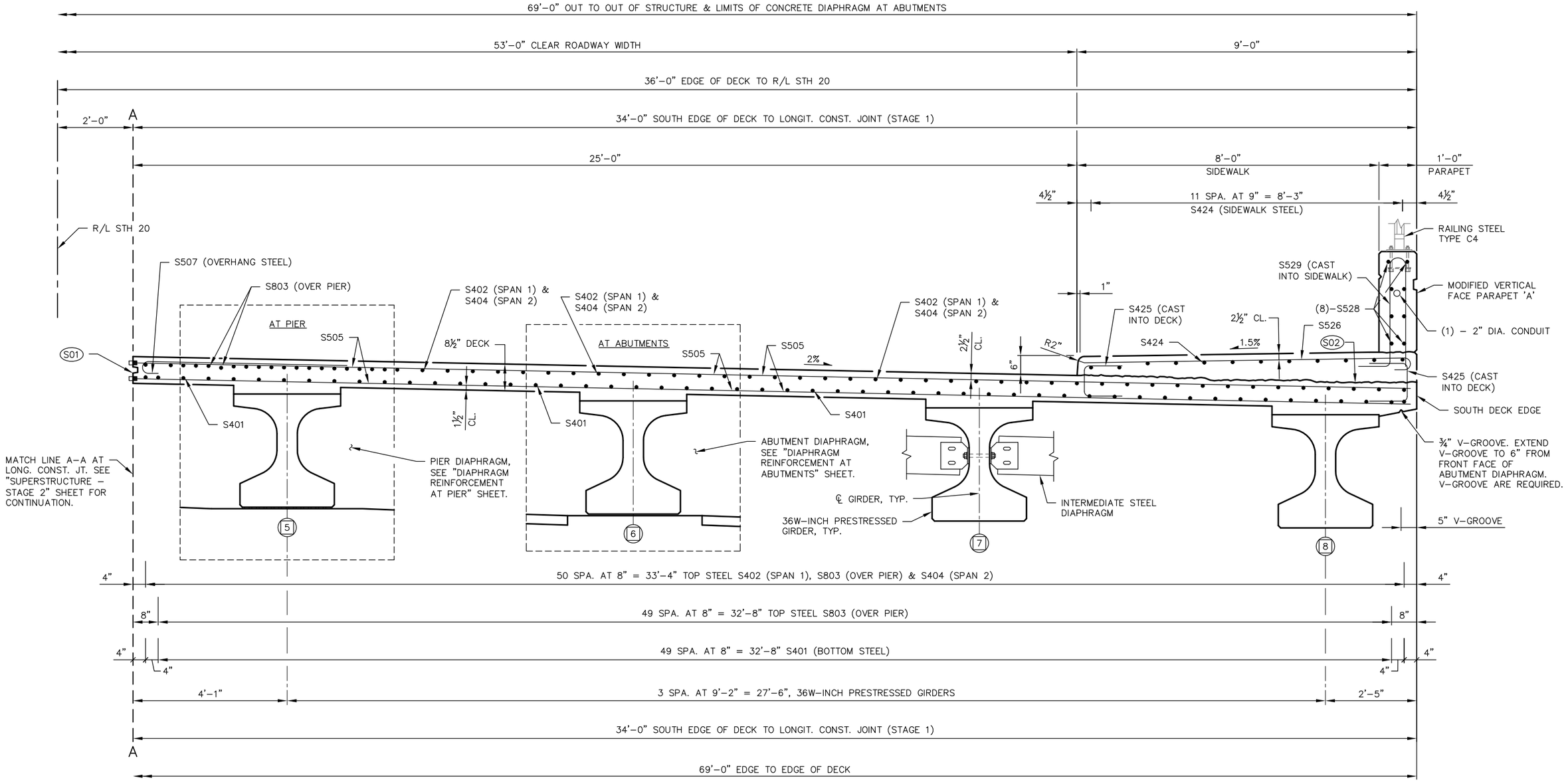
STATE PROJECT NUMBER
2250–12–70



PARTIAL CROSS SECTION THRU ROADWAY – STAGE 1 CONSTRUCTION

(LOOKING EAST)

NOTES

(S01) LONGITUDINAL CONSTRUCTION JOINT, SEE "SUPERSTRUCTURE REINFORCEMENT" SHEET FOR DETAILS. USE BAR COUPLERS BETWEEN BARS S505 & S506, SEE "BAR COUPLERS" SHEET.

(S02) CONSTRUCTION JOINT – STRIKE OFF AS SHOWN AND LEAVE ROUGH. MATCH BRIDGE CROSS SLOPE.

(#) INDICATES GIRDER LINE DESIGNATION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

SUPERSTRUCTURE – STAGE 1

SHEET 23 OF 39

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I.D. 2250–12–70

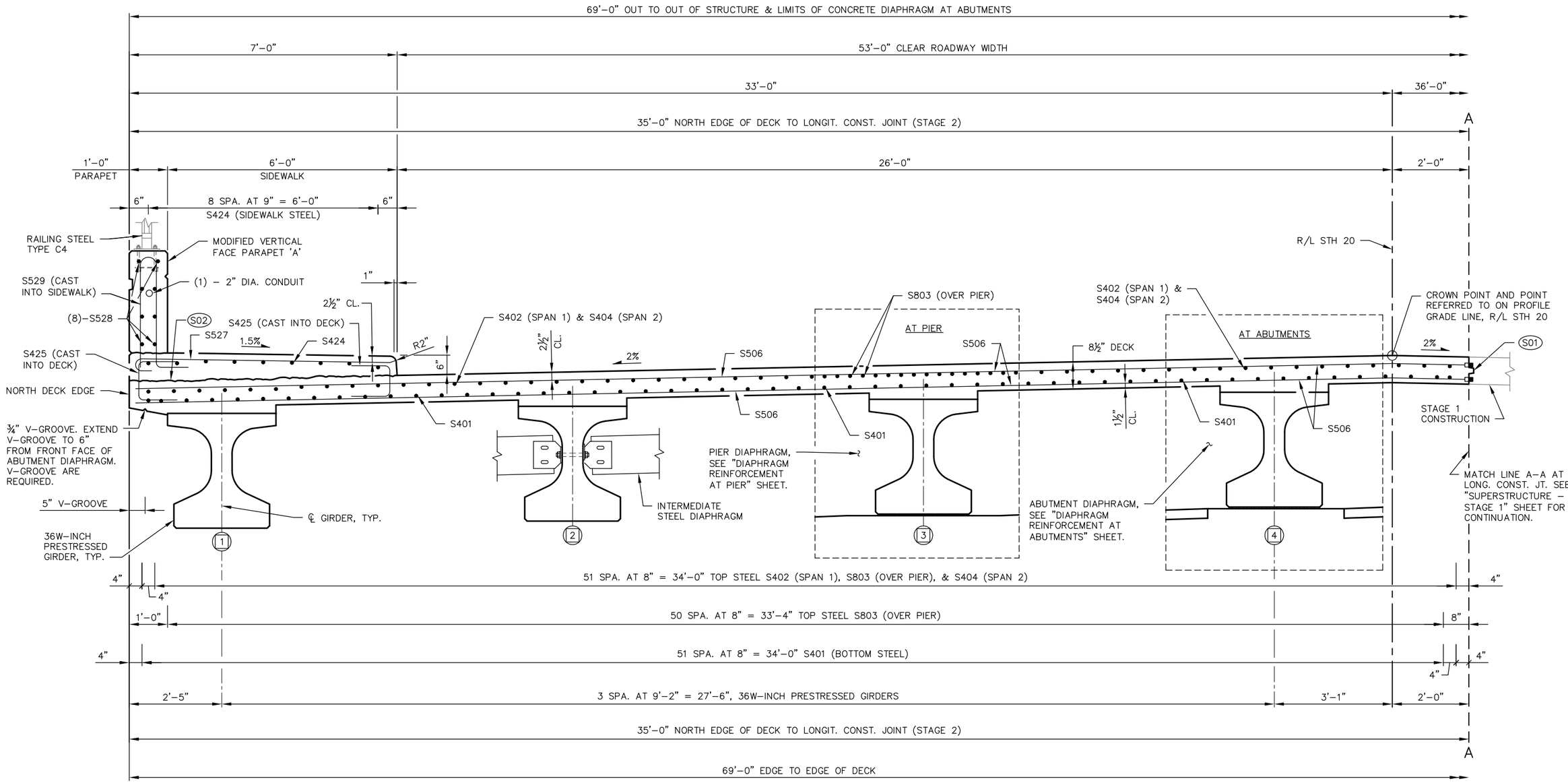
PLOT DATE: May 01, 2018

FILE: 22–27–B510150_super.dwg
PLOT SCALE:

8

8

STATE PROJECT NUMBER
2250–12–70



PARTIAL CROSS SECTION THRU ROADWAY – STAGE 2 CONSTRUCTION

(LOOKING EAST)

NOTES

(S01) LONGITUDINAL CONSTRUCTION JOINT, SEE "SUPERSTRUCTURE REINFORCEMENT" SHEET FOR DETAILS. USE BAR COUPLERS BETWEEN BARS S505 & S506, SEE "BAR COUPLERS" SHEET.

(S02) CONSTRUCTION JOINT – STRIKE OFF AS SHOWN AND LEAVE ROUGH. MATCH BRIDGE CROSS SLOPE.

(#) INDICATES GIRDER LINE DESIGNATION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

SUPERSTRUCTURE – STAGE 2

SHEET 24 OF 39

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I.D. 2250–12–70

PLOT DATE: May 01, 2018

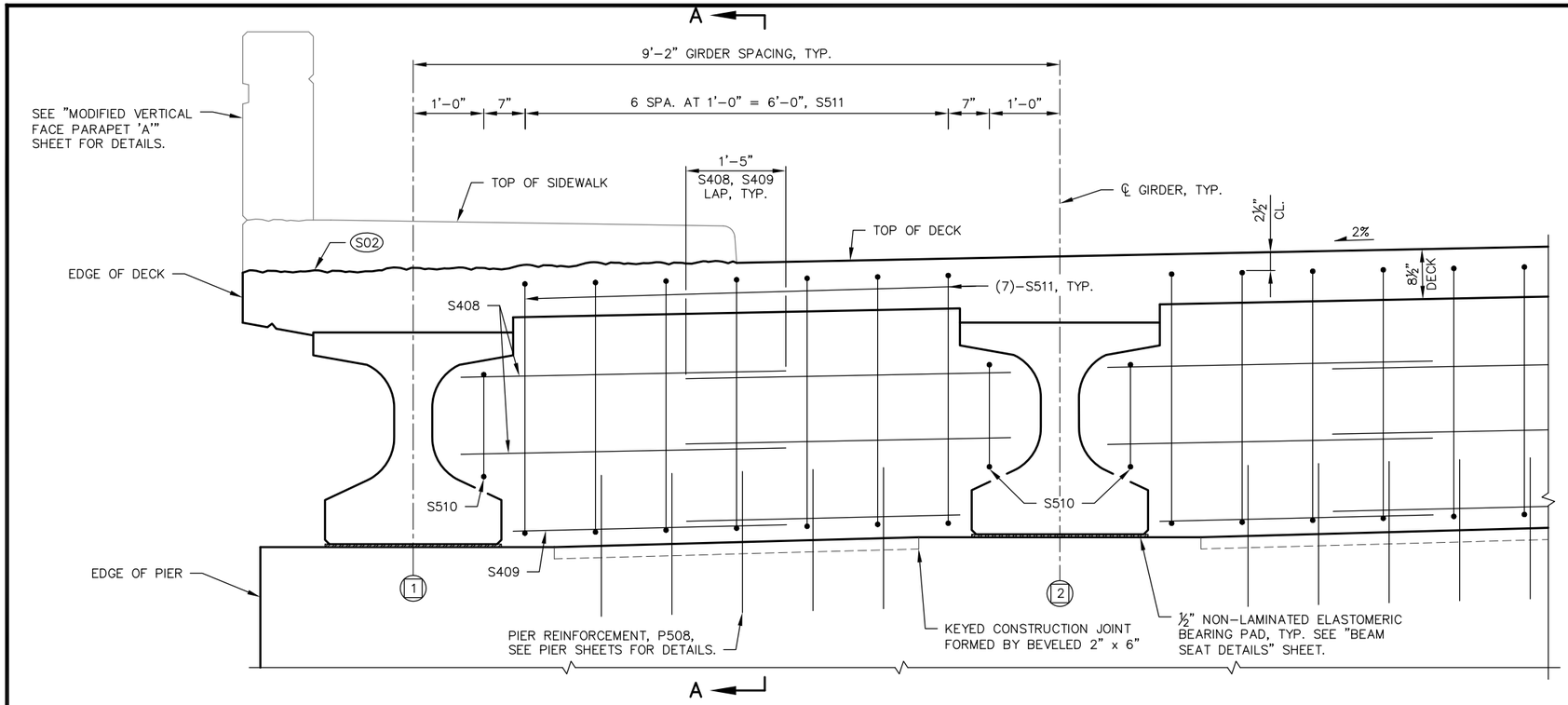
FILE: 22–27–B510150_super.dwg
PLOT SCALE:

8

8

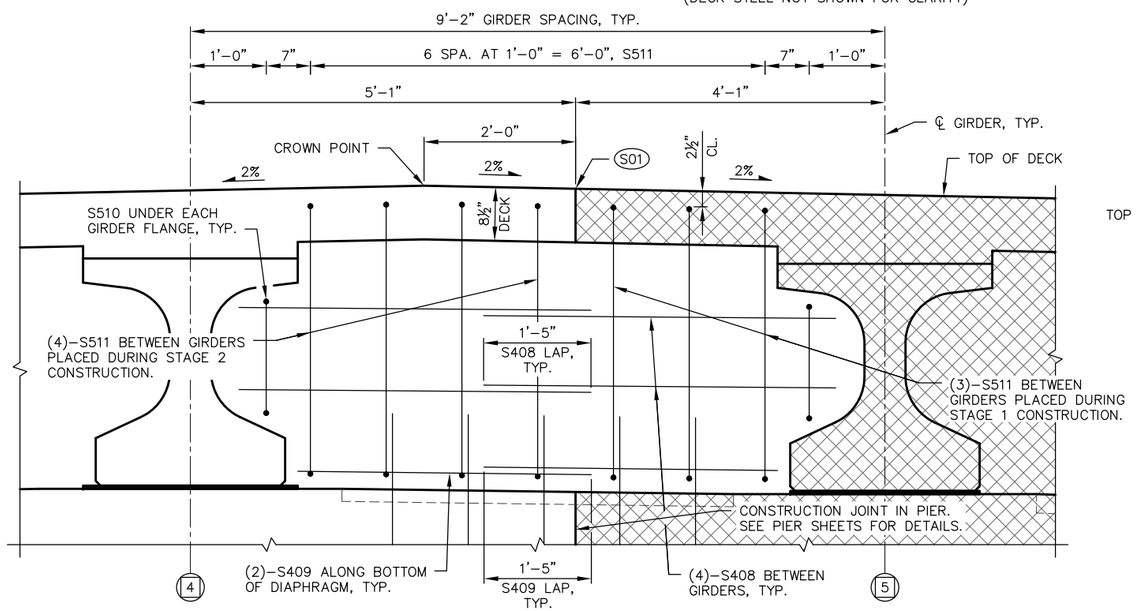
STATE PROJECT NUMBER

2250–12–70



DIAPHRAGM REINFORCEMENT AT PIER

(LOOKING EAST)
(DECK STEEL NOT SHOWN FOR CLARITY)



DIAPHRAGM CONSTRUCTION JOINT AT PIER

(LOOKING EAST)
(DECK STEEL NOT SHOWN FOR CLARITY)

NOTES

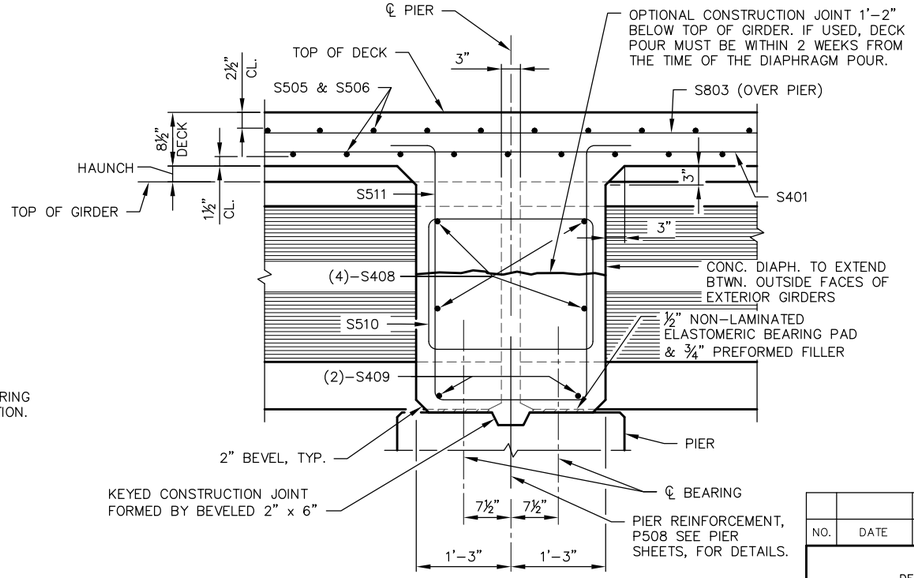
CONCRETE DIAPHRAGM TO EXTEND BETWEEN OUTSIDE FACES OF EXTERIOR GIRDERS.

(S01) LONGITUDINAL CONSTRUCTION JOINT, SEE "SUPERSTRUCTURE REINFORCEMENT" SHEET FOR DETAILS. USE BAR COUPLERS BETWEEN BARS S505 & S506, SEE "BAR COUPLERS" SHEET.

(S02) CONSTRUCTION JOINT – STRIKE OFF AS SHOWN AND LEAVE ROUGH. MATCH BRIDGE CROSS SLOPE.

(#) INDICATES GIRDER LINE DESIGNATION

AREAS OF THE PIER, DIAPHRAGM AND SUPERSTRUCTURE CONSTRUCTED DURING STAGE 1.



SECTION A–A

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

DIAPHRAGM REINFORCEMENT AT PIER

SHEET 25 OF 39

699

8

8

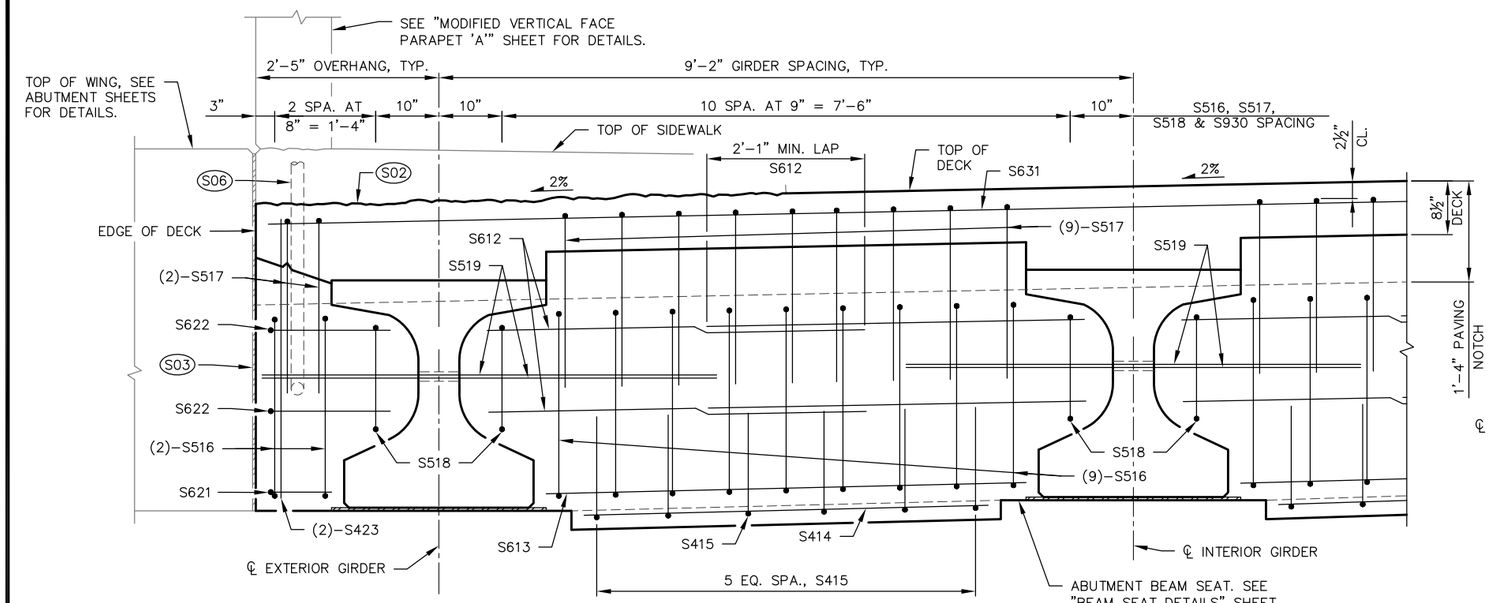
I.D. 2250–12–70

PLOT DATE: May 01, 2018

FILE: 22–27–B510150_super.dwg
PLOT SCALE:

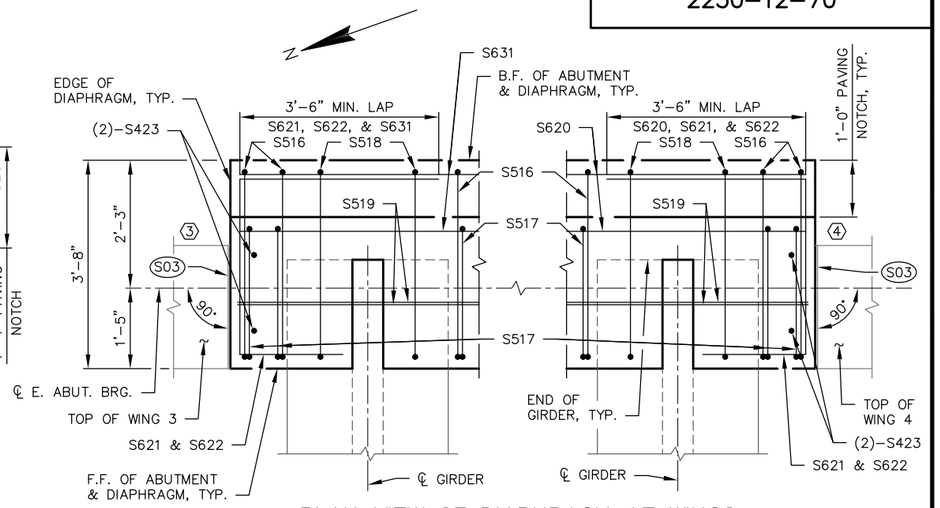
STATE PROJECT NUMBER

2250-12-70



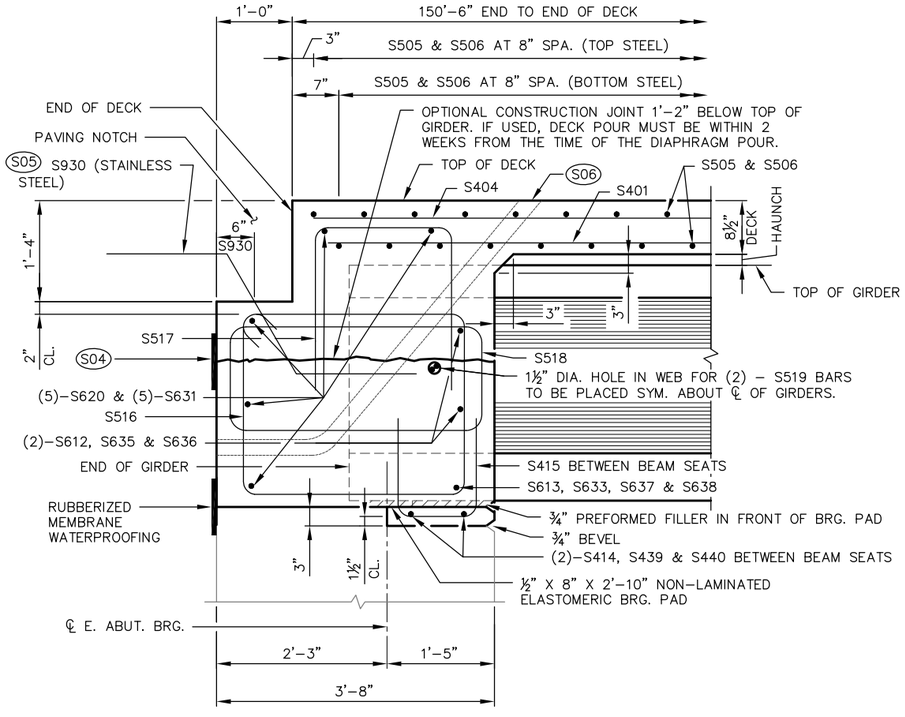
DIAPHRAGM REINFORCEMENT AT ABUTMENT

(EAST ABUTMENT SHOWN, LOOKING EAST. WEST ABUTMENT SIMILAR)
(DECK & ABUTMENT STEEL NOT SHOWN FOR CLARITY)



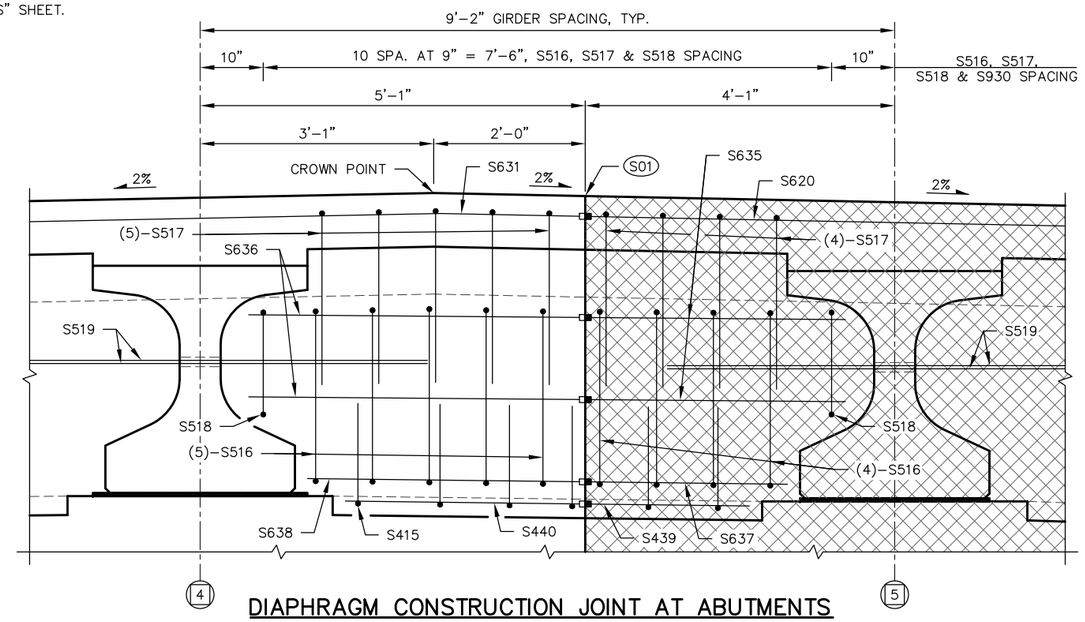
PLAN VIEW OF DIAPHRAGM AT WINGS

(EAST ABUTMENT SHOWN, WEST ABUTMENT SIMILAR)



SECTION THRU DIAPHRAGM AT ABUTMENT

(EAST ABUTMENT SHOWN, LOOKING SOUTH. WEST ABUTMENT SIMILAR)



DIAPHRAGM CONSTRUCTION JOINT AT ABUTMENTS

(EAST ABUTMENT SHOWN, LOOKING EAST. WEST ABUTMENT SIMILAR)
(DECK & ABUTMENT STEEL NOT SHOWN FOR CLARITY)

F.F. - FRONT FACE
B.F. - BACK FACE

NOTES

(S01) LONGITUDINAL CONSTRUCTION JOINT, SEE "SUPERSTRUCTURE REINFORCEMENT" SHEET FOR DETAILS.. USE BAR COUPLERS BETWEEN BARS S620 & S631, S635 & S636, S637 & S638, S439 & S440, SEE "BAR COUPLERS" SHEET.

(S02) CONSTRUCTION JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH. MATCH BRIDGE CROSS SLOPE.

(S03) ½" FILLER TO EXTEND FROM BRIDGE SEAT TO TOP OF WING.

(S04) RUBBERIZED MEMBRANE WATERPROOFING IF CONST. JOINT IS USED (COST INCLUDED WITH BID ITEM "CONCRETE MASONRY BRIDGES.")

(S05) ALIGN S930 (STAINLESS STEEL) WITH S516, S518 & S534 WITHIN LIMITS OF PAVING NOTCH AT BOTH ABUTMENTS. S930 (STAINLESS STEEL) REINFORCEMENT TO BE INCLUDED IN BID ITEM "BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES."

(S06) (1) - 2" DIA. CONDUIT REQUIRED. SEE "CONDUIT DETAILS" SHEET FOR DETAILS.

(#) INDICATES GIRDER LINE DESIGNATION

AREAS OF THE ABUTMENT, DIAPHRAGM AND SUPERSTRUCTURE CONSTRUCTED DURING STAGE 1.

⬡ INDICATES WING NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY JDO | PLANS CK'D ACK

DIAPHRAGM REINFORCEMENT AT ABUTMENTS

SHEET 26 OF 39

700

I.D. 2250-12-70

PLOT DATE: May 01, 2018

FILE: 22-27-B510150_super.dwg
PLOT SCALE:

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STATE PROJECT NUMBER

2250–12–70

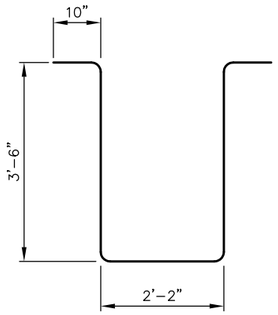
BILL OF BARS
SUPERSTRUCTURE

COATED = 94,810 LBS.
STAINLESS = 2,830 LBS

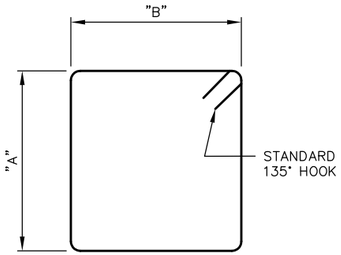
	MARK	NUMBER COATED	NUMBER STAINLESS	LENGTH	BENT	BAR SERIES	LOCATION	
	S401	420		38'–10"			DECK – BOTTOM	LONGIT.
	S402	208		27'–9"			DECK – TOP – SPAN 1	LONGIT.
	S803	205		39'–0"			DECK – TOP – CONTINUITY AT PIER	LONGIT.
	S404	208		31'–3"			DECK – TOP – SPAN 2	LONGIT.
(S09)	S505	451		33'–10"			DECK – TOP & BOTTOM – STAGE 1	TRANS.
(S09)	S506	451		34'–10"			DECK – TOP & BOTTOM – STAGE 2	TRANS.
	S507	226		6'–0"	X		DECK – TOP – OVERHANG STEEL AT CONST. JT.	TRANS.
	S408	56		4'–8"			PIER – DIAPHRAGM	HORIZ.
	S409	28		3'–11"			PIER – DIAPHRAGM	HORIZ.
	S510	14		8'–0"	X		PIER – DIAPHRAGM – STIRRUP	VERT.
	S511	49		10'–4"	X		PIER – DIAPHRAGM – STIRRUP	VERT.
	S612	48		5'–0"			ABUT. – DIAPHRAGM AT F.F.	HORIZ.
	S613	11		6'–3"			ABUT. – DIAPHRAGM AT F.F.	HORIZ.
	S414	22		5'–2"			ABUT. – DIAPHRAGM	HORIZ.
	S415	82		3'–10"	X		ABUT. – DIAPHRAGM – STIRRUP	VERT.
	S516	131		12'–0"	X		ABUT. – DIAPHRAGM – STIRRUP	VERT.
	S517	134		6'–9"	X		ABUT. – DIAPHRAGM – TOP	VERT.
	S518	32		10'–0"	X		ABUT. – DIAPHRAGM – STIRRUP	VERT.
	S519	32		6'–0"			ABUT. – DIAPHRAGM – THRU GIRDER	HORIZ.
(S09)	S620	10		33'–10"			ABUT. – DIAPHRAGM AT B.F. STAGE 1	HORIZ.
	S621	4		7'–4"	X		ABUT. – DIAPHRAGM AT WINGS	HORIZ.
	S622	8		8'–1"	X		ABUT. – DIAPHRAGM AT WINGS	HORIZ.
	S423	8		3'–7"			ABUT. – DIAPHRAGM AT WINGS	VERT.
	S424	84		38'–10"			DECK – SIDEWALK – TOP	LONGIT.
	S425	1204		2'–8"	X		DECK – SIDEWALK – STIRRUP	TRANS.
	S526	301		9'–2"	X		DECK – SIDEWALK – TOP SOUTH EDGE	TRANS.
	S527	301		7'–2"	X		DECK – SIDEWALK – TOP NORTH EDGE	TRANS.
	S528	64		39'–0"			VERTICAL FACE PARAPET TYPE A	LONGIT.
	S529	362		6'–9"	X		VERTICAL FACE PARAPET TYPE A – STIRRUP	VERT.
(S07)	S930		166	5'–0"	X		ABUT. DIAPHRAGM TO STR. APPROACH SLAB	LONGIT.
(S09)	S631	10		34'–10"			ABUT. – DIAPHRAGM AT B.F. STAGE 2	HORIZ.
	S432	4		1'–1"			ABUT. – DIAPHRAGM AT STORM SEWER	HORIZ.
	S633	2		4'–9"	X		ABUT. – DIAPHRAGM AT STORM SEWER	HORIZ.
	S534	3		11'–2"	X		ABUT. – DIAPHRAGM AT STORM SEWER	VERT.
(S09)	S635	2		3'–5"			ABUT. – DIAPHRAGM AT F.F. – STAGE 1	HORIZ.
(S09)	S636	2		4'–5"			ABUT. – DIAPHRAGM AT F.F. – STAGE 2	HORIZ.
(S09)	S637	1		2'–8"			ABUT. – DIAPHRAGM AT F.F. – STAGE 1	HORIZ.
(S09)	S638	1		3'–8"			ABUT. – DIAPHRAGM AT F.F. – STAGE 2	HORIZ.
(S09)	S439	2		2'–2"			ABUT. – DIAPHRAGM – STAGE 1	HORIZ.
(S09)	S440	2		3'–2"			ABUT. – DIAPHRAGM – STAGE 2	HORIZ.

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

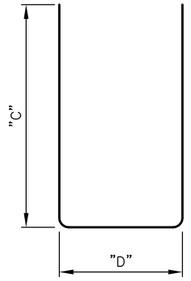
ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.



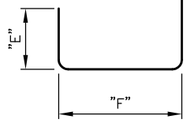
S511



S510, S516,
S518, S534



S415, S517,
S425



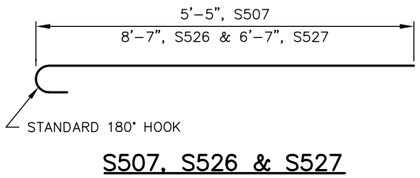
S621, S622

BAR BEND DIMENSIONS

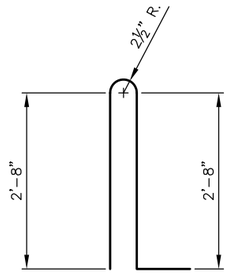
MARK	"A"	"B"
S510	1'–6"	2'–2"
S516	2'–4"	3'–4"
S518	1'–4"	3'–4"
S534	1'–11"	3'–4"

MARK	"C"	"D"
S415	1'–6"	1'–0"
S517	2'–4"	2'–4"
S425	1'–0"	0'–10"

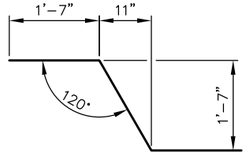
MARK	"E"	"F"
S621	0'–10"	3'–4"
S622	1'–7"	3'–4"



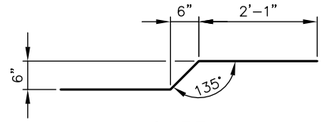
S507, S526 & S527



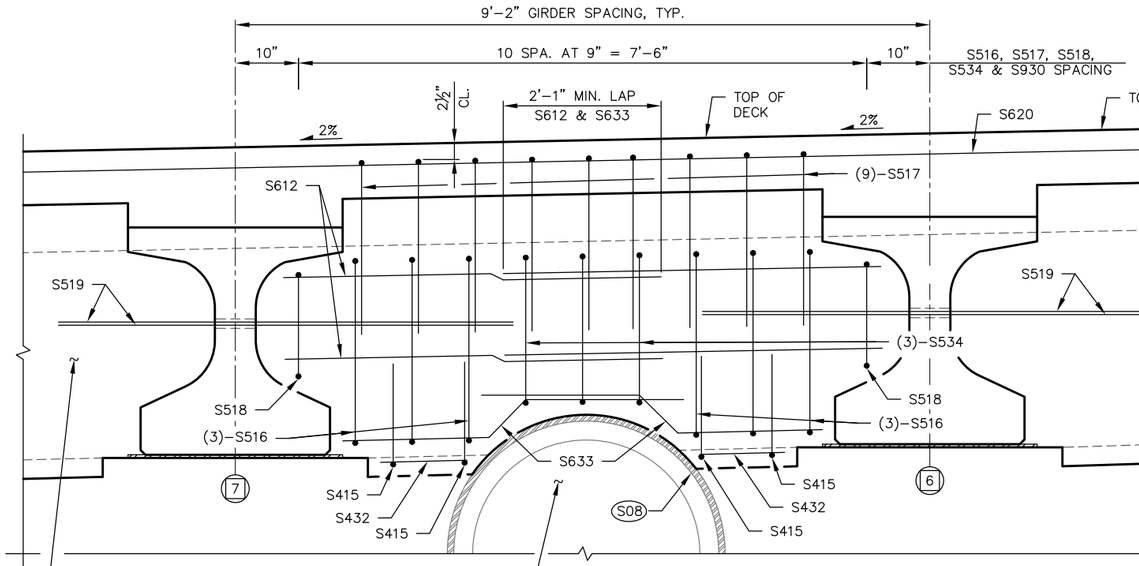
S529



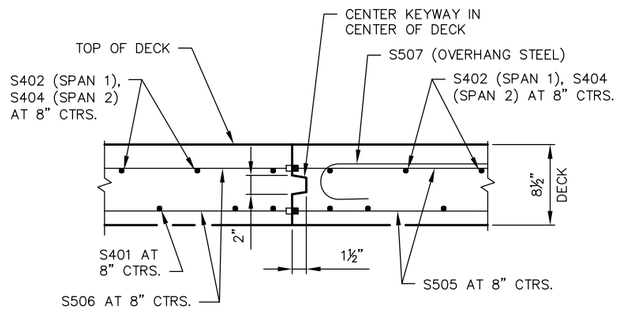
S930
(STAINLESS STEEL)



S633



DIAPHRAGM REINFORCEMENT AT STORM SEWER IN WEST ABUTMENT
(LOOKING WEST)



LONGITUDINAL CONSTRUCTION JOINT DETAIL

NOTES

(S07) S930 (STAINLESS STEEL) REINFORCEMENT TO BE INCLUDED IN BID ITEM "BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES". SEE "DIAPHRAGM REINFORCEMENT AT ABUTMENTS" SHEET FOR PLACEMENT.

(S08) 1" FILLER WRAPPED AROUND STORM SEWER PIPE AND PLACE SHEETS OF POLYETHYLENE OVER PIPE AND ABUTMENT BEAM SEATS. SEAL SURFACES OF 1" FILLER WITH NON–STAINING, GRAY NON–BITUMINOUS, JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

(S09) BAR REQUIRES BAR COUPLER. SEE "BAR COUPLERS" SHEET FOR DETAILS.

(#) INDICATES GIRDER LINE DESIGNATION

F.F. – FRONT FACE
B.F. – BACK FACE

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

SUPERSTRUCTURE REINFORCEMENT

SHEET 27 OF 39

701

I.D. 2250–12–70

PLOT DATE: May 01, 2018

FILE: 22–27–B510150_super.dwg
PLOT SCALE:

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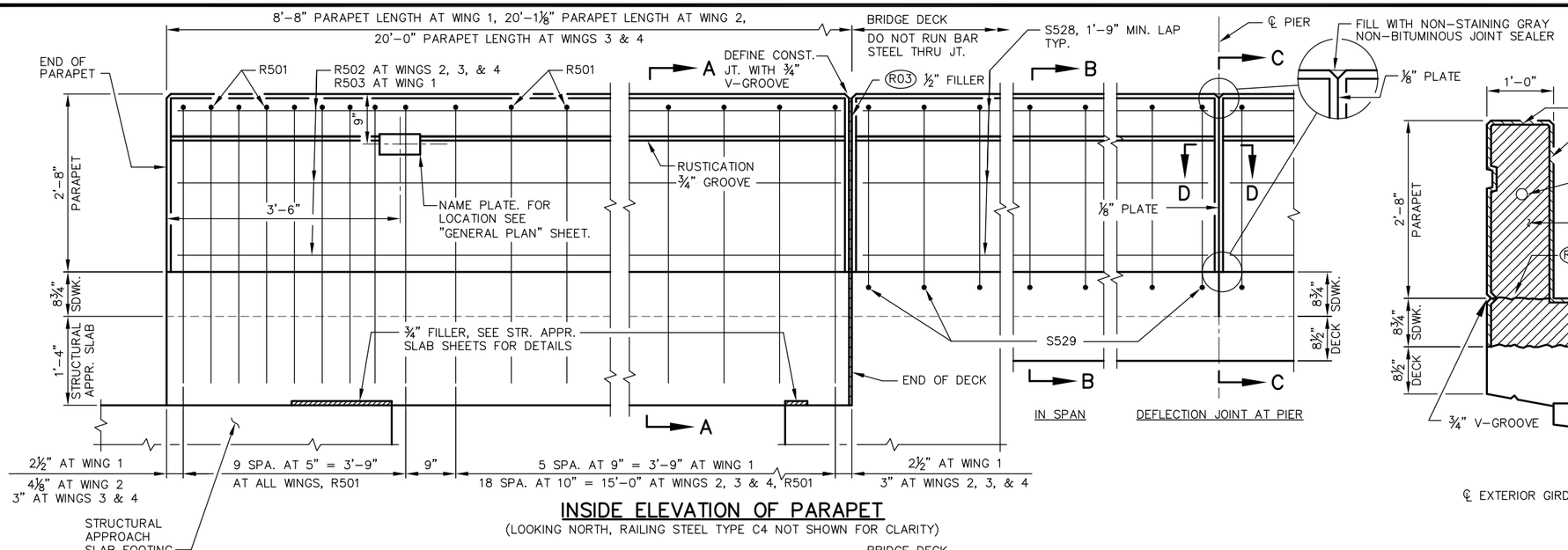
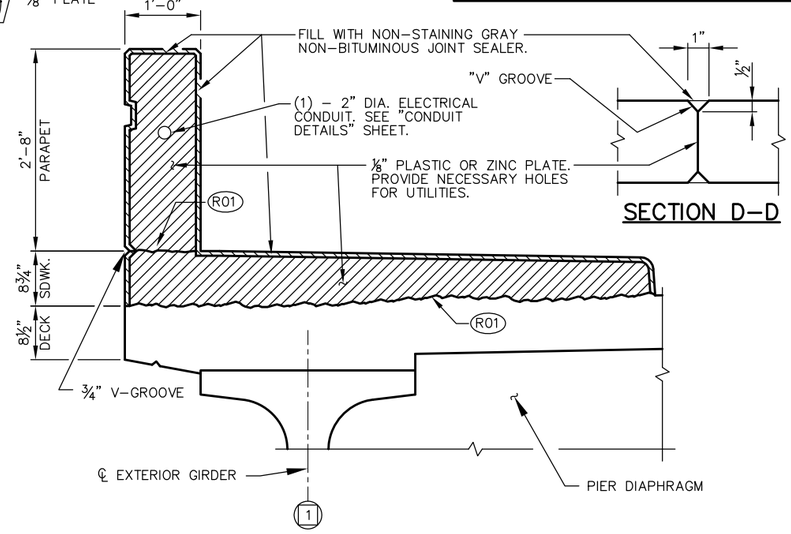
STATE PROJECT NUMBER

2250-12-70



INSIDE ELEVATION OF PARAPET

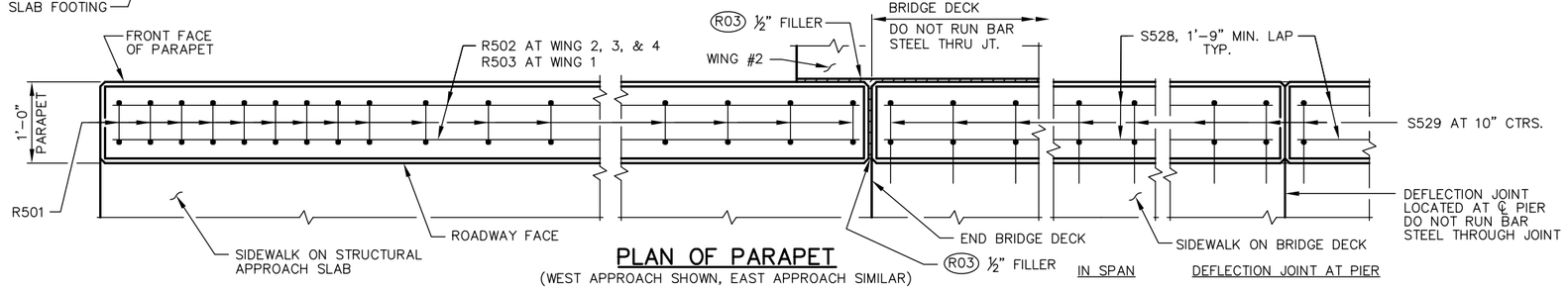
(LOOKING NORTH, RAILING STEEL TYPE C4 NOT SHOWN FOR CLARITY)



SECTION D–D

SECTION C–C

(LOOKING EAST, DEFLECTION JOINT IN PARAPET AND SIDEWALK LOCATED AT ℄ PIER STA. 365+02.36)
(NORTH EDGE OF DECK SHOWN, SOUTH EDGE SIMILAR)

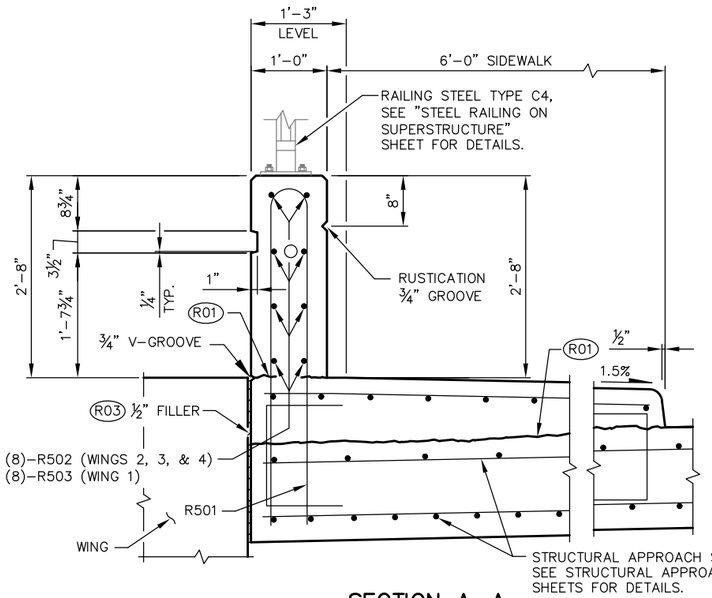


PLAN OF PARAPET

(WEST APPROACH SHOWN, EAST APPROACH SIMILAR)

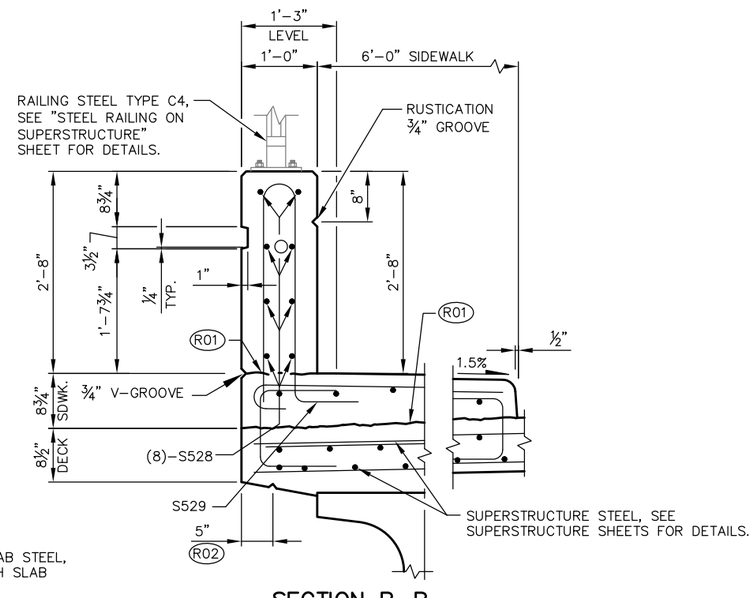
BILL OF BARS
BOTH APPROACH SLABS COATED = 1,560 LBS.

BAR MARK	COAT.	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	103	9'-2"	X		PARAPET VERT.
R502	X	24	19'-8"			PARAPET HORIZ.
R503	X	8	8'-4"			PARAPET AT WING 1 HORIZ.



SECTION A–A

(SHOWING PARAPET ON SIDEWALK AND APPROACH SLAB LOOKING EAST
NORTH EDGE SHOWN, SOUTH EDGE SIMILAR)



SECTION B–B

(SHOWING PARAPET ON SIDEWALK IN SPAN LOOKING EAST
NORTH EDGE SHOWN, SOUTH EDGE SIMILAR)

NOTES

WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF ⅛" ZINC OR PLASTIC PLATE CUT AS SHOWN IN SECTION C–C BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.

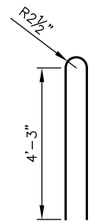
A DEFLECTION JT. IS REQ'D IN THE PARAPET AND SDWK. OVER THE PIER AS SHOWN IN SECTION C–C.

ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

R01 CONSTRUCTION JOINT – STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK AND STRUCTURAL APPROACH SLAB POUR, MATCH BRIDGE SLOPE.

R02 ¾" V-GROOVE. EXTEND V-GROOVE TO 3" FROM FRONT FACE OF ABUTMENT DIAPHRAGM. V-GROOVES ARE REQ'D.

R03 SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF ½" FILLER WITH NON-STAINING, GRAY NON-BITUMINOUS, JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3' BELOW GUTTER LINE AT INSIDE FACE.



R501

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY JDO | PLANS CK'D ACK

MODIFIED VERTICAL FACE PARAPET 'A'

SHEET 28 OF 39

702

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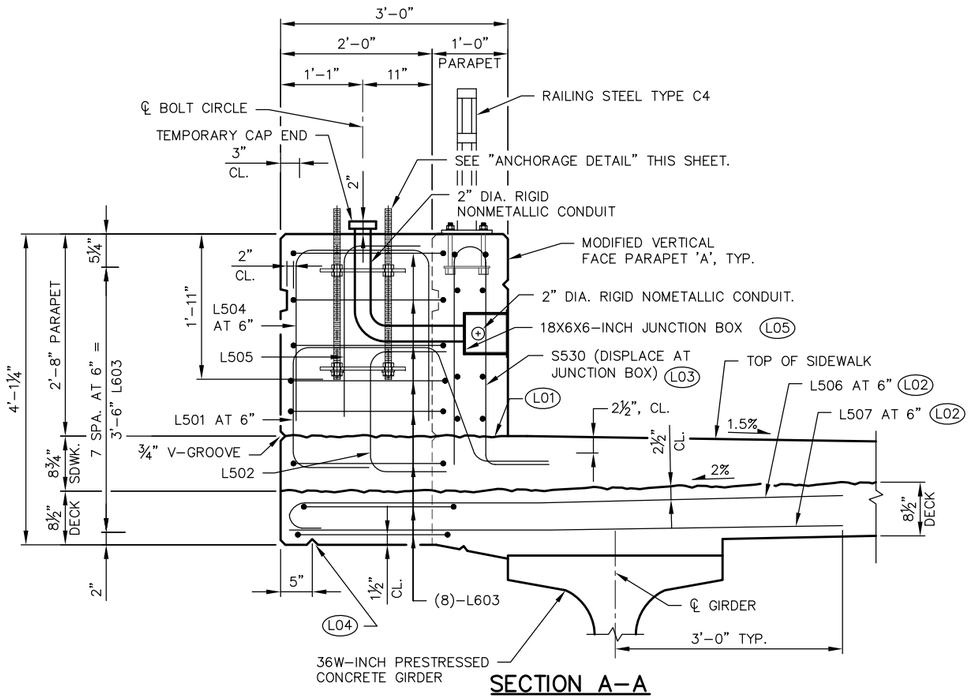
I.D. 2250-12-70

PLOT DATE: May 01, 2018

FILE: 28-B510150_apptа.dwg
PLOT SCALE:



SECTION A–A

NOTES

STEEL & CONCRETE QUANTITIES FOR LIGHT STANDARD ARE INCLUDED IN THE SUPERSTRUCTURE QUANTITIES ON THE "CROSS SECTION, GENERAL NOTES, AND QUANTITIES" SHEET.

(L01) CONSTRUCTION JOINT STRIKE OFF AS SHOWN.

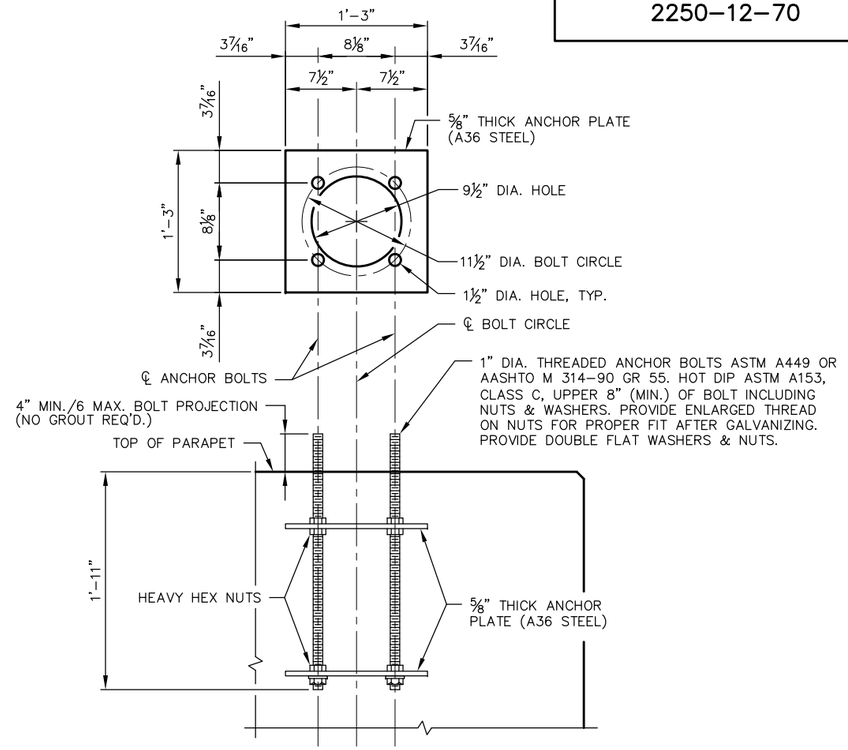
(L02) THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN DECK. SEE SUPERSTRUCTURE TYPICAL SECTION SHEETS FOR ADDITIONAL BAR STEEL IN DECK.

(L03) SEE "VERTICAL FACE PARAPET 'A'" SHEET FOR ADDITIONAL BAR STEEL DETAILS IN PARAPET.

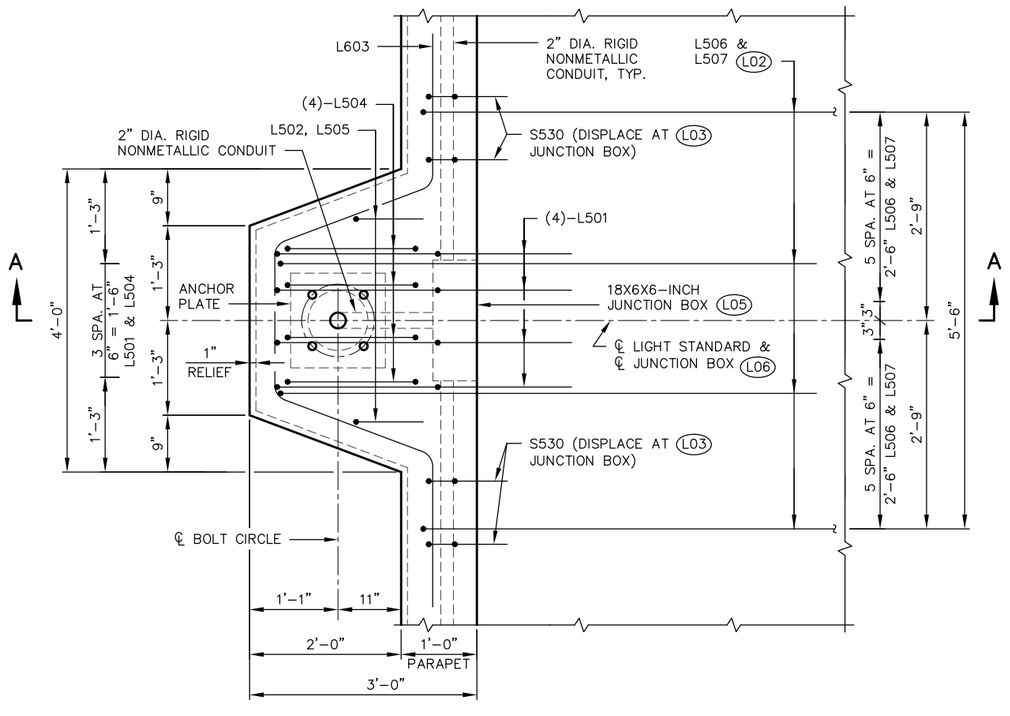
(L04) ¾" V–GROOVE, TYP. EXTEND V–GROOVE TO 6" FROM FRONT FACE OF ABUTMENT DIAPHRAGM. V–GROOVES ARE REQUIRED.

(L05) SEE "CONDUIT DETAILS" SHEET FOR JUNCTION BOX DETAILS.

(L06) SEE "SUPERSTRUCTURE PLAN" SHEET FOR LOCATIONS.



ANCHORAGE DETAIL



PLAN AT LIGHT STANDARD

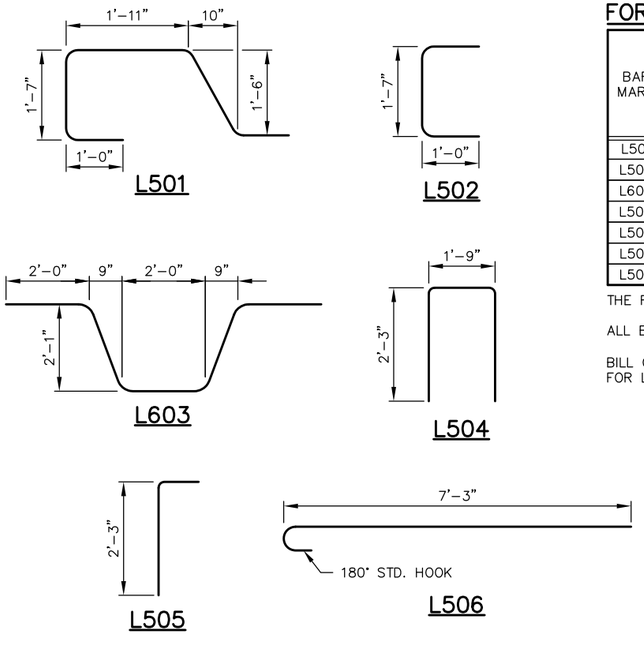
BILL OF BARS
FOR 4 LIGHT STANDARDS — COATED = 1,510 LBS.

BAR MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION	
L501	16		6'–9"	X		LIGHT STD. – PARAPET	VERT.
L502	8		3'–4"	X		LIGHT STD. – PARAPET	VERT.
L603	32		10'–0"	X		LIGHT STD. – PARAPET	HORIZ.
L504	16		6'–0"	X		LIGHT STD. – PARAPET	VERT.
L505	8		3'–2"	X		LIGHT STD. – PARAPET	VERT.
L506	48		7'–10"	X		LIGHT STD. – DECK	TRANS.
L507	48		7'–3"			LIGHT STD. – DECK	TRANS.

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

BILL OF BARS IS FOR FOUR LIGHT STANDARDS. SEE "SUPERSTRUCTURE PLAN" SHEET FOR LOCATIONS.



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

LIGHT STANDARD DETAILS

SHEET 29 OF 39

703

I.D. 2250–12–70

PLOT DATE: May 01, 2018

FILE: 29–B510150_light.dwg
PLOT SCALE:

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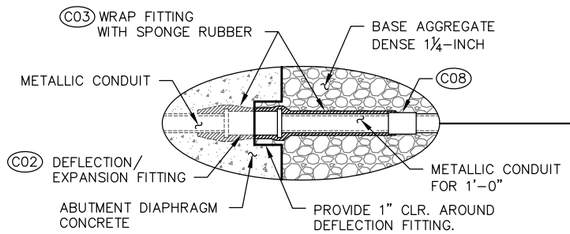
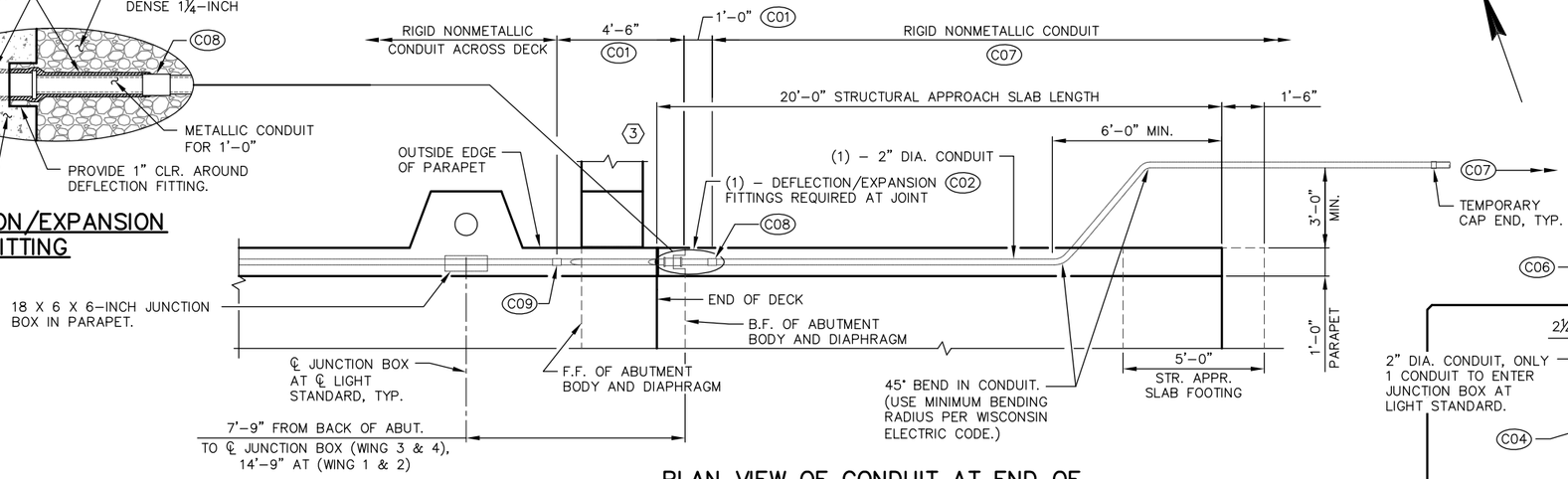
STATE PROJECT NUMBER

2250-12-70

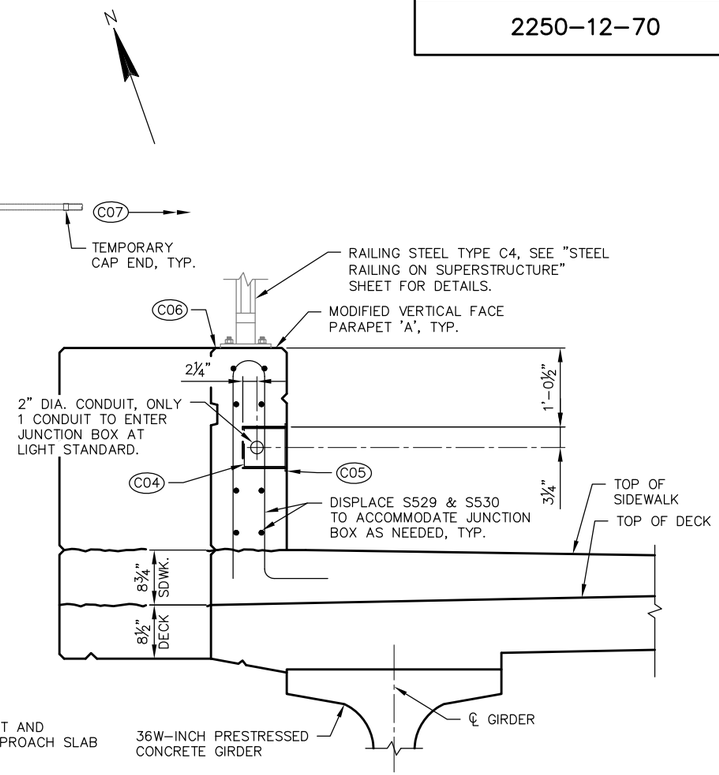


DEFLECTION/EXPANSION FITTING



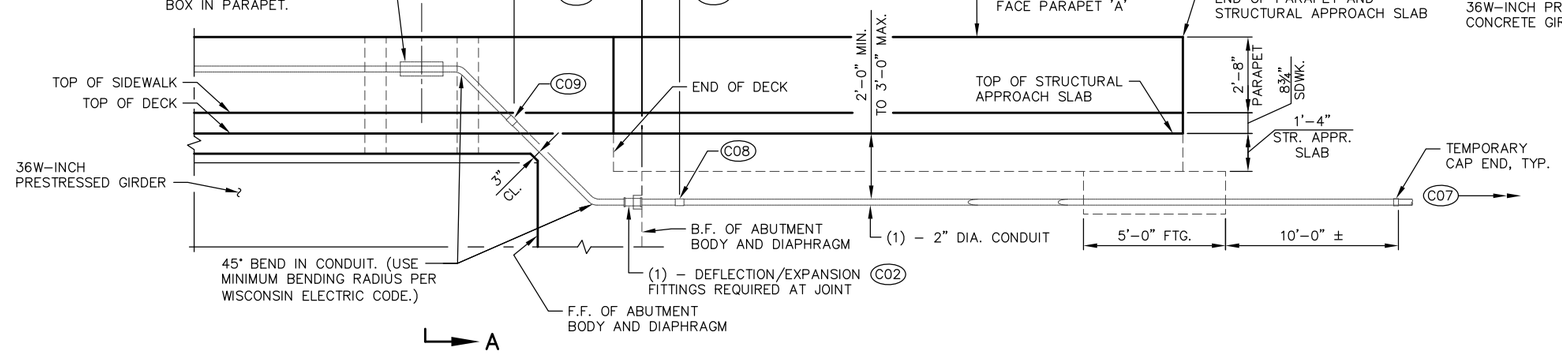
PLAN VIEW OF CONDUIT AT END OF DECK/STRUCTURAL APPROACH SLAB

(WING 3 SHOWN, ALL OTHER WINGS SIMILAR)



SECTION A-A

(NORTH SIDE OF BRIDGE, FACING EAST)



INSIDE ELEVATION VIEW OF CONDUIT AT END OF DECK/STRUCTURAL APPROACH SLAB

(WING 3 SHOWN, ALL OTHER WINGS SIMILAR)
(AESTHETIC DETAILS NOT SHOWN FOR CLARITY)

NOTES

CONDUIT SHALL BE EMBEDDED 2" CLEAR.

CONDUIT FITTINGS, CONDUIT BENDS AND ADAPTER FITTINGS TO BE INCLUDED WITH THE BID ITEM "CONDUIT RIGID METALLIC 2-INCH".

CONDUIT BENDS SHALL CONFORM TO THE NATIONAL ELECTRIC CODE.

PROVIDE JUNCTION BOXES FROM THE APPROVED PRODUCT LIST.

⬡ INDICATES WING NUMBER

(C01) USE 2" DIA. RIGID METALLIC CONDUIT AT DEFLECTION/EXPANSION FITTINGS IN THE ABUTMENT DIAPHRAGMS. EXTEND RIGID METALLIC CONDUIT THRU THE ABUTMENT DIAPHRAGM AND INTO THE DECK PARAPET AND 1'-0" ON THE STRUCTURAL APPROACH SLAB SIDE OF THE JOINT.

(C02) DEFLECTION/EXPANSION FITTING TO PROVIDE UP TO ¾" CONDUIT CONTRACTION OR EXPANSION AND UP TO 30 DEGREES OF ANGULAR MISALIGNMENT IN ANY DIRECTION WITH BONDING JUMPER.

(C03) SPONGE RUBBER WRAP TO BE AASHTO M153, TYPE 1 OR EQUIVALENT – ¼" MINIMUM THICKNESS. PROVIDE WRAP FOR THE ENTIRE LENGTH OF THE FITTING OR AS SHOWN. SPONGE RUBBER WRAP TO BE INCLUDED WITH THE BID ITEM "CONDUIT RIGID METALLIC 2-INCH".

(C04) LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.

(C05) CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.

(C06) SEE "MODIFIED VERTICAL FACE PARAPET 'A'" SHEET FOR REINFORCEMENT PLACEMENT.

(C07) LIMITS OF STRUCTURE BID ITEM FOR CONDUITS TERMINATES AT PULL BOX OFF OF STRUCTURE. REFER TO ROADWAY PLANS FOR LOCATIONS AND DETAILS.

(C08) WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED.

(C09) TEMPORARILY CAP END PRIOR TO PARAPET CONSTRUCTION.

F.F. – FRONT FACE
B.F. – BACK FACE

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY JDO | PLANS CK'D ACK

CONDUIT DETAILS

SHEET 30 OF 39

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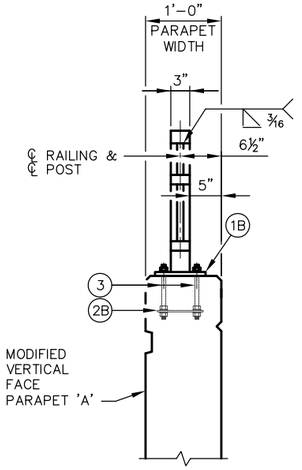
FILE: 30-B510150_conduit.dwg
PLOT SCALE:

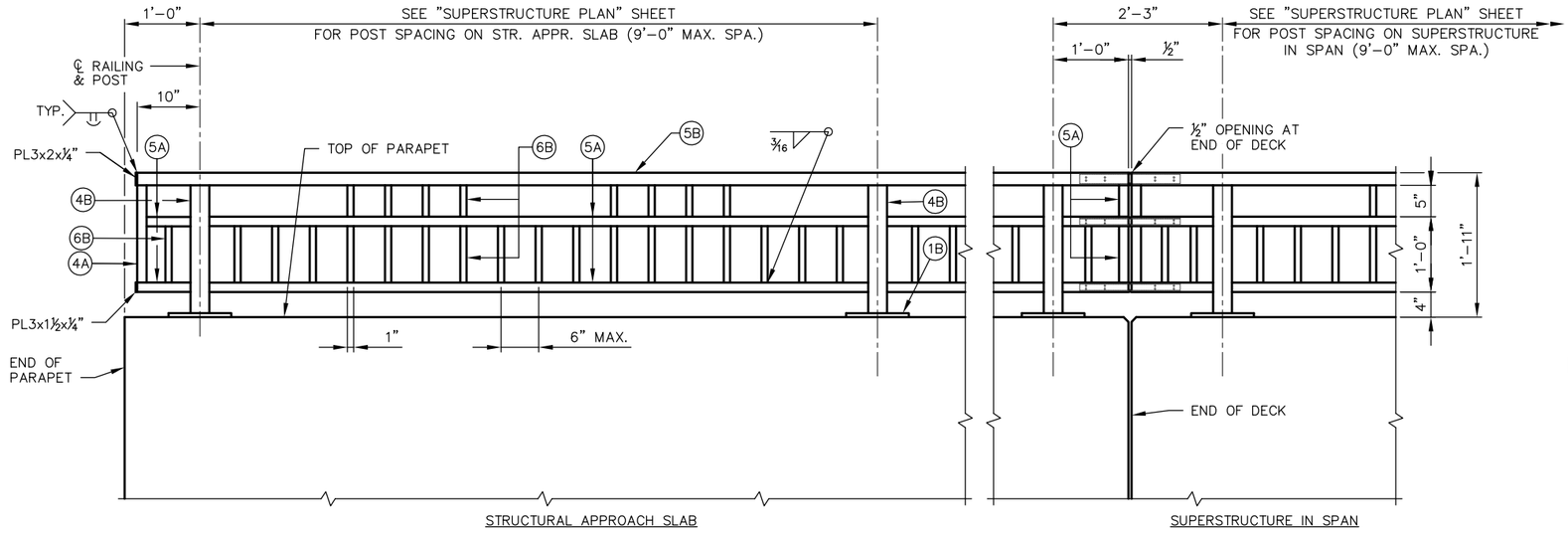
I.D. 2250-12-70

PLOT DATE: May 01, 2018

STATE PROJECT NUMBER

2250-12-70





END VIEW

ELEVATION OF PARAPET

NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C4 B-51-150", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL,. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL MATERIAL (EXCEPT NO. 3 & 12) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

LEGEND

(1B) PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES.

(2B) ¼" X 5" X 9" ANCHOR PLATE WITH 1⁄16" DIA. HOLES FOR THR'D. RODS NO. 3.

(3) ⅝" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS ⅝-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.

(4A) STRUCTURAL TUBING 3" X 1½" X 3⁄16". PLACE VERTICAL. WELD TO NO. 5.

(4B) STRUCTURAL TUBING 3" X 3" X 3⁄16". PLACE VERTICAL. WELD TO NO. 1 & 5.

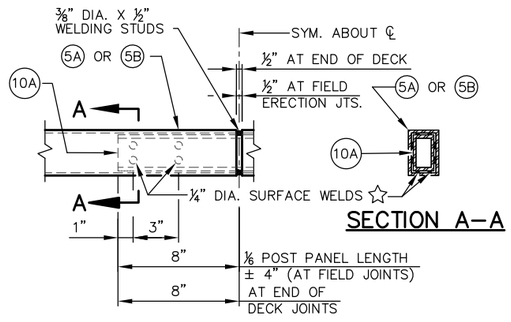
(5A) STRUCTURAL TUBING 3" X 1½" X 3⁄16" RAILS. WELD TO NO. 1 & NO. 4.

(5B) STRUCTURAL TUBING 3" X 2" X 3⁄16" RAILS. WELD TO NO. 1 & NO. 4.

(6B) BAR 1" X 1½" PICKETS. WELD TO NO. 5. (SPACE AT 6" MAX. ℄ TO ℄ SPACING). PLACE VERTICAL.

(9A) RECTANGULAR SLEEVE FABRICATED FROM 3⁄16" PLATES. PROVIDE "SLIDING FIT".

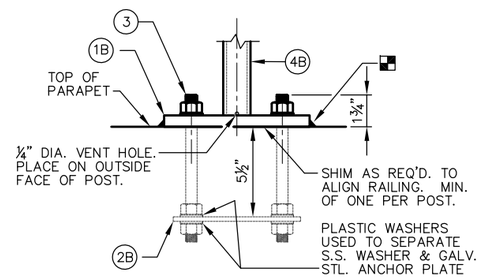
(10A) RECTANGULAR SLEEVE FABRICATED FROM 3⁄16" PLATES. (1'-4" @ FIELD ERECTION JTS.)



SECTION A-A

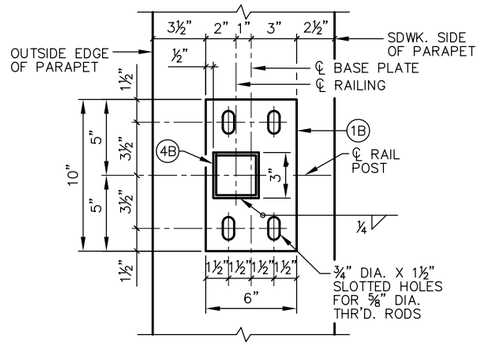
FIELD ERECTION JOINT DETAIL

☆MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



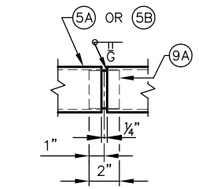
ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



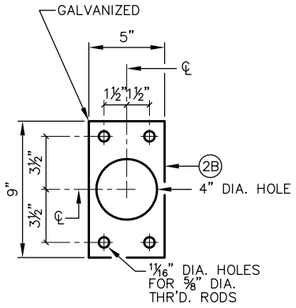
TYPICAL RAIL POST BASE PLATE

FOR 3" X 3" X 3⁄16" POSTS (4B)



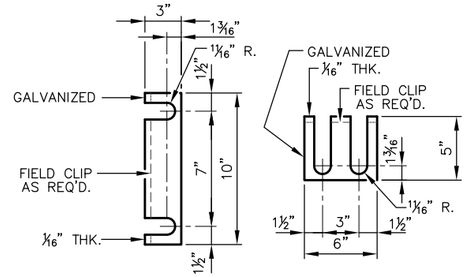
SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



ANCHOR PLATE

FOR 3" X 3" X 3⁄16" POSTS (4B)



RAIL POST SHIM DETAIL

(2 SETS PER POST)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY JDO | PLANS CK'D ACK

STEEL RAILING ON SUPERSTRUCTURE

SHEET 31 OF 39

705

I.D. 2250-12-70

PLOT DATE: May 02, 2018

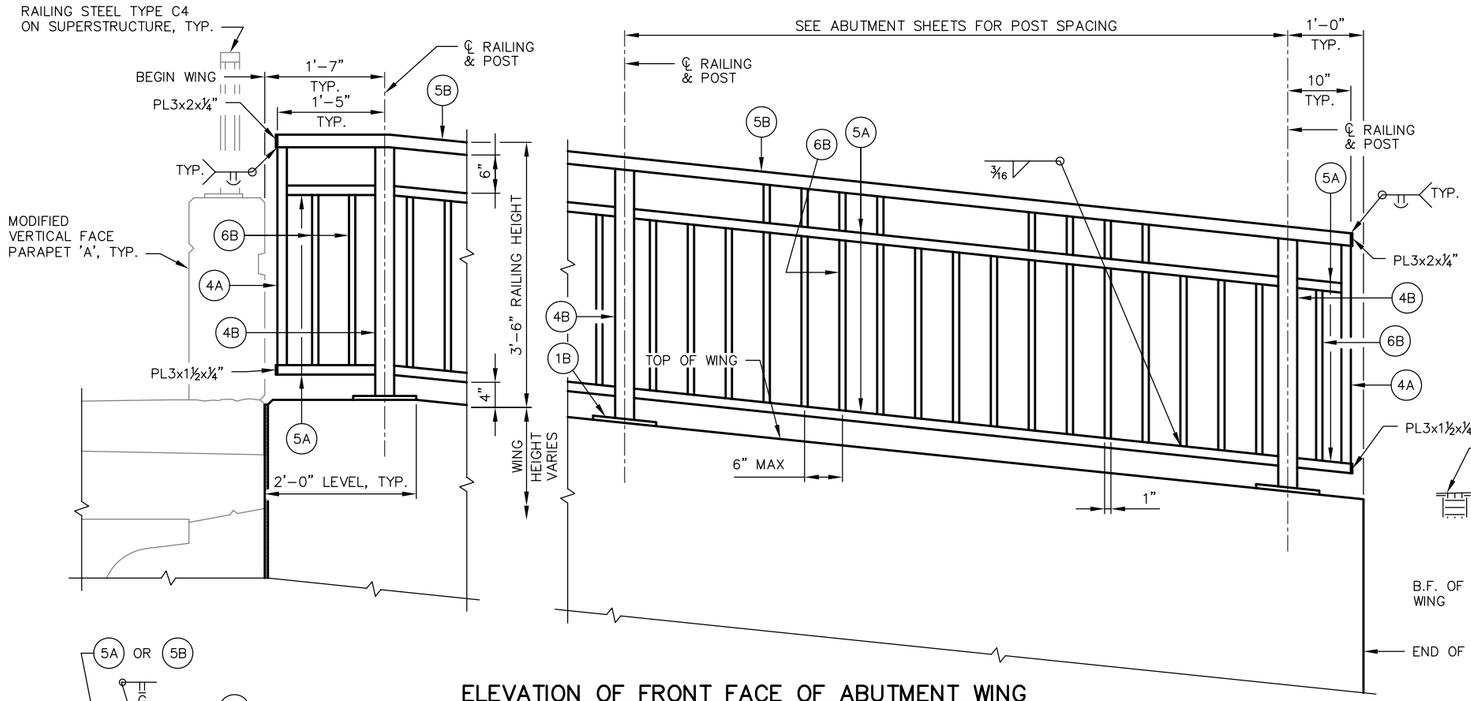
FILE: 31-B510150_rail.dwg
PLOT SCALE:

8

8

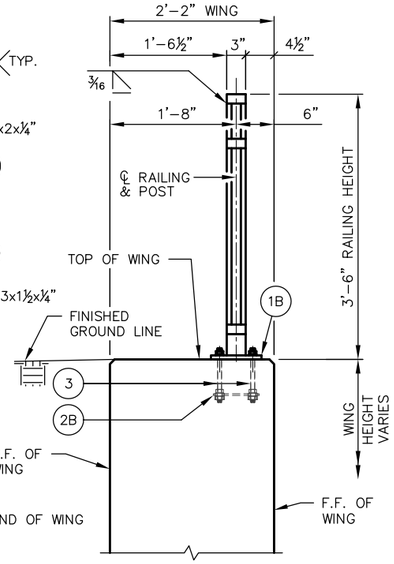
STATE PROJECT NUMBER

2250-12-70



ELEVATION OF FRONT FACE OF ABUTMENT WING

(WING 4 SHOWN, WING 3 SIMILAR)



TYPICAL SECTION THRU WING & RAILING

NOTES

BID ITEM SHALL BE "RAILING STEEL PEDESTRIAN TYPE C4 B-51-150", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

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■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

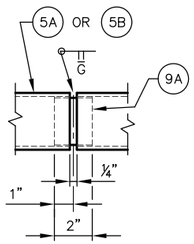
ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

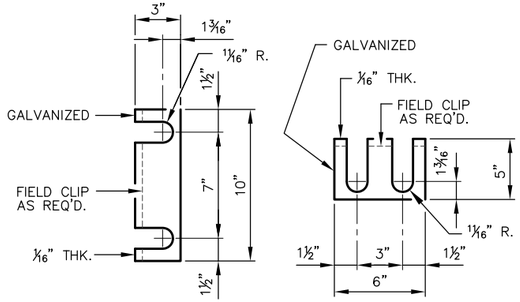
LEGEND

- (1B) PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES.
- (2B) ¼" X 5" X 9" ANCHOR PLATE WITH 1/16" DIA. HOLES FOR THR'D. RODS NO. 3.
- (3) ⅝" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS ⅝-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.
- (4A) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 5.
- (4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.
- (5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4.
- (5B) STRUCTURAL TUBING 3" X 2" X 3/16" RAILS. WELD TO NO. 1 & NO. 4.
- (6B) BAR 1" X 1½" PICKETS. WELD TO NO. 5. (SPACE AT 6" MAX. ℄ TO ℄ SPACING). PLACE VERTICAL.
- (9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".
- (10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.)



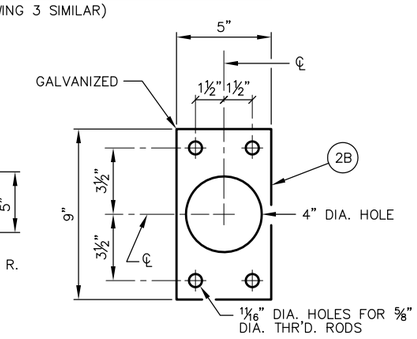
SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



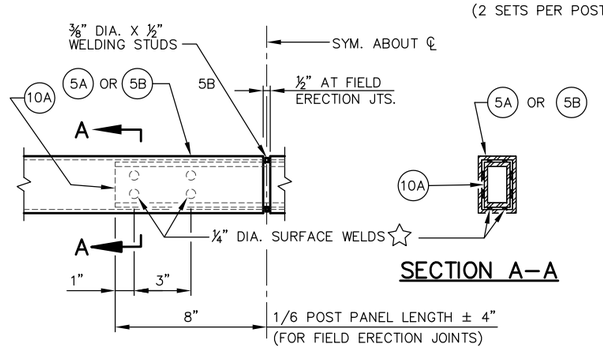
RAIL POST SHIM DETAIL

(2 SETS PER POST)



ANCHOR PLATE

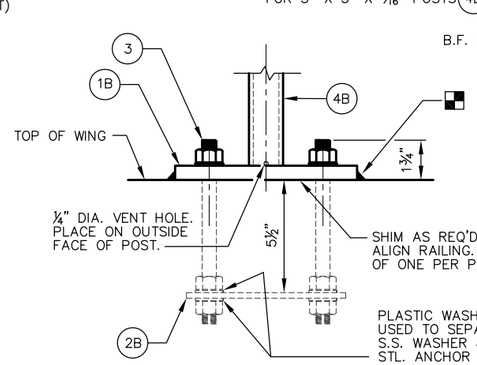
FOR 3" X 3" X 3/16" POSTS (4B)



SECTION A-A

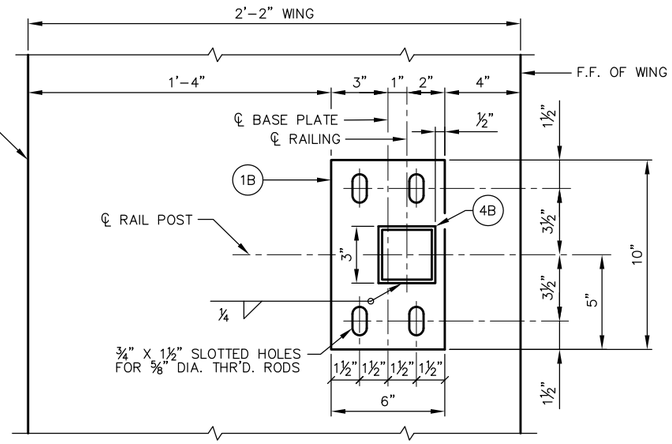
FIELD ERECTION JOINT DETAIL

☆ MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



TYPICAL RAIL POST BASE PLATE

FOR 3" X 3" X 3/16" POSTS (4B)

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY JDO | PLANS CK'D ACK

STEEL RAILING ON WINGS

SHEET 32 OF 39

706

I.D. 2250-12-70

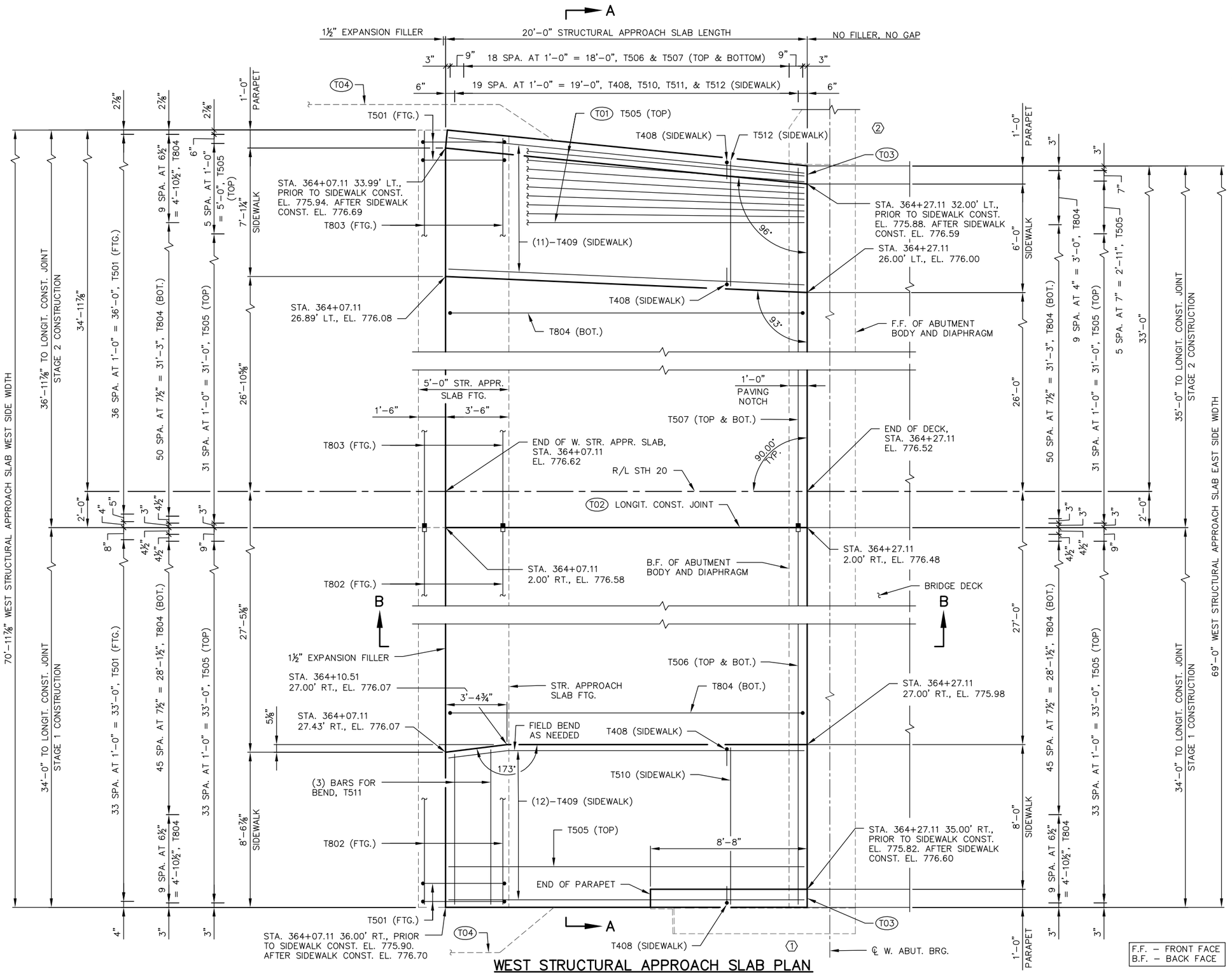
PLOT DATE: May 01, 2018

FILE: 32-R510150_wingrail.dwg
PLOT SCALE:

8

8

STATE PROJECT NUMBER
2250–12–70



WEST STRUCTURAL APPROACH SLAB PLAN

F.F. – FRONT FACE
B.F. – BACK FACE

NOTES

SECTION A–A & SECTION B–B SHOWN ON "WEST STRUCTURAL APPROACH SLAB DETAILS" SHEET.

(T01) FLARE T804 & T505 AS SHOWN TO MATCH EDGE OF BRIDGE DECK AT NORTH EDGE.

(T02) LONGITUDINAL CONSTRUCTION JOINT, SEE "SUPERSTRUCTURE REINFORCEMENT" SHEET FOR DETAILS. USE BAR COUPLERS BETWEEN BARS T802 & T803, AND T506 & T507, SEE "BAR COUPLERS" SHEET.

(T03) ½" FILLER IN STRUCTURAL APPROACH SLAB ONLY AT PARAPET LOCATIONS. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON–STAINING, NON–BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

(T04) RUN CONDUIT UNDER STRUCTURAL APPROACH SLABS. SEE "CONDUIT DETAILS" SHEET FOR LAYOUT.

⬡ INDICATES WING NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

WEST STRUCTURAL APPROACH SLAB

SHEET 33 OF 39

707

I.D. 2250–12–70

PLOT DATE: May 01, 2018

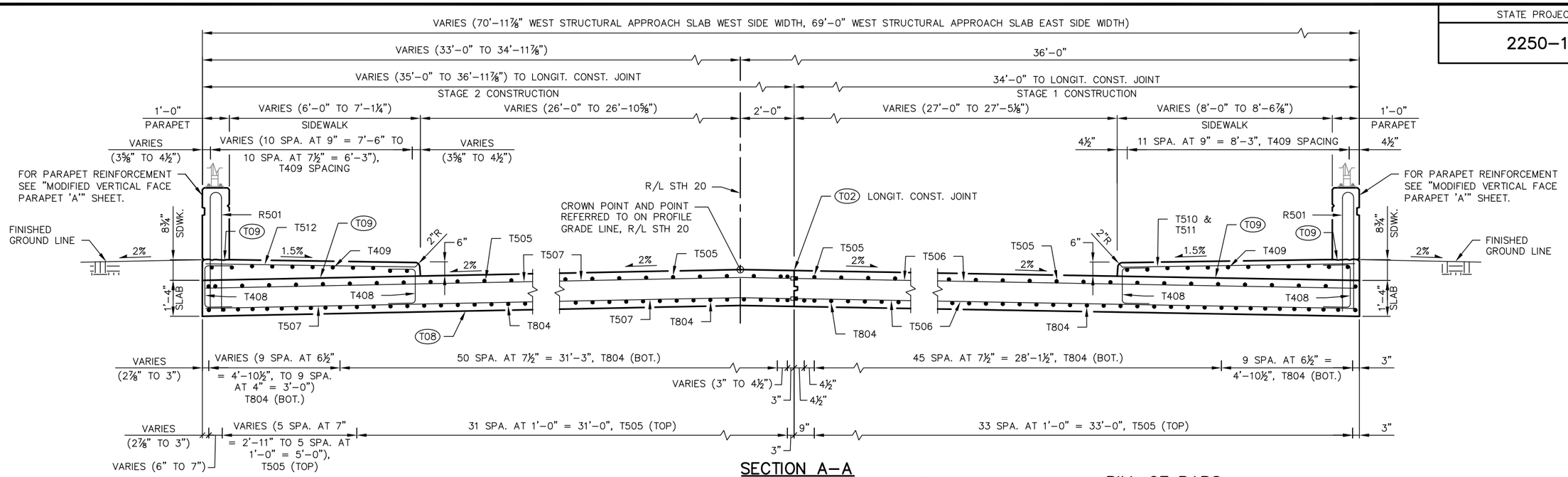
FILE: 33–36–B510150_slab.dwg
PLOT SCALE:

8

8

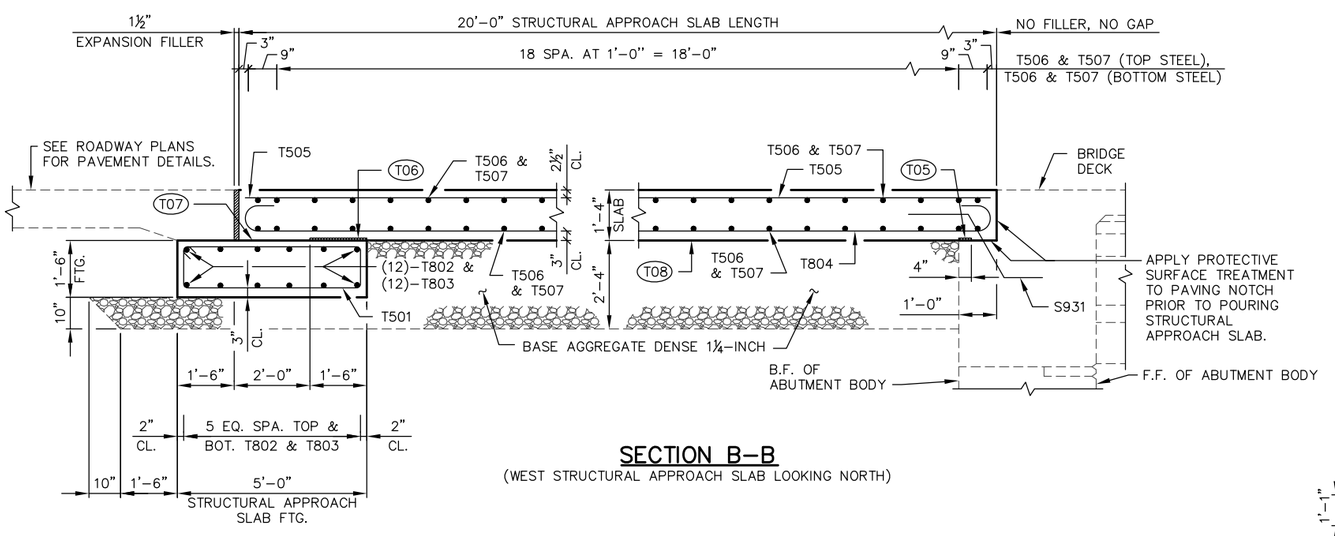
STATE PROJECT NUMBER

2250-12-70



SECTION A-A

(WEST STRUCTURAL APPROACH SLAB LOOKING EAST)



SECTION B-B

(WEST STRUCTURAL APPROACH SLAB LOOKING NORTH)

BILL OF BARS
WEST STR. APPROACH SLAB

COATED = 15,220 LBS.

	BAR MARK	COAT.	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
	T501	X	72	12'-2"	X		APPROACH SLAB FTG. - STIRRUP
(T10)	T802	X	12	33'-10"			APPROACH SLAB FTG. - TRANS. - STAGE 1
(T10)	T803	X	12	36'-8"		◭	APPROACH SLAB FTG. - TRANS. - STAGE 2
	T804	X	117	21'-6"	X		APPROACH SLAB - LONG. - BOT.
	T505	X	72	19'-8"			APPROACH SLAB - LONG. - TOP
(T10)	T506	X	42	33'-10"			APPROACH SLAB - TRANS. - TOP & BOT. - STAGE 1
(T10)	T507	X	42	35'-10"		◭	APPROACH SLAB - TRANS. - TOP & BOT. - STAGE 2
	T408	X	80	3'-3"	X		APPROACH SLAB - TRANS. - SIDEWALK
	T409	X	23	19'-8"			APPROACH SLAB - LONG. - SIDEWALK
	T510	X	17	8'-7"			APPROACH SLAB - TRANS. - SIDEWALK SOUTH EDGE
	T511	X	3	8'-2"		◭	APPROACH SLAB - TRANS. - SIDEWALK SOUTH EDGE
	T512	X	20	7'-1"		◭	APPROACH SLAB - TRANS. - SIDEWALK NORTH EDGE

THE FIRST DIGIT OR FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

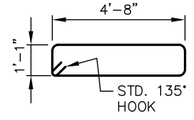
ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

◭ LENGTH SHOWN FOR BARS IN SERIES IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE "BAR SERIES TABLE" FOR ACTUAL LENGTHS.

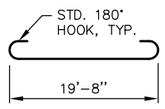
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
T803	2 SERIES OF 6	36'-5" TO 36'-11"
T507	2 SERIES OF 21	34'-10" TO 36'-9"
T511	1 SERIES OF 3	8'-2" TO 8'-5"
T512	1 SERIES OF 20	6'-7" TO 7'-7"

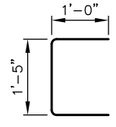
BUNDLE AND TAG EACH SERIES SEPARATELY.



T501



T804



T408

NOTES

(T02) LONGITUDINAL CONSTRUCTION JOINT, SEE "SUPERSTRUCTURE REINFORCEMENT" SHEET FOR DETAILS. USE BAR COUPLERS BETWEEN BARS T802 & T803, AND T506 & T507, SEE "BAR COUPLERS" SHEET FOR DETAILS.

(T05) ¾" PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC. 502.2.7 (4" WIDE X 69'-1¼" LONG)

(T06) ¾" PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC. 502.2.7 (1'-6" WIDE X 70'-7¾" LONG)

(T07) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

(T08) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

(T09) CONSTRUCTION JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(T10) BAR REQUIRES BAR COUPLER. SEE "BAR COUPLERS" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY JDO | PLANS CK'D ACK

WEST STRUCTURAL APPROACH SLAB DETAILS

SHEET 34 OF 39

708

8

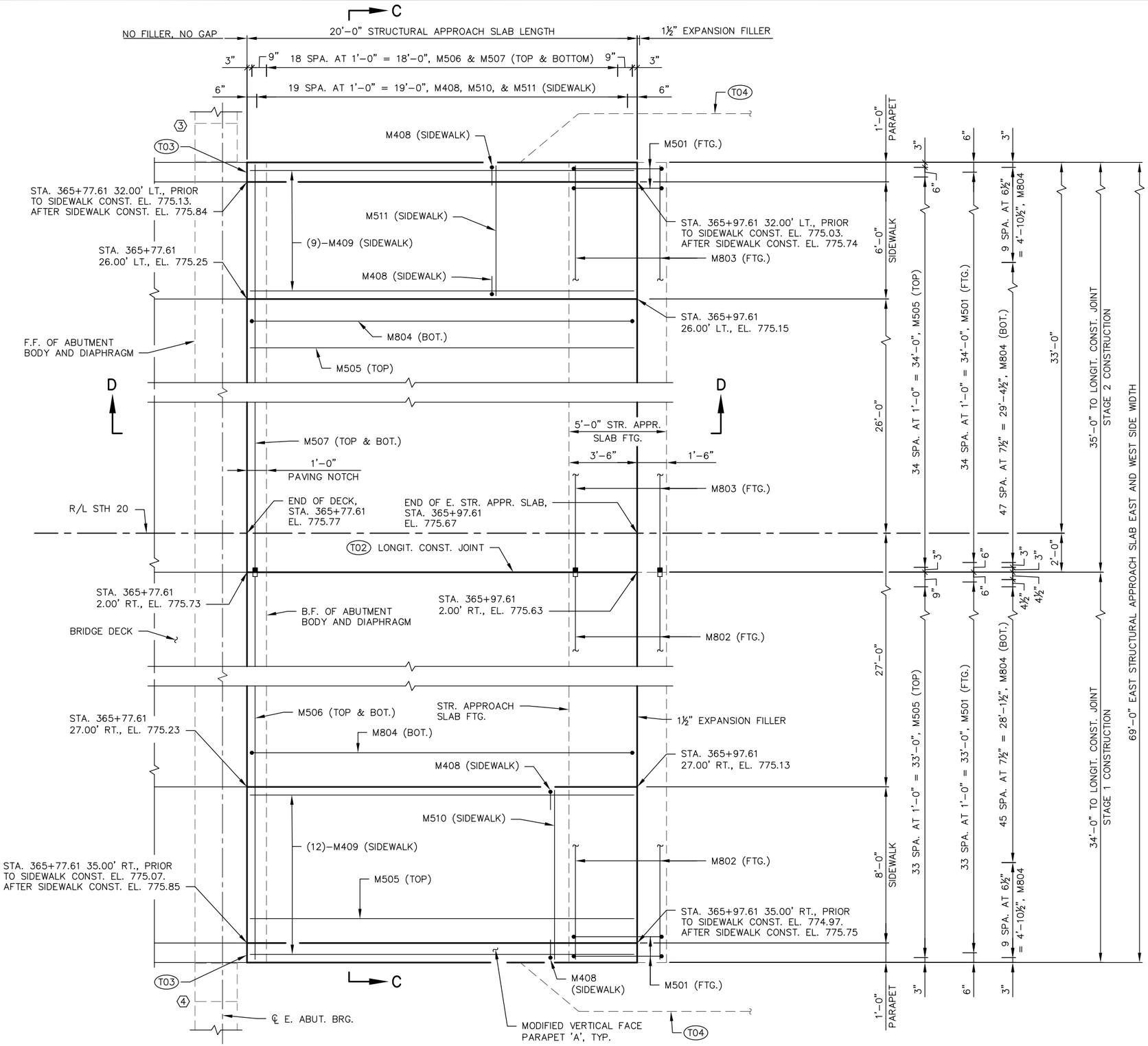
8

I.D. 2250-12-70

PLOT DATE: May 01, 2018

FILE: 33-36-B510150_slab.dwg
PLOT SCALE:

STATE PROJECT NUMBER
2250–12–70



EAST STRUCTURAL APPROACH SLAB PLAN

N

NOTES

SECTION C–C & SECTION D–D SHOWN ON "EAST STRUCTURAL APPROACH SLAB DETAILS" SHEET.

(T02) LONGITUDINAL CONSTRUCTION JOINT, SEE "SUPERSTRUCTURE REINFORCEMENT" SHEET FOR DETAILS. USE BAR COUPLERS BETWEEN BARS M802 & M803, AND M506 & M507, SEE "BAR COUPLERS" SHEET.

(T03) ½" FILLER IN STRUCTURAL APPROACH SLAB ONLY AT PARAPET LOCATIONS. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON–STAINING, NON–BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

(T04) RUN CONDUIT UNDER STRUCTURAL APPROACH SLABS. SEE "CONDUIT DETAILS" SHEET FOR LAYOUT.

⬡ INDICATES WING NUMBER

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

EAST STRUCTURAL APPROACH SLAB

SHEET 35 OF 39

709

I.D. 2250–12–70

PLOT DATE: May 01, 2018

FILE: 33–36–B510150_slab.dwg
PLOT SCALE:

8

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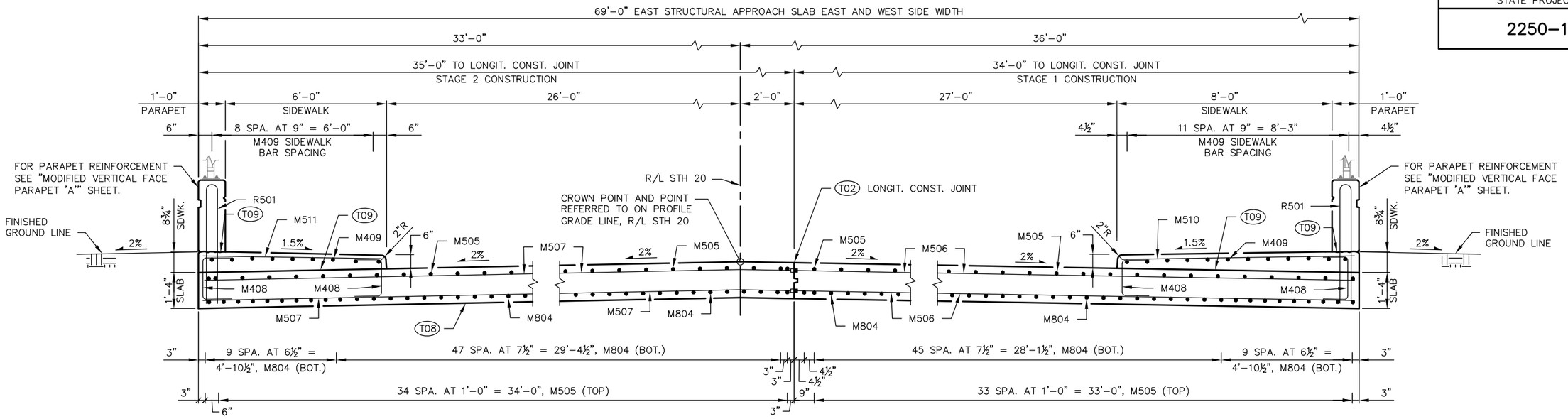
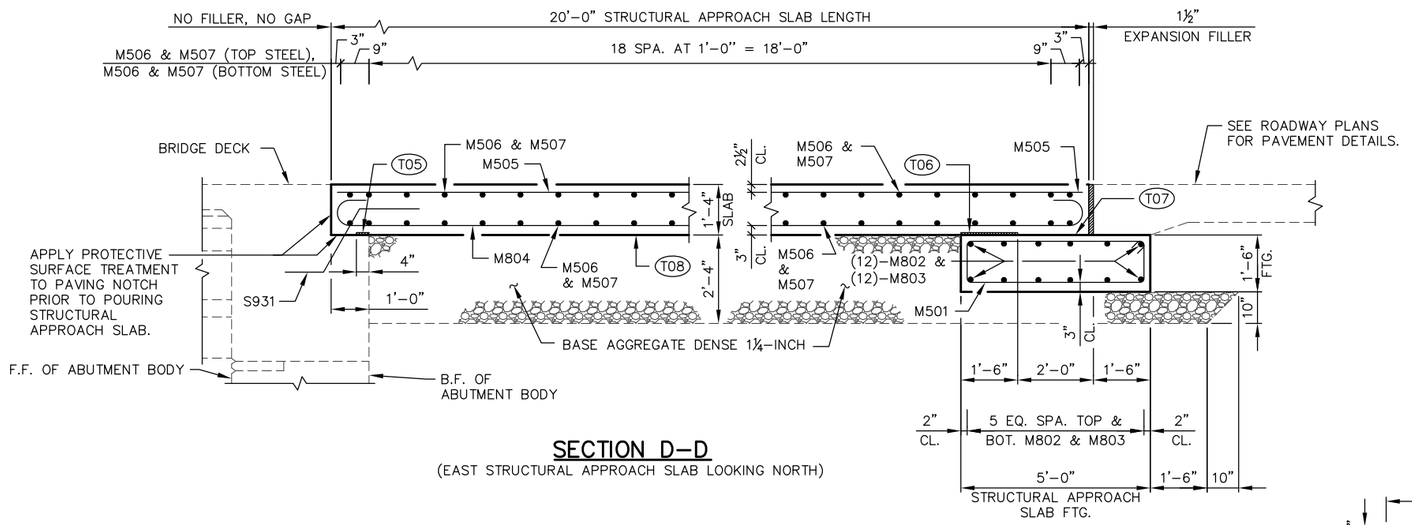
STATE PROJECT NUMBER
2250–12–70



SECTION C–C

(EAST STRUCTURAL APPROACH SLAB LOOKING EAST)



SECTION D–D

(EAST STRUCTURAL APPROACH SLAB LOOKING NORTH)

BILL OF BARS
EAST STR. APPROACH SLAB — COATED = 14,830 LBS.

BAR MARK	COAT.	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
M501	X	69	12'–2"	X		APPROACH SLAB FTG. – STIRRUP
(T10) M802	X	12	33'–10"			APPROACH SLAB FTG. – TRANS. – STAGE 1
(T10) M803	X	12	34'–10"			APPROACH SLAB FTG. – TRANS. – STAGE 2
M804	X	114	21'–6"	X		APPROACH SLAB – LONG. – BOT.
M505	X	70	19'–8"			APPROACH SLAB – LONG. – TOP
(T10) M506	X	42	33'–10"			APPROACH SLAB – TRANS. – TOP & BOT. – STAGE 1
(T10) M507	X	42	34'–10"			APPROACH SLAB – TRANS. – TOP & BOT. – STAGE 2
M408	X	80	3'–3"	X		APPROACH SLAB – TRANS. – SIDEWALK
M409	X	21	19'–8"			APPROACH SLAB – LONG. – SIDEWALK
M510	X	20	8'–7"			APPROACH SLAB – TRANS. – SIDEWALK SOUTH EDGE
M511	X	20	6'–7"			APPROACH SLAB – TRANS. – SIDEWALK NORTH EDGE

THE FIRST DIGIT OR FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

NOTES

(T02) LONGITUDINAL CONSTRUCTION JOINT, SEE "SUPERSTRUCTURE REINFORCEMENT" SHEET FOR DETAILS. USE BAR COUPLERS BETWEEN BARS M802 & M803, AND M506 & M507, SEE "BAR COUPLERS" SHEET.

(T05) ¾" PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC. 502.2.7 (4" WIDE X 69'–0" LONG)

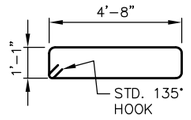
(T06) ¾" PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC. 502.2.7 (1'–6" WIDE X 69'–0" LONG)

(T07) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

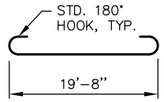
(T08) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

(T09) CONSTRUCTION JOINT – STRIKE OFF AS SHOWN AND LEAVE ROUGH.

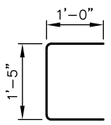
(T10) BAR REQUIRES BAR COUPLER. SEE "BAR COUPLERS" SHEET FOR DETAILS.



M501



M804



M408

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

EAST STRUCTURAL APPROACH SLAB DETAILS

SHEET 36 OF 39

710

I.D. 2250–12–70

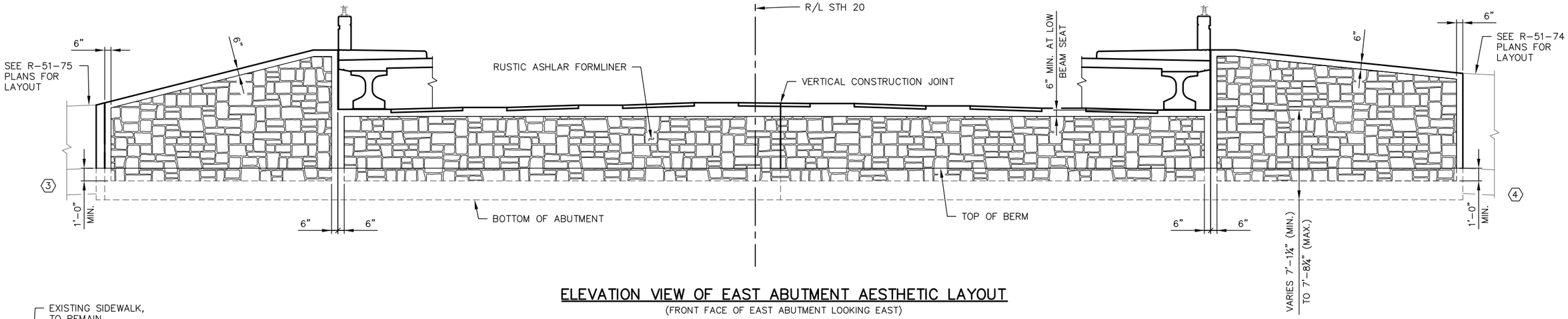
PLOT DATE: May 01, 2018

FILE: 33–36–B510150_slab.dwg
PLOT SCALE:

8

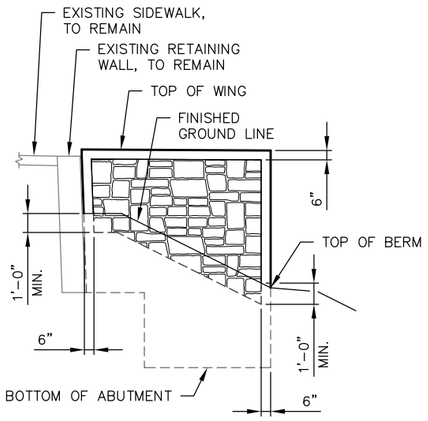
8

STATE PROJECT NUMBER
2250–12–70



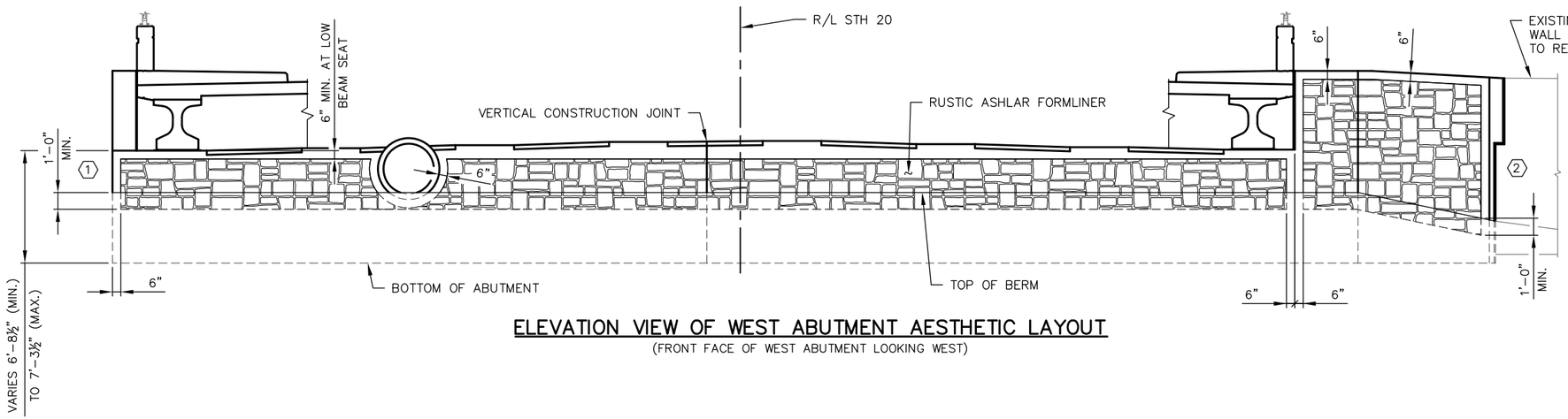
ELEVATION VIEW OF EAST ABUTMENT AESTHETIC LAYOUT

(FRONT FACE OF EAST ABUTMENT LOOKING EAST)



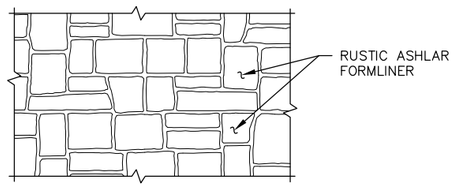
WING 1 AESTHETIC LAYOUT

(FRONT FACE OF WING 1 LOOKING NORTH)



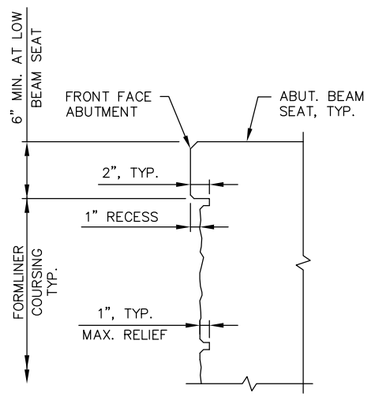
ELEVATION VIEW OF WEST ABUTMENT AESTHETIC LAYOUT

(FRONT FACE OF WEST ABUTMENT LOOKING WEST)



RUSTIC ASHLAR FORMLINER DETAIL

FORMLINER THICKNESS = 2"
SIZE = 8" TO 32"
MAX. RELIEF = 1"



SECTION THRU FORMLINER

NOTES

FORMLINER COURSING ON ABUTMENTS AND WINGS SHALL BE LEVEL.

THE FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT OF THE ABUTMENT.

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

WRAPAROUND/MATCH FORMLINER PATTERN AT CORNERS.

BRIDGE B–51–150 DOES NOT RECIEVE ANY CONCRETE STAINING. LEAVE FORMLINER PLAIN CONCRETE.

⬡ INDICATES WING NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

AESTHETIC DETAILS

SHEET 37 OF 39

711

I.D. 2250–12–70

PLOT DATE: May 04, 2018

FILE: 37–B510150_aesth.dwg
PLOT SCALE:

8

8

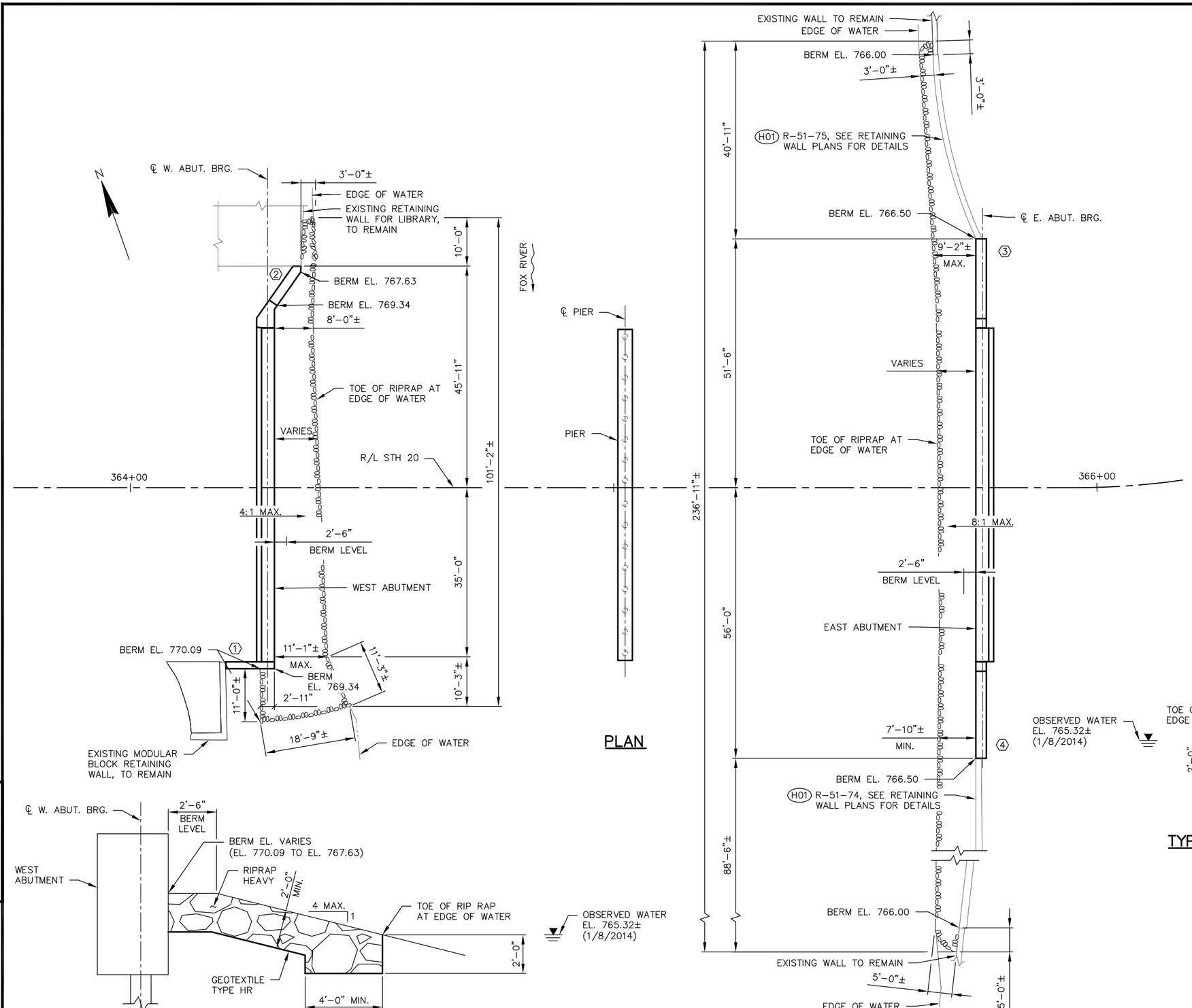
STATE PROJECT NUMBER
2250–12–70

NOTES

PLACE GEOTEXTILE TYPE HR BELOW HEAVY RIPRAP.

(H01) RIPRAP TO BE PLACED AFTER THE CONSTRUCTION OF RETAINING WALLS.

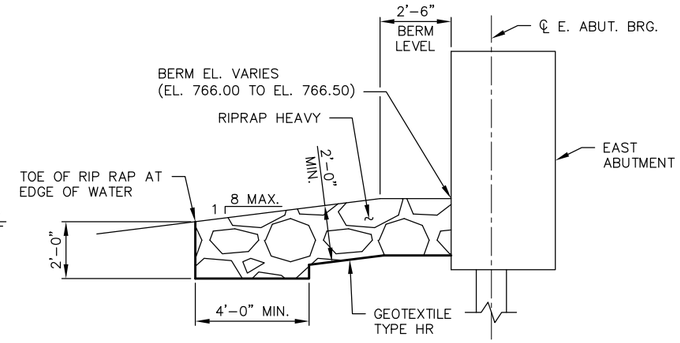
⬡ INDICATES WING NUMBER



PLAN

OBSERVED WATER EL. 765.32± (1/8/2014)

TYPICAL SECTION THROUGH WEST ABUTMENT
(LOOKING NORTH)



OBSERVED WATER EL. 765.32± (1/8/2014)

TYPICAL SECTION THROUGH EAST ABUTMENT
(LOOKING NORTH)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–51–150

DRAWN BY JDO | PLANS CK'D ACK

RIPRAP LAYOUT

SHEET 38 OF 39

712

I.D. 2250–12–70

PLOT DATE: May 01, 2018

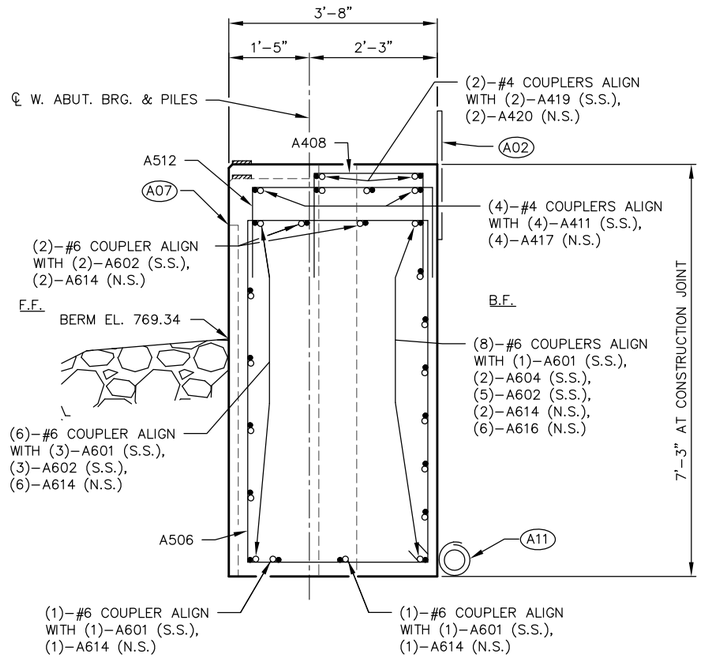
FILE: 38–B510150_riprap.dwg
PLOT SCALE:

8

8

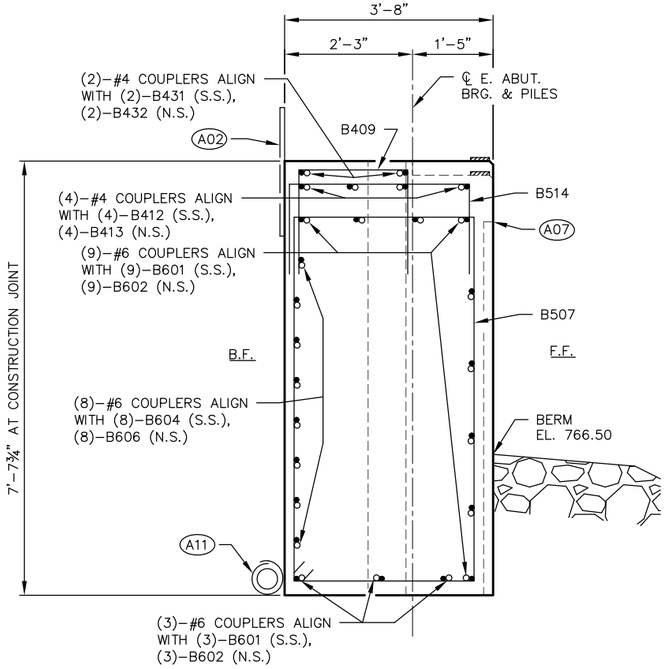
STATE PROJECT NUMBER

2250-12-70



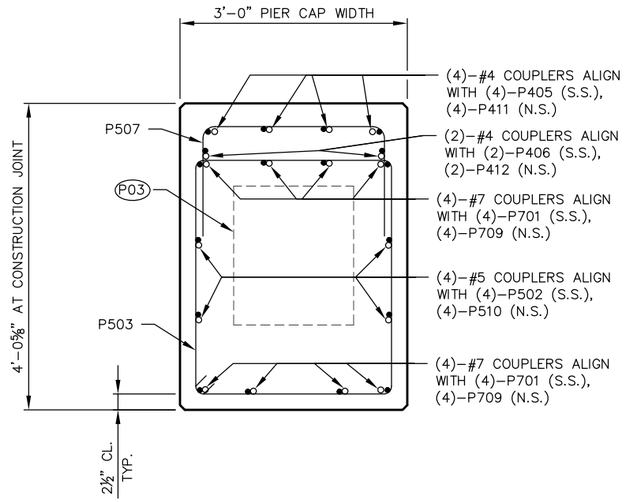
SECTION THRU WEST ABUTMENT AT CONSTRUCTION JOINT

(LOOKING SOUTH)



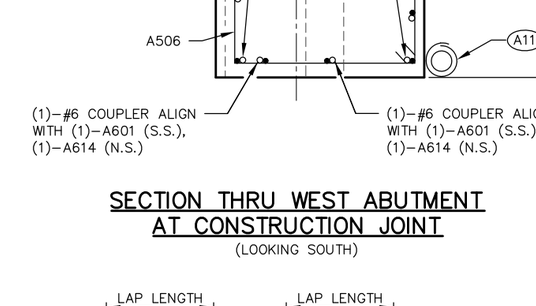
SECTION THRU EAST ABUTMENT AT CONSTRUCTION JOINT

(LOOKING SOUTH)



SECTION THRU PIER AT CONSTRUCTION JOINT

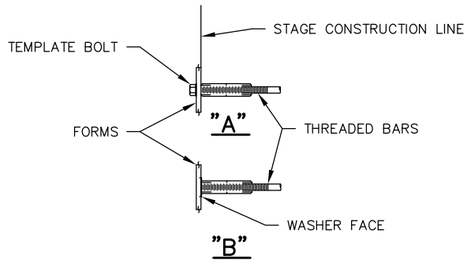
(LOOKING SOUTH)



DOWEL BAR SPLICER

ONE PIECE THREADED SPLICER

SPLICER ALTERNATIVES



INSTALLATION AND SETTING METHODS

"A" SET SPLICER BY MEANS OF A TEMPLATE BOLT.
"B" SET SPLICER BY NAILING TO WOOD FORMS OR CEMENTING TO STEEL FORMS.

NOTES

STEEL SPLICE (COUPLER) ASSEMBLY SHALL BE AN APPROVED TYPE AND SHALL DEVELOP IN TENSION AT LEAST 125% OF THE YIELD STRENGTH OF THE SPLICED REINFORCEMENT BARS.

DOWEL BAR SPLICERS SHALL BE OF MINIMUM 60 ksi YIELD STRENGTH, AND HAVE TENSILE STRENGTH AREA EQUAL OR GREATER THAN THAT OF THE LAPPED REINFORCEMENT BARS.

DOWEL BAR SPLICERS SHALL MEET THE DEFORMATION REQUIREMENTS FOR STANDARD ASTM DEFOREMED REINFORCING BARS.

FOR DOWEL BAR SPLICERS, ALL REINFORCEMENT BARS SHALL BE LAPPED AND TIED TO THE SPLICER BARS.

SPLICER (COUPLER) ASSEMBLY IN THE DECK, STRUCTURAL APPROACH SLABS, ABUTMENT BACKWALLS AND PAVING BLOCKS SHALL BE EPOXY COATED IN ACCORDANCE THE REQUIREMENTS FOR REINFORCEMENT BARS.

OTHER SYSTEMS OF SIMILAR DESIGN MAY BE SUBMITTED TO THE ENGINEER FOR APPROVAL. APPROVAL SHALL BE BASED ON CERTIFIED TEST RESULTS FROM AN APPROVED TESTING LABORATORY THAT THE PROPOSED SPLICER (COUPLER) ASSEMBLY SATISFIES THE FOLLOWING REQUIREMENT:

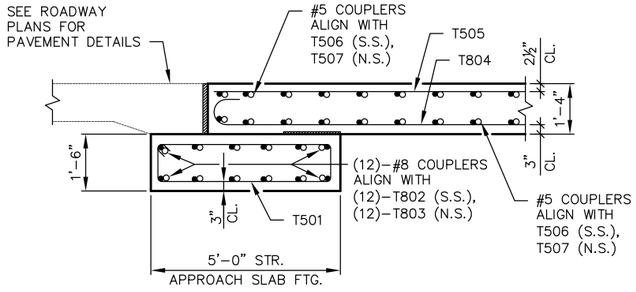
1. – MINIMUM CAPACITY = 1.25 X fy X AREA OF SPLICED REINFORCEMENT BAR.

   WHERE fy = YIELD STRENGTH OF SPLICED REINFORCEMENT BARS.

DOWEL BAR SPLICER LAP LENGTHS

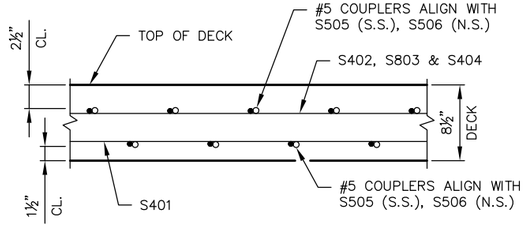
CONCRETE UNDER BAR	BAR SIZE	4	5	6	7	8	9	10	11
12" OR LESS	f'c = 3500	1'-8"	2'-8"	3'-2"	4'-3"	5'-6"	7'-0"	8'-9"	10'-11"
	f'c = 4000	1'-8"	2'-8"	3'-2"	4'-0"	5'-2"	6'-6"	8'-3"	10'-2"
MORE THAN 12"	f'c = 3500	2'-3"	2'-11"	3'-6"	4'-8"	6'-1"	7'-10"	9'-10"	12'-1"
	f'c = 4000	2'-3"	2'-11"	3'-6"	4'-5"	5'-8"	7'-4"	9'-2"	11'-4"

BAR LENGTH COMPUTED TO ℄ LONGIT. JOINT AND SHALL BE MODIFIED IF REQ'D. TO BAR COUPLER MANUFACTURER RECOMMENDATIONS. PAY BASED ON BARS AS DETAILED.



TYPICAL SECTION THRU STRUCTURAL APPROACH SLAB AT CONSTRUCTION JOINT

(WEST STR. APPR. SLAB SHOWN, EAST SIMILAR)



TYPICAL SECTION THRU SUPERSTRUCTURE AT CONSTRUCTION JOINT

(SECTION IN SPAN 1 SHOWN, SPAN 2 SIMILAR)

LEGEND

(A02) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

(A07) SEE "AESTHETIC DETAILS" SHEET FOR 2" DEEP FORMLINER PATTER LIMITS ON FRONT FACE OF ABUTMENT BODY AND WING.

(A11) PIPE UNDERDRAIN WRAPPED (6-INCH) SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON "EAST ABUTMENT DETAILS" SHEET. RODENT SHIELD IS INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(P03) KEYED CONSTRUCTION JOINT FOR PIER CAP FORMED BY BEVELED 1'-10" X 1'-7" X 2".

F.F. – FRONT FACE
B.F. – BACK FACE
E.F. – EACH FACE
S.S. – SOUTH SIDE
N.S. – NORTH SIDE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-150

DRAWN BY JDO | PLANS CK'D ACK

BAR COUPLERS

SHEET 39 OF 39

713

I.D. 2250-12-70

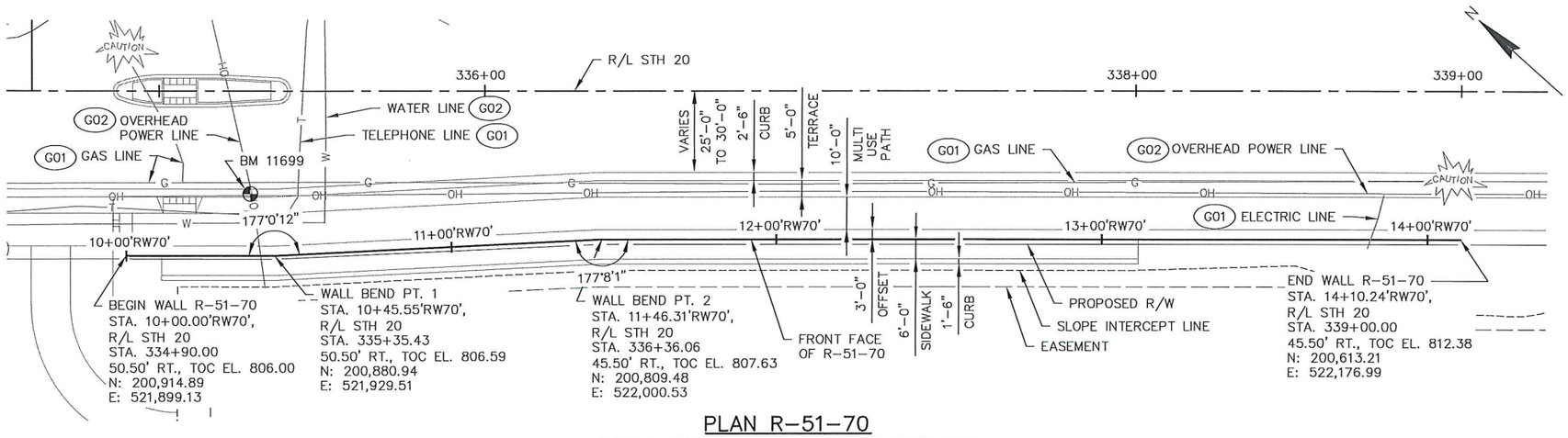
PLOT DATE: May 01, 2018

FILE: 39-B510150_coupler.dwg
PLOT SCALE:

8

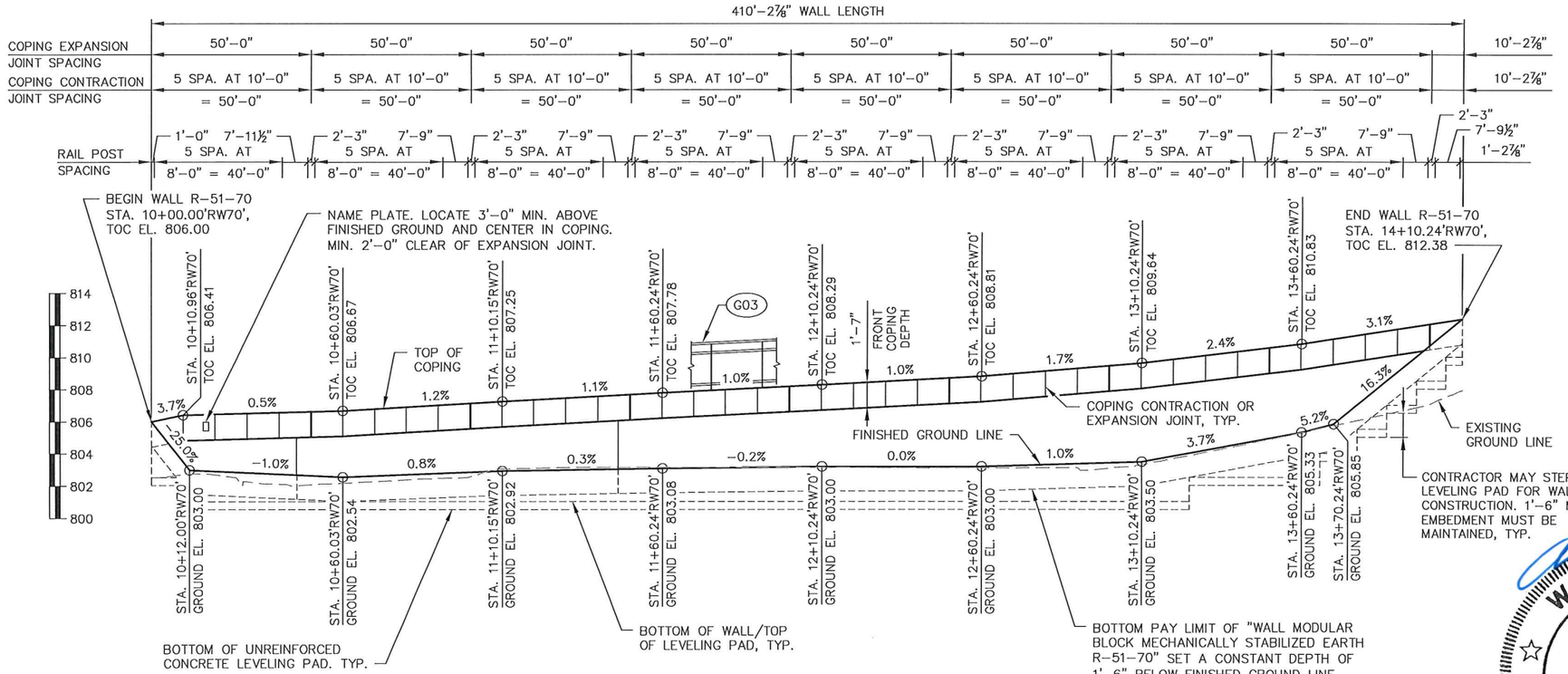
8

STATE PROJECT NUMBER
2250–12–70



PLAN R–51–70

(MODULAR BLOCK MECHANICALLY STABILIZED EARTH WALL)



ELEVATION

(LOOKING AT FRONT FACE OF WALL)

BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEVATION
11699	335+28.09, 31.52' RT.	8–INCH SPIKE ON NORTH SIDE OF POWER POLE #02–00490	804.11

HORIZONTAL DATUM AND ADJUSTMENT: NAD 83 (2007)
VERTICAL DATUM AND ADJUSTMENT: NAVD 88 (2007)
COORDINATE REFERENCE SYSTEM: WCCS RACINE CO

NOTES

TOC – TOP OF COPING

(G01) UTILITIES SHOWN ARE TO REMAIN.

(G02) UTILITIES SHOWN ARE TO BE RELOCATED.

(G03) RAILING STEEL PEDESTRIAN TYPE C4. SEE "STEEL RAILING DETAILS" SHEET.

LIST OF DRAWINGS

1. GENERAL PLAN
2. QUANTITIES, WALL DATA & PROFILE
3. WALL CROSS SECTIONS & DETAILS
4. STEEL RAILING DETAILS
5. SUBSURFACE EXPLORATION

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R–51–70".

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON "QUANTITIES, WALL DATA & PROFILE" SHEET.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE LOAD OF 240 PSF.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

MATERIAL PROPERTIES:

CONCRETE MASONRY CAST–IN–PLACE COPING ——— $f'c$ = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 ——— fy = 60,000 P.S.I.

ALLOWABLE WALL SYSTEMS

WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R–51–70

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER UNLESS OTHERWISE SHOWN OR NOTED.

ALL BAR STEEL REINFORCEMENT IN CAST–IN–PLACE CONCRETE IS TO BE EPOXY COATED.

ALL WALL STATIONING AND OFFSETS ARE GIVEN TO THE FRONT FACE OF THE WALL (R–51–70).

THE EXISTING GROUND LINE IS THE UPPER LIMIT OF EXCAVATION FOR STRUCTURES.

THE PLAN QUANTITY FOR THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R–51–70" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF COPING TO THE TOP OF LEVELING PAD, SET A CONSTANT DEPTH OF 1'–6" BELOW THE FINISHED GROUND LINE.

THE QUANTITY OF CONCRETE MASONRY, REINFORCING STEEL AND RUBBERIZED MEMBRANE WATERPROOFING FOR THE CAST–IN–PLACE COPING IS PAID FOR UNDER THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R–51–70".

WISCONSIN
ANDREW C. KNUTSON
E-34662
SPRING GREEN, WI
5-11-18
PROFESSIONAL ENGINEER

NO.	DATE	REVISION	BY

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ANDY KNUTSON, P.E., S.E.
(608) 588–7866

BRIDGE OFFICE CONTACT
WILLIAM DREHER, P.E.
(608) 266–8489

WESTBROOK Associated Engineers, Inc.
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PHONE (608) 588–7866
FAX (608) 588–7954

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 05/30/18
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R–51–70

RETAINING WALL ALONG STH 20

COUNTY	~~TOWN/CITY~~/VILLAGE
RACINE	WATERFORD

DESIGN SPEC. AASHTO LRFD DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
CDS	ACK	CDS	ACK

GENERAL PLAN

SHEET 1 OF 5

714

I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 01-R510070_fsh.dwg
PLOT SCALE:

8

8

STATE PROJECT NUMBER

2250–12–70

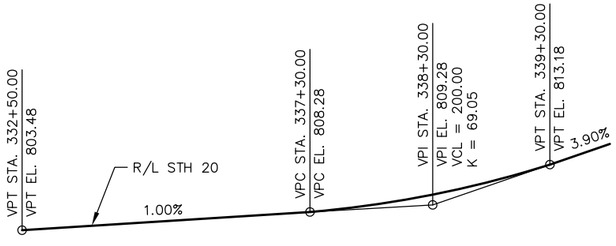
GEOMETRY TABLE

WALL STATION	R/L STH 20 STATION	R/L STH 20 OFFSET TO F.F. OF WALL	TOP OF COPING (TOC) EL.	FINISHED GROUND EL. AT F.F. OF WALL	EXISTING GROUND EL. AT F.F. OF WALL
10+00.00'RW70'	334+90.00	50.50' RT.	806.00	806.00	802.51
10+10.96'RW70'	335+00.93	50.50' RT.	806.41	803.26	802.68
10+12.00'RW70'	335+01.97	50.50' RT.	806.42	803.00	802.70
10+25.00'RW70'	335+14.93	50.50' RT.	806.48	802.88	802.55
10+45.55'RW70'	335+35.43	50.50' RT.	806.59	802.68	802.01
10+50.00'RW70'	335+39.87	50.28' RT.	806.62	802.64	802.06
10+60.03'RW70'	335+49.89	49.78' RT.	806.67	802.54	802.16
10+75.00'RW70'	335+64.84	49.04' RT.	806.84	802.65	802.31
11+00.00'RW70'	335+89.81	47.80' RT.	807.13	802.84	802.56
11+10.15'RW70'	335+99.95	47.29' RT.	807.25	802.92	802.78
11+25.00'RW70'	336+14.78	46.56' RT.	807.41	802.97	803.11
11+46.31'RW70'	336+36.06	45.50' RT.	807.63	803.04	803.16
11+50.00'RW70'	336+39.75	45.50' RT.	807.67	803.05	803.16
11+60.24'RW70'	336+49.99	45.50' RT.	807.78	803.08	803.16
11+75.00'RW70'	336+64.75	45.50' RT.	807.93	803.06	803.16
12+00.00'RW70'	336+89.75	45.50' RT.	808.19	803.02	803.15
12+10.24'RW70'	336+99.99	45.50' RT.	808.29	803.00	803.14
12+25.00'RW70'	337+14.75	45.50' RT.	808.44	803.00	803.12
12+50.00'RW70'	337+39.75	45.50' RT.	808.70	803.00	803.10
12+60.24'RW70'	337+49.99	45.50' RT.	808.81	803.00	803.11
12+75.00'RW70'	337+64.75	45.50' RT.	809.06	803.15	803.12
13+00.00'RW70'	337+89.76	45.50' RT.	809.47	803.40	803.09
13+10.24'RW70'	338+00.00	45.50' RT.	809.64	803.50	803.41
13+25.00'RW70'	338+14.76	45.50' RT.	809.99	804.04	803.88
13+50.00'RW70'	338+39.76	45.50' RT.	810.59	804.96	804.87
13+60.24'RW70'	338+50.00	45.50' RT.	810.83	805.33	805.32
13+70.24'RW70'	338+60.00	45.50' RT.	811.14	805.85	805.75
13+75.00'RW70'	338+64.76	45.50' RT.	811.29	806.63	805.96
14+00.00'RW70'	338+89.76	45.50' RT.	812.06	810.71	807.09
14+10.24'RW70'	339+00.00	45.50' RT.	812.38	812.38	807.93

NOTE: ALL WALL STATIONING & OFFSETS ARE GIVEN AT THE FRONT FACE OF THE WALL.

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTALS
209.1500	BACKFILL GRANULAR GRADE 1	TON	450
513.8021.02	RAILING STEEL PEDESTRIAN TYPE C4 R–51–70	LF	410
612.0406	PIPE UNDERDRAIN WRAPPED 6–INCH	LF	425
SPV.0165.01	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R–51–70	SF	2535
	NON–BID ITEMS		
	PREFORMED JOINT FILLER	SIZE	¾"
	NON–BITUMINOUS JOINT SEALER	---	---



PROFILE GRADE LINE, R/L STH 20

WALL EXTERNAL & OVERALL STABILITY EVALUATION

DIMENSIONS	
WALL HEIGHT (FEET) [1]	7.6
EXPOSED WALL HEIGHT (FEET)	6.1
MINIMUM LENGTH OF REINFORCEMENT (FEET) [2]	8
LENGTH OF REIN./WALL HEIGHT	1.05
WALL STATION	13+10.24'RW70'
BORING USED	BORING RW–7 & BORING RW–8
CAPACITY TO DEMAND RATIO (CDR) [3]	
SLIDING ($CDR_{REQ'D}$ > 1.0)	1.36
ECCENTRICITY ($CDR_{REQ'D}$ > 1.0)	2.08
GLOBAL STABILITY ($CDR_{REQ'D}$ > 1.0)	1.41
BEARING RESISTANCE ($CDR_{REQ'D}$ > 1.0)	1.50
REQUIRED BEARING RESISTANCE (PSF)	3000

NOTES:

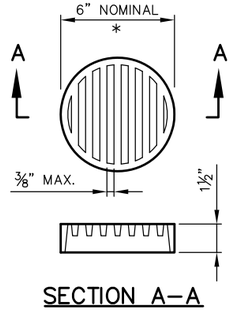
1. THE WALL HEIGHT INCLUDES AN EMBEDMENT OF 1.5 FEET.
2. THE WALL STABILITY EVALUATION INCLUDED A SURCHARGE LOAD OF 240 PSF.
3. CDR REQUIREMENTS AND LOAD AND RESISTANCE FACTORS ARE PRESENTED IN CHAPTER 14 OF THE BRIDGE MANUAL.

SOIL PARAMETERS

SOIL DESCRIPTIONS & APPROXIMATE ELEVATIONS	MOIST UNIT WEIGHT (PCF)	DRAINED		UNDRAINED	
		COHESION (PSF)	INTERNAL FRICTION ANGLE (DEGREES)	COHESION (PSF)	INTERNAL FRICTION ANGLE (DEGREES)
RETAINED FILL SOILS: SILTY CLAYS – TOW EL. 810±	125	0	28	750	0
REINFORCED SOILS: GRANULAR SOILS	120	0	30	0	30
FOUNDATIONS SOILS: SILTY CLAYS/STRUCTURE BACKFILL – FOOTING LEVEL EL. 802±	125	100	30	2000	0

NOTES:

1. TOW – TOP OF WALL; EL – ELEVATION; MSE – MECHANICALLY STABILIZED EARTH
2. DESIGN WALL HEIGHT IS MEASURED FROM TOP OF FOOTING TO THE BOTTOM OF THE WALL CAP.
3. WALL HEIGHTS BASED ON PLAN SHEETS PROVIDED BY RASMITH.
4. SEE SLOPE ANALYSIS REPORTS (APPENDIX D – GEOTECH REPORT) FOR PARAMETERS USED FOR FOUNDATION SOILS.



SECTION A–A

* DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1–INCH STAINLESS STEEL SHEET METAL SCREWS.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6–INCH".

RODENT SHIELD DETAIL

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–70

DRAWN BY CDS | PLANS CK'D ACK

QUANTITIES, WALL DATA & PROFILE

SHEET 2 OF 5

715

8

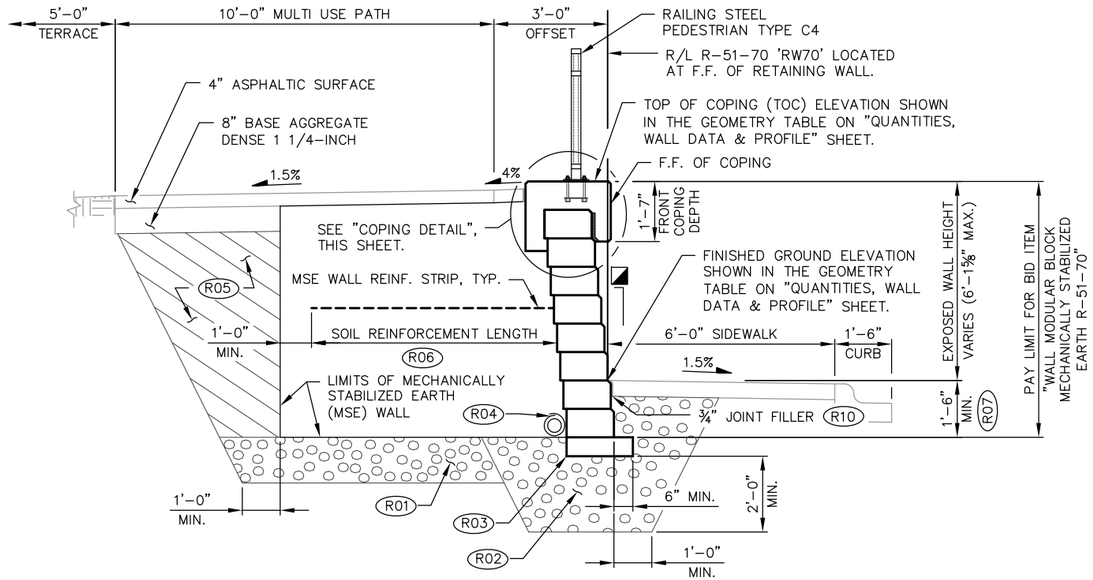
8

I.D. 2250–12–70

PLOT DATE: May 11, 2018

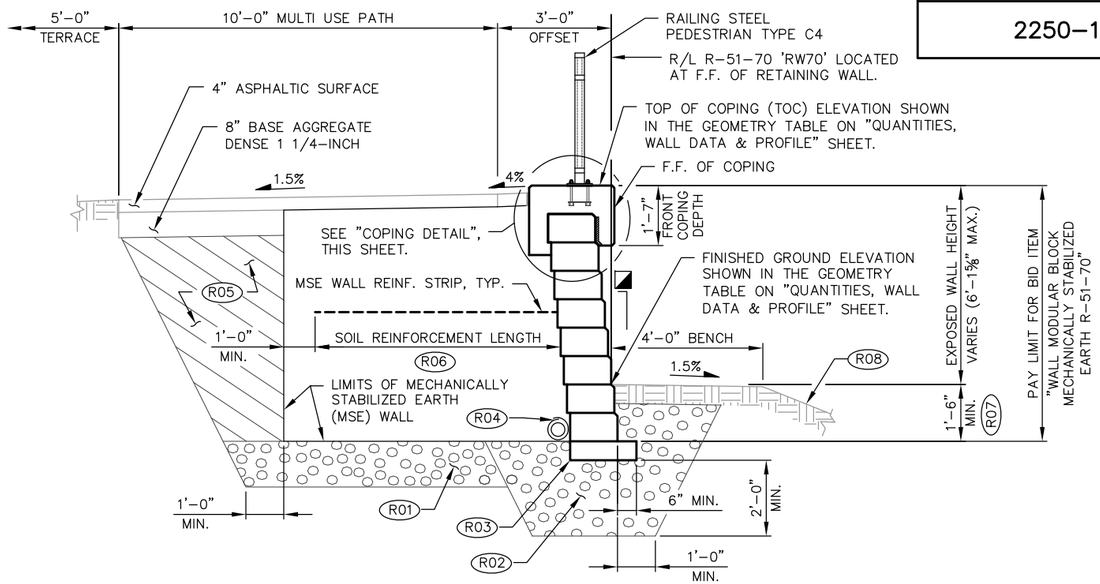
FILE: 02–R510070_data.dwg
PLOT SCALE:

STATE PROJECT NUMBER
2250–12–70



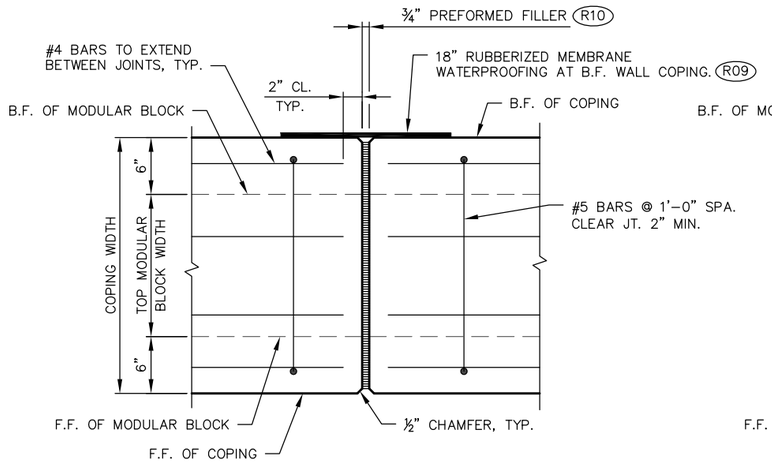
SECTION THRU RETAINING WALL AT SIDEWALK

(SECTION SHOWN BETWEEN WALL STA. 10+10.96'RW70' TO STA. 13+11.25'RW70')

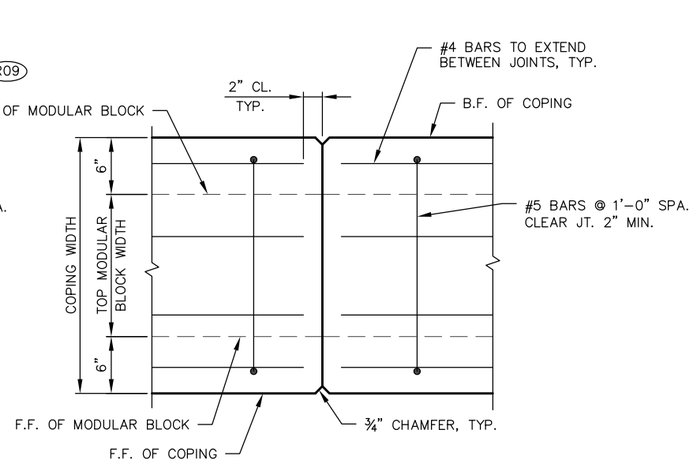


SECTION THRU RETAINING WALL AT GROUND LINE

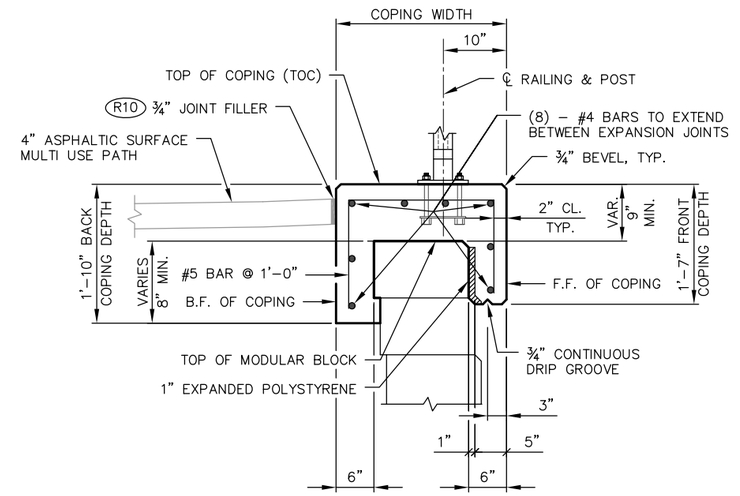
(SECTION SHOWN BETWEEN WALL STA. 10+00.00'RW70' TO STA. 10+10.96'RW70 AND ALSO BETWEEN WALL STA. 13+11.25'RW70' TO STA. 14+10.24'RW70')



COPING EXPANSION JOINT



COPING CONTRACTION JOINT



COPING DETAIL

NOTES

ALL EXPANSION JOINTS TO EXTEND THE FULL DEPTH OF COPING. SEE "GENERAL PLAN" SHEET FOR EXPANSION JOINT SPACING. DO NOT RUN BAR STEEL THRU JOINT.

◪ SET BACK VARIES BY MANUFACTURER. MAXIMUM FRONT FACE FROM VERTICAL BLOCK IS 1–HORIZONTAL TO 12–VERTICAL.

R01 UNDERCUT TO REMOVE UNSUITABLE MATERIALS AS DIRECTED BY THE ENGINEER AND REPLACE WITH BACKFILL GRANULAR GRADE 1. OVER EXCAVATION IS INCLUDED IN BID ITEM "BACKFILL GRANULAR GRADE 1".

R02 UNDERCUT 2'–0" BELOW LEVELING PAD TO REMOVE SILTY/SANDY CLAYS. REPLACE WITH BACKFILL GRANULAR GRADE 1. OVER EXCAVATION IS INCLUDED IN BID ITEM "BACKFILL GRANULAR GRADE 1".

R03 6" THICK UNREINFORCED CONCRETE LEVELING PAD. LEVELING PAD SHALL BE AS WIDE AS THE PROPOSED BLOCKS PLUS A MINIMUM OF 6" FROM FRONT FACE OF MODULAR BLOCKS. STEP THE LEVELING PAD TO FOLLOW THE GENERAL SLOPE OF THE GROUND LINE.

R04 PIPE UNDERDRAIN WRAPPED 6–INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE "QUANTITIES, WALL DATA & PROFILE" SHEET.

R05 ROADWAY FILL (NOT A RETAINING WALL BID ITEM). SLOPE LIMITS TO BE DETERMINED BY CONTRACTOR'S MEANS AND METHODS.

R06 SEE WALL EXTERNAL & OVERALL STABILITY EVALUATION TABLE ON "QUANTITIES, WALL DATA & PROFILE" SHEET FOR MINIMUM LENGTH OF MSE WALL REINFORCING STRIPS. SOIL REINFORCEMENT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.

R07 MINIMUM EMBEDMENT BASED ON SITE SPECIFIC PARAMETERS (1'–6" MINIMUM FOR ALL WALLS ON LEVEL GROUND). FIELD EMBEDMENT SHALL MEET OR EXCEED THE MINIMUM EMBEDMENT. FIELD EMBEDMENTS BELOW MINIMUM EMBEDMENT SHALL NOT BE INCLUDED IN THE PAY LIMITS.

R08 SLOPE IN FRONT OF MSE WALL VARIES. SEE ROADWAY PLANS FOR MORE INFORMATION.

R09 RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP COARSE OF MODULAR BLOCK.

