GRE

MARCH 2019

PROJECT ID: 4996-01-73

WITH: N/A

COUNTY: SHEBOYGAN

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (includes Erosion Control Plans)
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 = 210

39

N

DESIGN DESIGNATION

A.A.D.T. (2014)	=	7000
A.A.D.T. (2039)	=	7900
D.H.V.	=	864
D.D.	=	59/41
T.	=	4.3
DESIGN SPEED	=	30 MPH
ESALS	=	NA

BEGIN PROJECT 4996-01-73
STA 9+70.07
Y = 180,299.20
X = 209,012.89

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
- 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)
- 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

PLAN OF PROPOSED IMPROVEMENT

C SHEBOYGAN, SUPERIOR AVE

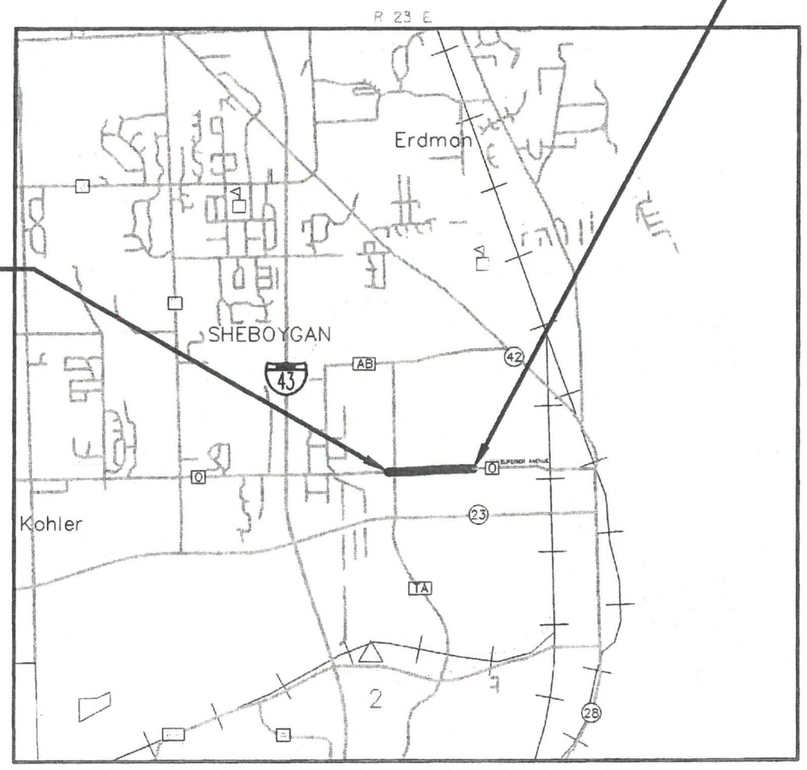
N TAYLOR DR - N 29TH STR

CTH O
SHEBOYGAN COUNTY

STATE PROJECT NUMBER
4996-01-73

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4996-01-73	WISC 2019172	1

END PROJCECT 4996-01-73
STA 25+80.32



LAYOUT
SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.305 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, SHEBOYGAN COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ACCEPTED FOR
CITY of SHEBOYGAN

10/31/18 (Date) (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY

WISCONSIN
ANNE M. HOLZEM
E-43226
SHEBOYGAN, WI
PROFESSIONAL ENGINEER

10-31-18 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor CITY OF SHEBOYGAN
Designer DONOHUE & ASSOCIATES, INC.
Management Consultant JT ENGINEERING, INC.
C.O. Supervisor

APPROVED FOR THE DEPARTMENT
DATE: 10/31/18 (Management Consultant Signature)
JT ENGINEERING, INC.

E

2

UTILITY CONTACTS

JASON HOGAN
ALLIANT ENERGY
SUITE 1000
4902 N BILTMORE LANE
MADISON, WI 53718-2148
(608) 458-4871
JASONHOGAN@ALLIANTENERGY.COM

TONY MARCINACK
AMERICAN TRANSMISSION CO., LLC
P.O. BOX 47
WAUKESHA, WI 53187-0047
AMARCINIAK@ATCLLC.COM

MATT ERNST
AMERICAN TRANSMISSION CO., LLC
801 O'KEEFE ROAD
P.O. BOX 6113
DE PERE, WI 54115-6113
(920) 338-6573
MERNST@ATCLLC.COM

CHUCK BARTELT
AT&T
70 EAST DIVISION STREET
FOND DU LAC, WI 54935
(920) 929-1013
CB1461@ATT.COM

TOM HARYCKI
CHARTER COMMUNICATIONS
2312 CONTINENTAL DRIVE
WEST BEND, WI 53095
(262) 306-8756 EXT 20702
TOM.HARYCKI@CHARTERCOM.COM

DARREL GORE
OSP DESIGNER MI-TECH SERVICES, INC.
16510 WEST ROGERS DRIVE
NEW BERLIN, WI 53151
(262) 938-6070 X3036
DGORE@MI-TECH.US

MIKE WILLMAS
CITY OF SHEBOYGAN (ELECTRICAL CONTACT)
2026 NEW JERSEY AVENUE
SHEBOYGAN, WI 53081
459-3444
MICHAEL.WILLMAS@SHEBOYGANWI.GOV

KEVIN JUMP
CITY OF SHEBOYGAN (SEWER CONTACT)
2026 NEW JERSEY AVENUE
SHEBOYGAN, WI 53081
(920) 459-3667
KEVIN.JUMP@SHEBOYGANWI.GOV

JOE TRUEBLOOD
SHEBOYGAN WATER UTILITY
72 PARK AVENUE
SHEBOYGAN, WI 53081
920-459-3800
JORTRUEBLOOD@SHEBOYGANWATER.ORG

MARIE BEMIS
ST. NICHOLAS HOSPITAL
ASSISTANT FACILITY/SAFETY MANAGER
920-451-7465
MARIE.BEMIS@HSHS.ORG
(NOT A MEMBER OF DIGGER'S HOTLINE)

DENNIS RUESS
WINDSTREAM COMMUNICATIONS
8531 COUNTY HWY FF
WISCONSIN RAPIDS, WI 54494
608-512-5587
DENNIS.RUESS@WINDSTREAM.COM

LORI BUTRY
WISCONSIN PUBLIC SERVICE
700 N ADAMS ST
PO BOX 19001
GREEN BAY, WI 54307-9001
(920) 433-1703
LABUTRY@INTEGRYSGROUP.COM

MIKE LOWTHER
WISCONSIN PUBLIC SERVICE
933 S WILDWOOD AVE
SHEBOYGAN, WI 53081
920-451-3743 OFFICE
920-946-3198 CELL
MLLOWTHER@WISCONSINPUBLICSERVICE.COM

CONVENTIONAL SYMBOLS AND ABBREVIATIONS

STATE, COUNTY, or TOWN LINE	
SECTION LINE	
QUARTER LINE	
SIXTEENTH LINE	
PROPOSED REFERENCE LINE	
PROPOSED R/W LINE	
EXISTING H.E. LINE	
PROPERTY LINE	
EASEMENT LINE	
CORPORATE LIMITS	
EXISTING CENTERLINE	
LOT & TIE LINES	
UTILITIES (TELEPHONE,GAS,ELECTRIC,CABLE TV,FIBER OPTIC)	FO (TYPE)
NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
NO ACCESS (BY ACQUISTION)	
NO ACCESS (BY STATUTORY AUTHORITY)	
FEE (HATCH VARIES)	
TEMPORARY LIMITED EASEMENT	
PERMANENT LIMITED EASEMENT	
PARCEL NUMBER	102
UTILITY PARCEL NUMBER	92
SIGN NUMBER (OFF PREMISE)	21-1
BUILDING	
FOUND IRON PIPE/PIN	I.P. (1" UNLESS NOTED)
R/W MONUMENT	●(SET)
R/W STANDARD	▲(SET)
SIGN	SIGN
SECTION CORNER SYMBOL	

ABANDON	ABD.
ACCESS POINT/ DRIVEWAY CONNECTION	AP
ACCESS RIGHTS	AR
ACRES	AC.
AND OTHERS	ET.AL.
CENTERLINE	C/L
CERTIFIED SURVEY MAP	CSM
DOCUMENT	DOC.
HIGHWAY EASEMENT	H.E.
LAND CONTRACT	LC
MONUMENT	MON.
PAGE	P.
PERMANENT LIMITED EASEMENT	PLE
PROPERTY LINE	PL
RECORDED AS	(100')
REFERENCE LINE	R/L
REMAINING	REM.
RIGHT-OF-WAY	R/W
SECTION	SEC.
SQUARE FEET	SQ.FT.
STATION	STA.
TEMPORARY LIMITED EASEMENT	TLE
VOLUME	V.

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		

GENERAL NOTES:

PIPE ELEVATIONS, LENGTHS AND LOCATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED TO FIT EXISTING FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL DISTURBED AREAS WITHIN THE RIGHT OF WAY AND TLE SHALL BE RESTORED WITH TOPSOIL, SEED, FERTILIZER AND EROSION MAT AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. ANY OTHER DISTURBED AREAS ARE TO BE SEEDED, FERTILIZED AND EMAT AS DIRECTED BY THE ENGINEER AT THE CONTRACTORS EXPENSE.

THE EXACT LOCATION AND WIDTHS OF PRIVATE AND COMMERCIAL DRIVEWAYS ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD AND SHALL BE REPLACED IN KIND.

ALL DISTANCES ARE GROUND DISTANCES. TIES ARE HORIZONTAL UNLESS SHOWN OTHERWISE.

THE LOCATIONS OF EXISTING UTILITY FACILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

TREES DESIGNATED FOR REMOVAL ARE SHOWN ON THE PLANS. NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

NO ADDITIONAL PAYMENT WILL BE MADE FOR PAVEMENT REMOVAL SHOULD THE EXISTING PAVEMENT BE FOUND TO CONTAIN STEEL MESH.

THE CONTROL SURVEY CONDUCTED FOR THIS PROJECT MET THIRD ORDER CONTROL SURVEY SPECIFICATIONS.

EXCAVATION BELOW SUBGRADE (EBS) LOCATIONS ARE NOT SHOWN ON THE CROSS SECTIONS. IF EBS IS DETERMINED NECESSARY BY THE ENGINEER IN THE FIELD IT SHALL BE MEASURED AND PAID FOR AS EXCAVATION COMMON, PROVIDED THE ENGINEER DID NOT APPROVE THE SUBGRADE FOR SUBSEQUENT OPERATIONS (SEE STANDARD SPEC. SECTION 205.5.2(2)). BACKFILL EBS AREAS WITH SELECT CRUSHED MATERIAL. LATERAL TRANSITIONS OUT OF EBS AREAS SHALL BE AT A 5:1 SLOPE.

EROSION CONTROL BMP'S ARE SHOWN ON THE EROSION CONTROL SHEETS AND IN THE SUMMARY OF MISCELLANEOUS QUANTITIES. BMP'S ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS ECIP AND BY THE ENGINEER IN THE FIELD. EROSION CONTROL BMP'S SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQUIRED.

ALL CURB AND GUTTER RADII SHOWN ON THE PLANS ARE MEASURED TO THE FLANGE UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

DRIVEWAY ACCESS MUST BE COORDINATED WITH ST. NICHOLAS HOSPITAL PRIOR TO REMOVING A DRIVEWAY FROM SERVICE.

ORDER OF DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
STORM SEWER DETAILS & EROSION CONTROL
SANITARY SEWER DETAILS
STREETLIGHT DETAILS
TRAFFIC SIGNAL DETAILS
PERMANENT SIGNING AND PAVEMENT MARKING
TRAFFIC CONTROL
DETOUR PLAN
ALIGNMENT DIAGRAM

DNR CONTACT

JAY SCHIEFELBEIN
WISCONSIN DNR NE REGION
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
920-360-3784
JEREMIAH.SCHIEFELBEIN@WI.GOV

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

RUNOFF COEFFICIENT TABLE

LAND USE	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	0.08 0.22	0.16 0.30	0.22 0.38	0.12 0.26	0.20 0.34	0.27 0.44	0.15 0.30	0.24 0.37	0.33 0.50	0.19 0.34	0.28 0.41	0.38 0.56
MEDIAN STRIP - TURF	0.19 0.24	0.20 0.26	0.24 0.30	0.19 0.25	0.22 0.28	0.26 0.33	0.20 0.26	0.23 0.30	0.30 0.37	0.20 0.27	0.25 0.32	0.30 0.40
SIDE SLOPE - TURF			0.25 0.32			0.27 0.34			0.28 0.36			0.30 0.38
LAND COVER												
ASPHALT	0.70 - 0.95											
CONCRETE	0.80 - 0.95											
BRICK	0.70 - 0.80											
DRIVES, WALKS	0.75 - 0.85											
ROOFS	0.75 - 0.95											
GRAVEL ROADS, SHOULDERS	0.40 - 0.60											

TOTAL PROJECT AREA = 4.8 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 3.5 ACRES

2

N

END CONSTRUCTION
STA. 110+50.29

LEFT TURN LANE, STREETLIGHT RELOCATION
AND NEW DRIVEWAY ENTRANCE

TAYLOR DR

110+00
109+00
108+00
107+00
106+00
105+00
104+00
103+00
102+00
101+00

BP: 9+50.00
PI: 11+59.99
PI: 12+10.84
EP: 103+99.89
PI: 103+04.53
PI: 103+04.47
PI: 102+19.84
PI: 102+19.80
BP: 100+00.00
BP: 100+00.00

BEGIN PROJECT
STA. 9+70.07

END CONSTRUCTION
STA. 100+12.73

SUPERIOR AVE

10
15
20
25
26

EP: 202+57.03
EP: 302+52.16
PI: 402+47.88
PI: 401+81.87

END CONSTRUCTION
STA. 201+16

END CONSTRUCTION
STA. 301+68

END CONSTRUCTION
STA. 401+67

31ST ST
30TH ST
29TH ST

300

BP: 200+00.00
BP: 299+70.00
BP: 400+00.00

EP: 404+23.09

END PROJECT
STA. 25+80.32

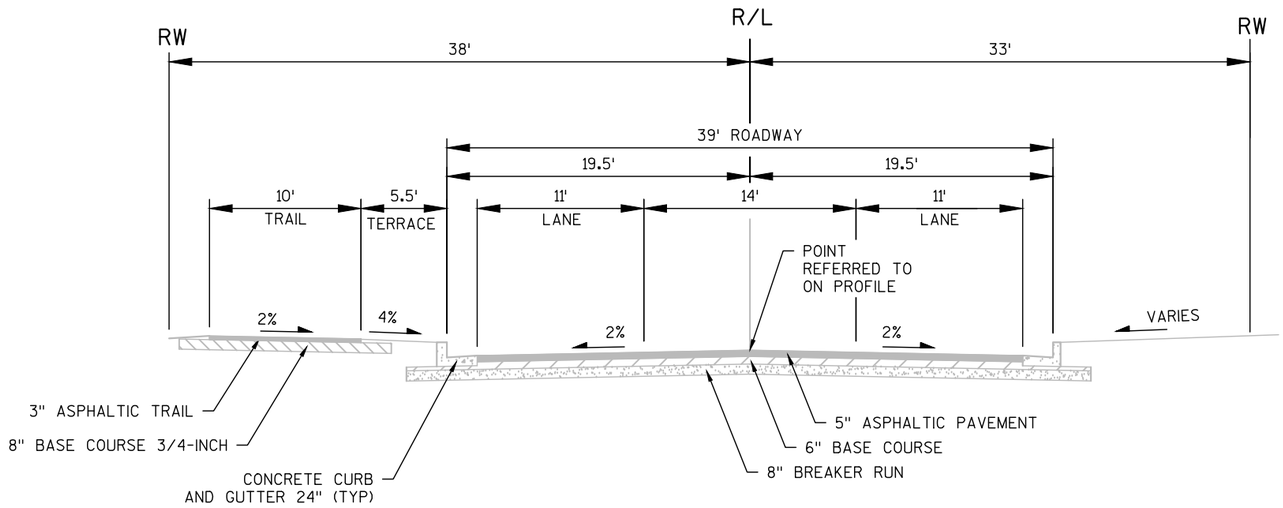
END CONSTRUCTION
STA. 402+61.25

EP: 26+73.15

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PROJECT OVERVIEW	SHEET	E

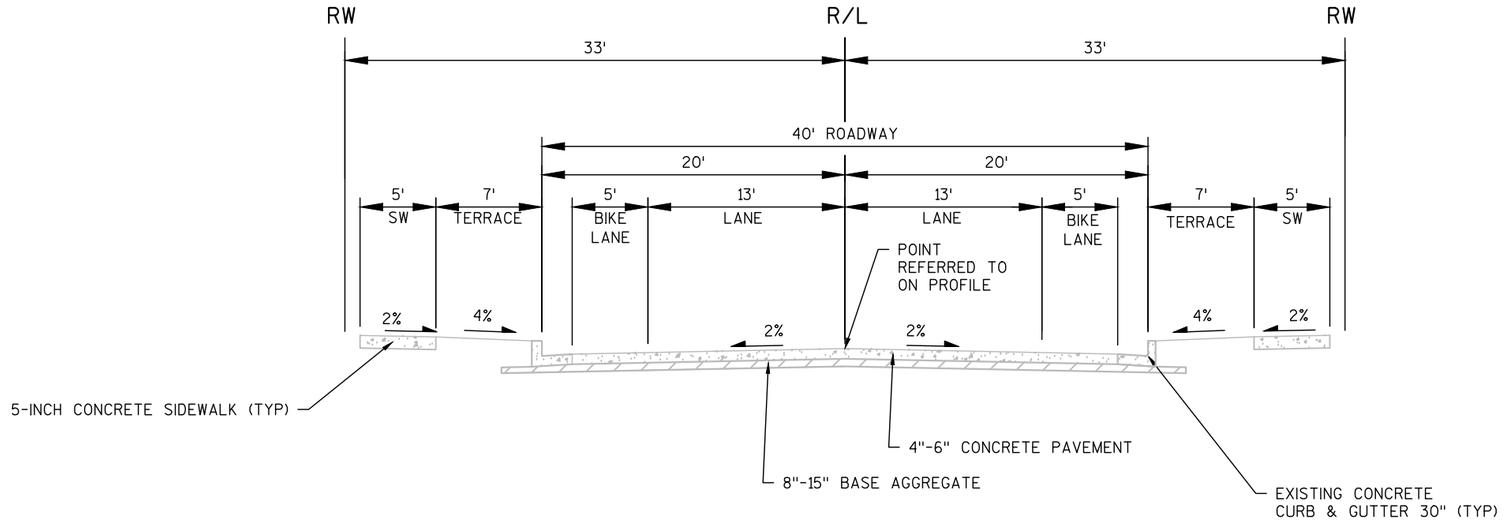
FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\020201_PO.DWG PLOT DATE : 1/10/2019 4:29 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 0.007963

WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION - CTH O

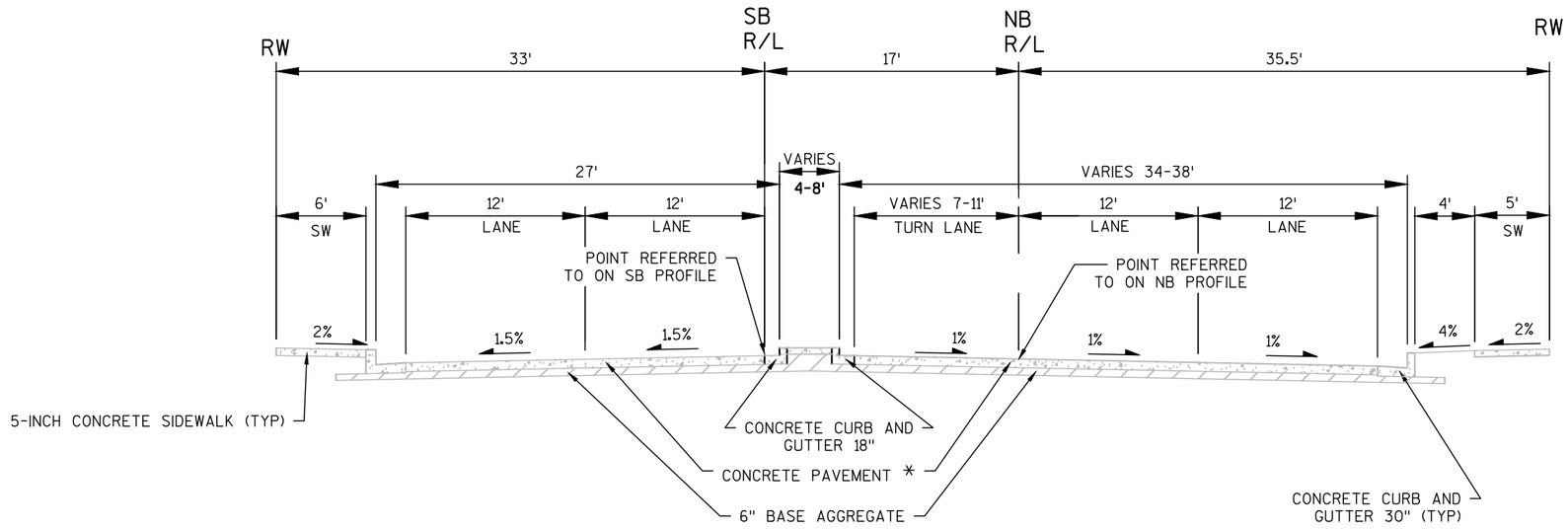
STA 9+70 TO STA 12+16.93



EXISTING TYPICAL SECTION - CTH O

STA 12+16.93 TO STA 25+80.32

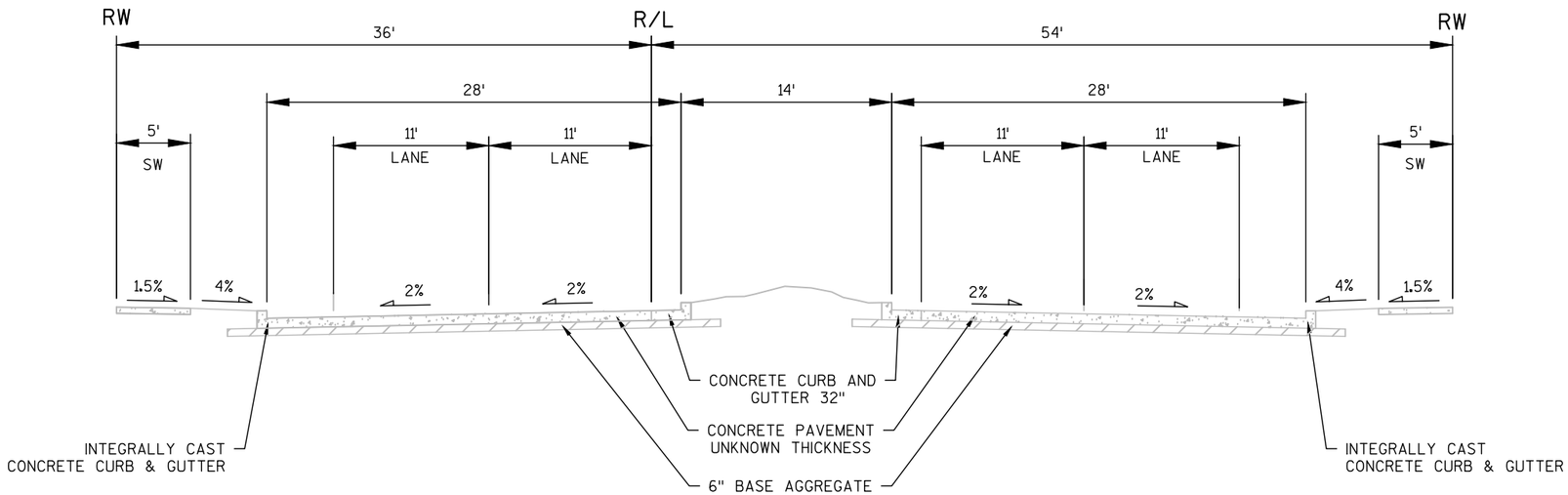
PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN: TYPICAL SECTIONS	SHEET 4	E



EXISTING TYPICAL SECTION - TAYLOR DRIVE

STA 100+12.73 TO SUPERIOR AVENUE
SUPERIOR AVENUE TO STA 103+50.33

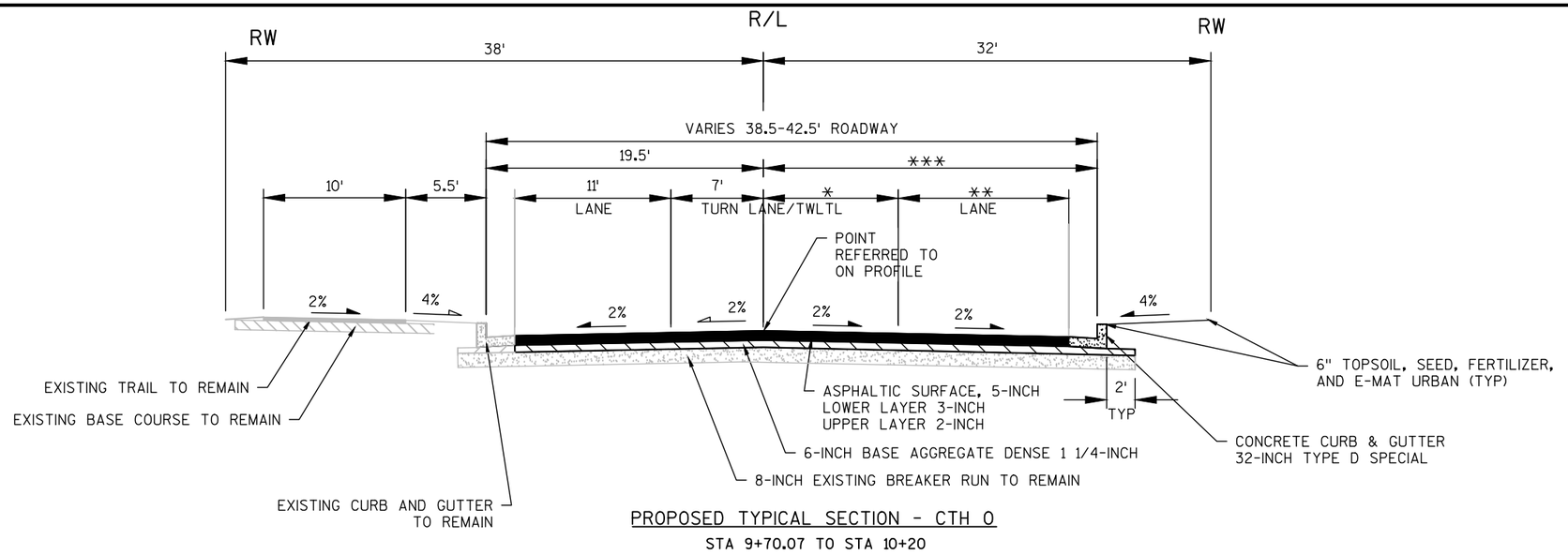
* CONCRETE PAVEMENT DEPTH VARIES
7-INCH FROM STA 100+12.73 TO SUPERIOR AVENUE
8-INCH FROM SUPERIOR AVENUE TO STA 103+50.33



EXISTING TYPICAL SECTION - TAYLOR DRIVE TURN LANE

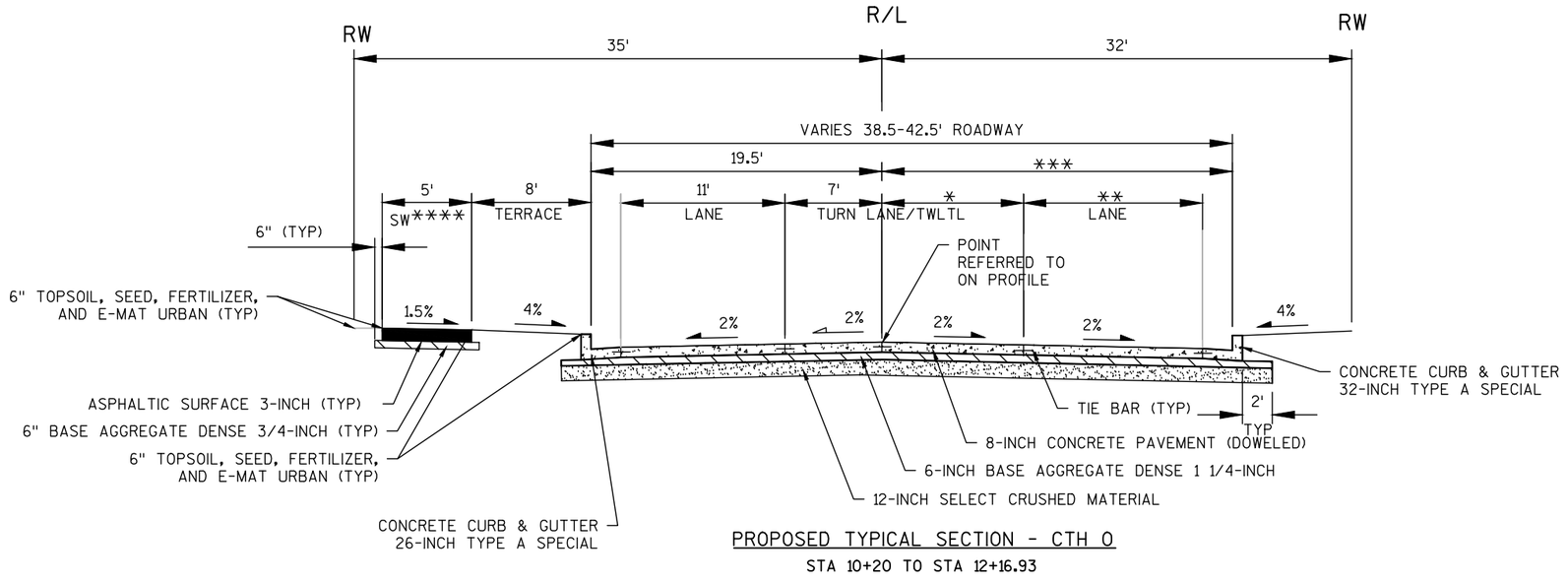
STA 109+00 TO STA 110+50

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN: TYPICAL SECTIONS	SHEET 5	E



PROPOSED TYPICAL SECTION - CTH O

STA 9+70.07 TO STA 10+20

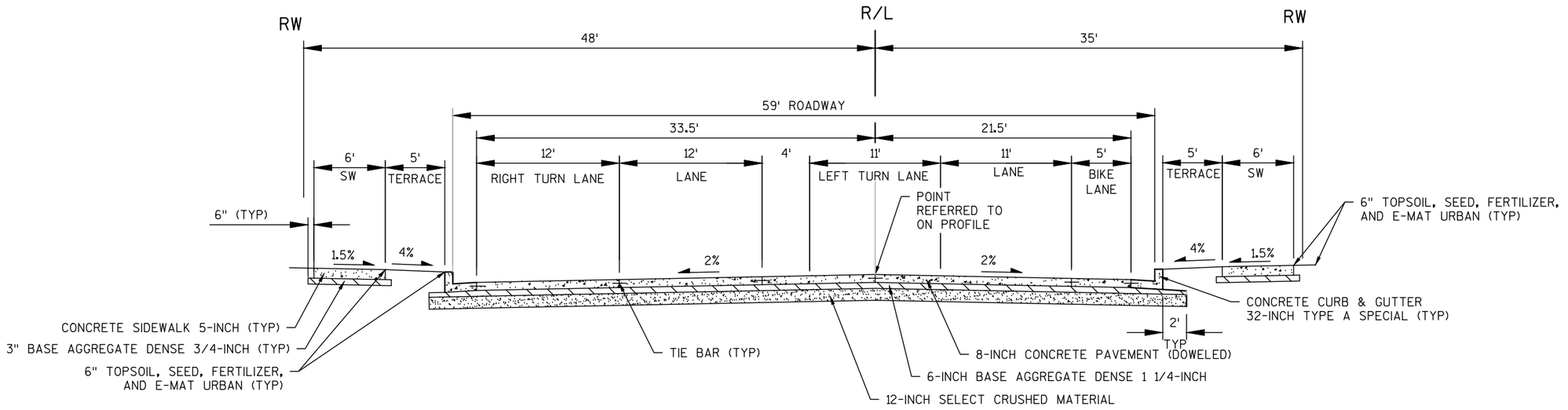


PROPOSED TYPICAL SECTION - CTH O

STA 10+20 TO STA 12+16.93

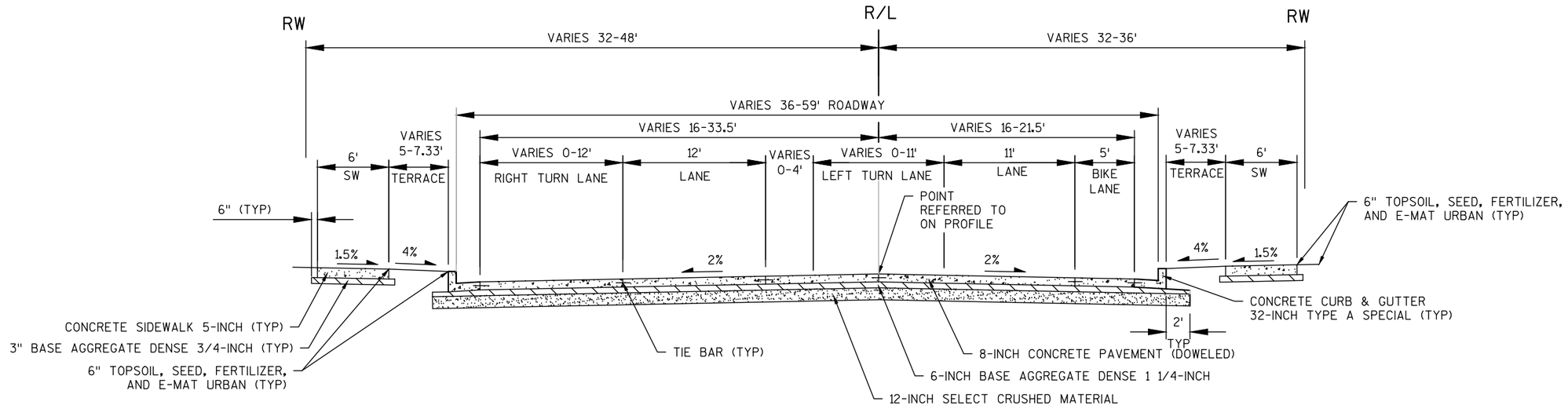
FROM	TO	*	**	***	****
9+70	10+30	TAPER FROM 7' TO 9'	TAPER FROM 11' TO 12'	TAPER FROM 19' TO 23'	EXISTING 10' TRAIL TO REMAIN FROM TO 10+20 TO 11+00 SIDEWALK TRANSITIONS FROM 10' TO 5' AT STATION 11+60.97, SEE CONSTRUCTION DETAILS
10+30	12+16.93	9'	12'	23'	

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN: TYPICAL SECTIONS	SHEET 6	E



PROPOSED TYPICAL SECTION - CTH O

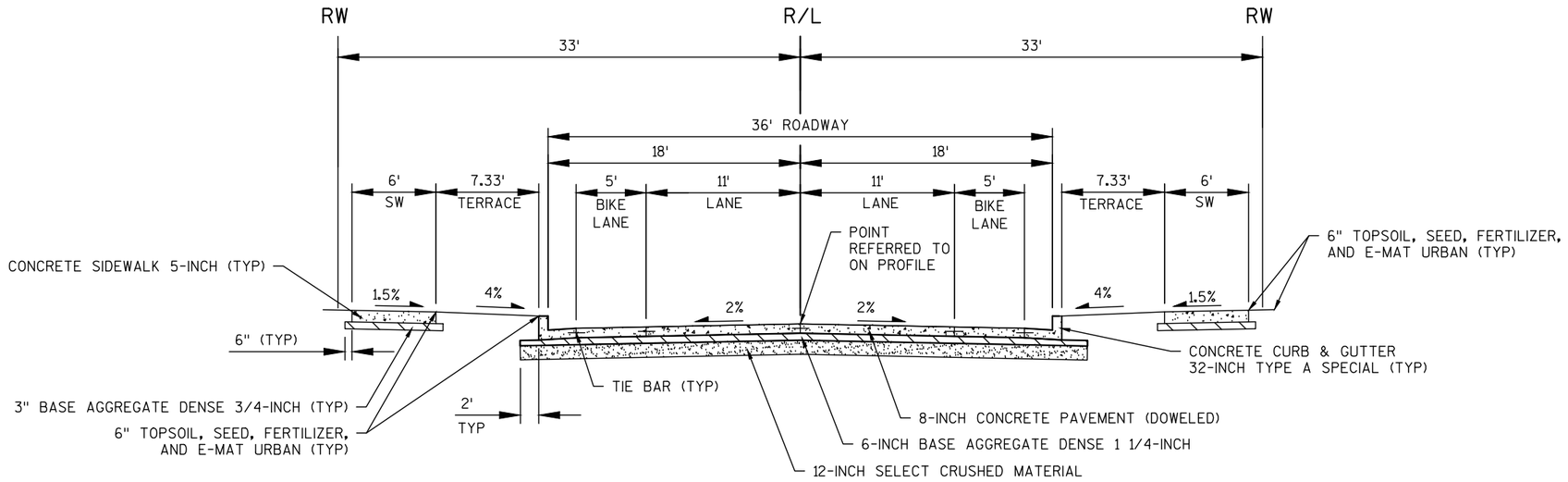
STA 12+16.93 TO STA 13+86



PROPOSED TYPICAL SECTION - CTH O

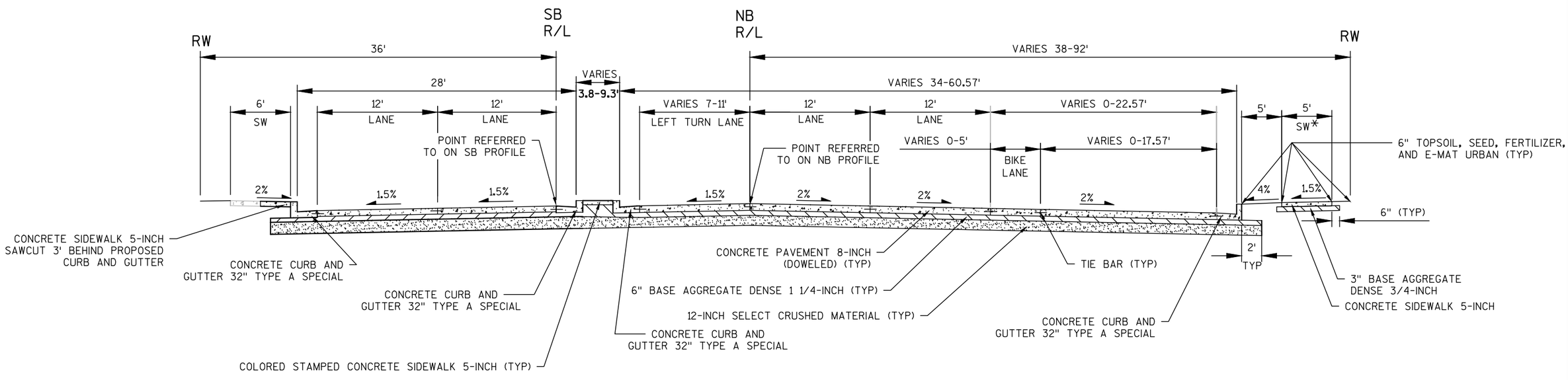
STA 13+86 TO STA 16+10

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN: TYPICAL SECTIONS	SHEET 7	E



PROPOSED TYPICAL SECTION - CTH O

STA 16+10 TO STA 25+80.32



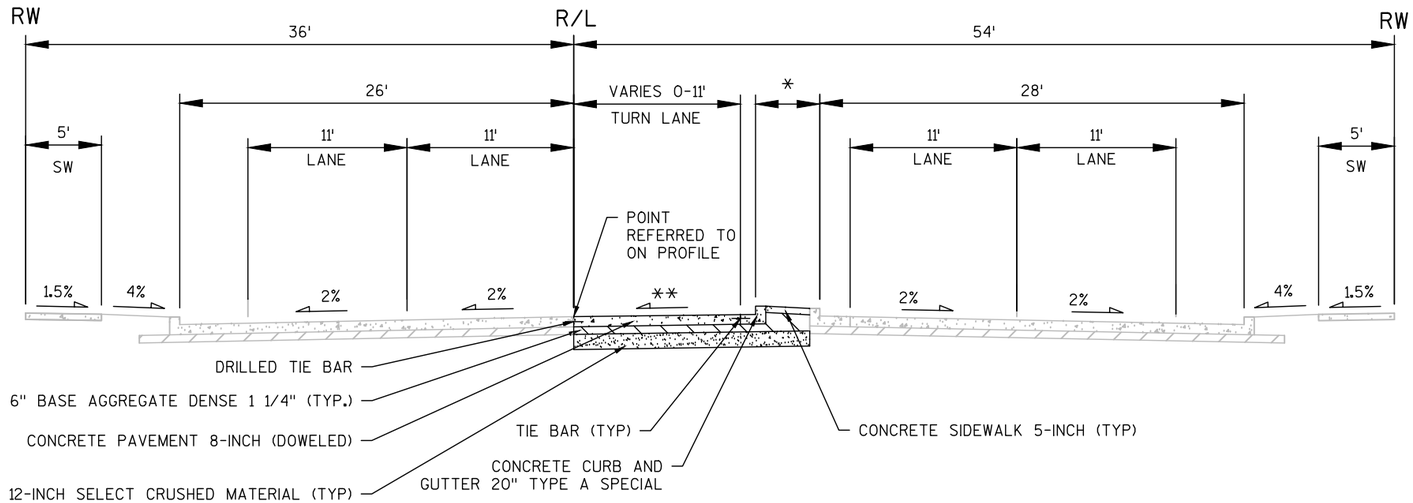
PROPOSED TYPICAL SECTION - TAYLOR DRIVE

STA 100+13.75 TO STA 102+66.75

* SIDEWALK TRANSITIONS FROM 5' TO 6' AT STATION 101+45.21,
SEE CONSTRUCTION DETAILS

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN: TYPICAL SECTIONS	SHEET 8	E

2



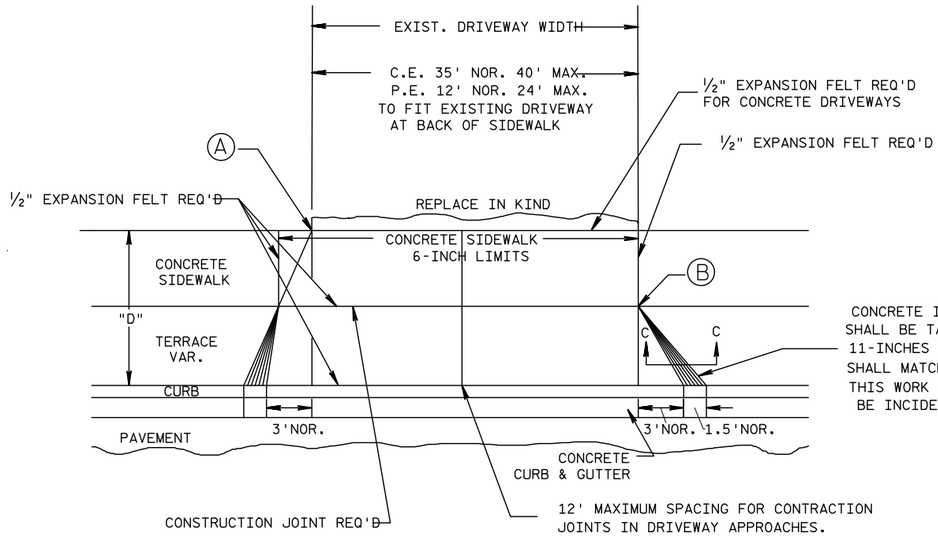
PROPOSED TYPICAL SECTION - TAYLOR DRIVE TURN LANE

STA 109+00 TO STA 110+50

* TERRACE VARIES 4.1-12.7'

** TURN LANE CROSS SLOPE VARIES - SEE CROSS SECTIONS

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

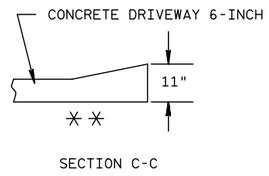


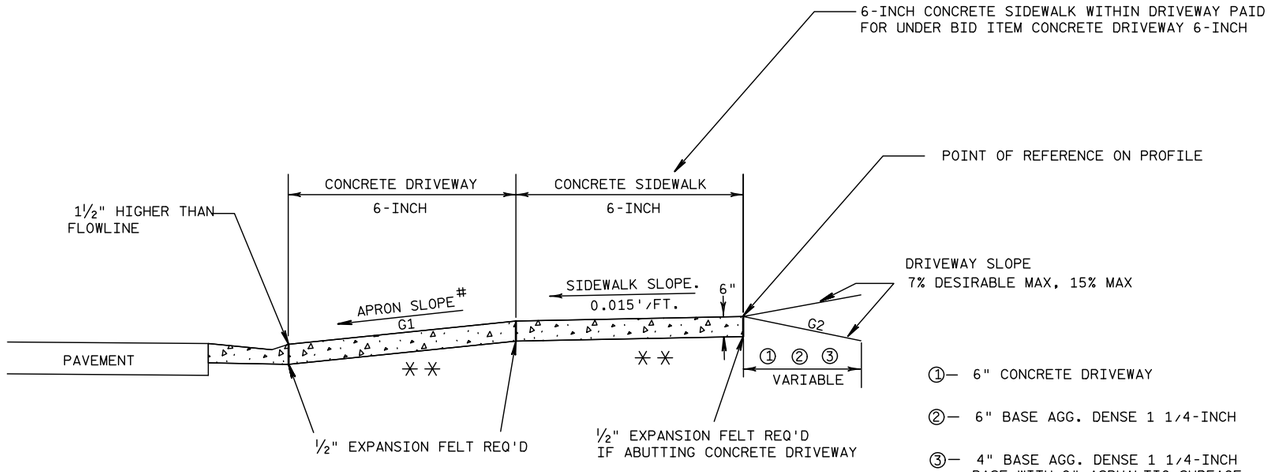
CONCRETE IN THE 1.5' TAPER AREA SHALL BE TAPERED TO A DEPTH OF 11-INCHES AND THE EXPANSION FELT SHALL MATCH THIS DEPTH. THIS WORK AND MATERIAL WILL BE INCIDENTAL TO THE BID ITEM.

