MAD MAR 2017

PROJECT ID: 3050-02-72
WITH: 3050-02-73

COUNTY: JEFFERSON

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 = 418



05

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

SUN PRAIRIE - WATERTOWN

McKAY WAY - STRUCTURE B-28-077

STH 19

JEFFERSON COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3050-02-72	WISC 2017095	1
3050-02-73	———	—

ROADWAY

STATE PROJECT NUMBER
3050-02-72

SANITARY SEWER & WATER

STATE PROJECT NUMBER
3050-02-73

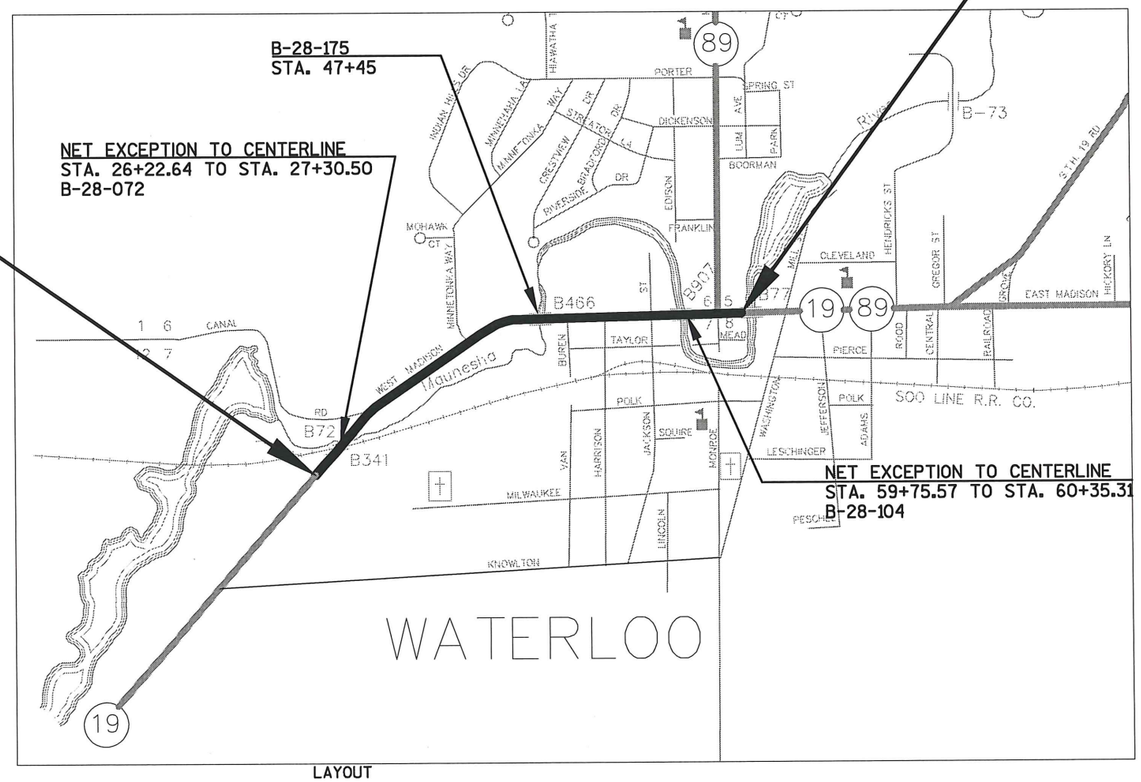
END PROJECT
STA. 65+89.16

R-13-E

B-28-175
STA. 47+45

NET EXCEPTION TO CENTERLINE
STA. 26+22.64 TO STA. 27+30.50
B-28-072

BEGIN PROJECT
STA. 21+90.46
X=802,893.92
Y=622,410.56



T-8-N

NET EXCEPTION TO CENTERLINE
STA. 59+75.57 TO STA. 60+35.31
B-28-104

LAYOUT
SCALE 0 1/4 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.833 MI.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, JEFFERSON 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.

DESIGN DESIGNATION

A.A.D.T.	(2012)	= 7,400
A.A.D.T.	(2037)	= 9,300
D.H.V.		= 11.7%
D.D.		= 60/40
T.		= 13.9%
DESIGN SPEED		= 45/30 MPH
ESALS		= 3,642,700

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EBF)
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- OVERHEAD UTILITY (OH)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
- Surveyor: WISDOT / RA SMITH NATIONAL
- Designer: MATTHEW LAMB
- Project Manager: JEREMY HALL
- Regional Examiner:
- Regional Supervisor: JAMES OETTINGER

APPROVED FOR THE DEPARTMENT
DATE: 10/27/16 (Signature)

E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\1.0_TITLE SHEET\010101_TI.DWG
LAYOUT NAME - 010101_TI - TITLE SHEET 1 IN EQ 1 MI

PLOT DATE : 10/27/2016 2:36 PM PLOT BY : LAMB, MATTHEW R PLOT NAME :

STANDARD ABBREVIATIONS

AC	ACRE
AGG	AGGREGATE
<	ANGLE
AE, AEW	APRON ENDWALL
ASPH.	ASPHALTIC
A.D.T.	AVERAGE DAILY TRAFFIC
A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC
B.F.	BACK FACE
BM	BENCHMARK
BTWN	BETWEEN
CTR.	CENTER
C/L	CENTER LINE
Δ	CENTRAL ANGLE OR DELTA
C.E.	COMMERCIAL ENTRANCE
CONST.	CONSTRUCTION
CMCP	CORRUGATED METAL CULVERT PIPE
CMP	CORRUGATED METAL PIPE
CO.	COUNTY
CTH	COUNTY TRUNK HIGHWAY
CR.	CREEK
CABC	CRUSHED AGGREGATE BASE COURSE
CY	CUBIC YARD
CP	CONTROL POINT OR CULVERT PIPE
C&G	CURB AND GUTTER
D	DEGREE OF CURVE
D.H.V.	DESIGN HOURLY VOLUME
DIA.	DIAMETER
D.D.	DIRECTIONAL DISTRIBUTION
DISCH.	DISCHARGE
DMS	DYNAMIC MESSAGE SIGN
EA	EACH
E	EAST
EB	EASTBOUND
ELEC.	ELECTRIC(AL), ELEC. CABLE
EL., ELEV.	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC.	EXCAVATION
EXIST	EXISTING
F.F.	FACE TO FACE
FERT.	FERTILIZER
F.E.	FIELD ENTRANCE
F/L, F.L.	FLOW LINE
GALV.	GALVANIZE
H.S.	HIGH STRENGTH
CWT	HUNDRED WEIGHT
INL	INLET
INTER.	INTERSECTION
IH	INTERSTATE HIGHWAY
JT.	JOINT
LT	LEFT
L.H.F.	LEFT HAND FORWARD
L.	LENGTH OF CURVE
L.F.	LINEAR FOOT(FEET)
LC.	LONG CHORD
LS	LUMP SUM
M.P.	MARKER POST
MGAL	1000 GALLONS
N.C.	NORMAL CROWN
N	NORTH
NB	NORTHBOUND
NOR	NORMAL
NO.	NUMBER
PAV'T	PAVEMENT
P.L.E.	PERMANENT LIMITED EASEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
PCC	PORTLAND CEMENT CONCRETE
P.E.	PRIVATE ENTRANCE
PGL	PROFILE GRADE LINE
P.L.	PROPERTY LINE
R	RADIUS OR RANGE
R/L	REFERENCE LINE
R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
REQ'D	REQUIRED
RT	RIGHT
R.H.F.	RIGHT HAND FORWARD
R/W	RIGHT OF WAY
RD.	ROAD
SHLD.	SHOULDER(S)
SHR.	SHRINKAGE
S	SOUTH
SB	SOUTHBOUND
S.F.	SQUARE FOOT (FEET)
SDD	STANDARD DETAIL DRAWING(S)
STH	STATE TRUNK HIGHWAY
STA.	STATION
S.E.	SUPERELEVATION
S/L	SURVEY LINE
SYM	SYMMETRICAL
T.	PERCENT TRUCKS
TEL.	TELEPHONE
TEMP.	TEMPORARY
T.L.E.	TEMPORARY LIMITED EASEMENT
T.O.C.	TOP OF CURB
TYP	TYPICAL
UNCL.	UNCLASSIFIED
U.G.	UNDERGROUND (CABLE)
VAR	VARIABLE
V.C.	VERTICAL CURVE
V.P.C.	VERTICAL POINT OF CURVATURE
V.P.I.	VERTICAL POINT OF INTERSECTION
V.P.T.	VERTICAL POINT OF TANGENCY
Wt.	WEIGHT
W	WEST
WB	WESTBOUND

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PAVING AND INTERSECTION DETAILS
CURB RAMP DETAILS
EROSION CONTROL AND DRAINAGE
STORM SEWER
WATER MAIN & SANITARY SEWER
PERMANENT SIGNING AND MARKING
LIGHTING
DETOURS
TRAFFIC CONTROL
ALIGNMENT OVERVIEW

2

GENERAL NOTES

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

UTILITY REFERENCE LINES IN CROSS SECTIONS ARE FOR HORIZONTAL REFERENCE ONLY.

D.O.T. BRIDGE BENCHMARK MONUMENT TO BE FURNISHED BY THE STATE AND PLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER.

RIGHT OF WAY LINES SHOWN ON THE CROSS SECTIONS ARE APPROXIMATE.

CROSS SLOPES AS SHOWN ON THE TYPICAL SECTION WILL VARY AT THE INTERSECTIONS. SEE DETAIL SHEETS AND CROSS SECTIONS FOR SLOPES AND GRADES.

ALL RADII ARE MEASURED TO EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.

EXPANSION JOINTS TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER OR AT LOCATIONS SHOWN ON THE PLAN.

CONSTRUCT INSIDE EDGE OF SIDEWALK 1/2 INCH HIGHER THAN TOP OF CURB WHEN THEY ARE ADJACENT TO EACH OTHER.

SAWCUTS, AS SHOWN ON PLANS, ARE AT SUGGESTED LOCATIONS AND MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER TO BETTER SUIT FIELD CONDITIONS.

CURB AND GUTTER PLAN GRADES ARE AT THE FLAG LINE UNLESS OTHERWISE NOTED.

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE FLAG OF CURB, UNLESS OTHERWISE NOTED.

THE CLEAR ZONE IS 2 FEET BEHIND THE FACE OF THE CURB.

SIGN LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND THE EXACT LOCATIONS OF SIGNS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

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

PAVEMENT REMOVAL WILL BE TO THE NEAREST JOINT OR A SAWED EDGE WILL BE REQUIRED AS DIRECTED BY THE ENGINEER.

EXCAVATION BELOW SUBGRADE (E.B.S.) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS, BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION. THE LOCATION OF THE UNDISTRIBUTED E.B.S. WILL BE DETERMINED BY THE ENGINEER.

EARTHWORK WASTE MATERIAL SHOWN ON THE EARTHWORK SUMMARY SHALL BE HAULED FROM THE PROJECT, EXCEPT AS DIRECTED BY THE ENGINEER.

ALL OPENINGS OR HOLES BELOW SUBGRADE RESULTING FROM REMOVALS OR ABANDONMENTS SHALL BE BACKFILLED AND COMPACTED WITH GRANULAR MATERIAL INCIDENTAL TO THE REMOVAL ITEM.

CONDUIT MUST BE PLACED PRIOR TO CURB AND GUTTER AND SIDEWALK CONSTRUCTION.

SOIL BORING REPORTS ARE AVAILABLE FROM THE WISDOT SOUTHWEST REGION PROJECTS SECTION. CONTACT: JEREMY HALL, PROJECT MANAGER @ (608) 245-2655.

EXISTING DRAINAGE DITCHES AND CULVERT PIPES WILL REMAIN FUNCTIONAL DURING EXCAVATION OPERATIONS.

THE EXACT LOCATION AND LIMITS OF PRIVATE AND COMMERCIAL ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. ALL EXISTING DRIVEWAYS ARE TO BE REPLACED IN KIND, UNLESS OTHERWISE NOTED.

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PIPE LAYING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER PIPE IN DRIVEWAY AREA IS INSTALLED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

ASPHALTIC COMMERCIAL AND PRIVATE ENTRANCES SHALL BE SAWCUT AS REQUIRED TO PROVIDE A CLEAN BUTT JOINT TO NEW WORK.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, BIKE OR PARKING LANE.

ASPHALTIC SURFACE WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

WHEREVER ASPHALTIC CONCRETE PAVEMENT ABUTS OR OVERLAPS ONTO PORTLAND CEMENT CONCRETE, THE EXISTING PAVEMENT SHALL RECEIVE A TACK COAT OF RS-1 OR RS-2 EMULSIFIED ASPHALT.

PAVEMENT TIES OR TIE BARS ARE REQUIRED ALONG ALL LONGITUDINAL JOINTS SHOWN ON PAVING DETAILS.

THE APPLICATION RATE FOR TACK COAT SHALL BE 0.05 GALLONS PER SQUARE YARD.

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

SECTIONS AS SHOWN ON THE CROSS SECTION SHEETS INCLUDE THE THICKNESS OF TOPSOIL.

THE EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL SHEETS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER.

THE CONTRACTOR WILL COORDINATE WITH LOCAL BUSINESSES WHEN ACCESS TO THE BUSINESS WILL BE CLOSED OFF FOR SIDEWALK INSTALLATION AND ANY OTHER WORK THAT MAY IMPACT THE PEDESTRIAN ACCESS AS LAID OUT IN THE 'TRAFFIC CONTROL - PEDESTRIAN ACCESS' SECTION OF THE PLAN.

DURING ANY WORK PRIOR TO THE INSTALLATION OF THE NEW STORM SEWER SYSTEM, ALL EFFORTS WILL BE MADE TO KEEP THE EXISTING STORM SEWER SYSTEM OPERATIONAL AT ALL TIMES.

THERE ARE SEVERAL AWNINGS WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL TAKE NOTE OF THEIR LOCATIONS AND AVOID THEM DURING ALL CONSTRUCTION ACTIVITIES. REPAIR OR REPLACEMENT OF DAMAGED AWNINGS WILL BE THE CONTRACTOR'S RESPONSIBILITY.

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

DIMENSIONS OF RIPRAP PLACEMENT SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

REMOVAL OF EROSION CONTROL DEVICES SHALL BE INCIDENTAL TO RESPECTIVE BID ITEMS.

DESIGNS, PLANS, SPECIFICATIONS AND ESTIMATE FOR STREET LIGHTING PREPARED BY KUNKEL ENGINEERING.

DESIGNS, PLANS, SPECIFICATIONS AND ESTIMATE FOR WATER MAIN AND SANITARY SEWER PREPARED BY KUNKEL ENGINEERING.

UTILITY CONTACTS

UTILITY/MUNICIPALITY	CONTACT/ADDRESS	UTILITY TYPE
CHARTER COMMUNICATIONS	BRANDON STORM 2701 DANIELS ST. MADISON, WI 53718 (608) 274-3822 brandon.storm@chartercom.com	COMMUNICATION
FRONTIER COMMUNICATIONS OF WI LLC	RUSSELL RYAN 118 DIVISION ST. PLYMOUTH, WI 53073 (920) 583-3275 russell.w.ryan@ftr.com	COMMUNICATION
WATERLOO WATER AND LIGHT COMMISSION	BARRY SORENSON 575 COMMERCIAL AVE. WATERLOO, WI 53594-2400 (920) 478-2260 bsorenson@wppienergy.org	WATER & ELECTRICITY
WE ENERGIES	LaTROY BRUMFIELD ROOM A299 333 WEST EVERETT ST. MILWAUKEE, WI 53203 (414) 221-5617 LaTroy.Brumfield@we-energies.com	ELECTRICITY & GAS/PETROLEUM

DIGGERS HOTLINE

Dial 811 or (800) 242-8511

www.DiggersHotline.com

DNR LIAISON

LAURA BUB
ENVIRONMENTAL ANALYSIS & REVIEW SPECIALIST
WISCONSIN DEPT. OF NATURAL RESOURCES
SOUTH CENTRAL REGION
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
608-275-3485

DESIGN CONTACTS

JEREMY HALL
PROJECT MANAGER
WISDOT SW REGION
2101 WRIGHT ST.
MADISON, WI 53704
(608) 245-2655

MATTHEW LAMB
PROJECT DESIGNER
WISDOT SW REGION
2101 WRIGHT ST.
MADISON, WI 53704
(608) 245-2641

MITCHELL LEISSES
PROJECT MANAGER
KUNKEL ENGINEERING GROUP, LLC
107 PARALLEL ST.
BEAVER DAM, WI 53916
(920) 356-9447

2

N

B-28-175
STA. 47+45

END PROJECT
STA. 65+89.16

19

'M'

'V'

'H'

'J'

'S'

'R'

NET EXCEPTION TO CENTERLINE
STA. 26+22.64 TO STA. 27+30.50
B-28-072

NET EXCEPTION TO CENTERLINE
STA. 59+75.57 - STA. 60+35.31
B-28-104

B-28-077

'C'

BEGIN PROJECT
STA. 21+90.46

MINNETONKA

WEST MADISON

Maunesha

CANAL RD.

BUREN

ST

STH 89

TAYLOR

MEAD

POLK

SQUIRE

JACKSON

S. MONROE ST.

VAN

HARRISON

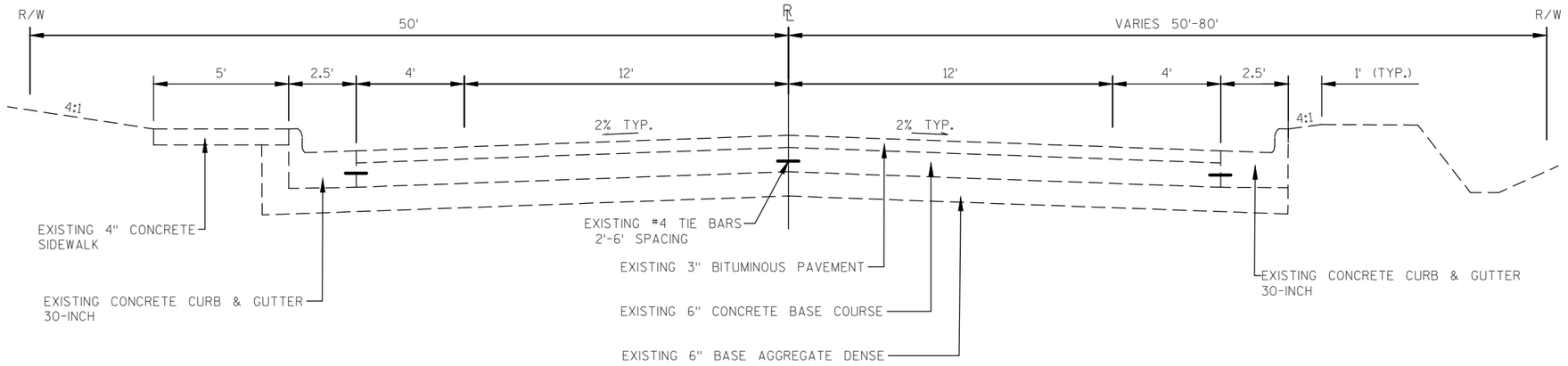
LINCOLN

MILWAUKEE

KNOWLTON

CITY OF WATERLOO

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PROJECT OVERVIEW	SHEET -4 E

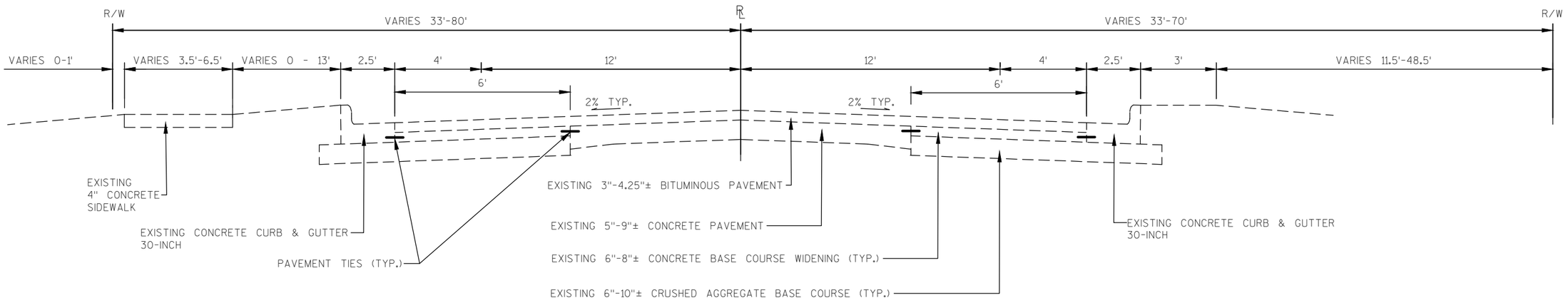


TYPICAL EXISTING SECTION

STH 19

STA. 21+90.46 - STA. 26+22.64 (B-28-072)

STA. 27+30.50 (B-28-072) - STA. 30+50



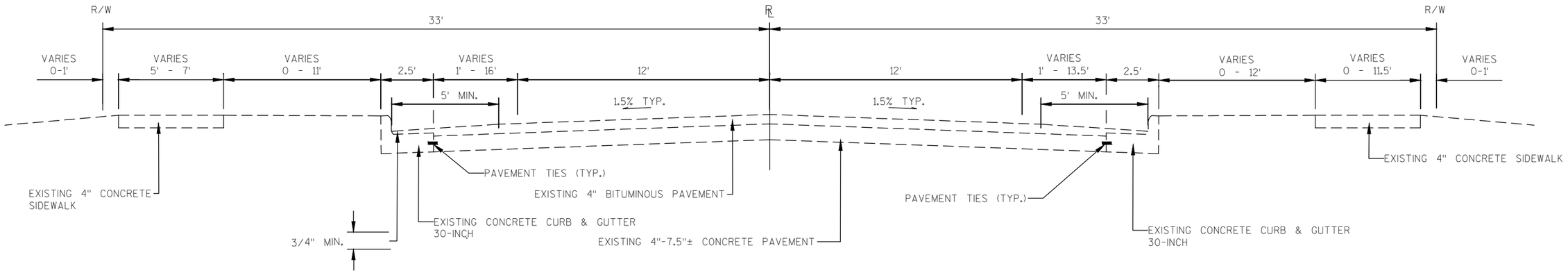
TYPICAL EXISTING SECTION

STH 19

STA. 30+50 - STA. 47+21.05 (B-28-466)

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	TYPICAL SECTIONS	SHEET 5	E

2



TYPICAL EXISTING SECTION

STH 19

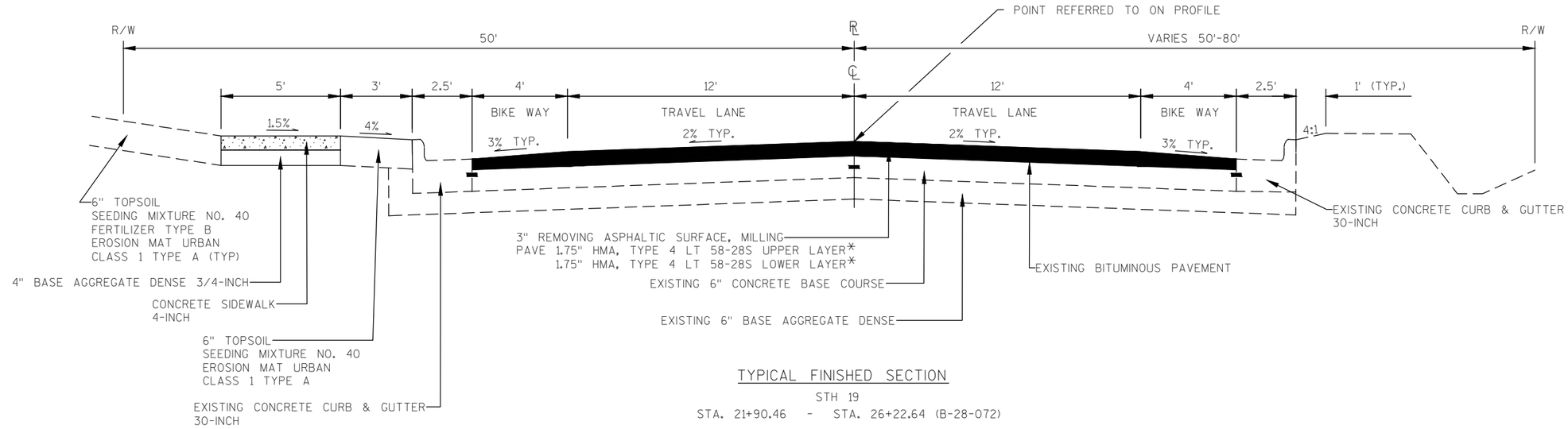
STA. 47+68.77 (B-28-466) - STA. 65+89.16 (B-28-077)

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	TYPICAL SECTIONS	SHEET 6	E

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WISDOT/CADDS SHEET 5

2



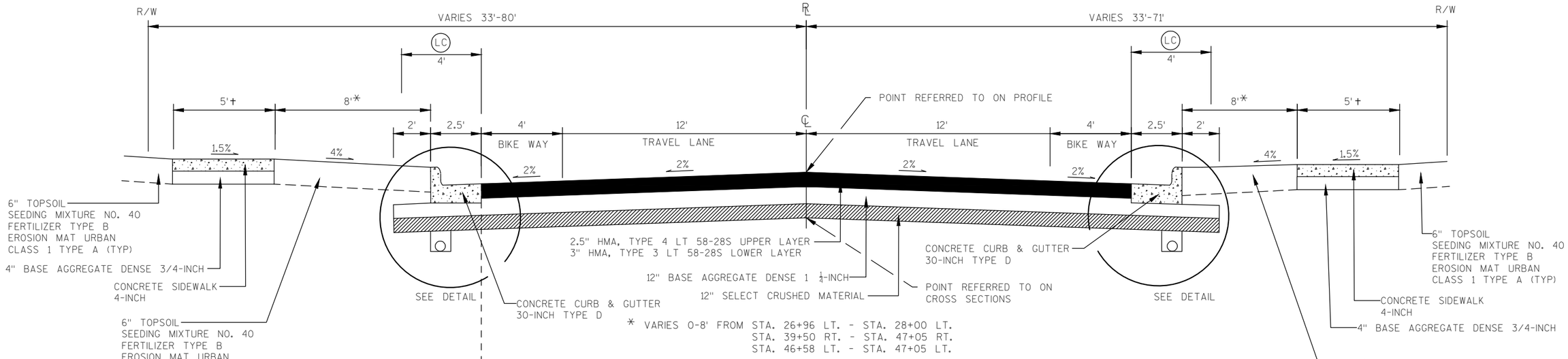
TYPICAL FINISHED SECTION

STH 19

STA. 21+90.46 - STA. 26+22.64 (B-28-072)

* TRAVEL LANE AND BIKE LANE SHALL BE PAVED INTEGRALLY

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	TYPICAL SECTIONS	SHEET 7	E



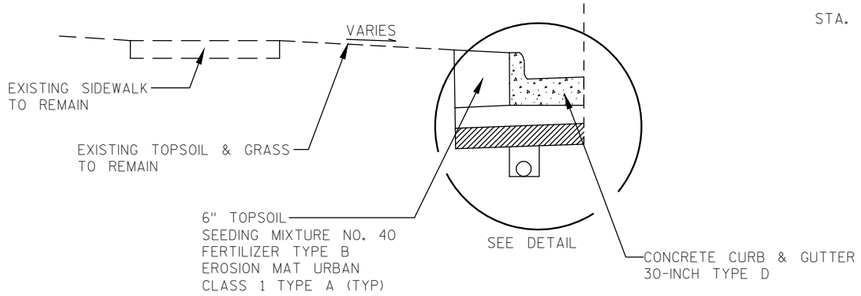
* VARIES 0-8' FROM STA. 26+96 LT. - STA. 28+00 LT.
STA. 39+50 RT. - STA. 47+05 RT.
STA. 46+58 LT. - STA. 47+05 LT.

\+ 6' SIDEWALK FROM STA. 26+96 LT. - STA. 27+25 LT.
STA. 39+75 RT. - STA. 47+05 RT.
STA. 46+83 LT. - STA. 47+05 LT.

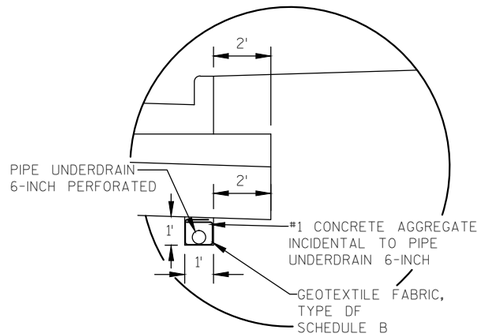
TYPICAL FINISHED SECTION

STH 19
STA. 27+30.50 (B-28-072) - STA. 47+05.08 (B-28-175)

(LC) = LATERAL CLEARANCE



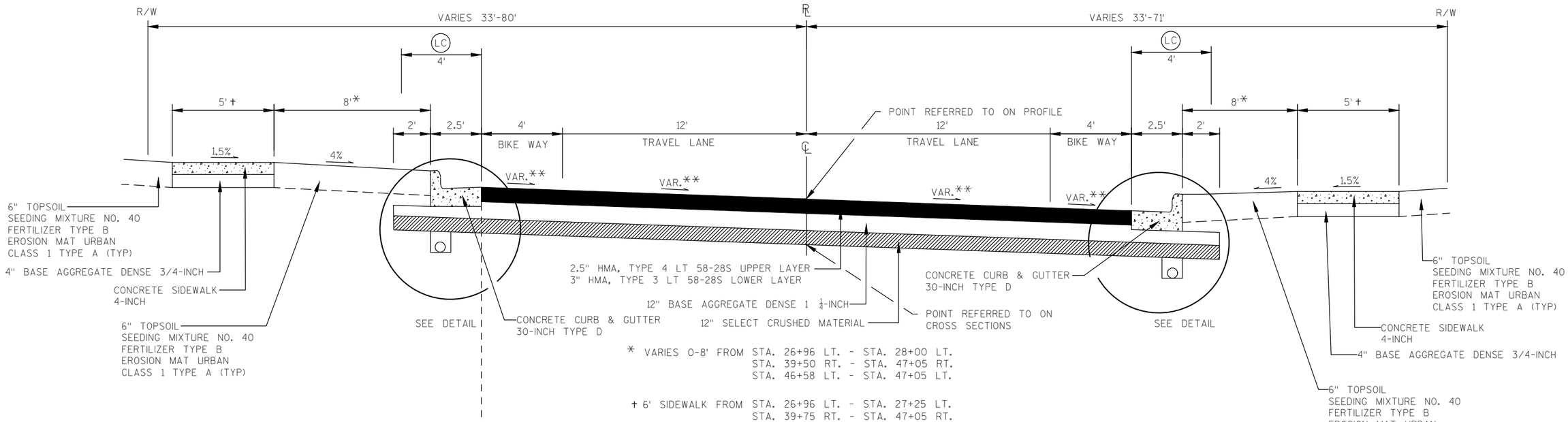
STA. 30+42 - STA. 32+91
STA. 33+37 - STA. 36+09
STA. 36+39 - STA. 38+25
STA. 38+40 - STA. 40+00
STA. 40+15 - STA. 41+57



PIPE UNDERDRAIN WRAPPED 6-INCH AND AGGREGATE DETAIL

UNDERDRAIN TO BE INSTALLED
50' IN EACH DIRECTION OF EVERY SAG INLET AND
50' ON UPSTREAM END OF ALL OTHER INLETS.
UNDERDRAIN TO BE DISCHARGED
INTO STORM SEWER INLETS/MANHOLES
TIE-INS INCIDENTAL TO UNDERDRAIN

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	TYPICAL SECTIONS	SHEET 8	E

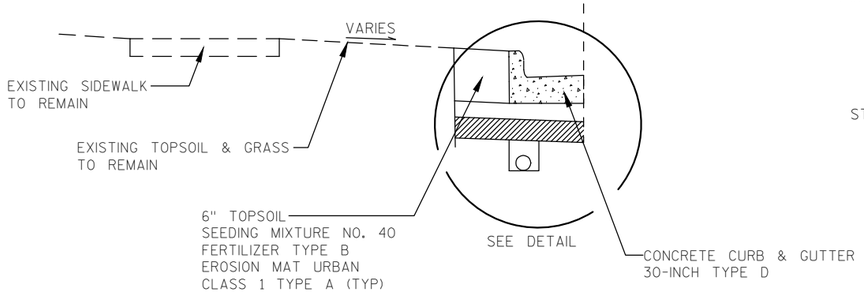


* VARIES 0-8' FROM STA. 26+96 LT. - STA. 28+00 LT.
STA. 39+50 RT. - STA. 47+05 RT.
STA. 46+58 LT. - STA. 47+05 LT.

\+ 6' SIDEWALK FROM STA. 26+96 LT. - STA. 27+25 LT.
STA. 39+75 RT. - STA. 47+05 RT.
STA. 46+83 LT. - STA. 47+05 LT.

** SEE SUPERELEVATION TABLES
FOR MORE DETAILS

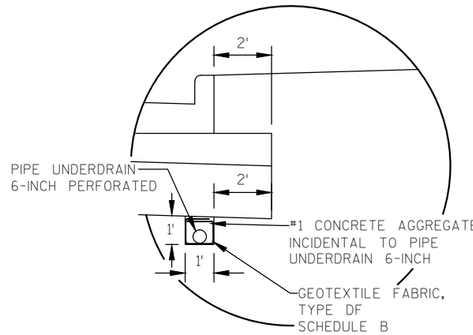
(LC) = LATERAL CLEARANCE



STA. 30+42 - STA. 32+91
STA. 33+37 - STA. 36+09
STA. 36+39 - STA. 38+25
STA. 38+40 - STA. 40+00
STA. 40+15 - STA. 41+57

TYPICAL SUPERELEVATED FINISHED SECTION

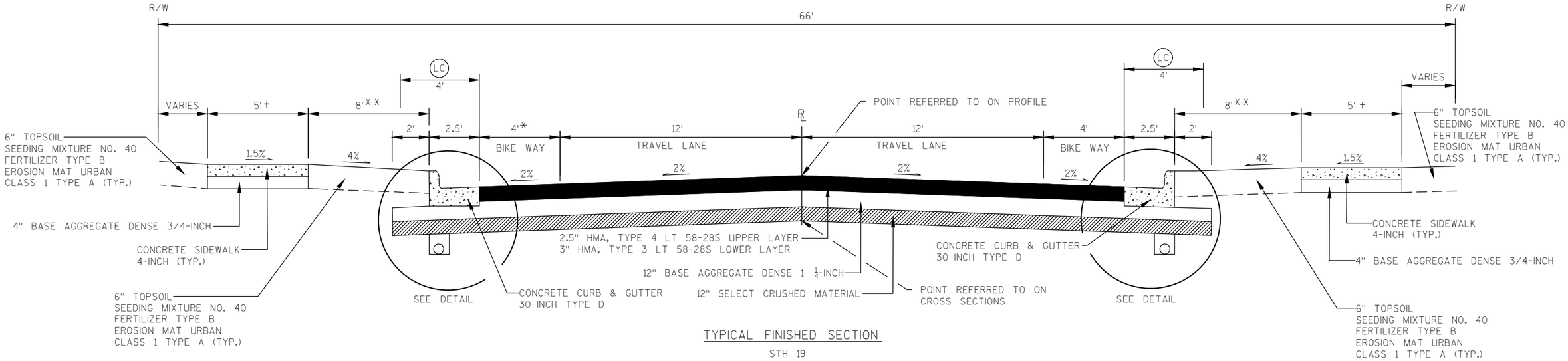
STH 19
STA. 27+30.50 (B-28-072) - STA. 47+05.08 (B-28-175)



PIPE UNDERDRAIN WRAPPED 6-INCH AND AGGREGATE DETAIL

UNDERDRAIN TO BE INSTALLED
50' IN EACH DIRECTION OF EVERY SAG INLET AND
50' ON UPSTREAM END OF ALL OTHER INLETS.
UNDERDRAIN TO BE DISCHARGED
INTO STORM SEWER INLETS/MANHOLES
TIE-INS INCIDENTAL TO UNDERDRAIN

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	TYPICAL SECTIONS	SHEET 9	E



TYPICAL FINISHED SECTION

STH 19

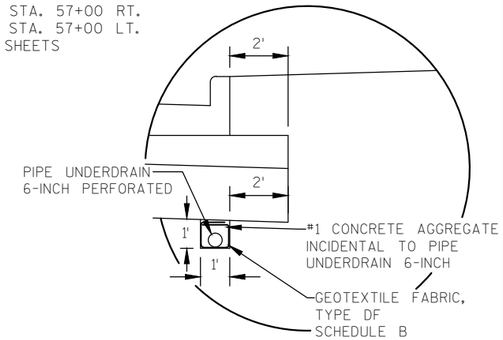
STA. 47+84.92 (B-28-175) - STA. 56+88.89

(LC) = LATERAL CLEARANCE

* 5' BIKE LANE AND 6' UNLOADING LANE FROM STA. 56+06 - STA. 57+00

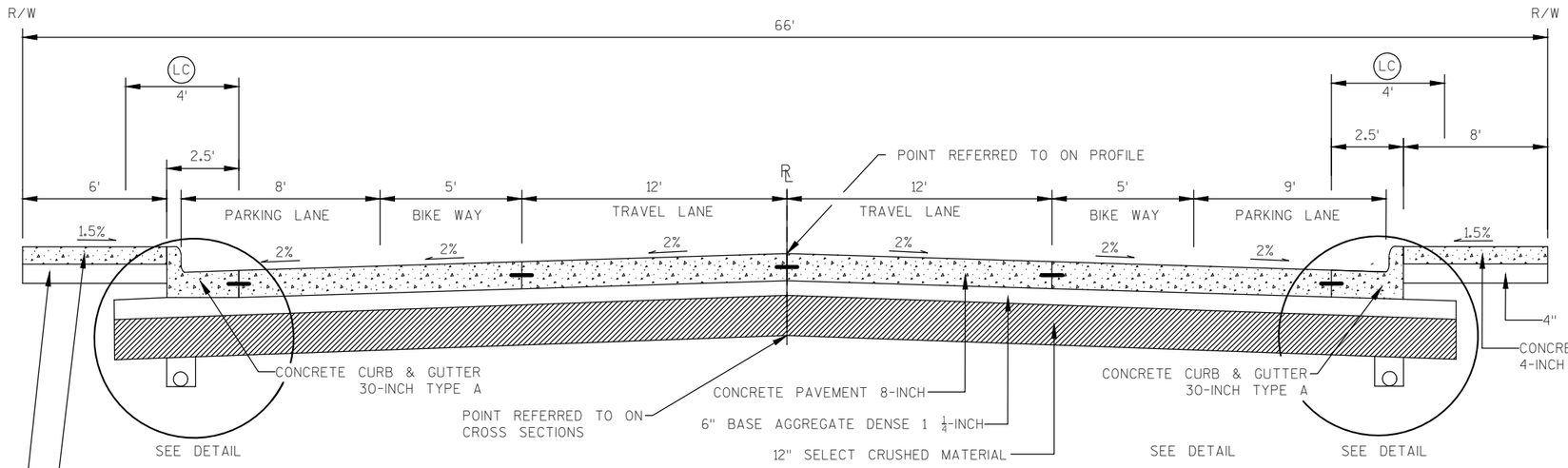
** VARIES 0-8' FROM STA. 47+85 LT. - STA. 48+32 LT.
STA. 47+85 RT. - STA. 48+32 RT.
STA. 54+14 RT. - STA. 55+66 RT.
STA. 56+06 LT. - STA. 57+00 LT.

\+ SIDEWALK VARIES 6'-7' FROM STA. 47+85 LT. - STA. 48+07 LT.
STA. 47+85 RT. - STA. 48+07 RT.
STA. 54+21 RT. - STA. 57+00 RT.
STA. 56+12 LT. - STA. 57+00 LT.
SEE PLAN DETAIL SHEETS



PIPE UNDERDRAIN WRAPPED 6-INCH AND AGGREGATE DETAIL

UNDERDRAIN TO BE INSTALLED
50' IN EACH DIRECTION OF EVERY SAG INLET AND
50' ON UPSTREAM END OF ALL OTHER INLETS.
UNDERDRAIN TO BE DISCHARGED
INTO STORM SEWER INLETS/MANHOLES
TIE-INS INCIDENTAL TO UNDERDRAIN



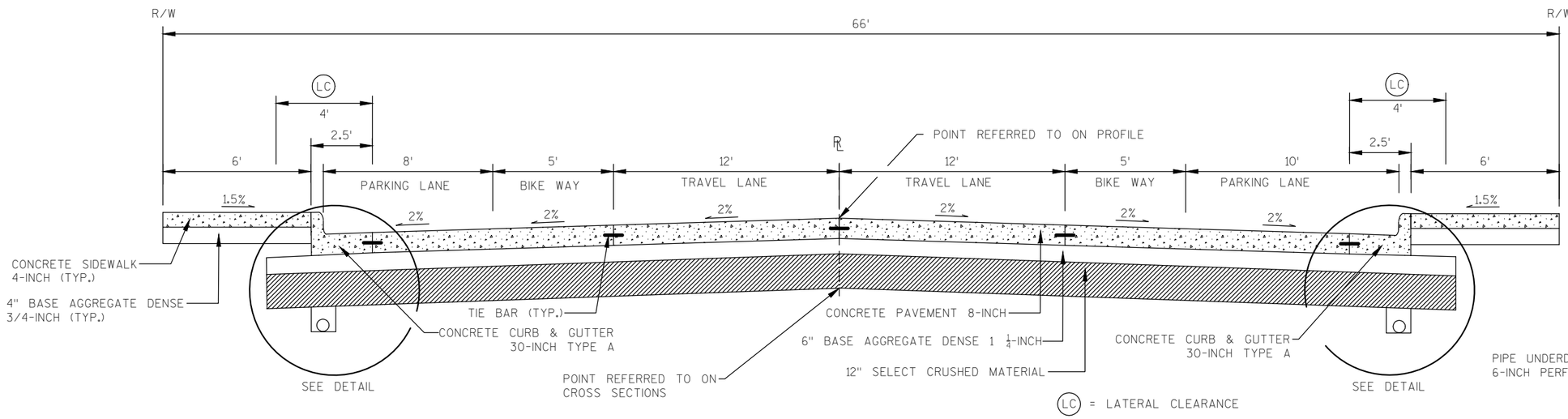
TYPICAL FINISHED SECTION

STH 19

STA. 56+88.89 - STA. 59+75.57 (B-28-104)

(LC) = LATERAL CLEARANCE

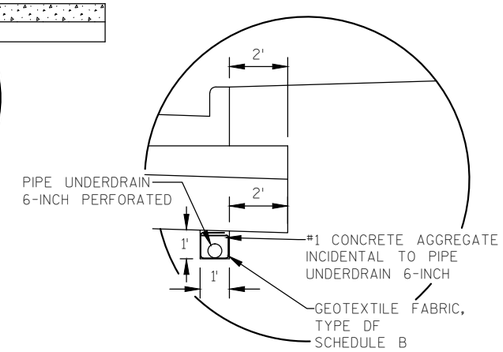
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	TYPICAL SECTIONS	SHEET 10	E



TYPICAL FINISHED SECTION

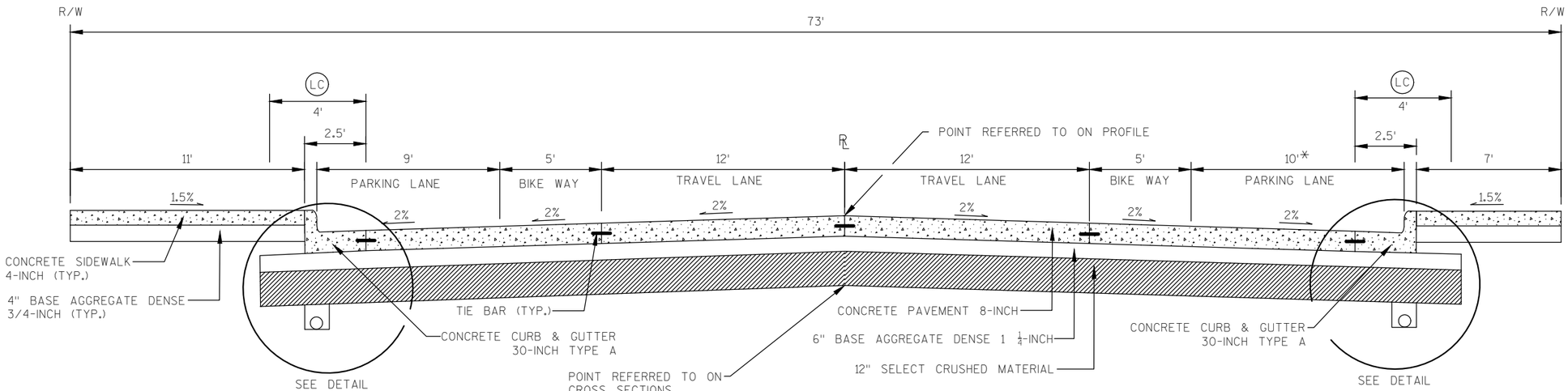
STH 19

STA. 60+35.31 (B-18-104) - STA. 63+33.58



PIPE UNDERDRAIN WRAPPED 6-INCH AND AGGREGATE DETAIL

UNDERDRAIN TO BE INSTALLED
50' IN EACH DIRECTION OF EVERY SAG INLET AND
50' ON UPSTREAM END OF ALL OTHER INLETS.
UNDERDRAIN TO BE DISCHARGED
INTO STORM SEWER INLETS/MANHOLES
TIE-INS INCIDENTAL TO UNDERDRAIN



* PARKING LANE TAPERS DOWN TO 9' LANE
FROM STA. 64+25 RT. TO STA. 65+50 RT.
SEE PLAN DETAILS

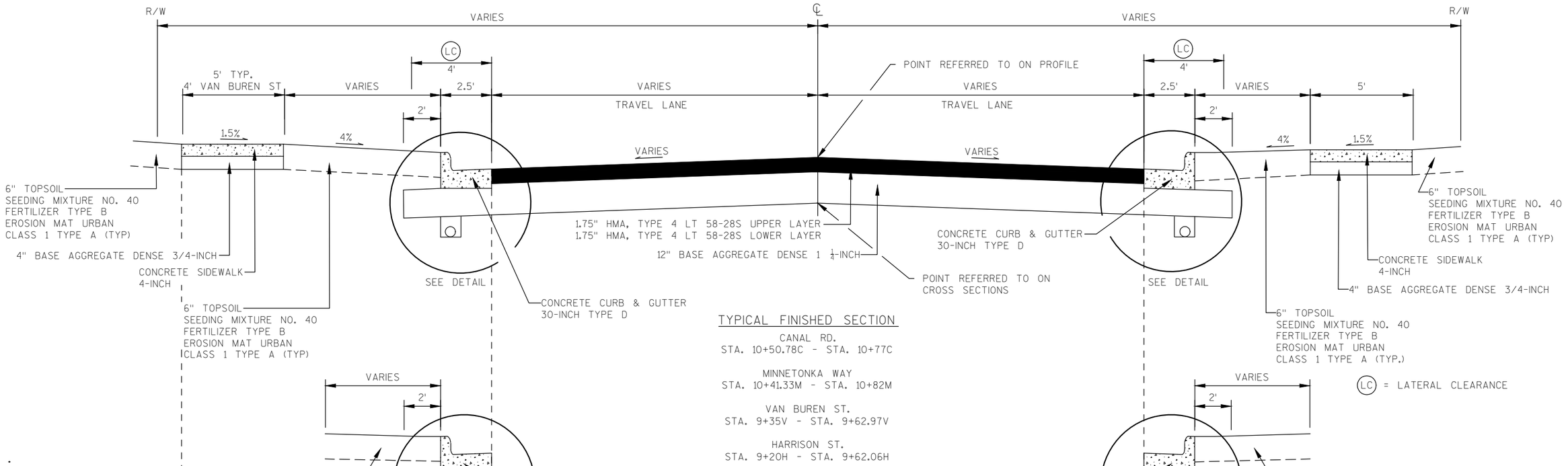
TYPICAL FINISHED SECTION

STH 19

STA. 63+33.58 - STA. 65+89.16 (B-28-077)

LC = LATERAL CLEARANCE

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	TYPICAL SECTIONS	SHEET 11	E



TYPICAL FINISHED SECTION

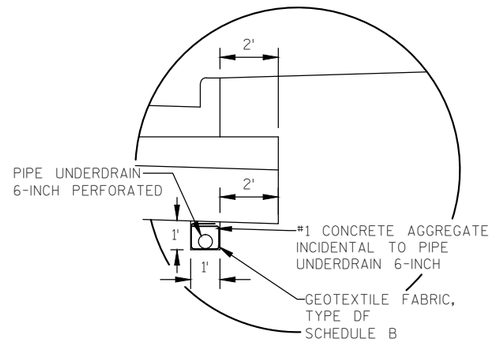
CANAL RD.
STA. 10+50.78C - STA. 10+77C

MINNETONKA WAY
STA. 10+41.33M - STA. 10+82M

VAN BUREN ST.
STA. 9+35V - STA. 9+62.97V

HARRISON ST.
STA. 9+20H - STA. 9+62.06H

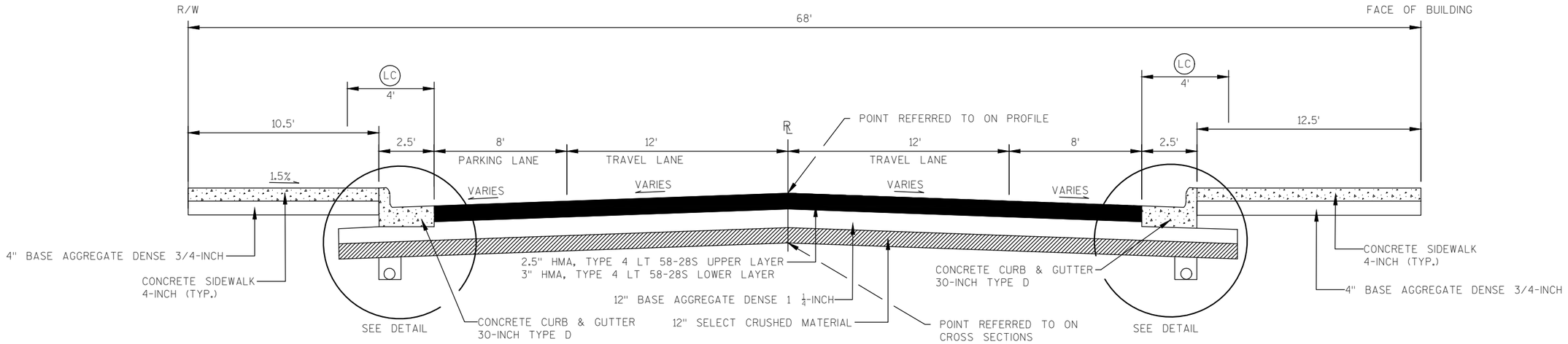
S. JACKSON ST.
STA. 9+45J - STA. 9+61.35J



PIPE UNDERDRAIN WRAPPED 6-INCH AND AGGREGATE DETAIL

UNDERDRAIN TO BE INSTALLED
50' IN EACH DIRECTION OF EVERY SAG INLET AND
50' ON UPSTREAM END OF ALL OTHER INLETS.
UNDERDRAIN TO BE DISCHARGED
INTO STORM SEWER INLETS/MANHOLES
TIE-INS INCIDENTAL TO UNDERDRAIN

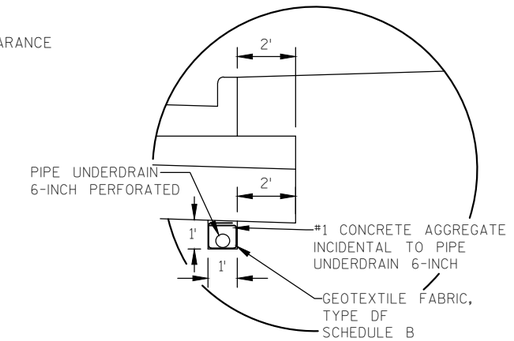
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	TYPICAL SECTIONS	SHEET 12	E



TYPICAL FINISHED SECTION

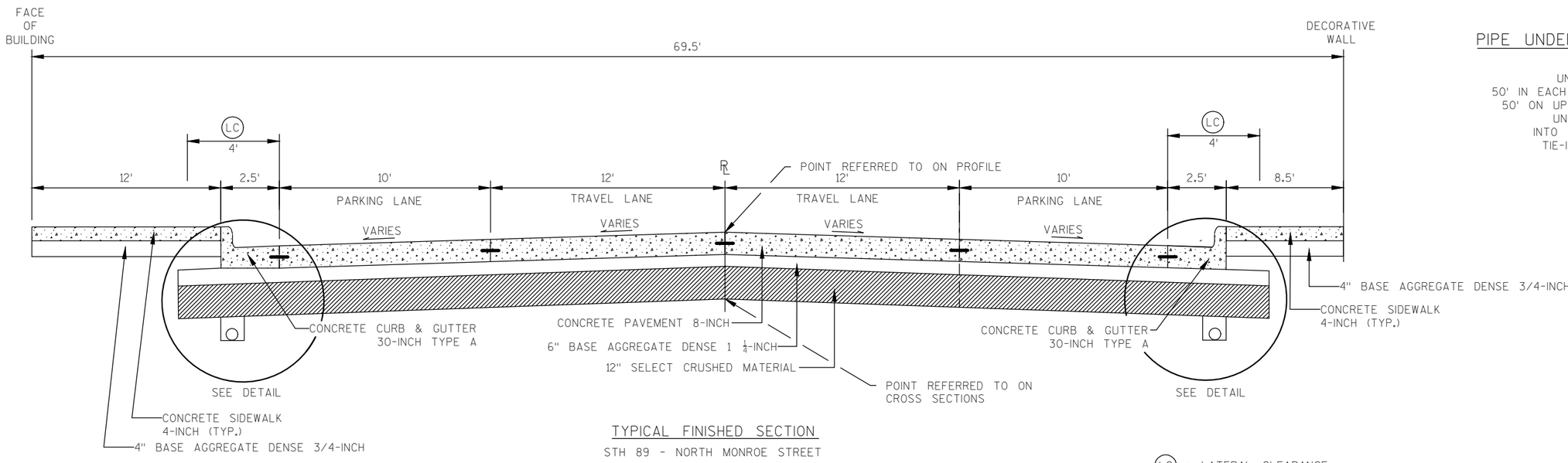
SOUTH MONROE STREET
STA. 9+40R - STA. 9+51.60R

(LC) = LATERAL CLEARANCE



PIPE UNDERDRAIN WRAPPED 6-INCH AND AGGREGATE DETAIL

UNDERDRAIN TO BE INSTALLED
50' IN EACH DIRECTION OF EVERY SAG INLET AND
50' ON UPSTREAM END OF ALL OTHER INLETS.
UNDERDRAIN TO BE DISCHARGED
INTO STORM SEWER INLETS/MANHOLES
TIE-INS INCIDENTAL TO UNDERDRAIN



TYPICAL FINISHED SECTION

STH 89 - NORTH MONROE STREET

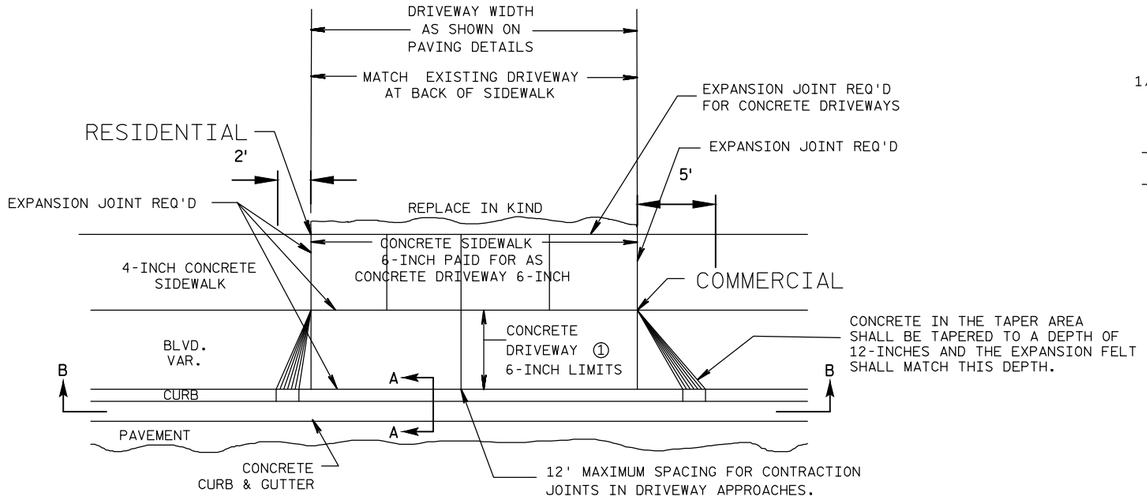
(LC) = LATERAL CLEARANCE

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	TYPICAL SECTIONS	SHEET 13	E

CURVE NO.	SUPERELEVATION DATA	STATION	LEFT BIKE/PARKING LANE	INSIDE LEFT LANE	INSIDE RIGHT LANE	RIGHT BIKE/PARKING LANE	REMARKS
1	END NORMAL CROWN	25+50.00	-3.00%	-2.00%	-2.00%	-3.00%	STATION LOCATED IN RESURFACE SECTION OF PROJECT.
	LEVEL CROWN	27+07.66	0.69%	0.69%	-2.94%	-2.94%	MATCH EXISTING CONDITION AT B-28-072
	REVERSE CROWN	27+30.46	2.50%	2.50%	-2.94%	-2.94%	
	BEGIN FULL SUPER	27+56.21	3.40%	3.40%	-3.40%	-3.40%	
	END FULL SUPER	30+75.29	3.40%	3.40%	-3.40%	-3.40%	
	REVERSE CROWN	31+75.00	2.00%	2.00%	-2.00%	-2.00%	
	LEVEL CROWN	32+19.70	0.00%	0.00%	-2.00%	-2.00%	
	BEGIN NORMAL CROWN	32+64.40	-2.00%	-2.00%	-2.00%	-2.00%	

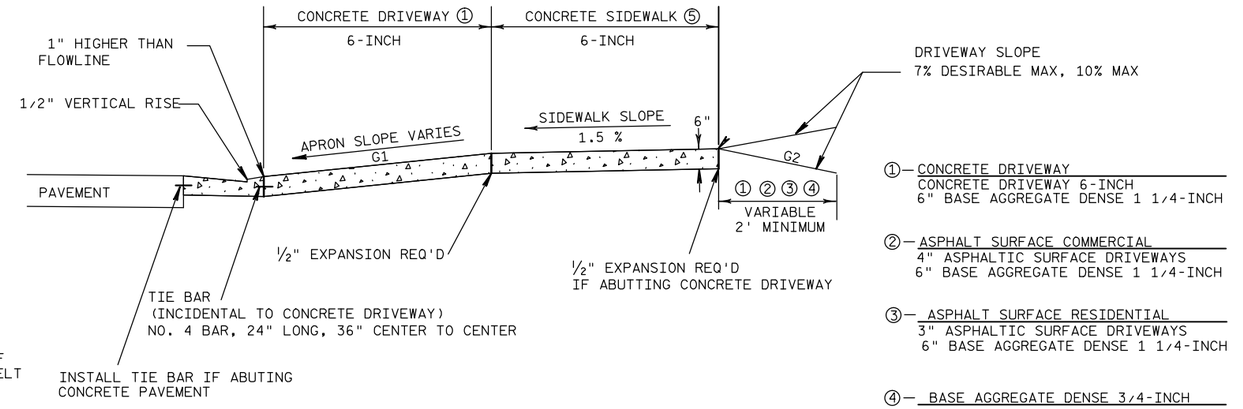
CURVE NO.	SUPERELEVATION DATA	STATION	LEFT BIKE/PARKING LANE	INSIDE LEFT LANE	INSIDE RIGHT LANE	RIGHT BIKE/PARKING LANE	REMARKS
2	END NORMAL CROWN	40+90.00	-2.00%	-2.00%	-2.00%	-2.00%	
	LEVEL CROWN	41+30.00	0.00%	0.00%	-2.00%	-2.00%	
		41+50.00	1.00%	1.00%	-2.00%	-2.00%	
		42+25.00	1.00%	1.00%	-2.00%	-2.00%	
	REVERSE CROWN	42+45.00	2.00%	2.00%	-2.00%	-2.00%	
	BEGIN FULL SUPER	42+75.00	3.50%	3.50%	-3.50%	-3.50%	
	END FULL SUPER	45+31.24	3.50%	3.50%	-3.50%	-3.50%	
	REVERSE CROWN	45+58.67	2.00%	2.00%	-2.00%	-2.00%	
	LEVEL CROWN	45+95.24	0.00%	0.00%	-2.00%	-2.00%	
	BEGIN NORMAL CROWN	46+31.81	-2.00%	-2.00%	-2.00%	-2.00%	

CURVE NO.	SUPERELEVATION DATA	STATION	LEFT BIKE/PARKING LANE	INSIDE LEFT LANE	INSIDE RIGHT LANE	RIGHT BIKE/PARKING LANE	REMARKS
	END NORMAL CROWN	61+00.00	-2.00%	-2.00%	-2.00%	-2.00%	
		61+25.00	-2.00%	-2.00%	-2.20%	-2.20%	
		61+50.00	-2.00%	-2.00%	-2.20%	-2.20%	
		62+00.00	-1.00%	-1.00%	-2.30%	-2.30%	
		62+50.00	0.00%	0.00%	-3.30%	-3.30%	
		62+75.00	1.00%	1.00%	-4.00%	-4.00%	
		63+00.00	2.00%	2.00%	-4.00%	-4.00%	
		63+25.00	3.20%	3.20%	-3.50%	-3.50%	
		63+50.00	3.20%	3.20%	-3.00%	-3.00%	
		63+64.85	1.77%	1.77%	-2.70%	-2.70%	
		63+75.00	0.80%	0.80%	-2.70%	-2.70%	
		63+86.06	0.00%	0.00%	-2.61%	-2.61%	
		64+00.00	-1.00%	-1.00%	-2.50%	-2.50%	
	BEGIN NORMAL CROWN	64+25.00	-2.00%	-2.00%	-2.00%	-2.00%	



CONCRETE CURB & GUTTER 30-INCH TYPE A AND D DRIVEWAY PLAN VIEW

STA. 21+90.46 - STA. 59+75.57



CONCRETE CURB & GUTTER 30-INCH TYPE A AND D TYPICAL DRIVEWAY SECTION

STA. 21+90.46 - STA. 59+75.57

① — CONCRETE DRIVEWAY
CONCRETE DRIVEWAY 6-INCH
6" BASE AGGREGATE DENSE 1 1/4-INCH

② — ASPHALT SURFACE COMMERCIAL
4" ASPHALTIC SURFACE DRIVEWAYS
6" BASE AGGREGATE DENSE 1 1/4-INCH

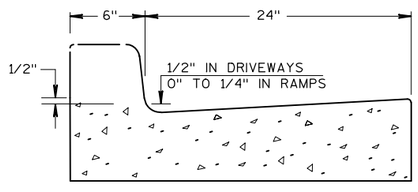
③ — ASPHALT SURFACE RESIDENTIAL
3" ASPHALTIC SURFACE DRIVEWAYS
6" BASE AGGREGATE DENSE 1 1/4-INCH

④ — BASE AGGREGATE DENSE 3/4-INCH
6" BASE AGGREGATE DENSE 3/4-INCH

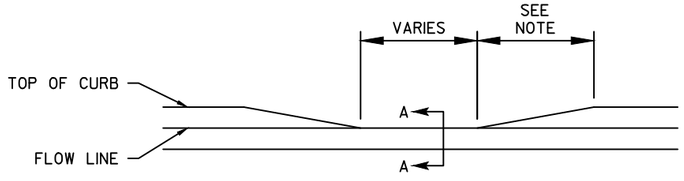
⑤ — CONCRETE SIDEWALK 6-INCH
PAID FOR AS CONCRETE DRIVEWAY 6-INCH

NOTE: ALGEBRAIC DIFFERENCE BETWEEN GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE



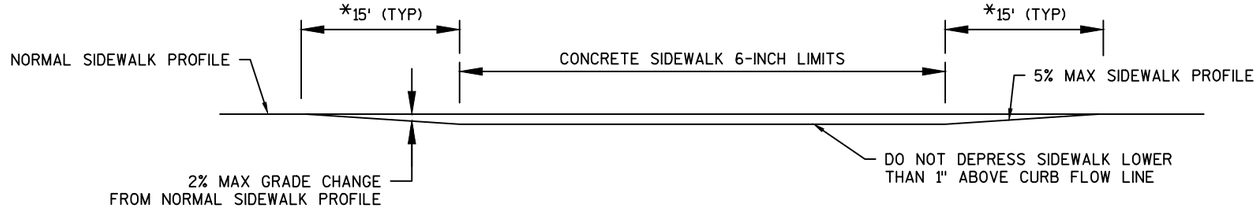
CONCRETE CURB & GUTTER 30-INCH TYPE A AND D DRIVEWAY CURB SECTION A-A



CONCRETE CURB & GUTTER 30-INCH TYPE A AND D TYPICAL CURB CUT DETAIL B-B

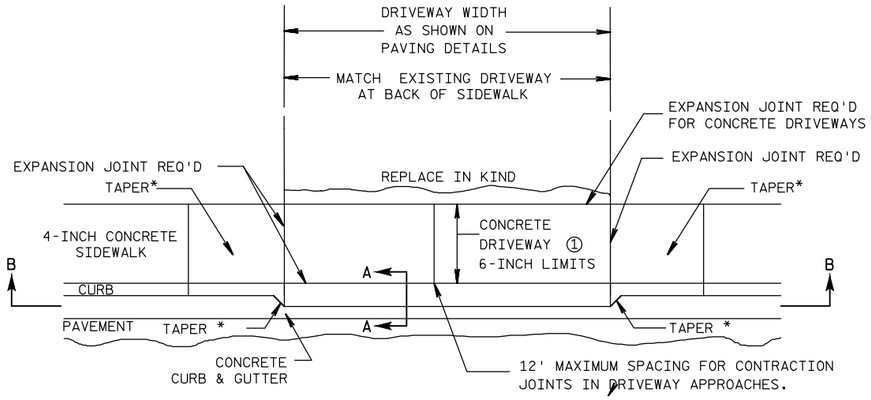
STA. 21+90.46 - STA. 59+75.57

NOTE:
12" TO 18" TAPER FOR STANDARD DRIVEWAY APPROACH
18" TO 24" TAPER FOR STANDARD RAMP
WHERE SIDEWALK IS AT THE BACK OF CURB, SEE CURB
RAMP DETAILS FOR MORE INFORMATION ON TAPER LENGTHS



DEPRESSED SIDEWALK & DRIVEWAY PROFILE DETAIL

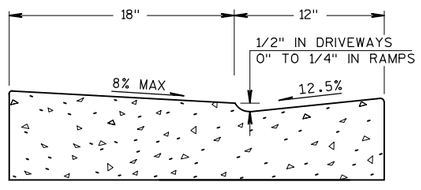
*WHERE SIDEWALK IS AT THE BACK OF CURB, SEE CURB RAMP DETAILS FOR MORE INFORMATION ON TAPER LENGTHS



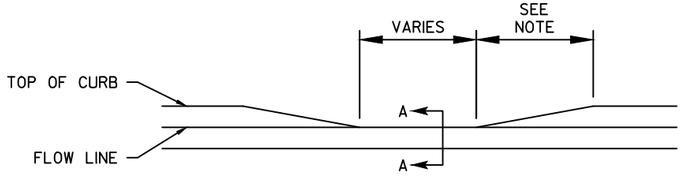
CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL DRIVEWAY CURB PLAN VIEW

STA. 60+35.31 - STA. 65+89.16

* SEE CURB RAMP DETAILS FOR TAPER INFORMATION



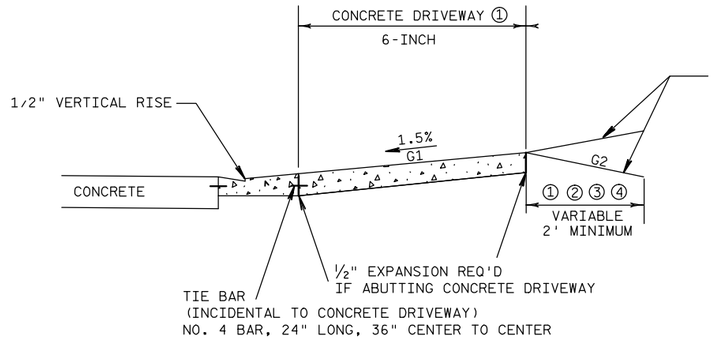
CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL DRIVEWAY CURB SECTION A-A



CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL DRIVEWAY CURB CUT DETAIL B-B

STA. 60+35.31 - STA. 65+89.16

SEE CURB RAMP DETAILS FOR TAPER INFORMATION



CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL DRIVEWAY CURB TYPICAL DRIVEWAY SECTION

STA. 60+35.31 - STA. 65+89.16

① — CONCRETE DRIVEWAY
CONCRETE DRIVEWAY 6-INCH
6" BASE AGGREGATE DENSE 1 1/4-INCH

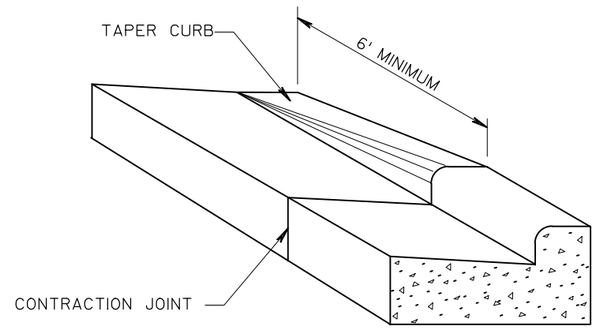
② — ASPHALT SURFACE COMMERCIAL
4" ASPHALTIC SURFACE DRIVEWAYS
6" BASE AGGREGATE DENSE 1 1/4-INCH

③ — ASPHALT SURFACE RESIDENTIAL
3" ASPHALTIC SURFACE DRIVEWAYS
6" BASE AGGREGATE DENSE 1 1/4-INCH

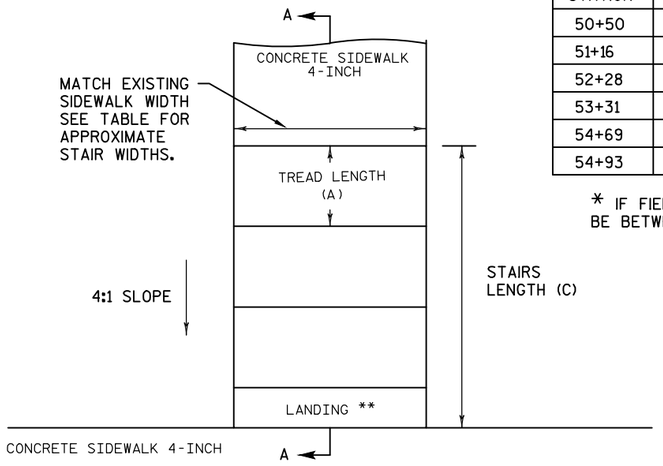
④ — BASE AGGREGATE DENSE 3/4-INCH
6" BASE AGGREGATE DENSE 3/4-INCH

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE



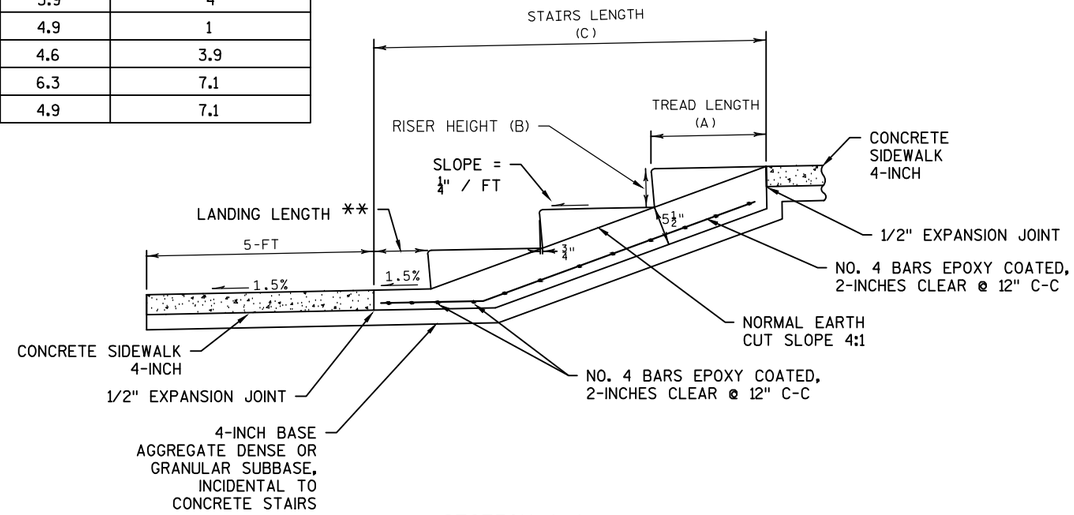
DETAIL OF CURB & GUTTER TERMINI



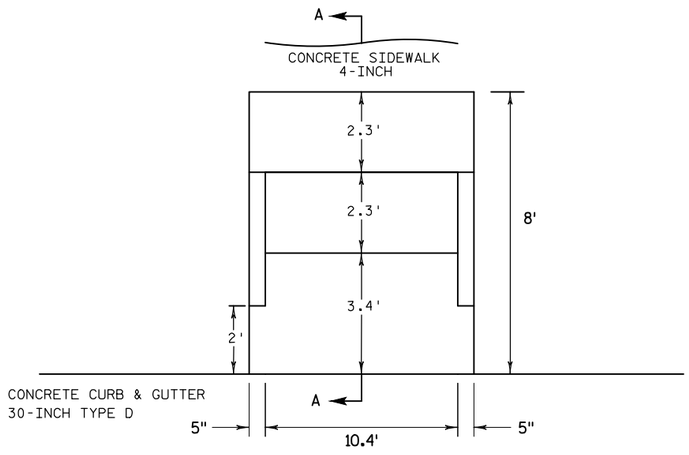
CONCRETE STEPS DETAIL

STATION	LOCATION	TREAD LENGTH (A) (INCH)	*RISER HEIGHT (B) (INCH)	NUMBER OF RISERS	STAIRS LENGTH (C)(FT)	**LANDING LENGTH (FT)	APPROX. STAIR WIDTH (FT)	LENGTH OF CONCRETE SIDEWALK 4-INCH BEHIND STAIRS (FT)
50+50	RT	18	7	4	8	2	3	4.8
51+16	RT	18	6	3	6.5	2	3.9	4
52+28	LT	18	6	3	5.5	1	4.9	1
53+31	LT	18	7	2	4	1	4.6	3.9
54+69	RT	18	7	2	5	2	6.3	7.1
54+93	RT	18	7	2	5	2	4.9	7.1

* IF FIELD ADJUSTMENTS ARE NEEDED FOR RISER HEIGHT, RISERS MUST BE BETWEEN 4 AND 7 INCHES.

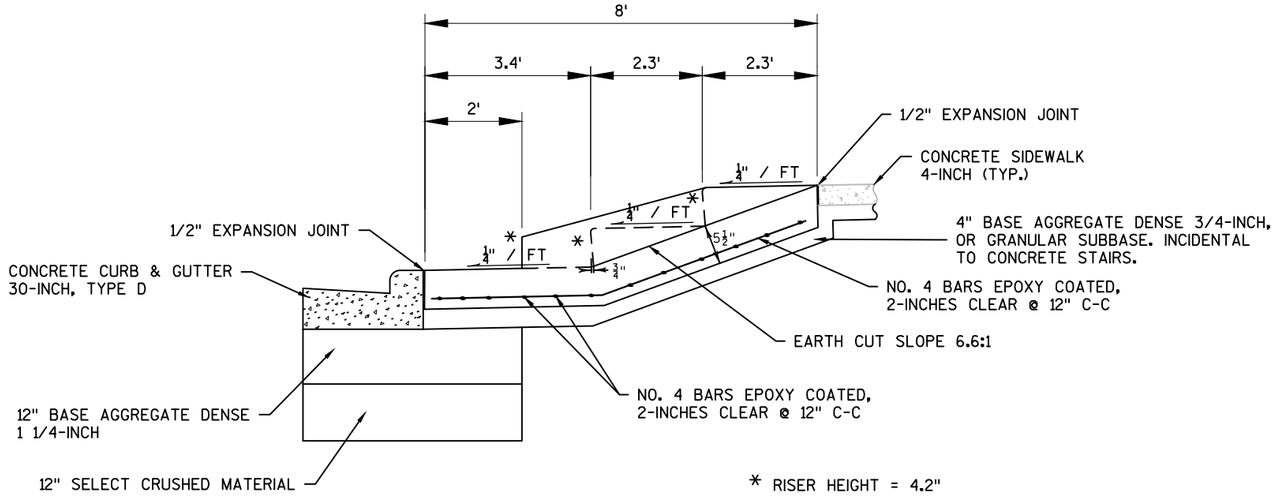


SECTION A-A



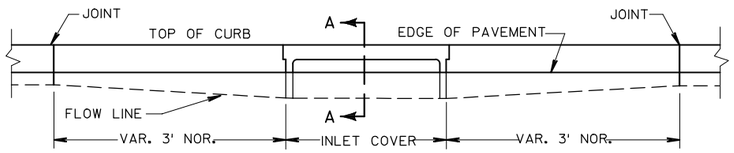
CONCRETE TERRACE STEPS DETAIL

STA. 51+75 RT.

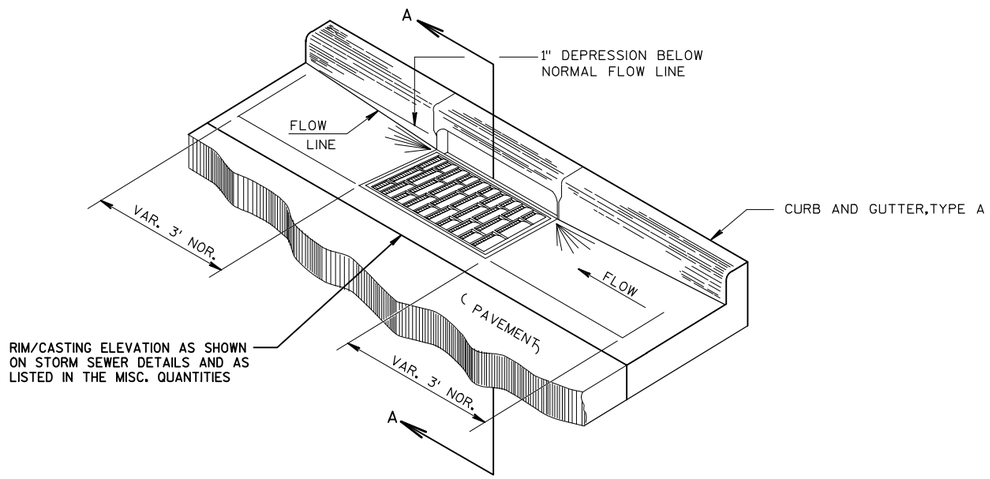


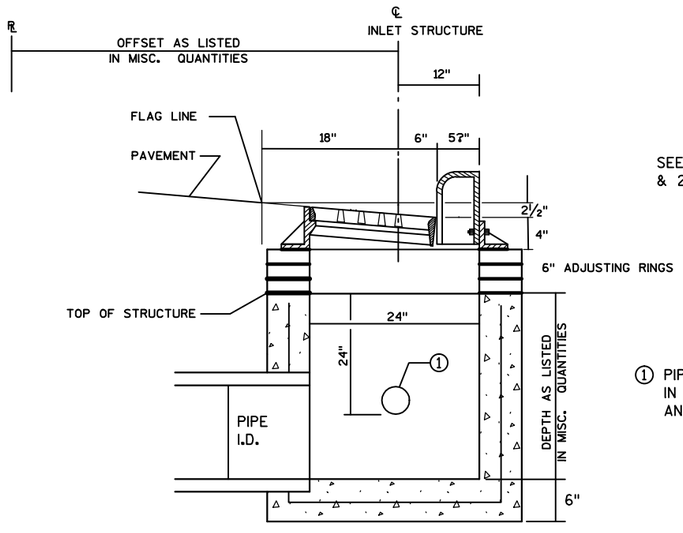
SECTION A-A

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CONSTRUCTION DETAIL	SHEET 17	E



ELEVATION



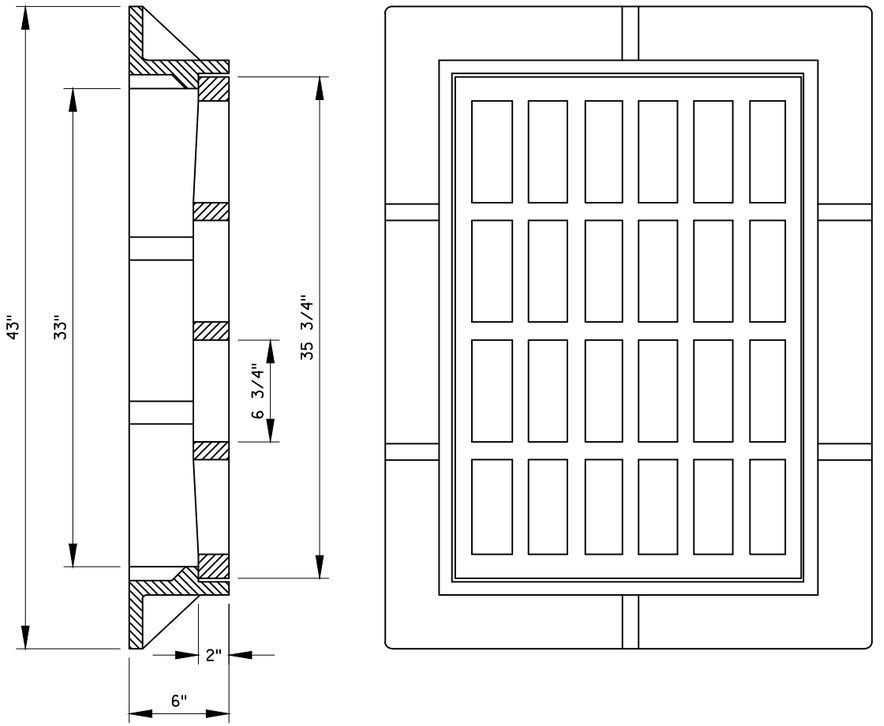


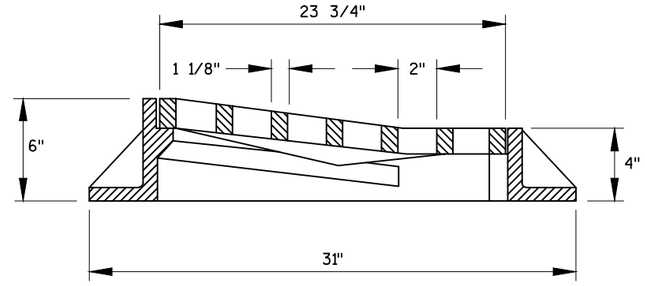
SEE S.D.D. "INLETS 2X2-FT, 2X2.5-FT, 2X3-FT,
& 2.5X3-FT" FOR ADDITIONAL INFORMATION

① PIPE UNDERDRAIN 6-INCH, 50 FEET
IN EACH DIRECTION FROM EVERY SAG INLET
AND 50 FEET UPSTREAM OF OTHER INLETS

DETAIL OF CURB AND GUTTER AT INLETS & INLET LOCATION DETAIL

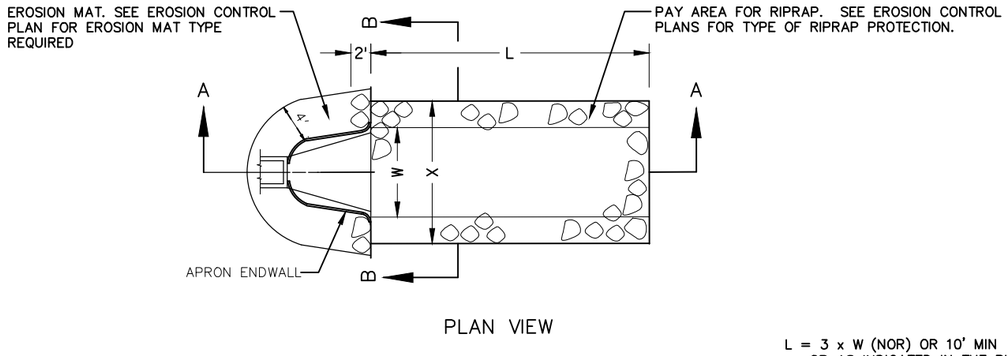
(2X3-FT INLET SHOWN)



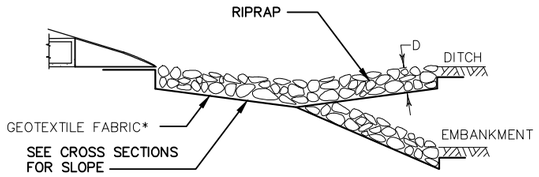


INLET TYPE 3290A

SEE STORM SEWER PLAN FOR LOCATIONS



PLAN VIEW



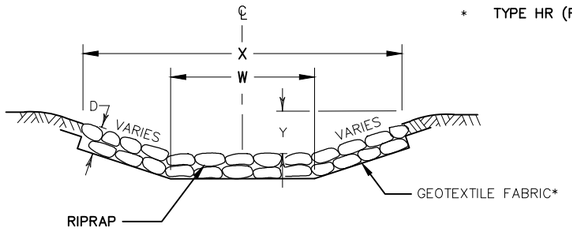
SECTION A–A

L = 3 x W (NOR) OR 10' MIN
OR AS INDICATED IN THE PLANS
OR AS DIRECTED BY THE ENGINEER

D = 12" FOR RIPRAP LIGHT
18" FOR RIPRAP MEDIUM
24" FOR RIPRAP HEAVY

X = W+2' FOR TYPICAL CULVERT
DISCHARGE INTO DITCH
W+5' FOR CULVERT DISCHARGE
DOWN EMBANKMENT SLOPE

Y = 0' FOR TYPICAL CULVERT
DISCHARGE INTO DITCH
12" FOR CULVERT DISCHARGE
DOWN EMBANKMENT SLOPE

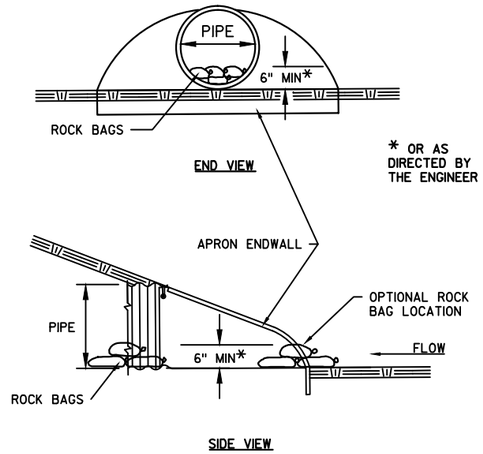


SECTION B–B

* TYPE HR (FOR RIPRAP HEAVY, MEDIUM, AND LIGHT)

RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS

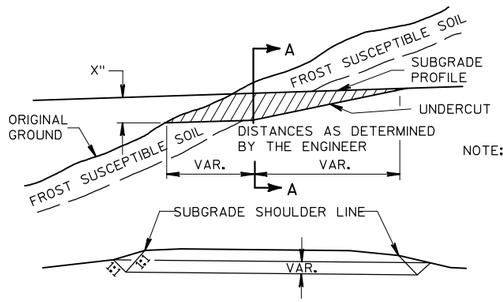
SEE EROSION CONTROL PLAN FOR LOCATIONS



ESTIMATED BAG SIZE = 18" X 12" X 6"	
PIPE SIZE	ESTIMATED NO. OF BAGS
12"	1
15"	2
18"	2
21"	3
14" X 23"	3
24"	3
27"	4
30"	5
19" X 30"	5
36"	7
24" X 38"	8
42"	8
29" X 45"	10
48"	10
34" X 53"	10
38" X 60"	13
60"	13
66"	15
53" X 83"	19

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)



SECTION A-A

CROSS SECTION SHOWING UNDERCUT

NOTE: EXACT LOCATIONS AND EXTENT OF E.B.S. SECTIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER

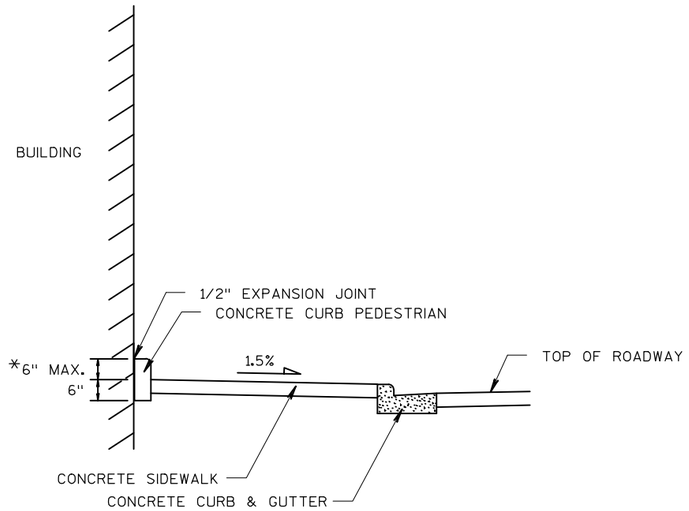
BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.

THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED.

THE USE OF GEOGRID REINFORCEMENT MAY BE REQUIRED AS DIRECTED BY THE FIELD ENGINEER.

DETAIL FOR EXCAVATION BELOW SUBGRADE AT CUTS

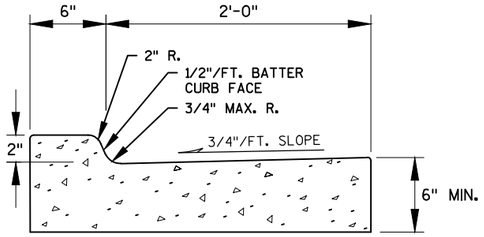
2



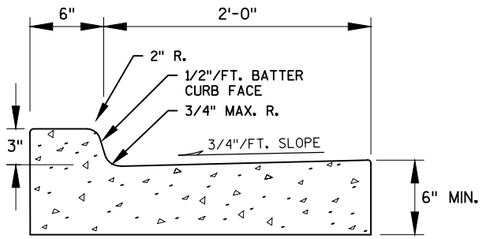
CONCRETE CURB PEDESTRIAN

SEE CURB RAMP DETAILS AND MISCELLANEOUS QUANTITIES FOR LOCATIONS.

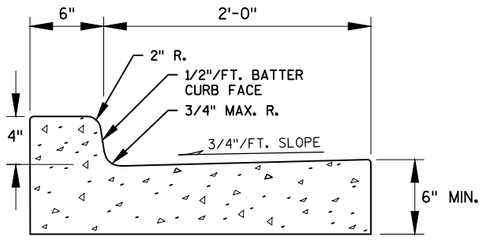
*CURB HEIGHT WILL VARY TO MATCH BOTTOM OF EXISTING BUILDING FACADE. APPROXIMATE HEIGHT FROM 0 - 6".



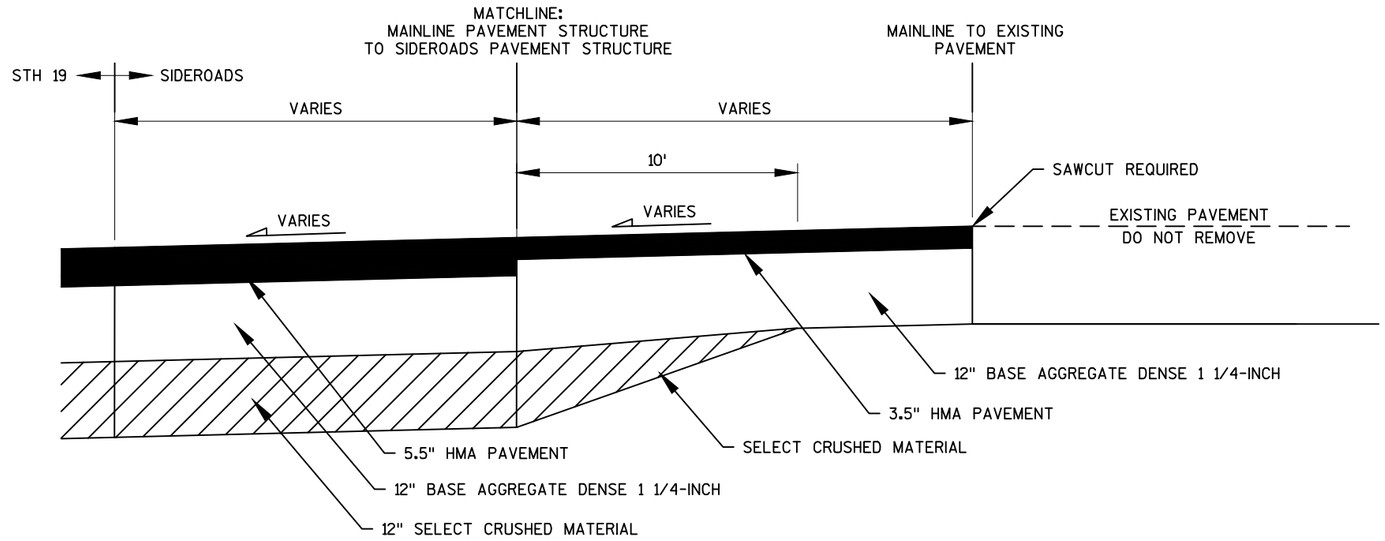
CONCRETE CURB & GUTTER
30-INCH TYPE A SPECIAL
2-INCH CURB



CONCRETE CURB & GUTTER
30-INCH TYPE A SPECIAL
3-INCH CURB

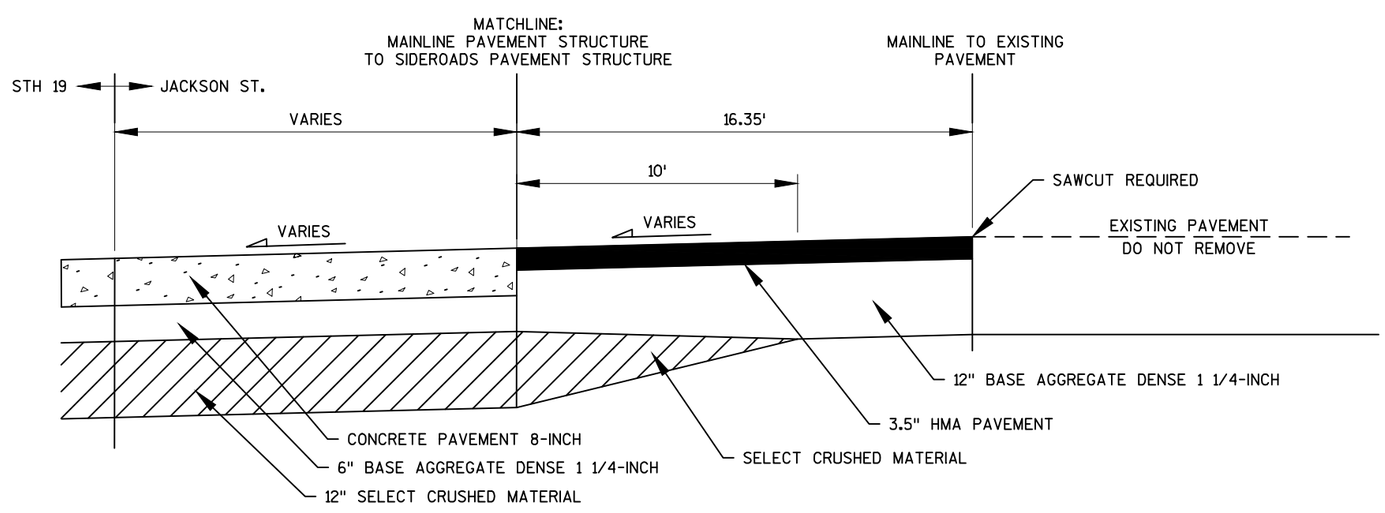


CONCRETE CURB & GUTTER
30-INCH TYPE A SPECIAL
4-INCH CURB



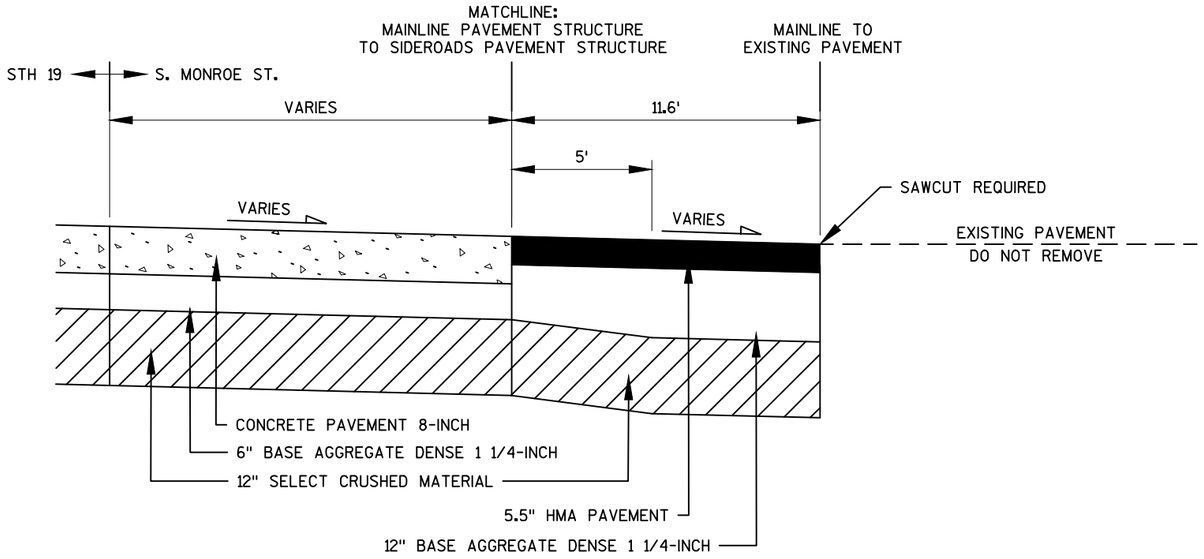
SUBGRADE TRANSITION BETWEEN MAINLINE AND SIDEROAD HMA PAVEMENT STRUCTURES

CANAL RD., MINNETONKA WAY, VAN BUREN ST., & HARRISON ST.



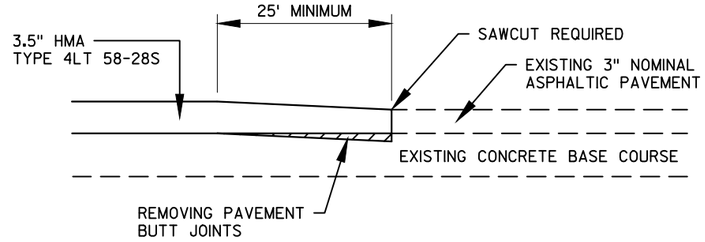
SUBGRADE TRANSITION BETWEEN MAINLINE CONCRETE PAVEMENT STRUCTURE
AND SIDEROAD HMA PAVEMENT STRUCTURE

S. JACKSON ST.



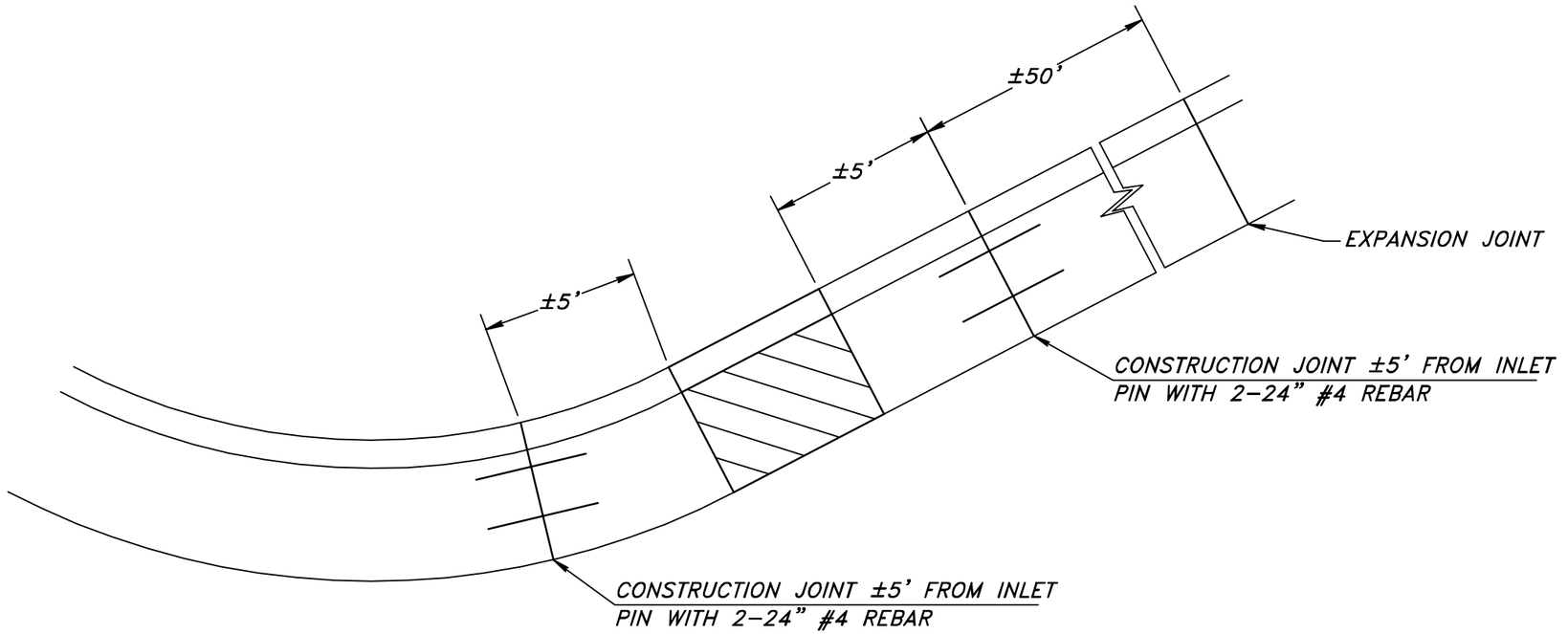
SUBGRADE TRANSITION BETWEEN MAINLINE CONCRETE PAVEMENT STRUCTURE AND SIDEROAD HMA PAVEMENT STRUCTURE

S. MONROE ST.



REMOVING PAVEMENT BUTT JOINTS DETAIL

2



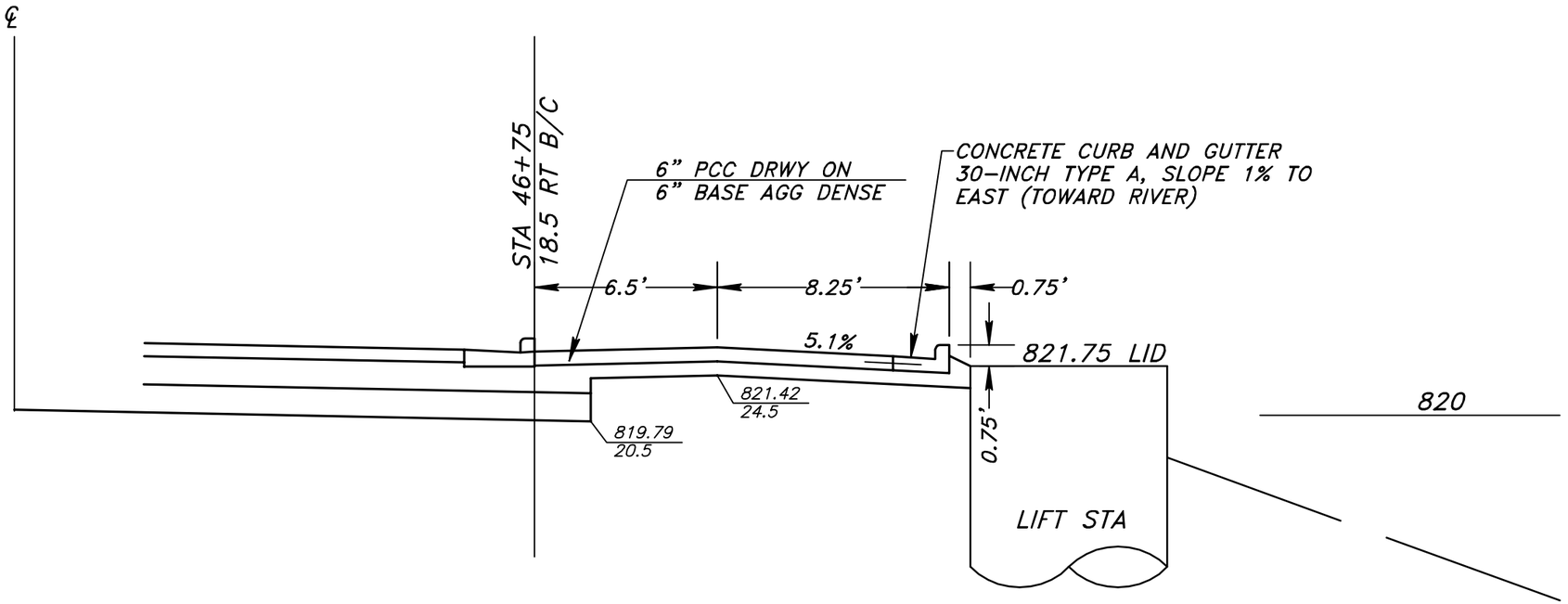
CURB PINS AT INLETS

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CURB PINS AT INLETS	SHEET	E

FILE NAME : M:\TOWNS\WATERLOO\STH 19 2017\DWG\CURB PINS AT INLETS.DWG
LAYOUT NAME - ****

PLOT DATE : 10/21/2016 1:56 PM PLOT BY : ALEX WILLIAMS PLOT NAME : PLOT SCALE : NTS

2



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	LIFT STATION CROSS SECTION	SHEET	E

FILE NAME : M:\TOWNS\WATERLOO\STH 19 2017\DWG\X-SECTION-LIFT-STA.DWG
LAYOUT NAME - ****

PLOT DATE : 12/13/2016 10:24 AM PLOT BY : ALEX WILLIAMS PLOT NAME : PLOT SCALE : 1 IN: 5 IN

WISDOT/CADDS

GENERAL NOTES:
1. THIS CONSTRUCTION DETAIL IS FOR INFORMATIONAL USE ONLY.
2. ALL LOCATIONS FOR KNOWN COAL CHUTES, BASEMENT EXTENSIONS, AND POTENTIAL VOIDS FROM OLD COAL CHUTES ARE APPROXIMATE.
3. KNOWN COAL CHUTES ARE TO BE FILLED IN BY OTHERS.
4. BASEMENT EXTENSIONS ARE TO REMAIN.

EP: 12+23.00S
12+00S
11+00S
9+00R
EP: 10+00.00R
BP: 10+00.00S
BP: 8+40.13R
60+00
61+00
62+00
63+00
64+00
65+00
66+00
STH 19 (W. MADISON ST.)
STH 19 (E. MADISON ST.)
N
ABANDONED STEAM TUNNEL
POTENTIAL VOIDS FROM OLD COAL CHUTES
POTENTIAL VOIDS FROM OLD COAL CHUTE
COAL CHUTE
COAL CHUTES
BASEMENT EXTENSIONS
103 N MONROE ST
117 E MADISON ST
127 E MADISON ST
141 E MADISON ST
144 W MADISON ST
Pi: 60+38.89
Pi: 60+58.23
Pi: 62+64.85
Pi: 62+99.68
151
141
139
135
129
132
130
122
120
118
112
104
100
108 & 112
116
126
134

FOR INFORMATIONAL USE ONLY

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CONSTRUCTION DETAILS - OLD UTILITY REMOVALS	SHEET 25	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.02_CONSTRUCTION DETAILS\OLD UTILITY REMOVALS.DWG
LAYOUT NAME - SHEET - (3)
PLOT DATE : 10/31/2016 8:39 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1 IN:40 FT

DRIVEWAY TYPE

1. CONCRETE DRIVEWAY
2. ASPHALT SURFACE COMMERCIAL
3. ASPHALT SURFACE RESIDENTAL
4. BASE AGGREGATE DENSE 3/4-INCH

BEGIN SIDE ROAD PAVEMENT STRUCTURE
STA 10+50.78C

MATCH EXISTING
STA 10+77C
SAWCUT REQ'D

BEGIN REJECT CURB
STA 10+61.64C

10+61.64C, 16.02' RT

10+68.40C, -17.99' LT

10+60.43C, -17.19' LT

10+46.57C, 15.00' RT

28+67.12, -56.00' LT

28+55.88, -17.70' LT

27+68.65, -46.00' LT

27+68.65, -16.00' LT

28+67.12, -16.00' LT

PC: 10+15.41C

PC: 27+76.52

R30.0'

R40.0'

CONCRETE PAVEMENT
APPROACH SLAB

REVERSE CROWN
STA 27+30.55

BEGIN FULL SUPER
STA 27+56.21

END REJECT CURB
STA 29+13.67

822.34 -0.94% 822.34 -0.56% 822.38 -1.88% 822.28 -1.80% 821.84

822.75 -0.38% 822.57 -1.12% 822.27

822.09 822.08 822.14 822.14 822.

822.05

820.88 821.24 821.40 821.41

820.37 820.38 820.35 820.49 820.55 820.73 820.89 820.99 821.05 821.05 821.00

2.50% -3.40% -3.40% -3.40% -3.40%

16.0' 16.0'

26+50 27+00 27+50 28+00 28+50 29+00 29+5

R/W

TLE

⊖GV ⊖WV ⊖WV

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 26	E

2

2

DRIVEWAY TYPE

1. CONCRETE DRIVEWAY
2. ASPHALT SURFACE COMMERCIAL
3. ASPHALT SURFACE RESIDENTAL
4. BASE AGGREGATE DENSE 3/4-INCH

N

TLE

R/W

2.0'

1

35'

+16.70 CE

822.09 821.99 29+99.51 821.86 821.73 821.61 30+34.17 821.48 821.30 821.30 821.12 820.93 820.75 820.45 820.14

-3.40%

END FULL SUPER
STA 30+75.29

16.0'

REVERSE CROWN
STA 31+75

-2.00%

0.00%

LEVEL CROWN
STA 32+19.70

29+50 30+00 30+50 31+00 31+50 32+00

PT: 31+00.62

820.65 820.52 820.39 820.32 820.32 820.25 820.18 820.11 819.99 819.86

821.00 820.90 820.77

R/W

TLE

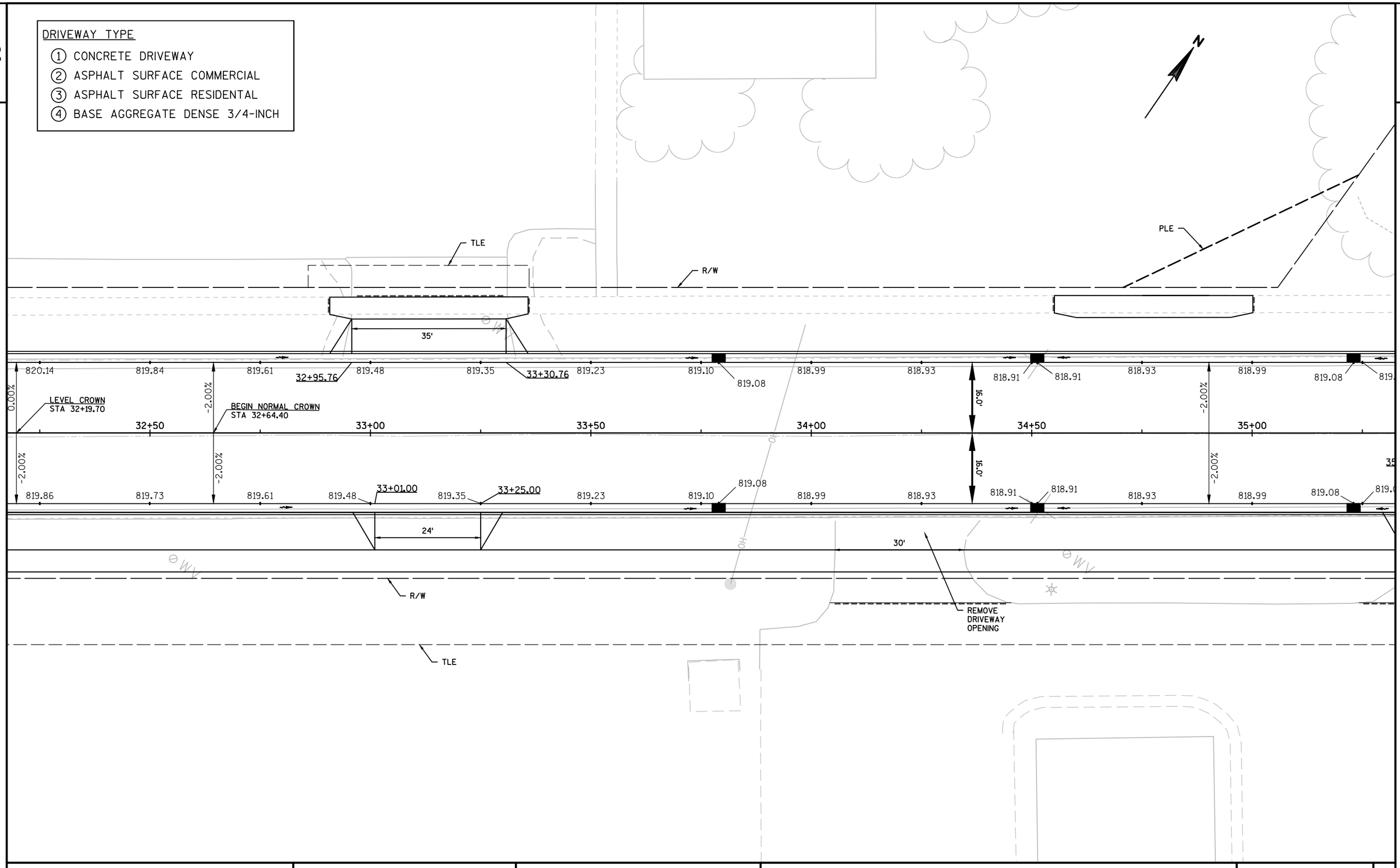
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 27	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.03_INTERSECTIONS\PAVING&INTERESECTIONDETAILS_28JAN16.DWG
LAYOUT NAME - 021101 - (2)

PLOT DATE : 1/5/2017 8:26 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1 IN:20 FT

DRIVEWAY TYPE

1. CONCRETE DRIVEWAY
2. ASPHALT SURFACE COMMERCIAL
3. ASPHALT SURFACE RESIDENTAL
4. BASE AGGREGATE DENSE 3/4-INCH



2

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 28	E

2

R/W

REPLACE BASE AT CULVERT CROSSING

48.6'

4

20'

819.08 819.09 819.21 819.33 819.45 819.59 819.80 820.09 820.46 820.91 821.43 822.04 822.72

36+13.76

36+33.76

-2.00%

16.0'

35+50 36+00 36+50 37+00 37+50 38+00

35+34.54

35+66.54

37+70.23

38+05.23

32'

35'

2 7.0'

1 7.0'

REMOVE DRIVEWAY OPENING

TLE

R/W

DRIVEWAY TYPE

1. CONCRETE DRIVEWAY
2. ASPHALT SURFACE COMMERCIAL
3. ASPHALT SURFACE RESIDENTAL
4. BASE AGGREGATE DENSE 3/4-INCH

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 29	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.03_INTERSECTIONS\PAVING&INTERESECTIONDETAILS_28JAN16.DWG
LAYOUT NAME - 021101 - (4)
PLOT DATE : 1/5/2017 8:26 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

2

DRIVEWAY TYPE

① CONCRETE DRIVEWAY
② ASPHALT SURFACE COMMERCIAL
③ ASPHALT SURFACE RESIDENTAL
④ BASE AGGREGATE DENSE 3/4-INCH

R/W

N

822.72 823.41 824.10 824.80 825.49 826.18 826.84 827.44 827.97 828.44 828.85 829.19 829.54

-2.00% 16.0' -2.00%

END NORMAL CROWN
STA 40+90

38+00 38+50 39+00 39+50 40+00 40+50 41+00

38+05.23

822.72 823.41 824.10 824.80 825.49 826.18 826.85 827.44 827.98 828.44 828.85 829.19 829.46

40+11.49 40+27.49

8.3% MAX 16' 8.3% MAX
6.0' 6.0'

R/W

REMOVE STEPS

③ 32.7'

TLE

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 30	E

2

DRIVEWAY TYPE

1. CONCRETE DRIVEWAY
2. ASPHALT SURFACE COMMERCIAL
3. ASPHALT SURFACE RESIDENTAL
4. BASE AGGREGATE DENSE 3/4-INCH

MATCH EXISTING
STA 10+82M
SAWCUT REQ'D

BEGIN SIDE ROAD PAVEMENT STRUCTURE
STA 10+41.33M

TLE

PC: 10+73.10M

PLE

10+40.67M, -15.00' LT

10+31.81M, -16.64' LT

10+41.33M, 15.00' RT

10+33.81M, 16.16' RT

R/W

41+62.24, -41.00' LT

42+42.24, -41.00' LT

41+62.24, -16.00' LT

42+42.24, -16.00' LT

R25.0'

-2.00%

-3.00%

-3.13%

-3.21%

-2.83%

831.43
831.16
830.99
831.43
831.26
831.06
830.22
830.14
830.18
830.08
830.16
830.10
830.19
830.12
830.24
830.24
830.43
830.45
830.48
830.48
830.24
829.93
829.57
829.14
829.54
829.96
830.30
830.35

LEVEL CROWN
STA 41+30

REVERSE CROWN
STA 42+45

BEGIN FULL SUPER
STA 42+75

PC: 42+71.27

41+00
41+50
42+00
42+50
43+00
43+50
44+00

-0.00%
-1.00%
-2.00%
-3.50%

16.0'

43+96.01

829.46
829.68
829.82
829.91
829.93
829.92
42+18.19
829.88
42+30.19
829.73
829.42
829.36
829.12
828.82
43+27.33
828.45
43+60.55
828.02
827.52

41+94.89, 16.00' RT

R/W

12'
6.0'
7.1'
6.0'
8.3% MAX

31'
6.0'
9.4'
30.3'
6.0'

TLE

TLE

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 31	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.03_INTERSECTIONS\PAVING&INTERESECTIONDETAILS_28JAN16.DWG
LAYOUT NAME - 021101 - (6)
PLOT DATE : 1/5/2017 8:26 AM
PLOT BY : LAMB, MATTHEW R
PLOT NAME :
PLOT SCALE : 1 IN:20 FT

2

DRIVEWAY TYPE

1. CONCRETE DRIVEWAY
2. ASPHALT SURFACE COMMERCIAL
3. ASPHALT SURFACE RESIDENTAL
4. BASE AGGREGATE DENSE 3/4-INCH

N

CONCRETE CURB & GUTTER 30-INCH TYPE D

CONCRETE CURB & GUTTER 30-INCH TYPE A

TLE

R/W

4-INCH CONCRETE SIDEWALK

CONCRETE PAVEMENT APPROACH SLAB

SEE LIFT STATION CONSTRUCTION DETAIL

43+96.01 828.64 828.08 827.46 826.77 826.05 825.33 824.46 824.37 823.66 823.01 822.51 822.38 822.31 822.31 822.33

44+14.65 +05.37 CE 20' 8.3' 4.0' 15.4' 20' 4.0'

44+00 44+50 45+00 45+50 46+00 46+50

16.0' 16.0'

-3.50% -2.00% 0.00% -2.00% -2.00%

END FULL SUPER STA 45+31.24

REVERSE CROWN STA 45+58.67

45+86.34

PT: 45+52.57

LEVEL CROWN STA 45+95.24

46+06.40

BEGIN NORMAL CROWN STA 46+31.81

826.34 825.66 824.94 824.22 823.67 823.63 823.16 822.73 822.44 822.38 822.31 822.30 822.33 822.37

826.97 827.52 828.02

46+69.11

8.3% MAX 8.3% MAX 6.0' 20' 6.0' 9.7'

CONC ASPH

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 32	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.03_INTERSECTIONS\PAVING&INTERESECTIONDETAILS_28JAN16.DWG
LAYOUT NAME - 021101 - (7)
PLOT DATE : 1/5/2017 8:27 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

2

DRIVEWAY TYPE

1. CONCRETE DRIVEWAY
2. ASPHALT SURFACE COMMERCIAL
3. ASPHALT SURFACE RESIDENTAL
4. BASE AGGREGATE DENSE 3/4-INCH

N

R/W

TLE

ASPH

REMOVE DRIVEWAY OPENING

SIGN

13.0'

10.5'

REMOVE DRIVEWAY OPENING

STRUCTURAL APPROACH SLAB

STRUCTURAL APPROACH SLAB

IP

CONC

24'

822.33 822.37 822.45 822.48 822.88 822.95 823.05 823.18 823.54 48+50.61 48+74.61 824.05 824.69 825.48 826.41 827.38

-2.00%

16.0'

-2.00%

ASPH

STH-19

MH

PI: 49

47+00 47+50 48+00 48+50 49+00 49+50

OH

CONC

822.33 822.37 46+89.11 822.45 822.48 822.87 822.95 823.05 823.17 823.54 48+80.50 824.04 48+93.50 824.69 825.48 826.40 49+55.88, 16.00' RT 826.64 827.14 827.23

8.3% MAX

20'

6.0'

9.7'

1

13'

R20.0'

49+55.88, 36.00' RT

CONCRETE PAVEMENT APPROACH SLAB

18.0'

3

11.8'

4-INCH CONCRETE SIDEWALK

9+61.47V, -10.50' LT

-5.2

827.8

-3.92

R/W

TLE

828.65

9+40.00V, -10.50' LT

-2.92

828.76

W

TA FR

OH

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 33	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.03_INTERSECTIONS\PAVING&INTERESECTIONDETAILS_28JAN16.DWG
LAYOUT NAME - 021101 - (8)

PLOT DATE : 1/5/2017 8:27 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

2

DRIVEWAY TYPE

1. CONCRETE DRIVEWAY
2. ASPHALT SURFACE COMMERCIAL
3. ASPHALT SURFACE RESIDENTAL
4. BASE AGGREGATE DENSE 3/4-INCH

N

CONCRETE STEPS
SEE CONSTRUCTION DETAILS

TLE

R/W

827.38 828.35 829.32 830.23 830.96 831.52 831.91 832.13 832.18 832.17 832.05 831.75 831.28

14'

50+93.42

51+07.47

51+69.05

12'

51+70.55

51+82.55

MH

PI: 49+72.28

50+00 50+50 51+00 51+50 52+00 52+50

-2.00%

16.0'

826.64 827.14 827.23 827.88 828.51 828.53 828.65 828.76 828.75 829.04 829.09 829.19 829.32 830.22 830.96 831.52 831.91 832.12 832.18 832.17 832.04 831.74 831.27

R20.0'

-5.24% -3.51% -3.92% -2.21% -2.92% -1.05%

-10.50' LT

10.50' LT

50+17.65, 16.00' RT

50+17.65, 36.00' RT

9+65.15V, 11.50' RT

9+40.00V, 11.50' RT

BEGIN SIDE ROAD PAVEMENT STRUCTURE
STA 9+62.97V

50+91.71

51+03.71

51+93.71

52+05.71

52+85.29,

12'

CONCRETE TERRACE STEPS
SEE CONSTRUCTION DETAILS

1.2'

4-INCH
CONCRETE
SIDEWALK

18.1'

3

CONCRETE STEPS
SEE CONSTRUCTION DETAILS

CONCRETE STEPS
SEE CONSTRUCTION DETAILS

TAPER CURB HEAD FROM 6" TO 0"
FROM STA. 9+35'V' TO STA. 9+40'V'.

MATCH EXISTING
STA 9+35V
SAWCUT REQ'D

TAPER CURB HEAD FROM 6" TO 0"
FROM STA. 9+35'V' TO STA. 9+40'V'.

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 34	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.03_INTERSECTIONS\PAVING&INTERESECTIONDETAILS_28JAN16.DWG
LAYOUT NAME - 021101 - (9)
PLOT DATE : 1/5/2017 8:27 AM
PLOT BY : LAMB, MATTHEW R
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

DRIVEWAY TYPE
1. CONCRETE DRIVEWAY
2. ASPHALT SURFACE COMMERCIAL
3. ASPHALT SURFACE RESIDENTAL
4. BASE AGGREGATE DENSE 3/4-INCH

N

CONCRETE STEPS SEE CONSTRUCTION DETAILS
TLE
R/W
REMOVE DRIVEWAY OPENING
18.0'
④
15'
12'
35'
35'
⊘WV

31.28 830.63 52+86.64 829.82 53+01.64 828.83 827.67 826.34 53+96.27 824.92 54+08.27 823.57 822.33 821.18 54+80.98 820.12 819.16 55+15.98 818.29

16.0' -2.00% 16.0' -2.00% 23.0' -2.00%

2+50 53+00 53+50 54+00 54+50 55+00 55+50

52+85.29, 16.00' RT
31.27 830.63 830.32
829.80 829.68
R20.0'
52+85.29, 36.00' RT
R/W
829.49 -2.05%
9+73.75H, -18.78' LT
9+62.06H, -15.02' LT
-1.81% -5.40%
-1.04% -6.25%
829.65
9+38.12H, -15.00' LT
829.69
-7.29%
-0.22% -7.42%
-0.43%
829.75 828.71
TLE
MATCH EXISTING STA 9+20H SAWCUT REQ'D

53+55.40, 16.00' RT
827.40 827.74 826.33 824.91
827.99
53+48.68, 17.16' RT
828.34 828.40 -5.07% 828.42
R20.0'
53+55.40, 36.00' RT
9+69.30H, 15.31' RT
9+65.84H, 15.00' RT
BEGIN SIDE ROAD PAVEMENT STRUCTURE STA 9+62.06H
828.56
9+38.12H, 15.00' RT

824.10 54+15.01, 16.00' RT
823.56 823.43 822.19 821.03 819.98 819.01 818.15
55+65.01, 16.00' RT
55+58.01, 23.00' RT
54+22.01, 23.00' RT
2.5'
4-INCH CONCRETE SIDEWALK
R/W
TLE
CONCRETE STEPS SEE CONSTRUCTION DETAILS

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 35	E

2

2

DRIVEWAY TYPE

① CONCRETE DRIVEWAY
② ASPHALT SURFACE COMMERCIAL
③ ASPHALT SURFACE RESIDENTAL
④ BASE AGGREGATE DENSE 3/4-INCH

N

REMOVE DRIVEWAY OPENING
8.0'
②
56+13.01, -23.00' LT
35'
818.29
817.52
55+63.13
816.37
816.11
816.66
816.84
55+98.13
56+07.35, -16.00' LT
815.62
815.23
815.07
815.05
814.93
814.81
814.72
57+19.80
814.61
814.60
57+55.10
814.59
814.58
814.59
814.67
814.83
814.85
58+35.72
815.0
TLE
6.8'
②
35'
R/W
5.2'
57+67.14, -23.00' LT
OH
16.0'
-2.00%
23.0'
55+50
56+00
56+50
57+00
57+50
58+00
58+50
815.51
815.39
815.27
815.15
815.18
PI: 57+12.27
PI: 57+61.96
815.07
815.05
815.13
815.29
815.4
814.94
814.83
814.81
814.89
815.05
815.2
24.0'
55+65.01, 16.00' RT
817.81
817.51
55+79.41
816.83
56+14.41
816.25
815.76
815.36
815.20
815.27
815.15
815.06
815.05
815.19
814.85
814.68
814.70
814.64
814.81
814.63
814.62
814.60
814.57
814.56
814.57
814.57
814.65
814.81
815.0
8.01, 23.00' RT
818.15
817.88
35'
57+02.00, 16.00' RT
57+09.82, 17.59' RT
57+02.00, 36.00' RT
57+59.94, 23.95' RT
R20.0'
R12.5'
57+67.14, 24.00' RT
57+53.01, 25.80' RT
57+59.56, 36.44' RT
R/W
TLE
3.0'
②
REMOVE DRIVEWAY OPENING
9+74.62J, -18.11' LT
9+59.85J, -13.00' LT
9+48.88J, -13.05' LT
-2.49%
814.75
-1.47%
815.06
-1.97%
814.80
814.73
-2.42%
814.94
814.90
815.02
9+50J
9+65.62J, 13.00' RT
9+51.12J, 13.00' RT
BEGIN SIDE ROAD PAVEMENT STRUCTURE STA 9+61.35J
MATCH EXISTING STA 9+45J SAWCUT REQ'D

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 36	E

DRIVEWAY TYPE

1. CONCRETE DRIVEWAY
2. ASPHALT SURFACE COMMERCIAL
3. ASPHALT SURFACE RESIDENTAL
4. BASE AGGREGATE DENSE 3/4-INCH

N

5.2' ① 35'

R/W

TLE

59+28.97, -23.00' LT

59+33.97, -20.00' LT

3.0' ② 10'

59+72.58, -20.00' LT

59+76.06, -19.84' LT

60+35.44, -20.13' LT

TLE

② 4.6' 14'

R/W

60+73.23, -23.00' LT

814.85 815.02 815.21 815.39 815.58 815.71 815.83 816.00 816.02

58+35.72 58+70.72 59+39.66 59+49.66

816.41 816.42 60+74.66 816.50 60+88.68 816.64 816.65 816.81

815.24 815.43 23.0' 815.61 -2.00% 815.80 815.99 816.18

816.61 816.72 -2.00% 816.86 23.0' -2.00% 817.03

58+50 59+00 59+50 60+00

815.48 815.67 815.85 816.04 816.23 816.42

CONCRETE PAVEMENT APPROACH SLAB

CONCRETE PAVEMENT APPROACH SLAB

PI: 60+38.89

END NORMAL CROWN STA 61+00.00

60+50 61+00

816.85 816.96 817.10 817.27

PI: 60+58.23

815.24 815.43 24.0' 815.61 -2.00% 815.80 815.99 816.18

816.61 816.72 816.86 -2.00% 25.0' 817.01 -2.20%

59+55.54, 24.00' RT

815.79 816.02

60+40.60, 20.01' RT

816.39 816.40

59+28.88 59+75.78, 19.57' RT

60+58.59, 25.00' RT

815.00 815.19 815.37 815.56 815.75 815.81

816.46 816.60 816.72

59+50.88

22'

R/W 5.8'

R/W

BIKE RACK

TLE

28.4'

②

PLE

PLE

27.4'

18.8' 17.9'

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 37	E

DRIVEWAY TYPE

1. CONCRETE DRIVEWAY
2. ASPHALT SURFACE COMMERCIAL
3. ASPHALT SURFACE RESIDENTAL
4. BASE AGGREGATE DENSE 3/4-INCH

MATCH EXISTING STA 10+58S SAWCUT REQ'D

10+56.13S, 22.00' RT
10+46.82S, 23.48' RT
10+37.25S, 28.69' RT
63+85.94, -54.00' LT
63+85.94, -24.00' LT
10+50.01S, -22.00' LT
10+38.14S, -22.00' LT
62+95.16, -40.50' LT
62+95.16, -23.00' LT
62+92.53
62+10.78
62+48.88
62+61.88
62+89.72, 25.00' RT
62+89.72, 45.00' RT
9+63.38R, -23.82' LT
9+51.64R, -20.00' LT
63+70.90, 25.33' RT
63+62.84, 26.38' RT
63+71.02, 45.33' RT
9+64.51R, 21.18' RT
9+57.75R, 20.00' RT
9+46.07R, 20.00' RT

TLE
R/W
R30.0'
R20.0'
10+50S
9+50R
5.8' ②
18'
+01.65 CE
13'
① 5.4'
R/W
5.1'
④
4.4'
RT 5'

PAVING GAP

EP: 10+00.00R
BP: 10+00.00S
PI: 62+98.68
PI: 63+64.85

MATCH EXISTING STA 9+40 R SAWCUT REQ'D

BEGIN SIDE ROAD PAVEMENT STRUCTURE STA 9+51.60 R

61+50 62+00 62+50 63+00 63+50 64+00

24.0' 24.1'

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 38	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.03_INTERSECTIONS\PAVING&INTERESECTIONDETAILS_28JAN16.DWG
LAYOUT NAME - 021101 - (13)
PLOT DATE : 1/5/2017 8:28 AM
PLOT BY : LAMB, MATTHEW R
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

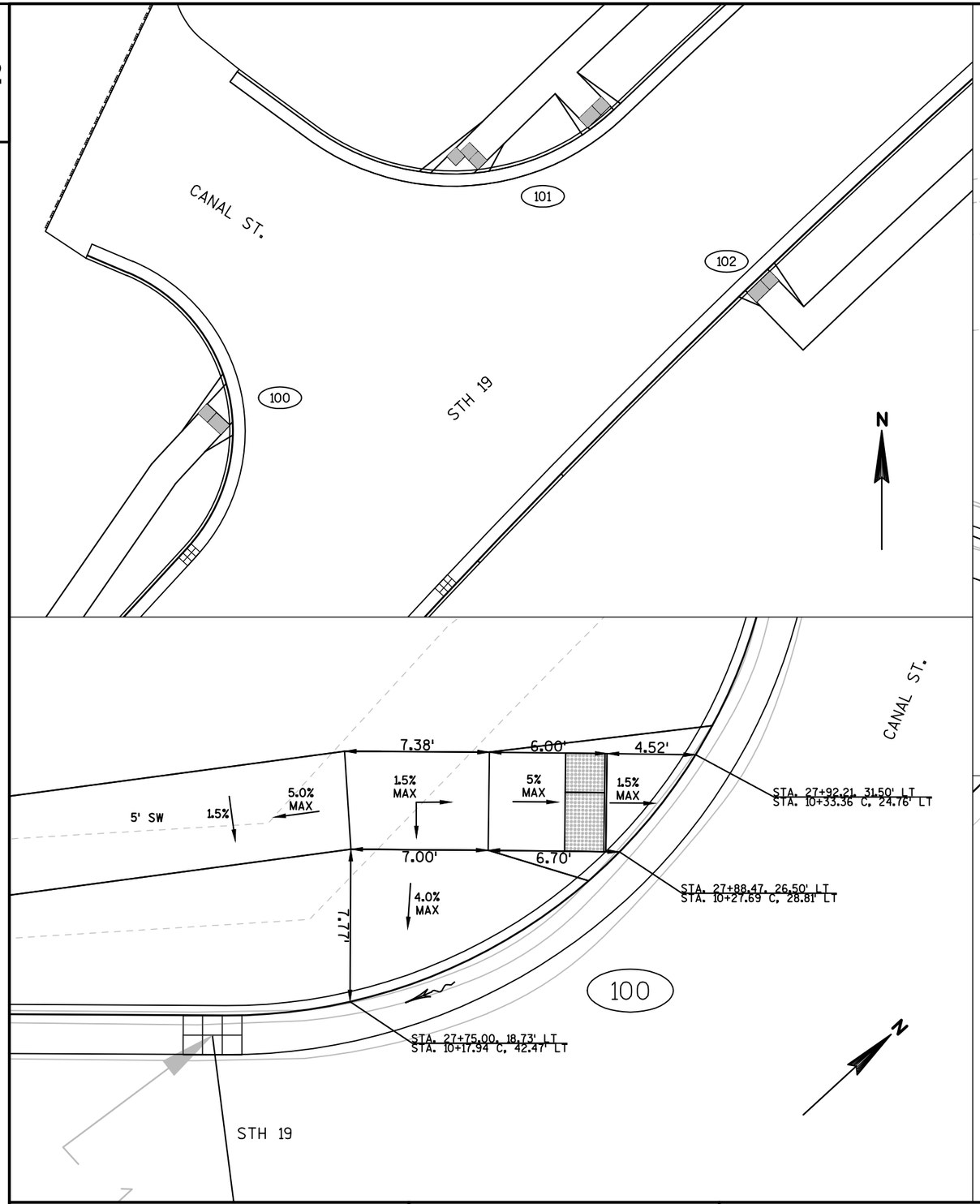
DRIVEWAY TYPE

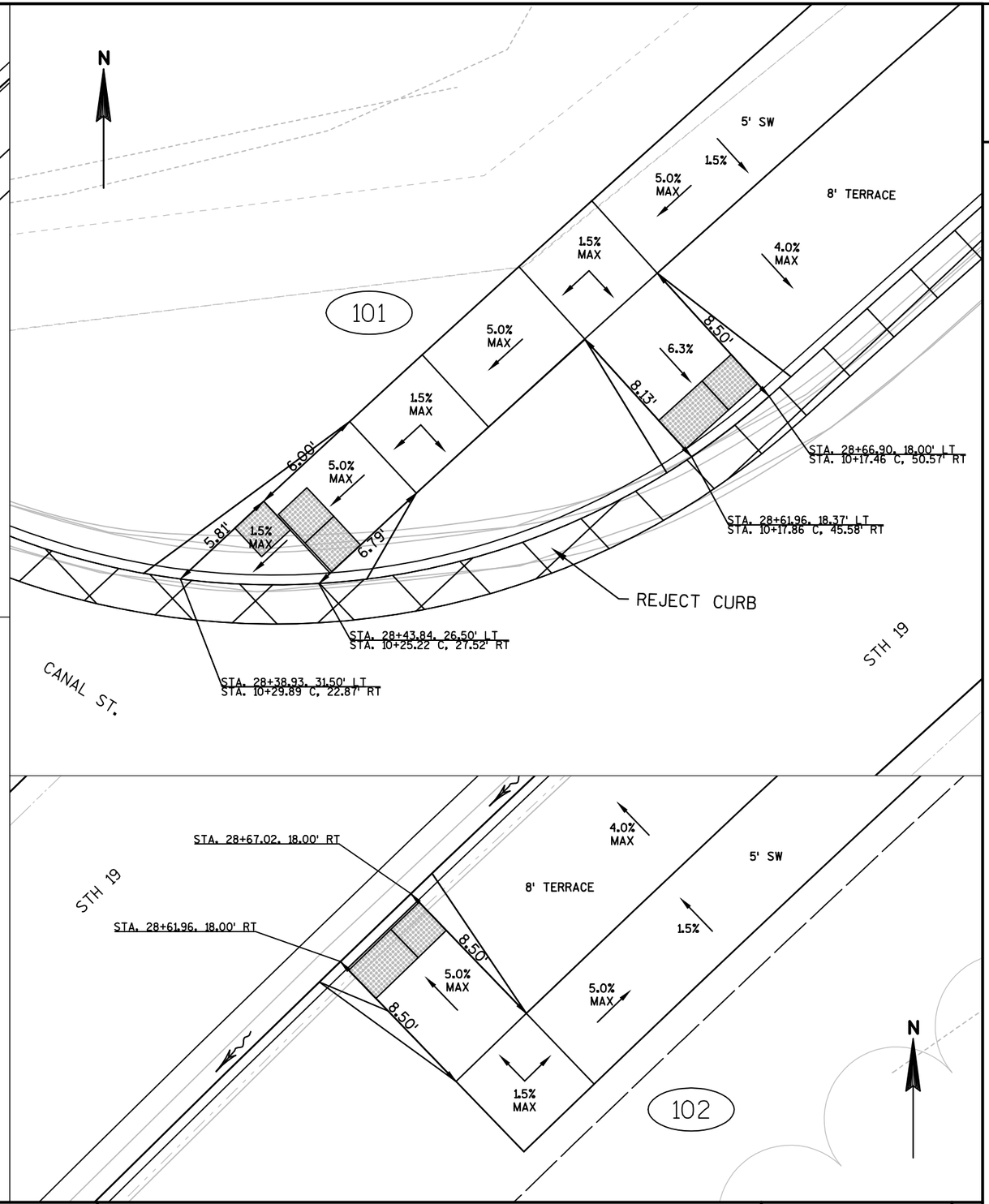
1. CONCRETE DRIVEWAY
2. ASPHALT SURFACE COMMERCIAL
3. ASPHALT SURFACE RESIDENTAL
4. BASE AGGREGATE DENSE 3/4-INCH

N

. 22.00' RT
2S, 23.48' RT
10+37.25S, 28.69' RT
63+85.94, -54.00' LT
TLE
R/W
63+85.94, -24.00' LT
TLE
R/W
65+66.62, -24.00' LT
65+89.16, -22.16' LT
2.4'
14'
819.87 819.51 818.96 818.65 818.18 817.62 817.13 816.73 816.54 816.44 816.31
64+86.92
65+00.92
0.00% -1.00% -2.00% -2.00%
20.02 819.63 819.20 818.88 818.42 817.86 817.37 816.97 816.67 816.51
24.0' 24.0' 22.9'
CONCRETE PAVEMENT APPROACH SLAB
+64.85 64+00 64+50 65+00 65+50 66+00 66+50
819.75 819.44 819.12 818.66 818.10 817.61 817.21 816.91 816.75
BEGIN NORMAL CROWN STA 64+25.00
MATCH EXISTING STA 65+89.16 SAWCUT REQ'D
-2.61% -2.50% -2.00% -2.00%
819.45 819.20 818.89 818.42 817.86 817.37 816.97 816.67 816.51
25.1' 24.8' 21.2'
819.24 819.12 818.94 818.63 818.17 817.61 817.12 816.73 816.53 816.46 816.37
64+91.93
65+01.93
65+89.16, 19.24' RT
65+66.48, 24.14' RT
3+70.90, 25.33' RT
62.84, 26.38' RT
TLE
R/W
10'
4 5.4'
R/W
-71.02, 45.33' RT
21.18' RT
20.00' RT
20.00' RT
E

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PAVING & INTERSECTION DETAILS	SHEET 39	E





PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CURB RAMP DETAILS - CANAL ST.	SHEET 40	E

2

N

MATCH EXISTING

APPROX. 20'

4' SW

4.00'

5.00'

5.00'

8.5% MAX

5.0% MAX

20.00'

1.5%

MINNETONKA WAY

⌀GV

113

MINNETONKA WAY

MATCH EXISTING

4.00'

5.73'

5.10'

5.00'

4.77'

APPROX. 22'

1.5%

15.00'

11.5% MAX

4.89'

10.44'

1.5%

10.44'

5.0% MAX

10.73'

114

104

7.97'

10.00'

5' SW

1.5%

8.0% MAX

5' SW

8' TERRACE

1.5% MAX

6.42'

3.5%

3.31'

STA. 42+21.29, 31.50' LT
STA. 10+31.66 M, 19.13' RT

STA. 42+24.43, 26.50' LT
STA. 10+26.69 M, 22.31' RT

CURB TRANSITION FROM 0-INCH TO 6-INCH CURB

STA. 41+76.77, 18.00' RT

STA. 41+71.78, 18.00' RT

CURB TRANSITION FROM 6-INCH TO 0-INCH CURB

10.00'

5.0% MAX

1.5% MAX

10.00'

5.0% MAX

8th CEDAR

105

N

STA. 41+83.52, 32.27' LT
STA. 10+32.12 M, 18.65' LT

STA. 41+80.70, 27.29' LT
STA. 10+27.11 M, 21.42' LT

STA. 41+77.07, 23.42' LT
STA. 10+23.21 M, 25.02' LT

STA. 41+72.05, 20.20' LT
STA. 10+19.95 M, 30.02' LT

5' SW

6.38'

4.3% MAX

1.5% MAX

3.67'

3.89'

2.7%

7.15'

1.5%

10.00'

5.0% MAX

MATCH EXISTING

8.92'

4.0% MAX

103

STH 19

STH 19

MINNETONKA WAY

104

103

105

STH 19

N

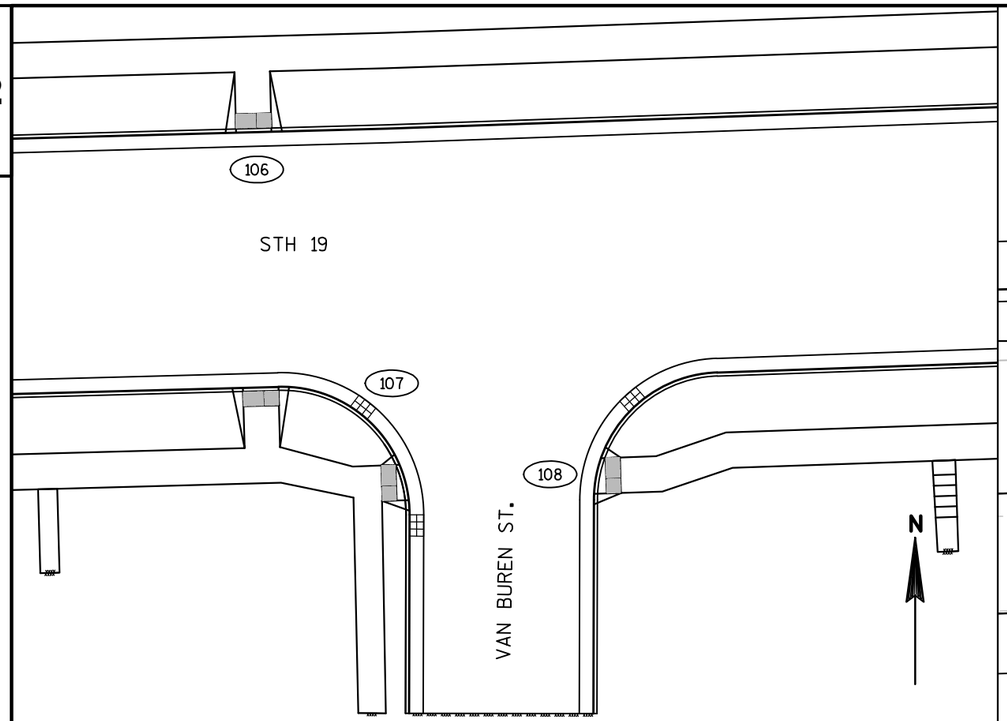
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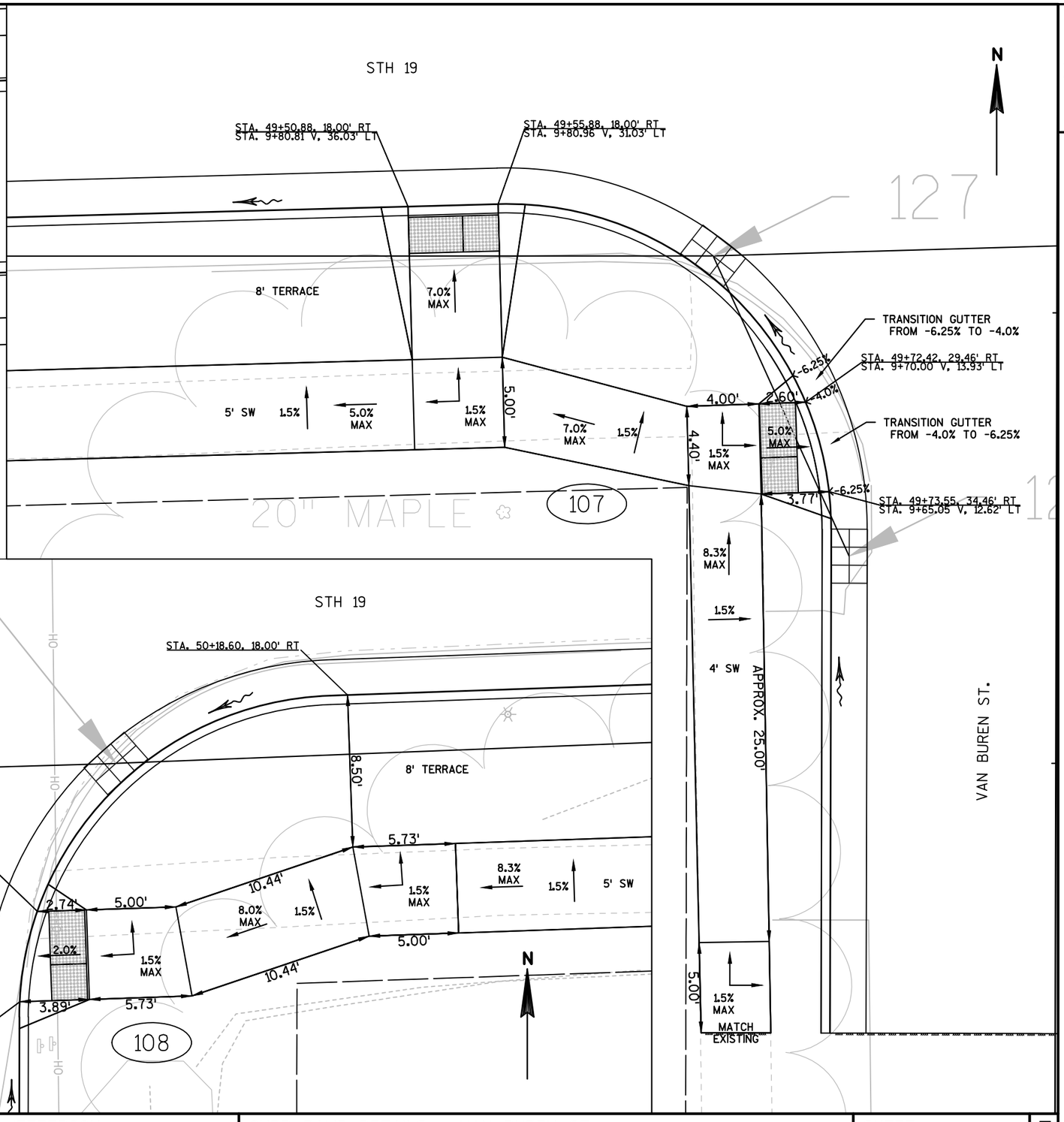
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CURB RAMP DETAILS - MINNETONKA WAY	SHEET 41	E

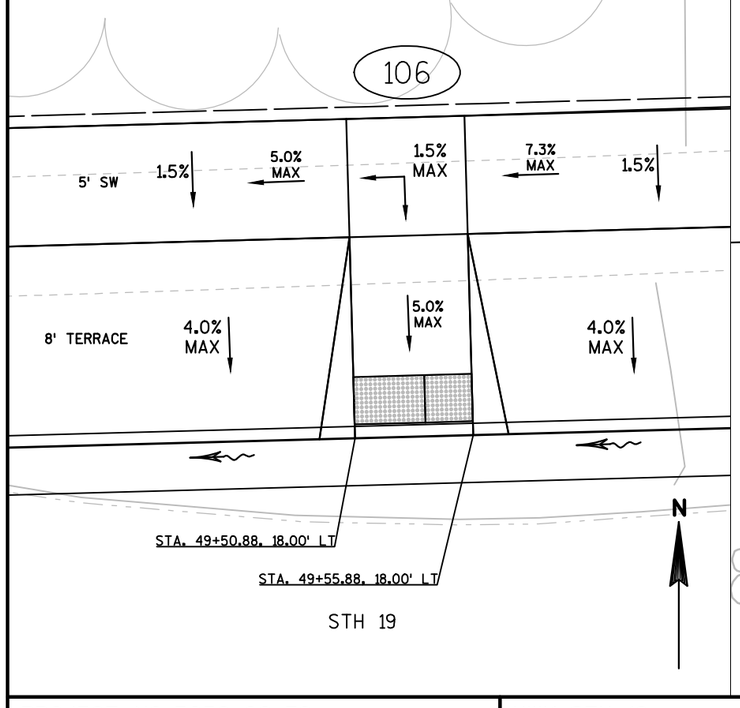
FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.02_CONSTRUCTION DETAILS\CURBRAMPDETAILS.DWG
LAYOUT NAME - MINNETONKA

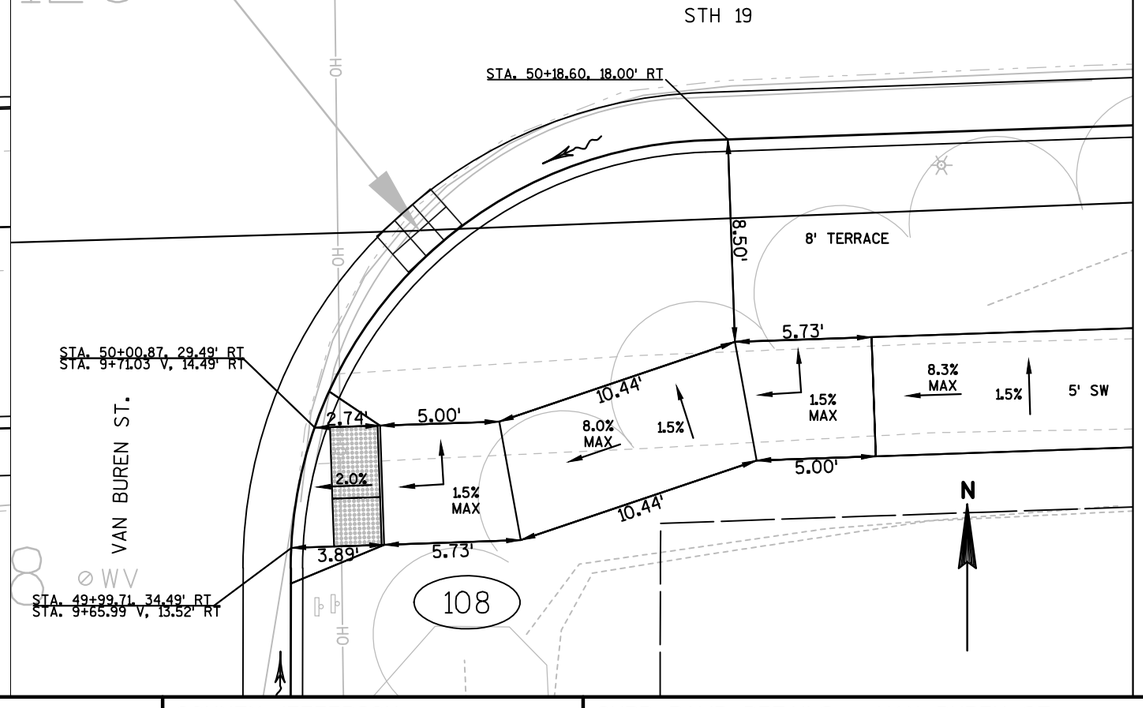
PLOT DATE : 1/5/2017 9:19 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 42









PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CURB RAMP DETAILS - VAN BUREN ST.	SHEET 42	E

STH 19

8' TERRACE

STA. 53+00.58, 26.50' RT
STA. 9+72.37 H, 20.25' LT

STA. 53+02.72, 31.50' RT
STA. 9+67.49 H, 17.84' LT

1.5%
5.0% MAX
5.00'
1.5% MAX
5' SW
20.00'
1.5%
8.3% MAX
5.00'
1.5% MAX
2.67'
5.0% MAX
4.81'
5.00'
2.51'
2.65'
4.80'
109
8.3% MAX
1.5%
5' TERRACE
17.67'
5' SW
5.00'
1.5% MAX
APPROX. 15.00'
1.5%
5.0% MAX
5.00'
5.14'
5.00'
5.0% MAX
4.00'
6.17'
MATCH EXISTING
STA. 9+20.00 H
N

111
STH 19
109
110
HARRISON ST.
N

HARRISON ST.

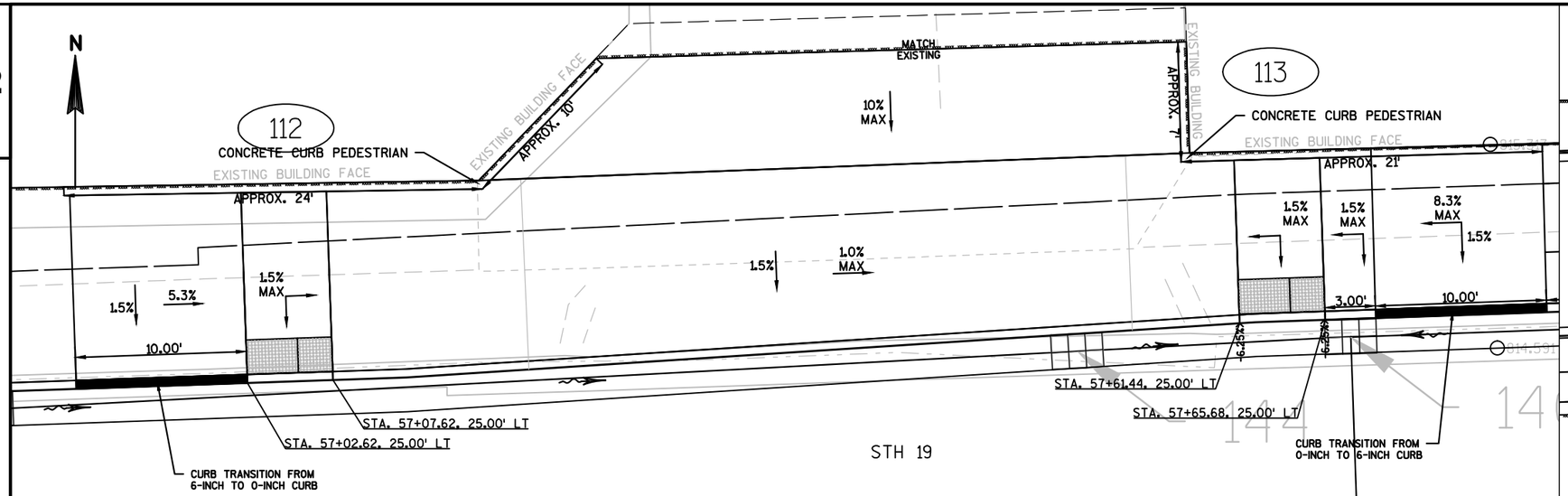
1

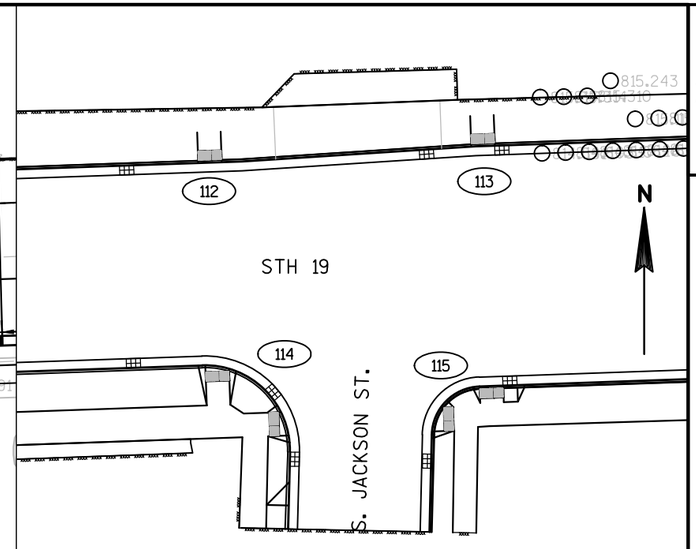
HARRISON ST.

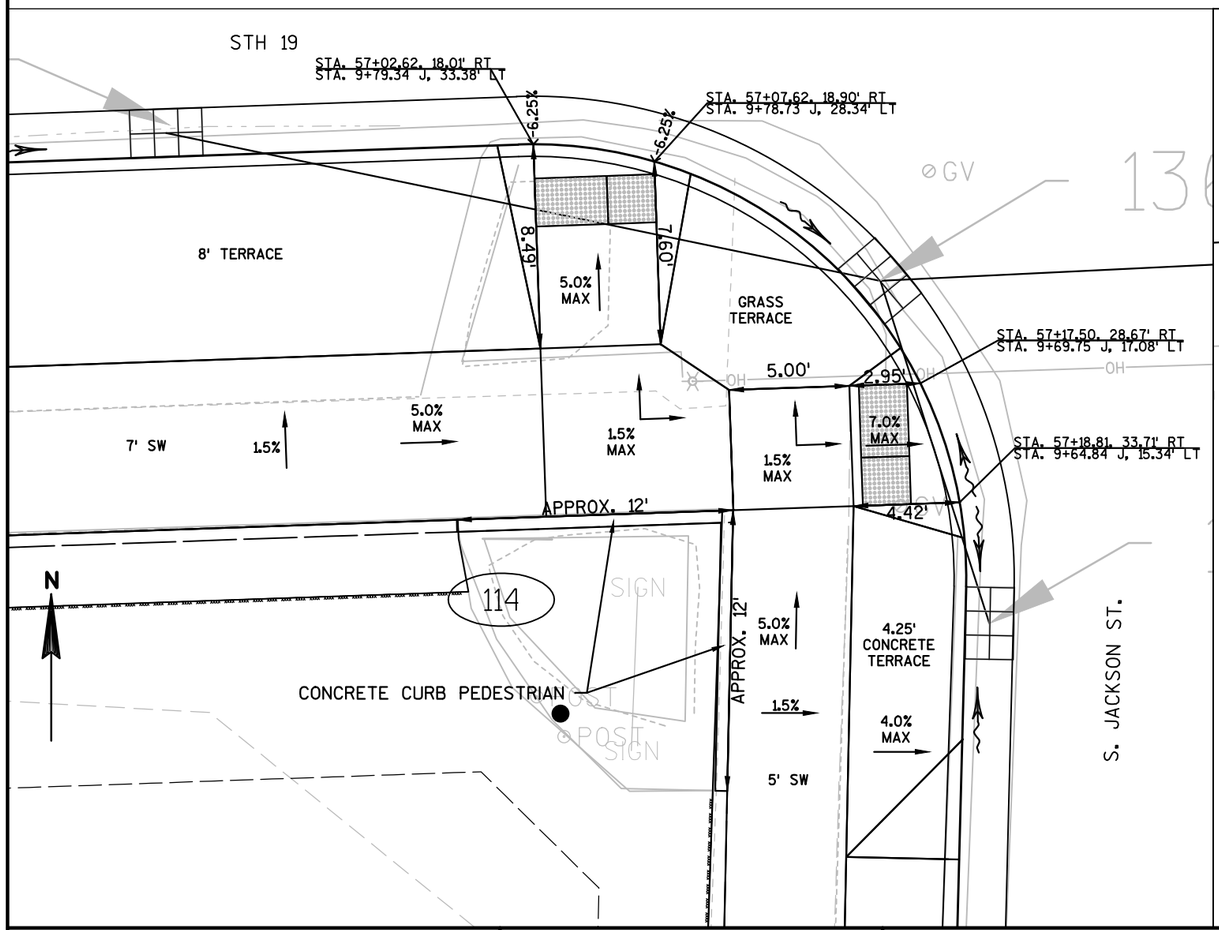
TRANSITION GUTTER
FROM -2.0% TO -6.25%
STA. 53+49.12, 19.13' RT
STA. 9+82.35 H, 27.83' RT
TRANSITION GUTTER
FROM -4.0% TO -2.0%
STA. 53+44.12, 21.97' RT
STA. 9+79.24 H, 22.99' RT
CONCRETE TERRACE
STA. 53+40.11, 26.50' RT
STA. 9+74.50 H, 19.22' RT
TRANSITION GUTTER
FROM -6.25% TO -4.0%
STA. 53+37.97, 31.50' RT
STA. 9+69.39 H, 17.35' RT
-6.25%
-4.0%
-2.0%
7.37'
4.53'
7.0% MAX
4.02'
5.0% MAX
6.15'
1.5% MAX
8.0% MAX
1.5%
5' SW
5.0% MAX
1.5%
6' TERRACE
5' SW
4.0% MAX
APPROX. 45.00'
MATCH EXISTING
STA. 9+20.00 H
110
N

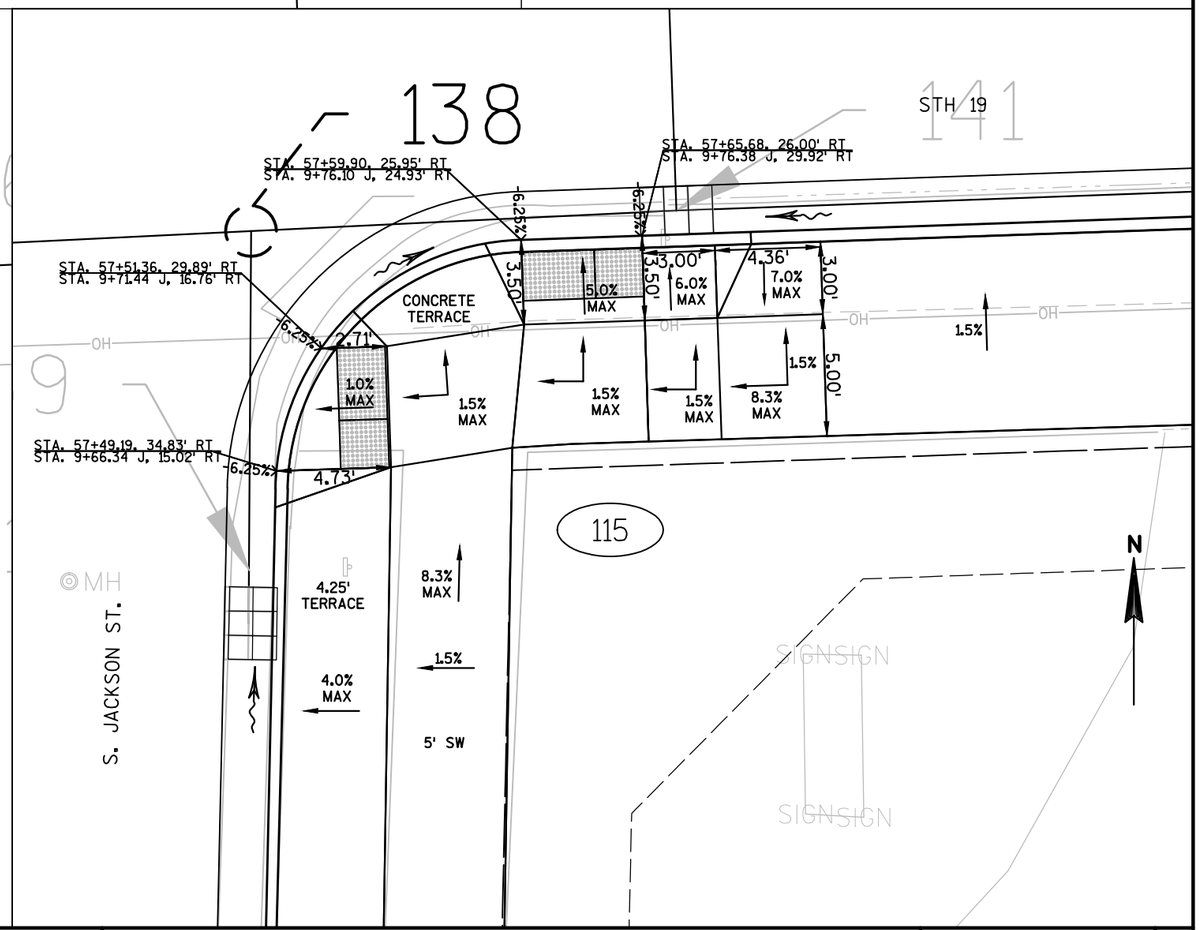
111
1.5%
5.0% MAX
8.3% MAX
1.5% MAX
8.3% MAX
1.5%
5' SW
8' TERRACE
5.5% MAX
8.0% MAX
4.0% MAX
5.00'
5.00'
-6.25%
-4.0%
-2.0%
-6.25%
TRANSITION GUTTER
FROM -6.25% TO -4.0%
STA. 53+44.12, 18.00' LT
TRANSITION GUTTER
FROM -4.0% TO -2.0%
TRANSITION GUTTER
FROM -2.0% TO -6.25%
STA. 53+49.12, 18.00' LT
N
STH 19

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CURB RAMP DETAILS - HARRISON ST.	SHEET 43 E



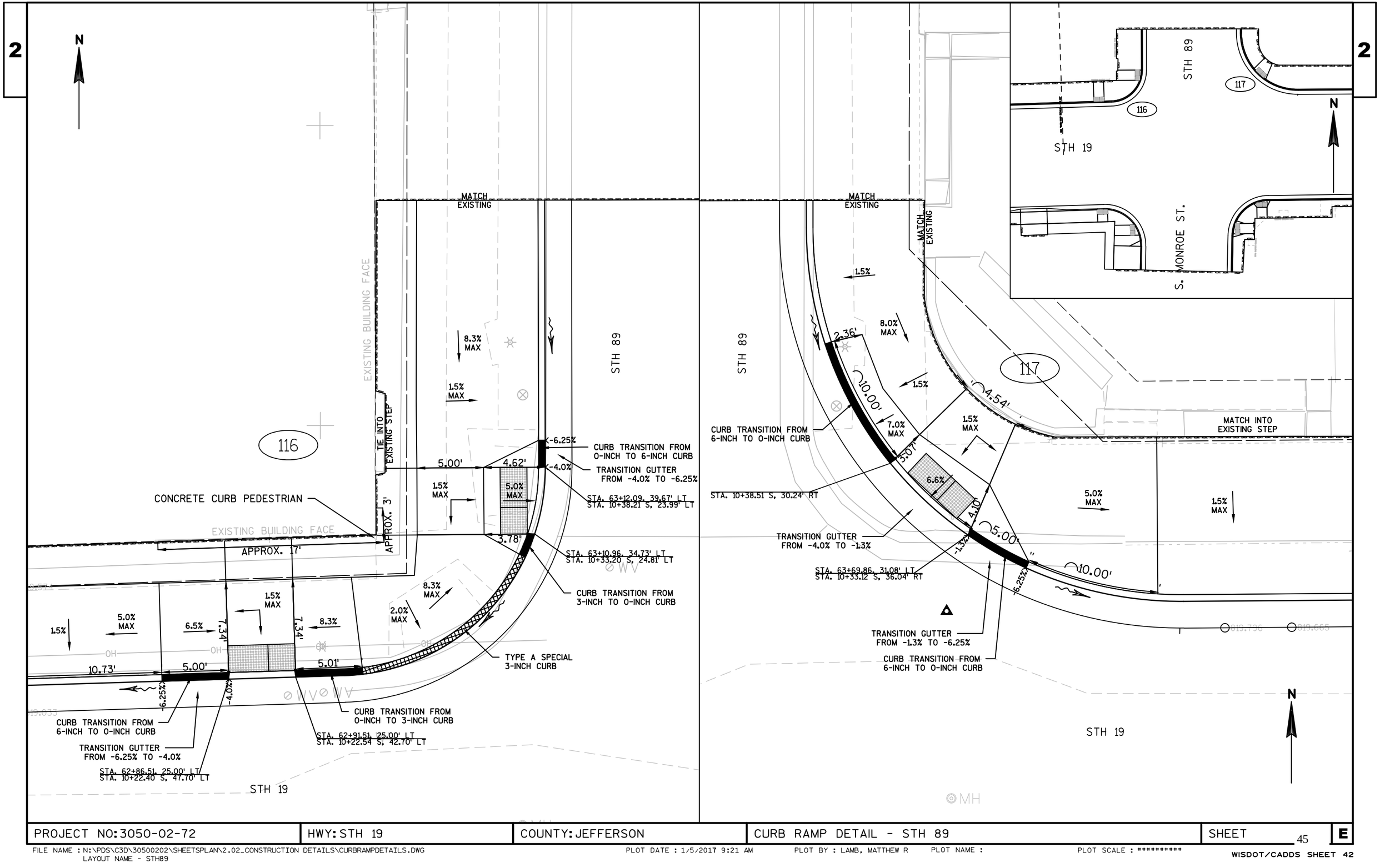






PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CURB RAMP DETAILS - S. JACKSON ST.	SHEET 44	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.02_CONSTRUCTION DETAILS\CURBRAMPDETAILS.DWG
LAYOUT NAME - JACKSON
PLOT DATE : 1/5/2017 9:20 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : **********



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CURB RAMP DETAIL - STH 89	SHEET 45	E

STH 19

N

STA. 62+42.76, 27.00' RT

CURB TRANSITION FROM
6-INCH TO 0-INCH CURB

STA. 62+48.88, 26.00' RT

TYPE A SPECIAL
DRIVEWAY CURB

STA. 62+61.88, 26.00' RT

CURB TRANSITION FROM
6-INCH TO 0-INCH CURB

STA. 62+71.51, 27.00' RT

STA. 62+86.51, 27.00' RT
STA. 9+69.44 R, 44.15' LT

TRANSITION GUTTER
FROM -6.25% TO -4.0%

CURB TRANSITION FROM
6-INCH TO 0-INCH CURB

STA. 62+91.51, 27.09' RT
STA. 9+69.62 R, 39.15' LT

CURB TRANSITION FROM
0-INCH TO 2-INCH CURB

118

TYPE A SPECIAL
2-INCH CURB

CURB TRANSITION FROM
2-INCH TO 0-INCH CURB

STA. 63+03.73, 35.69' RT
STA. 9+61.94 R, 25.24' LT

STA. 63+05.70, 40.80' RT
STA. 9+57.02 R, 22.82' LT

CURB TRANSITION FROM
0-INCH TO 2-INCH CURB

SPECIAL
2-INCH CURB

TRANSITION GUTTER
FROM -4.0% TO -6.25%

CURB TRANSITION FROM
2-INCH TO 0-INCH CURB

STA. 63+06.04, 46.28' RT
STA. 9+51.59 R, 22.00' LT

S. MONROE ST.

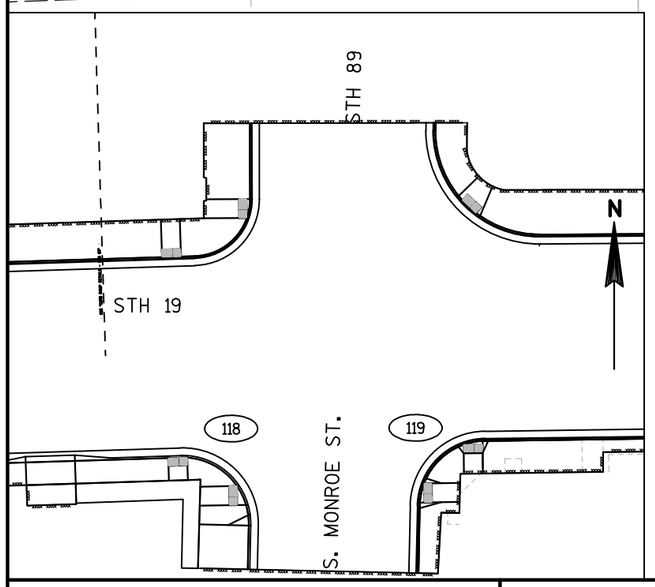
6.12'
8.3% MAX
1.5%
6' SW
9.63'
5.0% MAX
1.5%
2.0% MAX
5.00'
8.3% MAX
1.5%
1.5% MAX
3.00'
8.3% MAX
1.84'
1.46'
1.5% MAX
6.53'
3.76'
5.0% MAX
1.5% MAX
6.74'
6.00'
1.99'
-4.0%
2.0% MAX
1.5% MAX
7.60'
2.77'
6.00'
-6.25%
2.0% MAX
1.5% MAX
10.0% MAX
7.69'
MATCH EXISTING
6.00'

5.41'
10% MAX
MATCH EXISTING

-6.25%
-4.0%

⌀GV

OH



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CURB RAMP DETAIL - S. MONROE ST. #1	SHEET 46 E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.02_CONSTRUCTION DETAILS\CURBRAMPDETAILS.DWG
LAYOUT NAME - MONROE #1

PLOT DATE : 1/5/2017 9:21 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 42

2

N

STH 19

CONTROL POINT:
STA 63+70.90, 25.33' RT
ELEVATION: 819.25' = 10.0

119

CURB TRANSITION FROM
0-INCH TO 4-INCH CURB

STA. 63+70.21, 27.34' RT
STA. 9+75.70 R, 38.66' RT

TRANSITION GUTTER
FROM -2.0% TO -6.25%

TYPE A SPECIAL
4-INCH CURB

CURB TRANSITION FROM
4-INCH TO 6-INCH CURB

STA. 63+63.55, 28.26' RT
STA. 9+74.61 R, 33.70' RT

CURB TRANSITION FROM
2-INCH TO 0-INCH CURB

TYPE A SPECIAL
2-INCH CURB

CURB TRANSITION FROM
0-INCH TO 2-INCH CURB

STA. 63+51.93, 38.23' RT
STA. 9+63.65 R, 22.99' RT

STA. 63+50.51, 43.17' RT
STA. 9+58.61 R, 22.02' RT

CURB TRANSITION FROM
0-INCH TO 4-INCH CURB

TRANSITION GUTTER
FROM -2.0% TO -6.25%

CURB TRANSITION FROM
4-INCH TO 6-INCH CURB

-2.0%
-6.25%
5.00'
13.50'
15.00'
25.00'
6.73'
3.70'
3.78'
3.31'
3.34'
3.37'
6.15'
3.50'
9.98
10.08
10.27
10.23
10.24
10.29
10.18
10.31
10.28
10.33
10.34
10.34
10.14
9.95
10.26
10.30
10.28
10.39
10.41
10.41
10.42
10.34
10.39
9.86
10.14
10.22
10.35
10.18
10.21
10.01
10.18
MATCH
EXISTING

EXISTING BUILDING FACE

S. MONROE ST.

STH 89

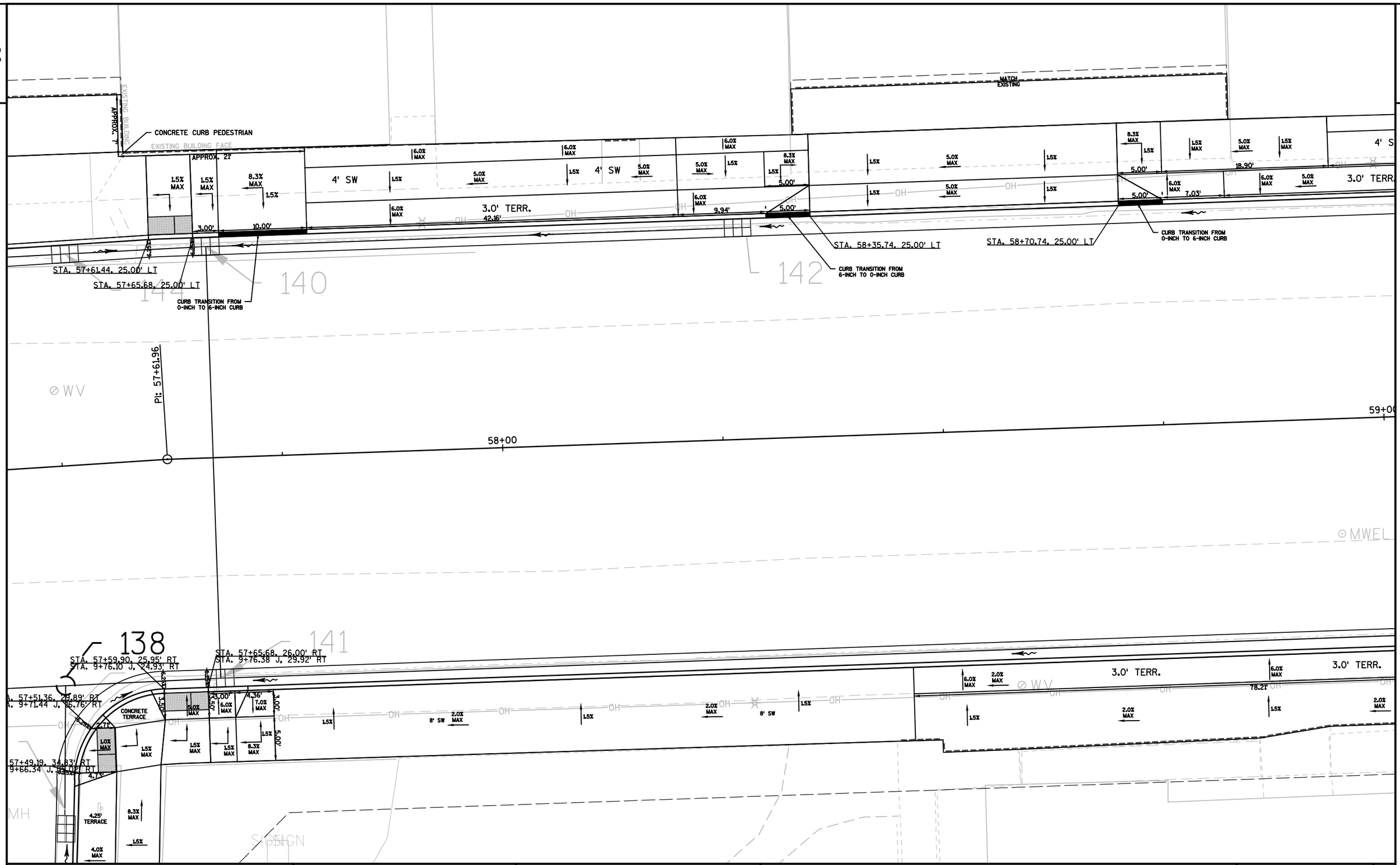
STH 19

118

119

S. MONROE ST.

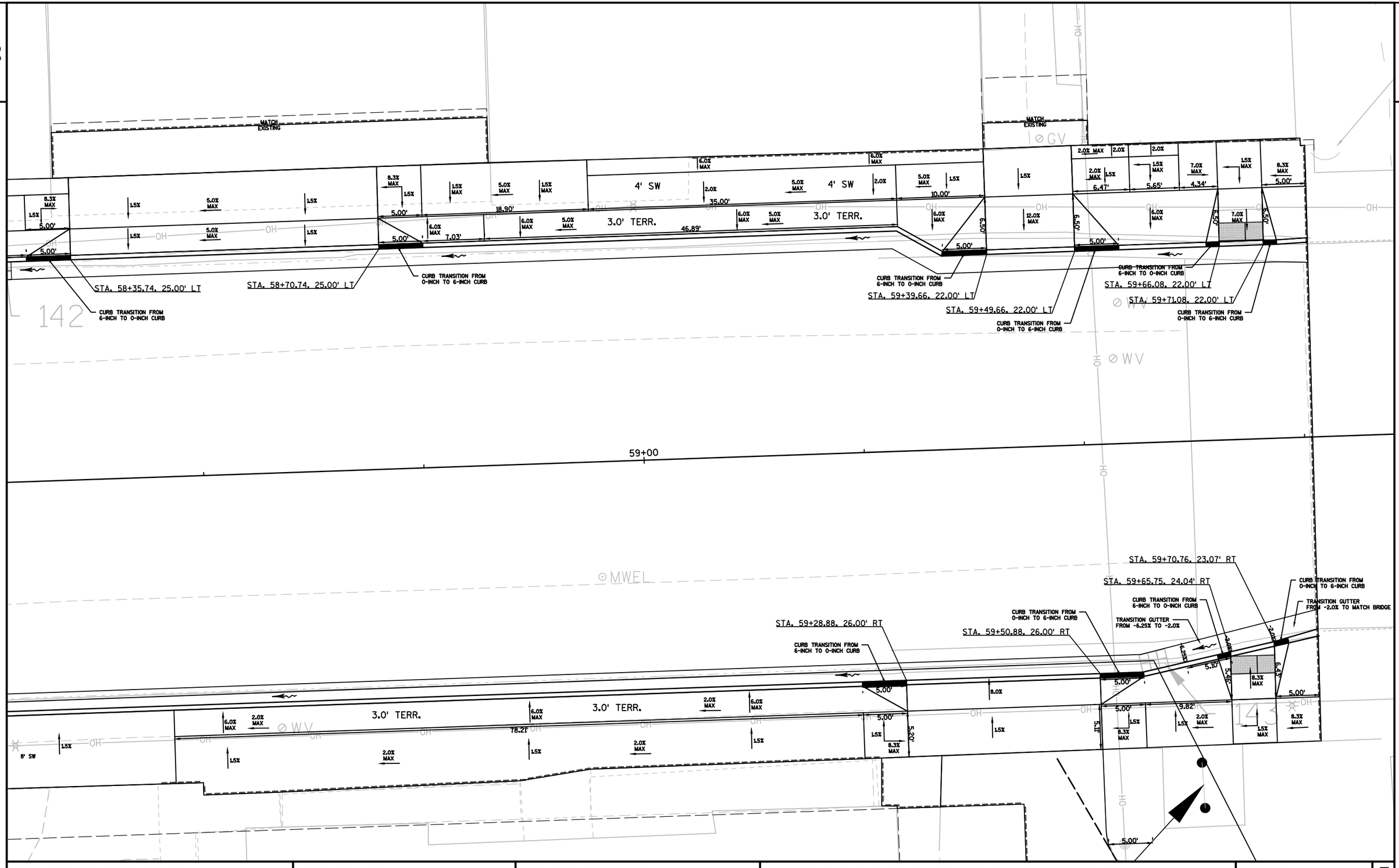
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CURB RAMP DETAIL - S. MONROE ST. #2	SHEET 47 E



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	SIDEWALK AND CURB RAMP DETAIL - DOWNTOWN #1	SHEET 48	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.02_CONSTRUCTION DETAILS\CURBRAMPDETAILS.DWG
LAYOUT NAME - DOWNTOWN #1

PLOT DATE : 1/5/2017 9:21 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1" = 10'



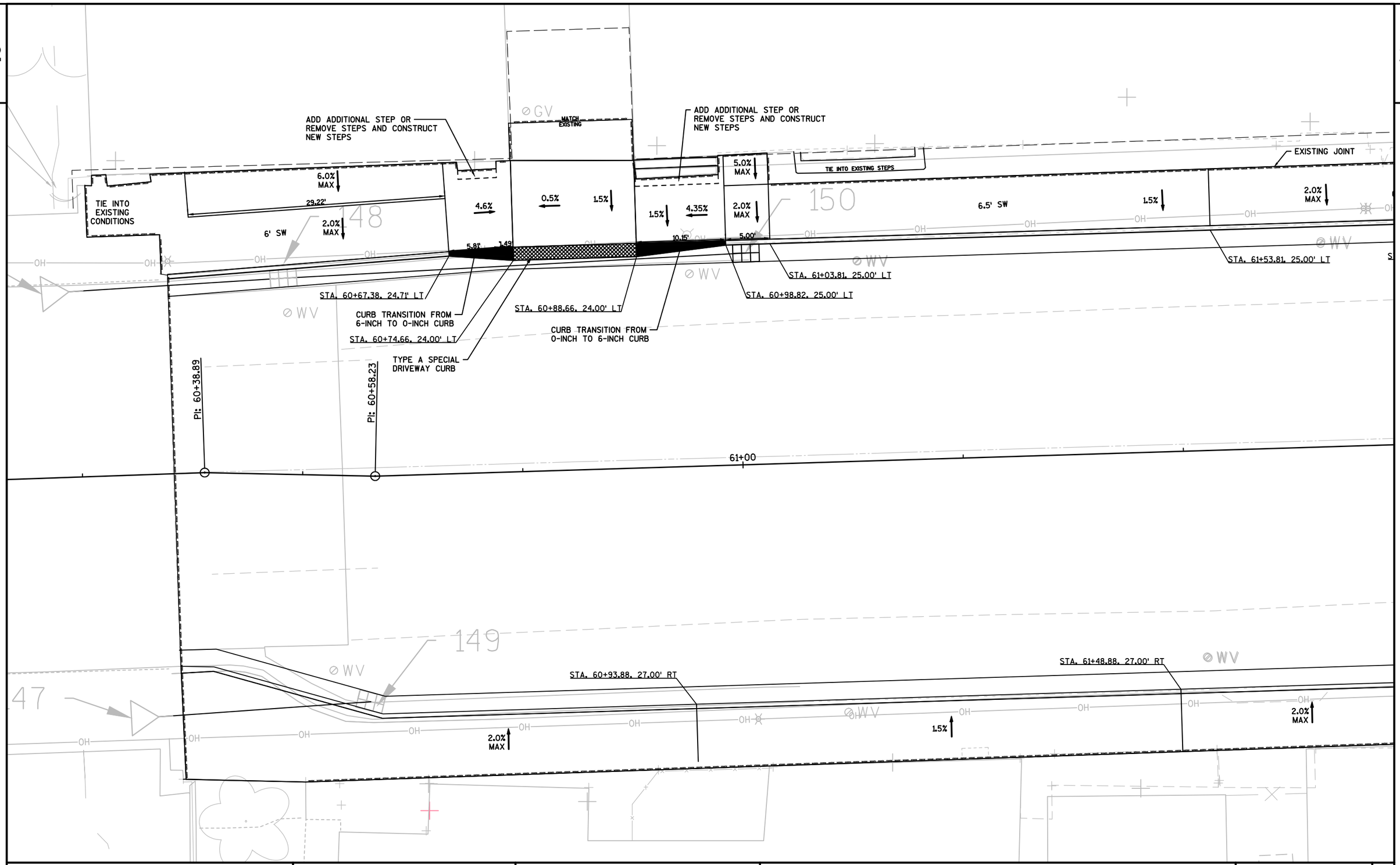
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	SIDEWALK AND CURB RAMP DETAIL - DOWNTOWN #2	SHEET 49 E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.02_CONSTRUCTION DETAILS\CURBRAMPDETAILS.DWG
LAYOUT NAME - DOWNTOWN #2

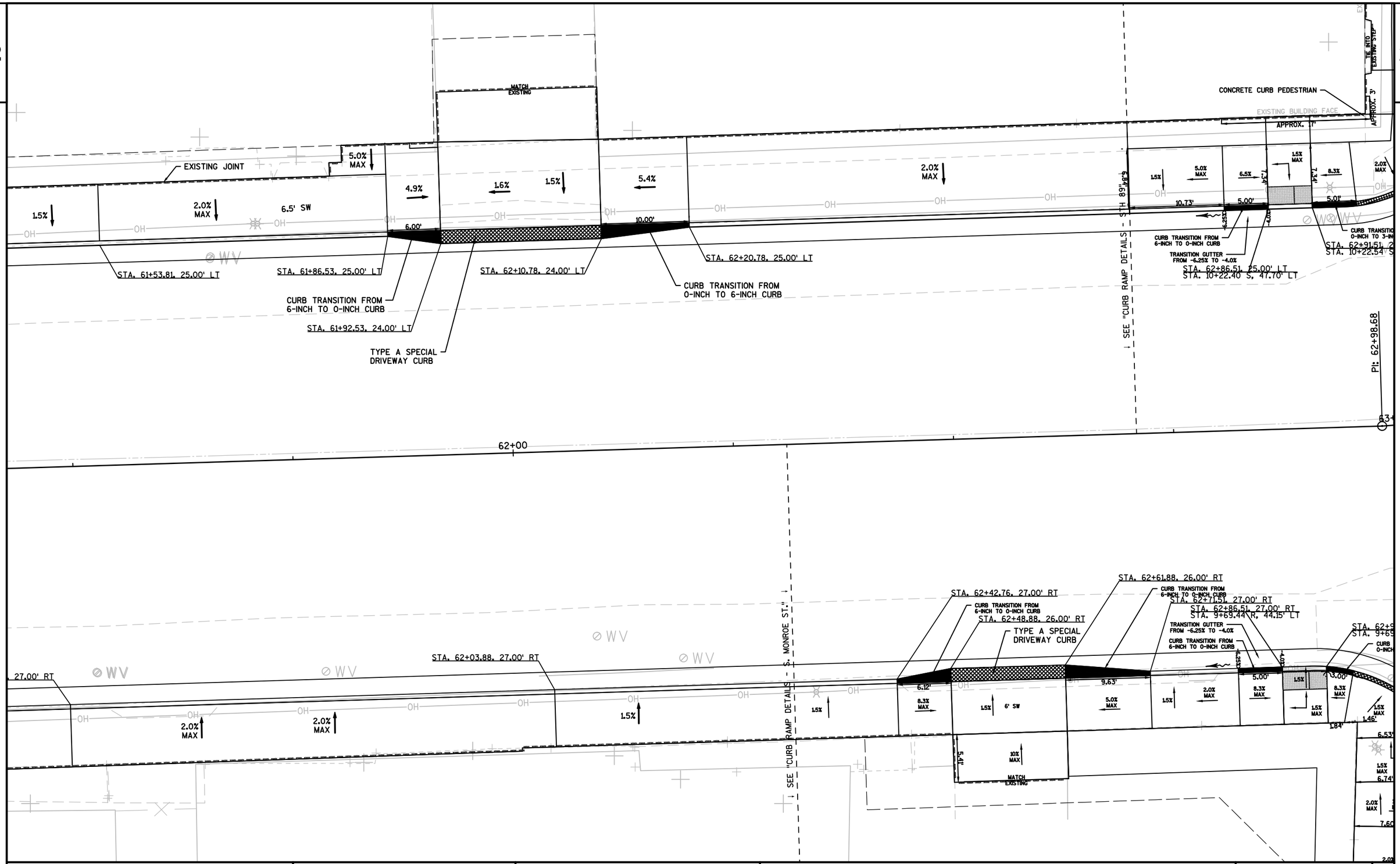
PLOT DATE : 1/5/2017 9:21 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1" = 10'

WISDOT/CADDS SHEET 42

2



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	SIDEWALK AND CURB RAMP DETAIL - DOWNTOWN #3	SHEET 50	E

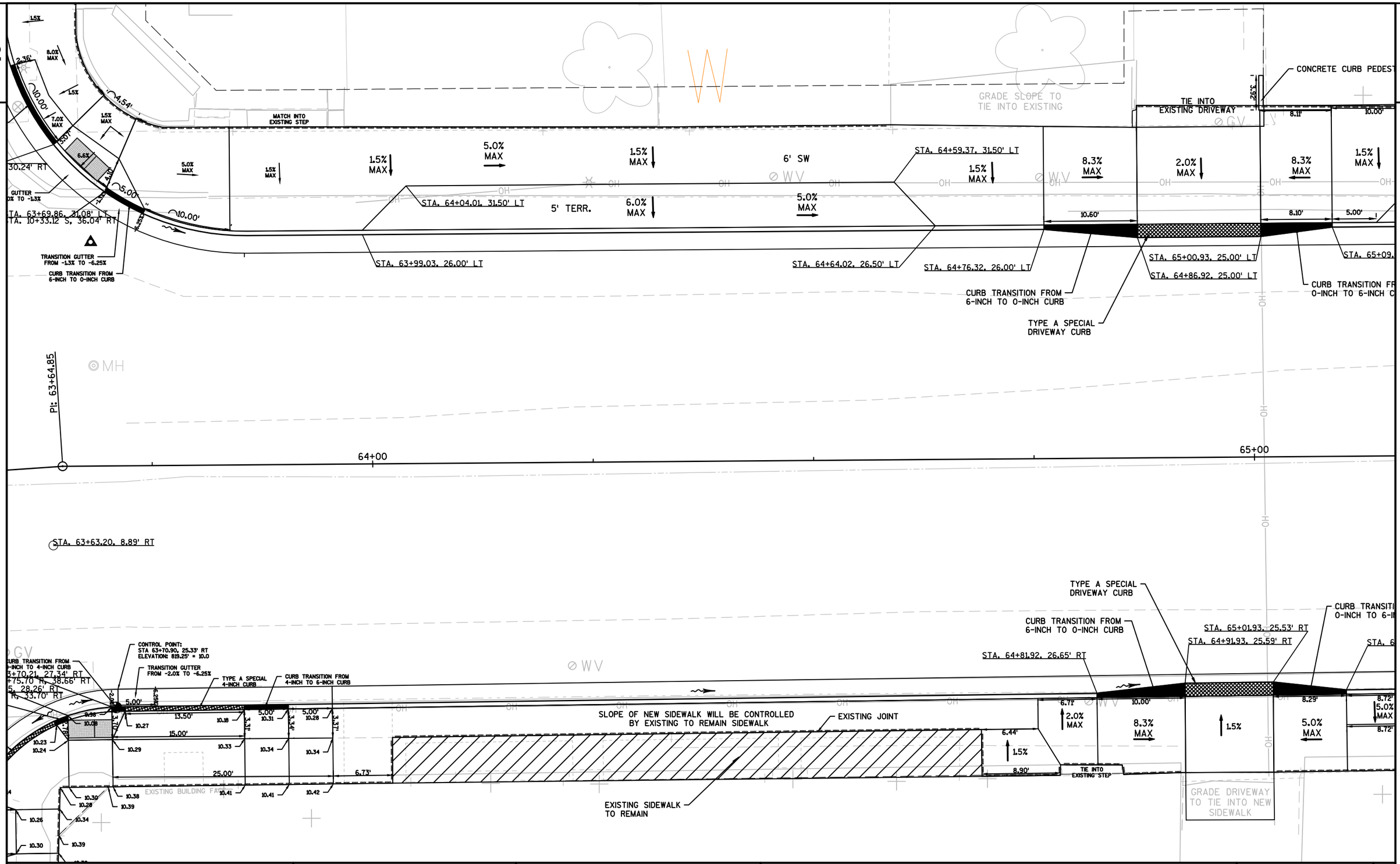


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	SIDEWALK AND CURB RAMP DETAIL - DOWNTOWN #4	SHEET 51 E

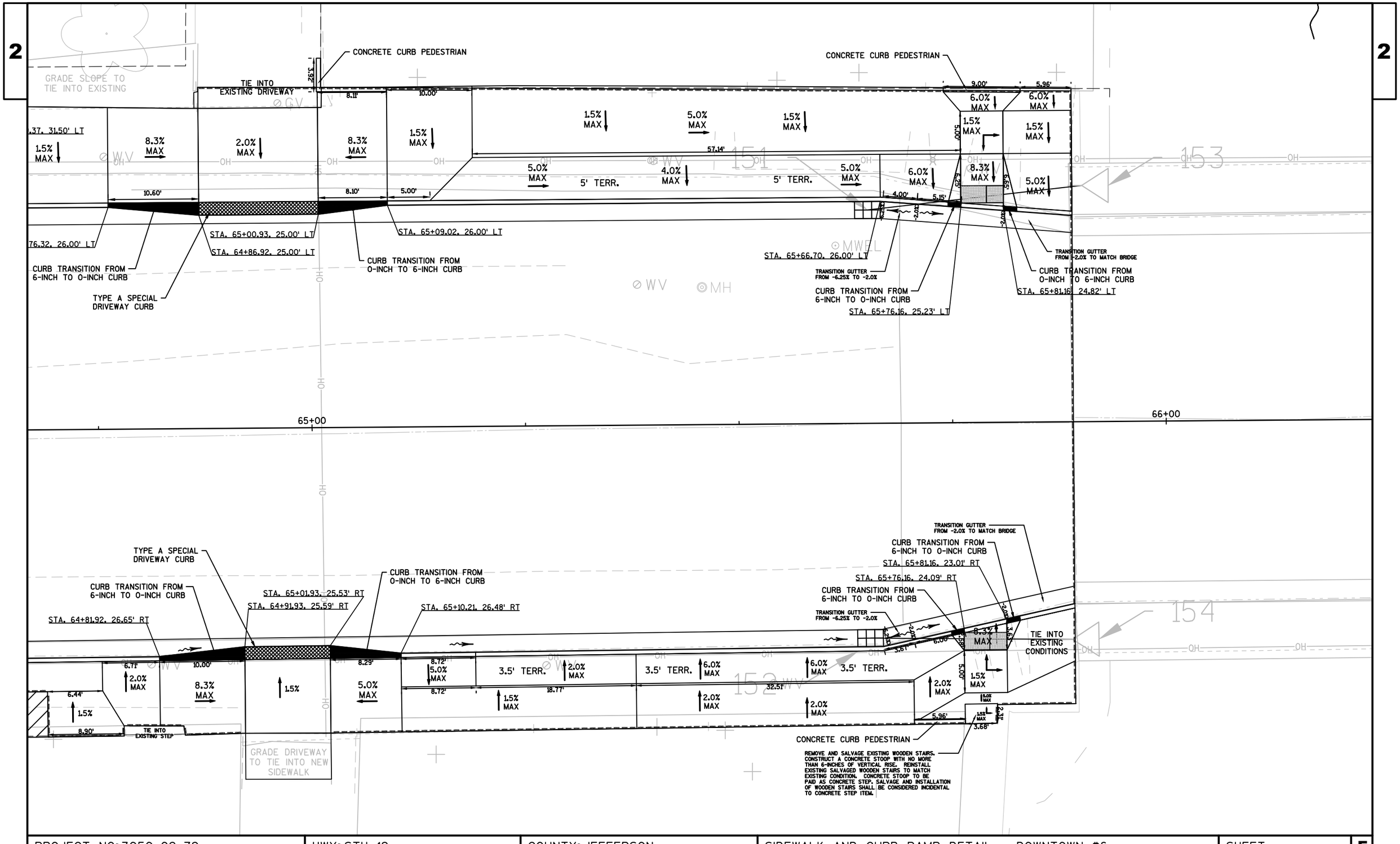
FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.02_CONSTRUCTION DETAILS\CURBRAMPDETAILS.DWG
LAYOUT NAME - DOWNTOWN #4

PLOT DATE : 1/5/2017 9:22 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1" = 10'

WISDOT/CADDS SHEET 42



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	SIDEWALK AND CURB RAMP DETAIL - DOWNTOWN #5	SHEET 52	E

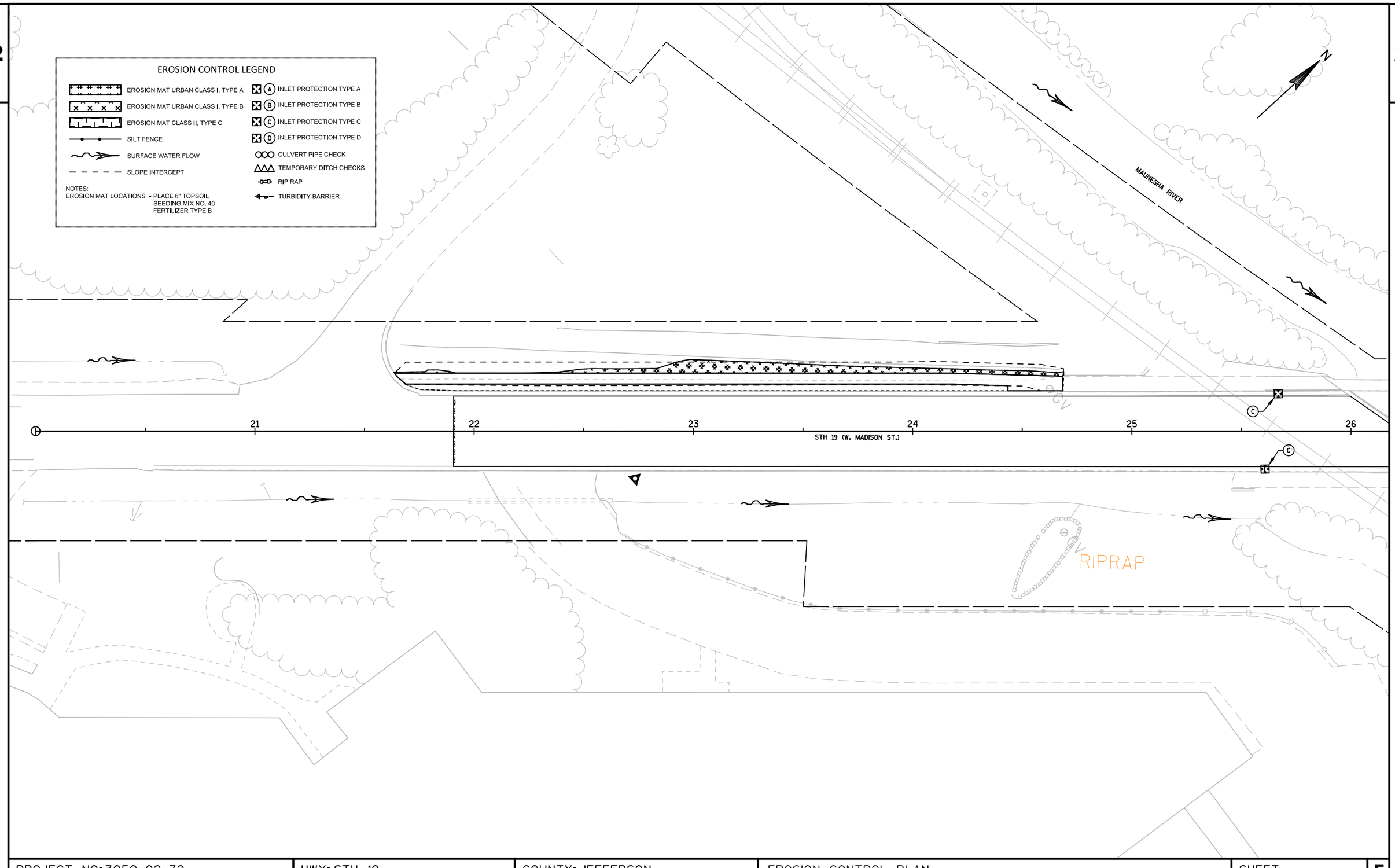


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	SIDEWALK AND CURB RAMP DETAIL - DOWNTOWN #6	SHEET 53	E

EROSION CONTROL LEGEND

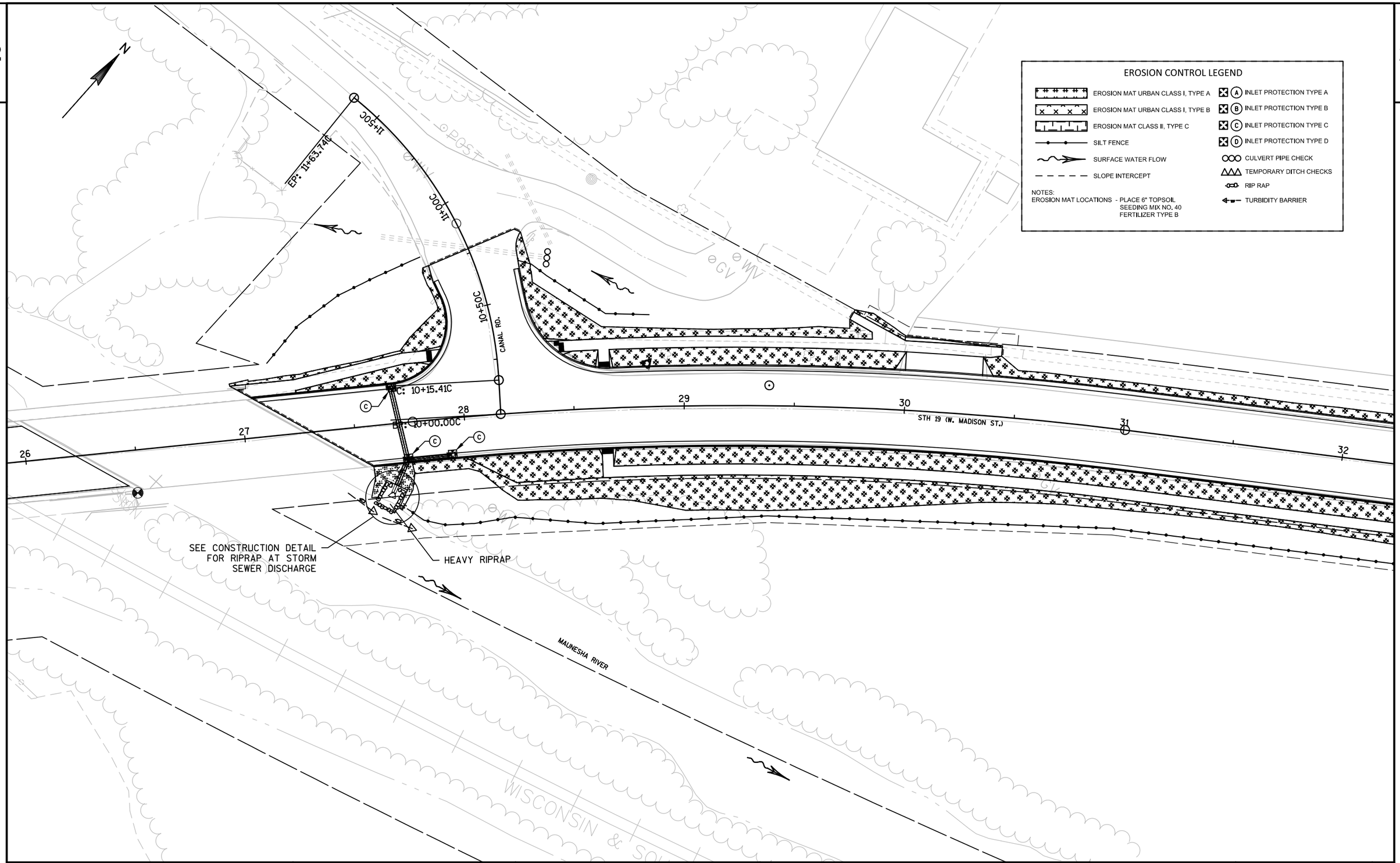
- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- SILT FENCE
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECKS
- RIP RAP
- TURBIDITY BARRIER

NOTES:
EROSION MAT LOCATIONS - PLACE 6" TOPSOIL
SEEDING MIX NO. 40
FERTILIZER TYPE B



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	EROSION CONTROL PLAN	SHEET 54	E

2



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	EROSION CONTROL PLAN	SHEET 55	E

2

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- SILT FENCE
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECKS
- RIP RAP
- TURBIDITY BARRIER

NOTES:
EROSION MAT LOCATIONS - PLACE 6" TOPSOIL
SEEDING MIX NO. 40
FERTILIZER TYPE B

SUBSTATION

N

LIGHT RIPRAP

SEE CONSTRUCTION DETAIL FOR RIPRAP AT STORM SEWER DISCHARGE

32 33 34 35 36 37 38

STH 19 (W. MADISON ST.)

CANOPY

FILLER CAP

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	EROSION CONTROL PLAN	SHEET 56	E

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- SILT FENCE
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECKS
- RIP RAP
- TURBIDITY BARRIER

NOTES:
EROSION MAT LOCATIONS - PLACE 6" TOPSOIL
SEEDING MIX NO. 40
FERTILIZER TYPE B

PT: 11+59.52M
11+50M
11+00M
MINNETONKA WAY
PC: 10+73.10M
10+50M
BP: 10+00.00M
STH 19 (W. MADISON ST.)
39
40
41
42
43
44
N

2

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	EROSION CONTROL PLAN	SHEET 57	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.07_EROSION CONTROL & DRAINAGE\022001-EC.DWG
LAYOUT NAME - 0220(4)-EC
PLOT DATE : 12/13/2016 5:09 PM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- SILT FENCE
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECKS
- RIP RAP
- TURBIDITY BARRIER

NOTES:
EROSION MAT LOCATIONS - PLACE 6" TOPSOIL
SEEDING MIX NO. 40
FERTILIZER TYPE B

N

SEE STRUCTURE B-28-175 PLAN SHEETS FOR ADDITIONAL EROSION CONTROL DETAILS

HEAVY RIPRAP

MAUNESHA RIVER

REMOVE SECTION OF TURBIDITY BARRIER AFTER RIPRAP IS INSTALLED AS DIRECTED BY THE ENGINEER IN THE FIELD.

HEAVY RIPRAP

STH 19 (W. MADISON ST.)

45 46 47 48 49 50

EP: 10+00.00V

9+50V

9+00V

8+50V

VAN BUREN ST.

HEAVY RIPRAP

HEAVY RIPRAP

INSTALL SELECT CRUSHED MATERIAL FOR SILT FENCE RELIEFS AS DIRECTED BY THE ENGINEER IN THE FIELD. TO BE PAID FOR AS SELECT CRUSHED MATERIAL.

MAUNESHA RIVER

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	EROSION CONTROL PLAN	SHEET 58	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.07_EROSION CONTROL & DRAINAGE\022001-EC.DWG
LAYOUT NAME - 0220(5)-EC
PLOT DATE : 12/13/2016 5:09 PM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- SILT FENCE
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECKS
- RIP RAP
- TURBIDITY BARRIER

NOTES:
EROSION MAT LOCATIONS - PLACE 6" TOPSOIL.
SEEDING MIX NO. 40
FERTILIZER TYPE B

N

51 52 53 54 55 56

STH 19 (W. MADISON ST.)

EP: 10+00.00H

9+50H

9+00H

8+50H

HARRISON ST.

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	EROSION CONTROL PLAN	SHEET 59 E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.07_EROSION CONTROL & DRAINAGE\022001-EC.DWG
LAYOUT NAME - 0220(6)-EC

PLOT DATE : 12/13/2016 5:09 PM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- SILT FENCE
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECKS
- RIP RAP
- TURBIDITY BARRIER

NOTES:
EROSION MAT LOCATIONS - PLACE 6" TOPSOIL
SEEDING MIX NO. 40
FERTILIZER TYPE B

N

MAUNESHA RIVER

57 58 59 60 61 62

STH 19 (W. MADISON ST.)

STH 19 (W. MADISON ST.)