R10 SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER AND EXPANDED POLYSTYRENE WITH NON–STAINING, GRAY NON–BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–70

DRAWN BY CDS | PLANS CK'D ACK

WALL CROSS SECTIONS & DETAILS

SHEET 3 OF 5

716

I.D. 2250–12–70 PLOT DATE: Apr 23, 2018

FILE: 03–R510070_det.dwg
PLOT SCALE:

8

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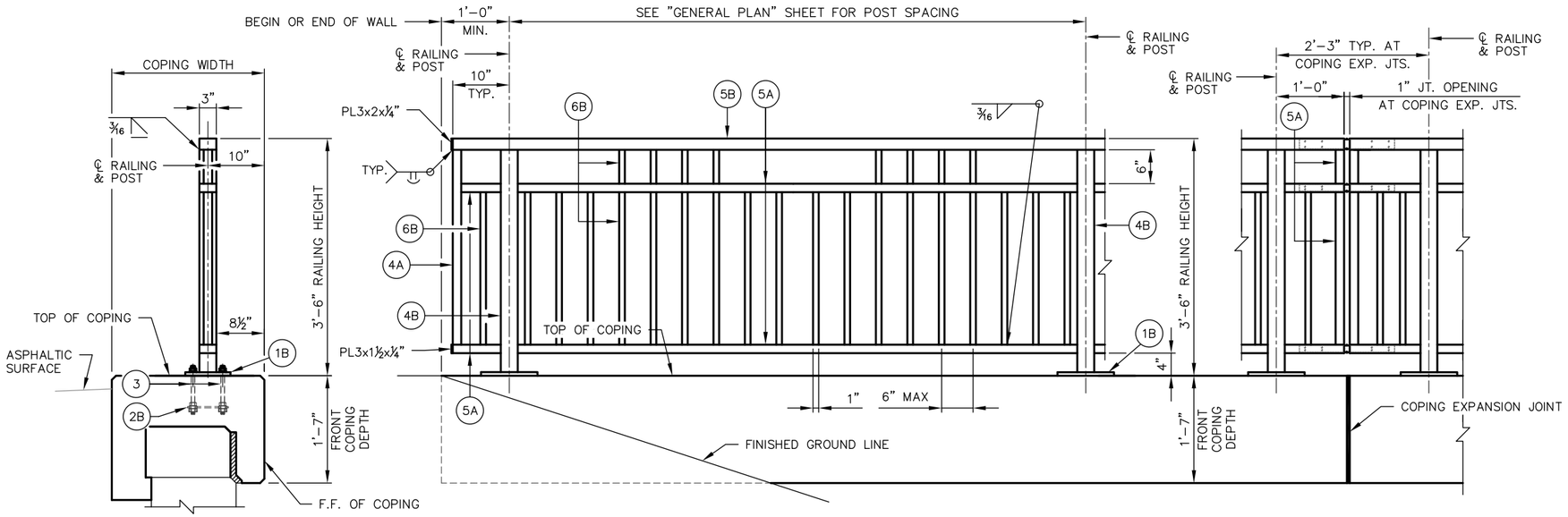
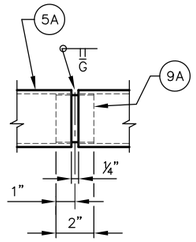
STATE PROJECT NUMBER

2250-12-70



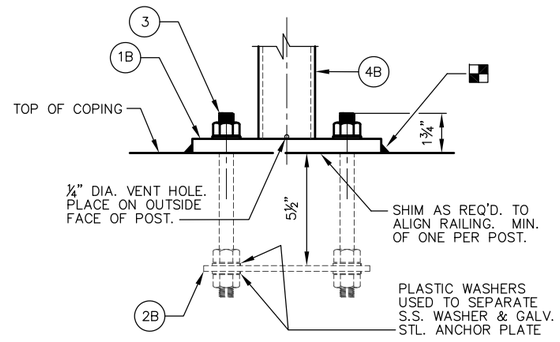
TYPICAL SECTION

ELEVATION OF WALL COPING



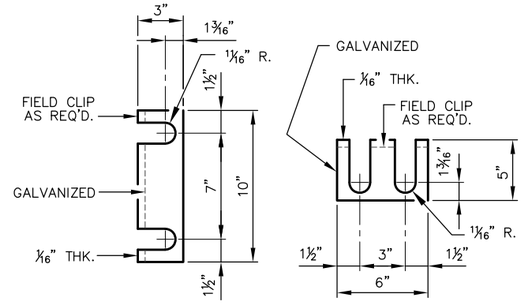
SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



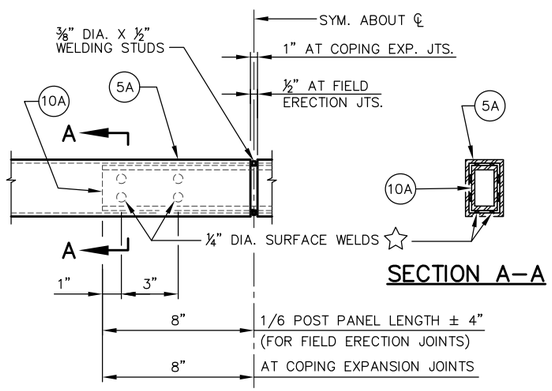
ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



RAIL POST SHIM DETAIL

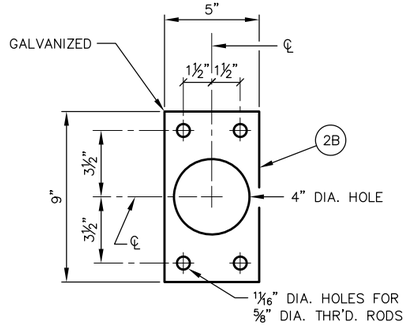
(2 SETS PER POST)



SECTION A-A

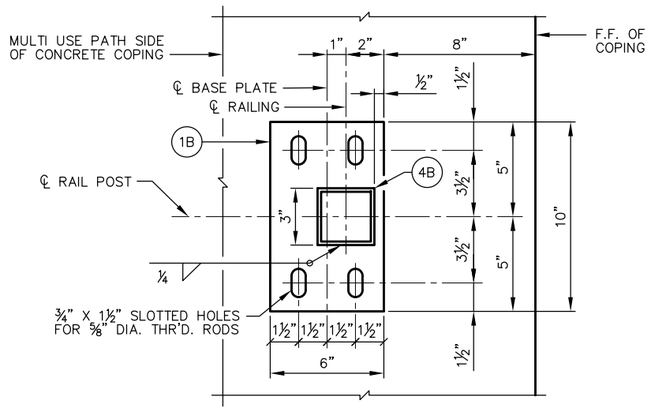
FIELD ERECTION JOINT DETAIL

☆ MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



ANCHOR PLATE

FOR 3" X 3" X 3/16" POSTS (4B)



TYPICAL RAIL POST BASE PLATE

FOR 3" X 3" X 3/16" POSTS (4B)

F.F. – FRONT FACE
B.F. – BACK FACE

NOTES

BID ITEM SHALL BE "RAILING STEEL PEDESTRIAN TYPE C4 R-51-70", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED AND USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS IN CONCRETE COPING ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED FEDERAL COLOR NO. 17038, BLACK.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

LEGEND

(1B) PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES.

(2B) ¼" X 5" X 9" ANCHOR PLATE WITH 1⅛" DIA. HOLES FOR THR'D. RODS NO. 3.

(3) ⅝" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS ⅝-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.

(4A) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 5.

(4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.

(5B) STRUCTURAL TUBING 3" X 2" X 3/16" RAILS. WELD TO NO. 1 & NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.

(6B) BAR 1" X 1½" PICKETS. WELD TO NO. 5. (SPACE AT 6" MAX. ℄ TO ℄ SPACING). PLACE VERTICAL.

(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-51-70

DRAWN BY CDS | PLANS CK'D ACK

STEEL RAILING DETAILS

SHEET 4 OF 5

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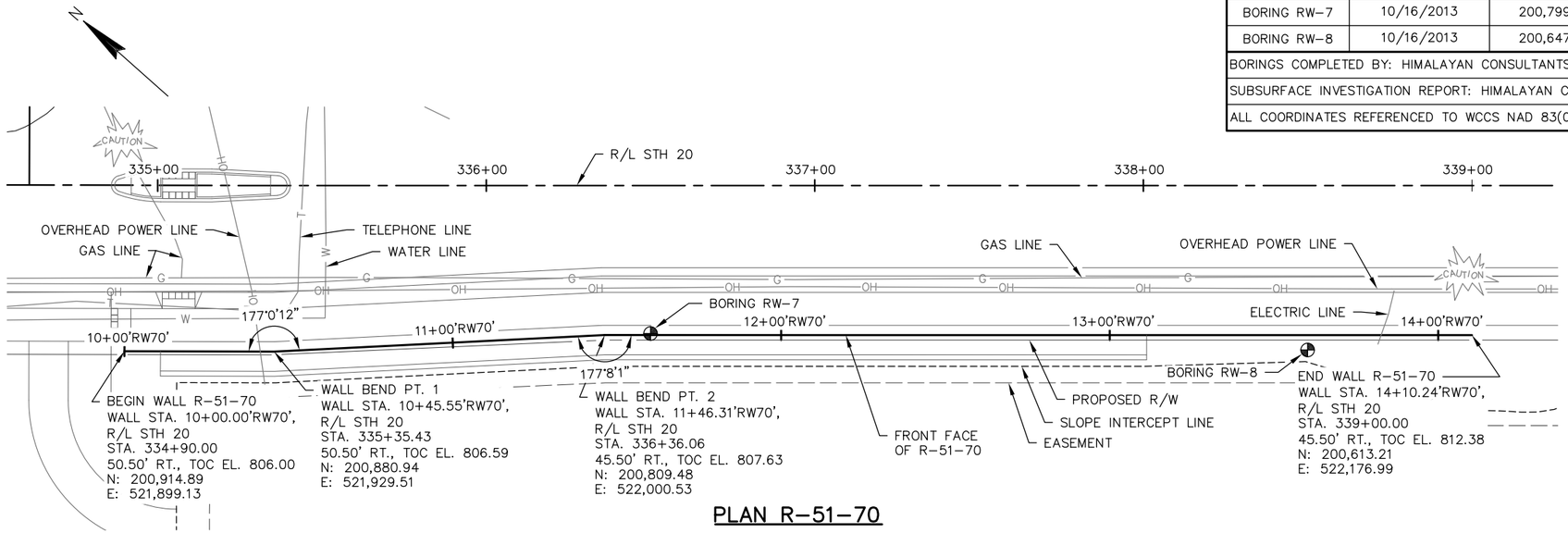
I.D. 2250-12-70

PLOT DATE: Apr 23, 2018

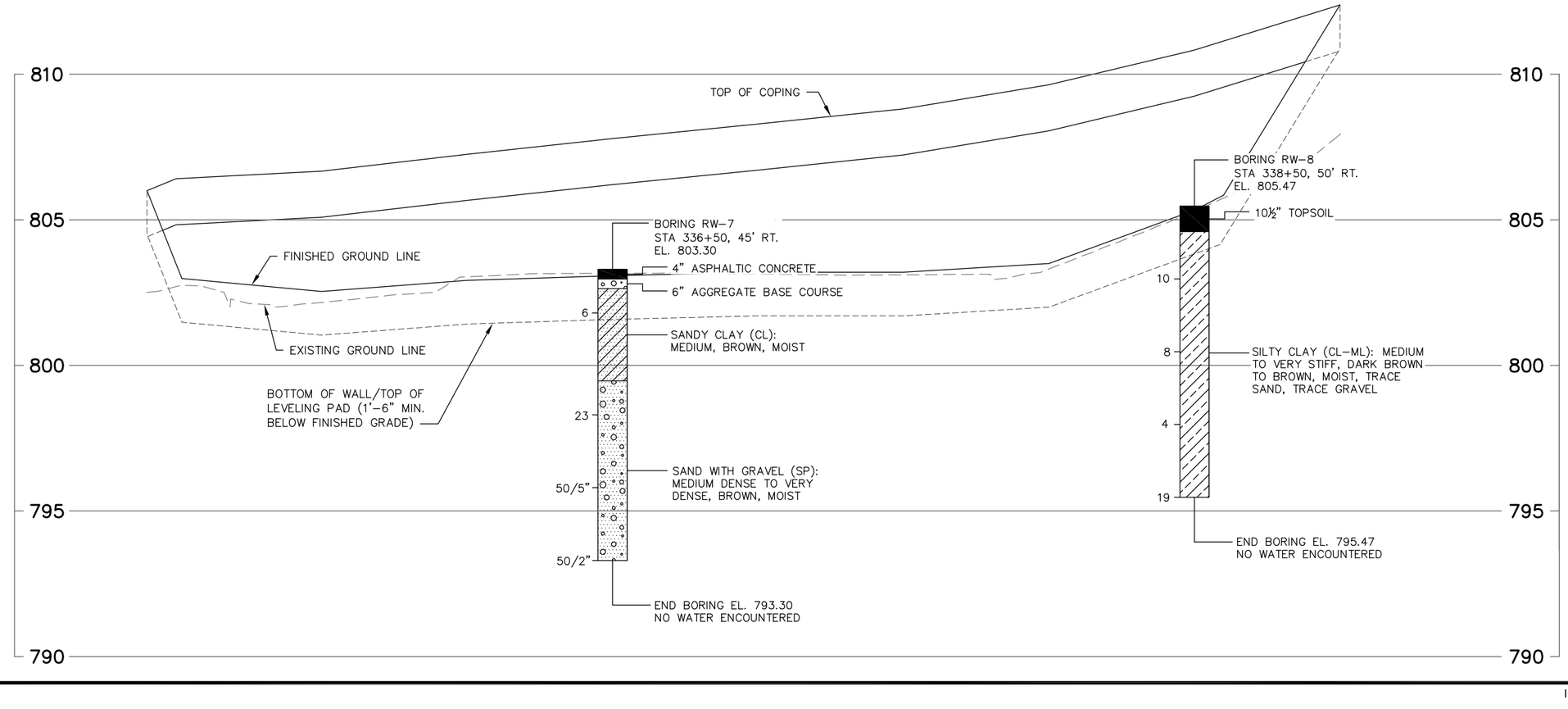
FILE: 04-R510070_rail.dwg
PLOT SCALE:

STH 20 – WATERFORD, WI

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BORING RW–7	10/16/2013	200,799.4	522,010.2
BORING RW–8	10/16/2013	200,647.4	522,140.2
BORINGS COMPLETED BY: HIMALAYAN CONSULTANTS, LLC			
SUBSURFACE INVESTIGATION REPORT: HIMALAYAN CONSULTANTS, LLC			
ALL COORDINATES REFERENCED TO WCCS NAD 83(07) RACINE COUNTY			



PLAN R–51–70



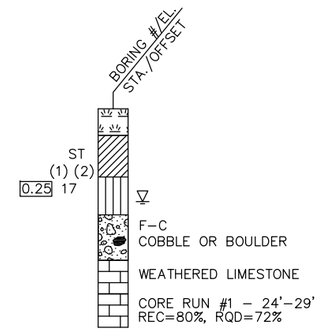
STATE PROJECT NUMBER

2250–12–70

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE SPECIFIED, THE SPT 'N' VALUE IS BASED ON AASHTO T–206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F–FINE M–MEDIUM C–COARSE ST–SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–70

DRAWN BY CDS | PLANS CK'D ACK

SUBSURFACE EXPLORATION

SHEET 5 OF 5

718

8

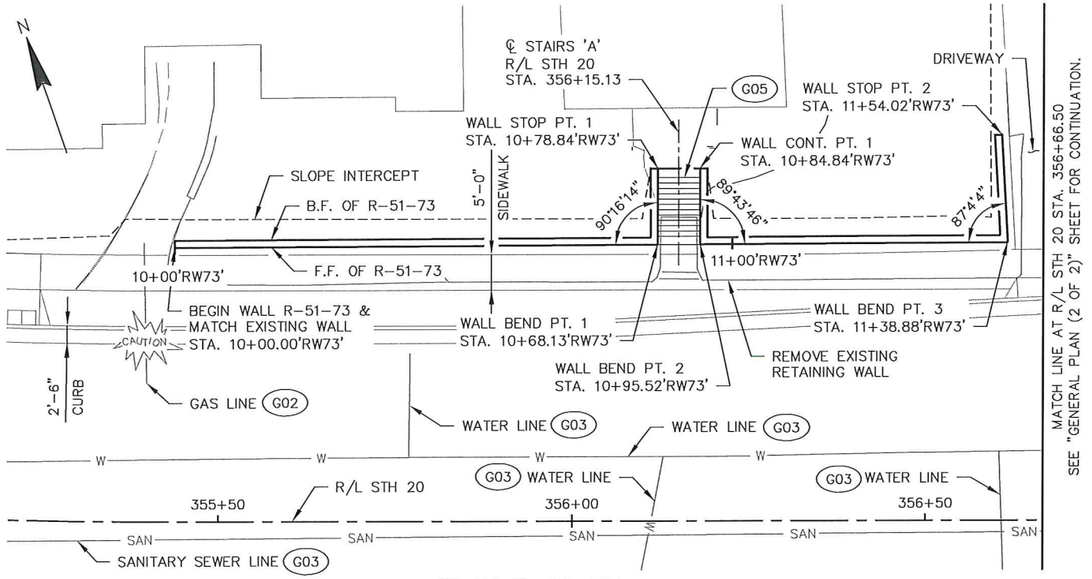
8

I.D. 2250–12–70

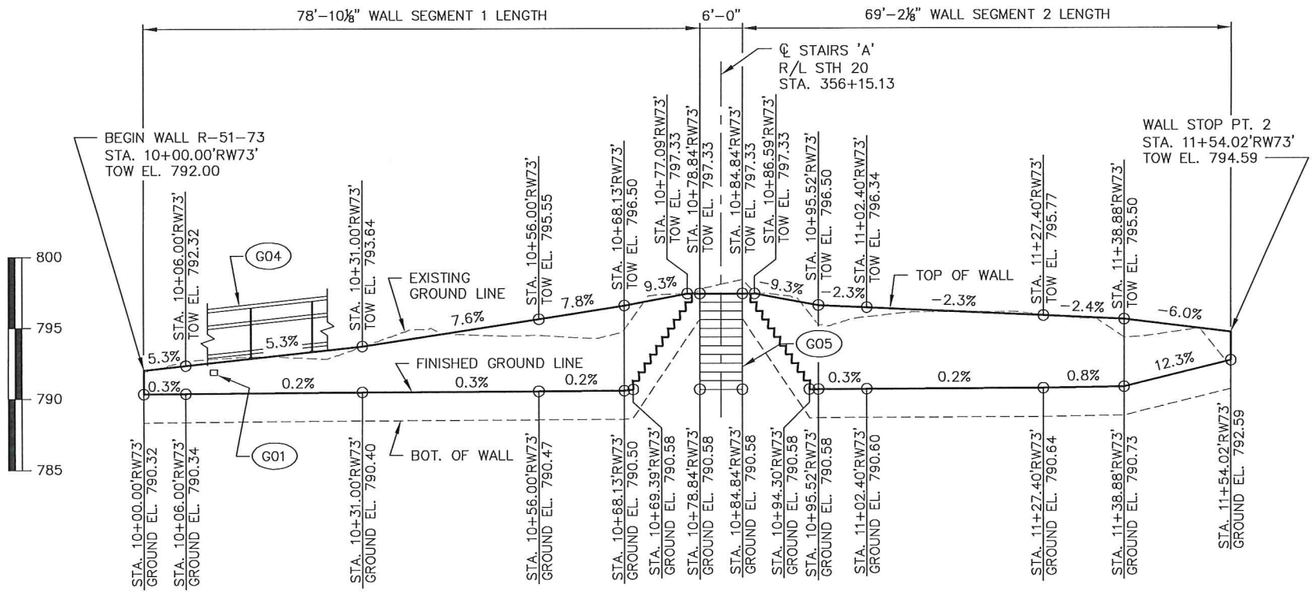
PLOT DATE: Apr 23, 2018

FILE: 05–R510070_bor.dwg

PLOT SCALE:



PLAN R-51-73
(SOLDIER PILE RETAINING WALL)



ELEVATION
(LOOKING AT F.F. OF WALL)

BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEVATION
13456	354+87.26, 37.12' LT.	TOP SW CORNER OF 1ST STEP AT NEW BEGINNING'S CHURCH	790.51

HORIZONTAL DATUM AND ADJUSTMENT: NAD 83 (2007)
VERTICAL DATUM AND ADJUSTMENT: NAVD 88 (2007)
COORDINATE REFERENCE SYSTEM: WCCS RACINE CO

F.F. – FRONT FACE
B.F. – BACK FACE

NOTES

WALL STOPS AT STA. 11+54.02'RW73' AND CONTINUES ON OTHER SIDE OF DRIVEWAY AT STA. 11+54.03'RW73'.

TOW – TOP OF WALL

(G01) NAME PLATE – SEE "NAME PLATE LOCATION" THIS SHEET.

(G02) UTILITIES SHOWN ARE TO REMAIN.

(G03) UTILITIES SHOWN ARE TO BE RELOCATED.

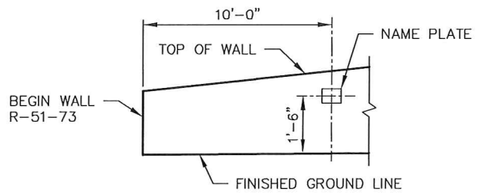
(G04) RAILING STEEL PEDESTRIAN TYPE C4. SEE "STEEL RAILING DETAILS" SHEET.

(G05) SEE ROADWAY PLANS FOR STAIR DETAILS BETWEEN RETAINING WALL SECTIONS.

ALIGNMENT INFORMATION

WALL STATION	REFERENCE	R/L STH 20 STATION	R/L STH 20 OFFSET TO F.F. OF WALL	NORTHING	EASTING
10+00.00'RW73'	BEGIN WALL	355+44.00	38.50' LT.	199,624.08	523,457.37
10+68.13'RW73'	BEND PT. 1	356+12.13	38.83' LT.	199,602.10	523,521.86
10+78.84'RW73'	STOP PT. 1	356+12.13	49.53' LT.	199,612.21	523,525.36
10+84.84'RW73'	CONT. PT. 1	356+18.13	49.53' LT.	199,610.25	523,531.04
10+95.52'RW73'	BEND PT. 2	356+18.13	38.86' LT.	199,600.16	523,527.54
11+38.88'RW73'	BEND PT. 3	356+61.49	39.07' LT.	199,586.17	523,568.58
11+54.02'RW73'	STOP PT. 2	356+60.65	54.19' LT.	199,600.74	523,572.73

NOTE: ALL WALL STATIONING & OFFSETS ARE GIVEN AT THE FRONT FACE OF THE WALL.



NAME PLATE LOCATION

LIST OF DRAWINGS

1. GENERAL PLAN (1 OF 2)
2. GENERAL PLAN (2 OF 2)
3. WALL LAYOUT (1 OF 6)
4. WALL LAYOUT (2 OF 6)
5. WALL LAYOUT (3 OF 6)
6. WALL LAYOUT (4 OF 6)
7. WALL LAYOUT (5 OF 6)
8. WALL LAYOUT (6 OF 6)
9. QUANTITIES & SOIL PARAMETERS
10. WALL DATA
11. WALL DETAILS (1 OF 2)
12. WALL DETAILS (2 OF 2)
13. WALL BEND DETAILS
14. WALL REINFORCEMENT (1 OF 4)
15. WALL REINFORCEMENT (2 OF 4)
16. WALL REINFORCEMENT (3 OF 4)
17. WALL REINFORCEMENT (4 OF 4)
18. STEEL RAILING DETAILS
19. AESTHETIC DETAILS (1 OF 2)
20. AESTHETIC DETAILS (2 OF 2)
21. SUBSURFACE EXPLORATION

STATE PROJECT NUMBER
2250-12-70

DESIGN DATA

LIVE LOAD:

LIVE LOAD SURCHARGE ——— 100 P.S.F.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
RETAINING WALLS ——— f'c = 4,000 P.S.I.
SOLDIER PILE FOOTINGS ——— f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT, GRADE 60 ——— fy = 60,000 P.S.I.

STRUCTURAL STEEL HS ——— fy = 50,000 P.S.I.

* TIMBER LAGGING ——— Fb = 975 P.S.I.
Fv = 90 P.S.I.
Fc⊥ = 565 P.S.I.
E = 1,600,000 P.S.I.

* MATERIAL VALUES BASED ON DOUGLAS FIR-LARCH (NO. 2) OR SOUTHER PINE (NO. 2), CONSTRUCTION GRADE, ROUGH CUT LUMBER.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL DIMENSIONS ARE IN FEET (FT) UNLESS OTHERWISE NOTED.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER UNLESS OTHERWISE SHOWN OR NOTED.

ALL BAR STEEL REINFORCEMENT IS TO BE EPOXY COATED.

ALL WALL STATIONING AND OFFSETS ARE GIVEN TO THE FRONT FACE OF THE WALL (R-51-73).

THE EXISTING GROUND LINE IS THE UPPER LIMIT OF EXCAVATION FOR STRUCTURES.

ALL STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270 GRADE 50 EXCEPT AS NOTED ON PLANS.

THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND PERFORMANCE OF THE TIMBER LAGGING.

ANY ADDITIONAL SHORING REQUIRED TO CONSTRUCT WALL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND INCLUDED TO WALL CONSTRUCTION.

CONSULTANT CONTACT
ANDY KNUTSON, P.E., S.E.
(608) 588-7866

BRIDGE OFFICE CONTACT
WILLIAM DREHER, P.E.
(608) 266-8489

NO.	DATE	REVISION	BY

WESTBROOK Associated Engineers, Inc.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WI 53588
PHONE (608) 588-7866
FAX (608) 588-7954

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 05/30/18
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-51-73

RETAINING WALL ALONG STH 20

COUNTY	TOWN/CITY/VILLAGE
RACINE	WATERFORD

DESIGN SPEC.: AASHTO LRFD DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
CDS	ACK	CDS	ACK

GENERAL PLAN (1 OF 2)

SHEET 1 OF 21

719

I.D. 2250-12-70

PLOT DATE: May 11, 2018

FILE: 01-02-R510073_fsh.dwg
PLOT SCALE:

8

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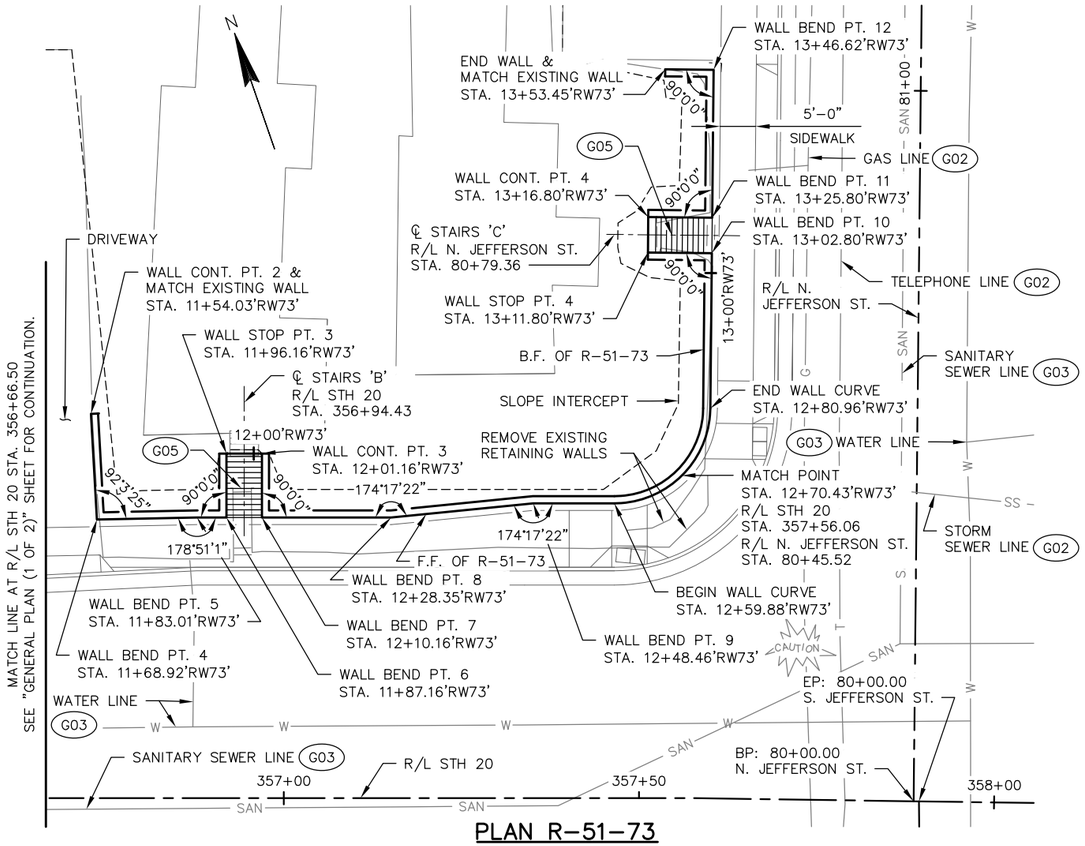
STATE PROJECT NUMBER
2250-12-70



PLAN R-51-73
(SOLDIER PILE RETAINING WALL)

ALIGNMENT INFORMATION

WALL STATION	REFERENCE	R/L STH 20 STATION	R/L STH 20 OFFSET TO F.F. OF WALL	NORTHING	EASTING
11+54.03'RW73'	CONT. PT. 2	356+72.85	54.08' LT.	199,596.64	523,584.23
11+68.92'RW73'	BEND PT. 4	356+73.69	39.22' LT.	199,582.32	523,580.16
11+83.01'RW73'	BEND PT. 5	356+87.78	39.50' LT.	199,577.97	523,593.57
11+87.16'RW73'	BEND PT. 6	356+91.93	39.50' LT.	199,576.62	523,597.48
11+96.16'RW73'	STOP PT. 3	356+91.93	48.50' LT.	199,585.13	523,600.43
12+01.16'RW73'	CONT. PT. 3	356+96.93	48.50' LT.	199,583.49	523,605.16
12+10.16'RW73'	BEND PT. 7	356+96.93	39.50' LT.	199,574.98	523,602.21
12+28.35'RW73'	BEND PT. 8	357+15.12	39.50' LT.	199,569.03	523,619.40
12+48.46'RW73'	BEND PT. 9	357+35.12	41.50' LT.	199,564.38	523,638.96
12+59.88'RW73'	BEGIN CURVE	357+46.54	41.50' LT.	199,560.64	523,649.75
12+70.43'RW73'	MATCH PT.	357+56.06	45.42' LT.	199,561.23	523,660.02

MATCH POINT

WALL STATION	REFERENCE	R/L N. JEFFERSON ST. STATION	R/L N. JEFFERSON ST. OFFSET TO F.F. OF WALL	NORTHING	EASTING
12+70.43'RW73'	MATCH PT.	80+45.52	33.08' LT.	199,561.23	523,660.02
12+80.96'RW73'	END CURVE	80+55.02	29.18' LT.	199,568.85	523,666.88
13+02.80'RW73'	BEND PT. 10	80+76.86	29.18' LT.	199,589.42	523,674.23
13+11.80'RW73'	STOP PT. 4	80+76.86	38.18' LT.	199,592.45	523,665.76
13+16.80'RW73'	CONT. PT. 4	80+81.86	38.18' LT.	199,597.16	523,667.44
13+25.80'RW73'	BEND PT. 11	80+81.86	29.18' LT.	199,594.13	523,675.92
13+46.62'RW73'	BEND PT. 12	81+02.68	29.18' LT.	199,613.73	523,682.93
13+53.45'RW73'	END WALL	81+02.68	36.00' LT.	199,616.03	523,676.51

NOTE: ALL WALL STATIONING & OFFSETS ARE GIVEN AT THE FRONT FACE OF THE WALL.

F.F. - FRONT FACE
B.F. - BACK FACE

NOTES

WALL STOPS AT STA. 11+54.02'RW73' AND CONTINUES ON OTHER SIDE OF DRIVEWAY AT STA. 11+54.03'RW73'.

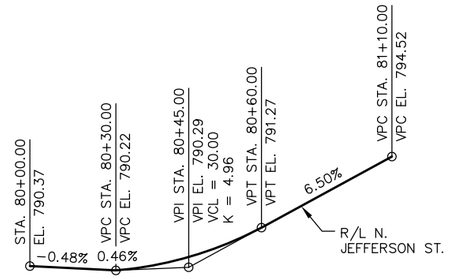
TOW - TOP OF WALL

(G02) UTILITIES SHOWN ARE TO REMAIN.

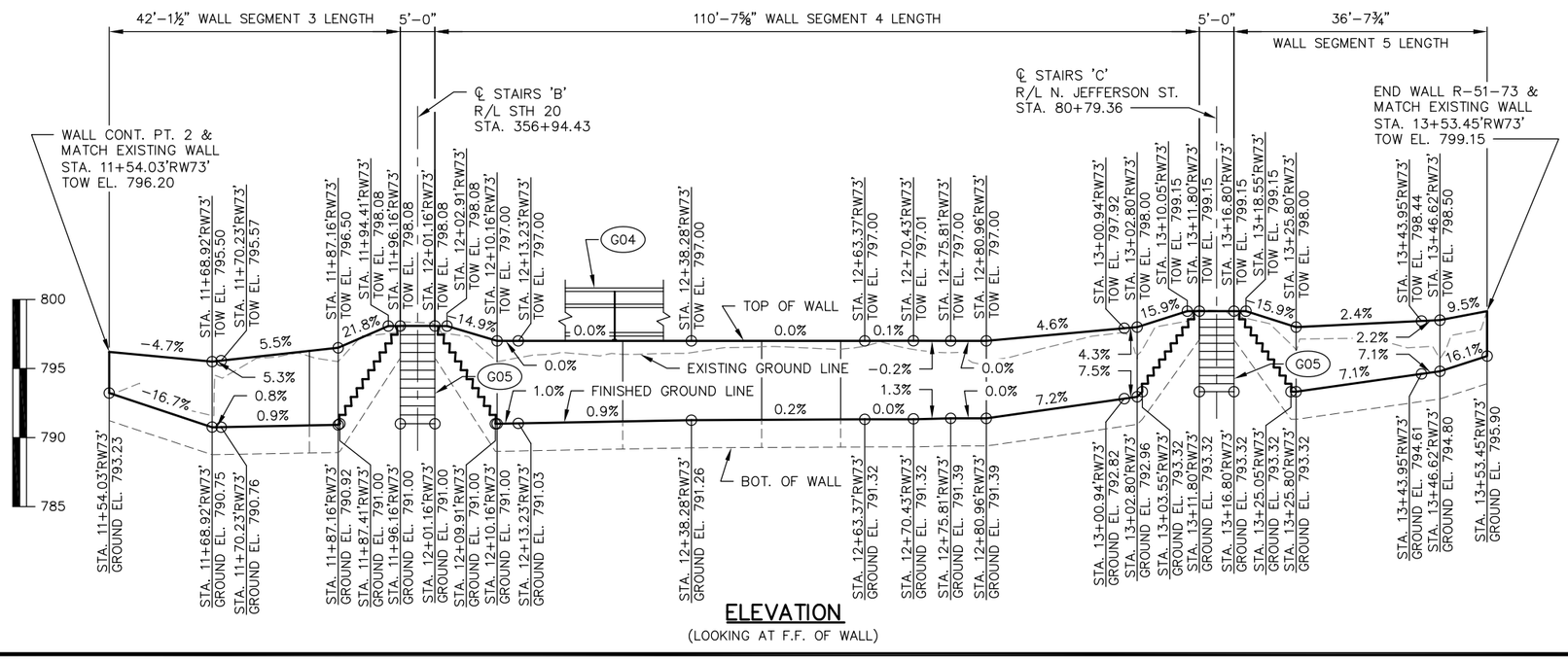
(G03) UTILITIES SHOWN ARE TO BE RELOCATED.

(G04) RAILING STEEL PEDESTRIAN TYPE C4. SEE "STEEL RAILING DETAILS" SHEET.

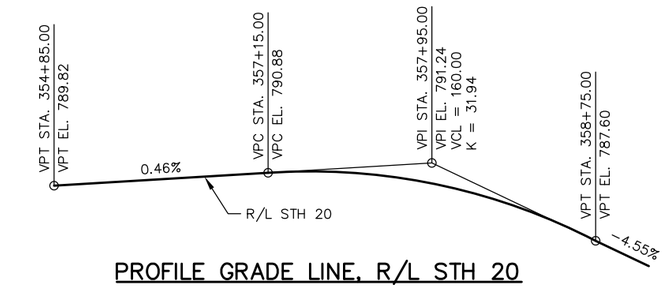
(G05) SEE ROADWAY PLANS FOR STAIR DETAILS BETWEEN RETAINING WALL SECTIONS.



PROFILE GRADE LINE, R/L N. JEFFERSON ST.



ELEVATION
(LOOKING AT F.F. OF WALL)



PROFILE GRADE LINE, R/L STH 20

WALL CURVE DATA

PI WALL STA. 12+70.43'RW73'
N: 199,556.26
E: 523,662.38
DELTA: 89°25'39"
T: 13.37
L: 21.08
R: 13.50
PC WALL STA. 12+59.88'RW73'
N: 199,560.64
E: 523,649.75
PT WALL STA. 12+80.96'RW73'
N: 199,568.85
E: 523,666.88

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-51-73

DRAWN BY CDS | PLANS CK'D ACK

GENERAL PLAN (2 OF 2)

SHEET 2 OF 21

720

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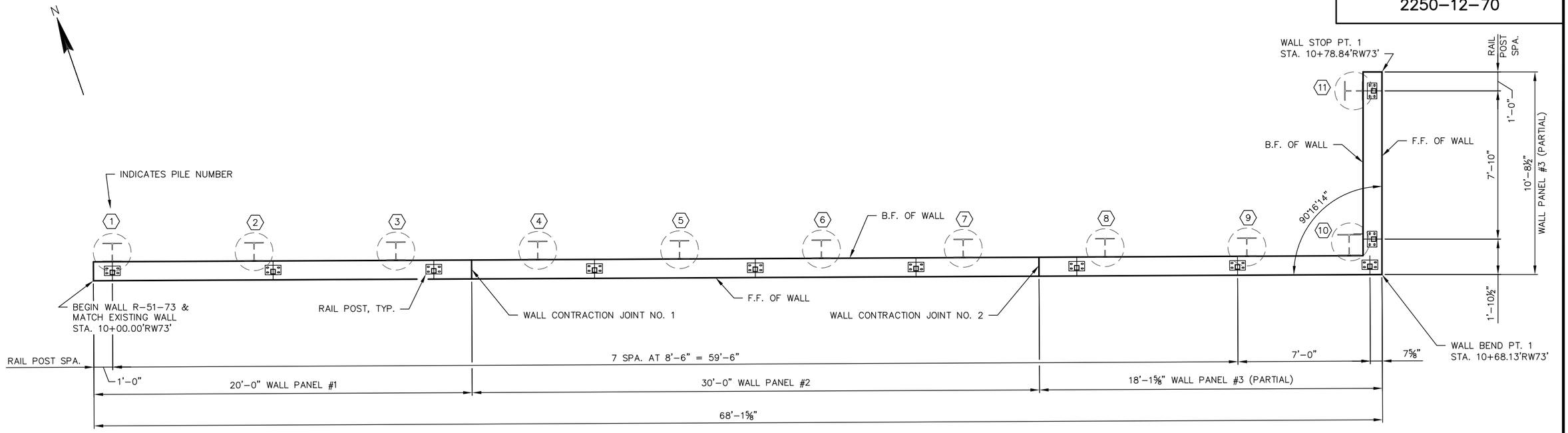
I.D. 2250-12-70

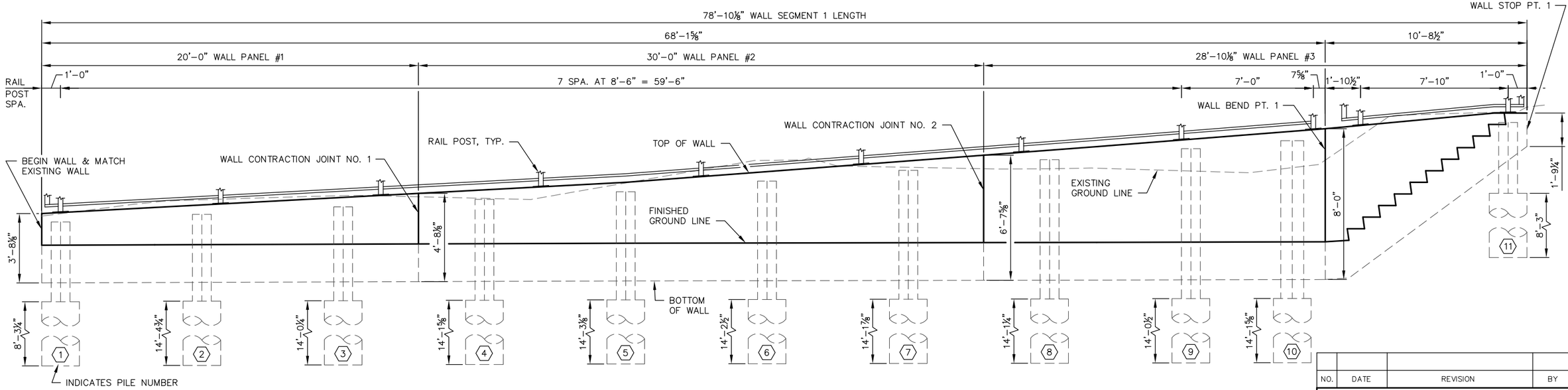
PLOT DATE: May 11, 2018

FILE: 01-02-R510073_fsh.dwg
PLOT SCALE:

STATE PROJECT NUMBER
2250–12–70



WALL SEGMENT 1 PLAN VIEW



WALL SEGMENT 1 ELEVATION VIEW

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY	CDS	PLANS CK'D	ACK

WALL LAYOUT
(1 OF 6)

SHEET 3 OF 21

721

I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 03–08–R510073_lay.dwg
PLOT SCALE:

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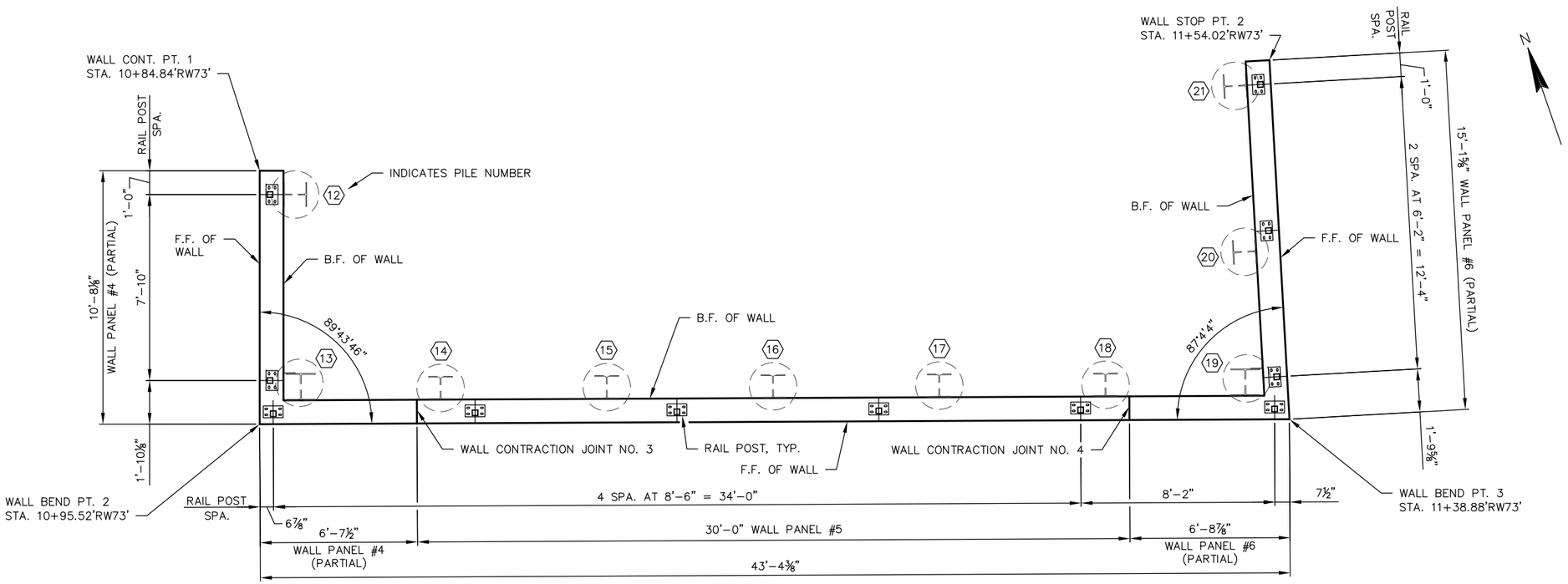
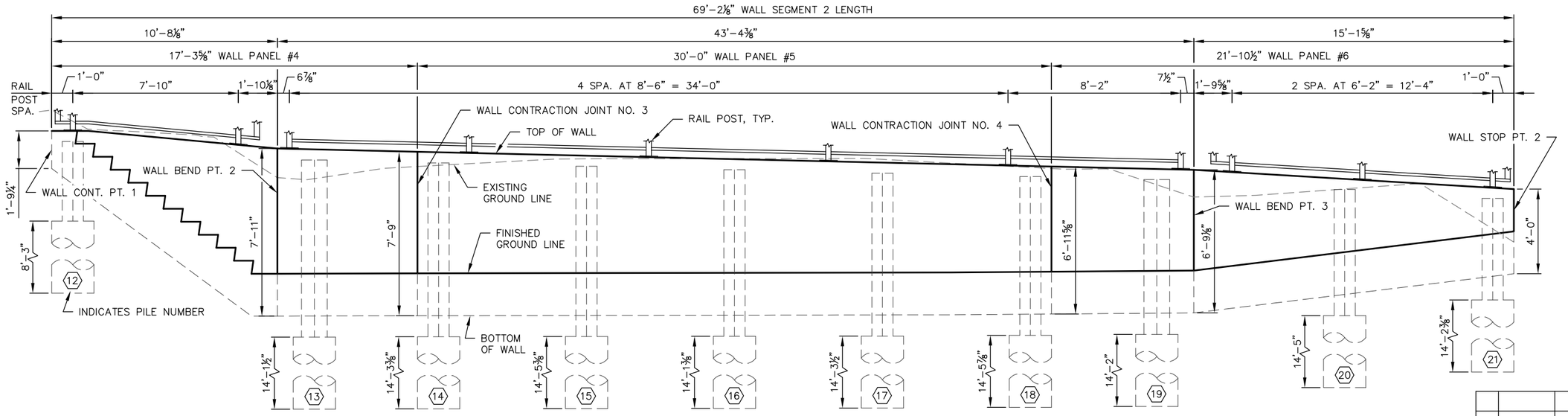
STATE PROJECT NUMBER
2250–12–70



WALL SEGMENT 2 PLAN VIEW



WALL SEGMENT 2 ELEVATION VIEW

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY CDS | PLANS CK'D ACK

WALL LAYOUT (2 OF 6)

SHEET 4 OF 21

722

I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 03–08–R510073_lay.dwg
PLOT SCALE:

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STATE PROJECT NUMBER
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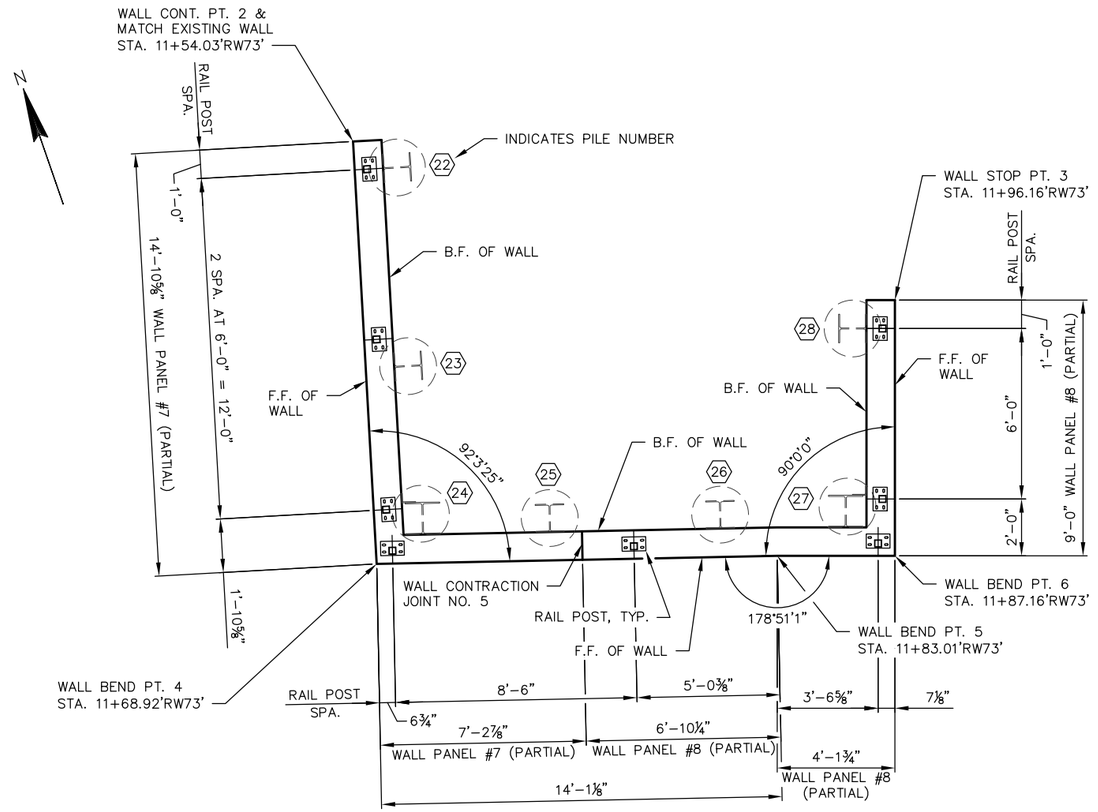
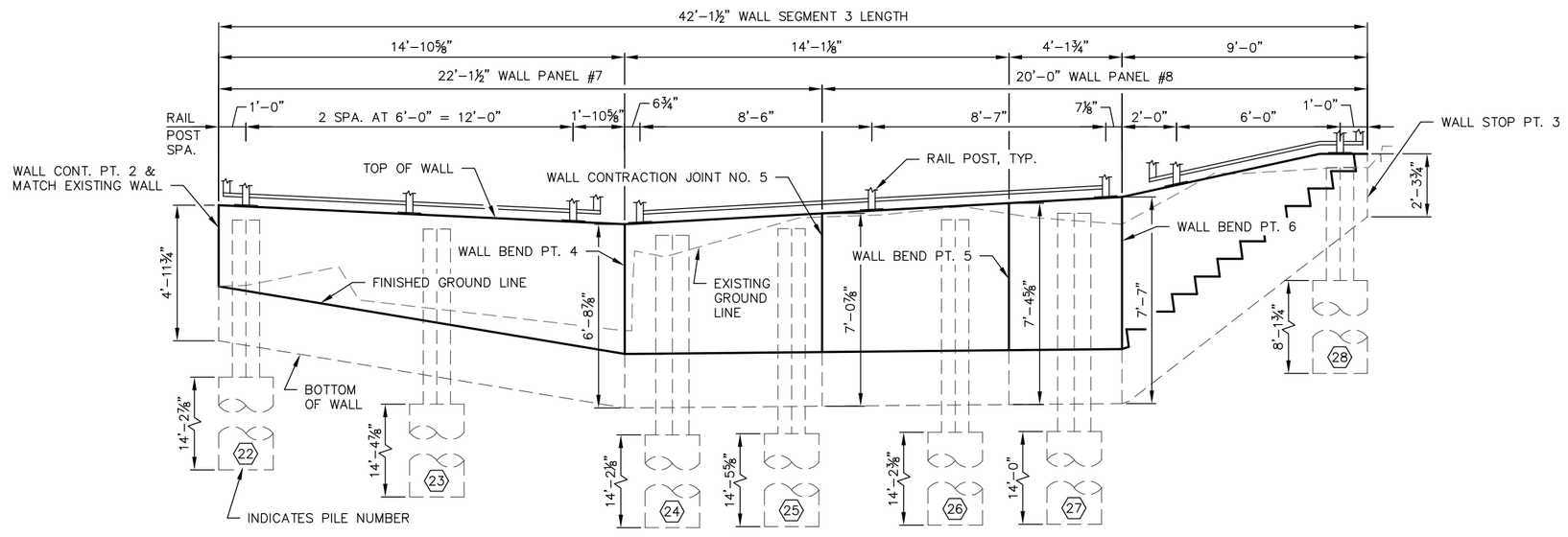


WALL SEGMENT 3 PLAN VIEW



WALL SEGMENT 3 ELEVATION VIEW

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY CDS | PLANS CK'D ACK

WALL LAYOUT
(3 OF 6)

SHEET 5 OF 21

723

I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 03–08–R510073_lay.dwg
PLOT SCALE:

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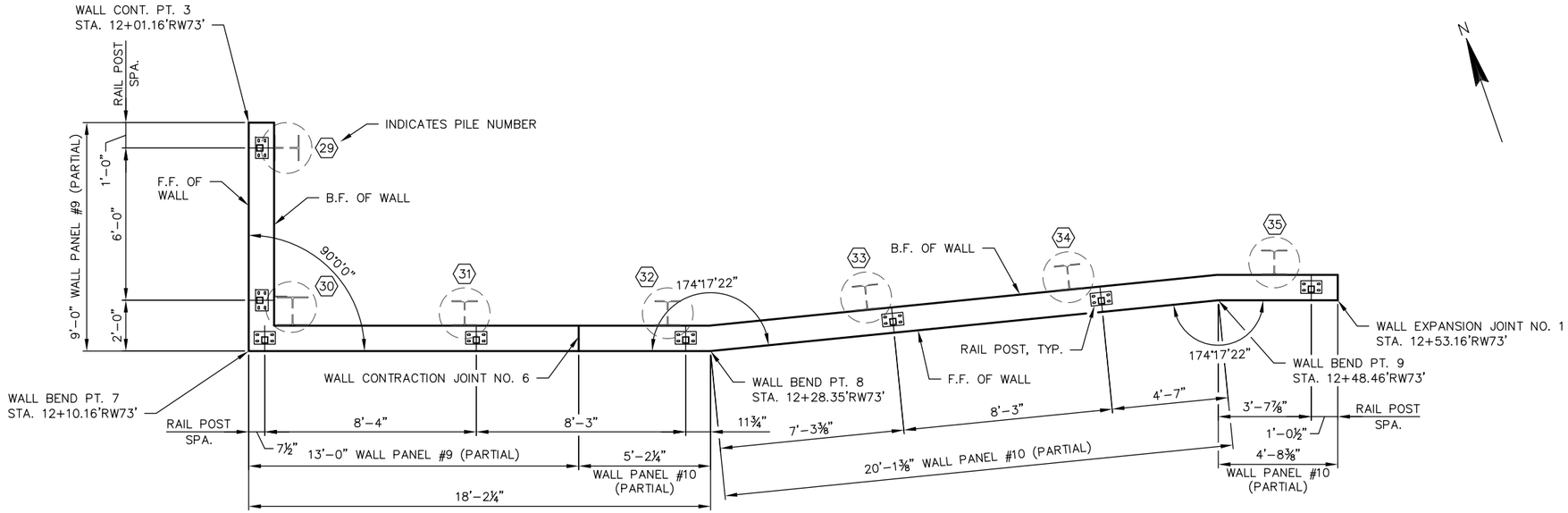
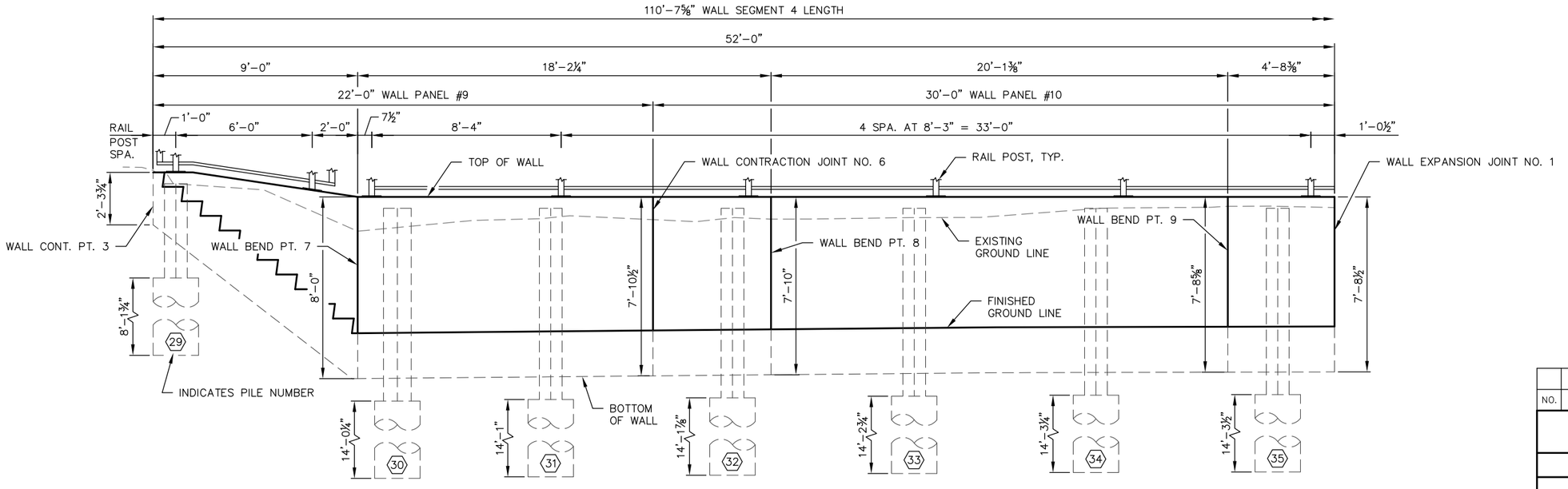
STATE PROJECT NUMBER
2250–12–70



WALL SEGMENT 4 PLAN VIEW



WALL SEGMENT 4 ELEVATION VIEW

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY CDS | PLANS CK'D ACK

WALL LAYOUT (4 OF 6)

SHEET 6 OF 21

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I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 03–08–R510073_lay.dwg
PLOT SCALE:

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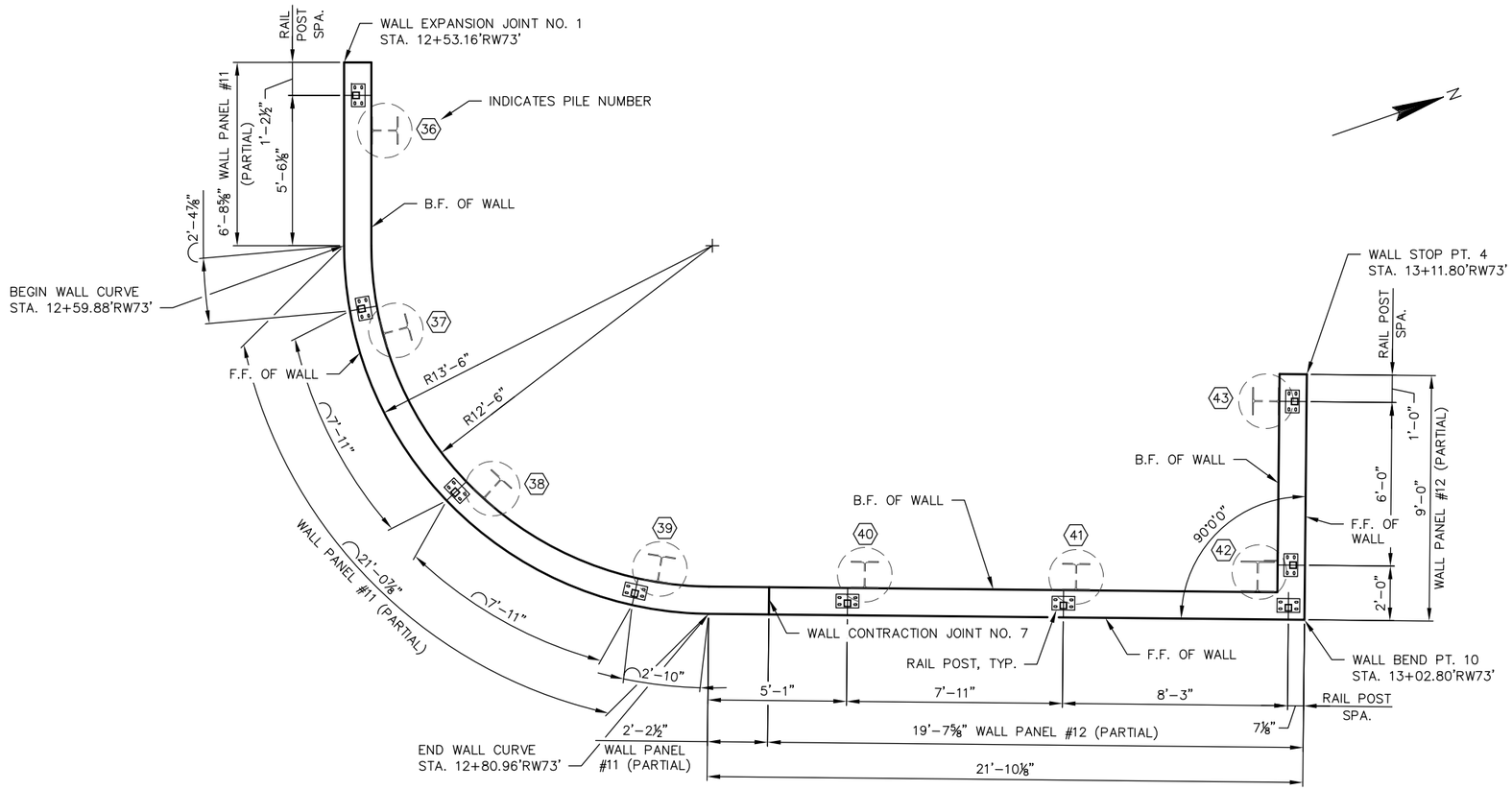
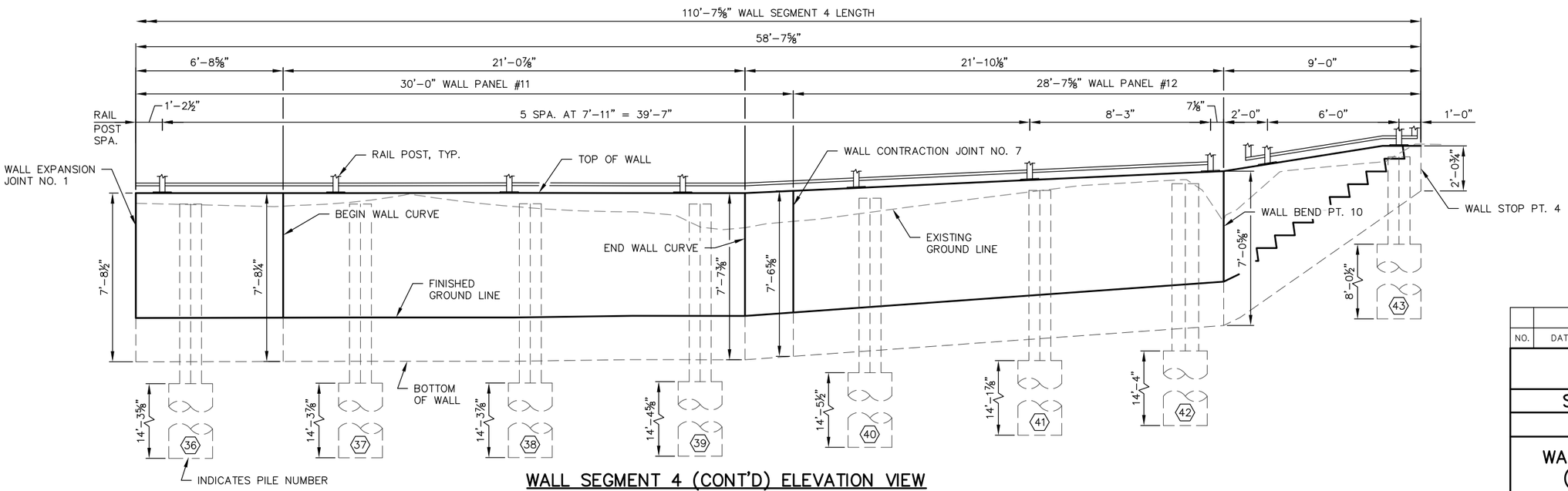
STATE PROJECT NUMBER
2250–12–70



WALL SEGMENT 4 (CONT'D) PLAN VIEW



WALL SEGMENT 4 (CONT'D) ELEVATION VIEW

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY CDS | PLANS CK'D ACK

WALL LAYOUT (5 OF 6)

SHEET 7 OF 21

725

I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 03–08–R5100073_lay.dwg
PLOT SCALE:

8

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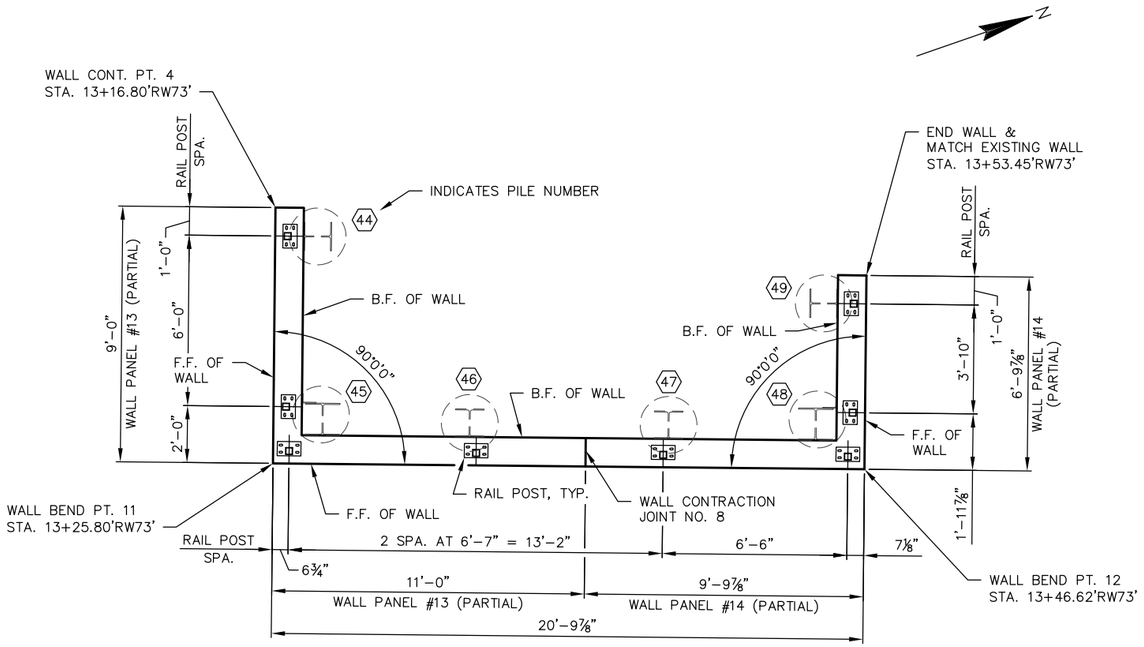
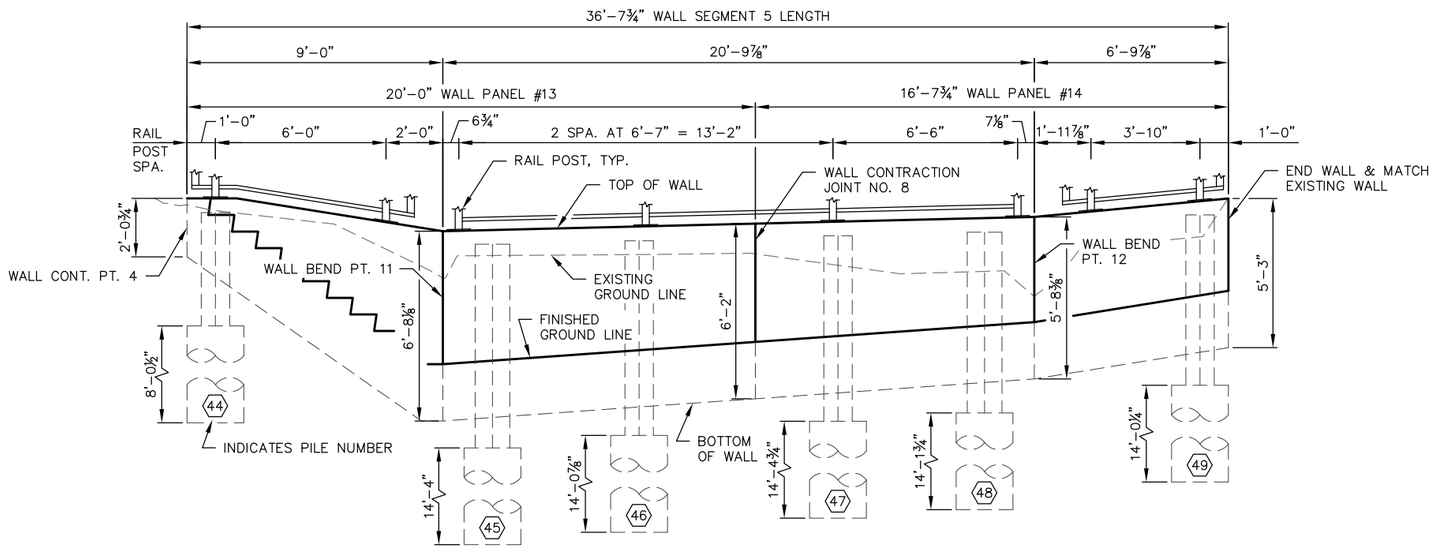
STATE PROJECT NUMBER
2250–12–70



WALL SEGMENT 5 PLAN VIEW



WALL SEGMENT 5 ELEVATION VIEW

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY	CDS	PLANS CK'D	ACK

WALL LAYOUT
(6 OF 6)

SHEET 8 OF 21

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I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 03–08–R510073_lay.dwg
PLOT SCALE:

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8

STATE PROJECT NUMBER
2250–12–70

TOTAL ESTIMATED QUANTITIES

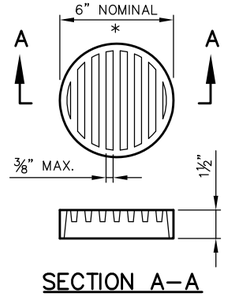
ITEM NO.	BID ITEMS	UNIT	TOTALS
206.3000.01	EXCAVATION FOR STRUCTURES RETAINING WALLS R–51–73	LS	1
502.0110.S	CONCRETE MASONRY SOLDIER PILE FOOTINGS	CY	77
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	81
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	11,820
506.0605	STRUCTURAL STEEL HS	LB	56,360
506.3009	WELDED STUD SHEAR CONNECTORS 3/4 X 5–INCH	EACH	478
513.8021.03	RAILING STEEL PEDESTRIAN TYPE C4 R–51–73	LF	324
517.1050.S.02	ARCHITECTURAL SURFACE TREATMENT R–51–73	SF	910
612.0406	PIPE UNDERDRAIN WRAPPED 6–INCH	LF	378
636.0050.S	FOUNDATION DRILLING 24–INCH DIAMETER	LF	655
645.0111	GEOTEXTILE FABRIC TYPE DF SCHEDULE A	SY	263
SPV.0110.01	TIMBER LAGGING	MBM	4.8
SPV.0165.02	GEOCOMPOSITE DRAIN BOARD	SF	1,610
	NON–BID ITEMS		
	PREFORMED JOINT FILLER	SIZE	¾"
	NON–BITUMINOUS JOINT SEALER	— — —	— — —

SOIL PARAMETERS

SOIL DESCRIPTIONS & APPROXIMATE ELEVATIONS	MOIST UNIT WEIGHT (PCF)	COHESION (PSF)	INTERNAL FRICTION ANGLE (DEGREES)
BORING RW–1, STA. 357+67, 93.87' LT. (WALL STA. 13+37.90'RW73')			
RETAINED FILL SOILS: **SILTY CLAYS – TOW EL. 798±	130	0	28
SOILS BELOW DREDGE LINE: SILTY CLAYS TO CLAYEY SILTS – FOOTING LEVEL EL. 792±	132	1,500	25
BORING RW–2, STA. 357+35, 31.68' LT. (WALL STA. 12+47.36'RW73')			
RETAINED FILL SOILS: CLAYEY SILTS – TOW EL. 797±	130	0	28
SOILS BELOW DREDGE LINE: SILTY CLAYS TO CLAYEY SILTS – FOOTING LEVEL EL. 788±	132	1,500	25
BORING RW–6, STA. 356+06, 38.81' LT. (WALL STA. 10+61.98'RW73')			
RETAINED FILL SOILS: SILTY SANDS – TOW EL. 796±	130	0	28
SOILS BELOW DREDGE LINE: SILTY CLAYS TO CLAYEY SILTS – FOOTING LEVEL EL. 788±	132	1,500	25

NOTES:

1. ** = ESTIMATED SOIL PARAMETERS BASED ON THE EXTENDED SOIL PROFILE OF THE SURFACE SOILS. THE RETAINED BACK FILL SOILS SHOULD BE VERIFIED/EVALUATED PRIOR TO OR DURING CONSTRUCTION.
2. TOW = TOP OF WALL; EL. = ELEVATION
3. STATIONING IS APPROXIMATE



SECTION A–A

* DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1–INCH STAINLESS STEEL SHEET METAL SCREWS.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6–INCH".

RODENT SHIELD DETAIL

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY CDS | PLANS CK'D ACK

QUANTITIES & SOIL PARAMETERS

SHEET 9 OF 21

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8

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FILE: 09–10–R510073_data.dwg
PLOT SCALE:

I.D. 2250–12–70

PLOT DATE: May 11, 2018

STATE PROJECT NUMBER

2250-12-70

WALL & PILE REFERENCE TABLE

WALL STATION	REFERENCE/ PILE NUMBER	PILE OFFSET – SEE NOTE BELOW	TOP OF WALL	FINISHED GROUND	BOTTOM OF WALL	WALL HEIGHT (FT)	EXISTING GROUND	TOP OF PILE	TOP OF FOOTING	BOTTOM OF FOOTING	FOOTING LENGTH	SOLDIER PILE SECTION	SOLDIER PILE LENGTH (FT)	NO. OF STUDS
10+00.00'RW73'	BEGIN WALL	---	792.00	790.32	788.32	3.68	791.86	---	---	---	---	---	---	---
10+01.00'RW73'	PILE 1	1.49	792.05	790.32	788.32	3.73	791.98	791.55	787.32	779.05	8.27	HP12x53	12.50	4
10+06.00'RW73'	G.C. 1	---	792.32	790.34	788.34	3.98	792.60	---	---	---	---	---	---	---
10+08.50'RW73'	PILE 2	1.49	792.45	790.35	788.35	4.10	792.72	791.95	787.35	772.95	14.40	HP12x53	19.00	6
10+16.00'RW73'	PILE 3	1.49	792.85	790.36	788.36	4.49	792.94	792.35	787.36	773.35	14.01	HP12x53	19.00	6
10+20.00'RW73'	C.J. 1	---	793.06	790.37	788.37	4.69	792.89	---	---	---	---	---	---	---
10+23.50'RW73'	PILE 4	1.49	793.24	790.38	788.38	4.86	792.81	792.74	787.38	773.24	14.14	HP12x53	19.50	6
10+31.00'RW73'	G.C. 2/PILE 5	1.49	793.64	790.40	788.40	5.24	793.62	793.14	787.40	773.14	14.26	HP12x53	20.00	6
10+38.50'RW73'	PILE 6	1.49	794.21	790.42	788.42	5.79	794.82	793.71	787.42	773.21	14.21	HP12x53	20.50	8
10+46.00'RW73'	PILE 7	1.49	794.79	790.44	788.44	6.35	794.46	794.29	787.44	773.29	14.15	HP12x53	21.00	8
10+50.00'RW73'	C.J. 2	---	795.09	790.45	788.45	6.64	794.39	---	---	---	---	---	---	---
10+53.50'RW73'	PILE 8	1.49	795.36	790.46	788.46	6.90	794.33	794.86	787.46	773.36	14.10	HP12x53	21.50	8
10+56.00'RW73'	G.C. 3	---	795.55	790.47	788.47	7.08	794.29	---	---	---	---	---	---	---
10+61.00'RW73'	PILE 9	1.49	795.94	790.48	788.48	7.46	794.21	795.44	787.48	773.44	14.04	HP12x53	22.00	10
10+66.41'RW73'	PILE 10	1.57	796.37	790.50	788.50	7.87	794.44	795.87	787.50	773.37	14.13	HP14x73	22.50	20
10+68.13'RW73'	BEND PT. 1	---	796.50	790.50	788.50	8.00	794.82	---	---	---	---	---	---	---
10+69.39'RW73'	G.C. 4	---	796.61	790.58	788.58	8.03	795.69	---	---	---	---	---	---	---
10+77.09'RW73'	G.C. 5	---	797.33	796.73	794.25	3.08	797.37	---	---	---	---	---	---	---
10+77.84'RW73'	PILE 11	1.49	797.33	796.81	794.81	2.52	797.40	796.83	793.07	784.83	8.24	HP12x53	12.00	4
10+78.84'RW73'	STOP PT. 1	---	797.33	797.33	795.55	1.78	797.48	---	---	---	---	---	---	---
10+84.84'RW73'	CONT. PT. 1	---	797.33	797.33	795.55	1.78	798.31	---	---	---	---	---	---	---
10+85.84'RW73'	PILE 12	1.49	797.33	796.81	794.81	2.52	797.79	796.83	793.08	784.83	8.25	HP12x53	12.00	4
10+86.59'RW73'	G.C. 6	---	797.33	796.73	794.25	3.08	797.42	---	---	---	---	---	---	---
10+94.30'RW73'	G.C. 7	---	796.61	790.58	788.58	8.03	795.90	---	---	---	---	---	---	---
10+95.52'RW73'	BEND PT. 2	---	796.50	790.58	788.58	7.92	795.12	---	---	---	---	---	---	---
10+97.25'RW73'	PILE 13	1.57	796.46	790.59	788.59	7.87	795.08	795.96	787.59	773.46	14.13	HP14x73	22.50	20
11+02.14'RW73'	C.J. 3	---	796.35	790.60	788.60	7.75	795.64	---	---	---	---	---	---	---
11+02.40'RW73'	G.C. 8	---	796.34	790.60	788.60	7.74	795.65	---	---	---	---	---	---	---
11+03.14'RW73'	PILE 14	1.49	796.32	790.60	788.60	7.72	795.69	795.82	787.60	773.32	14.28	HP12x53	22.50	10
11+10.14'RW73'	PILE 15	1.49	796.16	790.61	788.61	7.55	796.01	795.66	787.61	773.16	14.45	HP12x53	22.50	10
11+17.14'RW73'	PILE 16	1.49	796.00	790.62	788.62	7.38	796.03	795.50	787.62	773.50	14.12	HP12x53	22.00	10
11+24.14'RW73'	PILE 17	1.49	795.84	790.63	788.63	7.21	796.00	795.34	787.63	773.34	14.29	HP12x53	22.00	10
11+27.40'RW73'	G.C. 9	---	795.77	790.64	788.64	7.13	795.86	---	---	---	---	---	---	---
11+31.14'RW73'	PILE 18	1.49	795.68	790.67	788.67	7.01	795.69	795.18	787.67	773.18	14.49	HP12x53	22.00	10
11+32.14'RW73'	C.J. 4	---	795.66	790.68	788.68	6.98	795.65	---	---	---	---	---	---	---
11+37.02'RW73'	PILE 19	1.57	795.54	790.72	788.72	6.82	794.80	795.04	787.72	773.54	14.18	HP14x73	21.50	16
11+38.88'RW73'	BEND PT. 3	---	795.50	790.73	788.73	6.77	794.20	---	---	---	---	---	---	---
11+46.02'RW73'	PILE 20	1.49	795.07	791.61	789.61	5.46	794.63	794.57	788.48	774.07	14.41	HP12x53	20.50	6
11+53.02'RW73'	PILE 21	1.49	794.65	792.47	790.47	4.18	792.70	794.15	789.34	775.15	14.19	HP12x53	19.00	6
11+54.02'RW73'	STOP PT. 2	---	794.59	792.59	790.59	4.00	793.23	---	---	---	---	---	---	---
11+54.03'RW73'	CONT. PT. 2	---	796.20	793.23	791.23	4.97	793.23	---	---	---	---	---	---	---
11+55.03'RW73'	PILE 22	1.49	796.15	793.06	791.06	5.09	793.39	795.65	789.90	775.65	14.25	HP12x53	20.00	6
11+62.03'RW73'	PILE 23	1.49	795.82	791.90	789.90	5.92	792.40	795.32	788.73	774.32	14.41	HP12x53	21.00	8
11+68.92'RW73'	BEND PT. 4	---	795.50	790.75	788.75	6.75	791.62	---	---	---	---	---	---	---
11+70.23'RW73'	G.C. 10	---	795.57	790.76	788.76	6.81	794.33	---	---	---	---	---	---	---
11+70.57'RW73'	PILE 24	1.57	795.59	790.76	788.76	6.83	794.35	795.09	787.76	773.59	14.17	HP14x73	21.50	16
11+75.05'RW73'	PILE 25	1.49	795.83	790.81	788.81	7.02	795.66	795.33	787.81	773.33	14.48	HP12x53	22.00	10
11+76.16'RW73'	C.J. 5	---	795.90	790.82	788.82	7.08	795.80	---	---	---	---	---	---	---
11+81.05'RW73'	PILE 26	1.49	796.16	790.86	788.86	7.30	796.13	795.66	787.86	773.66	14.20	HP12x53	22.00	10
11+83.01'RW73'	BEND PT. 5	---	796.27	790.88	788.88	7.39	795.96	---	---	---	---	---	---	---
11+85.43'RW73'	PILE 27	1.57	796.40	790.90	788.90	7.50	795.69	795.90	787.90	773.90	14.00	HP14x73	22.00	20
11+87.16'RW73'	BEND PT. 6	---	796.50	790.92	788.92	7.58	795.49	---	---	---	---	---	---	---
11+87.41'RW73'	G.C. 11	---	796.55	791.00	789.00	7.55	795.63	---	---	---	---	---	---	---
11+94.41'RW73'	G.C. 12	---	798.08	796.82	794.42	3.66	797.54	---	---	---	---	---	---	---
11+95.16'RW73'	PILE 28	1.49	798.08	797.00	795.00	3.08	797.58	797.58	793.22	785.08	8.14	HP12x53	12.50	4
11+96.16'RW73'	STOP PT. 3	---	798.08	798.08	795.77	2.31	797.58	---	---	---	---	---	---	---
12+01.16'RW73'	CONT. PT. 3	---	798.08	798.08	795.77	2.31	798.17	---	---	---	---	---	---	---
12+02.16'RW73'	PILE 29	1.49	798.08	797.00	795.00	3.08	797.61	797.58	793.22	785.08	8.14	HP12x53	12.50	4

WALL & PILE REFERENCE TABLE (CONTINUE)

WALL STATION	REFERENCE/ PILE NUMBER	PILE OFFSET – SEE NOTE BELOW	TOP OF WALL	FINISHED GROUND	BOTTOM OF WALL	WALL HEIGHT (FT)	EXISTING GROUND	TOP OF PILE	TOP OF FOOTING	BOTTOM OF FOOTING	FOOTING LENGTH	SOLDIER PILE SECTION	SOLDIER PILE LENGTH (FT)	NO. OF STUDS
12+02.91'RW73'	G.C. 13	---	798.08	796.82	794.42	3.66	797.55	---	---	---	---	---	---	---
12+09.91'RW73'	G.C. 14	---	797.04	791.00	789.00	8.04	795.60	---	---	---	---	---	---	---
12+10.16'RW73'	BEND PT. 7	---	797.00	791.00	789.00	8.00	795.49	---	---	---	---	---	---	---
12+11.89'RW73'	PILE 30	1.57	797.00	791.02	789.02	7.98	795.65	796.50	788.02	774.00	14.02	HP14x73	22.50	20
12+13.23'RW73'	G.C. 15	---	797.00	791.03	789.03	7.97	795.78	---	---	---	---	---	---	---
12+18.66'RW73'	PILE 31	1.49	797.00	791.08	789.08	7.92	796.13	796.50	788.08	774.00	14.08	HP12x53	22.50	10
12+23.16'RW73'	C.J. 6	---	797.00	791.12	789.12	7.88	796.00	---	---	---	---	---	---	---
12+26.66'RW73'	PILE 32	1.49	797.00	791.15	789.15	7.85	796.08	796.50	788.15	774.00	14.15	HP12x53	22.50	10
12+28.35'RW73'	BEND PT. 8	---	797.00	791.17	789.17	7.83	796.03	---	---	---	---	---	---	---
12+34.66'RW73'	PILE 33	1.49	797.00	791.23	789.23	7.77	796.07	796.50	788.23	774.00	14.23	HP12x53	22.50	10
12+38.28'RW73'	G.C. 16	---	797.00	791.26	789.26	7.74	796.15	---	---	---	---	---	---	---
12+42.66'RW73'	PILE 34	1.49	797.00	791.27	789.27	7.73	796.49	796.50	788.27	774.00	14.27	HP12x53	22.50	10
12+48.46'RW73'	BEND PT. 9	---	797.00	791.28	789.28	7.72	796.58	---	---	---	---	---	---	---
12+50.66'RW73'	PILE 35	1.49	797.00	791.29	789.29	7.71	796.59	796.50	788.29	774.00	14.29	HP12x53	22.50	10
12+53.16'RW73'	E.J. 1	---	797.00	791.30	789.30	7.70	796.53	---	---	---	---	---	---	---
12+55.66'RW73'	PILE 36	1.49	797.00	791.30	789.30	7.70	796.47	796.50	788.30	774.00	14.30	HP12x53	22.50	10
12+59.88'RW73'	BEGIN CURVE	---	797.00	791.31	789.31	7.69	796.42	---	---	---	---	---	---	---
12+63.37'RW73'	G.C. 17	---	797.00	791.32	789.32	7.68	796.72	---	---	---	---	---	---	---
12+63.41'RW73'	PILE 37	1.49	797.00	791.32	789.32	7.68	796.72	796.50	788.32	774.00	14.32	HP12x53	22.50	10
12+70.43'RW73'	G.C. 18	---	797.01	791.32	789.32	7.69	796.47	---	---	---	---	---	---	---
12+71.16'RW73'	PILE 38	1.49	797.01	791.33	789.33	7.68	796.40	796.51	788.33	774.01	14.32	HP12x53	22.50	10
12+75.81'RW73'	G.C. 19	---	797.00	791.39	789.39	7.61	796.08	---	---	---	---	---	---	---
12+78.91'RW73'	PILE 39	1.49	797.00	791.39	789.39	7.61	795.58	796.50	788.39	774.00	14.39	HP12x53	22.50	10
12+80.96'RW73'	END CURVE	---	797.00	791.39	789.39	7.61	795.43	---	---	---	---	---	---	---
12+83.16'RW73'	C.J. 7	---	797.10	791.55	789.55	7.55	795.71	---	---	---	---	---	---	---
12+86.41'RW73'	PILE 40	1.49	797.25	791.78	789.78	7.47	796.11	796.75	788.71	774.25	14.46	HP12x53	22.50	10
12+94.16'RW73'	PILE 41	1.49	797.61	792.33	790.33	7.28	797.08	797.11	789.26	775.11	14.15	HP12x53	22.00	10
13+00.94'RW73'	G.C. 20	---	797.92	792.82	790.82	7.10	797.60	---	---	---	---	---	---	---
13+01.07'RW73'	PILE 42	1.57	797.93	792.83	790.83	7.10	797.61	797.43	789.76	775.43	14.33	HP14x73	22.00	20
13+02.80'RW73'	BEND PT. 10	---	798.00	792.96	790.96	7.04	795.75	---	---	---	---	---	---	---
13+03.55'RW73'	G.C. 21	---	798.12	793.32	791.32	6.80	796.40	---	---	---	---	---	---	---
13+10.05'RW73'	G.C. 22	---	799.15	797.98	795.87	3.28	798.42	---	---	---	---	---	---	---
13+10.80'RW73'	PILE 43	1.49	799.15	798.39	796.39	2.76	798.80	798.65	794.69	786.65	8.04	HP12x53	12.00	4
13+11.80'RW73'	STOP PT. 4	---	799.15	799.15	797.09	2.06	799.22	---	---	---	---	---	---	---
13+16.80'RW73'	CONT. PT. 4	---	799.15	799.15	797.09	2.06	798.92	---	---	---	---	---	---	---
13+17.80'RW73'	PILE 44	1.49	799.15	798.39	796.39	2.76	798.79	798.65	794.69	786.65	8.04	HP12x53	12.00	4
13+18.55'RW73'	G.C. 23	---	799.15	797.98	795.87	3.28	798.69	---	---	---	---	---	---	---
13+25.05'RW73'	G.C. 24	---	798.12	793.32	791.32	6.80	796.73	---	---	---	---	---	---	---
13+25.80'RW73'	BEND PT. 11	---	798.00	793.32	791.32	6.68	796.40	---	---	---	---	---	---	---
13+27.53'RW73'	PILE 45	1.57	798.04	793.44	791.44	6.60	797.14	797.54	790.37	776.04	14.33	HP14x73	21.50	16
13+32.69'RW73'	PILE 46	1.49	798.17	793.81	791.81	6.36	797.17	797.67	790.74	776.67	14.07	HP12x53	21.00	8
13+36.80'RW73'	C.J. 8	---	798.27	794.10	792.10	6.17	797.20	---	---	---	---	---	---	---
13+39.69'RW73'	PILE 47	1.49	798.34	794.31	792.31	6.03	796.80	797.84	791.24	776.84	14.40	HP12x53	21.00	8
13+43.95'RW73'	G.C. 25	---	798.44	794.61	792.61	5.83	796.56	---	---	---	---	---	---	---
13+44.89'RW73'	PILE 48	1.57	798.46	794.68	792.68	5.78	796.59	797.96	791.61	777.46	14.15	HP14x73	20.50	16
13+46.62'RW73'	BEND PT. 12	---	798.50	794.80	792.80	5.70	796.03	---	---	---	---	---	---	---
13+52.45'RW73'	PILE 49	1.49	799.05	795.74	793.74	5.31	797.80	798.55	792.58	778.55	14.03	HP12x53	20.00	6
13+53.45'RW73'	END WALL	---	799.15	795.90	793.90	5.25	799.15	---	---	---	---	---	---	---

NOTES

ALL WALL STATIONING & OFFSETS ARE BASED OFF OF THE FRONT FACE OF THE WALL ALIGNMENT TO CENTER OF PILE.

LEGEND

PT. – POINT
G.C. – GRADE CHANGE
C.J. – CONTRACTION JOINT
E.J. – EXPANSION JOINT
CONT. – CONTINUE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-51-73

DRAWN BY CDS | PLANS CK'D ACK

WALL DATA

SHEET 10 OF 21

728

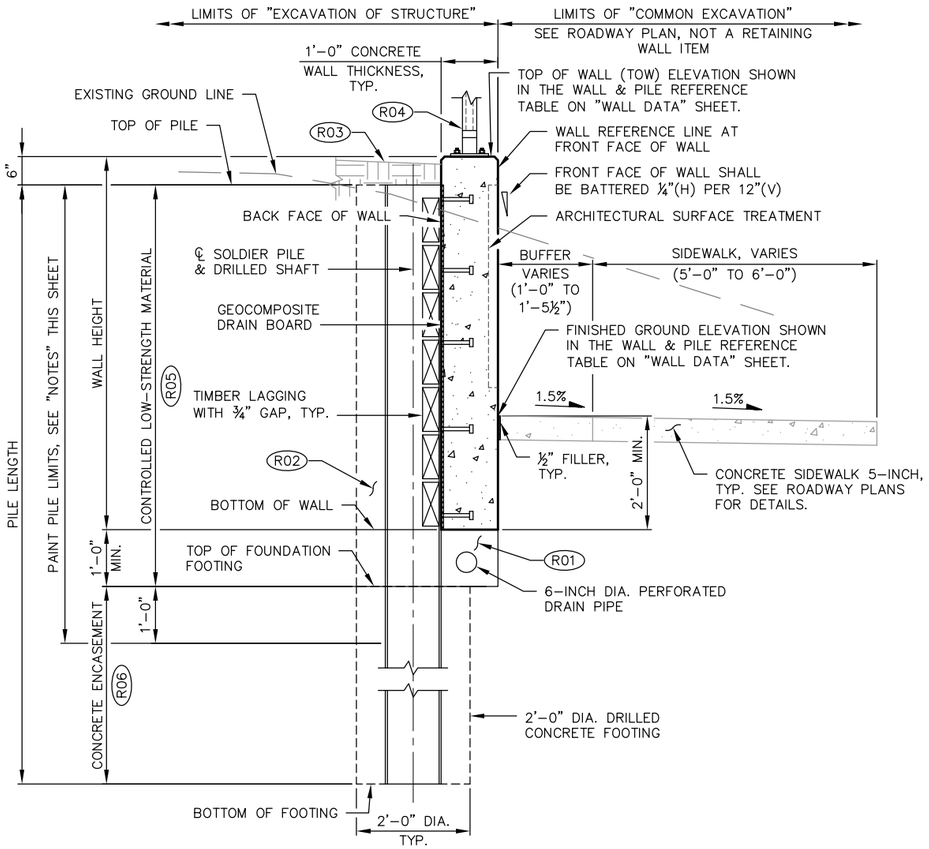
I.D. 2250-12-70

PLOT DATE: May 11, 2018

FILE: 09-10-R510073_data.dwg
PLOT SCALE:

8

8



TYPICAL SECTION THRU SOLDIER PILE WALL

(REINFORCEMENT NOT SHOWN FOR CLARITY)

NOTES

PAINT PILE FROM TOP OF PILE TO 1'-0" BELOW TOP OF FOOTING WITH A PRIME COAT OF ORGANIC ZINC-RICH PAINT. PREPARE THE SURFACE AND APPLY THE PAINT AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. PAINTING OF PILE IS INCLUDED WITH THE BID ITEM "STRUCTURAL STEEL HS".

PILES SHOULD BE SET WITH A ¼-INCH HORIZONTAL TO 1-FOOT VERTICAL BATTER.

FILL VOIDS BEHIND LAGGING WITH #1 OR #2 COARSE AGGREGATE. INCLUDED WITH BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALL R-51-73".

(R01) DRAINAGE AGGREGATE MINIMUM OF 1'-0" X 1'-0" BASE AGGREGATE OPEN GRADED IN GEOTEXTILE FABRIC, TYPE DF SCHEDULE A. BASE AGGREGATE IS INCLUDED IN THE PIPE UNDERDRAIN. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE "QUANTITIES & SOIL PARAMETERS" SHEET.

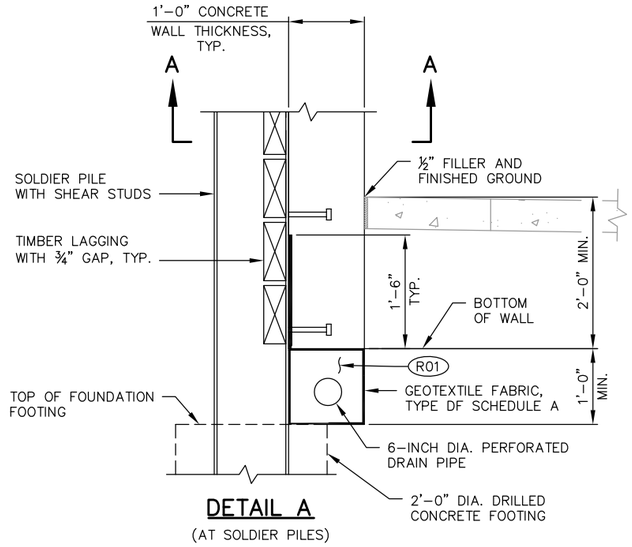
(R02) FILL AUGERED HOLE AROUND SOLDIER PILE AND ABOVE FOOTING WITH CONTROLLED LOW-STRENGTH MATERIAL (CLSM). INCLUDED WITH THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS R-51-73".

(R03) SLOPE BEHIND WALL VARIES. SEE ROADWAY CROSS SECTION.

(R04) RAILING STEEL PEDESTRIAN TYPE C4. SEE "STEEL RAILING DETAILS" SHEET.

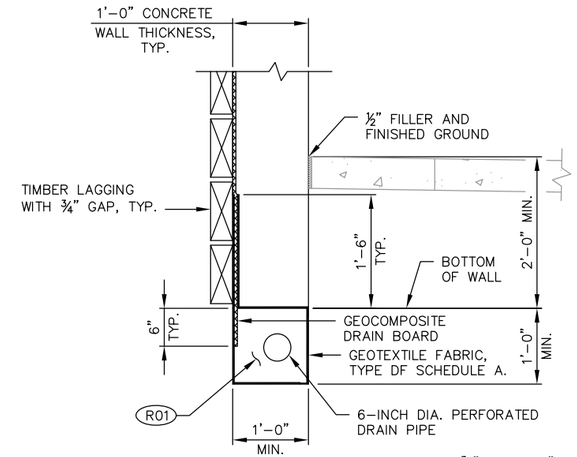
(R05) COST OF DRILLING AND CONTROLLING LOW STRENGTH MATERIAL IN DRILLED HOLES SHALL BE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS, R-51-73."

(R06) CONCRETE ENCASEMENT LIMITS INCLUDES THE PAY LIMITS FOR BOTH THE BID ITEM "FOUNDATION DRILLING 24-INCH DIAMETER" AND THE BID ITEM "CONCRETE MASONRY RETAINING WALLS."



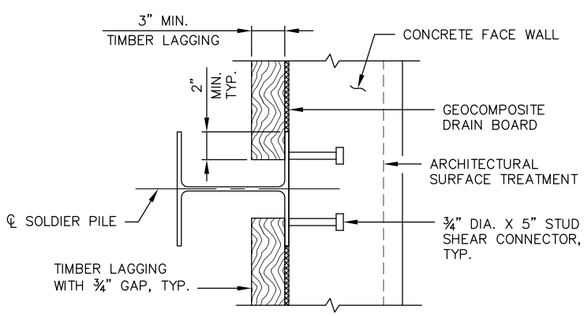
DETAIL A

(AT SOLDIER PILES)



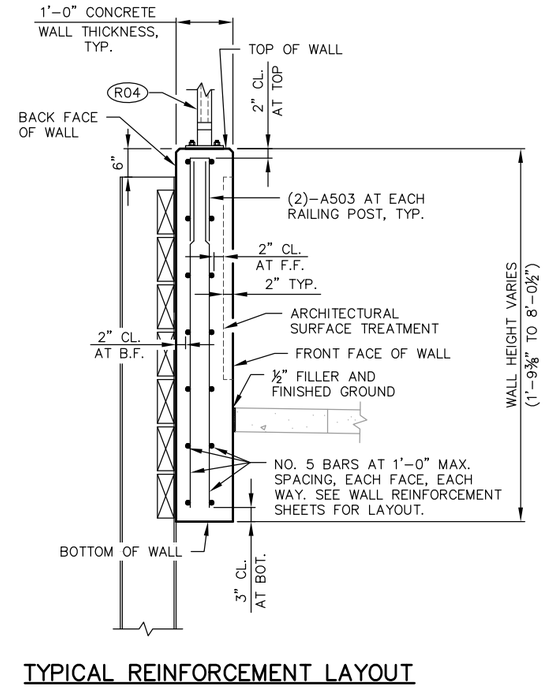
DETAIL B

(BETWEEN SOLDIER PILES)

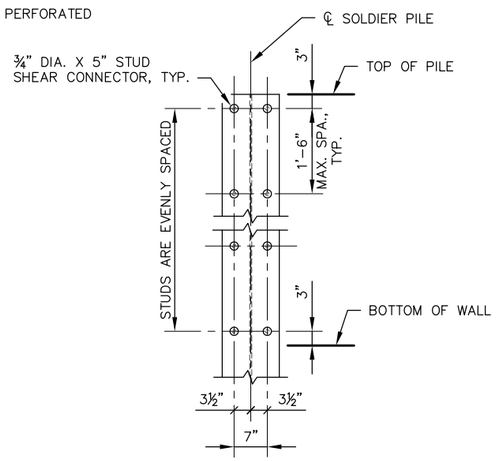


SECTION A-A

(REINFORCEMENT NOT SHOWN FOR CLARITY)



TYPICAL REINFORCEMENT LAYOUT



STUD SHEAR CONNECTION LAYOUT

F.F. - FRONT FACE
B.F. - BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-51-73

DRAWN BY CDS | PLANS CK'D ACK

WALL DETAILS (1 OF 2)

SHEET 11 OF 21

729

I.D. 2250-12-70

PLOT DATE: May 11, 2018

FILE: 11-13-R510073_det.dwg
PLOT SCALE:

8

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STATE PROJECT NUMBER

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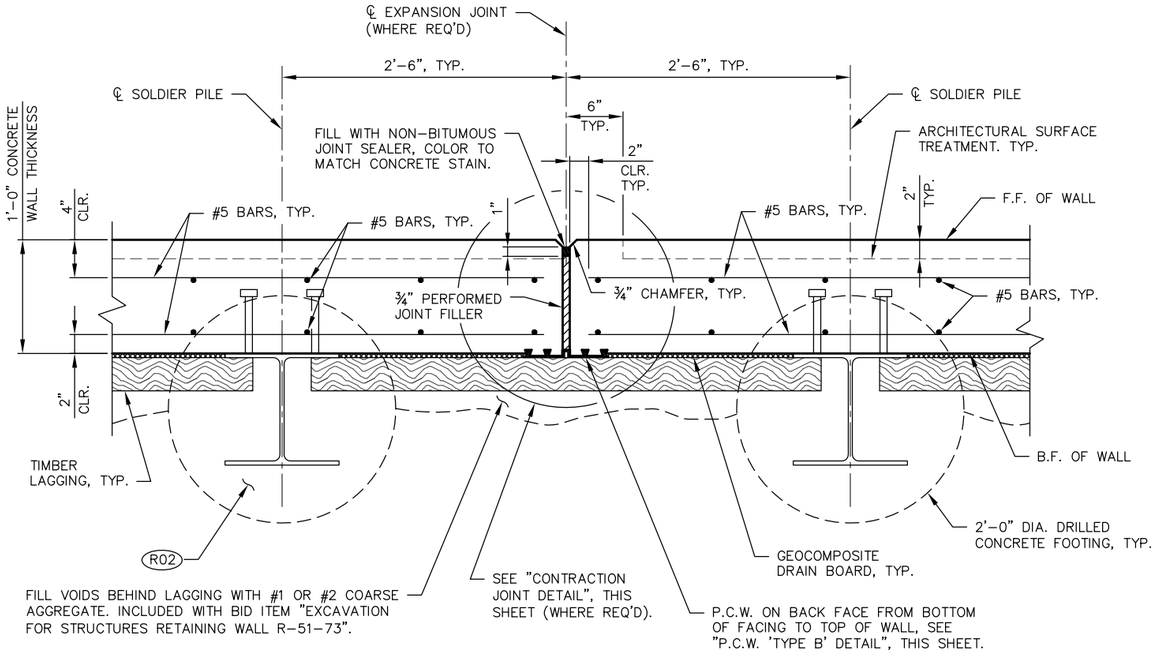
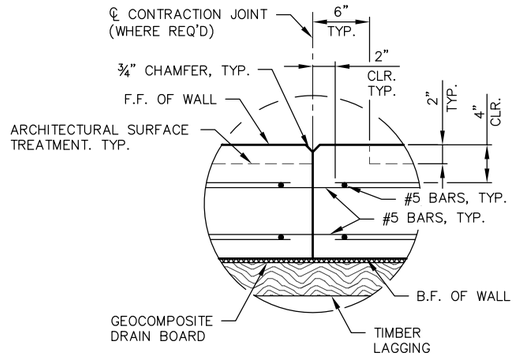


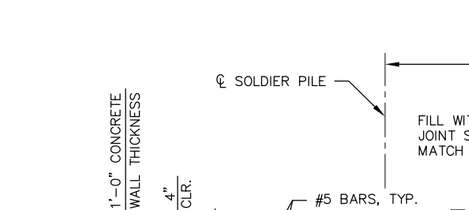
SOLDIER PILE JOINT DETAIL

(SEE WALL LAYOUT SHEETS FOR LOCATIONS)



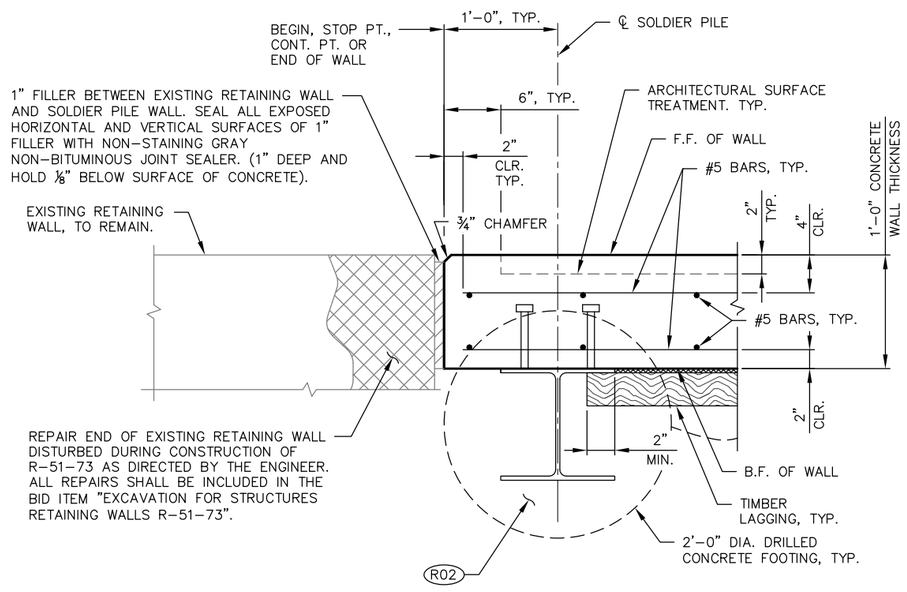
CONTRACTION JOINT DETAIL

(SEE WALL LAYOUT SHEETS FOR LOCATIONS)



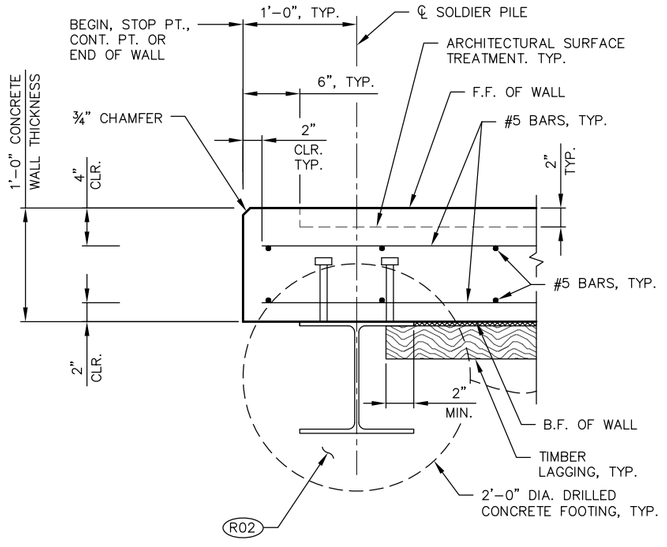
P.C.W. 'TYPE B' DETAIL

(POLYVINYL CHLORIDE WATERSTOP)
(INCLUDED WITH THE BID ITEM "CONCRETE MASONRY RETAINING WALLS")
P.C.W. SHALL BE BUTT SPLICED AT ALL INTERSECTIONS BY USING A HEATED SPLICING IRON. HOLD P.C.W. FLUSH WITH CONCRETE. SEAL ALL VERTICAL ENDS OF P.C.W. WITH NON–STAINING BITUMINOUS JOINT SEALER.



RETAINING WALL MATCHING EXISTING RETAINING WALL DETAIL

(SEE WALL LAYOUT SHEETS FOR LOCATIONS)



BEGIN, STOP POINT, CONT. POINT OR END OF WALL DETAIL

(SEE WALL LAYOUT SHEETS FOR LOCATIONS)

NOTES

PAINT PILE FROM TOP OF PILE TO 1'–0" BELOW TOP OF FOOTING WITH A PRIME COAT OF ORGANIC ZINC–RICH PAINT. PREPARE THE SURFACE AND APPLY THE PAINT AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. PAINTING OF PILE IS INCLUDED WITH THE BID ITEM "STRUCTURAL STEEL HS".

(R02) FILL AUGERED HOLE AROUND SOLDIER PILE AND ABOVE FOOTING WITH CONTROLLED LOW–STRENGTH MATERIAL (CLSM). INCLUDED WITH THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS R–51–73".

F.F. – FRONT FACE
B.F. – BACK FACE

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WALL DETAILS (2 OF 2)

SHEET 12 OF 21

730

8

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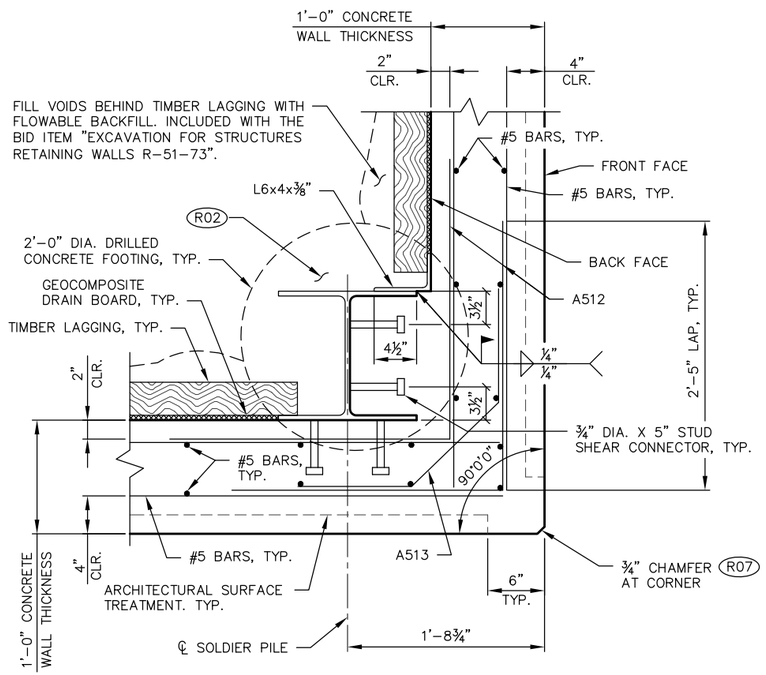
I.D. 2250–12–70

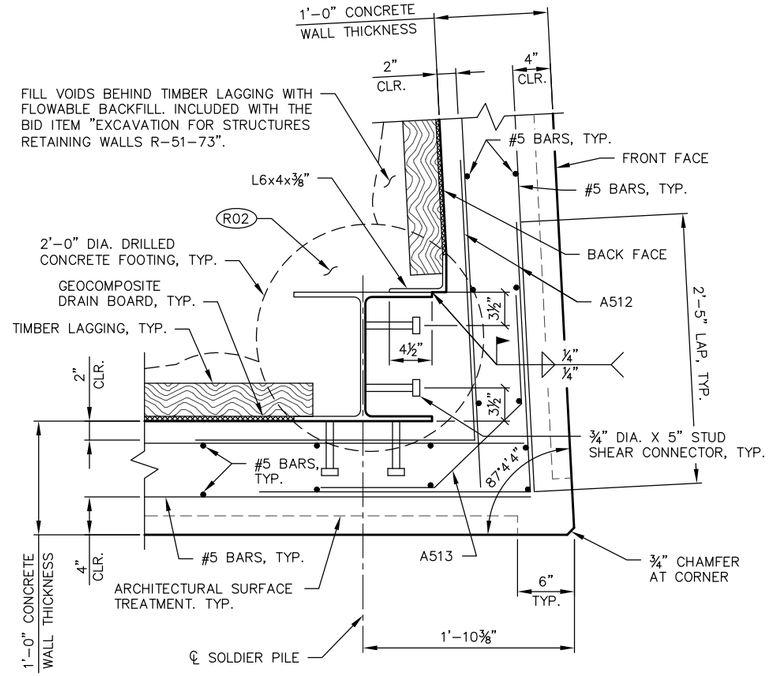
PLOT DATE: May 11, 2018

FILE: 11–13–R5100073_det.dwg
PLOT SCALE:

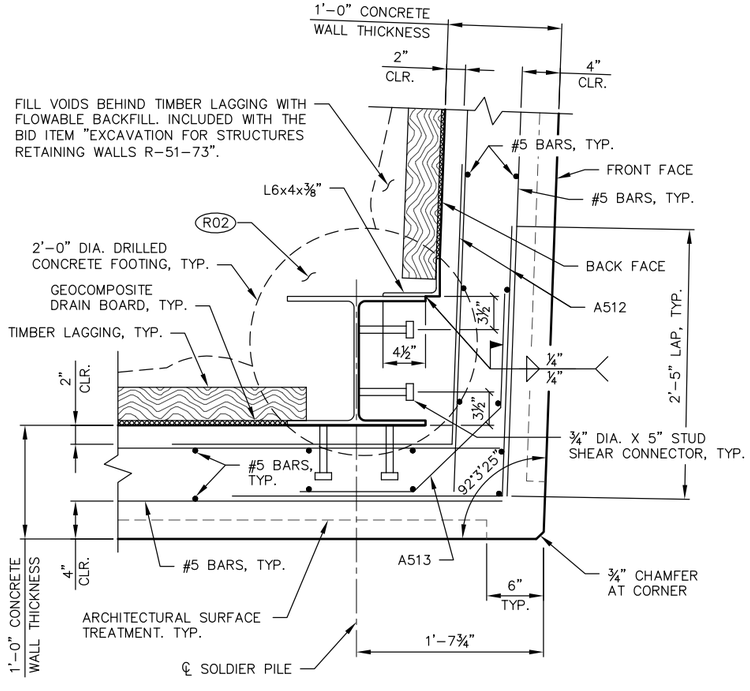
STATE PROJECT NUMBER
2250–12–70



R07 **WALL BEND PT. DETAIL**
(SEE WALL LAYOUT SHEETS FOR LOCATIONS)



WALL BEND PT. 3 DETAIL
(SEE WALL LAYOUT SHEETS FOR LOCATIONS)



WALL BEND PT. 4 DETAIL
(SEE WALL LAYOUT SHEETS FOR LOCATIONS)

NOTES

PAINT PILE FROM TOP OF PILE TO 1'–0" BELOW TOP OF FOOTING WITH A PRIME COAT OF ORGANIC ZINC–RICH PAINT. PREPARE THE SURFACE AND APPLY THE PAINT AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. PAINTING OF PILE IS INCLUDED WITH THE BID ITEM "STRUCTURAL STEEL HS".

(R02) FILL AUGERED HOLE AROUND SOLDIER PILE AND ABOVE FOOTING WITH CONTROLLED LOW–STRENGTH MATERIAL (CLSM). INCLUDED WITH THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS R–51–73".

(R07) USE "WALL BEND PT. DETAIL" FOR WALL BEND PT. 1, WALL BEND PT. 2, WALL BEND PT. 5, WALL BEND PT. 6, WALL BEND PT. 10, WALL BEND PT. 11 & WALL BEND PT. 12. SEE WALL LAYOUT SHEETS FOR LOCATIONS. CORNER ANGLE VARIES SLIGHTLY FROM 90° 0' 0" AT WALL BEND PT. 1 & WALL BEND PT. 2.

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY CDS | PLANS CK'D ACK

WALL BEND DETAILS

SHEET 13 OF 21

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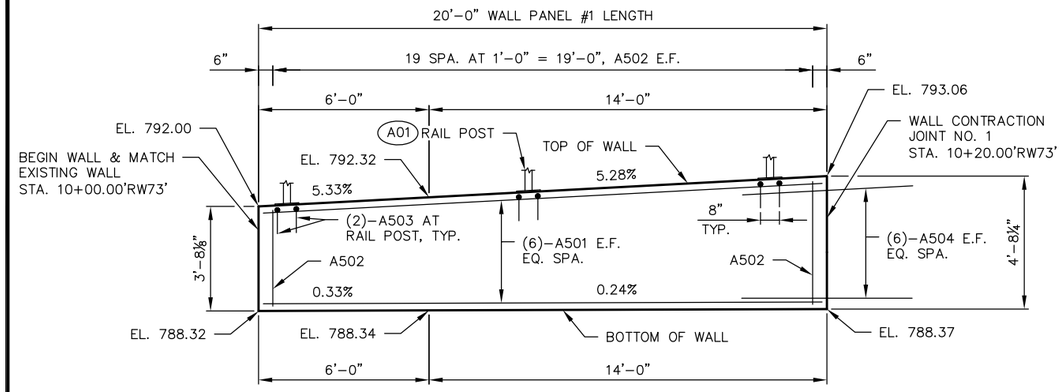
I.D. 2250–12–70

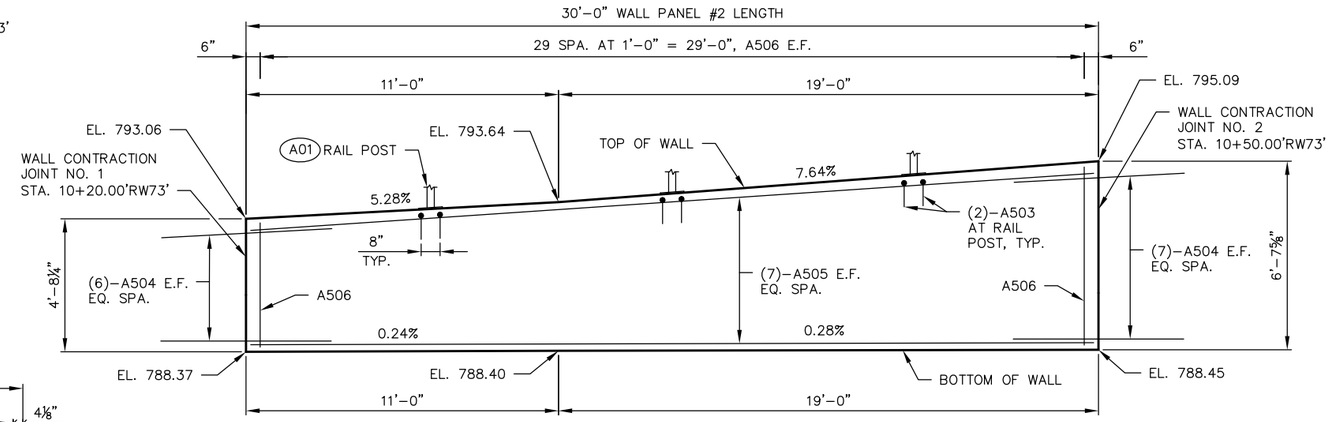
PLOT DATE: May 11, 2018

FILE: 11–13–R510073_det.dwg
PLOT SCALE:

STATE PROJECT NUMBER
2250–12–70



WALL PANEL #1



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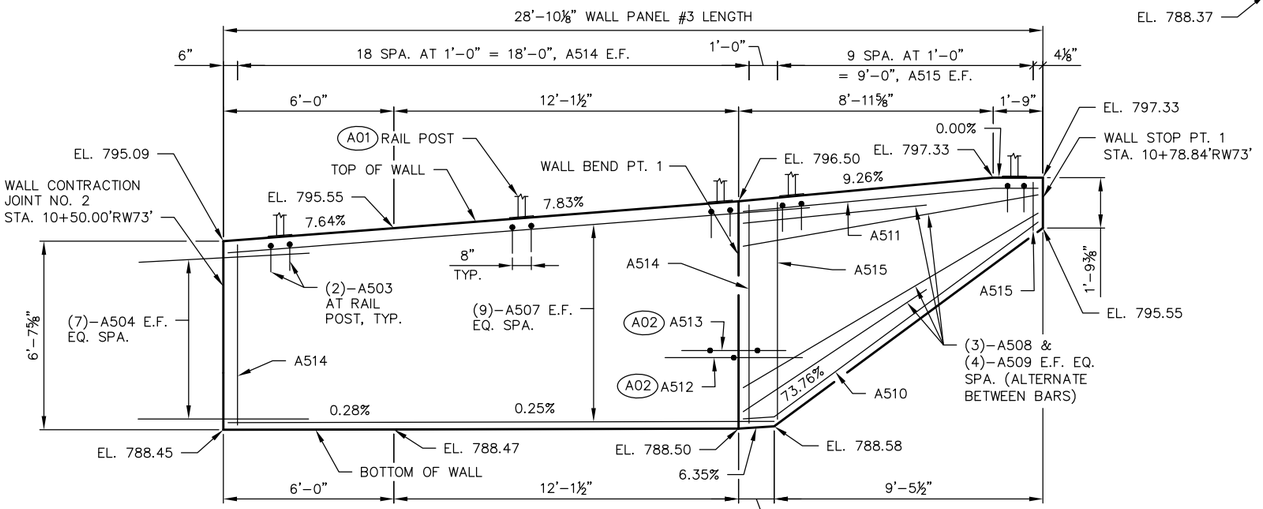
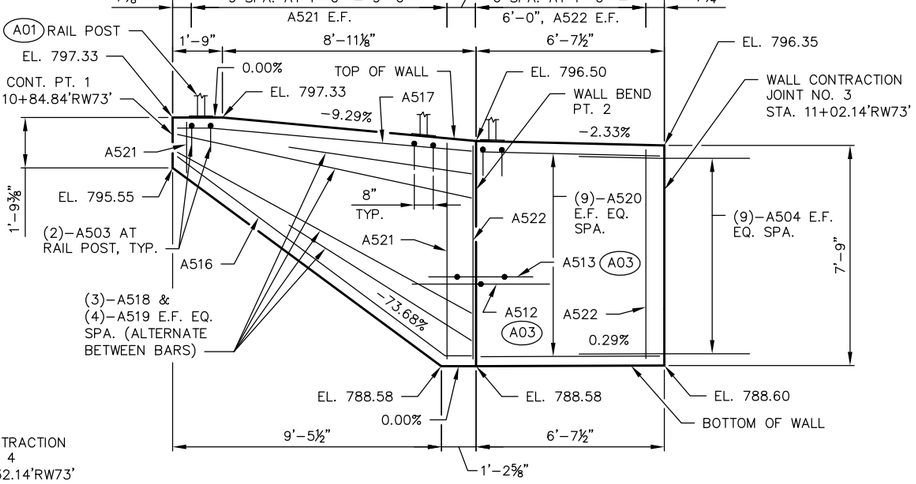


WALL PANEL #3



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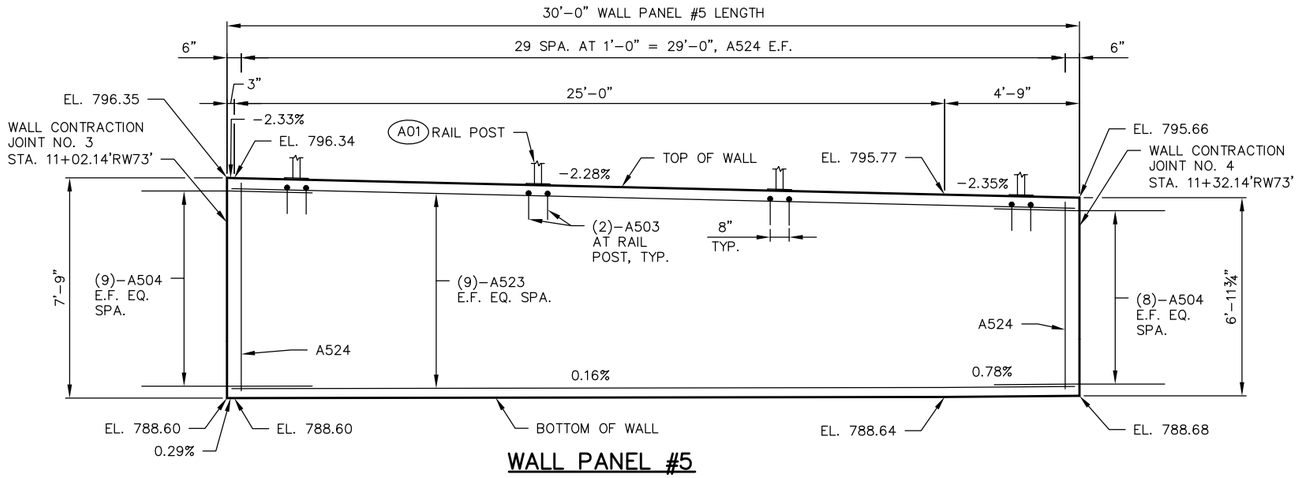

WALL PANEL #5

NOTES

- A01 SEE WALL LAYOUT SHEETS FOR RAIL POST SPACING.
- A02 ALIGN A512 & A513 BARS WITH A507 BARS.
- A03 ALIGN A512 & A513 BARS WITH A520 BARS.

F.F. – FRONT FACE
B.F. – BACK FACE
E.F. – EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY CDS | PLANS CK'D ACK

WALL REINFORCEMENT (1 OF 4)

SHEET 14 OF 21

732

I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 14–17–R510073_rein.dwg
PLOT SCALE:

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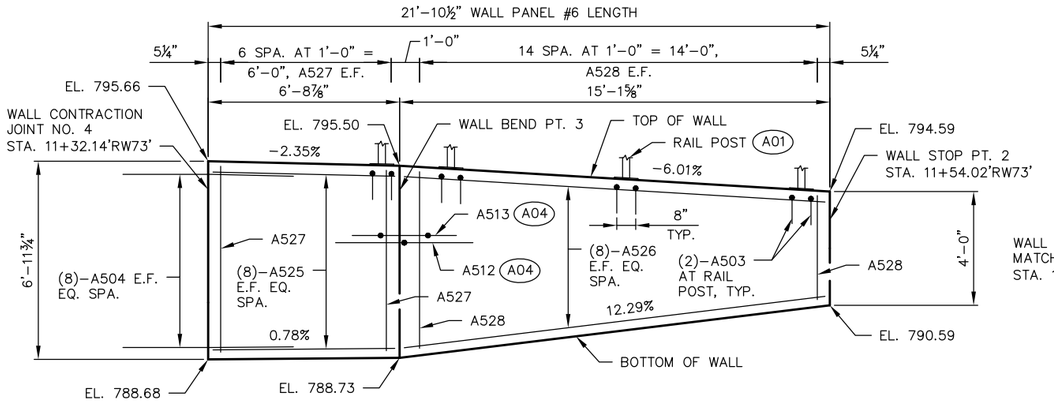
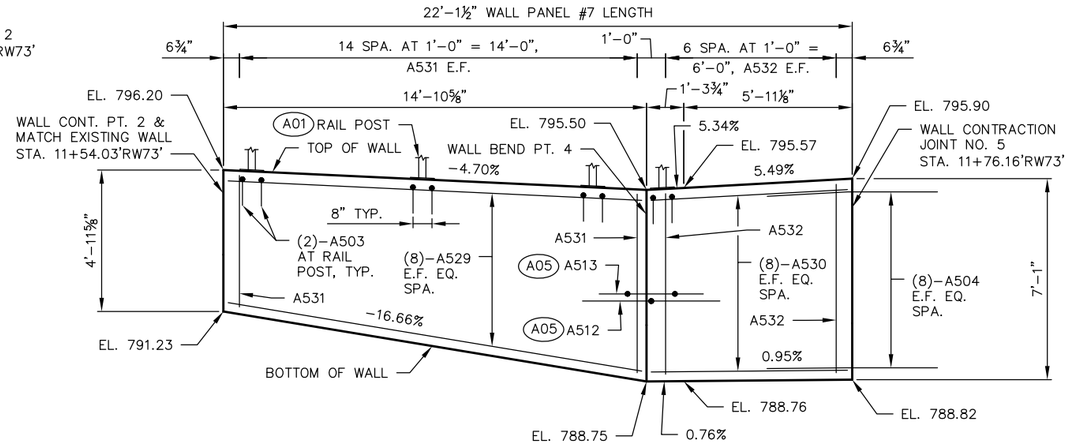
STATE PROJECT NUMBER

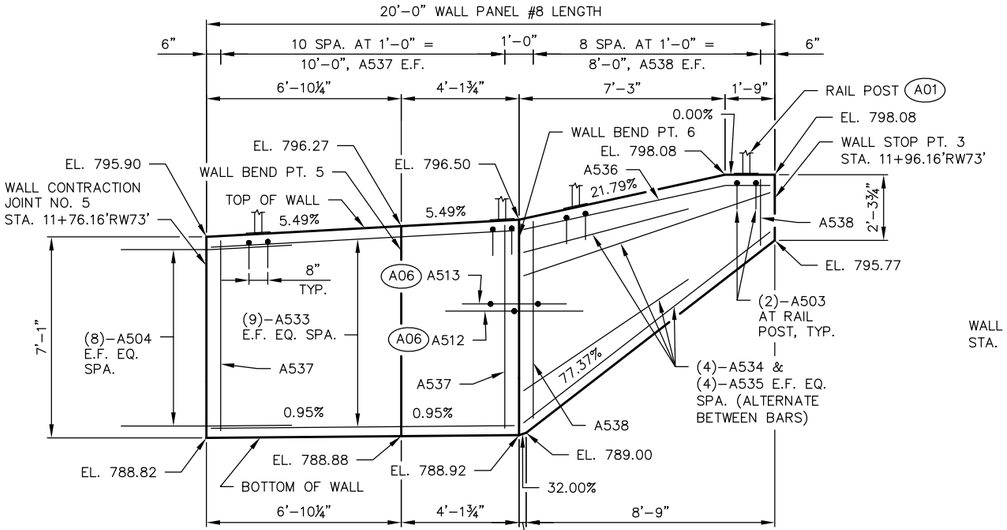
2250-12-70



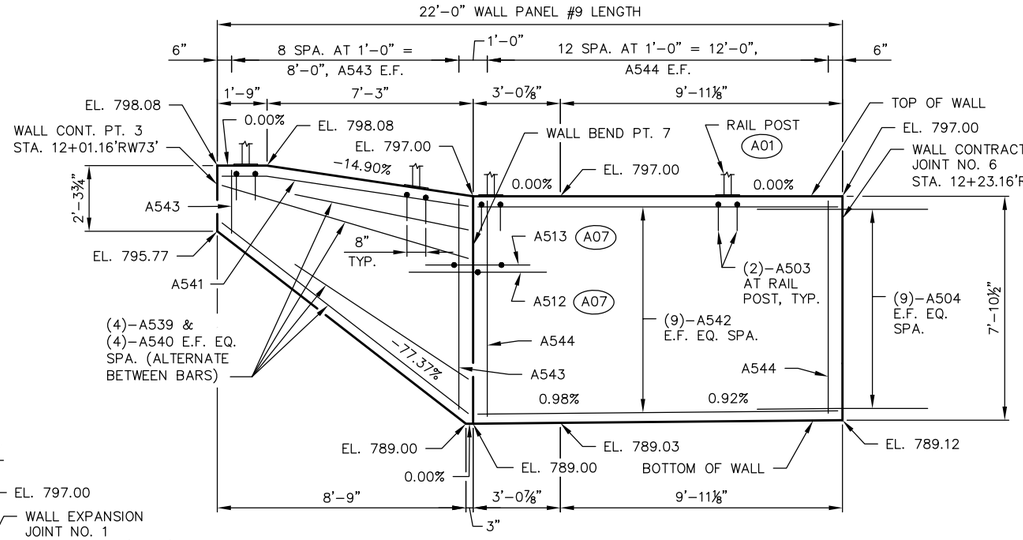
WALL PANEL #6



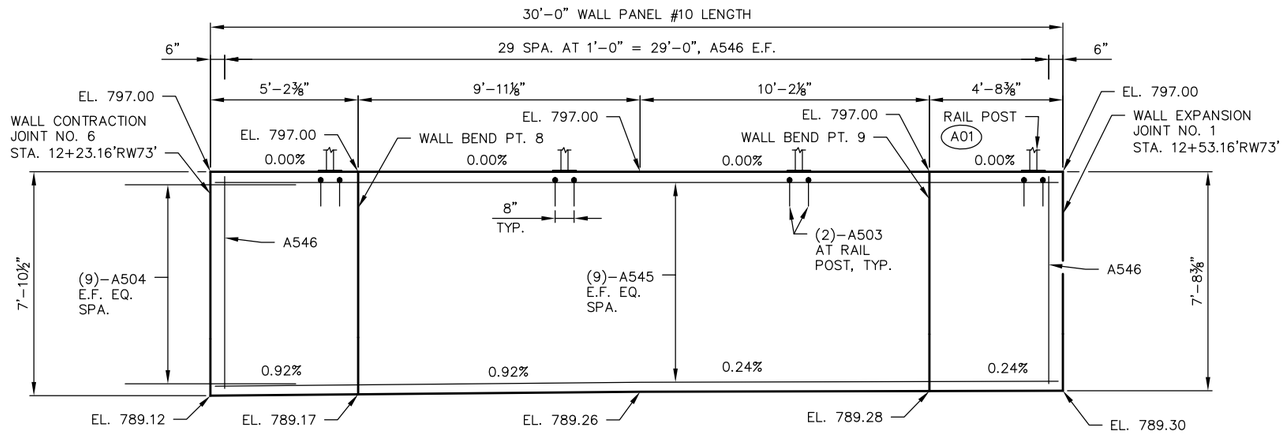
WALL PANEL #7



WALL PANEL #8



WALL PANEL #9



WALL PANEL #10

NOTES

- A01 SEE WALL LAYOUT SHEETS FOR RAIL POST SPACING.
- A04 ALIGN A512 & A513 BARS WITH A525 BARS.
- A05 ALIGN A512 & A513 BARS WITH A530 BARS.
- A06 ALIGN A512 & A513 BARS WITH A533 BARS.
- A07 ALIGN A512 & A513 BARS WITH A542 BARS.

F.F. – FRONT FACE
B.F. – BACK FACE
E.F. – EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-51-73

DRAWN BY CDS | PLANS CK'D ACK

WALL REINFORCEMENT (2 OF 4)

SHEET 15 OF 21

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I.D. 2250-12-70

PLOT DATE: May 11, 2018

FILE: 14-17-R510073_rein.dwg
PLOT SCALE:

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STATE PROJECT NUMBER

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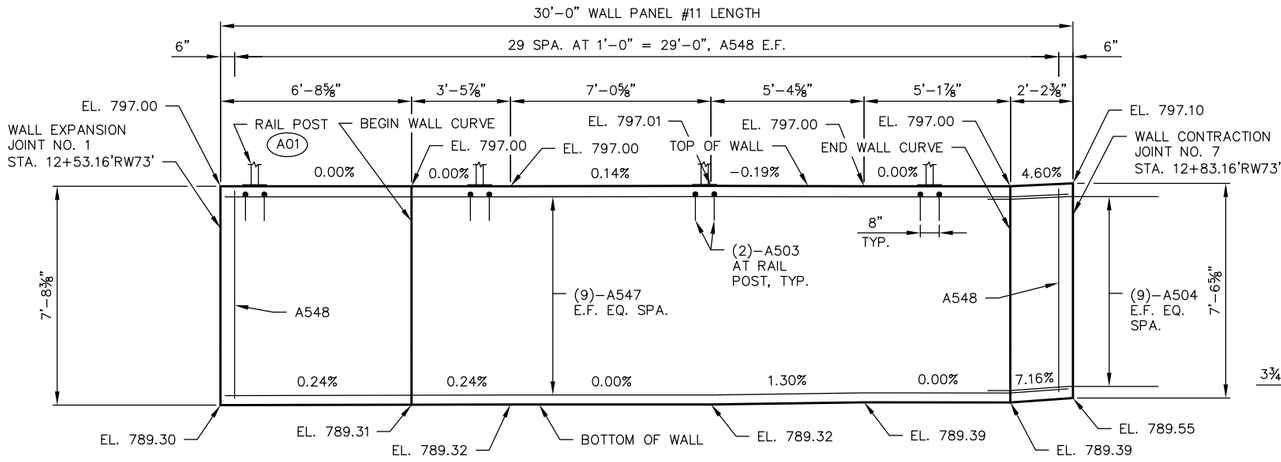
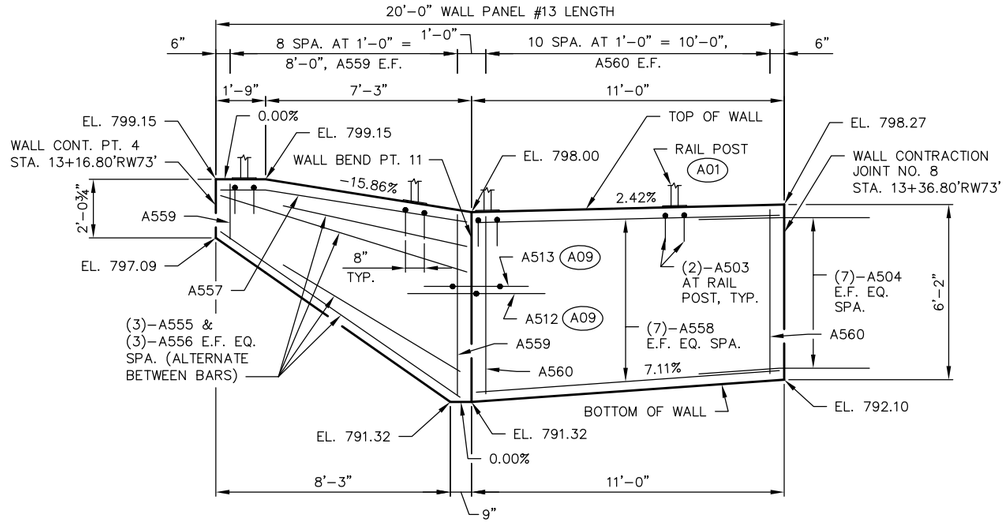
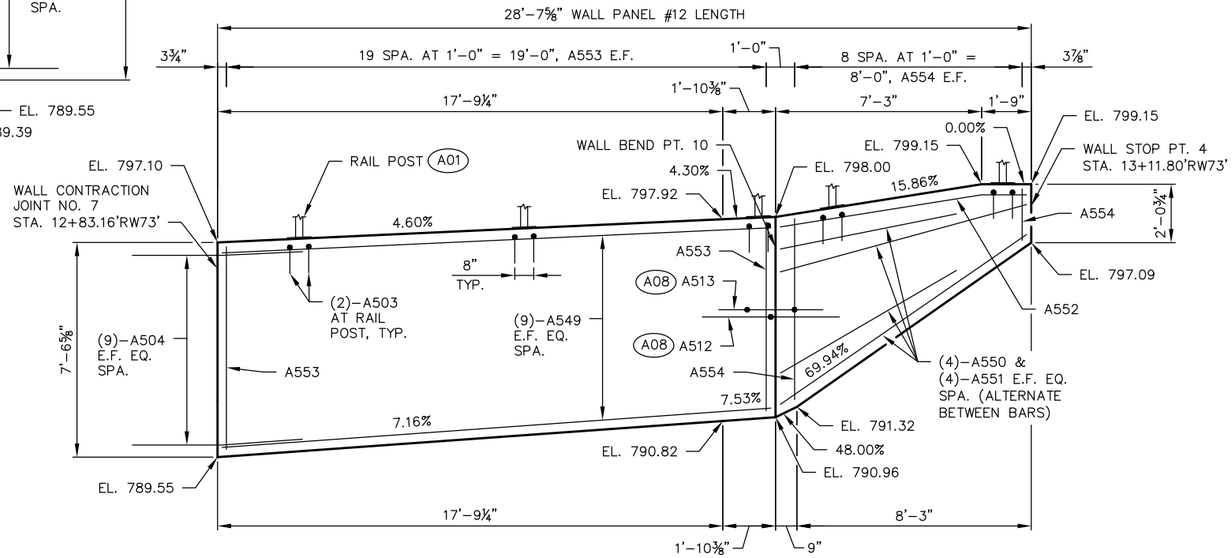


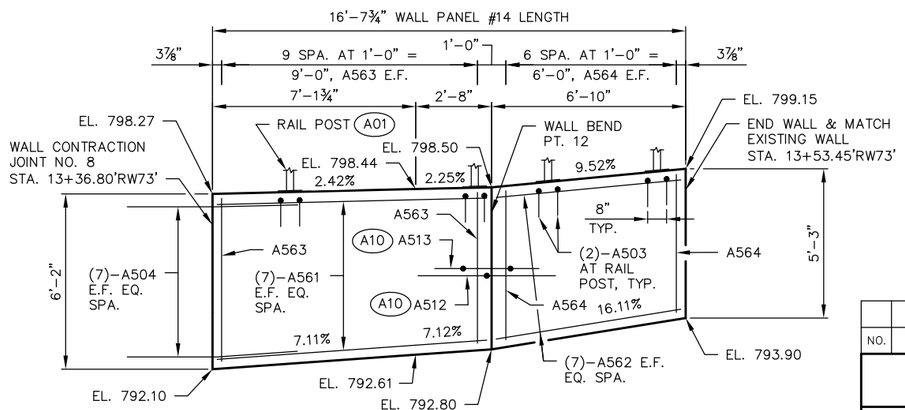
WALL PANEL #11



WALL PANEL #13



WALL PANEL #12



WALL PANEL #14

NOTES

- (A01) SEE WALL LAYOUT SHEETS FOR RAIL POST SPACING.
- (A08) ALIGN A512 & A513 BARS WITH A549 BARS.
- (A09) ALIGN A512 & A513 BARS WITH A558 BARS.
- (A10) ALIGN A512 & A513 BARS WITH A561 BARS.

F.F. – FRONT FACE
B.F. – BACK FACE
E.F. – EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE R–51–73

DRAWN BY CDS | PLANS CK'D ACK

WALL REINFORCEMENT (3 OF 4)

SHEET 16 OF 21

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I.D. 2250–12–70

PLOT DATE: May 11, 2018

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PLOT SCALE:

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STATE PROJECT NUMBER
2250–12–70

BILL OF BARS
RETAINING WALL

COATED = 11,820 LBS.

MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION	
A501	12		19'–7"			LONGIT. BAR WALL PANEL #1	LONGIT.
A502	40		3'–9"		⚠	VERTICAL BAR WALL PANEL #1	VERT.
A503	110		2'–3"	X		RAIL POST STIRRUP	VERT.
A504	126		6'–0"			LONGIT. BAR BETWEEN WALL PANELS	LONGIT.
A505	14		29'–8"			LONGIT. BAR WALL PANEL #2	LONGIT.
A506	60		5'–0"		⚠	VERTICAL BAR WALL PANEL #2	VERT.
A507	18		17'–7"			LONGIT. BAR WALL PANEL #3	LONGIT.
A508	6		10'–4"			LONGIT. BAR WALL PANEL #3	LONGIT.
A509	8		6'–5"			LONGIT. BAR WALL PANEL #3	LONGIT.
A510	2		12'–7"	X		LONGIT. BAR WALL PANEL #3 – BOT.	LONGIT.
A511	2		10'–3"	X		LONGIT. BAR WALL PANEL #3 – TOP	LONGIT.
(A11) A512	150		4'–9"	X		CORNER BAR AT WALL BENDS	LONGIT.
(A11) A513	75		3'–3"	X		CORNER BAR AT WALL BENDS	LONGIT.
A514	38		6'–11"		⚠	VERTICAL BAR WALL PANEL #3	VERT.
A515	20		4'–7"		⚠	VERTICAL BAR WALL PANEL #3	VERT.
A516	2		12'–8"	X		LONGIT. BAR WALL PANEL #4 – BOT.	LONGIT.
A517	2		10'–4"	X		LONGIT. BAR WALL PANEL #4 – TOP	LONGIT.
A518	6		10'–5"			LONGIT. BAR WALL PANEL #4	LONGIT.
A519	8		6'–5"			LONGIT. BAR WALL PANEL #4	LONGIT.
A520	18		6'–1"			LONGIT. BAR WALL PANEL #4	LONGIT.
A521	20		4'–8"		⚠	VERTICAL BAR WALL PANEL #4	VERT.
A522	14		7'–4"			VERTICAL BAR WALL PANEL #4	VERT.
A523	18		29'–8"			LONGIT. BAR WALL PANEL #5	LONGIT.
A524	60		6'–10"		⚠	VERTICAL BAR WALL PANEL #5	VERT.
A525	16		6'–4"			LONGIT. BAR WALL PANEL #6	LONGIT.
A526	16		14'–10"			LONGIT. BAR WALL PANEL #6	LONGIT.
A527	14		6'–4"			VERTICAL BAR WALL PANEL #6	VERT.
A528	30		4'–10"		⚠	VERTICAL BAR WALL PANEL #6	VERT.
A529	16		14'–6"			LONGIT. BAR WALL PANEL #7	LONGIT.
A530	16		6'–10"			LONGIT. BAR WALL PANEL #7	LONGIT.
A531	30		5'–5"		⚠	VERTICAL BAR WALL PANEL #7	VERT.
A532	14		6'–4"			VERTICAL BAR WALL PANEL #7	VERT.
A533	18		10'–8"			LONGIT. BAR WALL PANEL #8	LONGIT.
A534	8		9'–11"		⚠	LONGIT. BAR WALL PANEL #8	LONGIT.
A535	8		6'–5"			LONGIT. BAR WALL PANEL #8	LONGIT.
A536	2		8'–10"	X		LONGIT. BAR WALL PANEL #8 – TOP	LONGIT.
A537	22		6'–8"			VERTICAL BAR WALL PANEL #8	VERT.
A538	18		4'–7"		⚠	VERTICAL BAR WALL PANEL #8	VERT.
A539	8		9'–10"		⚠	LONGIT. BAR WALL PANEL #9	LONGIT.
A540	8		6'–5"			LONGIT. BAR WALL PANEL #9	LONGIT.
A541	2		8'–9"	X		LONGIT. BAR WALL PANEL #9 – TOP	LONGIT.
A542	18		12'–8"			LONGIT. BAR WALL PANEL #9	LONGIT.
A543	18		4'–9"		⚠	VERTICAL BAR WALL PANEL #9	VERT.
A544	26		7'–5"			VERTICAL BAR WALL PANEL #9	VERT.
A545	18		29'–8"			LONGIT. BAR WALL PANEL #10	LONGIT.
A546	60		7'–3"			VERTICAL BAR WALL PANEL #10	VERT.
A547	18		29'–8"			LONGIT. BAR WALL PANEL #11	LONGIT.
A548	60		7'–1"			VERTICAL BAR WALL PANEL #11	VERT.
A549	18		19'–3"			LONGIT. BAR WALL PANEL #12	LONGIT.
A550	8		9'–8"		⚠	LONGIT. BAR WALL PANEL #12	LONGIT.
A551	8		6'–8"			LONGIT. BAR WALL PANEL #12	LONGIT.
A552	2		8'–9"	X		LONGIT. BAR WALL PANEL #12 – TOP	LONGIT.
A553	40		6'–10"		⚠	VERTICAL BAR WALL PANEL #12	VERT.
A554	18		4'–0"		⚠	VERTICAL BAR WALL PANEL #12	VERT.
A555	6		9'–6"		⚠	LONGIT. BAR WALL PANEL #13	LONGIT.
A556	6		6'–11"			LONGIT. BAR WALL PANEL #13	LONGIT.
A557	2		8'–9"	X		LONGIT. BAR WALL PANEL #13 – TOP	LONGIT.
A558	14		10'–8"			LONGIT. BAR WALL PANEL #13	LONGIT.
A559	18		4'–1"		⚠	VERTICAL BAR WALL PANEL #13	VERT.
A560	22		5'–11"		⚠	VERTICAL BAR WALL PANEL #13	VERT.
A561	14		9'–5"			LONGIT. BAR WALL PANEL #14	LONGIT.
A562	14		6'–6"			LONGIT. BAR WALL PANEL #14	LONGIT.
A563	20		5'–5"		⚠	VERTICAL BAR WALL PANEL #14	VERT.
A564	14		4'–10"			VERTICAL BAR WALL PANEL #14	VERT.

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

⚠ LENGTH SHOWN FOR BARS IN SERIES IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE "BAR SERIES TABLE" FOR ACTUAL LENGTHS.

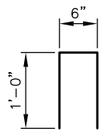
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
A502	2 SERIES OF 20	3'–4" TO 4'–3"
A506	2 SERIES OF 30	4'–1" TO 6'–0"
A514	2 SERIES OF 19	6'–3" TO 7'–7"
A515	2 SERIES OF 10	1'–8" TO 7'–7"
A521	2 SERIES OF 10	1'–9" TO 7'–7"
A524	2 SERIES OF 30	6'–6" TO 7'–3"
A528	2 SERIES OF 15	3'–7" TO 6'–2"
A531	2 SERIES OF 15	4'–7" TO 6'–3"
A534	2 SERIES OF 4	8'–11" TO 10'–11"
A538	2 SERIES OF 9	2'–3" TO 6'–11"
A539	2 SERIES OF 4	8'–10" TO 10'–11
A543	2 SERIES OF 9	2'–2" TO 7'–4"
A550	2 SERIES OF 4	8'–10" TO 10'–6"
A553	2 SERIES OF 20	6'–7" TO 7'–1"
A554	2 SERIES OF 9	1'–9" TO 6'–4"
A555	2 SERIES OF 3	8'–10" TO 10'–3"
A559	2 SERIES OF 9	1'–11" TO 6'–4"
A560	2 SERIES OF 11	5'–9" TO 6'–2"
A563	2 SERIES OF 10	5'–3" TO 5'–8"

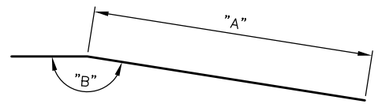
BUNDLE AND TAG EACH SERIES SEPARATELY.

NOTE

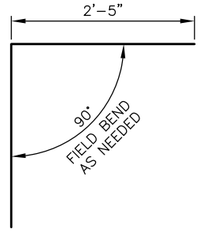
(A11) FIELD BEND A512 & A513 BARS AS NEEDED. A512 & A513 BARS LOCATED AT WALL BEND PT. 1, WALL BEND PT. 2, WALL BEND PT. 3, WALL BEND PT. 4, WALL BEND PT. 6, WALL BEND PT. 7, WALL BEND PT. 10, WALL BEND PT. 11, & WALL BEND PT. 12. ALIGN A512 & A513 BARS WITH LONGITUDINAL BARS ON EACH FACE OF WALL. SEE GENERAL PLAN SHEETS FOR LOCATION OF BEND POINTS.



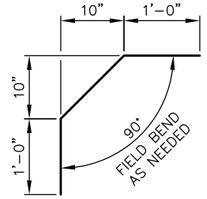
A503



A510, A511, A516, A517, A536, A541, A552, & A557



A512



A513

BAR BEND DIMENSIONS

MARK	"A"	"B"
A510	11'–6"	147°
A511	8'–10"	175°
A516	11'–7"	144°
A517	9'–2"	175°
A536	7'–3"	168°
A541	7'–2"	172°
A552	7'–2"	171°
A557	7'–2"	171°

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY CDS | PLANS CK'D ACK

WALL REINFORCEMENT (4 OF 4)

SHEET 17 OF 21

735

I.D. 2250–12–70

PLOT DATE: May 11, 2018

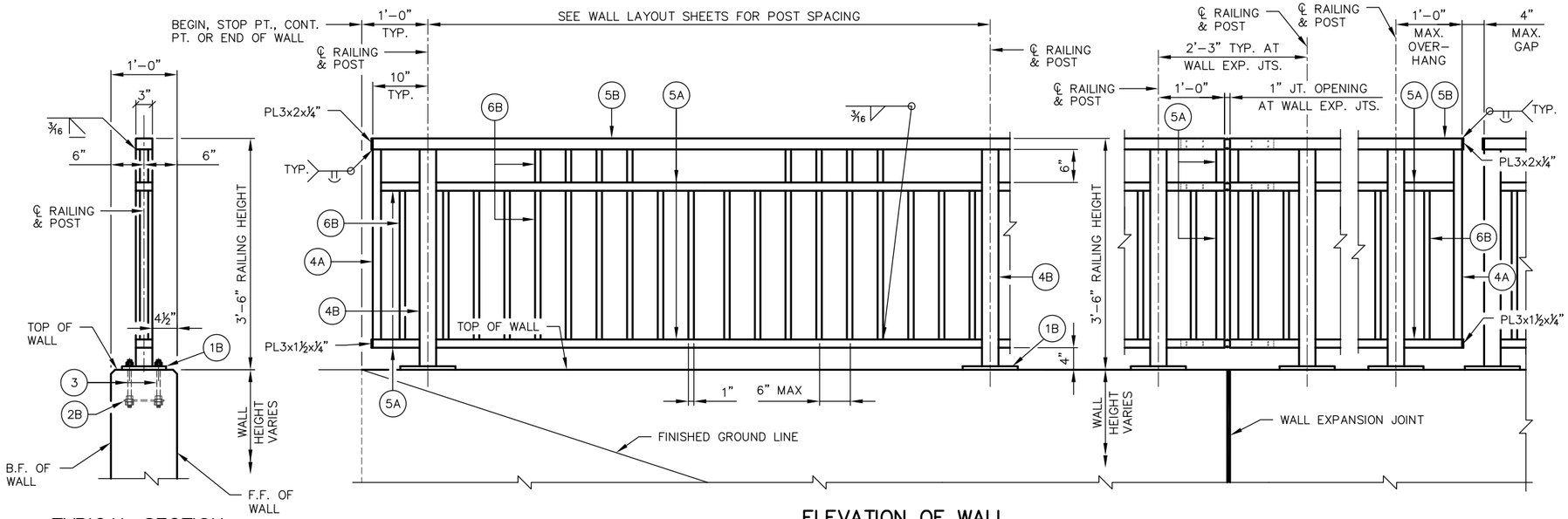
FILE: 14–17–R510073_rein.dwg
PLOT SCALE:

8

8

STATE PROJECT NUMBER

2250–12–70



TYPICAL SECTION

ELEVATION OF WALL

NOTES

BID ITEM SHALL BE "RAILING STEEL PEDESTRIAN TYPE C4 R–51–73", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED AND USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

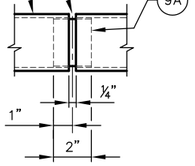
■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON–STAINING GRAY NON–BITUMINOUS JOINT SEALER.

ALL JOINTS IN CONCRETE COPING ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS.

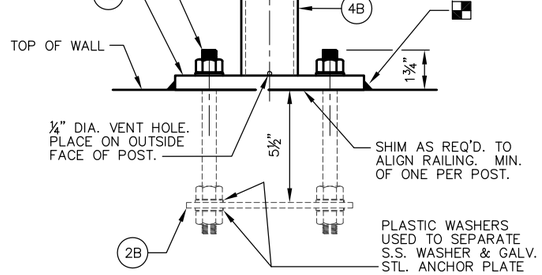
VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.



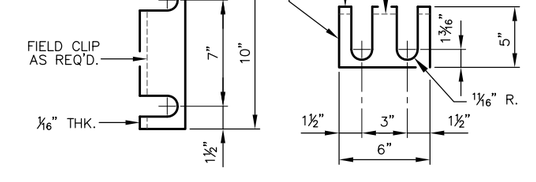
SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



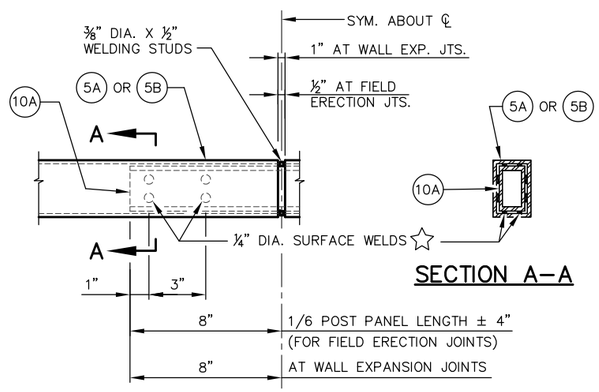
ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



RAIL POST SHIM DETAIL

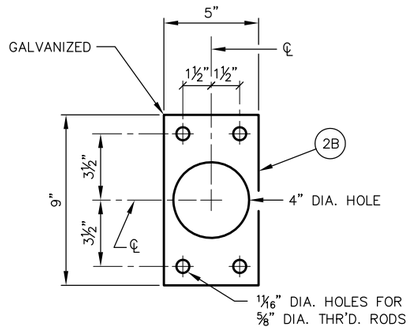
(2 SETS PER POST)



SECTION A–A

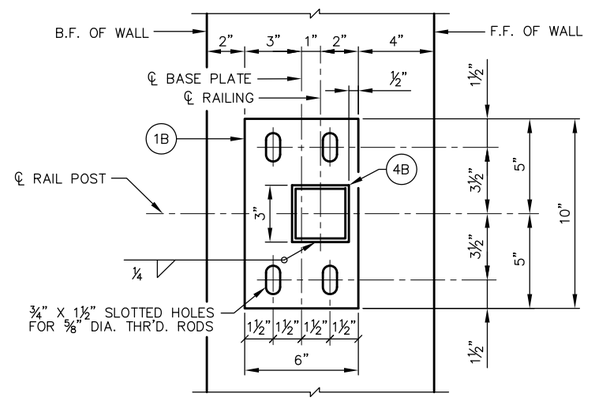
FIELD ERECTION JOINT DETAIL

☆ MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



ANCHOR PLATE

FOR 3" X 3" X 3/16" POSTS (4B)



TYPICAL RAIL POST BASE PLATE

FOR 3" X 3" X 3/16" POSTS (4B)

LEGEND

- (1B) PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES.
- (2B) ¼" X 5" X 9" ANCHOR PLATE WITH 1/16" DIA. HOLES FOR THR'D. RODS NO. 3.
- (3) ⅝" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS ⅝–INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.
- (4A) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 5.
- (4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.
- (5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4.
- (5B) STRUCTURAL TUBING 3" X 2" X 3/16" RAILS. WELD TO NO. 1 & NO. 4.
- (6B) BAR 1" X 1½" PICKETS. WELD TO NO. 5. (SPACE AT 6" MAX. ℄ TO ℄ SPACING). PLACE VERTICAL.
- (9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".
- (10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'–4" @ FIELD ERECTION JTS.)

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY CDS | PLANS CK'D ACK

STEEL RAILING DETAILS

SHEET 18 OF 21

736

8

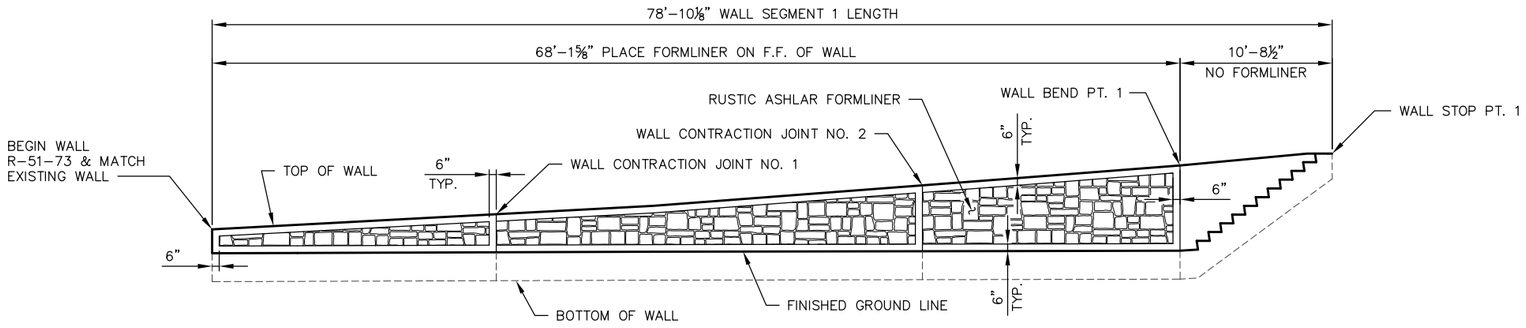
8

I.D. 2250–12–70

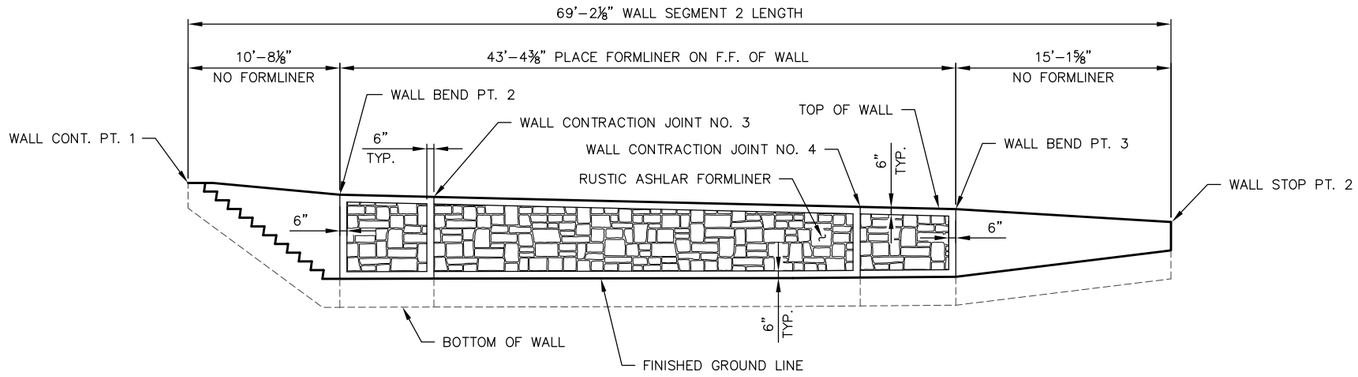
PLOT DATE: May 11, 2018

FILE: 18–R510073_rail.dwg
PLOT SCALE:

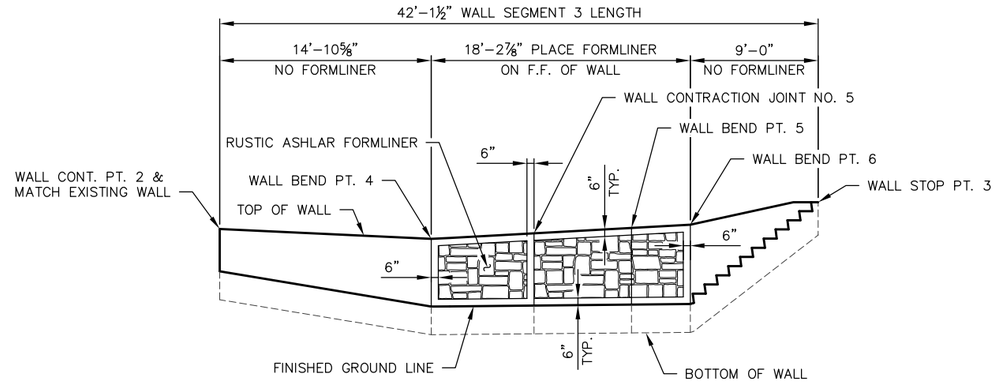
STATE PROJECT NUMBER
2250–12–70



FORMLINER LAYOUT ON WALL SEGMENT 1



FORMLINER LAYOUT ON WALL SEGMENT 2



FORMLINER LAYOUT ON WALL SEGMENT 3

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY CDS | PLANS CK'D ACK

AESTHETIC DETAILS (1 OF 2)

SHEET 19 OF 21

737

8

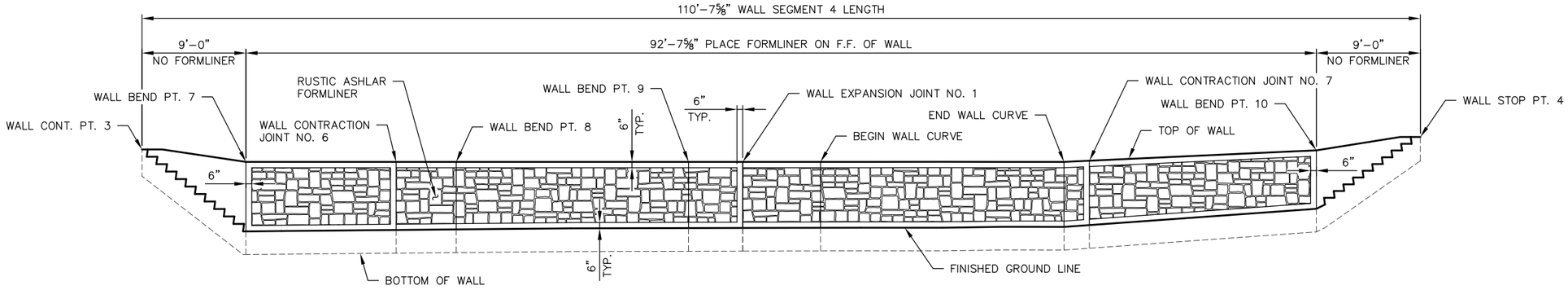
8

I.D. 2250–12–70

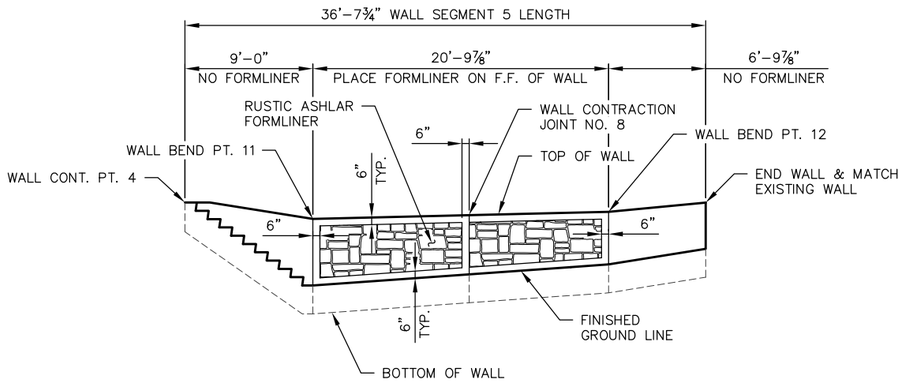
PLOT DATE: May 11, 2018

FILE: 19–20–R510073_aesth.dwg
PLOT SCALE:

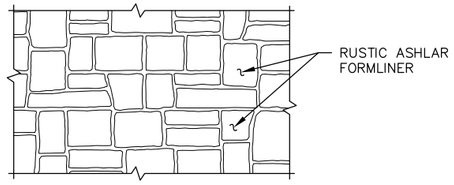
STATE PROJECT NUMBER
2250–12–70



FORMLINER LAYOUT ON WALL SEGMENT 4

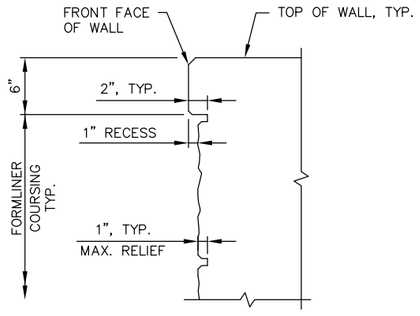


FORMLINER LAYOUT ON WALL SEGMENT 5



RUSTIC ASHLAR FORMLINER DETAIL

FORMLINER THICKNESS = 2"
SIZE = 8" TO 32"
MAX. RELIEF = 1"



SECTION THRU FORMLINER

NOTES

FORMLINER COURSING SHALL BE LEVEL ACROSS JOINTS.