PLAN VIEW

Ⓐ WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

Ⓑ WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF SIDEWALK





TYPICAL SIDEWALK SECTION

① — 6" CONCRETE DRIVEWAY

② — 6" BASE AGG. DENSE 1 1/4-INCH

③ — 4" BASE AGG. DENSE 1 1/4-INCH BASE WITH 2" ASPHALTIC SURFACE

✳✳ = 6" BASE AGG. DENSE 1 1/4-INCH REQ'D UNDER CONCRETE DRWY

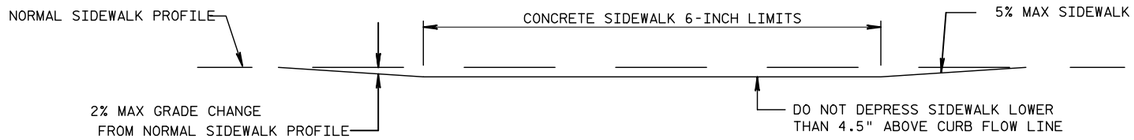
\#

TERRACE	APRON SLOPE* (G1)		
WIDTH	MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	10.0
4 FT	5.0	7.0	10.0
5 FT	4.0	7.0	10.0
6 FT	4.0	7.0	10.0
7 FT	3.5	7.0	10.0
8 FT	3.0	7.0	10.0

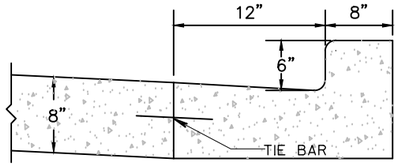
NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE

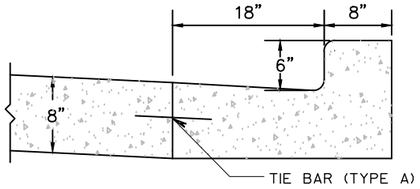
*THE DRIVEWAY AT STATION 10+88 LT HAS A MAXIMUM APRON SLOPE OF 12.2%. IT IS AN EXCEPTION TO THIS TABLE.



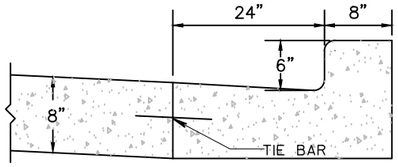
DEPRESSED SIDEWALK PROFILE DETAIL



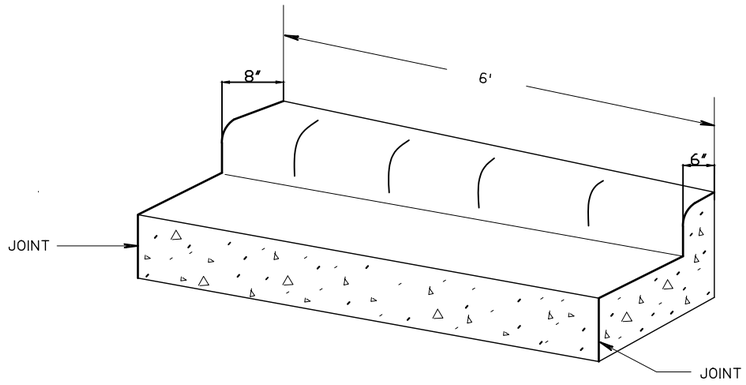
CONCRETE CURB AND GUTTER 20-INCH TYPE A SPECIAL SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE CURB AND GUTTER 18-INCH TYPE A EXCEPT THE CURB HEAD SHALL BE 8-INCH.



CONCRETE CURB AND GUTTER 26-INCH TYPE A & TYPE D SPECIAL SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE CURB AND GUTTER 24-INCH TYPE A & TYPE D, RESPECTIVELY, EXCEPT THE CURB HEAD SHALL BE 8-INCH AND THE CURB PAN SHALL BE 18-INCH.

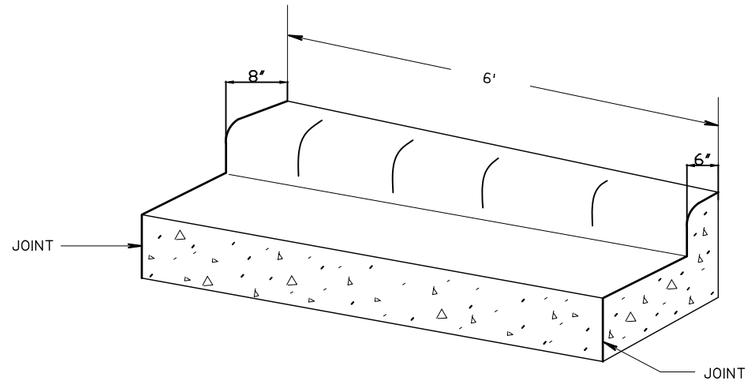


CONCRETE CURB AND GUTTER 32-INCH TYPE A SPECIAL SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE CURB AND GUTTER 30-INCH TYPE A EXCEPT THE CURB HEAD SHALL BE 8-INCH.



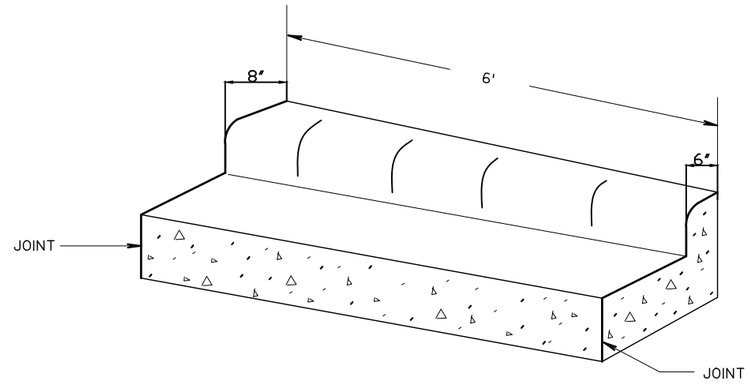
CONCRETE CURB AND GUTTER 20-INCH TYPE A SPECIAL

IF ADJACENT CURB AND GUTTER HAS A 6-INCH CURB HEAD TRANSITION FROM 8-INCH TO 6-INCH CURB HEAD OVER 6 FEET. TRANSITION LENGTH TO BE PAID FOR UNDER BID ITEM CONCRETE CURB AND GUTTER 20-INCH TYPE A SPECIAL.



CONCRETE CURB AND GUTTER 26-INCH TYPE A SPECIAL

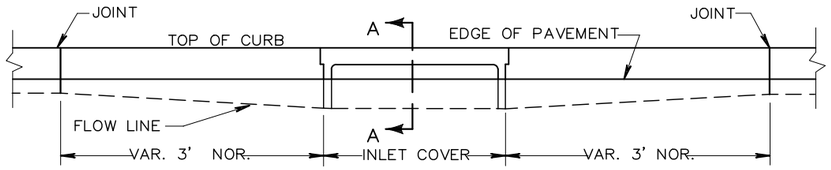
IF ADJACENT CURB AND GUTTER HAS A 6-INCH CURB HEAD TRANSITION FROM 8-INCH TO 6-INCH CURB HEAD OVER 6 FEET. TRANSITION LENGTH TO BE PAID FOR UNDER BID ITEM CONCRETE CURB AND GUTTER 26-INCH TYPE A OR TYPE D SPECIAL.



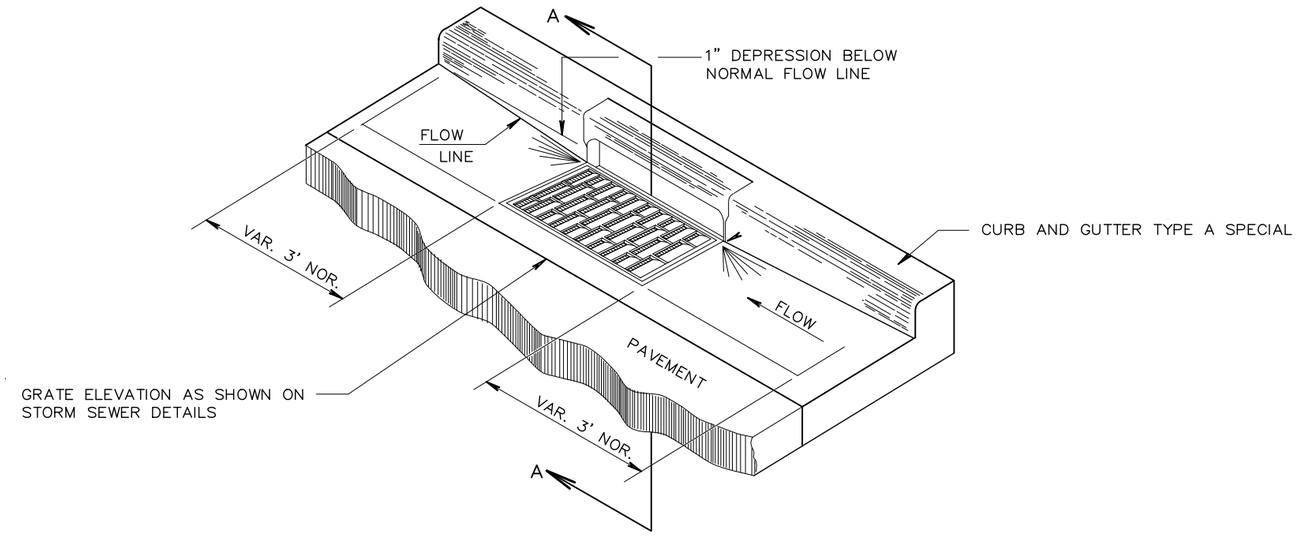
CONCRETE CURB AND GUTTER 32-INCH TYPE A SPECIAL

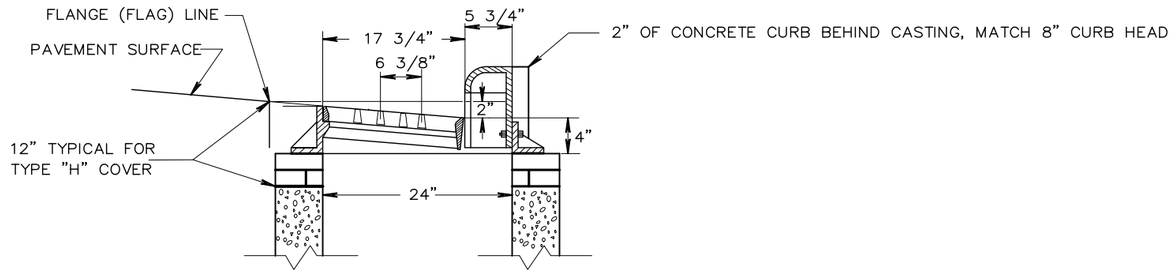
IF ADJACENT CURB AND GUTTER HAS A 6-INCH CURB HEAD TRANSITION FROM 8-INCH TO 6-INCH CURB HEAD OVER 6 FEET. TRANSITION LENGTH TO BE PAID FOR UNDER BID ITEM CONCRETE CURB AND GUTTER 32-INCH TYPE A SPECIAL.

2



ELEVATION

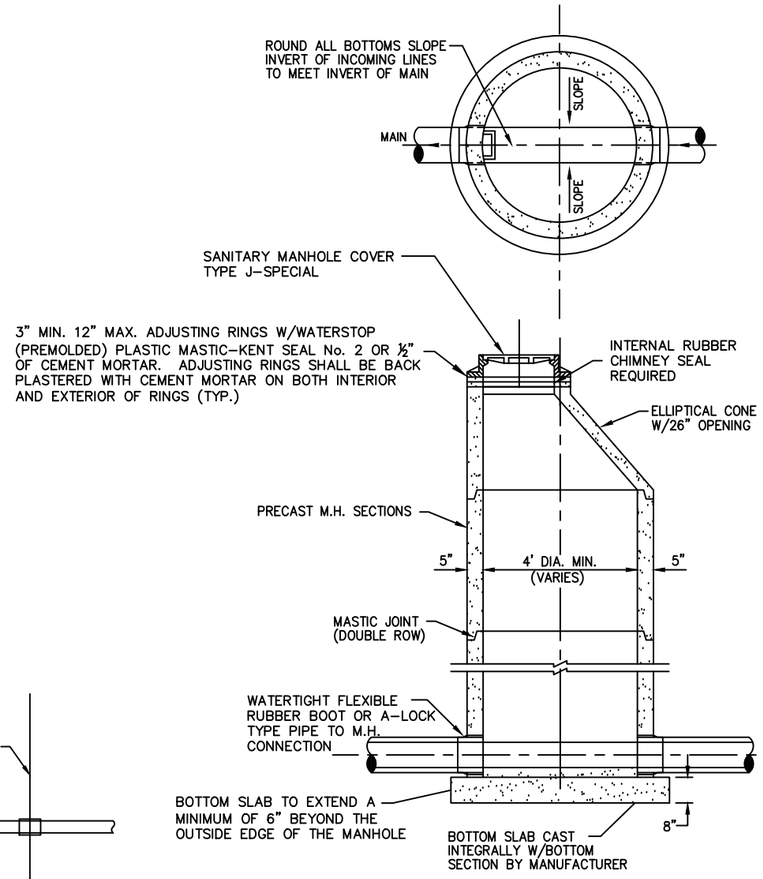




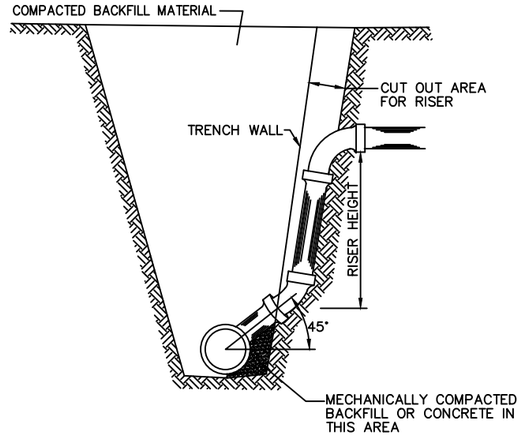
SECTION A–A

DETAIL OF CURB AND GUTTER AT INLETS

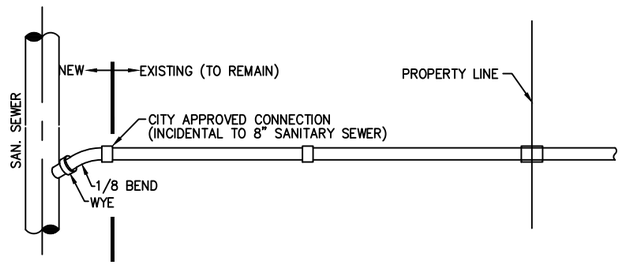
PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN: CONSTRUCTION DETAILS	SHEET 12	E

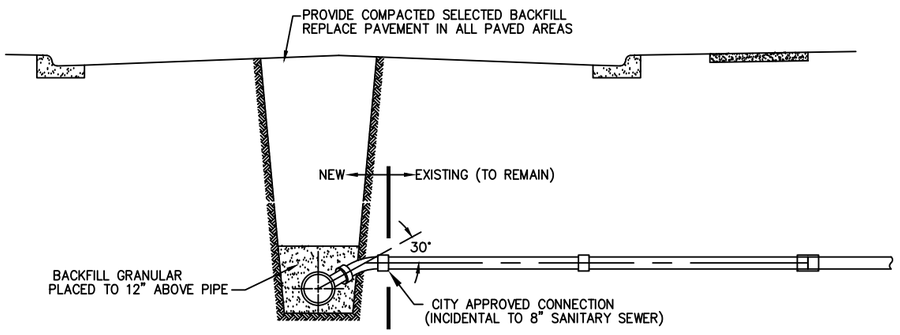


STANDARD PRECAST SANITARY MANHOLE

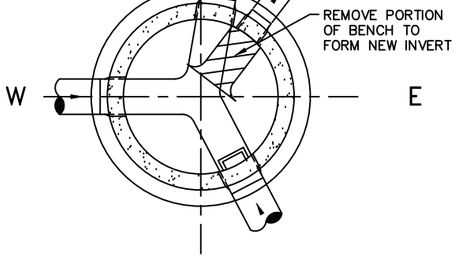


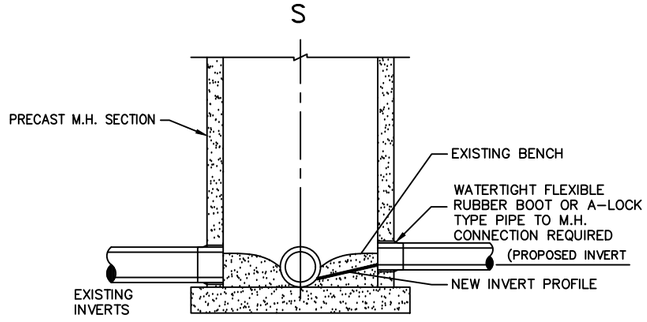
SANITARY LATERAL RISER





TYPICAL CONNECTION SEWER



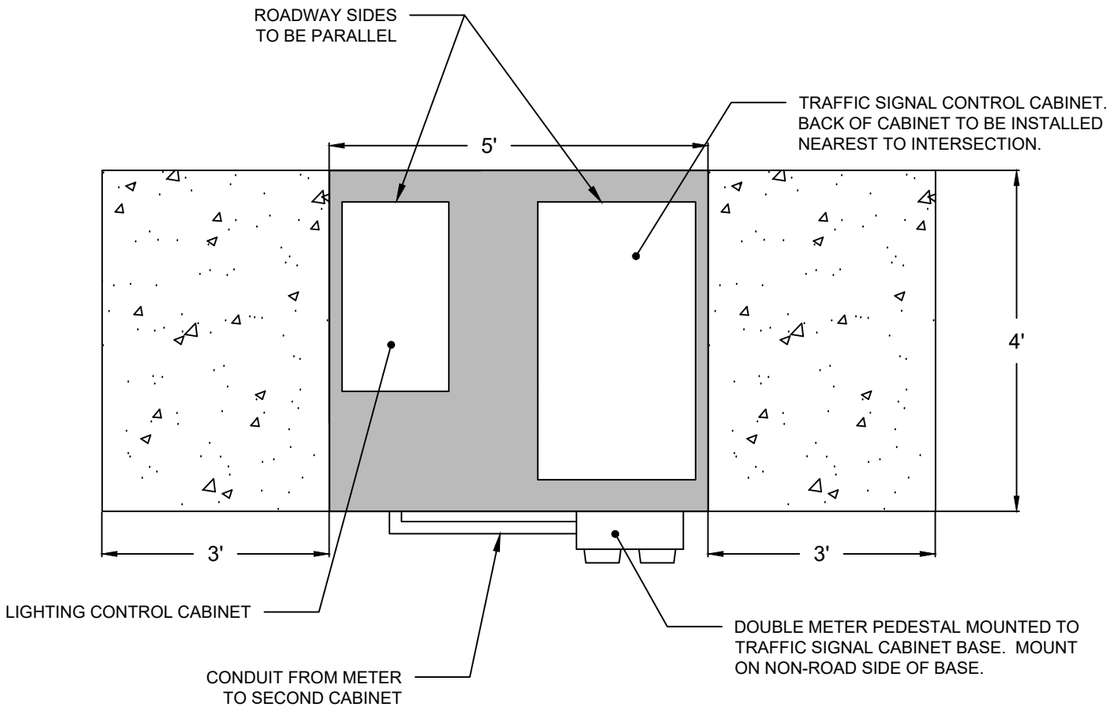


CONNECTING TO EXISTING SANITARY MANHOLE

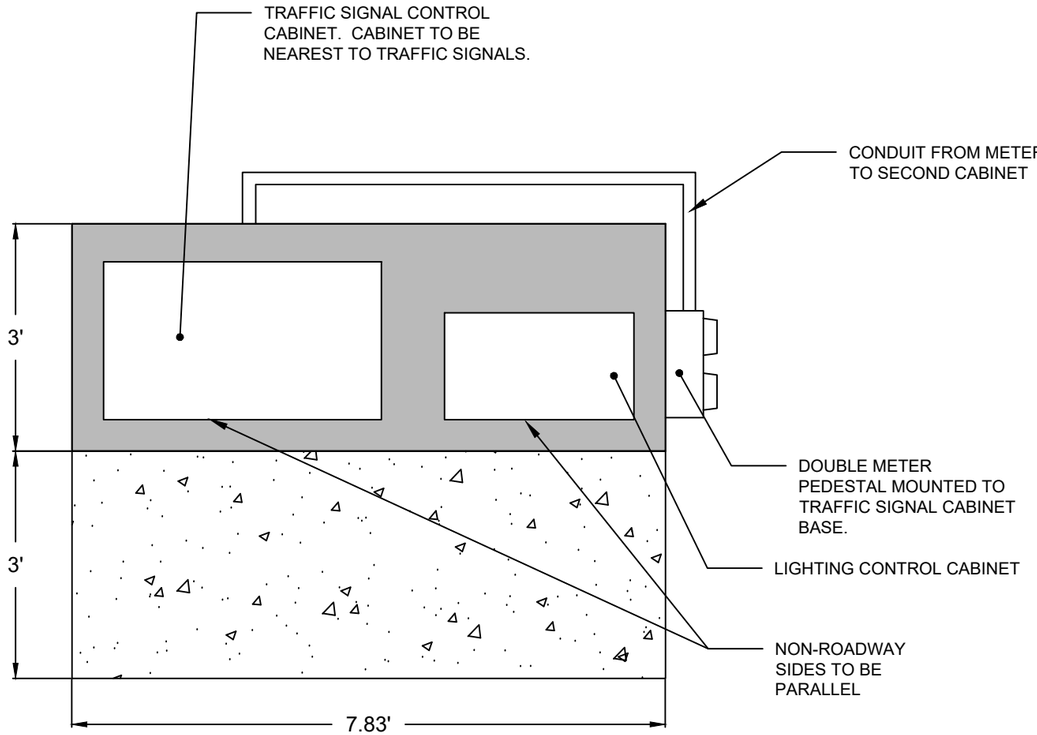
PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN: CONSTRUCTION DETAILS	SHEET 13	E

NOTES:

1. DOUBLE METER PEDESTAL REQUIRED FOR DUAL CONTROLLER CABINET INSTALLATIONS. PROVIDE DOUBLE METER PEDESTAL ACCEPTABLE WITH LOCAL UTILITY.
2. INSTALL CONDUIT FROM DOUBLE METER PEDESTAL TO EACH CABINET BASE AS SHOWN OR UNDER CONCRETE BASE.
3. SIDE-BY-SIDE OR BACK-TO-BACK ORIENTATION TO BE DETERMINED BY ENGINEER.
4. REFER TO WISDOT CONTROL CABINET BASE, TYPE 9, SPECIAL AND TYPE L (30) FOR ADDITIONAL DETAILS OF CONSTRUCTION.

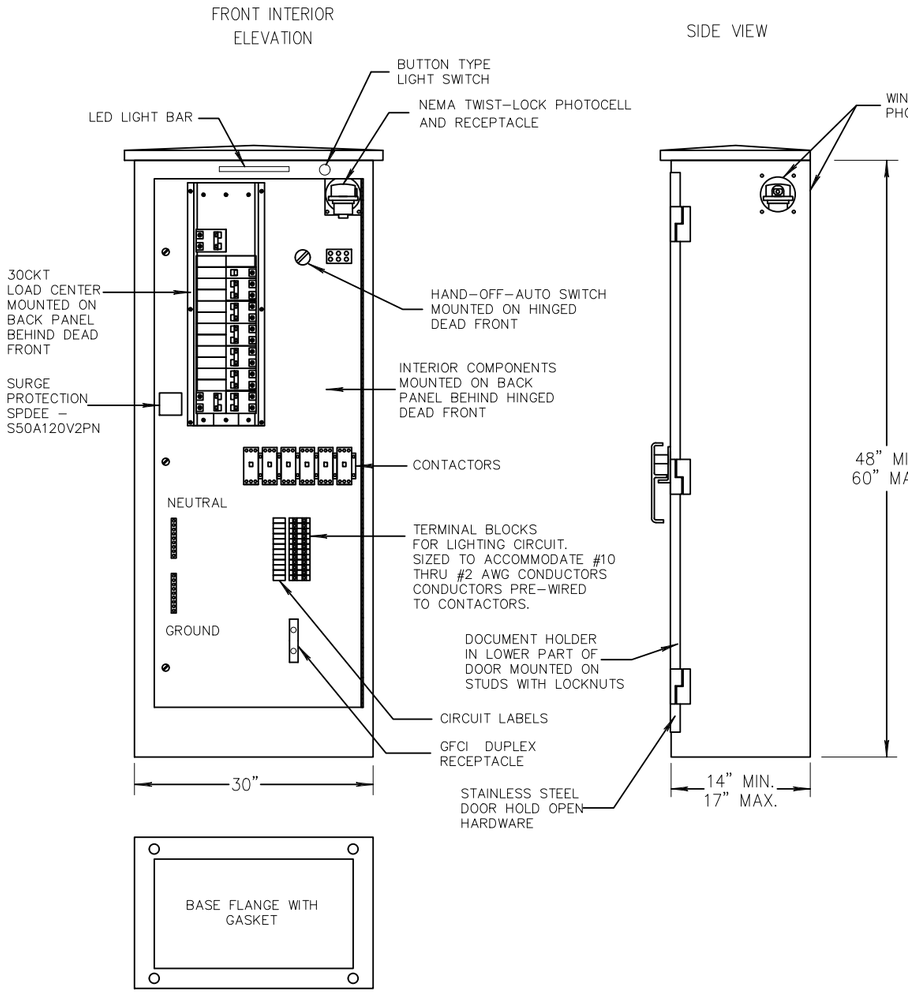


BACK-TO-BACK ORIENTATION

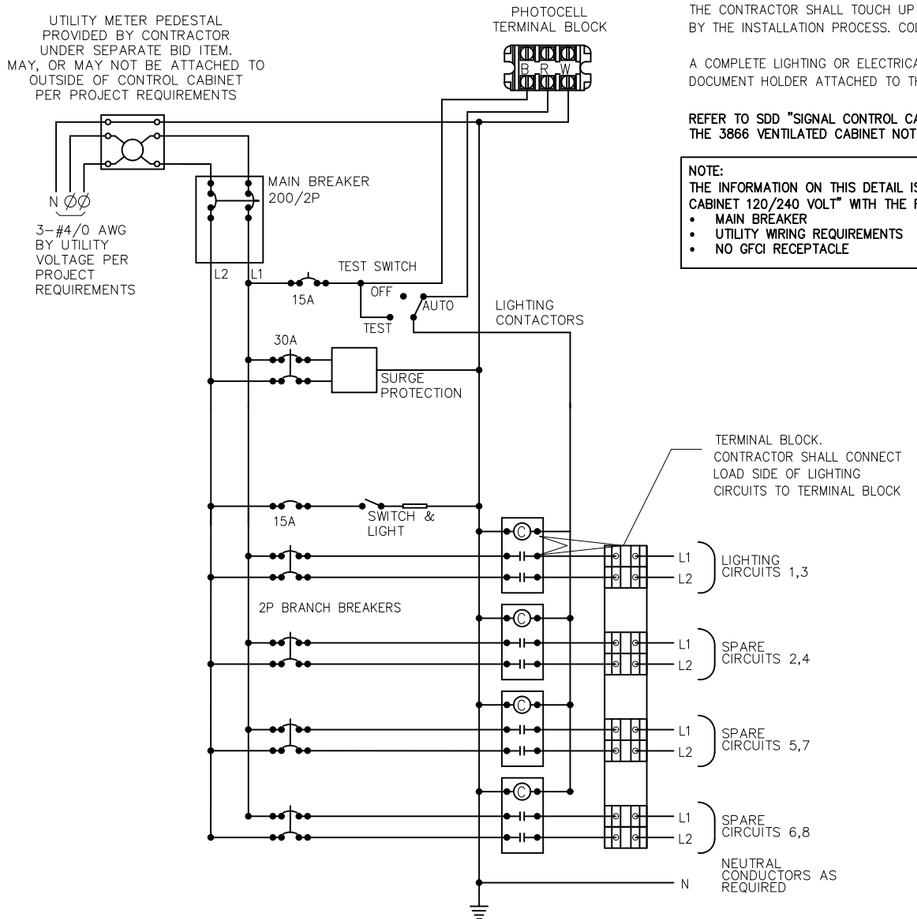


SIDE-BY-SIDE ORIENTATION

COMBINED LIGHTING AND TRAFFIC SIGNAL CABINET BASE



LIGHTING CONTROL CABINET 120/240 VOLT



CONTROL CABINET SCHEMATIC

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.

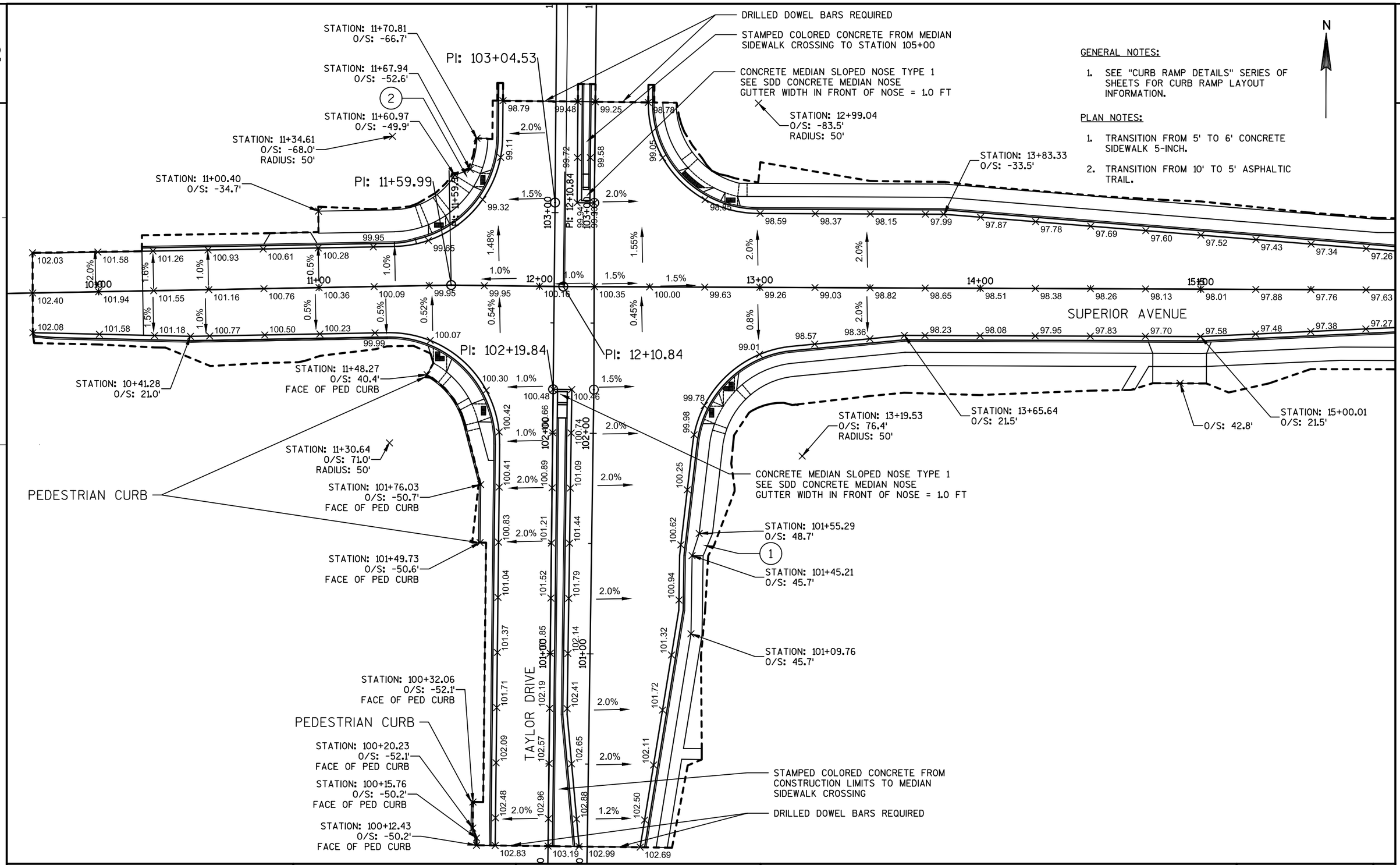
ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

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.

REFER TO SDD "SIGNAL CONTROL CABINET" FOR ADDITIONAL INFORMATION REGARDING THE 3866 VENTILATED CABINET NOT SHOWN ON THIS DRAWING.

NOTE:
THE INFORMATION ON THIS DETAIL IS THE SAME AS ON "SDD LIGHTING CONTROL CABINET 120/240 VOLT" WITH THE FOLLOWING EXCEPTIONS:
- **MAIN BREAKER**
- **UTILITY WIRING REQUIREMENTS**
- **NO GFCI RECEPTACLE**



PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN DETAILS	SHEET 16	E

2

6-INCH CONCRETE SIDEWALK FROM BACK OF CURB TO REGULAR EDGE OF 5-INCH CONCRETE SIDEWALK AT THIS LOCATION

STATION: 19+25.30
O/S: -26.0'

STATION: 19+43.30
O/S: -26.0'

STATION: 19+02.96
O/S: -31.0'
RADIUS: 15'

STATION: 18+33.96
O/S: -31.0'
RADIUS: 15'

O/S: -39.9'

STATION: 16+10.01
O/S: -16.0'

HES LIMIT

STATION: 21+71.78
O/S: -31.0'
RADIUS: 15'

97.34 97.26 97.17 97.06 96.93 96.81 96.68 96.56 96.43 96.30 96.18 96.05 96.28 97.02 96.81 96.51 95.76 96.77 96.56 96.23 95.55 95.27 94.93 94.55 94.18 93.80 93.43 93.05 92.68 92.32 91.99

16+00 17+00 18+00 19+00 20+00 21+00

97.76 97.63 97.50 97.38 97.25 97.13 97.00 96.88 96.75 96.62 96.50 96.37 96.25 96.09 95.87 95.59 95.25 94.87 94.50 94.12 93.75 93.37 93.00 92.64 92.31

SUPERIOR AVENUE

97.38 97.27 97.17 97.06 96.93 96.81 96.68 96.56 96.43 96.30 96.18 96.05 95.82 95.55 95.41 95.27 94.93 94.55 94.18 93.80 93.43 93.05 92.68 92.33 91.99

O/S: 33.1'

STATION: 16+10.01
O/S: 16.0'

ION: 15+00.01
21.5'

STATION: 18+31.31
O/S: 41.0'
RADIUS: 25'

96.36 96.51 96.07

O/S: 41.0'

DRILLED DOWEL BARS REQUIRED

O/S: 35.6'

HES LIMIT

STATION: 19+13.30
O/S: 41.0'
RADIUS: 25'

O/S: 32.9'

O/S: 34.2'

STATION: 21+63.68
O/S: 41.0'
RADIUS: 25'

31ST STREET

HES CONCRETE PAVEMENT REQUIRED AT CTH O/31ST ST. INTERSECTION.

PAVING GAP REQUIRED AT THIS LOCATION.
SEE GENERAL NOTE 2.

GENERAL NOTES:

1. SEE "CURB RAMP DETAILS" SERIES OF SHEETS FOR CURB RAMP LAYOUT INFORMATION.
2. ACCESS TO ST. NICHOLAS HOSPITAL MUST BE MAINTAINED ACROSS SUPERIOR AVENUE AT 31ST STREET FOR EMERGENCY ROOM. PAVING GAPS REQUIRED AT THIS LOCATION.

N

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN DETAILS	SHEET 17	E

GENERAL NOTES:

1. SEE "CURB RAMP DETAILS" SERIES OF SHEETS FOR CURB RAMP LAYOUT INFORMATION.
2. M.E. = MATCH EXISTING

N

29TH STREET

30TH STREET

SUPERIOR AVENUE

STATION: 21+71.78
O/S: -31.0'
RADIUS: 15'

O/S: -39.9'

STATION: 22+40.97
O/S: -31.0'
RADIUS: 15'

O/S: -42.0'

O/S: -32.3'

O/S: -32.2'

STATION: 24+87.93
O/S: -41.0'
RADIUS: 25'

O/S: -46.3'

DRILLED DOWEL BARS REQUIRED

STATION: 25+73.98
O/S: -43.6'
RADIUS: 25'

EPP: 26+73.55

92.32 91.99 91.72 92.69 92.40 91.97 92.60 91.84 91.90 91.45 91.33 90.94 90.59 90.24 89.89 89.54 89.19 88.84 88.49 88.17 87.94 87.58 87.65 87.76 88.01 87.60 87.51 87.54 87.44 87.24

22+00 23+00 24+00 25+00 26+00 26+73

92.64 92.31 92.02 91.76 91.54 91.26 90.91 90.56 90.21 89.86 89.51 89.16 88.81 88.49 88.26 88.06 87.94 87.75 87.49

92.33 91.99 91.95 91.48 90.94 90.59 90.24 89.89 89.54 89.19 88.84 88.49 88.17 87.94 87.73 87.61 87.56 87.93 87.49 87.48 87.45 87.56

STATION: 21+63.68
O/S: 41.0'
RADIUS: 25'

91.58 91.95 91.61

M.E. M.E. M.E.

O/S: 53.4'

STATION: 22+45.43
O/S: 41.0'
RADIUS: 25'

O/S: 33.9'

STATION: 24+87.56
O/S: 41.0'
RADIUS: 25'

O/S: 47.8'

STATION: 25+73.31
O/S: 42.5'
RADIUS: 25'

DRILLED DOWEL BARS REQUIRED

DRILLED DOWEL BARS REQUIRED

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN DETAILS	SHEET 18	E

2

2

N

EP: 111+19.79

111+20

111+00

110+00

109+00

108+00

110+50, 1' RT

DRILLED TIE BARS REQUIRED

ADJUST EXISTING SANITARY MANHOLE TO MATCH PROPOSED TURN LANE PAVEMENT ELEVATION

CONCRETE SIDEWALK 5-INCH (NOT COLORED) MATCH MEDIAN AT ADJACENT LT TURN LANE TO SOUTH

EXISTING STREET LIGHT TO BE RELOCATED. SEE LIGHTING PLAN SHEETS FOR MORE INFORMATION.