EP: 10+00.00J

9+00J

8+50J

S. JACKSON ST.

BP: 8+50.00J

HEAVY RIPRAP

SEE CONSTRUCTION DETAIL FOR RIPRAP AT STORM SEWER DISCHARGE

MAUNESHA RIVER

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	EROSION CONTROL PLAN	SHEET 60	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.07_EROSION CONTROL & DRAINAGE\022001-EC.DWG
LAYOUT NAME - 0220 (7)-EC
PLOT DATE : 12/13/2016 5:10 PM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- SILT FENCE
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECKS
- RIP RAP
- TURBIDITY BARRIER

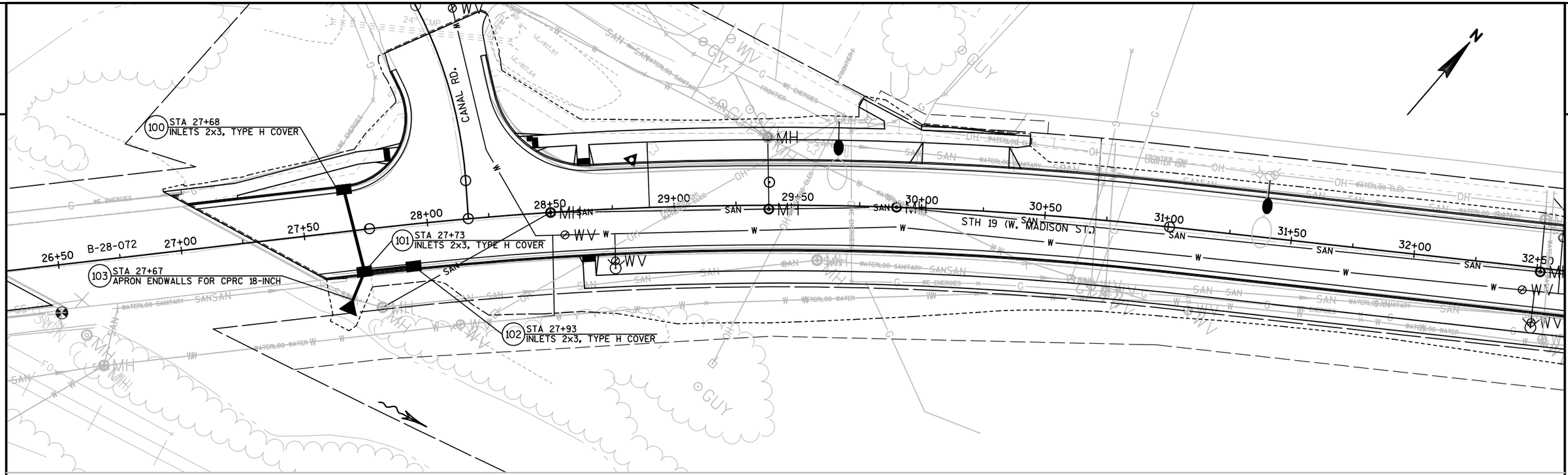
NOTES:
EROSION MAT LOCATIONS - PLACE 6" TOPSOIL
SEEDING MIX NO. 40
FERTILIZER TYPE B

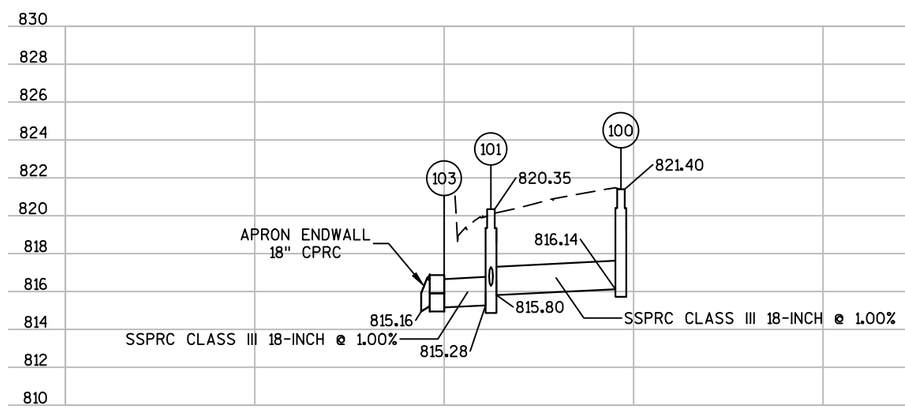
N

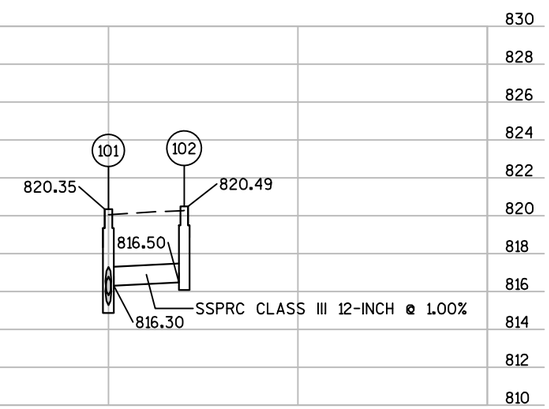
11+50S
11+00S
10+50S
STH 89 (N. MONROE ST.)
MAUNESHA RIVER
63
64
65
66
67
68
STH 19 (E. MADISON ST.)
9+50R
9+00R
8+50R
S. MONROE ST.
BP: 8+40.13R
MAUNESHA RIVER

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	EROSION CONTROL PLAN	SHEET 61 E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.07_EROSION CONTROL & DRAINAGE\022001-EC.DWG
LAYOUT NAME - 0220 (8)-EC
PLOT DATE : 12/13/2016 5:10 PM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



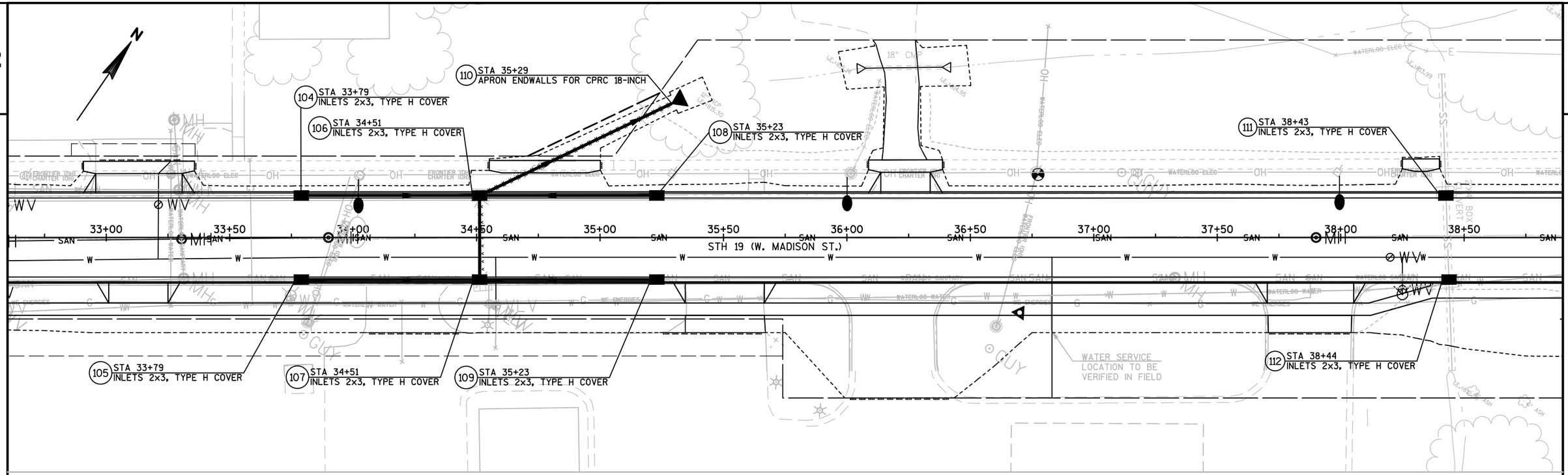




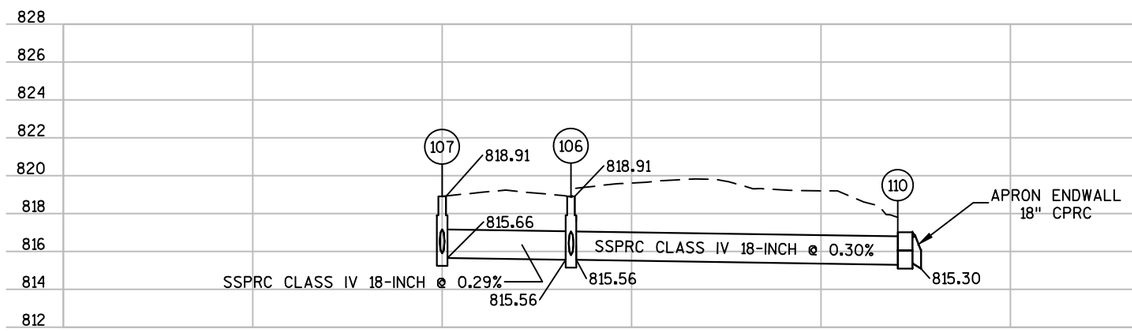
NOTE: ALL PIPES ARE REINFORCED CONCRETE UNLESS OTHERWISE NOTED.

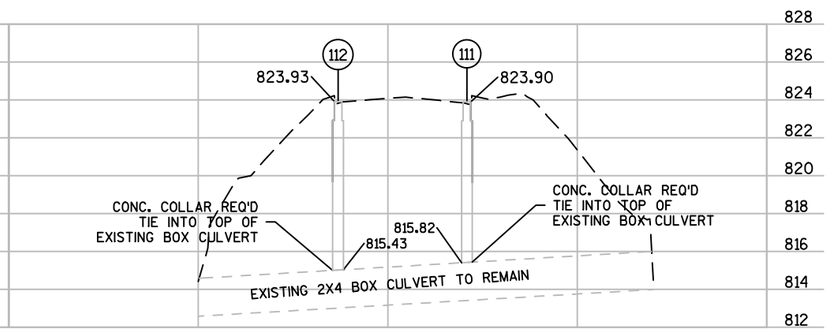
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	STORM SEWER	SHEET 62	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.08_STORM SEWER & UTILITIES\022501-SS.DWG
LAYOUT NAME - 022501
PLOT DATE : 12/13/2016 1:17 PM PLOT BY : SCHERER, MEGAN S PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

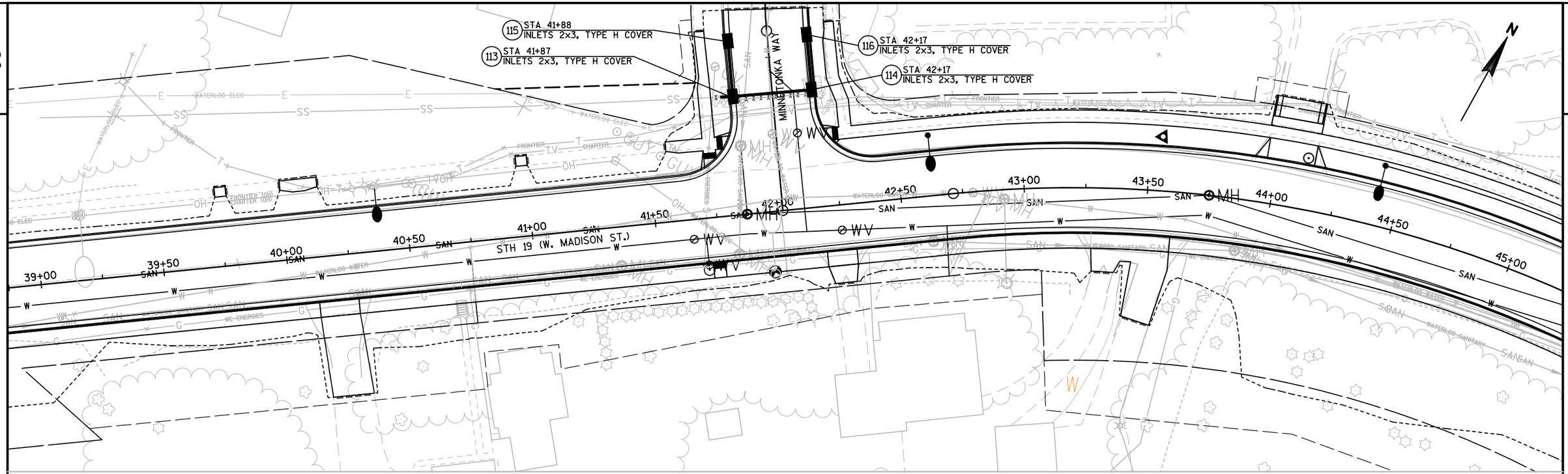


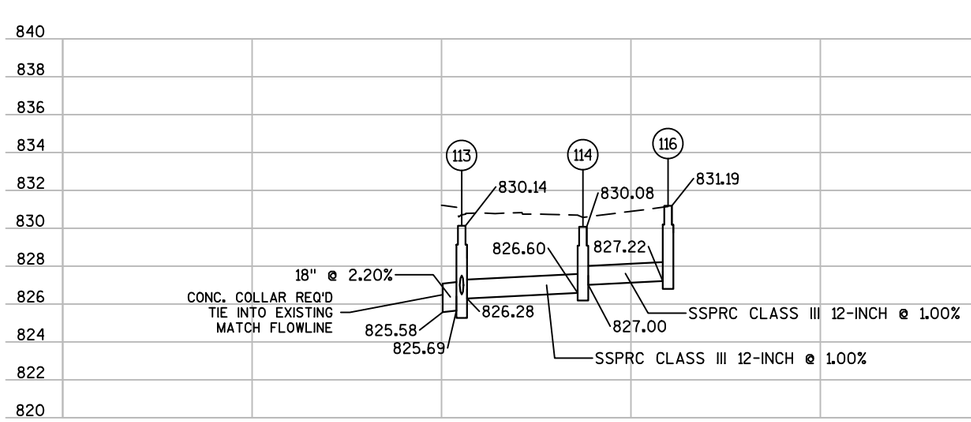


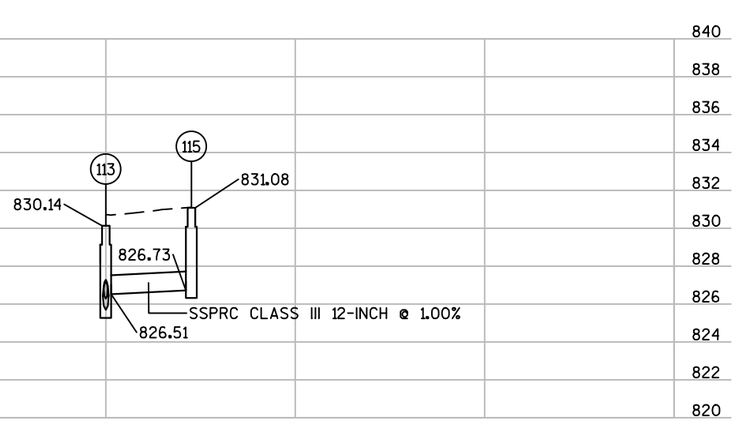




NOTE: ALL PIPES ARE REINFORCED CONCRETE UNLESS OTHERWISE NOTED.



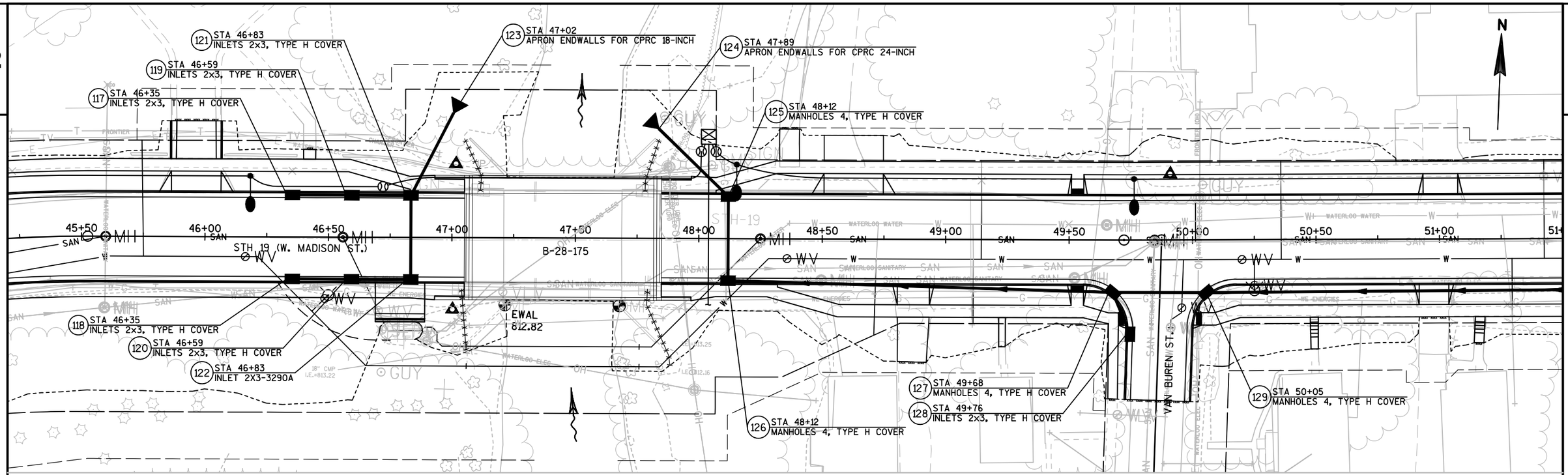


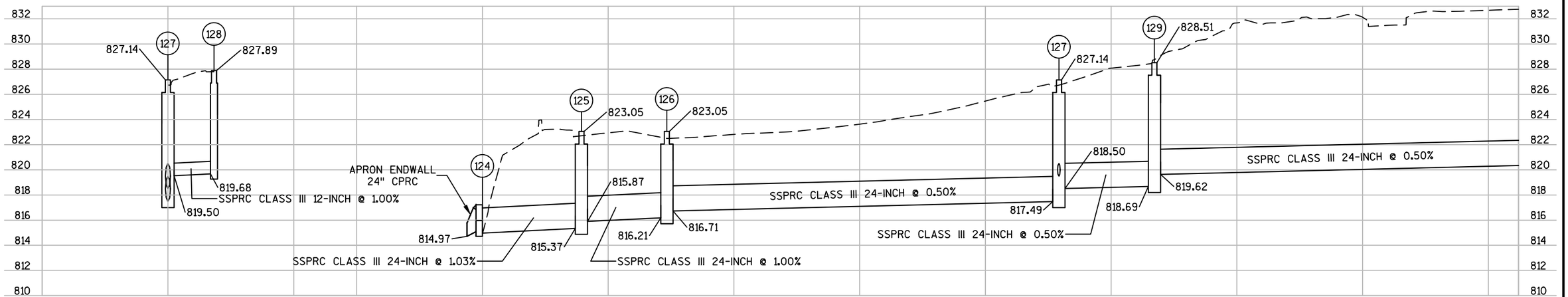


NOTE: ALL PIPES ARE REINFORCED CONCRETE UNLESS OTHERWISE NOTED.

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	STORM SEWER	SHEET 64	E

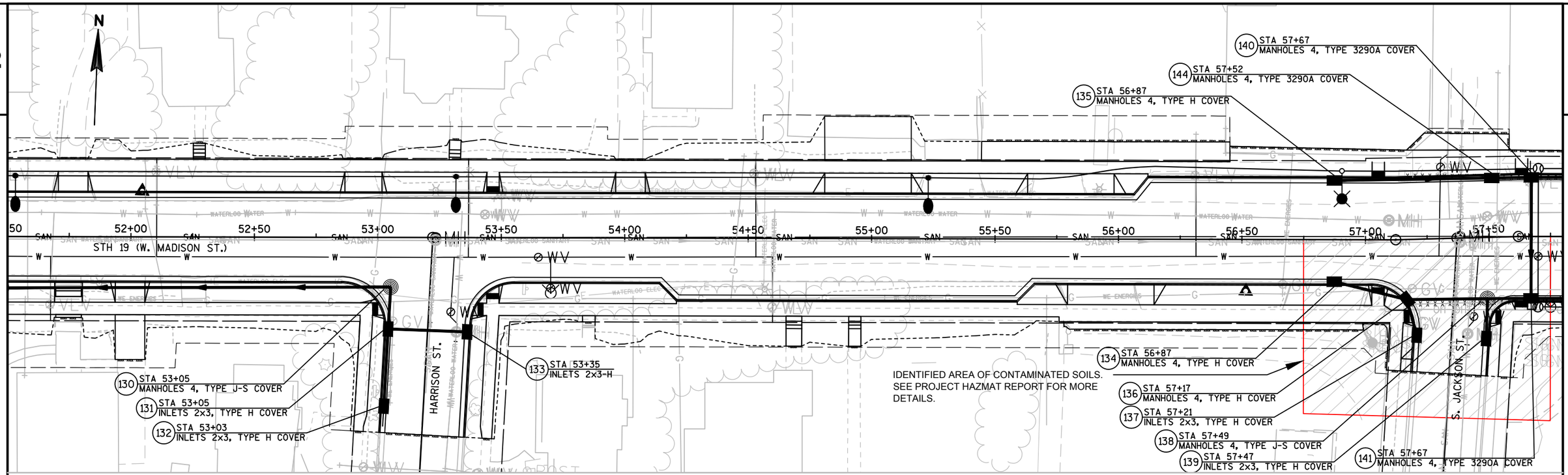
FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.08_STORM SEWER & UTILITIES\022501-SS.DWG
LAYOUT NAME - 022503
PLOT DATE : 12/13/2016 1:17 PM PLOT BY : SCHERER, MEGAN S PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

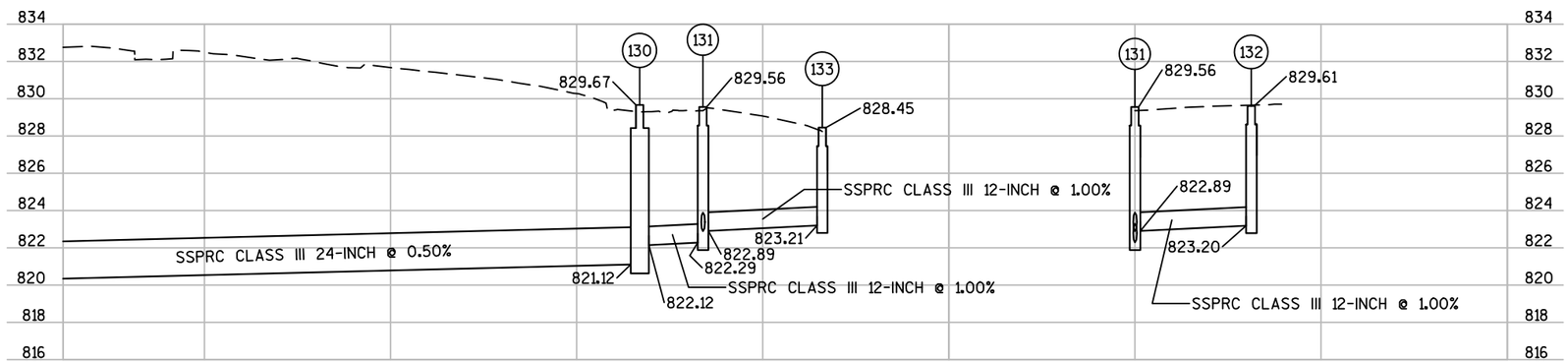


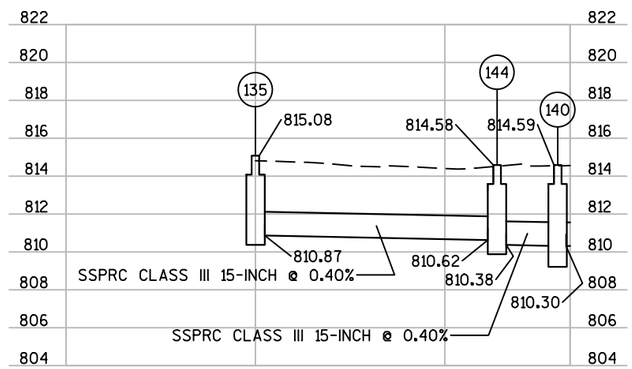


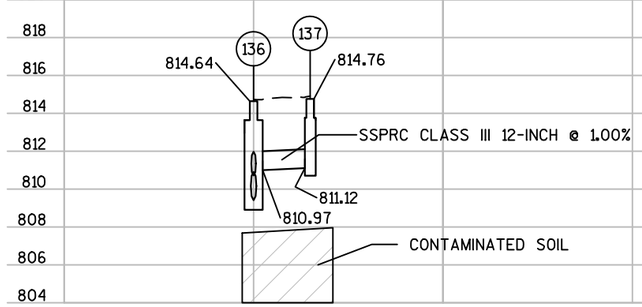
NOTE: ALL PIPES ARE REINFORCED CONCRETE UNLESS OTHERWISE NOTED.

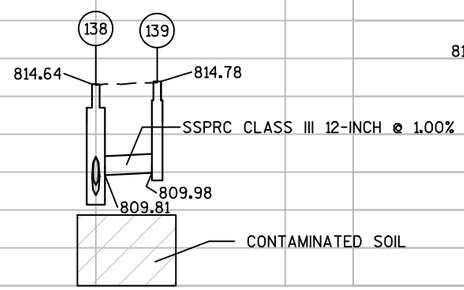
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	STORM SEWER	SHEET 65	E

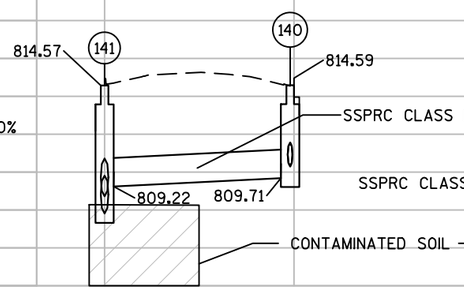


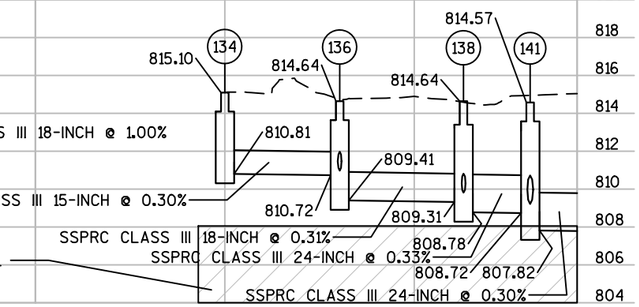






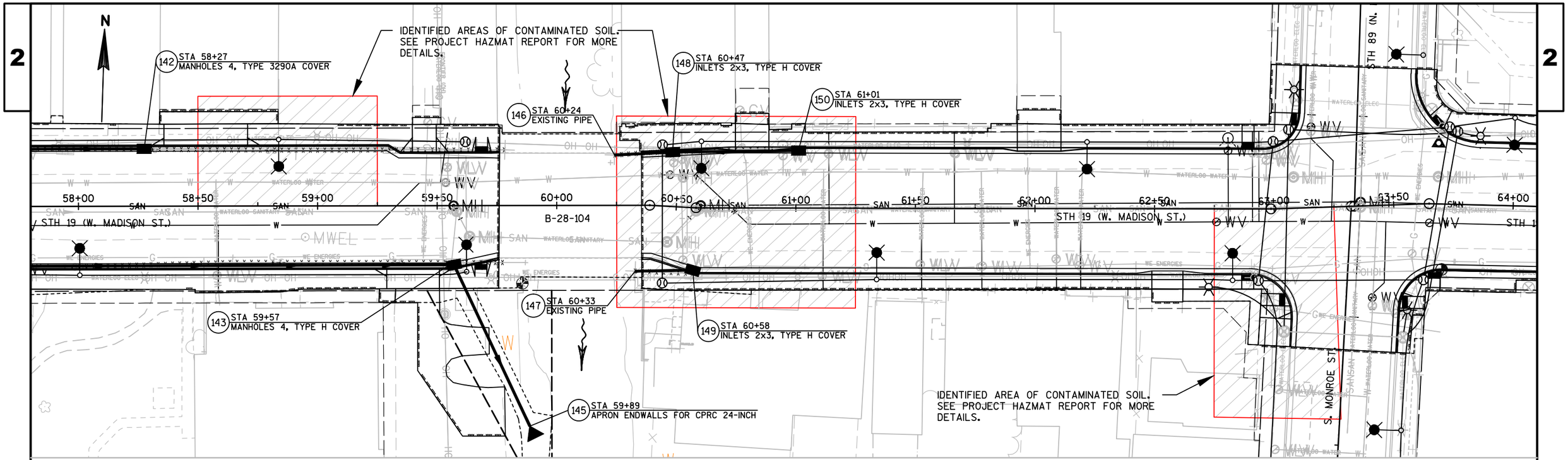






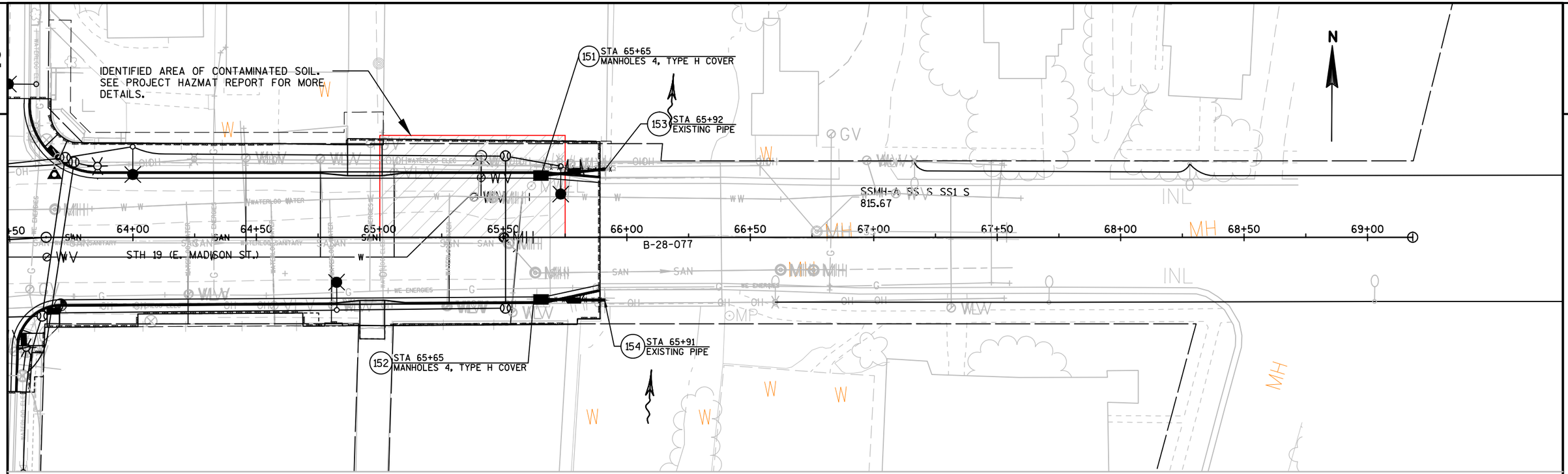
NOTE: ALL PIPES ARE REINFORCED CONCRETE UNLESS OTHERWISE NOTED.

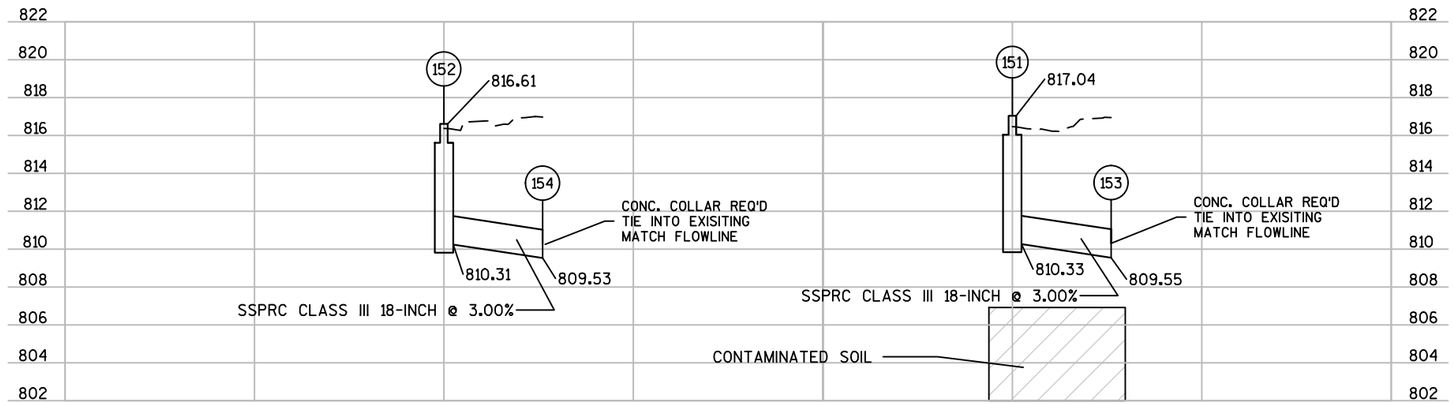
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	STORM SEWER	SHEET 66	E



NOTE: ALL PIPES ARE REINFORCED CONCRETE UNLESS OTHERWISE NOTED.

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	STORM SEWER	SHEET 67	E





NOTE: ALL PIPES ARE REINFORCED CONCRETE UNLESS OTHERWISE NOTED.

STA 28+19.0 / 97.5' LT
CONNECT TO EXISTING WM, 6"
INSTALL REDUCER FITTING, 10"x6"

STA 28+16.5 / 93.3' LT
INSTALL 45° BEND FITTING, 10"

STA 28+17.6 / 85.4' LT
INSTALL GATE VALVE AND BOX, 10"

INSTALL 112 LF WM, 10"
FROM BEND AT SANITARY CROSSING
TO CONNECTION AT EXISTING WM

STA 28+26.1 / 27.1' LT
INSTALL 22.5° BEND FITTING, 10"

MAINTAIN 18" MINIMUM CLEARANCE
BETWEEN SANITARY AND WATERMAIN

CANAL ROAD

PC: 27+76.52

EXISTING WATERMAIN
TO BE ABANDONED

EXISTING MH
TO BE REMOVED

STA 28+43.3 / 8.9' RT
INSTALL 45° BEND FITTING, 10"
AND 22.5° BEND FITTING, 10"

STA 28+50.0 @ C/L
INSTALL SAN MH A

STA 28+50.2 / 9.2' RT
INSTALL TEE FITTING, 10"x10"

BORE 1

STA 29+37.9 / 27.5' LT
INSTALL SAN MH C
RIM 821.94
8" W 814.80
8" SW 814.80
8" SE 814.55

INSTALL 30 LF
SAN SEWER, 8" @ 5.06%

STA 29+38.3 / 1.6' RT
INSTALL SAN MH B

INSTALL 51 LF
SAN SEWER, 12"

TO BE ABANDONED

PT: 31+00.62

INSTALL 261 LF
SAN SEWER, 12"

STA 32+
INSTALL

INSTALL 88 LF
SAN SEWER, 12"

TO BE ABANDONED

EXISTING WATERMAIN
TO BE ABANDONED

STA 28+75.2 / 24' RT
INSTALL HYDRANT WITH
GATE VALVE AND BOX, 6"
TEE FITTING, 10" x 6"
14 LF WM, 6"

STA 28+55.2 / 9.4' RT
INSTALL GATE VALVE AND BOX, 10"

STA 28+48.8 / 41.7' RT
INSTALL 90° BEND FITTING, 10"

INSTALL 45' LF WM, 10"
FROM TEE TO CONNECTION

STA 27+78.2 / 32.2' RT
CONNECT TO EXISTING
SAN MH

INSTALL 78 LF
SAN SEWER, 12"

STA 28+36.4 / 42.2' RT
INSTALL REDUCER FITTING, 10" x 8"
CONNECT TO EXISTING 8" WATERMAIN

EXISTING MH
TO BE REMOVED

INSTALL 146 LF WM, 10"
FROM BEND TO BEND

STA 29+89.9 @ C/L
INSTALL SAN MH D

STA 29+89.9 / 8' RT
INSTALL 11.25° BEND FITTING, 10"

INSTALL 260 LF WM, 10"
FROM BEND TO HYDRANT TEE

26+00 27+00 27+50 28+00 28+50 29+00 29+50 30+00 30+50 31+00 31+50 32+00

840 830 820 810

STA. 26+63.60
EX. SAN. MANHOLE

EXISTING 15"
PVC INSULATING PIPE
8" SAN SEWER

STA. 27+31.47
EX. SAN. MANHOLE

STA. 27+78.40
EX. SAN. MANHOLE

STA. 27+78.18
CONNECT TO EXISTING MH

STA. 28+50.00
INSTALL SAN MH A

STA. 29+37.75
EX. SAN. MANHOLE

STA. 29+38.25
INSTALL SAN MH B

STA. 29+58.00
EX. SAN. MANHOLE

STA. 29+89.91
INSTALL SAN MH D

EXISTING 8" WATERMAIN

RIM 823.67
8" SE 820.65
6" E 821.82
8" NW 820.65

RIM 821.23
8" SW 815.93
8" W 815.90

RIM 820.72
8" SW 816.41
8" NE 816.04
12" N 816.04

INSTALL 78 LF
SAN SEWER, 12" @ -4.12%

INSTALL 112 LF WM, 10"
MAINTAIN 6.5' MIN COVER

EXISTING 8" SANITARY
EXISTING 8" SANITARY

RIM 821.43
12" S 813.08
12" NE 812.83

INSTALL 88 LF
SAN SEWER, 12" @ -0.23%

INSTALL 146 LF WM, 10"
MAINTAIN 6" BELOW SAN
TO ALLOW FOR SERVICES

RIM 822.28
8" W 815.36
8" NW 815.48
8" NE 815.36

RIM 821.57
12" SW 812.63
12" NE 812.53
8" NW 813.03

INSTALL 51 LF
SAN SEWER, 12" @ -0.23%

RIM 820.95
8" SW 815.27
8" NE 815.12

RIM 821.37
12" SW 812.41
12" NE 812.31

EXISTING 8" SANITARY
EXISTING 8" SANITARY

INSTALL 261 LF
SAN SEWER, 12" @ -0.23%

EXISTING 6" WATERMAIN

INSTALL 260 LF WM, 10"
MAINTAIN 6" UNDER SAN
TO ALLOW FOR SERVICES

PROJECT NO: 3050-02-73	HWY: STH 19	COUNTY: JEFFERSON	SANITARY SEWER AND WATER	SHEET 69	E

FILE NAME : M:\TOWNS\WATERLOO\STH 19 2017\DWG\KUNKEL-11.DWG PLOT DATE : 10/28/2016 9:56 AM PLOT BY : ALEX WILLIAMS PLOT NAME : ---------- PLOT SCALE : 1" = 20' H 4' V
WISDOT/CADDS SHEET 44

STA 33+21.2 / 13.3' LT
INSTALL GATE VALVE AND BOX, 6"

INSTALL 35 LF WM, 6"

STA 33+21 / 8.7' RT
INSTALL TEE FITTING, 10"x6"

CONNECT TO
EXISTING 8" SAN

INSTALL 26 LF
SAN SEWER, 8"

32+53.5 / 29' LT
INSTALL 2-45° BENDS
& CONNECT TO
EXISTING 8" WM

STA 32+51.5 / 1.5' RT
INSTALL SAN MH E

EXISTING MH
TO BE ABANDONED

TO BE ABANDONED

INSTALL 79 LF
SAN SEWER, 12"

33+26.2 / 30.9' LT
INSTALL REDUCER FITTING, 6"X4"
INSTALL 2- 45° BENDS, 4"
INSTALL 7 LF WM, 4"
CONNECT TO EXISTING 4" WM

INSTALL 23LF SAN SEWER, 8"
CONNECT TO EXISTING 8" SAN

EXISTING MH
TO BE REMOVED

STA 33+30.6 / 0.6'RT
INSTALL SAN MH F

INSTALL 59 LF
SAN SEWER, 12"

EXISTING MH
TO BE REMOVED

TO BE ABANDONED

INSTALL 400 LF
SAN SEWER, 12"

BORE 2

32+59 / 13.2' LT
INSTALL GATE VALVE AND BOX, 8"
INSTALL 42 LF WM, 8"

32+59.7 / 9.4' RT
INSTALL TEE FITTING, 10"x8"

STA 32+45 / 9.5' RT
INSTALL GATE VALVE AND BOX, 10"

STA 32+50 / 24.3' RT
INSTALL HYDRANT WITH
GATE VALVE AND BOX, 6"
TEE FITTING, 10"X6"
15 LF WM, 6"

STA 33+90 @ C/L
INSTALL SAN MH G

EXISTING HYDRANT
TO BE REMOVED

INSTALL 575 LF WM, 10"
FROM HYDRANT TEE TO HYDRANT TEE

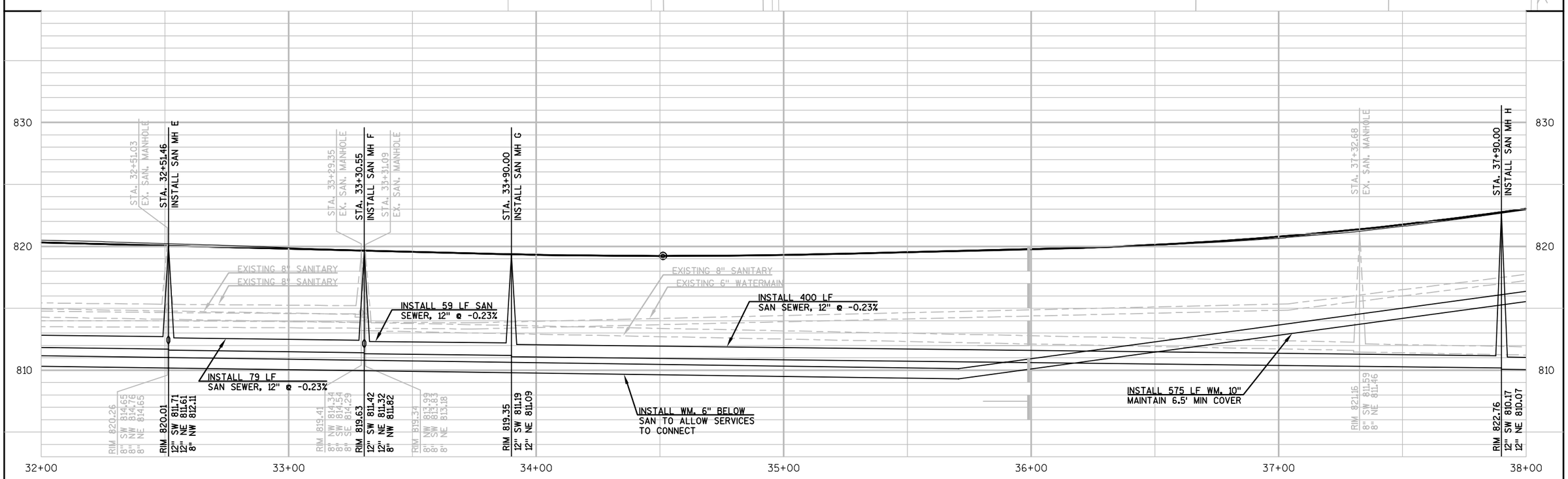
EXISTING MH
TO BE REMOVED

WATER SERVICE
LOCATION TO BE
VERIFIED IN FIELD

STA 37+90 @ C/L
INSTALL SAN MH H

CANOPY

32+00 32+50 33+00 33+50 34+00 34+50 35+00 35+50 36+00 36+50 37+00 37+50 38+00



PROJECT NO: 3050-02-73	HWY: STH 19	COUNTY: JEFFERSON	SANITARY SEWER AND WATER	SHEET 70	E

2

STA 41+87.4 / 27.7' LT
CONNECT TO EXISTING SAN MH
INSTALL 28 LF SAN SEWER, 8"

STA 41+87.4 ℄ C/L
INSTALL SAN MH I

STA 42+02.0 / 62.4' LT
CONNECT TO EXISTING WM
INSTALL REDUCER, 10"x8"

STA 42+01.8 / 57.4' LT
INSTALL 45° BEND FITTING, 10"

STA 42+10.9 / 47.60' LT
INSTALL 45° BEND FITTING, 10"

STA 42+10.8 / 30.8' LT
INSTALL GATE VALVE AND BOX, 10"

STA 43+75 ℄ C/L
INSTALL SAN MH J

BORE 3
PT: 42+71.27

INSTALL 76 LF 10" WM
FROM MAINLINE TEE TO CONNECTION

EXISTING MH
TO BE REMOVED

EXISTING MH
TO BE REMOVED

EXISTING MH
TO BE REMOVED

EXISTING MH
TO BE REMOVED

EXISTING HYDRANT
TO BE REMOVED

INSTALL 187 LF
SAN SEWER, 12"

INSTALL 162 LF WM, 10"
FROM MAINLINE TEE TO BEND

STA 43+74.8 / 8.1' RT
INSTALL 22.5° BEND FITTING, 10"

STA 42+25 / 10.2' RT
INSTALL GATE VALVE AND BOX, 10"

42+10.7 / 9.4' RT
INSTALL TEE FITTING, 10"x10"

STA 41+65 / 8' RT
INSTALL GATE VALVE AND BOX, 10"

STA 41+70 / 21.0' RT
INSTALL HYDRANT WITH
GATE VALVE AND BOX, 6"
TEE FITTING, 10"x6"
13 LF WM, 6"

STA 41+87 / 8' RT
INSTALL 11.25° WM BEND

INSTALL 386 LF
SAN SEWER, 12"

INSTALL 370 LF WM, 10"
FROM HYDRANT TEE TO MAINLINE TEE

STA 38+25 / 23.0' RT
INSTALL HYDRANT WITH
GATE VALVE AND BOX, 6"
TEE FITTING, 10"x6"
15 LF WM, 6"

STA 38+20 / 8' RT
INSTALL GATE VALVE AND BOX, 10"

MINNETONKA WAY

STH 19

INL

SIGN

TO BE ABANDONED

38+00 MH | 38+50 | 39+00 | 39+50 | 40+00 | 40+50 | 41+00 | 41+50 | 42+00 MH | 42+50 | 43+00 | 43+50 | MH 44+00

STA. 41+34.39 EX. SAN. MANHOLE
STA. 41+82.36 EX. SAN. MANHOLE
STA. 41+87.41 INSTALL SAN MH I
STA. 42+61.69 EX. SAN. MANHOLE
STA. 43+75.00 INSTALL SAN MH J
STA. 43+88.06 EX. SAN. MANHOLE

RIM 829.74
8" SW 810.05
8" NE 809.96

RIM 829.84
8" SW 810.43
8" NW 811.06
8" NE 810.39

RIM 830.24
12" SW 809.15
12" NE 809.05
12" NW 809.55

RIM 829.57
8" SW 810.13
8" NE 810.08

RIM 828.58
12" SW 808.62
12" E 808.52

RIM 827.17
8" SW 809.07
8" NE 809.07

EXISTING 6" WATERMAIN

INSTALL 386 LF WM, 10"
MAINTAIN 6.5' MIN COVER

INSTALL 162 LF WM, 10"
MAINTAIN 6.5' MIN COVER

EXISTING 8" SANITARY

INSTALL 370 LF
SAN SEWER, 12" @ -0.23%

INSTALL 187 LF
SAN SEWER, 12" @ -0.23%

830 | 820 | 810

38+00 | 39+00 | 40+00 | 41+00 | 42+00 | 43+00 | 44+00

PROJECT NO: 3050-02-73	HWY: STH 19	COUNTY: JEFFERSON	SANITARY SEWER AND WATER	SHEET 71	E

2

2

INSTALL 182 LF WM, 10"
FROM BEND TO BEND

INSTALL 184 LF
SAN SEWER, 12"

STA 45+59.8 ℄ C/L
INSTALL SAN MH K

WATER SERVICE
LOCATION TO BE
VERIFIED IN FIELD

INSTALL 96 LF
SAN SEWER, 12"

STA 46+16.4 / 8' RT
INSTALL GATE VALVE AND BOX, 10"

STA 46+21.4 / 8' RT
INSTALL 45° BEND FITTING, 10"

STA 46+55.9 ℄ C/L
INSTALL SAN MH L

INSTALL 43 LF
SAN SEWER, 15"
CONNECT TO EXISTING WET-WELL

STA 46+66.9 / 22.6' RT
EXISTING MH TO BE REMOVED

STA 48+25 / C/L
INSTALL SAN MH M

INSTALL 67 LF
FORCEMAIN, 6"

INSTALL 71 LF WM, 10"
DIR-DRILLING TO BEND

STA 49+96.3 / 8' RT
INSTALL TEE FITTING, 10"x8"
INSTALL 30 LF WM, 8"

STA 49+84.6 ℄ C/L
INSTALL SAN MH N
INSTALL 34 LF SAN SEWER, 8"
AND CONNECT TO EXISTING

INSTALL 168 LF WM, 10"
FROM BEND TO MAINLINE TEE FITTING

INSTALL 160 LF SAN SEWER, 12"

PT 49+72.28

N

PT 45+52.57

TO BE ABANDONED

STA 45+60.5 / 8' RT
INSTALL 11.25° BEND FITTING, 10"

EXISTING MH
TO BE REMOVED

INSTALL 61 LF WM, 10"
FROM BEND TO BEND

STA 46+50 / 23.5' RT
INSTALL HYDRANT WITH
GATE VALVE AND BOX, 6"
TEE FITTING, 10"x6"
8 LF WM, 6"

INSTALL 103 LF
WM, 10"
FROM BEND TO DIR-DRILLING

BORE 4

STA 46+65.4 / 52' RT
INSTALL 45° BEND FITTING, 10"

STA 46+80 / 38' RT
EXIST LIFT STA
TO REMAIN

STA 46+96 / 44' RT
INSTALL 24 LF FORCEMAIN, 6"
CONNECT TO EX DISCHARGE W/
FOUR 45° BEND FITTINGS, 6" & MJ SOLID SLEEVE

STA 47+06 TO 47+76
44' RT TO LF DIR DRILLED FORCEMAIN, 6"
52' RT TO LF DIR DRILLED WATERMAIN, 10"

BORE 5

STA 47+84 / 52' RT
INSTALL 45° BEND FITTING, 10"

STA 47+81 / 44' RT
INSTALL 45° BEND FITTING, 6"

TO BE ABANDONED

EXISTING MH
TO BE REMOVED

STA 48+05.2 / 8' RT
INSTALL WATER MANHOLE
W/ GATE VALVE AND BOX, 10"
& TESTING CORP STOPS

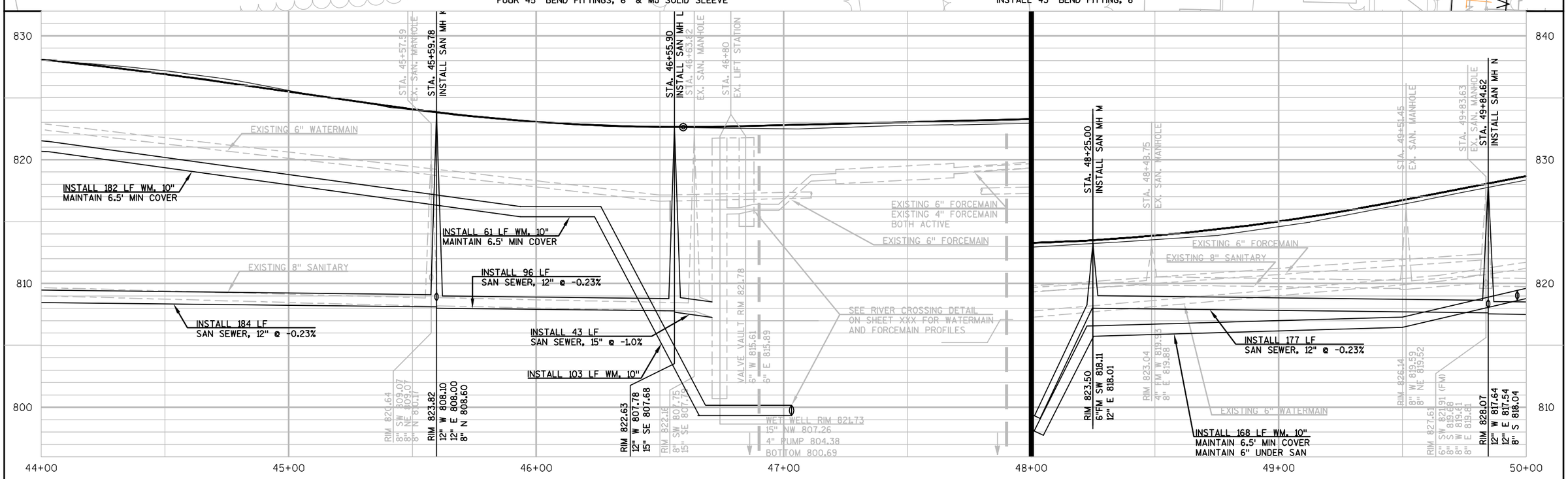
STA 48+28.3 / 8' RT
INSTALL 45° BEND FITTING, 10"

STA 49+95.5 / 27.4' RT
INSTALL GATE VALVE
AND BOX, 8"

STA 49+91.1 / 32.3' RT
INSTALL 45° BEND FITTING, 8"
CONNECT TO EXISTING 6" WM
INSTALL REDUCER FITTING, 8"x6"

STA 49+95.4 / 29.4' RT
INSTALL 45° BEND FITTING, 8"

VAN BUREN



PROJECT NO: 3050-02-73	HWY: STH 19	COUNTY: JEFFERSON	SANITARY SEWER AND WATER	SHEET 72	E

2

INSTALL 335 LF WM, 10"
FROM MAINLINE TEE TO MAINLINE TEE

INSTALL 339 LF
SAN SEWER, 12"

STA 53+23.5 @ C/L
INSTALL SAN MH 0
INSTALL 35 LF SAN SEWER SOUTH, 8"
CONNECT TO EX 8" SAN SEWER

EXISTING HYDRANT
TO BE REMOVED

STA 53+65 / 7.8' RT
INSTALL GATE VALVE AND BOX, 10"

INSTALL 415 LF
SAN SEWER, 12"

TO BE ABANDONED

TO BE ABANDONED

TO BE ABANDONED

EXISTING MH
TO BE REMOVED

STA 50+25 / 20.5' RT
INSTALL HYDRANT WITH
GATE VALVE AND BOX, 6"
TEE FITTING, 10"x6"
13 LF WM, 6"

STA 50+20 / 8' RT
INSTALL GATE VALVE AND BOX, 10"

STA 53+31 / 8' RT
INSTALL TEE FITTING, 10"x8"

STA 53+29.6 / 30.1' RT
INSTALL GATE VALVE AND BOX, 8"

STA 53+29.5 / 32.1' RT
INSTALL 45° BEND FITTING, 8"

EXISTING MH
TO BE REMOVED

STA 53+70 / 22.4' RT
INSTALL HYDRANT WITH
GATE VALVE AND BOX, 6"
TEE FITTING, 10"x6"
15 LF WM, 6"

INSTALL 36 LF WM, 8"

STA 53+32.2 / 34.8' RT
INSTALL 45° BEND FITTING, 10"

STA 53+31.6 / 42.1' RT
CONNECT TO EXISTING 6" WM
INSTALL REDUCER FITTING, 8"x6"

INSTALL 399 LF WM, 10"
FROM MAINLINE TEE TO MAINLINE TEE NORTH

VAN BUREN ST

HARRISON ST

STH 19

INSTALL 335 LF WM, 10"
MAINTAIN 6.5' MIN COVER

EXISTING 6" WATERMAIN

EXISTING 8" SANITARY

INSTALL 339 LF
SAN SEWER, 12" @ -0.23%

STA. 53+22.42
EX. SAN. MANHOLE

STA. 53+23.45
INSTALL SAN MH 0

RIM 828.69
8" W 818.22
8" S 818.18
8" E 818.15

RIM 829.21
12" W 816.76
12" E 816.66
8" S 817.16

INSTALL 415 LF
SAN SEWER, 12" @ -2.51%

INSTALL 399 LF WM, 10"
MAINTAIN 6.5' MIN COVER

INSTALL WM, 6" BELOW
SAN TO ALLOW SERVICES
TO CONNECT

EXISTING 6" WATERMAIN

EXISTING 8" SANITARY

830

820

810

50+00 51+00 52+00 53+00 54+00 55+00 56+00

PROJECT NO: 3050-02-73	HWY: STH 19	COUNTY: JEFFERSON	SANITARY SEWER AND WATER	SHEET 73	E

STA 57+34.3 / 34.0' LT
INSTALL 45° BEND FITTING, 10"
CONNECT TO EXISTING 6" WM
INSTALL REDUCER FITTING, 10"x6"
INSTALL 45 LF WM, 10"

STA 57+31.3 / 32.0' LT
INSTALL 45° BEND FITTING, 10"

STA 57+31.2 / 29.0' LT
INSTALL GATE VALVE AND BOX, 10"

STA 57+38.4 / 0.7' LT
INSTALL SAN MH P
INSTALL 35 LF SAN SEWER NORTH, 8"
INSTALL 36 LF SAN SEWER SOUTH, 10"
& CONNECT TO EXISTING SEWERS

STA 57+45.5 / 7.5' RT
INSTALL TEE FITTING, 10"X10"

STA 57+70 / 8' RT
INSTALL GATE VALVE AND BOX, 10"

INSTALL 219 LF
SAN SEWER, 12"

INSTALL 231 LF WM, 10"
FROM CONNECT TO MAINLINE TEE NORTH

NOTE: CONTAMINATED SOILS FOUND
BETWEEN STA 58+50 TO 59+25 (CL
TO LEFT PROJECT LIMITS). SEE PROJECT
HAZMAT REPORT FOR MORE DETAIL. CONTRACTOR
SHALL COMPLY WITH ALL REQUIREMENTS FOR
HANDLING AND PROPERLY DISPOSING OF ANY
MATERIAL REMOVED FROM THIS AREA.

STA 59+42.6 / 9.6' LT
INSTALL 45° BEND FITTING, 10"

STA 59+53.5 / 9.6' LT
INSTALL GATE VALVE AND BOX, 10"
CONNECT TO EXISTING 10" WM

EXISTING MH
TO BE REMOVED

STA 60+46.7 / 13.3' LT
INSTALL GATE VALVE AND BOX, 10"
CONNECT TO EXISTING 10" WM

EXISTING MH
TO BE REMOVED

STA 60+57.3 / 14.0' LT
INSTALL 45° BEND FITTING, 10"

EXISTING HYDRANT
TO BE REMOVED

INSTALL 276 LF
SAN SEWER, 12"

STA 57+12.27

STA 57+61.96

STA 60+38.89

STA 60+58.23

EXISTING MH
TO BE REMOVED

TO BE ABANDONED

TO BE ABANDONED

TO BE ABANDONED

STA 57+29.6 / 7.1' RT
INSTALL TEE FITTING, 10"x10"

STA 57+43.0 / 31.9' RT
INSTALL GATE VALVE AND BOX, 10"

EXISTING MH
TO BE REMOVED

NOTE: CONTAMINATED SOILS FOUND
BETWEEN STA 56+75 TO 57+75 (CL
TO RIGHT PROJECT LIMITS). SEE PROJECT
HAZMAT REPORT FOR MORE DETAIL. CONTRACTOR
SHALL COMPLY WITH ALL REQUIREMENTS FOR
HANDLING AND PROPERLY DISPOSING OF ANY
MATERIAL REMOVED FROM THIS AREA.

STA 57+75 / 28.5' RT
INSTALL HYDRANT WITH
GATE VALVE AND BOX, 6"
TEE FITTING, 10"x6"
21 LF WM, 6"

INSTALL 37 LF WM, 8"

STA 57+42.8 / 33.9' RT
INSTALL 45° BEND FITTING, 10"

STA 57+40.6 / 36.2' RT
INSTALL 45° BEND FITTING, 10"

STA 57+40.0 / 43.3' RT
CONNECT TO EXISTING 10" WM

STA 59+25.0 / 8.0' RT
INSTALL 45° BEND FITTING, 10"

STA 59+56.8 @ C/L
INSTALL SAN MH Q
INSTALL 6' LF SAN SEWER, 12"
& CONNECT TO EXISTING SEWER

EXISTING MH
TO REMAIN

NOTE: CONTAMINATED SOILS FOUND
BETWEEN STA 60+25 TO 61+25 (RIGHT
TO LEFT PROJECT LIMITS). SEE PROJECT
HAZMAT REPORT FOR MORE DETAIL. CONTRACTOR
SHALL COMPLY WITH ALL REQUIREMENTS FOR
HANDLING AND PROPERLY DISPOSING OF ANY
MATERIAL REMOVED FROM THIS AREA.
CONTRACTOR SHALL ALSO INSTALL LOW PERMEABLE
PLUG IN THIS AREA AS DESCRIBED IN THE SPECIAL PROVISIONS

INSTALL 289 LF WM, 10"
FROM CONNECT TO MAINLINE TEE NORTH

STA 60+80.2 / 6.8' RT
INSTALL 45° BEND FITTING, 10"

STA 60+60.2 / 1' LT
INSTALL SAN MH R
INSTALL 7 LF SAN SEWER, 12"
& CONNECT TO EXISTING SEWER

JACKSON ST

N

56+00 56+50 57+00 57+50 58+00 58+50 59+00 59+50 60+00 60+50 61+00 61+50 62+00



PROJECT NO: 3050-02-73	HWY: STH 19	COUNTY: JEFFERSON	SANITARY SEWER AND WATER	SHEET 74	E

STA 63+25.3 / 19.3' LT
INSTALL 45° BEND FITTING, 10"

STA 63+16.6 / 33.8' LT
INSTALL GATE VALVE AND BOX, 10"

STA 63+16.3 / 28.9' LT
INSTALL 45° BEND FITTING, 10"
CONNECT TO EXISTING 10" WM
INSTALL 39 LF WM, 10"

EXISTING HYDRANT
TO BE REMOVED

STA 62+80.6 / 29.6' LT
INSTALL HYDRANT WITH
GATE VALVE AND BOX, 6"
TEE FITTING, 10"X6"
35 LF WM, 6"

NOTE: CONTAMINATED SOILS FOUND BETWEEN STA 62+75 TO 63+25 (CL TO RIGHT PROJECT LIMITS). SEE PROJECT HAZMAT REPORT FOR MORE DETAIL. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR HANDLING AND PROPERLY DISPOSING OF ANY MATERIAL REMOVED FROM THIS AREA.

STA 63+36.2 / 1.7' LT
INSTALL SAN MH S
INSTALL 36 LF SAN SEWER NORTH, 12"
INSTALL 48 LF SAN SEWER SOUTH, 8"
& CONNECT TO EXISTING SEWERS

EXISTING MANHOLE
TO BE REMOVED

INSTALL 214 LF
SAN SEWER, 15"

TO BE ABANDONED

EXISTING MH
TO BE REMOVED

TO BE ABANDONED

BORE 6

STA 62+75.9 / 5.4' RT
INSTALL GATE VALVE AND BOX, 10"

STA 63+23.7 / 6.0' RT
INSTALL TEE FITTING, 10"x10"

EXISTING MH
TO BE REMOVED

STA 63+65.1 / 8.0' RT
INSTALL GATE VALVE AND BOX, 10"

STA 63+46.5 / 6.9' RT
INSTALL TEE FITTING, 10"x10"

STA 63+44.9 / 32.4' RT
INSTALL 45° BEND FITTING, 10"

STA 63+39.8 / 37.0' RT
INSTALL 45° BEND FITTING, 10"

STA 63+39.8 / 38.4' RT
INSTALL GATE VALVE AND BOX, 10"

STA 63+39.6 / 43.4' RT
CONNECT TO EXISTING 10" WM
INSTALL 39 LF WM, 10"

NOTE: CONTAMINATED SOILS FOUND BETWEEN STA 65+00 TO 65+75 (CL TO LEFT PROJECT LIMITS). SEE PROJECT HAZMAT REPORT FOR MORE DETAIL. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR HANDLING AND PROPERLY DISPOSING OF ANY MATERIAL REMOVED FROM THIS AREA.

STA 65+35.7 / 16.3' LT
INSTALL 45° BEND FITTING, 10"

STA 65+38.0 / 16.3' LT
INSTALL GATE VALVE AND BOX, 10"

STA 65+41.0 / 33.0' LT
INSTALL HYDRANT WITH
GATE VALVE AND BOX, 6"
TEE FITTING, 10"x6"
17 LF WM, 6"
EXISTING HYDRANT TO BE REMOVED

STA 65+60.6 / 16.4' LT
CONNECT TO EXISTING 10" WM

EXISTING MH
TO BE REMOVED

EXISTING MH
TO REMAIN

STA 65+50.2 @ C/L
INSTALL SAN MH T
INSTALL 7 LF SAN SEWER, 15"
& CONNECT TO EXISTING SEWER

STA 65+10.9 / 8.0' RT
INSTALL 45° BEND FITTING, 10"

INSTALL 247 LF WM, 10"
FROM CONNECT TO MAINLINE TEE NORTH

RUINS

N

STA. 63+36.07
EX. SAN. MANHOLE

STA. 63+36.21
INSTALL SAN MH S

RIM 819.73
12" W 804.75
15" E 804.75
12" N 805.25
8" S 804.75

RIM 820.08
12" W 804.75
15" E 804.79
12" N 805.58
8" S 804.76

STA. 65+50.21
INSTALL SAN MH T

RIM 817.35
15" W 804.70
15" SE 804.70

STA. 65+52.33
EX. SAN. MANHOLE

RIM 817.10
15" W 804.65
15" E 804.70

STA. 65+63.03
EX. SAN. MANHOLE

RIM 815.75
15" W 804.68
15" E 804.60

STA. 66+62.38
EX. SAN. MANHOLE

RIM 815.53
15" W 803.18
15" E 803.33

STA. 66+75.64
EX. SAN. MANHOLE

RIM 815.11
15" W 803.06
15" E 803.10

INSTALL 247 LF WM, 10"
MAINTAIN 6.5' MIN COVER

STA 65+60.5
CONNECT TO EX WM

EXISTING 10" WATERMAIN

EXISTING 10" WATERMAIN

EXISTING 6" WATERMAN

EXISTING 15" SANITARY

EXISTING 15"
INVERTED SIPHON PIPE

EXISTING 12" SANITARY

INSTALL 214 LF
SAN SEWER, 15" @ -0.02 %

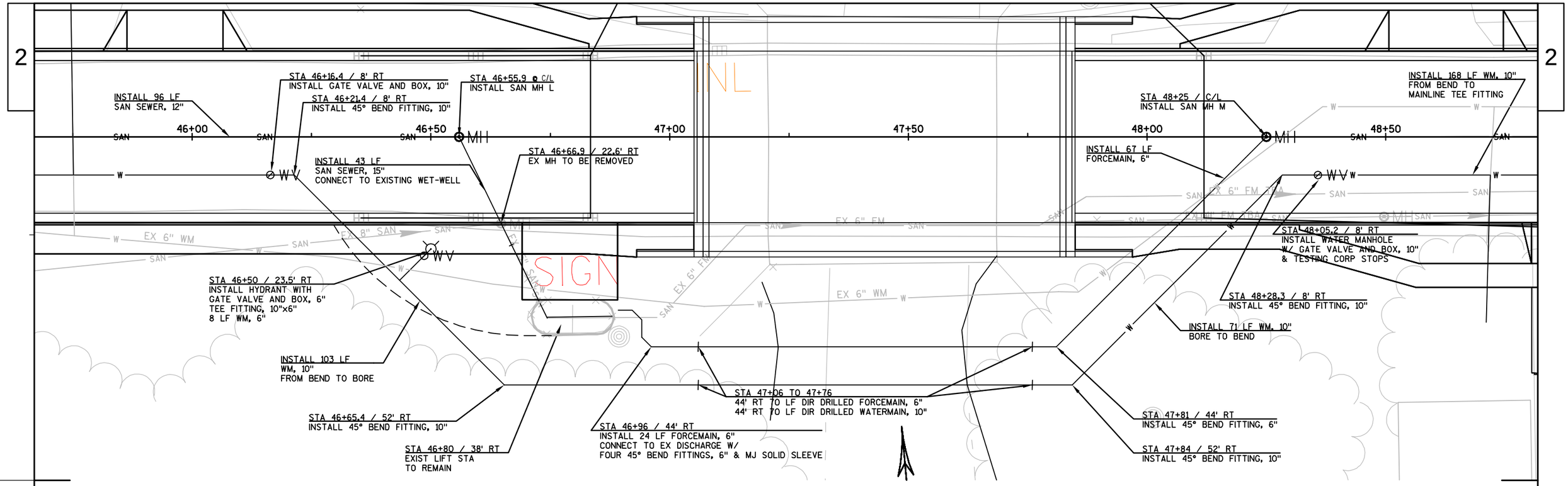
820
810
800

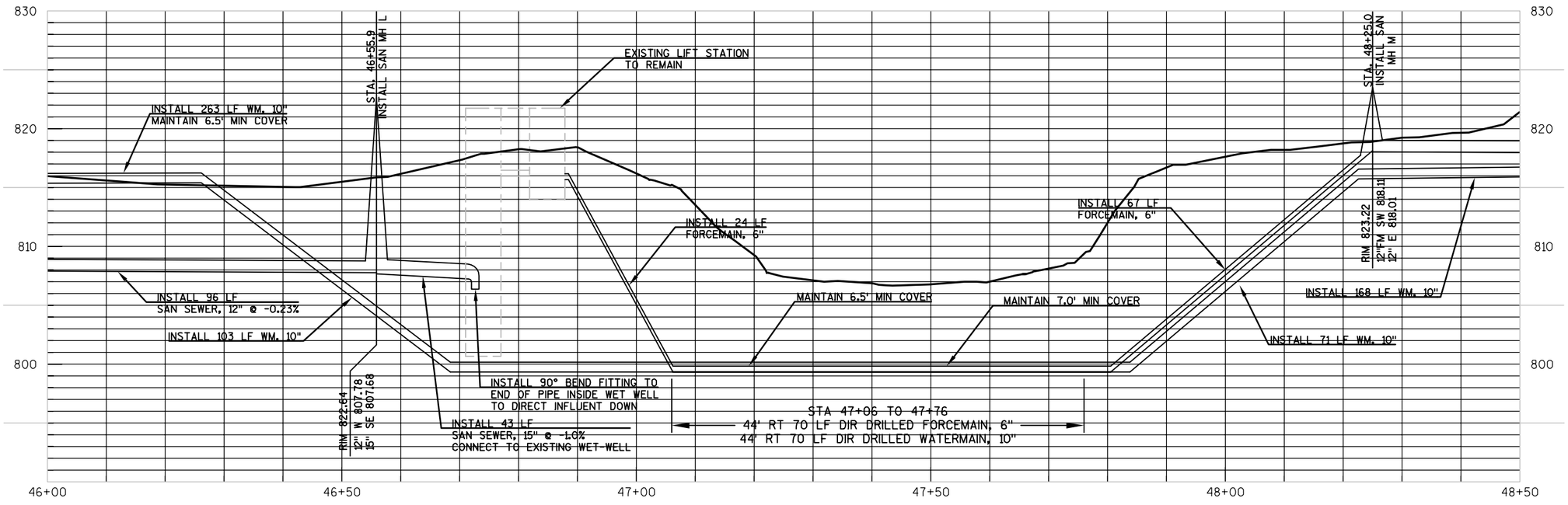
62+00 63+00 64+00 65+00 66+00 67+00 68+00

PROJECT NO: 3050-02-73	HWY: STH 19	COUNTY: JEFFERSON	SANITARY SEWER AND WATER	SHEET 75	E

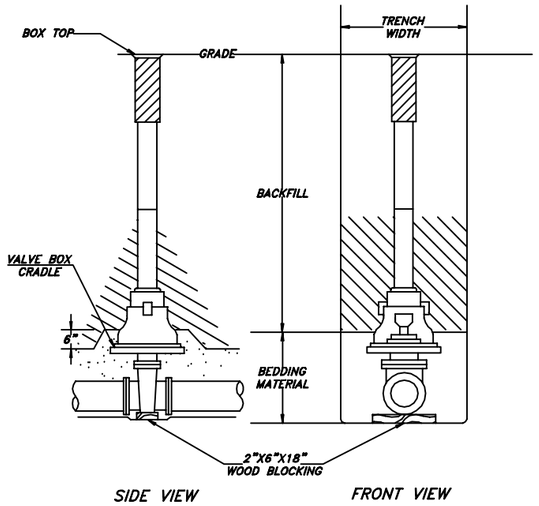
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WISDOT/CADDS SHEET 44

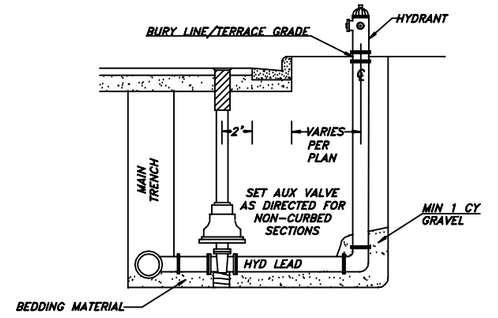




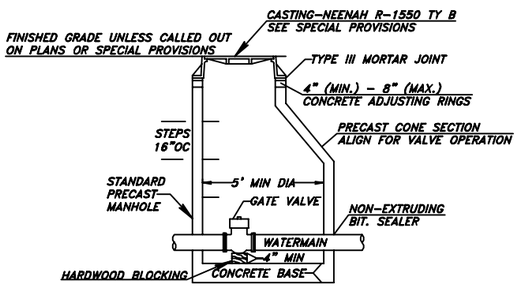
PROJECT NO: 3050-02-73	HWY: STH 19	COUNTY: JEFFERSON	SANITARY SEWER AND WATER	SHEET 76	E



GATE VALVE & BOX SETTING DETAIL



HYDRANT SETTING DETAIL
WITH AUXILIARY VALVE



STANDARD MANHOLE
FOR MAIN LINE WATER VALVES
(REQUIRED WHERE SPECIFICALLY CALLED OUT ON PLANS)

WATER & SEWER NOTES

1) Standard Specifications:
Install all Sewer and Watermain under this contract as per the provisions of the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition,

2) Sanitary Sewer:
Sanitary sewer and laterals, shall be PVC SDR-35, with rubber gasket joints conforming to Section 8.10.1 - 8.10.6(a) of the Standard Specifications.

3) Sanitary Sewer Manholes:
Shall be pre-cast manholes, conforming to Section 3.5.0 of the standard specifications and ASTM C-478. Furnish manholes of a size to accommodate the intersecting sewer per the standard specifications, with minimum 48" inside diameter. All pipe connections to new manholes are to be made with factory installed flexible boots. Install internal/external rubber sleeve frame/chimney seals, by Adaptor Inc or equal. Frames and lids shall be Neenah R-1550 frame, type "B" sealed non-rocking lid w/ concealed pick holes.

4) Watermain:
Shall be Ductile Iron class 52 pipe conforming to AWWA C151 and Section 8.18.0 of the Wisconsin W&S Specifications, cement mortar lined per AWWA C104, polyethylene wrapped per AWWA C105 and conforming to section 8.21.0 of the Wisconsin W&S Specifications, pressure class 150 psi, and have joint bonding cable installed on all watermain joints including hydrants. Fittings shall be mechanical joint ductile iron conforming to AWWA C110 or C153 (compact ductile iron fittings). All fittings to be provided with polyethylene wrap corrosion protection.

5) Gate Valves
Shall be Mueller Company A2370-20 with resilient seat, mechanical joint gate valves, and stainless steel bonnet bolts or equal conforming to AWWA C509.

6) Valve Box
Shall be Mueller Buffalo type three piece cast iron 5-1/4 inch shaft screw type valve box with noon-tip cover clearly marked "Water", or approved equal, provide valve stem extensions for watermain in excess of 6-1/2' bury. Provide valve box mounting frame by Adaptor Inc. or equal.

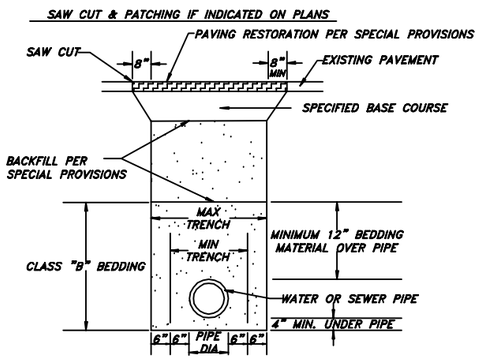
7) Hydrants
Shall be Mueller A-423

8) Water service laterals
Shall be 1" Type K continuous copper pipe. Corporation stops shall be Mueller H15000, compression type, with Mueller single strap bronze service clamps. Curb Stop & Box shall be Mueller H15154 with Mueller 6-foot 6-inch H10385 arch base boxes, complete with stationary rod and one piece lid.

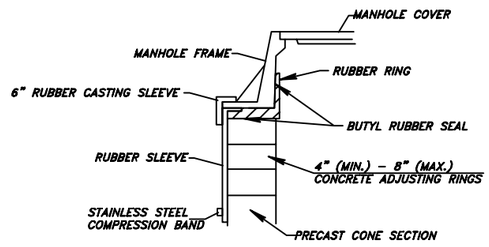
9) Pipe bedding
Shall be Class B. Bedding sand will not be allowed.

10) Pipe Backfill
Shall be mechanically compacted excavated material, or granular material as directed by the Engineer.

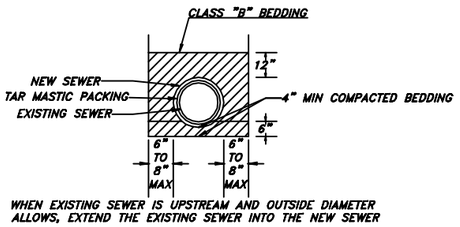
2

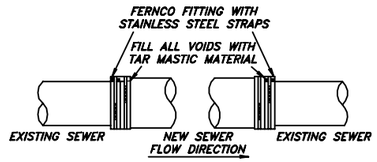


STANDARD TRENCH DETAIL

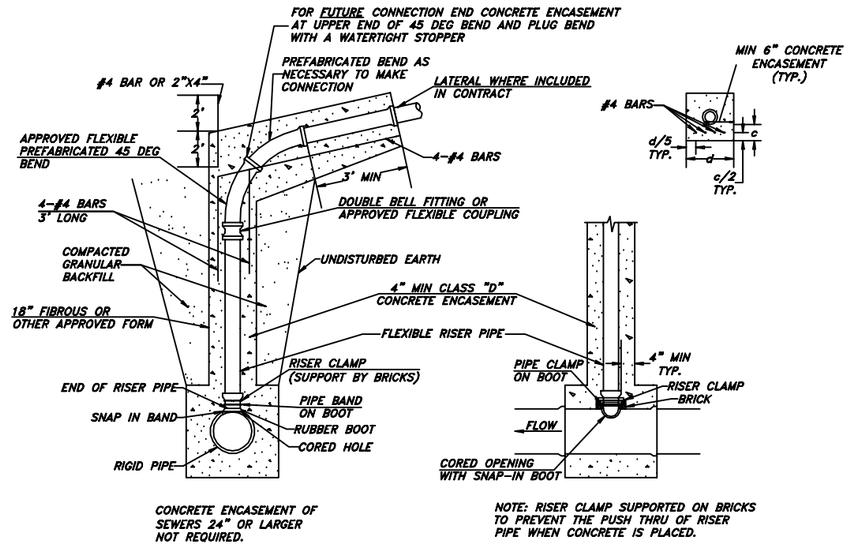


INTERNAL/EXTERNAL FRAME/CHIMNEY SEAL

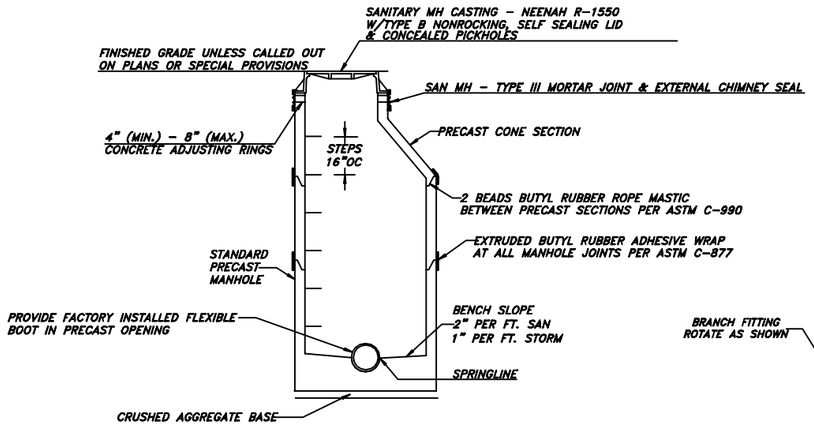




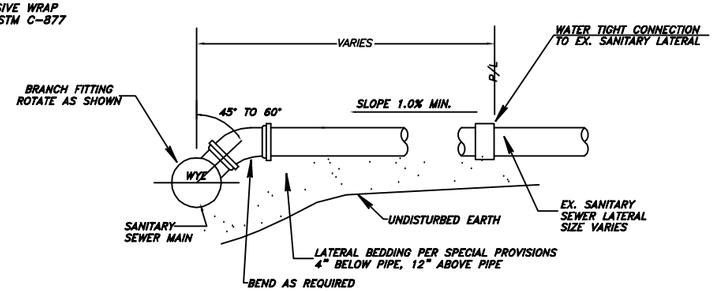
DETAIL OF CONNECTION TO EXISTING SAN SEWER



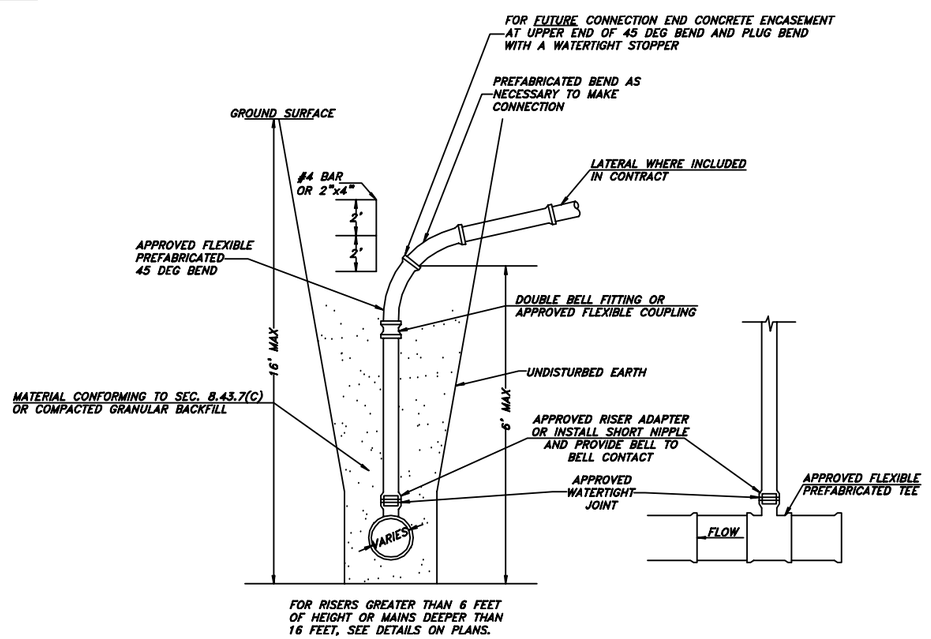
RISER DETAIL "TYPE C"
FLEXIBLE RISER TO RIGID MAIN



STANDARD MANHOLE DETAIL



SANITARY SEWER LATERAL

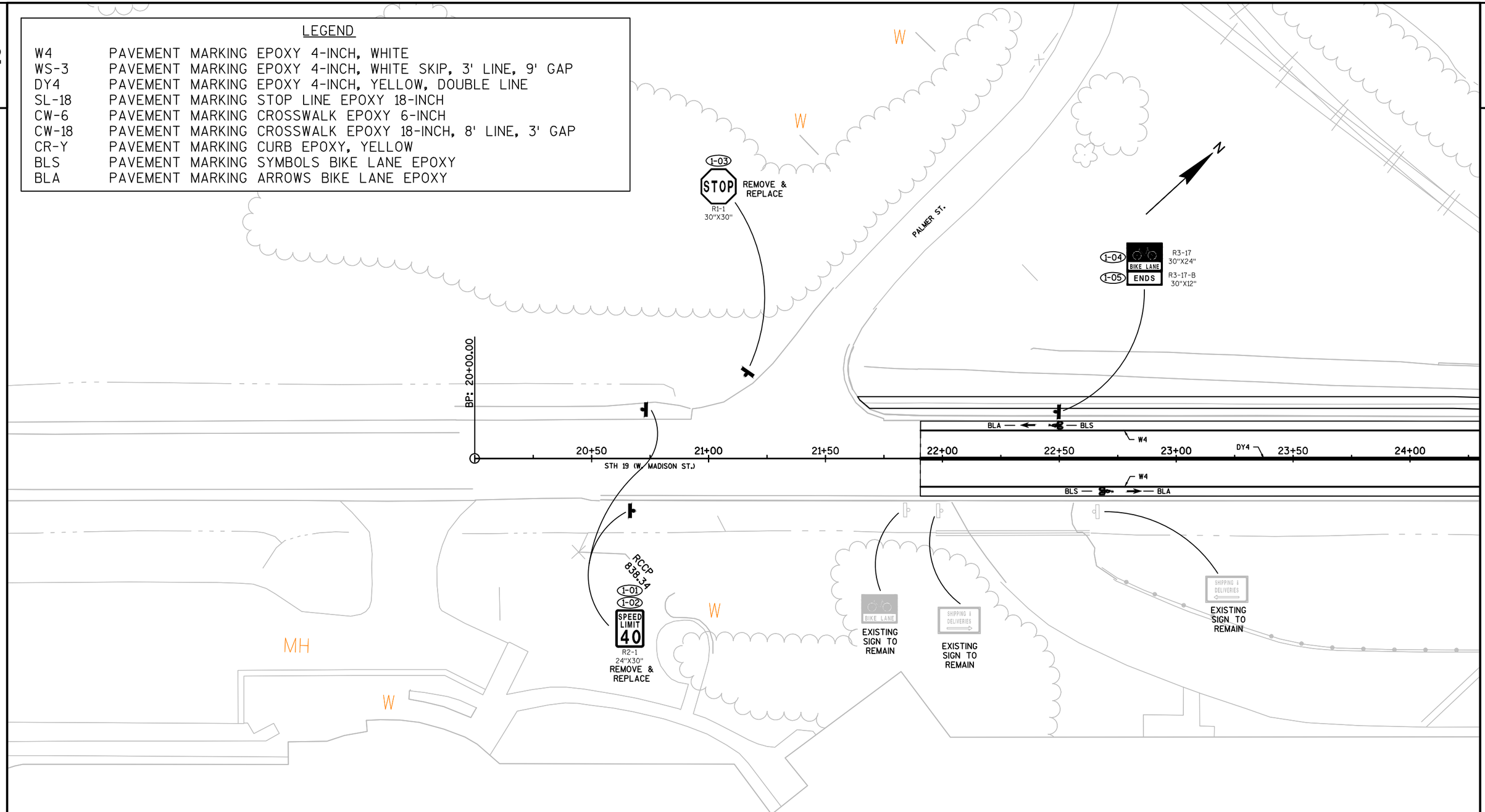


RISER DETAIL "TYPE D"
FLEXIBLE RISER TO FLEXIBLE MAIN

2

LEGEND

W4	PAVEMENT MARKING EPOXY 4-INCH, WHITE
WS-3	PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' LINE, 9' GAP
DY4	PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE LINE
SL-18	PAVEMENT MARKING STOP LINE EPOXY 18-INCH
CW-6	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
CW-18	PAVEMENT MARKING CROSSWALK EPOXY 18-INCH, 8' LINE, 3' GAP
CR-Y	PAVEMENT MARKING CURB EPOXY, YELLOW
BLS	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
BLA	PAVEMENT MARKING ARROWS BIKE LANE EPOXY



ALL SIGNS AND POSTS NOT SPECIFICALLY NOTED FOR RELOCATION WILL BE REMOVED AND REPLACED BY THE CITY OF WATERLOO AT SUCH TIMES AS TO AVOID INTERFERENCE WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF WATERLOO FOR REMOVALS/RELOCATIONS AT LEAST 48 HOURS PRIOR TO AFFECTED WORK.

2

ALL SIGNS AND POSTS NOT SPECIFICALLY NOTED FOR RELOCATION WILL BE REMOVED AND REPLACED BY THE CITY OF WATERLOO AT SUCH TIMES AS TO AVOID INTERFERENCE WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF WATERLOO FOR REMOVALS/RELOCATIONS AT LEAST 48 HOURS PRIOR TO AFFECTED WORK.

LEGEND

W4	PAVEMENT MARKING EPOXY 4-INCH, WHITE
WS-3	PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' LINE, 9' GAP
DY4	PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE LINE
SL-18	PAVEMENT MARKING STOP LINE EPOXY 18-INCH
CW-6	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
CW-18	PAVEMENT MARKING CROSSWALK EPOXY 18-INCH, 8' LINE, 3' GAP
CR-Y	PAVEMENT MARKING CURB EPOXY, YELLOW
BLS	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
BLA	PAVEMENT MARKING ARROWS BIKE LANE EPOXY

N

PALMER ST.

SIGN

SHA RIVER

30+11

18+00C

18+00C

2-02
STOP
R1-1
30"X30"
REMOVE & REPLACE

LOCAL STREET NAME SIGNS
MOVE BY LOCALS

2-01
BIKE LANE
R3-17
30"X24"

PC: 27+76.52

BLA — ← — BLS

22+00 22+50 23+00 23+50 24+00 24+50 25+00 25+50 26+00 26+50 27+00 27+50 28+00

DY4

W4

STH 19 (W. MADISON ST.)

W4

BLS — → — BLA

RIPRAP

WINTER PARKING RESTRICTIONS

MOVE BY LOCALS

W

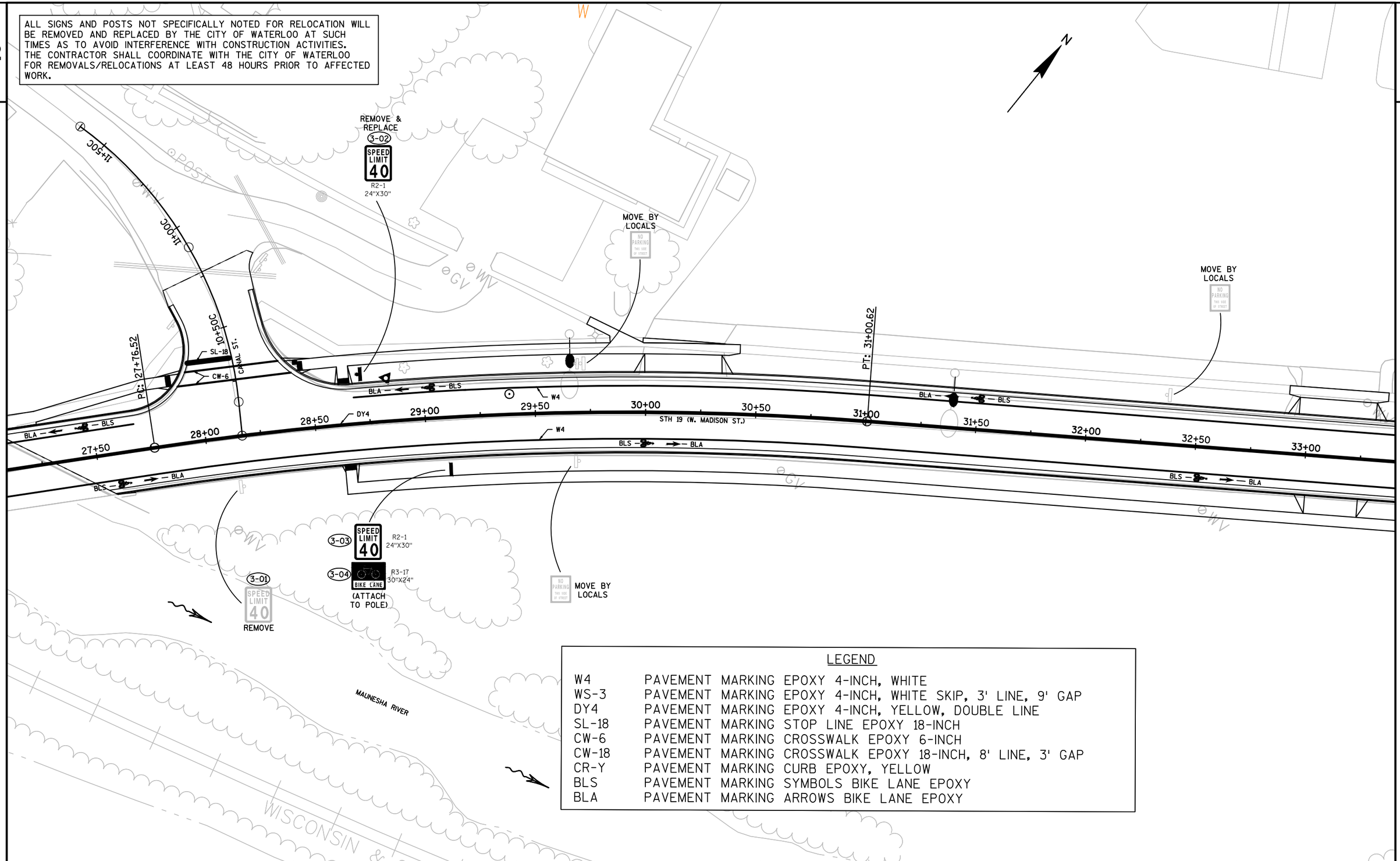
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PERMANENT SIGNING & MARKING	SHEET 80	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.10_SIGNING\023201-PS.DWG
LAYOUT NAME - 023201-PS - 02320 (2)

PLOT DATE : 1/5/2017 11:20 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

ALL SIGNS AND POSTS NOT SPECIFICALLY NOTED FOR RELOCATION WILL BE REMOVED AND REPLACED BY THE CITY OF WATERLOO AT SUCH TIMES AS TO AVOID INTERFERENCE WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF WATERLOO FOR REMOVALS/RELOCATIONS AT LEAST 48 HOURS PRIOR TO AFFECTED WORK.



LEGEND

W4	PAVEMENT MARKING EPOXY 4-INCH, WHITE
WS-3	PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' LINE, 9' GAP
DY4	PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE LINE
SL-18	PAVEMENT MARKING STOP LINE EPOXY 18-INCH
CW-6	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
CW-18	PAVEMENT MARKING CROSSWALK EPOXY 18-INCH, 8' LINE, 3' GAP
CR-Y	PAVEMENT MARKING CURB EPOXY, YELLOW
BLS	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
BLA	PAVEMENT MARKING ARROWS BIKE LANE EPOXY

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PERMANENT SIGNING & MARKING	SHEET 81 E

ALL SIGNS AND POSTS NOT SPECIFICALLY NOTED FOR RELOCATION WILL BE REMOVED AND REPLACED BY THE CITY OF WATERLOO AT SUCH TIMES AS TO AVOID INTERFERENCE WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF WATERLOO FOR REMOVALS/RELOCATIONS AT LEAST 48 HOURS PRIOR TO AFFECTED WORK.

2

N

MOVE BY LOCALS
NO PARKING THIS SIDE OF STREET

ESTR
NO PASSING ZONE

MOVE BY LOCALS
NO PARKING THIS SIDE OF STREET

BLA — BLS

BLA — BLS

W4

DY4

32+50 33+00 33+50 34+00 34+50 35+00 35+50 36+00 36+50 37+00 37+50 38+00 38+50

STH 19 (W. MADISON ST.)

W4

BLS — BLA

BLS — BLA

BLS — BLA

F

H

4-01
SPEED LIMIT 25
W3-5
36"X36"
REMOVE & REPLACE

MOVE BY LOCALS
NO PARKING THIS SIDE OF STREET

4-02
W1-2R
30"X30"
REMOVE & REPLACE

NO PASSING ZONE
4-03
W14-3
48"X36"
REMOVE & REPLACE

ASH

FILLER CAP

LEGEND

W4	PAVEMENT MARKING EPOXY 4-INCH, WHITE
WS-3	PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' LINE, 9' GAP
DY4	PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE LINE
SL-18	PAVEMENT MARKING STOP LINE EPOXY 18-INCH
CW-6	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
CW-18	PAVEMENT MARKING CROSSWALK EPOXY 18-INCH, 8' LINE, 3' GAP
CR-Y	PAVEMENT MARKING CURB EPOXY, YELLOW
BLS	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
BLA	PAVEMENT MARKING ARROWS BIKE LANE EPOXY

ALL SIGNS AND POSTS NOT SPECIFICALLY NOTED FOR RELOCATION WILL BE REMOVED AND REPLACED BY THE CITY OF WATERLOO AT SUCH TIMES AS TO AVOID INTERFERENCE WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF WATERLOO FOR REMOVALS/RELOCATIONS AT LEAST 48 HOURS PRIOR TO AFFECTED WORK.

2

N

MOVE BY LOCALS
NO PARKING THIS SIDE OF STREET

5-01 REMOVE EXISTING SIGN POST

5-03 REMOVE & REPLACE
SPEED LIMIT 40
R2-1
24"X30"

REMOVE & REPLACE
WEST 19
J4-1
24"X36"
5-04

5-05
BIKE LANE
R3-17
30"X24"

MOVE BY LOCALS
NO PARKING THIS SIDE OF STREET

REMOVE & REPLACE
5-06 STOP
R1-1
30"X30"

11+50M

11+00M
MINNETONKA WAY

10+50M

MOVE BY LOCALS
NO PARKING THIS SIDE OF STREET

MOVE STREET NAME SIGNS BY LOCALS

MOVE BY LOCALS
NO TRUCKS

PC: 42+71.27

SL-18
CW-6
CW-18

BLA — ← — BLS

W4
DY4

38+00 38+50 39+00 39+50 40+00 40+50 41+00 41+50 42+00 42+50 43+00 43+50 44+

STH 19 (W. MADISON ST.)

BLS — → — BLA

5-02
SPEED LIMIT 25
R2-1
24"X30"
REMOVE & REPLACE

TRUCK ROUTE DESIGNATED BY YELLOW POST
NO PARKING THIS SIDE OF STREET
MOVE BY LOCALS

5-07
BIKE LANE
R3-17
30"X24"

LEGEND

W4	PAVEMENT MARKING EPOXY 4-INCH, WHITE
WS-3	PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' LINE, 9' GAP
DY4	PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE LINE
SL-18	PAVEMENT MARKING STOP LINE EPOXY 18-INCH
CW-6	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
CW-18	PAVEMENT MARKING CROSSWALK EPOXY 18-INCH, 8' LINE, 3' GAP
CR-Y	PAVEMENT MARKING CURB EPOXY, YELLOW
BLS	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
BLA	PAVEMENT MARKING ARROWS BIKE LANE EPOXY

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PERMANENT SIGNING & MARKING	SHEET 83	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.10_SIGNING\023201-PS.DWG
LAYOUT NAME - 023201-PS - 02320 (5)
PLOT DATE : 1/5/2017 11:20 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42

2

LEGEND

W4	PAVEMENT MARKING EPOXY 4-INCH, WHITE
WS-3	PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' LINE, 9' GAP
DY4	PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE LINE
SL-18	PAVEMENT MARKING STOP LINE EPOXY 18-INCH
CW-6	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
CW-18	PAVEMENT MARKING CROSSWALK EPOXY 18-INCH, 8' LINE, 3' GAP
CR-Y	PAVEMENT MARKING CURB EPOXY, YELLOW
BLS	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
BLA	PAVEMENT MARKING ARROWS BIKE LANE EPOXY

N

RT: 45+52.57

W4 DY4 W4 BLS BLA

43+00 43+50 44+00 44+50 45+00 45+50 46+00 46+50 47+00 47+50 48+00 48+50 49+00

STH 19 (W. MADISON ST.)

STH-19

6-02 SPEED LIMIT 25 R2-1 24"X30" REMOVE & REPLACE

6-04 REMOVE STOP

MOVE BY OTHERS ONE WAY DO NOT ENTER

6-01 SPEED LIMIT 25 REMOVE

6-03 SPEED LIMIT 25 R2-1 24"X30"

MAUNESHA RIVER

ASPH CONC SIGN

ALL SIGNS AND POSTS NOT SPECIFICALLY NOTED FOR RELOCATION WILL BE REMOVED AND REPLACED BY THE CITY OF WATERLOO AT SUCH TIMES AS TO AVOID INTERFERENCE WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF WATERLOO FOR REMOVALS/RELOCATIONS AT LEAST 48 HOURS PRIOR TO AFFECTED WORK.

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PERMANENT SIGNING & MARKING	SHEET 84	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.10_SIGNING\023201-PS.DWG
LAYOUT NAME - 023201-PS - 02320 (6)
PLOT DATE : 1/5/2017 11:21 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42

ALL SIGNS AND POSTS NOT SPECIFICALLY NOTED FOR RELOCATION WILL BE REMOVED AND REPLACED BY THE CITY OF WATERLOO AT SUCH TIMES AS TO AVOID INTERFERENCE WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF WATERLOO FOR REMOVALS/RELOCATIONS AT LEAST 48 HOURS PRIOR TO AFFECTED WORK.

LEGEND

W4	PAVEMENT MARKING EPOXY 4-INCH, WHITE
WS-3	PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' LINE, 9' GAP
DY4	PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE LINE
SL-18	PAVEMENT MARKING STOP LINE EPOXY 18-INCH
CW-6	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
CW-18	PAVEMENT MARKING CROSSWALK EPOXY 18-INCH, 8' LINE, 3' GAP
CR-Y	PAVEMENT MARKING CURB EPOXY, YELLOW
BLS	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
BLA	PAVEMENT MARKING ARROWS BIKE LANE EPOXY

N

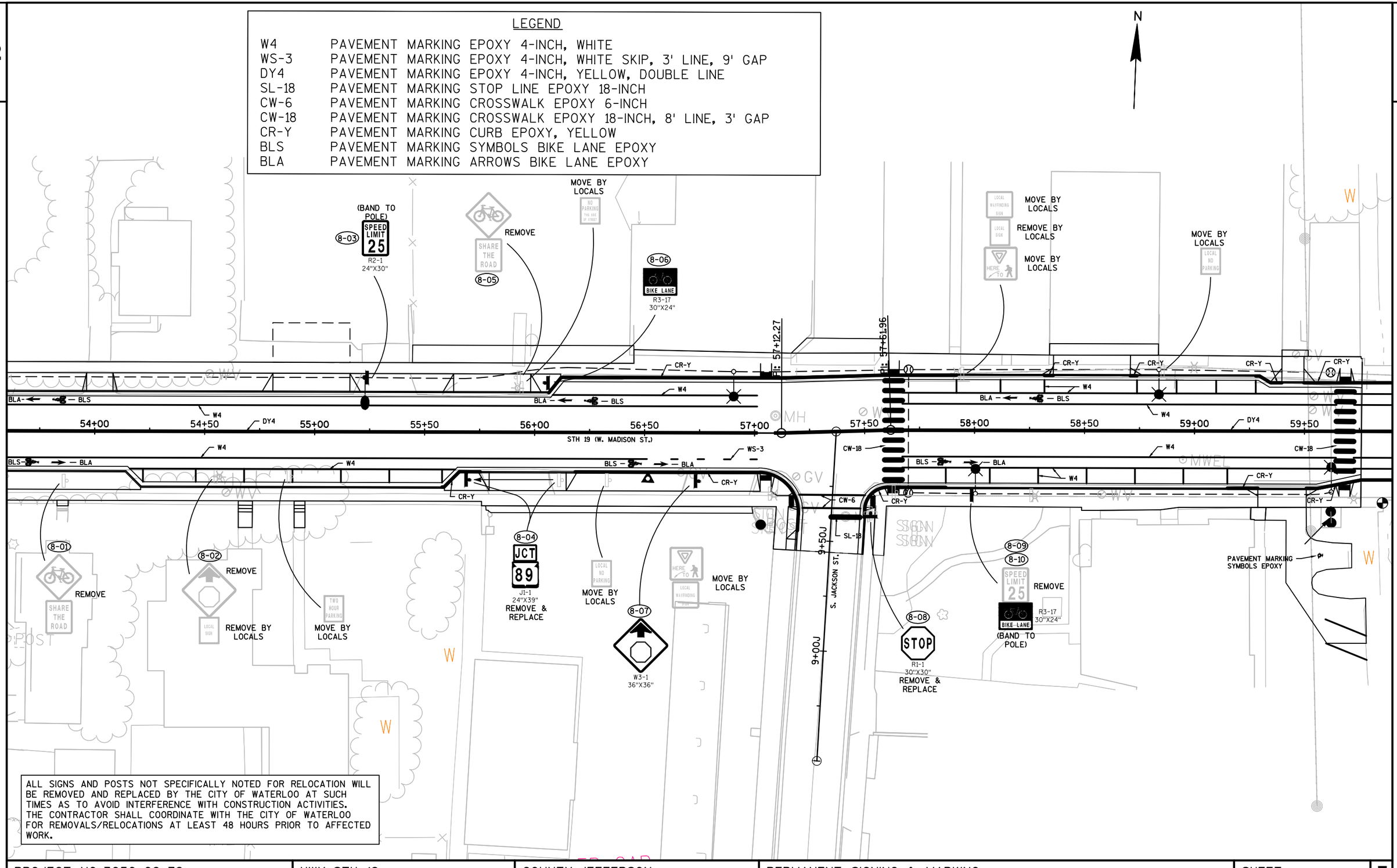
ESTR
BIKE LANE
15" SPRUCE
30" SPRUCE
ASPH
49+72.28
32" MAPLE
32" MAPLE
7-04
BIKE LANE
R3-17
30"X24"
MOVE BY LOCALS
NO PARKING THIS SIDE OF STREET
BLA — BLS
W4
48+50 49+00 49+50 50+00 DY4 50+50 51+00 51+50 52+00 52+50 53+00 53+50 54+00 54+50
STH 19 (W. MADISON ST.)
W4 WS-3 BLS BLA CW-18
BLS — BLA W4
WS-3 BLS — BLA CW-18
BLS — BLA W4
48" CATALPA
20" MAPLE
37" MAPLE
SL-18 CW-6
9+50V
VAN BUREN ST.
7-03
BIKE LANE
R3-17
30"X24"
7-02
STOP
R1-1
30"X30"
REMOVE & REPLACE
LOCAL STREET NAME SIGNS MOVE BY LOCALS
SHARE THE ROAD
REMOVE
7-01
9+00V
8+50V
NO PARKING THIS SIDE OF STREET
MOVE BY LOCALS
STOP FOR PEDESTRIAN IN CROSSWALK
MOVE BY LOCALS
LOCAL STREET NAME SIGNS MOVE BY LOCALS
SL-18 CW-6
9+50H
HARRISON ST.
9+00H
8+50H
7-05
STOP
R1-1
30"X30"
REMOVE & REPLACE
7-06
SPEED LIMIT 25
R2-1
24"X30"
REMOVE & REPLACE IN NEW LOCATION
TWO HOUR PARKING
MOVE BY LOCALS
7-07
BIKE LANE
R3-17
30"X24"

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PERMANENT SIGNING & MARKING	SHEET	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.10_SIGNING\023201-PS.DWG
LAYOUT NAME - 023201-PS - 02320 (7)
PLOT DATE : 1/5/2017 11:21 AM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42

LEGEND

W4	PAVEMENT MARKING EPOXY 4-INCH, WHITE
WS-3	PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' LINE, 9' GAP
DY4	PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE LINE
SL-18	PAVEMENT MARKING STOP LINE EPOXY 18-INCH
CW-6	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
CW-18	PAVEMENT MARKING CROSSWALK EPOXY 18-INCH, 8' LINE, 3' GAP
CR-Y	PAVEMENT MARKING CURB EPOXY, YELLOW
BLS	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
BLA	PAVEMENT MARKING ARROWS BIKE LANE EPOXY

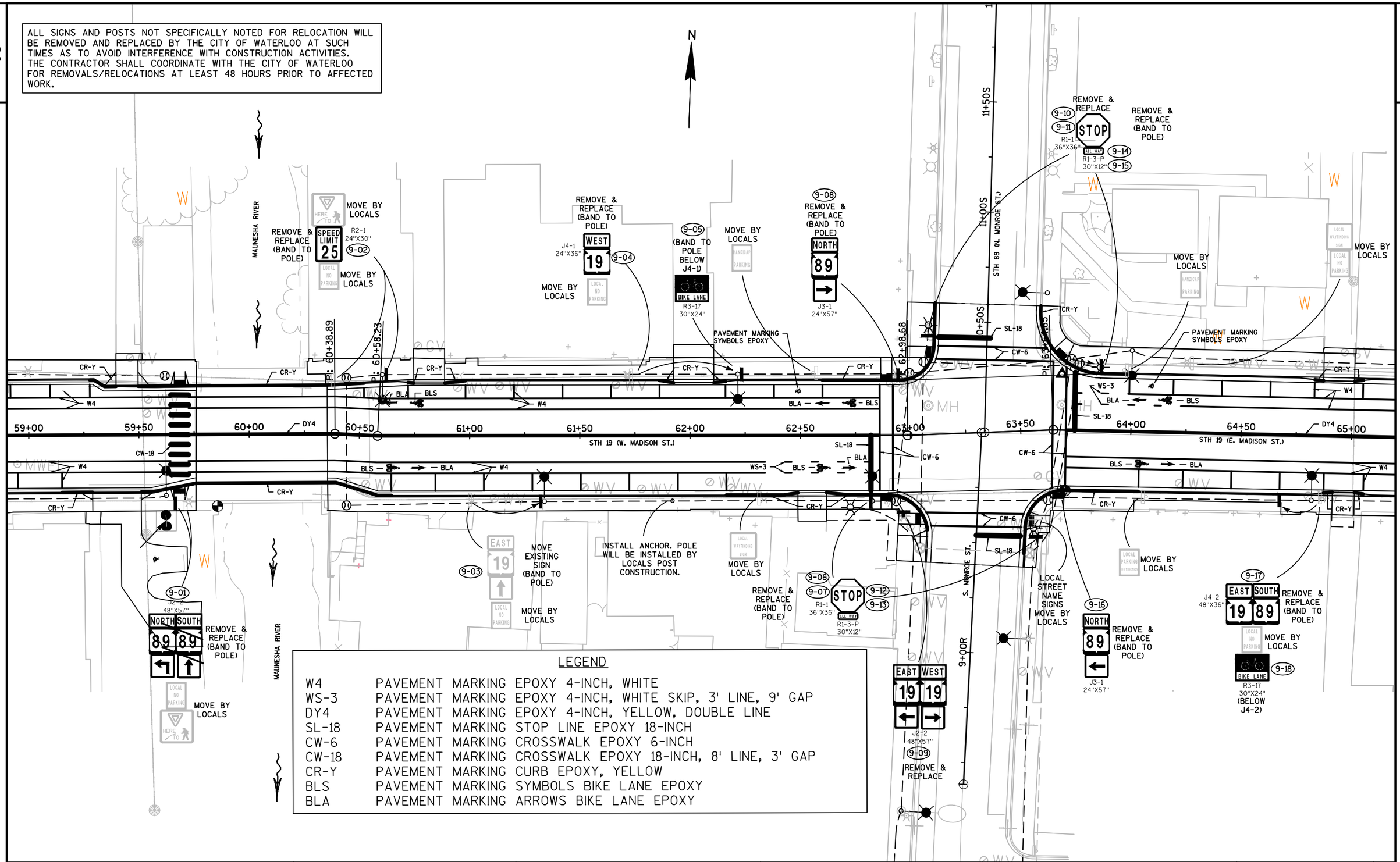


ALL SIGNS AND POSTS NOT SPECIFICALLY NOTED FOR RELOCATION WILL BE REMOVED AND REPLACED BY THE CITY OF WATERLOO AT SUCH TIMES AS TO AVOID INTERFERENCE WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF WATERLOO FOR REMOVALS/RELOCATIONS AT LEAST 48 HOURS PRIOR TO AFFECTED WORK.

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PERMANENT SIGNING & MARKING	SHEET 86	E

2

ALL SIGNS AND POSTS NOT SPECIFICALLY NOTED FOR RELOCATION WILL BE REMOVED AND REPLACED BY THE CITY OF WATERLOO AT SUCH TIMES AS TO AVOID INTERFERENCE WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF WATERLOO FOR REMOVALS/RELOCATIONS AT LEAST 48 HOURS PRIOR TO AFFECTED WORK.



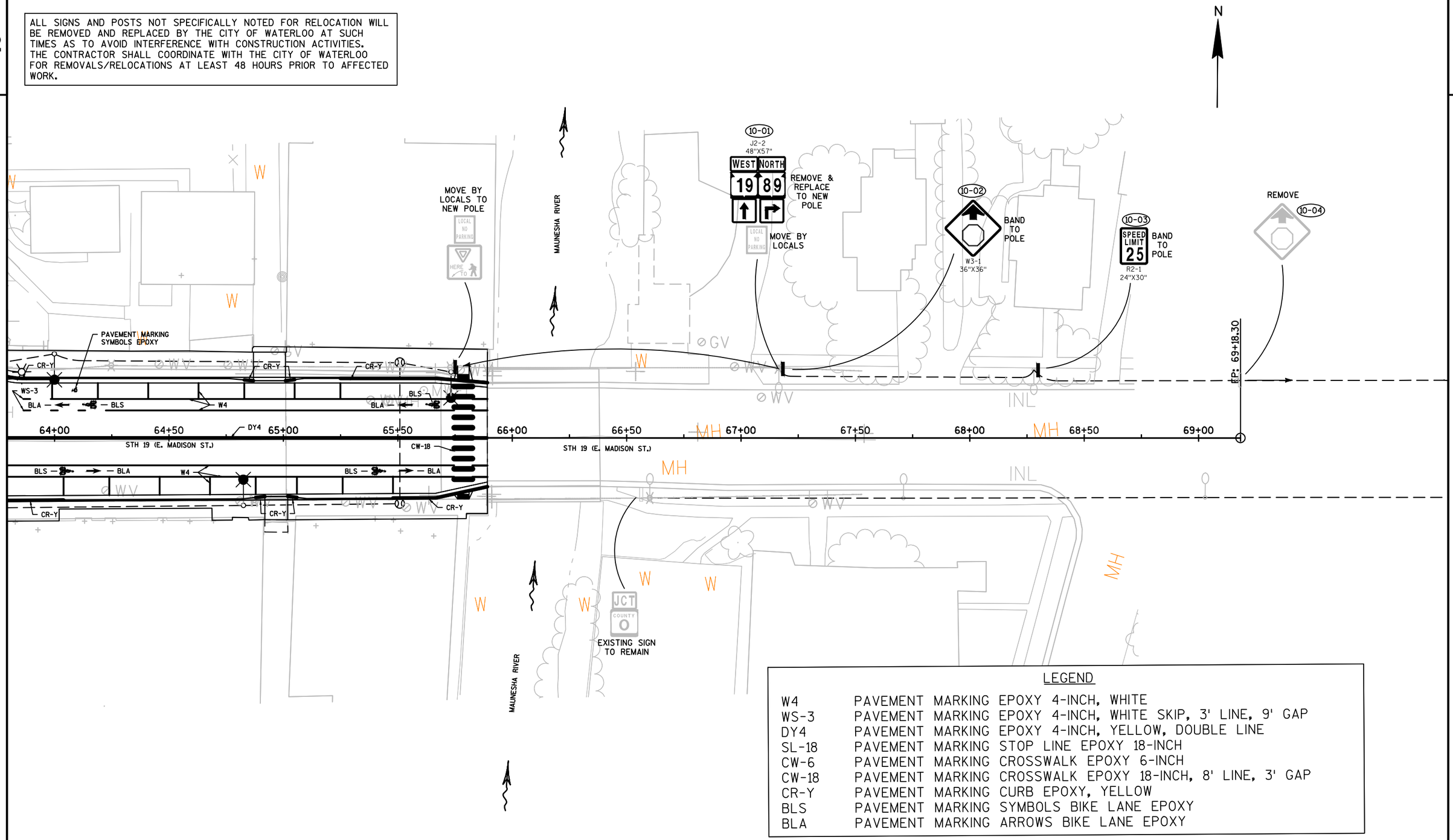
LEGEND

W4	PAVEMENT MARKING EPOXY 4-INCH, WHITE
WS-3	PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' LINE, 9' GAP
DY4	PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE LINE
SL-18	PAVEMENT MARKING STOP LINE EPOXY 18-INCH
CW-6	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
CW-18	PAVEMENT MARKING CROSSWALK EPOXY 18-INCH, 8' LINE, 3' GAP
CR-Y	PAVEMENT MARKING CURB EPOXY, YELLOW
BLS	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
BLA	PAVEMENT MARKING ARROWS BIKE LANE EPOXY

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PERMANENT SIGNING & MARKING	SHEET 87	E

2

ALL SIGNS AND POSTS NOT SPECIFICALLY NOTED FOR RELOCATION WILL BE REMOVED AND REPLACED BY THE CITY OF WATERLOO AT SUCH TIMES AS TO AVOID INTERFERENCE WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF WATERLOO FOR REMOVALS/RELOCATIONS AT LEAST 48 HOURS PRIOR TO AFFECTED WORK.



LEGEND

W4	PAVEMENT MARKING EPOXY 4-INCH, WHITE
WS-3	PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' LINE, 9' GAP
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CR-Y	PAVEMENT MARKING CURB EPOXY, YELLOW
BLS	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
BLA	PAVEMENT MARKING ARROWS BIKE LANE EPOXY

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PERMANENT SIGNING & MARKING	SHEET 88	E

STREET LIGHTING PLANS PREPARED BY:

KL Engineering
[A] Better Experience

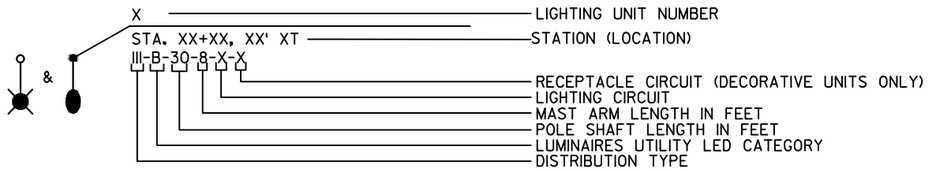
WISCONSIN
MIKE D. SCARMON
E-37613
EVANSVILLE, WI
PROFESSIONAL ENGINEER

10-27-16
(DATE)

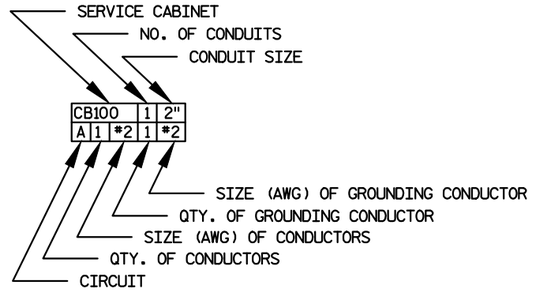
(SIGNATURE)

LIGHTING PLAN LEGEND:

- SINGLE ARM LIGHTING UNIT
- EXISTING SINGLE ARM LIGHTING UNIT
- DECORATIVE PENDANDT STYLE LIGHTING UNIT
- EXISTING DECORATIVE PENDANT STYLE LIGHTING UNIT
- EXISTING DECORATIVE POST TOP LIGHTING UNIT
- CONCRETE CONTROL CABINET BASE/ELECTRICAL SERVICE
- PULL BOX NON-CONDUCTIVE 24X42-INCH
- LIGHTING CONDUIT (2" SCHEDULE 40 PVC UNLESS NOTED)
- STOP SIGN FLASHERS
- EXISTING AUDIO SYSTEM
- EXISTING STREET LIGHT TO BE REMOVED AND SALVAGED



CONDUIT/CONDUCTOR LEGEND



PWO = PULL WIRE ONLY

CONDUCTOR COLOR LEGEND

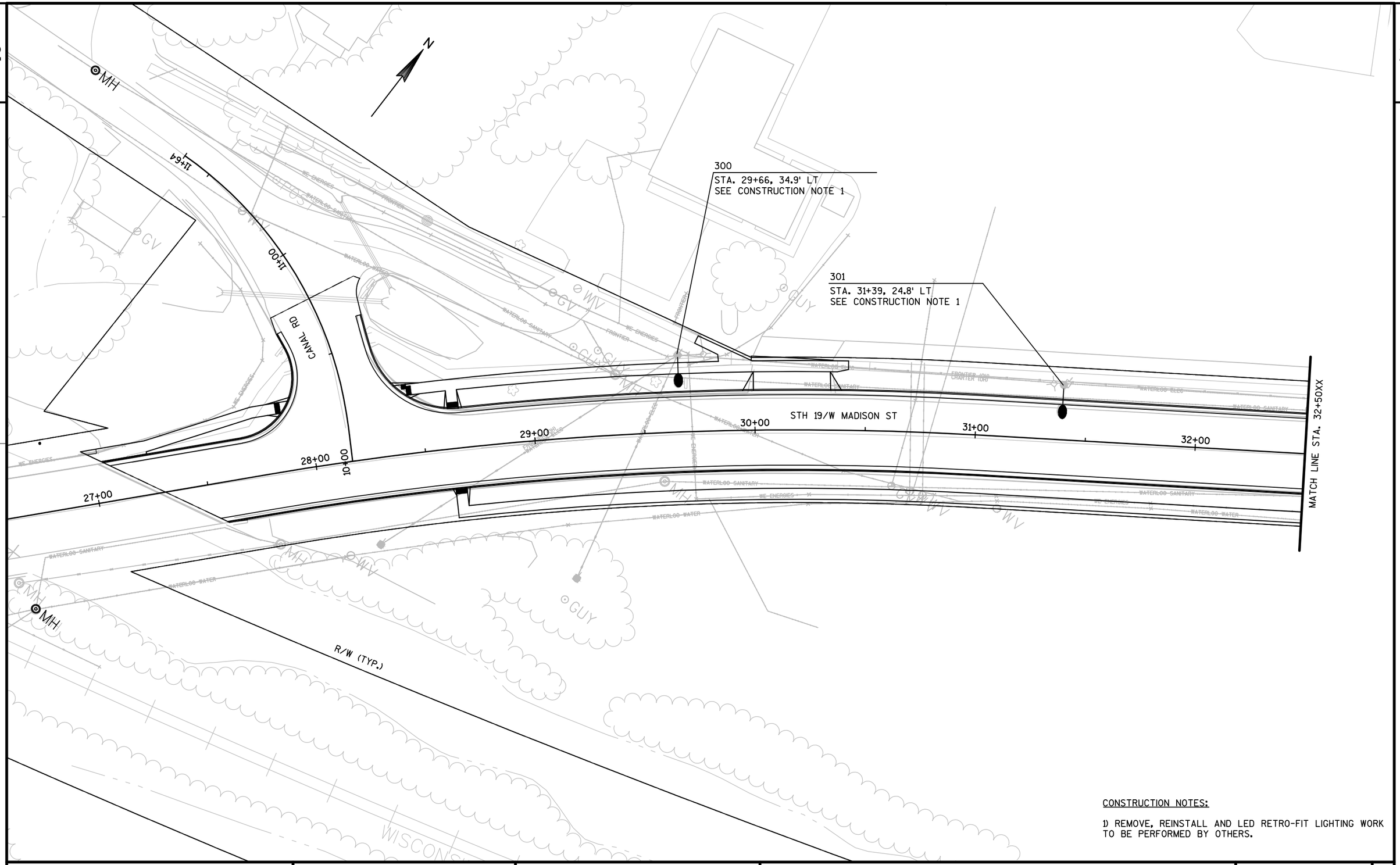
CB100	CB200
LIGHTING CIRCUITS	LIGHTING CIRCUITS
A - RED & NEUTRAL	A - RED & NEUTRAL
B - RED & NEUTRAL	B - RED & NEUTRAL
RECEPTACLE CIRCUITS	RECEPTACLE CIRCUITS
C - BLACK	C - BLACK
D - BLACK	
120V PHASE TO GROUND	120V PHASE TO GROUND

GENERAL STREET LIGHTING NOTES:

1) THE ENGINEER SHALL APPROVE THE FINAL LOCATION FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION.

2) PITCH ALL CONDUITS TOWARD PULLBOXES. INSTALL A 2" DRAIN DUCT TO DITCH OR STORM SEWER AS REQUIRED FOR DRAINAGE. THIS 2" DRAIN DUCT IS INCIDENTAL TO THE PULL BOX BID ITEM. DRAIN DUCT IS NOT SHOWN. DO NOT SPLICE IN PULLBOXES.

3) 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.



CONSTRUCTION NOTES:

1) REMOVE, REINSTALL AND LED RETRO-FIT LIGHTING WORK TO BE PERFORMED BY OTHERS.

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	LIGHTING PLAN	SHEET 90	E

FILE NAME : G:\KUNKEL\14002 - STH 19\CIVIL3D\SHEETSPLAN\023601_LP.DWG PLOT DATE : 11/28/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

2

303
STA. 36+02, 26.0' LT
SEE CONSTRUCTION NOTE 1

304
STA. 38+00, 26.5' LT
SEE CONSTRUCTION NOTE 1

302
STA. 34+02, 25.2' LT
SEE CONSTRUCTION NOTE 1

N

MATCH LINE STA. 32+50XX

33+00

34+00

35+00

STH 19/ W MADISON ST

36+00

37+00

38+00

MATCH LINE STA. 38+10XX

R/W (TYP.)

CONSTRUCTION NOTES:

1) REMOVE, REINSTALL AND LED RETRO-FIT LIGHTING WORK TO BE PERFORMED BY OTHERS.

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	LIGHTING PLAN	SHEET 91	E

FILE NAME : G:\KUNKEL\14002 - STH 19\CIVIL3D\SHEETSPLAN\023601_LP.DWG PLOT DATE : 11/28/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

CB200		1	2"
A	1	#2	1	#2
NEU	1	#2	--	--

= A

N

305
STA. 40+38, 26.1' LT
SEE CONSTRUCTION NOTE 1

306
STA. 42+63, 24.5' LT
SEE CONSTRUCTION NOTE 1

SEE CONSTRUCTION NOTE 1

SEE CONSTRUCTION NOTE 1

SEE CONSTRUCTION NOTE 1

MINNETONKA WAY

STH 19/W MADISON ST

11+73

11+00

10+00

43+00

42+00

41+00

40+00

39+00

MATCH LINE STA. 38+10XX

MATCH LINE STA. 44+00XX

R/W (TYP.)

CONSTRUCTION NOTES:

1) REMOVE, REINSTALL AND LED RETRO-FIT LIGHTING WORK TO BE PERFORMED BY OTHERS.

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	LIGHTING PLAN	SHEET 92	E

FILE NAME : G:\KUNKEL\14002 - STH 19\CIVIL3D\SHEETSPLAN\023601_LP.DWG PLOT DATE : 11/28/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

CB200		1	2"
A	1	#6	1 #6
NEU	1	#6	-- --

=

CB200		1	2"
B	1	#6	1 #6
C	1	#6	-- --
NEU	1	#6	-- --

STREET LIGHTS —
RECEPTACLES —

=

N

200
STA. 44+42, 24.7' LT
III-B-30-8-A

201
STA. 46+18, 24.7' LT
III-B-30-8-A

LPB 200
STA. 46+72, 20.5' LT

CB200		2	2"
A	1	#6	1 #6
NEU	1	#6	-- --

LPB 201
STA. 48+02, 35.2' LT
FIELD LOCATE

CB 200
STA. 48+04, 42.2' LT
FIELD LOCATE

CB200		2	2"
B	1	#6	1 #6
C	1	#6	-- --
NEU	1	#6	-- --

LPB 202
STA. 48+06, 35.2' LT
FIELD LOCATE

202
STA. 48+15, 30.0' LT
III-B-30-8-B

SEE CONSTRUCTION NOTE 1

A

B

MATCH LINE STA. 44+00XX

45+00

46+00

STH 19/W MADISON ST

47+00

48+00

49+00

MATCH LINE STA. 49+50XX

RIGID METALLIC CONDUIT REQ'D. BETWEEN PULLBOX AND STRUCTURE

CONNECT TO WATERLOO UTILITIES SERVICE LATERAL

R/W (TYP.)

SEE STRUCTURE B-28-175 PLANS FOR ELECTRICAL DETAILS

CONSTRUCTION NOTES:

1) REMOVE, REINSTALL AND LED RETRO-FIT LIGHTING WORK TO BE PERFORMED BY OTHERS.

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	LIGHTING PLAN	SHEET 93	E

STREET LIGHTS —
RECEPTACLES —

CB200			1	2"
B	1	#6	1	#6
C	1	#6	--	--
NEU	1	#6	--	--

= B

N

203
STA. 49+76, 24.7' LT
III-B-30-8-B

204
STA. 51+53, 24.7' LT
III-B-30-8-B

205
STA. 53+32, 24.7' LT
III-B-30-8-B

MATCH LINE STA. 49+50XX

MATCH LINE STA. 55+00XX

10+00

50+00

51+00

STH 19/W MADISON ST

52+00

53+00

10+00

54+00

55+

R/W (TYP.)

HARRISON ST

9+02

VAN BUREN ST

9+00

8+64

WATERLOO WATER

WATERLOO SANITARY

WE ENERGIES

FRONTIER COMM

WATERLOO ELEC

POST

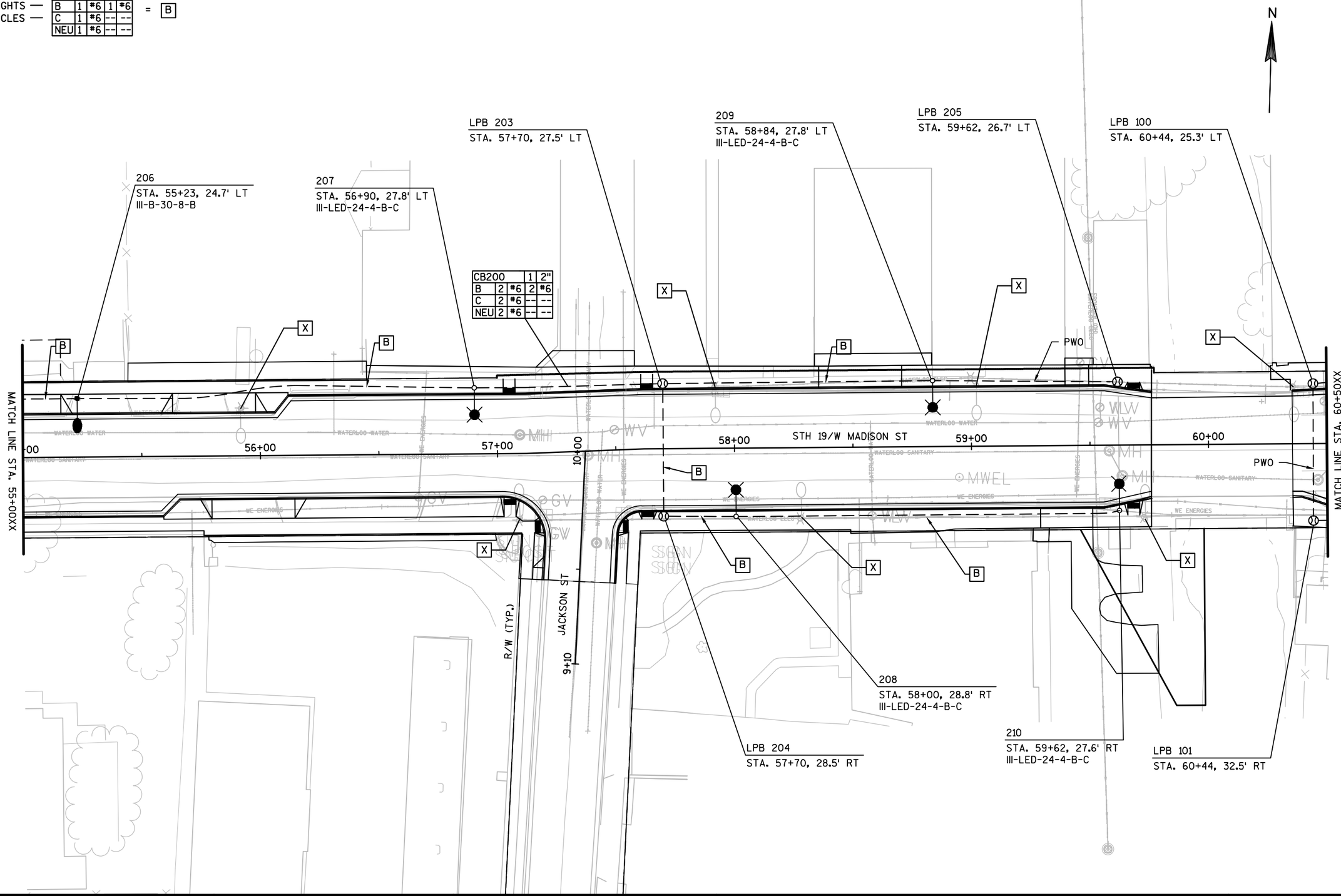
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	LIGHTING PLAN	SHEET 94	E

FILE NAME : G:\KUNKEL\14002 - STH 19\CIVIL3D\SHEETSPLAN\023601_LP.DWG PLOT DATE : 11/28/2016 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

STREET LIGHTS — RECEPTACLES —

CB200		1	2"
B	1	#6	1	#6
C	1	#6	--	--
NEU	1	#6	--	--

= B



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	LIGHTING PLAN	SHEET 95	E

100
STA. 60+60, 26.8' LT
III-LED-24-4-A-C

102
STA. 62+22, 26.8' LT
III-LED-24-4-A-C

LPB 102
STA. 63+00, 27.2' LT

CB100		1	2"
A	2	#8	2	#8
C	2	#8	--	--
NEU	2	#8	--	--

104
STA. 10+66, 26.7' RT
III-LED
SEE CONSTRUCTION NOTE 5
SEE CONSTRUCTION NOTE 7

LPB 104
STA. 63+73, 32.3' LT

LPB 106
STA. 65+51, 33.0' LT

107
STA. 65+73, 28.8' LT
III-LED-24-4-B-D

105
STA. 64+00, 36.7' LT
III-LED-24-4-B-D

STH 19/W MADISON ST

STH 189/N MONROE ST

MATCH LINE STA. 60+50

MATCH LINE STA. 66+00

61+00 62+00 63+00 64+00 65+00 66+

10+00

9+00

8+00

7+13

PWO

C X D

101
STA. 61+34, 30.8' RT
III-LED-24-4-A-C

103
STA. 62+73, 33.7' RT
III-LED-24-4-A-C

CB100		1	2"
A	2	#8	2	#8
C	2	#8	--	--
NEU	2	#8	--	--

LPB 103
STA. 62+93, 31.0' RT

LPB 105
STA. 63+62, 31.8' RT

CB100		1	2"
B	2	#8	2	#8
D	2	#8	--	--
NEU	2	#8	--	--

106
STA. 64+83, 29.5' RT
III-LED-24-4-B-D

LPB 107
STA. 65+51, 28.7' RT

108
STA. 9+09, 24.4' RT
III-LED-24-4-B-D
SEE CONSTRUCTION NOTE 5

N

109
STA. 8+29, 29.2' LT
III-LED-24-4-A-C
SEE CONSTRUCTION NOTE 5

R/W (TYP.)

S MONROE ST

MEADE ST

110
STA. 7+68, 27.8' RT
III-LED-24-4-B-D
SEE CONSTRUCTION NOTE 5

LPB 108
FIELD LOCATE

TAYLOR ST

CB100 - INSTALL NEW ELECTRICAL METER AND CONTROL BOX. MOUNT ON UTILITY POLE.

BORE NEW CONDUIT

EXISTING LIGHTING CONTROLS LOCATED ON UTILITY POLE TO BE ABANDONED OR REMOVED BY OTHERS

STOP SIGN FLASHER CONTROL
CB 300

STREET LIGHTS — RECEPTACLES — | CB100 | | 1 | 2" | = C

A	1	#8	1	#8
C	1	#8	--	--
NEU	1	#8	--	--

STREET LIGHTS — RECEPTACLES — | CB100 | | 1 | 2" | = D

B	1	#8	1	#8
D	1	#8	--	--
NEU	1	#8	--	--

CONSTRUCTION NOTES:

1) AUDIO SYSTEM TO BE REMOVED BY OTHERS.

2) SEE STOP SIGN FLASHER DETAIL FOR LAYOUT.

3) LIGHTING CONTROL CABINET FOR EXISTING CIRCUITS NORTH OF STH 19 IS LOCATED ON FRANKLIN ST.

4) FIELD VERIFY CONDUCTOR SIZE AND QUANTITY PRIOR TO CONTINUING EXISTING CIRCUITRY.

5) SEE MISCELLANEOUS QUANTITIES FOR UNDISTRIBUTED QUANTITY OF SAWCUT AND SIDEWALK REMOVAL/REPLACEMENT ITEMS.

6) FIELD VERIFY ALL STREET LIGHT LOCATIONS TO ENSURE THEY DO NOT OBSTRUCT DOORWAYS, WALKWAYS, STAIRCASES OR GARAGES. THE ENGINEER SHALL APPROVE THE FINAL LOCATION OF ALL STREET LIGHTS PRIOR TO CONSTRUCTION.

7) REMOVE AND REINSTALL DECORATIVE STREET LIGHT ASSEMBLY. REPLACE EXISTING HPS LUMINAIRE WITH LED. KEEP LIGHT ASSEMBLY ON EXISTING ELECTRICAL SYSTEM BY PULLING BACK CONDUCTORS TO PREVIOUS LIGHT AND REWIRING ONCE CONDUIT CONNECTION HAS BEEN MADE TO NEW CONCRETE BASE.

8) USE EXISTING CONDUIT ALONG S MONROE ST IF IN WORKING CONDITION. BURY NEW CONDUIT VIA DIRECTIONAL BORE IF NECESSARY.

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	LIGHTING PLAN	SHEET 96	E

2

N

MATCH LINE STA. 66+00XX

66+00

67+00

68+00

69+00

69+18

FURNISH AND INSTALL EQUIVALENT CONDUCTORS

EX SL401

EX SL403

CONNECT TO STREET LIGHT BASE
AND CONTINUE EXISTING CIRCUIT

EX SL405

MILL ST

STH 19/W MADISON ST

EX SL402

EX SL400

R/W (TYP.)

S WASHINGTON ST

EX SL404

EX SL406

CONNECT TO STREET LIGHT BASE
AND CONTINUE EXISTING CIRCUIT

FURNISH AND INSTALL EQUIVALENT CONDUCTORS

CONSTRUCTION NOTES:

1) EXISTING OVERHEAD LIGHTING SYSTEM TO BE DISCONNECTED AND REMOVED. RECONNECT LIGHTS TO EXISTING UNDERGROUND SYSTEM FROM THE EAST.

2) CONDUIT TO BE BURIED VIA TRENCHING OR HORIZONTAL BORE BASED ON FIELD REVIEW AND ENGINEERS APPROVAL

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	LIGHTING PLAN	SHEET 97	E

SSF 502
STA. 10+50, 26.8' LT
SEE NOTE 3

CB500		1	2"
A	4	#14	2 #10
NEU	2	#14	-- --

FPB 502
STA. 63+07, 32.1' LT

FPB 503
STA. 63+76, 30.5' LT

SSF 503
STA. 63+86, 28.8' LT

N

STH 89/N MONROE ST

STH 19/W MADISON ST

61+00 62+00 63+00 10+00 64+00 65+00 66+00

E

PWO

SSF 501
STA. 62+83, 30.8' RT

CB500		1	2"
A	4	#14	2 #10
NEU	2	#14	-- --

EX FPB 501
STA. 9+48, 26.7' LT

SSF 500
STA. 9+60, 24.2' RT
SEE NOTE 3

CB500		1	2"
A	4	#14	2 #10
NEU	2	#14	-- --

EX FPB 500
STA. 9+48, 23.1' RT

9+00

CB500		1	EX
A	2	#14	1 #10
NEU	1	#14	-- --

S MONROE ST

CB500		1	EX
A	2	#14	1 #10
NEU	1	#14	-- --

R/W (TYP.)

8+00

MEADE ST

TAYLOR ST

EXISTING LIGHTING CONTROL

7+13

STOP SIGN FLASHER CONTROL
CB500

CB500		1	2"
A	2	#14	1 #10
NEU	1	#14	-- --

= E

CONSTRUCTION NOTES:

1) EX FPB 501 AND EX FPB 500 TO REMAIN THROUGHOUT CONSTRUCTION.

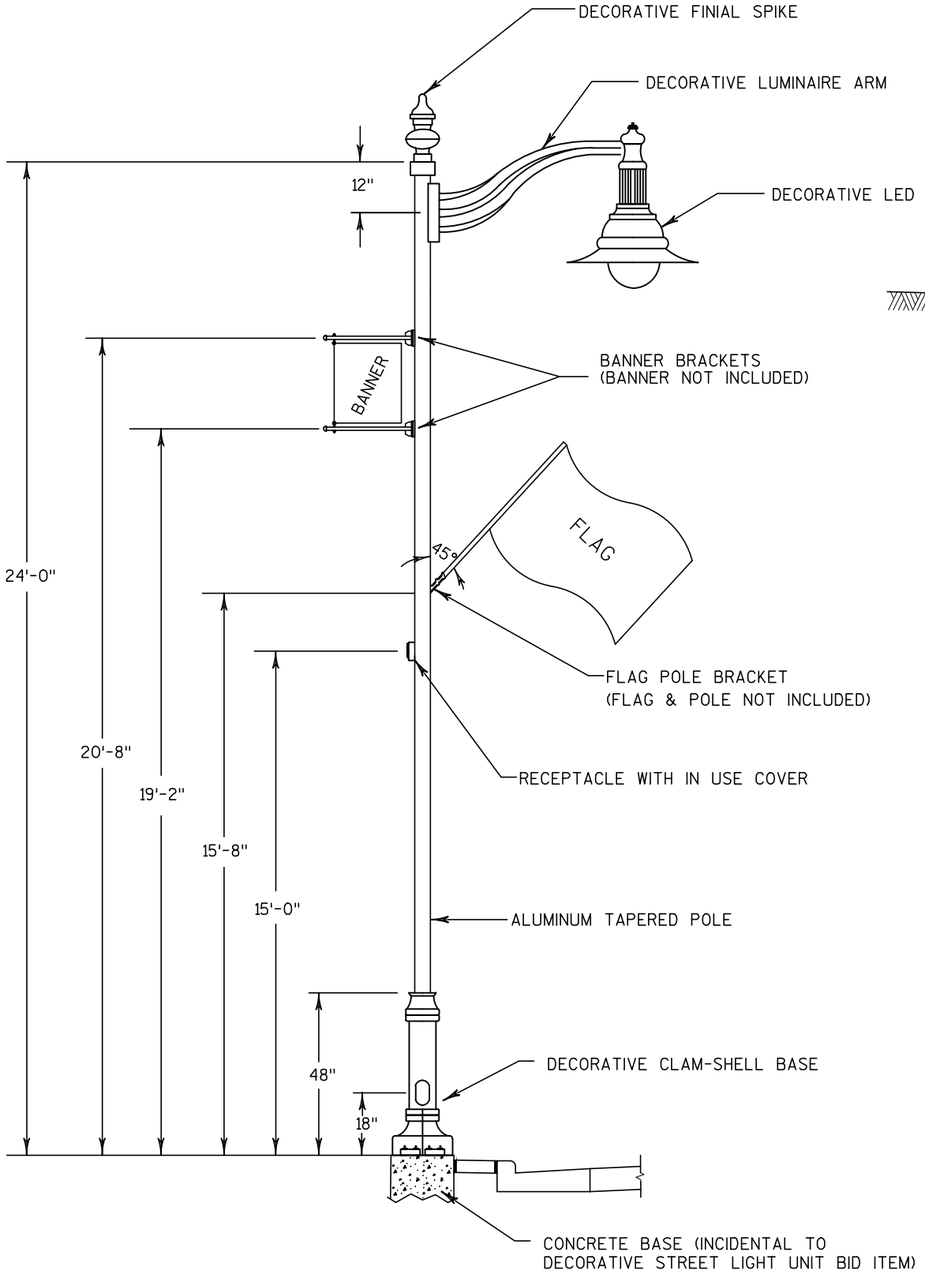
2) SEE SIGNING SHEETS FOR EXACT LOCATION OF STOP SIGNS.

3) SALVAGE EXISTING STOP SIGN FLASHER ASSEMBLY. CONCRETE BASE AND HPS FLASHER TO BE REMOVED AND REPLACED.

4) USE EXISTING CONDUIT ALONG S MONROE ST.

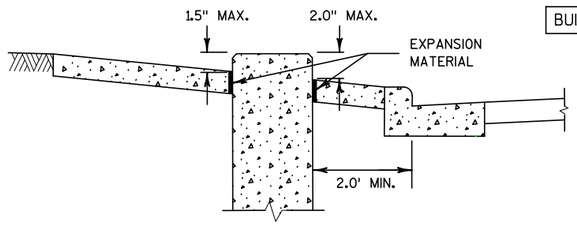
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	LIGHTING PLAN: STOP SIGN FLASHER DETAIL	SHEET 98	E

2



DECORATIVE LIGHTING UNIT DETAIL

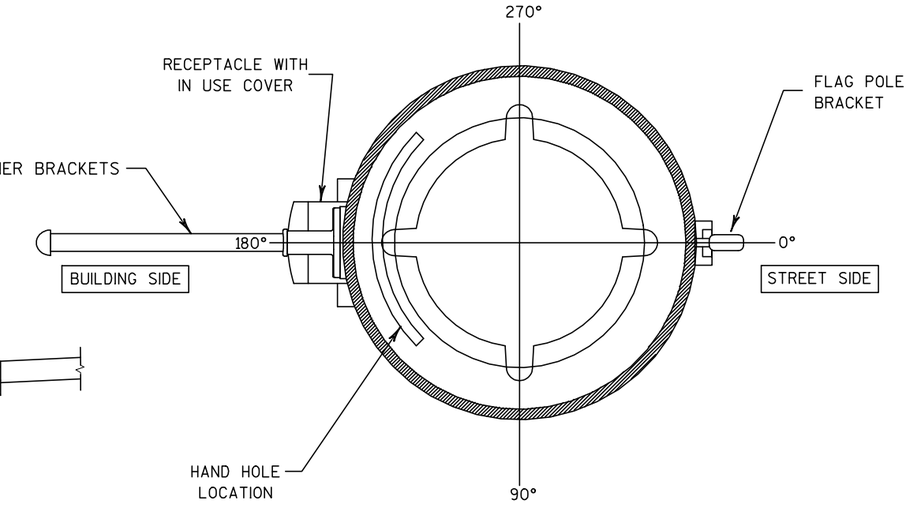
NO SCALE



IN CONCRETE TERRACE

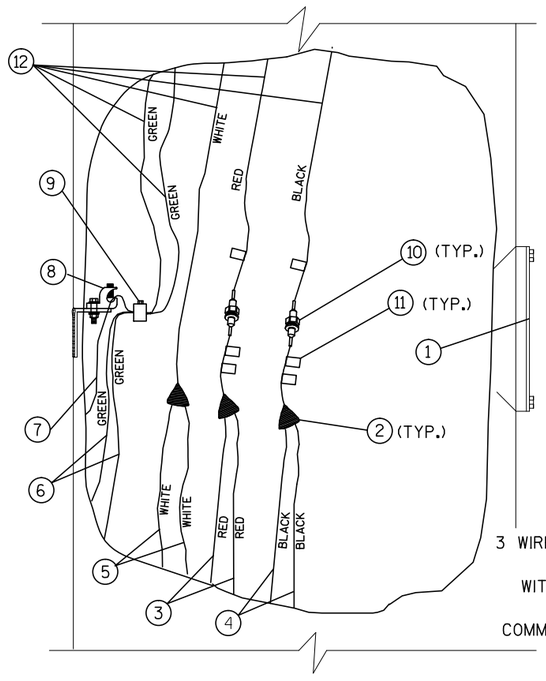
LIGHT BASE INSTALLATION DETAIL

NO SCALE



OVERHEAD VIEW

NO SCALE



1. HANDHOLE AND COVER
2. APPROVED INSULATED MULTITAP TERMINAL BLOCK TYPE CONNECTORS. COMPRESSION, CRIMP OR WIRE NUT CONNECTORS ARE NOT ALLOWED.
3. INSULATED UNGROUNDED LIGHTING CKT CONDUCTORS FROM SYSTEM RACEWAY (120V)
4. INSULATED UNGROUNDED RECEPTACLE CKT CONDUCTORS FROM SYSTEM RACEWAY (120V)
5. SHARED SYSTEM INSULATED NEUTRAL CONDUCTORS FROM SYSTEM RACEWAY
6. SHARED SYSTEM INSULATED EQUIPMENT GROUNDING CONDUCTORS FROM SYSTEM RACEWAY
7. #4 BARE EQUIPMENT GROUNDING CONDUCTOR TO GROUND ROD (SEE S.D.D. FOR ADDITIONAL INFORMATION)
8. TYPICAL GROUNDING CONNECTION STAINLESS STEEL BOLT, NUT AND WASHERS ½" X 1½" X 13 TPI
9. APPROVED MECHANICAL TYPE CONNECTOR FOR EQUIPMENT GROUNDING CONDUCTORS. COMPRESSION, CRIMP OR WIRE NUT CONNECTORS ARE NOT ALLOWED.
10. FUSE ASSEMBLY, (SEE S.D.D. FOR ADDITIONAL INFORMATION)
11. CIRCUIT TAG, BOTH SIDES OF ALL FUSES (TYP.)
12. #12 AWG CONDUCTORS TO LUMINAIRE(S) & RECEPTACLES (SEE S.D.D. FOR ADDITIONAL INFORMATION)

3 WIRE - 120 VAC (UNGROUNDED CONDUCTOR)
WITH GROUNDED CONDUCTOR AND
WITH EQUIPMENT GROUNDING CONDUCTOR
FOR GFCI RECEPTACLES
COMMON TRIP BREAKERS REQUIRED FOR ALL
CIRCUITS

POLE WIRING DETAIL

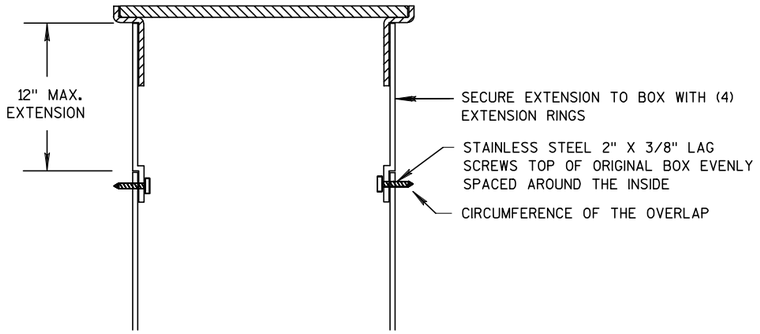
NO SCALE

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

NON-CONDUCTIVE PULL BOX DIMENSION (INCHES)			
BOX DIAMETER ** (INSIDE)	A	24	24
BOX DIAMETER ** (OUTSIDE)	B	25	25
BOX LENGTH	C	36	42
COVER	D	25 1/2	25 1/2
FRAME	E	27	27
FRAME	F	25 3/4	25 3/4
FRAME	G	22 1/2	22 1/2
WEIGHT (POUNDS) *			
COVER		50	50

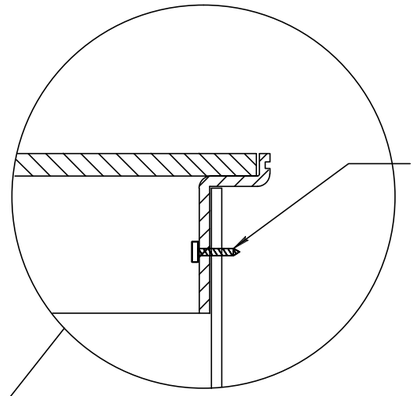
* THE ACTUAL WEIGHT OF THE COVER MAY VARY NOT TO EXCEED 100 LBS.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

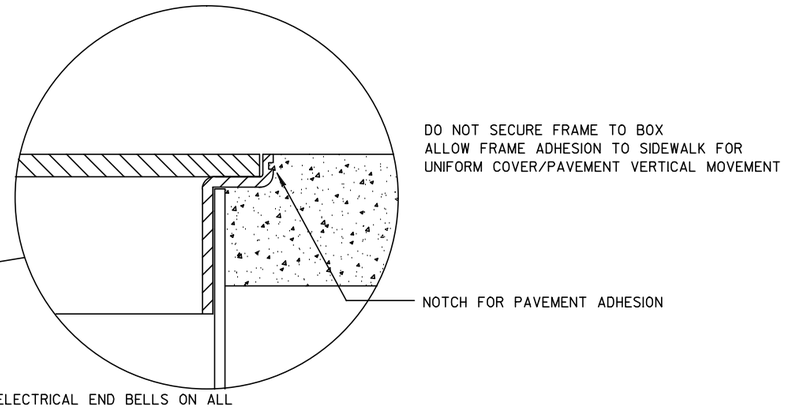


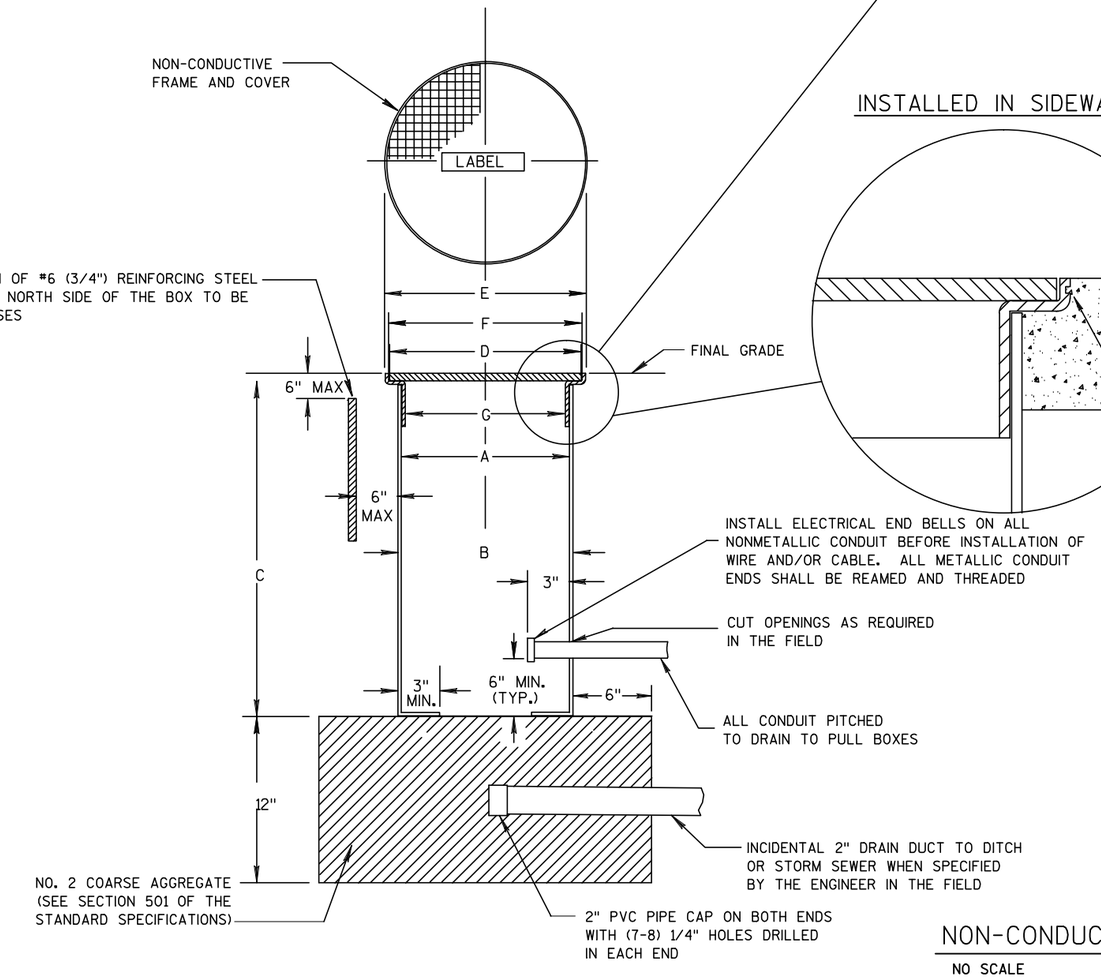
BOX EXTENSION

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK





NON-CONDUCTIVE PULL BOX

NO SCALE

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 DISCONTINUITIES LESS THAN 1/4".

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.

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 OR LIGHTING SYSTEMS. "WISDOT COMMUNICATIONS" FOR COMMUNICATIONS SYSTEMS.

2

N

CONSTRUCTION ZONE

BLOW UP 1

BLOW UP 2

BLOW UP 3

BLOW UP 4

DETOUR ROUTE

① DETOUR WEST 19 — M3-4 24"X12" — M1-6 24"X24"

② DETOUR EAST 19 — M3-2 24"X12" — M1-6 24"X24"

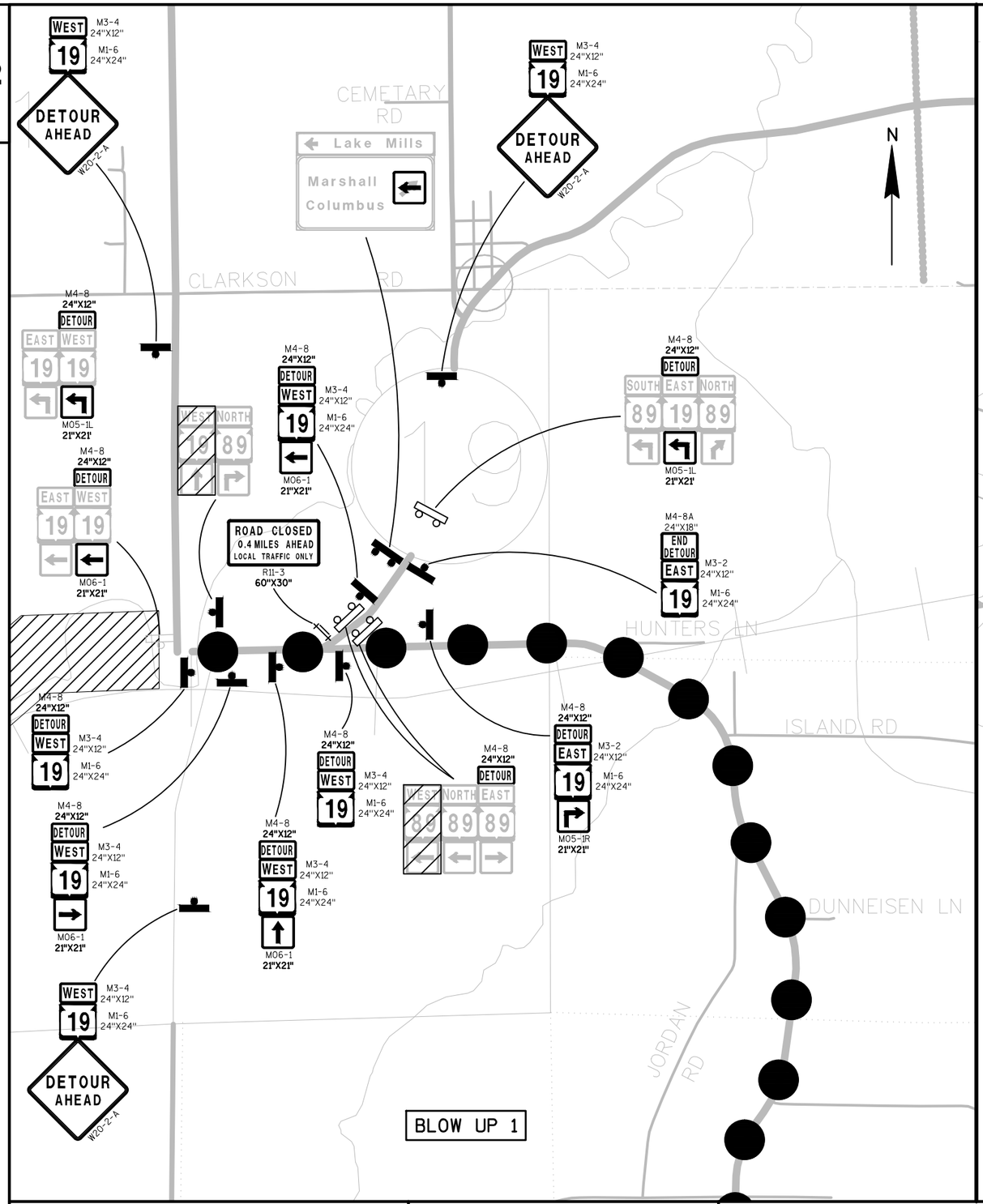
③ DETOUR WEST 19 — M3-4 36"X24" — M1-6 36"X36"

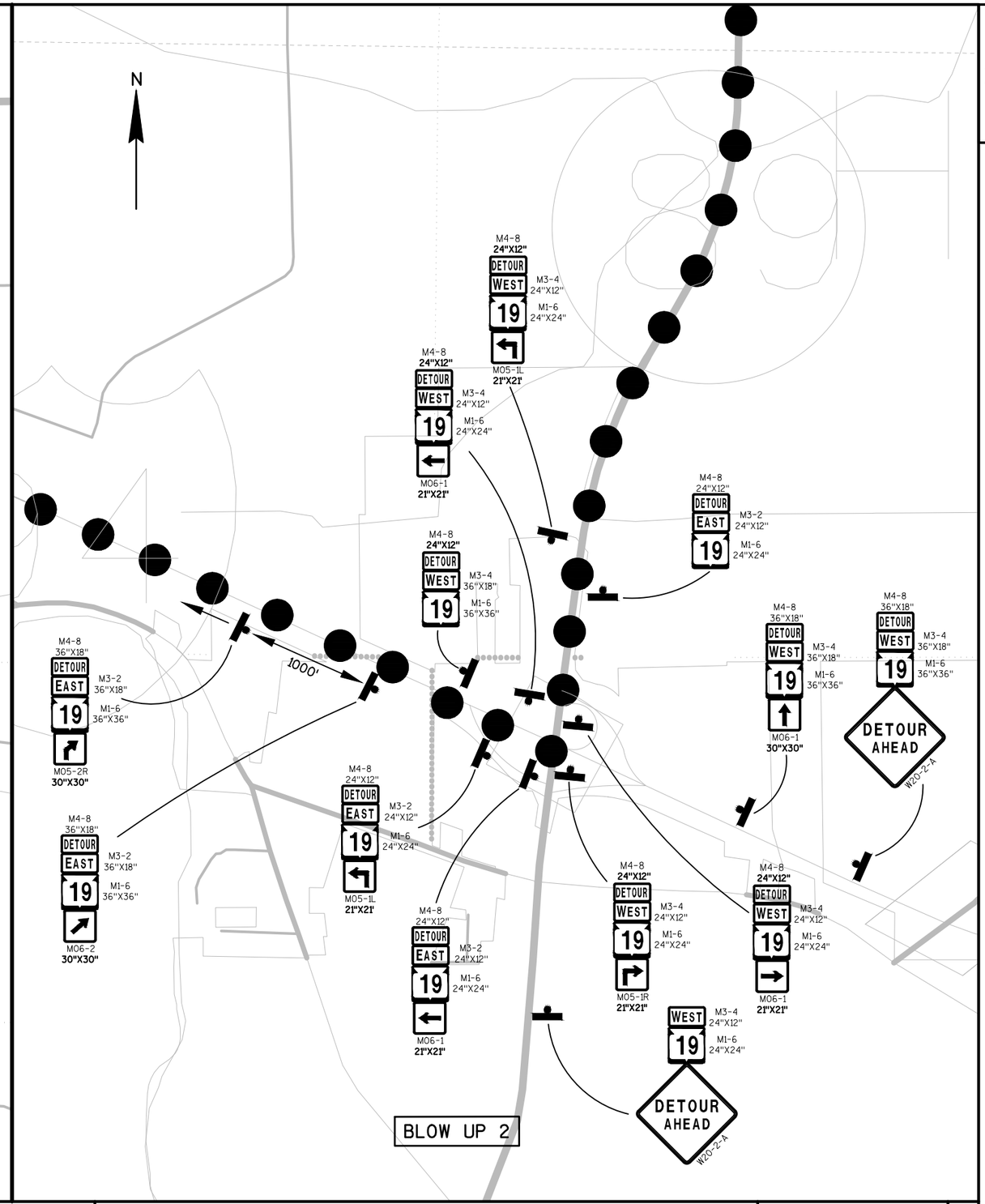
④ DETOUR EAST 19 — M3-2 36"X24" — M1-6 36"X36"

LEGEND

- POST MOUNTED DETOUR ROUTE SIGN/ (EXISTING)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DOUBLE STEEL SUPPORT SIGN
- DETOUR ROUTE

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	DETOUR STH 19	SHEET 101	E





PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	DETOUR STH 19 BLOW UPS	SHEET 102 E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.14_TRAFFIC CONTROL & CONSTRUCTION STAGING\027001_DT.DWG
LAYOUT NAME - 1.1
PLOT DATE : 10/31/2016 3:52 PM PLOT BY : DEYMARCOS, TIJLER JOPLOT NAME :
PLOT SCALE : 0.000851
WISDOT/CADDS SHEET 44

2

N

SHERMAN DR

TOWER LINE RD

PARK

OAK DR

MEADOWLARK DR

LEA DR

PLANTZ RD

GUNDERSON RD

SMITH DR

KRUEGER RD

BANNON RD

DAHL RD

M4-8 24"X12" DETOUR EAST 19 M3-2 24"X12" M1-6 24"X24" M06-1 21"X21"

M4-8 24"X12" DETOUR EAST 19 M3-2 24"X12" M1-6 24"X24" M05-1L 21"X21"

M4-8 24"X12" DETOUR WEST 19 M3-4 36"X18" M1-6 24"X24" M06-1 21"X21"

M4-8 24"X12" DETOUR WEST 19 M3-4 36"X18" M1-6 24"X24" M05-1R 21"X21"

M4-8 36"X18" DETOUR WEST 19 M3-4 36"X18" M1-6 36"X36" M06-2 30"X30"

M4-8 36"X18" DETOUR WEST 19 M3-4 36"X18" M1-6 36"X36" M05-2R 30"X30"

1000'

M4-8 36"X18" DETOUR EAST 19 M3-2 36"X18" M1-6 36"X36" M06-1 30"X30"

M4-8 36"X18" DETOUR EAST 19 M3-2 36"X18" M1-6 36"X36"

M4-8 24"X12" DETOUR EAST 19 M3-2 24"X12" M1-6 24"X24" M05-1R 21"X21"

M4-8 24"X12" DETOUR EAST 19 M3-2 24"X12" M1-6 24"X24" M06-1 21"X21"

EAST 19 M3-2 36"X18" M1-6 36"X36"

DETOUR AHEAD W20-2-A

EAST 19 M3-2 24"X12" M1-6 24"X24"

DETOUR AHEAD W20-2-A

BLOW UP 3

N

2

EAST 19 M3-2 24"X12" M1-6 24"X24"

DETOUR AHEAD W20-2-A

M4-8 24"X12" DETOUR EAST WEST SOUTH 19 19 73 M05-1R 21"X21"

WEST EAST NORTH 19 19 73

M4-8 24"X12" DETOUR EAST 19 M05-1R 21"X21"

Waterloo

Deerfield

M4-8 24"X12" DETOUR EAST 19 M3-2 24"X12" M1-6 24"X24" M06-1 21"X21"

M4-8 24"X12" DETOUR EAST 19 M3-2 24"X12" M1-6 24"X24" M06-1 21"X21"

SOUTH 73

EAST WEST 19 19

M4-8 24"X12" DETOUR EAST 19 M3-2 24"X12" M1-6 24"X24" M05-1L 21"X21"

ROAD CLOSED 3.3 MILES AHEAD LOCAL TRAFFIC ONLY R11-3 60"X30"

M4-8 24"X12" DETOUR EAST 19 M3-2 24"X12" M1-6 24"X24"

M4-8A 24"X18" END DETOUR WEST 19 M3-4 36"X18" M1-6 24"X24"

WEST EAST NORTH 19 19 73

NORTH EAST 73 19

BLOW UP 4

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	DETOUR STH 19 BLOW-UPS	SHEET 103 E

2

BLOW UP 5

DETOUR ROUTE

BLOW UP 1

BLOW UP 4

CONSTRUCTION ZONE

BLOW UP 3

BLOW UP 2

N

⑤ DETOUR NORTH 89 — M3-1 24"X12" / M1-6 24"X24"

⑥ DETOUR SOUTH 89 — M3-3 24"X12" / M1-6 24"X24"

⑦ DETOUR NORTH 89 — M3-1 36"X24" / M1-6 36"X36"

⑧ DETOUR SOUTH 89 — M3-3 36"X24" / M1-6 36"X36"

⑨ DETOUR NORTH 89 ↑ — M3-1 24"X12" / M1-6 24"X24" / M06-1 21"X21"

⑩ DETOUR SOUTH 89 ↑ — M3-3 24"X12" / M1-6 24"X24" / M06-1 21"X21"

LEGEND

- POST MOUNTED DETOUR ROUTE SIGN/ (EXISTING)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DOUBLE STEEL SUPPORT SIGN
- DETOUR ROUTE

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	DETOUR STH 89	SHEET 104	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.14_TRAFFIC CONTROL & CONSTRUCTION STAGING\027001_DT.DWG PLOT DATE : 10/31/2016 3:52 PM PLOT BY : DEYMARCOS, TIJLER JOPLOT NAME : PLOT SCALE : 1 IN:2 MI

2

CEMETARY RD

CLARKS RD

HUNTERS LN

ISLAND RD

DUNNEISEN LN

JORDAN RD

N

M4-8 24"X12" DETOUR SOUTH 89 — M06-1 21"X21"

M4-8 24"X12" DETOUR DETOUR SOUTH WEST 89 19 — M05-1L 21"X21" M05-1L 21"X21"

M3-4 24"X12" M3-1 24"X12" WEST NORTH 19 89 — M1-6 24"X24" M1-6 24"X24" — DETOUR AHEAD W20-2-A

M4-8 24"X12" DETOUR WEST NORTH EAST 19 89 — M4-8 24"X12" DETOUR NORTH 89 — M3-1 24"X12" M1-6 24"X24" — M06-1 21"X21"

M3-4 24"X12" M3-1 24"X12" WEST NORTH 19 89 — M1-6 24"X24" M1-6 24"X24" — DETOUR AHEAD W20-2-A

BLOW UP 1

* SIGNS ADJUSTED FROM STH 19 DETOUR

M4-8A 30"X24" END DETOUR SOUTH 89 — M3-3 24"X12" M1-6 36"X36"

M4-8 36"X18" DETOUR NORTH 89 — M3-1 36"X18" M1-6 36"X36"

M4-8 24"X12" DETOUR NORTH 89 — M3-1 24"X12" M1-6 24"X24" — M06-1 21"X21"

M4-8 24"X12" DETOUR NORTH 89 — M3-1 24"X12" M1-6 24"X24" — M05-1L 21"X21"

Exit 259 SOUTH 89 Lake Mills Waterloo 1 Mile

Exit 259 SOUTH 89 Lake Mills Waterloo

ROAD CLOSED 9.2 MILES AHEAD LOCAL TRAFFIC ONLY — R11-3 60"X30"

NORTH SOUTH 89 89

M4-8 36"X18" DETOUR NORTH 89 — M3-1 36"X18" M1-6 36"X36" — M06-1 30"X30"

Exit 259 SOUTH 89 Lake Mills Waterloo 1 Mile

Exit 259 SOUTH 89 Lake Mills Waterloo

M4-8 24"X12" DETOUR NORTH 89 — M3-1 24"X12" M1-6 24"X24" — M06-1 21"X21"

M4-8 24"X12" DETOUR NORTH 89 — M3-1 24"X12" M1-6 24"X24" — M05-1R 21"X21"

M3-4 24"X12" M3-1 24"X12" WEST NORTH 19 89 — M1-6 24"X24" M1-6 24"X24" — DETOUR AHEAD W20-2-A

M3-4 36"X18" M3-1 36"X18" WEST NORTH 19 89 — M1-6 36"X36" M1-6 36"X36" — DETOUR AHEAD W20-2-A

BLOW UP 2

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	DETOUR STH 89 BLOW UPS	SHEET 105	E

2

N

M3-2 36"X18" EAST 19 | M3-1 36"X18" NORTH 89 | M1-6 36"X36" | M1-6 36"X36"
DETOUR AHEAD W20-2-A
*

M4-8 24"X12" DETOUR SOUTH 89 M3-3 24"X12" M1-6 24"X24"
M06-1 21"X21"

M4-8 24"X12" DETOUR SOUTH 89 M3-3 24"X12" M1-6 24"X24"
M05-1L 21"X21"

M4-8 24"X12" DETOUR NORTH 89 M3-1 24"X12" M1-6 24"X24"

M4-8 24"X12" DETOUR NORTH 89 M3-1 24"X12" M1-6 24"X24"
M06-1 21"X21"

M4-8 24"X12" DETOUR NORTH 89 M3-1 24"X12" M1-6 24"X24"
M05-1R 21"X21"

M4-8 36"X18" DETOUR NORTH 89 M3-1 36"X18" M1-6 36"X36"
M06-2 30"X30"

M4-8 36"X18" DETOUR NORTH 89 M3-1 36"X18" M1-6 36"X36"
M05-2R 30"X30"

1000'

1000'

M4-8 36"X18" DETOUR SOUTH 89 M3-3 36"X18" M1-6 36"X36"

M4-8 36"X18" DETOUR NORTH 89 M3-1 36"X18" M1-6 36"X36"
M06-2 30"X30"

M4-8 24"X12" DETOUR NORTH 89 M3-1 24"X12" M1-6 24"X24"
M05-1L 21"X21"

M4-8 24"X12" DETOUR NORTH 89 M3-1 24"X12" M1-6 24"X24"
M06-1 21"X21"

M4-8 36"X18" DETOUR NORTH 89 M3-1 36"X18" M1-6 36"X36"
M05-2R 30"X30"

M4-8 24"X12" DETOUR NORTH 89 M3-1 24"X12" M1-6 24"X24"
M06-1 21"X21"

M3-2 24"X12" EAST 19 | M3-1 24"X12" NORTH 89 | M1-6 24"X24" | M1-6 24"X24"
*
DETOUR AHEAD W20-2-A

BLOW UP 3

* SIGNS ADJUSTED FROM STH 19 DETOUR

N

2

M4-8 24"X12" DETOUR SOUTH 89 M3-3 24"X12" M1-6 24"X24"
M05-1R 21"X21"

M4-8 24"X12" DETOUR SOUTH 89 M3-3 24"X12" M1-6 24"X24"
M06-1 21"X21"

M4-8 24"X12" DETOUR SOUTH 89 M3-3 24"X12" M1-6 24"X24"
M05-1L 21"X21"

M4-8 24"X12" DETOUR SOUTH 89 M3-3 24"X12" M1-6 24"X24"
M06-1 21"X21"

M4-8 24"X12" DETOUR NORTH 89 M3-1 24"X12" M1-6 24"X24"

M3-2 24"X12" EAST 19 | M3-1 24"X12" NORTH 89 | M1-6 24"X24" | M1-6 24"X24"
*
DETOUR AHEAD W20-2-A

M4-8 24"X12" DETOUR NORTH 89 M3-3 24"X12" M1-6 24"X24"
M06-1 21"X21"

M4-8 24"X12" DETOUR SOUTH 89 M3-3 24"X12" M1-6 24"X24"
M05-1R 21"X21"

M4-8 24"X12" DETOUR SOUTH 89 M3-3 24"X12" M1-6 24"X24"
M06-1 21"X21"

M4-8 24"X12" DETOUR NORTH 89 M3-1 24"X12" M1-6 24"X24"
M05-1R 21"X21"

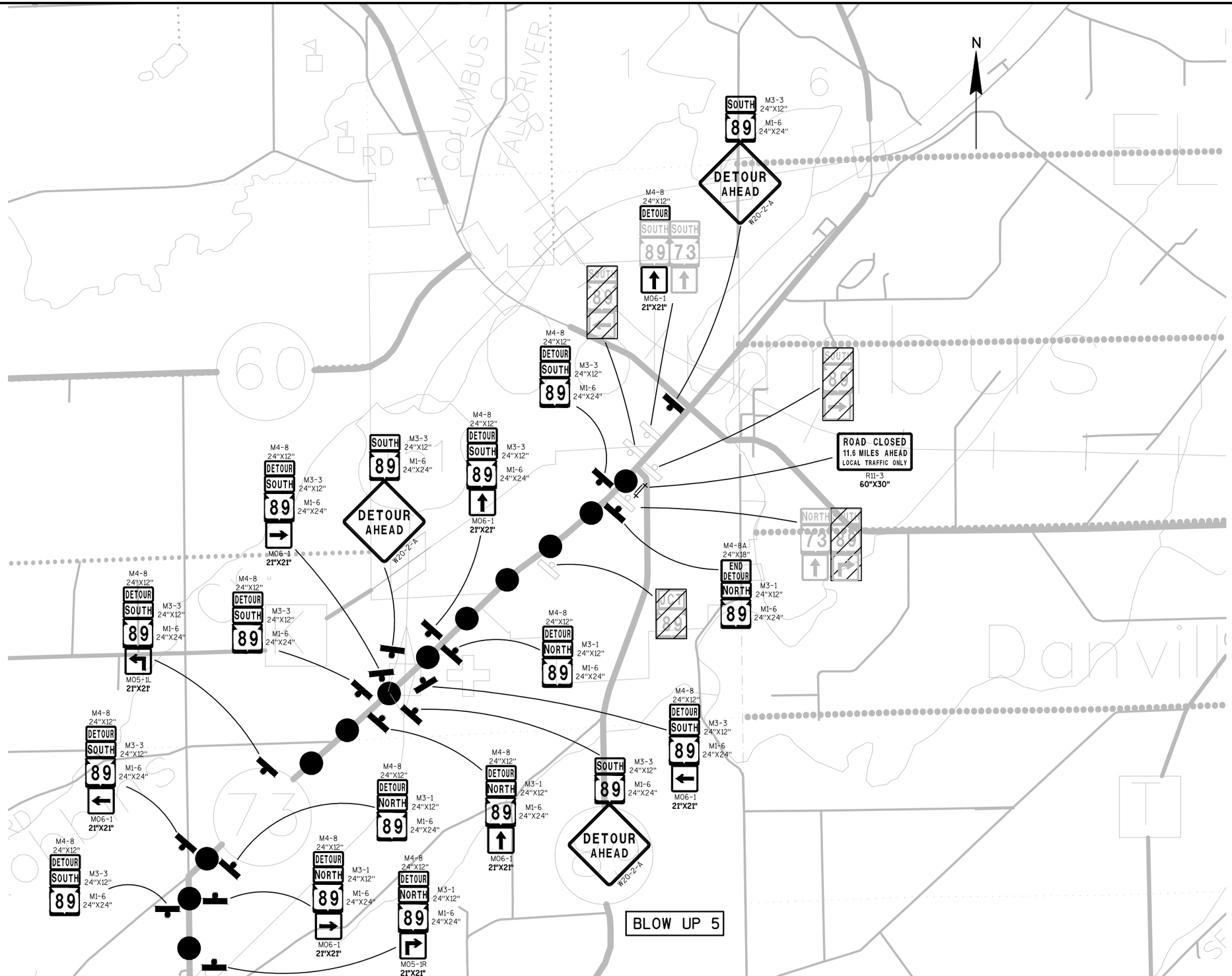
M4-8 24"X12" DETOUR NORTH 89 M3-1 24"X12" M1-6 24"X24"
M05-1L 21"X21"

M4-8 24"X12" DETOUR NORTH 89 M3-1 24"X12" M1-6 24"X24"
M06-1 21"X21"

BLOW UP 4

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	DETOUR STH 89 BLOW-UPS	SHEET 106	E

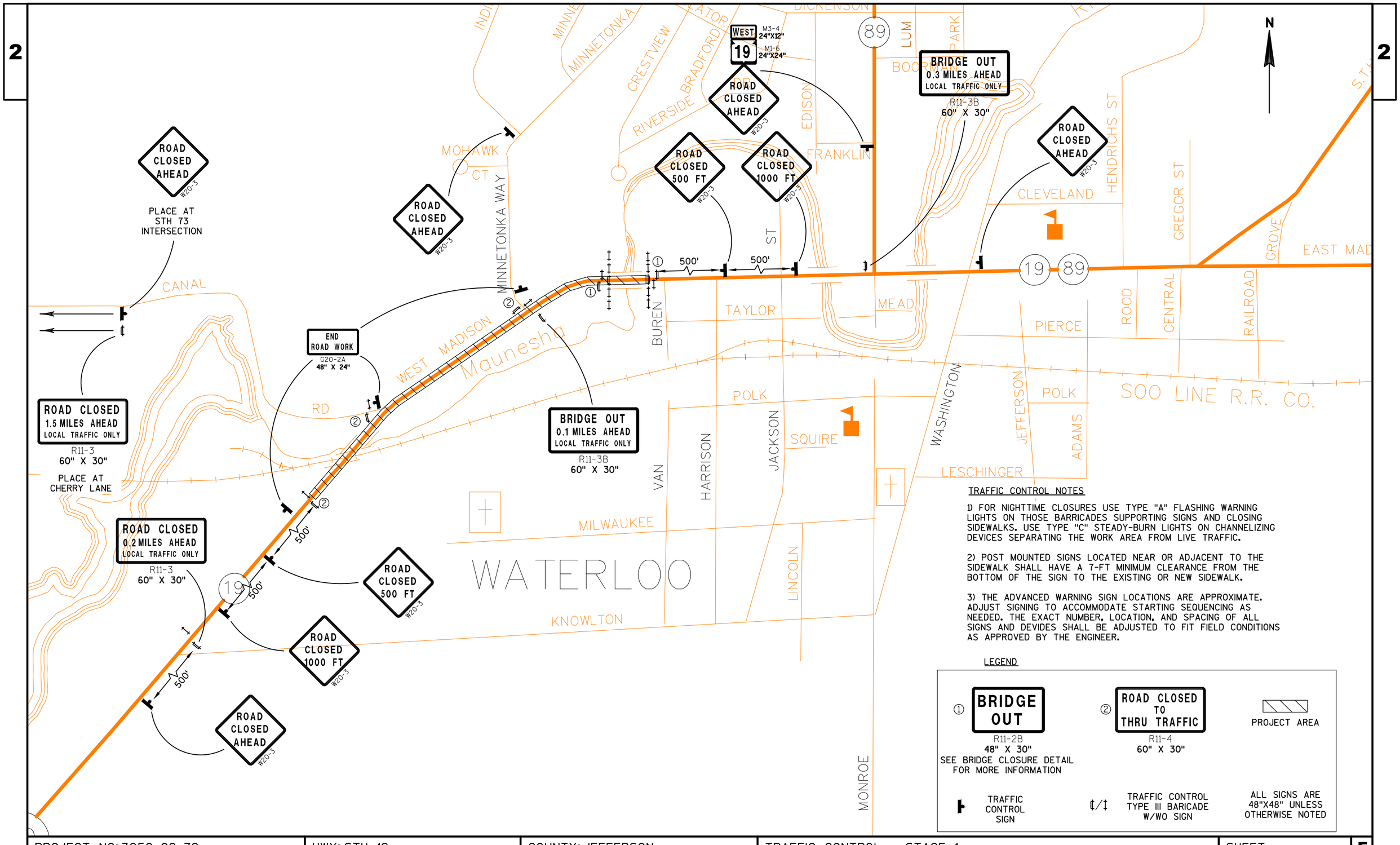
2



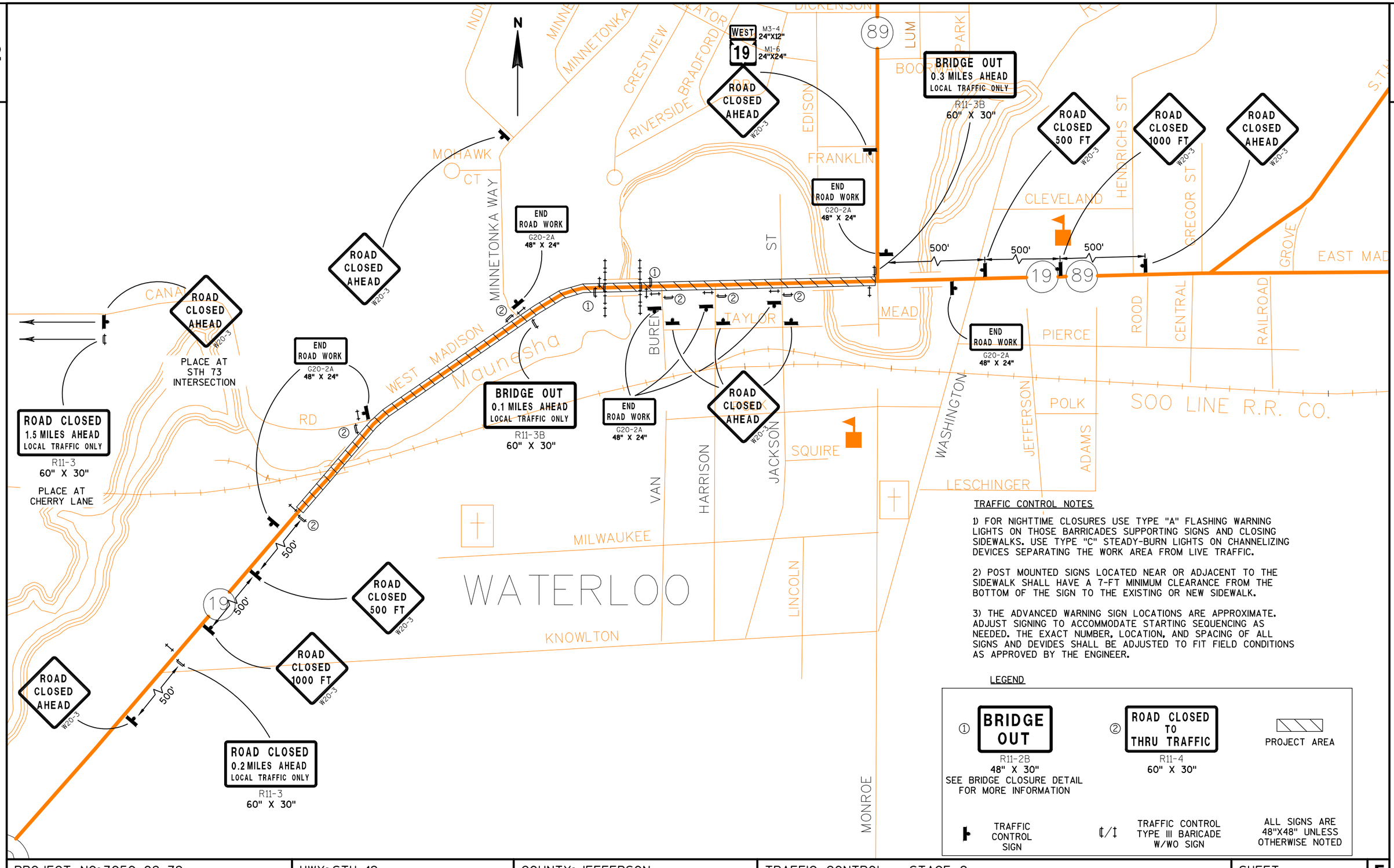
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	DETOUR STH 89 BLOW UP	SHEET 107 E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\2.14_TRAFFIC CONTROL & CONSTRUCTION STAGING\027001_DT.DWG
LAYOUT NAME - 2.3

PLOT DATE : 10/31/2016 3:52 PM PLOT BY : DEYMARCOS, TIJLER JOPLOT NAME : PLOT SCALE : 0.000326



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	TRAFFIC CONTROL - STAGE 1	SHEET 108	E



TRAFFIC CONTROL NOTES

1) FOR NIGHTTIME CLOSURES USE TYPE "A" FLASHING WARNING LIGHTS ON THOSE BARRICADES SUPPORTING SIGNS AND CLOSING SIDEWALKS. USE TYPE "C" STEADY-BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM LIVE TRAFFIC.

2) POST MOUNTED SIGNS LOCATED NEAR OR ADJACENT TO THE SIDEWALK SHALL HAVE A 7-FT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE EXISTING OR NEW SIDEWALK.

3) THE ADVANCED WARNING SIGN LOCATIONS ARE APPROXIMATE. ADJUST SIGNING TO ACCOMMODATE STARTING SEQUENCING AS NEEDED. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVIDES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

LEGEND

① BRIDGE OUT — R11-2B, 48" X 30", SEE BRIDGE CLOSURE DETAIL FOR MORE INFORMATION

② ROAD CLOSED TO THRU TRAFFIC — R11-4, 60" X 30"

PROJECT AREA

TRAFFIC CONTROL SIGN

TRAFFIC CONTROL TYPE III BARICADE W/WO SIGN

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	TRAFFIC CONTROL - STAGE 2	SHEET 109	E

2

LEGEND

① **BRIDGE OUT**
R11-2B
48" X 30"
SEE BRIDGE CLOSURE DETAIL FOR MORE INFORMATION

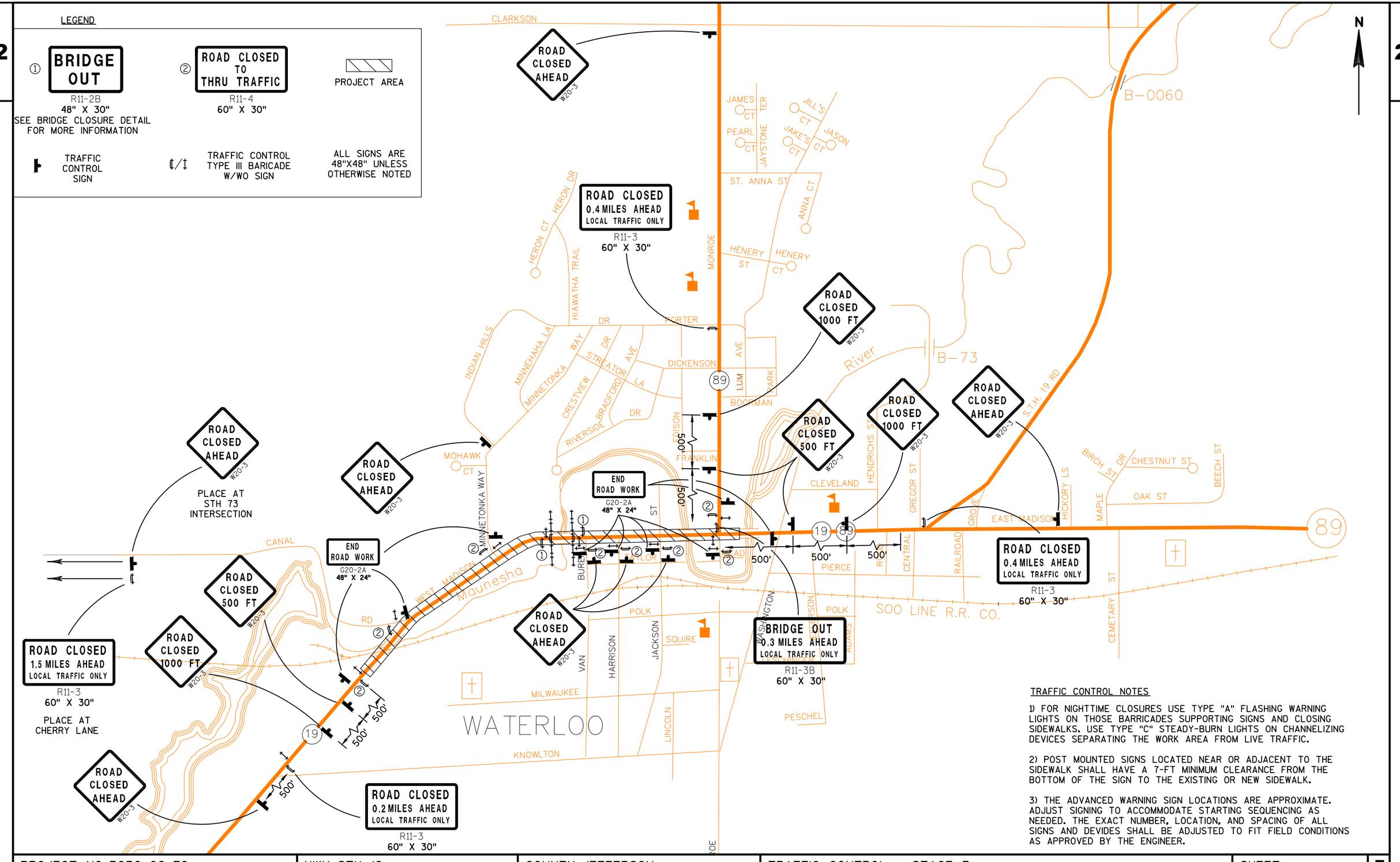
② **ROAD CLOSED TO THRU TRAFFIC**
R11-4
60" X 30"

PROJECT AREA

TRAFFIC CONTROL SIGN

TRAFFIC CONTROL TYPE III BARICADE W/WO SIGN

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED



TRAFFIC CONTROL NOTES

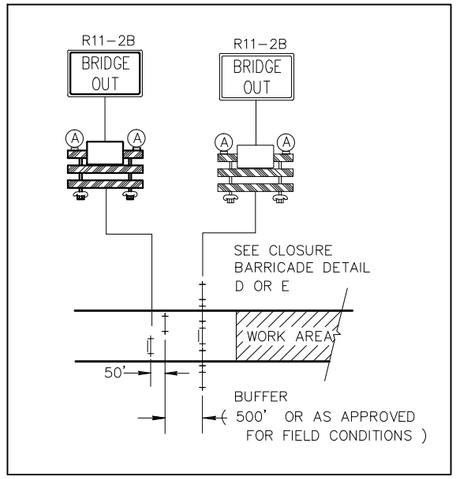
1) FOR NIGHTTIME CLOSURES USE TYPE "A" FLASHING WARNING LIGHTS ON THOSE BARRICADES SUPPORTING SIGNS AND CLOSING SIDEWALKS. USE TYPE "C" STEADY-BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM LIVE TRAFFIC.

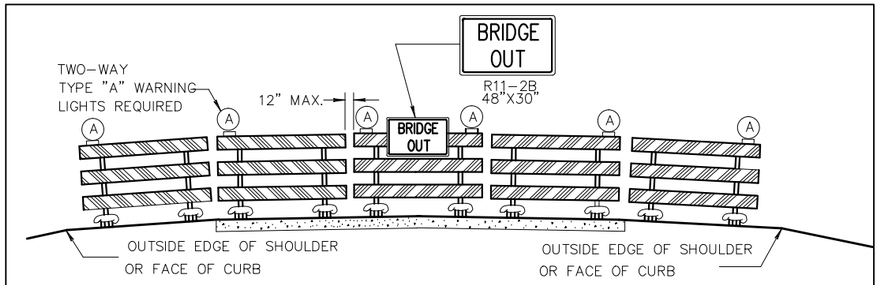
2) POST MOUNTED SIGNS LOCATED NEAR OR ADJACENT TO THE SIDEWALK SHALL HAVE A 7-FT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE EXISTING OR NEW SIDEWALK.

3) THE ADVANCED WARNING SIGN LOCATIONS ARE APPROXIMATE. ADJUST SIGNING TO ACCOMMODATE STARTING SEQUENCING AS NEEDED. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVIDES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	TRAFFIC CONTROL - STAGE 3	SHEET 110	E

2

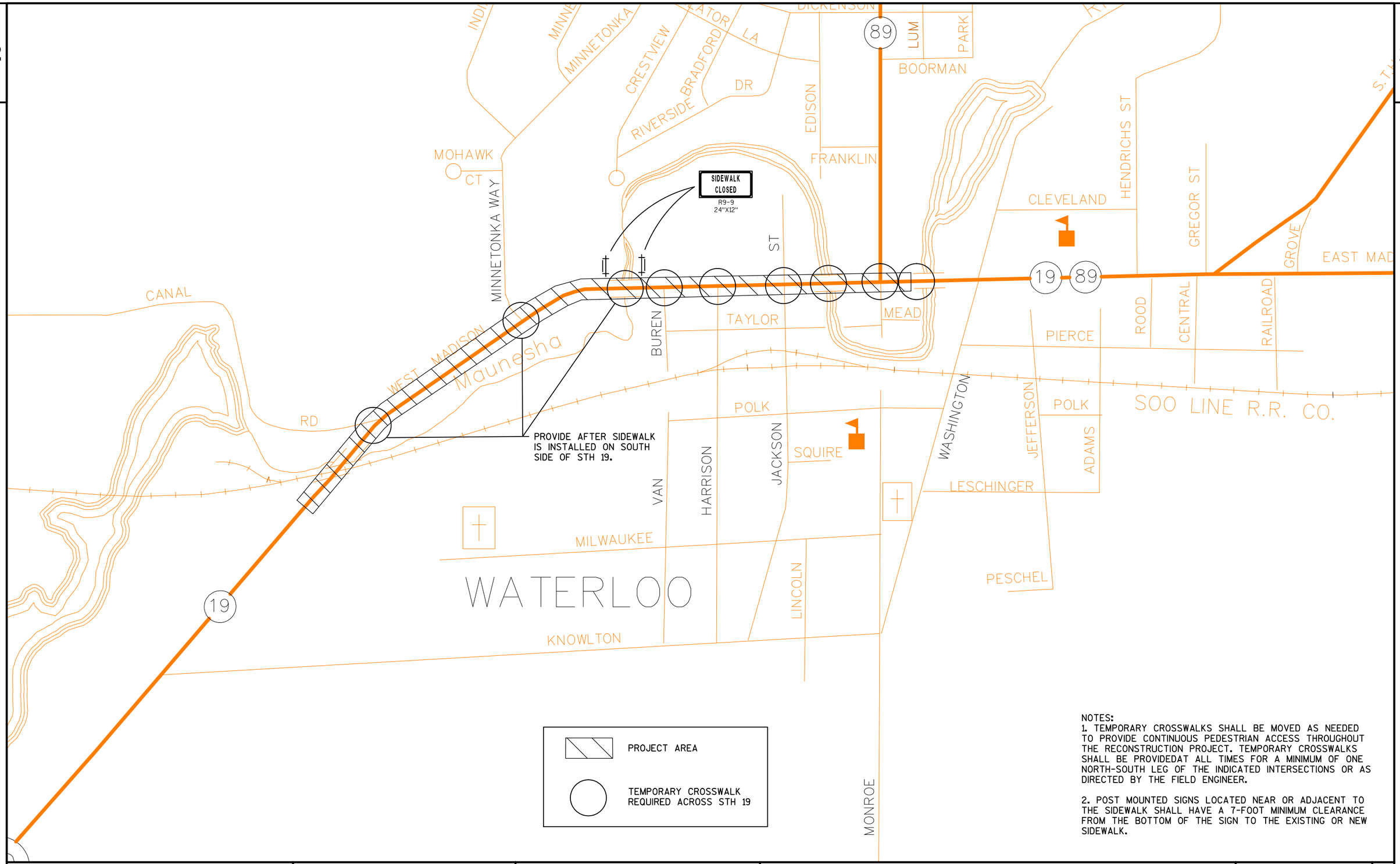




BRIDGE CLOSURE BARRICADE DETAIL

APPROACH VIEW

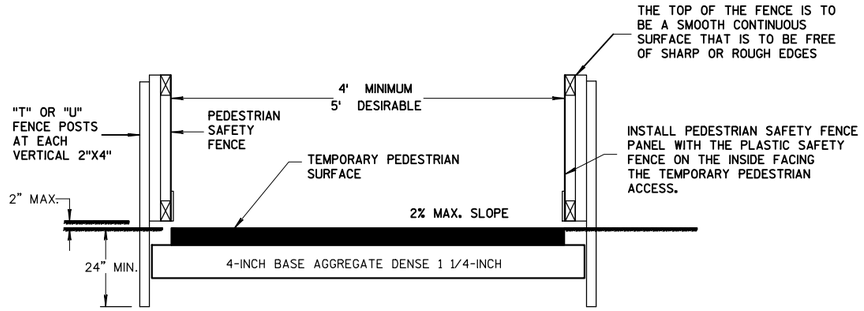
2



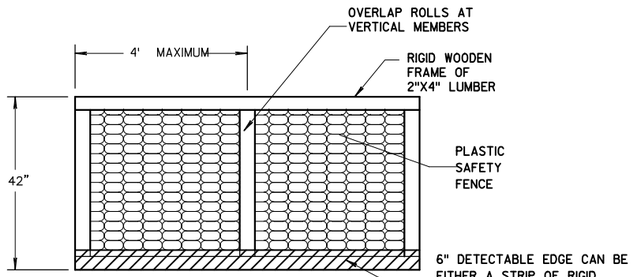
NOTES:
1. TEMPORARY CROSSWALKS SHALL BE MOVED AS NEEDED TO PROVIDE CONTINUOUS PEDESTRIAN ACCESS THROUGHOUT THE RECONSTRUCTION PROJECT. TEMPORARY CROSSWALKS SHALL BE PROVIDEDAT ALL TIMES FOR A MINIMUM OF ONE NORTH-SOUTH LEG OF THE INDICATED INTERSECTIONS OR AS DIRECTED BY THE FIELD ENGINEER.

2. POST MOUNTED SIGNS LOCATED NEAR OR ADJACENT TO THE SIDEWALK SHALL HAVE A 7-FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE EXISTING OR NEW SIDEWALK.

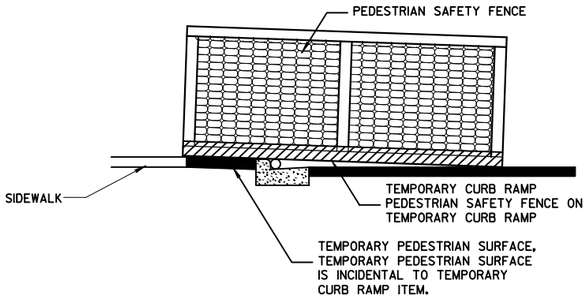
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PEDESTRIAN ACCESS - OVERVIEW	SHEET 112	E

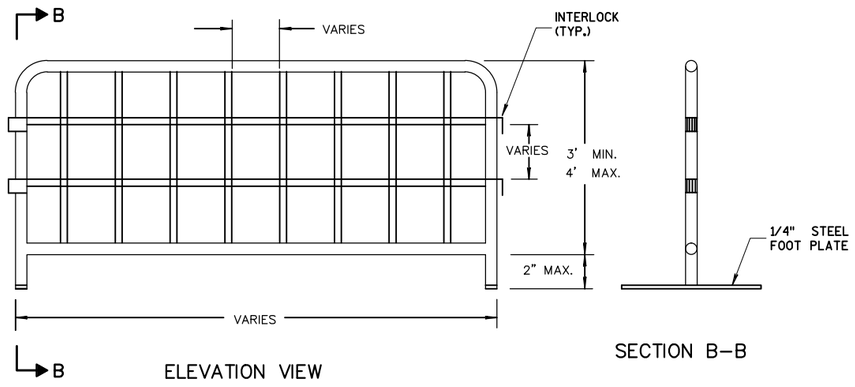


TEMPORARY PEDESTRIAN ACCESS



PEDESTRIAN SAFETY FENCE

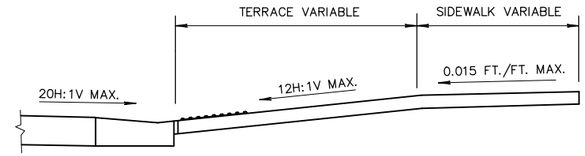




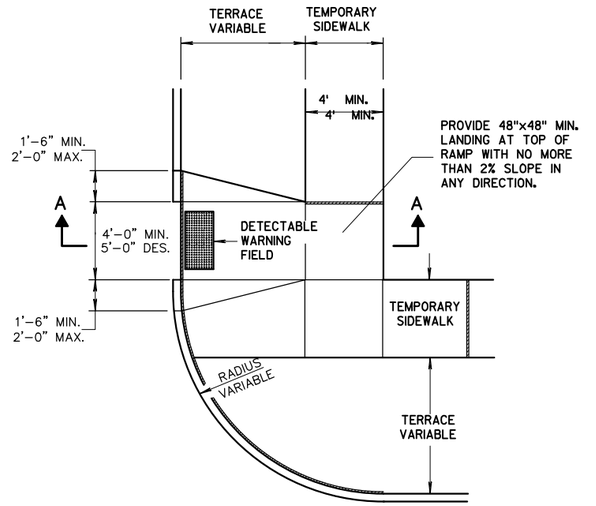
TEMPORARY PEDESTRIAN STEEL BARRICADE

GENERAL NOTES

① INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



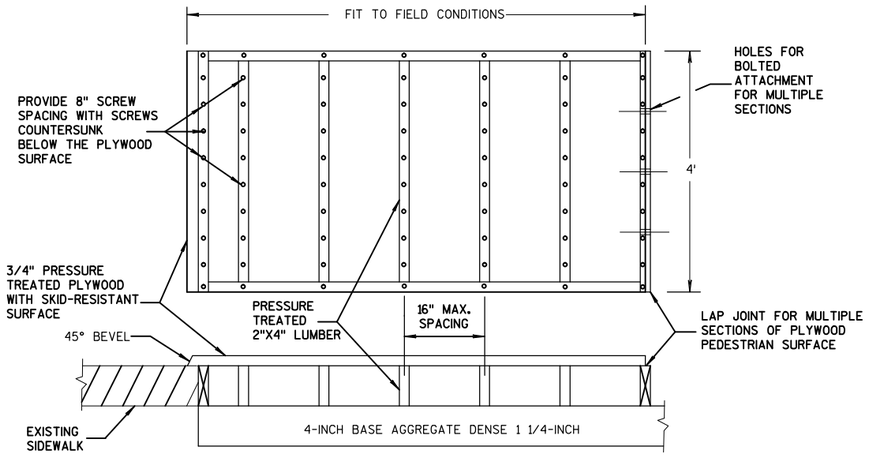
SECTION A-A



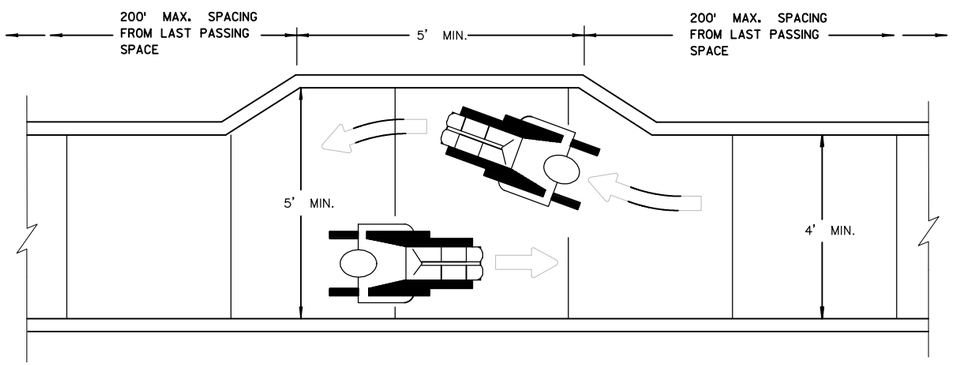
PLAN VIEW

TEMPORARY TYPE 3 RAMP

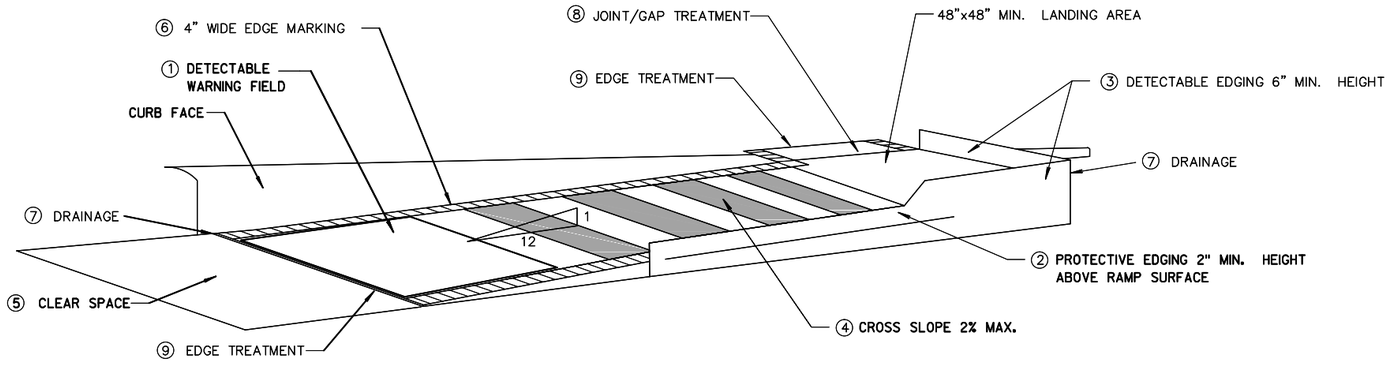
(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL



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.**

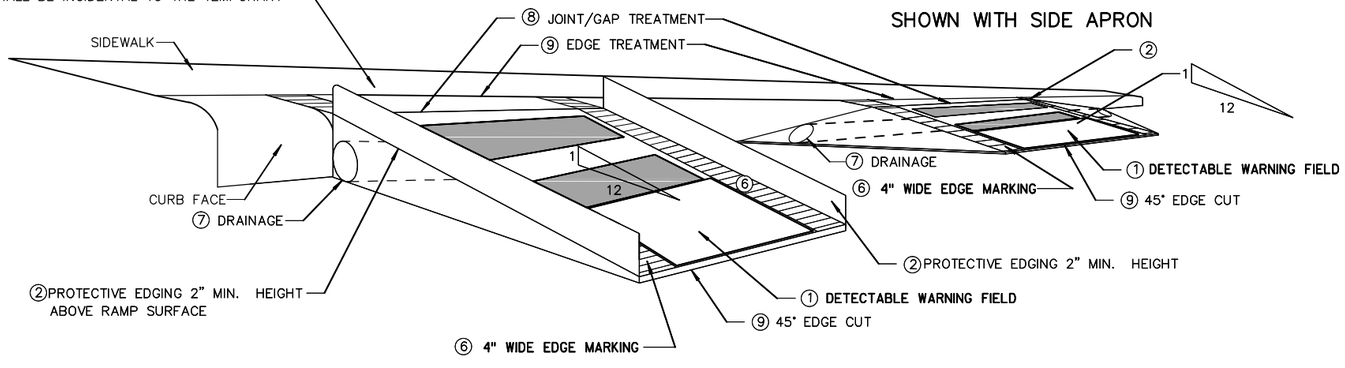
⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

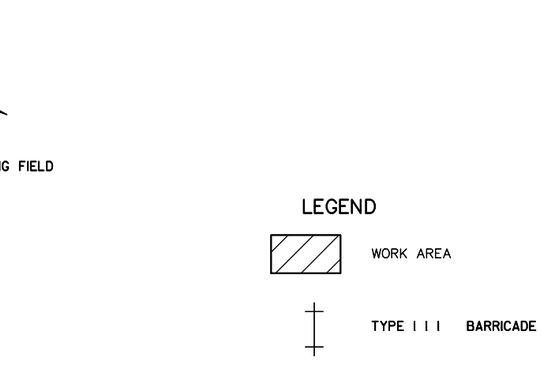
⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

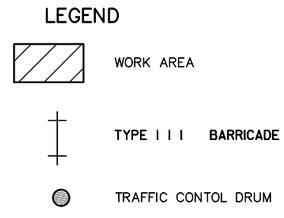
⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.

ANY TEMPORARY SURFACE REQUIRED THROUGH THE EXISTING TERRACE TO MAKE CONNECTION BETWEEN SIDEWALK AND TEMPORARY CURB RAMP SHALL BE ADA COMPLIANT AND SHALL BE INCIDENTAL TO THE TEMPORARY CURB RAMP ITEM.

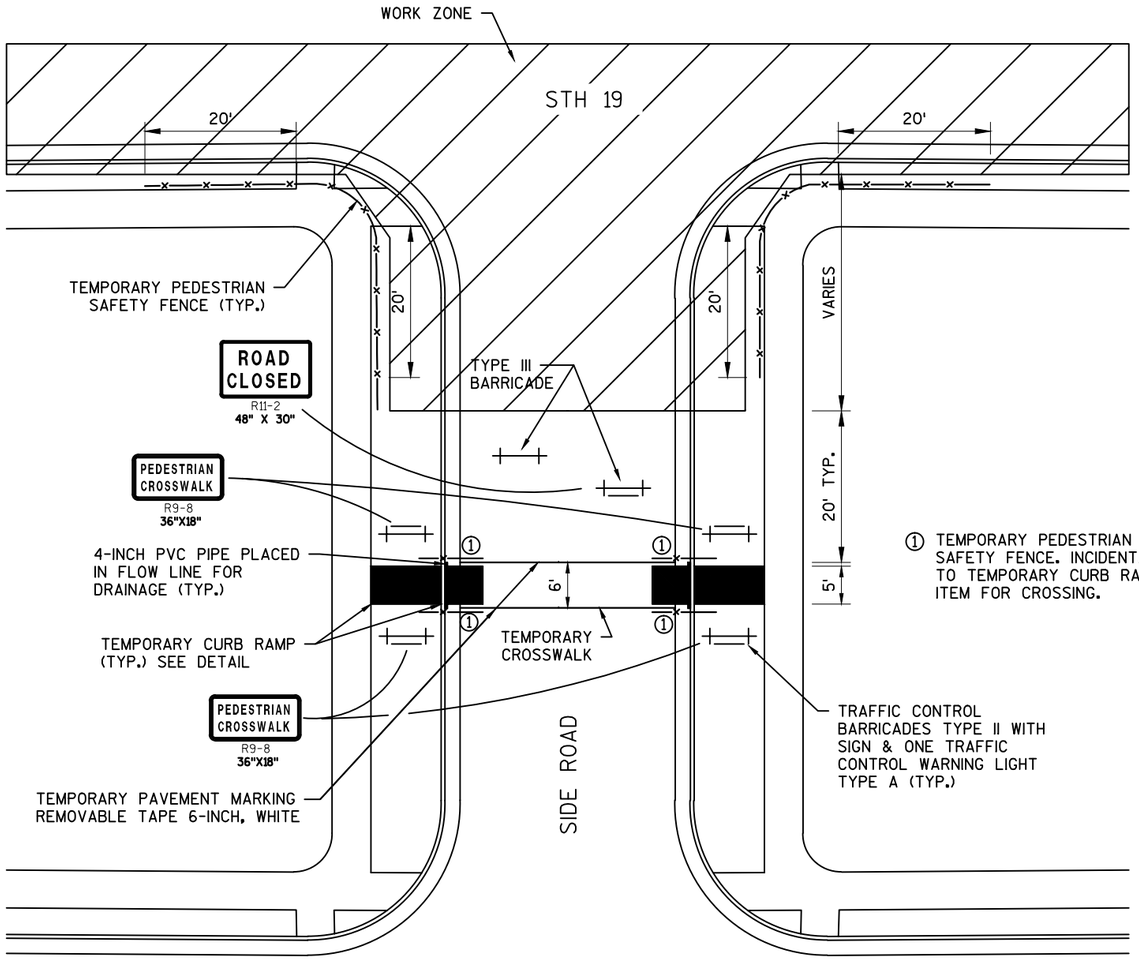


SHOWN WITH PROTECTIVE EDGE



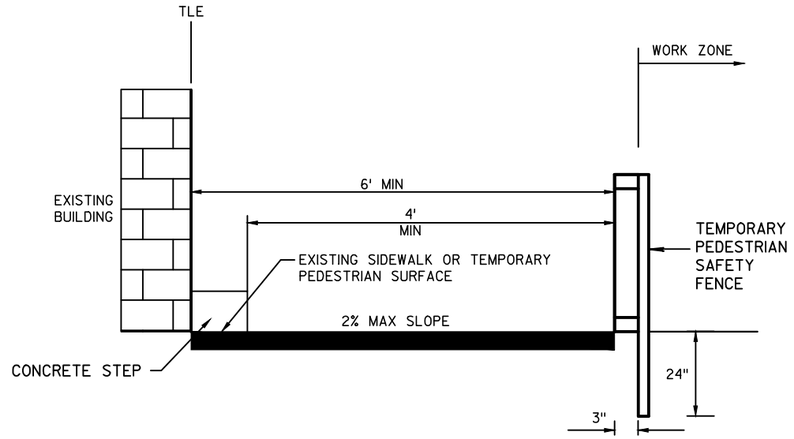


TEMPORARY CURB RAMP
PERPENDICULAR TO CURB



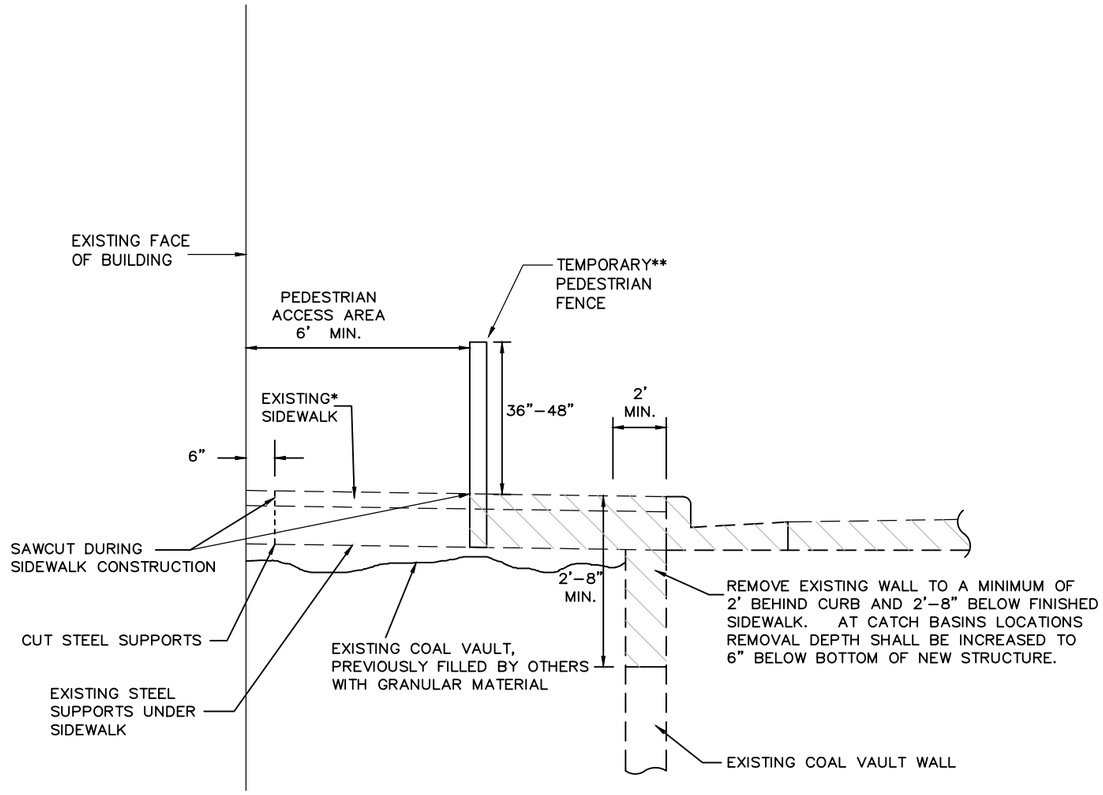
USE ACROSS ALL SIDE STREETS CLOSED TO THROUGH TRAFFIC ACROSS STH 19.