THE FORMLINER COURSING SHALL BE VERTICALLY ALIGNED.

THE FORMLINER COURSING SHALL BE CONTINUOUS AND LEVEL ACROSS CONSTRACTION AND EXPANSION JOINTS.

WRAPAROUND/MATCH FORMLINER PATTERN AT WALL BEND POINTS.

WALL R–51–73 DOES NOT RECIEVE ANY CONCRETE STAINING. LEAVE FORMLINER PLAIN CONCRETE.

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY CDS | PLANS CK'D ACK

AESTHETIC DETAILS (2 OF 2)

SHEET 20 OF 21

738

8

8

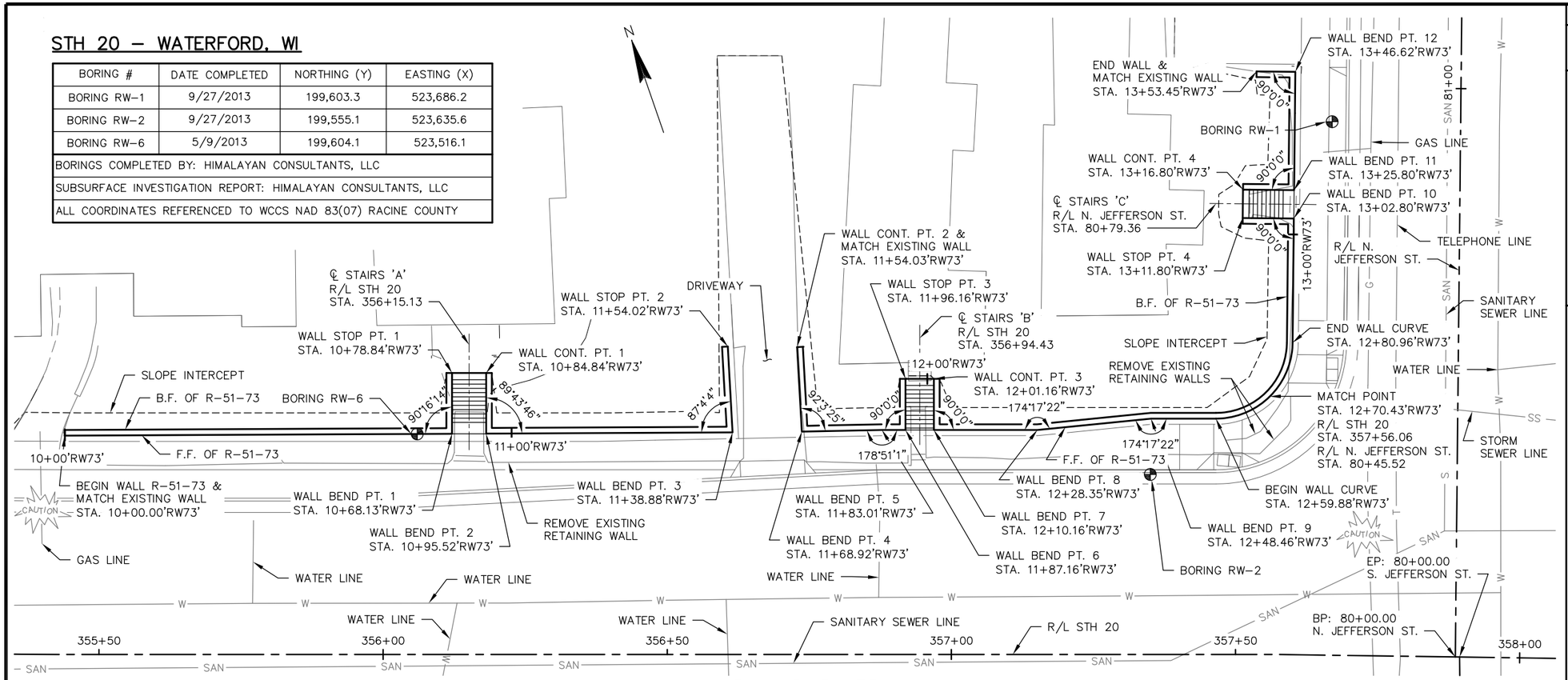
I.D. 2250–12–70

PLOT DATE: May 11, 2018

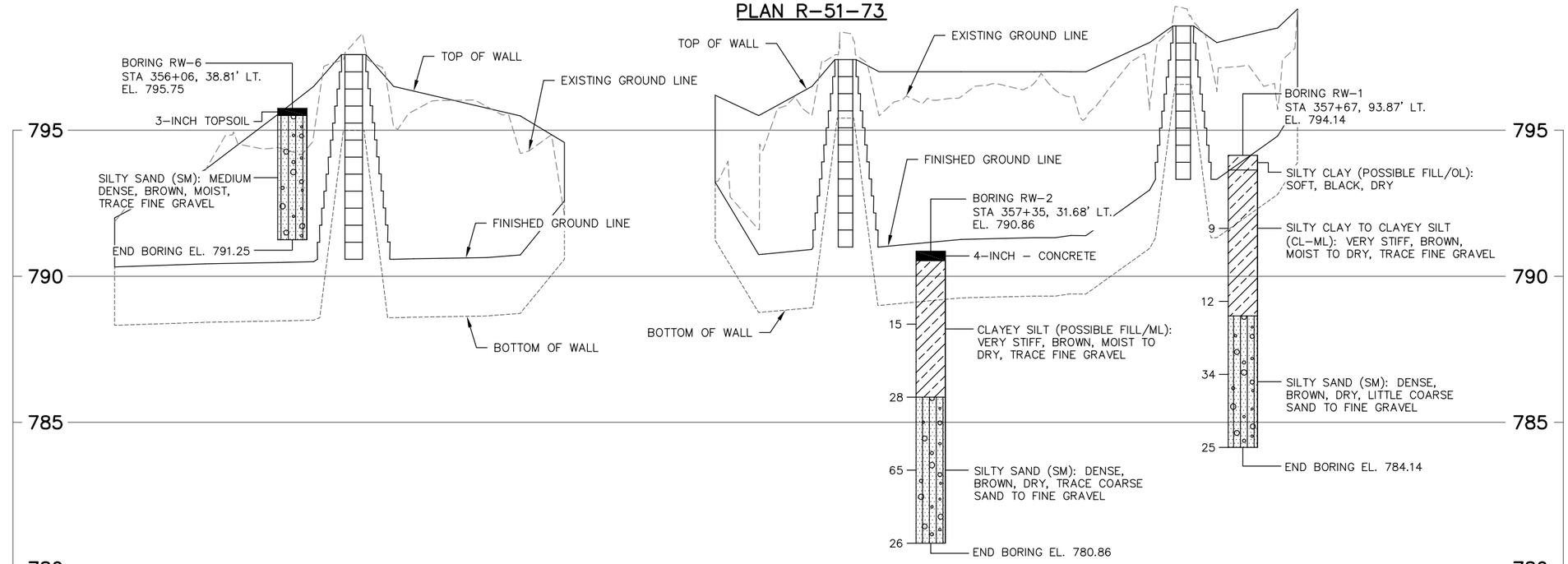
FILE: 19–20–R510073_aesth.dwg
PLOT SCALE:

STH 20 – WATERFORD, WI

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BORING RW–1	9/27/2013	199,603.3	523,686.2
BORING RW–2	9/27/2013	199,555.1	523,635.6
BORING RW–6	5/9/2013	199,604.1	523,516.1
BORINGS COMPLETED BY: HIMALAYAN CONSULTANTS, LLC			
SUBSURFACE INVESTIGATION REPORT: HIMALAYAN CONSULTANTS, LLC			
ALL COORDINATES REFERENCED TO WCCS NAD 83(07) RACINE COUNTY			



PLAN R–51–73



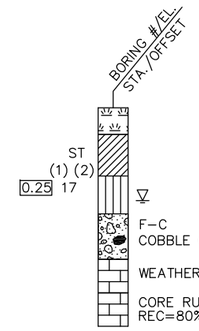
STATE PROJECT NUMBER

2250–12–70

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE SPECIFIED, THE SPT 'N' VALUE IS BASED ON AASHTO T–206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F–FINE M–MEDIUM C–COARSE ST–SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–73

DRAWN BY CDS | PLANS CK'D ACK

SUBSURFACE EXPLORATION

SHEET 21 OF 21

739

I.D. 2250–12–70

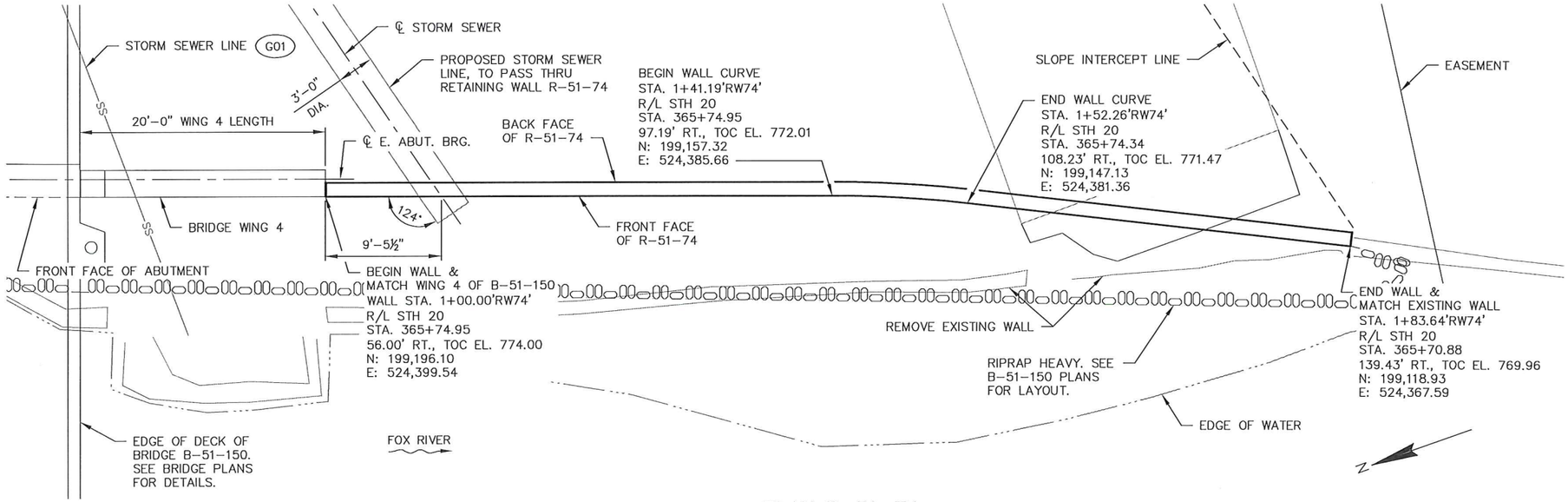
PLOT DATE: May 11, 2018

FILE: 21–R510073_bor.dwg
PLOT SCALE:

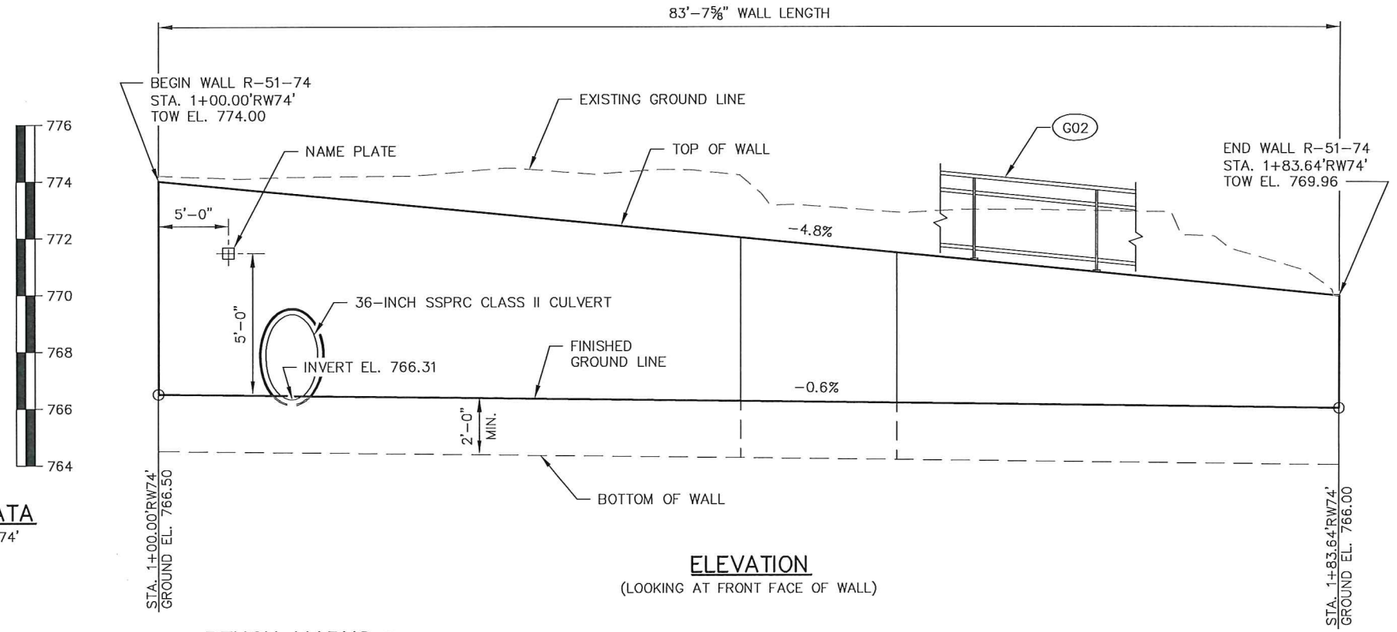
8

8

STATE PROJECT NUMBER
2250–12–70



PLAN R–51–74
(SOLDIER PILE RETAINING WALL)



ELEVATION
(LOOKING AT FRONT FACE OF WALL)

WALL CURVE DATA

PI WALL STA. 1+46.73'RW74'
N: 199,152.11
E: 524,383.79
DELTA: 6°20'23"
D: 57°17'45"
T: 5.54
L: 11.07
R: 100.00
PC WALL STA. 1+41.19RW74'
N: 199,157.32
E: 524,385.66
PT WALL STA. 1+52.26'RW74'
N: 199,147.13
E: 524,381.36

BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEVATION
16400	366+05.50, 33.64' LT.	DISK IN TOP OF EAST END OF NORTH PARAPET WALL ON BRIDGE	777.52

HORIZONTAL DATUM AND ADJUSTMENT: NAD 83 (2007)
VERTICAL DATUM AND ADJUSTMENT: NAVD 88 (2007)
COORDINATE REFERENCE SYSTEM: WCCS RACINE CO

NOTES

TOW – TOP OF WALL
(G01) UTILITIES SHOWN ARE TO BE RELOCATED.
(G02) RAILING STEEL PEDESTRIAN TYPE C4. SEE "STEEL RAILING DETAILS" SHEET.

DESIGN DATA

LIVE LOAD:

LIVE LOAD SURCHARGE ——— 100 P.S.F.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
RETAINING WALLS ——— f'c = 4,000 P.S.I.
SOLDIER PILE FOOTINGS ——— f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT, GRADE 60 ——— fy = 60,000 P.S.I.

STRUCTURAL STEEL HS ——— fy = 50,000 P.S.I.

* TIMBER LAGGING ——— Fb = 975 P.S.I.
Fv = 90 P.S.I.
$Fc_{\perp}$ = 565 P.S.I.
E = 1,600,000 P.S.I.

* MATERIAL VALUES BASED ON DOUGLAS FIR–LARCH (NO. 2) OR SOUTHER PINE (NO. 2), CONSTRUCTION GRADE, ROUGH CUT LUMBER.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL DIMENSIONS ARE IN FEET (FT) UNLESS OTHERWISE NOTED.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER UNLESS OTHERWISE SHOWN OR NOTED.

ALL BAR STEEL REINFORCEMENT IS TO BE EPOXY COATED.

ALL WALL STATIONING AND OFFSETS ARE GIVEN TO THE FRONT FACE OF THE WALL (R–51–74).

THE EXISTING GROUND LINE IS THE UPPER LIMIT OF EXCAVATION FOR STRUCTURES.

ALL STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270 GRADE 50 EXCEPT AS NOTED ON PLANS.

THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND PERFORMANCE OF THE TIMBER LAGGING.

ANY ADDITIONAL SHORING REQUIRED TO CONSTRUCT WALL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND INCLUDED TO WALL CONSTRUCTION.

LIST OF DRAWINGS

1. GENERAL PLAN
2. WALL LAYOUT (1 OF 2)
3. WALL LAYOUT (2 OF 2)
4. QUANTITIES, WALL DATA & PROFILE
5. WALL DETAILS (1 OF 2)
6. WALL DETAILS (2 OF 2)
7. WALL REINFORCEMENT
8. STEEL RAILING DETAILS
9. AESTHETIC LAYOUT
10. SUBSURFACE EXPLORATION

WISCONSIN
ANDREW C. KNUTSON
E-34662
SPRING GREEN, WI
5-11-18
PROFESSIONAL ENGINEER

CONSULTANT CONTACT
ANDY KNUTSON, P.E., S.E.
(608) 588–7866

BRIDGE OFFICE CONTACT
WILLIAM DREHER, P.E.
(608) 266–8489

NO.	DATE	REVISION	BY

WESTBROOK Associated Engineers, Inc.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WI 53588
PHONE (608) 588–7866
FAX (608) 588–7954

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 05/30/18
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R–51–74

RETAINING WALL ALONG THE FOX RIVER

COUNTY	~~TOWN/CITY~~/VILLAGE
RACINE	WATERFORD

DESIGN SPEC. AASHTO LRFD DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
CDS	ACK	CDS	ACK

GENERAL PLAN

SHEET 1 OF 10

740

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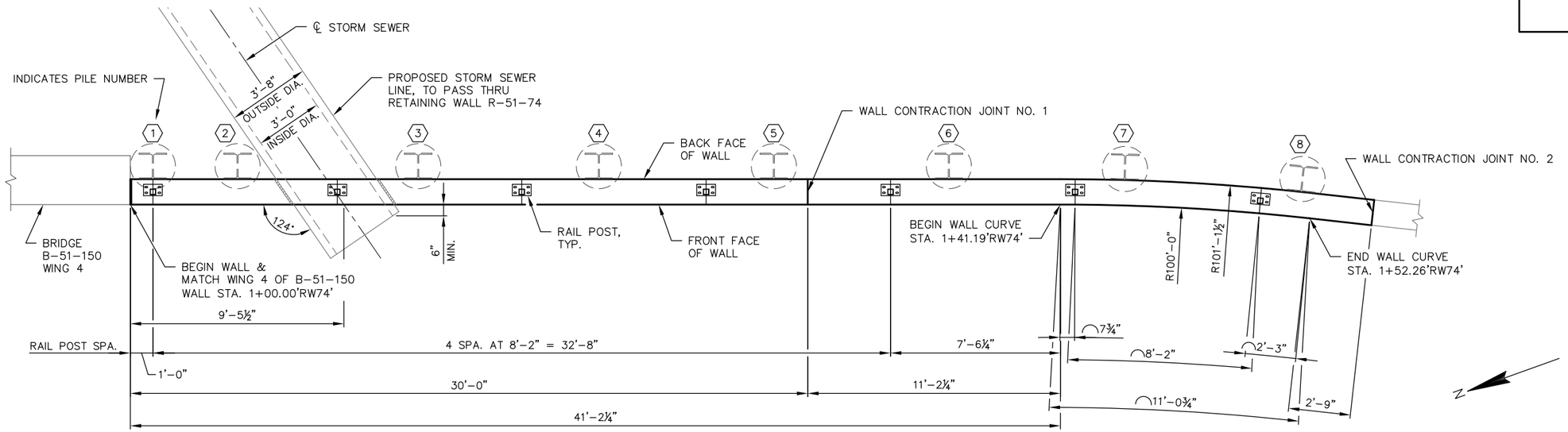
8

I.D. 2250–12–70 PLOT DATE: May 11, 2018

FILE: 01–R510074_fsh.dwg
PLOT SCALE:

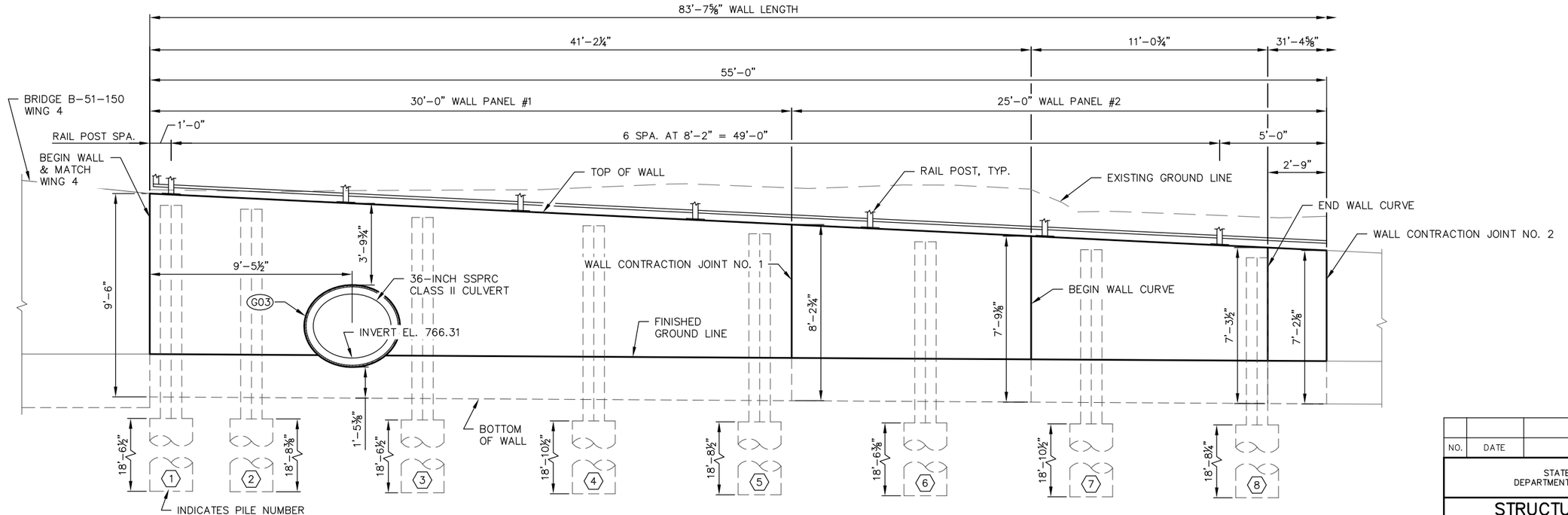
STATE PROJECT NUMBER
2250–12–70



WALL SEGMENT 1 PLAN VIEW

NOTE

(G03) 1" FILLER WRAPPED AROUND STORM SEWER PIPE. SEAL SURFACES OF 1" FILLER WITH NON–STAINING, GRAY NON–BITUMINOUS, JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).



WALL SEGMENT 1 ELEVATION VIEW

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–74

DRAWN BY CDS | PLANS CK'D ACK

WALL LAYOUT (1 OF 2)

SHEET 2 OF 10

741

I.D. 2250–12–70

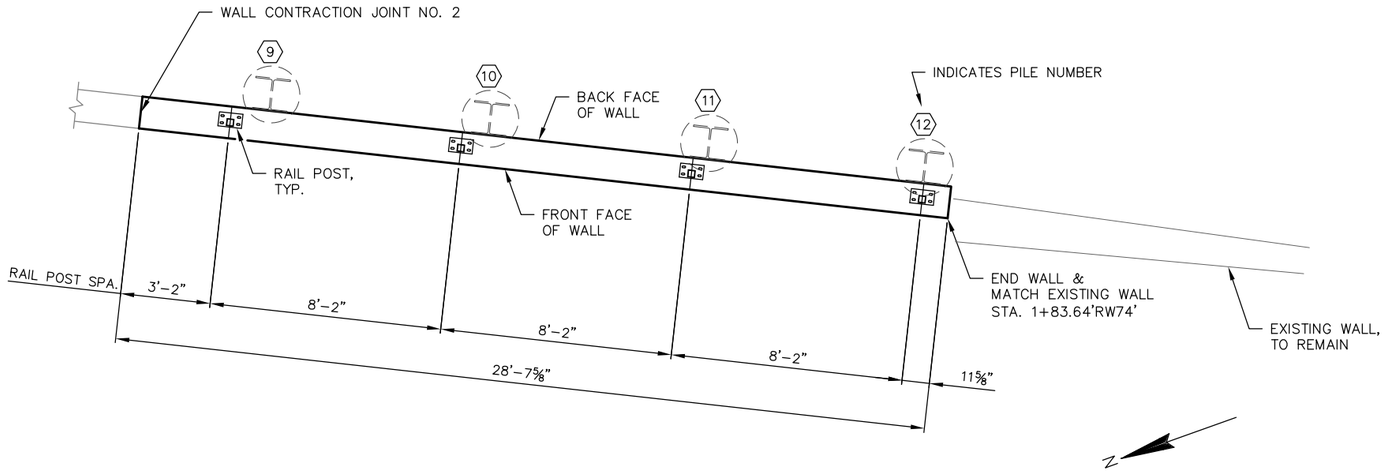
PLOT DATE: May 11, 2018

FILE: 02–03–R510074_lay.dwg
PLOT SCALE:

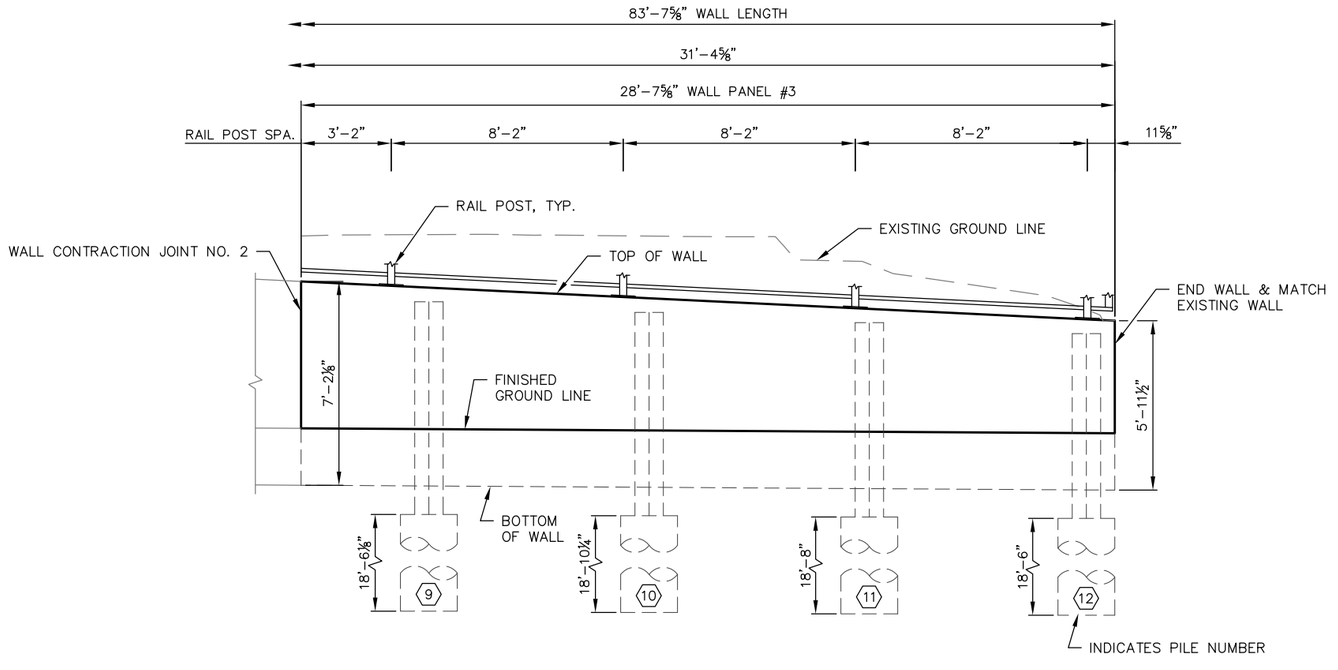
8

8

STATE PROJECT NUMBER
2250–12–70



WALL SEGMENT 2 PLAN VIEW



WALL SEGMENT 2 ELEVATION VIEW

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–74

DRAWN BY CDS | PLANS CK'D ACK

WALL LAYOUT (2 OF 2)

SHEET 3 OF 10

742

I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 02-03-R510074_lay.dwg
PLOT SCALE:

STATE PROJECT NUMBER
2250–12–70

WALL & PILE REFERENCE TABLE

WALL STATION	REFERENCE/ PILE NUMBER	OFFSET – SEE NOTE BELOW	TOP OF WALL	FINISHED GROUND LINE AT WALL FACE	BOTTOM OF WALL	WALL HEIGHT (FT)	EXISTING GROUND LINE AT WALL FACE	TOP OF PILE	TOP OF FOOTING	BOTTOM OF FOOTING	FOOTING LENGTH	SOLDIER PILE SECTION	SOLDIER PILE LENGTH (FT)	NO. OF STUDS
1+00.00'RW75'	BEGIN WALL	---	774.00	766.50	764.50	9.50	774.19	---	---	---	---	---	---	---
1+01.00'RW75'	PILE 1	1.58	773.95	766.49	764.49	9.46	774.17	773.45	763.49	744.95	18.54	HP14x89	28.50	12
1+04.75'RW75'	PILE 2	1.58	773.77	766.47	764.47	9.30	774.10	773.27	763.47	744.77	18.70	HP14x89	28.50	12
1+12.75'RW75'	PILE 3	1.58	773.38	766.42	764.42	8.96	774.16	772.88	763.42	744.88	18.54	HP14x89	28.00	12
1+20.75'RW75'	PILE 4	1.58	773.00	766.38	764.38	8.62	774.28	772.50	763.38	744.50	18.88	HP14x89	28.00	12
1+28.50'RW75'	PILE 5	1.58	772.62	766.33	764.33	8.29	774.33	772.12	763.33	744.62	18.71	HP14x89	27.50	10
1+30.00'RW75'	C.J. 1	---	772.55	766.32	764.32	8.23	774.27	---	---	---	---	---	---	---
1+36.25'RW75'	PILE 6	1.58	772.25	766.28	764.28	7.97	774.39	771.75	763.28	744.75	18.53	HP14x89	27.00	10
1+41.19'RW75'	BEGIN CURVE	---	772.01	766.25	764.25	7.76	774.18	---	---	---	---	---	---	---
1+44.00'RW75'	PILE 7	1.58	771.87	766.24	764.24	7.63	773.12	771.37	763.24	744.37	18.87	HP14x89	27.00	10
1+51.75'RW75'	PILE 8	1.58	771.50	766.19	764.19	7.31	772.90	771.00	763.19	744.50	18.69	HP14x89	26.50	10
1+52.30'RW75'	END CURVE	---	771.47	766.19	764.19	7.28	772.88	---	---	---	---	---	---	---
1+55.00'RW75'	C.J. 2	---	771.34	766.17	764.17	7.17	772.90	---	---	---	---	---	---	---
1+59.50'RW75'	PILE 9	1.58	771.13	766.14	764.14	6.99	772.97	770.63	763.14	744.63	18.51	HP14x89	26.00	8
1+67.25'RW75'	PILE 10	1.58	770.75	766.10	764.10	6.65	772.95	770.25	763.10	744.25	18.85	HP14x89	26.00	8
1+75.00'RW75'	PILE 11	1.58	770.38	766.05	764.05	6.33	771.95	769.88	763.05	744.38	18.67	HP14x89	25.50	8
1+82.64'RW75'	PILE 12	1.58	770.01	766.01	764.01	6.00	770.33	769.51	763.01	744.51	18.50	HP14x89	25.00	8
1+83.64'RW75'	END WALL	---	769.96	766.00	764.00	5.96	769.96	---	---	---	---	---	---	---

NOTE: ALL WALL STATIONING & OFFSETS ARE BASED OFF OF THE FRONT FACE OF THE WALL ALIGNMENT TO CENTER OF PILE.

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTALS
206.3000.02	EXCAVATION FOR STRUCTURES RETAINING WALLS R–51–74	LS	1
502.0110.S	CONCRETE MASONRY SOLDIER PILE FOOTINGS	CY	27
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	24
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	3,560
506.0605	STRUCTURAL STEEL HS	LB	28,800
506.3009	WELDED STUD SHEAR CONNECTORS 3/4 X 5–INCH	EACH	120
513.8021.04	RAILING STEEL PEDESTRIAN TYPE C4 R–51–74	LF	84
517.1050.S.03	ARCHITECTURAL SURFACE TREATMENT R–51–74	SF	490
612.0406	PIPE UNDERDRAIN WRAPPED 6–INCH	LF	100
636.0050.S	FOUNDATION DRILLING 24–INCH DIAMETER	LF	224
645.0111	GEOTEXTILE FABRIC TYPE DF SCHEDULE A	SY	66
SPV.0110.01	TIMBER LAGGING	MBM	1.6
SPV.0165.02	GEOCOMPOSITE DRAIN BOARD	SF	532
	NON–BID ITEMS		
	PREFORMED JOINT FILLER	SIZE	¾"
	NON–BITUMINOUS JOINT SEALER	–––	–––

SOIL PARAMETERS

SOIL DESCRIPTIONS & APPROXIMATE ELEVATIONS	MOIST UNIT WEIGHT (PCF)	COHESION (PSF)	INTERNAL FRICTION ANGLE (DEGREES)	Ko	Ka	Kp
BORING S–4 & BORING S–6						
IMPORTED GRANULAR MATERIALS [1]	120	0	30	0.50	0.33	3.00
ON–SITE GRANULAR MATERIALS	120	0	29	0.52	0.35	2.88

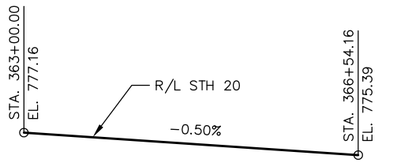
NOTES:

1. SPECIFIED AS GRADE 1 OR GRADE 2 IN SECTION 209.2 OF THE STANDARD SPECIFICATIONS.
2. Ko = AT–REST EARTH PRESSURE COEFFICIENT
3. Ka = ACTIVE EARTH PRESSURE COEFFICIENT
4. Kp = PASSIVE EARTH PRESSURE COEFFICIENT

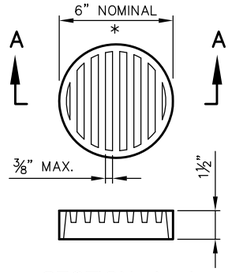
GEOMETRY TABLE

WALL STATION	R/L STH 20 STATION	R/L STH 20 OFFSET TO F.F. OF WALL	TOP OF WALL (TOW) EL.	FINISHED GROUND EL. AT F.F. OF WALL	EXISTING GROUND EL. AT F.F. OF WALL
1+00.00'RW74'	365+74.95	56.00' RT.	774.00	766.50	774.19
1+25.00'RW74'	365+74.95	81.00' RT.	772.79	766.35	774.46
1+50.00'RW74'	365+74.56	105.95' RT.	771.58	766.20	772.98
1+75.00'RW74'	365+71.83	130.80' RT.	770.38	766.05	771.95
1+83.64'RW74'	365+70.88	139.43' RT.	769.96	766.00	769.96

NOTE: ALL WALL STATIONING & OFFSETS ARE GIVEN AT THE FRONT FACE OF THE WALL.



PROFILE GRADE LINE, R/L STH 20



SECTION A–A

* DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1–INCH STAINLESS STEEL SHEET METAL SCREWS.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6–INCH".

RODENT SHIELD DETAIL

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–74

DRAWN BY CDS | PLANS CK'D ACK

QUANTITIES, WALL DATA & PROFILE

SHEET 4 OF 10

743

I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 04–R510074_data.dwg
PLOT SCALE:

8

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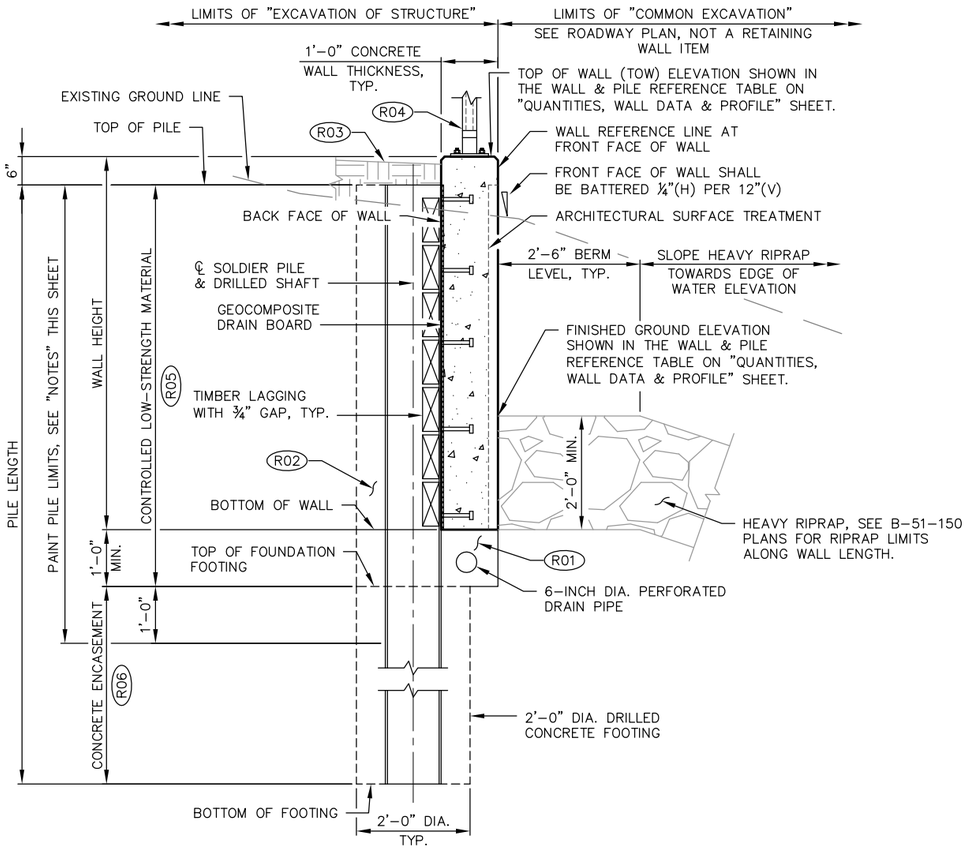
STATE PROJECT NUMBER

2250–12–70



TYPICAL SECTION THRU SOLDIER PILE WALL

(REINFORCEMENT NOT SHOWN FOR CLARITY)

NOTES

PAINT PILE FROM TOP OF PILE TO 1'–0" BELOW TOP OF FOOTING WITH A PRIME COAT OF ORGANIC ZINC–RICH PAINT. PREPARE THE SURFACE AND APPLY THE PAINT AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. PAINTING OF PILE IS INCLUDED WITH THE BID ITEM "STRUCTURAL STEEL HS".

PILES SHOULD BE SET WITH A ¼–INCH HORIZONTAL TO 1–FOOT VERTICAL BATTER.

FILL VOIDS BEHIND LAGGING WITH #1 OR #2 COARSE AGGREGATE. INCLUDED WITH BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALL R–51–74".

(R01) DRAINAGE AGGREGATE MINIMUM OF 1'–0" X 1'–0" BASE AGGREGATE OPEN GRADED IN GEOTEXTILE FABRIC, TYPE DF SCHEDULE A. BASE AGGREGATE IS INCLUDED IN THE PIPE UNDERDRAIN. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE "QUANTITIES, WALL DATA & PROFILE" SHEET.

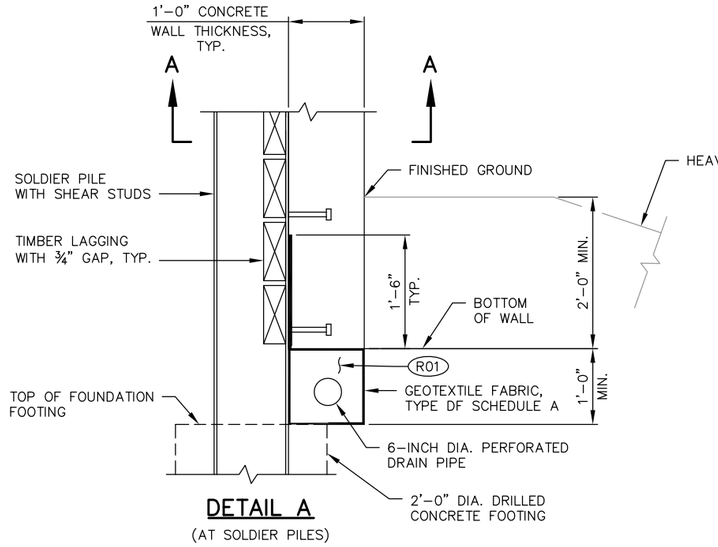
(R02) FILL AUGERED HOLE AROUND SOLDIER PILE AND ABOVE FOOTING WITH CONTROLLED LOW–STRENGTH MATERIAL (CLSM). INCLUDED WITH THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS R–51–74".

(R03) SLOPE BEHIND WALL VARIES. SEE ROADWAY CROSS SECTION.

(R04) RAILING STEEL PEDESTRIAN TYPE C4. SEE "STEEL RAILING DETAILS" SHEET.

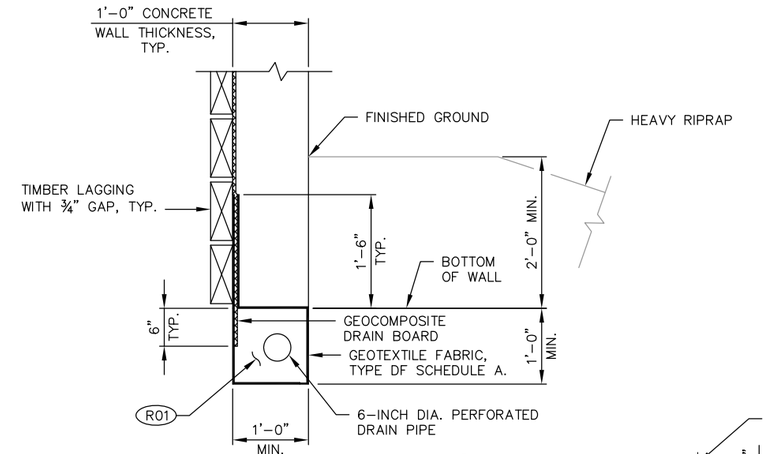
(R05) COST OF DRILLING AND CONTROLLING LOW STRENGTH MATERIAL IN DRILLED HOLES SHALL BE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS, R–51–74."

(R06) CONCRETE ENCASEMENT LIMITS INCLUDES THE PAY LIMITS FOR BOTH THE BID ITEM "FOUNDATION DRILLING 24–INCH DIAMETER" AND THE BID ITEM "CONCRETE MASONRY RETAINING WALLS."



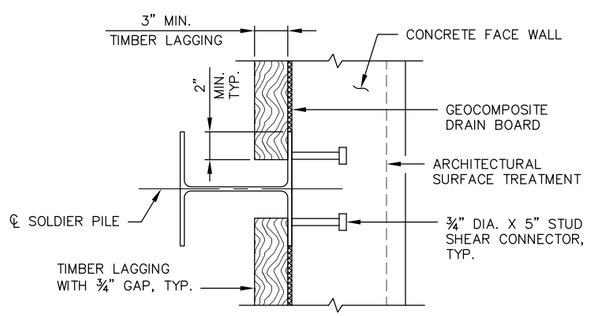
DETAIL A

(AT SOLDIER PILES)



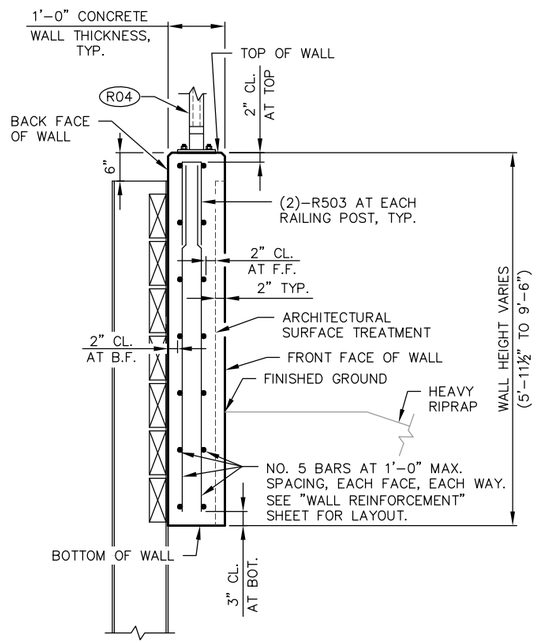
DETAIL B

(BETWEEN SOLDIER PILES)

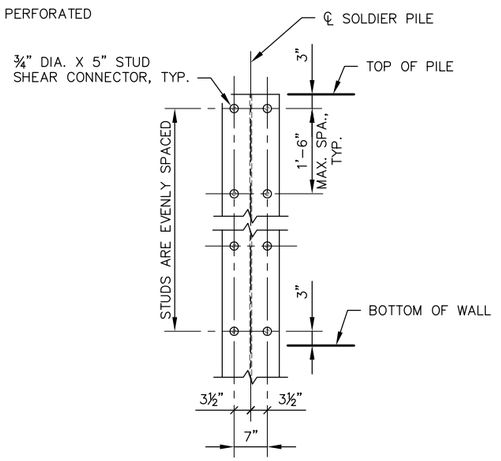


SECTION A–A

(REINFORCEMENT NOT SHOWN FOR CLARITY)



TYPICAL REINFORCEMENT LAYOUT



STUD SHEAR CONNECTION LAYOUT

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–74

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WALL DETAILS (1 OF 2)

SHEET 5 OF 10

744

I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 05–06–R510074_det.dwg
PLOT SCALE:

8

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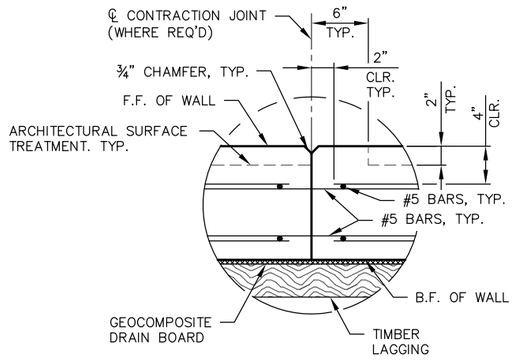
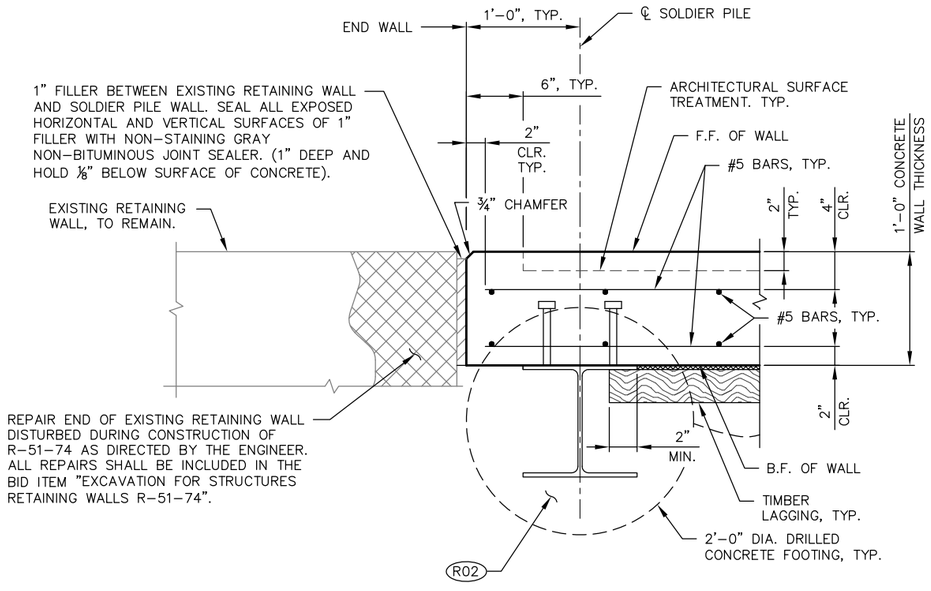
STATE PROJECT NUMBER

2250–12–70



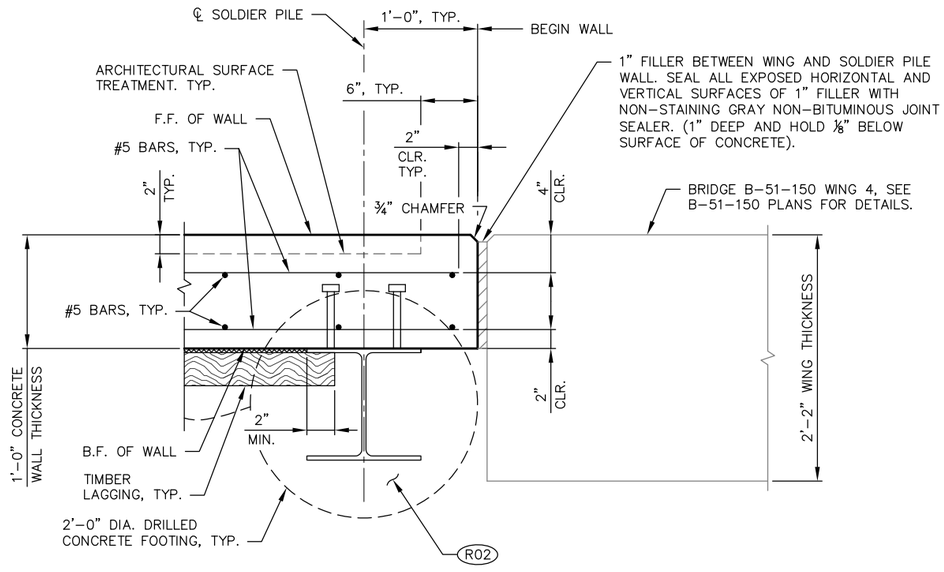
CONTRACTION JOINT DETAIL

(SEE WALL LAYOUT SHEETS FOR LOCATIONS)



END WALL DETAIL

(SEE WALL LAYOUT SHEETS FOR LOCATION)



BEGIN WALL DETAIL

(SEE WALL LAYOUT SHEETS FOR LOCATION)

NOTES

PAINT PILE FROM TOP OF PILE TO 1'–0" BELOW TOP OF FOOTING WITH A PRIME COAT OF ORGANIC ZINC–RICH PAINT. PREPARE THE SURFACE AND APPLY THE PAINT AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. PAINTING OF PILE IS INCLUDED WITH THE BID ITEM "STRUCTURAL STEEL HS".

(R02) FILL AUGERED HOLE AROUND SOLDIER PILE AND ABOVE FOOTING WITH CONTROLLED LOW–STRENGTH MATERIAL (CLSM). INCLUDED WITH THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS R–51–74".

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–74

DRAWN BY CDS | PLANS CK'D ACK

WALL DETAILS (2 OF 2)

SHEET 6 OF 10

745

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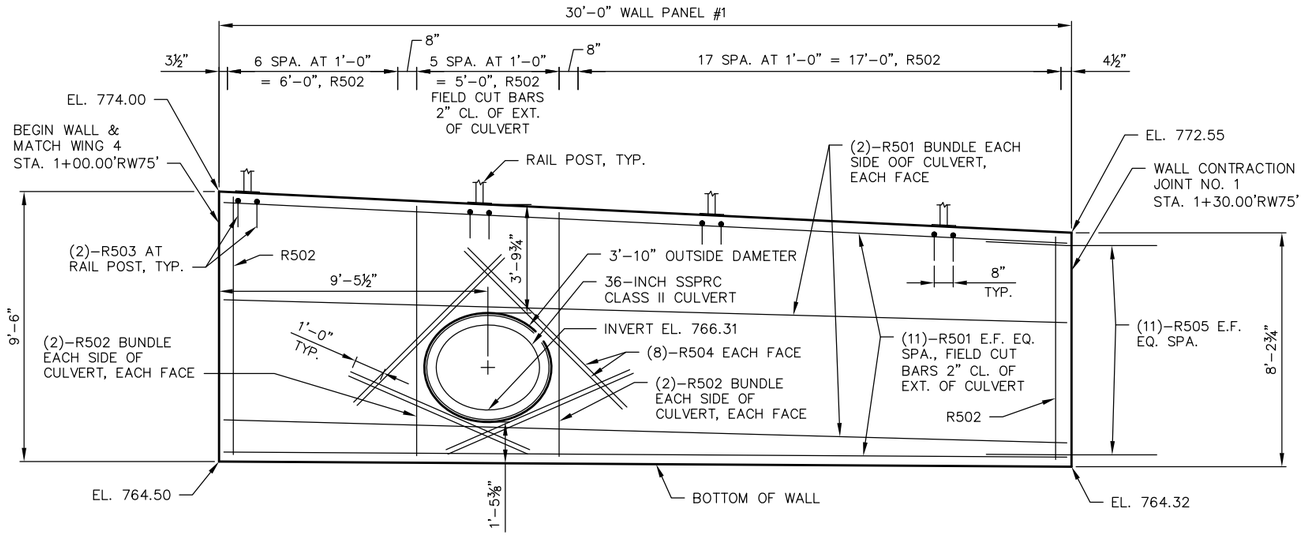
8

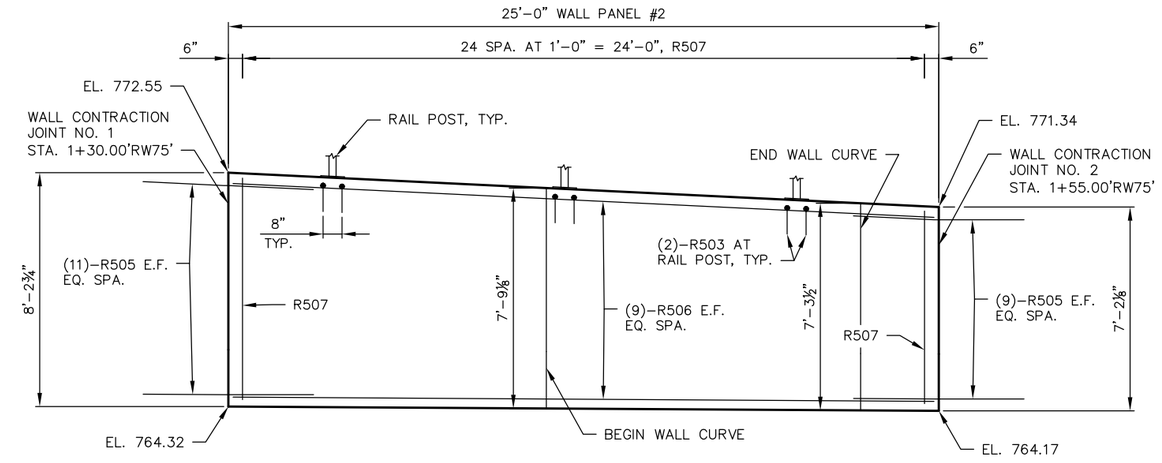
I.D. 2250–12–70

PLOT DATE: May 11, 2018

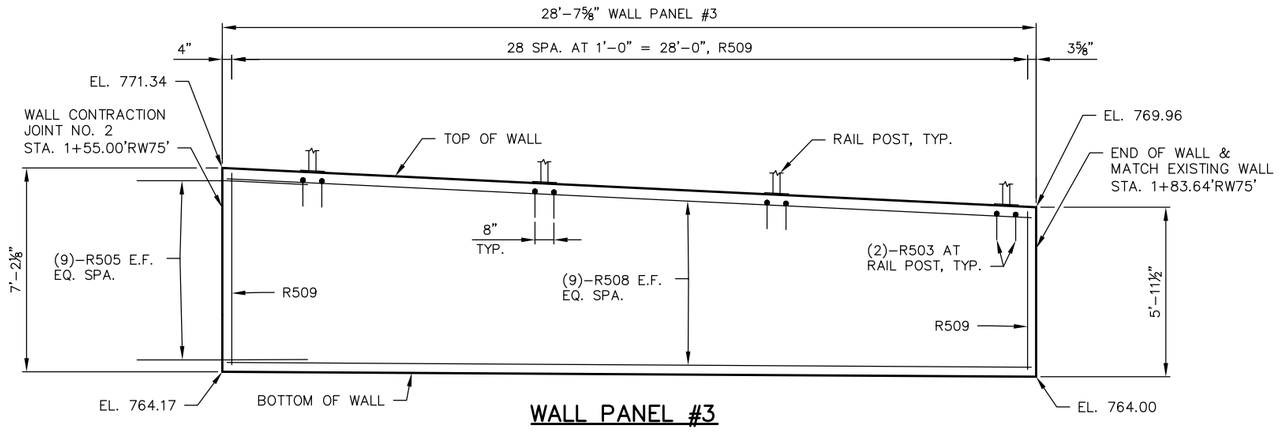
FILE: 05–06–R510074_det.dwg
PLOT SCALE:



WALL PANEL #1



WALL PANEL #2



WALL PANEL #3

BILL OF BARS
RETAINING WALL

COATED = 3,560 LBS.

MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION	
R501	22		29'-8"			LONGIT. BAR WALL PANEL #1	LONGIT.
R502	66		8'-5"		◭	VERTICAL BAR WALL PANEL #1	VERT.
R503	22		2'-3"	X		RAIL POST STIRRUP	VERT.
R504	16		8'-0"			BARS AT WALL OPENING FOR CULVERT	LONGIT.
R505	40		6'-0"			LONGIT. BARS BETWEEN WALL PANELS	LONGIT.
R506	18		24'-8"			LONGIT. BAR WALL PANEL #2	LONGIT.
R507	50		7'-3"		◭	VERTICAL BAR WALL PANEL #2	VERT.
R508	18		28'-3"			LONGIT. BAR WALL PANEL #3	LONGIT.
R509	58		6'-1"		◭	VERTICAL BAR WALL PANEL #3	VERT.

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

◭ LENGTH SHOWN FOR BARS IN SERIES IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE "BAR SERIES TABLE" FOR ACTUAL LENGTHS.

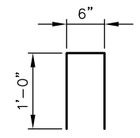
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
R502	2 SERIES OF 33	7'-10" TO 9'-0"
R507	2 SERIES OF 25	6'-9" TO 7'-9"
R509	2 SERIES OF 29	5'-6" TO 6'-8"

BUNDLE AND TAG EACH SERIES SEPARATELY.

NOTE

FIELD BEND LONGITUDINAL BARS ALONG RADIUS OF THE WALL PANELS.



R503

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-51-74

DRAWN BY CDS | PLANS CK'D ACK

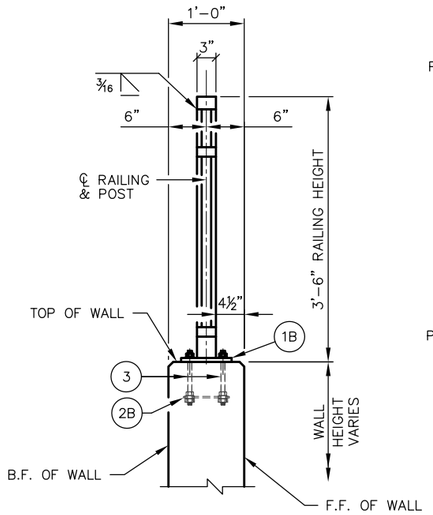
WALL REINFORCEMENT

SHEET 7 OF 10

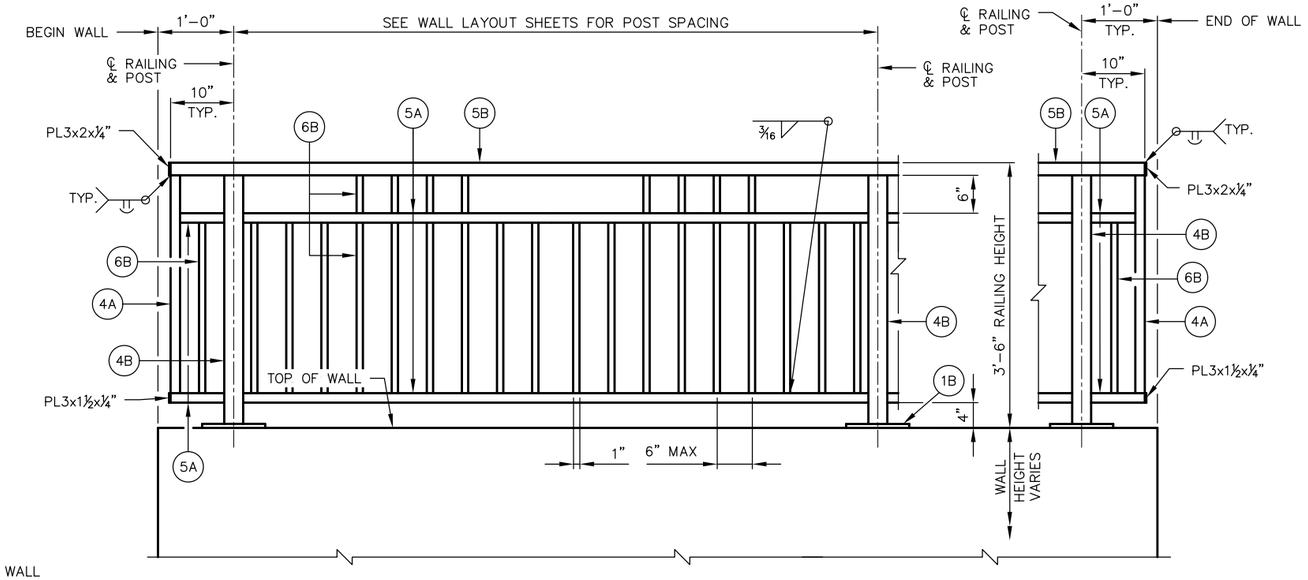
746

STATE PROJECT NUMBER

2250-12-70



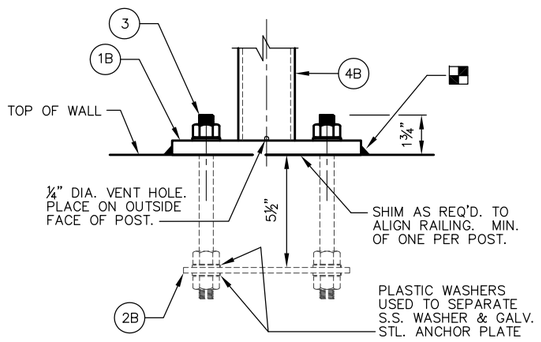
TYPICAL SECTION



ELEVATION OF PARAPET

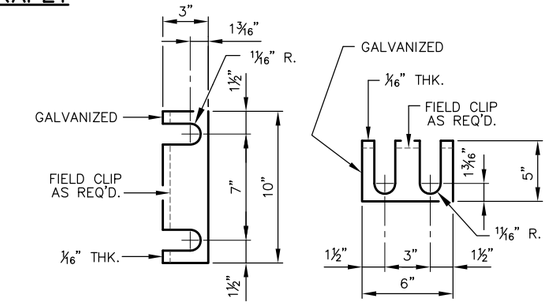
SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



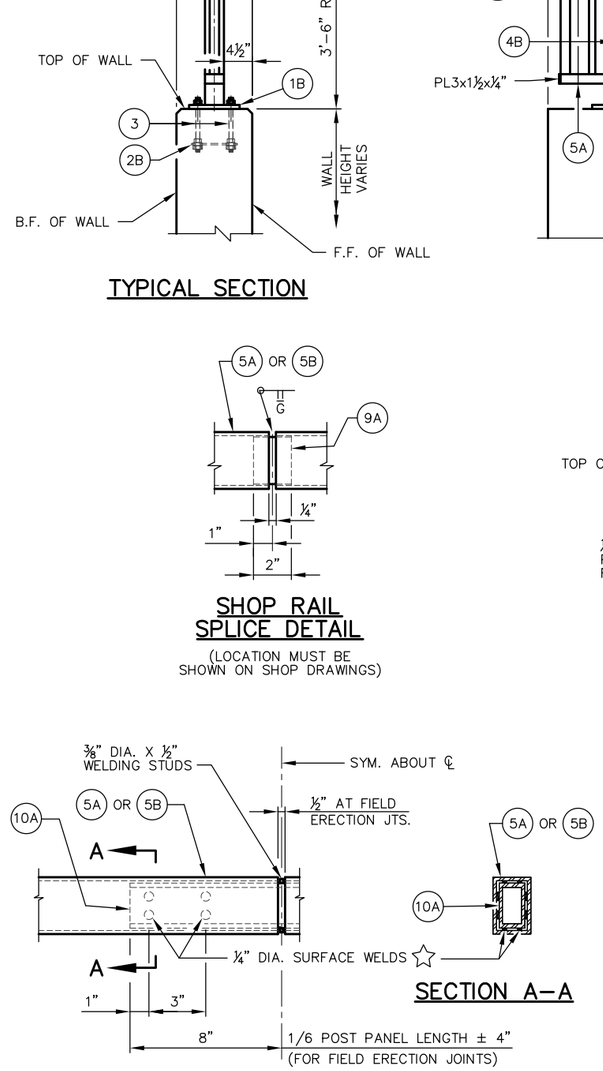
ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



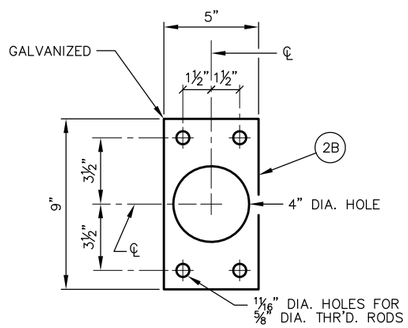
RAIL POST SHIM DETAIL

(2 SETS PER POST)



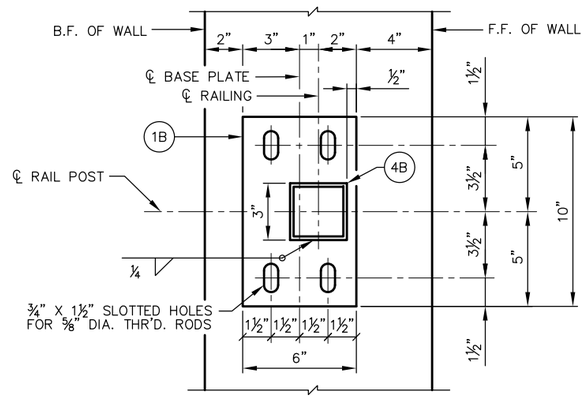
FIELD ERECTION JOINT DETAIL

☆ MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



ANCHOR PLATE

FOR 3" X 3" X 3/16" POSTS (4B)



TYPICAL RAIL POST BASE PLATE

FOR 3" X 3" X 3/16" POSTS (4B)

NOTES

BID ITEM SHALL BE "RAILING STEEL PEDESTRIAN TYPE C4 R-51-74", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED AND USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS IN CONCRETE COPING ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS..

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

LEGEND

- (1B) PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES.
- (2B) ¼" X 5" X 9" ANCHOR PLATE WITH 1/16" DIA. HOLES FOR THR'D. RODS NO. 3.
- (3) ⅝" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS ⅝-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.
- (4A) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 5.
- (4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.
- (5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4.
- (5B) STRUCTURAL TUBING 3" X 2" X 3/16" RAILS. WELD TO NO. 1 & NO. 4.
- (6B) BAR 1" X 1½" PICKETS. WELD TO NO. 5. (SPACE AT 6" MAX. ℄ TO ℄ SPACING). PLACE VERTICAL.
- (9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".
- (10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.)

F.F. - FRONT FACE
B.F. - BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-51-74

DRAWN BY CDS | PLANS CK'D ACK

STEEL RAILING DETAILS

SHEET 8 OF 10

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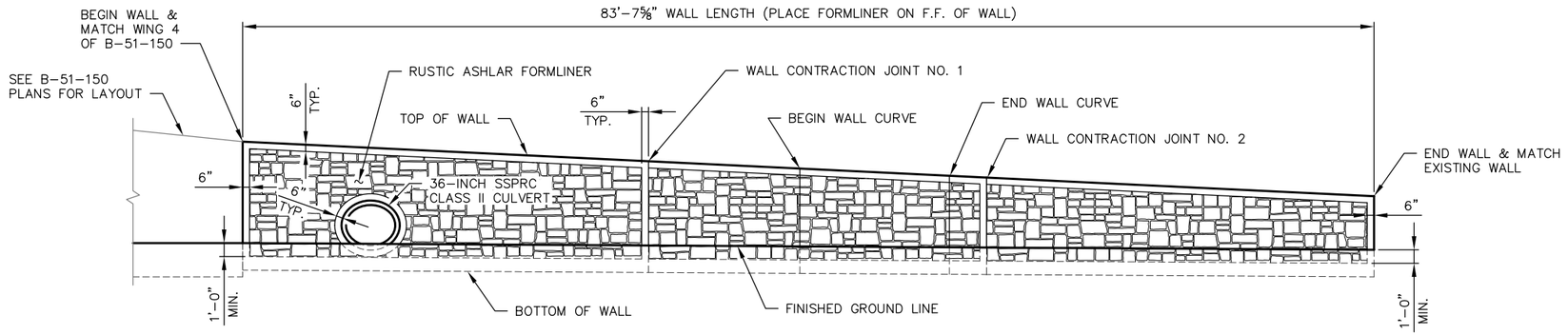
8

I.D. 2250-12-70

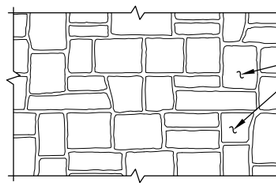
PLOT DATE: May 11, 2018

FILE: 08-R510074_rail.dwg
PLOT SCALE:

STATE PROJECT NUMBER
2250–12–70

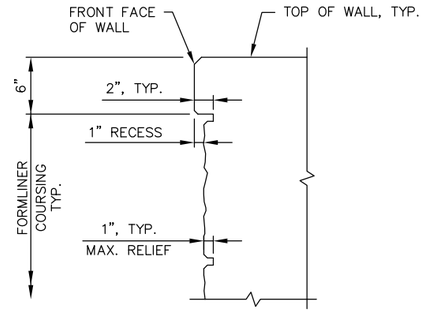


FORMLINER LAYOUT ON WALL



RUSTIC ASHLAR FORMLINER DETAIL

FORMLINER THICKNESS = 2"
SIZE = 8" TO 32"
MAX. RELIEF = 1"



SECTION THRU FORMLINER

NOTES

THE FORMLINER COURSING SHALL BE VERTICALLY ALIGNED.

THE FORMLINER COURSING SHALL BE CONTINUOUS AND LEVEL ACROSS CONSTRACTION JOINTS.

WRAPAROUND/MATCH FORMLINER PATTERN AT WALL CURVE POINTS.

WALL R–51–74 DOES NOT RECIEVE ANY CONCRETE STAINING. LEAVE FORMLINER PLAIN CONCRETE.

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–74

DRAWN BY CDS | PLANS CK'D ACK

AESTHETIC LAYOUT

SHEET 9 OF 10

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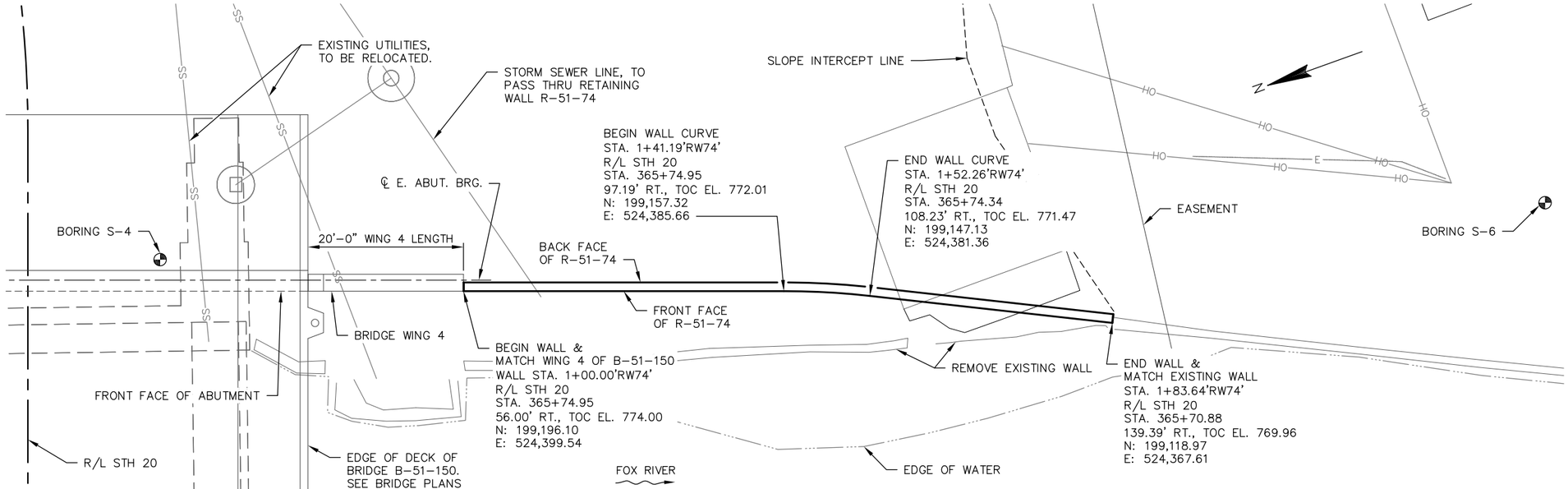
I.D. 2250–12–70

PLOT DATE: May 11, 2018

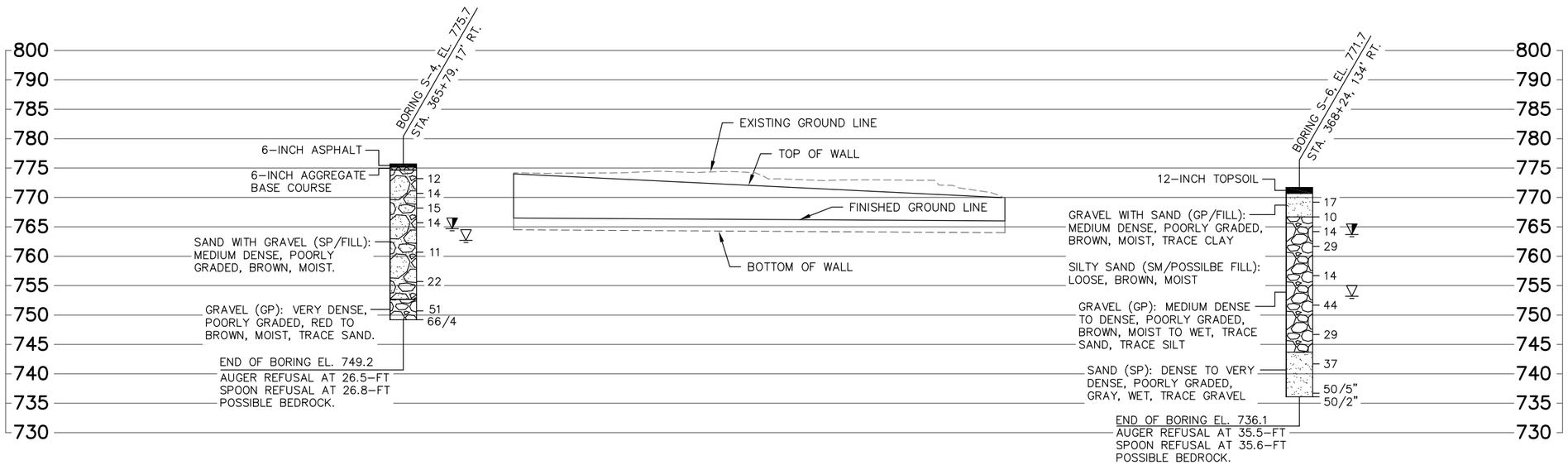
FILE: 09–R510074_aesth.dwg
PLOT SCALE:

STH 20 – WATERFORD, WI

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BORING S-4	11/1/2013	199,231.5	524,416.5
BORING S-6	10/30/2013	199,061.4	524,363.4
BORINGS COMPLETED BY: HIMALAYAN CONSULTANTS, LLC			
SUBSURFACE INVESTIGATION REPORT: HIMALAYAN CONSULTANTS, LLC			
ALL COORDINATES REFERENCED TO WCCS NAD 83(07) RACINE COUNTY			



PLAN R-51-74



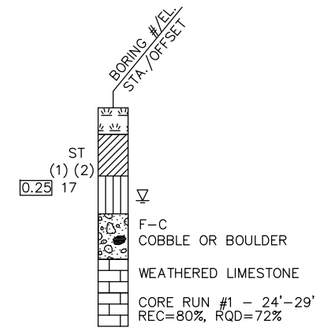
STATE PROJECT NUMBER

2250-12-70

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE SPECIFIED, THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-51-74

DRAWN BY CDS | PLANS CK'D ACK

SUBSURFACE EXPLORATION

SHEET 10 OF 10

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I.D. 2250-12-70

PLOT DATE: May 11, 2018

FILE: 10-R510074_bor.dwg
PLOT SCALE:

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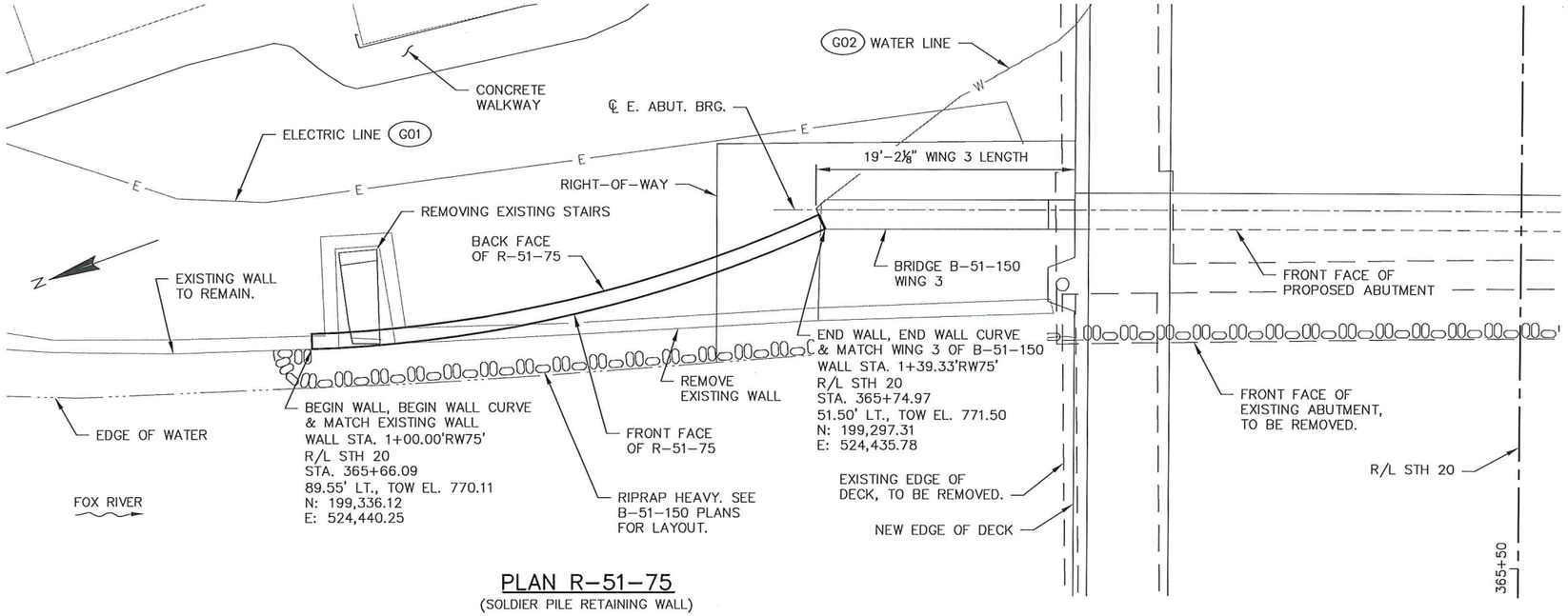
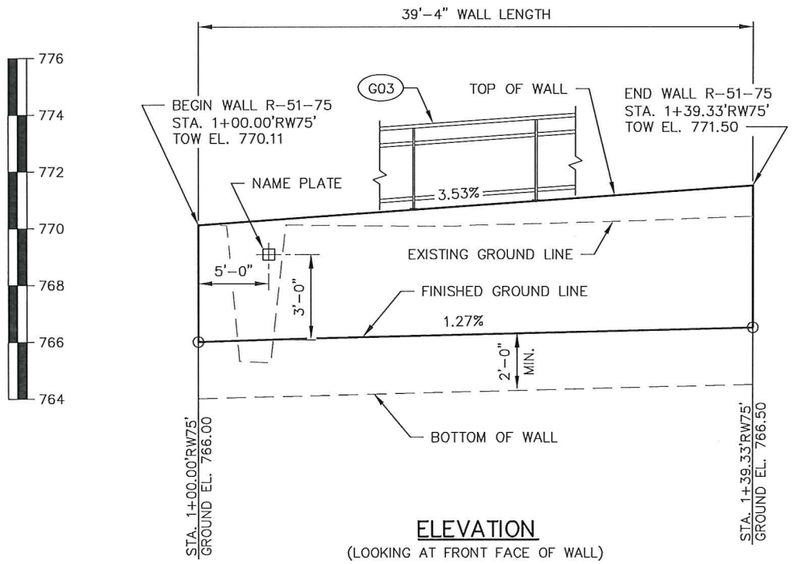
2250–12–70



PLAN R–51–75
(SOLDIER PILE RETAINING WALL)



ELEVATION
(LOOKING AT FRONT FACE OF WALL)

BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEVATION
16400	366+05.50, 33.64' LT.	DISK IN TOP OF EAST END OF NORTH PARAPET WALL ON BRIDGE	777.52

HORIZONTAL DATUM AND ADJUSTMENT: NAD 83 (2007)
VERTICAL DATUM AND ADJUSTMENT: NAVD 88 (2007)
COORDINATE REFERENCE SYSTEM: WCCS RACINE CO

WALL CURVE DATA

PI WALL STA. 1+19.66'RW75'
N: 199,317.16
E: 524,434.15
DELTA: 22°31'55"
D: 57°17'45"
T: 19.92
L: 39.33
R: 100.00
PC WALL STA. 1+00.00'RW75'
N: 199,336.12
E: 524,440.25
PT WALL STA. 1+39.33'RW75'
N: 199,297.31
E: 524,435.78

NOTES

TOW – TOP OF WALL

(G01) UTILITIES SHOWN ARE TO REMAIN.

(G02) UTILITIES SHOWN ARE TO BE RELOCATED.

(G03) RAILING STEEL PEDESTRIAN TYPE C4 R–51–75. SEE "STEEL RAILING DETAILS" SHEET.

DESIGN DATA

LIVE LOAD:

LIVE LOAD SURCHARGE ——— 100 P.S.F.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
RETAINING WALLS ——— f'c = 4,000 P.S.I.
SOLDIER PILE FOOTINGS ——— f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT, GRADE 60 ——— fy = 60,000 P.S.I.

STRUCTURAL STEEL HS ——— fy = 50,000 P.S.I.

* TIMBER LAGGING ——— Fb = 975 P.S.I.
Fv = 90 P.S.I.
Fc⊥ = 565 P.S.I.
E = 1,600,000 P.S.I.

* MATERIAL VALUES BASED ON DOUGLAS FIR–LARCH (NO. 2) OR SOUTHER PINE (NO. 2), CONSTRUCTION GRADE, ROUGH CUT LUMBER.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL DIMENSIONS ARE IN FEET (FT) UNLESS OTHERWISE NOTED.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER UNLESS OTHERWISE SHOWN OR NOTED.

ALL BAR STEEL REINFORCEMENT IS TO BE EPOXY COATED.

ALL WALL STATIONING AND OFFSETS ARE GIVEN TO THE FRONT FACE OF THE WALL (R–51–75).

THE EXISTING GROUND LINE IS THE UPPER LIMIT OF EXCAVATION FOR STRUCTURES.

ALL STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270 GRADE 50 EXCEPT AS NOTED ON PLANS.

THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND PERFORMANCE OF THE TIMBER LAGGING.

ANY ADDITIONAL SHORING REQUIRED TO CONSTRUCT WALL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND INCLUDED TO WALL CONSTRUCTION.

WISCONSIN
ANDREW C. KNUTSON
E-34662
SPRING GREEN, WI
5-11-18
PROFESSIONAL ENGINEER

LIST OF DRAWINGS

1. GENERAL PLAN
2. WALL LAYOUT
3. QUANTITIES, WALL DATA & PROFILE
4. WALL DETAILS (1 OF 2)
5. WALL DETAILS (2 OF 2)
6. WALL REINFORCEMENT
7. STEEL RAILING DETAILS
8. AESTHETIC LAYOUT
9. SUBSURFACE EXPLORATION

CONSULTANT CONTACT
ANDY KNUTSON, P.E., S.E.
(608) 588–7866

BRIDGE OFFICE CONTACT
WILLIAM DREHER, P.E.
(608) 266–8489

NO.	DATE	REVISION	BY

WESTBROOK Associated Engineers, Inc.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WI 53588
PHONE (608) 588–7866
FAX (608) 588–7954

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 05/30/18
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R–51–75

RETAINING WALL ALONG THE FOX RIVER

COUNTY	~~TOWN/CITY/~~VILLAGE
RACINE	WATERFORD

DESIGN SPEC.
AASHTO LRFD DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
CDS	ACK	CDS	ACK

GENERAL PLAN

SHEET 1 OF 9

750

I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 01–R510075_fsh.dwg
PLOT SCALE:

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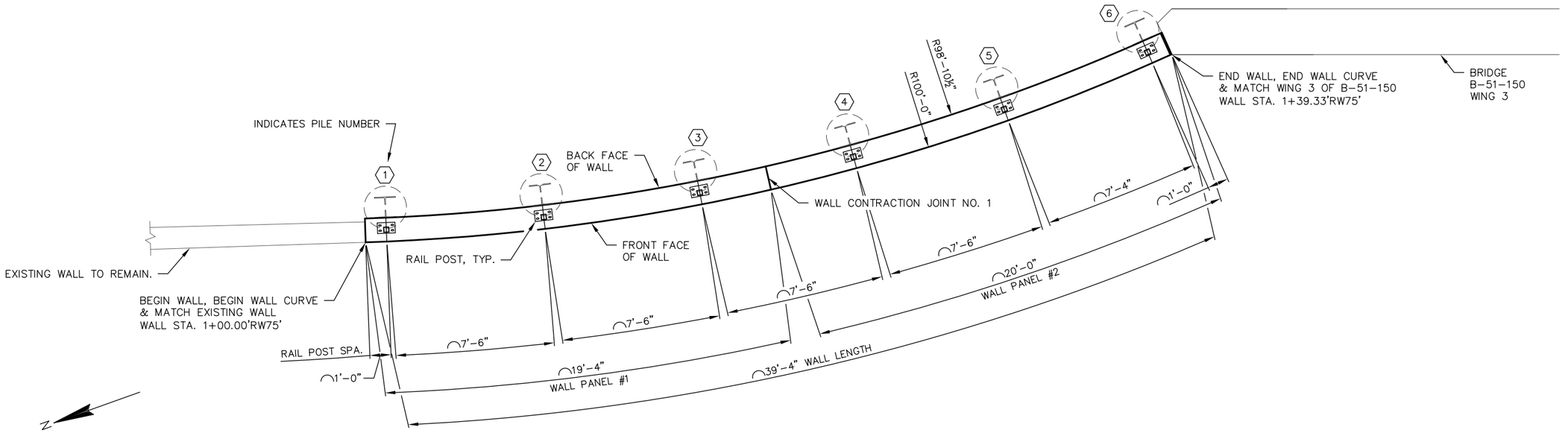
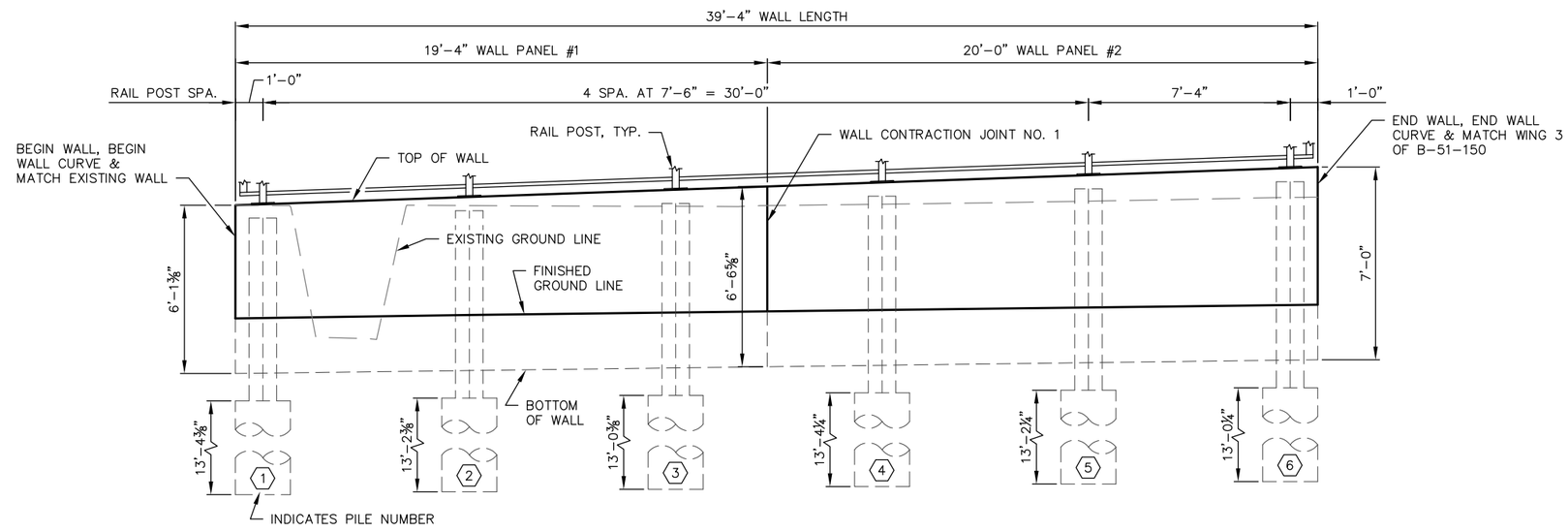
STATE PROJECT NUMBER
2250–12–70



WALL PLAN VIEW



WALL ELEVATION VIEW

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–75

DRAWN BY CDS | PLANS CK'D ACK

WALL LAYOUT

SHEET 2 OF 9

751

I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 02–R510075_lay.dwg
PLOT SCALE:

STATE PROJECT NUMBER
2250–12–70

WALL & PILE REFERENCE TABLE

WALL STATION	REFERENCE/ PILE NUMBER	OFFSET – SEE NOTE BELOW	TOP OF WALL	FINISHED GROUND LINE AT WALL FACE	BOTTOM OF WALL	WALL HEIGHT (FT)	EXISTING GROUND LINE AT WALL FACE	TOP OF PILE	TOP OF FOOTING	BOTTOM OF FOOTING	FOOTING LENGTH	SOLDIER PILE SECTION	SOLDIER PILE LENGTH (FT)	NO. OF STUDS
1+00.00'RW75'	BEGIN WALL	---	770.11	766.00	764.00	6.11	770.11	---	---	---	---	---	---	---
1+01.00'RW75'	PILE 1	1.49	770.15	766.01	764.01	6.14	770.10	769.65	763.01	749.65	13.36	HP12x53	20.00	8
1+08.50'RW75'	PILE 2	1.49	770.41	766.11	764.11	6.30	770.10	769.91	763.11	749.91	13.20	HP12x53	20.00	8
1+16.00'RW75'	PILE 3	1.49	770.68	766.20	764.20	6.48	770.08	770.18	763.20	750.18	13.02	HP12x53	20.00	8
1+19.33'RW75'	C.J. 1	---	770.79	766.25	764.25	6.54	770.10	---	---	---	---	---	---	---
1+23.50'RW75'	PILE 4	1.49	770.94	766.30	764.30	6.64	770.16	770.44	763.30	749.94	13.36	HP12x53	20.50	8
1+31.00'RW75'	PILE 5	1.49	771.21	766.39	764.39	6.82	770.28	770.71	763.39	750.21	13.18	HP12x53	20.50	8
1+38.33'RW75'	PILE 6	1.49	771.46	766.49	764.49	6.97	770.39	770.96	763.49	750.46	13.03	HP12x53	20.50	8
1+39.33'RW75'	END WALL	---	771.50	766.50	764.50	7.00	770.41	---	---	---	---	---	---	---

NOTE: ALL WALL STATIONING & OFFSETS ARE BASED OFF OF THE FRONT FACE OF THE WALL ALIGNMENT TO CENTER OF PILE.

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTALS
206.3000.03	EXCAVATION FOR STRUCTURES RETAINING WALLS R–51–75	LS	1
502.0110.S	CONCRETE MASONRY SOLDIER PILE FOOTINGS	CY	10
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	10
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,280
506.0605	STRUCTURAL STEEL HS	LB	6,440
506.3009	WELDED STUD SHEAR CONNECTORS 3/4 X 5–INCH	EACH	48
513.8021.05	RAILING STEEL PEDESTRIAN TYPE C4 R–51–75	LF	39
517.1050.S.04	ARCHITECTURAL SURFACE TREATMENT R–51–75	SF	200
612.0406	PIPE UNDERDRAIN WRAPPED 6–INCH	LF	50
636.0050.S	FOUNDATION DRILLING 24–INCH DIAMETER	LF	80
645.0111	GEOTEXTILE FABRIC TYPE DF SCHEDULE A	SY	31
SPV.0110.01	TIMBER LAGGING	MBM	0.7
SPV.0165.02	GEOCOMPOSITE DRAIN BOARD	SF	212
	NON–BID ITEMS		
	PREFORMED JOINT FILLER	SIZE	¾"
	NON–BITUMINOUS JOINT SEALER	– – –	– – –

SOIL PARAMETERS

SOIL DESCRIPTIONS & APPROXIMATE ELEVATIONS	MOIST UNIT WEIGHT (PCF)	COHESION (PSF)	INTERNAL FRICTION ANGLE (DEGREES)	Ko	Ka	Kp
BORING S–3						
IMPORTED GRANULAR MATERIALS [1]	120	0	30	0.50	0.33	3.00
ON–SITE GRANULAR MATERIALS	120	0	29	0.52	0.35	2.88

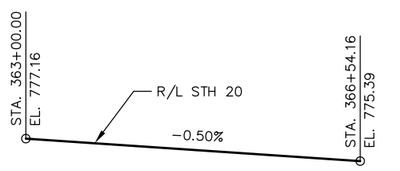
NOTES:

1. SPECIFIED AS GRADE 1 OR GRADE 2 IN SECTION 209.2 OF THE STANDARD SPECIFICATIONS.
2. Ko = AT–REST EARTH PRESSURE COEFFICIENT
3. Ka = ACTIVE EARTH PRESSURE COEFFICIENT
4. Kp = PASSIVE EARTH PRESSURE COEFFICIENT

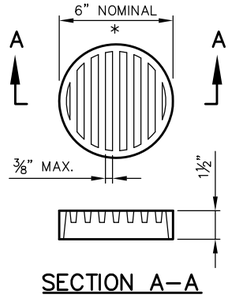
GEOMETRY TABLE

WALL STATION	R/L STH 20 STATION	R/L STH 20 OFFSET TO F.F. OF WALL	TOP OF WALL (TOW) EL.	FINISHED GROUND EL. AT F.F. OF WALL	EXISTING GROUND EL. AT F.F. OF WALL
1+00.00'RW75'	365+66.09	89.55' LT.	770.11	766.00	770.11
1+25.00'RW75'	365+70.00	64.93' LT.	770.99	766.32	770.17
1+39.33'RW75'	365+74.97	51.50' LT.	771.50	766.50	770.41

NOTE: ALL WALL STATIONING & OFFSETS ARE GIVEN AT THE FRONT FACE OF THE WALL.



PROFILE GRADE LINE, R/L STH 20



SECTION A–A

* DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1–INCH STAINLESS STEEL SHEET METAL SCREWS.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6–INCH".

RODENT SHIELD DETAIL

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–75

DRAWN BY CDS | PLANS CK'D ACK

QUANTITIES, WALL DATA & PROFILE

SHEET 3 OF 9

752

I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 03–R510075_data.dwg
PLOT SCALE:

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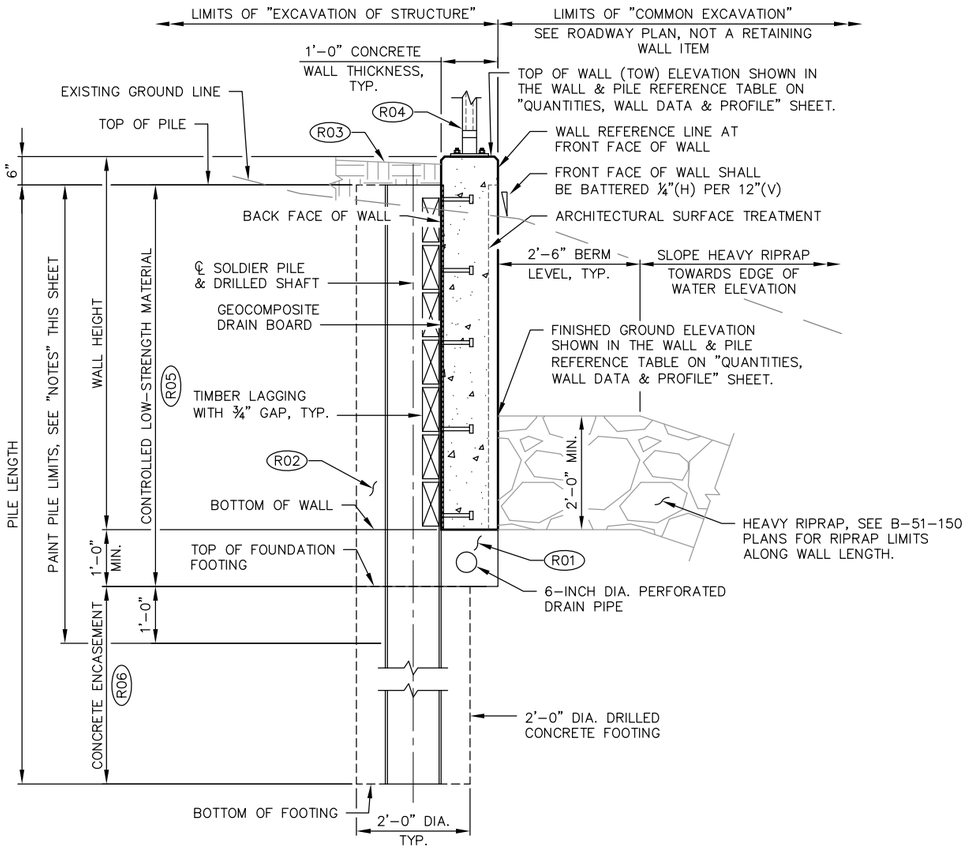
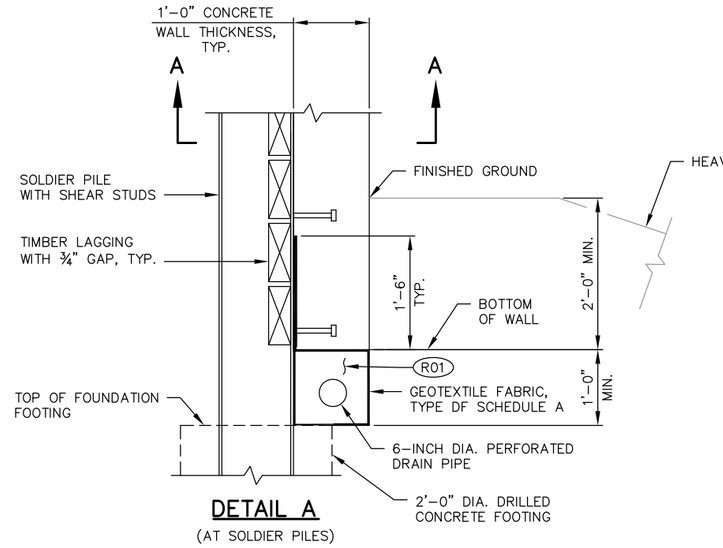
STATE PROJECT NUMBER

2250-12-70



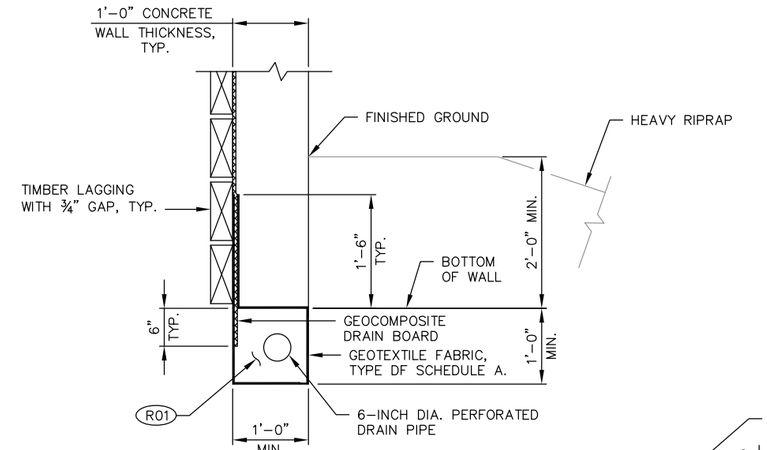
TYPICAL SECTION THRU SOLDIER PILE WALL

(REINFORCEMENT NOT SHOWN FOR CLARITY)



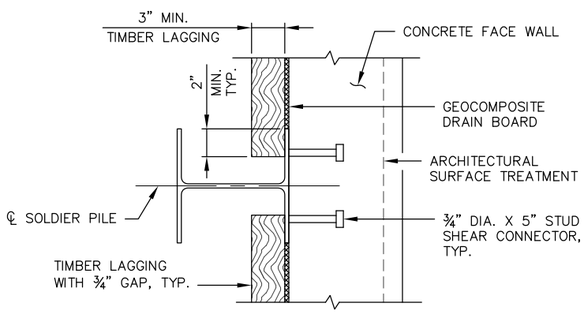
DETAIL A

(AT SOLDIER PILES)



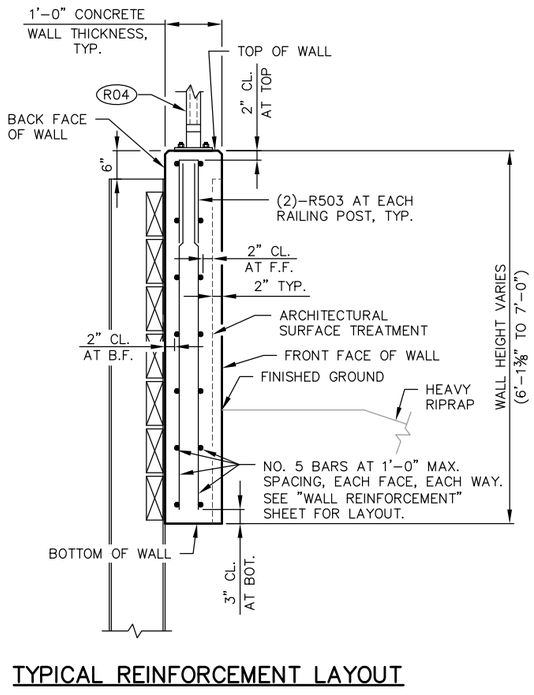
DETAIL B

(BETWEEN SOLDIER PILES)

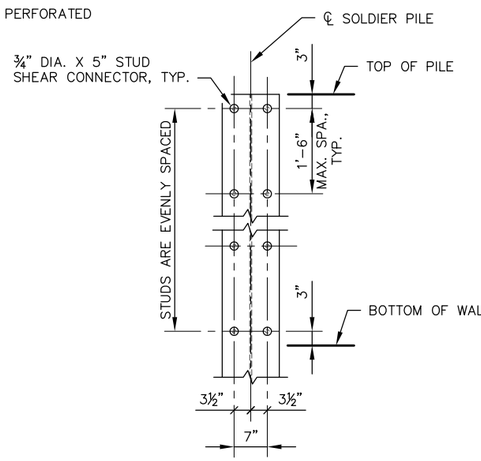


SECTION A-A

(REINFORCEMENT NOT SHOWN FOR CLARITY)



TYPICAL REINFORCEMENT LAYOUT



STUD SHEAR CONNECTION LAYOUT

NOTES

PAINT PILE FROM TOP OF PILE TO 1'-0" BELOW TOP OF FOOTING WITH A PRIME COAT OF ORGANIC ZINC-RICH PAINT. PREPARE THE SURFACE AND APPLY THE PAINT AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. PAINTING OF PILE IS INCLUDED WITH THE BID ITEM "STRUCTURAL STEEL HS".

PILES SHOULD BE SET WITH A ¼-INCH HORIZONTAL TO 1-FOOT VERTICAL BATTER.

FILL VOIDS BEHIND LAGGING WITH #1 OR #2 COARSE AGGREGATE. INCLUDED WITH BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALL R-51-75".

(R01) DRAINAGE AGGREGATE MINIMUM OF 1'-0" X 1'-0" BASE AGGREGATE OPEN GRADED IN GEOTEXTILE FABRIC, TYPE DF SCHEDULE A. BASE AGGREGATE IS INCLUDED IN THE PIPE UNDERDRAIN. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE "QUANTITIES, WALL DATA & PROFILE" SHEET.

(R02) FILL AUGERED HOLE AROUND SOLDIER PILE AND ABOVE FOOTING WITH CONTROLLED LOW-STRENGTH MATERIAL (CLSM). INCLUDED WITH THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS R-51-75".

(R03) SLOPE BEHIND WALL VARIES. SEE ROADWAY CROSS SECTION.

(R04) RAILING STEEL PEDESTRIAN TYPE C4. SEE "STEEL RAILING DETAILS" SHEET.

(R05) COST OF DRILLING AND CONTROLLING LOW STRENGTH MATERIAL IN DRILLED HOLES SHALL BE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS, R-51-75."

(R06) CONCRETE ENCASEMENT LIMITS INCLUDES THE PAY LIMITS FOR BOTH THE BID ITEM "FOUNDATION DRILLING 24-INCH DIAMETER" AND THE BID ITEM "CONCRETE MASONRY RETAINING WALLS."

F.F. - FRONT FACE
B.F. - BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-51-75

DRAWN BY CDS | PLANS CK'D ACK

WALL DETAILS (1 OF 2)

SHEET 4 OF 9

753

I.D. 2250-12-70

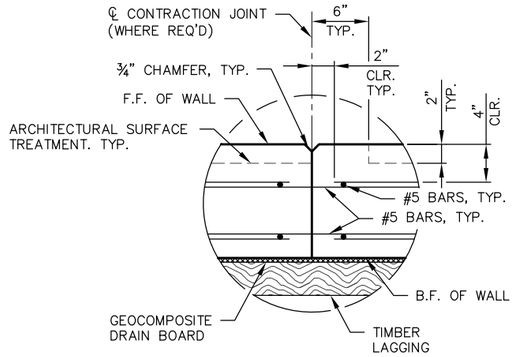
PLOT DATE: May 11, 2018

FILE: 04-05-R510075_det.dwg
PLOT SCALE:

8

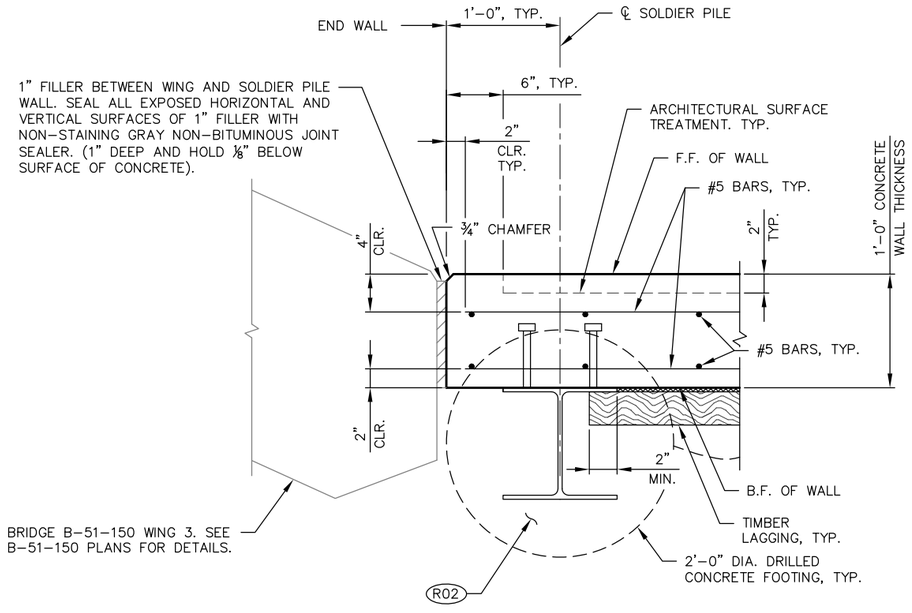
8

STATE PROJECT NUMBER
2250–12–70



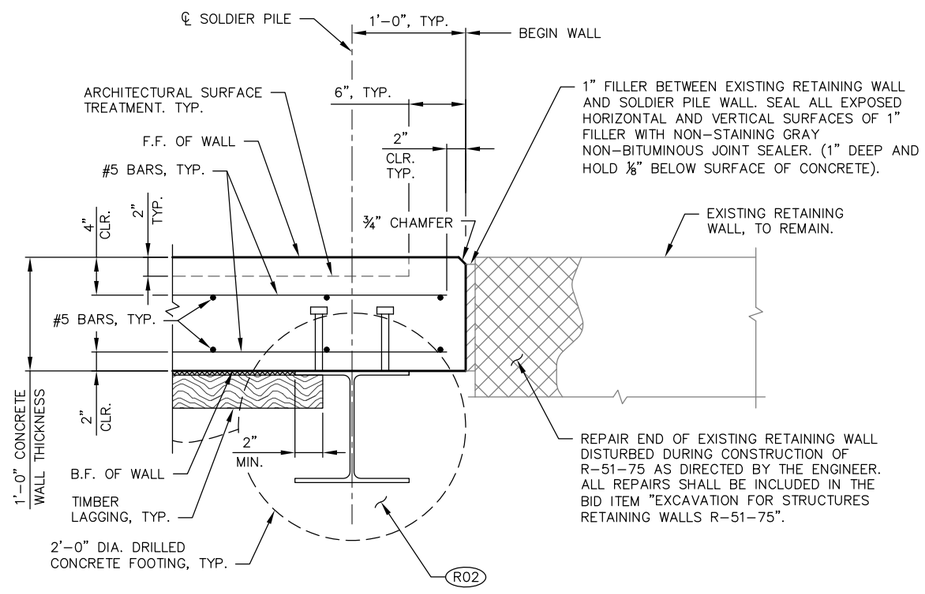
CONTRACTION JOINT DETAIL

(SEE "WALL LAYOUT" SHEET FOR LOCATION)



END WALL DETAIL

(SEE "WALL LAYOUT" SHEET FOR LOCATION)



BEGIN WALL DETAIL

(SEE "WALL LAYOUT" SHEET FOR LOCATION)

NOTES

PAINT PILE FROM TOP OF PILE TO 1'–0" BELOW TOP OF FOOTING WITH A PRIME COAT OF ORGANIC ZINC–RICH PAINT. PREPARE THE SURFACE AND APPLY THE PAINT AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. PAINTING OF PILE IS INCLUDED WITH THE BID ITEM "STRUCTURAL STEEL HS".

(R02) FILL AUGERED HOLE AROUND SOLDIER PILE AND ABOVE FOOTING WITH CONTROLLED LOW–STRENGTH MATERIAL (CLSM). INCLUDED WITH THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS R–51–75".

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–75

DRAWN BY CDS | PLANS CK'D ACK

WALL DETAILS (2 OF 2)

SHEET 5 OF 9

754

8

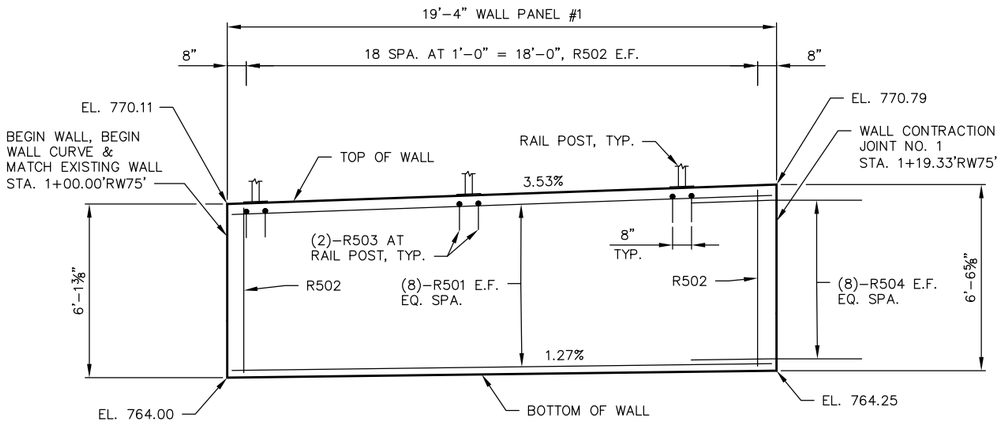
8

FILE: 04–05–R510075_det.dwg
PLOT SCALE:

I.D. 2250–12–70

PLOT DATE: May 11, 2018

STATE PROJECT NUMBER
2250–12–70



WALL PANEL #1

BILL OF BARS
RETAINING WALL

COATED = 1,280 LBS.

MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION	
R501	16		19'–0"			LONGIT. BAR WALL PANEL #1	LONGIT.
R502	38		5'–11"		⚠	VERTICAL BAR WALL PANEL #1	VERT.
R503	12		2'–3"	X		RAIL POST STIRRUP	VERT.
R504	16		6'–0"			LONGIT. BAR BETWEEN WALL PANELS	LONGIT.
R505	16		19'–8"			LONGIT. BAR WALL PANEL #2	LONGIT.
R506	40		6'–5"		⚠	VERTICAL BAR WALL PANEL #2	VERT.

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

⚠ LENGTH SHOWN FOR BARS IN SERIES IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE "BAR SERIES TABLE" FOR ACTUAL LENGTHS.

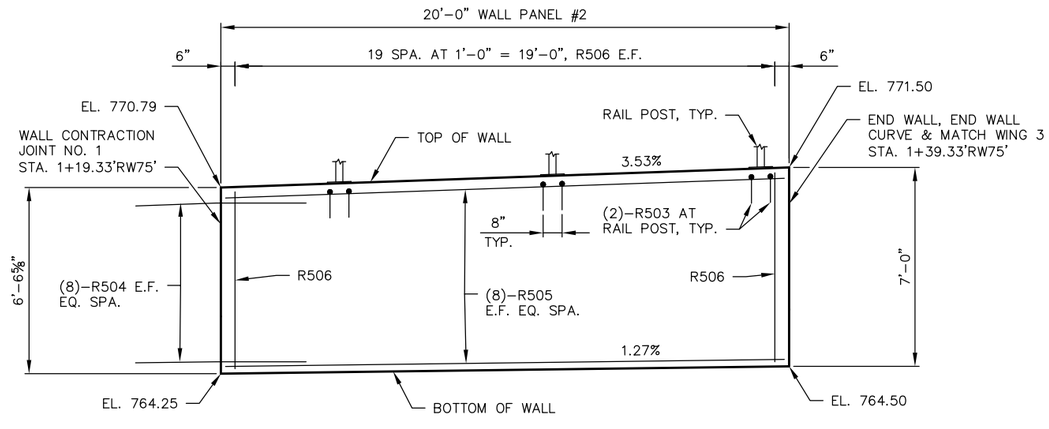
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
R502	2 SERIES OF 19	5'–9" TO 6'–1"
R506	2 SERIES OF 20	6'–2" TO 6'–7"

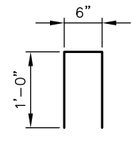
BUNDLE AND TAG EACH SERIES SEPARATELY.

NOTE

FIELD BEND LONGITUDINAL BARS ALONG RADIUS OF THE WALL PANELS.



WALL PANEL #2



R503

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–75

DRAWN BY CDS | PLANS CK'D ACK

WALL REINFORCEMENT

SHEET 6 OF 9

755

I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 06–R510075_rein.dwg
PLOT SCALE:

8

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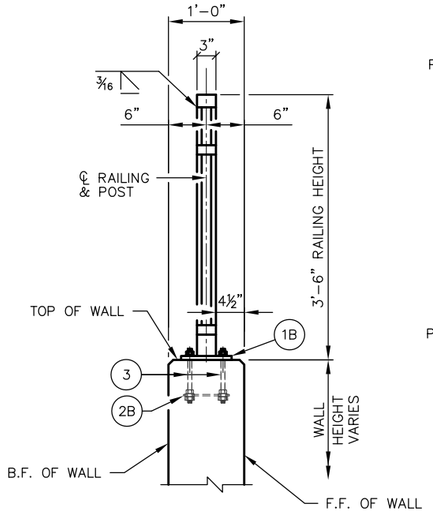
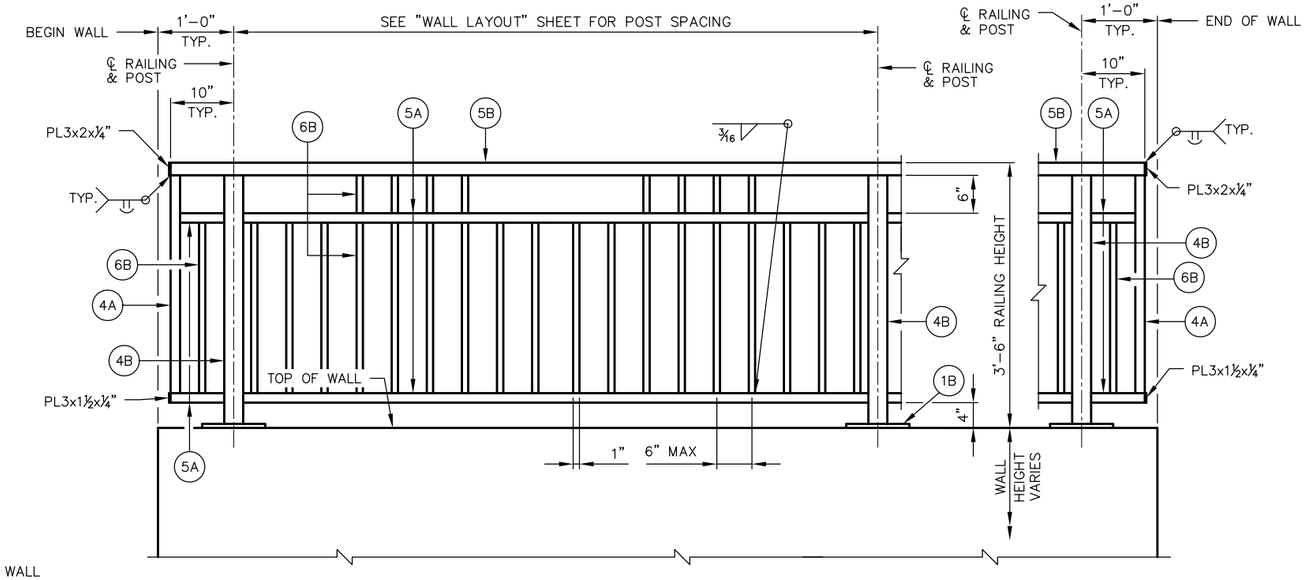
STATE PROJECT NUMBER

2250-12-70



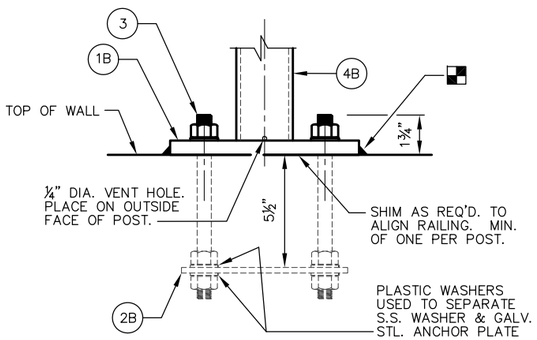
TYPICAL SECTION



ELEVATION OF PARAPET

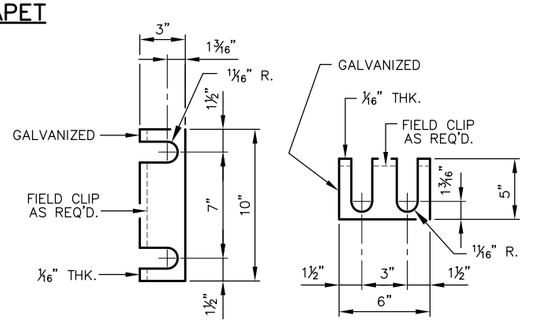
SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



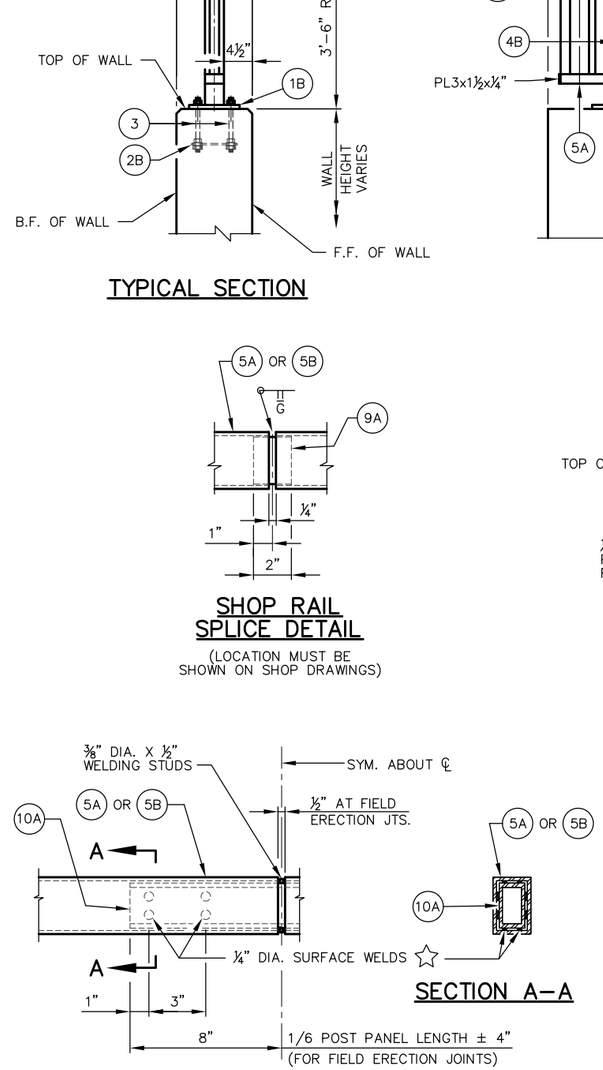
ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



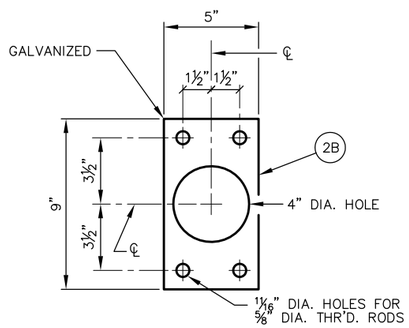
RAIL POST SHIM DETAIL

(2 SETS PER POST)



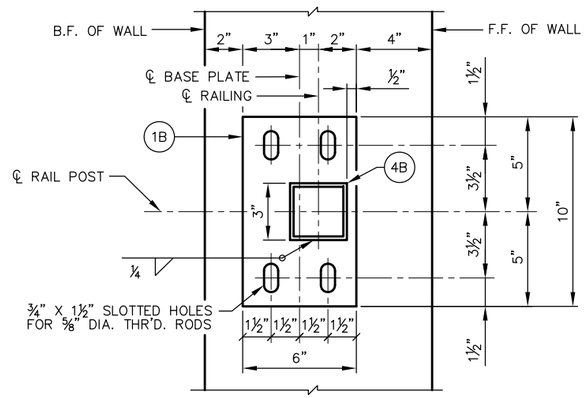
FIELD ERECTION JOINT DETAIL

☆ MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



ANCHOR PLATE

FOR 3" X 3" X 3/16" POSTS (4B)



TYPICAL RAIL POST BASE PLATE

FOR 3" X 3" X 3/16" POSTS (4B)

F.F. – FRONT FACE
B.F. – BACK FACE

NOTES

BID ITEM SHALL BE "RAILING STEEL PEDESTRIAN TYPE C4 R-51-75", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED AND USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS IN CONCRETE COPING ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

LEGEND

(1B) PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES.

(2B) ¼" X 5" X 9" ANCHOR PLATE WITH 1/16" DIA. HOLES FOR THR'D. RODS NO. 3.

(3) ⅝" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS ⅝-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.

(4A) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 5.

(4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4.

(5B) STRUCTURAL TUBING 3" X 2" X 3/16" RAILS. WELD TO NO. 1 & NO. 4.

(6B) BAR 1" X 1½" PICKETS. WELD TO NO. 5. (SPACE AT 6" MAX. ℄ TO ℄ SPACING). PLACE VERTICAL.

(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-51-75

DRAWN BY CDS | PLANS CK'D ACK

STEEL RAILING DETAILS

SHEET 7 OF 9

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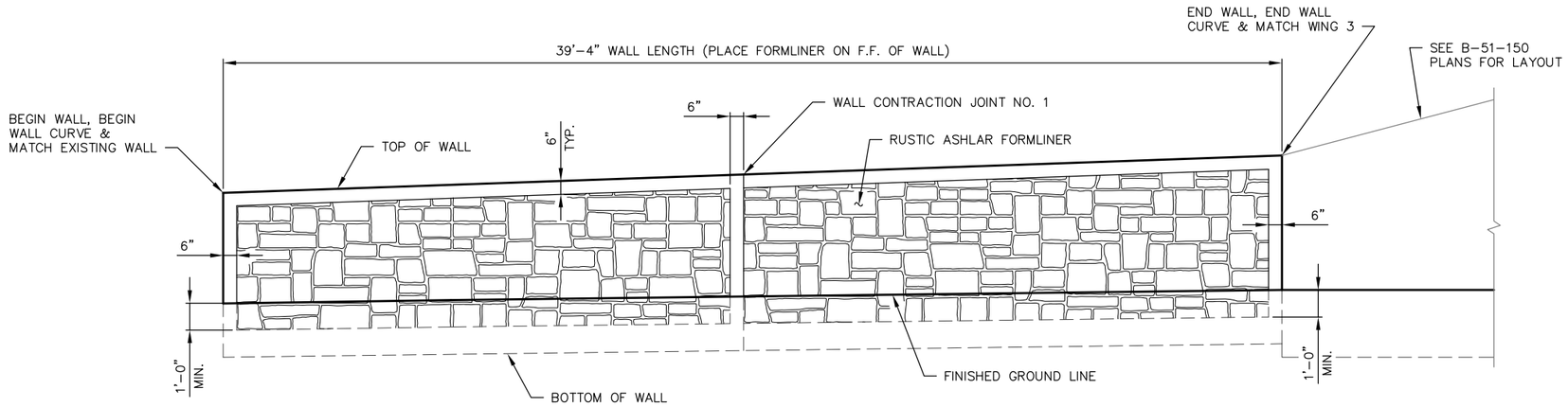
I.D. 2250-12-70

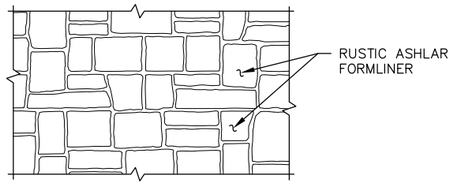
PLOT DATE: May 11, 2018

FILE: 07-R510075_rail.dwg
PLOT SCALE:

STATE PROJECT NUMBER
2250–12–70

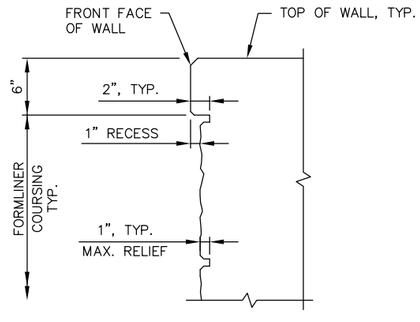


FORMLINER LAYOUT ON WALL



RUSTIC ASHLAR FORMLINER DETAIL

FORMLINER THICKNESS = 2"
SIZE = 8" TO 32"
MAX. RELIEF = 1"



SECTION THRU FORMLINER

NOTES

THE FORMLINER COURSING SHALL BE VERTICALLY ALIGNED.

THE FORMLINER COURSING SHALL BE CONTINUOUS AND LEVEL ACROSS CONSTRACTION JOINTS.

WRAPAROUND/MATCH FORMLINER PATTERN AT WALL CURVE POINTS.

WALL R–51–75 DOES NOT RECIEVE ANY CONCRETE STAINING. LEAVE FORMLINER PLAIN CONCRETE.

F.F. – FRONT FACE
B.F. – BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–75

DRAWN BY CDS | PLANS CK'D ACK

AESTHETIC LAYOUT

SHEET 8 OF 9

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8

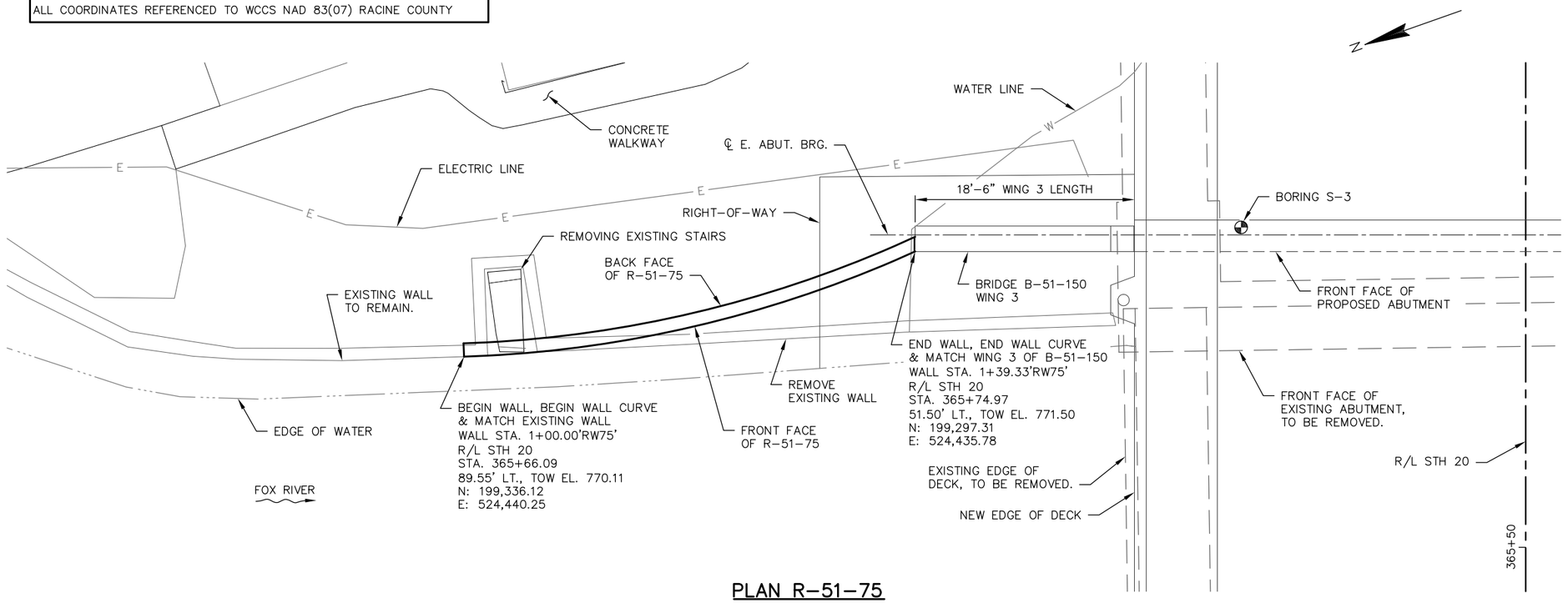
I.D. 2250–12–70

PLOT DATE: May 11, 2018

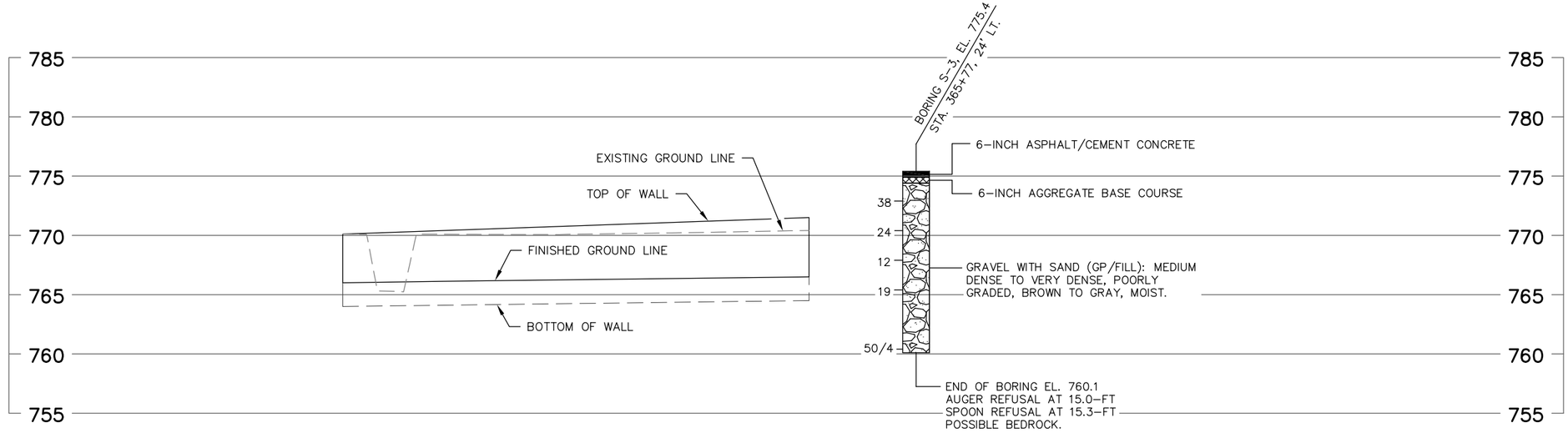
FILE: 08–R510075_aesth.dwg
PLOT SCALE:

STH 20 – WATERFORD, WI

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BORING S–3	10/30/2013	199,270.7	524,428.4
BORINGS COMPLETED BY: HIMALAYAN CONSULTANTS, LLC			
SUBSURFACE INVESTIGATION REPORT: HIMALAYAN CONSULTANTS, LLC			
ALL COORDINATES REFERENCED TO WCCS NAD 83(07) RACINE COUNTY			



PLAN R–51–75



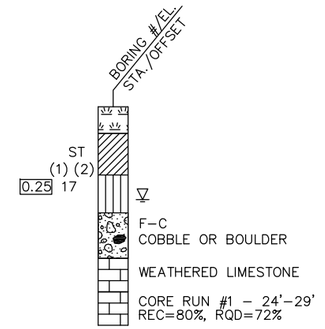
STATE PROJECT NUMBER

2250–12–70

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE SPECIFIED, THE SPT 'N' VALUE IS BASED ON AASHTO T–206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F–FINE M–MEDIUM C–COARSE ST–SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R–51–75

DRAWN BY CDS | PLANS CK'D ACK

SUBSURFACE EXPLORATION

SHEET 9 OF 9

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I.D. 2250–12–70

PLOT DATE: May 11, 2018

FILE: 09–R510075_bor.dwg
PLOT SCALE:

STH 20 (W. Main St)

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
306+00	0.00	0.00	0.00	0	0	0	0	0
306+25	25.00	119.69	57.58	55	27	55	32	23
307+00	75.00	106.94	53.78	315	155	370	218	153
307+50	50.00	106.67	44.41	198	91	568	327	241
308+00	50.00	111.30	44.68	202	82	770	426	344
308+50	50.00	119.30	42.35	214	81	983	522	461
309+00	50.00	125.10	49.69	226	85	1,210	625	585
309+50	50.00	134.34	61.48	240	103	1,450	748	702
310+00	50.00	146.64	64.12	260	116	1,710	888	822
310+50	50.00	163.16	62.36	287	117	1,997	1,028	969
311+00	50.00	169.18	67.12	308	120	2,305	1,172	1,132
311+50	50.00	162.99	81.36	308	137	2,612	1,337	1,275
312+00	50.00	144.49	77.84	285	147	2,897	1,514	1,383
312+50	50.00	140.52	86.98	264	153	3,161	1,697	1,464
313+00	50.00	143.82	81.20	263	156	3,424	1,884	1,540
313+50	50.00	192.68	3.82	312	79	3,736	1,979	1,757
314+00	50.00	347.54	0.00	500	4	4,236	1,983	2,253
314+03.11	3.11	340.37	0.00	40	0	4,275	1,983	2,293
314+50	46.89	248.74	0.00	512	0	4,787	1,983	2,804
315+00	50.00	213.45	74.73	428	69	5,215	2,066	3,149
315+50	50.00	215.88	154.34	398	212	5,612	2,320	3,292
316+00	50.00	201.17	172.50	386	303	5,999	2,684	3,315
316+50	50.00	155.65	209.09	330	353	6,329	3,108	3,222
317+00	50.00	135.35	210.64	269	389	6,598	3,574	3,025
317+50	50.00	112.44	148.33	229	332	6,828	3,973	2,855
318+00	50.00	79.73	92.90	178	223	7,006	4,241	2,765
318+50	50.00	117.88	85.75	183	165	7,189	4,439	2,750
319+00	50.00	156.19	94.22	254	167	7,443	4,639	2,803
319+50	50.00	149.21	125.70	283	204	7,725	4,884	2,842
320+00	50.00	132.77	157.41	261	262	7,986	5,198	2,788
320+50	50.00	136.32	176.99	249	310	8,236	5,570	2,666
321+00	50.00	172.10	36.83	286	198	8,521	5,807	2,714
321+50	50.00	329.24	25.96	464	58	8,985	5,877	3,108
322+00	50.00	256.57	21.72	542	44	9,528	5,930	3,598
322+50	50.00	259.15	21.34	478	40	10,005	5,978	4,027
323+00	50.00	259.31	21.51	480	40	10,485	6,025	4,460
323+50	50.00	265.66	30.61	486	48	10,971	6,083	4,888
324+00	50.00	277.61	22.87	503	50	11,474	6,143	5,332
324+50	50.00	290.69	3.71	526	25	12,001	6,172	5,828
325+00	50.00	311.40	0.35	557	4	12,558	6,177	6,381
325+50	50.00	317.43	2.20	582	2	13,140	6,180	6,961
326+00	50.00	304.95	60.49	576	58	13,717	6,249	7,467
326+50	50.00	280.84	98.12	542	147	14,259	6,426	7,834
327+00	50.00	252.31	119.69	494	202	14,753	6,668	8,085
327+50	50.00	231.52	146.00	448	246	15,201	6,963	8,238
328+00	50.00	189.81	167.49	390	290	15,591	7,311	8,280
328+50	50.00	165.02	157.89	329	301	15,919	7,673	8,247

STH 20 (W. Main St)

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) Cut	Incremental Vol (CY) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
329+00	50.00	152.38	149.62	294	285	16,213	8,014	8,199
329+50	50.00	107.31	86.69	240	219	16,454	8,277	8,177
330+00	50.00	177.11	145.61	263	215	16,717	8,535	8,182
330+50	50.00	161.63	129.55	314	255	17,031	8,841	8,190
331+00	50.00	146.46	160.55	285	269	17,316	9,163	8,153
331+50	50.00	166.60	165.28	290	302	17,606	9,525	8,081
332+00	50.00	182.43	209.15	323	347	17,929	9,941	7,988
332+50	50.00	168.09	273.26	325	447	18,254	10,477	7,776
333+00	50.00	67.09	316.19	218	546	18,471	11,132	7,339
333+50	50.00	68.16	280.46	125	552	18,597	11,795	6,802
334+00	50.00	85.92	183.16	143	429	18,739	12,310	6,429
334+50	50.00	106.47	51.80	178	218	18,917	12,571	6,346
335+00	50.00	112.55	34.72	203	80	19,120	12,667	6,453
335+50	50.00	74.77	65.10	173	92	19,294	12,778	6,515
336+00	50.00	68.90	67.05	133	122	19,427	12,925	6,502
336+50	50.00	59.11	78.71	119	135	19,545	13,087	6,458
337+00	50.00	58.76	86.20	109	153	19,654	13,270	6,384
337+50	50.00	62.73	88.68	112	162	19,767	13,465	6,302
338+00	50.00	60.05	94.50	114	170	19,880	13,668	6,212
338+50	50.00	65.59	83.38	116	165	19,997	13,866	6,131
339+00	50.00	91.05	113.34	145	182	20,142	14,084	6,057
339+50	50.00	126.41	28.88	201	132	20,343	14,242	6,101
340+00	50.00	183.65	0.00	287	27	20,630	14,275	6,356
340+50	50.00	206.67	0.00	361	0	20,992	14,275	6,717
341+00	50.00	208.48	34.76	384	32	21,376	14,313	7,063
341+50	50.00	188.15	58.63	367	86	21,743	14,417	7,326
342+00	50.00	182.32	38.16	343	90	22,086	14,524	7,562
342+50	50.00	294.96	0.00	442	35	22,528	14,567	7,961
343+00	50.00	619.40	0.00	847	0	23,375	14,567	8,808
343+50	50.00	780.52	0.00	1,296	0	24,671	14,567	10,104
344+00	50.00	781.86	0.00	1,447	0	26,118	14,567	11,551
344+50	50.00	356.85	0.00	1,054	0	27,172	14,567	12,605
345+00	50.00	245.52	0.00	558	0	27,730	14,567	13,163
345+50	50.00	319.24	0.00	523	0	28,253	14,567	13,686
345+71.68	21.68	355.58	0.00	271	0	28,524	14,567	13,957
346+00	28.32	368.18	0.00	380	0	28,903	14,567	14,336
346+50	50.00	402.84	0.00	714	0	29,617	14,567	15,050
347+00	50.00	409.65	0.00	752	0	30,370	14,567	15,803
347+50	50.00	377.62	0.00	729	0	31,098	14,567	16,532
348+00	50.00	537.67	0.00	847	0	31,946	14,567	17,379
348+50	50.00	198.19	9.41	681	9	32,627	14,577	18,050
349+00	50.00	179.59	4.12	350	13	32,977	14,592	18,385
349+50	50.00	199.18	7.25	351	11	33,328	14,605	18,723
350+00	50.00	189.16	6.45	360	13	33,687	14,620	19,067
350+50	50.00	191.82	5.43	353	11	34,040	14,633	19,407
351+00	50.00	195.87	2.08	359	7	34,399	14,642	19,757
351+50	50.00	222.97	0.00	388	2	34,787	14,644	20,143
351+78.51	28.51	295.33	0.00	274	0	35,061	14,644	20,417
352+00	21.49	200.11	2.33	197	1	35,258	14,645	20,613

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STH 20 (W. Main St)

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) Cut	Incremental Vol (CY) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
352+50	50.00	231.53	0.00	400	2	35,657	14,648	21,010
353+00	50.00	244.63	0.00	441	0	36,098	14,648	21,451
353+50	50.00	239.62	0.00	448	0	36,547	14,648	21,899
354+00	50.00	230.12	0.00	435	0	36,982	14,648	22,334
354+50	50.00	191.96	0.00	391	0	37,373	14,648	22,725
354+86.39	36.39	215.85	0.03	275	0	37,647	14,648	23,000
355+00	13.61	209.60	0.00	107	0	37,755	14,648	23,107
355+50	50.00	185.32	0.00	366	0	38,120	14,648	23,472
356+00	50.00	195.71	0.00	353	0	38,473	14,648	23,825
356+50	50.00	212.53	0.00	378	0	38,851	14,648	24,203
357+00	50.00	206.95	0.02	388	0	39,239	14,648	24,592
357+50	50.00	219.90	0.00	395	0	39,635	14,648	24,987
357+88.68	38.68	164.72	0.00	275	0	39,910	14,648	25,262
357+89.43	0.76	152.14	0.00	4	0	39,915	14,648	25,267
358+00	10.57	305.52	0.00	90	0	40,004	14,648	25,356
358+50	50.00	199.60	0.07	468	0	40,472	14,648	25,824
359+00	50.00	207.90	0.02	377	0	40,849	14,648	26,201
359+50	50.00	212.14	0.08	389	0	41,238	14,648	26,590
360+00	50.00	216.05	0.04	396	0	41,635	14,648	26,986
360+50	50.00	210.52	0.12	395	0	42,030	14,648	27,381
361+00	50.00	231.15	0.00	409	0	42,438	14,649	27,790
361+50	50.00	237.00	0.00	433	0	42,872	14,649	28,223
362+00	50.00	235.12	0.00	437	0	43,309	14,649	28,661
362+50	50.00	330.93	0.00	524	0	43,833	14,649	29,185
362+58.06	8.06	147.13	0.00	71	0	43,905	14,649	29,256
362+61.66	3.60	167.00	0.00	21	0	43,926	14,649	29,277
363+00	38.34	159.35	0.00	232	0	44,157	14,649	29,509
363+50	50.00	179.16	0.08	313	0	44,471	14,649	29,822
364+00	50.00	147.86	2.60	303	2	44,773	14,652	30,122
364+30	30.00	158.92	68.51	170	40	44,944	14,699	30,245
365+77.45	147.45	0.00	0.00	434	187	45,378	14,924	30,454
366+00	22.55	0.00	0.00	0	0	45,378	14,924	30,454
366+50	50.00	0.00	0.00	0	0	45,378	14,924	30,454
100+00	4.16	0.00	0.00	0	0	45,378	14,924	30,454
				45,378	12,436			

ALL ITEMS CATEGORY 0010 UNLESS NOTED

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	EARTHWORK DATA	SHEET NO: 760	E

STH 20 (1st St)

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Expanded Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
367+27.77	0.00	132.03	0.00	0	0	0	0	0
367+50	22.23	145.98	0.20	114	0	114	0	114
367+67.33	17.33	144.71	0.22	93	0	208	0	207
368+00	32.67	146.23	0.07	176	0	384	0	383
368+50	50.00	149.59	0.00	274	0	658	1	657
369+00	50.00	138.13	0.00	266	0	924	1	923
369+50	50.00	194.04	0.00	308	0	1,232	1	1,231
369+61.09	11.09	195.48	0.00	80	0	1,312	1	1,311
370+00	38.91	118.17	0.00	226	0	1,538	1	1,537
370+50	50.00	0.00	0.00	109	0	1,647	1	1,646
371+00	50.00	160.95	0.00	149	0	1,796	1	1,796
371+50	50.00	172.93	0.00	309	0	2,105	1	2,105
372+00	50.00	156.58	0.00	305	0	2,410	1	2,410
372+50	50.00	109.81	0.00	247	0	2,657	1	2,656
373+00	50.00	105.38	0.00	199	0	2,856	1	2,856
373+50	50.00	151.88	0.00	238	0	3,094	1	3,094
374+00	50.00	154.12	0.00	283	0	3,378	1	3,377
374+50	50.00	150.14	0.00	282	0	3,659	1	3,659
375+00	50.00	157.37	0.00	285	0	3,944	1	3,944
375+50	50.00	152.50	0.00	287	0	4,231	1	4,231
376+00	50.00	150.38	0.00	280	0	4,512	1	4,511
376+50	50.00	132.71	0.00	262	0	4,774	1	4,773
377+00	50.00	144.20	0.00	256	0	5,030	1	5,030
377+50	50.00	140.09	0.00	263	0	5,293	1	5,293
378+00	50.00	135.93	0.00	256	0	5,549	1	5,548
378+50	50.00	137.75	0.00	253	0	5,802	1	5,802
379+00	50.00	148.26	0.00	265	0	6,067	1	6,067
379+50	50.00	154.31	0.00	280	0	6,347	1	6,347
380+00	50.00	136.25	0.59	269	1	6,616	1	6,615
380+50	50.00	116.32	0.00	234	1	6,850	2	6,848
381+00	50.00	145.88	0.00	243	0	7,093	2	7,091
381+50	50.00	149.31	0.00	273	0	7,366	2	7,364
382+00	50.00	138.98	0.35	267	0	7,633	2	7,631
382+50	50.00	141.60	0.08	260	0	7,893	3	7,890
383+00	50.00	144.57	0.00	265	0	8,158	3	8,155
383+50	50.00	122.75	0.00	248	0	8,406	3	8,403
384+00	50.00	137.00	0.00	241	0	8,646	3	8,643
384+50	50.00	139.49	0.00	256	0	8,902	3	8,899
385+00	50.00	145.30	0.00	264	0	9,166	3	9,163
385+50	50.00	110.88	0.76	237	1	9,403	4	9,399
386+00	50.00	104.83	4.23	200	5	9,603	9	9,593
386+50	50.00	119.33	1.26	208	5	9,810	15	9,795
387+00	50.00	127.21	0.00	228	1	10,038	17	10,022
387+50	50.00	140.68	0.00	248	0	10,287	17	10,270
388+00	50.00	145.03	0.00	265	0	10,551	17	10,534

Division - STH 20 (1st St)

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) Cut	Incremental Vol (CY) Fill	Cumulative Vol (CY) Expanded Cut 1	Cumulative Vol (CY) Expanded Fill 1	Mass Ordinate
388+50	50.00	138.23	0.00	262	0	10,813	17	10,797
389+00	50.00	129.41	0.00	248	0	11,061	17	11,044
389+50	50.00	124.70	0.00	235	0	11,296	17	11,280
390+00	50.00	126.99	0.00	233	0	11,530	17	11,513
390+50	50.00	121.35	0.00	230	0	11,759	17	11,743
391+00	50.00	120.16	0.00	224	0	11,983	17	11,966
391+50	50.00	114.30	0.04	217	0	12,200	17	12,183
392+00	50.00	125.74	0.00	222	0	12,422	17	12,406
392+50	50.00	118.39	0.00	226	0	12,648	17	12,632
393+00	50.00	119.89	0.00	221	0	12,869	17	12,852
393+50	50.00	112.98	1.47	216	1	13,085	18	13,066
394+00	50.00	122.96	0.00	218	1	13,303	20	13,283
394+50	50.00	134.72	0.00	239	0	13,542	20	13,522
395+00	50.00	148.73	0.00	262	0	13,804	20	13,784
395+50	50.00	149.47	0.00	276	0	14,080	20	14,060
396+00	50.00	130.43	0.00	259	0	14,340	20	14,319
396+50	50.00	127.37	0.00	239	0	14,578	20	14,558
397+00	50.00	115.33	0.00	225	0	14,803	20	14,783
397+50	50.00	134.03	0.00	231	0	15,034	20	15,014
398+00	50.00	131.33	0.53	246	0	15,280	21	15,259
398+50	50.00	87.15	0.00	202	0	15,482	21	15,461
399+00	50.00	128.47	0.48	200	0	15,681	22	15,660
399+50	50.00	123.01	0.00	233	0	15,914	22	15,892
400+00	50.00	125.56	0.00	230	0	16,144	22	16,122
400+50	50.00	138.66	0.00	245	0	16,389	22	16,367
401+00	50.00	126.25	0.00	245	0	16,634	22	16,612
401+50	50.00	115.83	0.00	224	0	16,859	22	16,836
402+00	50.00	151.22	0.00	247	0	17,106	22	17,084
402+50	50.00	126.03	0.00	257	0	17,363	22	17,340
403+00	50.00	134.35	0.00	241	0	17,604	22	17,581
403+50	50.00	124.56	3.96	240	4	17,843	27	17,817
404+00	50.00	145.05	22.32	250	24	18,093	56	18,037
404+50	50.00	19.97	40.09	153	58	18,246	125	18,121
405+00	50.00	23.46	46.50	40	80	18,286	221	18,065
405+50	50.00	0.00	0.00	22	43	18,308	273	18,035
				18,308	228			

ALL ITEMS CATEGORY 0010 UNLESS NOTED

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	EARTHWORK DATA	SHEET NO: 761	E

FILE NAME : T:\1112700\cadd\Civil3D\22501200\SheetsPlan\090101_EW.ppt PLOT DATE : 4/30/2018 8:20 AM PLOT BY : PLOT NAME : 090101_EW PLOT SCALE : 1.000000:1.000000

WISDOT / CADDS SHEET 42

E. Main St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Expanded Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
100+50	0.00	157.24	0.00	0	0	0	0	0
101+00	50.00	170.29	0.00	303	0	303	0	303
101+50	50.00	171.52	0.00	316	0	620	0	620
101+75	25.00	167.93	0.00	157	0	777	0	777
102+00	25.00	167.77	0.00	155	0	932	0	932
102+50	50.00	156.33	0.00	300	0	1,232	0	1,232
103+00	50.00	149.56	0.00	283	0	1,516	0	1,516
103+08.83	8.83	138.00	0.00	47	0	1,563	0	1,563
103+09.56	0.73	141.72	0.00	4	0	1,566	0	1,566
103+50	40.44	105.81	0.00	185	0	1,752	0	1,752
		Category 0010 Subtotal:		1,752	0			
103+50	0.00	105.81	0.00	0	0	0	0	0
104+00	50.00	136.82	0.24	215	0	1,967	0	1,967
104+15.81	15.81	136.98	0.00	80	0	2,047	0	2,047
104+50	34.19	135.65	0.35	173	0	2,220	1	2,219
104+62.91	12.91	141.55	0.33	66	0	2,286	1	2,285
104+96.52	33.61	151.77	0.17	183	0	2,469	1	2,467
105+00	3.48	151.47	0.14	20	0	2,488	1	2,487
105+50	50.00	155.85	0.00	285	0	2,773	1	2,771
106+00	50.00	160.72	0.00	293	0	3,066	1	3,064
106+18.2	18.20	159.27	0.00	108	0	3,174	1	3,172
106+19.33	1.13	159.11	0.00	7	0	3,180	1	3,179
106+50	30.67	144.22	0.00	172	0	3,353	1	3,351
107+00	50.00	149.44	0.00	272	0	3,624	1	3,623
107+22.5	22.50	160.04	0.00	129	0	3,753	1	3,752
107+37.87	15.37	160.01	0.11	91	0	3,844	1	3,843
107+50	12.13	161.01	0.00	72	0	3,917	1	3,915
108+00	50.00	158.29	0.04	296	0	4,212	1	4,211
108+50	50.00	157.77	0.00	293	0	4,505	1	4,503
109+00	50.00	203.41	0.00	334	0	4,839	1	4,838
109+08.6	8.60	200.72	0.00	64	0	4,904	1	4,902
109+23.61	15.01	146.01	0.00	96	0	5,000	1	4,999
109+50	26.39	161.79	0.00	150	0	5,150	1	5,149
109+75	25.00	146.31	0.06	143	0	5,293	1	5,292
		Category 0090 Subtotal:		3,541	1			

S. Buena Park Road

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Expanded Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
05+62.24	0.00	0.00	0.00	0	0	0	0	0
06+00	37.76	0.00	0.00	0	0	0	0	0
06+50	50.00	92.35	0.15	86	0	86	0	85
07+00	50.00	92.55	0.42	171	1	257	1	256
07+50	50.00	67.75	0.11	148	0	405	1	404
08+00	50.00	55.61	6.74	114	6	519	9	510
08+50	50.00	66.81	2.77	113	9	633	20	613
09+00	50.00	42.93	8.80	102	11	734	32	702
09+06.66	6.66	102.39	8.30	18	2	752	35	717
				752	29			

N. Buena Park Road

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Expanded Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
10+94	0.00	188.90	1.26	0	0	0	0	0
11+00	6.00	79.89	3.39	30	1	30	1	29
11+50	50.00	72.07	4.01	141	7	171	9	162
12+00	50.00	73.40	2.95	135	6	305	17	289
12+50	50.00	56.63	3.33	120	6	426	24	402
13+00	50.00	74.78	2.77	122	6	547	30	517
13+50	50.00	72.35	5.95	136	8	684	40	644
14+00	50.00	41.39	2.75	105	8	789	50	739
14+50	50.00	35.32	6.06	71	8	860	59	800
15+00	50.00	35.97	9.21	66	14	926	76	850
15+40	40.00	38.35	6.78	55	12	981	91	890
				981	76			

ALL ITEMS CATEGORY 0010 UNLESS NOTED

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	EARTHWORK DATA	SHEET NO: 762	E

Division - Augusta

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
20+56.6	0.00	214.00	0.00	0	0	0	0	0
20+75	18.40	212.71	0.00	145	0	145	0	145
21+00	25.00	169.75	0.00	177	0	322	0	322
21+26	26.00	116.89	1.03	138	0	461	1	460
21+50	24.00	85.79	5.82	90	3	551	4	546
				551	4			

Division - Racine St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
50+10	0.00	182.60	0.00	0	0	0	0	0
50+50	40.00	134.70	0.00	235	0	235	0	235
51+00	50.00	85.35	0.00	204	0	439	0	439
51+50	50.00	52.51	1.47	128	1	566	2	565
51+51.21	1.21	52.76	1.61	2	0	569	2	567
				569	1			

3

Division - Rivermoor Road

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
30+67.39	0.00	20.41	70.80	0	0	0	0	0
31+00	32.61	27.48	29.02	29	60	29	72	-43
31+25	25.00	27.04	27.75	25	26	54	104	-50
				54	87			

Division - Center St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
60+60	0.00	43.54	8.31	0	0	0	0	0
61+00	40.00	41.55	1.86	63	8	63	9	54
				63	8			

Division - Rivermoor Drive

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
40+59.5	0.00	119.71	0.00	0	0	0	0	0
40+62.5	3.00	86.58	0.00	11	0	11	0	11
41+00	37.50	80.30	0.00	116	0	127	0	127
41+50	50.00	49.07	4.70	120	4	247	5	242
41+75	25.00	45.43	5.11	44	5	291	11	280
				291	9			

Division - S Water St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
68+75	0.00	63.49	0.00	0	0	0	0	0
69+00	25.00	66.31	0.00	60	0	60	0	60
69+50	50.00	64.08	0.00	121	0	181	0	181
69+53.31	3.31	71.11	0.00	8	0	189	0	189
				189	0			

ALL ITEMS CATEGORY 0010 UNLESS NOTED

3

Division - S Jefferson St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
78+50	0.00	56.01	0.00	0	0	0	0	0
79+00	50.00	143.67	0.11	185	0	185	0	185
79+35	35.00	214.22	0.00	232	0	417	0	417
				417	0			

Division - N Jefferson St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
80+55.02	0.00	94.65	0.29	0	0	0	0	0
81+00	44.98	83.63	0.45	149	1	149	1	148
81+12.78	12.78	95.16	0.01	42	0	191	1	190
81+50	37.22	84.50	0.00	124	0	315	1	314
81+76.77	26.77	78.78	0.95	81	0	396	1	394
81+90.32	13.55	101.77	1.07	45	1	441	2	439
82+00	9.68	83.85	1.01	33	0	474	2	472
82+06.2	6.20	81.71	0.52	19	0	493	3	490
82+50	43.80	73.85	1.23	126	1	619	4	615
82+90	40.00	60.54	1.26	100	2	719	7	712
83+00	10.00	63.32	0.70	23	0	742	7	735
83+49.99	49.99	70.57	0.15	124	1	866	8	858
				866	7			

Division - Elizabeth St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
120+41.45	0.00	59.79	0.00	0	0	0	0	0
120+65	23.55	63.44	0.00	54	0	54	0	54
				54	0			

Division - S River St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
88+80	0.00	78.92	0.00	0	0	0	0	0
89+00	20.00	77.66	0.00	58	0	58	0	58
89+50	50.00	79.24	0.00	145	0	203	0	203
				203	0			

Division - N River St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
90+44.27	0.00	61.68	0.00	0	0	0	0	0
90+50	5.73	60.36	0.05	13	0	13	0	13
91+00	50.00	65.37	0.04	116	0	129	0	129
91+25	25.00	68.02	0.01	62	0	191	0	191
				191	0			

Division - St. Thomas St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unad. Cut Note 1	Incremental Vol (CY) (Unad. Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1	Mass Ordinate Note 6
160+20	0.00	184.84	0.00	0.00	0.00	0.00	0.00	0.00
160+25	5.00	172.83	0.00	33.12	0.00	33.12	0.00	33.12
160+50	25.00	80.39	0.00	117.23	0.00	150.35	0.00	150.35
160+62	12.00	91.04	0.00	38.10	0.00	188.44	0.00	188.44
160+75	13.00	68.38	0.00	38.38	0.00	226.82	0.00	226.82
161+00	25.00	60.97	0.00	59.88	0.00	286.71	0.00	286.71
161+25	25.00	63.79	0.00	57.76	0.00	344.47	0.00	344.47
161+28	3.00	30.09	0.90	5.22	0.05	349.68	0.05	349.63
				349.68	0.05			

3

ALL ITEMS CATEGORY 0010 UNLESS NOTED

Division - S 2nd St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
129+00	0.00	80.43	0.00	0	0	0	0	0
129+50	50.00	53.07	0.00	124	0	124	0	124
129+57.7	7.70	93.81	0.00	21	0	145	0	145
				145	0			

Division - N 2nd St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
130+42	0.00	105.73	0.00	0	0	0	0	0
130+50	8.00	86.47	0.00	28	0	28	0	28
131+00	50.00	59.44	0.00	135	0	164	0	164
				164	0			

Division - S 3rd St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
138+70	0.00	69.13	0.76	0	0	0	0	0
138+90	20.00	74.25	0.00	53	0	53	0	53
139+00	10.00	77.44	0.00	28	0	81	0	81
139+50	50.00	68.65	0.00	135	0	216	0	216
139+58	8.00	66.16	0.00	20	0	236	0	236
				236	0			

Division - N 3rd St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
140+41	0.00	66.58	0.00	0	0	0	0	0
140+50	9.00	59.55	0.00	21	0	21	0	21
141+00	50.00	63.68	0.16	114	0	135	0	135
141+12	12.00	66.47	0.37	29	0	164	0	164
141+25	13.00	69.64	0.00	33	0	197	0	196
				197	0			

Division - S Milwaukee St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
149+22	0.00	35.05	0.31	0	0	0	0	0
149+50	28.00	75.38	0.03	57	0	57	0	57
149+65.55	15.55	86.37	0.00	47	0	104	0	104
				104	0			