CONCRETE MEDIAN SLOPED NOSE TYPE 1 SEE SDD CONCRETE MEDIAN NOSE GUTTER WIDTH IN FRONT OF NOSE = 2.0 FT MATCH EXISTING GUTTER WIDTH ON EAST SIDE OF NOSE

109+07

DRILLED TIE BARS REQUIRED

109+07, 18.25' RT

2.0%

1.5%

0.9%

109+92, MATCH BACK OF EXISTING CURB

109+82, 11' RT

109+14, 18.25' RT

109+29, 42.48' RT

109+29, 52.48' RT

109+19, 53.91' RT

R10'

DRILLED TIE BARS REQUIRED

109+07, 42.51' RT

R20'

108+78, 53.92' RT

108+59, 63.99' RT

108+60, 42.58' RT

TAYLOR DRIVE SB

TAYLOR DRIVE NB

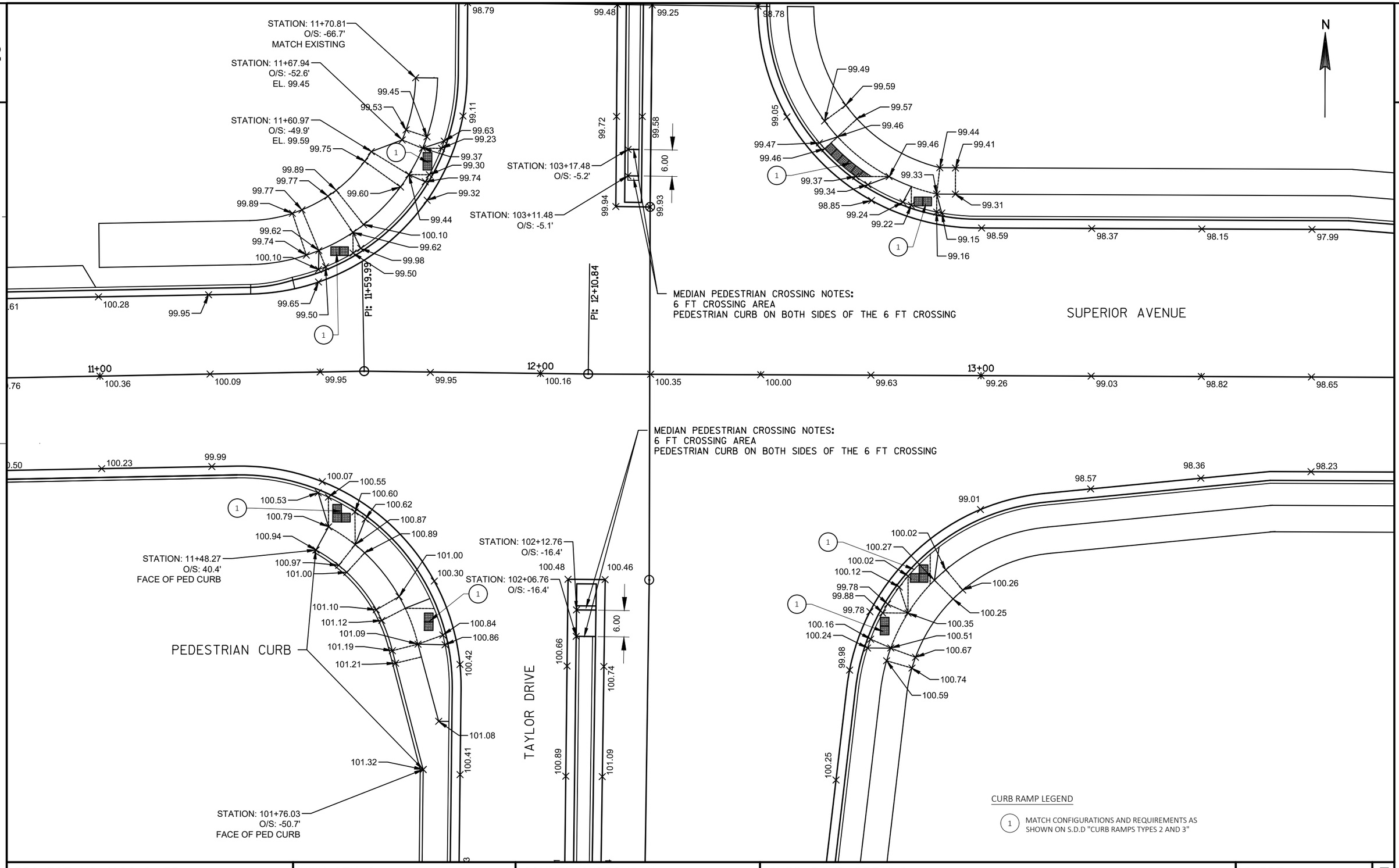
GAS

NEW TURN LANE TO HOSPITAL

59281631521
ST NICHOLAS HOSPITAL
1703 N TAYLOR DR

59281631523
ST NICHOLAS HOSPITAL
1621 N TAYLOR DR

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN DETAILS	SHEET 19	E

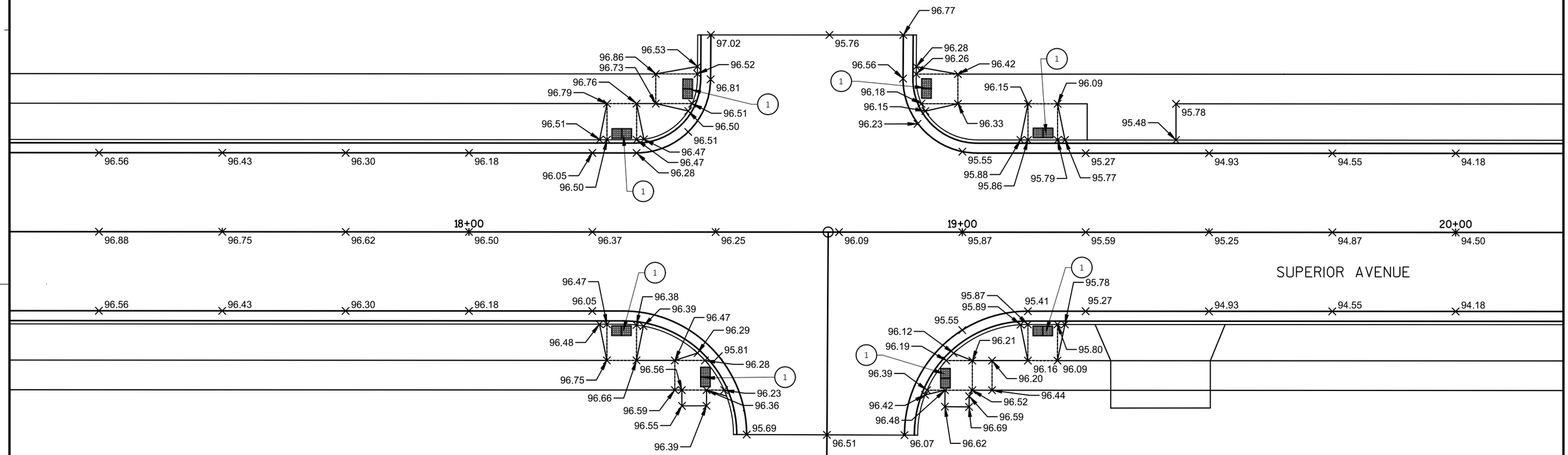


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CURB RAMP DETAILS	SHEET	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\021205_PD.DWG
LAYOUT NAME - 021201_PD - 021201_PD
PLOT DATE : 1/14/2019 2:28 PM PLOT BY : HOLZEM, ANNE PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

N



CURB RAMP LEGEND

(1) MATCH CONFIGURATIONS AND REQUIREMENTS AS SHOWN ON S.D.D "CURB RAMPS TYPES 2 AND 3"

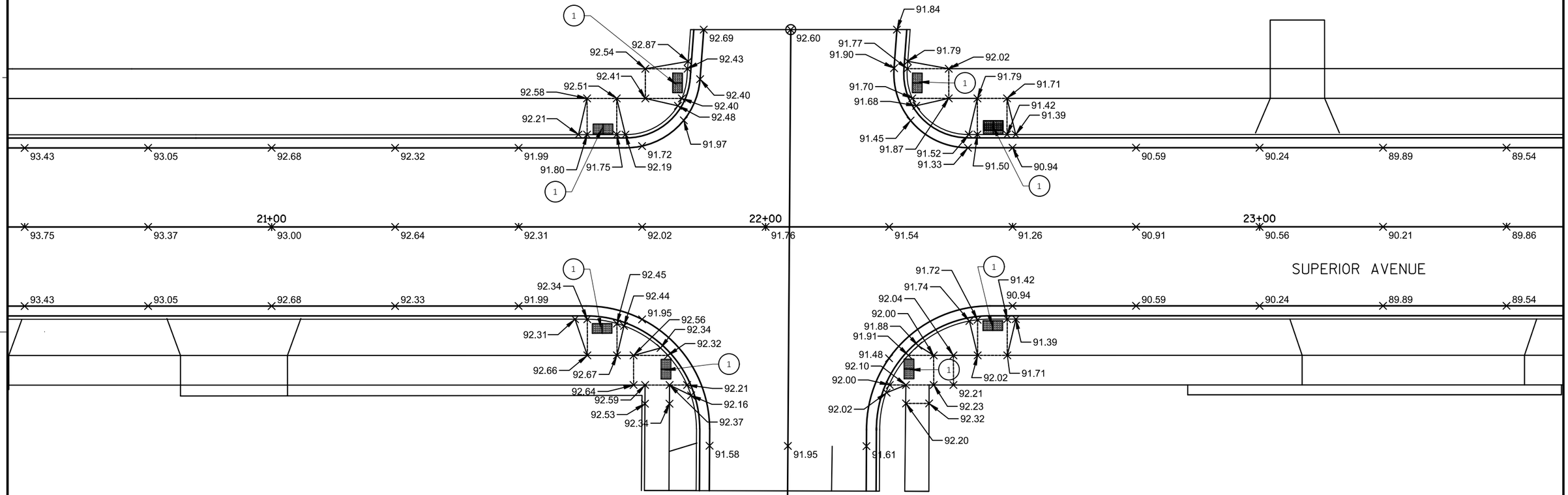
PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CURB RAMP DETAILS	SHEET 21	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\021205_PD.DWG
LAYOUT NAME - 050101_PP - 050103_PP
PLOT DATE : 1/10/2019 4:30 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

2

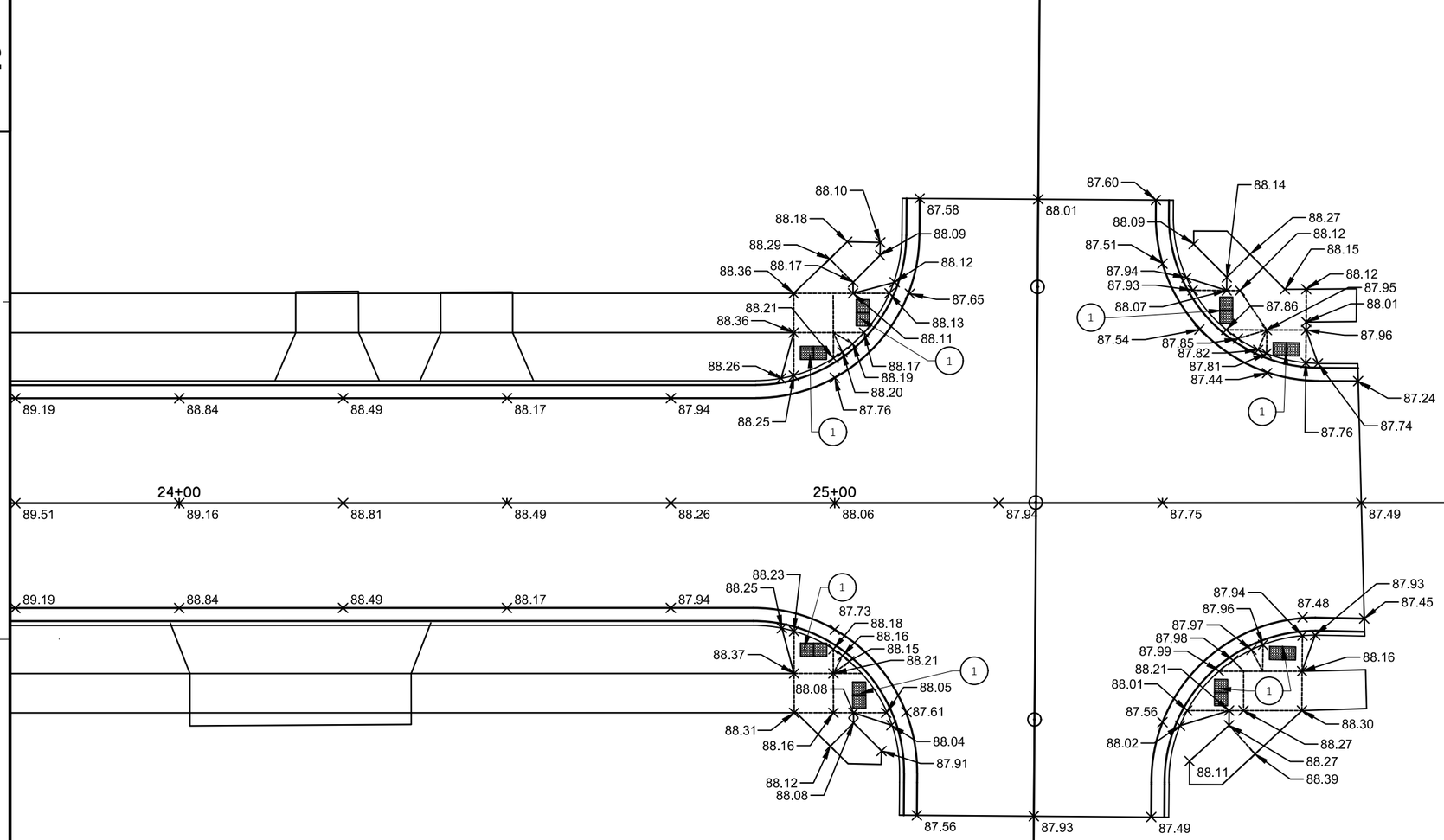
N



CURB RAMP LEGEND

(1) MATCH CONFIGURATIONS AND REQUIREMENTS AS SHOWN ON S.D.D "CURB RAMPS TYPES 2 AND 3"

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CURB RAMP DETAILS	SHEET 22	E



CURB RAMP LEGEND

(1) MATCH CONFIGURATIONS AND REQUIREMENTS AS SHOWN ON S.D.D "CURB RAMPS TYPES 2 AND 3"

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CURB RAMP DETAILS	SHEET 23	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\021205_PD.DWG
LAYOUT NAME - 021205_PD - 021208_PD

PLOT DATE : 1/10/2019 4:30 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

WV ADJUSTMENT
STATION: 9+95.95
OFFSET: 12.74

WV ADJUSTMENT
STATION: 9+97.21
OFFSET: 12.46

STA 11+45, 20.6' LT
CATCH BASINS 2x3-H
CB 23

STA 11+30, 19.0' LT
CATCH BASINS 2x3-H
CB 22

PI: 103+04.53

6FT, 15-INCH.
CONNECT TO EXISTING MANHOLE

REMOVE
INLET

TAYLOR DRIVE

PI: 12+10.84

REMOVE
INLET

CB 29
STA 103+33, 28.7' RT
CATCH BASINS 2x3-H
CONCRETE COLLAR REQ'D

CB 1
STA 13+03, 35.0' LT
CATCH BASINS 2x3-H

MH 1
STA 13+18, 11.0' LT
MANHOLES 4-J

CAUTION

PI: 103+04.47

WV ADJUSTMENT
STATION: 12+22.08
OFFSET: 8.20

WV ADJUSTMENT
STATION: 12+49.14
OFFSET: 5.81

N

MH 2

CB 3

24"

SUPERIOR AVENUE

STA 11+50, 19.5' RT
MANHOLES 4-J
MH 12

4FT, 18-INCH.
CONC COLLAR REQ'D.

REMOVE
INLET

ABD.
12-INCH
STORM

CB 26
STA 102+00, 1.5' RT
CATCH BASINS 2x3-H

CAUTION

REMOVE
INLET

WV ADJUSTMENT
STATION: 10+05.77
OFFSET: 15.72

CAUTION

12FT, 12-INCH
CONNECT TO EX.
CONC COLLAR REQ'D

PI: 102+19.84

PI: 102+19.80

STA 11+17, 22.5' RT
CATCH BASINS 2x3-H
CB 20

STA 11+27, 22.5' RT
CATCH BASINS 2x3-H
CB 21

4FT, 15-INCH. CONC COLLAR REQ'D.

STA 101+87, 25.5' LT
CATCH BASINS 2x3-H
CB 24

STA 102+00, 5.0' LT
MANHOLES 5-J
MH 13

4FT, 15-INCH.
CONC COLLAR
REQ'D.

CB 27
STA 102+00, 11.5' LT
CATCH BASINS 2x3-H

CB 2
STA 13+18, 27.8' RT
CATCH BASINS 2x3-H

CB 28
STA 101+93, 46.4' RT
CATCH BASINS 2x3-H

CAUTION

WV ADJUSTMENT
STATION: 16+08.30
OFFSET: 10.19

CB 4

EROSION CONTROL LEGEND

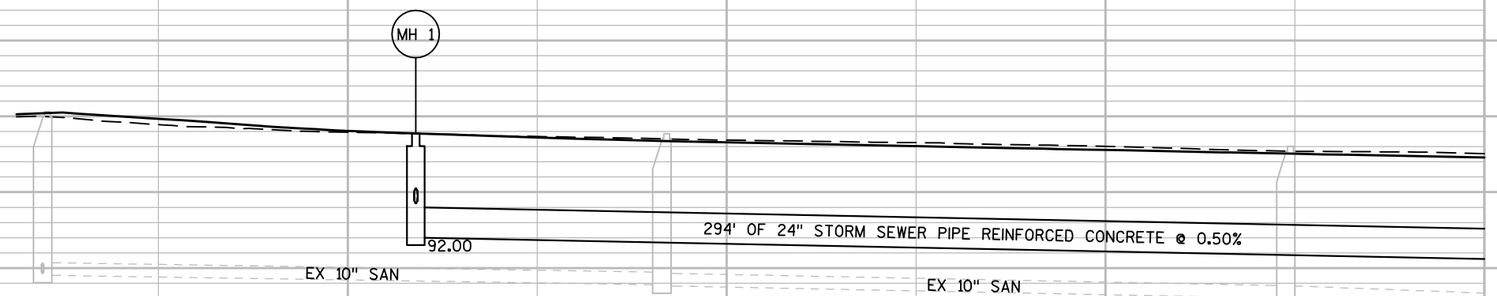
- INLET PROTECTION
- SILT FENCE
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- ROCK BAGS

EROSION CONTROL NOTES

ALL EXISTING INLETS TO BE REMOVED OR REMAIN IN PLACE SHALL HAVE INLET PROTECTION PLACED PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.

INLET PROTECTION TYPE A REQUIRED AT INLETS WHERE CASTINGS ARE NOT INSTALLED OR NOT PERMANENTLY IN PLACE.

INLET PROTECTION TYPE C REQUIRED AT INLETS WHERE CASTINGS ARE INSTALLED AND PERMANENTLY IN PLACE.



PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	STORM SEWER AND EROSION CONTROL	SHEET 24	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022501_SS - 022501_SS
PLOT DATE : 1/10/2019 4:55 PM PLOT BY : BREMER, SAM PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2

ABD. 12-INCH STORM SEWER

ABANDON 15-INCH STORM SEWER.
REMOVE 15-INCH STORM SEWER
WHERE IT INTERFERES WITH NEW CONSTRUCTION

CB 3 STA 16+12, 17.5' LT CATCH BASINS 2x3-H

MH 2 STA 16+12, 11.0' LT MANHOLES 4-J

STA 18+20, 17.5' LT CATCH BASINS 2x3-H CB 5

STA 18+20, 11.0' LT MANHOLES 4-J MH 3

REMOVE MANHOLE

MH 4 STA 18+88, 11.0' LT MANHOLES 6-J

STA 20+61, 11.0' LT MANHOLES 6-J MH 5

CB 8

CB 9

REMOVE MANHOLE

REMOVE 36-INCH STORM

REMOVE 36-INCH STORM

MH 6

EP: 302+52.16

REMOVE MANHOLE

REMOVE INLETS (4)

ABANDON 15-INCH STORM SEWER

ABANDON 12-INCH STORM SEWER

302+00

N

12" 24" 12" 24" 8" 36" 8" 42" 12" 42"

16+00 17+00 18+00 EP: 202+57.03 19+00 20+00 21+00 22+00

SUPERIOR AVENUE

CAUTION

CAUTION

REMOVE INLET

STA 18+20, 17.5' RT CATCH BASINS 2x3-H CB 6

WV ADJUSTMENT
STATION: 18+55.22
OFFSET: 8.18

WV ADJUSTMENT
STATION: 18+60.95
OFFSET: 17.64

202+00

31ST STREET

CB 7 STA 19+25, 17.5' RT CATCH BASINS 2x3-H

CONC. COLLAR REQ'D

STA 21+50, 17.5' RT CATCH BASINS 2x3-H CB 10

STA 21+56, 17.5' RT CATCH BASINS 2x3-H CB 11

CB 14

CB 15

30TH STREET

CB 4 STA 16+12, 17.5' RT CATCH BASINS 2x3-H

EROSION CONTROL NOTES

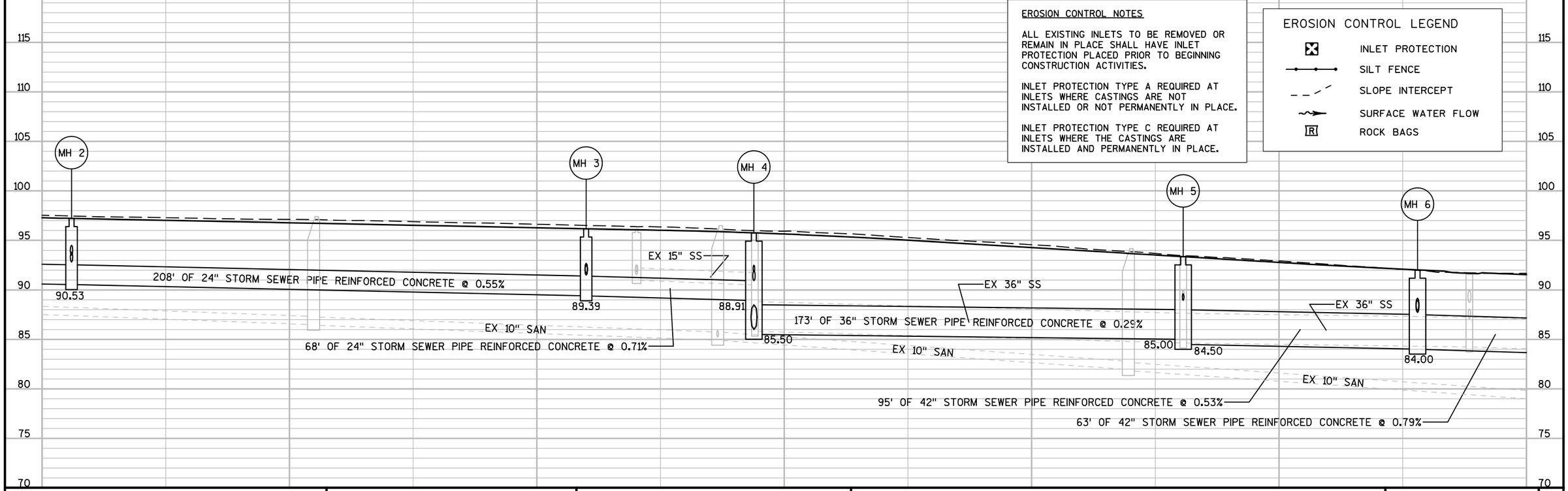
ALL EXISTING INLETS TO BE REMOVED OR REMAIN IN PLACE SHALL HAVE INLET PROTECTION PLACED PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.

INLET PROTECTION TYPE A REQUIRED AT INLETS WHERE CASTINGS ARE NOT INSTALLED OR NOT PERMANENTLY IN PLACE.

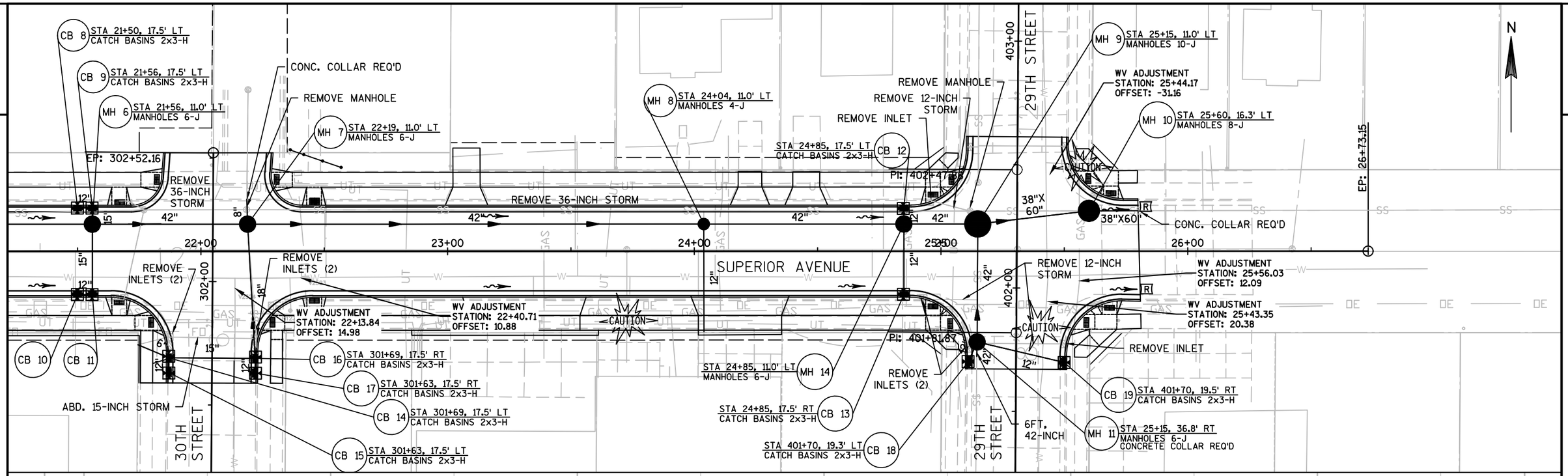
INLET PROTECTION TYPE C REQUIRED AT INLETS WHERE THE CASTINGS ARE INSTALLED AND PERMANENTLY IN PLACE.

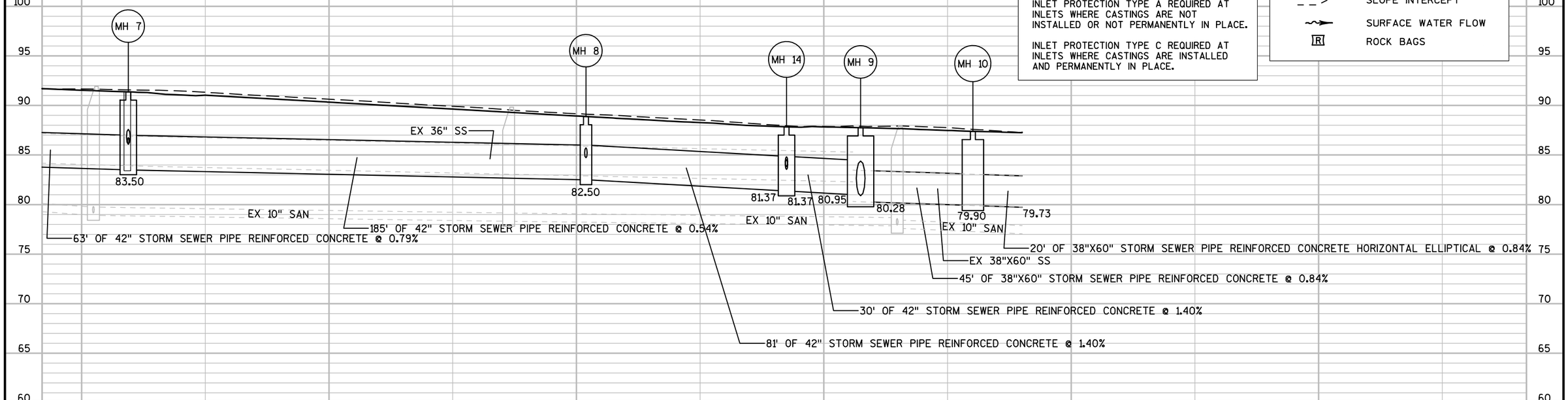
EROSION CONTROL LEGEND

- INLET PROTECTION
- SILT FENCE
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- R ROCK BAGS



PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	STORM SEWER AND EROSION CONTROL	SHEET 25 E





EROSION CONTROL NOTES

ALL EXISTING INLETS TO BE REMOVED OR REMAIN IN PLACE SHALL HAVE INLET PROTECTION PLACED PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.

INLET PROTECTION TYPE A REQUIRED AT INLETS WHERE CASTINGS ARE NOT INSTALLED OR NOT PERMANENTLY IN PLACE.

INLET PROTECTION TYPE C REQUIRED AT INLETS WHERE CASTINGS ARE INSTALLED AND PERMANENTLY IN PLACE.

EROSION CONTROL LEGEND

- INLET PROTECTION
- SILT FENCE
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- [R] ROCK BAGS

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	STORM SEWER AND EROSION CONTROL	SHEET 26	E

2

2

N

106+00 107+00 108+00 109+00 110+00 111+00

EP: 111+19.79

24"

GAS

GAS

CAUTION

EROSION CONTROL NOTES

ALL EXISTING INLETS TO BE REMOVED OR REMAIN IN PLACE SHALL HAVE INLET PROTECTION PLACED PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.

INLET PROTECTION TYPE A REQUIRED AT INLETS WHERE CASTINGS ARE NOT INSTALLED OR NOT PERMANENTLY IN PLACE.

INLET PROTECTION TYPE C REQUIRED AT INLETS WHERE CASTINGS ARE INSTALLED AND PERMANENTLY IN PLACE.

EROSION CONTROL LEGEND

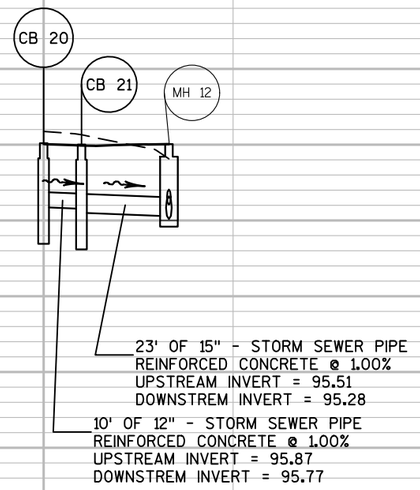
- INLET PROTECTION
- SILT FENCE
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- R ROCK BAGS

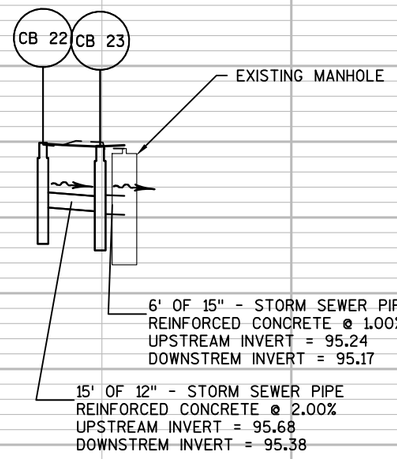
PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	STORM SEWER	SHEET	E

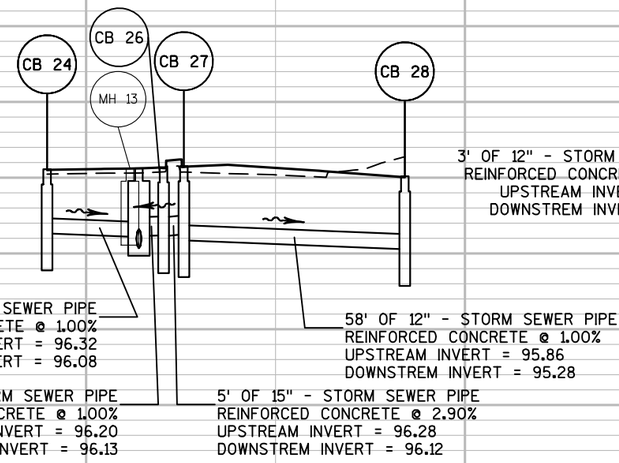
FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 022501_SS - 022504_SS

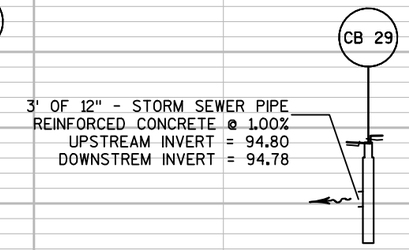
PLOT DATE : 1/10/2019 4:56 PM PLOT BY : BREMER, SAM PLOT NAME : ---------- PLOT SCALE : 1 IN:50 FT

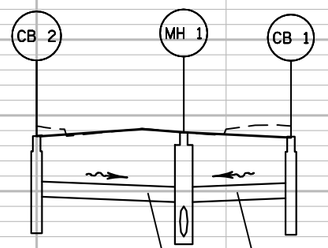
WISDOT/CADDS SHEET 41

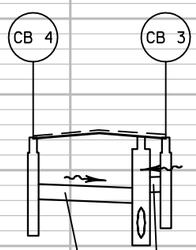

CB 20
CB 21
MH 12
23' OF 15" - STORM SEWER PIPE
REINFORCED CONCRETE @ 1.00%
UPSTREAM INVERT = 95.51
DOWNSTREM INVERT = 95.28
10' OF 12" - STORM SEWER PIPE
REINFORCED CONCRETE @ 1.00%
UPSTREAM INVERT = 95.87
DOWNSTREM INVERT = 95.77

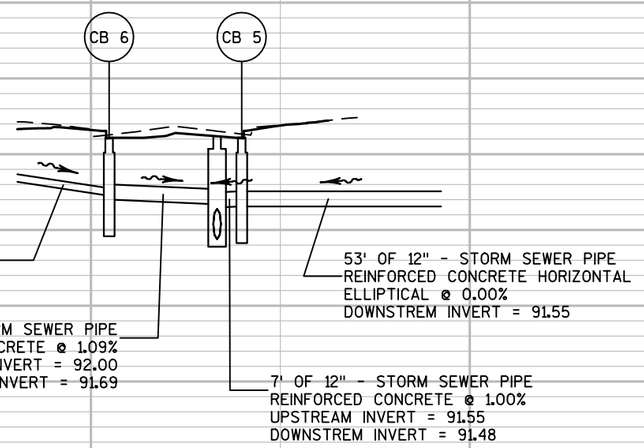

CB 22
CB 23
EXISTING MANHOLE
6' OF 15" - STORM SEWER PIPE
REINFORCED CONCRETE @ 1.00%
UPSTREAM INVERT = 95.24
DOWNSTREM INVERT = 95.17
15' OF 12" - STORM SEWER PIPE
REINFORCED CONCRETE @ 2.00%
UPSTREAM INVERT = 95.68
DOWNSTREM INVERT = 95.38

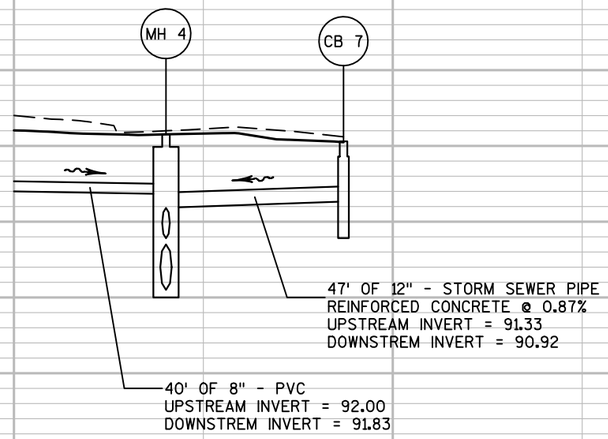

CB 24
CB 26
CB 27
CB 28
MH 13
24' OF 12" - STORM SEWER PIPE
REINFORCED CONCRETE @ 1.00%
UPSTREAM INVERT = 96.32
DOWNSTREM INVERT = 96.08
6' OF 15" - STORM SEWER PIPE
REINFORCED CONCRETE @ 1.00%
UPSTREAM INVERT = 96.20
DOWNSTREM INVERT = 96.13
5' OF 15" - STORM SEWER PIPE
REINFORCED CONCRETE @ 2.90%
UPSTREAM INVERT = 96.28
DOWNSTREM INVERT = 96.12
58' OF 12" - STORM SEWER PIPE
REINFORCED CONCRETE @ 1.00%
UPSTREAM INVERT = 95.86
DOWNSTREM INVERT = 95.28

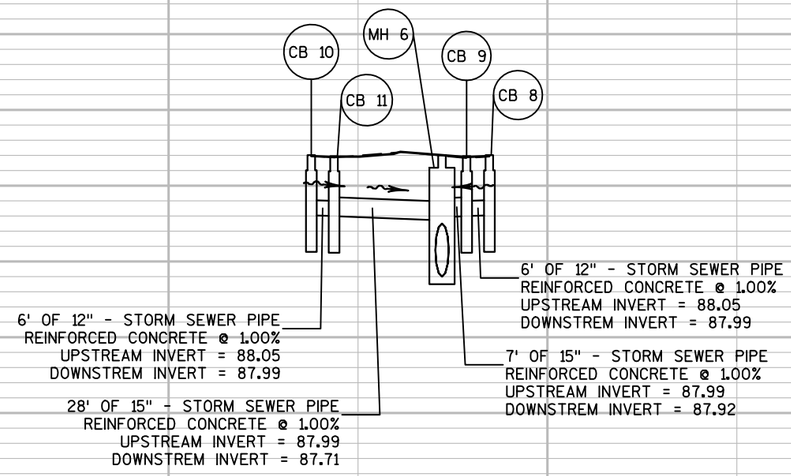

CB 29
3' OF 12" - STORM SEWER PIPE
REINFORCED CONCRETE @ 1.00%
UPSTREAM INVERT = 94.80
DOWNSTREM INVERT = 94.78

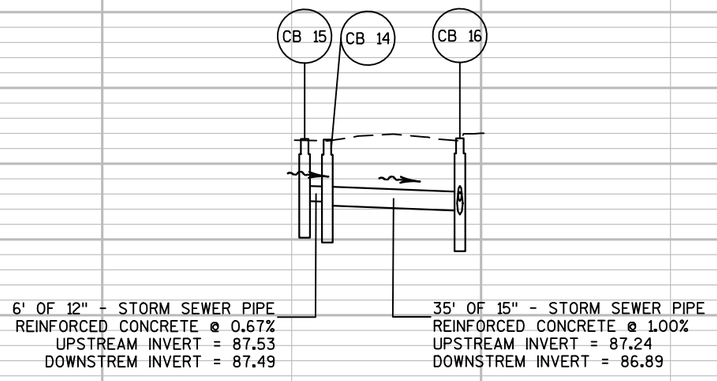

CB 2
MH 1
CB 1
39' OF 12" - STORM SEWER PIPE
REINFORCED CONCRETE @ 1.00%
UPSTREAM INVERT = 94.64
DOWNSTREM INVERT = 94.25
28' OF 12" - STORM SEWER PIPE
REINFORCED CONCRETE @ 1.00%
UPSTREAM INVERT = 94.54
DOWNSTREM INVERT = 94.26

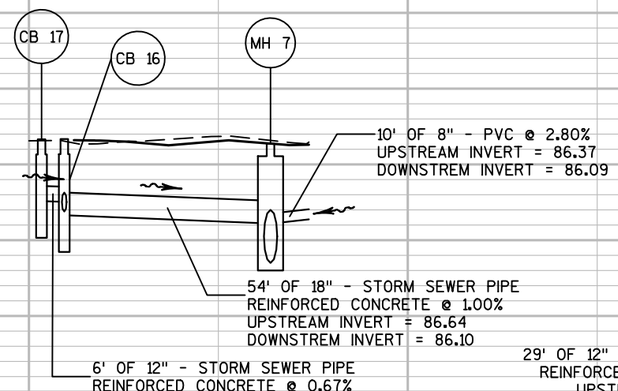

CB 4
CB 3
28' OF 12" - STORM SEWER PIPE
REINFORCED CONCRETE @ 1.00%
UPSTREAM INVERT = 93.09
DOWNSTREM INVERT = 92.81
7' OF 12" - STORM SEWER PIPE
REINFORCED CONCRETE @ 1.00%
UPSTREAM INVERT = 93.58
DOWNSTREM INVERT = 93.51

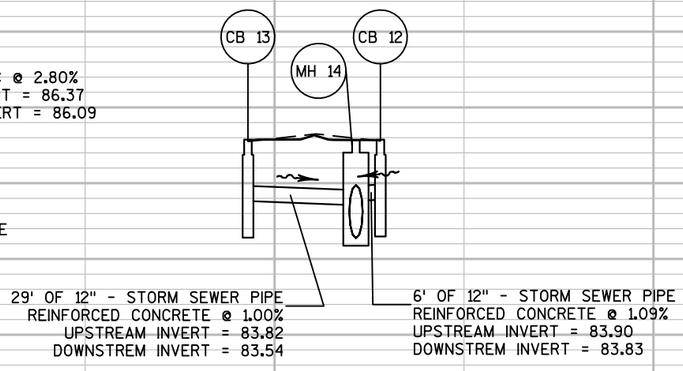

CB 6
CB 5
24' OF 6" - PVC @ 3.80%
UPSTREAM INVERT = 93.17
DOWNSTREM INVERT = 92.25
28' OF 12" - STORM SEWER PIPE
REINFORCED CONCRETE @ 1.09%
UPSTREAM INVERT = 92.00
DOWNSTREM INVERT = 91.69
53' OF 12" - STORM SEWER PIPE
REINFORCED CONCRETE HORIZONTAL
ELLIPTICAL @ 0.00%
DOWNSTREM INVERT = 91.55
7' OF 12" - STORM SEWER PIPE
REINFORCED CONCRETE @ 1.00%
UPSTREAM INVERT = 91.55
DOWNSTREM INVERT = 91.48

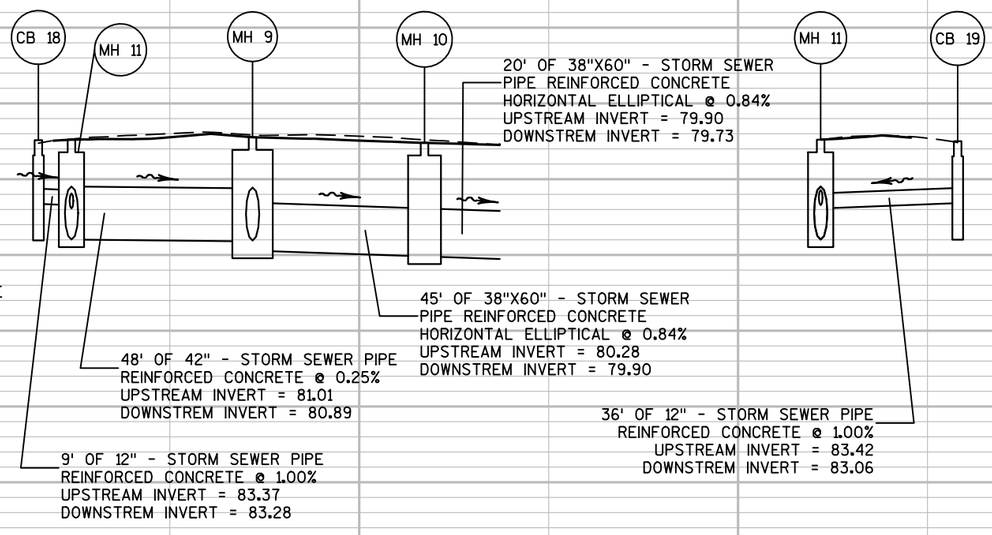




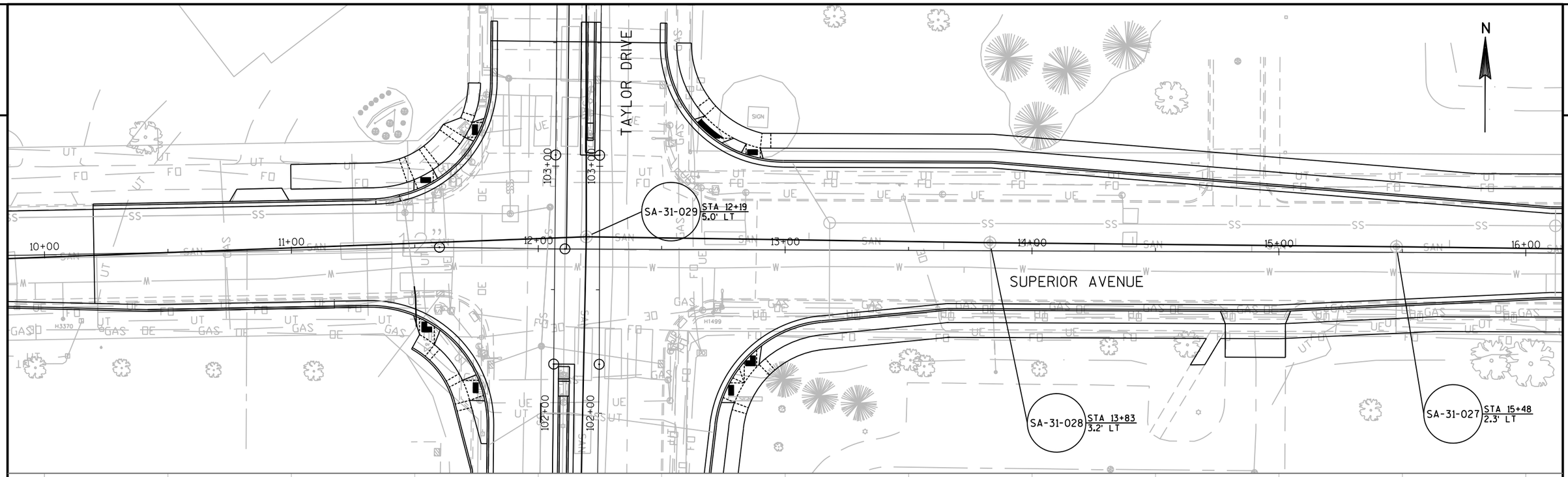


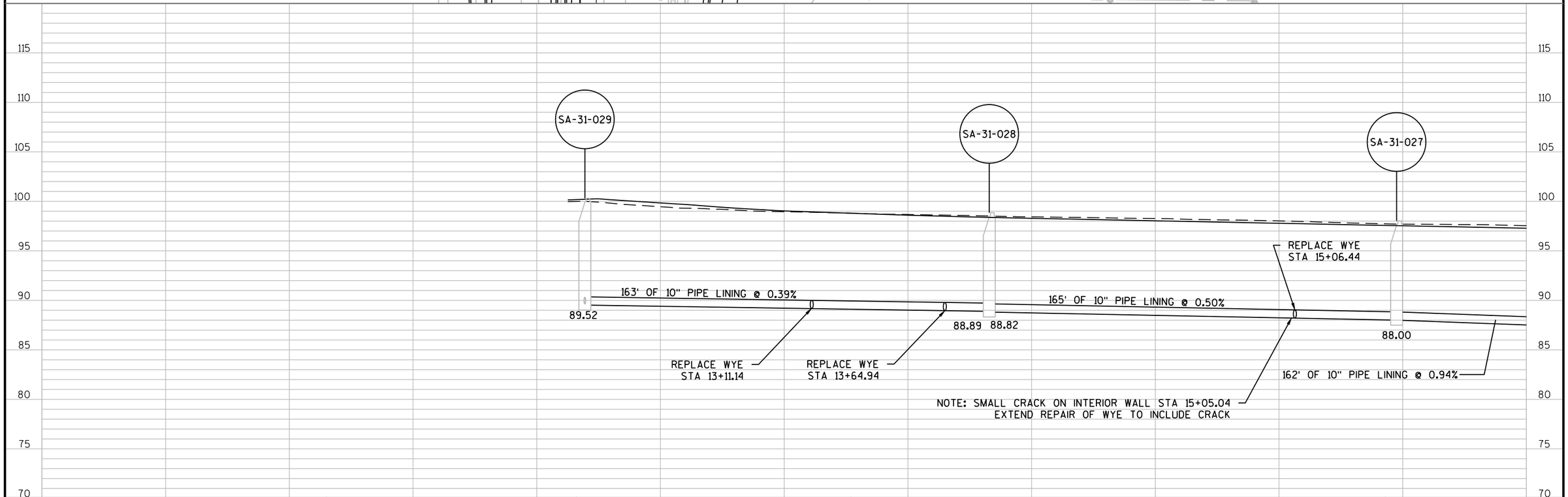






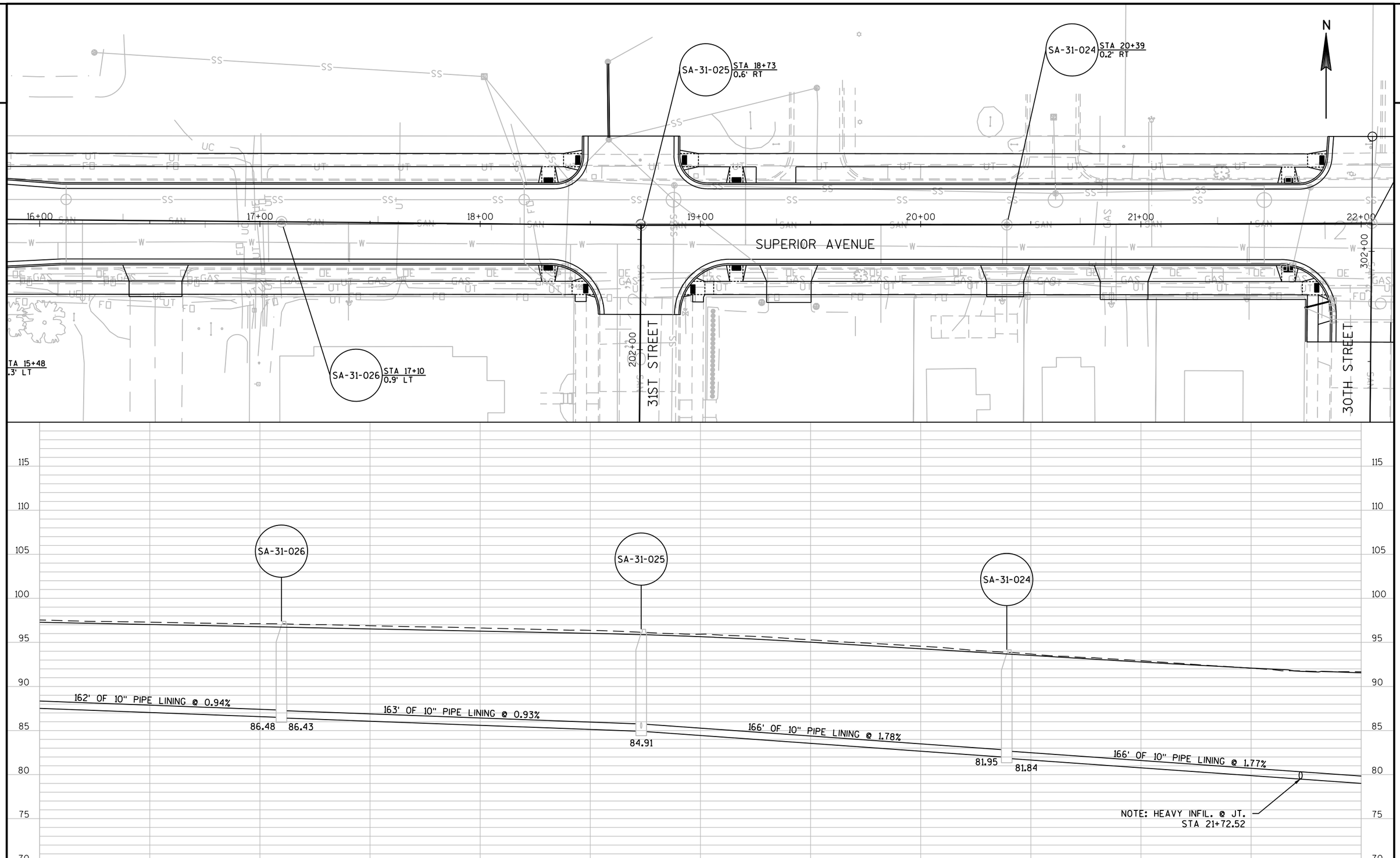
PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	STORM SEWER AND EROSION CONTROL	SHEET 29	E





PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	SANITARY SEWER	SHEET 30	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\022510_SS.DWG
LAYOUT NAME - 022501_SS - 022501_SS
PLOT DATE : 1/10/2019 4:31 PM PLOT BY : BREMER, SAM PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41



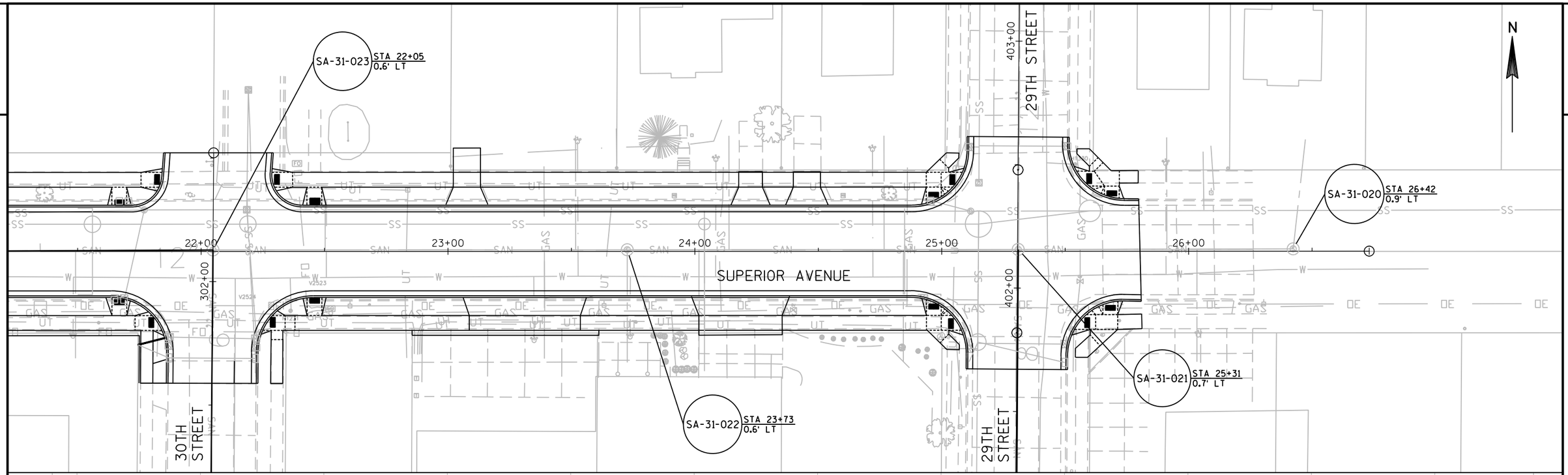
PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	SANITARY SEWER	SHEET 31	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\022510_SS.DWG
LAYOUT NAME - 022501_SS - 022502_SS

PLOT DATE : 1/10/2019 4:31 PM PLOT BY : BREMER, SAM PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

2



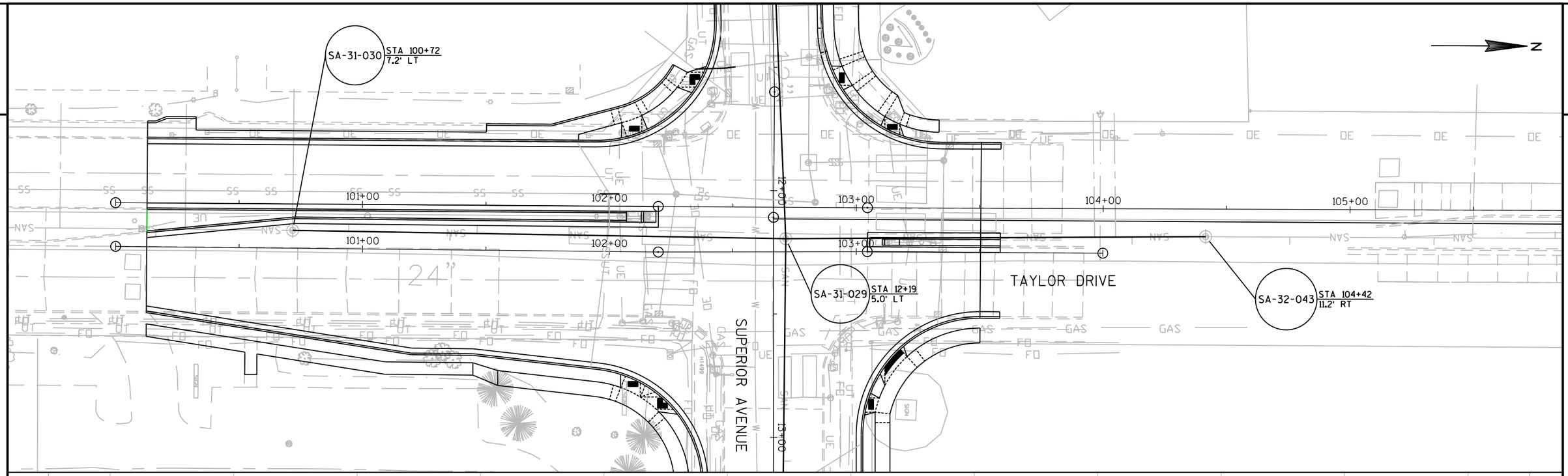
2

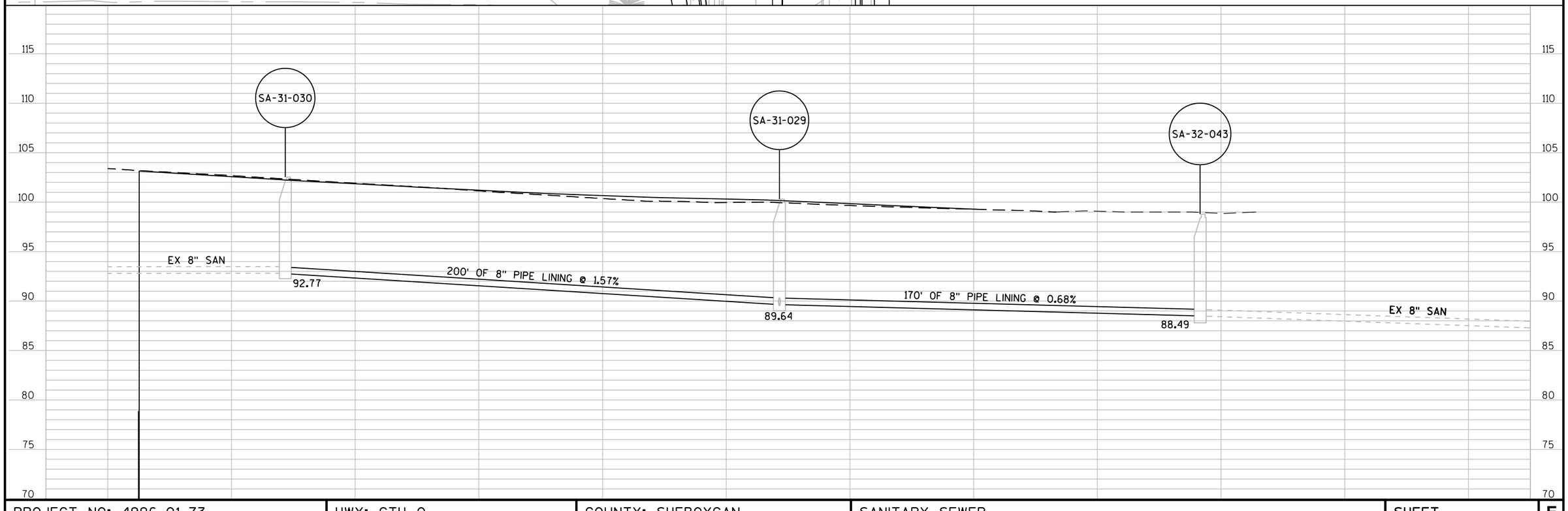
PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	SANITARY SEWER	SHEET 32	E

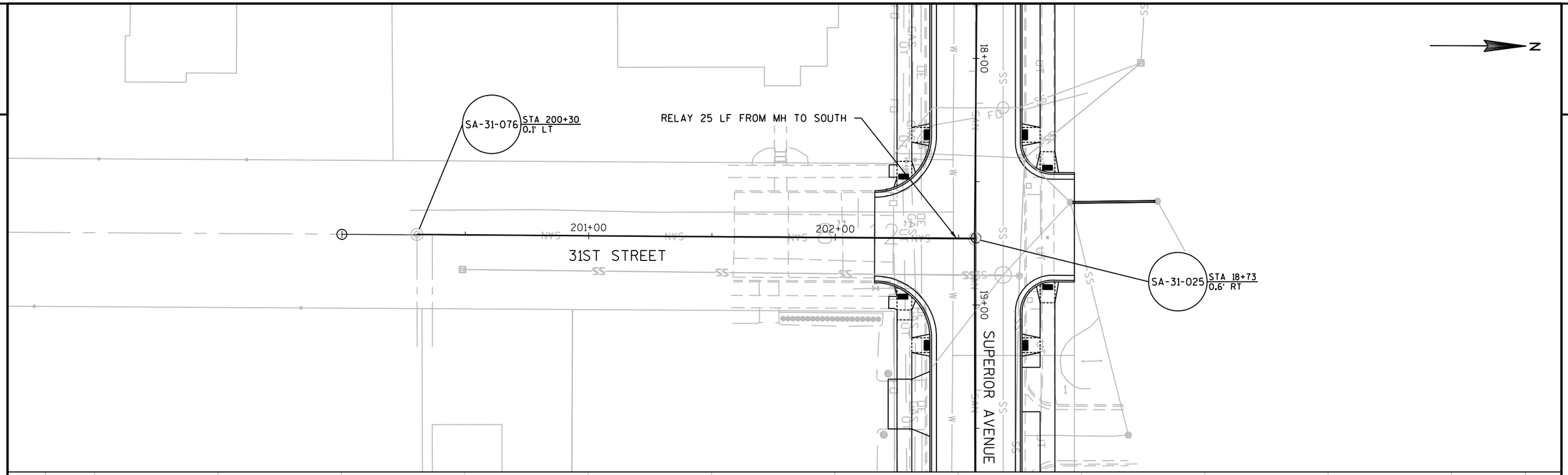
FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\022510_SS.DWG
LAYOUT NAME - 022501_SS - 022503_SS

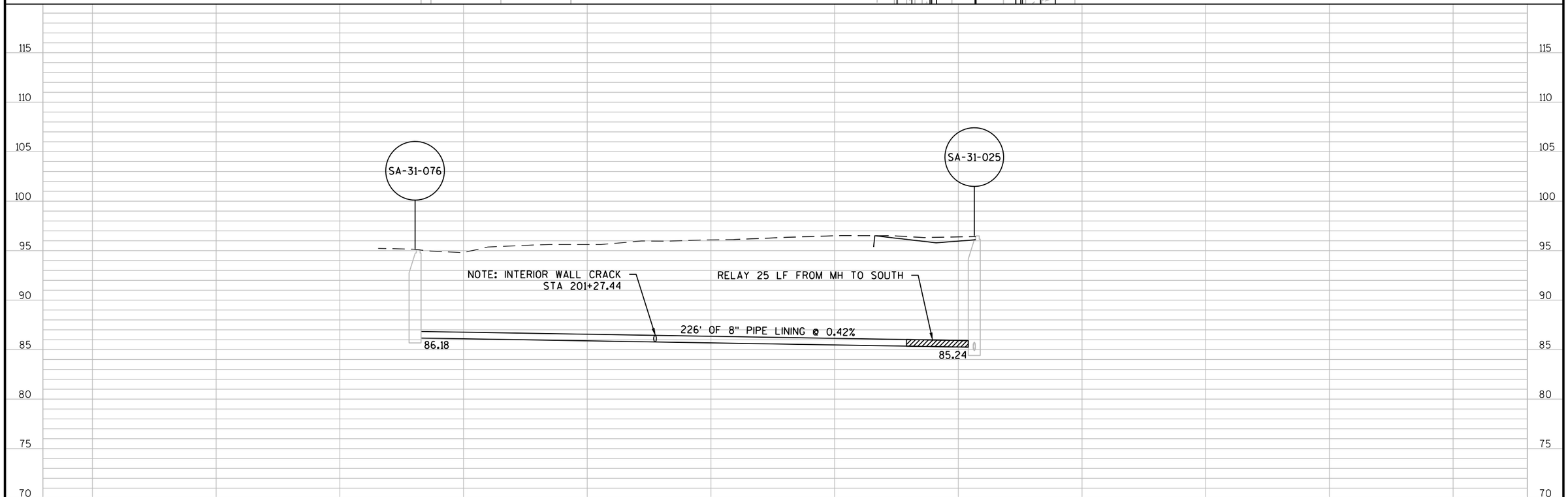
PLOT DATE : 1/10/2019 4:31 PM PLOT BY : BREMER, SAM PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

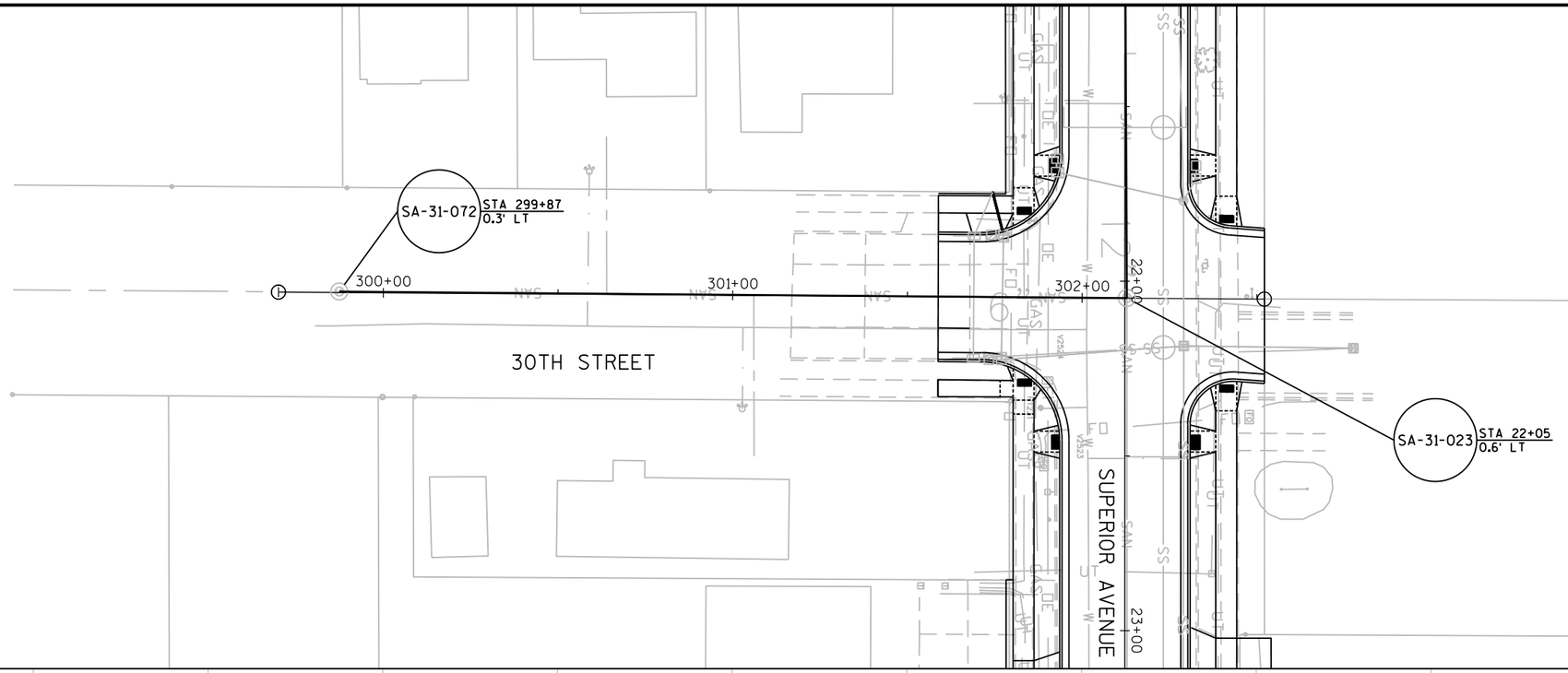

SA-31-030
STA 100+72
7.2' LT
SA-31-029
STA 12+19
5.0' LT
SA-32-043
STA 104+42
11.2' RT
TAYLOR DRIVE
SUPERIOR AVENUE
101+00
102+00
103+00
104+00
105+00
12+00
13+00
24"
N

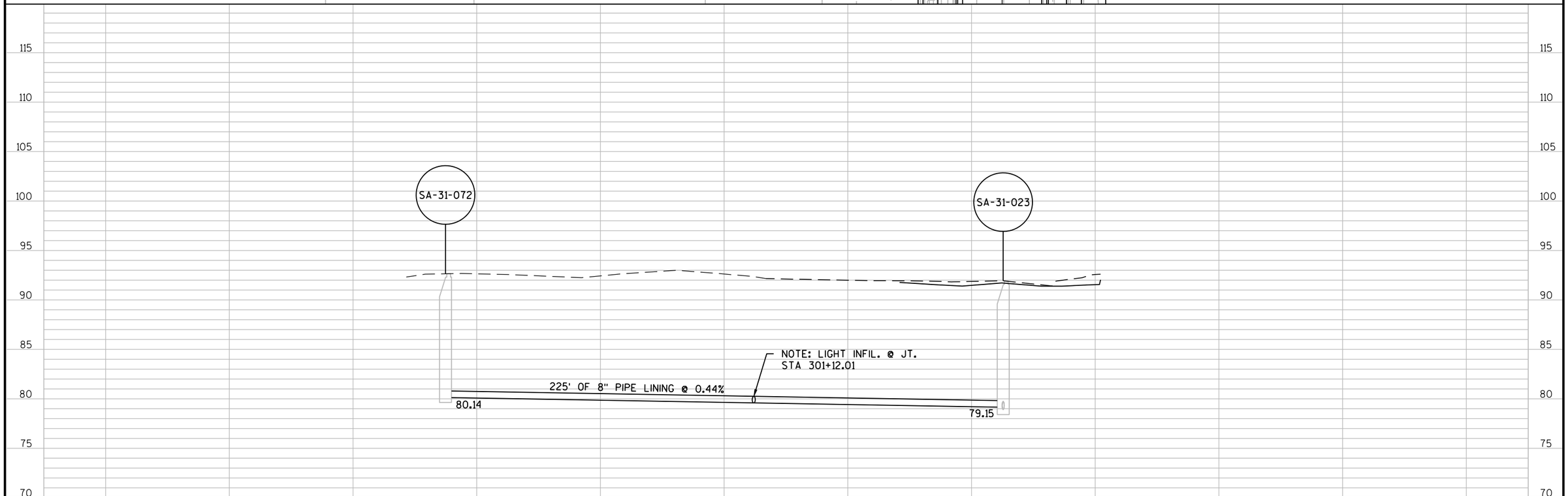

SA-31-030
SA-31-029
SA-32-043
EX 8" SAN
92.77
200' OF 8" PIPE LINING @ 1.57%
89.64
170' OF 8" PIPE LINING @ 0.68%
88.49
EX 8" SAN
115
110
105
100
95
90
85
80
75
70





PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	SANITARY SEWER	SHEET 34	E





PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	SANITARY SEWER	SHEET 35	E

2

N

LONG SWEEP BEND REQUIRED

CB1 SIGNAL CONTROLLER
(SEE SIGNAL PLANS)

STA 11+35, 38' LT
ELECTRICAL SERVICE A

STA 11+50, 40' LT
PB 1

STA 13+73.5, 38.5' LT
PB 2

STA 13+79, 38.5' LT
II-95-A-A-1-3

STA 15+19, 28' LT
II-95-A-A-1-3

TAYLOR DRIVE

SUPERIOR AVENUE

EP: 103+99.89

PI: 103+04.47

PI: 12+10.84

PI: 11+55.99

11+00 12+00 13+00 14+00 15+00 16+00

TAYLOR DRIVE

LIGHTING PLAN LEGEND

- ELECTRICAL SERVICE
- LIGHTING PULL BOX
- STREET LIGHTING UNIT "A"
- CONDUIT (2" NON-METALLIC UNLESS OTHERWISE NOTED)

STREET LIGHTING UNIT DESCRIPTION -

STA. 13+79, 13.5' LT
II-95-A-A-1-1

- CIRCUIT
- LIGHTING UNIT TYPE
- LAMP WATTAGE
- IES/ANSI DISTRIBUTION TYPE

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	LIGHTING PLAN	SHEET 36	E

2

2

N

STA 16+59, 22' LT
II-95-A-A-1-3

STA 17+99, 22' LT
II-95-A-A-1-3

STA 19+51, 22' LT
II-95-A-A-1-3

STA 20+89, 22' LT
II-95-A-A-1-3

STA 22+54, 22' LT
II-95-A-A-1-3

EP: 302+52.16

17+00 18+00 19+00 20+00 21+00 22+00

EP: 202+57.03

SUPERIOR AVENUE

31ST STREET

30TH STREET

LIGHTING PLAN LEGEND

- ELECTRICAL SERVICE
- LIGHTING PULL BOX
- STREET LIGHTING UNIT "A"
- CONDUIT (2" NON-METALLIC UNLESS OTHERWISE NOTED)

STREET LIGHTING UNIT DESCRIPTION -

STA. 13+79, 13.5' LT
II-95-A-A-1-1

- II-95-A-A-1-1 — CIRCUIT
- II-95-A-A-1-1 — LIGHTING UNIT TYPE
- II-95-A-A-1-1 — LAMP WATTAGE
- II-95-A-A-1-1 — IES/ANSI DISTRIBUTION TYPE

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	LIGHTING PLAN	SHEET 37	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\023601_LP.DWG
LAYOUT NAME - 023601_LP - 023602_LP

PLOT DATE : 1/14/2019 2:19 PM PLOT BY : HOLZEM, ANNE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

STA 22+54, 22' LT
II-95-A-A-1-3

STA 24+00, 22' LT
II-95-A-A-1-3

STA 24+88, 22' LT
PB 7

STA 25+76.5, 24' LT
PB 8

STA 25+80, 24' LT
II-95-A-A-1-3

EP: 302+52.15

EP: 26+73.15

22+00 23+00 24+00 25+00 26+00

29TH STREET

SUPERIOR AVENUE

30TH STREET

29TH STREET

LIGHTING PLAN LEGEND

- ELECTRICAL SERVICE
- LIGHTING PULL BOX
- STREET LIGHTING UNIT "A"
- CONDUIT (2" NON-METALLIC UNLESS OTHERWISE NOTED)

STREET LIGHTING UNIT DESCRIPTION -

STA. 13+79, 13.5' LT
II-95-A-A-1-1

- CIRCUIT
- LIGHTING UNIT TYPE
- LAMP WATTAGE
- IES/ANSI DISTRIBUTION TYPE

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	LIGHTING PLAN	SHEET 38	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\023601_LP.DWG
LAYOUT NAME - 023601_LP - 023601_LP

PLOT DATE : 1/14/2019 2:19 PM PLOT BY : HOLZEM, ANNE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

EP: 111+19.79

111+00

110+00

109+00

108+00

SAN

W

TAYLOR DRIVE SB

TAYLOR DRIVE NB

GAS

MOVE EXISTING STREETLIGHT FROM
STA 109+15.6 TO STA 109+27, 14' RT.
SPLICE INTO EXISTING CONDUIT AND ROUTE
TO NEW POLE LOCATION. INSTALL NEW WIRE
FROM THIS POLE TO SOUTH. REUSE WIRE FROM
THIS POLE TO NORTH.
CONCRETE BASE TYPE 5 REQUIRED.

LIGHTING PLAN LEGEND

- ELECTRICAL SERVICE
- LIGHTING PULL BOX
- STREET LIGHTING UNIT "A"
- CONDUIT (2" NON-METALLIC UNLESS OTHERWISE NOTED)

STREET LIGHTING UNIT DESCRIPTION -

STA. 13+79, 13.5' LT
II-95-A-A-1-1
- CIRCUIT
- LIGHTING UNIT TYPE
- LAMP WATTAGE
- IES/ANSI DISTRIBUTION TYPE

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	LIGHTING PLAN	SHEET 39	E

2

LEGEND

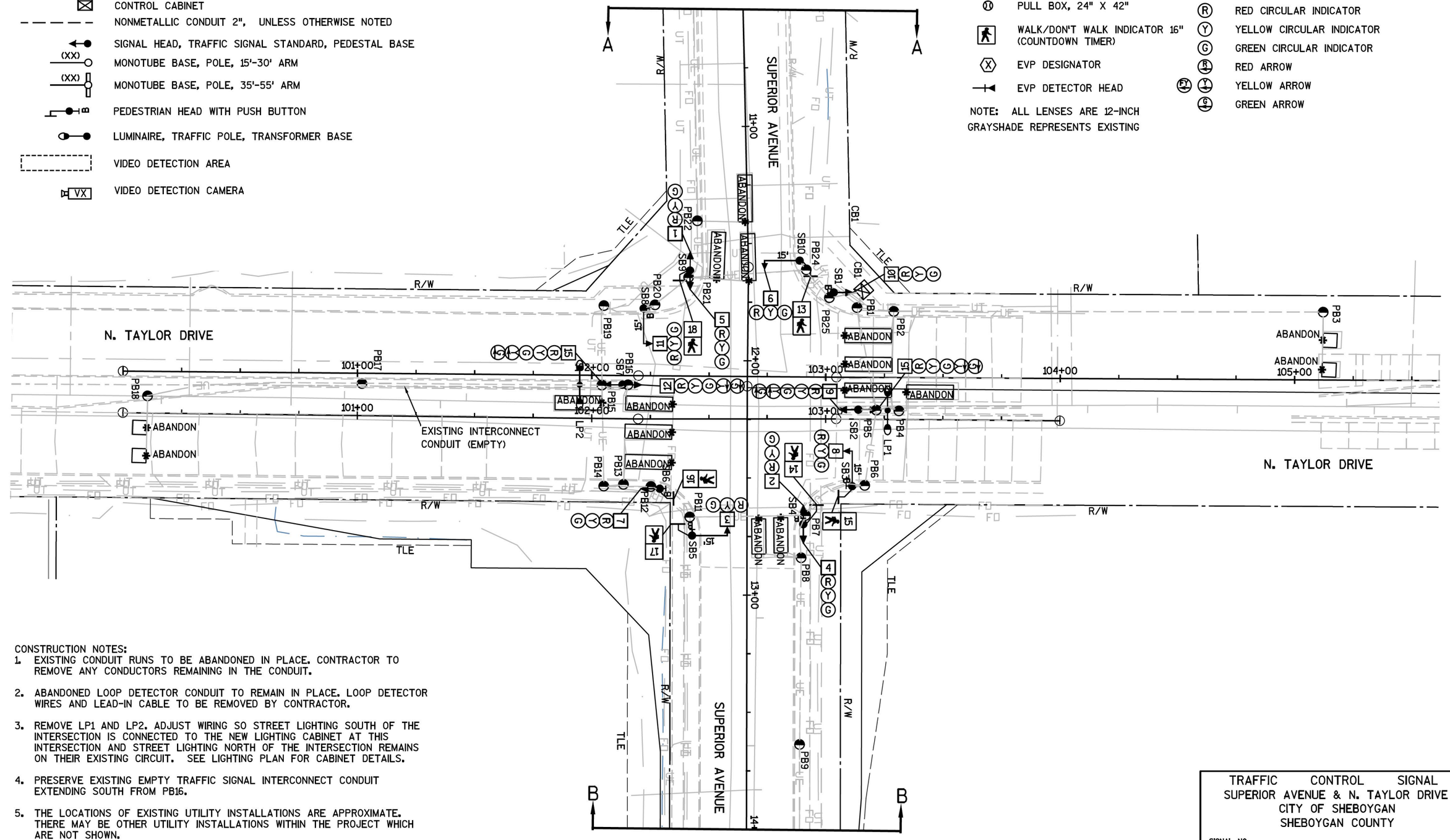
- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- VIDEO DETECTION AREA
- VX VIDEO DETECTION CAMERA

LEGEND CONT'D

- PULL BOX, 24" X 42"
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y) YELLOW ARROW
- (G) GREEN ARROW

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

N



CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRES AND LEAD-IN CABLE TO BE REMOVED BY CONTRACTOR.
3. REMOVE LP1 AND LP2. ADJUST WIRING SO STREET LIGHTING SOUTH OF THE INTERSECTION IS CONNECTED TO THE NEW LIGHTING CABINET AT THIS INTERSECTION AND STREET LIGHTING NORTH OF THE INTERSECTION REMAINS ON THEIR EXISTING CIRCUIT. SEE LIGHTING PLAN FOR CABINET DETAILS.
4. PRESERVE EXISTING EMPTY TRAFFIC SIGNAL INTERCONNECT CONDUIT EXTENDING SOUTH FROM PB16.
5. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
6. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED. PROPOSED ROADWAY SHOWN IN GRAYSHADE FOR PLAN CLARITY.

TRAFFIC CONTROL SIGNAL
SUPERIOR AVENUE & N. TAYLOR DRIVE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

MUNICIPAL CONTACT:
DESIGNED BY: TADI
REVISED BY:

PAGE 1 OF 2

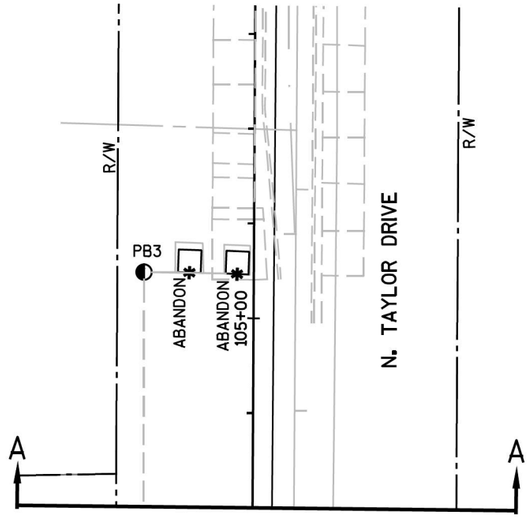
PROJECT NO: 4996-01-73	HWY: SUPERIOR AVENUE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 40	E

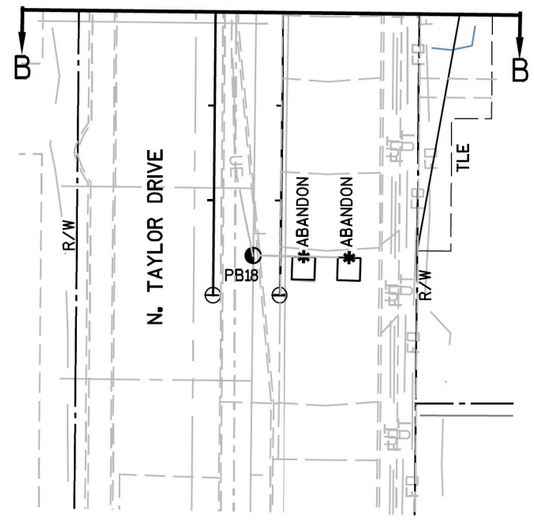
FILE NAME : F:\USERS\JEFF\TADI JOBS\SHARED\WI\1843 SUPERIOR AT TAYLOR SIGNAL\CAD\SUPERIOR AND TAYLOR_SIGNAL REMOVAL PLANS_18-1008.DWG PLOT DATE : 10/8/2018 7:31 PM PLOT BY : JEFF PLOT NAME : PLOT SCALE : 1:40
LAYOUT NAME - 024211_rm

WISDOT/CADDS SHEET 42

2

N





TRAFFIC CONTROL SIGNAL
SUPERIOR AVENUE & N. TAYLOR DRIVE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

MUNICIPAL CONTACT:
DESIGNED BY: TADI
REVISED BY:

PAGE 2 OF 2

PROJECT NO: 4996-01-73	HWY: SUPERIOR AVENUE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 41	E

LEGEND

- CONTROL CABINET ON COMBINED BASE WITH LIGHTING CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- VIDEO DETECTION AREA
- VX VIDEO DETECTION CAMERA

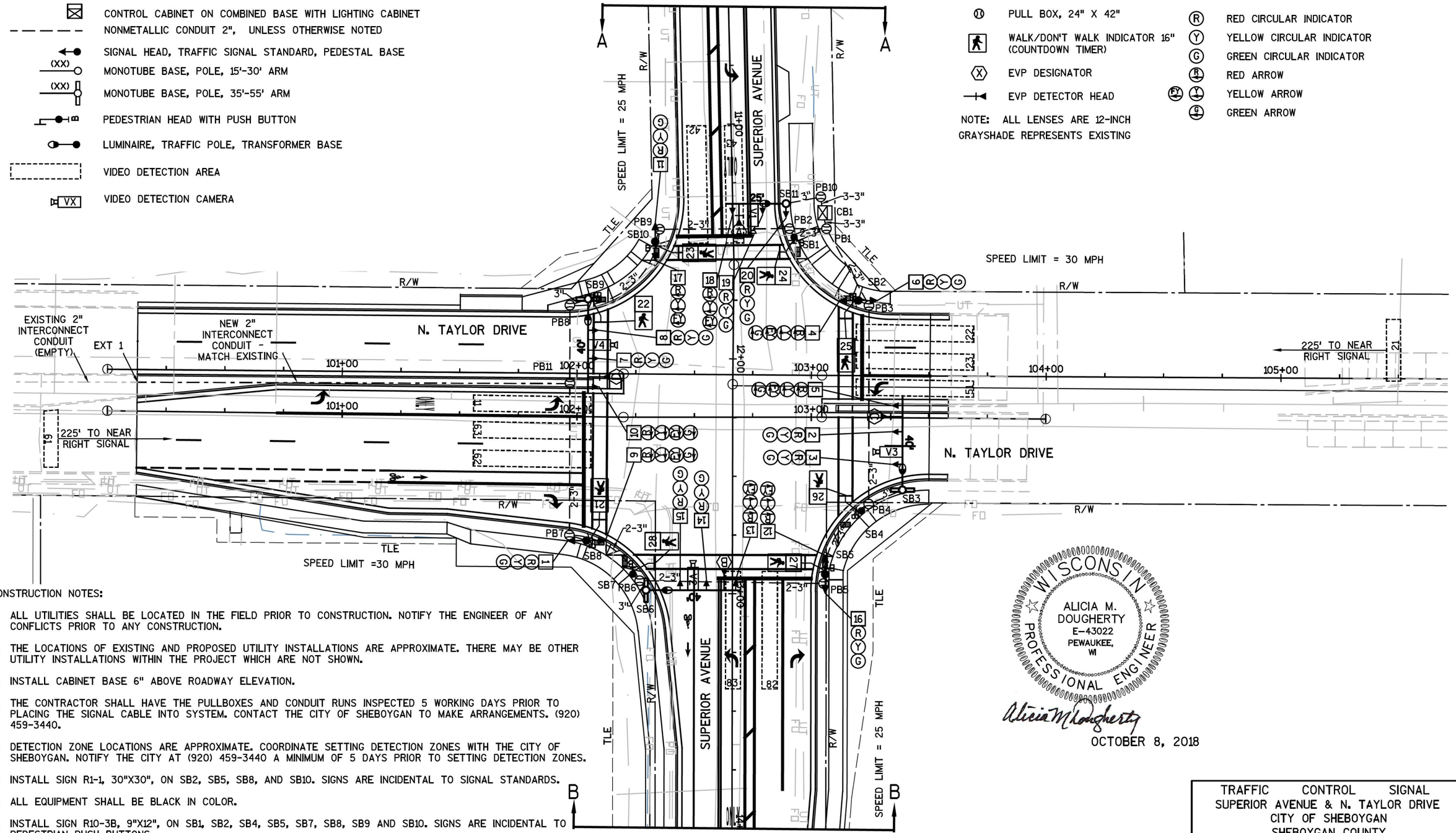
LEGEND CONT'D

- PULL BOX, 24" X 42"
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN ARROW

N



CONSTRUCTION NOTES:

1. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO ANY CONSTRUCTION.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
4. THE CONTRACTOR SHALL HAVE THE PULLBOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING THE SIGNAL CABLE INTO SYSTEM. CONTACT THE CITY OF SHEBOYGAN TO MAKE ARRANGEMENTS. (920) 459-3440.
5. DETECTION ZONE LOCATIONS ARE APPROXIMATE. COORDINATE SETTING DETECTION ZONES WITH THE CITY OF SHEBOYGAN. NOTIFY THE CITY AT (920) 459-3440 A MINIMUM OF 5 DAYS PRIOR TO SETTING DETECTION ZONES.
6. INSTALL SIGN R1-1, 30"X30", ON SB2, SB5, SB8, AND SB10. SIGNS ARE INCIDENTAL TO SIGNAL STANDARDS.
7. ALL EQUIPMENT SHALL BE BLACK IN COLOR.
8. INSTALL SIGN R10-3B, 9"X12", ON SB1, SB2, SB4, SB5, SB7, SB8, SB9 AND SB10. SIGNS ARE INCIDENTAL TO PEDESTRIAN PUSH BUTTONS.
9. INSTALL SIGN R10-50L, 30"X36", ON SB3 NEXT TO HEAD 15, SB6 NEXT TO HEAD 3, SB9 NEXT TO HEAD 20 AND ON SB11 NEXT TO HEAD 8. SIGNS ARE INCIDENTAL TO MONOTUBE ARMS.

WISCONSIN
ALICIA M. DOUGHERTY
E-43022
PEWAUKEE, WI
PROFESSIONAL ENGINEER

Alicia M Dougherty

OCTOBER 8, 2018

TRAFFIC CONTROL SIGNAL
SUPERIOR AVENUE & N. TAYLOR DRIVE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

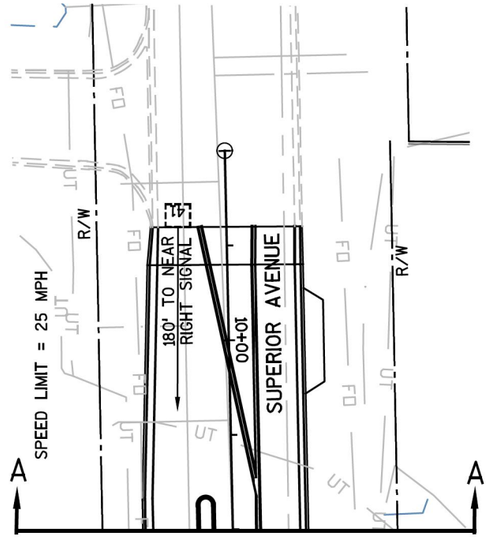
MUNICIPAL CONTACT:
DESIGNED BY: TADI
REVISED BY:

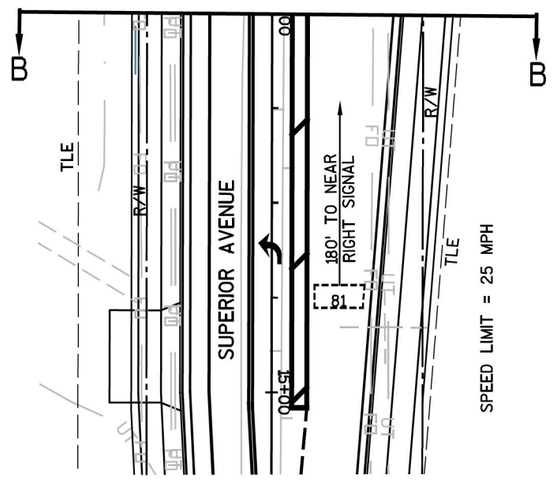
PAGE 1 OF 3

PROJECT NO: 4996-01-73	HWY: SUPERIOR AVENUE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL PLAN	SHEET 42	E

FILE NAME : F:\USERS\JEFF\TADI JOBS\SHARED\WI\1843 SUPERIOR AT TAYLOR SIGNAL\CAD\SUPERIOR AND TAYLOR_SIGNAL LAYOUT_18-1008.DWG
LAYOUT NAME - 024211_sp
PLOT DATE : 10/9/2018 10:17 AM PLOT BY : JEFF PLOT NAME : PLOT SCALE : 1:40

2





TRAFFIC CONTROL SIGNAL
SUPERIOR AVENUE & N. TAYLOR DRIVE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

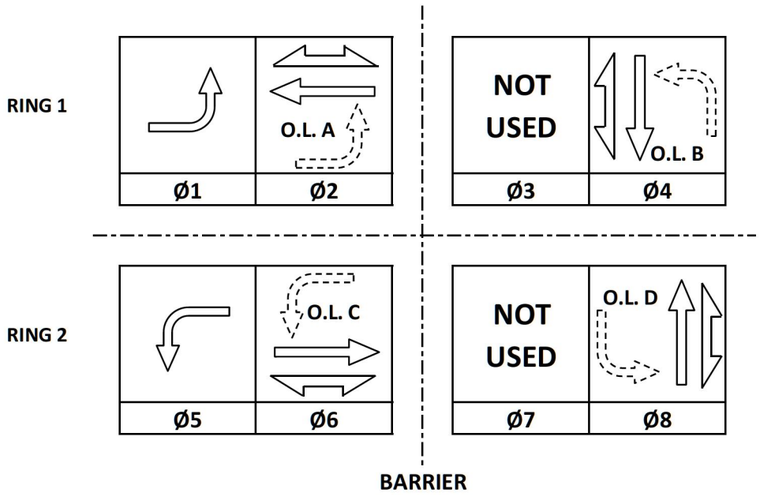
SIGNAL NO.

MUNICIPAL CONTACT:
DESIGNED BY: TADI
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 4996-01-73	HWY: SUPERIOR AVENUE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL PLAN	SHEET 43	E

	HEAD NUMBERS	FLASH
Ø1	4,5	-
Ø2	6,7,8	R
Ø3		
Ø4	11,14,15	R
Ø5	9,10	-
Ø6	1,2,3	R
Ø7		
Ø8	16,19,20	R
Ø2P	23,24	
Ø4P	21,22	
Ø6P	27,28	
Ø8P	25,26	
OLA	4,5	R
OLB	17,18	R
OLC	9,10	R
OLD	12,13	R



N

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3				
4		8		X
5		2		X
6	X	2	MIN	X
7				
8		4		X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+8	8+4

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+8 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	X
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM NO: SS-	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	22	41	43	61	63	82										PLAN LOOP DETECTOR*(S)
ASSIGNED PHASE	1	2	4	4	6	6	8										ASSIGNED PHASE
OPERATION MODE	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OPERATION MODE
SWITCH	2																SWITCH
EXTEND			X														EXTEND
DELAY				X													DELAY

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	21	23	42	51	62	81	83										PLAN LOOP DETECTOR*(S)
ASSIGNED PHASE	2	2	4	5	6	8	8										ASSIGNED PHASE
OPERATION MODE	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OPERATION MODE
SWITCH				6													SWITCH
EXTEND						X											EXTEND
DELAY							X										DELAY

SUPERIOR AVENUE & N. TYALOR DRIVE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY
SIGNAL NO: CABINET TYPE: TS2
CONTROLLER TYPE: EPAC
DATE: 10/18 PAGE NO. 3 OF 3

2

PROJECT ID:	4996-01-73
INTERSECTION:	SUPERIOR AVENUE & N. TAYLOR DRIVE

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

CB1 TO	JUMPER	# OF COND. AWG 14	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	PED BUTTON 2
				RED	YELLOW	GREEN	<RED>	<YELLOW>	<FL YELLOW>	<GREEN>	D/WALK	WALK		
SB1		7	24								BLK	BLU		
			B										WHT/BLK	BLU/BLK
SB2		12	4				RED	ORG	BLK/WHT	GRN				
			6	RED/BLK	ORG/BLK	GRN/BLK								
			25								BLK	BLU		
			B										WHT/BLK	BLU/BLK
SB3		12	2	RED	ORG	GRN								
			3	RED	ORG	GRN								
			5				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB4		7	26								BLK	BLU		
			B										WHT/BLK	BLU/BLK
SB5		12	12				RED	ORG	BLK/WHT					
			16	RED/BLK	ORG/BLK	GRN/BLK								
			27								BLK	BLU		
			B										WHT/BLK	BLU/BLK
SB6		12	13				RED/BLK	ORG/BLK	BLK/WHT					
			14	RED	ORG	GRN								
			15	RED	ORG	GRN								
SB7		7	28								BLK	BLU		
			B										WHT/BLK	BLU/BLK
SB8		12	1	RED	ORG	GRN								
			9				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
			21								BLK	BLU		
			B										WHT/BLK	BLU/BLK
SB9		12	7	RED	ORG	GRN								
			8	RED	ORG	GRN								
			10				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
			22								BLK	BLU		
			B										WHT/BLK	BLU/BLK
SB10		12	11	RED	ORG	GRN								
			17				RED/BLK	ORG/BLK	BLK/WHT					
			23								BLK	BLU		
			B										WHT/BLK	BLU/BLK
SB11		12	18				RED/BLK	ORG/BLK	BLK/WHT					
			19	RED	ORG	GRN								
			20	RED	ORG	GRN								

CABLE ROUTING CONTINUED

2

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
CB1	PB1
SB1	PB2
SB2	PB3
SB4	PB4
SB5	PB5
SB6	PB6
SB8	PB7
SB9	PB8
SB10	PB9
CB1	PB10

VIDEO DETECTION CABLE	
FROM	TO
CB1	SB11 (V1)
CB1	SB6 (V2)
CB1	SB3 (V3)
CB1	SB9 (V4)

EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	SB11 (HEAD A)
CB1	SB6 (HEAD B)
CB1	SB3 (HEAD C)
CB1	SB9 (HEAD D)

LIGHTING UF 10 AWG W/GROUND	
FROM	TO
CB1	SB3
SB3	SB6
CB1	SB9
SB9	SB11

OCTOBER 8, 2018

Alicia M Dougherty

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. "OTHER" COLUMN MAY INCLUDE SHADOW BOX (BLANK OUT) SIGN.