TEMPORARY CROSSWALK DETAIL – SIDE STREET CROSSINGS
(REQUIRED AT ALL CLOSED SIDE STREETS)



TEMPORARY PEDESTRIAN ACCESS AT BUILDING FACE

2

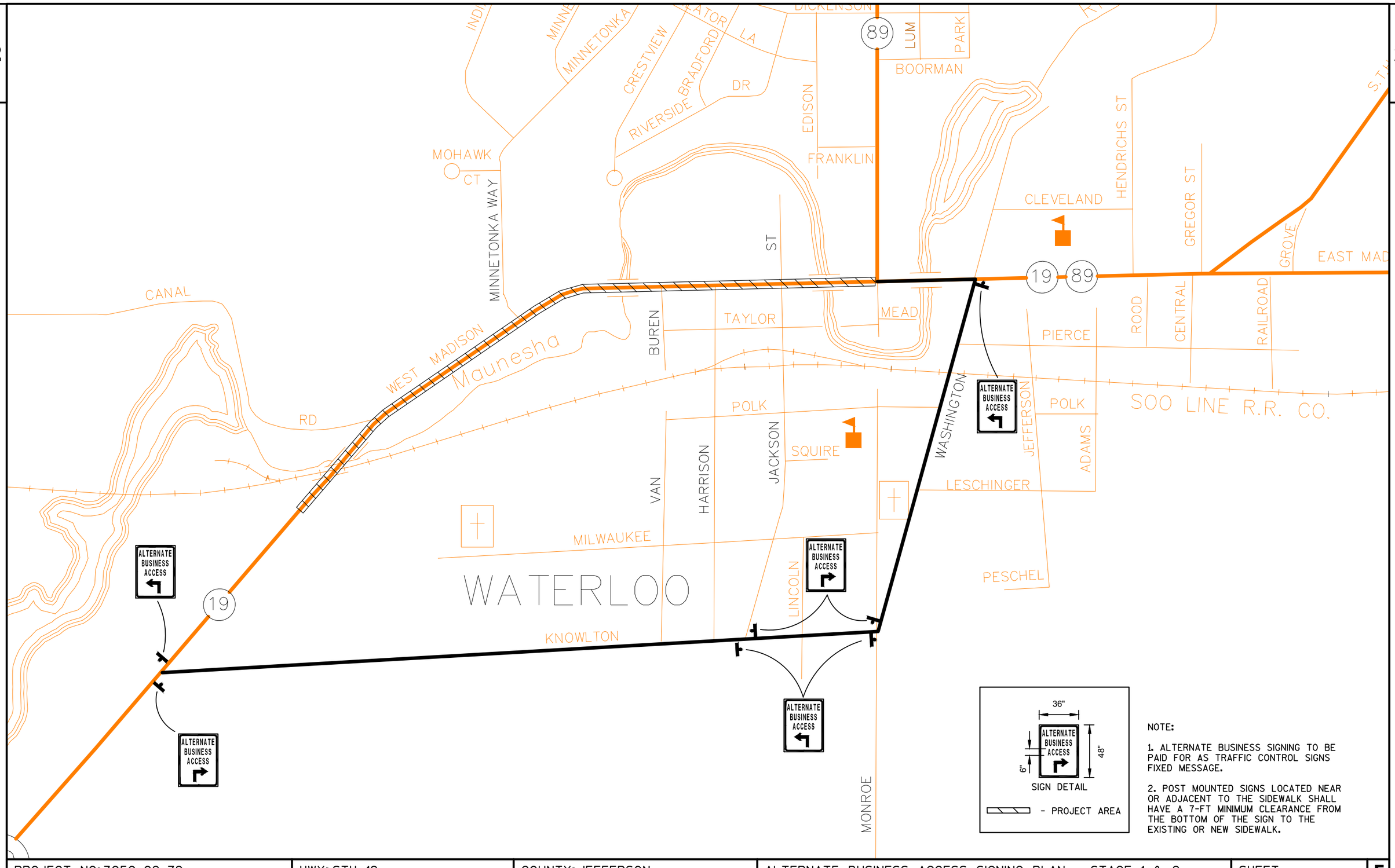


TEMPORARY PEDESTRIAN ACCESS & REMOVE COAL VAULT WALL DETAIL

*EXISTING SIDEWALK MAY BE ALLOWED TO REMAIN IN PLACE FOR PEDESTRIAN ACCESS, BUT IF FOR ANY REASON THE EXISTING SIDEWALK CANNOT BE MAINTAINED FOR PEDESTRIAN ACCESS, THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A MINIMUM 6–FOOT WIDE ADA ACCESSIBLE PEDESTRIAN ACCESS UNTIL SIDEWALK IS REMOVED FOR REPLACEMENT.

**MAINTAIN TEMPORARY PEDESTRIAN FENCE AT EDGE OF EXISTING SIDEWALK FOR PEDESTRIAN ACCESS AREA AT ALL TIMES DURING ROADWAY WORK. SEE 'PEDESTRIAN ACCOMMODATION – TEMPORARY PEDESTRIAN ACCESS AT BUILDING FACE' CONSTRUCTION DETAIL FOR LIMITS OF PEDESTRIAN SAFETY FENCE.

2



36"
ALTERNATE BUSINESS ACCESS
48"
6"
SIGN DETAIL

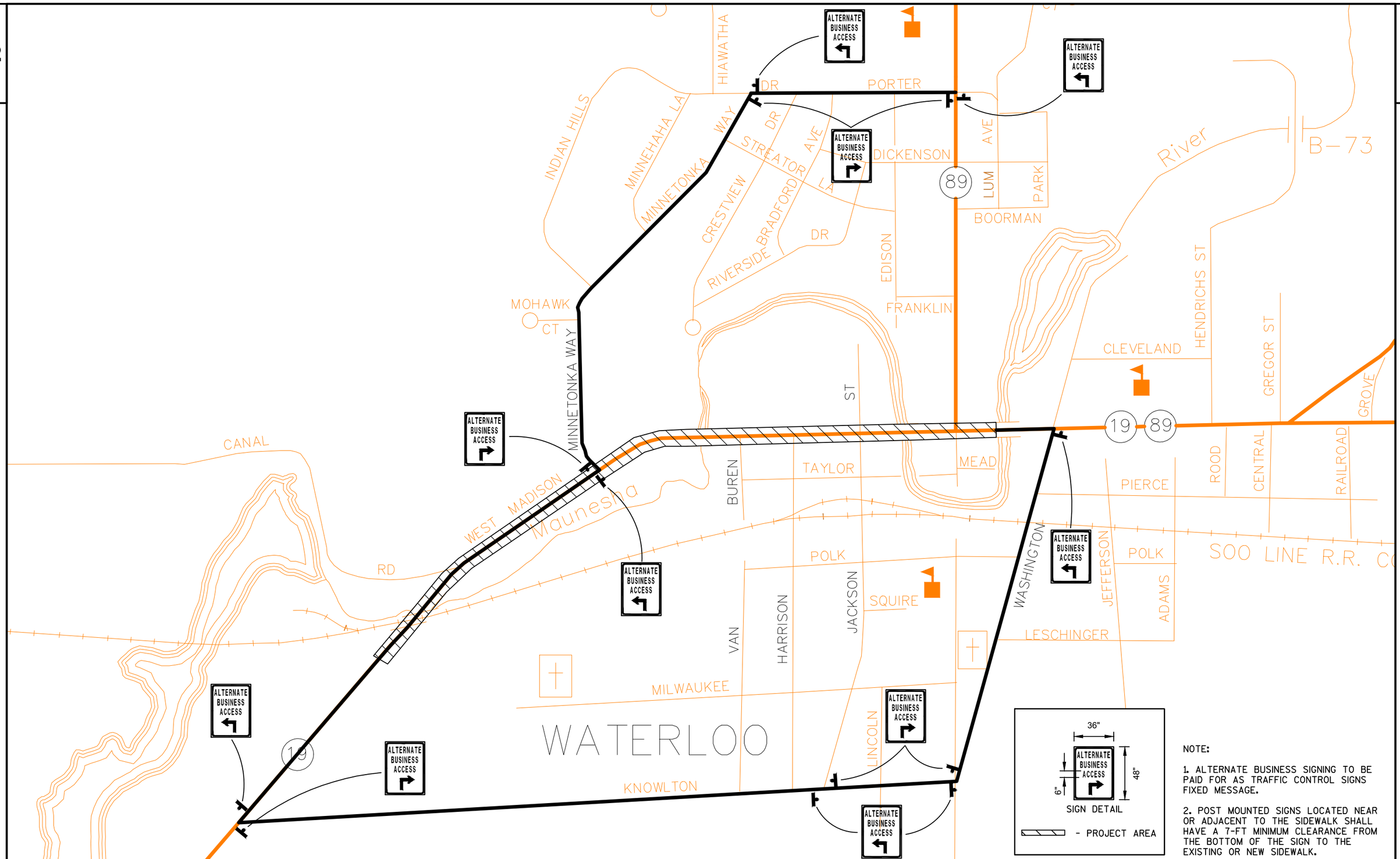
- PROJECT AREA

NOTE:

1. ALTERNATE BUSINESS SIGNING TO BE PAID FOR AS TRAFFIC CONTROL SIGNS FIXED MESSAGE.

2. POST MOUNTED SIGNS LOCATED NEAR OR ADJACENT TO THE SIDEWALK SHALL HAVE A 7-FT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE EXISTING OR NEW SIDEWALK.

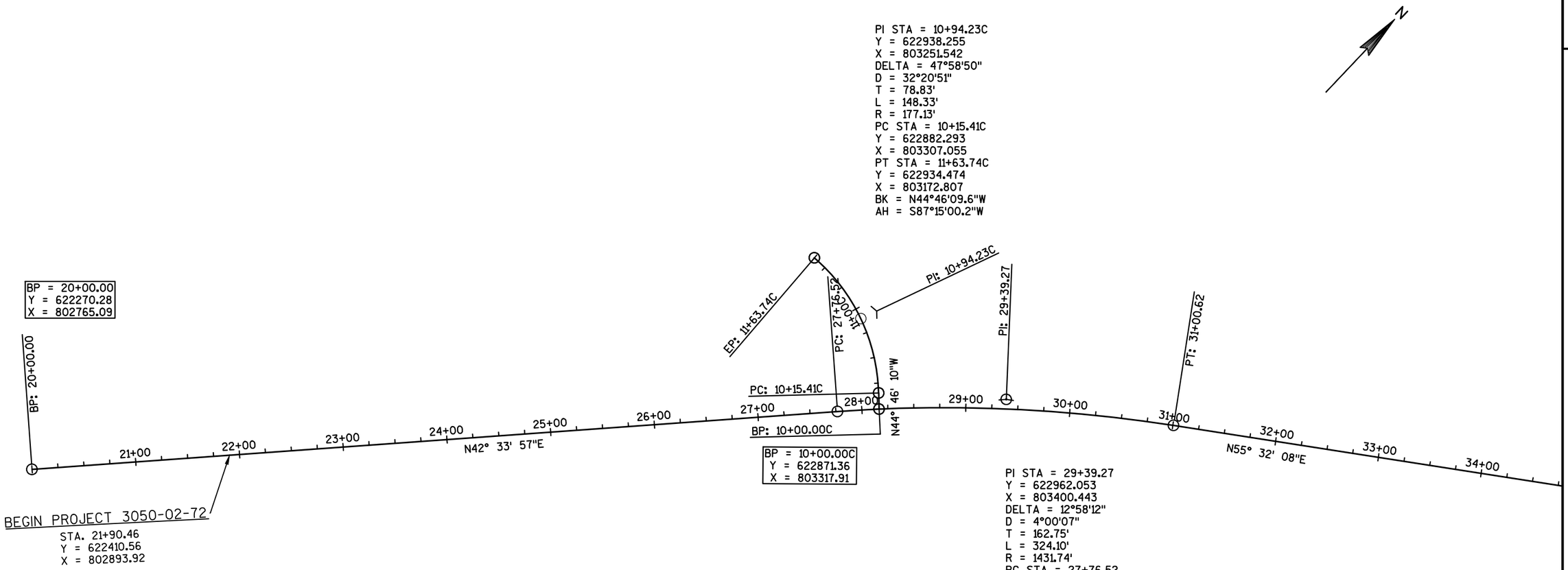
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	ALTERNATE BUSINESS ACCESS SIGNING PLAN - STAGE 1 & 2	SHEET 117	E



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	ALTERNATE BUSINESS ACCESS SIGNING PLAN - STAGE 3	SHEET 118	E

2

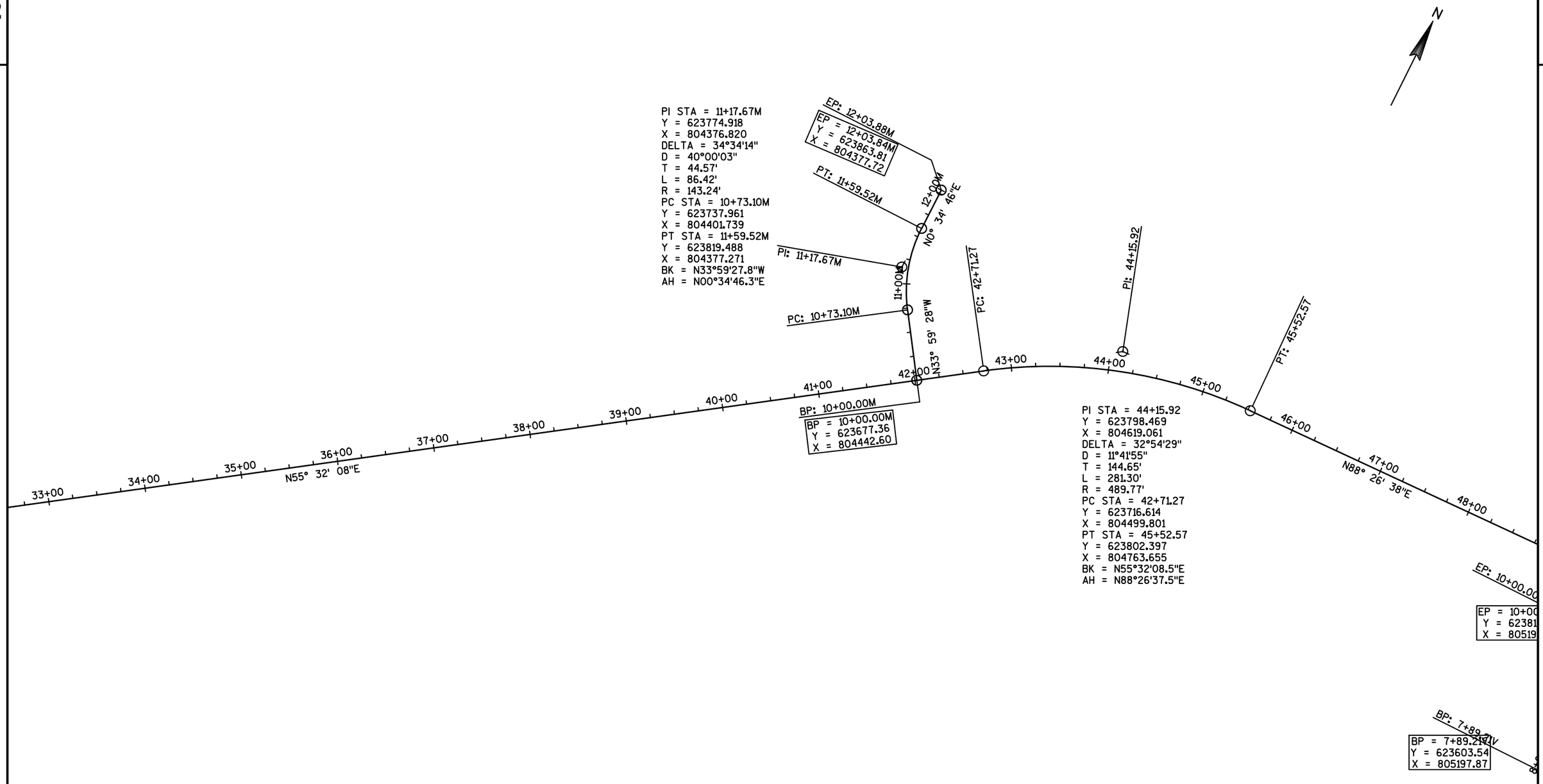
PI STA = 10+94.23C
Y = 622938.255
X = 803251.542
DELTA = 47°58'50"
D = 32°20'51"
T = 78.83'
L = 148.33'
R = 177.13'
PC STA = 10+15.41C
Y = 622882.293
X = 803307.055
PT STA = 11+63.74C
Y = 622934.474
X = 803172.807
BK = N44°46'09.6"W
AH = S87°15'00.2"W



PI STA = 29+39.27
Y = 622962.053
X = 803400.443
DELTA = 12°58'12"
D = 4°00'07"
T = 162.75'
L = 324.10'
R = 1431.74'
PC STA = 27+76.52
Y = 622842.190
X = 803290.355
PT STA = 31+00.62
Y = 623054.150
X = 803534.624
BK = N42°33'56.6"E
AH = N55°32'08.5"E

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	ALIGNMENT OVERVIEW	SHEET 119	E

2



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	ALIGNMENT OVERVIEW	SHEET 120	E

2

N

PI: 49+72.28
PI = 49+72.28
Y = 623813.80
X = 805183.21

PI: 57+12.27
PI = 57+12.27
Y = 623839.51
X = 805922.75

PI: 57+61.96
PI = 57+61.96
Y = 623842.73
X = 805972.33

PI: 60+38.89
PI = 60+38.89
Y = 623852.36
X = 806249.10

PI: 60+58.23
PI = 60+58.23
Y = 623851.95
X = 806268.44

47+00 48+00 49+00 50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00

N88° 26' 38"E

N88° 00' 32"E

N86° 16' 43"E

N88° 00' 31"E

S88° 48' 26"E

N88° 13' 45"E

EP: 10+00.00V
EP = 10+00.00V
Y = 623814.32
X = 805198.38

9+00V N0° 08' 18"E

BP: 7+89.21V
BP = 7+89.21V
Y = 623603.54
X = 805197.87

8+00V

EP: 10+00.00H
EP = 10+00.00H
Y = 623825.96
X = 805533.01

9+00H N1° 06' 05"E

BP: 7+88.12H
BP = 7+88.12H
Y = 623614.11
X = 805528.93

8+00H

EP: 10+00.00J
EP = 10+00.00J
Y = 623841.12
X = 805947.54

9+00J N1° 12' 32"E

BP: 8+50.00J
BP = 8+50.00J
Y = 623691.16
X = 805944.38

EP: 10+
EP = 10
Y = 62
X = 80

BP:
BP =
Y =
X =

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	ALIGNMENT OVERVIEW	SHEET 121	E

2

N

EP: 12+23.00S
EP = 12+23.00S
Y = 624084.71
X = 806543.08

PI = 57+61.96
Y = 623842.73
X = 805972.33

PI = 60+38.89
Y = 623852.36
X = 806249.10

PI = 60+58.23
Y = 623851.95
X = 806268.44

PI = 62+98.68
Y = 623859.38
X = 806508.77

PI = 63+64.85
Y = 623863.79
X = 806574.79

EP = 69+18.30
Y = 623868.13
X = 807128.23

BP: 10+00.00S
BP = 10+00.00S
Y = 623861.71
X = 806543.59

PI: 57+61.96
PI: 60+38.89
PI: 60+58.23
PI: 62+98.68
PI: 63+64.85
EP: 69+18.30

12+00S
11+00S
N0° 07' 55"W

58+00
59+00
60+00
61+00
62+00
63+00
64+00
65+00
66+00
67+00
68+00
69+00

N88° 00' 31"E
S88° 48' 26"E
N88° 13' 45"E
N86° 10' 39"E
N89° 33' 05"E

EP: 10+00.00R
EP = 10+00.00R
Y = 623861.62
X = 806542.24

9+00R
N1° 13' 59"E

BP: 8+40.13R
BP = 8+40.13R
Y = 623701.79
X = 806538.80

N1° 12' 32"E

END PROJECT 3050-02-72
STA. 65+89.16
Y = 623865.55
X = 806799.10

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	ALIGNMENT OVERVIEW	SHEET 122	E

Estimate Of Quantities

					3050-02-72	3050-02-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0010	201.0120	Clearing	ID	1,235.000	1,235.000	
0020	201.0220	Grubbing	ID	1,235.000	1,235.000	
0030	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000	
0040	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. Sta. 47+48	LS	1.000	1.000	
0050	204.0100	Removing Pavement	SY	18,261.000	18,261.000	
0060	204.0105	Removing Pavement Butt Joints	SY	178.000	178.000	
0070	204.0120	Removing Asphaltic Surface Milling	SY	1,551.000	1,551.000	
0080	204.0150	Removing Curb & Gutter	LF	416.000	416.000	
0090	204.0155	Removing Concrete Sidewalk	SY	3,252.000	3,252.000	
0100	204.0185	Removing Masonry	CY	10.000	10.000	
0110	204.0195	Removing Concrete Bases	EACH	28.000	28.000	
0120	204.0220	Removing Inlets	EACH	22.000	22.000	
0130	204.0245	Removing Storm Sewer (size) 01. 10-Inch	LF	112.000	112.000	
0140	204.0245	Removing Storm Sewer (size) 02. 12-Inch	LF	718.000	718.000	
0150	204.0245	Removing Storm Sewer (size) 03. 18-Inch	LF	359.000	359.000	
0160	204.9090.S	Removing (item description) 01. Retaining Wall & Steps	LF	159.000	159.000	
0170	205.0100	Excavation Common	CY	17,127.000	17,127.000	
0180	206.1000	Excavation for Structures Bridges (structure) 01. B-28-175	LS	1.000	1.000	
0190	210.1500	Backfill Structure Type A	TON	466.000	466.000	
0200	213.0100	Finishing Roadway (project) 01. 3050-02-72	EACH	1.000	1.000	
0210	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,252.000	1,252.000	
0220	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	13,415.000	13,415.000	
0230	312.0110	Select Crushed Material	TON	12,042.000	12,042.000	
0240	405.0100	Coloring Concrete WisDOT Red	CY	31.000	31.000	
0250	415.0080	Concrete Pavement 8-Inch	SY	4,573.000	4,573.000	
0260	415.0210	Concrete Pavement Gaps	EACH	4.000	4.000	
0270	415.0410	Concrete Pavement Approach Slab	SY	459.000	459.000	
0280	415.1080	Concrete Pavement HES 8-Inch	SY	229.000	229.000	
0290	416.0160	Concrete Driveway 6-Inch	SY	1,141.000	1,141.000	
0300	416.0260	Concrete Driveway HES 6-Inch	SY	57.000	57.000	
0310	416.0620	Drilled Dowel Bars	EACH	42.000	42.000	
0320	440.4410	Incentive IRI Ride	DOL	3,320.000	3,320.000	
0330	455.0605	Tack Coat	GAL	877.000	877.000	
0340	460.2000	Incentive Density HMA Pavement	DOL	2,420.000	2,420.000	
0350	460.5223	HMA Pavement 3 LT 58-28 S	TON	1,829.000	1,829.000	
0360	460.5224	HMA Pavement 4 LT 58-28 S	TON	1,937.000	1,937.000	
0370	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	58.000	58.000	
0380	502.0100	Concrete Masonry Bridges	CY	433.000	433.000	

					3050-02-72	3050-02-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0390	502.3200	Protective Surface Treatment	SY	659.000	659.000	
0400	502.3210	Pigmented Surface Sealer	SY	165.000	165.000	
0410	503.0137	Prestressed Girder Type I 36W-Inch	LF	462.000	462.000	
0420	505.0400	Bar Steel Reinforcement HS Structures	LB	6,280.000	6,280.000	
0430	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	52,690.000	52,690.000	
0440	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	1,740.000	1,740.000	
0450	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	12.000	12.000	
0460	506.4000	Steel Diaphragms (structure) 01. B-28-175	EACH	5.000	5.000	
0470	516.0500	Rubberized Membrane Waterproofing	SY	30.000	30.000	
0480	520.8000	Concrete Collars for Pipe	EACH	5.000	5.000	
0490	521.0118	Culvert Pipe Corrugated Steel 18-Inch	LF	35.000	35.000	
0500	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	2.000	2.000	
0510	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	3.000	3.000	
0520	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000	
0530	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	660.000	660.000	
0540	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	1,719.000	1,719.000	
0550	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	5,856.000	5,856.000	
0560	601.0600	Concrete Curb Pedestrian	LF	133.000	133.000	
0570	602.0405	Concrete Sidewalk 4-Inch	SF	38,811.000	38,811.000	
0580	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	335.000	335.000	
0590	602.1500	Concrete Steps	SF	202.000	202.000	
0600	606.0100	Riprap Light	CY	6.000	6.000	
0610	606.0300	Riprap Heavy	CY	486.000	486.000	
0620	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	400.000	400.000	
0630	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	167.000	167.000	
0640	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	256.000	256.000	
0650	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	850.000	850.000	
0660	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	288.000	288.000	
0670	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	120.000	120.000	
0680	611.0535	Manhole Covers Type J-Special	EACH	2.000	2.000	
0690	611.0624	Inlet Covers Type H	EACH	39.000	39.000	
0700	611.2004	Manholes 4-FT Diameter	EACH	16.000	16.000	
0710	611.3230	Inlets 2x3-FT	EACH	30.000	30.000	

					3050-02-72	3050-02-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0720	611.8120.S	Cover Plates Temporary	EACH	6.000	6.000	
0730	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	188.000	188.000	
0740	616.0700.S	Fence Safety	LF	250.000	250.000	
0750	618.0100	Maintenance And Repair of Haul Roads (project) 01. 3050-02-72	EACH	1.000	1.000	
0760	619.1000	Mobilization	EACH	1.000	0.610	0.390
0770	623.0200	Dust Control Surface Treatment	SY	20,061.000	20,061.000	
0780	624.0100	Water	MGAL	126.000	126.000	
0790	625.0100	Topsoil	SY	10,326.000	10,326.000	
0800	627.0200	Mulching	SY	600.000	600.000	
0810	628.1504	Silt Fence	LF	2,087.000	2,087.000	
0820	628.1520	Silt Fence Maintenance	LF	2,087.000	2,087.000	
0830	628.1905	Mobilizations Erosion Control	EACH	18.000	18.000	
0840	628.1910	Mobilizations Emergency Erosion Control	EACH	5.000	5.000	
0850	628.2006	Erosion Mat Urban Class I Type A	SY	7,899.000	7,899.000	
0860	628.2008	Erosion Mat Urban Class I Type B	SY	2,060.000	2,060.000	
0870	628.2027	Erosion Mat Class II Type C	SY	367.000	367.000	
0880	628.6005	Turbidity Barriers	SY	432.000	432.000	
0890	628.7005	Inlet Protection Type A	EACH	64.000	64.000	
0900	628.7010	Inlet Protection Type B	EACH	2.000	2.000	
0910	628.7015	Inlet Protection Type C	EACH	40.000	40.000	
0920	628.7020	Inlet Protection Type D	EACH	10.000	10.000	
0930	628.7504	Temporary Ditch Checks	LF	38.000	38.000	
0940	628.7555	Culvert Pipe Checks	EACH	15.000	15.000	
0950	628.7560	Tracking Pads	EACH	4.000	4.000	
0960	628.7570	Rock Bags	EACH	4.000	4.000	
0970	629.0210	Fertilizer Type B	CWT	9.000	9.000	
0980	630.0140	Seeding Mixture No. 40	LB	191.000	191.000	
0990	633.5200	Markers Culvert End	EACH	5.000	5.000	
1000	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	22.000	22.000	
1010	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	1.000	1.000	
1020	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	2.000	2.000	
1030	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	5.000	5.000	
1040	637.2210	Signs Type II Reflective H	SF	354.000	354.000	
1050	638.2102	Moving Signs Type II	EACH	1.000	1.000	
1060	638.2602	Removing Signs Type II	EACH	43.000	43.000	
1070	638.3000	Removing Small Sign Supports	EACH	25.000	25.000	
1080	642.5401	Field Office Type D	EACH	1.000	1.000	
1090	643.0100	Traffic Control (project) 01. 3050-02-72	EACH	1.000	1.000	
1100	643.0300	Traffic Control Drums	DAY	5,306.000	5,306.000	

					3050-02-72	3050-02-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
1110	643.0410	Traffic Control Barricades Type II	DAY	6,970.000	6,970.000	
1120	643.0420	Traffic Control Barricades Type III	DAY	4,916.000	4,916.000	
1130	643.0705	Traffic Control Warning Lights Type A	DAY	14,618.000	14,618.000	
1140	643.0715	Traffic Control Warning Lights Type C	DAY	2,620.000	2,620.000	
1150	643.0900	Traffic Control Signs	DAY	13,079.000	13,079.000	
1160	643.0920	Traffic Control Covering Signs Type II	EACH	19.000	19.000	
1170	643.1000	Traffic Control Signs Fixed Message	SF	324.000	324.000	
1180	643.1050	Traffic Control Signs PCMS	DAY	70.000	70.000	
1190	643.2000	Traffic Control Detour (project) 01. 3050-02-72	EACH	1.000	1.000	
1200	643.3000	Traffic Control Detour Signs	DAY	32,422.000	32,422.000	
1210	644.1616.S	Temporary Pedestrian Safety Fence	LF	1,176.000	1,176.000	
1220	645.0120	Geotextile Type HR	SY	744.000	744.000	
1230	645.0220	Geogrid Type SR	SY	203.000	203.000	
1240	646.0106	Pavement Marking Epoxy 4-Inch	LF	18,316.000	18,316.000	
1250	647.0206	Pavement Marking Arrows Bike Lane Epoxy	EACH	42.000	42.000	
1260	647.0256	Pavement Marking Symbols Epoxy	EACH	3.000	3.000	
1270	647.0306	Pavement Marking Symbols Bike Lane Epoxy	EACH	42.000	42.000	
1280	647.0456	Pavement Marking Curb Epoxy	LF	1,066.000	1,066.000	
1290	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	175.000	175.000	
1300	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	1,354.000	1,354.000	
1310	647.0786	Pavement Marking Crosswalk Epoxy 18-Inch	LF	420.000	420.000	
1320	649.0600	Temporary Pavement Marking Removable Tape 6-Inch	LF	1,353.000	1,353.000	
1330	650.4000	Construction Staking Storm Sewer	EACH	53.000	53.000	
1340	650.4500	Construction Staking Subgrade	LF	3,982.000	3,982.000	
1350	650.5000	Construction Staking Base	LF	3,120.000	3,120.000	
1360	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	5,856.000	5,856.000	
1370	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000	
1380	650.6500	Construction Staking Structure Layout (structure) 01. B-28-175	LS	1.000	1.000	
1390	650.7000	Construction Staking Concrete Pavement	LF	873.000	873.000	
1400	650.9910	Construction Staking Supplemental Control (project) 01. 3050-02-72	LS	1.000	1.000	
1410	650.9920	Construction Staking Slope Stakes	LF	3,982.000	3,982.000	
1420	652.0125	Conduit Rigid Metallic 2-Inch	LF	56.000	56.000	
1430	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	3,560.000	3,560.000	
1440	652.0605	Conduit Special 2-Inch	LF	1,410.000	1,410.000	
1450	653.0900	Adjusting Pull Boxes	EACH	2.000	2.000	
1460	654.0101	Concrete Bases Type 1	EACH	4.000	4.000	
1470	654.0105	Concrete Bases Type 5	EACH	7.000	7.000	
1480	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000	

					3050-02-72	3050-02-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
1490	655.0210	Cable Traffic Signal 3-14 AWG	LF	704.000	704.000	
1500	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	600.000	600.000	
1510	655.0610	Electrical Wire Lighting 12 AWG	LF	3,756.000	3,756.000	
1520	655.0620	Electrical Wire Lighting 8 AWG	LF	7,968.000	7,968.000	
1530	655.0625	Electrical Wire Lighting 6 AWG	LF	7,912.000	7,912.000	
1540	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. CB 200	LS	1.000	1.000	
1550	657.0100	Pedestal Bases	EACH	2.000	2.000	
1560	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	7.000	7.000	
1570	657.0322	Poles Type 5-Aluminum	EACH	7.000	7.000	
1580	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	2.000	2.000	
1590	657.0615	Luminaire Arms Single Member 4 1/2-Inch Clamp 8-FT	EACH	7.000	7.000	
1600	658.0103	Traffic Signal Face 1-12 Inch Vertical	EACH	2.000	2.000	
1610	658.0600	Led Modules 12-Inch Red Ball	EACH	4.000	4.000	
1620	658.5069	Signal Mounting Hardware (location) 01. W Madison St. & N. Monroe St.	LS	1.000	1.000	
1630	659.1120	Luminaires Utility LED B	EACH	7.000	7.000	
1640	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000	
1650	690.0150	Sawing Asphalt	LF	1,102.000	1,102.000	
1660	690.0250	Sawing Concrete	LF	2,393.000	2,393.000	
1670	715.0415	Incentive Strength Concrete Pavement	DOL	1,520.000	1,520.000	
1680	715.0502	Incentive Strength Concrete Structures	DOL	2,598.000	2,598.000	
1690	999.1500.S	Crack and Damage Survey	LS	1.000	1.000	
1700	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,600.000	1,600.000	
1710	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,075.000	1,075.000	
1720	SPV.0035	Special 21. Trench Backfill - Water and Sanitary	CY	22,890.000		22,890.000
1730	SPV.0045	Special 01. Temporary Curb Ramp	DAY	3,340.000	3,340.000	
1740	SPV.0045	Special 02. Temporary Crosswalk	DAY	1,670.000	1,670.000	
1750	SPV.0045	Special 03. Seismograph	DAY	30.000	30.000	
1760	SPV.0060	Special 01. Low Permeable Plug	EACH	2.000	1.000	1.000
1770	SPV.0060	Special 02. Inlet Cover Type 3290A	EACH	5.000	5.000	
1780	SPV.0060	Special 03. Connect Private Pipe	EACH	5.000	5.000	
1790	SPV.0060	Special 04. Landmark Reference Monuments Special	EACH	1.000	1.000	
1800	SPV.0060	Special 21. Connect to Existing Watermain	EACH	14.000		14.000
1810	SPV.0060	Special 22. Gate Valve and Box, 6"	EACH	11.000		11.000
1820	SPV.0060	Special 23. Gate Valve and Box, 8"	EACH	3.000		3.000
1830	SPV.0060	Special 24. Gate Valve and Box, 10"	EACH	20.000		20.000
1840	SPV.0060	Special 25. Tee Fitting, 10"x10"	EACH	6.000		6.000
1850	SPV.0060	Special 26. Tee Fitting, 10"x8"	EACH	3.000		3.000
1860	SPV.0060	Special 27. Tee Fitting, 10"x6"	EACH	11.000		11.000

					3050-02-72	3050-02-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
1870	SPV.0060	Special 28. Reducer Fitting, 10"x8"	EACH	2.000		2.000
1880	SPV.0060	Special 29. Reducer Fitting, 10"x6"	EACH	2.000		2.000
1890	SPV.0060	Special 30. Reducer Fitting, 8"x6"	EACH	2.000		2.000
1900	SPV.0060	Special 31. Reducer Fitting, 6"x4"	EACH	1.000		1.000
1910	SPV.0060	Special 32. 90-degree Bend Fitting, 10"	EACH	1.000		1.000
1920	SPV.0060	Special 33. 45-degree Bend Fitting, 10"	EACH	21.000		21.000
1930	SPV.0060	Special 34. 22.5-degree Bend Fitting, 10"	EACH	2.000		2.000
1940	SPV.0060	Special 35. 11.25-degree Bend Fitting, 10"	EACH	3.000		3.000
1950	SPV.0060	Special 36. 45-degree Bend Fitting, 8"	EACH	6.000		6.000
1960	SPV.0060	Special 37. 45-degree Bend Fitting, 4"	EACH	2.000		2.000
1970	SPV.0060	Special 38. Corporation Stop, 1"	EACH	41.000		41.000
1980	SPV.0060	Special 39. Curb Stop and Box, 1" Service	EACH	41.000		41.000
1990	SPV.0060	Special 40. Connect to Existing Water Service	EACH	41.000		41.000
2000	SPV.0060	Special 41. Hydrant	EACH	10.000		10.000
2010	SPV.0060	Special 42. Remove Existing Hydrant	EACH	6.000		6.000
2020	SPV.0060	Special 43. Remove or abandon Existing Water Valve MH	EACH	9.000		9.000
2030	SPV.0060	Special 44. Remove or Abandon Existing Sanitary Sewer Manhole	EACH	21.000		21.000
2040	SPV.0060	Special 45. Connect to Existing San. Sewer	EACH	18.000		18.000
2050	SPV.0060	Special 46. Connect to Exist. San. Sewer Service	EACH	40.000		40.000
2060	SPV.0060	Special 47. San. Sewer Wye, 15"x6"	EACH	9.000		9.000
2070	SPV.0060	Special 48. San. Sewer Wye, 12"x6"	EACH	31.000		31.000
2080	SPV.0060	Special 49. Water Manhole with Gate Valve and Box and Testing Corp Stops	EACH	1.000		1.000
2090	SPV.0060	Special 61. Remove And Salvage Stop Sign Flasher Assembly	EACH	2.000	2.000	
2100	SPV.0060	Special 62. Remove, Salvage and Reinstall Stop Sign Flasher Assembly	EACH	2.000	2.000	
2110	SPV.0060	Special 63. Remove and Salvage Lighting Unit	EACH	23.000	23.000	
2120	SPV.0060	Special 64. Remove and Reinstall Decorative Street Light Assembly	EACH	1.000	1.000	
2130	SPV.0060	Special 65. Decorative Street Light Assembly	EACH	14.000	14.000	
2140	SPV.0060	Special 66. Pull Box Non-Conductive 24X42-Inch	EACH	17.000	17.000	
2150	SPV.0060	Special 67. Lighting Control Box Special	EACH	1.000	1.000	
2160	SPV.0090	Special 01. Pipe Underdrain Wrapped 6-Inch and Aggregate	LF	2,166.000	2,166.000	
2170	SPV.0090	Special 02. Concrete Curb & Gutter 30-Inch Type A Special 2-Inch Curb	LF	25.000	25.000	
2180	SPV.0090	Special 03. Concrete Curb & Gutter 30-Inch Type A Special 3-Inch Curb	LF	16.000	16.000	

					3050-02-72	3050-02-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
2190	SPV.0090	Special 04. Concrete Curb & Gutter 30-Inch Type A Special 4-Inch Curb	LF	14.000	14.000	
2200	SPV.0090	Special 05. Concrete Curb & Gutter 30-Inch Type A Special Driveway Curb	LF	156.000	156.000	
2210	SPV.0090	Special 07. Remove Abandoned Steam Tunnels	LF	808.000	33.000	775.000
2220	SPV.0090	Special 21. Watermain, 10"	LF	3,953.000		3,953.000
2230	SPV.0090	Special 22. Watermain, 8"	LF	108.000		108.000
2240	SPV.0090	Special 23. Watermain, 6"	LF	240.000		240.000
2250	SPV.0090	Special 24. Watermain, 4"	LF	7.000		7.000
2260	SPV.0090	Special 25. Water Service Lateral, 1"	LF	1,426.000		1,426.000
2270	SPV.0090	Special 26. Sanitary Sewer, 15"	LF	264.000		264.000
2280	SPV.0090	Special 27. Sanitary Sewer, 12"	LF	3,327.000		3,327.000
2290	SPV.0090	Special 28. Sanitary Sewer, 10"	LF	36.000		36.000
2300	SPV.0090	Special 29. Sanitary Sewer, 8"	LF	259.000		259.000
2310	SPV.0090	Special 30. San. Sewer Service Lateral, 6"	LF	1,366.000		1,366.000
2320	SPV.0090	Special 31. Sanitary Sewer, 6" FM	LF	91.000		91.000
2330	SPV.0090	Special 32. Watermain Directionally Drilled, 10-Inch	LF	70.000		70.000
2340	SPV.0090	Special 33. Sanitary Sewer, 6" FM Dir. Drilled	LF	70.000		70.000
2350	SPV.0090	Special 61. Equivalent Lighting Conductor	LF	2,565.000	2,565.000	
2360	SPV.0090	Special 81. Parapet Concrete Type 'TX'	LF	237.000	237.000	
2370	SPV.0105	Special 01. Concrete Pavement Joint Layout	LS	1.000	1.000	
2380	SPV.0165	Special 01. Stone Mulch	SF	165.000	165.000	
2390	SPV.0165	Special 02. Concrete Sidewalk HES 4-Inch	SF	800.000	800.000	
2400	SPV.0195	Special 01. Excavation, Hauling, and Disposal of Petroleum-Contaminated Soil and Management of Petroleum-Contaminated Groundwater	TON	3,944.000	284.000	3,660.000
2410	SPV.0200	Special 21. Sanitary Sewer Manhole 48"	VF	231.000		231.000

CLEARING & GRUBBING

CATEGORY	STATION	OFFSET	LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID
0010	28+92	24' LT	STH 19	13	13
0010	29+56	23' LT	STH 19	12	12
0010	31+29	22' LT	STH 19	12	12
0010	32+04	23' LT	STH 19	18	18
0010	35+85	22' LT	STH 19	18	18
0010	37+00	22' LT	STH 19	18	18
0010	37+86	22' LT	STH 19	12	12
0010	38+86	22' LT	STH 19	13	13
0010	39+87	22' LT	STH 19	13	13
0010	40+40	39' RT	STH 19	24	24
0010	40+61	34' RT	STH 19	16	16
0010	41+15	37' RT	STH 19	16	16
0010	44+21	58' RT	STH 19	8	8
0010	44+25	65' RT	STH 19	8	8
0010	44+29	58' RT	STH 19	8	8
0010	44+33	56' RT	STH 19	7	7
0010	44+43	75' RT	STH 19	8	8
0010	44+54	67' RT	STH 19	6	6
0010	54+55	41' RT	STH 19	24	24
0010	45+19	49' RT	STH 19	42	42
0010	46+08	49' RT	STH 19	42	42
0010	46+96	47' LT	STH 19	11	11
0010	47+09	59' RT	STH 19	5	5
0010	47+21	70' LT	STH 19	21	21
0010	47+21	43' LT	STH 19	21	21
0010	47+69	50' RT	STH 19	10	10
0010	47+69	65' LT	STH 19	6	6
0010	47+69	45' LT	STH 19	20	20
0010	47+70	64' LT	STH 19	16	16
0010	47+70	65' LT	STH 19	5	5
0010	47+71	68' LT	STH 19	9	9
0010	47+75	66' LT	STH 19	10	10
0010	47+76	63' LT	STH 19	7	7
0010	47+77	47' LT	STH 19	17	17
0010	47+79	48' LT	STH 19	9	9
			SUB TOTAL:	505	505

3

CLEARING & GRUBBING

CATEGORY	STATION	OFFSET	LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID
0010	47+82	45' LT	STH 19	9	9
0010	47+88	43' LT	STH 19	40	40
0010	47+97	70'LT	STH 19	13	13
0010	48+79	39' RT	STH 19	48	48
0010	49+56	35' RT	STH 19	20	20
0010	9+36 'V'	23' LT	VAN BUREN ST	37	37
0010	49+93	39' LT	STH 19	32	32
0010	50+25	22' LT	STH 19	20	20
0010	50+40	23' RT	STH 19	28	28
0010	50+42	34' LT	STH 19	32	32
0010	51+16	23' RT	STH 19	13	13
0010	51+53	22' RT	STH 19	7	7
0010	52+11	22' RT	STH 19	10	10
0010	52+56	22' RT	STH 19	10	10
0010	52+68	22' LT	STH 19	25	25
0010	9+27 'H'	20' LT	HARRISON ST	21	21
0010	53+14	22' LT	STH 19	24	24
0010	9+31 'H'	21' RT	HARRISON ST	30	30
0010	53+42	22' LT	STH 19	23	23
0010	53+86	22' LT	STH 19	24	24
0010	54+22	23' LT	STH 19	20	20
0010	54+43	23' LT	STH 19	15	15
0010	54+45	24' RT	STH 19	32	32
0010	55+13	22' RT	STH 19	33	33
0010	55+16	22' LT	STH 19	20	20
0010	59+64	47' RT	STH 19	19	19
0010	62+84	27' LT	STH 19	6	6
0010	64+01	28' RT	STH 19	8	8
0010	64+45	28' RT	STH 19	11	11
0010			UNDISTRIBUTED	100	100
			SUB TOTAL:	730	730
			TOTAL:	1235	1235

3

REMOVING CULVERTS

CATEGORY	STATION	OFFSET	-	STATION	OFFSET	203.0100 REMOVING SMALL PIPE CULVERTS EACH
0010	36+05	67' LT	-	36+40	68' LT	1
					TOTAL:	1

REMOVING SURFACE MILLING

CATEGORY	STATION	-	STATION	LOCATION	204.0105 REMOVING PAVEMENT BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
0010	21+90	-	26+23	STH 19	-	1551
0010	21+90	-	22+15	STH 19	89	-
0010	25+98	-	26+23	STH 19	89	-
				TOTAL:	178	1551

3

REMOVING PAVEMENT

CATEGORY	STATION	-	STATION	LOCATION	* 204.0100 REMOVING PAVEMENT SY
0010	27+30	-	32+50	STH 19	2131
0010	32+50	-	37+00	STH 19	1855
0010	37+00	-	42+00	STH 19	2061
0010	42+00	-	47+21	STH 19	2165
0010	47+69	-	53+25	STH 19	2164
0010	53+25	-	57+00	STH 19	1571
0010	57+00	-	59+76	STH 19	1504
0010	60+38	-	65+89	STH 19	3332
0010	10+17 'C'	-	10+50 'C'	CANAL ST	195
0010	9+35 'V'	-	9+51 'V'	VAN BUREN ST	84
0010	9+68 'J'	-	9+78 'J'	S. JACKSON ST	45
0010	10+25 'S'	-	10+58 'S'	N. MONROE ST	167
				TOTAL:	17274

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING CURB & GUTTER

CATEGORY	STATION	-	STATION	LOCATION	204.0150 REMOVING CURB & GUTTER LF
0010	10+50 'C'	-	10+76 'C'	CANAL ST	37
0010	10+20 'M'	-	10+75 'M'	MINNETONKA WAY	129
0010	9+20 'H'	-	9+83 'H'	HARRISON ST	140
0010	9+50 'J'	-	9+68 'J'	S. JACKSON ST	37
0010	9+46 'R'	-	9+76 'R'	S. MONROE ST	73
				TOTAL:	416

REMOVING MASONRY

CATEGORY	STATION	OFFSET	LOCATION	204.0185 REMOVING MASONRY CY
0010	49+90	LT/RT	STH 19	7
0010	50+09	20' LT	STH 19	3
			TOTAL:	10

REMOVING CONCRETE BASES

CATEGORY	STATION	OFFSET	204.0195 REMOVING CONCRETE BASES EACH
0010	50+30	20' RT	1
0010	51+90	20' RT	1
0010	53+25	20' LT	1
0010	54+55	20' RT	1
0010	55+90	20' LT	1
0010	57+10	30' RT	1
0010	57+90	25' LT	1
0010	58+25	30' RT	1
0010	59+00	25' LT	1
0010	59+70	30' RT	1
0010	60+30	25' LT	1
0010	61+00	30' RT	1
0010	61+70	25' LT	1
0010	62+30	30' RT	1
0010	62+90	25' LT	1
0010	63+70	30' RT	1
0010	64+25	30' LT	1
0010	64+90	30' RT	1
0010	65+75	30' LT	1
0010	9+60 'R'	35' LT	1
0010	9+60 'R'	24' RT	1
0010	62+73	34' RT	1
0010	10+50 'S'	27' LT	1
0010	63+86	29' LT	1
0010		UNDISTRIBUTED	1
		TOTAL:	25

REMOVING INLETS

CATEGORY	STATION	OFFSET	204.0220 REMOVING INLETS EACH
0010	34+52	16' LT	1
0010	34+52	18' RT	1
0010	38+42	17' LT	1
0010	38+44	17' RT	1
0010	41+86	46' LT	1
0010	41+86	50' LT	1
0010	42+18	51' LT	1
0010	42+18	47' LT	1
0010	47+04	20' RT	1
0010	47+12	19' LT	1
0010	47+78	18' LT	1
0010	47+79	20' RT	1
0010	57+18	25' LT	1
0010	57+18	26' RT	1
0010	57+53	26' RT	1
0010	57+94	23' LT	1
0010	59+58	24' RT	1
0010	60+39	22' LT	1
0010	60+58	27' RT	1
0010	61+01	24' LT	1
0010	65+64	28' LT	1
0010	65+65	25' RT	1
		TOTAL:	22

REMOVING STORM SEWER PIPES

CATEGORY	STATION	OFFSET	-	STATION	OFFSET	204.0245.01 REMOVING STORM SEWER 10-INCH LF	204.0245.02 REMOVING STORM SEWER 12-INCH LF	204.0245.03 REMOVING STORM SEWER 18-INCH LF
0010	34+52	18' RT	-	34+52	16' LT	-	35	-
0010	34+52	16' LT	-	35+29	54' LT	-	86	-
0010	39+07	67' LT	-	41+86	46' LT	-	-	280
0010	41+86	46' LT	-	42+18	47' LT	-	32	-
0010	47+04	20' RT	-	47+06	45' RT	-	-	26
0010	47+06	40' LT	-	47+12	19' LT	-	22	-
0010	47+78	18' LT	-	47+84	41' LT	-	23	-
0010	47+79	20' RT	-	47+88	48' RT	-	30	-
0010	57+18	25' LT	-	57+94	23' LT	77	-	-
0010	57+18	26' RT	-	57+53	26' RT	35	-	-
0010	57+53	26' RT	-	59+58	24' RT	-	204	-
0010	57+94	23' LT	-	59+76	25' LT	-	181	-
0010	59+58	24' RT	-	59+76	24' RT	-	18	-
0010	60+39	22' LT	-	60+35	21' LT	-	5	-
0010	60+58	27' RT	-	60+36	28' RT	-	21	-
0010	61+01	24' LT	-	60+39	22' LT	-	61	-
0010	65+65	24' RT	-	65+93	25' RT	-	-	25
0010	65+68	29' LT	-	65+93	29' LT	-	-	28
					TOTAL:	112	718	359

REMOVING RETAINING WALL & STEPS

CATEGORY	STATION	LOCATION	204.9090.S.01 REMOVING RETAINING WALL & STEPS LF
0010	40+69	STH 19 - RT	26
0010	50+50	STH 19 - RT	10
0010	51+16	STH 19 - RT	16
0010	51+75	STH 19 - RT	42
0010	52+28	STH 19 - LT	20
0010	53+31	STH 19 - LT	10
0010	53+86	STH 19 - RT	5
0010		UNDISTRIBUTED	30
		TOTAL:	159

Division	From/To Station	Location	Common Excavation (1) (item # 205.0100)		Salvaged/ Unusable Pavement Material (4)	Available Material (5)	Reduced EBS in Fill (6)	Expanded EBS Backfill (7)	Unexpanded Fill	Expanded Fill (8)	Mass Ordinate +/- (9)	Waste	Comment:
			Cut (2)	EBS Excavation (3)			Factor 0.80	Factor 1.30		Factor 1.25			
Stage 1													
	21+75 - 47+05.08	STH 19	8,026	0	2,221	5,805	0	0	1,316	1,645	4,160	4,160	
	10+16C - 10+77C	CANAL RD.	176	0	55	121	0	0	0	0	120	120	
	10+16M - 10+82M	MINNETONKA WAY	190	0	43	147	0	0	0	0	147	147	
	EBS	UNDISTRIBUTED	0	146	0	0	117	190	0	0	0	0	
Stage 1 Subtotal			8,392	146	2,319	6,073	117	190	1,316	1,645	4,428	4,428	
Stage 2													
	47+84.92 - 62+89.82	STH 19	6,316	0	2,148	4,168	0	0	163	203	3,964	3,964	
	9+35V - 9+84V	VAN BUREN ST.	100	0	22	78	0	0	1	1	77	77	
	9+20H - 9+84H	HARRISON ST.	149	0	44	105	0	0	0	1	104	104	
	9+45J - 9+80.15J	S. JACKSON ST.	77	0	32	45	0	0	0	0	45	45	
	EBS	UNDISTRIBUTED	0	121	0	0	96	157	0	0	0	0	
Stage 2 Subtotal			6,642	121	2,247	4,396	96	157	164	205	4,191	4,191	
Stage 3													
	62+89.82 - 65+89.16	STH 19	1,528	0	551	977	0	0	0	0	977	977	
	9+40R - 9+74.90R	S. MONROE ST.	131	0	18	113	0	0	0	0	113	113	
	10+23.05S - 10+58.18S	STH 89	130	0	47	83	0	0	0	0	83	83	
	EBS	UNDISTRIBUTED	0	37	0	0	29	48	0	0	0	0	
Stage 3 Subtotal			1,789	37	616	1,174	29	48	0	0	1,173	1,173	
Grand Total			16,824	303	5,181	11,642	243	394	1,480	1,850	9,792	9,792	
Total Common Exc				17,127									

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100

2) Salvaged/Unsuable Pavement Material is included in Cut.

3) EBS Excavation to be backfilled w ith Select Crushed Material.

4) Salvaged/Unusable Pavement Material

5) Available Material = Cut - Salvaged/Unusuable Pavement Material

6) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8

7) Expanded EBS Backfill - This is to be filled w ith Select Crushed Material. EBS Backfill Factor = 1.3. Item number 208.1100

8) Expanded Fill. Factor = 1.25

9) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material w ithin the Division. Minus indicates a shortage of material w ithin the Division.

3

FINISHING ROADWAY

CATEGORY	LOCATION	213.0100 FINISHING ROADWAY (3050-02-72) EACH
0010	3050-02-72	1
	TOTAL:	1

BASE AGGREGATE ITEMS

CATEGORY	STATION	-	STATION	LOCATION	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON
0010	27+30	-	32+50	STH 19	1653	1377
0010	32+50	-	37+00	STH 19	1435	1196
0010	37+00	-	42+00	STH 19	1595	1329
0010	42+00	-	47+05	STH 19	1611	1348
0010	47+85	-	53+25	STH 19	1723	1441
0010	53+25	-	57+00	STH 19	1326	1105
0010	57+00	-	59+76	STH 19	589	981
0010	60+38	-	65+89	STH 19	1221	2035
0010	10+20 'C'	-	10+62 'C'	CANAL ST	170	141
0010	10+20 'M'	-	10+59 'M'	MINNETONKA WAY	132	110
0010	10+59 'M'	-	10+75 'M'	MINNETONKA WAY	48	-
0010	9+35 'V'	-	9+51 'V'	VAN BUREN ST	39	-
0010	9+51 'V'	-	9+80 'V'	VAN BUREN ST	77	65
0010	9+20 'H'	-	9+52 'H'	HARRISON ST	96	-
0010	9+52 'H'	-	9+79 'H'	HARRISON ST	93	78
0010	9+50 'J'	-	9+75 'J'	S. JACKSON ST	37	61
0010	9+46 'R'	-	9+75 'R'	S. MONROE ST	51	84
0010	10+25 'S'	-	10+58 'S'	N. MONROE ST	71	118
				UNDISTRIBUTED	598	573
				TOTAL:	12565	12042

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

COLORING CONCRETE WISDOT RED

CATEGORY	STATION	-	STATION	LOCATION	405.0100 COLORING CONCRETE WISDOT RED CY
0040	27+07		27+69	STH 19	-
0040	46+90		47+05	STH 19	-
0040	47+85		48+00	STH 19	-
0040	57+00	-	59+62	STH 19	-
0040	59+62	-	59+76	STH 19	-
0040	60+38	-	60+56	STH 19	-
0040	60+38	-	65+74	STH 19	16
0040	65+74	-	65+89	STH 19	-
0040	9+50 'J'	-	9+79 'J'	S. JACKSON ST	-
0040	9+46 'R'	-	9+75 'R'	S. MONROE ST	7
0040	10+23 'S'	-	10+58 'S'	N. MONROE ST	8
0040				UNDISTRIBUTED	-
				TOTAL:	31

CONCRETE PAVEMENT

CATEGORY	STATION	-	STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	415.1080 CONCRETE PAVEMENT HES 8-INCH SY	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	SPV.0105.01 CONCRETE PAVEMENT JOINT LAYOUT LS
0010	27+07		27+69	STH 19	-	-	135	-	-	-
0010	46+90		47+05	STH 19	-	-	54	-	-	-
0010	47+85		48+00	STH 19	-	-	54	-	-	-
0010	57+00	-	59+62	STH 19	1339	-	-	-	262	-
0010	59+62	-	59+76	STH 19	-	-	65	-	-	-
0010	60+38	-	60+56	STH 19	-	-	78	-	-	-
0010	60+56	-	65+74	STH 19	2786	-	-	-	518	-
0010	65+74	-	65+89	STH 19	-	-	73	-	-	-
0010	9+50 'J'	-	9+79 'J'	S. JACKSON ST	98	-	-	-	29	-
0010	9+46 'R'	-	9+75 'R'	S. MONROE ST	147	1	-	-	29	-
0010	10+23 'S'	-	10+58 'S'	N. MONROE ST	203	1	-	-	35	-
0010				UNDISTRIBUTED	-	2	-	229	-	-
0010				PROJECT	-	-	-	-	-	1
				TOTAL:	4573	4	459	229	873	1

DRIVEWAYS

CATEGORY	STATION	TO	STATION	LOCATION	MATERIAL	* 204.0100 REMOVING PAVEMENT SY	* 305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	416.0160 CONCRETE DRIVEWAY 6-INCH SY	416.0260 CONCRETE DRIVEWAY HES 6-INCH SY	465.0120 ASPHALT SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
0010	30+00	-	30+35	STH 19 - LT	CONCRETE	87	-	21	60	-	-
0010	32+95	-	33+30	STH 19 - LT	CONCRETE	72	-	19	52	-	-
0010	36+10	-	36+35	STH 19 - LT	AGGREGATE	-	30	12	33	-	-
0010	43+90	-	44+20	STH 19 - LT	ASPHALT	36	-	19	42	-	1.8
0010	45+80	-	46+10	STH 19 - LT	CONCRETE	54	-	22	61	-	-
0010	48+30	-	48+40	STH 19 - LT	ASPHALT	-	-	3	-	-	1.4
0010	48+50	-	48+75	STH 19 - LT	AGGREGATE	22	12	14	39	-	-
0010	49+65	-	49+80	STH 19 - LT	ASPHALT	6	-	-	-	-	-
0010	50+80	-	51+10	STH 19 - LT	CONCRETE	22	-	8	22	-	-
0010	51+70	-	51+80	STH 19 - LT	CONCRETE/ASPHALT	17	-	7	20	-	-
0010	52+85	-	53+05	STH 19 - LT	CONCRETE	17	-	9	24	-	-
0010	53+95	-	54+15	STH 19 - LT	ASPHALT	13	-	7	20	-	-
0010	54+75	-	55+25	STH 19 - LT	AGGREGATE	-	28	20	55	-	-
0010	55+20	-	55+50	STH 19 - LT	CONCRETE	46	-	-	-	-	-
0010	55+45	-	56+45	STH 19 - LT	ASPHALT	21	-	41	55	-	10.5
0010	57+15	-	57+60	STH 19 - LT	ASPHALT	-	-	21	40	-	3.4
0010	58+30	-	58+85	STH 19 - LT	CONCRETE	52	-	23	64	-	-
0010	59+40	-	59+50	STH 19 - LT	ASPHALT	-	-	5	10	-	0.5
0010	60+75	-	60+90	STH 19 - LT	ASPHALT	-	-	7	15	-	0.9
0010	61+95	-	62+10	STH 19 - LT	ASPHALT	-	-	11	21	-	1.4
0010	64+85	-	65+05	STH 19 - LT	ASPHALT	-	-	8	18	-	0.5
0010	32+95	-	33+25	STH 19 - RT	-	-	-	14	39	-	-
0010	34+05	-	34+35	STH 19 - RT	ASPHALT	-	-	-	-	-	-
0010	35+35	-	35+65	STH 19 - RT	ASPHALT	-	-	24	51	-	3.1
0010	35+95	-	36+45	STH 19 - RT	CONCRETE	189	-	-	-	-	-
0010	37+65	-	38+15	STH 19 - RT	CONCRETE	86	-	29	81	-	-
0010	40+05	-	40+30	STH 19 - RT	ASPHALT	-	-	15	11	-	7
0010	42+15	-	42+30	STH 19 - RT	CONCRETE	21	-	6	17	-	-
0010	43+25	-	43+65	STH 19 - RT	CONCRETE	88	-	29	81	-	-
0010	46+70	-	46+90	STH 19 - RT	CONCRETE	-	-	10	28	-	-
0010	48+80	-	48+95	STH 19 - RT	ASPHALT	-	-	12	21	-	3
0010	50+90	-	51+05	STH 19 - RT	CONCRETE	41	-	7	19	-	-
0010	51+95	-	52+05	STH 19 - RT	ASPHALT	-	-	12	20	-	3
0010	52+20	-	52+30	STH 19 - RT	CONCRETE	13	-	-	-	-	-
0010	55+75	-	57+00	STH 19 - RT	ASPHALT	35	-	32	63	-	4.8
0010	56+60	-	57+00	STH 19 - RT	CONCRETE	34	-	-	-	-	-
0010	9+50 'J'	-	9+55 'J'	S. JACKSON ST - LT	CONCRETE	7	-	3	7	-	-
0010	59+30	-	59+50	STH 19 - RT	ASPHALT	-	-	42	25	-	16.3
0010	62+45	-	62+60	STH 19 - RT	AGGREGATE	8	28	6	17		-
0010	64+90	-	63+05	STH 19 - RT	AGGREGATE	-	3	4	10	-	-
0010				UNDISTRIBUTED	CONCRETE	-	5	26	-	57	-
					TOTAL	987	106	548	1141	57	58

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

DRILLED DOWEL BARS

CATEGORY	STATION	LOCATION	416.0620 DRILLED DOWEL BARS EACH
0010	10+58 'S'	N. MONROE ST	42
		TOTAL:	42

ASPHALTIC PAVING

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON
0010	21+90	-	26+46	STH 19	185	-	302
0010	27+08	-	32+50	STH 19	111	311	259
0010	32+50	-	37+00	STH 19	96	269	224
0010	37+00	-	42+00	STH 19	107	299	249
0010	42+00	-	47+05	STH 19	108	302	252
0010	47+85	-	53+25	STH 19	116	323	269
0010	53+25	-	56+89	STH 19	88	247	206
0010	10+16 'C'	-	10+51 'C'	CANAL ST	11	30	25
0010	10+51 'C'	-	10+77 'C'	CANAL ST	7	-	22
0010	10+23 'M'	-	10+41 'M'	MINNETONKA WAY	7	20	16
0010	10+41 'M'	-	10+82 'M'	MINNETONKA WAY	9	-	27
0010	9+63 'V'	-	9+78 'V'	VAN BUREN ST	5	12	10
0010	9+35 'V'	-	9+63 'V'	VAN BUREN ST	5	-	14
0010	9+62 'H'	-	9+78 'H'	HARRISON ST	6	16	13
0010	9+20 'H'	-	9+62 'H'	HARRISON ST	9	-	28
0010	9+45 'J'	-	9+61 'J'	S. JACKSON ST	3	-	10
0010	9+40 'J'	-	9+52 'J'	S. MONROE ST	4	-	11
				TOTAL:	877	1829	1937

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CULVERT PIPE ITEMS

CATEGORY	ROADWAY	521.0118 CULVERT PIPE CORRUGATED STEEL 18-INCH LF	521.1018 APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH
0010	STH 19	35	2	1
	TOTAL:	35	2	1

CONCRETE CURB PEDESTRIAN

CATEGORY	STATION	TO	STATION	LOCATION	601.0600 CONCRETE CURB PEDESTRIAN LF
0010	56+92	-	57+25	LT	34
0010	56+98	-	57+11	RT	24
0010	57+59	-	57+76	LT	28
0010	62+82	-	63+00	LT	20
0010	65+00	-	65+09	LT	12
0010	65+55	-	65+83	LT	9
0010	65+70	-	65+89	RT	6
				TOTAL:	133

CURB & GUTTER ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	SPV.0090.02 CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL 2-INCH CURB LF	SPV.0090.03 CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL 3-INCH CURB LF	SPV.0090.04 CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL 4-INCH CURB LF	SPV.0090.05 CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL DRIVEWAY CURB LF
0010	27+30	-	32+50	STH 19 - RT	15	475	475	-	-	-	-
0010	27+30	-	32+50	STH 19 - LT	66	486	486	-	-	-	-
0010	32+50	-	37+00	STH 19 - RT	-	450	450	-	-	-	-
0010	32+50	-	37+00	STH 19 - LT	-	450	450	-	-	-	-
0010	37+00	-	42+00	STH 19 - RT	-	500	500	-	-	-	-
0010	37+00	-	42+00	STH 19 - LT	-	499	499	-	-	-	-
0010	42+00	-	47+05	STH 19 - RT	55	461	461	-	-	-	-
0010	42+00	-	47+05	STH 19 - LT	66	492	492	-	-	-	-
0010	47+85	-	53+25	STH 19 - RT	35	493	493	-	-	-	-
0010	47+85	-	53+25	STH 19 - LT	35	506	506	-	-	-	-
0010	53+25	-	56+89	STH 19 - RT	-	370	370	-	-	-	-
0010	53+25	-	56+89	STH 19 - LT	-	367	367	-	-	-	-
0010	56+89	-	59+76	STH 19 - RT	278	-	-	-	-	-	-
0010	56+89	-	59+76	STH 19 - LT	287	-	-	-	-	-	-
0010	60+38	-	65+89	STH 19 - RT	443	-	-	25	-	14	57
0010	60+38	-	65+89	STH 19 - LT	439	-	-	-	16	-	99
0010	10+51 'C'	-	10+77 'C'	CANAL - LT	-	16	16	-	-	-	-
0010	10+51 'C'	-	10+77 'C'	CANAL - RT	-	12	12	-	-	-	-
0010	10+41 'M'	-	10+82 'M'	MINNETONKA - LT	-	42	42	-	-	-	-
0010	10+41 'M'	-	10+82 'M'	MINNETONKA - RT	-	40	40	-	-	-	-
0010	9+35 'V'	-	9+63 'V'	VAN BUREN - LT	-	28	28	-	-	-	-
0010	9+35 'V'	-	9+63 'V'	VAN BUREN - RT	-	28	28	-	-	-	-
0010	9+20 'H'	-	9+62 'H'	HARRISON - LT	-	42	42	-	-	-	-
0010	9+20 'H'	-	9+62 'H'	HARRISON - RT	-	42	42	-	-	-	-
0010	9+45 'J'	-	9+61 'J'	S. JACKSON - LT	-	16	16	-	-	-	-
0010	9+45 'J'	-	9+61 'J'	S. JACKSON - RT	-	17	17	-	-	-	-
0010	9+40 'R'	-	9+52 'R'	S. MONROE - LT	-	12	12	-	-	-	-
0010	9+40 'R'	-	9+52 'R'	S. MONROE - RT	-	12	12	-	-	-	-
											-
				TOTAL:	1719	5856	5856	25	16	14	156

CONCRETE SIDEWALK

CATEGORY	STATION	TO	STATION	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK SY	* 305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	SPV.0165.02 CONCRETE SIDEWALK HES 4-INCH SF
0010	21+64	-	24+69	STH 19 - LT	155	45	1562	-	-
0010	26+98	-	27+95	STH 19 - LT	59	13	439	-	-
0010	28+30	-	30+42	STH 19 - LT	112	24	836	-	-
0010	32+91	-	33+36	STH 19 - LT	20	2	46	-	-
0010	34+55	-	35+00	STH 19 - LT	20	7	220	-	-
0010	36+09	-	36+39	STH 19 - LT	14	2	46	-	-
0010	38+25	-	38+40	STH 19 - LT	7	2	70	-	-
0010	40+00	-	40+15	STH 19 - LT	7	2	70	-	-
0010	41+56	-	41+83	STH 19 - LT	7	3	98	-	-
0010	10+32	-	10+75	MINNETONKA WAY - LT	19	6	196	-	-
0010	10+32	-	10+75	MINNETONKA WAY - RT	19	7	212	-	-
0010	42+21	-	47+21	STH 19 - LT	226	68	2375	-	-
0010	47+69	-	56+45	STH 19 - LT	459	109	3826	-	-
0010	56+45	-	57+20	STH 19 - LT	79	24	821	-	-
0010	57+20	-	58+36	STH 19 - LT	75	21	717	-	-
0010	58+36	-	59+76	STH 19 - LT	102	24	835	-	-
0010	60+26	-	60+89	STH 19 - LT	68	14	477	-	-
0010	60+89	-	62+10	STH 19 - LT	100	21	735	-	-
0010	62+10	-	63+10	STH 19 - LT	95	26	884	-	-
0010	10+33	-	10+58	N. MONROE ST - LT	33	7	239	-	-
0010	10+40	-	10+58	N. MONROE ST - RT	20	4	140	-	-
0010	63+60	-	64+86	STH 19 - LT	99	38	1316	-	-
0010	64+86	-	65+89	STH 19 - LT	115	33	1133	-	-
0010	28+62	-	33+01	STH 19 - RT	-	62	2171	-	-
0010	33+25	-	35+35	STH 19 - RT	-	30	1049	-	-
0010	35+66	-	37+70	STH 19 - RT	-	29	1019	-	-
0010	38+05	-	40+12	STH 19 - RT	-	35	1212	-	-
0010	40+27	-	41+71	STH 19 - RT	-	25	866	-	-
0010	41+76	-	42+18	STH 19 - RT	-	8	249	-	-
0010	42+30	-	43+28	STH 19 - RT	-	17	571	-	-
0010	43+60	-	46+69	STH 19 - RT	-	52	1803	-	-
0010	46+89	-	47+05	STH 19 - RT	-	3	88	-	-
0010	47+85	-	48+81	STH 19 - RT	-	15	496	-	-
0010	48+95	-	49+75	STH 19 - RT	36	11	380	-	-
0010	9+35	-	9+68	VAN BUREN - LT	15	4	118	-	-
0010	50+01	-	51+05	STH 19 - RT	45	13	443	-	-
0010	51+05	-	53+02	STH 19 - RT	86	26	888	-	-
0010	9+20	-	9+66	HARRISON ST - LT	21	7	231	-	-
0010	9+20	-	9+68	HARRISON ST - RT	22	7	243	-	-
0010	53+38	-	57+19	STH 19 - RT	217	58	2017	-	-
0010	9+50	-	9+65	S. JACKSON ST - LT	16	4	140	-	-
0010	9+50	-	9+68	S. JACKSON ST - RT	10	3	86	-	-
0010	57+50	-	59+75	STH 19 - RT	236	45	1574	-	-
0010	60+35	-	63+05	STH 19 - RT	160	-	-	-	-
0010	60+35	-	62+49	STH 19 - RT	-	42	1476	-	-
				SUBTOTAL:	2774	998	34413	0	0

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE SIDEWALK CONT.

CATEGORY	STATION	TO	STATION	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK SY	* 305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	SPV.0165.02 CONCRETE SIDEWALK HES 4-INCH SF
0010	62+62		62+87	STH 19 - RT	-	5	148		-
0010	62+91		63+03	STH 19 - RT	-	2	61	-	-
0010	9+46	-	9+57	S. MONROE ST - LT	33	5	153	-	-
0010	9+46	-	9+61	S. MONROE ST - RT	17	6	185	-	-
0010	63+52	-	65+89	STH 19 - RT	181	45	1574	-	-
0010		10+31		CANAL ST - CURB RAMP LT	-	2	52	10	-
0010		10+27		CANAL ST - CURB RAMP RT	-	2	56	15	-
0010		28+64		STH 19 - CURB RAMP LT	-	2	51	10	-
0010		28+64		STH 19 - CURB RAMP RT	-	2	48	10	-
0010		35+63		STH 19 - CURB RAMP LT	7	-	-	-	-
0010		41+75		STH 19 - CURB RAMP LT	-	1	33	10	-
0010		41+74		STH 19 - CURB RAMP RT	-	1	31	10	-
0010		10+29		MINNETONKA WAY - CURB RAMP LT	-	1	30	10	-
0010		10+29		MINNETONKA WAY - CURB RAMP RT	-	1	28	10	-
0010		49+53		STH 19 - CURB RAMP LT	-	2	52	10	-
0010		49+53		STH 19 - CURB RAMP RT	-	2	52	10	-
0010		9+68		VAN BUREN ST - CURB RAMP LT	-	1	18	10	-
0010		9+68		VAN BUREN ST - CURB RAMP RT	-	1	19	10	-
0010		9+70		HARRISON ST - CURB RAMP LT	-	2	50	10	-
0010		9+70		HARRISON ST - CURB RAMP RT	-	1	31	10	-
0010		53+47		STH 19 - CURB RAMP LT	-	2	52	10	-
0010		53+47		STH 19 - CURB RAMP RT	-	2	37	10	-
0010		57+05		STH 19 - CURB RAMP LT	-	1	30	10	-
0010		57+05		STH 19 - CURB RAMP RT	-	2	49	10	-
0010		9+67		S. JACKSON ST - CURB RAMP LT	-	1	21	10	-
0010		9+69		S. JACKSON ST - CURB RAMP RT	-	1	22	10	-
0010		57+63		STH 19 - CURB RAMP LT	-	1	31	10	-
0010		57+63		STH 19 - CURB RAMP RT	-	1	19	10	-
0010		59+69		STH 19 - CURB RAMP LT	-	1	18	10	-
0010		59+69		STH 19 - CURB RAMP RT	-	1	35	10	-
0010		62+89		STH 19 - CURB RAMP LT	-	2	50	10	-
0010		62+89		STH 19 - CURB RAMP RT	-	1	30	10	-
0010		9+59		S. MONROE ST - CURB RAMP LT	-	2	53	10	-
0010		9+61		S. MONROE ST - CURB RAMP RT	-	1	19	10	-
0010		10+36		N. MONROE ST - CURB RAMP LT	-	2	60	10	-
0010		10+38		N. MONROE ST - CURB RAMP RT	-	2	49	10	-
0010		63+68		STH 19 - CURB RAMP RT	-	1	17	10	-
0010		65+79		STH 19 - CURB RAMP LT	-	1	16	10	-
0010		65+79		STH 19 - CURB RAMP RT	-	1	17	10	-
0010		29+88		STH 19 - WALKWAY LT	5	4	123	-	-
0010		35+63		STH 19 - WALKWAY LT - CURB RAMP	4	-	-	-	-
0010		40+69		STH 19 - WALKWAY RT	6	-	-	-	-
0010		46+42		STH 19 - WALKWAY LT	3	1	20	-	-
0010		49+23		STH 19 - WALKWAY RT	4	1	33	-	-
0010		50+10		STH 19 - WALKWAY LT	7	-	-	-	-
				SUBTOTAL:	267	116	3473	335	0

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

CONCRETE SIDEWALK CONT.

CATEGORY	STATION TO STATION	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK SY	305.0110 * BASE AGGREGATE DENSE 3/4-INCH TON	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	SPV.0165.02 CONCRETE SIDEWALK HES 4-INCH SF
0010	50+49	STH 19 - WALKWAY RT	5	2	40	-	-
0010	51+16	STH 19 - WALKWAY RT	6	2	48	-	-
0010	51+75	STH 19 - WALKWAY RT	28	7	212	-	-
0010	52+28	STH 19 - WALKWAY LT	4	1	32	-	-
0010	53+31	STH 19 - WALKWAY LT	5	2	38	-	-
0010	53+85	STH 19 - WALKWAY RT	1	1	13	-	-
0010	54+68	STH 19 - WALKWAY RT	22	3	82	-	-
0010	54+93	STH 19 - WALKWAY RT	6	2	60	-	-
0010		UNDISTRIBUTED	-	-	-	-	800
		SUBTOTAL:	77	20	525	0	800
0040		UNDISTRIBUTED	134	12	400	-	-
		SUBTOTAL:	134	12	400	0	0
		TOTAL:	3252	1146	38811	335	800

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE STEPS

CATEGORY	STATION	LOCATION	602.1500 CONCRETE STEPS SF
0010	50+50	STH 19 - RT	16
0010	51+16	STH 19 - RT	16
0010	51+75	STH 19 - RT	91
0010	52+28	STH 19 - LT	18
0010	53+31	STH 19 - LT	14
0010	54+69	STH 19 - RT	20
0010	54+93	STH 19 - RT	15
0010	65+85	STH 19 - RT	12
		TOTAL:	202

RIP RAP & FABRIC

CATEGORY	STATION	LOCATION	606.0100 RIPRAP LIGHT CY	606.0300 RIPRAP HEAVY CY	645.0120 GEOTEXILE TYPE HR SY
0010	27+67	STH 19 - RT	-	6	9
0010	35+29	STH 19 - LT	6	-	16
0010	47+02	STH 19 - LT	-	62	93
0010	47+89	STH 19 - LT	-	29	43
0010	59+90	STH 19 - RT	-	9	13
		TOTAL:	6	106	174

STORM SEWER PIPE QUANTITIES

CATEGORY	ROADWAY	520.8000 CONCRETE COLLARS FOR PIPE EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	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	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-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	611.0535 MANHOLE COVERS TYPE J-SPECIAL EACH	611.0624 INLET COVERS TYPE H EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	611.8120.S COVER PLATES TEMPORARY EACH	633.5200 MARKERS CULVERT END EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	SPV.0060.02 INLET COVERS TYPE 3290A EACH
0010	STH 19	5	3	2	400	167	256	850	288	120	2	39	16	30	-	5	53	5
0010	UNDISTRIBUTED	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-
	TOTAL:	5	3	2	400	167	256	850	288	120	2	39	16	30	6	5	53	5

DRAINAGE STRUCTURES

NO.	LOCATION	STRUCTURE TYPE MANHOLE	STRUCTURE TYPE INLET	COVER TYPE	RIM ELEVATION	INVERT OF STRUCTURE	BOTTOM OF STRUCTURE	**DEPTH FT.	REMARKS	INLET PROTECTION TYPE
100	27+68 16'LT	-	2X3-FT	H	821.40	816.14	815.72	4.26	-	C
101	27+73 16'RT	-	2X3-FT	H	820.35	815.28	814.86	4.07	-	C
102	27+93 16.1'RT	-	2X3-FT	H	820.49	816.50	816.08	2.99	-	C
103	27+67 27.8'RT	-	-	-	-	815.16	-	-	APRON ENDWALL 18"	-
104	33+79 16'LT	-	2X3-FT****	H	819.08	816.03	815.61	2.05	REQUIRED TO BE CAST-IN-PLACE	C
105	33+79 16.1'RT	-	2X3-FT****	H	819.08	816.13	815.71	1.95	REQUIRED TO BE CAST-IN-PLACE	C
106	34+51 16'LT	-	2X3-FT****	H	818.91	815.56	815.14	2.35	REQUIRED TO BE CAST-IN-PLACE	C
107	34+51 16.1'RT	-	2X3-FT****	H	818.91	815.66	815.24	2.25	REQUIRED TO BE CAST-IN-PLACE	C
108	35+23 16'LT	-	2X3-FT****	H	819.08	816.03	815.61	2.05	REQUIRED TO BE CAST-IN-PLACE	C
109	35+23 16.1'RT	-	2X3-FT****	H	819.08	816.13	815.71	1.95	REQUIRED TO BE CAST-IN-PLACE	C
110	35+29 54.3'LT	-	-	-	-	815.30	-	-	APRON ENDWALL 18"	-
111	38+43 16'LT	-	2X3-FT	H	823.90	815.82	-	7.08	CONNECT TO EXISTING BOX CULVERT	C
112	38+44 16'RT	-	2X3-FT	H	823.93	815.43	-	7.50	CONNECT TO EXISTING BOX CULVERT	C
113	41+87 48.2'LT	-	2X3-FT	H	830.14	825.69	825.27	3.45	-	C
114	42+17 47.6'LT	-	2X3-FT	H	830.08	826.60	826.18	2.48	-	C
115	41+88 70.6'LT	-	2X3-FT	H	831.08	826.73	826.31	3.35	-	C
116	42+17 70.1'LT	-	2X3-FT	H	831.19	827.22	826.80	2.97	-	C
117	46+35 16'LT	-	2X3-FT	H	822.38	818.49	818.07	2.89	-	C
118	46+35 16'RT	-	2X3-FT	H	822.38	818.62	818.20	2.76	-	C
119	46+59 16'LT	-	2X3-FT	H	822.31	817.80	817.38	3.51	-	C
120	46+59 16.1'RT	-	2X3-FT	H	822.31	817.97	817.55	3.33	-	C
121	46+83 16.1'LT	-	2X3-FT	H	822.37	816.48	816.06	4.89	-	C
122	46+83 16.1'RT	-	2X3-FT	3290A	822.37	817.23	816.81	4.14	-	C
123	47+02 46.8'LT	-	-	-	-	816.00	-	-	APRON ENDWALL 18"	-
124	47+89 47.6'LT	-	-	-	-	814.97	-	-	APRON ENDWALL 24"	-
125	48+12 16'RT	4-FT D	-	H	823.05	815.37	814.87	6.68	-	C
126	48+12 16'RT	4-FT D	-	H	823.05	816.21	815.71	5.84	-	C
127	49+68 20.5'RT	4-FT D	-	H	827.14	817.49	816.99	8.65	-	C
128	49+76 38.2'RT	-	2X3-FT	H	827.89	819.68	819.26	7.21	-	C
129	50+05 20.6'RT	4-FT D	-	H	828.51	818.69	818.19	8.82	-	C
130	53+05 20.1'RT	4-FT D	-	J-S	829.67	821.12	820.62	7.55	MANHOLE	-
131	53+05 37.1'RT	-	2X3-FT	H	829.56	822.29	821.87	6.27	-	C
132	53+03 76.4'RT	-	2X3-FT	H	829.61	823.20	822.78	5.41	-	C
133	53+35 38.2'RT	-	2X3-FT	H	828.45	823.21	822.79	4.24	-	C
134	56+87 16.1'RT	4-FT D	-	H	815.10	810.81	810.31	3.29	-	C
135	56+87 23'LT	4-FT D	-	H	815.08	810.87	810.45	3.21	-	C
136	57+17 23.8'RT	4-FT D	-	H	814.64	809.41	808.91	4.23	-	C
137	57+21 39'RT	-	2X3-FT	H	814.76	811.12	810.70	2.64	-	C
138	57+49 24.9'RT	4-FT D	-	J-S	814.64	808.78	808.28	4.86	MANHOLE	-
139	57+47 43.2'RT	-	2X3-FT	H	814.79	809.97	809.55	3.81	-	C
140	57+67 23'LT	4-FT D	-	3290A	814.59	809.71	809.21	3.88	-	C
141	57+67 24.1'RT	4-FT D	-	3290A	814.57	807.82	807.32	5.75	-	C
142	58+27 23'LT	4-FT D	-	3290A	814.89	810.54	810.04	3.35	-	C
143	59+57 24.6'RT	4-FT D	-	H	815.81	806.98	806.48	7.83	-	C
144	57+52 23'LT	4-FT D	-	3290A	814.58	810.38	809.88	3.20	-	C
145	59+90 91.7'RT	-	-	-	-	806.75	-	-	APRON ENDWALL 24"	-
146	60+24 21.1'LT	-	-	-	-	810.26	-	-	PIPE OUTFALL CONCRETE COLLAR REQUIRED	-
147	60+33 27.6'RT	-	-	-	-	810.86	-	-	PIPE OUTFALL CONCRETE COLLAR REQUIRED	-
148	60+47 21.6'LT	-	2X3-FT	H	816.48	810.62	810.20	4.86	-	C
149	60+58 25.1'RT	-	2X3-FT	H	816.43	811.22	810.80	4.20	-	C
150	61+01 23.1'LT	-	2X3-FT	H	816.71	812.21	811.79	3.50	-	C
151	65+65 26.9'LT	4-FT D	-	H	817.04	810.36	809.86	5.67	-	C
152	65+65 24.7'RT	4-FT D	-	H	816.61	810.33	809.83	5.28	-	C
153	65+92 27.4'LT	-	-	-	-	809.55	-	-	PIPE OUTFALL CONCRETE COLLAR REQUIRED	-
154	65+91 24.7'RT	-	-	-	-	809.53	-	-	PIPE OUTFALL CONCRETE COLLAR REQUIRED	-

STORM SEWER PIPE

LOCATION TO	LOCATION FROM	SIZE IN.	LENGTH FT.	TYPE	GRADE %	INVERT ELEVATION INLET	INVERT ELEVATION DISCHARGE	REMARKS	APRON ENDWALL
100	101	18	34	CL III	1.00%	816.14	815.80	-	-
101	103	18	12	CL III	1.00%	815.28	815.16	6 JOINT TIES REQUIRED***	1
102	101	12	20	CL III	1.00%	816.50	816.30	-	-
104	106	15	72	CL IV	0.31%	816.03	815.81	-	-
105	107	15	72	CL IV	0.31%	816.13	815.91	-	-
106	110	18	86	CL IV	0.30%	815.56	815.30	6 JOINT TIES REQUIRED***	1
107	106	18	34	CL IV	0.29%	815.66	815.56	-	-
108	106	15	72	CL IV	0.31%	816.03	815.81	-	-
109	107	15	72	CL IV	0.31%	816.13	815.91	-	-
113	EXIST	18	5	CL III	2.20%	825.69	825.58	CONCRETE COLLAR REQUIRED	-
115	113	12	22	CL III	1.00%	826.73	826.51	-	-
114	113	12	32	CL III	1.00%	826.60	826.28	-	-
116	114	12	22	CL IV	1.00%	827.22	827.00	-	-
117	119	12	24	CL III	1.00%	818.49	818.25	-	-
118	120	12	24	CL III	1.00%	818.62	818.38	-	-
119	121	12	24	CL III	1.00%	817.80	817.56	-	-
120	122	12	24	CL III	1.00%	817.97	817.73	-	-
121	123	18	37	CL III	1.30%	816.48	816.00	6 JOINT TIES REQUIRED***	1
122	121	18	34	CL III	0.50%	817.23	817.06	-	-
125	124	24	39	CL III	1.03%	815.37	814.97	6 JOINT TIES REQUIRED***	1
126	125	24	34	CL III	1.00%	816.21	815.87	-	-
127	126	24	156	CL III	0.50%	817.49	816.71	-	-
128	127	12	18	CL III	1.00%	819.68	819.50	-	-
129	127	24	38	CL III	0.50%	818.69	818.50	-	-
130	129	24	300	CL III	0.50%	821.12	819.62	-	-
133	131	12	32	CL III	1.00%	823.21	822.89	-	-
132	131	12	31	CL III	1.00%	823.20	822.89	-	-
131	130	12	17	CL III	1.00%	822.29	822.12	-	-
134	136	15	30	CL III	0.30%	810.81	810.72	-	-
135	144	15	61	CL III	0.40%	810.87	810.62	-	-
136	138	18	32	CL III	0.31%	809.41	809.31	-	-
137	136	12	15	CL III	1.00%	811.12	810.97	-	-
138	141	24	18	CL III	0.33%	808.78	808.72	-	-
139	138	12	16	CL III	1.00%	809.97	809.81	-	-
140	142	15	60	CL III	0.40%	810.54	810.30	-	-
141	143	24	190	CL III	0.29%	807.82	807.26	-	-
140	141	18	49	CL III	1.00%	809.71	809.22	-	-
143	145	24	75	CL III	0.31%	806.98	806.75	6 JOINT TIES REQUIRED***	1
144	140	15	16	CL III	0.40%	810.38	810.31	-	-
148	146	12	24	CL III	1.50%	810.62	810.26	CONCRETE COLLAR REQUIRED	-
149	147	12	24	CL III	1.50%	811.22	810.86	CONCRETE COLLAR REQUIRED	-
150	148	12	53	CL III	1.49%	812.21	811.42	-	-
151	153	18	27	CL III	3.00%	810.36	809.55	CONCRETE COLLAR REQUIRED	-
152	154	18	26	CL III	3.08%	810.33	809.53	CONCRETE COLLAR REQUIRED	-

CULVERT PIPE

LOCATION STA OFFSET - STA OFFSET	SIZE IN.	LENGTH FT.	GRADE %	INVERT ELEVATION INLET	INVERT ELEVATION DISCHARGE	REMARKS	MIN. PIPE THICKNESS	APRON ENDWALL
36+05, 67' LT - 36+40, 68' LT	18	35	1.20%	815.46	815.04	DRIVEWAY CULVERT PIPE	0.064"	2

NOTE:

** STRUCTURE DEPTH = RIM ELEVATION - INVERT OF STRUCTURE- CASTING HEIGHT - ADJUSTMENT RINGS
CASTING HEIGHT = 0.5 FT FOR INLET COVERS H AND 3290A AND MANHOLE COVERS J-S
ADJUSTMENT RINGS = 0.5 FT FOR INLET COVERS H AND 3290A AND MANHOLE COVERS .

***TIE THE APRON ENDWALL AND THE LAST TWO JOINTS AT OUTFALL LOCATIONS, SEE SDD

****INLETS REQUIRE TO BE CAST-IN-PLACE.

3

FENCE SAFETY

CATEGORY	LOCATION	616.0700.S FENCE SAFETY LF
0010	UNDISTRIBUTED	250
	TOTAL:	250

MAINTENANCE AND REPAIR OF HAUL ROADS (3050-02-72)

CATEGORY	STATION	TO	STATION	LOCATION	618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS EACH
0010	OUTSIDE OF PROJECT LIMITS				1
				TOTAL:	1

MOBILIZATION

CATEGORY	STAGE	619.1000 MOBILIZATION EACH
PROJECT I.D. 3050-02-72		
0010	ALL	0.44
0020	ALL	0.12
0030	ALL	0.04
0040	ALL	0.01
PROJECT I.D. 3050-02-73		
0010	ALL	0.11
0020	ALL	0.28
	TOTAL:	1

DUST CONTROL AND WATER

CATEGORY	STATION	TO	STATION	LOCATION	623.0200 DUST CONTROL SURFACE TREATMENT SY	624.0100 WATER MGAL
0010	21+90.46	-	65+89.16	PROJECT	20061	126
				TOTAL	20061	126

3

RESTORATION ITEMS

CATEGORY	ROADWAY	STATION	-	STATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2027 EROSION MAT CLASS II TYPE C SY	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LB	SPV.0165.01 STONE MULCH SF
0010	STH 19	21+00	-	27+00	83	-	83	-	-	0.06	2	-
0010	STH 19	27+00	-	33+00	1401	-	1377	-	24	0.89	26	-
0010	STH 19	33+00	-	39+00	1435	-	1217	218	-	0.91	26	-
0010	STH 19	39+00	-	45+00	1426	-	873	553	-	0.9	26	-
0010	STH 19	45+00	-	51+00	2424	-	1324	877	223	1.53	44	-
0010	STH 19	51+00	-	57+00	1204	-	1204	-	-	0.76	22	-
0010	STH 19	57+00	-	63+00	180	-	134	-	46	0.12	4	150
0010	STH 19	63+00	-	67+00	-	-	-	-		-	-	-
0010				UNDISTRIBUTED	2039	600	1553	412	74	2	38	15
				SUBTOTAL:	10192	600	7765	2060	367	8	188	165
0040				UNDISTRIBUTED	134	-	134	-	-	1	3	-
				SUBTOTAL:	134	0	134	0	0	1	3	0
				TOTAL:	10326	600	7899	2060	367	9	191	165

EROSION CONTROL ITEMS

CATEGORY	ROADWAY	STATION	-	STATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH
0010	STH 19	21+00	-	27+00	-	-	-	-	-
0010	STH 19	27+00	-	33+00	675	675	-	3	-
0010	STH 19	33+00	-	39+00	189	189	18	12	-
0010	STH 19	39+00	-	45+00	153	153	-	-	-
0010	STH 19	45+00	-	51+00	625	625	12	-	-
0010	STH 19	51+00	-	57+00	-	-	-	-	-
0010	STH 19	57+00	-	63+00	27	27	-	-	-
0010	STH 19	63+00	-	67+00	-	-	-	-	-
0010				UNDISTRIBUTED	418	418	8	-	4
				TOTAL:	2087	2087	38	15	4

EROSION CONTROL MOBILIZATION

CATEGORY	STATION	-	STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	21+00	-	67+00	PROJECT	18	5
				TOTAL:	18	5

TURBIDITY BARRIER

CATEGORY	LOCATION	628.6005 TURBIDITY BARRIER SY
0010	B-28-072	54
0010	B-28-175	288
0010	B-28-104	57
0010	UNDISTRIBUTED	87
	TOTAL:	432

TRACKING PADS

CATEGORY	LOCATION	628.7560 TRACKING PAD EACH
0010	STAGE 1	2
0010	STAGE 2	2
	TOTAL:	4

INLET PROTECTION ITEMS

CATEGORY	LOCATION	STA OFFSET	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH
NEW INLETS						
0010	STH 19	27+68 16'LT	1	-	1	-
0010	STH 19	27+73 16'RT	1	-	1	-
0010	STH 19	27+93 16.1'RT	1	-	1	-
0010	STH 19	33+79 16'LT	1	-	1	-
0010	STH 19	33+79 16.1'RT	1	-	1	-
0010	STH 19	34+51 16'LT	1	-	-	1
0010	STH 19	34+51 16.1'RT	1	-	-	1
0010	STH 19	35+23 16'LT	1	-	1	-
0010	STH 19	35+23 16.1'RT	1	-	1	-
0010	STH 19	38+43 16'LT	1	-	1	-
0010	STH 19	38+44 16'RT	1	-	1	-
0010	STH 19	41+87 48.2'LT	1	-	-	1
0010	STH 19	42+17 47.6'LT	1	-	-	1
0010	STH 19	41+88 70.6'LT	1	-	1	-
0010	STH 19	42+17 70.1'LT	1	-	1	-
0010	STH 19	46+35 16'LT	1	-	1	-
0010	STH 19	46+35 16'RT	1	-	1	-
0010	STH 19	46+59 16'LT	1	-	-	1
0010	STH 19	46+59 16.1'RT	1	-	-	1
0010	STH 19	46+83 16.1'LT	1	-	1	-
0010	STH 19	46+83 16.1'RT	1	1	-	-
0010	STH 19	48+12 16'RT	1	-	1	-
0010	STH 19	48+12 16'RT	1	-	1	-
0010	STH 19	49+68 20.5'RT	1	-	1	-
0010	STH 19	49+76 38.2'RT	1	-	1	-
0010	STH 19	50+05 20.6'RT	1	-	1	-
0010	STH 19	53+05 37.1'RT	1	-	-	1
0010	STH 19	53+03 76.4'RT	1	-	1	-
0010	STH 19	53+35 38.2'RT	1	-	1	-
0010	STH 19	56+87 16.1'RT	1	-	1	-
0010	STH 19	56+87 23'LT	1	-	1	-
0010	STH 19	57+17 23.8'RT	1	-	-	1
0010	STH 19	57+21 39'RT	1	-	1	-
0010	STH 19	57+47 43.2'RT	1	-	1	-
0010	STH 19	57+52 23'LT	1	1	-	-
0010	STH 19	57+67 23'LT	1	-	-	1
0010	STH 19	57+67 24.1'RT	1	-	-	1
0010	STH 19	58+27 23'LT	1	-	1	-
0010	STH 19	59+57 24.6'RT	1	-	1	-
0010	STH 19	60+33 27.6'RT	1	-	1	-
0010	STH 19	60+47 21.6'LT	1	-	1	-
		SUBTOTAL:	41	2	29	10

INLET PROTECTION ITEMS CONT.

CATEGORY	LOCATION	STA OFFSET	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH
0010	STH 19	65+65 26.9'LT	1	-	1	-
0010	STH 19	61+01 23.1'LT	1	-	1	-
0010	STH 19	65+65 26.9'LT	1	-	1	-
		SUBTOTAL:	3	0	3	0
EXISTING INLETS TO REMAIN						
0010	STH 19	25+60.57 16'RT	-	-	1	-
0010	STH 19	25+66.92 16'LT	-	-	1	-
0010	S. MONROE ST	7+63 'R' 20' LT	-	-	1	-
0010	S. MONROE ST	7+69 'R' 20' LT	-	-	1	-
0010	S. MONROE ST	8+20 'R' 20' RT	-	-	1	-
0010	S. MONROE ST	8+21 'R' 20' LT	-	-	1	-
0010	STH 19	68+23 RT	-	-	1	-
0010	STH 19	68+23 LT	-	-	1	-
		SUBTOTAL:	0	0	8	0
EXISTING INLETS TO BE REMOVED						
0010	STH 19	34+51 16' LT	1	-	-	-
0010	STH 19	34+53 18' RT	1	-	-	-
0010	STH 19	38+42 17' LT	1	-	-	-
0010	STH 19	38+44 17' RT	1	-	-	-
0010	STH 19	41+87 50' LT	1	-	-	-
0010	STH 19	41+87 46' LT	1	-	-	-
0010	STH 19	42+18 51' LT	1	-	-	-
0010	STH 19	42+18 46' LT	1	-	-	-
0010	STH 19	47+04 21' RT	1	-	-	-
0010	STH 19	47+10 18' LT	1	-	-	-
0010	STH 19	47+78 19' LT	1	-	-	-
0010	STH 19	47+79 21' RT	1	-	-	-
0010	STH 19	57+18 26' LT	1	-	-	-
0010	STH 19	57+19 26' RT	1	-	-	-
0010	STH 19	57+53 26' RT	1	-	-	-
0010	STH 19	57+94 23' LT	1	-	-	-
0010	STH 19	59+57 24' RT	1	-	-	-
0010	STH 19	60+39 22' LT	1	-	-	-
0010	STH 19	60+58 26' RT	1	-	-	-
0010	STH 19	61+01 24' LT	1	-	-	-
		SUBTOTAL:	20	0	0	0
		TOTAL:	64	2	40	10

3

PERMENANT SIGNING

SIGN NO.	SIGN CODE	SIGN SIZE W X H	MESSAGE	634.0614 POSTS WOOD 4X6-INCH 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH 16-FT EACH	634.0620 POSTS WOOD 4X6-INCH 20-FT EACH	634.0814 POSTS TUBULAR STEEL 2X2-INCH 14-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1-01	R2-1	24 X 30	SPEED LIMIT 40	-	-	1	-	5.0	-	1	1	
1-02	R2-1	24 X 30	SPEED LIMIT 40	-	-	1	-	5.0	-	1	1	
1-03	R1-1	30 X 30	STOP	-	1	-	-	6.3	-	1	1	
1-04	R3-17	30 X 24	BIKE LANE	1	-	-	-	5.0	-	-	-	
1-05	R3-17-B	30 X 12	ENDS	-	-	-	-	2.5	-	-	-	ON SAME POST AS 1-04
2-01	R3-17	30 X 24	BIKE LANE	1	-	-	-	5.0	-	-	-	
2-02	R1-1	30 X 30	STOP	1	-	-	-	6.3	-	1	1	
3-01	R2-1		SPEED LIMIT 40	-	-	-	-	-	-	1	1	
3-02	R2-1	24 X 30	SPEED LIMIT 40	1	-	-	-	5.0	-	1	1	
3-03	R2-1	24 X 30	SPEED LIMIT 40	-	-	-	-	5.0	-	-	-	ATTACH TO POLE
3-04	R3-17	30 X 24	BIKE LANE	-	-	-	-	5.0	-	-	-	ON SAME POLE AS 3-03
4-01	W3-5	36 X 36	SPEED LIMIT 25 AHEAD	1	-	-	-	9.0	-	1	1	
4-02	W1-2R	30 X 30	ARROW RIGHT	1	-	-	-	6.3	-	1	1	
4-03	W14-3	48 X 36	NO PASSING ZONE	-	-	-	-	12.0	-	1	-	ON SAME POST AS 4-02
5-01				-	-	-	-	-	-	-	1	
5-02	R2-1	24 X 30	SPEED LIMIT 25	1	-	-	-	5.0	-	1	1	
5-03	R2-1	24 X 30	SPEED LIMIT 40	1	-	-	-	5.0	-	1	1	
5-04	J4-1	24 X 36	WEST 19	1	-	-	-	6.0	-	1	1	
5-05	R3-17	30 X 24	BIKE LANE	-	-	-	-	5.0	-	-	-	ON SAME POST AS 5-04
5-06	R1-1	30 X 30	STOP	1	-	-	-	6.3	-	1	1	
5-07	R3-17	30 X 24	BIKE LANE	1	-	-	-	5.0	-	-	-	
6-01	R2-1		SPEED LIMIT 25	-	-	-	-	-	-	1	1	
6-02	R2-1	24 X 30	SPEED LIMIT 25	1	-	-	-	5.0	-	1	1	
6-03	R2-1	24 X 30	SPEED LIMIT 25	1	-	-	-	5.0	-	-	-	
6-04	R1-1		STOP	-	-	-	-	-	-	1	1	
7-01	W11-1		SHARE THE ROAD	-	-	-	-	-	-	1	1	
7-02	R-1	30 X 30	STOP	1	-	-	-	6.3	-	1	1	
7-03	R3-17	30 X 24	BIKE LANE	1	-	-	-	5.0	-	-	-	
7-04	R3-17	30 X 24	BIKE LANE	1	-	-	-	5.0	-	-	-	
7-05	R-1	30 X 30	STOP	1	-	-	-	6.3	-	1	1	
7-06	R2-1	24 X 30	SPEED LIMIT 25	1	-	-	-	-	-	1	1	
7-07	R3-17	30 X 24	BIKE LANE	-	-	-	-	5.0	-	-	-	ON SAME POST AS 7-06
8-01	W11-1		SHARE THE ROAD	-	-	-	-	-	-	1	1	
8-02	W3-1		STOP SIGN AHEAD	-	-	-	-	-	-	1	1	
8-03	R2-1	24 X 30	SPEED LIMIT 25	-	-	-	-	5.0	-	-	-	BAND TO POLE
			SUBTOTAL:	18	1	2	0	153	0	22	22	

3

PERMENANT SIGNING CONT.

SIGN NO.	SIGN CODE	SIGN SIZE W X H	MESSAGE	634.0614 POSTS WOOD 4X6-INCH 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH 16-FT EACH	634.0620 POSTS WOOD 4X6-INCH 20-FT EACH	634.0814 POSTS TUBULAR STEEL 2X2-INCH 14-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
8-04	J1-1	24 X 39	JCT 89	1	-	-	-	6.5	-	1	1	
8-05	W11-1		SHARE THE ROAD	-	-	-	-	-	-	1	1	
8-06	R3-17	30 X 24	BIKE LANE	1	-	-	-	5.0	-	-	-	
8-07	W3-1	36 X 36	STOP SIGN AHEAD	1	-	-	-	9.0	-	-	-	
8-08	R-1	30 X 30	STOP	1	-	-	-	6.3	-	1	1	
8-09	R2-1		SPEED LIMIT 25	-	-	-	-	-	-	1	-	
8-10	R3-17	30 X 24	BIKE LANE	-	-	-	-	5.0	-	-	-	BAND TO POLE
9-01	J2-2	48 X 57	N 89 LEFT TURN ARROW / S 89 STRAIGHT ARROW	-	-	-	-	19.0		1	-	BAND TO POLE
9-02	R2-1	24 X 30	SPEED LIMIT 25	-	-	-	-	5.0	-	1	-	BAND TO POLE
9-03				-	-	-	-	-	1	-	-	BAND TO POLE
9-04	J4-1	24 X 36	WEST 19	-	-	-	-	6.0	-	1	-	BAND TO POLE
9-05	R3-17	30 X 24	BIKE LANE	-	-	-	-	5.0	-	-	-	BAND TO POLE BELOW 9-04
9-06	R1-1	36 X 36	STOP	-	-	-	-	9.0	-	1	-	BAND TO POLE
9-07	R1-3-P	30 X 12	ALL WAY	-	-	-	-	2.5	-	1	-	ON SAME POLE AS 9-06
9-08	J3-1	24 X 57	NORTH 89 RIGHT ARROW	-	-	-	-	9.5	-	1	-	BAND TO POLE
9-09	J2-2	48 X 57	E 19 LEFT TURN ARROW / W 19 RIGHT TURM ARROW	-	-	-	1	19.0	-	1	-	
9-10	R1-1	36 X 36	STOP	-	-	-	-	9.0	-	1	-	BAND TO POLE
9-11	R1-3-P	30 X 12	ALL WAY	-	-	-	-	2.5	-	1	-	ON SAME POLE AS 9-10
9-12	R1-1	36 X 36	STOP	-	-	-	-	9.0	-	1	-	BAND TO POLE
9-13	R1-3-P	30 X 12	ALL WAY	-	-	-	-	2.5	-	1	-	ON SAME POLE AS 9-12
9-14	R1-1	36 X 36	STOP	-	-	-	-	9.0	-	1	-	BAND TO POLE
9-15	R1-3-P	30 X 12	ALL WAY	-	-	-	-	2.5	-	1	-	ON SAME POLE AS 9-14
9-16	J3-1	24 X 57	NORTH 89 LEFT ARROW	-	-	-	-	9.5	-	1	-	BAND TO POLE
9-17	J4-2	48 X 36	EAST 19 / SOUTH 89	-	-	-	-	12.0	-	1	-	BAND TO POLE
9-18	R3-17	30 X 24	BIKE LANE	-	-	-	-	5.0	-	-	-	ON SAME POLE BELOW 9-17
10-01	J2-2	48 X 57	W 19 STRAIGHT ARROW / N 89 RIGHT TURN ARROW	-	-	-	-	19.0	-	1	-	BAND TO POLE
10-02	W3-1	36 X 36	STOP SIGN AHEAD	-	-	-	-	9.0	-	-	-	BAND TO POLE
10-03	R2-1	24 X 30	SPEED LIMIT 25	-	-	-	-	5.0	-	-	-	BAND TO POLE
10-04	W3-1		STOP SIGN AHEAD	-	-	-	-	-	-	1	-	
			UNDISTRIBUTED	-	-	-	4	-	-	-	-	
			SUBTOTAL:	4	0	0	5	201	1	21	3	
			TOTAL:	22	1	2	5	354	1	43	25	

3

FIELD OFFICE

CATEGORY	LOCATION	642.5401 FIELD OFFICE TYPE D EACH
0010	PROJECT	1
	TOTAL:	1

TRAFFIC CONTROL

CATEGORY	LOCATION	643.0100 TRAFFIC CONTROL (3050-02-72) EACH
0010	STH 19	0.5
0010	STH 89	0.5
	TOTAL:	1

TRAFFIC CONTROL DETOUR

CATEGORY	LOCATION	643.2000 TRAFFIC CONTROL DETOUR (3050-02-72) EACH
0010	STH 19	0.5
0010	STH 89	0.5
	TOTAL:	1

TRAFFIC CONTROL ITEMS - DETOUR

CATEGORY	STAGE	AREA	DAYS	* 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS	* 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.3000 TRAFFIC CONTROL DETOUR SIGNS EACH	643.3000 TRAFFIC CONTROL DETOUR SIGNS DAYS
0010	STH 19	FULL	84	-	-	-	-	-	12	1008
0010		BLOW - UP 1	84	1	84	2	168	3	44	3696
0010		BLOW - UP 2	84	-	-	-	-	-	49	4116
0010		BLOW - UP 3	84	-	-	-	-	-	48	4032
0010		BLOW - UP 4	84	1	84	2	168	4	34	2856
0010	STH 89	FULL	61	-	-	-	-	-	35	2135
0010		BLOW - UP 1	61	-	-	-	-	4	22	1342
0010		BLOW - UP 2	61	1	61	2	122	4	41	2501
0010		BLOW - UP 3	61	-	-	-	-	-	60	3660
0010		BLOW - UP 4	61	-	-	-	-	-	54	3294
0010		BLOW - UP 5	61	1	61	2	122	4	62	3782
		TOTAL:			290		580	19		32422

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL ITEMS

CATEGORY	STAGE	LOC	DAYS	643.0300 TRAFFIC CONTROL DRUMS EACH	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0410 TRAFFIC CONTROL BARRICADES TYPE II EACH	643.0410 TRAFFIC CONTROL BARRICADES TYPE II DAY	* 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	* 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0900 TRAFFIC CONTROL SIGNS EACH	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE EACH	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	643.1050 TRAFFIC CONTROL SIGNS PCMS EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	644.1616.S TEMPORARY PEDESTRIAN SAFETY FENCE LF	SPV.0045.01 TEMPORARY CURB RAMP EACH	SPV.0045.01 TEMPORARY CURB RAMP DAY	SPV.0045.02 TEMPORARY CROSSWALK EACH	SPV.0045.02 TEMPORARY CROSSWALK DAY
0010	STAGE 1	CANAL RD	42	2	84	4	168	3	126	8	336	2	84	8	336	-	-	-	-	76	2	84	1	42
0010		MINNETONKA WAY	42	2	84	4	168	2	84	6	252	2	84	7	294	-	-	-	-	76	2	84	1	42
0010		STH 89	42	4	168	-	-	-	-	-	-	-	-	3	126	-	-	-	-	-	-	-	-	-
0010		STH 19	42	22	924	14	588	20	840	47	1974	4	168	29	1218	-	-	2	28	216	6	252	3	126
0010		ALT BUS	42	-	-	-	-	-	-	-	-	-	-	7	294	7	84	-	-	-	-	-	-	-
0010	STAGE 2	CANAL RD	47	2	94	4	188	3	141	8	376	2	94	8	376	-	-	-	-	-	2	94	1	47
0010		MINNETONKA WAY	47	2	94	4	188	2	94	6	282	2	94	7	329	-	-	-	-	-	2	94	1	47
0010		VAN BUREN ST	47	2	94	4	188	2	94	6	282	2	94	7	329	-	-	-	-	52	2	94	1	47
0010		HARRISON ST	47	2	94	4	188	2	94	6	282	2	94	7	329	-	-	-	-	70	2	94	1	47
0010		JACKSON ST	47	2	94	4	188	2	94	6	282	2	94	7	329	-	-	-	-	62	2	94	1	47
0010		STH 89	47	4	188	-	-	-	-	-	-	-	-	4	188	-	-	-	-	-	-	-	-	-
0010		STH 19	47	28	1316	30	1410	21	987	68	3196	10	470	46	2162	-	-	-	-	288	14	658	7	329
0010		ALT BUS	47	-	-	-	-	-	-	-	-	-	-	7	329	7	84	-	-	-	-	-	-	-
0010	STAGE 3	CANAL RD	56	2	112	4	224	3	168	8	448	2	112	8	448	-	-	-	-	-	2	112	1	56
0010		MINNETONKA WAY	56	2	112	4	224	2	112	6	336	2	112	7	392	-	-	-	-	-	2	112	1	56
0010		VAN BUREN ST	56	2	112	4	224	2	112	6	336	2	112	7	392	-	-	-	-	-	2	112	1	56
0010		HARRISON ST	56	2	112	4	224	2	112	6	336	2	112	7	392	-	-	-	-	-	2	112	1	56
0010		JACKSON ST	56	2	112	4	224	2	112	6	336	2	112	7	392	-	-	-	-	-	2	112	1	56
0010		STH 89	56	4	224	8	448	5	280	14	784	4	224	12	672	-	-	1	14	192	4	224	2	112
0010		STH 19	56	23	1288	38	2128	21	1176	75	4200	10	560	54	3024	-	-	2	28	144	18	1008	9	504
0010		ALT BUS	56	-	-	-	-	-	-	-	-	-	-	13	728	13	156	-	-	-	-	-	-	-
		TOTAL:			5306		6970		4626		14038		2620		13079		324		70	1176		3340		1670

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

GEOGRID REINFORCEMENT

CATEGORY	STAGE	LOCATION	645.0220 GEOGRID TYPE SR SY
0010	STAGE 1	CANAL RD	6
0010		MINNETONKA WAY	7
0010		STH 19	76
0010	STAGE 2	VAN BUREN ST	5
0010		HARRISON ST	6
0010		S. JACKSON ST	4
0010		STH 19	65
0010	STAGE 3	S. MONROE ST	6
0010		STH 89	6
0010		STH 19	22
		TOTAL:	203

TEMPORARY PAVEMENT MARKING

CATEGORY	STA	LOCATION	649.0600 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 6-INCH LF
0010	28+64	STH 19	65
0010	41+75	STH 19	71
0010	47+00	STH 19	64
0010	49+53	STH 19	64
0010	53+45	STH 19	69
0010	57+05	STH 19	79
0010	57+63	STH 19	102
0010	59+68	STH 19	83
0010	62+89	STH 19	97
0010	63+67	STH 19	114
0010	65+78	STH 19	90
0010	10+61 'C'	CANAL ST	69
0010	10+60 'M'	MINNETONKA WAY	60
0010	9+40 'V'	VAN BUREN ST	44
0010	9+37 'H'	HARRISON ST	60
0010	9+33 'J'	S JACKSON ST	53
0010	10+71 'S'	STH 89	88
0010	9+27 'R'	S MONROE ST	81
		TOTAL:	1353

PAVEMENT MARKING

CATEGORY	STA	-	STA	LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH YELLOW LF	646.0106 PAVEMENT MARKING EPOXY 4-INCH WHITE LF	647.0206 PAVEMENT MARKING ARROWS BIKE LANE EPOXY EACH	647.0306 PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY EACH	647.0456 PAVEMENT MARKING CURB EPOXY LF	647.0566 PAVEMENT MARKING STOP LINE EPOXY 18-INCH LF	647.0766 PAVEMENT MARKING CROSSWALK EPOXY 6-INCH LF	647.0786 PAVEMENT MARKING CROSSWALK EPOXY 18-INCH LF
0010	21+90	-	28+00	STH 19	1219	1188	6	6	-	-	-	-
0010	28+00	-	34+00	STH 19	1300	1186	5	5	-	-	65	-
0010	34+00	-	40+00	STH 19	1100	1100	5	5	-	-	-	-
0010	40+00	-	46+00	STH 19	1185	1083	5	5	-	-	72	63
0010	46+00	-	52+00	STH 19	1185	1087	6	6	-	-	65	56
0010	52+00	-	58+00	STH 19	1152	1187	6	6	320	-	243	149
0010	58+00	-	64+00	STH 19	1015	2154	5	5	407	52	292	72
0010	64+00	-	65+89	STH 19	363	812	4	4	126	-	90	80
0010	-	-	-	CANAL ST	-	-	-	-	-	20	95	-
0010	-	-	-	MINNETONKA WAY	-	-	-	-	-	16	73	-
0010	-	-	-	VAN BUREN ST	-	-	-	-	-	12	47	-
0010	-	-	-	HARRISON ST	-	-	-	-	-	16	67	-
0010	-	-	-	S. JACKSON ST	-	-	-	-	56	14	57	-
0010	-	-	-	STH 89	-	-	-	-	91	24	103	-
0010	-	-	-	S. MONROE ST	-	-	-	-	66	21	85	-
				TOTAL:	8519	9797	42	42	1066	175	1354	420

HANDICAP PARKING STALL SYMBOLS

CATEGORY	STA	LOCATION	647.0256 PAVEMENT MARKING SYMBOLS EPOXY EACH
0010	59+52	STH 19 - RT	1
0010	62+49	STH 19 - LT	1
0010	64+09	STH 19 - LT	1
		TOTAL:	3

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.9910 CONSTRUCTION STAKING SUPPLEMENT CONTROL 3050-02-72 LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010	26+95	-	47+05	STH 19	2010	2010	-	2010
0010	47+85	-	57+00	STH 19	915	915	-	915
0010	57+00	-	59+76	STH 19	276	-	-	276
0010	60+38	-	65+89	STH 19	551	-	1	551
0010	SIDE STREETS (CURB RADIUS PT TO SAWCUT)				230	195	-	230
				TOTAL	3982	3120	1	3982

SAWCUTS

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	21+91			STH 29 - START OF PROJECT	32	-
0010	24+65			LT - SIDEWALK	-	6.5
0010	27+00	-	27+65	STH 29 - AT BRIDGE	-	75
0010	10+77 'C'			CANAL ST	45	-
0010	29+75	-	30+45	LT - DRIVEWAY & SIDEWALK	-	45
0010	33+00	-	33+40	LT - DRIVEWAY & SIDEWALK	-	45
0010	34+50	-	35+00	LT - SIDEWALK		8
0010	35+60		35+65	LT - SIDEWALK, RAMP	-	6
0010	36+00	-	36+50	LT - SIDEWALK AT DRIVEWAY	-	8
0010	38+25	-	38+50	LT - SIDEWALK	-	8
0010	40+00	-	40+20	LT - SIDEWALK	-	8
0010	41+50	-	41+75	LT - SIDEWALK	-	8
0010	10+82 'M'			MINNETONKA WAY	35	-
0010	42+30	-	42+34	LT - SIDEWALK	-	4
0010	43+90	-	44+20	LT - DRIVEWAY	16	4.5
0010	45+90	-	46+10	LT - DRIVEWALK	-	21
0010	46+40	-	46+45	LT - SIDEWALK	-	5
0010	48+40	-	48+70	LT - DRIVEWAY	28	-
0010	49+65	-	49+80	LT - DRIVEWAY	-	9
0010	50+15	-		LT - WALKWAY	-	4
0010	50+80	-	51+10	LT - DRIVEWAY	-	27
0010	51+70	-	51+85	LT - DRIVEWAY	11	-
0010	52+27	-		LT - WALKWAY	-	3
0010	52+90	-	53+05	LT - DRIVEWAY	15	-
0010	53+31			LT - WALKWAY	-	5
0010	53+95	-	54+10	LT - DRIVEWAY	10	-
0010	54+80	-	55+20	LT - PARKING LOT	52	-
0010	55+25	-	55+50	LT - DRIVEWAY	-	28
0010	55+45	-	56+50	LT - PARKING LOT	99	-
0010	56+50	-	57+15	LT - SIDEWALK - DO IT BEST	-	72
0010	57+15	-	57+60	LT - DRIVEWAY	40	-
0010	57+60	-	57+70	LT - SIDEWALK - POST OFFICE	-	30
0010	58+20	-		LT -SIDEWALK	-	4
0010	58+35	-	58+80	LT - DRIVEWALK	-	60
0010	59+10	-	59+40	LT - SIDEWALK - ROYAL COMMUNICATION	-	33
0010	59+40	-	59+50	LT - DRIVEWAY	17	-
0010	59+50	-	59+75	LT - SIDEWALK - MADISON ST. PUB	-	25
0010	59+75	-		BRIDGE APPROACH & SIDEWALK (W)	-	68
0010	60+35	-		BRIDGE APPROACH & SIDEWALK (E)	-	78
0010	60+25	-	60+75	LT - SIDEWALK - BUILDING CENTER	-	51
0010	60+75	-	60+90	LT - DRIVEWAY	23	-
0010	60+90	-	61+90	LT - SIDEWALK - ENDS AT AVESTAR CREDIT	-	115
0010	61+90	-	62+10	LT - DRIVEWAY	30	-
0010	62+10	-	63+15	LT - SIDEWALK TO MONROE ST	-	125
0010	10+58 'S'			N. MONROE ST	49	-
				SUBTOTAL:	502	989

SAWCUTS

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	63+55	-	64+55	LT - SIDEWALK - PARK/FOOD PANTRY	-	114
0010	64+85	-	65+00	LT - DRIVEWAY	15	-
0010	65+00	-	65+90	LT - SIDEWALK - STUBBY'S BOWL TO BRIDGE	-	88
0010	64+90			BRIDGE APPROACH & SIDEWALK	-	72
0010	34+00	-	34+50	RT - DRIVEWAY	41	-
0010	35+25	-	35+65	RT - DRIVEWAY	43	-
0010	36+00	-	36+50	RT - DRIVEWAY	-	44
0010	37+75	-	38+10	RT - DRIVEWAY	-	37
0010	40+10	-	40+30	RT - DRIVEWAY	16	-
0010	40+69			RT - WALKWAY	-	3
0010	42+15	-	42+35	RT - DRIVEWAY	-	9
0010	43+25	-	43+45	RT - DRIVEWAY	-	9
0010	43+50	-	43+60	RT - DRIVEWAY	12	-
0010	48+80	-	48+95	RT - DRIVEWAY	12	-
0010	49+25	-		RT - WALKWAY	-	3
0010	49+70	-		RT - SIDEWALK	-	4
0010	9+35 'V'	-		VAN BUREN ST	27	-
0010	50+50	-		RT - WALKWAY	-	3
0010	50+90	-	51+05	RT - DRIVEWAY	-	12
0010	51+20	-		RT - WALKWAY	-	4
0010	51+70	-	51+80	RT - WALKWAY	-	10
0010	51+95	-	52+05	RT - DRIVEWAY	12	-
0010	52+90	-	52+95	RT - SIDEWALK	-	4
0010	9+20 'H'	-		HARRISON ST	35	-
0010	53+45	-	53+50	RT - SIDEWALK	-	4
0010	53+85	-		RT - WALKWAY	-	5
0010	54+65	-	54+75	RT - WALKWAY	-	7
0010	54+90	-	54+95	RT - WALKWAY	-	5
0010	55+75	-	57+00	RT - PARKING LOT - SUBWAY/BP	125	-
0010	57+10	-	57+25	RT - SIDEWALK	-	19
0010	9+45 'J'			S. JACKSON ST	28	-
0010	57+55	-	57+60	RT - SIDEWALK	-	5
0010	58+45	-	59+35	RT - SIDEWALK - STATE BANK		96
0010	59+35	-	59+75	RT - DRIVEWAY - STATE BANK	89	-
0010	60+50	-	62+50	RT - SIDEWALK - ATTORNEY TO SERVICE DRIVE	-	200
0010	62+60	-	62+90	RT - U-SERVE PARKING LOT	50	-
0010	62+95	-	63+05	RT - SIDEWALK	-	13
0010	9+40 'R'			S. MONROE ST	45	-
0010	63+50	-	65+90	RT - SIDEWALK - CHIROPRACTIC TO BRIDGE	-	274
0010				UNDISTRIBUTED	50	200
				SUBTOTAL:	600	1244
0040				UNDISTRIBUTED	-	160
				SUBTOTAL:	0	160
				TOTAL:	1102	2393

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SEISMOGRAPH

CATEGORY	STAGE	STATION	TO	STATION	SPV.0045.03 SEISMOGRAPH DAY	COMMENTS
0010	1	46+50	-	48+25	10	LOCATED WITHIN STATION RANGE
0010	3	62+50	-	64+00	15	LOCATED WITHIN STATION RANGE
0010				UNDISTRIBUTED	5	
				TOTAL:	30	

LOW PERMEABLE PLUG

CATEGORY	STAGE	STATION	TO	STATION	SPV.0060.01 LOW PERMEABLE PLUG EACH	COMMENTS
PROJECT I.D. 3050-02-72						
0010	2/3	60+25	-	61+25	1	SITE 12
				SUBTOTAL:	1	
PROJECT I.D. 3050-02-73						
0020	2/3	60+25	-	61+25	1	SITE 12
				SUBTOTAL:	1	
				TOTAL:	2	

CONNECT PRIVATE PIPE ITEMS

CATEGORY	ROADWAY	SPV.0060.03 CONNECT PRIVATE PIPE EACH
0010	UNDISTRIBUTED	5
	TOTAL:	5

PIPE UNDERDRAIN

CATEGORY	STATION	-	STATION	LOCATION	SPV.0090.01 PIPE UNDERDRAIN WRAPPED (6-INCH) AND AGGREGATE LF
0010	27+68	-	27+96	STH 19 - LT	50
0010	27+73	-	28+44	STH 19 - RT	70
0010	33+29	-	35+73	STH 19 - LT	244
0010	33+29	-	35+73	STH 19 - RT	244
0010	38+43	-	38+93	STH 19 - LT	50
0010	38+44	-	38+94	STH 19 - RT	50
0010	41+55	-	41+85	STH 19 - LT	44
0010	42+19	-	42+50	STH 19 - LT	44
0010	45+85	-	47+05	STH 19 - LT	120
0010	45+85	-	47+05	STH 19 - RT	120
0010	48+12	-	48+62	STH 19 - LT	50
0010	48+12	-	48+62	STH 19 - RT	50
0010	49+67	-	49+74	STH 19 - RT	17
0010	50+00	-	50+55	STH 19 - RT	67
0010	52+65	-	53+03	STH 19 - RT	50
0010	56+37	-	58+82	STH 19 - LT	195
0010	56+37	-	57+19	STH 19 - RT	94
0010	57+49	-	58+17	STH 19 - RT	76
0010	59+54	-	59+76	STH 19 - RT	22
0010	60+47	-	61+51	STH 19 - LT	103
0010	60+58	-	61+07	STH 19 - RT	50
0010	65+15	-	65+65	STH 19 - LT	50
0010	65+15	-	65+65	STH 19 - RT	50
0010	10+41 'M'	-	10+82 'M'	MINNETONKA - LT	42
0010	10+41 'M'	-	10+82 'M'	MINNETONKA - RT	40
0010	9+35 'V'	-	9+63 'V'	VAN BUREN - LT	28
0010	9+35 'V'	-	9+63 'V'	VAN BUREN - RT	28
0010	9+20 'H'	-	9+62 'H'	HARRISON - LT	42
0010	9+20 'H'	-	9+62 'H'	HARRISON - RT	43
0010	9+45 'J'	-	9+61 'J'	S. JACKSON - LT	16
0010	9+45 'J'	-	9+61 'J'	S. JACKSON - RT	17
				TOTAL:	2166

REMOVE ABANDONED STEAM TUNNELS

CATEGORY	STATION	-	STATION	LOCATION	SPV.0090.07 REMOVE ABANDONED STEAM TUNNELS LF
PROJECT 3050-02-72					
0010	60+45			STH 19 - LT	10
0010	65+54			STH 19 - LT	13
				UNDISTRIBUTED	10
				TOTAL:	33
PROJECT 3050-02-73					
0010	60+45	-	60+58	STH 19 - RT	12
0010	61+14			STH 19	9
0010	61+65			STH 19	9
0010	63+10	-	63+20	STH 19	19
0010	63+30	-	63+40	STH 19 - RT	9
0010	65+55			STH 19	14
				Undistributed	20
				SUBTOTAL:	92
PROJECT 3050-02-73					
0020	60+45			STH 19 - LT	9
0020	60+58	-	63+31	STH 19 - RT	274
0020	61+14			STH 19	57
0020	61+65			STH 19	34
0020	61+73	-	61+82	STH 19 - RT	9
0020	62+97	-	63+22	STH 19	84
0020	63+40	-	64+27	STH 19 - RT	87
0020	64+76	-	64+85	STH 19 - RT	9
0020	65+24	-	65+33	STH 19 - RT	9
0020	65+50	-	65+55	STH 19	48
0020				Undistributed	63
				SUBTOTAL:	683
				TOTAL:	808

REMOVING HAZMAT

CATEGORY	STATION	-	STATION	LOCATION	SPV.0195.01 EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM-CONTAMINATED SOIL AND MANAGEMENT OF PETROLEUM-CONTAMINATED GROUNDWATER TONS
0010	57+62	-	57+75	STH 19 - RT	40
0010	60+35	-	61+25	STH 19	5
0010	60+25	-	61+04	STH 19 - LT	162
0010	60+32	-	60+63	STH 19 - RT	51
0010				UNDISTRIBUTED	26
				TOTAL:	284

EXCAVATION, HAULING, AND DISPOSING OF PETROLEUM-CONTAMINATED SOIL
AND MANAGEMENT OF PETROLEUM-CONTAMINATED GROUNDWATER

			SPV.0195.01	SPV.0195.01	
		CATEGORY:	0010	0020	
STATION	TO STATION	LOCATION	SANITARY TN	WATERMAIN TN	COMMENTS
56+75	57+75	CL TO RT LIMITS	494	482	SITE 10
58+50	59+25	CL TO LT LIMITS	299	0	SITE 11
60+25	61+25	LT TO RT LIMITS	601	453	SITE 12
62+75	63+25	CL TO RT LIMITS	290	215	SITE 13
65+00	65+75	CL TO LT LIMITS	446	380	SITE 14
TOTAL			**2130**	**1530**	

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WATERMAIN

STATION	TO	STATION	LOCATION	SPV.0090.21 10-INCH LF	SPV.0090.22 8-INCH LF	SPV.0090.23 6-INCH LF	SPV.0090.24 4-INCH LF	COMMENTS
28+19.0		28+43.3	LT&RT	112				CANEL RD
28+43.3		29+89.9	RT	146				MAIN
28+36.4		28+50.2	RT	45				MAIN CONNECT TO TEE
28+75.2			RT			14		HYDRANT LATERAL
29+89.9		32+50	RT	260				MAIN
32+50			24.3 RT			15		HYDRANT LATERAL
32+53.5		32+59.7	29 LT		42			MAIN CONNECT TO TEE
32+53.5		33+25.9	RT&LT			35		MAIN
33+21.2		33+25.9	30.5 LT				7	MAIN TO CONNECT
32+50		38+25	9.5 RT	575				MAIN
38+25			23 RT			15		HYDRANT LATERAL
38+25		42+10.7	23 RT	370				MAIN
41.7			21 RT			13		HYDRANT LATERAL
42+10.7		42+02.0	9.4 RT	76				MAIN TO CONNECT
42+10.7		43+74.8	8.1 RT	162				MAIN
43+74.8		45+60.5	8.1 RT	182				MAIN
45+60.5		46.21.4	8 RT	61				MAIN
46+21.4		47+06	8 RT	103				MAIN TO DIR DRILL
46+50			23.5 RT			8		HYDRANT LATERAL
47+76		48+28.3	52 RT	71				MAIN
48+28.3		49+96.3	8 RT	168				MAIN CONNECT TO TEE
49+96.3		49+91.1	8 RT		30			CONNECT TO TEE
49+96.3		53+31	8 RT	335				MAIN
50+25			20.5 RT			13		HYDRANT LATERAL
53+31			8 RT		36			CONNECT TO TEE
53+31		57+29.6	8 RT	399				MAIN
53+70			22.4 RT			15		HYDRANT LATERAL
57+29.6		57+34.3	7.1 RT	45				MAIN TO CONNECT
57+29.6		59+53.5	7.1 RT	231				MAIN
57+45.5		57+40.0	7.5 RT	37				JACKSON ST
57+75			28.5 RT			21		HYDRANT LATERAL
60+46.7		63+23.7	13.3 LT	289				MAIN
62+80.6		29.6 LT	29.6 LT			35		HYDRANT LATERAL
63+16.3			28.9 LT			39		N MONROE ST
63+23.7		65+60.6	6 RT	247				MAIN
63+46.5			6.9 RT	39				S MONROE ST
65+41			33 LT			17		HYDRANT LATERAL
TOTAL				**3953**	**108**	**240**	**7**	

WATERMAIN DIRECTIONALLY DRILLED

CATEGORY: SPV.0090.32 0020

STATION	TO	STATION	10-INCH EACH	COMMENTS
47+06		47+76	70	RIVER CROSSING BY LIFT STATION
TOTAL			**70**	

SANITARY FORCEMAIN DIRECTIONALLY DRILLED

CATEGORY: SPV.0090.33 0010

STATION	TO	STATION	6-INCH EACH	COMMENTS
47+06		47+76	70	RIVER CROSSING BY LIFT STATION
TOTAL			**70**	

TRENCH BACKFILL-WATER AND SANITARY

SPV.0035.21

UNDISTRIBUTED	CY	CATEGORY
WATERMAIN	9830	0020
SAN SEWER	13060	0010
TOTAL	**22890**	

NOTE:
ALL BID ITEMS INCLUDED IN CATEGORY 0020
UNLESS OTHERWISE NOTED

GATE VALVE & BOX

SPV.0060.24 SPV.0060.23 SPV.0060.22

STATION	LOCATION	10-INCH EACH	8-INCH EACH	6-INCH EACH	COMMENTS
28+17.6	85.4 LT	1			CANEL RD
28+55.2	9.4 RT	1			MAIN
28+75.2	21.0 RT			1	MAIN HYDRANT
32+45	9.5 RT	1			MAIN
32+50	24.3 RT			1	MAIN - HYDRANT
32+59	13.2 LT		1		MAIN
33+21.2	13.3 LT			1	MAIN
38+20	8 RT	1			MAIN
38+25	8 RT			1	MAIN - HYDRANT
41+65	8 RT	1			MAIN
41.7	21 RT			1	MAIN - HYDRANT
42+10.8	30.8 LT	1			MAIN
42+25	10.2 RT	1			MAIN
46+16.4	8 RT	1			MAIN
46+50	23.5 RT			1	MAIN - HYDRANT
49+95.5	27.4 RT		1		VAN BUREN
50+20	8 RT	1			MAIN
50+25	20.5 RT			1	MAIN - HYDRANT
53+29.6	30.1 RT		1		HARRISON ST
53+65	7.8 RT	1			MAIN
53+70	22.4 RT			1	MAIN - HYDRANT
57+31.2	29 LT	1			MAIN - CONNECTION
57+43	31.9 RT	1			JACKSON ST
57+70	8 RT	1			MAIN
57+75	28.5 RT			1	MAIN - HYDRANT
59+53.5	9.6 LT	1			MAIN
60+46.7	13.3 LT	1			MAIN
62+75.9	5.4 RT	1			MAIN
62+80.6	29.6 LT			1	MAIN - HYDRANT
63+16.6	33.8 LT	1			S MONROE ST
63+65.1	8 RT	1			MAIN
63+39.8	38.4 RT	1			
65+38.0	16.3	1			MAIN
65+41.0	33 LT			1	MAIN - HYDRANT
TOTAL		**20**	**3**	**11**	

WATER MANHOLE WITH GATE VALVE AND BOX AND TESTING CORP STOPS

SPV.0060.49

STATION	LOCATION	WATER MANHOLE W/ 60" ID
48+05.2	8 RT	1
TOTAL		1

NOTE:
ALL BID ITEMS INCLUDED IN CATEGORY 0020
UNLESS OTHERWISE NOTED

HYDRANT

SPV.0060.41

STATION	LOCATION	EACH	BURY LINE ELEVATION	COMMENTS
28+75.2	24 RT	1	821.8	
32+50	24.3 RT	1	820.4	
38+25	23 RT	1	824.0	
41+70	21 RT	1	830.4	
46+50	23.5 RT	1	822.9	
50+25	20.5 RT	1	829.8	
53+70	22.4 RT	1	827.2	
57+75	28.5 RT	1	815.0	
62+80.6	29.6 LT	1	818.9	
65+41	33	1	817.4	
TOTAL		**10**		

CONNECT TO EXISTING WATERMAIN

SPV.0060.21

STATION	LOCATION	EACH	COMMENTS
28+19.0	97.5 LT	1	CANAL RD
28+36.4	42.2 RT	1	W. MADISON ST
32+53.5	29 LT	1	MAIN
33+26.2	30.9 LT	1	MAIN
42+02.0	62.4 LT	1	MINNETONKA WAY
49+91.1	32.3 RT	1	VAN BUREN
53+31.6	42.1 RT	1	HARRISON ST
57+34.3	34 LT	1	MAIN
57+40.0	43.3 RT	1	JACKSON ST
59+53.5	9.6 LT	1	MAIN
60+46.7	13.3 LT	1	MAIN
63+16.3	28.9 LT	1	N MONROE ST
63+39.8	39 RT	1	S MONROE ST
65+60.6	16.4 LT	1	END OF WORK
TOTAL		**14**	

REMOVE HYDRANT

SPV.0060.42

STATION	LOCATION	EACH	COMMENTS
33+75	23.5 RT	1	
42+90.5	38.0 RT	1	
53+50.0	18.9 LT	1	
60+94.3	26.3 LT	1	
62+97.1	26.8 LT	1	
65+41.1	33 LT	1	
TOTAL		**6**	

BEND FITTINGS

		SPV.0060.32	SPV.0060.33	SPV.0060.34	SPV.0060.35	SPV.0060.36	SPV.0060.37	
STATION	LOCATION	90° 10-INCH EACH	45° 10-INCH EACH	22.5° 10-INCH EACH	11.25° 10-INCH EACH	45° 8-INCH EACH	45° 4-INCH EACH	COMMETNS
28+16.5	93.3 LT		1					CANAL RD
28+26.1	27.1 LT			1				CANAL RD
28+43.3	8.9 RT		1	1				MAIN
28+48.8	41.7 RT	1						MAIN
29+89.9	8 RT				1			MAIN
32+54	28 LT					2		CONNECT
33+21.2	26 LT						2	CONNECT - MAIN
41+87	8 RT				1			
42+01.8	57.4 LT		1					MAIN
42+10.9	47.6 LT		1					MAIN
43+74.8	8.1 RT			1				MAIN
45+60.5	8 RT				1			MAIN
46+21.4	8 RT		1					MAIN
46+65.4	52 RT		1					MAIN
47+84	52 RT		1					MAIN
48+28.3	8 RT		1					MAIN
49+95.4	29.4 RT					1		VAN BUREN
49+91.1	32.3 RT					1		VAN BUREN
53+29.5	32.1 RT					1		HARRISON ST
53+32.2	34.8 RT					1		HARRISON ST
57+31.3	32 LT		1					CONNECT - MAIN
57+34.3	34 LT		1					CONNECT - MAIN
57+42.8	33.9 RT		1					JACKSON ST
57+40.6	36.2 RT		1					JACKSON ST
59+25	8 RT		1					MAIN
59+42.6	9.6 LT		1					MAIN
60+57.3	14.0 LT		1					MAIN
60+80.2	6.8 RT		1					MAIN
63+25.3	19.3 LT		1					N MONROE ST
63+16.3	28.9 LT		1					N MONROE ST
63+44.9	32.4 RT		1					S MONROE ST
63+39.8	37 RT		1					S MONROE ST
65+10.9	8 RT		1					MAIN
65+35.7	16.3 LT		1					MAIN
TOTAL		**1**	**21**	**2**	**3**	**6**	**2**	

REDUCER FITTING

		SPV.0060.28	SPV.0060.29	SPV.0060.30	SPV.0060.31	
STATION	LOCATION	10"X8" EACH	10"X6" EACH	8"X6" EACH	6"X4" EACH	COMMENTS
28+19.0	97.5 LT		1			CANEL RD
28+36.4	42.2 RT	1				W. MADISON ST
33+21.2	26.0 LT				1	MAIN
42+02	62.4 LT	1				
49+91.1	32.3 RT			1		VAN BUREN
53+31.6	42.1 RT			1		HARRISON ST
57+34.3	34 LT		1			MAIN - CONNECTION
TOTAL		**2**	**2**	**2**	**1**	

NOTE:
ALL BID ITEMS INCLUDED IN CATEGORY 0020
UNLESS OTHERWISE NOTED

WATER SERVICE

STATION		LOCATION	SPV.0090.25 WATER SERVICE LATERAL 1-INCH LF	SPV.0060.38 CORP STOP 1-INCH EACH	SPV.0060.39 CURB STOP & BOX 1-INCH EACH	SPV.0060.40 CONNECT TO EXISTING WATER SERVICE EACH	COMMENTS
29+10		LT	90	1	1	1	Waterloo Vet Clinic
30+75		LT	44	1	1	1	
34+57		RT	25	1	1	1	
37+00		RT	57	1	1	1	
40+74		RT	25	1	1	1	
42+85		RT	21	1	1	1	
45+95		LT	47	1	1	1	
48+77		RT	31	1	1	1	
49+11		RT	26	1	1	1	
49+16		LT	40	1	1	1	
50+36		RT	40	1	1	1	
51+27		RT	26	1	1	1	
51+42		LT	40	1	1	1	
51+68		RT	26	1	1	1	
52+08		LT	40	1	1	1	
53+37		LT	40	1	1	1	
54+55		LT	39	1	1	1	
54+61		RT	26	1	1	1	
56+32		LT	39	1	1	1	
57+67		LT	39	1	1	1	
58+58		RT	28	1	1	1	
59+54		LT	26	1	1	1	
60+53		LT	18	1	1	1	
61+12		RT	28	1	1	1	
61+14		LT	38	1	1	1	
61+53		RT	28	1	1	1	
61+66		LT	38	1	1	1	
61+78		RT	28	1	1	1	
62+09		RT	28	1	1	1	
62+20		RT	28	1	1	1	
62+90		LT	39	1	1	1	
62+94		LT	39	1	1	1	
64+22		RT	27	1	1	1	
64+46		LT	39	1	1	1	
64+56		RT	27	1	1	1	
64+77		LT	39	1	1	1	
64+80		RT	27	1	1	1	
65+06		LT	39	1	1	1	
65+28		RT	36	1	1	1	
65+41		LT	14	1	1	1	
65+57		RT	51	1	1	1	
TOTAL			**1426**	**41**	**41**	**41**	

TEE FITTING

STATION	LOCATION	SPV.0060.25 10"X10" EACH	SPV.0060.26 10"X8" EACH	SPV.0060.27 10"X6" EACH
28+50.2	9.2 RT	1		
28+60.3	10 RT			1
32+50	24.3 RT			1
32+59.7	9.4 RT		1	
33+21	8.7 RT			1
38+25	8 RT			1
41+70	21 RT			1
42+10.7	9.4 RT	1		
46+50	23.5 RT			1
49+96.3	8 RT		1	
50+25	20.5 RT			1
53+31	8 RT		1	
53+70	22.4 RT			1
57+29.6	7.1 RT	1		
57+45.5	7.5 RT	1		
57+75	28.5 RT			1
62+80.6	29.6 LT			1
63+23.7	6 RT	1		
63+46.5	6.9 RT	1		
65+41	33 LT			1
TOTAL		**6**	**3**	**11**

REMOVE OR ABANDON EXISTING WATER VALVE MH

STATION	LOCATION	SPV.0060.43 EACH
42+91.9	3.8 RT	1
49+65.3	6.1 LT	1
53+32.0	38.2 RT	1
57+40.6	36.2 RT	1
59+09.5	8.0 LT	1
60+52.2	12.4 LT	1
63+08.5	12.9 LT	1
63+68.3	11.3 LT	1
65+45.8	16.1 LT	1
TOTAL		**9**

NOTE:
ALL BID ITEMS INCLUDED IN CATEGORY 0020
UNLESS OTHERWISE NOTED

SAN SEWER SCHEDULE OF QTY

			SPV.0200.21						SPV.0090.26	SPV.0090.27	SPV.0090.28	SPV.0090.29	SPV.0090.31	
STRUCTURE	STATION	LOCATION	SAN MH 48" ID W/ CASTING VF	RIM EL	IE	FROM	TO	SAN SEWER 48" EA	SAN SEWER 15-INCH LF	SAN SEWER 12-INCH LF	SAN SEWER 10-INCH LF	SAN SEWER 8-INCH LF	SAN SEWER 6-INCH FM LF	COMMENTS
A	28+50	CL	8.6	821.43	812.83			1						
						CONT	A			78				
						A	B			88				
B	29+38.3	1.6 RT	9.04	821.57	812.53			1						
						C	B					30		
						B	D			51				
C	29+37.9	27.5 LT	7.39	821.94	814.55			1						
D	29+89.9	CL	9.06	821.37	812.31			1						
						D	E			261				
E	32+51.5	1.5 RT	8.4	820.01	811.61			1						
						EXIST	E					26		
						E	F			79				
F	33+30.6	0.6 RT	8.31	819.63	811.32			1						
						F	G			59				
						EXIST	F					23		
G	33+90	CL	8.26	819.35	811.09			1						
						G	H			400				
H	37+90	CL	12.69	822.76	810.07			1						
						H	I			386				
I	41+87.4	CL	21.19	830.24	809.05			1						
						EXIST	I					28		
						I	J			187				
J	43+75	CL	20.06	828.58	808.52			1						
						J	K			184				
K	45+59.8	CL	15.82	823.82	808			1						
						K	L			96				
L	46+55.9	CL	14.94	822.62	807.68			1						
						L	LIFT		43					
LIFT STA	46+80	38 RT				LIFT	DIR						24	FM on each side of Directionally
						DIR	M						67	Drilled River Crossing
M	48+25	CL	5.49	823.50	818.01			1						
						M	N			160				
N	49+84.5	CL	10.53	828.07	817.54			1						
						EXIST	N					34		
						N	O			339				
O	53+23.5	CL	11.55	828.21	816.66			1						
						EXIST	O					35		
						O	P			415				
P	57+38.4	0.7 LT	8.94	815.1	806.16			1						
						NORTH	P					35		
						SOUTH	P				36			
						P	Q			219				
Q	59+56.8	CL	10.57	816.28	805.71			1						
						Q	EXIST			6				
R	60+60.2	1 LT	11.81	816.96	805.15			1						
						EXIST	R			7				
						R	S			276				
S	63+36.2	1.7 LT	15	819.75	804.75			1						
						NORTH	S			36				
						SOUTH	S					48		
						SOUTH	T		214					
T	65+50.2	CL	12.65	817.35	804.7			1						
						T	EXIST		7					
TOTAL			**230.3**					**20**	**264**	**3327**	**36**	**259**	**91**	

NOTE:
ALL BID ITEMS INCLUDED IN CATEGORY 0010 UNLESS OTHERWISE NOTED

3

SANITARY SEWER SERVICES AND RECONNECTIONS

STATION	LOCATION	SPV.0060.47 WYE SPV.0060. 15"X6" EACH	SPV.0060.48 WYE SPV.0060. 12"X6" EACH	SPV.0090.30 SAN SEWER SERVICE LAT 6" LF	SPV.0060.46 CONNECT TO EXIST SAN SEWER SERVICE EACH	COMMENTS
30+75	LT		1	36	1	
34+57	RT		1	33	1	
37+00	RT		1	65	1	
40+74	RT		1	33	1	
42+85	RT		1	28	1	
45+95	LT		1	39	1	
48+77	RT		1	40	1	
49+11	RT		1	34	1	
49+16	LT		1	32	1	
50+36	LT		1	32	1	
51+27	RT		1	34	1	
51+42	LT		1	32	1	
51+68	RT		1	34	1	
52+08	LT		1	34	1	
53+37	LT		1	33	1	
54+55	LT		1	32	1	
54+61	RT		1	34	1	
56+32	LT		1	31	1	
57+67	LT		1	31	1	
58+58	RT		1	36	1	
59+54	LT		1	31	1	
60+53	LT		1	33	1	
61+12	RT		1	35	1	
61+14	LT		1	31	1	
61+53	RT		1	36	1	
61+66	LT		1	30	1	
61+78	RT		1	36	1	
62+09	RT		1	36	1	
62+20	RT		1	36	1	
62+90	LT		1	30	1	
62+94	LT		1	30	1	
64+22	RT	1		35	1	
64+46	LT	1		31	1	
64+56	RT	1		35	1	
64+77	LT	1		31	1	
64+80	RT	1		35	1	
65+06	LT	1		31	1	
65+28	RT	1		35	1	
65+41	LT	1		31	1	
65+57	RT	1		35	1	
TOTAL		**9**	**31**	**1366**	**40**	

CONNECT TO EXISTING SAN SEWER

STATION	LOCATION	SPV.0060.45 EACH	COMMENTS
27+78.2	32.2 RT	1	
29+37.9	27.5 LT	2	
32+51.2	21.8 LT	1	
33+29.4	21.3 LT	1	
41+87.5	27.7 LT	1	
45+59.8	CL	1	
46+80	38 RT	2	CONNECTION TO LIFT STATION
49+83.2	34 RT	1	
53+21.3	34.4 RT	1	
57+39.9	35.5 LT	1	
57+34.6	35.5 RT	1	
59+59.7	5.5 RT	1	
60+55.72	4.3 RT	1	
63+38.5	37.4 LT	1	
63+31.8	46.4 RT	1	
65+54.8	5.2 RT	1	
TOTAL		**18**	

REMOVE OR ABANDON EXISTING SAN MH

STATION	LOCATION	SPV.0060.44 EACH	COMMENTS
29+37.8	27.5 LT	1	
29+58.1	22.2 RT	1	
32+51.2	19.8 LT	1	
33+31.4	16.6 RT	1	
33+29.55	19.3 LT	1	
37+32.9	16.3 RT	1	
41+34.7	15.8 RT	1	
41+82.6	16.1 RT	1	
42+61.8	18.5 RT	1	
43+88.4	21.0 RT	1	
45+59.6	28.8 RT	1	
46.66.9	22.6 RT	1	
48+49.7	16.7 RT	1	
49+52.3	15.5 RT	1	
49+84.6	0.8 RT	1	
53+23.4	1.2 RT	1	
57+38.1	1.7 RT	1	
59+58.1	2.4 RT	1	
60+58.23	1.2 RT	1	
63+36.1	0.5 RT	1	
65+52.3	2.4 RT	1	
TOTAL		**21**	

NOTE:
ALL BID ITEMS INCLUDED IN CATEGORY 0010
UNLESS OTHERWISE NOTED

3

STREET LIGHTING REMOVALS

STATION	OFFSET	R/L	204.0195 REMOVING CONCRETE BASES EACH	SPV.0060.63 REMOVE AND SALVAGE LIGHTING UNIT EACH
ALL ITEMS CATEGORY 0030				
50+30	20'	RT	--	1
51+90	20'	RT	--	1
53+25	20'	LT	--	1
54+55	20'	RT	--	1
55+90	20'	LT	--	1
57+10	30'	RT	--	1
57+90	25'	LT	--	1
58+25	30'	RT	--	1
59+00	25'	LT	--	1
59+70	30'	RT	--	1
60+30	25'	LT	--	1
61+00	30'	RT	--	1
61+70	25'	LT	--	1
62+30	30'	RT	--	1
62+90	25'	LT	--	1
63+70	30'	RT	--	1
64+25	30'	LT	--	1
64+90	30'	RT	--	1
65+75	30'	LT	--	1
9+60 'R'	35'	LT	--	1
CATEGORY 0030 SUBTOTAL			--	20
ALL ITEMS CATEGORY 0040				
9+10 'R'	25'	RT	1	1
8+30 'R'	25'	LT	1	1
7+70 'R'	25'	RT	1	1
CATEGORY 0040 SUBTOTAL			3	3
PROJECT TOTALS			3	23

LIGHTING CONDUIT AND WIRE - EAST

FROM	-	TO	652.0605* CONDUIT SPECIAL 2-INCH LF	SPV.0090.61 EQUIVALENT LIGHTING CONDUCTOR LF	REMARKS
ALL ITEMS ARE CATEGORY 0030					
SL 400	-	SL 402	115	375	--
SL 402	-	SL 404	135	435	--
SL 404	-	SL 406	240	750	--
SL 401	-	SL 403	115	375	--
SL 403	-	SL 405	200	630	--
PROJECT TOTALS			805	2565	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

LIGHTING CONDUIT AND WIRE

FROM	-	TO	652.0125 CONDUIT RIGID METALLIC 2-INCH LF	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0605* CONDUIT SPECIAL 2-INCH LF	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF	REMARKS
ALL ITEMS ARE CATEGORY 0030								
CB 200	-	LPB 201	--	10	--	--	168	--
LPB 201	-	LPB 200	40	--	--	--	483	CONDUIT IN STRUCTURE
LPB 200	-	SL 201	--	55	--	--	204	--
SL 201	-	SL 200	--	185	--	--	585	--
CB 200	-	LPB 202	--	10	--	--	168	--
LPB 202	-	SL 202	--	15	--	--	112	--
SL 202	-	SL 203	--	165	--	--	700	--
SL 203	-	SL 204	--	180	--	--	760	--
SL 204	-	SL 205	--	180	--	--	760	--
SL 205	-	SL 206	--	190	--	--	800	--
SL 206	-	SL 207	--	170	--	--	720	--
SL 207	-	LPB 203	--	80	--	--	744	--
LPB 203	-	SL 209	--	115	--	--	512	--
SL 209	-	LPB 207	--	80	--	--	--	PULL WIRE ONLY
LPB 205	-	LPB 206	--	60	--	--	304	--
LPB 206	-	SL 208	--	35	--	--	192	--
SL 208	-	SL 210	--	165	--	--	700	--
CB 100	-	LPB 108	--	--	30	344	--	--
LPB 108	-	SL 109	--	--	110	492	--	--
SL 109	-	LPB 103	--	--	145	632	--	--
LPB 103	-	SL 103	--	15	--	224	--	--
SL 103	-	SL 101	--	150	--	640	--	--
SL 101	-	LPB 101	--	90	--	--	--	PULL WIRE ONLY
LPB 101	-	LPB 100	--	60	--	--	--	PULL WIRE ONLY
LPB 100	-	SL 100	--	20	--	--	--	PULL WIRE ONLY
SL 100	-	SL 102	--	165	--	700	--	--
SL 102	-	LPB 102	--	80	--	744	--	--
LPB 102	-	LPB 103	--	70	--	344	--	--
LPB 102	-	LPB 104	--	75	--	--	--	PULL WIRE ONLY
LPB 104	-	SL 105	--	30	--	172	--	--
SL 105	-	LPB 106	--	155	--	672	--	--
LPB 106	-	SL 107	--	25	--	152	--	--
LPB 106	-	LPB 107	--	65	--	--	--	PULL WIRE ONLY
LPB 107	-	SL 106	--	70	--	--	--	PULL WIRE ONLY
SL 106	-	LPB 105	--	125	--	552	--	--
LPB 105	-	LPB 104	--	65	--	324	--	--
LPB 105	-	LPB 103	--	70	--	--	--	PULL WIRE ONLY
LPB 105	-	SL 108	--	--	65	624	--	--
SL 108	-	SL 110	--	--	145	620	--	--
SL 110	-	LPB 108	--	--	80	372	--	--
LPB 108	-	CB 100	--	--	30	360	--	--
PROJECT TOTALS			40	3025	605	7968	7912	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

LIGHTING CONTROL

CABINET NUMBER	STATION	OFFSET	R/L	654.0230 CONCRETE CONTROL BASES TYPE L30 EACH	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (CB200) LS	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH EACH	SPV.0060.67 LIGHTING CONTROL BOX SPECIAL LS
ALL ITEMS ARE CATEGORY 0030							
CB100	FIELD LOCATE			--	--	--	1
CB200	48+04	42.2'	LT	1	1	1	--
PROJECT TOTALS				1	1	1	1

3

STREET LIGHTS

LIGHT NUMBER	STATION	OFFSET	R/L	654.0105 CONCRETE BASES TYPE 5 EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0322 POLES TYPE 5-ALUMINUM EACH	657.0615 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 8-FT EACH	659.1120 LUMINAIRES UTILITY LED B EACH	SPV.0060.64 REMOVE AND REINSTALL DECORATIVE STREET LIGHT ASSEMBLY EACH	SPV.0060.65 DECORATIVE STREET LIGHT ASSEMBLY EACH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF
ALL ITEMS ARE CATEGORY 0030											
SL 100	60+60	26.8'	LT	--	--	--	--	--	--	1	179
SL 101	61+34	30.8'	RT	--	--	--	--	--	--	1	179
SL 102	62+22	26.8'	LT	--	--	--	--	--	--	1	179
SL 103	62+83	30.8'	RT	--	--	--	--	--	--	1	179
SL 104	10+66	26.7'	RT	--	--	--	--	--	1	--	179
SL 105	64+00	36.7'	LT	--	--	--	--	--	--	1	179
SL 106	64+83	29.5'	RT	--	--	--	--	--	--	1	179
SL 107	65+73	28.8'	LT	--	--	--	--	--	--	1	179
SL 200	44+42	24.7'	LT	1	1	1	1	1	--	--	153
SL 201	46+18	24.7'	LT	1	1	1	1	1	--	--	153
SL 202	48+15	30.0'	LT	1	1	1	1	1	--	--	153
SL 203	49+76	24.7'	LT	1	1	1	1	1	--	--	153
SL 204	51+53	24.7'	LT	1	1	1	1	1	--	--	153
SL 205	53+32	24.7'	LT	1	1	1	1	1	--	--	153
SL 206	55+23	24.7'	LT	1	1	1	1	1	--	--	153
SL 207	56+90	27.8'	LT	--	--	--	--	--	--	1	179
SL 208	58+00	28.8'	RT	--	--	--	--	--	--	1	179
SL 209	58+84	27.8'	LT	--	--	--	--	--	--	1	179
SL 210	59+62	27.6'	RT	--	--	--	--	--	--	1	179
CATEGORY 0030 SUBTOTAL				7	7	7	7	7	1	11	3219
ALL ITEMS ARE CATEGORY 0040											
SL 108	9+09 'R'	24.4'	RT	--	--	--	--	--	--	1	179
SL 109	8+29 'R'	29.2'	LT	--	--	--	--	--	--	1	179
SL 110	7+68 'R'	27.8'	RT	--	--	--	--	--	--	1	179
CATEGORY 0040 SUBTOTAL				0	0	0	0	0	0	3	537
PROJECT TOTALS				7	7	7	7	7	1	14	3756

3

LIGHTING PULLBOXES

PULLBOX NUMBER	STATION	OFFSET	R/L	SPV.0060.66 * PULL BOX NON-CONDUCTIVE 24X42-INCH EACH
ALL ITEMS ARE CATEGORY 0030				
PB 100	60+44	25.3'	LT	1
PB 101	60+44	32.5'	RT	1
PB 102	63+00	27.2'	LT	1
PB 103	62+93	31.0'	RT	1
PB 104	63+73	32.3'	LT	1
PB 105	63+62	31.8'	RT	1
PB 106	65+51	33.0'	LT	1
PB 107	65+51	28.7'	RT	1
PB 108	FIELD LOCATE			1
PB 200	46+72	20.5'	LT	1
PB 201	48+02	35.2'	LT	1
PB 202	48+06	35.2'	LT	1
PB 203	57+70	27.5'	LT	1
PB 206	57+70	28.5'	RT	1
PB 207	59+62	26.7'	LT	1
PROJECT TOTALS				15

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

STOP SIGN FLASHER CONDUIT AND WIRE

FROM	-	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	655.0210 * CABLE TRAFFIC SIGNAL 3-14 AWG LF	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF	REMARKS
ALL ITEMS ARE CATEGORY 0040						
EX CB 500	-	EX FPB 500	--	240	240	EXISTING CONDUIT
EX FPB 500	-	SSF 500	15	30	30	--
EX FPB 500	-	EX FPB 501	--	50	50	EXISTING CONDUIT
EX FPB 501	-	SSF 501	35	70	70	--
EX FPB 501	-	FPB 502	85	85	85	--
FPB 502	-	SSF 102	20	40	40	--
FPB 502	-	FPB 503	75	75	75	--
FPB 503	-	SSF 503	10	10	10	--
FPB 503	-	EX FPB 500	95	--	--	PULL WIRE ONLY
PROJECT TOTALS			335	600	600	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

STOP SIGN FLASHER PULLBOXES

PULLBOX NUMBER	STATION	OFFSET	R/L	653.0900 ADJUSTING PULL BOXES EACH	SPV.0060.66 * PULL BOX NON-CONDUCTIVE 24X42-INCH EACH
ALL ITEMS ARE CATEGORY 0040					
EX FPB 500	9+48	23.1'	RT	1	--
EX FPB 501	9+48	26.7'	LT	1	--
FPB 502	63+07	33.0'	LT	--	1
FPB 503	63+76	30.5'	LT	--	1
PROJECT TOTALS				2	2

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

STOP SIGN FLASHERS

LIGHT NUMBER	STATION	OFFSET	R/L	654.0101 CONCRETE BASES TYPE 1 EACH	657.0100 PEDESTAL BASES EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	658.0103 TRAFFIC SIGNAL FACE 1-12 INCH VERTICAL EACH	658.0600 LED MODULES 12-INCH RED BALL EACH	658.5069 SIGNAL MOUNTING HARDWARE (STH 19 & STH 89) LS	655.0210 * CABLE TRAFFIC SIGNAL 3-14 AWG LF	SPV.0060.61 REMOVE AND SALVAGE STOP SIGN FLASHER ASSEMBLY EACH	SPV.0060.62 REMOVE SALVAGE AND REINSTALL STOP SIGN FLASHER ASSEMBLY EACH
ALL ITEMS ARE CATEGORY 0040												
SSF 500	9+60	24.2'	RT	1	--	--	--	1	--	26	--	1
SSF 501	62+73	33.7'	RT	1	1	1	1	1	--	26	1	--
SSF 502	10+50	26.8'	LT	1	--	--	--	1	--	26	--	1
SSF 503	63+86	28.8'	LT	1	1	1	1	1	--	26	1	--
W Madison St & N Monroe St				--	--	--	--	--	1	--	--	--
PROJECT TOTALS				4	2	2	2	4	1	104	2	2

* ADDITIONAL QUANTITIES LISTED ELSEWHERE



CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
NATIONAL GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES

R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND CHISELED X
FOUND IRON PIN
VALVE (GAS, WATER, ETC.)
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS CONTROLLED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)

BRIDGE
PARCEL NUMBER 25
UTILITY NUMBER 40

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	PART OF	PRT
ACRES	AC	PERMANENT LIMITED EASEMENT	PLE
AHEAD	AH	POINT OF BEGINNING	POB
ALUMINUM	ALUM	POINT OF CURVATURE	PC
AND OTHERS	ET AL	POINT OF COMPOUND CURVE	PCC
BACK	BK	POINT OF INTERSECTION	PI
BLOCK	BLK	PROPERTY LINE	PL
CENTERLINE	C/L	RECORDED AS	(100')
CERTIFIED SURVEY MAP	CSM	REFERENCE LINE	R/L
CONCRETE	CONC	REMAINING	REM
COUNTY	CO	RIGHT	RT
COUNTY TRUNK HIGHWAY	CTH	RIGHT OF WAY	R/W
DISTANCE	DIST	SECTION	SEC
DRILL HOLE	DH	SEPTIC VENT	SEPV
CORNER	COR	SQUARE FEET	SF
DOCUMENT NUMBER	DOC	STATE TRUNK HIGHWAY	STH
EASEMENT	EASE	STATION	STA
EXISTING	EX	SUBDIVISION	SUBD
FOUND	FD.	TANGENT	TAN
GAS VALVE	GV	TELEPHONE PEDESTAL	TP
GRID NORTH	GN	TEMPORARY LIMITED EASEMENT	TLE
HIGHWAY EASEMENT	HE	TRANSPORTATION PROJECT PLAT	TPP
IDENTIFICATION	ID	UNITED STATES HIGHWAY	USH
IRON PIPE/REBAR	IP	VOLUME	V
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
PARKER KALON NAIL	PK		
PINCHED PIPE	PP		
POINT OF TANGENCY	PT		

CURVE DATA

LONG CHORD	LC
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET

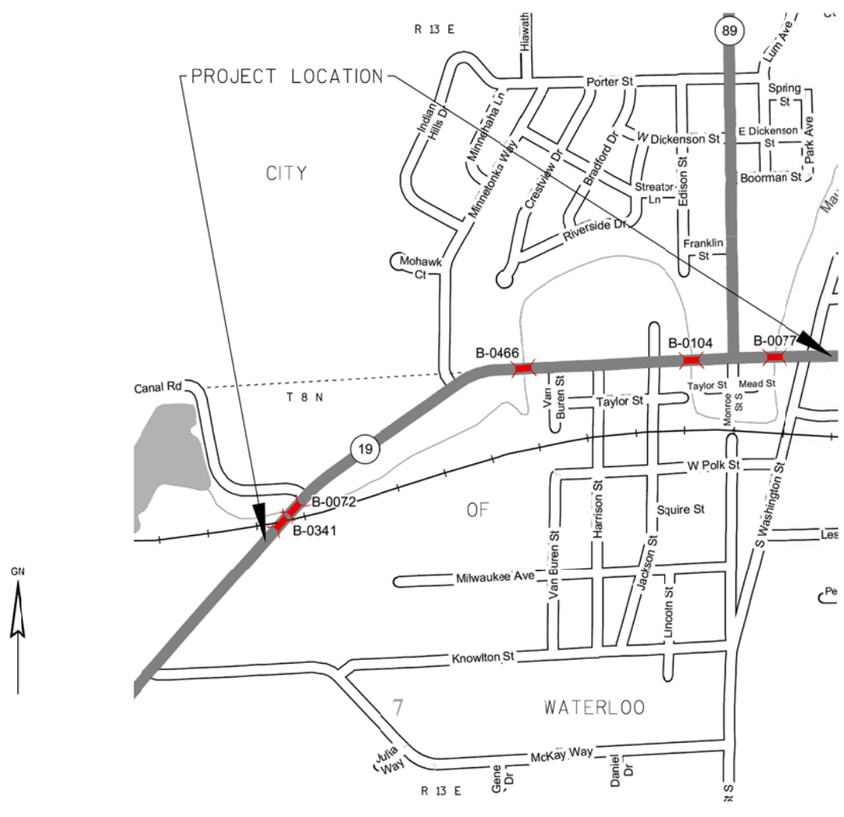
3050-02-20

SUN PRAIRIE - WATERTOWN

McKAY WAY - STRUCTURE B-28-0104

STH 19

JEFFERSON COUNTY



CONVENTIONAL UTILITY SYMBOLS

WATER
GAS
TELEPHONE
OVERHEAD TRANSMISSION LINES
ELECTRIC
CABLE TELEVISION
FIBER OPTIC
SANITARY SEWER
STORM SEWER

LAYOUT
SCALE 0 1/4 MI.

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 3050-02-20.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, JEFFERSON 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 MONUMENTS (TYPICALLY 3/4" X 24" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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 THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, 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 DESIRABLE. ALL (TLEs) ON THIS PLAT 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 DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

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, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

EXISTING ACCESS CONTROL ALONG STH 19 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT 3050-01-29, CSM 2733, CSM 1185, CSM 1102, INDIAN HILLS SOUTH AND VOL. 655, P.628-629, DOC. 804400

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 19 IS BASED ON THE FOLLOWING POINTS OF REFERENCE: DJ1450, 3050-03-21, 3050-03-23, VILLAGE (CITY) OF WATERLOO ASSESSOR'S PLAT, FIRST ADDITION TO THE VILLAGE OF WATERLOO, ORIGINAL PLAT OF THE VILLAGE OF WATERLOO, MEADS SUBDIVISION, INDIAN HILLS SOUTH SUBDIVISION, CSM 4686, CSM 2733, CSM 3185, CSM 217, CSM 1185 CSM 1102, CSM 5300, CSM 3596, CSM 3759, PLAT OF SURVEYS (S04-037), (290M003), (290M004), (290M021), (S17-071), (290M026), (290M41), (S28-166), LAND TITLE SURVEY (290M030), ALTA/ACSM LAND TITLE SURVEY(290M029), ALTA/ACSM LAND TITLE SURVEY (290M038), VOL. 771, P.94, DOC. 872521, AND VOL. 655, P.628-629, DOC. 804400.
EXISTING HIGHWAY RIGHT OF WAY FOR CANAL RD. ESTABLISHED FROM PREVIOUS PROJECTS: 3050-03-21, VILLAGE(CITY) OF WATERLOO ASSESSOR'S PLAT AND CSM 906.
EXISTING HIGHWAY RIGHT OF WAY FOR MINNETONKA WAY ESTABLISHED FROM PREVIOUS PROJECTS: INDIAN HILLS SOUTH SUBDIVISION, CSM 1185 AND CSM 1102.
EXISTING HIGHWAY RIGHT OF WAY FOR VAN BUREN ST. ESTABLISHED FROM PREVIOUS PROJECTS: VILLAGE(CITY) OF WATERLOO ASSESSOR'S PLAT, ORIGINAL PLAT OF THE VILLAGE OF WATERLOO, CSM 2129 AND PLAT OF SURVEY (S22-172).
EXISTING HIGHWAY RIGHT OF WAY FOR NORTH MONROE ST. ESTABLISHED FROM PREVIOUS PROJECTS: FIRST ADDITION TO THE VILLAGE OF WATERLOO AND CSM 5166.
EXISTING HIGHWAY RIGHT OF WAY FOR SOUTH MONROE ST. ESTABLISHED FROM PREVIOUS PROJECTS: MEADS SUBDIVISION, PLAT OF SURVEYS (290M025) AND (S28-166).
EXISTING HIGHWAY RIGHT OF WAY FOR HARRISON ST. ESTABLISHED FROM PREVIOUS PROJECTS: ORIGINAL PLAT OF THE VILLAGE OF WATERLOO, PLAT OF SURVEYS (290M026), (290M41) AND (S07-109).
EXISTING HIGHWAY RIGHT OF WAY FOR SOUTH JACKSON ST. ESTABLISHED FROM PREVIOUS PROJECTS: CSM 3596, PLAT OF SURVEYS (S02-131), (S02-137) AND TOPOGRAPHIC SURVEY (290M049).
EXISTING HIGHWAY RIGHT OF WAY FOR SCHULTZ ST. ESTABLISHED FROM PREVIOUS PROJECTS: PLAT OF SURVEY (S28-166) AND CSM 3759.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3050-02-20 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME : N:\PDS\RW-PLAT\30500202\040400.DWG
APPRAISAL PLAT DATE :
PLOT DATE : 12/14/2012 7:46 PM
PLOT BY : CALLAWAY, KEIF S PLOT NAME :

TRANSPORTATION PROJECT PLAT NO: 3050-02-20 - 4.01

THAT PART OF LOT 1 CSM 905, LOT 1 CSM 2733, LOT 1 CSM 3185 AND OUTLOTS 98 AND 111 OF ASSESSOR'S PLAT. ALL LOCATED IN THE NE¼ OF THE NW¼ OF SECTION 7, T 8 N, R 13 E, CITY OF WATERLOO, JEFFERSON COUNTY, WISCONSIN

RELOCATION ORDER STH 19 SUN PRAIRIE - WATERTOWN, (MCKAY WAY - STRUCTURE B-28-0104)

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 SECTION 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 SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

CITY

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, JEFFERSON 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.

EXISTING ACCESS CONTROL ALONG STH 19 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT 3050-01-29 AND CSM 2733.

EXISTING HIGHWAY RIGHT OF WAY FOR STH 19 ESTABLISHED FROM PREVIOUS PROJECTS AND SURVEYS: DJ1450, 3050-03-21, VILLAGE(CITY) OF WATERLOO ASSESSOR'S PLAT, CSM 4686, CSM 2733, CSM 3185, PLAT OF SURVEY NO. S04-037, LAND TITLE SURVEY(290M030), AND VOL. 771, P.94, DOC. 872521.

EXISTING HIGHWAY RIGHT OF WAY FOR CANAL RD. ESTABLISHED FROM PREVIOUS PROJECTS AND SURVEYS: 3050-03-21, VILLAGE(CITY) OF WATERLOO ASSESSOR'S PLAT, AND CSM 906.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2

(104) WISCONSIN TELEPHONE COMPANY
V 132, P 533, DOC 268822 - PARCELS 2, 3 & 4

UTILITY SCHEDULE & INTEREST REQUIRED		
UTILITY NUMBER	UTILITY OWNERS	INTEREST REQUIRED
100	WATERLOO WATER & LIGHT COMMISSION - WATER	RELEASE OF RIGHTS
101	WATERLOO WATER & LIGHT COMMISSION - ELECTRIC	RELEASE OF RIGHTS
104	WISCONSIN TELEPHONE COMPANY	RELEASE OF RIGHTS

ALUM. MON.
Y 623770.436
X 803859.961

T 8 N, R 13 E, Sec. 6, 7

PLE - DRAINAGE (2) 447 S.F.

S 1°14'30" W, 459.90' SEC. COR. TO R/W

S 1°14'30" W, 40.64' R/W TO R/L

34+82.07

S 1°14'30" W, 40.64' R/L TO R/W

GN

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEED IN Jefferson COUNTY, WISCONSIN AT 9:30 AM ON July 20, 2015 AS DOCUMENT 1357038 AND FILED IN TPP- T-3, pg 64 & 65

Staci M. Hoffman
SIGNATURE OF REGISTER OF DEEDS

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE COUNTY REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3050-02-20 - 4.01
AMENDMENT NO:---
SHEET 1 OF 2

TLE - DRIVEWAY (2) 251 S.F.

W. MADISON ST. (STH 19) N55° 32' 08"E

LOT 1 CSM 3185 VOL 13 OF CSMs P 228-230 DOC 948469

TLE - GRADING (4) 1088 S.F.

108-109
L = 100.09'
LC = 100.07'
LCB = N53°24'59"E
R = 1465.50'

PRT CL 98 ASSESSOR'S PLAT PLAT OF SURVEY S02-006

LOT 1 CSM 906 VOL 3 OF CSMs P 359 DOC 739445

TLE - GRADING (2) 264 S.F.

TLE - GRADING (1) 85 S.F.

LOT 2 CSM 906 VOL 3 OF CSMs P 359 DOC 739445

PI: 31+00.62

PI: 29+39.27

PC: 27+76.52

CANAL RD.

LOT 1 CSM 2733 VOL 10 OF CSMs P 229-231 DOC 903357

TLE - GRADING (3) 11,603 S.F.

112-113
L = 310.56'
LC = 309.93'
LCB = S49°00'56"E
R = 1399.50'

PRT OL 110 ASSESSOR'S PLAT

PRT OL 111 ASSESSOR'S PLAT

MAUNESHA RIVER

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

WATERLOO

B-28-072

B-28-341

FD. IP
0.08' N
0.37' E

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

OL 184 ASSESSOR'S PLAT PLAT OF SURVEY S04-037

W. MADISON ST. (STH 19)

DISCONTINUED PALMER DR.

OL 113 ASSESSOR'S PLAT LAND TITLE SURVEY 290M030

N42° 33' 57"E

21+76.04

S 87°34'06" W, 70.71 R/L TO R/W

S 87°34'06" W, 70.71 R/W TO R/L

OL 114

NE-NW

LOT 1 CSM 4686 VOL. 24 OF CSMs P 98-99 DOC 1163568

SE-NW

SCALE, FEET
0 50 100

N 1°14'30" E, 476.07' SEC. COR. TO R/W

POT 20+00.00
Y = 622,270.281
X = 802,765.089

PI 29+39.27
Y = 622,962.053
X = 803,400.443
Delta = 12° 58' 12" RT
D = 4° 00' 07"
T = 162.75'
L = 324.10'
R = 1431.75'

R/W Station & Offset Table		
Point No.	Station	Offset
100	21+26.04	50.00'
101	24+56.99	50.00'
102	26+11.03	33.00'
103	27+09.67	33.00'
104	26+82.33	45.44'
105	27+64.83	119.30'
106	28+52.44	123.62'
107	28+79.59	99.37'
108	29+98.84	33.01'
109	30+96.67	33.01'
110	35+05.79	33.00'
111	34+58.35	33.00'
112	30+96.67	32.99'
113	27+78.79	33.00'
114	27+09.01	33.00'
115	25+99.24	80.00'
116	23+50.14	80.00'
117	23+51.76	50.00'
118	22+26.03	50.00'
119	34+70.75	33.00'
120	35+24.12	58.52'

TLE Station & Offset Table		
Point No.	Station	Offset
T1	29+80.11	42.38'
T2	29+82.26	46.86'
T3	29+99.95	38.00'
T4	30+48.67	38.01'
T5	30+48.67	33.01'
T6	32+85.88	33.01'
T7	32+85.88	38.01'
T8	33+36.00	38.01'
T9	33+36.00	33.01'
T10	27+39.60	53.00'
T11	27+76.52	53.00'
T12	29+38.57	53.00'
T13	31+00.62	48.00'
T14	34+47.56	48.00'

R/W Course Table		
100-101	N 42° 33' 56" E	330.95'
101-102	N 48° 51' 48" E	154.98'
102-103	N 42° 33' 56" E	98.64'
103-104	S 67° 01' 41" W	30.03'
104-105	N 0° 43' 38" E	110.73'
105-106	N 41° 16' 04" E	94.15'
106-107	N 85° 46' 35" E	38.01'
107-108	N 77° 04' 26" E	141.26'
108-109	SEE CURVE NOTE	
109-119	N 55° 32' 10" E	374.17'
119-110	N 55° 32' 10" E	35.04'
111-112	S 55° 32' 10" W	361.58'
112-113	SEE CURVE NOTE	
113-114	S 42° 33' 56" W	69.72'
114-115	S 19° 23' 09" W	119.41'
115-116	S 42° 33' 56" W	249.11'
116-117	N 44° 20' 37" W	30.04'
117-118	S 42° 33' 56" W	125.73'
119-120	N 29° 59' 23" E	59.15'
120-110	S 1° 14' 30" W	31.42'

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE D.O.T.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	TLE ACRES OR S.F.	PLE ACRES OR S.F.
1	ROXANNA R WEINER(VENDOR) BAR NAN LLC(PURCHASER)	TLE				85	
2	JG VAN HOLTEN AND SONS INC	PLE & TLE				515	447
3	CITY OF WATERLOO	TLE				11603	
4	IRVING J SHERMAN TRUST	TLE				1088	
		ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED.					

ALUM. MON.
Y 618466.428
X 803744.991

T 8 N, R 13 E, Sec. 7, 18

PROJECT LOCATION

SHEET LOCATION

LOCATION SKETCH NOT TO SCALE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, KEIF S. CALLAWAY PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN Keif S. Callaway S-2607 Sun Prairie, WI LAND SURVEYOR

SIGNATURE: DATE:7/15/15
PRINT NAME: KEIF S. CALLAWAY
REGISTRATION NUMBER: S-2607

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SW REGION - MADISON OFFICE
SIGNATURE: DATE:7/15/15
PRINT NAME: Cory Schlagel

FILE NAME : N:\PDS\RW-PLAT\30500202\040401-040404.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 7/27/2015 4:25 PM
PLOT BY : CLARK, CLYDE J
PLOT NAME :
PLOT SCALE : **********

TRANSPORTATION PROJECT PLAT NO: 3050-02-20 - 4.02 AMENDMENT 2 - AMENDS PARCELS 11 AND 12 OF TRANSPORTATION PROJECT PLAT NO: 3050-02-20 - 4.02 RECORDED AS DOCUMENT NUMBER 1357316 AND FILED IN T-3, PAGE 66.

THAT PART OF LOT 1 CSM 3185, PARCEL 2 CSM 217, LOT 1 CSM 1185 AND OUTLOTS 100, 101, 102 AND 103 OF ASSESSOR'S PLAT. ALL LOCATED IN THE NW¼ OF THE NE¼ OF SECTION 7, T 8 N, R 13 E. ALSO THAT PART OF LOTS 1 AND 2 OF BLOCK 1 OF FIRST ADDITION TO THE VILLAGE OF WATERLOO AND OUTLOTS 90 AND 91 OF ASSESSOR'S PLAT. ALL LOCATED IN THE SW¼ OF THE SE¼ OF SECTION 6, T 8 N, R 13 E. ALL IN THE CITY OF WATERLOO, JEFFERSON COUNTY, WISCONSIN

RELOCATION ORDER STH 19 SUN PRAIRIE - WATERTOWN, (MCKAY WAY - STRUCTURE B-28-0104)

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 SECTION 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 SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

TLE Station & Offset Table			R/W Station & Offset Table		
Point No.	Station	Offset	Point No.	Station	Offset
T15	34+47.56	48.00'	200	35+39.57	80.00'
T16	35+73.97	48.00'	201	40+33.35	80.00'
T17	39+13.69	60.00'	202	41+52.45	39.83'
T18	40+75.85	60.00'	203	10+59.75 M	30.11'
T19	40+75.85	45.00'	204	10+69.48 M	30.19'
T20	41+06.17	45.00'	205	10+79.13 M	30.13'
T21	41+06.17	55.00'	206	10+80.74 M	29.89'
T22	42+33.09	43.00'	207	10+69.99 M	29.81'
T23	43+06.06	43.00'	208	10+60.25 M	29.89'
T24	43+06.18	90.00'	209	42+52.29	40.00'
T25	44+29.35	90.00'	210	42+72.25	40.00'
T26	45+52.57	90.00'	211	43+55.48	40.13'
T27	47+33.73	90.00'	212	45+48.46	39.02'
T30	47+67.59	90.00'	213	46+81.08	39.00'
T31	48+11.92	90.00'	214	46+81.08	60.00'
T32	48+11.92	71.47'	215	48+06.92	60.00'
T33	48+50.03	54.00'	216	48+06.92	32.00'
T34	49+60.35	54.00'	217	49+72.53	32.00'
T35	49+59.91	68.98'	218	49+91.56	32.00'
T36	10+55.27 M	39.47'	219	49+64.90	69.14'
T37	10+59.64 M	35.11'	220	49+65.94	34.00'
T38	10+78.95 M	35.32'	221	48+81.67	34.00'
T39	43+87.96	40.07'	222	48+33.67	56.00'
T40	43+88.05	50.00'	223	48+06.92	56.00'
T41	44+22.31	50.00'	224	48+06.92	71.00'
T42	44+22.40	39.96'	225	45+47.20	70.98'
T43	45+72.36	39.00'	226	43+06.12	69.90'
T44	45+72.36	60.00'	227	43+06.03	32.90'
T45	46+75.29	60.00'	228	42+72.46	33.00'
T46	46+75.29	70.00'	229	38+88.95	33.00'
T47	47+39.90	70.00'	230	39+18.27	65.00'
T50	47+67.84	70.00'	231	35+73.97	65.00'
T51	48+21.92	70.00'	232	35+73.97	33.00'
T52	48+21.92	45.00'	233	34+58.35	33.00'
T53	49+72.11	45.00'	234	40+90.97	60.57'
T54	49+92.12	45.00'	235	10+54.73 M	30.66'

UTILITY SCHEDULE & INTEREST REQUIRED		
UTILITY NUMBER	UTILITY OWNERS	INTEREST REQUIRED
100	WATERLOO WATER & LIGHT COMMISSION - WATER	RELEASE OF RIGHTS
101	WATERLOO WATER & LIGHT COMMISSION - ELECTRIC	RELEASE OF RIGHTS
102	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
103	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS
104	WISCONSIN TELEPHONE COMPANY	RELEASE OF RIGHTS

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, JEFFERSON 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.

EXISTING HIGHWAY RIGHT OF WAY FOR STH 19 ESTABLISHED FROM PREVIOUS PROJECTS AND SURVEYS: DJ1450, VILLAGE (CITY) OF WATERLOO ASSESSOR'S PLAT, INDIAN HILLS SOUTH SUBDIVISION, FIRST ADDITION TO THE VILLAGE OF WATERLOO, CSM 3185, CSM 2733, CSM 217, CSM 1185, CSM 1102, ALTA/ACSM LAND TITLE SURVEY (290M038), ALTA/ACSM LAND TITLE SURVEY (290M029), AND VOL. 655, P. 628-629, DOC. 804400.

EXISTING HIGHWAY RIGHT OF WAY FOR MINNETONKA WAY ESTABLISHED FROM PREVIOUS SURVEYS: INDIAN HILLS SOUTH SUBDIVISION, CSM 1185 AND CSM 1102.

EXISTING HIGHWAY RIGHT OF WAY FOR VAN BUREN ST. ESTABLISHED FROM PREVIOUS SURVEYS: VILLAGE (CITY) OF WATERLOO ASSESSOR'S PLAT, ORIGINAL PLAT OF THE VILLAGE OF WATERLOO, CSM 2129 AND PLAT OF SURVEY (S22-172).

EXISTING ACCESS CONTROL ALONG STH 19 HAS BEEN ESTABLISHED FROM CSM 2733, CSM 1185, CSM 1102, INDIAN HILLS SOUTH AND VOL. 655, P.628-629, DOC. 804400.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

208-209
L = 31.41'
LC = 28.28'
LCB = S79°27'50"E
R = 20.00'

225-226
L = 206.53'
LC = 204.33'
LCB = S74°00'18"W
R = 407.50'

211-212
L = 208.64'
LC = 207.23'
LCB = N76°58'30"E
R = 517.50'

227-228
L = 31.32'
LC = 31.31'
LCB = S57°28'02"W
R = 444.50'

202-235
L = 26.35'
LC = 24.49'
LCB = N17°18'52"E
R = 20.00'

235-203
L = 5.06'
LC = 5.04'
LCB = N27°40'37"W
R = 20.00'

204-205
L = 10.92'
LC = 10.91'
LCB = N32°52'30"W
R = 180.00'

206-207
L = 9.16
LC = 9.15'
LCB = S32°29'49"E
R = 120.00'

ALUM. MON.
Y 628959.198
X 803945.335

ALUM. MON.
Y 623770.436
X 803859.961

ALUM. MON.
Y 623859.767
X 806542.199

ALUM. MON.
Y 618466.428
X 803744.991

PI 11+17.67 M
Y = 623,774.918
X = 804,376.820
Delta = 34° 34' 14" RT
D = 40° 00' 03"
T = 44.57'
L = 86.43'
R = 143.24'

PI 44+15.92
Y = 623,798.469
X = 804,619.061
Delta = 32° 54' 29" RT
D = 11° 41' 55"
T = 144.65'
L = 281.30'
R = 489.77'

PI 49+72.28
Y = 623,813.796
X = 805,183.211
Delta =179° 33' 54" LT

POT 12+03.88 M
Y = 623,863.843
X = 804,377.720

POT 10+00.00 M
Y = 623,677.356
X = 804,442.605

POT 10+00.00M=
42+01.90

R/W Course Table			R/W Course Table		
200-201	N 55° 32' 10" E	493.78'	216-217	N 88° 26' 38" E	165.37'
201-234	N 74° 10' 20" E	60.81'	217-218	N 88° 00' 31" E	19.03'
234-202	N 74° 10' 20" E	64.89'	219-220	N 0° 08' 18" E	35.16'
202-235	SEE CURVE NOTE		220-221	S 88° 26' 38" W	84.27'
235-203	SEE CURVE NOTE		221-222	S 63° 49' 13" W	52.80'
203-204	N 34° 27' 50" W	9.74'	222-223	S 88° 26' 38" W	26.75'
204-205	SEE CURVE NOTE		223-224	S 1° 33' 22" E	15.00'
205-206	N 57° 12' 31" E	60.04'	224-225	S 88° 26' 38" W	258.94'
206-207	SEE CURVE NOTE		225-226	SEE CURVE NOTE	
207-208	S 34° 27' 50" E	9.74'	226-227	N 30° 30' 53" W	37.00'
208-209	SEE CURVE NOTE		227-228	SEE CURVE NOTE	
209-210	N 55° 32' 10" E	20.04'	228-229	S 55° 32' 10" W	383.43'
210-211	N 60° 26' 24" E	89.94'	229-230	S 76° 57' 50" E	43.40'
211-212	SEE CURVE NOTE		230-231	S 55° 32' 10" W	344.30'
212-213	N 88° 26' 37" E	132.95'		(S 54° 32' 40" W)	(344.32')
213-214	N 1° 33' 22" W	21.00'	231-232	N 34° 28' 06" W	32.00'
214-215	N 88° 26' 38" E	125.83'	232-233	S 55° 32' 10" W	115.62'
215-216	S 1° 33' 22" E	28.00'	234-235	N 59° 29' 39" E	81.10'

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE D.O.T.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	TLE ACRES OR S.F.	PLE ACRES OR S.F.
4	IRVING J SHERMAN TRUST	TLE				1816	
6	KIMBERLY A GILLEN	TLE				5374	
7	ROBERT F & BRENDA A ROWBOTHAM	TLE				10392	
8	GERALD & BARBARA SCHENKER	PLE & TLE				137	733
9	REDISCOVERED LLC	FEE & TLE	478		478	3293	
11	BARBARA A STRAND	FEE & TLE	529	2223	2752	2038	
12	RICHARD SARIC	TLE				1395	
13	RIVERWALK OF WATERLOO LLC	FEE & TLE	700	449	1149	2774	
14	HAWTHORN & STONE DEVELOPMENT INC	TLE				398	
		ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED.					

WISCONSIN TELEPHONE COMPANY
V 132, P 533, DOC 268822 - PARCELS 6, 7 & 8

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN JEFFERSON COUNTY AS SHEET 2 OF 2 OF DOCUMENT 1357038 AND FILED IN TPP- T-3, PG. 64 & 65.

WATERLOO SCALE, FEET 0 50 100

Document # 1364721
Office of Register of Deeds
Jefferson County, WI
RECEIVED FOR RECORD
Feb 19, 2015 AT 08:12 AM
Staci M. Hoffman
Staci Hoffman
Total Pages 1
Fee 25.00
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3050-02-20-4.02
AMENDMENT NO: 2

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, KEIF S. CALLAWAY PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: DATE:2/16/16
PRINT NAME: KEIF S. CALLAWAY
REGISTRATION NUMBER: S-2607

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SW REGION - MADISON OFFICE
SIGNATURE: DATE:2/17/16
PRINT NAME: Cory Schlagel

WISCONSIN Keif S. Callaway S-2607 Sun Prairie, WI LAND SURVEYOR

FILE NAME : N:\PDS\RW-PLAT\30500202\040402A2.DWG
APPRAISAL PLAT DATE : FEB. 16, 2016
PLOT DATE : 2/22/2016 12:23 PM PLOT BY : CLARK, CLYDE J PLOT NAME : PLOT SCALE : **********

TRANSPORTATION PROJECT PLAT NO: 3050-02-20 - 4.03 AMENDMENT 2 - AMENDS PARCELS 26 AND 27 OF TRANSPORTATION PROJECT PLAT NO: 3050-02-20 - 4.03 RECORDED AS DOCUMENT NUMBER 1357317 AND FILED IN T-3, PAGES 67 & 68.

THAT PART OF LOT 1 CSM 5300, LOTS 2 THRU 10 OF BLOCK 1 OF FIRST ADDITION TO THE VILLAGE OF WATERLOO AND LOTS 1 AND 2 OF BLOCK 2 OF FIRST ADDITION TO THE VILLAGE OF WATERLOO ALL LOCATED IN THE SE¼ OF THE SE¼ OF SECTION 6, T 8 N, R 13 E. ALSO THAT PART OF LOT 1 CSM 3596, LOTS 1 THRU 3 OF BLOCK 4, LOTS 3 THRU 5 OF BLOCK 3, LOTS 1 AND 2 OF BLOCK 2 AND LOT 1 OF BLOCK 1 OF THE ORIGINAL PLAT OF THE CITY OF WATERLOO. ALL LOCATED IN THE NE¼ OF THE NE¼ OF SECTION 7, T 8 N, R 13 E. ALL IN THE CITY OF WATERLOO, JEFFERSON COUNTY, WISCONSIN

RELOCATION ORDER STH 19 SUN PRAIRIE - WATERTOWN, (MCKAY WAY - STRUCTURE B-28-0104)

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 SECTION 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 SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

EXISTING HIGHWAY RIGHT OF WAY FOR STH 19 ESTABLISHED FROM PREVIOUS PROJECTS AND SURVEYS: 3050-03-23, FIRST ADDITION TO THE VILLAGE OF WATERLOO, ORIGINAL PLAT OF THE VILLAGE OF WATERLOO, ALTA/ACSM LAND TITLE SURVEY (290M029), CSM 5300, CSM 3596, PLAT OF SURVEYS (290M021), (290M026), (290M003), (290M004), (290M41).

EXISTING HIGHWAY RIGHT OF WAY FOR VAN BUREN ST. ESTABLISHED FROM PREVIOUS SURVEYS: VILLAGE (CITY) OF WATERLOO ASSESSOR'S PLAT, ORIGINAL PLAT OF THE VILLAGE OF WATERLOO, CSM 2129 AND PLAT OF SURVEY (S22-172).

EXISTING HIGHWAY RIGHT OF WAY FOR NORTH MONROE ST. ESTABLISHED FROM PREVIOUS SURVEYS: FIRST ADDITION TO THE VILLAGE OF WATERLOO AND CSM 5166.
EXISTING HIGHWAY RIGHT OF WAY FOR SOUTH MONROE ST. ESTABLISHED FROM PREVIOUS SURVEYS: MEADS SUBDIVISION, AND PLAT OF SURVEYS (290M025), (S22-166).

EXISTING HIGHWAY RIGHT OF WAY FOR HARRISON ST. ESTABLISHED FROM PREVIOUS SURVEYS: ORIGINAL PLAT OF THE VILLAGE OF WATERLOO, AND PLAT OF SURVEYS (290M026), (290M41), (S07-109).

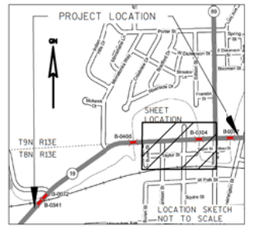
EXISTING HIGHWAY RIGHT OF WAY FOR SOUTH JACKSON ST. ESTABLISHED FROM PREVIOUS SURVEYS: CSM 3596, PLAT OF SURVEYS (S02-131), (S02-137), (290M012) AND TOPOGRAPHIC SURVEY (290M049).

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN JEFFERSON COUNTY AS SHEET 2 OF 2 OF DOCUMENT 1357038 AND FILED IN TPP- T-3, PG. 64 & 65.

SEE SHEET 2 OF 2 FOR STATION/OFFSET TABLES, R/W COURSE TABLE AND DETAILS.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, JEFFERSON 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.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.



Document # 1364722
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Jefferson County, WI
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Staci Hoffman
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3050-02-20- 4.03
SHEET 1 OF 2
AMENDMENT NO: 2

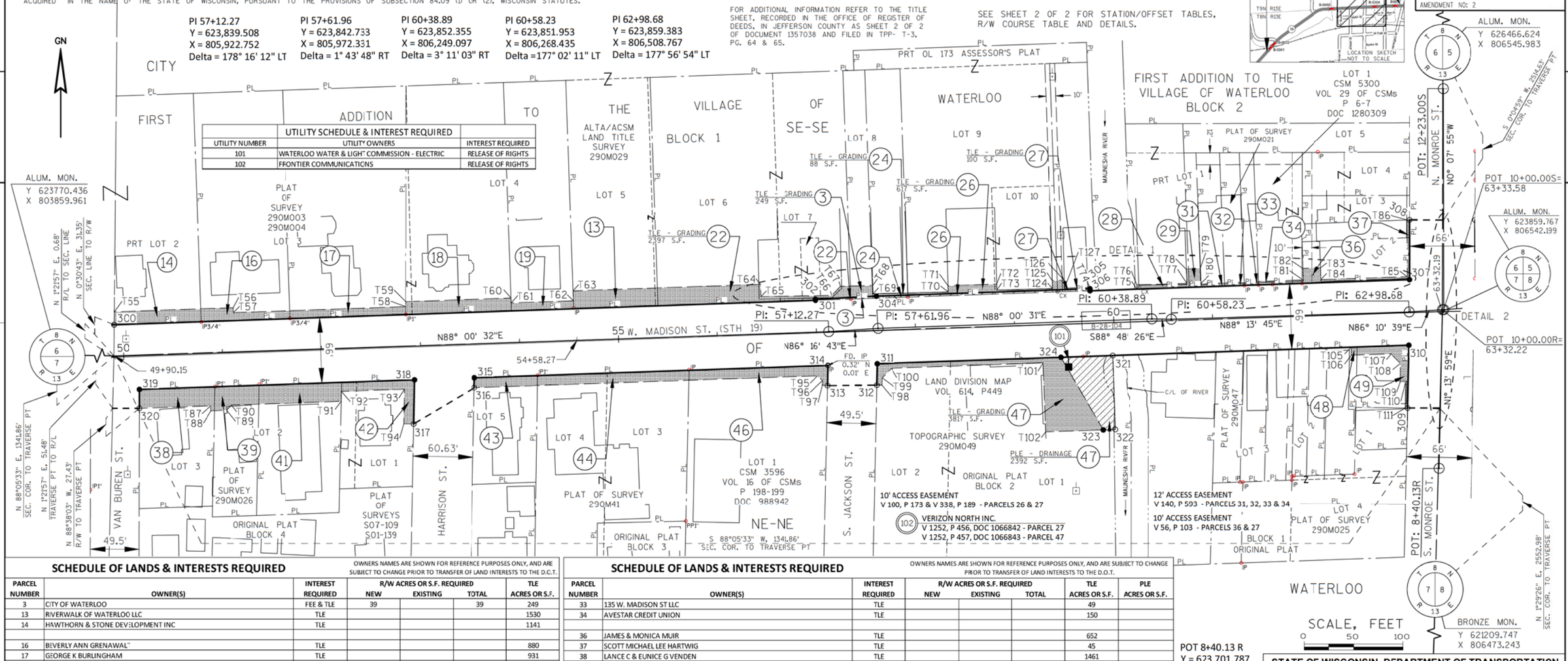
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Delta = 178° 16' 12" LT

PI 57+61.96
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X = 805,972.331
Delta = 1° 43' 48" RT

PI 60+38.89
Y = 623,852.355
X = 806,249.097
Delta = 3° 11' 03" RT

PI 60+58.23
Y = 623,851.953
X = 806,268.435
Delta =177° 02' 11" LT

PI 62+98.68
Y = 623,859.383
X = 806,508.767
Delta = 177° 56' 54" LT



UTILITY SCHEDULE & INTEREST REQUIRED		
UTILITY NUMBER	UTILITY OWNERS	INTEREST REQUIRED
101	WATERLOO WATER & LIGHT COMMISSION - ELECTRIC	RELEASE OF RIGHTS
102	FRONTIER COMMUNICATIONS	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 INTERESTS TO THE D.O.T.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	TLE ACRES OR S.F.
3	CITY OF WATERLOO	FEE & TLE	39		39	249
13	RIVERWALK OF WATERLOO LLC	TLE				1530
14	HAWTHORN & STONE DEVELOPMENT INC	TLE				1141
16	BEVERLY ANN GRENAWAL	TLE				880
17	GEORGE K BURLINGHAM	TLE				931
18	THOMAS R & CHRISTINE T LICARI	TLE				1380
19	BETTY ARIANS	TLE				504
22	NEITZEL REAL ESTATE LLC	FEE & TLE	46		46	2397
24	EHLEN LIMITED PARTNERSHIP	FEE & TLE	71		71	88
26	HART FAMILY LIMITED PARTNERSHIP	FEE & TLE	302		302	617
27	RUTHLESS LLC	FEE & TLE	65		65	100
28	SUE M MURRAY, THOMAS L HOTMAR & MARY A HOTMAR	TLE				247
29	IFA R ROOD ETAL	TLE				214
31	JAMES J ARCHIE JR	TLE				82
32	MARK A & WENDY S SILLMAN	TLE				68
		ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED.				
		* PURPOSE OF ALL OF THE TLES IS FOR GRADING, UNLESS NOTED.				

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE D.O.T.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	TLE ACRES OR S.F.	PLE ACRES OR S.F.
33	135 W. MADISON ST LLC	TLE				49	
34	AVESTAR CREDIT UNION	TLE				150	
36	JAMES & MONICA MUIR	TLE				652	
37	SCOTT MICHAEL LEE HARTWIG	TLE				45	
38	LANCE C & EUNICE G VENDEN	TLE				1461	
39	LARRY M SORENSON	TLE				917	
41	BARRY B & KIM M ENGEN	TLE				1582	
42	ROBERT & BETH HASELEU	TLE				1011	
43	ROBERT A JANECK	TLE				633	
44	WATERLOO UNITED METHODIST CHURCH	TLE				1531	
46	WG ENTERPRISES LLC	TLE				1471	
47	FARMERS & MERCHANTS STATE BANK	PLE & TLE				3817	2392
48	JOSEPH T & JESSICA A JAEHNKE	TLE				46	
49	LARRY & LAURIE OTTESON	TLE				767	
		ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED.					
		* PURPOSE OF ALL OF THE TLES IS FOR GRADING, UNLESS NOTED.					

10' ACCESS EASEMENT V 100, P 173 & V 338, P 189 - PARCELS 26 & 27	12' ACCESS EASEMENT V 140, P 593 - PARCELS 31, 32, 33 & 34
102 VERIZON NORTH INC. V 1252, P 456, DOC 1066842 - PARCEL 27 V 1252, P 457, DOC 1066843 - PARCEL 47	10' ACCESS EASEMENT V 56, P 103 - PARCELS 36 & 27

POT 8+40.13 R
Y = 623,701.787
X = 806,538.799

POT 10+00.00 R
Y = 623,861.619
X = 806,542.239

POT 10+00.00 S
Y = 623,861.709
X = 806,543.588

POT 12+23.00 S
Y = 624,084.708
X = 806,543.075

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, KEIF S. CALLAWAY PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN Kelf S. Callaway S-2607 Sun Prairie, WI LAND SURVEYOR

SIGNATURE: _____ DATE: 2/16/16
PRINT NAME: KEIF S. CALLAWAY
REGISTRATION NUMBER: S-2607

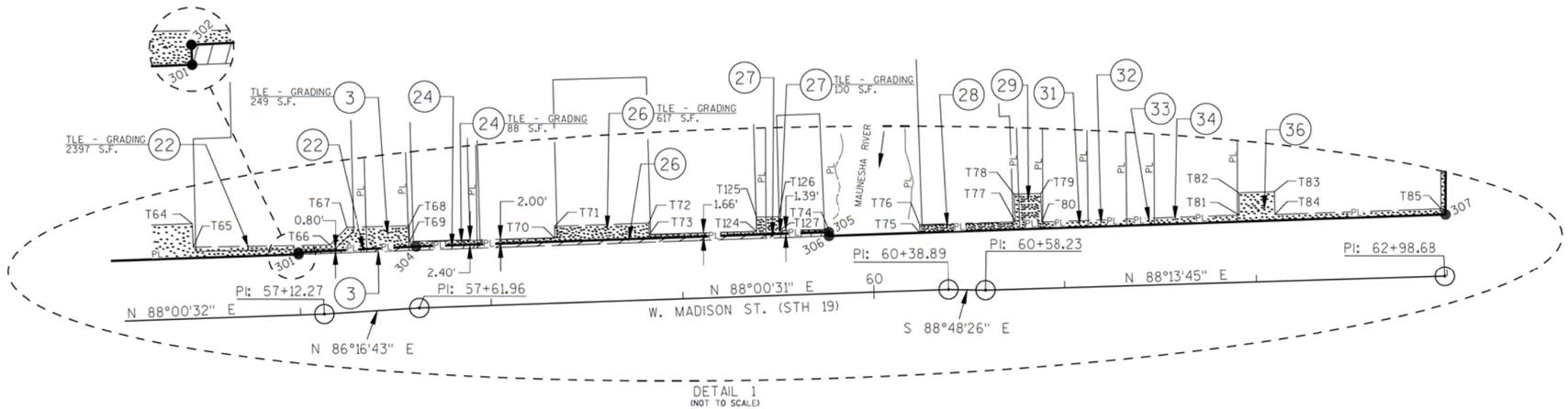
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SW REGION - MADISON OFFICE
SIGNATURE: _____ DATE: 2/17/16
PRINT NAME: Cory Schlagel

FILE NAME : N:\PDS\RW-P_AT\30500202\040403A2.DWG
APPRAISAL PLAT DATE : FEB. 16, 2016
PLOT DATE : 2/22/2016 12:33 PM
PLOT BY : CLARK, CLYDE J
PLOT NAME :
PLOT SCALE : 1.0000

TRANSPORTATION PROJECT PLAT NO: 3050-02-20 - 4.03 - AMENDMENT 2

RELOCATION ORDER STH 19 SUN PRAIRIE - WATERTOWN, (MCKAY WAY - STRUCTURE B-28-0104)

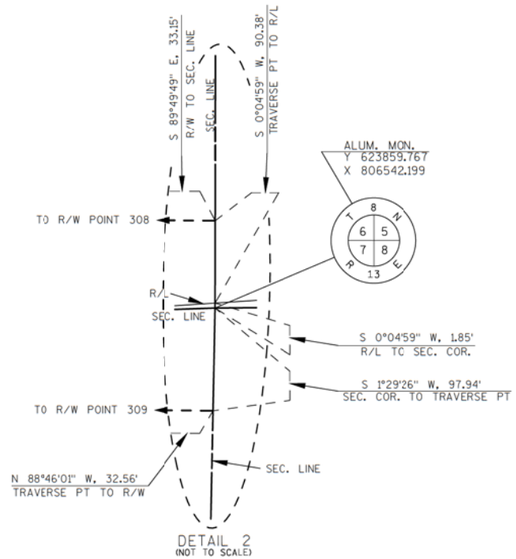
GN



TLE Station & Offset Table		
Point No.	Station	Offset
T55	49+92.12	45.00'
T56	51+12.36	45.00'
T57	51+12.36	40.00'
T58	52+86.55	40.00'
T59	52+86.73	45.00'
T60	53+92.98	45.00'
T61	53+92.98	40.00'
T62	54+55.98	40.00'
T63	54+55.98	50.00'
T64	56+44.88	50.00'
T65	56+45.03	37.70'
T66	57+17.62	36.21'
T67	57+26.99	44.77'
T68	57+59.47	43.58'
T69	57+59.16	35.11'
T70	58+34.02	34.32'
T71	58+34.06	40.50'
T72	58+83.53	40.50'
T73	58+83.48	34.37'
T74	59+77.21	33.74'
T75	60+25.00	30.50'
T76	60+25.00	34.82'
T77	60+74.87	35.58'
T78	60+74.71	50.01'
T79	60+88.60	50.00'
T80	60+88.68	35.09'
T81	61+92.10	35.53'
T82	61+92.25	47.21'
T83	62+10.74	47.19'
T84	62+10.67	35.28'
T85	62+97.85	35.53'
T86	10+90.37 S	36.78'
T87	50+86.37	53.00'
T88	50+86.37	58.00'
T89	51+02.26	58.00'
T90	51+07.26	53.00'
T91	52+17.98	53.00'
T92	52+18.52	43.00'
T93	52+82.41	43.00'
T94	52+80.53	77.88'
T95	56+99.55	44.00'
T96	57+04.27	49.00'
T97	57+03.99	53.99'
T98	57+64.00	57.34'
T99	57+64.43	49.86'
T100	57+74.32	40.50'
T101	59+27.38	40.50'
T102	59+27.57	110.00'
T105	62+38.88	33.73'
T106	62+38.91	41.73'
T107	62+78.90	41.58'
T108	9+45.06 R	41.00'
T109	9+26.00 R	41.00'
T110	9+25.95 R	35.61'
T111	9+00.19 R	35.22'
T124	59+39.67	33.93'
T125	59+39.73	42.00'
T126	59+51.68	42.00'
T127	59+51.59	33.91'

R/W Station & Offset Table		
Point No.	Station	Offset
300	49+91.56	32.00'
301	57+00.00	32.00'
302	57+00.00	33.00'
304	57+61.96	32.50'
305	59+77.19	32.50'
306	59+77.19	30.50'
307	63+01.21	32.44'
308	10+90.46 S	34.20'
309	9+00.21 R	33.00'
310	62+97.34	33.51'
311	57+58.90	35.42'
312	57+57.04	56.92'
313	57+09.24	54.29'
314	57+10.37	34.00'
315	53+53.50	34.00'
316	53+52.96	44.00'
317	52+90.38	78.35'
318	52+92.78	34.00'
319	50+15.22	34.00'
320	50+14.51	53.00'
321	59+97.80	35.50'
322	59+97.80	110.00'
323	59+85.70	110.00'
324	59+45.68	35.50'

R/W Course Table		
300-301	N 88° 00' 31" E	708.44'
301-302	N 1° 59' 29" W	1.00'
302-304	N 87° 04' 35" E	61.45'
304-305	N 88° 00' 31" E	215.73'
305-306	S 1° 59' 29" E	2.00'
306-307	N 88° 00' 31" E	322.95'
307-308	N 0° 02' 54" E	60.18'
309-310	N 1° 13' 59" E	63.31'
310-321	S 88° 00' 31" W	299.38'
321-324	S 88° 00' 31" W	52.12'
324-311	S 88° 00' 31" W	185.71'
311-312	S 1° 12' 32" W	21.58'
312-313	S 89° 28' 01" W	49.52'
313-314	N 1° 12' 32" E	20.32'
314-315	S 88° 00' 31" W	356.87'
315-316	S 1° 06' 05" W	10.01'
316-317	S 59° 14' 43" W	71.38'
317-318	N 1° 06' 05" E	44.41'
318-319	S 88° 00' 31" W	277.56'
319-320	S 0° 08' 13" W	19.01'
321-322	S 1° 59' 29" E	74.50'
322-323	S 88° 00' 31" W	12.10'
323-324	N 30° 13' 48" W	84.56'



TPP NUMBER 3050-02-20 - 4.03
AMENDMENT 2
SHEET 2 OF 163

FILE NAME : N:\PDS\RW-PLAT\30500202\040403E_A2.DWG
APPRAISAL PLAT DATE : ----------

PLOT DATE : 2/23/2016 6:28 AM PLOT BY : CLARK, CLYDE J PLOT NAME : PLOT SCALE : **********

3050-02-20 - 4.03A2

TRANSPORTATION PROJECT PLAT NO: 3050-02-20 - 4.04 AMENDMENT 1 - AMENDS PARCEL 53 OF TRANSPORTATION PROJECT PLAT NO: 3050-02-20 - 4.04 RECORDED AS DOCUMENT NUMBER 1357318 AND FILED IN T-3, PAGE 69.

THAT PART OF LOT 2 CSM 5166 AND LOT 1 OF BLOCK 3 OF FIRST ADDITION TO THE VILLAGE OF WATERLOO. ALL LOCATED IN THE SW¼ OF THE SW¼ OF SECTION 5, T 8 N, R 13 E. ALSO THAT PART OF LOTS 4 THRU 7 OF BLOCK 16 MEADS SUBDIVISION. ALL LOCATED IN THE NW¼ OF THE NW¼ OF SECTION 8, T 8 N, R 13 E. ALL IN THE CITY OF WATERLOO, JEFFERSON COUNTY, WISCONSIN

RELOCATION ORDER STH 19 SUN PRAIRIE - WATERTOWN, (MCKAY WAY - STRUCTURE B-28-0104)

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 SECTION 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 SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE D.O.T.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	TLE ACRES OR S.F.
3	CITY OF WATERLOO	FEE & TLE	960		960	896
51	BLINKY'S BOWL INC	FEE & TLE	458		458	266
52	JAMES F & CHRISA M MATHESON	FEE & TLE	438	2137	2575	49
53	TINA M ROTH	TLE				38
54	NICHOLAS L & THERESA B SHARROW	TLE				27
56	HUBRED PROPERTIES LLC	TLE				44
57	EMMANINA LLC	TLE				18
58	MT BAR LLC	TLE				19
		ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED.				
		* PURPOSE OF ALL OF THE TLES IS FOR GRADING, UNLESS NOTED.				