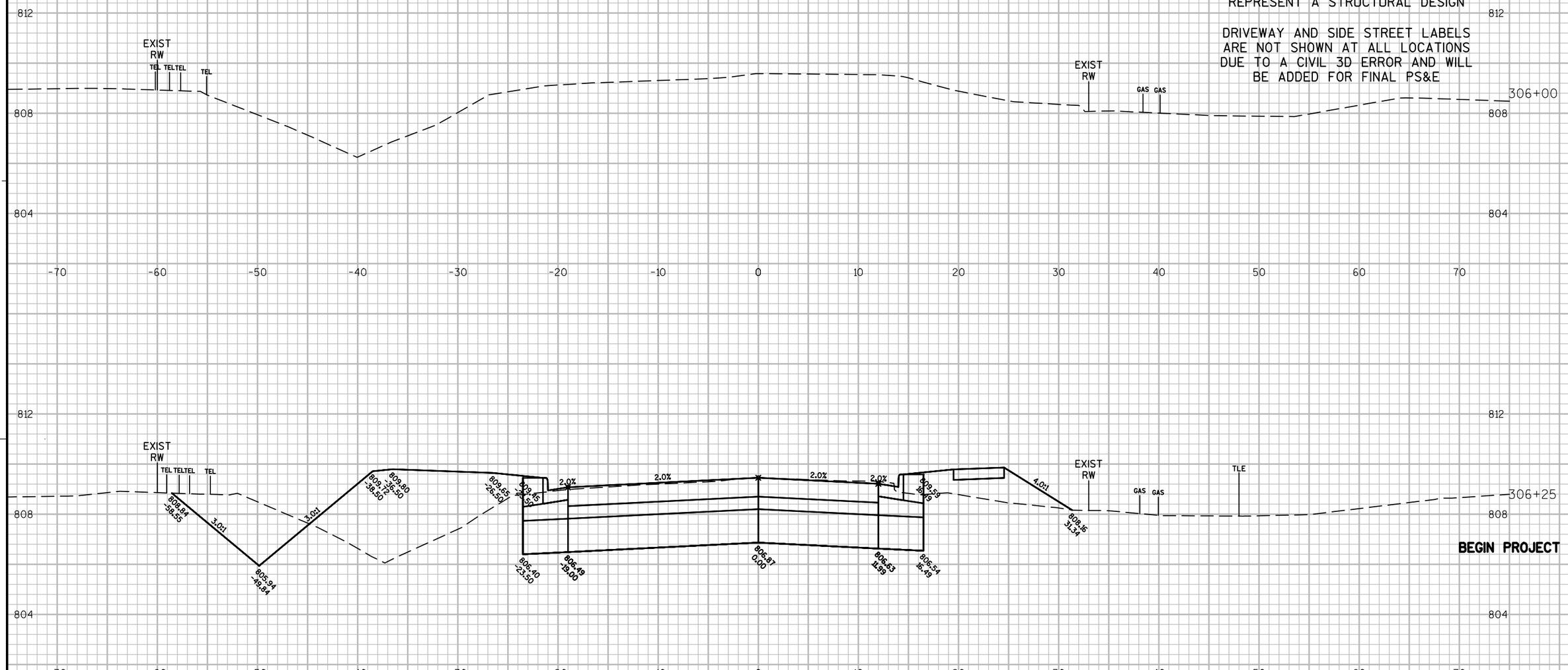
Division - N Milwaukee St

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
150+50	0.00	159.38	0.00	0	0	0	0	0
150+69.94	19.94	148.86	0.00	114	0	114	0	114
151+00	30.06	80.37	0.00	128	0	241	0	241
151+10	10.00	79.20	0.24	30	0	271	0	271
151+15	5.00	77.92	0.39	15	0	286	0	285
151+50	35.00	72.56	0.26	98	0	383	1	382
				383	1			

ALL ITEMS CATEGORY 0010 UNLESS NOTED

RETAINING WALLS ARE SHOWN FOR VISUAL PURPOSES ONLY AND DO NOT REPRESENT A STRUCTURAL DESIGN

DRIVEWAY AND SIDE STREET LABELS ARE NOT SHOWN AT ALL LOCATIONS DUE TO A CIVIL 3D ERROR AND WILL BE ADDED FOR FINAL PS&E



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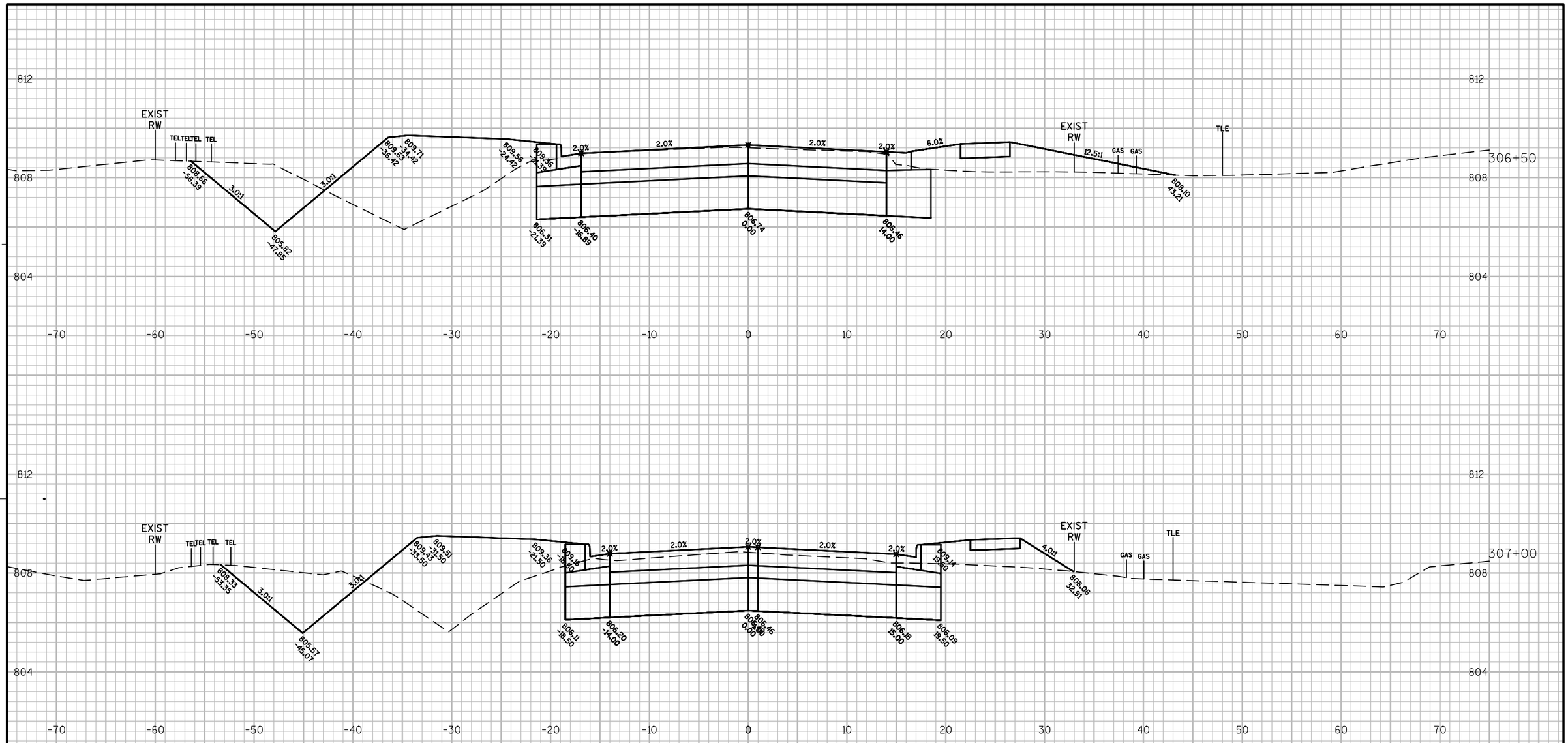

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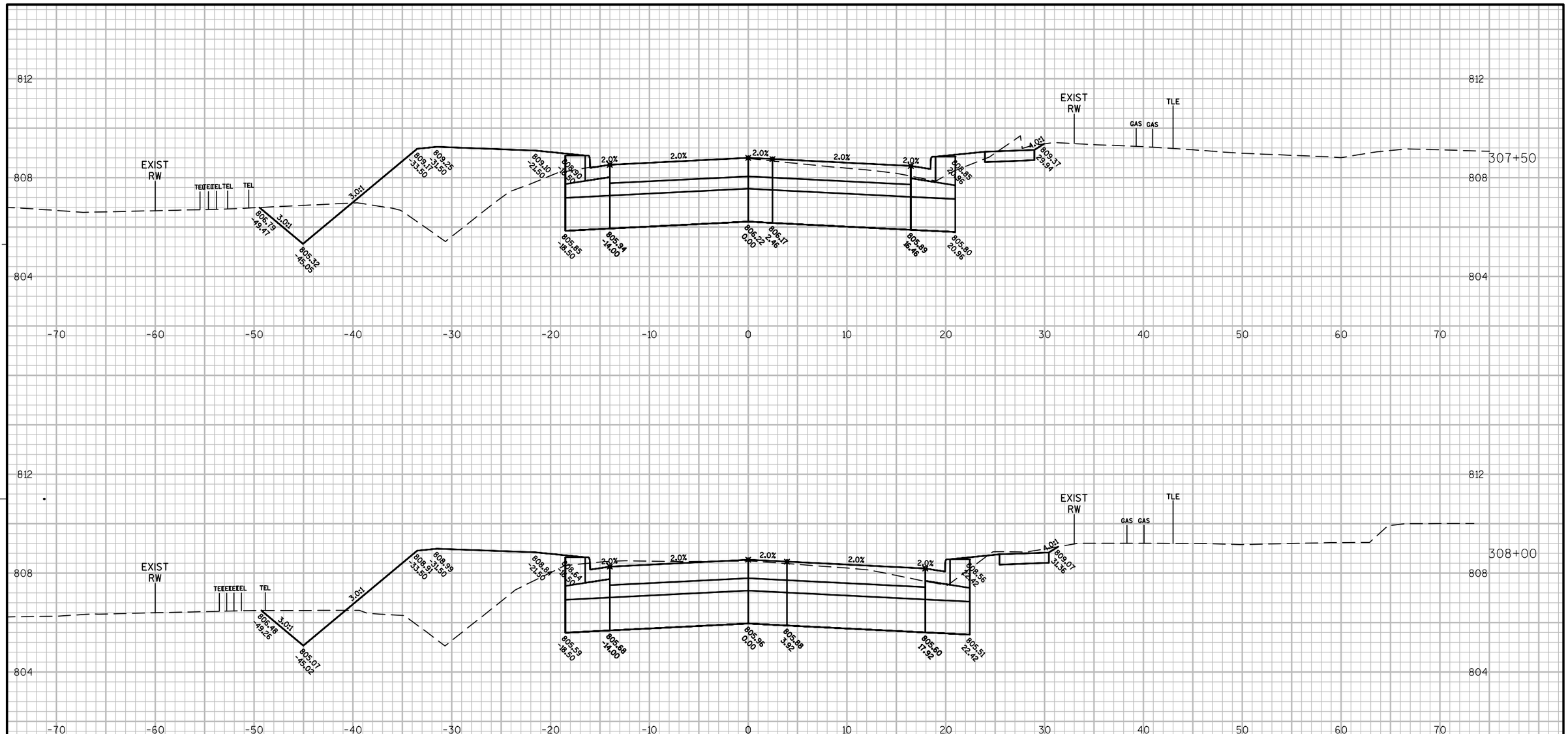

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PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 768	E

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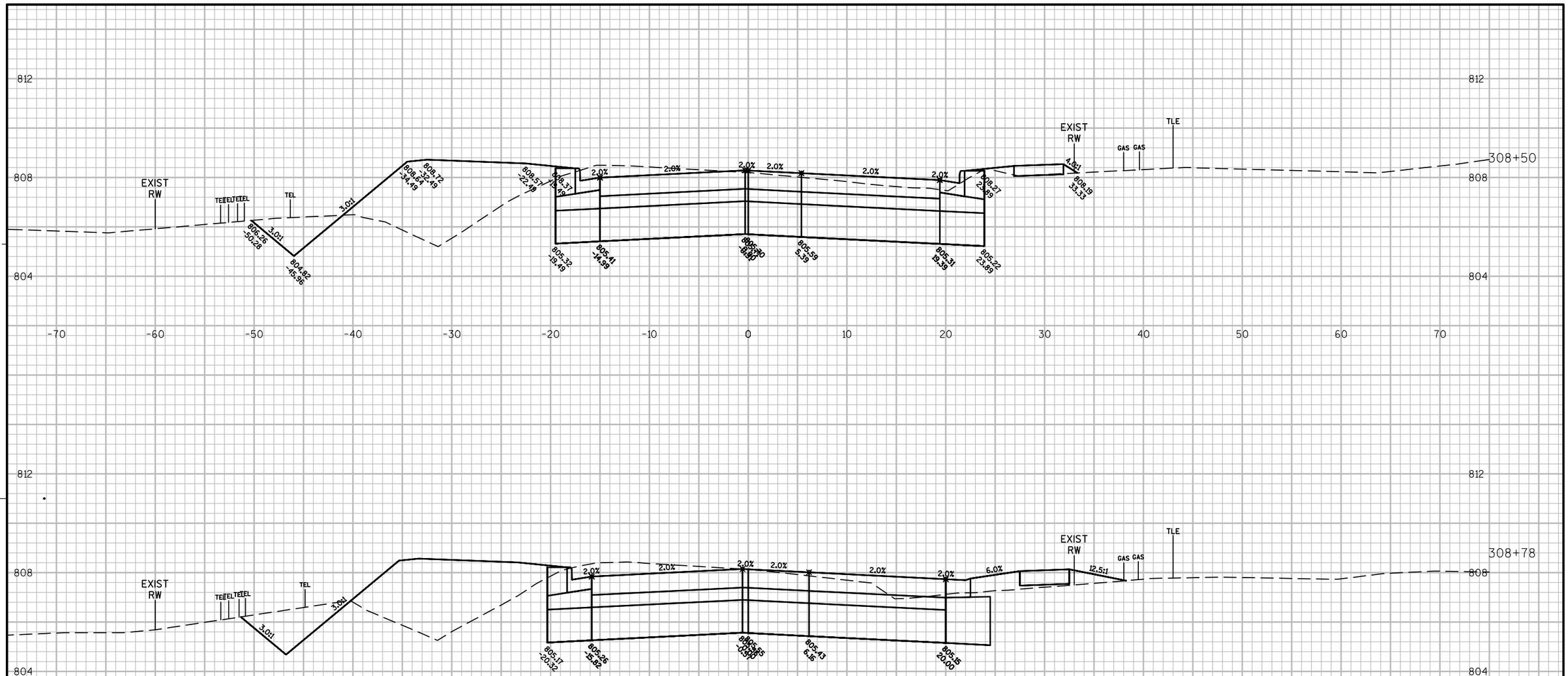
WISDOT/CADDS SHEET 49



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PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 769	E

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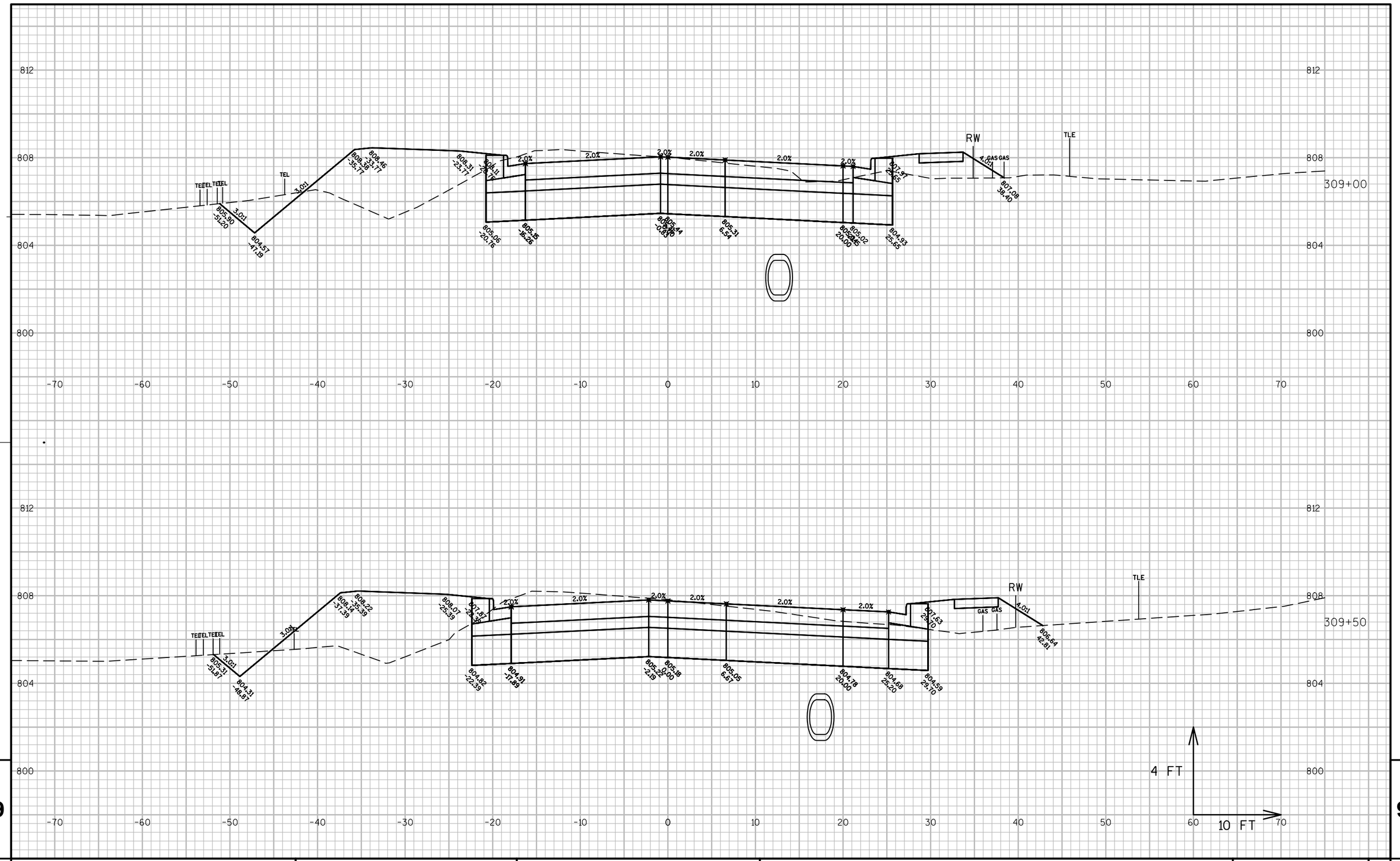
WISDOT/CADDS SHEET 49



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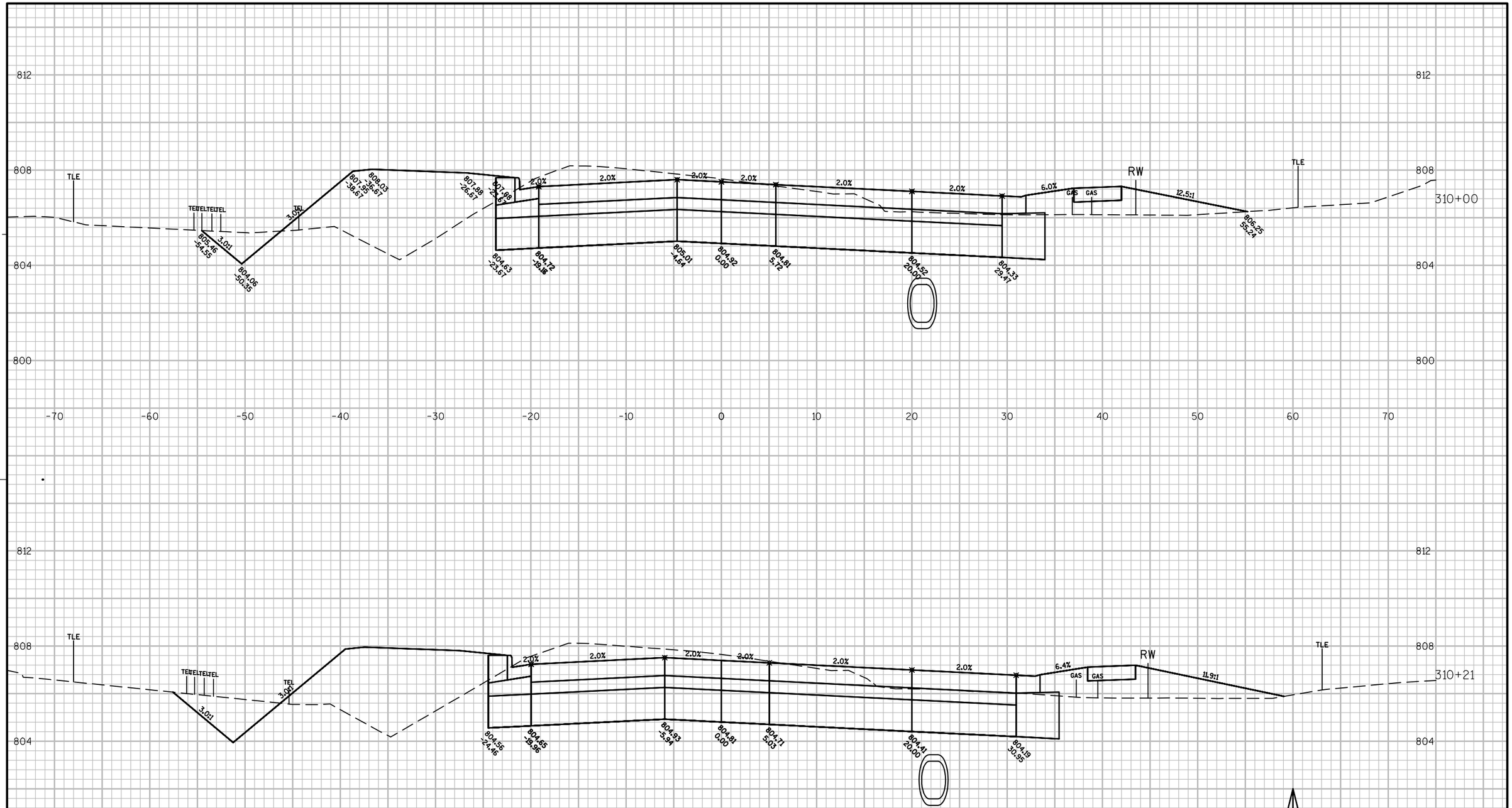

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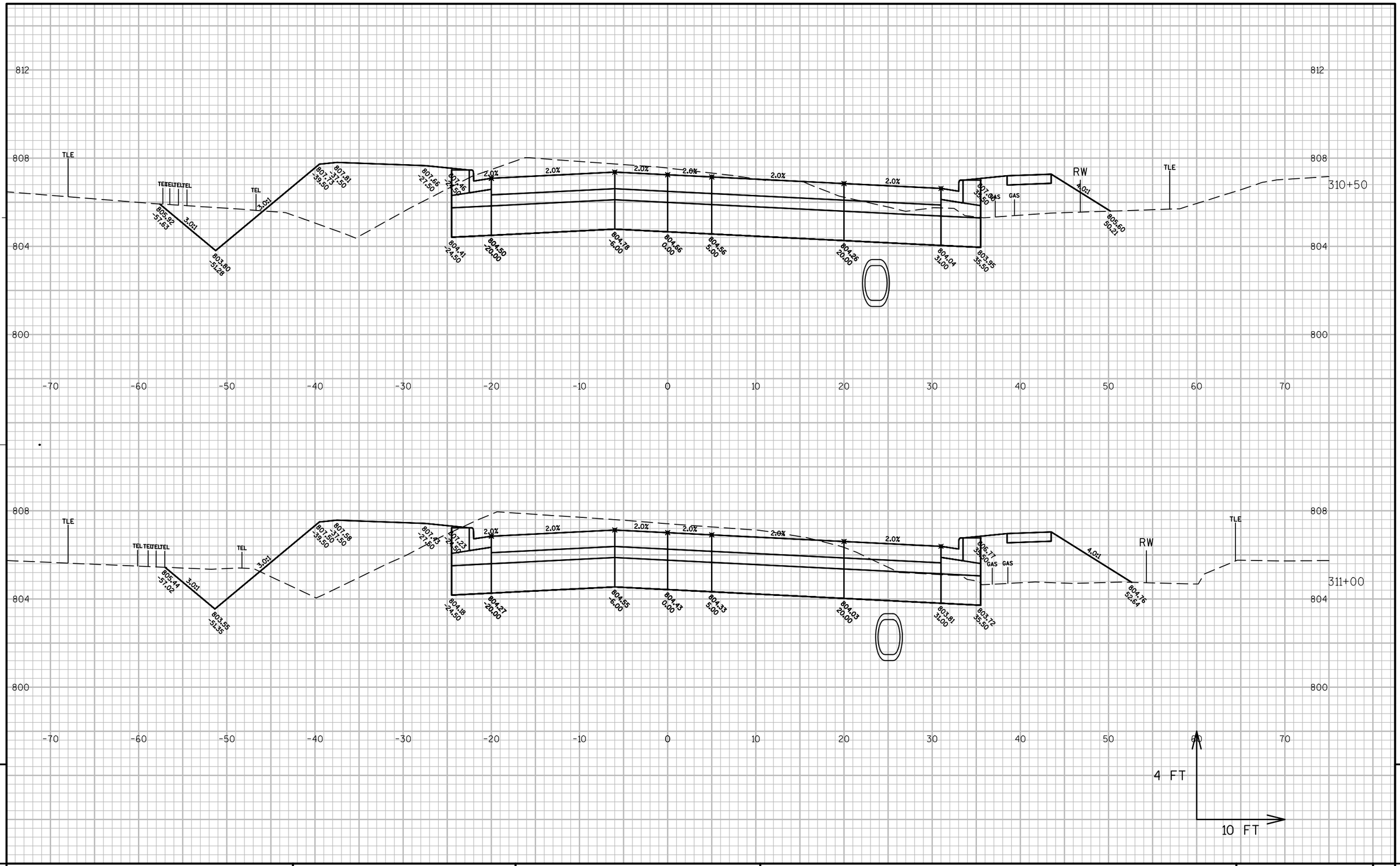
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 771	E



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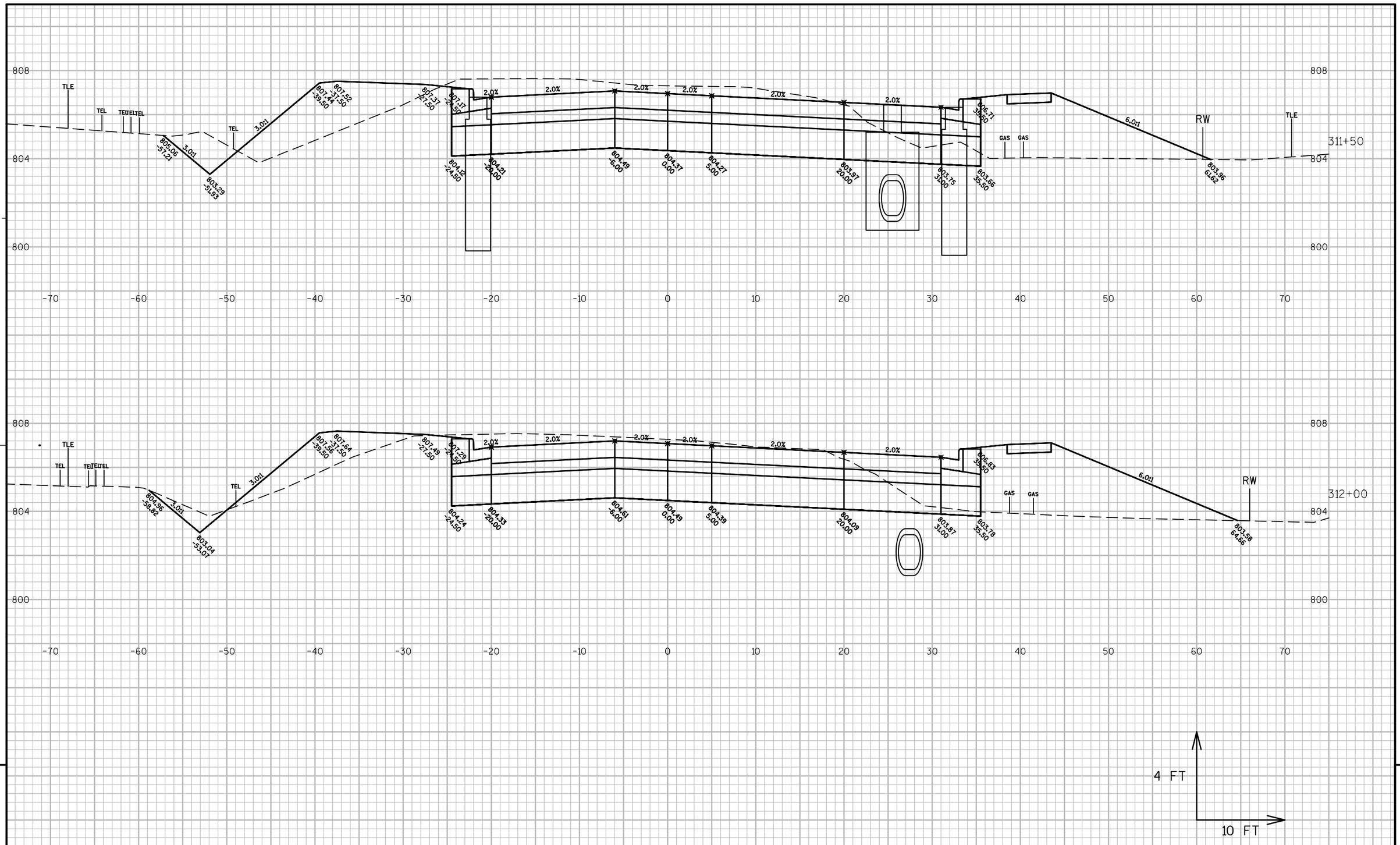

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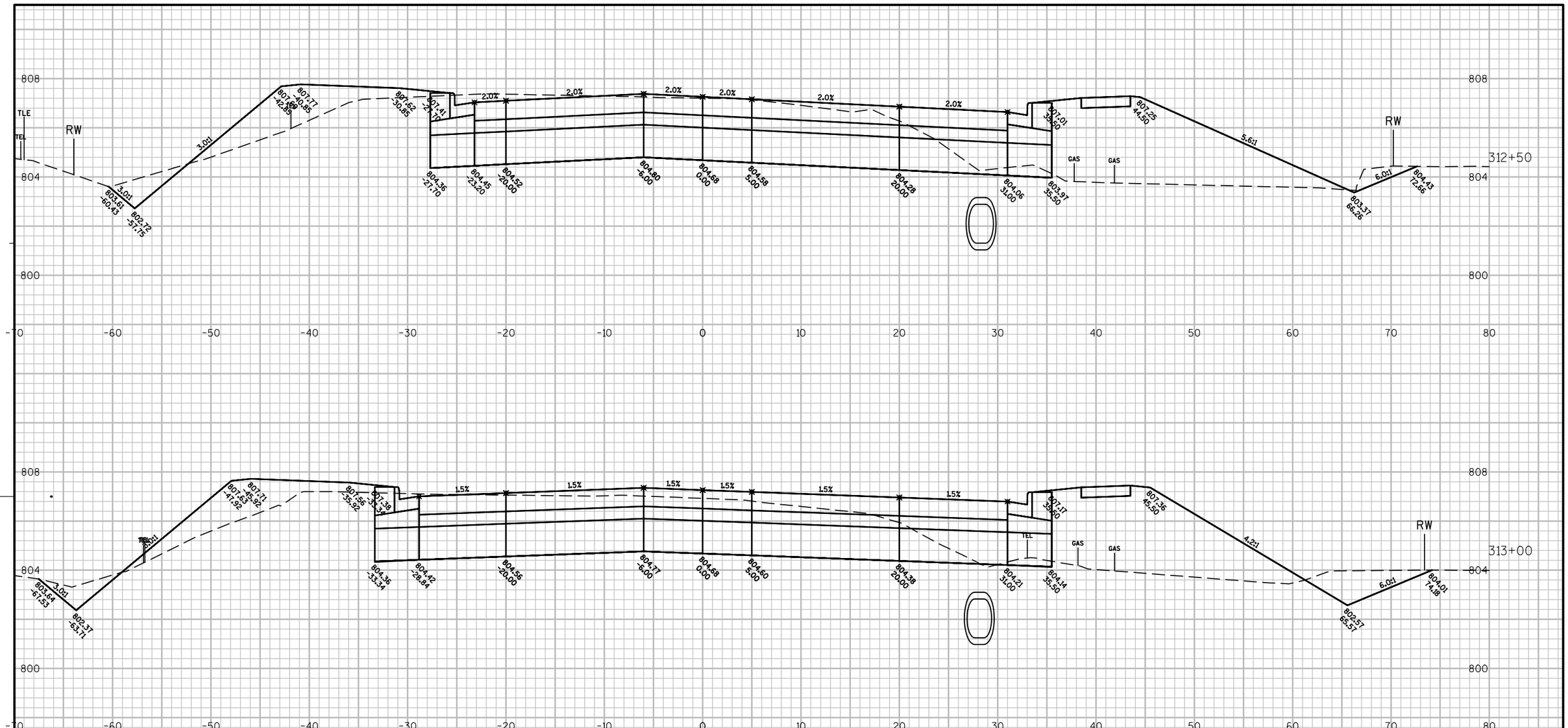
WISDOT/CADDS SHEET 49



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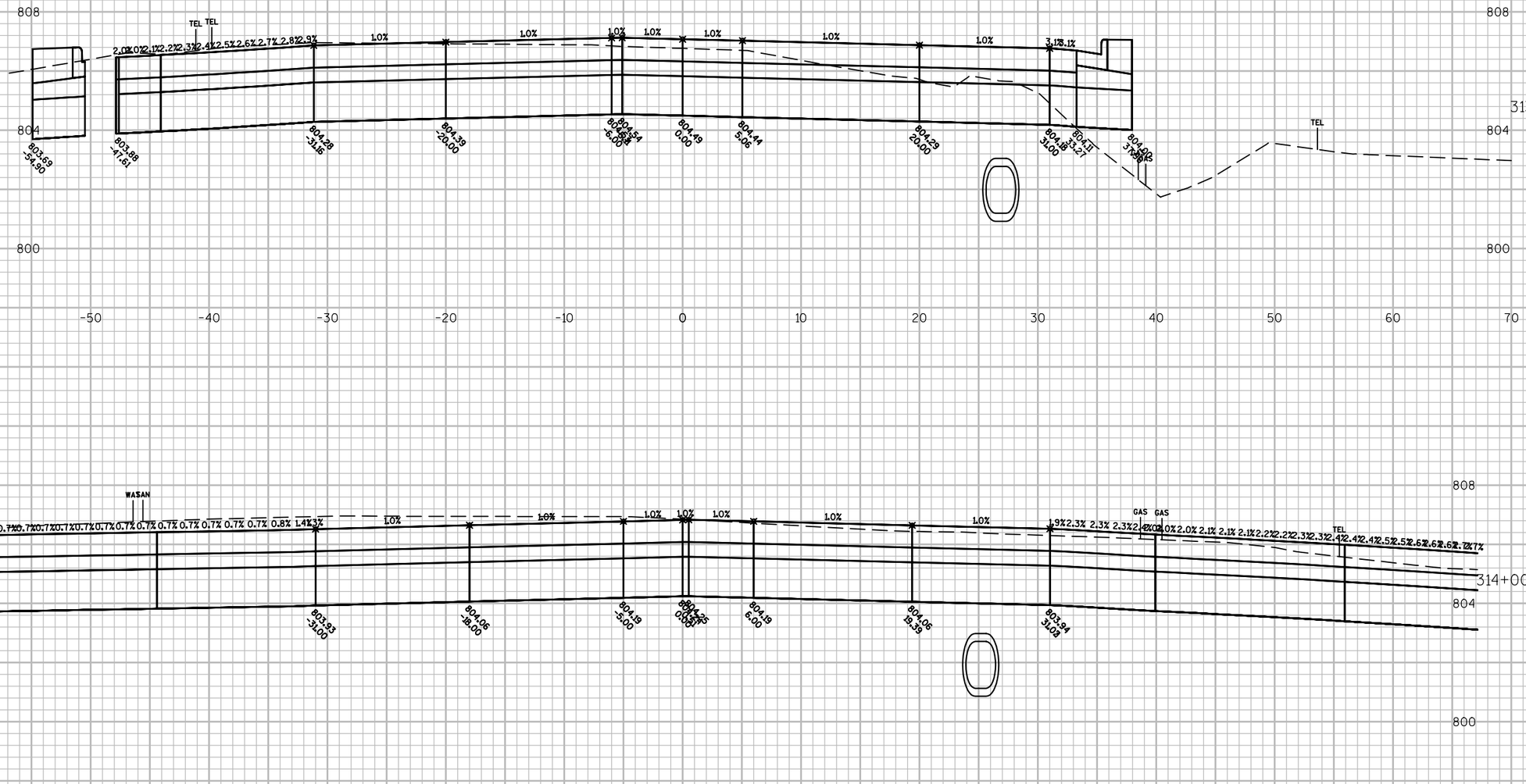
WISDOT/CADDS SHEET 49



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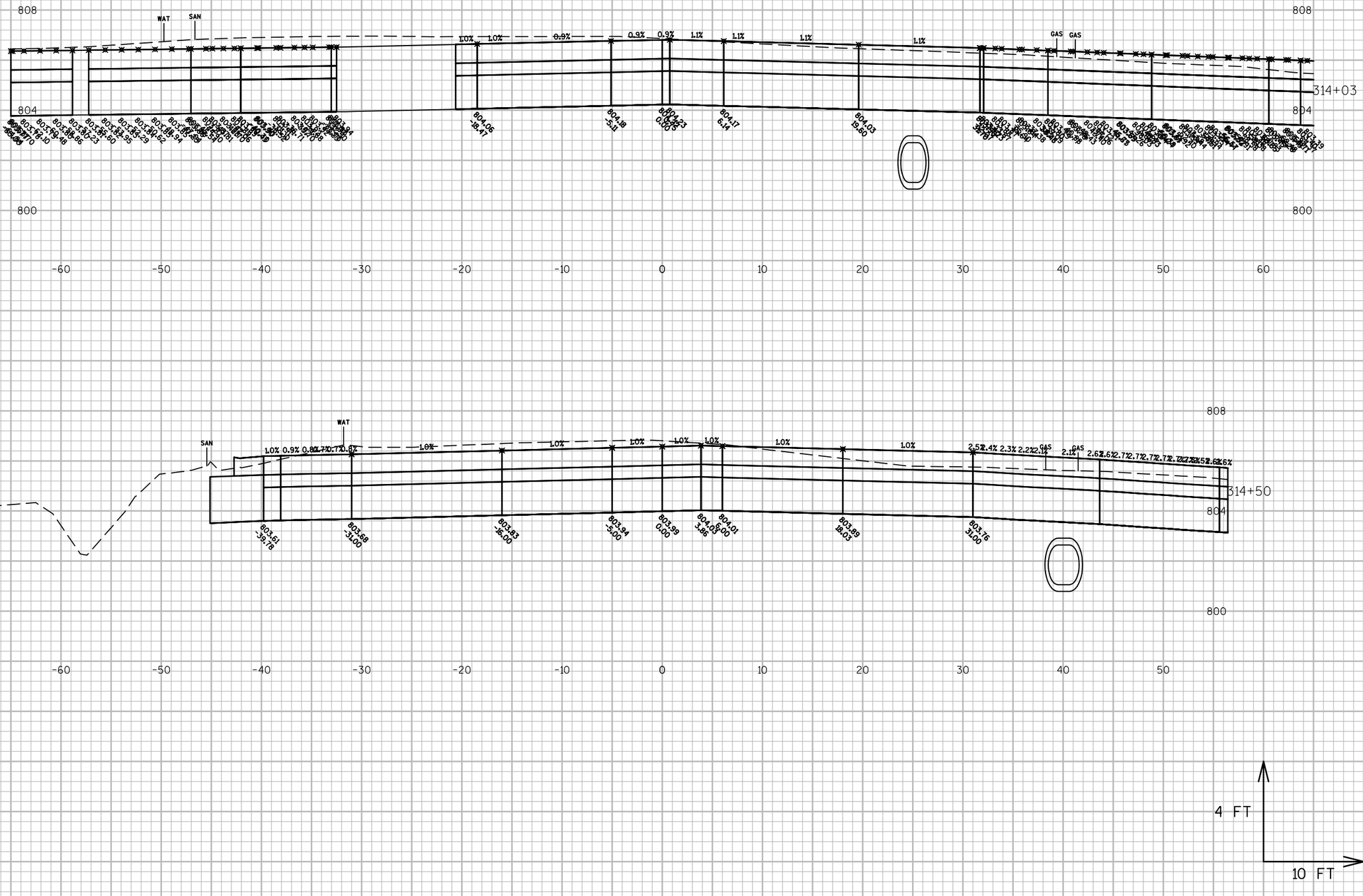

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PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 776	E

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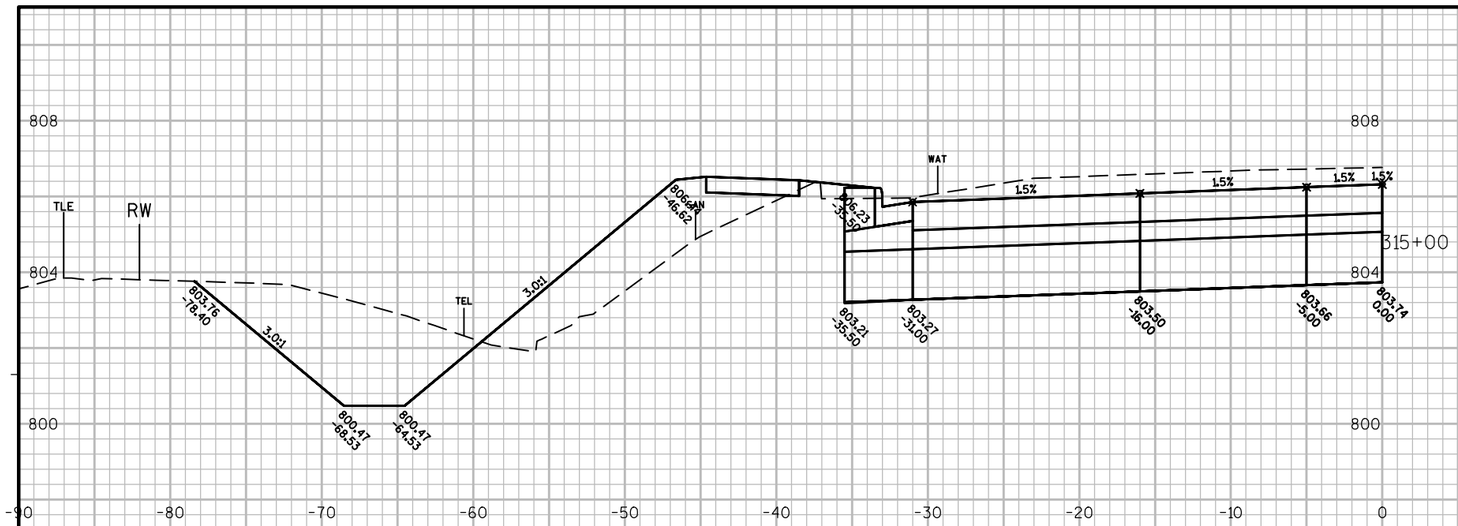

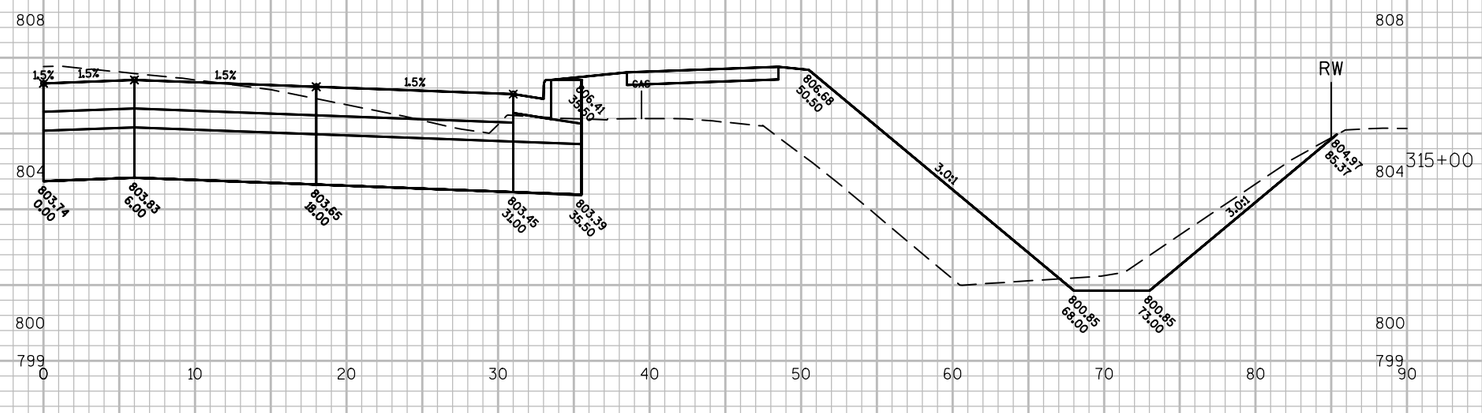

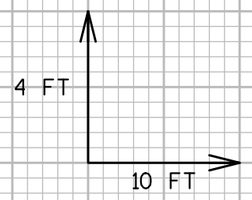

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PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 777	E

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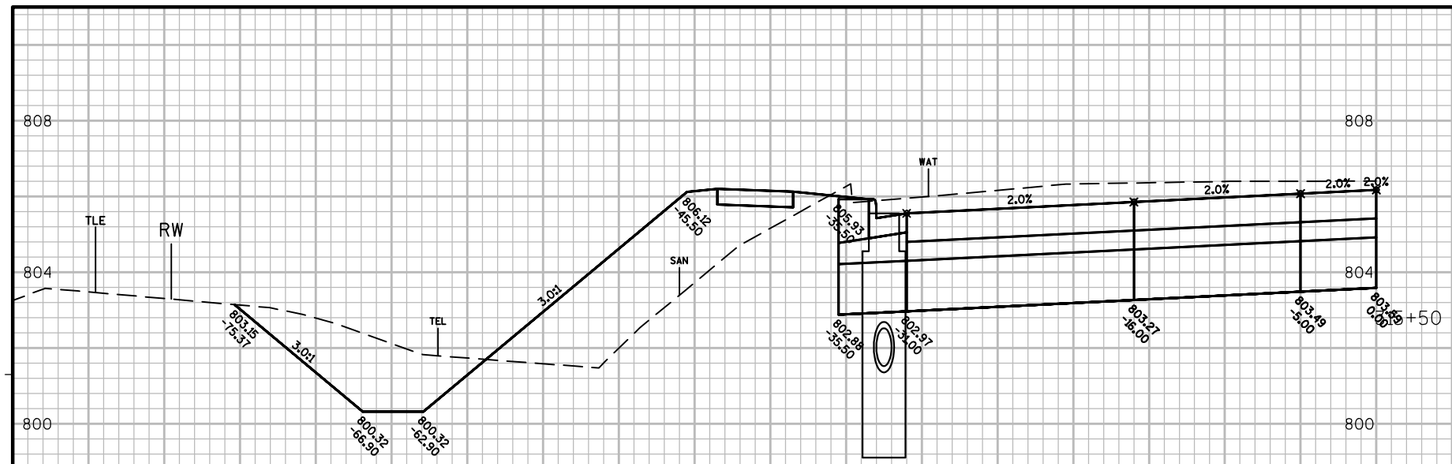
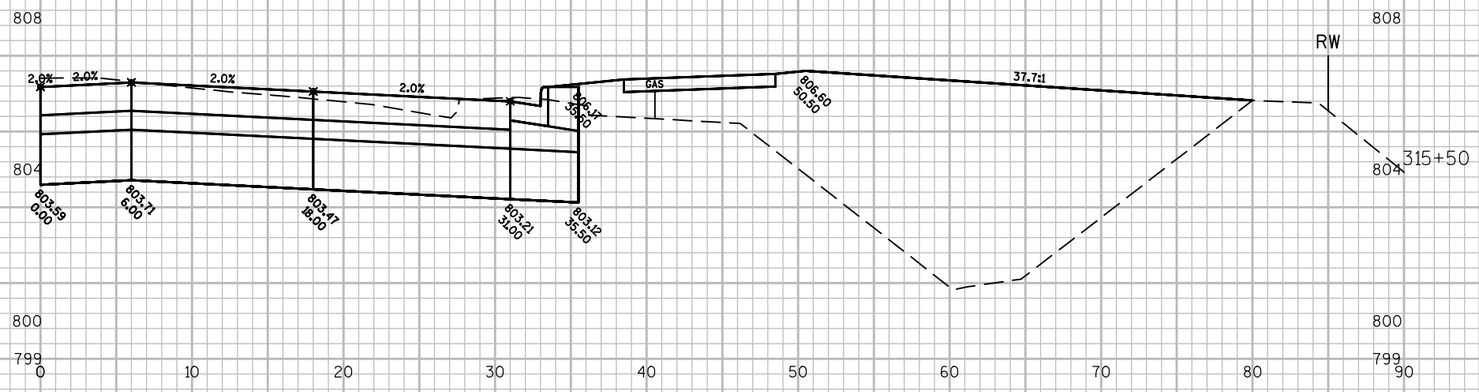
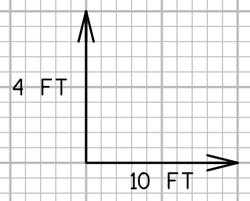
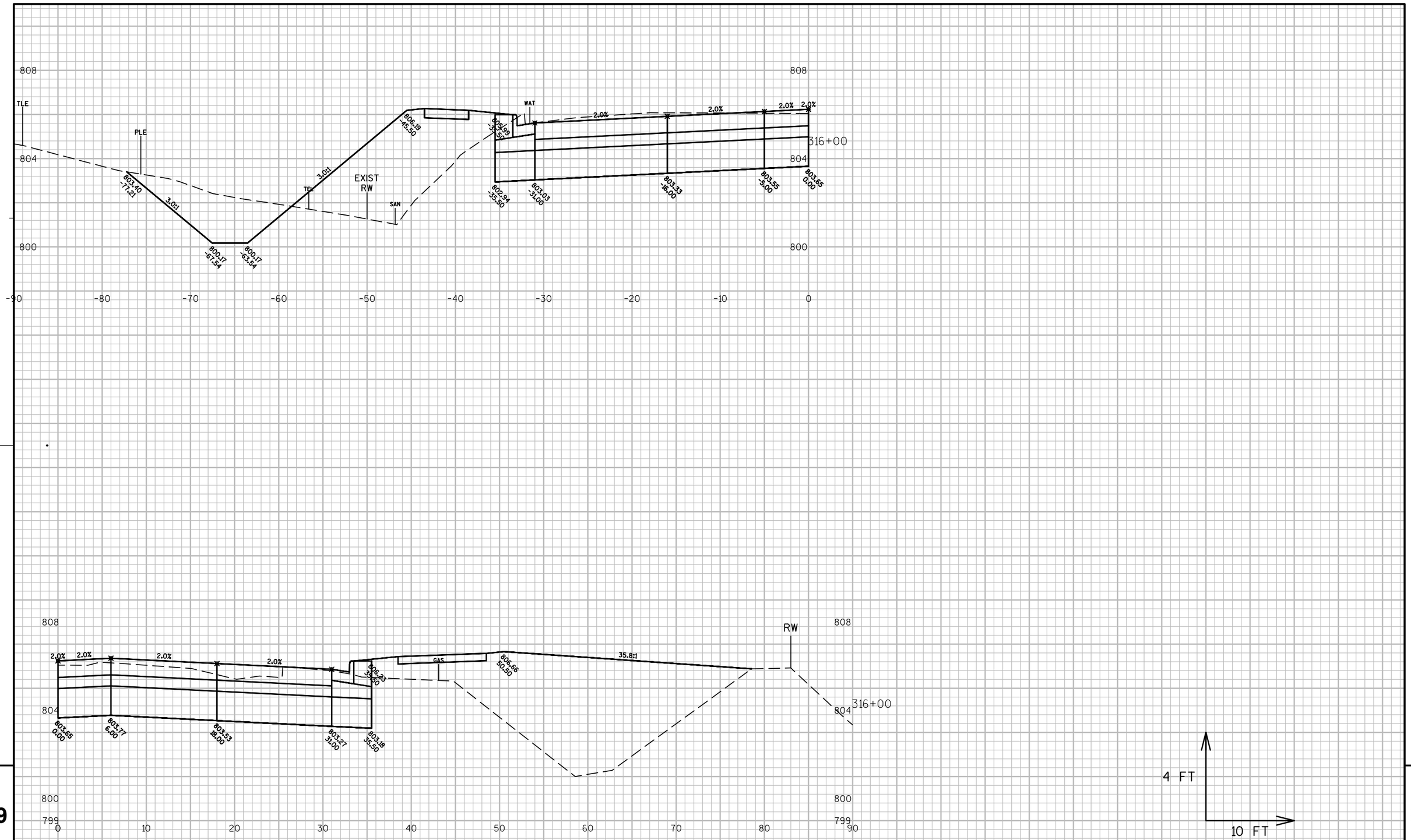






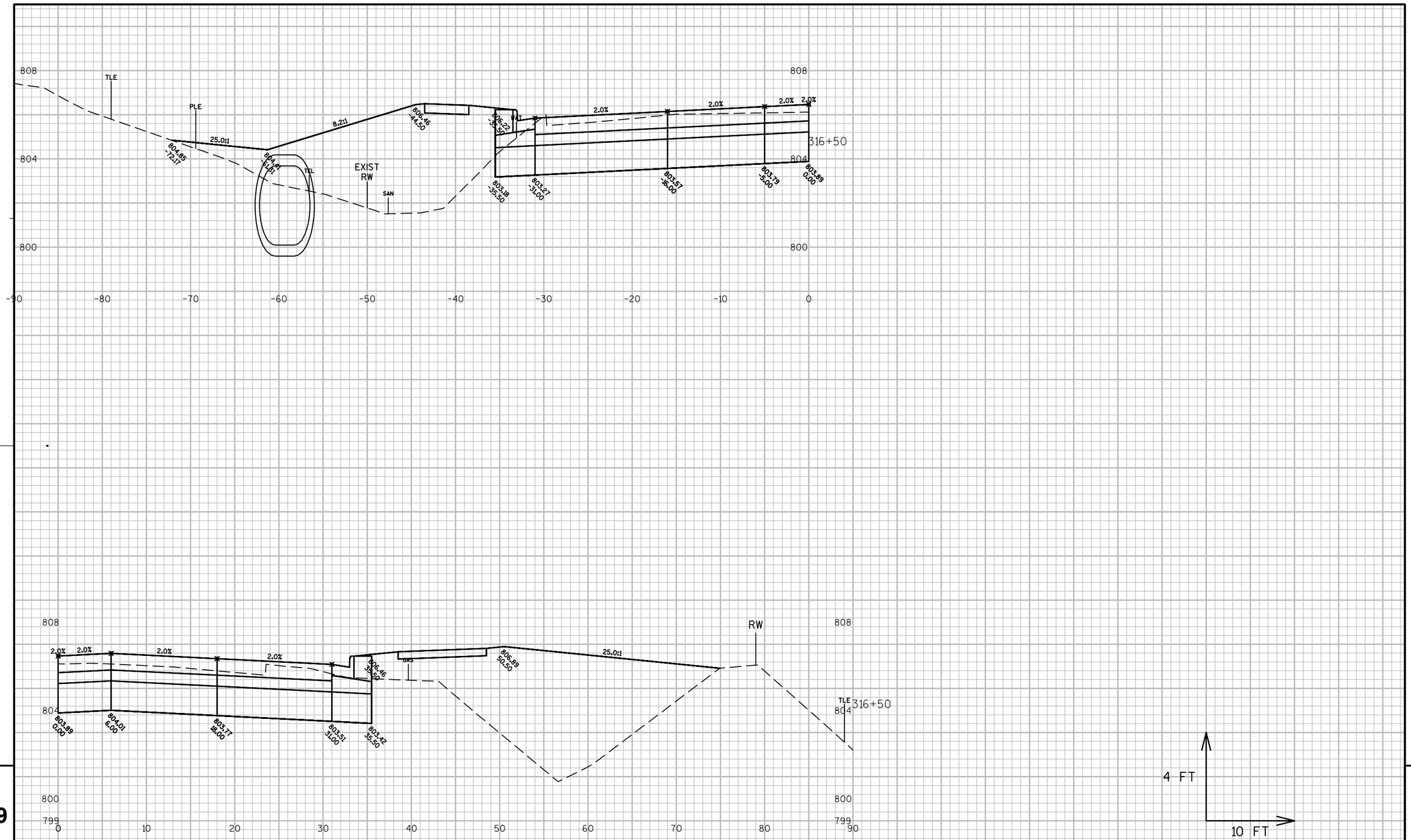
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 778	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:22 PM PLOT BY : MANSKE, CALEB PLOT NAME :



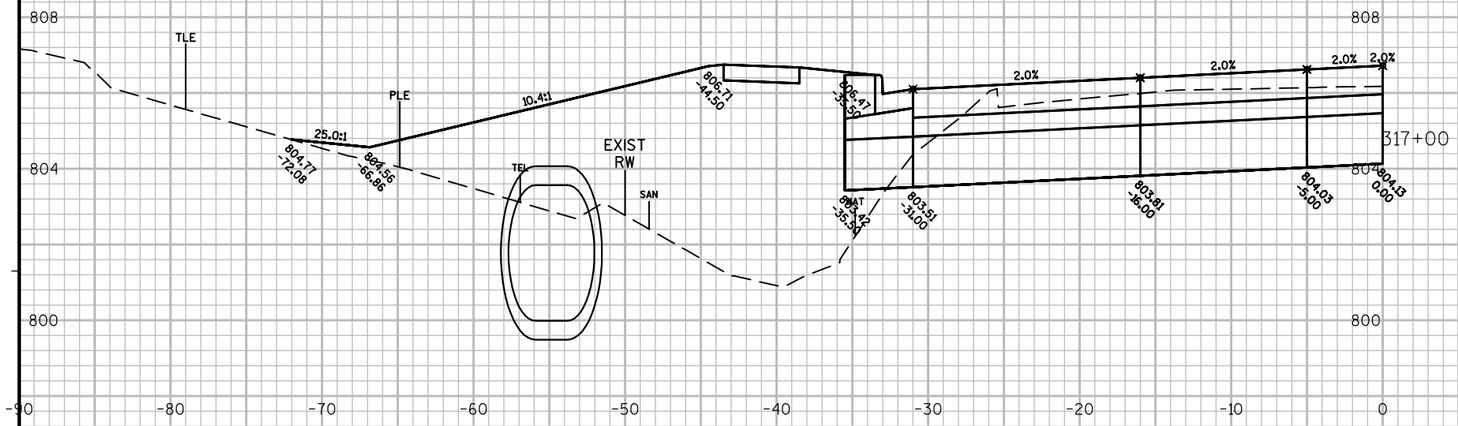
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 779	E

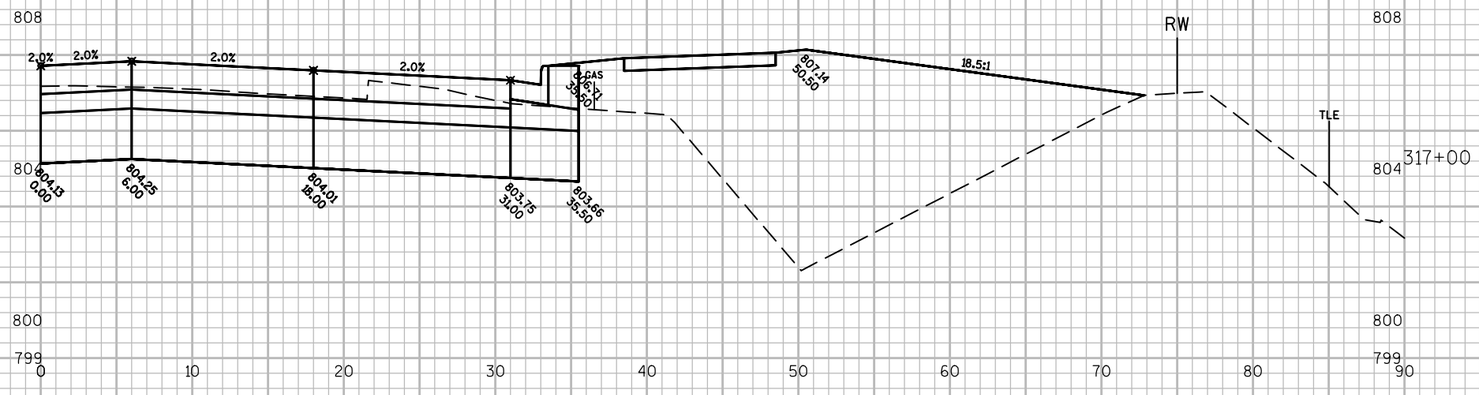
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:23 PM PLOT BY : MANSKE, CALEB PLOT NAME :

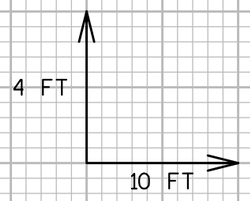


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 780	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:23 PM PLOT BY : MANSKE, CALEB PLOT NAME :







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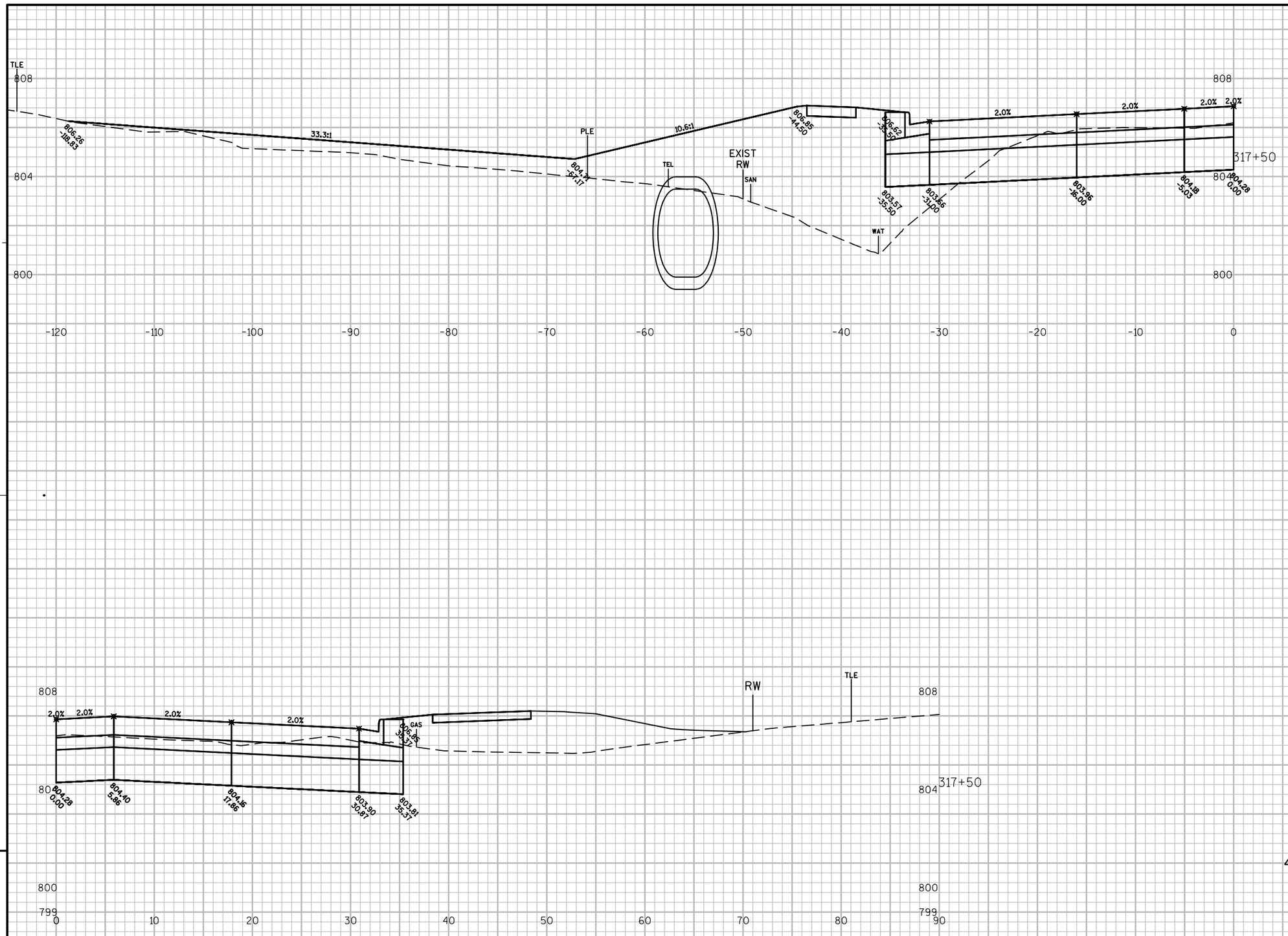
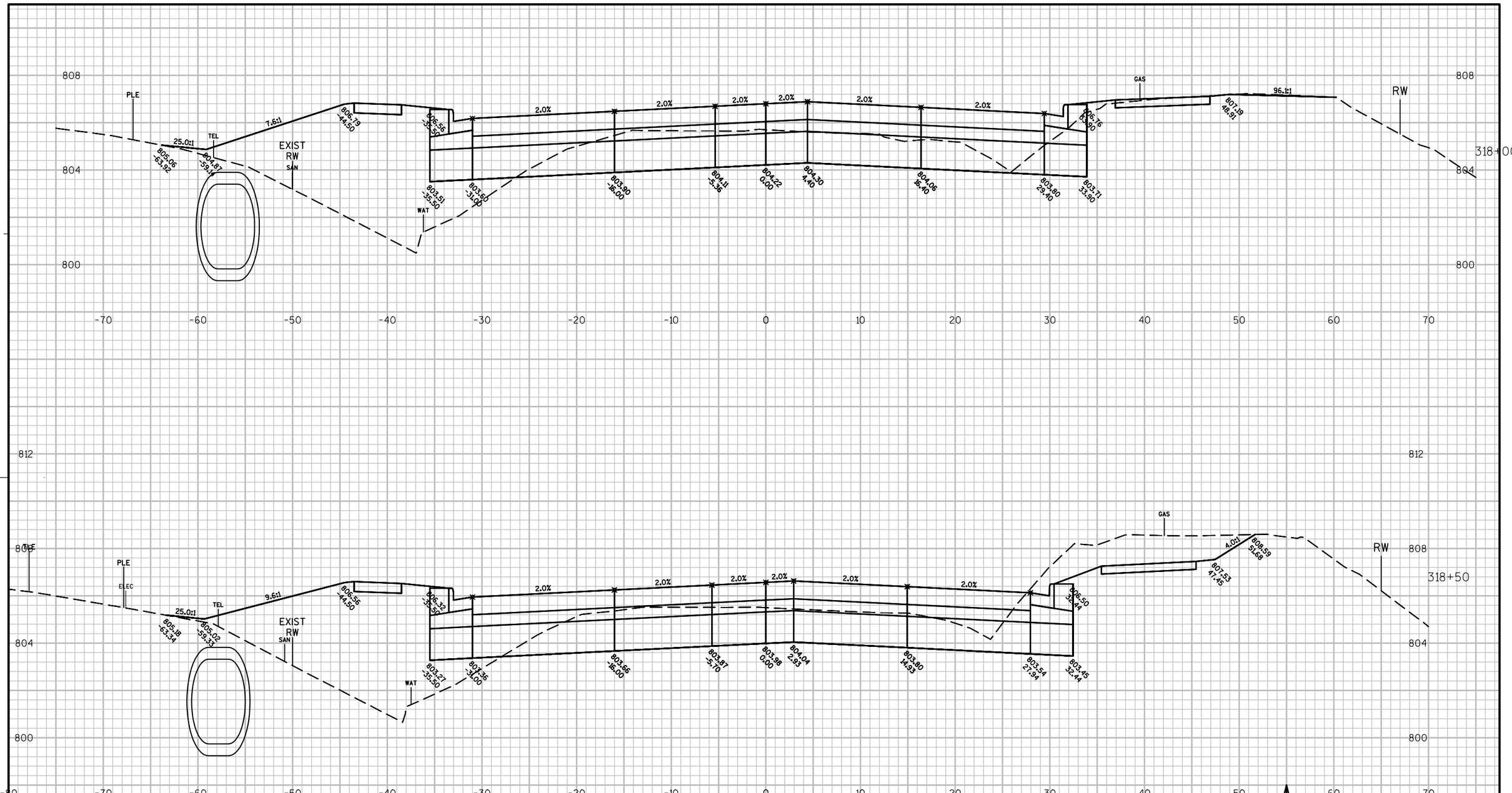
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 781	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:23 PM PLOT BY : MANSKE, CALEB PLOT NAME :

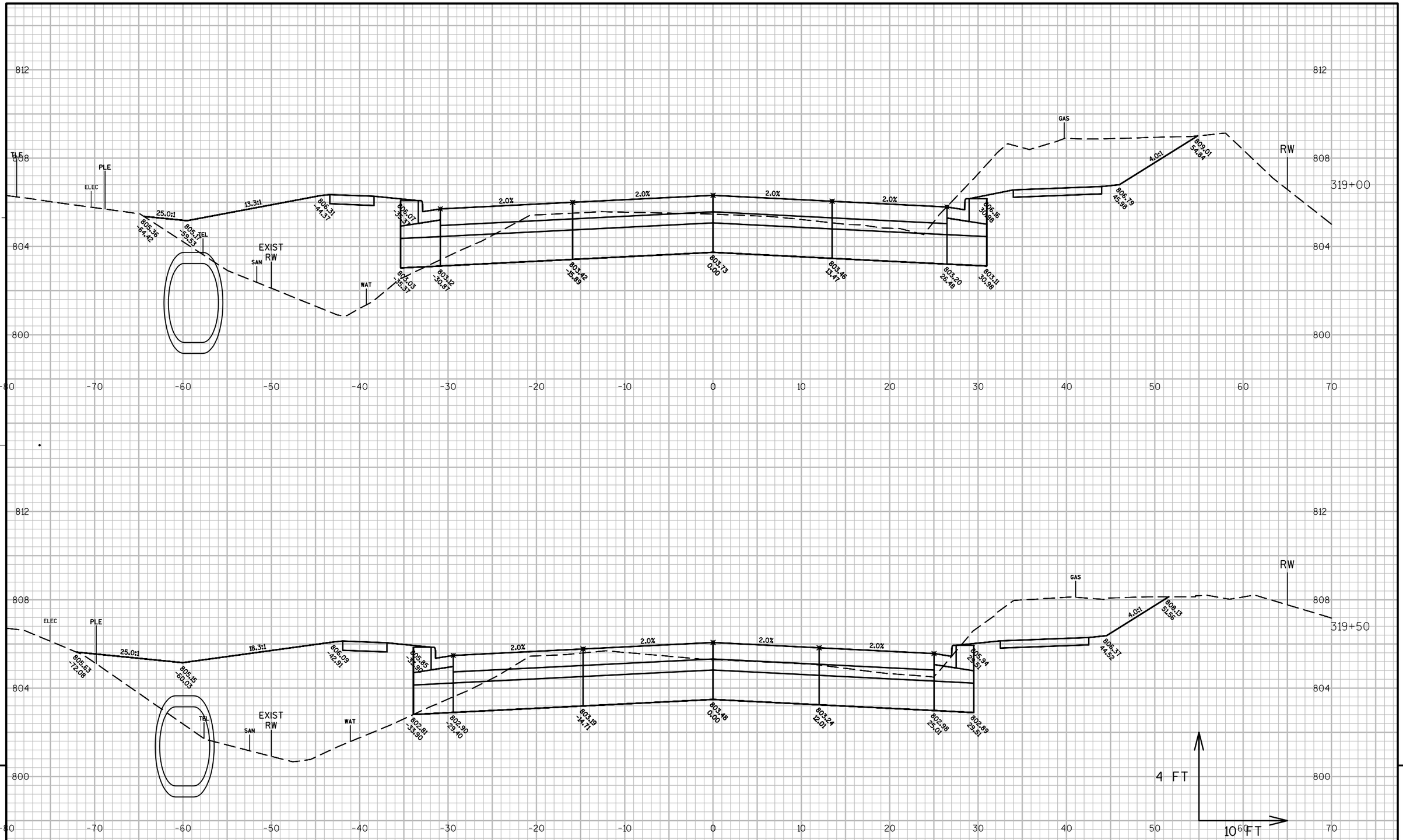
WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 782	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 783	E



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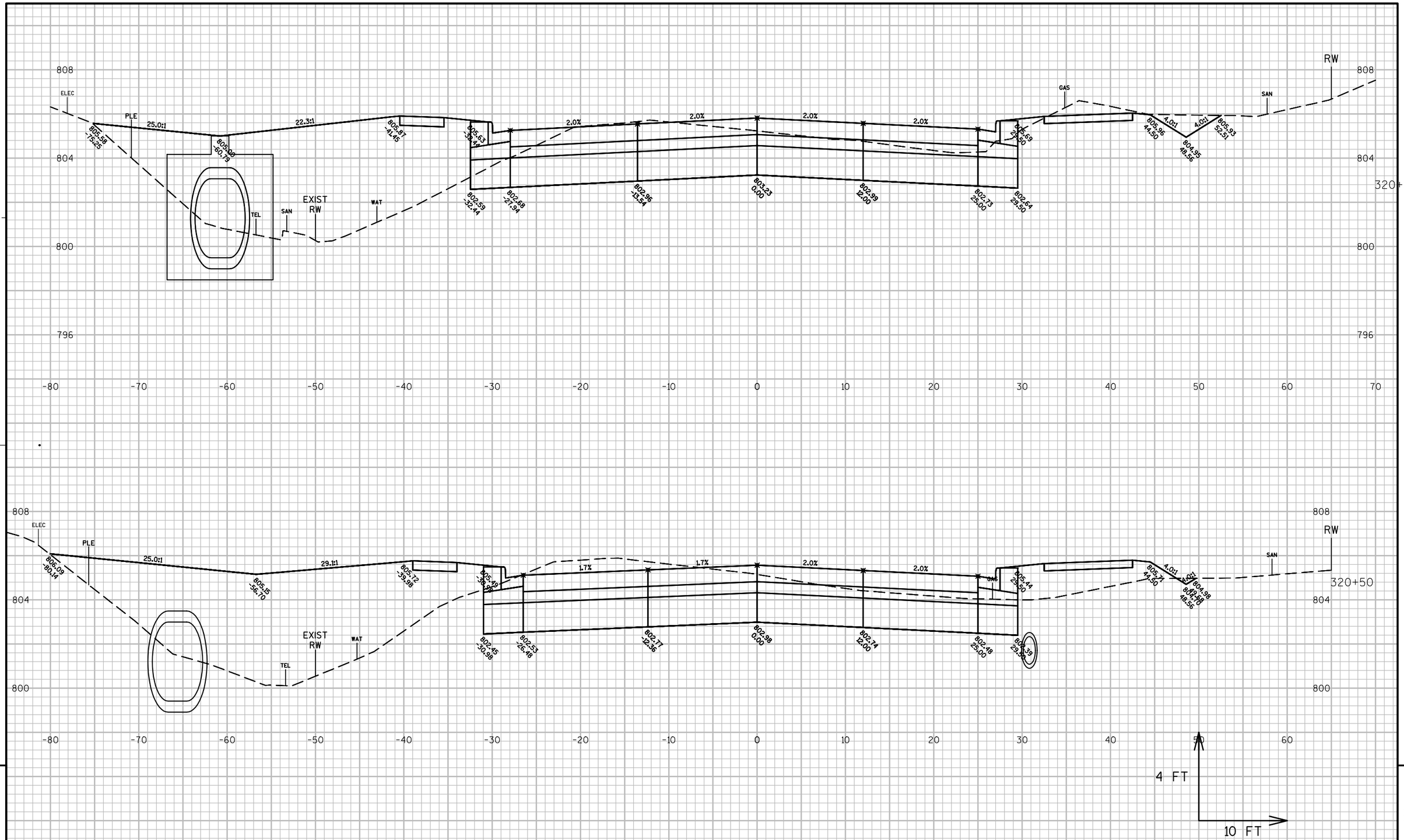
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 784	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:25 PM PLOT BY : MANSKE, CALEB PLOT NAME :



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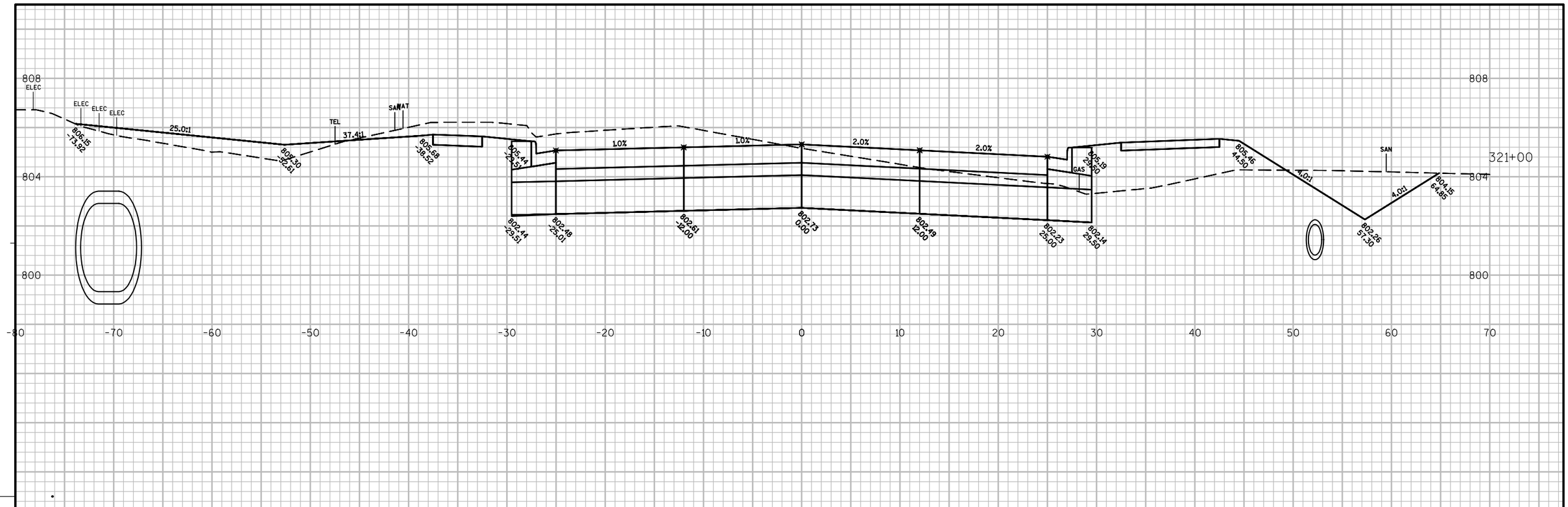
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 785	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:25 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



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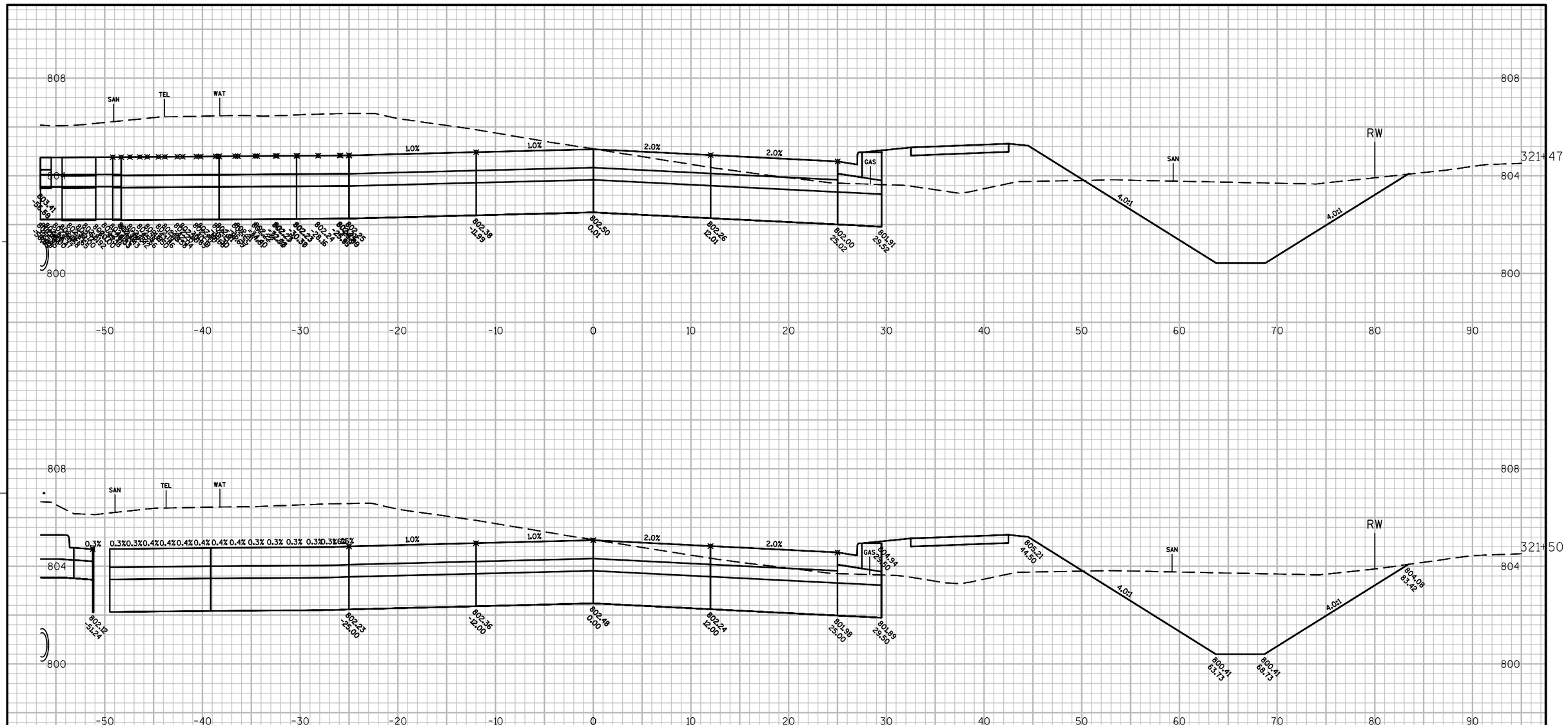
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 786	E



321+47

321+50

4 FT

10 FT

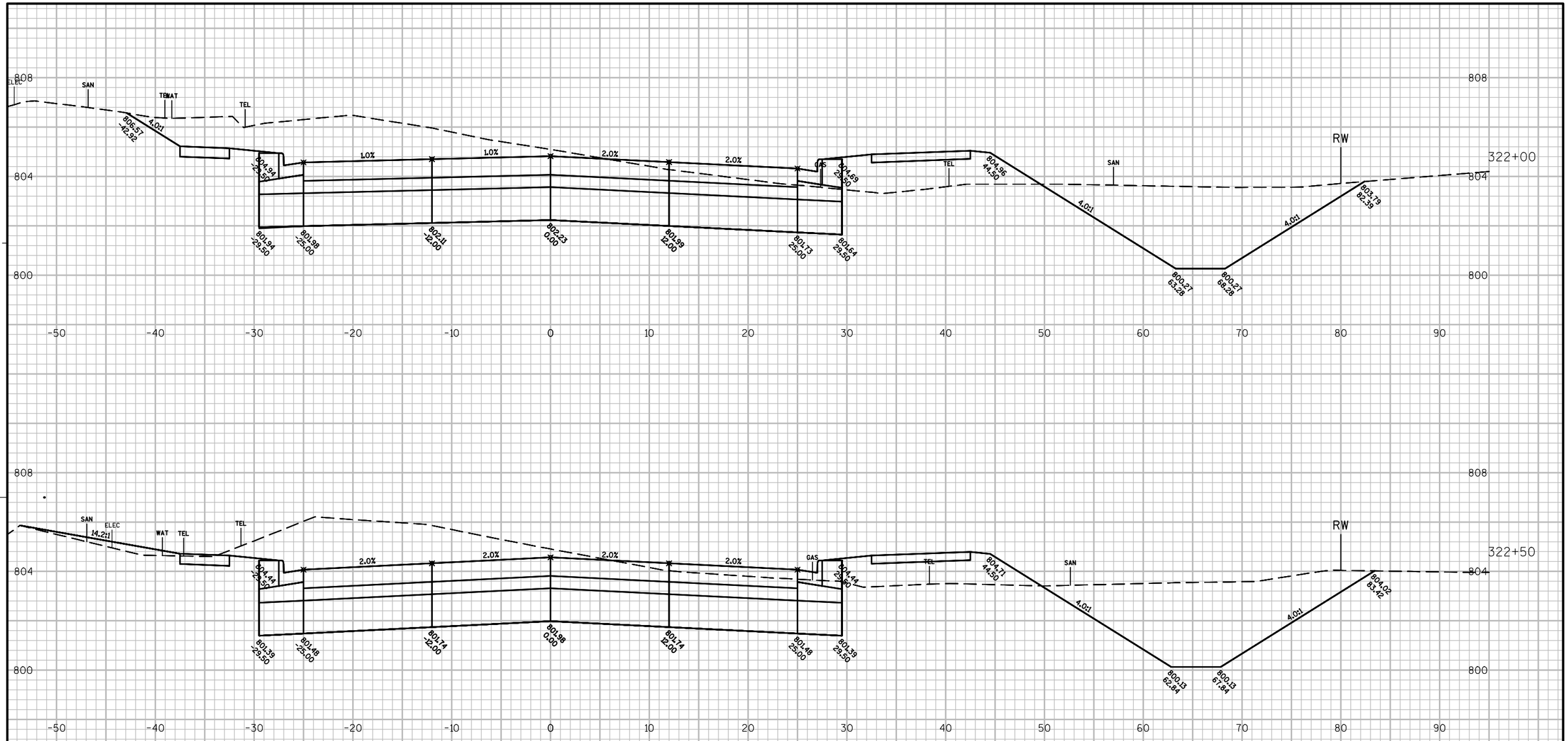
9

9

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 787	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:26 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 788	E

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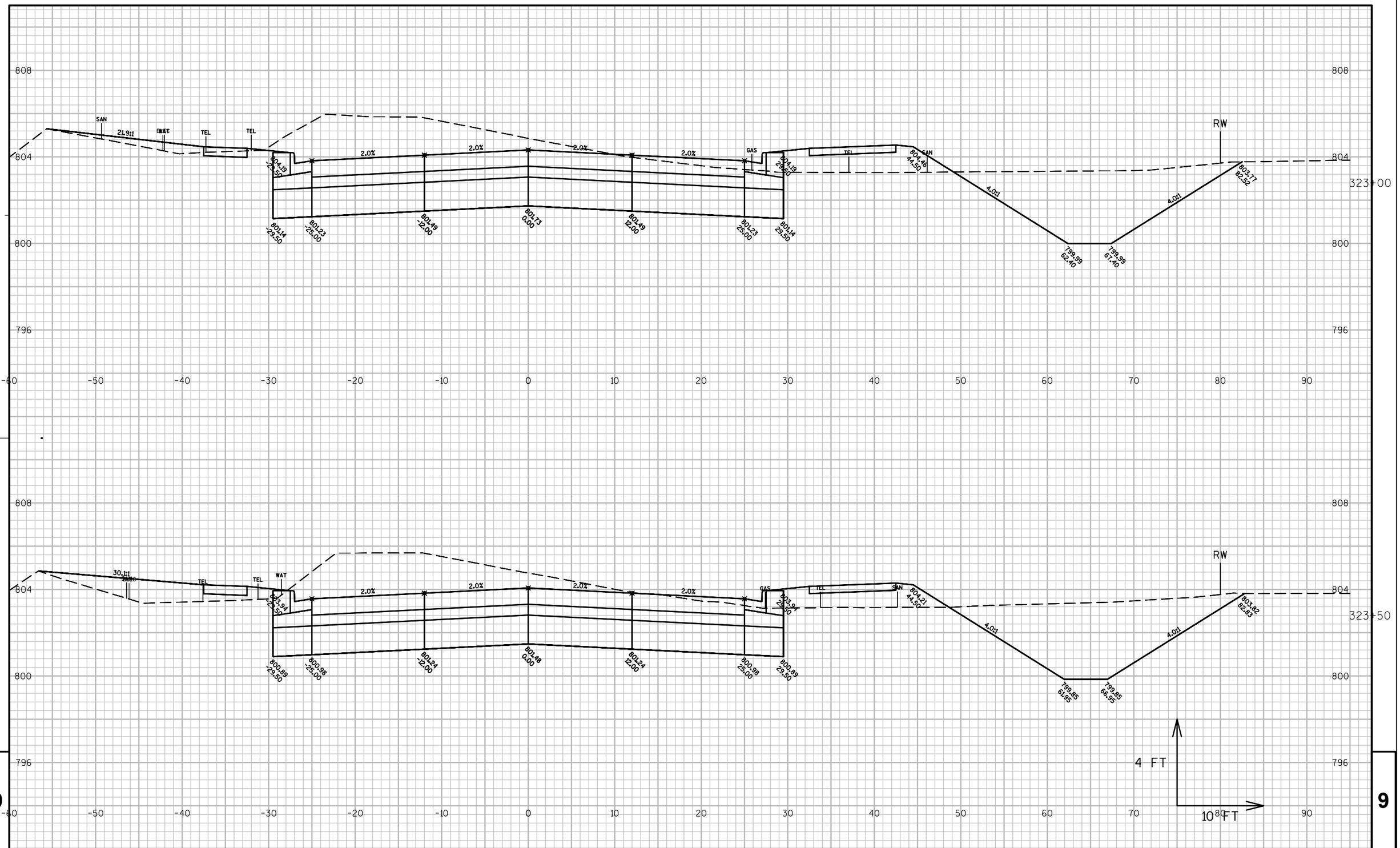
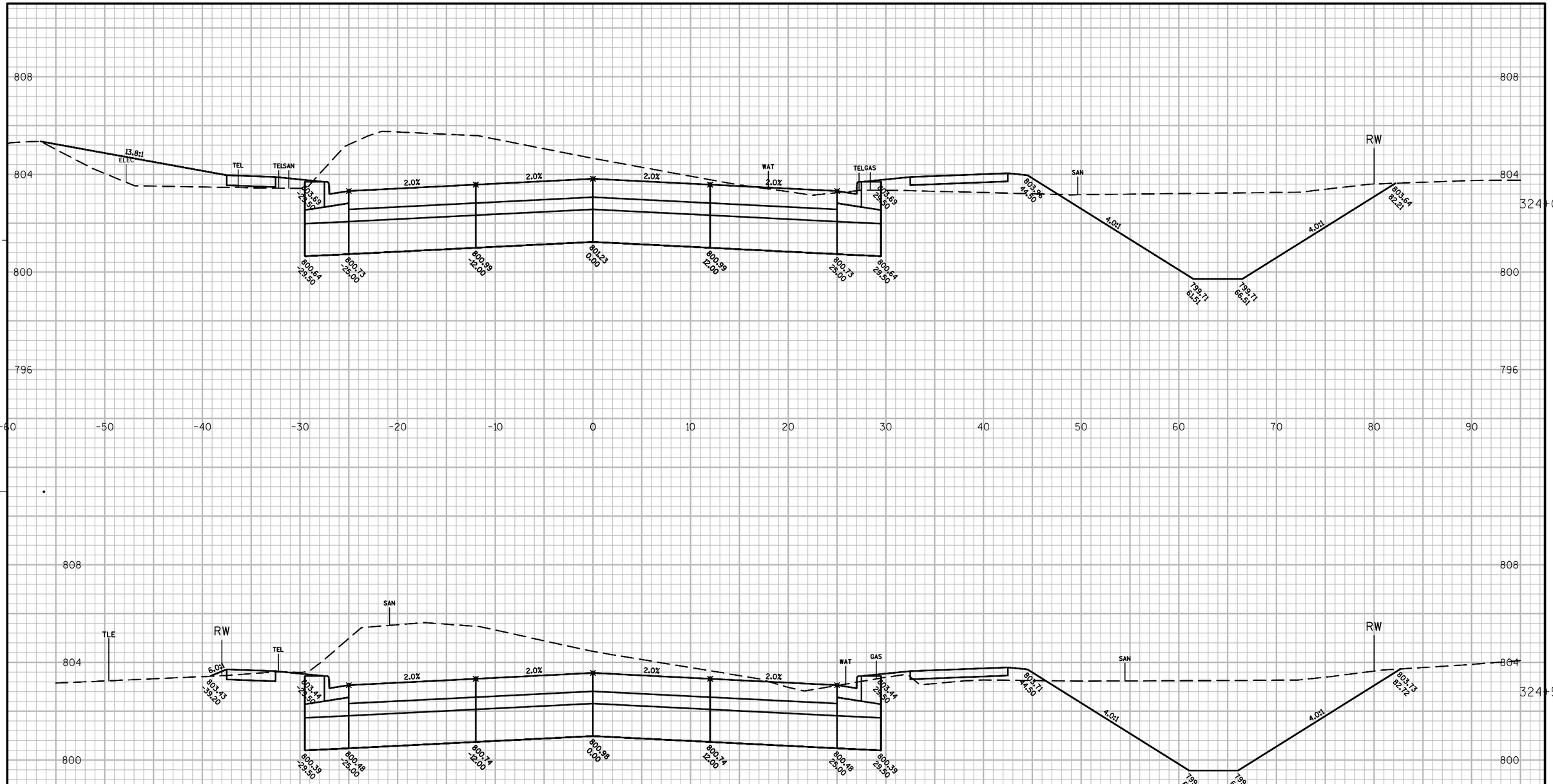


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 789	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:27 PM PLOT BY : MANSKE, CALEB PLOT NAME :

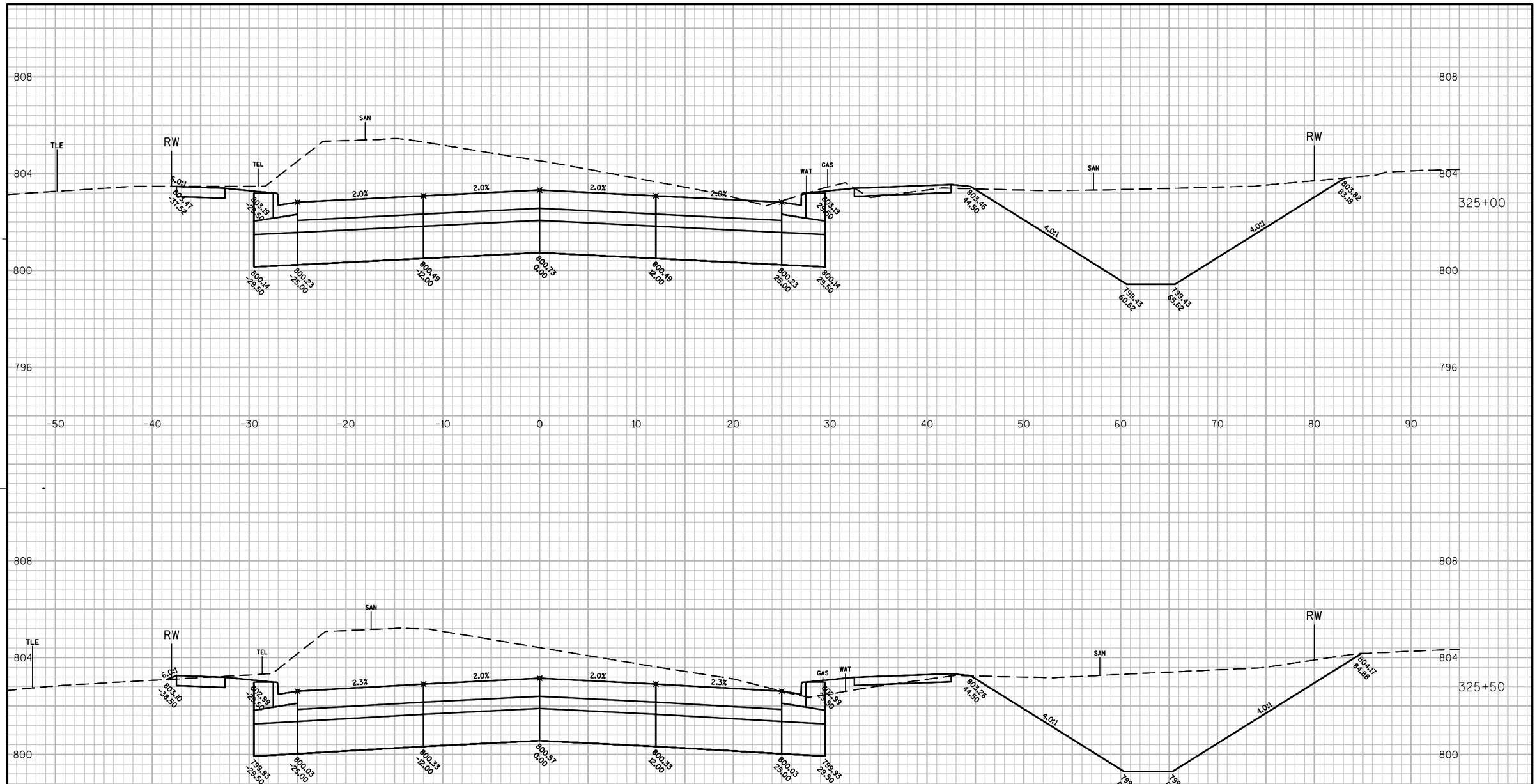
WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 790	E

FILE NAME : T:\1112700\CADD\CIVIL3D\225012OO\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:27 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



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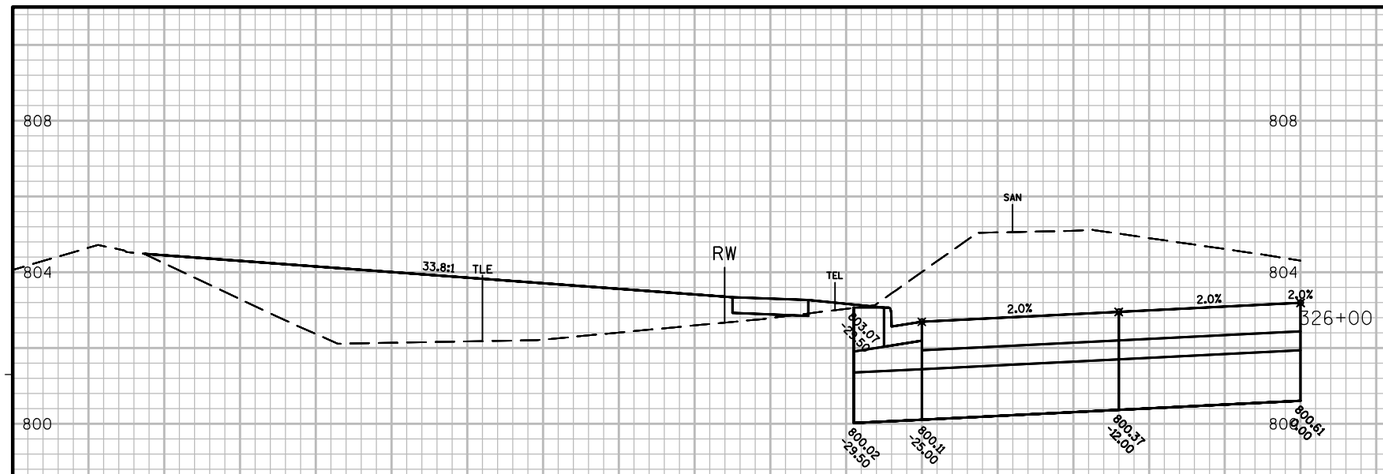
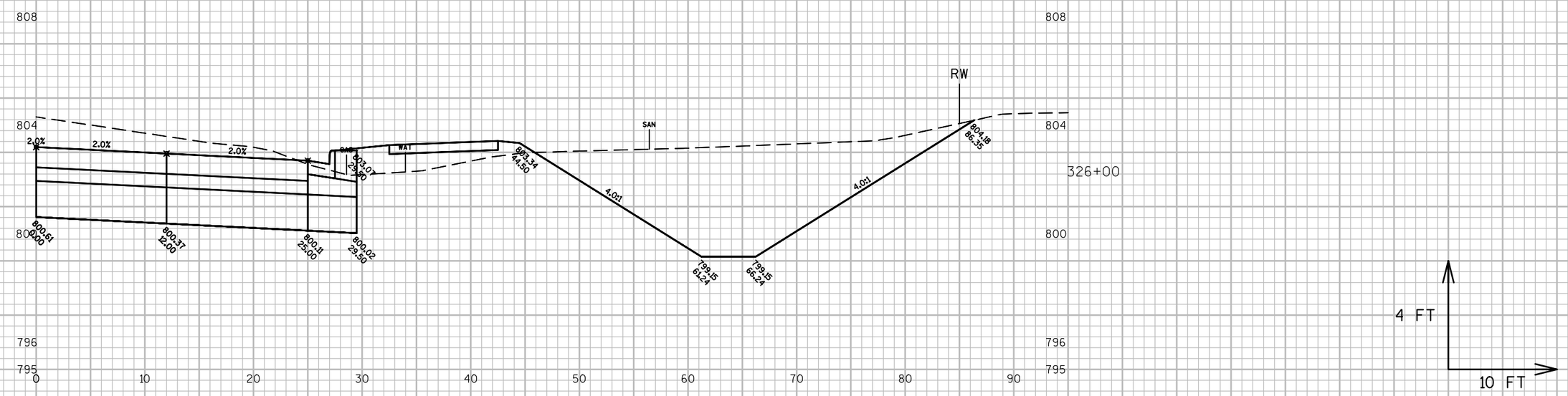
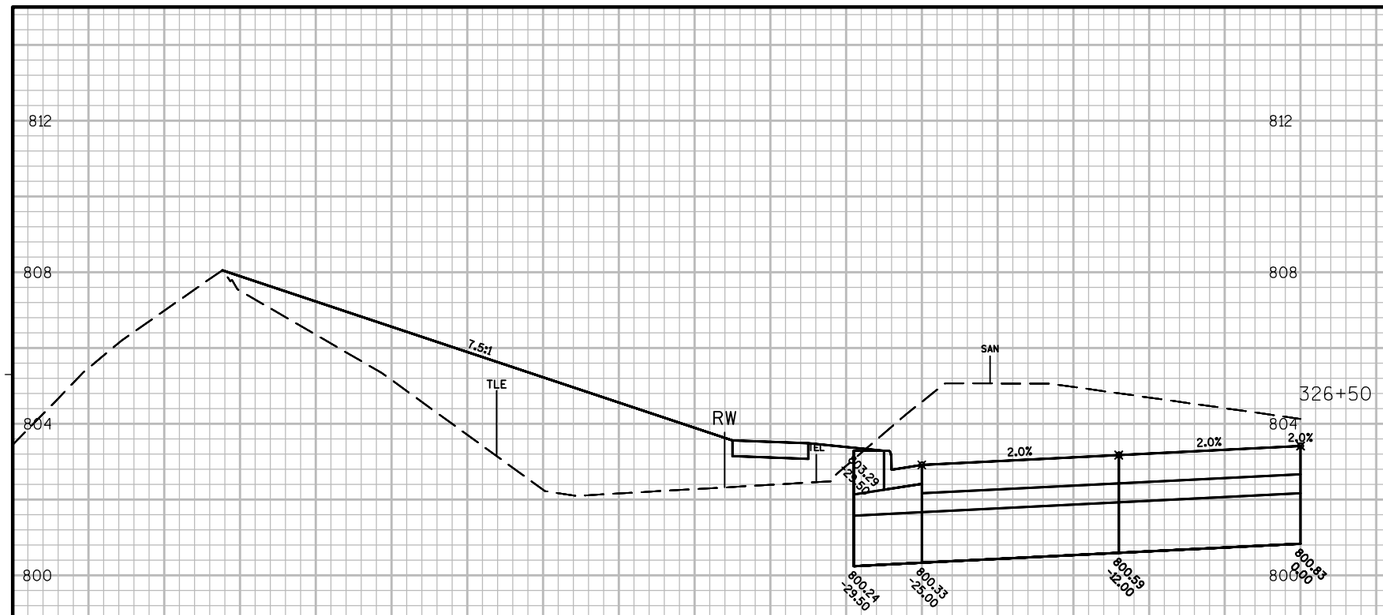
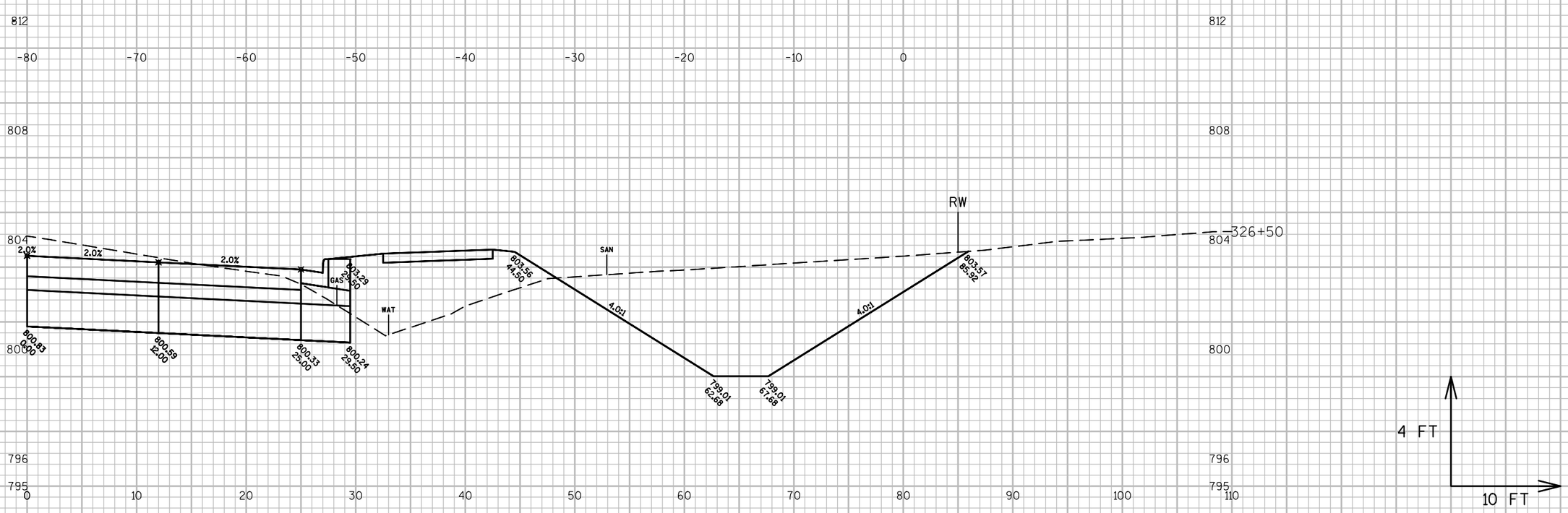
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 791	E





PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 792	E

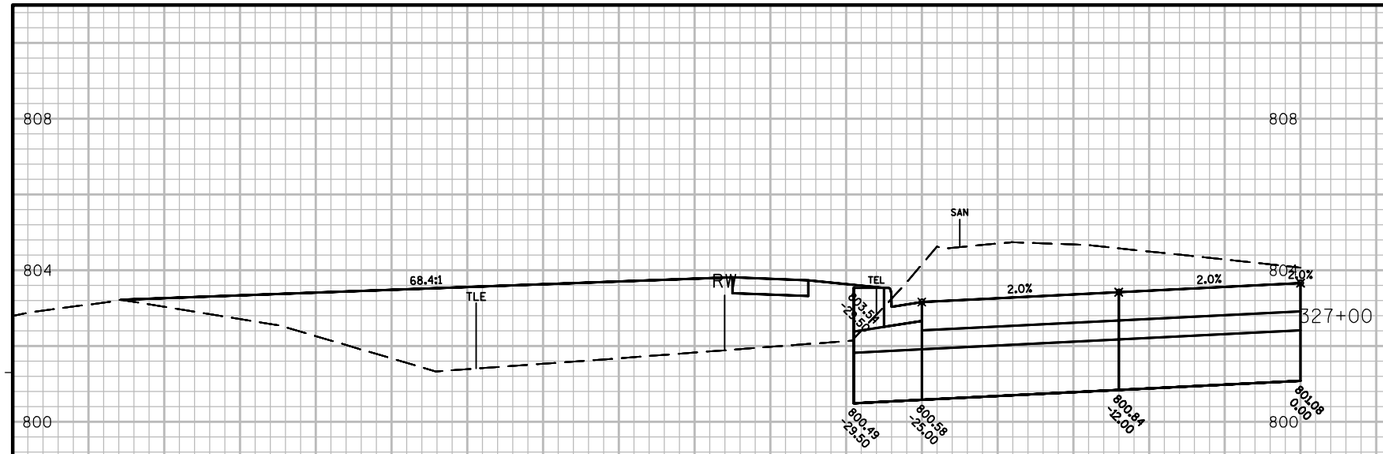


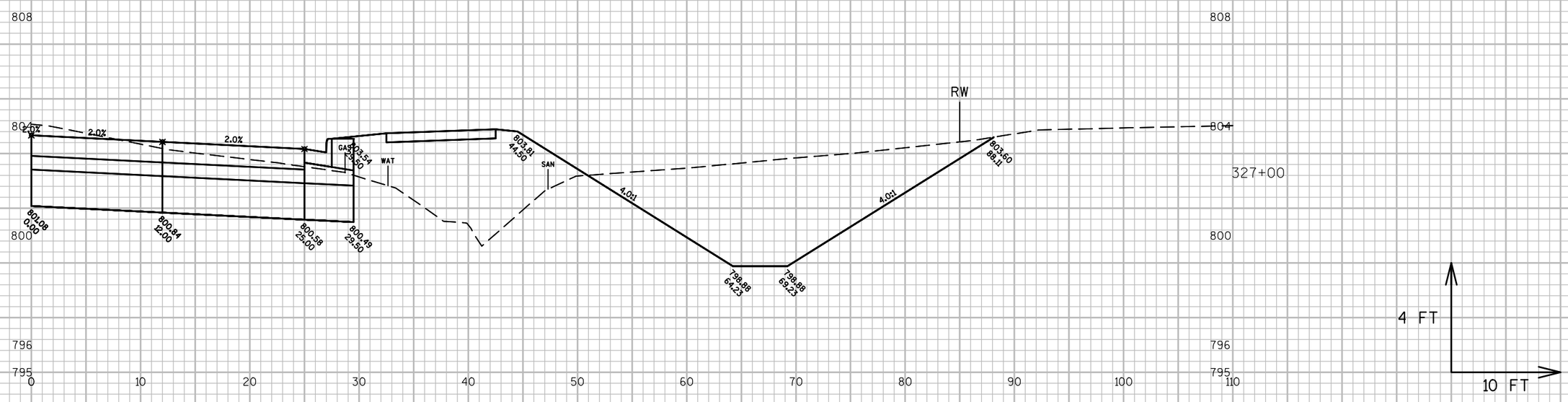


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 793	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:29 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49





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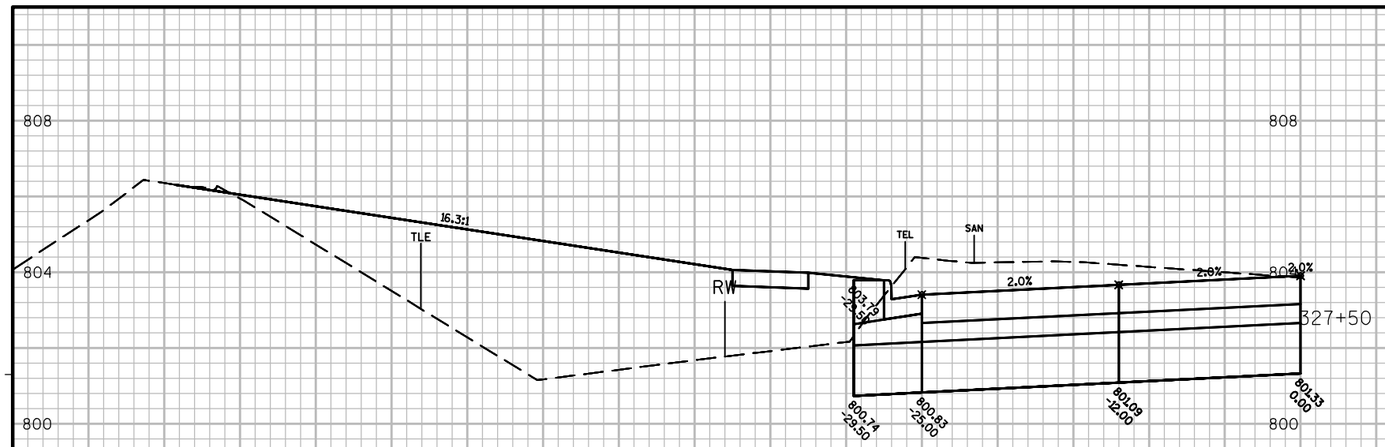
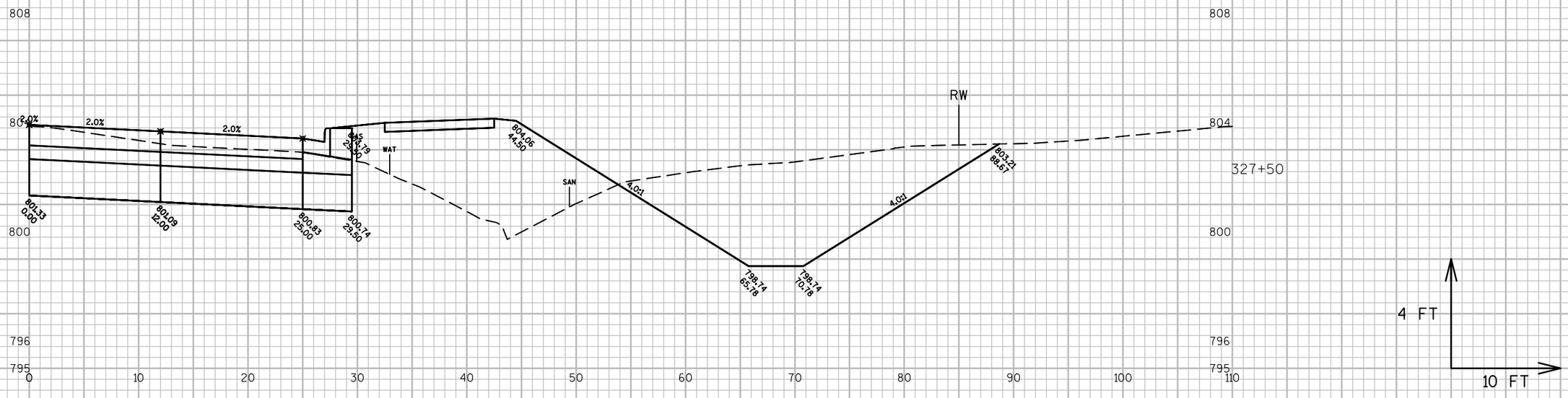
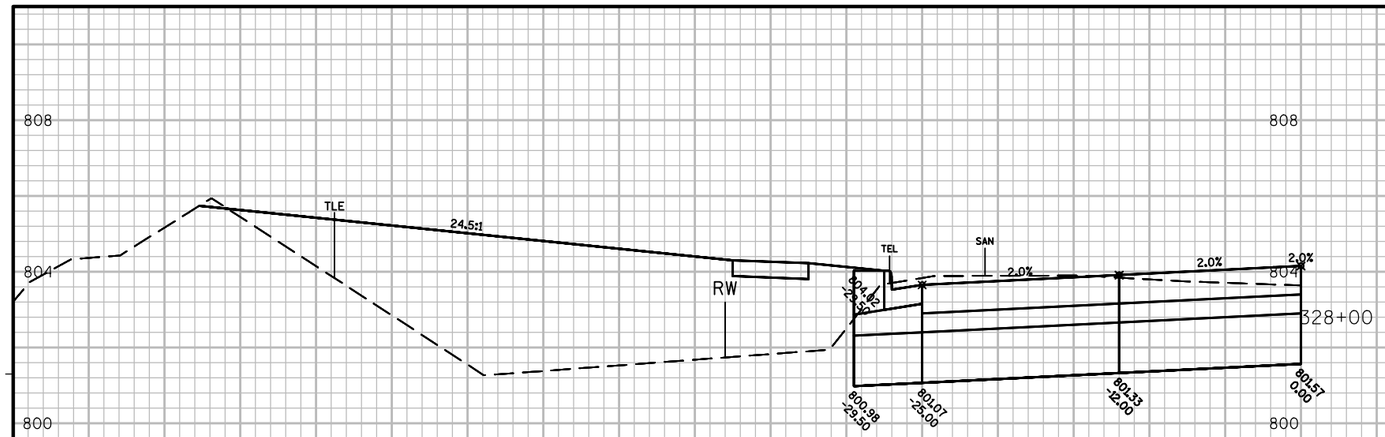
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 794	E

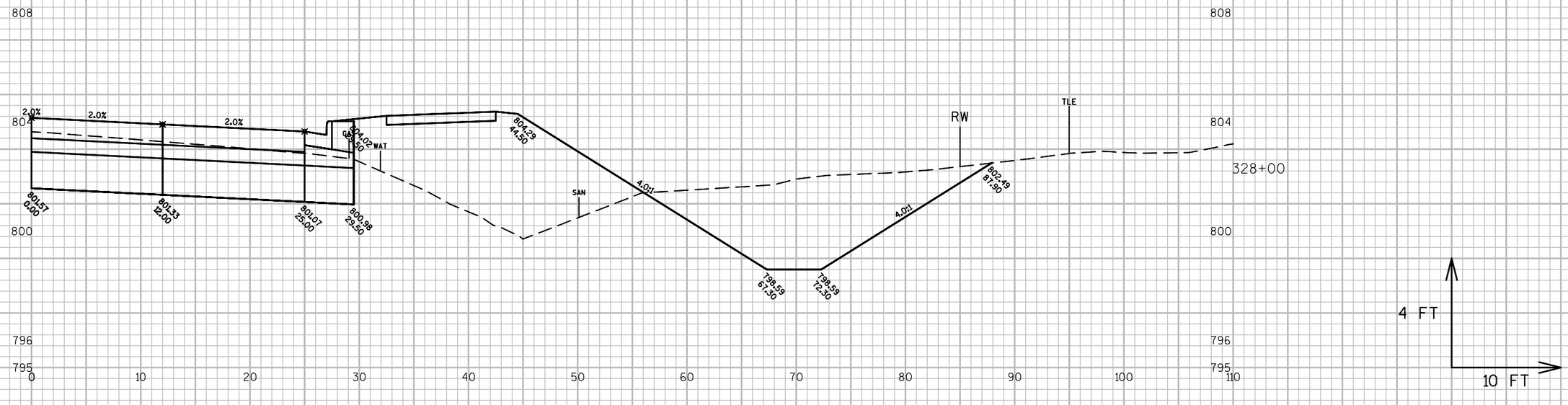




PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 795	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:30 PM PLOT BY : MANSKE, CALEB PLOT NAME :

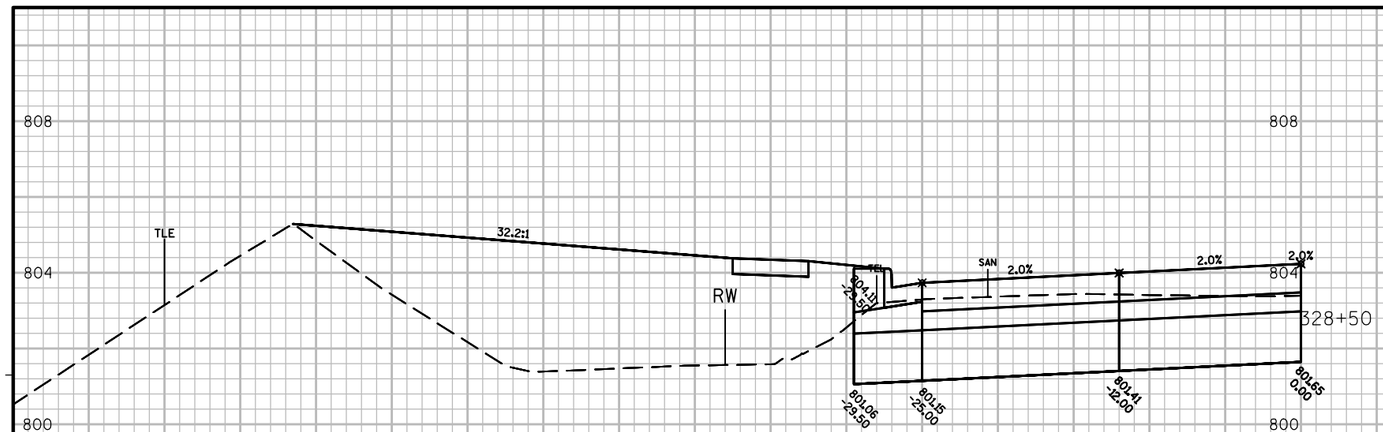


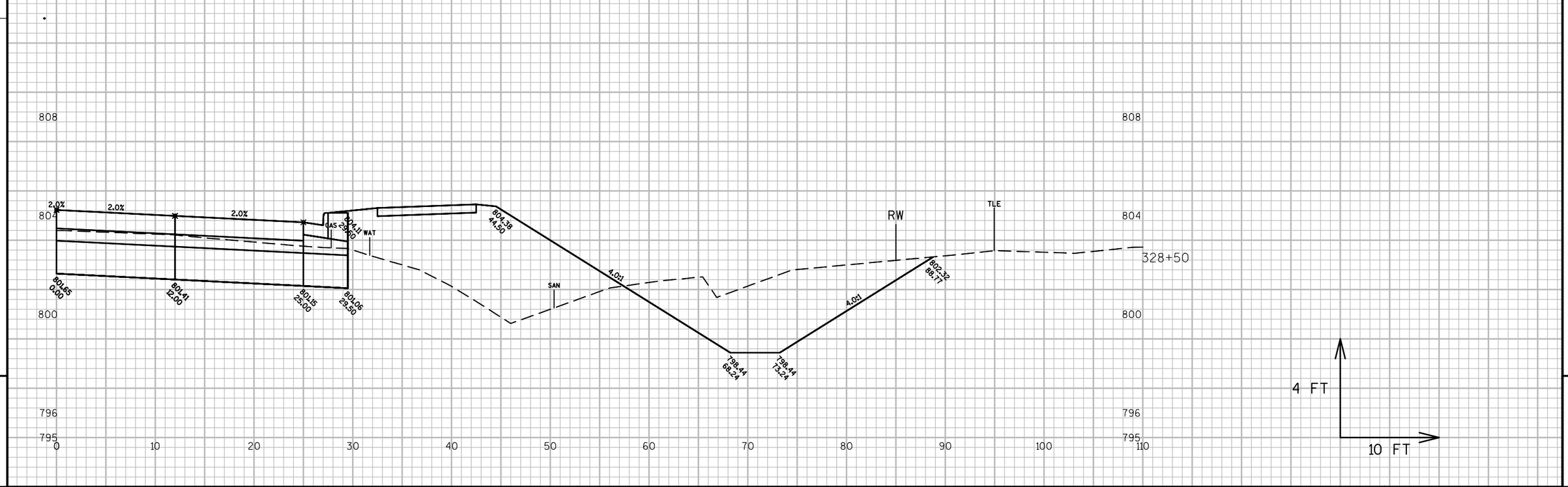


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 796	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:30 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49





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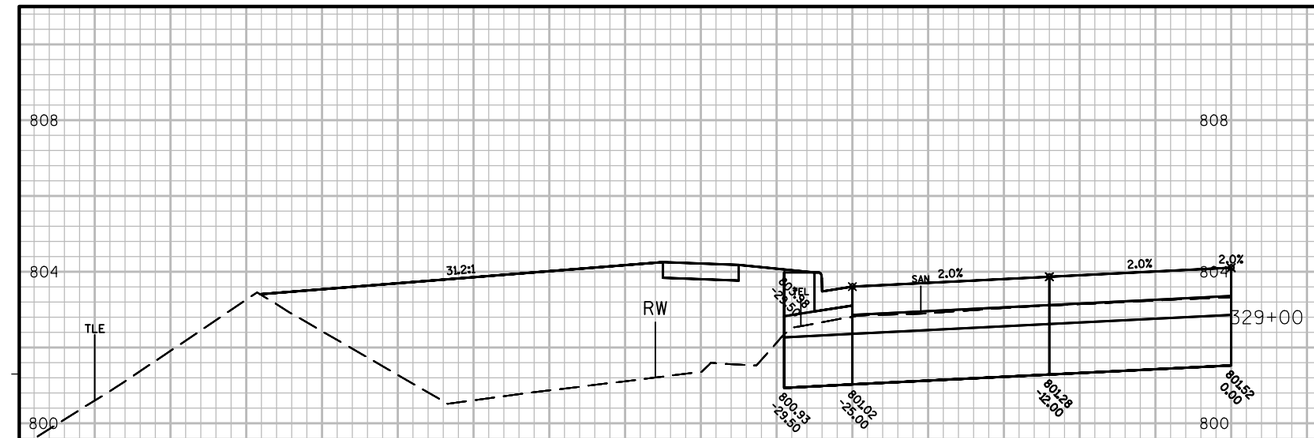
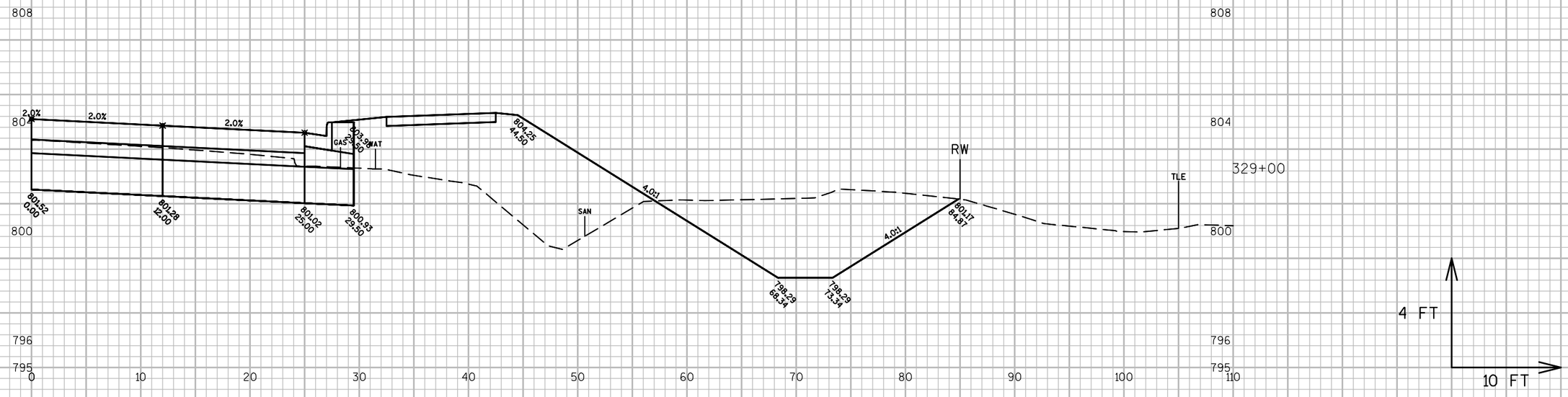
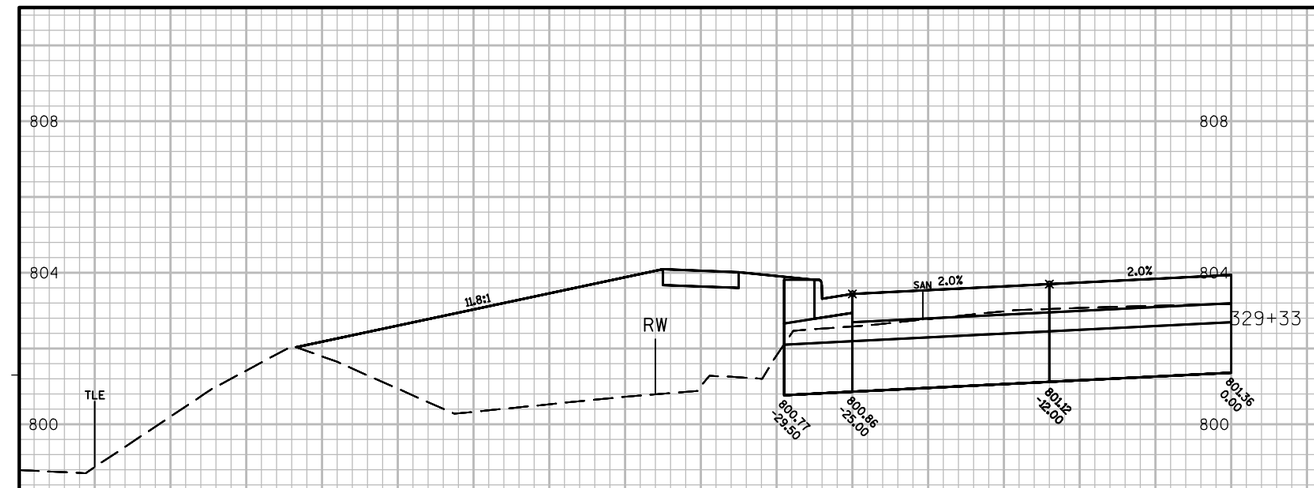
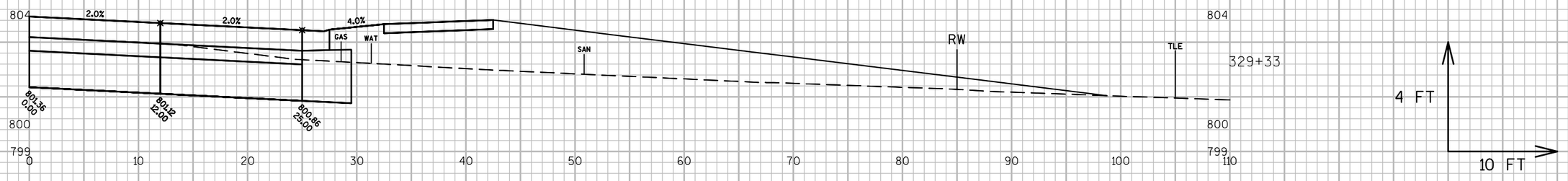
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 797	E





PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 798	E





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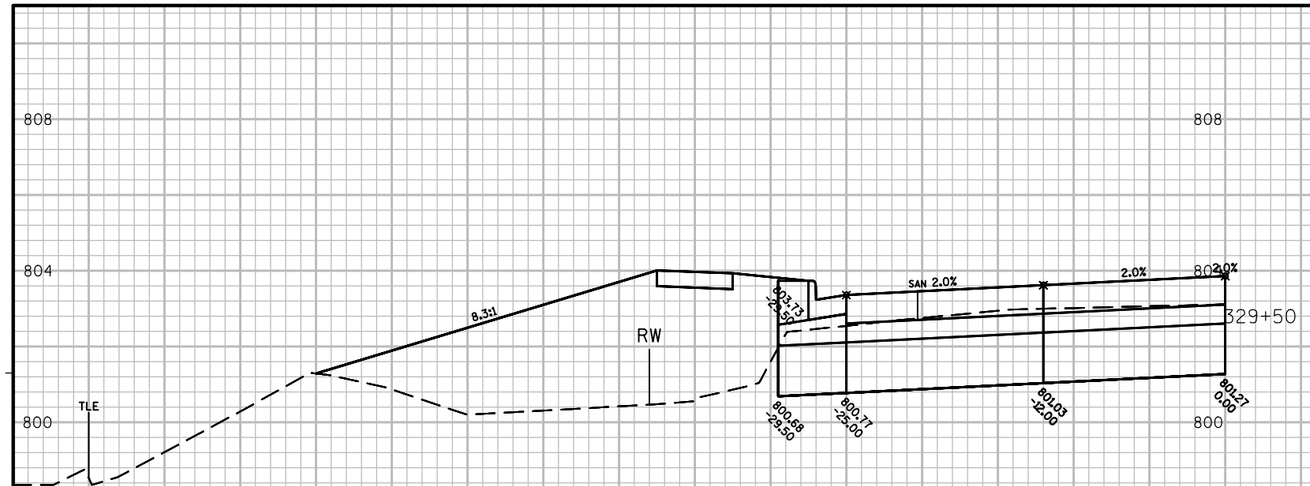
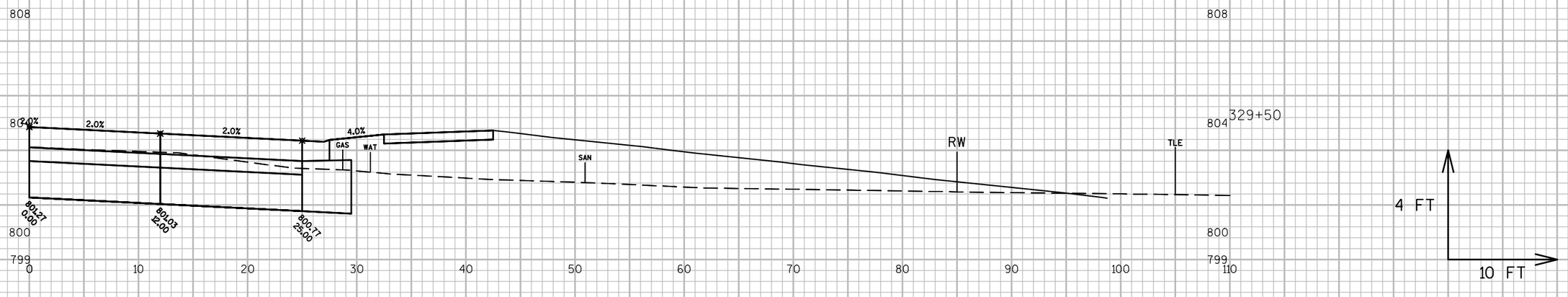
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 799	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:31 PM PLOT BY : MANSKE, CALEB PLOT NAME :





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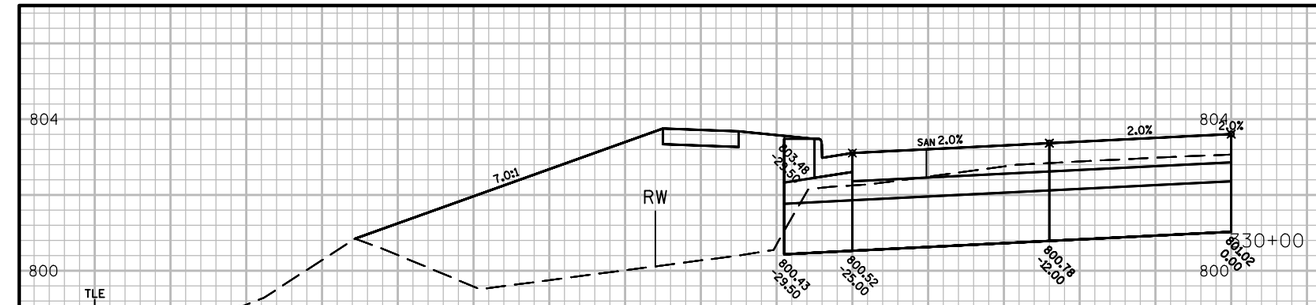
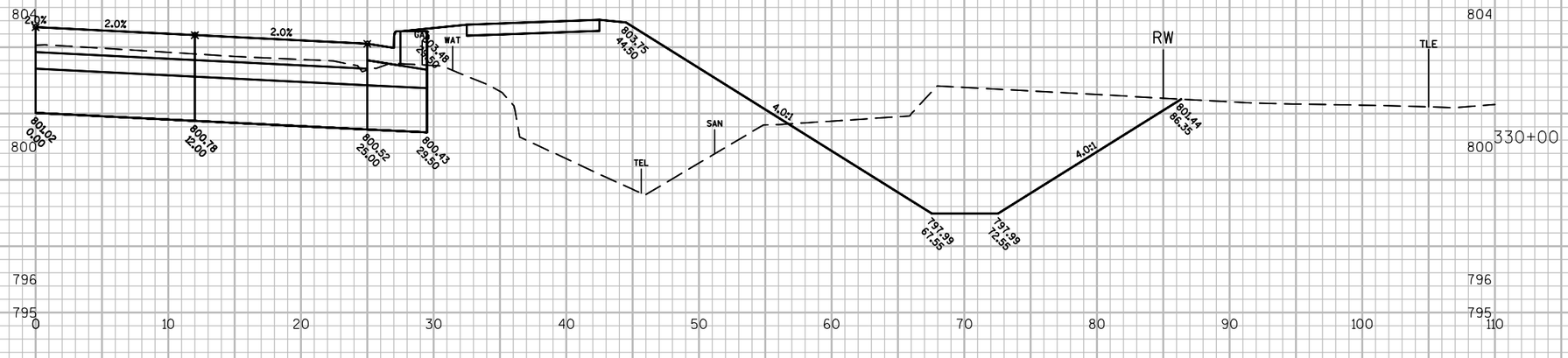
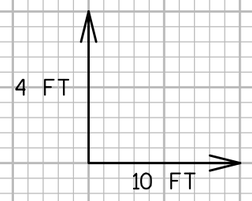
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 800	E



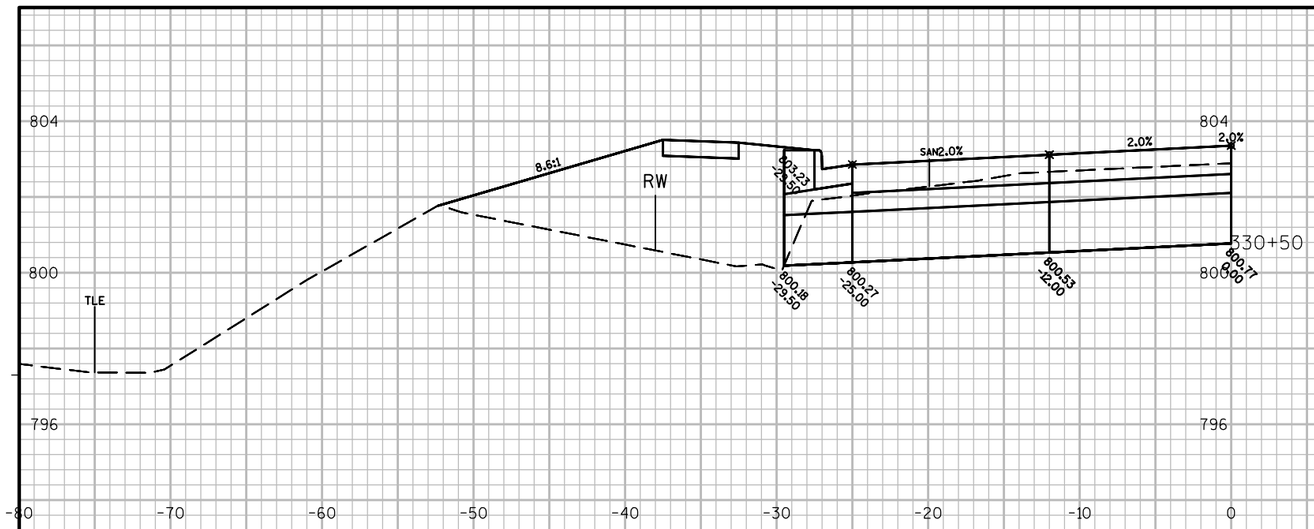


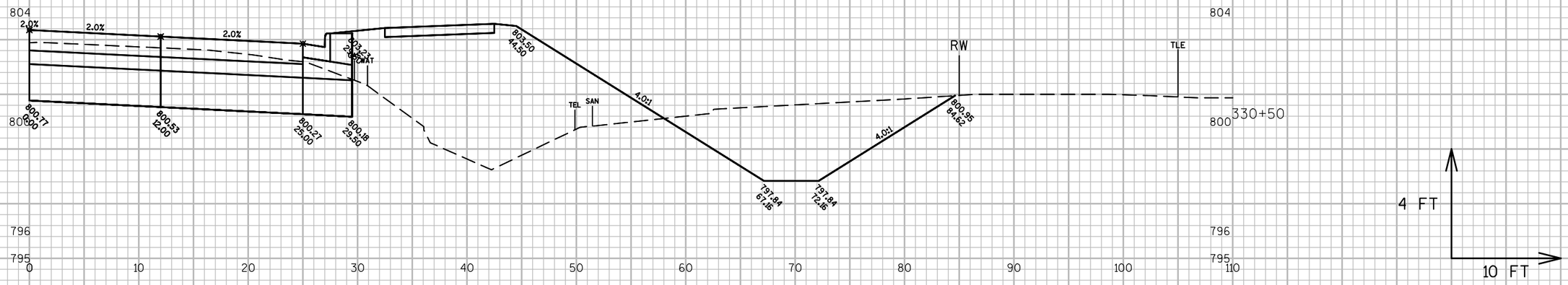


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 801	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:32 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49





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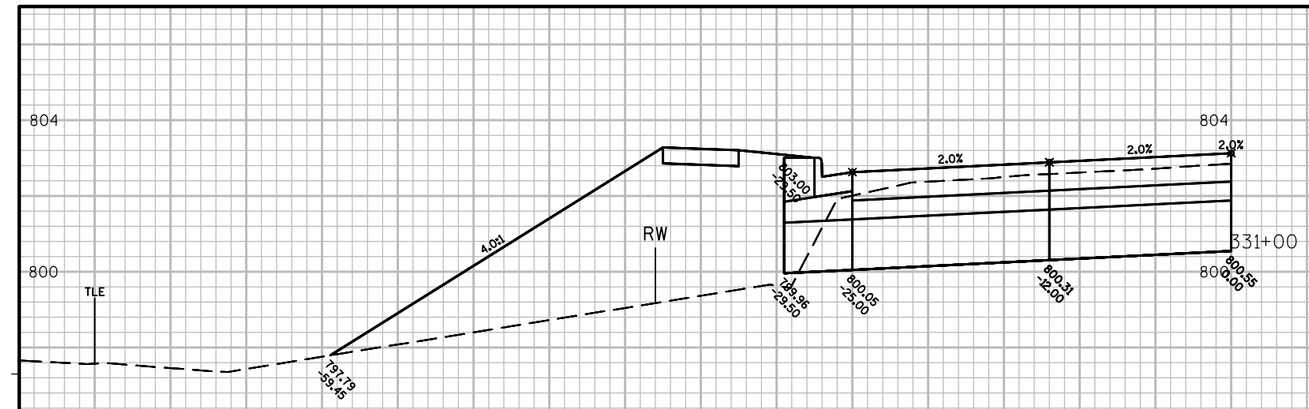
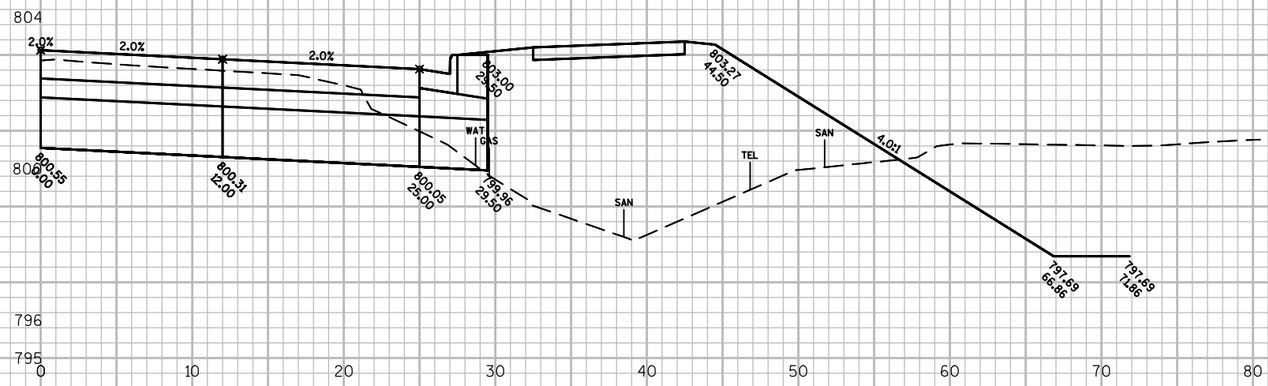
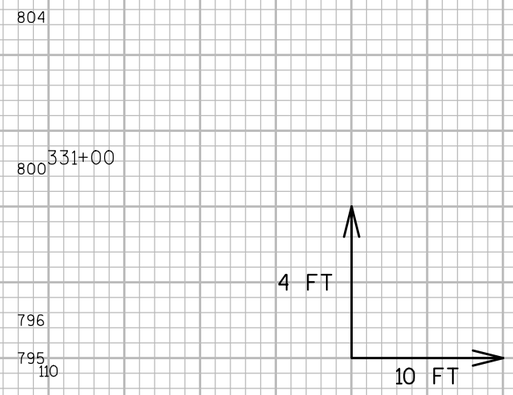
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 802	E



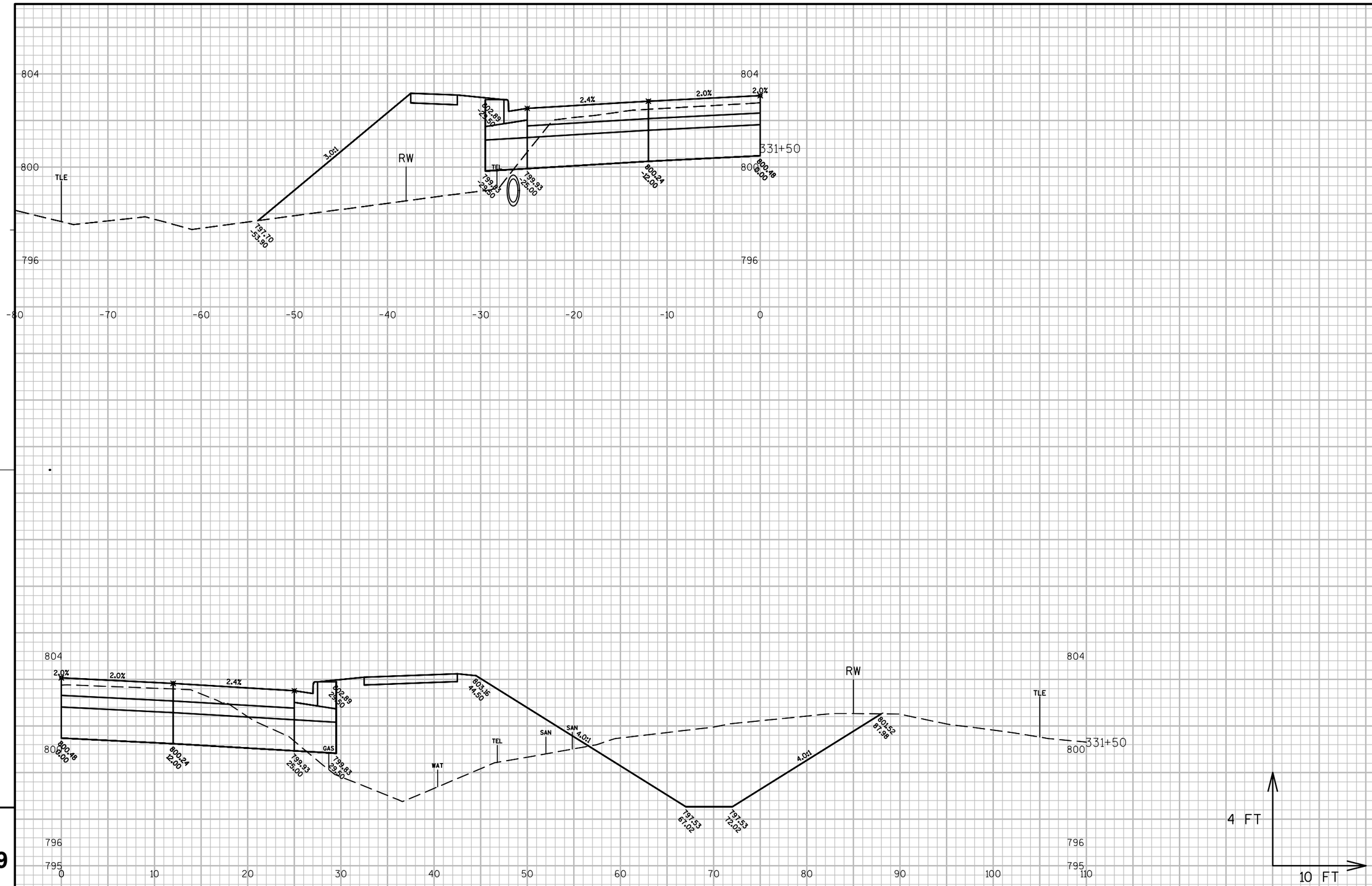




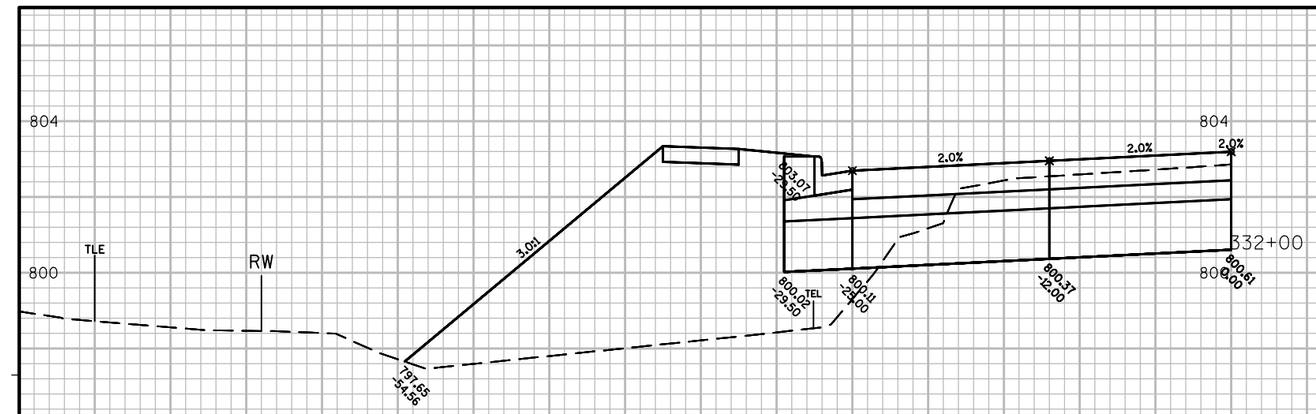
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 803	E

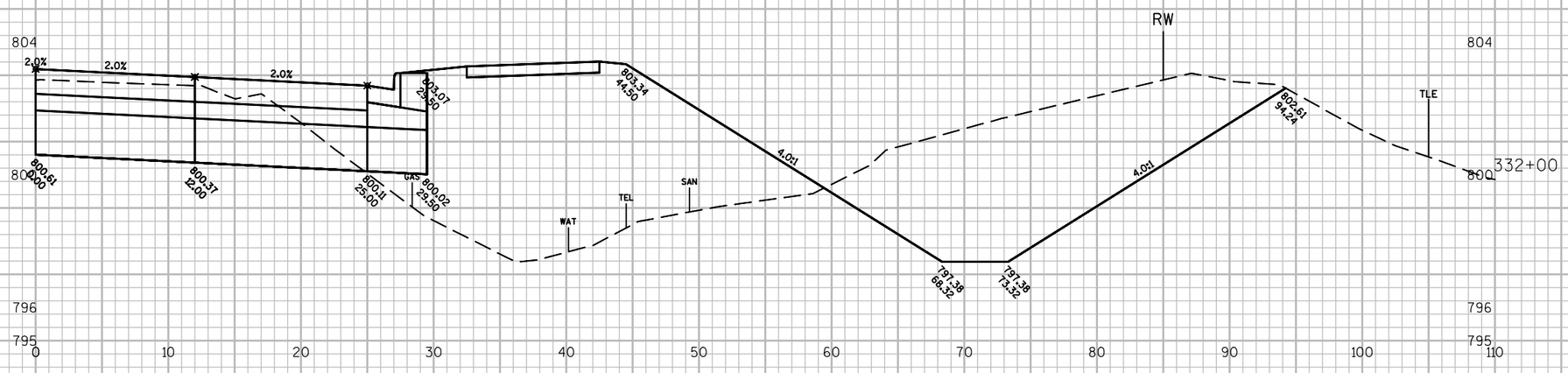
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:32 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 804	E





4 FT

10 FT

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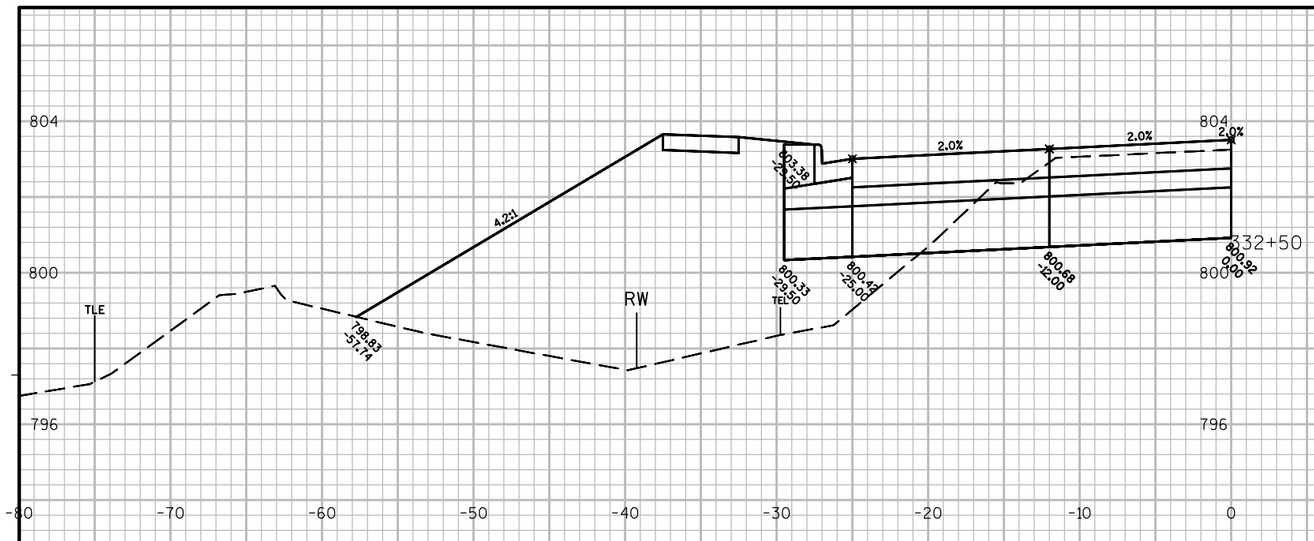
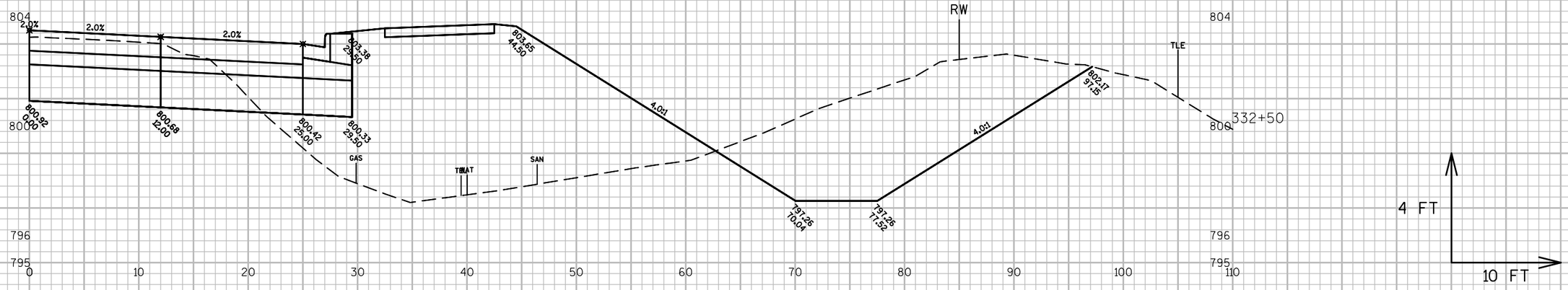
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 805	E





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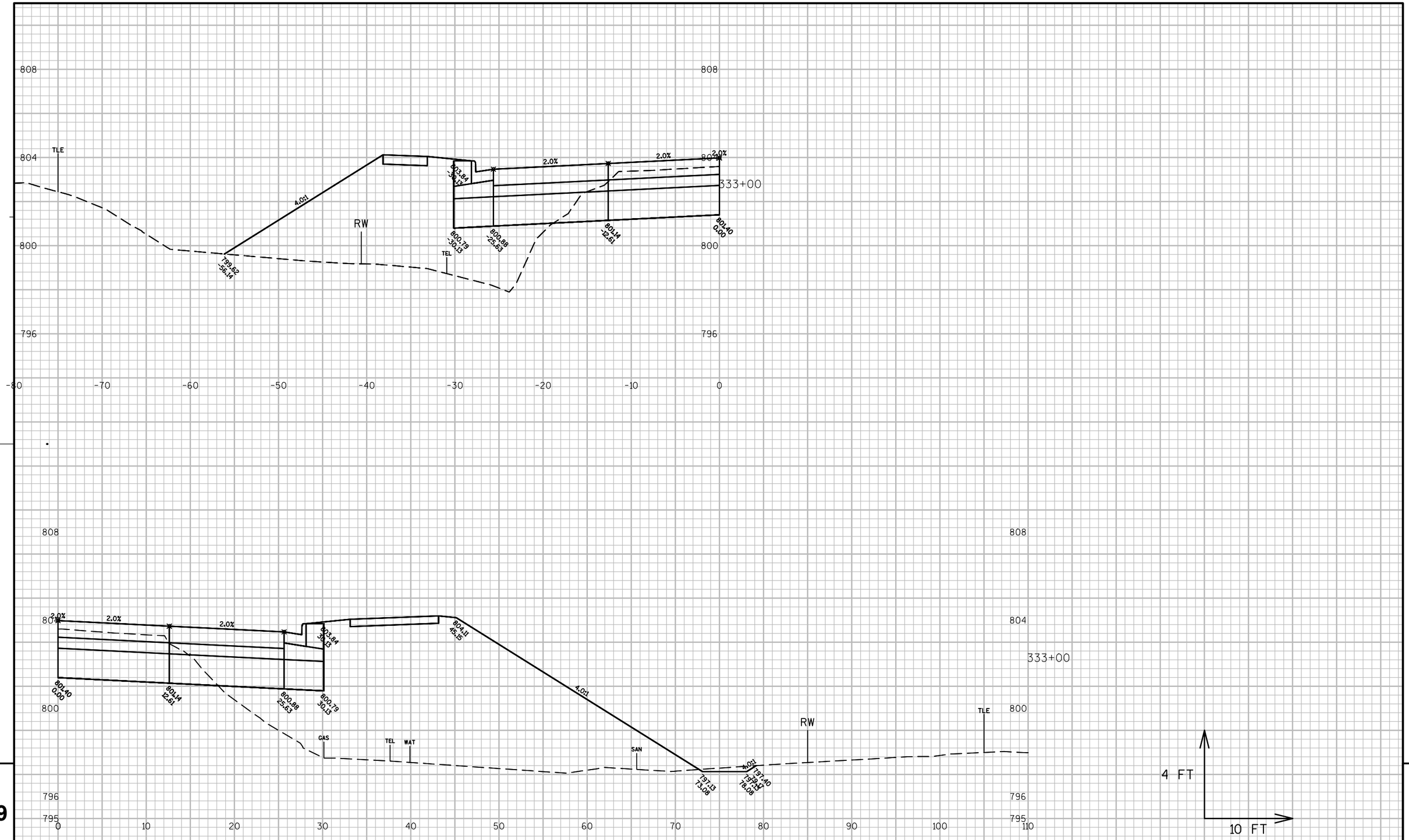
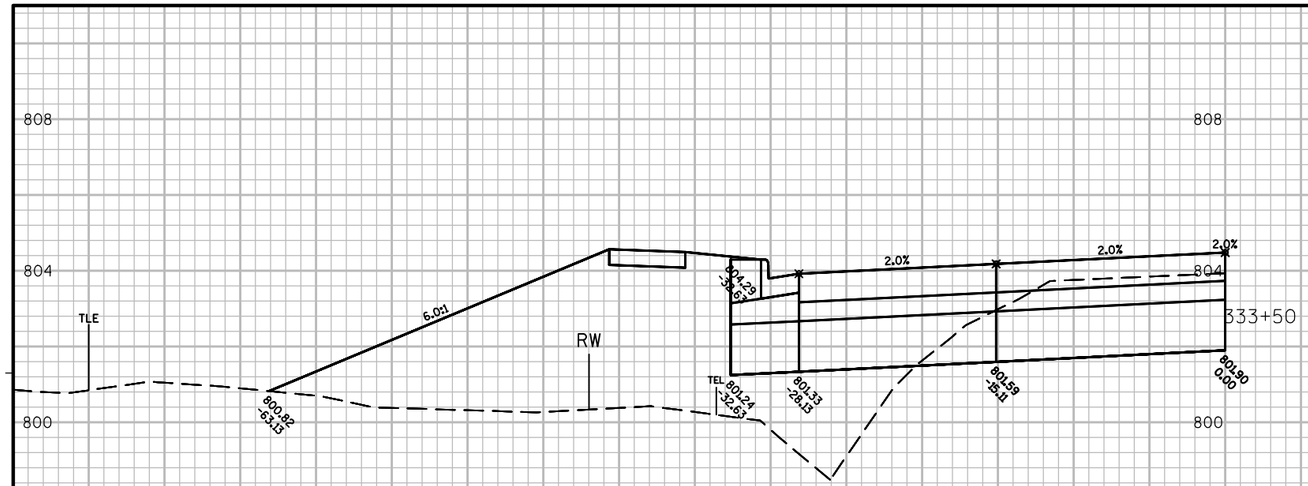
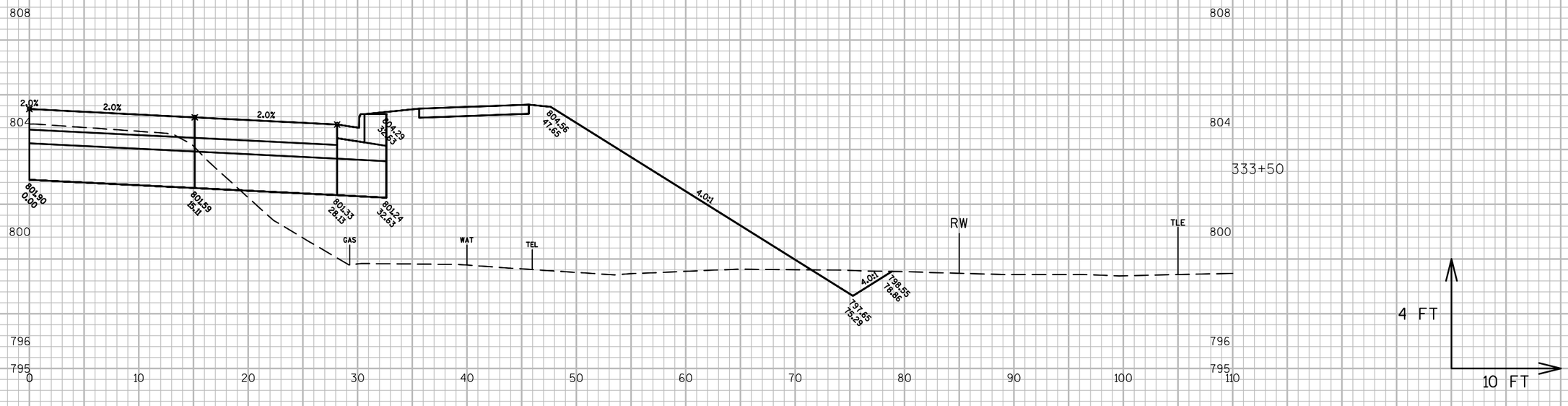
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 806	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 807	E