LEGEND

SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE

N

EP: 103+99.89
ON SIGNAL POLE

R4-7
24"X30"

R3-4
24"X24"

R5-2
24"X24"

TRUCK ROUTE
R14-1
24"X18"

M6-6
21"X21"

REMOVE SIGN/SUPPORT

NO MOTOR VEHICLES
R5-3
24"X24"

ON LIGHT POLE

NO PARKING
R7-1
18"X24"

REMOVE SIGN/SUPPORT

ON LIGHT POLE

ONLY ONLY ONLY
R3-8W
54"X30"

MARKING SYMBOL AND ARROW EPOXY (TYP)

PI: 103+59.99

PI: 103+04.53

PI: 103+10.82

PI: 103+04.47

40'

25' (TYP)

25'

10+00

11+00

12+00

13+00

14+00

15+00

16+

REMOVE SIGN/SUPPORT

REMOVE SIGN/SUPPORT

MARKING WORD EPOXY (TYP)

(TYP)

TRUCK ROUTE
R14-1
24"X18"

M6-6
21"X21"

ONLY
R3-8-A
36"X30"

REMOVE SIGN/SUPPORT

PI: 102+19.84

PI: 102+19.80

40'

REMOVE SIGN/SUPPORT

SPEED LIMIT 25
R2-1
24"X30"

BIKE LANE
R3-17
30"X24"

MARKING ARROW EPOXY (TYP)

REMOVE SIGN/SUPPORT

REMOVE SIGN/SUPPORT

TRUCK ROUTE
R14-1
24"X18"

NO PARKING
R7-1
18"X24"

NO PARKING
R7-1
18"X24"

R4-7
24"X30"

R3-4
24"X24"

ONLY

BEGIN LEFT TURN LANE
R3-20-L
24"X36"

PLACE AT BEGINNING OF TAPER
STA 99+75 +/-

REMOVE SIGN/SUPPORT

BEGIN RIGHT TURN LANE
R3-20-R
24"X36"

PLACE AT BEGINNING OF TAPER
STA 100+12

PAVEMENT MARKING LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING STOP LINE EPOXY 18-INCH
4. MARKING LINE EPOXY 8-INCH
5. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
6. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

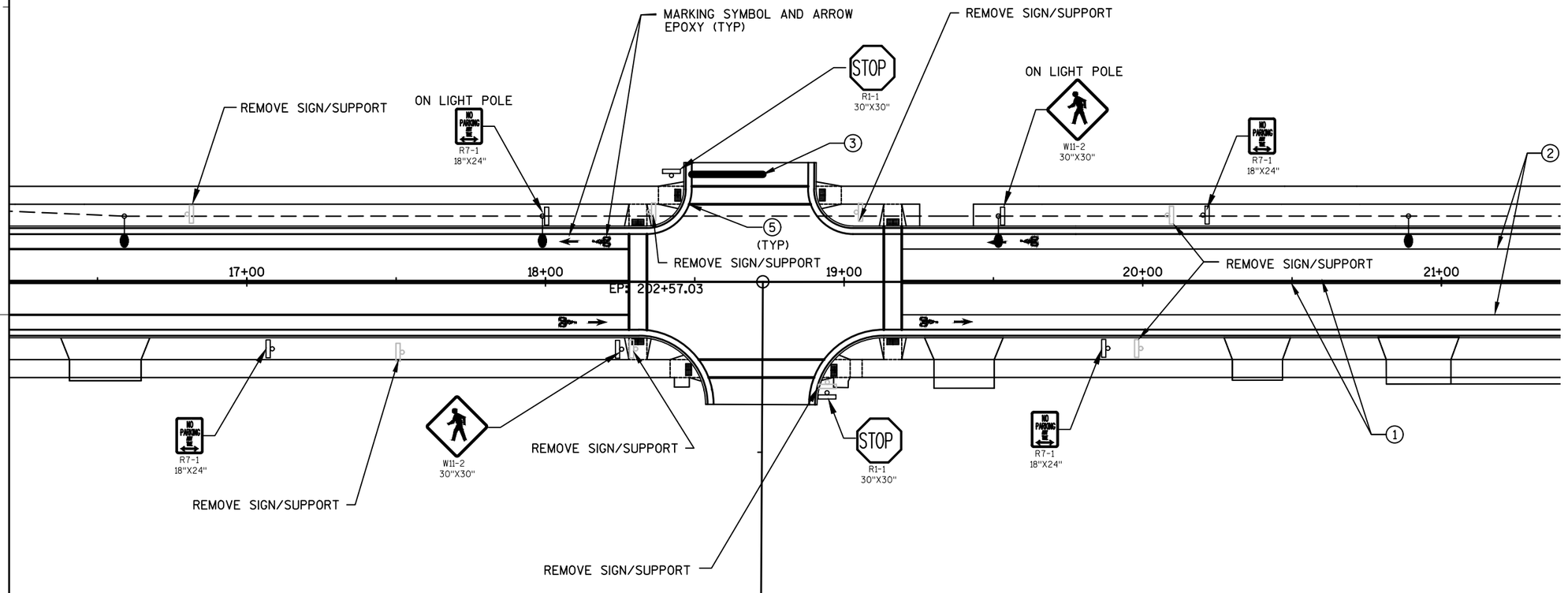
PROJECT NO:4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN: PAVEMENT MARKING AND SIGNING	SHEET 47	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\024501_PM.DWG PLOT DATE : 1/10/2019 4:32 PM PLOT BY : BREMER, SAM PLOT NAME : ----------

WISDOT/CADDS SHEET 42

2

N



PAVEMENT MARKING LEGEND

(1)	MARKING LINE EPOXY 4-INCH (YELLOW)
(2)	MARKING LINE EPOXY 4-INCH (WHITE)
(3)	MARKING STOP LINE EPOXY 18-INCH
(4)	MARKING LINE EPOXY 8-INCH
(5)	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
(6)	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO:4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN: PAVEMENT MARKING AND SIGNING	SHEET 48	E

2

N

STOP
R1-1
30"X30"

ON LIGHT POLE
W11-2
30"X30"

SPEED LIMIT 25
R2-1
24"X30"

ON LIGHT POLE
NO PARKING
R7-1
18"X24"

REMOVE SIGN/SUPPORT

TRUCK ROUTE
R14-1
24"X18"

STOP
R1-1
30"X30"

ON LIGHT POLE
W11-2
30"X30"

EP: 26+73.15

1+00 22+00 23+00 24+00 25+00 26+00

(2) (2)* (3) (5) (TYP)

REMOVE SIGN/SUPPORT

*DASHED MARKING TO MATCH EXISTING DASHED MARKING

LENGTHS AND LOCATIONS OF MARKINGS TO MATCH EXISTING MARKINGS

NO PARKING
R7-1
18"X24"

MARKING SYMBOL & ARROW EPOXY (TYP)

STOP
R1-1
30"X30"

W11-2
30"X30"

(1)

SPEED LIMIT 25
R2-1
24"X30"

NO PARKING
R7-1
18"X24"

(3)

STOP
R1-1
30"X30"

W11-2
30"X30"

REMOVE SIGN/SUPPORT

PAVEMENT MARKING LEGEND

(1) MARKING LINE EPOXY 4-INCH (YELLOW)

(2) MARKING LINE EPOXY 4-INCH (WHITE)

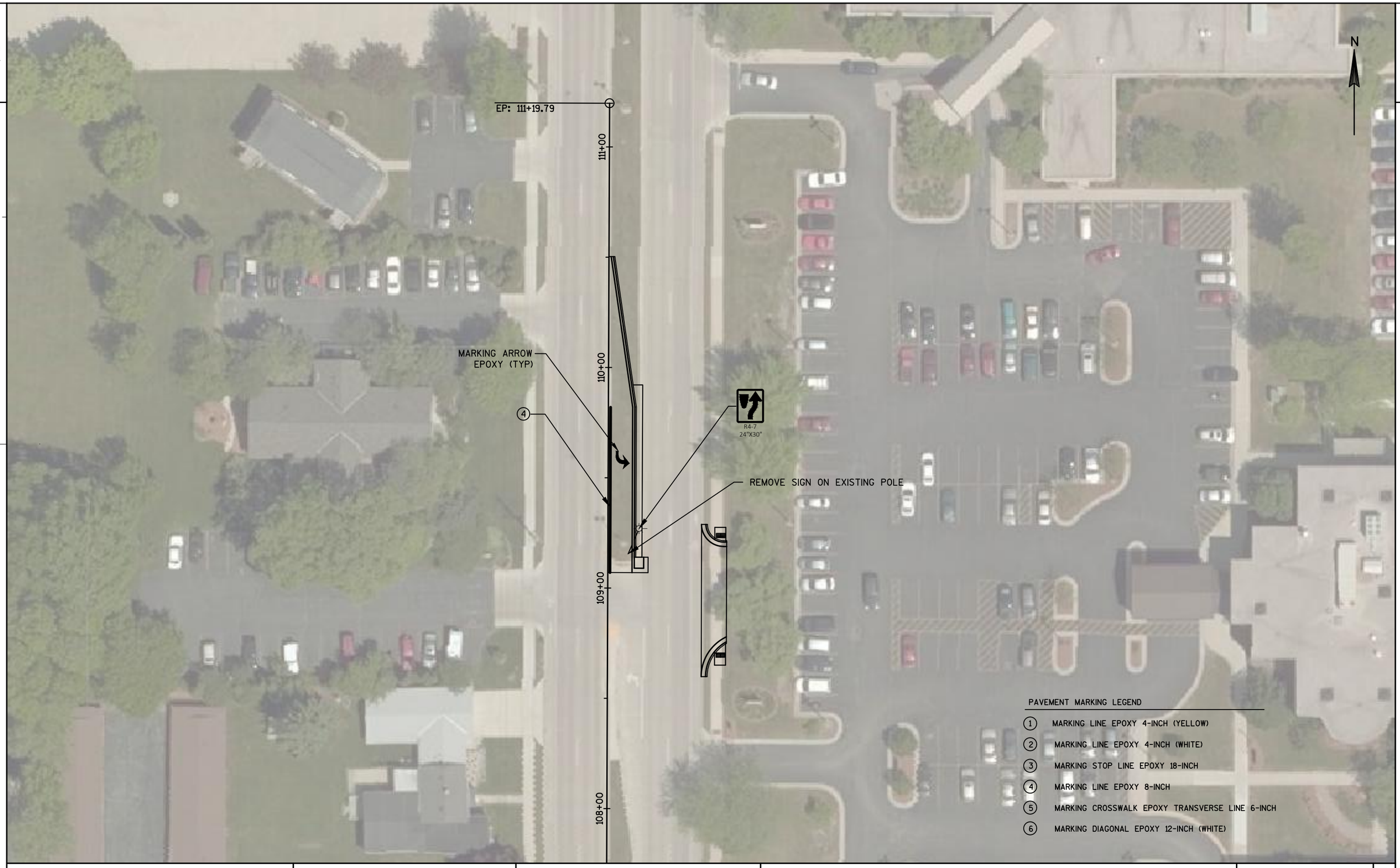
(3) MARKING STOP LINE EPOXY 18-INCH

(4) MARKING LINE EPOXY 8-INCH

(5) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

(6) MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO:4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN: PAVEMENT MARKING AND SIGNING	SHEET 49	E



PROJECT NO:4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN: PAVEMENT MARKING AND SIGNING	SHEET 50	E

2

LEGEND

WORK AREA

CONSTRUCT LEFT TURN LANE AND HOSPITAL DRIVEWAY.

CLOSE LANES WITH DRUMS AND TAPERS PER SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON FREEWAY/EXPRESSWAY".

ADVANCED WARNING SIGNS SHALL CONFORM TO SDD "TRAFFIC CONTROL, ADVANCED WARNING SIGNS 40 MPH OR LESS"

MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION ON TAYLOR DRIVE AT ALL TIMES DURING CONSTRUCTION.

NOTE:

PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES DURING THE PROJECT. ONE SIDEWALK EACH ON TAYLOR AND SUPERIOR MUST BE OPEN DURING CONSTRUCTION.

N

2

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	STAGE 1 CONSTRUCTION & TRAFFIC CONTROL PLAN	SHEET 51	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\025001_TC.DWG
LAYOUT NAME - 025001_TC - 025001

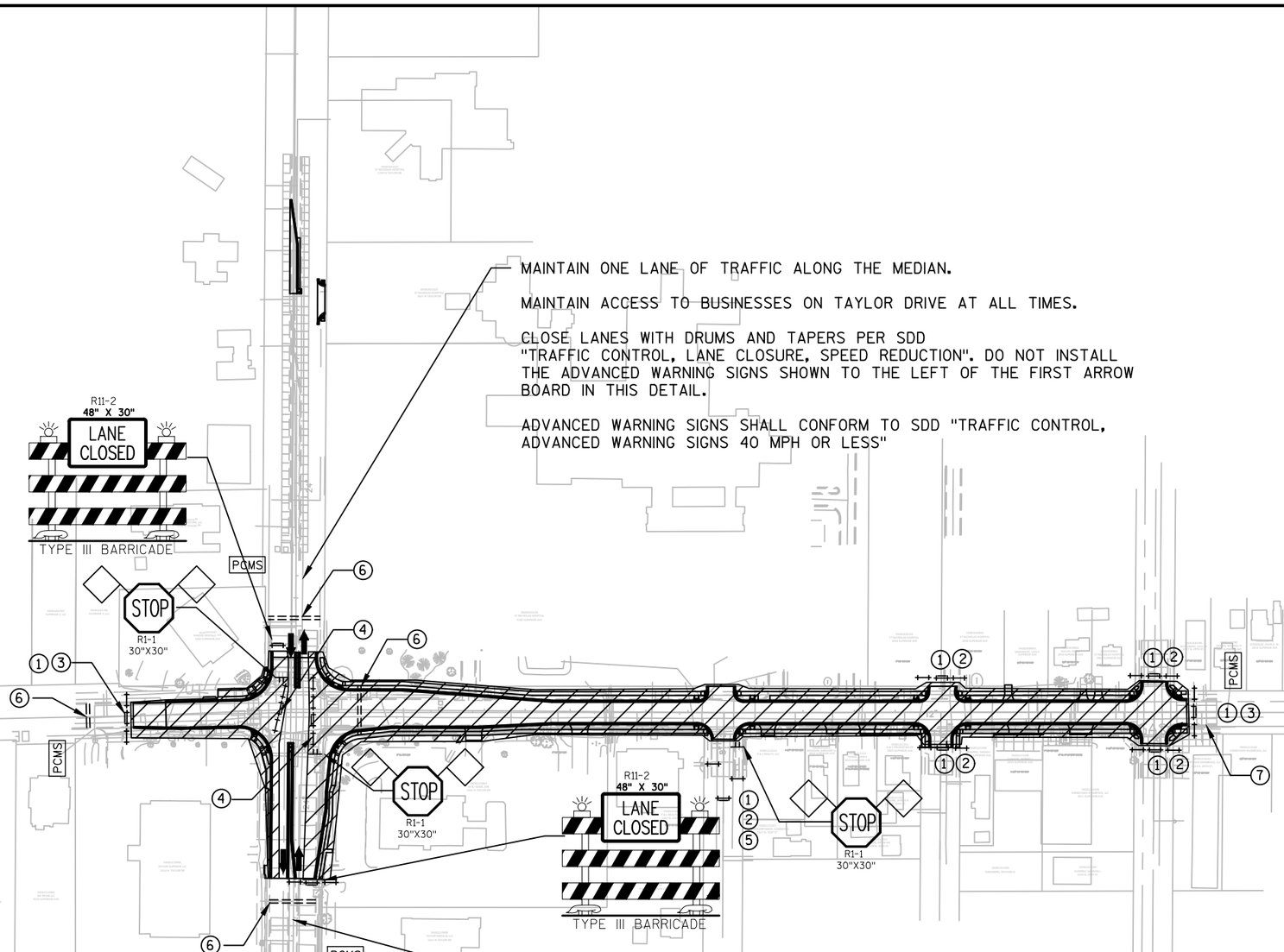
PLOT DATE : 1/11/2019 9:37 AM PLOT BY : HOLZEM, ANNE PLOT NAME : PLOT SCALE : 1 IN:200 FT

NOTE:

PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES DURING THE PROJECT. ONE SIDEWALK EACH ON TAYLOR AND SUPERIOR MUST BE OPEN DURING CONSTRUCTION.

ACCESS TO ST. NICHOLAS HOSPITAL MUST BE MAINTAINED ACROSS SUPERIOR AVENUE AT 31ST STREET FOR EMERGENCY ROOM. PAVING GAPS REQUIRED AT THIS LOCATION.

DRIVEWAY ACCESS MUST BE COORDINATED WITH ST. NICHOLAS HOSPITAL PRIOR TO REMOVING A DRIVEWAY FROM SERVICE.



MAINTAIN ONE LANE OF TRAFFIC ALONG THE MEDIAN.

MAINTAIN ACCESS TO BUSINESSES ON TAYLOR DRIVE AT ALL TIMES.

CLOSE LANES WITH DRUMS AND TAPERS PER SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION". DO NOT INSTALL THE ADVANCED WARNING SIGNS SHOWN TO THE LEFT OF THE FIRST ARROW BOARD IN THIS DETAIL.

ADVANCED WARNING SIGNS SHALL CONFORM TO SDD "TRAFFIC CONTROL, ADVANCED WARNING SIGNS 40 MPH OR LESS"

MAINTAIN ONE LANE OF TRAFFIC ALONG THE MEDIAN.
MAINTAIN AN ACCESS OPENING TO BMO BANK ON THE SE QUADRANT OF THE SUPERIOR AVENUE INTERSECTION.

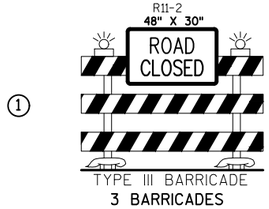
MAINTAIN ACCESS TO BUSINESSES ON TAYLOR DRIVE AT ALL TIMES.

CLOSE LANES WITH DRUMS AND TAPERS PER SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION". DO NOT INSTALL THE ADVANCED WARNING SIGNS SHOWN TO THE LEFT OF THE FIRST ARROW BOARD IN THIS DETAIL.

ADVANCED WARNING SIGNS SHALL CONFORM TO SDD "TRAFFIC CONTROL, ADVANCED WARNING SIGNS 40 MPH OR LESS"

LEGEND

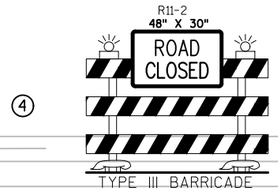
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN



① 3 BARRICADES

② ADVANCED WARNING SIGNS SHALL CONFORM TO SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"

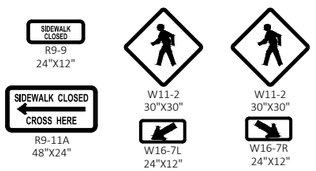
③ ADVANCED WARNING SIGNS SHALL CONFORM TO SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"



④ 5 BARRICADES

⑤ STAGGER BARRICADES TO ALLOW FOR EMERGENCY ACCESS

⑥ TEMPORARY CROSSWALK. PROVIDE TEMPORARY CURB RAMPS PER SDD "TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION". PROVIDE TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES. PROVIDE SIDEWALK CLOSED AND CROSSWALK SIGNS.



⑦ EXISTING CROSSWALK TO TO BE MAINTAINED THROUGHOUT CONSTRUCTION. PROVIDE SIDEWALK CLOSED SIGNS.

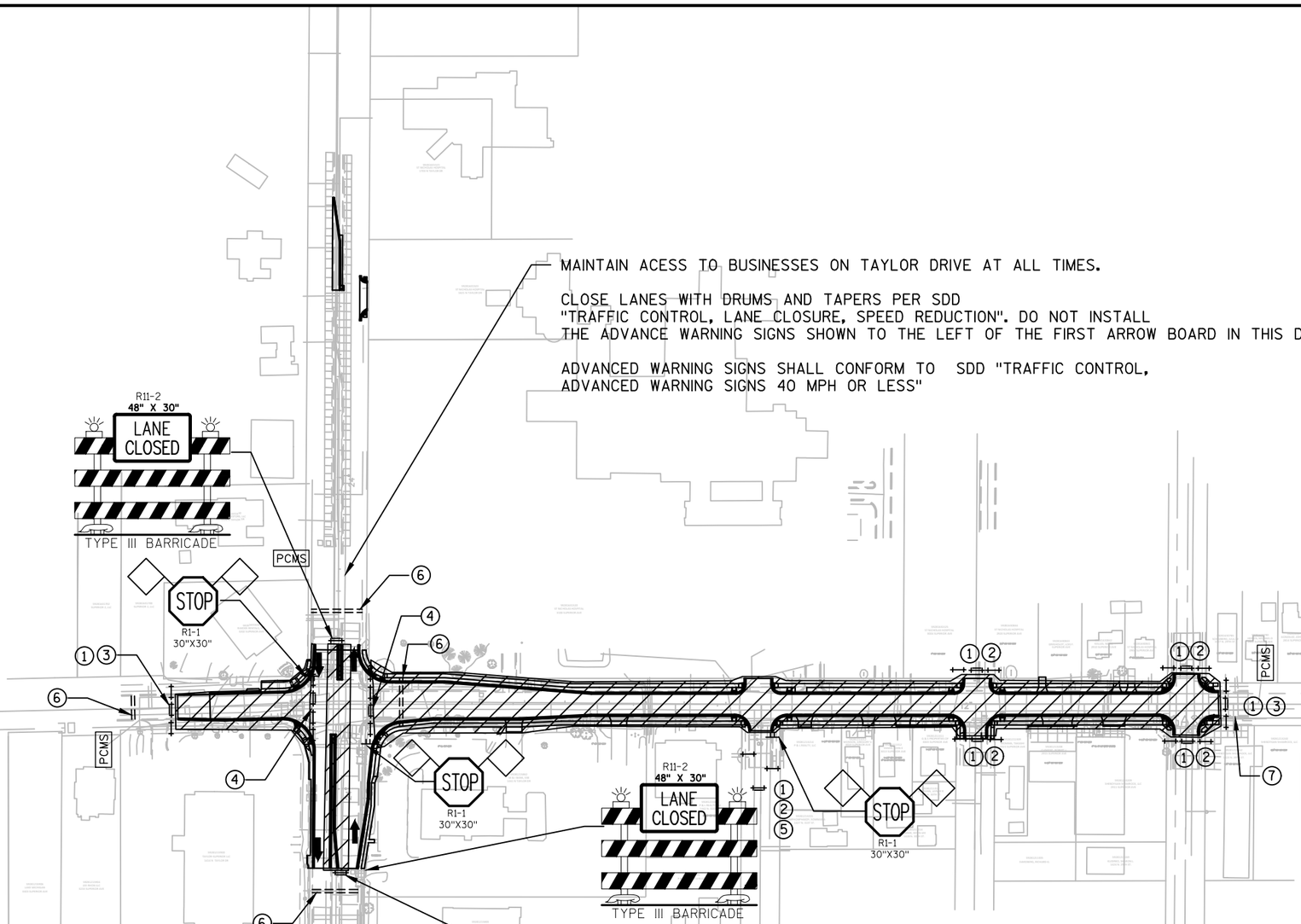
PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	STAGE 2 CONSTRUCTION & TRAFFIC CONTROL PLAN	SHEET 52	E

NOTE:

PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES DURING THE PROJECT. ONE SIDEWALK EACH ON TAYLOR AND SUPERIOR MUST BE OPEN DURING CONSTRUCTION.

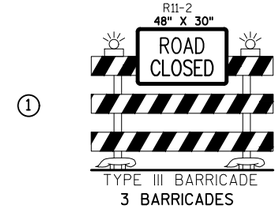
ACCESS TO ST. NICHOLAS HOSPITAL MUST BE MAINTAINED ACROSS SUPERIOR AVENUE AT 31ST STREET FOR EMERGENCY ROOM. PAVING GAPS REQUIRED AT THIS LOCATION.

DRIVEWAY ACCESS MUST BE COORDINATED WITH ST. NICHOLAS HOSPITAL PRIOR TO REMOVING A DRIVEWAY FROM SERVICE.



LEGEND

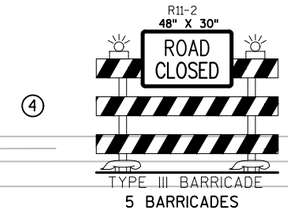
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN



① 3 BARRICADES

② ADVANCED WARNING SIGNS SHALL CONFORM TO SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"

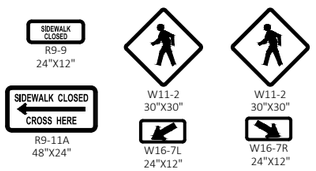
③ ADVANCED WARNING SIGNS SHALL CONFORM TO SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"



④ 5 BARRICADES

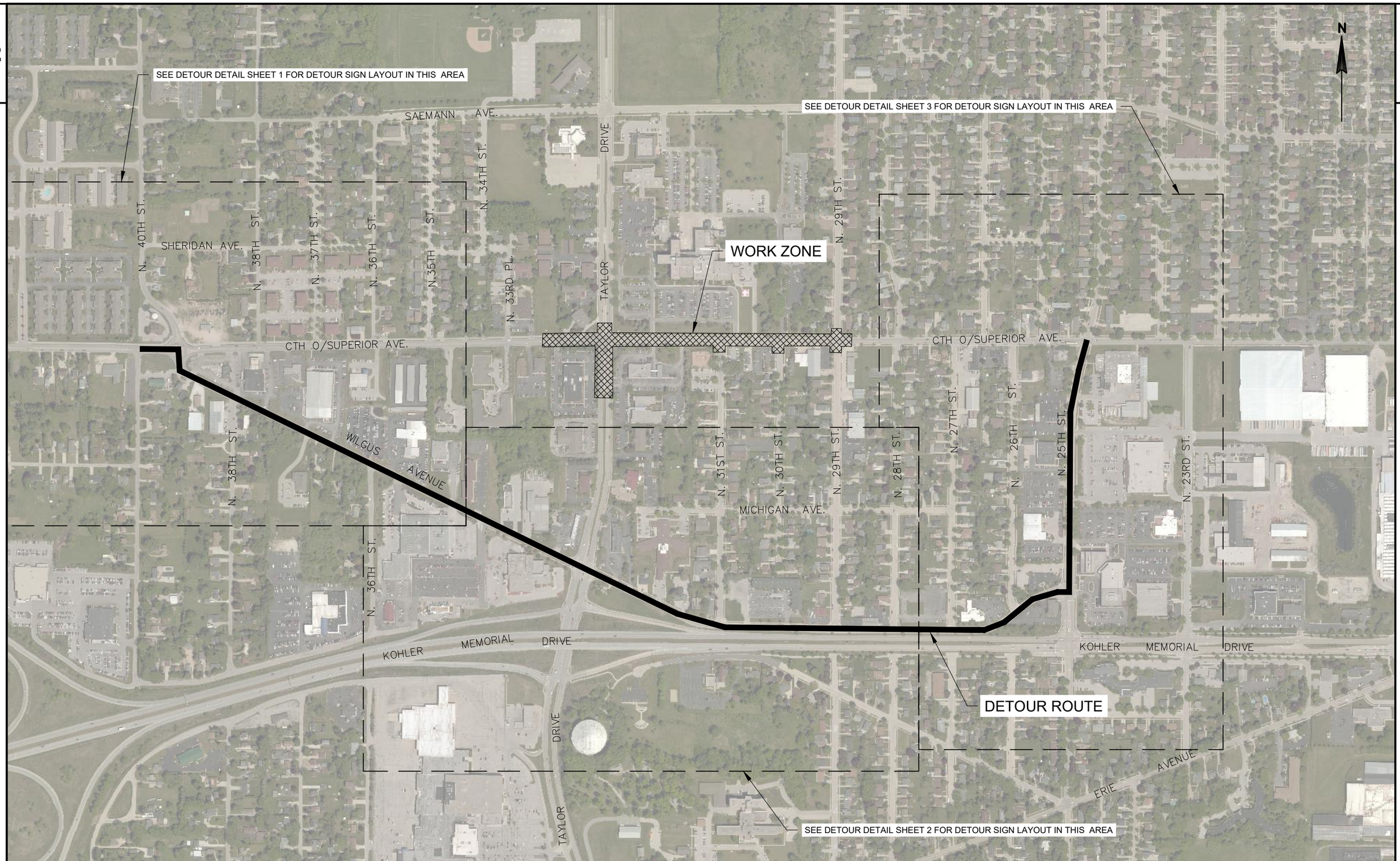
⑤ STAGGER BARRICADES TO ALLOW FOR EMERGENCY ACCESS

⑥ TEMPORARY CROSSWALK. PROVIDE TEMPORARY CURB RAMPS PER SDD "TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION". PROVIDE TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES. PROVIDE SIDEWALK CLOSED AND CROSSWALK SIGNS.

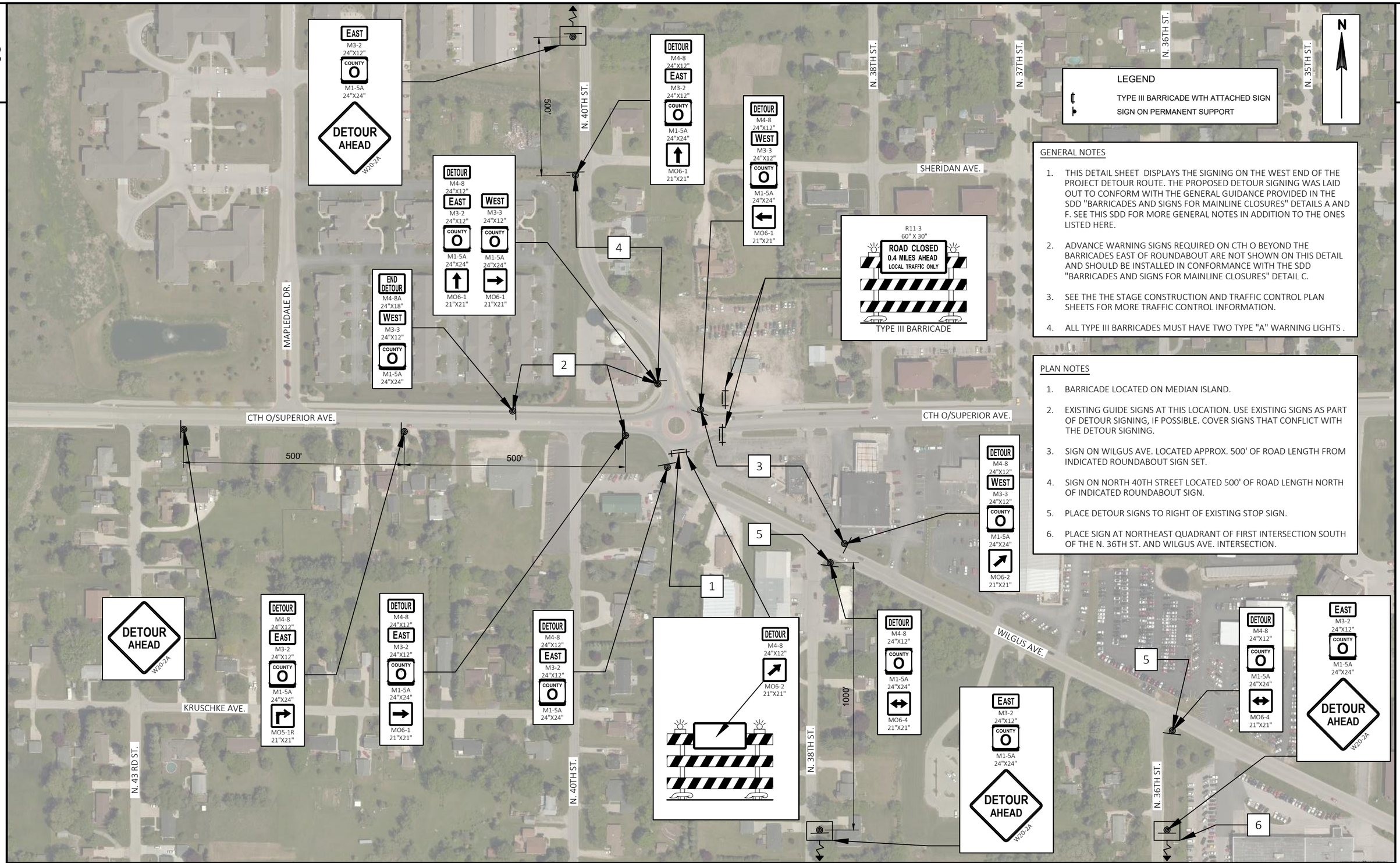


⑦ EXISTING CROSSWALK TO TO BE MAINTAINED THROUGHOUT CONSTRUCTION. PROVIDE SIDEWALK CLOSED SIGNS.

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	STAGE 3 CONSTRUCTION & TRAFFIC CONTROL PLAN	SHEET 53	E



PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	DETOUR OVERVIEW	SHEET 54	E

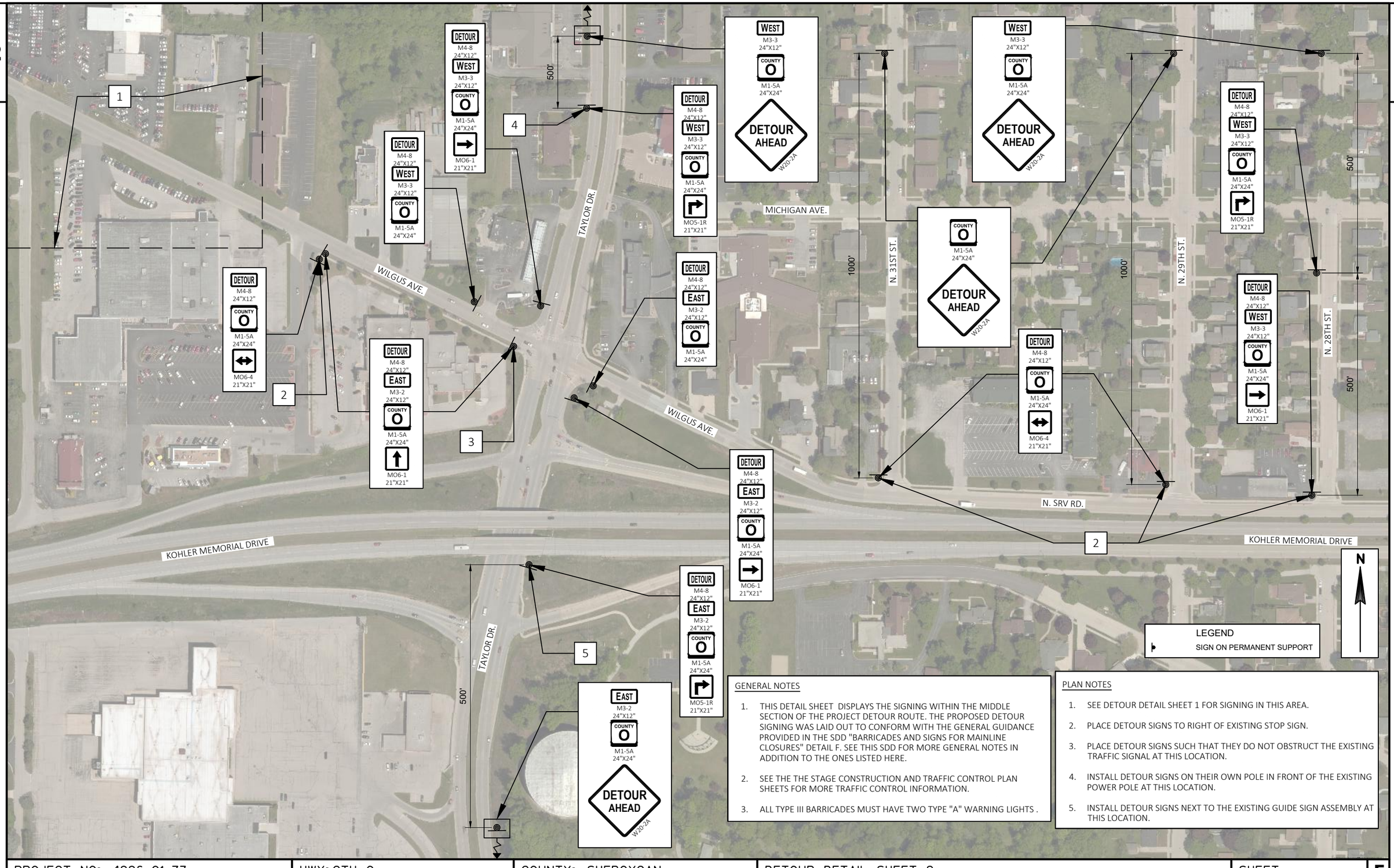


GENERAL NOTES

1. THIS DETAIL SHEET DISPLAYS THE SIGNING ON THE WEST END OF THE PROJECT DETOUR ROUTE. THE PROPOSED DETOUR SIGNING WAS LAID OUT TO CONFORM WITH THE GENERAL GUIDANCE PROVIDED IN THE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAILS A AND F. SEE THIS SDD FOR MORE GENERAL NOTES IN ADDITION TO THE ONES LISTED HERE.
2. ADVANCE WARNING SIGNS REQUIRED ON CTH O BEYOND THE BARRICADES EAST OF ROUNDABOUT ARE NOT SHOWN ON THIS DETAIL AND SHOULD BE INSTALLED IN CONFORMANCE WITH THE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL C.
3. SEE THE THE STAGE CONSTRUCTION AND TRAFFIC CONTROL PLAN SHEETS FOR MORE TRAFFIC CONTROL INFORMATION.
4. ALL TYPE III BARRICADES MUST HAVE TWO TYPE "A" WARNING LIGHTS .

PLAN NOTES

1. BARRICADE LOCATED ON MEDIAN ISLAND.
2. EXISTING GUIDE SIGNS AT THIS LOCATION. USE EXISTING SIGNS AS PART OF DETOUR SIGNING, IF POSSIBLE. COVER SIGNS THAT CONFLICT WITH THE DETOUR SIGNING.
3. SIGN ON WILGUS AVE. LOCATED APPROX. 500' OF ROAD LENGTH FROM INDICATED ROUNDABOUT SIGN SET.
4. SIGN ON NORTH 40TH STREET LOCATED 500' OF ROAD LENGTH NORTH OF INDICATED ROUNDABOUT SIGN.
5. PLACE DETOUR SIGNS TO RIGHT OF EXISTING STOP SIGN.
6. PLACE SIGN AT NORTHEAST QUADRANT OF FIRST INTERSECTION SOUTH OF THE N. 36TH ST. AND WILGUS AVE. INTERSECTION.



GENERAL NOTES

1. THIS DETAIL SHEET DISPLAYS THE SIGNING WITHIN THE MIDDLE SECTION OF THE PROJECT DETOUR ROUTE. THE PROPOSED DETOUR SIGNING WAS LAID OUT TO CONFORM WITH THE GENERAL GUIDANCE PROVIDED IN THE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL F. SEE THIS SDD FOR MORE GENERAL NOTES IN ADDITION TO THE ONES LISTED HERE.
2. SEE THE THE STAGE CONSTRUCTION AND TRAFFIC CONTROL PLAN SHEETS FOR MORE TRAFFIC CONTROL INFORMATION.
3. ALL TYPE III BARRICADES MUST HAVE TWO TYPE "A" WARNING LIGHTS .

PLAN NOTES

1. SEE DETOUR DETAIL SHEET 1 FOR SIGNING IN THIS AREA.
2. PLACE DETOUR SIGNS TO RIGHT OF EXISTING STOP SIGN.
3. PLACE DETOUR SIGNS SUCH THAT THEY DO NOT OBSTRUCT THE EXISTING TRAFFIC SIGNAL AT THIS LOCATION.
4. INSTALL DETOUR SIGNS ON THEIR OWN POLE IN FRONT OF THE EXISTING POWER POLE AT THIS LOCATION.
5. INSTALL DETOUR SIGNS NEXT TO THE EXISTING GUIDE SIGN ASSEMBLY AT THIS LOCATION.

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	DETOUR DETAIL SHEET 2	SHEET 56	E

KOHLER MEMORIAL DRIVE

N. SRV. RD

MICHIGAN AVE.

N. 28TH ST.

CTH O/SUPERIOR AVE.

N. 27TH ST.

N. 26TH ST.

N. 25TH ST.

N. 23RD ST.

500'

1000'

DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / COUNTY O M1-5A 24"X24" / MO5-1L 21"X21"

DETOUR M4-8 24"X12" / WEST M3-3 24"X12" / COUNTY O M1-5A 24"X24" / MO6-1 21"X21"

DETOUR M4-8 24"X12" / WEST M3-3 24"X12" / COUNTY O M1-5A 24"X24" / MO5-1R 21"X21"

DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / COUNTY O M1-5A 24"X24" / MO6-1 21"X21"

WEST M3-3 24"X12" / COUNTY O M1-5A 24"X24" / DETOUR AHEAD W20-2A

DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / COUNTY O M1-5A 24"X24" / MO6-1 21"X21"

WEST M3-3 24"X12" / COUNTY O M1-5A 24"X24" / DETOUR AHEAD W20-2A

R11-3 60" X 30" ROAD CLOSED 0.3 MILES AHEAD LOCAL TRAFFIC ONLY

TYPE III BARRICADE

DETOUR M4-8 24"X12" / WEST M3-3 24"X12" / COUNTY O M1-5A 24"X24" / MO6-1 21"X21"

DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / COUNTY O M1-5A 24"X24" / MO5-1R 21"X21"

DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / COUNTY O M1-5A 24"X24" / MO6-1 21"X21"

END DETOUR M4-8A 24"X18" / EAST M3-2 24"X12" / COUNTY O M1-5A 24"X24"

DETOUR AHEAD W20-2A

DETOUR M4-8 24"X12" / WEST M3-3 24"X12" / COUNTY O M1-5A 24"X24" / MO5-1L 21"X21"

DETOUR M4-8 24"X12" / WEST M3-3 24"X12" / COUNTY O M1-5A 24"X24" / MO6-1 21"X21"

DETOUR M4-8 24"X12" / WEST M3-3 24"X12" / COUNTY O M1-5A 24"X24" / MO6-1 21"X21"

LEGEND

TYPE III BARRICADE WTH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

1. THIS DETAIL SHEET DISPLAYS THE SIGNING AT THE EAST END OF THE PROJECT DETOUR ROUTE. THE PROPOSED DETOUR SIGNING WAS LAID OUT TO CONFORM WITH THE GENERAL GUIDANCE PROVIDED IN THE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAILS A AND F. SEE THIS SDD FOR MORE GENERAL NOTES IN ADDITION TO THE ONES LISTED HERE.
2. ADVANCE WARNING SIGNS REQUIRED ON CTH O BEYOND THE BARRICADE WEST OF THE CTH O/N. 25TH ST. INTERSECTION ARE NOT SHOWN ON THIS DETAIL AND SHOULD BE INSTALLED IN CONFORMANCE WITH THE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL C.
3. SEE THE THE STAGE CONSTRUCTION AND TRAFFIC CONTROL PLAN SHEETS FOR MORE TRAFFIC CONTROL INFORMATION.
4. ALL TYPE III BARRICADES MUST HAVE TWO TYPE "A" WARNING LIGHTS .

PLAN NOTES

1. SEE DETOUR DETAIL SHEET 2 FOR SIGNING IN THIS AREA.
2. PLACE DETOUR SIGNS TO RIGHT OF EXISTING STOP SIGN.
3. MOVE EXISTING "TRUCK ROUTE" SIGN AT THIS LOCATION IF IT OBSTRUCTS THE PROPOSED DETOUR ROUTE SIGNING.
4. PLACE DETOUR SIGN ADJACENT TO THE BEGINNING OF THE RIGHT TURN LANE TAPER.
5. INSTALL DETOUR SIGN IN A MANNER THAT IT DOES NOT OBSTRUCT THE EXISTING TRAFFIC SIGNAL.