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PROJECT NUMBER 3050-02-20- 4.04
AMENDMENT NO: 1

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X = 806,574.789
Delta = 3° 22' 25" RT

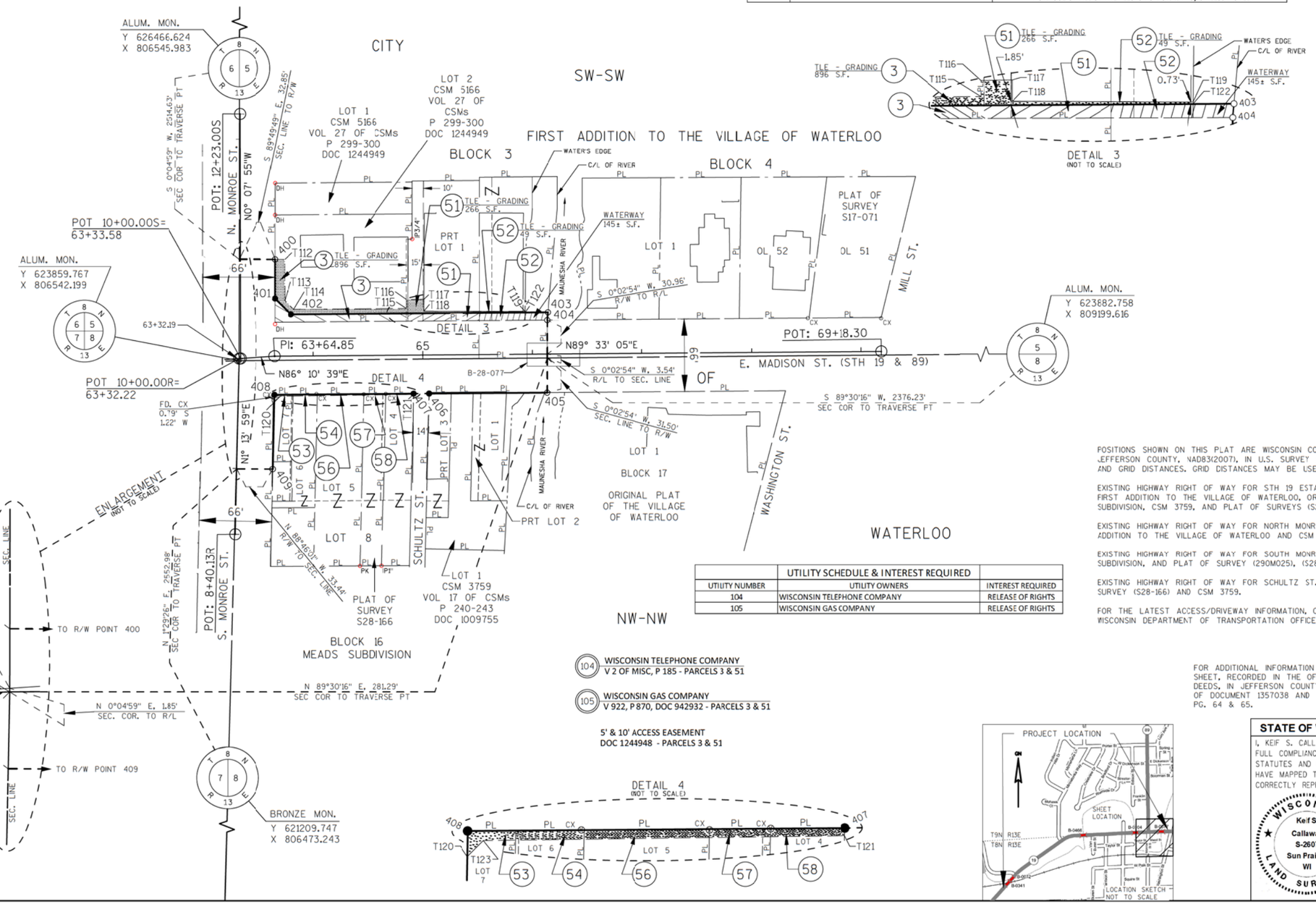
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X = 807,128.228

POT 8+40.13 R
Y = 623,701.787
X = 806,538.799

POT 10+00.00 R
Y = 623,861.619
X = 806,542.239

POT 10+00.00 S
Y = 623,861.709
X = 806,543.588

POT 12+23.00 S
Y = 624,084.708
X = 806,543.075



UTILITY SCHEDULE & INTEREST REQUIRED		
UTILITY NUMBER	UTILITY OWNERS	INTEREST REQUIRED
104	WISCONSIN TELEPHONE COMPANY	RELEASE OF RIGHTS
105	WISCONSIN GAS COMPANY	RELEASE OF RIGHTS

R/W Station & Offset Table		
Point No.	Station	Offset
400	10+90.12 S	31.80'
401	63+65.62	52.50'
402	63+79.99	38.00'
403	66+14.50	38.00'
404	66+13.81	30.96'
405	66+13.24	35.04'
406	65+05.46	35.04'
407	64+91.46	35.04'
408	63+62.26	34.95'
409	9+00.21 R	33.00'

R/W Course Table		
400-401	S 0° 02' 54" W	35.60'
401-402	S 45° 11' 58" E	20.42'
402-403	N 89° 33' 05" E	234.51'
403-404	S 5° 09' 29" W	7.07'
405-406	S 89° 33' 05" W	107.78'
406-407	S 89° 33' 05" W	14.01'
407-408	S 89° 33' 05" W	127.13'
408-409	S 1° 13' 59" W	67.63'

TLE Station & Offset Table		
Point No.	Station	Offset
T112	10+90.06 S	40.82'
T113	10+52.55 S	40.74'
T114	63+82.57	42.50'
T115	64+85.53	42.50'
T116	64+85.60	50.69'
T117	65+01.42	50.82'
T118	65+01.30	39.85'
T119	65+93.69	38.99'
T120	63+61.67	41.65'
T121	64+91.43	35.73'
T122	65+93.67	38.00'
T123	63+69.72	36.40'

FOSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, JEFFERSON 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.

EXISTING HIGHWAY RIGHT OF WAY FOR STH 19 ESTABLISHED FROM PREVIOUS SURVEYS: FIRST ADDITION TO THE VILLAGE OF WATERLOO, ORIGINAL PLAT OF THE VILLAGE OF WATERLOO, MEADS SUBDIVISION, CSM 3759, AND PLAT OF SURVEYS (S28-166), (S17-071).

EXISTING HIGHWAY RIGHT OF WAY FOR NORTH MONROE ST. ESTABLISHED FROM PREVIOUS SURVEYS: FIRST ADDITION TO THE VILLAGE OF WATERLOO AND CSM 5166.

EXISTING HIGHWAY RIGHT OF WAY FOR SOUTH MONROE ST. ESTABLISHED FROM PREVIOUS SURVEYS: MEADS SUBDIVISION, AND PLAT OF SURVEY (290M025), (S28-166).

EXISTING HIGHWAY RIGHT OF WAY FOR SCHULTZ ST. ESTABLISHED FROM PREVIOUS SURVEYS: PLAT OF SURVEY (S28-166) AND CSM 3759.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN JEFFERSON COUNTY AS SHEET 2 OF 2 OF DOCUMENT 1357038 AND FILED IN TPP- T-3, PG. 64 & 65.

SCALE, FEET
0 50 100

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, KEIF S. CALLAWAY PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN Keif S. Callaway S-2607 Sun Prairie, WI LAND SURVEYOR

SIGNATURE: DATE:11/3/15
PRINT NAME: KEIF S. CALLAWAY
REGISTRATION NUMBER: S-2607

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SW REGION - MADISON OFFICE
SIGNATURE: DATE:11/4/15
PRINT NAME: Cory Schlagel

FILE NAME : N:\PDS\RW-PLAT\30500202\040404A1.DWG
APPRAISAL PLAT DATE : NOVEMBER 3, 2015
PLOT DATE : 11/18/2015 10:12 AM PLOT BY : CLARK, CLYDE J PLOT NAME : PLOT SCALE : **********

DATE: JULY 15, 2015

REVISION DATE
SEPT. 22, 2015

TRANSPORTATION PROJECT PLAT NO: 3050-02-20 - 4.05

RELOCATION ORDER STH 19 SUN PRAIRIE - WATERTOWN (McKAY WAY - STRUCTURE B-28-0104)

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, JEFFERSON 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.

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
100	622,396.932	802,813.522
101	622,640.675	803,037.384
102	622,742.627	803,154.103
103	622,815.275	803,220.825
104	622,803.555	803,193.177
105	622,914.273	803,194.583
106	622,985.039	803,256.681
107	622,987.838	803,294.583
108	623,019.436	803,432.259
109	623,079.075	803,512.610
110	623,310.641	803,849.994
111	623,229.382	803,848.233
112	623,024.766	803,550.114
113	622,821.500	803,316.155
114	622,770.148	803,268.992
115	622,657.512	803,229.357
116	622,474.044	803,060.854
117	622,495.530	803,039.855
118	622,402.932	802,954.809
119	623,290.814	803,821.107
120	623,342.048	803,850.675

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
200	623,368.507	803,851.249
201	623,647.931	804,258.361
202	623,682.216	804,379.296
203	623,710.060	804,384.240
204	623,718.091	804,378.728
205	623,727.257	804,372.804
206	623,759.772	804,423.275
207	623,752.049	804,428.194
208	623,744.019	804,433.706
209	623,738.848	804,461.509
210	623,750.188	804,478.032
211	623,794.559	804,556.265
212	623,841.262	804,758.161
213	623,844.873	804,891.059
214	623,865.865	804,890.488
215	623,869.283	805,016.276
216	623,841.293	805,017.036
217	623,845.784	805,182.341
218	623,846.445	805,201.360
219	623,744.478	805,177.711
220	623,779.636	805,177.796
221	623,777.347	805,093.553
222	623,754.052	805,046.168
223	623,753.325	805,019.426
224	623,738.331	805,019.833
225	623,731.299	804,760.989
226	623,674.995	804,564.571
227	623,706.870	804,545.784
228	623,690.033	804,519.388
229	623,473.053	804,203.255
230	623,463.263	804,245.539
231	623,268.429	803,961.672
232	623,294.811	803,943.562
233	623,229.382	803,848.233
234	623,664.518	804,316.867
235	623,705.593	804,386.583

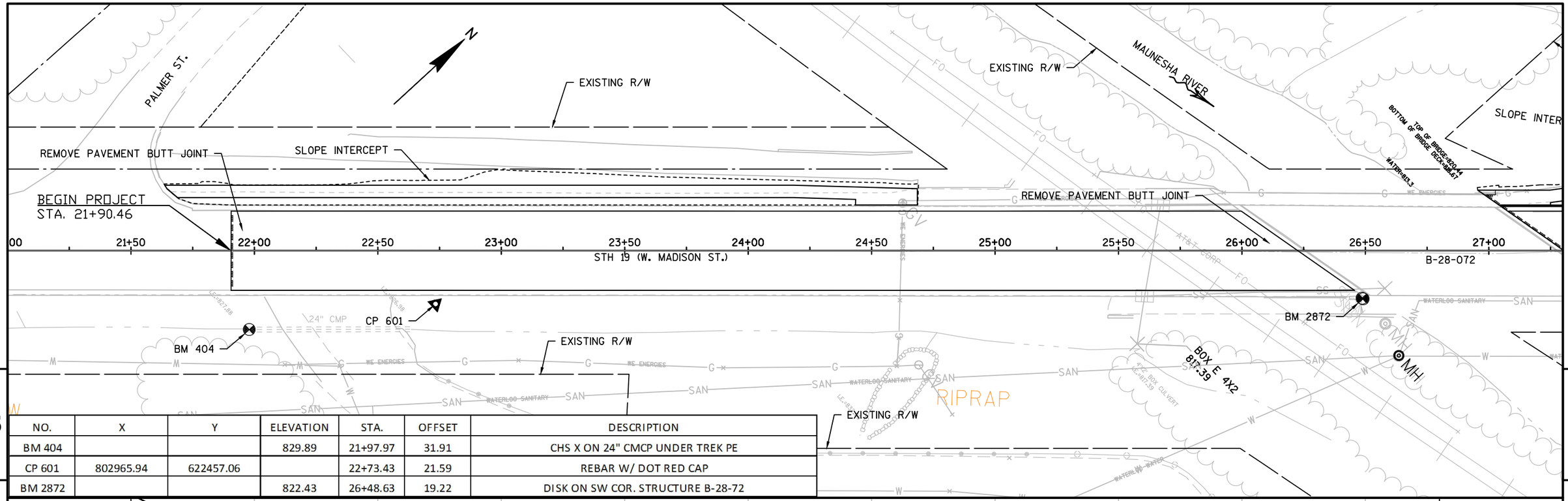
R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
300	623,846.445	805,201.360
301	623,871.062	805,909.376
302	623,872.062	805,909.341
304	623,875.196	805,970.711
305	623,882.692	806,186.309
306	623,880.693	806,186.379
307	623,891.915	805,509.129
308	623,952.095	805,509.180
309	623,762.560	805,507.099
310	623,825.852	806,508.461
311	623,807.185	805,971.580
312	623,785.611	805,971.125
313	623,785.150	805,921.604
314	623,805.462	805,922.033
315	623,793.062	805,565.379
316	623,783.050	805,565.187
317	623,746.547	805,503.842
318	623,790.952	805,504.696
319	623,781.307	805,227.300
320	623,762.295	805,227.254

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
400	623,951.899	806,575.180
401	623,916.298	806,575.150
402	623,901.911	806,589.637
403	623,903.748	806,824.141
404	623,856.703	806,823.505
405	623,830.700	806,823.450
406	623,829.856	806,715.675
407	623,829.746	806,701.668
408	623,828.751	806,574.539
409	623,761.139	806,573.084

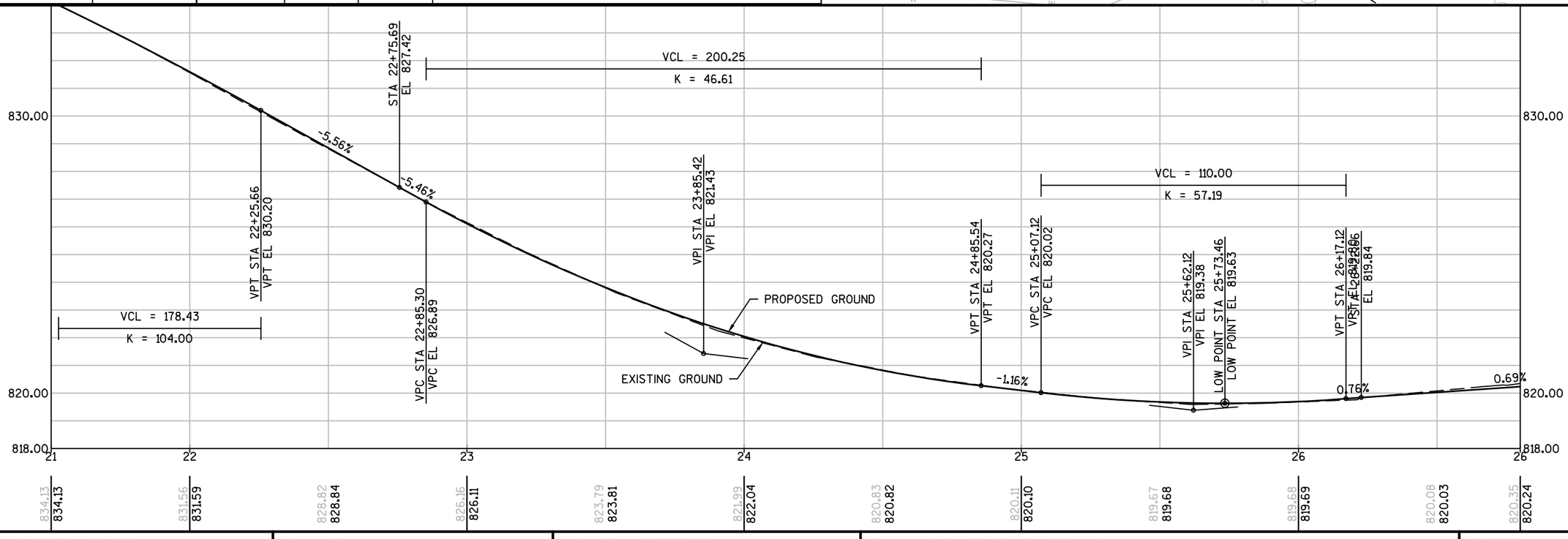
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4

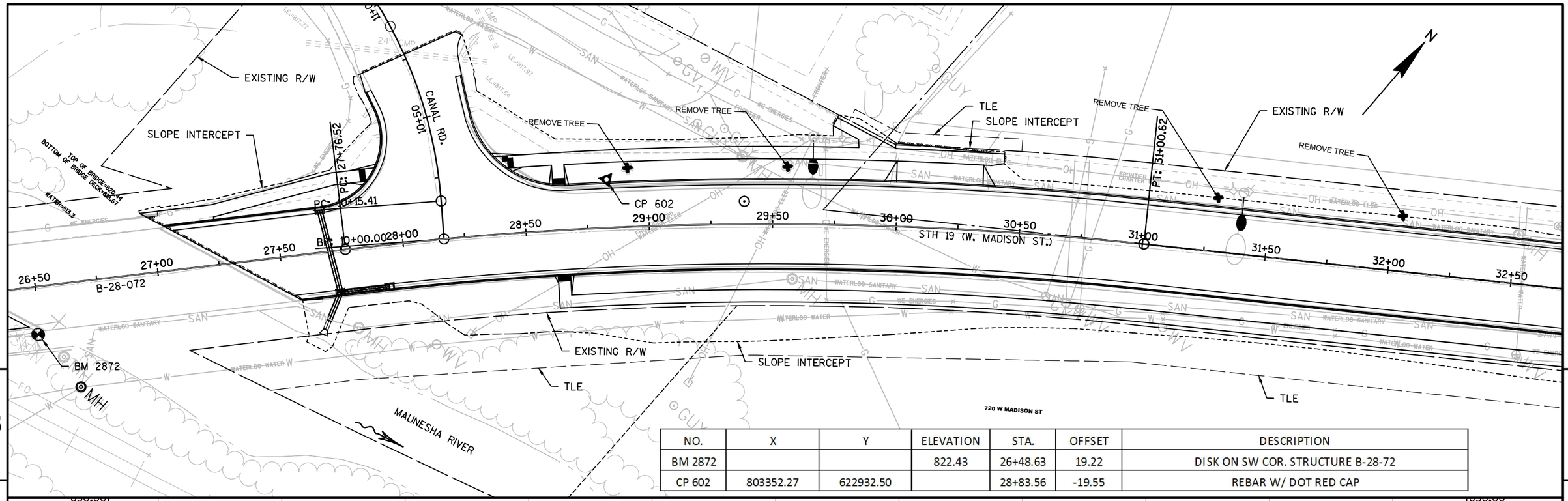
FILE NAME : N:\PDS\RW-PLAT\30500202\040405.DWG PLOT DATE : 9/22/2015 10:20 AM PLOT BY : CLARK, CLYDE J PLOT NAME : ----------



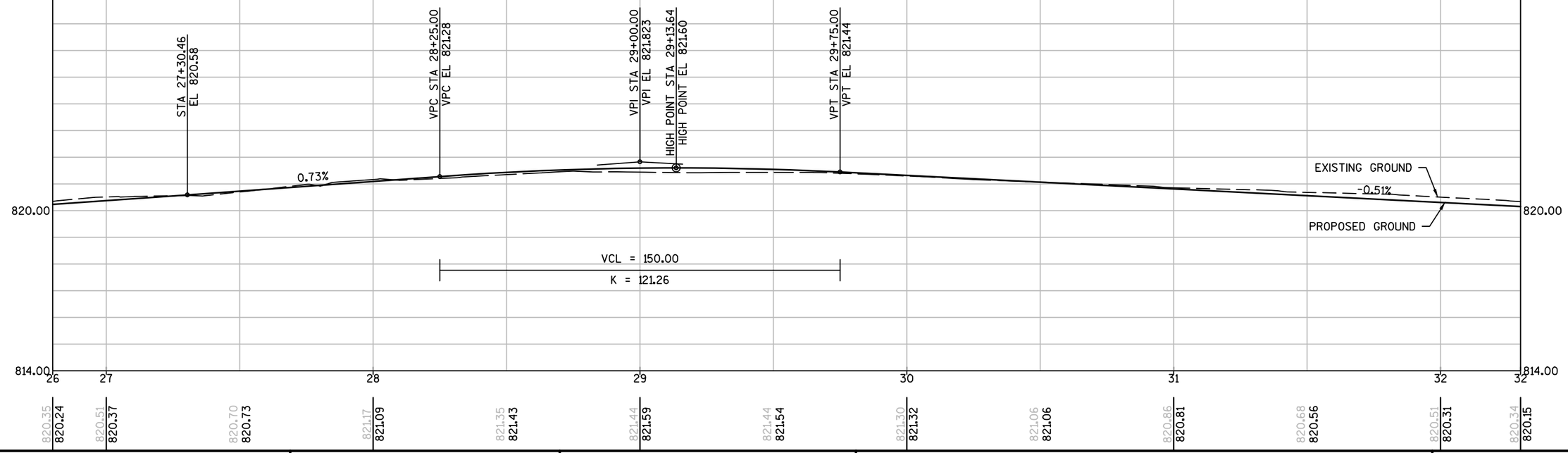
NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
BM 404			829.89	21+97.97	31.91	CHS X ON 24" CMCP UNDER TREK PE
CP 601	802965.94	622457.06		22+73.43	21.59	REBAR W/ DOT RED CAP
BM 2872			822.43	26+48.63	19.22	DISK ON SW COR. STRUCTURE B-28-72



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: STH 19	SHEET 166	E

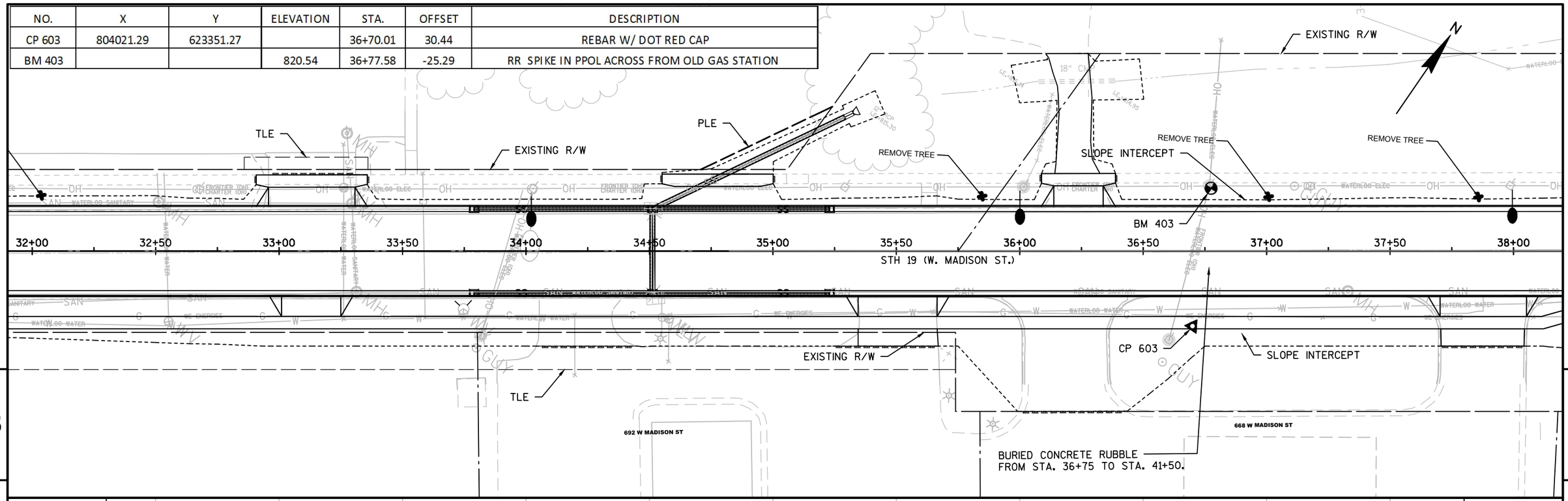


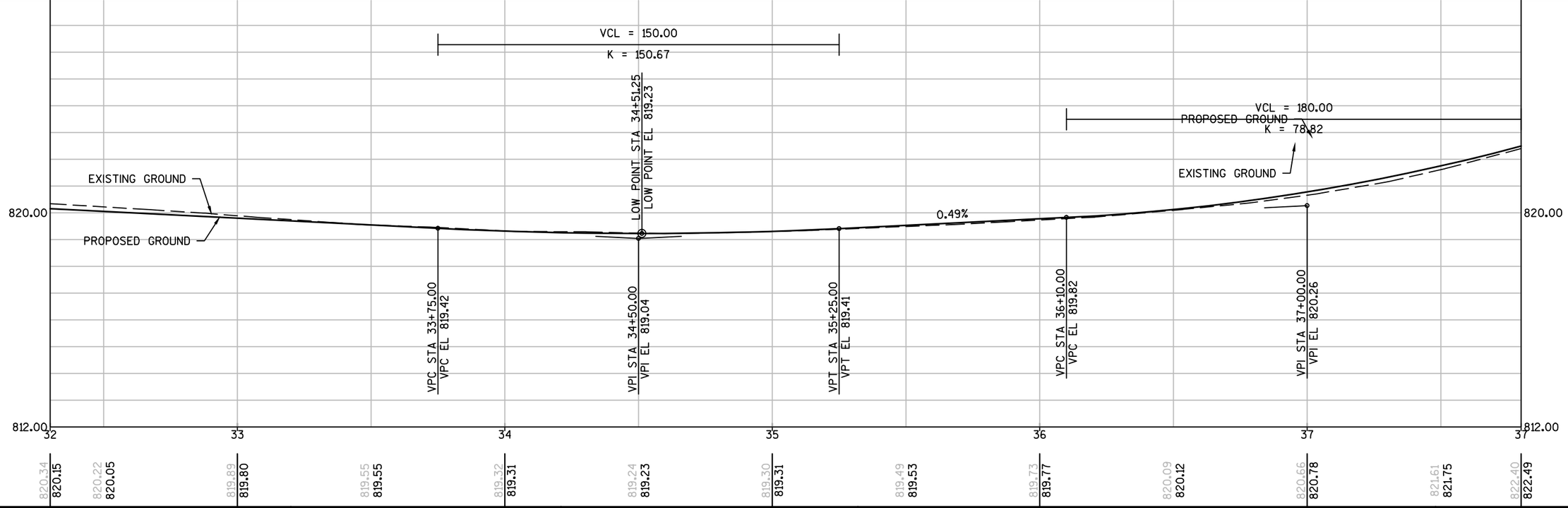
NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
BM 2872			822.43	26+48.63	19.22	DISK ON SW COR. STRUCTURE B-28-72
CP 602	803352.27	622932.50		28+83.56	-19.55	REBAR W/ DOT RED CAP



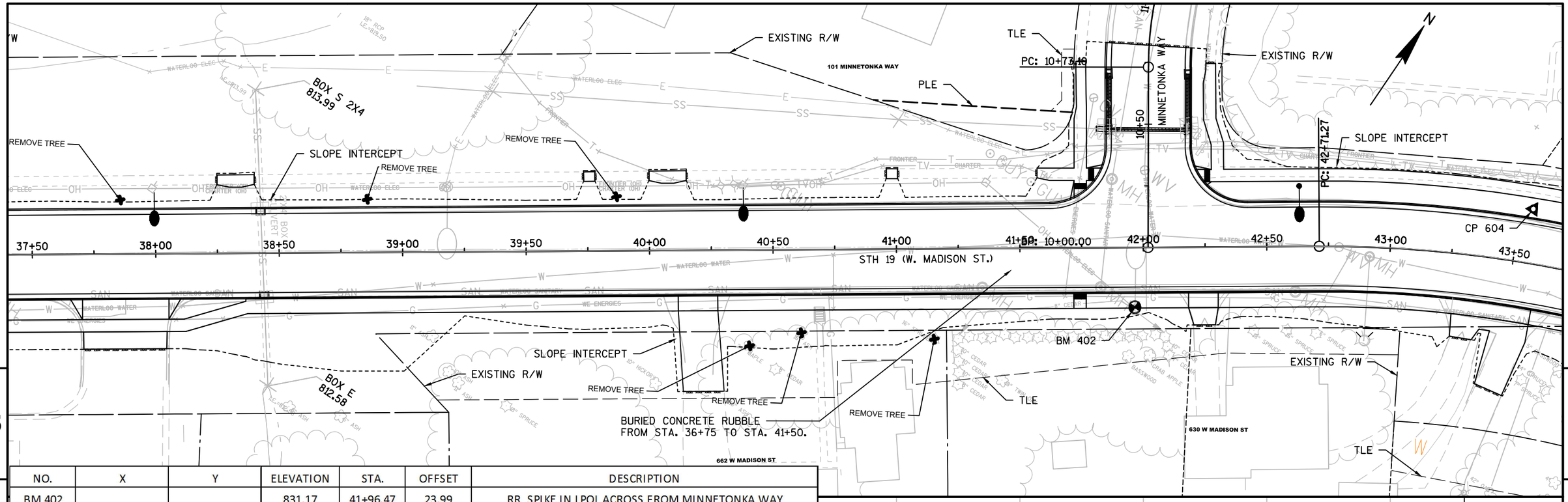
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: STH 19	SHEET 167	E

NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
CP 603	804021.29	623351.27		36+70.01	30.44	REBAR W/ DOT RED CAP
BM 403			820.54	36+77.58	-25.29	RR SPIKE IN PPOL ACROSS FROM OLD GAS STATION

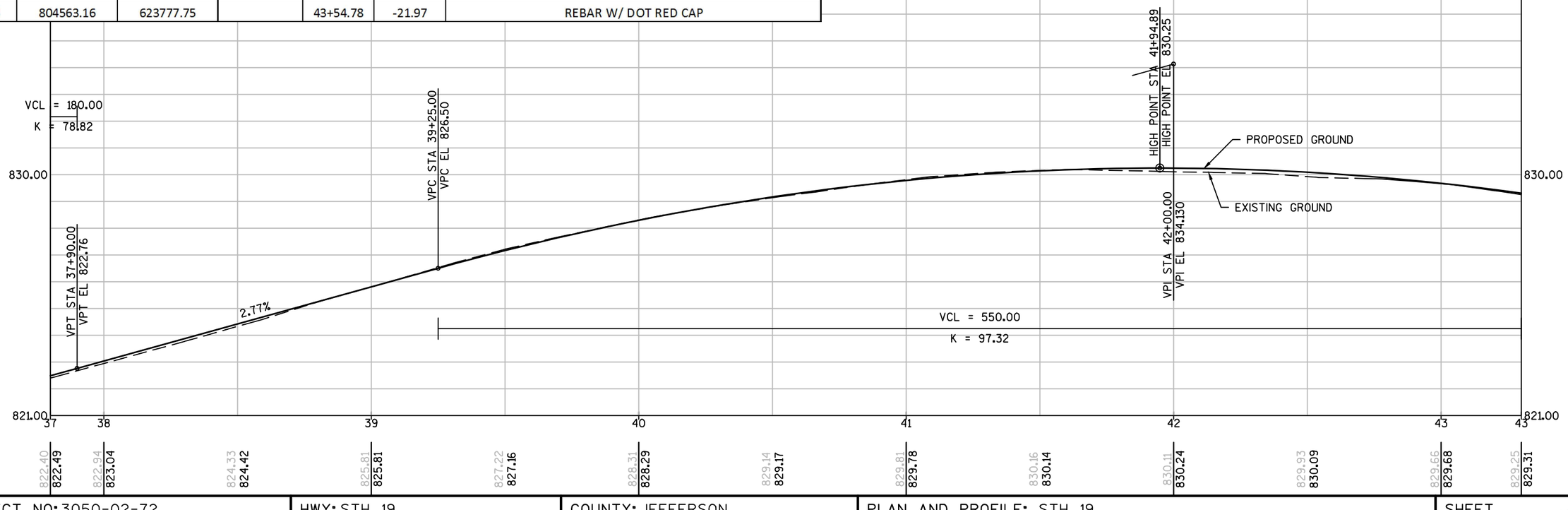




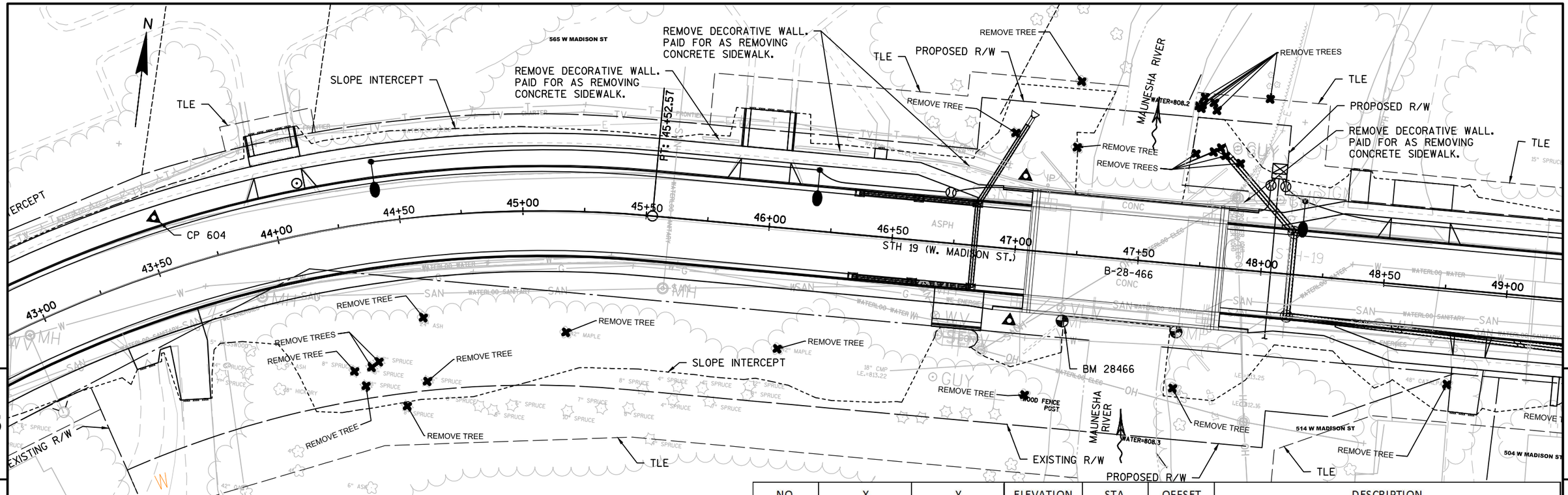
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: STH 19	SHEET 168	E



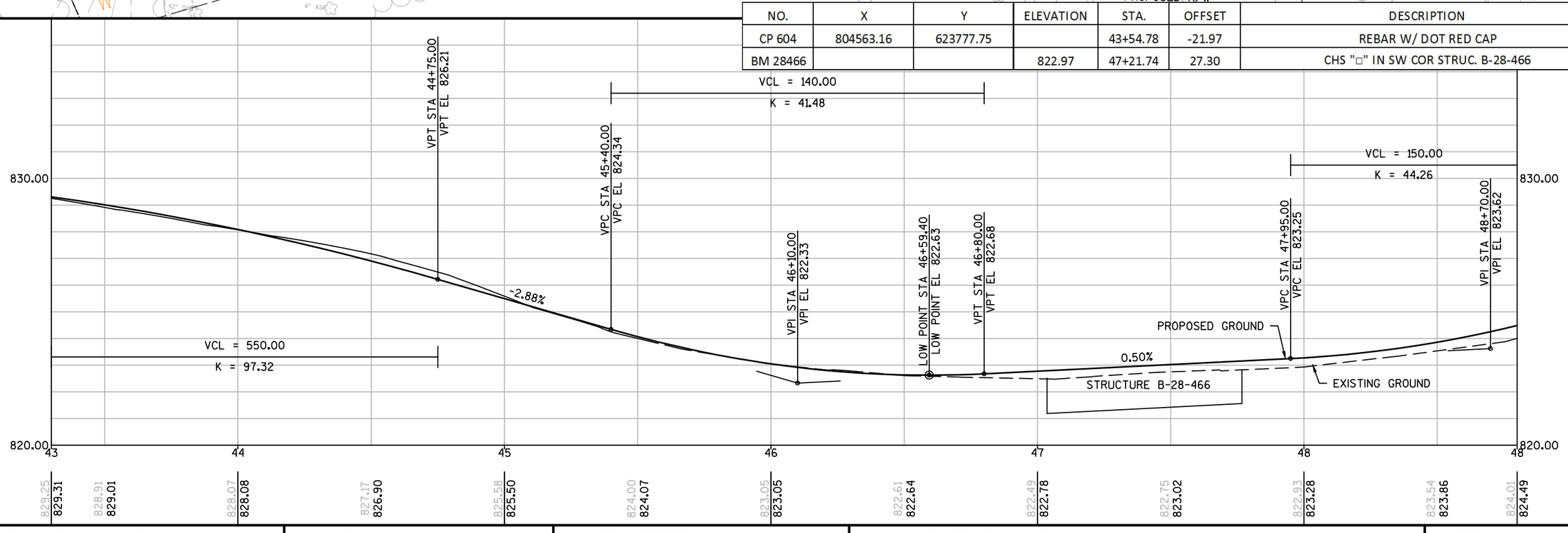
NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
BM 402			831.17	41+96.47	23.99	RR SPIKE IN LPOL ACROSS FROM MINNETONKA WAY
CP 604	804563.16	623777.75		43+54.78	-21.97	REBAR W/ DOT RED CAP



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: STH 19	SHEET 169	E



NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
CP 604	804563.16	623777.75		43+54.78	-21.97	REBAR W/ DOT RED CAP
BM 28466			822.97	47+21.74	27.30	CHS "□" IN SW COR STRUC. B-28-466



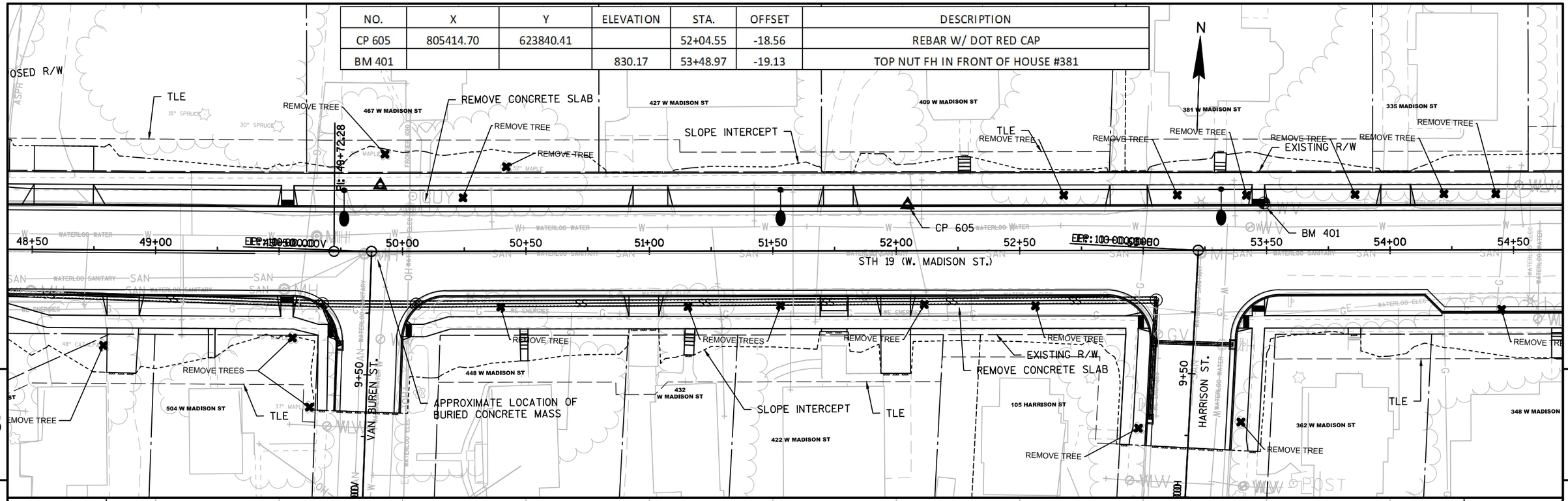
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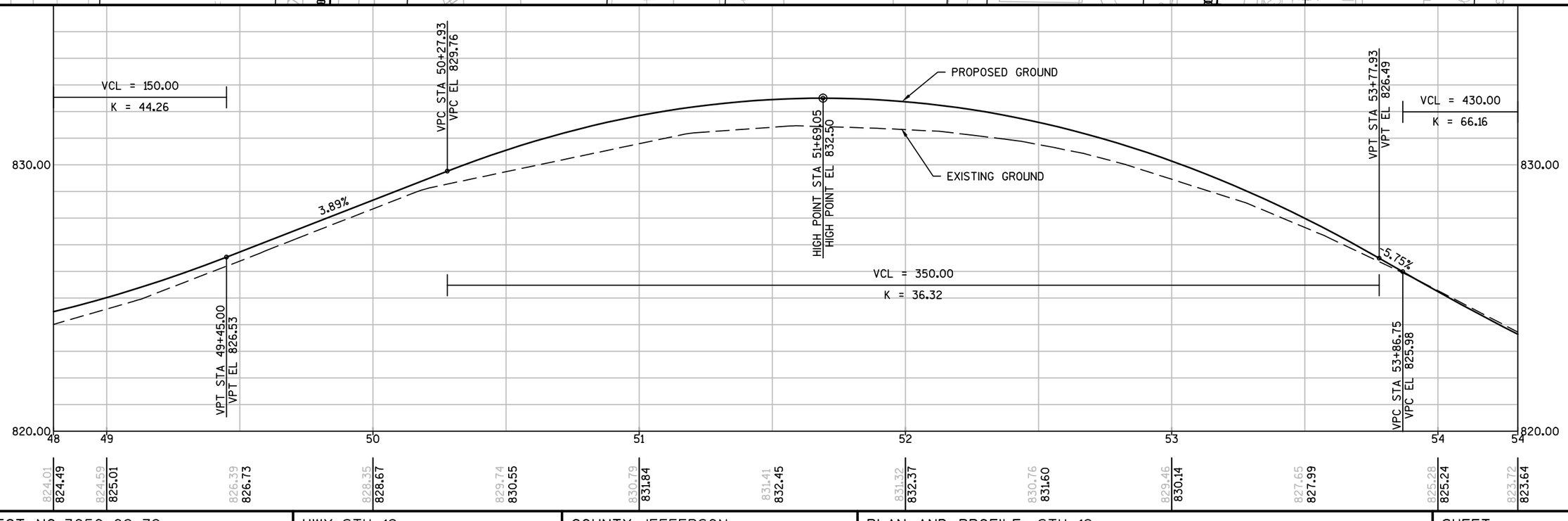
FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\5.0_PLAN AND PROFILE\STH19_1078_PP.DWG
LAYOUT NAME - STH19_1078_PP - 05050 - (5)

PLOT DATE : 1/5/2017 2:19 PM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

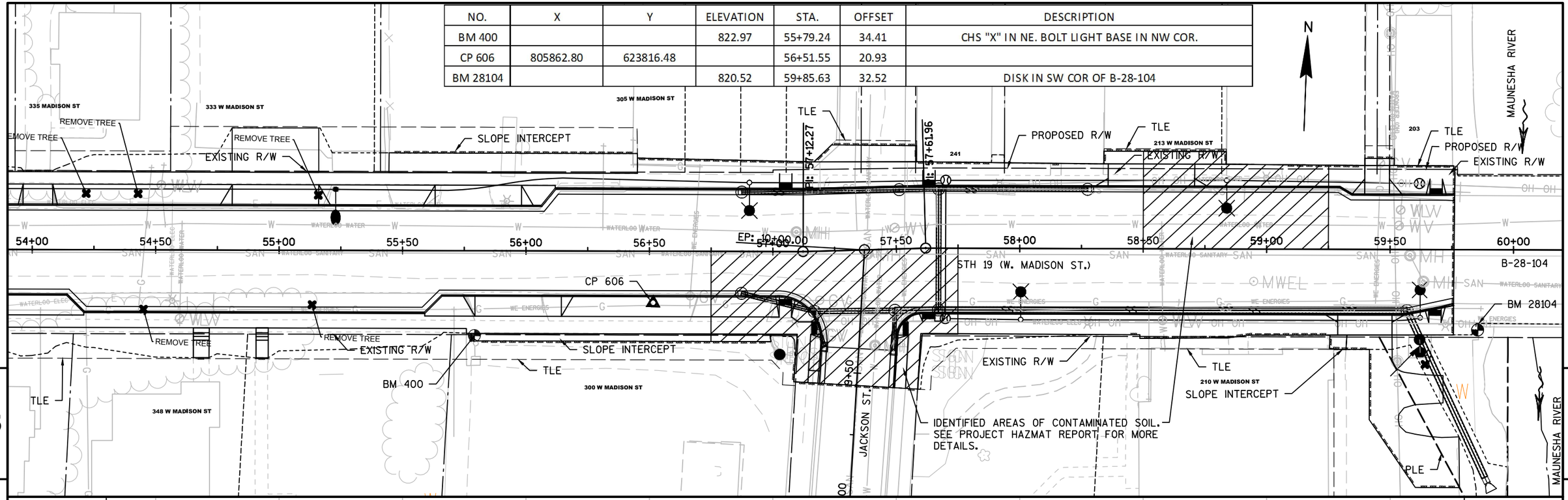
NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
CP 605	805414.70	623840.41		52+04.55	-18.56	REBAR W/ DOT RED CAP
BM 401			830.17	53+48.97	-19.13	TOP NUT FH IN FRONT OF HOUSE #381

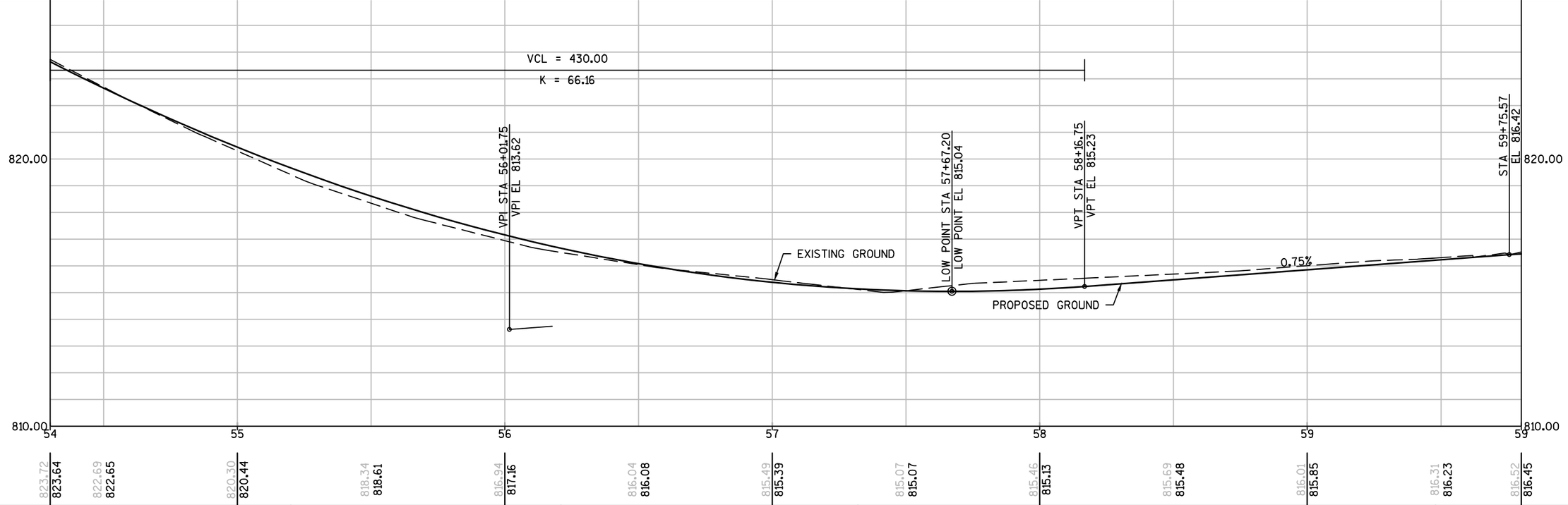




PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: STH 19	SHEET 171	E

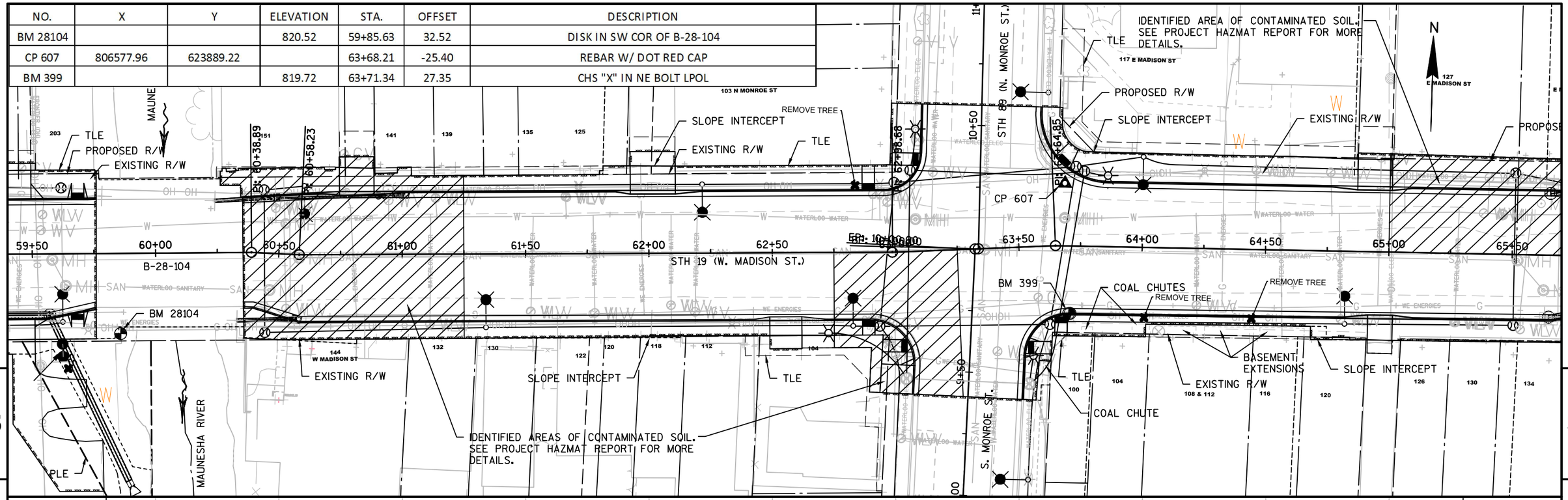
NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
BM 400			822.97	55+79.24	34.41	CHS "X" IN NE. BOLT LIGHT BASE IN NW COR.
CP 606	805862.80	623816.48		56+51.55	20.93	
BM 28104			820.52	59+85.63	32.52	DISK IN SW COR OF B-28-104

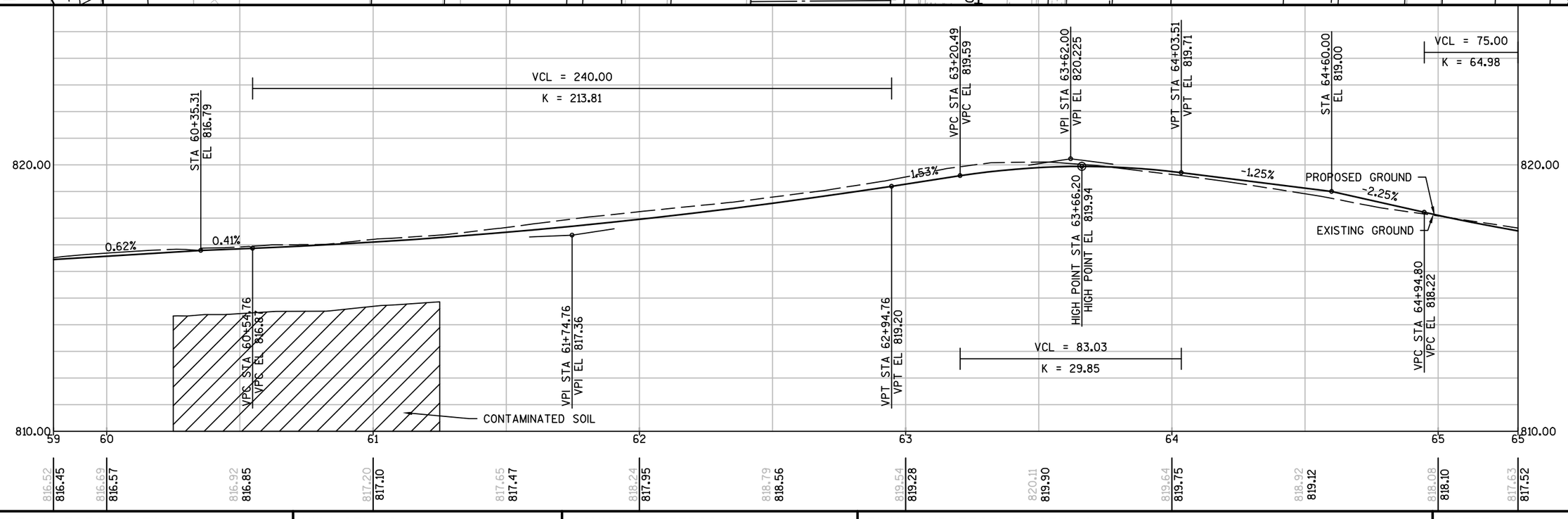




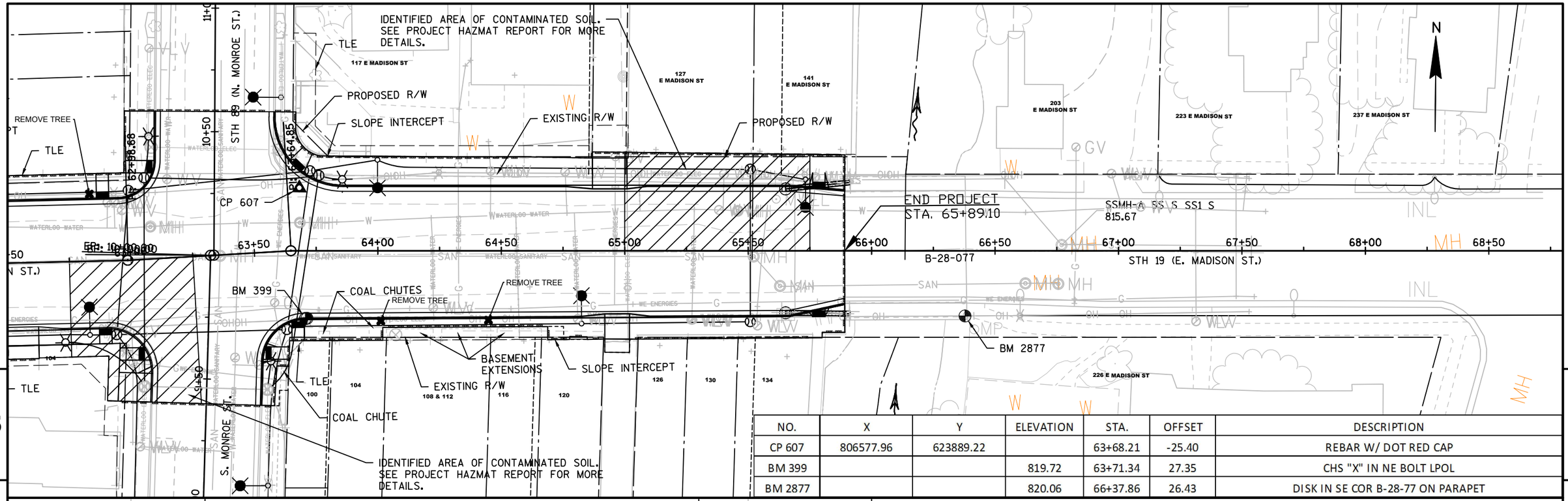
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: STH 19	SHEET 172	E

NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
BM 28104			820.52	59+85.63	32.52	DISK IN SW COR OF B-28-104
CP 607	806577.96	623889.22		63+68.21	-25.40	REBAR W/ DOT RED CAP
BM 399			819.72	63+71.34	27.35	CHS "X" IN NE BOLT LPOL

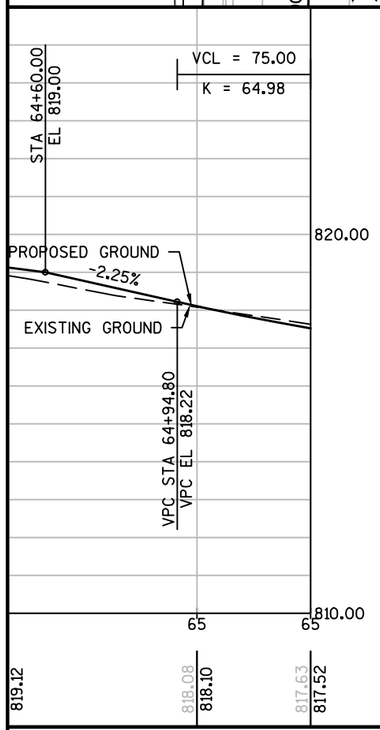


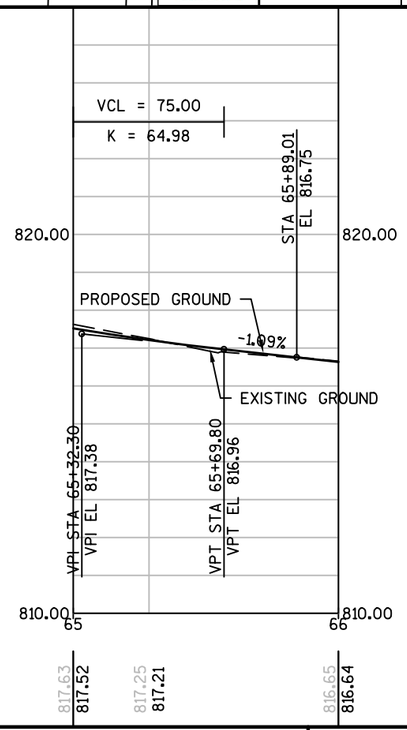


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: STH 19	SHEET 173	E

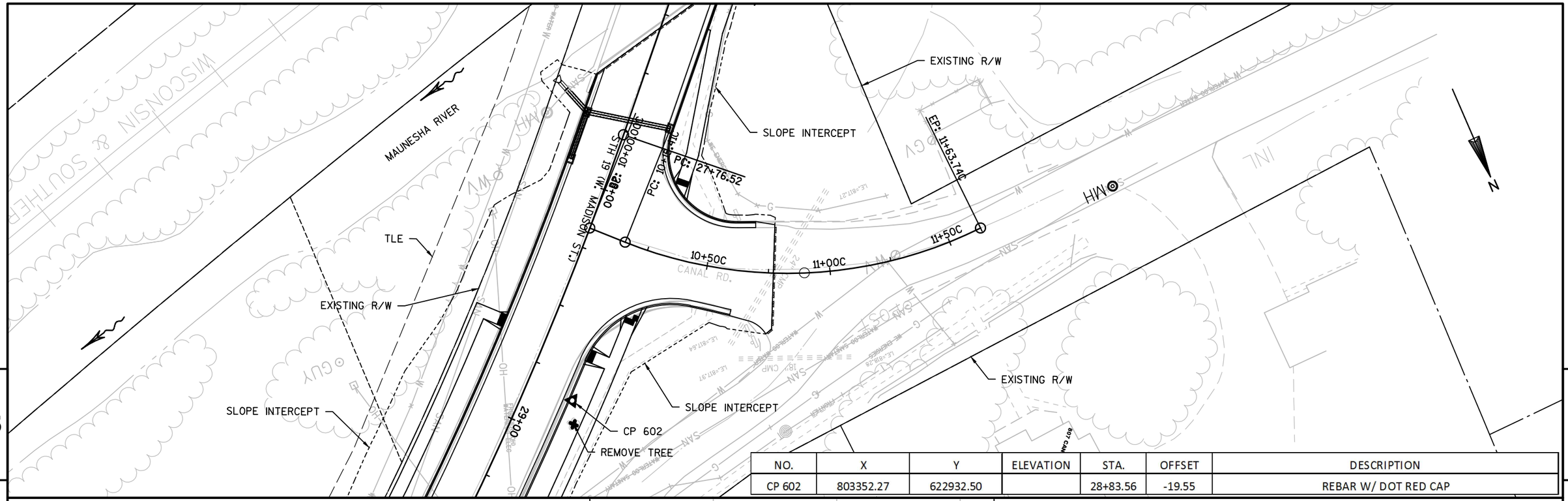


NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
CP 607	806577.96	623889.22		63+68.21	-25.40	REBAR W/ DOT RED CAP
BM 399			819.72	63+71.34	27.35	CHS "X" IN NE BOLT LPOL
BM 2877			820.06	66+37.86	26.43	DISK IN SE COR B-28-77 ON PARAPET

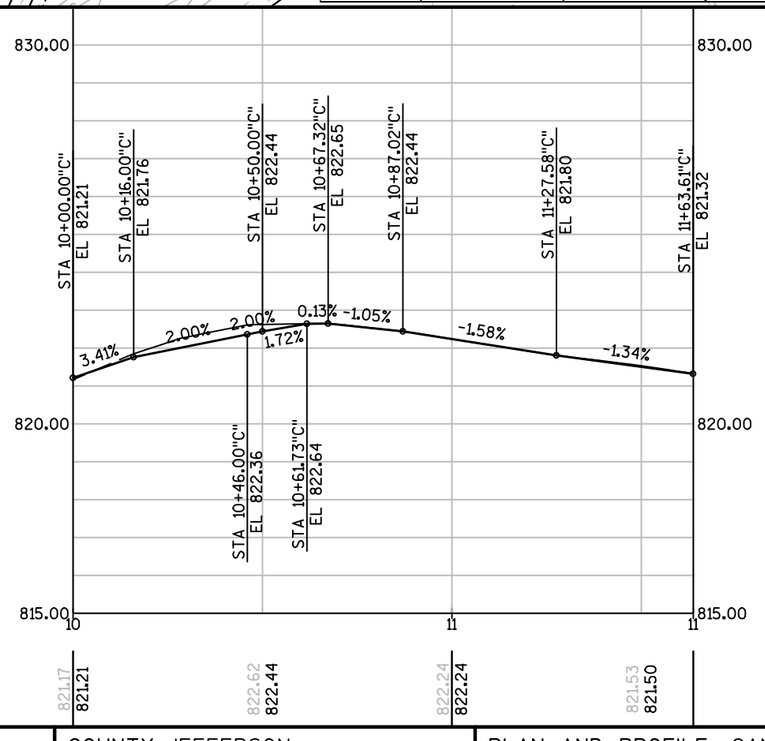




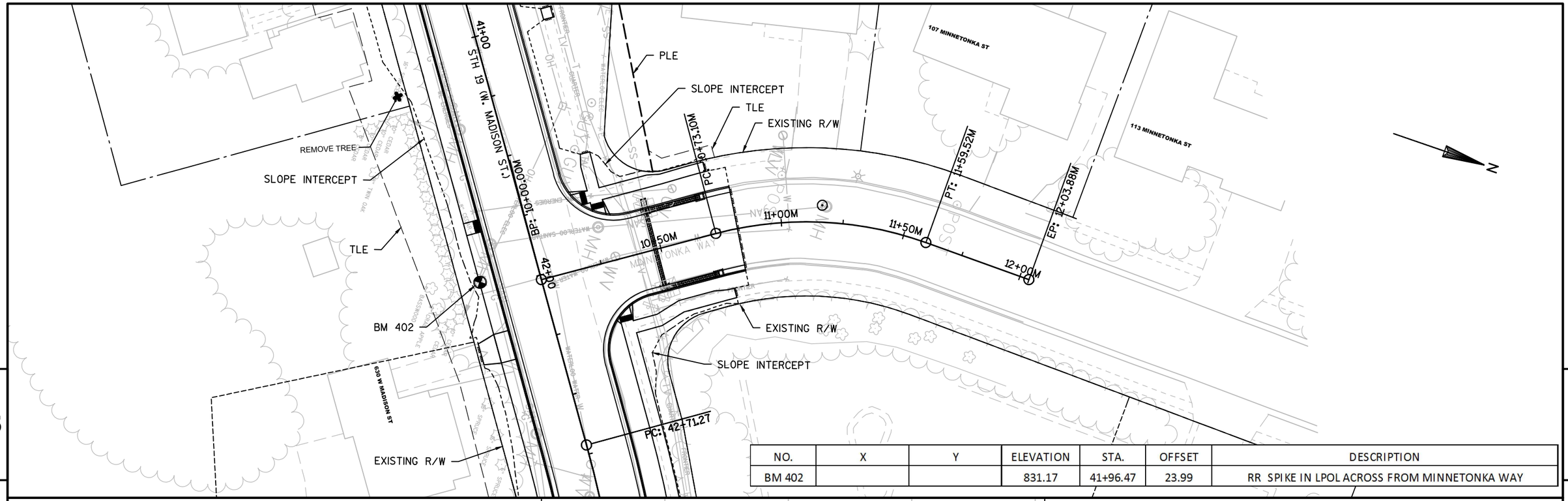
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: STH 19	SHEET 174	E



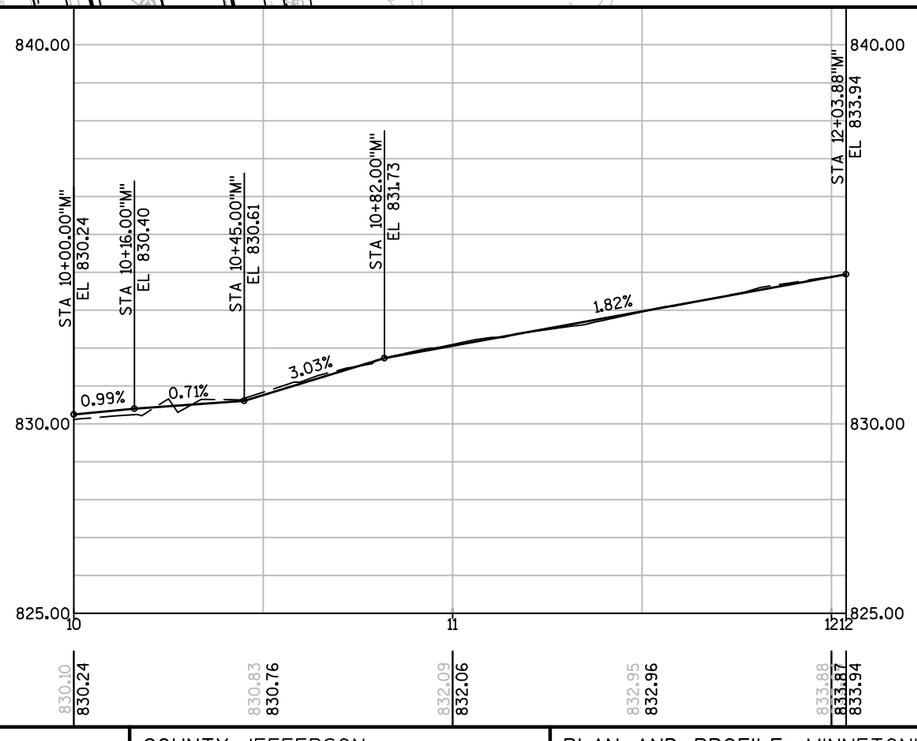
NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
CP 602	803352.27	622932.50		28+83.56	-19.55	REBAR W/ DOT RED CAP



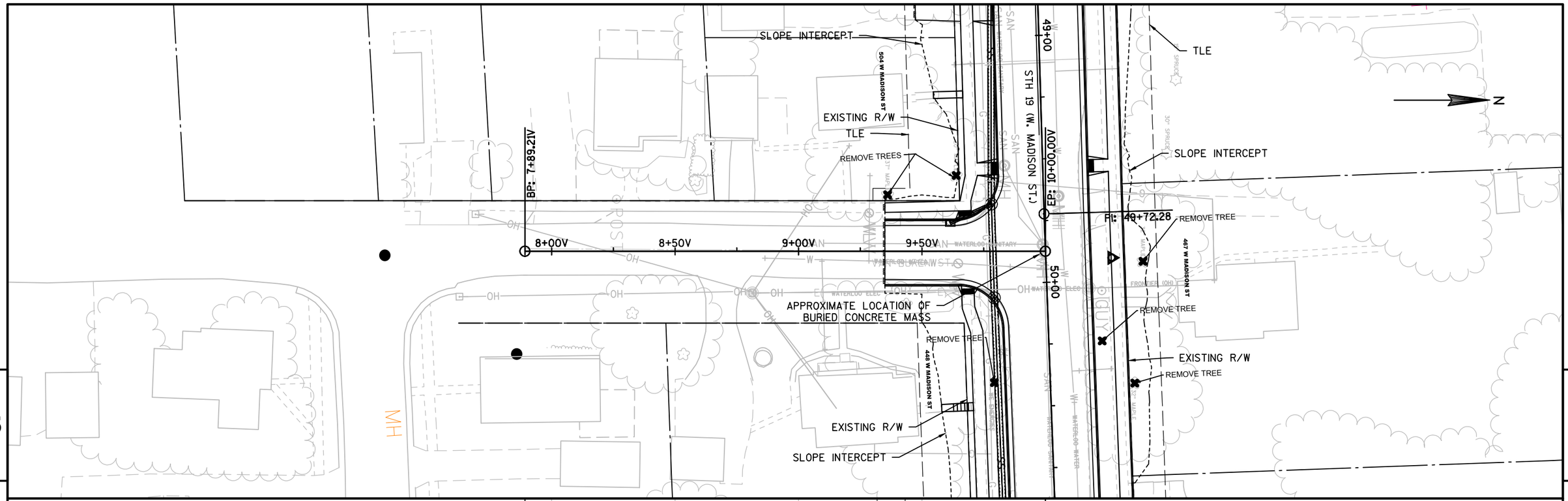
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: CANAL RD.	SHEET 175	E

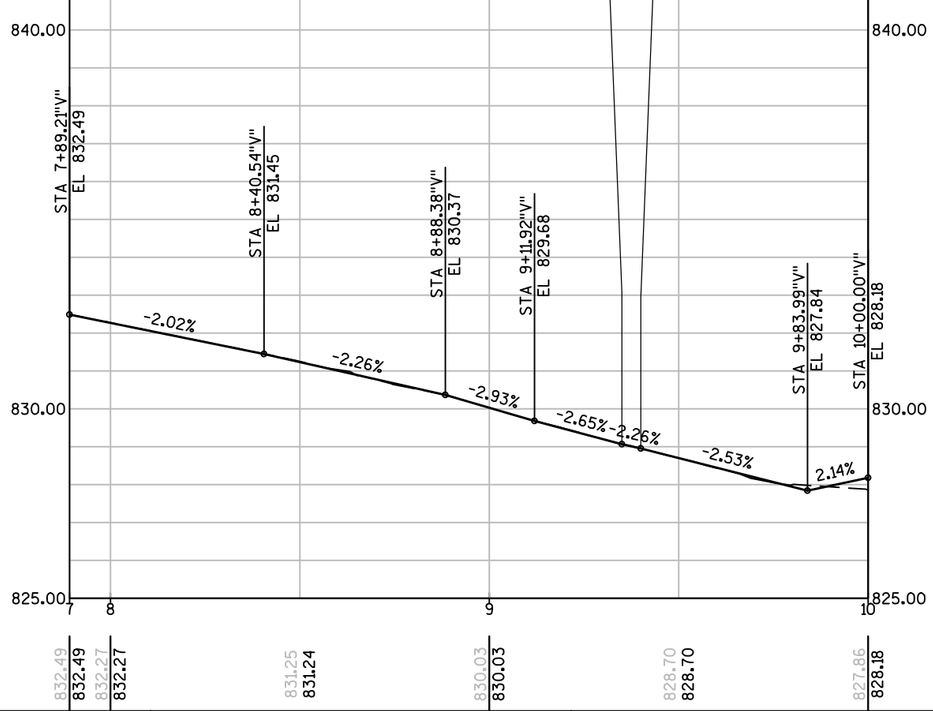


NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
BM 402			831.17	41+96.47	23.99	RR SPIKE IN LPOL ACROSS FROM MINNETONKA WAY

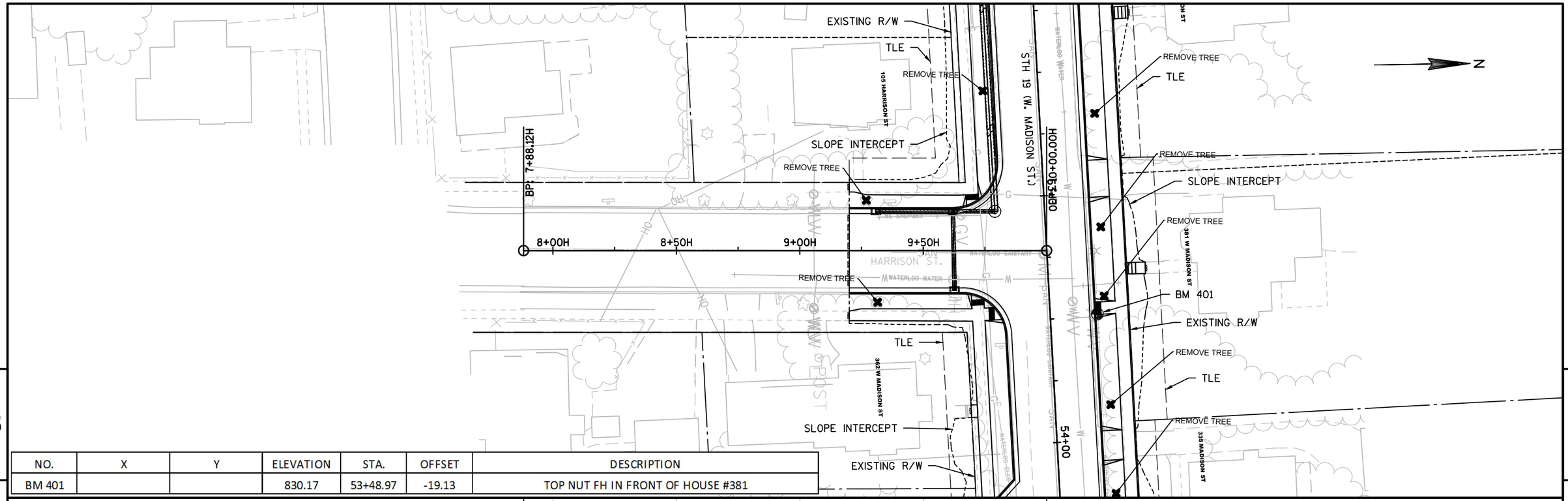


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: MINNETONKA WAY	SHEET 176	E

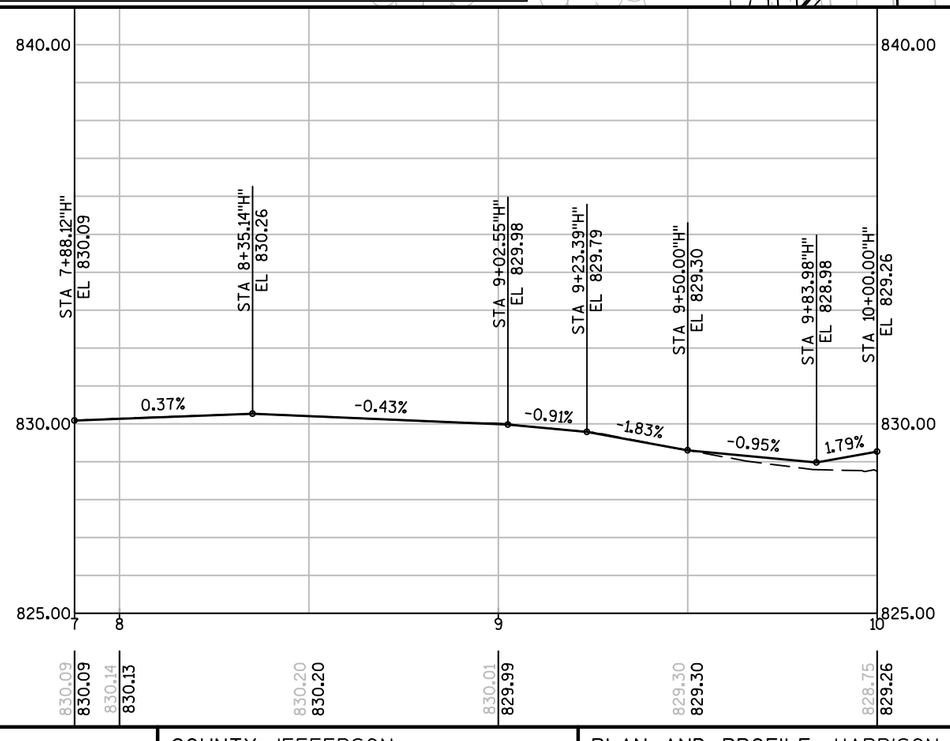




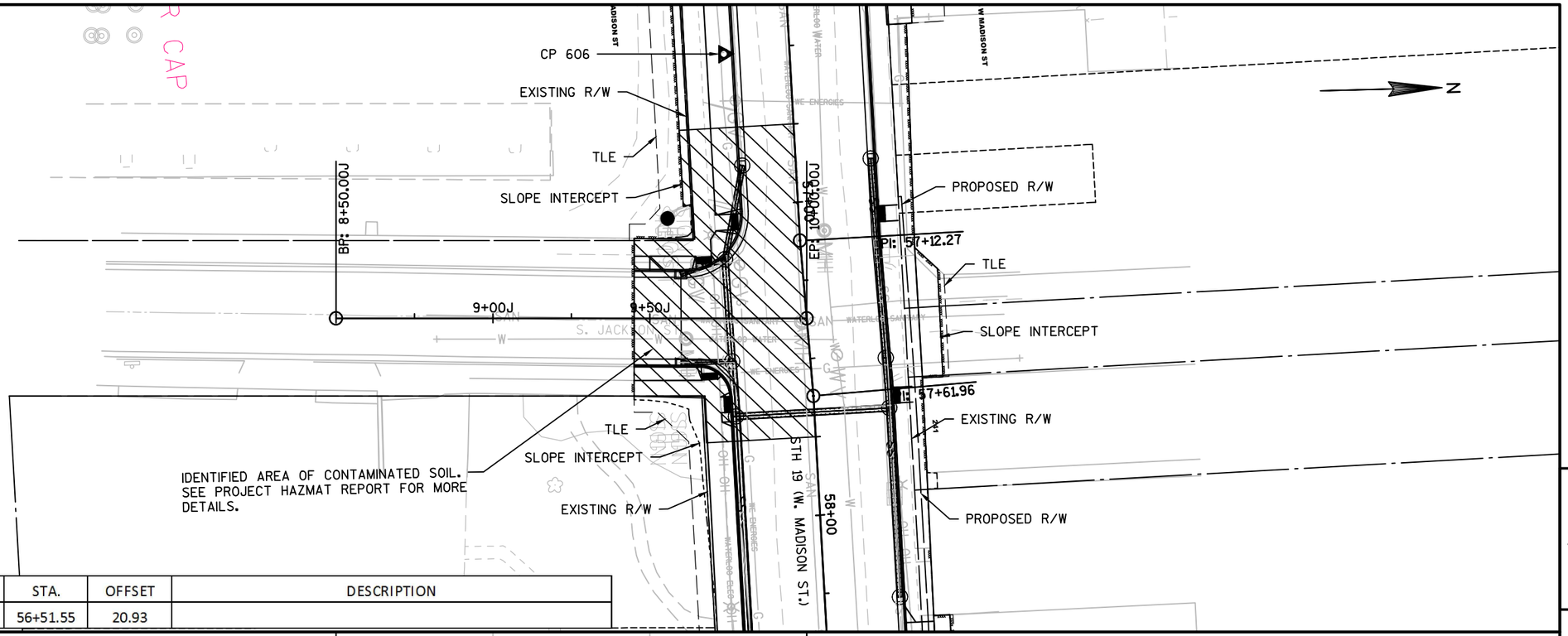
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: VAN BUREN ST.	SHEET 177 E



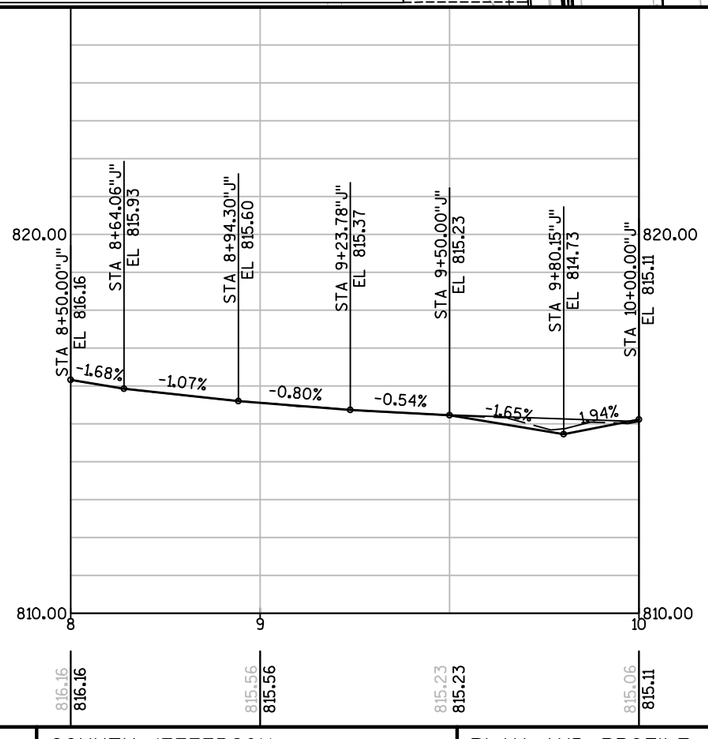
NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
BM 401			830.17	53+48.97	-19.13	TOP NUT FH IN FRONT OF HOUSE #381



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: HARRISON ST.	SHEET 178	E

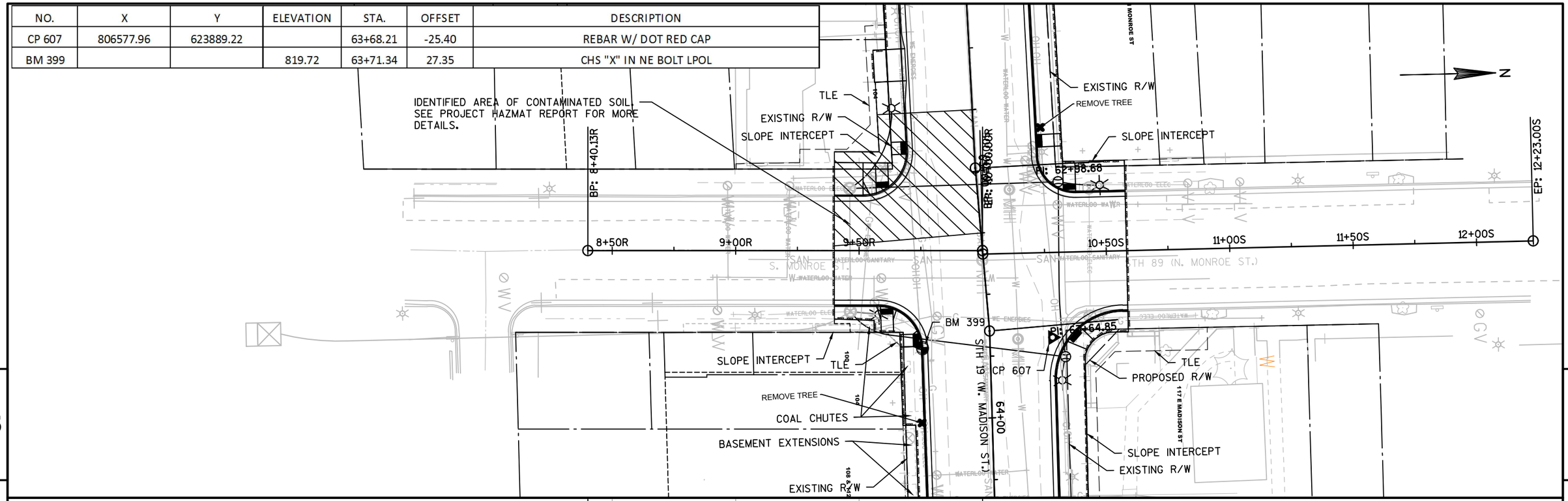


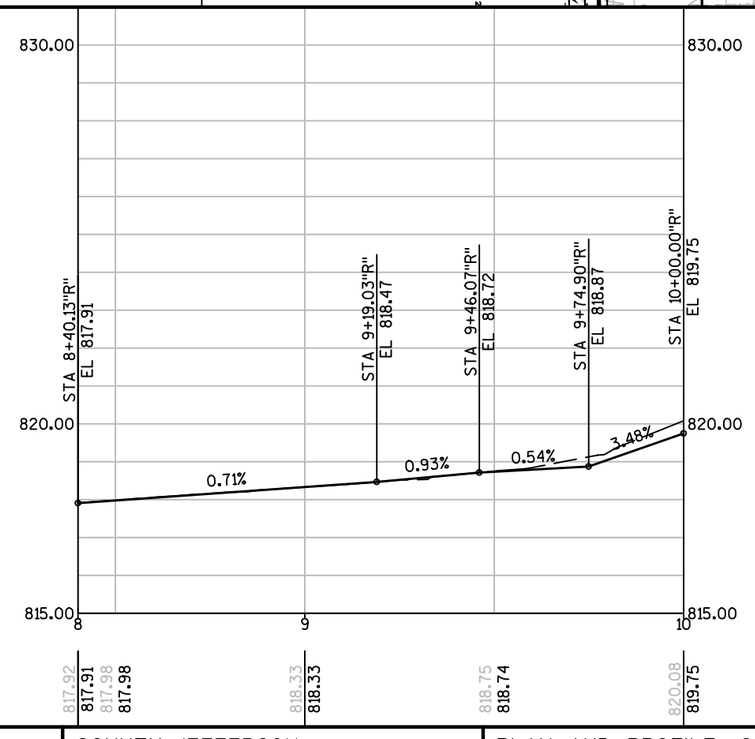
NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
CP 606	805862.80	623816.48		56+51.55	20.93	



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: S. JACKSON ST.	SHEET 179	E

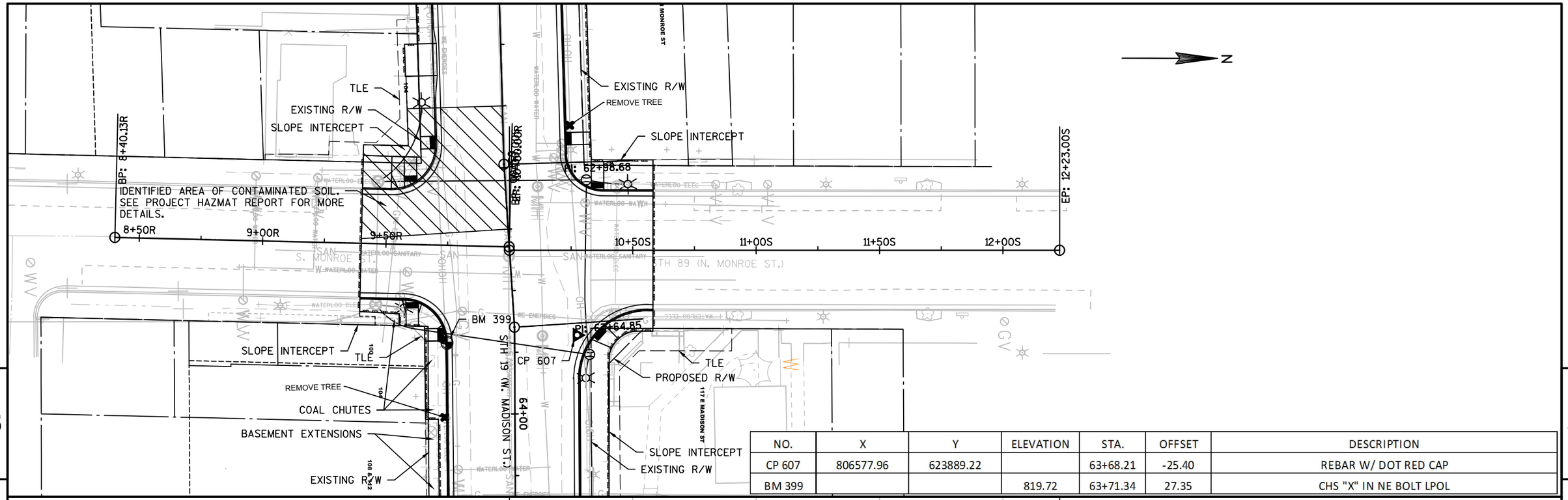
NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
CP 607	806577.96	623889.22		63+68.21	-25.40	REBAR W/ DOT RED CAP
BM 399			819.72	63+71.34	27.35	CHS "X" IN NE BOLT LPOL



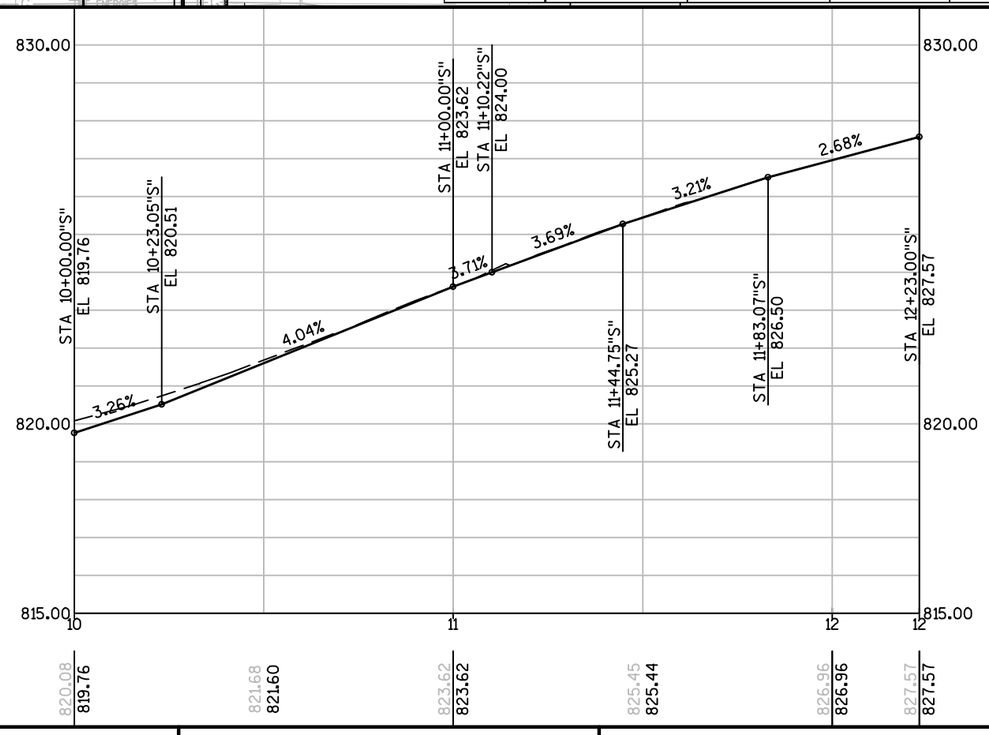


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: S. MONROE ST.	SHEET 180	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\5.0_PLAN AND PROFILE\STH19_1078_SIDEROADS_PP.DWG
LAYOUT NAME - STH19_1078_SIDEROADS_PP - SHEET - (9)
PLOT DATE : 1/5/2017 2:21 PM PLOT BY : LAMB, MATTHEW R PLOT NAME : PLOT SCALE : 1 IN:40 FT



NO.	X	Y	ELEVATION	STA.	OFFSET	DESCRIPTION
CP 607	806577.96	623889.22		63+68.21	-25.40	REBAR W/ DOT RED CAP
BM 399			819.72	63+71.34	27.35	CHS "X" IN NE BOLT LPOL

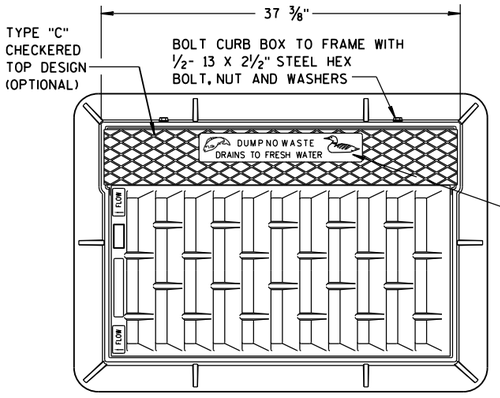


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	PLAN AND PROFILE: STH 89 (N. MONROE ST.)	SHEET 181	E

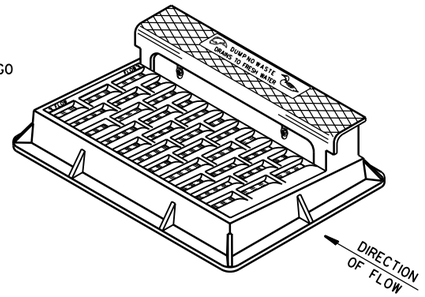
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-19	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-17A	CURB RAMPS TYPES 1 AND 1-A
08D05-17B	CURB RAMPS TYPES 2 AND 3
08D05-17C	CURB RAMPS TYPES 4A AND 4A1
08D05-17D	CURB RAMPS TYPE 4B AND 4B1
08D05-17E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
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
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C14-02	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D04-02	LIGHTING CONTROL CABINET 120/240 VOLT
09E01-14D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
12A03-10	NAME PLATE (STRUCTURES)
13B02-08A	CONCRETE PAVEMENT APPROACH SLAB
13B02-08B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C04-16	URBAN NON-DOWELED CONCRETE PAVEMENT
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-03A	CONCRETE PAVEMENT JOINTING
13C18-03B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-03C	CONCRETE PAVEMENT JOINT TIES
13C18-03D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
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
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-13A	PAVEMENT MARKING SYMBOLS
15C07-13E	PAVEMENT MARKING FOR BIKE LANES
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C29-03E	PAVEMENT MARKING FOR BIKE LANES
15C29-04A	BICYCLE LANE MARKING
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D38-01A	TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS
15D38-01B	ATTACHMENT OF SIGNS TO POSTS

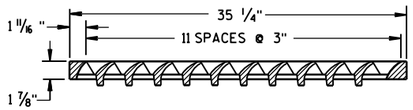
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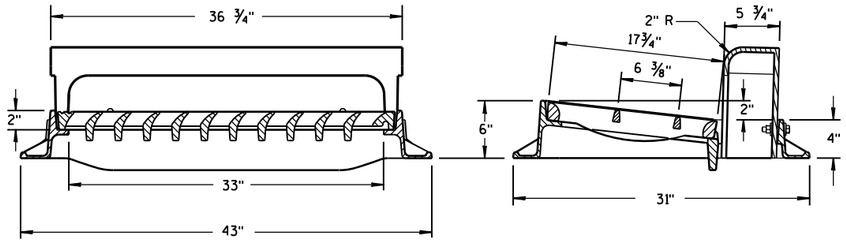


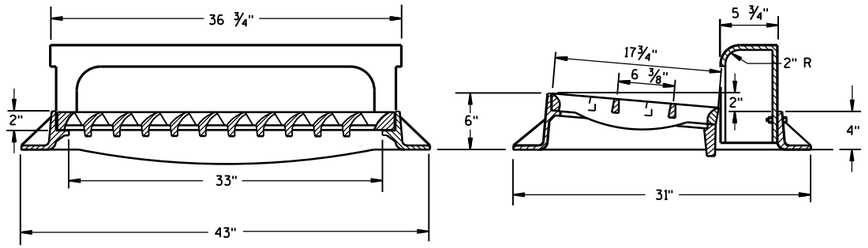
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

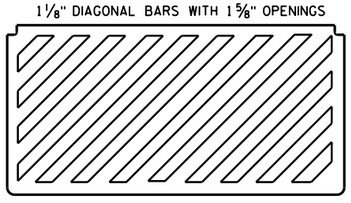






TYPE "H"

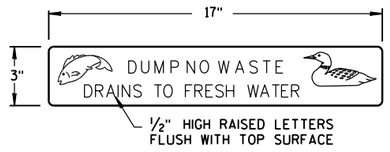
NOTE: EITHER CASTING IS ACCEPTABLE



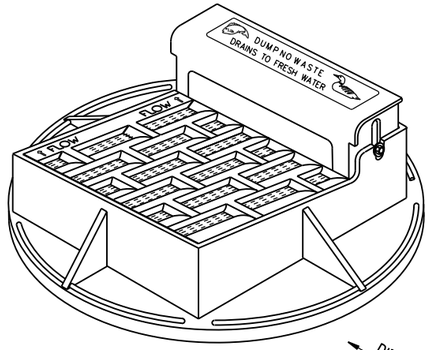
SPECIAL GRATE FOR TYPE "H" COVER

(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"

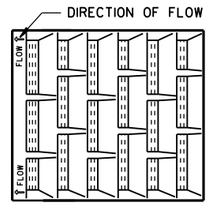
NOTE:
GRATE IS REVERSIBLE.

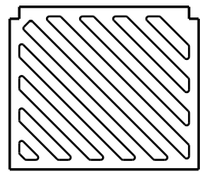
GENERAL NOTES

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.

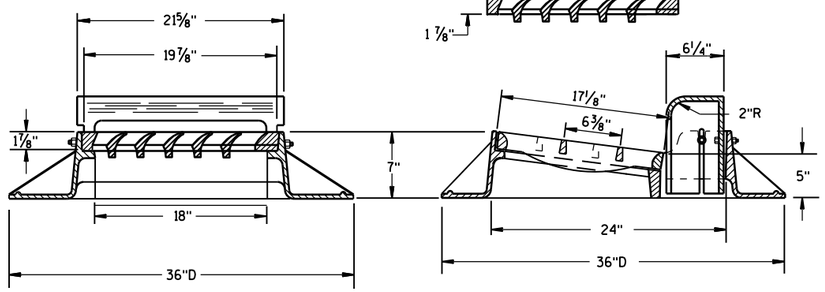




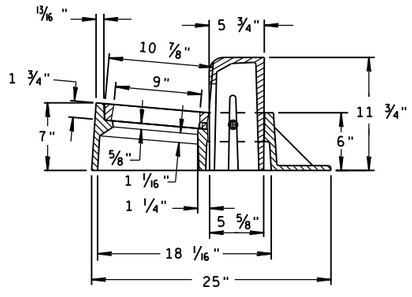
SPECIAL GRATE FOR TYPE "A" COVER

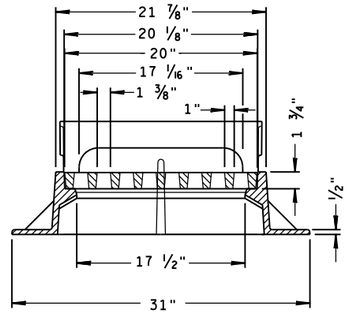
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

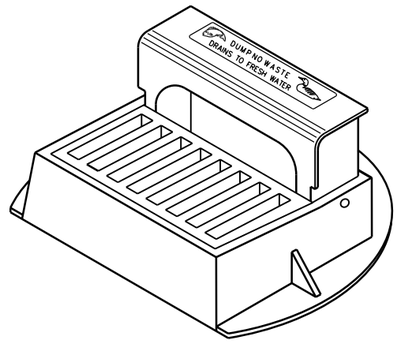


TYPE "A"





TYPE "Z"



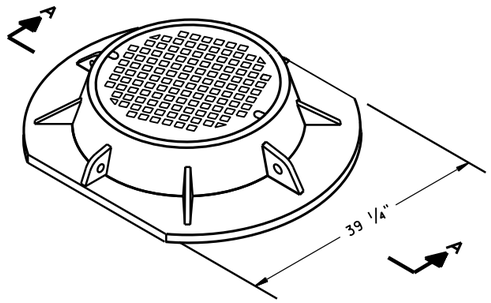
INLET COVERS
TYPE A, H, A-S, H-S & Z

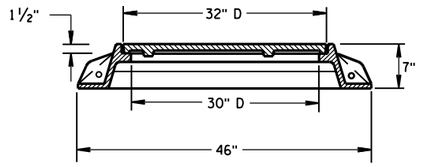
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

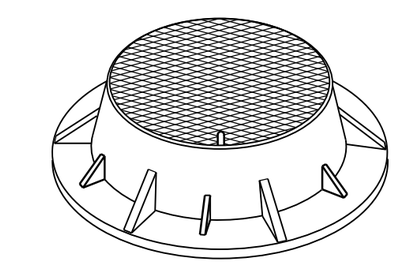
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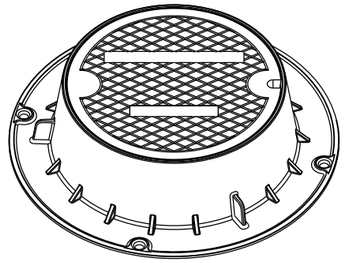
S.D.D. 8 A 5-19a

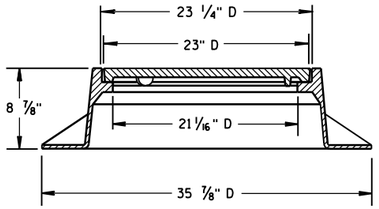


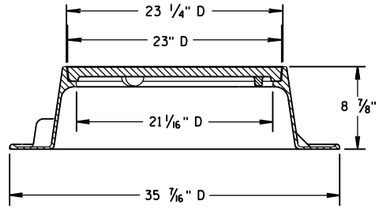


SECTION A-A
TYPE "K"









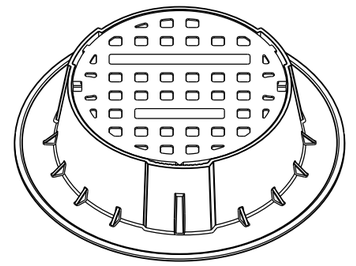
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

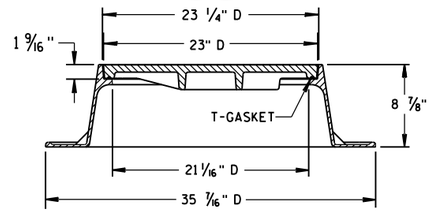
GENERAL NOTES

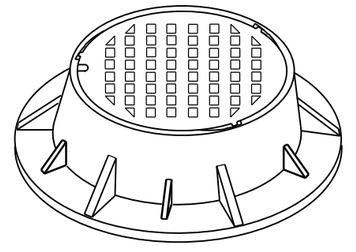
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

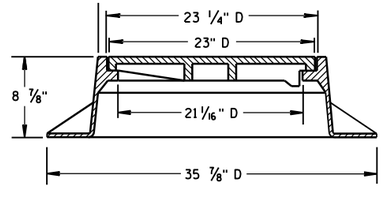
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

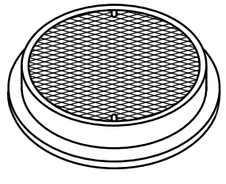


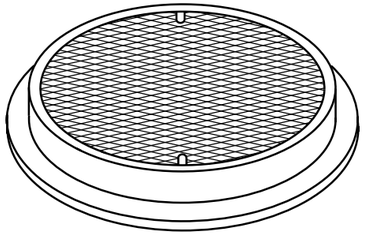


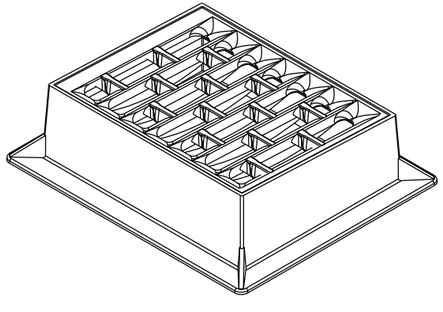


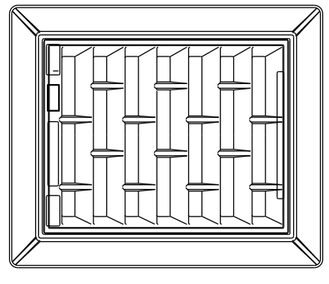


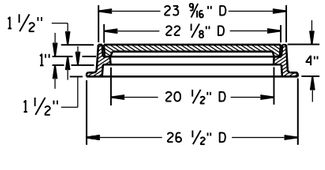
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



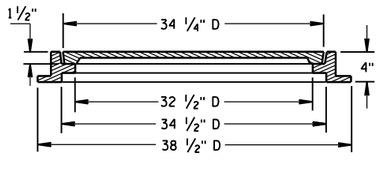




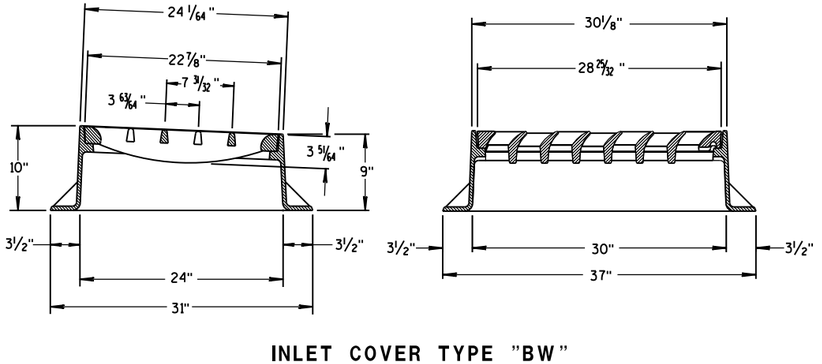




TYPE "L"



TYPE "M"



INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

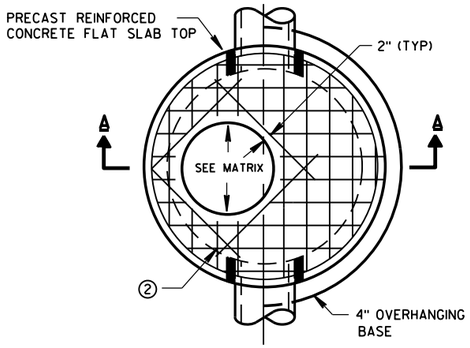
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

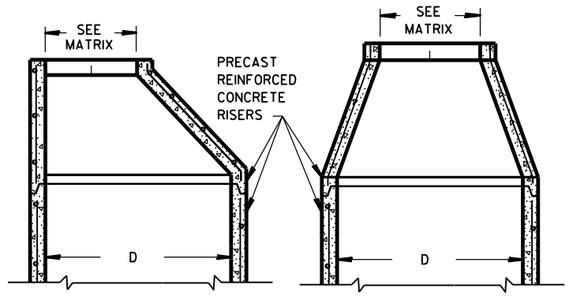
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

S.D.D. 8 A 5-19d

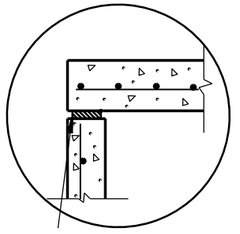


PLAN VIEW CIRCULAR OPENING

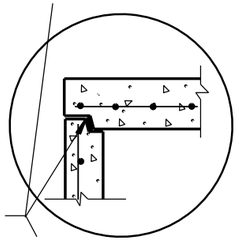


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

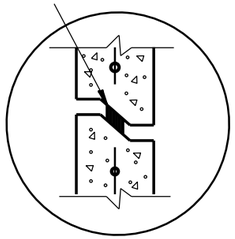


TOP WITH PLAIN END JOINT



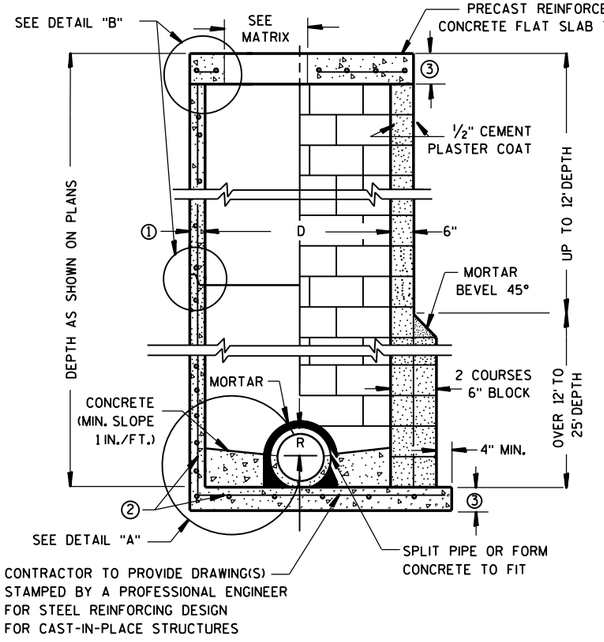
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



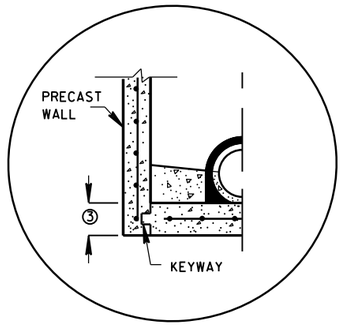
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

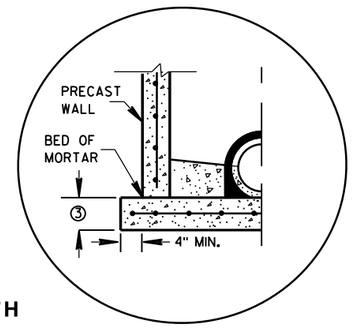


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

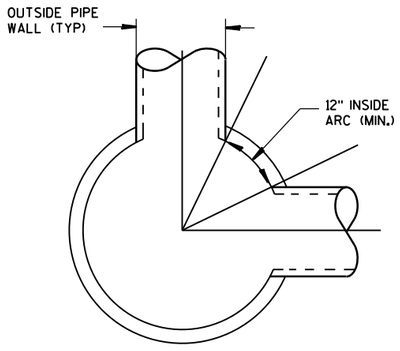


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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 GRANULAR 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. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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

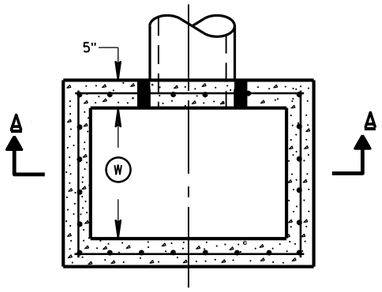
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

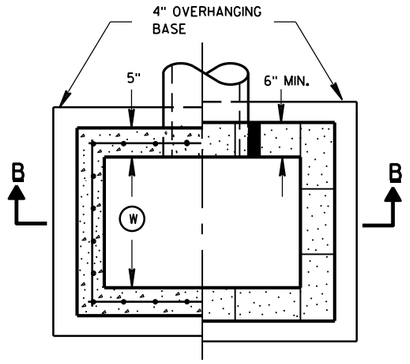
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

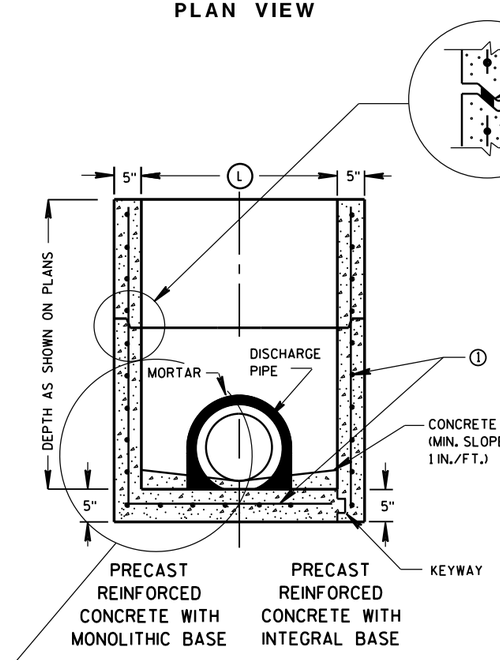
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S.D.D. 8 B 9-1



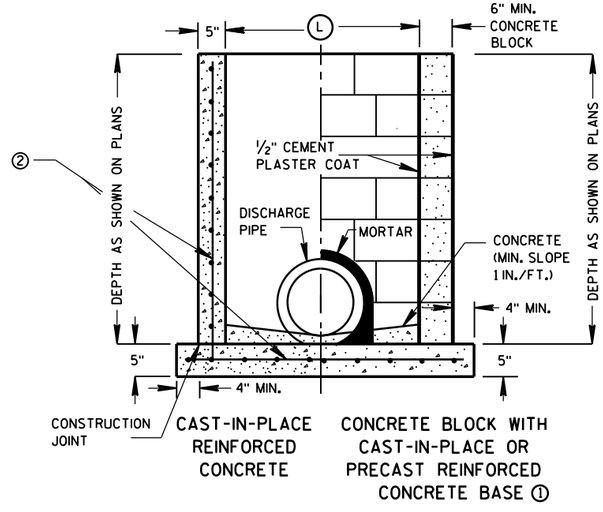
PLAN VIEW



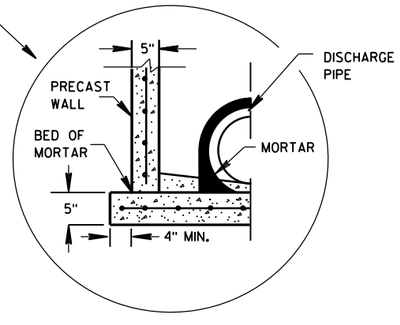
PLAN VIEW



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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET 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 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 GRANULAR 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.

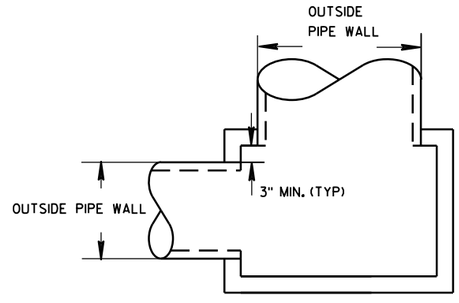
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (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"

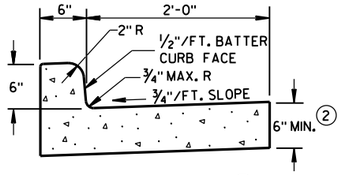
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

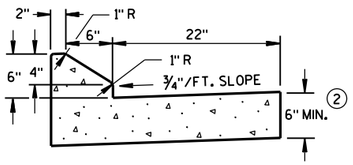
APPROVED
6/5/2012
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DE
ENGINEER

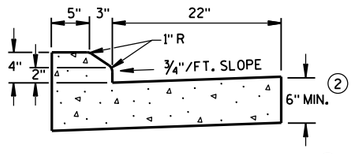
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TYPES A & D ①

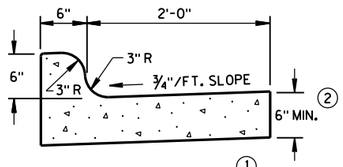


6" SLOPED CURB TYPES G & J ①

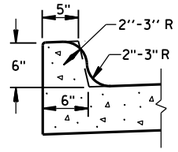


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

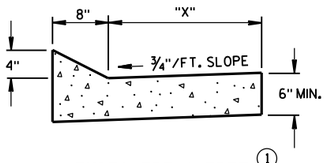


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

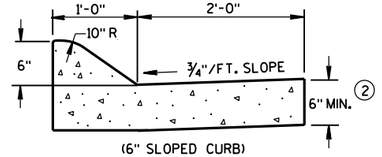
CONCRETE CURB & GUTTER 30"



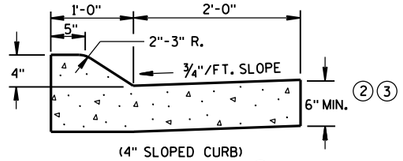
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

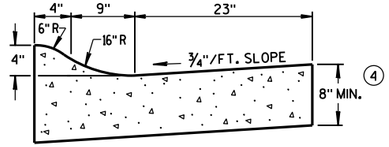


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ①⑤

CONCRETE CURB & GUTTER 36"

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. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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.

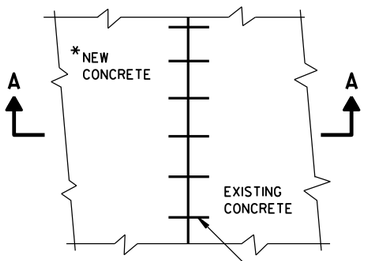
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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.

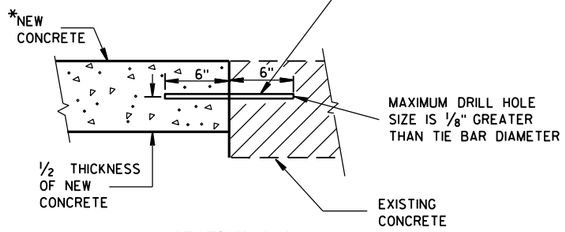
⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



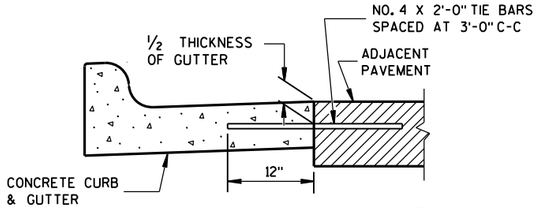
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

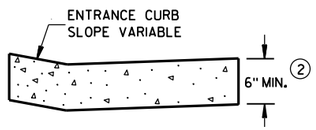


SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT

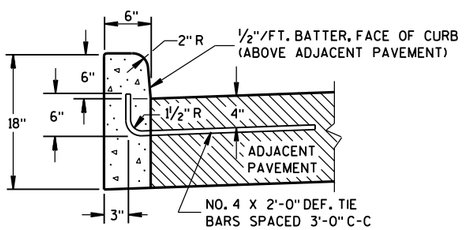


TYPICAL TIE BAR LOCATION ①

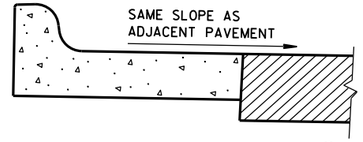


DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)

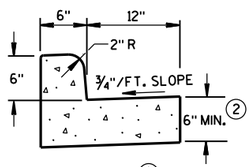


① TYPES A & D



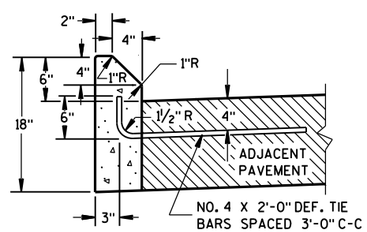
⑥ REVERSE SLOPE GUTTER

(TYPICAL FOR ALL CURB & GUTTER TYPES)



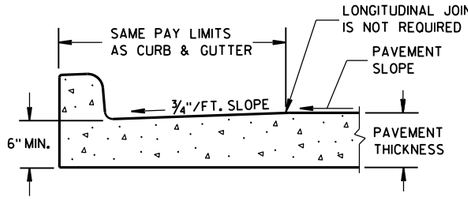
① TYPES A & D

CONCRETE CURB & GUTTER 18"

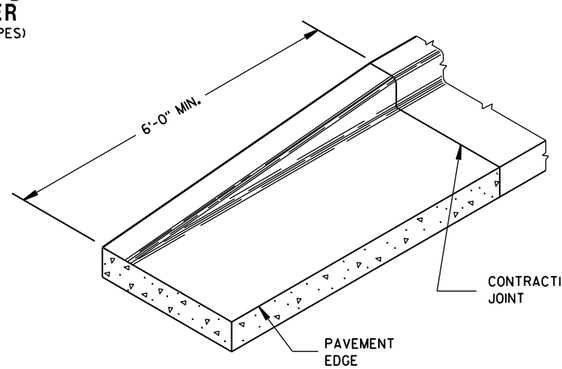


① TYPES G & J

CONCRETE CURB



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

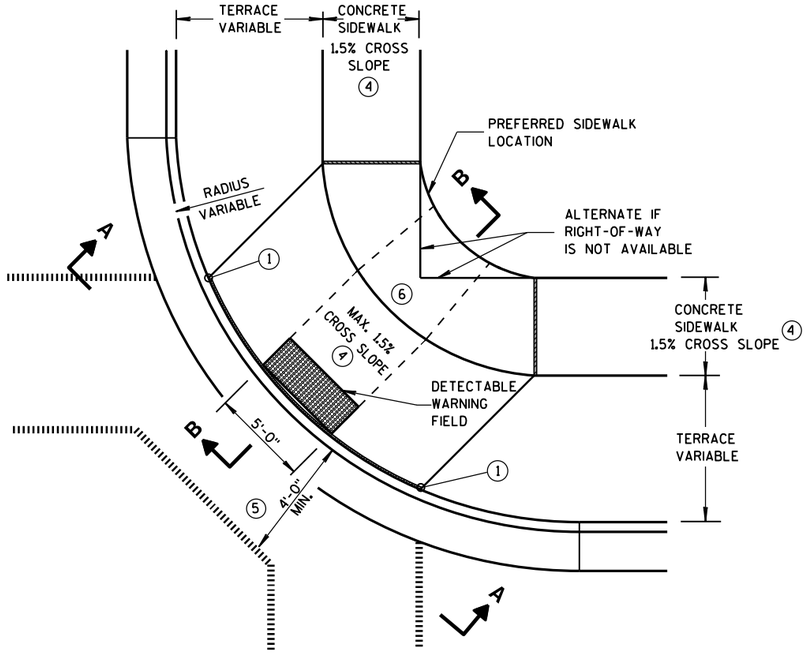
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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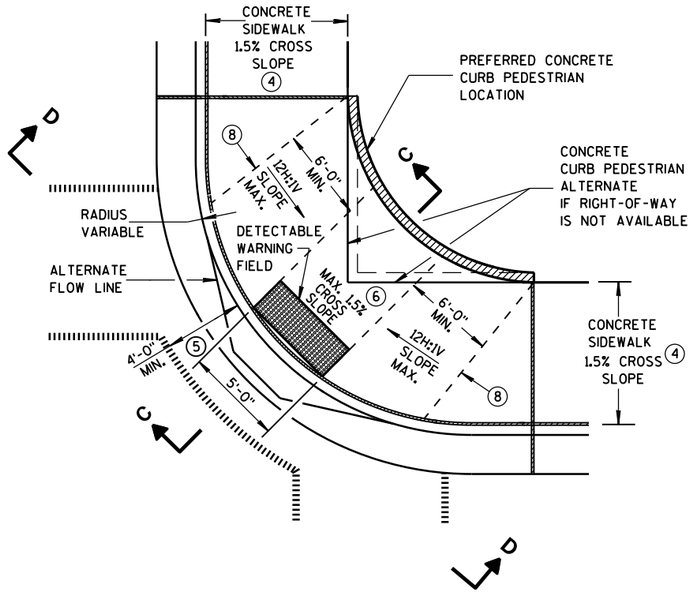
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PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

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.

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 NOT EXCEED 7%.

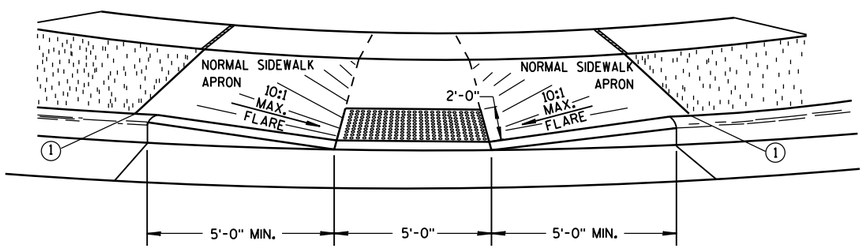
(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(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.

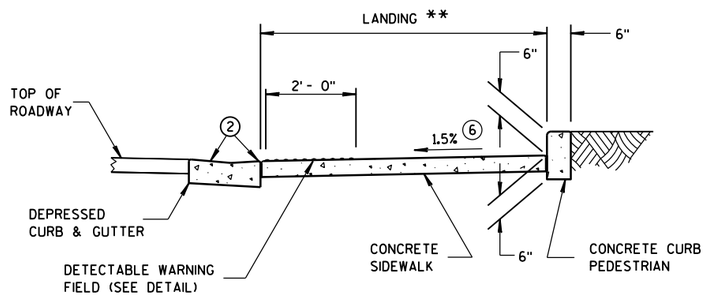
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.



VIEW A-A

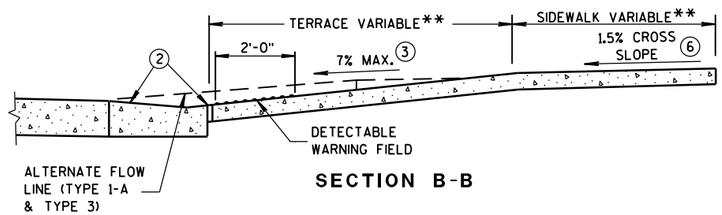
** WIDTH SHOWN ELSEWHERE IN THE PLANS



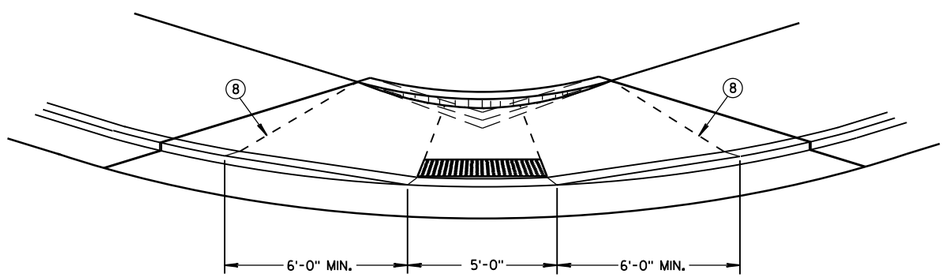
SECTION C-C

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



SECTION B-B



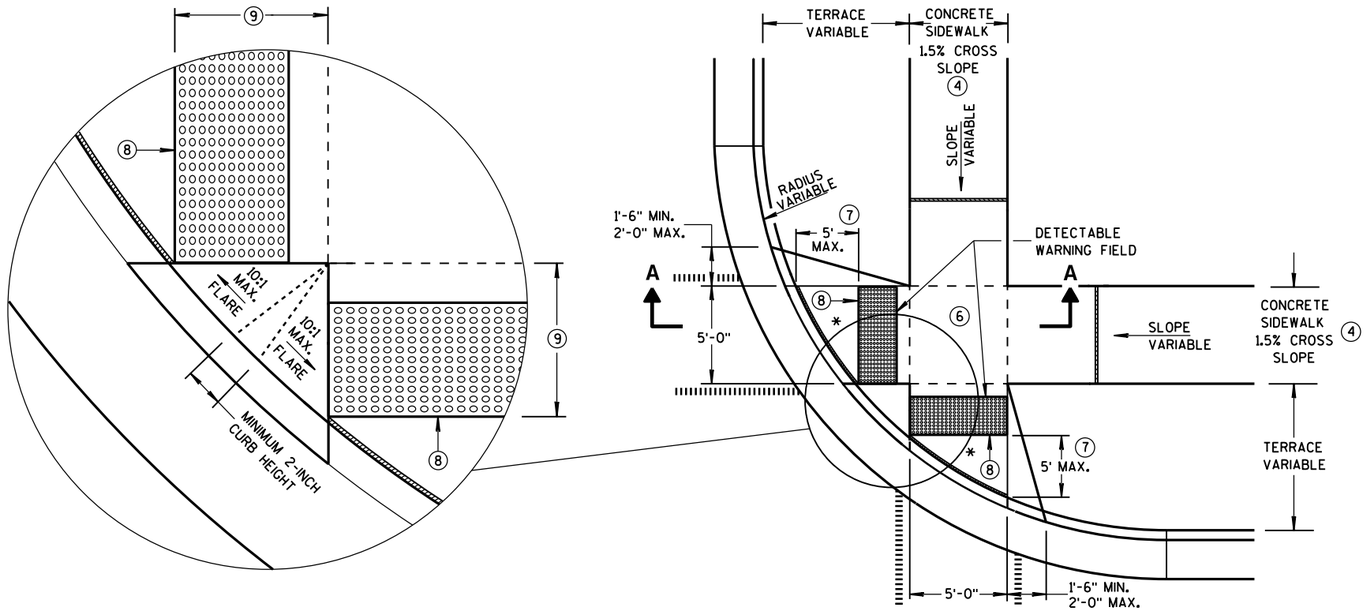
VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

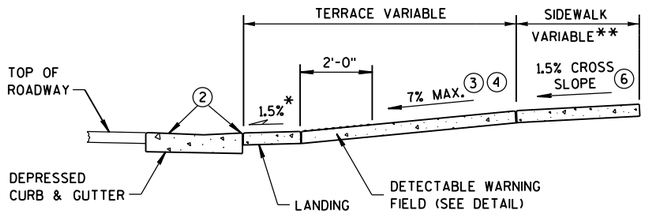
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S.D.D. 8 D 5-17a



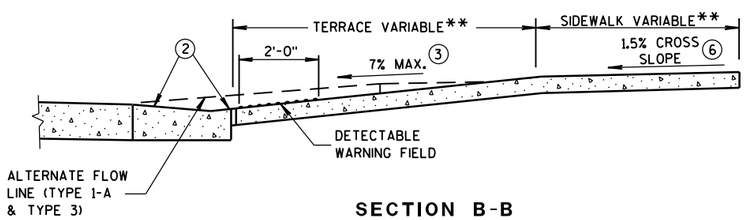
PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B

GENERAL NOTES

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 NOT EXCEED 7%.

(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 (MINIMUM 4 FEET X 4 FEET).

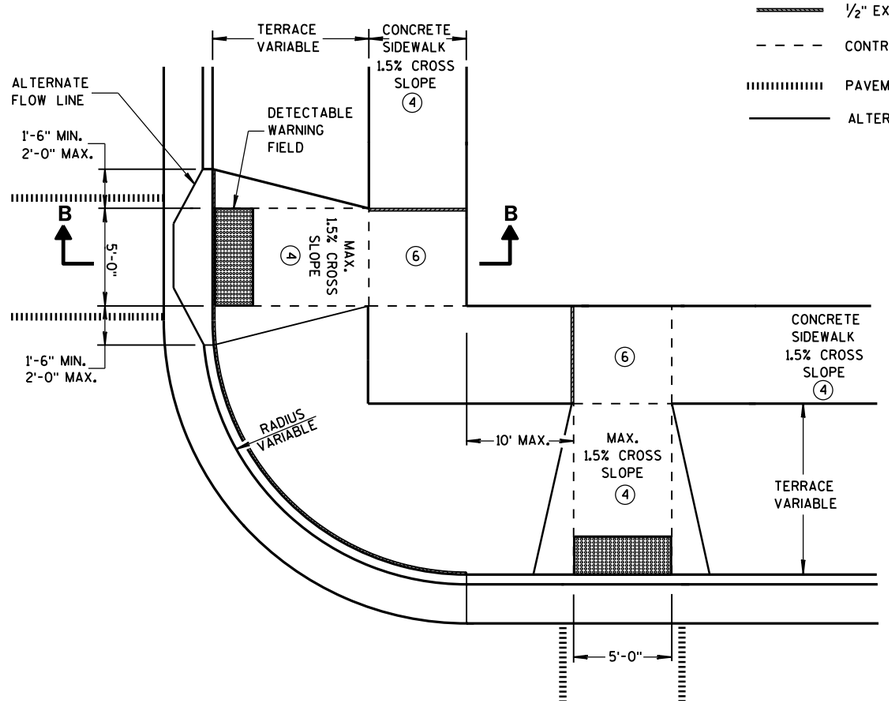
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

(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



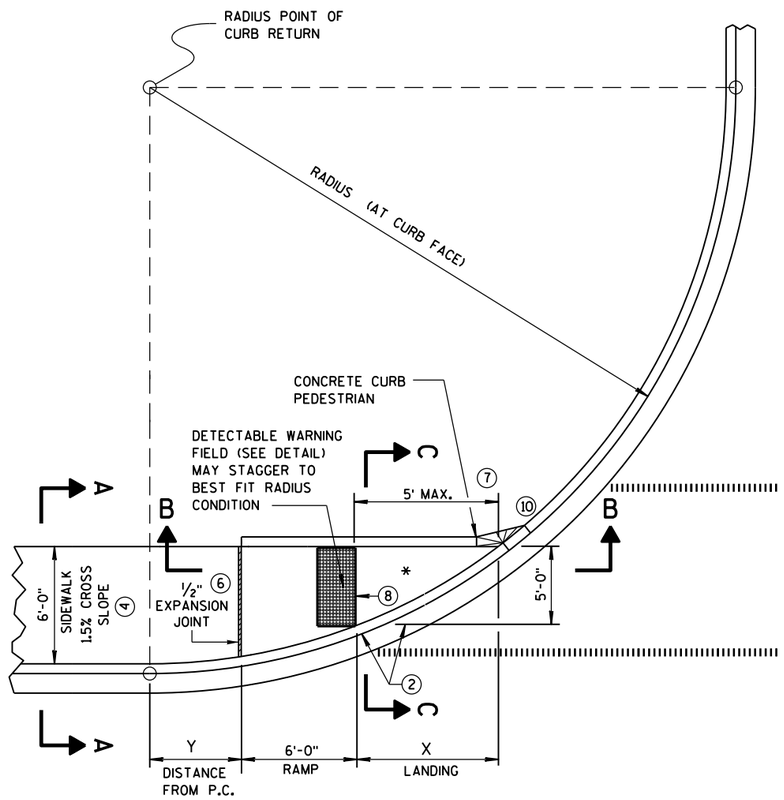
PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

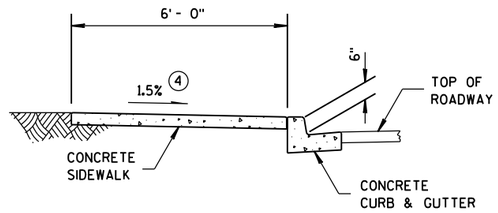
S.D.D. 8 D 5-17b



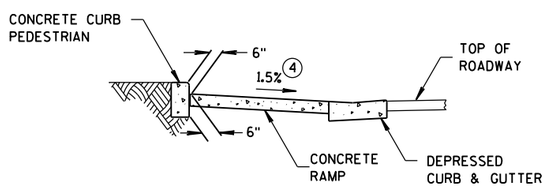
CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X	Y
20 FEET	7'-11"	0'-2"
30 FEET	10'-2¾"	1'-7½"
40 FEET	12'-1¼"	2'-10"
50 FEET	13'-8¾"	3'-10¾"
60 FEET	15'-2"	4'-10¼"

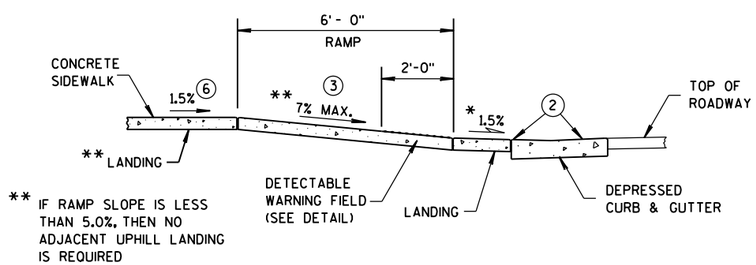
INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

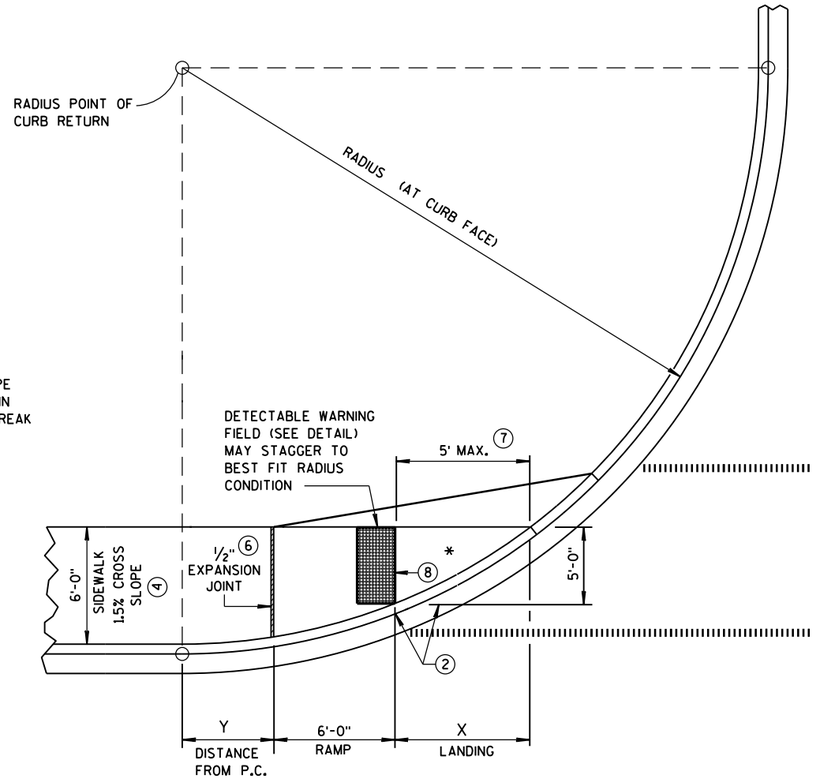


SECTION C-C FOR TYPE 4A



** 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

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 NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

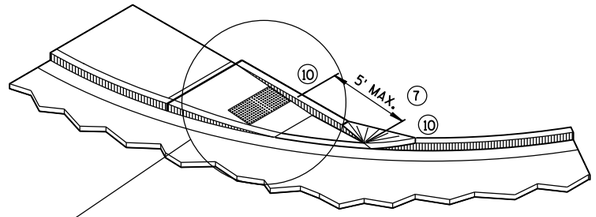
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

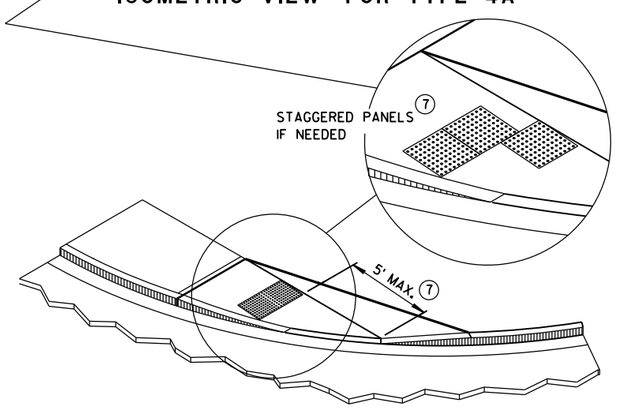
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

(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



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

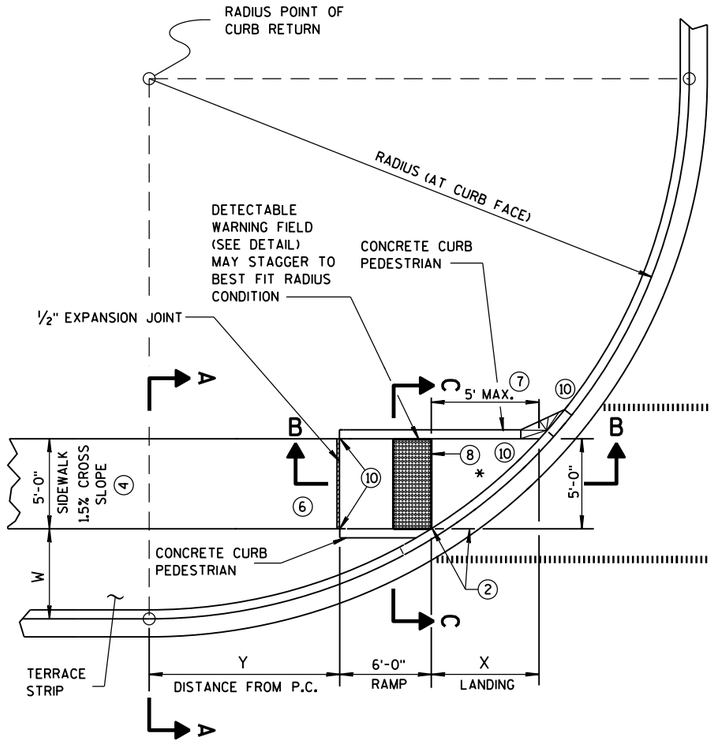
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

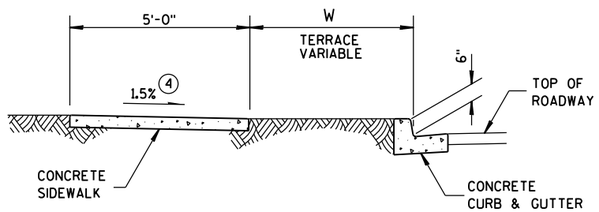
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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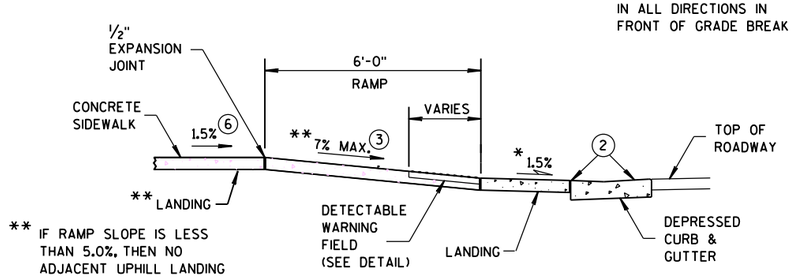
S.D.D. 8 D 5-17c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



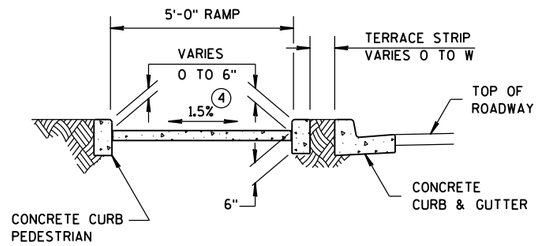
SECTION B-B FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-6¾"	3'-3"	8'-6¼"
30 FEET	7'-9¼"	5'-10½"	6'-9½"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"
40 FEET	9'-4"	7'-10"	8'-2¾"	10'-3"	7'-4¾"	12'-3¾"	6'-8½"	14'-1¼"	6'-1¾"	15'-8½"
50 FEET	10'-8"	9'-6½"	9'-5½"	12'-3¼"	8'-6½"	14'-7½"	7'-9¾"	16'-8¼"	7'-2½"	18'-6¼"
60 FEET	11'-10¼"	11'-0¾"	10'-6½"	14'-1¼"	9'-6½"	16'-8½"	8'-9¼"	18'-11¾"	8'-1½"	21'-0½"

INTERMEDIATE RADII CAN BE INTERPOLATED

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 NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

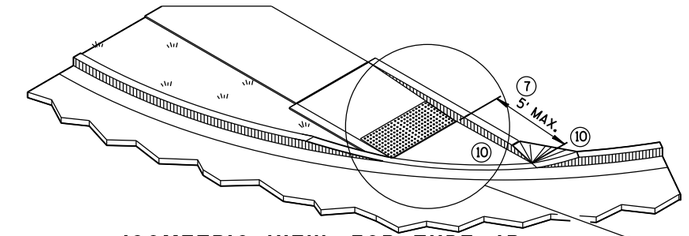
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

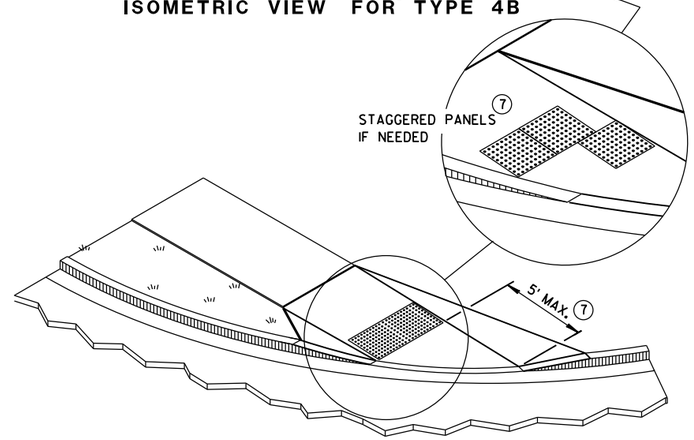
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

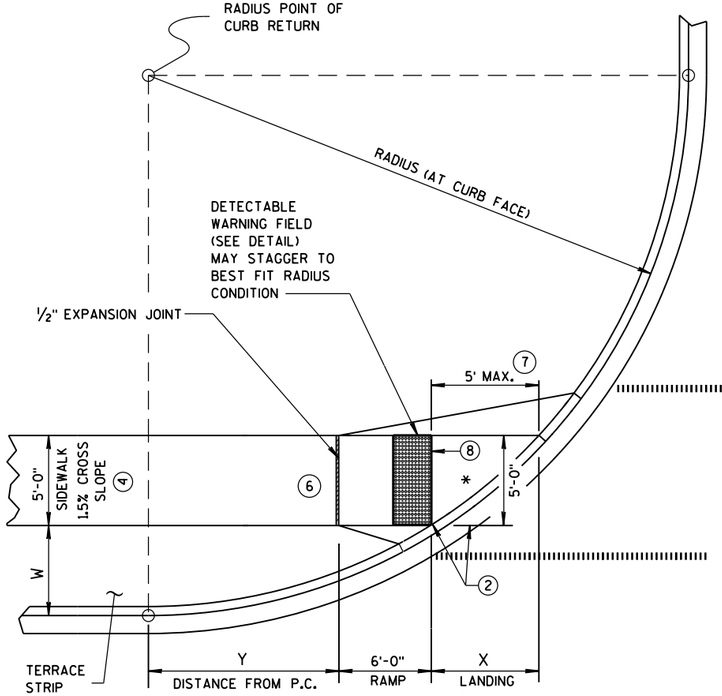
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1



CURB RAMP TYPE 4B1
PLAN VIEW

CURB RAMPS TYPE 4B AND 4B1

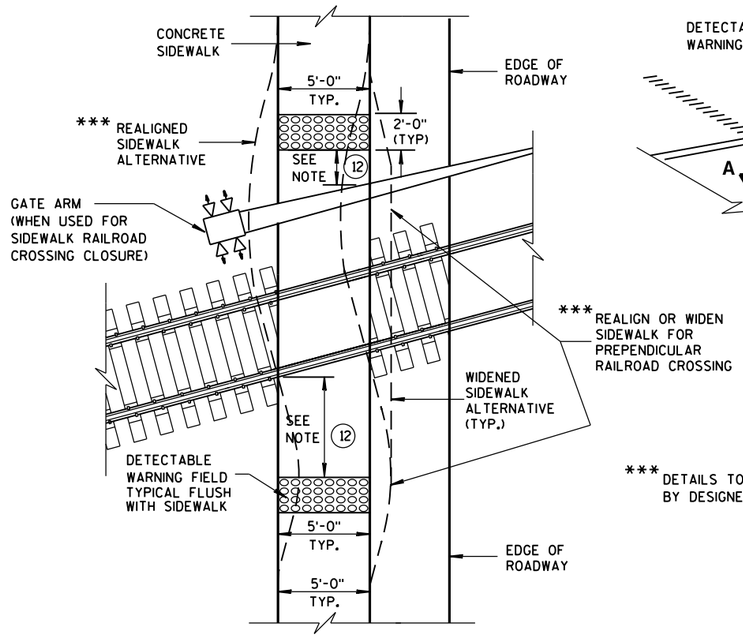
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 5-17d

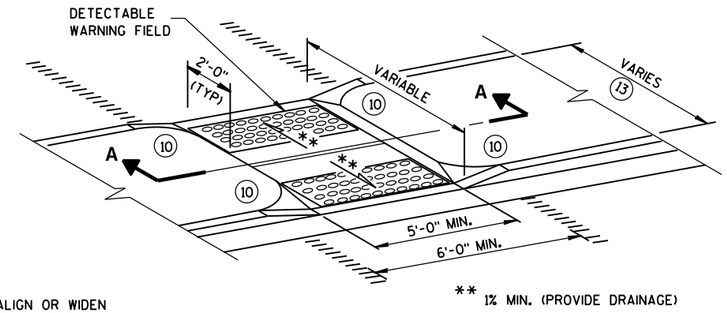
6

S.D.D. 8 D 5-17d



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

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 NOT EXCEED 7%.

(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.

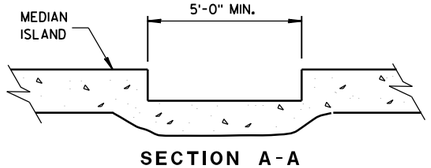
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(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.

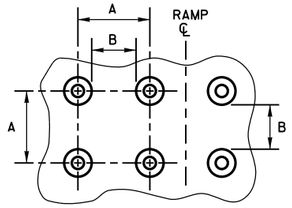
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



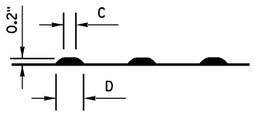
SECTION A-A

	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.

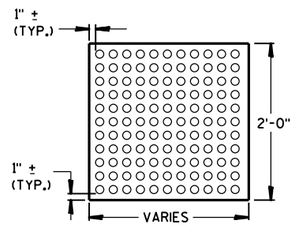


PLAN VIEW



ELEVATION VIEW

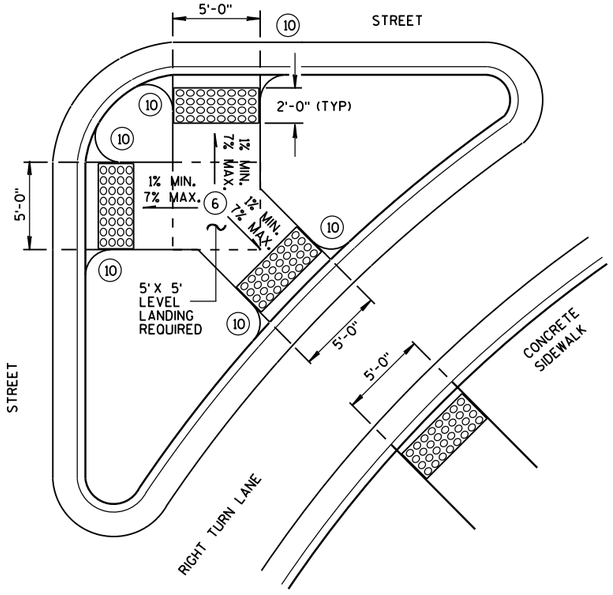
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



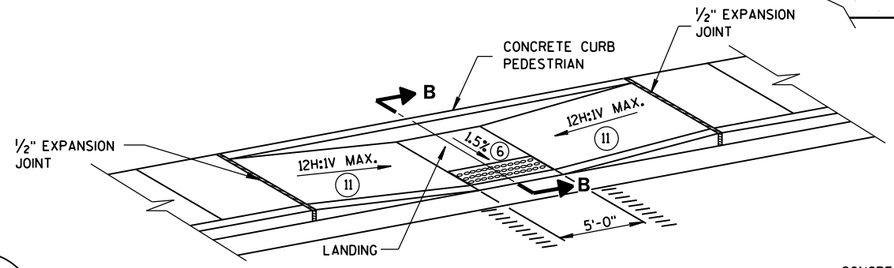
PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)

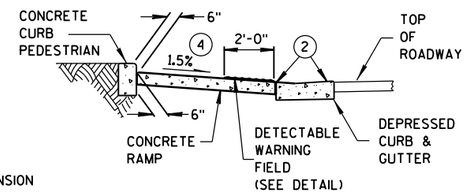
REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



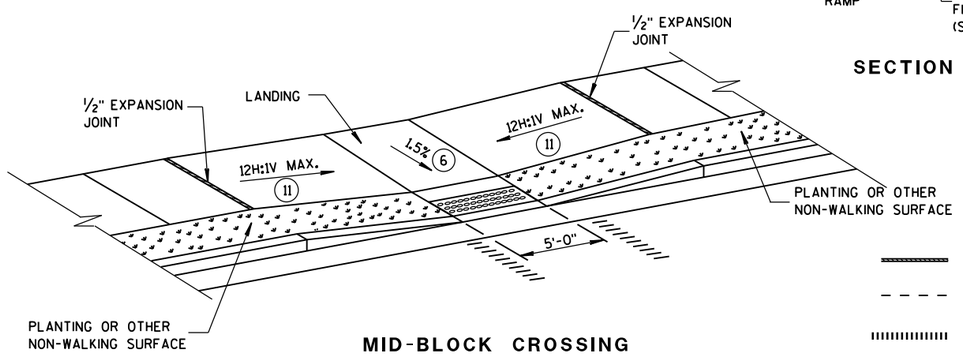
TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



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 TRANSPORTATION

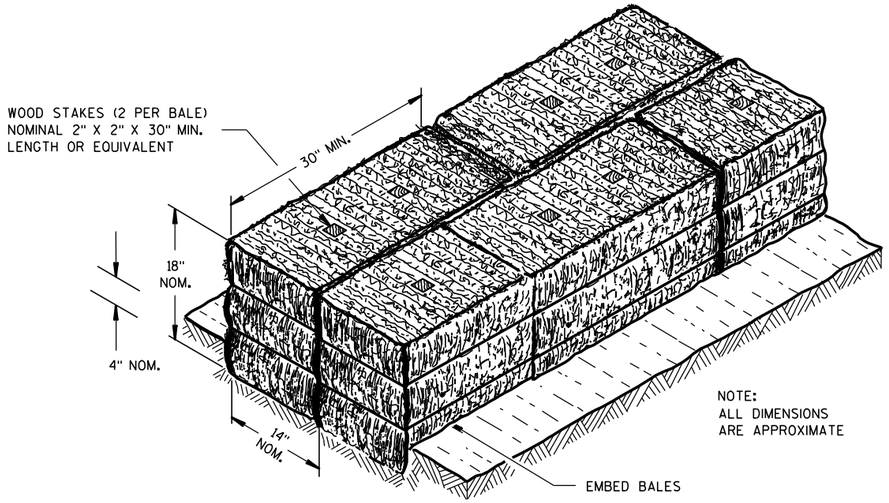
APPROVED
June, 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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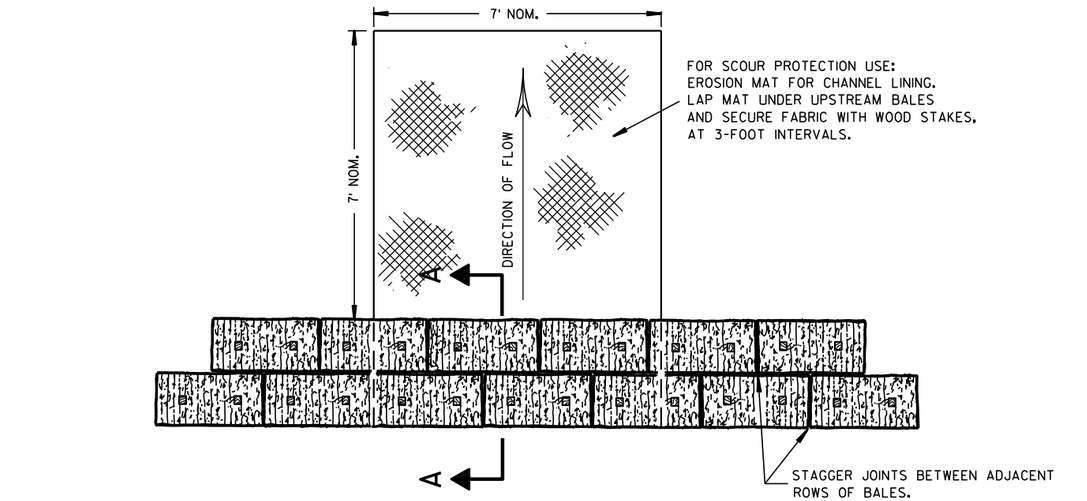
S.D.D. 8 D 5-17e

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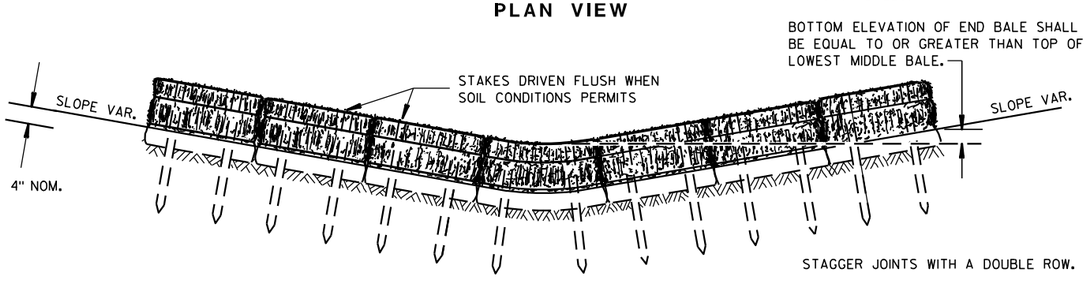
S.D.D. 8 D 5-17e



SECTION A-A



PLAN VIEW



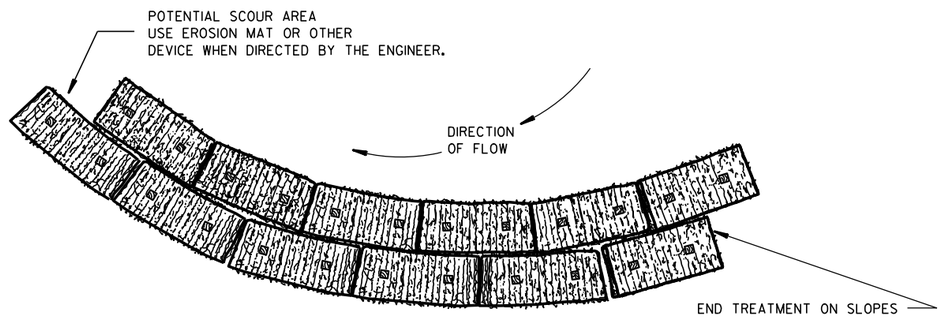
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

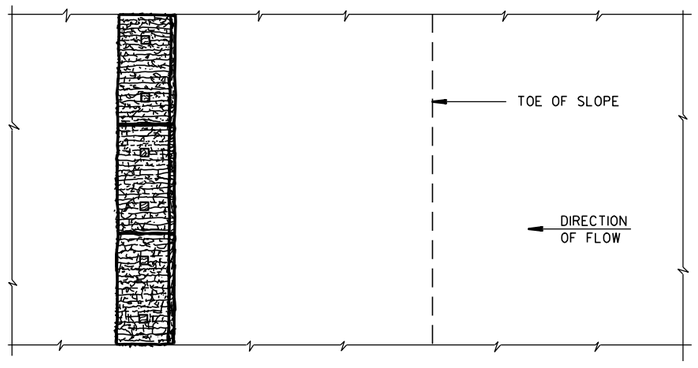
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

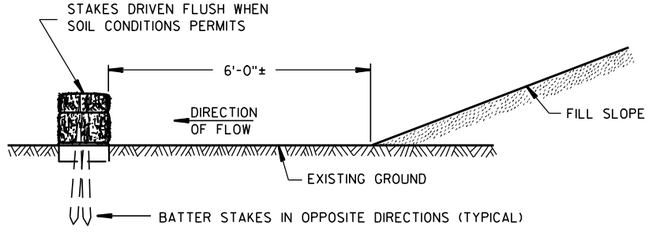


PLAN VIEW

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

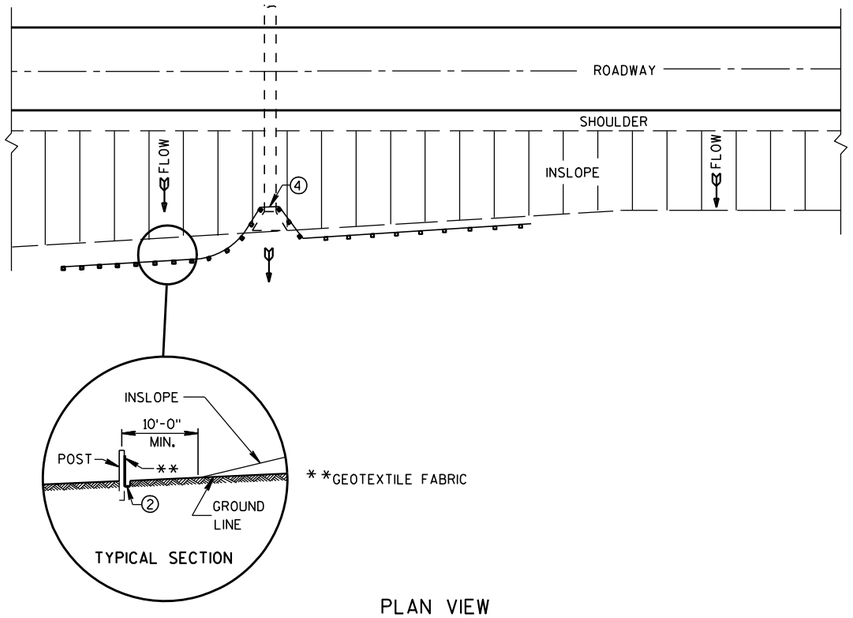
FHWA

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S.D.D. 8 E 8-3

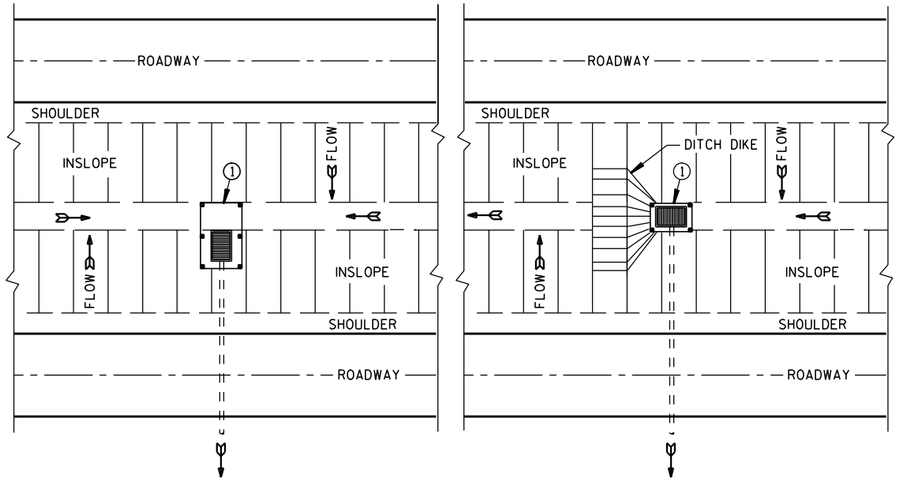
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



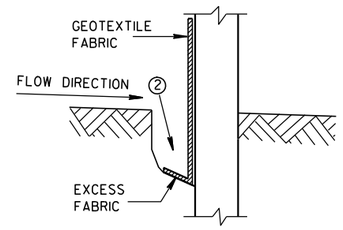
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

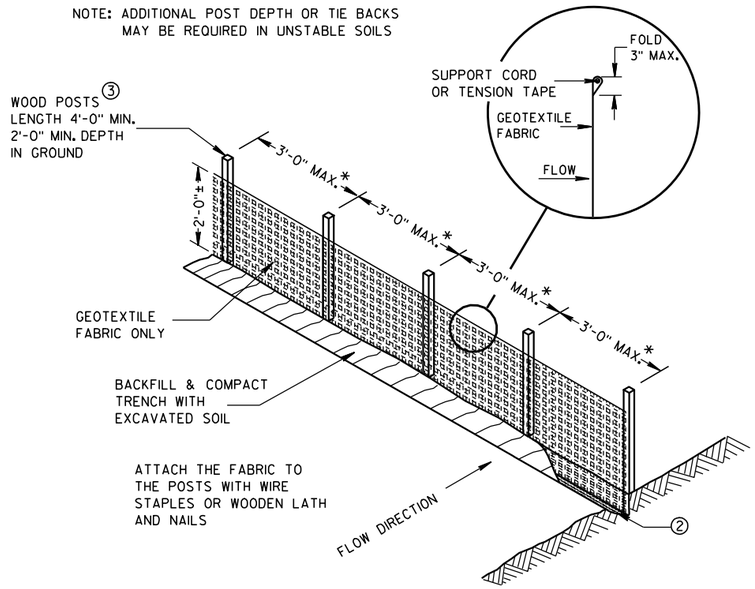
GENERAL NOTES

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.

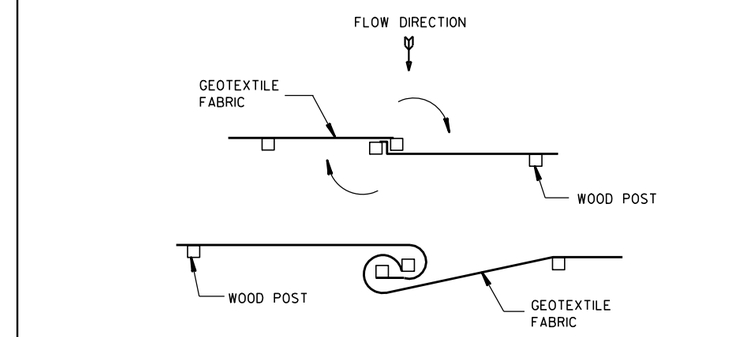


TRENCH DETAIL

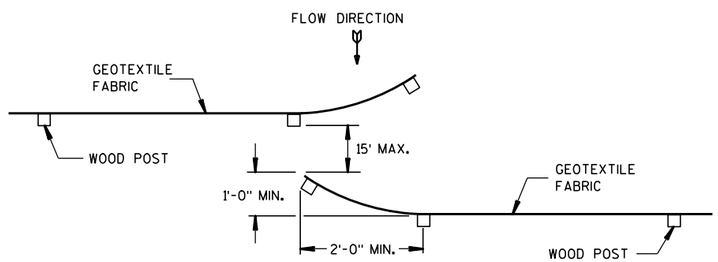


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

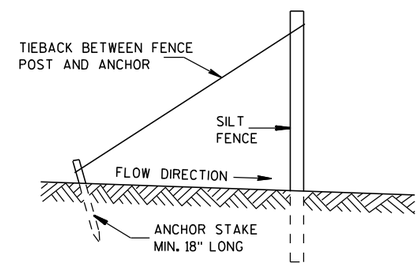


TWIST METHOD



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

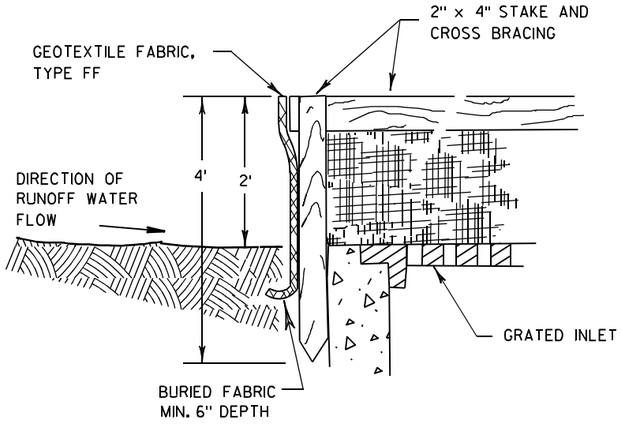
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

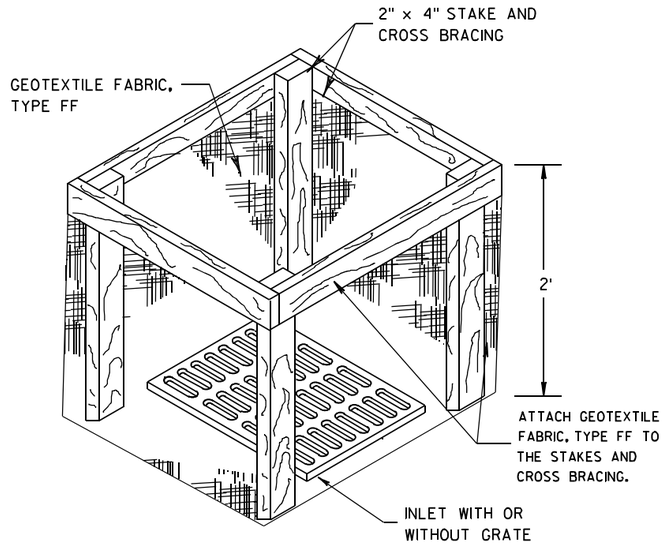
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S.D.D. 8 E 9-6

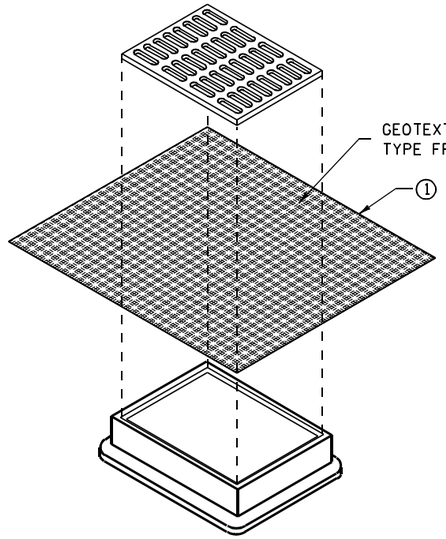
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S.D.D. 8 E 9-6



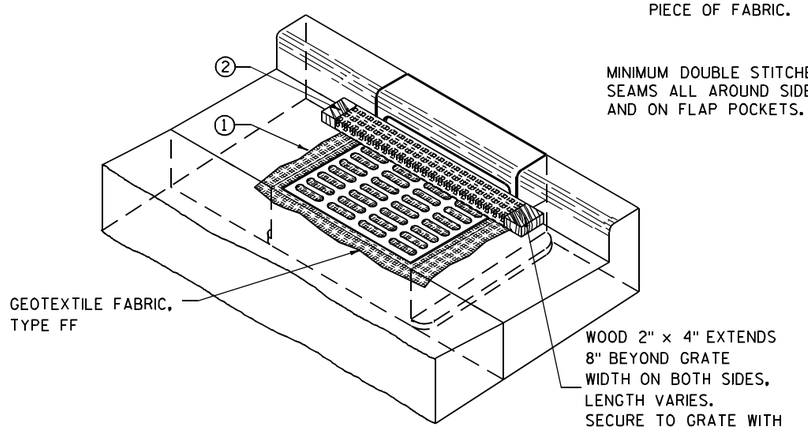


INLET PROTECTION, TYPE A

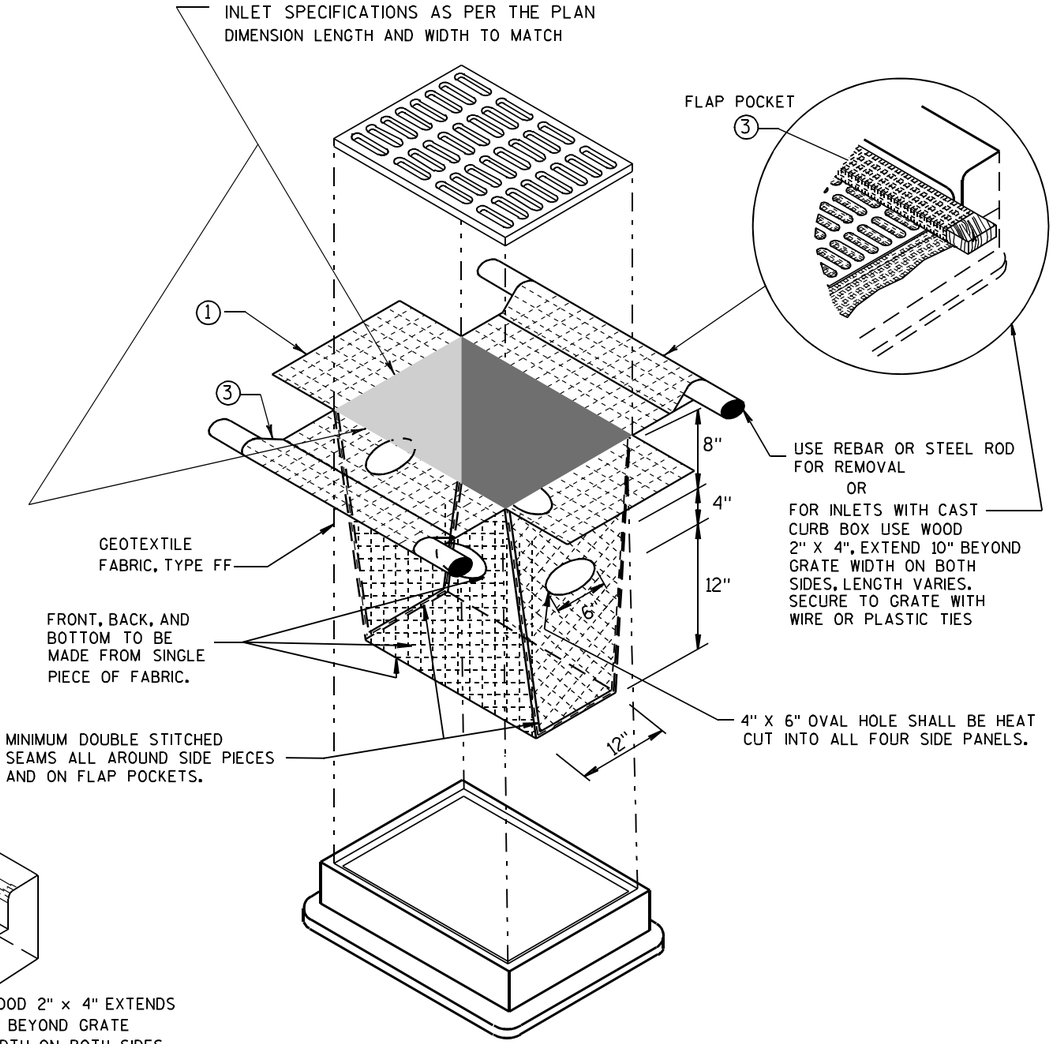


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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.

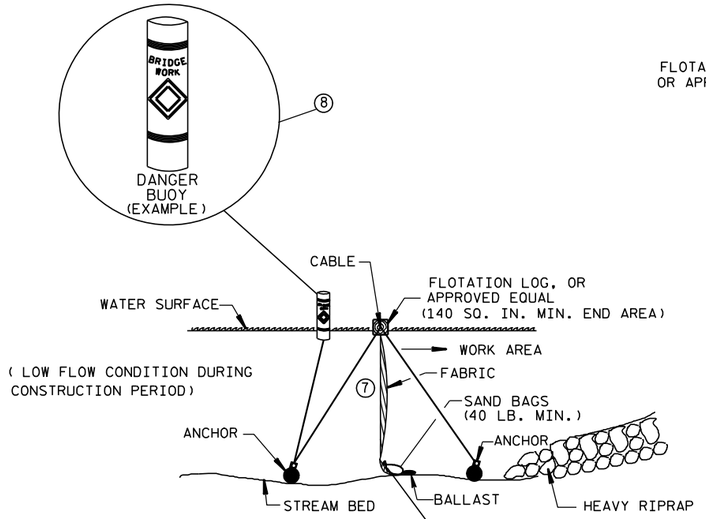
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

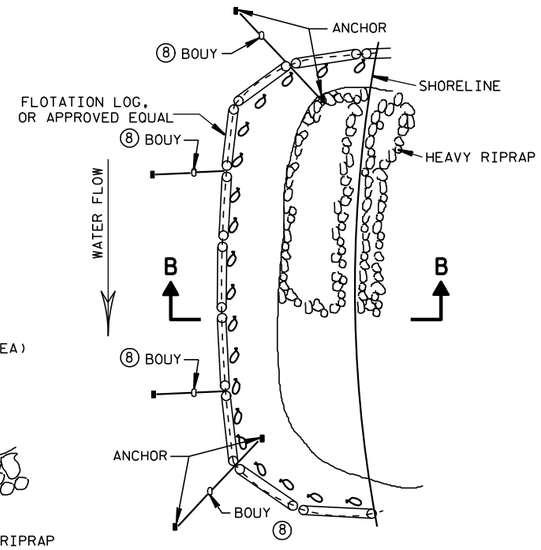
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

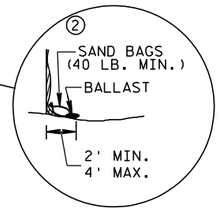
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 E 10-2

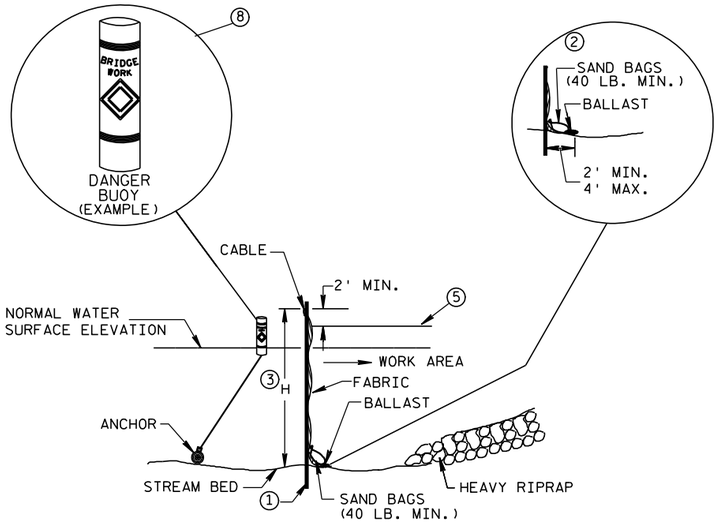


SECTION B-B

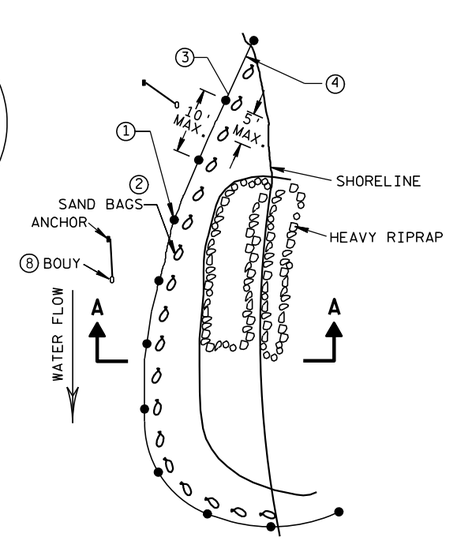




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



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.

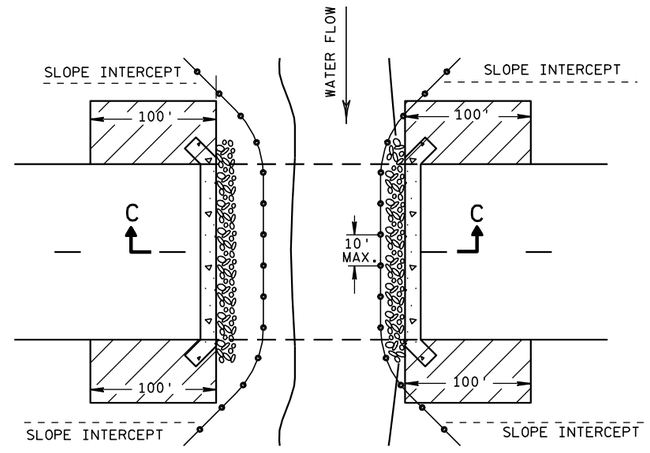
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

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.

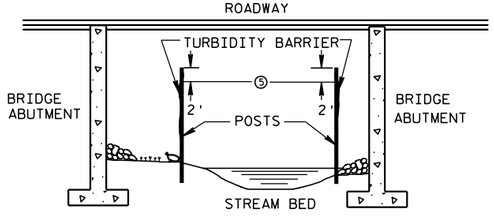
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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

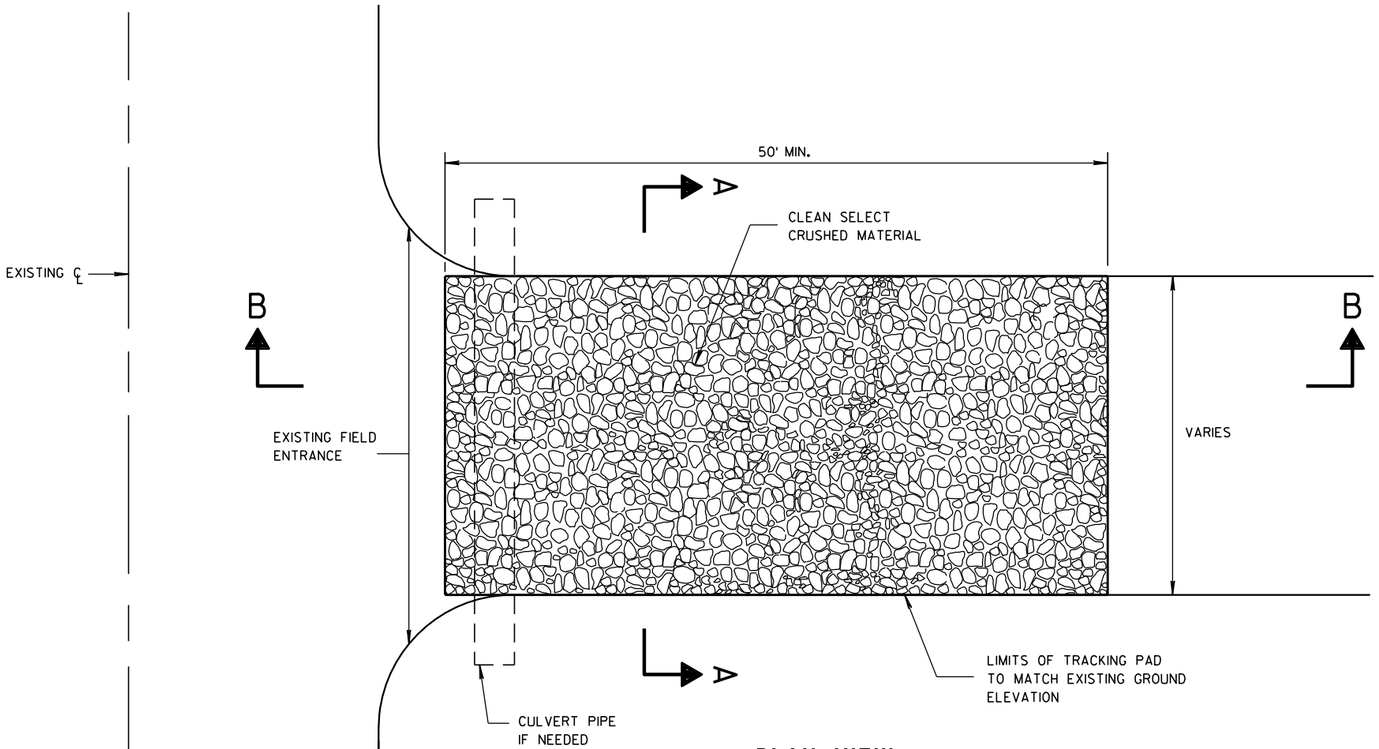
APPROVED
6/04/02 DATE
/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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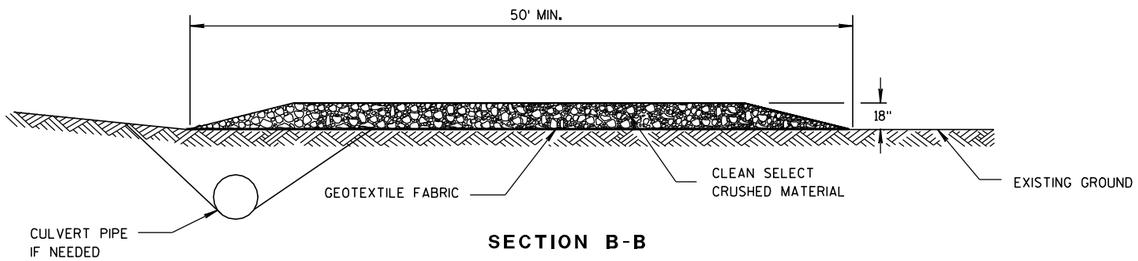
S.D.D. 8 E 11-2

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S.D.D. 8 E 11-2



PLAN VIEW



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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

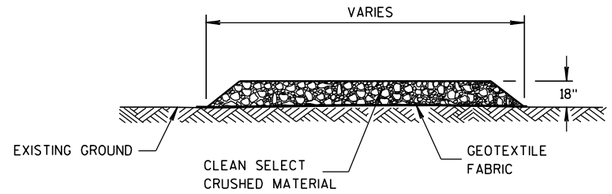
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

TRACKING PAD	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/24/2011 DATE FHWA	/S/ Jerry H. Zoda ROADWAY STANDARDS ENGINEER

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S.D.D. 8 E 14-1

METAL APRON ENDWALLS

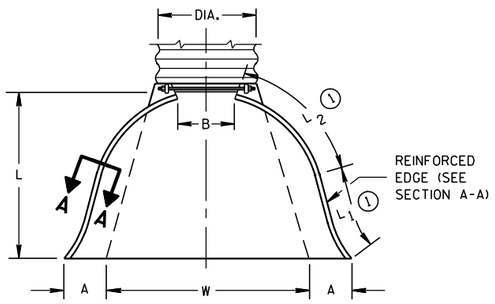
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

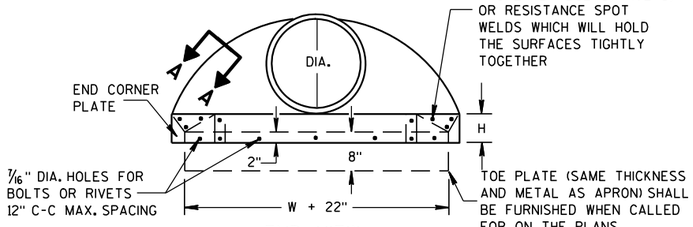
REINFORCED CONCRETE APRON ENDWALLS

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

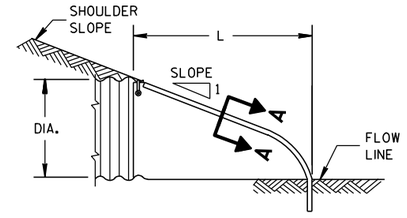
* MINIMUM
** MAXIMUM



PLAN VIEW

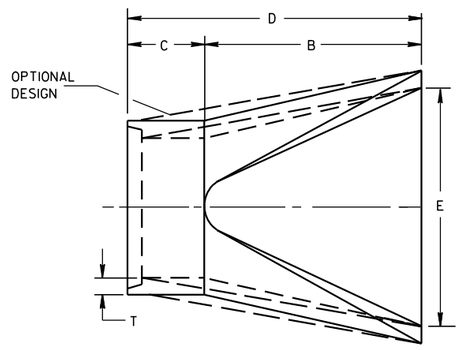


END VIEW

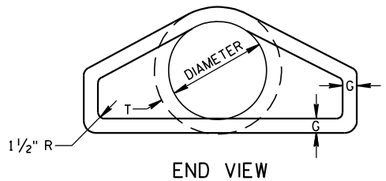


SIDE ELEVATION

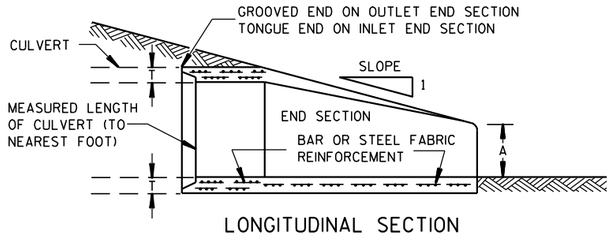
METAL ENDWALLS



PLAN

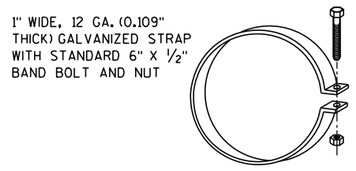


END VIEW



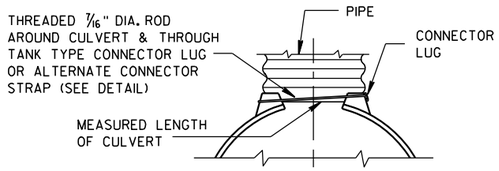
LONGITUDINAL SECTION

CONCRETE ENDWALLS

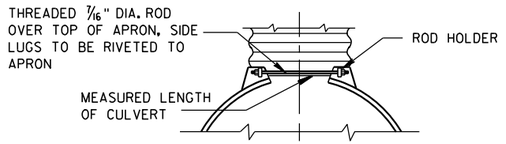


ALTERNATE FOR TYPE 1 CONNECTION

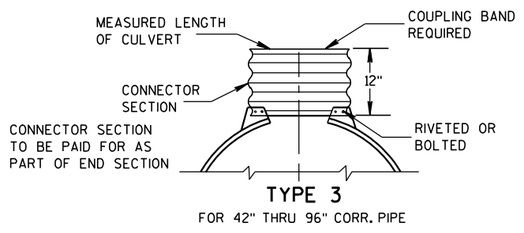
END SECTION CONNECTOR STRAP



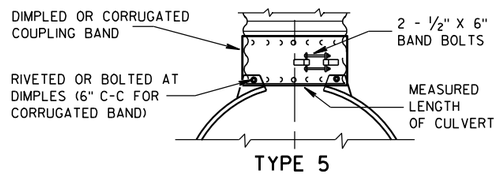
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

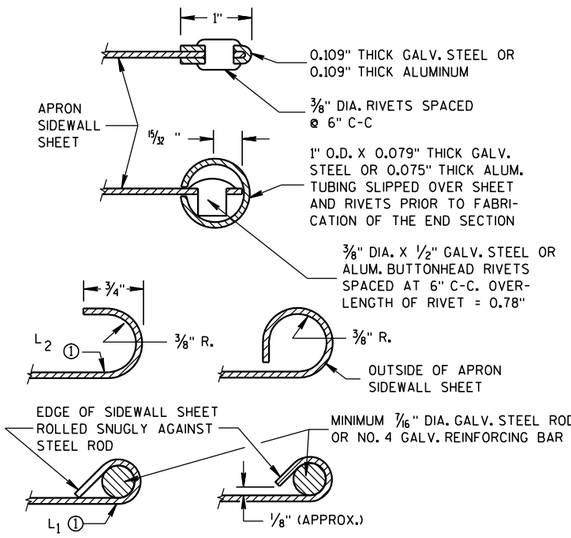
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

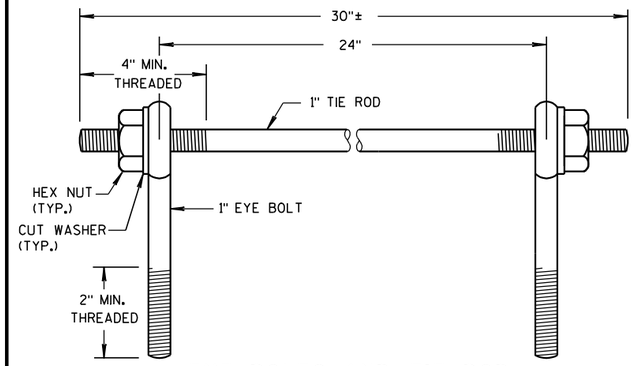
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

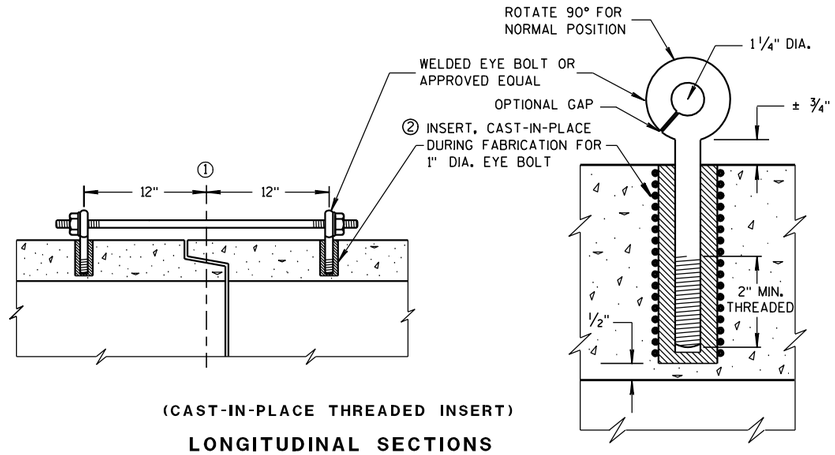
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11



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.

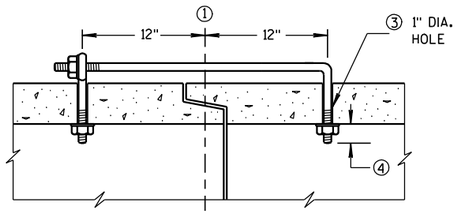
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

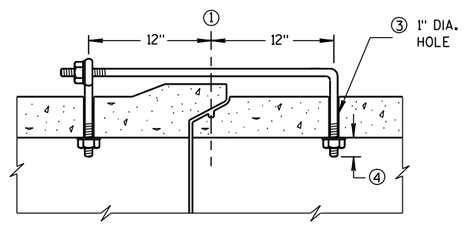
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

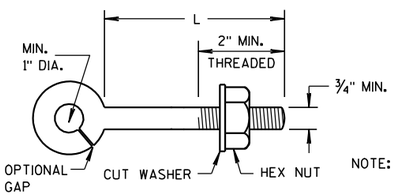


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

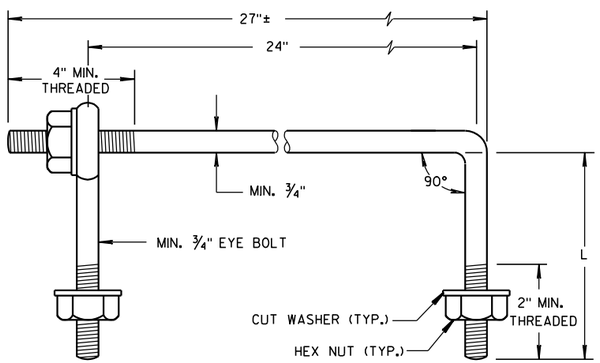
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

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

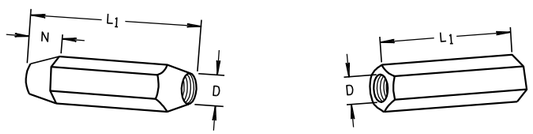
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

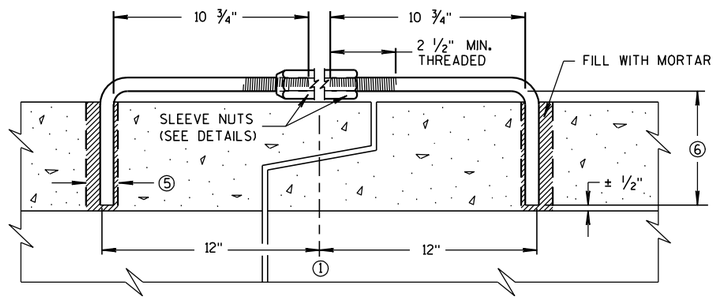
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

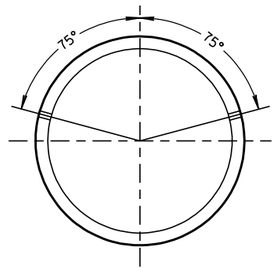
SLEEVE NUTS



LONGITUDINAL SECTION

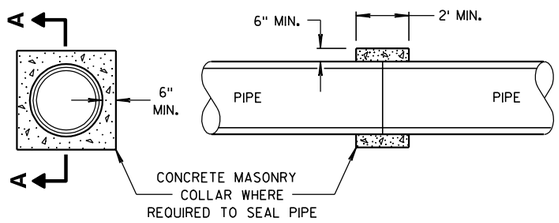
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

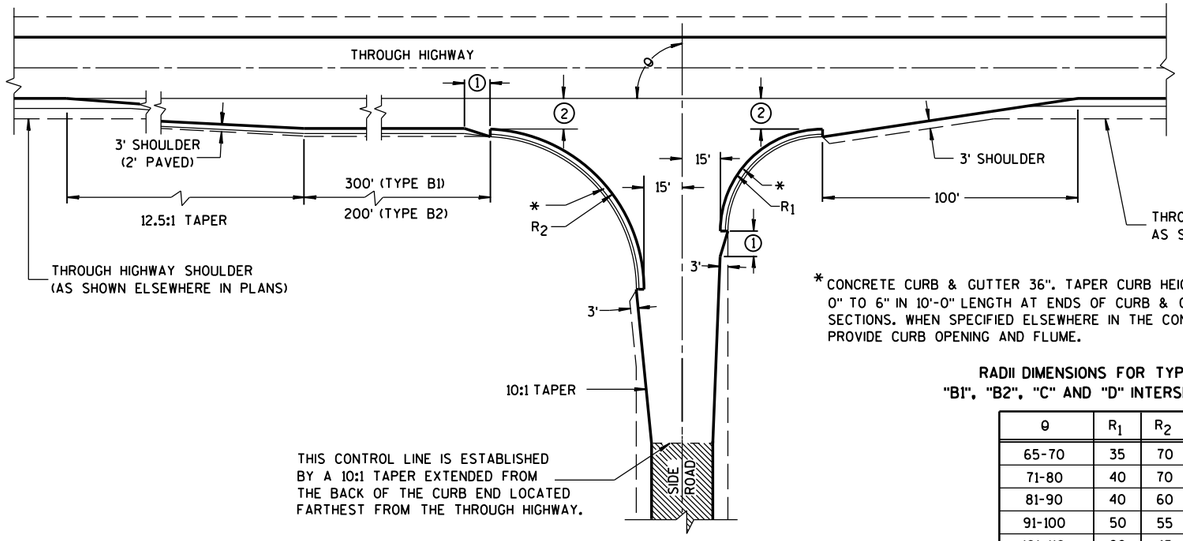
APPROVED
6/5/2012 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
199
FHWA

6

S.D.D. 8 F 4-7

6

S.D.D. 8 F 4-7

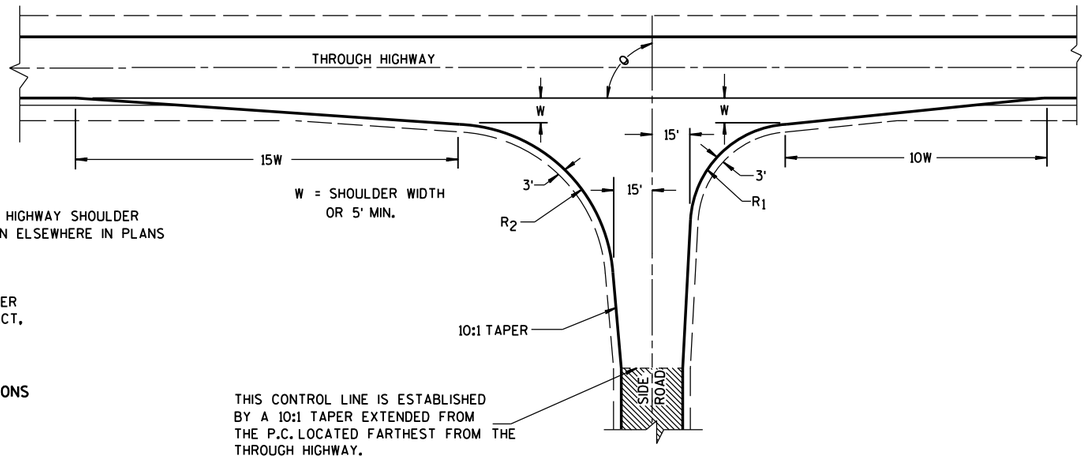


TYPE "B1" AND "B2"

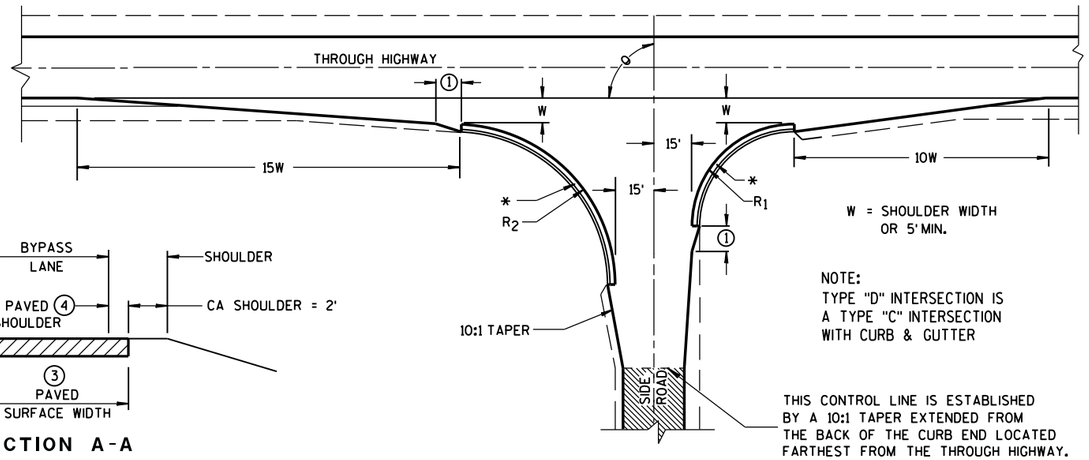
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

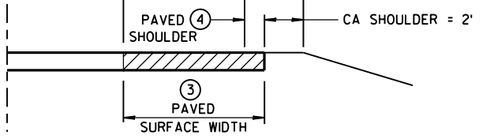
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

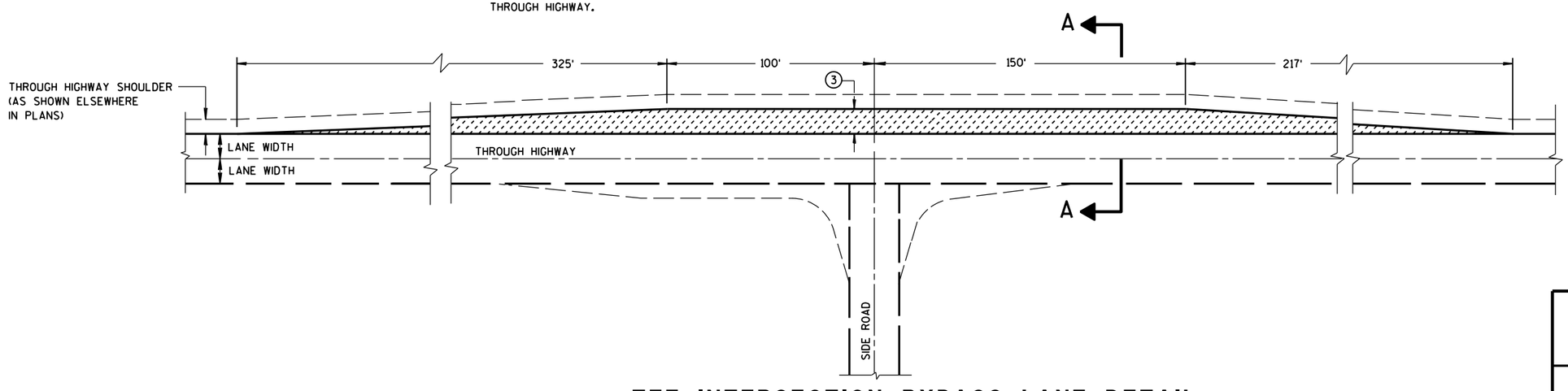
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)

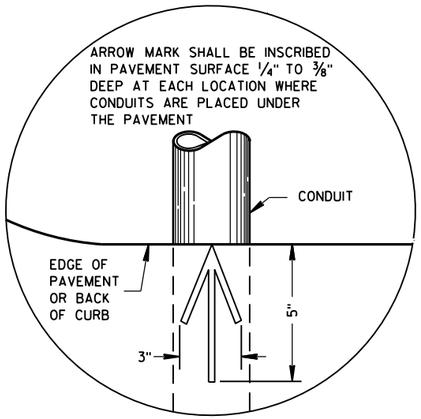


TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

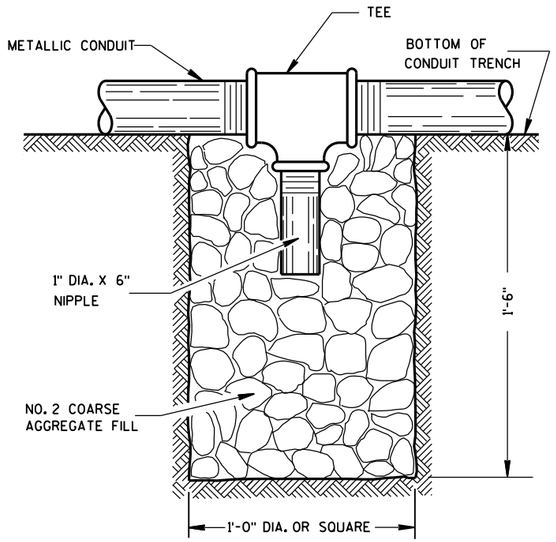
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 9 A 1-13a



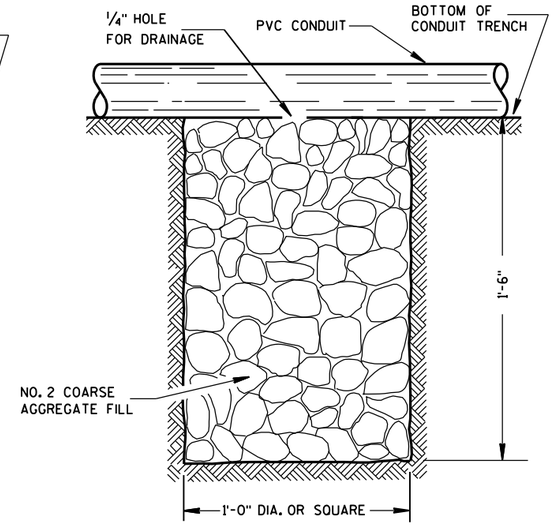
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

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.

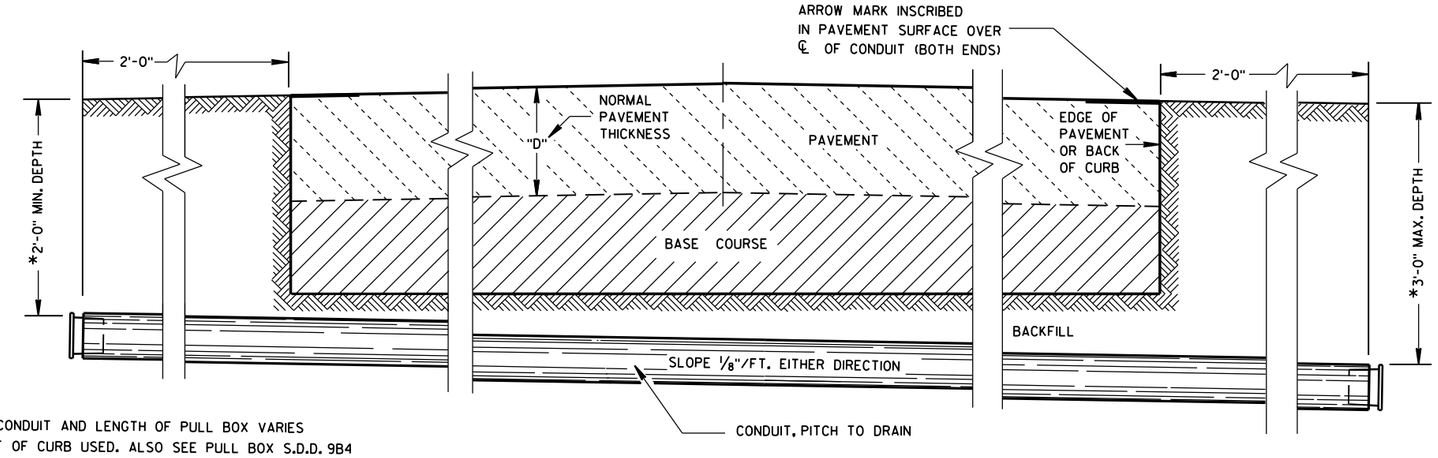
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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.



*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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

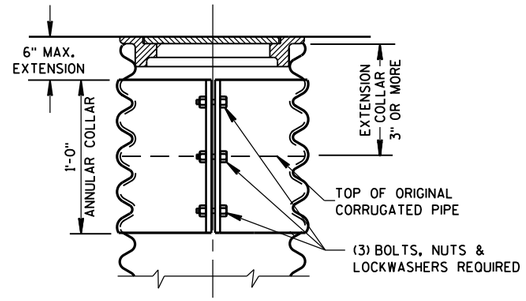
S.D.D. 9 B 2-9

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

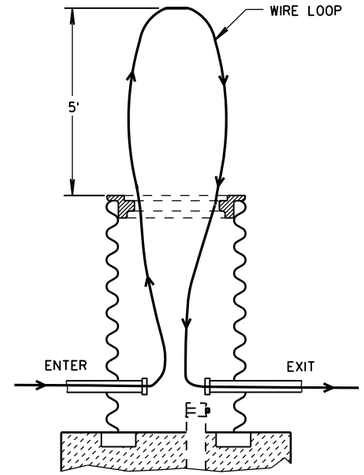
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	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.

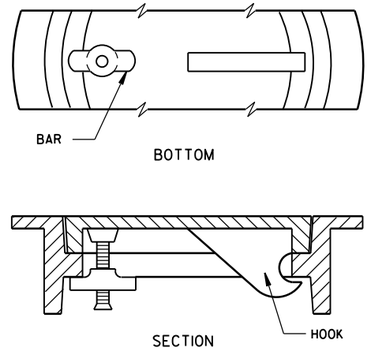
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

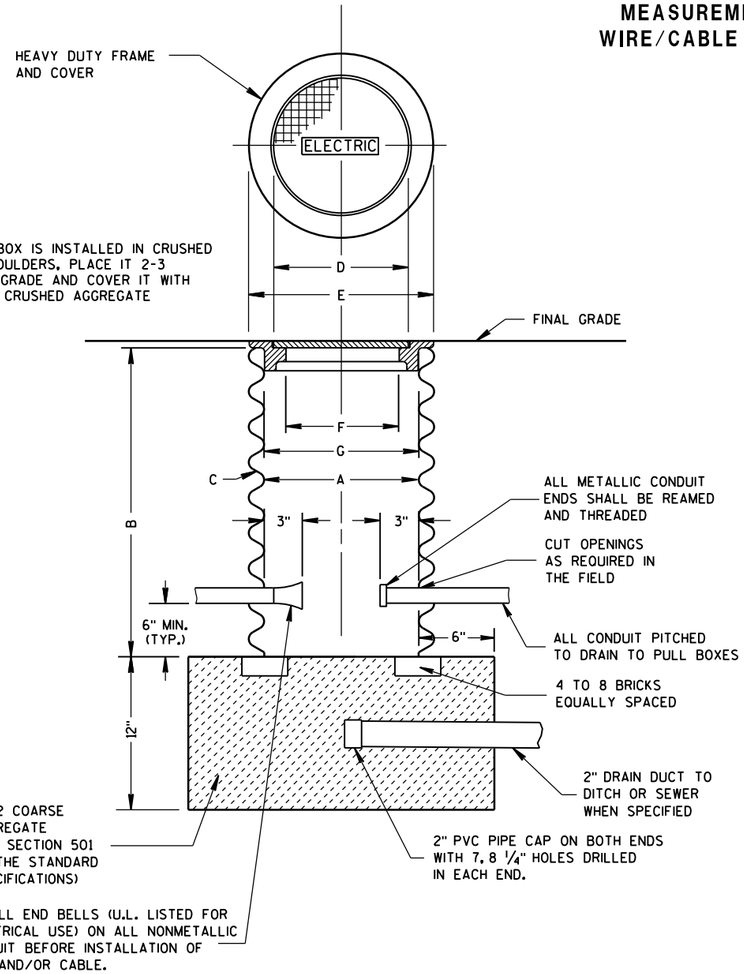


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



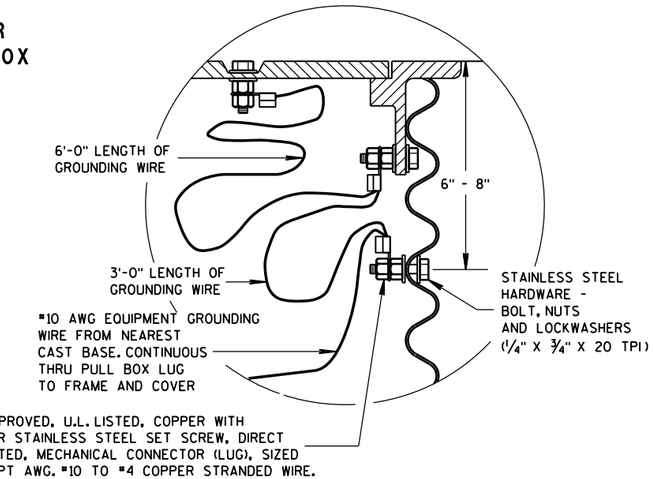
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

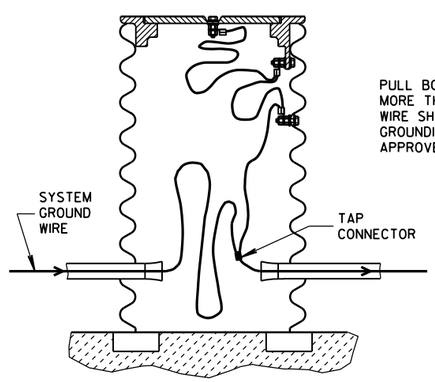


WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

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.

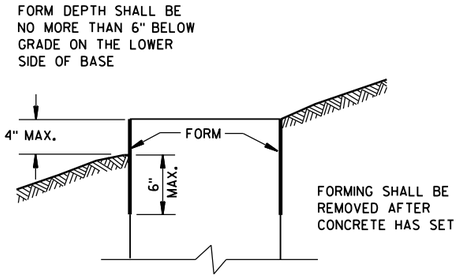
WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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6
S.D.D. 9 B 4-11



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.