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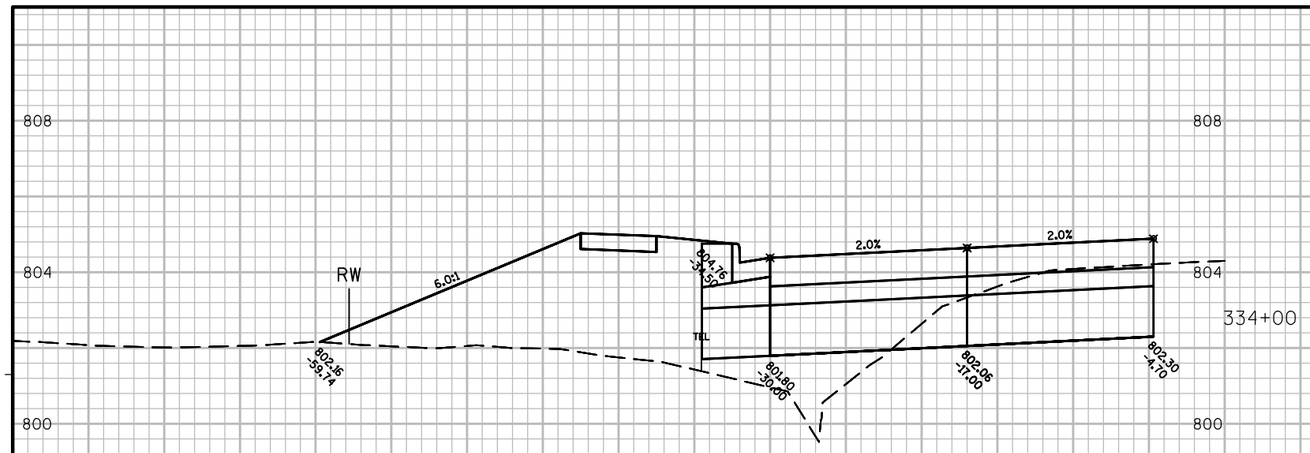
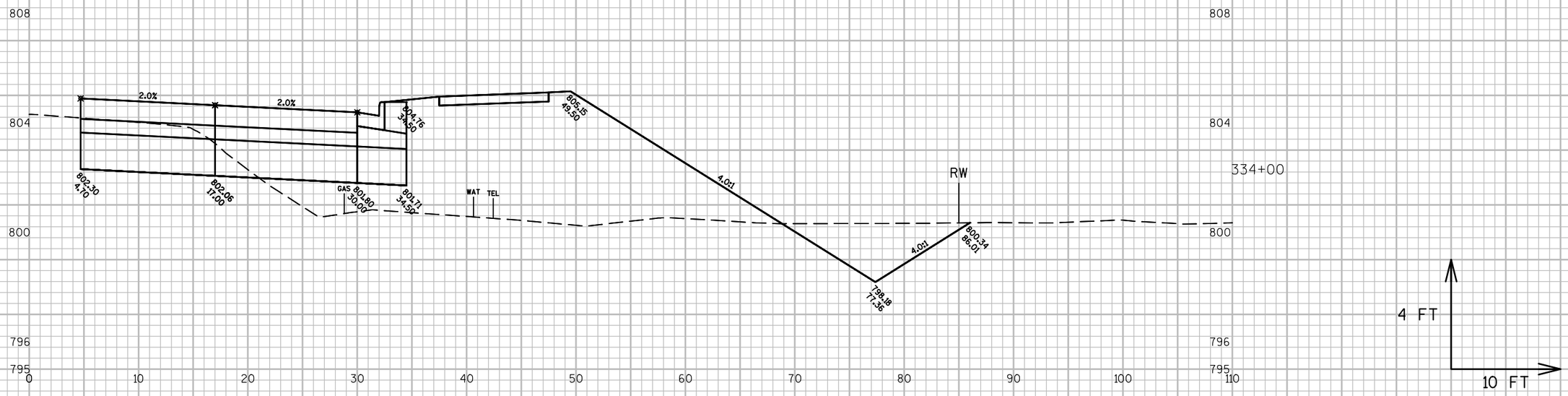
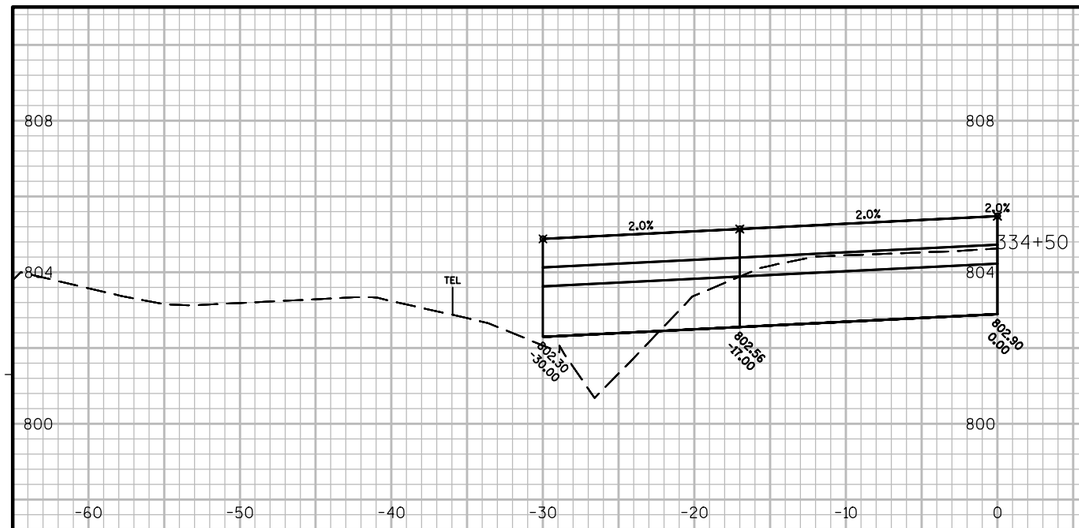
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 808	E

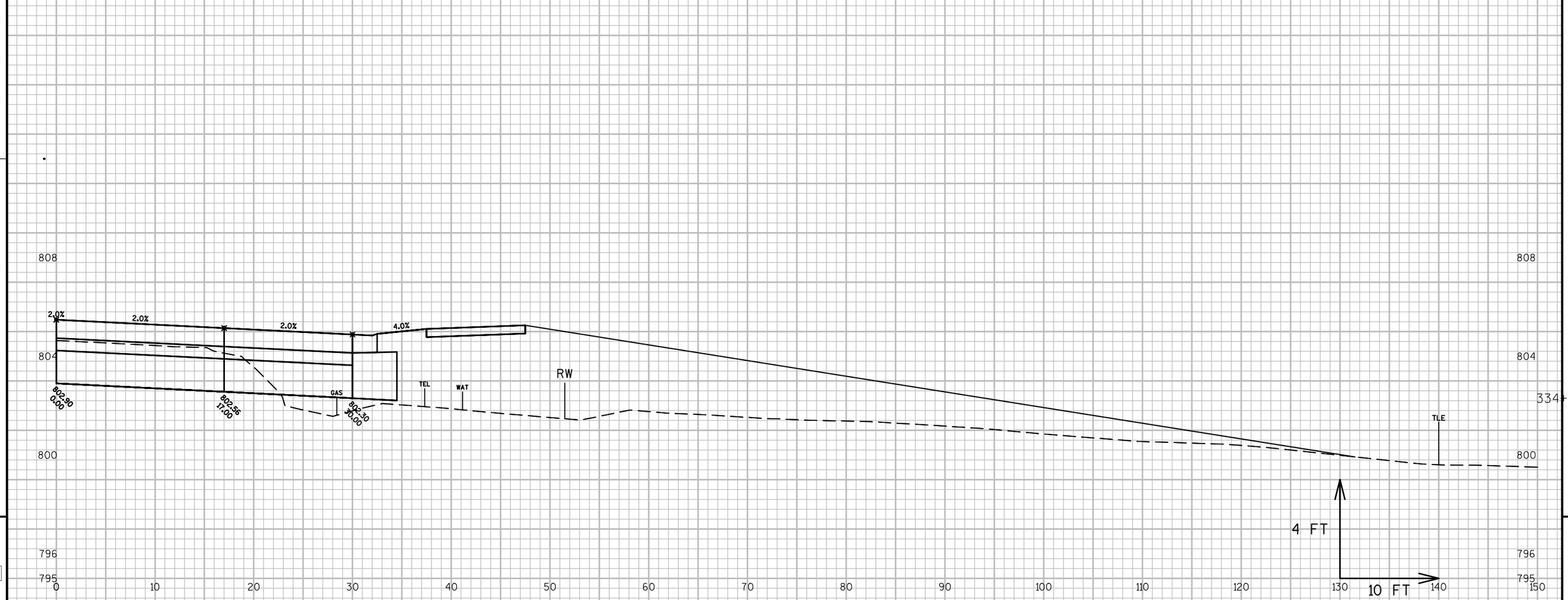




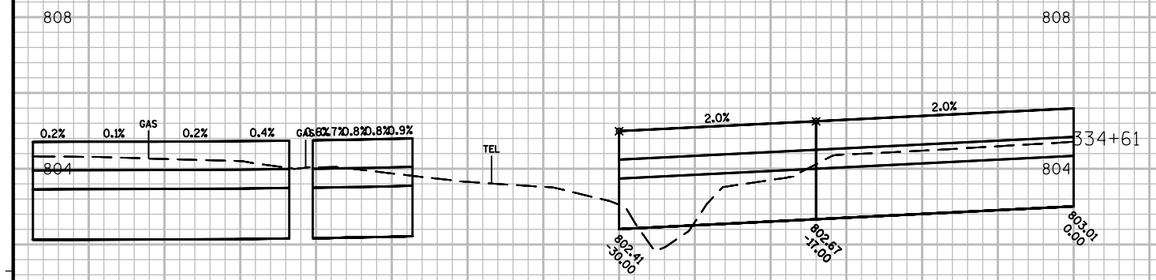
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 809	E

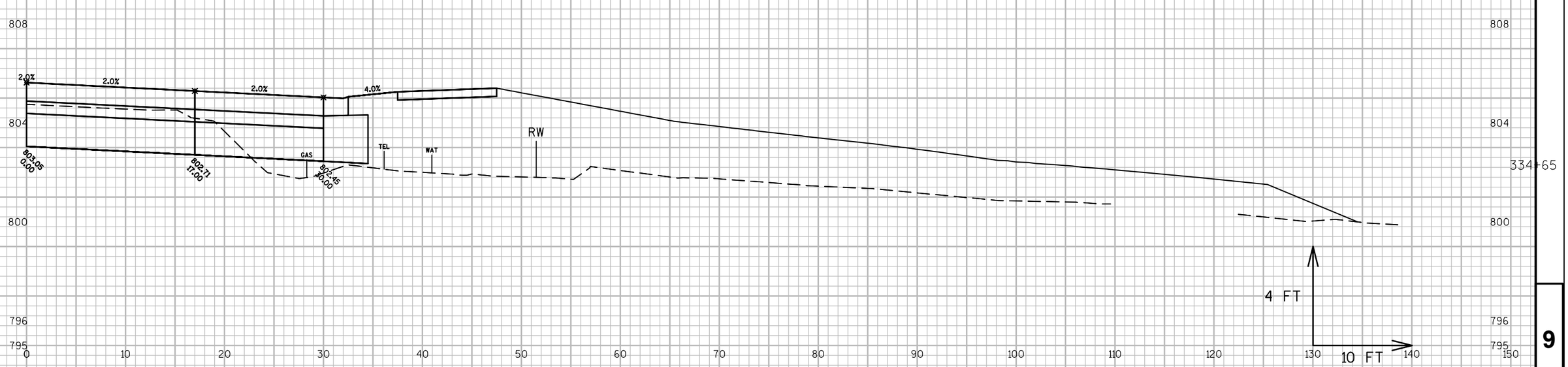
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/12/2018 4:55 PM PLOT BY : MANSKE, CALEB PLOT NAME :





PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 810	E





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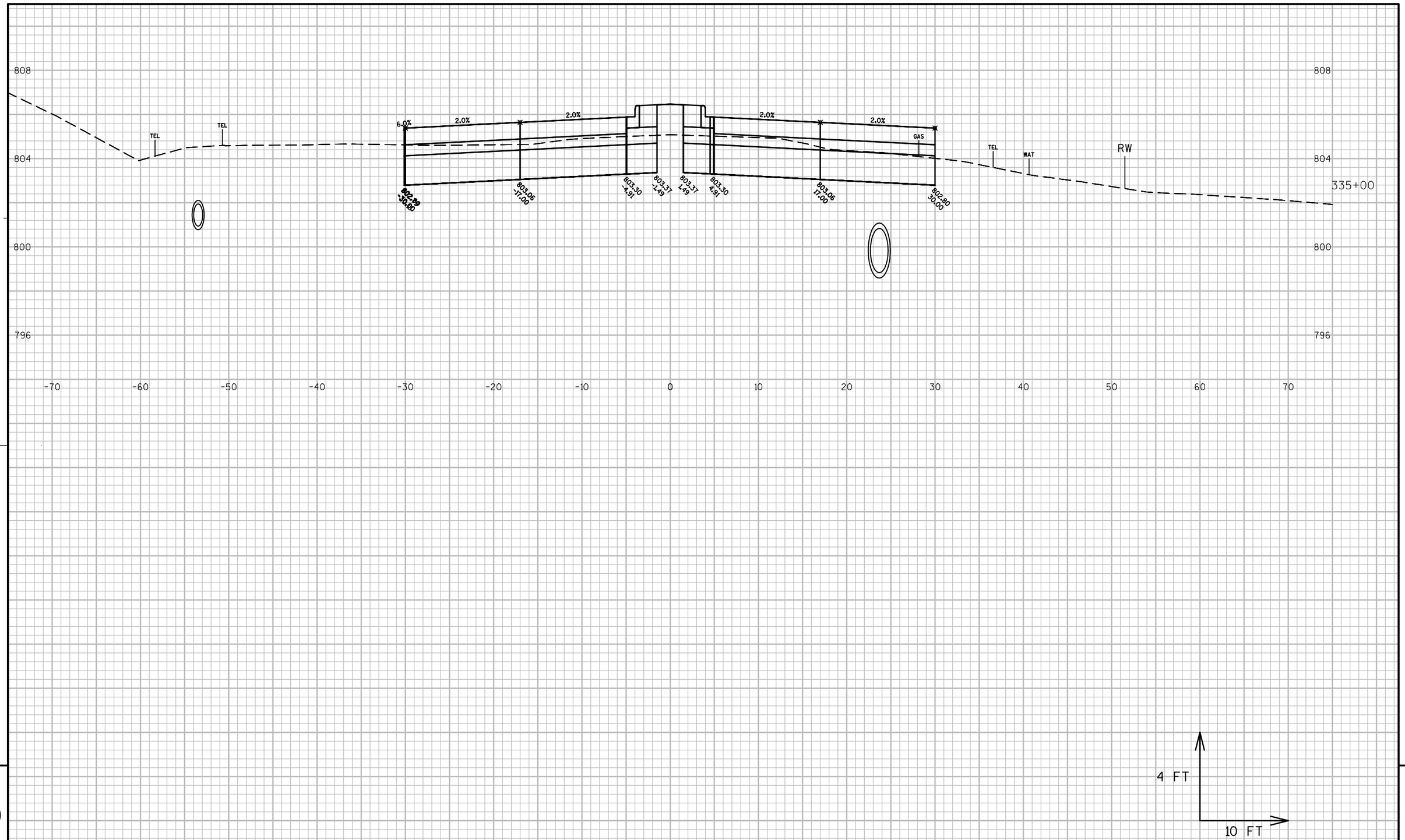
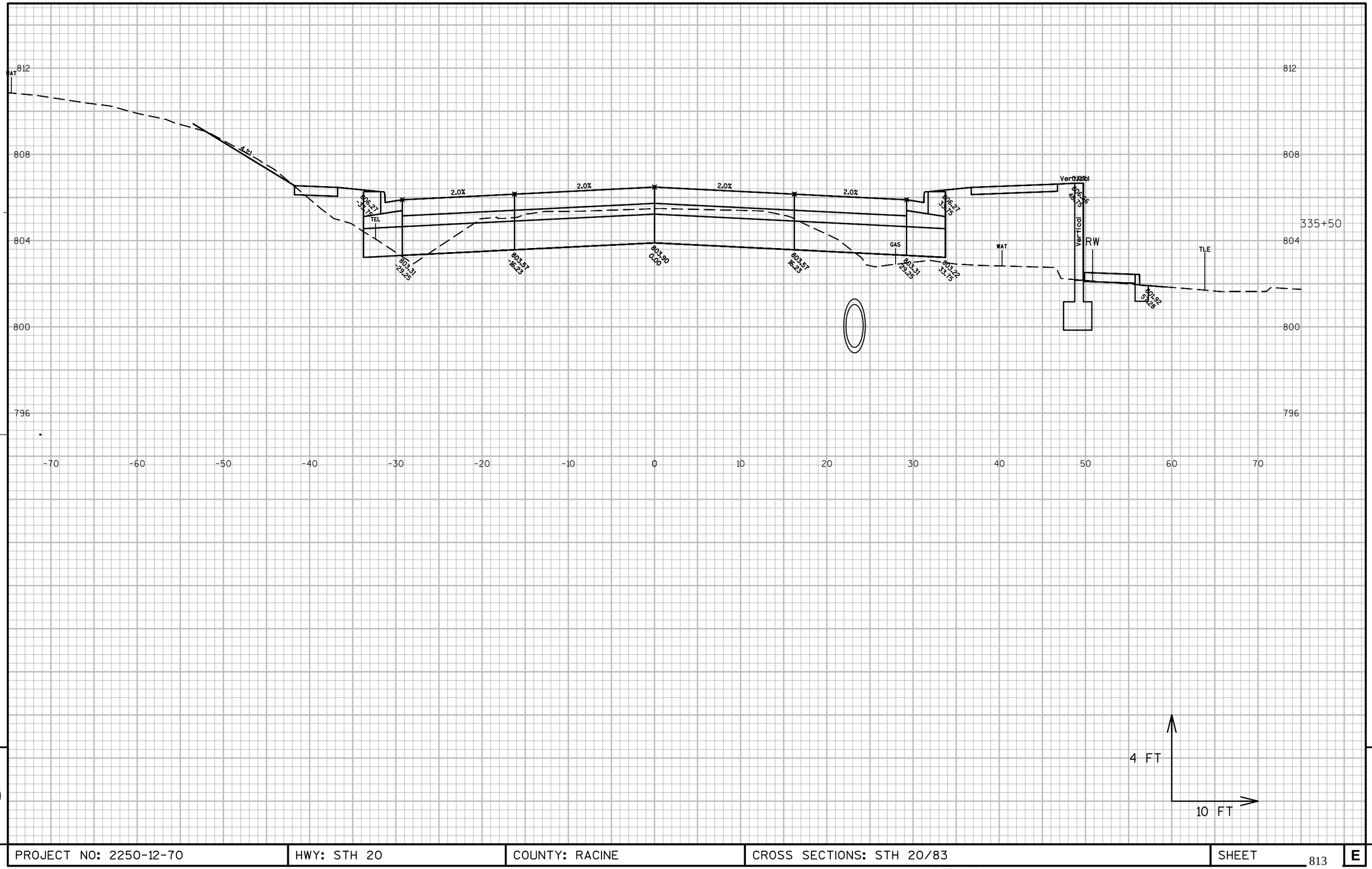
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 811	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 812	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:36 PM PLOT BY : MANSKE, CALEB PLOT NAME :

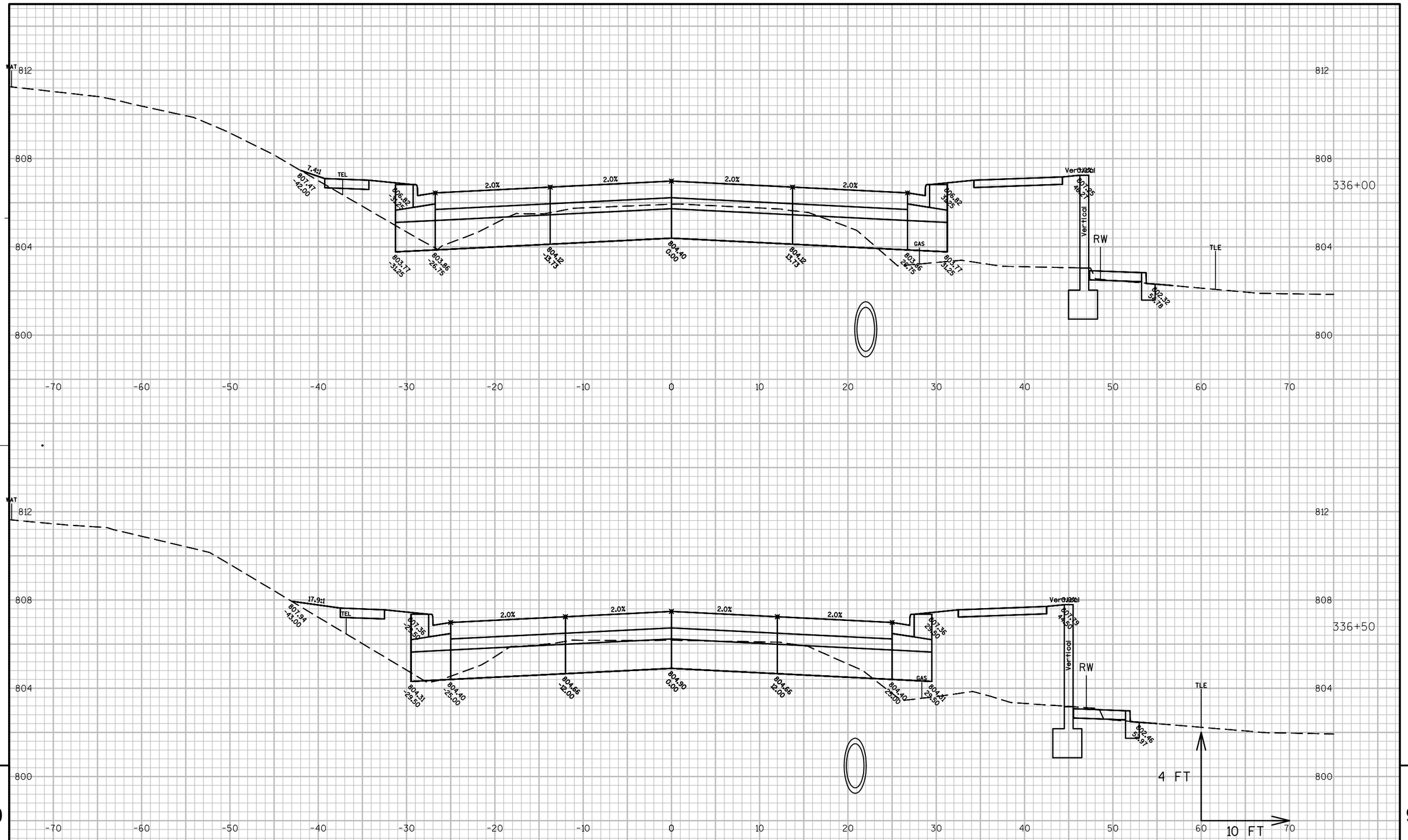
WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 813	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:37 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49


812
808
804
800
-70
-60
-50
-40
-30
-20
-10
0
10
20
30
40
50
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7.4:1
17.9:1
TEL
GAS
RW
TLE
Vertical
2.0%
4 FT
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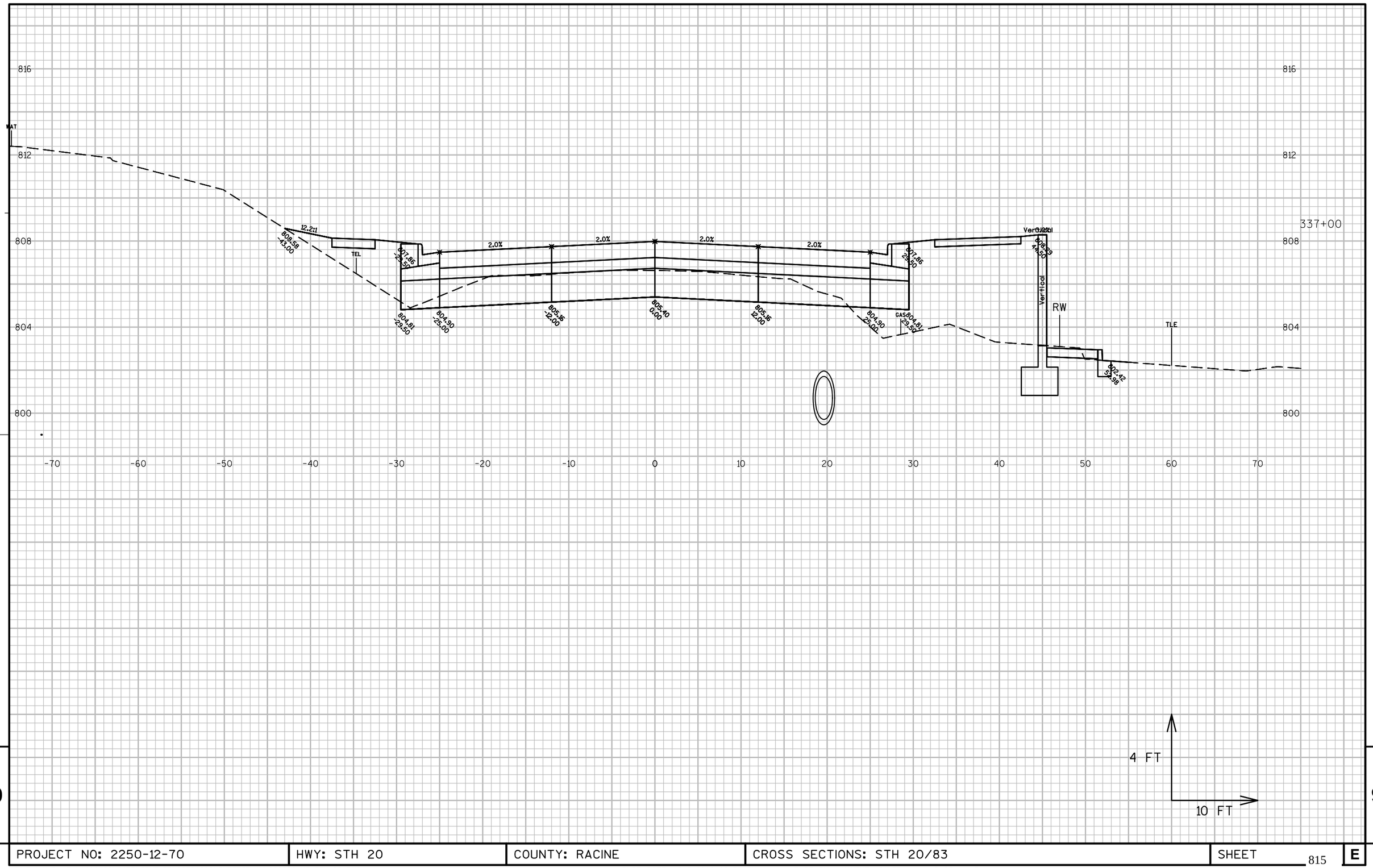

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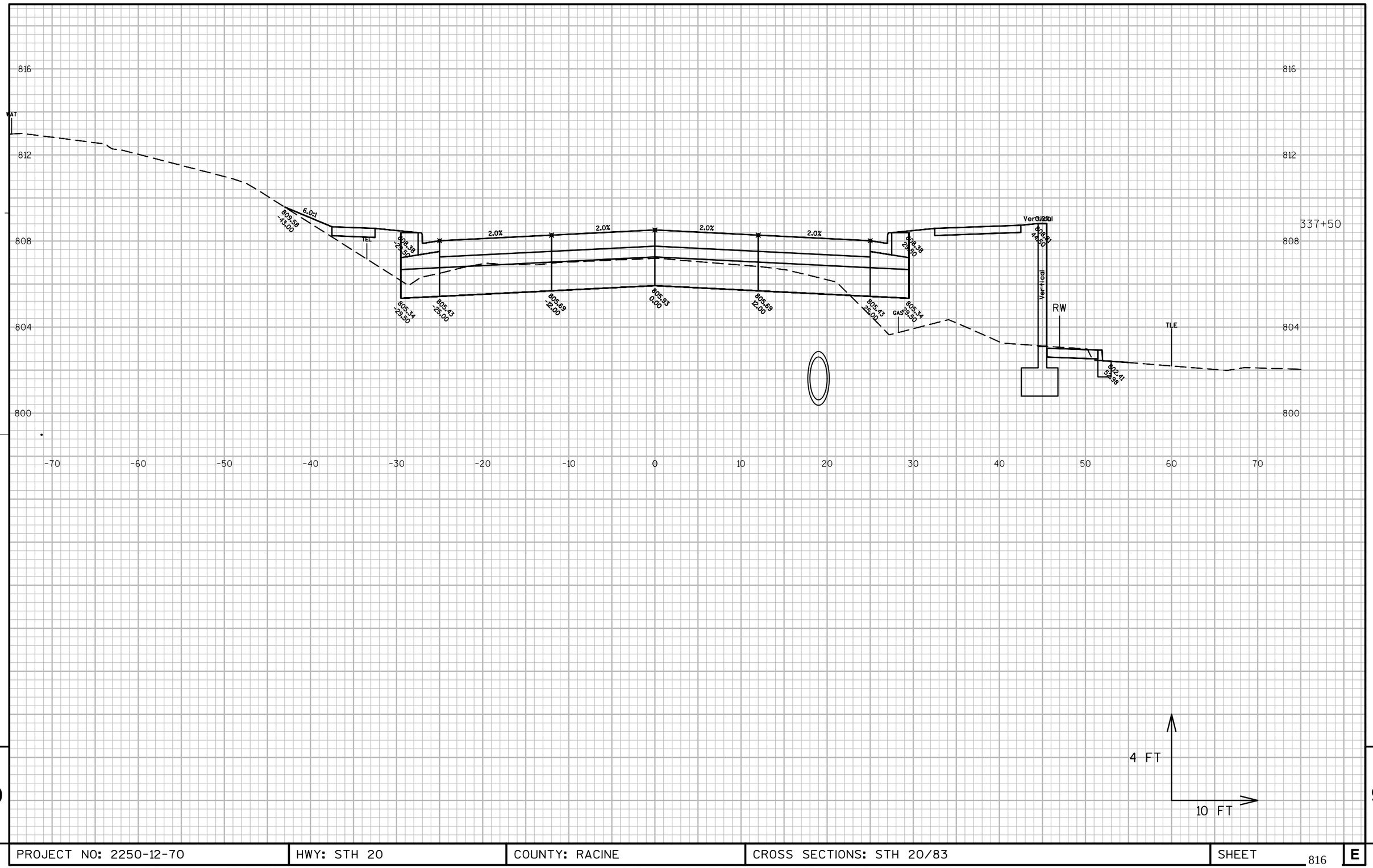
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 815	E



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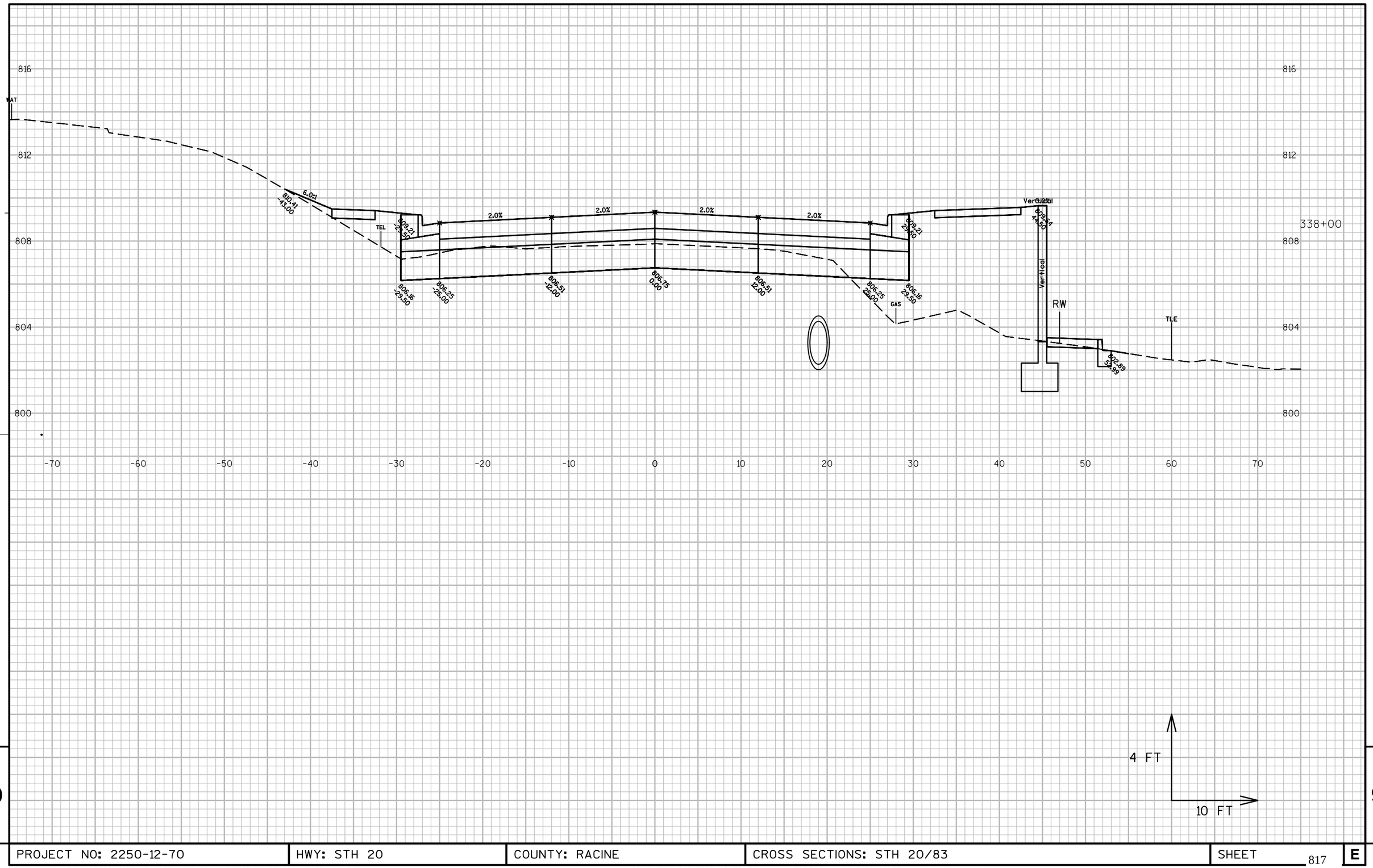
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 816	E



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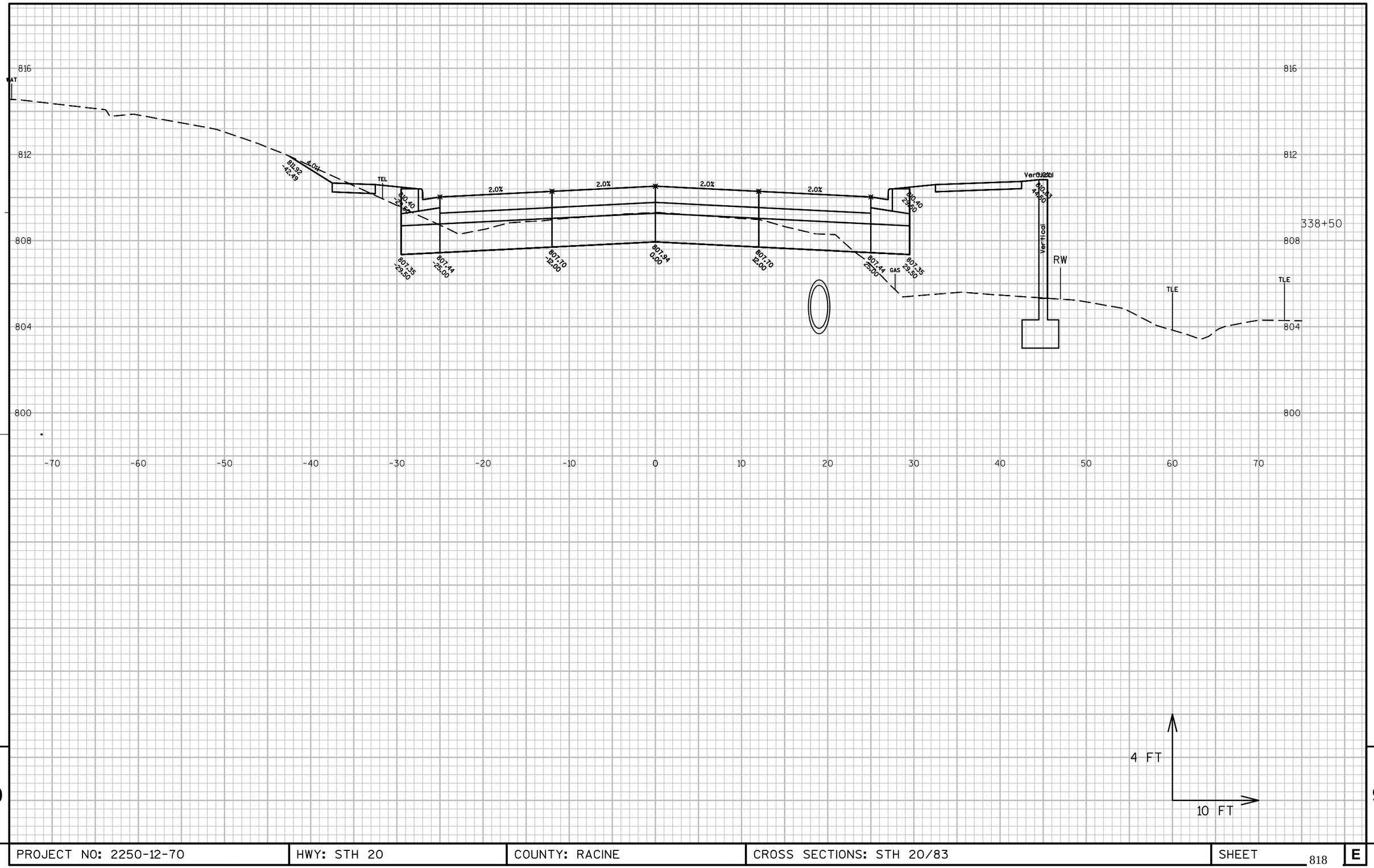
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 817	E



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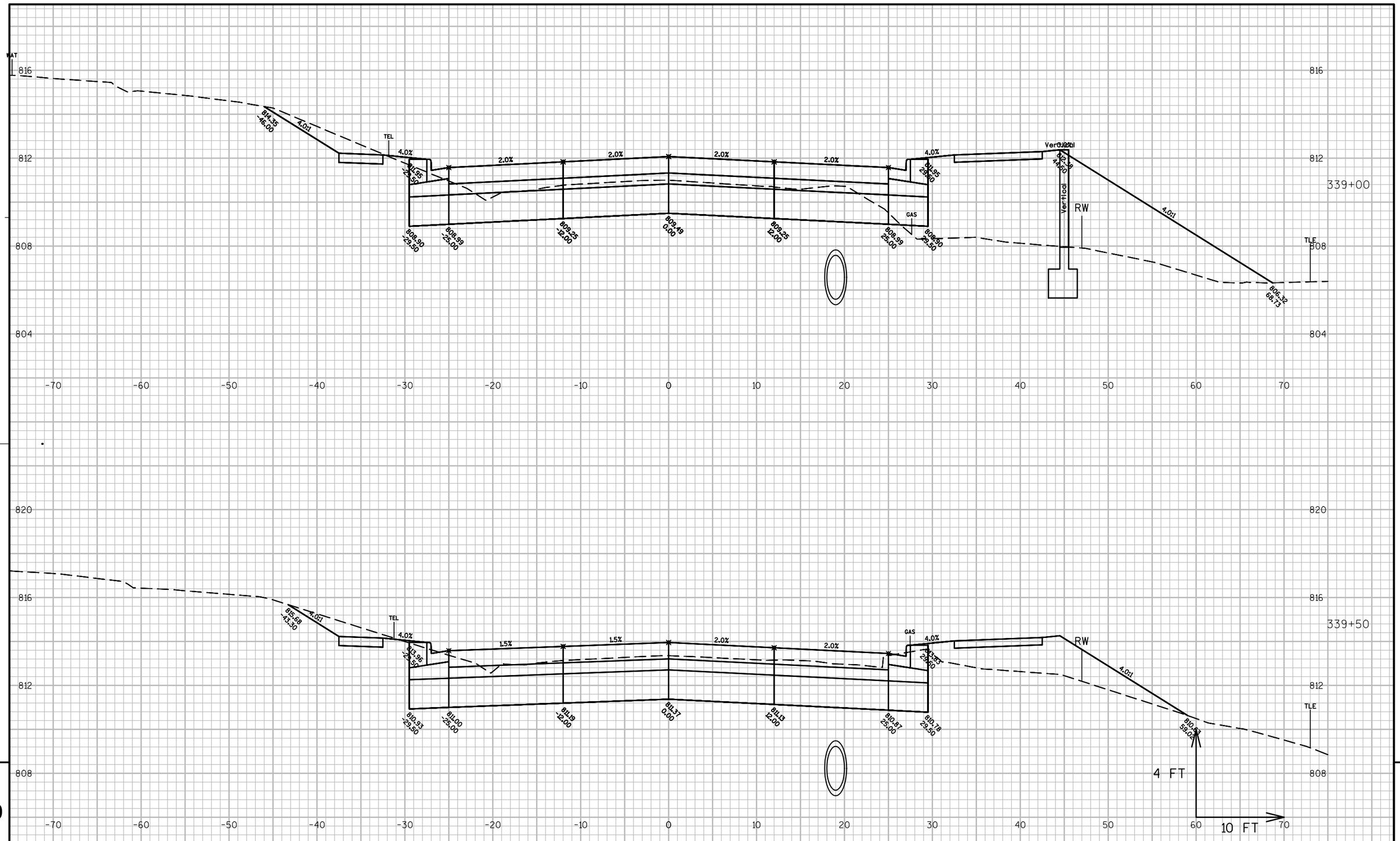
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 818	E

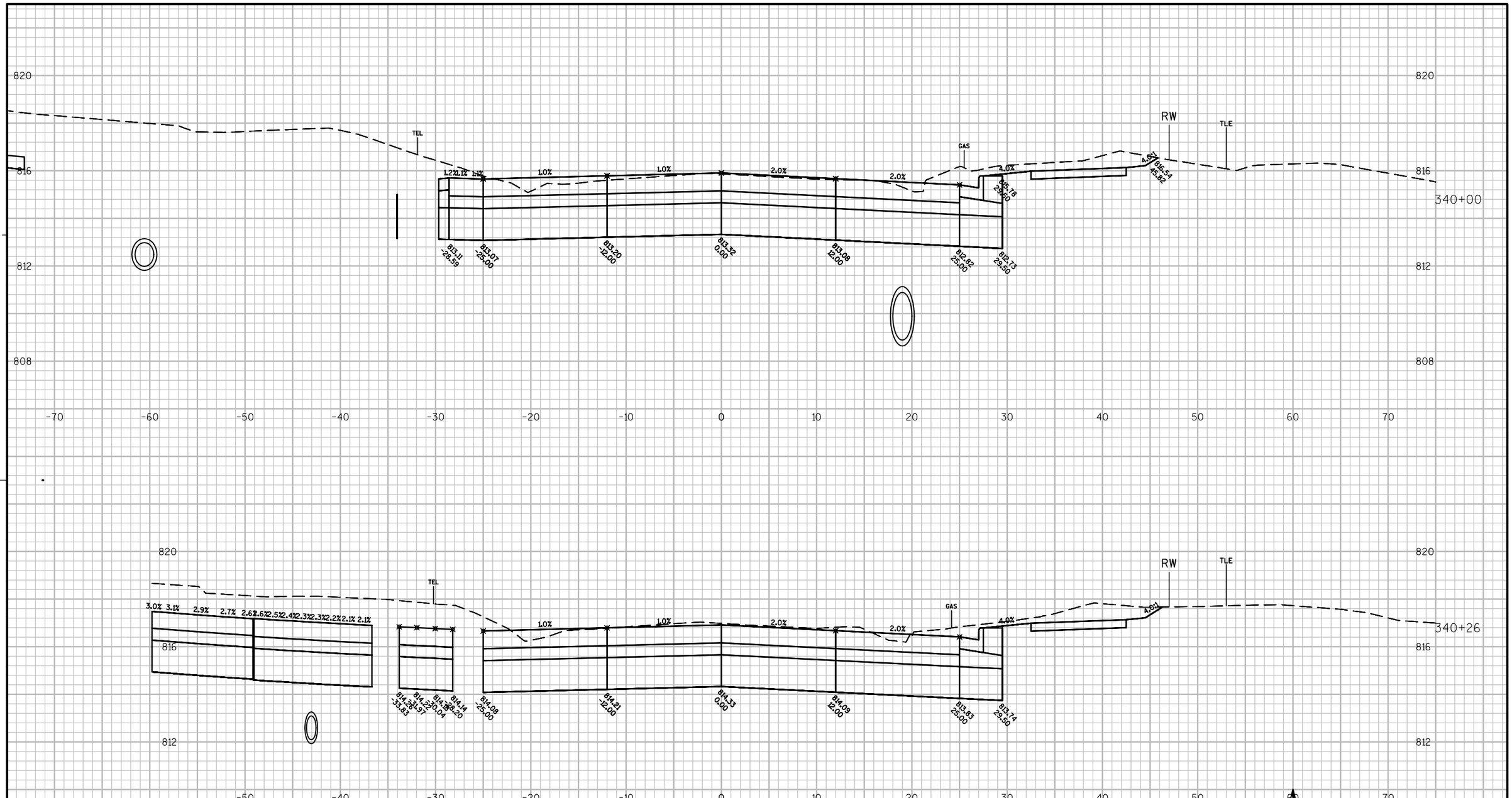
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:38 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 819	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:39 PM PLOT BY : MANSKE, CALEB PLOT NAME :



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 820	E

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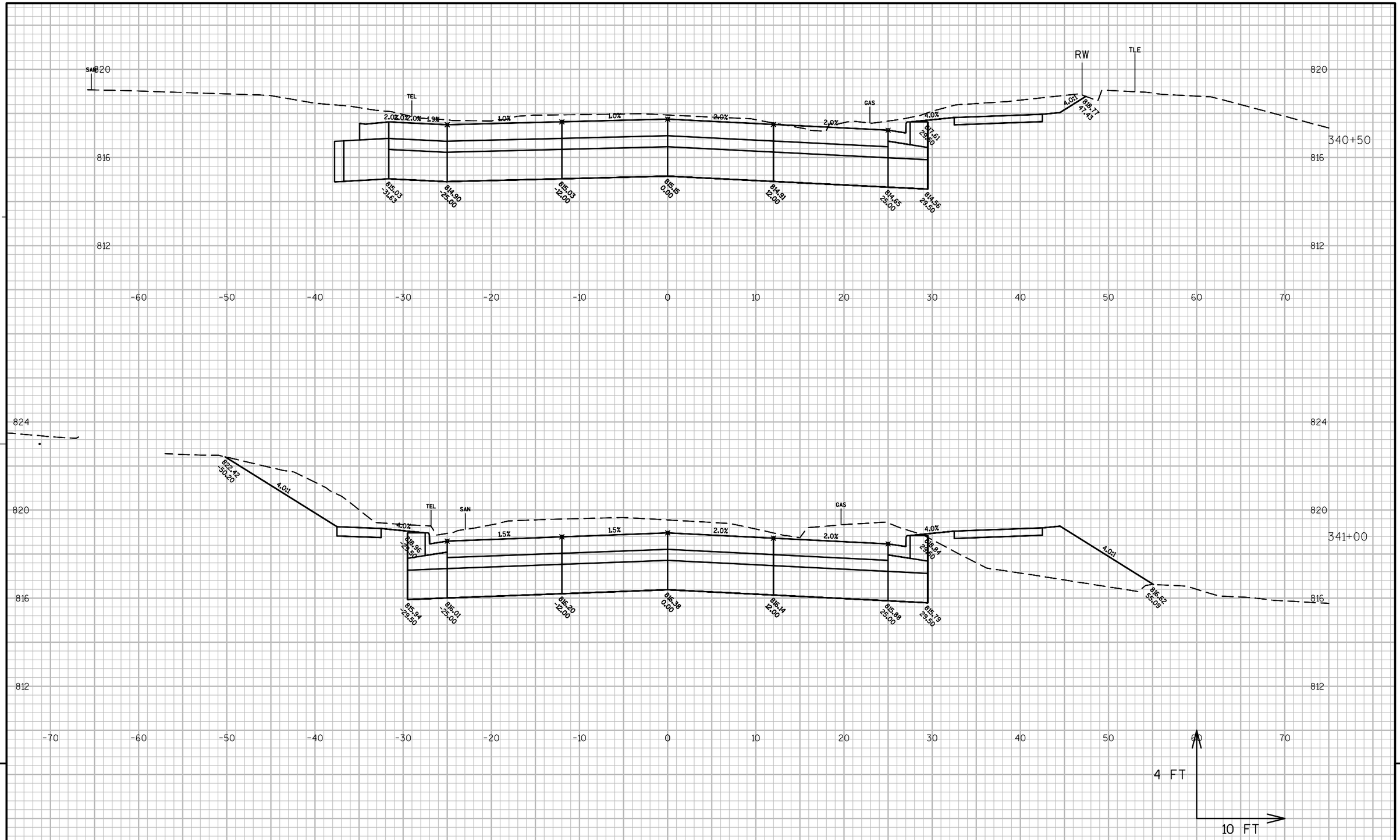

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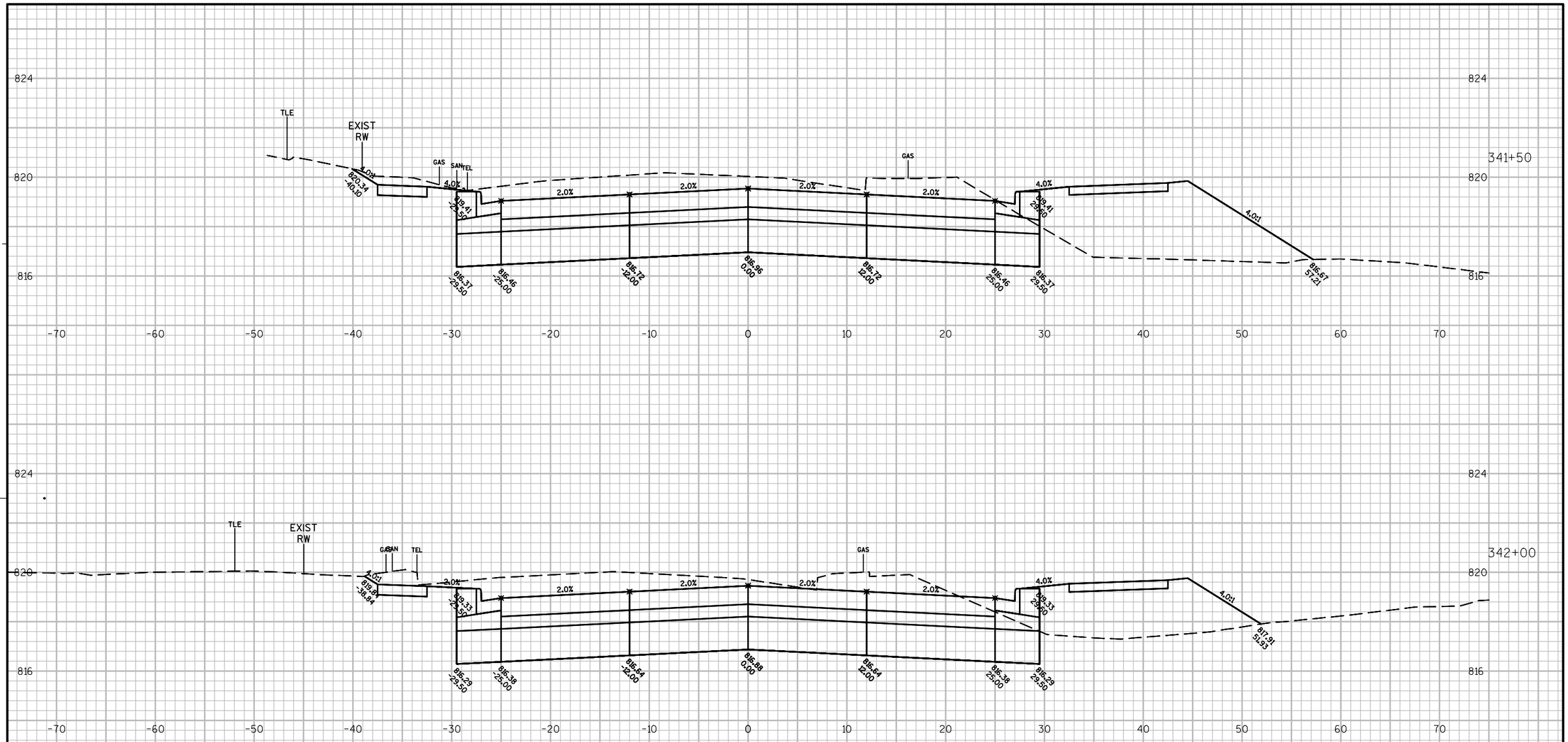
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 821	E



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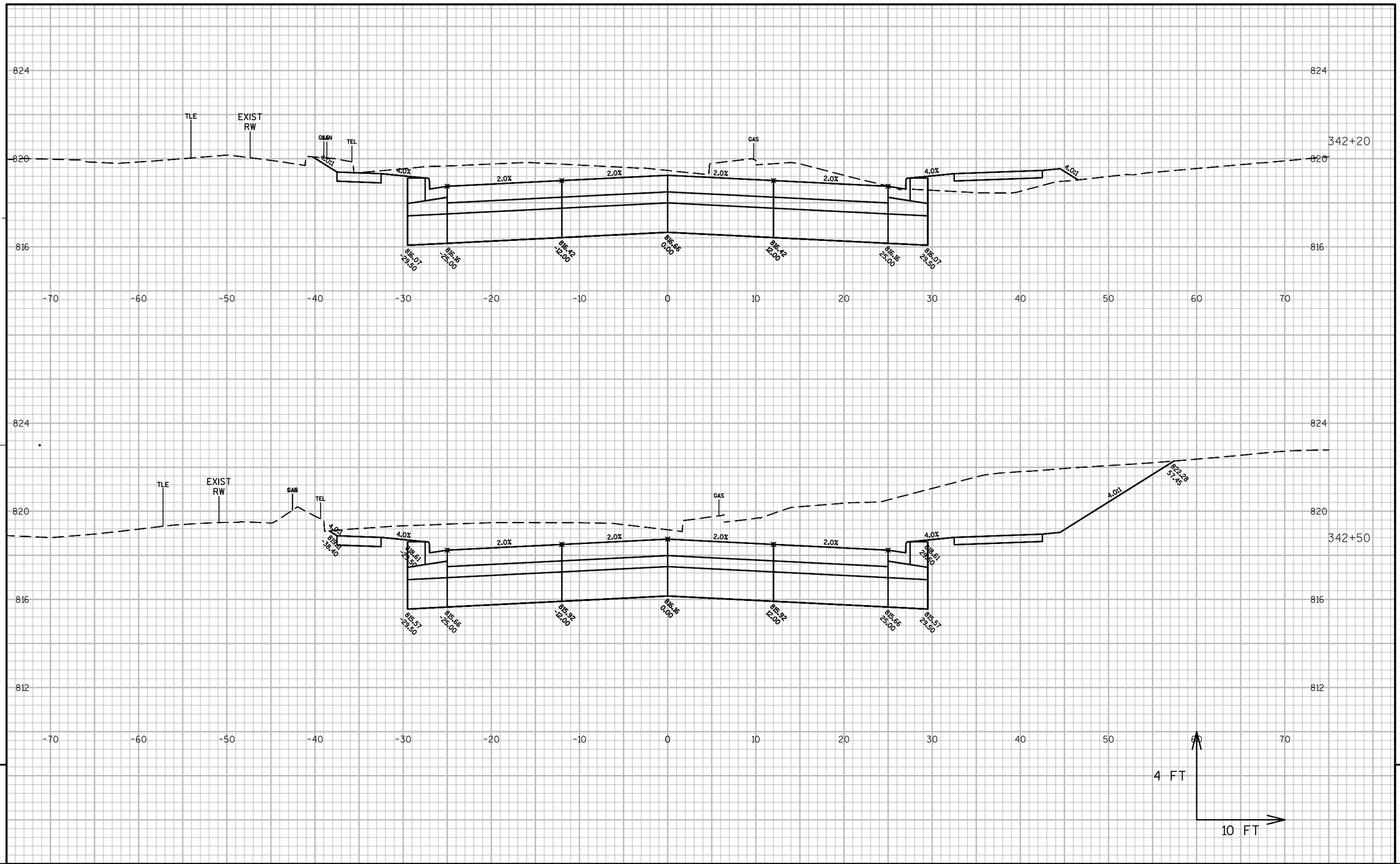
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 822	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:40 PM PLOT BY : MANSKE, CALEB PLOT NAME :



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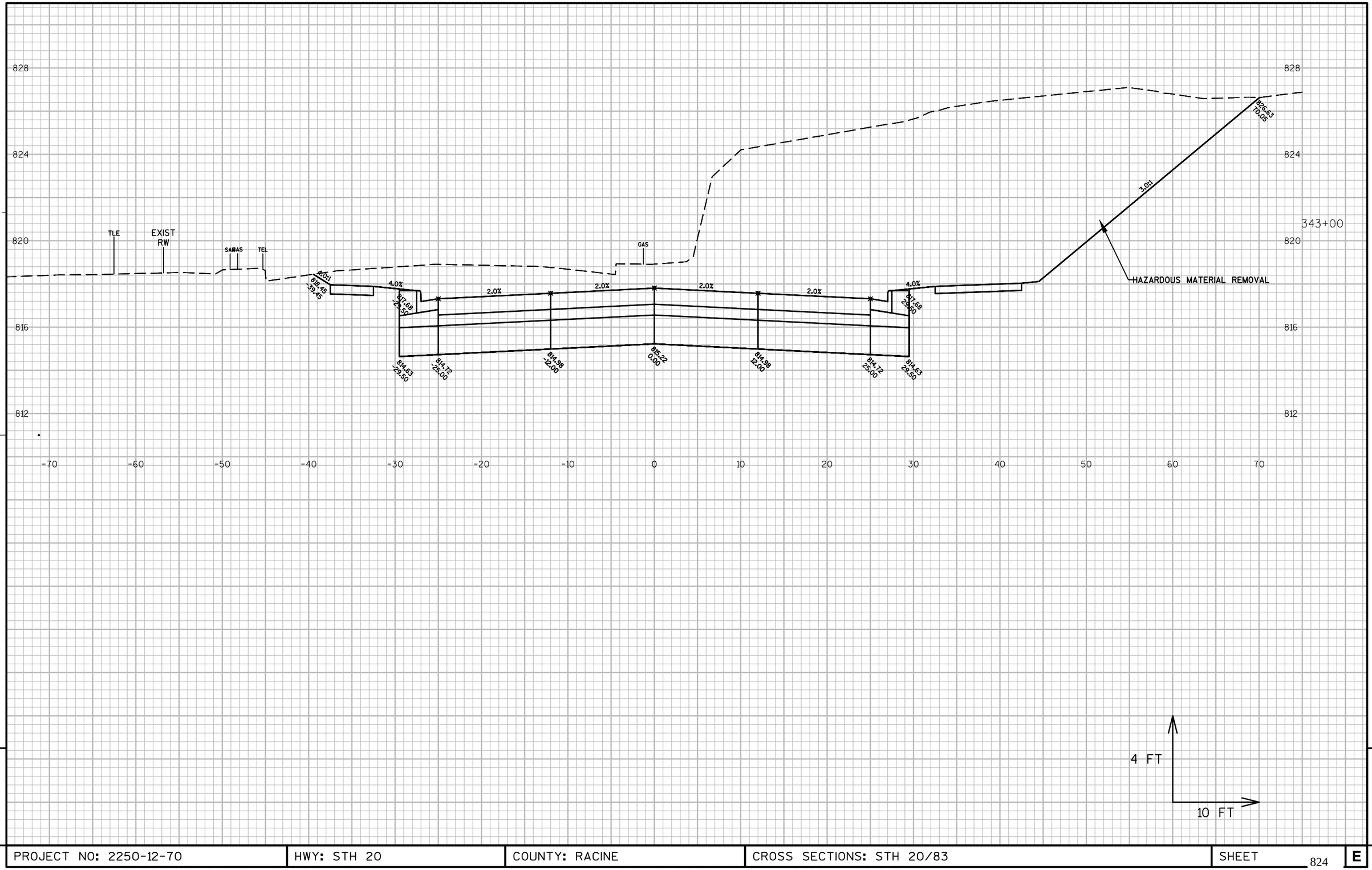
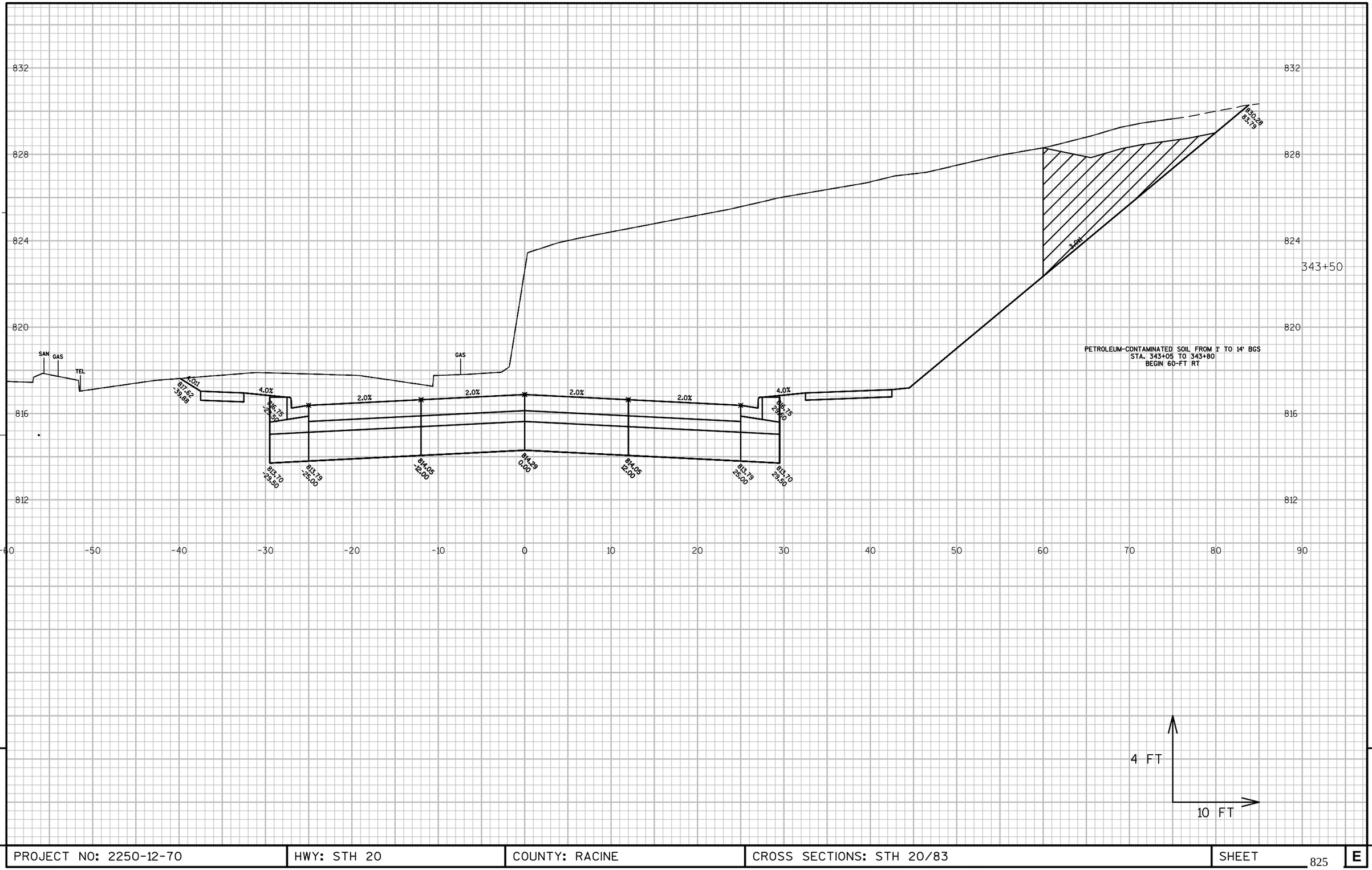
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 823	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 824	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:40 PM PLOT BY : MANSKE, CALEB PLOT NAME :



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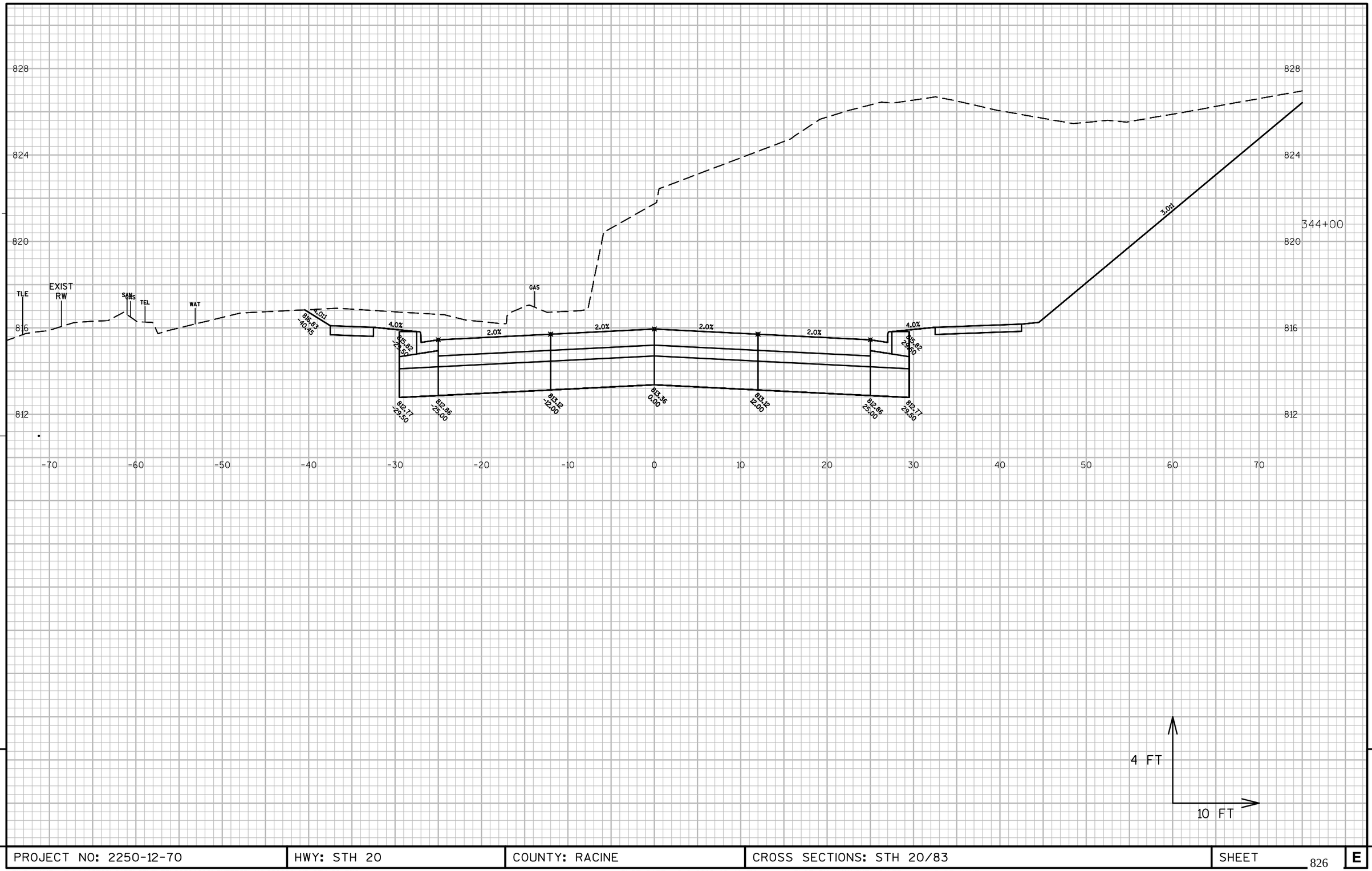
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 825	E



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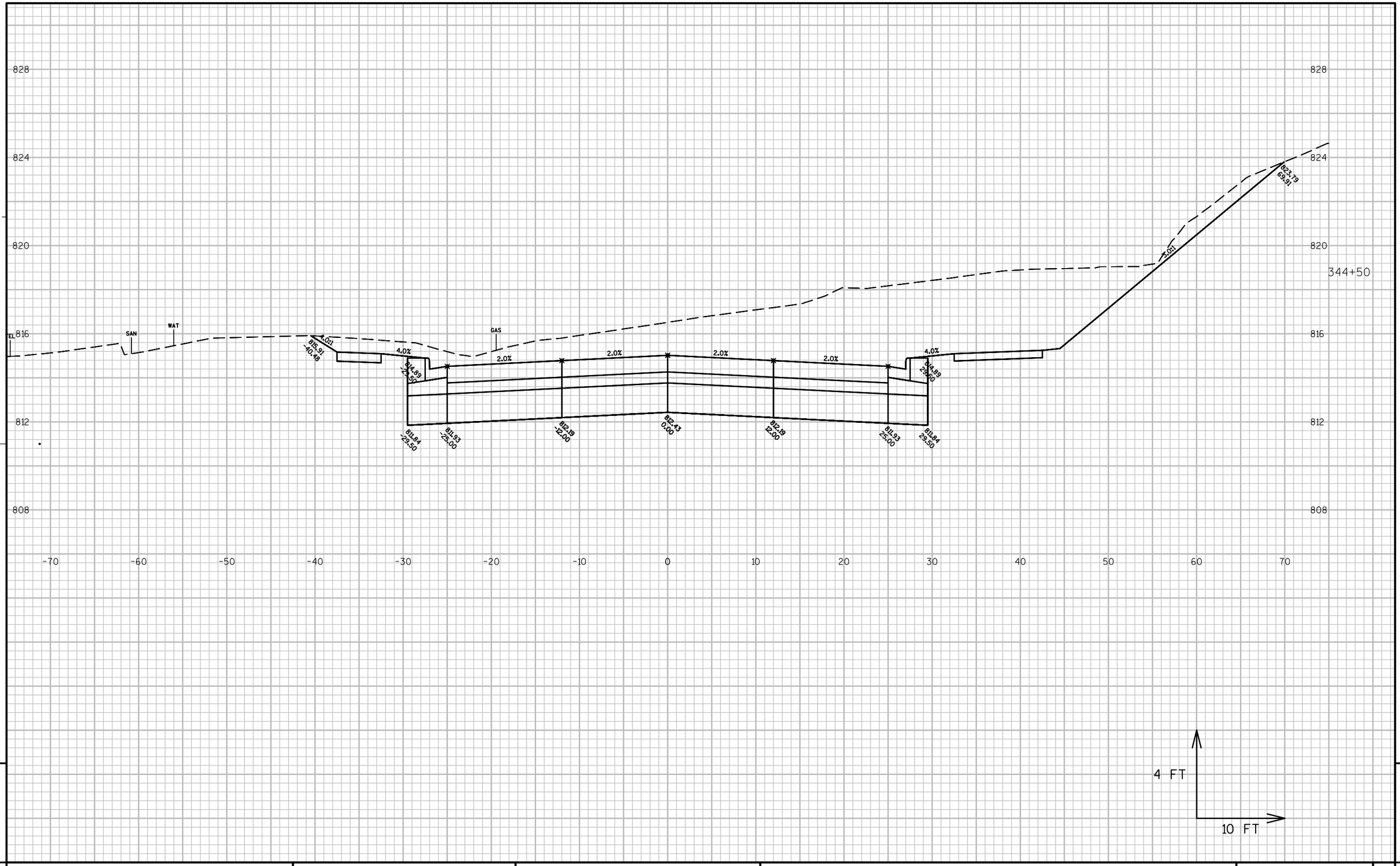
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 826	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:41 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



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PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 827	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:42 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49

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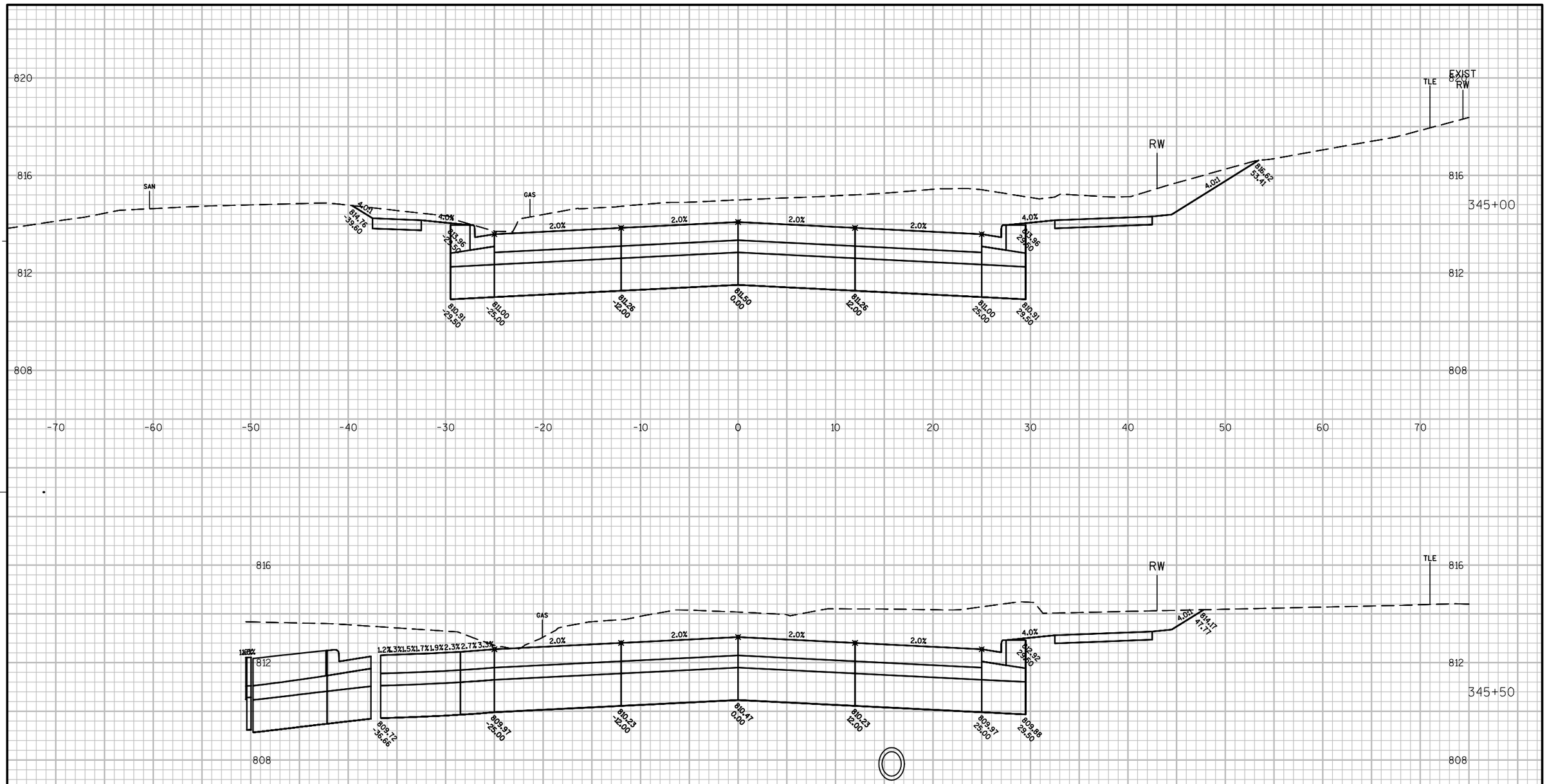
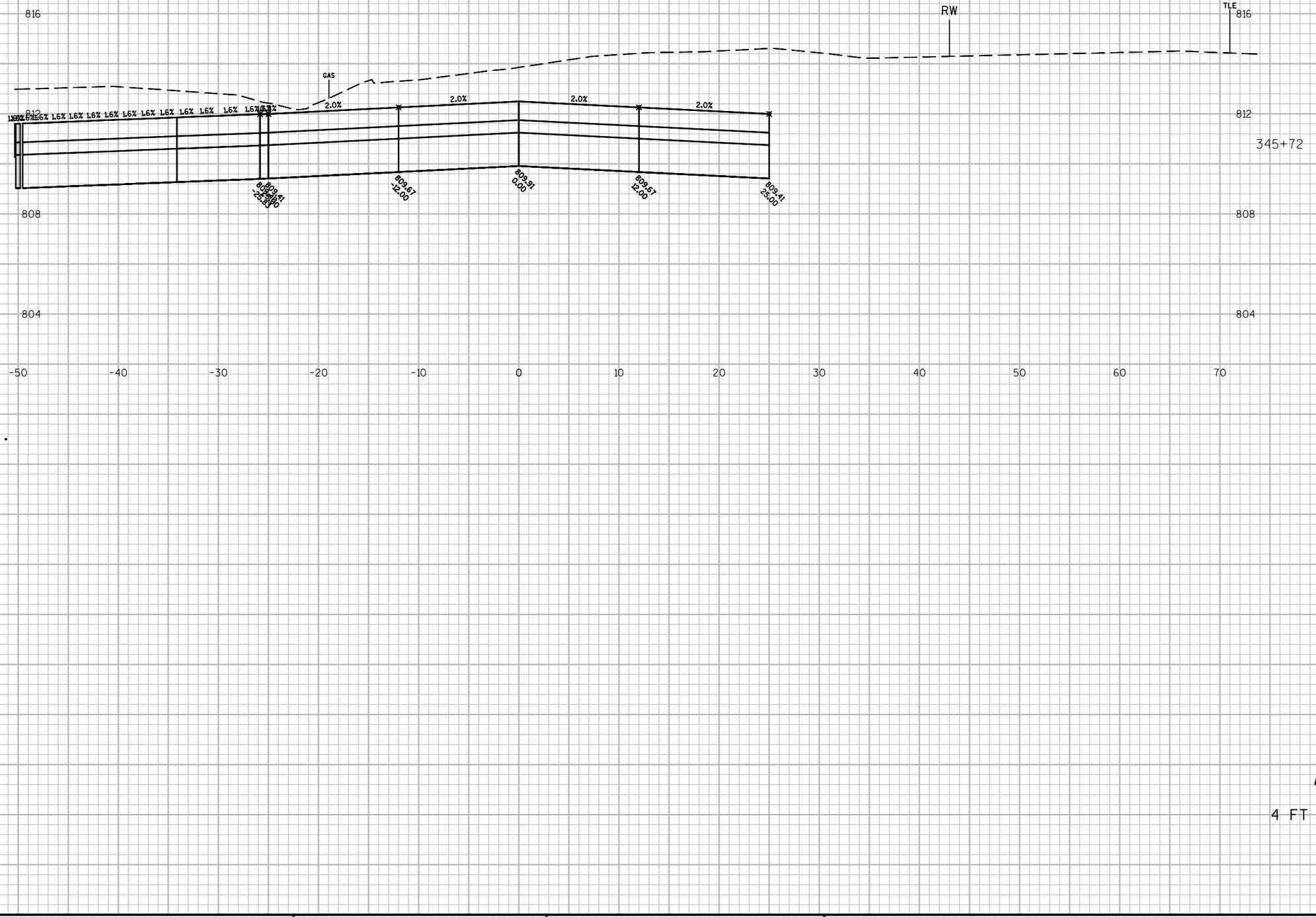


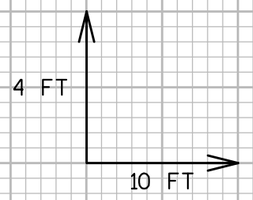
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 828	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:42 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 829	E



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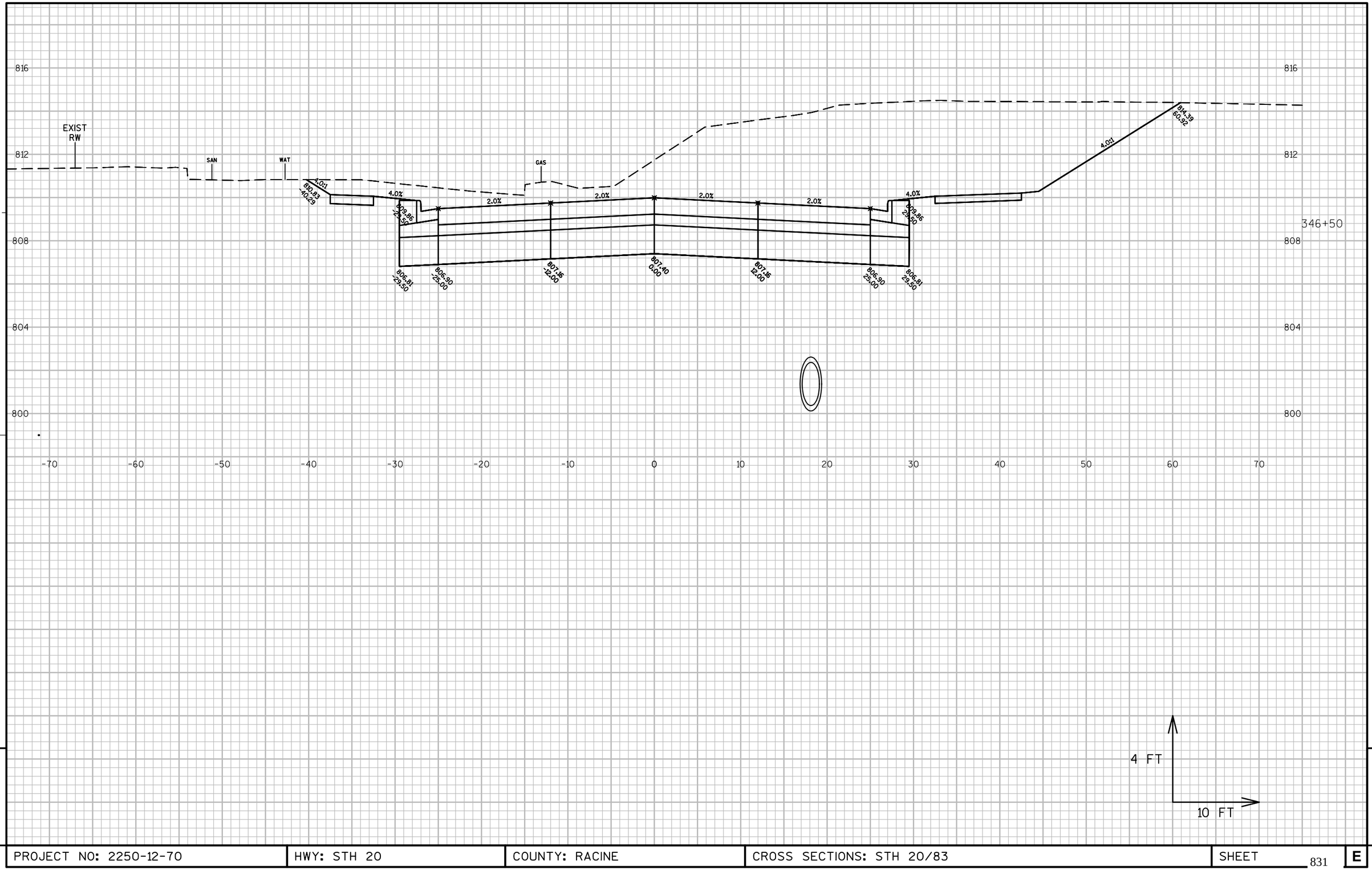
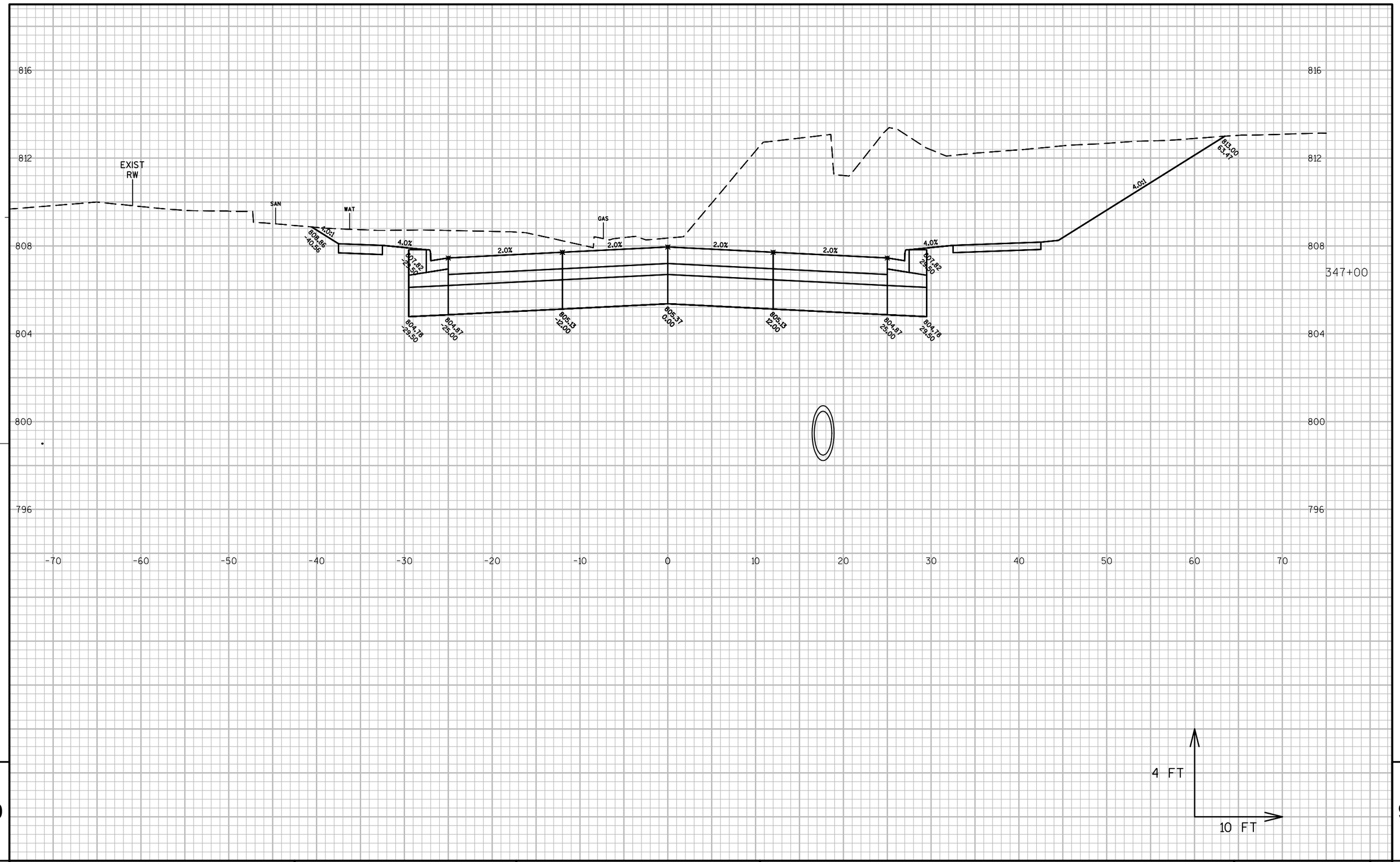
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 830	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:43 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



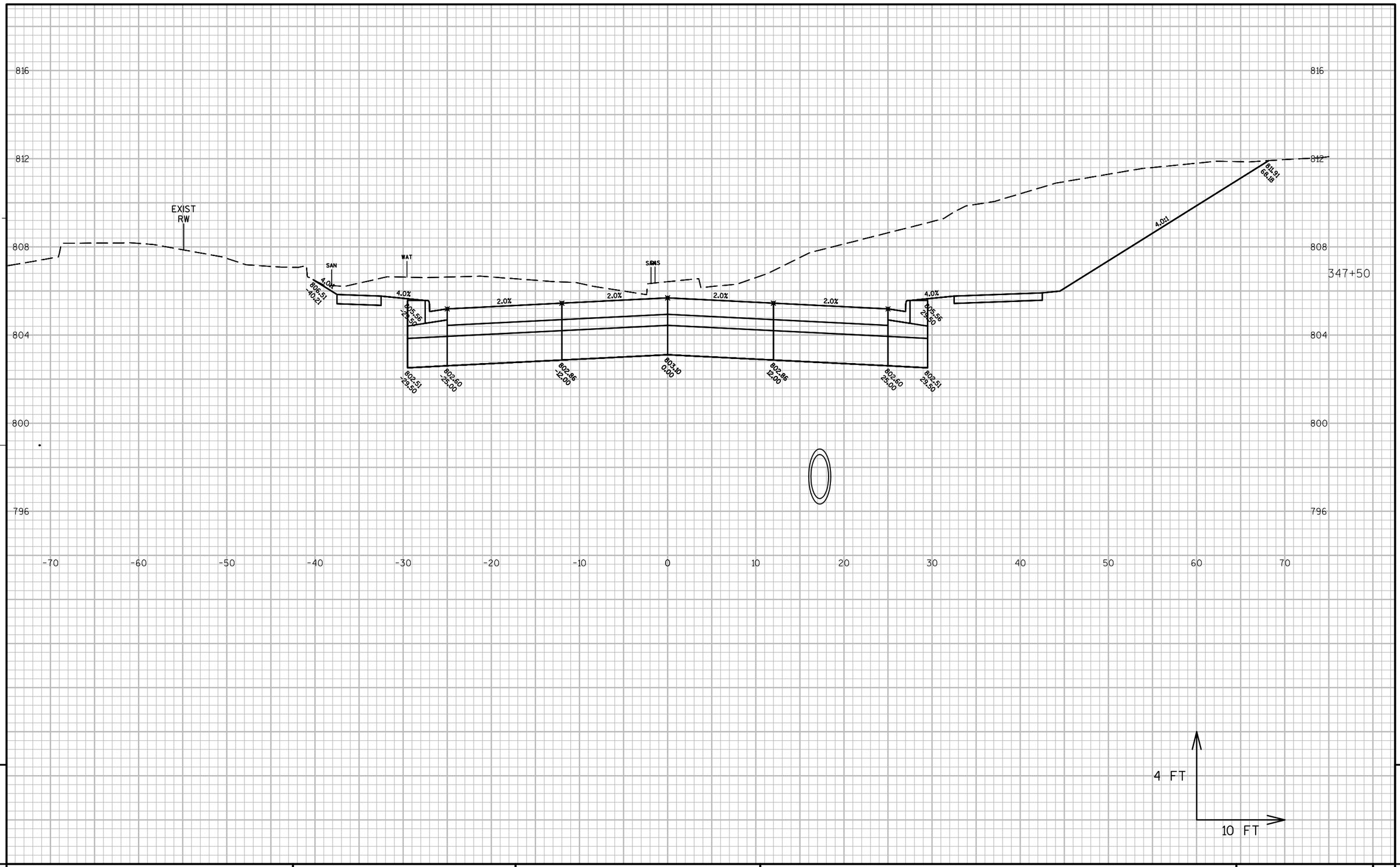
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 831	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 832	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:43 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



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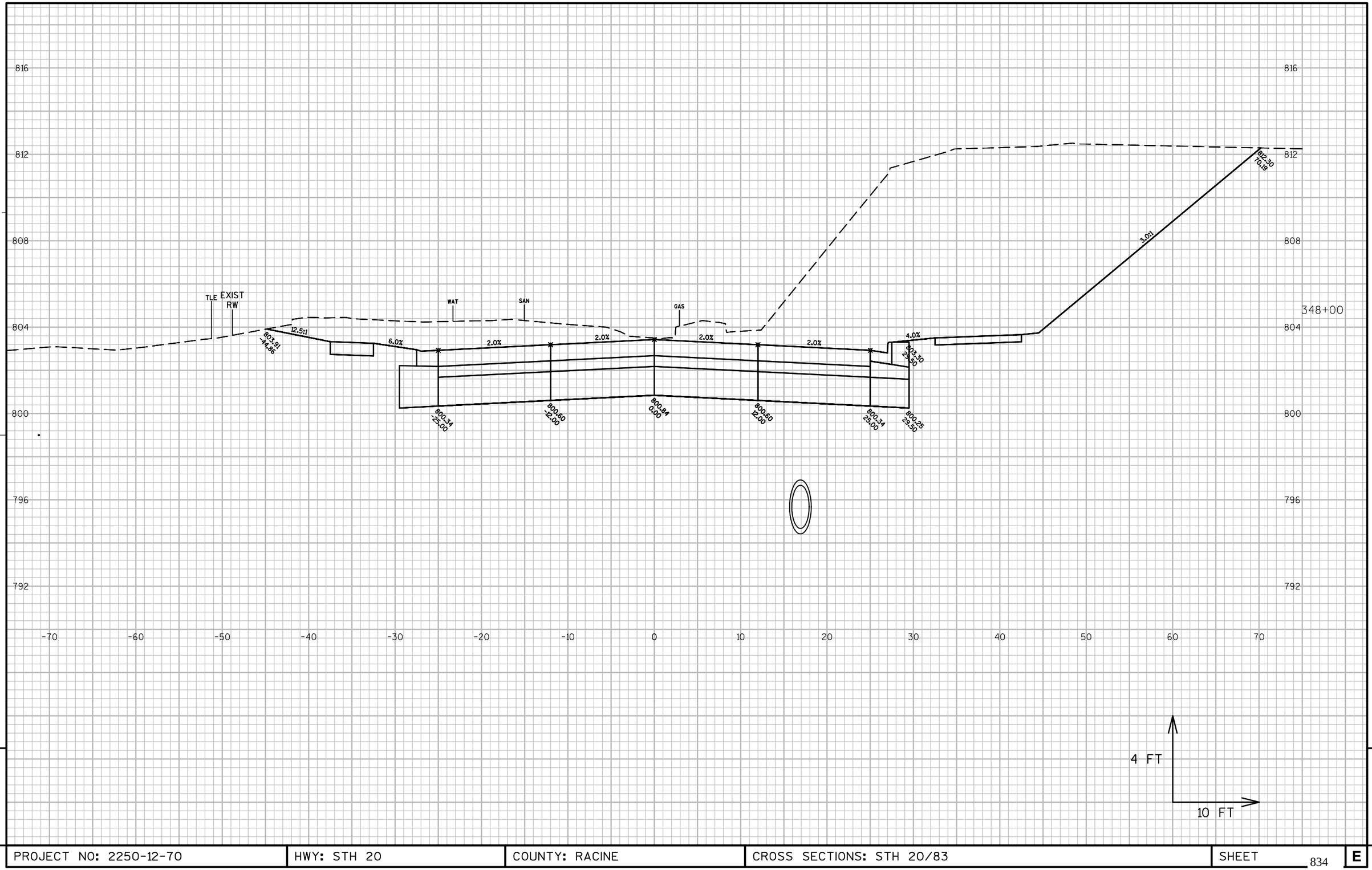
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 833	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:44 PM PLOT BY : MANSKE, CALEB PLOT NAME :

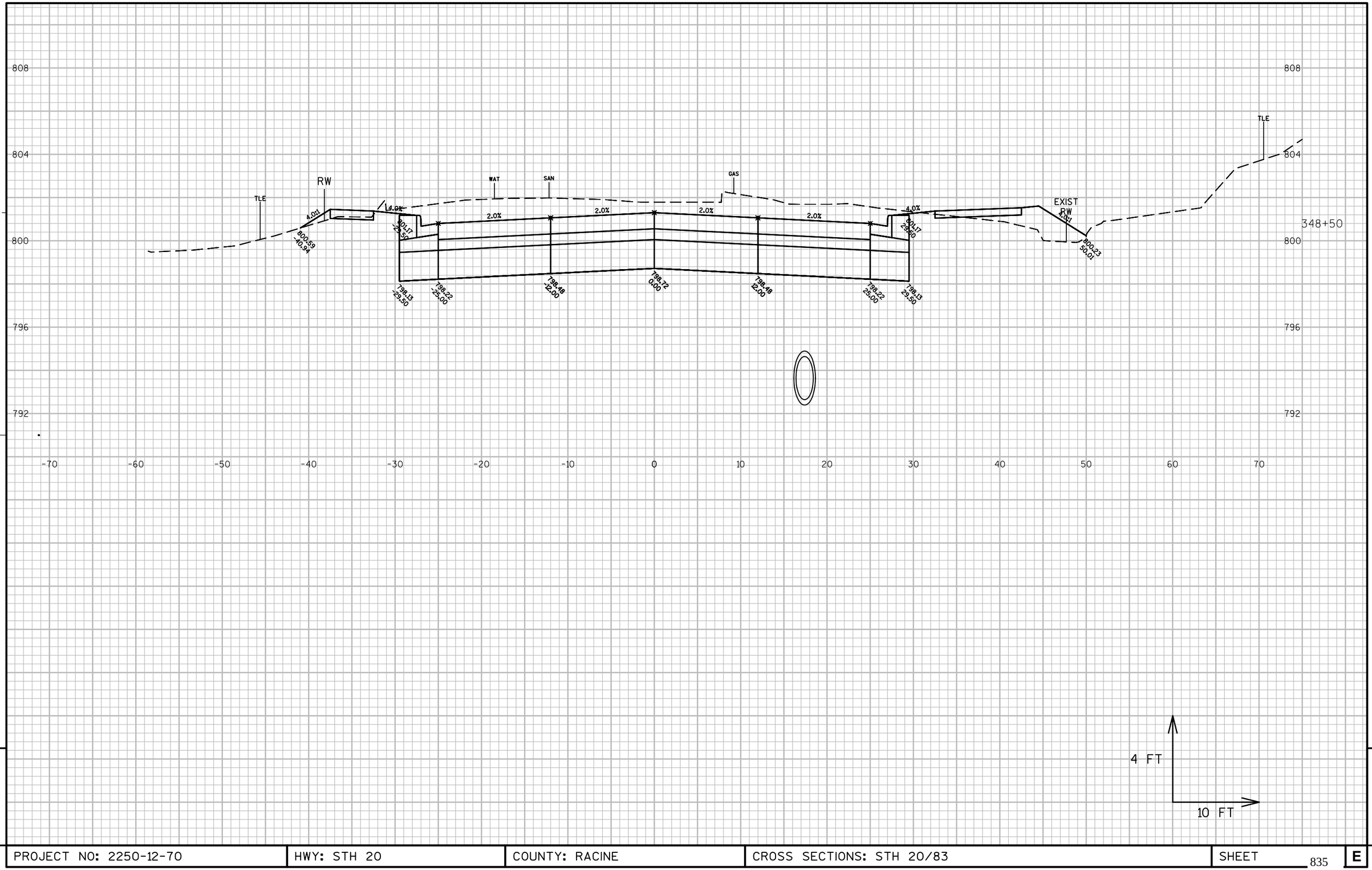
WISDOT/CADDS SHEET 49

9

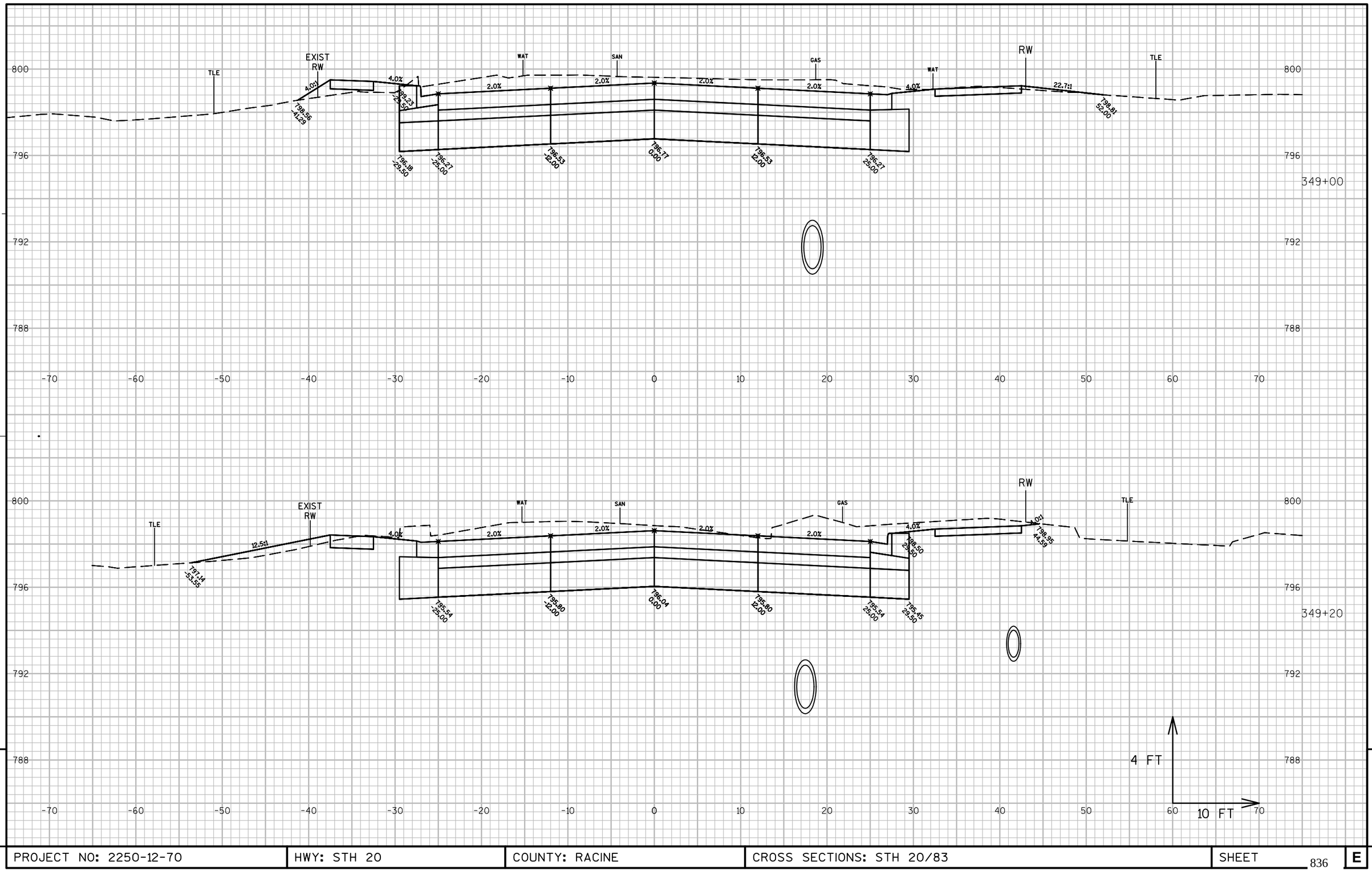


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 834	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:44 PM PLOT BY : MANSKE, CALEB PLOT NAME :



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 835	E



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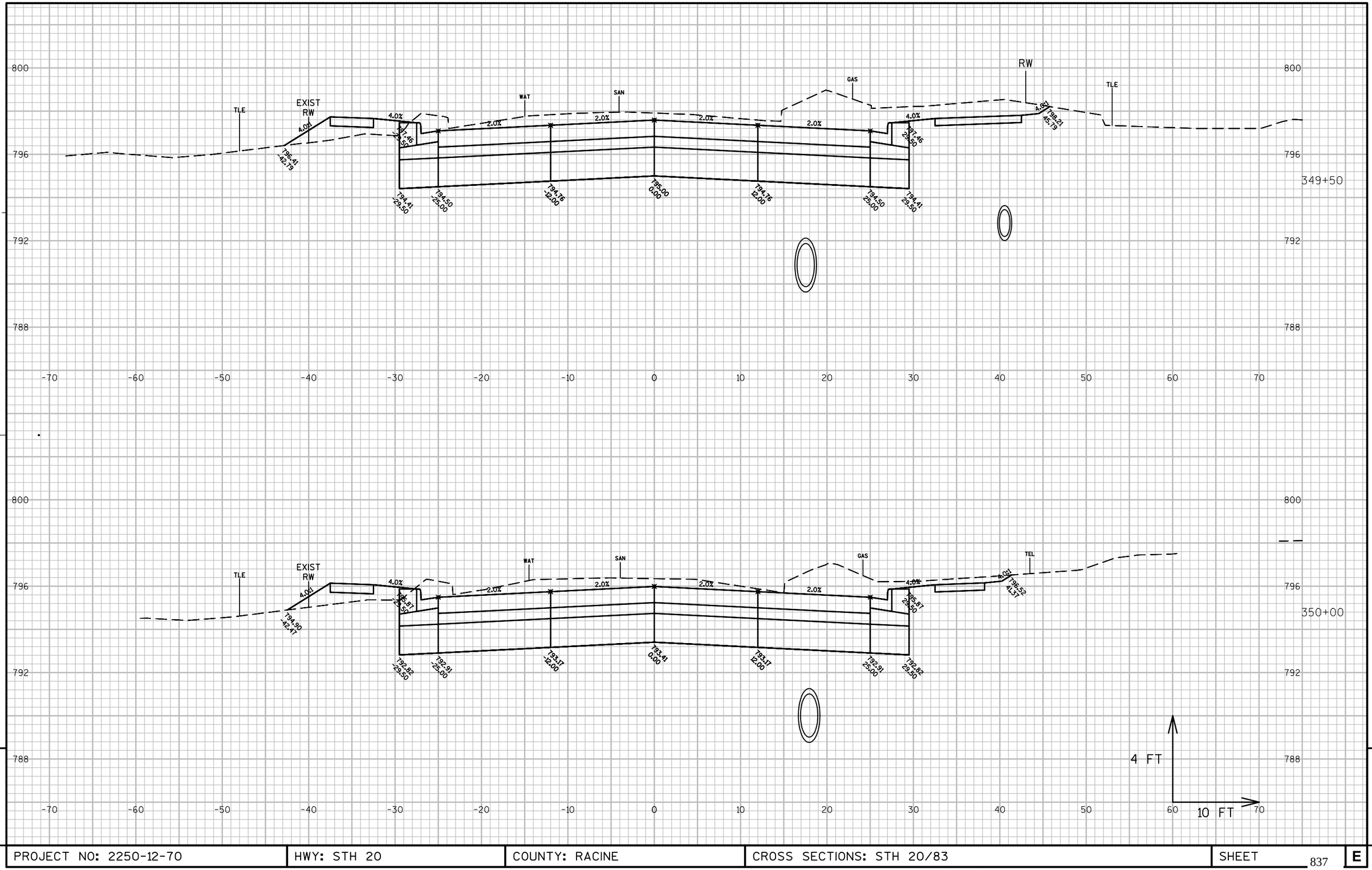
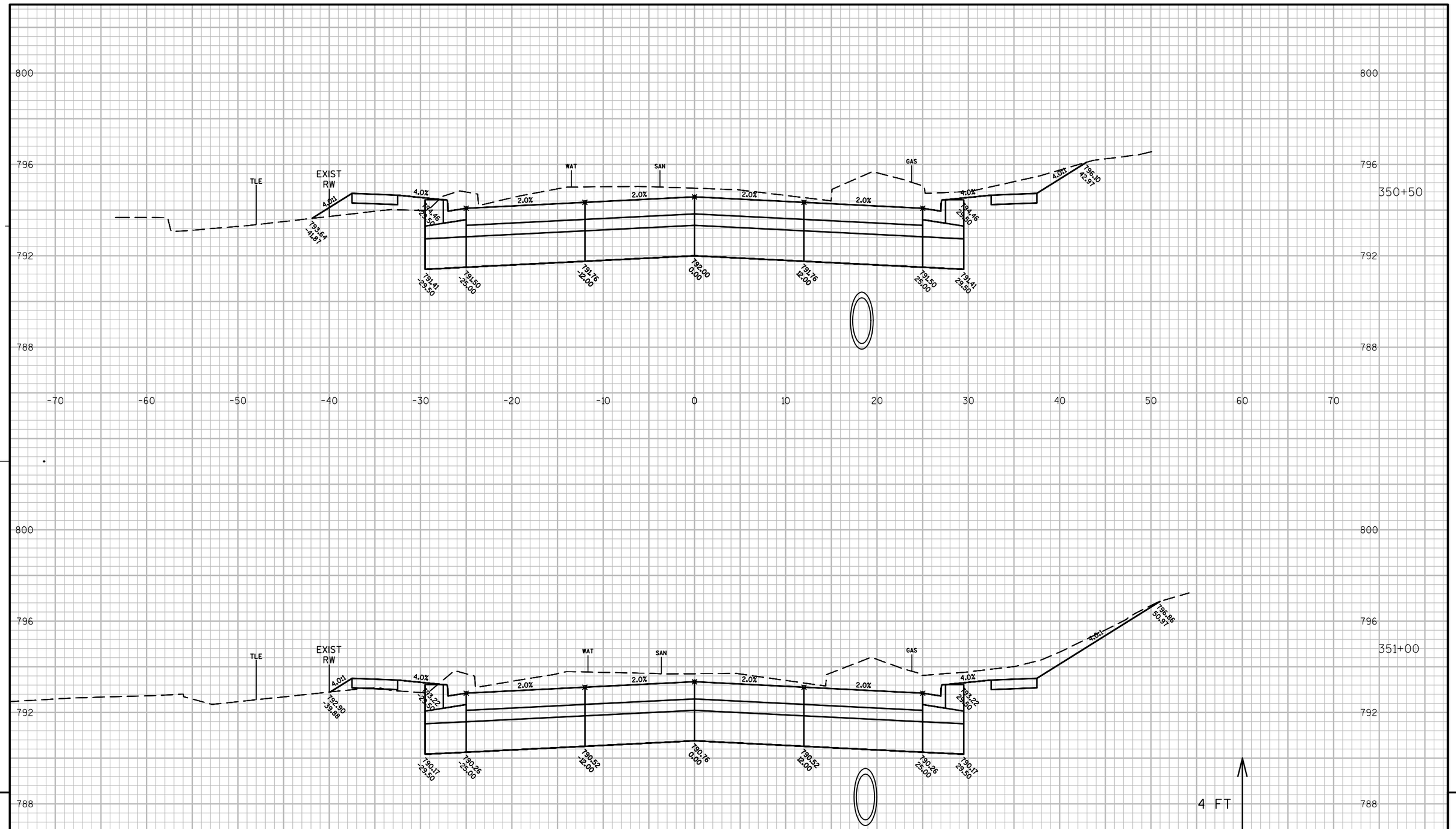
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 836	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 837	E

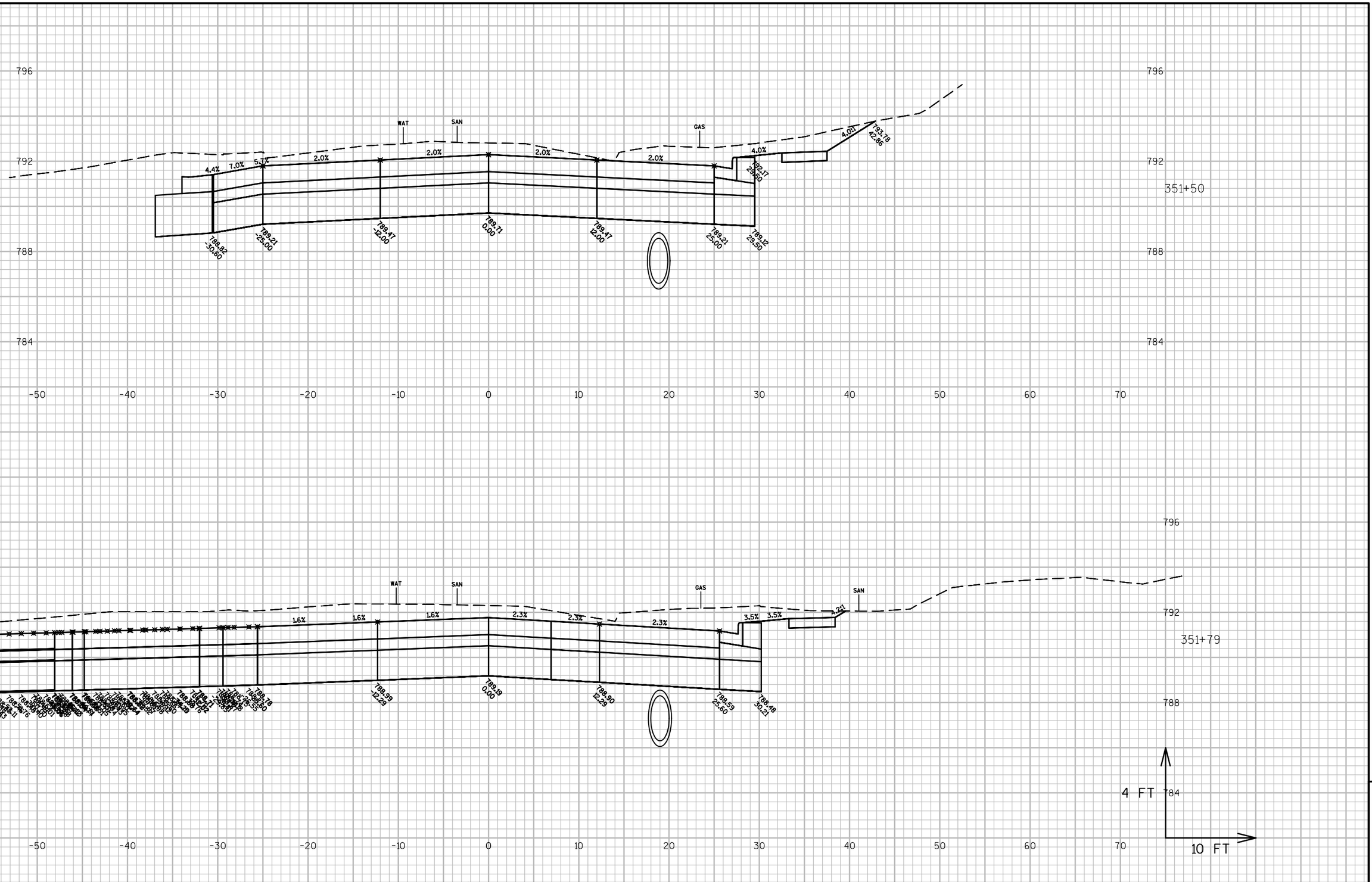
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:45 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 838	E

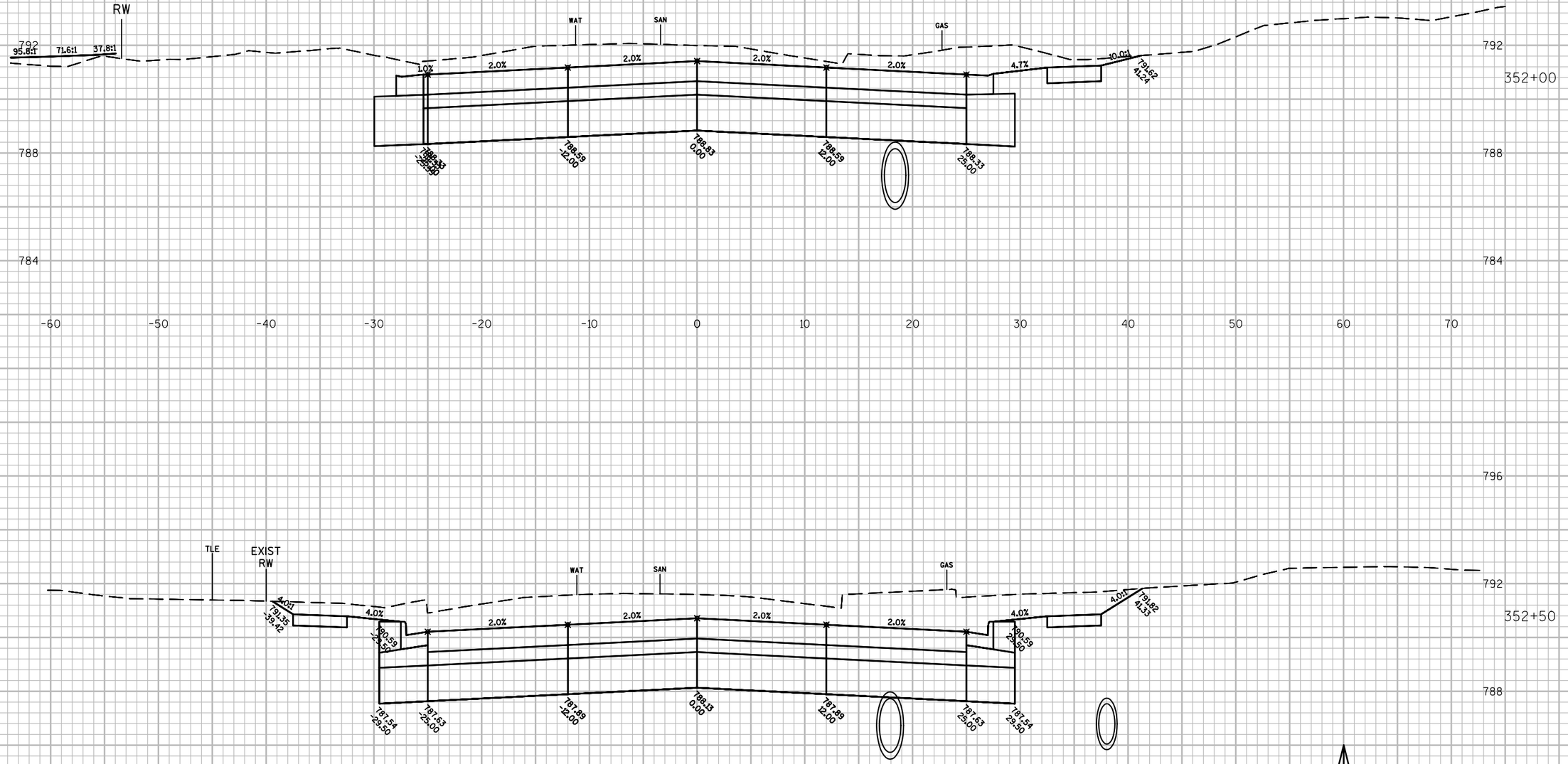
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:45 PM PLOT BY : MANSKE, CALEB PLOT NAME :



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 839	E

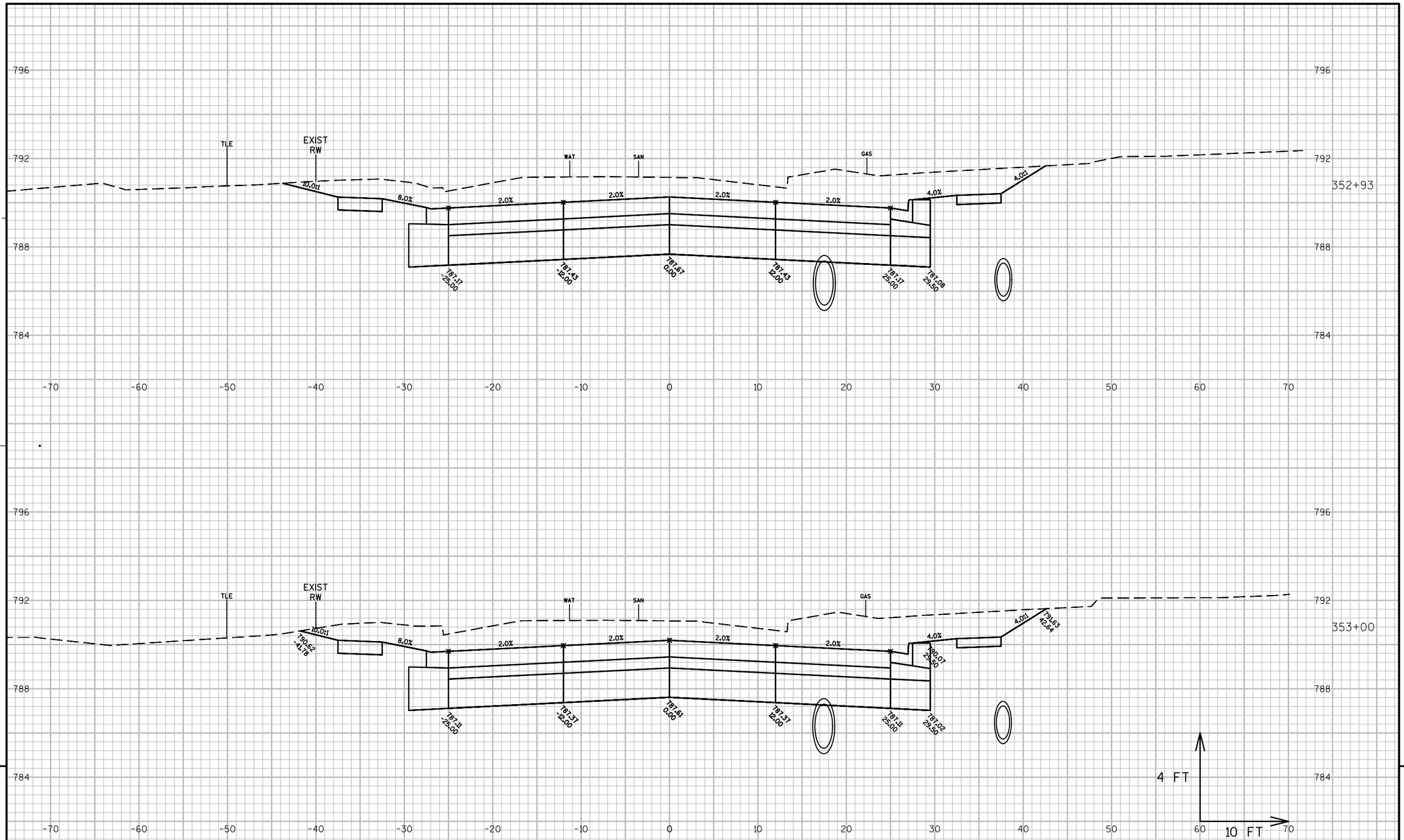
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:46 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 840	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:46 PM PLOT BY : MANSKE, CALEB PLOT NAME :



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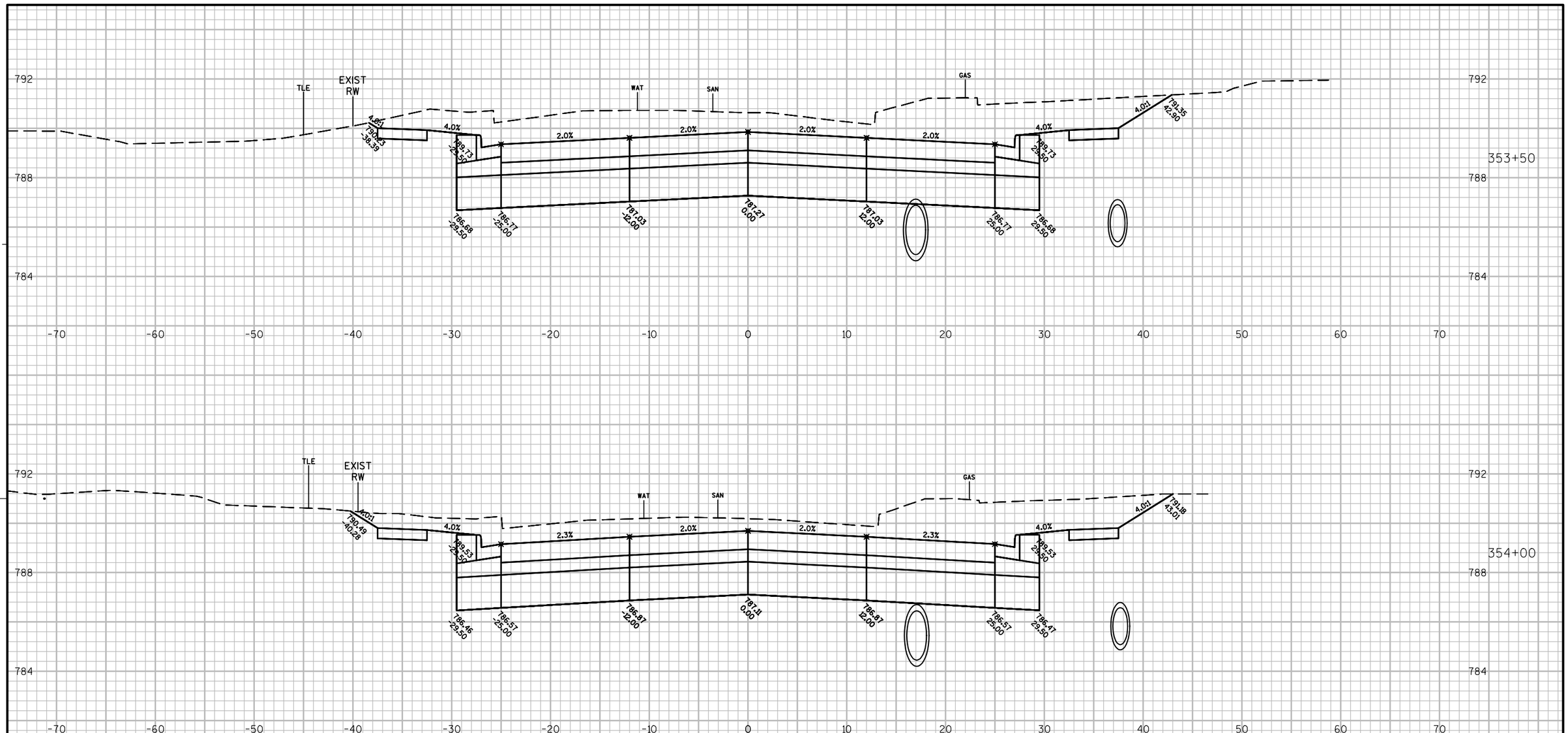
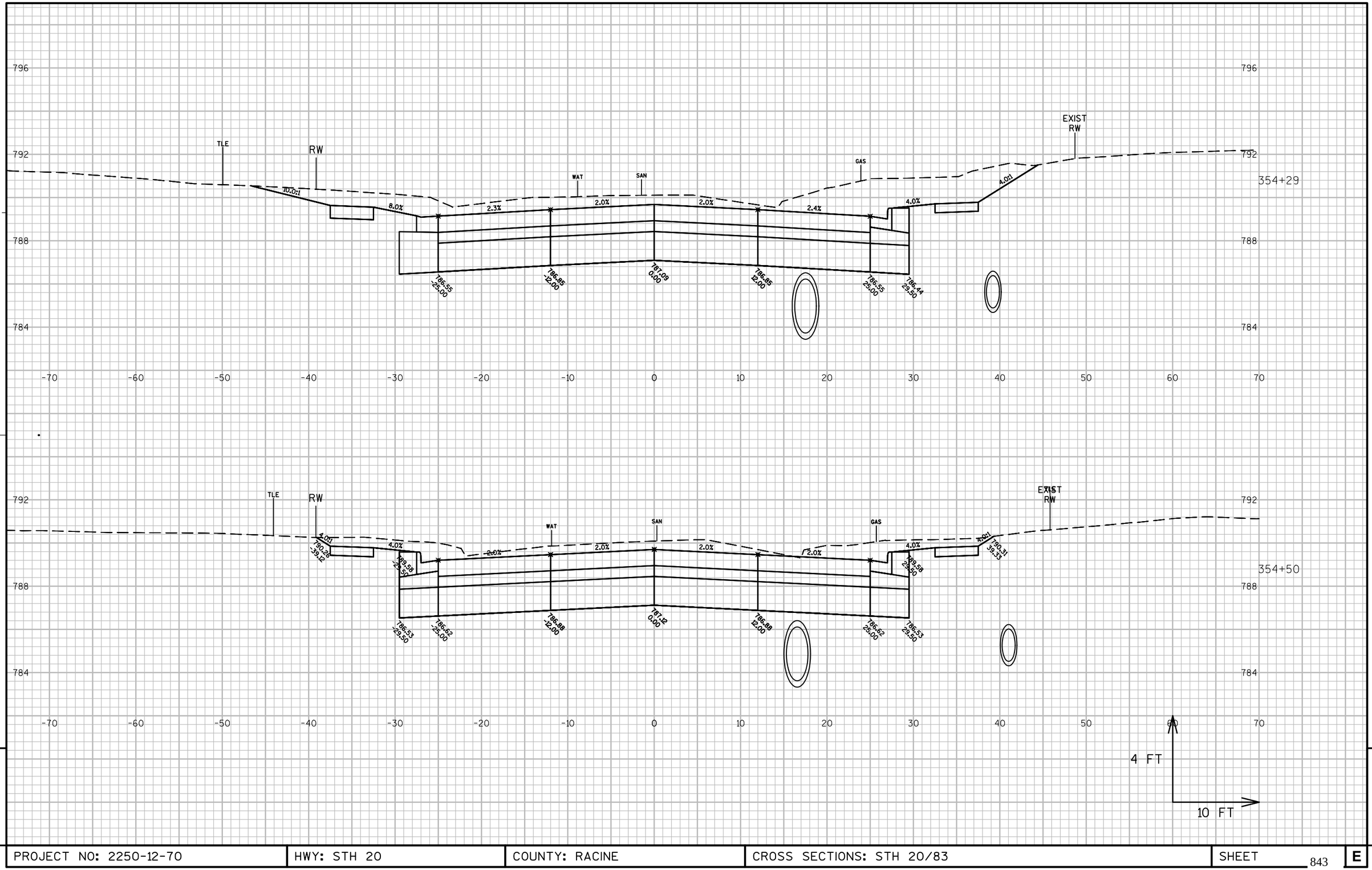
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 841	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 842	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:47 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



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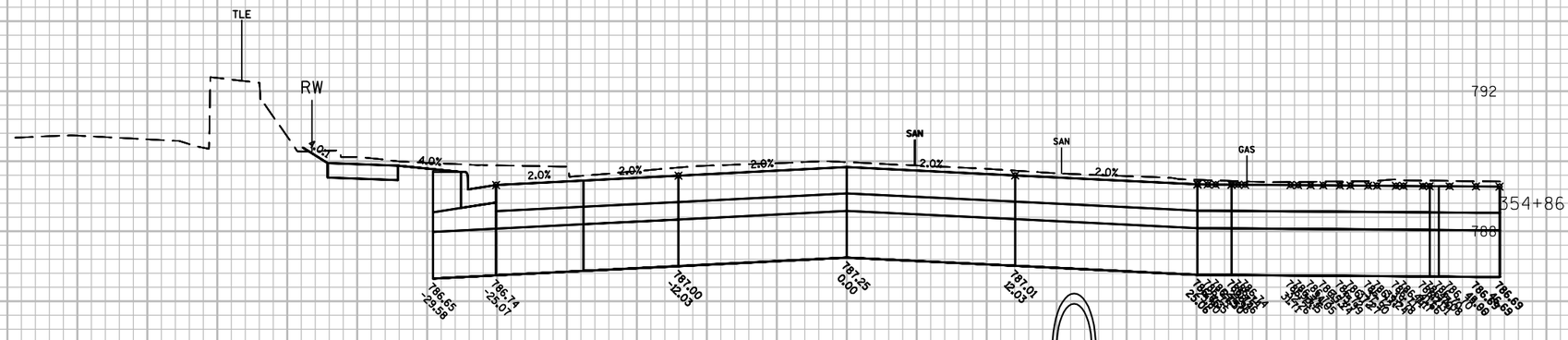
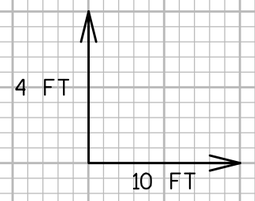
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 843	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:47 PM PLOT BY : MANSKE, CALEB PLOT NAME :





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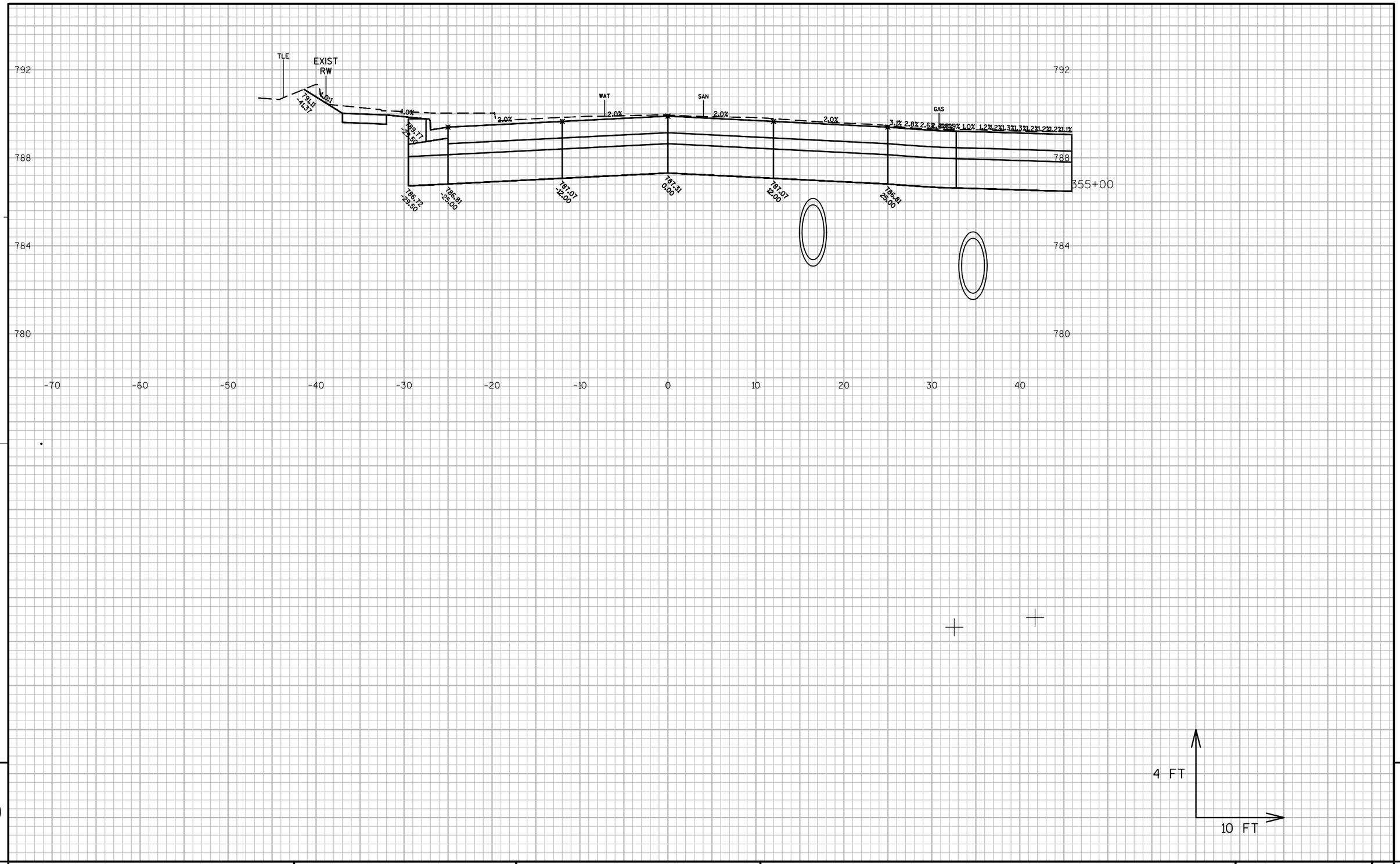
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 844	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:48 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



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PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 845	E

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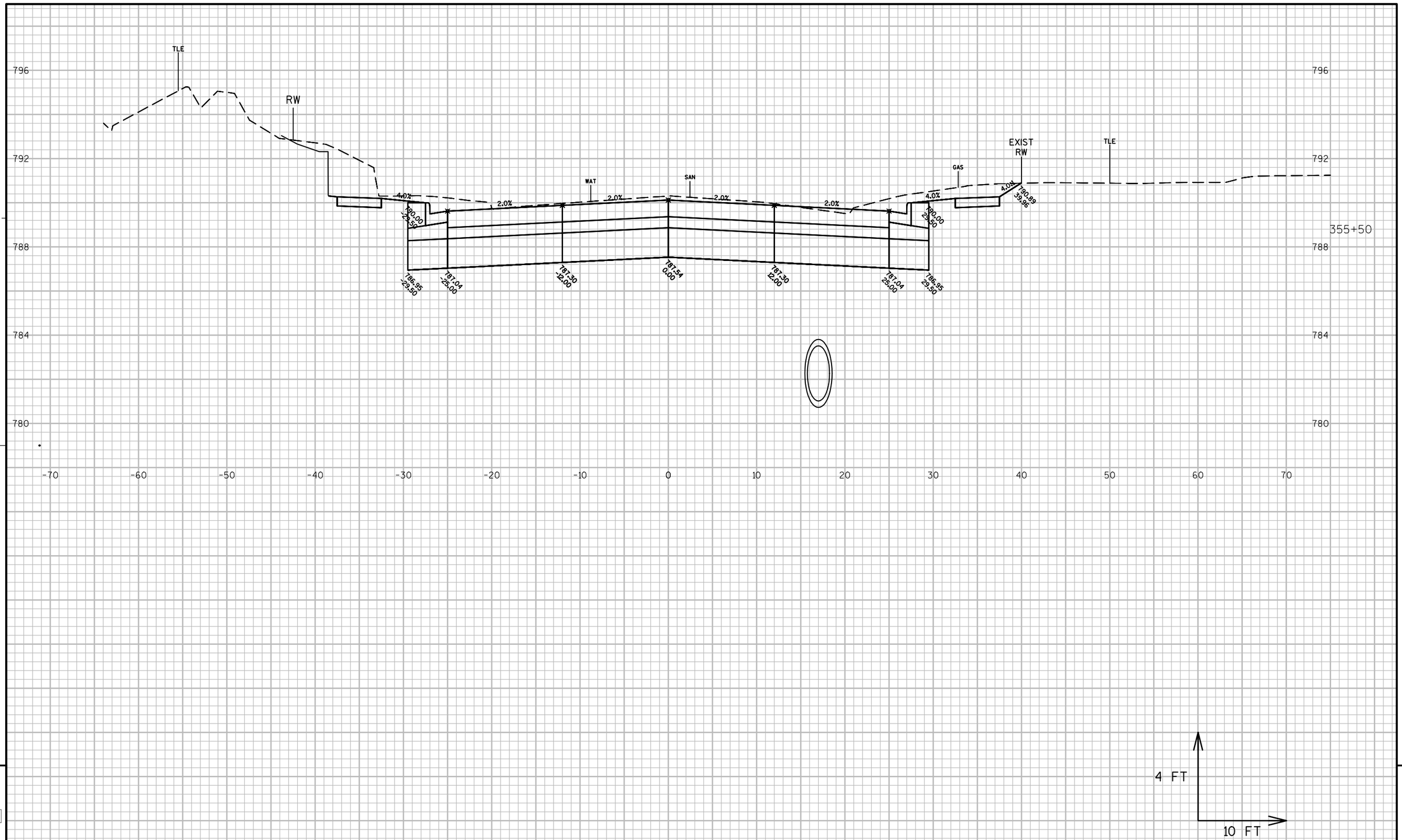
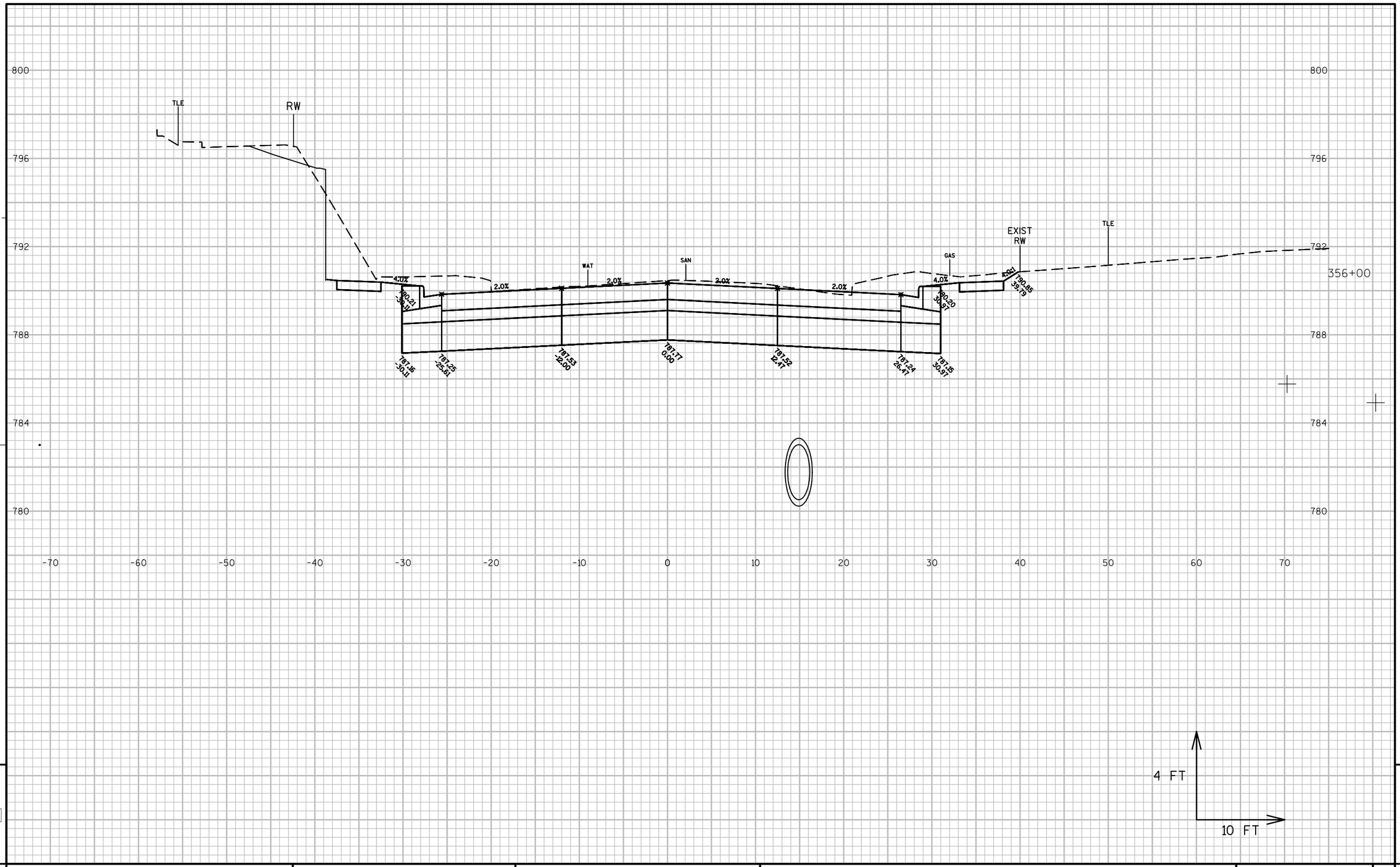
WISDOT/CADDS SHEET 49

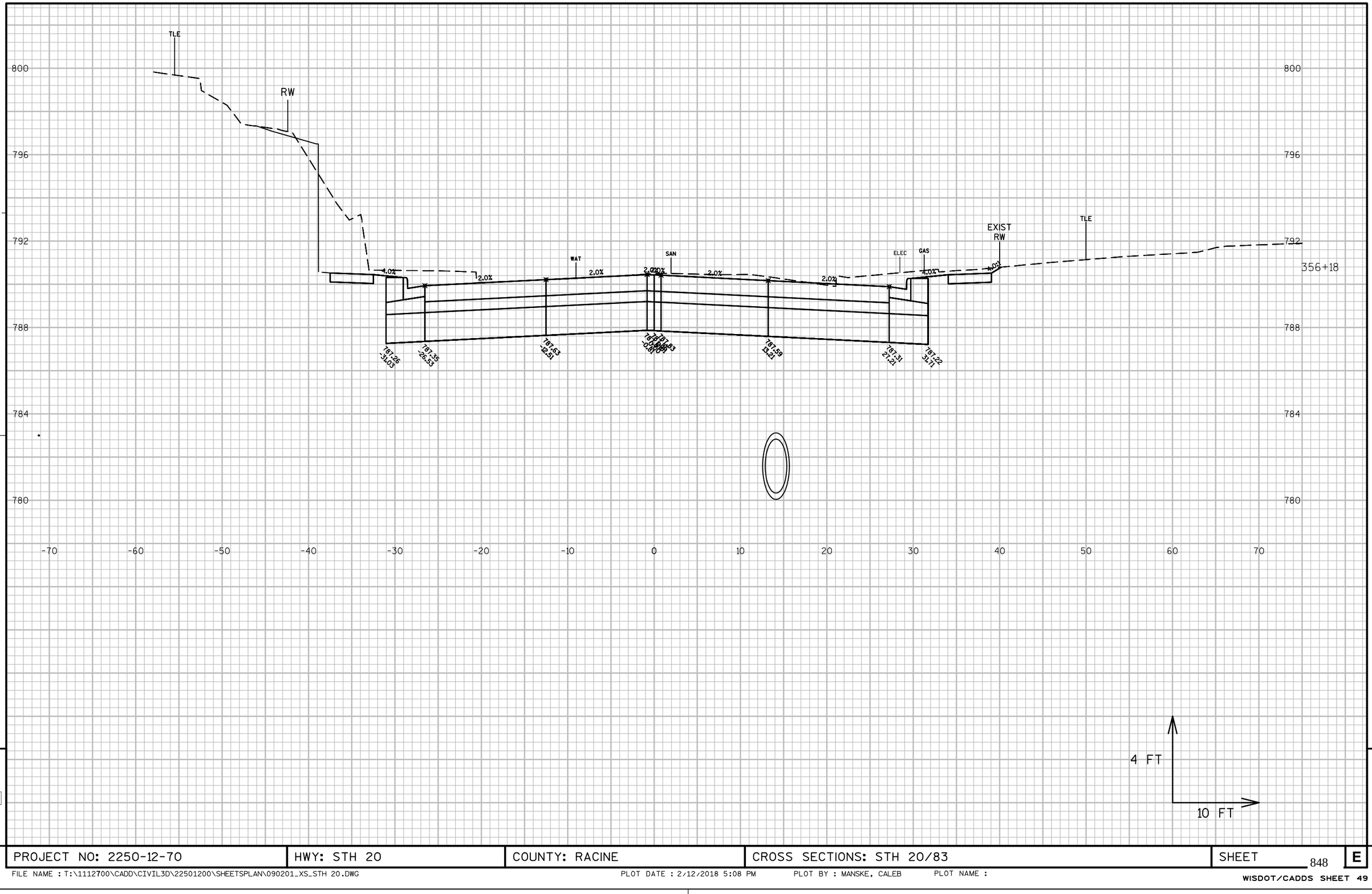


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 846	E



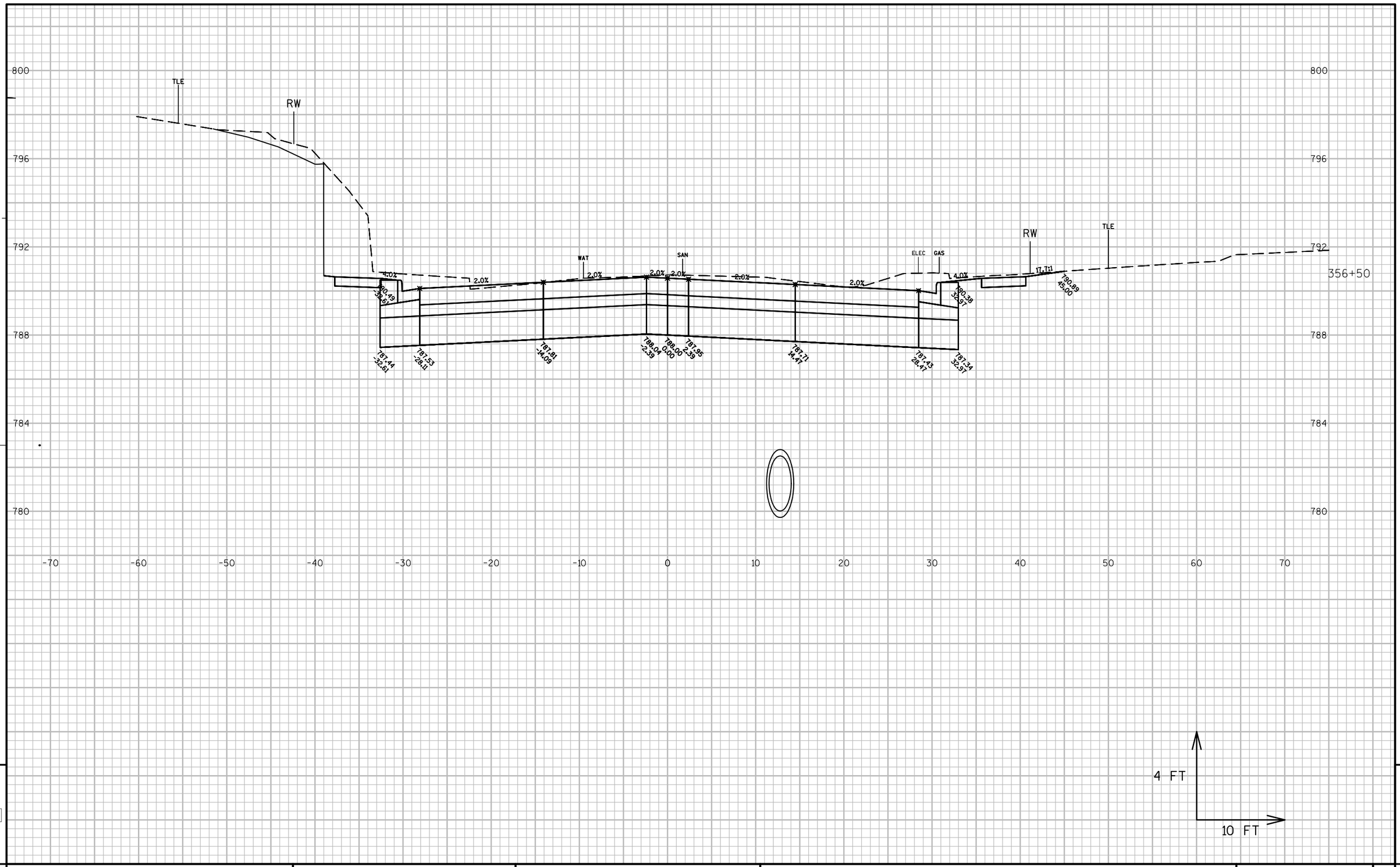
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 847	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/12/2018 5:07 PM PLOT BY : MANSKE, CALEB PLOT NAME :



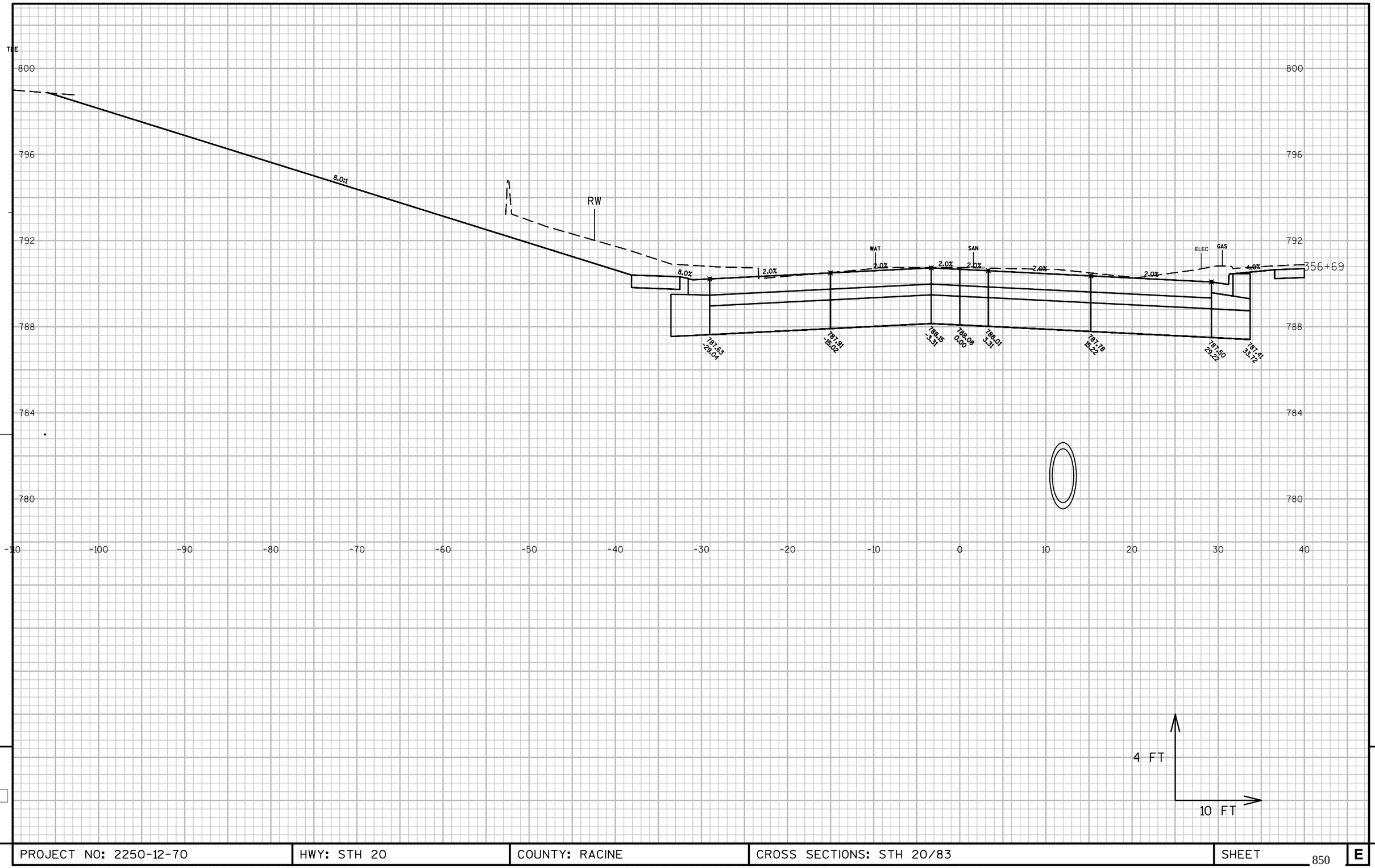
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 848	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/12/2018 5:08 PM PLOT BY : MANSKE, CALEB PLOT NAME :

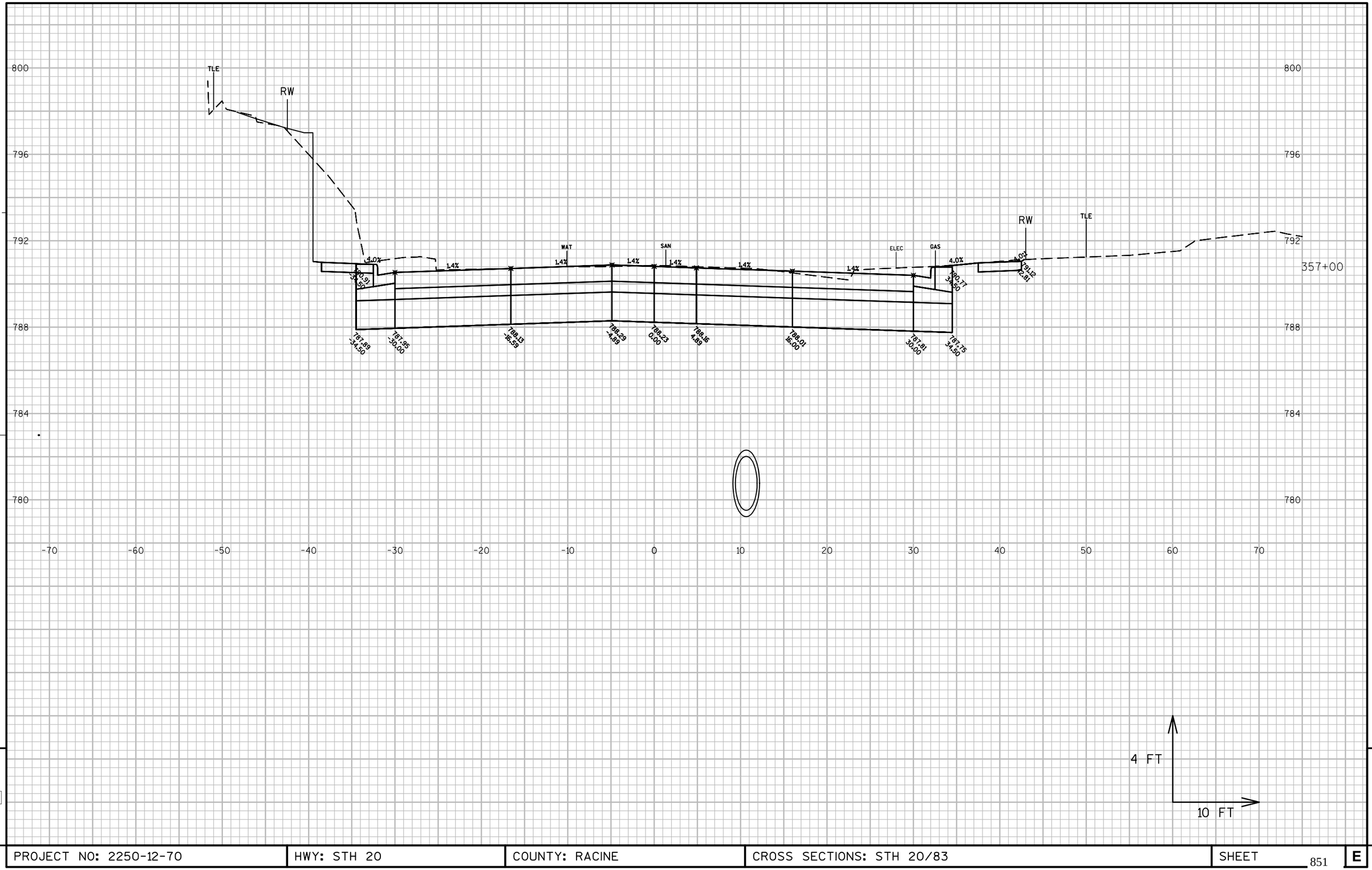


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 849	E

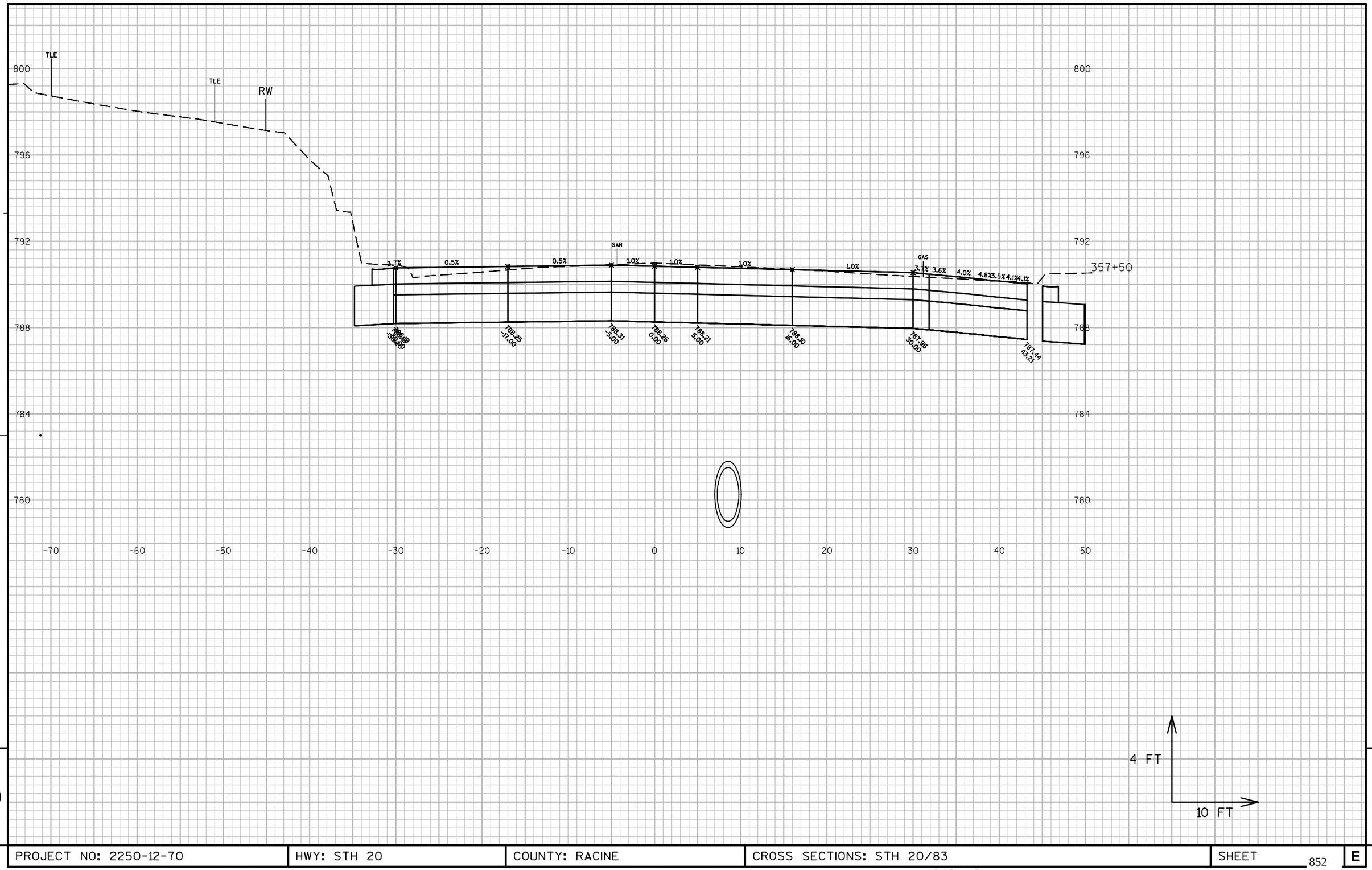
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/12/2018 5:08 PM PLOT BY : MANSKE, CALEB PLOT NAME :



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 850	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 851	E



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PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 852	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 3:57 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49

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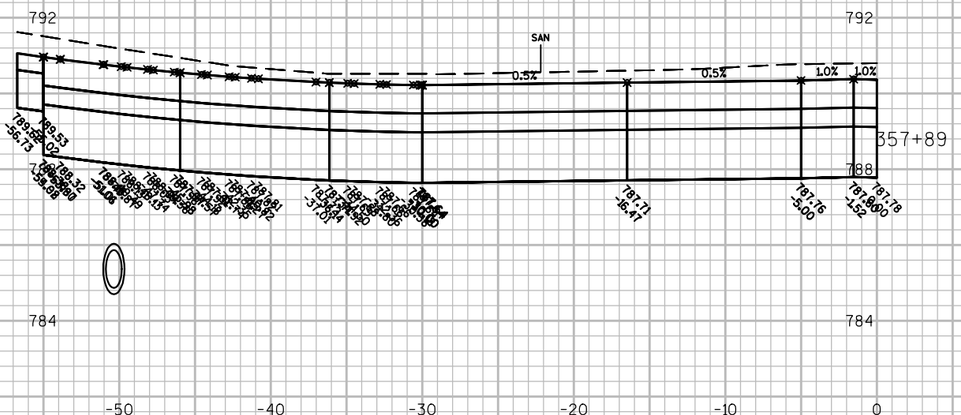