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	DETOUR DETAIL SHEET 3	SHEET 57	E

SUPERIOR AVENUE						
NUMBER	STATION START	STATION END	NORTHING START	EASTING START	LENGTH	LINE/CHORD DIRECTION
L1	9+50.00	11+59.99	180298.74	208992.82	209.99′	N88° 41′ 30″E
L2	11+59.99	12+10.84	180303.54	209202.75	50.85′	S89° 29′ 58″E
L3	12+10.84	26+73.15	180303.09	209253.61	1462.31′	N89° 59′ 56″E

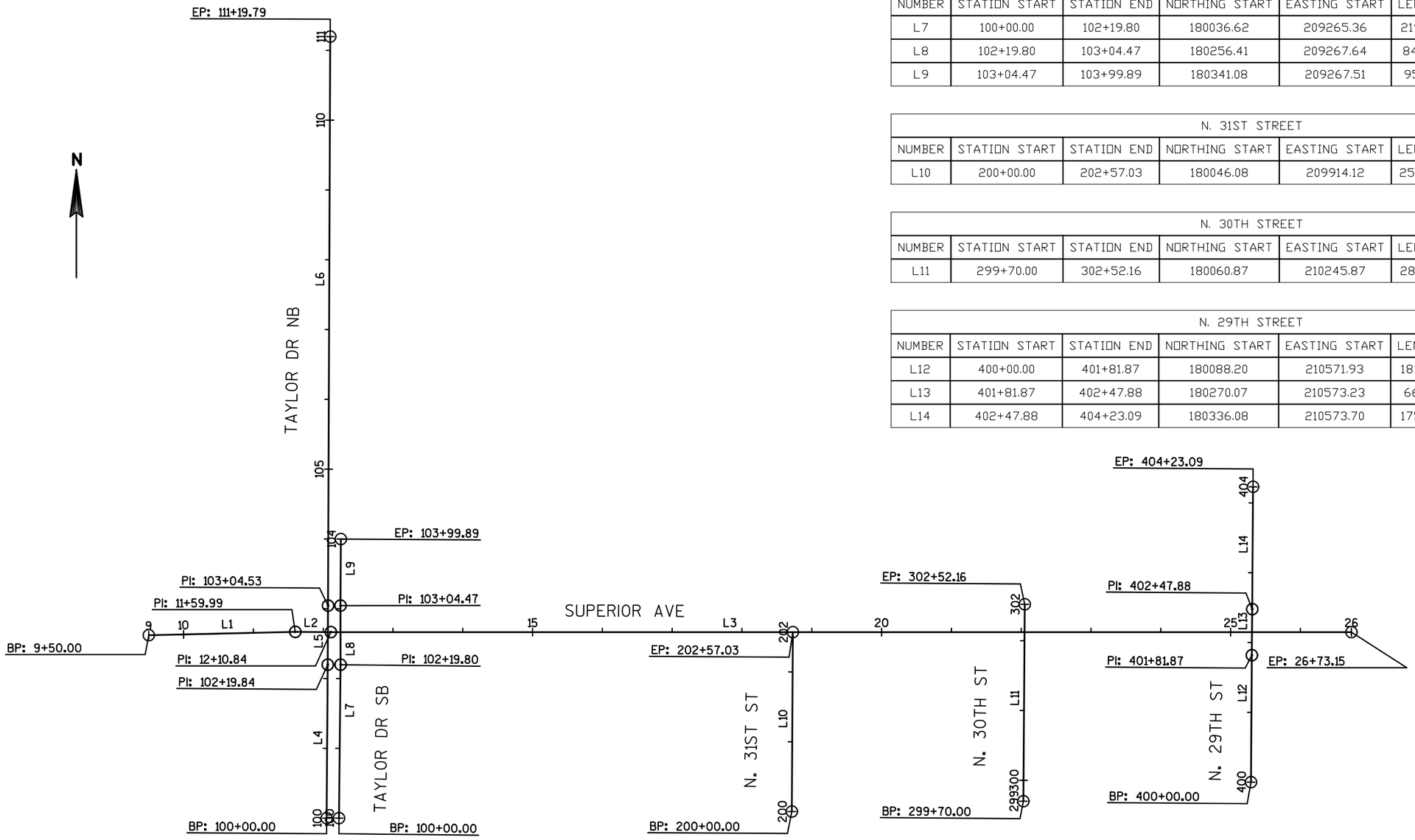
TAYLOR DRIVE SOUTHBOUND						
NUMBER	STATION START	STATION END	NORTHING START	EASTING START	LENGTH	LINE/CHORD DIRECTION
L4	100+00.00	102+19.84	180036.62	209247.64	219.84′	N00° 24′ 27″E
L5	102+19.84	103+04.53	180256.46	209249.21	84.68′	N00° 20′ 47″E
L6	103+04.53	111+19.79	180341.14	209249.72	815.26′	N00° 13′ 18″E

TAYLOR DRIVE NORTHBOUND						
NUMBER	STATION START	STATION END	NORTHING START	EASTING START	LENGTH	LINE/CHORD DIRECTION
L7	100+00.00	102+19.80	180036.62	209265.36	219.80′	N00° 35′ 46″E
L8	102+19.80	103+04.47	180256.41	209267.64	84.67′	N00° 05′ 34″W
L9	103+04.47	103+99.89	180341.08	209267.51	95.41′	N00° 22′ 11″E

N. 31ST STREET						
NUMBER	STATION START	STATION END	NORTHING START	EASTING START	LENGTH	LINE/CHORD DIRECTION
L10	200+00.00	202+57.03	180046.08	209914.12	257.03′	N00° 19′ 31″E

N. 30TH STREET						
NUMBER	STATION START	STATION END	NORTHING START	EASTING START	LENGTH	LINE/CHORD DIRECTION
L11	299+70.00	302+52.16	180060.87	210245.87	282.16′	N00° 24′ 17″E

N. 29TH STREET						
NUMBER	STATION START	STATION END	NORTHING START	EASTING START	LENGTH	LINE/CHORD DIRECTION
L12	400+00.00	401+81.87	180088.20	210571.93	181.87′	N00° 24′ 37″E
L13	401+81.87	402+47.88	180270.07	210573.23	66.01′	N00° 24′ 36″E
L14	402+47.88	404+23.09	180336.08	210573.70	175.21′	N00° 24′ 36″E



PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	ALIGNMENT DIAGRAM	SHEET	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\027201_AD.DWG PLOT DATE : 1/10/2019 4:33 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:160 FT

4996-01-73

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	3.000	3.000
0004	201.0120	Clearing	ID	12.000	12.000
0006	201.0205	Grubbing	STA	3.000	3.000
0008	201.0220	Grubbing	ID	12.000	12.000
0010	204.0100	Removing Pavement	SY	8,866.000	8,866.000
0012	204.0150	Removing Curb & Gutter	LF	765.000	765.000
0014	204.0155	Removing Concrete Sidewalk	SY	1,959.000	1,959.000
0016	204.0195	Removing Concrete Bases	EACH	11.000	11.000
0018	204.0210	Removing Manholes	EACH	5.000	5.000
0020	204.0215	Removing Catch Basins	EACH	19.000	19.000
0022	204.0245	Removing Storm Sewer (size) 01. 8-inch	LF	18.000	18.000
0024	204.0245	Removing Storm Sewer (size) 02. 12-Inch	LF	162.000	162.000
0026	204.0245	Removing Storm Sewer (size) 03. 15-inch	LF	42.000	42.000
0028	204.0245	Removing Storm Sewer (size) 04. 18-Inch	LF	64.000	64.000
0030	204.0245	Removing Storm Sewer (size) 05. 30-inch	LF	59.000	59.000
0032	204.0245	Removing Storm Sewer (size) 06. 36-inch	LF	624.000	624.000
0034	204.0245	Removing Storm Sewer (size) 07. 42-inch	LF	59.000	59.000
0036	204.0245	Removing Storm Sewer (size) 08. 38-inch x 60-inch Elliptical	LF	69.000	69.000
0038	204.0291.S	Abandoning Sewer	CY	10.000	10.000
0040	205.0100	Excavation Common	CY	11,796.000	11,796.000
0042	213.0100	Finishing Roadway (project) 01. 4996-01-73	EACH	1.000	1.000
0044	305.0110	Base Aggregate Dense 3/4-Inch	TON	433.000	433.000
0046	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	3,578.000	3,578.000
0048	312.0110	Select Crushed Material	TON	6,668.000	6,668.000
0050	405.1000	Stamping Colored Concrete	CY	24.000	24.000
0052	415.0080	Concrete Pavement 8-Inch	SY	9,468.000	9,468.000
0054	415.0210	Concrete Pavement Gaps	EACH	1.000	1.000
0056	415.1080	Concrete Pavement HES 8-Inch	SY	525.000	525.000
0058	415.4100	Concrete Pavement Joint Filling	SY	9,994.000	9,994.000
0060	415.5110.S	Concrete Pavement Joint Layout	LS	1.000	1.000
0062	416.0160	Concrete Driveway 6-Inch	SY	469.000	469.000
0064	416.0610	Drilled Tie Bars	EACH	68.000	68.000
0066	416.0620	Drilled Dowel Bars	EACH	198.000	198.000
0068	465.0105	Asphaltic Surface	TON	66.000	66.000
0070	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	11.000	11.000
0072	520.8000	Concrete Collars for Pipe	EACH	9.000	9.000
0074	601.0600	Concrete Curb Pedestrian	LF	124.000	124.000
0076	602.0410	Concrete Sidewalk 5-Inch	SF	19,956.000	19,956.000
0078	602.0415	Concrete Sidewalk 6-Inch	SF	132.000	132.000

4996-01-73

Line	Item	Item Description	Unit	Total	Qty
0080	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	294.000	294.000
0082	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	461.000	461.000
0084	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	118.000	118.000
0086	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	58.000	58.000
0088	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	570.000	570.000
0090	608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	173.000	173.000
0092	608.0342	Storm Sewer Pipe Reinforced Concrete Class III 42-Inch	LF	508.000	508.000
0094	608.2338	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 38x60-Inch	LF	65.000	65.000
0096	611.0624	Inlet Covers Type H	EACH	28.000	28.000
0098	611.1230	Catch Basins 2x3-FT	EACH	28.000	28.000
0100	611.2004	Manholes 4-FT Diameter	EACH	5.000	5.000
0102	611.2005	Manholes 5-FT Diameter	EACH	1.000	1.000
0104	611.2006	Manholes 6-FT Diameter	EACH	6.000	6.000
0106	611.2008	Manholes 8-FT Diameter	EACH	1.000	1.000
0108	618.0100	Maintenance And Repair of Haul Roads (project) 01. 4996-01-73	EACH	1.000	1.000
0110	619.1000	Mobilization	EACH	1.000	1.000
0112	620.0300	Concrete Median Sloped Nose	SF	149.000	149.000
0114	621.0100	Landmark Reference Monuments	EACH	24.000	24.000
0116	623.0200	Dust Control Surface Treatment	SY	11,525.000	11,525.000
0118	625.0100	Topsoil	SY	4,270.000	4,270.000
0120	628.1504	Silt Fence	LF	45.000	45.000
0122	628.1520	Silt Fence Maintenance	LF	45.000	45.000
0124	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0126	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0128	628.2006	Erosion Mat Urban Class I Type A	SY	4,270.000	4,270.000
0130	628.7005	Inlet Protection Type A	EACH	28.000	28.000
0132	628.7015	Inlet Protection Type C	EACH	34.000	34.000
0134	628.7570	Rock Bags	EACH	20.000	20.000
0136	629.0210	Fertilizer Type B	CWT	3.000	3.000
0138	630.0120	Seeding Mixture No. 20	LB	115.000	115.000
0140	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	26.000	26.000
0142	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	3.000	3.000
0144	637.2210	Signs Type II Reflective H	SF	163.030	163.030

4996-01-73

Line	Item	Item Description	Unit	Total	Qty
0146	637.2230	Signs Type II Reflective F	SF	37.500	37.500
0148	638.2602	Removing Signs Type II	EACH	37.000	37.000
0150	638.3000	Removing Small Sign Supports	EACH	27.000	27.000
0152	642.5201	Field Office Type C	EACH	1.000	1.000
0154	643.0300	Traffic Control Drums	DAY	7,310.000	7,310.000
0156	643.0420	Traffic Control Barricades Type III	DAY	8,170.000	8,170.000
0158	643.0705	Traffic Control Warning Lights Type A	DAY	16,215.000	16,215.000
0160	643.0715	Traffic Control Warning Lights Type C	DAY	2,780.000	2,780.000
0162	643.0800	Traffic Control Arrow Boards	DAY	695.000	695.000
0164	643.0900	Traffic Control Signs	DAY	35,190.000	35,190.000
0166	643.0920	Traffic Control Covering Signs Type II	EACH	2.000	2.000
0168	643.1050	Traffic Control Signs PCMS	DAY	620.000	620.000
0170	643.5000	Traffic Control	EACH	1.000	1.000
0172	644.1601.S	Temporary Curb Ramp	EACH	8.000	8.000
0174	646.1020	Marking Line Epoxy 4-Inch	LF	4,327.000	4,327.000
0176	646.3020	Marking Line Epoxy 8-Inch	LF	528.000	528.000
0178	646.5020	Marking Arrow Epoxy	EACH	20.000	20.000
0180	646.5120	Marking Word Epoxy	EACH	3.000	3.000
0182	646.5220	Marking Symbol Epoxy	EACH	11.000	11.000
0184	646.6120	Marking Stop Line Epoxy 18-Inch	LF	190.000	190.000
0186	646.7120	Marking Diagonal Epoxy 12-Inch	LF	45.000	45.000
0188	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,460.000	1,460.000
0190	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	2,322.000	2,322.000
0192	650.4000	Construction Staking Storm Sewer	EACH	42.000	42.000
0194	650.4500	Construction Staking Subgrade	LF	1,878.000	1,878.000
0196	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	50.000	50.000
0198	650.7000	Construction Staking Concrete Pavement	LF	1,878.000	1,878.000
0200	650.8500	Construction Staking Electrical Installations (project) 01. 4996-01-73	LS	1.000	1.000
0202	650.9000	Construction Staking Curb Ramps	EACH	32.000	32.000
0204	650.9910	Construction Staking Supplemental Control (project) 01. 4996-01-73	LS	1.000	1.000
0206	650.9920	Construction Staking Slope Stakes	LF	1,878.000	1,878.000
0208	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,688.000	1,688.000
0210	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	520.000	520.000
0212	652.0615	Conduit Special 3-Inch	LF	470.000	470.000
0214	653.0115	Pull Boxes Steel 12x36-Inch	EACH	5.000	5.000
0216	653.0140	Pull Boxes Steel 24x42-Inch	EACH	11.000	11.000
0218	653.0905	Removing Pull Boxes	EACH	25.000	25.000
0220	654.0101	Concrete Bases Type 1	EACH	7.000	7.000

4996-01-73

Line	Item	Item Description	Unit	Total	Qty
0222	654.0105	Concrete Bases Type 5	EACH	10.000	10.000
0224	655.0230	Cable Traffic Signal 5-14 AWG	LF	760.000	760.000
0226	655.0240	Cable Traffic Signal 7-14 AWG	LF	765.000	765.000
0228	655.0260	Cable Traffic Signal 12-14 AWG	LF	1,565.000	1,565.000
0230	655.0320	Cable Type UF 2-10 AWG Grounded	LF	830.000	830.000
0232	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,205.000	1,205.000
0234	655.0610	Electrical Wire Lighting 12 AWG	LF	3,456.000	3,456.000
0236	655.0615	Electrical Wire Lighting 10 AWG	LF	580.000	580.000
0238	655.0625	Electrical Wire Lighting 6 AWG	LF	1,995.000	1,995.000
0240	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. Sta. 11+35, 38' LT (Street lighting)	LS	1.000	1.000
0242	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. Sta. 11+40, 38' LT (Traffic Signal)	LS	1.000	1.000
0244	657.0100	Pedestal Bases	EACH	7.000	7.000
0246	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	2.000	2.000
0248	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	2.000	2.000
0250	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	3.000	3.000
0252	658.0173	Traffic Signal Face 3S 12-Inch	EACH	16.000	16.000
0254	658.0174	Traffic Signal Face 4S 12-Inch	EACH	4.000	4.000
0256	658.0416	Pedestrian Signal Face 16-Inch	EACH	8.000	8.000
0258	658.0500	Pedestrian Push Buttons	EACH	8.000	8.000
0260	658.5069	Signal Mounting Hardware (location) 01. Superior and Taylor	LS	1.000	1.000
0262	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0264	690.0150	Sawing Asphalt	LF	293.000	293.000
0266	690.0250	Sawing Concrete	LF	923.000	923.000
0268	715.0415	Incentive Strength Concrete Pavement	DOL	2,997.000	2,997.000
0270	740.0440	Incentive IRI Ride	DOL	1,220.000	1,220.000
0272	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000	1,200.000
0274	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000	600.000
0276	SPV.0060	Special 01. Concrete Bases Type 10, Contractor Supplied Anchor Bolts & Anchor Rod Templa	EACH	1.000	1.000
0278	SPV.0060	Special 02. Concrete Bases Type 13, Contractor Supplied Anchor Bolts & Anchor Rod Templa	EACH	3.000	3.000
0280	SPV.0060	Special 03. Poles Type 10	EACH	1.000	1.000
0282	SPV.0060	Special 04. Poles Type 13	EACH	3.000	3.000
0284	SPV.0060	Special 05. Monotube Arms 25-FT	EACH	1.000	1.000
0286	SPV.0060	Special 06. Monotube Arms 40-FT	EACH	3.000	3.000
0288	SPV.0060	Special 07. Luminaire Arms Steel 15-FT	EACH	4.000	4.000
0290	SPV.0060	Special 08. LED Luminaires	EACH	4.000	4.000
0292	SPV.0060	Special 09. Traffic Signal Controller and Cabinet Fully	EACH	1.000	1.000

4996-01-73

Line	Item	Item Description	Unit	Total	Qty
		Actuated 8-Phase			
0294	SPV.0060	Special 10. Lighting Assembly	EACH	9.000	9.000
0296	SPV.0060	Special 11. Storm Sewer Manhole Cover Type J-Special	EACH	14.000	14.000
0298	SPV.0060	Special 12. Sanitary Sewer Manhole Cover Type J-Special	EACH	14.000	14.000
0300	SPV.0060	Special 13. Internal Chimney Seal	EACH	14.000	14.000
0302	SPV.0060	Special 14. Lateral Connection Sealing	EACH	3.000	3.000
0304	SPV.0060	Special 15. Adjusting Water Valve Boxes	EACH	13.000	13.000
0306	SPV.0060	Special 16. Manholes 10-FT Diameter	EACH	1.000	1.000
0308	SPV.0060	Special 17. Combined Lighting and Traffic Signal Cabinet Base	EACH	1.000	1.000
0310	SPV.0060	Special 18. Salvage and Re-Install Bus Shelter	EACH	1.000	1.000
0312	SPV.0090	Special 01. Televising Storm Sewer	LF	1,949.000	1,949.000
0314	SPV.0090	Special 02. Sanitary Sewer Cured-in-Place Liner	LF	1,806.000	1,806.000
0316	SPV.0090	Special 03. Sanitary Sewer 8-Inch	LF	25.000	25.000
0318	SPV.0090	Special 04. Sanitary Sewer Laterals 6-Inch	LF	30.000	30.000
0320	SPV.0090	Special 05. Televising Sanitary Sewer	LF	1,806.000	1,806.000
0322	SPV.0090	Special 06. Concrete Curb and Gutter Type A 26-inch	LF	414.000	414.000
0324	SPV.0090	Special 07. Concrete Curb and Gutter Type A 32-Inch	LF	3,054.000	3,054.000
0326	SPV.0090	Special 08. Concrete Curb and Gutter Type D 26-Inch	LF	50.000	50.000
0328	SPV.0090	Special 09. Concrete Curb and Gutter Type A 20-Inch	LF	137.000	137.000
0330	SPV.0090	Special 10. Storm Sewer Pipe PVC 6-Inch	LF	24.000	24.000
0332	SPV.0090	Special 11. Storm Sewer Pipe PVC 8-inch	LF	50.000	50.000
0334	SPV.0105	Special 01. Emergency Vehicle Preemption and Priority Control System, Intersection of Su	LS	1.000	1.000
0336	SPV.0105	Special 02. Remove Traffic Signals, Intersection of Superior Ave & Taylor Dr	LS	1.000	1.000
0338	SPV.0105	Special 03. Vehicle Video Detection System 4-Camera, Intersection of Superior Ave & Tayl	LS	1.000	1.000
0340	SPV.0105	Special 05. Remove and Relocate Street Light	LS	1.000	1.000
0342	SPV.0120	Special 01. Water for Seeded Areas	MGAL	26.000	26.000
0344	SPV.0200	Special 01. Sanitary Sewer Manhole Liner	VF	153.000	153.000

3

CLEARING & GRUBBING

STATION	DESCRIPTION	ITEM NO. 201.0105 CLEARING STA	ITEM NO. 201.0120 CLEARING ID	ITEM NO. 201.0205 GRUBBING STA	ITEM NO. 201.0220 GRUBBING ID
13+00 - 15+00	CTH O, RT	2	---	2	---
14+00	CTH O, RT	---	12	---	12
100+75 - 101+75	TAYLOR DR, RT	1	---	1	---
TOTAL		**3**	**12**	**3**	**12**

REMOVING PAVEMENT ITEMS

LOCATION	DESCRIPTION	ITEM NO. 204.0100 REMOVING PAVEMENT SY
TAYLOR DR - 31ST	CTH O	3286
31ST TO 30TH	CTH O	1710
30TH TO 29TH	CTH O	1660
TAYLOR DRIVE	SOUTH OF CTH O	1807
TAYLOR DRIVE	NORTH OF CTH O	403
TOTAL		**8866**

REMOVING CURB AND GUTTER

STATION	-	STATION	DESCRIPTION	ITEM NO. 204.0150 REMOVING CURB AND GUTTER LF
10+20	-	11+82	LEFT	182
19+28	-	19+65	LEFT	55
22+10	-	22+33	LEFT	15
9+70	-	11+82	RIGHT	216
101+50	-	102+25	LEFT, PEDESTRIAN CURB	78
		HOSPITAL TURN LANE		220
TOTAL				**765**

REMOVING CONCRETE SIDEWALK

STATION	-	STATION	DESCRIPTION	ITEM NO. 204.0155 REMOVING CONCRETE SIDEWALK SY
11+45	-	11+75	LEFT	24
12+54	-	14+70	LEFT	152
14+94	-	19+40	LEFT	273
19+66	-	20+47	LEFT	61
20+73	-	20+97	LEFT	14
21+09	-	25+09	LEFT	224
25+52	-	25+79	LEFT	23
11+68	-	11+80	RIGHT	74
12+54	-	18+53	RIGHT	469
18+91	-	21+87	RIGHT	205
22+23	-	25+09	RIGHT	234
25+52	-	25+81	RIGHT	26
100+12	-	CTH O	RIGHT	105
100+12	-	CTH O	LEFT	74
TOTAL				**1959**

REMOVING STORM SEWER STRUCTURES

STATION	DESCRIPTION	ITEM NO. 204.0210 REMOVING MANHOLES EACH	ITEM NO. 204.0215 REMOVING CATCH BASINS EACH	ALIGNMENT	REMARKS
11+40	19.4' LT	--	1	CTH O	
11+48	19.4' LT	--	1	CTH O	
11+50	19.5' RT	--	1	CTH O	
11+60	19.5' RT	--	1	CTH O	
18+39	20.0' RT	--	1	CTH O	
18+40	20.0' LT	--	1	CTH O	
18+88	17.5' LT	1	--	CTH O	
20+61	14.0' LT	1	--	CTH O	
21+67	19.5' RT	--	2	CTH O	
21+69	20.0' LT	--	2	CTH O	
21+77	16.8' LT	1	--	CTH O	
22+19	16.9' LT	1	--	CTH O	
24+93	19.5' RT	--	1	CTH O	
24+95	20.5' LT	--	1	CTH O	ON 29TH STREET
25+11	39.5' RT	--	1	CTH O	
25+12	16.3' LT	1	--	CTH O	
25+49	37.5' RT	--	1	CTH O	ON 29TH STREET
102+19	26.0' LT	--	1	TAYLOR DR. SB	
102+20	26.0' RT	--	1	TAYLOR DR. NB	
103+33	24.0' RT	--	1	TAYLOR DR. NB	
301+75	17.9' LT	--	2	N. 30TH STREET	
301+75	17.9' RT	--	2	N. 30TH STREET	
TOTAL		**5**	**19**		

EARTHWORK SUMMARY TABLE

Division	From/To Station	Location	#205.0100 Excavation Common (1) Cut (2)	#205.0100 Excavation Common (1) EBS Excavation (3,8)	Salvaged/ Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (6) Factor 1.20	Mass Ordinate +/- (7)	Waste	#208.0100 Borrow	Comment:
1	STA 109+07 - STA 110+50	TAYLOR DR	173	25	90	83	17	20	63	6390		
2	STA 9+70 - STA 25+80	CTH O	8299	425	1479	6820	17	20	6799	6390		
3	STA 100+12 - STA 103+58	TAYLOR DR	2724	150	491	2233	8	10	2223	1734		
Grand Total			11196	600	2060	9136	42	51	9085	14514	0	
			Total Common Exc	11796								

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unusable Pavement Material is included in Cut in reconstruction area.
3) EBS Excavation to be backfilled with Select Borrow material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusable Pavement Material
6) Expanded Fill. Factor = 1.20
Expanded Fill = (Unexpanded Fill) * Fill Factor
7) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.
8) The EBS quantities are contingencys in the event that EBS is determined necessary by the Engineer. They do represent a planned part of the total common excavation quantity.

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010 UNLESS OTHERWISE NOTED.

3

3

REMOVING & ABANDONING STORM SEWER PIPE

STATION	-	STATION	DESCRIPTION	ITEM NO. 204.0245.01 REMOVING STORM SEWER 8-INCH LF	ITEM NO. 204.0245.02 REMOVING STORM SEWER 12-INCH LF	ITEM NO. 204.0245.03 REMOVING STORM SEWER 15-INCH LF	ITEM NO. 204.0245.04 REMOVING STORM SEWER 18-INCH LF	ITEM NO. 204.0245.05 REMOVING STORM SEWER 30-INCH LF	ITEM NO. 204.0245.06 REMOVING STORM SEWER 36-INCH LF	ITEM NO. 204.0245.07 REMOVING STORM SEWER 42-INCH LF	ITEM NO. 204.0245.08 REMOVING STORM SEWER 38-INCH X 60-INCH ELLIPTICAL LF	ITEM NO. 204.0291.S ABANDONING SEWER CY	REMARKS
18+02	-	18+40	LEFT	---	---	---	---	---	---	---	---	2	ABANDON 12-INCH STORM SEWER
18+40	-	18+59	LEFT	---	---	---	---	---	---	---	---	1	ABANDON 12-INCH STORM SEWER
18+40	-	18+40	LEFT TO RIGHT	---	13	---	---	---	---	---	---	1	ABANDON 12-INCH STORM SEWER
18+40	-	18+89	LEFT	---	---	20	---	---	---	---	---	1	ABANDON 15-INCH STORM SEWER
18+89	-	18+89	LEFT TO RIGHT	---	---	---	---	59	---	---	---	---	31ST STREET
18+89	-	20+61	LEFT	---	---	---	---	---	173	---	---	---	
20+61	-	20+61	LEFT TO RIGHT	8	---	---	---	---	---	---	---	---	
20+61	-	21+77	LEFT	---	---	---	---	---	116	---	---	---	
21+66	-	21+77	LEFT TO RIGHT	---	11	18	---	---	---	---	---	1	ABANDON 15-INCH STORM SEWER
21+77	-	22+18	LEFT	---	---	---	---	---	42	---	---	---	
21+87	-	22+21	RIGHT	---	8	---	---	---	---	---	---	2	ABANDON 12-INCH & 15-INCH STORM SEWER
22+18	-	22+18	LEFT TO RIGHT	10	---	---	53	---	---	---	---	---	30TH STREET
22+18	-	25+12	LEFT	---	---	---	---	---	293	---	---	---	
24+03	-	24+03	LEFT TO RIGHT	---	44	---	---	---	---	---	---	---	LATERAL
24+93	-	25+15	RIGHT	---	22	---	---	---	---	---	---	---	
25+15	-	25+50	RIGHT	---	35	---	---	---	---	---	---	---	
25+09	-	25+09	LEFT TO RIGHT	---	---	---	---	---	---	59	---	---	29TH STREET
24+95	-	25+12	LEFT	---	17	---	---	---	---	---	---	---	
25+12	-	25+80	LEFT	---	---	---	---	---	---	---	69	---	
			TAYLOR SB	---	---	---	11	---	---	---	---	2	ABANDON 12-INCH STORM SEWER
			TAYLOR NB	---	12	4	---	---	---	---	---	---	
TOTALS				18	162	42	64	59	624	59	69	10	

PAVEMENT ITEMS

STATION	-	STATION	DESCRIPTION	ITEM NO. 305.0110 BASE AGGREGATE DENSE 3/4-INCH TONS	ITEM NO. 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TONS	ITEM NO. 312.0110 SELECT CRUSHED MATERIAL TONS	ITEM NO. 405.1000 STAMPING COLORED CONCRETE CY	ITEM NO. 415.0080 CONCRETE PAVEMENT 8-INCH SY	ITEM NO. 415.0210 CONCRETE PAVEMENT GAPS EACH	ITEM NO. 415.1080 CONCRETE PAVEMENT HES 8-INCH SY	ITEM NO. 415.4100 CONCRETE PAVEMENT JOINT FILLING SY	ITEM NO. 416.0160 CONCRETE DRIVEWAY 6-INCH SY	ITEM NO. 416.0610 DRILLED TIE BARS EACH	ITEM NO. 416.0620 DRILLED DOWEL BARS EACH	ITEM NO. 465.0105 ASPHALTIC SURFACE TONS	ITEM NO. 465.0120 ASPH. SUFRACE DRIVEWAYS & FIELD ENTRANCES TONS
109+07	-	110+50	HOSPITAL TURN LANE	22	55	95	---	133	---	---	133	80	68	---	---	---
9+70	-	10+20	CTH O	---	72	---	---	---	---	---	---	---	---	---	62	---
10+20	-	11+83	CTH O	---	283	538	---	807	---	---	807	12	---	---	---	---
11+83	-	18+30	CTH O	---	1234	2351	---	3527	---	---	3527	69	---	---	---	6
18+30	-	19+40	CTH O/31ST ST INTERSECTION	---	184	350	---	---	1	525	526	---	---	---	22	---
19+40	-	22+05	CTH O	---	409	778	---	1167	---	---	1167	96	---	---	4	3
22+05	-	25+80	CTH O	---	631	1201	---	1802	---	---	1802	213	---	---	---	2
TAYLOR DRIVE SOUTH			TAYLOR	---	571	1087	12	1631	---	---	1631	---	---	---	---	---
TAYLOR DRIVE NORTH			TAYLOR	---	140	267	12	401	---	---	401	---	---	---	---	---
11+00	-	11+78	SIDEWALK LEFT	20	---	---	---	---	---	---	---	---	---	---	---	---
12+55	-	14+71	SIDEWALK LEFT	34	---	---	---	---	---	---	---	---	---	---	---	---
14+94	-	19+40	SIDEWALK LEFT	65	---	---	---	---	---	---	---	---	---	---	---	---
19+65	-	20+47	SIDEWALK LEFT	13	---	---	---	---	---	---	---	---	---	---	---	---
20+72	-	25+09	SIDEWALK LEFT	63	---	---	---	---	---	---	---	---	---	---	---	---
25+53	-	25+74	SIDEWALK LEFT	5	---	---	---	---	---	---	---	---	---	---	---	---
11+48	-	11+79	SIDEWALK RIGHT	11	---	---	---	---	---	---	---	---	---	---	---	---
12+53	-	18+52	SIDEWALK RIGHT	108	---	---	---	---	---	---	---	---	---	---	---	---
18+92	-	21+86	SIDEWALK RIGHT	42	---	---	---	---	---	---	---	---	---	---	---	---
22+24	-	25+09	SIDEWALK RIGHT	44	---	---	---	---	---	---	---	---	---	---	---	---
25+53	-	25+73	SIDEWALK RIGHT	6	---	---	---	---	---	---	---	---	---	---	---	---
TOTALS				433	3578	6668	24	9468	1	525	9994	469	68	198	66	11

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010 UNLESS OTHERWISE NOTED.

3

3

CONCRETE CURB AND GUTTER

STATION	-	STATION	DESCRIPTION	ITEM NO. 601.0600 CONCRETE CURB PEDESTRIAN LF	ITEM NO. SPV.0090.09 CONCRETE CURB AND GUTTER 20-INCH TYPE A SPECIAL LF	ITEM NO. SPV.0090.08 CONCRETE CURB AND GUTTER 26-INCH TYPE D SPECIAL LF	ITEM NO. SPV.0090.06 CONCRETE CURB AND GUTTER 26-INCH TYPE A SPECIAL LF	ITEM NO. SPV.0090.07 CONCRETE CURB AND GUTTER 32-INCH TYPE A SPECIAL LF
109+07	-	110+50	MEDIAN AND DRIVEAWY	---	137	---	---	35
10+20	-	11+83	LEFT	---	---	---	118	--
12+48	-	14+73	LEFT	---	---	---	--	240
14+91	-	19+42	LEFT	---	---	---	--	441
19+62	-	20+50	LEFT	---	---	---	--	117
20+70	-	25+13	LEFT	---	---	---	--	343
25+49	-	25+74	LEFT	---	---	---	--	12
9+70	-	10+20	RIGHT	---	---	50	--	---
10+20	-	11+82	RIGHT	---	---	---		146
12+46	-	18+56	RIGHT	---	---	---	--	705
18+88	-	21+88	RIGHT	---	---	---	--	221
22+20	-	25+12	RIGHT	---	---	---	--	256
25+38	-	25+74	RIGHT	---	---	---	---	12
100+12	-	102+25	RIGHT	---	---	---	---	213
100+12	-	102+25	LEFT	104	---	---	---	213
100+12	-	102+10	MEDIAN	10	---	---	196	---
103+05	-	103+55	RIGHT	---	---	---	---	50
103+05	-	103+55	LEFT	---	---	---	---	50
103+05	-	103+55	MEDIAN	10	---	---	100	---
TOTALS				**124**	**137**	**50**	**414**	**3054**

SIDEWALK ITEMS

STATION	-	STATION	DESCRIPTION	ITEM NO. 602.0410 CONCRETE SIDEWALK 5-INCH SF	ITEM NO. 602.0415 CONCRETE SIDEWALK 6-INCH SF	ITEM NO. 602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF	ITEM NO. 620.0300 CONCRETE MEDIAN SLOPED NOSE SF
11+00	-	11+78	LEFT	932	---	---	---
12+55	-	14+71	LEFT	1483	---	---	---
14+94	-	19+40	LEFT	2923	---	---	---
19+25	-	19+43	LEFT	---	132	---	---
19+65	-	20+47	LEFT	597	---	---	---
20+72	-	25+09	LEFT	2760	---	---	---
25+53	-	25+74	LEFT	225	---	---	---
11+48	-	11+79	RIGHT	494	---	---	---
12+53	-	18+52	RIGHT	4690	---	---	---
18+92	-	21+86	RIGHT	1895	---	---	---
22+24	-	25+09	RIGHT	1897	---	---	---
25+53	-	25+73	RIGHT	245	---	---	---
100+12	-	102+10	RIGHT	945	---	---	---
100+12	-	102+10	LEFT	643	---	---	---
102+14	-	102+20	MEDIAN	---	---	---	51
103+05	-	103+11	MEDIAN	---	---	---	47
109+00	-	110+50	RIGHT	227	---	---	51
TAYLOR DRIVE			21.5 PANELS	---	---	86	---
TAYLRO DRIVE HOSPITAL ENTRANCE			4 PANELS	---	---	16	---
31ST STREET			16 PANELS	---	---	64	---
30TH STREET			16 PANELS	---	---	64	---
29TH STREET			16 PANELS	---	---	64	---
TOTAL				**19956**	**132**	**294**	**149**

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010 UNLESS OTHERWISE NOTED.

STORM SEWER PIPES

FROM	-	TO	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	608.0336 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	608.0342 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH LF	608.2338 STORM SEWER PIPE REINFORCED CONCRETE HORIZONGAL ELLIPTICAL CLASS HE-III 38X60-INCH LF	SPV.0090.10 STORM SEWER PIPE PVC 6-INCH LF	SPV.0090.11 STORM SEWER PIPE PVC 8-INCH LF	520.8000 CONCRETE COLLAR FOR PIPE EACH	SPV.0090.01* TELEVISING STORM SEWER LF	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT
MH 10	-		---	---	---	---	---	---	20	---	---	1	20	79.90	79.73	0.0085
MH 9	-	MH 14	---	---	---	---	---	30	---	---	---	---	30	81.37	80.95	0.0140
MH 14	-	MH 8	---	---	---	---	---	81	---	---	---	---	81	82.50	81.37	0.0140
MH 8	-	MH 7	---	---	---	---	---	185	---	---	---	---	185	83.50	82.50	0.0054
MH 7	-	MH 6	---	---	---	---	---	63	---	---	---	---	63	84.00	83.50	0.0079
MH 6	-	MH 5	---	---	---	---	---	95	---	---	---	---	95	84.50	84.00	0.0053
MH 5	-	MH 4	---	---	---	---	173	---	---	---	---	---	173	85.50	85.00	0.0029
MH 4	-	MH 3	---	---	---	68	---	---	---	---	---	---	68	89.39	88.91	0.0071
MH 3	-	MH 2	---	---	---	208	---	---	---	---	---	---	208	90.53	89.39	0.0055
MH 2	-	MH 1	---	---	---	294	---	---	---	---	---	---	294	92.00	90.53	0.0050
CB 2	-	MH 1	39	---	---	---	---	---	---	---	---	---	39	94.64	94.25	0.0100
CB 1	-	MH 1	28	---	---	---	---	---	---	---	---	---	28	94.54	94.26	0.0100
MH 9	-	MH 11	---	---	---	---	---	48	---	---	---	---	48	81.01	80.89	0.0025
CB 4	-	MH 2	28	---	---	---	---	---	---	---	---	---	28	93.09	92.81	0.0100
CB 3	-	MH 2	7	---	---	---	---	---	---	---	---	---	7	93.58	93.51	0.0100
CB 6	-	MH 3	28	---	---	---	---	---	---	---	---	---	28	92.00	91.69	0.0111
CB 5	-	MH 3	7	---	---	---	---	---	---	---	---	---	7	91.55	91.48	0.0100
MH 4	-	CB 7	47	---	---	---	---	---	---	---	---	---	47	91.33	90.92	0.0087
CB 8	-	CB 9	6	---	---	---	---	---	---	---	---	---	6	88.05	87.99	0.0100
CB 9	-	MH 6	---	7	---	---	---	---	---	---	---	---	7	87.99	87.92	0.0100
CB 10	-	CB 11	6	---	---	---	---	---	---	---	---	---	6	88.05	87.99	0.0100
CB 11	-	MH 6	---	28	---	---	---	---	---	---	---	---	28	87.99	87.71	0.0100
CB 19	-	MH 11	36	---	---	---	---	---	---	---	---	---	36	83.42	83.06	0.0100
CB 15	-	CB 14	6	---	---	---	---	---	---	---	---	---	4	87.53	87.49	0.0067
CB 14	-	CB 16	---	35	---	---	---	---	---	---	---	---	35	87.24	86.89	0.0100
MH 7	-	CB 16	---	---	54	---	---	---	---	---	---	---	54	86.64	86.10	0.0100
CB 17	-	CB 16	6	---	---	---	---	---	---	---	---	---	4	87.57	87.53	0.0067
CB 18	-	MH 11	9	---	---	---	---	---	---	---	---	---	9	83.37	83.28	0.0100
MH 11	-	EX SS	---	---	---	---	---	6	---	---	---	1	6	81.02	81.01	0.0017
MH 4	-	EX SS	---	---	---	---	---	---	---	---	40	1	---	92.00	91.83	0.0043
CB 5	-	EX CB	53	---	---	---	---	---	---	---	---	---	53	91.55	91.55	0.0000
MH 7	-	EX SS	---	---	---	---	---	---	---	---	10	1	---	86.37	86.09	0.0280
PIPE	-	CB 6	---	---	---	---	---	---	---	24	---	---	---	93.17	92.25	0.0383
MH 14	-	CB 13	29	---	---	---	---	---	---	---	---	---	29	83.82	83.54	0.0097
CB 24	-	MH 13	22	---	---	---	---	---	---	---	---	---	22	96.30	96.08	0.0100
CB 27	-	CB 28	58	---	---	---	---	---	---	---	---	---	58	95.86	95.28	0.0100
CB 27	-	CB 26	---	5	---	---	---	---	---	---	---	---	5	96.28	96.12	0.0320
CB 26	-	MH 13	---	6	---	---	---	---	---	---	---	---	6	96.20	96.13	0.0117
CB 21	-	MH 12	---	23	---	---	---	---	---	---	---	---	23	95.51	95.28	0.0100
CB 20	-	CB 21	10	---	---	---	---	---	---	---	---	---	10	95.87	95.77	0.0100
CB 22	-	CB 23	15	---	---	---	---	---	---	---	---	---	15	95.68	95.38	0.0200
CB 23	-	EX MH	---	6	---	---	---	---	---	---	---	---	6	95.24	95.17	0.0117
CB 29	-	EX SS	3	---	---	---	---	---	---	---	---	1	3	94.80	94.78	0.0067
CB 12	-	MH 14	6	---	---	---	---	---	---	---	---	---	6	83.90	83.83	0.0117
MH 10	-	MH 9	---	---	---	---	---	---	45	---	---	---	45	80.28	79.90	0.0084
EX SS		MH 13	---	4	---	---	---	---	---	---	---	1	4	95.40	95.35	0.0118
MH 13		EX SS	---	4	---	---	---	---	---	---	---	1	4	95.35	95.30	0.0118
EX SS		MH 12	12	---	---	---	---	---	---	---	---	1	12	MATCH	96.04	
MH 12		EX SS	---	---	4	---	---	---	---	---	---	1	4	95.09	95.08	0.0025
			461	118	58	570	173	508	65	24	50	9	1949*			

*CATEGORY CODE 0020

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010 UNLESS OTHERWISE NOTED.