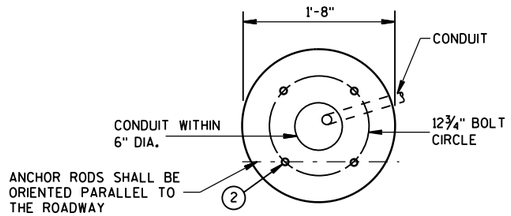
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

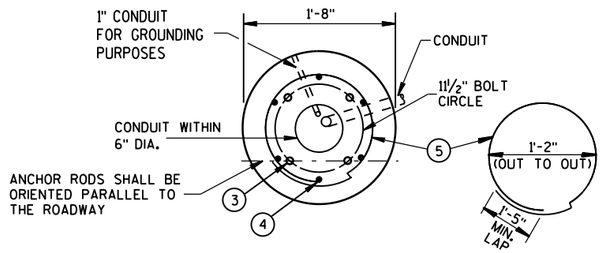
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

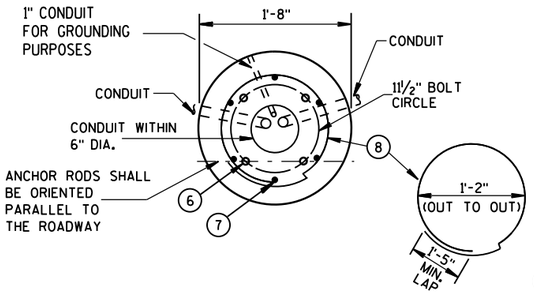
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

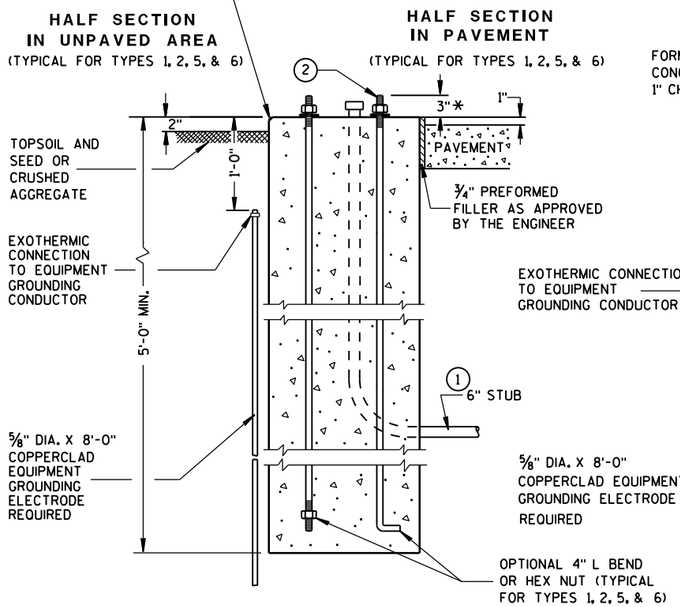






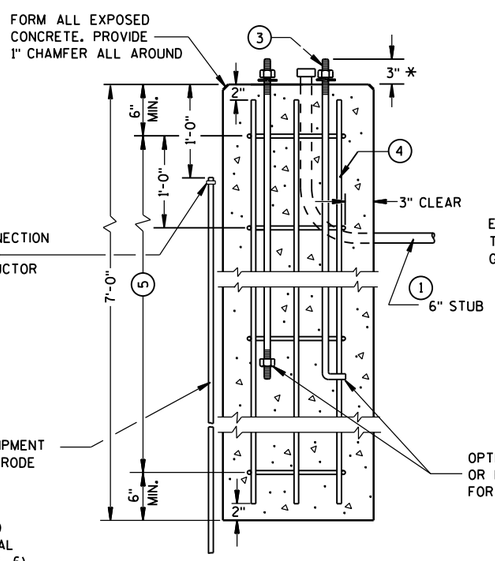
HALF SECTION IN UNPAVED AREA

(TYPICAL FOR TYPES 1, 2, 5, & 6)

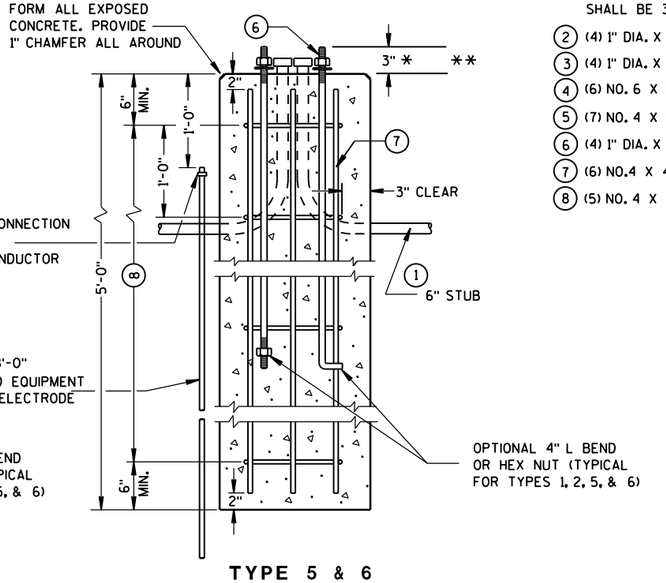


HALF SECTION IN PAVEMENT

(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 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
FHWA

6

S.D.D. 9 C 2-7

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.

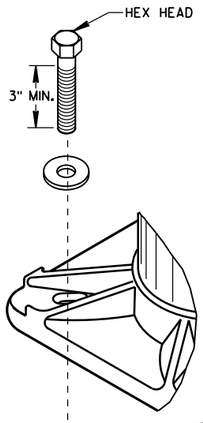
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

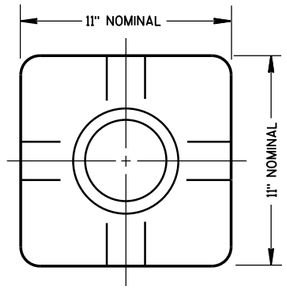
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

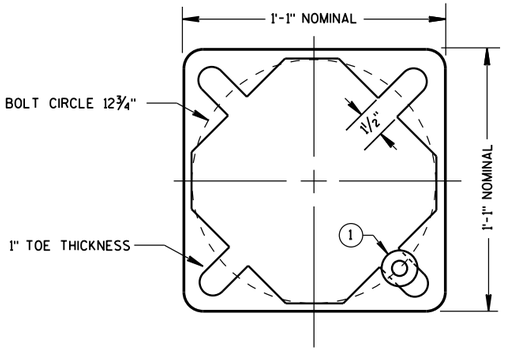
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

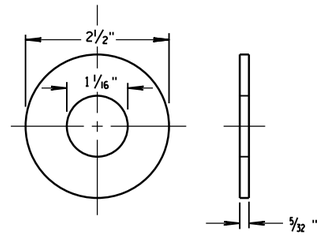




TOP VIEW
(PEDESTAL BASE)

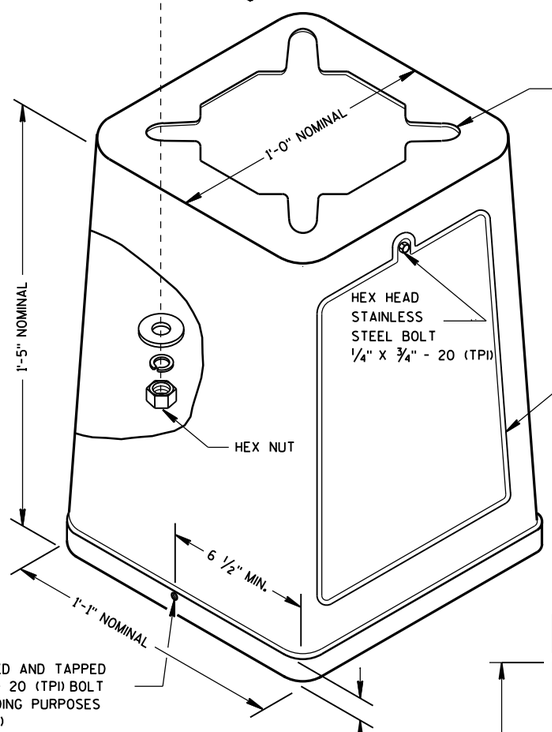


BOTTOM VIEW
(PEDESTAL BASE)

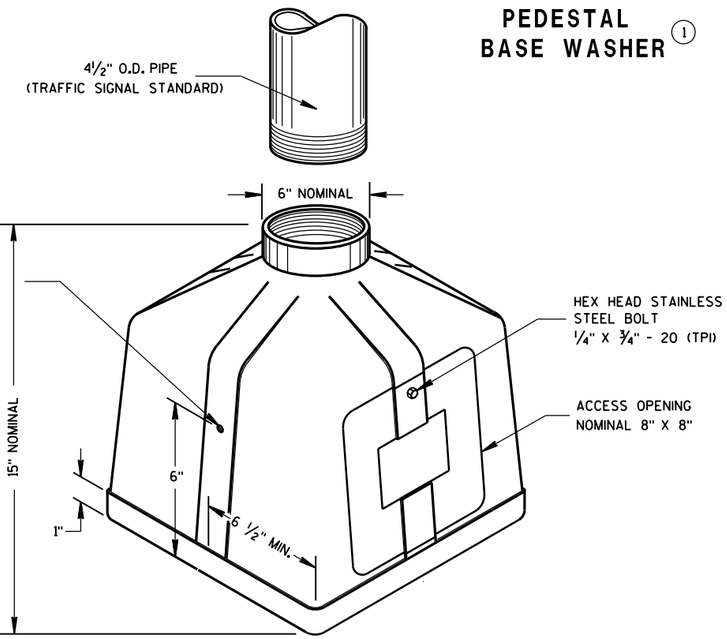


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

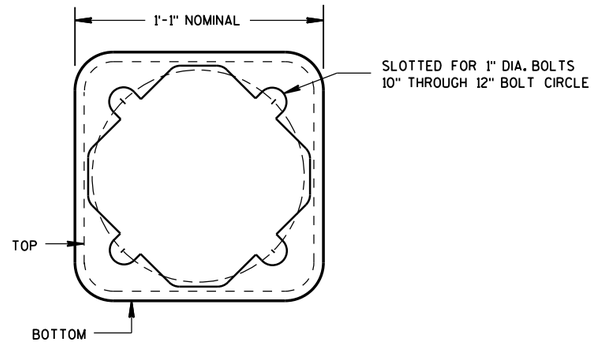


ISOMETRIC VIEW

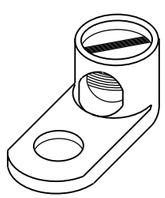


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

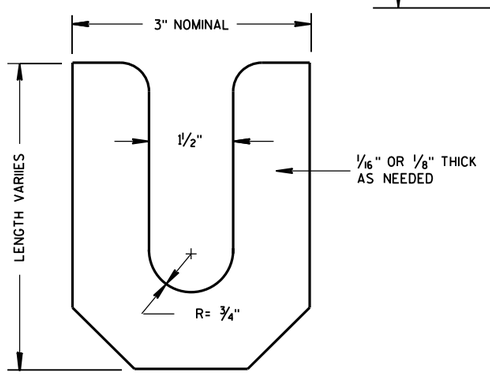


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

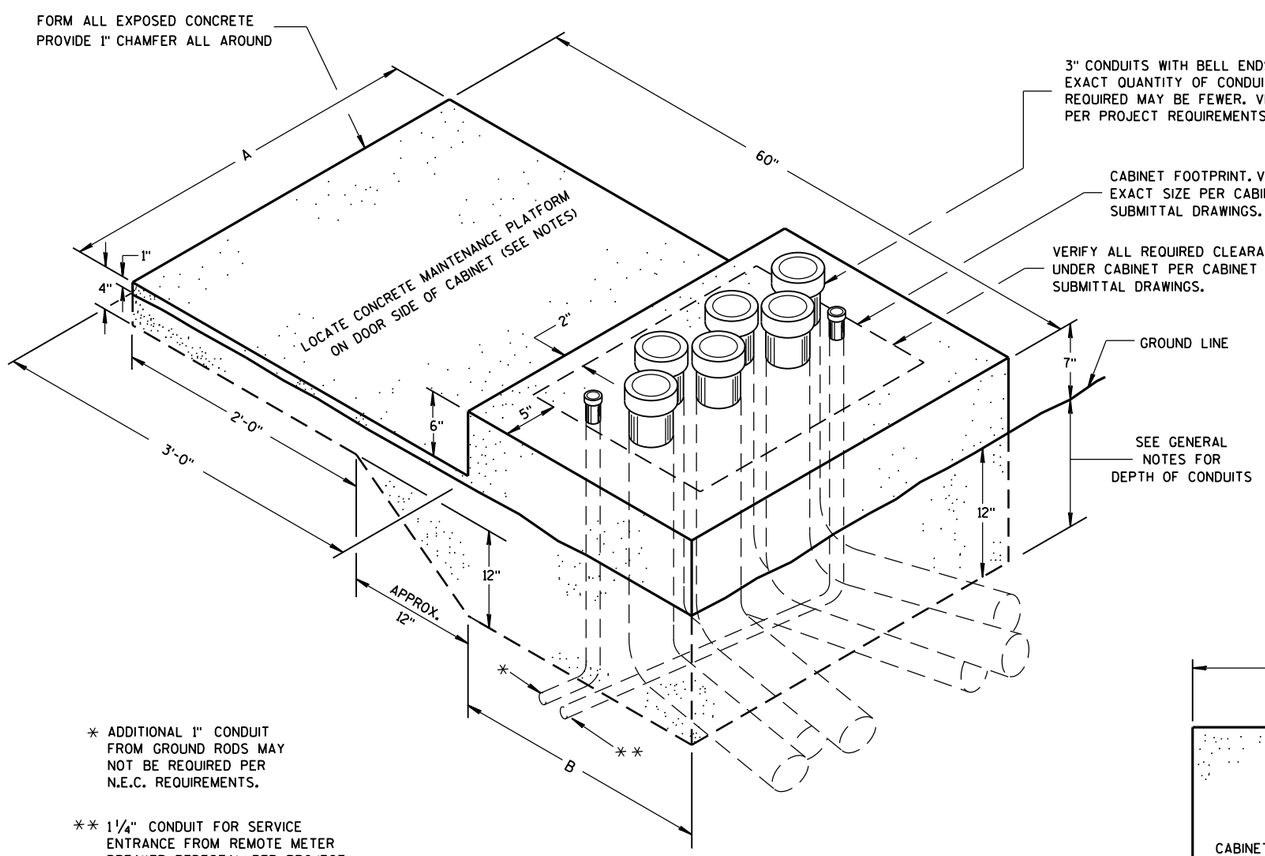
TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
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6

S.D.D. 9 C 3-4



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

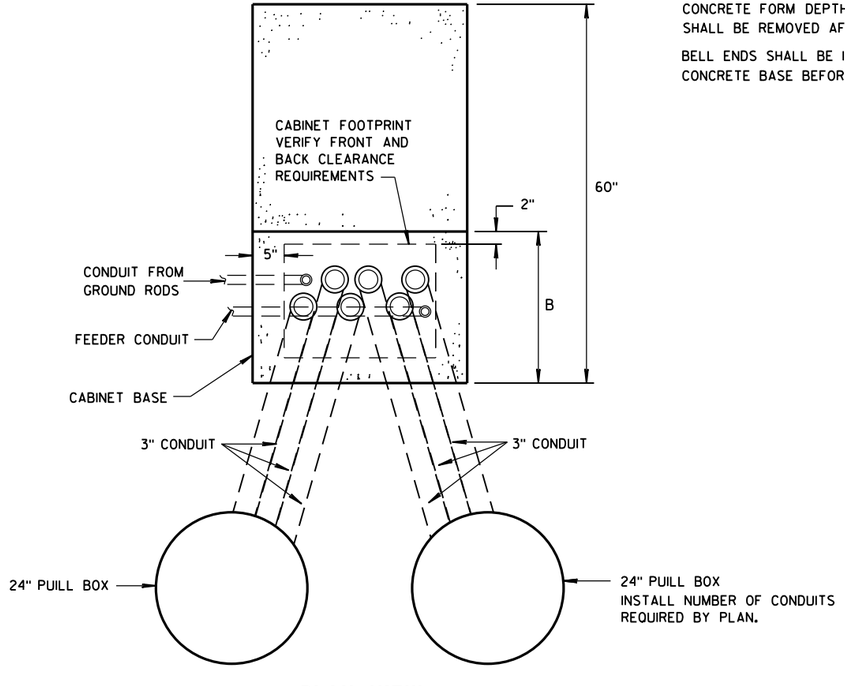
** 1¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

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.

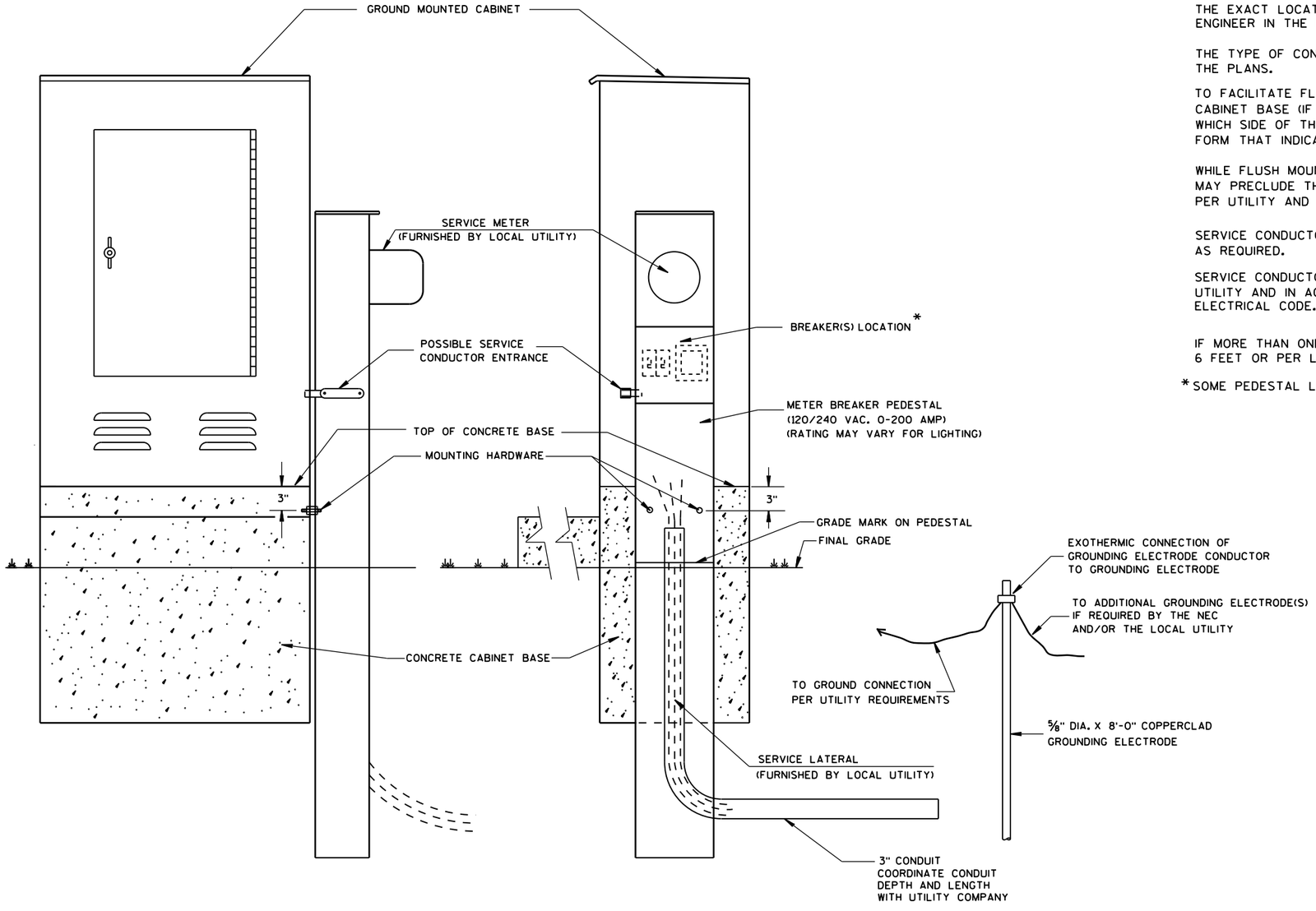
BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINE
FHWA

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

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.

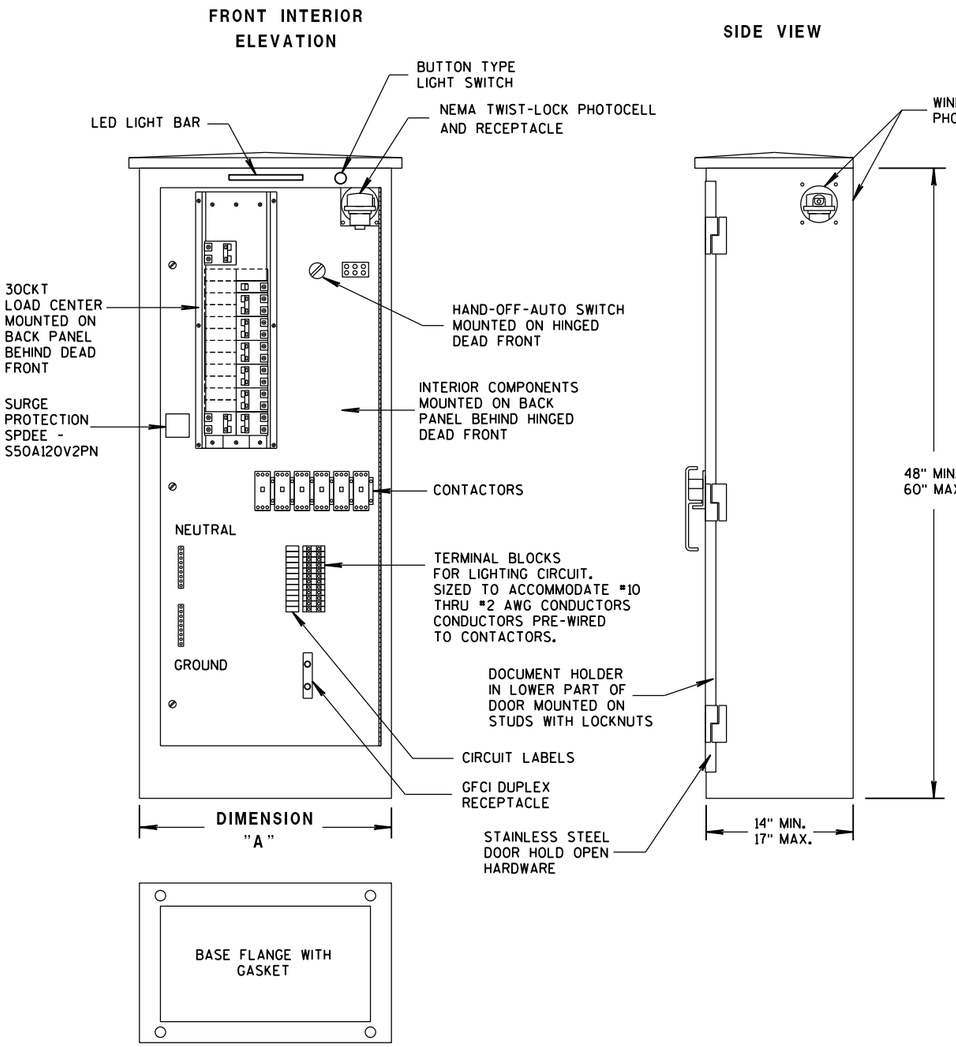
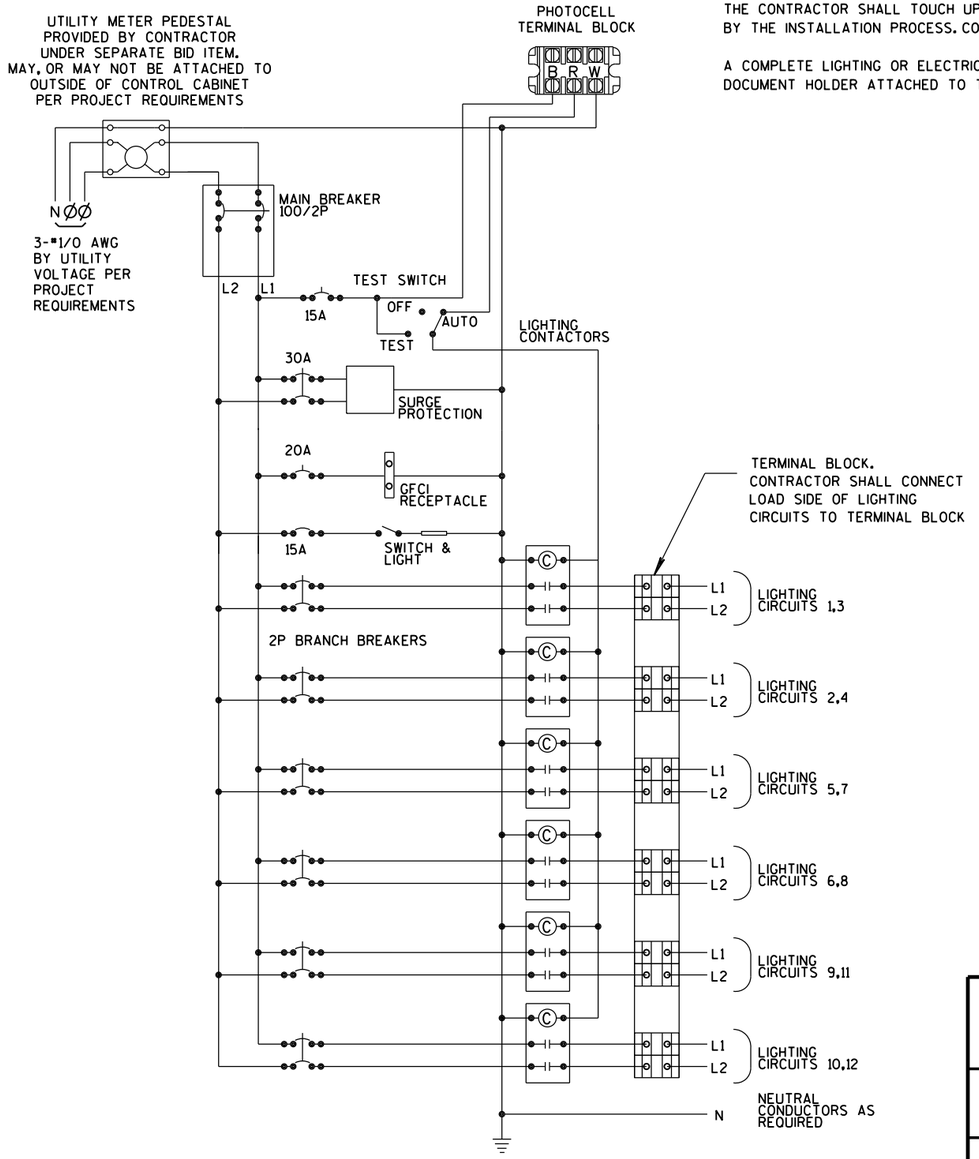


TABLE OF DIMENSIONS (INCHES)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

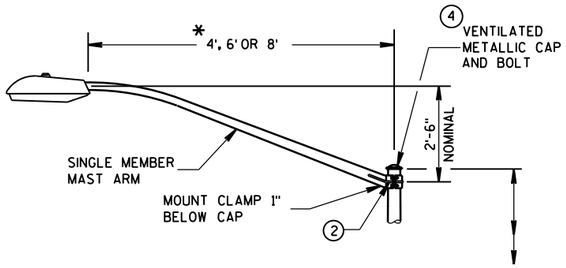
LIGHTING CONTROL CABINET 120/240 VOLT

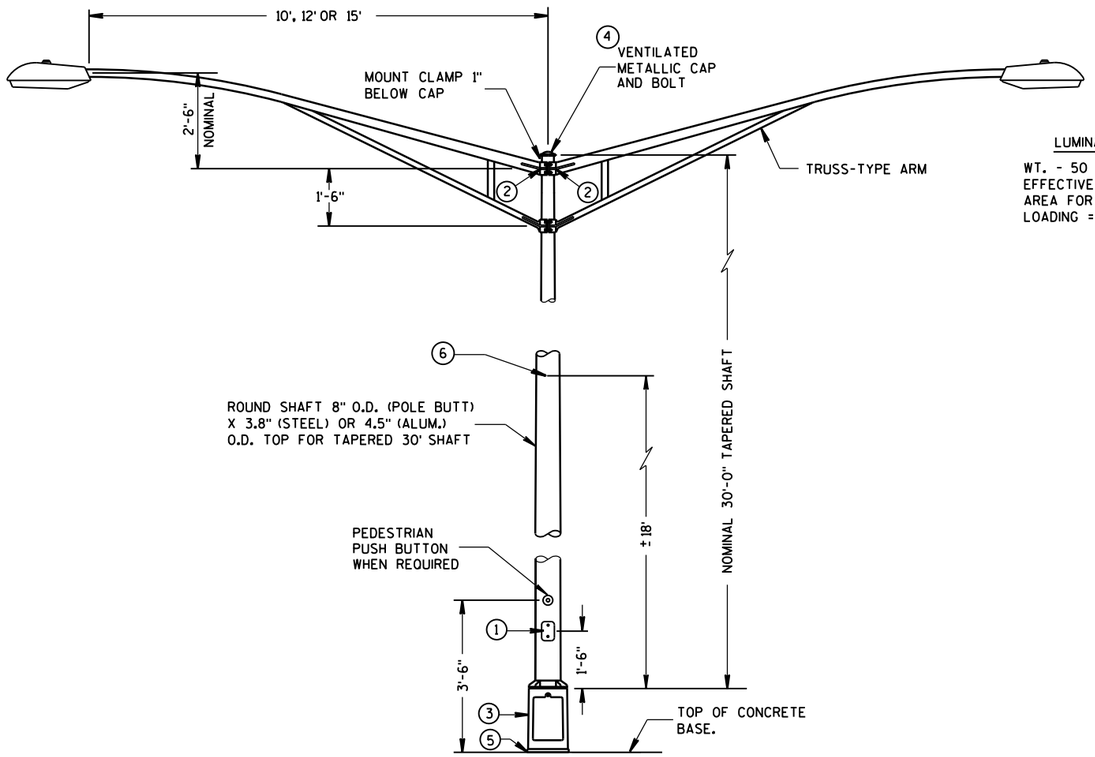
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 DATE
/S/ Thomas Gonring STATE LIGHTING ENGINEER
FHWA

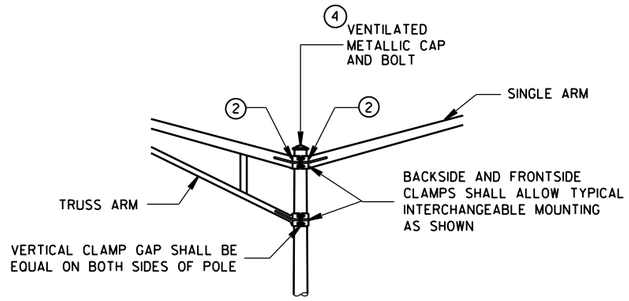
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S.D.D. 9 D 4-2

*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

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 ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS 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) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

6

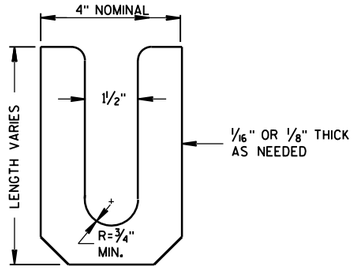
S.D.D. 9 E 1-14d

POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

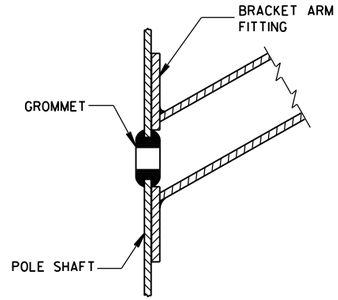
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S.D.D. 9 E 1-14d

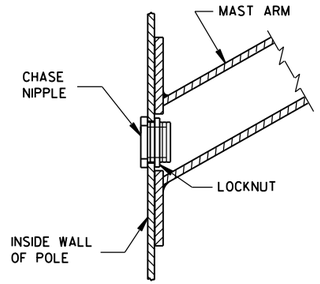


LEVELING SHIM (13)

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.

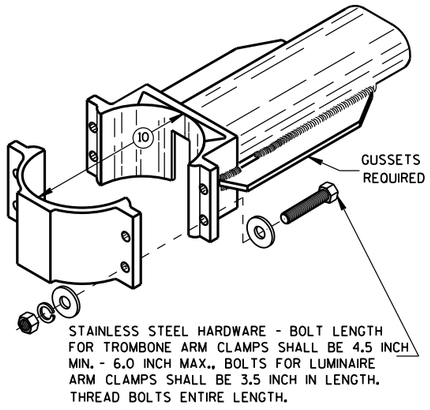
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

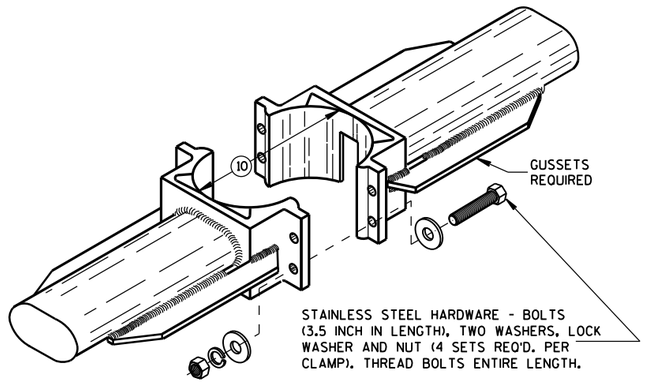
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

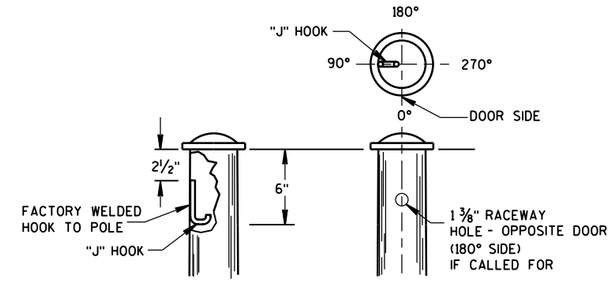
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



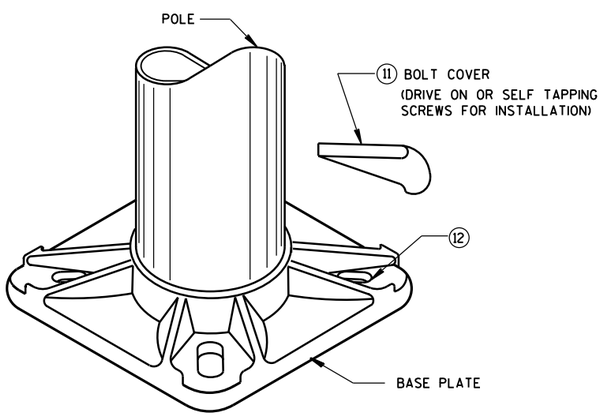
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



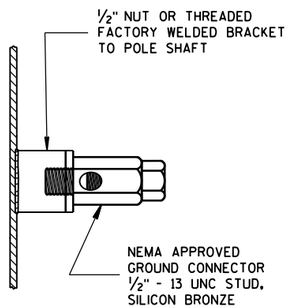
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

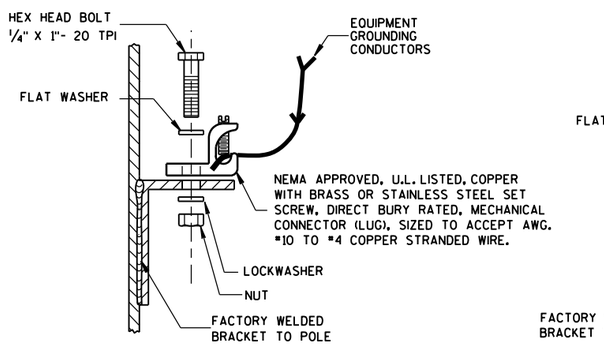


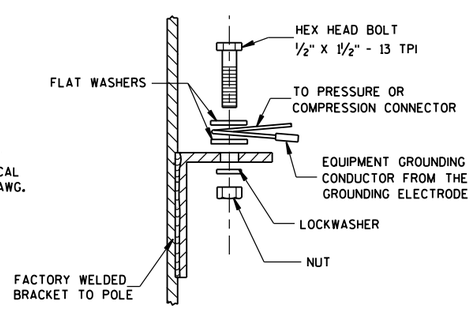
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

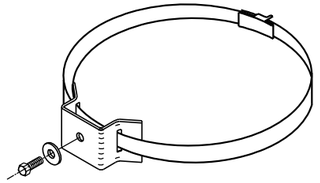
HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

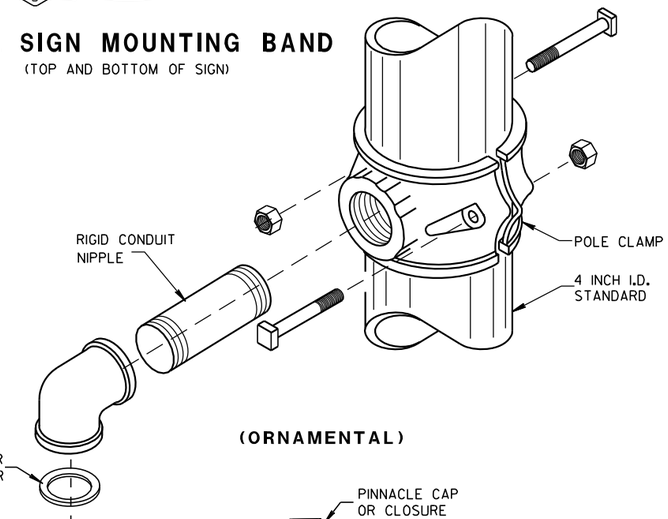
APPROVED
Feb. 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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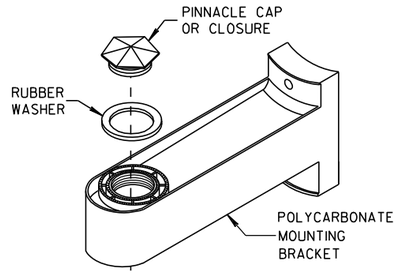
S.D.D. 9 E 1-14g



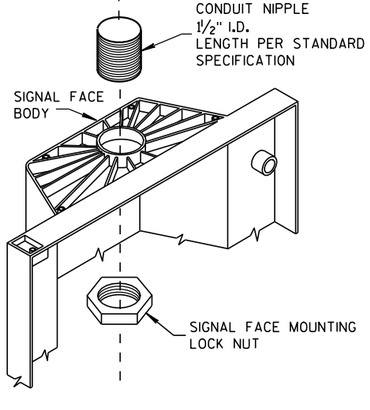
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



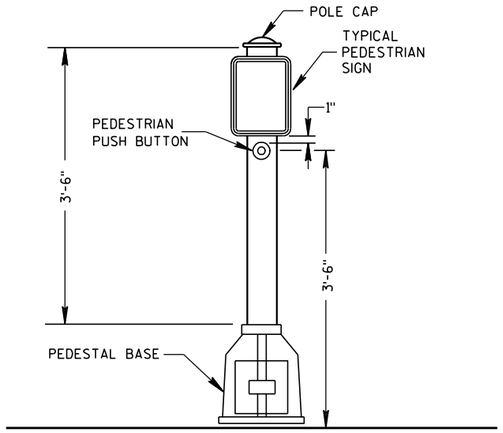
(ORNAMENTAL)



(BANDED)



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.

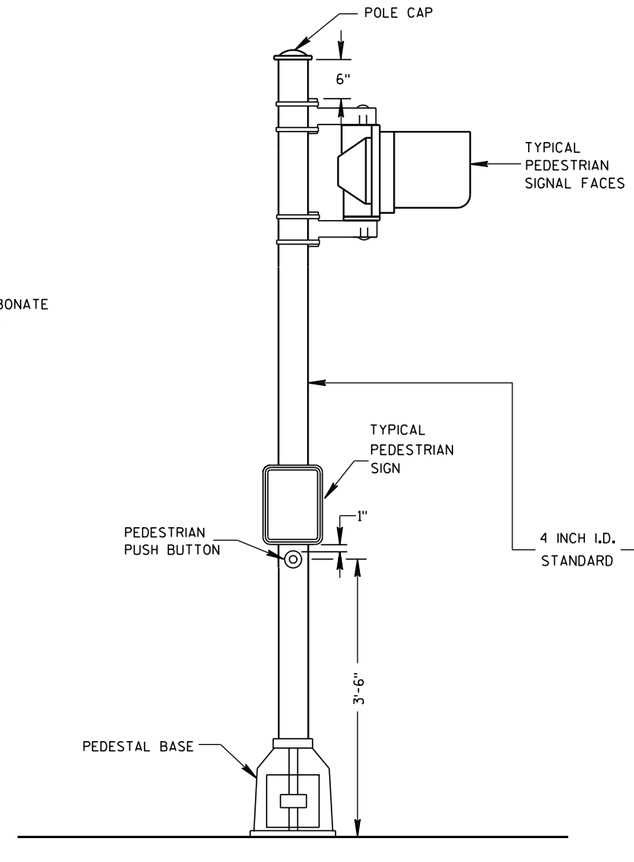
POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

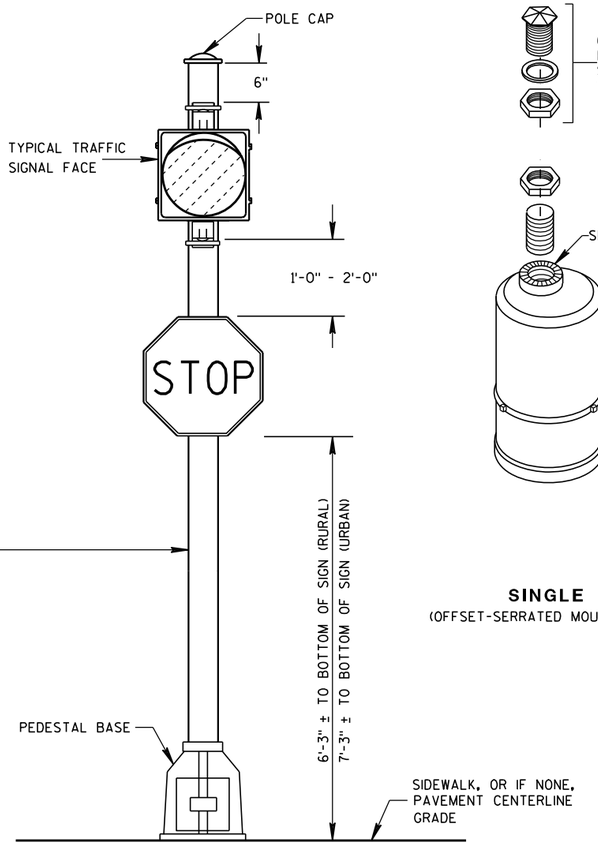
MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

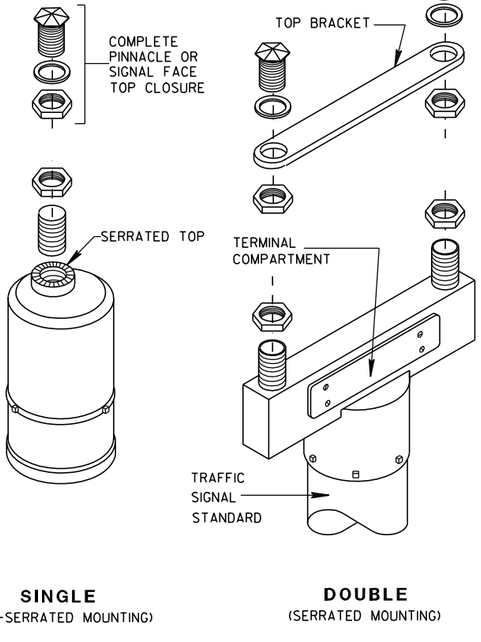
FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



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
FHWA

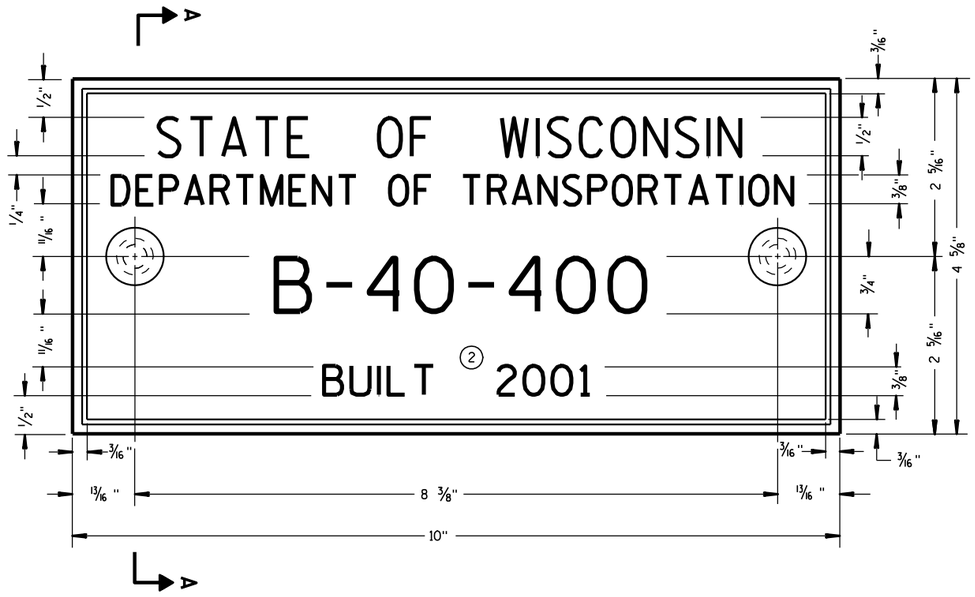
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S.D.D. 9 E 7-5



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

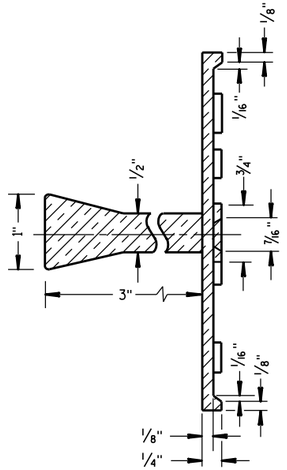
GENERAL NOTES

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.

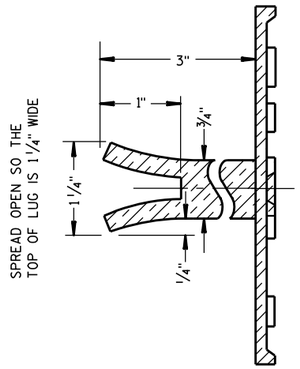
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

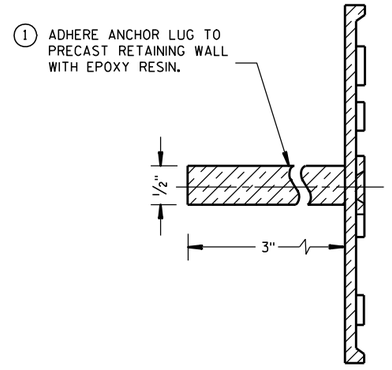
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

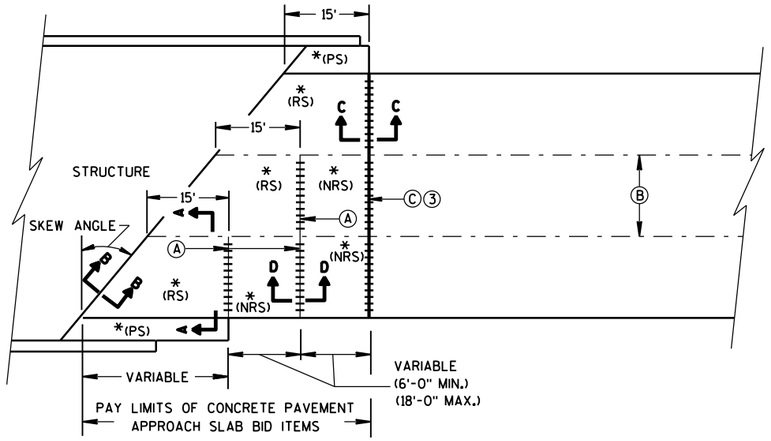
3/26/10 DATE

/S/ Scot Beck-- CHIEF STRUCTURAL DEVELOP ENGINEER

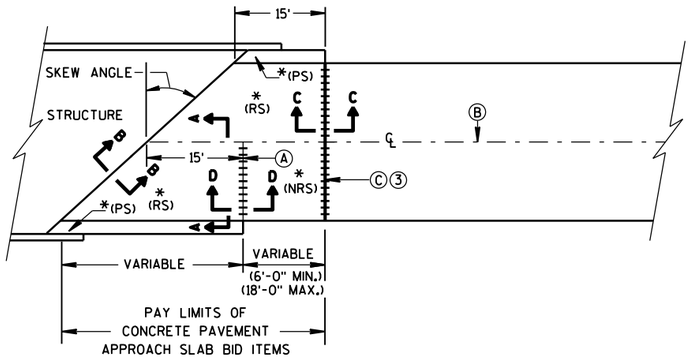
FHWA

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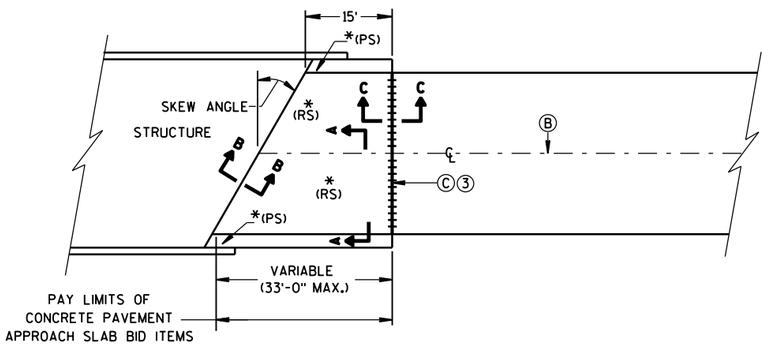
S.D.D. 12 A 3-10



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >20°
(PAVEMENT WIDTH ≤30')



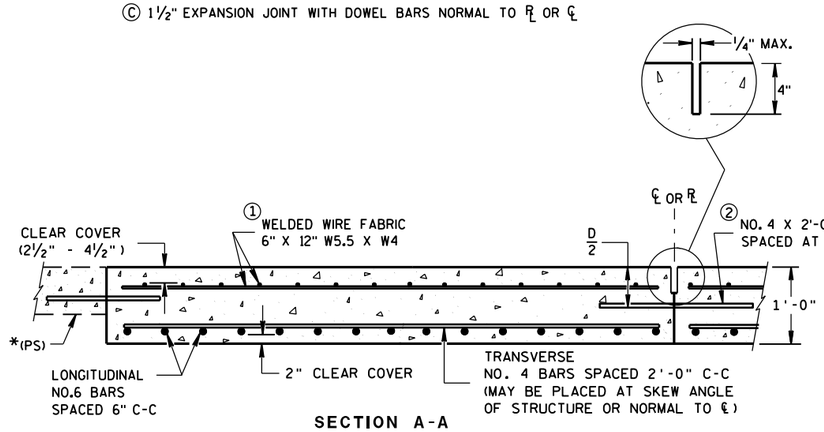
SKEWS ≤20°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

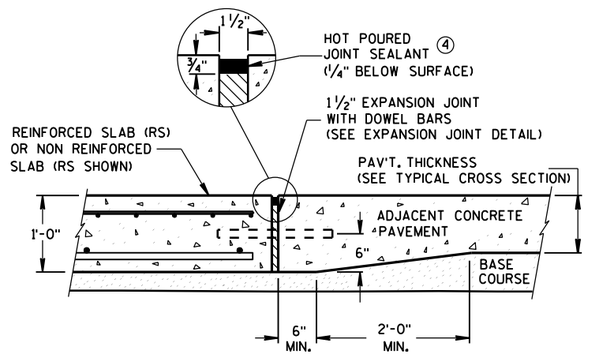
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

***STANDARD DOWEL BAR DIAMETER
(SEE SDD 13C11, & SDD 13C13)

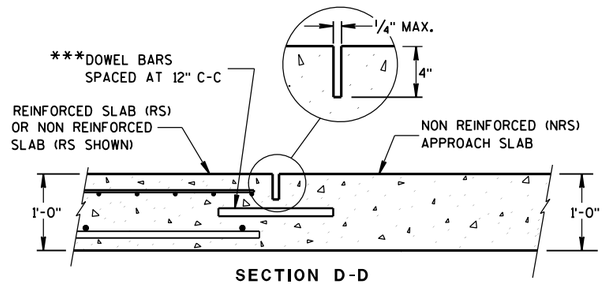
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
Ⓑ STANDARD LONGITUDINAL JOINT WITH TIE BARS.
Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



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.

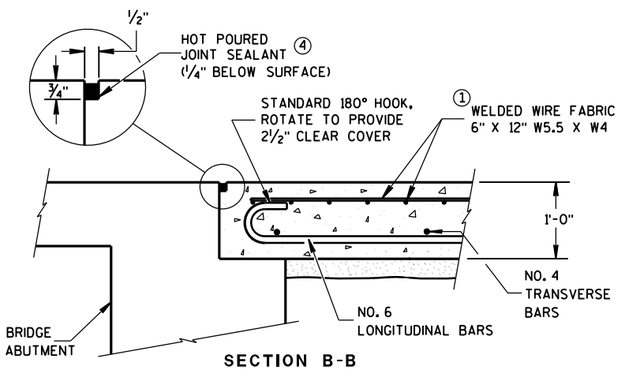
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

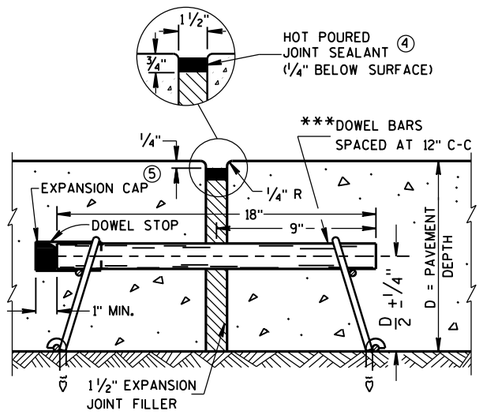
③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

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

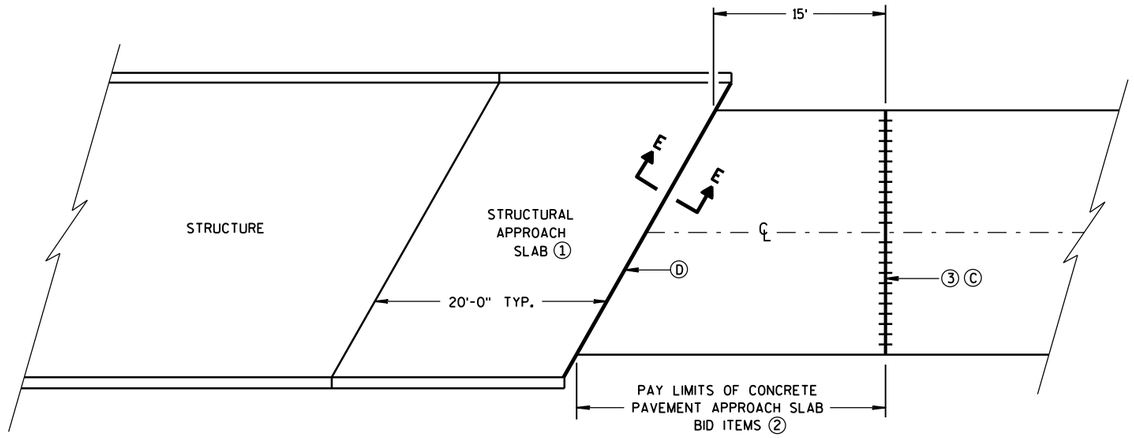
CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

6
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.

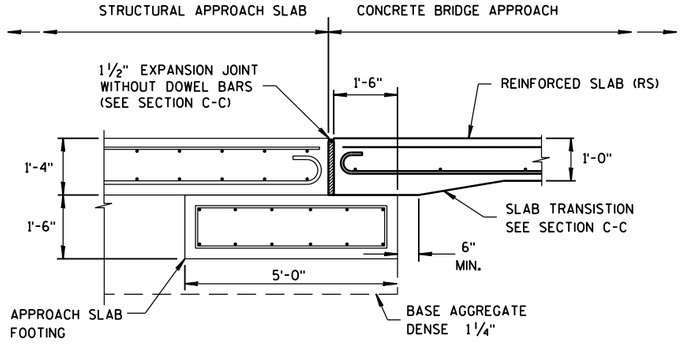
① SEE BRIDGE PLAN.

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

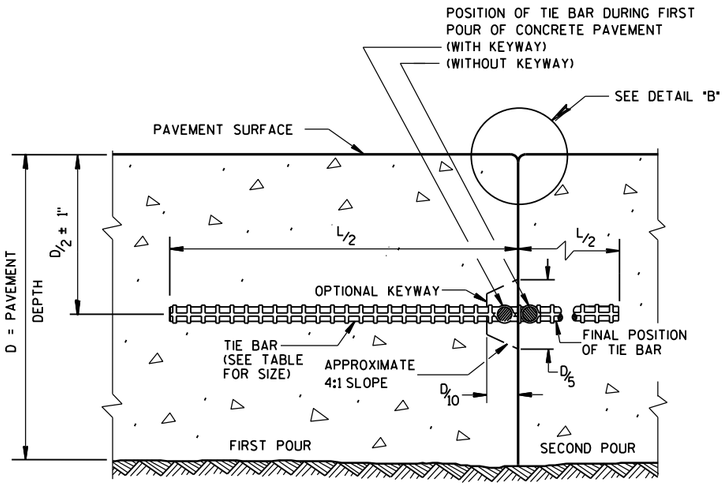
STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

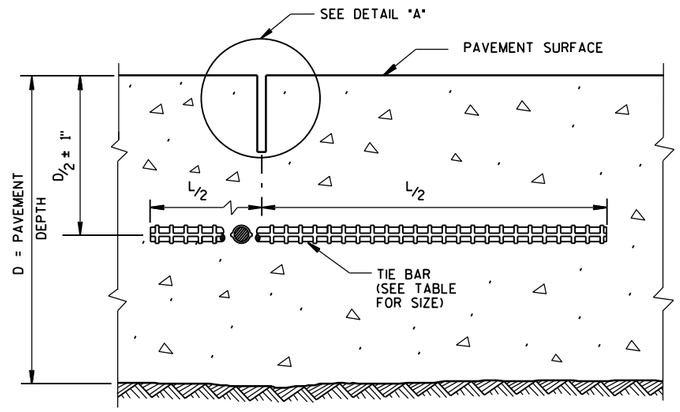
APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPERV
FHWA

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S.D.D. 13 B 2-8b



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

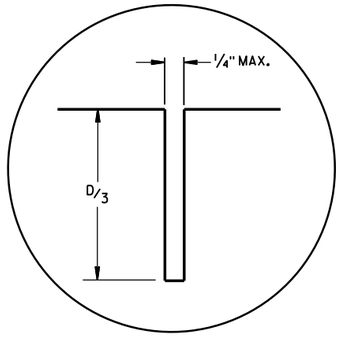
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

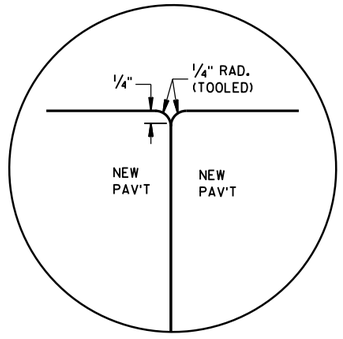
PLAN VIEW

SECTION A-A

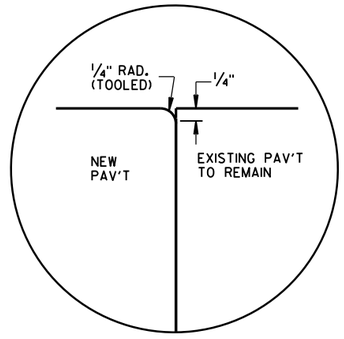
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



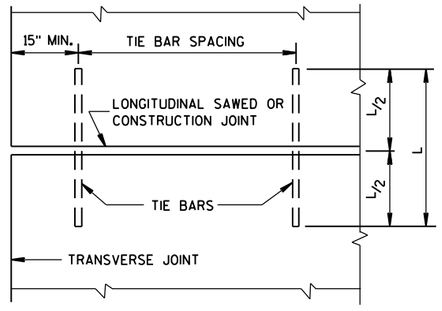
DETAIL "C"

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.



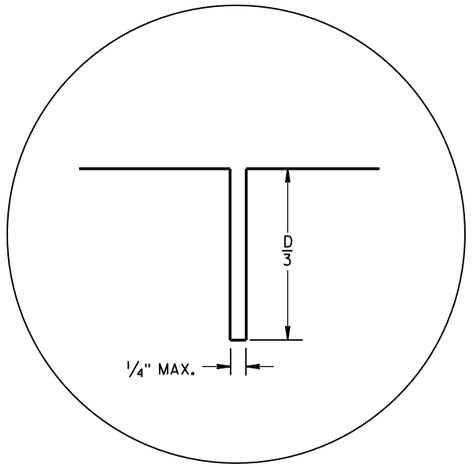
PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

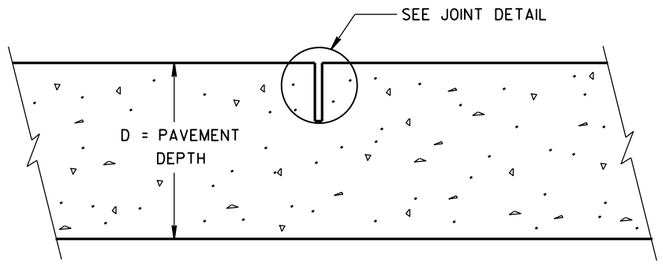
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
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S.D.D. 13 C 1-18



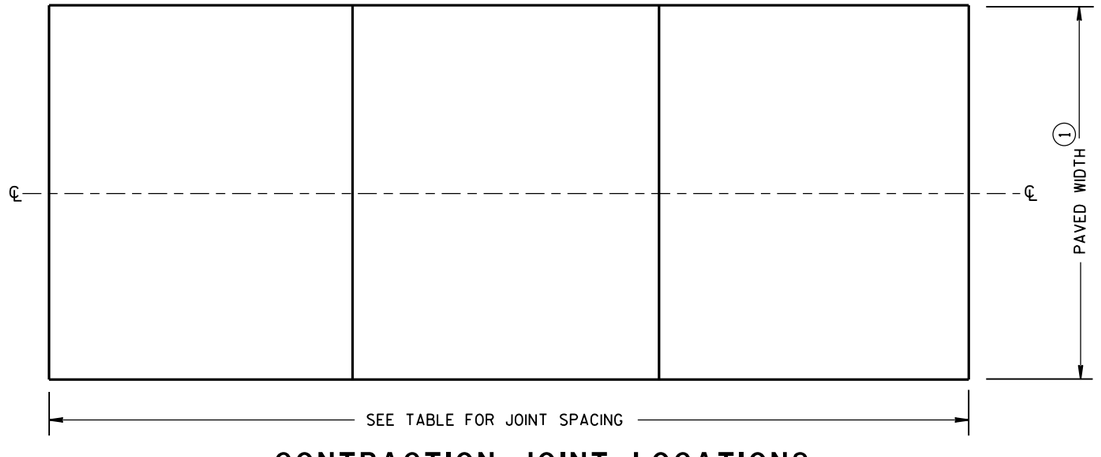
JOINT DETAIL



CONTRACTION JOINT

PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 1/2"	12'
7", 7 1/2"	14'
8" & ABOVE	15'



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE.

LOCATE AND ORIENT CONTRACTION JOINTS THROUGH INTERSECTIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

CONSTRUCTION JOINTS

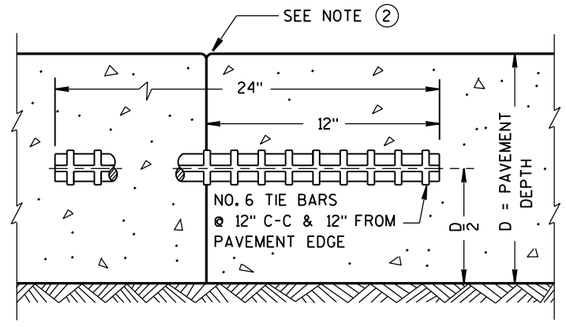
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

FORM OR SAW CONSTRUCTION JOINTS.

THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

(1) REFER TO TYPICAL CROSS SECTIONS FOR PAVED WIDTH AND LOCATION OF LONGITUDINAL JOINTS.

(2) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.



TIED TRANSVERSE CONSTRUCTION JOINT

6

6

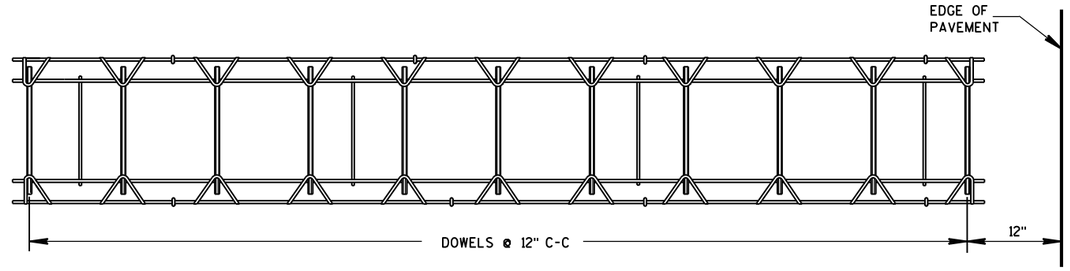
S.D.D. 13 C 4-16

S.D.D. 13 C 4-16

URBAN NON-DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-3-2013 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DE
IEER
FHWA

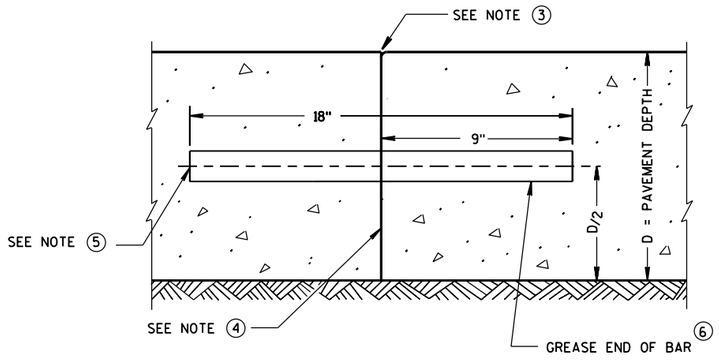


PLAN VIEW

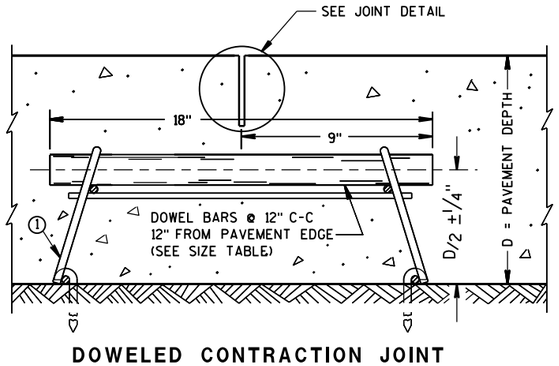


SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



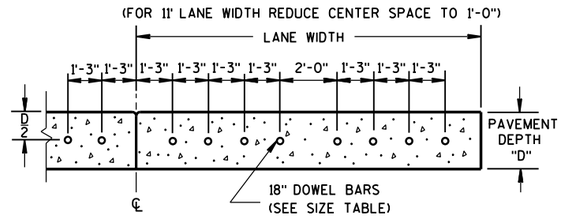
TRANSVERSE CONSTRUCTION JOINT



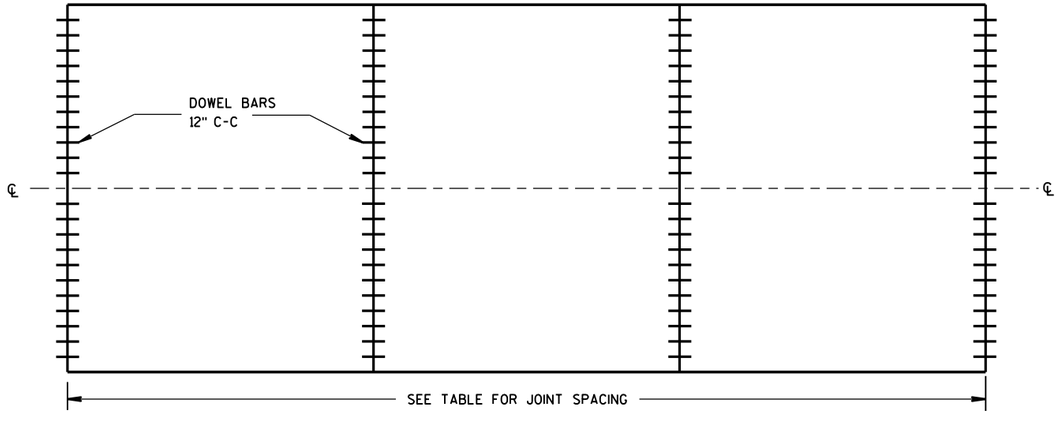
DOWELED CONTRACTION JOINT

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.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

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.

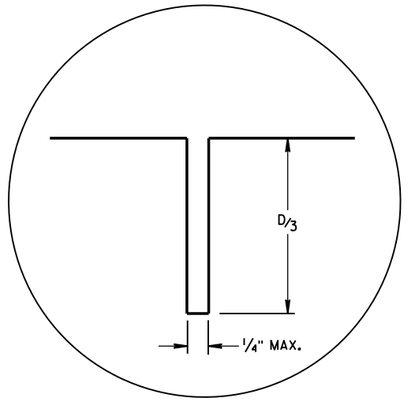
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

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

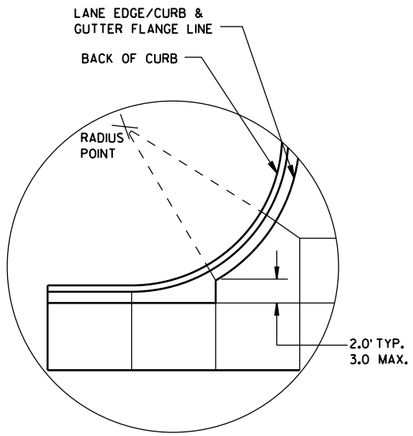
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5/3/2013 DATE
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PAVEMENT POLICY & DE ENGINEER
FHWA

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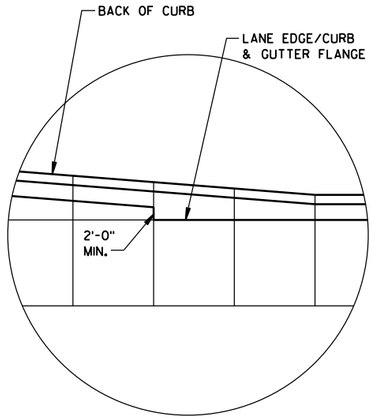
S.D.D. 13 C 13-8

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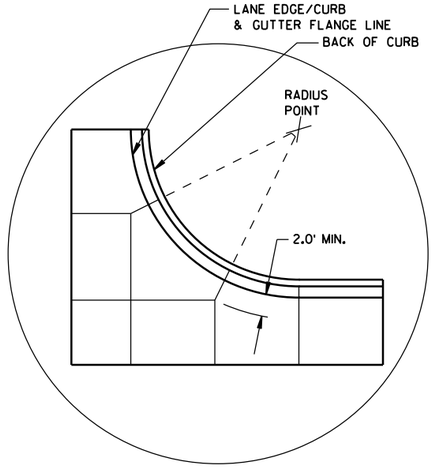
S.D.D. 13 C 13-8



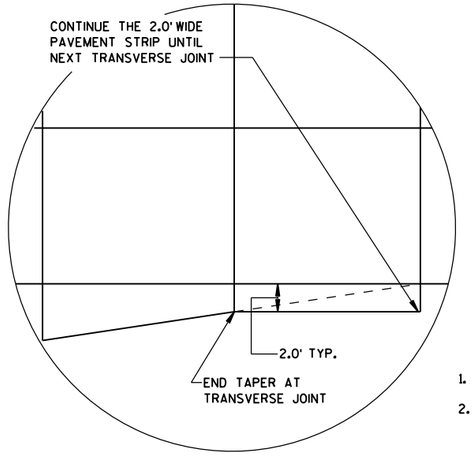
DETAIL "A"



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.

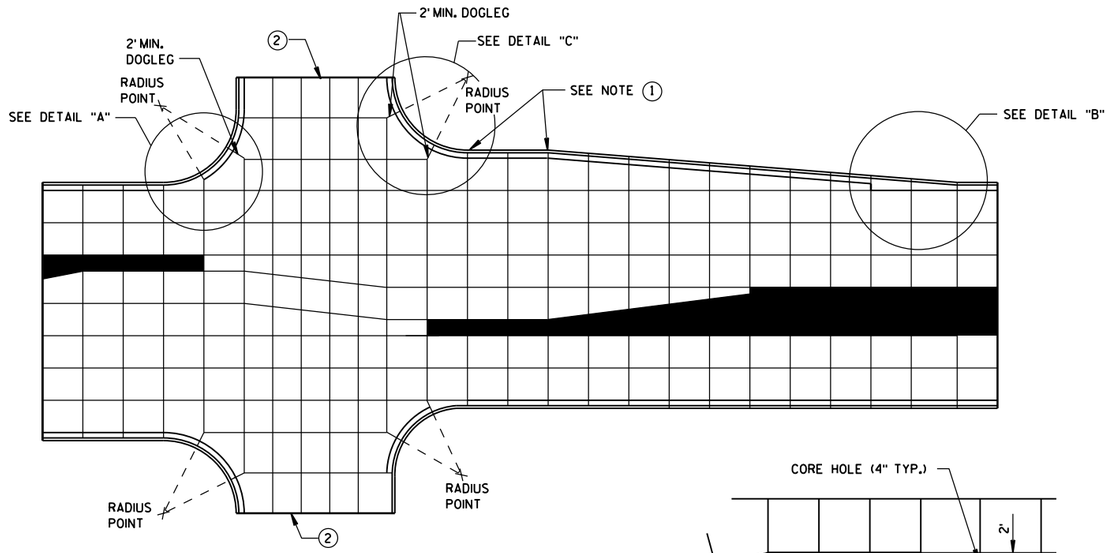
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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.

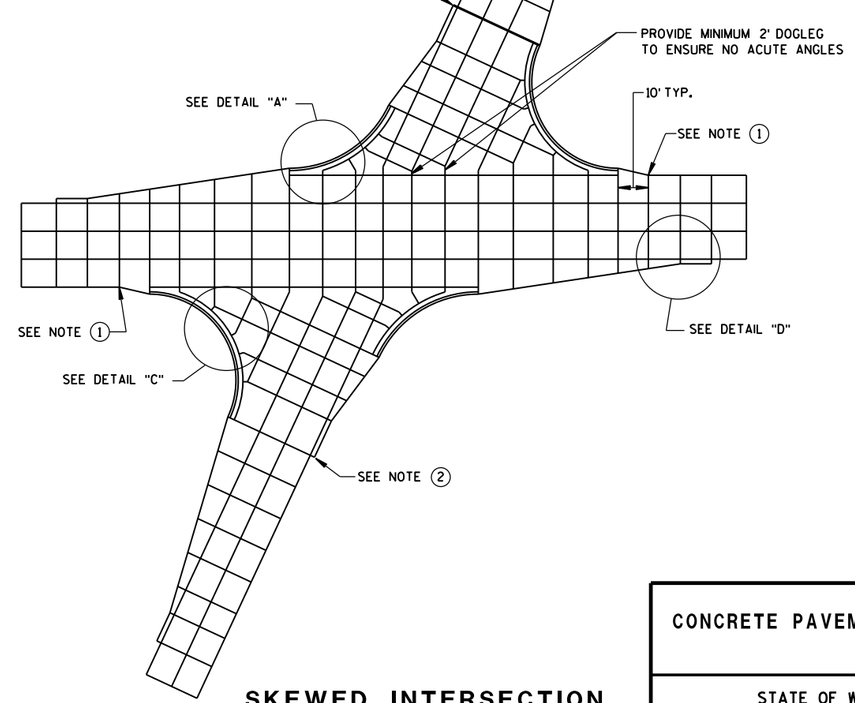
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



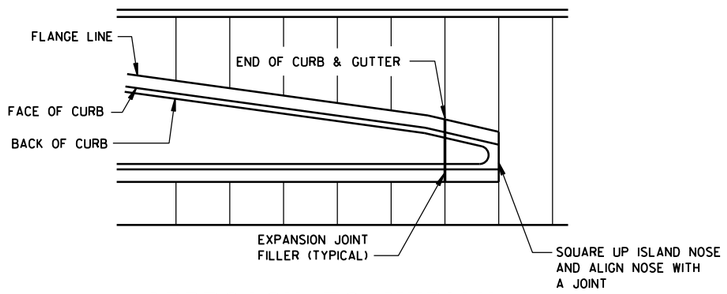
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

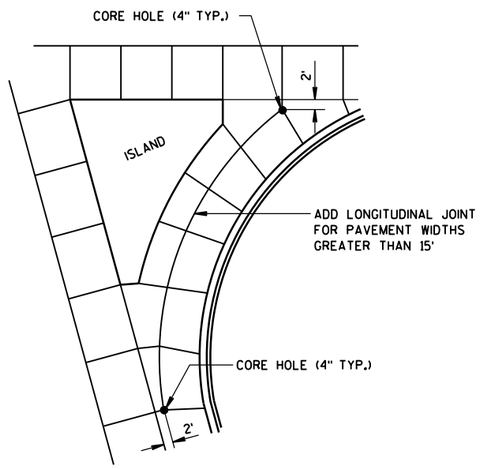
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

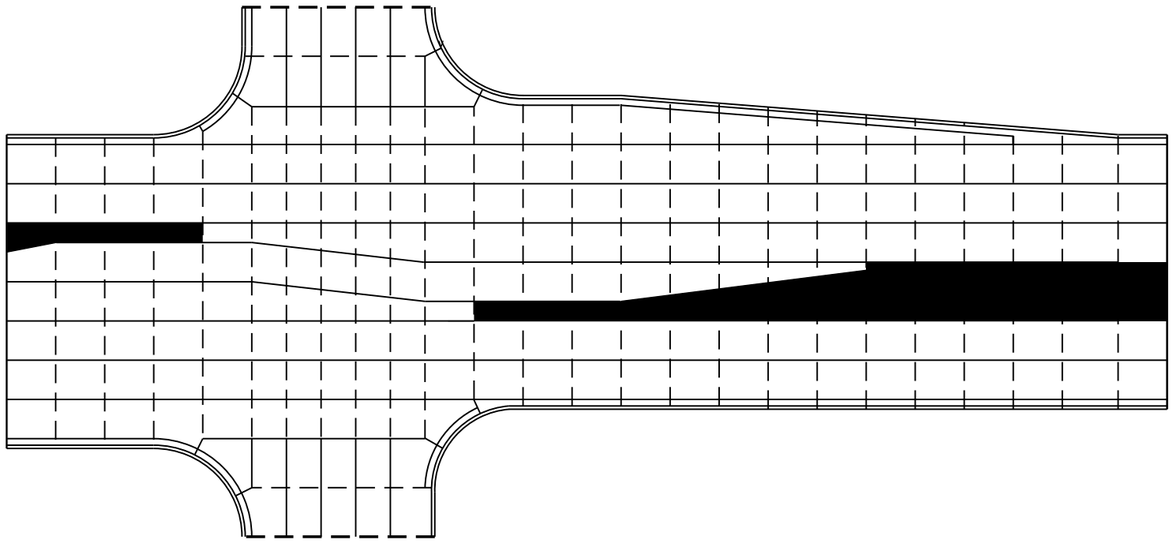
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S.D.D. 13 C 18-3a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

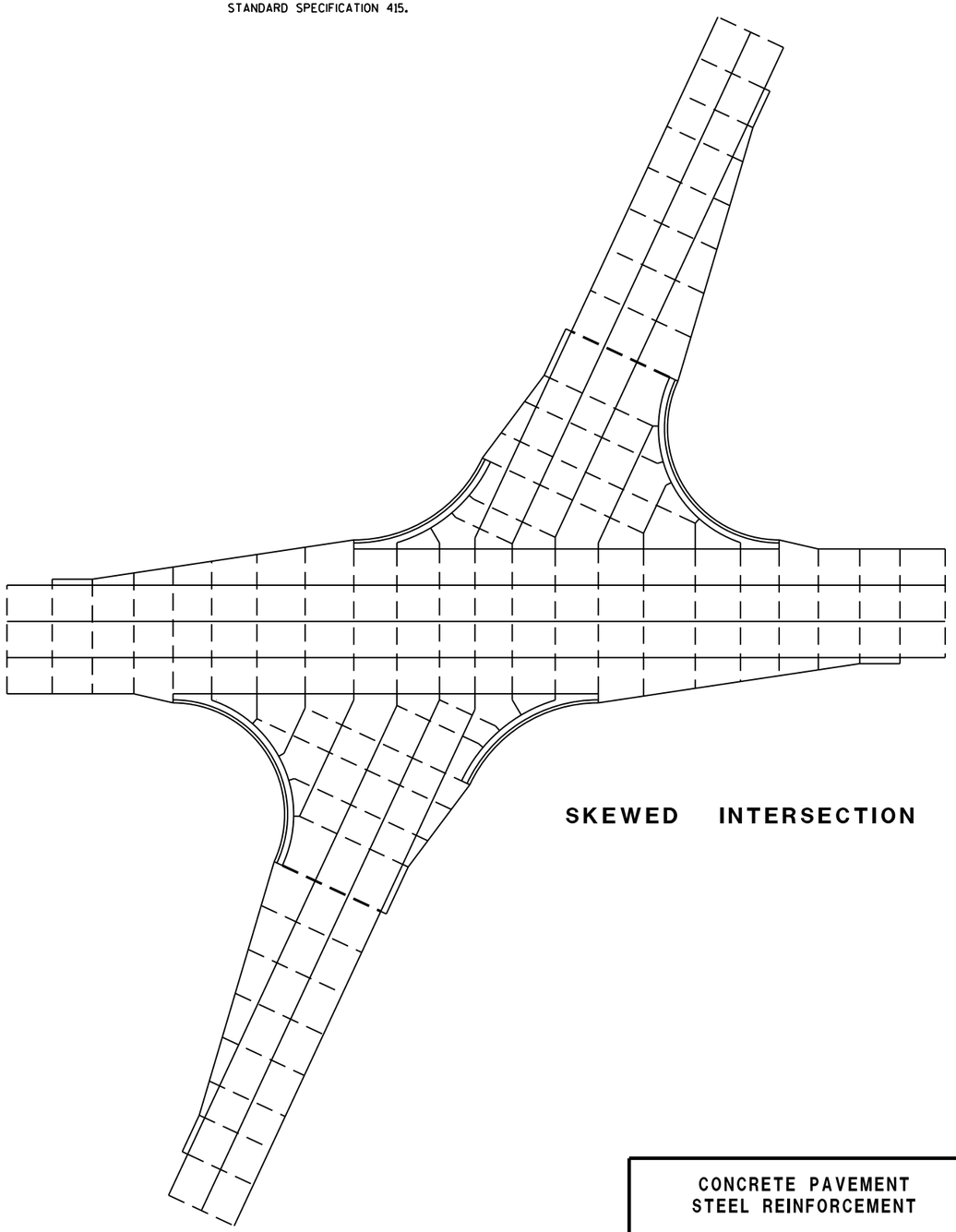
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

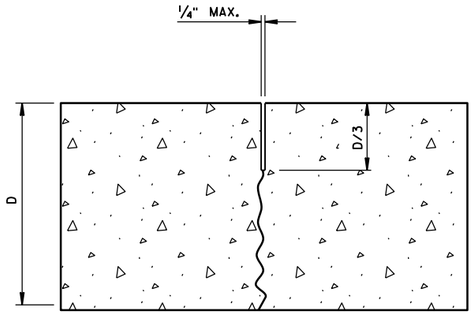
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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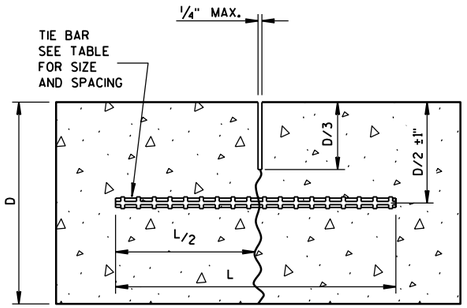
S.D.D. 13 C 18-3b

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S.D.D. 13 C 18-3b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

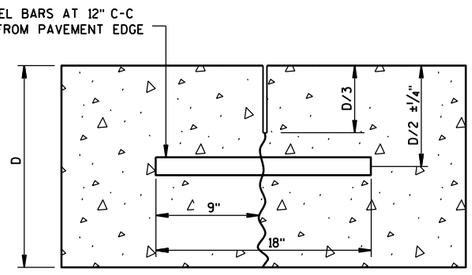
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* 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

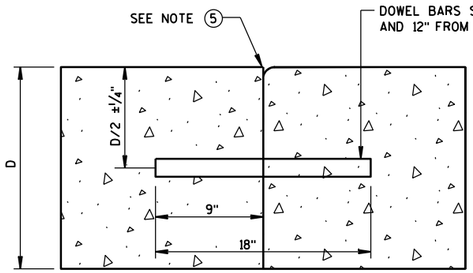
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 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.



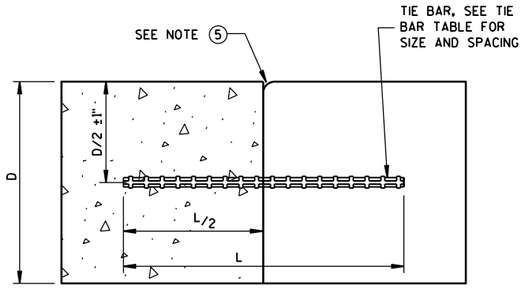
DOWELED-TRANSVERSE

CONTRACTION JOINTS

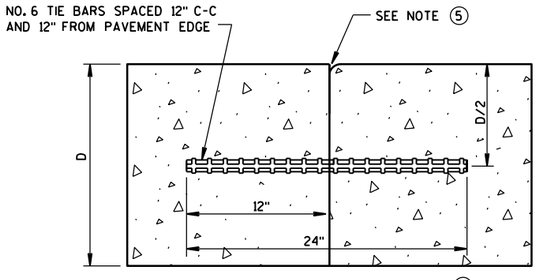
SEE NOTE (2)



DOWELED TRANSVERSE (3)

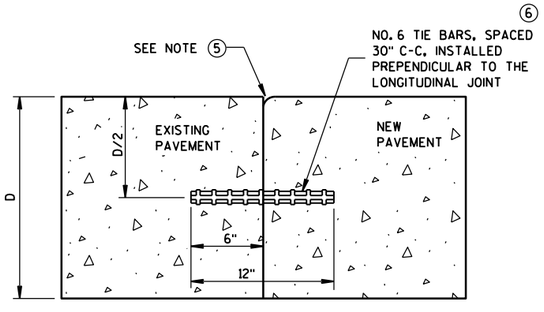


TIED LONGITUDINAL



TIED TRANSVERSE (3)

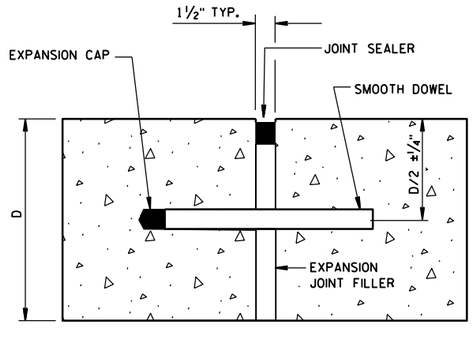
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

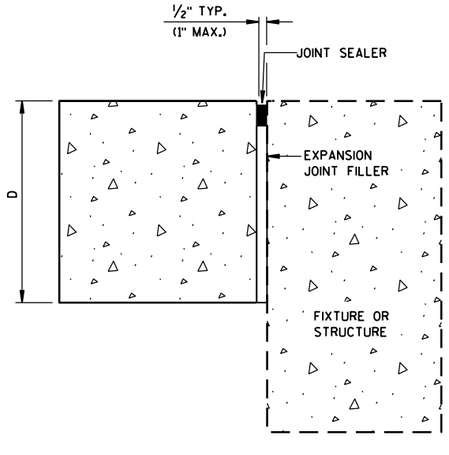
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

6

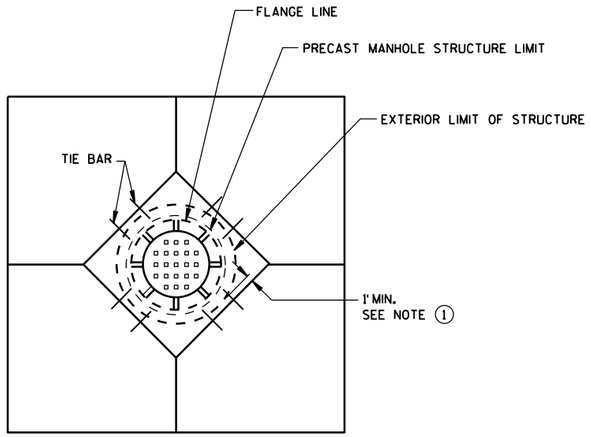
6

S.D.D. 13 C 18-3c

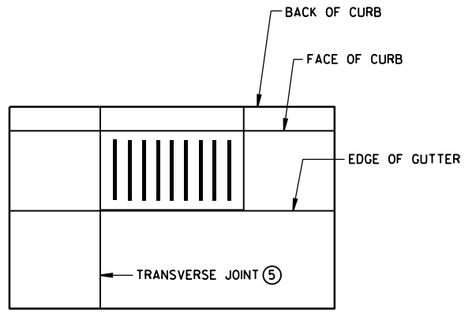
S.D.D. 13 C 18-3c

CONCRETE PAVEMENT
JOINT TYPES

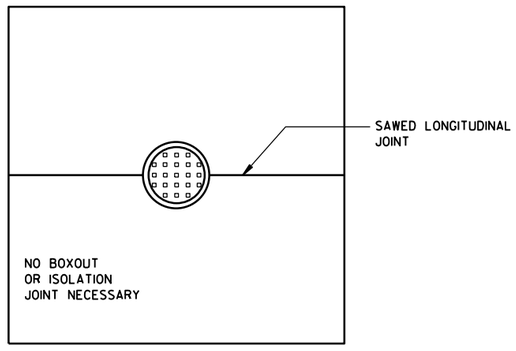
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



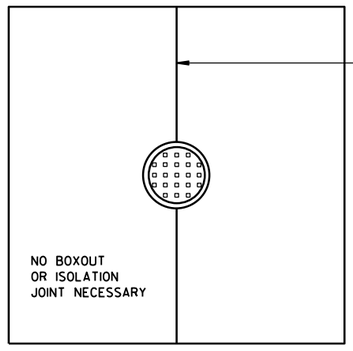
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



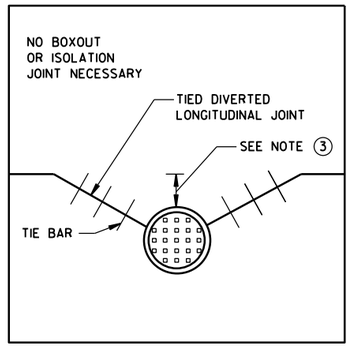
INLET WITH TRANSVERSE JOINT



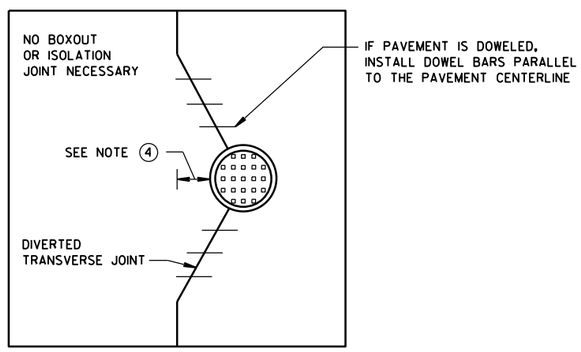
MANHOLE WITH LONGITUDINAL JOINT



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.

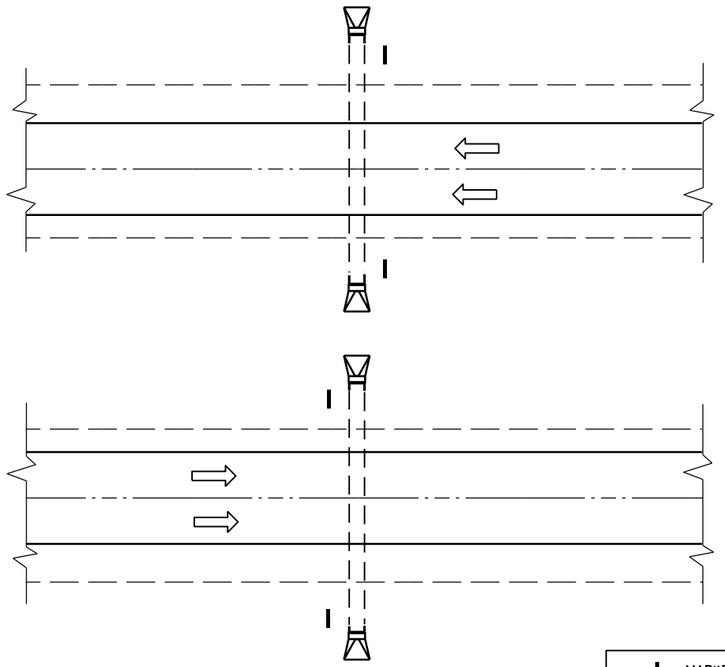
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

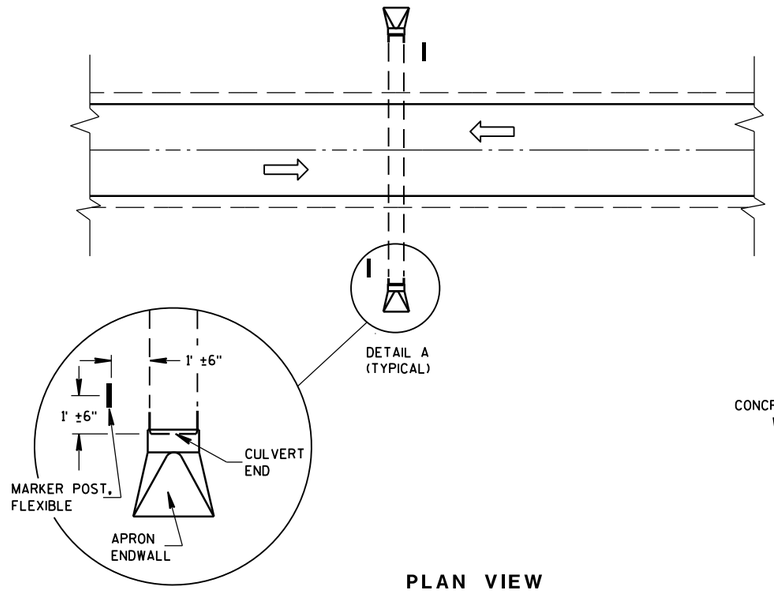
6

S.D.D. 13 C 18-3d



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

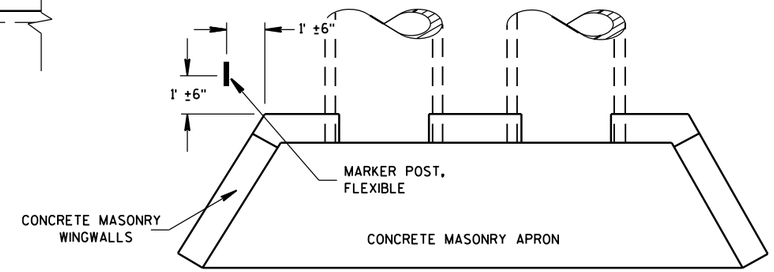
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

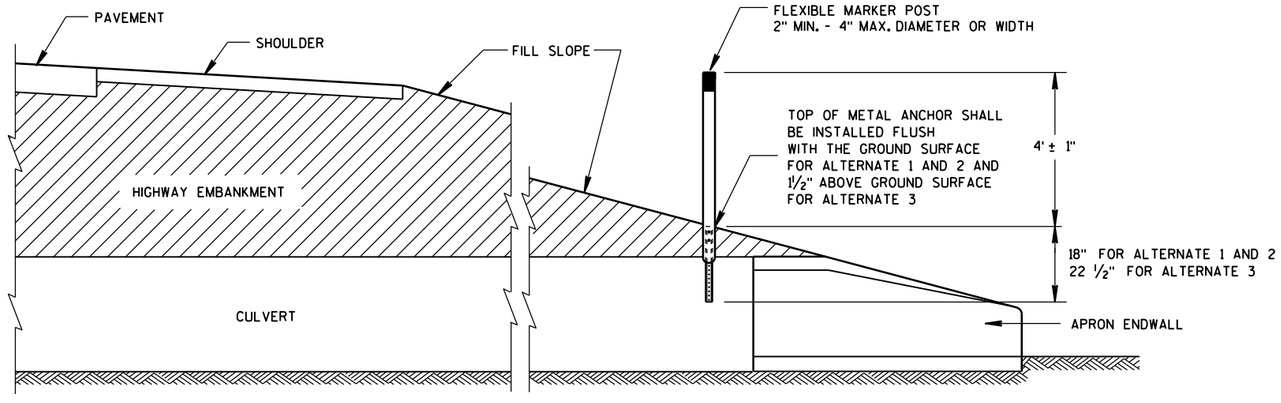
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

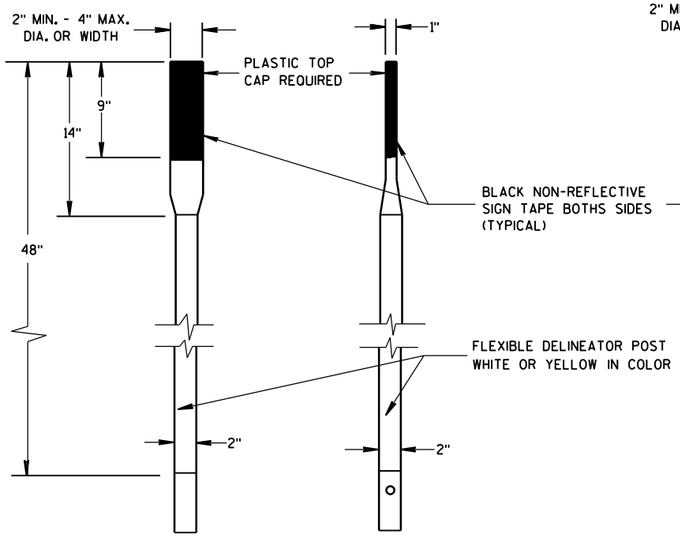
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

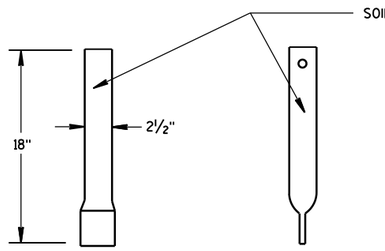
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S.D.D. 15 A 3-2a

6

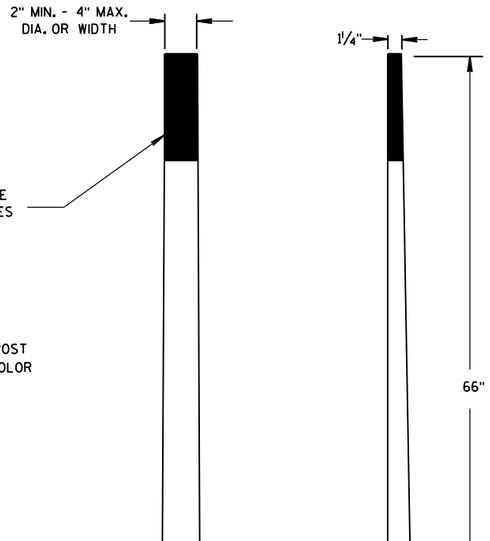
S.D.D. 15 A 3-2a





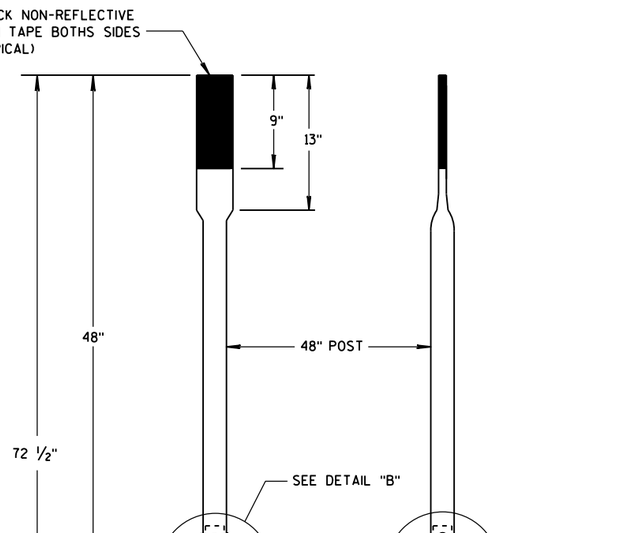
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

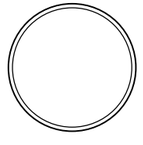
ALTERNATE 2



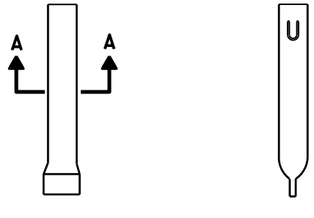
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

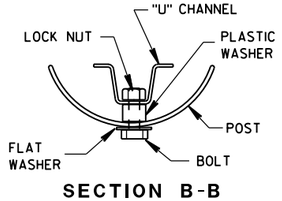


SECTION A-A

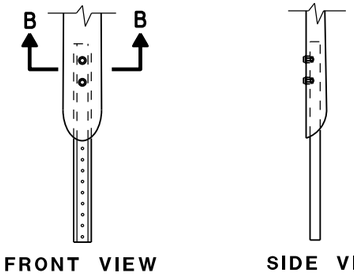


FRONT VIEW SIDE VIEW

ALTERNATE 1

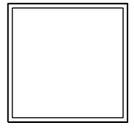


SECTION B-B

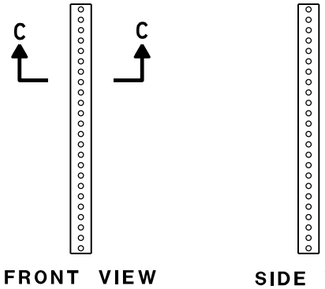


FRONT VIEW SIDE VIEW

ALTERNATE 2



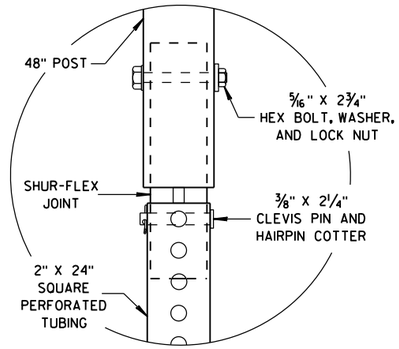
SECTION C-C



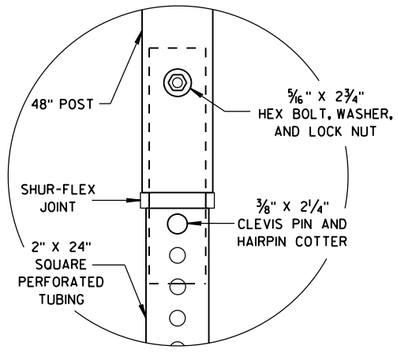
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

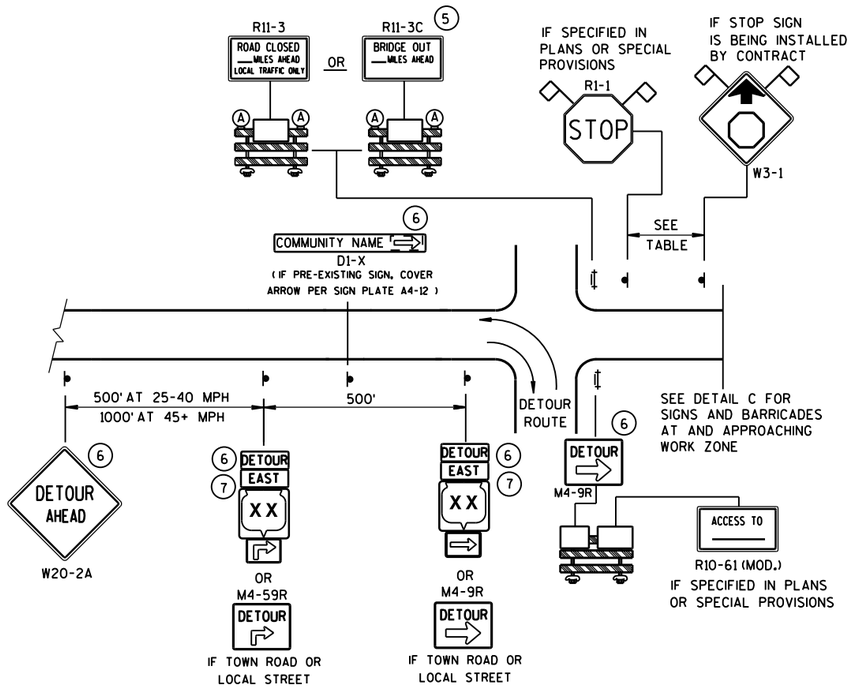
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

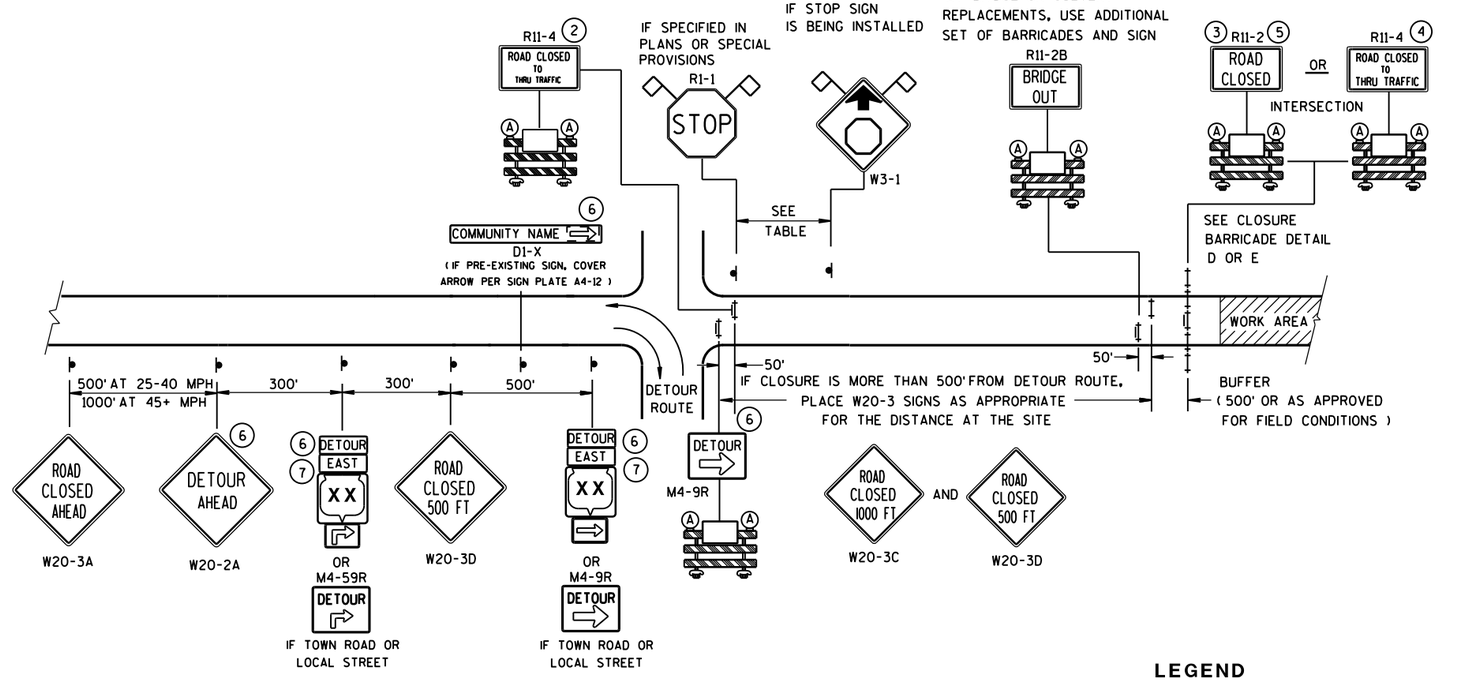
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S.D.D. 15 A 3-2b



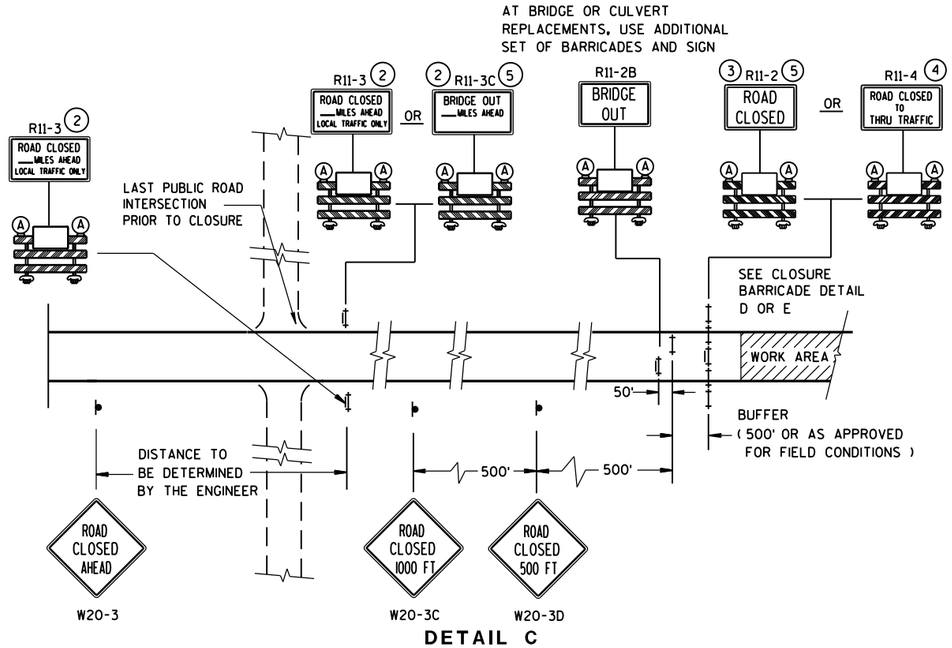
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

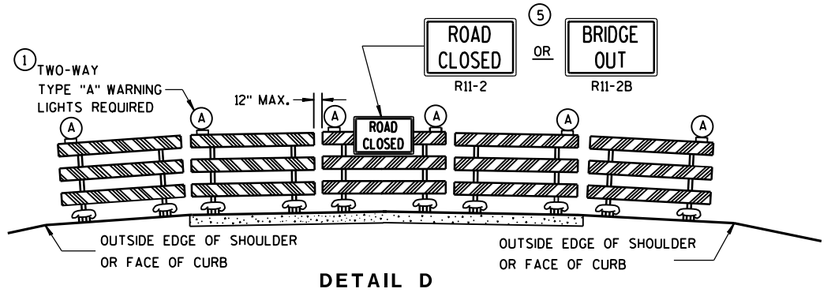
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

S.D.D. 15 C 2-6a

6

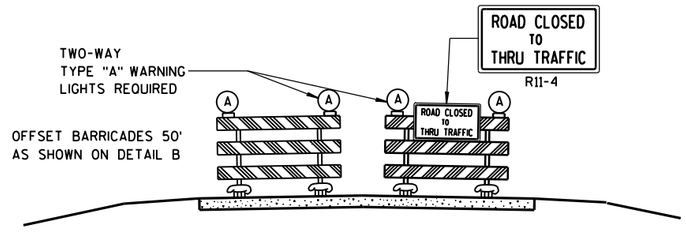
S.D.D. 15 C 2-6a



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

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.

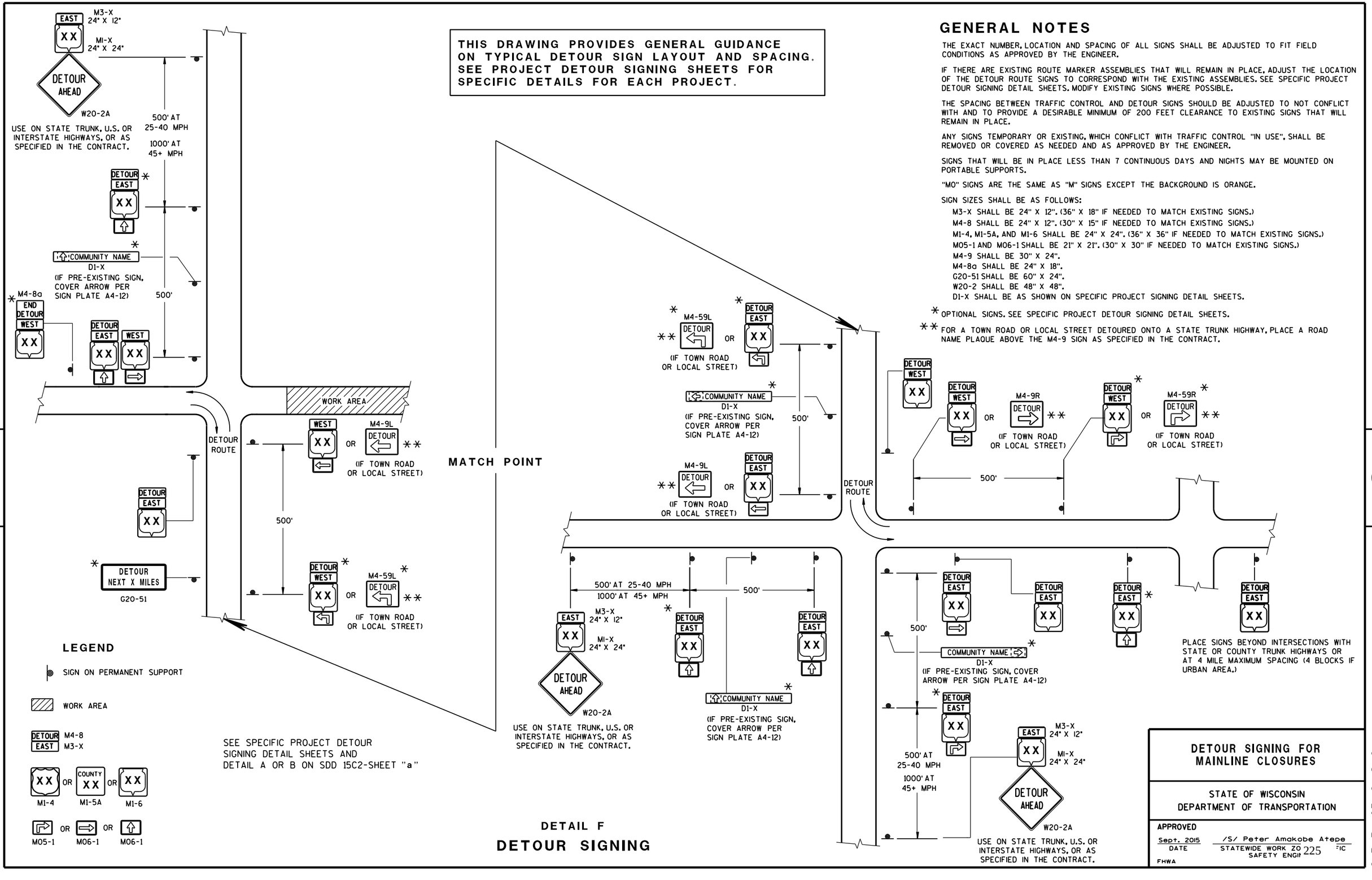
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

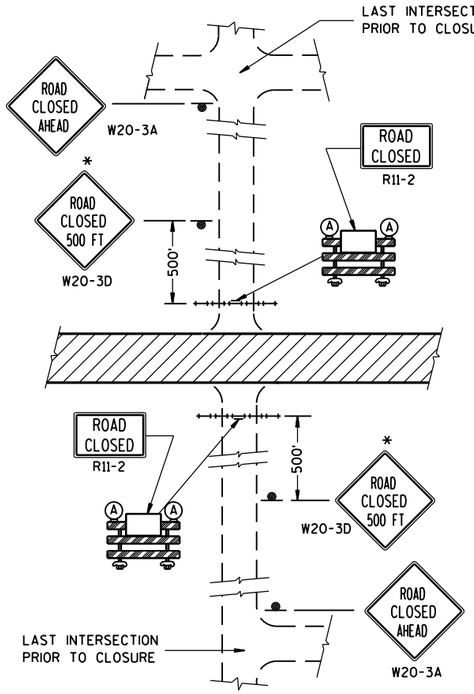
Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

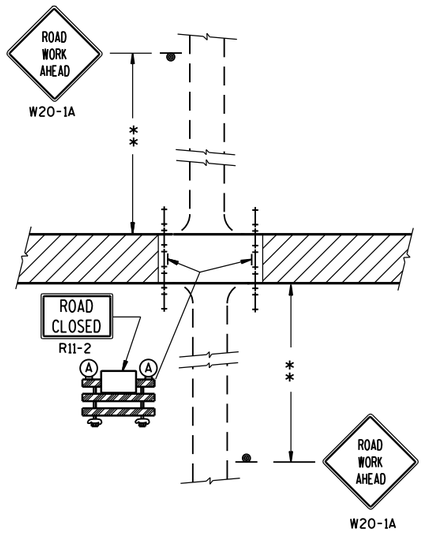
S.D.D. 15 C 2-6c

6



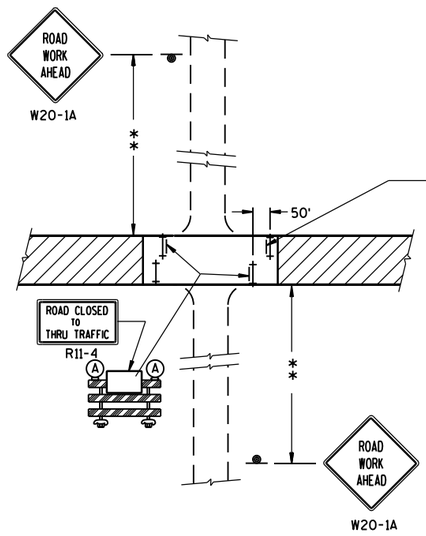
DETAIL 1

(NO ACCESS TO PROJECT)



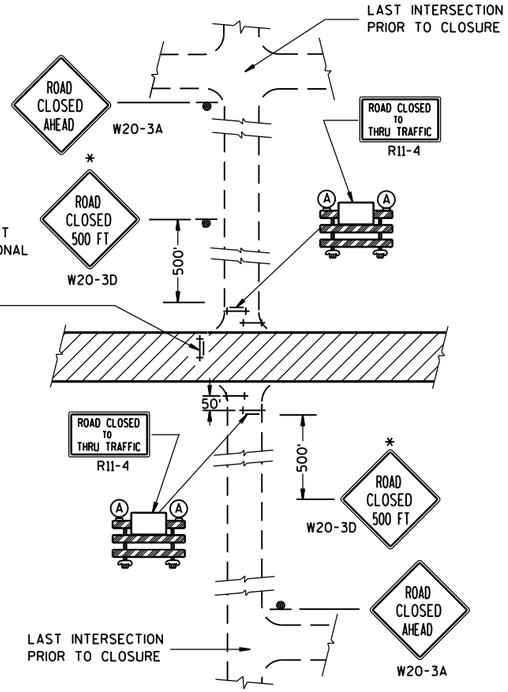
DETAIL 2

(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. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible]FIC SAFETY ENGI[illegible]
FHWA

6

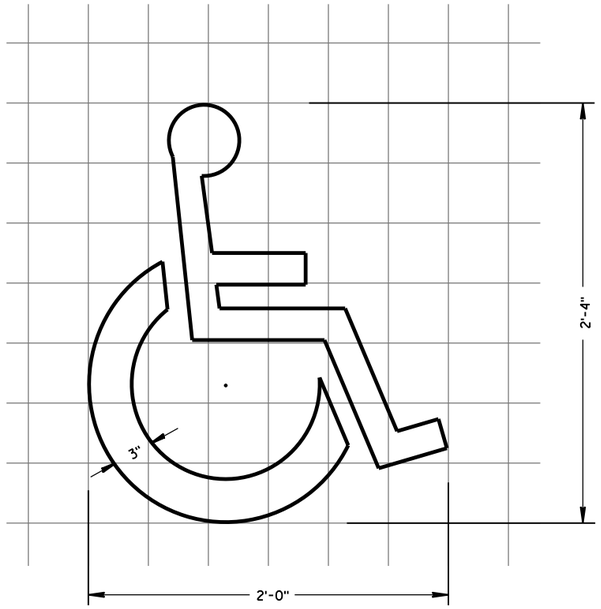
S.D.D. 15 C 3-3

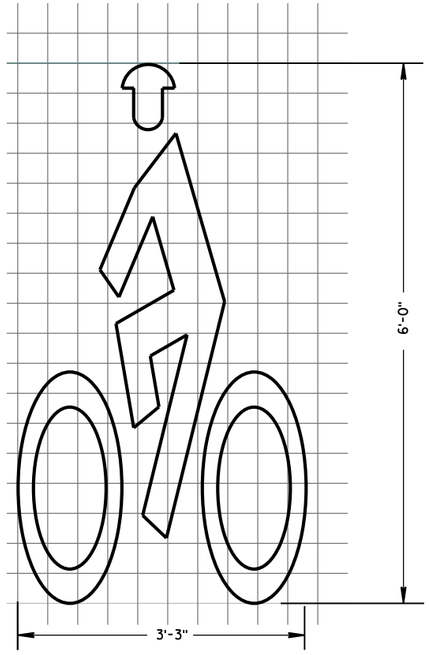
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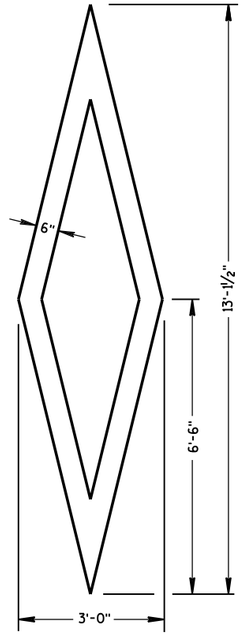
GENERAL NOTES

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.





BIKE CROSSING SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

S.D.D. 15 C 7-13a

S.D.D. 15 C 7-13a

PAVEMENT MARKING SYMBOLS

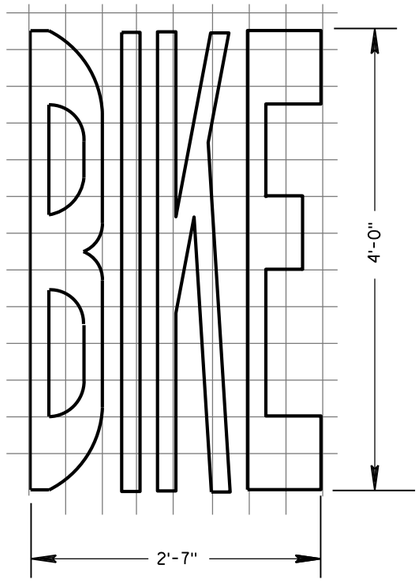
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

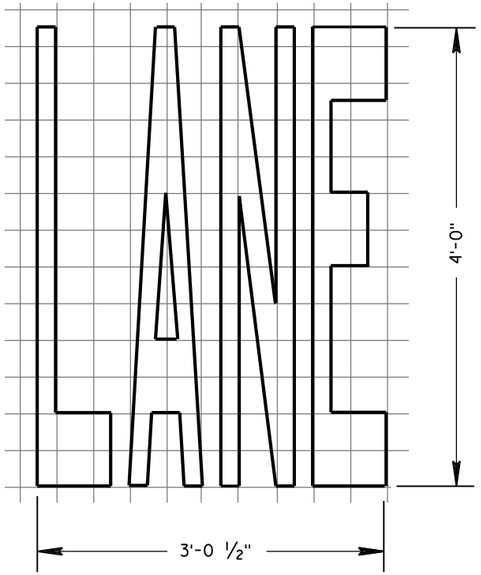
APPROVED

4/18/16 — DATE

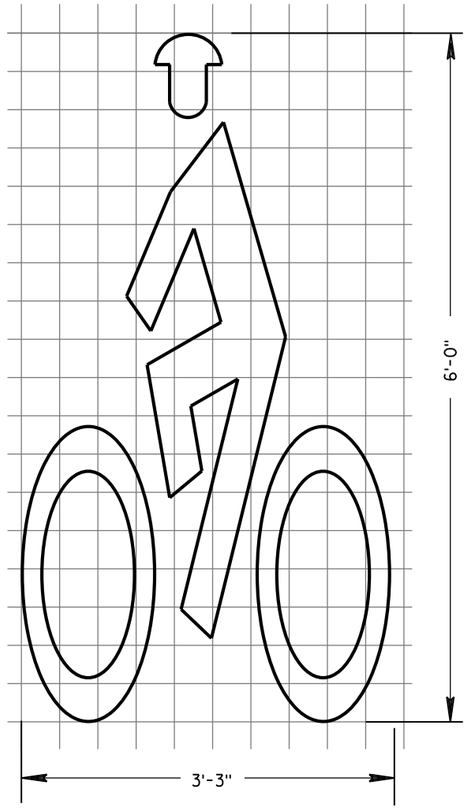
/S/ Matthew R. Rauch — STATE SIGNING AND MARK EER

FHWA

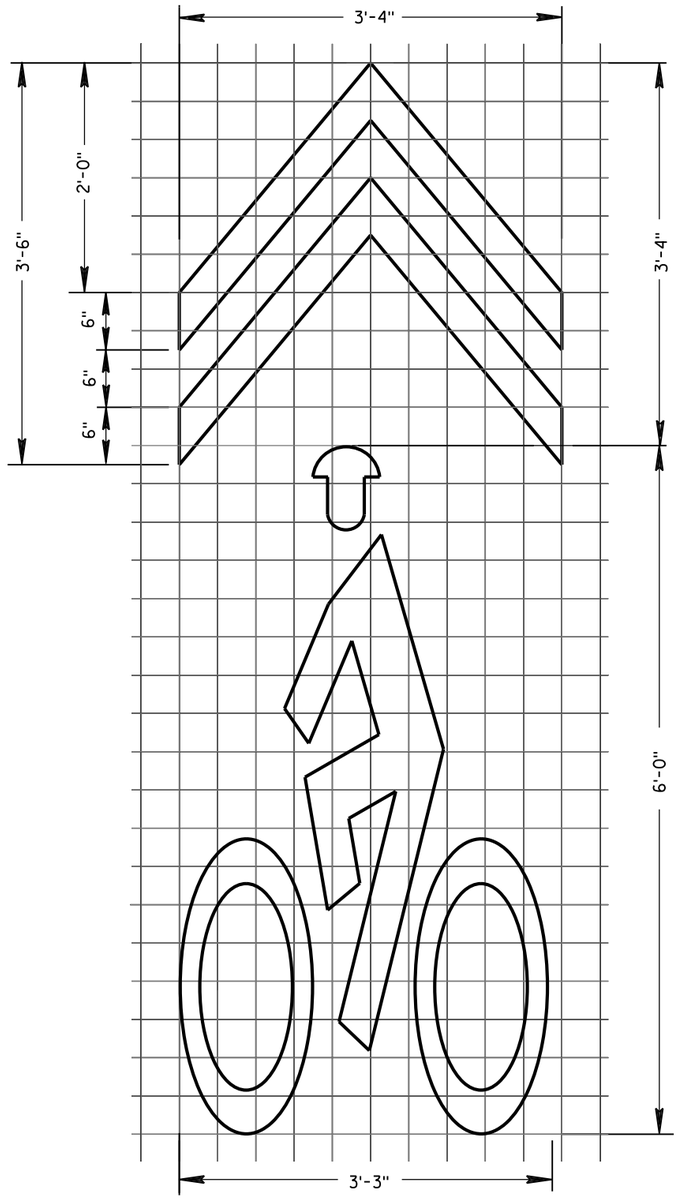




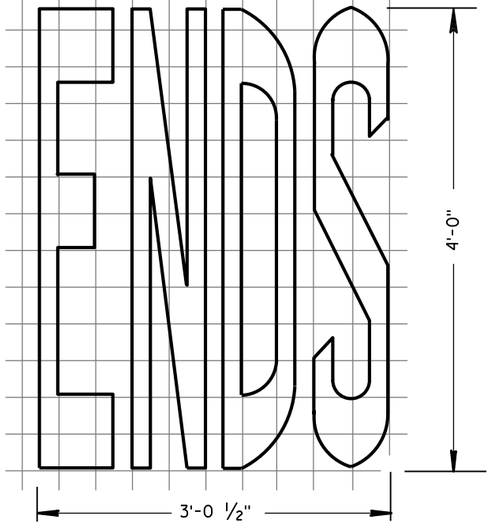
BIKE LANE WORDS



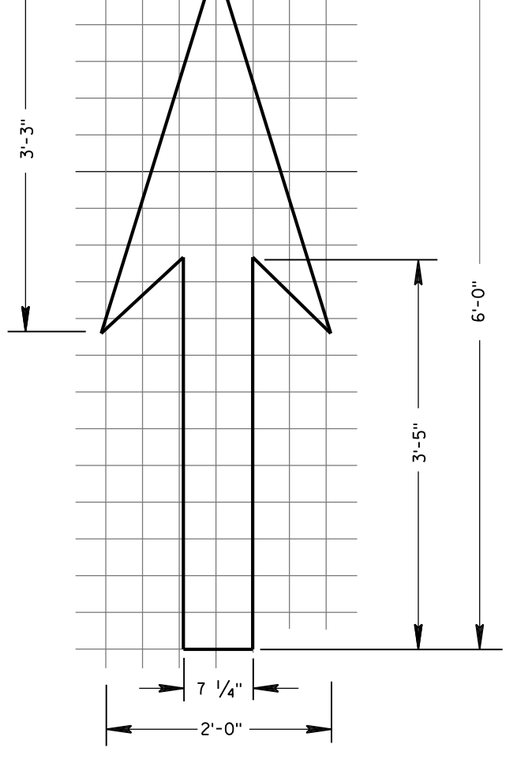
BIKE LANE SYMBOL



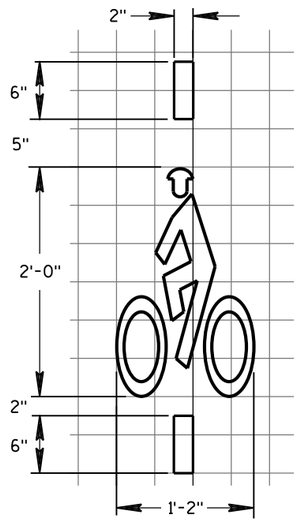
BIKE SYMBOL FOR SHARED LANE



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

4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARK ENGINEER

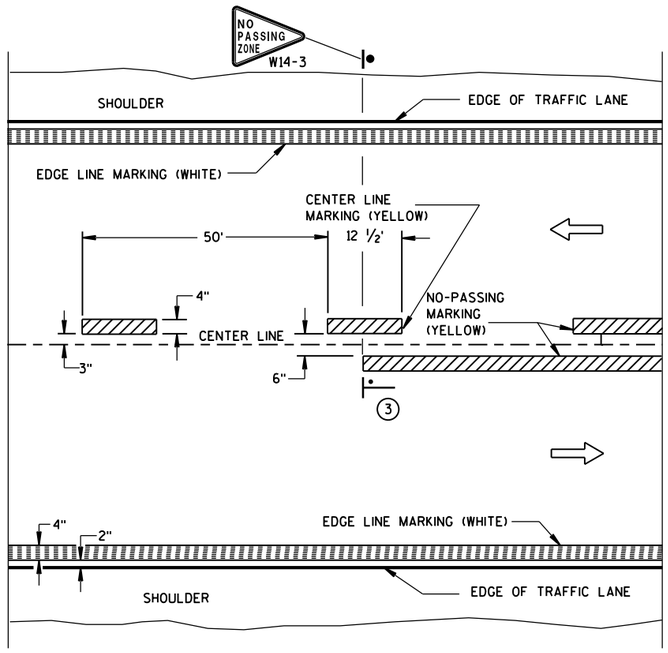
FHWA

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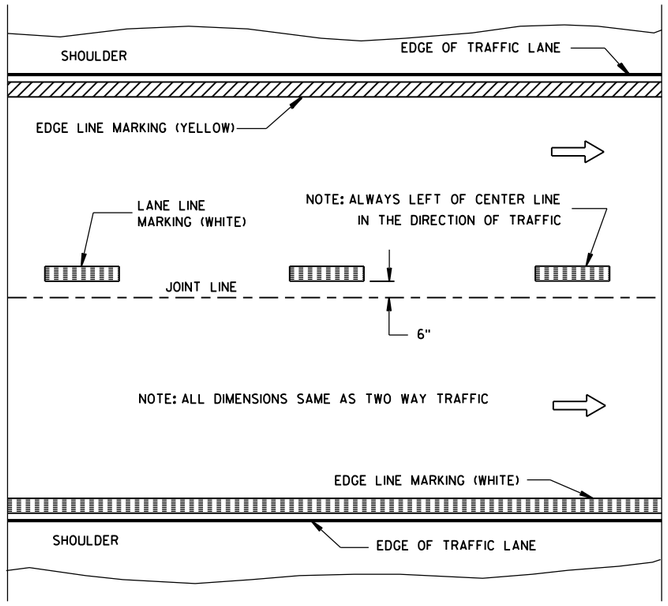
S.D.D. 15 C 7-13e

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S.D.D. 15 C 7-13e

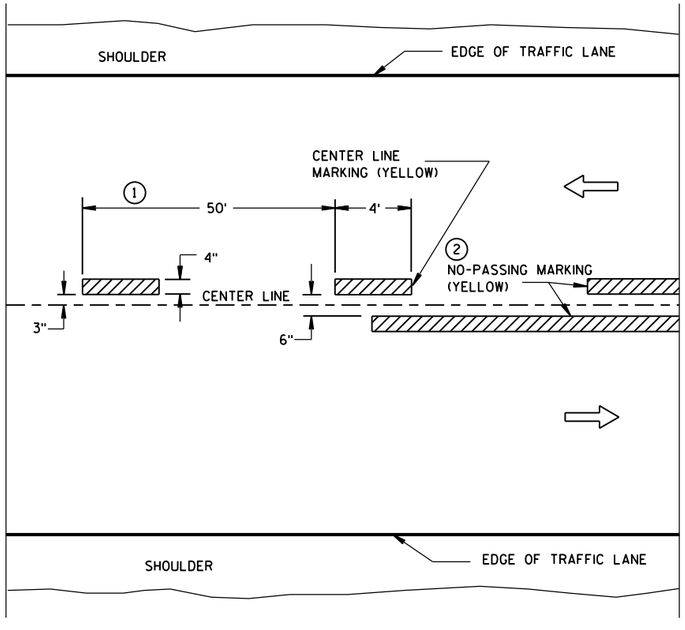


TWO WAY TRAFFIC

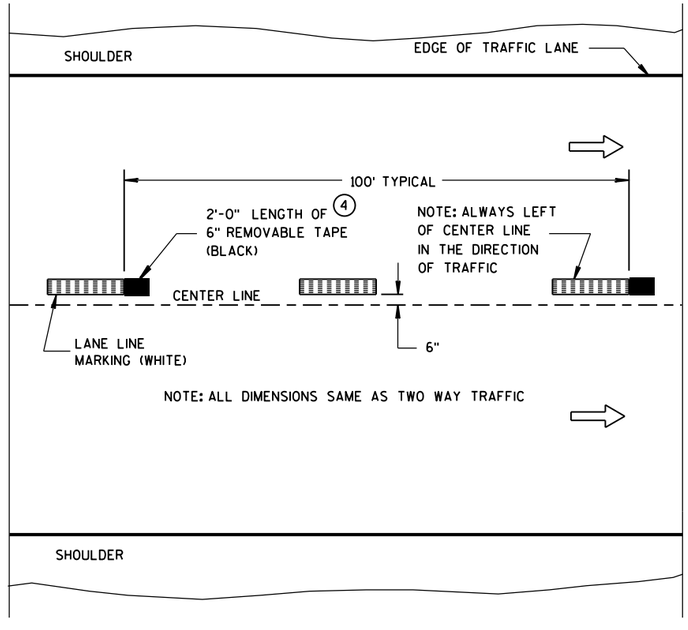


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

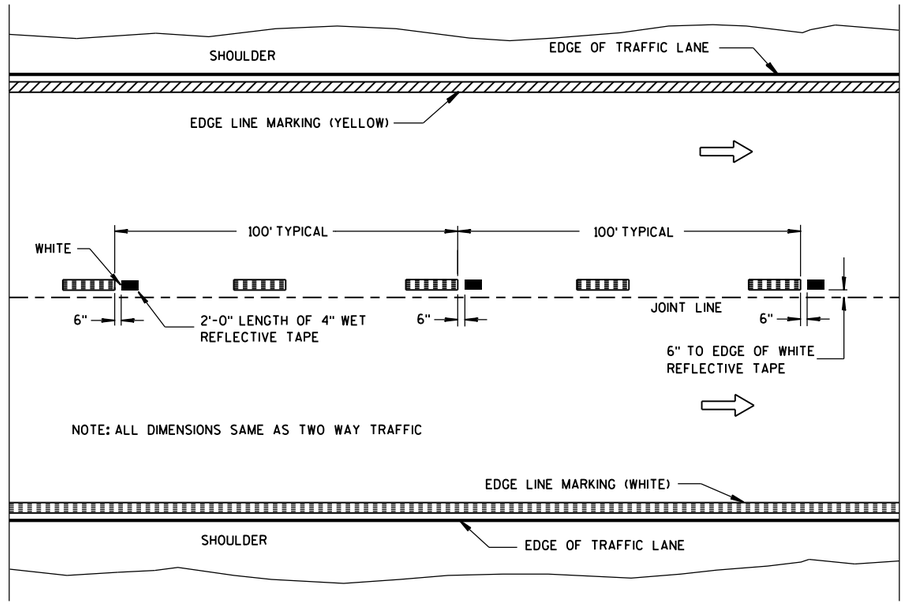
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC E

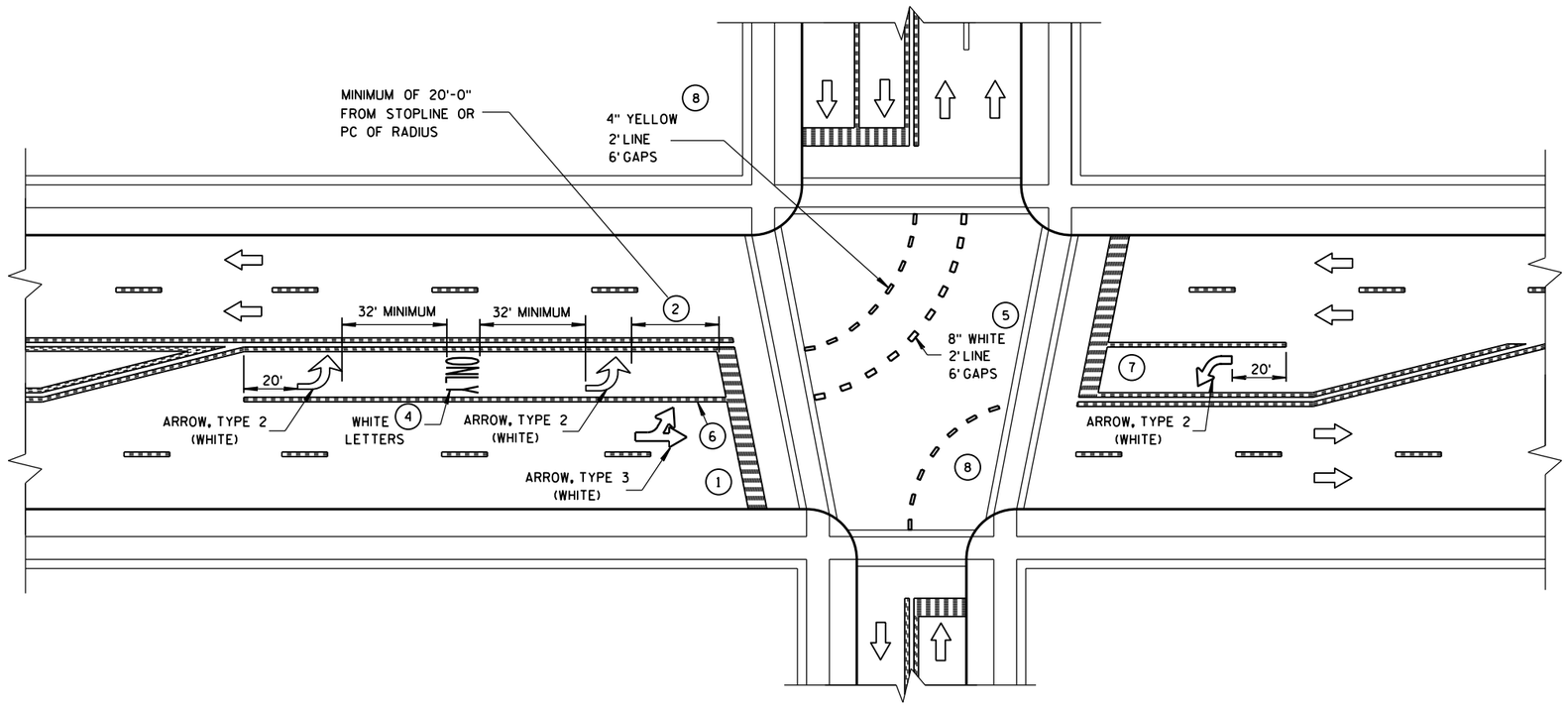
FHWA

6

S.D.D. 15 C 8-16a

6

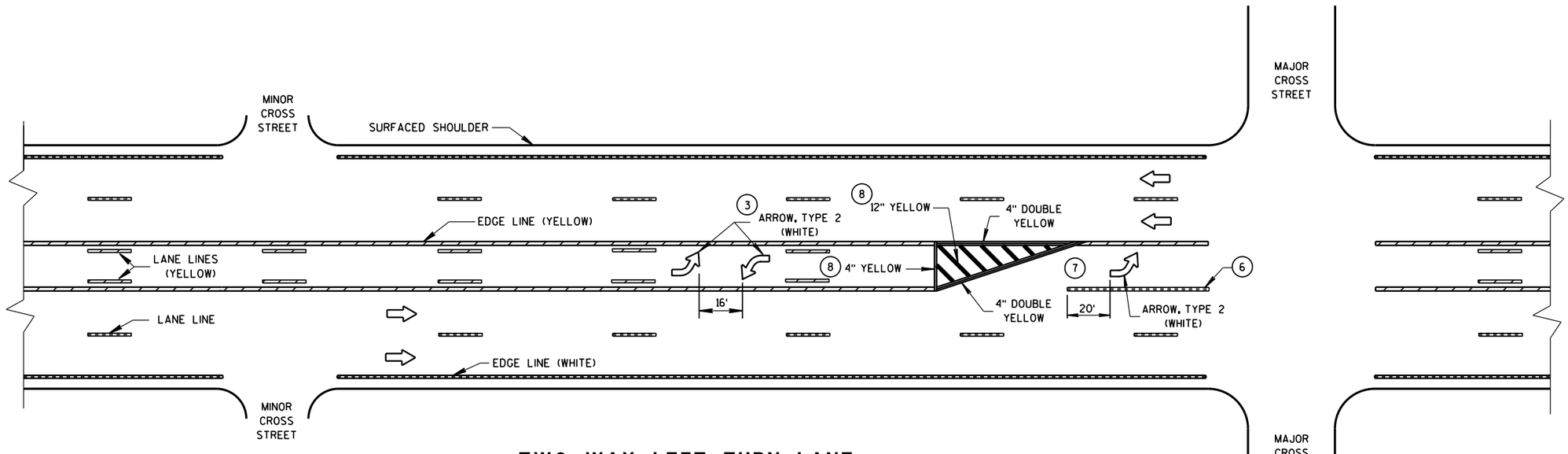
S.D.D. 15 C 8-16a



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

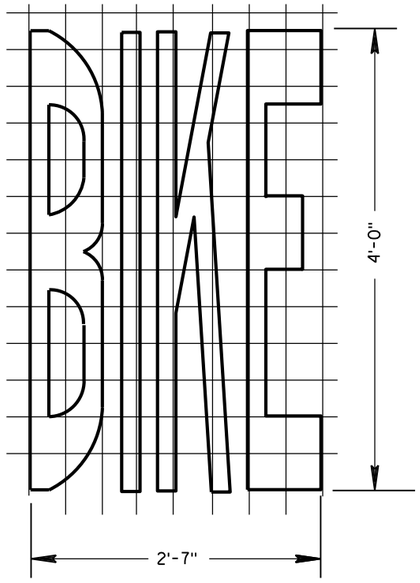
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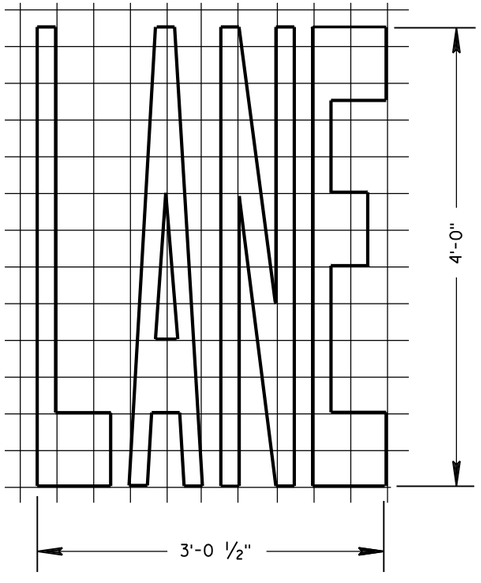
S.D.D. 15 C 8-16e
S.D.D. 15 C 8-16e

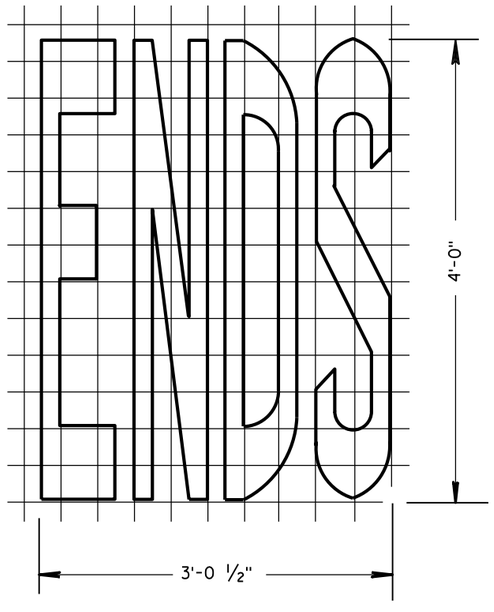
GENERAL NOTES

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.

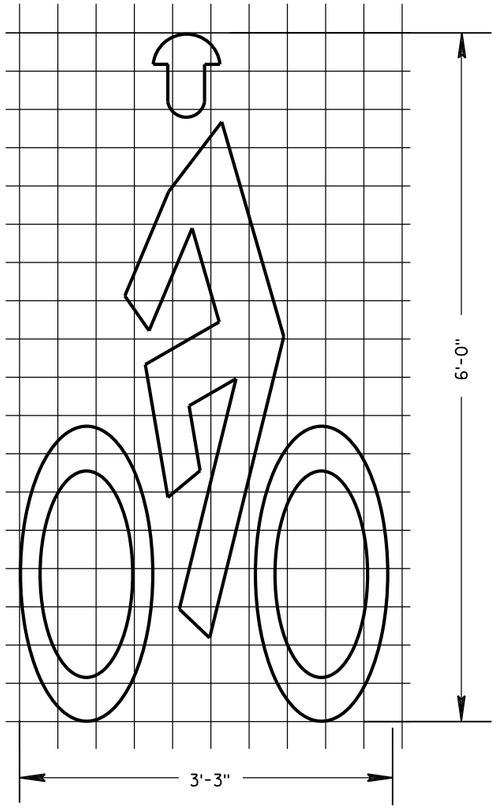
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



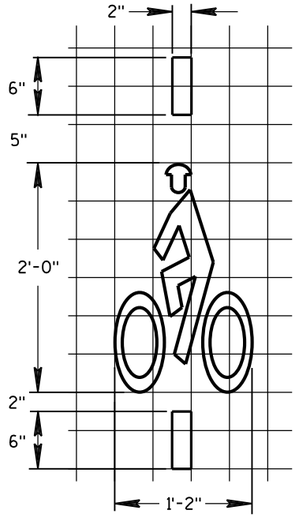




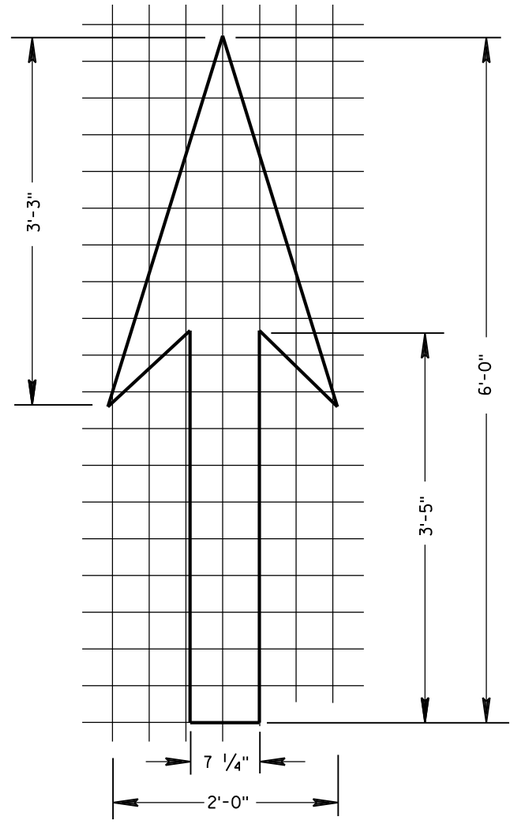
BIKE LANE WORDS



BIKE LANE SYMBOL



BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE ARROW

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

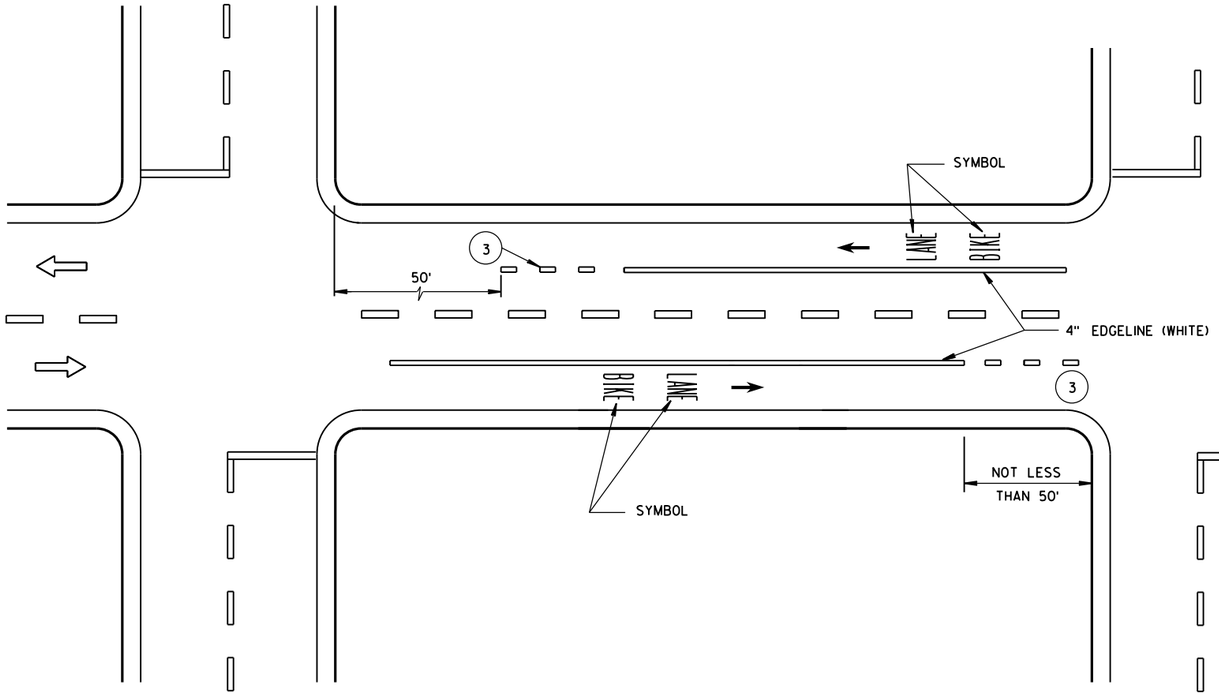
APPROVED
4-30-2013
DATE

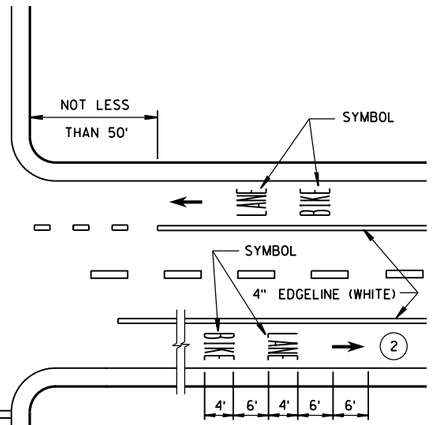
/S/ Travis Feltes
STATE TRAFFIC EN

FHWA

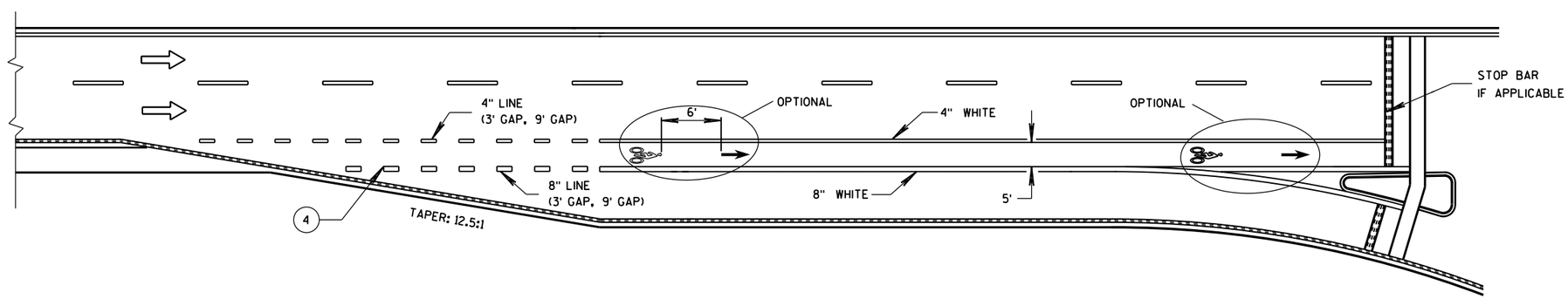
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S.D.D. 15 C 29-3e





DESIGNATED BICYCLE LANE
NO PARKING



BIKE LANE - 4-LANE DIVIDED WITH RIGHT TURN LANE

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.

⇨ DIRECTION OF TRAVEL

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

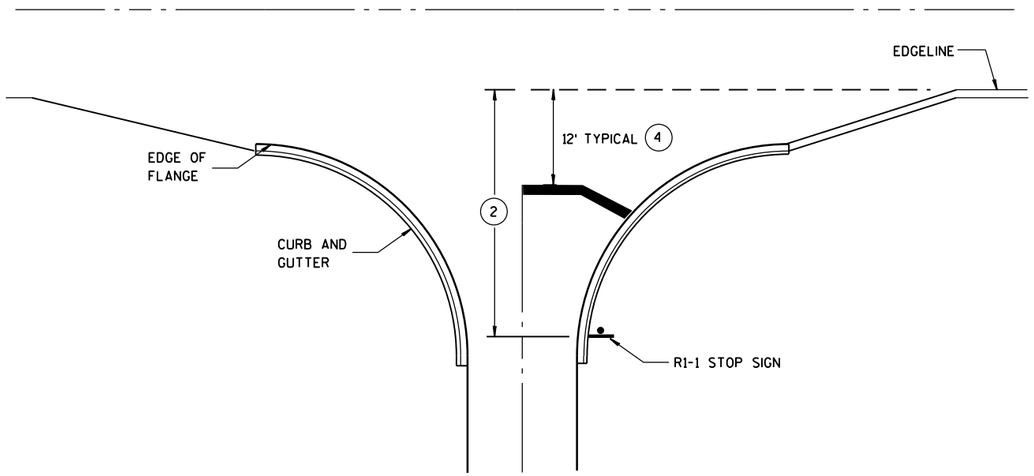
APPROVED

4-18-2016	/S/ Matthew R. Rauch	
DATE	STATE SIGNING AND MAR	NEER

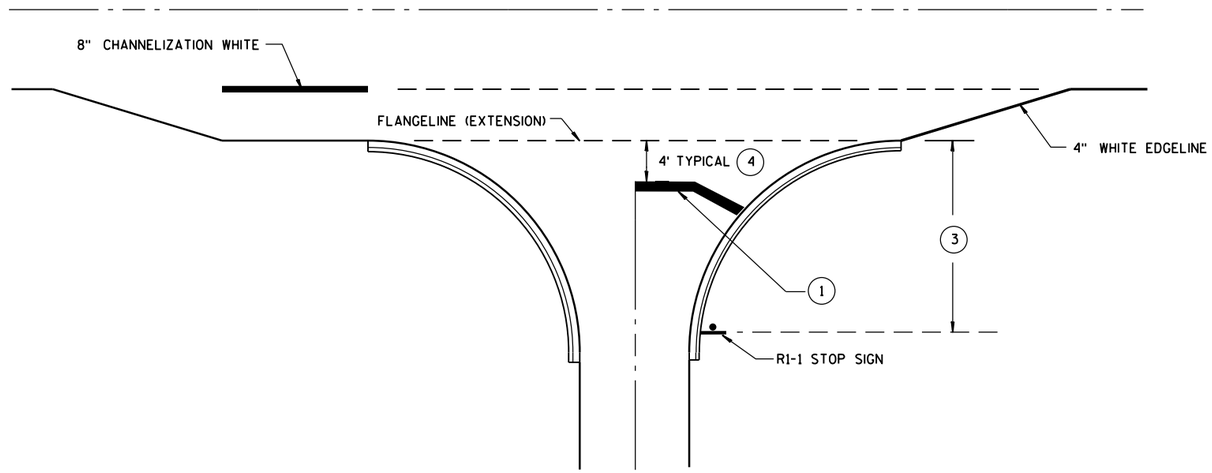
FHWA

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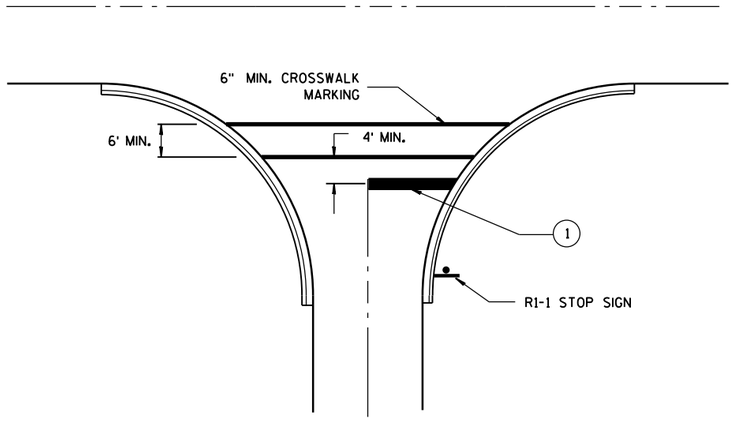
S.D.D. 15 C 29-4a



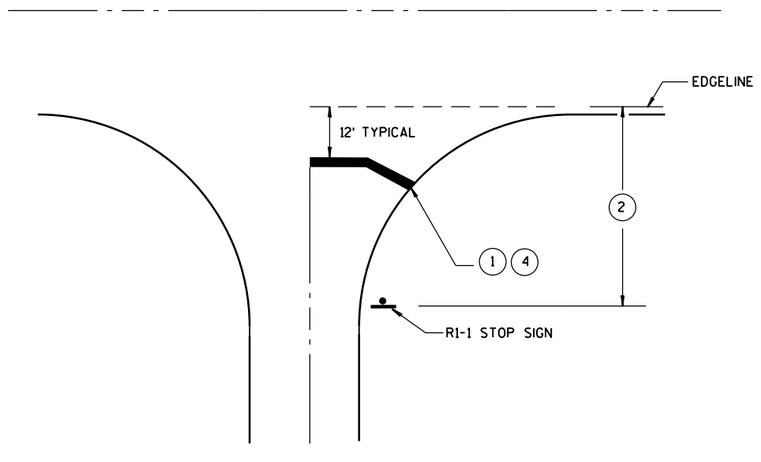
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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

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

4-18-2016
DATE

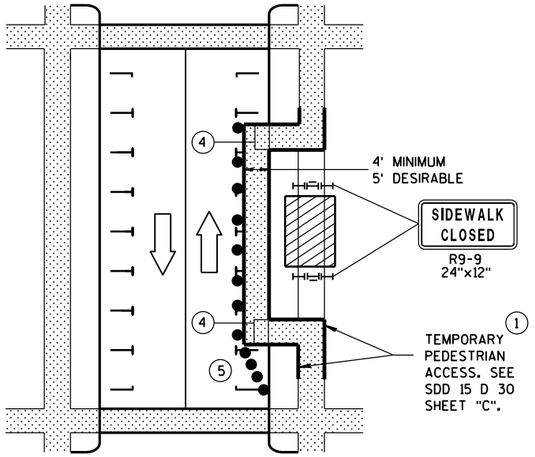
/S/ Matthew R. Rauch
STATE SIGNING AND MAR 233 NEER

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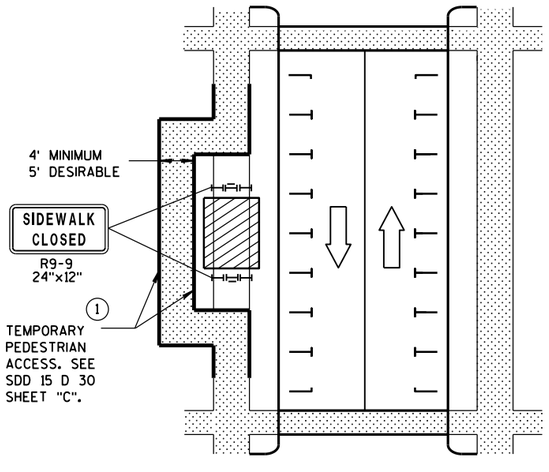
S.D.D. 15 C 33-2

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

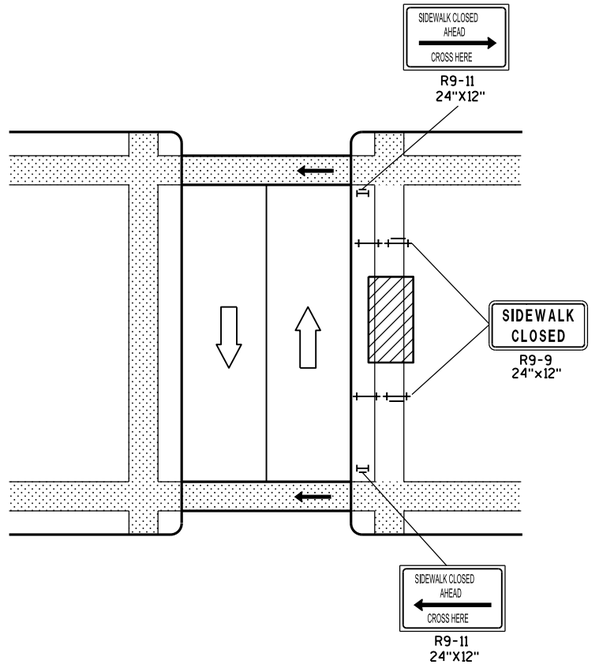


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

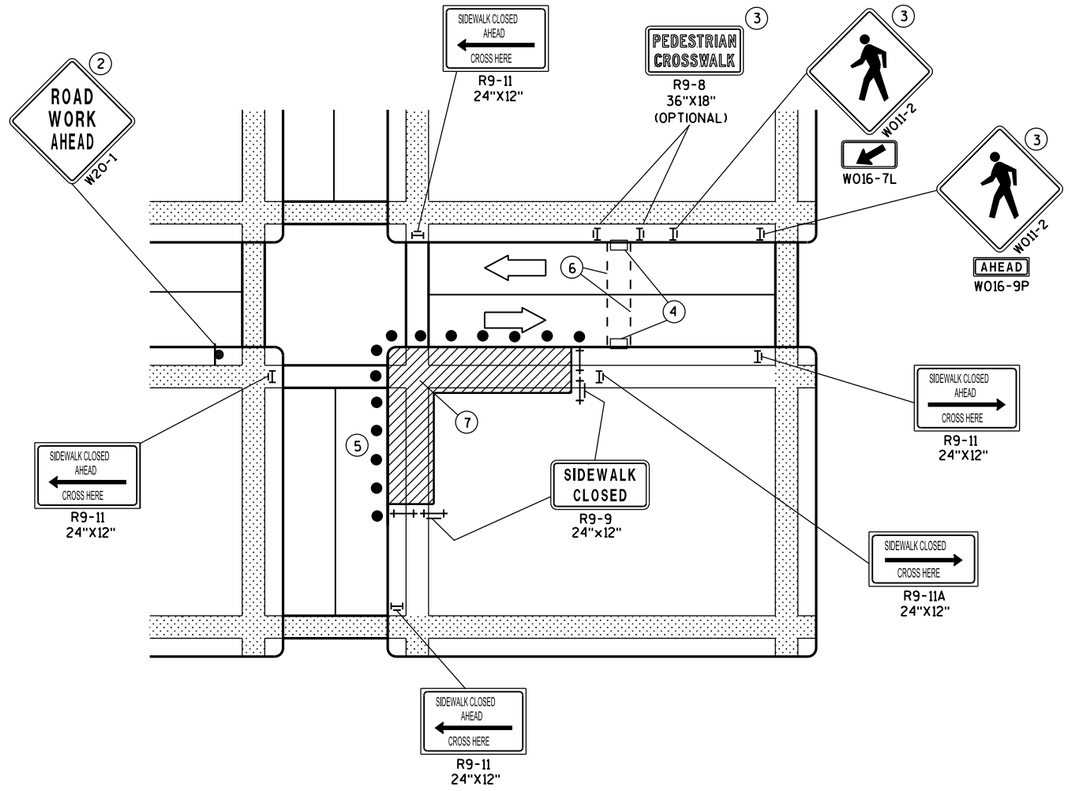
NOTE: LAYOUT SAME AS ABOVE.



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

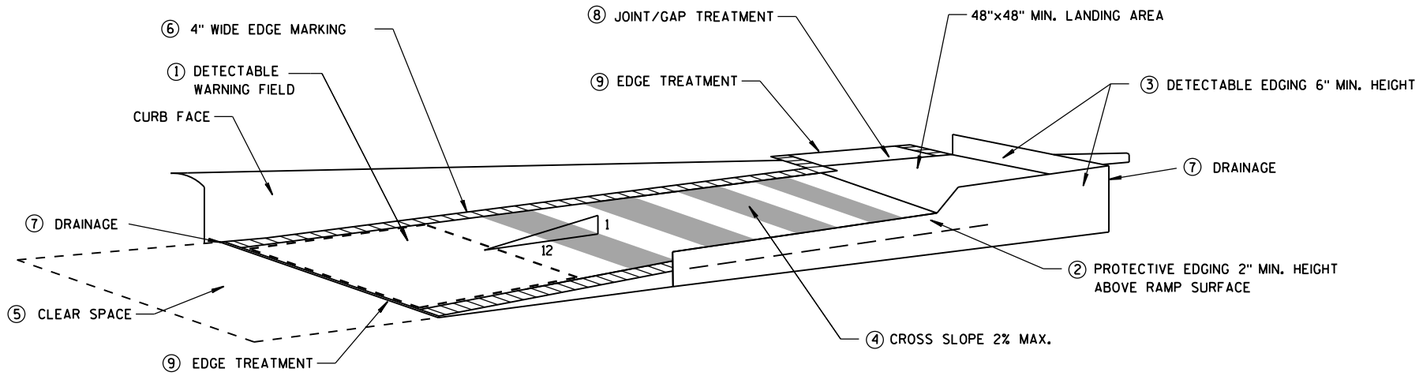
- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- 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.

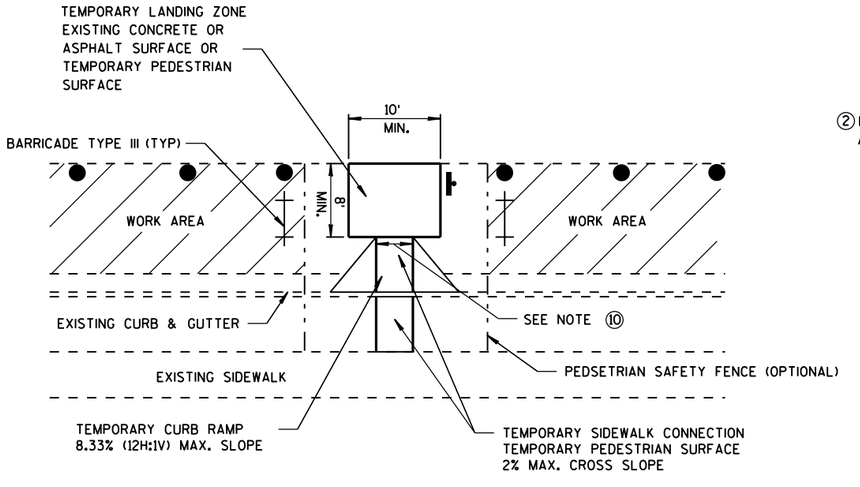
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

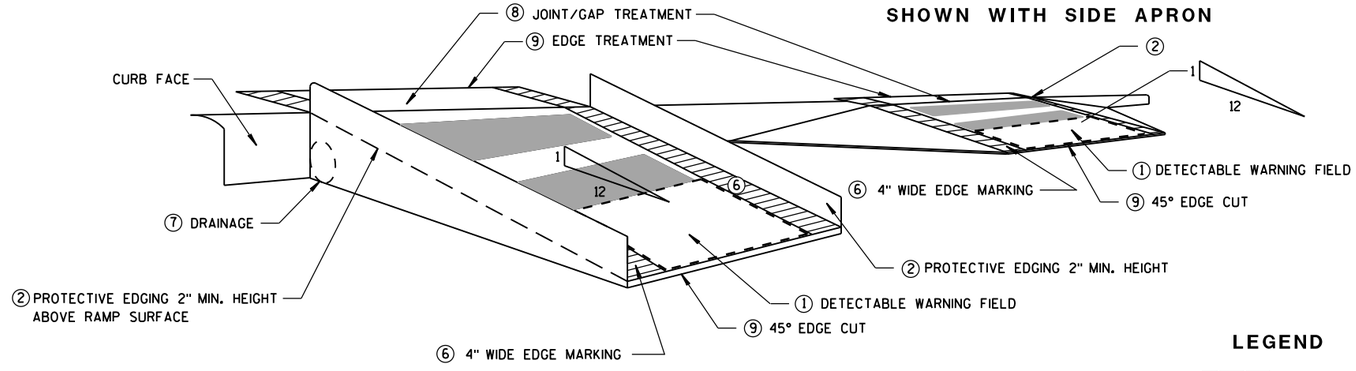
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

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

SHOWN WITH SIDE APRON

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 ZONE SAFETY ENGINEER

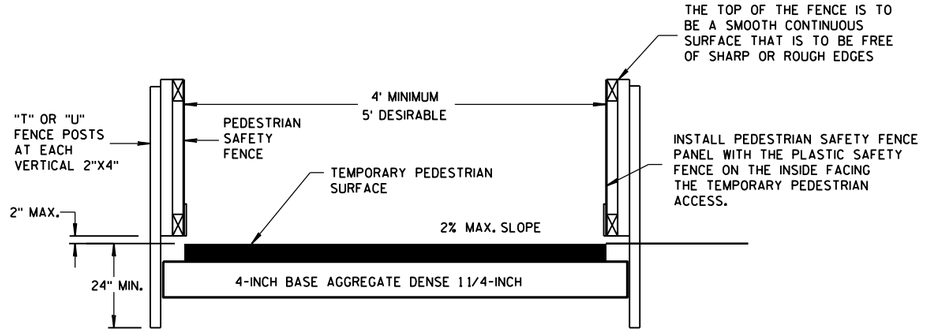
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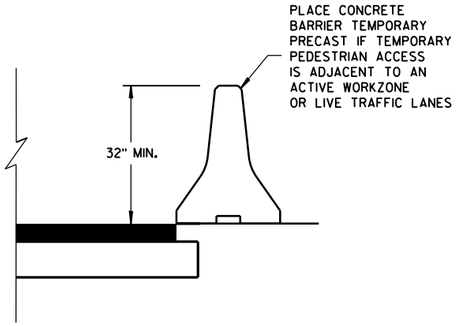
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S.D.D. 15 D 30-3b

6

S.D.D. 15 D 30-3b

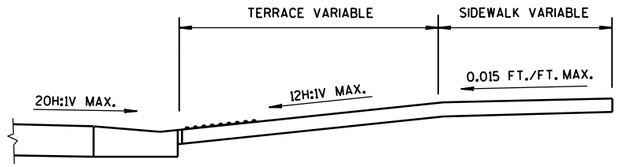




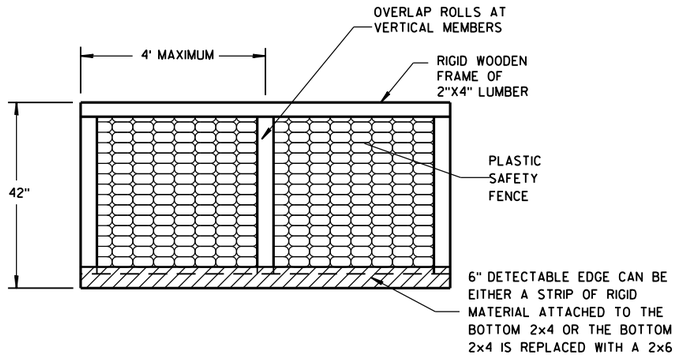
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

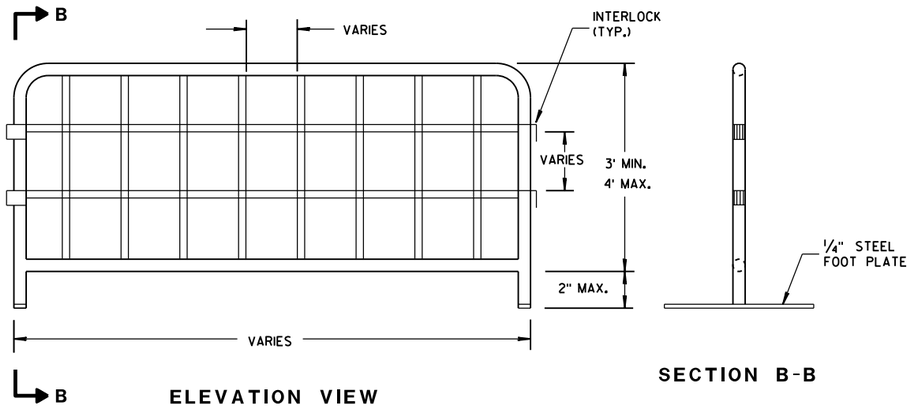
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



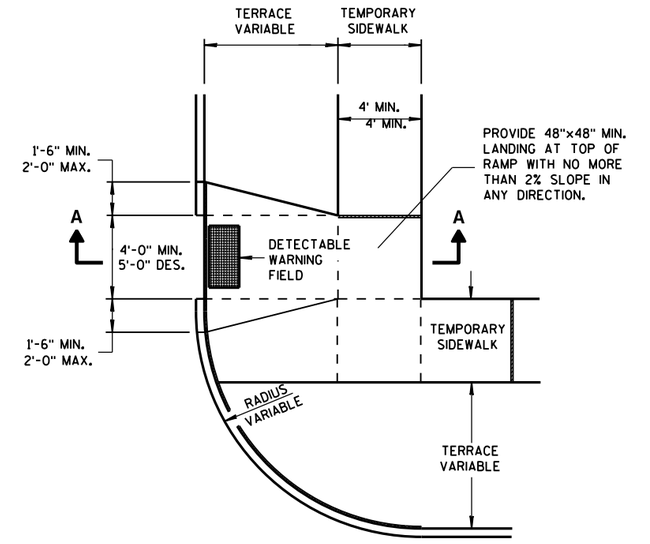
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

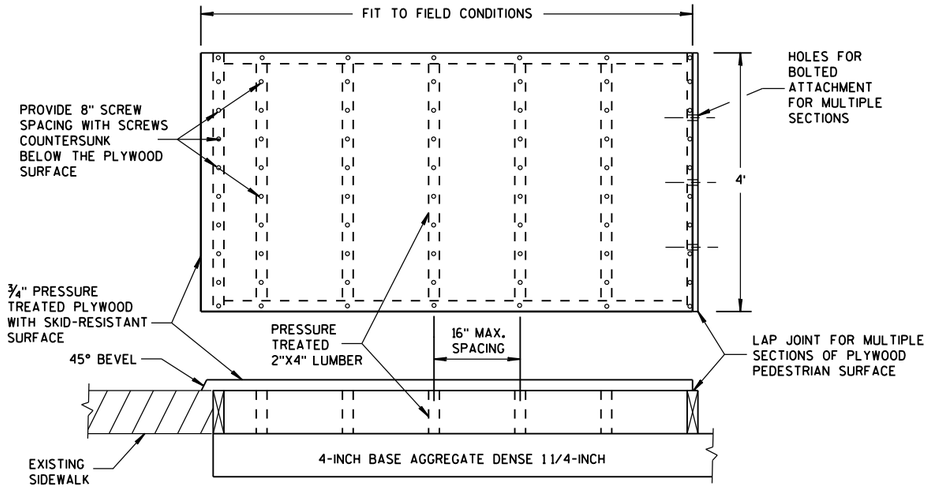
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



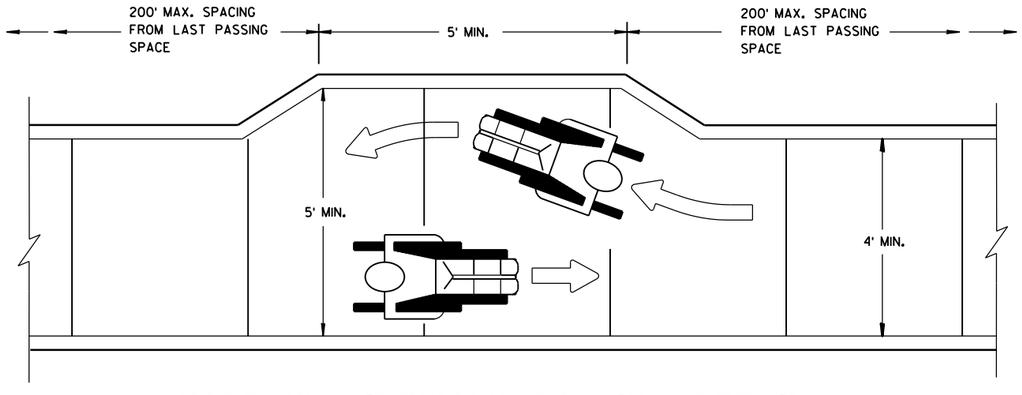
PLAN VIEW

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

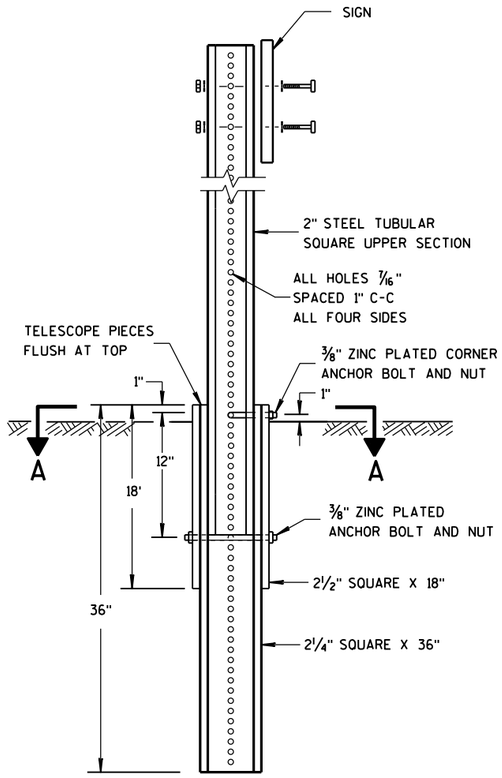
APPROVED
June 2016
DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON IC
SAFETY ENGIN
FHWA

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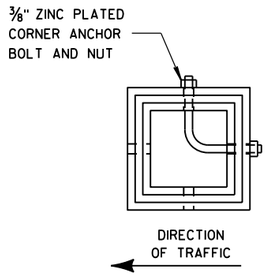
S.D.D. 15 D 30-3c

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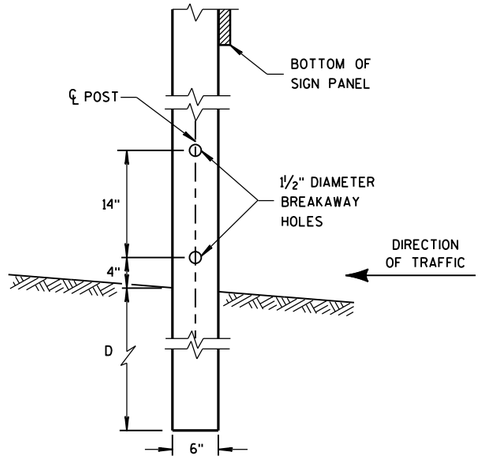
S.D.D. 15 D 30-3c



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



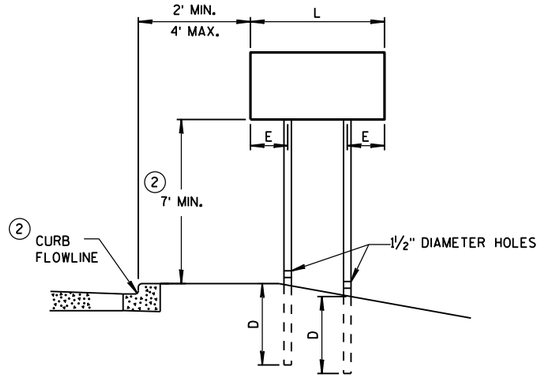
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

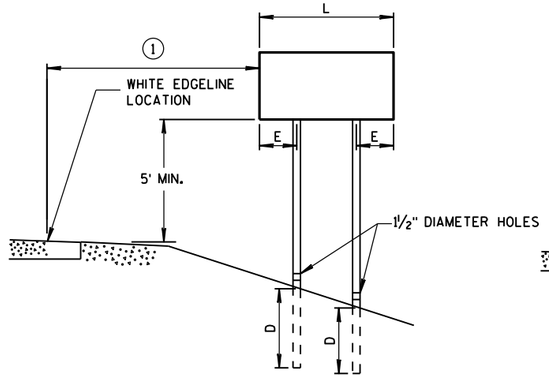
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

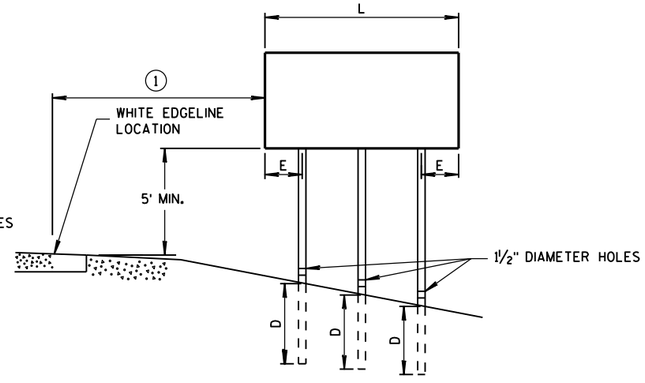
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK 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

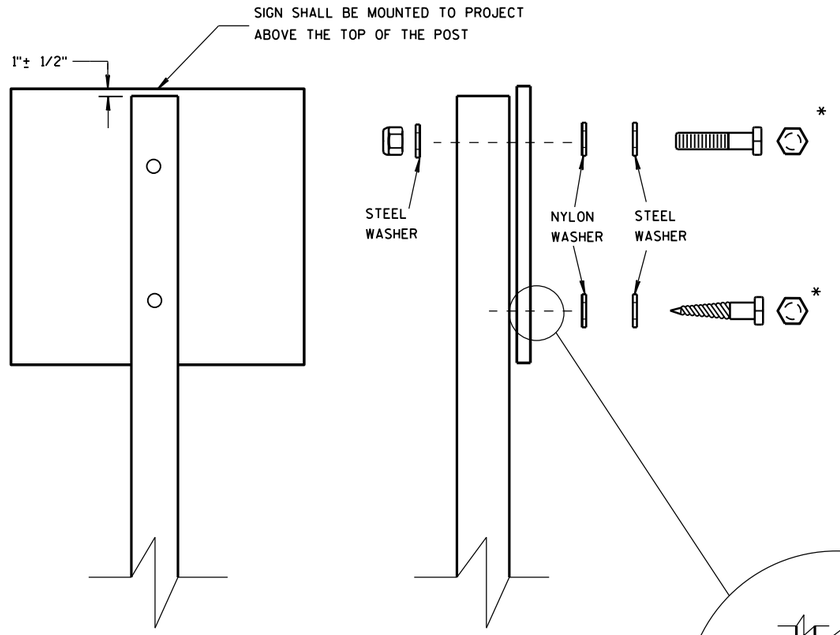
SEE NOTE (3)

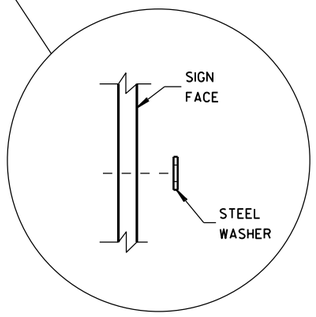
TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

STATE OF WISCONSIN DEPARTMENT OF TRANSPO

6

S.D.D. 15 D 38-1a





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.

6

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S.D.D. 15 D 38-1b

S.D.D. 15 D 38-1b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Feb. 2015
DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

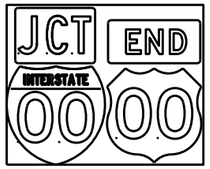
FHWA

SIGN

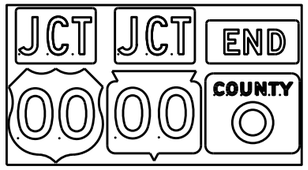
TYPICAL ASSEMBLIES



J1-1



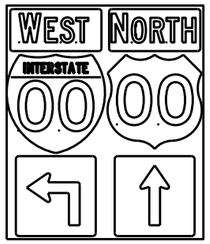
J1-2



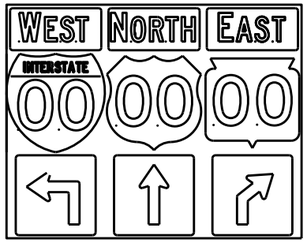
J1-3



J2-1



J2-2

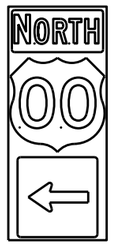


J2-3

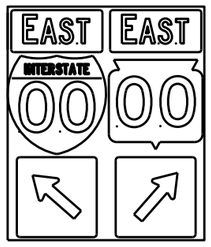


JV

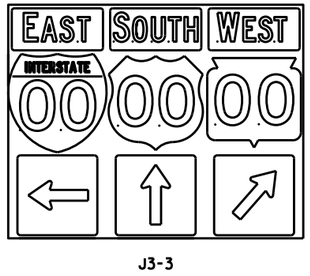
(Typical Vertical J-Assembly
See Note 10 and 11)



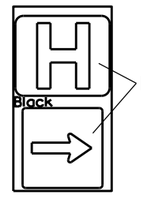
J3-1



J3-2



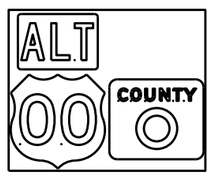
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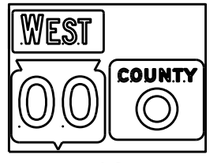
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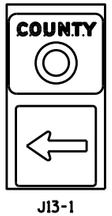
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

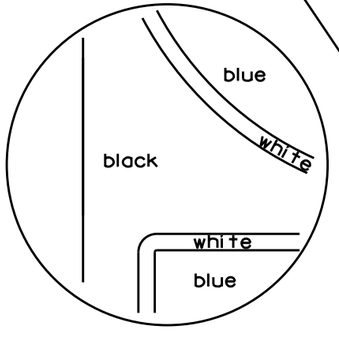


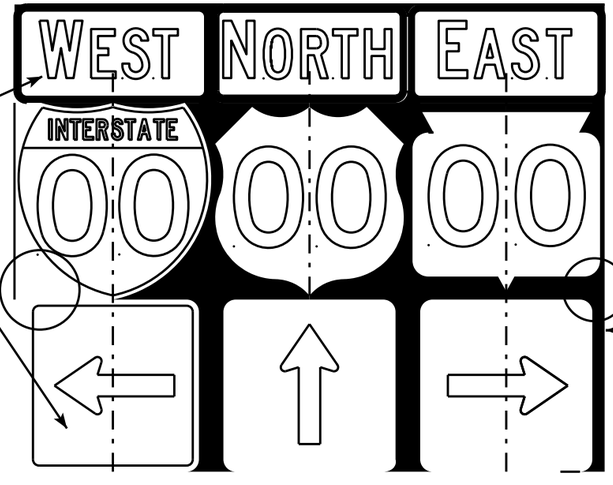
J23-1

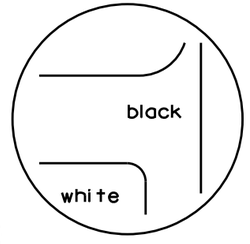


J22-1

[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

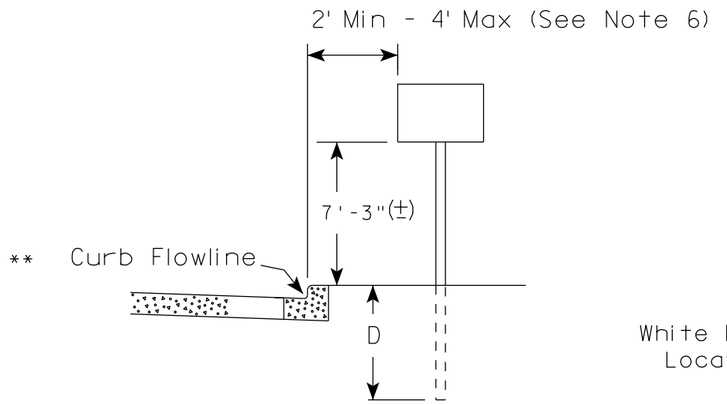
DATE 2/06/14 PL A2-1S.8

PROJECT NO: SHEET NO: E

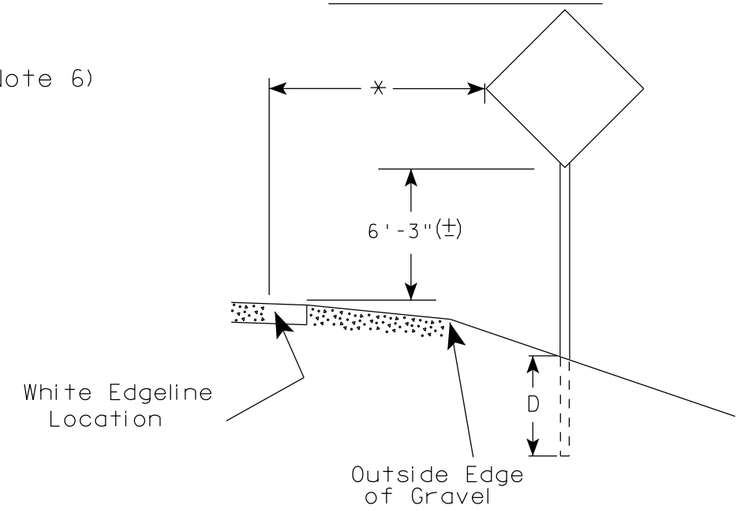
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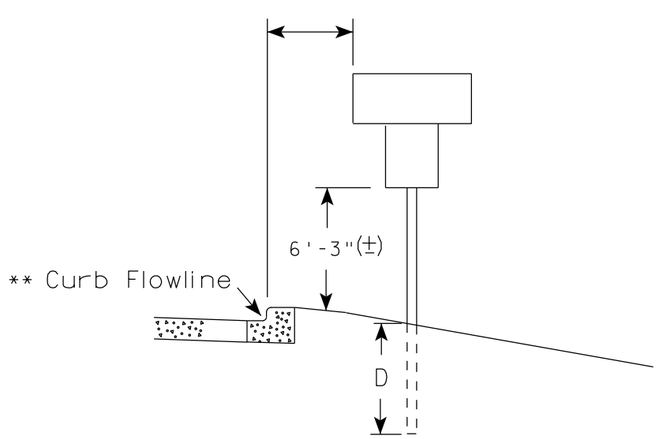
WISDOT/CADDS SHEET 42

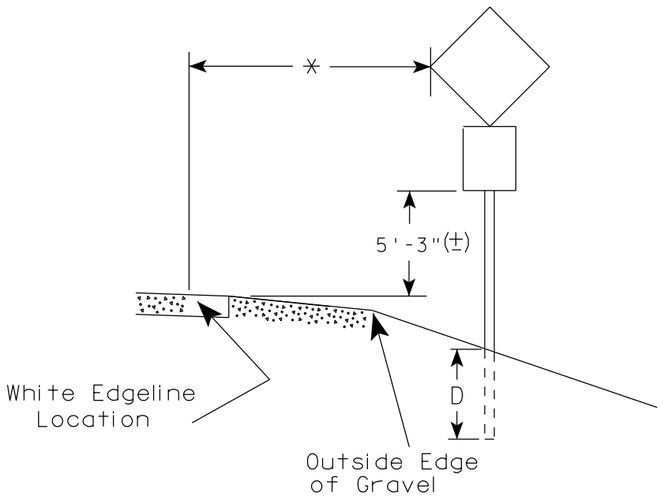
URBAN AREA



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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
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" (±).

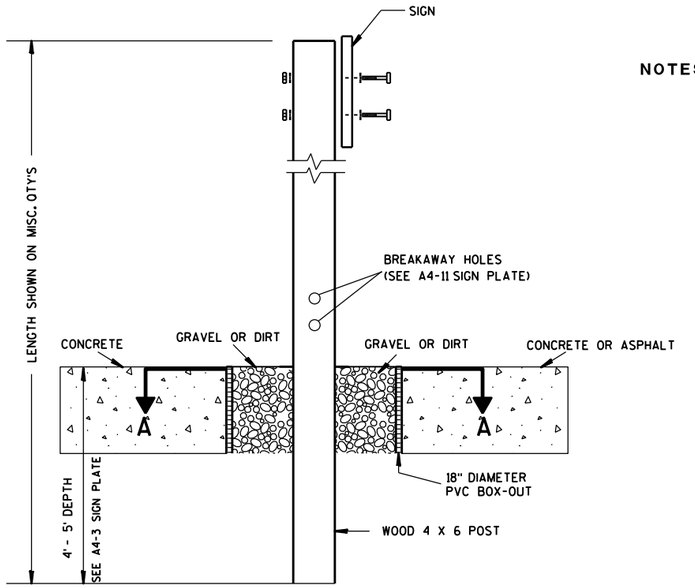
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

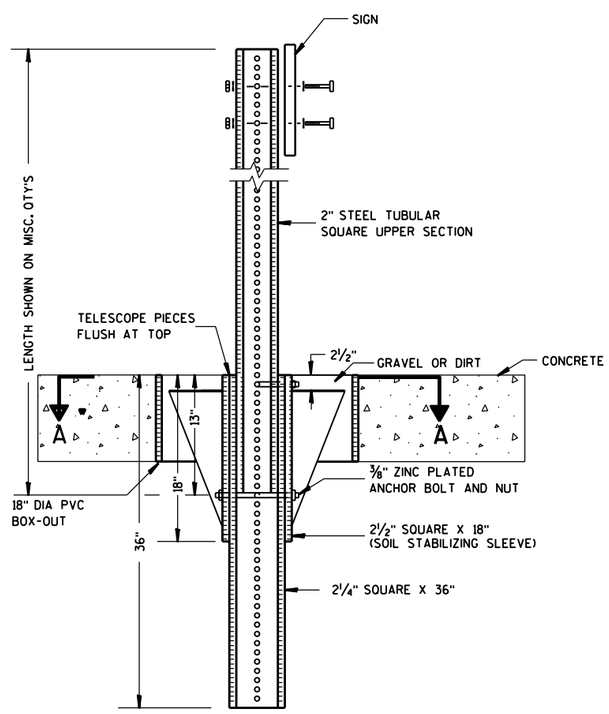
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

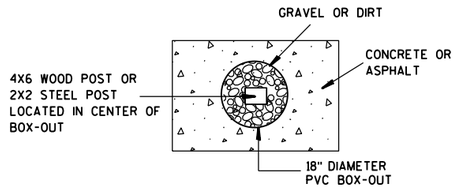
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

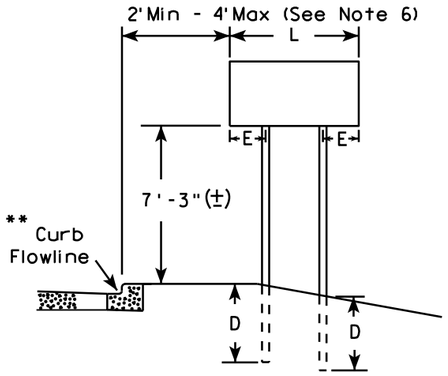
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

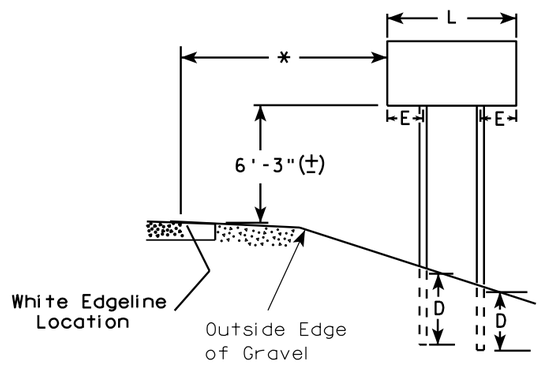
DATE 1/27/14 PLATE NO. A4-3B.1

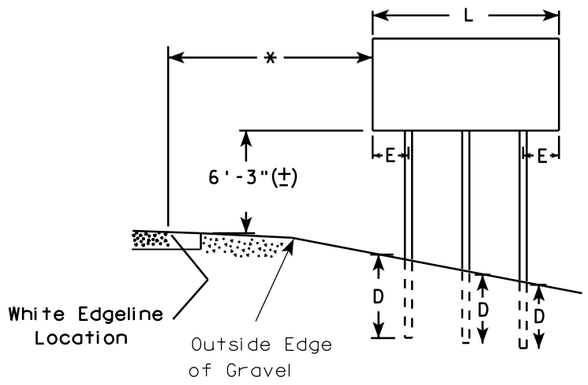
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

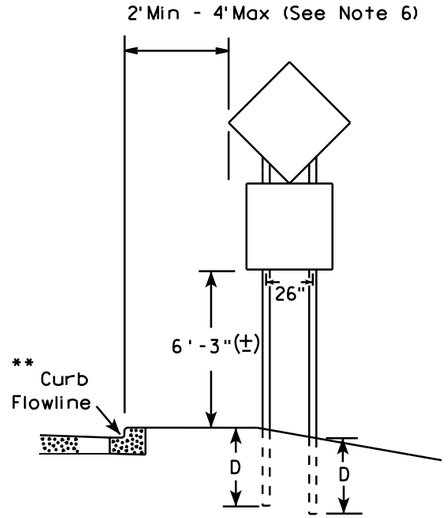
URBAN AREA



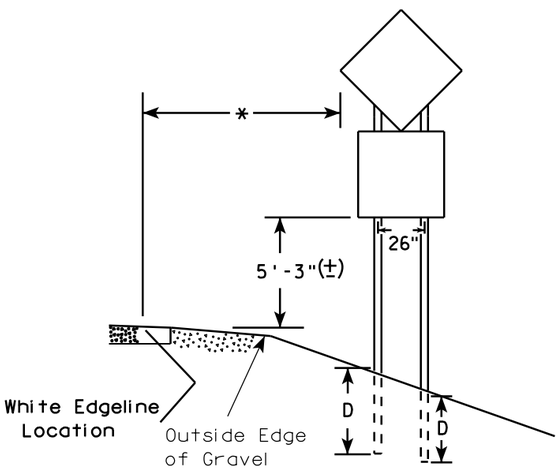
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
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.

***

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

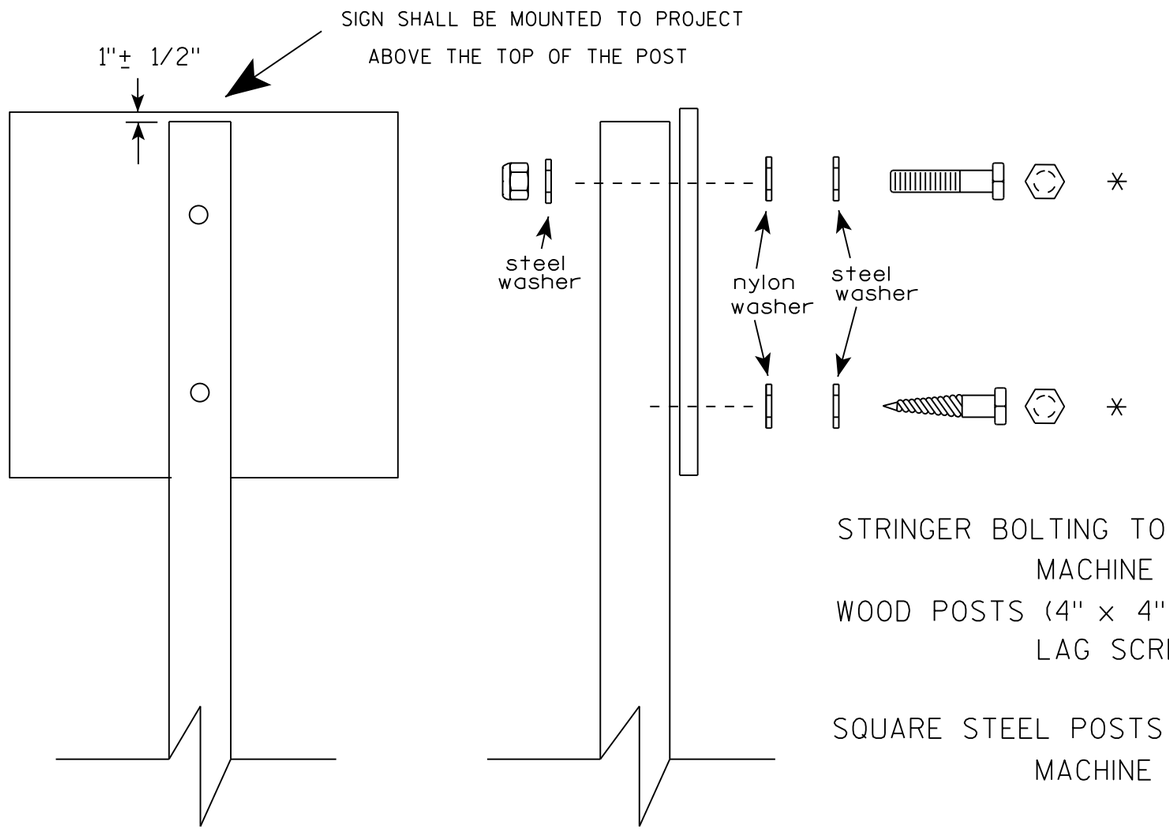
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. AA-4 242 14

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	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

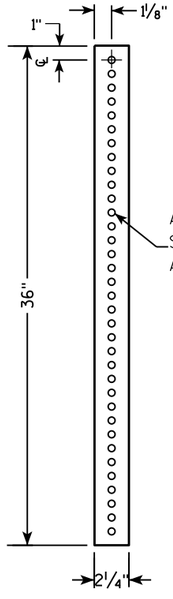
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

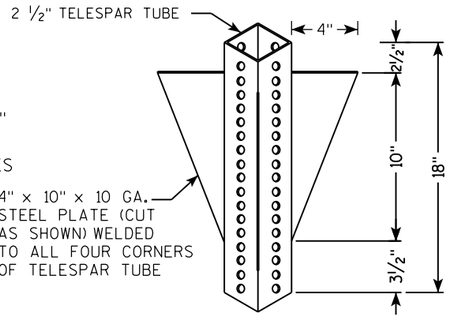
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TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

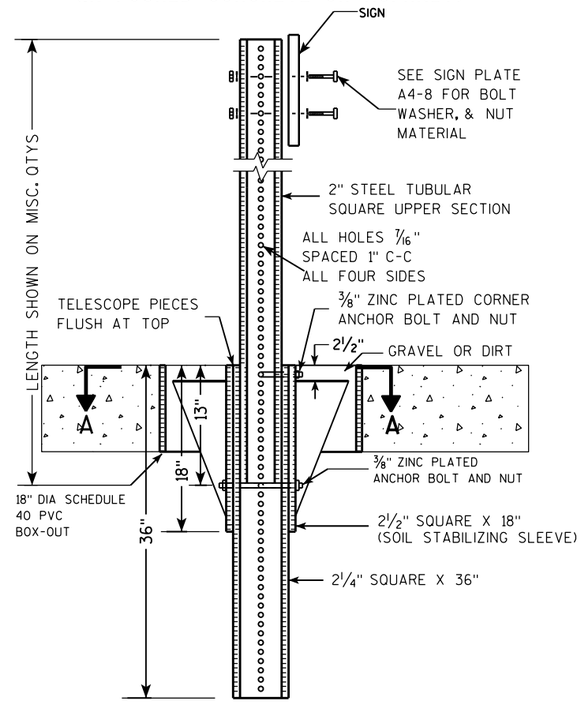
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



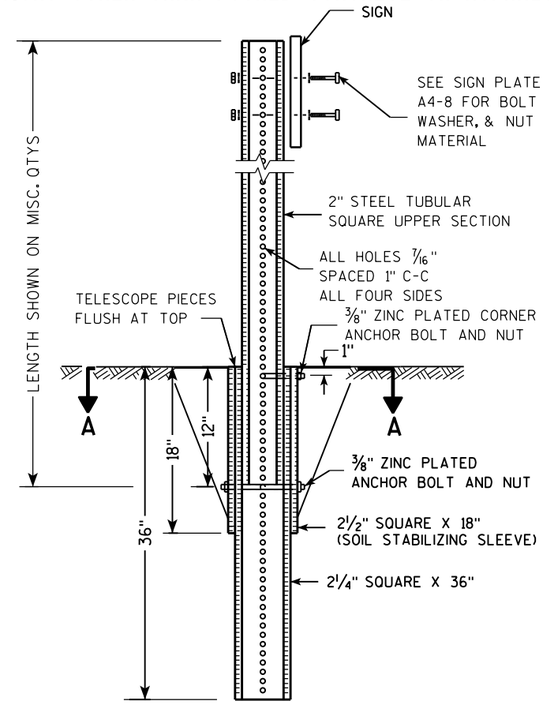
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

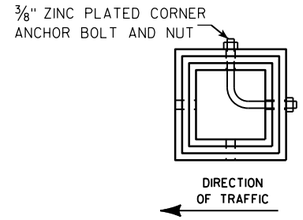


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

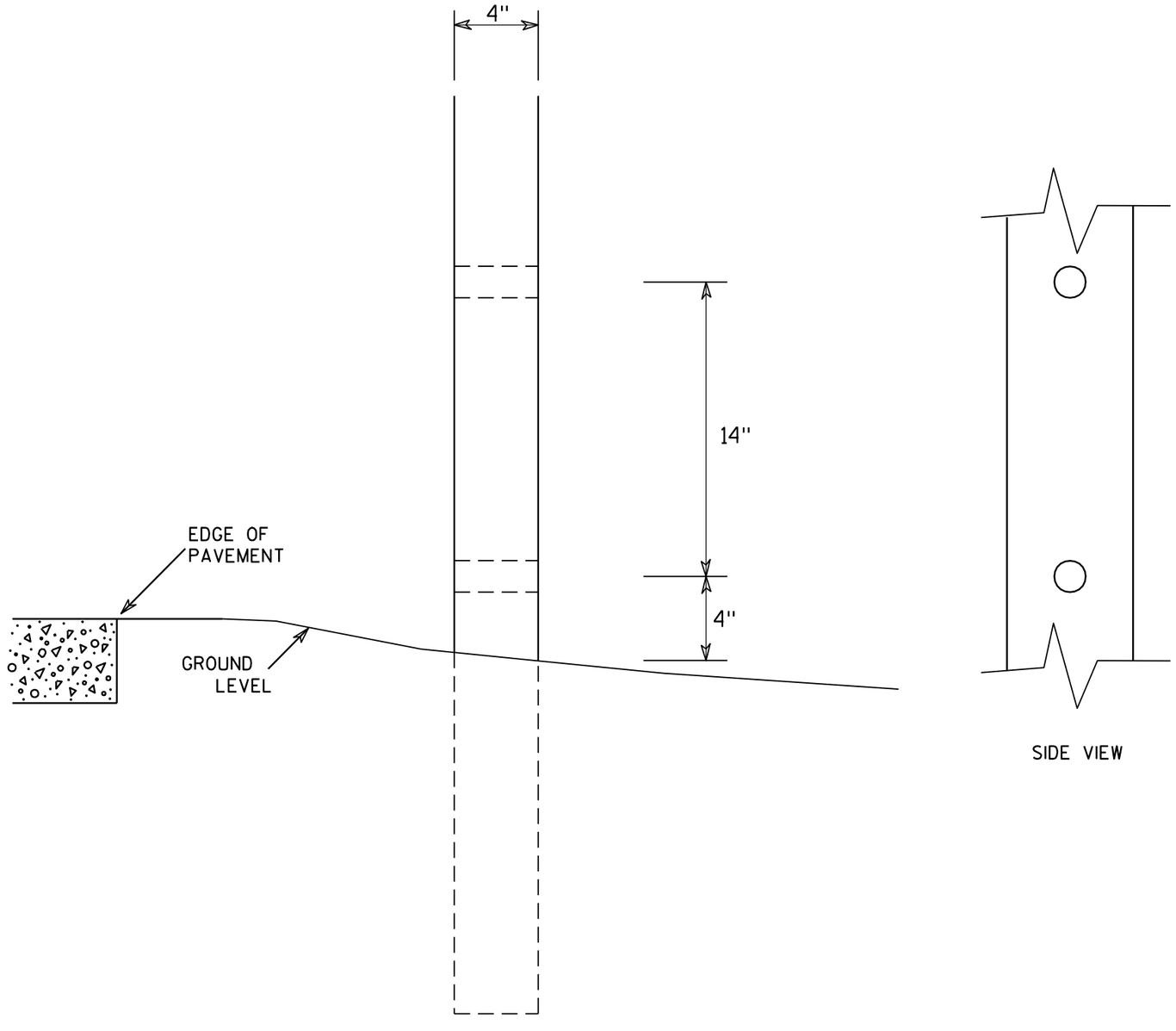
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 244 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

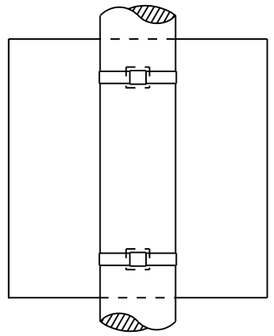
APPROVED Chester J Spang for State Traffic Engineer

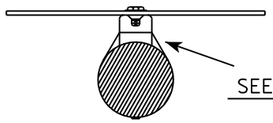
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 245	E

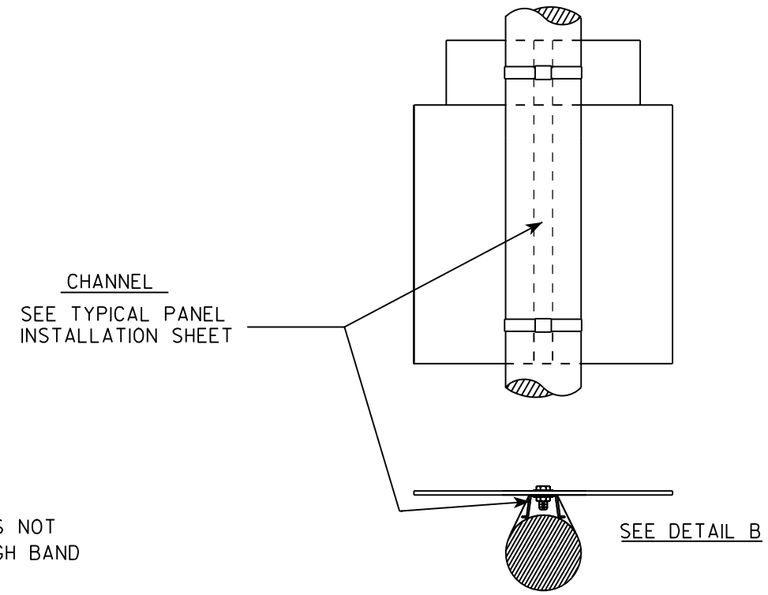
BANDING

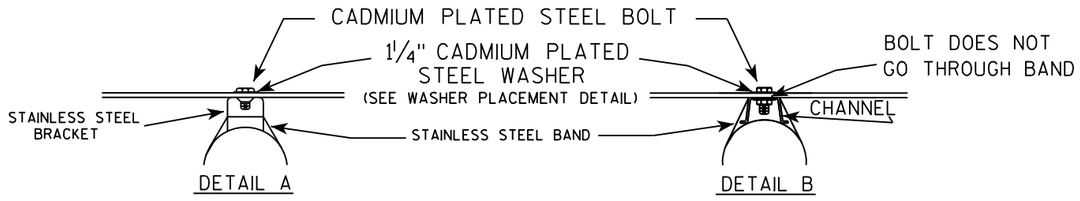
SINGLE SIGN



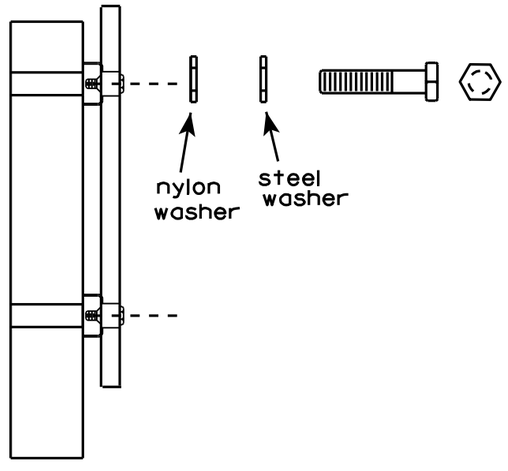


"J" ASSEMBLY





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 3/4" in width and 0.025" thickness.