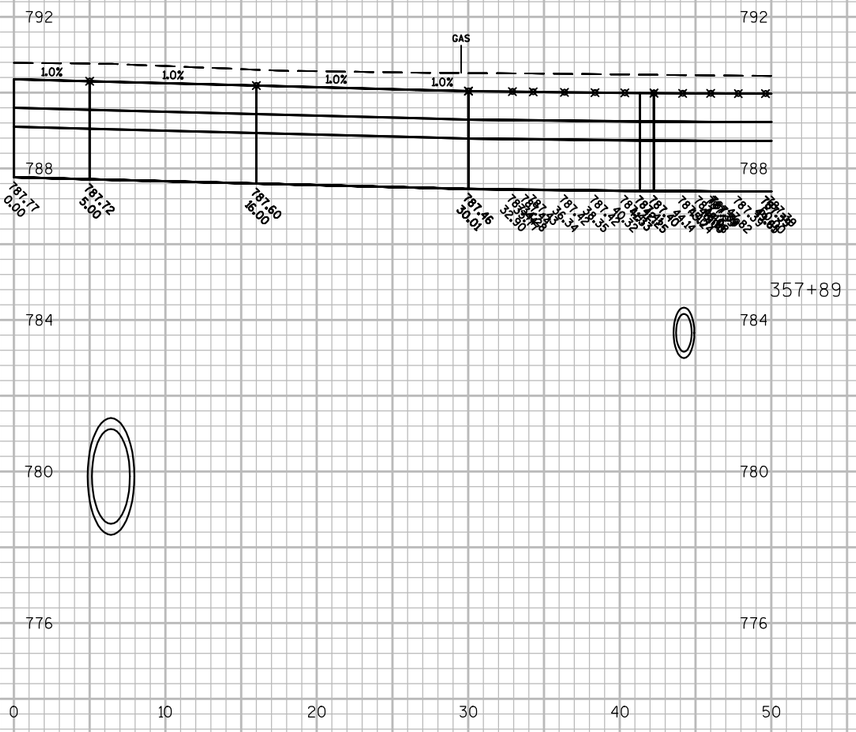

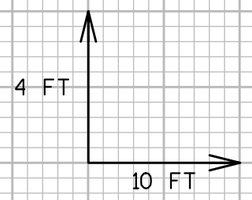

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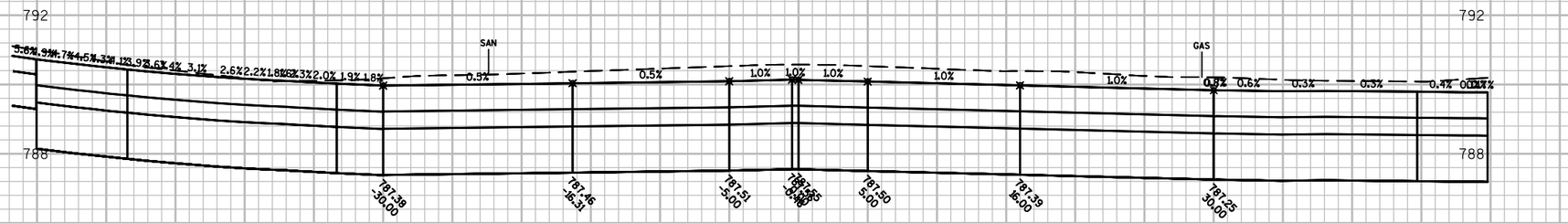
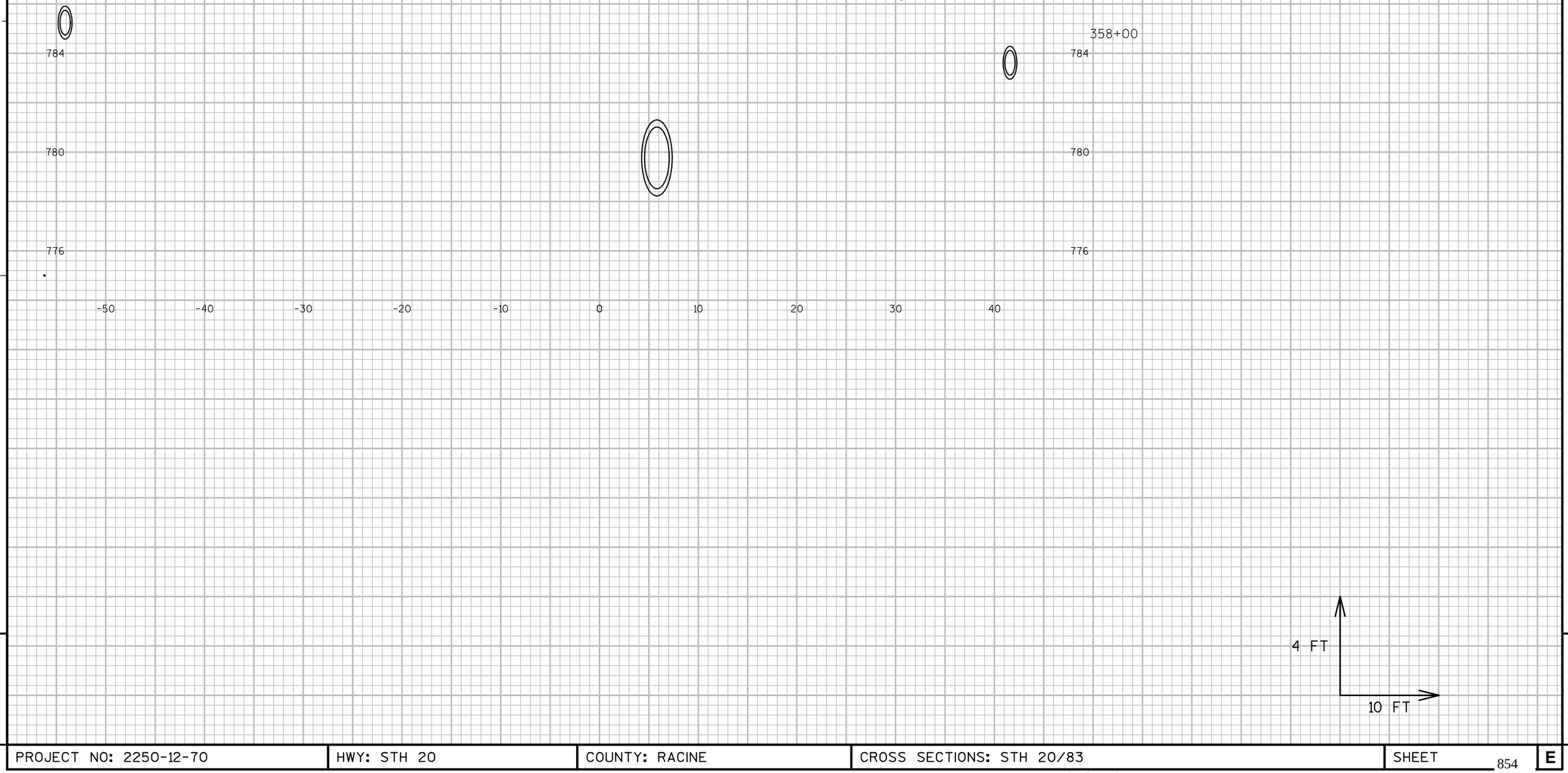
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 853	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 3:57 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



358+00



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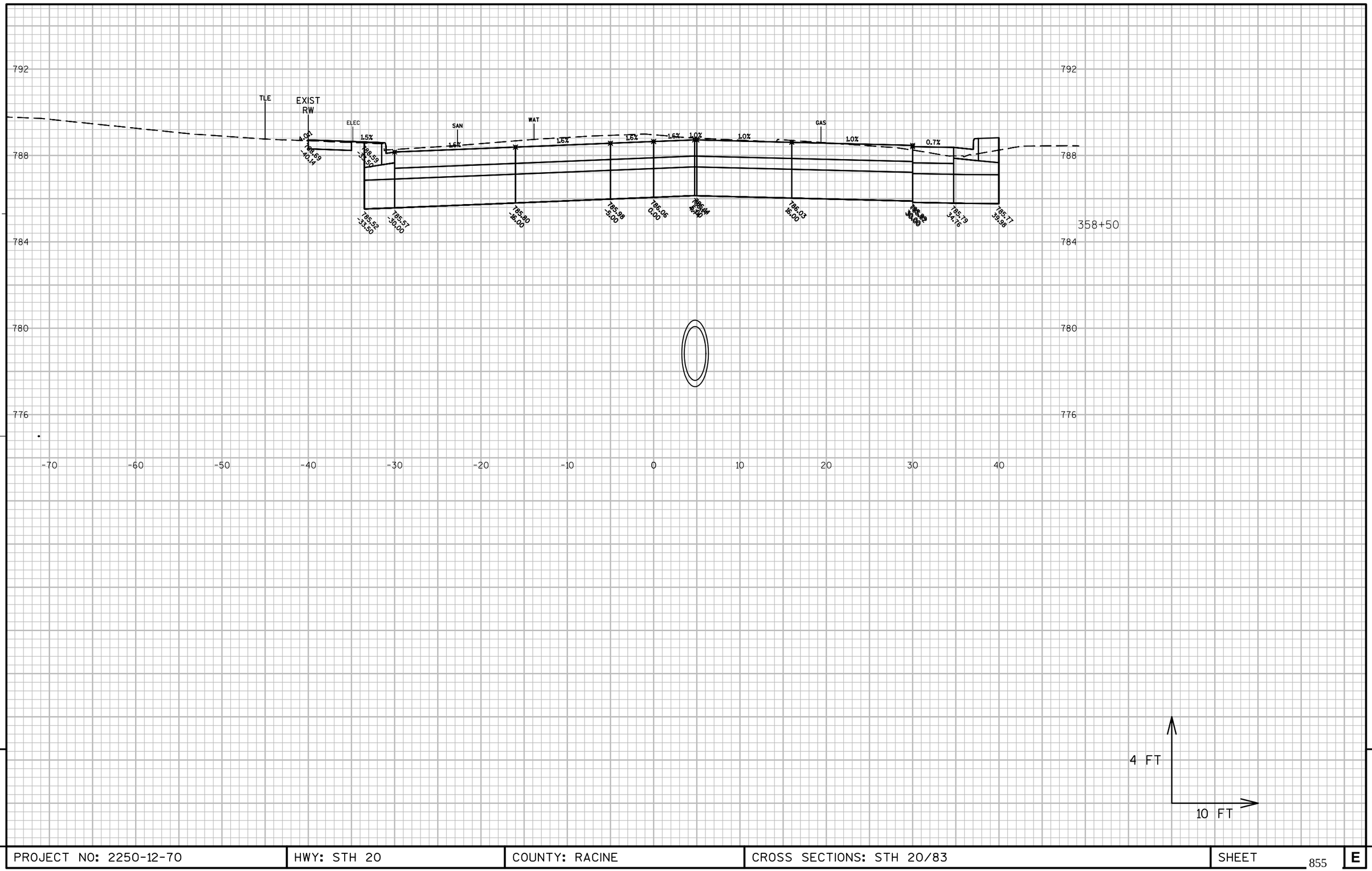
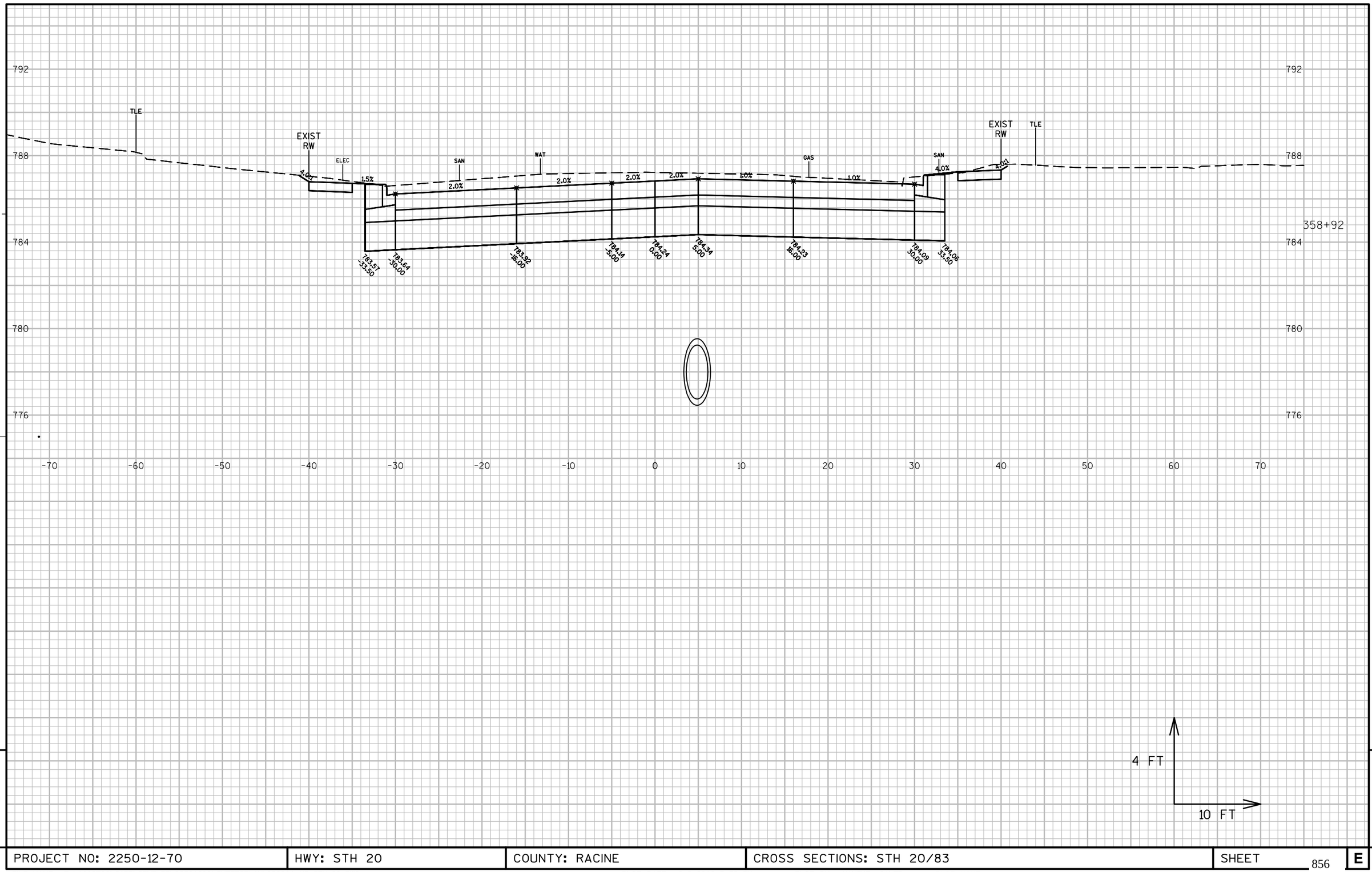
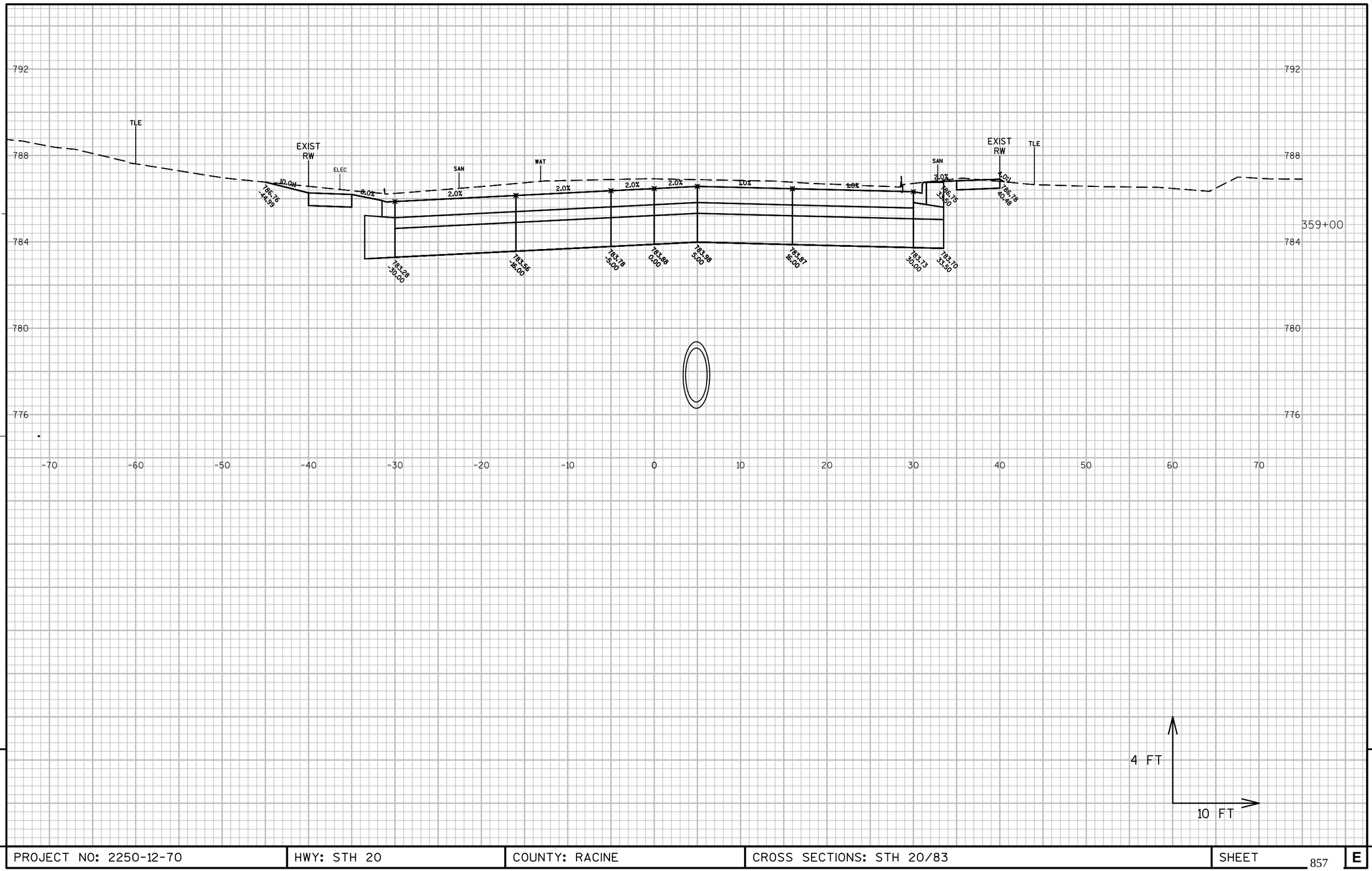
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 854	E



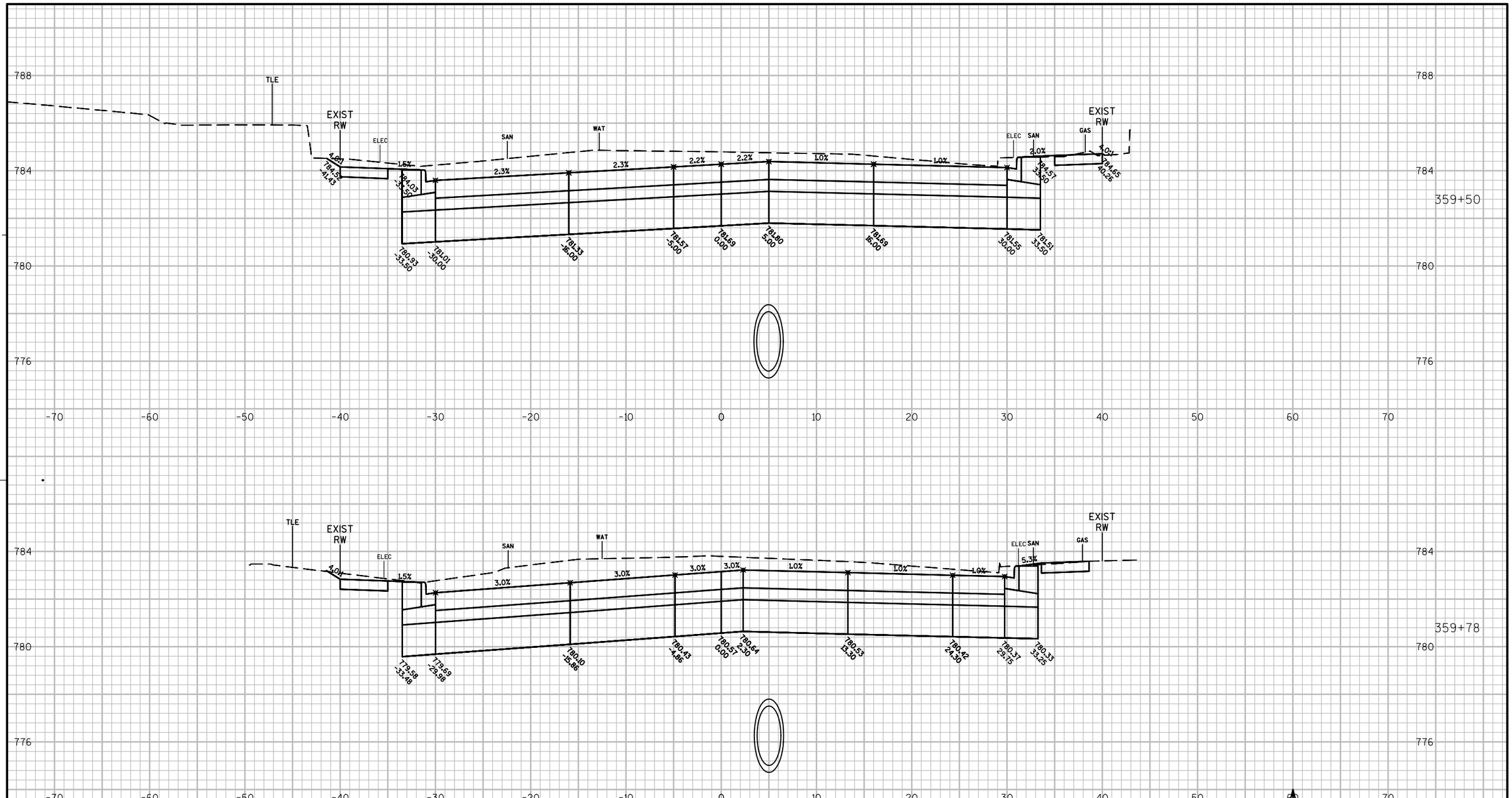
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 855	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 856	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 857	E



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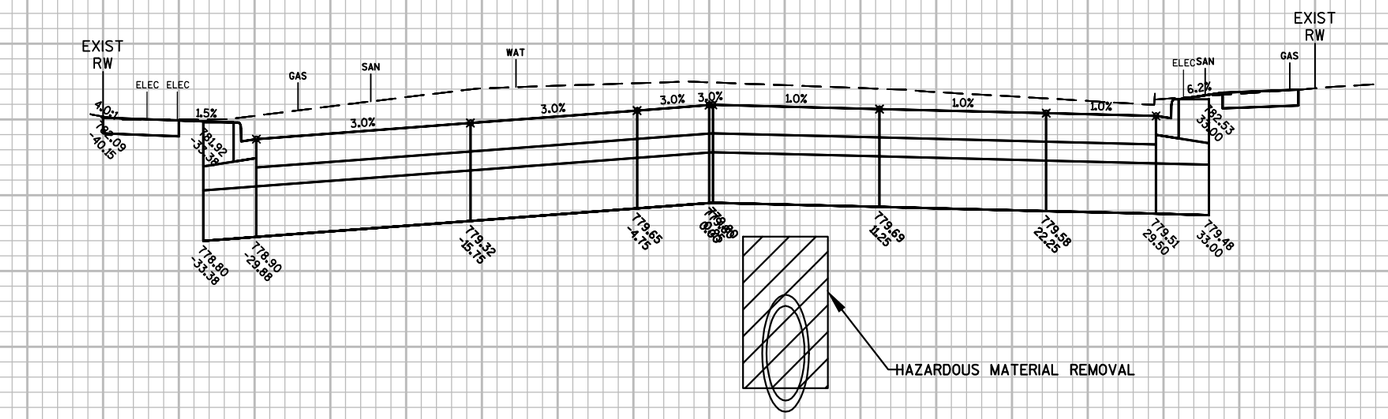
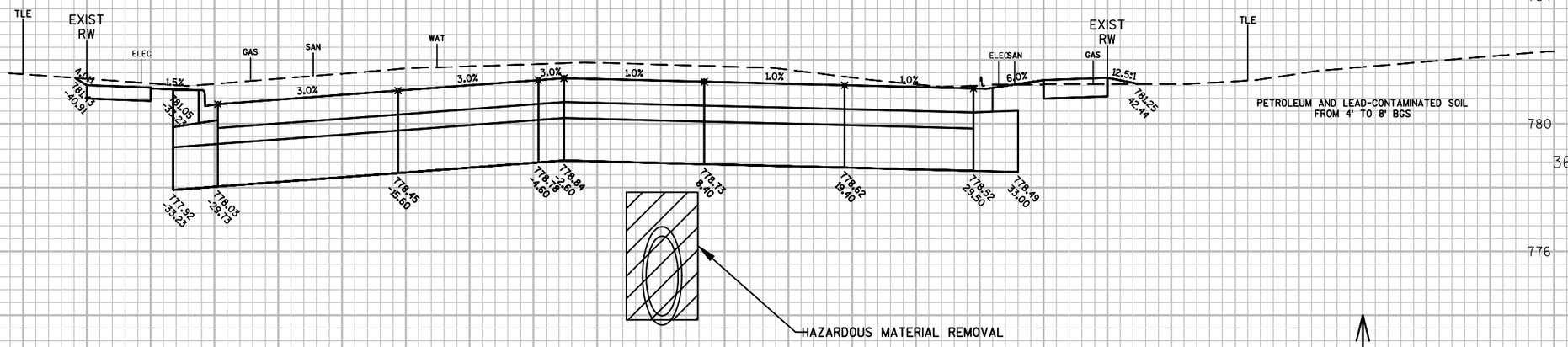
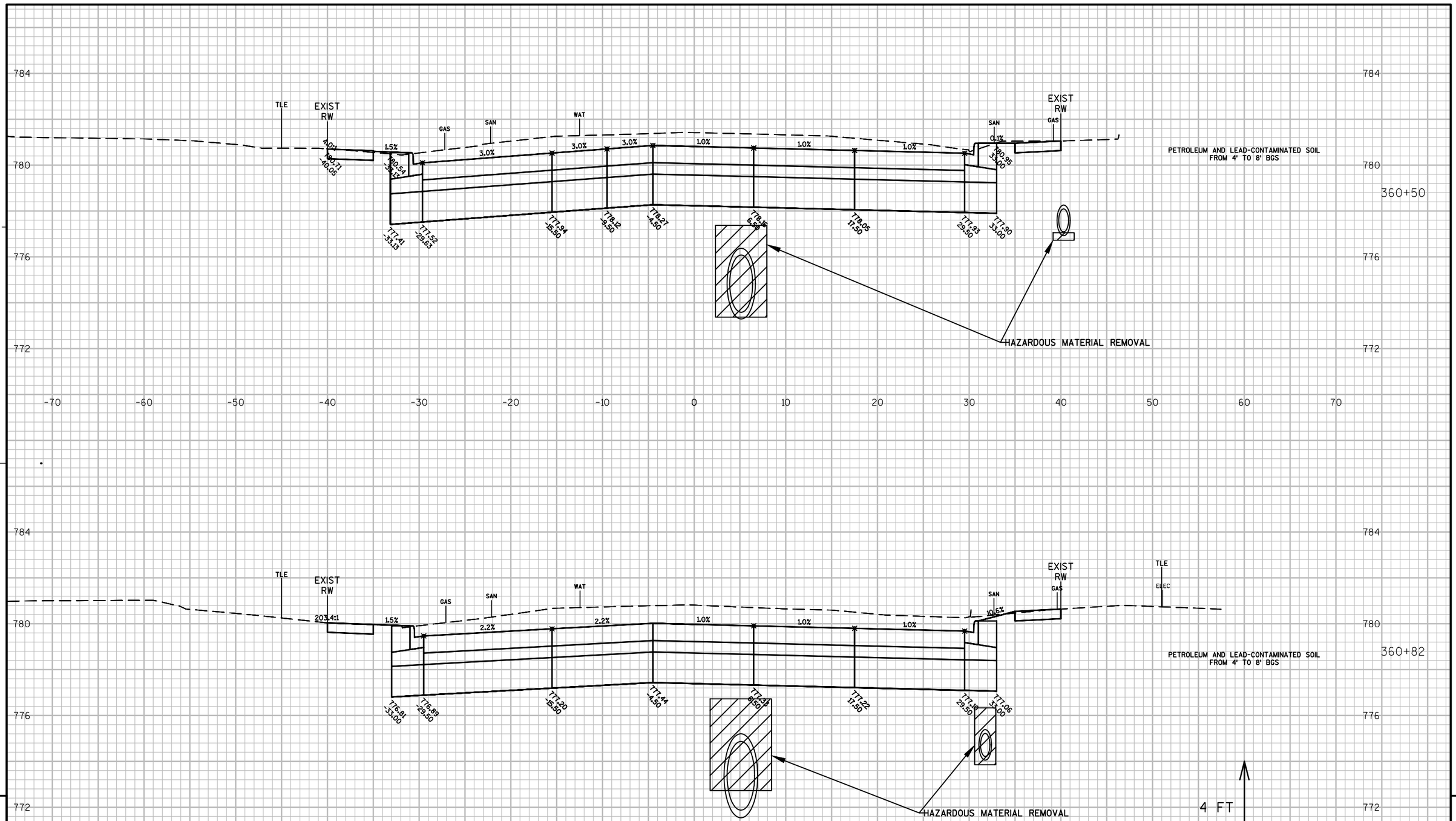
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 858	E





PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 859	E



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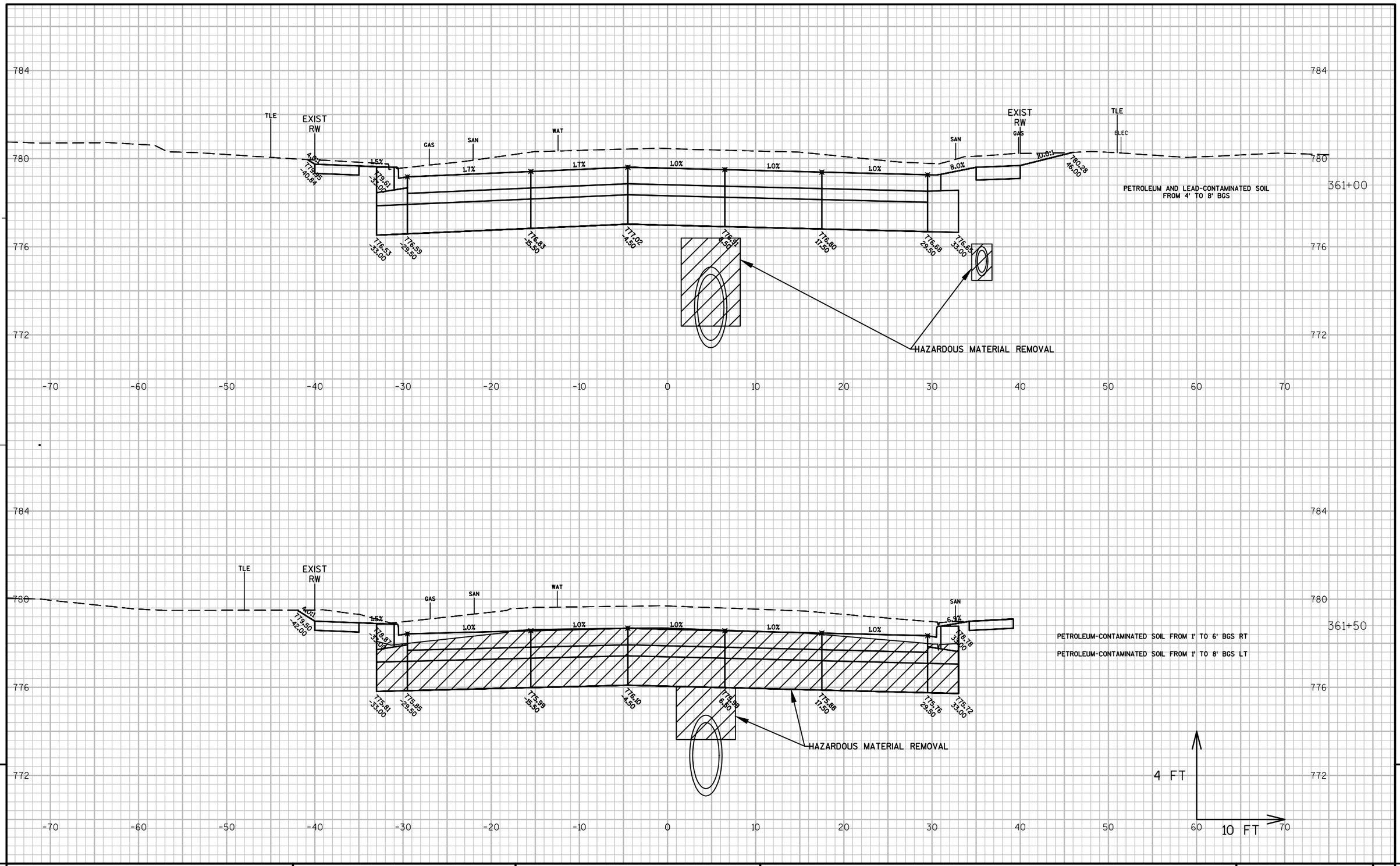
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 860	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 3:49 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



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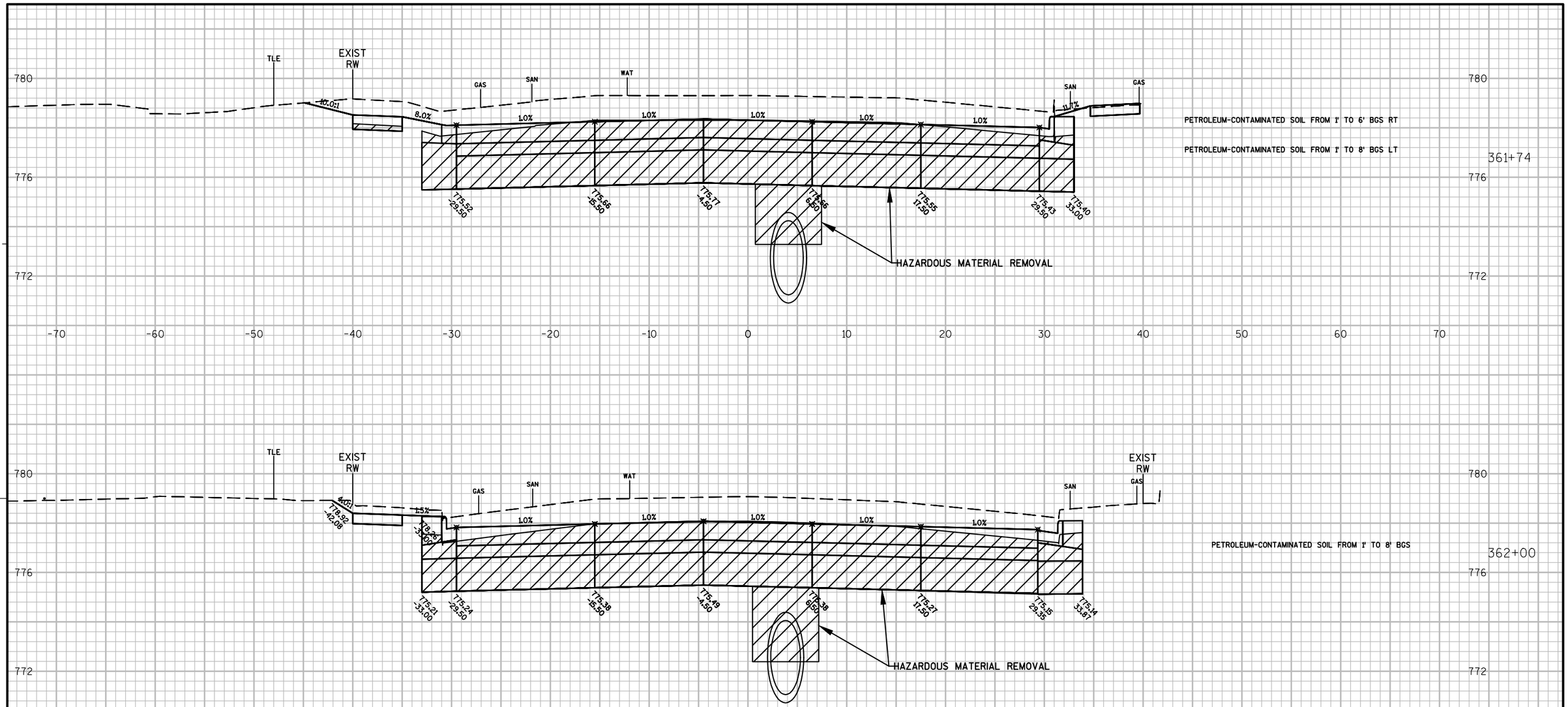
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 861	E



PETROLEUM-CONTAMINATED SOIL FROM 1' TO 6' BGS RT

PETROLEUM-CONTAMINATED SOIL FROM 1' TO 8' BGS LT

361+74

PETROLEUM-CONTAMINATED SOIL FROM 1' TO 8' BGS

362+00

4 FT

10 FT

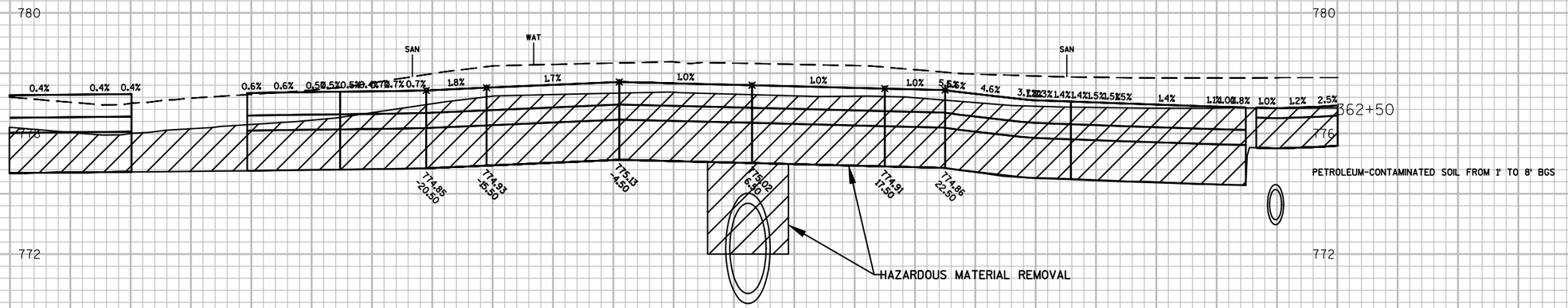
9

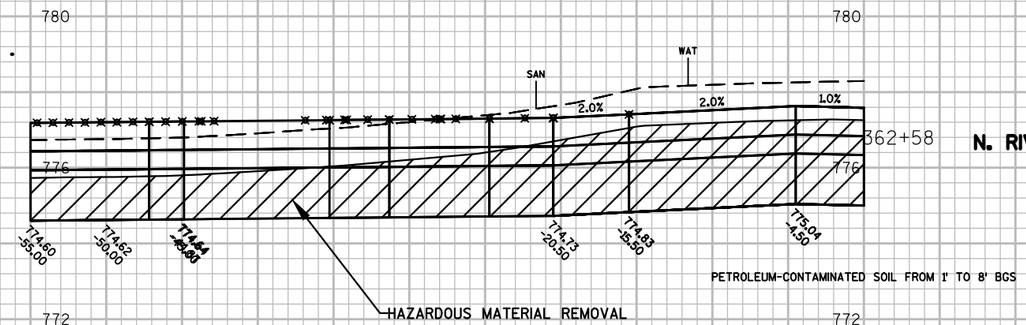
9

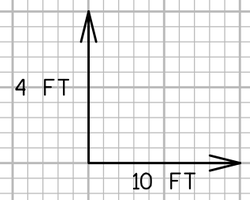
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 862	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 3:50 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49







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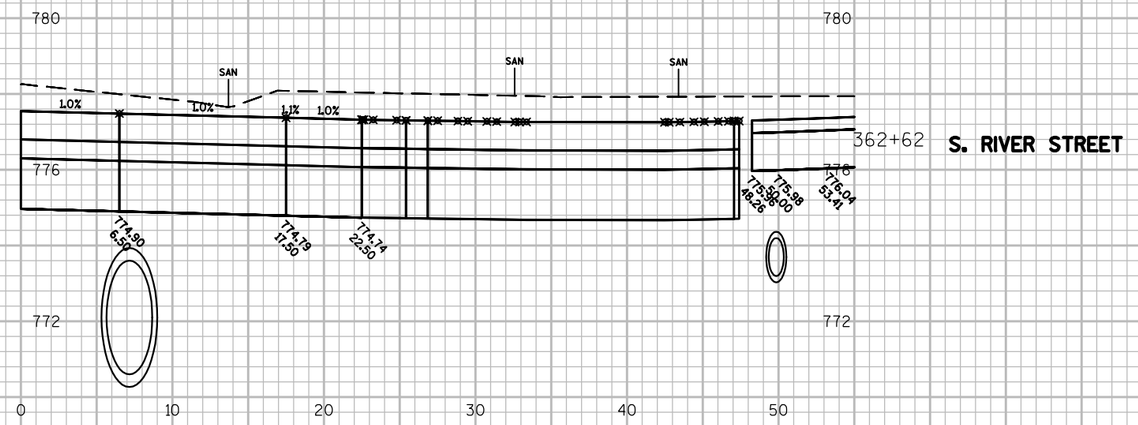
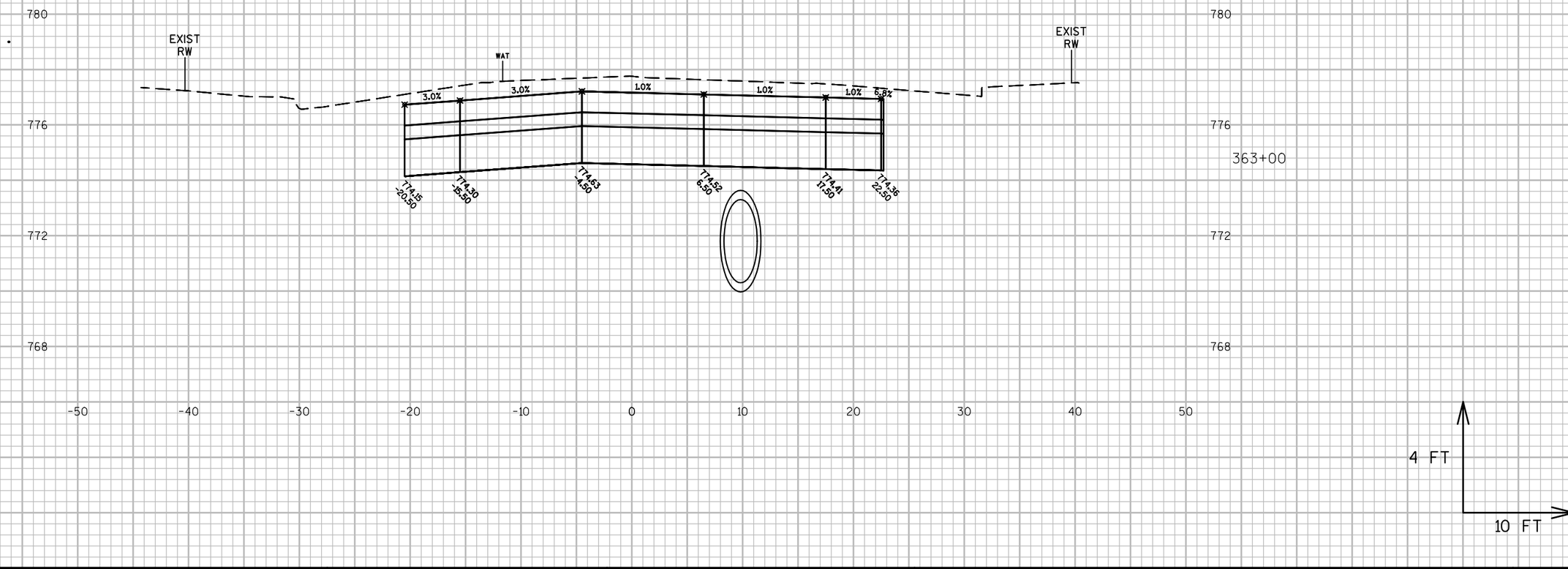
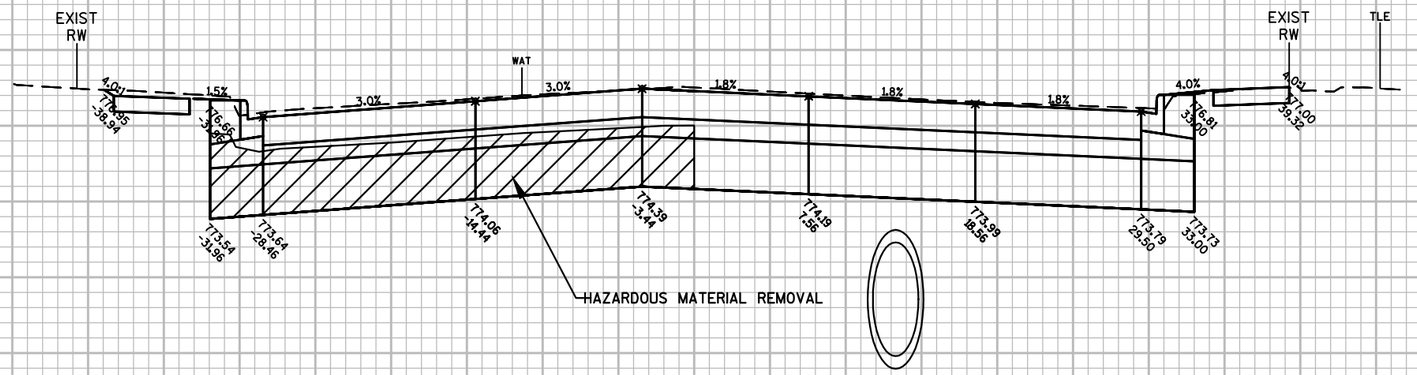
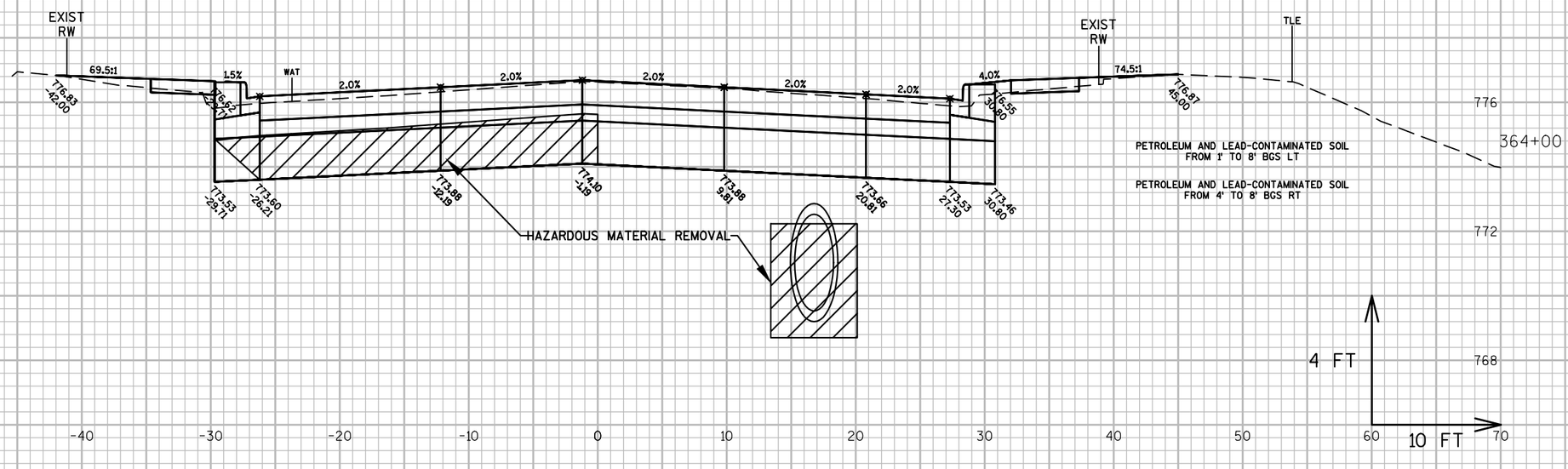
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 863	E





PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 864	E





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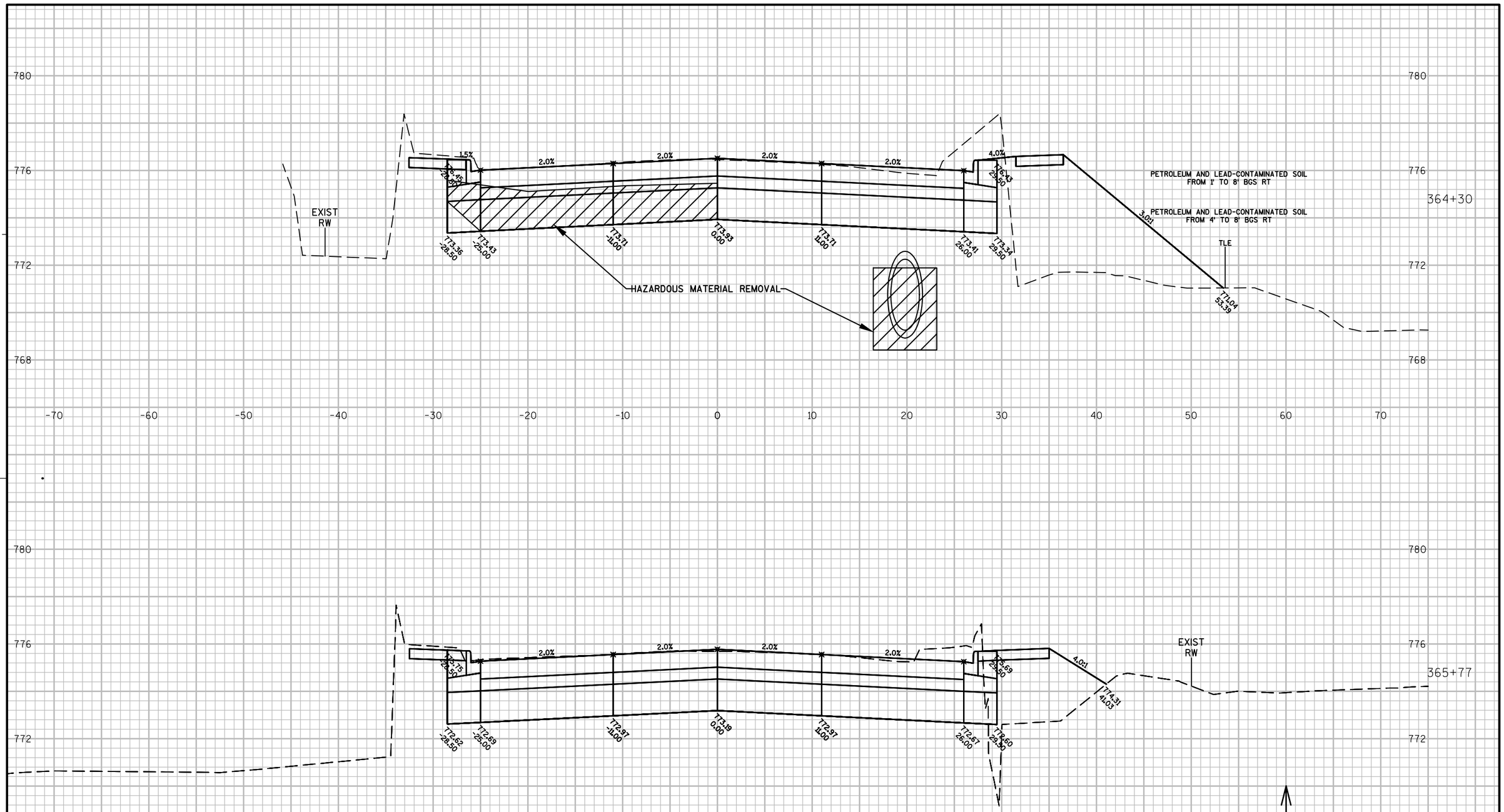
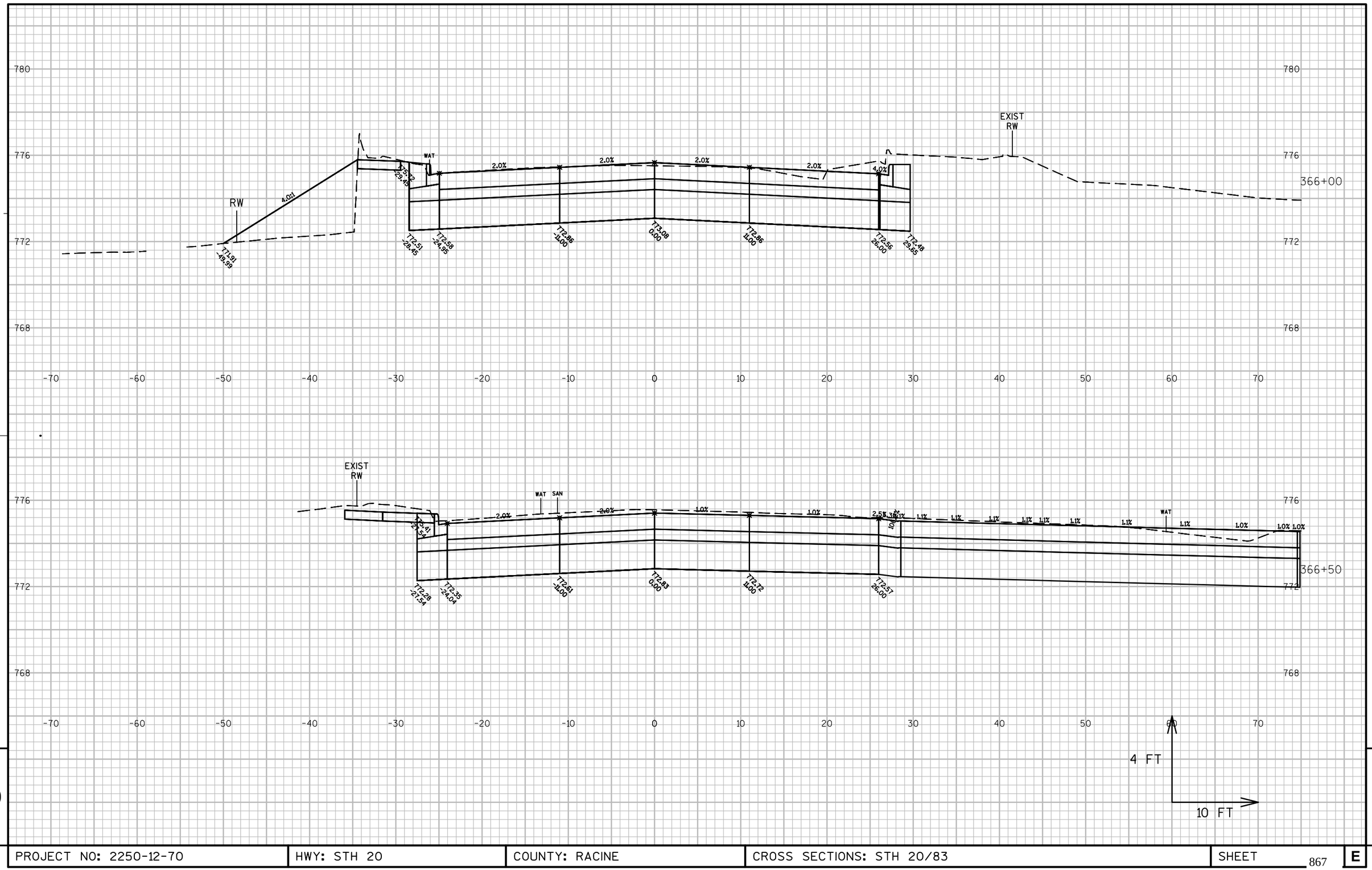
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 865	E

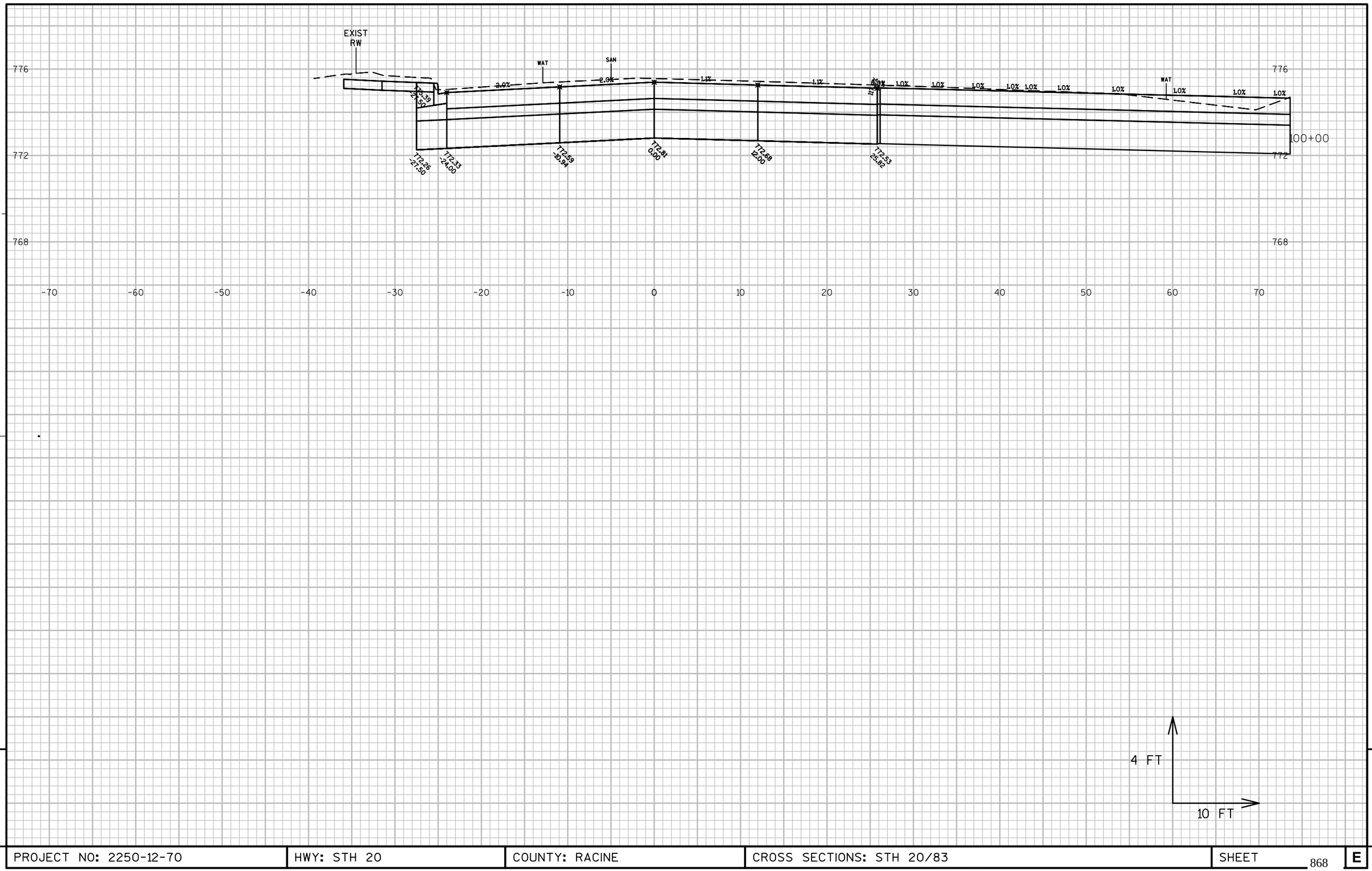


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 866	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 867	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:56 PM PLOT BY : MANSKE, CALEB PLOT NAME :



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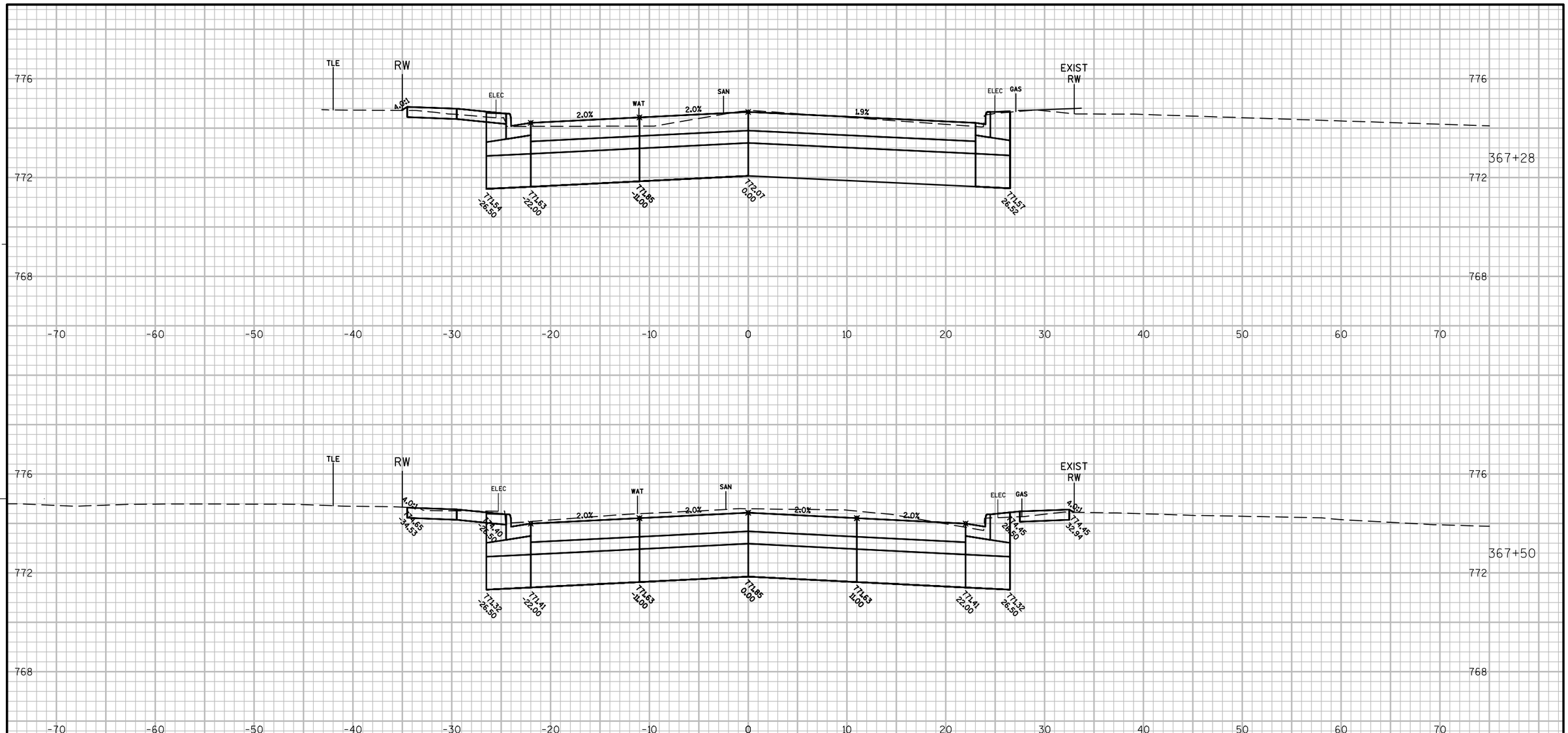
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 868	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:56 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



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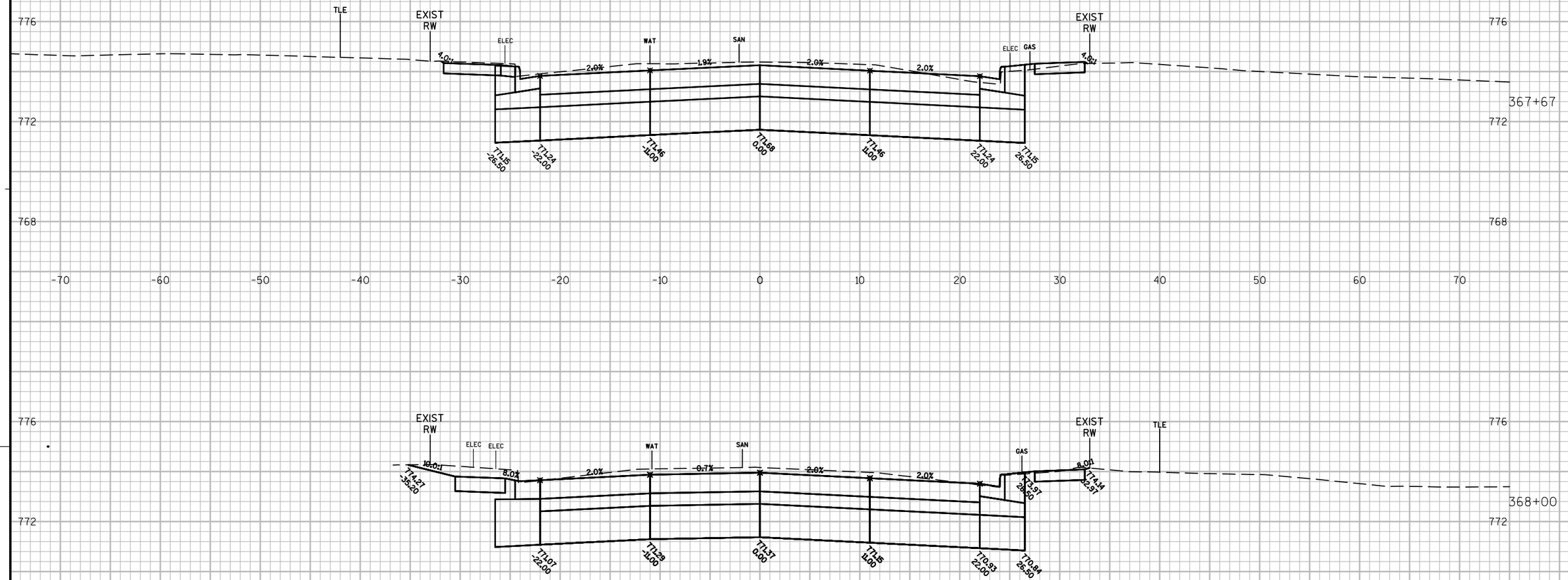
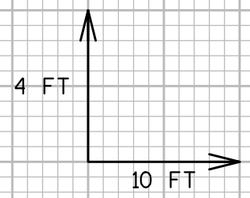
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 869	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:59 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49





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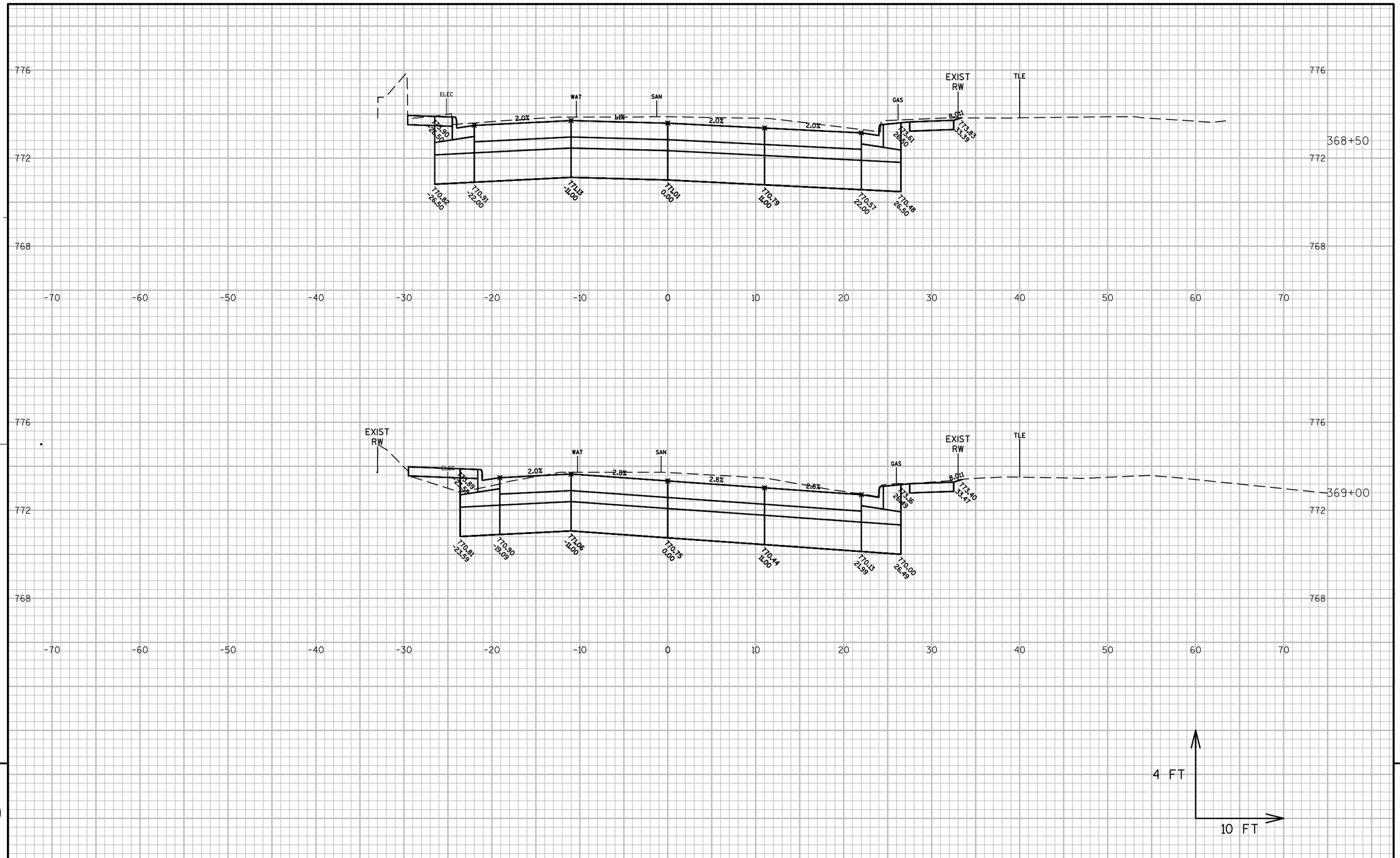
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 870	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 12:59 PM PLOT BY : MANSKE, CALEB PLOT NAME :

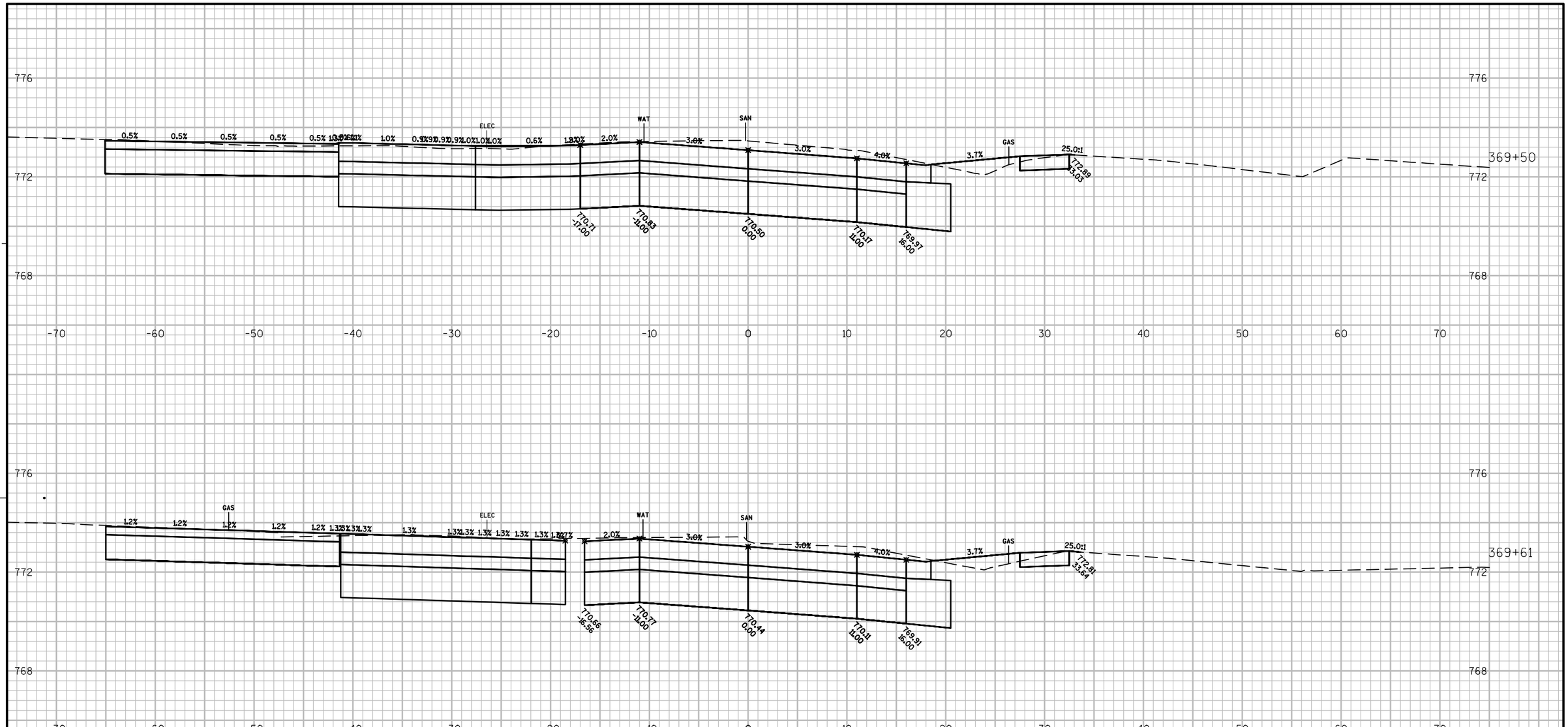
WISDOT/CADDS SHEET 49

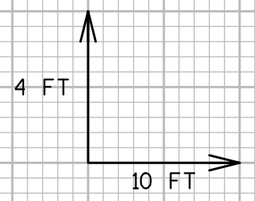


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 871	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 1:00 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49





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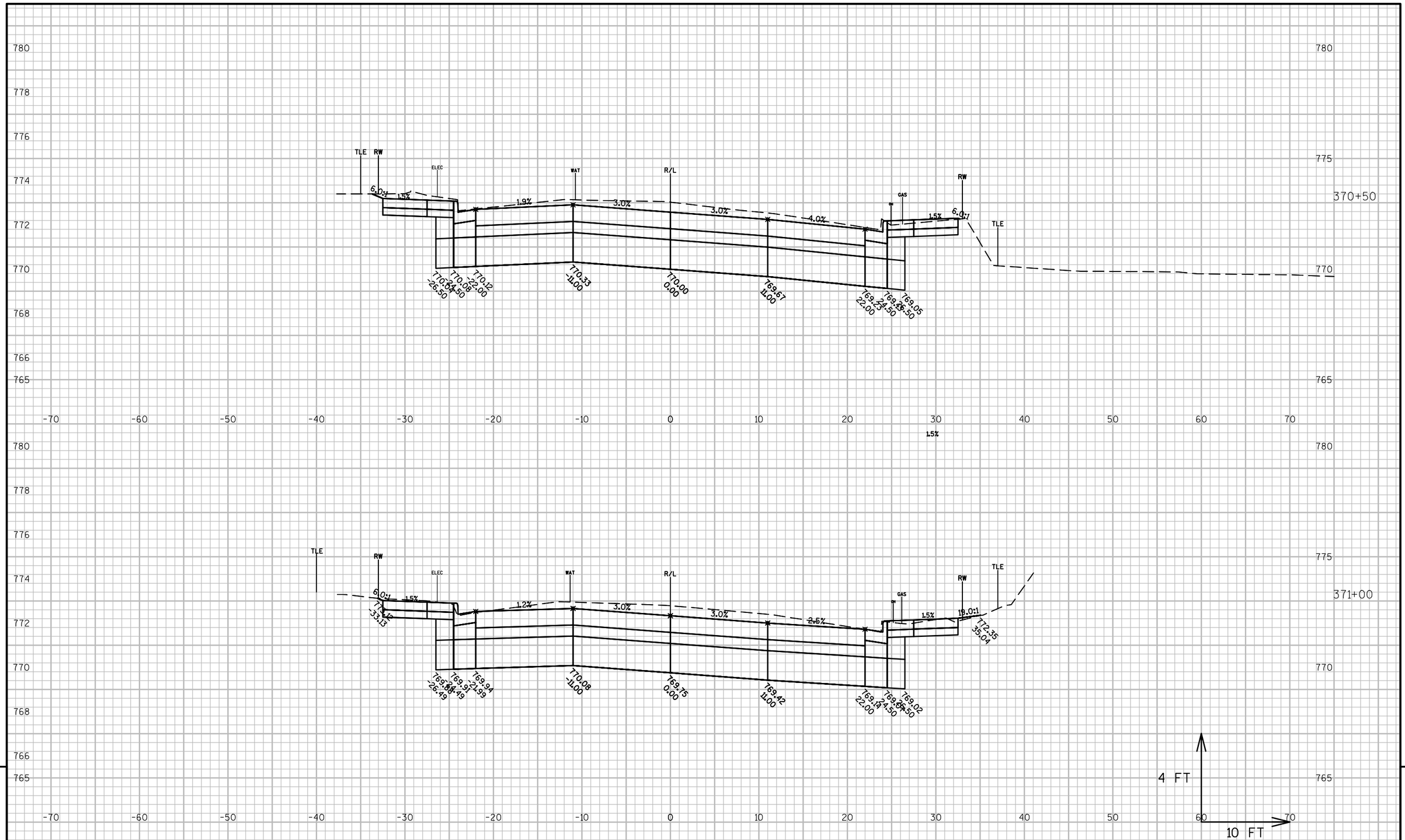
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20/83	SHEET 872	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090201_XS_STH 20.DWG PLOT DATE : 2/2/2018 1:00 PM PLOT BY : MANSKE, CALEB PLOT NAME :



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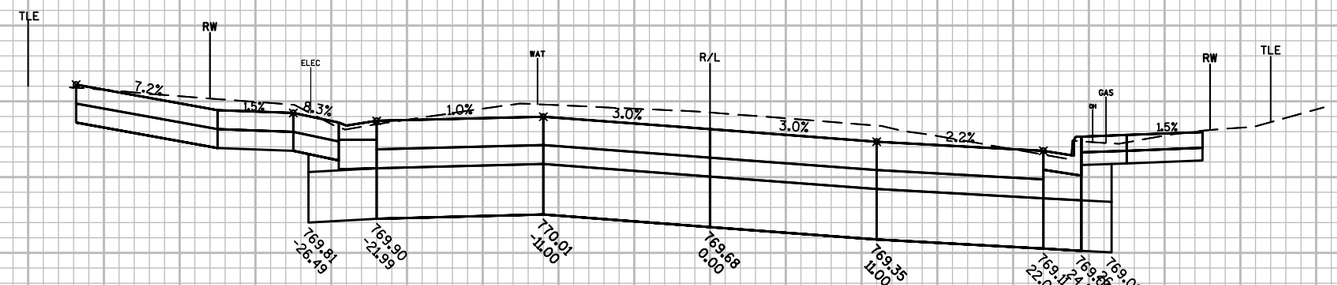
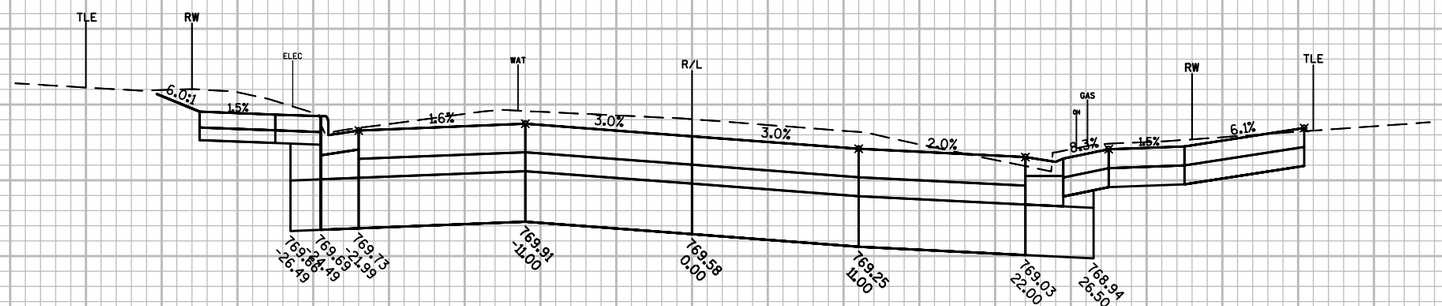
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 873	E



371+12

DWY LT



371+34

DWY RT

4 FT

10 FT

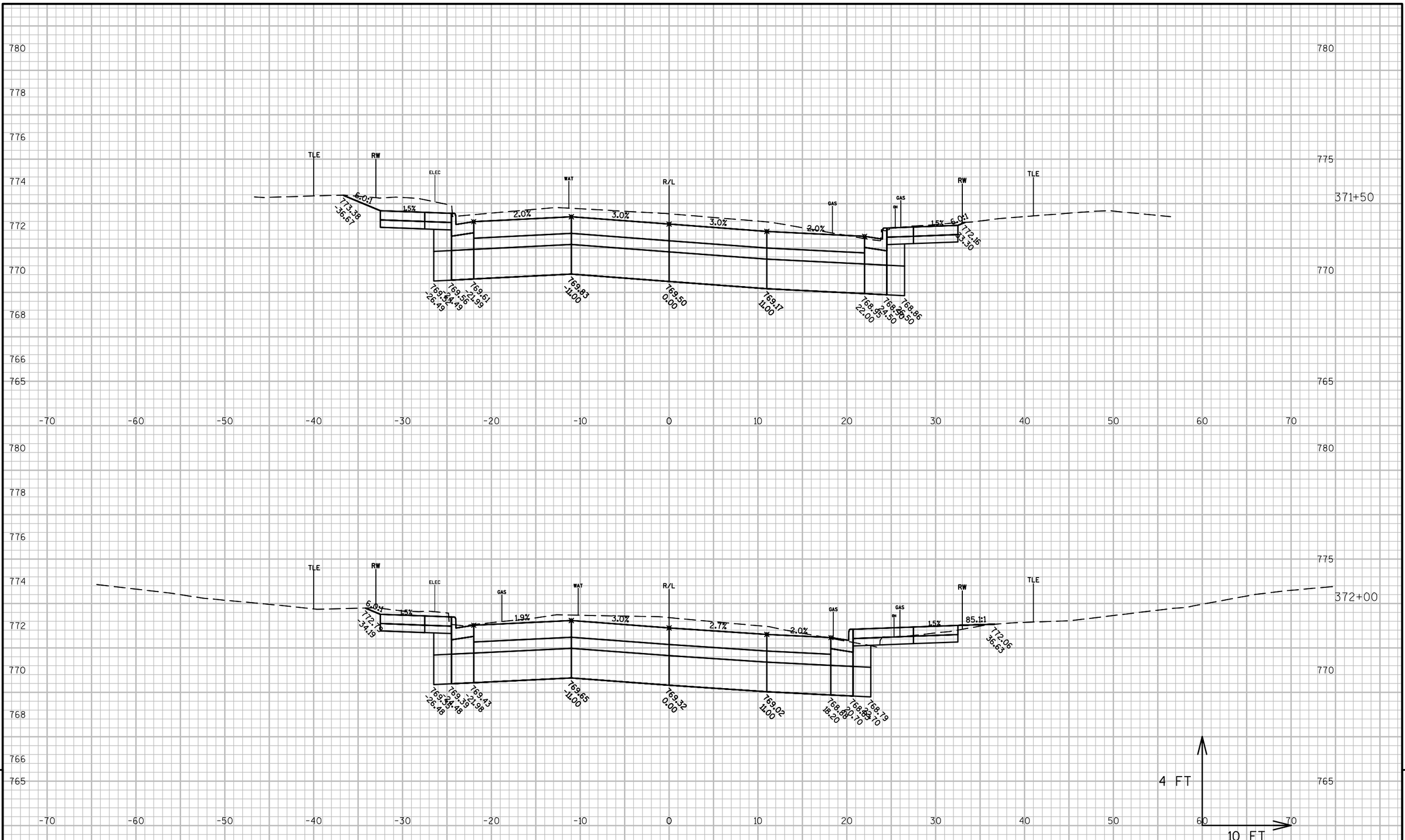
9 9

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 874	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 3:59 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

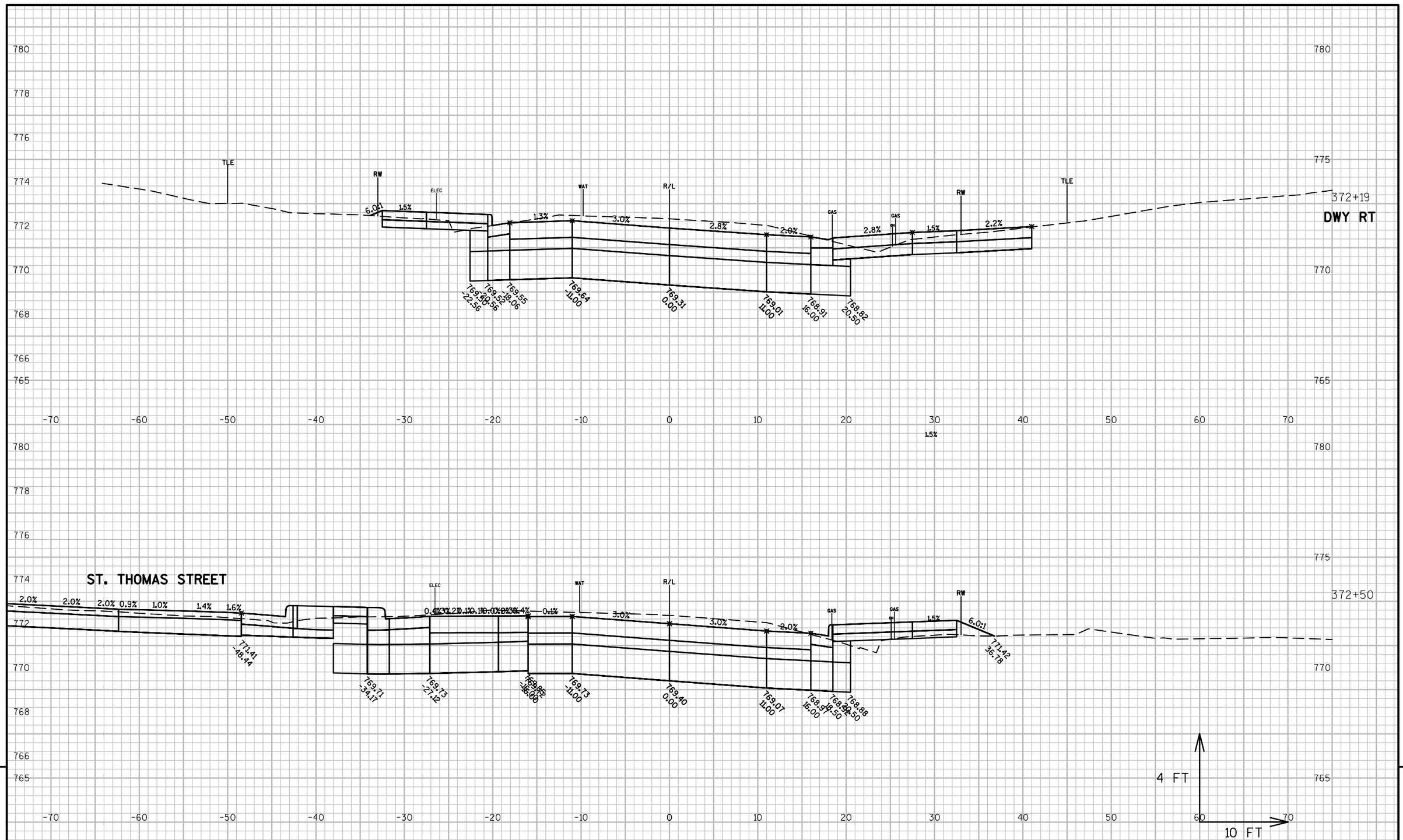


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 875	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 3:59 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

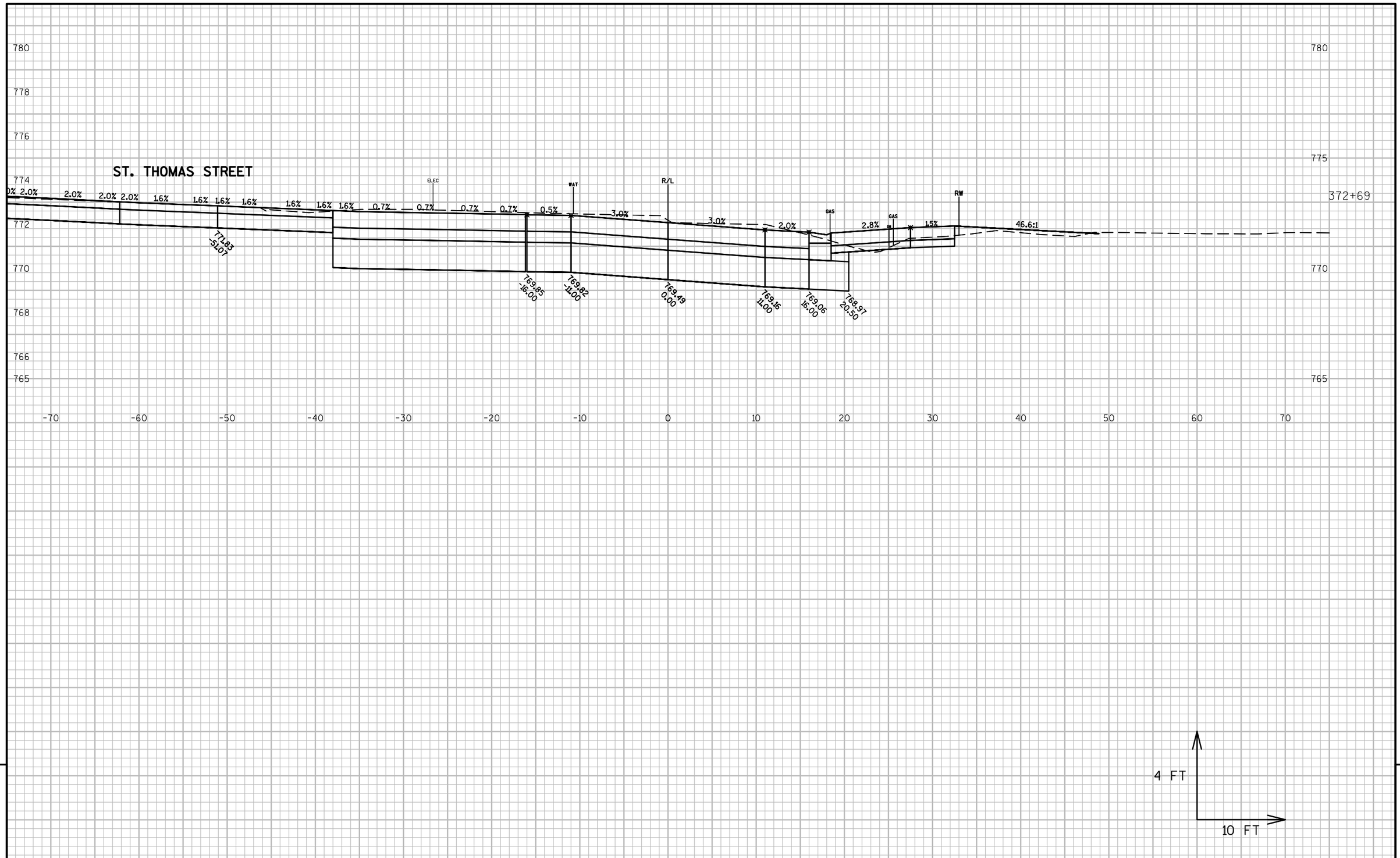


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 876	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:00 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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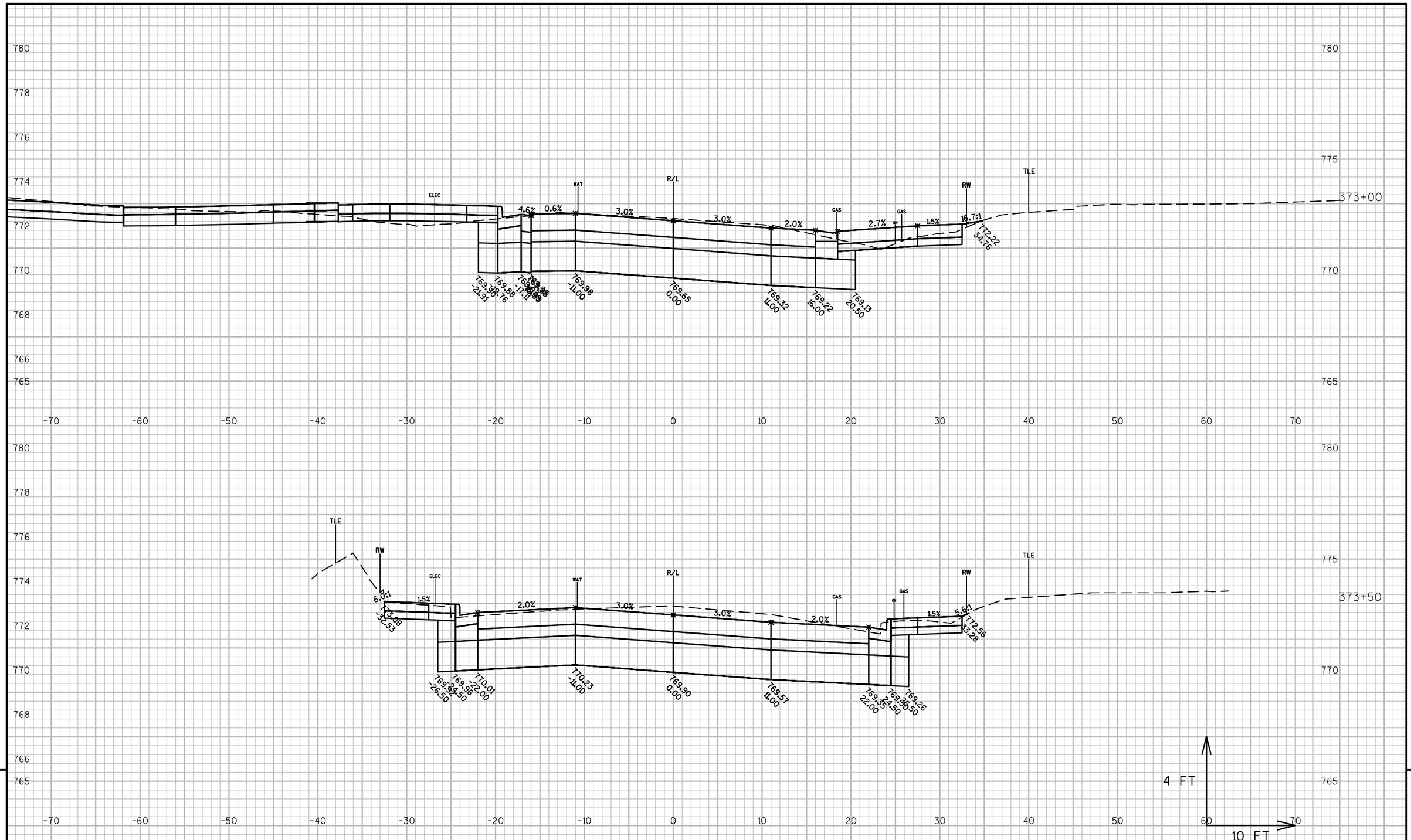
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 877	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****
PLOT DATE : 1/30/2018 4:00 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



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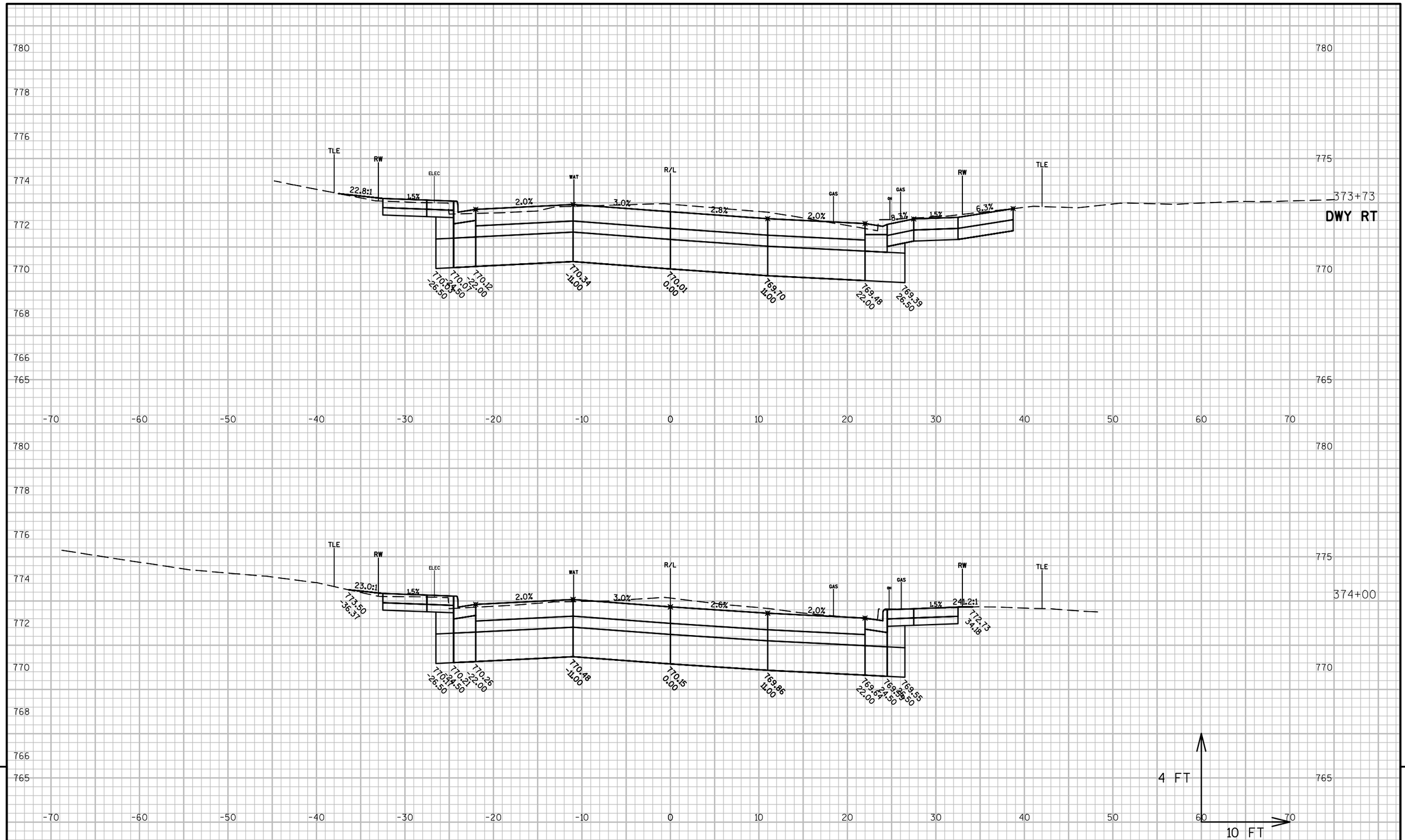
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 878	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:00 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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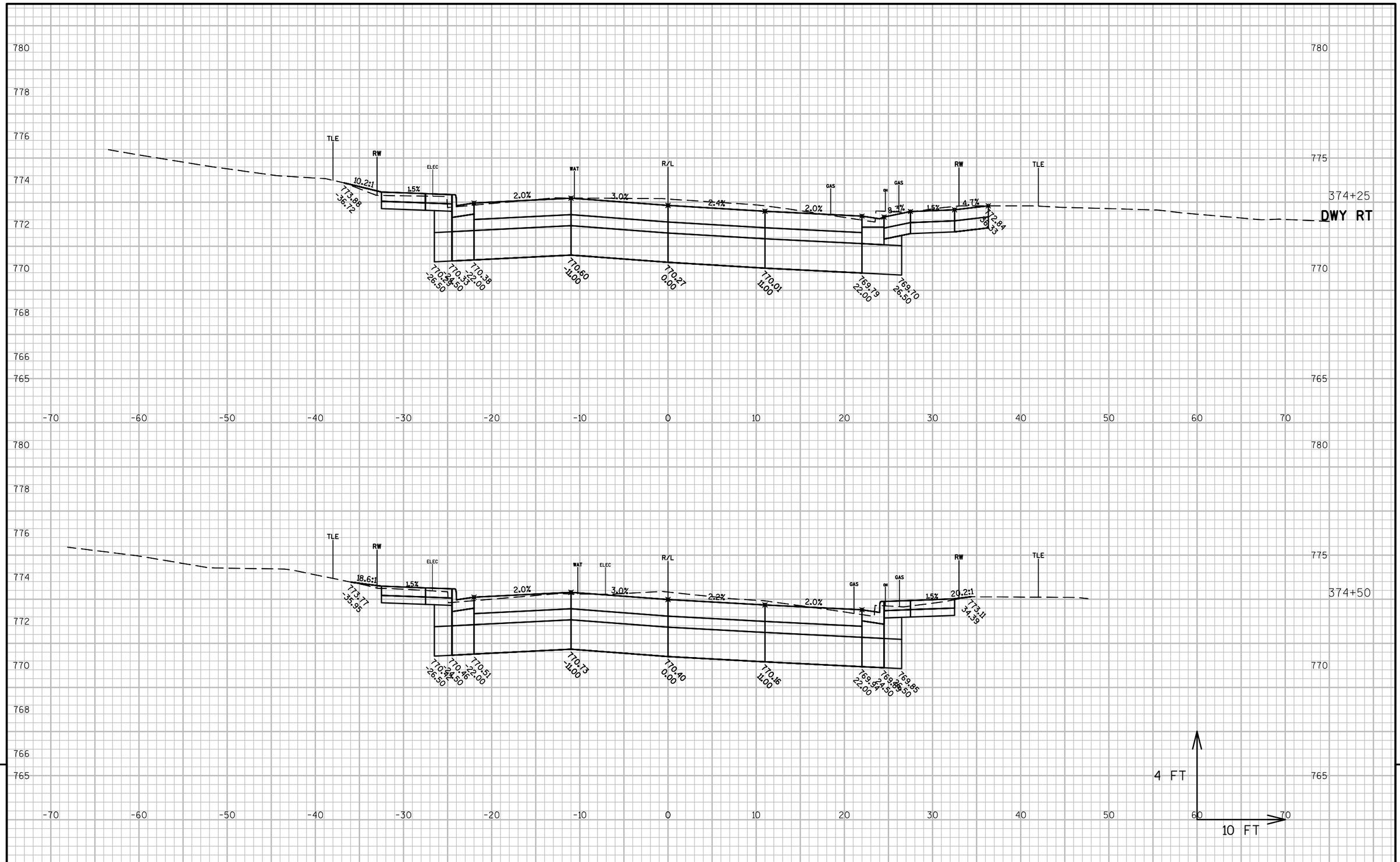
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 879	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:00 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT



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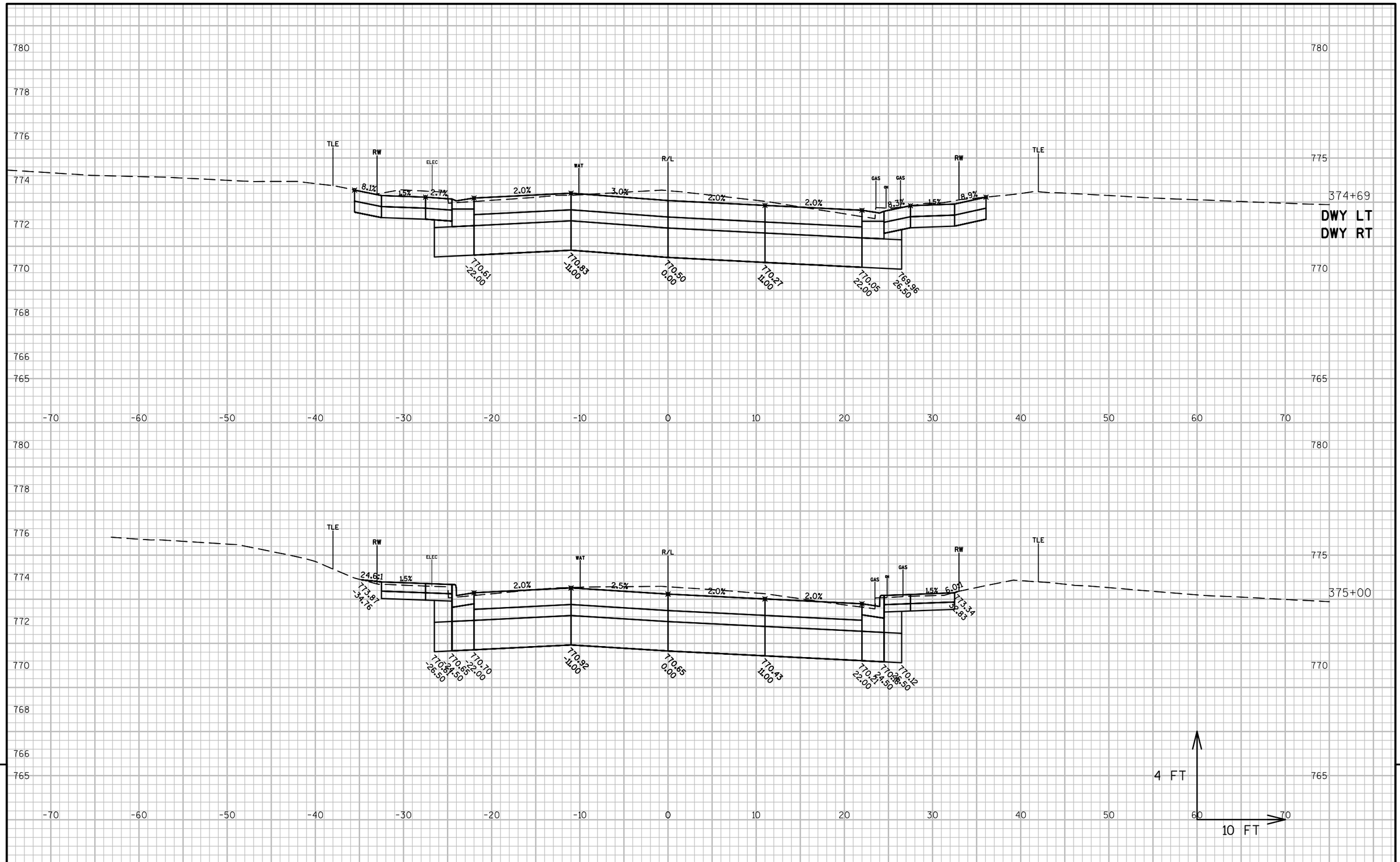
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 880	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:01 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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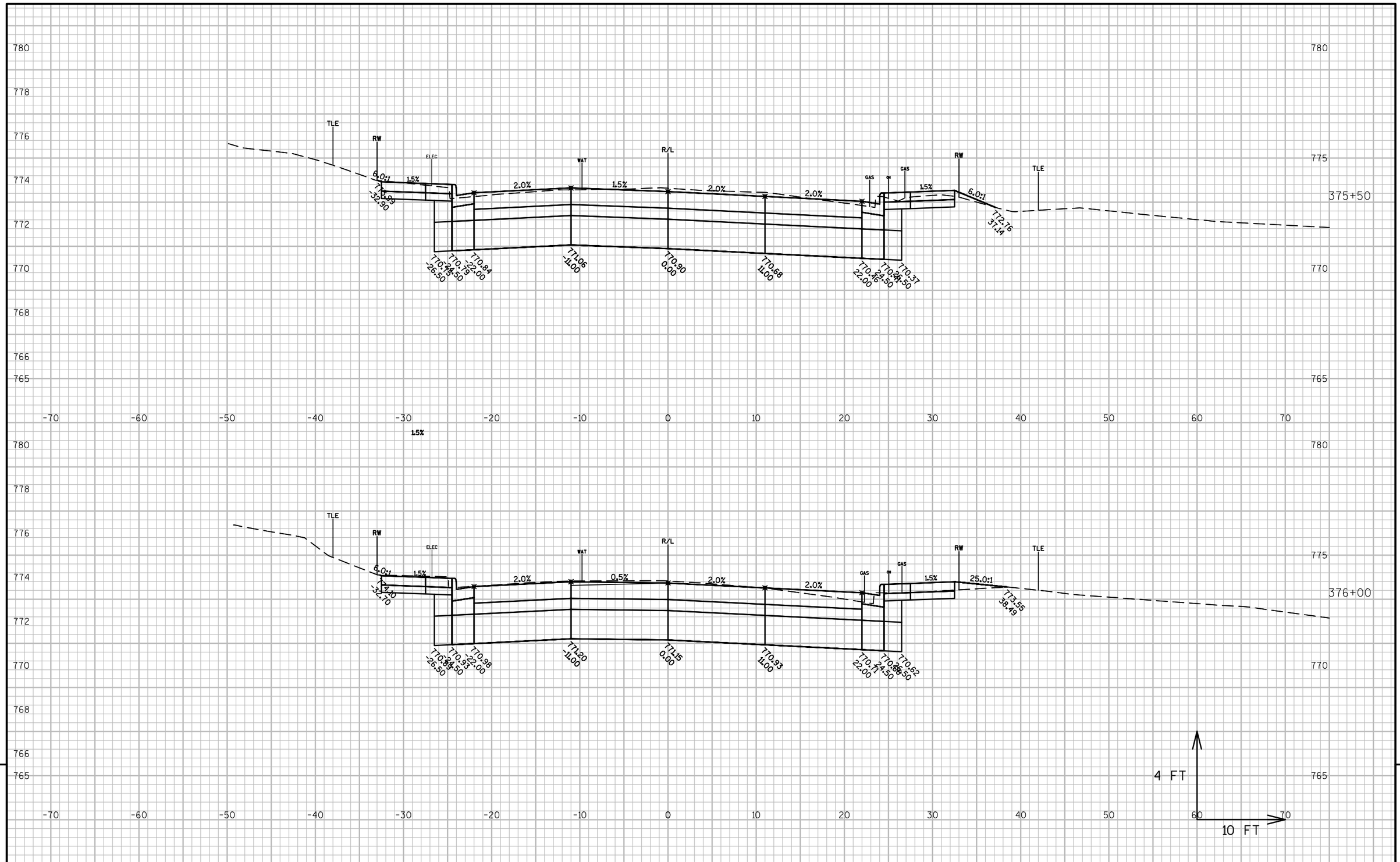
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 881	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:01 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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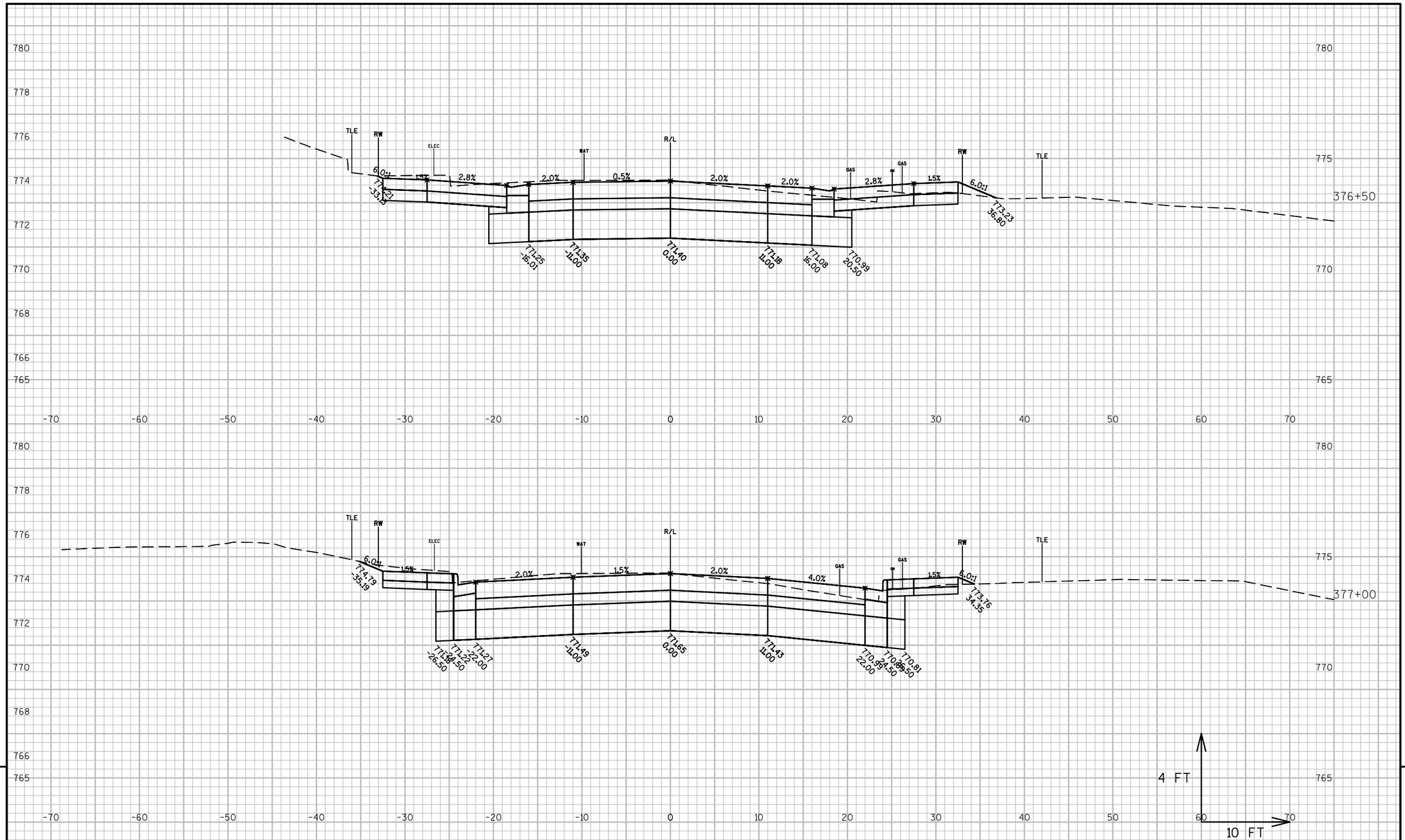
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 882	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:01 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

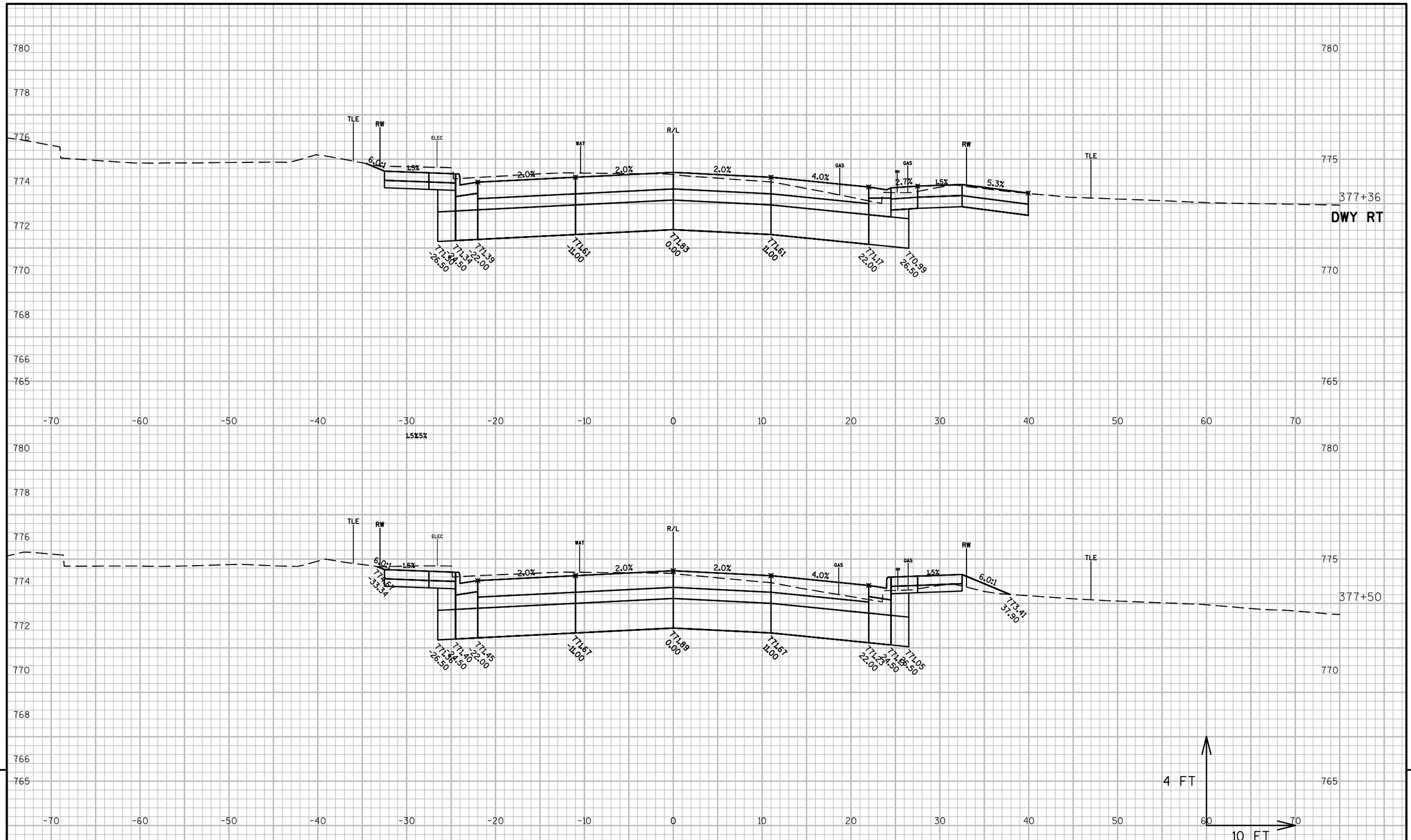


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 883	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:01 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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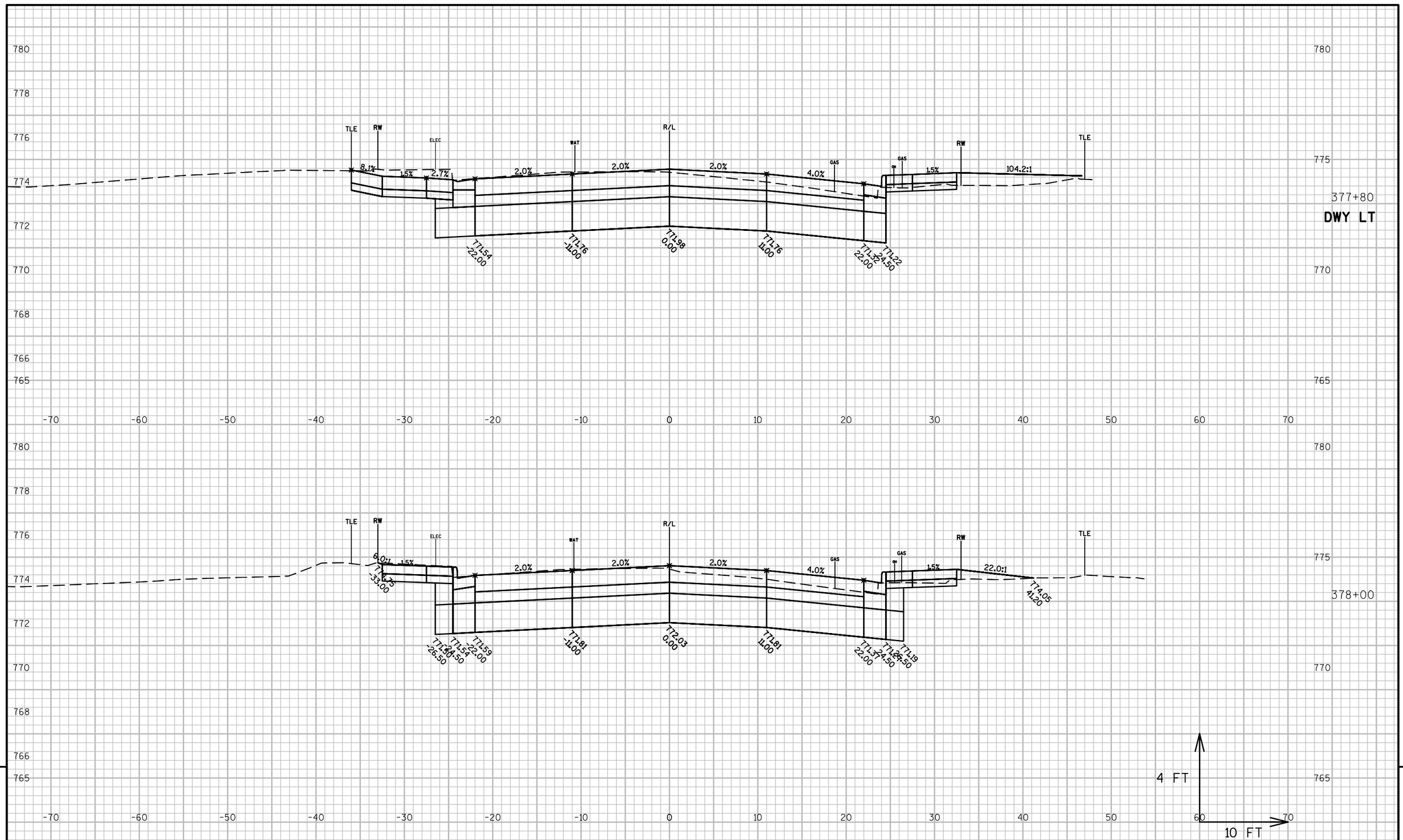
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 884	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:02 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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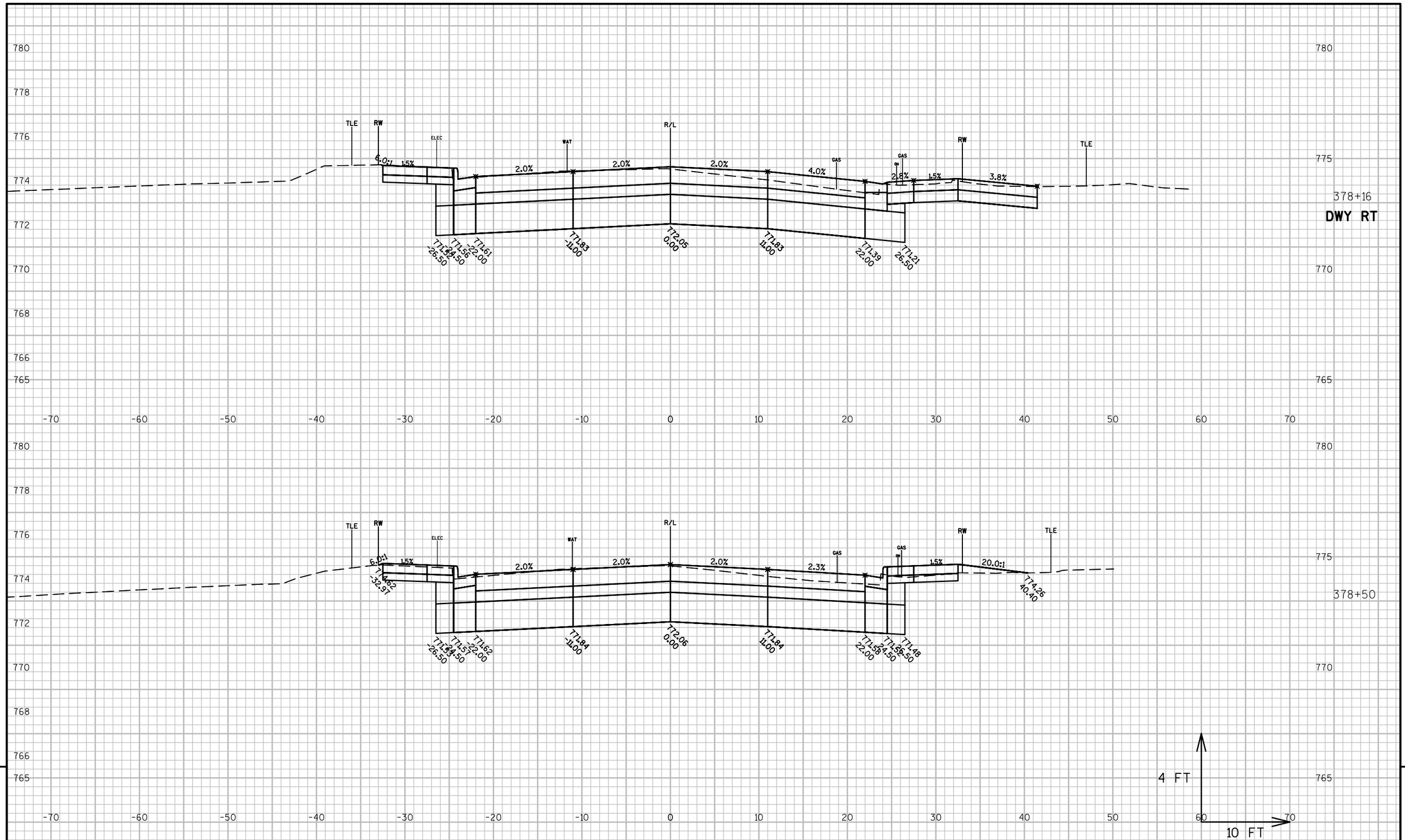
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 885	E

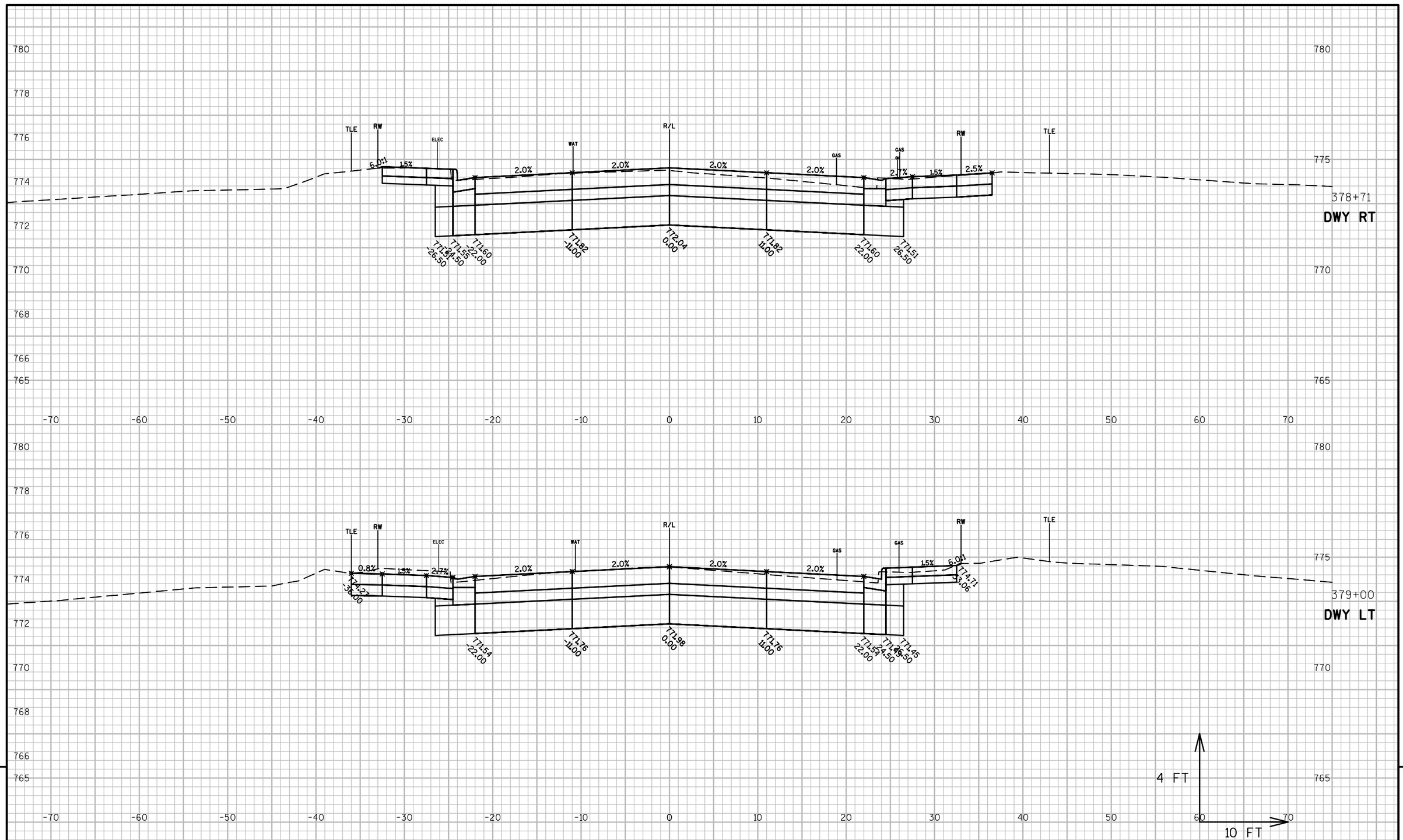
FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:02 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 886	E



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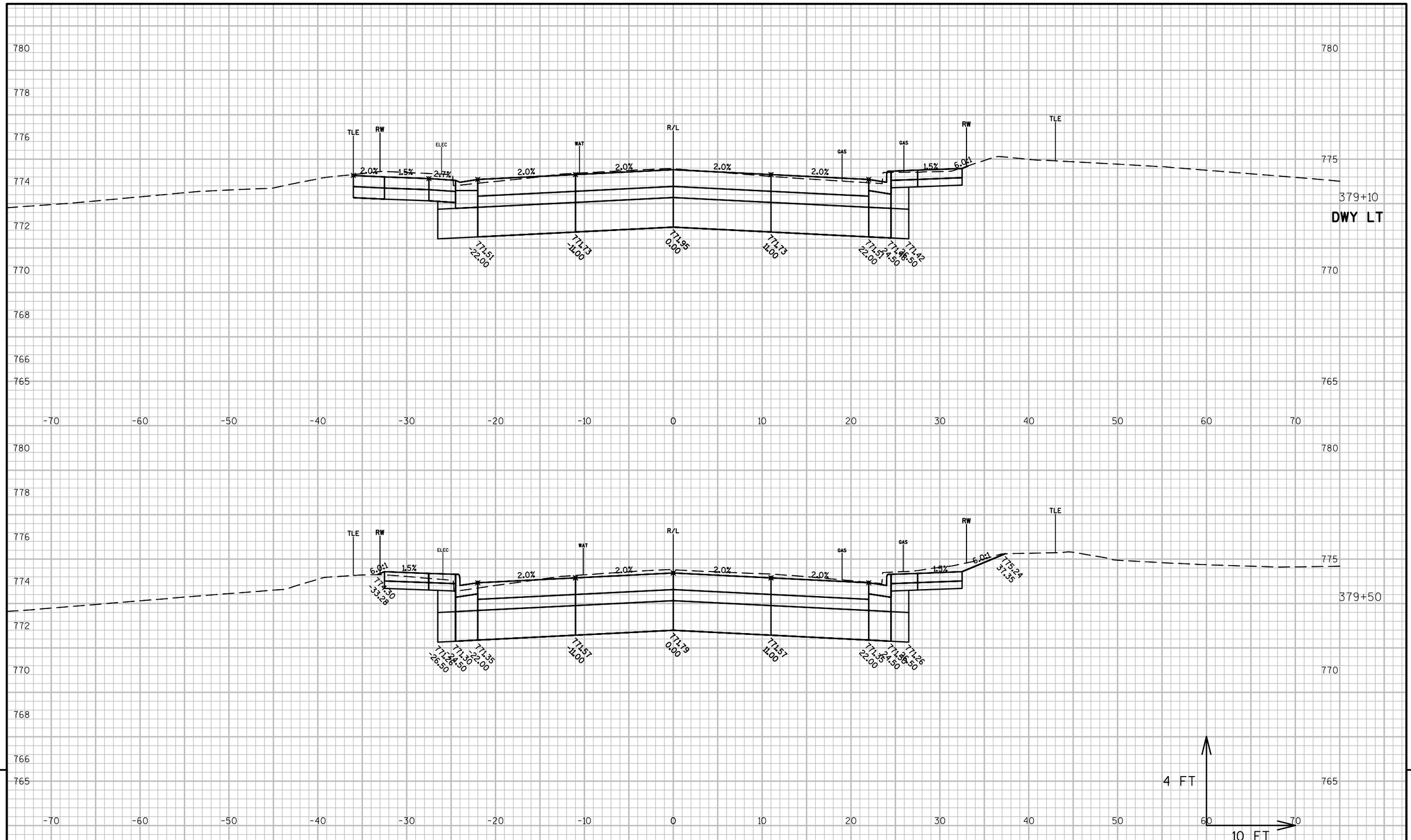
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 887	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:02 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

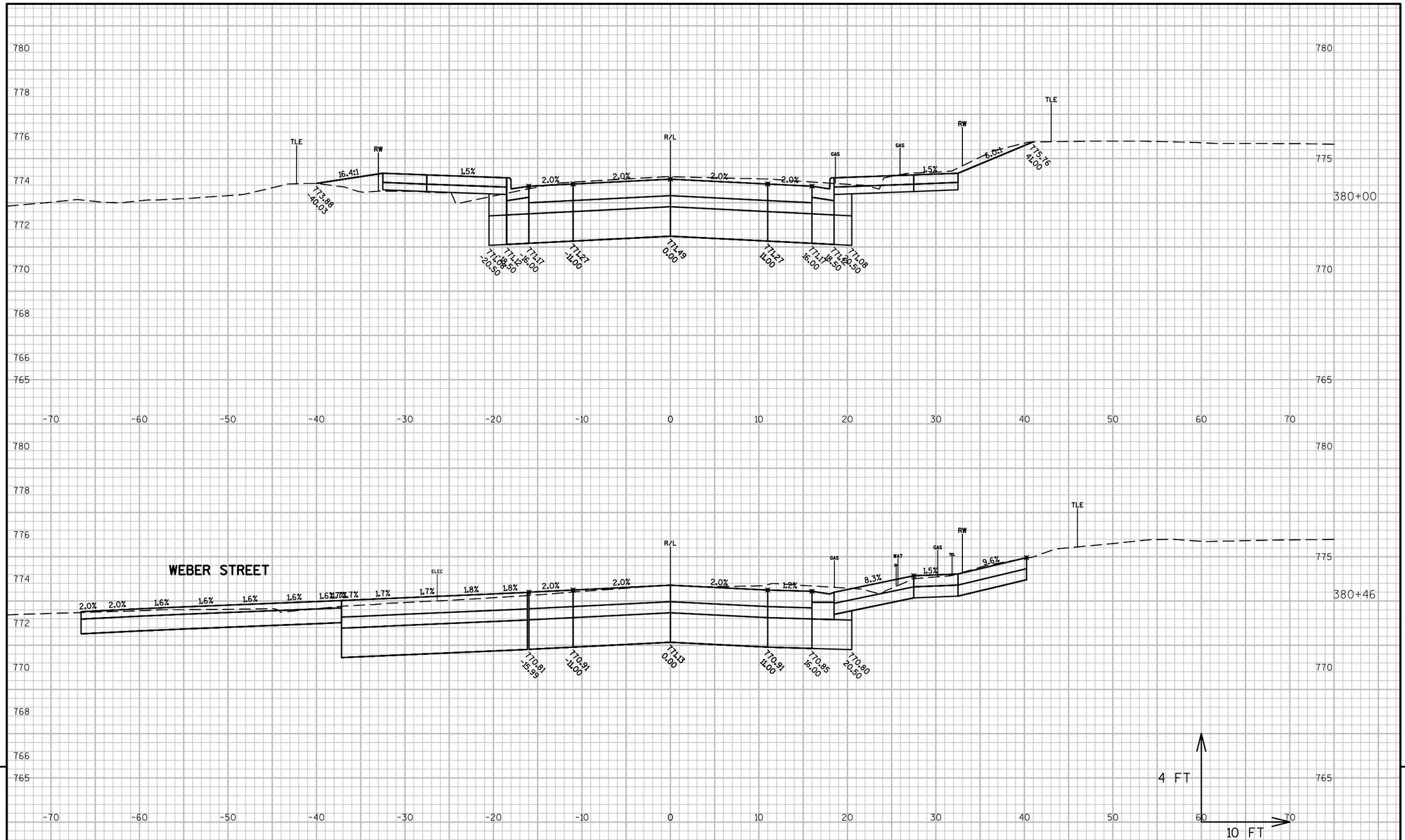


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 888	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:03 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

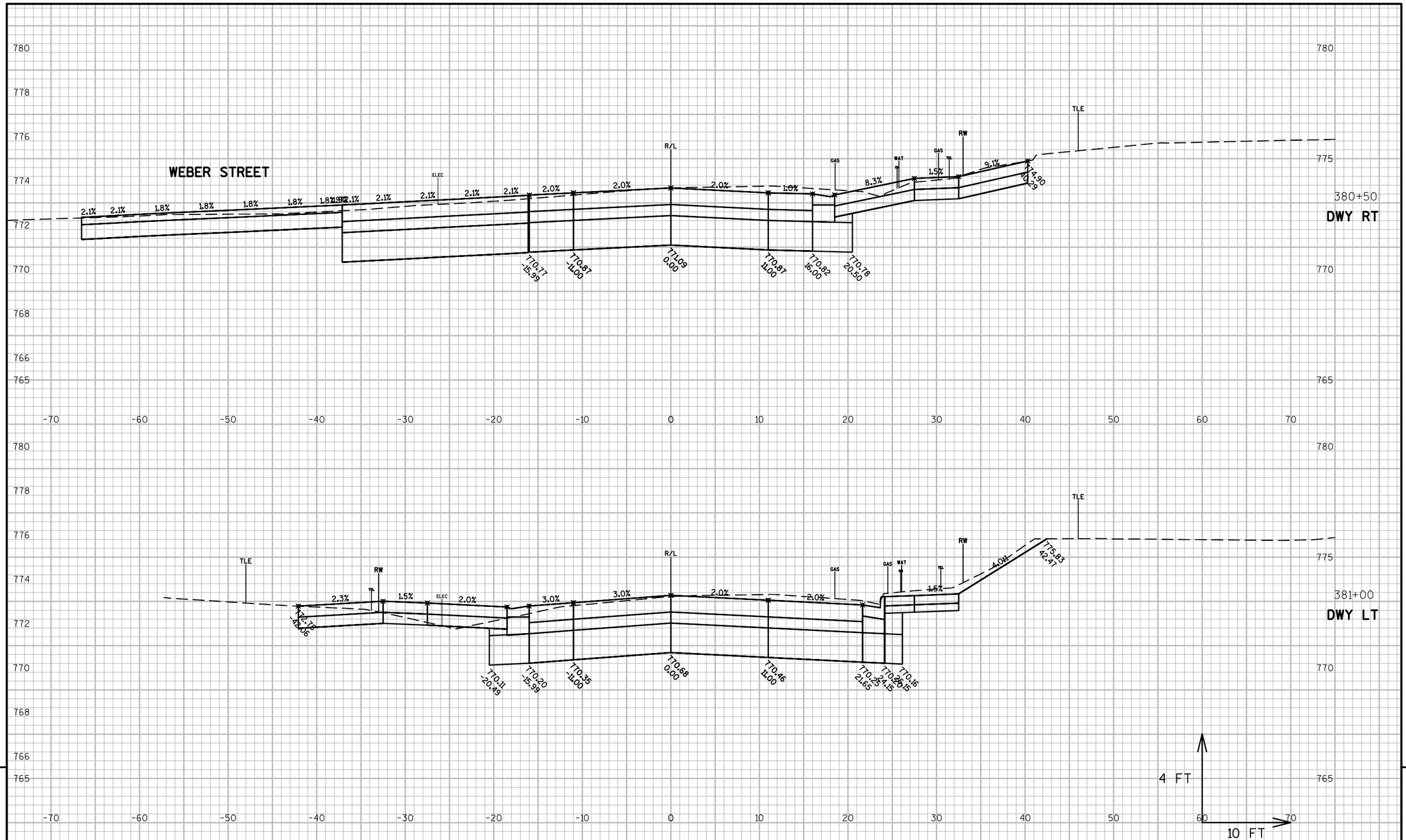


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 889	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:03 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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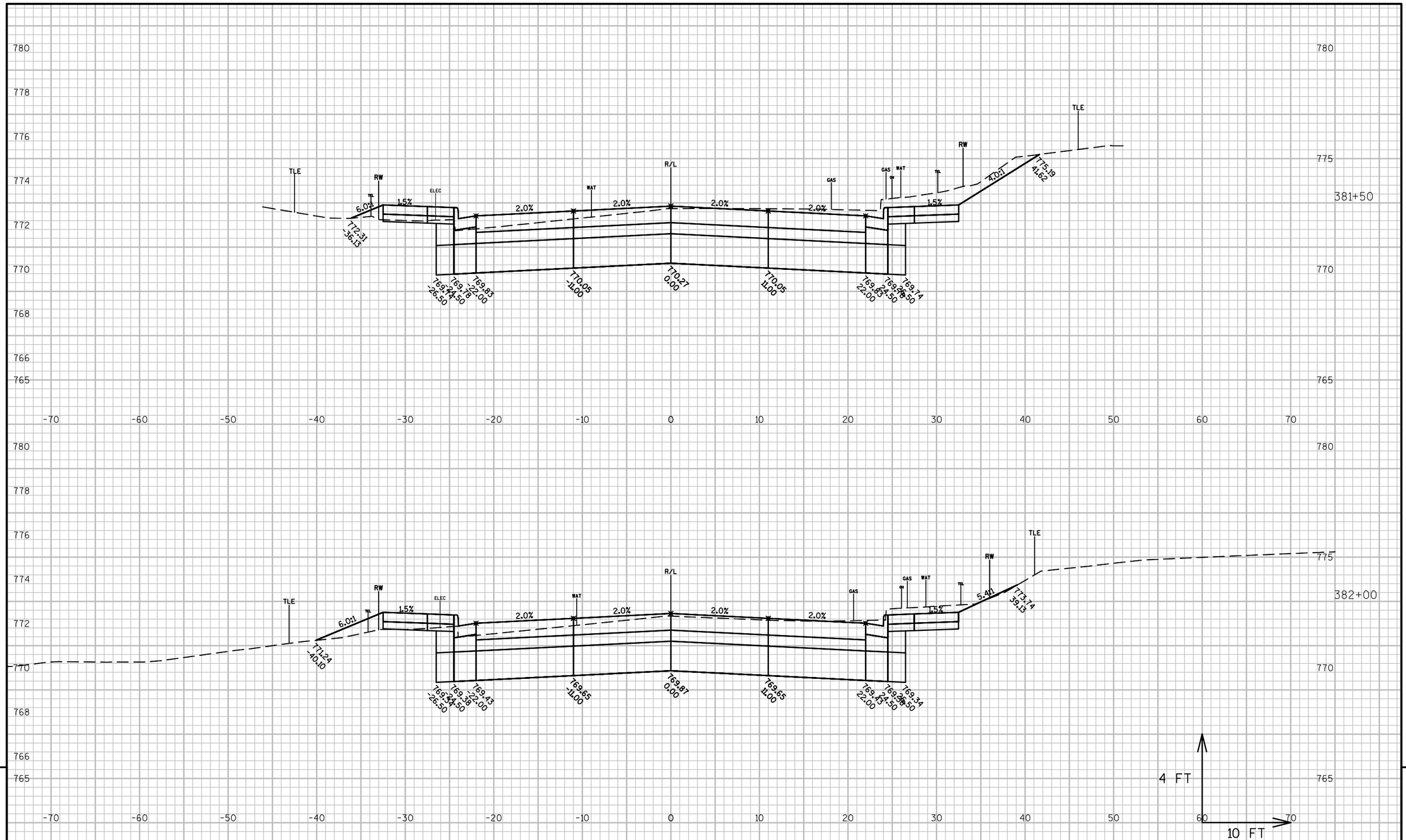
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 890	E

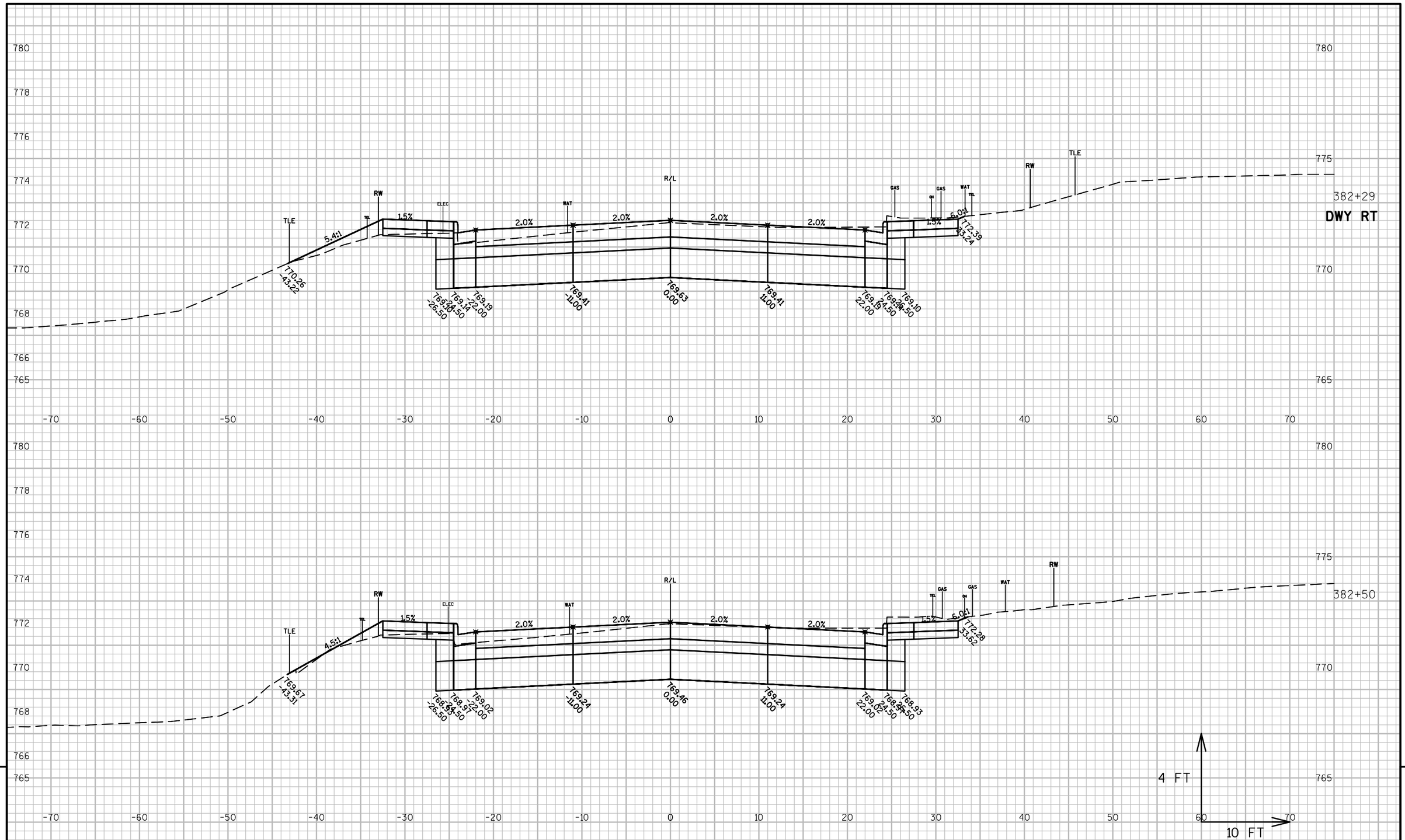
FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****
PLOT DATE : 1/30/2018 4:03 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 891	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:03 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

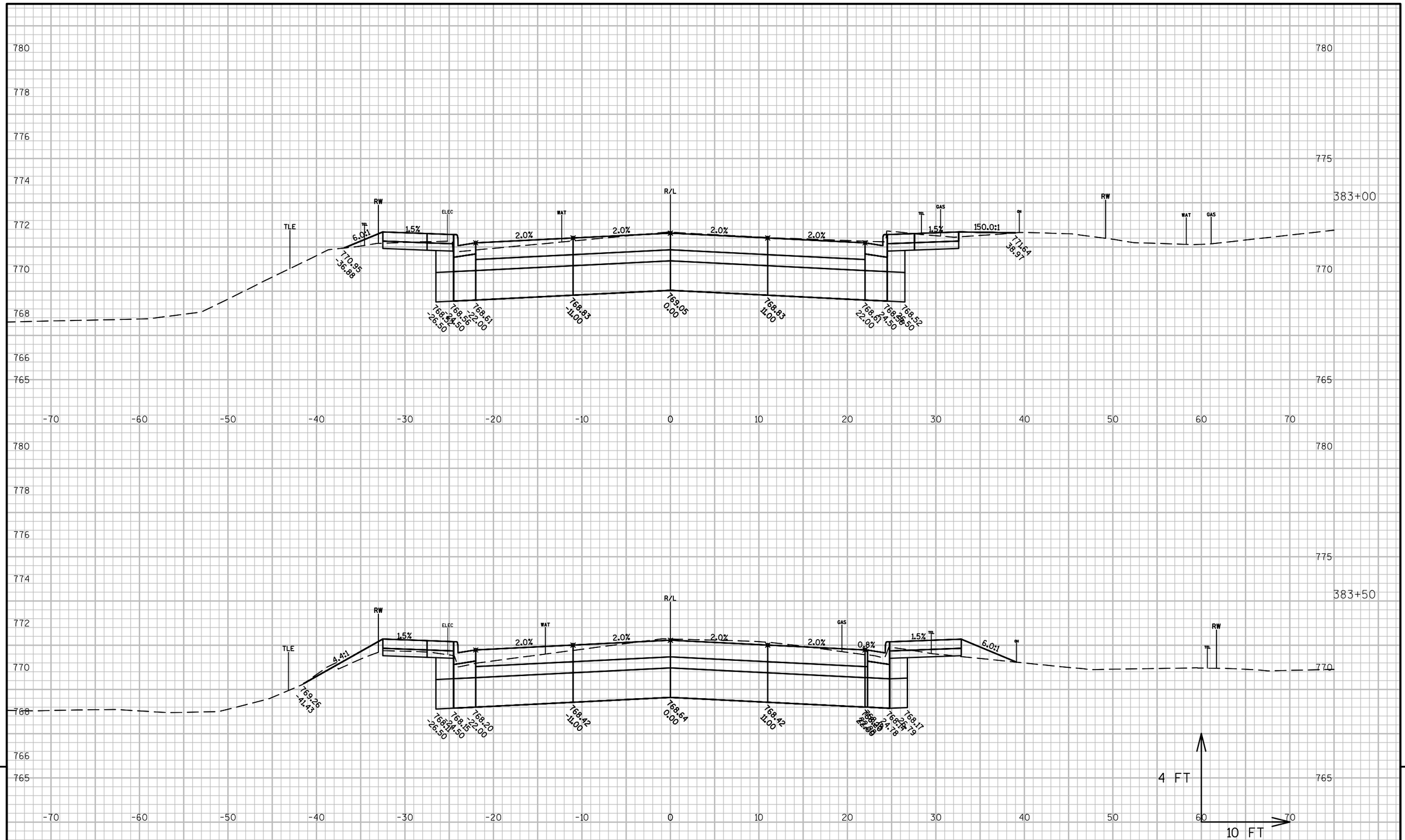


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 892	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:04 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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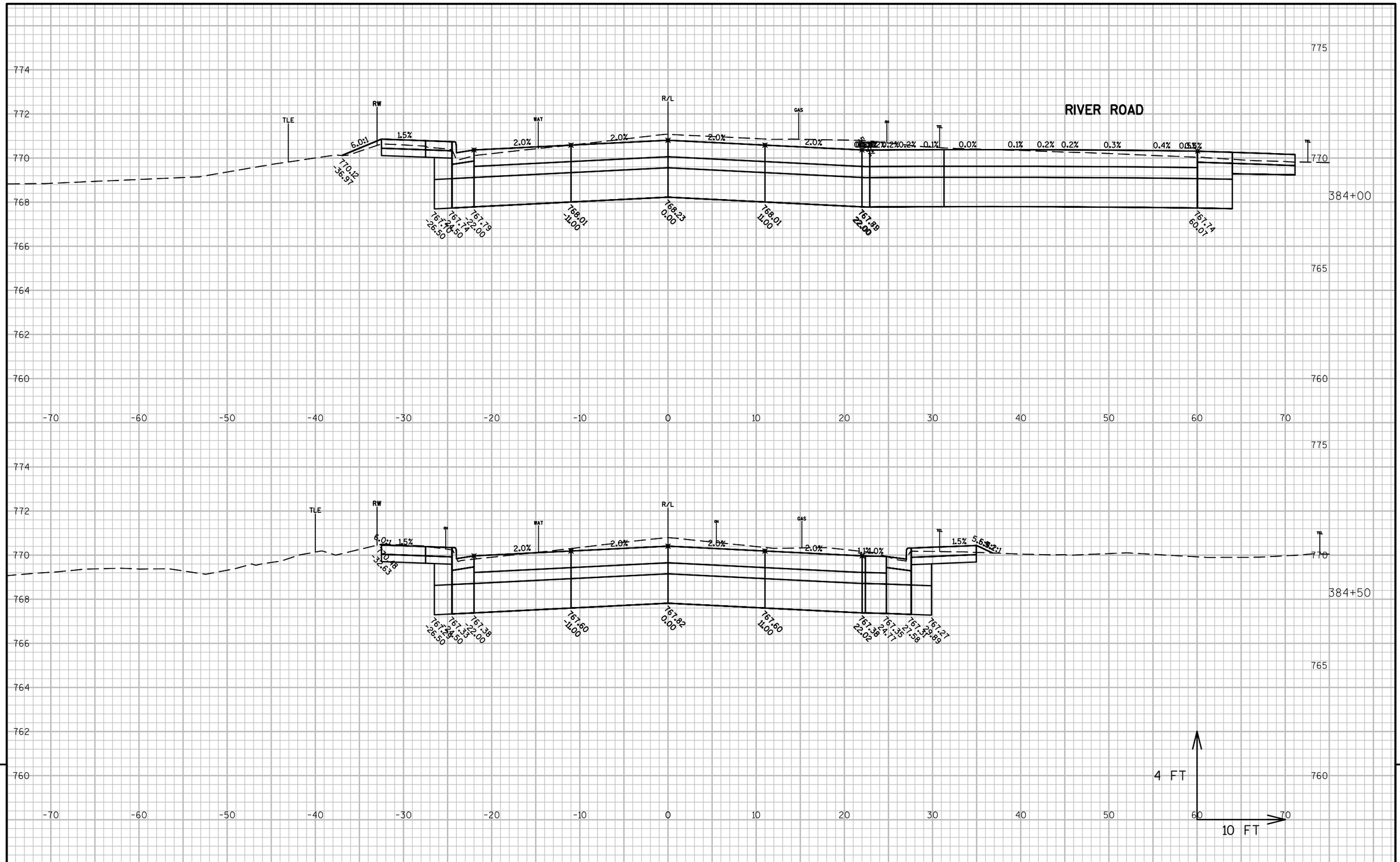
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 893	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:04 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

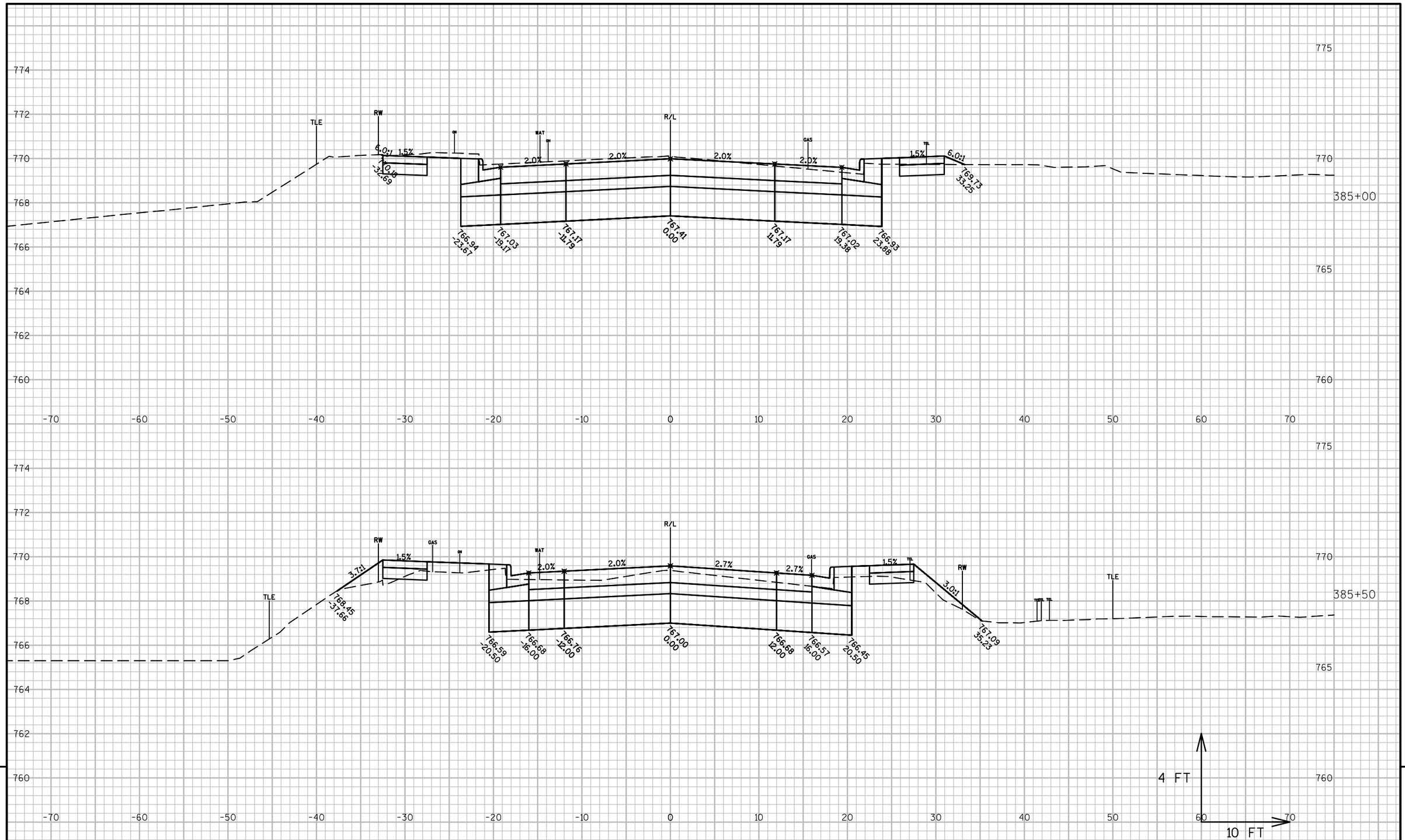
WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 894	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:04 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