STORM SEWER STRUCTURES

STRUCTURE	STATION	OFFSET*	LOCATION	SPV.0060.11 STORM SEWER MANHOLE COVERS TYPE J SPECIAL EACH	611.0624 INLET COVERS TYPE H EACH	611.1230 CATCH BASINS 2X3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH	SPV.0060.16 MANHOLES 10-FT DIAMETER EACH	RIM ELEVATION	INVERT** ELEVATION	DEPTH*** FT	2 FT SUMP
CB 1	13+03.00	35' LT	CTH O PROPOSED		1	1						98.60	92.54	5.06	YES
CB 2	13+18.00	27.8' RT	CTH O PROPOSED		1	1						98.63	92.64	4.99	YES
CB 3	16+12.00	17.5' LT	CTH O PROPOSED		1	1						97.15	91.58	4.57	YES
CB 4	16+12.00	17.5' RT	CTH O PROPOSED		1	1						97.15	91.09	5.06	YES
CB 5	18+20.00	17.5' LT	CTH O PROPOSED		1	1						96.11	89.55	5.56	YES
CB 6	18+20.00	17.5' RT	CTH O PROPOSED		1	1						96.11	90.00	5.11	YES
CB 7	19+25.00	17.5' RT	CTH O PROPOSED		1	1						95.30	89.33	4.97	YES
CB 8	21+50.00	17.5' LT	CTH O PROPOSED		1	1						92.02	86.05	4.97	YES
CB 9	21+56.00	17.5' LT	CTH O PROPOSED		1	1						91.95	85.99	4.96	YES
CB 10	21+50.00	17.5' RT	CTH O PROPOSED		1	1						92.02	86.05	4.97	YES
CB 11	21+56.00	17.5' RT	CTH O PROPOSED		1	1						91.95	85.99	4.96	YES
CB 12	24+84.95	17.5' LT	CTH O PROPOSED		1	1						87.88	81.90	4.98	YES
CB 13	24+85.00	17.5' RT	CTH O PROPOSED		1	1						87.87	81.82	5.05	YES
CB 14	301+69.00	17.5' LT	N 30TH ST PROPOSED		1	1						91.59	85.22	5.37	YES
CB 15	301+63.00	17.5' LT	N 30TH ST PROPOSED		1	1						91.63	85.53	5.10	YES
CB 16	301+69.00	17.5' RT	N 30TH ST PROPOSED		1	1						91.67	84.64	6.03	YES
CB 17	301+63.00	17.5' RT	N 30TH ST PROPOSED		1	1						91.65	85.57	5.08	YES
CB 18	401+70.00	19.3' LT	N 29TH ST PROPOSED		1	1						87.57	81.37	5.20	YES
CB 19	401+70.00	19.5' RT	N 29TH ST PROPOSED		1	1						87.51	81.42	5.09	YES
CB 20	11+17.00	22.5' RT	CTH O PROPOSED		1	1						100.10	93.87	5.23	YES
CB 21	11+27.00	22.5' RT	CTH O PROPOSED		1	1						100.00	93.51	5.50	YES
CB 22	11+30.00	19' LT	CTH O PROPOSED		1	1						99.90	93.68	5.23	YES
CB 23	11+45.00	20.6' LT	CTH O PROPOSED		1	1						99.74	93.24	5.50	YES
CB 24	101+91.00	25.5' LT	TAYLOR DRIVE PROPOSED SB		1	1						100.53	94.30	5.23	YES
CB 26	102+00.00	1.5' RT	TAYLOR DRIVE PROPOSED SB		1	1						100.69	94.12	5.57	YES
CB 27	102+00.00	11.5' LT	TAYLOR DR PROPOSED		1	1						100.77	93.86	5.91	YES
CB 28	101+93.00	46.4' RT	TAYLOR DR PROPOSED		1	1						100.09	93.28	5.81	YES
CB 29	103+33.13	28.7' RT	TAYLOR DR PROPOSED		1	1						99.03	92.80	5.23	YES
MH 1	13+18.00	11' LT	CTH O PROPOSED	1			1					98.88	92.00	5.63	NO
MH 2	16+12.00	11' LT	CTH O PROPOSED	1			1					97.22	90.53	5.44	NO
MH 3	18+20.00	11' LT	CTH O PROPOSED	1			1					96.18	89.39	5.54	NO
MH 4	18+87.80	11' LT	CTH O PROPOSED	1					1			95.76	85.50	9.01	NO
MH 5	20+61.26	11' LT	CTH O PROPOSED	1					1			93.36	84.50	7.61	NO
MH 6	21+56.00	11' LT	CTH O PROPOSED	1					1			92.02	84.00	6.77	NO
MH 7	22+18.95	11' LT	CTH O PROPOSED	1					1			91.37	83.50	6.62	NO
MH 8	24+03.88	11' LT	CTH O PROPOSED	1			1					88.89	82.50	5.14	NO
MH 9	25+14.93	11' LT	CTH O PROPOSED	1							1	87.76	80.28	6.23	NO
MH 10	25+60.00	16.3' LT	CTH O PROPOSED	1						1		87.40	79.90	6.25	NO
MH 11	25+14.64	36.8' RT	CTH O PROPOSED	1					1			87.60	81.01	5.34	NO
MH 12	11+49.88	19.5' RT	CTH O PROPOSED	1			1					100.04	95.09	3.70	NO
MH 13	102+00.00	5' LT	TAYLOR DRIVE PROPOSED SB	1				1				100.61	95.35	4.01	NO
MH 14	24+84.96	11' LT	CTH O PROPOSED	1					1			87.85	81.37	5.23	NO
			TOTALS	14	28	28	5	1	6	1	1				

REMARKS
* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
** FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
*** DEPTH = RIM ELEV - INVERT ELEVATION - CASTING HEIGHT - 0.5 FOOT ADJUSTMENT RING HEIGHT

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010 UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL

LOCATION	DAYS	ITEM NO. 643.0300 TRAFFIC CONTROL DRUMS EACH	ITEM NO. 643.0300 TRAFFIC CONTROL DRUMS DAYS	ITEM NO. 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	ITEM NO. 643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS	ITEM NO. 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	ITEM NO. 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	ITEM NO. 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH	ITEM NO. 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS	ITEM NO. 643.0800 TRAFFIC CONTROL ARROW BOARDS EACH	ITEM NO. 643.0800 TRAFFIC CONTROL ARROW BOARDS DAYS	ITEM NO. 643.0900 TRAFFIC CONTROL SIGNS EACH	ITEM NO. 643.0900 TRAFFIC CONTROL SIGNS DAYS	ITEM NO. 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	ITEM NO. 643.1050 TRAFFIC CONTROL SIGNS PCMS EACH	ITEM NO. 643.1050 TRAFFIC CONTROL SIGNS PCMS DAYS	ITEM NO. 643.5000 TRAFFIC CONTROL EACH	ITEM NO. 649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH LF
STAGE 1																		
TAYLOR DR. SB	15	42	630	4	60	8	120	16	240	4	60	24	360	--	--	--	--	360
TAYLOR DR. NB	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CTH O WEST OF TAYLOR DR.	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SUPERIOR AVE. EAST OF TAYLOR DR.	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
UNDISTRIBUTED	---	---	40	---	5	---	5	---	10	---	5	---	10	--	---	---	--	---
STAGE 1 SUBTOTAL			**670**		**65**		**125**		**250**		**65**		**370**			**0**		**360**
STAGE 2																		
TAYLOR DR. SB	40	21	840	3	120	6	240	8	320	2	80	18	720	--	1	40	--	516
TAYLOR DR. NB	40	21	840	5	200	10	400	8	320	2	80	18	720	--	1	40	--	502
CTH O WEST OF TAYLOR DR.	40	--	--	12	480	24	960	--	--	--	--	11	440	--	1	40	--	72
CTH O EAST OF TAYLOR DR.	40	--	--	12	480	24	960	--	--	--	--	11	440	--	1	40	--	152
N 31st ST.	40	--	--	6	240	12	480	--	--	--	--	3	120	--	--	--	--	--
N 30th ST.	40	--	--	6	240	12	480	--	--	--	--	3	120	--	--	--	--	--
N 29th ST.	40	--	--	6	240	12	480	--	--	--	--	8	320	--	--	--	--	--
UNDISTRIBUTED	---	---	50	---	50	---	50	---	25	---	5	---	50	--	---	---	--	---
STAGE 2 SUBTOTAL			**1730**		**2050**		**4050**		**665**		**165**		**2930**	--		**160**	--	**1242**
STAGE 3																		
TAYLOR DR. SB	115	21	2,415	3	345	6	690	8	920	2	230	18	2,070	--	1	115	--	360
TAYLOR DR. NB	115	21	2,415	3	345	6	690	8	920	2	230	18	2,070	--	1	115	--	360
CTH O WEST OF TAYLOR DR.	115	--	--	12	1,380	24	2,760	--	--	--	--	11	1,265	--	1	115	--	--
CTH O EAST OF TAYLOR DR.	115	--	--	12	1,380	24	2,760	--	--	--	--	11	1,265	--	1	115	--	--
N 31st ST.	115	--	--	6	690	12	1,380	--	--	--	--	3	345	--	--	--	--	--
N 30th ST.	115	--	--	6	690	12	1,380	--	--	--	--	3	345	--	--	--	--	--
N 29th ST.	115	--	--	6	690	12	1,380	--	--	--	--	8	920	--	--	--	--	--
UNDISTRIBUTED	---	---	80	---	70	---	70	---	25	---	5	---	50	--	---	---	--	---
STAGE 3 SUBTOTAL			**4910**		**5590**		**11110**		**1865**		**465**		**8330**	--		**460**	--	**720**
DETOUR																		
	155	---	--	3	465	6	930	---	--	---	--	152	23,560	**2**			--	--
TOTAL			**7,310**		**8,170**		**16,215**		**2,780**		**695**		**35,190**	**2**		**620**	**1**	**2,322**

TOPSOIL, SEED, FERTILZER, E-MAT

STATION		STATION	DESCRIPTION	ITEM NO. 625.0100 TOPSOIL S.Y.	ITEM NO. 628.2006 EROSION MAT URBAN CLASS I TYPE A S.Y.	ITEM NO. 629.0210 FERTILIZER TYPE B CWT	ITEM NO. 630.0120 SEEDING MIXTURE NO. 20 LB	ITEM NO. SPV.0120.01 WATER FOR SEEDED AREAS MGAL
10+20	-	11+80	LEFT	166	166	0.10	4.5	1.0
12+51	-	18+90	LEFT	1214	1214	0.76	32.8	7.3
18+90	-	21+85	LEFT	448	448	0.28	12.1	2.7
21+85	-	25+80	LEFT	582	582	0.37	15.7	3.5
9+70	-	11+70	RIGHT	297	297	0.19	8.0	1.8
12+50	-	18+53	RIGHT	1114	1114	0.70	30.1	6.7
18+53	-	21+87	RIGHT	230	230	0.14	6.2	1.4
21+87	-	25+80	RIGHT	218	218	0.14	5.9	1.3
PROJECT 4996-01-73 SUBTOTAL				**4270**	**4270**	**3**	**115**	**26**

MAINTENANCE AND REPAIR OF HAUL ROADS

LOCATION	ITEM NO. 618.0100* MAINTENANCE AND REPAIR OF HAUL ROADS EACH
PROJECT	1
TOTAL	1

TEMPORARY CURB RAMP

LOCATION	ITEM NO. 644.1601.S TEMPORARY CURB RAMP EACH
TAYLOR DR. SB	2
TAYLOR DR. NB	2
CTH O WEST OF TAYLOR DR.	2
CTH O EAST OF TAYLOR DR.	2
TOTAL	**8**

*CATEGORY CODE 0020

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010 UNLESS OTHERWISE NOTED.

SIGNS AND POSTS

STATION	CODE	SIZE IN. X IN.	ITEM NO. 634.0614 POSTS WOOD 4X6-INCH X 14 FEET EACH	ITEM NO. 634.0616 POSTS WOOD 4X6-INCH X 16 FEET EACH	ITEM NO. 637.2210 SIGNS TYPE II REFLECTIVE H S.F.	ITEM NO. 637.2230 SIGNS TYPE II REFLECTIVE F S.F.	ITEM NO. 638.2602 REMOVING SIGNS TYPE II EACH	ITEM NO. 638.3000 REMOVING SMALL SIGN SUPPORTS EACH
9+85, RT	R3-8A	36X30	1	---	7.50	---	---	---
10+30, RT	---	---	---	---	---	---	1	1
10+55, LT	---	---	---	---	---	---	3	1
11+20, RT	R14-1	24X18	1	---	3.00	---	1	1
	M6-6	21X21	---	---	2.60	---	1	---
11+50, LT	R5-3	24X24	1	---	4.00	---	1	1
12+10, RT	R4-7	24X30	---	1	5.00	---	1	---
	R3-4	24X24	---	---	4.00	---	1	---
12+20, LT	R4-7	24X30	---	1	5.00	---	1	---
	R3-4	24X24	---	---	4.00	---	1	---
12+56, LT	R5-2	24X24	---	---	4.00	---	---	---
13+05, LT	R14-1	24X18	1	---	3.00	---	1	1
	M6-6	21X21	---	---	2.60	---	1	---
13+85, LT	R7-1	18X24	---	---	3.00	---	---	---
13+85, RT	---	---	---	---	---	---	1	1
13+95, RT	R2-1	24X30	---	---	5.00	---	---	---
	R14-1	24X18	---	---	3.00	---	---	---
	R7-1	18X24	---	1	3.00	---	---	---
14+00, LT	---	---	---	---	---	---	1	1
14+30, RT	R3-17	30X24	1	---	5.00	---	---	---
14+40, RT	---	---	---	---	---	---	1	1
14+55, LT	---	---	---	---	---	---	1	1
15+20, LT	R3-8W	54X30	---	---	11.25	---	---	---
14+45, LT	---	---	---	---	---	---	1	1
15+90, RT	---	---	---	---	---	---	1	1
16+00, RT	R7-1	18X24	1	---	3.00	---	---	---
16+80, LT	---	---	---	---	---	---	1	1
17+05, RT	R7-1	18X24	1	---	3.00	---	---	---
17+50, RT	---	---	---	---	---	---	1	1
18+00, LT	R7-1	18X24	---	---	3.00	---	---	---
18+15, RT	W11-2	30X30	---	---	---	6.25	---	---
18+20, RT	---	---	---	---	---	---	1	1
18+25, LT	---	---	---	---	---	---	1	1
18+40, LT	R1-1	30X30	1	---	5.18	---	---	---
18+95, RT	R1-1	30X30	1	---	5.18	---	1	1
19+05, LT	---	---	---	---	---	---	1	1
19+50, LT	W11-2	30X30	---	---	---	6.25	---	---
19+90, RT	R7-1	18X24	1	---	3.00	---	---	---
20+00, RT	---	---	---	---	---	---	1	1
20+05, LT	---	---	---	---	---	---	1	1
20+20, LT	R7-1	18X24	1	---	3.00	---	---	---
21+25, RT	R7-1	18X24	1	---	3.00	---	---	---
21+55, RT	W11-2	30X30	1	---	---	6.25	---	---
21+75, LT	R1-1	30X30	1	---	5.18	---	---	---
22+25, RT	R1-1	30X30	1	---	5.18	---	1	1
22+55, LT	W11-2	30X30	1	---	---	6.25	---	---
22+65, RT	R7-1	18X24	1	---	3.00	---	---	---
22+30, RT	---	---	---	---	---	---	1	1
22+30, LT	R2-1	24X30	1	---	5.00	---	---	---
22+35, RT	R2-1	24X30	1	---	5.00	---	---	---
22+35, LT	---	---	---	---	---	---	1	1
24+00, LT	R7-1	18X24	---	---	3.00	---	---	---
24+45, RT	R7-1	18X24	1	---	3.00	---	---	---
24+55, LT	R14-1	24X18	1	---	3.00	---	---	---
24+60, LT	---	---	---	---	---	---	2	1
24+85, RT	W11-2	30X30	1	---	---	6.25	---	---
25+05, LT	R1-1	30X30	1	---	5.18	---	1	1
25+55, RT	R1-1	30X30	1	---	5.18	---	1	1
25+80, LT	W11-2	30X30	---	---	---	6.25	---	---
99+75, LT	R3-20L	24X36	1	---	6.00	---	---	---
100+12, RT	R3-20R	24X36	1	---	6.00	---	---	---
100+50, RT	---	---	---	---	---	---	1	1
101+50, LT	---	---	---	---	---	---	1	1
109+15, RT	---	---	---	---	---	---	1	---
109+15, RT	R4-7	24X30	---	---	5.00	---	---	---
TOTALS			**26.00**	**3.00**	**163.03**	**37.50**	**37.00**	**27.00**

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010 UNLESS OTHERWISE NOTED.

PAVEMENT MARKING

STATION	-	STATION	ITEM NO. 646.1020 MARKING LINE EPOXY 4-INCH WHITE LF	ITEM NO. 646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF	ITEM NO. 646.3020 MARKING LINE EPOXY 8-INCH LF	ITEM NO. 646.6120 MARKING STOP LINE EPOXY 18-INCH LF	ITEM NO. 646.5020 MARKING ARROW EPOXY EACH	ITEM NO. 646.5120 MARKING WORD EPOXY EACH	ITEM NO. 646.5220 MARKING SYMBOL EPOXY EACH	ITEM NO. 646.7120 MARKING DIAGONAL EPOXY 12-INCH EACH	ITEM NO. 646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH LF
9+70	-	11+48	---	376	205	---	1	1	---	15	---
13+05	-	18+42	780	1042	100	---	7	1	3	30	---
19+15	-	21+62	494	494	---	---	4	---	4	---	---
22+49	-	25+80	450	490	---	---	4	---	4	---	---
CTH O			---	---	---	142	---	---	---	---	570
31ST STREET			---	---	---	24	---	---	---	---	283
30TH STREET			---	---	---	24	---	---	---	---	282
29TH STREET			10	---	---	---	---	---	---	---	325
100+12	--	102+03	166	---	115	---	3	1	---	---	---
103+18	--	103+55	25	---	33	---	---	---	---	---	---
109+07	--	109+82	---	---	75	---	1	---	---	---	---
SUB-TOTALS			**1925**	**2402**	**528**	**190**	**20**	**3**	**11**	**45**	**1460**
TOTALS			**1925**	**4327**	**528**	**190**	**20**	**3**	**11**	**45**	**1460**

CONSTRUCTION STAKING

STATION	-	STATION	DESCRIPTION	ITEM NO. 650.4000 CONSTRUCTION STAKIN STORM SEWER EACH	ITEM NO. 650.4500 CONSTRUCTION STAKIN SUBGRADE LF	ITEM NO. 650.5500 CONSTRUCTION STAKIN CURB GUTTER AND CURB & GUTTER LF	ITEM NO. 650.7000 CONSTRUCTION STAKIN CONCRETE PAVEMENT LF	ITEM NO. 650.9000 CONSTRUCTION STAKIN CURB RAMPS EACH	ITEM NO. 650.9910 CONSTRUCTION STAKIN SUPPLEMENTAL CONTROL (PROJECT) LS	ITEM NO. 650.9920 CONSTRUCTION STAKIN SLOPE STAKES LF
9+70	-	12+10	CTH O	5	240	50	240	4	---	240
12+10	-	18+70	CTH O	10	660	0	660	8	---	660
18+70	-	22+15	CTH O	12	345	0	345	8	---	345
22+15	-	25+90	CTH O	9	375	0	375	12	---	375
TAYLOR DRIVE SOUTH			TAYLOR	5	213	0	213	---	---	213
TAYLOR DRIVE NORTH			TAYLOR	1	45	0	45	---	---	45
TOTALS				**42**	**1878**	**50**	**1878**	**32**	**1**	**1878**

LANDMARK REFERENCE MONUMENTS

LOCATION	ITEM NO. 621.0100* LANDMARK REFERENCE MONUMENTS EACH
PROJECT	24
TOTALS	**24**

*CATEGORY CODE 0020

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010 UNLESS OTHERWISE NOTED.

3

SAWING ITEMS

STATION	-	STATION	ROADWAY	DESCRIPTION	ITEM NO. 690.0150 SAWING ASPHALT LF	ITEM NO. 690.0250 SAWING CONCRETE LF
9+70	-	9+70	CTH O	PROJECT START	36	2
10+20	-	10+20	CURB & GUTTER LT		--	2
10+78	-	11+00	CTH O	DRIVEWAY & TRAIL LT	10	22
103+30	-	103+50	TAYLOR DR	NORTH LEG	---	109
101+94	-	100+14	TAYLOR DR	SOUTH LEG	---	225
14+71	-	14+94	CTH O	HOSPITAL ENTRANCE LT	---	24
14+78	-	15+03	CTH O	BANK DRIVEWAY & SIDEWALK RT	25	6
16+40	-	16+65	CTH O	BANK DRIVEWAY RT	25	---
202+16	-	202+16	31ST STREET	CURB RETURN & SIDEWALK	---	48
19+31	-	19+50	CTH O	DRIVEWAY RT	20	---
19+40	-	19+65	CTH O	HOSPITAL ENTRANCE LT	25	---
20+30	-	20+47	CTH O	DRIVEWAY RT	---	18
20+47	-	20+73	CTH O	HOSPITAL ENTRANCE LT	---	25
20+83	-	21+75	CTH O	DRIVEWAY & PARKING LOT RT	111	---
301+59	-	301+59	30TH STREET	CURB RETURN & SIDEWALK	---	53
22+08	-	22+34	CTH O	DRIVEWAY LT	21	4
22+85	-	23+61	CTH O	DRIVEWAY/CONCRETE PAD RT	---	76
24+02	-	24+35	CTH O	DRIVEWAY RT	---	34
24+17	-	24+27	CTH O	DRIVEWAY LT	---	10
24+40	-	24+51	CTH O	DRIVEWAY LT	---	11
401+72	-	401+72	29TH STREET	SOUTH LEG CURB RETURN & SIDEWALK	---	50
402+58	-	402+58	29TH STREET	NORTH LEG CURB RETURN & SIDEWALK	---	52
25+74	-	25+74	CTH O	PROJECT END	---	52
UNDISTRIBUTED					20	100
PROJECT 4996-01-72 SUBTOTAL					**293**	**923**

DUST CONTROL

STATION	-	STATION	DESCRIPTION	ITEM NO. 623.0200 DUST CONTROL SURFACE TREATMENT SY
109+07	-	110+50	HOSPITAL TURN LANE	133
9+70	-	TAYLOR	CTH O	850
TAYLOR	-	31ST	CTH O	4800
31ST	-	30TH	CTH O	1652
30TH	-	29TH	CTH O	1740
TAYLOR DRIVE SOUTH			TAYLOR DR	1950
TAYLOR DRIVE NORTH			TAYLOR DR	400
			TOTAL	**11525**

SILT FENCE

STATION	-	STATION	LOCATION	ITEM NO. 628.1504 SILT FENCE L.F.	ITEM NO. 628.1520 SILT FENCE MAINTENANCE L.F.
22+20	-	22+70	LT	40	40
UNDISTRIBUTED				5	5
TOTAL				45	45

ADJUSTING WATER VALVE BOXES

STATION	LOCATION	ITEM NO. SPV.0060.15 * ADJUSTING WATER VALVE BOXES EACH
9+96	RT	1
9+97	RT	1
10+06	RT	1
12+22	RT	1
12+49	RT	1
16+08	RT	1
18+55	RT	1
18+61	RT	1
22+14	RT	1
22+41	RT	1
25+43	RT	1
25+44	LT	1
25+56	RT	1
TOTAL		**13***

*CATEGORY CODE 0020

SALVAGE AND RE-INSTALL BUS SHELTER

STATION	LOCATION	ITEM NO. SPV.0060.18 SALVAGE AND RE-INSTALL BUS SHELTER EACH
20+00	LT	1
TOTAL		**1**

INLET PROTECTION

STRUCTURE	STATION	OFFSET	LOCATION	ITEM NO. 628.7005 INLET PROTECTION TYPE A EACH	ITEM NO. 628.7015 INLET PROTECTION TYPE C EACH
CB 1	13+03.00	35' LT	CTH O	1	1
CB 2	13+18.00	27.8' RT	CTH O	1	1
CB 3	16+12.00	17.5' LT	CTH O	1	1
CB 4	16+12.00	17.5' RT	CTH O	1	1
CB 5	18+20.00	17.5' LT	CTH O	1	1
CB 6	18+20.00	17.5' RT	CTH O	1	1
CB 7	19+25.00	17.5' RT	CTH O	1	1
CB 8	21+50.00	17.5' LT	CTH O	1	1
CB 9	21+56.00	17.5' LT	CTH O	1	1
CB 10	21+50.00	17.5' RT	CTH O	1	1
CB 11	21+56.00	17.5' RT	CTH O	1	1
CB 12	24+84.95	17.5' LT	CTH O	1	1
CB 13	24+85.00	17.5' RT	CTH O	1	1
CB 14	301+69.00	17.5' LT	N 30TH ST	1	1
CB 15	301+63.00	17.5' LT	N 30TH ST	1	1
CB 16	301+69.00	17.5' RT	N 30TH ST	1	1
CB 17	301+63.00	17.5' RT	N 30TH ST	1	1
CB 18	401+70.00	19.3' LT	N 29TH ST	1	1
CB 19	401+70.00	19.5' RT	N 29TH ST	1	1
CB 20	11+17.00	22.5' RT	CTH O	1	1
CB 21	11+27.00	22.5' RT	CTH O	1	1
CB 22	11+30.00	19' LT	CTH O	1	1
CB 23	11+45.00	20.6' LT	CTH O	1	1
CB 24	101+91.00	25.5' LT	TAYLOR DRIVE	1	1
CB 26	102+00.00	1.5' RT	TAYLOR DRIVE	1	1
CB 27	102+00.00	11.5' LT	TAYLOR DRIVE	1	1
CB 28	101+93.00	46.4' RT	TAYLOR DRIVE	1	1
CB 29	103+33.13	28.7' RT	TAYLOR DRIVE	1	1
EXIST	106+18	28.6' LT	TAYLOR DRIVE		1
EXIST	106+77	28.6' LT	TAYLOR DRIVE		1
EXIST	106+65	28.6' RT	TAYLOR DRIVE		1
EXIST	106+76	28.6' RT	TAYLOR DRIVE		1
EXIST		LT	TAYLOR DR-NORTH OF HOSPITAL TURN LANE		1
EXIST		RT	TAYLOR DR-NORTH OF HOSPITAL TURN LANE		1
			TOTALS	**28**	**34**

MOBILIZATIONS EROSION CONTROL

	ITEM NO. 628.1905 MOBILIZATIONS EROSION CONTROL EACH	ITEM NO. 628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT SITE	4	4
TOTAL	**4**	4

ROCK BAGS

STATION	OFFSET	ITEM NO. 628.7570 ROCK BAGS EACH
25+80	LT & RT	10
UNDISTRIBUTED		10
TOTAL		**20**

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010 UNLESS OTHERWISE NOTED.

SANITARY SEWER ITEMS

STRUCTURE	STATION	OFFSET*	LOCATION	SPV.0060.12 SANITARY SEWER MANHOLE COVER TYPE J SPECIAL EACH	SPV.0060.13 INTERNAL CHIMNEY SEAL EACH	SPV.0200.01 SANITARY SEWER MANHOLE LINER VF
SA-31-029	12+19	5' LT	CTH O	1	1	12
SA-31-028	13+83	3.2' LT	CTH O	1	1	10
SA-31-027	15+48	2.3' LT	CTH O	1	1	10
SA-31-026	17+10	0.9' LT	CTH O	1	1	9
SA-31-025	18+73	0.6' RT	CTH O	1	1	10
SA-31-024	20+39	0.2' RT	CTH O	1	1	12
SA-31-023	22+05	0.6' LT	CTH O	1	1	13
SA-31-022	23+73	0.6' LT	CTH O	1	1	13
SA-31-021	25+31	0.7' LT	CTH O	1	1	11
SA-31-030	100+72	7.2' RT	TAYLOR DRIVE	1	1	9
SA-32-043	104+42	11.2' RT	TAYLOR DRIVE	1	1	10
UNKNOWN NAME	109+72	10.9' RT	TAYLOR DRIVE	1	1	13
SA-31-076	200+30	0.1' LT	31ST STREET	1	1	9
SA-31-072	299+87	0.3' LT	30TH STREET	1	1	12
			TOTALS	**14**	**14**	**153**

SANITARY SEWER ITEMS

FROM STRUCTURE	TO STRUCTURE	LOCATION	SPV.0060.14 LATEAL CONNECTION SEALING EACH	SPV.0090.02 SANITARY SEWER CURED IN PLACE LINER LF	SPV.0090.03 SANITARY SEWER 8-INCH LF	SPV.0090.04 SANITARY SEWER LATERALS 6-INCH LF	SPV.0090.05 TELEVISING SANITARY SEWER LF
SA-31-029	SA-31-028	CTH O	2	163	---	20	163
SA-31-028	SA-31-027	CTH O	1	165	---	10	165
SA-31-027	SA-31-026	CTH O	---	162	---	---	162
SA-31-026	SA-31-025	CTH O	---	163	---	---	163
SA-31-025	SA-31-024	CTH O	---	166	---	---	166
SA-31-024	SA-31-023	CTH O	---	166	---	---	166
SA-31-030	SA-31-029	TAYLOR DRIVE	---	200	---	---	200
SA-31-029	SA-31-043	TAYLOR DRIVE	---	170	---	---	170
SA-31-076	SA-31-025	31ST STREET	---	226	25	---	226
SA-31-072	21-31-023	30TH STREET	---	225	---	---	225
		TOTALS	**3**	**1806**	**25**	**30**	**1806**

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0020 UNLESS OTHERWISE NOTED.

LIGHTING SUMMARY

LP / PBL	STATION	LOCATION	ITEM NO. 653.0115 PULL BOXES 12x36-INCH EACH	ITEM NO. 654.0105 CONCRETE BASES TYPE 5 EACH	ITEM NO. SPV.0060.17 COMBINED LIGHTING AND TRAFFIC SIGNAL CABINET BASE EACH	ITEM NO. 656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS	ITEM NO. 659.2130 LIGHTING CONTROL CABINETS 120/140 30-INCH EACH	ITEM NO. SPV.0060.10 LIGHTING ASSEMBLY EACH	ITEM NO. SPV.0105.05 MOVING EXISTING STREETLIGHT EACH
PB 1	11+40, 38' LT	CTH O	1	---	---	---	---	---	---
PB 2	13+73.5, 38.5' LT	CTH O	1	---	---	---	---	---	---
LP 1	13+79, 38.5' LT	CTH O	---	1	---	---	---	1	---
LP 2	15+19, 28' LT	CTH O	---	1	---	---	---	1	---
LP 3	16+59, 22' LT	CTH O	---	1	---	---	---	1	---
LP 4	17+99, 22' LT	CTH O	---	1	---	---	---	1	---
LP 5	19+39, 22' LT	CTH O	---	1	---	---	---	1	---
LP 6	20+89, 22' LT	CTH O	---	1	---	---	---	1	---
LP 7	22+54, 22' LT	CTH O	---	1	---	---	---	1	---
LP 8	24+00, 22' LT	CTH O	---	1	---	---	---	1	---
PB 7	24+88, 22' LT	CTH O	1	---	---	---	---	---	---
PB 8	25+76.5, 24' LT	CTH O	1	---	---	---	---	---	---
LP 9	25+80, 24' LT	CTH O	---	1	---	---	---	1	---
LC 1: SUPERIOR AVE	11+35, 38' LT	CTH O	---	---	0.5	1	1	---	---
TAYLOR DRIVE	109+27, 14' RT	TAYLOR DRIVE	1	1	---	---	---	---	1
	TOTAL		**5**	**10**	**0.5***	**1**	**1**	**9**	**1**

* - BASE IS COMBINED WITH TRAFFIC SIGNAL CONTROL CABINET

ELECTRICAL WIRE & CONDUIT FOR STREET LIGHTING

FROM	TO	LOCATION	ITEM NO. 655.0610 12 AWG LF	ITEM NO. 655.0625 6 AWG LF	ITEM NO. 652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF
LC 1	PB 1	CTH O	---	15	5
PB 1	PB 2	CTH O	---	702	234
PB 2	LP 1	CTH O	---	18	6
	LP 1	CTH O	90	---	---
LP 1	LP 2	CTH O	---	420	140
	LP 2	CTH O	90	---	---
LP 2	LP 3	CTH O	---	420	140
	LP 3	CTH O	90	---	---
LP 3	LP 4	CTH O	---	420	140
	LP 4	CTH O	90	---	---
LP 4	LP 5	CTH O	420	---	140
	LP 5	CTH O	90	---	---
LP 5	LP 6	CTH O	450	---	150
	LP 6	CTH O	90	---	---
LP 6	LP 7	CTH O	495	---	165
	LP 7	CTH O	90	---	---
LP 7	LP 8	CTH O	438	---	146
	LP 8	CTH O	90	---	---
LP 8	PB 7	CTH O	264	---	88
PB 7	PB 8	CTH O	267	---	89
PB 8	LP 9	CTH O	12	---	4
	LP 9	CTH O	90	---	---
109+15.6	109+27	TAYLOR DRIVE	300	---	11
	TOTAL		**3456**	**1995**	**1458**

NOTES CIRCUITS: 2x6 AWG AND 1x8 AWG ARE FROM BASE TO BASE
12 AWG IS FROM FIXTURE TO HAND HOLE

*QUANTITY SHOWN ELSEWHERE ON PLAN

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010 UNLESS OTHERWISE NOTED.

REMOVING CONCRETE BASES

SIGNAL BASE NO.	204.0195 REMOVING CONCRETE BASES EACH
CB1	1
SB1	1
SB2	1
SB3	1
SB4	1
SB5	1
SB6	1
SB7	1
SB8	1
SB9	1
SB10	1
TOTAL	11

WISCONSIN
ALICIA M. DOUGHERTY
E-43022
PEWAUKEE, WI
PROFESSIONAL ENGINEER

OCTOBER 22, 2018

Alicia M Dougherty

3

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.	652.0615 CONDUIT SPECIAL 3-INCH L.F.
CB1	PB1	--	30	--
PB1	PB2	--	40	--
PB2	SB1	5	--	--
PB1	PB3	--	80	--
PB3	SB2	5	--	--
PB3	PB4	--	--	170
PB4	SB3	--	20	--
PB4	SB4	5	--	--
PB4	PB5	--	90	--
PB5	SB5	5	--	--
PB5	PB6	--	--	160
PB6	SB6	--	5	--
PB6	SB7	5	--	--
PB6	PB7	--	80	--
PB7	SB8	10	--	--
PB7	PB8	--	--	20
PB8	SB9	--	10	--
PB8	PB9	--	120	--
PB9	SB10	10	--	--
PB9	PB2	--	--	120
CB1	PB10	--	30	--
PB10	SB11	--	15	--
EXT 1	PB11	185	--	--
	TOTAL	230	520	470

*** QUANTITY SHOWN ELSEWHERE ON PLAN**

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010
UNLESS OTHERWISE NOTED

PULL BOXES

PULL BOX NO.	LOCATION STA	LOCATION OFFSET	653.0140 PULL BOXES STEEL 24x42-INCH EACH
PB1	11+45.4	39.7' LT	1
PB2	11+45.1	24.0' LT	1
PB3	103+24.4SB	29.8' LT	1
PB4	103+24.7SB	36.9' RT	1
PB5	12+95.6	38.9' LT	1
PB6	12+94.5	39.7' RT	1
PB7	101+97.4SB	50.6' RT	1
PB8	101+97.4SB	29.0' LT	1
PB9	11+44.2	31.5' RT	1
PB10	11+31.8	37.7' LT	1
PB11	101+97.4SB	04.5' LT	1
		TOTAL	11

REMOVE PULL BOXES

PULL BOX NO.	653.0905 REMOVING PULL BOXES EACH
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
PB13	1
PB14	1
PB15	1
PB16	1
PB17	1
PB18	1
PB19	1
PB20	1
PB21	1
PB22	1
PB23	1
PB24	1
PB25	1
TOTAL	25

3

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010
UNLESS OTHERWISE NOTED

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG L.F.
SB1	HEAD 24	20	--
SB2	HEAD 4	--	25
SB2	HEAD 6	20	--
SB2	HEAD 25	20	--
SB3	HEAD 2	55	--
SB3	HEAD 3	40	--
SB3	HEAD 5	--	70
SB4	HEAD 26	20	--
SB5	HEAD 12	20	--
SB5	HEAD 16	20	--
SB5	HEAD 27	20	--
SB6	HEAD 13	70	--
SB6	HEAD 14	55	--
SB6	HEAD 15	45	--
SB7	HEAD 28	20	--
SB8	HEAD 1	20	--
SB8	HEAD 9	--	25
SB8	HEAD 21	20	--
SB9	HEAD 7	55	--
SB9	HEAD 8	45	--
SB9	HEAD 10	--	70
SB9	HEAD 22	20	--
SB10	HEAD 11	20	--
SB10	HEAD 17	20	--
SB10	HEAD 23	20	--
SB11	HEAD 18	55	--
SB11	HEAD 19	40	--
SB11	HEAD 20	20	--
	TOTAL	760	190

* QUANTITY SHOWN ELSEWHERE ON PLAN

3

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.
CB1	SB1	80	--
CB1	SB2	--	100
CB1	SB3	--	200
CB1	SB4	185	--
CB1	SB5	--	230
CB1	SB6	--	310
CB1	SB7	310	--
CB1	SB8	--	305
CB1	SB9	--	205
CB1	SB10	--	145
CB1	SB11	--	70
	TOTAL	575	1565

* QUANTITY SHOWN ELSEWHERE ON PLAN

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010
UNLESS OTHERWISE NOTED

CONCRETE BASES

SIGNAL BASE NO.	LOCATION STA	LOCATION OFFSET	654.0101 CONCRETE BASES TYPE 1 EACH	SPV.0060.17 COMBINED LIGHTING AND TRAFFIC SIGNAL CABINET BASE EACH	SPV.0060.01 CONCRETE BASES TYPE 10, CONTRACTOR SUPPLIED ANCHOR BOLTS & ANCHOR ROD TEMPLATE EACH	SPV.0060.02 CONCRETE BASES TYPE 13, CONTRACTOR SUPPLIED ANCHOR BOLTS & ANCHOR ROD TEMPLATE EACH
CB1	11+35.0	38.0' LT	--	0.5	--	--
SB1	11+48.7	25.8' LT	1	--	--	--
SB2	103+19.8SB	32.0' LT	1	--	--	--
SB3	103+39.0SB	48.6' RT	--	--	--	1
SB4	103+21.6SB	57.6' RT	1	--	--	--
SB5	12+91.7	39.6' LT	1	--	--	--
SB6	12+98.6	36.9' RT	--	--	--	1
SB7	12+91.7	42.7' RT	1	--	--	--
SB8	102+04.7SB	71.2' RT	1	--	--	--
SB9	102+04.4SB	31.7' LT	--	--	--	1
SB10	11+49.4	33.5' RT	1	--	--	--
SB11	11+34.3	22.7' LT	--	--	1	--
		TOTAL	7	0.5*	1	3

* - BASE IS COMBINED WITH LIGHTING CONTROL CABINET

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG L.F.
CB1	SB3	200	--
SB3	LUMIN 1	--	145
SB3	SB6	195	--
SB6	LUMIN 1	--	145
CB1	SB9	205	--
SB9	LUMIN 1	--	145
SB9	SB11	230	--
SB11	LUMIN 1	--	145
	TOTAL	830	580

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010
UNLESS OTHERWISE NOTED

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.
CB1	SB1	50
SB1	SB2	85
SB2	SB3	125
SB3	SB4	40
SB4	SB5	70
SB5	SB6	105
SB6	SB7	25
SB7	SB8	70
SB8	SB9	135
SB9	SB10	95
SB10	SB11	140
SB11	CB1	40
CB1	PB1	25
SB1	PB2	20
SB2	PB3	20
SB4	PB4	20
SB5	PB5	20
SB6	PB6	20
SB8	PB7	25
SB9	PB8	25
SB10	PB9	25
CB1	PB10	25
	TOTAL	1205

ELECTRICAL SERVICE METER BREAKER PEDESTAL

LOCATION	656.0200.02 ELECTRICAL SERVICE METER BREAKER PEDESTAL L.S.
SUPERIOR AVE & TAYLOR DR	1
TOTAL	1

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010
UNLESS OTHERWISE NOTED

3

	POLES										
	657.0100	657.0420	657.0425	657.0430	658.0500	SPV.0060.03	SPV.0060.04	SPV.0060.05	SPV.0060.06	SPV.0060.07	SPV.0060.08
	PEDESTAL BASES	TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT	TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT	TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT	PEDESTRIAN PUSH BUTTONS	POLES TYPE 10	POLES TYPE 13	MONOTUBE ARMS 25-FT	MONOTUBE ARMS 40-FT	LUMINAIRE ARMS STEEL 15-FT	LED LUMINAIRES
SIGNAL BASE NO.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
SB1	1	--	--	1	1	--	--	--	--	--	--
SB2	1	--	1	--	1	--	--	--	--	--	--
SB3	--	--	--	--	--	--	1	--	1	1	1
SB4	1	--	--	1	1	--	--	--	--	--	--
SB5	1	1	--	--	1	--	--	--	--	--	--
SB6	--	--	--	--	--	--	1	--	1	1	1
SB7	1	--	--	1	1	--	--	--	--	--	--
SB8	1	--	1	--	1	--	--	--	--	--	--
SB9	--	--	--	--	1	--	1	--	1	1	1
SB10	1	1	--	--	1	--	--	--	--	--	--
SB11	--	--	--	--	--	1	--	1	--	1	1
TOTAL	7	2	2	3	8	1	3	1	3	4	4

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010
UNLESS OTHERWISE NOTED

FILE NAME : Superior and Taylor_mq.ppt PLOT DATE : 10/22/2018 9:18:55 AM PLOT BY : JGF PLOT NAME : Superior and Taylor PLOT SCALE : 1:1

		FACES		
		658.0173	658.0174	658.0416
		TRAFFIC SIGNAL FACE	TRAFFIC SIGNAL FACE	PEDESTRIAN SIGNAL FACE
SIGNAL BASE NO.	SIGNAL HEAD NO.	3S-12 INCH EACH	4S-12 INCH EACH	16-INCH EACH
SB8	HEAD 1	1	--	--
SB3	HEAD 2	1	--	--
SB3	HEAD 3	1	--	--
SB2	HEAD 4	--	1	--
SB3	HEAD 5	--	1	--
SB2	HEAD 6	1	--	--
SB9	HEAD 7	1	--	--
SB9	HEAD 8	1	--	--
SB8	HEAD 9	--	1	--
SB9	HEAD 10	--	1	--
SB10	HEAD 11	1	--	--
SB5	HEAD 12	1	--	--
SB6	HEAD 13	1	--	--
SB6	HEAD 14	1	--	--
SB6	HEAD 15	1	--	--
SB5	HEAD 16	1	--	--
SB10	HEAD 17	1	--	--
SB11	HEAD 18	1	--	--
SB11	HEAD 19	1	--	--
SB11	HEAD 20	1	--	--
SB8	HEAD 21	--	--	1
SB9	HEAD 22	--	--	1
SB10	HEAD 23	--	--	1
SB1	HEAD 24	--	--	1
SB2	HEAD 25	--	--	1
SB4	HEAD 26	--	--	1
SB5	HEAD 27	--	--	1
SB7	HEAD 28	--	--	1
	TOTAL	16	4	8

3

TRAFFIC SIGNAL MOUNTING HARDWARE	
	658.5069.01 SIGNAL MOUNTING HARDWARE
LOCATION	L.S.
SUPERIOR AVE & TAYLOR DR	1
TOTAL	1

TRAFFIC SIGNAL CABINET	
	SPV.0060.09 TRAFFIC SIGNAL CONTROLLER AND CABINET FULLY ACTUATED 8-PHASE
LOCATION	EACH
SUPERIOR AVE & TAYLOR DR	1
TOTAL	1

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010
UNLESS OTHERWISE NOTED

3

EMERGENCY VEHICLE PREEMPTION

LOCATION	SPV.0105.01 TRAFFIC SIGNAL PRE-EMPTION AND PRIORITY CONTROL SYSTEM L.S.
SUPERIOR AVE & TAYLOR DR	1
TOTAL	1

REMOVE TRAFFIC SIGNALS

LOCATION	SPV.0105.02 REMOVE TRAFFIC SIGNALS L.S.
SUPERIOR AVE & TAYLOR DR	1
TOTAL	1

3

VIDEO DETECTION SYSTEM

LOCATION	SPV.0105.03 VEHICLE VIDEO DETECTION SYSTEM 4-CAMERA L.S.
SUPERIOR AVE & TAYLOR DR	1
TOTAL	1

ALL ITEMS ON THIS PAGE ARE CATEGORY CODE 0010
UNLESS OTHERWISE NOTED

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
4996-01-72	4.01	8

PLAT OF RIGHT OF WAY REQUIRED FOR
SUPERIOR AVENUE
NORTH TAYLOR DRIVE TO
NORTH 29TH STREET

CITY OF SHEBOYGAN — SHEBOYGAN COUNTY

4996-01-00

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING — TO BE REMOVED
BRIDGE

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN

R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED)

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)

PARCEL NUMBER 25 — UTILITY NUMBER 40

PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTICTIVE DEVELOPMENT EASEMENT	RDE
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE	CONC	SECTION	SEC
COUNTY	CO	SEPTIC VENT	SEPV
COUNTY TRUNK HIGHWAY	CTH	SQUARE FEET	SF
DISTANCE	DIST	STATE TRUNK HIGHWAY	STH
CORNER	COR	STATION	STA
DOCUMENT NUMBER	DOC	TELEPHONE PEDESTAL	TP
EASEMENT	EASE	TEMPORARY LIMITED EASEMENT	TLE
EXISTING	EX	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	GV	UNITED STATES HIGHWAY	USH
GRID NORTH	GN	VOLUME	V
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		
POINT OF COMPOUND CURVE	PCC		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WCCS), SHEBOYGAN COUNTY, NAD 83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 1" X 24" IRON PIPE) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

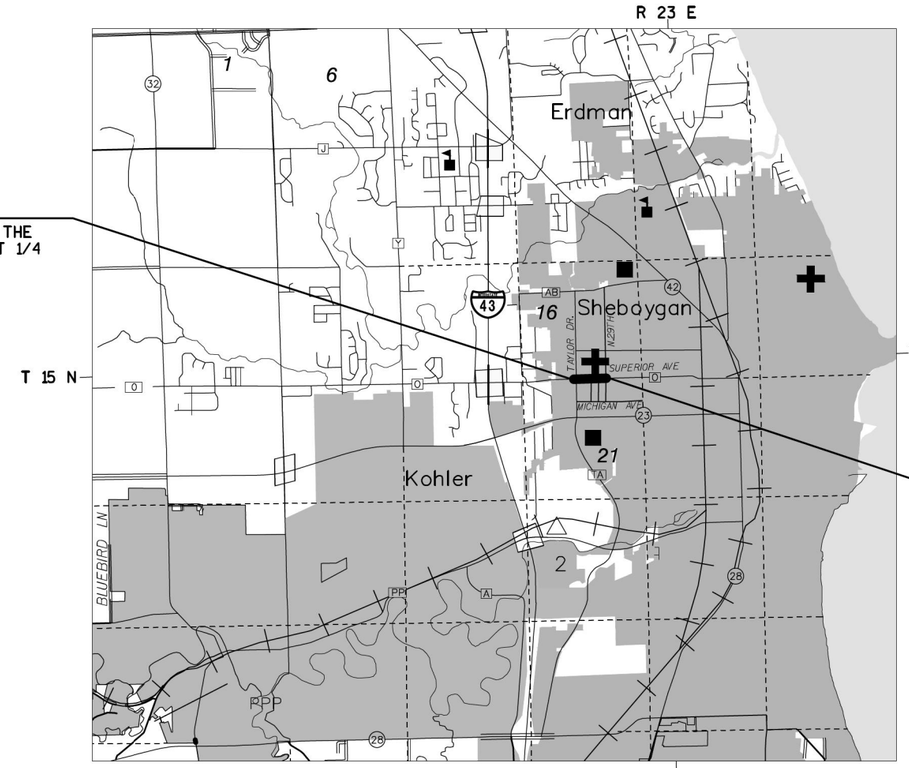
CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS

CAUTION
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES.