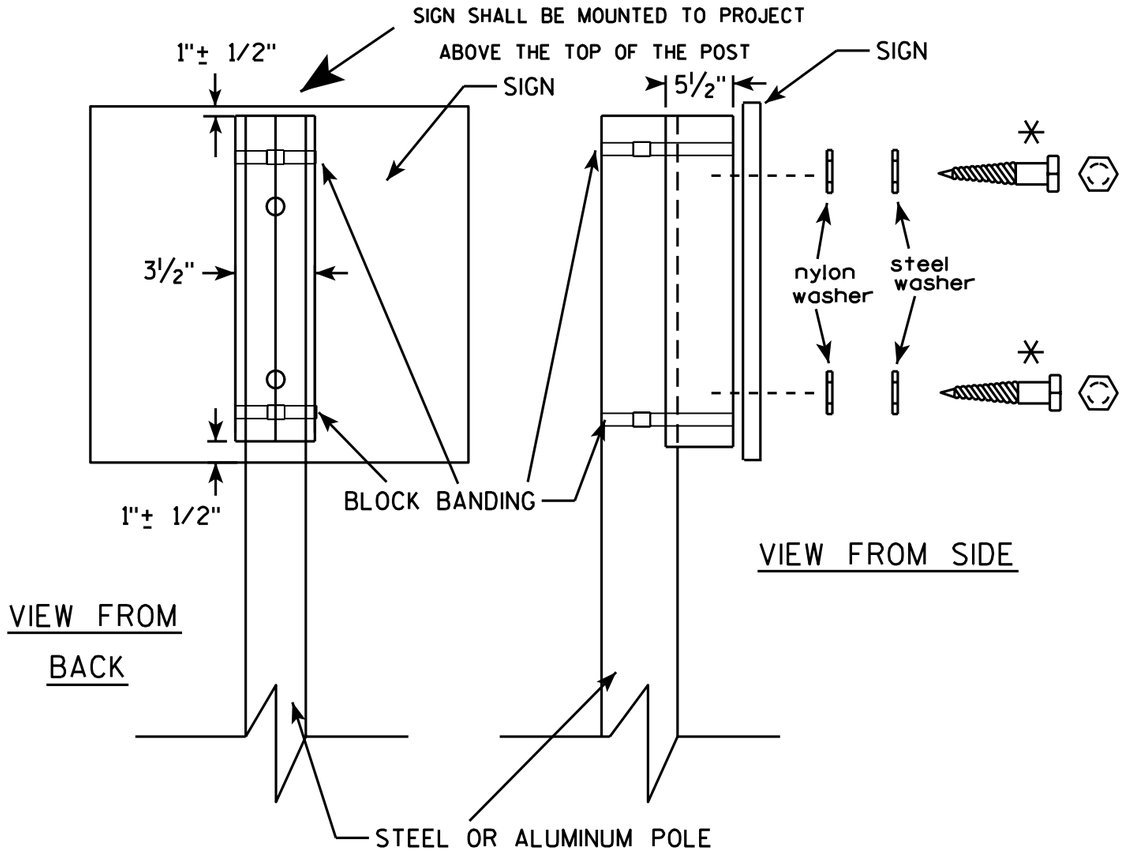
STANDARD SIGN
SIGN BANDING DETAILS

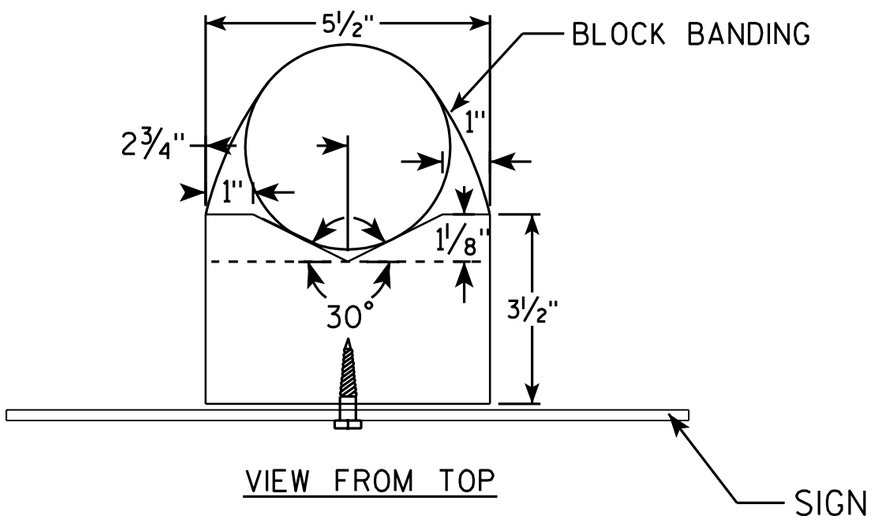
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 246	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)

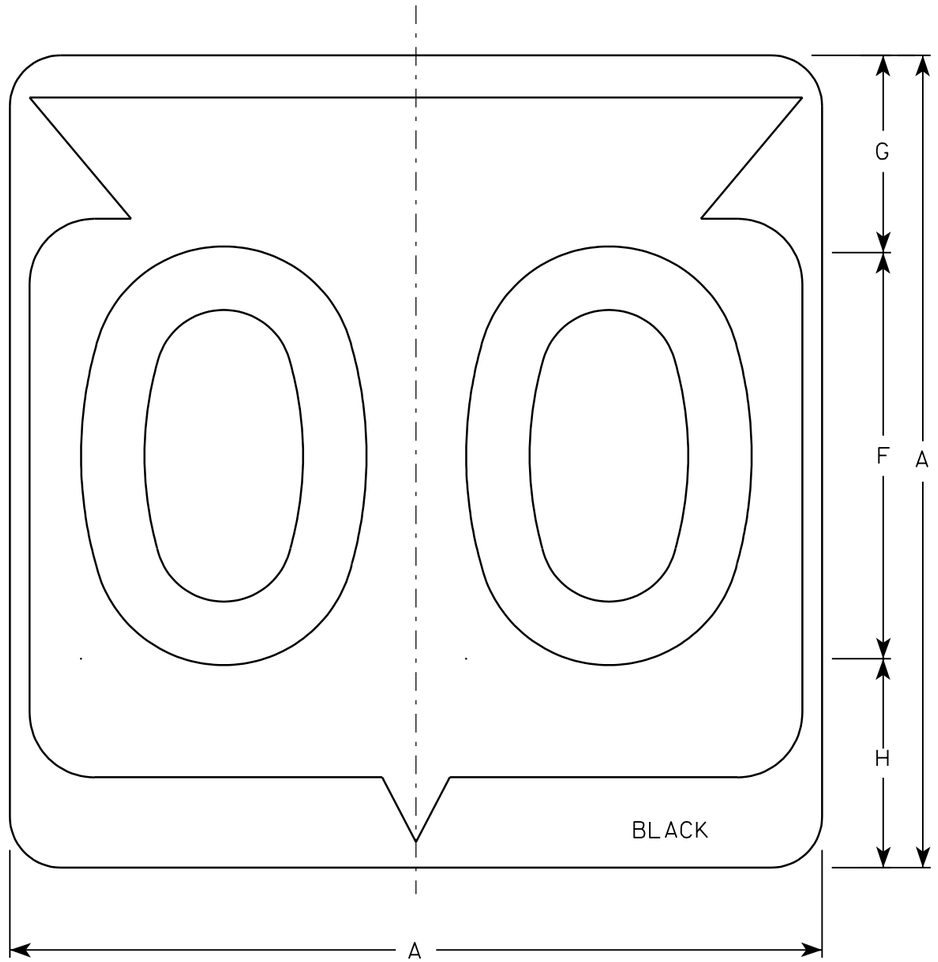
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

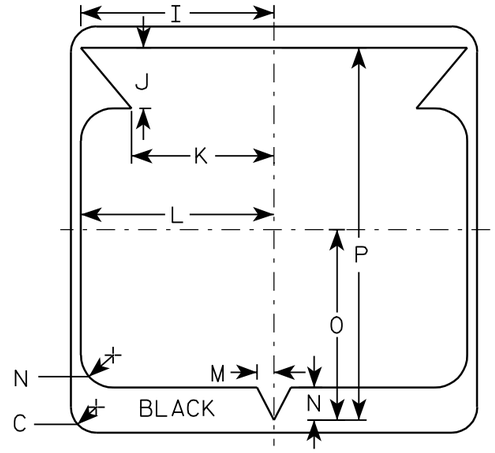
SHEET NO: 247 E



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   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. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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		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	.36
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	.81
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	.81
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	.81

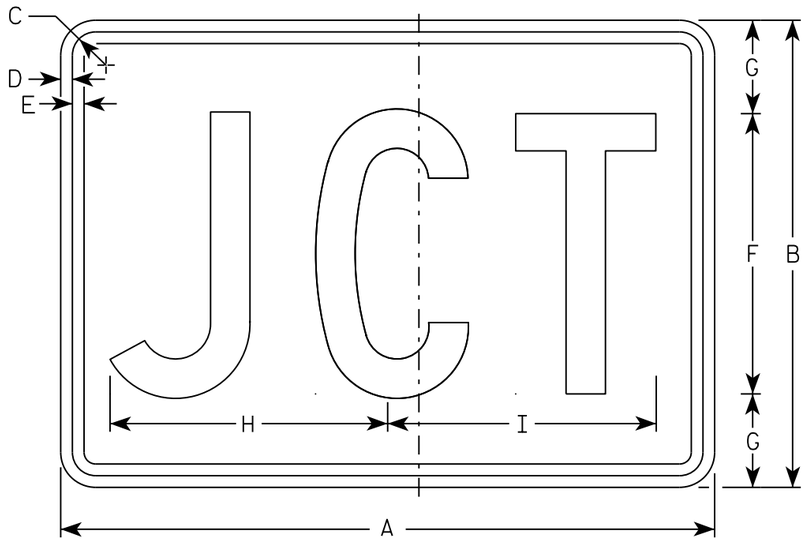
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

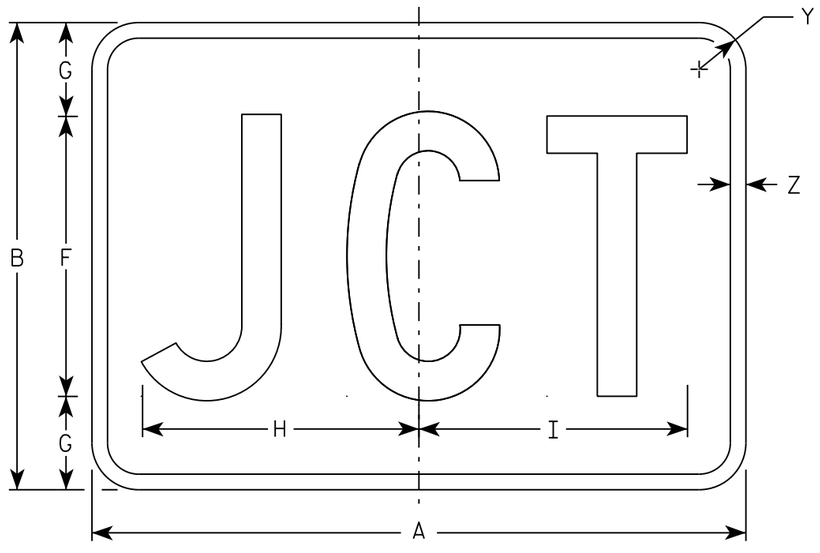
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 248	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

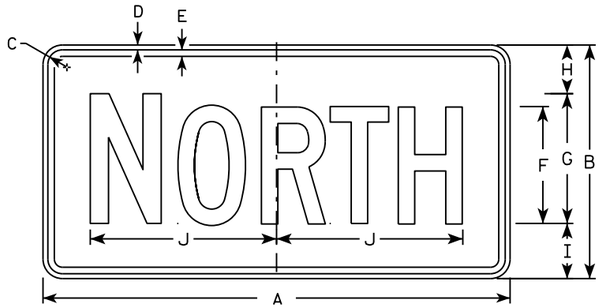
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

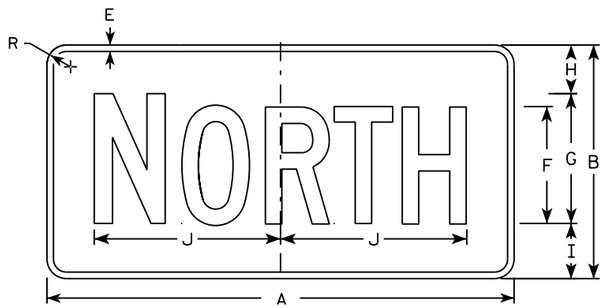
DATE 10/15/15 PLATE 249 12-1.12

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



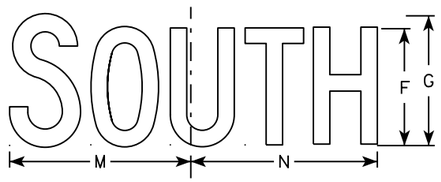
MB3-1
MK3-1
MN3-1



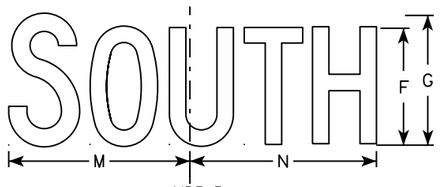
M3-2
MM3-2
MP3-2



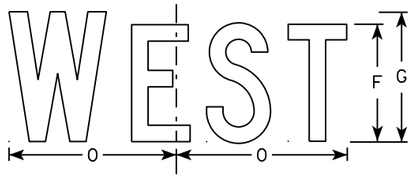
MB3-2
MK3-2
MN3-2



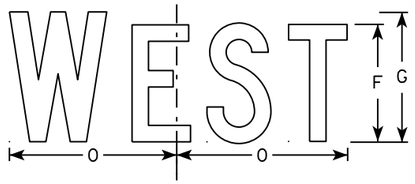
M3-3
MM3-3
MP3-3



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

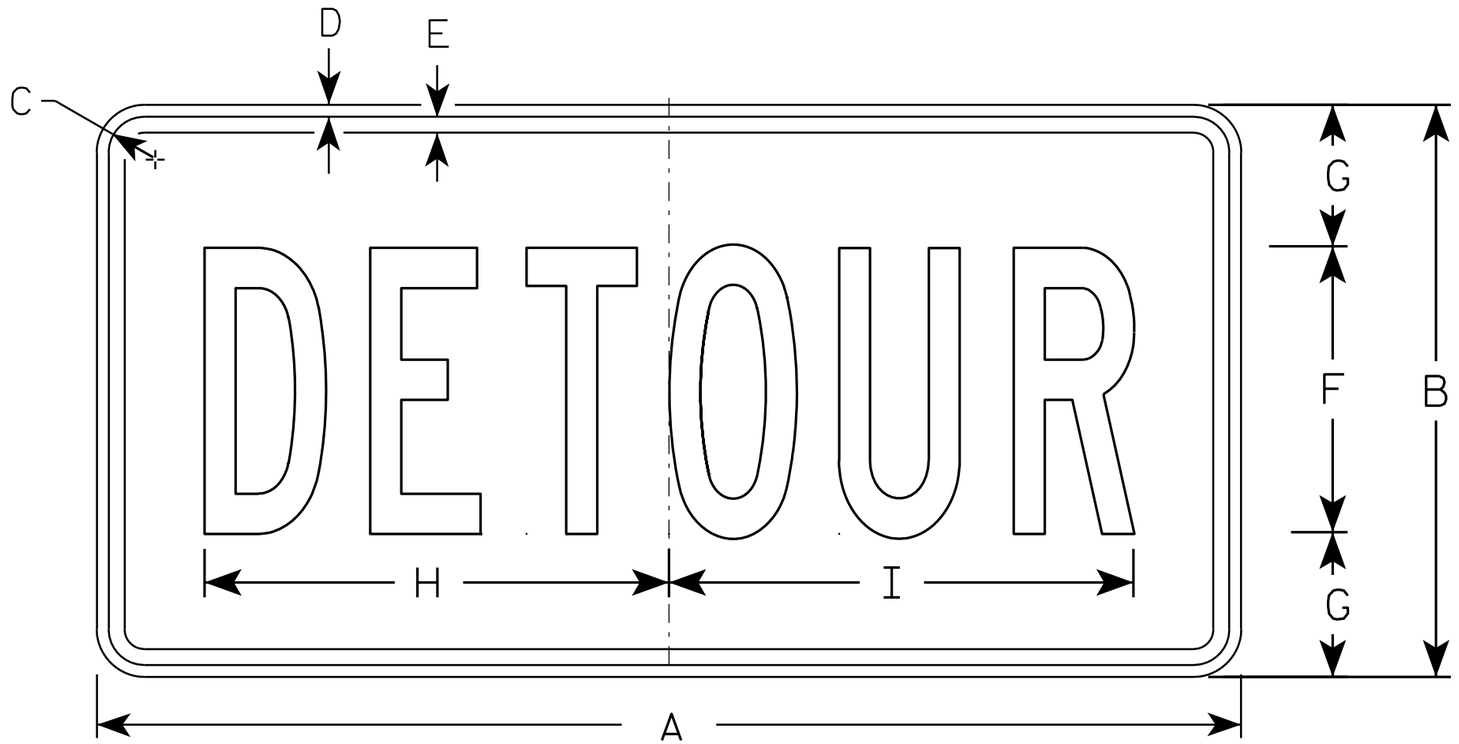
WISCONSIN DEPT OF TRANSPORTATION

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																											

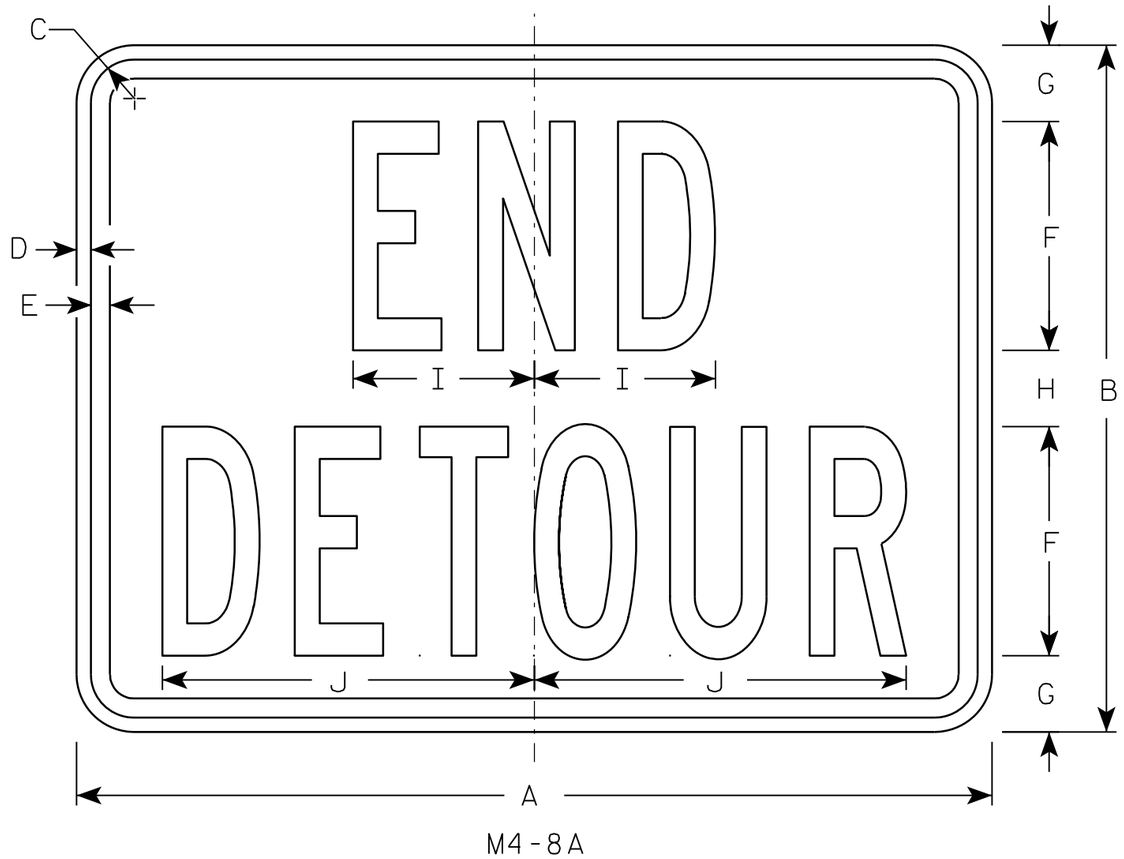
STANDARD SIGN
M4-8

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: 251	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																											

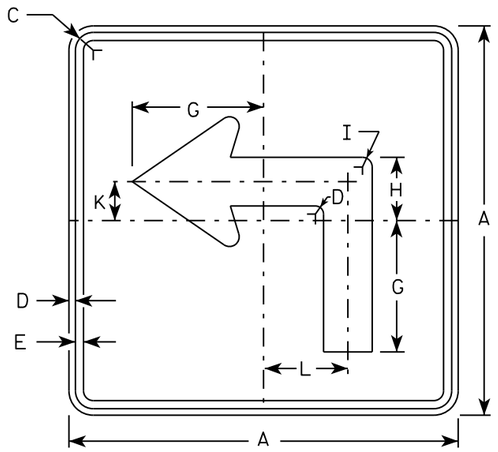
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

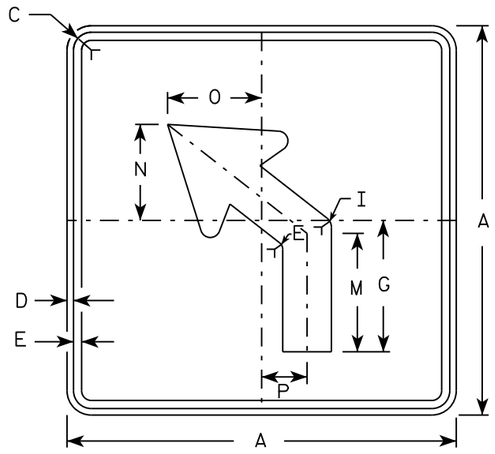
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

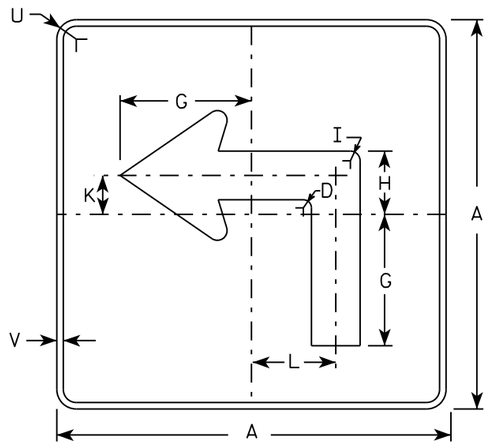
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 252	E



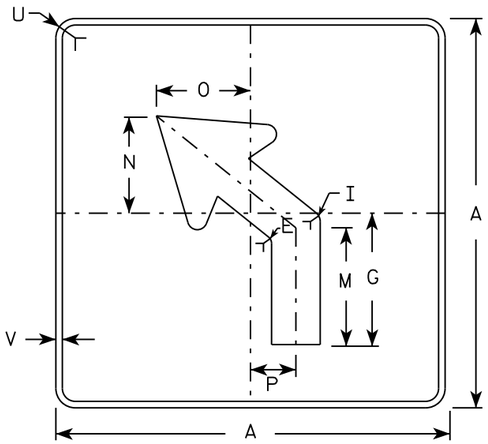
M5-1L
MM5-1L
MO5-1L
MP5-1L



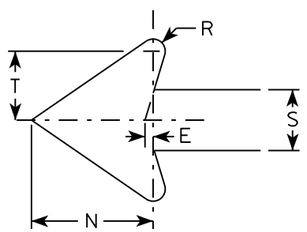
M5-2L
MM5-2L
MO5-2L
MP5-2L



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

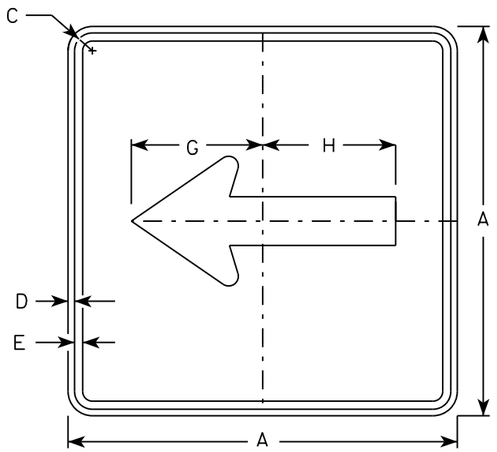
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

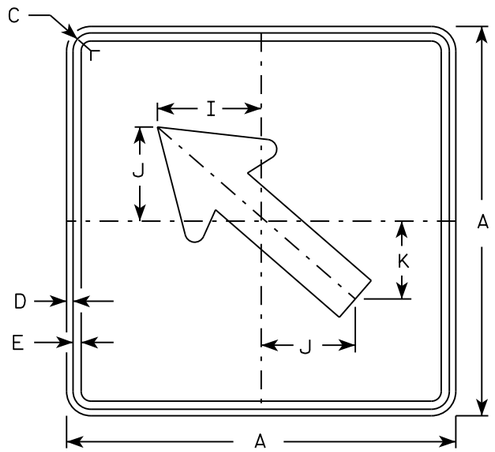
DATE 10/15/15 PLATE NO. M5-1.13

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



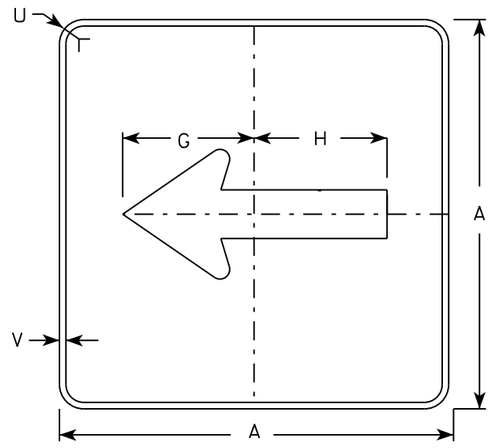
M6-1
MM6-1
MO6-1
MP6-1



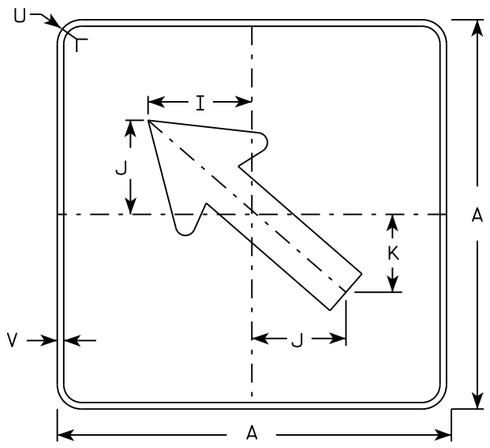
M6-2
MM6-2
MO6-2
MP6-2

NOTES

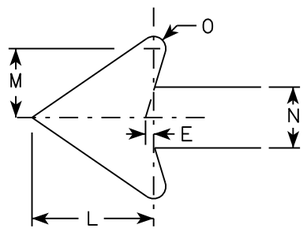
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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

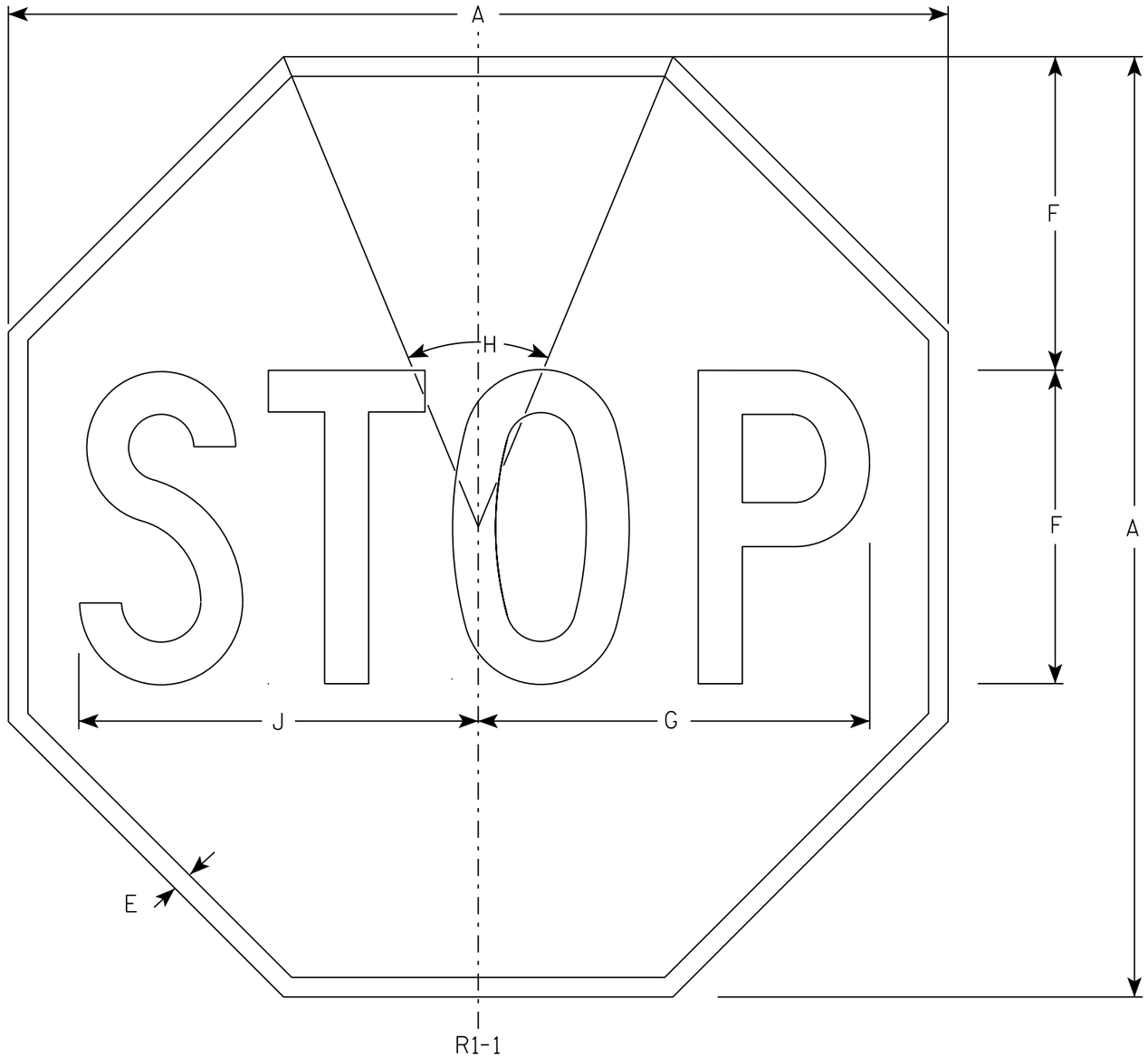
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 254 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



R1-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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

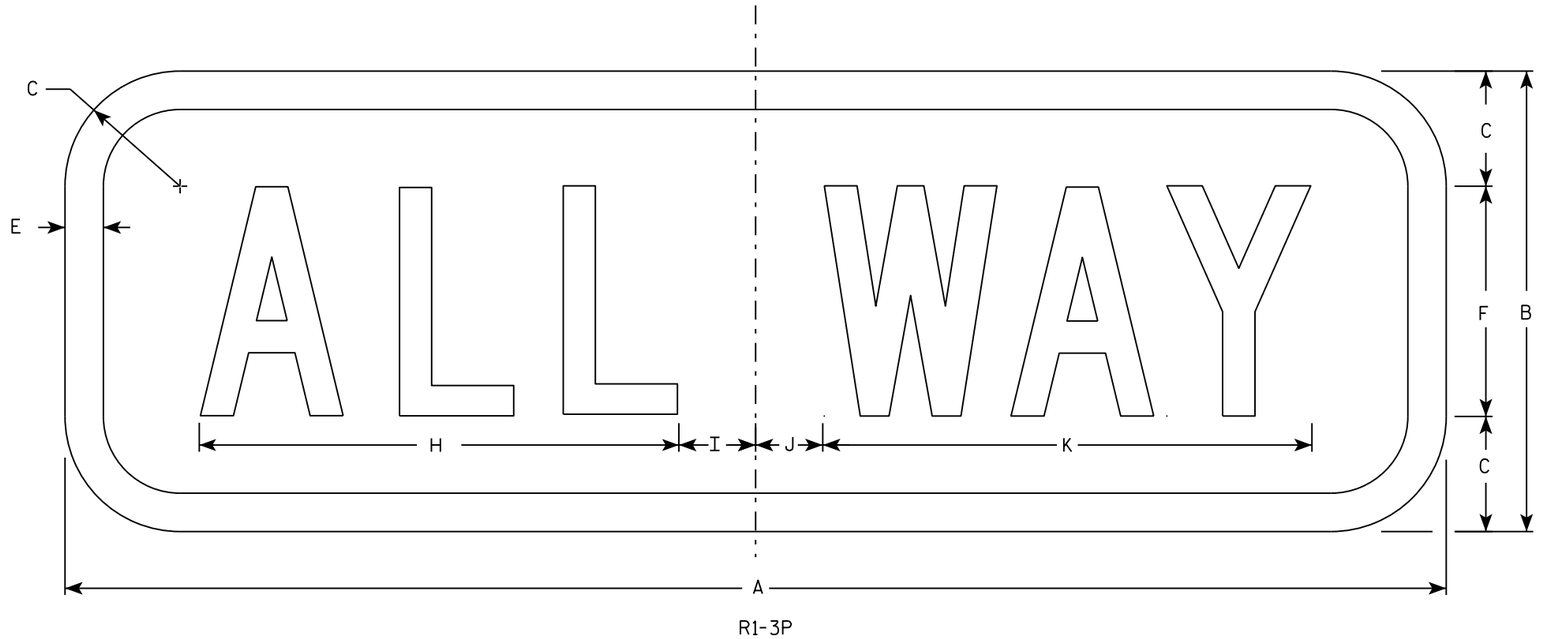
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE 255 R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000



R1-3P

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. For 30"x30" R1-1 use 18"x6" R1-3P sign
   For 36"x36" R1-1 use 24"x9" R1-3P sign
   For 48"x48" R1-1 use 30"x12" R1-3P sign

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	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																0.75
2S	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																1.5
2M	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
3	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
4	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5
5	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5

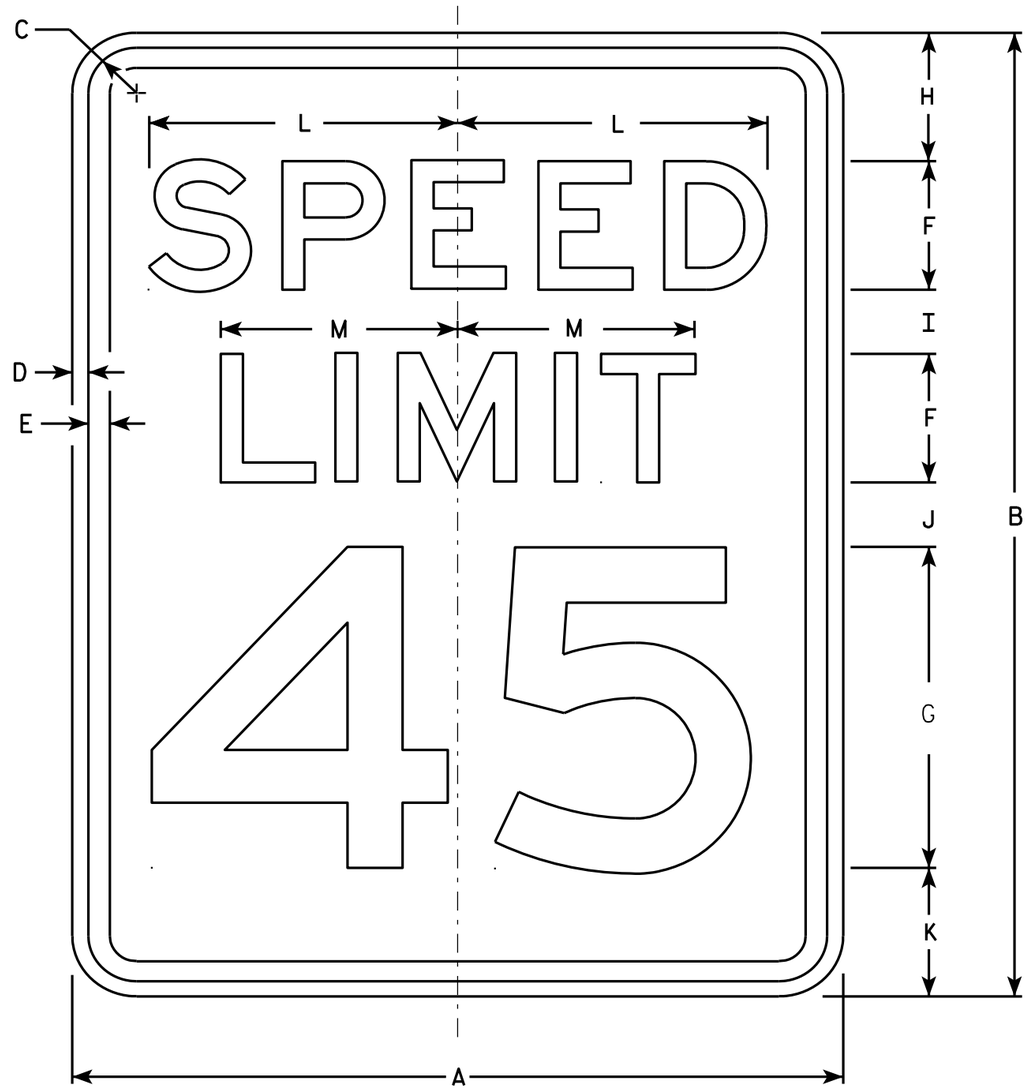
STANDARD SIGN
R1-3P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R1-3P.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 256	E



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

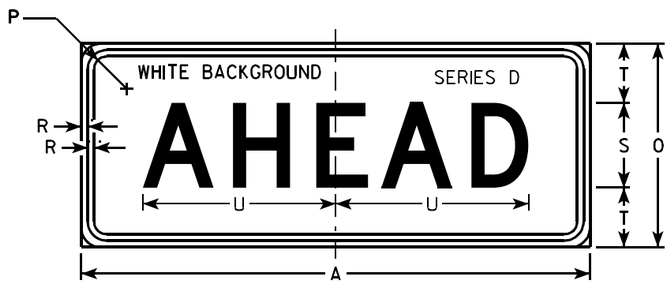
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 257	E



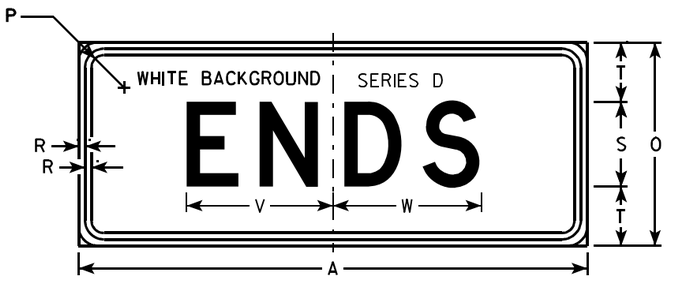
R3-17

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - AS SHOWN
   Message - BLACK
3. Message Series - C or as noted on the Signs.
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.



R3-17ap



R3-17bp

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	R3-17 Area sq. ft.	R3-17ap Area sq. ft.	R3-17bp Area sq. ft.
1																													
2S	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
2M	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
3																													
4																													
5																													

STANDARD SIGN
R3-17 & R3-17a&bp

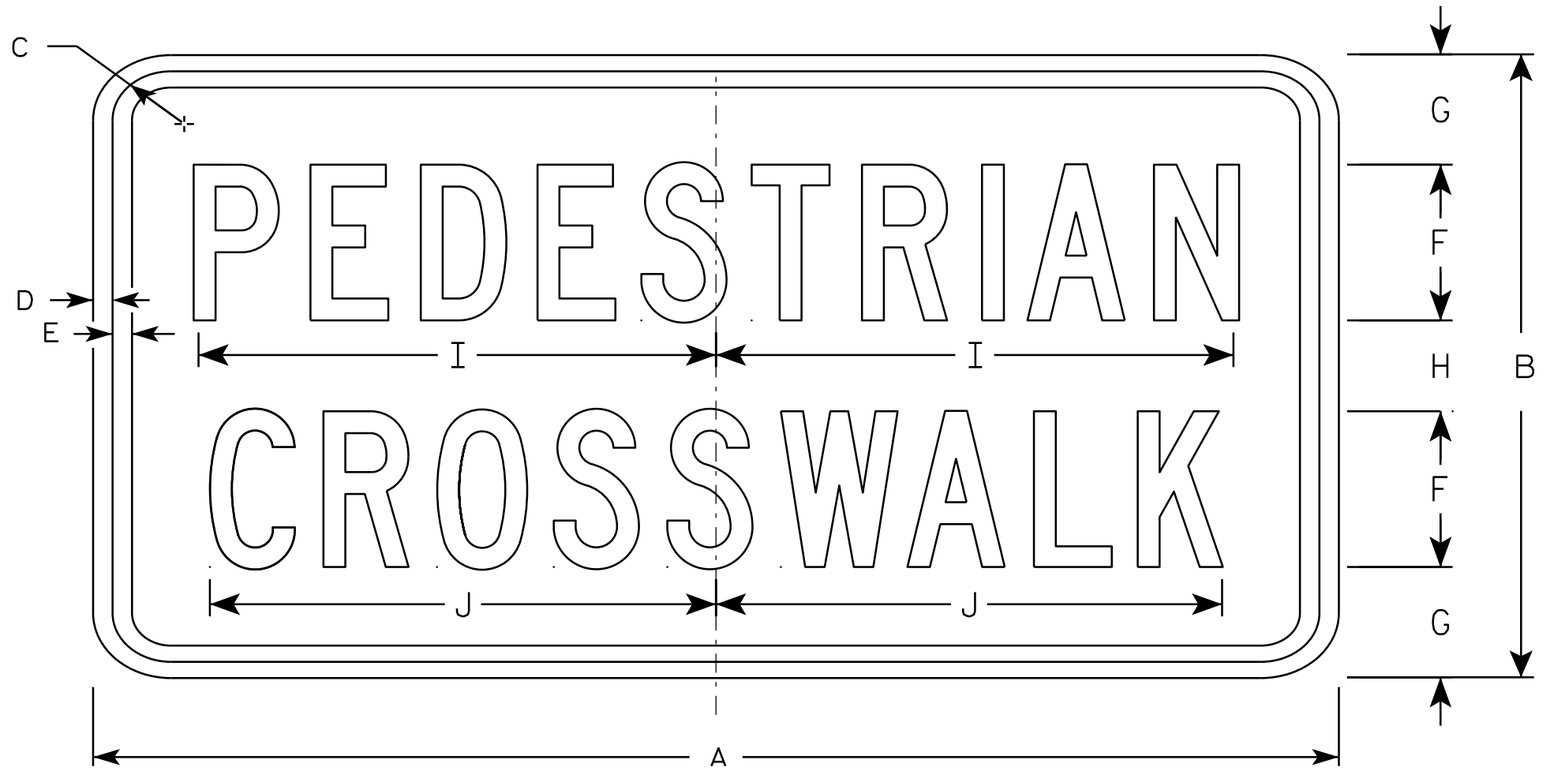
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/12/2011 PLATE NO. R3-17.2

PROJECT NO:

SHEET NO: 258 E



R9-8

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	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	9 3/4																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	9 3/4																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	13	13																	3.75
4																											
5																											

STANDARD SIGN
R9-8

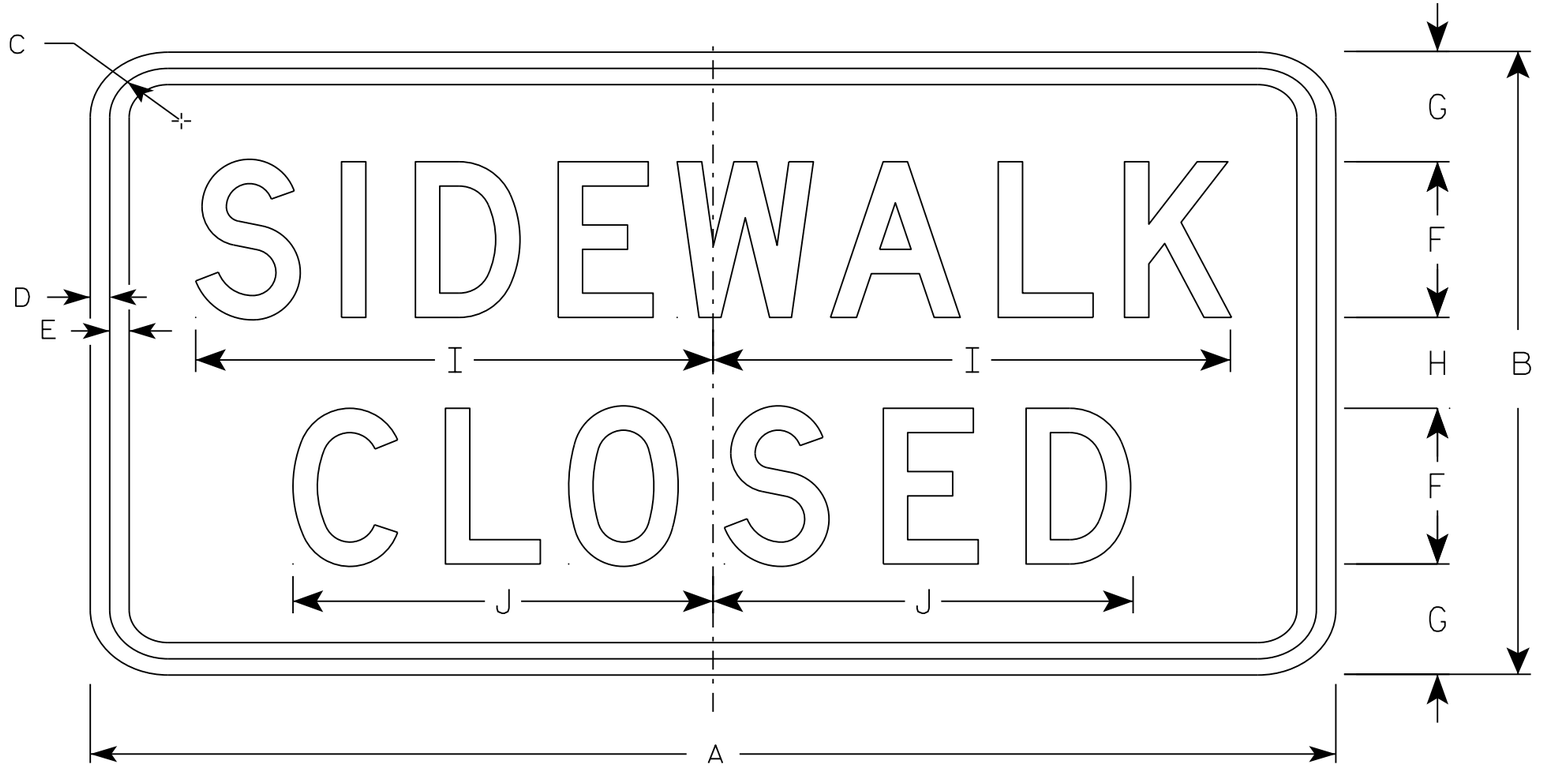
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/17/16 PLATE 259 R9-8.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R98.DGN PLOT DATE : 17-MAR-2016 15:06 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 2.918761:1.000000
WISDOT/CADDS SHEET 42



R9-9

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. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

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	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

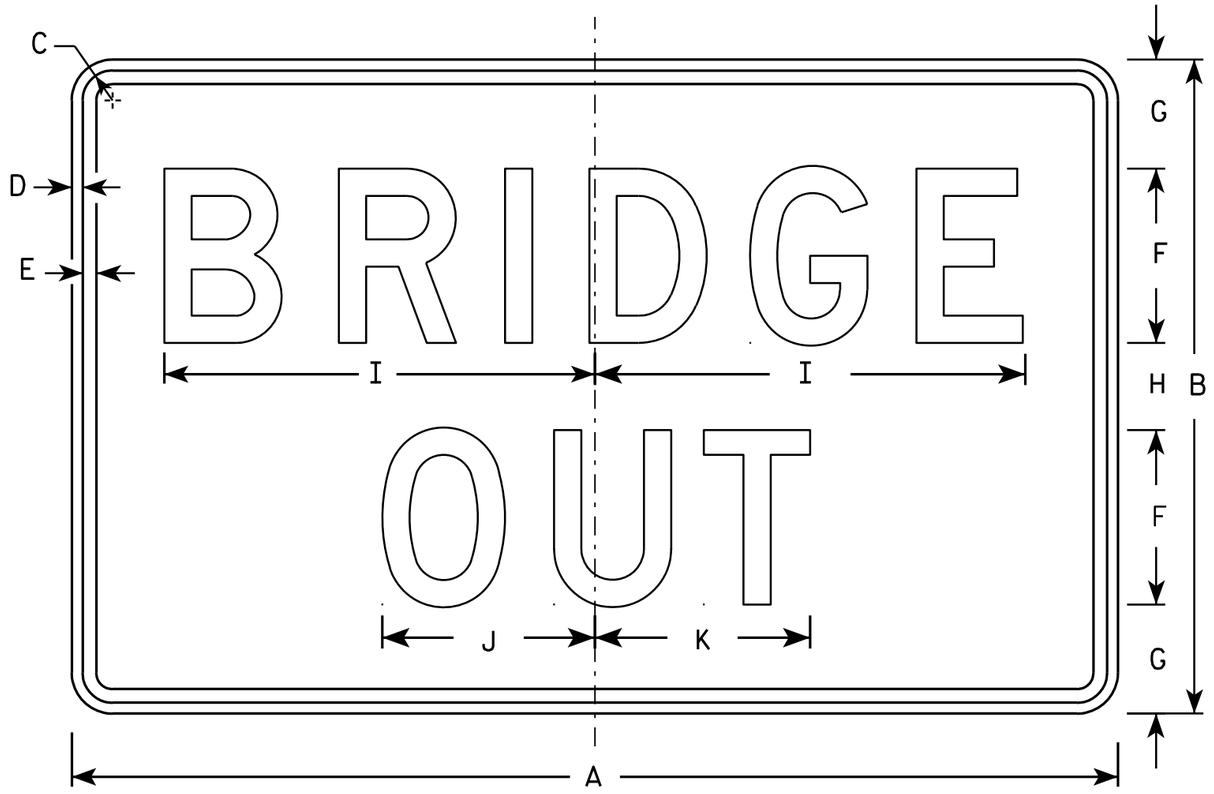
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 260 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R11-2B

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	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

STANDARD SIGN
R11-2B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

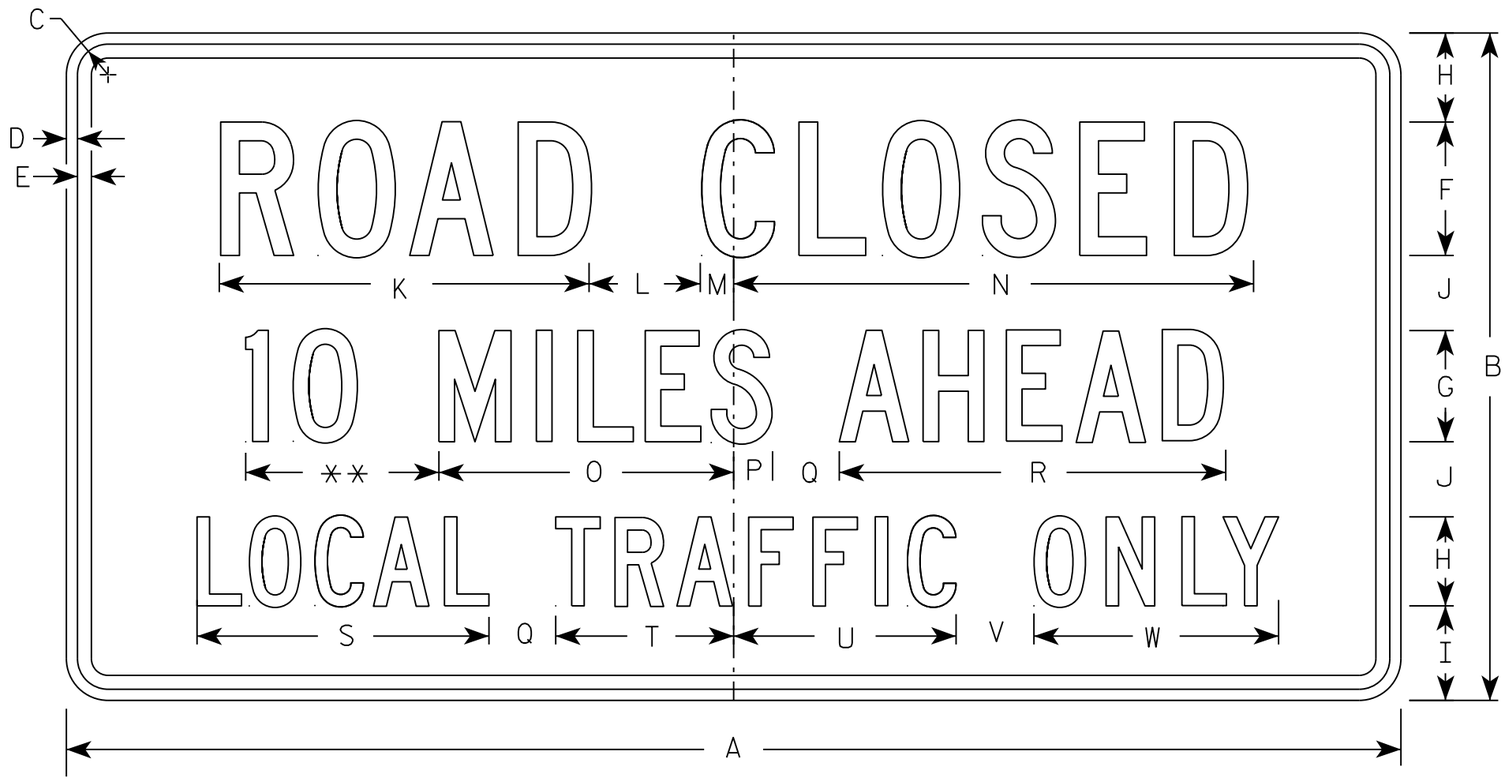
DATE 4/1/11 PLATE NO. R11-2B.2

PROJECT NO:

SHEET NO: 261 E

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.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 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.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

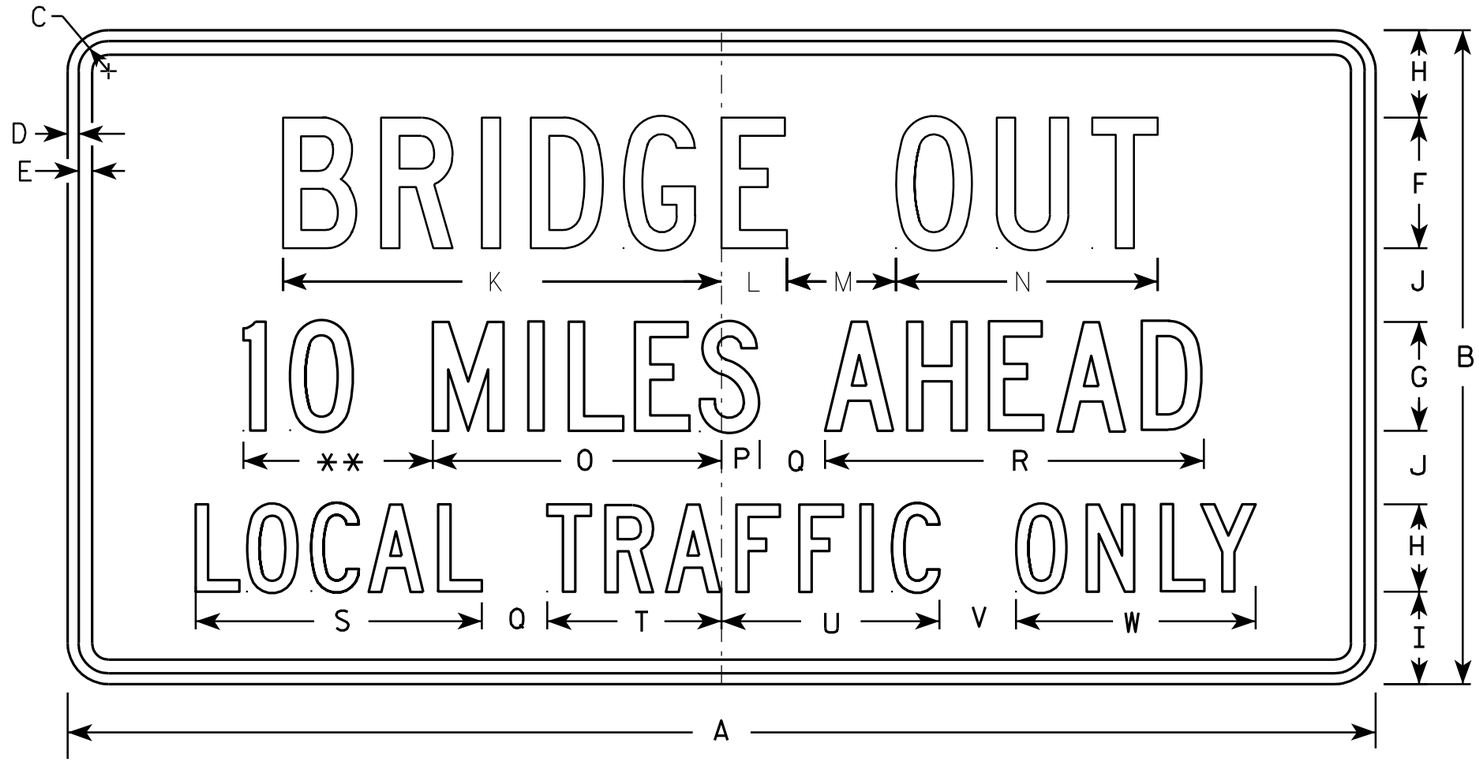
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/28/16 PLATE NO. R11-3.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R113.DGN PLOT DATE : 28-JUL-2016 16:25 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 6.810445:1.000000



R11-3B

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. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

** See Note 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.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
3																											
4																											
5																											

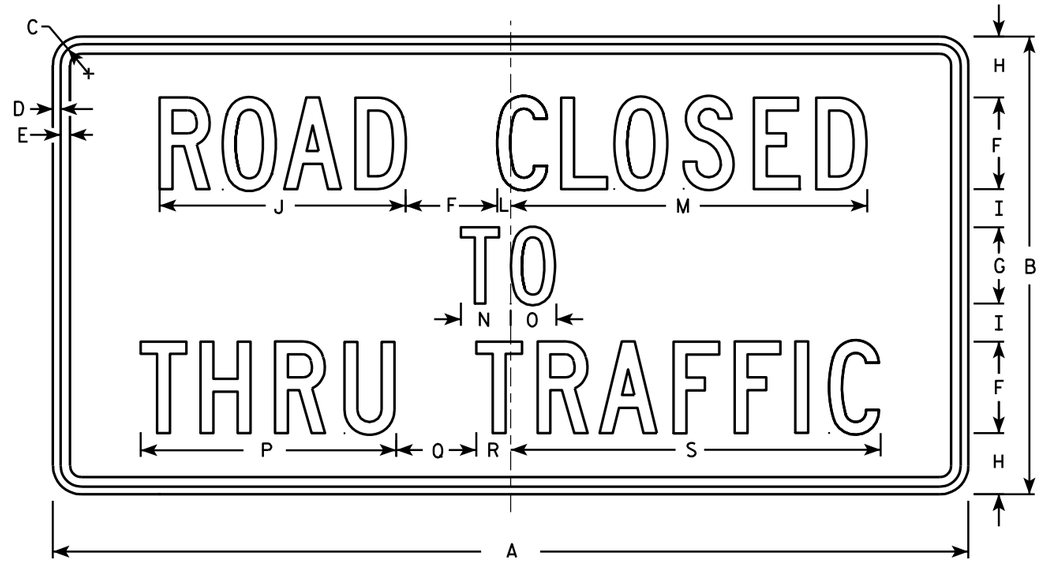
STANDARD SIGN
R11-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-3B.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 263 | 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

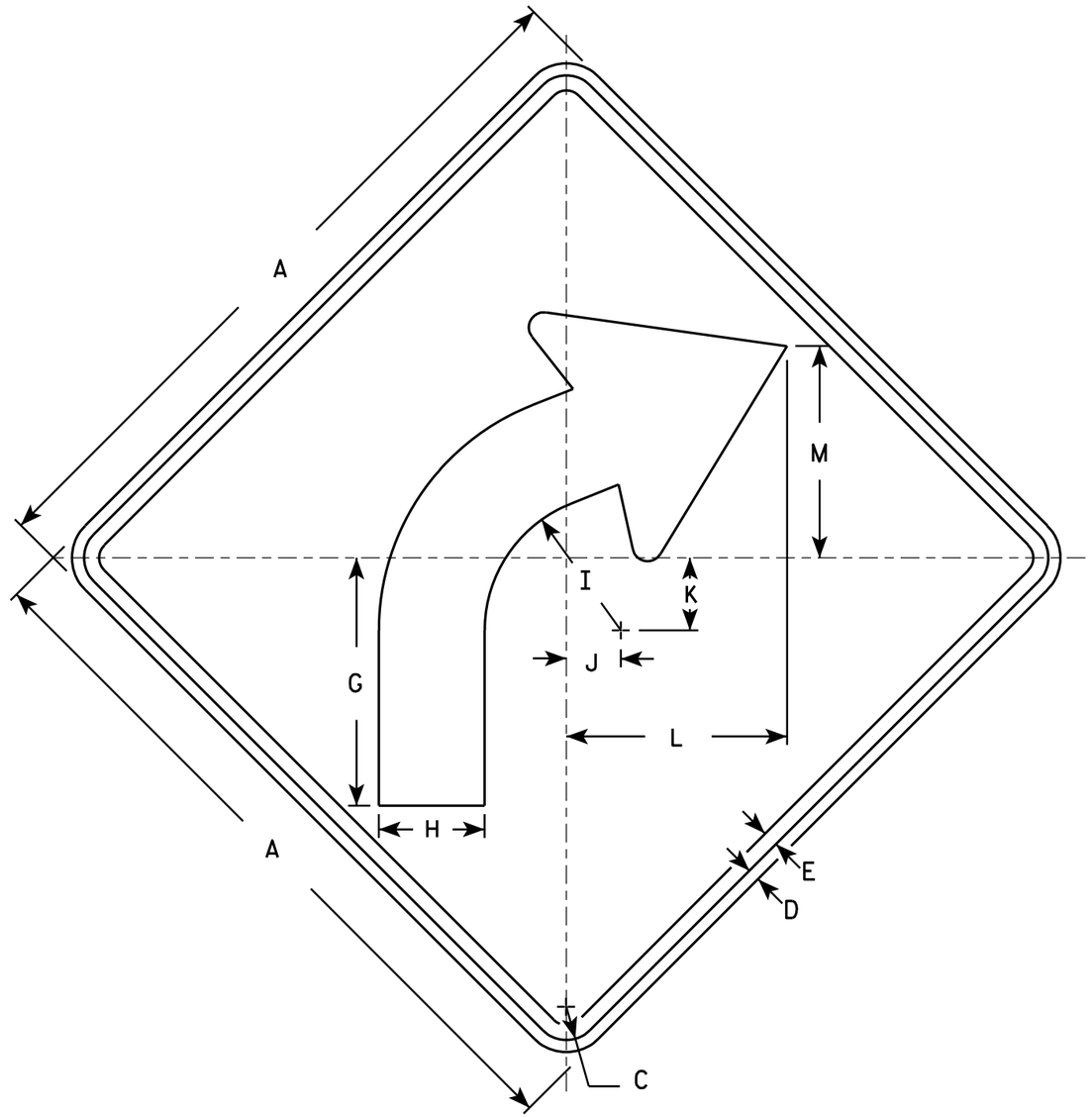
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

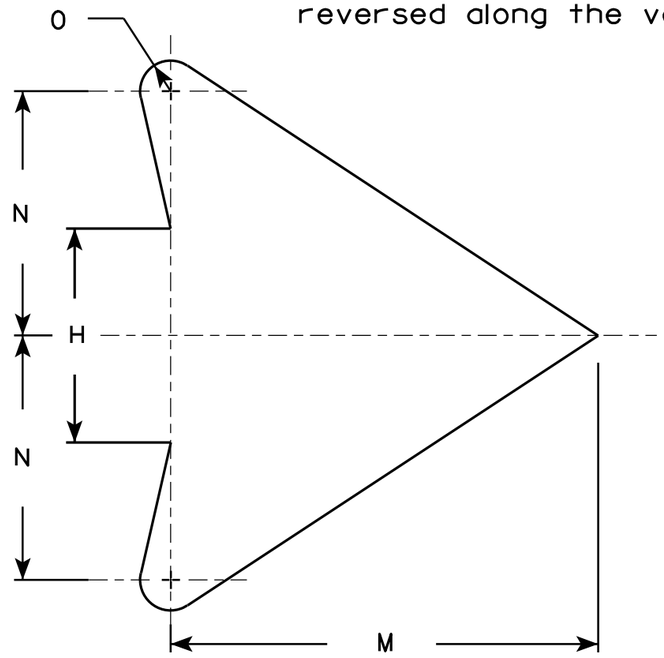
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 264 | E

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

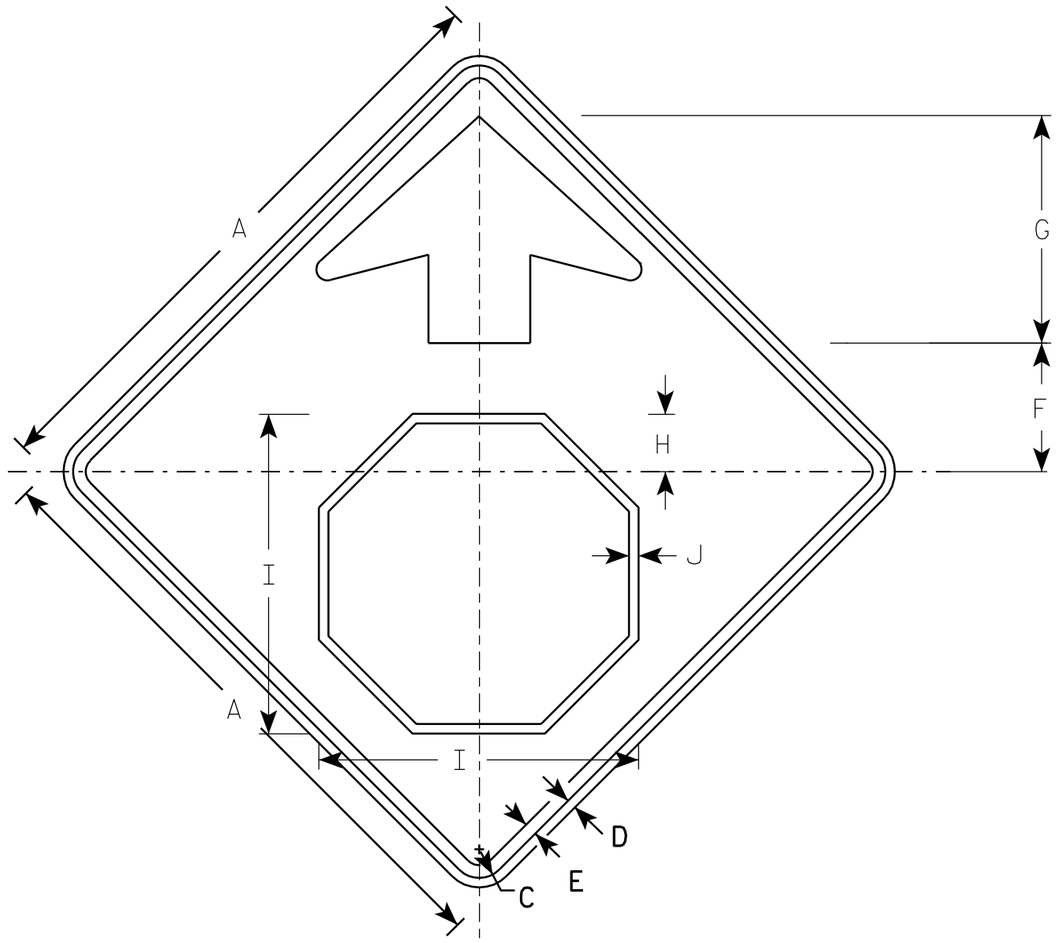
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

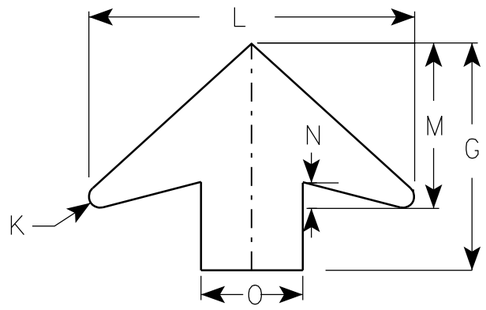
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 265	E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



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	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

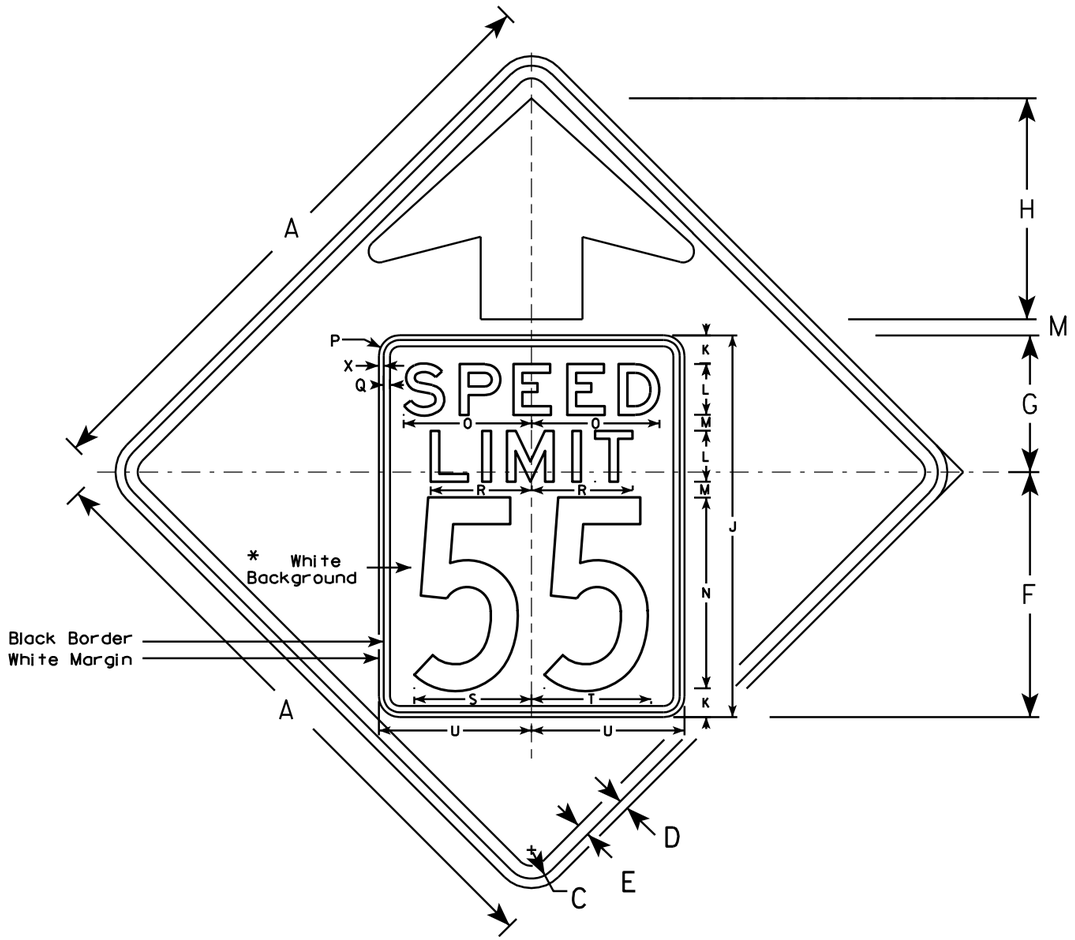
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 266 E

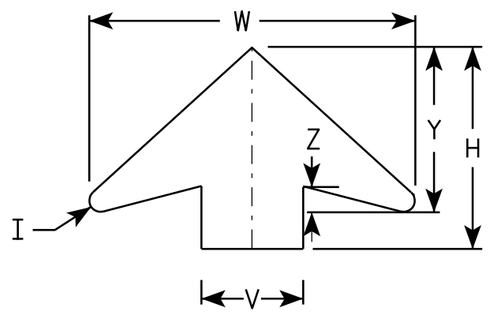


W3-5

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. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



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	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

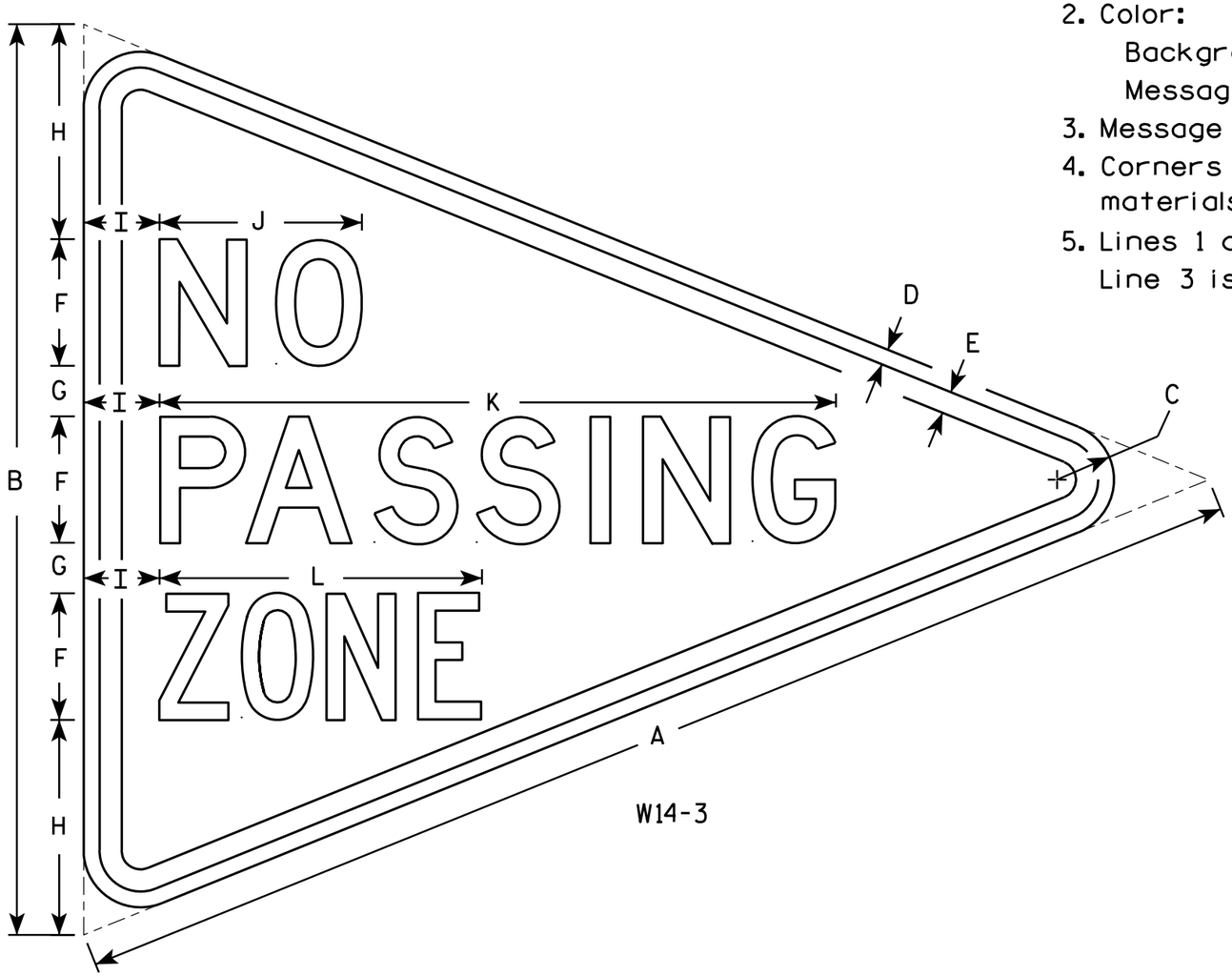
DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 267 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. Message Series - See note 5
4. Corners and borders shall be rounded on all base materials for this sign.
5. Lines 1 and 2 are Series D.
   Line 3 is series C.



W14-3

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	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

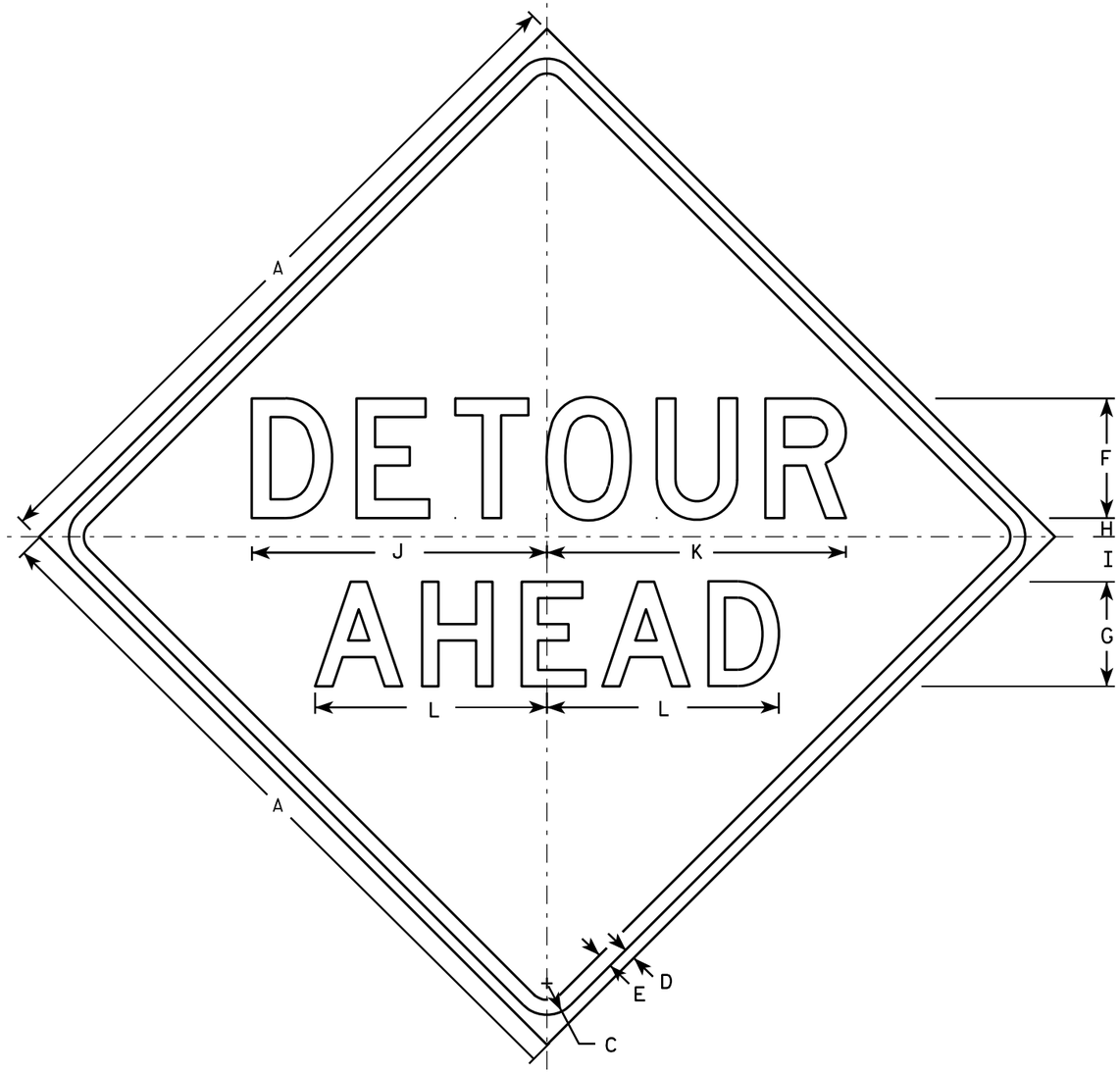
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

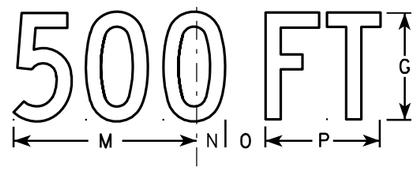
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

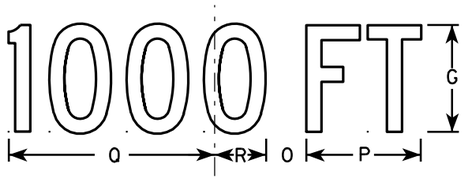
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 268	E



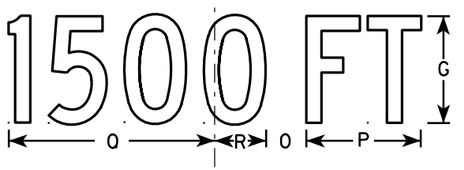
W20-2A



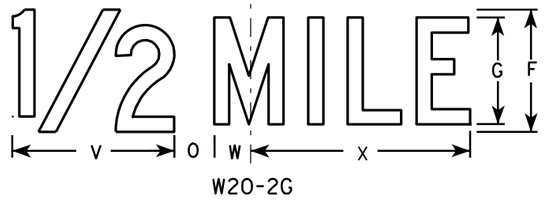
W20-2D



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

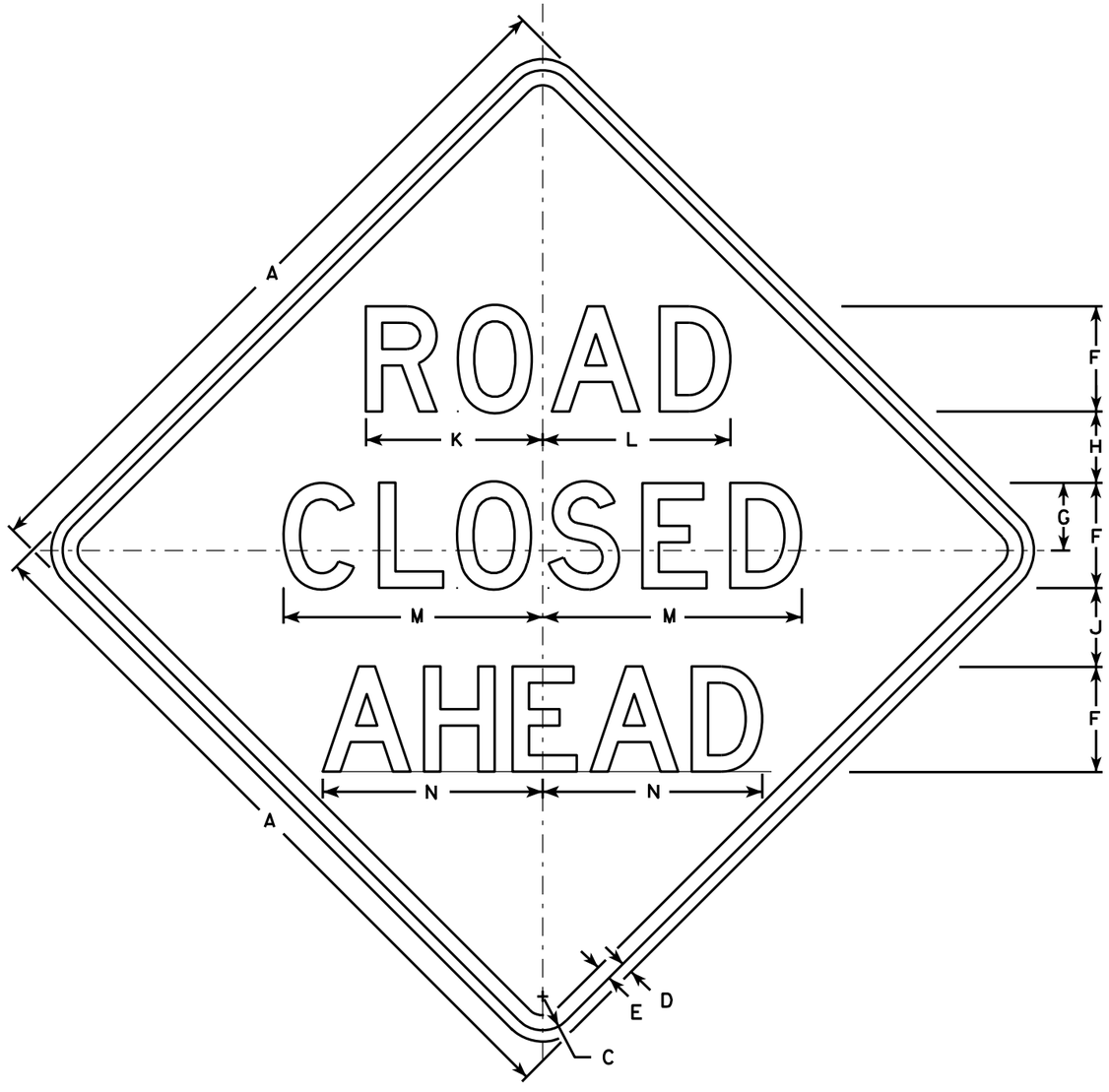
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

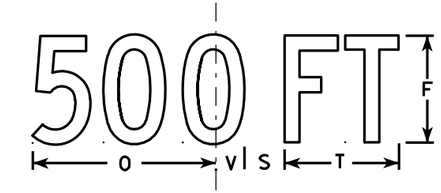
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

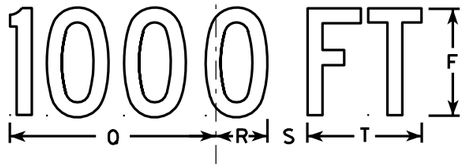
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 269 | E



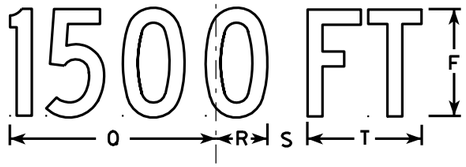
W20-3A



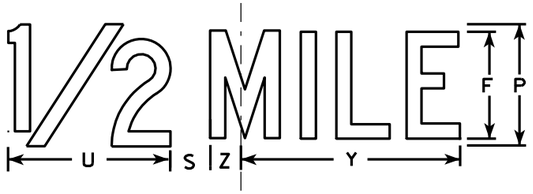
W20-3D



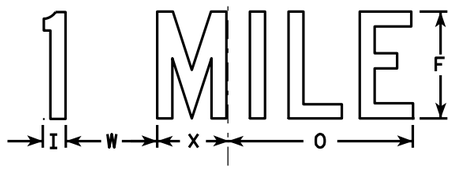
W20-3C



W20-3B



W20-3G



W20-3F

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. Lines 1 and 2 are Series D.
   Line 3 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	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

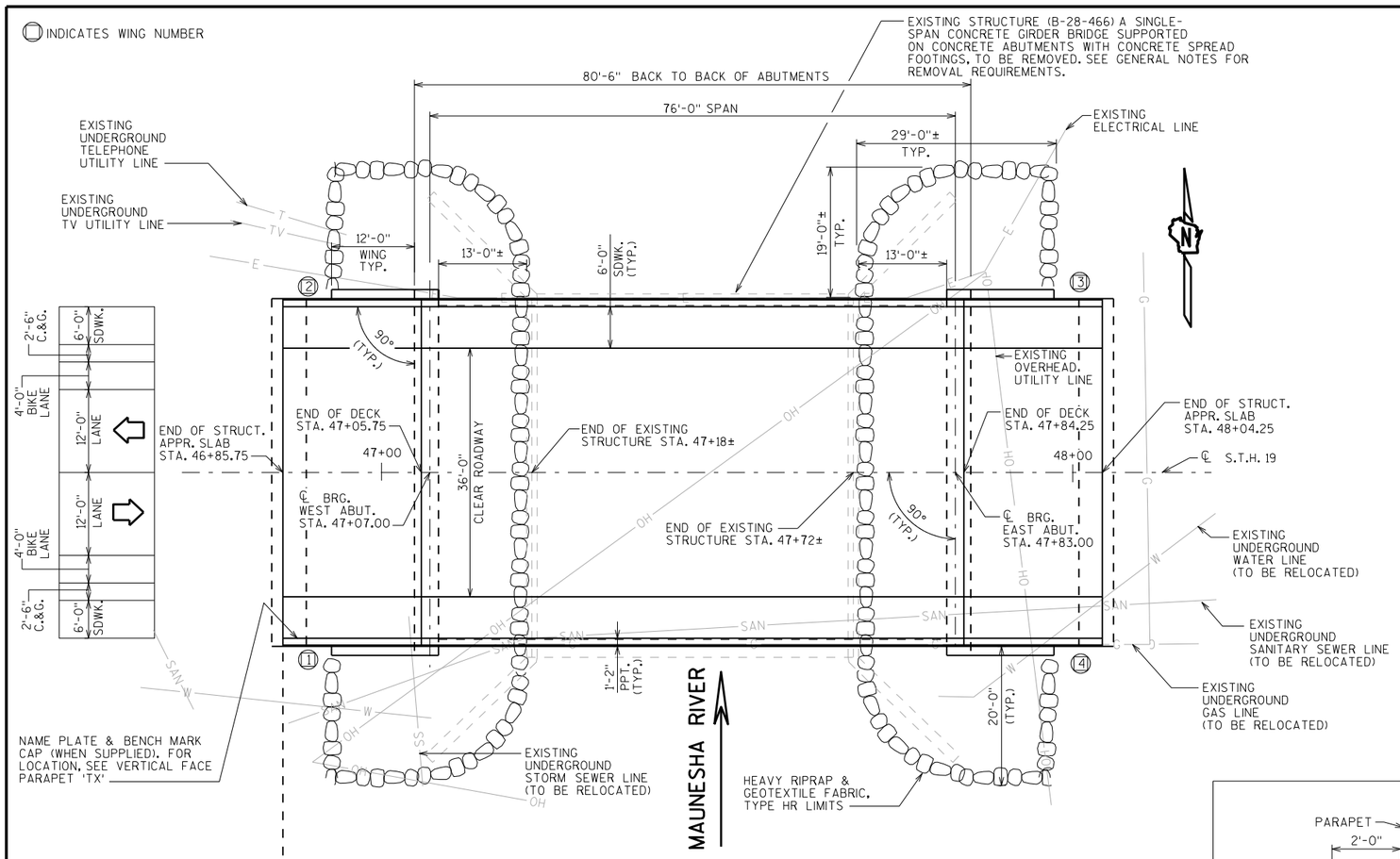
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 270 | E

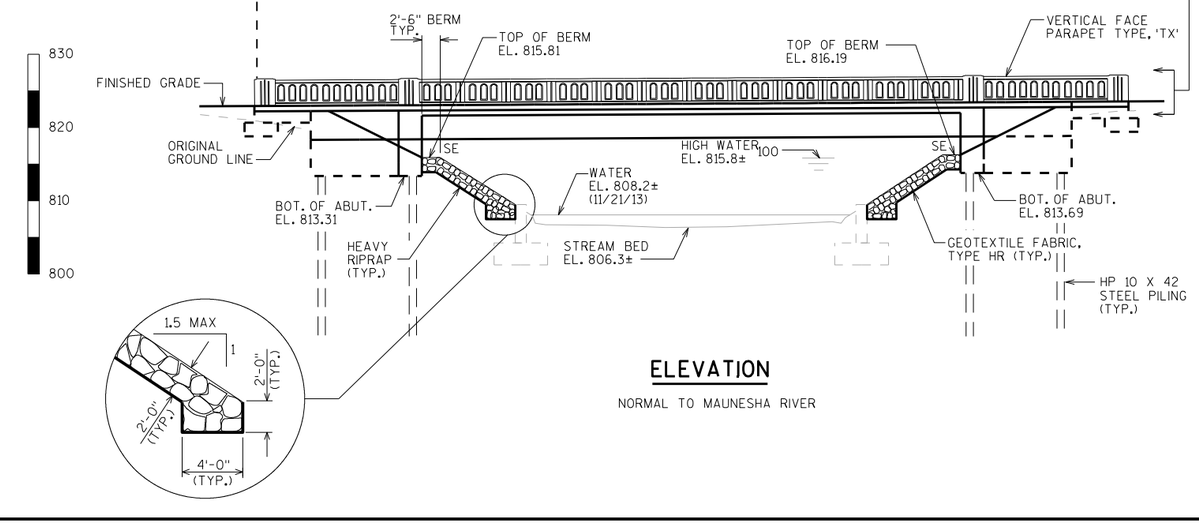
7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



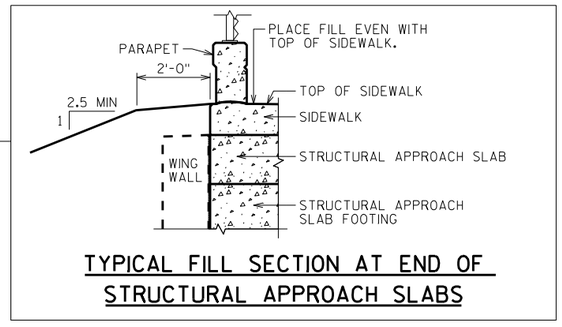
PLAN

SINGLE SPAN - 36W" PRESTRESSED GIRDERS



ELEVATION

NORMAL TO MAUNESHA RIVER



TYPICAL FILL SECTION AT END OF STRUCTURAL APPROACH SLABS

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF=1.18
OPERATING RATING FACTOR: RF=1.55
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY DECK — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.
BAR STEEL REINFORCEMENT, STAINLESS, GRADE 60 — fy = 60,000 P.S.I.
36W" PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 8,000 P.S.I.
STRANDS- 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 STEEL PILING
DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE
AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 35 FEET LONG AT WEST ABUTMENT.
ESTIMATED 25 FEET LONG AT EAST ABUTMENT.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} = 2500 C.F.S.
VEL. = 5.40 F.P.S.
HW. = EL. 815.83
WATERWAY AREA = 464 SQ. FT.
DRAINAGE AREA = 91.49 SQ. MI.
ROAD OVERTOPPING = NA
SCOUR CRITICAL CODE = 8

2 YEAR FREQUENCY

Q_2 = 1040 C.F.S.
$HW._2$ = EL. 811.91

TRAFFIC VOLUME

S.T.H. 19
A.D.T. = 6250 (2037)
R.D.S. = 30 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. EAST ABUTMENT
7. EAST ABUTMENT DETAILS
8. 36W" PRESTRESSED GIRDER DETAILS 1
9. 36W" PRESTRESSED GIRDER DETAILS 2
10. STEEL DIAPHRAGM
11. SUPERSTRUCTURE
12. SUPERSTRUCTURE DETAILS
13. VERTICAL FACE PARAPET 'TX'
14. PARAPET 'TX' CONDUIT DETAILS
15. WEST STRUCTURAL APPROACH SLAB
16. WEST STRUCTURAL APPROACH SLAB DETAILS
17. EAST STRUCTURAL APPROACH SLAB
18. EAST STRUCTURAL APPROACH SLAB DETAILS
19. ALTERNATE CONSTRUCTION JOINT

STATE PROJECT NUMBER

3050-02-72

STRUCTURE DESIGN CONTACT:
BRANDAN BURGER (608) 267-4019
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

Plans Prepared By **WISDOT**
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS 11/16/16
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-28-175

S.T.H. 19 OVER MAUNESHA RIVER

COUNTY: JEFFERSON — ~~TOWN~~/CITY/~~VILLAGE~~: WATERLOO

DESIGN SPEC.: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BK	BLB	WWR	DLM

GENERAL PLAN

SHEET 1 OF 19

271

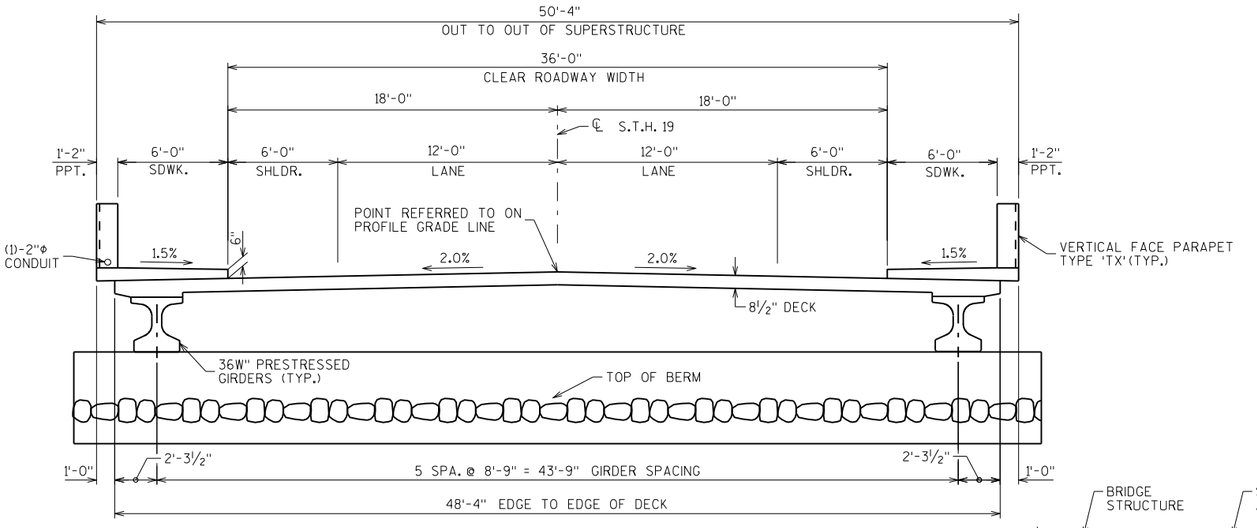
I.D. 3050-02-02

DATE: AUG 2016

SCALE = 10

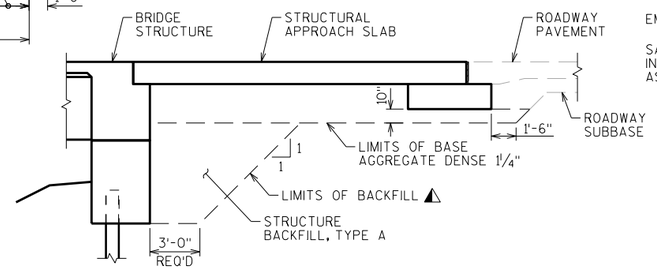
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8



CROSS SECTION THRU ROADWAY

(LOOKING EAST)



TYPICAL SECTION THRU ABUTMENT

(A1 ABUTMENT WITH STRUCTURAL APPROACH)

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

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 THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL. ALSO EXCLUDED IS THE "BASE AGGREGATE DENSE 1 1/4-INCH" AS DETAILED ON THE STRUCTURAL APPROACH SLAB SHEETS.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK, SIDEWALK, AND APPROACH SLAB SURFACES.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE, INSIDE WINDOW FACES, AND TOP OF PARAPETS, INCLUDING PARAPETS ON APPROACH SLABS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE FABRIC TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "36W PRESTRESSED GIRDER DETAILS 2" SHEET.

EMBEDDED CONDUIT IN THE NORTH PARAPET IS INCLUDED IN THE BRIDGE CONSTRUCTION.

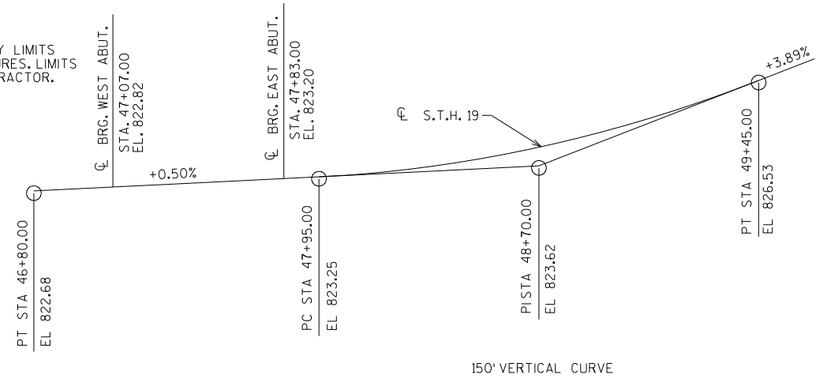
SAW CUT AND REMOVE CONCRETE ABUTMENTS AND WINGS TO ELEVATION 809.5± INCORPORATE THE EXISTING ABUTMENTS AND WINGS IN STREAM BANK PROTECTION AS SHOWN ON THE "GENERAL PLAN" SHEET.

STATE PROJECT NUMBER

3050-02-72

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	WEST APPROACH	WEST ABUTMENT	EAST ABUTMENT	EAST APPROACH	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 47+48	LS	———	———	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-28-175	LS	———	———	———	———	———	1
210.1500	BACKFILL STRUCTURE TYPE A	TONS	———	———	233	233	———	466
305.0120	BASE AGGREGATE DENSE 1¼- INCH	TONS	———	151	———	———	151	302
502.0100	CONCRETE MASONRY BRIDGES	CY	181	71	55	55	71	433
502.3200	PROTECTIVE SURFACE TREATMENT	SY	441	109	———	———	109	659
502.3210	PIGMENTED SURFACE SEALER	SY	115	25	———	———	25	165
503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	462	———	———	———	———	462
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	———	———	3140	3140	———	6280
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	27,820	11,090	1340	1350	11,090	52,690
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	1740	———	———	———	———	1740
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH		———	6	6	———	12
506.4000	STEEL DIAPHRAGMS B-28-175	EACH	5	———	———	———	———	5
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	———	15	15	———	30
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	———	———	385	275	———	660
606.0300	RIPRAP HEAVY	CY	———	———	190	190	———	380
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	———	94	94	———	188
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	———	———	285	285	———	570
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	16	———	———	———	———	16
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	75	25	———	———	25	125
SPV.0090	PARAPET CONCRETE TYPE 'TX'	LF	161	38	———	———	38	237
	NON-BID ITEMS							
	FILLER	SIZE	———	———	———	———	———	½", ¾", 1½"
			———	———	———	———	———	



150' VERTICAL CURVE

PROFILE GRADE LINE FOR S.T.H. 19

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

DRAWN BY MJL | PLANS CK'D. DLM

CROSS SECTION & QUANTITIES

SHEET 2

272

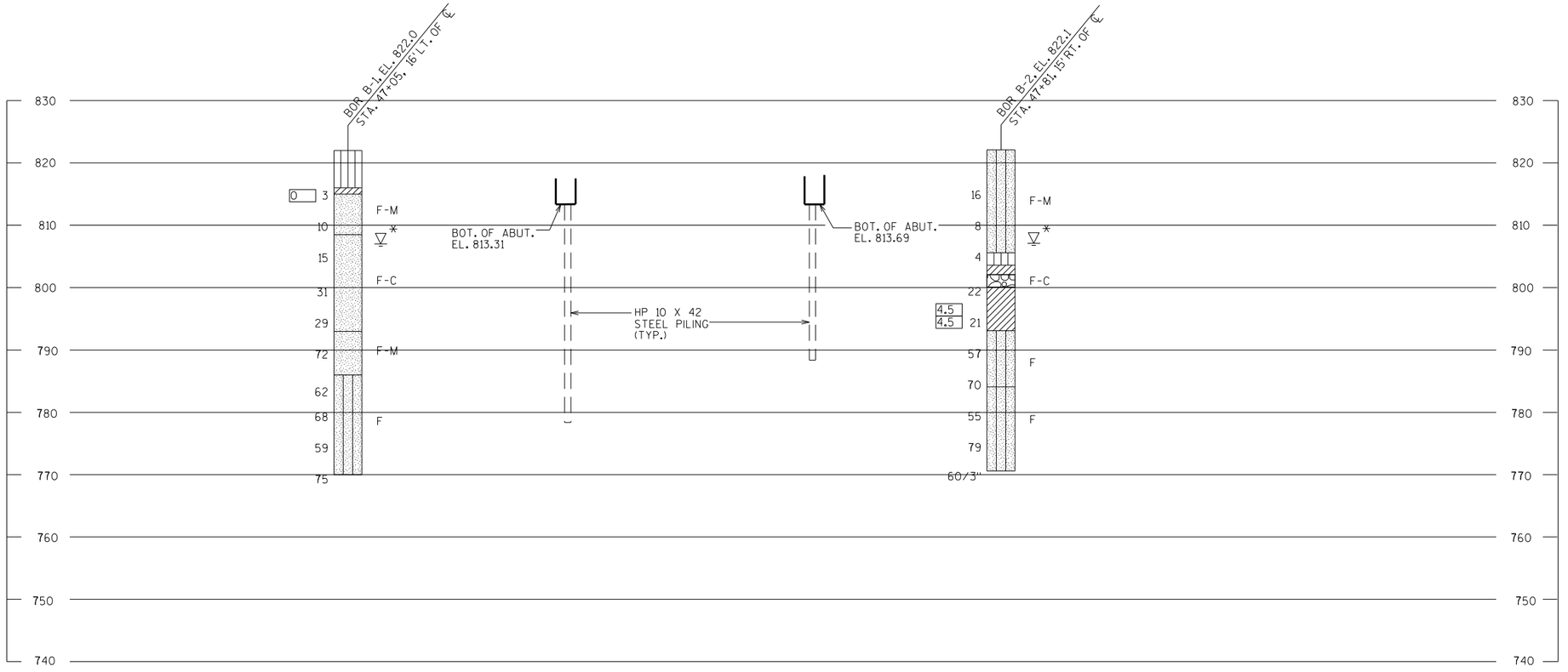
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STH 19 OVER MAUNESHA RIVER
SUN PRAIRIE - WATERTOWN





* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

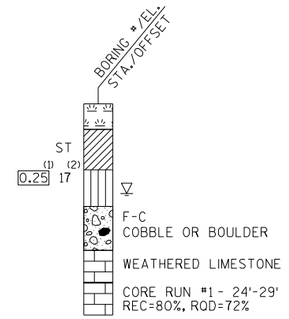
STATE PROJECT NUMBER

3050-02-72

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.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

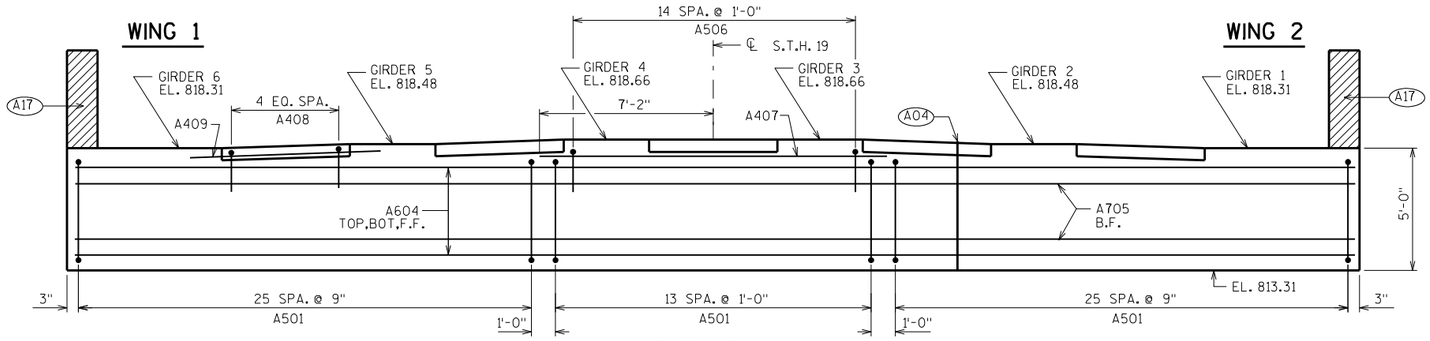
DRAWN BY PR/WWR | PLANS CK'D. DLM

SUBSURFACE EXPLORATION

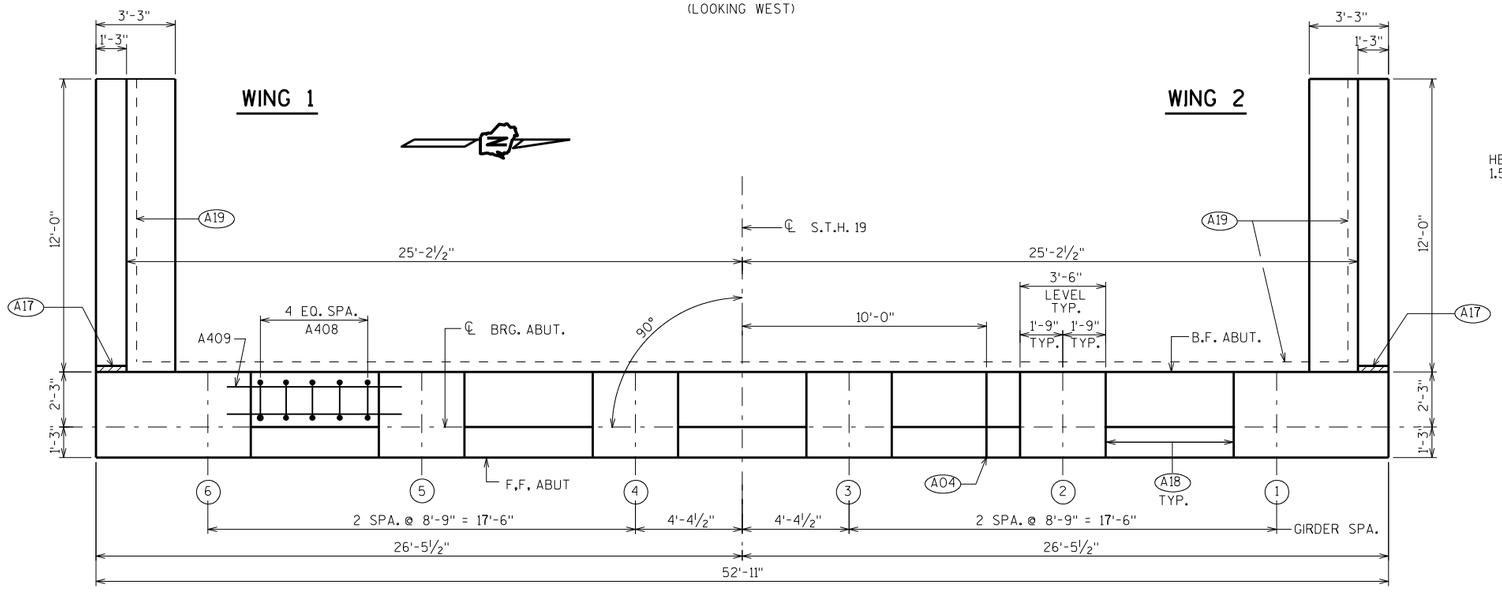
SHEET 3

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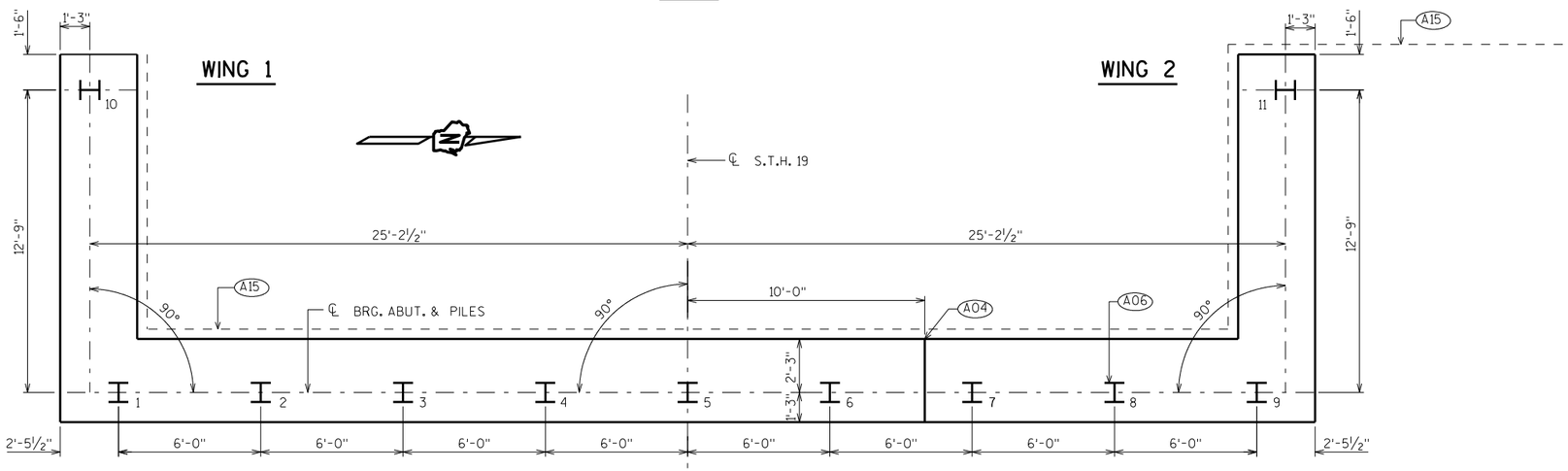
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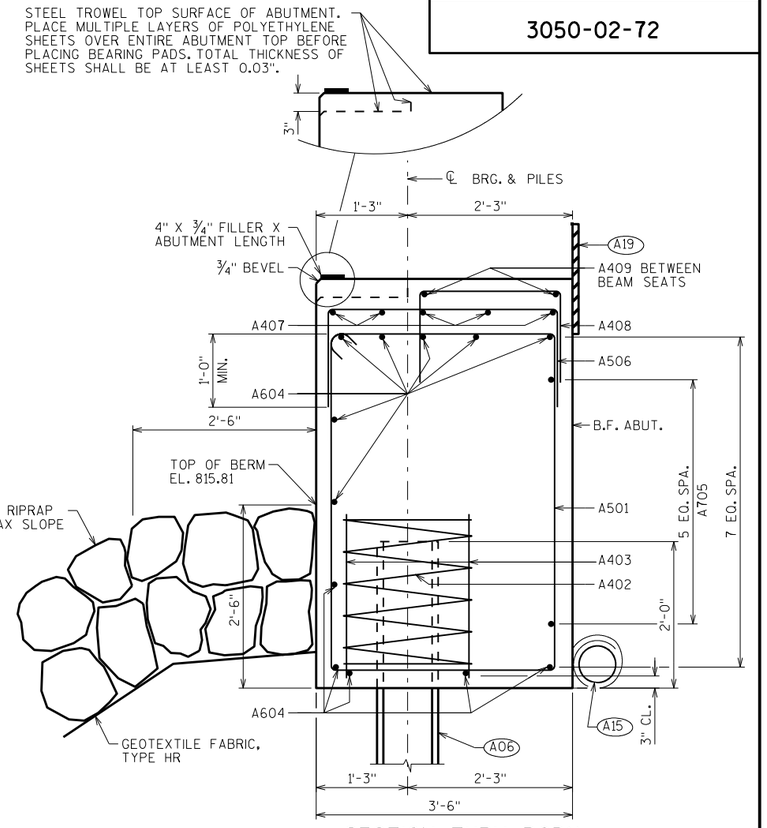
ELEVATION
(LOOKING WEST)



PLAN



PILE PLAN



SECTION THRU BODY

(A04) VERT. CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" RMW @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

DRAWN BY WWR | PLANS CK'D. DLM

WEST ABUTMENT

SHEET 4

274

SCALE = 3

8

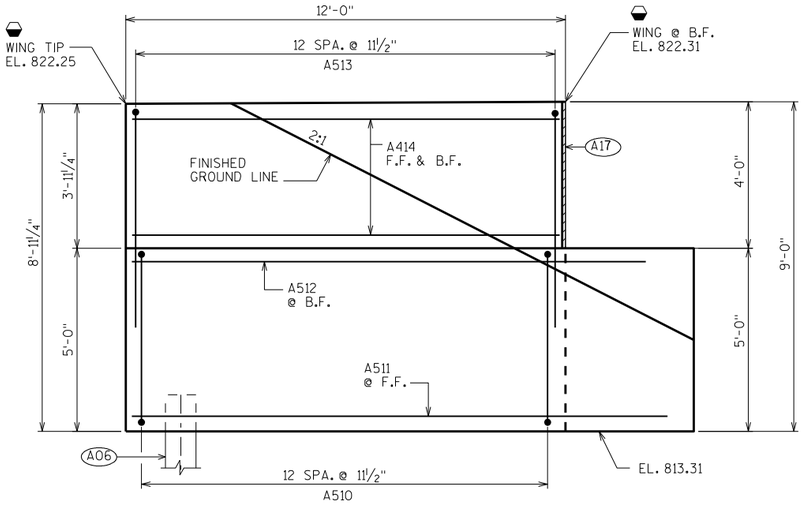
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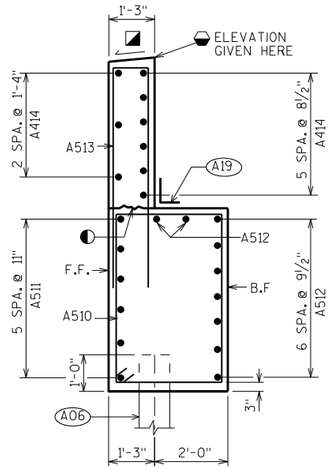
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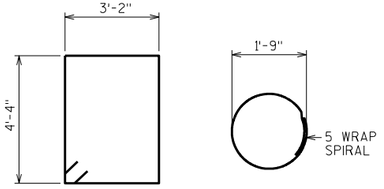
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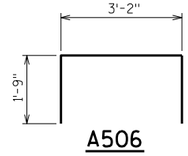


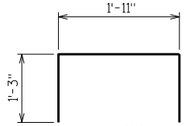
WING 1 ELEVATION

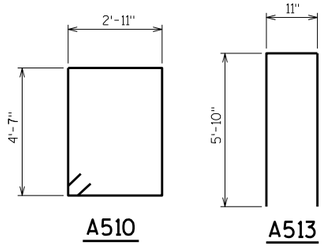


WING 1 SECTION





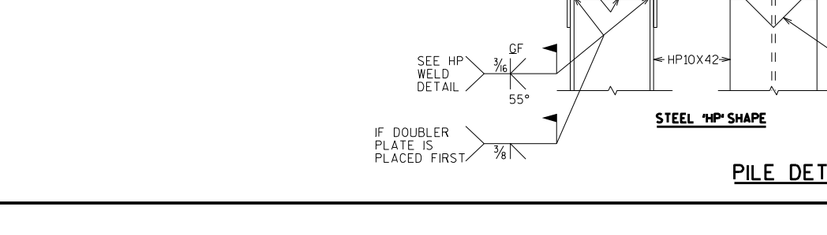




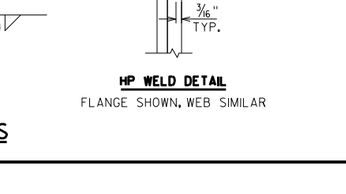
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

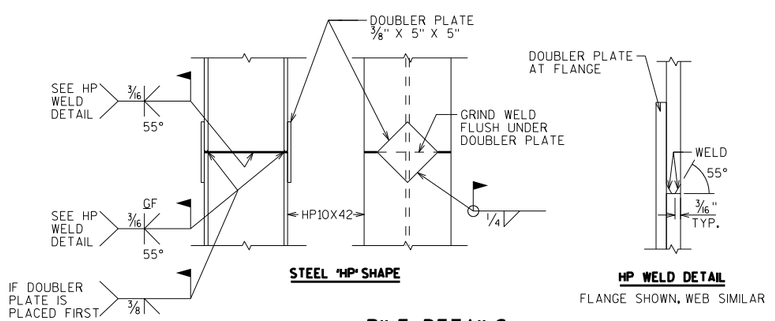
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		66	15'-8"	X		BODY-VERT.-STIRRUP
A402		9	28'-0"	X		BODY-SPIRAL-1 PER BODY PILE
A403		18	2'-3"			BODY-VERT.-2 PER BODY PILE
A604		12	52'-7"			BODY-HORIZ.
A705		6	52'-7"			BODY-HORIZ.-B.F.
A506		15	6'-5"	X		BODY-VERT.-TOP
A407		5	14'-4"			BODY-HORIZ.-TOP
A408		25	4'-3"	X		BODY-VERT.-BTWN. BEAM SEATS
A409		10	7'-3"			BODY-HORIZ.-BTWN. BEAM SEATS
A510	X	26	15'-8"	X		WING BODY 1 & 2-VERT.
A511	X	12	14'-7"			WING BODY 1 & 2-HORIZ.
A512	X	18	13'-7"			WING BODY 1 & 2-HORIZ.
A513	X	26	12'-4"	X		WINGWALL 1 & 2-VERT.
A414	X	18	11'-8"			WINGWALL 1 & 2-HORIZ.



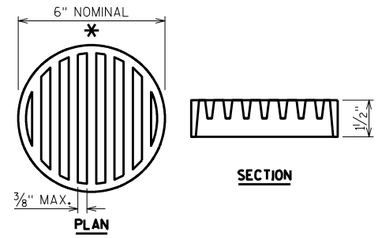
WING 2 ELEVATION



WING 2 SECTION



PILE DETAILS



RODENT SHIELD DETAIL

✱ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

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 ATTACHEMENT 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.

◪ SLOPE TO DRAIN

◐ CONST. JOINT.-STRIKE OFF AND LEAVE ROUGH

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

DRAWN BY WWR | PLANS CK'D. DLM

WEST ABUTMENT DETAILS

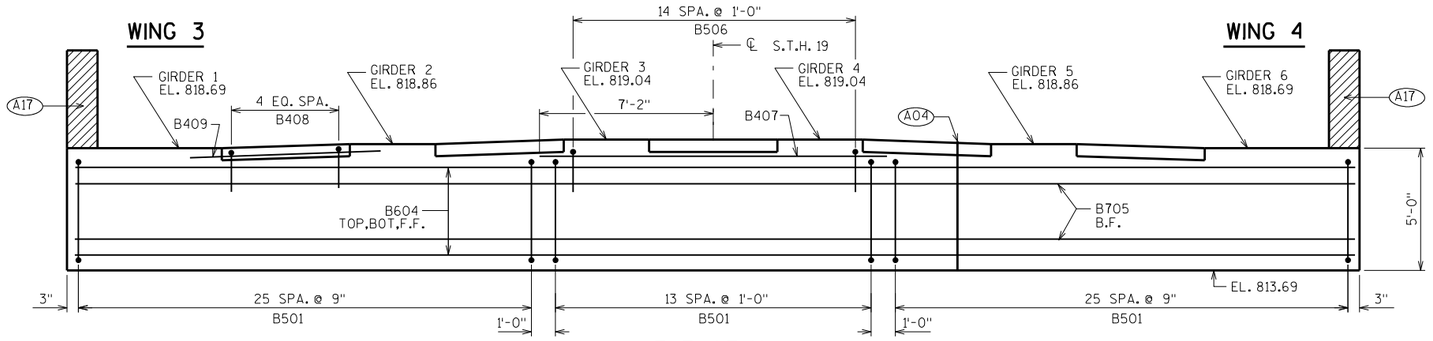
SHEET 5

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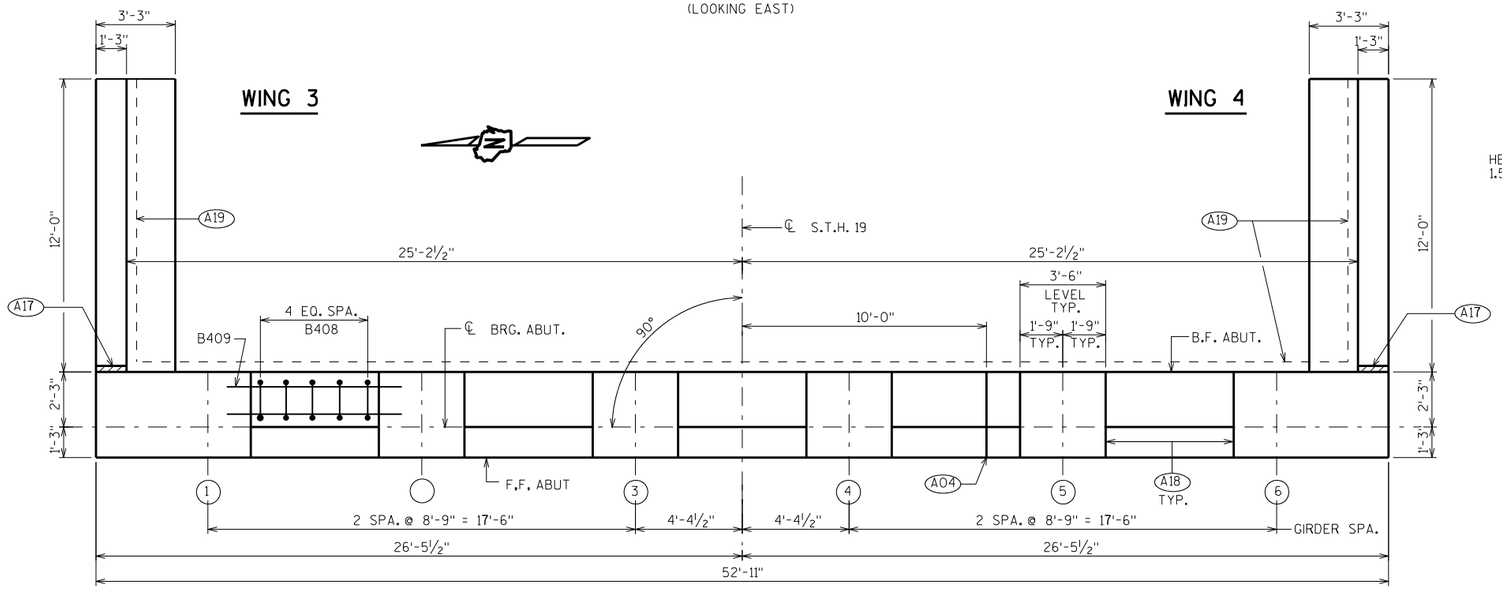
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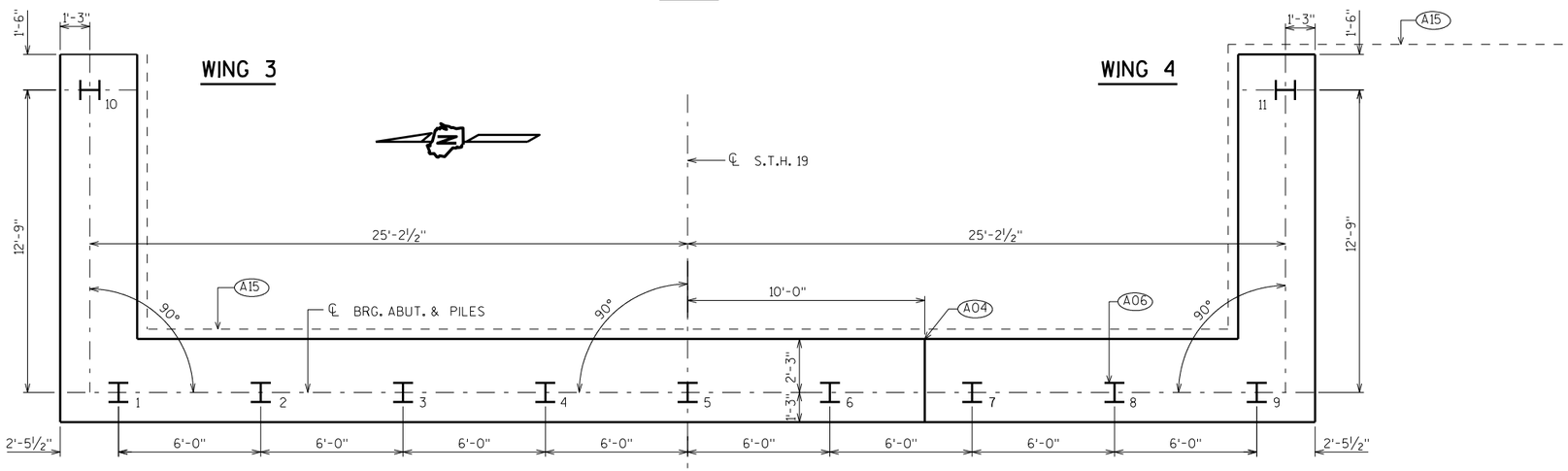
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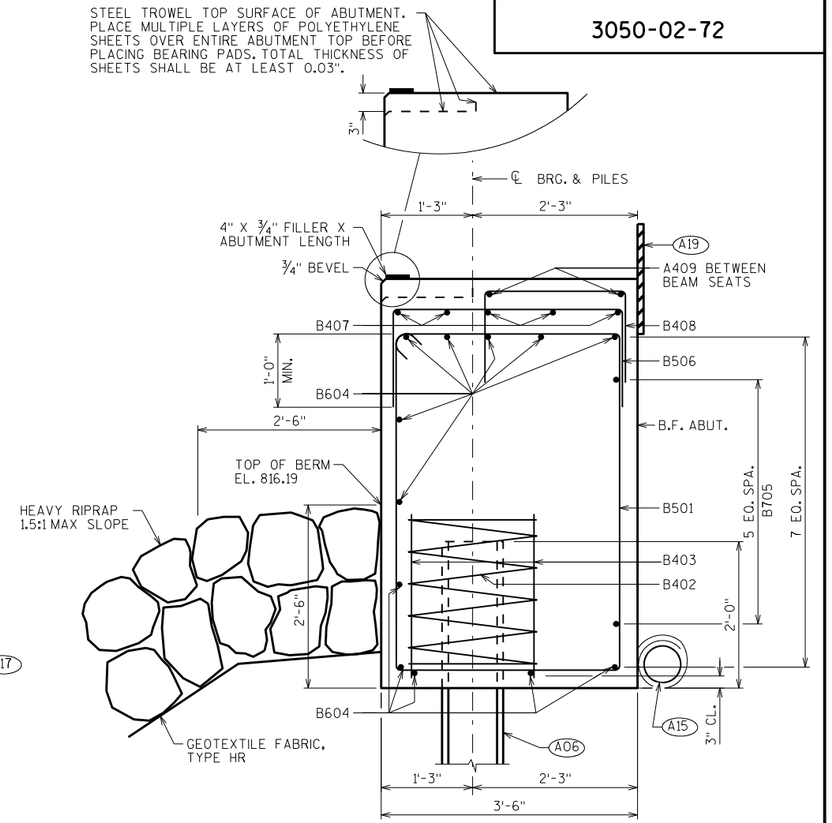
ELEVATION
(LOOKING EAST)



PLAN



PILE PLAN



SECTION THRU BODY

(A04) VERT. CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" RMW @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 25'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

DRAWN BY WWR | PLANS CK'D. DLM

EAST ABUTMENT

SHEET 6

276

STATE PROJECT NUMBER

3050-02-72

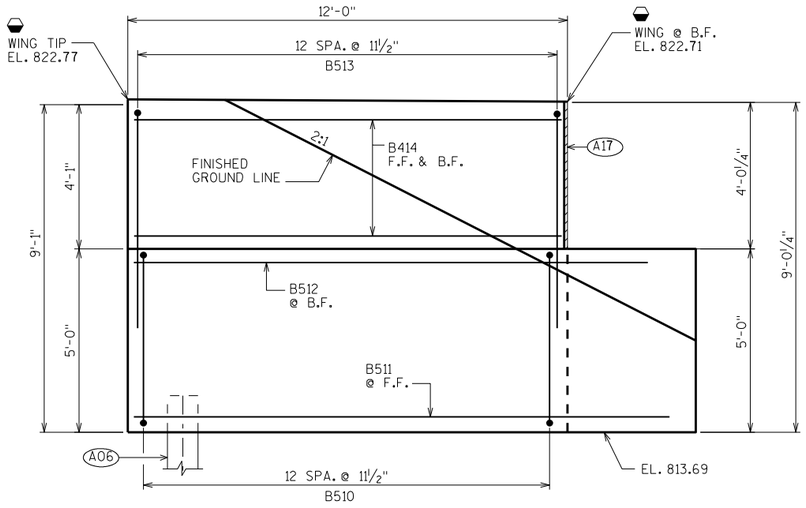
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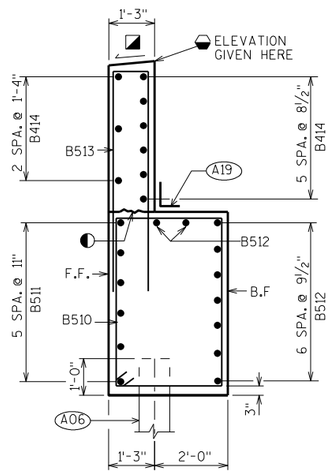
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STATE PROJECT NUMBER

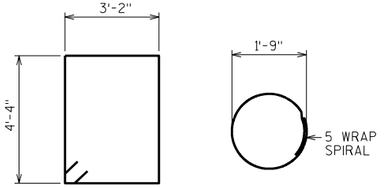
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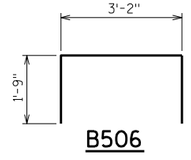
WING 3 ELEVATION



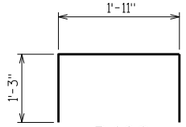
WING 3 SECTION



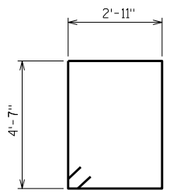
B501 B402



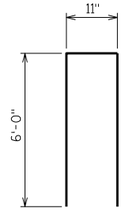
B506



B408



B510

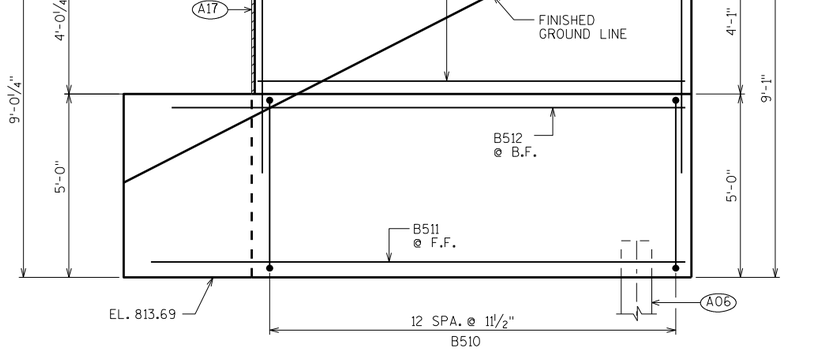


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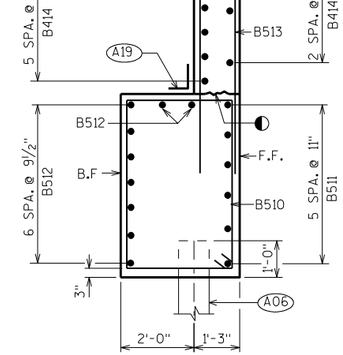
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

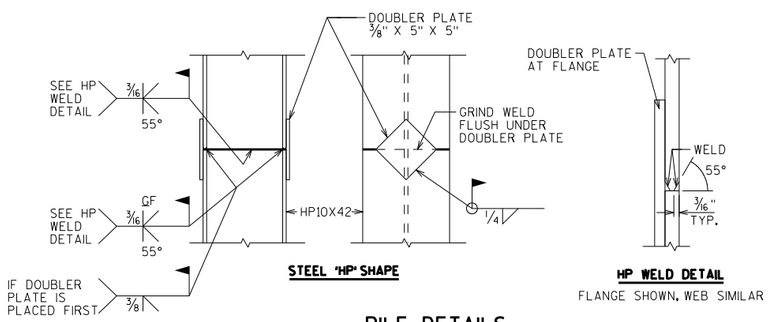
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		66	15'-8"	X		BODY-VERT.-STIRRUP
B402		9	28'-0"	X		BODY-SPIRAL-1 PER BODY PILE
B403		18	2'-3"			BODY-VERT.-2 PER BODY PILE
B604		12	52'-7"			BODY-HORIZ.
B705		6	52'-7"			BODY-HORIZ.-B.F.
B506		15	6'-5"	X		BODY-VERT.-TOP
B407		5	14'-4"			BODY-HORIZ.-TOP
B408		25	4'-3"	X		BODY-VERT.-BTWN. BEAM SEATS
B409		10	7'-3"			BODY-HORIZ.-BTWN. BEAM SEATS
B510	X	26	15'-8"	X		WING BODY 3 & 4-VERT.
B511	X	12	14'-7"			WING BODY 3 & 4-HORIZ.
B512	X	18	13'-7"			WING BODY 3 & 4-HORIZ.
B513	X	26	12'-8"	X		WINGWALL 3 & 4-VERT.
B414	X	18	11'-8"			WINGWALL 3 & 4-HORIZ.



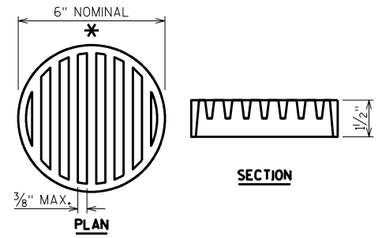
WING 4 ELEVATION



WING 4 SECTION



PILE DETAILS



RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

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 ATTACHEMENT 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.

◪ SLOPE TO DRAIN

◐ CONST. JOINT.-STRIKE OFF AND LEAVE ROUGH

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 25'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

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EAST ABUTMENT DETAILS

SHEET 7

277

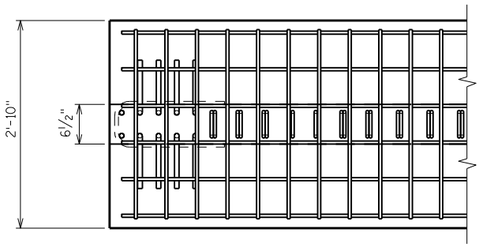
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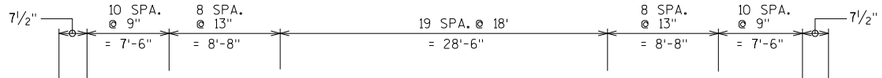
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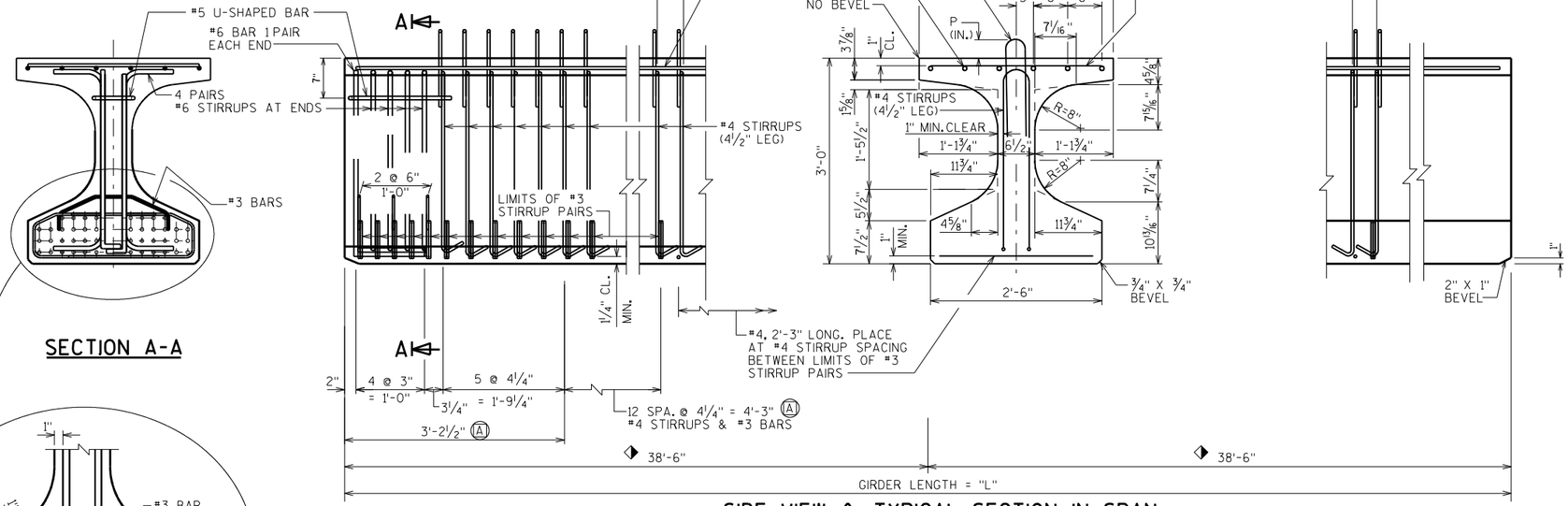
STATE PROJECT NUMBER

3050-02-72



TOP FLANGE





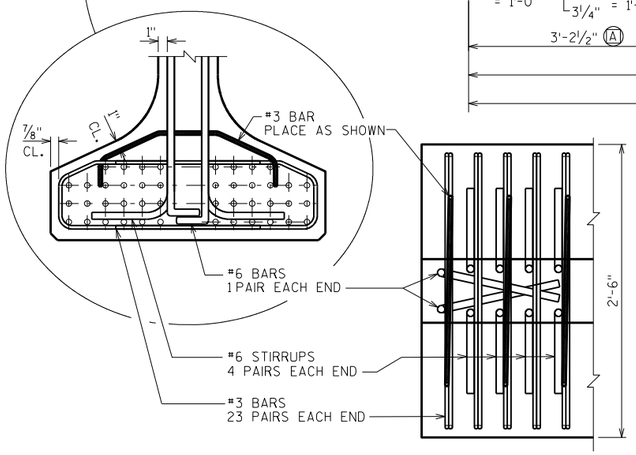
SECTION A-A

SIDE VIEW & TYPICAL SECTION IN SPAN

(A) DETAIL TYP. AT EACH END

(B) SIX #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"

◆ INSERT/HOLES SPACING FOR STEEL DIAPHRAGMS TO GIRDER WEB CONNECTION FOR ALL GIRDERS



BOTTOM FLANGE

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE 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 SECT. 503.3.3 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END 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.

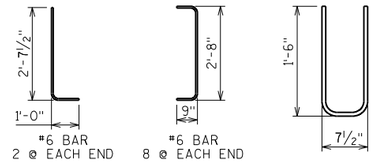
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

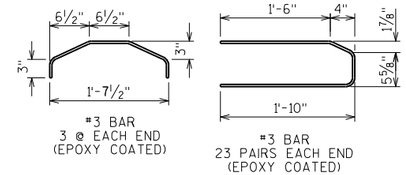
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 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.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.





✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.)									CONC. STRGTH. f'c (p.s.i.)	"P" 1ST ⅓ OF GIRDER	"P" MID ⅓ OF GIRDER	"P" END ⅓ OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN						UNDRAPED PATTERN	
			1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10						TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳
1	ALL	77'-0"	0.4	0.8	1.1	1.3	1.4	1.3	1.1	0.8	0.4	8000	7	7	7	0.6	28	6400	32	11	14	4		

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

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36W" PRESTRESSED GIRDER DETAILS 1

SHEET 8

278

SCALE =

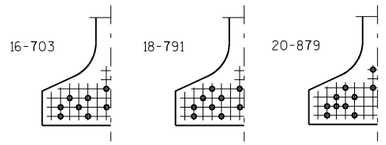
1-16
G36W

8

8

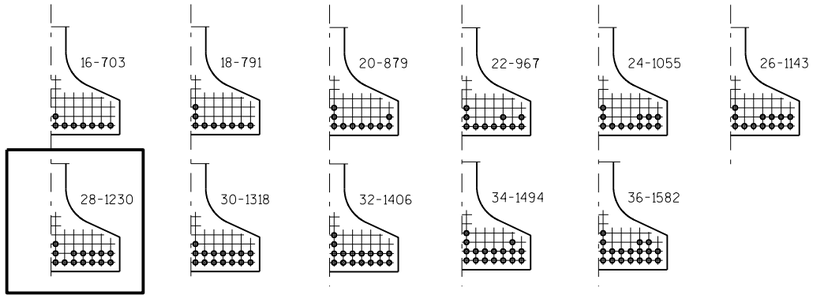
STATE PROJECT NUMBER

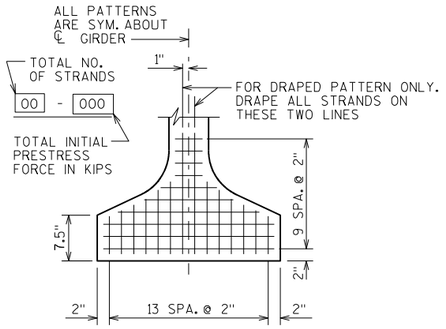
3050-02-72



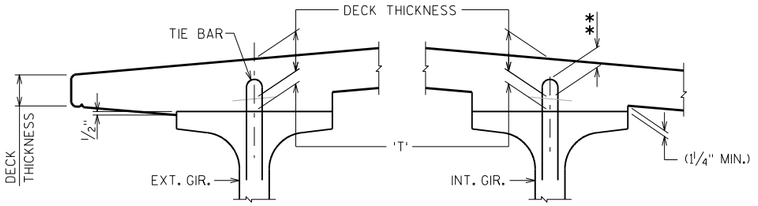
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS





TYP. STRAND PATTERN



DECK 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 DECK 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.

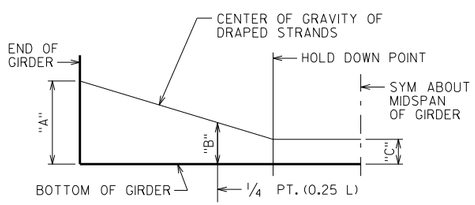
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 2⅞" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS



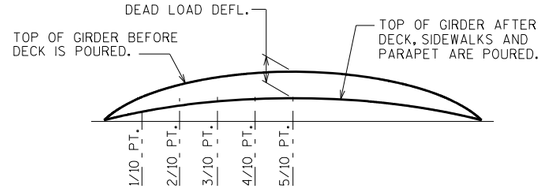
DRAPED STRAND PROFILE

*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	1.98

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



DEAD LOAD DEFLECTION DIAGRAM

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

DRAWN BY WWR | PLANS CK'D. DLM

36W" PRESTRESSED GIRDER DETAILS 2

SHEET 9

279

G36W
1-14

SCALE =

STATE PROJECT NUMBER
3050-02-72

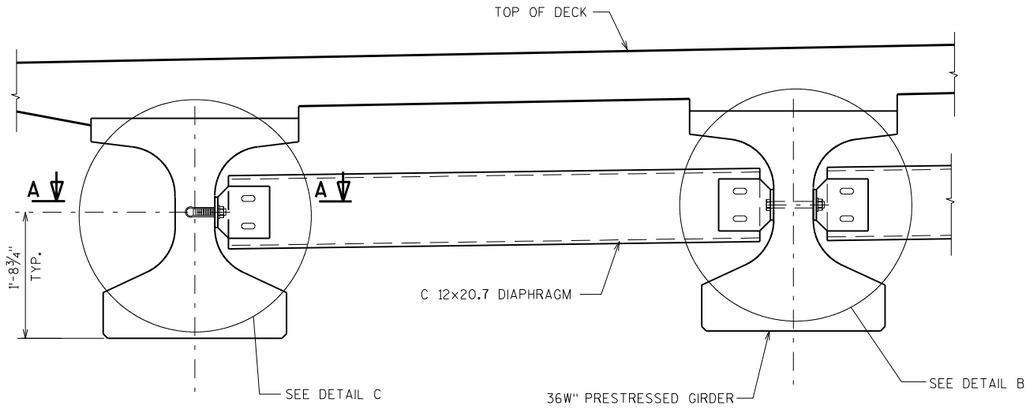
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-28-175", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

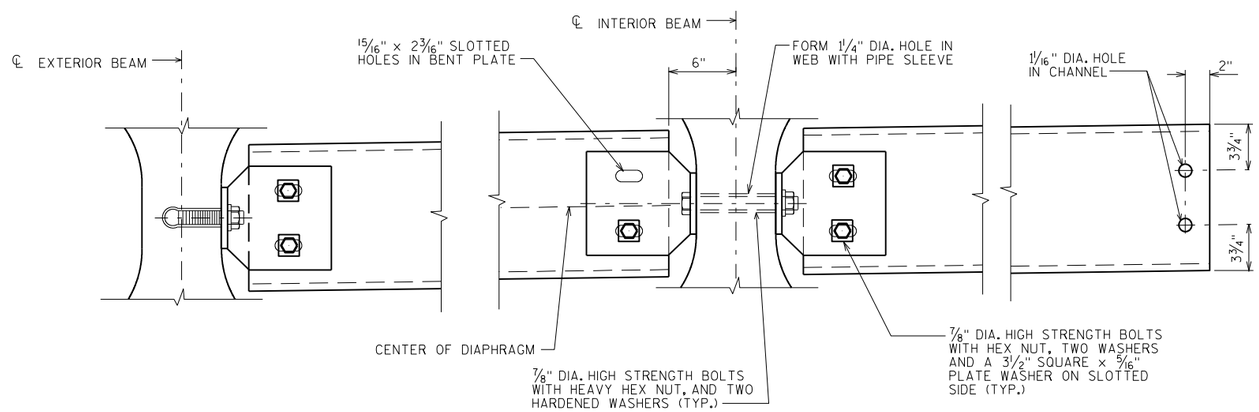
ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563. LUBRICANT AND TEST FOR COATED NUTS.



EXTERIOR GIRDER

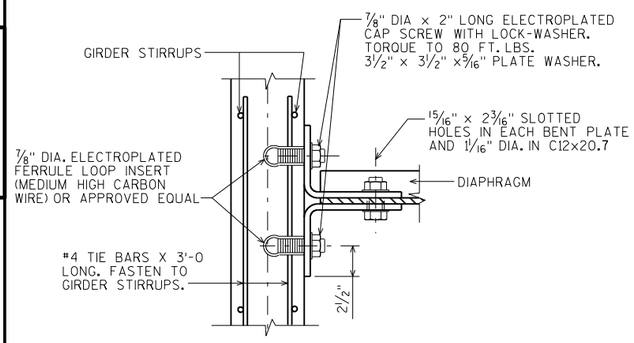
INTERIOR GIRDER

PART TRANSVERSE SECTION AT DIAPHRAGM

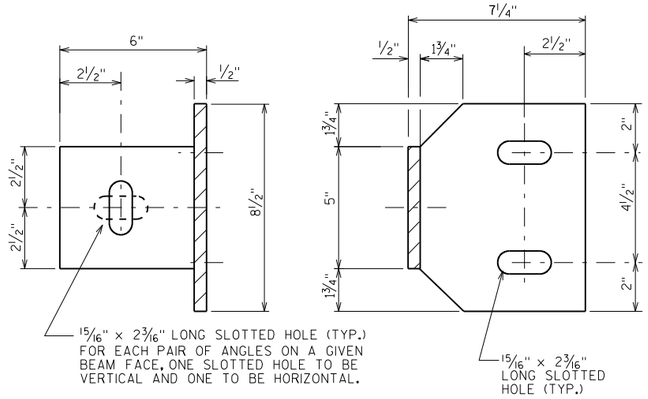


DETAIL C

DETAIL B

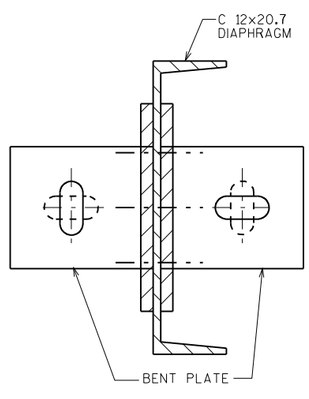


SECTION A-A
(FOR EXTERIOR ATTACHMENT)



BEAM FACE

DIAPHRAGM FACE



ATTACHMENT TO CHANNEL

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

DRAWN BY WWR | PLANS CK'D. DLM

STEEL DIAPHRAGM | SHEET 10 | 280

SCALE =

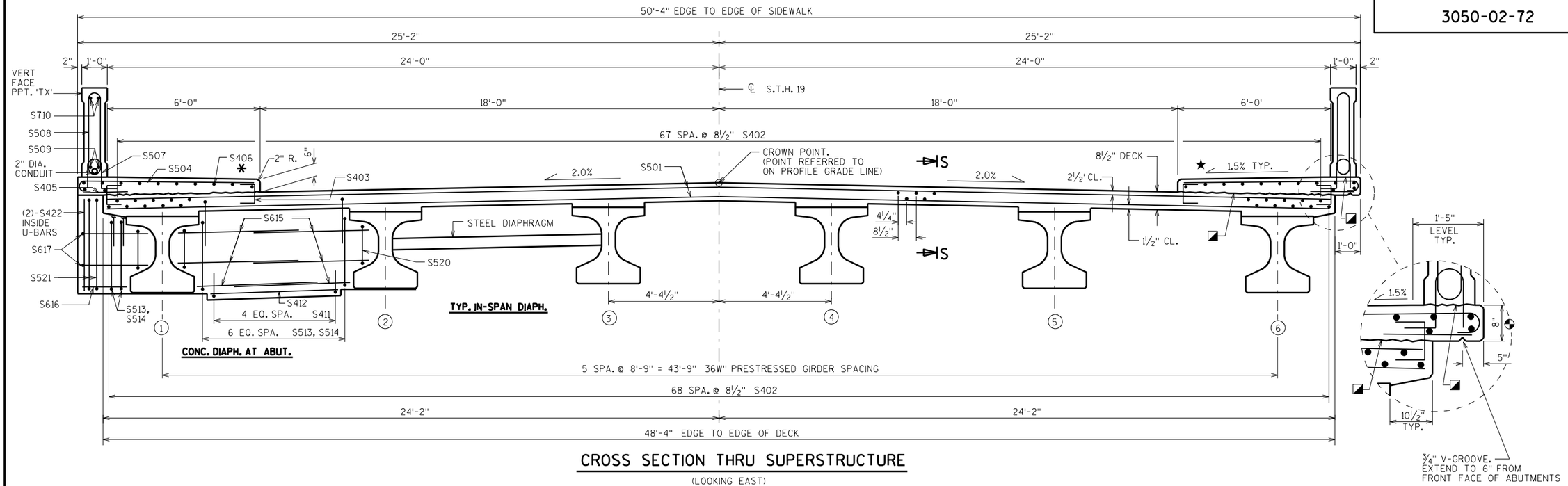
GSTDIA36W
1-13

8

8

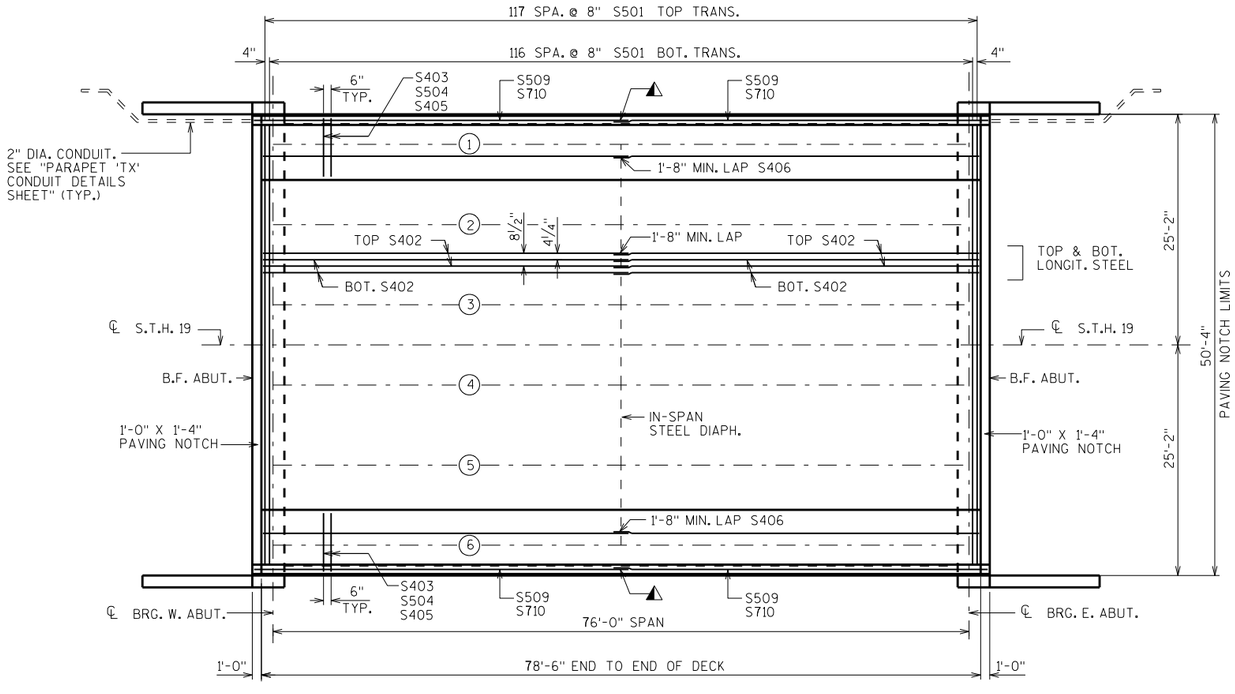
STATE PROJECT NUMBER

3050-02-72

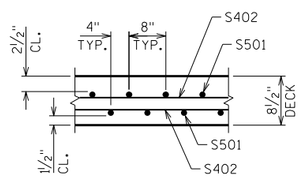


CROSS SECTION THRU SUPERSTRUCTURE

(LOOKING EAST)



PLAN



SECTION S-S

◪ CONST. JOINT- STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE CROSS SLOPE.

◔ 8" MIN. SIDEWALK THICKNESS ALSO REQ'D. AT THE EDGE OF DECK/SLAB.

★ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

✱ EQUALLY SPACE (10) S406 BARS ACROSS THE TOP OF SIDEWALK. (TYP.)

⚠ S509 BARS MIN. LAP = 1'-9"
S710 BARS MIN. LAP = 2'-7"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

DRAWN BY WWR | PLANS CK'D. DLM

SUPERSTRUCTURE

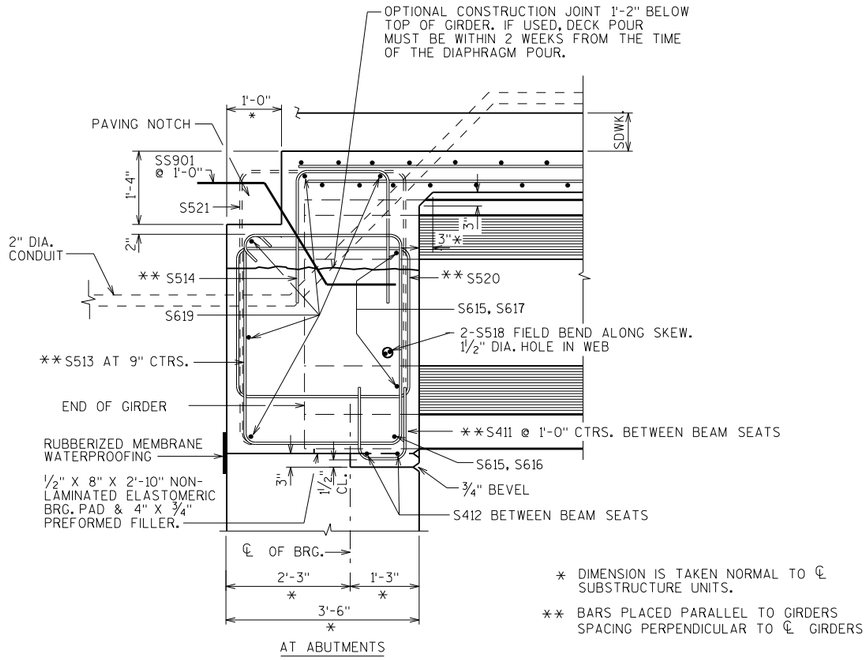
SHEET 11

281

8

8

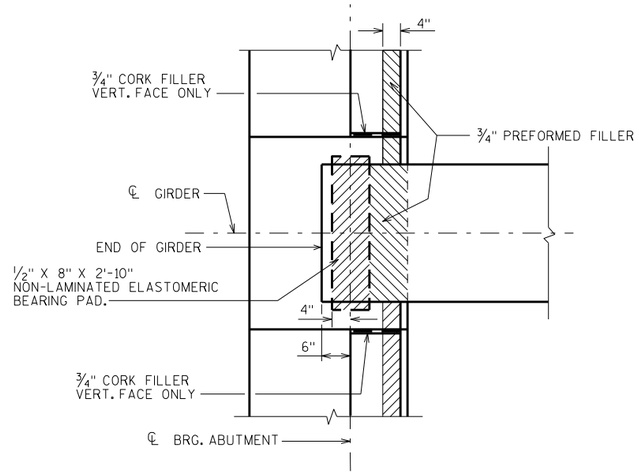
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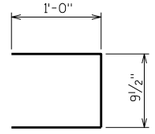
* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

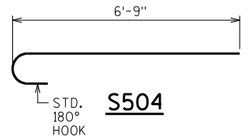
PART LONGIT. SECTION



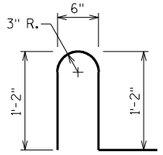
BEARING PAD DETAIL



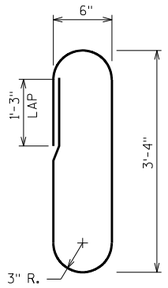
S403



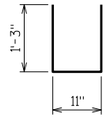
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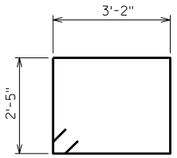
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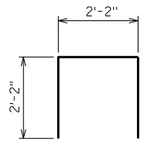
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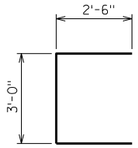
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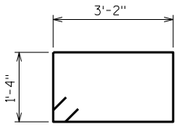
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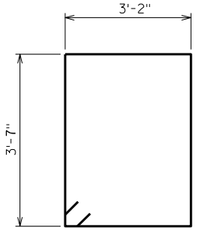
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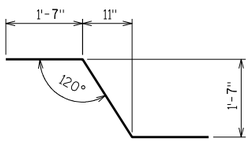
S617



S520



S521



SS901

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S501	X	235	48'-0"			DECK-TRANSVERSE
S402	X	274	40'-0"			DECK-LONGITUDINAL
S403	X	628	2'-8"	X		DECK/SDWK.-VERT.
S504	X	314	7'-4"	X		SDWK.-TRANSVERSE
S405	X	314	2'-2"			SDWK. TRANSVERSE
S406	X	48	40'-0"			SDWK.-LONGITUDINAL
◆ S507	X	212	3'-4"	X		SDWK./PPT.-VERT.
◆ S508	X	216	8'-6"	X		PPT.-VERT.
◆ S509	X	8	40'-0"			PPT.-HORIZ.-BOT.
◆ S710	X	8	40'-5"			PPT.-HORIZ.-TOP
S411	X	50	3'-3"	X		DIAPH.-BTWN. BEAM SEATS
S412	X	20	4'-11"			DIAPH. BTWN. BEAM SEATS
S513	X	78	11'-10	X		DIAPH.-VERT.
S514	X	78	6'-3"	X		DIAPH.-VERT.
S615	X	60	5'-0"			DIAPH.-HORIZ.
S616	X	4	1'-9"			DIAPH.-HORIZ.
S617	X	8	7'-8"	X		DIAPH.-HORIZ.
S518	X	24	6'-0"			DIAPH. AT GIRDERS
S619	X	10	50'-0"			DIAPH.-HORIZ.
S520	X	24	9'-8"	X		DIAPH.-VERT.
S521	X	8	14'-2"	X		DIAPH.-VERT.
S422	X	8	3'-7"			DIAPH.-VERT.
STAINLESS STEEL → SS901		102	5'-0"	X		DIAPH./APPR. SLAB @ PAVING NOTCH

◆ BAR STEEL INCLUDED IN THE BID ITEM "PARAPET CONCRETE TYPE TX".

TOP OF DECK ELEVATIONS

	℄ BRG. W. ABUT.	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	℄ BRG. E. ABUT.
LEFT E.O.D.	822.33	822.37	822.41	822.45	822.49	822.52	822.56	822.60	822.64	822.68	822.71
GIRDER 1	822.38	822.42	822.46	822.49	822.53	822.57	822.61	822.65	822.68	822.72	822.76
GIRDER 2	822.55	822.59	822.63	822.67	822.71	822.74	822.78	822.82	822.86	822.90	822.93
GIRDER 3	822.73	822.77	822.81	822.84	822.88	822.92	822.96	823.00	823.03	823.07	823.11
GIRDER 4	822.73	822.77	822.81	822.84	822.88	822.92	822.96	823.00	823.03	823.07	823.11
GIRDER 5	822.55	822.59	822.63	822.67	822.71	822.74	822.78	822.82	822.86	822.90	822.93
GIRDER 6	822.38	822.42	822.46	822.49	822.53	822.57	822.61	822.65	822.68	822.72	822.76
RIGHT E.O.D.	822.33	822.37	822.41	822.45	822.49	822.52	822.56	822.60	822.64	822.68	822.71

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

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SUPERSTRUCTURE DETAILS

SHEET 12

282

STATE PROJECT NUMBER

3050-02-72

8

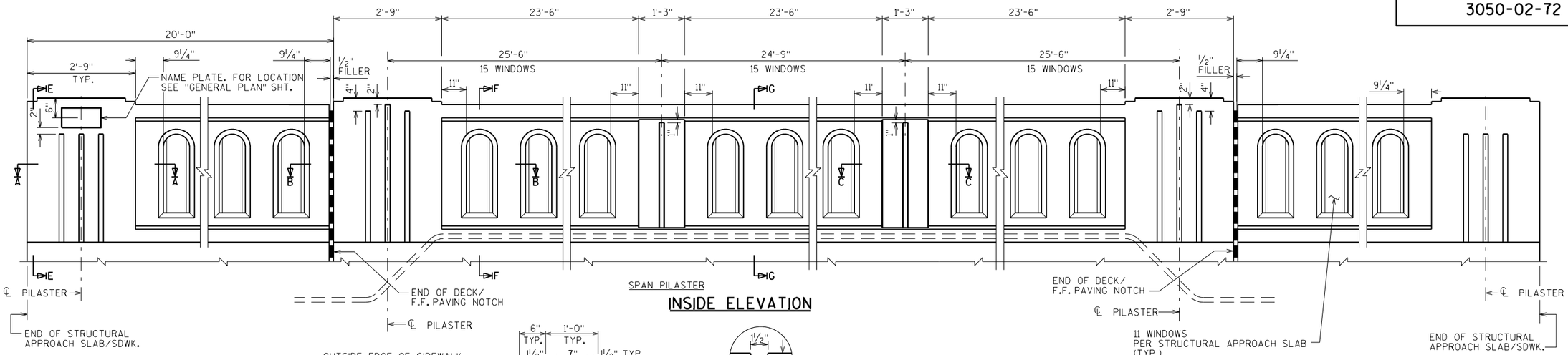
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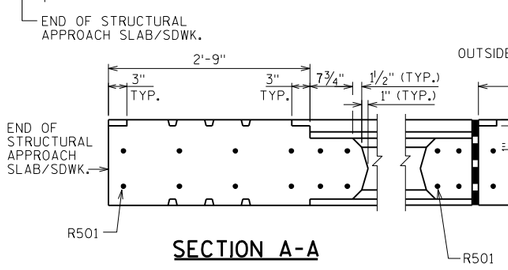
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STATE PROJECT NUMBER

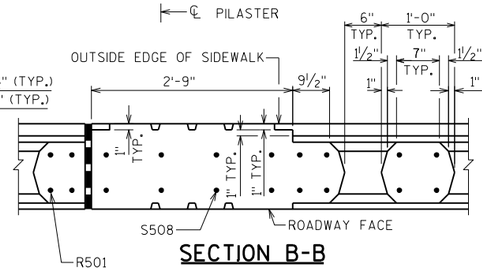
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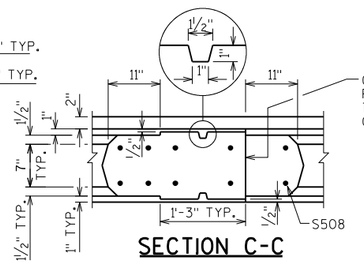
INSIDE ELEVATION



SECTION A-A



SECTION B-B

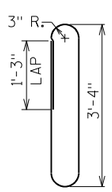


SECTION C-C

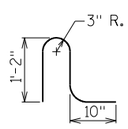
BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	LOCATION
R501	X	112	8'-6"	X	PARAPET VERT. @ STRUCT. APPR. SLAB
R502	X	112	3'-4"	X	PARAPET VERT. @ STRUCT. APPR. SLAB
R503	X	8	19'-8"		PARAPET HORIZ. BOT. @ STRUCT. APPR. SLAB
R704	X	8	19'-8"		PARAPET HORIZ. TOP @ STRUCT. APPR. SLAB

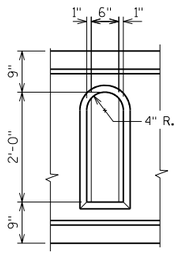
PARAPET BAR STEEL TO BE INCLUDED IN BID ITEM "PARAPET CONCRETE TYPE TX"



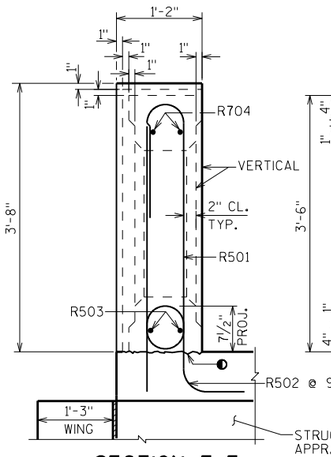
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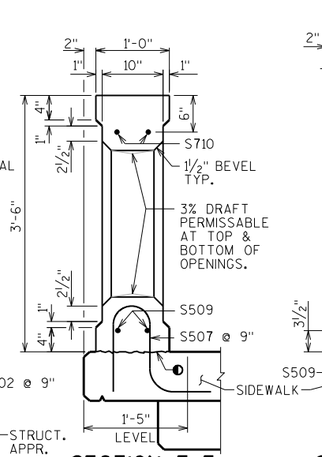
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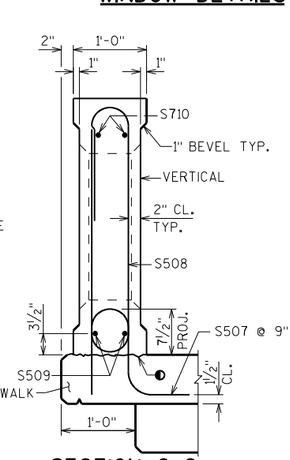
WINDOW DETAILS



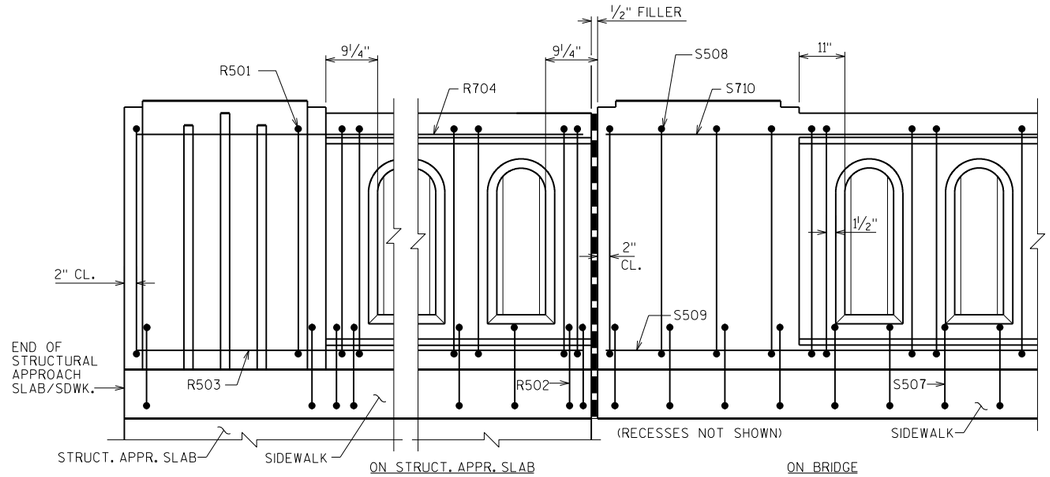
SECTION E-E



SECTION F-F



SECTION G-G



OUTSIDE ELEVATION SHOWING TYPICAL REINFORCEMENT PLACEMENT

NOTES

BID ITEM "PARAPET CONCRETE TYPE 'TX'", INCLUDES PARAPET STEEL, PARAPET CONCRETE, AND ALL CONSTRUCTION RELATED TO PARAPET.

◐ HORIZ. CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

DRAWN BY WWR | PLANS CK'D. DLM

VERTICAL FACE PARAPET 'TX'

SHEET 13

283

8

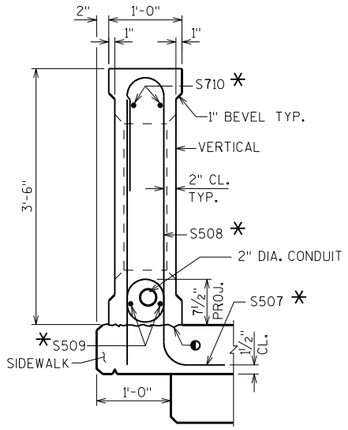
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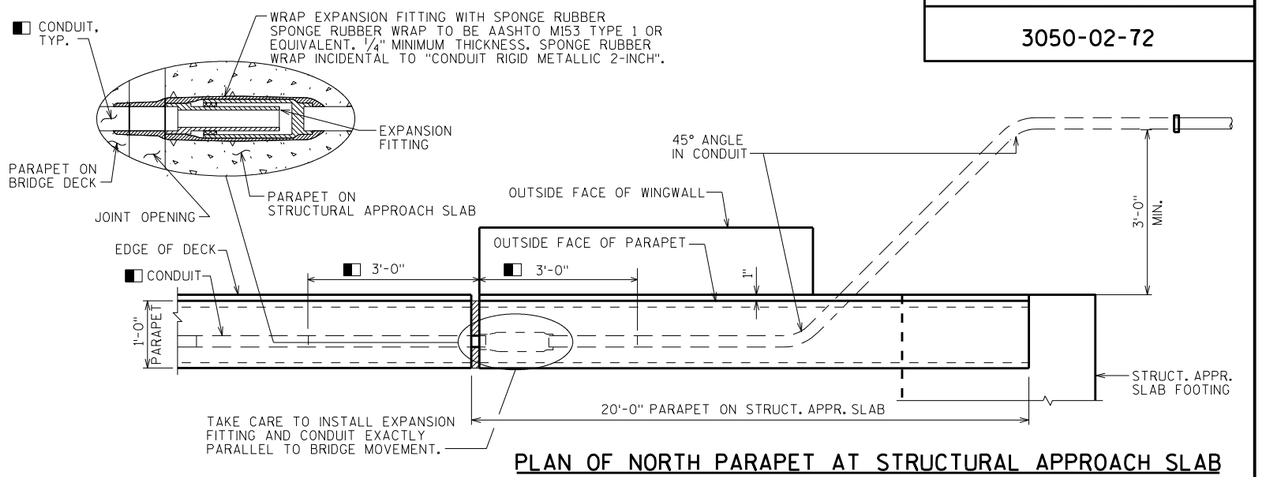
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STATE PROJECT NUMBER

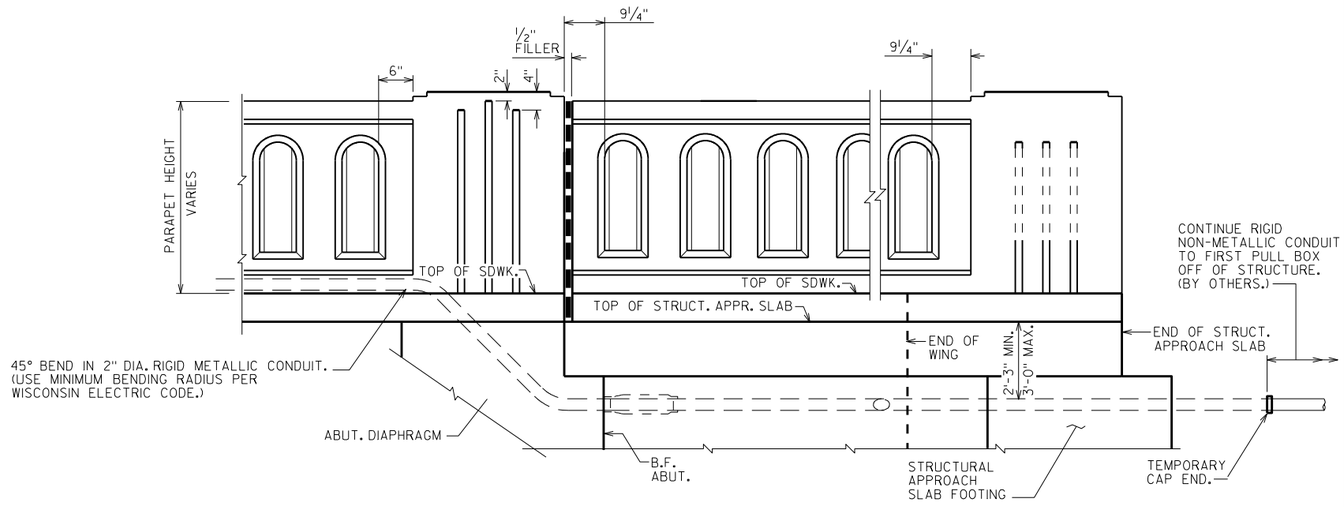
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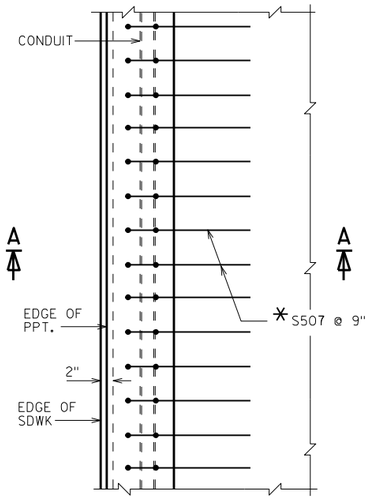
SECTION A-A



PLAN OF NORTH PARAPET AT STRUCTURAL APPROACH SLAB



OUTSIDE ELEVATION OF NORTH PARAPET AT STRUCTURAL APPROACH SLAB



PLAN AT NORTH SIDEWALK

SIDEWALK REINFORCEMENT NOT SHOWN FOR CLARITY.

■ USE RIGID METALLIC CONDUIT 3'-0" INTO PARAPET ON DECK AND WING SIDES OF THE JOINT OPENING.

◐ CONSTR. JT. STRIKE OFF AS SHOWN

* SEE VERTICAL FACE PARAPET "TX" SHT. 13 FOR ADDITIONAL BAR STEEL DETAILS.

NOTES

BID ITEMS SHALL BE:

"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH".

APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER (4" TOTAL CONDUIT MOVEMENT).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

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PARAPET "TX" CONDUIT DETAILS

SHEET 14

284

8

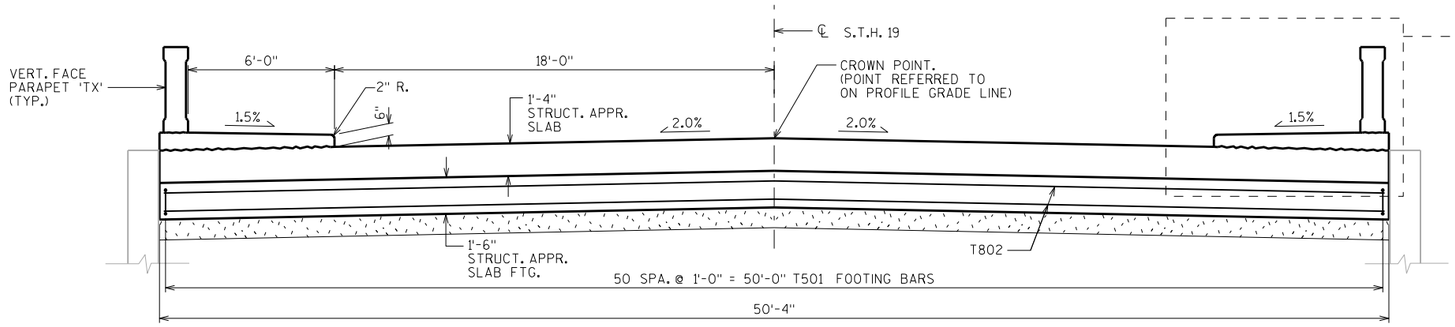
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7-13

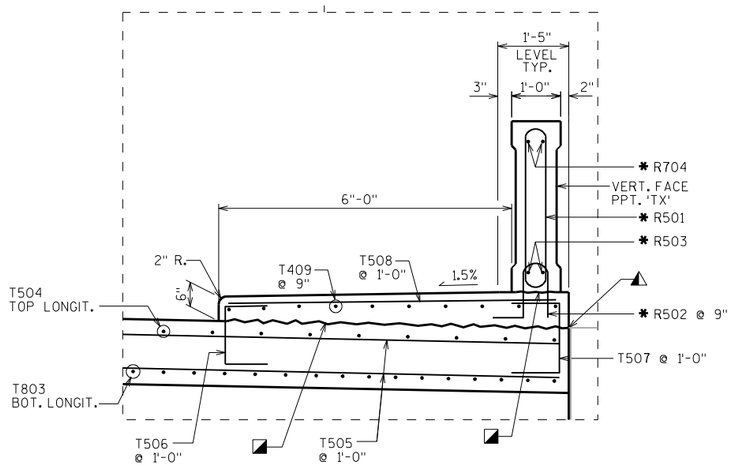
STATE PROJECT NUMBER

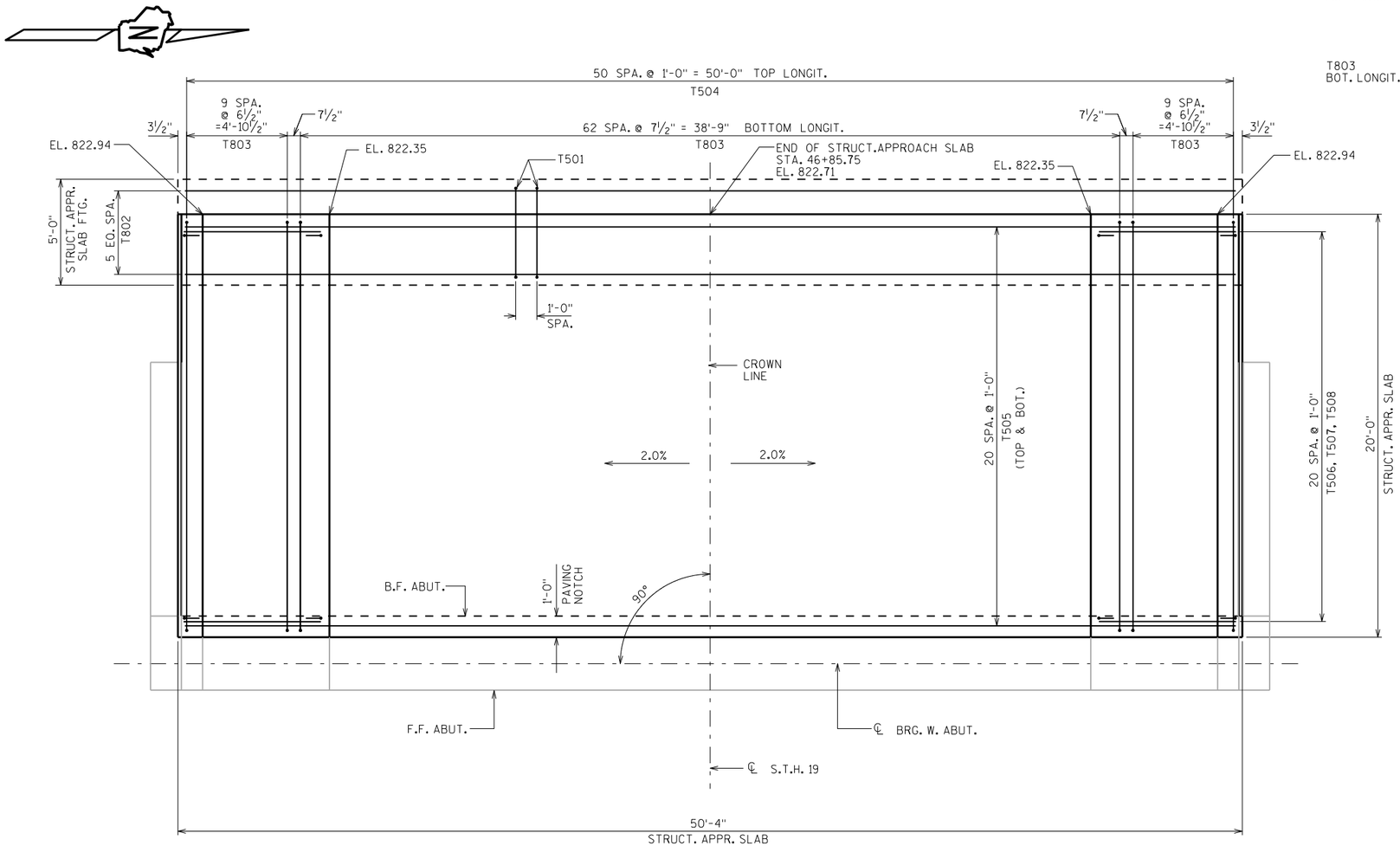
3050-02-72



SECTION THRU STRUCT. APPR. SLAB

(SHOWING FOOTING STEEL ONLY)
(LOOKING WEST)





PLAN

* SEE "VERTICAL FACE PARAPET 'TX'" SHEET FOR PARAPET BARS.

◪ CONST. JOINT- STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE CROSS SLOPE.

◭ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SUFACE OF CONCRETE.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

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WEST STRUCTURAL APPROACH SLAB

SHEET 15

285

SCALE =

8

8

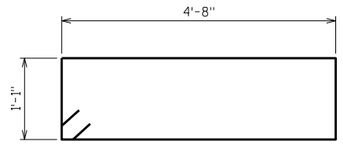
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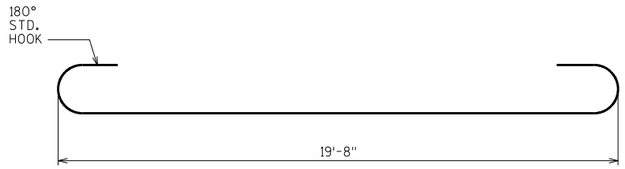
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

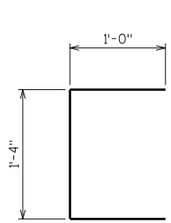
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	51	12'-2"	X		FOOTING-VERT.
T802	X	12	50'-0"			FOOTING-HORIZ.
T803	X	83	21'-6"	X		SLAB-LONGIT.-BOT.
T504	X	51	19'-8"			SLAB-LONGIT.-TOP
T505	X	42	50'-0"			SLAB-TRANSVERSE
T506	X	42	3'-1"	X		SLAB/SDWK.-VERT.
T507	X	42	3'-3"	X		SLAB/SDWK.-VERT.
T508	X	42	6'-9"			SDWK.-TRANSVERSE
T409	X	20	19'-8"			SDWK.-LONGIT.



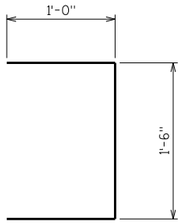
T501



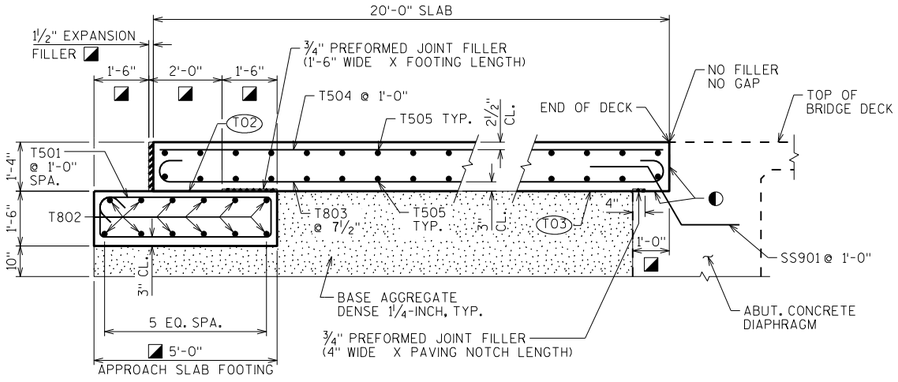
T803



T506



T507



SECTION THRU APPROACH SLAB

◐ APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCTURAL APPROACH SLAB.

◪ MEASURED NORMAL TO ABUTMENT

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE SUBGRADE.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

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WEST STRUCTURAL APPROACH SLAB DETAILS

SHEET 16

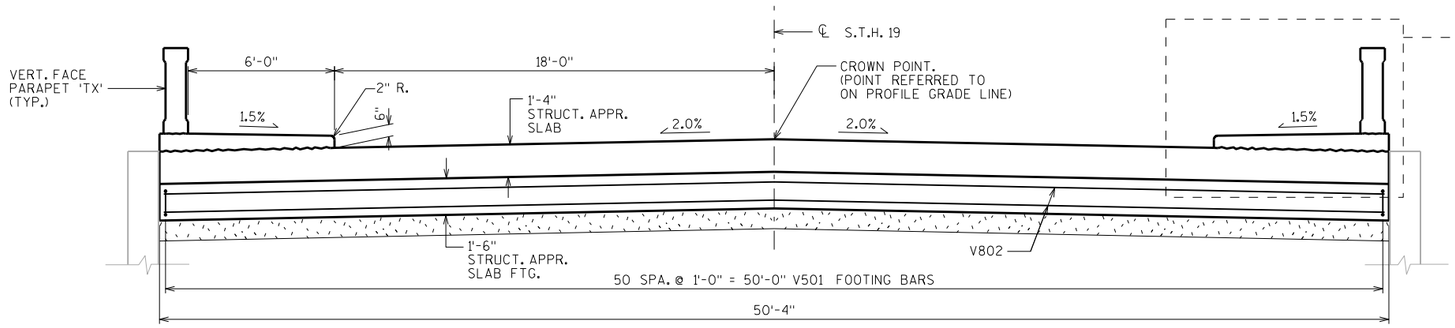
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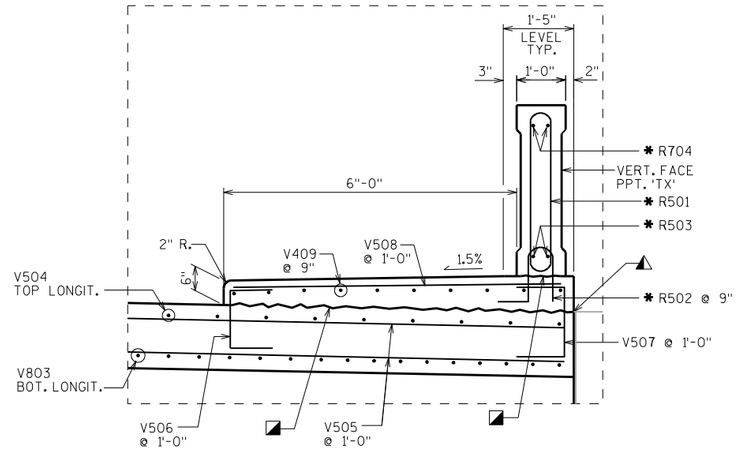
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STATE PROJECT NUMBER
3050-02-72

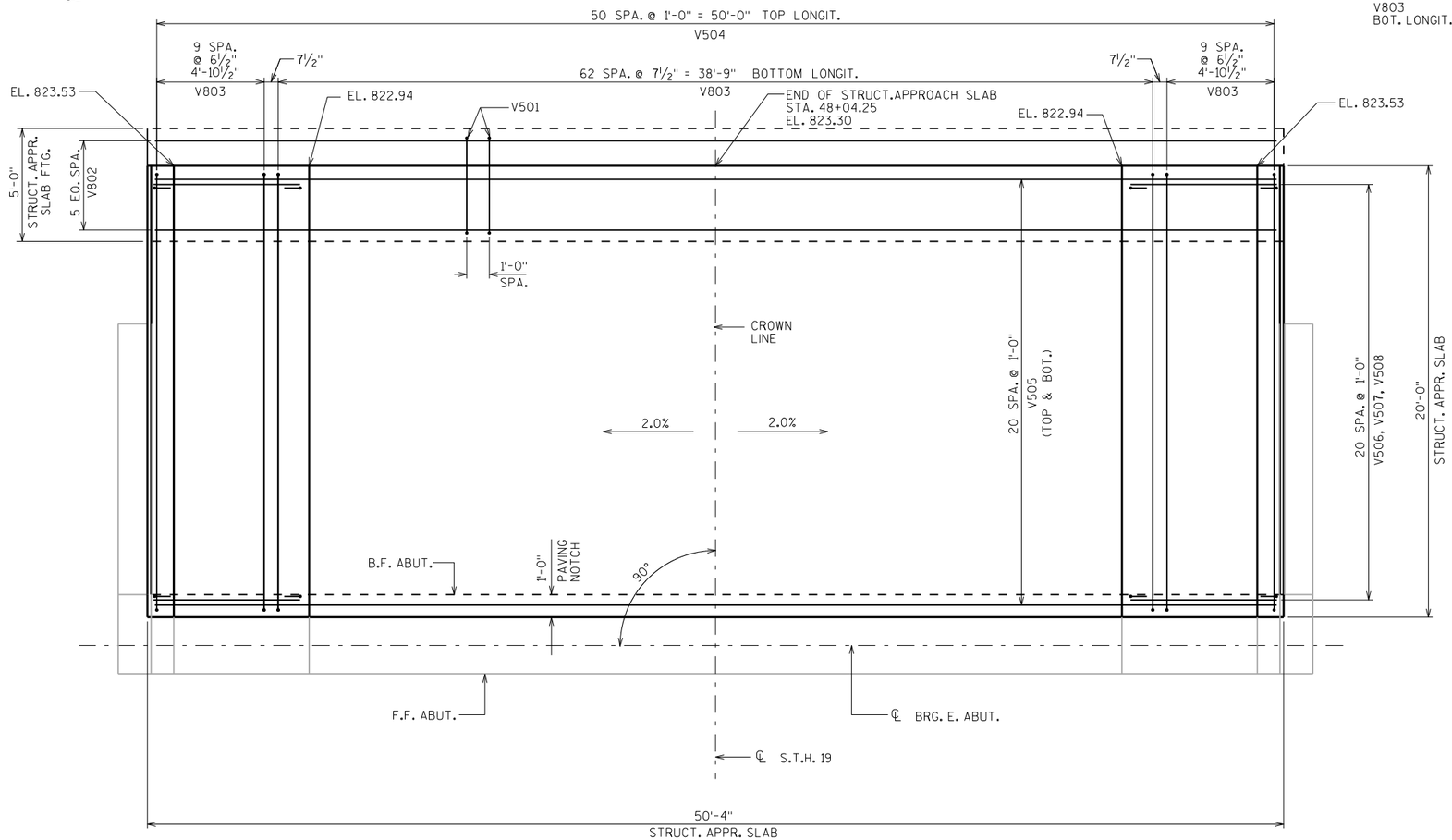


SECTION THRU STRUCT. APPR. SLAB

(SHOWING FOOTING STEEL ONLY)
(LOOKING EAST)







PLAN

✱ SEE "VERTICAL FACE PARAPET 'TX'" SHEET FOR PARAPET BARS.

◪ CONST. JOINT- STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE CROSS SLOPE.

◭ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SUFACE OF CONCRETE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

DRAWN BY WWR | PLANS CK'D. DLM

EAST STRUCTURAL APPROACH SLAB

SHEET 17

287

SCALE =

8

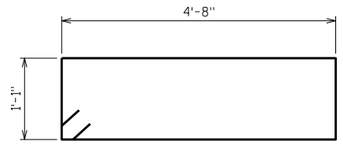
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STATE PROJECT NUMBER
3050-02-72

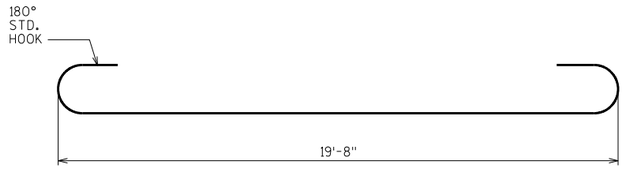
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

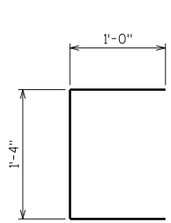
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
V501	X	51	12'-2"	X		FOOTING-VERT.
V802	X	12	50'-0"			FOOTING-HORIZ.
V803	X	83	21'-6"	X		SLAB-LONGIT.-BOT.
V504	X	51	19'-8"			SLAB-LONGIT.-TOP
V505	X	42	50'-0"			SLAB-TRANSVERSE
V506	X	42	3'-1"	X		SLAB/SDWK.-VERT.
V507	X	42	3'-3"	X		SLAB/SDWK.-VERT.
V508	X	42	6'-9"			SDWK.-TRANSVERSE
V409	X	20	19'-8"			SDWK.-LONGIT.



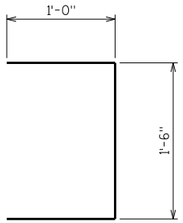
V501



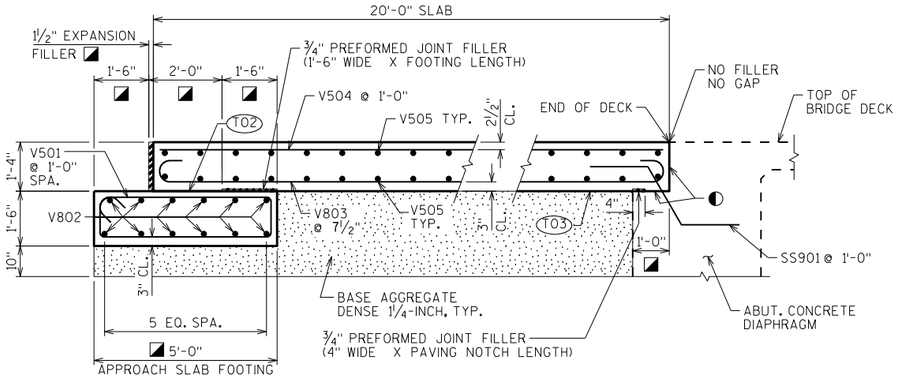
V803



V506



V507



SECTION THRU APPROACH SLAB

◐ APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCTURAL APPROACH SLAB.

◪ MEASURED NORMAL TO ABUTMENT

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE SUBGRADE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

DRAWN BY WWR | PLANS CK'D. DLM

EAST STRUCTURAL APPROACH SLAB DETAILS

SHEET 18

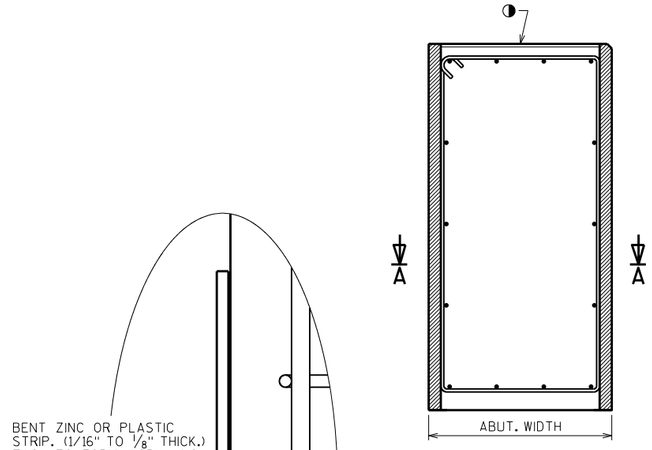
288

8

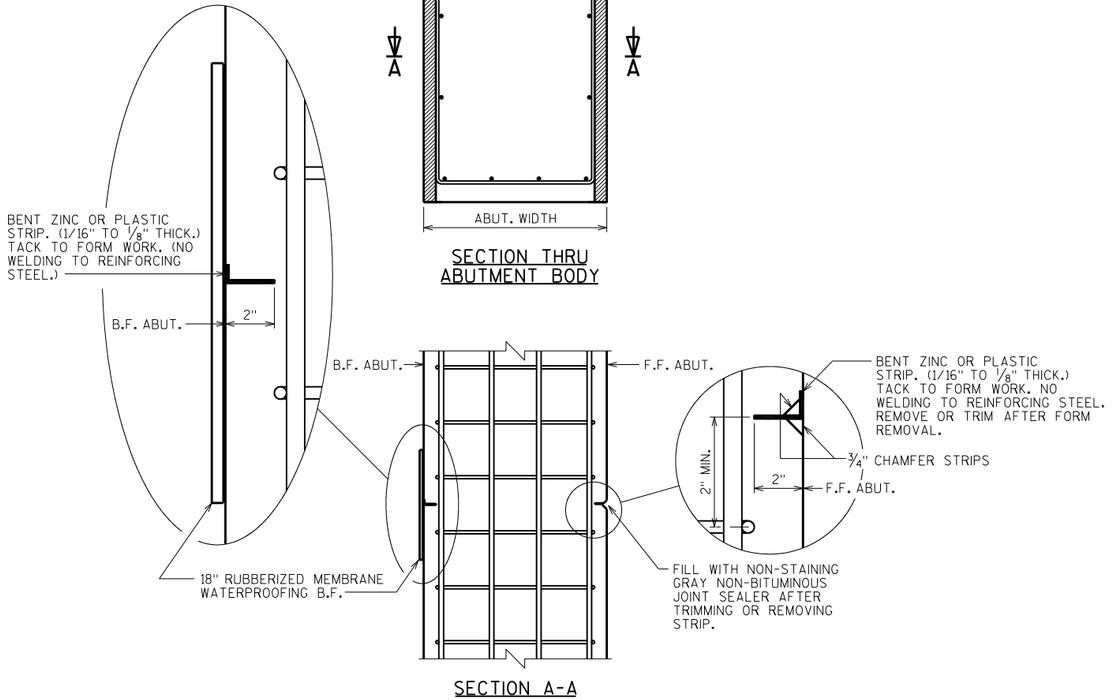
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STATE PROJECT NUMBER
3050-02-72



SECTION THRU ABUTMENT BODY



SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SAW CUTTING JOINT IS NOT ALLOWED.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-28-175

DRAWN BY WWR | PLANS CK'D. DLM

ALTERNATE CONSTRUCTION JOINT

SHEET 19

289

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123

SCALE =

ALTJOINT
7-15

STH 19

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
27+00.000	2700	0	0	0.00	1.4	0	0	0	0	0	0	0
27+25.000	2725	25	45.92	10.88	0	0	21.26	5.03	0.65	21.26	0.81	15.41
27+50.000	2750	25	89.13	23.63	0.11	0	62.52	15.97	0.05	83.78	0.87	61.90
27+70.000	2770	20	103.83	27.75	3.88	0	71.47	19.03	1.48	155.25	2.72	112.49
27+75.000	2775	5	103.17	27.75	1.01	0	19.17	5.14	0.45	174.42	3.29	125.96
27+80.000	2780	5	105.98	27.75	1.03	0	19.37	5.14	0.19	193.78	3.52	139.95
27+85.000	2785	5	117.22	27.75	0.4	0	20.67	5.14	0.13	214.45	3.69	155.31
27+90.000	2790	5	130.22	27.75	0.36	0	22.91	5.14	0.07	237.36	3.78	172.99
27+95.000	2795	5	120.62	27.75	0.33	0	23.23	5.14	0.06	260.59	3.86	191.00
28+00.000	2800	5	113.63	27.75	0.38	0	21.69	5.14	0.07	282.28	3.94	207.47
28+05.000	2805	5	107.11	27.75	0.83	0	20.44	5.14	0.11	302.71	4.08	222.63
28+10.000	2810	5	99.21	27.75	2.12	0	19.10	5.14	0.27	321.82	4.42	236.25
28+15.000	2815	5	90.23	27.75	4.68	0	17.54	5.14	0.63	339.36	5.21	247.87
28+20.000	2820	5	92.28	27.75	8.77	0	16.90	5.14	1.25	356.26	6.76	258.07
28+25.000	2825	5	101.77	27.75	12.74	0	17.97	5.14	1.99	374.23	9.25	268.41
28+30.000	2830	5	112.04	27.75	13.93	0	19.80	5.14	2.47	394.02	12.34	279.98
28+35.000	2835	5	122.87	27.75	14.96	0	21.75	5.14	2.68	415.77	15.68	293.25
28+40.000	2840	5	134.58	27.75	15.89	0	23.84	5.14	2.86	439.61	19.25	308.38
28+45.000	2845	5	122.68	27.75	17.03	0	23.82	5.14	3.05	463.43	23.06	323.25
28+50.000	2850	5	113.58	27.75	17.72	0	21.88	5.14	3.22	485.31	27.09	335.96
28+55.000	2855	5	106.95	27.75	18.19	0	20.42	5.14	3.33	505.73	31.24	347.09
28+60.000	2860	5	103.95	27.75	18.57	0	19.53	5.14	3.40	525.25	35.50	357.22
28+65.000	2865	5	105.58	27.75	18.4	0	19.40	5.14	3.42	544.66	39.78	367.21
28+75.000	2875	10	102.41	27.75	24.25	0	38.52	10.28	7.90	583.17	49.65	385.57
29+00.000	2900	25	98.65	27.75	37.16	0	93.08	25.69	28.43	676.26	85.19	417.42
29+25.000	2925	25	97.11	27.75	40.97	0	90.63	25.69	36.17	766.89	130.40	437.14
29+50.000	2950	25	98.5	27.75	45.53	0	90.56	25.69	40.05	857.45	180.46	451.95
29+75.000	2975	25	101.74	27.75	42.69	0	92.70	25.69	40.84	950.15	231.51	467.91
30+00.000	3000	25	116.71	27.75	32.06	0	101.13	25.69	34.61	1051.28	274.77	500.09
30+25.000	3025	25	114.46	27.75	22.84	0	107.02	25.69	25.42	1158.31	306.54	549.65
30+50.000	3050	25	105.41	27.75	13.78	0	101.79	25.69	16.95	1260.10	327.73	604.55
30+75.000	3075	25	106.52	30.83	8.38	0	98.12	27.12	10.26	1358.21	340.56	662.72
31+00.000	3100	25	105.31	30.83	6.57	0	98.07	28.55	6.92	1456.28	349.21	723.59
31+25.000	3125	25	108.17	30.83	4.04	0	98.83	28.55	4.91	1555.12	355.35	787.73
31+50.000	3150	25	110.44	30.83	2.77	0	101.21	28.55	3.15	1656.33	359.29	856.45
31+75.000	3175	25	112.85	30.83	2.54	0	103.38	28.55	2.46	1759.70	362.36	928.20
32+00.000	3200	25	112.6	30.83	3.19	0	104.38	28.55	2.65	1864.08	365.68	1000.71
32+25.000	3225	25	111.32	30.83	4.11	0	103.67	28.55	3.38	1967.74	369.90	1071.61
32+50.000	3250	25	108.48	30.83	7.01	0	101.76	28.55	5.15	2069.50	376.34	1138.38

STH 19

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
32+75.000	3275	25	106.63	30.83	9.76	0	99.59	28.55	7.76	2169.09	386.04	1199.72
33+00.000	3300	25	114.11	30.83	6.46	0	102.19	28.55	7.51	2271.28	395.43	1263.97
33+25.000	3325	25	120.41	30.83	2.51	0	108.57	28.55	4.15	2379.86	400.62	1338.81
33+50.000	3350	25	104.23	30.83	4.63	0	104.00	28.55	3.31	2483.86	404.75	1410.13
33+75.000	3375	25	106.01	30.83	2.76	0	97.33	28.55	3.42	2581.19	409.03	1474.63
34+00.000	3400	25	105.8	30.83	3.35	0	98.06	28.55	2.83	2679.25	412.57	1540.61
34+25.000	3425	25	104.85	30.83	6.11	0	97.52	28.55	4.38	2776.77	418.04	1604.11
34+50.000	3450	25	105.52	30.83	3.24	0	97.39	28.55	4.33	2874.17	423.45	1667.54
34+75.000	3475	25	106.06	30.83	2.63	0	97.95	28.55	2.72	2972.12	426.85	1733.55
35+00.000	3500	25	106.71	30.83	2.12	0	98.50	28.55	2.20	3070.63	429.60	1800.75
35+25.000	3525	25	104.64	30.83	2.89	0	97.85	28.55	2.32	3168.47	432.50	1867.15
35+50.000	3550	25	112.88	30.83	0.14	0	100.70	28.55	1.40	3269.18	434.25	1937.55
35+75.000	3575	25	102.29	30.83	5.63	0	99.62	28.55	2.67	3368.79	437.59	2005.28
36+00.000	3600	25	106.97	30.83	7.45	0	96.88	28.55	6.06	3465.67	445.16	2066.04
36+25.000	3625	25	117.89	30.83	8.83	0	104.10	28.55	7.54	3569.77	454.58	2132.17
36+50.000	3650	25	107.81	30.83	0.74	0	104.49	28.55	4.43	3674.26	460.12	2202.58
36+75.000	3675	25	106.45	30.83	2.23	0	99.19	28.55	1.38	3773.46	461.84	2271.50
37+00.000	3700	25	105.75	30.83	1.81	0	98.24	28.55	1.87	3871.70	464.17	2338.86
37+25.000	3725	25	105.04	30.83	1.81	0	97.59	28.55	1.68	3969.29	466.27	2405.80
37+50.000	3750	25	103.25	30.83	2.82	0	96.43	28.55	2.14	4065.72	468.95	2471.00
37+75.000	3775	25	113.43	30.83	0.07	0	100.31	28.55	1.34	4166.03	470.62	2541.09
38+00.000	3800	25	113.14	30.83	0.07	0	104.89	28.55	0.06	4270.93	470.70	2617.36
38+25.000	3825	25	97.78	30.83	11.86	0	97.65	28.55	5.52	4368.58	477.61	2679.55
38+50.000	3850	25	100.33	30.83	14.81	0	91.72	28.55	12.35	4460.29	493.04	2727.29
38+75.000	3875	25	101.29	30.83	13.54	0	93.34	28.55	13.13	4553.64	509.45	2775.67
39+00.000	3900	25	103.29	30.83	8.43	0	94.71	28.55	10.17	4648.35	522.16	2829.12
39+25.000	3925	25	106.52	30.83	0.16	0	97.13	28.55	3.98	4745.48	527.13	2892.74
39+50.000	3950	25	111.08	30.83	0	0	100.74	28.55	0.07	4846.22	527.22	2964.84
39+75.000	3975	25	114.56	30.83	0.02	0	104.46	28.55	0.01	4950.69	527.24	3040.74
40+00.000	4000	25	113.29	30.83	0.68	0	105.49	28.55	0.32	5056.17	527.64	3117.27
40+25.000	4025	25	154.77	30.83	0	0	124.10	28.55	0.31	5180.27	528.03	3212.43
40+50.000	4050	25	131.77	30.83	0	0	132.66	28.55	0.00	5312.93	528.03	3316.54
40+75.000	4075	25	126.97	30.83	0	0	119.79	28.55	0.00	5432.72	528.03	3407.77
41+00.000	4100	25	123.84	30.83	0	0	116.12	28.55	0.00	5548.83	528.03	3495.34
41+25.000	4125	25	108.97	30.83	0.04	0	107.78	28.55	0.02	5656.62	528.06	3574.55
41+50.000	4150	25	105.49	30.83	0.05	0	99.29	28.55	0.04	5755.90	528.11	3645.24
41+65.000	4165	15	105.56	30.83	0.38	0	58.63	17.13	0.12	5814.53	528.26	3686.58
41+70.000	4170	5	109.76	30.83	0.06	0	19.94	5.71	0.04	5834.47	528.31	3700.76
41+75.000	4175	5	117.29	30.83	0	0	21.02	5.71	0.01	5855.49	528.32	3716.06

STH 19

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
41+80.000	4180	5	127.73	30.83	0	0	22.69	5.71	0.00	5878.18	528.32	3733.04
41+85.000	4185	5	118.07	30.83	0	0	22.76	5.71	0.00	5900.94	528.32	3750.09
41+90.000	4190	5	109.08	30.83	0	0	21.03	5.71	0.00	5921.97	528.32	3765.41
41+95.000	4195	5	100.4	30.83	0	0	19.40	5.71	0.00	5941.36	528.32	3779.10
42+00.000	4200	5	91.41	30.83	0	0	17.76	5.71	0.00	5959.12	528.32	3791.15
42+05.000	4205	5	91.58	30.83	0	0	16.94	5.71	0.00	5976.07	528.32	3802.38
42+10.000	4210	5	98.6	30.83	0.76	0	17.61	5.71	0.07	5993.68	528.41	3814.20
42+15.000	4215	5	106.94	30.83	1.8	0	19.03	5.71	0.24	6012.71	528.70	3827.22
42+20.000	4220	5	125.08	30.83	0	0	21.48	5.71	0.17	6034.19	528.91	3842.79
42+25.000	4225	5	134.68	30.83	0	0	24.05	5.71	0.00	6058.24	528.91	3861.13
42+30.000	4230	5	121.19	30.83	0	0	23.69	5.71	0.00	6081.94	528.91	3879.11
42+35.000	4235	5	110.13	30.83	0.85	0	21.42	5.71	0.08	6103.35	529.01	3894.72
42+40.000	4240	5	108.34	30.83	0.8	0	20.23	5.71	0.15	6123.58	529.20	3909.05
42+50.000	4250	10	102.09	30.83	0.8	0	38.97	11.42	0.30	6162.55	529.57	3936.23
42+75.000	4275	25	97.67	30.83	2.56	0	92.48	28.55	1.56	6255.03	531.51	3998.21
43+00.000	4300	25	96.76	30.83	5.24	0	90.01	28.55	3.61	6345.05	536.03	4055.16
43+25.000	4325	25	96.4	30.83	11.51	0	89.43	28.55	7.75	6434.47	545.72	4106.35
43+50.000	4350	25	100.26	30.83	2.04	0	91.05	28.55	6.27	6525.52	553.56	4161.00
43+75.000	4375	25	101.03	30.83	13.74	0	93.19	28.55	7.31	6618.71	562.69	4216.51
44+00.000	4400	25	134.58	30.83	54.34	0	109.08	28.55	31.52	6727.79	602.09	4257.64
44+25.000	4425	25	118.18	30.83	116.46	0	117.02	28.55	79.07	6844.81	700.94	4247.27
44+50.000	4450	25	123.24	30.83	115.92	0	111.77	28.55	107.58	6956.57	835.41	4196.01
44+75.000	4475	25	122.46	30.83	124.62	0	113.75	28.55	111.36	7070.32	974.62	4142.01
45+00.000	4500	25	114.29	30.83	99.17	0	109.61	28.55	103.61	7179.93	1104.12	4093.56
45+25.000	4525	25	104.1	30.83	75.59	0	101.11	28.55	80.91	7281.04	1205.26	4064.98
45+50.000	4550	25	101.01	30.83	70.1	0	94.96	28.55	67.45	7376.00	1289.57	4047.08
45+75.000	4575	25	110.2	30.83	65.86	0	97.78	28.55	62.94	7473.78	1368.25	4037.63
46+00.000	4600	25	141.17	30.83	62.49	0	116.38	28.55	59.42	7590.15	1442.53	4051.18
46+25.000	4625	25	117.62	30.83	75.08	0	119.81	28.55	63.69	7709.96	1522.14	4062.83
46+50.000	4650	25	107.05	31.42	66.43	0	104.01	28.82	65.51	7813.98	1604.03	4056.13
46+75.000	4675	25	112.03	32.75	1	0	101.43	29.71	31.22	7915.40	1643.05	4088.83
47+00.000	4700	25	91.22	34.17	1.5	0	94.10	30.98	1.16	8009.50	1644.50	4150.50
47+05.083	4705.083	5.083	85.33	34.42	0.18	0	16.62	6.46	0.16	8026.12	1644.70	4160.46
47+84.917	4784.917	79.834	85.08	34.42	0.18	0	0.00	101.76	0.00	8026.12	1644.70	4058.70
48+00.000	4800	15.083	86.61	34.42	3.66	0	47.96	19.23	1.07	8074.07	1646.04	4086.09
48+25.000	4825	25	86.53	34.42	10.54	0	80.16	31.87	6.57	8154.23	1654.26	4126.16
48+50.000	4850	25	82.32	34.42	28.31	0	78.17	31.87	17.99	8232.40	1676.74	4149.98
48+75.000	4875	25	76.3	34.42	24.05	0	73.44	31.87	24.24	8305.84	1707.04	4161.25
49+00.000	4900	25	76.93	34.42	20.61	0	70.94	31.87	20.68	8376.78	1732.88	4174.48

STH 19

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
49+25.000	4925	25	78.4	33.67	12.98	0	71.91	31.52	15.55	8448.69	1752.32	4195.43
49+50.000	4950	25	93.21	30.42	3.1	0	79.45	29.67	7.44	8528.14	1761.63	4235.90
49+55.880	4955.88	5.88	106.84	30.42	0	0	21.78	6.62	0.34	8549.92	1762.05	4250.64
49+60.000	4960	4.12	105.08	30.42	0	0	16.17	4.64	0.00	8566.09	1762.05	4262.17
49+65.000	4965	5	108.8	30.00	0.38	0	19.80	5.59	0.04	8585.89	1762.09	4276.34
49+70.000	4970	5	107.94	30.00	0.32	0	20.07	5.56	0.06	8605.96	1762.18	4290.77
49+75.000	4975	5	104.89	30.00	0.25	0	19.71	5.56	0.05	8625.67	1762.24	4304.85
49+80.000	4980	5	103.17	29.58	0.06	0	19.26	5.52	0.03	8644.93	1762.28	4318.56
49+85.000	4985	5	103.36	29.17	0	0	19.12	5.44	0.01	8664.06	1762.28	4332.24
49+90.000	4990	5	107.54	28.33	0	0	19.53	5.32	0.00	8683.59	1762.28	4346.44
49+95.000	4995	5	116.18	27.92	0	0	20.71	5.21	0.00	8704.30	1762.28	4361.95
50+00.000	5000	5	124.86	27.50	0	0	22.32	5.13	0.00	8726.62	1762.28	4379.14
50+05.000	5005	5	132.85	27.08	0	0	23.86	5.05	0.00	8750.48	1762.28	4397.95
50+10.000	5010	5	135.64	26.67	0	0	24.86	4.98	0.00	8775.34	1762.28	4417.83
50+15.000	5015	5	131.77	26.67	0	0	24.76	4.94	0.00	8800.10	1762.28	4437.65
50+17.645	5017.645	2.645	135.23	26.08	0	0	13.08	2.58	0.00	8813.18	1762.28	4448.15
50+25.000	5025	7.355	147.69	26.00	0	0	38.53	7.09	0.00	8851.71	1762.28	4479.59
50+50.000	5050	25	124.2	26.00	0	0	125.88	24.07	0.00	8977.59	1762.28	4581.39
50+75.000	5075	25	103.57	26.00	1	0	105.45	24.07	0.46	9083.04	1762.86	4662.18
51+00.000	5100	25	80.57	26.00	0	0	85.25	24.07	0.46	9168.29	1763.44	4722.78
51+25.000	5125	25	73.34	26.00	3.02	0	71.25	24.07	1.40	9239.54	1765.19	4768.21
51+50.000	5150	25	68.72	26.00	3.29	0	65.77	24.07	2.92	9305.31	1768.84	4806.26
51+75.000	5175	25	71.96	26.00	2.38	0	65.13	24.07	2.63	9370.44	1772.12	4844.03
52+00.000	5200	25	97.46	26.00	3.9	0	78.44	24.07	2.91	9448.88	1775.76	4894.76
52+25.000	5225	25	72.74	26.00	5.56	0	78.80	24.07	4.38	9527.67	1781.23	4944.01
52+50.000	5250	25	77.25	26.00	3.68	0	69.44	24.07	4.28	9597.11	1786.58	4984.02
52+75.000	5275	25	83.16	26.25	2.42	0	74.26	24.19	2.82	9671.38	1790.11	5030.57
52+85.294	5285.294	10.294	88.04	26.33	2.04	0	32.64	10.02	0.85	9704.01	1791.17	5052.12
52+90.000	5290	4.706	100.47	27.00	0	0	16.43	4.65	0.18	9720.44	1791.39	5063.67
52+95.000	5295	5	100.64	27.67	0	0	18.62	5.06	0.00	9739.06	1791.39	5077.23
53+00.000	5300	5	96.8	28.33	0	0	18.28	5.19	0.00	9757.34	1791.39	5090.33
53+05.000	5305	5	88.38	28.42	1.71	0	17.15	5.25	0.16	9774.49	1791.59	5102.02
53+10.000	5310	5	86.8	28.58	0.08	0	16.22	5.28	0.17	9790.71	1791.80	5112.76
53+15.000	5315	5	85.11	28.67	0.03	0	15.92	5.30	0.01	9806.63	1791.81	5123.36
53+20.000	5320	5	82.71	28.83	0	0	15.54	5.32	0.00	9822.17	1791.81	5133.58
53+25.000	5325	5	89.24	29.00	0	0	15.92	5.35	0.00	9838.09	1791.81	5144.14
53+30.000	5330	5	99.41	29.17	0	0	17.47	5.39	0.00	9855.55	1791.81	5156.22
53+35.000	5335	5	105.65	29.25	0	0	18.99	5.41	0.00	9874.54	1791.81	5169.80
53+40.000	5340	5	112.88	29.33	0	0	20.23	5.42	0.00	9894.78	1791.81	5184.61

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
53+45.000	5345	5	119.42	29.42	0	0	21.51	5.44	0.00	9916.29	1791.81	5200.68
53+50.000	5350	5	108.84	29.58	0	0	21.14	5.46	0.00	9937.42	1791.81	5216.35
53+55.000	5355	5	103.69	29.75	0.25	0	19.68	5.49	0.02	9957.10	1791.84	5230.51
53+55.396	5355.396	0.396	104.59	29.75	0.9	0	1.53	0.44	0.01	9958.63	1791.85	5231.59
53+75.000	5375	19.604	104.84	29.50	0.77	0	76.03	21.51	0.61	10034.66	1792.61	5285.35
54+00.000	5400	25	117.86	30.00	0.04	0	103.10	27.55	0.38	10137.76	1793.08	5360.44
54+25.000	5425	25	138.45	30.00	2.05	0	118.66	27.78	0.97	10256.42	1794.29	5450.11
54+50.000	5450	25	140.87	30.00	6.62	0	129.31	27.78	4.01	10385.74	1799.31	5546.63
54+75.000	5475	25	132.25	30.00	5.13	0	126.44	27.78	5.44	10512.18	1806.11	5638.50
55+00.000	5500	25	145.69	30.00	0.21	0	128.68	27.78	2.47	10640.86	1809.20	5736.31
55+25.000	5525	25	121.65	29.92	12.42	0	123.77	27.74	5.85	10764.63	1816.51	5825.03
55+50.000	5550	25	120.76	29.83	10.52	0	112.23	27.66	10.62	10876.85	1829.78	5896.32
55+75.000	5575	25	102.74	29.75	1.73	0	103.47	27.58	5.67	10980.32	1836.87	5965.12
56+00.000	5600	25	106.54	29.67	5.47	0	96.89	27.51	3.33	11077.21	1841.04	6030.33
56+25.000	5625	25	113.72	37.50	2.17	0	101.97	31.10	3.54	11179.19	1845.46	6096.79
56+50.000	5650	25	122.12	37.50	0	0	109.19	34.72	1.00	11288.37	1846.72	6169.99
56+75.000	5675	25	128.83	37.50	1.13	0	116.18	34.72	0.52	11404.55	1847.37	6250.80
57+00.000	5700	25	119.55	37.50	0	0	114.99	34.72	0.52	11519.54	1848.02	6330.41
57+01.996	5701.996	1.996	123.47	37.50	0	0	8.98	2.77	0.00	11528.52	1848.02	6336.62
57+05.000	5705	3.004	126.35	37.50	0	0	13.90	4.17	0.00	11542.42	1848.02	6346.35
57+10.000	5710	5	132.26	37.50	0	0	23.95	6.94	0.00	11566.37	1848.02	6363.35
57+15.000	5715	5	131.31	37.50	0	0	24.40	6.94	0.00	11590.77	1848.02	6380.81
57+20.000	5720	5	128.59	37.92	0	0	24.06	6.98	0.00	11614.84	1848.02	6397.89
57+25.000	5725	5	132.81	38.33	0	0	24.20	7.06	0.00	11639.04	1848.02	6415.03
57+30.000	5730	5	126.8	38.92	0	0	24.04	7.15	0.00	11663.08	1848.02	6431.92
57+35.000	5735	5	120.85	39.17	0	0	22.93	7.23	0.00	11686.01	1848.02	6447.62
57+40.000	5740	5	128.89	39.75	0	0	23.12	7.31	0.00	11709.13	1848.02	6463.44
57+45.000	5745	5	138.22	40.17	0	0	24.73	7.40	0.00	11733.87	1848.02	6480.77
57+50.000	5750	5	146.46	40.58	0	0	26.36	7.48	0.00	11760.22	1848.02	6499.65
57+55.000	5755	5	152.13	41.00	0	0	27.65	7.55	0.00	11787.87	1848.02	6519.75
57+59.564	5759.564	4.564	150.17	41.42	0	0	25.55	6.97	0.00	11813.42	1848.02	6538.33
57+75.000	5775	15.436	151.91	41.67	0	0	86.35	23.75	0.00	11899.77	1848.02	6600.93
58+00.000	5800	25	148.13	41.67	0	0	138.91	38.58	0.00	12038.68	1848.02	6701.26
58+25.000	5825	25	145.98	41.67	0	0	136.16	38.58	0.00	12174.84	1848.02	6798.84
58+50.000	5850	25	152.23	41.67	0	0	138.06	38.58	0.00	12312.90	1848.02	6898.32
58+75.000	5875	25	140.95	41.67	0	0	135.73	38.58	0.00	12448.63	1848.02	6995.47
59+00.000	5900	25	139.78	41.67	0.03	0	129.97	38.58	0.01	12578.60	1848.04	7086.84
59+25.000	5925	25	141.35	41.67	0.04	0	130.15	38.58	0.03	12708.75	1848.08	7178.37
59+50.000	5950	25	158.18	40.83	0	0	138.67	38.19	0.02	12847.42	1848.10	7278.83

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
59+75.000	5975	25	128.65	68.10	0	0	132.79	50.43	0.00	12980.22	1848.10	7361.19
59+75.919	5975.919	0.919	109.71	68.10	0	0	4.06	2.32	0.00	12984.27	1848.10	7362.92
60+35.413	6035.413	59.494	104.75	68.10	0	0	0.00	150.06	0.00	12984.27	1848.10	7212.87
60+50.000	6050	14.587	136.87	75.00	0	0	65.27	38.66	0.00	13049.54	1848.10	7239.48
60+75.000	6075	25	154.52	44.50	0	0	134.90	55.32	0.00	13184.44	1848.10	7319.06
61+00.000	6100	25	139.62	44.50	0	0	136.18	41.20	0.00	13320.62	1848.10	7414.03
61+25.000	6125	25	139.39	44.50	0	0	129.17	41.20	0.00	13449.79	1848.10	7502.00
61+50.000	6150	25	140.25	44.42	0	0	129.46	41.17	0.00	13579.25	1848.10	7590.30
61+75.000	6175	25	145.98	44.33	0	0	132.51	41.09	0.00	13711.77	1848.10	7681.72
62+00.000	6200	25	155.79	44.17	0	0	139.71	40.97	0.00	13851.48	1848.10	7780.46
62+25.000	6225	25	143.44	44.17	0	0	138.53	40.90	0.00	13990.01	1848.10	7878.10
62+50.000	6250	25	150.73	44.17	0	0	136.19	40.90	0.00	14126.20	1848.10	7973.39
62+75.000	6275	25	144.41	44.17	0	0	136.64	40.90	0.00	14262.84	1848.10	8069.13
62+89.723	6289.723	14.723	147.02	43.33	0	0	79.46	23.86	0.00	14342.30	1848.10	8124.74
62+95.161	6295.161	5.438	154.53	43.33	0	0	30.37	8.73	0.00	14372.66	1848.10	8146.38
63+00.000	6300	4.839	154.81	42.50	0	0	27.72	7.69	0.00	14400.38	1848.10	8166.40
63+05.000	6305	5	154.47	43.33	0	0	28.64	7.95	0.00	14429.02	1848.10	8187.09
63+10.000	6310	5	159.59	44.17	0	0	29.08	8.10	0.00	14458.10	1848.10	8208.07
63+15.000	6315	5	152.39	44.17	0	0	28.89	8.18	0.00	14486.99	1848.10	8228.78
63+20.000	6320	5	143.22	44.17	0	0	27.37	8.18	0.00	14514.36	1848.10	8247.97
63+25.000	6325	5	133.36	44.17	0	0	25.61	8.18	0.00	14539.97	1848.10	8265.40
63+30.000	6330	5	122.91	44.17	0	0	23.73	8.18	0.00	14563.70	1848.10	8280.95
63+35.000	6335	5	122.1	44.58	0	0	22.69	8.22	0.00	14586.38	1848.10	8295.42
63+40.000	6340	5	131.52	45.00	0	0	23.48	8.29	0.00	14609.87	1848.10	8310.61
63+45.000	6345	5	141.32	45.42	0	0	25.26	8.37	0.00	14635.13	1848.10	8327.50
63+50.000	6350	5	151.17	45.83	0	0	27.08	8.45	0.00	14662.21	1848.10	8346.13
63+55.000	6355	5	159.31	46.25	0	0	28.75	8.53	0.00	14690.96	1848.10	8366.36
63+60.000	6360	5	151.45	46.42	0	0	28.77	8.58	0.00	14719.73	1848.10	8386.55
63+65.000	6365	5	145.44	46.92	0	0	27.49	8.64	0.00	14747.22	1848.10	8405.40
63+70.000	6370	5	142.75	49.00	0	0	26.68	8.88	0.00	14773.91	1848.10	8423.20
63+71.024	6371.024	1.024	144.12	48.92	0	0	5.44	1.86	0.00	14779.35	1848.10	8426.78
63+75.000	6375	3.976	138.17	48.92	0	0	20.78	7.20	0.00	14800.13	1848.10	8440.36
63+85.941	6385.941	10.941	131.37	48.83	0.06	0	54.61	19.81	0.01	14854.74	1848.12	8475.16
64+00.000	6400	14.059	135.79	48.83	0	0	69.56	25.43	0.02	14924.30	1848.14	8519.26
64+25.000	6425	25	133.42	48.50	0	0	124.63	45.06	0.00	15048.93	1848.14	8598.84
64+50.000	6450	25	128.88	48.08	0	0	121.44	44.71	0.00	15170.37	1848.14	8675.56
64+75.000	6475	25	123.38	47.67	0	0	116.79	44.33	0.00	15287.16	1848.14	8748.02
65+00.000	6500	25	144.38	47.67	0	0	123.96	44.14	0.00	15411.12	1848.14	8827.84
65+25.000	6525	25	143.76	47.50	0	0	133.40	44.06	0.00	15544.52	1848.14	8917.18

STH 19

STATION	Real Station	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 8
65+50.000	6550	25	139.28	47.25	0	0	131.04	43.87	0.00	15675.55	1848.14	9004.35
65+75.000	6575	25	130.1	78.90	0	0	124.71	58.40	0.00	15800.27	1848.14	9070.66
65+89.156	6589.156	14.156	137.07	69.15	0	0	70.04	38.81	0.00	15870.31	1848.14	9101.89

Canal Rd.