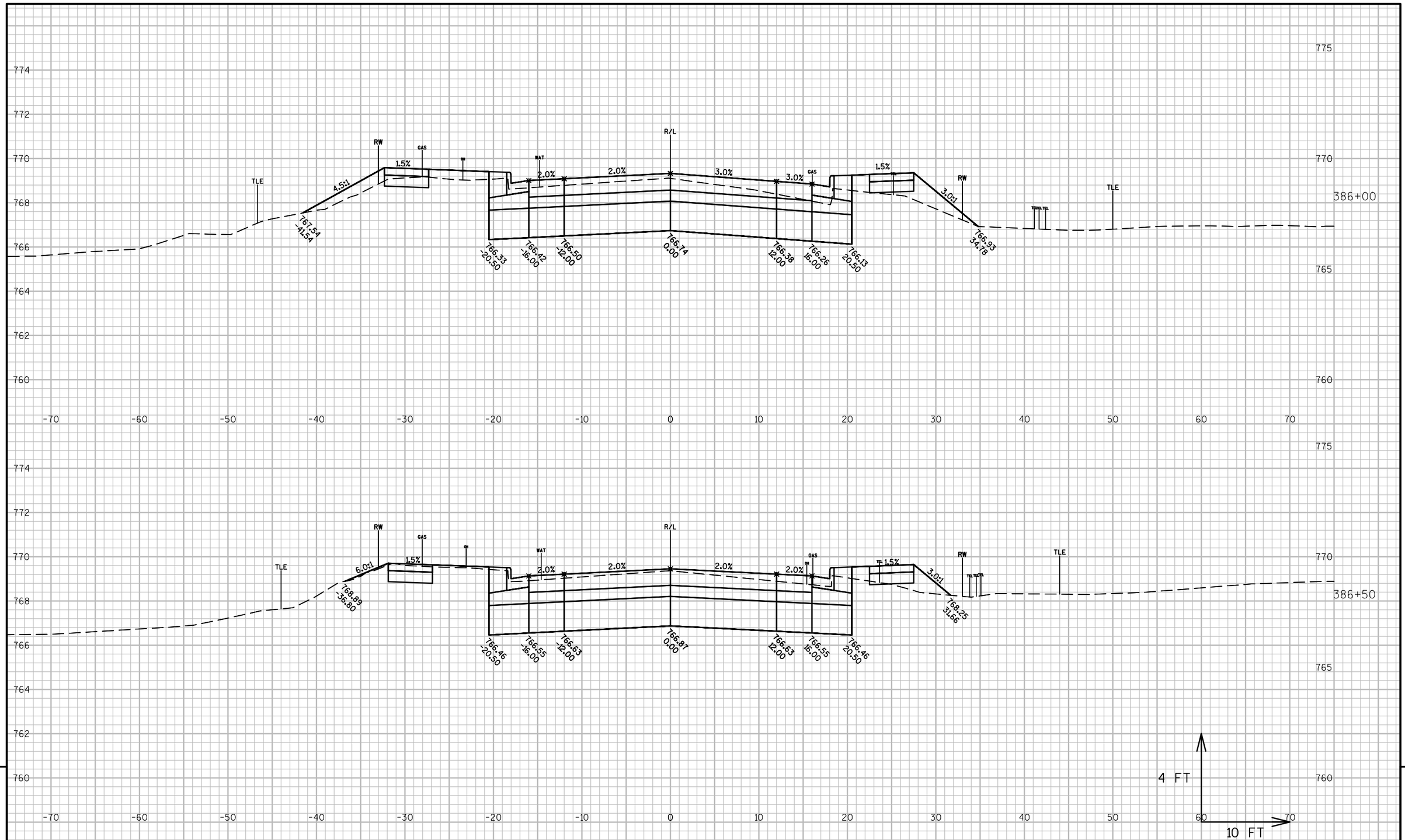


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 895 E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:04 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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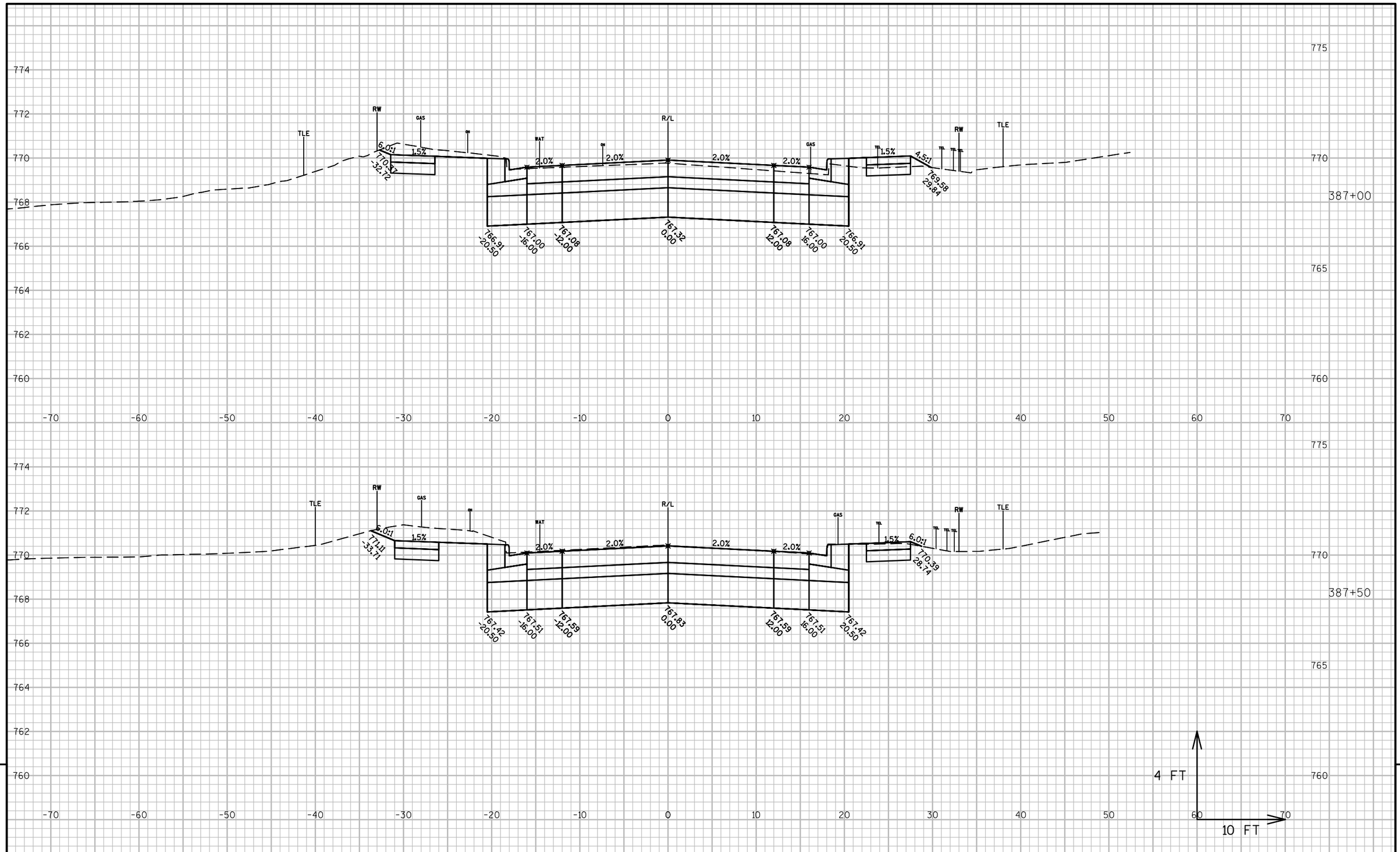
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 896	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:05 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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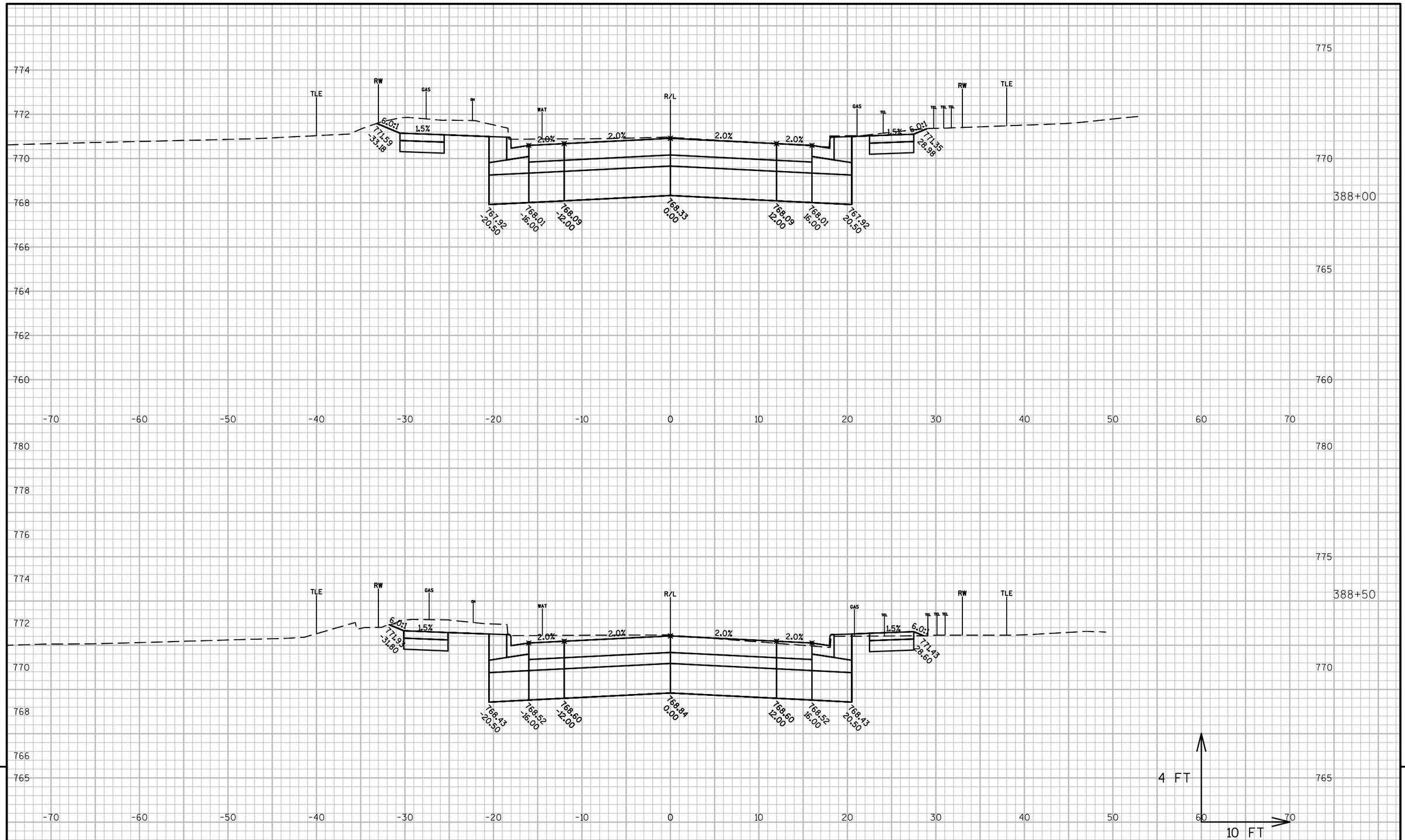
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 897	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:05 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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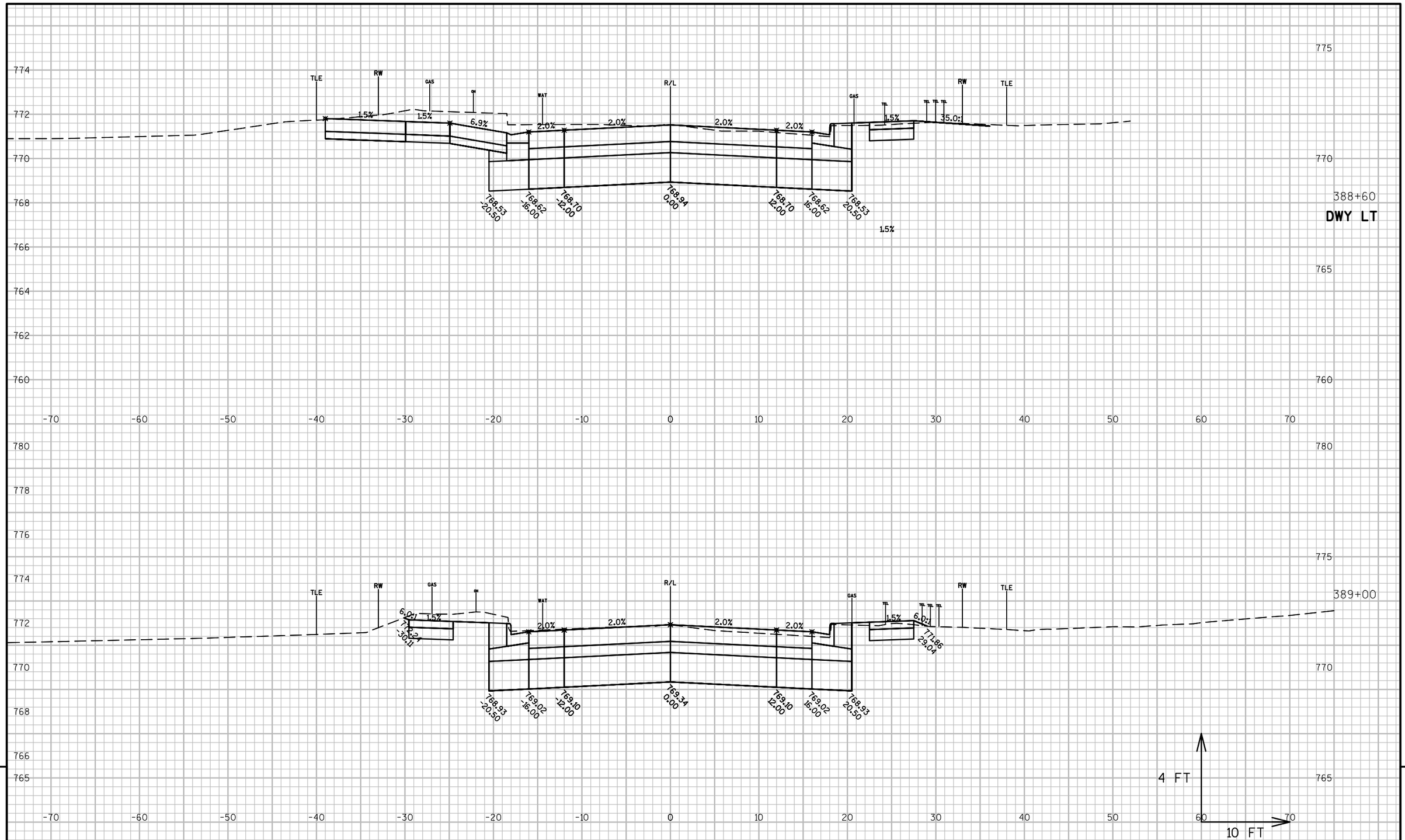
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 898	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

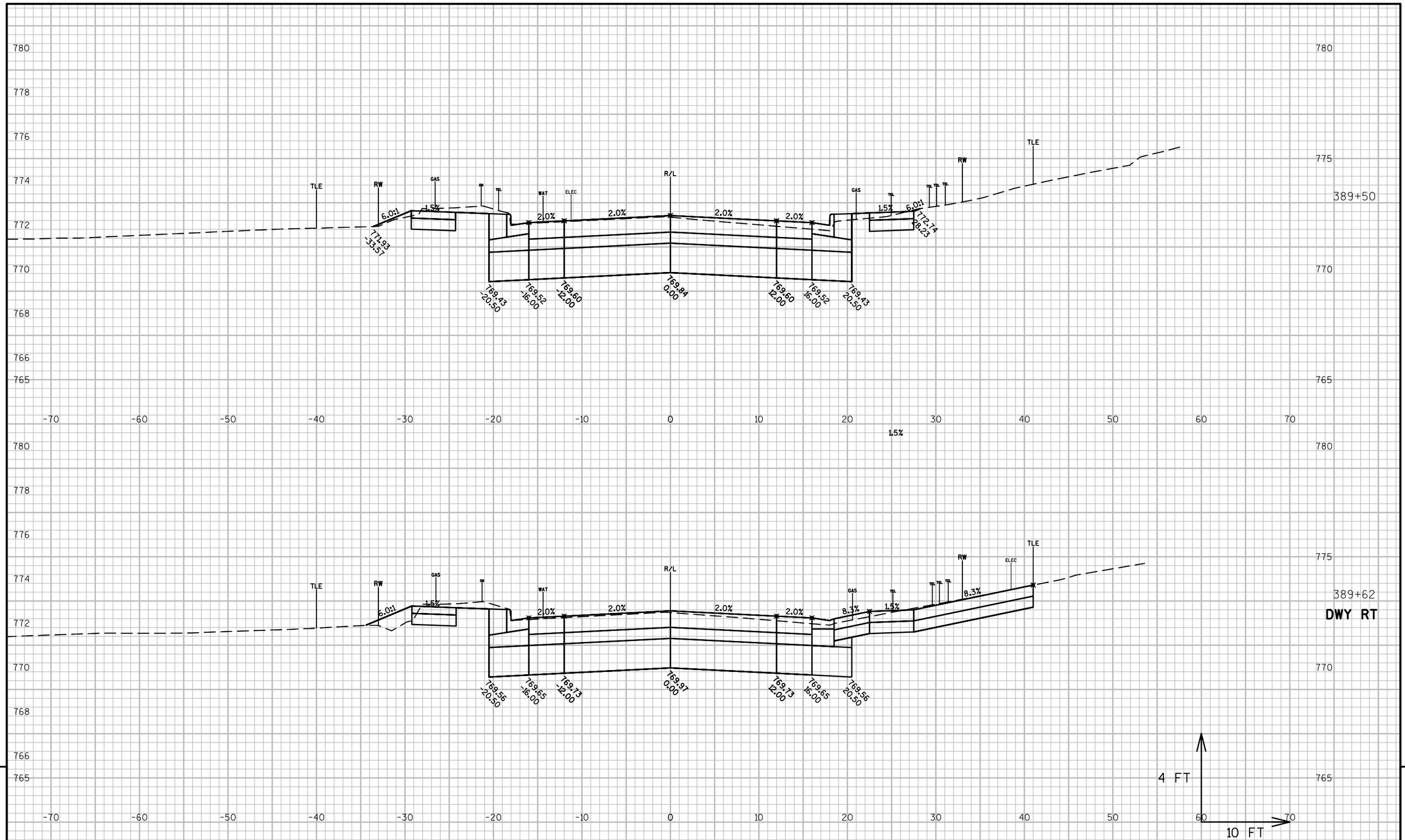
PLOT DATE : 1/30/2018 4:05 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

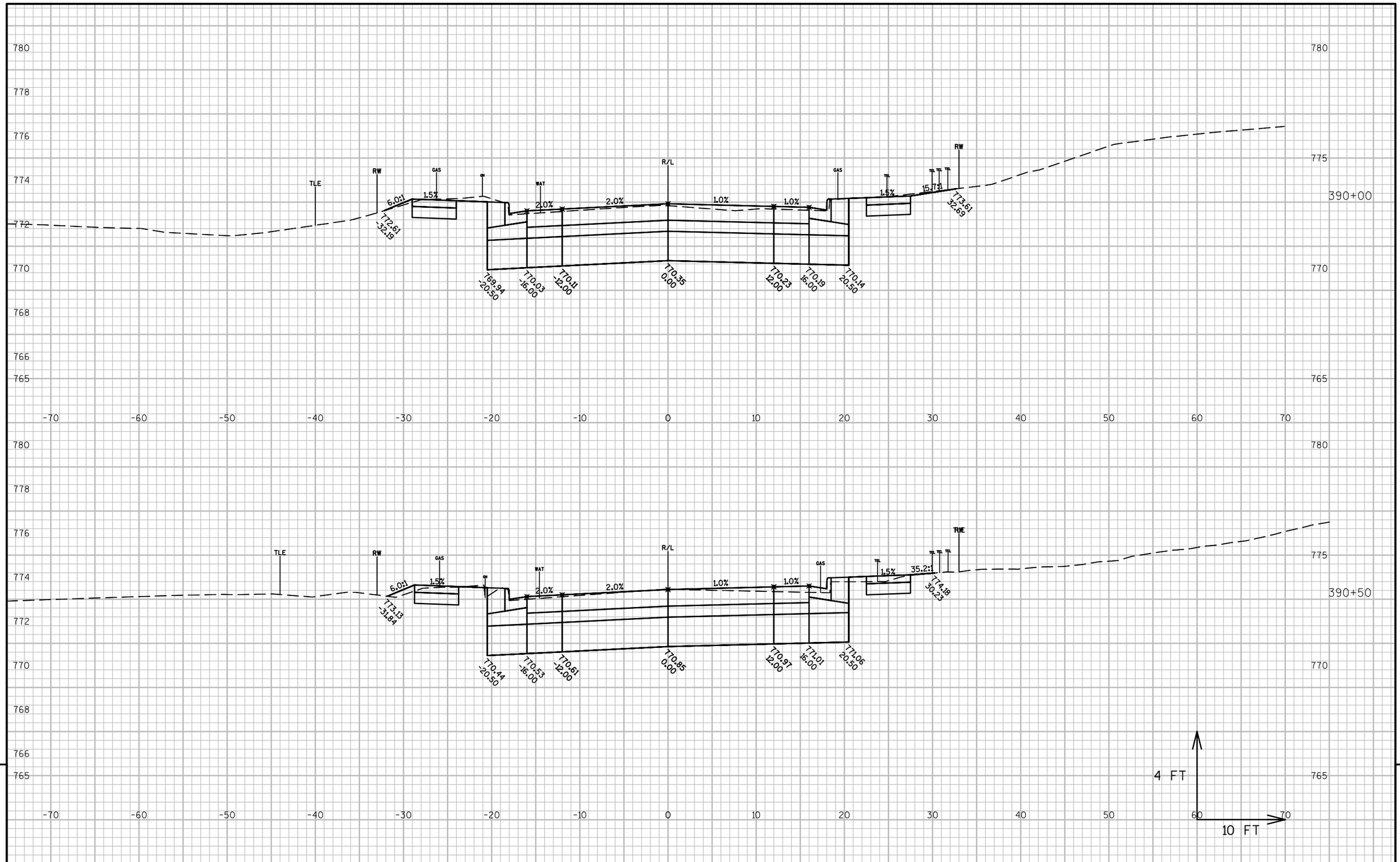


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 899	E

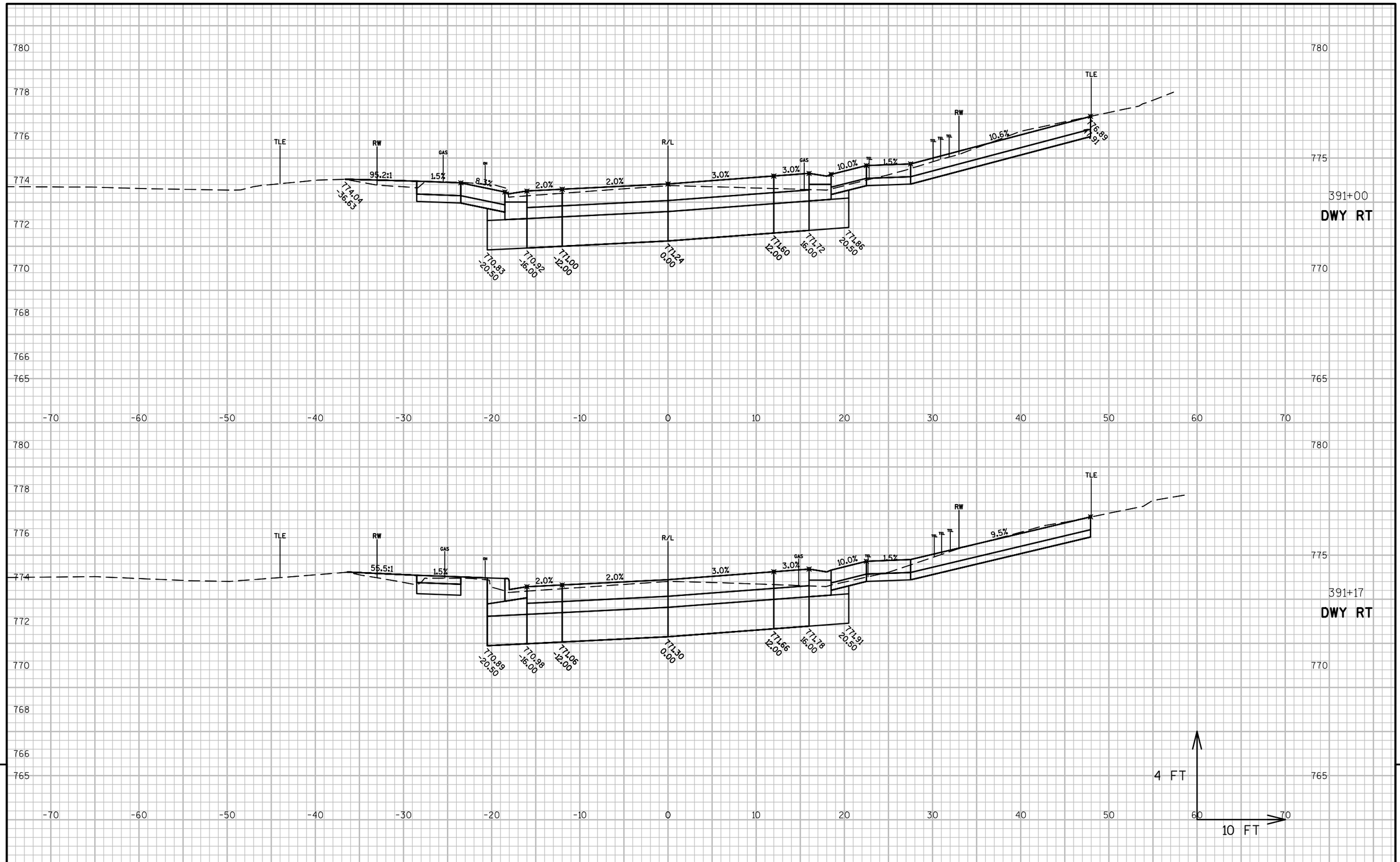
FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****
PLOT DATE : 1/30/2018 4:06 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 900	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 901	E



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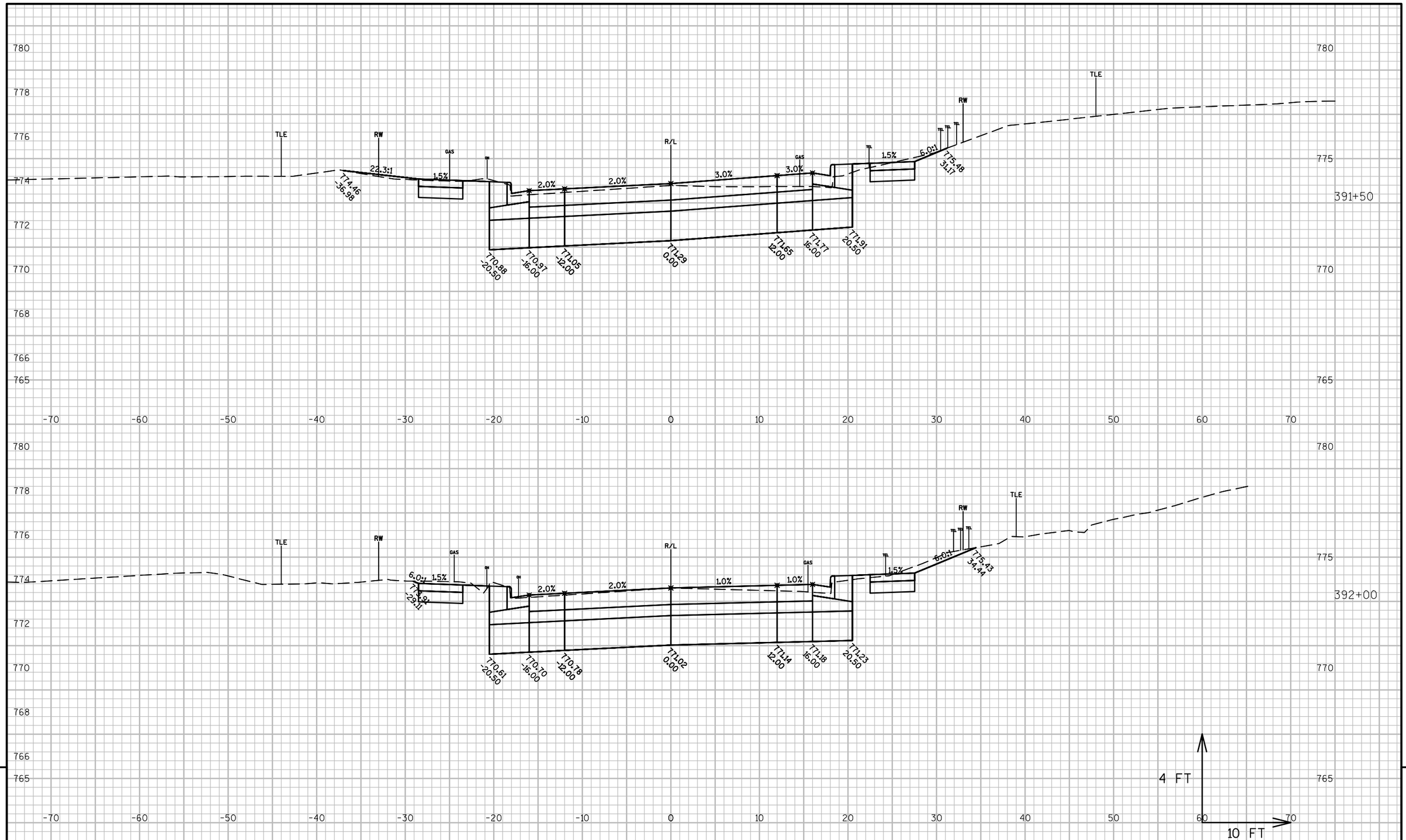
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 902	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:06 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

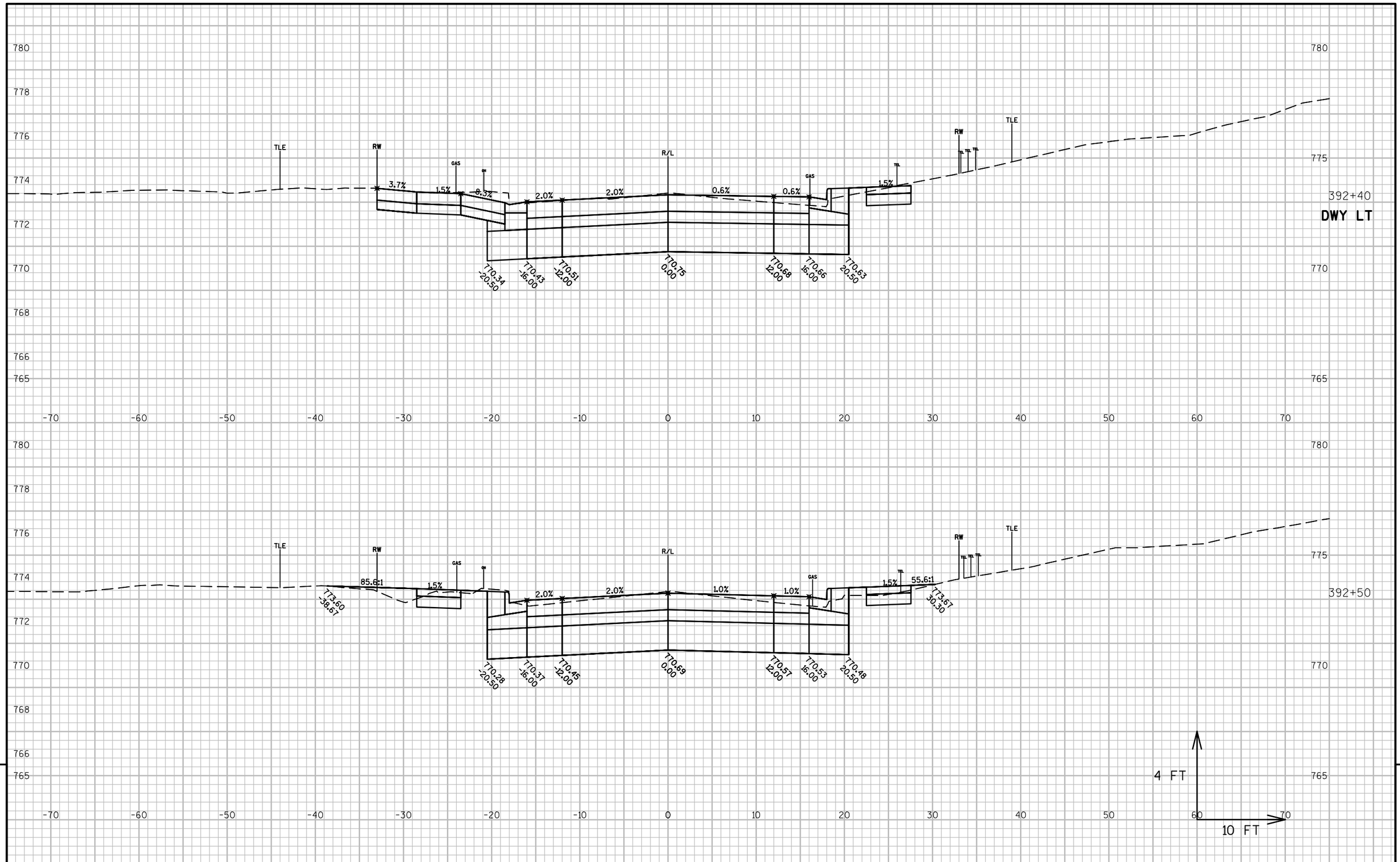


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 903	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 4/18/2018 12:48 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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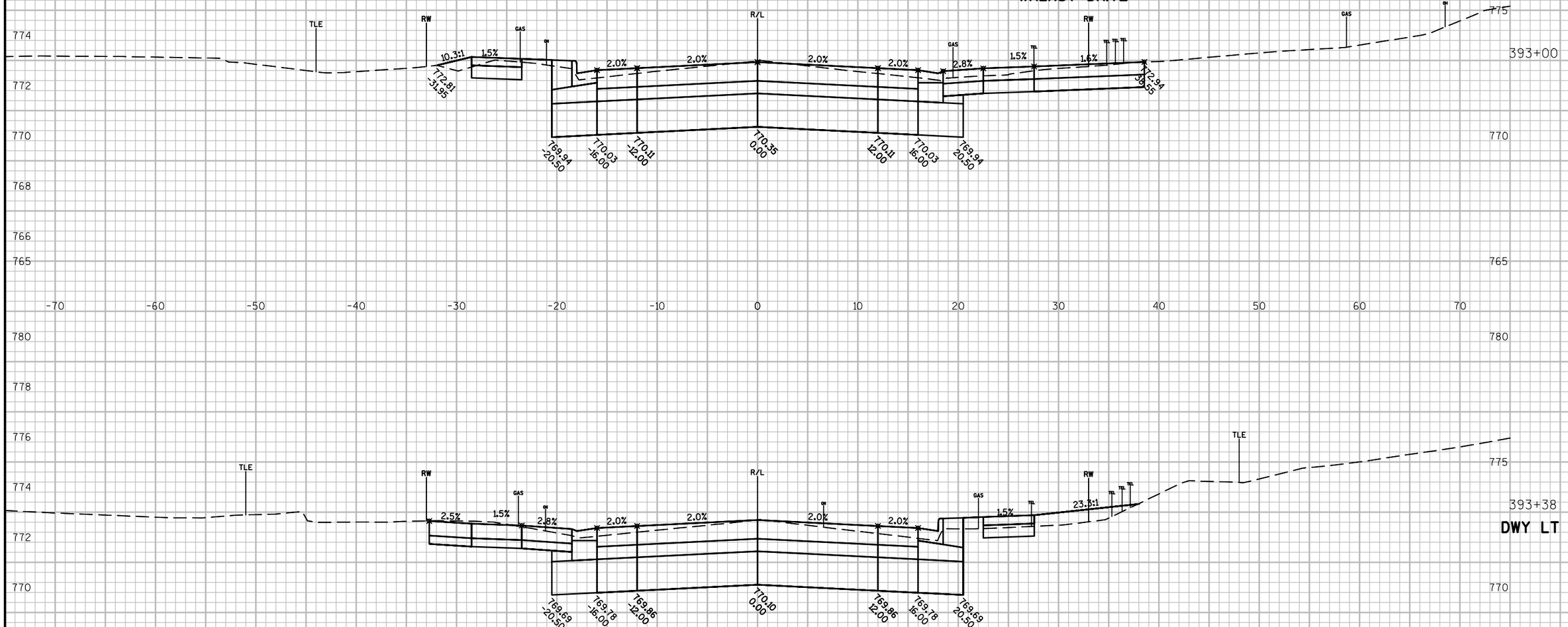
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 904	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:07 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WALNUT DRIVE

393+00

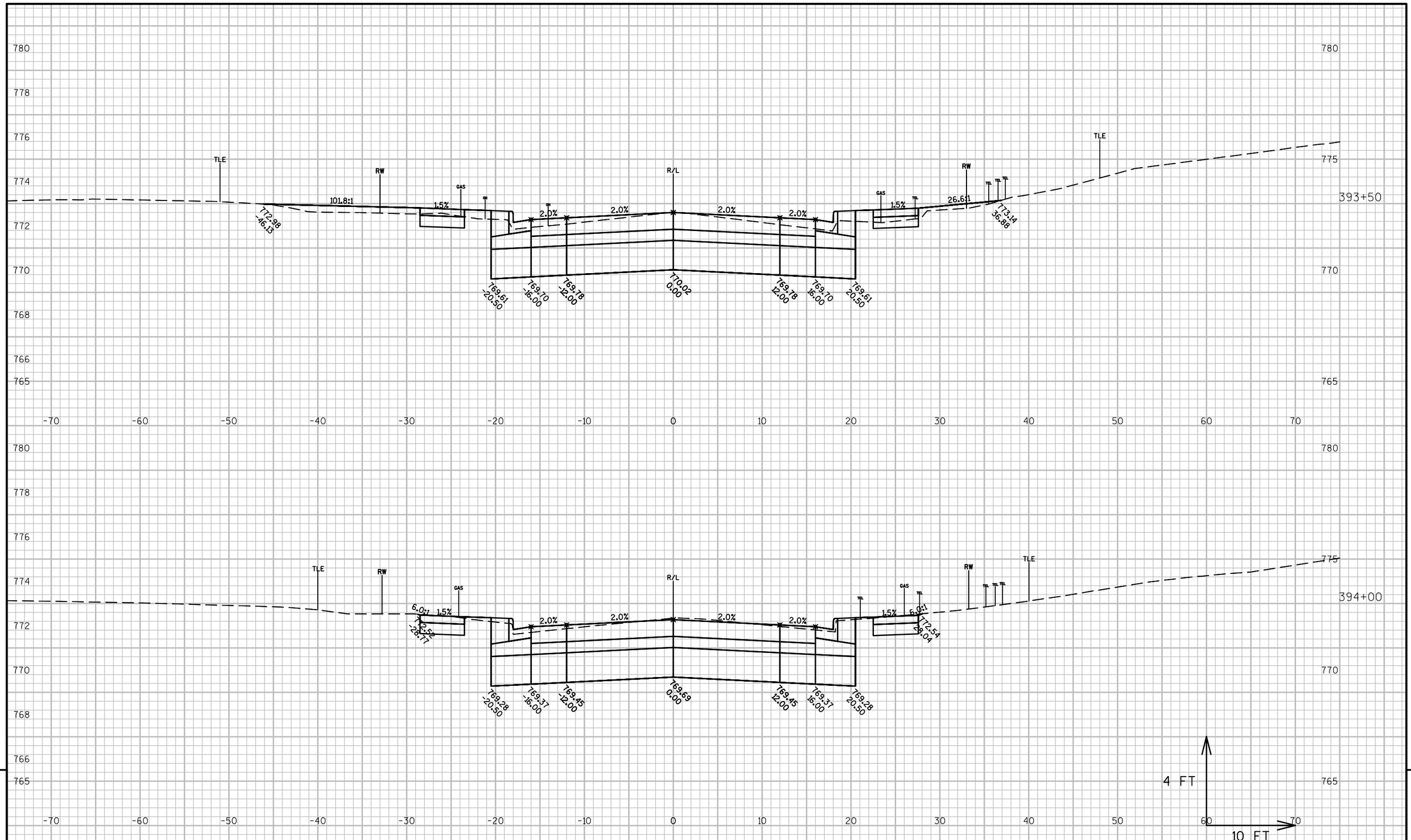


393+38

DWY LT

9 9

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 905	E



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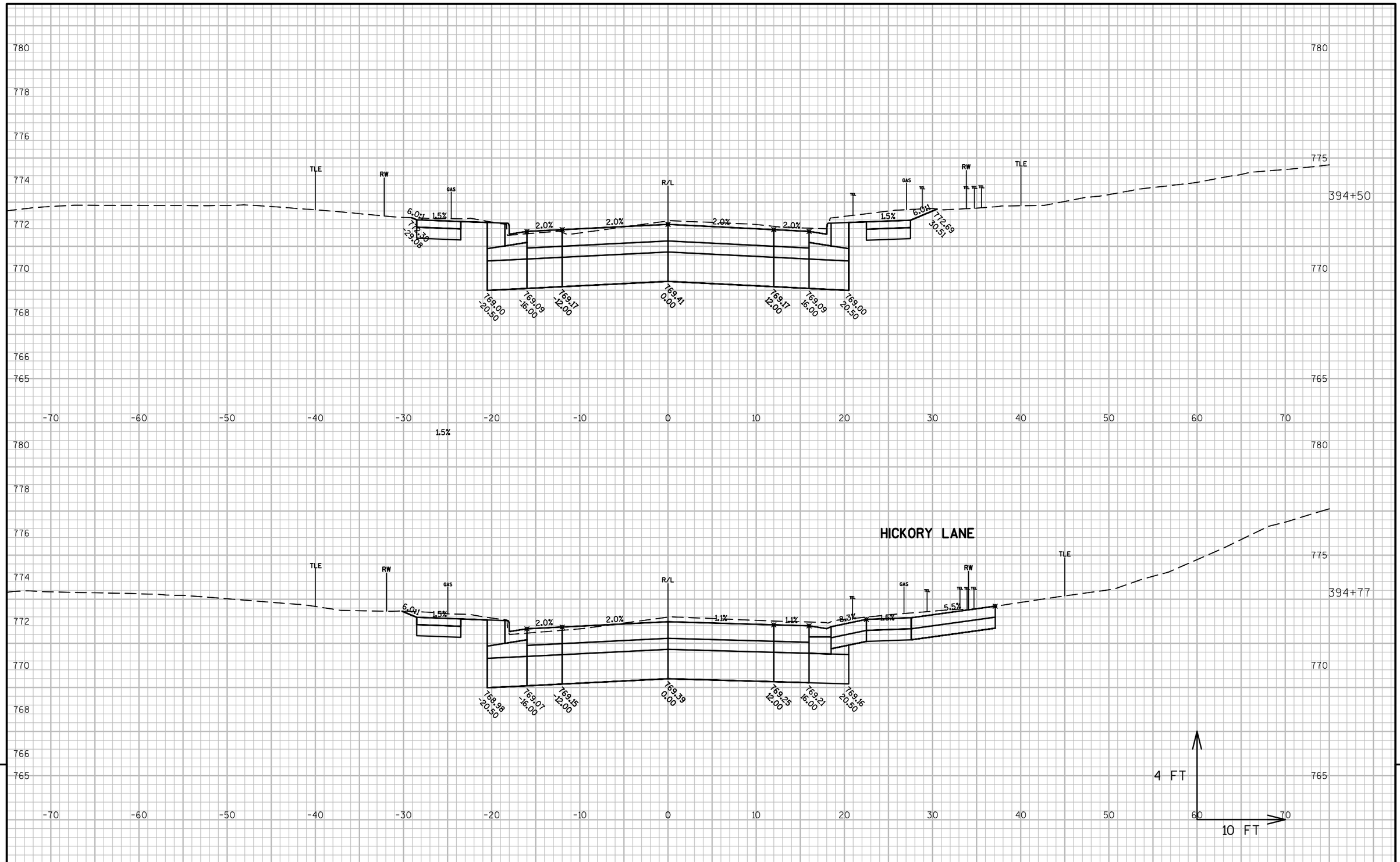
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 906	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:07 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

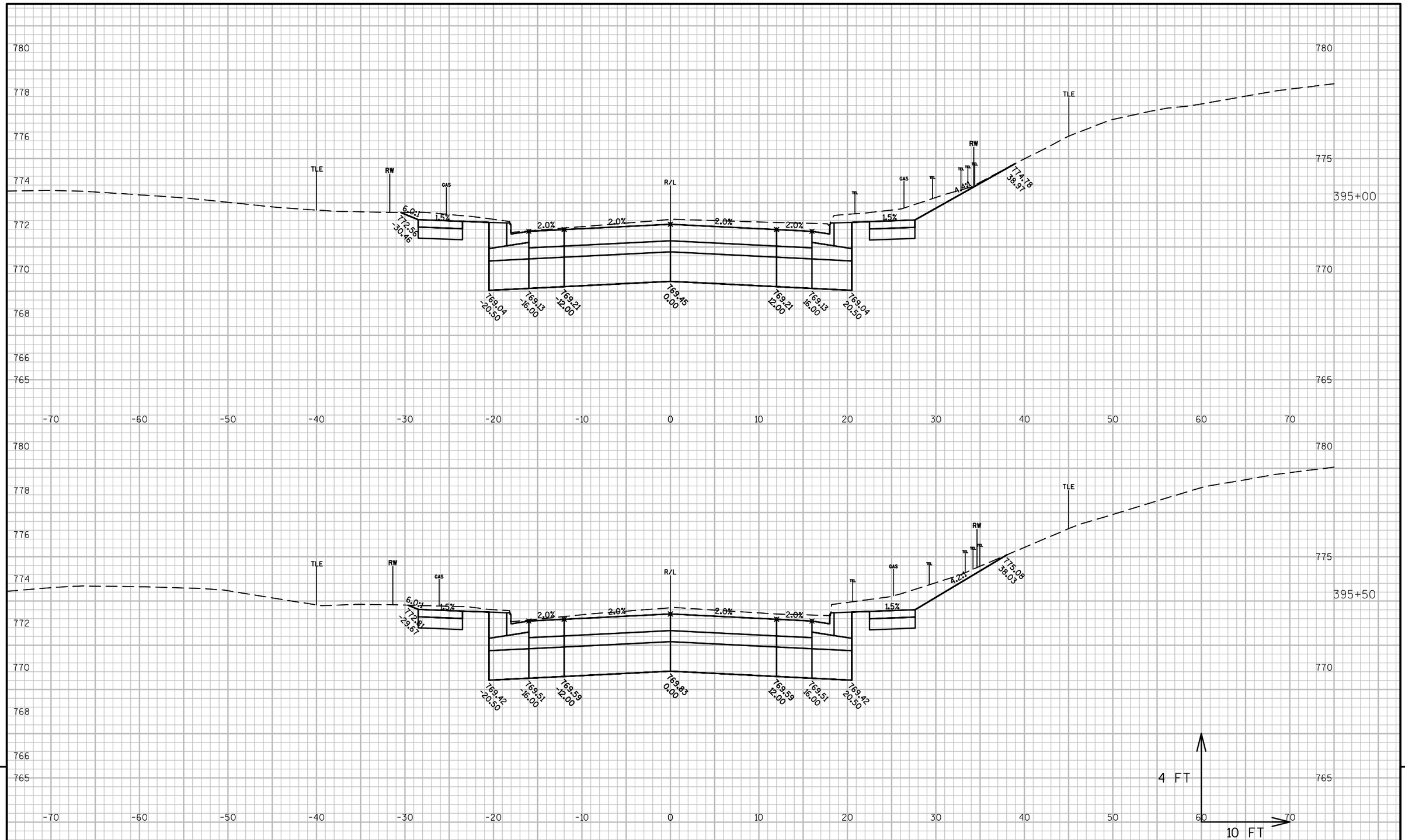


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 907	E

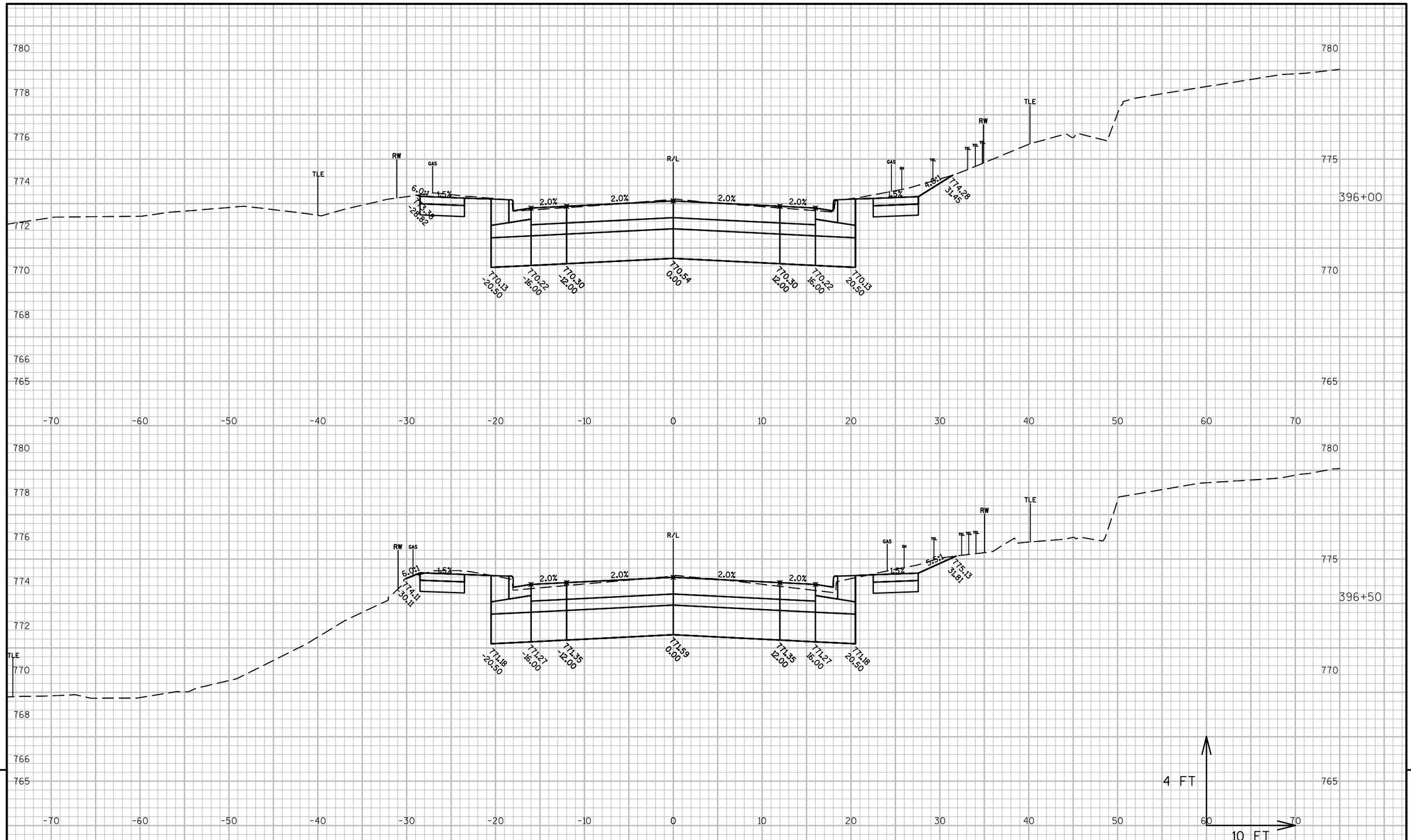
FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 4/18/2018 12:46 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 908	E



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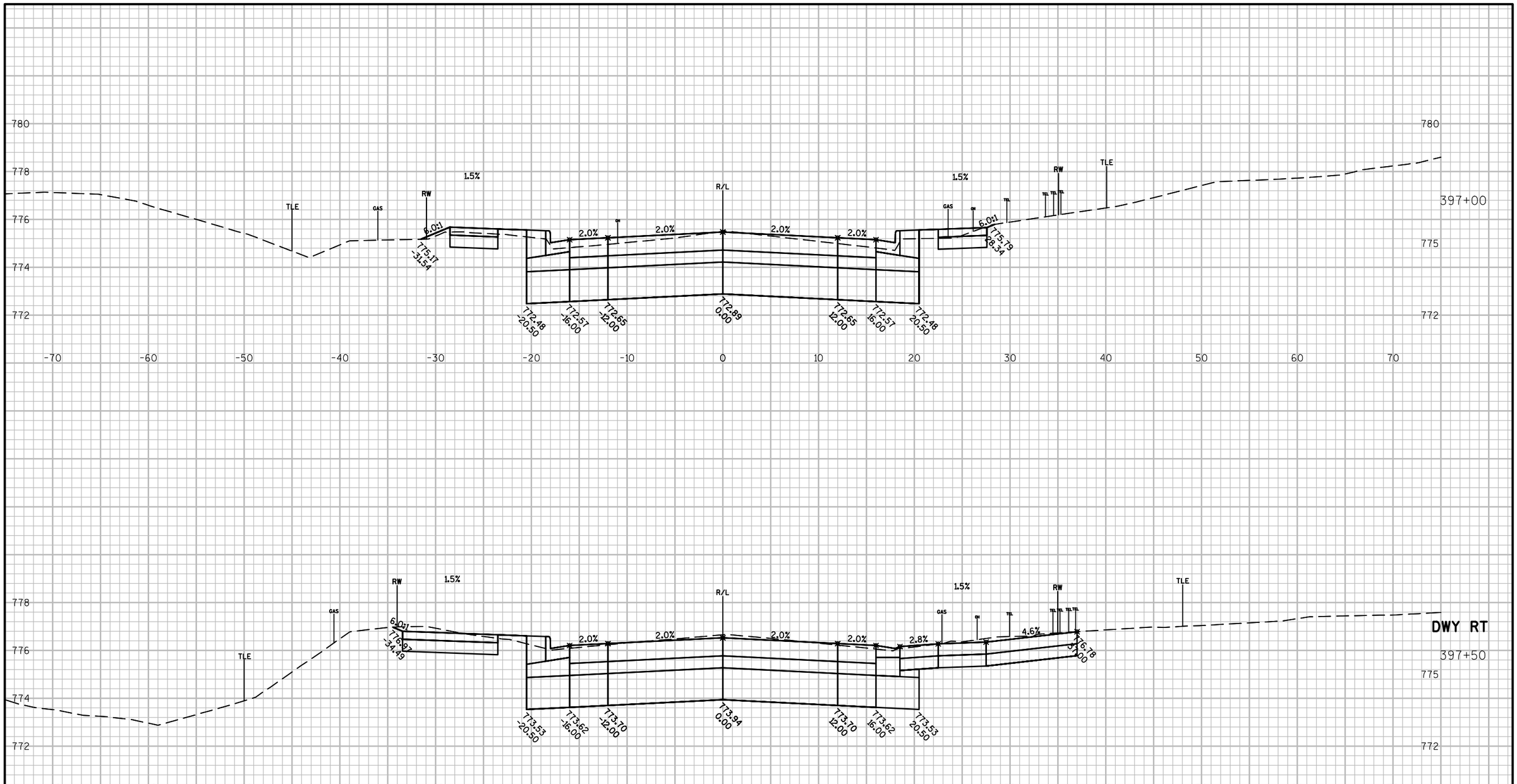
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 909	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:08 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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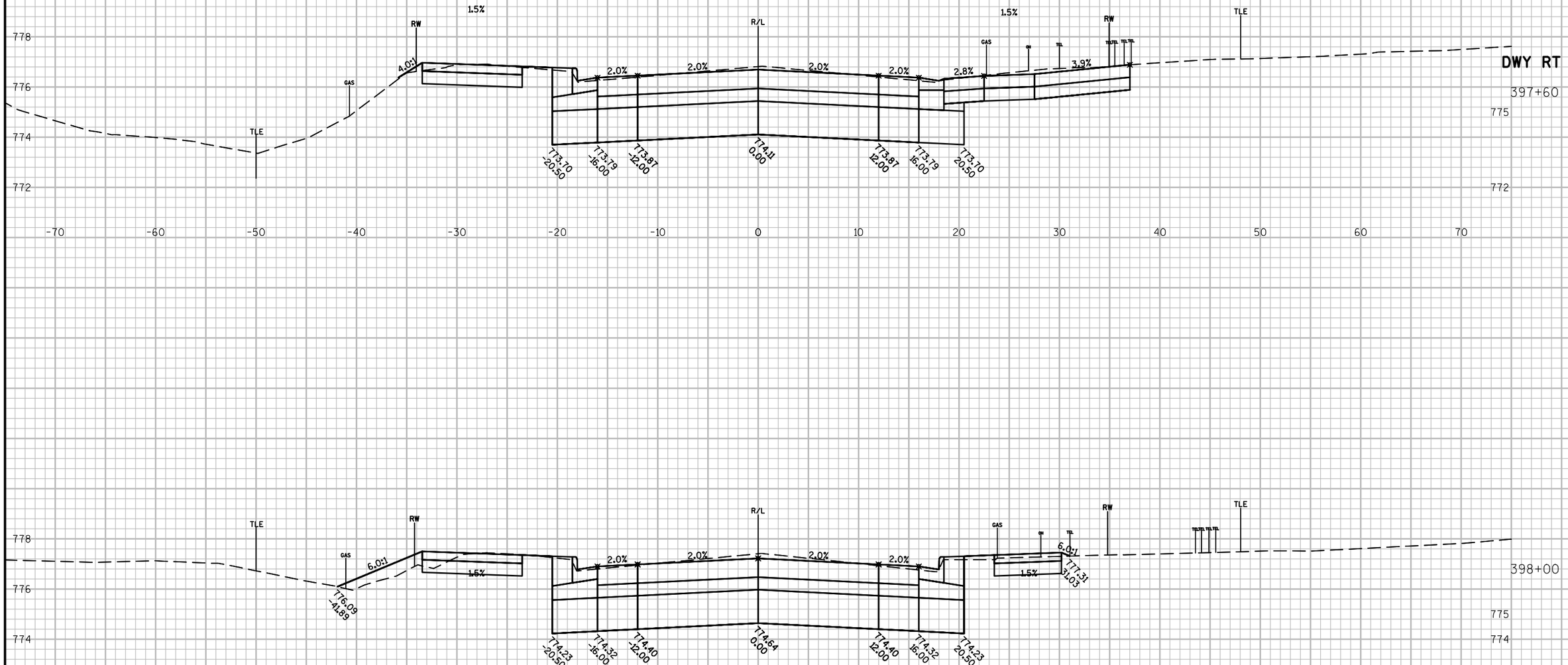
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 910	E

9



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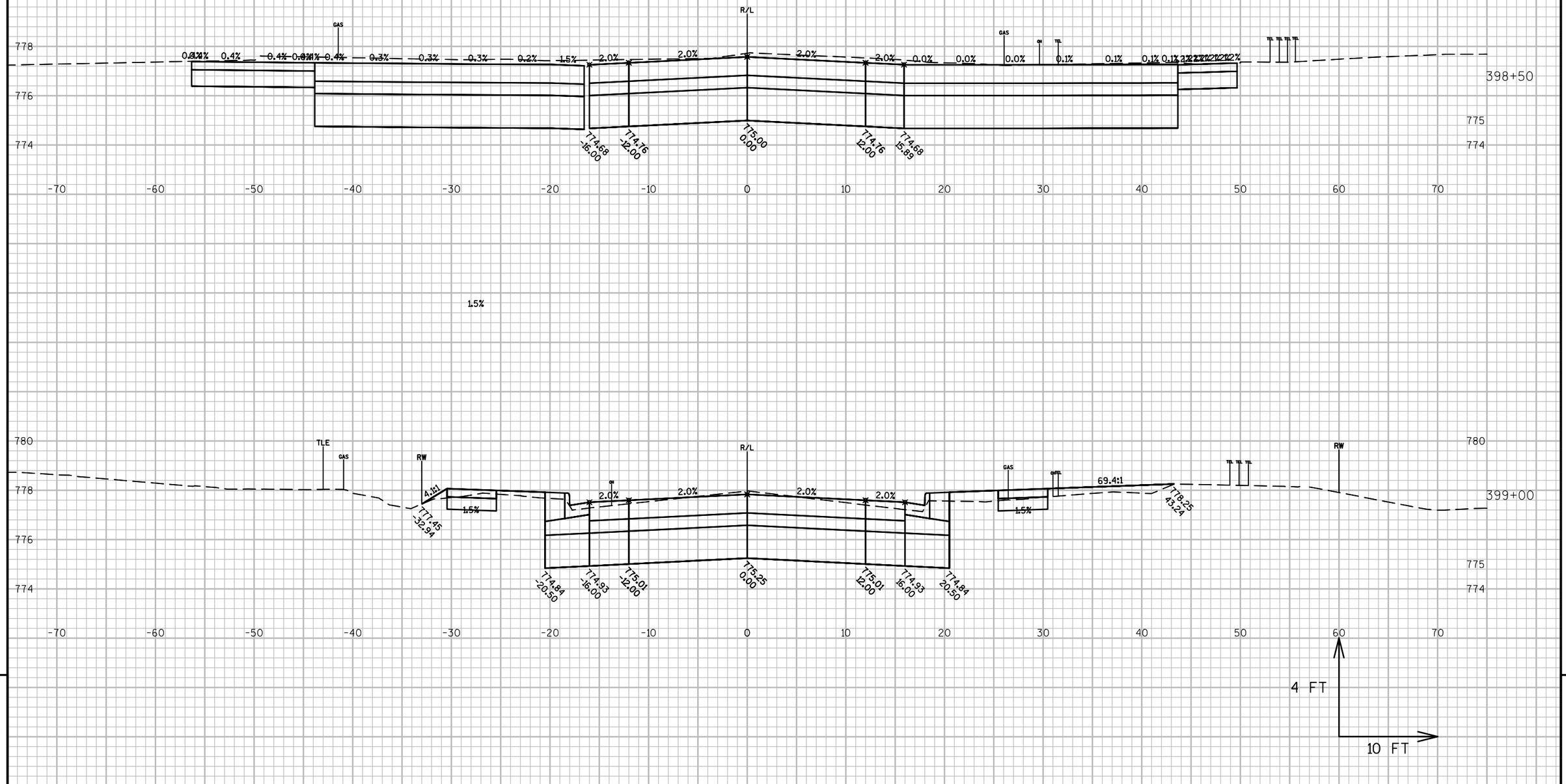
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 911	E

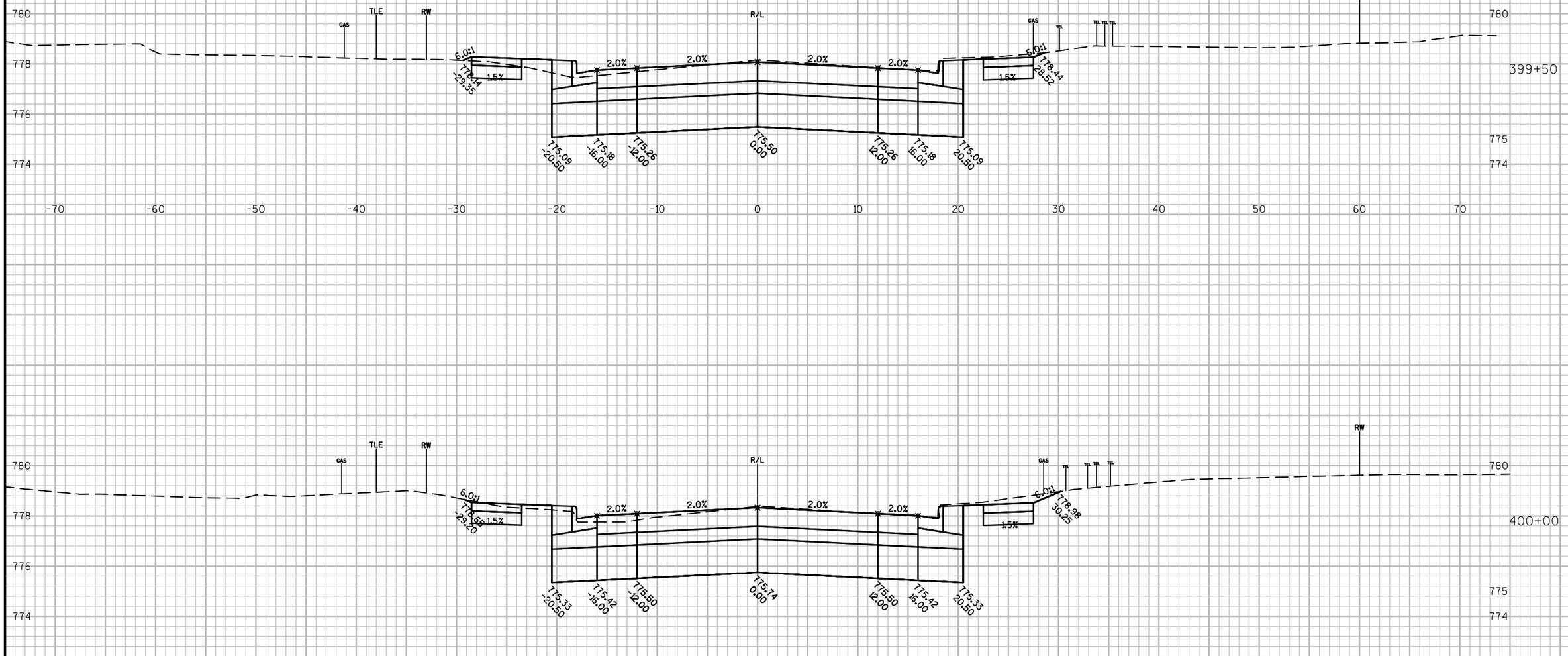
FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****
PLOT DATE : 1/30/2018 4:09 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

EVERGREEN DRIVE



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 912	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****
PLOT DATE : 1/30/2018 4:09 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



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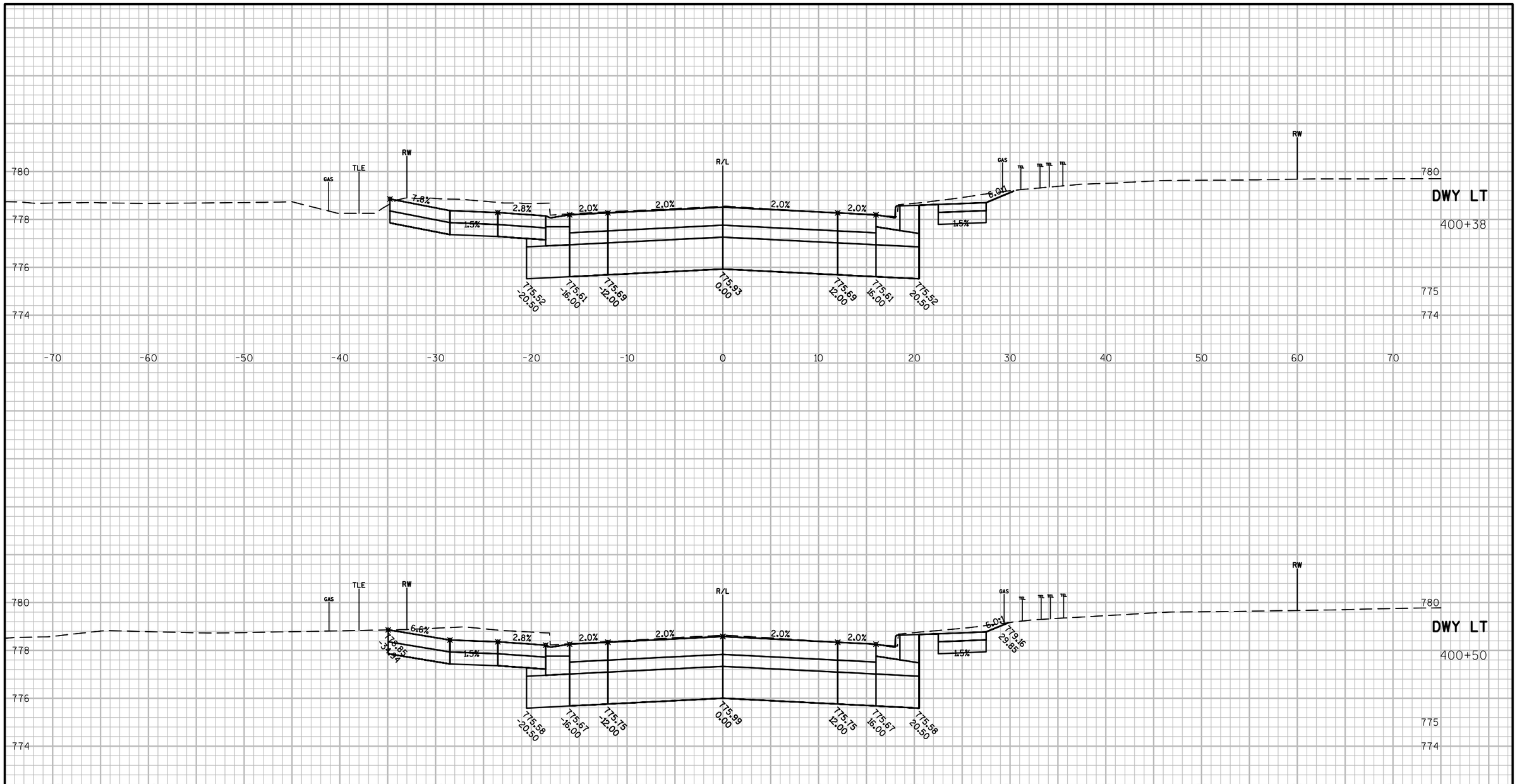
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 913	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:09 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

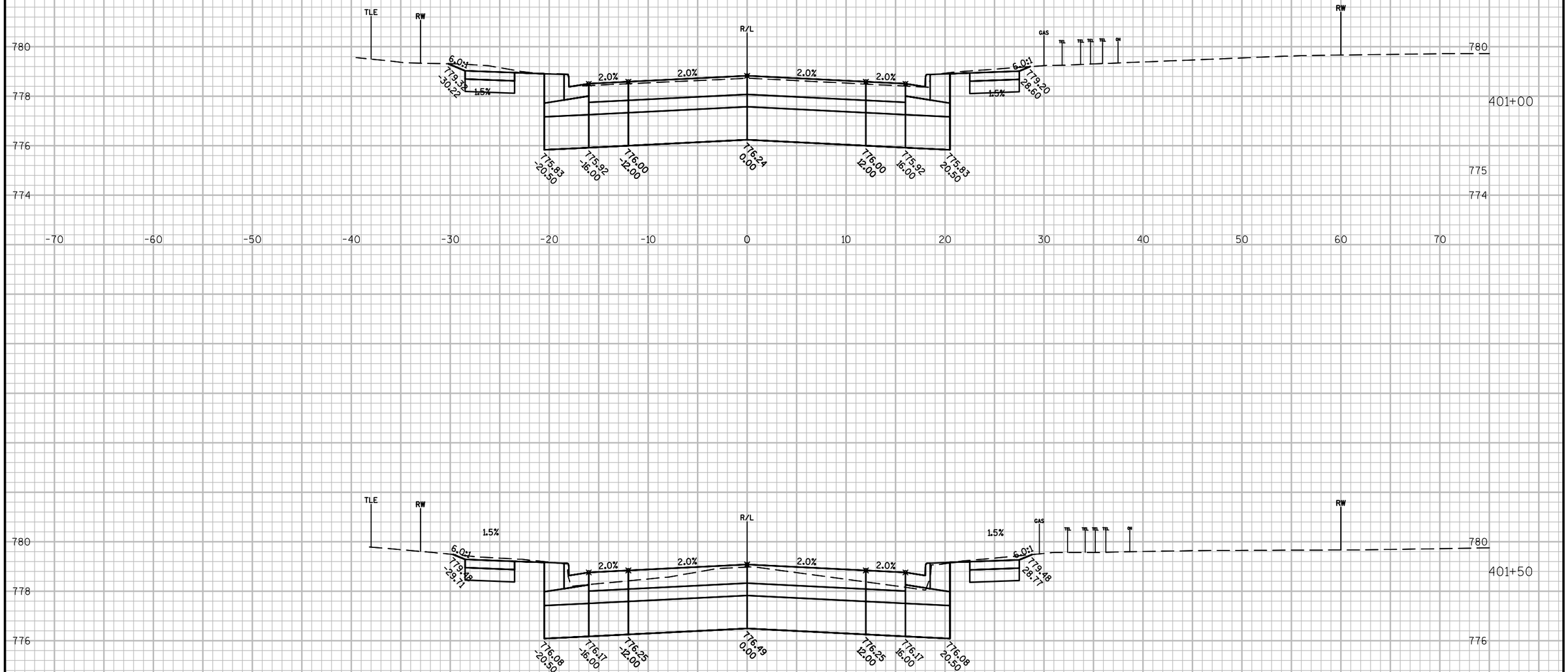


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 914	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:09 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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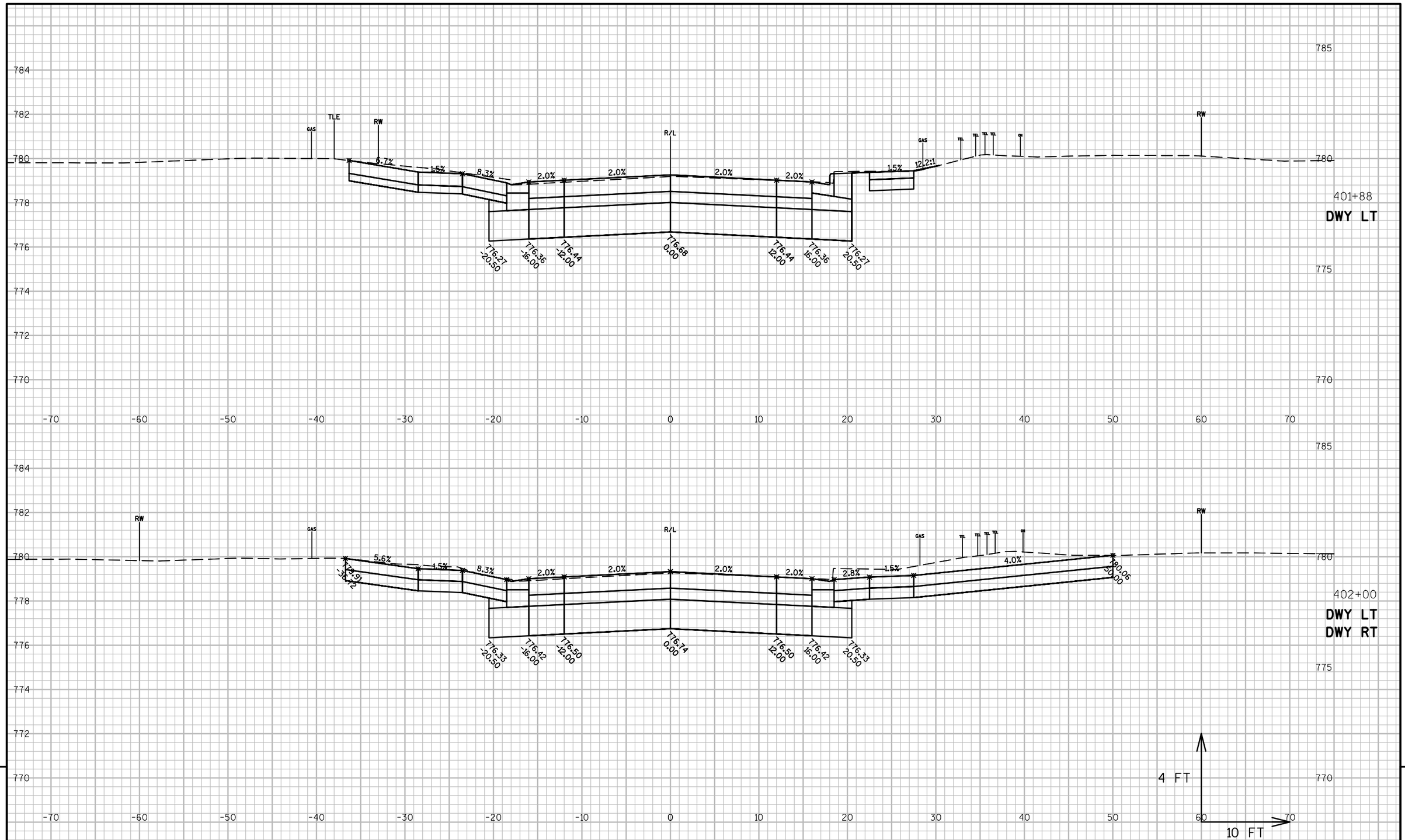
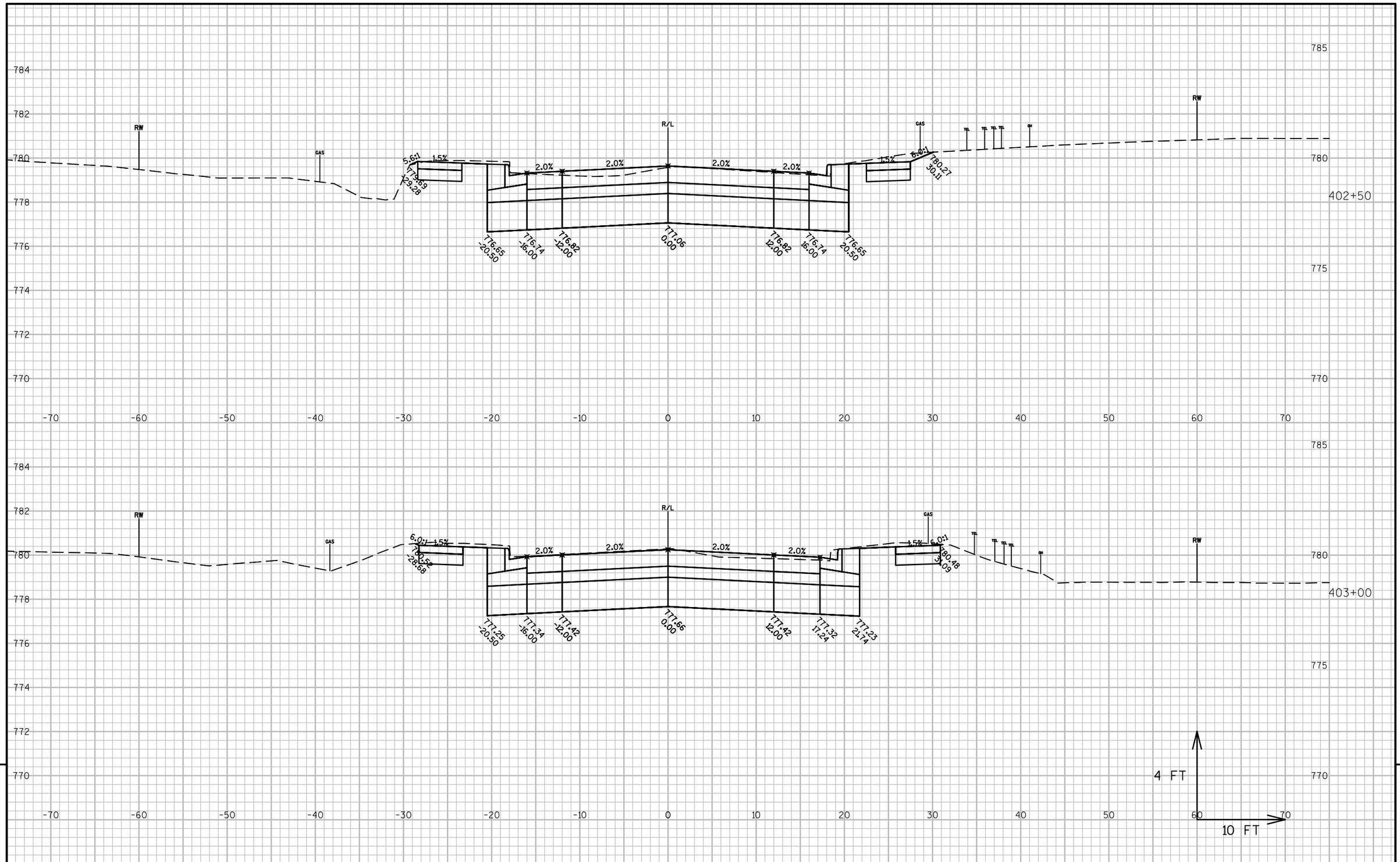
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 915	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****
PLOT DATE : 1/30/2018 4:10 PM
PLOT BY : TONY BUBLITZ
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 916	E



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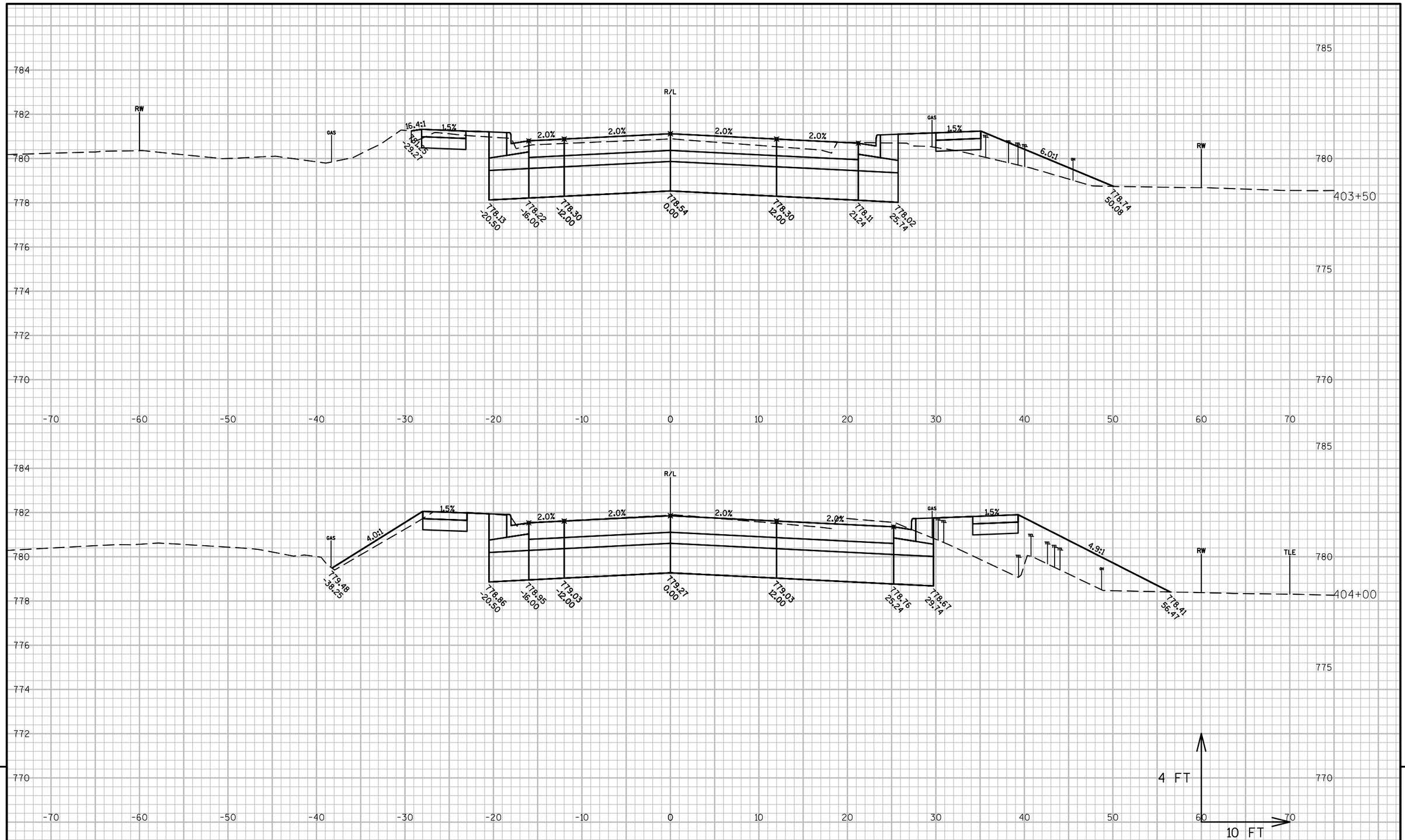
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 917	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:10 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

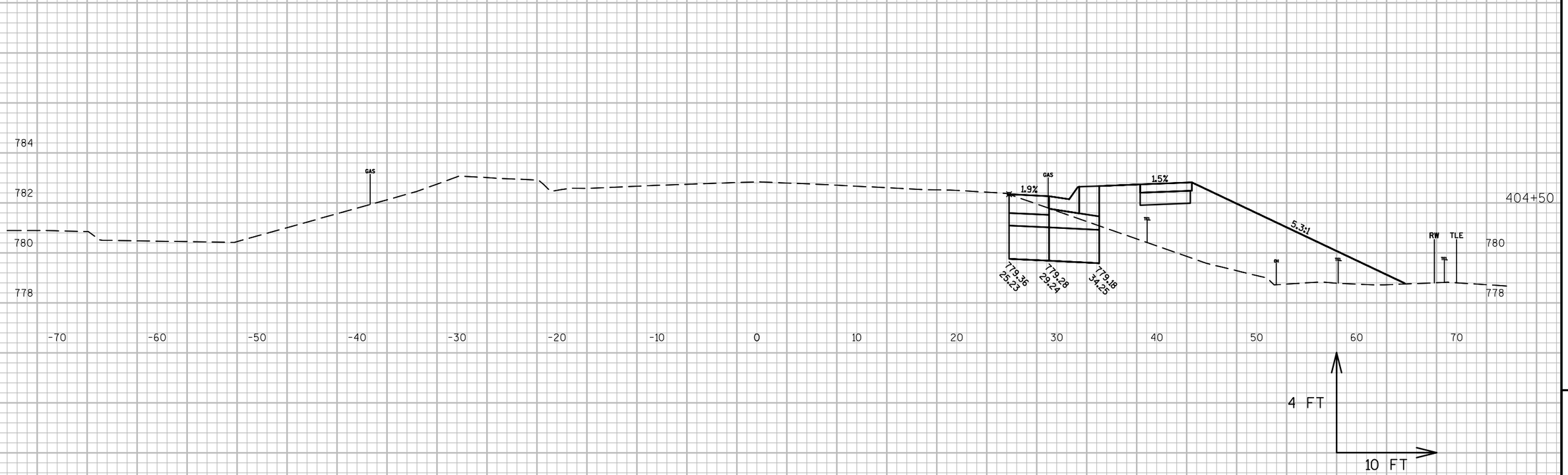


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 918	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:10 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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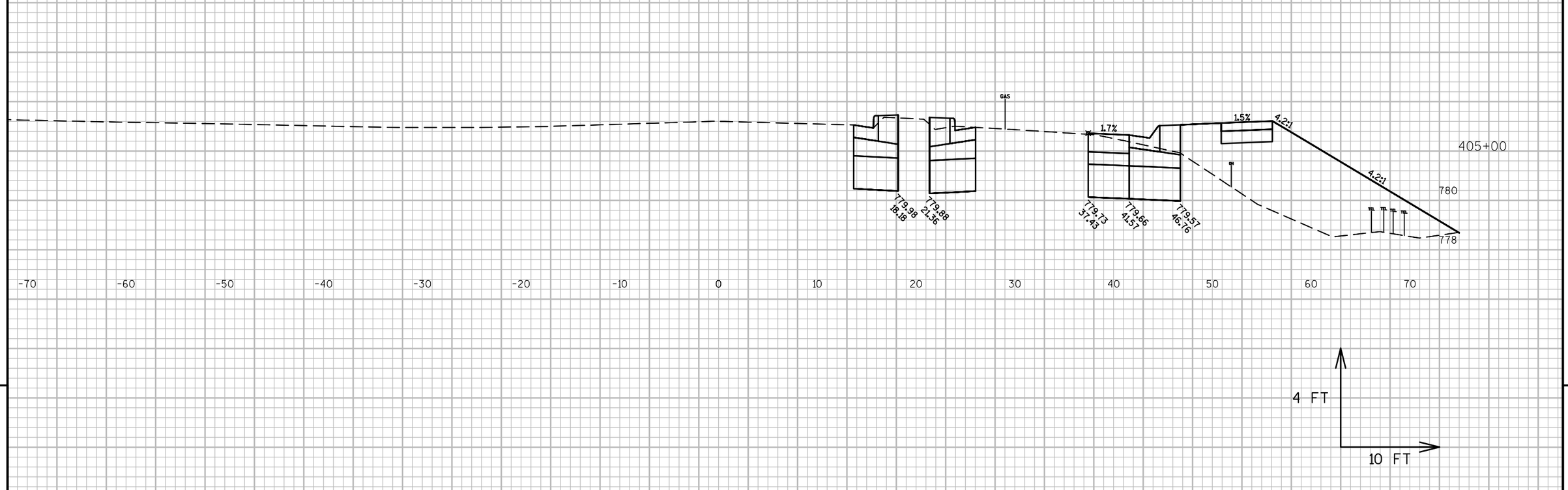
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 919	E



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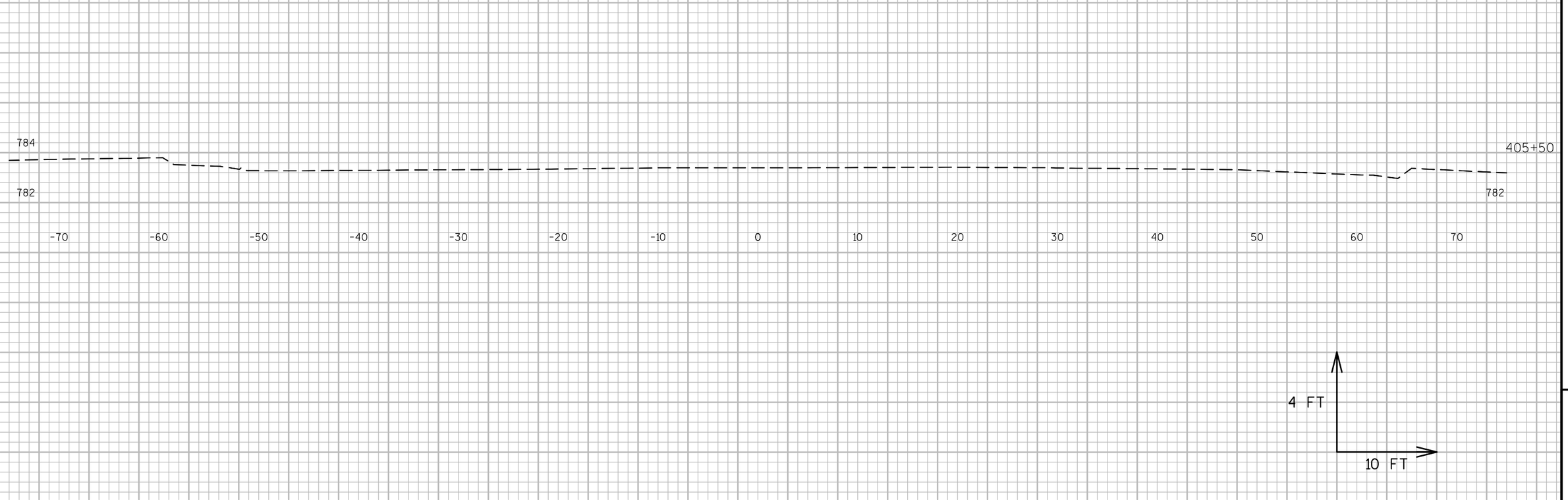
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 920	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:11 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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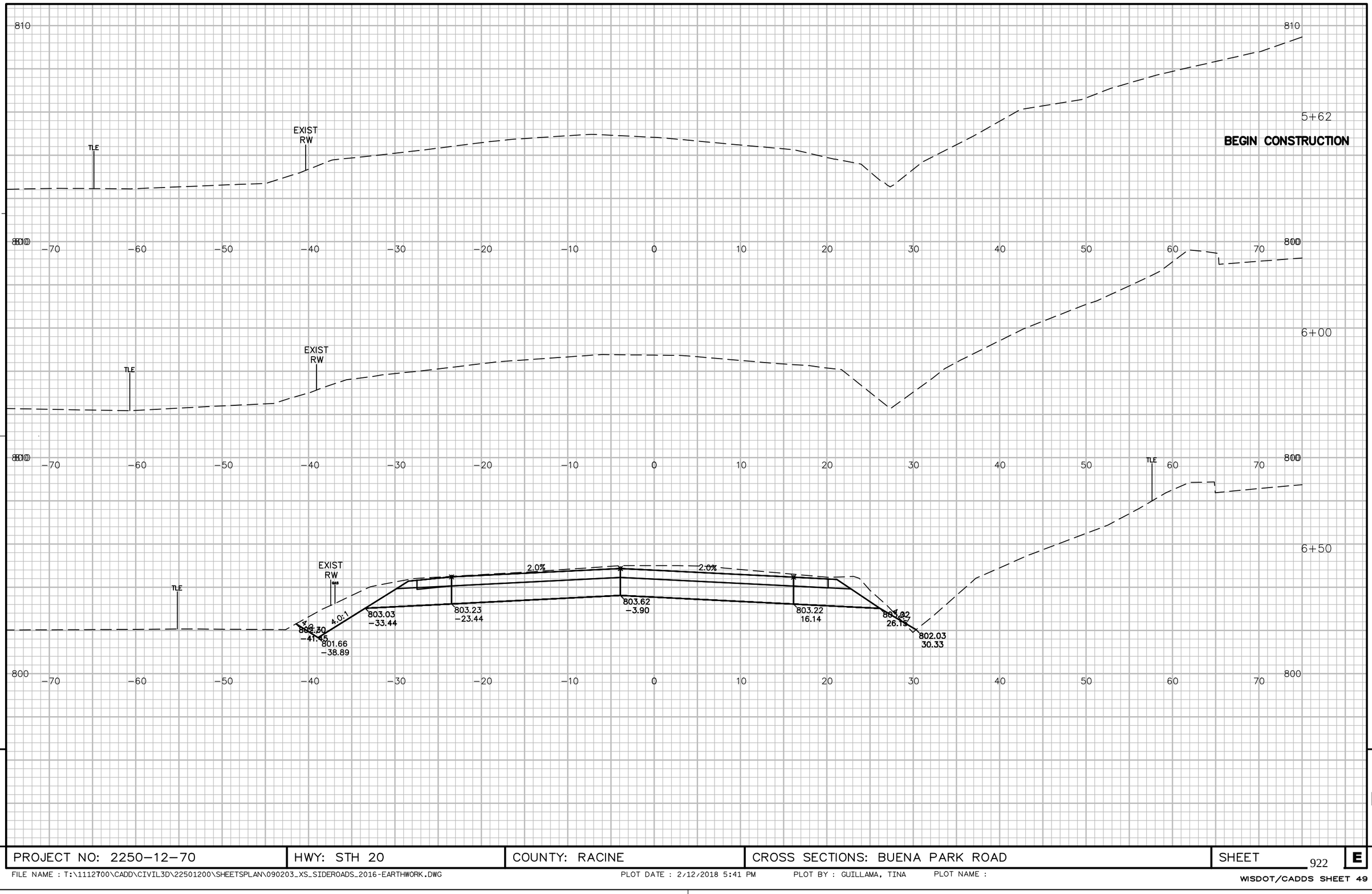
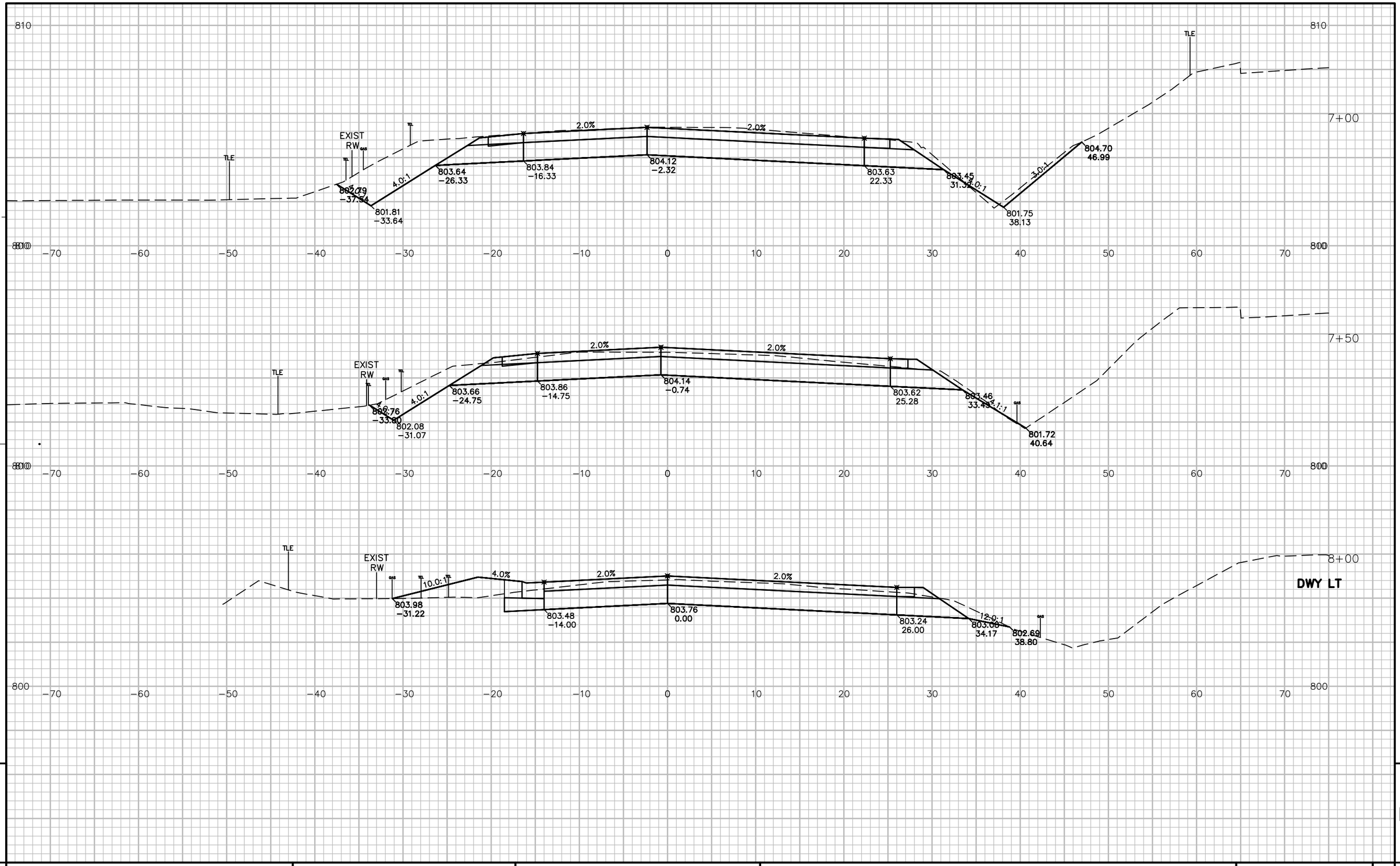
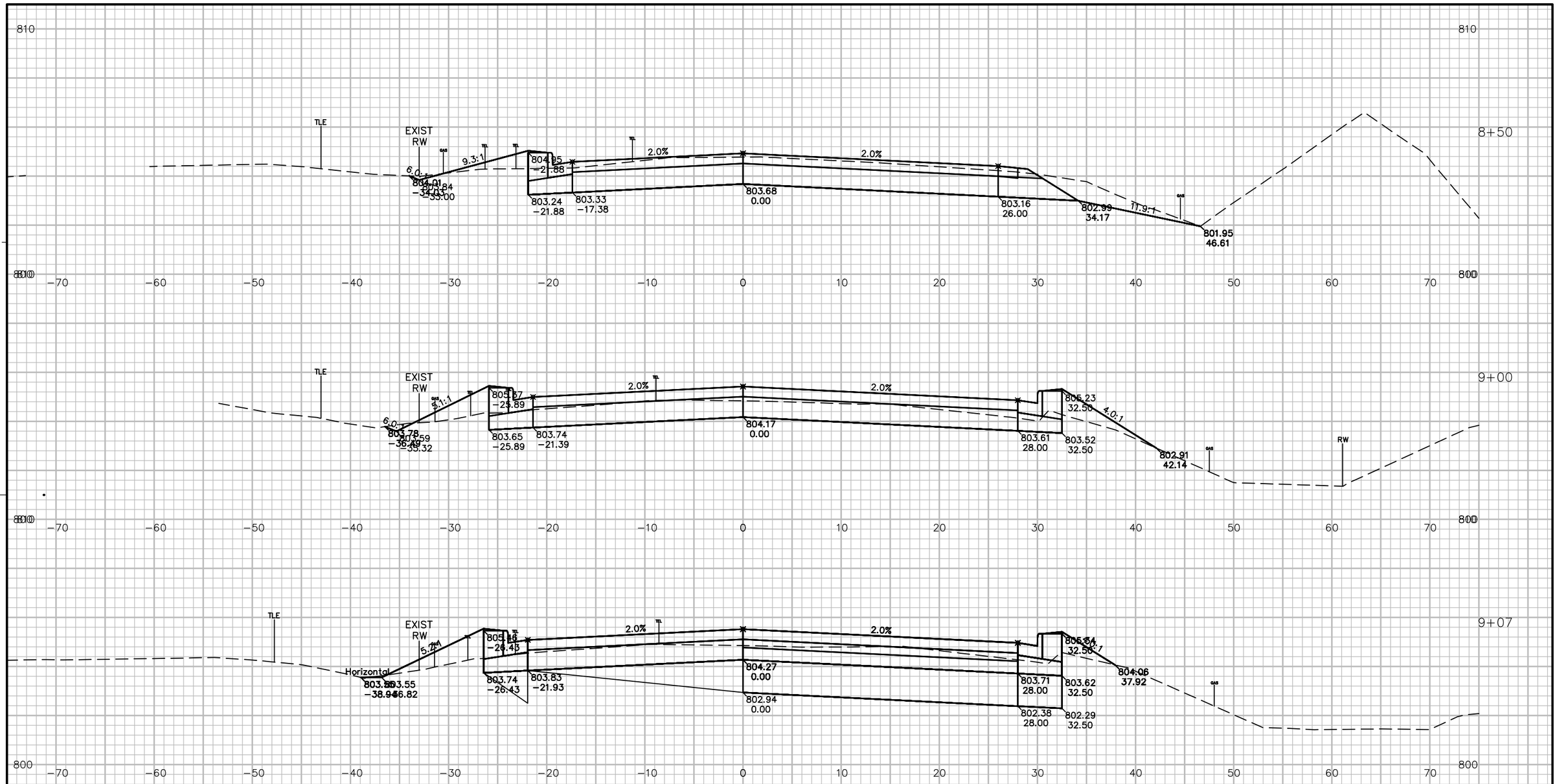
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 921	E



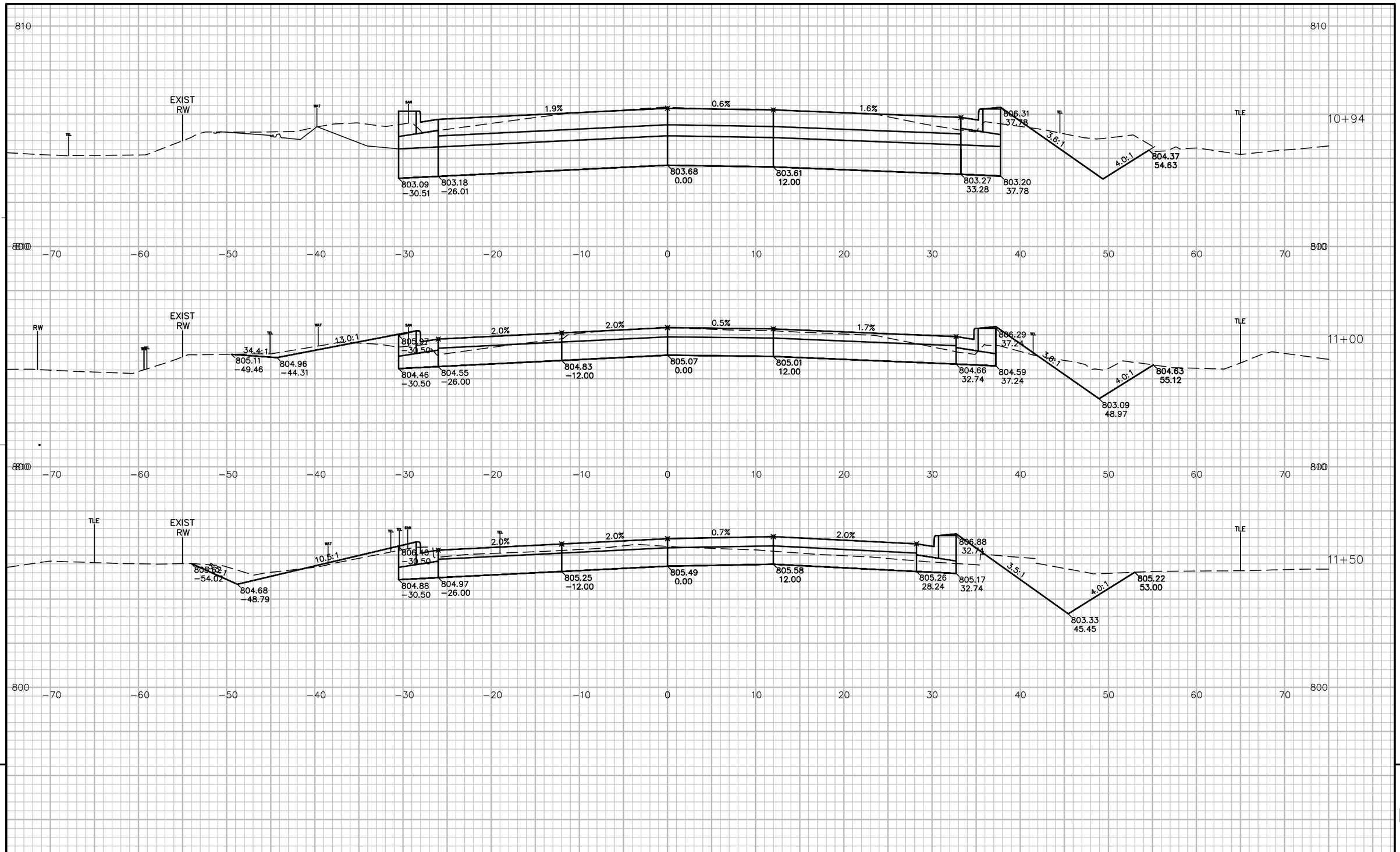
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: BUENA PARK ROAD	SHEET 922	E



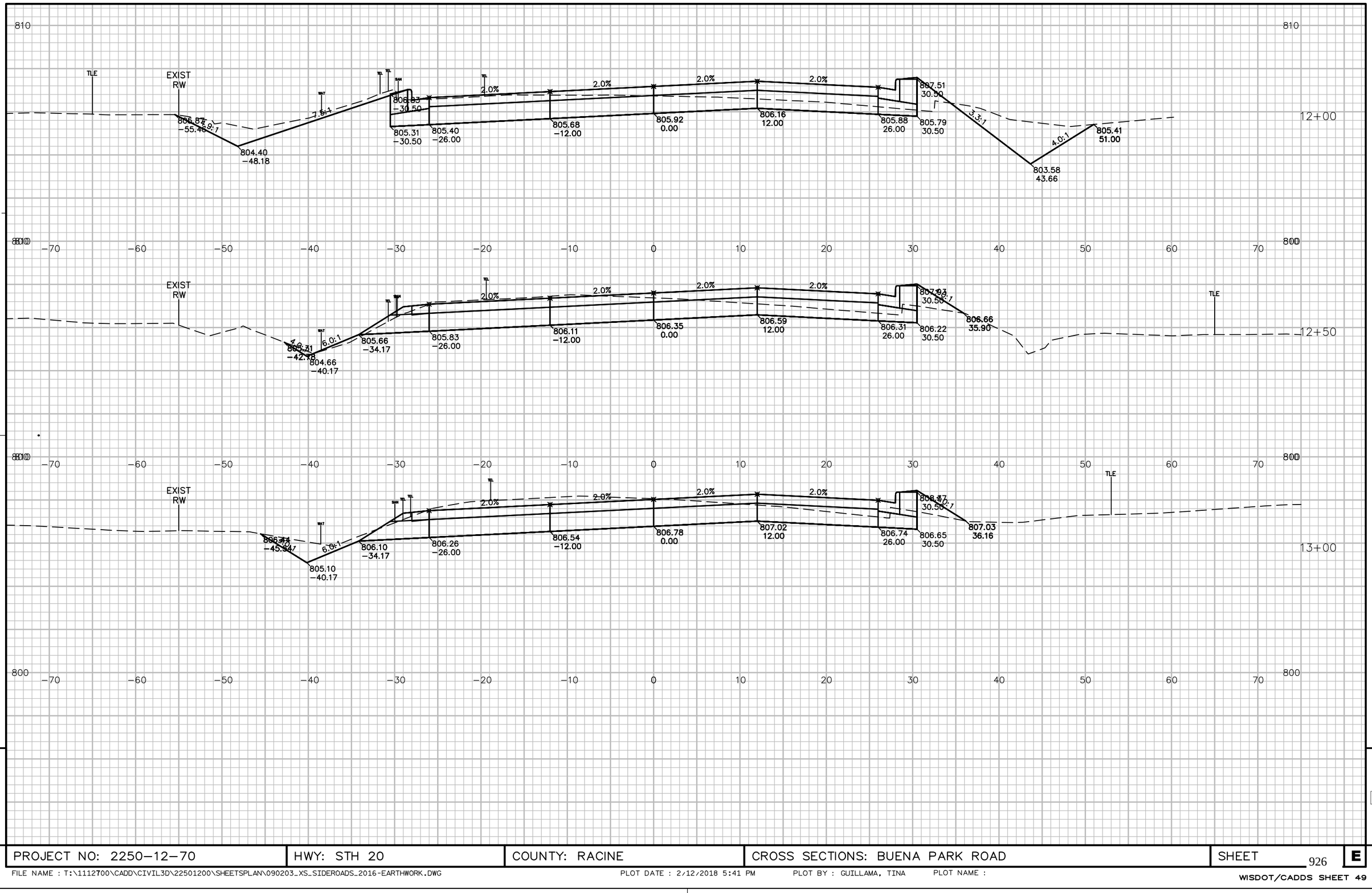
PROJECT NO: 2250−12−70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: BUENA PARK ROAD	SHEET 923	E



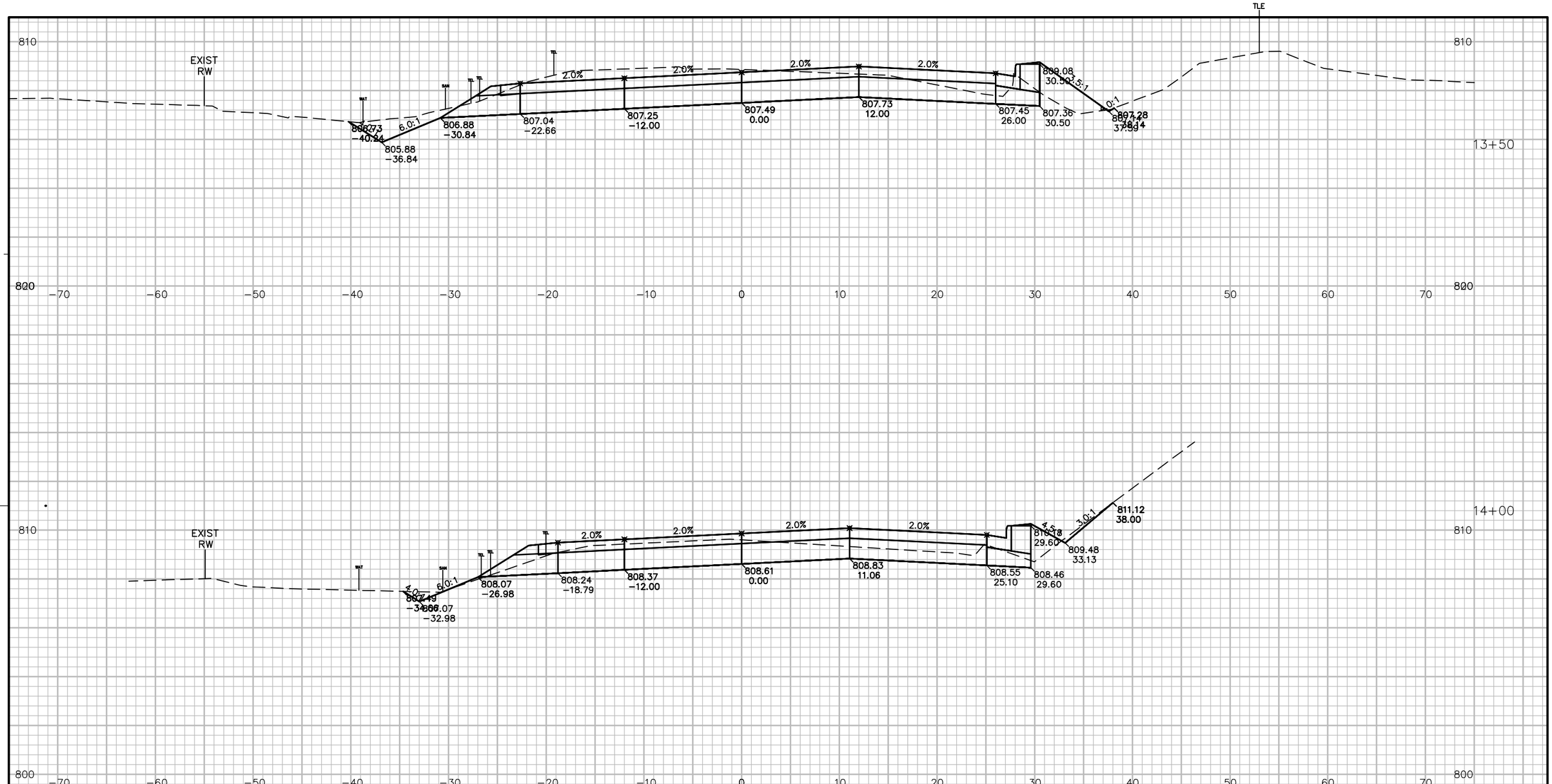
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: BUENA PARK ROAD	SHEET 924	E



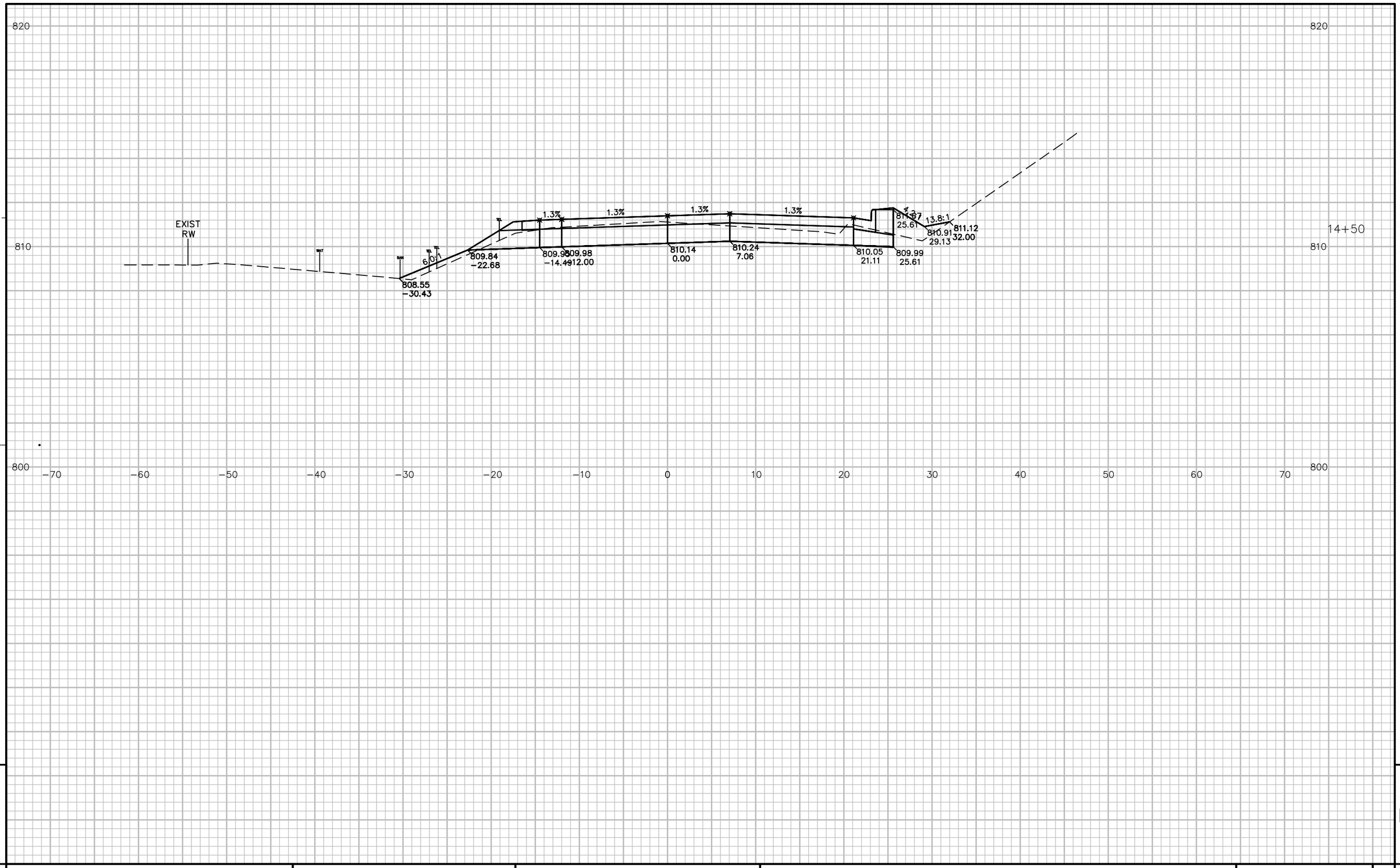
PROJECT NO: 2250−12−70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: BUENA PARK ROAD	SHEET 925	E



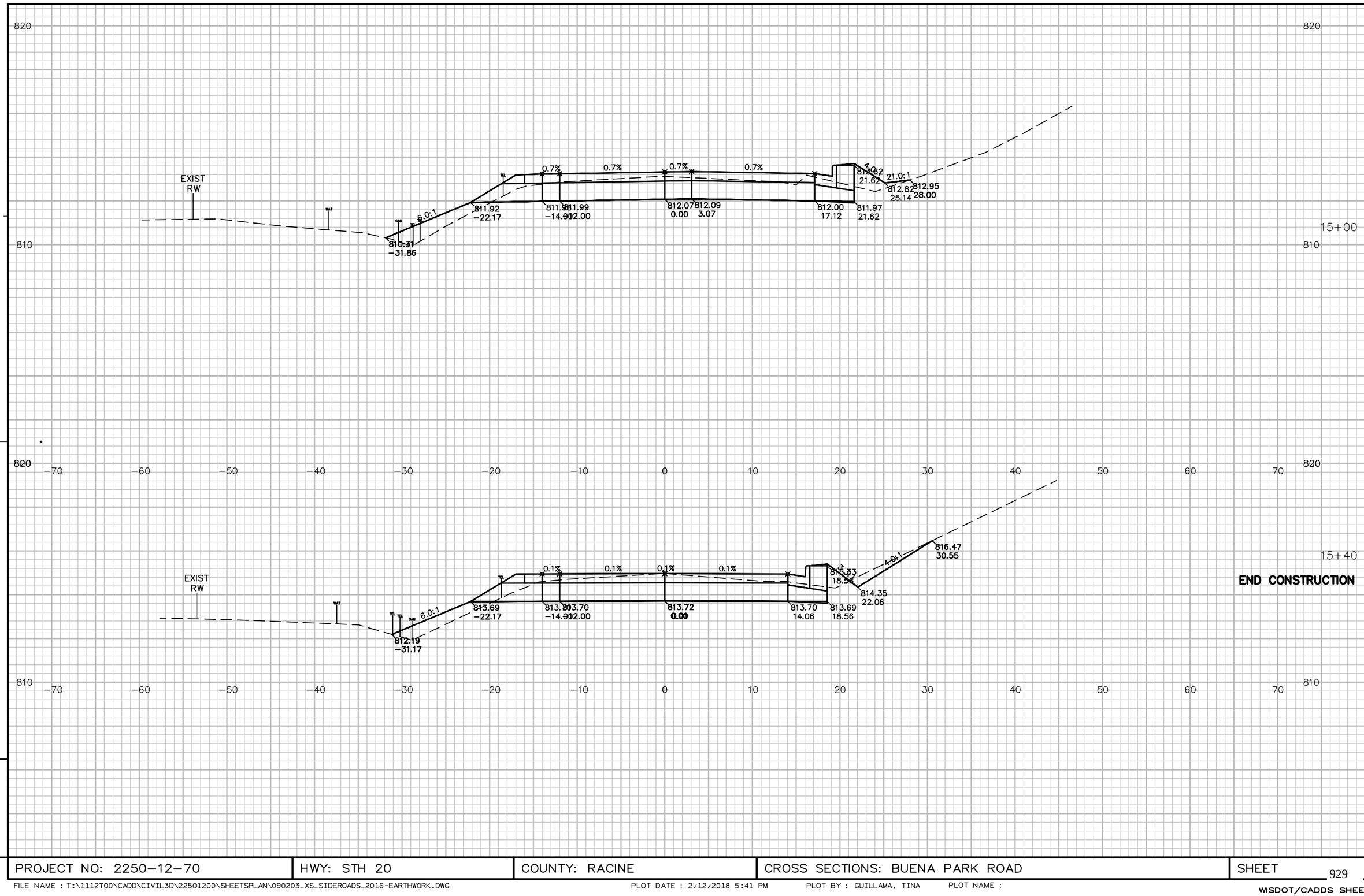
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: BUENA PARK ROAD	SHEET 926	E



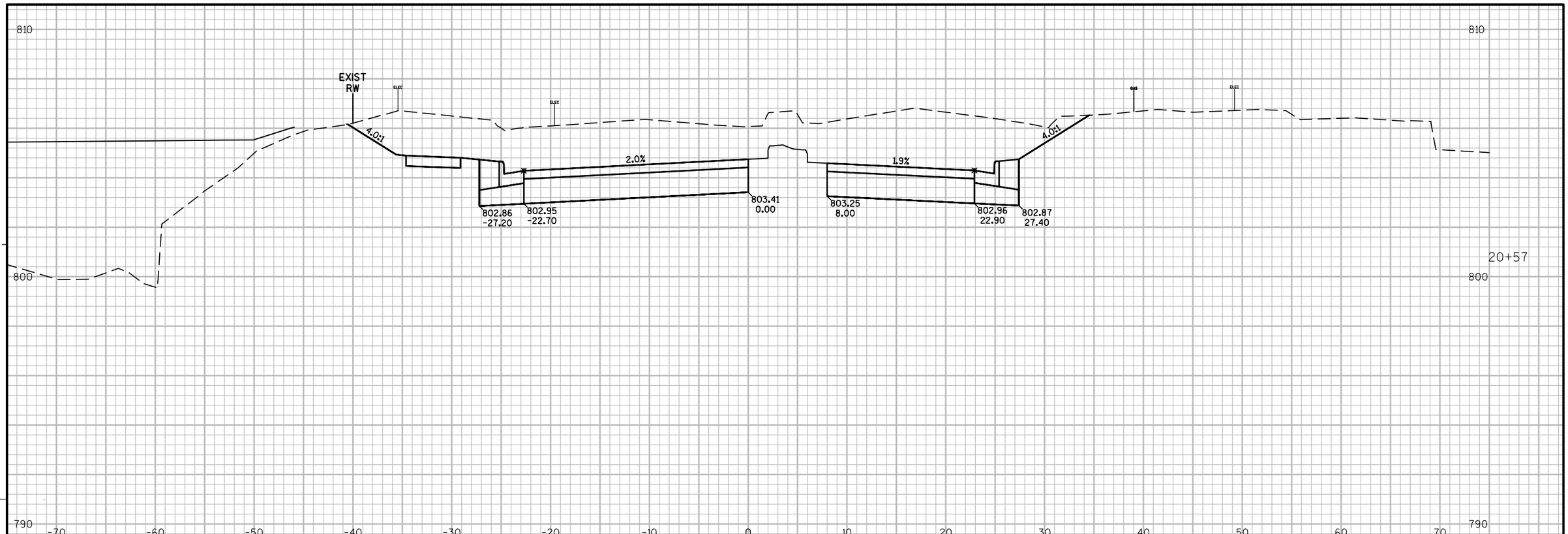
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: BUENA PARK ROAD	SHEET 927	E



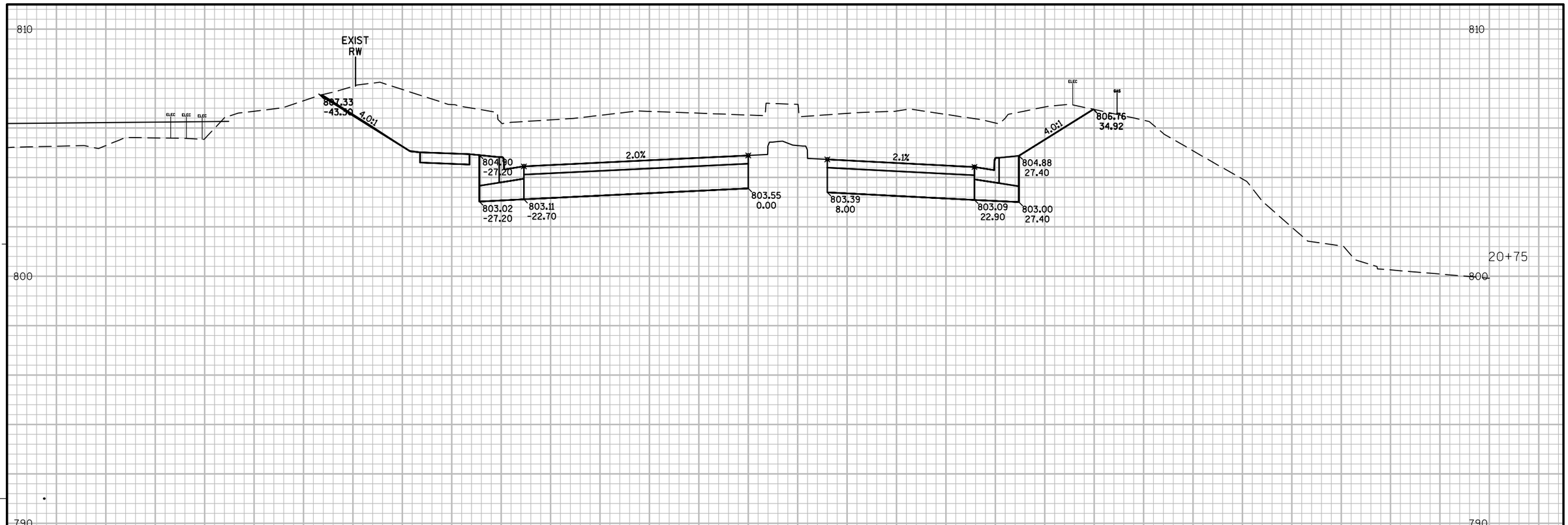
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: BUENA PARK ROAD	SHEET 928	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: BUENA PARK ROAD	SHEET 929	E



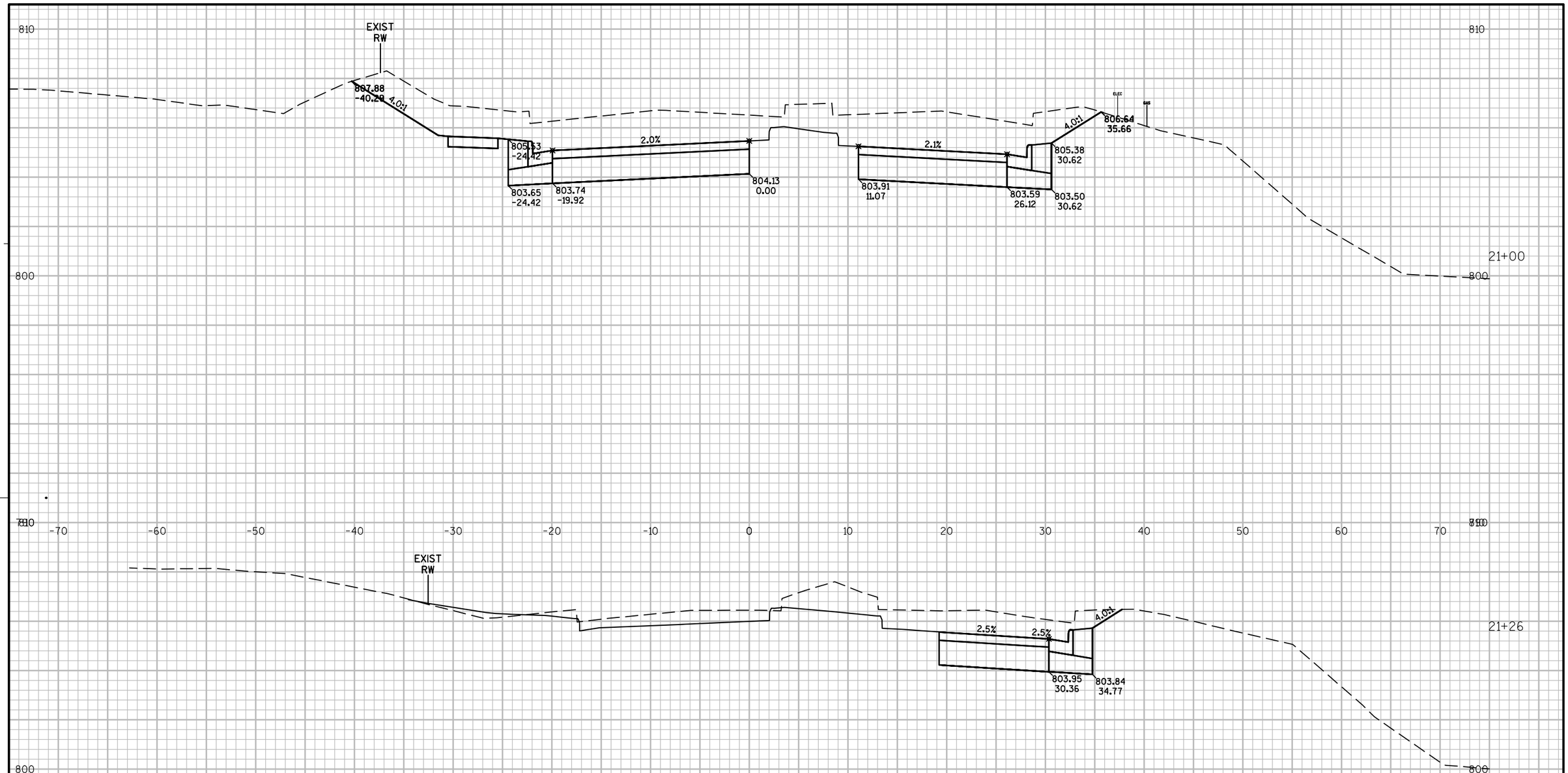
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: AUGUSTA WAY	SHEET 930	E



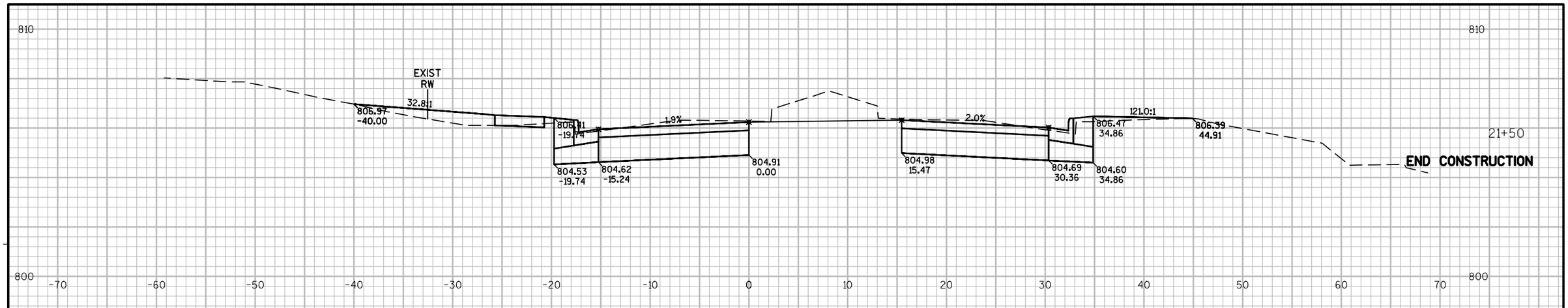
AUGUSTA WAY 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: AUGUSTA WAY	SHEET 931 E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS.DWG PLOT DATE : 2/2/2018 1:45 PM PLOT BY : GUILLAMA, TINA PLOT NAME :

WISDOT/CADDS SHEET 49



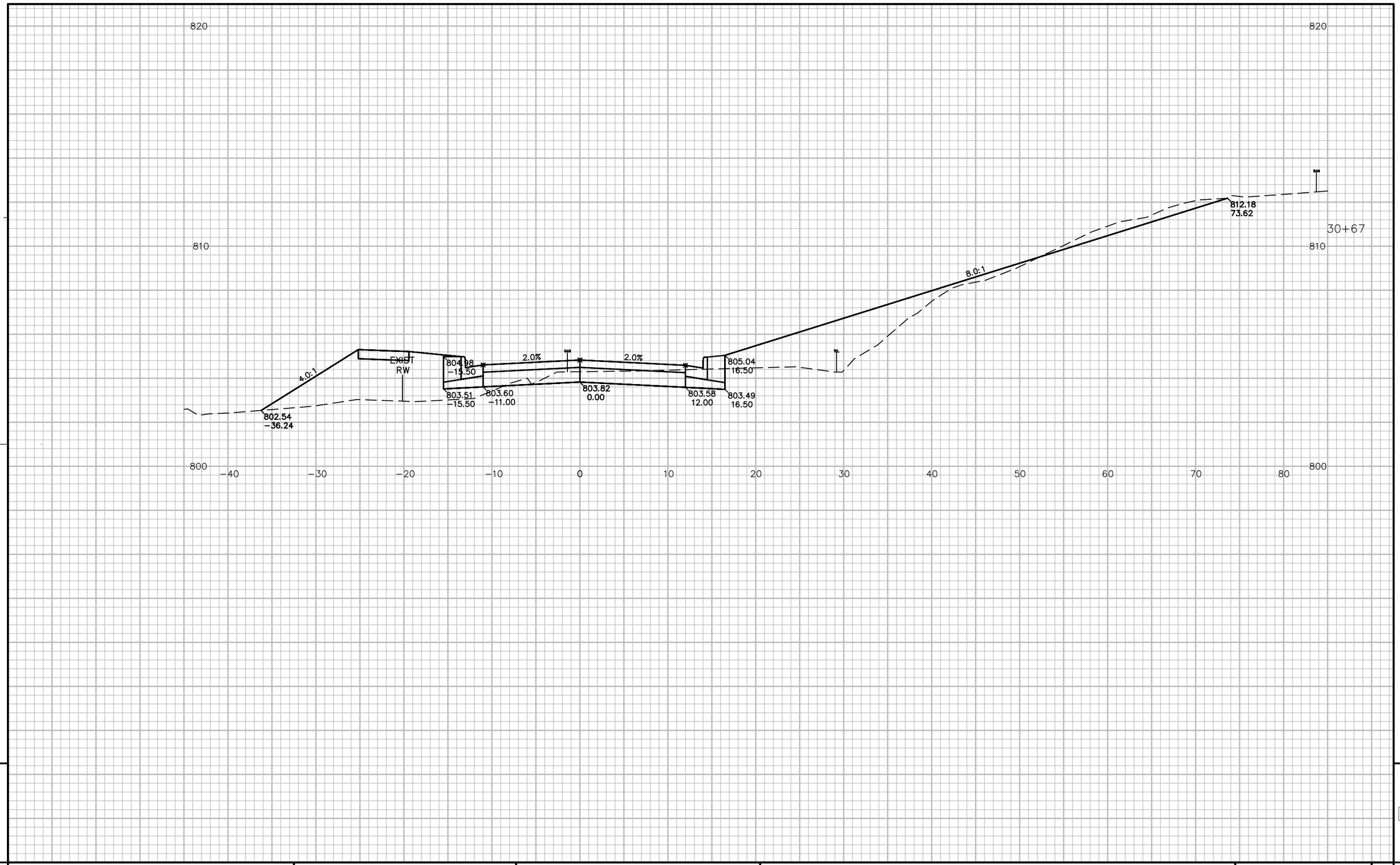
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: AUGUSTA WAY	SHEET 932	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: AUGUSTA WAY	SHEET 933	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS.DWG PLOT DATE : 2/2/2018 1:45 PM PLOT BY : GUILLAMA, TINA PLOT NAME :

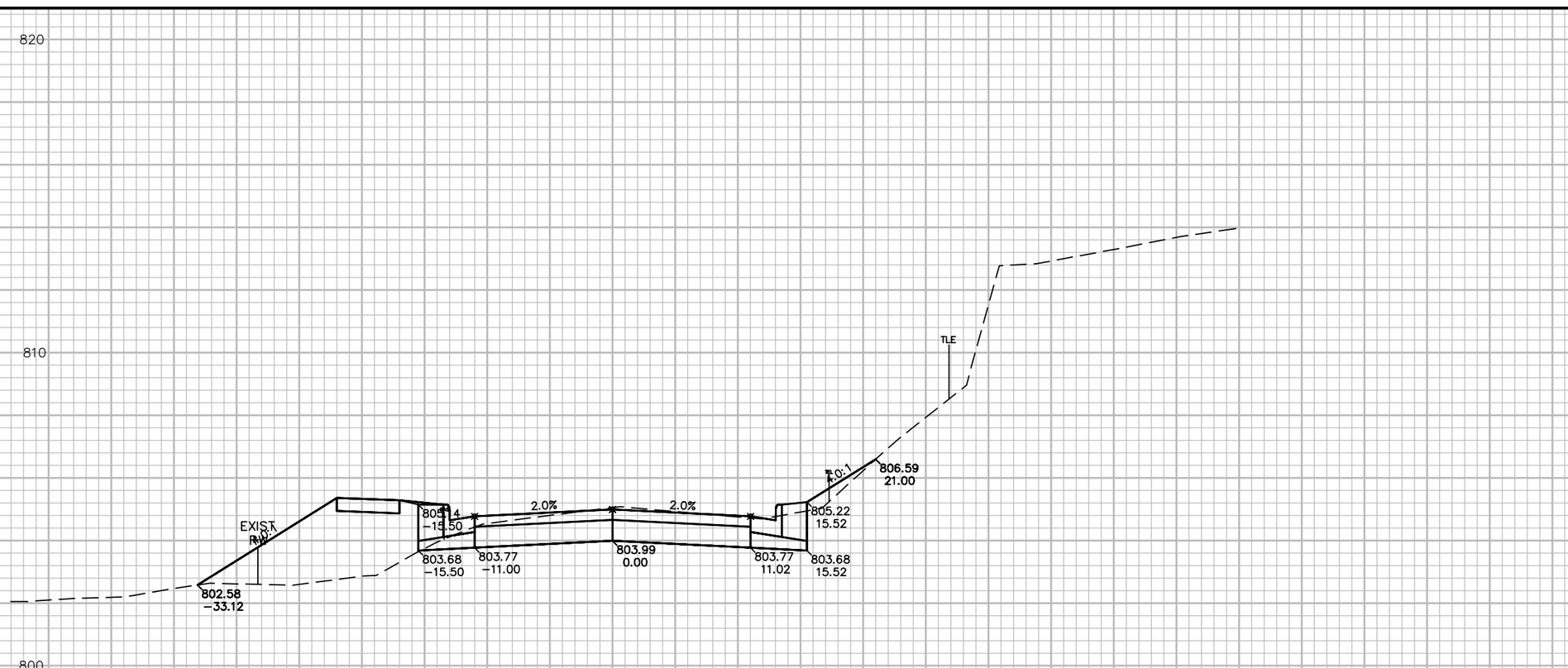
WISDOT/CADDS SHEET 49



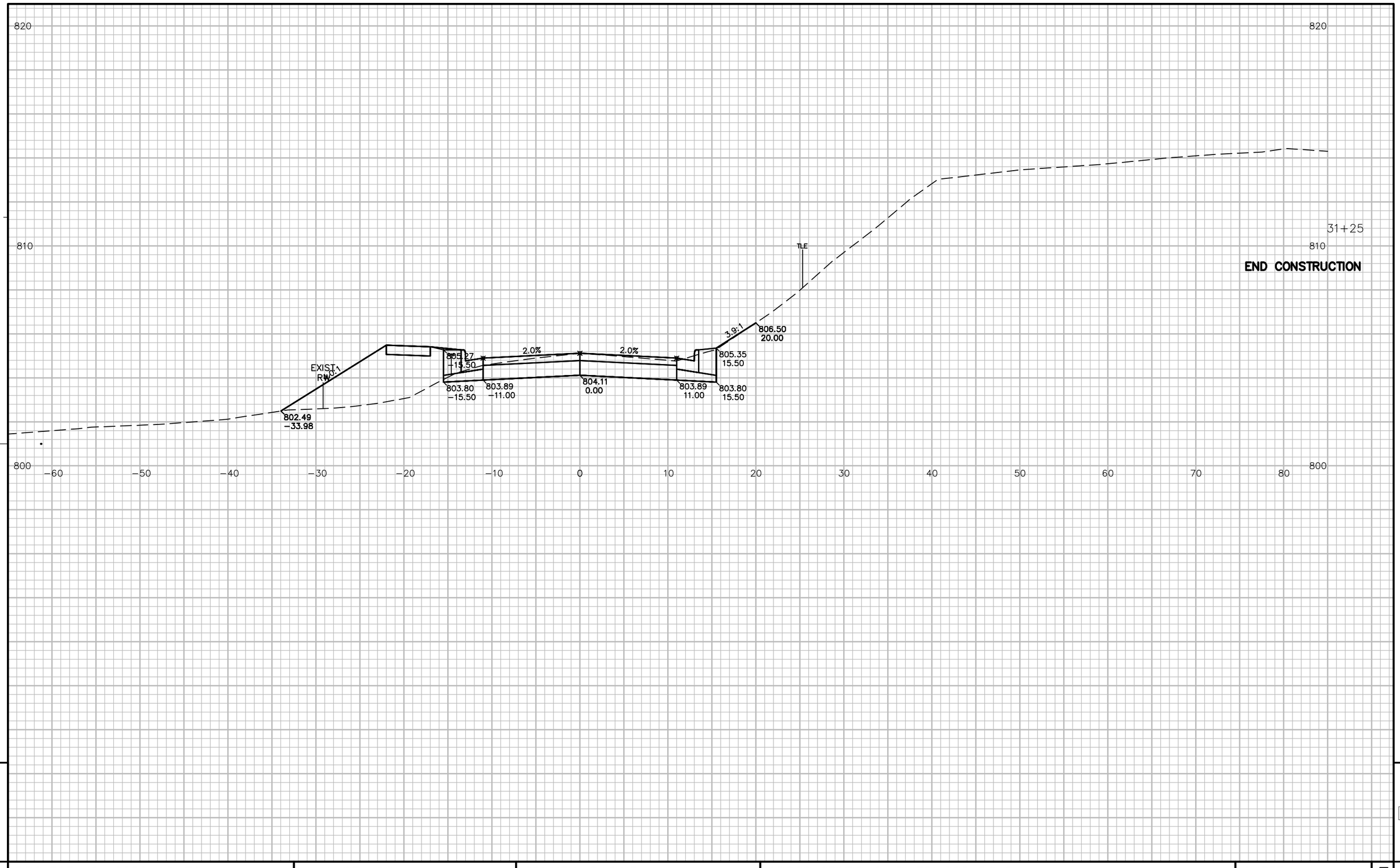
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: RIVERMOOR ROAD	SHEET 934	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS_2016-EARTHWORK.DWG PLOT DATE : 2/12/2018 5:42 PM PLOT BY : GUILLAMA, TINA PLOT NAME :

WISDOT/CADDS SHEET 49

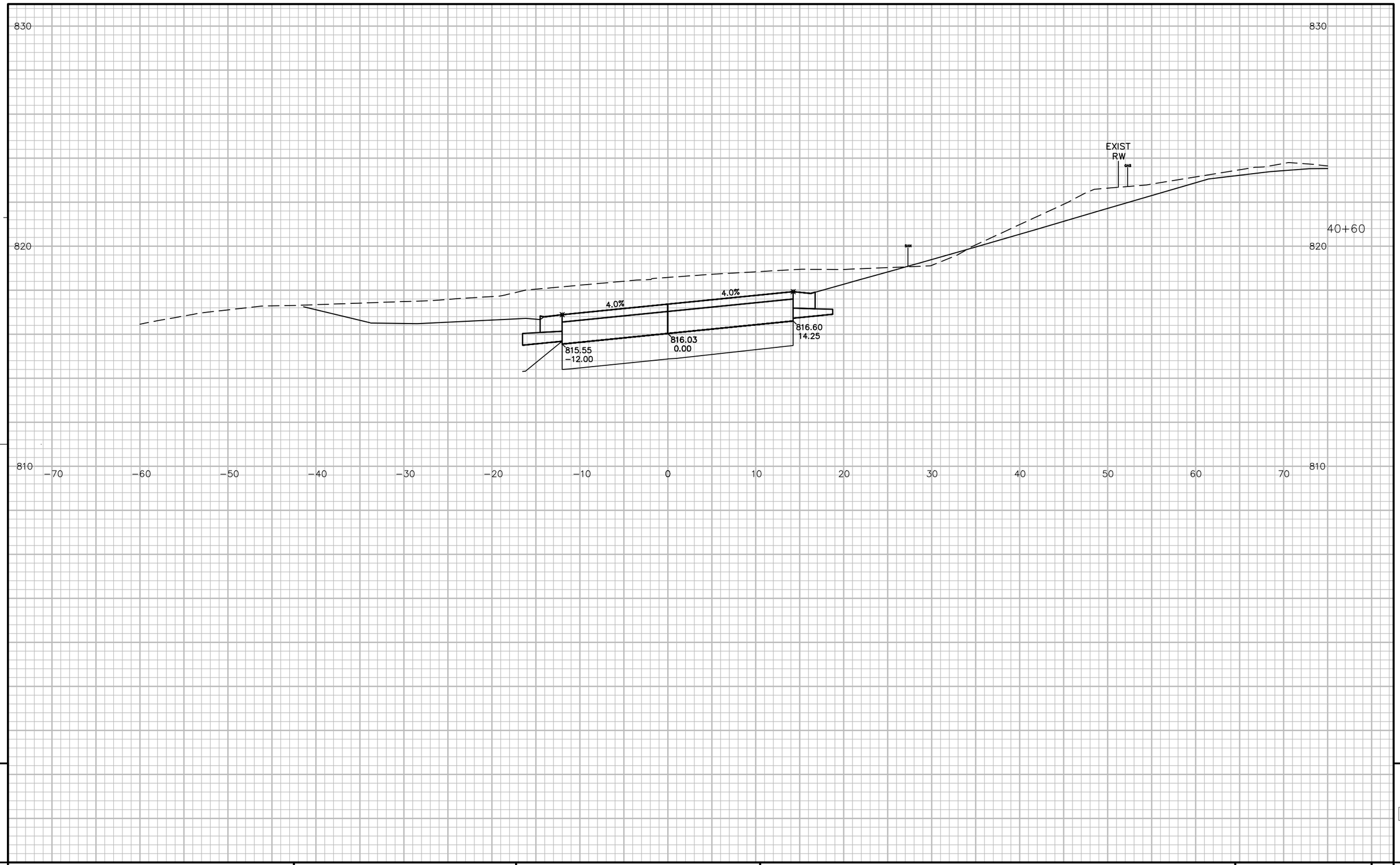


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: RIVERMOOR ROAD	SHEET 935	E

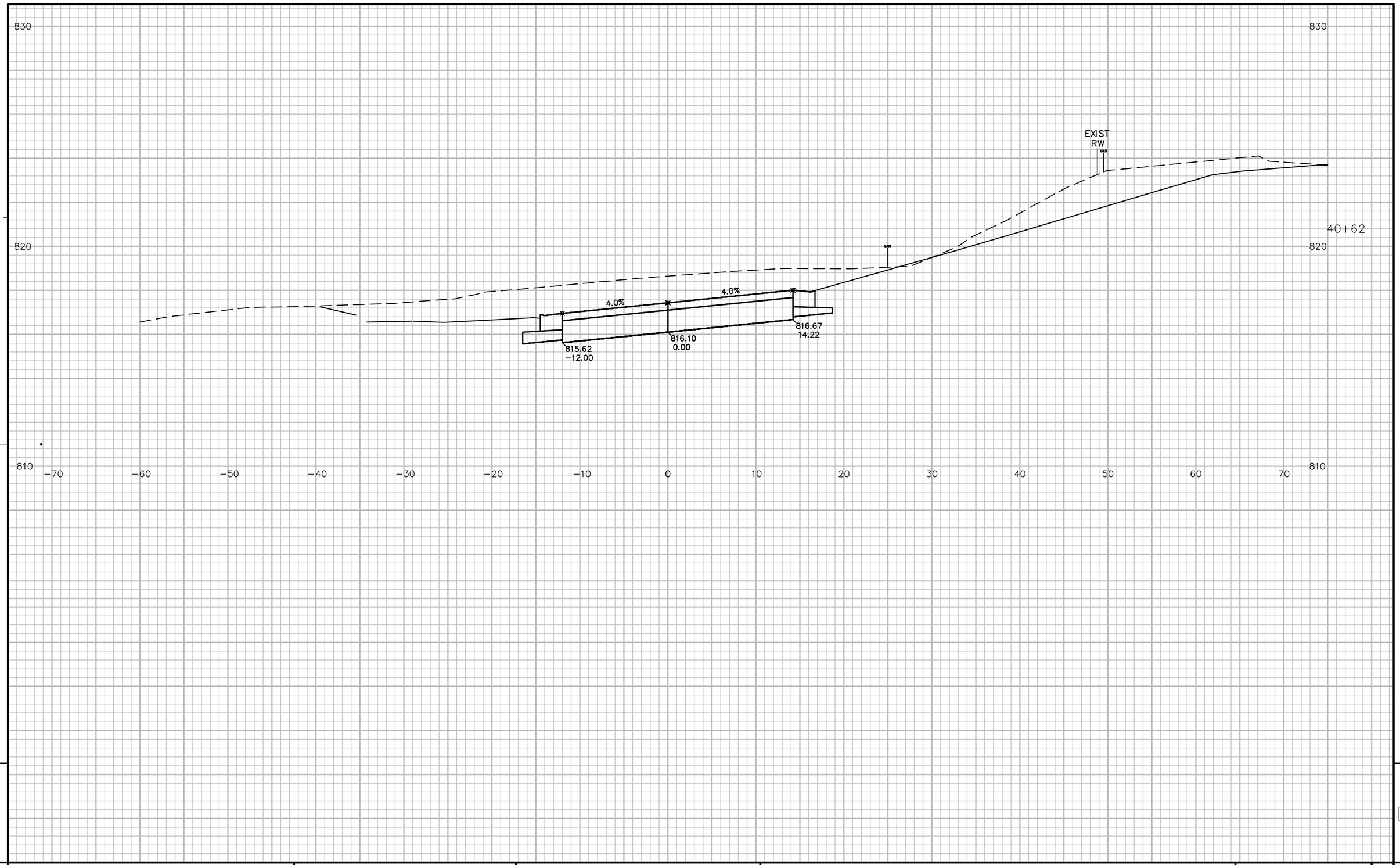


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: RIVERMOOR ROAD	SHEET 936	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS_2016-EARTHWORK.DWG PLOT DATE : 2/12/2018 5:42 PM PLOT BY : GUILLAMA, TINA PLOT NAME :

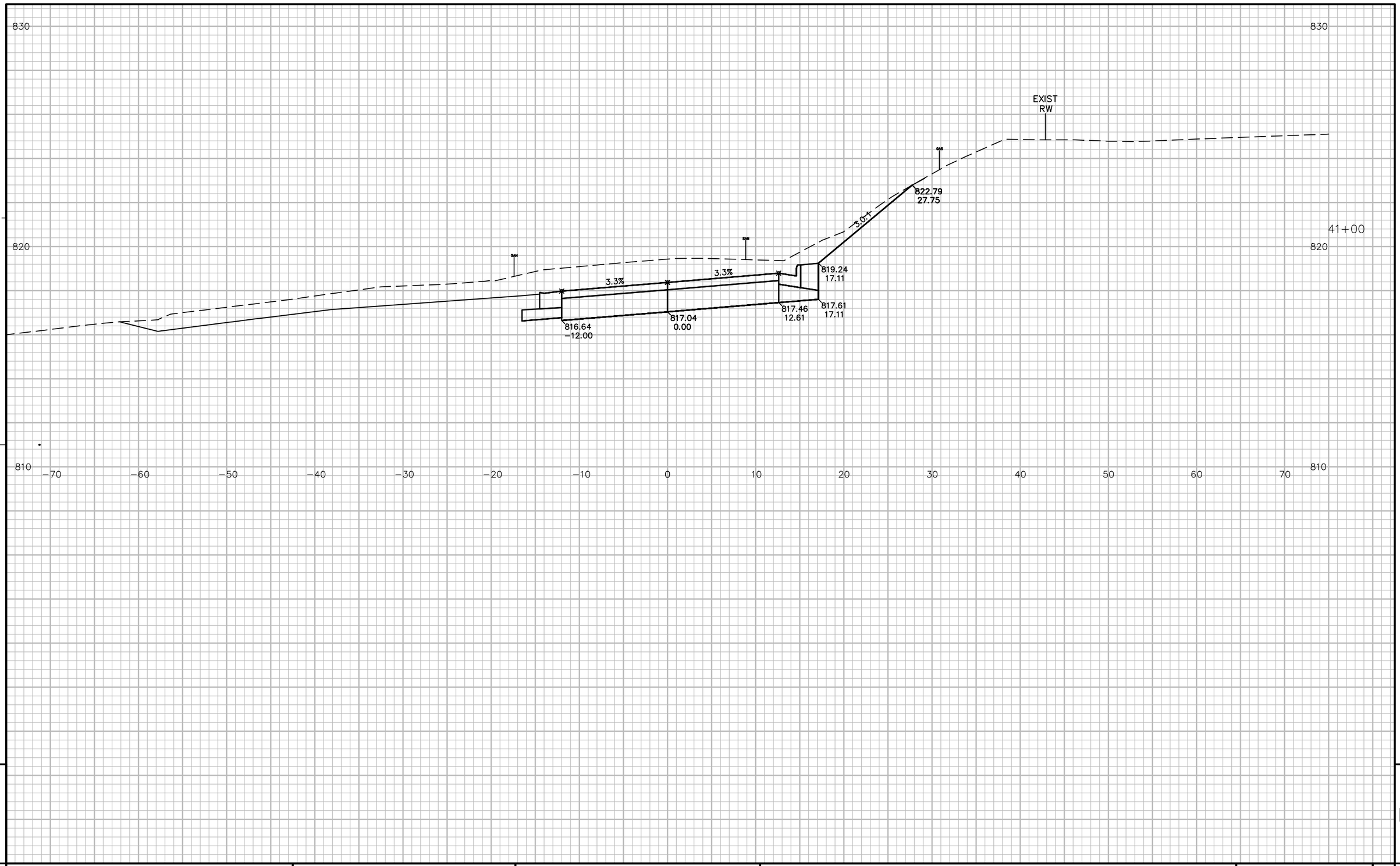


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: RIVERMOOR DRIVE	SHEET 937	E

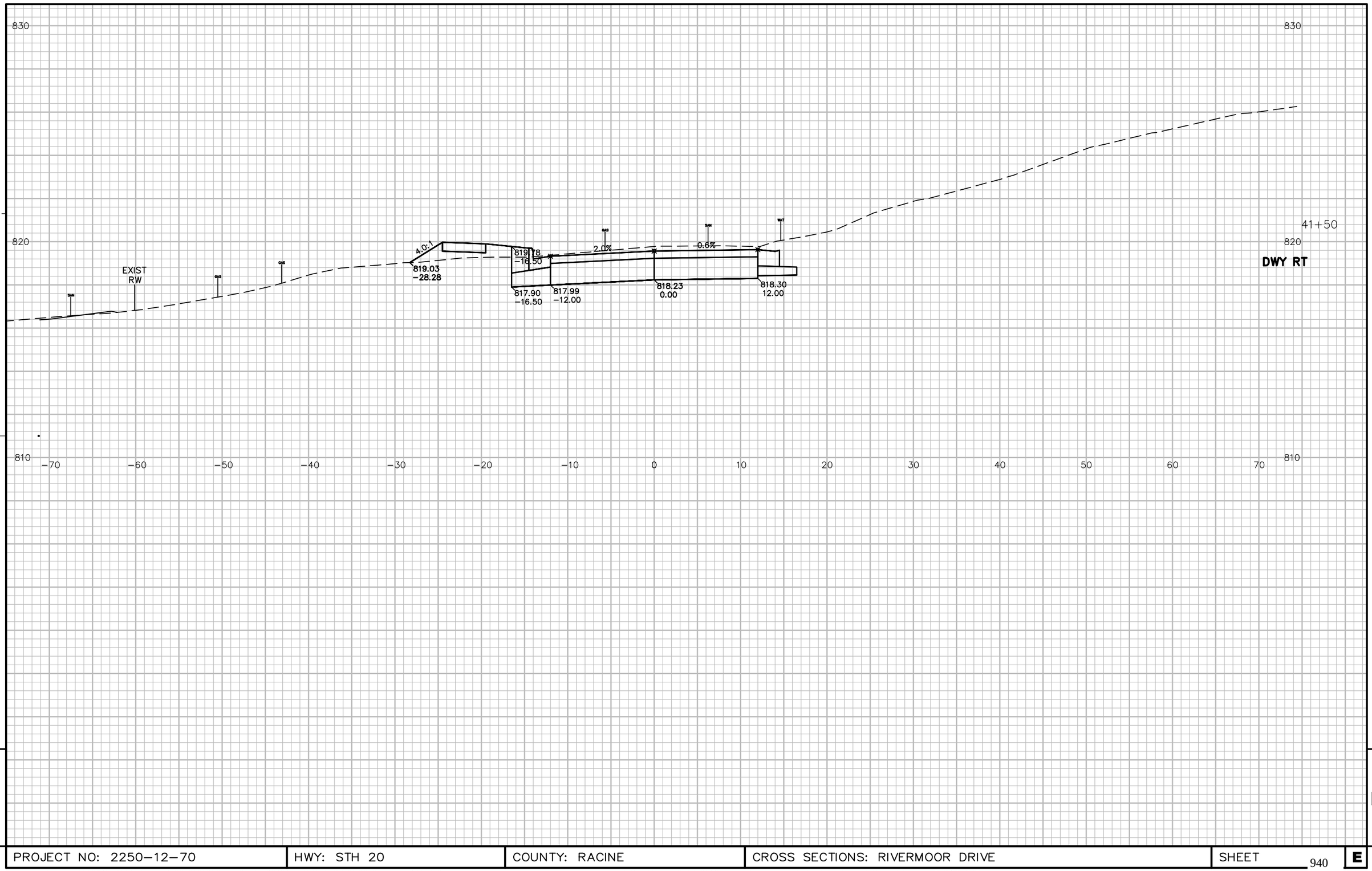


PROJECT NO: 2250−12−70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: RIVERMOOR DRIVE	SHEET 938	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS_2016-EARTHWORK.DWG PLOT DATE : 2/12/2018 5:43 PM PLOT BY : GUILLAMA, TINA PLOT NAME :



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: RIVERMOOR DRIVE	SHEET 939	E



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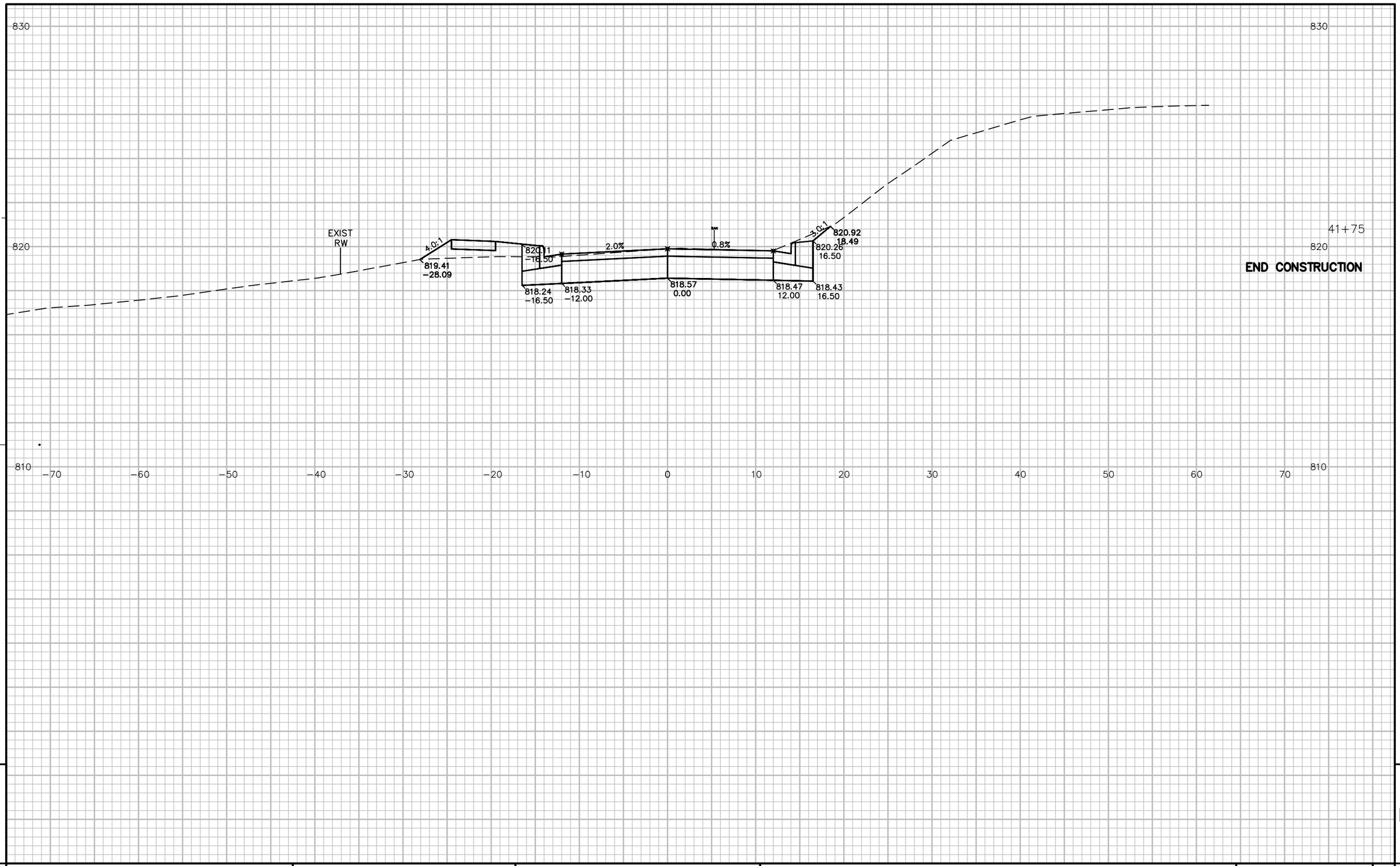
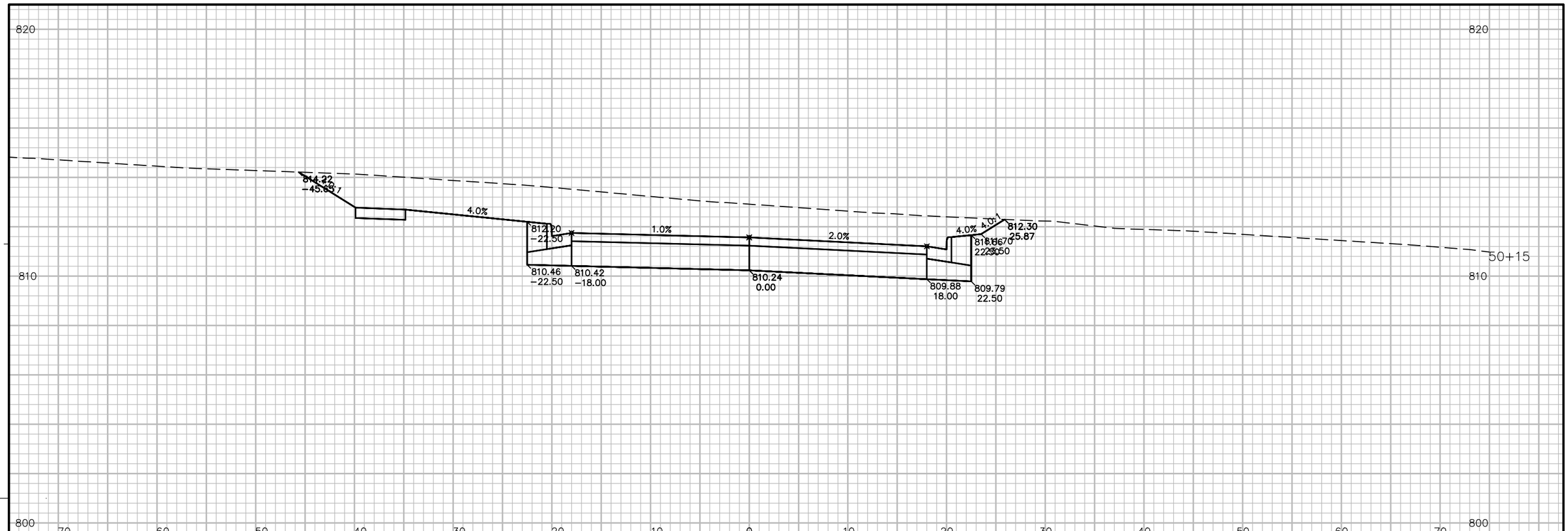
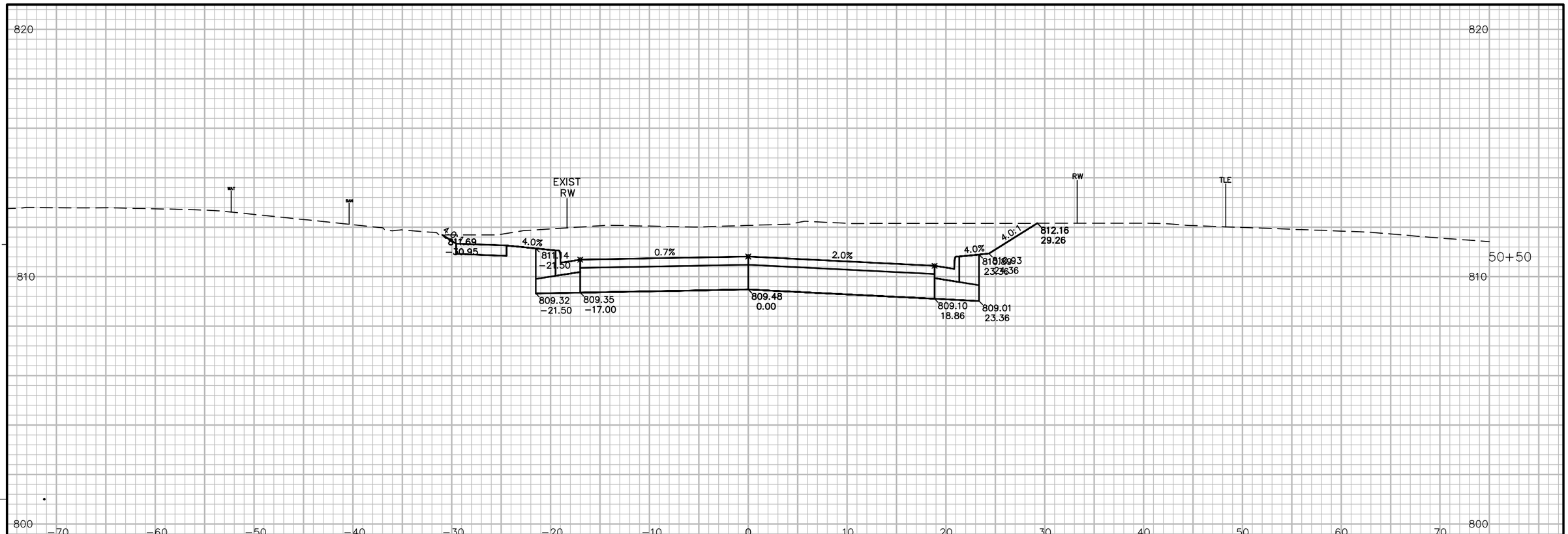


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: RIVERMOOR DRIVE	SHEET 941	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: RACINE STREET	SHEET 942	E