STATION	Real Station	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 8
10+20.000	1020	0	31.6	0.00	0	0	0	0	0	0	0	0
10+25.000	1025	5	71.17	46.95	0	0	9.52	4.35	0.00	9.52	0.00	5.17
10+30.000	1030	5	109.78	39.90	0	0	16.75	8.04	0.00	26.27	0.00	13.88
10+35.000	1035	5	129.64	34.65	0.23	0	22.17	6.90	0.02	48.44	0.03	29.12
10+40.000	1040	5	119.83	31.13	0.04	0	23.10	6.09	0.03	71.54	0.06	46.10
10+45.000	1045	5	112.88	29.03	0.28	0	21.55	5.57	0.03	93.09	0.09	62.04
10+50.000	1050	5	103.61	27.98	0.24	0	20.05	5.28	0.05	113.13	0.16	76.75
10+55.000	1055	5	57.57	27.90	0.19	0	14.92	5.17	0.04	128.05	0.20	86.45
10+60.000	1060	5	57.24	28.80	0.58	0	10.63	5.25	0.07	138.69	0.29	91.74
10+65.000	1065	5	59.24	9.93	0.03	0	10.79	3.59	0.06	149.47	0.36	98.87
10+70.000	1070	5	59.54	10.28	0	0	11.00	1.87	0.00	160.47	0.37	107.99
10+75.000	1075	5	58.48	11.38	0	0	10.93	2.00	0.00	171.40	0.37	116.91
10+77.000	1077	2	54.77	10.88	0	0	4.19	0.82	0.00	175.59	0.37	120.29

3

3

Minnetonka Way

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
10+20.000	1020	0	31.1	56.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10+25.000	1025	5	76.45	40.83	0.00	0.00	9.96	9.00	0.00	9.96	0.00	0.96
10+30.000	1030	5	118.23	34.17	0.00	0.00	18.03	6.94	0.00	27.98	0.00	12.04
10+35.000	1035	5	125.95	30.58	0.00	0.00	22.61	6.00	0.00	50.59	0.00	28.66
10+40.000	1040	5	129.91	29.17	0.00	0.00	23.69	5.53	0.00	74.28	0.00	46.82
10+45.000	1045	5	85.26	8.75	0.00	0.00	19.92	3.51	0.00	94.21	0.00	63.23
10+50.000	1050	5	82.88	8.70	0.00	0.00	15.57	1.62	0.00	109.78	0.00	77.18
10+55.000	1055	5	77.02	8.70	0.00	0.00	14.81	1.61	0.00	124.58	0.00	90.37
10+60.000	1060	5	72.02	8.70	0.00	0.00	13.80	1.61	0.00	138.38	0.00	102.56
10+65.000	1065	5	68.21	8.70	0.00	0.00	12.98	1.61	0.00	151.37	0.00	113.94
10+70.000	1070	5	64.25	8.70	0.05	0.00	12.26	1.61	0.00	163.63	0.01	124.58
10+75.000	1075	5	61.33	8.75	0.06	0.00	11.63	1.62	0.01	175.26	0.02	134.58
10+80.000	1080	5	54.66	8.75	0.00	0.00	10.74	1.62	0.01	186.00	0.03	143.70
10+82.000	1082	2	54.53	8.75	0.00	0.00	4.04	0.65	0.00	190.04	0.03	147.09

Van Buren St.

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
9+35.000	935	0	44.15	5.33	0.24	0	0	0	0	0	0	0
9+40.000	940	5	43.56	5.43	0.56	0	8.12	1.00	0.07	8.12	0.09	7.03
9+45.000	945	5	43.09	5.50	1.06	0	8.02	1.01	0.15	16.14	0.28	13.86
9+50.000	950	5	43.15	5.55	1.27	0	7.99	1.02	0.22	24.13	0.55	20.55
9+55.000	955	5	55.37	5.60	0.69	0	9.12	1.03	0.18	33.25	0.78	28.41
9+60.000	960	5	65.91	5.73	0.2	0	11.23	1.05	0.08	44.48	0.88	38.49
9+62.967	962.967	2.967	88	5.85	0.09	0	8.46	0.64	0.02	52.94	0.90	46.29
9+65.000	965	2.033	102.21	19.58	0.1	0	7.16	0.96	0.01	60.10	0.91	52.49
9+65.146	965.146	0.146	102.61	20.00	0.22	0	0.55	0.11	0.00	60.65	0.91	52.93
9+70.000	970	4.854	82.45	22.25	0	0	16.63	3.80	0.02	77.29	0.93	65.74
9+75.000	975	5	66.03	27.00	0	0	13.75	4.56	0.00	91.04	0.93	74.93
9+80.000	980	5	30.9	44.25	0	0	8.98	6.60	0.00	100.01	0.93	77.31

Harrison St.

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
9+20.000	920	0	59.24	8.75	0	0	0.00	0.00	0.00	0.00	0.00	0.00
9+25.000	925	5	61.52	8.75	0.03	0	11.18	1.62	0.00	11.18	0.00	9.56
9+30.000	930	5	60.79	8.75	0.07	0	11.33	1.62	0.01	22.51	0.02	19.25
9+35.000	935	5	60.92	8.75	0.07	0	11.27	1.62	0.01	33.78	0.03	28.88
9+40.000	940	5	59.84	8.75	0.07	0	11.18	1.62	0.01	44.96	0.05	38.43
9+45.000	945	5	58.9	8.75	0.07	0	10.99	1.62	0.01	55.95	0.06	47.79
9+50.000	950	5	60.96	8.75	0.01	0	11.10	1.62	0.01	67.05	0.07	57.25
9+55.000	955	5	62.46	29.17	0.24	0	11.43	3.51	0.02	78.48	0.10	65.14
9+60.000	960	5	65.83	29.17	0.01	0	11.88	5.40	0.02	90.36	0.13	71.59
9+62.056	962.056	2.056	67.35	29.17	0	0	5.07	2.22	0.00	95.43	0.13	74.44
9+65.000	965	2.944	102.57	29.33	1.57	0	9.26	3.19	0.09	104.69	0.24	80.41
9+65.839	965.839	0.839	106.07	30.67	2.32	0	3.24	0.93	0.06	107.93	0.31	82.64
9+70.000	970	4.161	97.15	35.17	0	0	15.66	5.07	0.18	123.59	0.54	93.00
9+75.000	975	5	72.22	36.08	0	0	15.68	6.60	0.00	139.27	0.54	102.09
9+80.000	980	5	31.83	44.75	0	0	9.63	7.48	0.00	148.91	0.54	104.24

S. Jackson St.

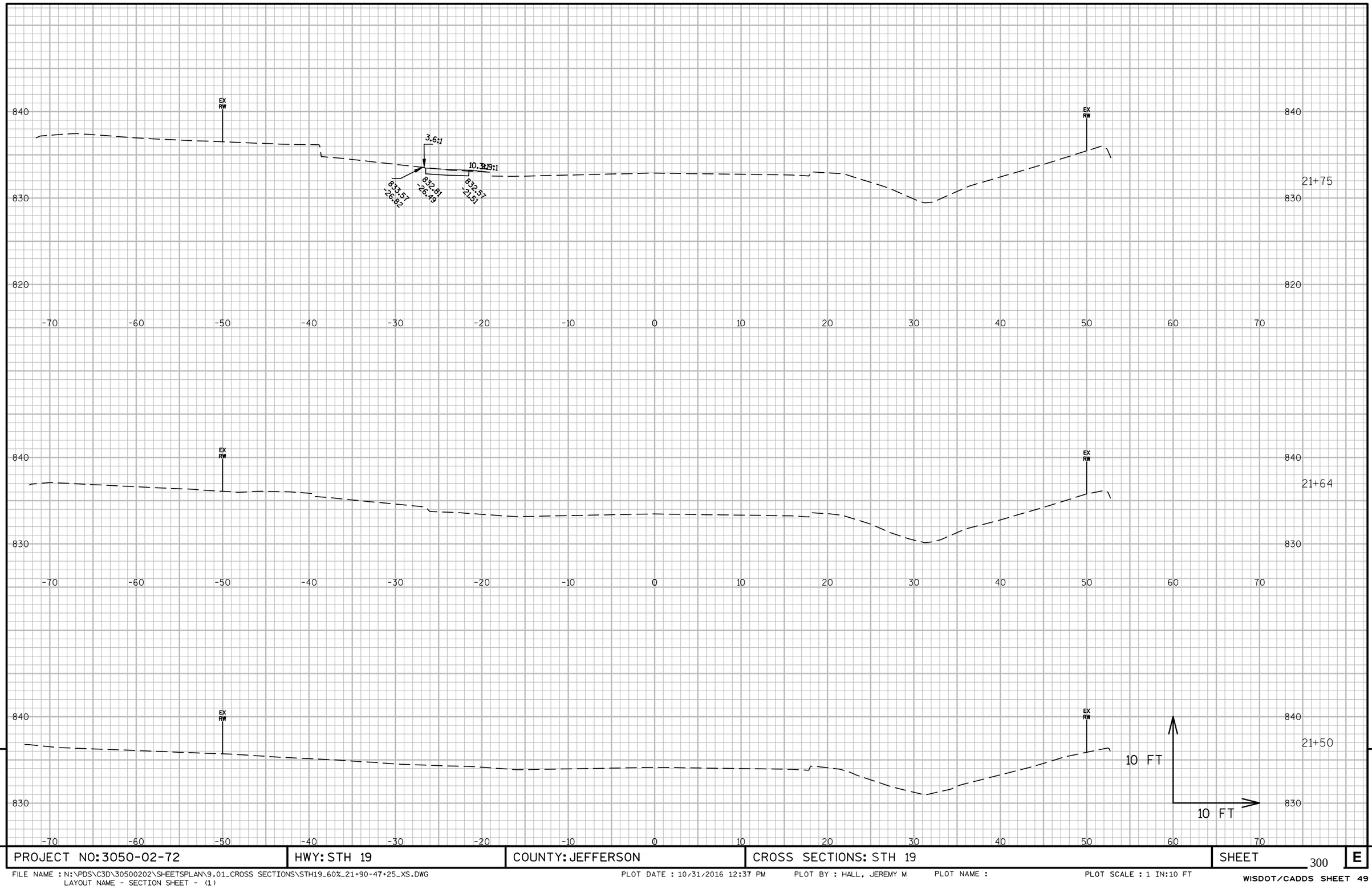
STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
9+45.000	945	0	53.92	7.78	0.03	0	0.00	0.00	0.00	0.00	0.00	0.00
9+50.000	950	5	53.86	7.78	0.18	0	9.98	1.44	0.02	9.98	0.02	8.52
9+55.000	955	5	57.12	25.92	0.09	0	10.28	3.12	0.03	20.26	0.06	15.64
9+60.000	960	5	62.23	25.92	0	0	11.05	4.80	0.01	31.31	0.07	21.88
9+61.348	961.348	1.348	69.01	25.92	0	0	3.28	1.29	0.00	34.58	0.07	23.86
9+65.000	965	3.652	100.67	26.00	0	0	11.48	3.51	0.00	46.06	0.07	31.83
9+65.620	965.62	0.62	99.11	26.00	0	0	2.29	0.60	0.00	48.35	0.07	33.52
9+70.000	970	4.38	77.06	27.50	0	0	14.29	4.34	0.00	62.64	0.07	43.47
9+75.000	975	5	40.51	33.92	0	0	10.89	5.69	0.00	73.53	0.07	48.67
9+80.000	980	5	1.24	48.75	0	0	3.87	7.65	0.00	77.39	0.07	44.89

S. Monroe St.

STATION	Real Station	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 8
9+40.000	940	0	142.78	15.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00
9+45.000	945	5	142.93	15.07	0	0	26.45	2.78	0.00	26.45	0.00	23.67
9+50.000	950	5	144.25	15.07	0	0	26.59	2.79	0.00	53.05	0.00	47.47
9+51.636	951.636	1.636	137.38	15.10	0	0	8.53	0.91	0.00	61.58	0.00	55.09
9+55.000	955	3.364	123.99	15.17	0	0	16.28	1.89	0.00	77.86	0.00	69.49
9+57.749	957.749	2.749	119.23	15.33	0	0	12.38	1.55	0.00	90.24	0.00	80.32
9+60.000	960	2.251	113.38	15.67	0	0	9.70	1.29	0.00	99.94	0.00	88.72
9+65.000	965	5	88.8	17.57	0	0	18.72	3.08	0.00	118.66	0.00	104.36
9+70.000	970	5	46.04	22.47	0	0	12.49	3.71	0.00	131.14	0.00	113.14

STH 89

STATION	Real Station	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 8
10+23.048	1023.048	0	0	47.73	0	0	0.00	0.00	0.00	0.00	0.00	0.00
10+25.000	1025	1.952	19.79	46.07	0	0	0.72	3.39	0.00	0.72	0.00	-2.68
10+30.000	1030	5	67.81	40.13	0	0	8.11	7.98	0.00	8.83	0.00	-2.55
10+35.000	1035	5	104.56	35.60	0	0	15.96	7.01	0.00	24.79	0.00	6.40
10+38.137	1038.137	3.137	115.11	34.33	0.87	0	12.76	4.06	0.05	37.55	0.06	15.04
10+40.000	1040	1.863	120.85	33.00	0.39	0	8.14	2.32	0.04	45.69	0.12	20.80
10+45.000	1045	5	128.13	32.73	0.18	0	23.05	6.09	0.05	68.74	0.18	37.70
10+50.000	1050	5	126.31	32.67	0.02	0	23.56	6.06	0.02	92.30	0.21	55.18
10+55.000	1055	5	124.04	32.67	0.02	0	23.18	6.05	0.00	115.48	0.21	72.31
10+56.129	1056.129	1.129	125.09	32.67	0.03	0	5.21	1.37	0.00	120.69	0.21	76.15
10+58.181	1058.181	2.052	125.04	32.67	0.21	0	9.50	2.48	0.01	130.20	0.22	83.16



9

9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 300	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (1)
PLOT DATE : 10/31/2016 12:37 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

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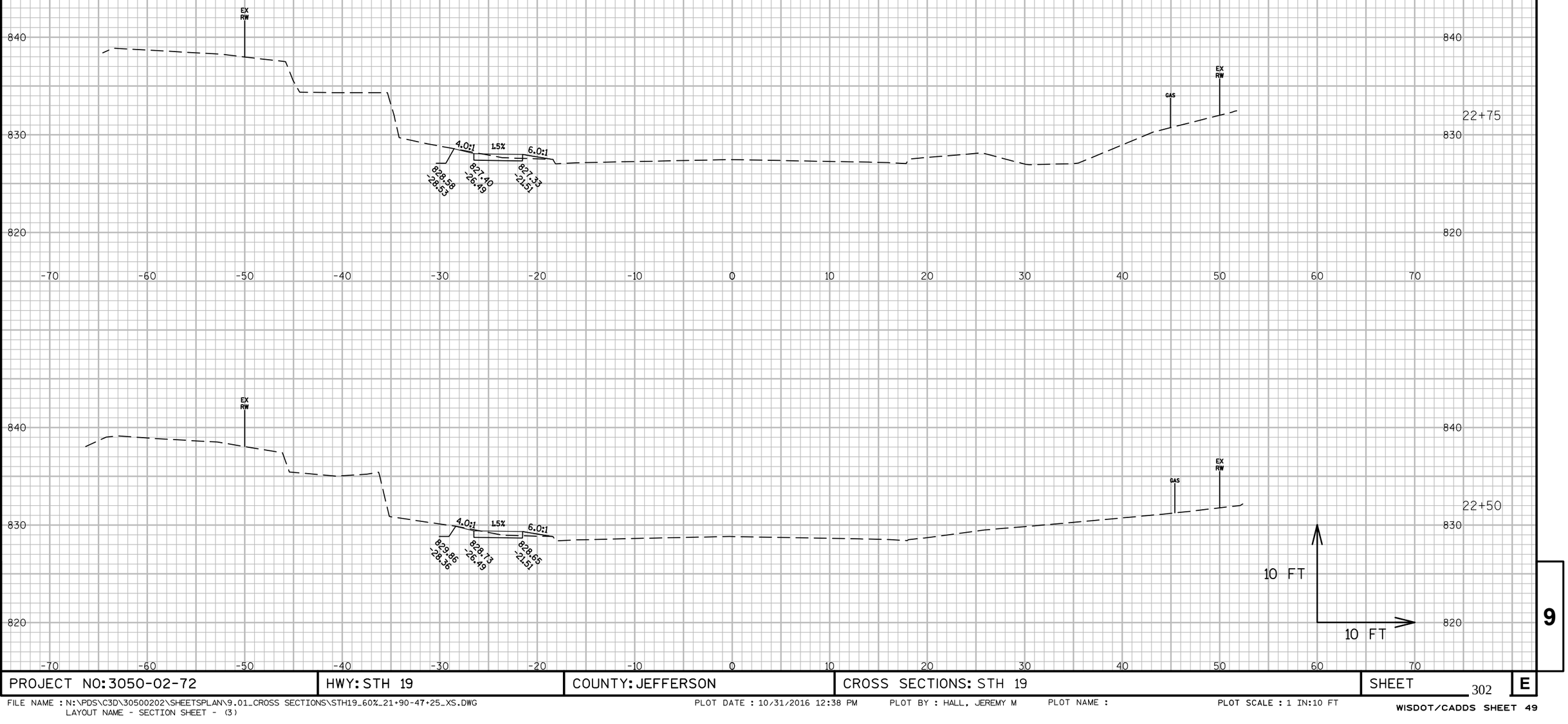
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 301	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (2)

PLOT DATE : 10/31/2016 12:37 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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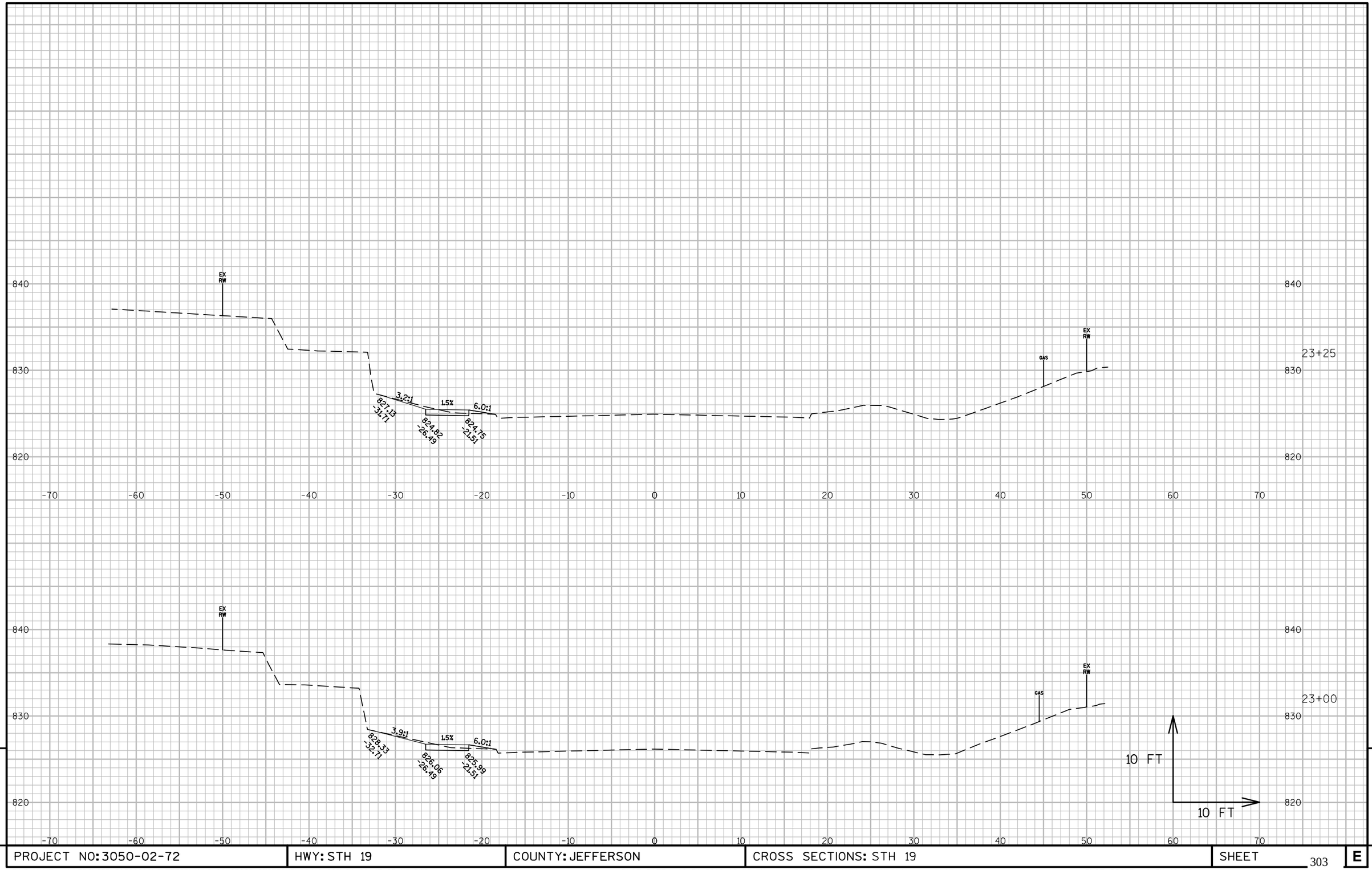
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 302	E

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LAYOUT NAME - SECTION SHEET - (3)

PLOT DATE : 10/31/2016 12:38 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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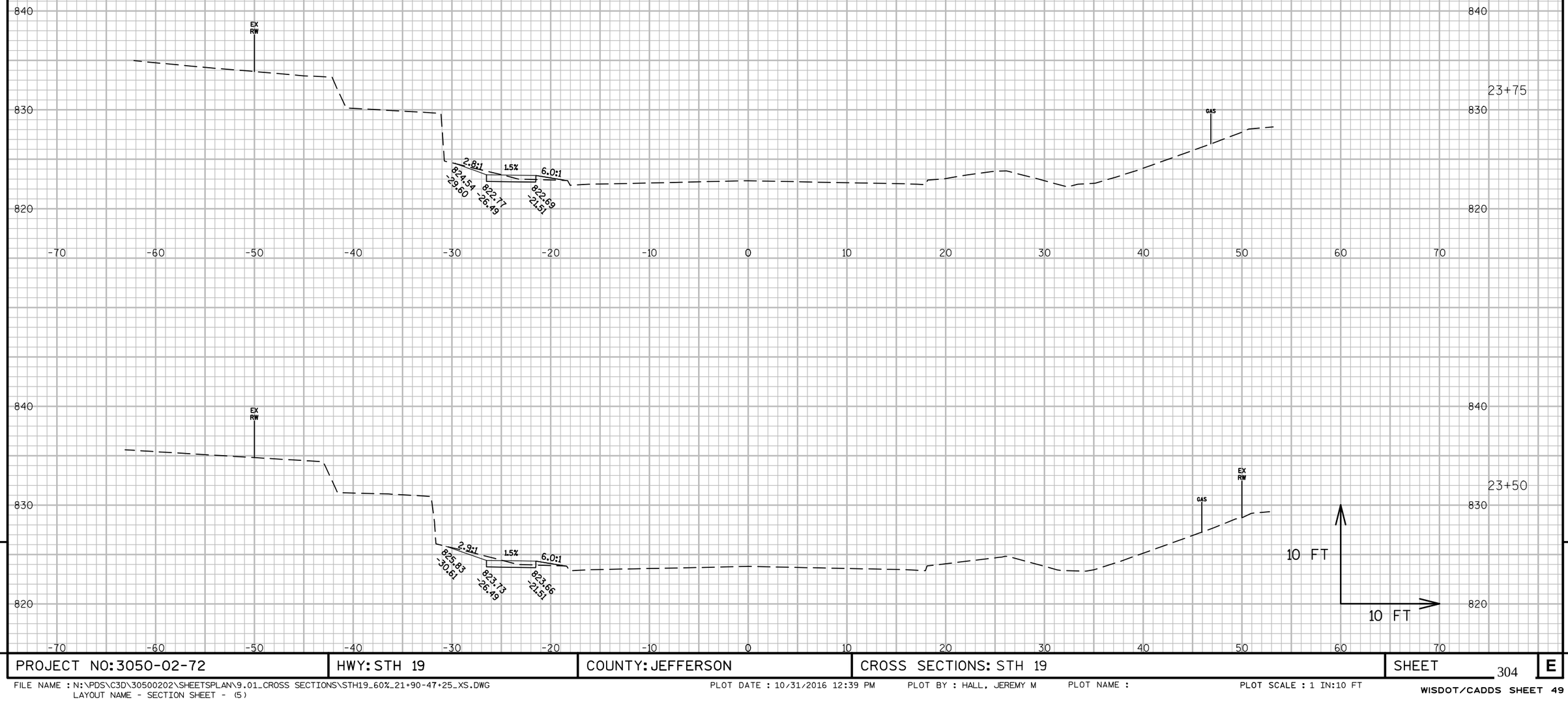
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 303	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (4)

PLOT DATE : 10/31/2016 12:39 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



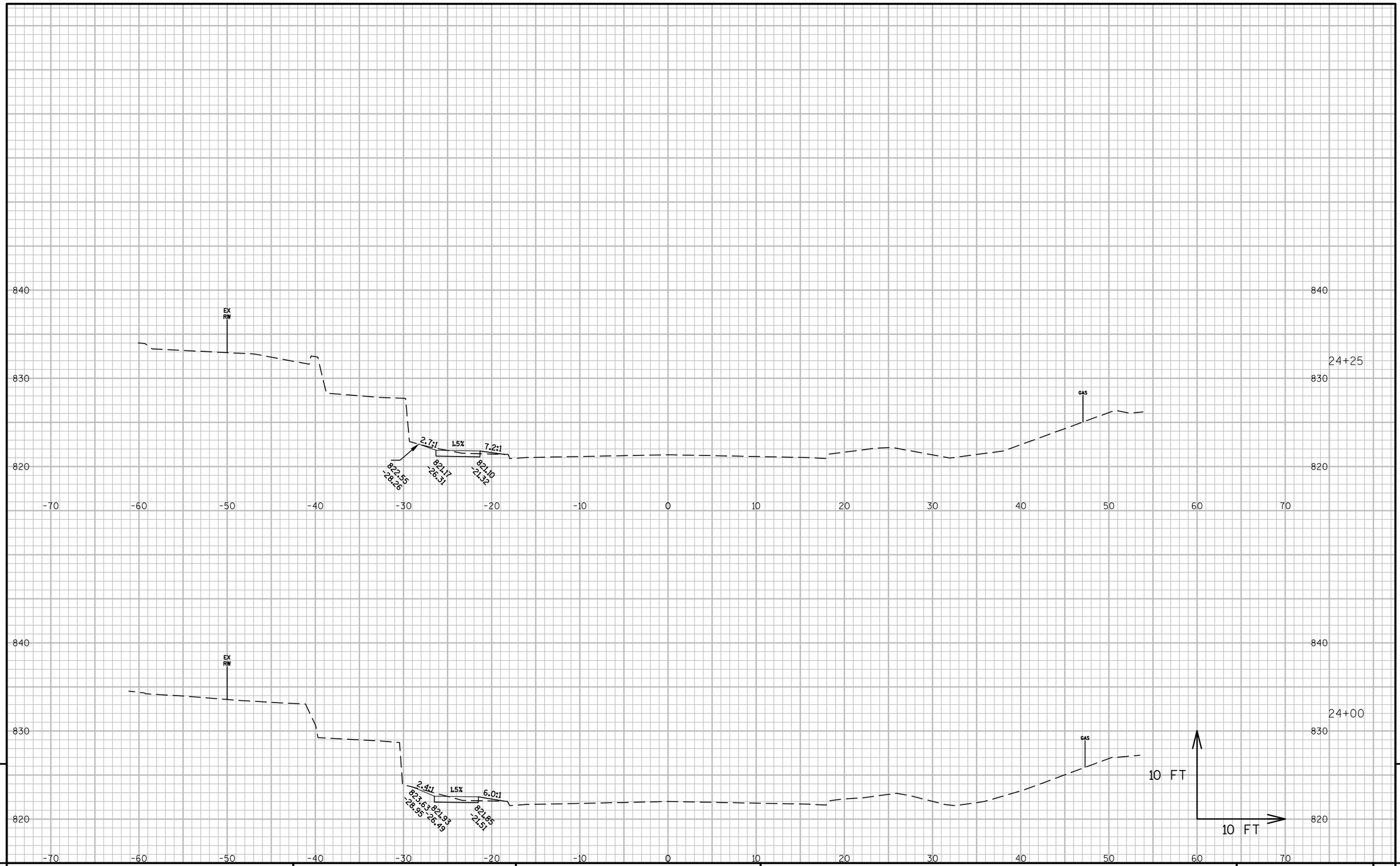
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 304	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (5)

PLOT DATE : 10/31/2016 12:39 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 305	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (6)

PLOT DATE : 10/31/2016 12:40 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

840
830
820
GAS
24+75
GAS
840
830
820
810
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70
EX RW
840
830
820
1.5%
821.99
-27.63
820.27
-25.61
820.17
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GAS
24+50
10 FT
10 FT
810
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

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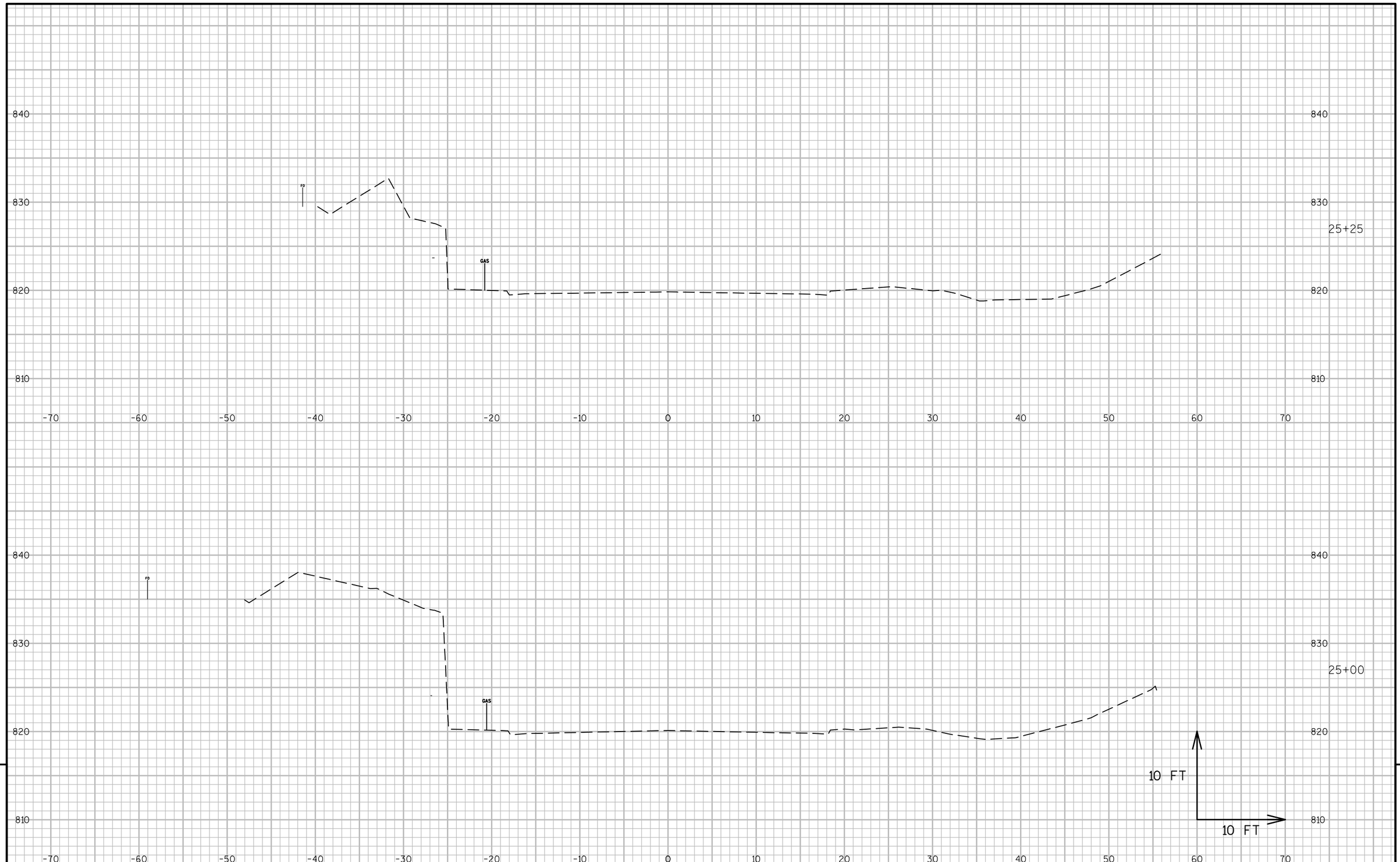
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 306	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (7)

PLOT DATE : 10/31/2016 12:40 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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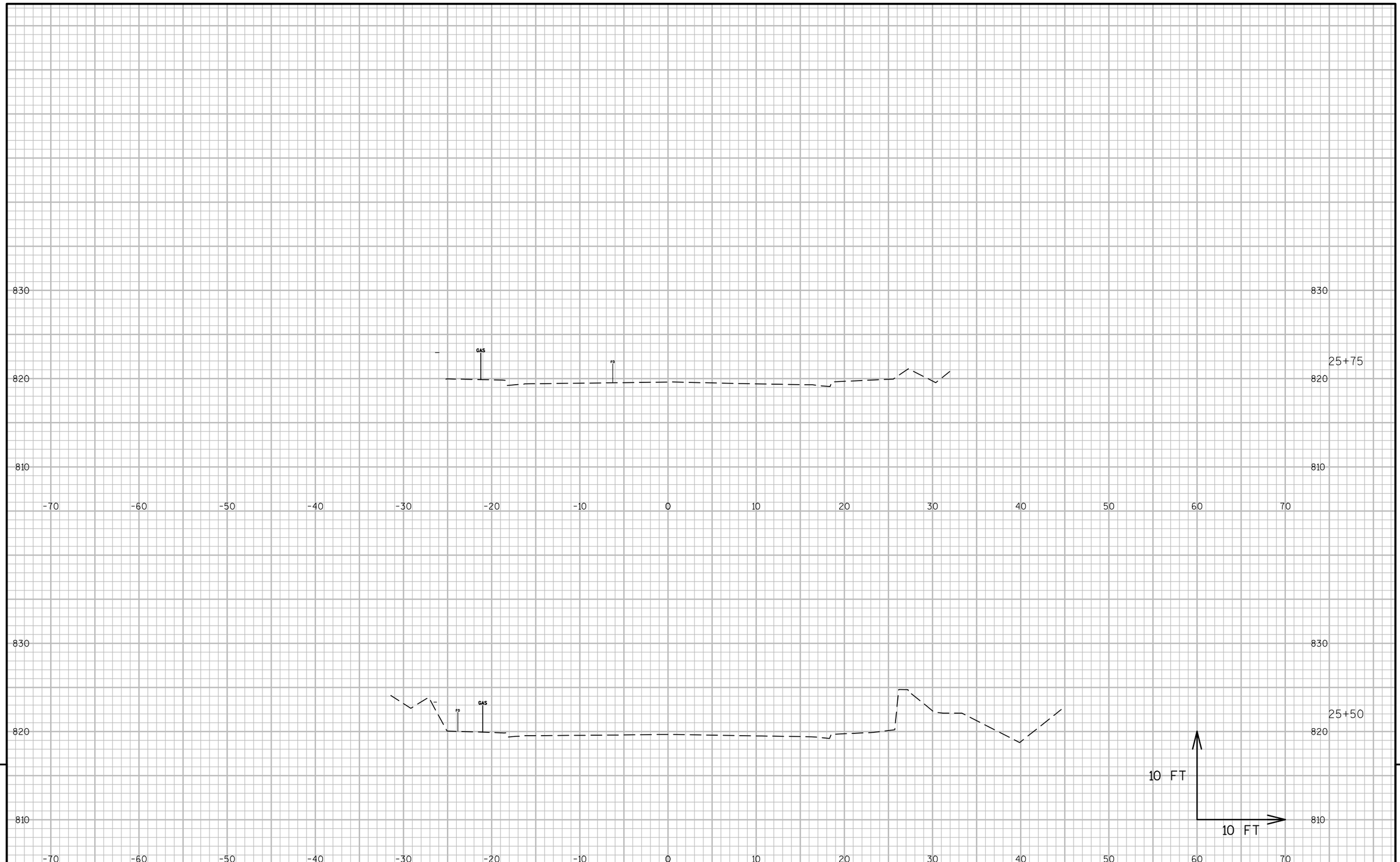
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FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (8)

PLOT DATE : 10/31/2016 12:41 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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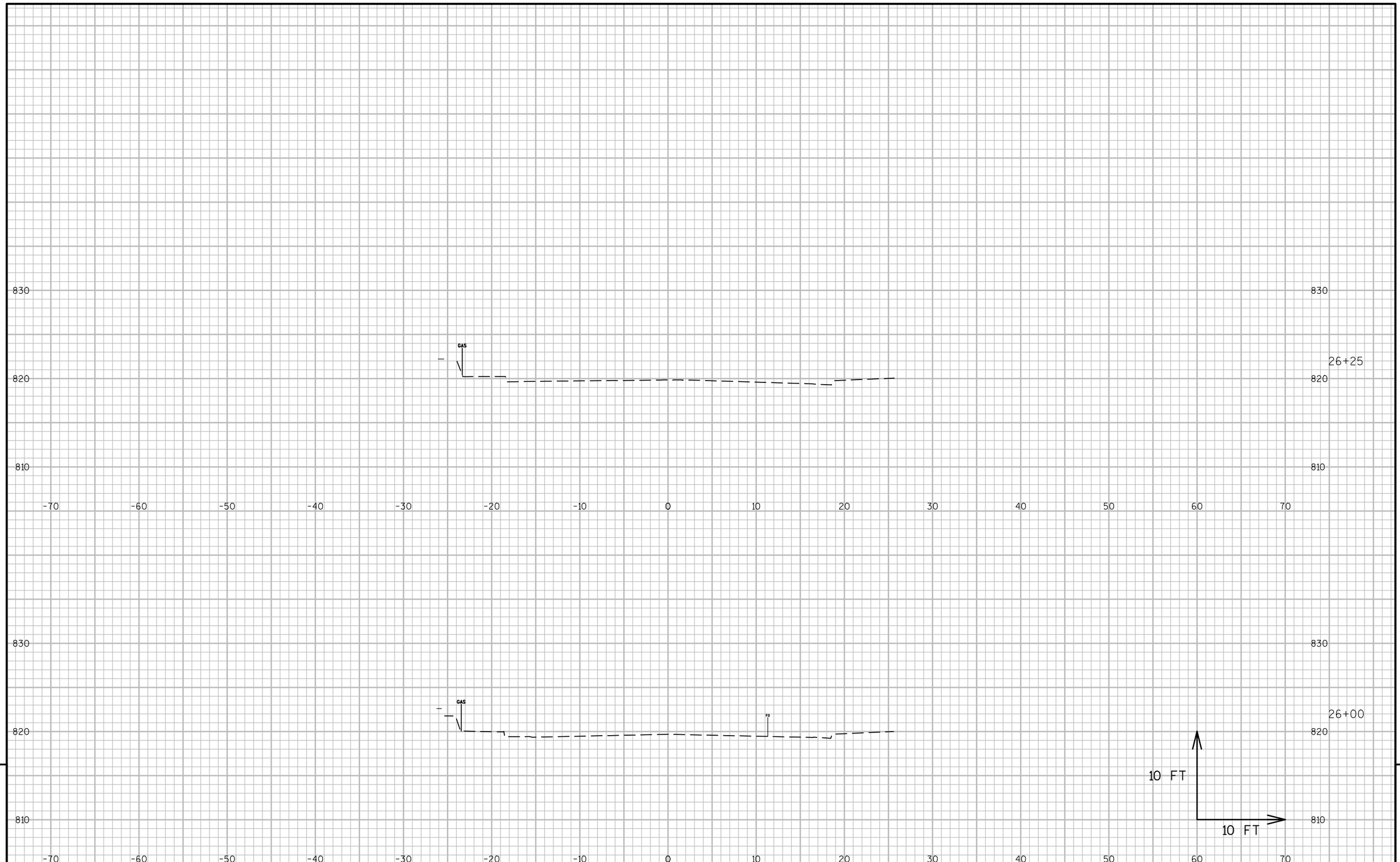
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 308	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (9)

PLOT DATE : 10/31/2016 12:41 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

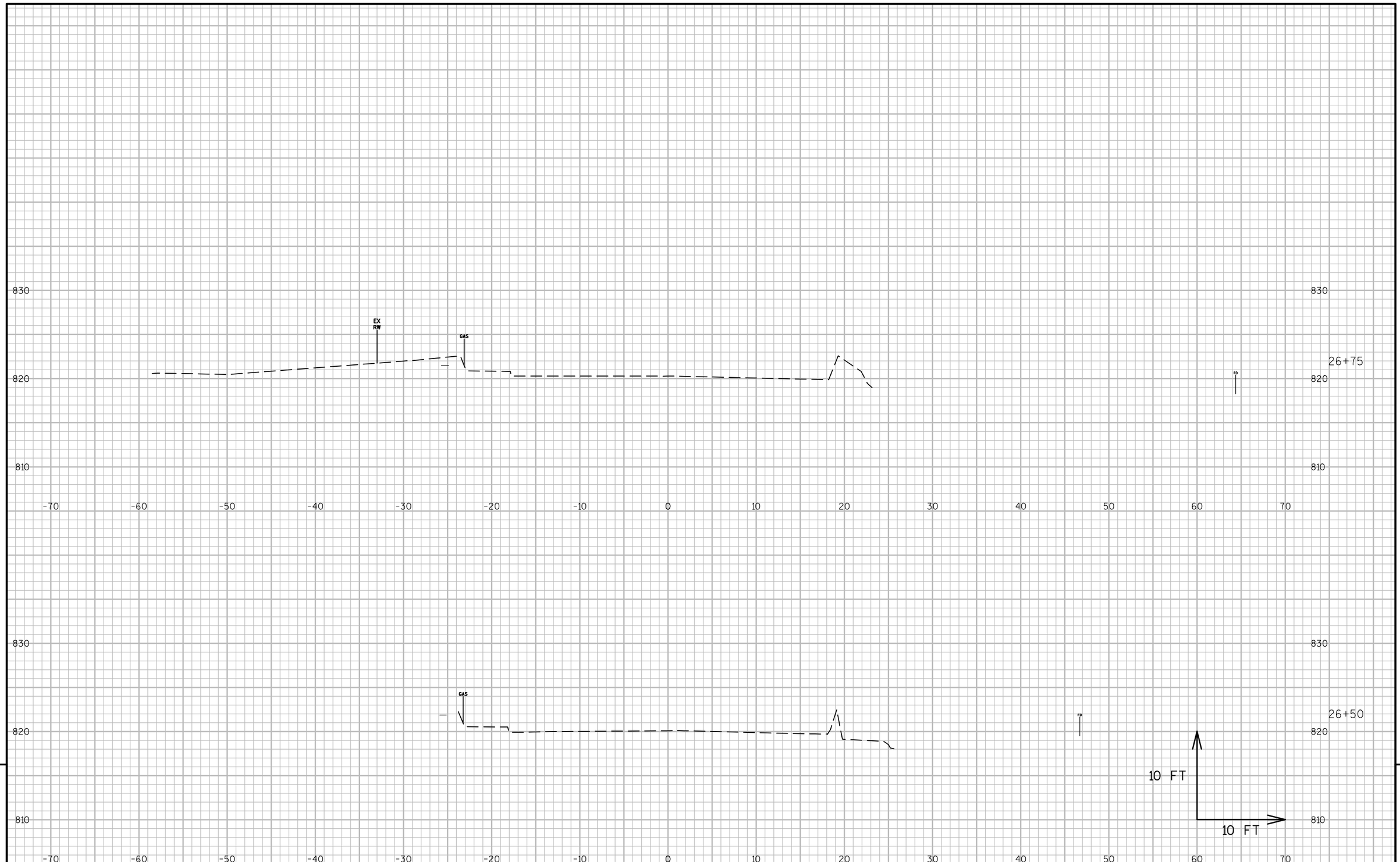
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 309	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (10)

PLOT DATE : 10/31/2016 12:42 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



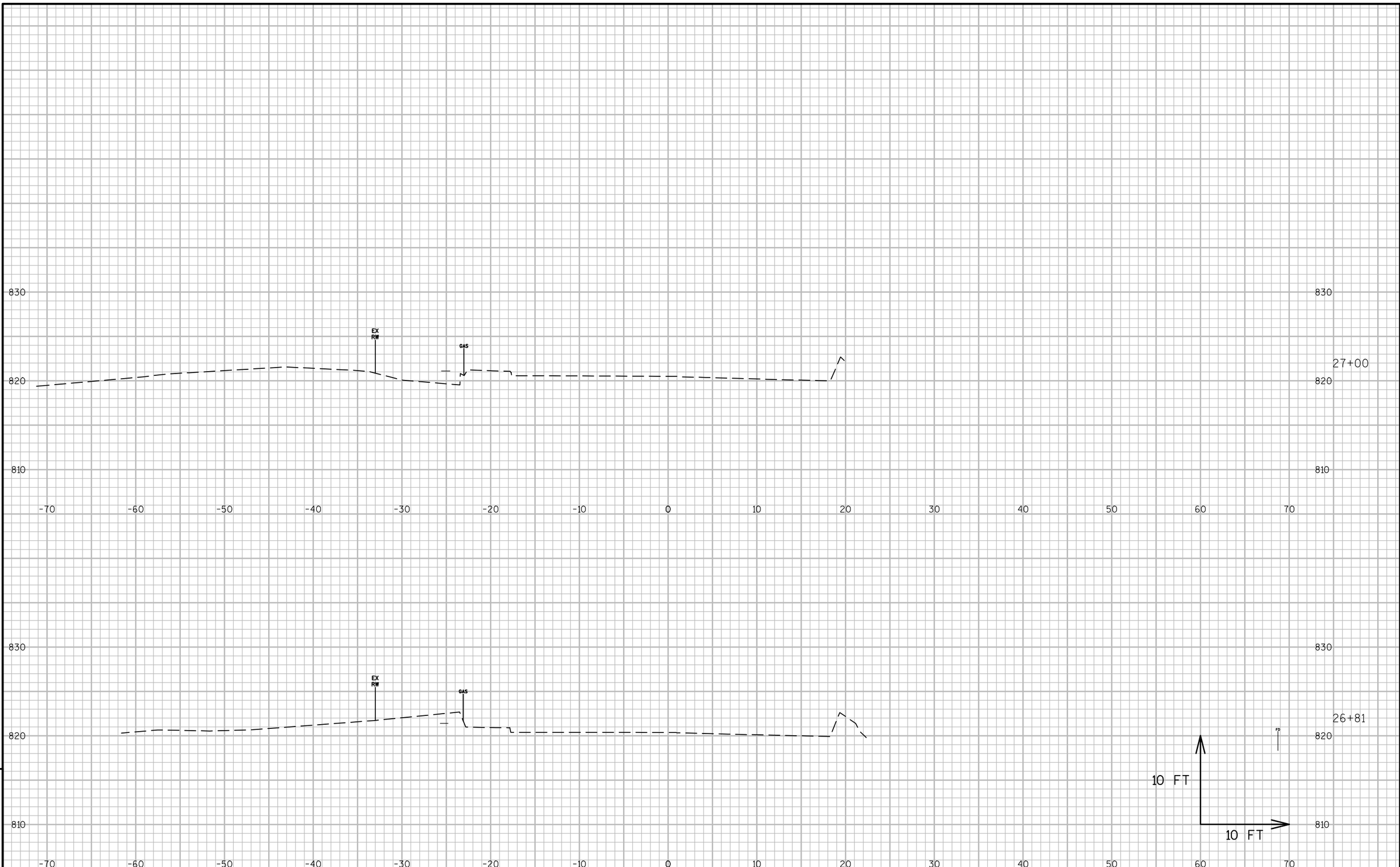
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 310	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
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PLOT DATE : 10/31/2016 12:42 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



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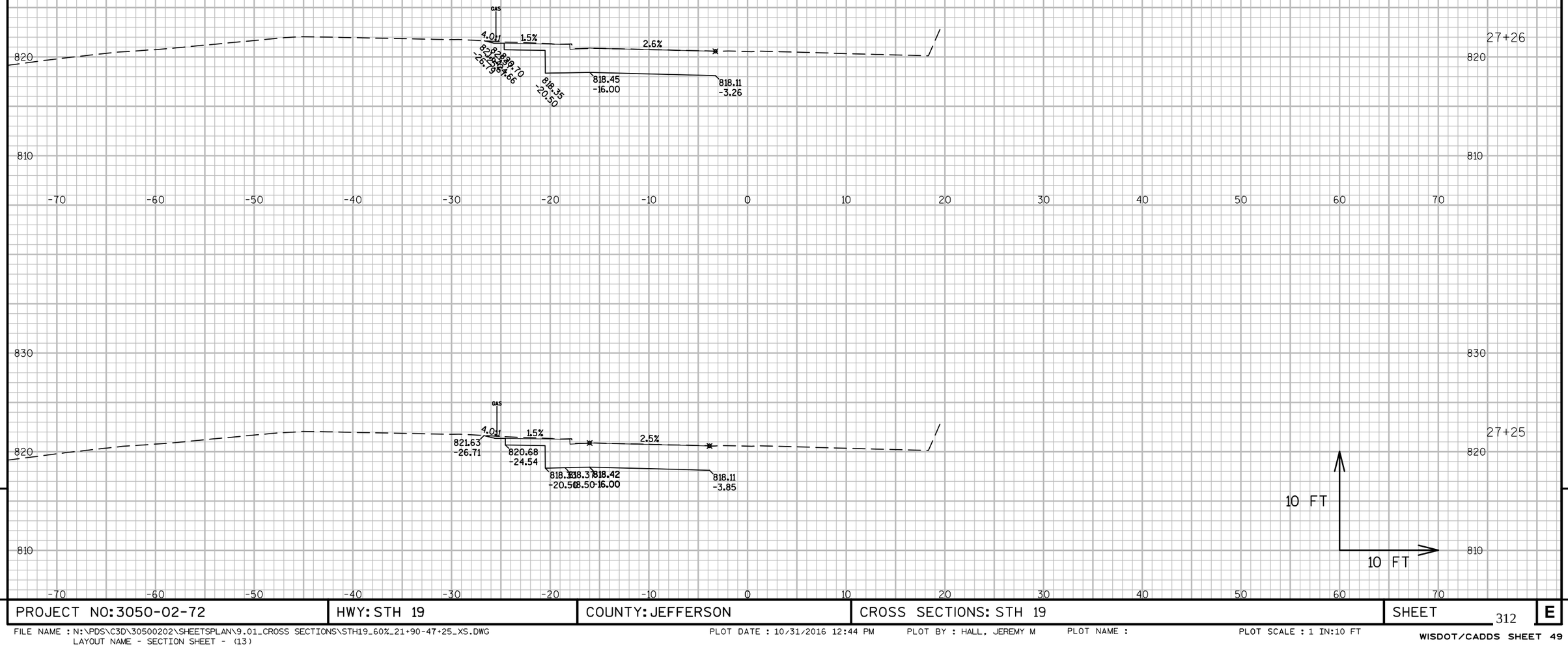
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 311	E

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FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (12)

PLOT DATE : 10/31/2016 12:43 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

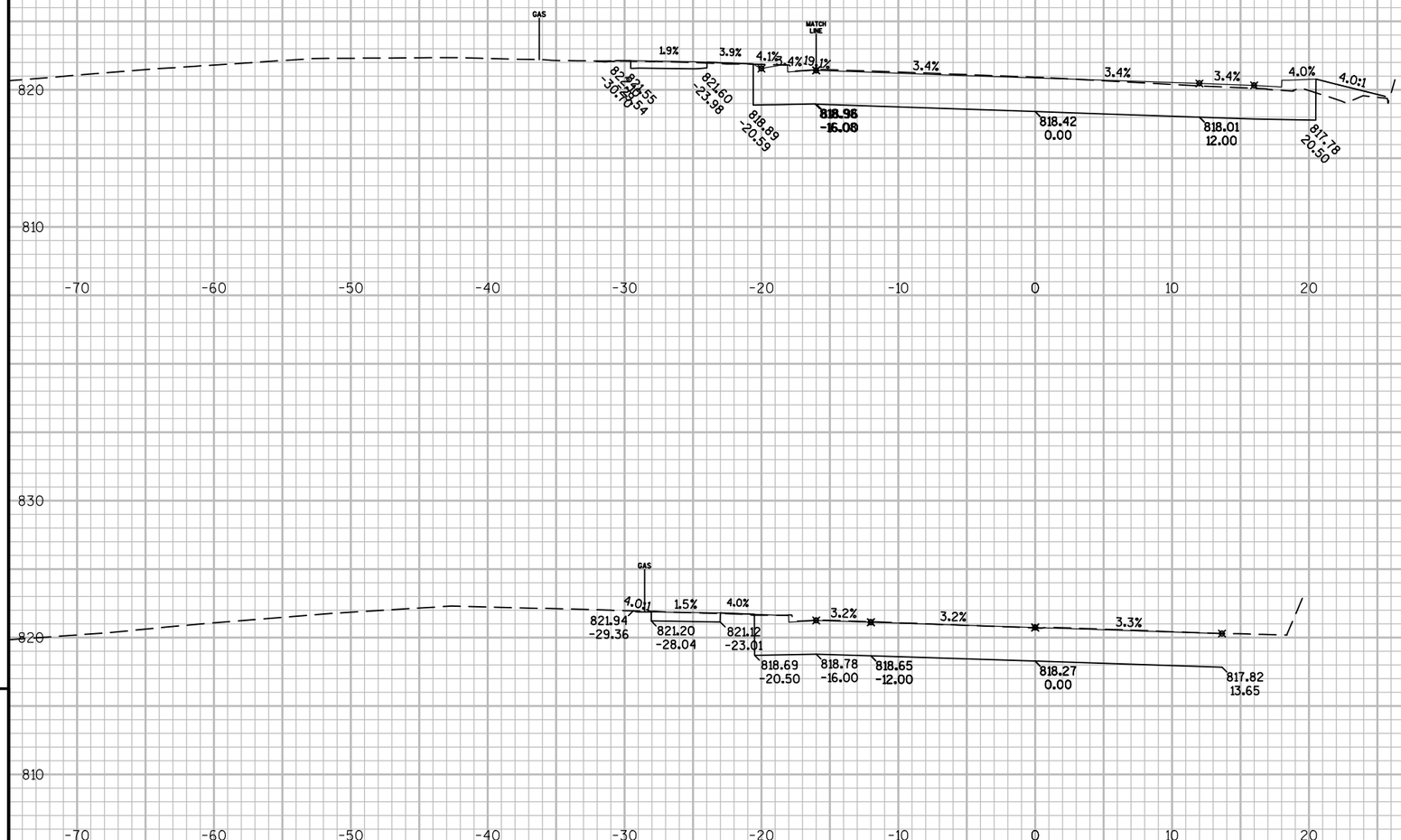
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 312	E

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LAYOUT NAME - SECTION SHEET - (13)

PLOT DATE : 10/31/2016 12:44 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

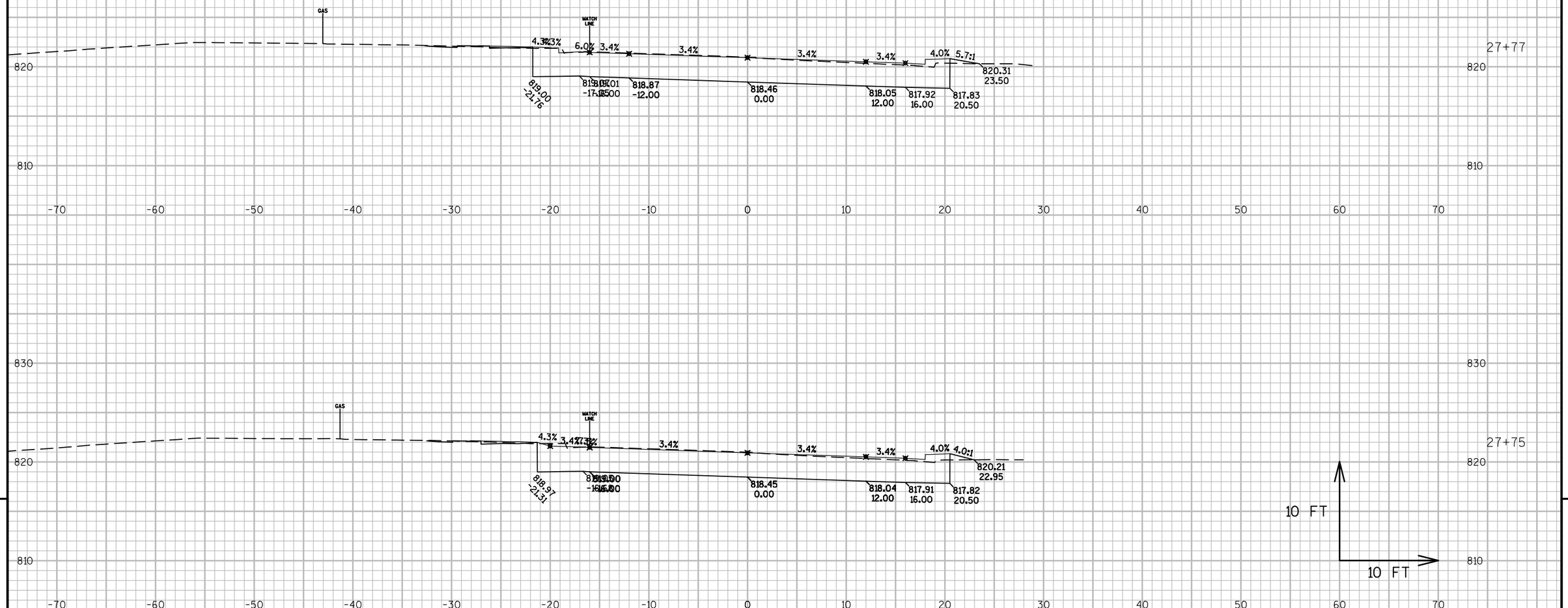
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 313	E

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LAYOUT NAME - SECTION SHEET - (14)

PLOT DATE : 10/31/2016 12:44 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

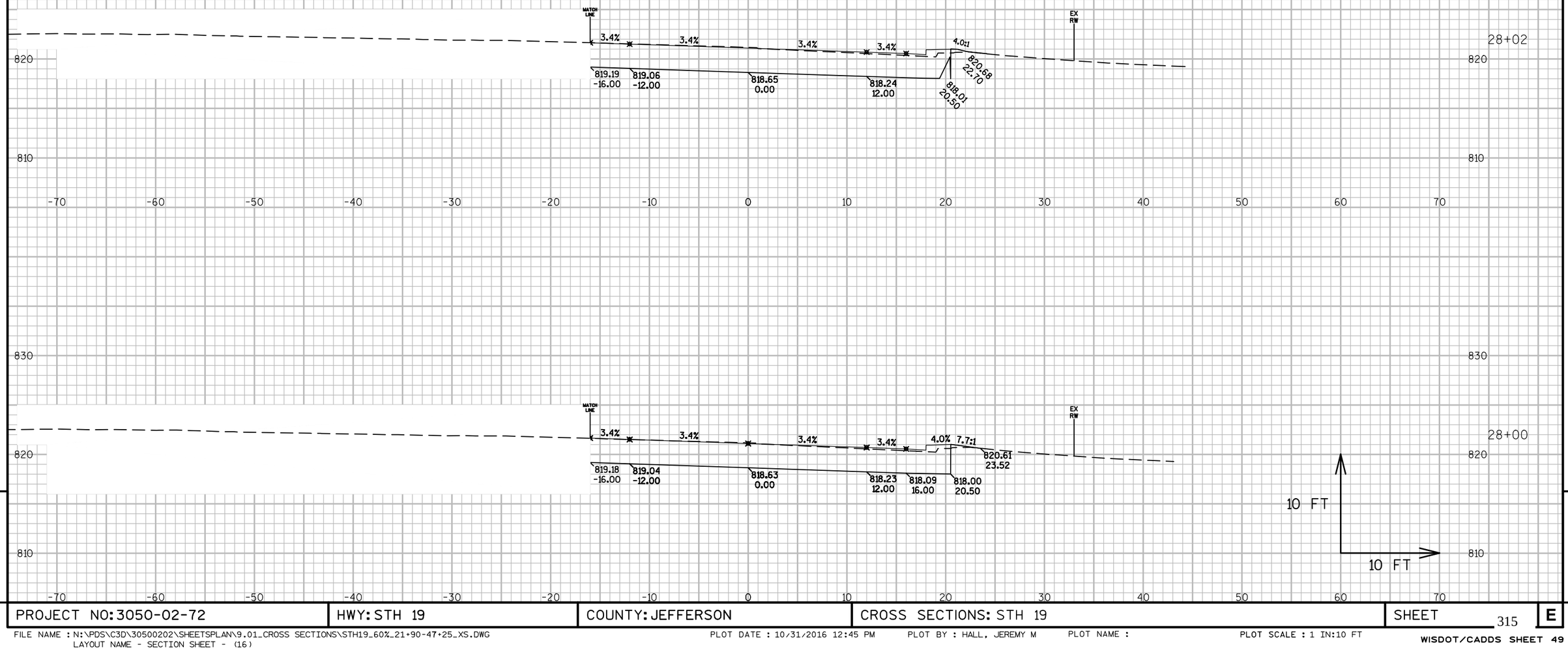
9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 314	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (15)

PLOT DATE : 10/31/2016 12:45 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

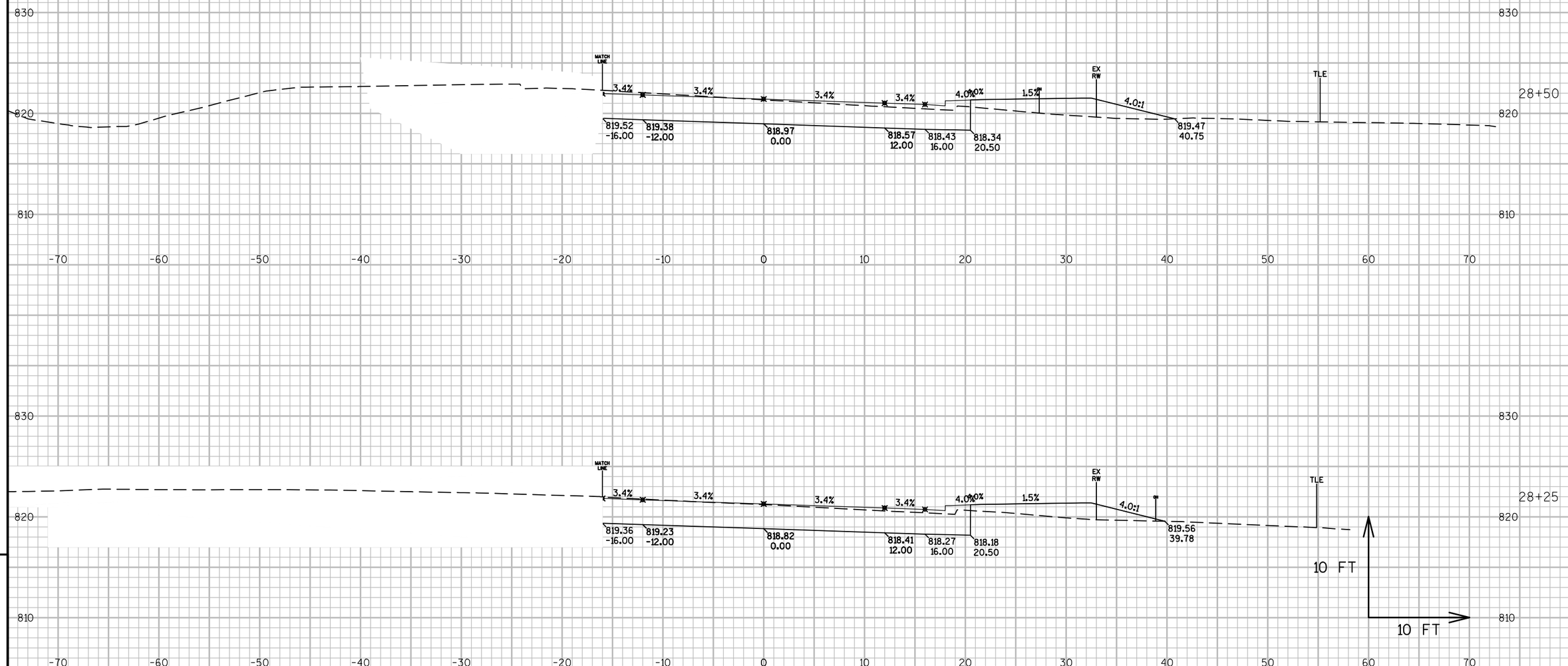
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 315	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (16)

PLOT DATE : 10/31/2016 12:45 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

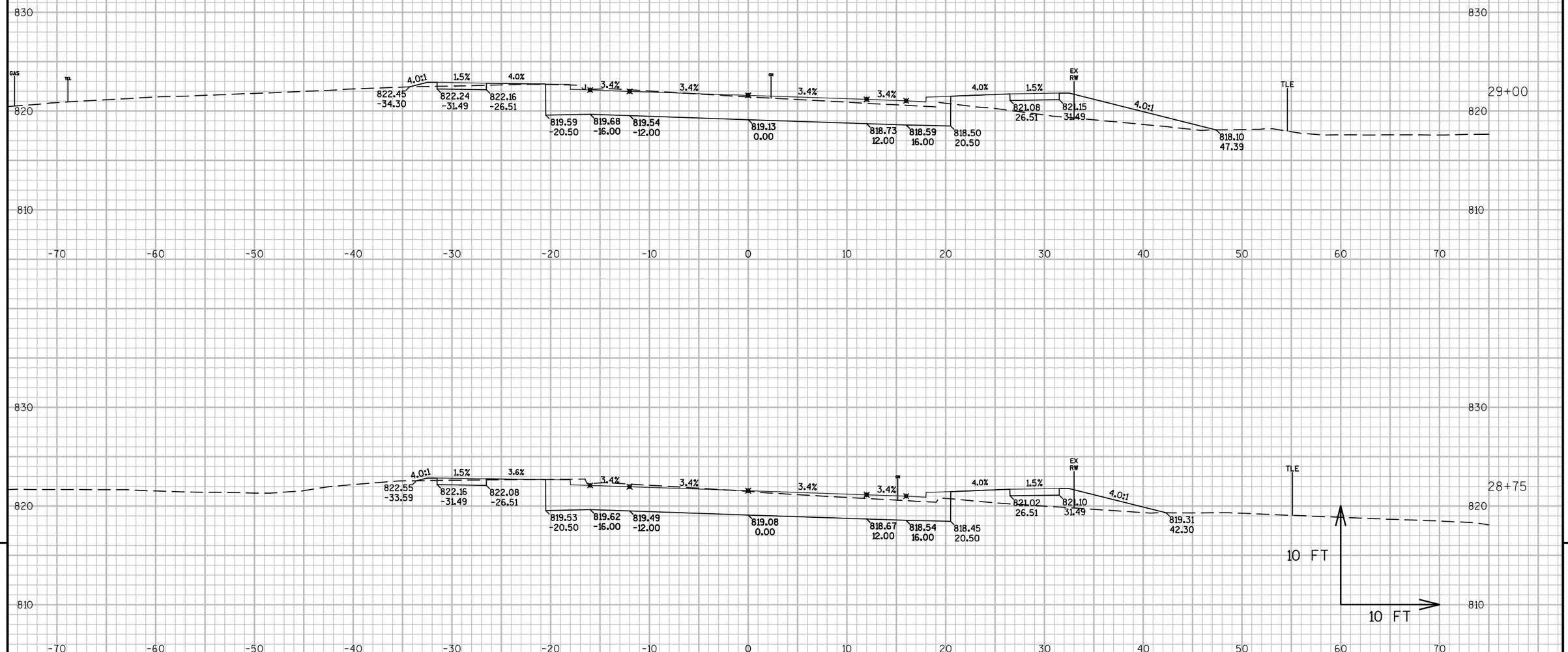
9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 316	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (17)

PLOT DATE : 10/31/2016 12:46 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

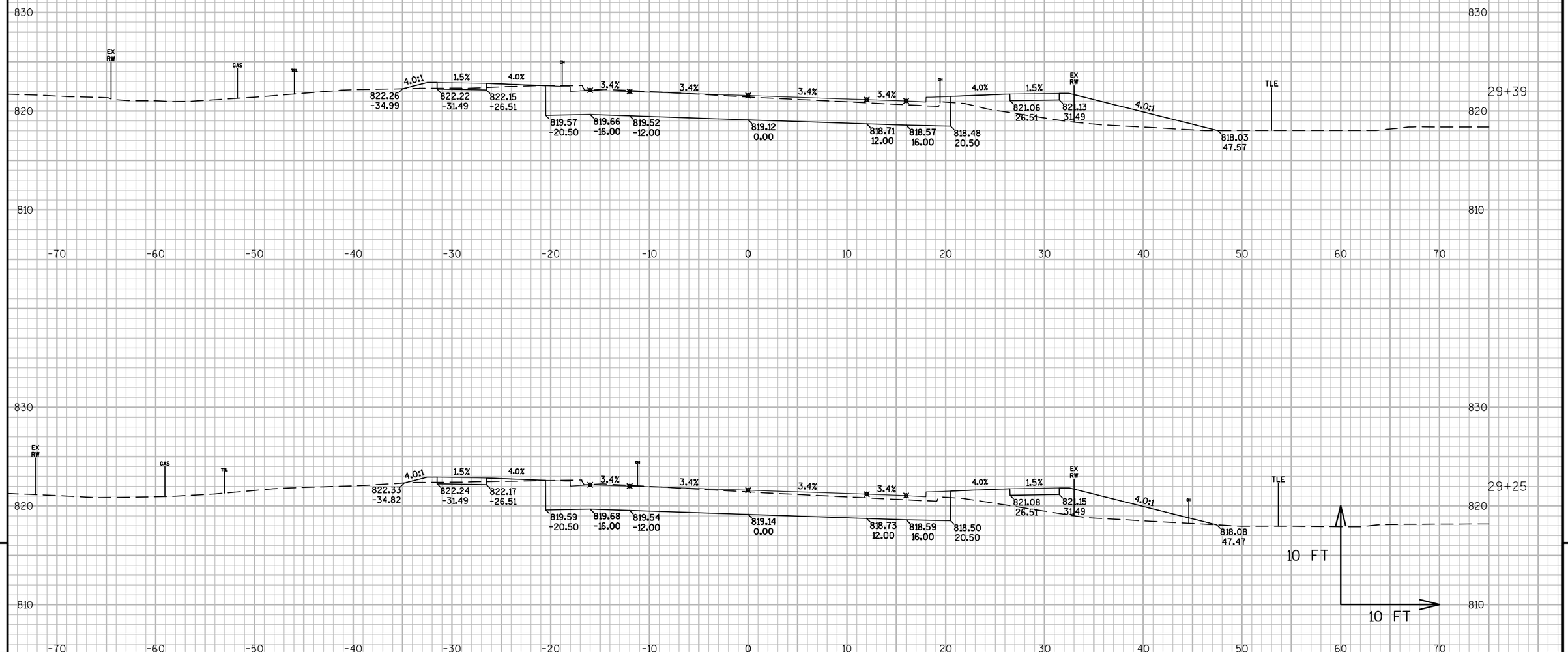
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 317	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (18)

PLOT DATE : 10/31/2016 12:46 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

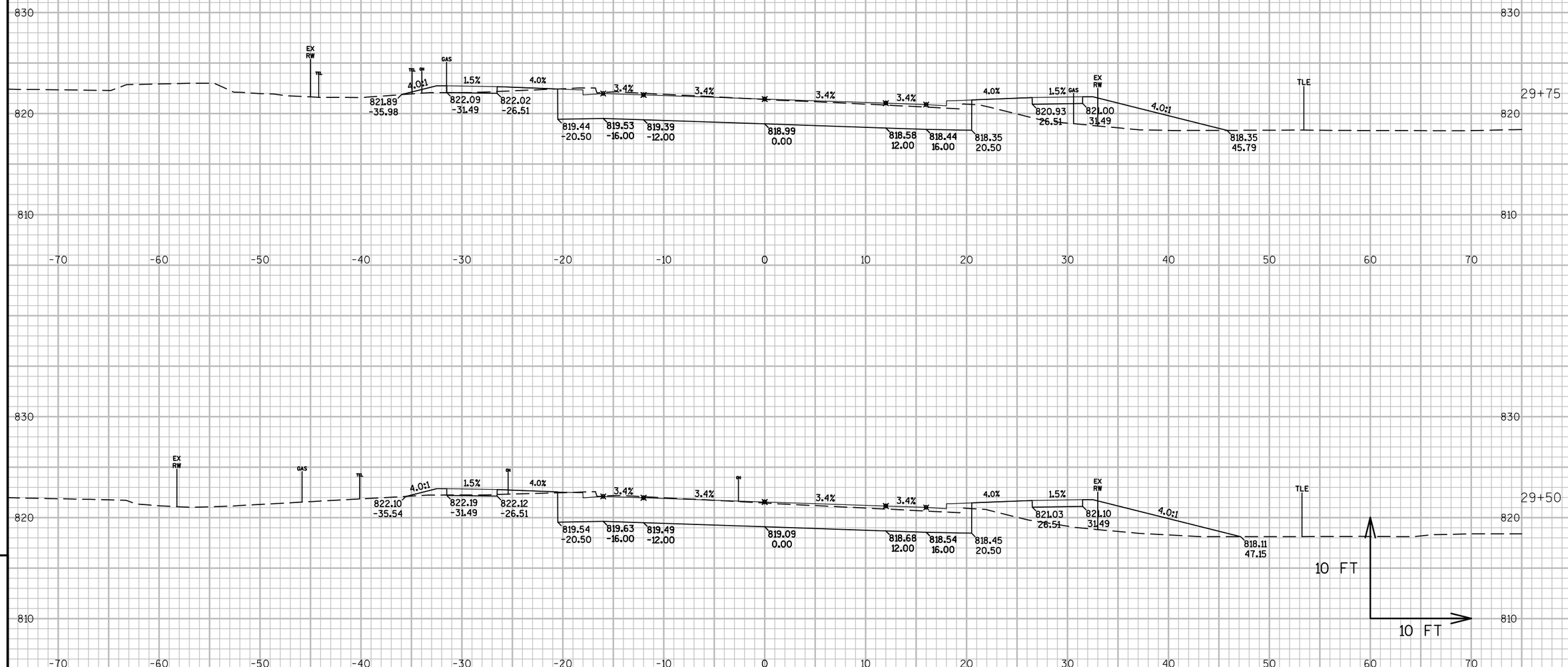
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 318	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (19)

PLOT DATE : 10/31/2016 12:47 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

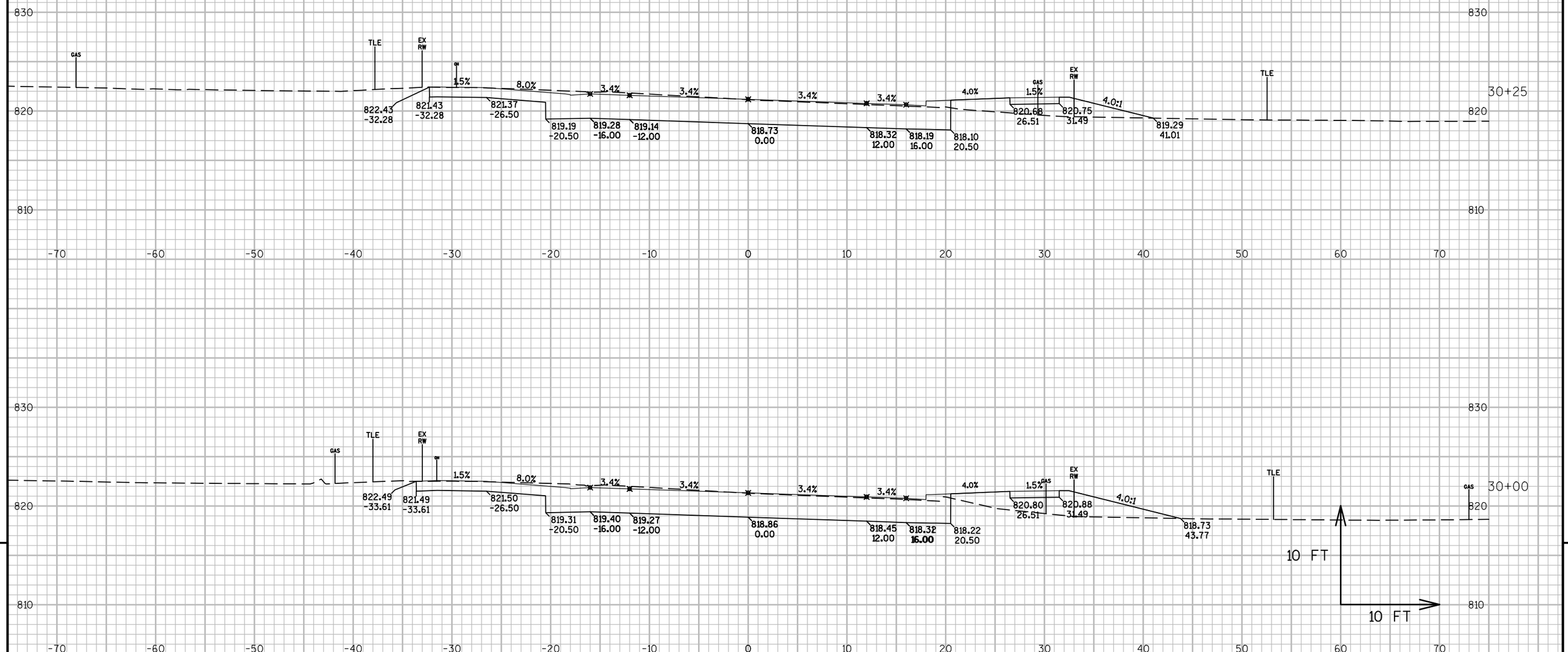
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 319	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (20)

PLOT DATE : 10/31/2016 12:48 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

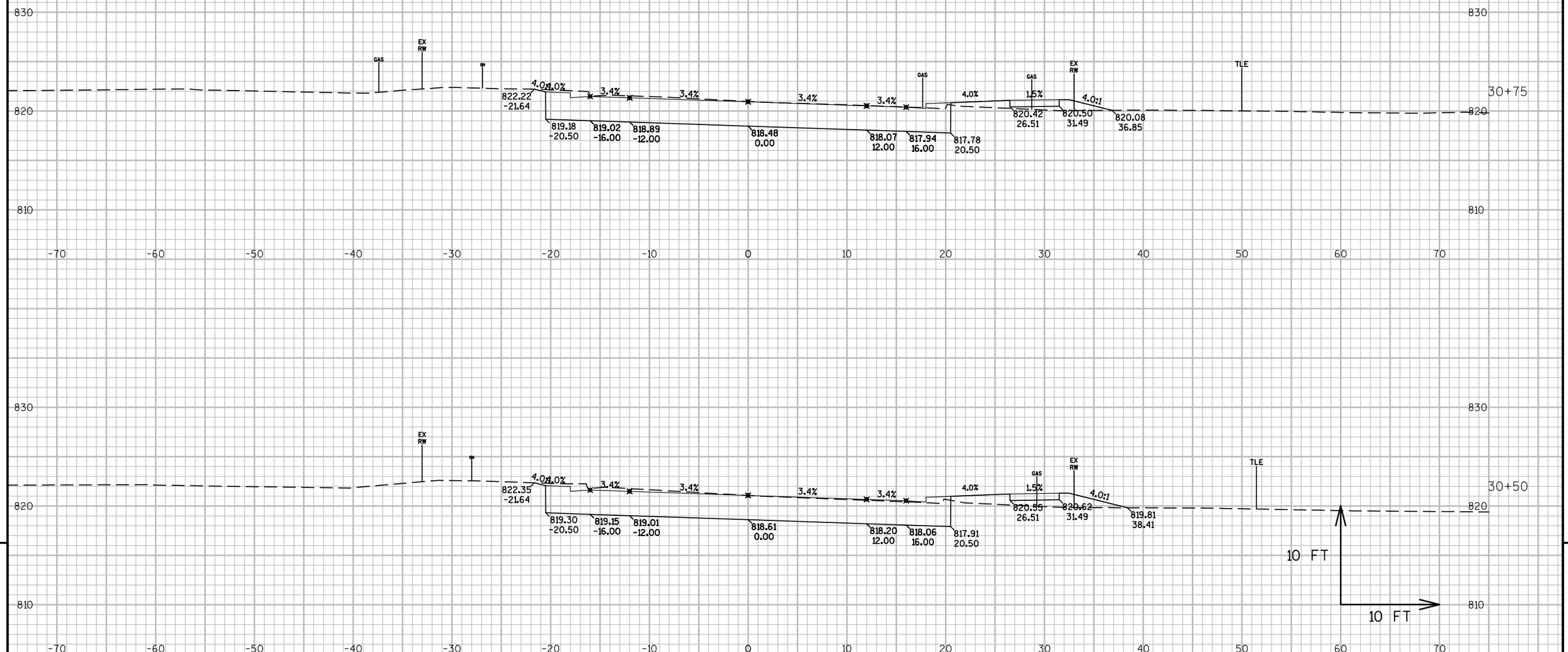
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 320	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (21)

PLOT DATE : 10/31/2016 12:48 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

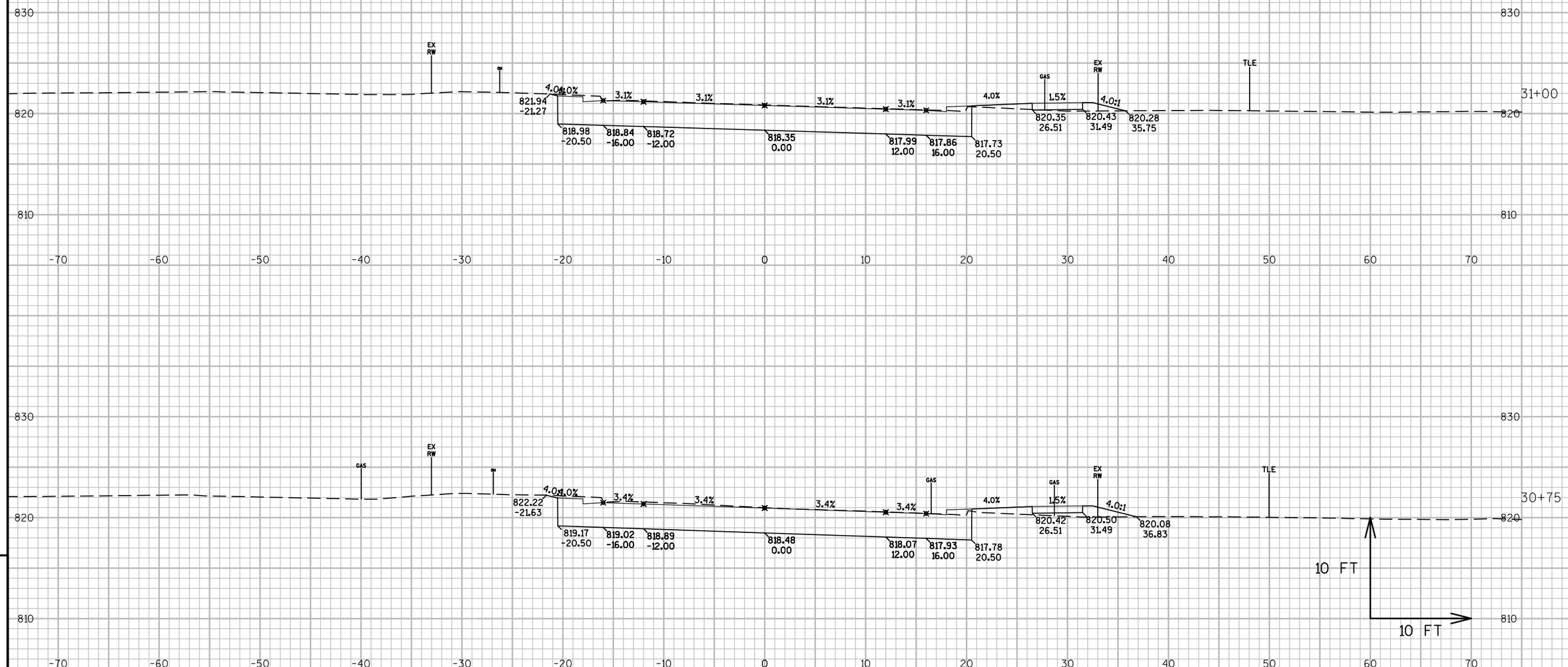


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 321	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (22)

PLOT DATE : 10/31/2016 12:49 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



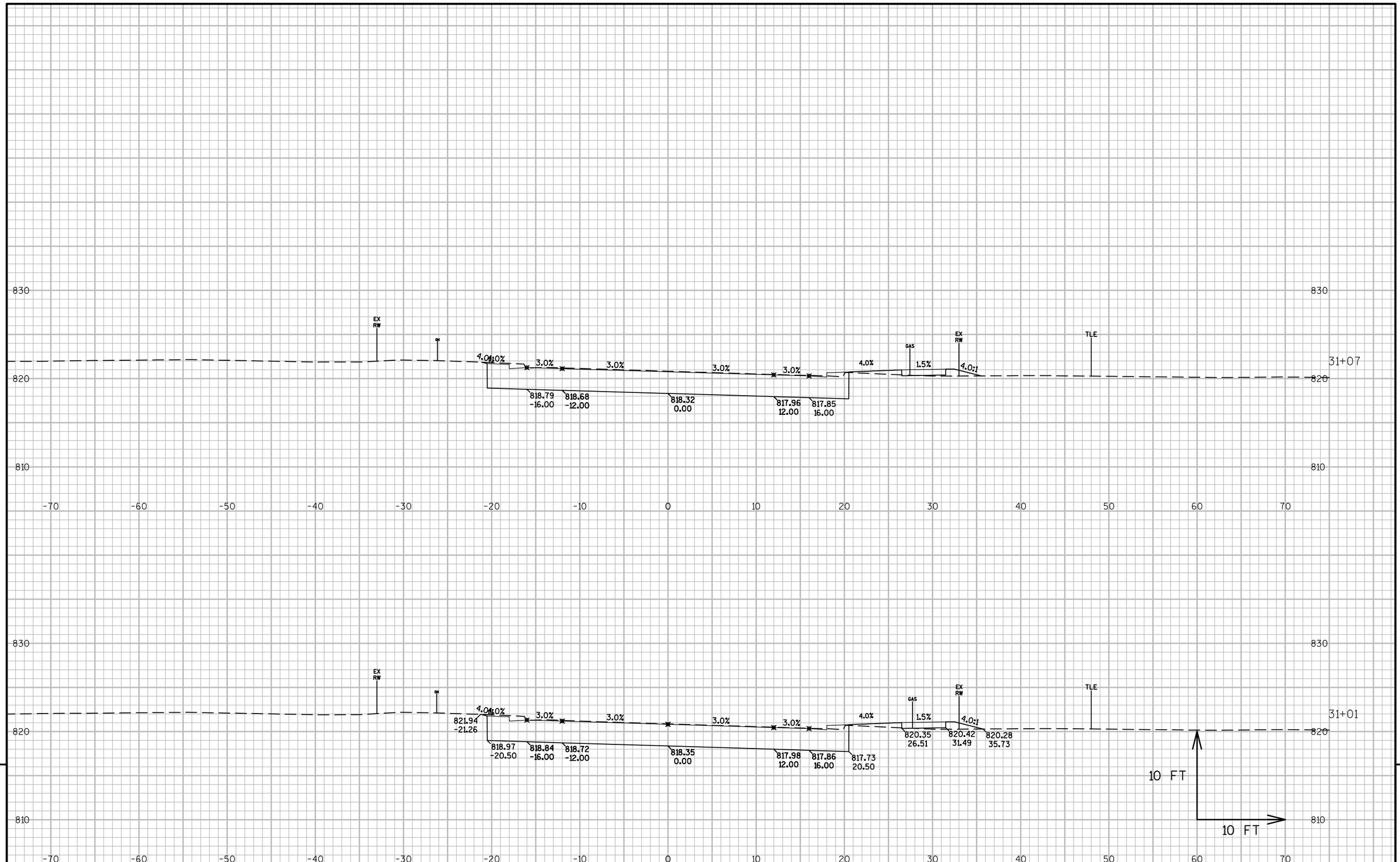
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9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 322	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (23)

PLOT DATE : 10/31/2016 12:49 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

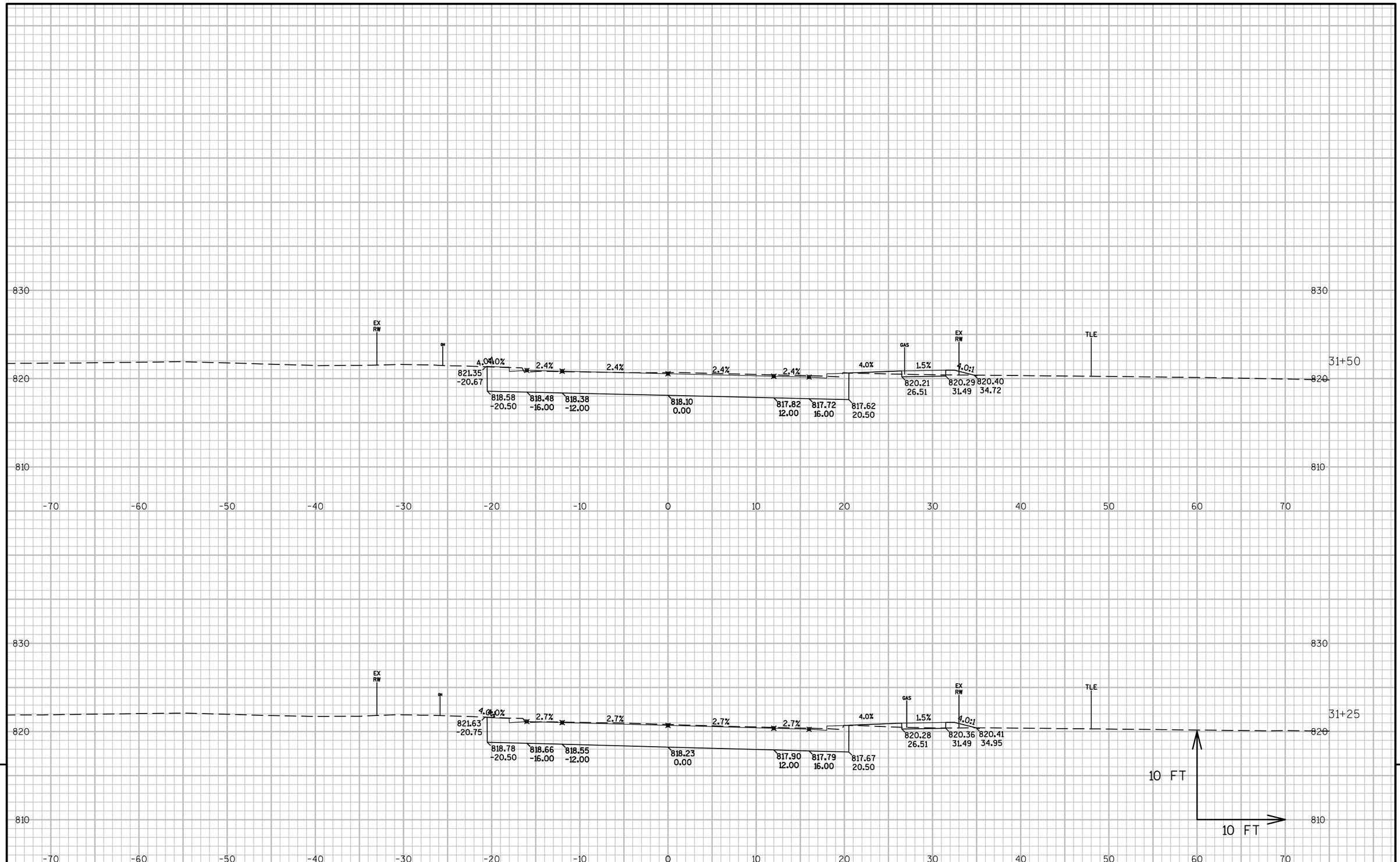


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 323	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (24)

PLOT DATE : 10/31/2016 12:50 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



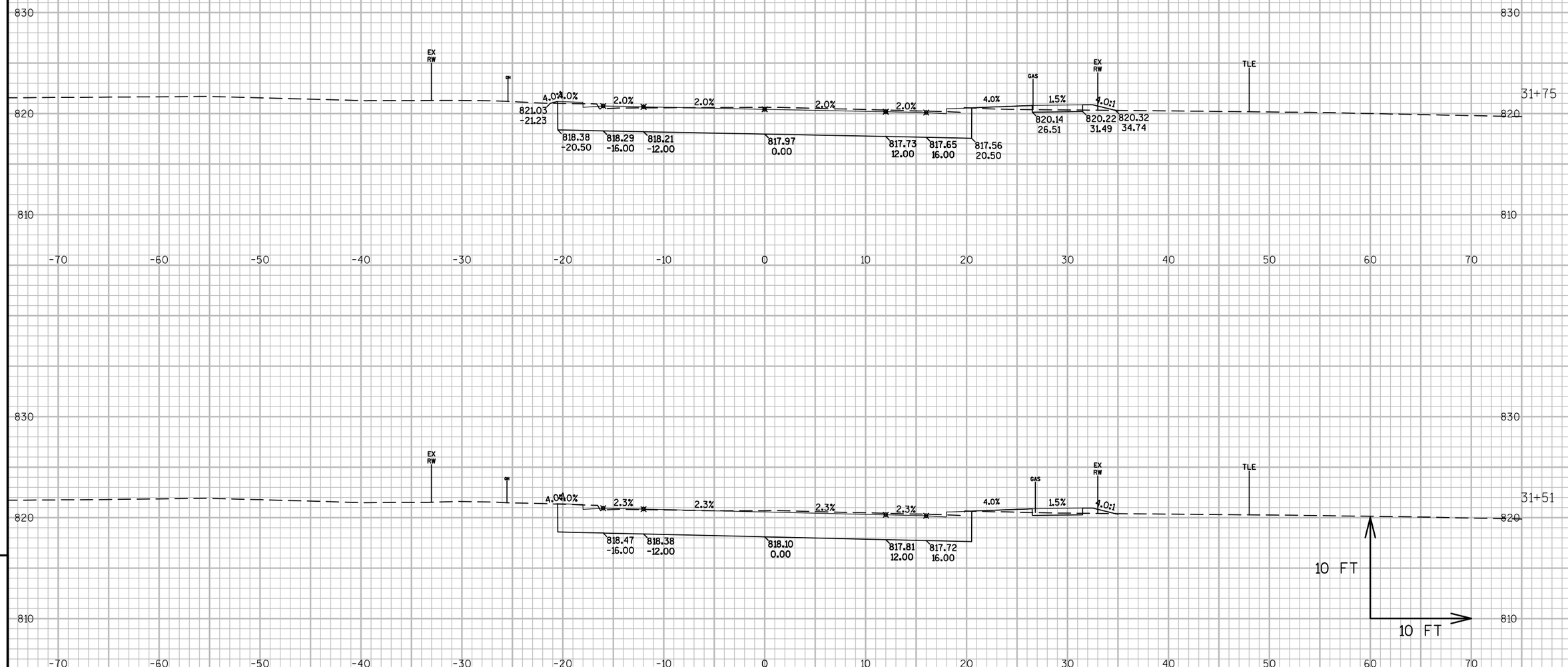
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9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 324	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (25)

PLOT DATE : 10/31/2016 12:50 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



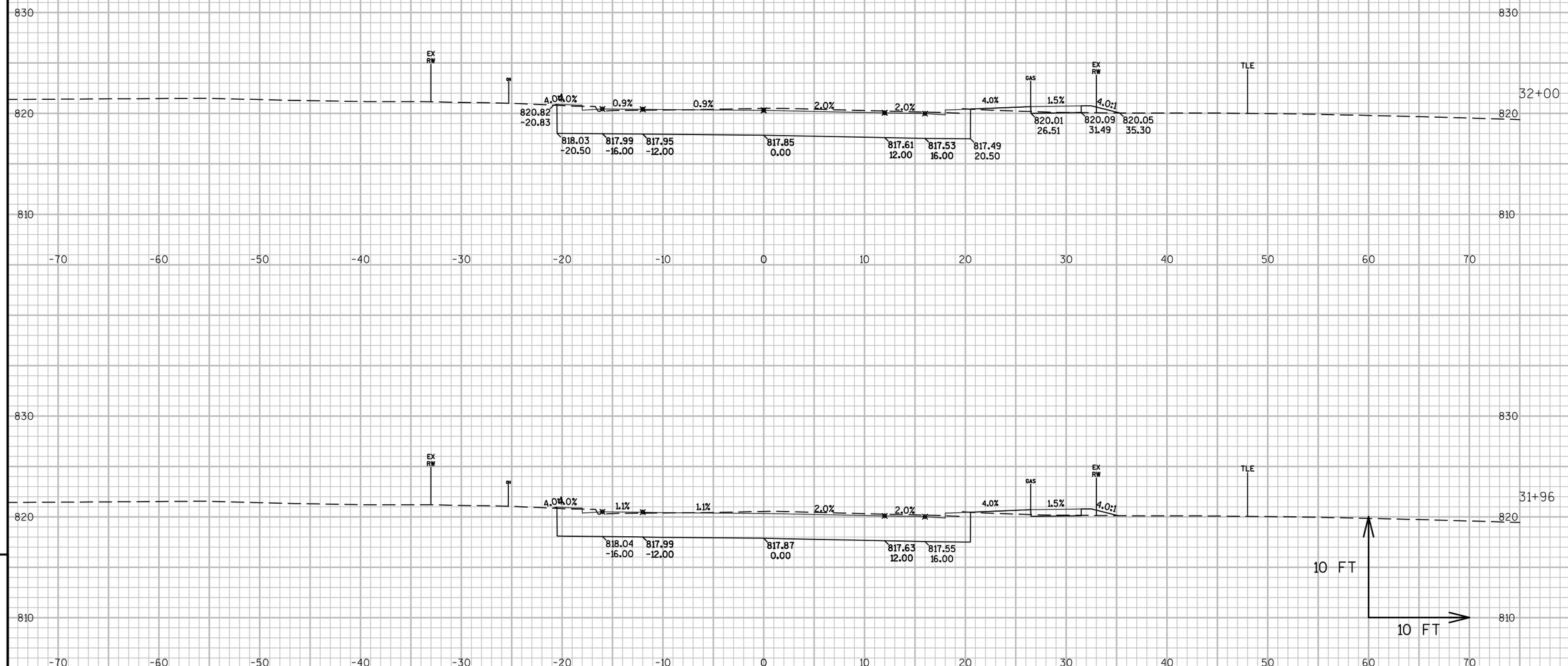
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9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 325	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (26)

PLOT DATE : 10/31/2016 12:51 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

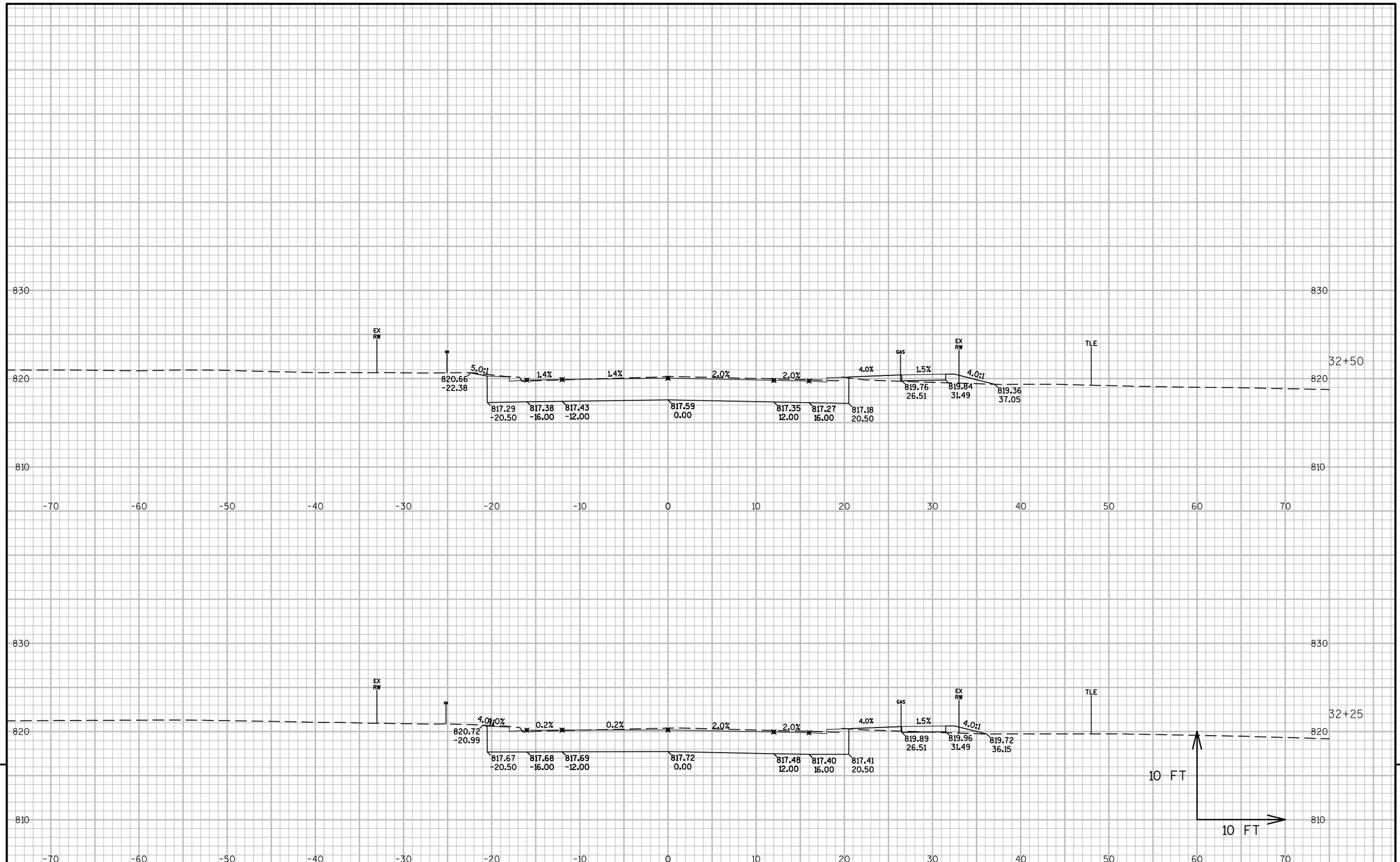


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 326	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (27)

PLOT DATE : 10/31/2016 12:51 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



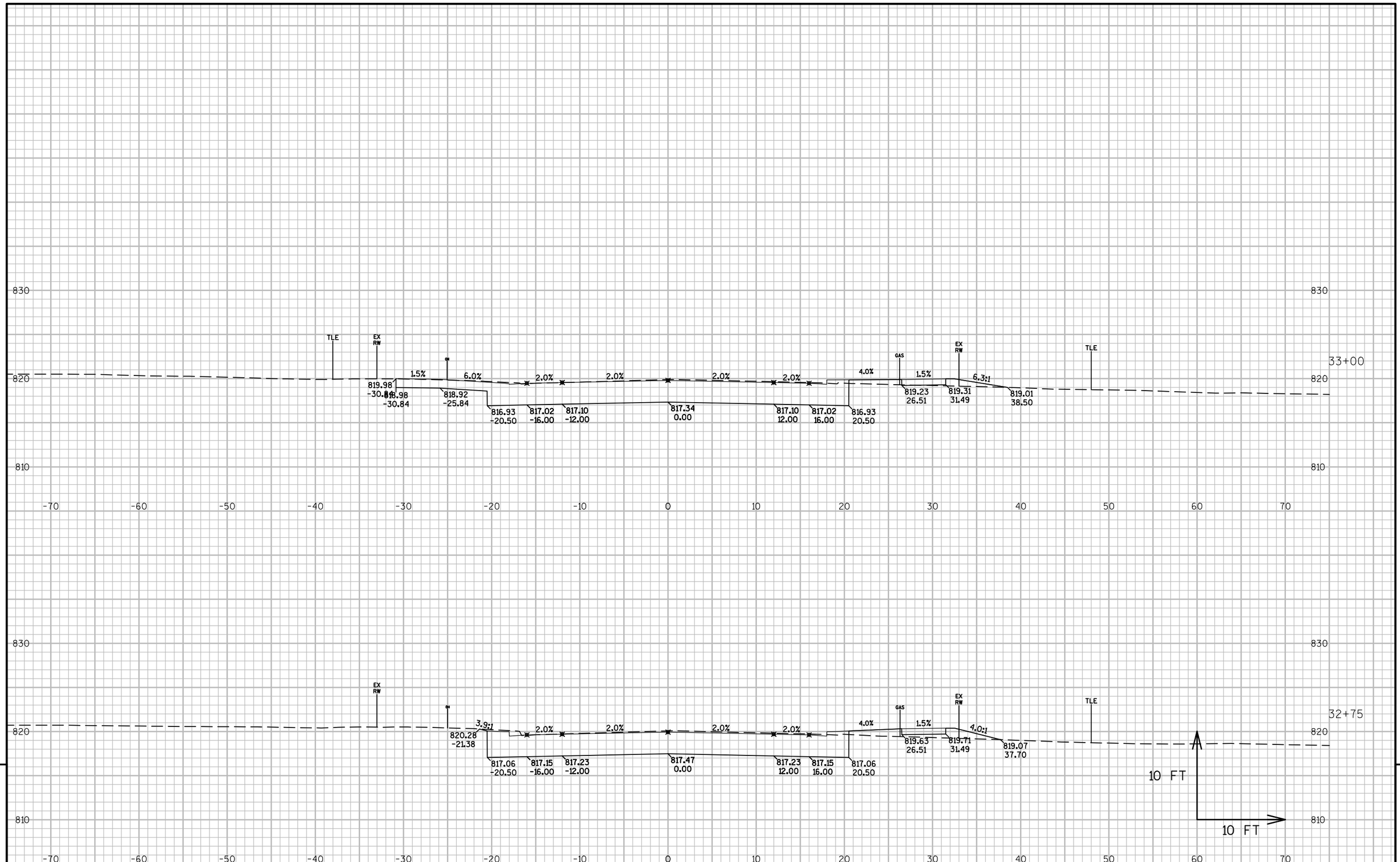
9

9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 327	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (28)

PLOT DATE : 10/31/2016 12:52 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



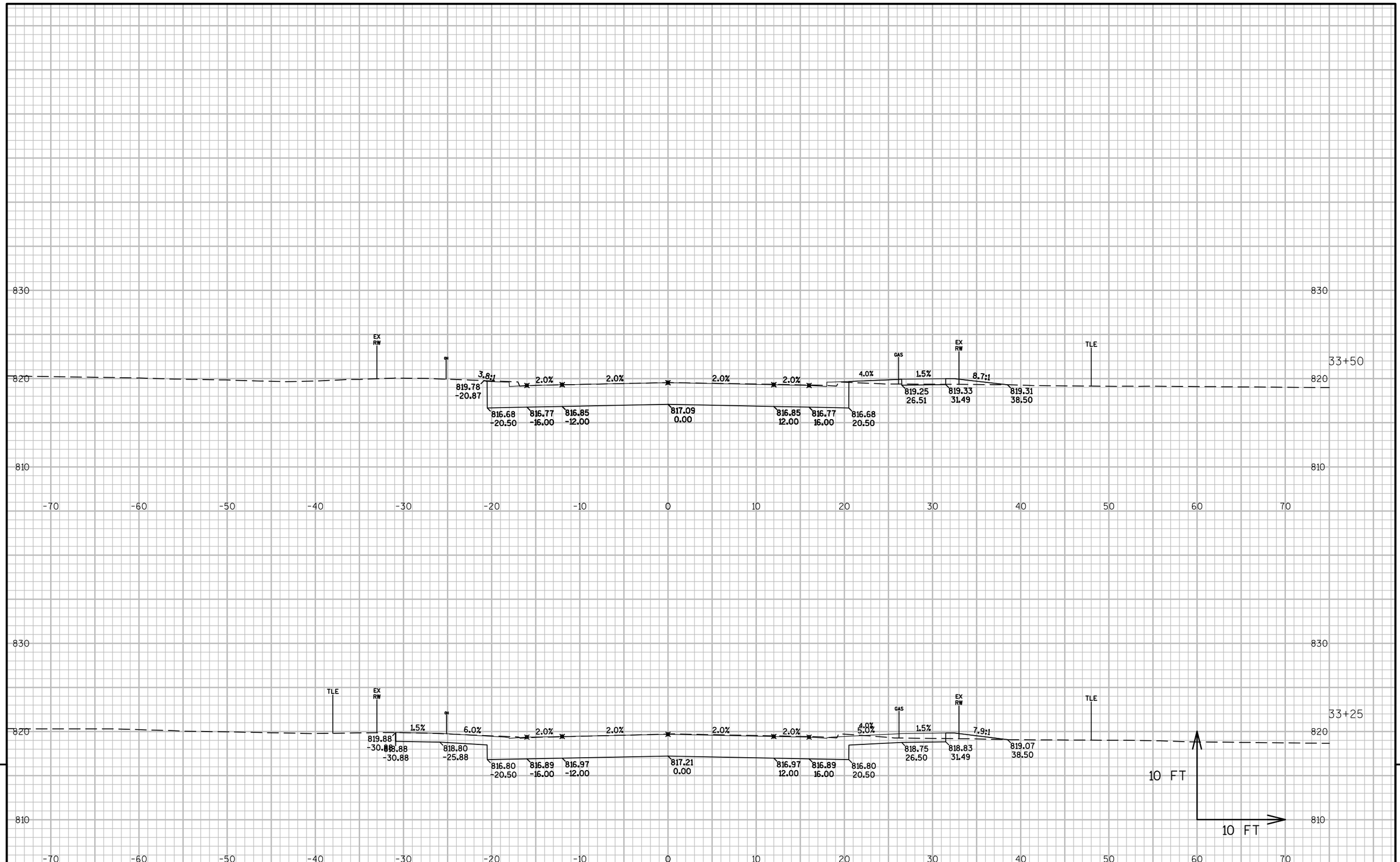
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9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 328	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (29)

PLOT DATE : 10/31/2016 12:52 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

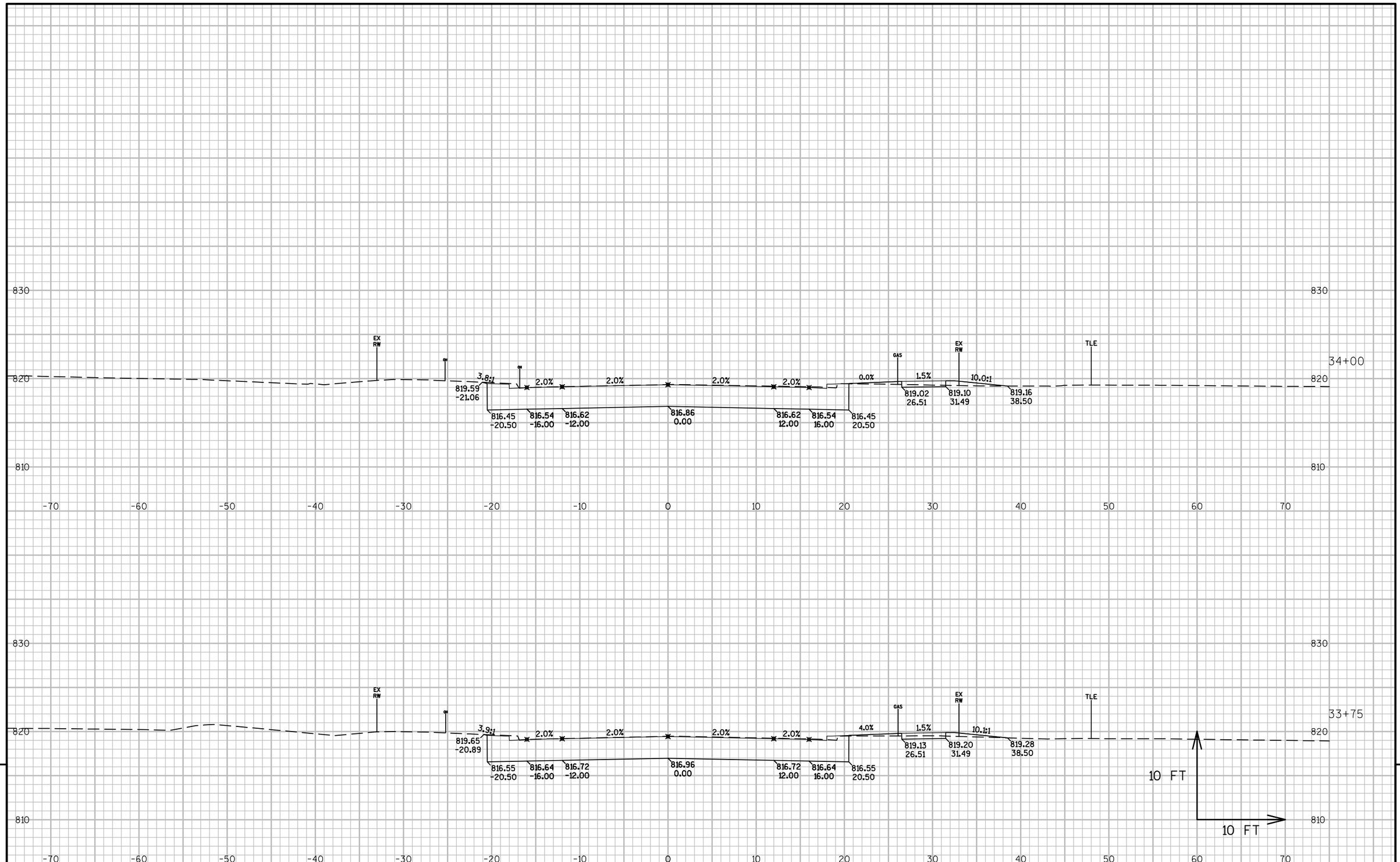


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 329	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (30)

PLOT DATE : 10/31/2016 12:53 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



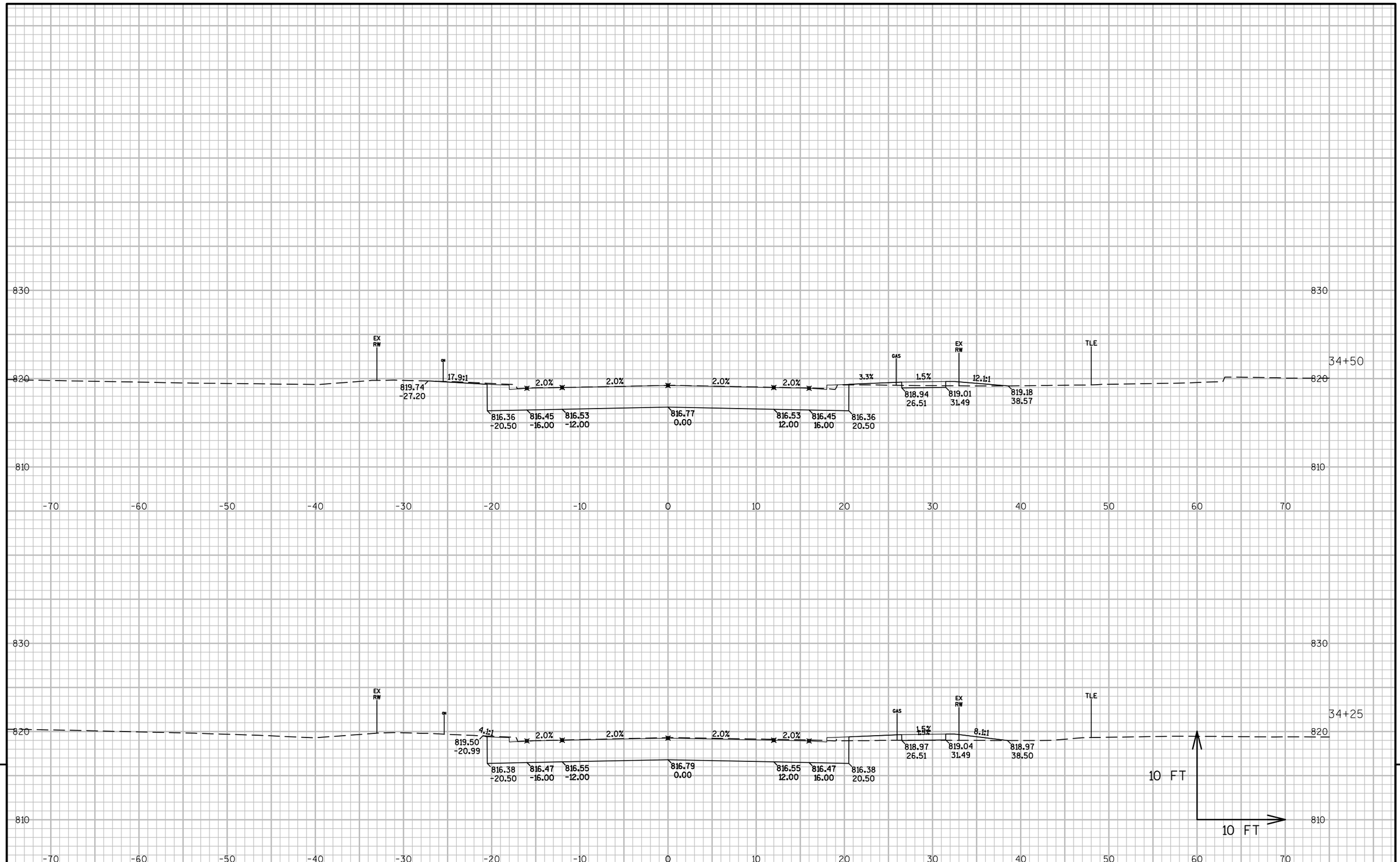
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9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 330	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (31)

PLOT DATE : 10/31/2016 12:53 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

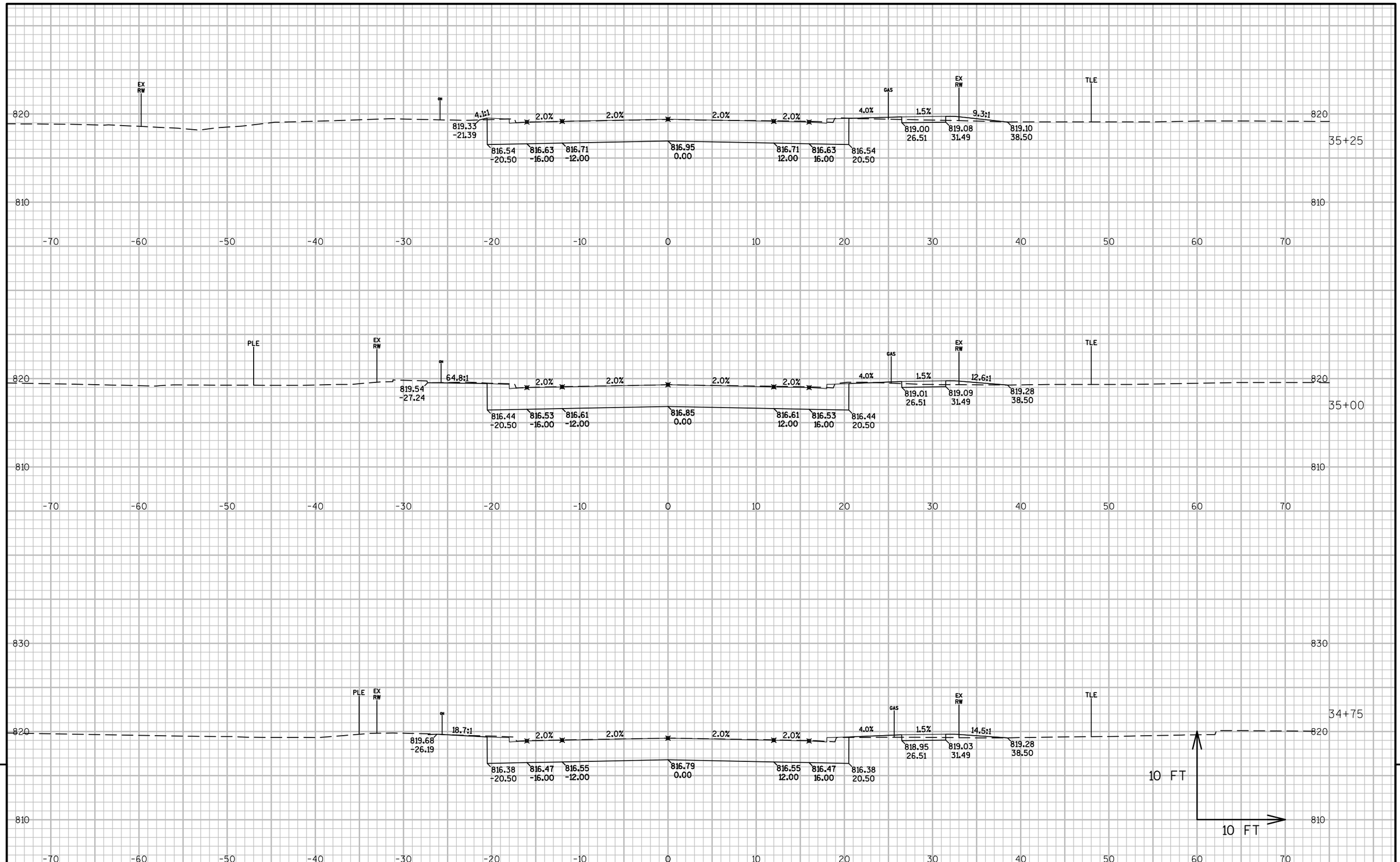
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 331	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (32)

PLOT DATE : 10/31/2016 12:54 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

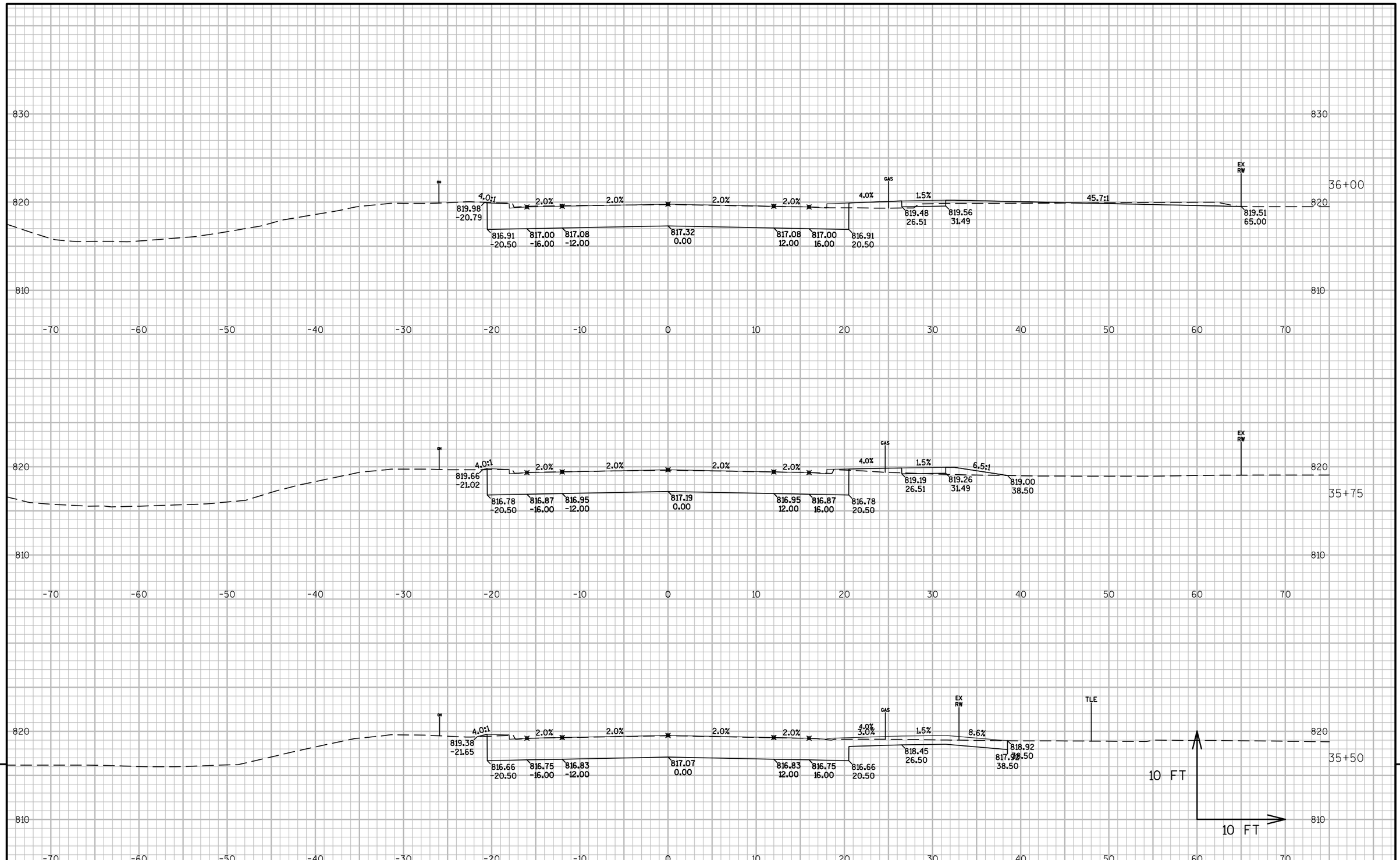
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 332	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (33)

PLOT DATE : 10/31/2016 12:54 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



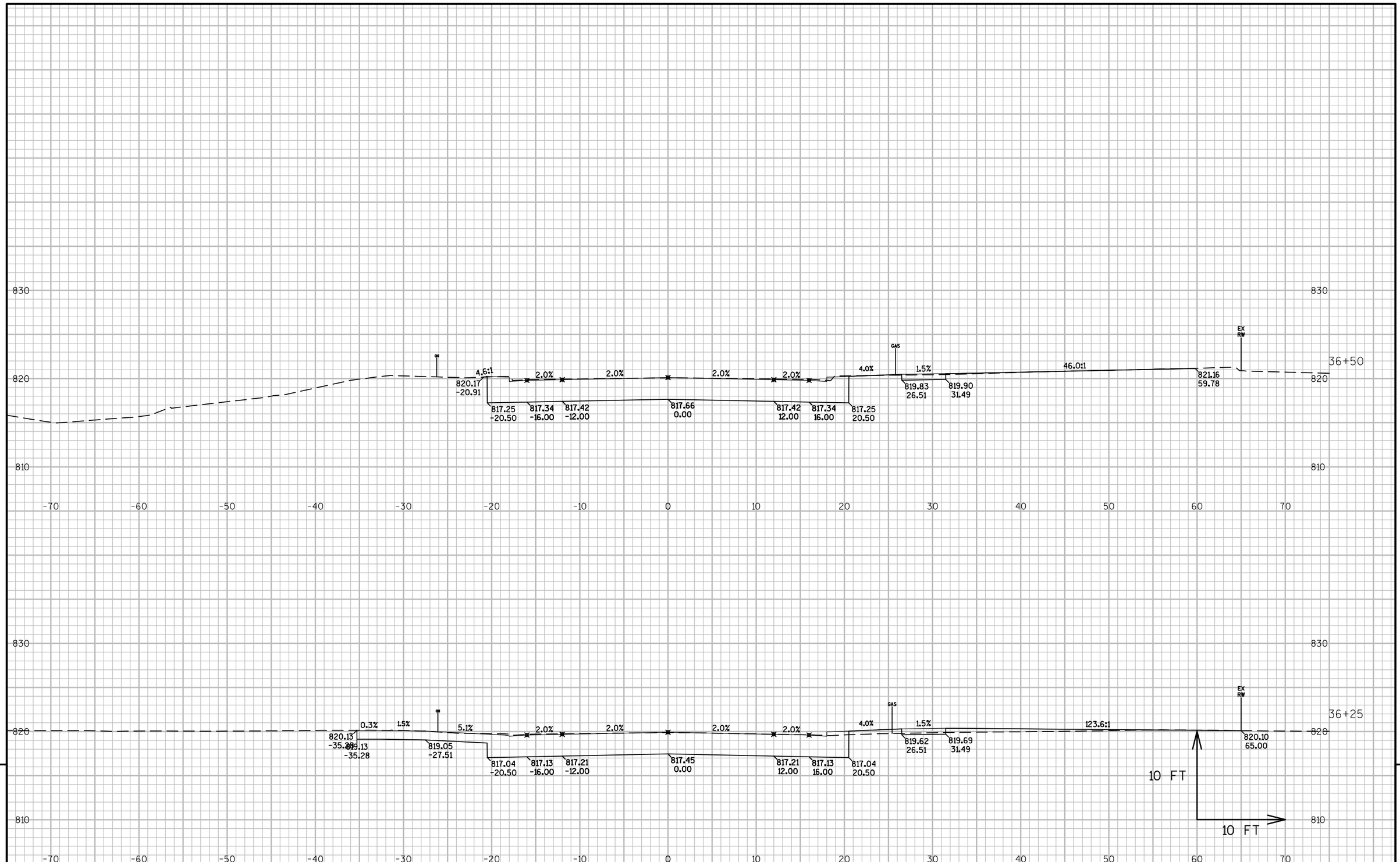
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 333	E

9

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (34)

PLOT DATE : 10/31/2016 12:55 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

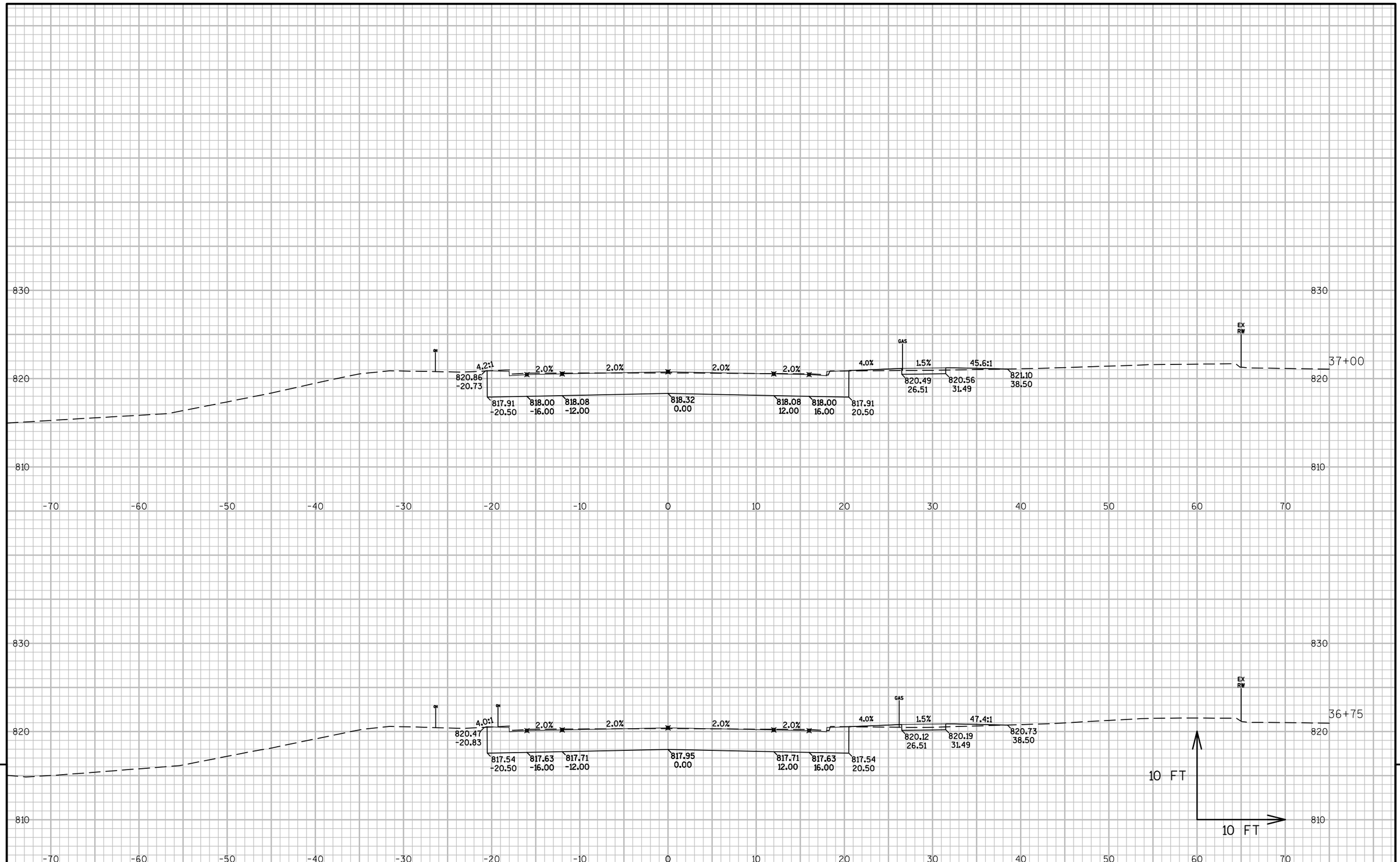
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 334	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (35)

PLOT DATE : 10/31/2016 12:55 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



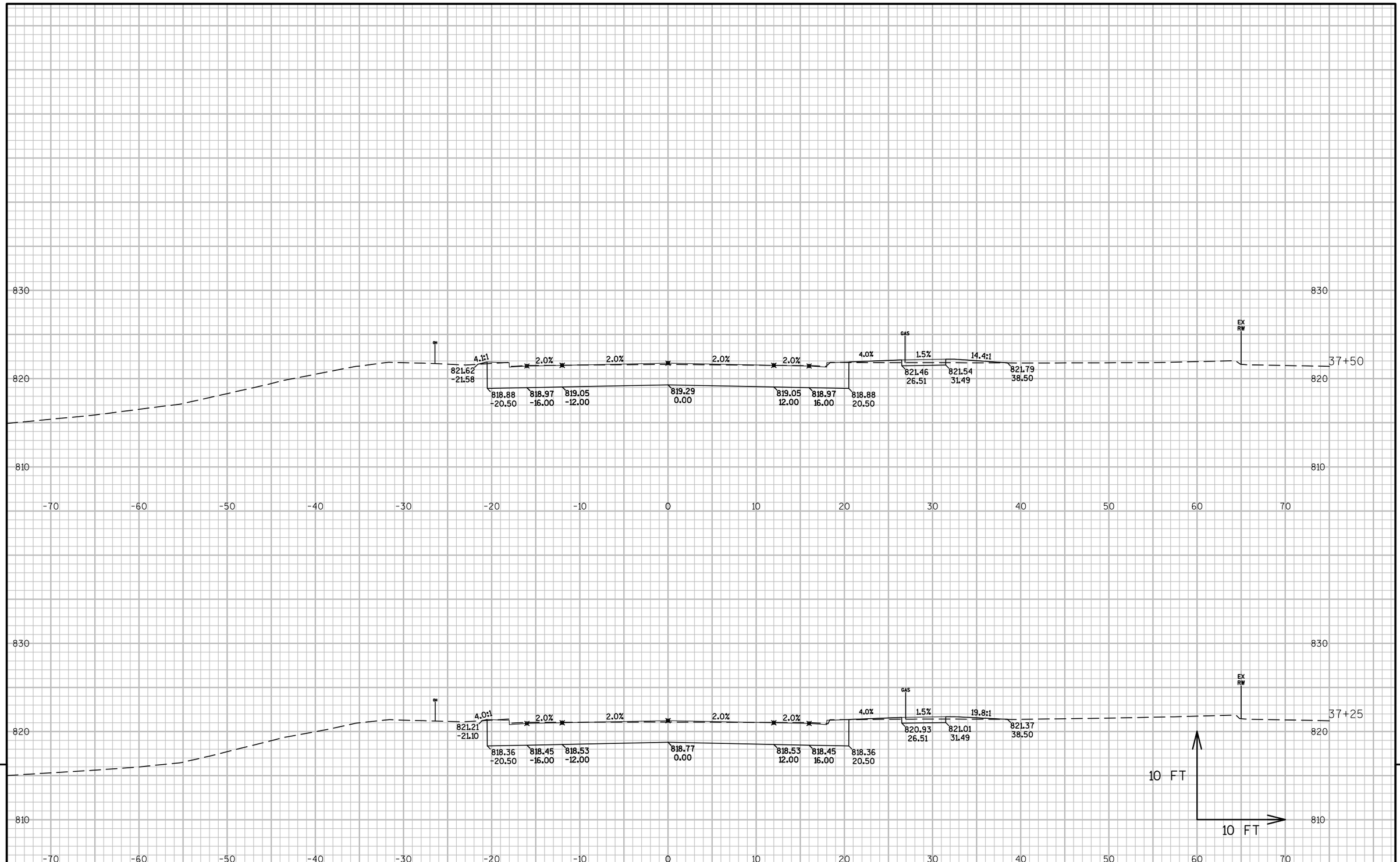
9

9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 335	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (36)

PLOT DATE : 10/31/2016 12:56 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

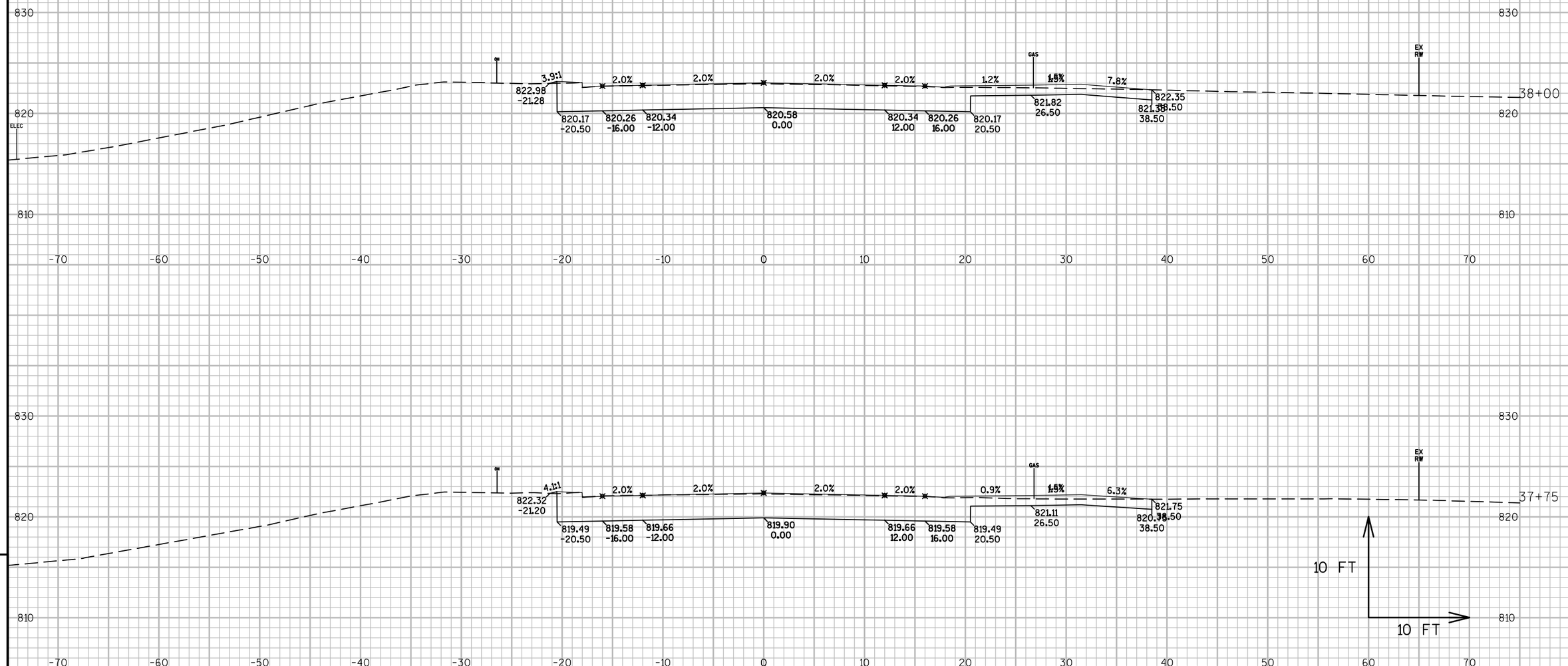
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 336	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (37)

PLOT DATE : 10/31/2016 12:57 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

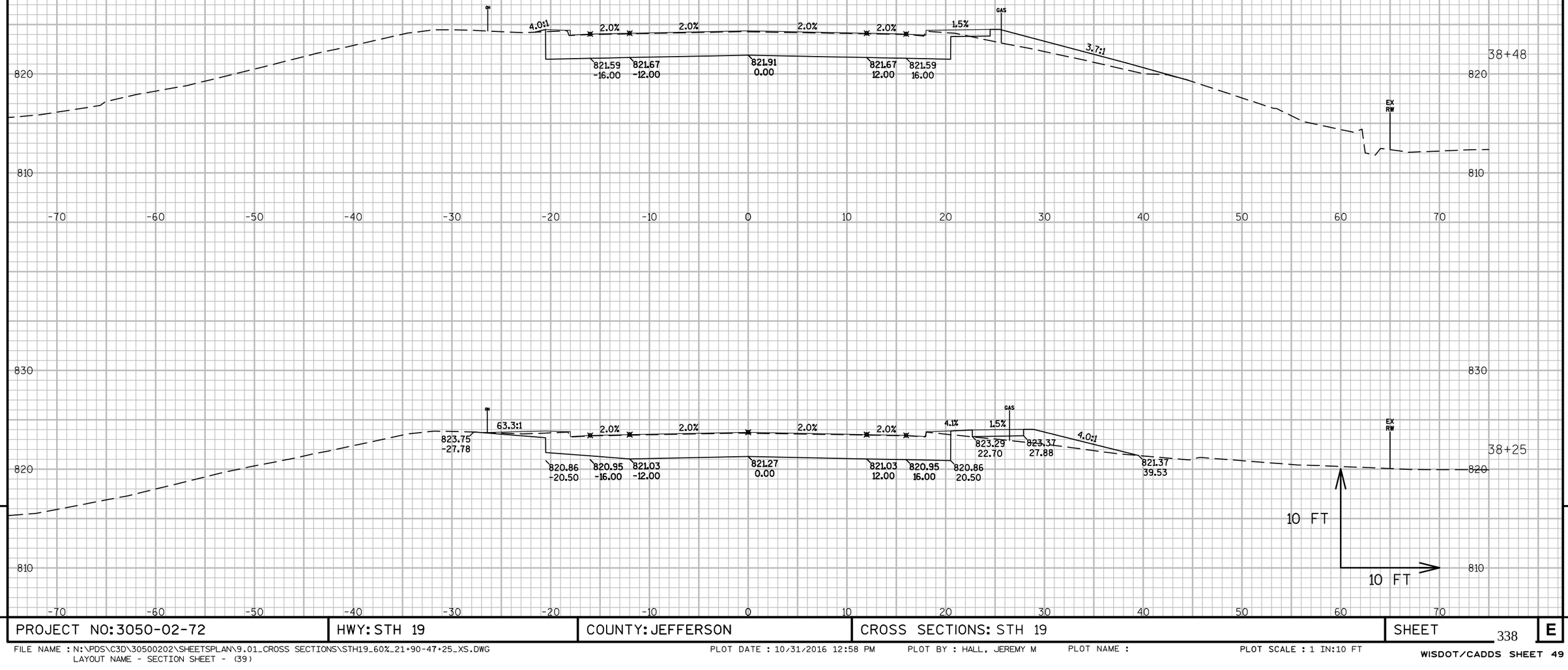
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 337	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (38)

PLOT DATE : 10/31/2016 12:57 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

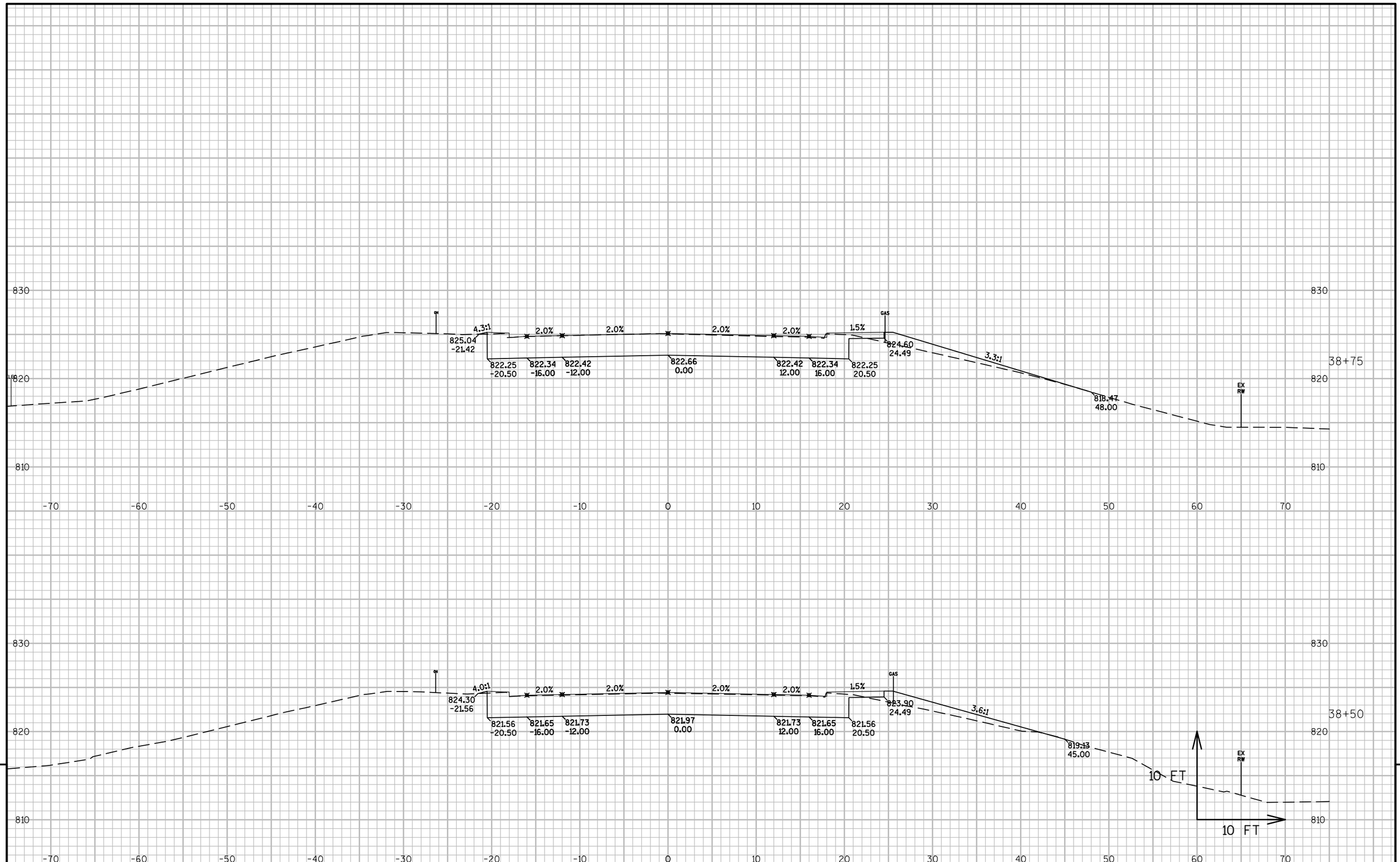
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 338	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (39)

PLOT DATE : 10/31/2016 12:58 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

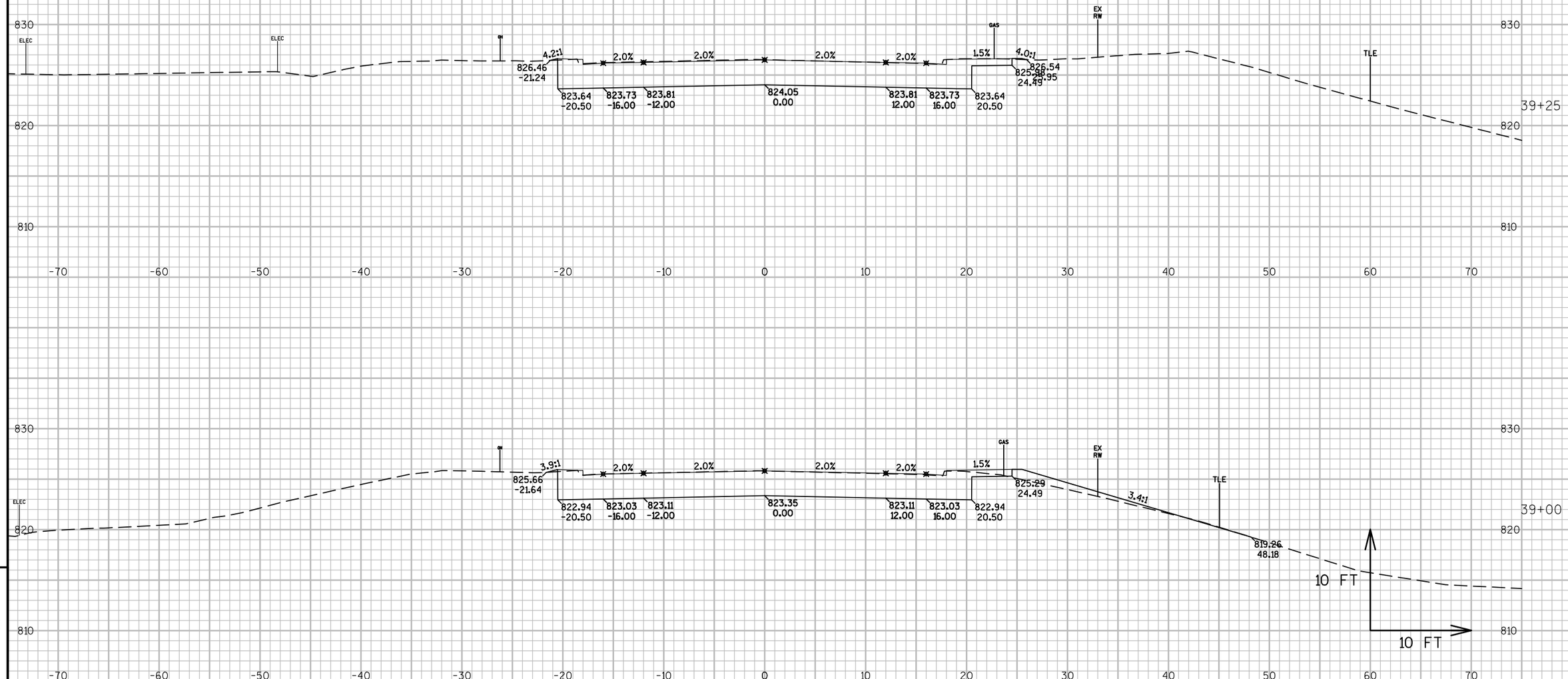
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 339	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (40)

PLOT DATE : 10/31/2016 12:58 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

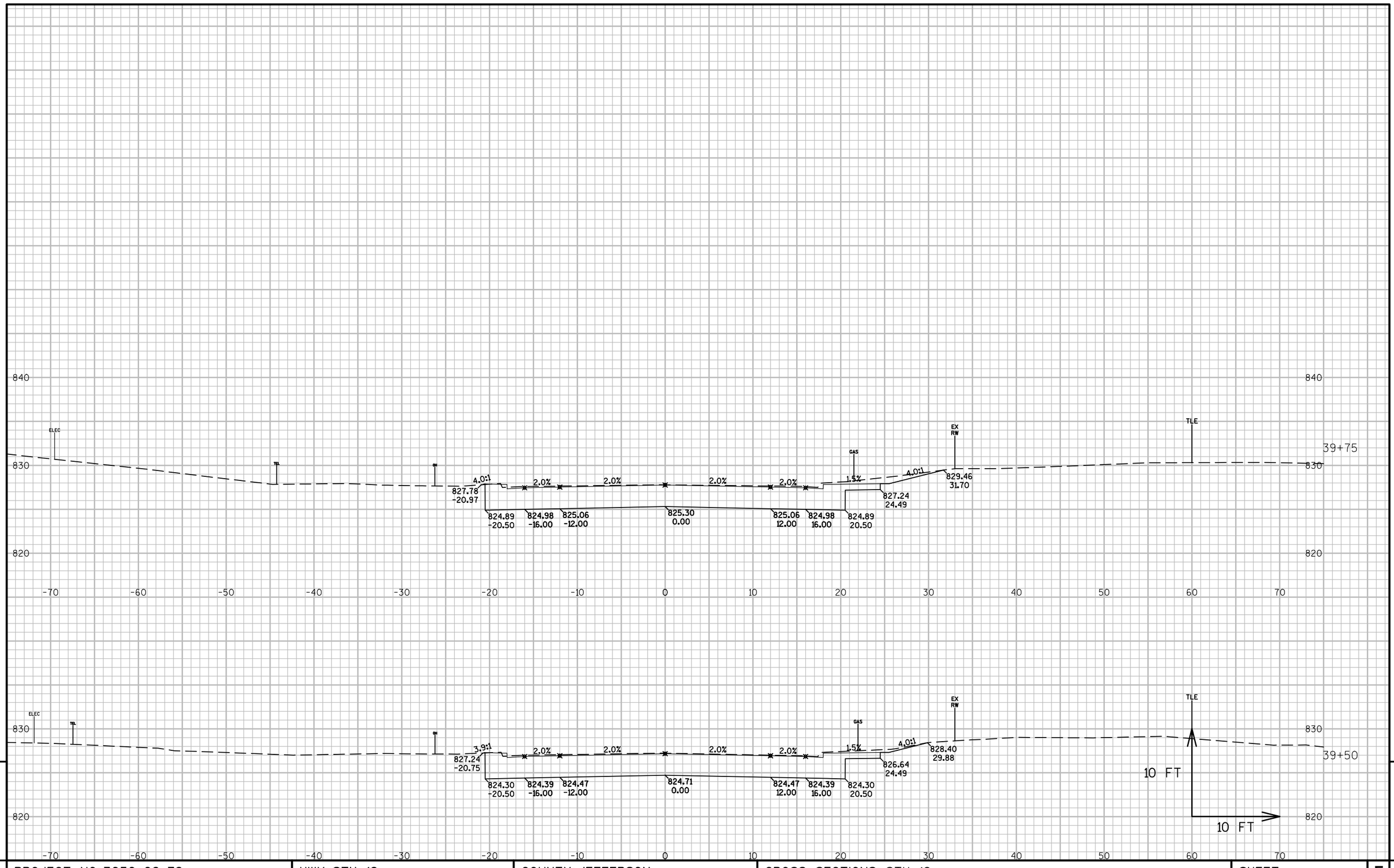


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 340	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (41)

PLOT DATE : 10/31/2016 12:59 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



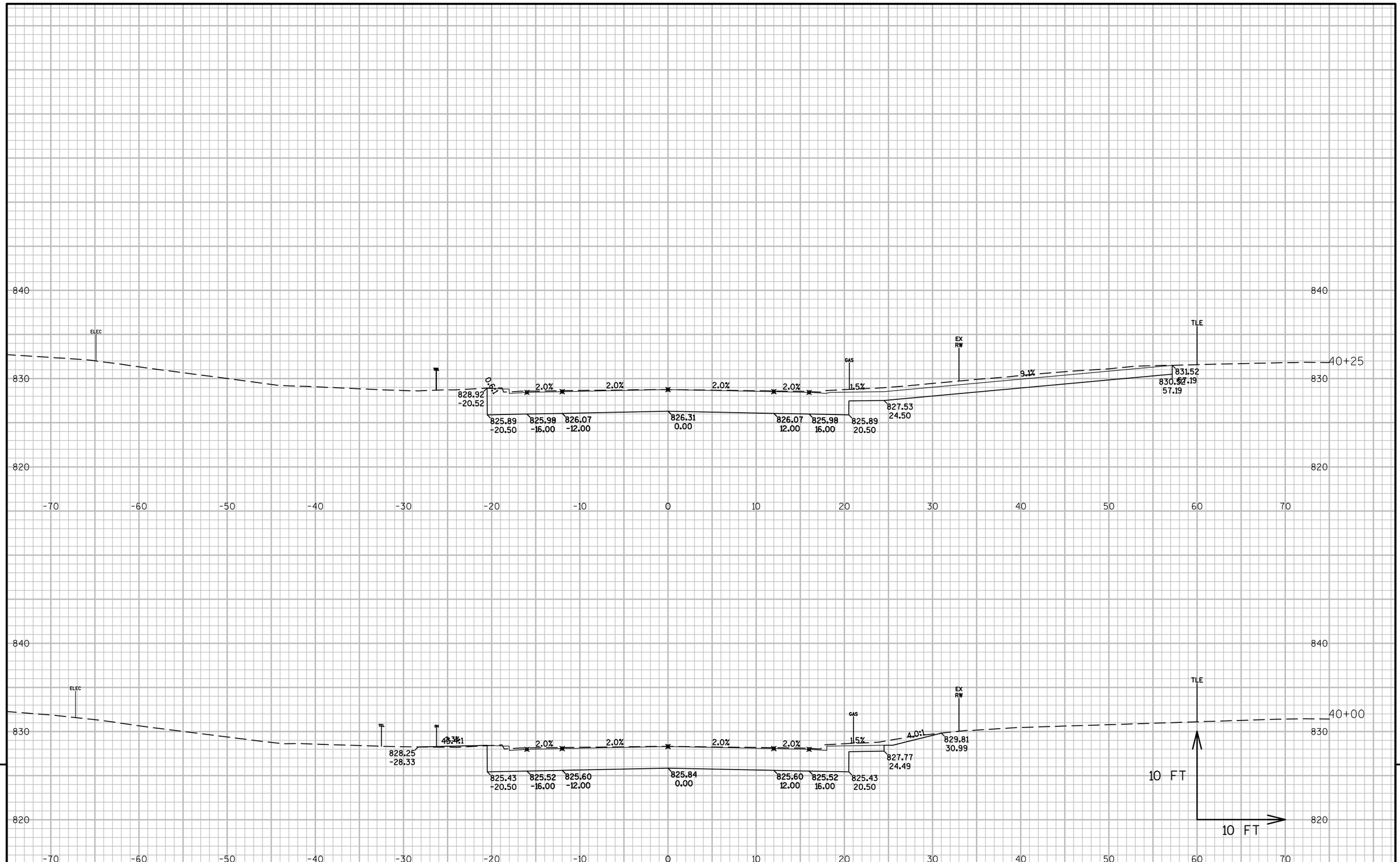
9

9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 341	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (42)

PLOT DATE : 10/31/2016 12:59 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

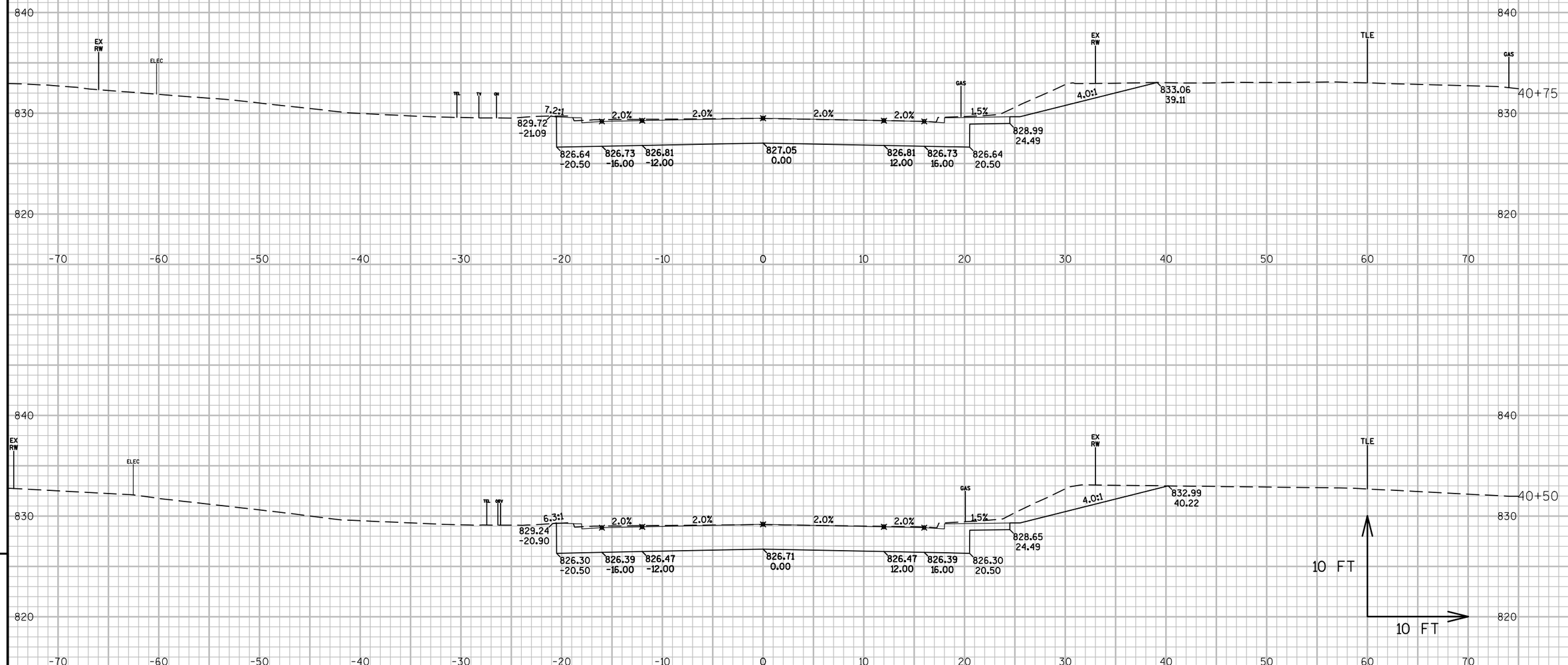
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 342	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (43)

PLOT DATE : 10/31/2016 1:00 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

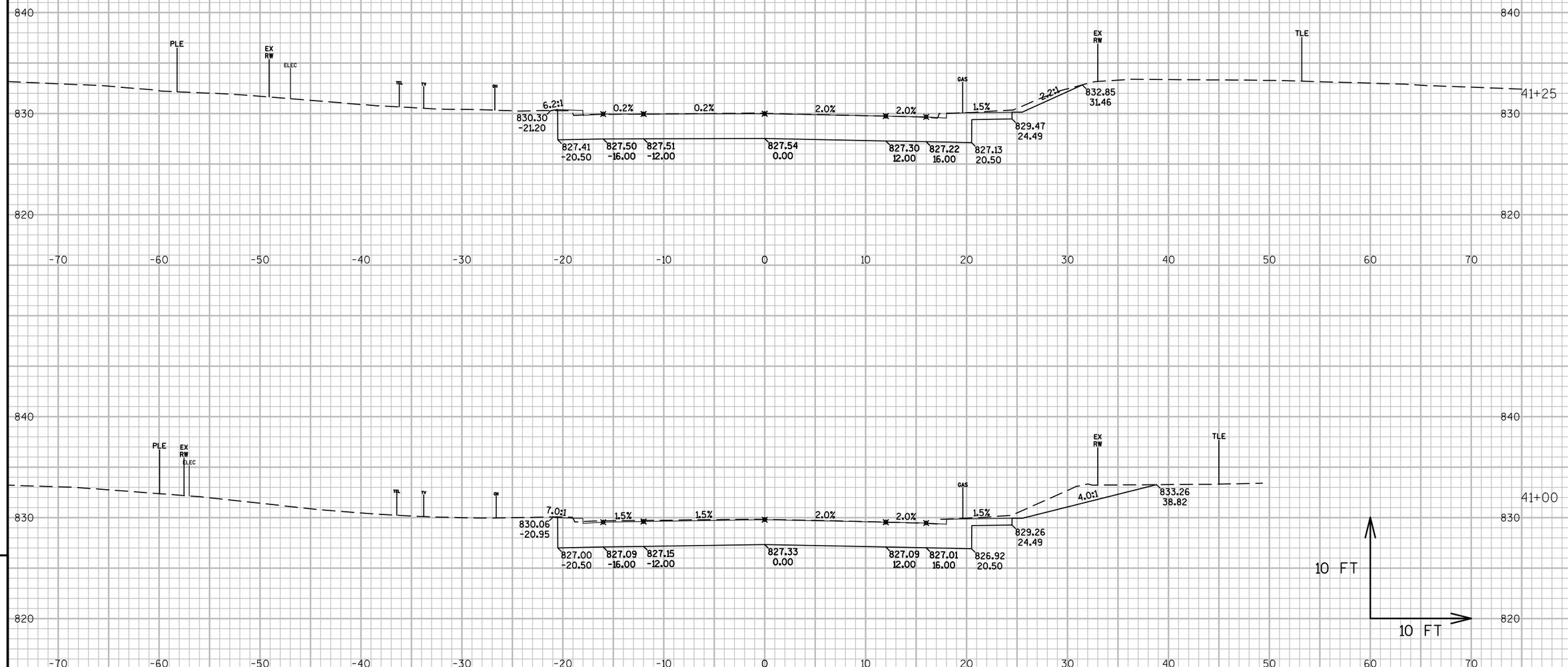
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 343	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (44)

PLOT DATE : 10/31/2016 1:00 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

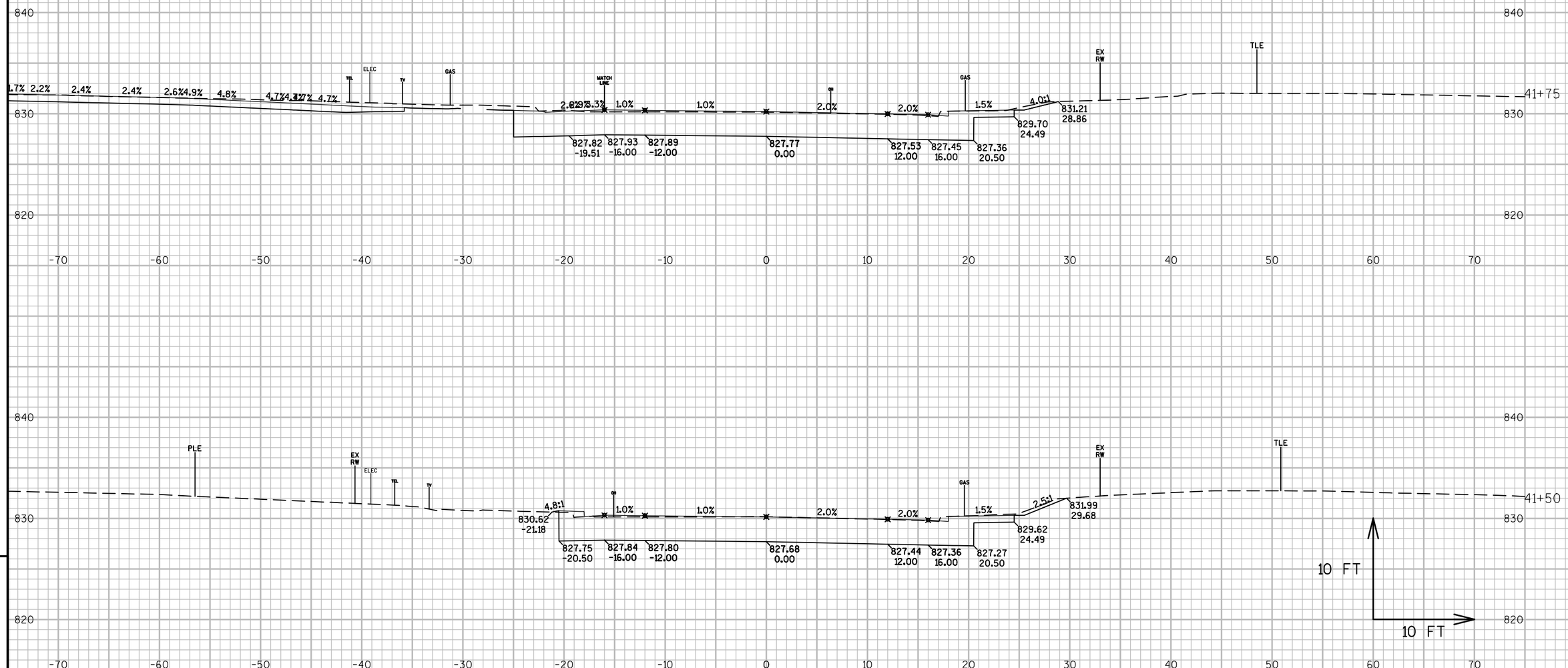
9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 344	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (45)

PLOT DATE : 10/31/2016 1:01 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



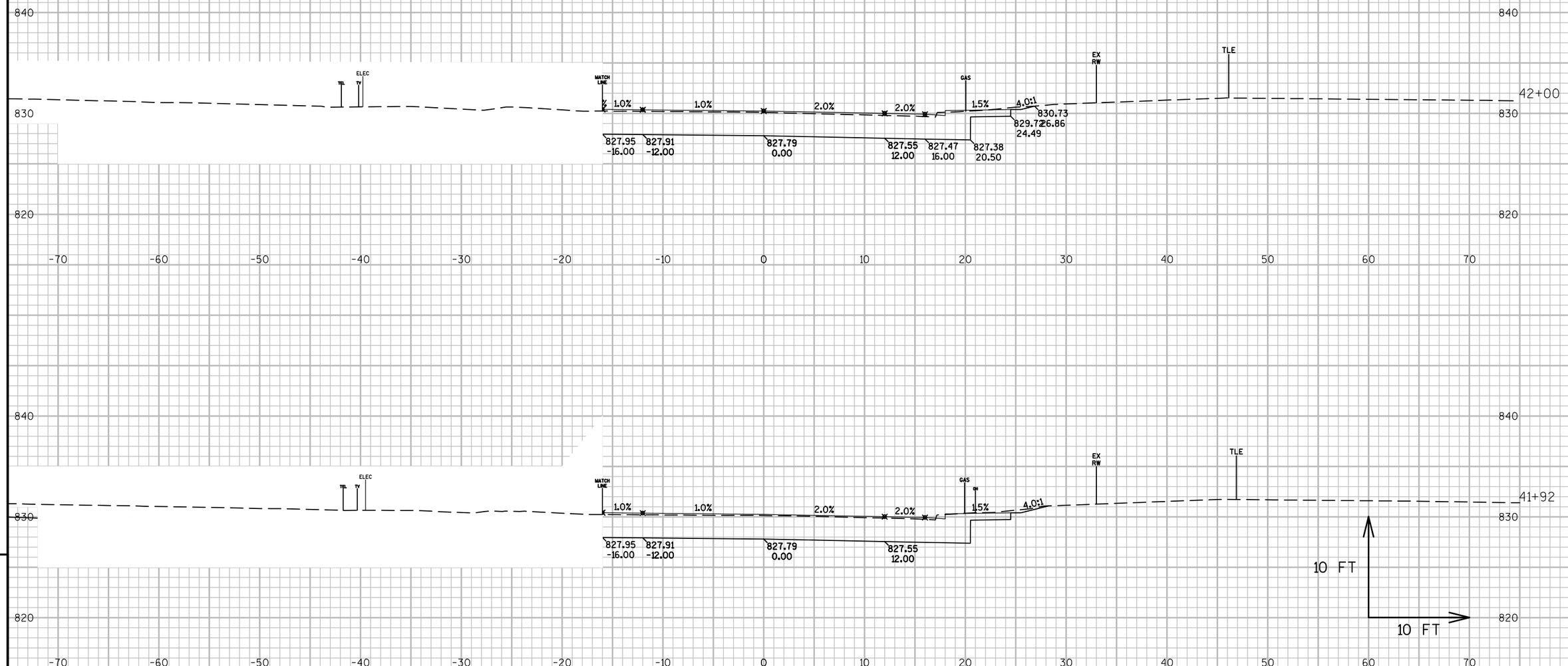
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9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 345	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (46)

PLOT DATE : 10/31/2016 1:01 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

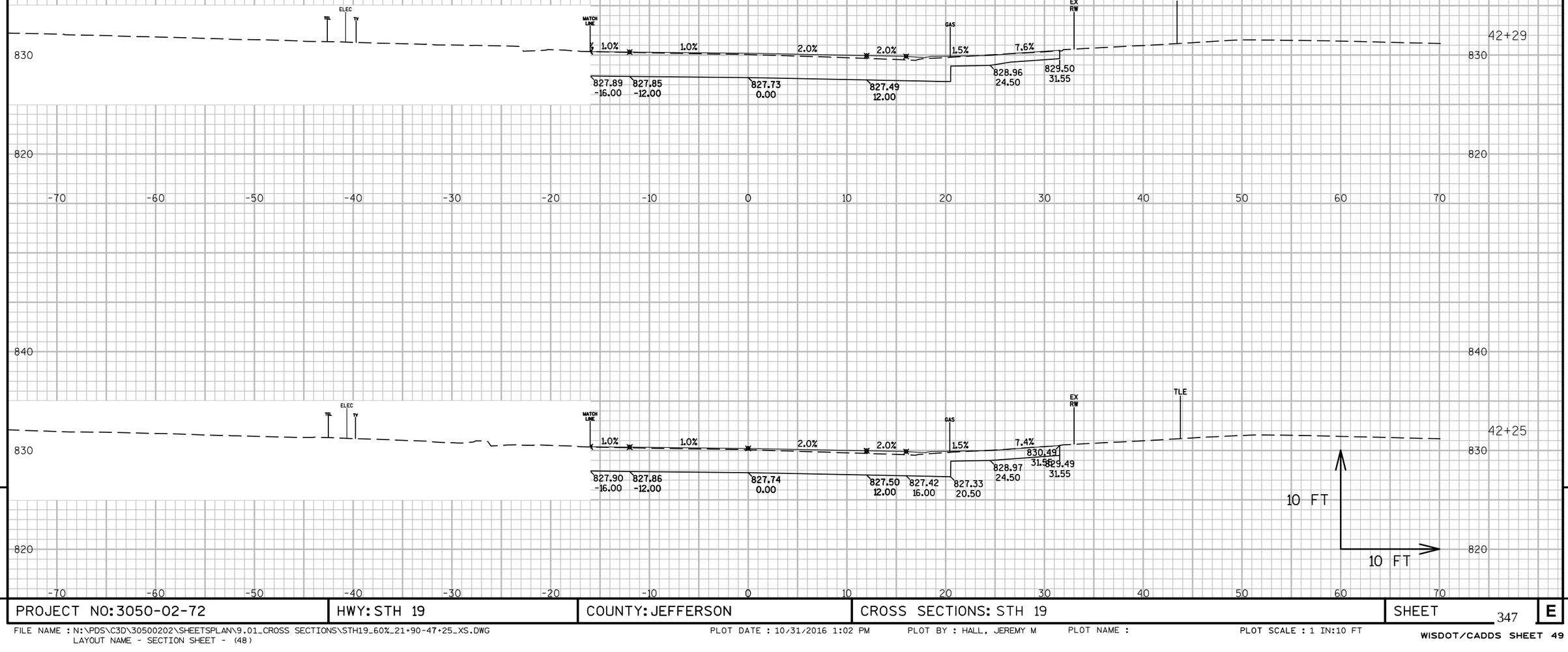
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 346	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (47)

PLOT DATE : 10/31/2016 1:02 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

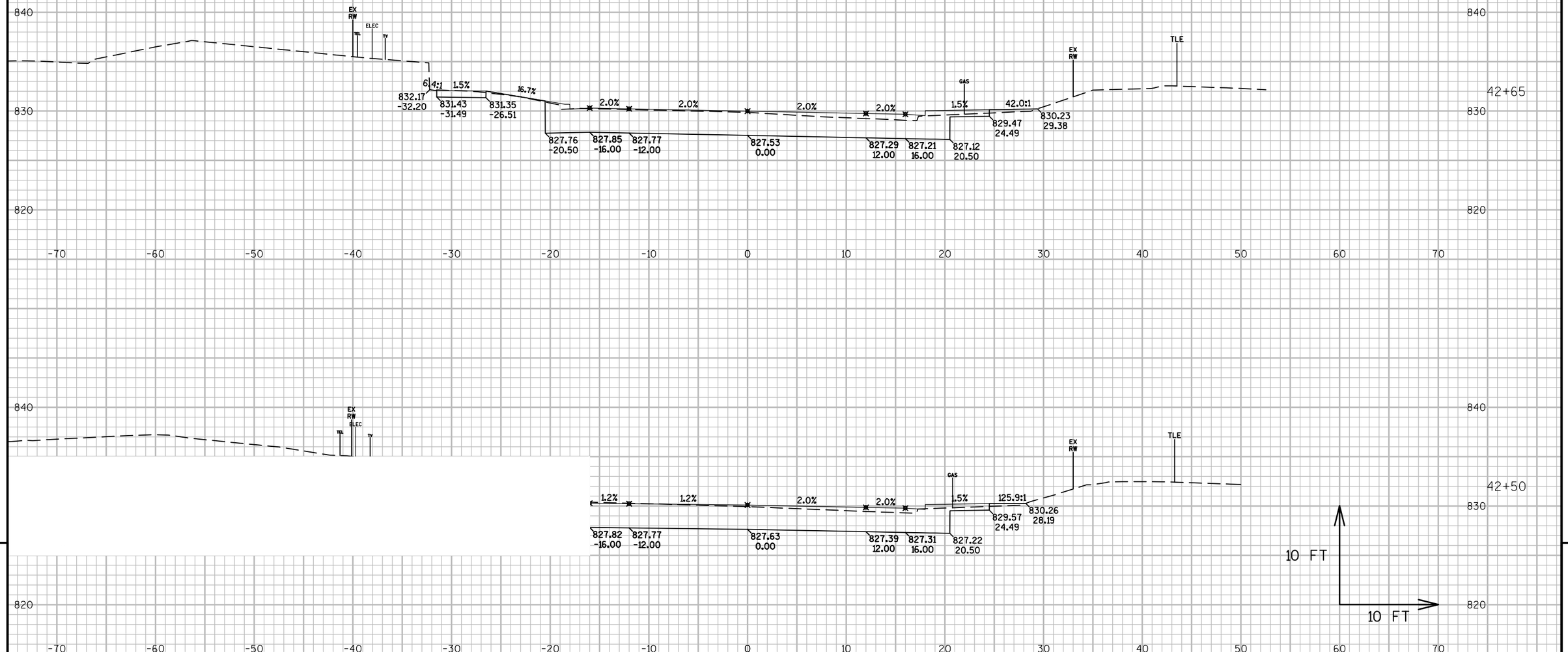
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 347	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (48)

PLOT DATE : 10/31/2016 1:02 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

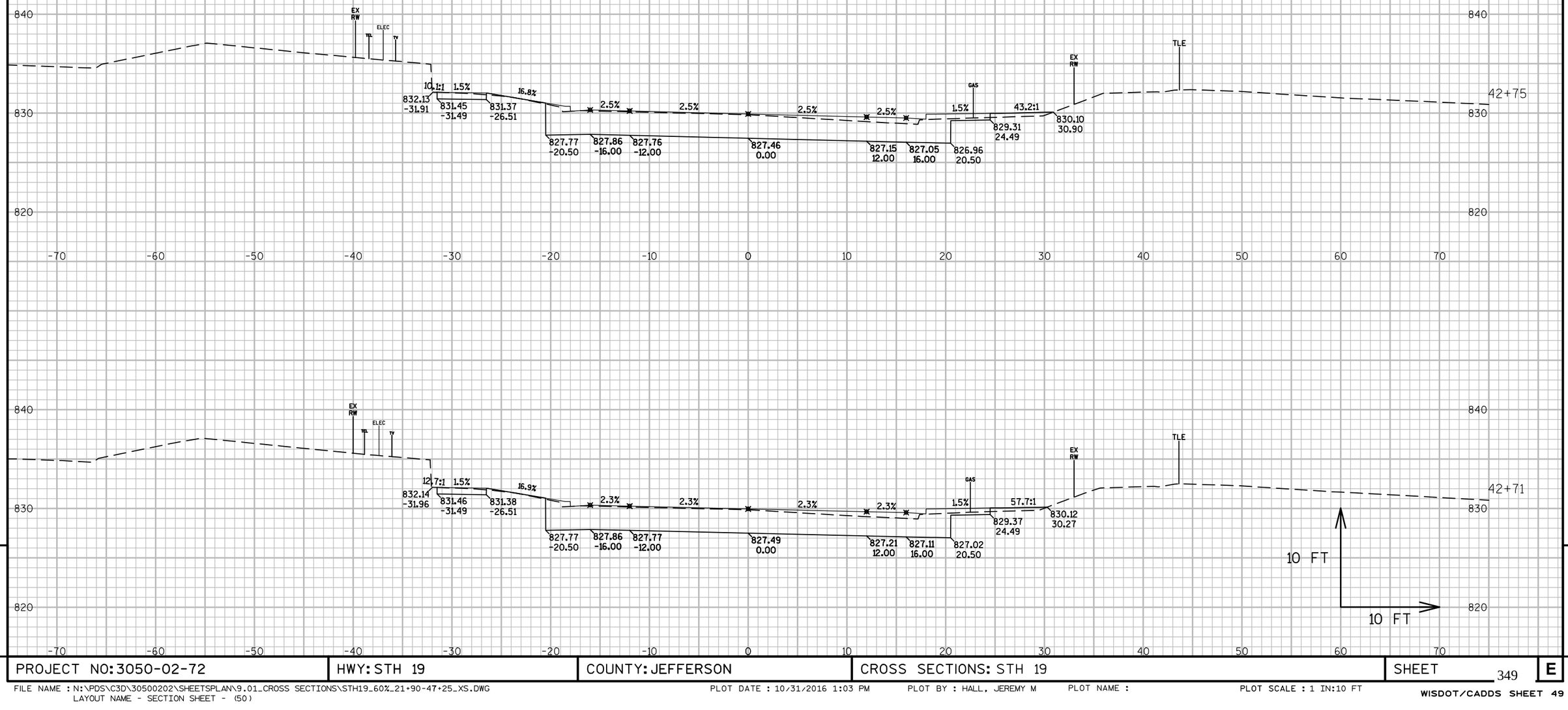
9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 348	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (49)

PLOT DATE : 10/31/2016 1:03 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

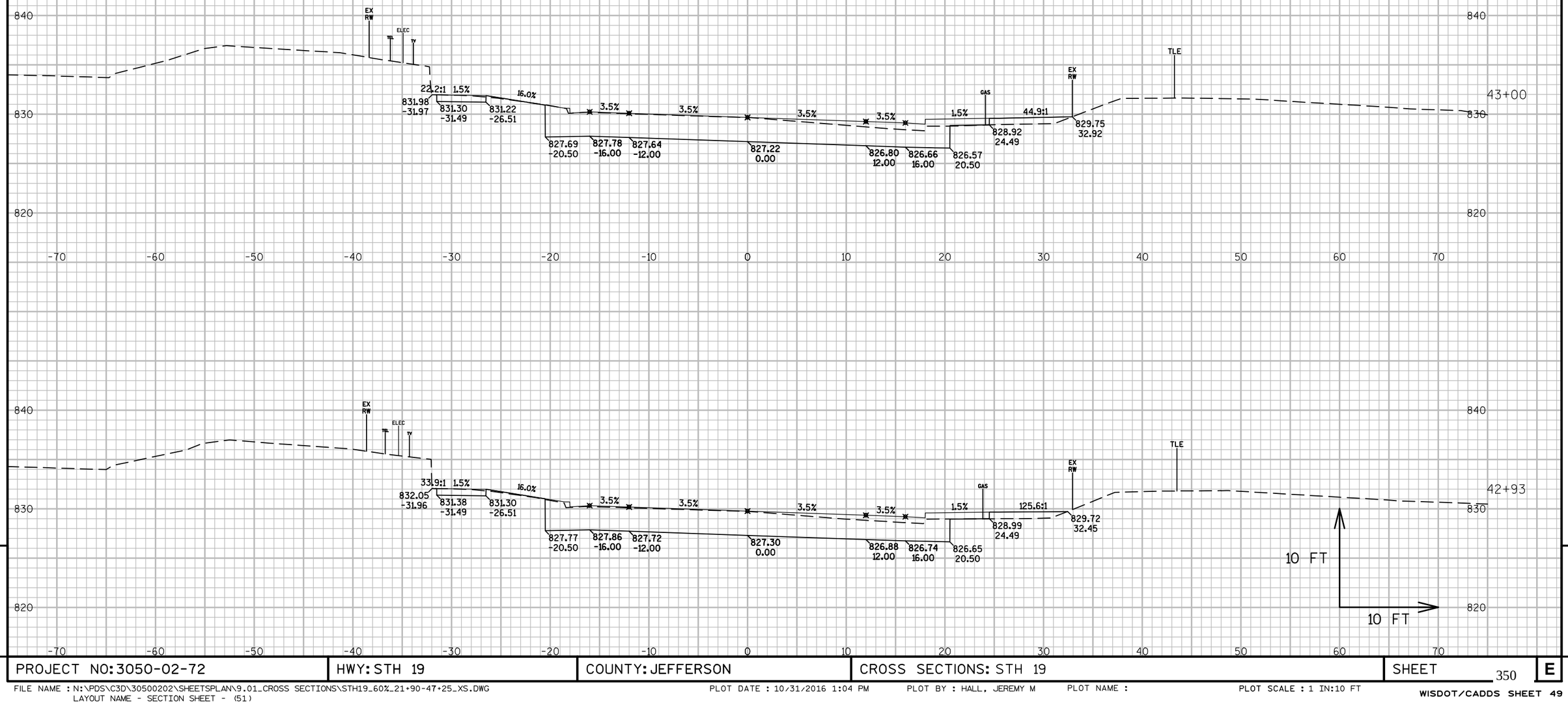


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 349	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (50)

PLOT DATE : 10/31/2016 1:03 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

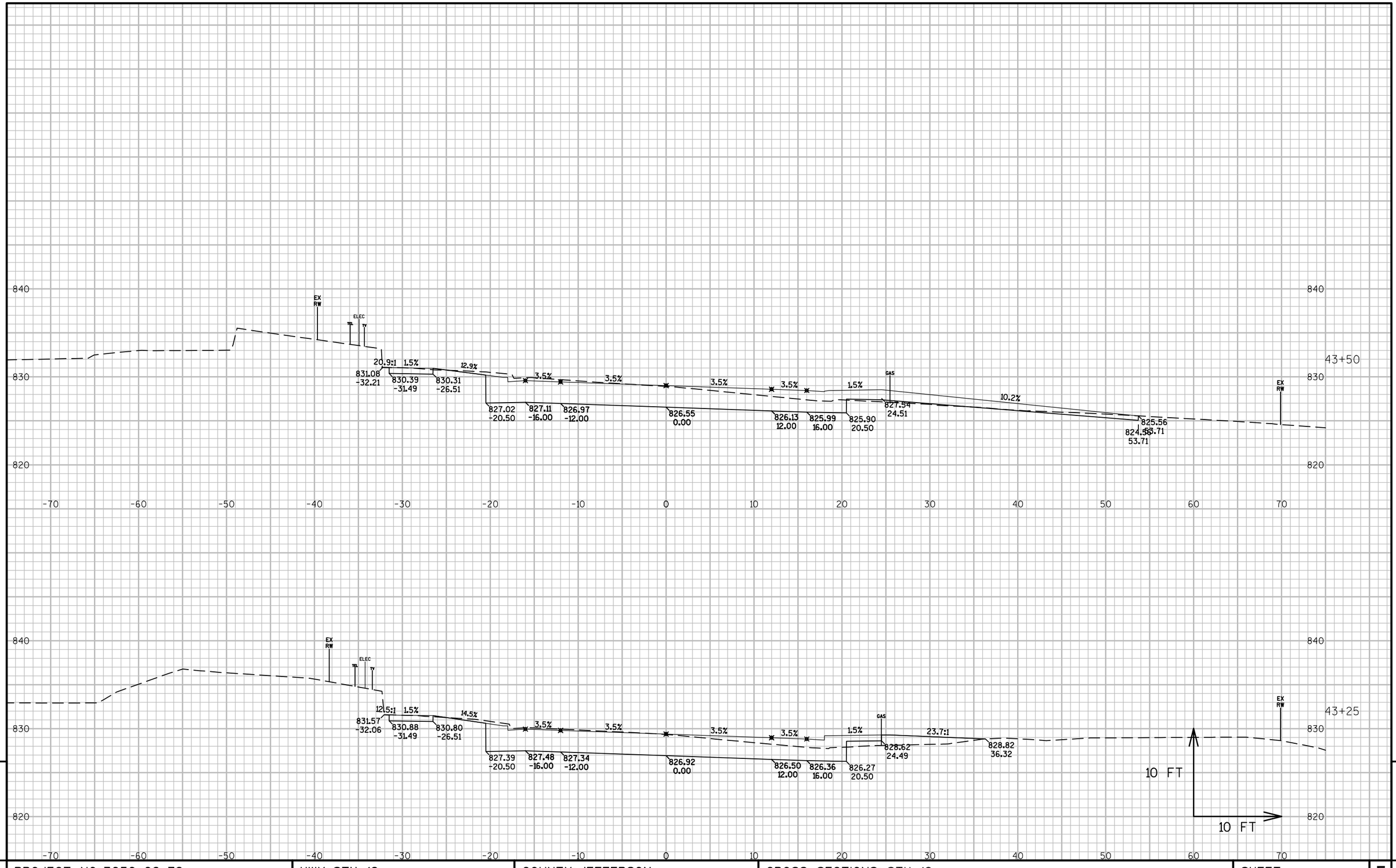


9	PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 350 E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (51)

PLOT DATE : 10/31/2016 1:04 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

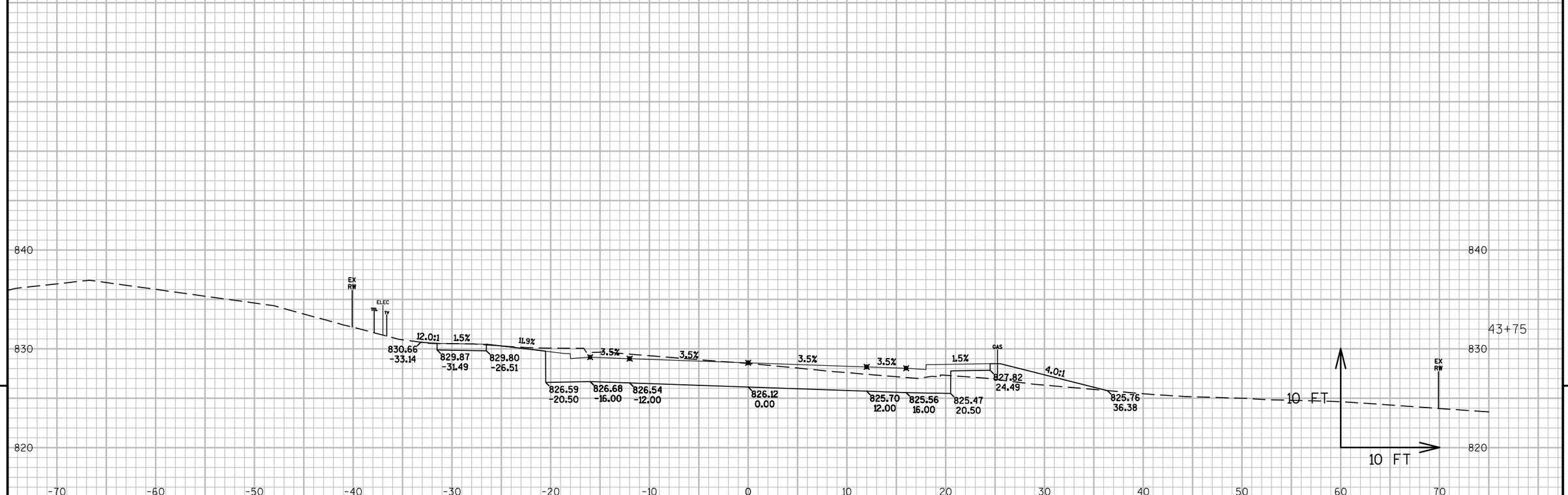


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 351	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (52)

PLOT DATE : 10/31/2016 1:04 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

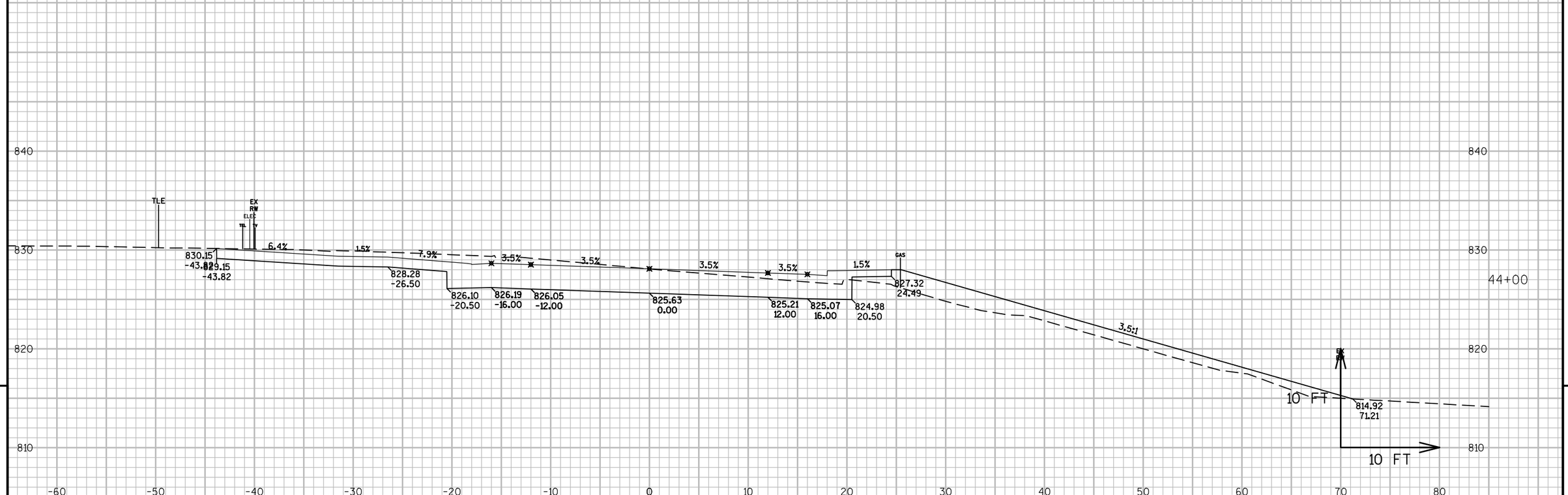


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 352	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (53)

PLOT DATE : 10/31/2016 1:05 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



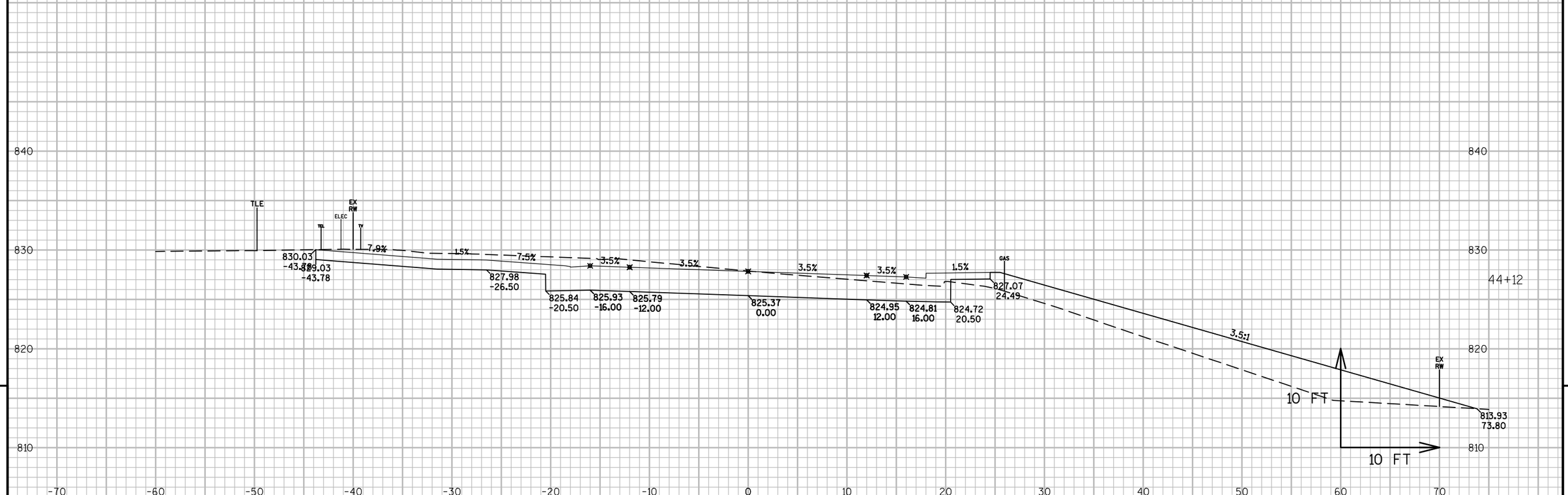
9

9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 353	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (54)

PLOT DATE : 10/31/2016 1:05 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