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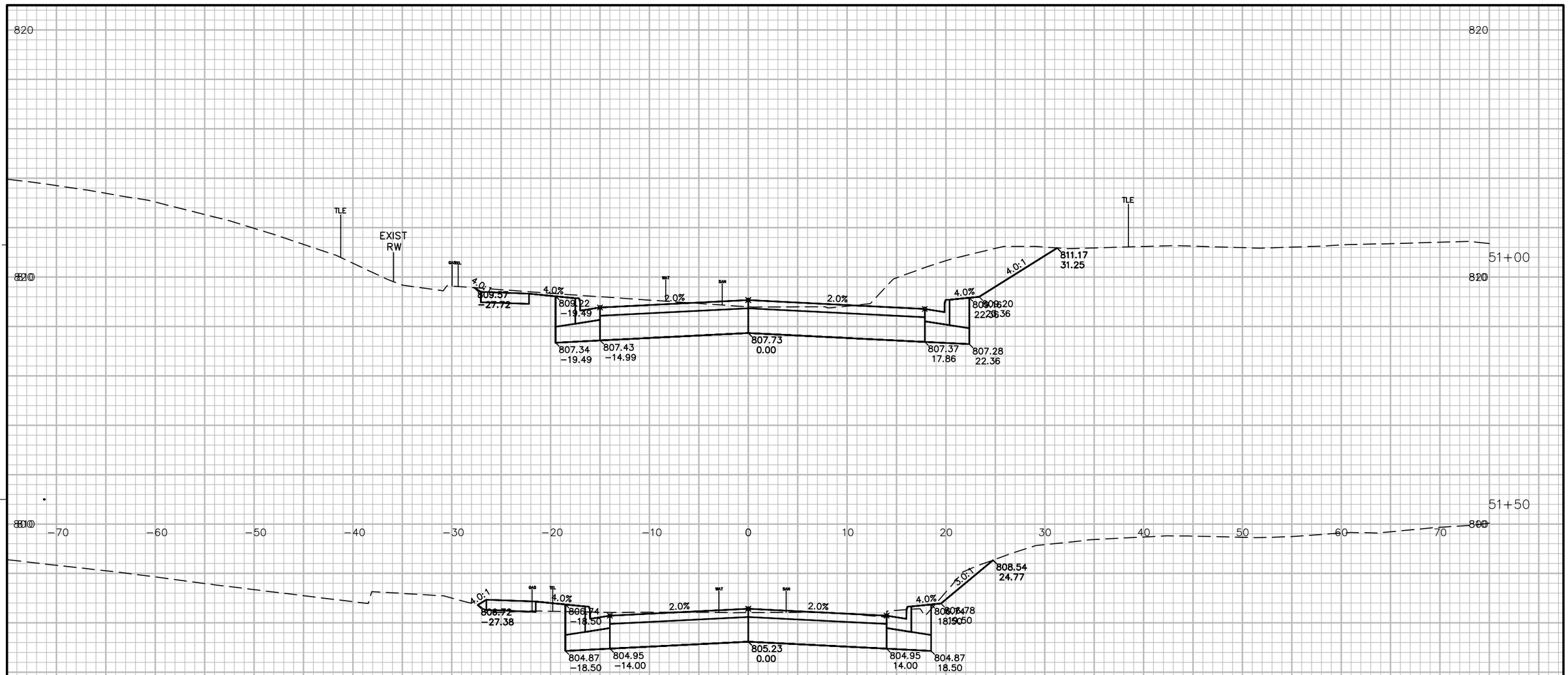
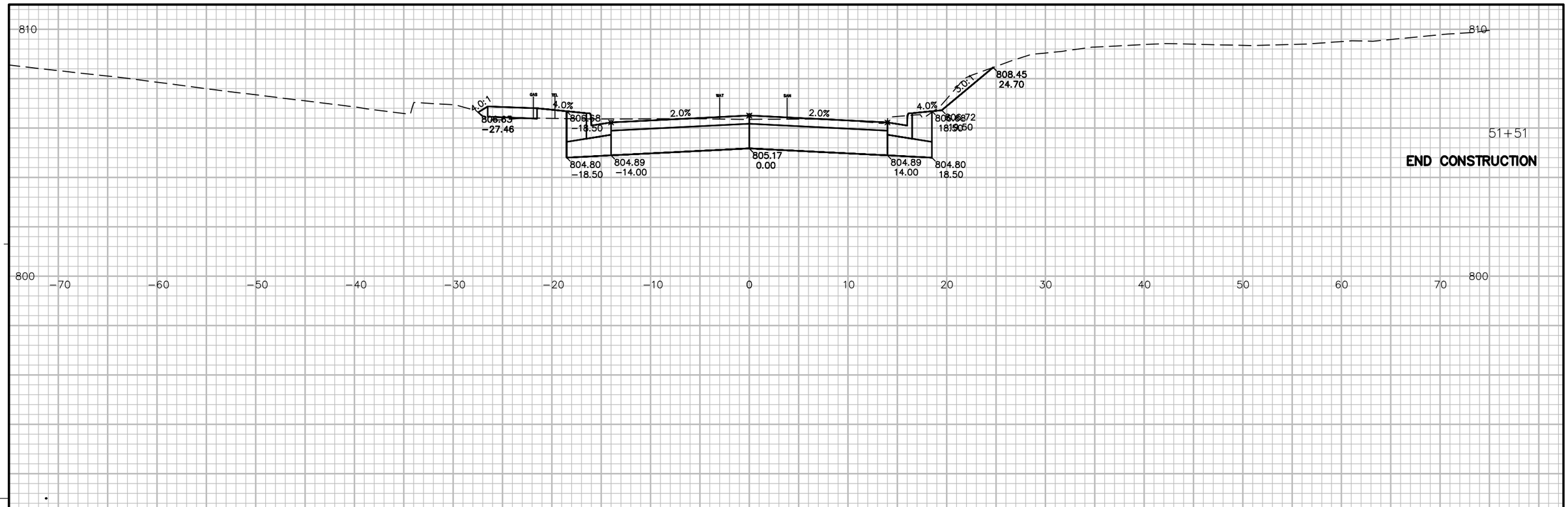
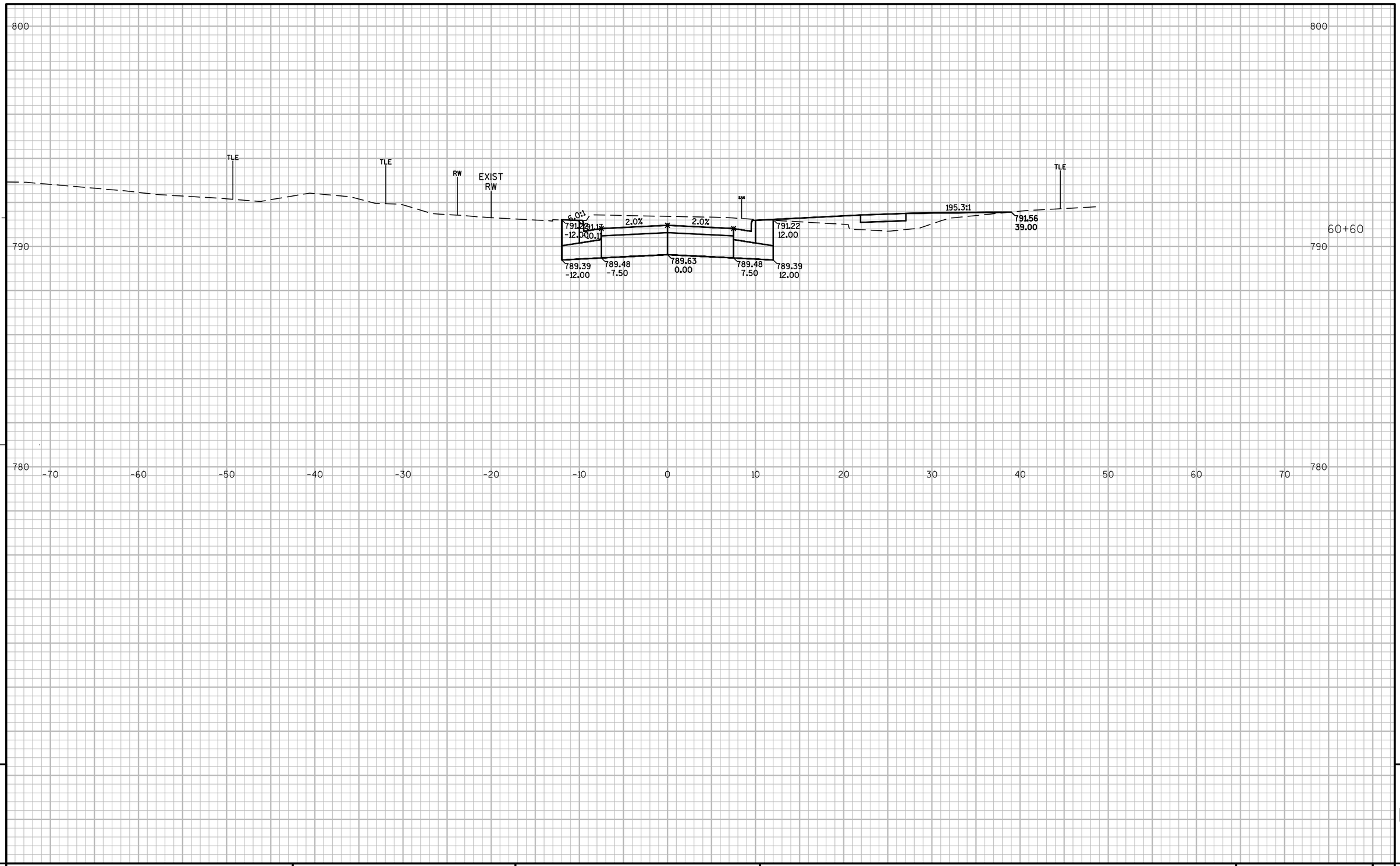


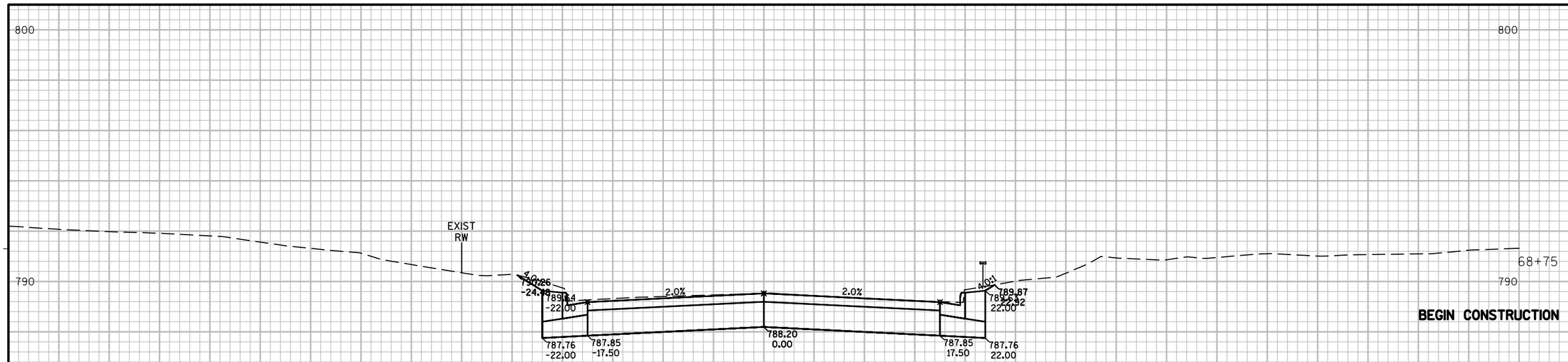
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: RACINE STREET	SHEET 944	E



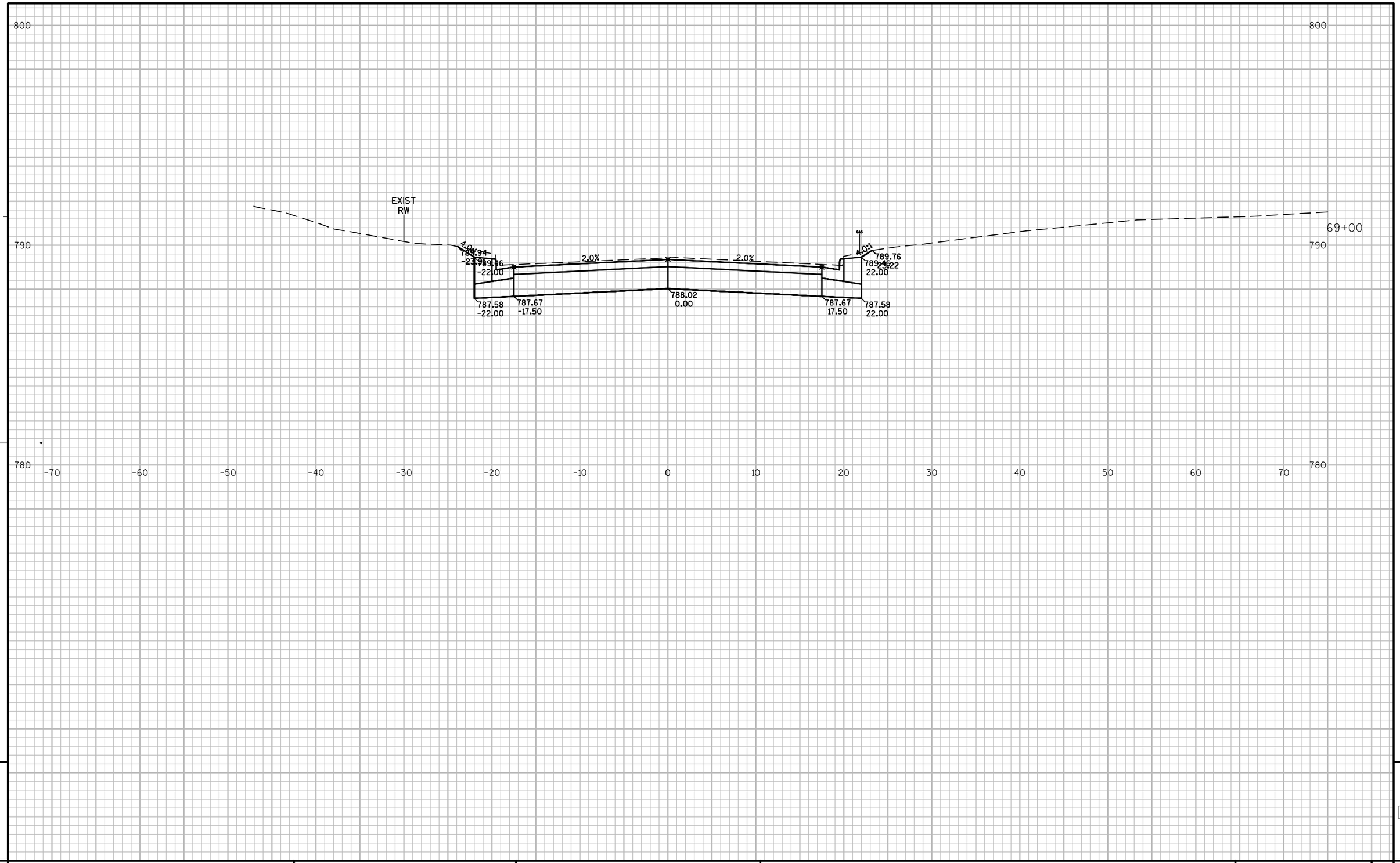
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: RACINE STREET	SHEET 945	E



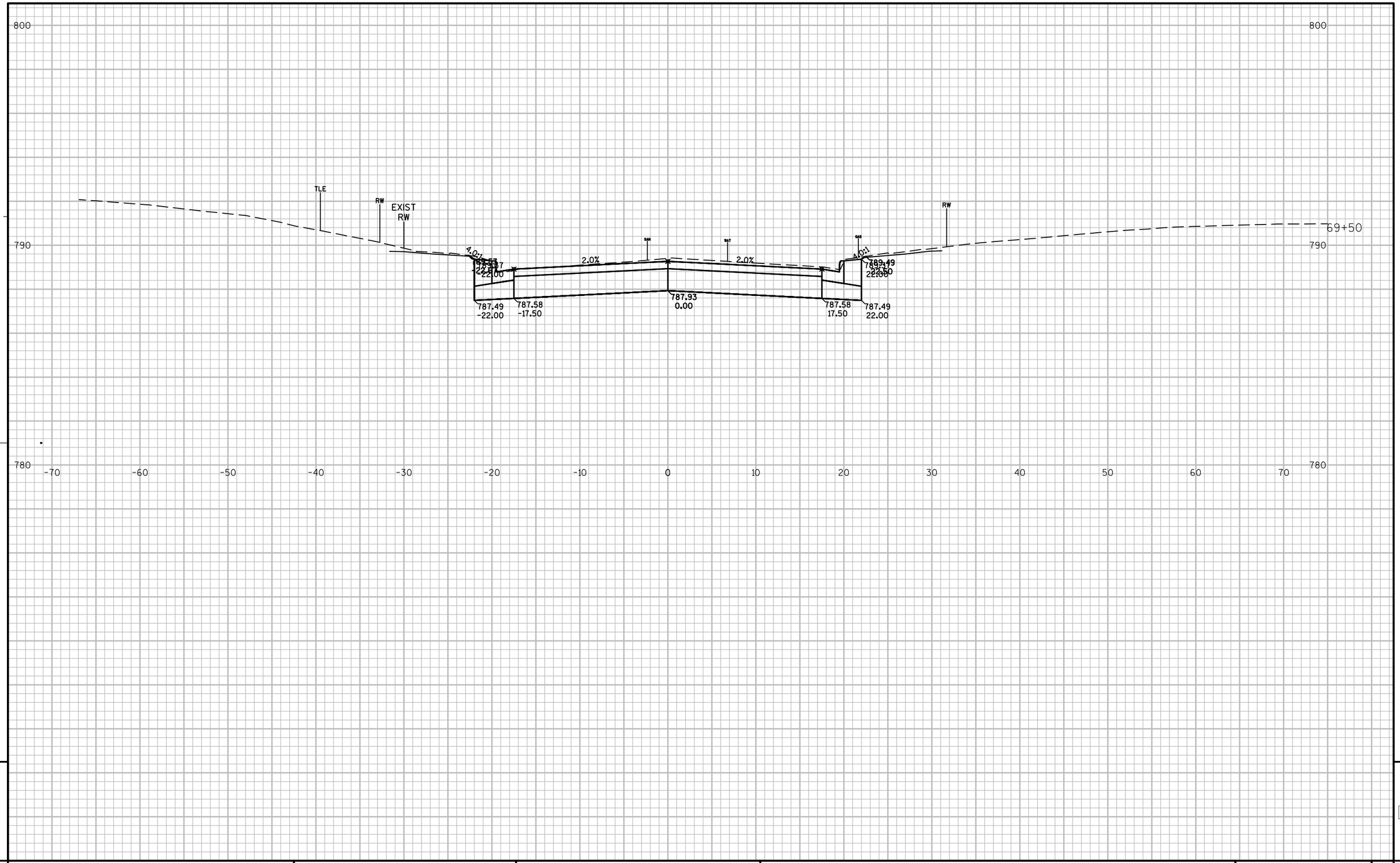
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: CENTER STREET	SHEET 946	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: WATER STREET	SHEET 947	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: WATER STREET	SHEET 948	E



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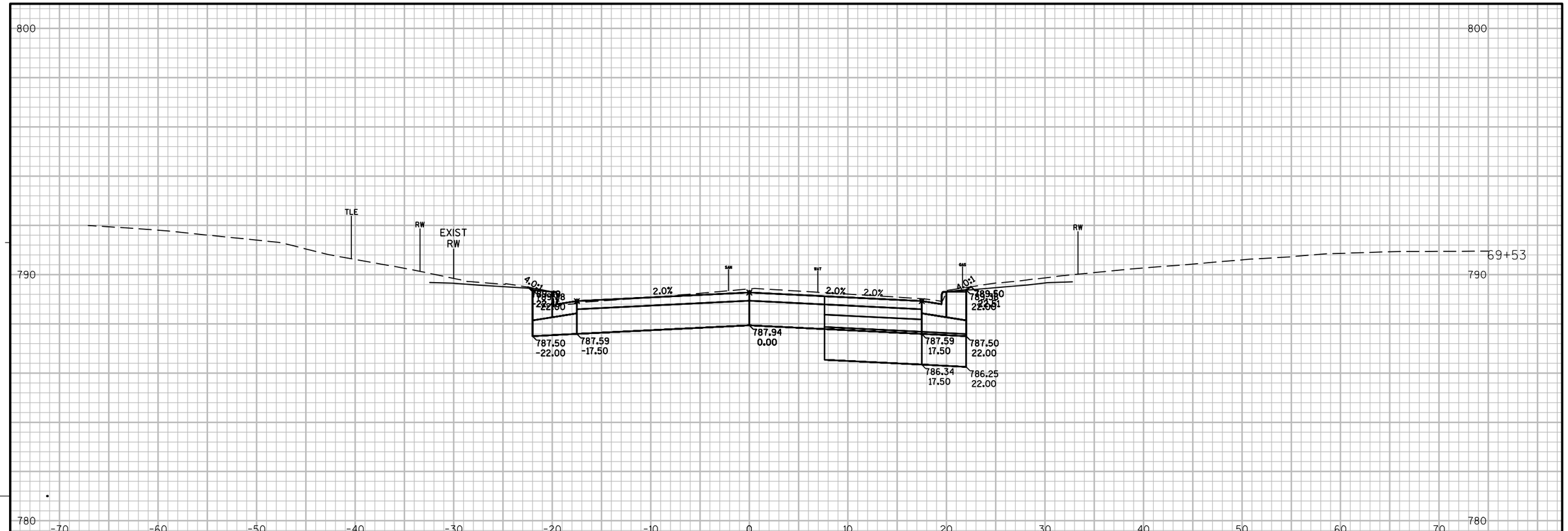
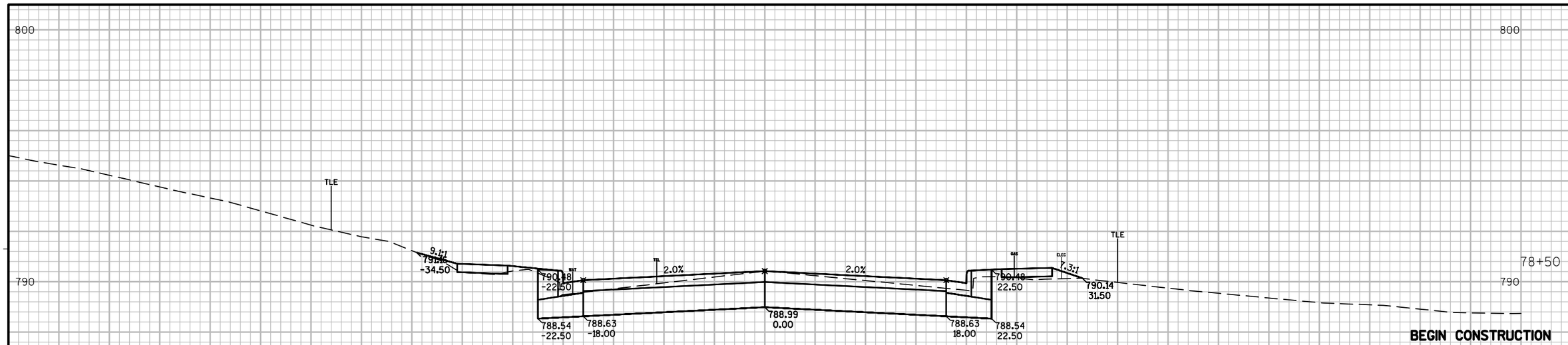
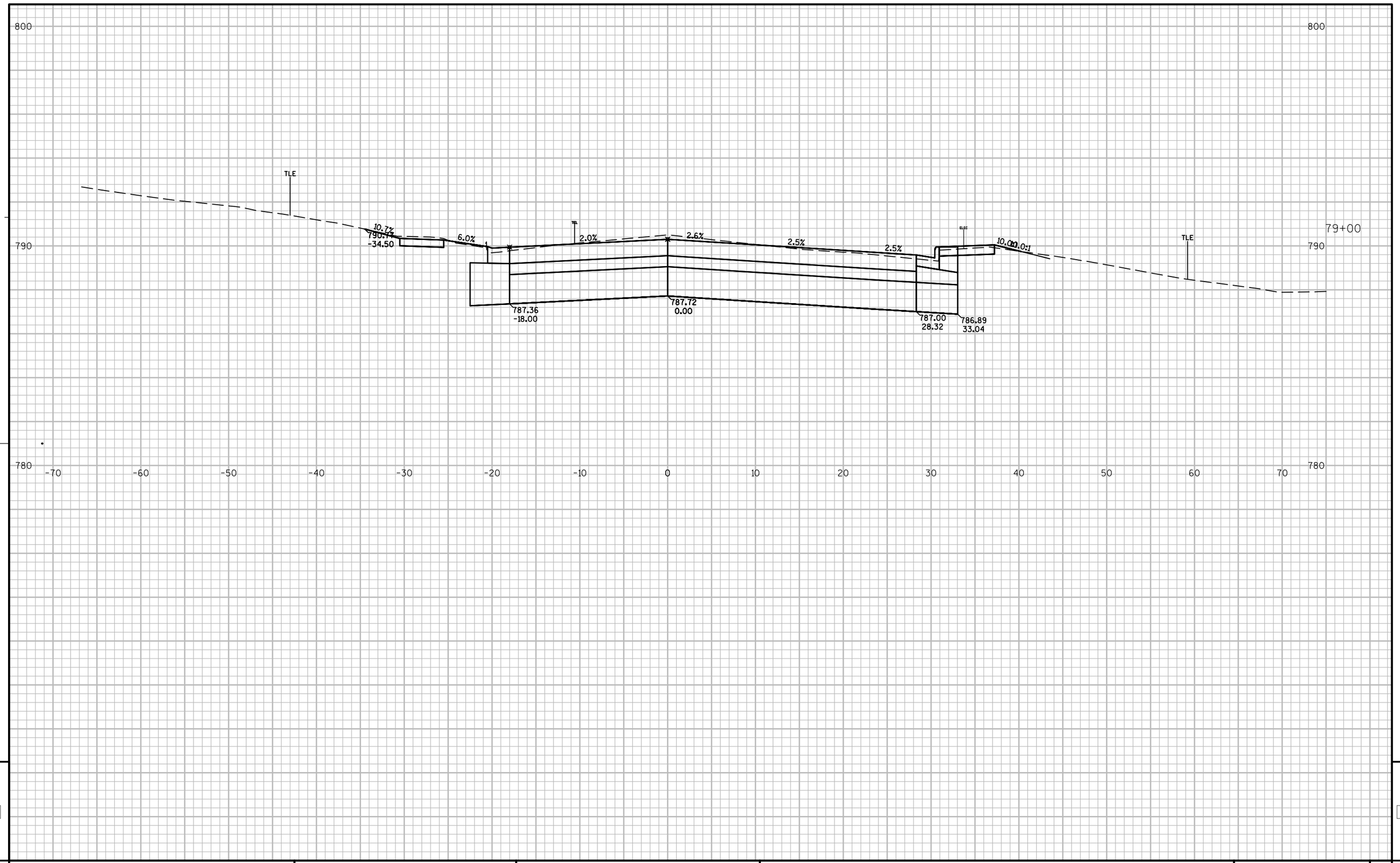


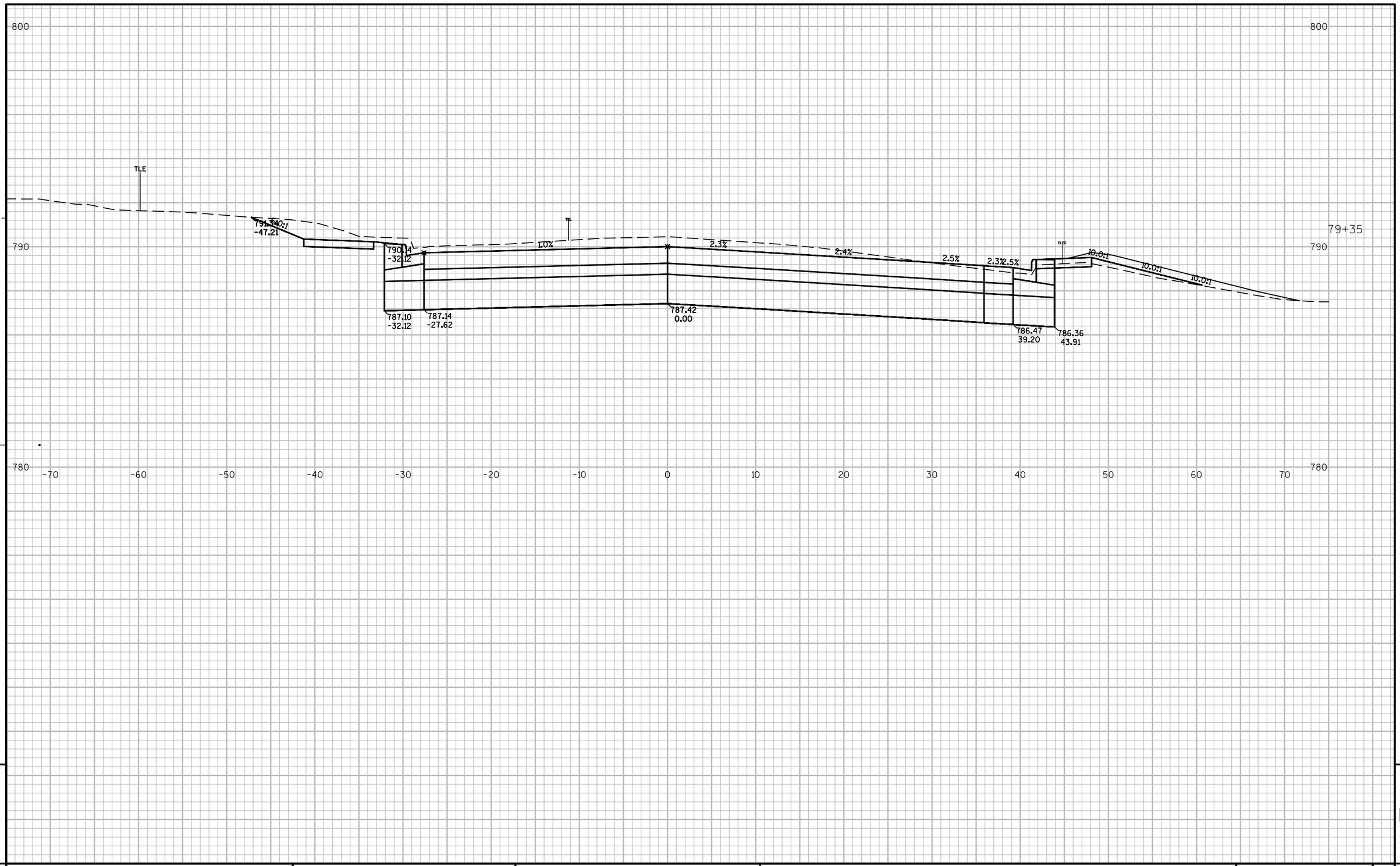
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: WATER STREET	SHEET 950	E



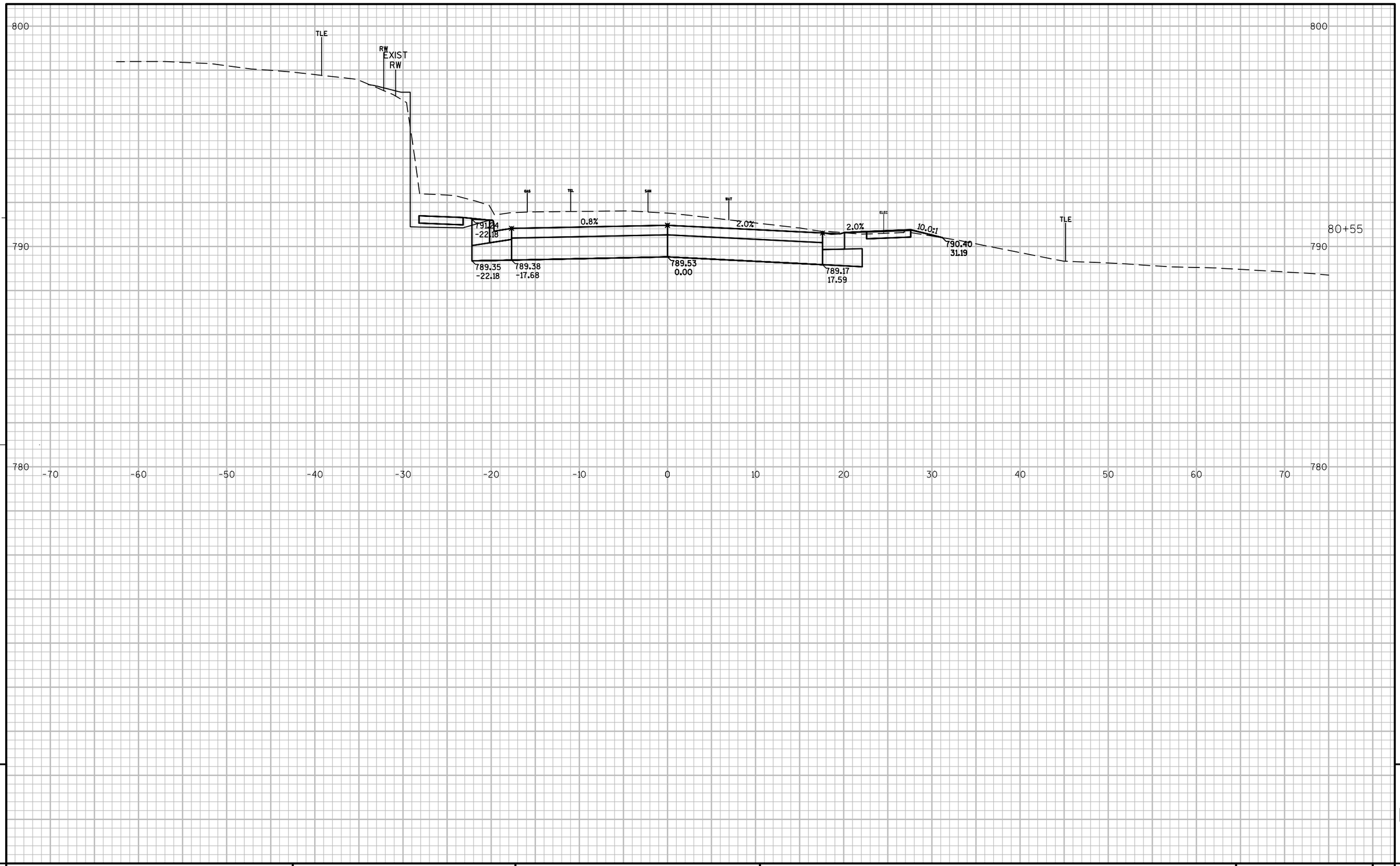
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: S. JEFFERSON ST.	SHEET 951	E



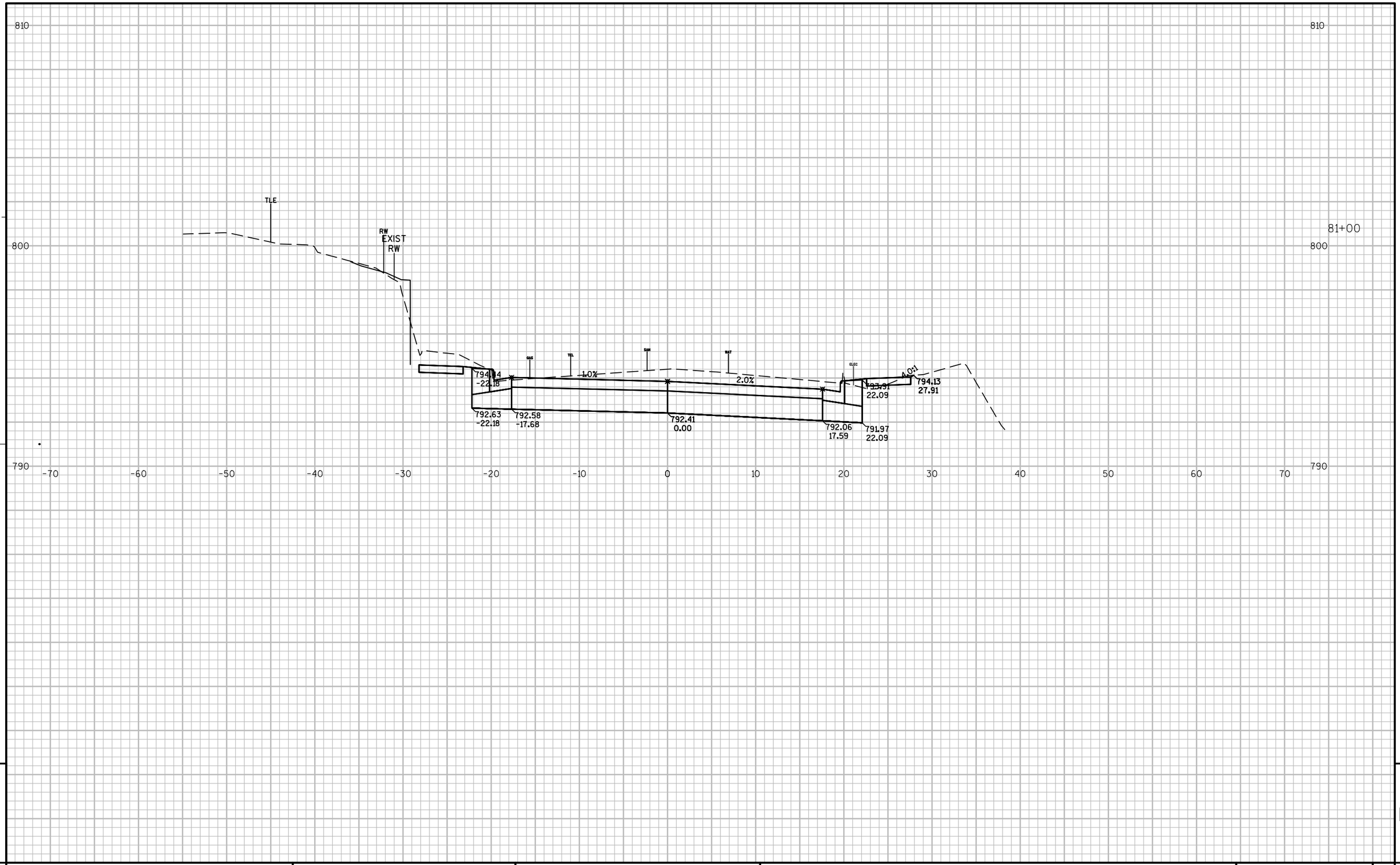
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: S. JEFFERSON ST.	SHEET 952	E



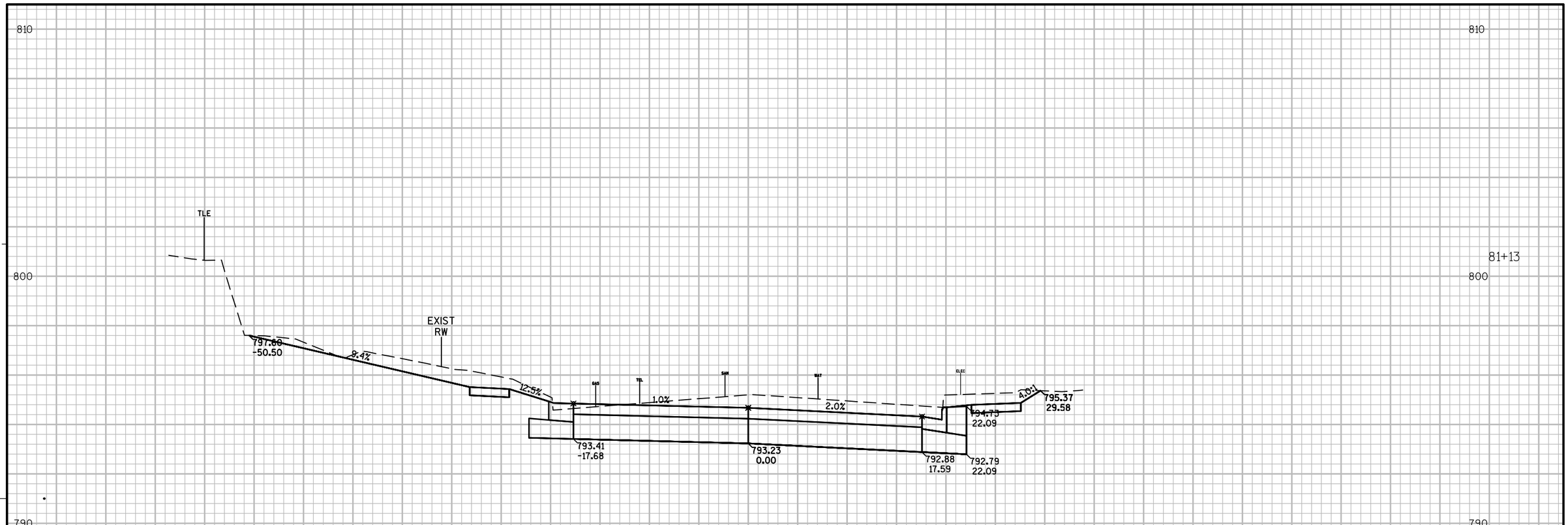
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: S. JEFFERSON ST.	SHEET 953	E



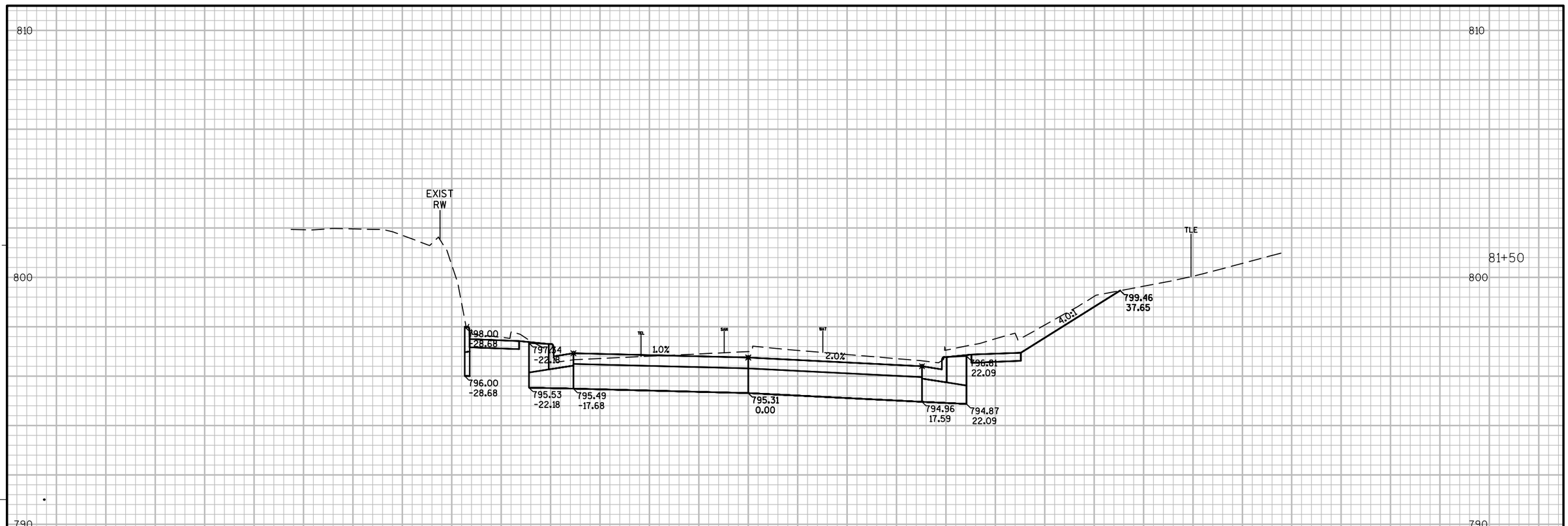
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. JEFFERSON ST.	SHEET 954	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. JEFFERSON ST.	SHEET 955	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. JEFFERSON ST.	SHEET 956	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. JEFFERSON ST.	SHEET 957	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS.DWG PLOT DATE : 2/2/2018 2:06 PM PLOT BY : GUILLAMA, TINA PLOT NAME :

WISDOT/CADDS SHEET 49

81+77

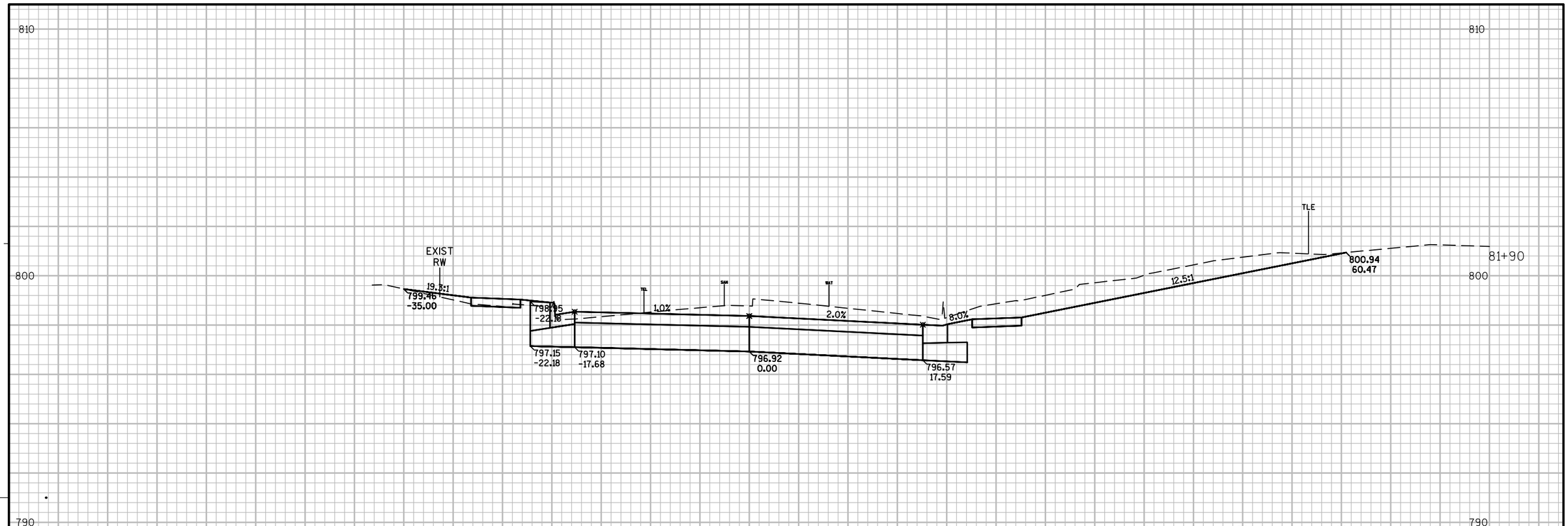
810 800 790

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. JEFFERSON ST.	SHEET 958	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS.DWG PLOT DATE : 2/2/2018 2:06 PM PLOT BY : GUILLAMA, TINA PLOT NAME :

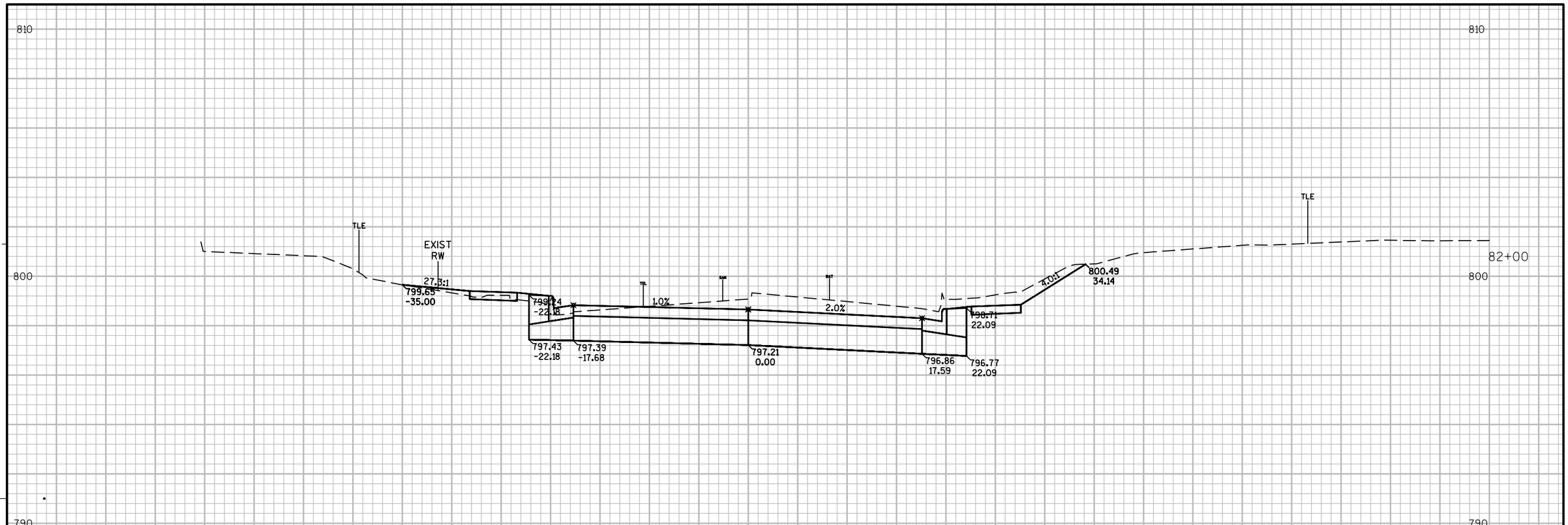
WISDOT/CADDS SHEET 49



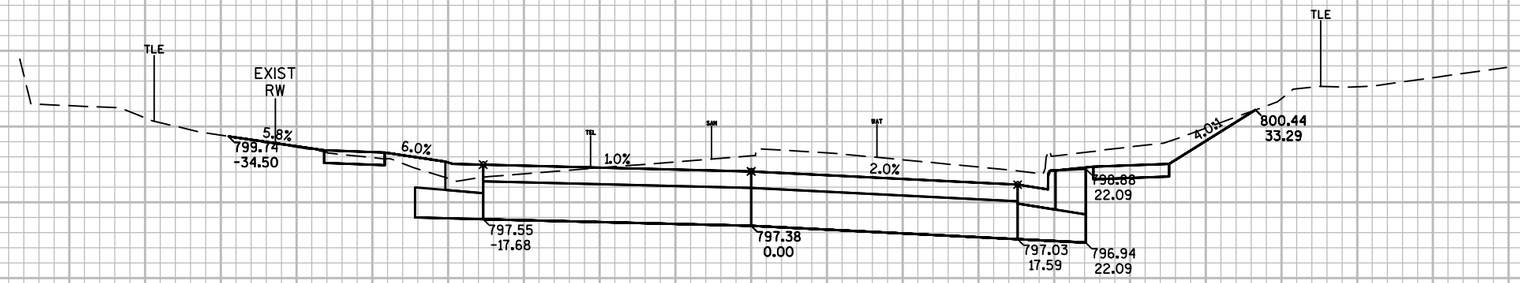
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. JEFFERSON ST.	SHEET 959	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS.DWG PLOT DATE : 2/2/2018 2:06 PM PLOT BY : GUILLAMA, TINA PLOT NAME :

WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. JEFFERSON ST.	SHEET 960	E



810 810

800 800

82+06

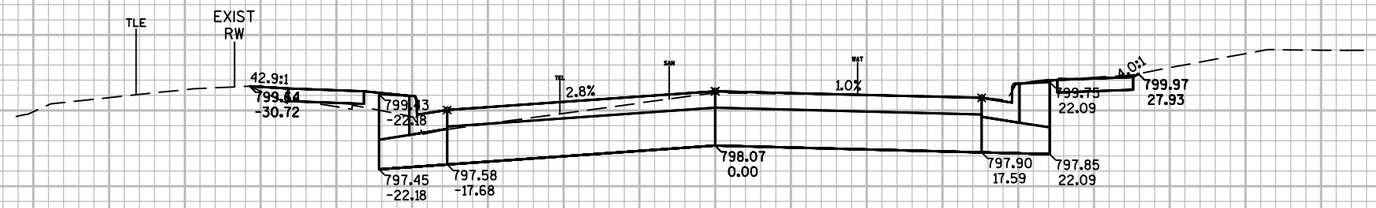
790 790

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. JEFFERSON ST.	SHEET 961	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS.DWG PLOT DATE : 2/2/2018 2:07 PM PLOT BY : GUILLAMA, TINA PLOT NAME :

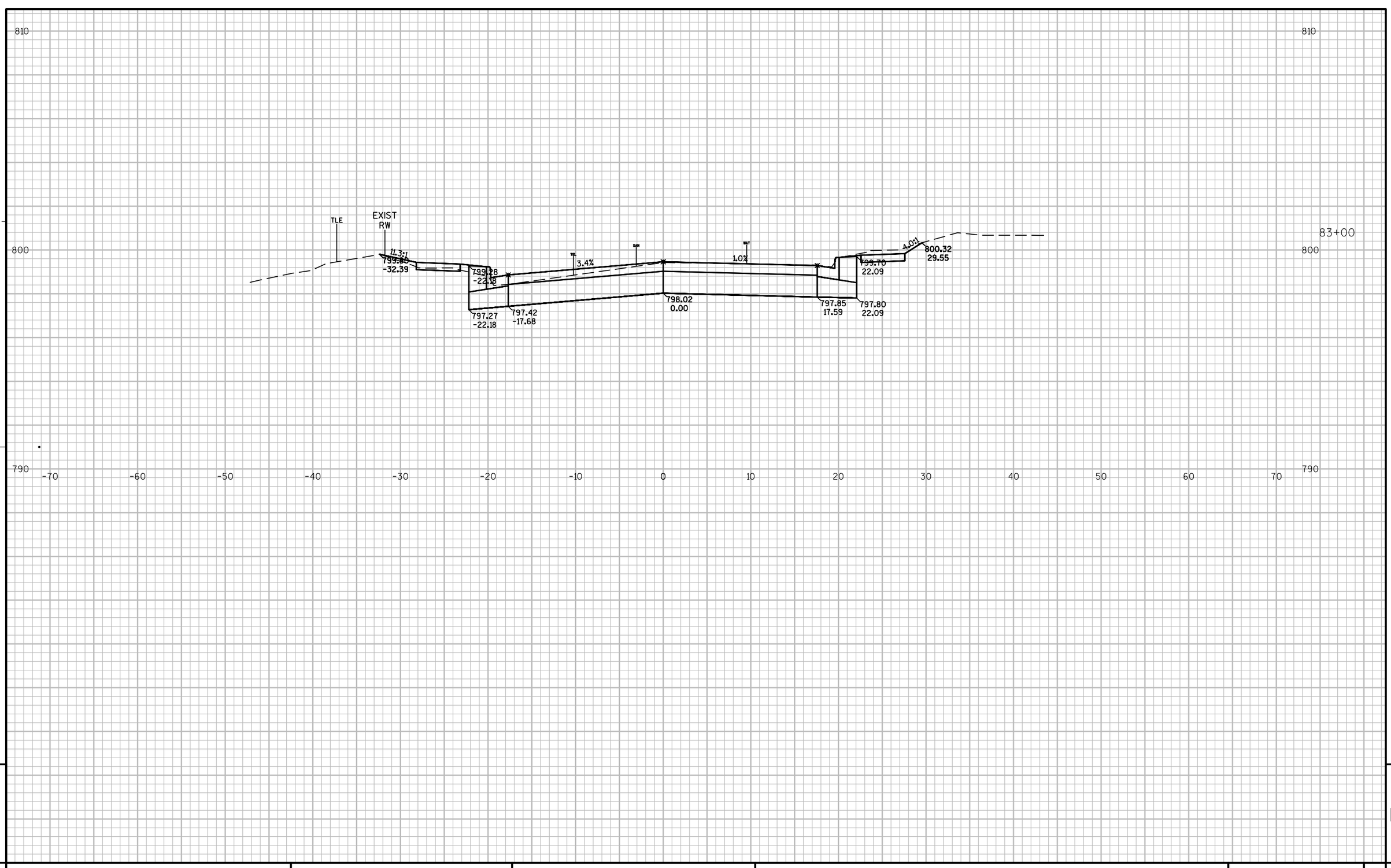
WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. JEFFERSON ST.	SHEET 962	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS.DWG PLOT DATE : 2/2/2018 2:07 PM PLOT BY : GUILLAMA, TINA PLOT NAME :

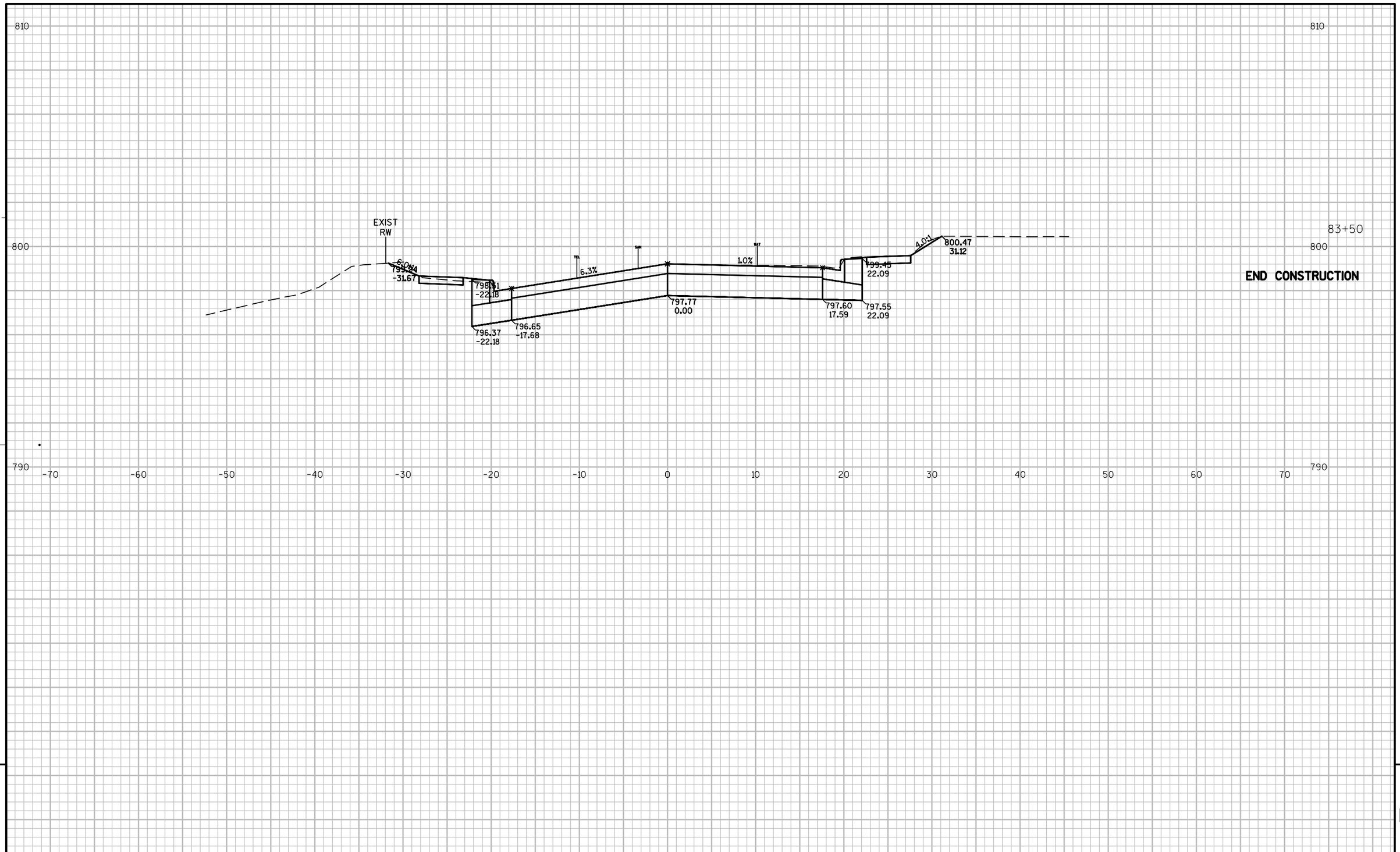
WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. JEFFERSON ST.	SHEET 963	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS.DWG PLOT DATE : 2/2/2018 2:08 PM PLOT BY : GUILLAMA, TINA PLOT NAME :

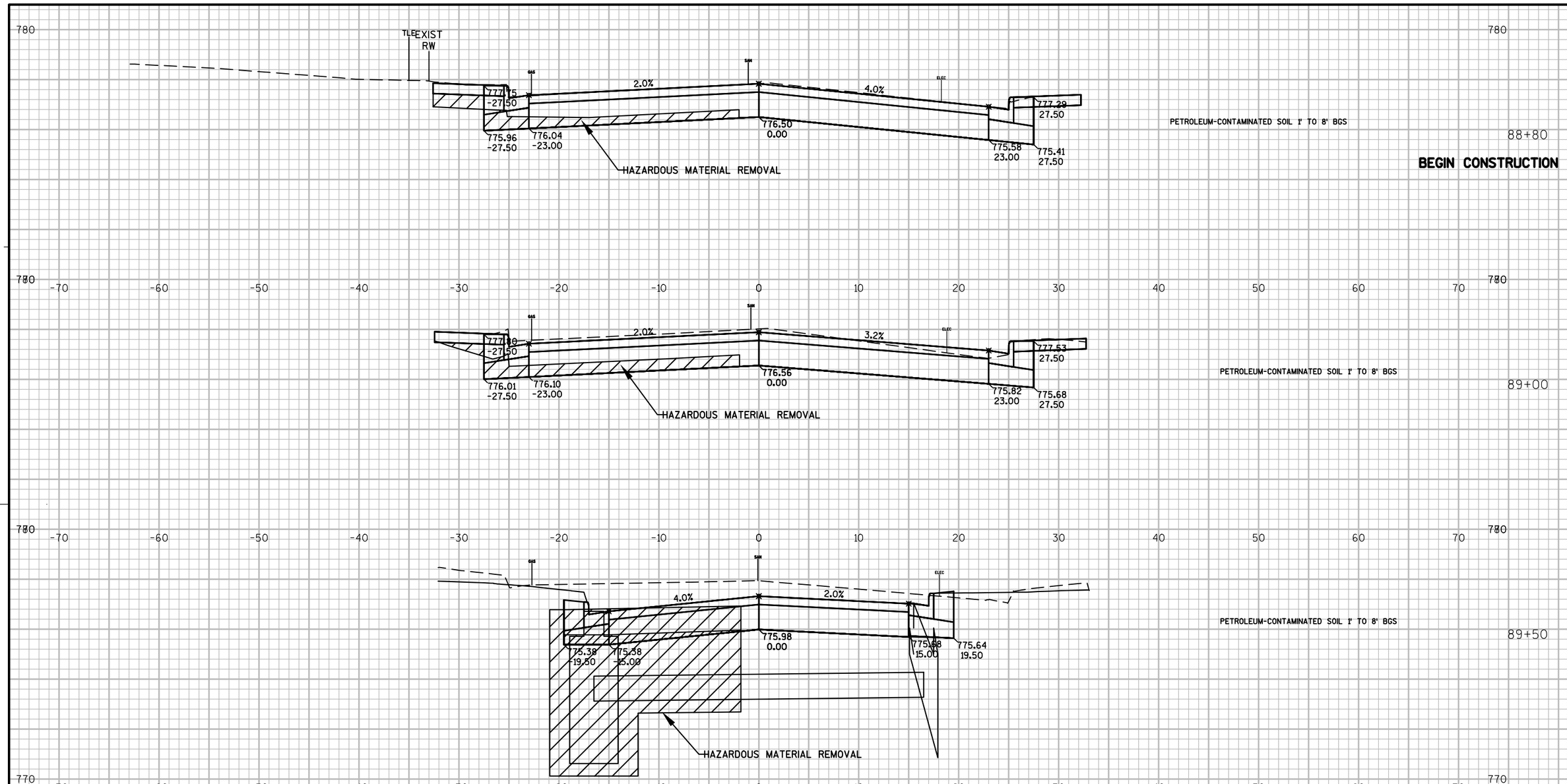
WISDOT/CADDS SHEET 49



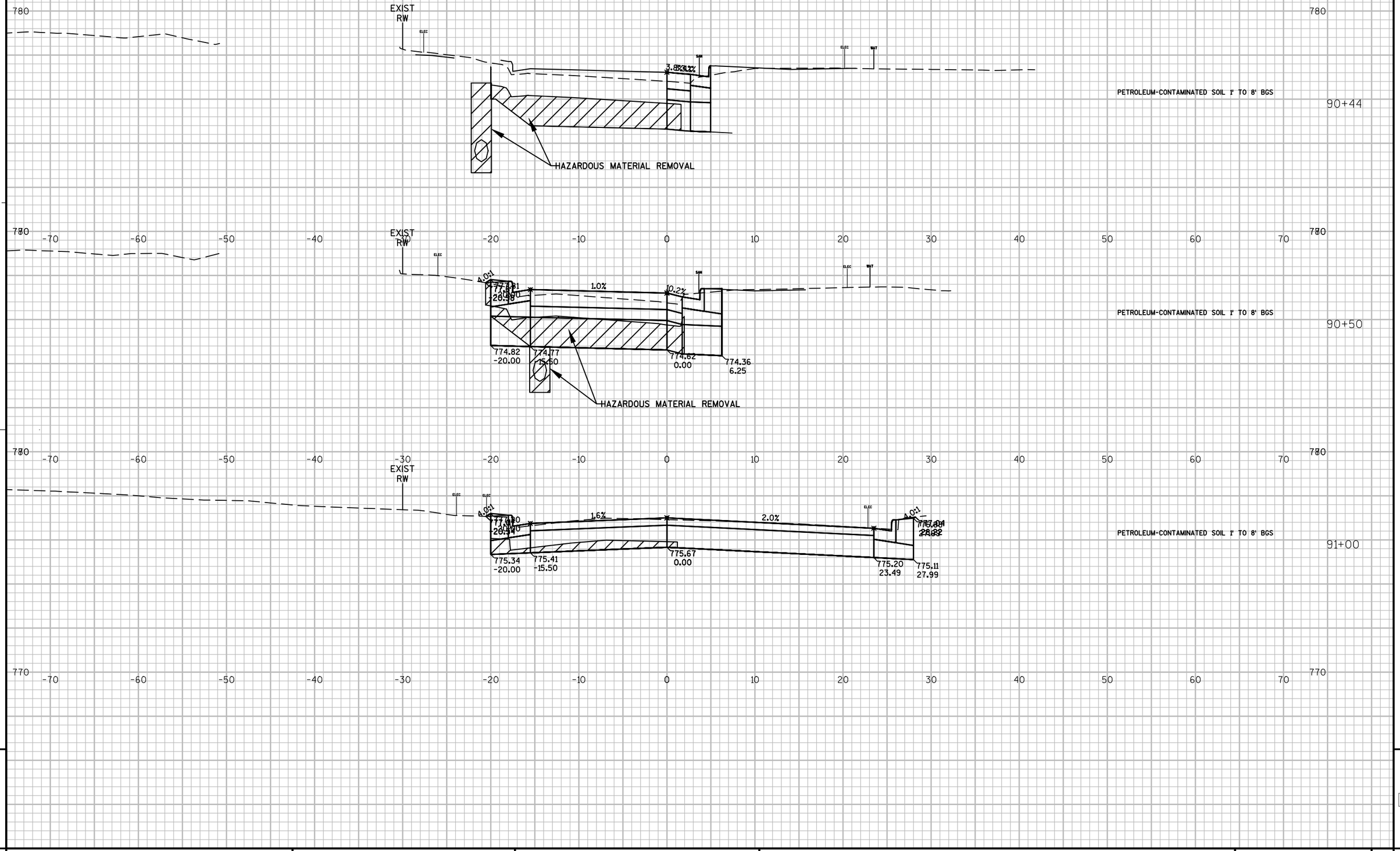
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. JEFFERSON ST.	SHEET 964	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS.DWG PLOT DATE : 2/2/2018 2:08 PM PLOT BY : GUILLAMA, TINA PLOT NAME :

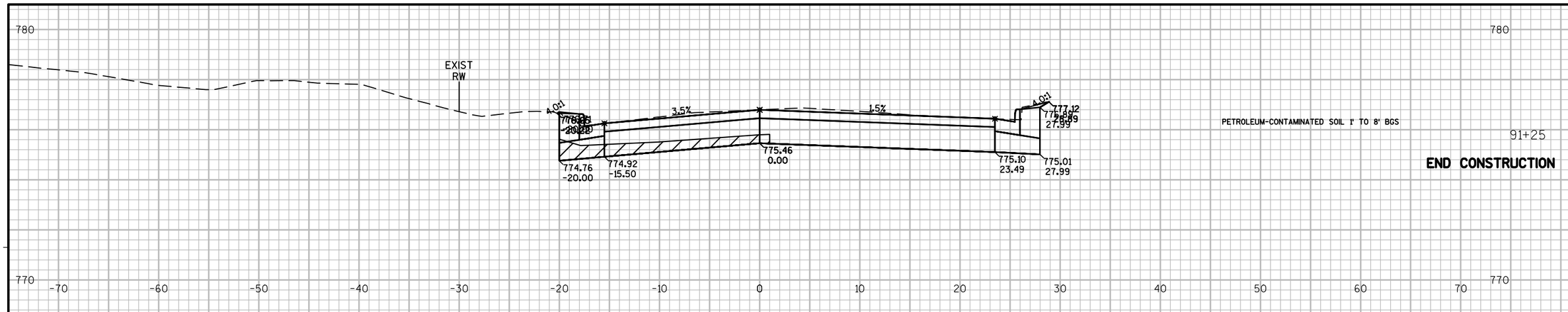
WISDOT/CADDS SHEET 49



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: S. RIVER STREET	SHEET 965	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. RIVER STREET	SHEET 966	E



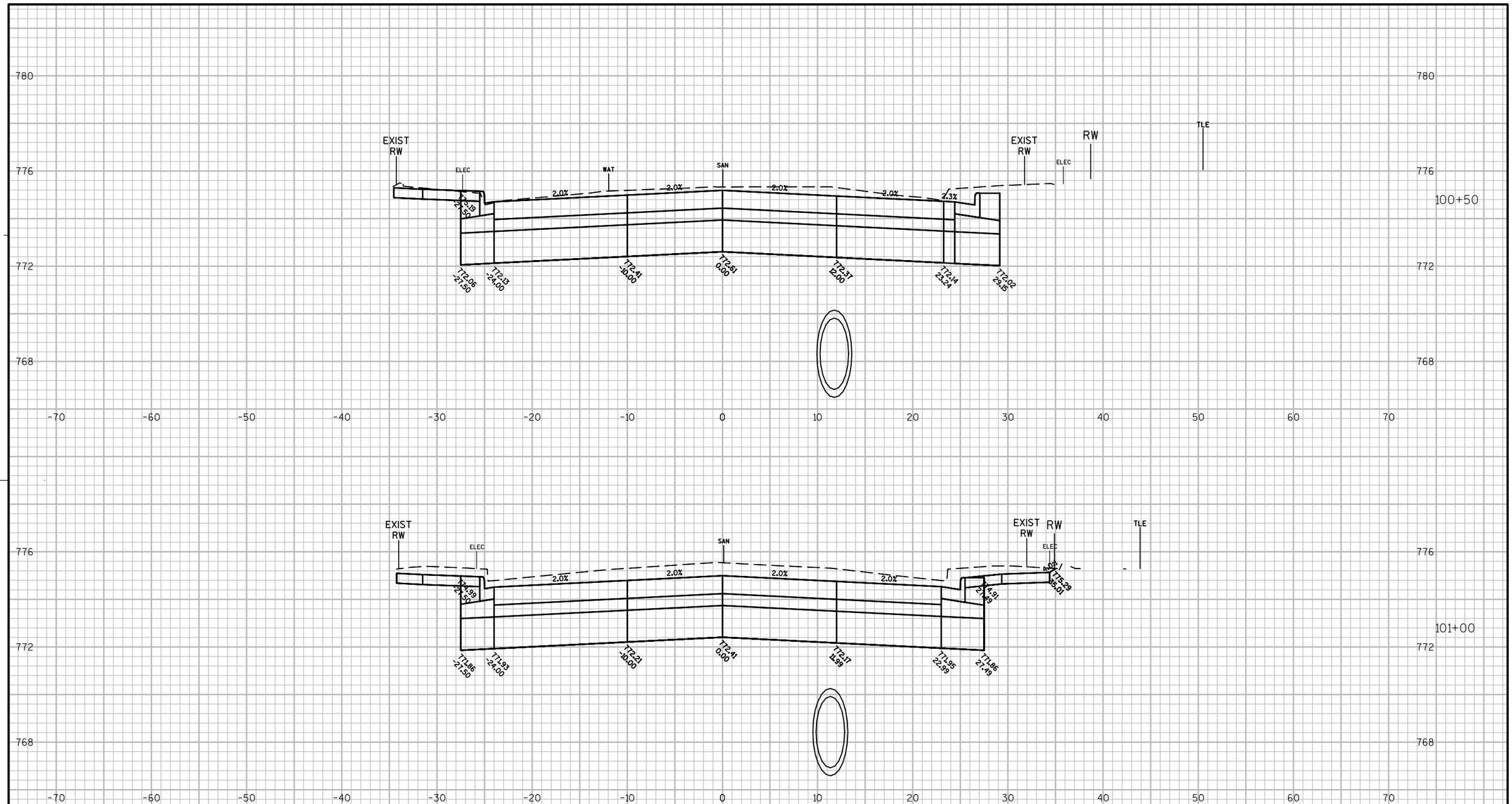
PETROLEUM-CONTAMINATED SOIL 1' TO 8' BGS

91+25

END CONSTRUCTION

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. RIVER STREET	SHEET 967	E

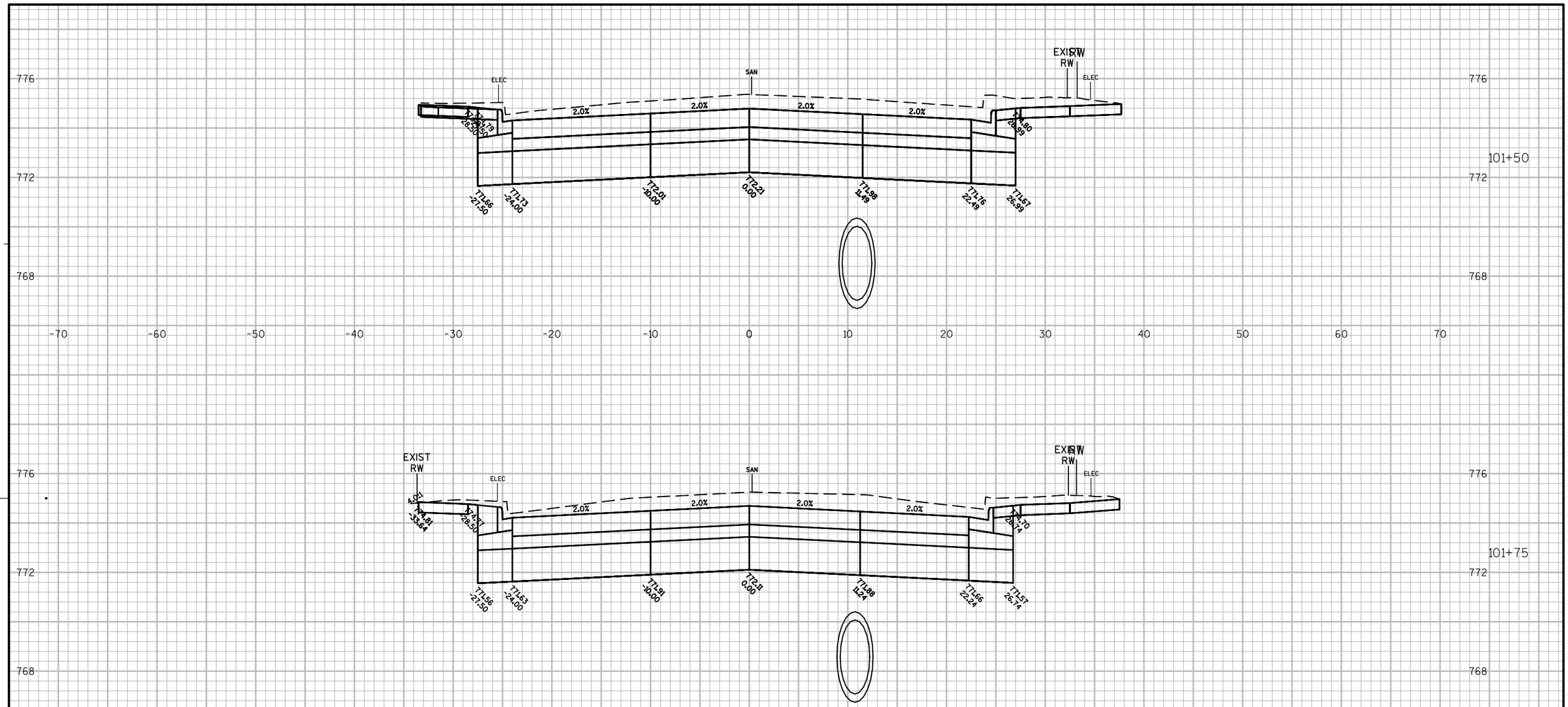
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS.DWG PLOT DATE : 2/2/2018 2:13 PM PLOT BY : GUILLAMA, TINA PLOT NAME :



PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 968	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090202_XS_E MAIN ST.DWG PLOT DATE : 2/2/2018 1:27 PM PLOT BY : MANSKE, CALEB PLOT NAME :

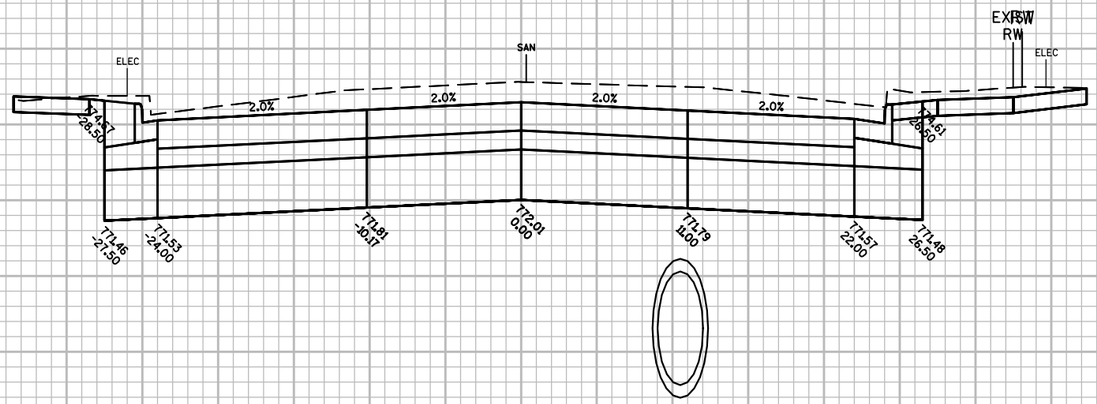
WISDOT/CADDS SHEET 49



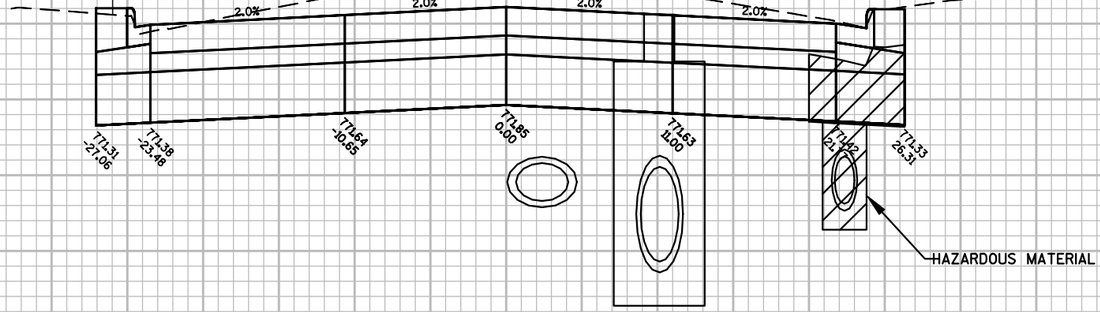
PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 969	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090202_XS_E MAIN ST.DWG PLOT DATE : 2/2/2018 1:27 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



102+00



LEAD-CONTAMINATED SOIL FROM 1' TO 6' BGS

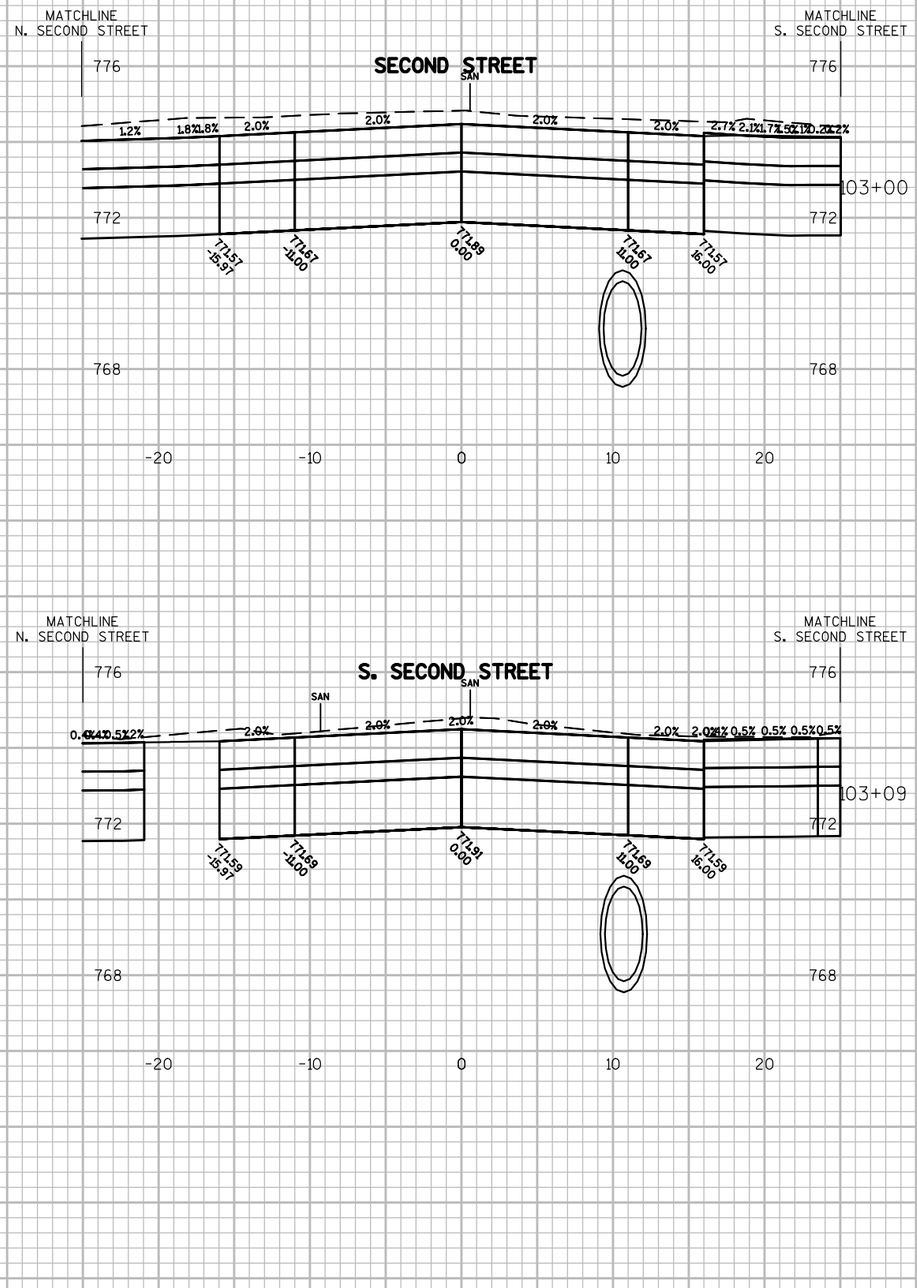
102+50

776 772 768 764

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

9 9

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 970	E



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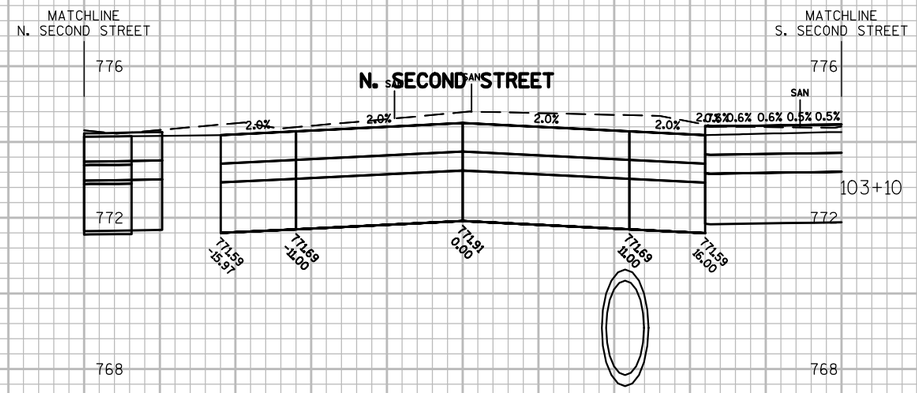
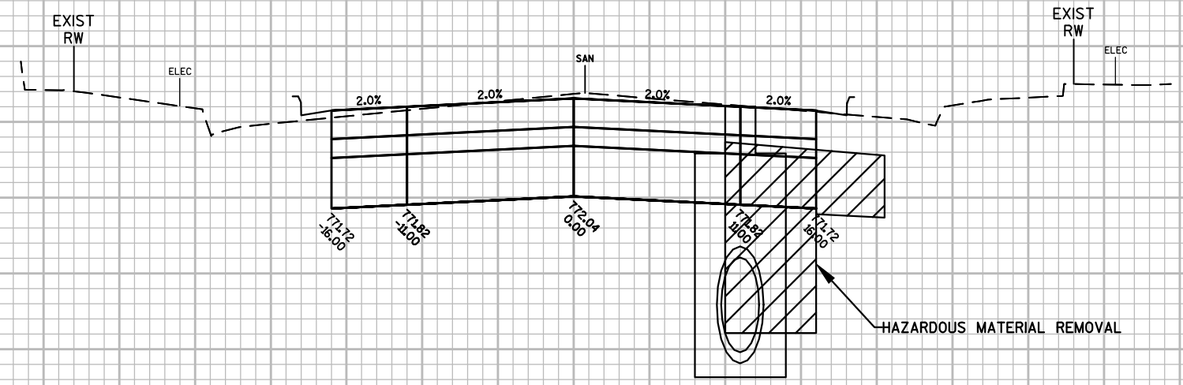
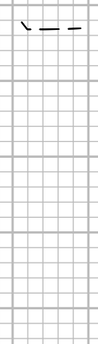
9

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 971	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090202_XS_E MAIN ST.DWG PLOT DATE : 2/2/2018 1:27 PM PLOT BY : MANSKE, CALEB PLOT NAME :







LEAD-CONTAMINATED SOIL FROM 1' TO 6' BGS

103+50

776
772
768
764

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

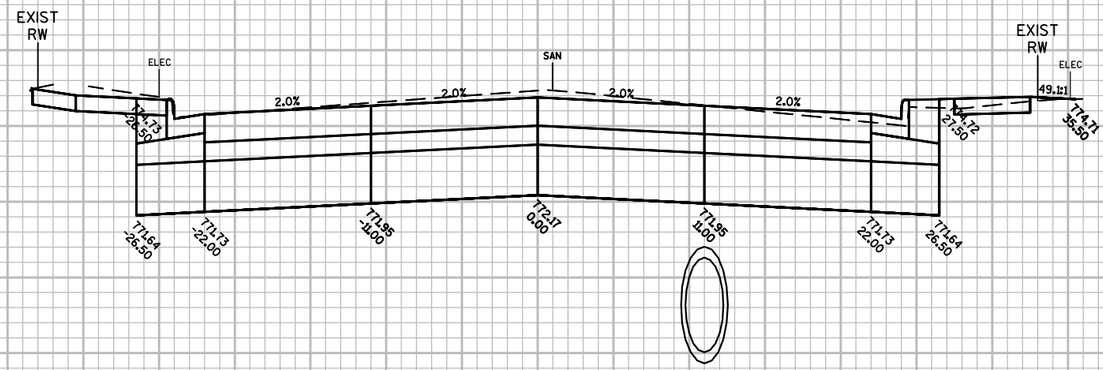
9

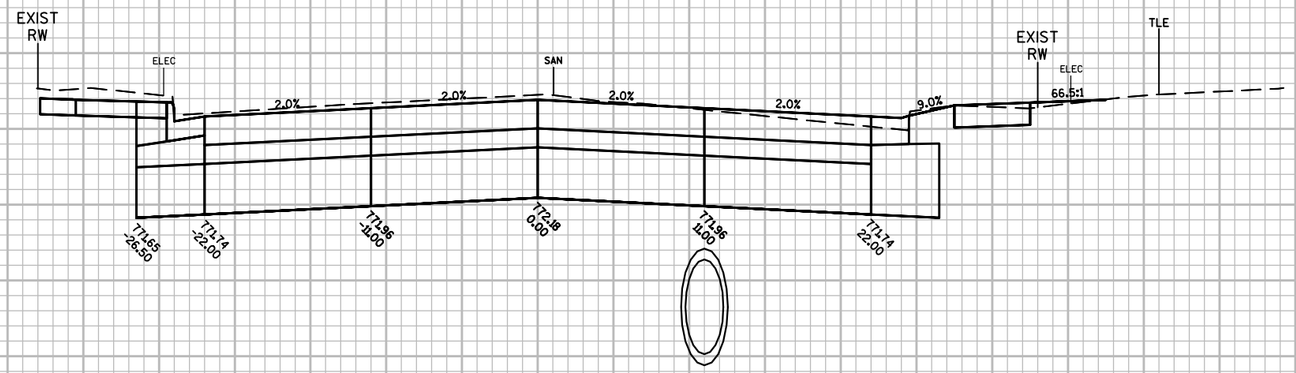
9

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 972	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090202_XS_E MAIN ST.DWG PLOT DATE : 2/2/2018 1:27 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49





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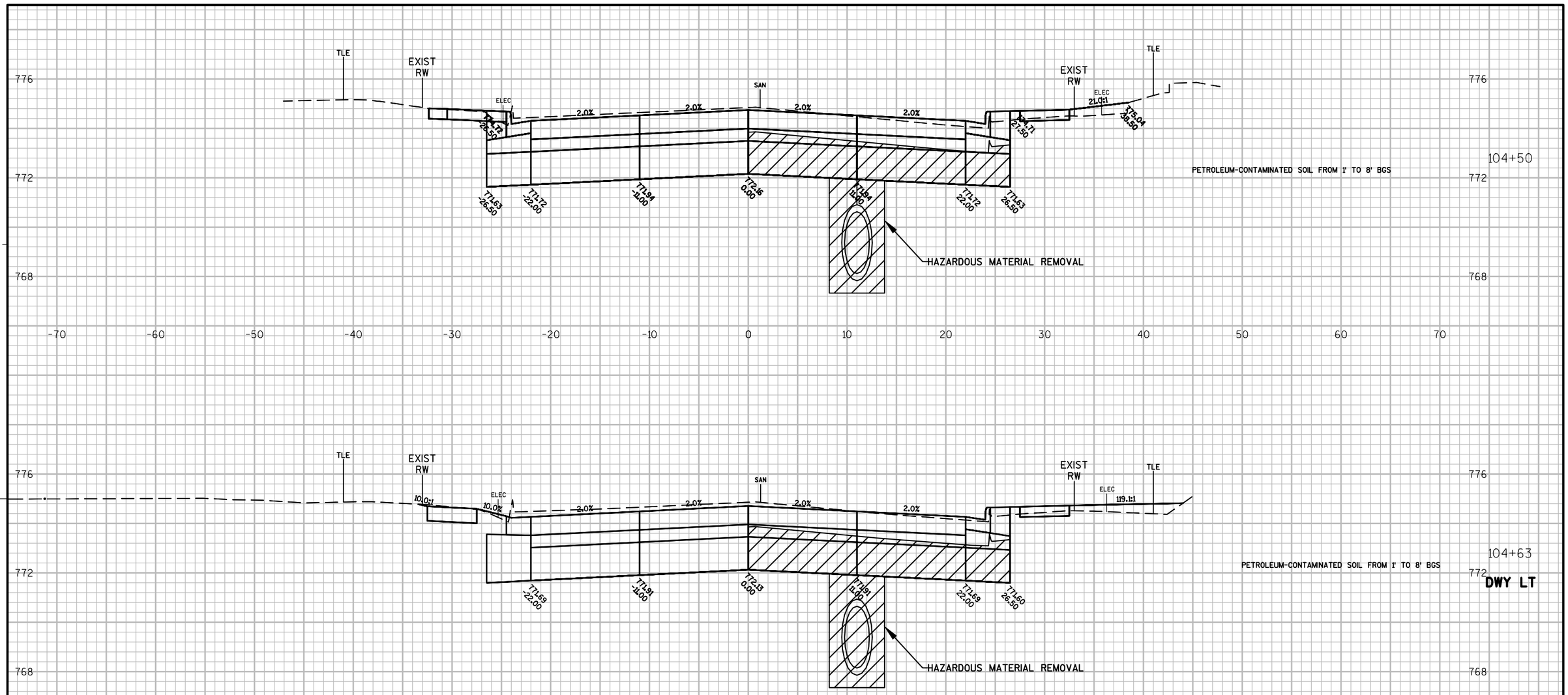
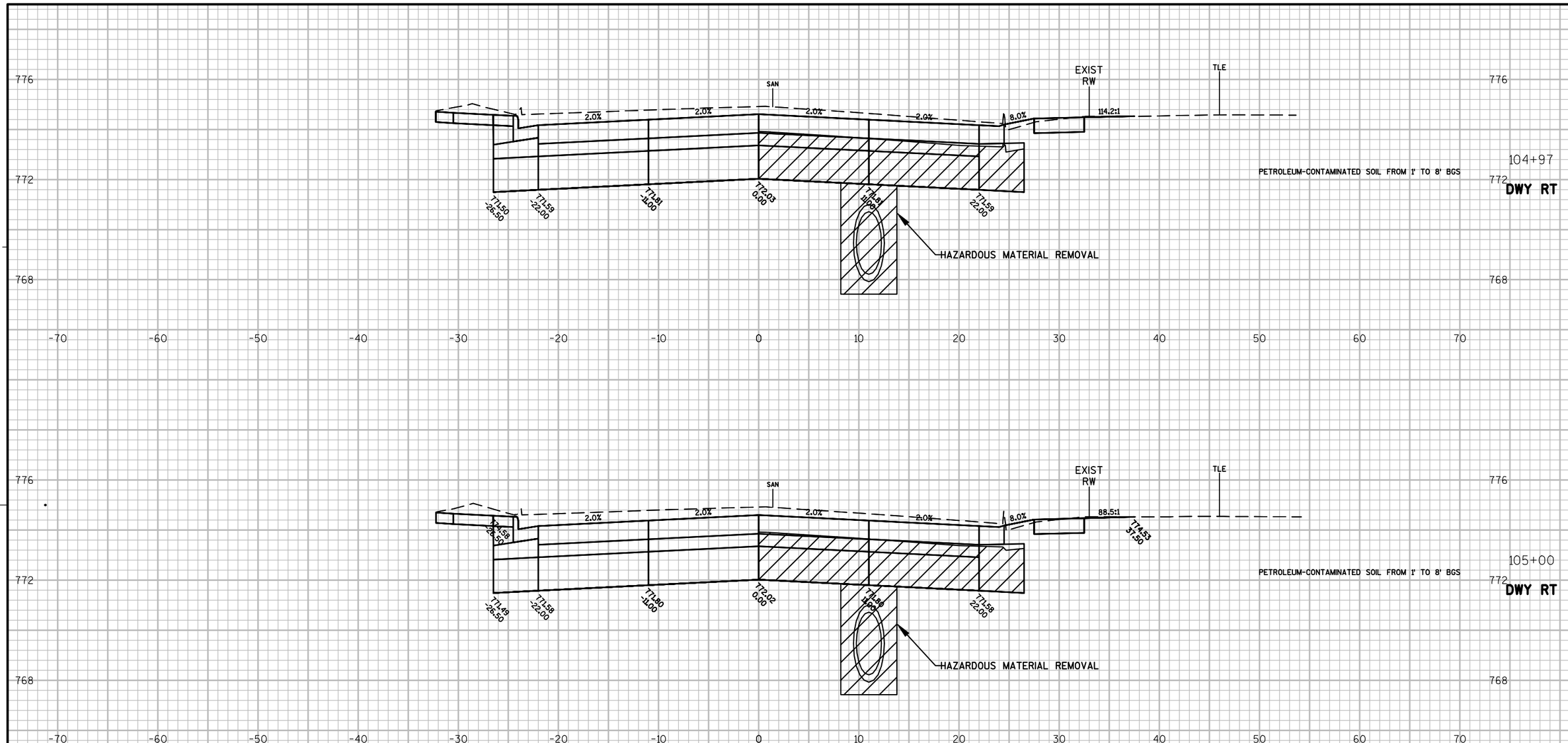
PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 973	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090202_XS_E MAIN ST.DWG PLOT DATE : 2/2/2018 1:28 PM PLOT BY : MANSKE, CALEB PLOT NAME :



PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 974	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090202_XS_E MAIN ST.DWG PLOT DATE : 2/2/2018 1:28 PM PLOT BY : MANSKE, CALEB PLOT NAME :

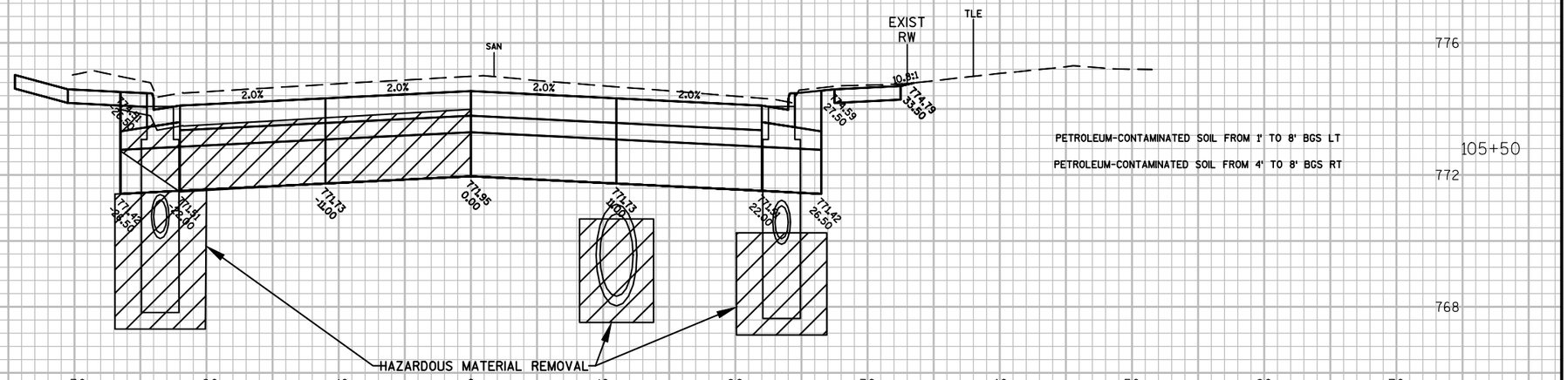


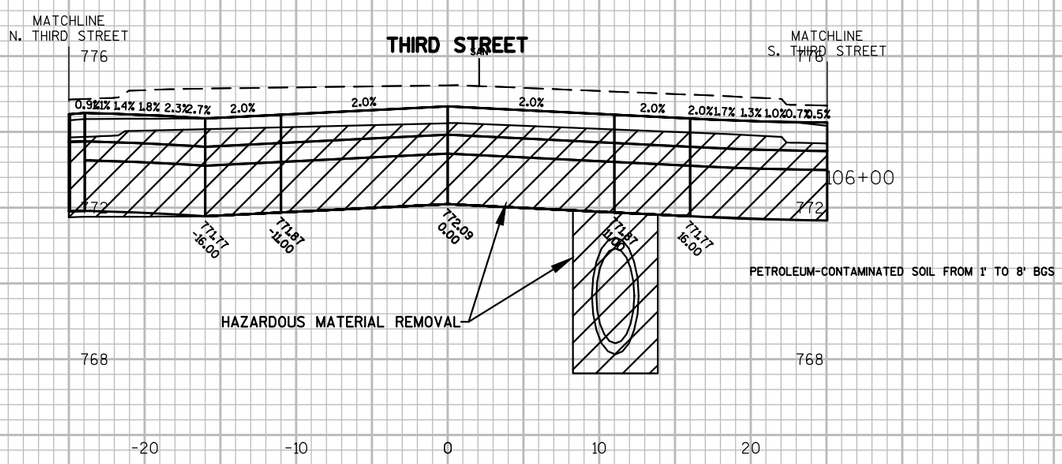
9

9

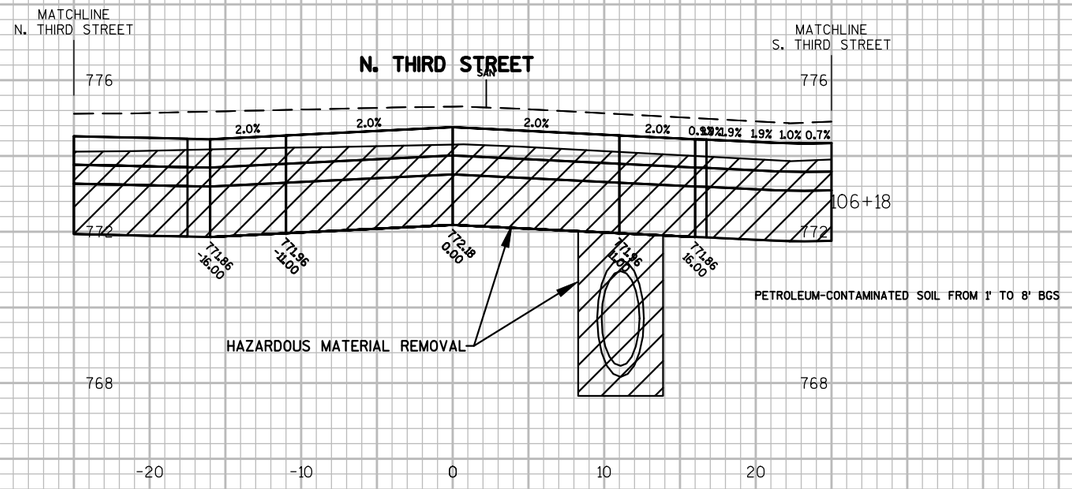
PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 975	E

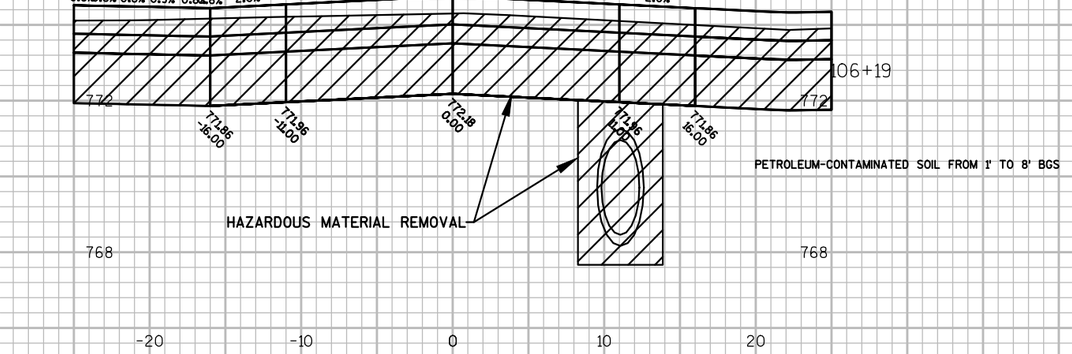
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090202_XS_E MAIN ST.DWG PLOT DATE : 2/2/2018 1:28 PM PLOT BY : MANSKE, CALEB PLOT NAME :





PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 976	E





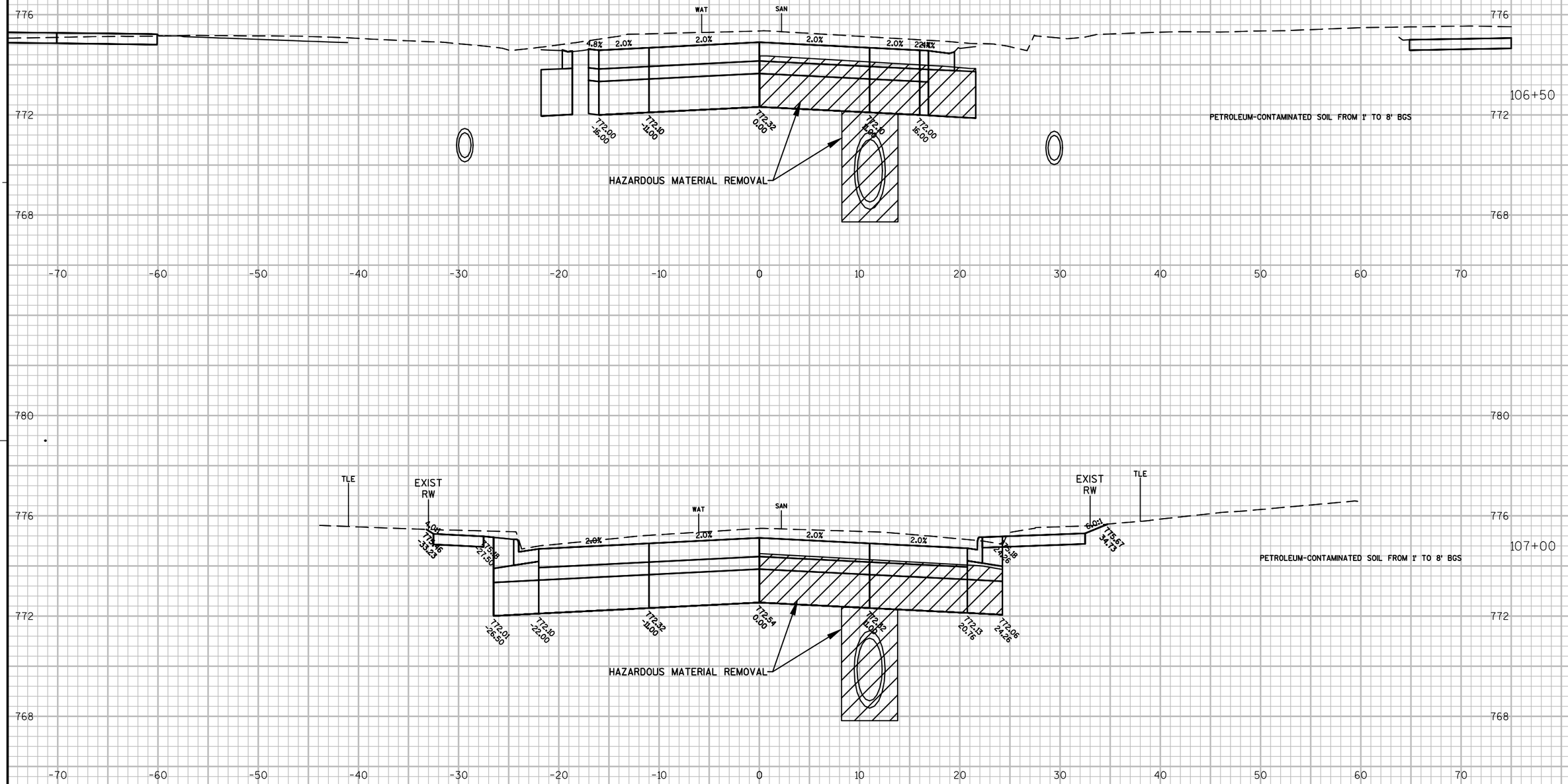
9

9

PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 977	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090202_XS_E MAIN ST.DWG PLOT DATE : 2/2/2018 1:28 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



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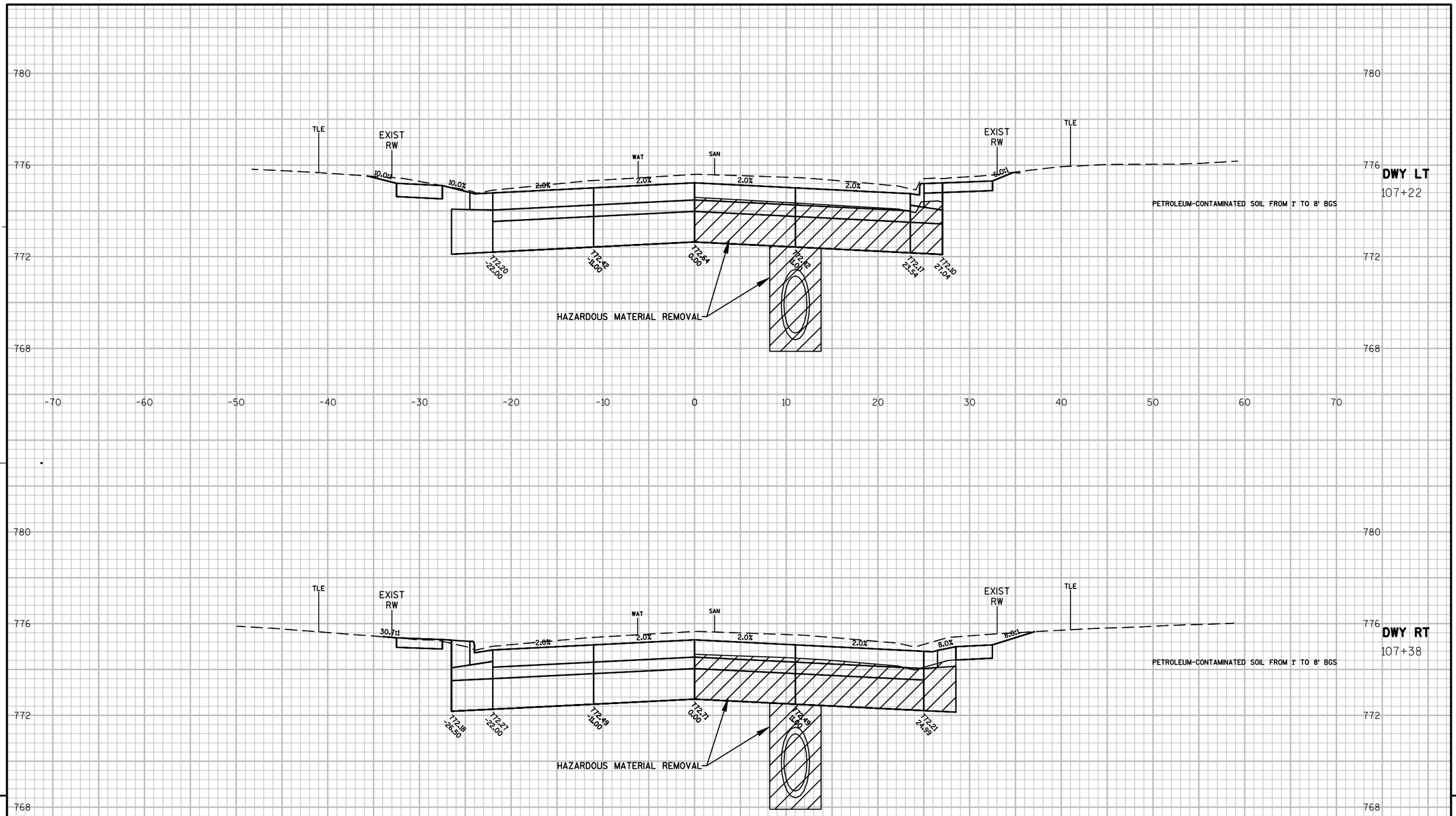
PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 978	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090202_XS_E MAIN ST.DWG PLOT DATE : 2/2/2018 1:28 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



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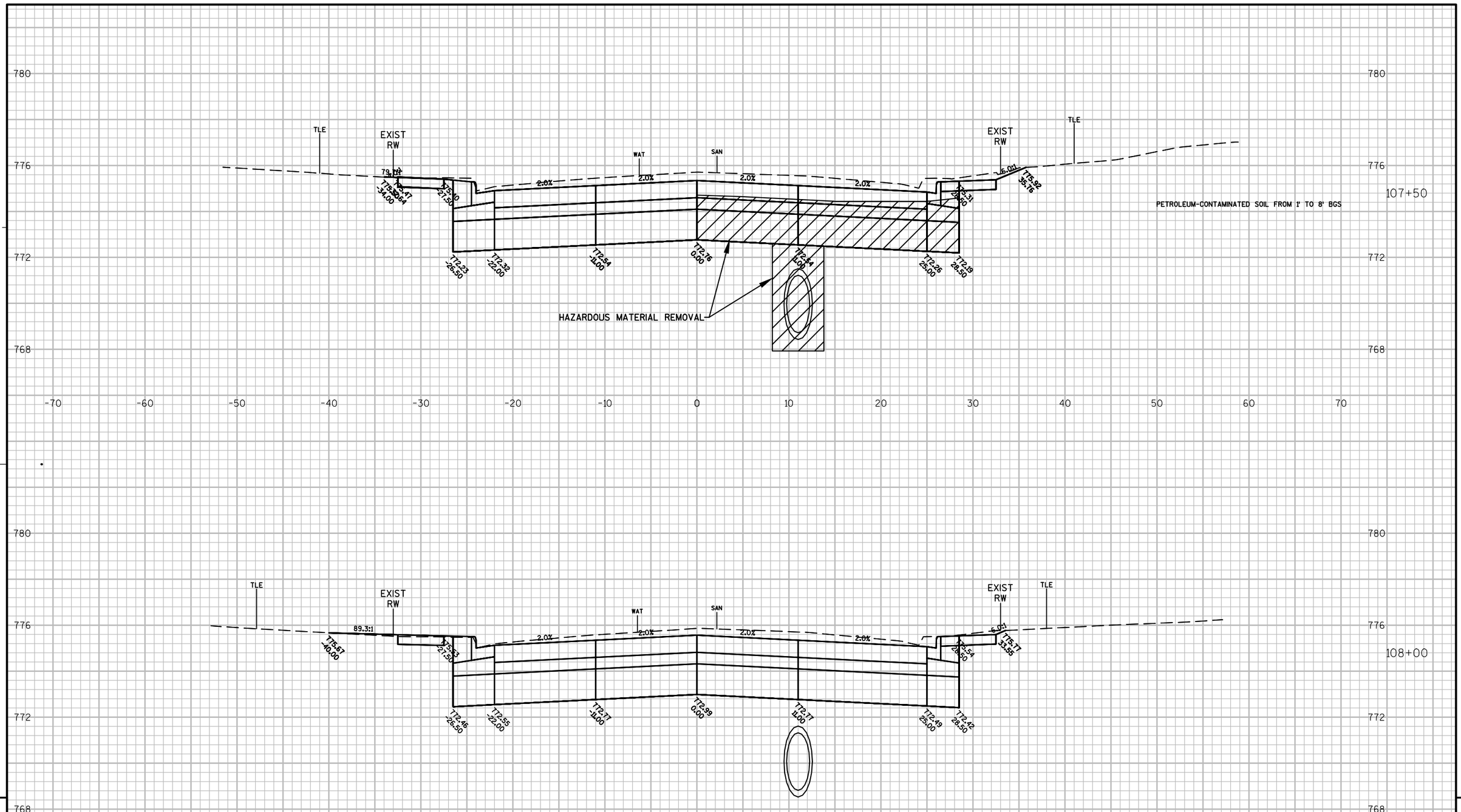
PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 979	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090202_XS_E MAIN ST.DWG PLOT DATE : 2/2/2018 1:28 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49



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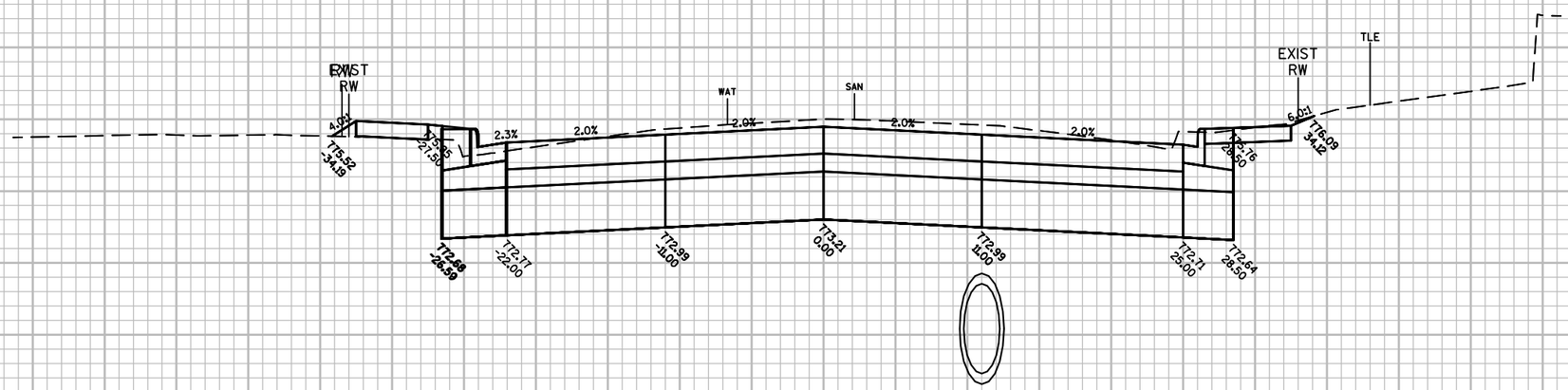
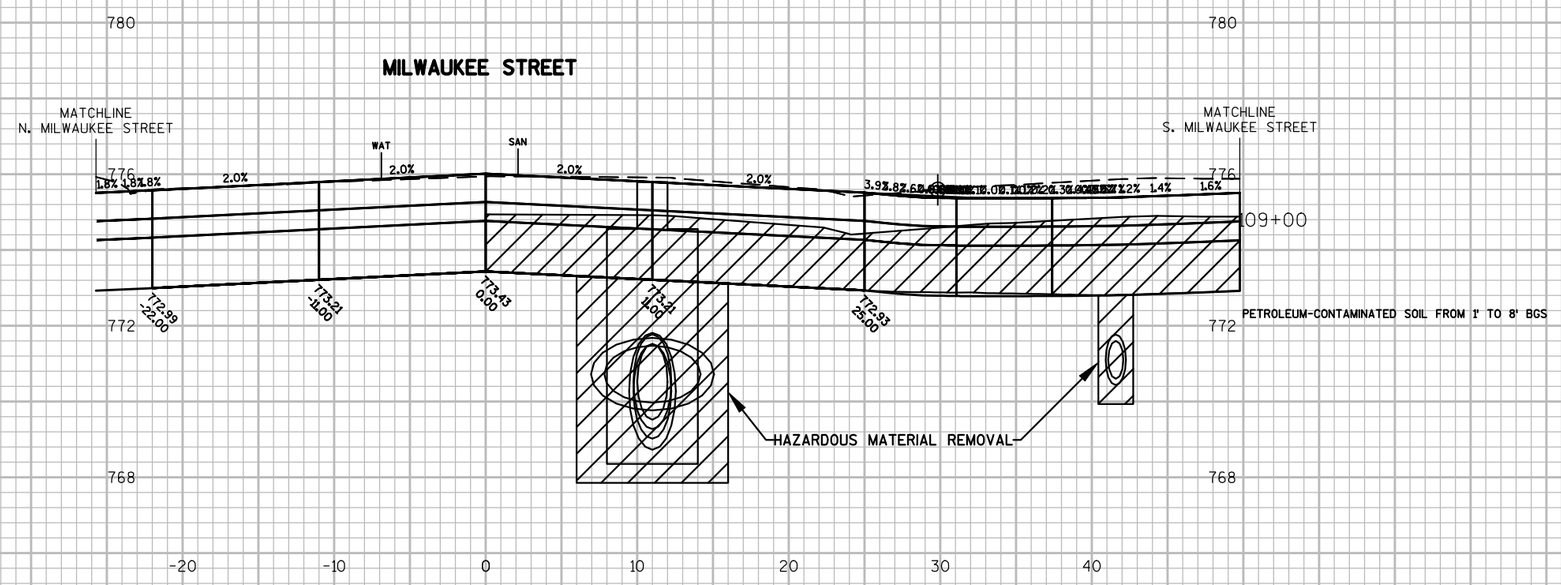
PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 980	E





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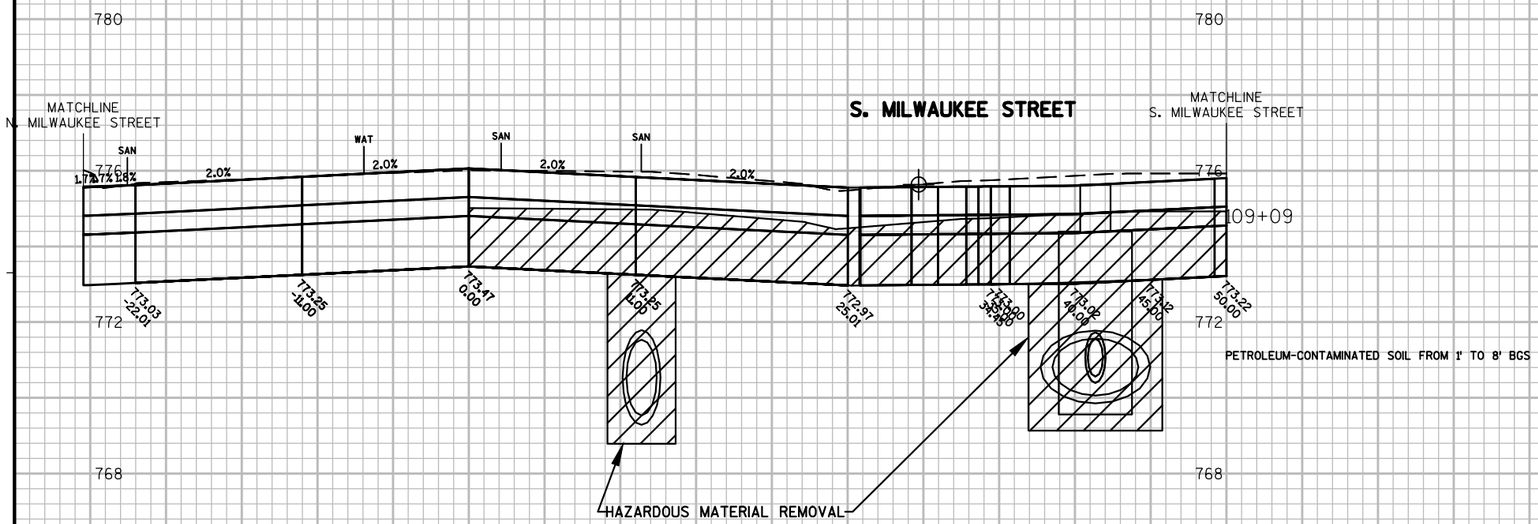
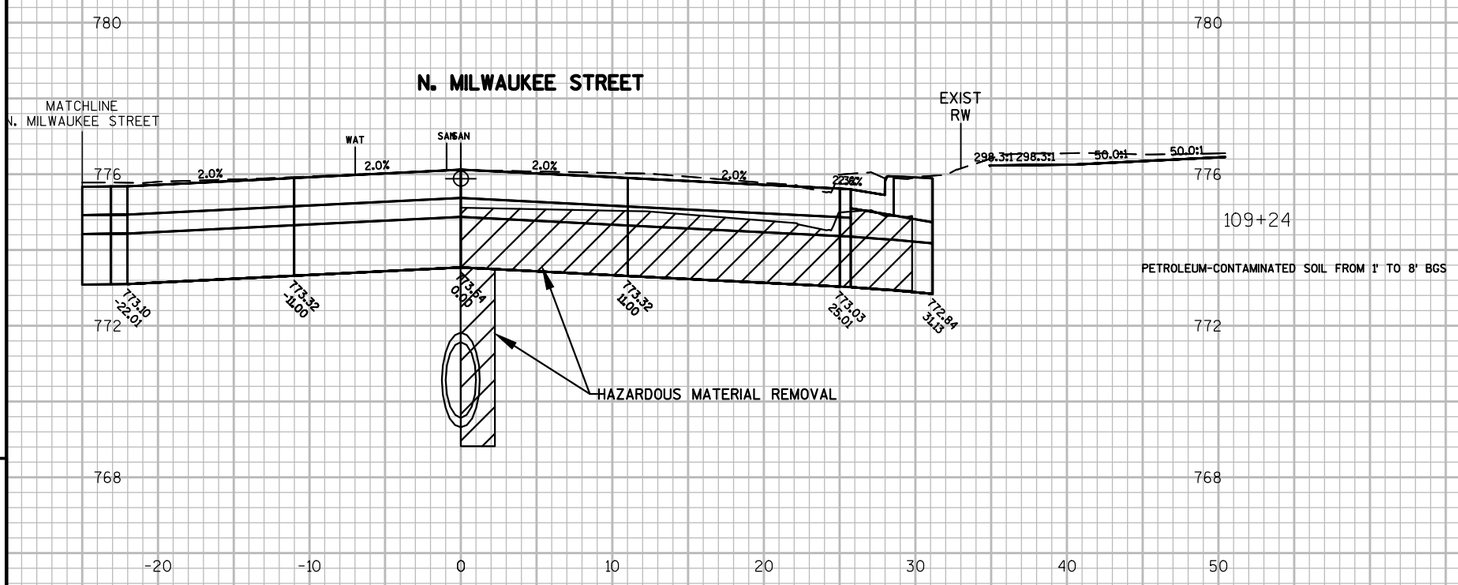
PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 981	E





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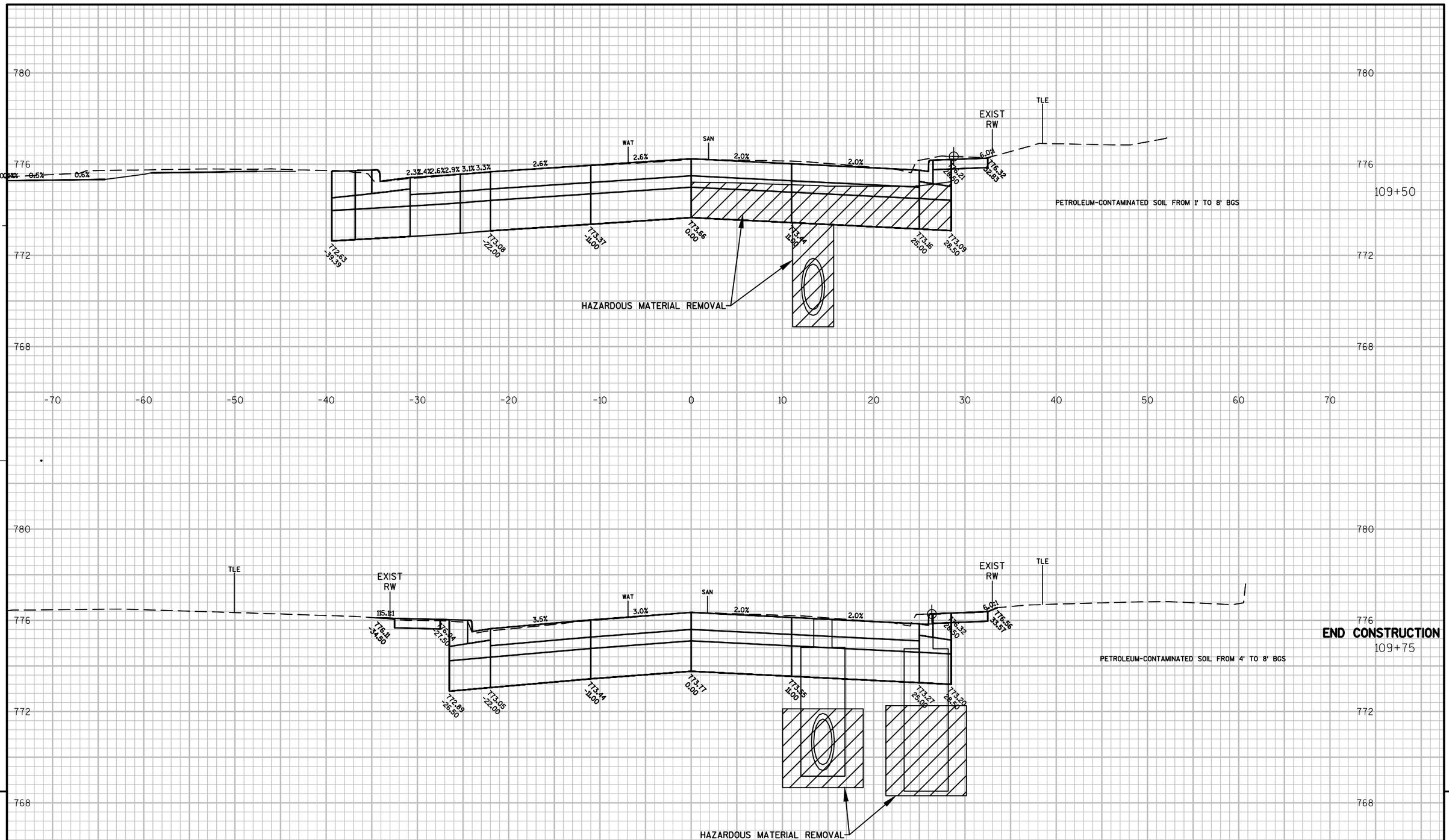
9

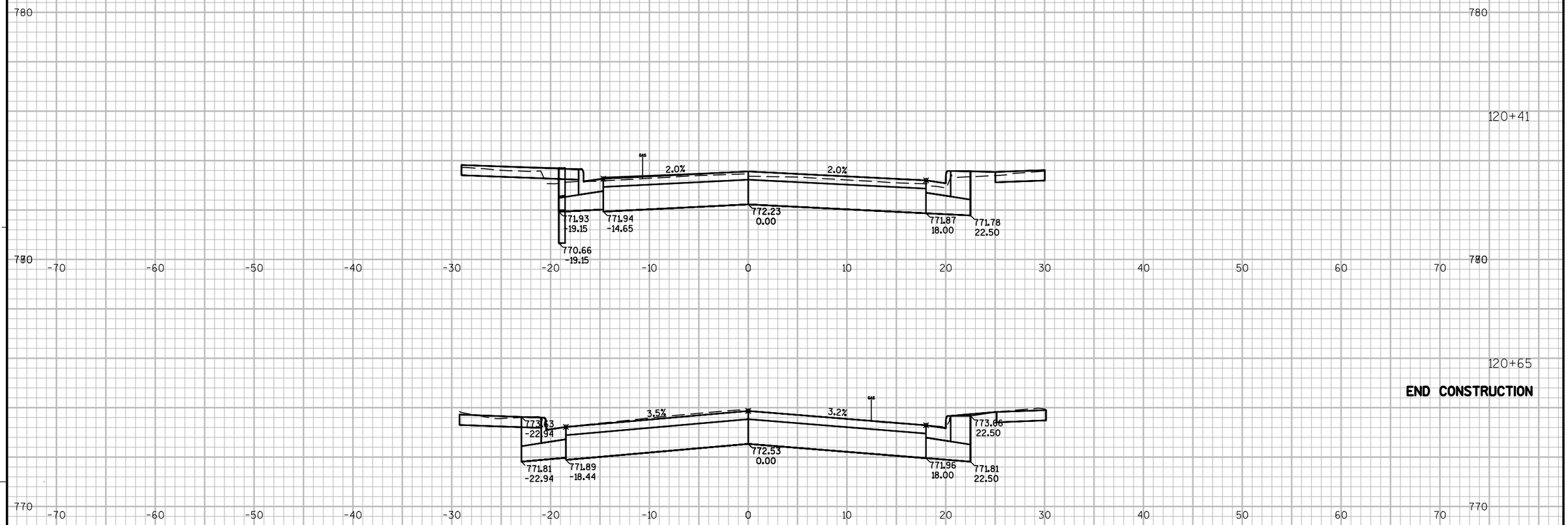
PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 982	E



PROJECT NO: 2250-12-70	HWY: STH 20/83	COUNTY: RACINE	CROSS SECTIONS: E. MAIN STREET	SHEET 983	E

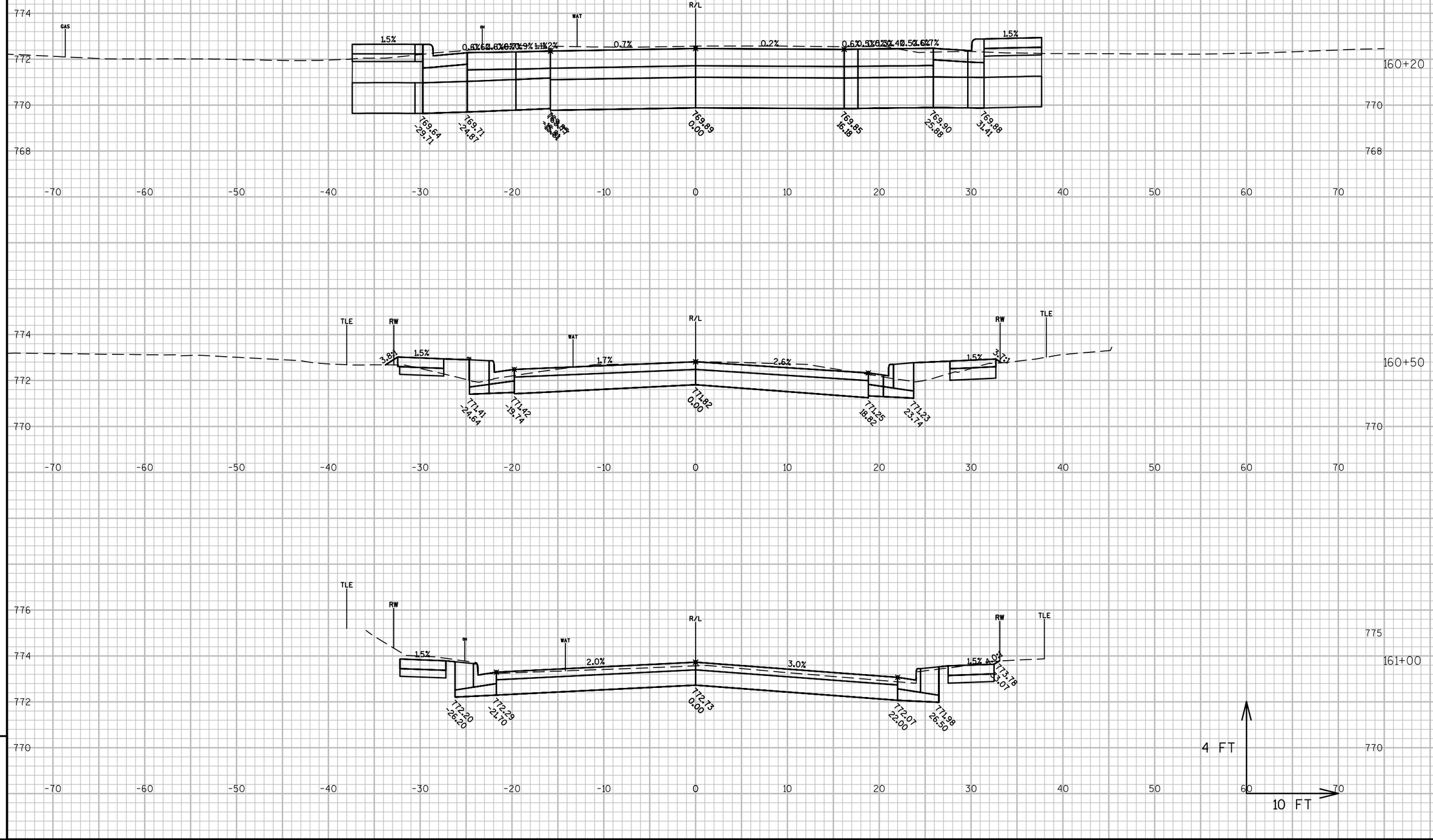
FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090202_XS_E MAIN ST.DWG PLOT DATE : 2/2/2018 1:29 PM PLOT BY : MANSKE, CALEB PLOT NAME :

WISDOT/CADDS SHEET 49

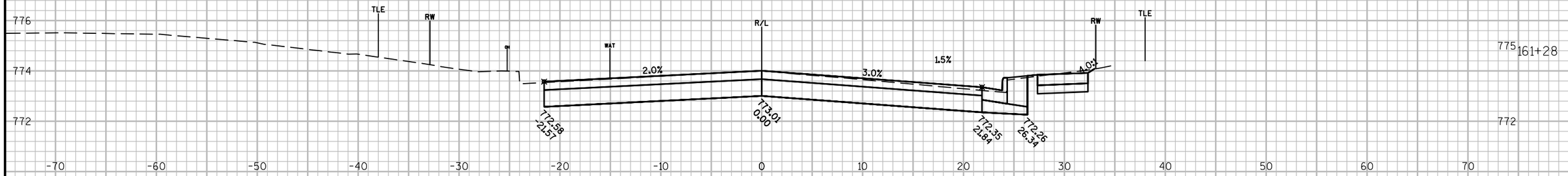


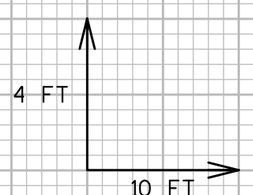
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: ELIZABETH STREET	SHEET 984	E

FILE NAME : T:\1112700\CADD\CIVIL3D\22501200\SHEETSPLAN\090203_XS_SIDEROADS.DWG PLOT DATE : 2/2/2018 2:15 PM PLOT BY : GUILLAMA, TINA PLOT NAME :



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: ST. THOMAS STREET	SHEET 985	E





9

9

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: ST. THOMAS STREET	SHEET 986	E

FILE NAME : L:\DESIGN PROJECTS\2250-10-00 STH 20\2250-12-00 DESIGN\SHEETSPLAN\090201_XS 90%.DWG
LAYOUT NAME - ****

PLOT DATE : 1/30/2018 4:12 PM PLOT BY : TONY BUBLITZ PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

780

780

TLE EXIST RW

SAM

129+00

BEGIN CONSTRUCTION

2.0% 2.0%

774.98 -26.50

773.14 -26.50

773.23 -22.00

773.67 0.00

773.23 22.00

774.98 26.50

773.14 26.50

780 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 780

TLE

SAM

129+50

2.0% 2.0%

772.78 -20.33

772.88 -14.90

773.18 0.00

772.88 14.72

772.79 19.97

780 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 780

EXIST RW

TLE

SAM

129+58

1.9% 1.9%

774.55 18.50

771.49 -18.50

771.50 18.50

770 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 770

PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: S. 2ND STREET	SHEET 987	E

780

780

130+42

TLE

SM

2.0%

1.9%

771.15
-17.50

771.50
0.00

771.12
19.50

780

780

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

130+50

SM

2.0%

2.0%

774.18
19.50

772.32
-19.61

772.42
-15.52

772.73
0.00

772.43
15.00

772.34
19.50

780

780

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

131+00

END CONSTRUCTION

SM

2.0%

2.0%

774.03
19.50

773.95
-23.50

772.12
-23.50

772.20
-19.00

772.58
0.00

772.28
15.00

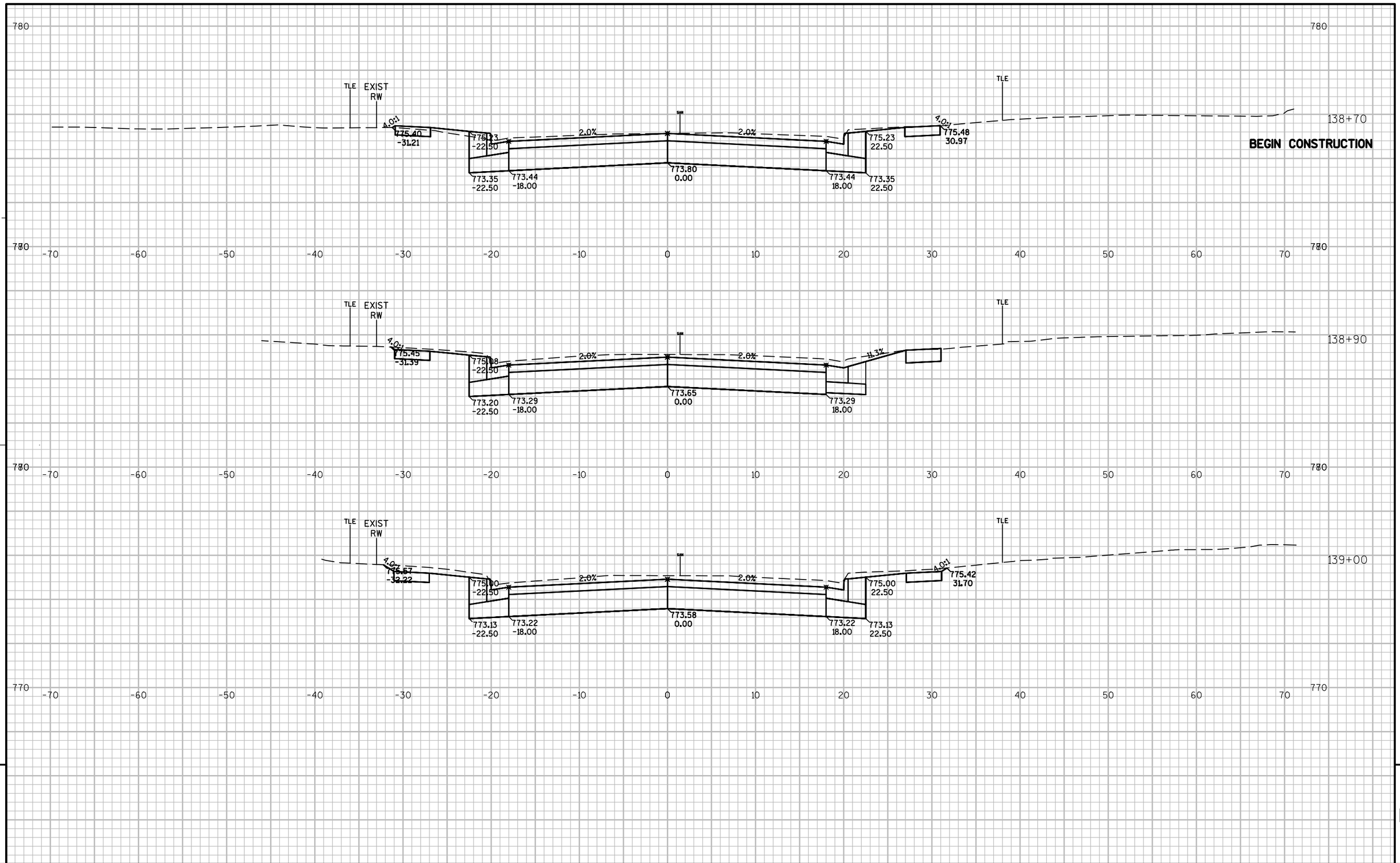
772.22
19.50

770

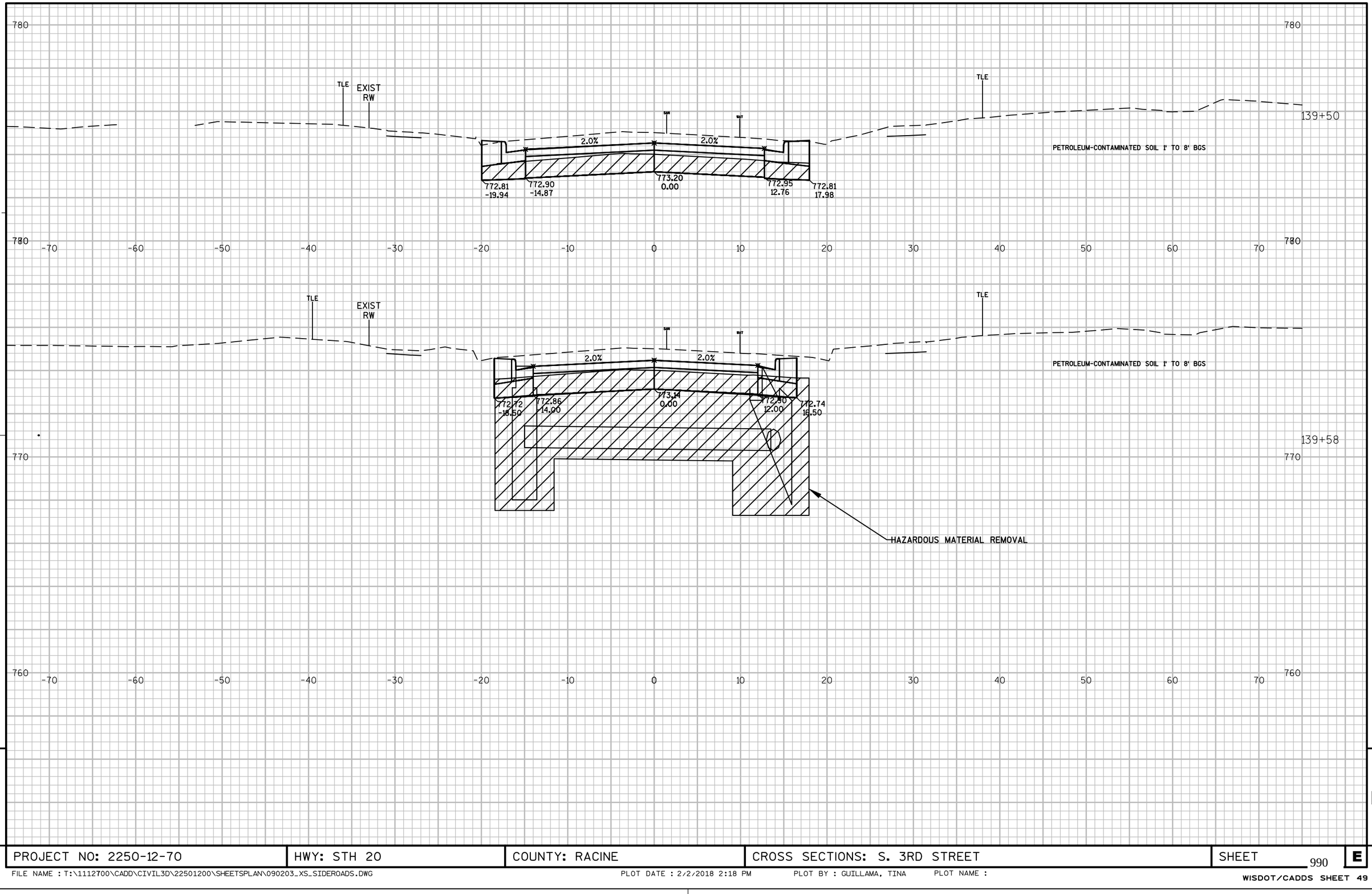
770

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

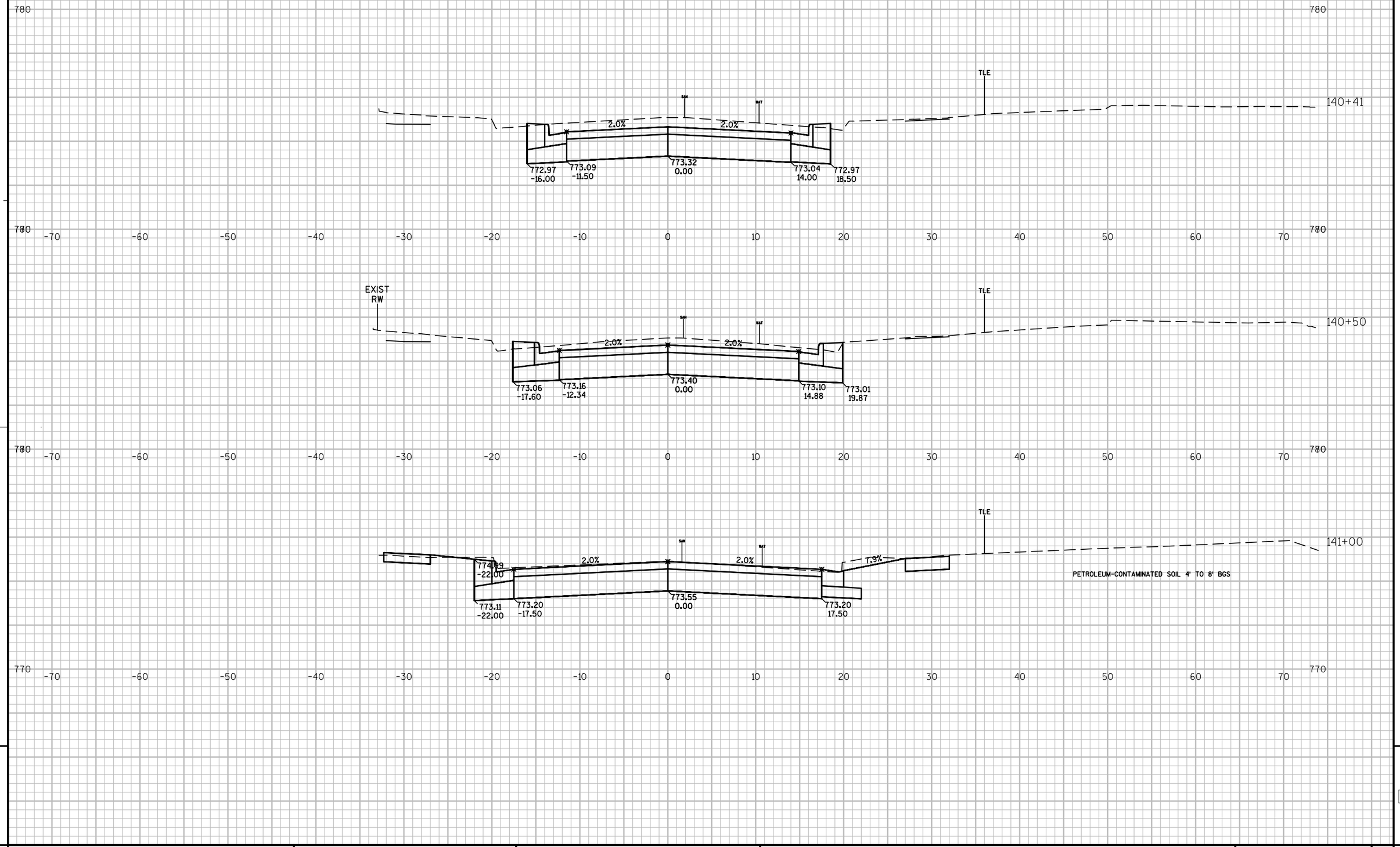
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. 2ND STREET	SHEET 988	E



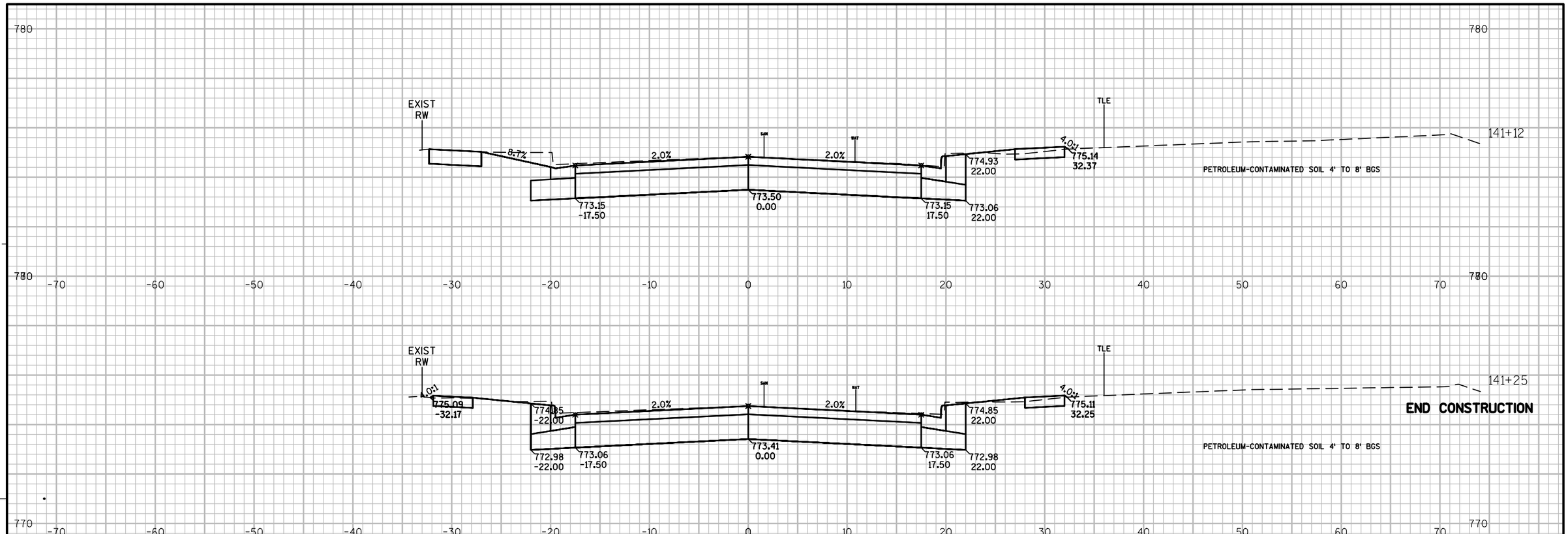
PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: S. 3RD STREET	SHEET 989	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: S. 3RD STREET	SHEET 990	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. 3RD STREET	SHEET 991	E



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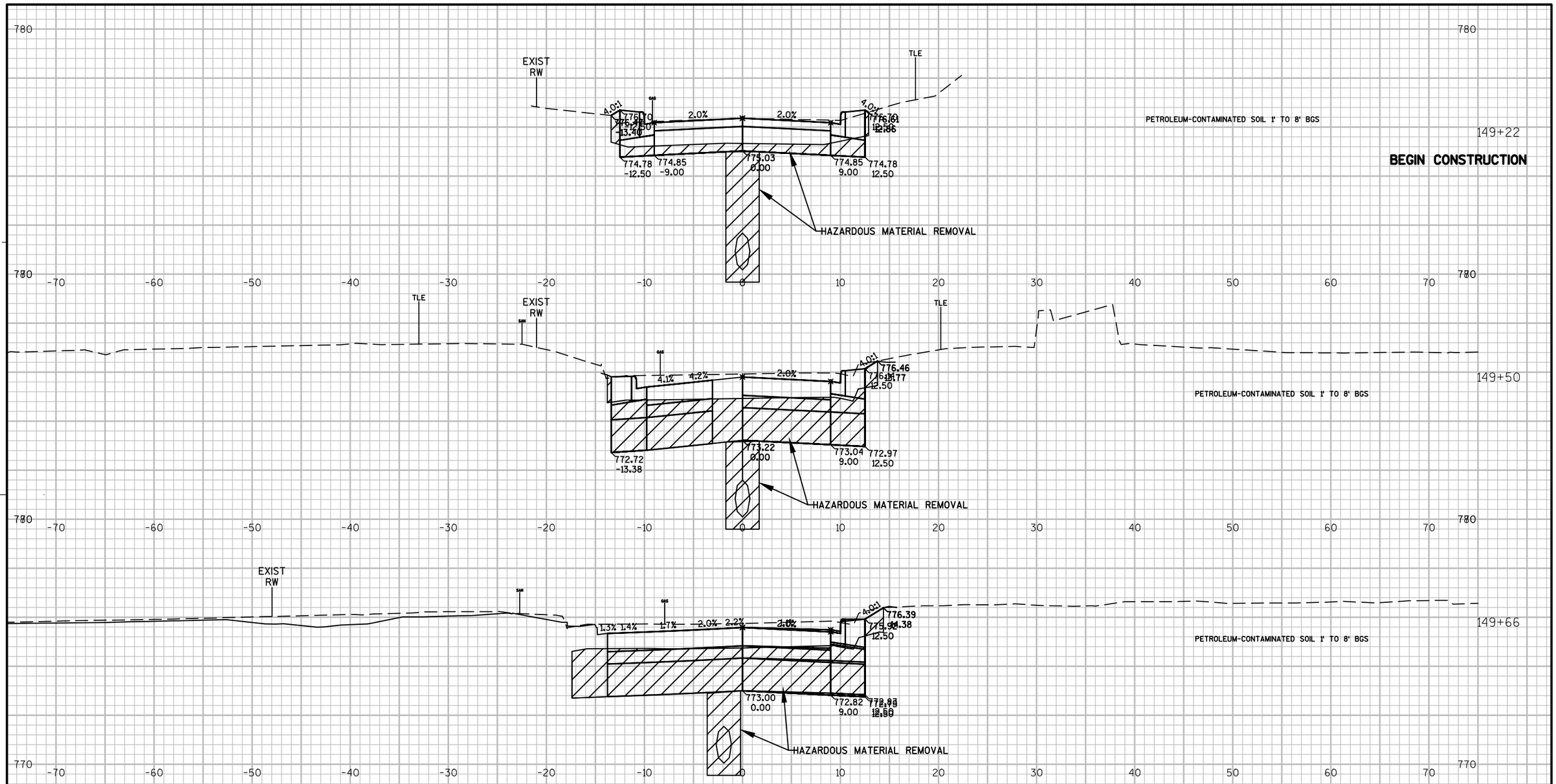
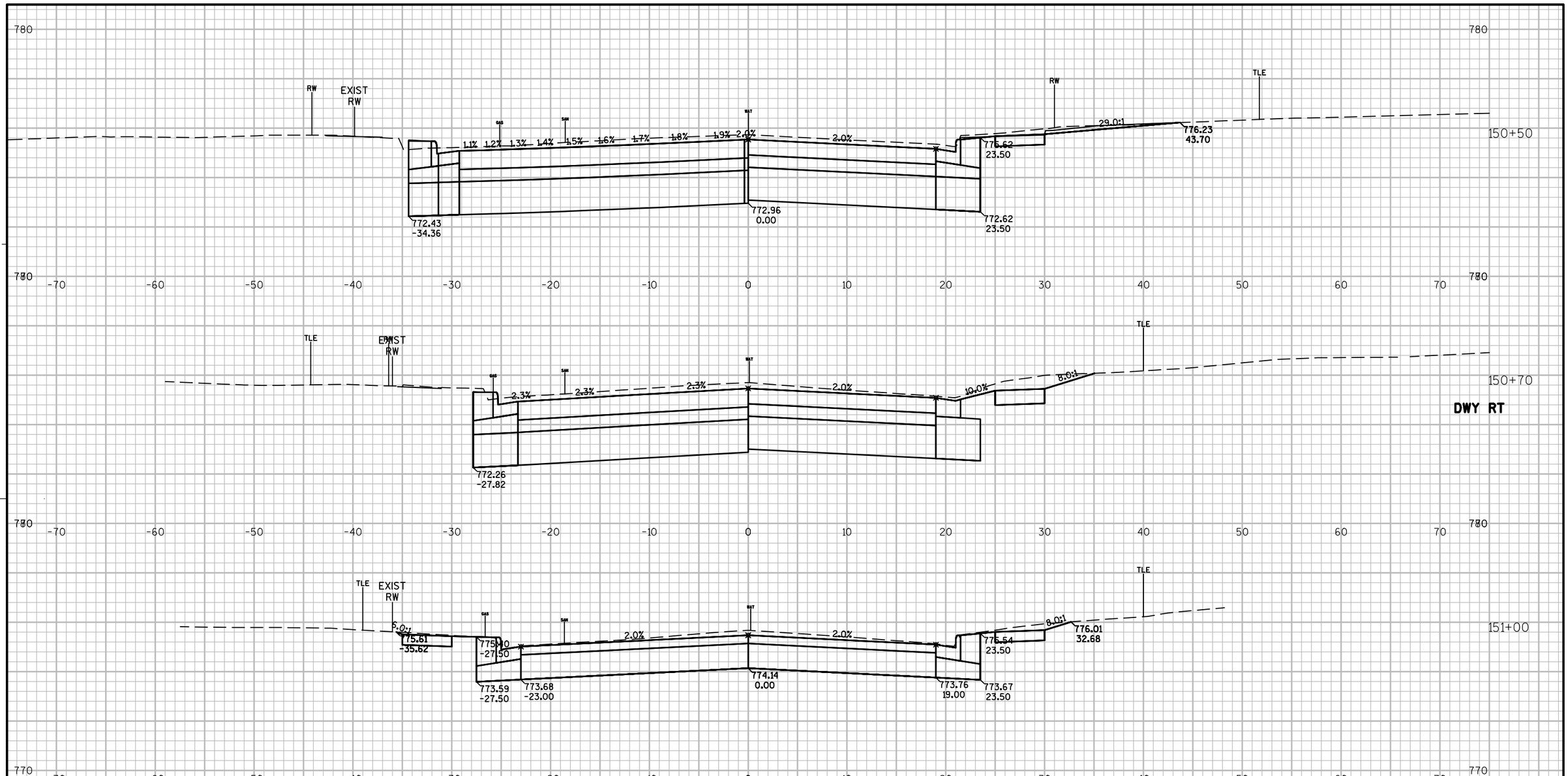
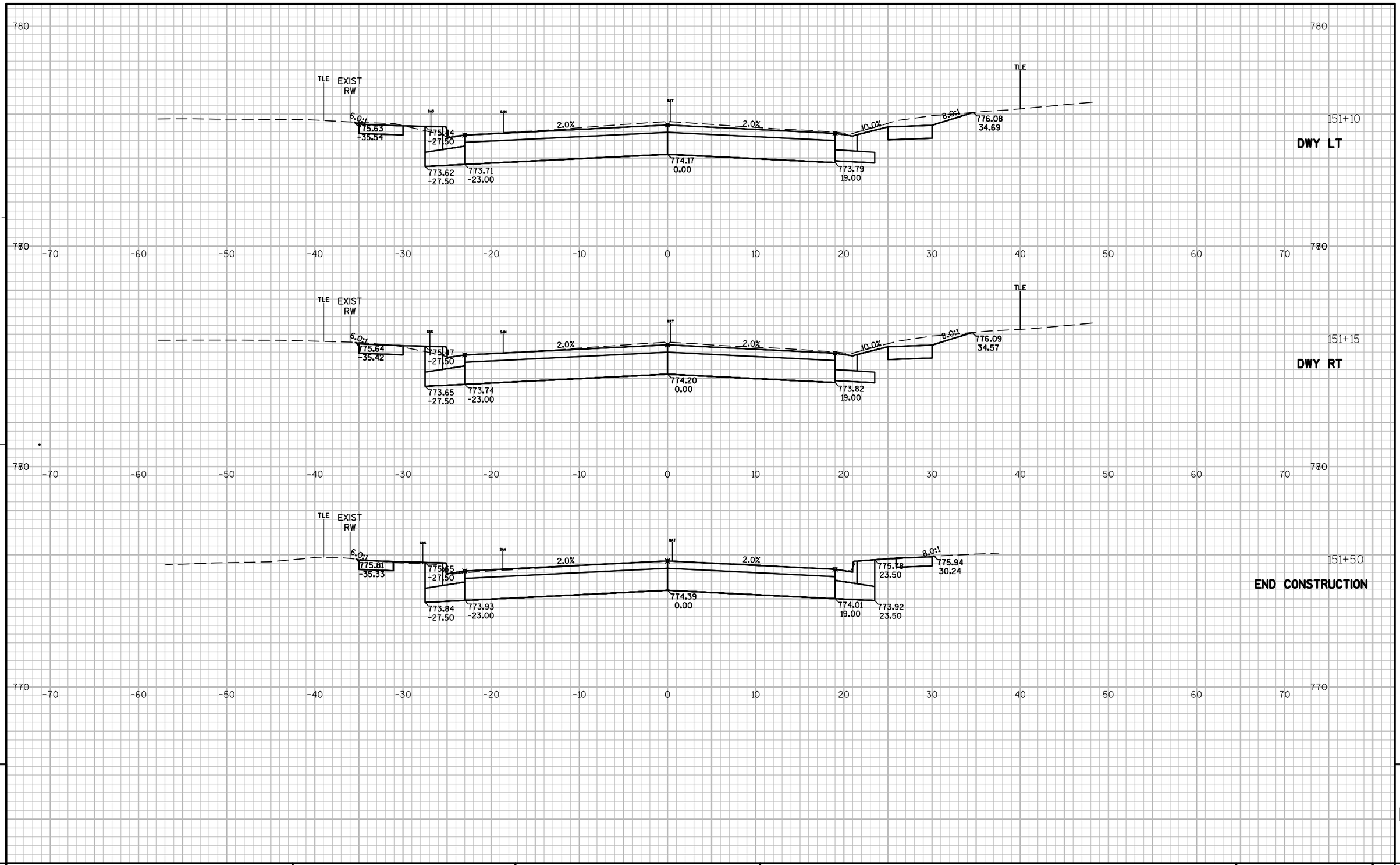


PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: S. MILWAUKEE STREET	SHEET 993	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. MILWAUKEE STREET	SHEET 994	E



PROJECT NO: 2250-12-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: N. MILWAUKEE STREET	SHEET 995	E

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