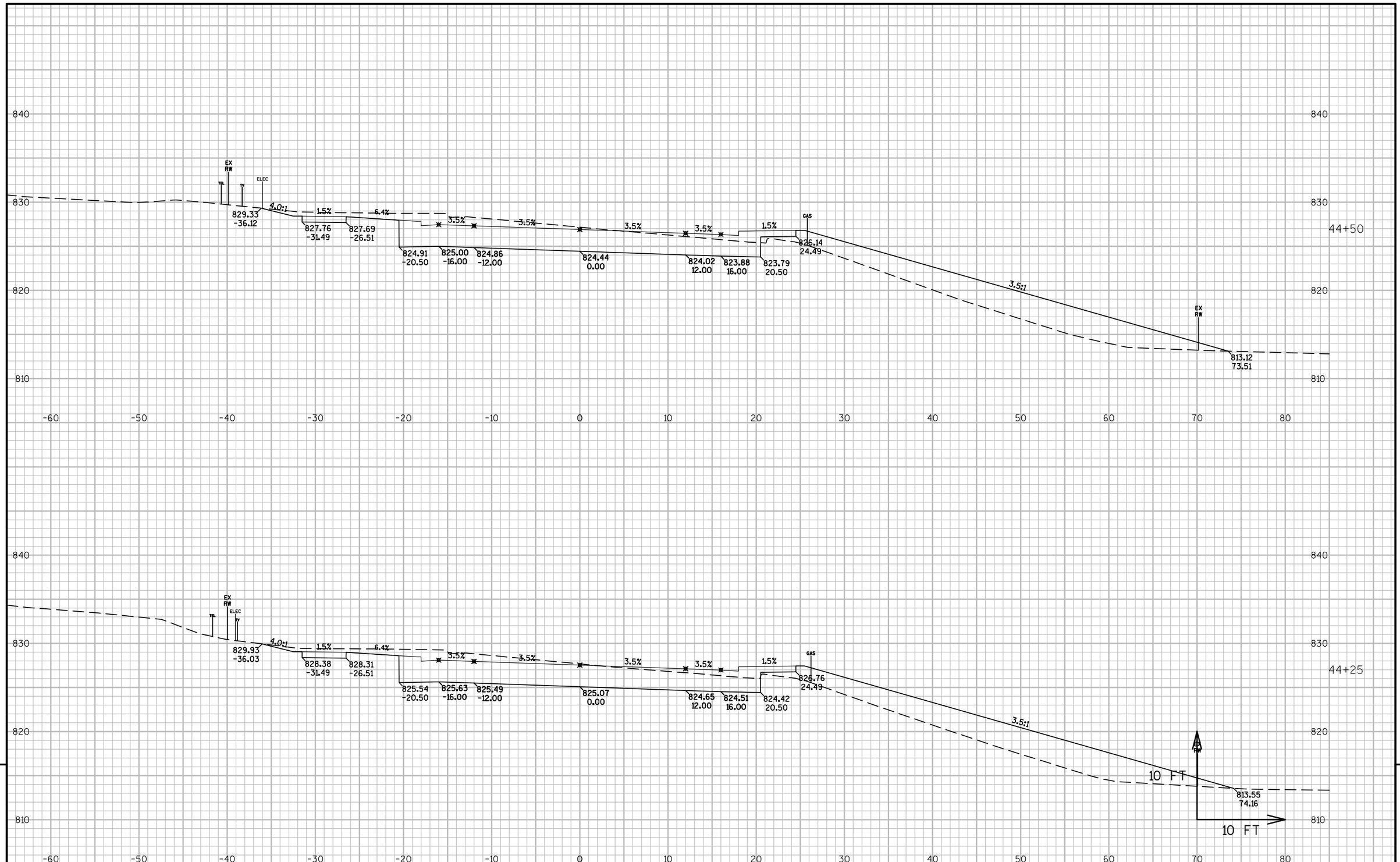


9

9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 354	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (55)
PLOT DATE : 10/31/2016 1:06 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

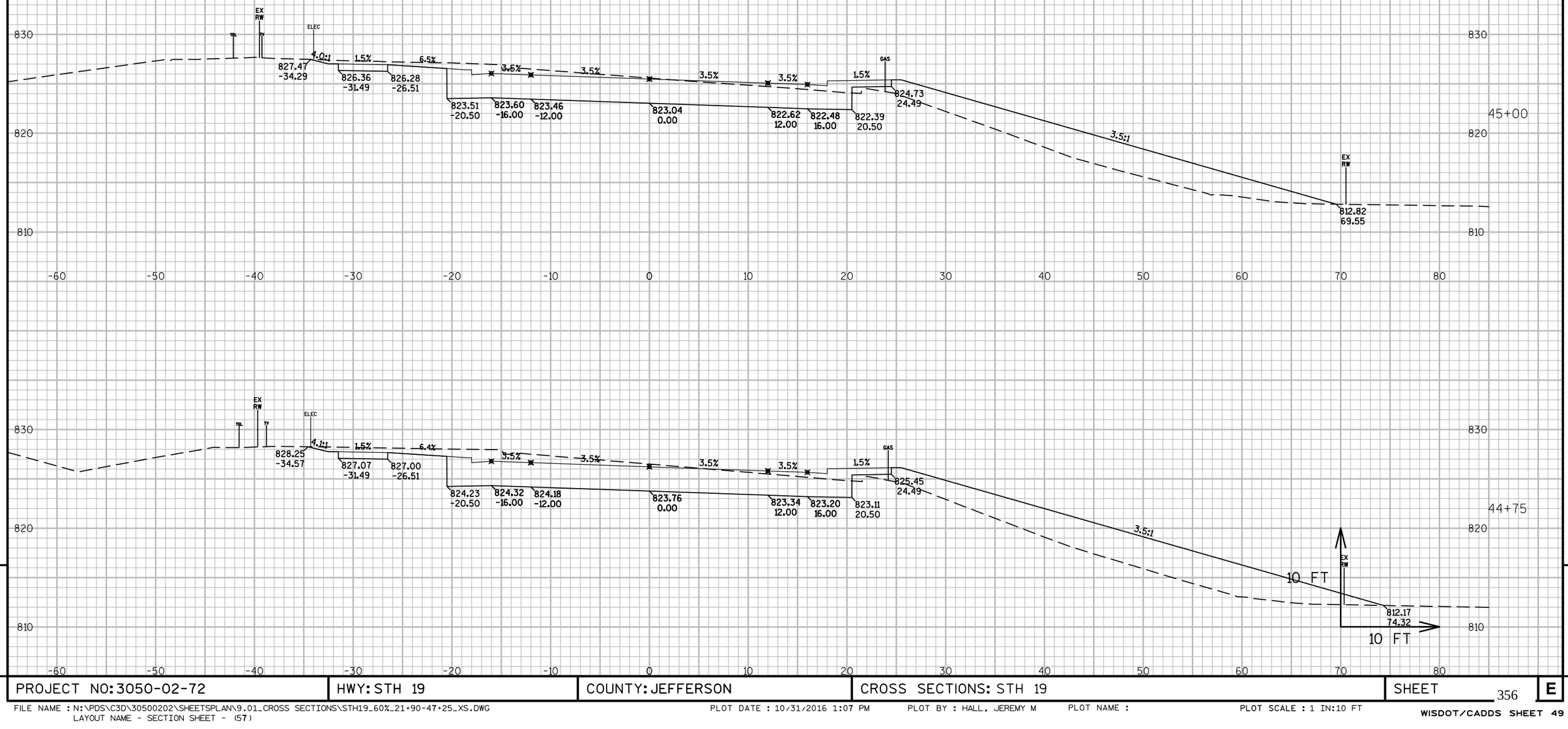


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 355	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (56)

PLOT DATE : 10/31/2016 1:06 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



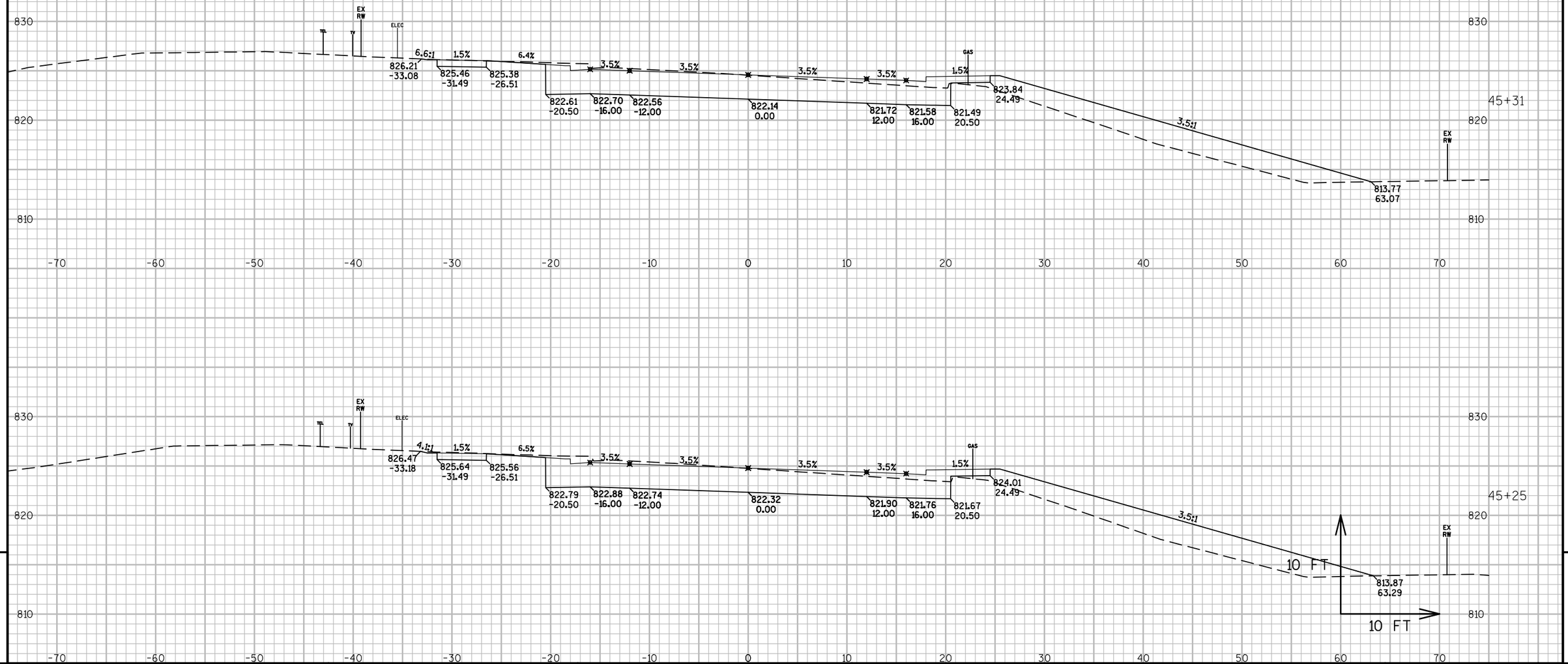
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9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 356	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (57)

PLOT DATE : 10/31/2016 1:07 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

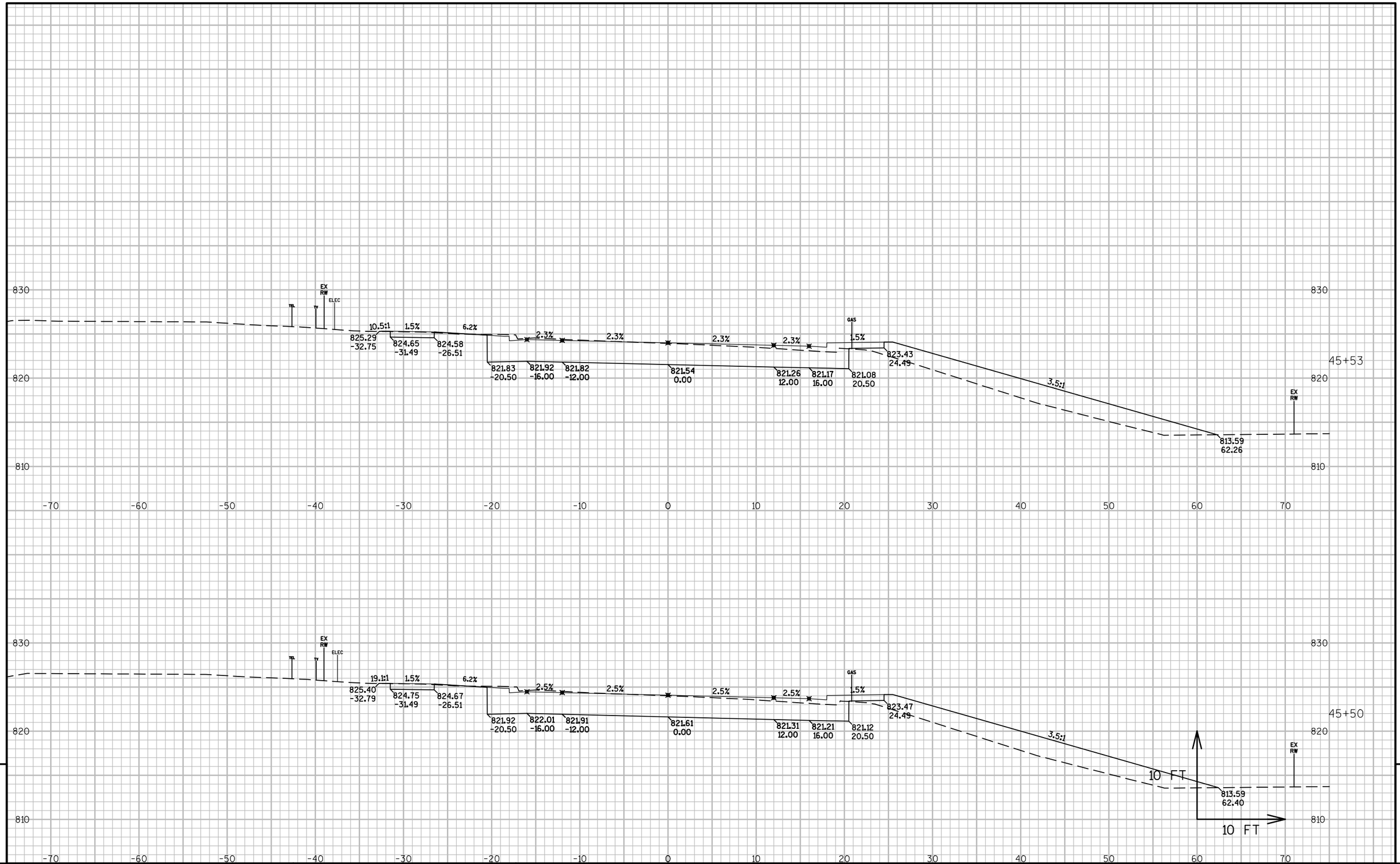


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 357	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (58)

PLOT DATE : 10/31/2016 1:07 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

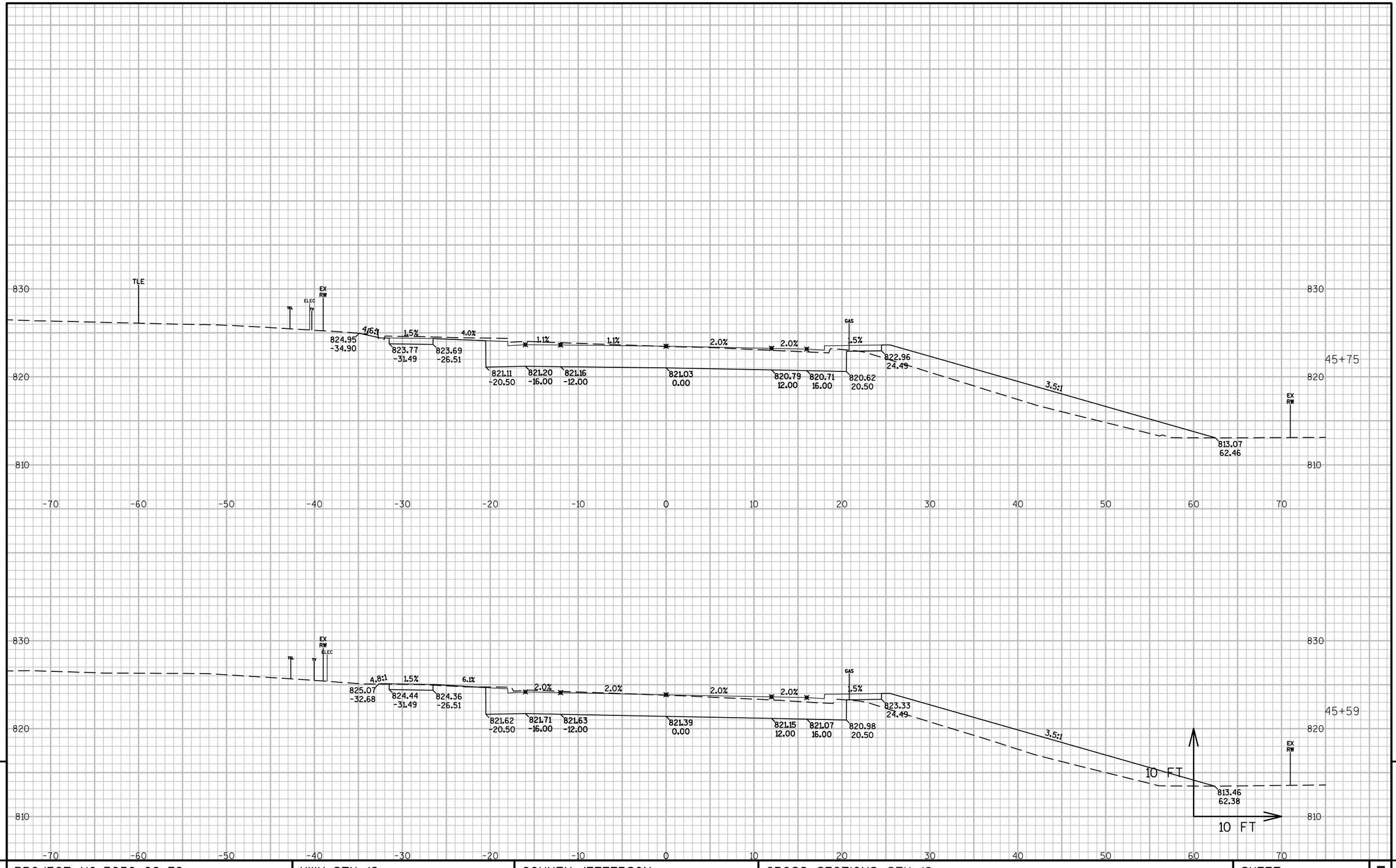


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 358	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (59)

PLOT DATE : 10/31/2016 1:08 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

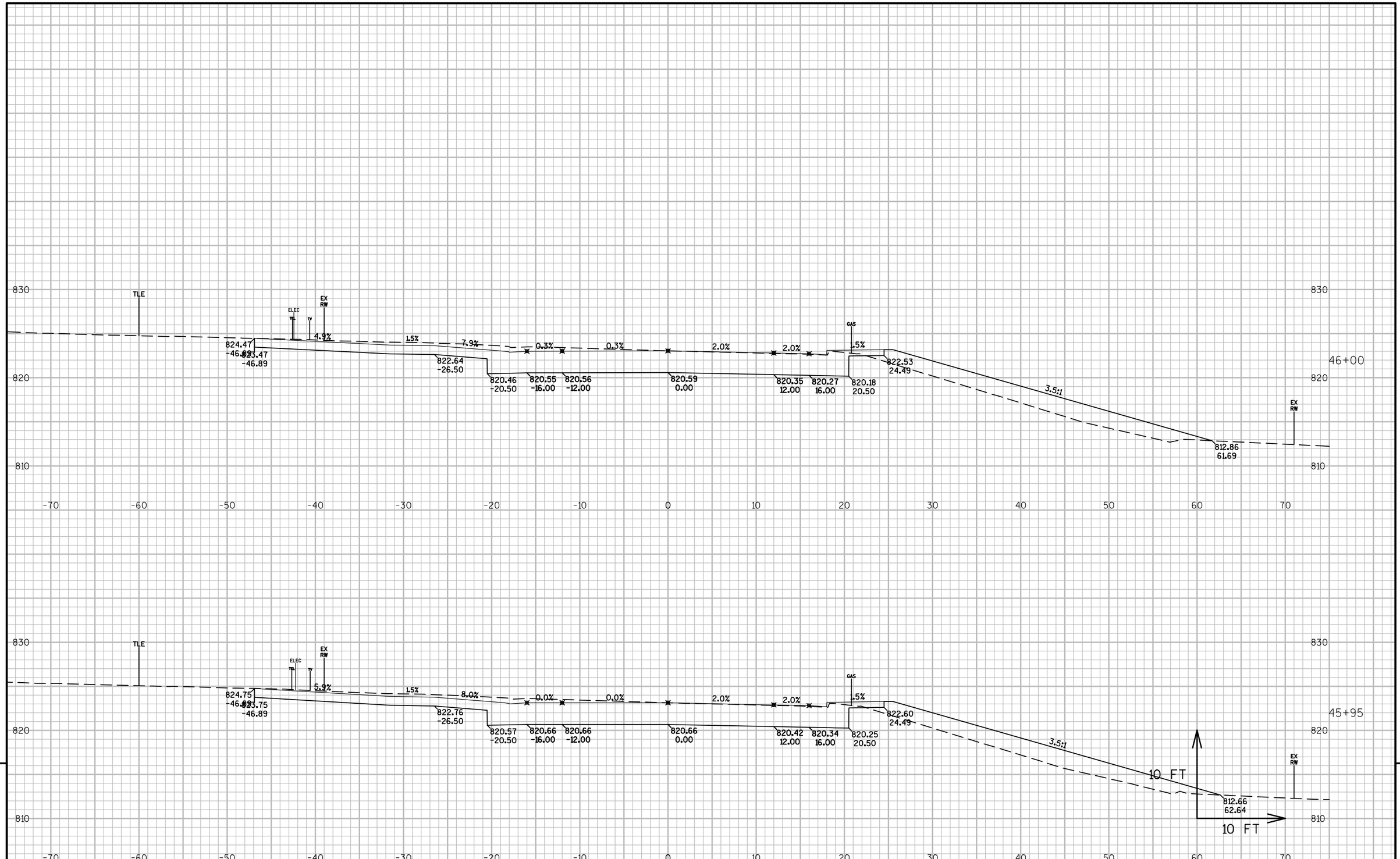


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 359	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (60)

PLOT DATE : 10/31/2016 1:08 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 360	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (61)

PLOT DATE : 10/31/2016 1:09 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

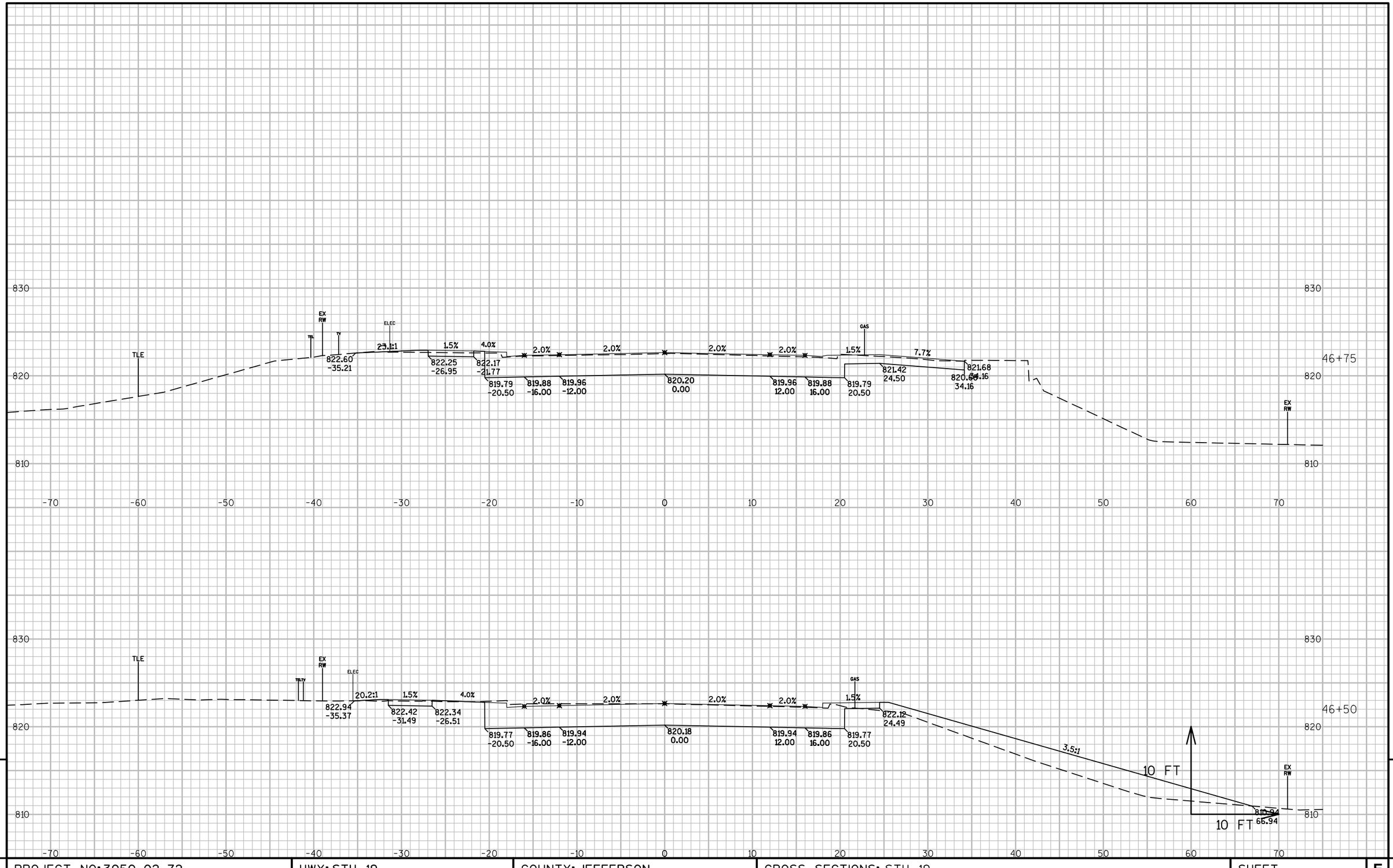
9

9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 361	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (62)

PLOT DATE : 10/31/2016 1:09 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

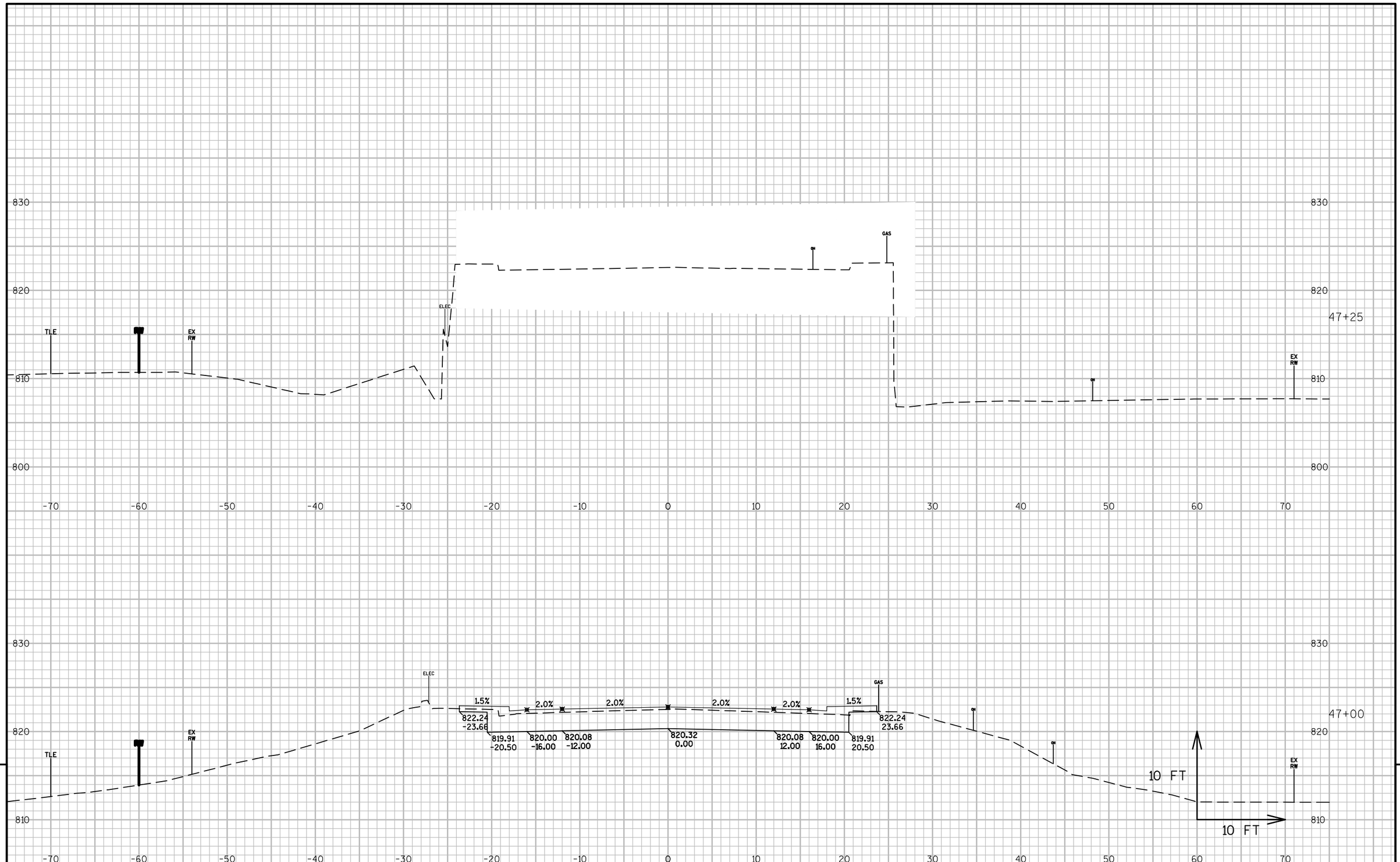
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 362	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (63)

PLOT DATE : 10/31/2016 1:10 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 363	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_21+90-47+25_XS.DWG
LAYOUT NAME - SECTION SHEET - (64)

PLOT DATE : 10/31/2016 1:10 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

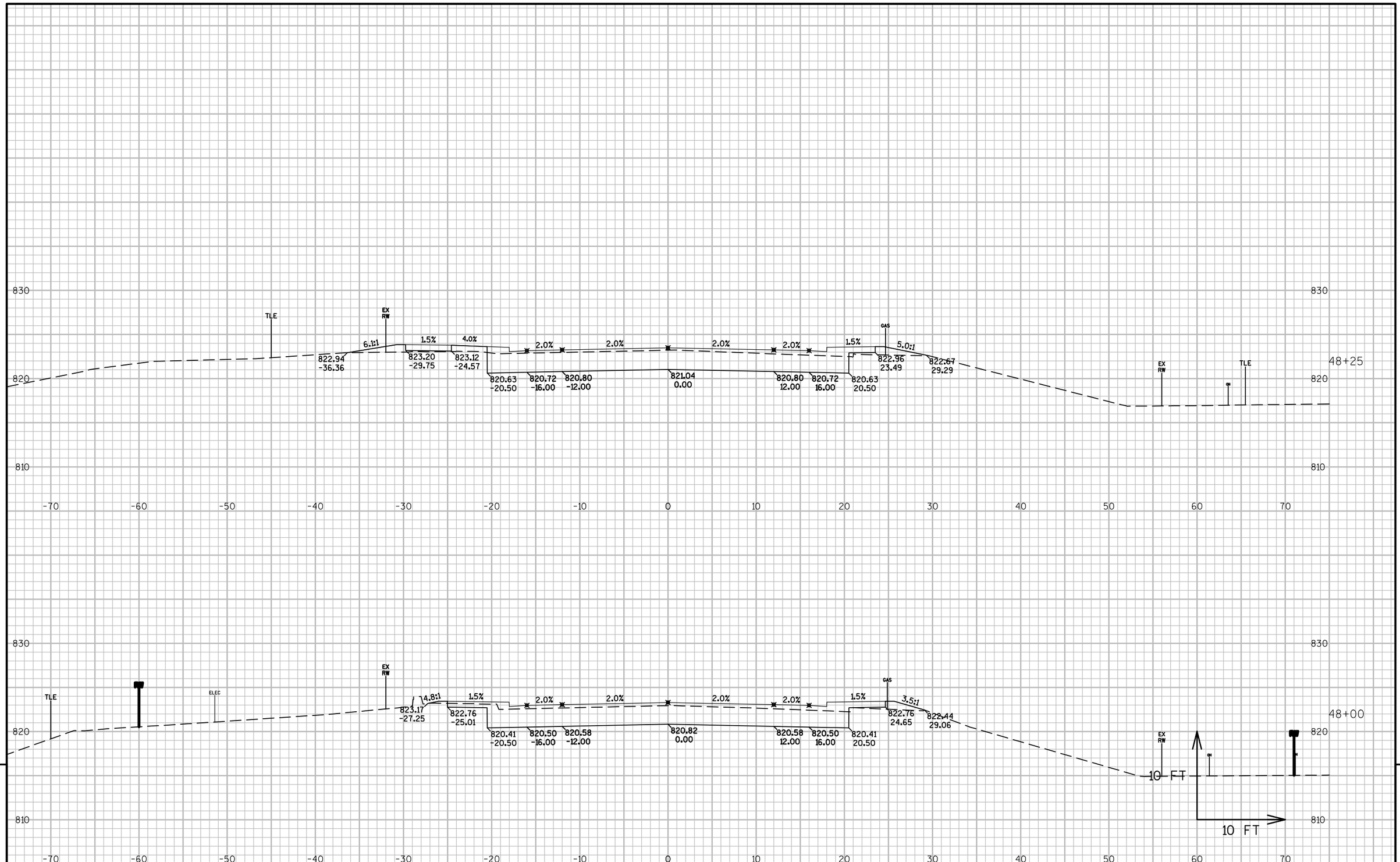


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 364	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (1)

PLOT DATE : 10/31/2016 1:29 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



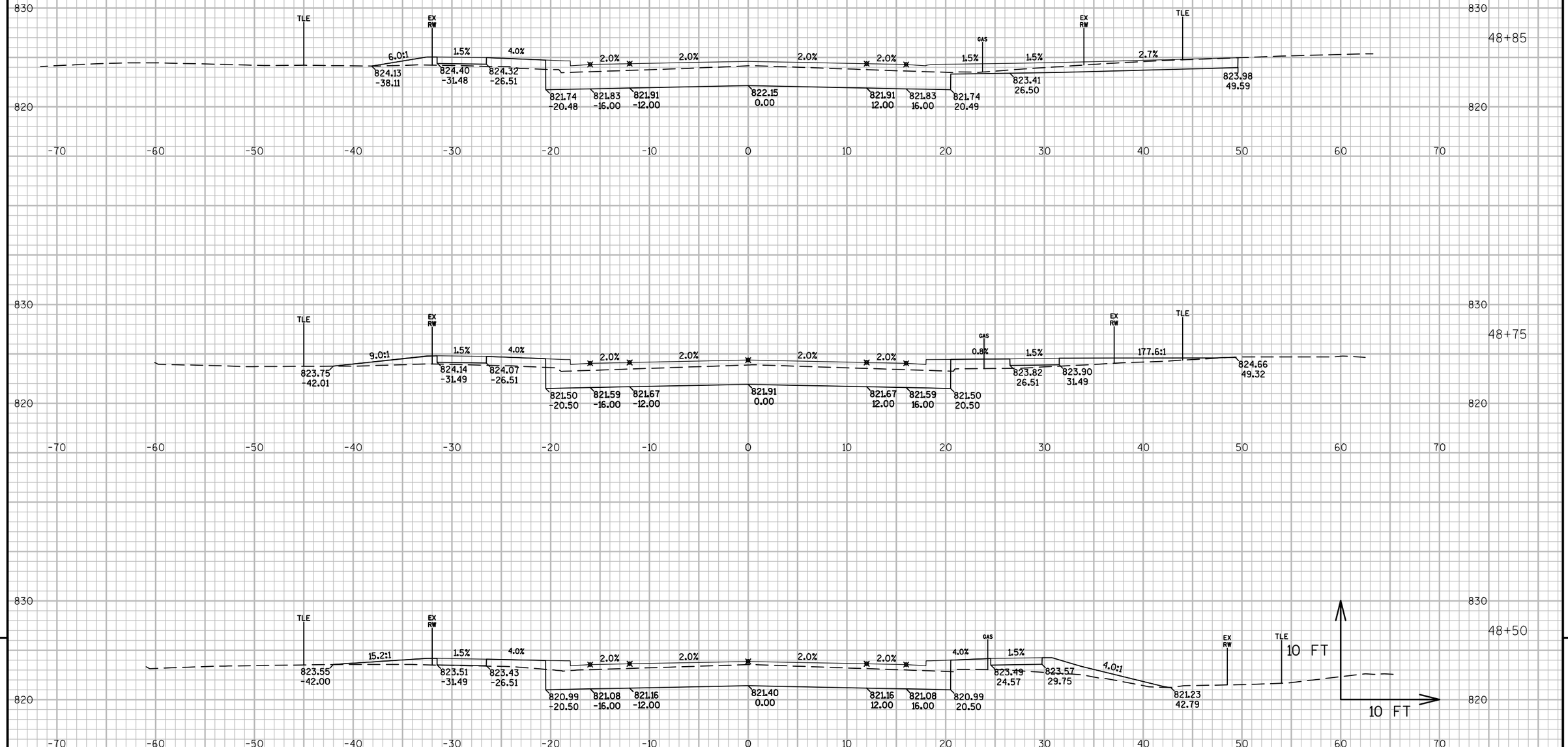
9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 365	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (2)

PLOT DATE : 10/31/2016 1:30 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

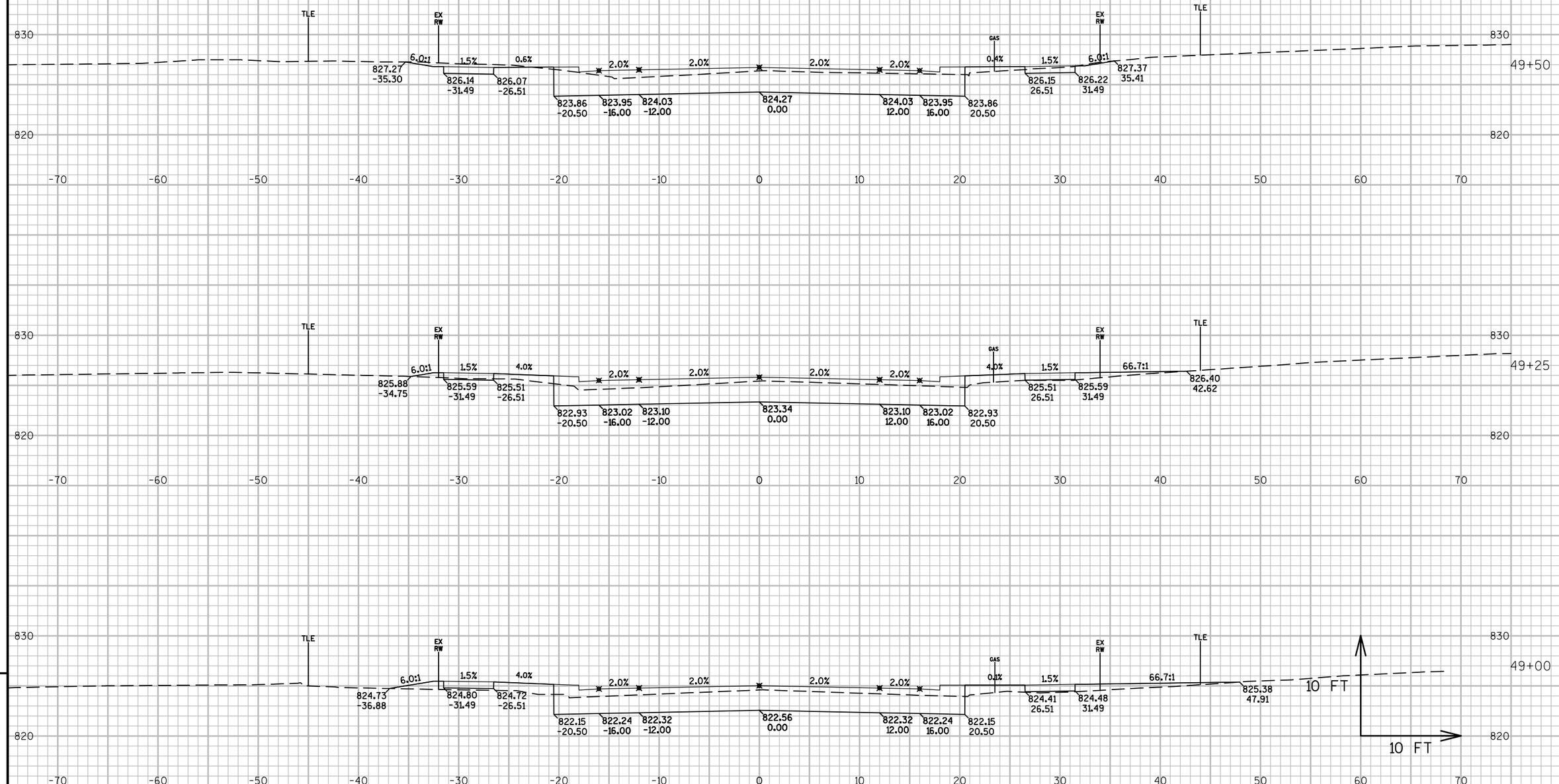
9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 366	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (3)

PLOT DATE : 10/31/2016 1:31 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

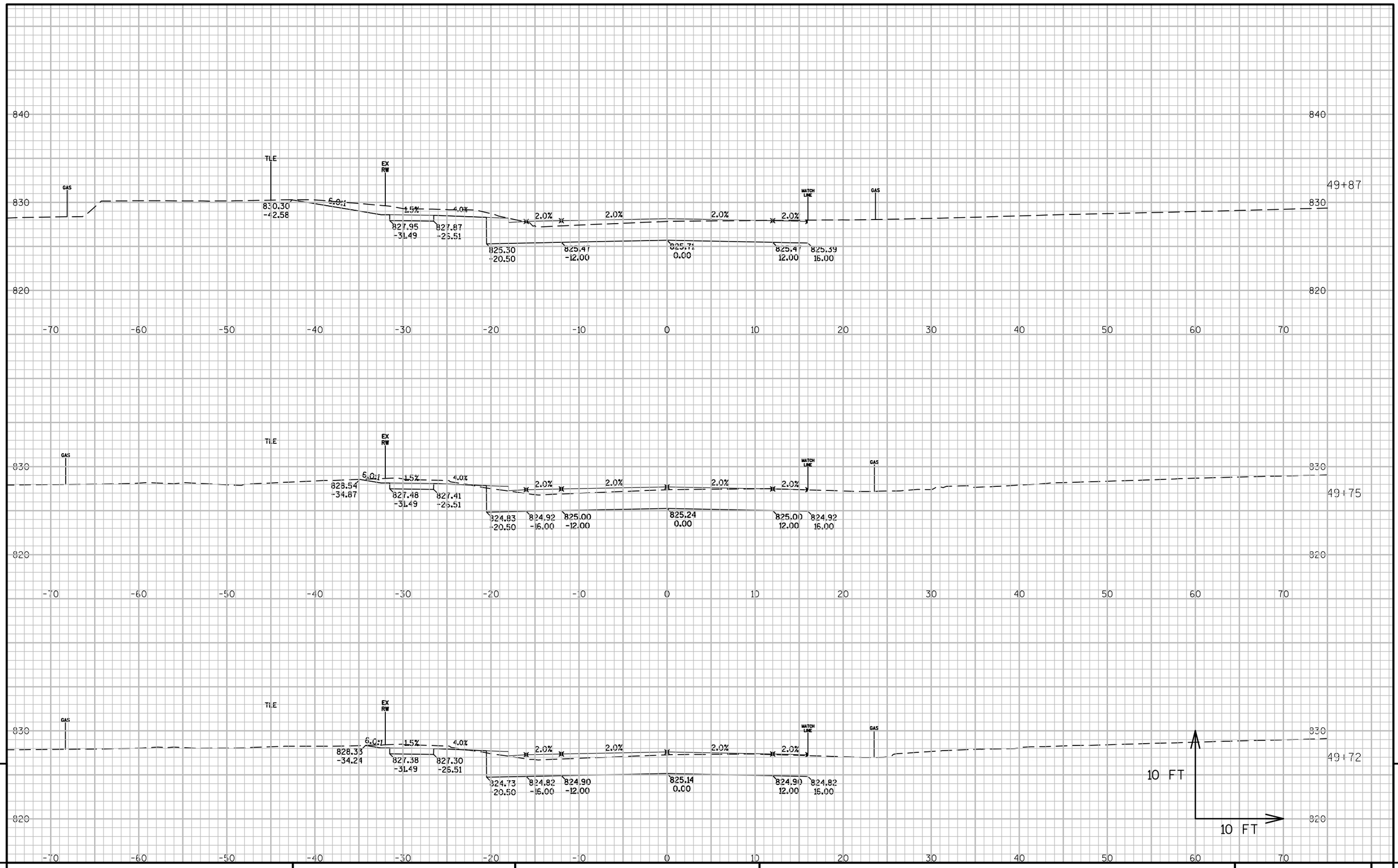


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 367	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (4)

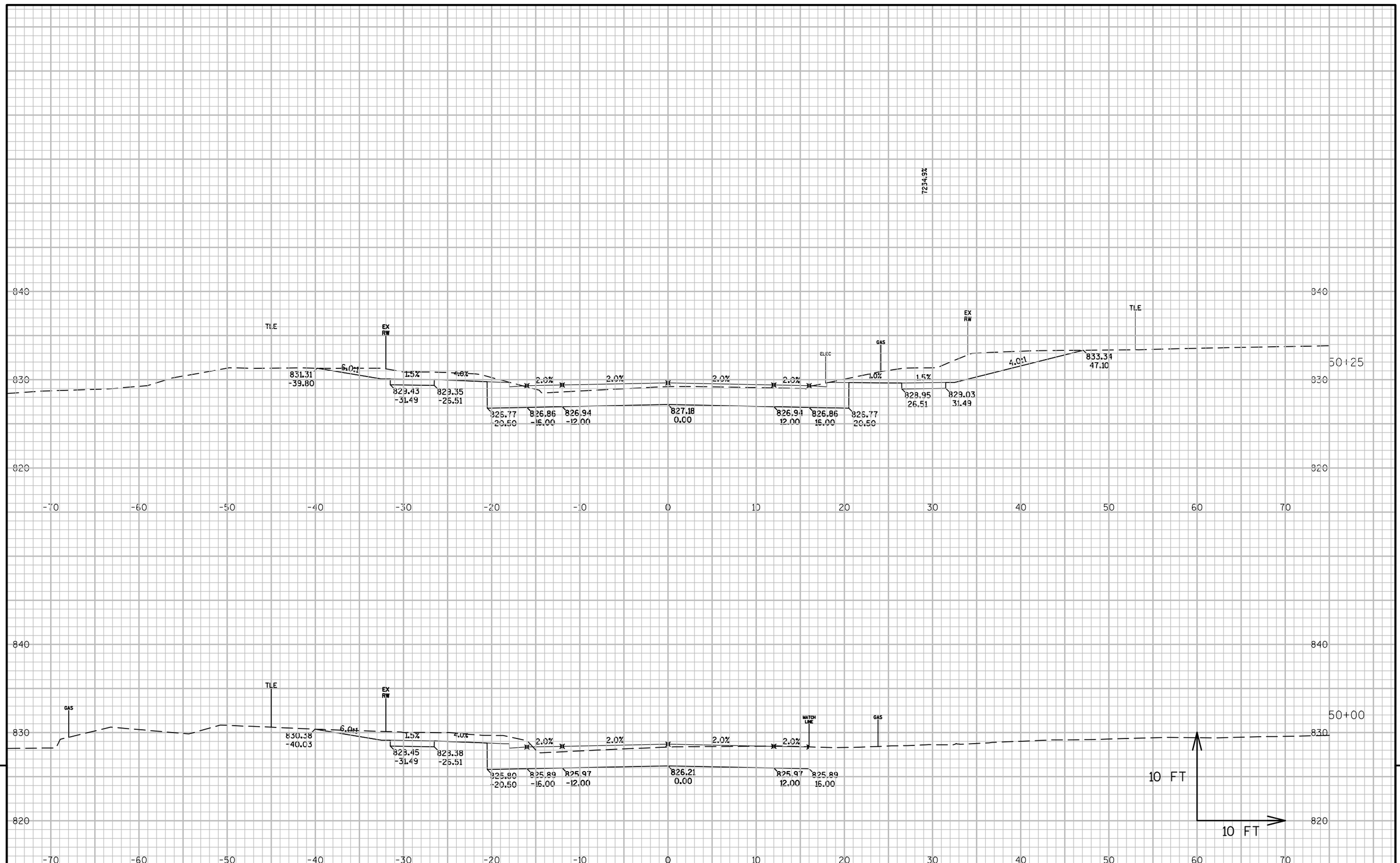
PLOT DATE : 10/31/2016 1:32 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 368	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (5)
PLOT DATE : 10/31/2016 1:32 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49

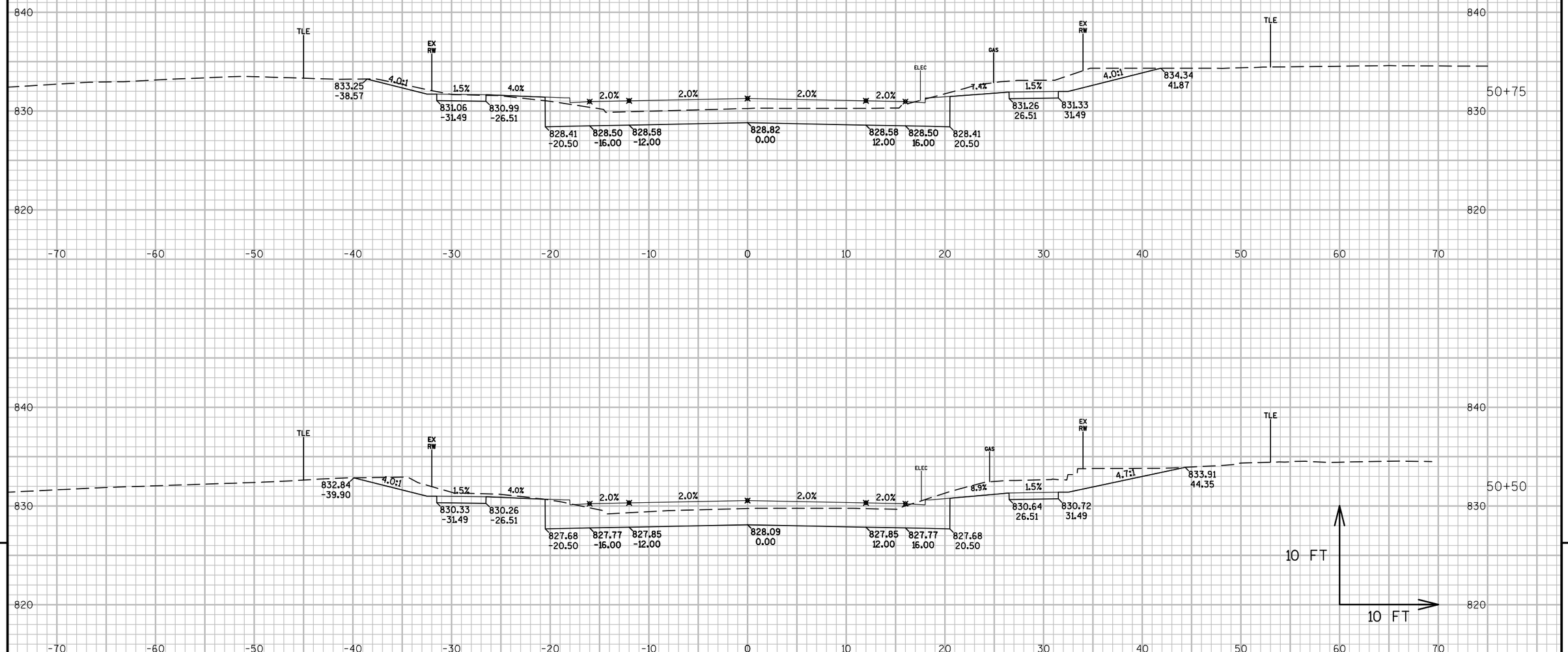


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 369	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (6)

PLOT DATE : 10/31/2016 1:33 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

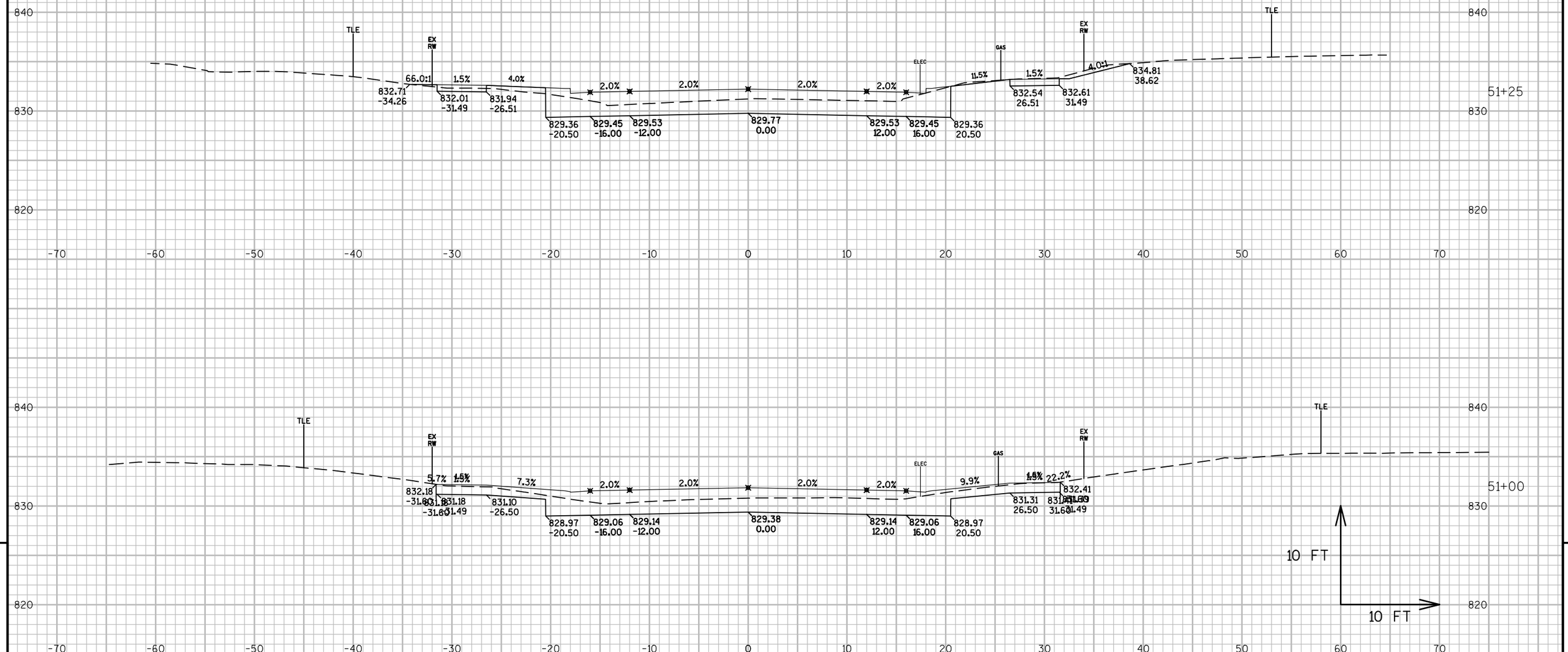


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 370	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (7)

PLOT DATE : 10/31/2016 1:34 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

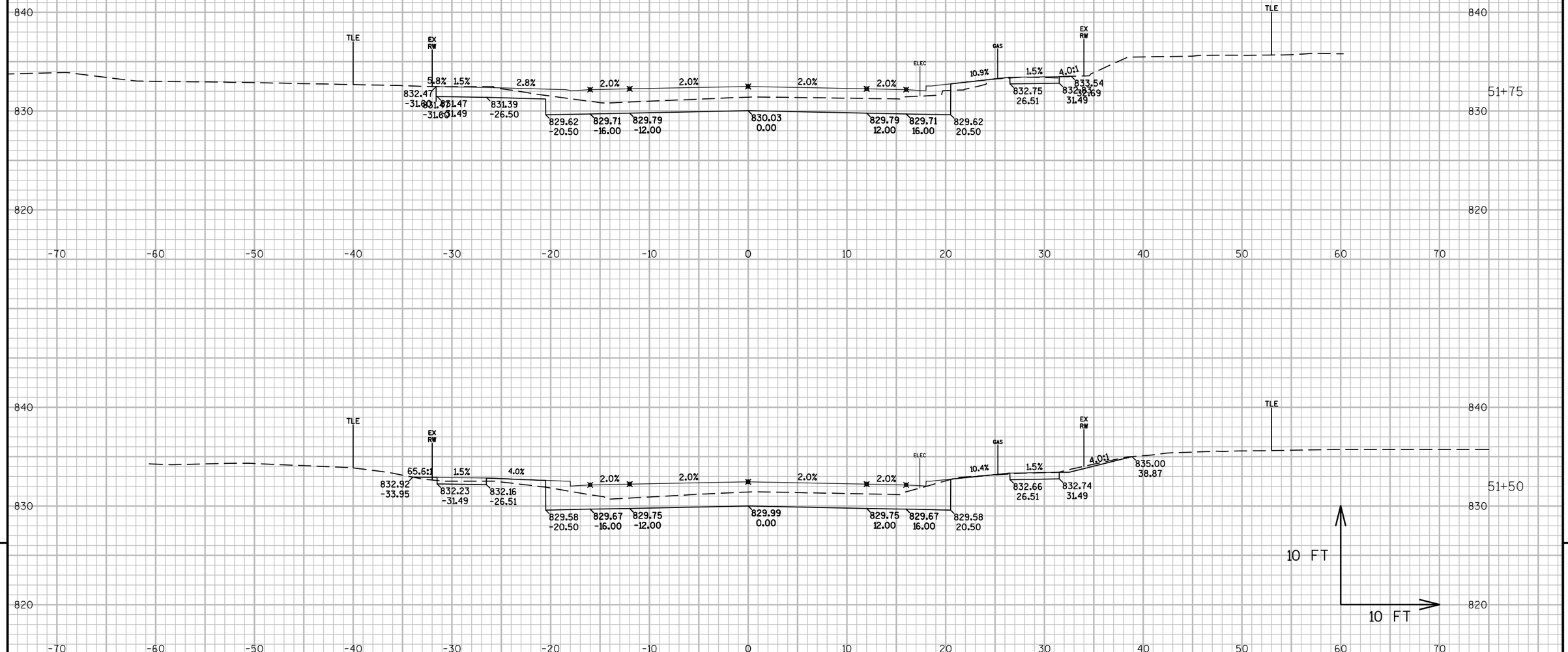
9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 371	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (8)

PLOT DATE : 10/31/2016 1:35 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

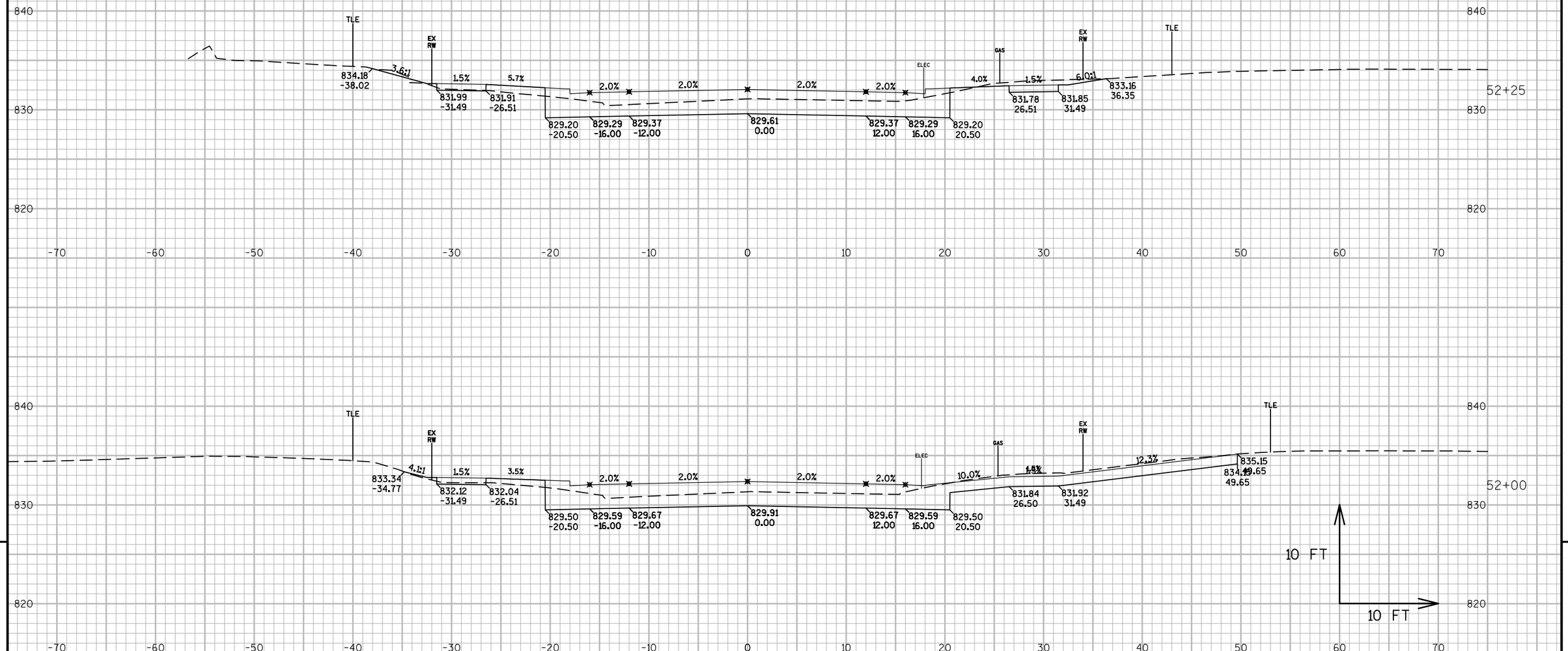


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 372	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (9)

PLOT DATE : 10/31/2016 1:36 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

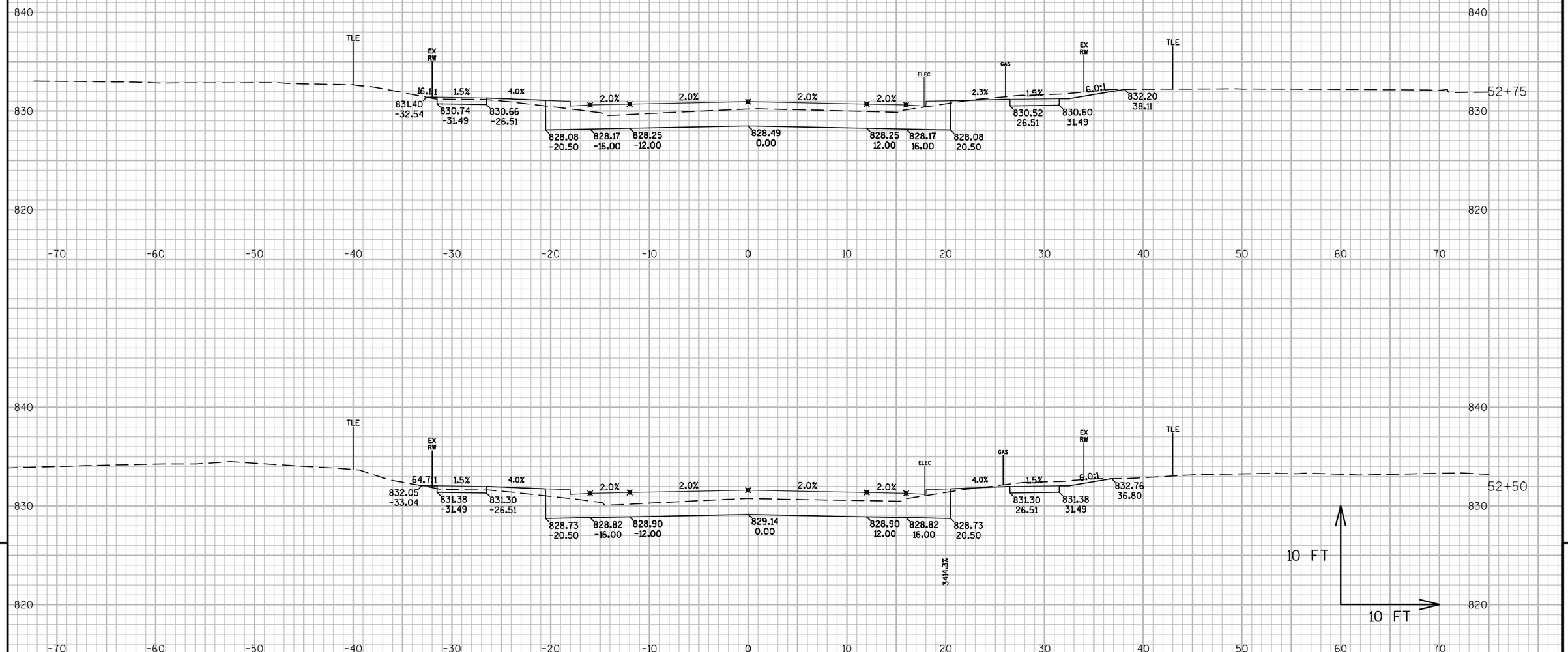


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 373	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (10)

PLOT DATE : 10/31/2016 1:37 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

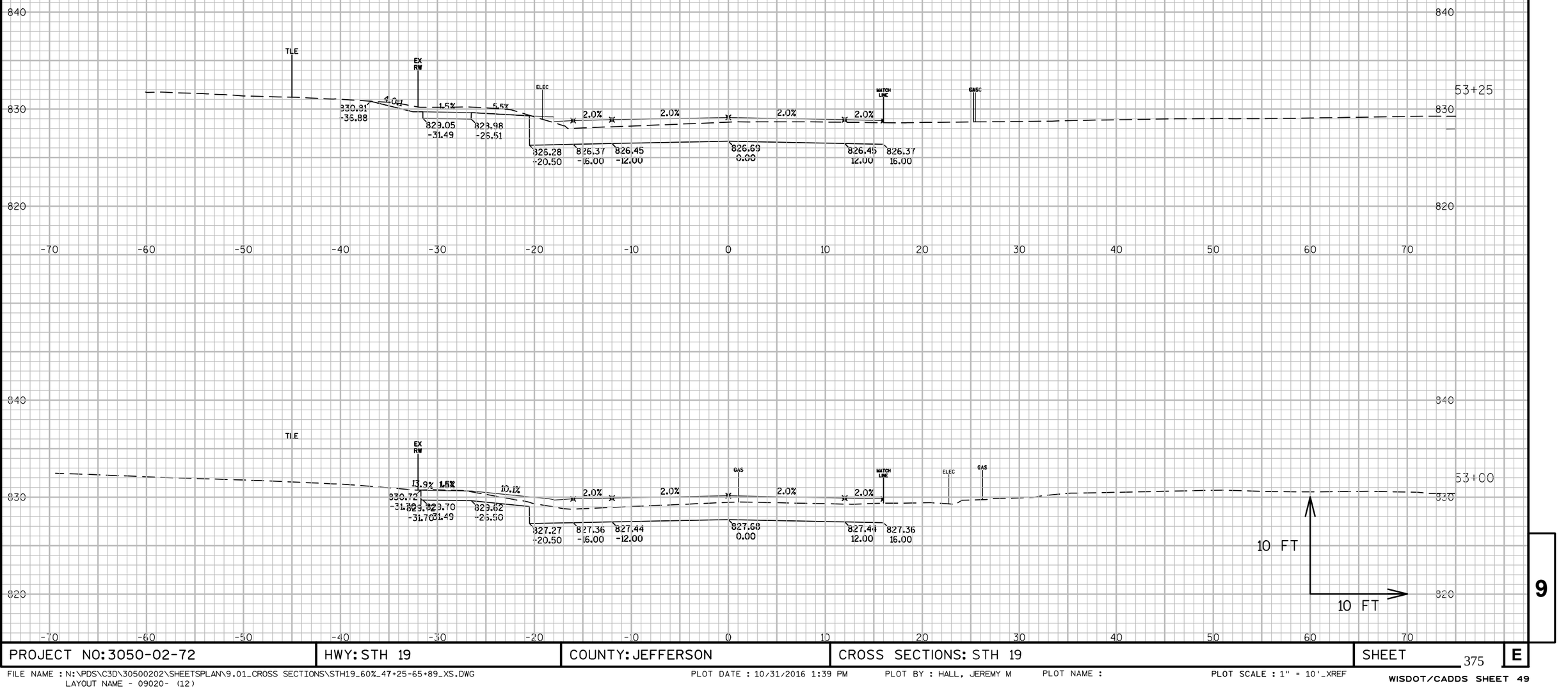
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 374	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (11)

PLOT DATE : 10/31/2016 1:38 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

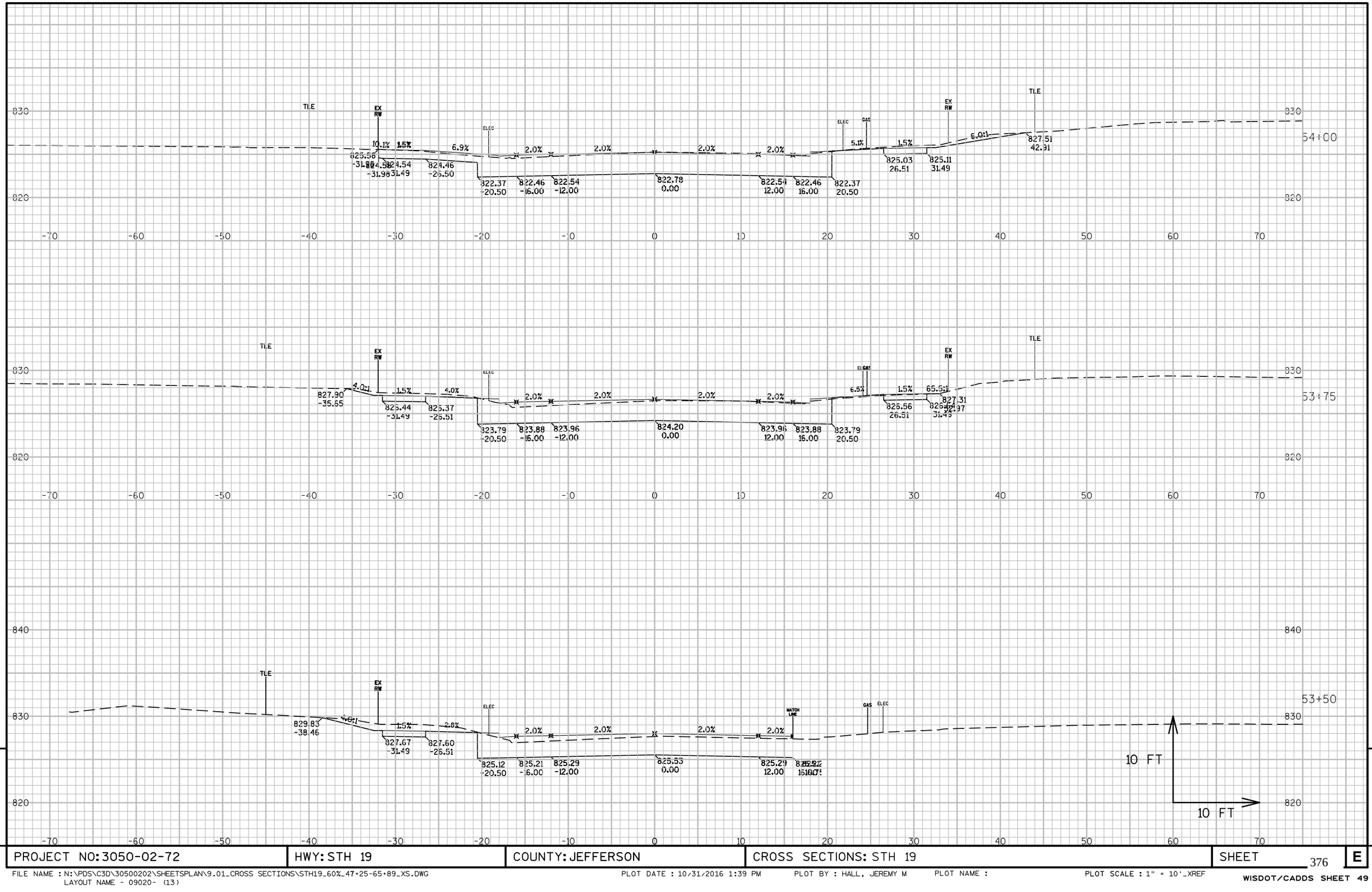
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 375	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (12)

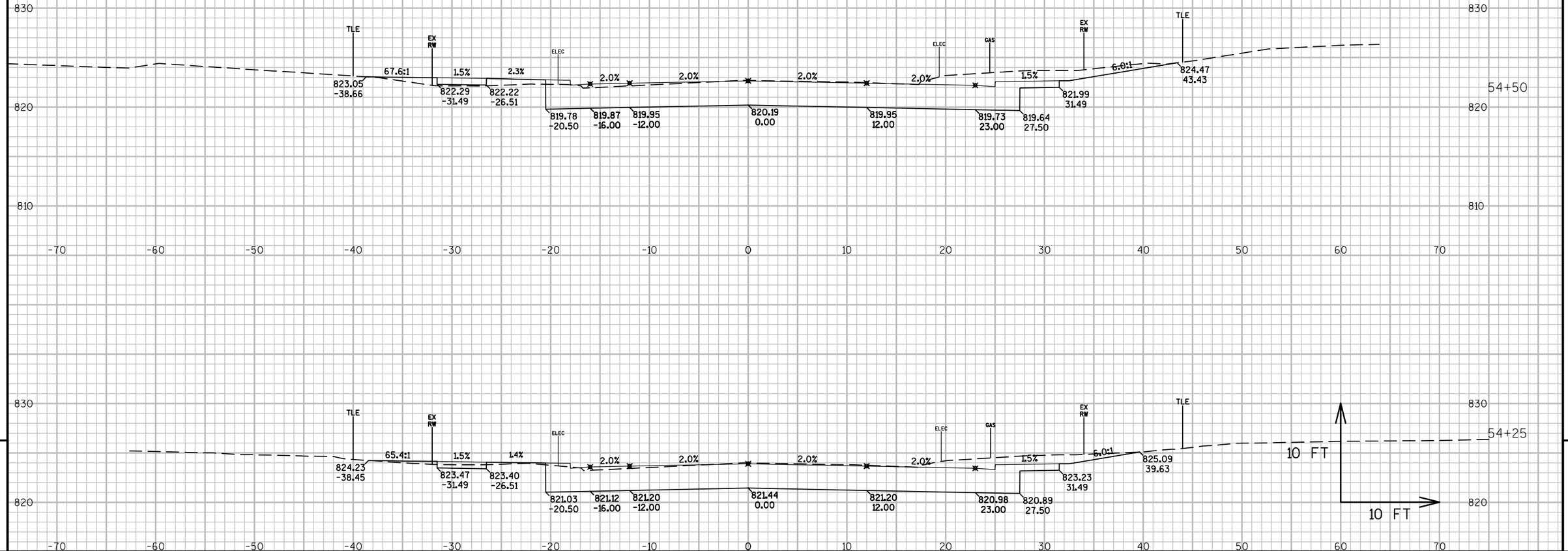
PLOT DATE : 10/31/2016 1:39 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 376	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (13)
PLOT DATE : 10/31/2016 1:39 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49

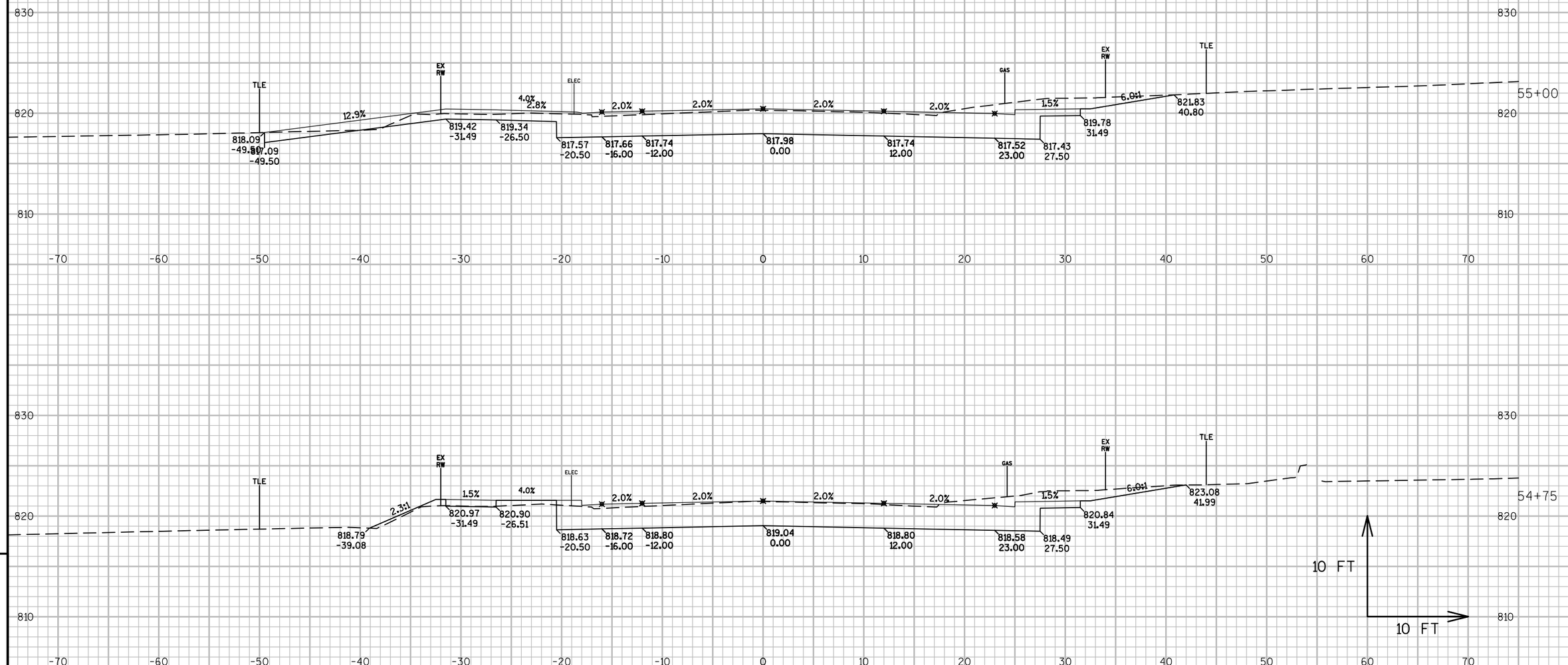


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 377	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (14)

PLOT DATE : 10/31/2016 1:40 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

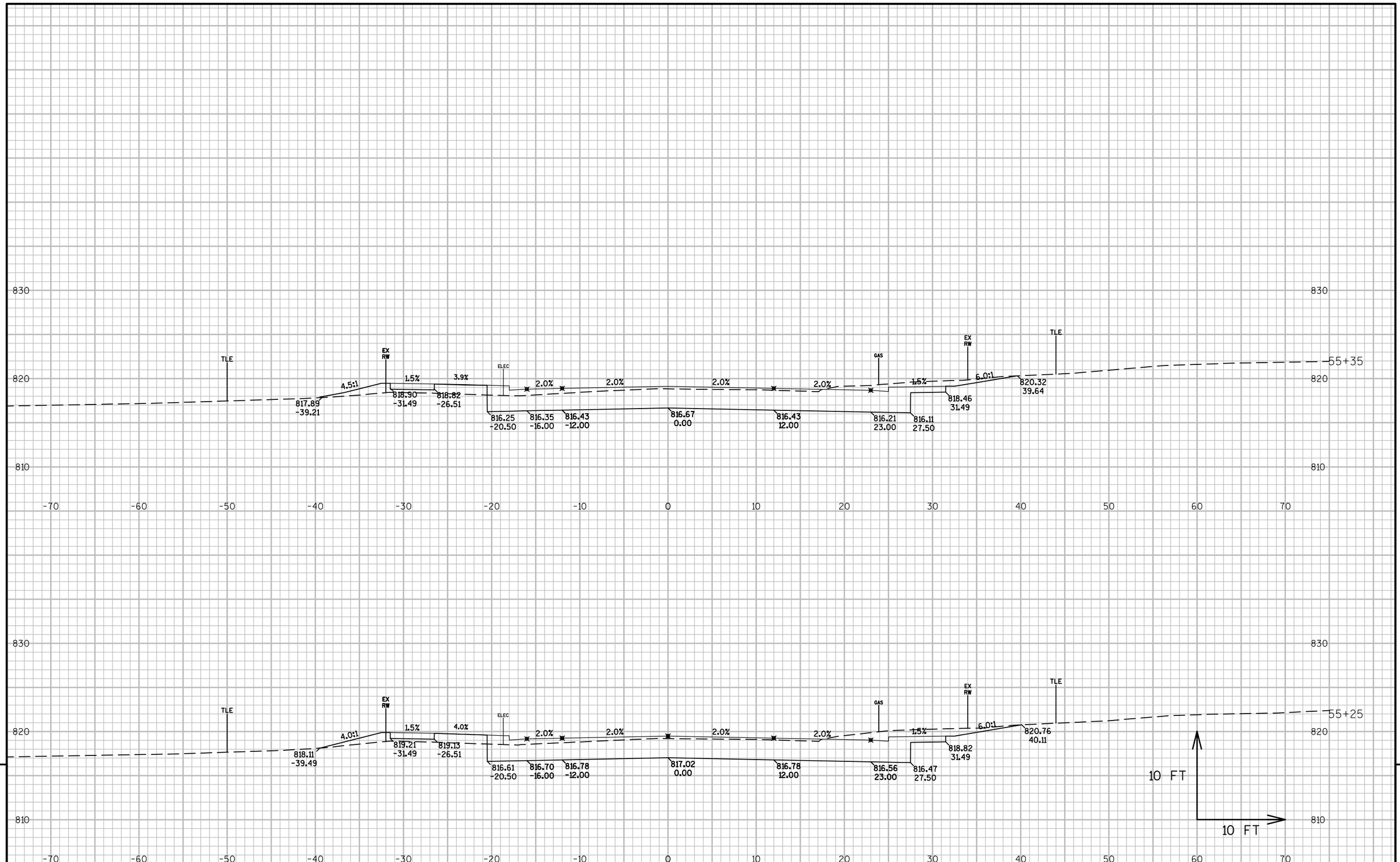


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 378	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (15)

PLOT DATE : 10/31/2016 1:41 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

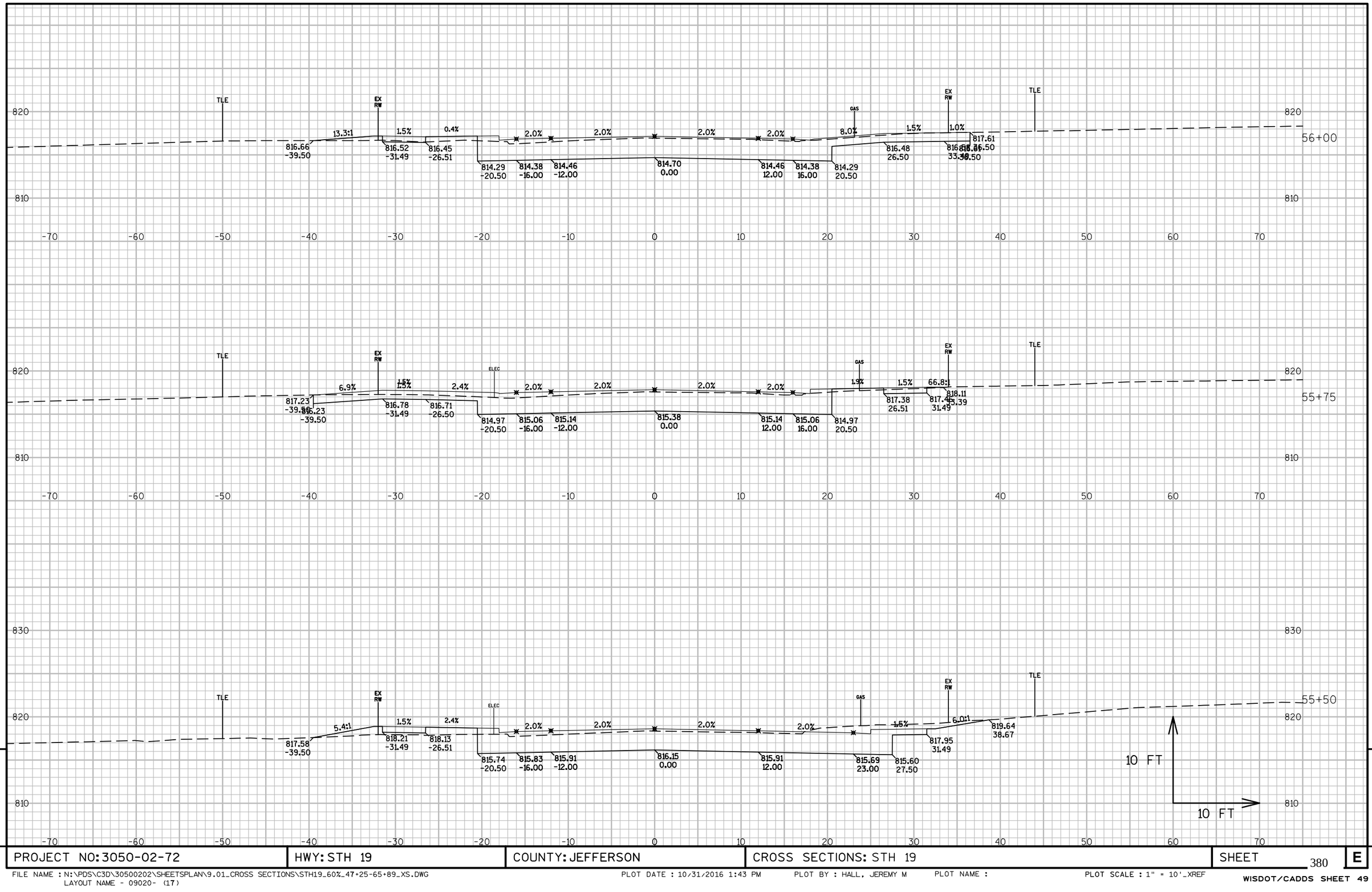


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 379	E

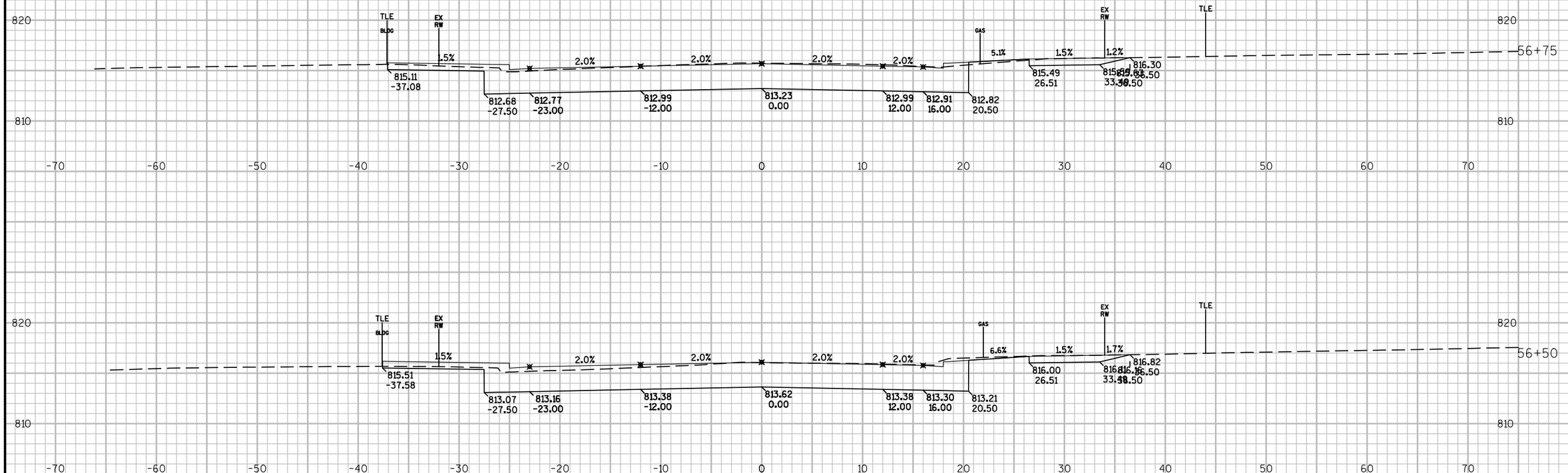
FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (16)

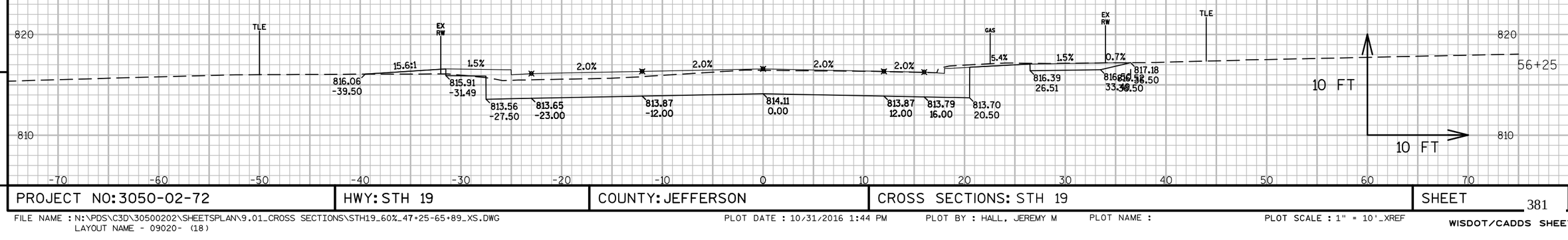
PLOT DATE : 10/31/2016 1:42 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 380	E



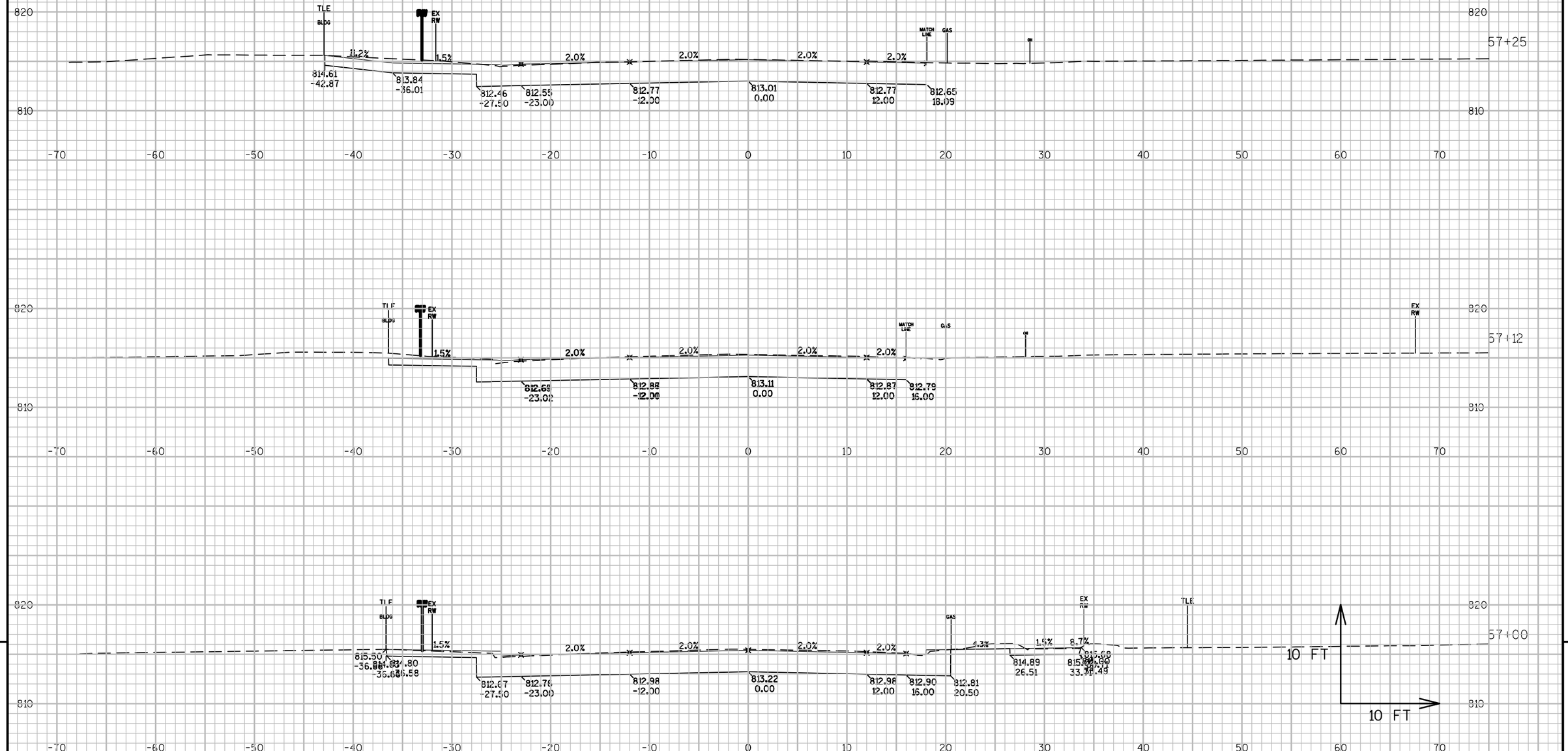


9

9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 381	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (18)
PLOT DATE : 10/31/2016 1:44 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49

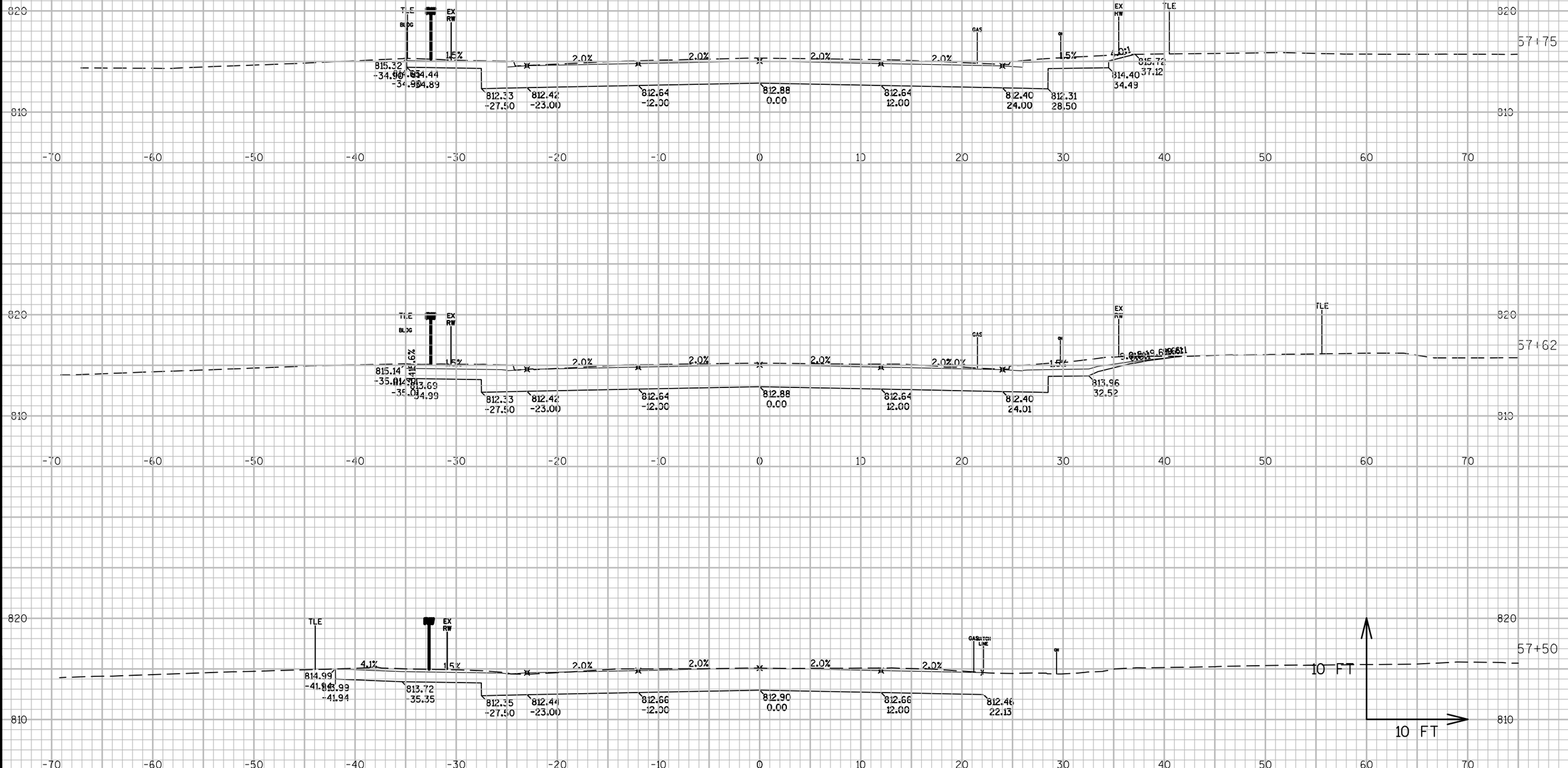


9

9

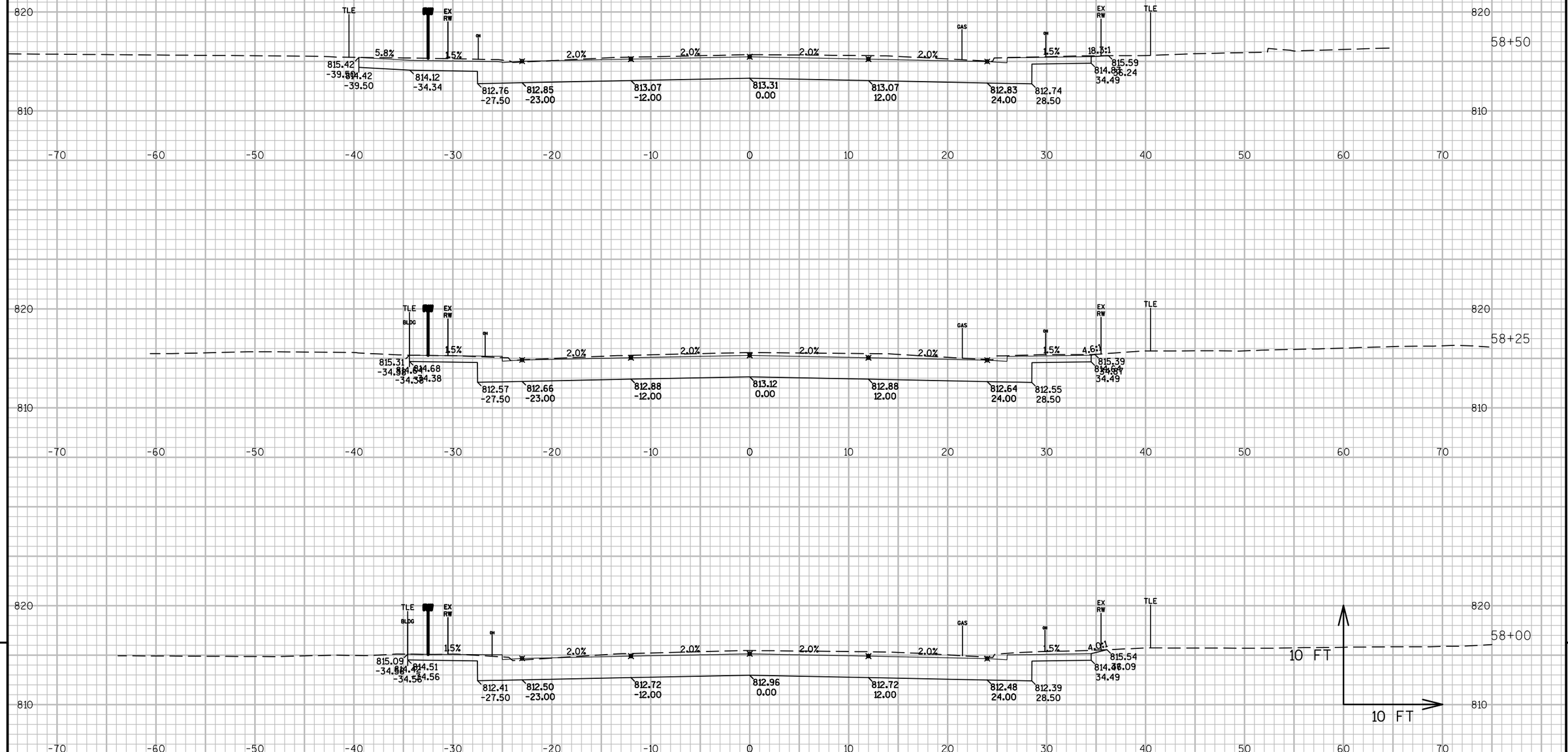
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 382	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (19)
PLOT DATE : 10/31/2016 1:45 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 383	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (20)
PLOT DATE : 10/31/2016 1:46 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



9

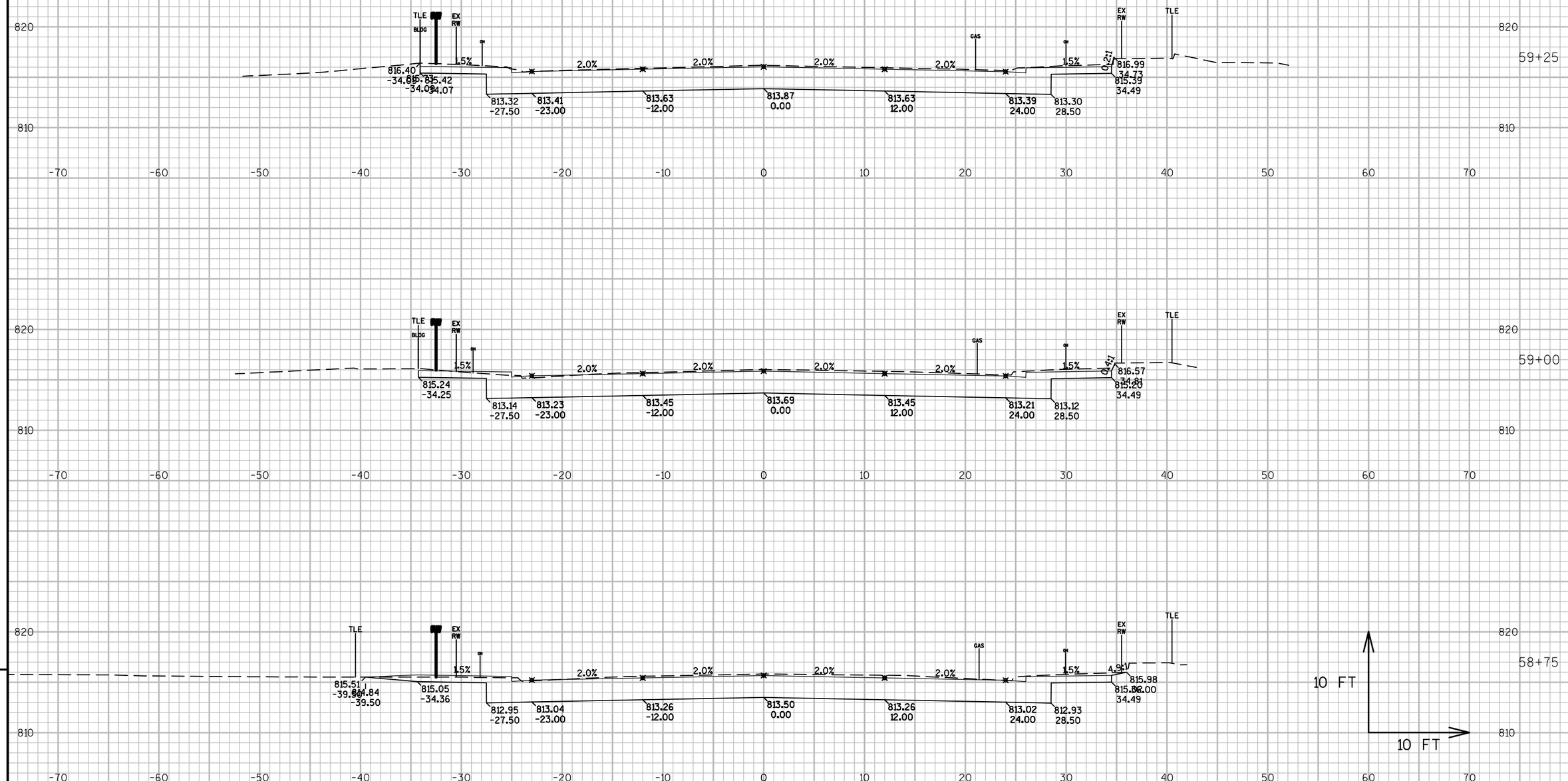
9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 384	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (21)

PLOT DATE : 10/31/2016 1:47 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

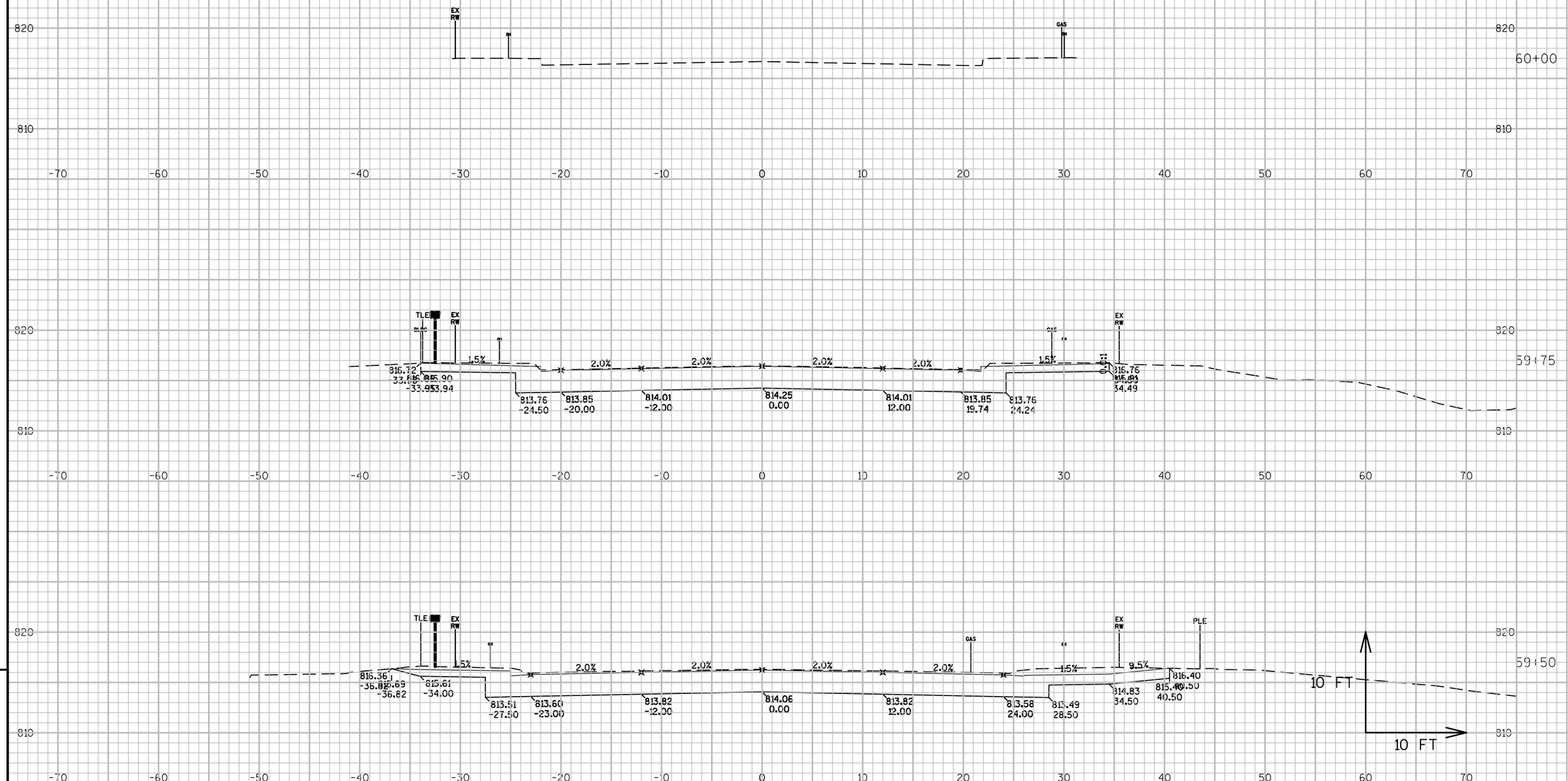
9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 385	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (22)

PLOT DATE : 10/31/2016 1:47 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

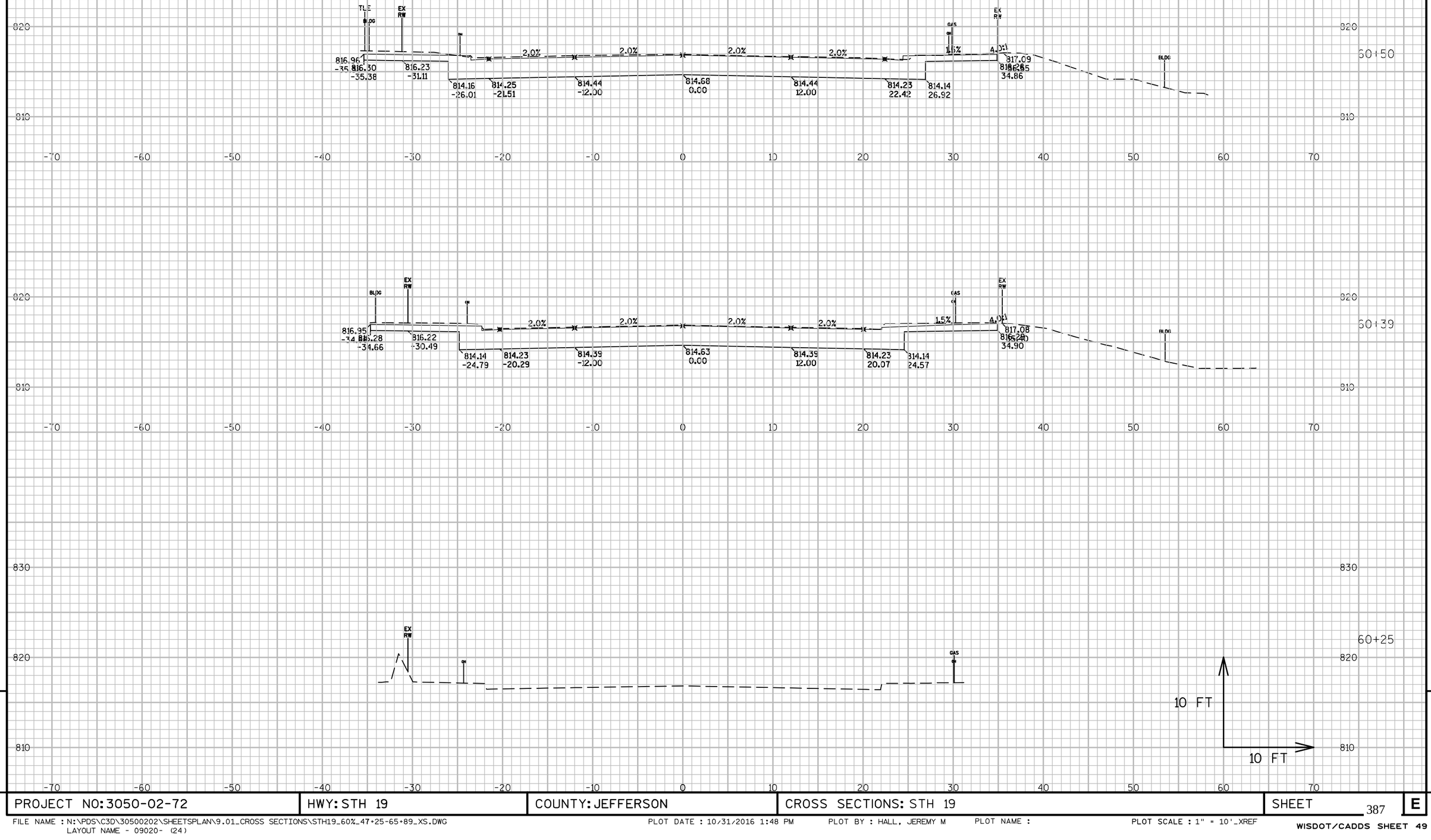
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 386	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (23)

PLOT DATE : 10/31/2016 1:48 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

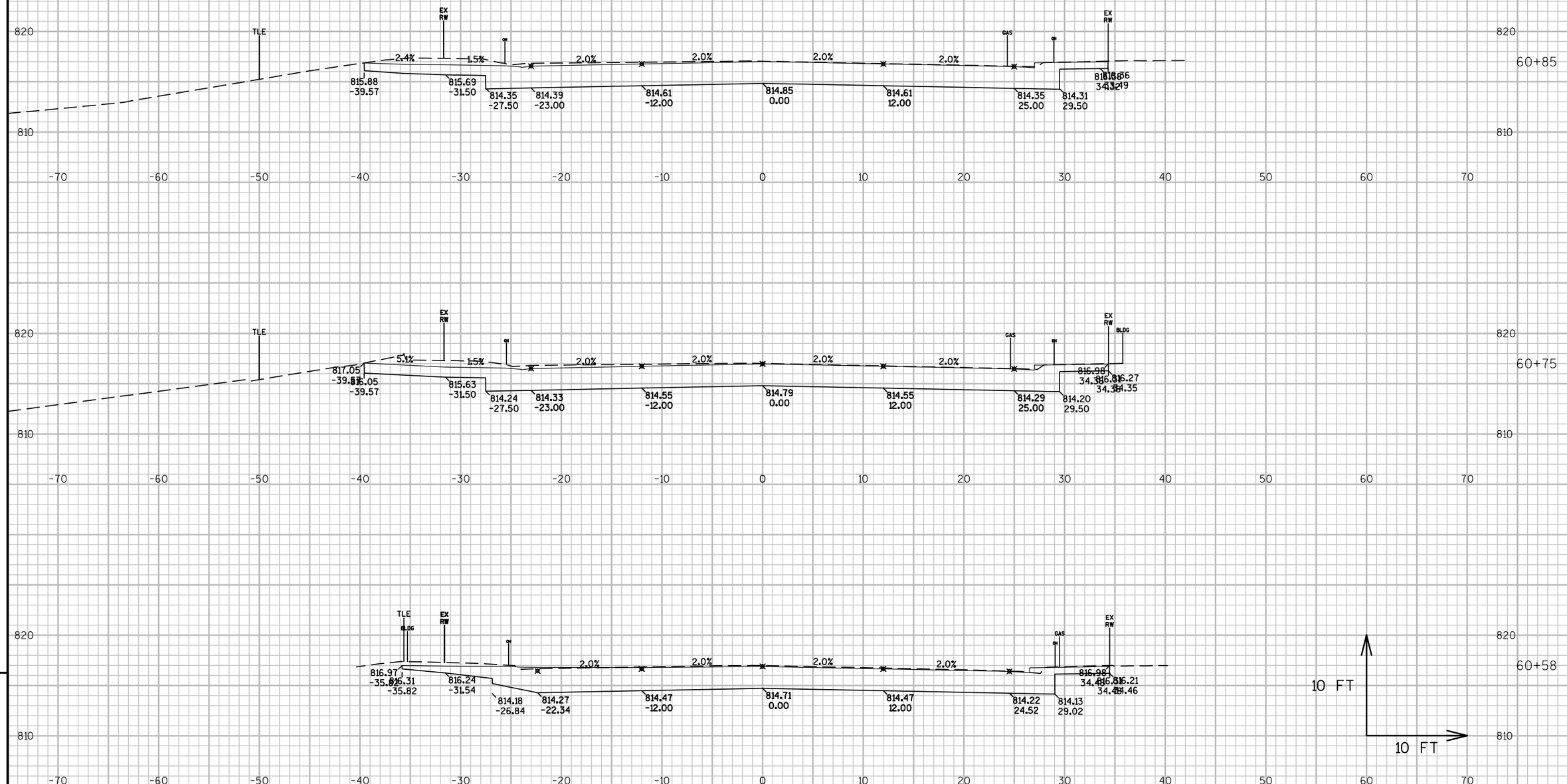
WISDOT/CADDS SHEET 49



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 387	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (24)

PLOT DATE : 10/31/2016 1:48 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF



9

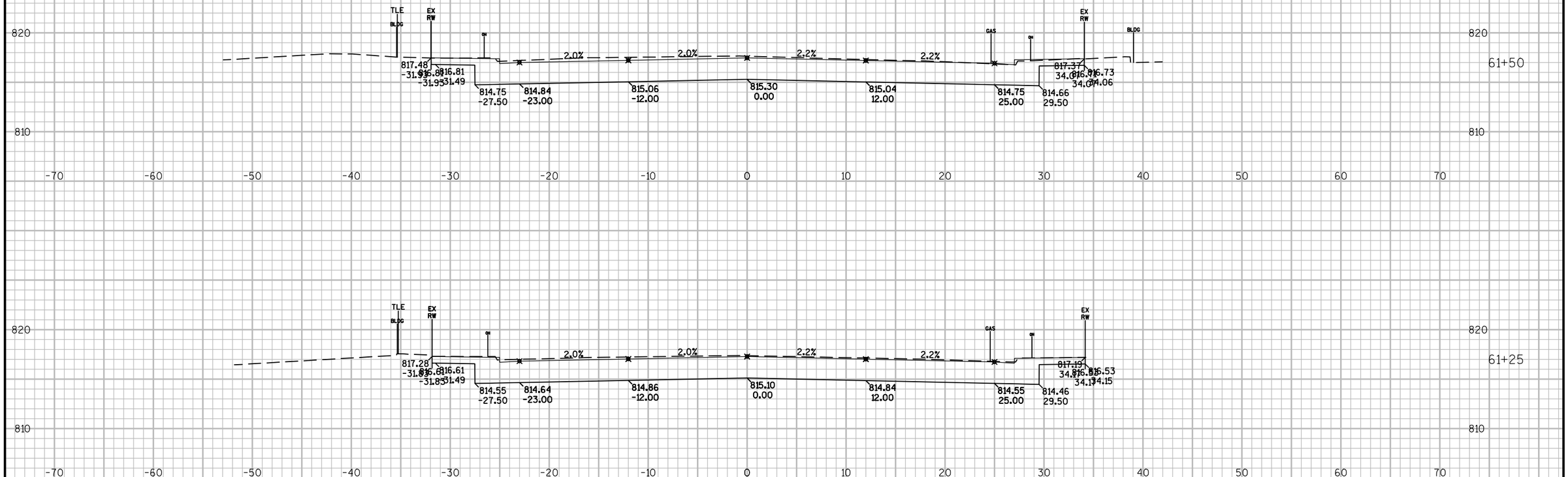
9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 388	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (25)

PLOT DATE : 10/31/2016 1:49 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

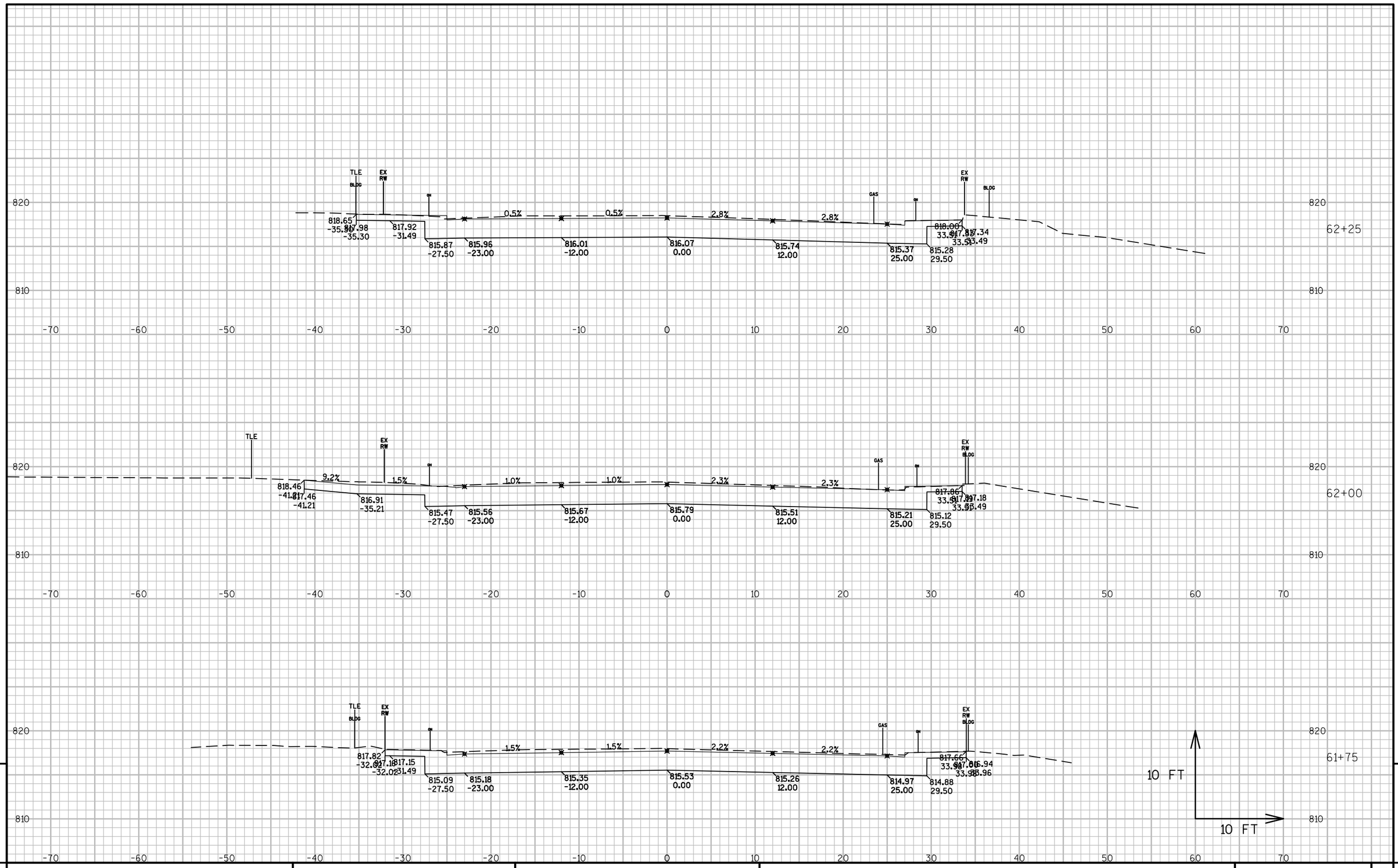


9

9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 389	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (26)
PLOT DATE : 10/31/2016 1:49 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49

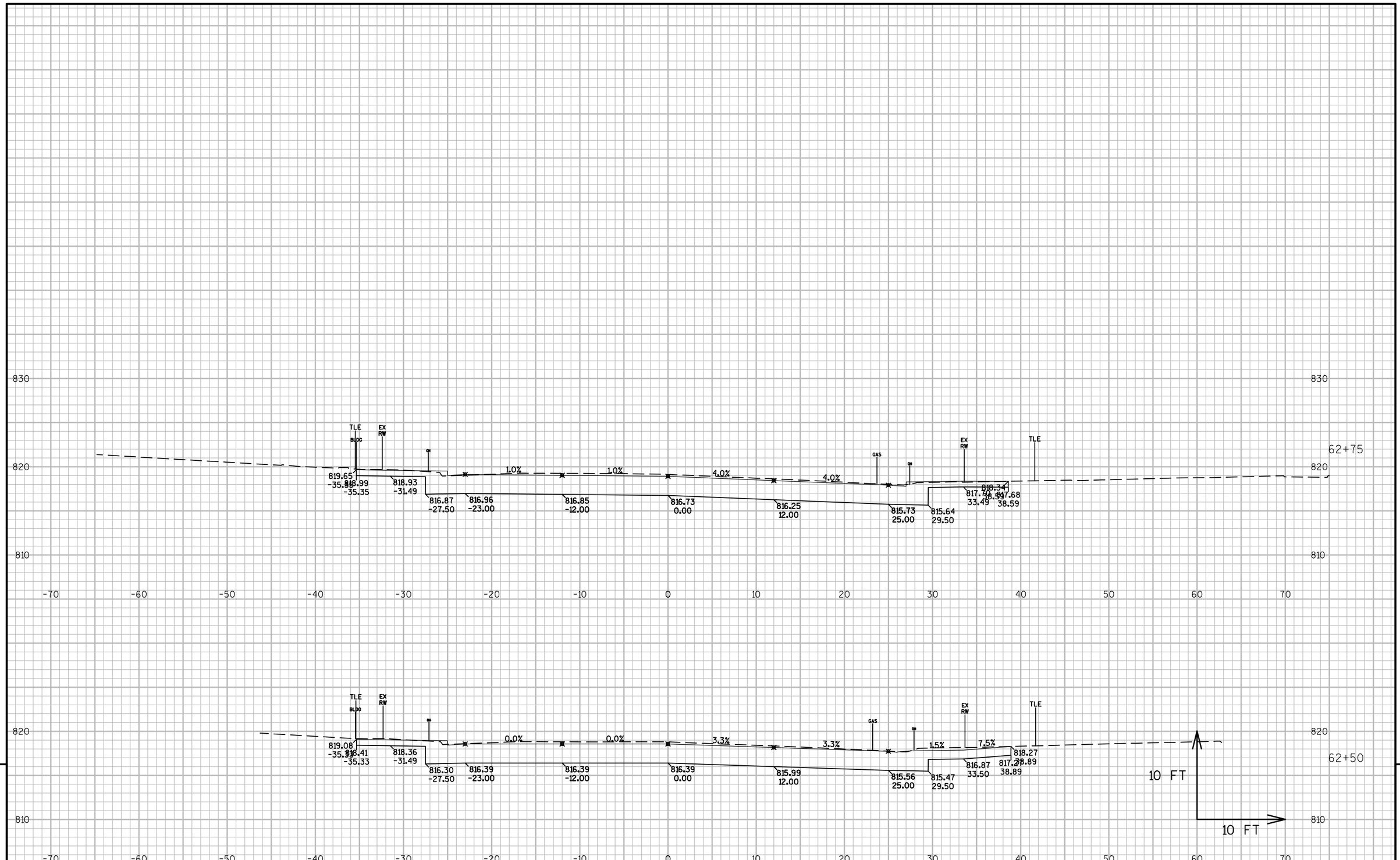


9

9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 390	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (27)
PLOT DATE : 10/31/2016 1:50 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49

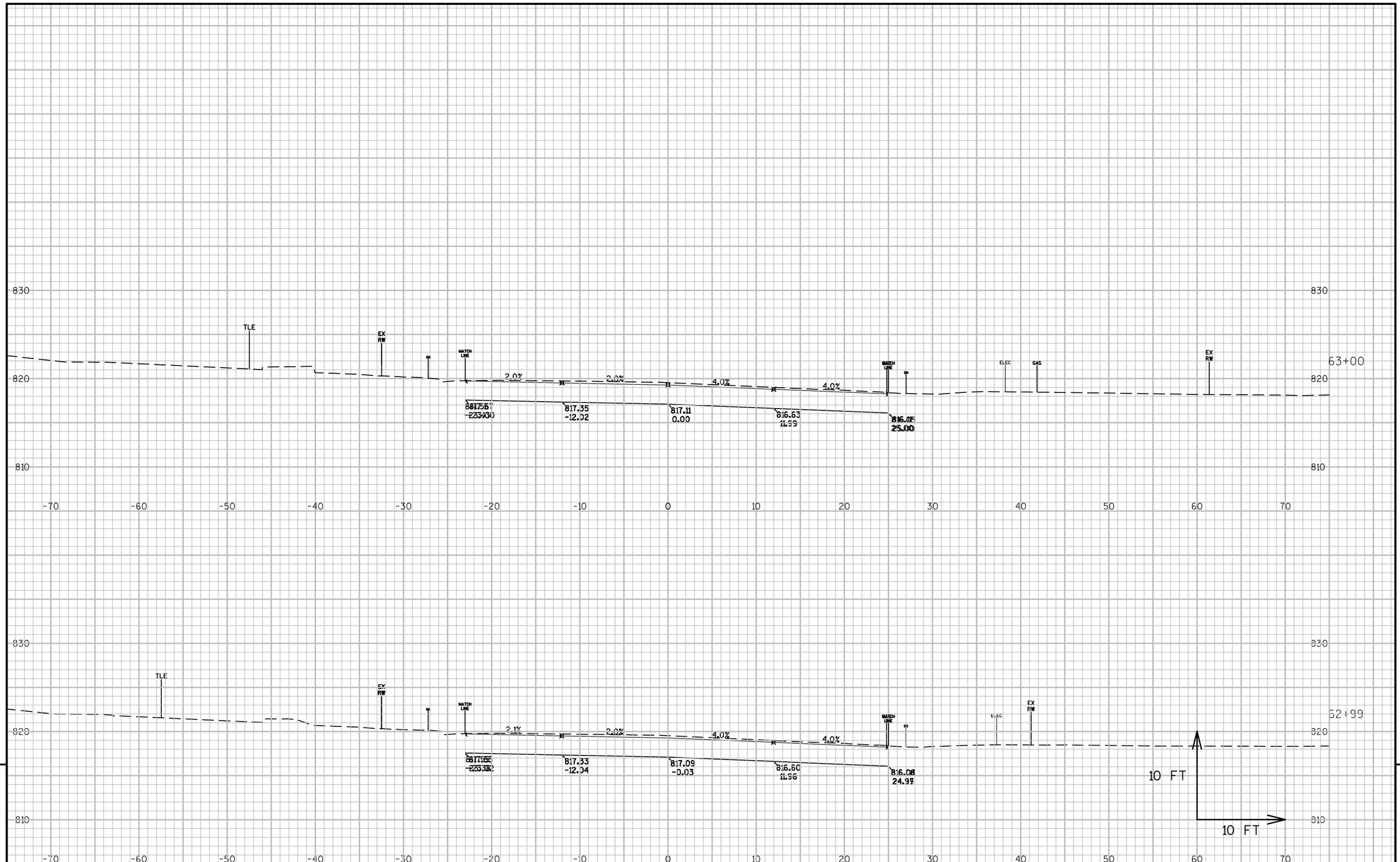


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 391	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (28)

PLOT DATE : 10/31/2016 1:50 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

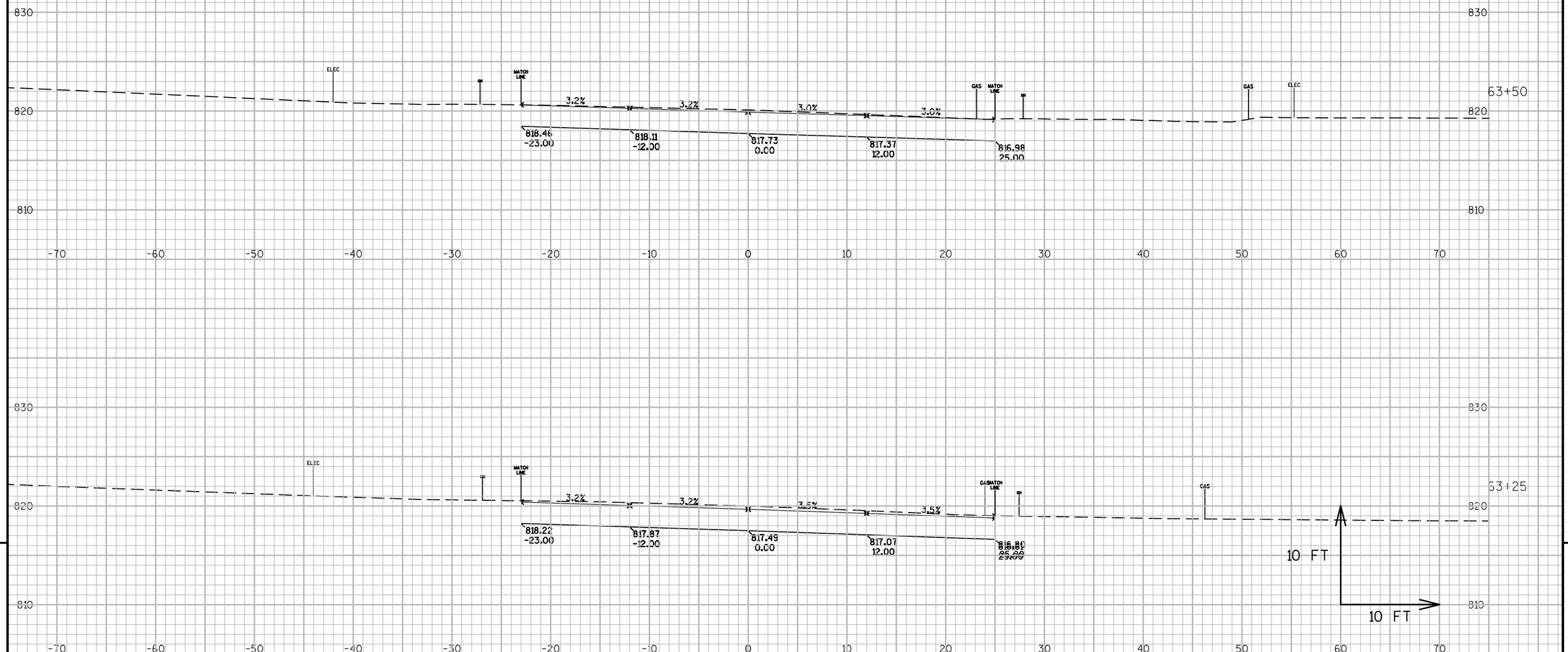
9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 392	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (29)

PLOT DATE : 10/31/2016 1:51 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

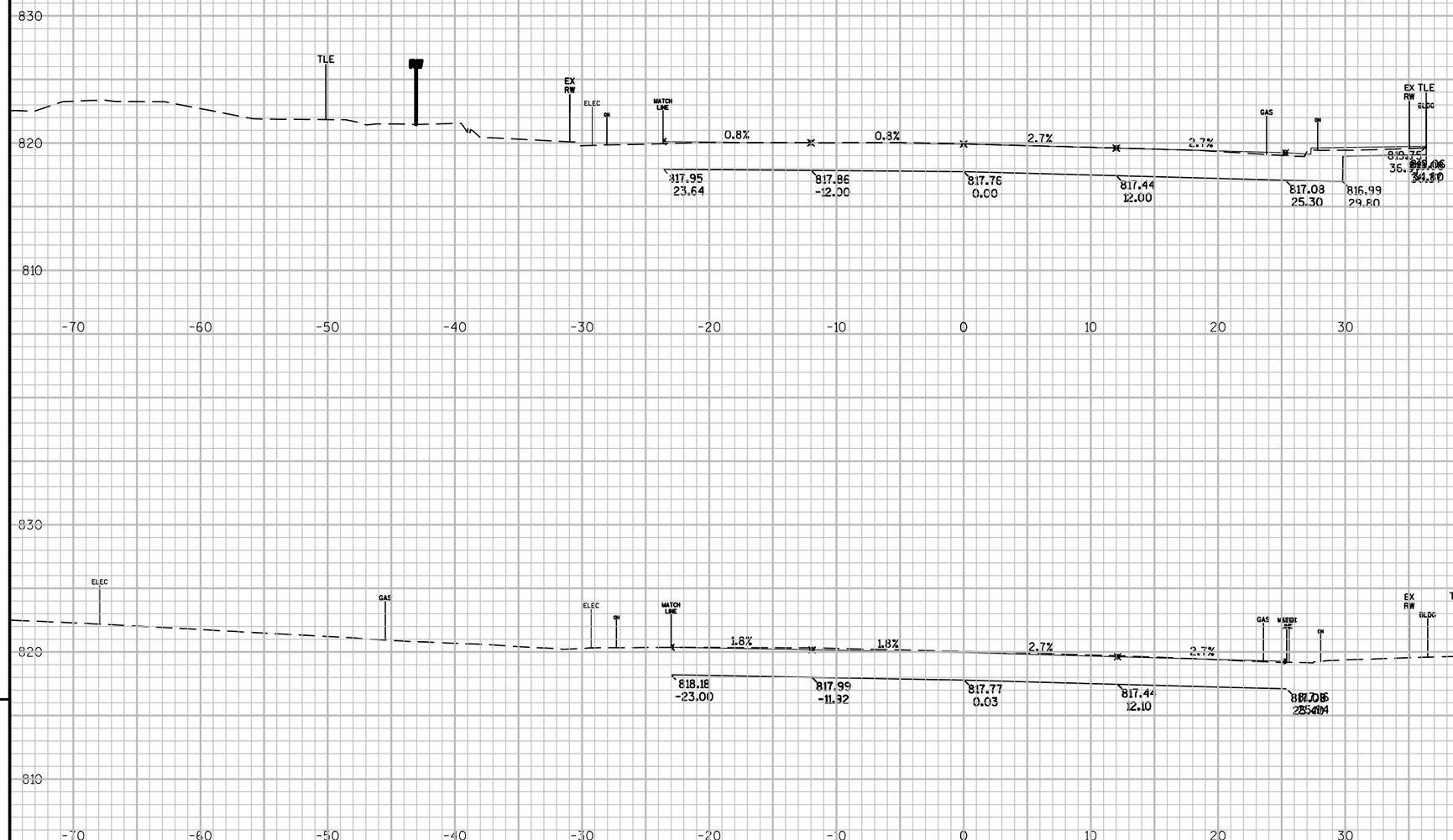
9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 393	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (30)

PLOT DATE : 10/31/2016 1:52 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

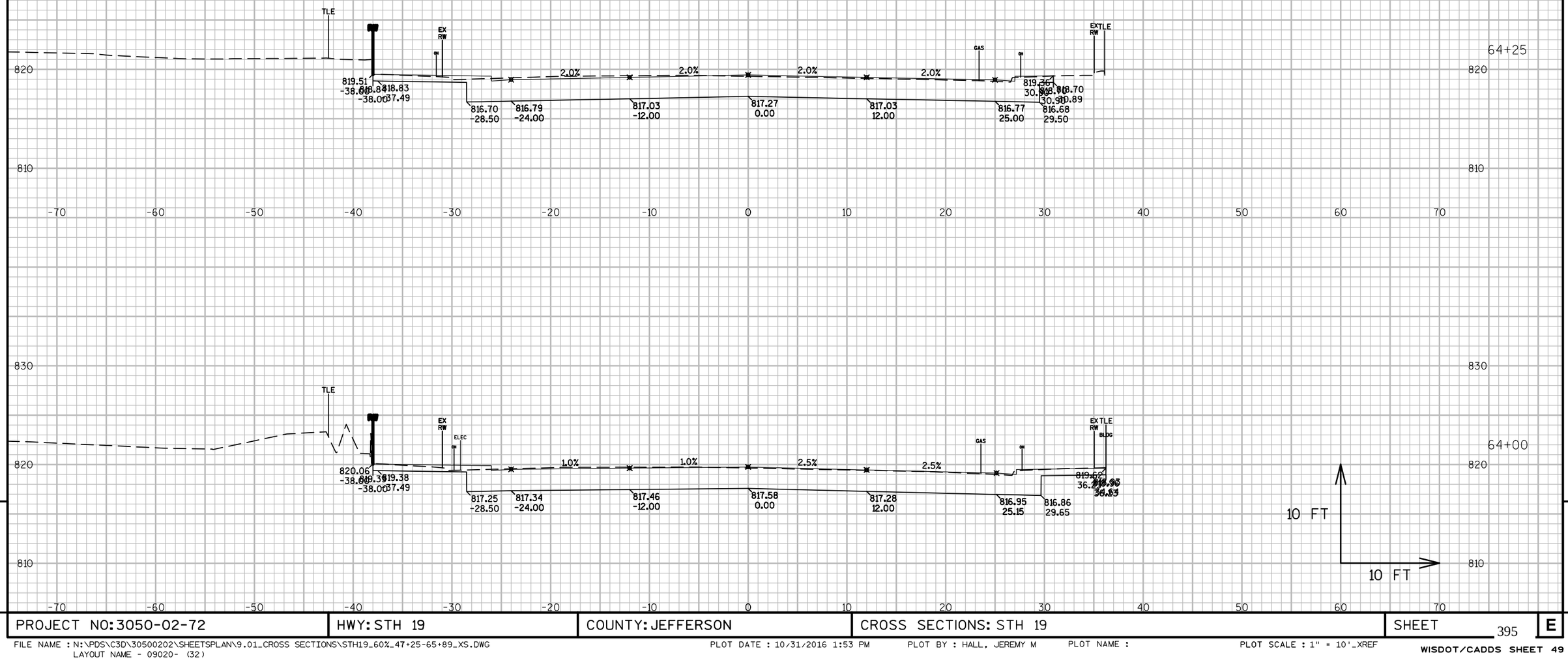


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 394	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (31)

PLOT DATE : 10/31/2016 1:52 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

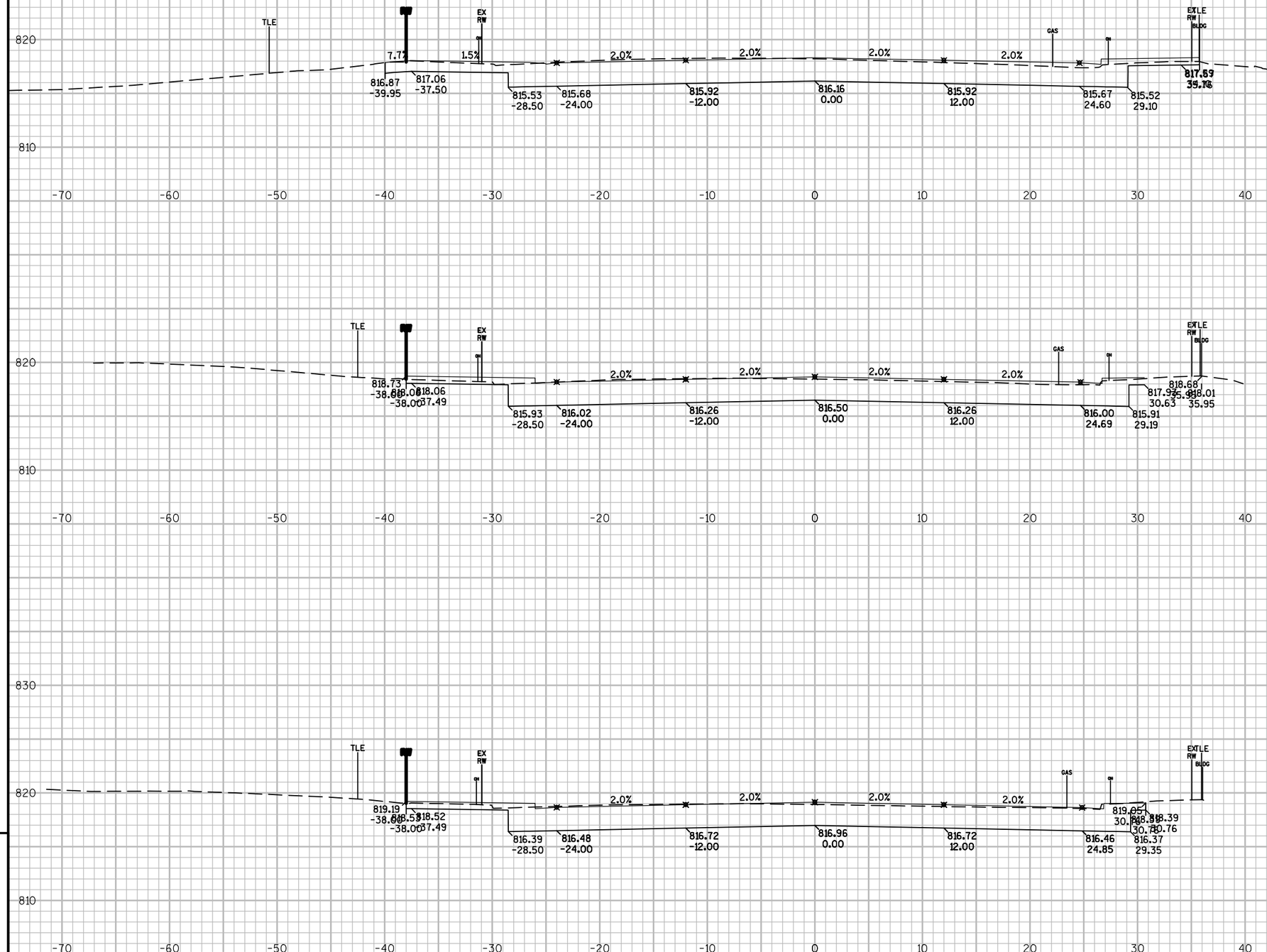


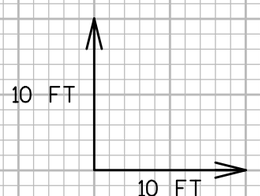
PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 395	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (32)

PLOT DATE : 10/31/2016 1:53 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49





9

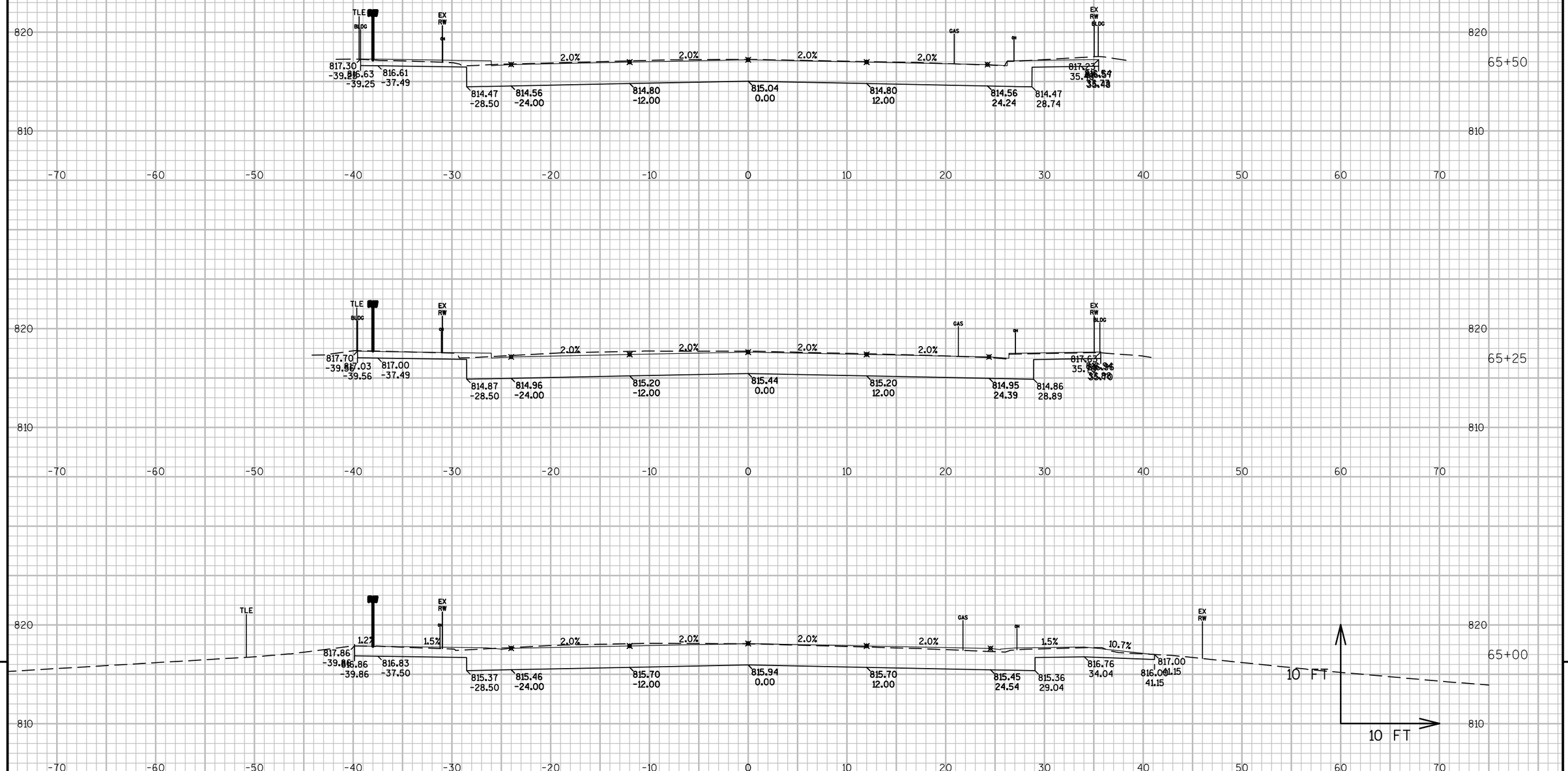
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 396	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (33)

PLOT DATE : 10/31/2016 1:53 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

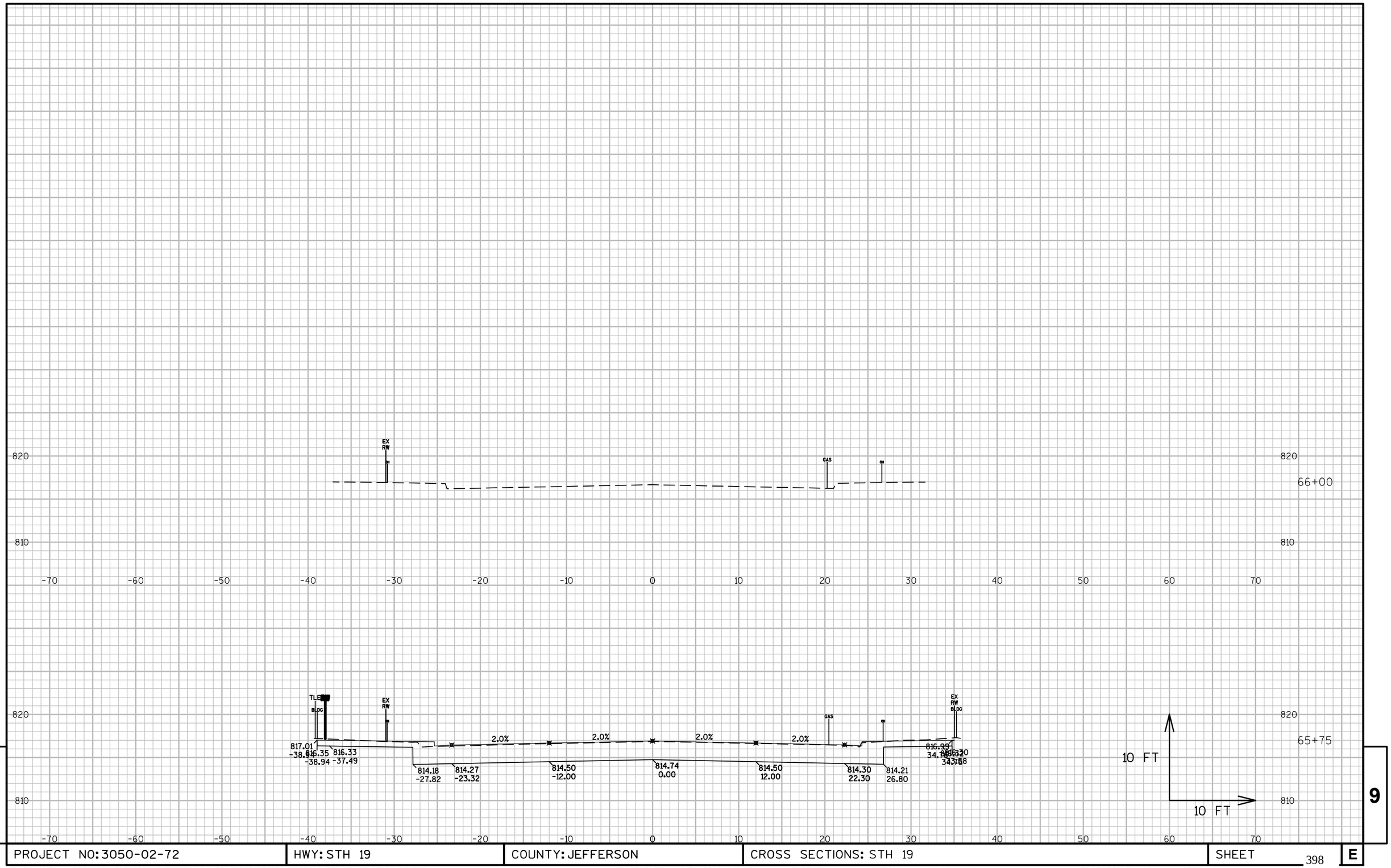


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 397	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (34)

PLOT DATE : 10/31/2016 1:54 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



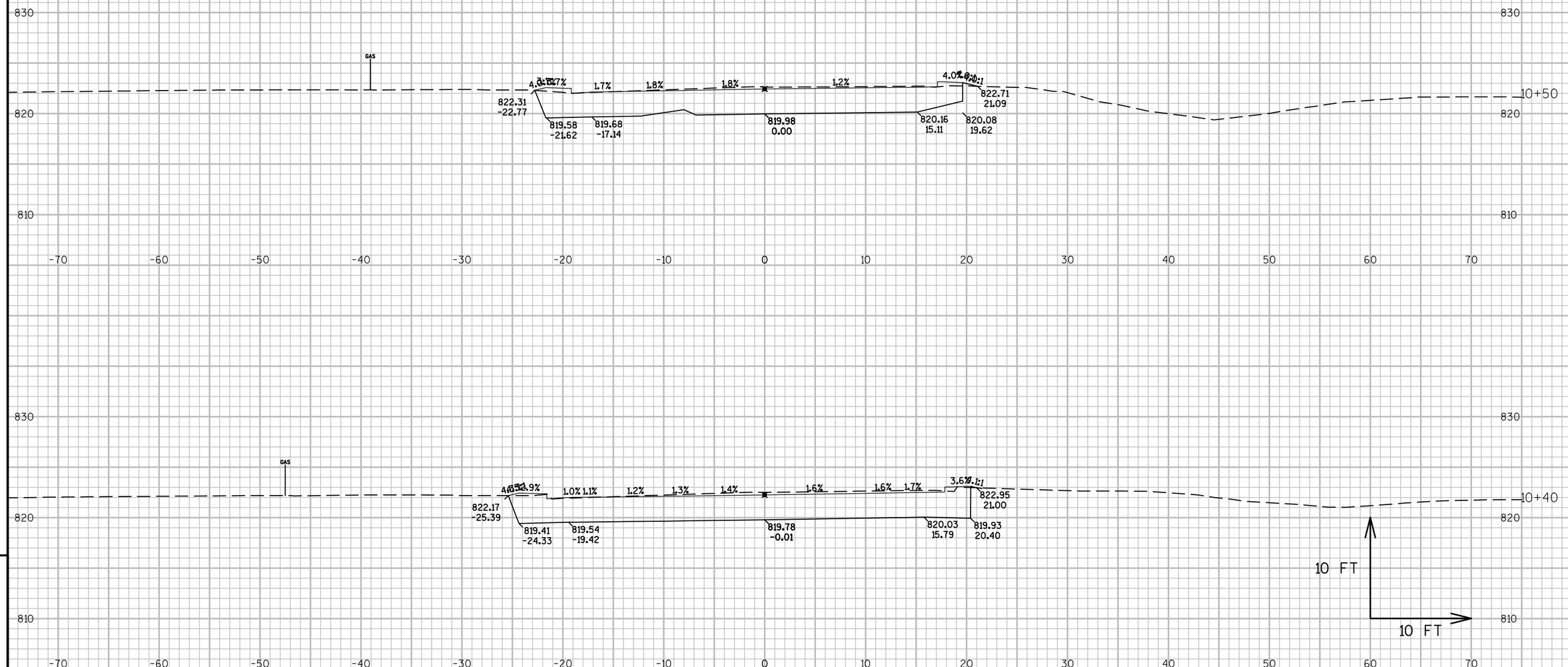
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 19	SHEET 398	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_60%_47+25-65+89_XS.DWG
LAYOUT NAME - 09020- (35)

PLOT DATE : 10/31/2016 1:54 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1" = 10'_XREF



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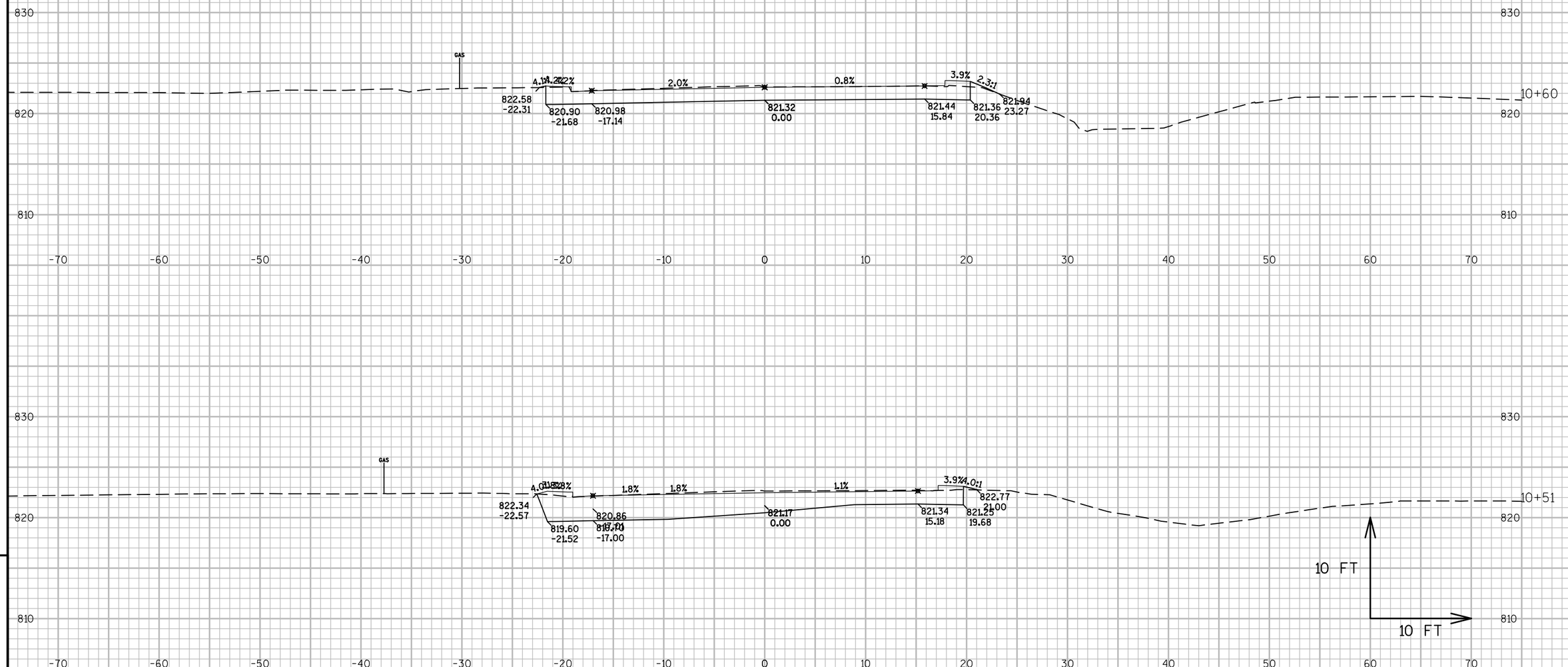
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: CANAL ROAD	SHEET 399	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - CA - (1)

PLOT DATE : 10/31/2016 2:27 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

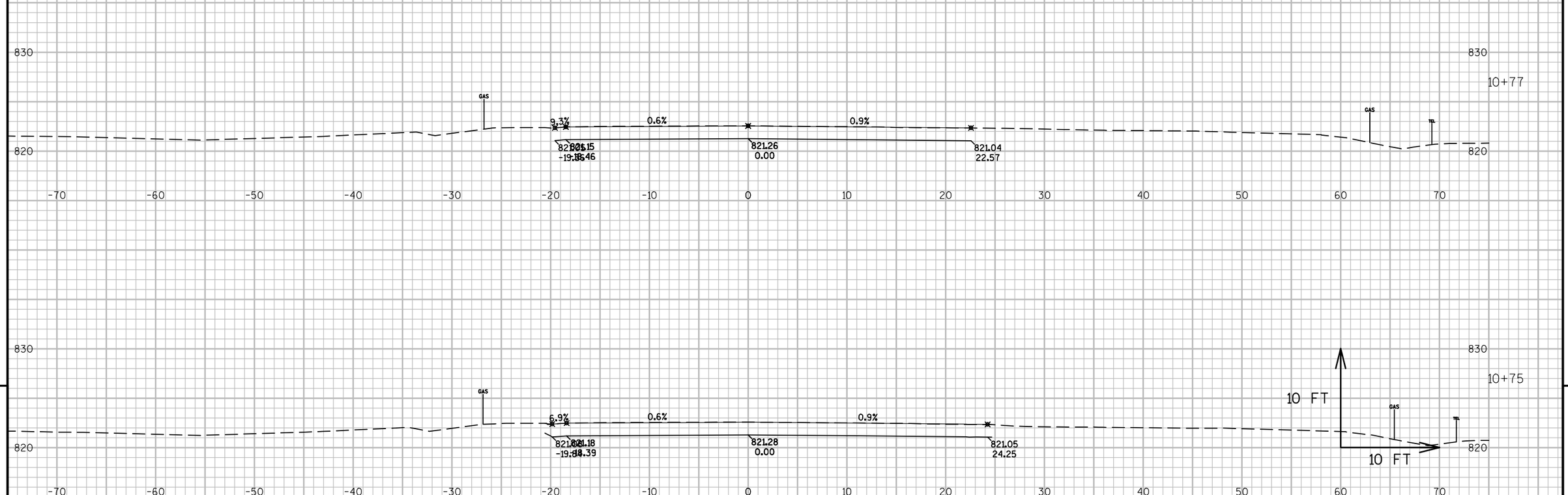


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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: CANAL ROAD	SHEET 400	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - CA - (2)

PLOT DATE : 10/31/2016 2:28 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



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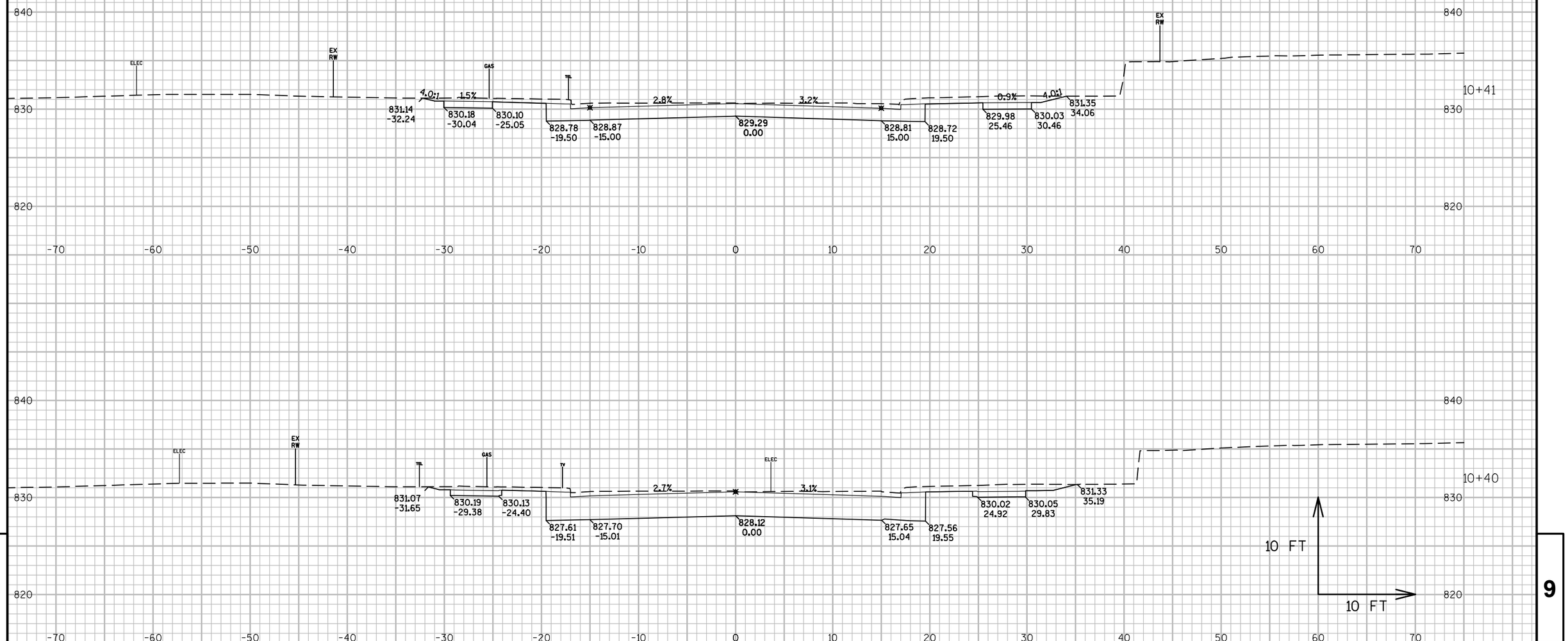
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: CANAL ROAD	SHEET 401	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - CA - (3)

PLOT DATE : 10/31/2016 2:29 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



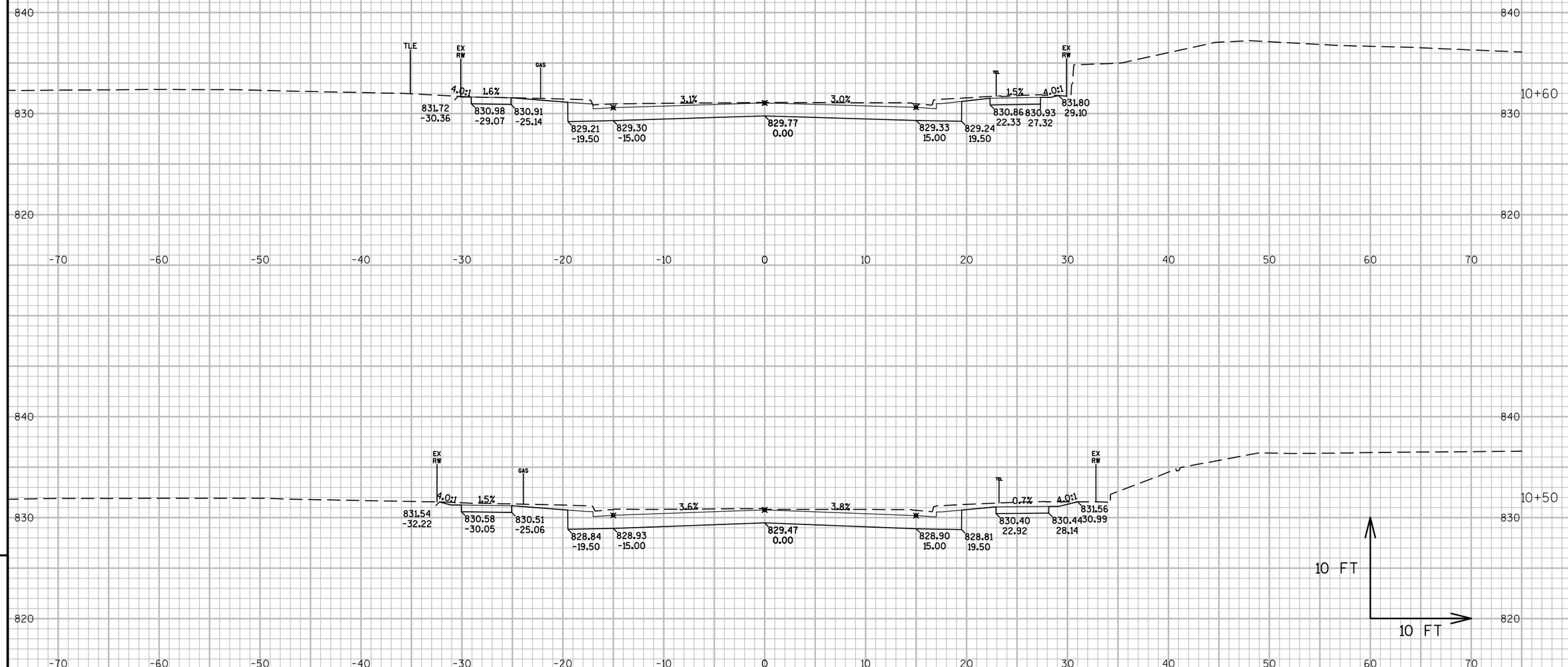
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: MINNETONKA WAY	SHEET 402	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - M - (1)

PLOT DATE : 10/31/2016 2:30 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

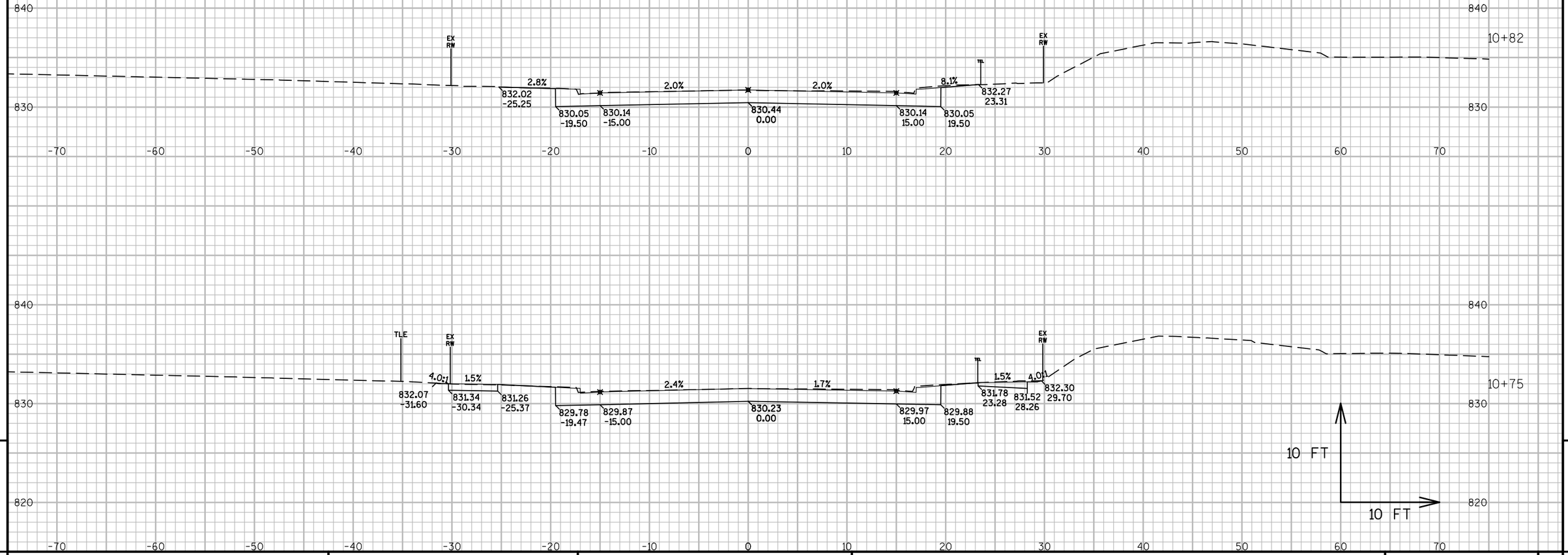
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: MINNETONKA WAY	SHEET 403	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - M - (2)

PLOT DATE : 10/31/2016 2:31 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

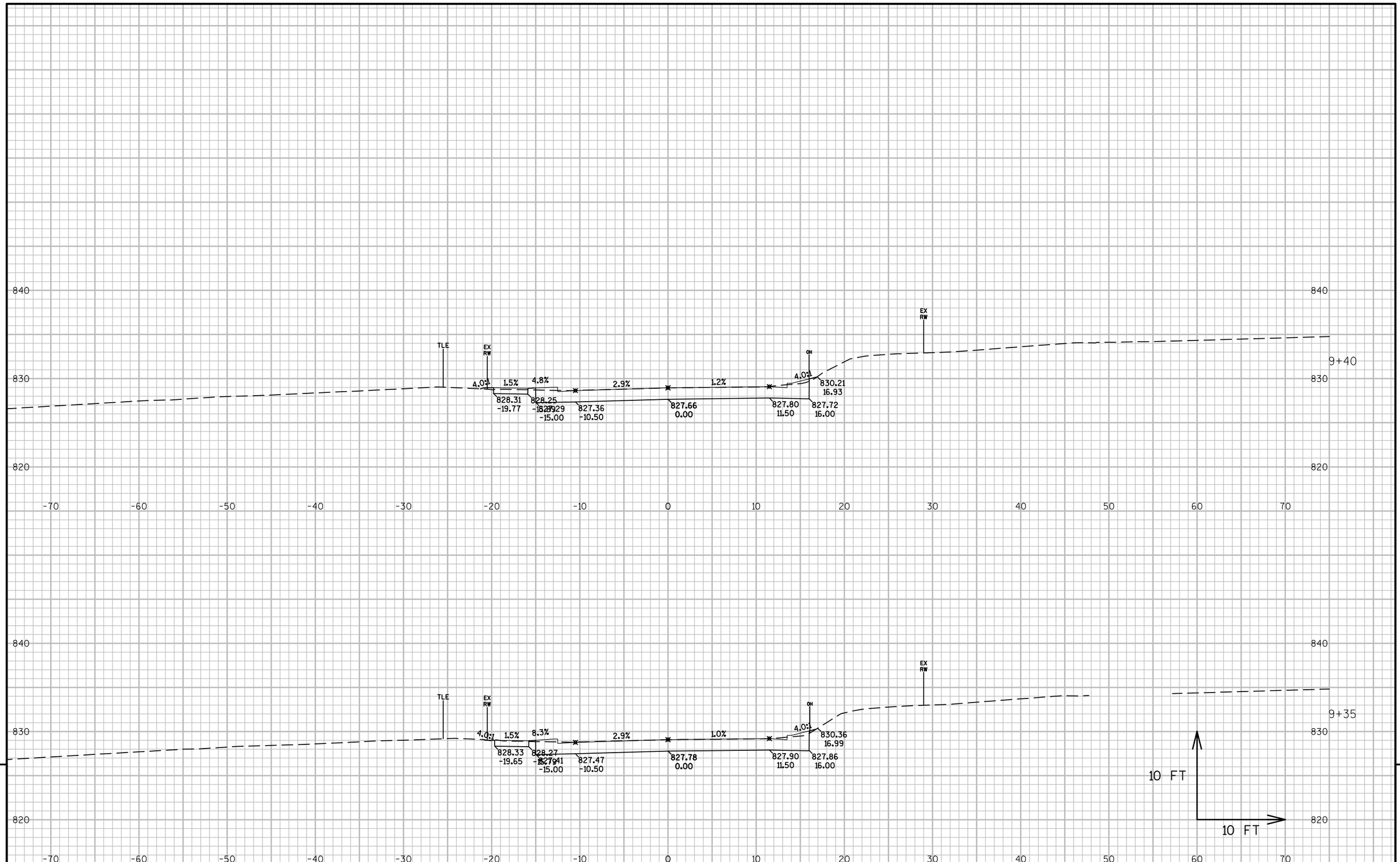
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: MINNETONKA WAY	SHEET 404	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - M - (3)

PLOT DATE : 10/31/2016 2:32 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



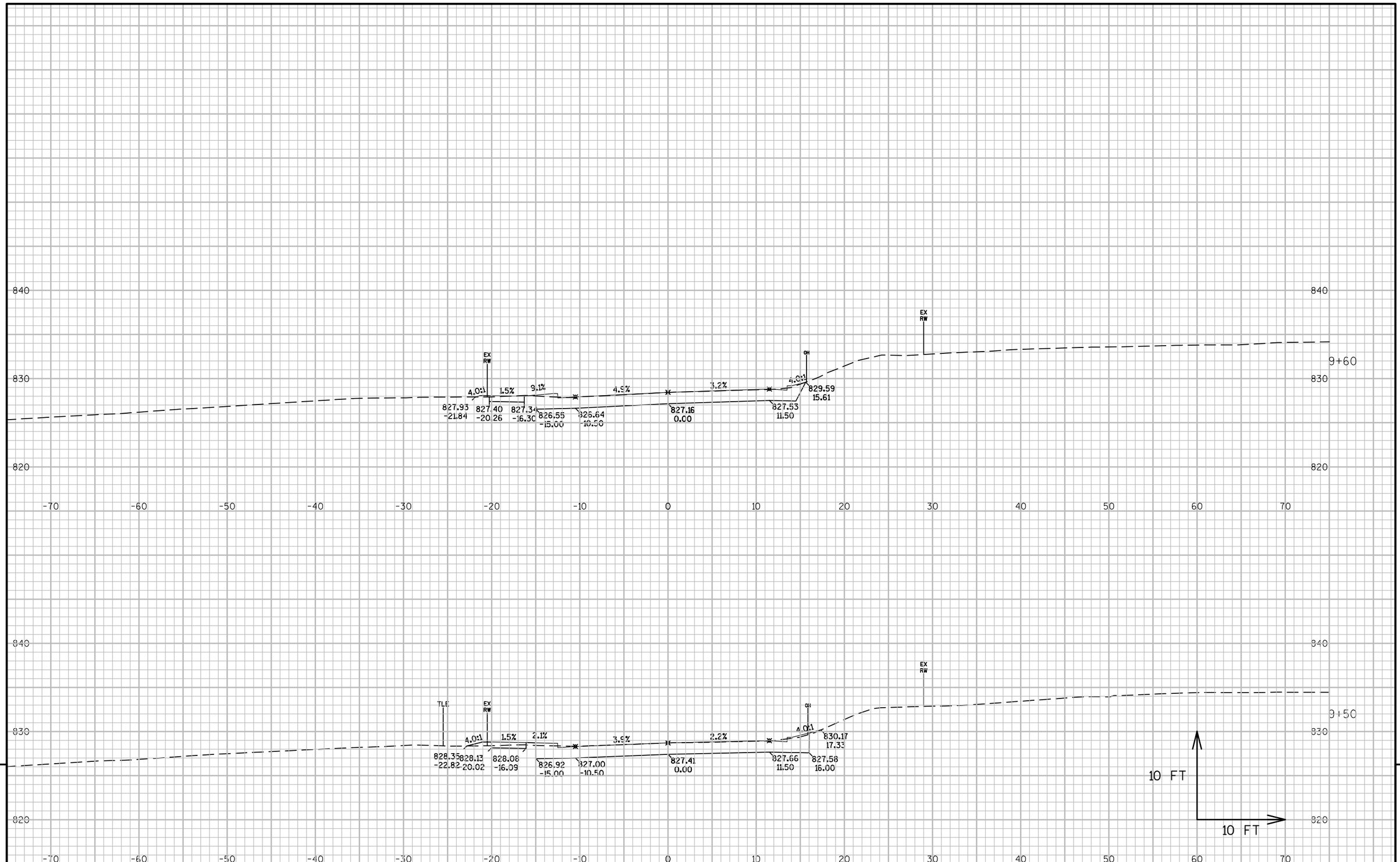
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: VAN BUREN STREET	SHEET 405	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - V - (1)

PLOT DATE : 10/31/2016 2:33 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

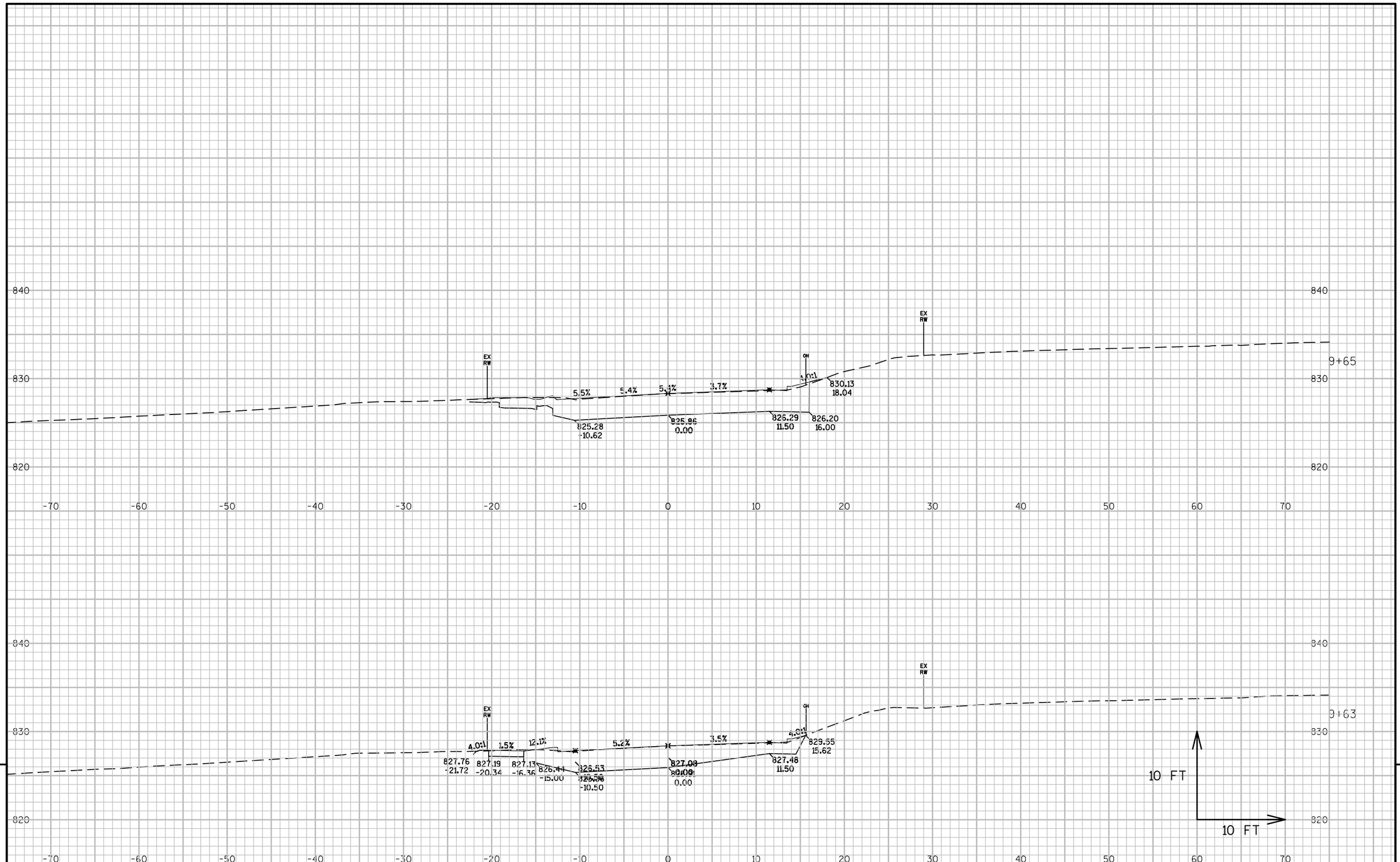


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: VAN BUREN STREET	SHEET 406 E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - V - (2)

PLOT DATE : 10/31/2016 2:34 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

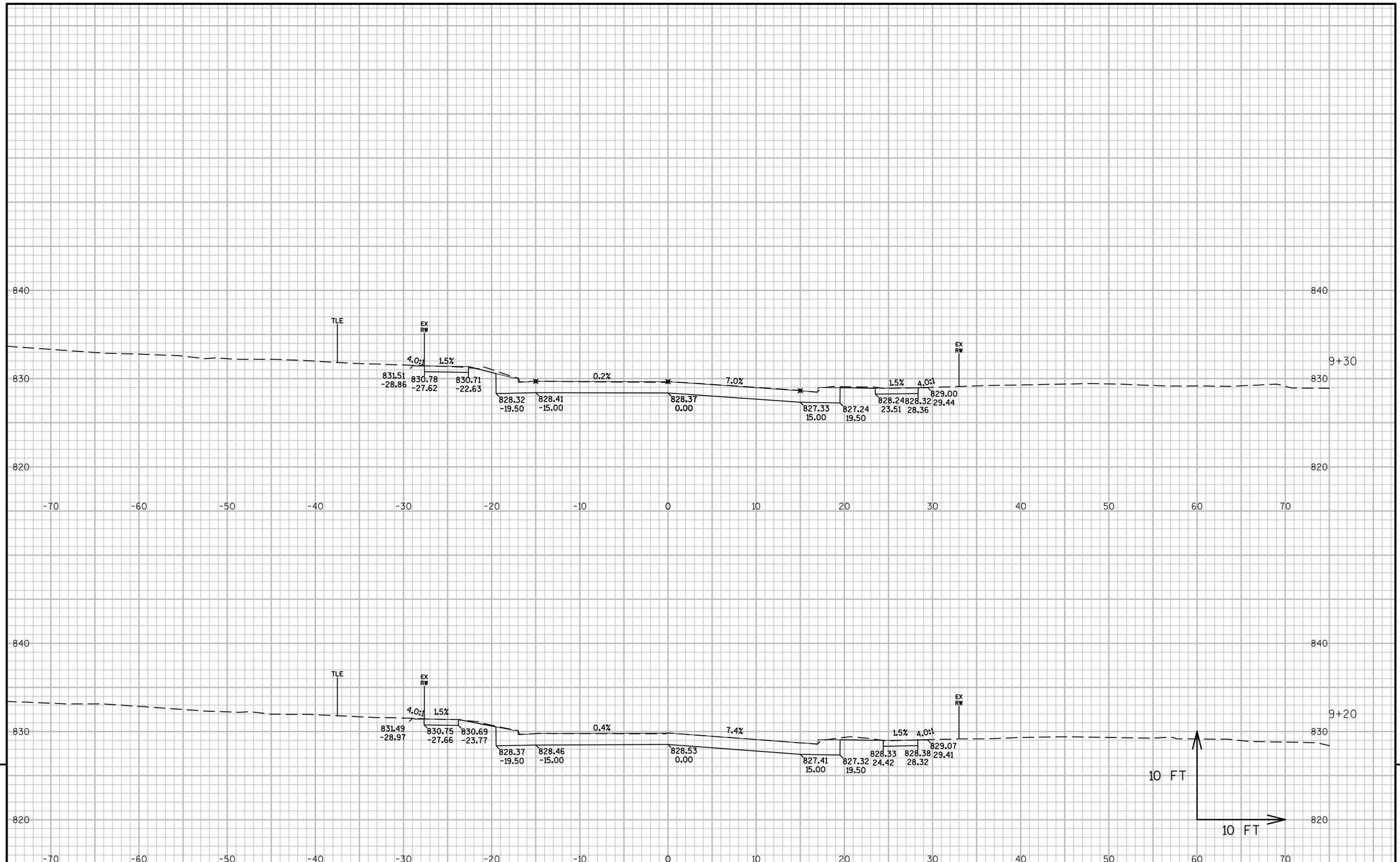
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: VAN BUREN STREET	SHEET 407	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - V - (3)

PLOT DATE : 10/31/2016 2:34 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



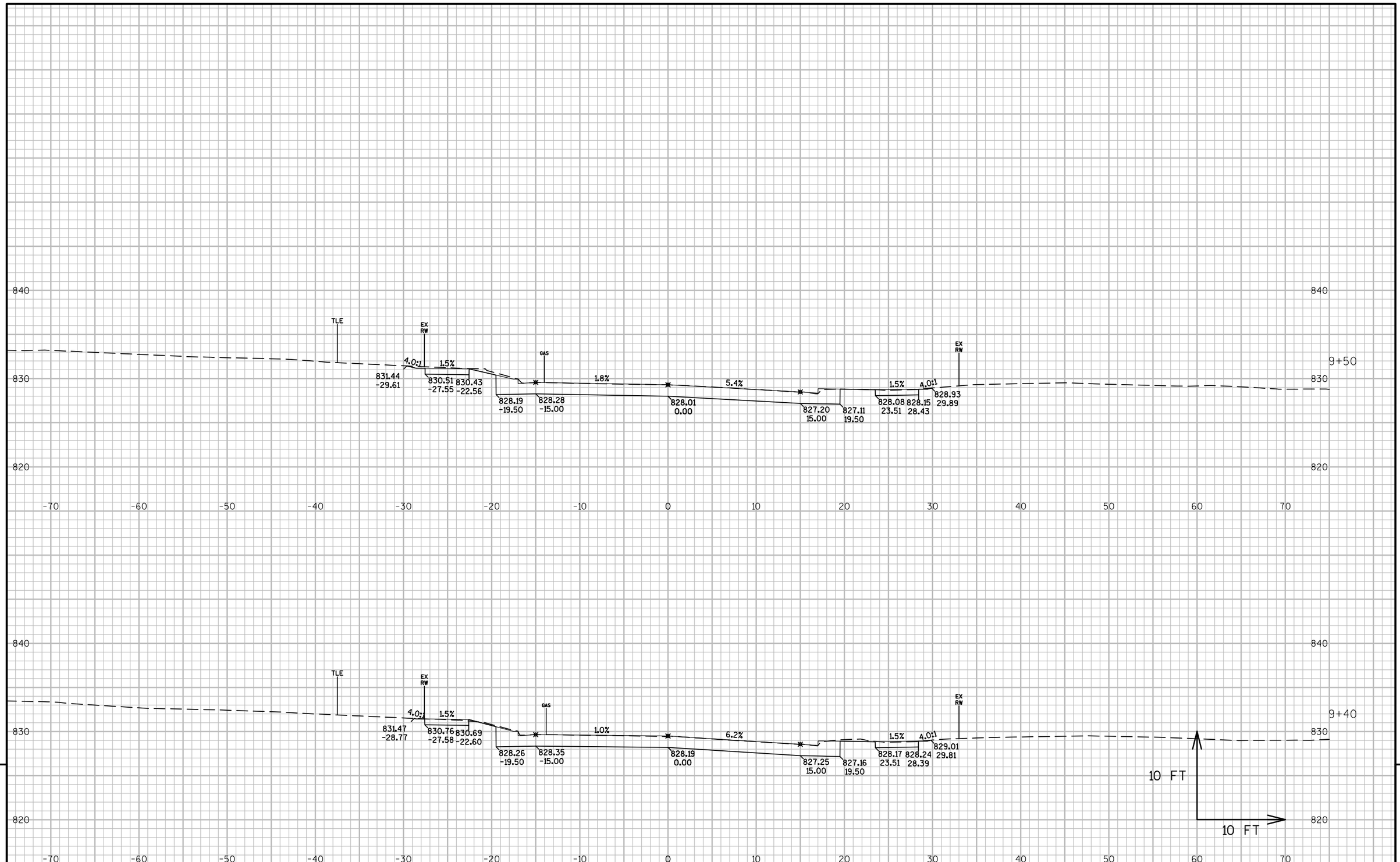
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: HARRISON STREET	SHEET 408	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - H - (1)

PLOT DATE : 10/31/2016 2:35 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

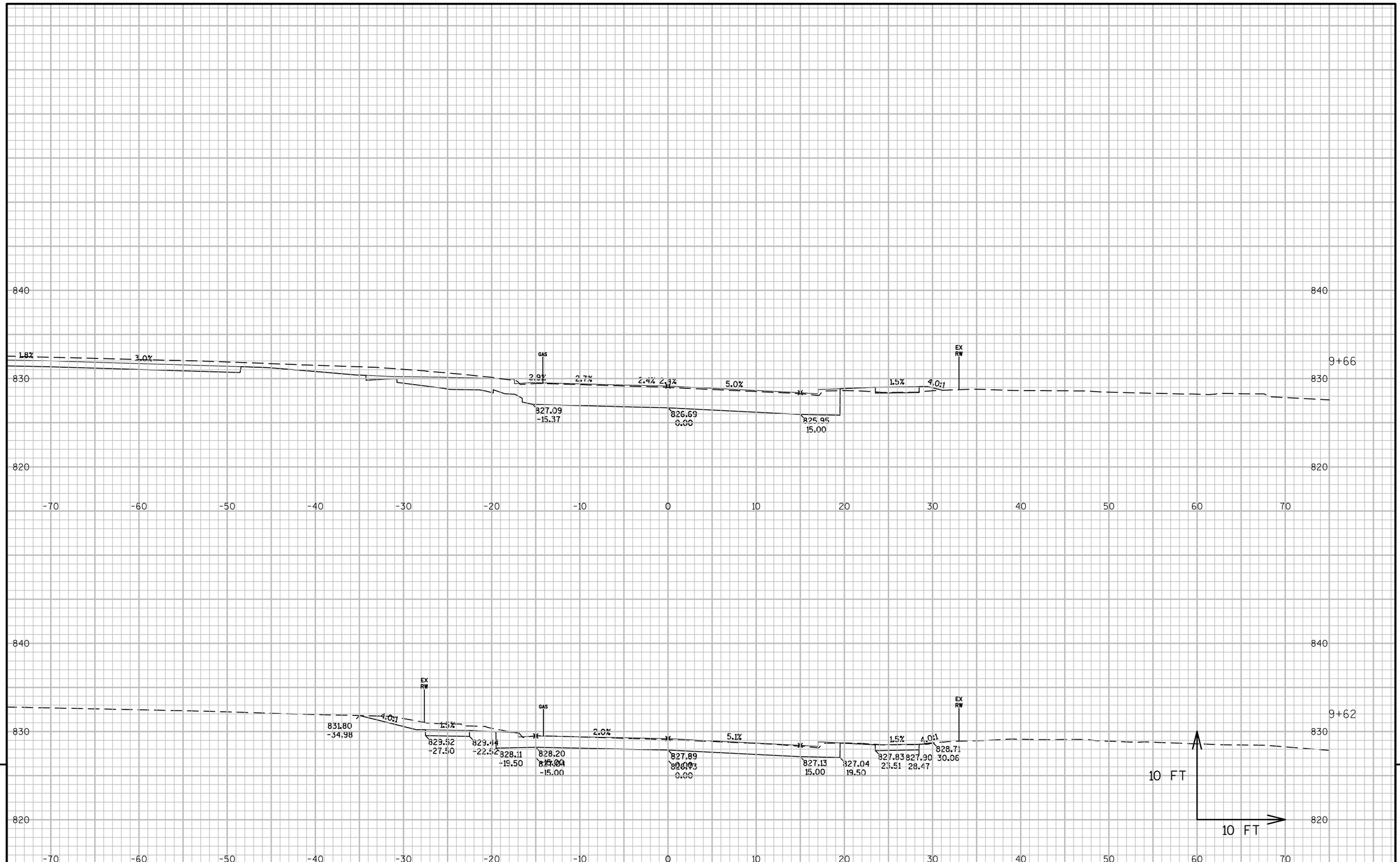


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: HARRISON STREET	SHEET 409	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - H - (2)

PLOT DATE : 10/31/2016 2:36 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

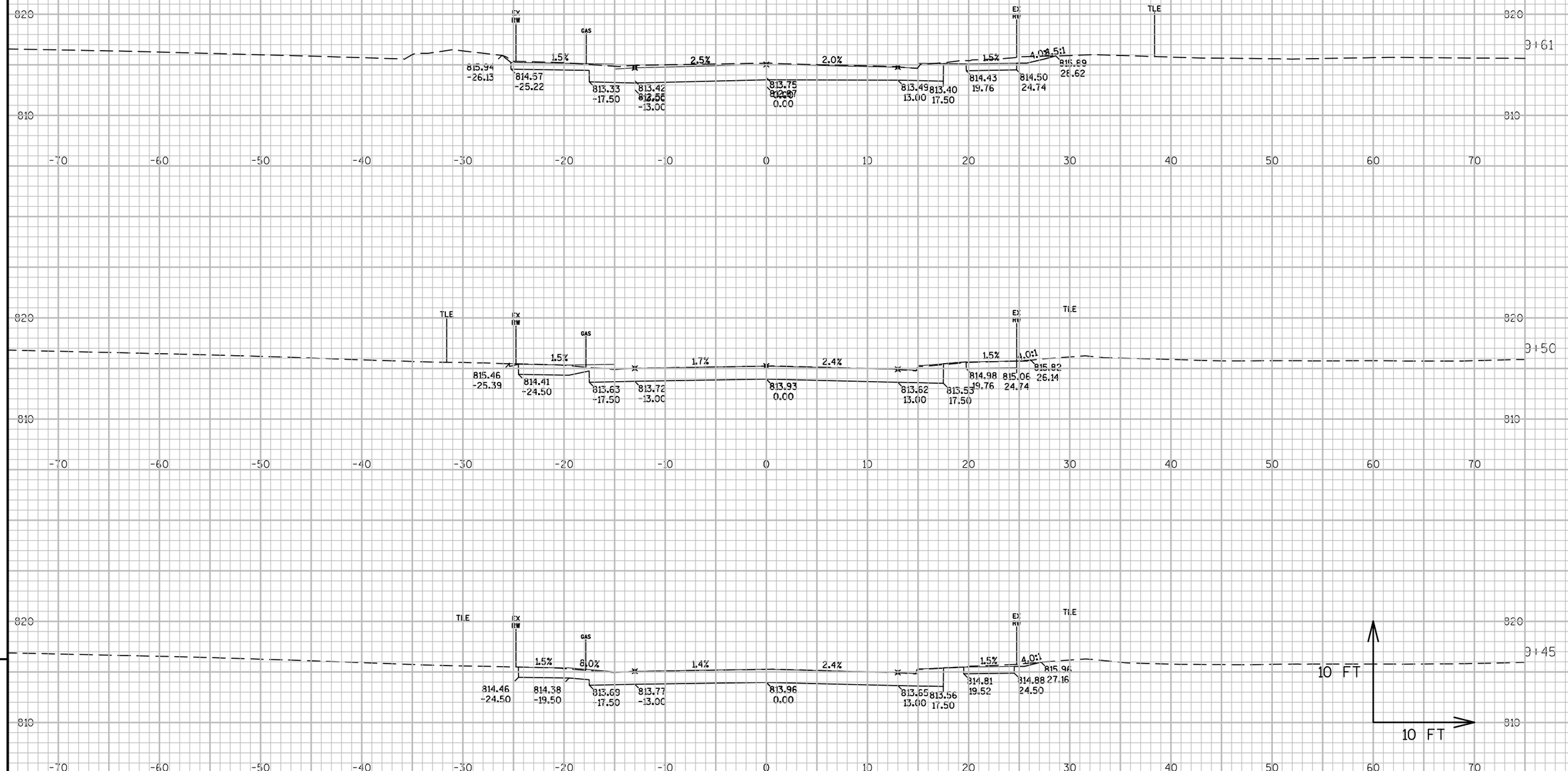
WISDOT/CADDS SHEET 49



9	PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: HARRISON STREET	SHEET 410 E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - H - (3)

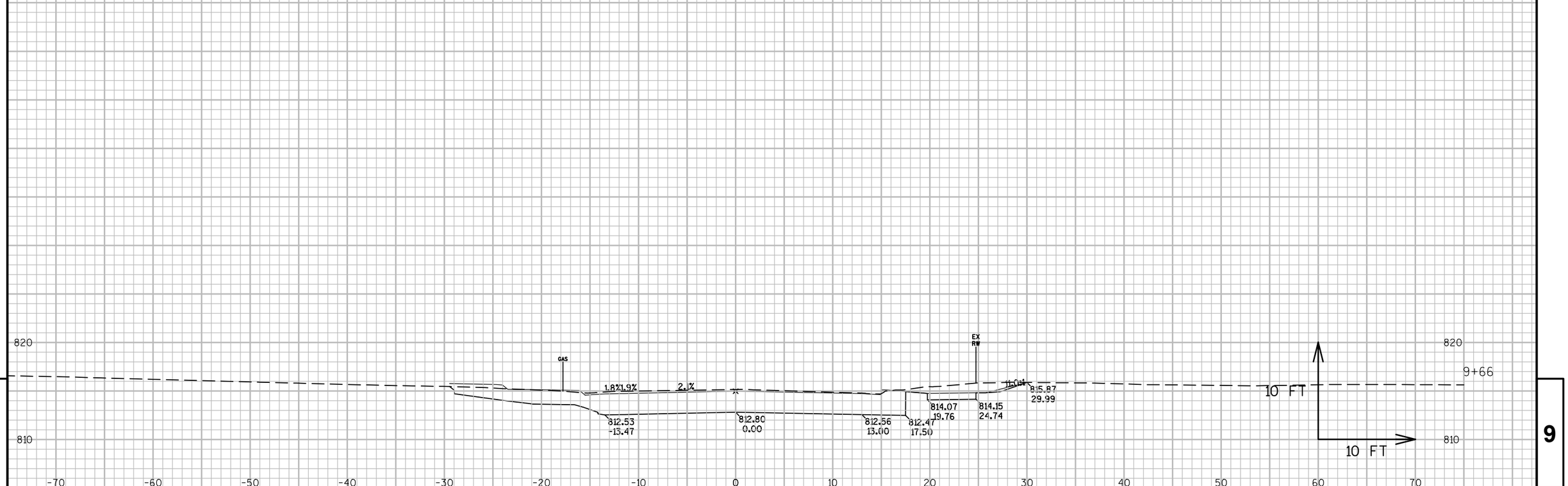
PLOT DATE : 10/31/2016 2:37 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: SOUTH JACKSON STREET	SHEET 411	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - J - (1)

PLOT DATE : 10/31/2016 2:38 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT



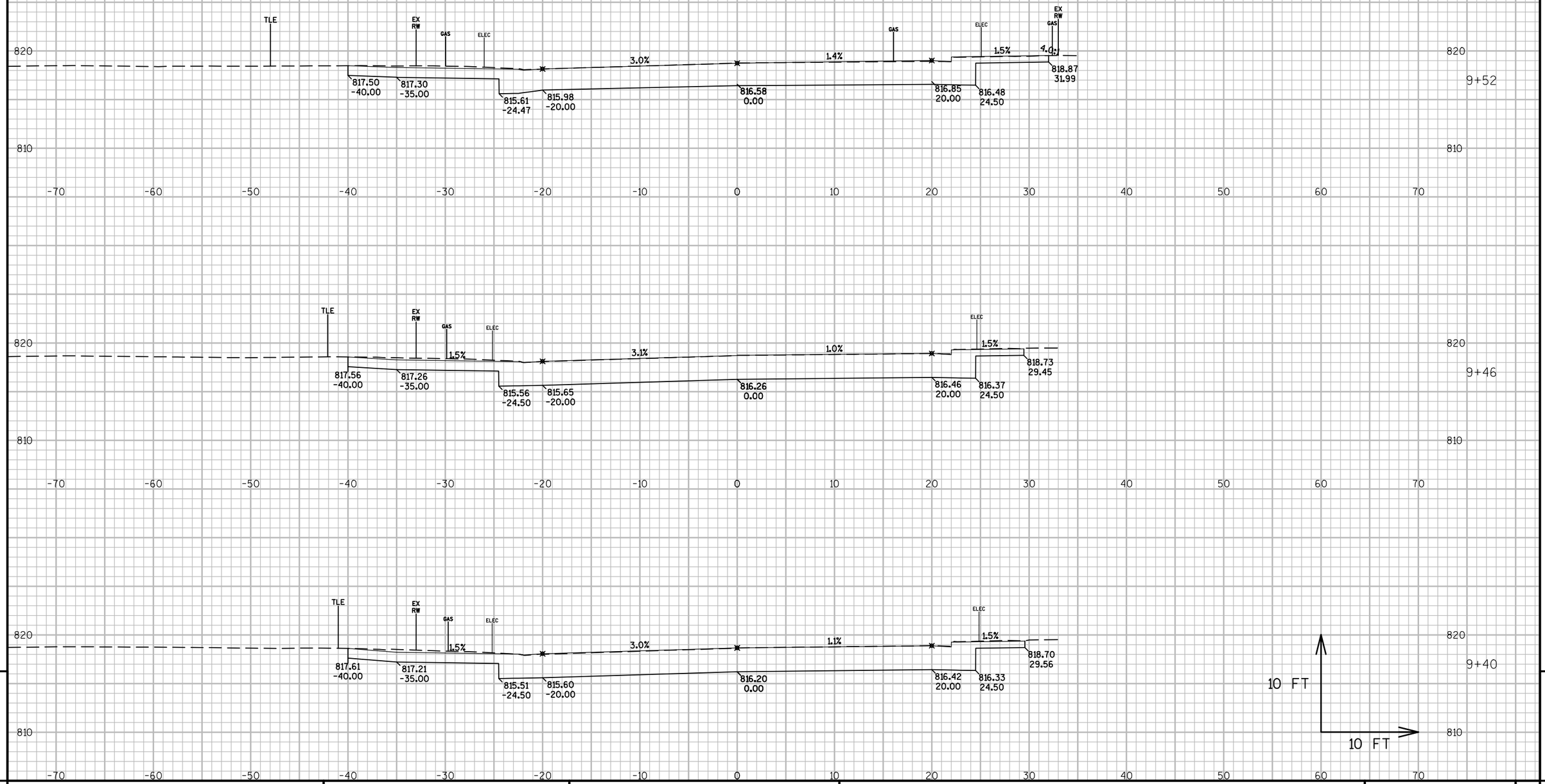
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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: SOUTH JACKSON STREET	SHEET 412	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - J - (2)

PLOT DATE : 10/31/2016 2:39 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

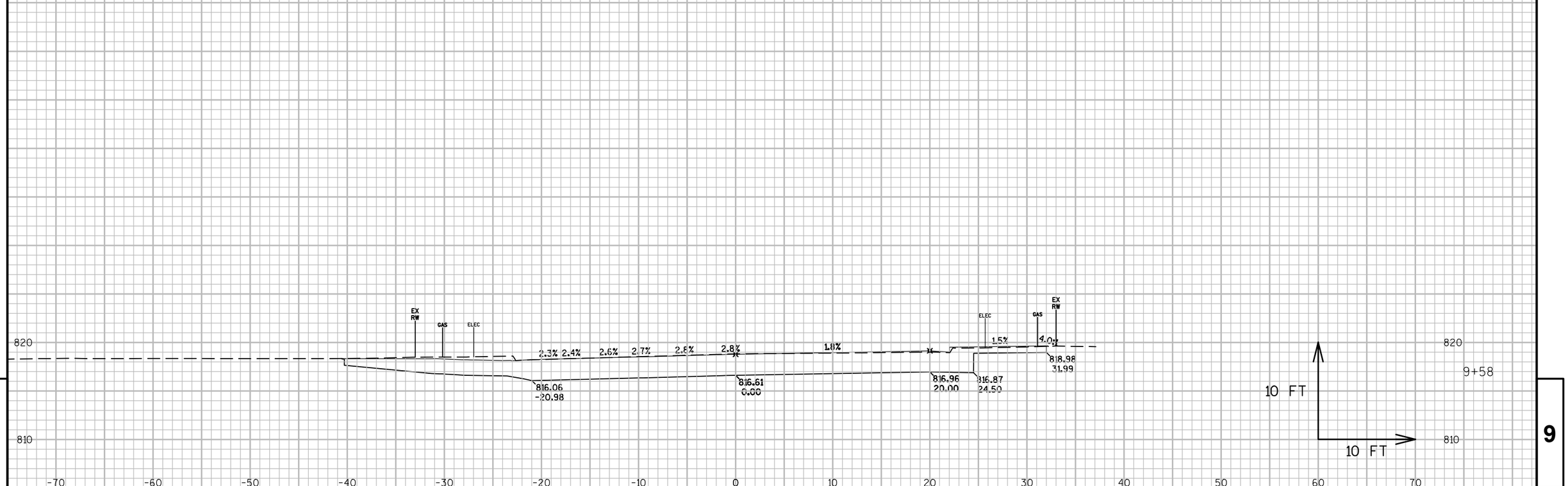


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PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: SOUTH MONROE STREET	SHEET 413	E

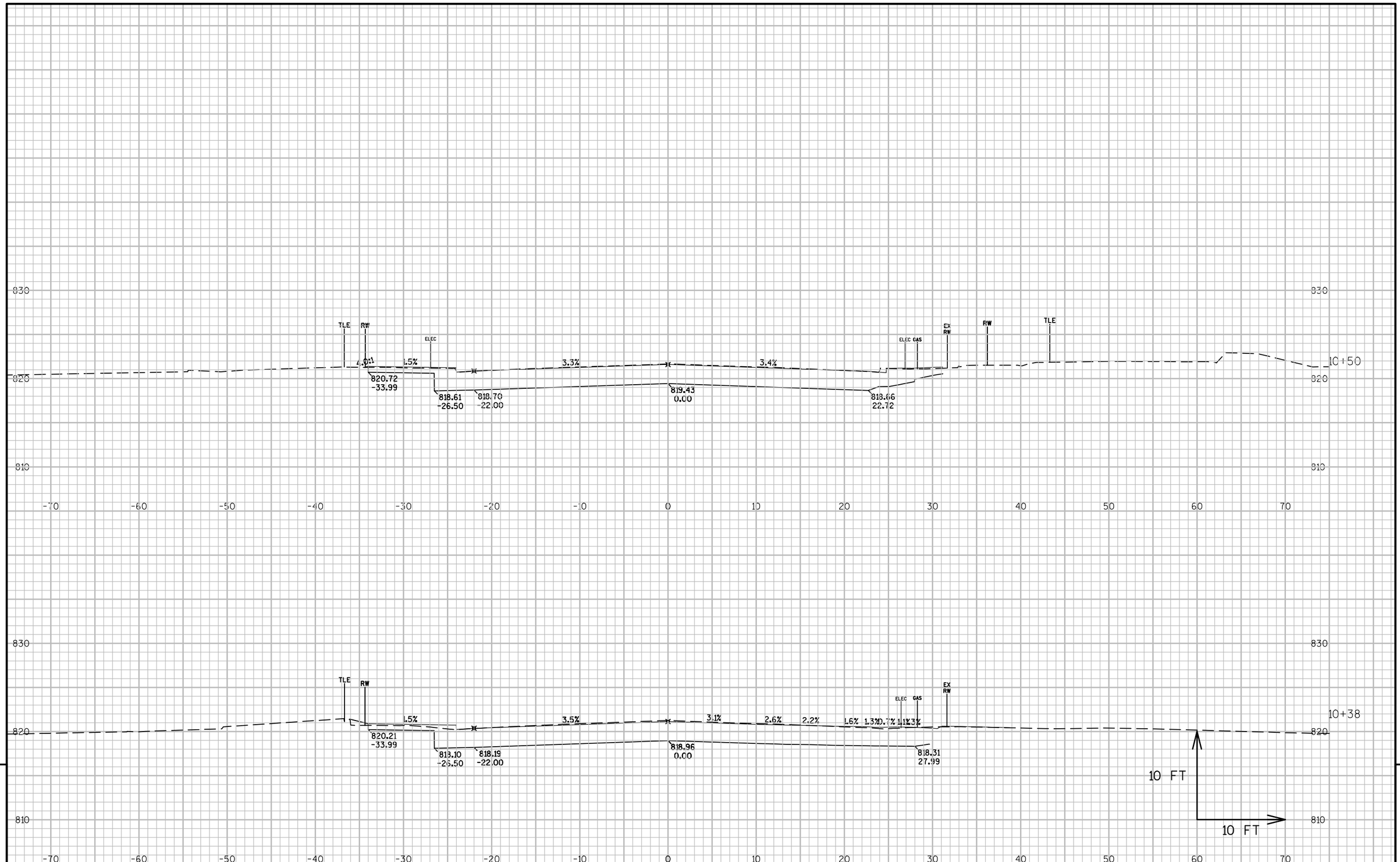
FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - R- (1)
PLOT DATE : 10/31/2016 2:40 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: SOUTH MONROE STREET	SHEET 414 E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - R- (2)

PLOT DATE : 10/31/2016 2:41 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

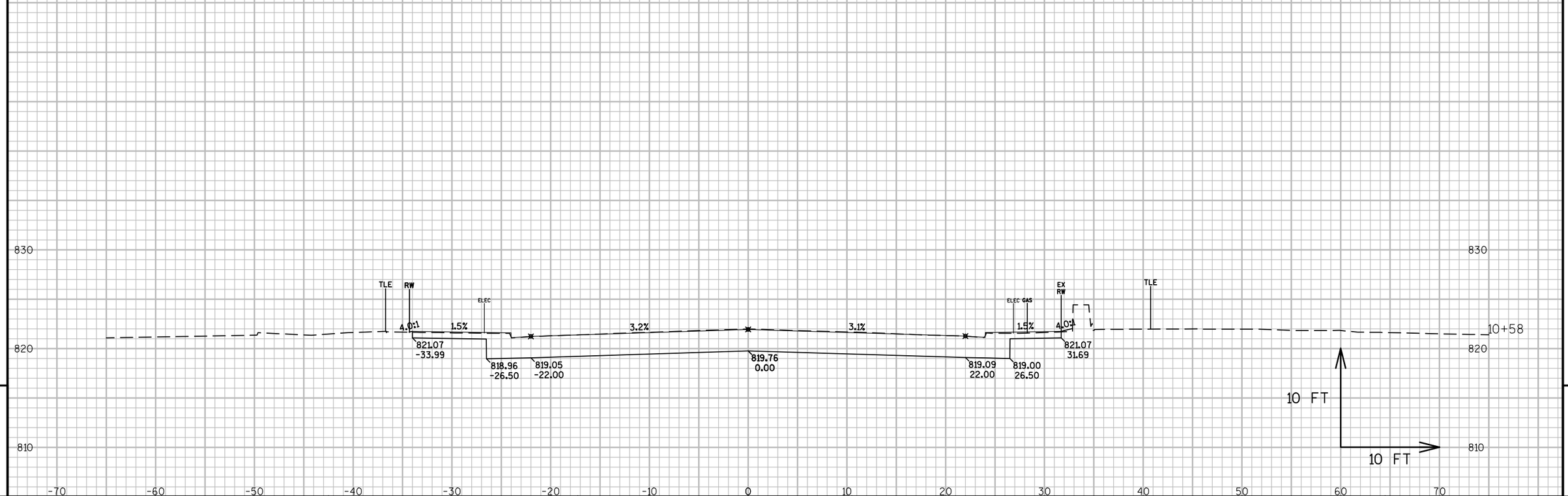


PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 89 (NORTH MONROE STREET)	SHEET 415	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - S - (1)

PLOT DATE : 10/31/2016 2:42 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 3050-02-72	HWY: STH 19	COUNTY: JEFFERSON	CROSS SECTIONS: STH 89 (NORTH MONROE STREET)	SHEET 416	E

FILE NAME : N:\PDS\C3D\30500202\SHEETSPLAN\9.01_CROSS SECTIONS\STH19_SIDEROADS_XS.DWG
LAYOUT NAME - S - (2)

PLOT DATE : 10/31/2016 2:42 PM PLOT BY : HALL, JEREMY M PLOT NAME : PLOT SCALE : 1 IN:10 FT

Notes

Wisconsin Department of Transportation

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