N

BEGIN RELOCATION ORDER
STA. 9+50 (SUPERIOR STREET)
4.35' SOUTH OF AND 260.79' WEST OF THE SOUTHWEST CORNER OF THE SOUTHEAST 1/4 OF SECTION 16, T.15N., R.23E.
Y=180298.74
X=208992.82



END RELOCATION ORDER
STA. 26+00 (SUPERIOR STREET)
0.03' NORTH OF AND 1389.15' EAST OF THE SOUTHWEST CORNER OF THE SOUTHEAST 1/4 OF SECTION 16, T.15N., R.23E.
Y=180303.12
X=210642.76

LAYOUT
SCALE 0 SCALE
1" = 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.313 MI

WISCONSIN
ROBERT F. SCHMALZER
1760
COLGATE, WI
LAND SURVEYOR

ROBERT F. SCHMALZER, PLS 1760
DATE: 06-27-2017

TERRATEC ENGINEERING, LLC.
W67 N222 EVERGREEN BLVD. STE. 205
CEDARBURG, WI 53012
Tel: 262.377.8905 - Fax: 262.375.1958

© 2017 TERRATEC ENGINEERING, LLC.

REVISION DATE	

APPROVED FOR CITY OF SHEBOYGAN

DATE: _____ (Signature)

SCHEDULE OF LANDS AND INTEREST

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO CITY OF SHEBOYGAN. AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES EXISTING PARCEL	AREA ACRES REQUIRED			TOTAL ACRES REMAINING	TLE ACRES REQUIRED
					NEW	EXISTING	TOTAL		
1	4.04	TAYLOR-SUPERIOR, LLC	FEE/TLE	2.560	0.002	0.000	0.002	2.558	0.007
2	4.04	RAEDER RENTALS, INC.	TLE	0.756	-	-	-	0.756	0.004
3	4.04, 405	UNITED SAVINGS AND LOAN ASSOCIATION	FEE/TLE	2.650	0.129	-	0.129	2.521	0.107
4	4.04,406,4.07,4.08	ST. NICHOLAS HOSPITAL OF THE HOSPITAL SISTERS OF THE THRID ORDER OF ST. FRANCIS	FEE/TLE	26.297 *	0.052	-	0.052	26.245	0.668
5	4.05	P & L REALTY, LLC	TLE	0.656 *	-	-	-	0.656	0.010
6	4.05	P & L REALTY, LLC	TLE	0.284 *	-	-	-	0.284	0.007
7	4.05	GREGORY V. & JENNIFER S. MONSON	TLE	0.161 *	-	-	-	0.161	0.003
8	4.05	JOHN E. YANDA	TLE	0.193 *	-	-	-	0.193	0.004
9	4.05, 4.06	G & S PROPERTIES OF SHEBOYGAN, LLC	TLE	0.132 *	-	-	-	0.132	0.005
10	4.06	TAKASHI & CATHERINE M. MOMMA	TLE	0.202 *	-	-	-	0.202	0.004
11	4.06	ROBERT J, & DEBORAH CLEMENT	TLE	0.322 *	-	-	-	0.322	0.005
13	4.06	SHEBOYGAN SHAMROCK, LLC	FEE/TLE	0.475 *	0.001	-	0.001	0.474	0.009
14	4.06	SHEBOYGAN SHAMROCK, LLC	FEE	0.413 *	0.002	-	0.002	0.411	-
				-	-	-	-	-	-
16	4.06	GARFIELD D. & LOIS F. GRESHOLDT	TLE	0.191 *	-	-	-	0.191	0.017
17	4.06	MARK & KIM L. KALLAS	TLE	0.191 *	-	-	-	0.191	0.008
18	4.06	ST. NICHOLAS HOSPITAL OF THE HOSPITAL SISTERS OF THE THRID ORDER OF ST. FRANCIS	FEE/TLE	0.191 *	0.001	-	0.001	0.190	0.007
19	4.06	JUUL M. SCHIMBERG	FEE	0.18 *	0.001	-	0.001	0.179	-

* COMPUTED ACREAGE

UTILITY NUMBER	SHEET NUMBER	OWNER	
90	4.04,4.05,4.06,4.07,4.08	AT&T OF WISCONSIN	RELEASE OF RIGHTS
91	4.04,4.05,4.07	ALLIANT ENERGY	RELEASE OF RIGHTS

LAYOUT-ALIGNMENT PLAN

AVE.

SAEMANN AVENUE

CITY OF SHEBOYGAN

EP: 111+19.79

1/4 SEC LINE= N0°18'19"E 2611.75' COR TO COR

NORTH 34TH STREET

SE-SW
16-15-23

SHERIDAN AVE.

N. TAYLOR DRIVE

SW-SE
16-15-23

BP: 9+50
Y=180298.74
X=208992.82
PI: 11+59.99
Y=180303.54
X=209202.75
PI: 12+06.72
Y=180303.13
X=209249.49
EP: 26+73.15
Y=180303.12
X=210715.92

BP: 100+00
Y=180036.62
X=209247.64
PI: 102+19.84
Y=180256.46
X=209249.21
PI: 102+66.51
Y=180303.13
X=209249.49
PI: 103+04.53
Y=180341.14
X=209249.72
EP: 111+19.79
Y=181156.40
X=209252.87

REF LINE= N0°13'18"E 815.26'

REF LINE= S89°29'58"E 50.85'

PI: 11+59.99

REF LINE= N88°41'30"E 209.99'

BP: 9+50.00

PI: 103+04.53
179°52'30"
REF LINE= N0°24'47"E 38.02'
179°29'54"
REF LINE=SEC LINE N89°59'56"E

CTH O/SUPERIOR AVENUE
SEC LINE= N88°46'57"E 2642.53' COR TO COR

SUPERIOR AVENUE

178°11'28"
PI: 12+06.72=
PI: 102+66.51
PI: 102+19.84

REF LINE= N0°24'47"E 46.67'
179°56'20"
REF LINE= N0°24'27"E 219.84'

CTH IA
N. TAYLOR DRIVE

BP: 100+00

1/4 SEC LINE= S0°25'47"W 2671.16' COR TO COR

SECTION COR.
1" IRON PIPE
Y=180246.94
X=206611.67

NE-NW
21-15-23

QUARTER SEC. COR.
MAG NAIL
Y=180303.09
X=209253.61
12+10.84' 0.00 RT
102+66.50 4.12' RT

NW-NE
21-15-23

NORTH 31ST STREET

NORTH 30TH STREET

NORTH 29TH STREET

NORTH 28TH STREET

NORTH 27TH PLACE

N. 27TH PL.

EP: 23+73.15

SEC LINE = N89°59'56"E 2647.98' COR TO COR

SECTION CORNER
CUT CROSS
Y=180303.14
X=211901.58

GN

4

4

REVISION DATE	DATE 06/27/2017	SCALE, FEET 0 200	HWY: SUPERIOR AVENUE	STATE R/W PROJECT NUMBER - 4996-01-72	PLAT SHEET 4.03
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER - 4996-01-73	PS&E SHEET --85 E

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-72 SUPERIOR STREET\RW\SHEET 4.03.DWG PLOT DATE : 9/3/2008 9:50 AM PLOT BY : BOB PLOT NAME : ----------PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 70

CITY OF SHEBOYGAN

RAEDER RENTALS, INC.
UNPLATTED LAND
DOC. NO. 1718658 (2)
592-816-31620

(91) ALLIANT ENERGY EASEMENT DOC. NO. 1739278

SE-SW 16-15-23

NE-NW 21-15-23

SW-SE 16-15-23

ST. NICHOLAS HOSPITAL OF THE HOSPITAL SISTERS OF THE THRID ORDER OF ST. FRANCIS
UNPLATTED LAND
DOC. NO. 983765 (4)
592-816-31520

MATCH LINE 103+80 SHEET 4.08

MATCH LINE 15+50 SHEET 4.05

GN

CTH O
SUPERIOR AVENUE

N. TAYLOR DRIVE
CTH TA

SUPERIOR AVENUE

BEGIN RELOCATION ORDER
STA. 9+50 (SUPERIOR STREET)
4.35' SOUTH OF AND 260.79' WEST OF THE SOUTHWEST CORNER OF THE SOUTHEAST 1/4 OF SECTION 16, T.15N., R.23E.
Y=180298.74
X=208992.82

BP: 9+50.00

SLOPE INTERCEPT S88°46'57"W

R/L = N88°41'30"E 209.99'

SEC LINE = N88°46'57"E 2642.53' COR TO COR

N88°46'57"E

SLOPE INTERCEPT

PI: 11+59.99

PI: 12+06.72= 102+66.51

R/L= N0°20'47"E 38.02'

179°29'54"

178°11'28"

R/L=S89°29'58"E 50.85'

R/L=N0°20'47"E 46.67'

PI: 102+19.84

179°56'20"

S89°34'13"E 49.99'

N89°34'13"W 40.01'

PI: 103+04.53

179°52'30"

R/L= N0°13'18"E 815.26'
S89°41'41"E 49.85'

1/4 SEC LINE= N0°18'19"E 2611.75 COR TO COR / N89°41'41"W 40.12'

C/L= N0°12'42"E

S0°12'42"W

N0°12'42"E

N47°11'53"E 38.22'

S47°11'53"W 27.92'

6.84'

7.53'

16.14'

69.33'

-45.20'

-32.63'

-83.48'

101+97.18 35.97' EXRW (106)

S48°11'49"E 56.84'

S0°25'50"W

N0°25'50"E 221.86'

R/L= N0°24'27"E 219.84'

1/4 SEC LINE= S0°25'47"W 2671.16' COR TO COR

C/L= S0°25'50"W

244.02'

S89°59'56"W

RL/SEC LINE = N89°59'56"E 2647.98' COR TO COR

N89°59'56"E 324.41'

S89°59'56"W 183.00'

S85°34'45"W 64.91'

S87°08'12"W 80.10'

S0°25'47"W 49.26'

N89°35'33"W 6.33'

S13°28'16"W 35.93'

N89°35'33"W 4.02'

45' 45'

40'

33'

60.7

70.7

10+00 11+00 12+00 13+00 14+00 15+00

101+00 102+00 103+00

125	103+35.88 35.99' TLE
201	103+29.04 35.99' EXRW
	TLE GRADING
200	11+51.57 43.49' EXRW
124	11+44.03 43.50' TLE
202	11+31.10 34.48' EXRW 4.40'
104	11+26.70 34.47' TLE TLE SLOPES/GRADING
103	11+51.49 57.68' TLE
105	11+57.99 59.66' FEE, TLE
102	101+93.02 49.99' TLE
100	101+83.04 35.98' FEE, TLE
101	101+75.63 35.98' TLE
126	103+51.88 54.01' FEE
	ST. NICHOLAS HOSPITAL EASEMENT (CABLES) DOC.NO. 1982555
	AT&T - WIS 6' EASEMENT/CABLES DOC.NO. 1908594
131	12+81.23 60.00' TLE
	S-3
	N89°59'56"E 24.77'
132	13+06 60.00' TLE
133	13+63 49.00' TLE
128	14+00 49.00' FEE
129	15+05 40.00' FEE
	S79°04'42"E 58.05'
	S85°06'07"E 105.39'
	SLOPE INTERCEPT
	10' IRRIGATION EASEMENT ST. NICHOLAS HOSPITAL DOC.NO. 1038511
127	12+89.99 49.00' FEE/TLE
130	12+60.98 40.00' EXRW
	TLE SLOPES/GRADING
203	12+60.59 33.00' EXRW
109	
112	13+17 42.00' FEE
111	13+67 37.00' FEE
121	13+02.28 56.00' TLE
146	13+67 51.00' TLE
	SLOPE INTERCEPT TLE SLOPES/GRADING
110	15+05 37.00' FEE
123	15+50 36.00' TLE
122	51.00' TLE
113	101+98.26 82.54' FEE
115	101+49.00 70.57' FEE
117	74.20' TLE
114	82.52' FEE
	AT&T CABLES NO RECORDED EASEMENT
	AT&T CABLES/MH NO RECORDED EASEMENT
	TLE SLOPES/GRADING
116	101+10 51.93' FEE
	S-2
	S00°24'27"W 102.00'
	8' ST. NICHOALS HOSPITAL FACILITIES EASEMENT DOC. NO. 1980835
119	100+47 67.88' TLE
118	74.20' TLE
107	100+12 53.96' FEE
108	55.74' FEE
120	59.76' TLE

(3) UNITED SAVINGS AND LOAN ASSOCIATION
592-812-15862
CSM VOL. 20 P.245
LOT 1
DOC. NO. 1737129

(1) TAYLOR-SUPERIOR, LLC
UNPLATTED LAND
DOC. NO.
592-812-15900

SECTION COR.
1" IRON PIPE
Y=180246.94
X=206611.67

QUARTER SEC. COR.
MAG NAIL
Y=180303.09
X=209253.61
12+10.84' 0.00 RT
102+66.50 4.12' RT

PI: 102+19.84
Y=180256.46
X=209249.21

PI: 12+06.72=
102+66.51
Y=180303.13
X=209249.49

PI: 103+04.53
Y=180341.14
X=209249.72

PI: 11+59.99
Y=180303.54
X=209202.75

SECTION CORNER
CUT CROSS
Y=180303.14
X=211901.58

BASIS OF EXISTING R/W
SEE SHEET 4.08

SIGN SCHEDULE

SIGN NO.	STATION	OFFSET	SIGN OWNER
S-1	12+83	60.0' RT	M&I BANK SBC
S-2	100+91	64.3' RT	M&I BANK SBC
S-3	12+90	54.0' LT	ST. NICHOLAS HOSPITAL

LINE COURSE TABLE

PT. #	BEARING	DISTANCE
100-105	N24°23'18"W	26.28'
105-106	S48°11'49"E	14.70'
106-100	S00°25'50"W	14.14'
100-101	S00°25'50"W	7.41'
101-102	N38°27'43"W	22.33'
102-103	N12°23'54"W	16.06'
103-104	N48°11'49"W	33.96'
105-100	S24°23'18"E	26.28'

LINE COURSE TABLE

PT. #	BEARING	DISTANCE
110-111	S89°59'56"W	138.00'
111-110	N89°59'56"E	138.00'
111-112	S84°17'18"W	50.25'
112-111	N84°17'18"E	50.25'
112-113	S46°25'55"W	38.88'
114-115	N89°35'33"W	11.95'
115-116	S00°19'06"W	38.80'
116-115	N00°19'06"E	38.80'
116-108	S09°01'53"W	99.33'
108-116	N09°01'53"E	99.33'
108-107	N89°35'33"W	1.79'
115-117	S89°35'33"E	3.63'
123-122	S00°00'04"E	15.00'
121-112	N46°25'55"E	20.32'
126-127	S38°32'55"E	46.29'
127-128	N89°59'56"E	110.01'
126-131	S38°32'55"E	32.22'
133-127	S89°59'56"W	73.01'
127-131	N38°32'55"W	14.06'

CITY OF SHEBOYGAN

REVISION DATE X	DATE: 06-27-2017	SCALE, FEET 0 40	HWY: SUPERIOR AVENUE	STATE R/W PROJECT NUMBER - 4996-01-72	PLAT SHEET 4.04
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER - 4996-01-73	PS&E SHEET --86 E

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-72 SUPERIOR STREET\RW\SHEET 4.04.DWG PLOT DATE : 7/7/2017 7:50 AM PLOT BY : BOB PLOT NAME :

CONST. 4996-01-73 SUPERIOR AVE R/W 4996-01-72_4.04

CITY OF SHEBOYGAN

SW-SE
16-15-23

4

ST. NICHOLAS HOSPITAL OF THE HOSPITAL SISTERS OF THE THRID ORDER OF ST. FRANCIS

UNPLATTED LAND
DOC. NO. 983765
592-816-31520

BASIS OF EXISTING R/W
SEE SHEET 4.08

LINE COURSE TABLE		
PT #	BEARING	DISTANCE
135-136	S00°19'31"W	3.00'
137-134	N00°21'34"E	3.00'
147-148	N00°00'04"W	5.00'
149-150	S00°00'04"E	5.00'
139-144	S00°35'00"W	3.00'
145-138	N00°19'31"E	3.00'
140-143	S00°20'23"W	3.00'
141-142	S00°24'14"W	3.00'

QUARTER SEC. COR.
MAG NAIL
Y=180303.09
X=209253.61
12+10.84' 0.00 RT

SECTION CORNER
CUT CROSS
Y=180303.14
X=211901.58

SHEET 4.04
MATCH LINE 15+50

MATCH LINE 21+25
SHEET 4.06

10' IRRIGATION EASEMENT
ST. NICHOLAS HOSPITAL
DOC.NO. 103811

SLOPE INTERCEPT

17+75
148 70.00' TLE
147 40.00' TLE

TLE
DRIVE/
GRADING

18+95
70.00' TLE 149
40.00' TLE 150

30.0'

120.00'

N00°00'04"W
30.00'

S00°00'04"E
30.00'

120.00'

P/L

SUPERIOR AVENUE

N00°00'04"W
40.00'

MATCH LINE SHEET 4.07

16+00 N89°59'56"E 564.16' 17+00 N89°59'56"E 127.62' 18+00 19+00 20+00 21+00

N89°59'56"E 489.82'

RL=SEC LINE = N89°59'56"E 2647.98' COR TO COR

S0°00'04"E
33.00'

S00°00'04"E
33.00'

134 17+00.66
33.00' TLE

135 18+42.62
33.00' TLE

19+02.62
33.00' TLE 138

139 19+97.82
33.00' TLE

140 20+47.82
33.00' TLE

141 21+07.82
33.00' TLE

15+85.00
33.00' FEE 109

S89°59'56"W 324.41'
108

115.66'
150.65'

141.96'
141.96'

95.19'
95.18'

50.00'
50.01'

60.00'
60.00'

66.77'
66.77'

S87°08'12"W
80.10'

TLE
SIDEWALK/
GRADING

3.0'

3.0'

AT&T
BURIED CABLE
NO RECORDED
EASEMENT
90

15+50
36.00' TLE 123
51.00' TLE 122

ALLIANT
BURIED CABLE
NO RECORDED
EASEMENT
91

17+00.65
36.00' TLE 137

18+42.61
36.00' TLE 136

19+02.61
36.00' TLE 145

144 19+97.79
36.00' TLE

143 20+47.80
36.00' TLE

142 21+07.79
36.00' TLE

3
UNITED SAVINGS
AND
LOAN ASSOCIATION
592-812-15862
CSM VOL. 20 P.245
LOT 1
DOC. NO. 1737129

40' ACCESS EASEMENT
PER CSM VOL. 20 P. 245

10' WIS. TELEPHONE COMPANY
EASEMENT DOC. NO. 1026760

5
P & L REALTY, LLC
592-812-15868
UNPLATTED LAND
DOC. NO. 1660172

WIS. BELL INC.
BURIED CABLES & EASEMENT
DOC. NO. 1382783
90

WIS. TELE, CO.
BURIED CABLES & EASEMENT
DOC.NO. 1982555
90

NW-NE
21-15-23

30' 30'

N 31st STREET

C/L= S0°19'31"W
STA 18+72.81

AT&T
BURIED CABLE
NO RECORDED
EASEMENT
90

LOT 8
SMITH GARDENS
BLOCK 6
LOT 7

6
P & L REALTY, LLC
592-812-13214
DOC. NO. 1660172

7
GREGORY V. &
JENNIFER S.
MONSON
592-812-13212
DOC. NO. 1485327

8
JOHN E. YANDA
592-812-11312
DOC. NO. 1458154

LOT 2
O.C. NEUMEISTER'S
RESUBDIVISION NO. 2
BLOCK 5

9
G & S
PROPERTIES
OF
SHEBOYGAN,
LLC
592-812-11311
DOC. NO. 1717733
LOT 1

70' P/L 25'

50' P/L P/L 60'

CITY OF SHEBOYGAN

REVISION DATE			
X			

DATE: 06-27-2017
GRID FACTOR N/A

SCALE, FEET
0 40

HWY: SUPERIOR AVENUE
COUNTY: SHEBOYGAN

STATE R/W PROJECT NUMBER - 4996-01-72
CONSTRUCTION PROJECT NUMBER - 4996-01-73

PLAT SHEET 4.05
PS&E SHEET --87

E

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-72 SUPERIOR STREET\RW\SHEET 4.05.DWG
PLOT DATE : 7/7/2017 7:51 AM
PLOT BY : BOB
PLOT NAME :

CONST. 4996-01-73 SUPERIOR AVE R/W 4996-01-72_4.05

CITY OF SHEBOYGAN

LINE COURSE TABLE		
PT #	BEARING	DISTANCE
152-151	S00°24'17"W	3.00'
142-141	N00°24'14"E	3.00'
162-156	S89°59'56"W	215.00"
156-155	S00°17'28"W	3.00'
153-154	N00°24'17"E	3.00'
157-158	S00°19'04"W	3.00'
161-159	N52°59'00"W	14.95'
161-160	N52°59'00"W	9.97'
159-160	S52°59'00"E	4.98'
176-177	S44°47'44"E	15.50'
165-166	N00°24'36"E	11.00'
167-169	S00°24'36"W	11.00'
167-168	S00°24'36"W	6.00'
171-170	S00°24'36"W	5.00'
169-168	N00°24'36"E	5.00'
172-174	N53°16'38"E	15.05'
173-172	S53°16'38"W	8.36'

QUARTER SEC. COR.
MAG NAIL
Y=180303.09
X=209253.61
12+10.84' 0.00 RT

T 15 N
16 16
21 21
R 23 E

BASIS OF EXISTING R/W
SEE SHEET 4.08

SW-SE
16-15-23

SE-SE
16-15-23

GN

16 GARFIELD D. & LOIS F. GRESHOLDT
592-816-30843
UNPLATTED LAND
DOC. NO. 1578464

17 MARK & KIM L. KALLAS
592-816-30842
UNPLATTED LAND
DOC. NO. 1383239

18 ST. NICHOLAS HOSPITAL OF THE HOSPITAL SISTERS OF THE THRID ORDER OF ST. FRANCIS
592-816-30841
UNPLATTED LAND
DOC. NO. 1104410

19 JUUL M. SCHIMBERG
592-816-30785
UNPLATTED LAND
DOC. NO. 1906382

SECTION CORNER
CUT CROSS
Y=180303.14
X=21190.58

T 15 N
16 15
21 22
R 23 E

N 29TH STREET
C/L= N0°24'36"E
STA 25+30.71

1/16 LINE

4 4

MATCH LINE SHEET 4.05

MATCH LINE SHEET 4.07

SLOPE INTERCEPT

TLE DRIVE/SLOPES & GRADING

166 23+01.04 44.00' TLE

171 24+34.35 38.00' TLE

167 23+67.76 44.00' TLE

168 23+67.72 38.00' TLE

165 23+00.96 33.00' TLE

169 23+67.68 33.00' TLE

170 24+34.31 33.00' TLE

174 25+01.01 42.00' FEE

173 24+95.64 38.00' TLE

172 24+88.94 33.00' FEE

175 25+00.94 33.00' FEE

176 25+61.02 44.00' FEE

177 25+71.94 33.00' FEE

178 25+60.94 33.00' FEE

179 25+60.47 33.00' FEE

N00°00'04"W 33.00'

1319.86

1090.12'

963.74'

SUPERIOR AVENUE

21+00 22+00 23+00 24+00 25+00 26+00

RL=SEC LINE = N89°59'56"E 2647.98' COR TO COR

S00°00'04"E 33.00'

152 21+74.59 33.00' TLE

151 21+74.57 36.00' TLE

153 22+34.57 36.00' TLE

154 22+34.59 33.00' TLE

155 22+85.45 36.00' TLE

156 22+85.47 33.00' TLE

157 23+60.47 33.00' TLE

158 23+60.45 36.00' TLE

162 25+00.47 33.00' FEE

159 24+88.47 33.00' FEE

160 24+92.45 36.00' TLE

161 25+00.40 42.00' FEE

164 25+73.47 33.00' FEE S45°12'17"W 18.45'

163 23+60.38 46.00' FEE

60.00' 66.77' 66.77' 3.0' 50.88' 50.88' 75.00' 75.00' 3.0' 128.00' 132.00' 12.00' 30.00' 30.00' 13.00' 75.00'

66.72' 11.0' 66.63' 5.0' 61.30' 54.63' 12.00' 9.00' 30.00' 30.00' 11.00' 11.00' P/L 54.90'

36.0' 28.2' 56.3' 35.0'

30' 30' 30' 30' 30' 30'

33' 33' 33' -33.00' 33' 33'

40' 40'

TLE GRADING/ SLOPES

9 G & S PROPERTIES
592-812-11311
DOC. NO. 1717733

LOT 1 LOT 2

10 TAKASHI & CATHERINE M. MOMMA
592-812-11309
DOC. NO. 1684885

LOT 34

11 ROBERT J, & DEBORAH CLEMENT
592-812-13208
DOC. NO. 1896702

LOT 3

90 AT&T (WIS TELEPHONE) EASEMENT/BURIED CABLES DOC.NO. 1024394

LOT 33

13 SHEBOYGAN SHAMROCK, LLC
592-812-13209
DOC. NO. 1732099

LOT 2

TLE SLOPES/ GRADING

14 SHEBOYGAN SHAMROCK, LLC
592-812-13242
DOC. NO. 1732099

LOT 8 LOT 7

END RELOCATION ORDER
STA. 26+00 (SUPERIOR STREET)
0.03' NORTH OF AND 1389.15' EAST OF THE SOUTHWEST CORNER OF THE SOUTHEAST 1/4 OF SECTION 16, T.15N., R.23E.
Y=180303.12
X=210642.76

N 30TH STREET
C/L= S0°27'17"W
STA 22+04.82

N 29TH STREET
C/L= S0°24'37"W
STA 25+30.71

O.C. NEUMEISTER'S RESUBDIVISION NO. 2 BLOCK 5

O.C. NEUMEISTER'S RESUBDIVISION NO. 2 BLOCK 4

SMITH GARDENS BLOCK 6

O.C. NEUMEISTER'S RESUBDIVISION NO. 2 BLOCK 4

SMITH GARDENS BLOCK 7

NW-NE
21-15-23

NE-NE
21-15-23

REVISION DATE X	DATE: 06-27-2017	SCALE, FEET 0 40	HWY: SUPERIOR AVENUE	STATE R/W PROJECT NUMBER - 4996-01-72	PLAT SHEET 4.06
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER - 4996-01-73	PS&E SHEET 88 E

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-72 SUPERIOR STREET\RW\SHEET 4.06.DWG
PLOT DATE : 6/28/2017 11:21 AM
PLOT BY : BOB
PLOT NAME :
CONST. 4996-01-73 SUPERIOR AVE R/W 4996-01-72_4.06

CITY OF SHEBOYGAN

SW-SE
16-15-23

91

4

4

SUPERIOR AVENUE

N 30TH STREET

QUARTER SEC. COR.
MAG NAIL
Y=180303.09
X=209253.61
12+10.84' 0.00 RT

O.C. NEUMEISTER'S RESUBDIVISION NO. 2
BLOCK 5

LOT 1
LOT 2

O.C. NEUMEISTER'S RESUBDIVISION NO. 2
BLOCK 4

LOT 33
LOT 34

592-81

10' IRRIGATION EASEMENT
ST. NICHOLAS HOSPITAL
DOC.NO. 1038511

UNPLATTED LAND
DOC. NO. 983765
592-816-31520

TLE
CONST. ENT./
GRADING

20+45
40.00' TLE (180)

N00°00'04"W 307.50'

20+45
347.50' TLE (181)

ALLIANT ENERGY
BURIED CABLES

S00°00'04"E 262.00'

20+75
302.00' TLE (188)

20+75
40.00' TLE (189)

348'

MATCH LINE
SHEET 4.05

N89°59'56"E
834.16'

N00°00'04"E
40.00'

S89°59'56"W
30.00'

SHEET 4.05
MATCH LINE 21+25
SHEET 4.06

RL=SEC LINE = N89°59'56"E 2647.98' COR TO COR

MATCH LINE SHEET 4.06

SLOPE INTERCEPT
21+75
40.00' TLE (184)

N00°00'04"W
10.00'

21+75
50.00' TLE (185)

N89°59'56"E
29.40'

22+04.40
50.00' TLE (186)

4

ST. NICHOLAS
HOSPITAL OF THE
HOSPITAL SISTERS OF
THE THRID ORDER OF
ST. FRANCIS

UNPLATTED LAND
DOC. NO. 1946805
592-816-31525

N00°24'36"E 252.01'

22+06.21
302.00' TLE (187)

SLOPE INTERCEPT

S89°59'56"W 131.21'

N89°59'56"E 190.00'

112.26'

Z

S00°00'04"E 307.50'

TLE
CONST. ENT./
GRADING

22+35
40.00' TLE (183)

22+35
347.50' TLE (182)

SECTION CORNER
CUT CROSS
Y=180303.14
X=211901.58

UNPLATTED LAND
DOC. NO. 974242
592-816-30844

AT&T
BURIED CABLES

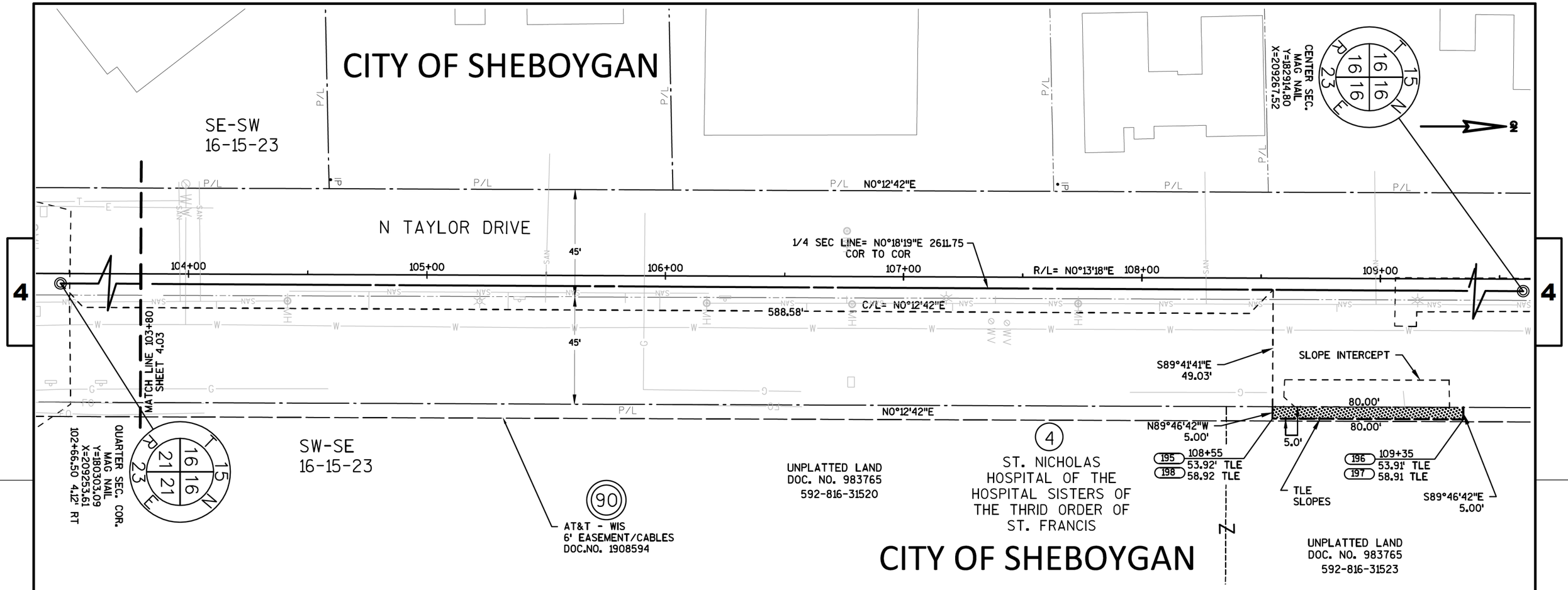
90

BASIS OF EXISTING R/W
SEE SHEET 4.08

REVISION DATE X	DATE: 06/27/2017	SCALE, FEET 0 40	HWY: SUPERIOR AVENUE	STATE R/W PROJECT NUMBER - 4996-01-72	PLAT SHEET 4.07
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER - 4996-01-73	PS&E SHEET 89 E

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-72 SUPERIOR STREET\RW\SHEET 4.07.DWG
PLOT DATE : 7/7/2017 7:51 AM
PLOT BY : BOB
PLOT NAME :

CONST. 4996-01-73 SUPERIOR AVE R/W 4996-01-72_4.07



COORDINATE TABLE

PT#	Y	X	PT#	Y	X	PT#	Y	X	PT#	Y	X	PT#	Y	X
100	180219.912	209212.969	123	180267.097	209592.764	141	180270.106	210150.579	165	180336.110	210343.720	189	180343.10	210117.76
101	180212.501	209212.913	124	180346.660	209185.808	142	180267.106	210150.558	166	180347.110	210343.799	195	180891.403	209305.770
102	180229.989	209199.022	125	180372.630	209213.852	143	180267.105	210090.561	167	180347.111	210410.480	196	180971.402	209306.066
103	180245.675	209195.573	126	180388.291	209303.911	144	180267.105	210040.548	169	180336.111	210410.444	197	180971.383	209311.066
104	180268.312	209170.259	127	180352.092	209332.755	145	180267.103	209945.371	170	180336.112	210477.074	198	180891.384	209310.770
105	180243.849	209202.117	128	180352.094	209442.762	147	180343.101	209817.762	171	180341.112	210477.110			
106	180234.050	209213.075	129	180343.096	209547.762	148	180373.101	209817.762	172	180336.113	210531.704			
107	180048.239	209301.682	130	180343.091	209303.744	149	180373.103	209937.762	173	180341.113	210538.406			
108	180048.226	209303.467	131	180363.092	209323.990	150	180343.103	209937.762	174	180345.113	210543.768			
109	180270.097	209627.763	132	180363.092	209348.762	151	180267.108	210217.330	175	180336.113	210543.704			
110	180266.096	209547.763	133	180352.093	209405.762	152	180270.108	210217.351	176	180347.114	210603.784			
111	180266.093	209409.763	146	180252.093	209409.763	153	180267.109	210277.331	177	180336.115	210614.705			
112	180261.092	209359.763	200	180346.820	209193.340	154	180270.109	210277.352	178	180336.115	210603.705			
113	180234.295	209331.592	201	180365.792	209213.827	155	180267.110	210328.216	179	180270.115	210603.233			
114	180185.032	209331.222	202	180268.405	209174.655	156	180270.110	210328.231	180	180343.10	210087.76			
115	180185.117	209319.274	203	180270.091	209303.349	157	180270.111	210403.231	181	180650.60	210087.75			
116	180146.321	209319.059	134	180270.099	209743.428	158	180267.111	210403.215	182	180650.60	210277.75			
117	180185.091	209322.903	135	180270.102	209885.387	159	180270.113	210531.231	183	180343.10	210277.76			
118	180083.094	209322.178	136	180267.102	209885.370	160	180267.113	210535.210	184	180343.10	210217.76			
119	180083.139	209315.853	137	180267.099	209743.409	161	180261.114	210543.167	185	180353.10	210217.76			
120	180048.197	209307.483	138	180270.103	209945.388	162	180270.113	210543.231	186	180353.10	210247.16			
121	180247.090	209345.042	139	180270.105	210040.579	163	180257.115	210603.140	187	180605.10	210248.96			
122	180252.031	209592.758	140	180270.105	210090.579	164	180270.115	210616.233	188	180605.10	210117.75			

BASIS OF EXISTING R/W

NAME	DOCUMENT	WIDTH	YEAR
SUPERIOR AVENUE	PROJECT ID 4996-01-11	VARIES	2007
	CSM VOL 20 PAGE 245	33'	2004
	DOC NO 1856359	VARIES	2008
	DOC NO 1660172	33'	2002
	GEN ORD 21-76-77	80'	1976
	SMITH GARDEN SUB.	33'	1919
TAYLOR AVENUE	CSM VOL 20 PAGE 245	50'	2004
	RELOC. ORDR 229-78-79	VARIES	1981
	DOC NO 1049477	40'	1979
	DOC NO 1049473	40'	1979
	DOC NO 1049478	40'	1979
	DOC NO 1049474	40'	1979
	DOC NO 1049476	40'	1979
	DOC NO 954541	VARIES	1972
29TH STREET	SMITH GARDEN SUB	60'	1919
	DOC NO 961071	30'	1973
30TH STREET	O.C. NEUMEISTER'S SUB	260'	1927
31ST STREET	SMITH GARDEN	25'	1919
	DOC NO 1660172	30'	1973

REVISION DATE			
X			

DATE: 06-27-2017

GRID FACTOR N/A

SCALE, FEET 0 40

HWY: SUPERIOR AVENUE

COUNTY: SHEBOYGAN

STATE R/W PROJECT NUMBER - 4996-01-72

CONSTRUCTION PROJECT NUMBER - 4996-01-73

PLAT SHEET 4.08

PS&E SHEET --90

E

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-72 SUPERIOR STREET\RW\SHEET 4.08.DWG

PLOT DATE : 6/28/2017 11:29 AM

PLOT BY : BOB

PLOT NAME :

CONST. 4996-01-73 SUPERIOR AVE R/W 4996-01-72_4.08

STATION: 9+70.34
O/S: 18.2' LT

STATION: 10+20.07
O/S: 20.2' LT

STATION: 10+20.07
O/S: 18.0' LT

STATION: 11+00.40
O/S: 34.7' LT

STATION: 11+00.21
O/S: 25.2' LT

STATION: 10+78.35
O/S: 25.1' LT

BP: 9+50.00

PI: 103+04.53

PI: 12+10.84

PI: 12+59.99

PI: 103+04.41

STATION: 14+94.28
O/S: 41.7' LT

STATION: 14+71.16
O/S: 41.5' LT

CONC.

RW

TLE

CAUTION

9+50

10+00

11+00

12+00

13+00

14+00

15+00

SUPERIOR AVENUE

PI: 102+19.84

PI: 102+19.80

TAYLOR DRIVE

STATION: 9+69.78
O/S: 20.0' RT

ASPHALTIC SURFACE TRANSITION
FROM STA. 9+70.07 TO STA. 10+20

APPROXIMATE LOCATION OF NEW
21-INCH ATC POWER POLE,
BY OTHERS

CLEAR AND GRUB

HYDRANT TO BE RELOCATED
BY SHEBOYGAN WATER UTILITY

STATION: 14+64.35
O/S: 45.9' RT

STATION: 14+70.19
O/S: 45.8' RT

STATION: 14+78.41
O/S: 42.8' RT

STATION: 15+02.76
O/S: 42.8' RT

ASPH.

BEGIN PROJECT 4996-01-73
STA. 9+70.07
Y = 180299.20
X = 209012.89

VCL = 90.00
K = 319.45

VCL = 90.00
K = 45.03

VCL = 100.00
K = 201.22

P.I. 9+70.07 EL 102.40
VPC STA 9+90.00 VPC EL 102.09
VPI STA 10+35.00 VPI EL 101.40
VPT STA 10+80.00 VPT EL 100.68
VPC STA 10+90.00 VPC EL 100.51
VPI STA 11+35.00 VPI EL 99.79
LOW POINT STA 11+62.49 LOW POINT EL 99.93
VPT STA 11+80.00 VPT EL 99.96
P.I. 11+80.25 EL 99.97
P.I. 12+06.56 EL 100.23
P.I. 12+23.65 EL 100.40
P.I. 12+48.62 EL 100.03
P.I. 12+70.23 EL 99.70
P.I. 12+98.62 EL 99.28
VPC STA 13+00.00 VPC EL 99.26
VPI STA 13+50.00 VPI EL 98.76
VPT STA 14+00.00 VPT EL 98.51

-1.54% -1.61% 0.39% 1.00% 1.00% -1.50% -1.50% -1.50% -1.00% -0.50%

EX: PR: EX:102.88 PR: EX:101.86 PR:101.94 EX:101.23 PR:101.16 EX:100.58 PR:100.36 EX:99.73 PR:99.95 EX:99.93 PR:100.16 EX:99.61 PR:100.00 EX:99.21 PR:99.26 EX:98.99 PR:98.82 EX:98.73 PR:98.51 EX:98.50 PR:98.26 EX:98.27 PR:98.01

110 100 90 80

9+00 10+00 11+00 12+00 13+00 14+00 15+00

GENERAL NOTES

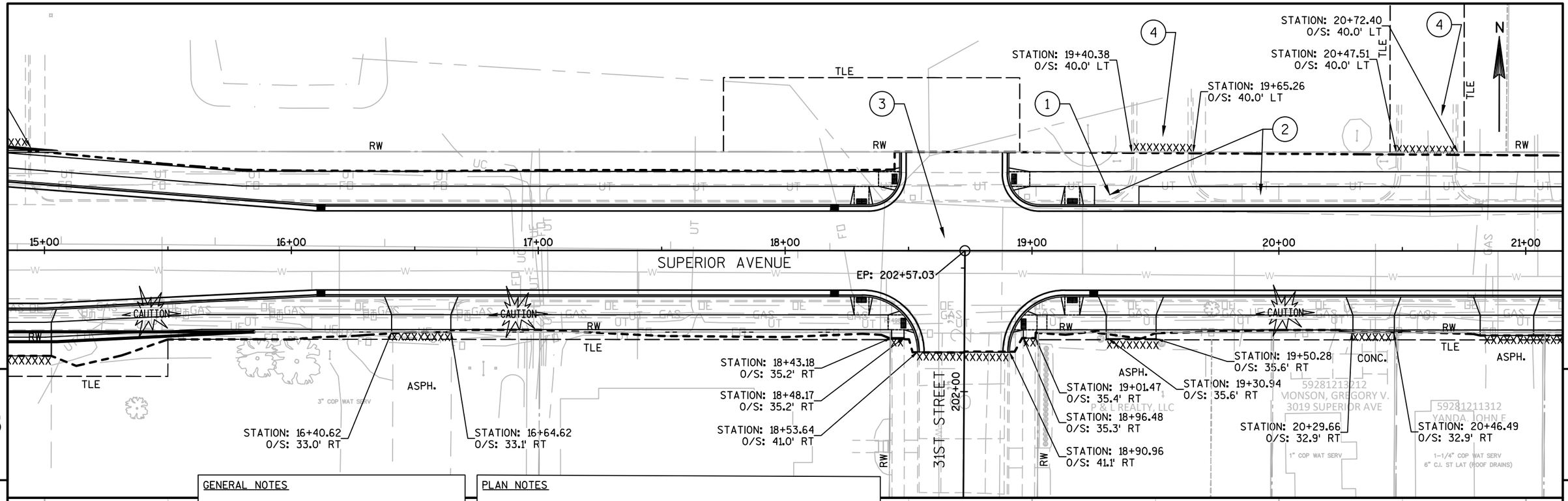
1. CURB RAMPS MATCH CONFIGURATIONS AND REQUIREMENTS AS SHOWN ON S.D.D "CURB RAMPS TYPES 2 AND 3." SEE CURB RAMP DETAIL SHEETS FOR MORE INFORMATION.

– – – – – – = SLOPE INTERCEPT

PLAN NOTES

1. DRIVEWAY TO BE REMOVED AND REPLACED WITH LAWN BY HOSPITAL CONTRACTOR. DRIVEWAY ACCESS MUST BE COORDINATED WITH ST. NICHOLAS HOSPITAL PRIOR TO REMOVING A DRIVEWAY FROM SERVICE.

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN AND PROFILE: CTH O	SHEET 91	E



GENERAL NOTES

1. CURB RAMPS MATCH CONFIGURATIONS AND REQUIREMENTS AS SHOWN ON S.D.D "CURB RAMPS TYPES 2 AND 3." SEE CURB RAMP DETAIL SHEETS FOR MORE INFORMATION.

= SLOPE INTERCEPT

PLAN NOTES

1. 6-INCH CONCRETE SIDEWALK FOR BUS SHELTER PAD. SEE PAVING DETAIL SHEETS FOR MORE INFORMATION.
2. SALVAGE EXISTING BUS SHELTER AT STA 20+00 LEFT. REINSTALL ON 6-INCH CONCRETE SIDEWALK BUS SHELTER PAD.
3. CONCRETE PAVING GAP AND HES REQUIRED AT CTH O/31ST ST INTERSECTION. SEE PAVING DETAILS SHEET FOR MORE INFORMATION.
4. DRIVEWAY TO BE REMOVED AND REPLACED WITH LAWN BY HOSPITAL CONTRACTOR. DRIVEWAY ACCESS MUST BE COORDINATED WITH ST. NICHOLAS HOSPITAL PRIOR TO REMOVING A DRIVEWAY FROM SERVICE.

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN AND PROFILE: CTH O	SHEET 92 E

STATION: 22+08.80
O/S: 39.9' LT

STATION: 22+33.92
O/S: 40.0' LT

STATION: 22+43.47
O/S: 32.4' LT

STATION: 22+48.46
O/S: 32.4' LT

EP: 302+52.16

STATION: 24+39.39
O/S: 32.2' LT

STATION: 24+27.34
O/S: 32.3' LT

STATION: 24+17.77
O/S: 32.3' LT

STATION: 25+10.30
O/S: 46.5' LT

STATION: 25+06.96
O/S: 39.8' LT

STATION: 25+02.02
O/S: 39.8' LT

STATION: 24+50.86
O/S: 32.2' LT

29TH STREET

STATION: 25+51.67
O/S: 46.2' LT

STATION: 25+55.03
O/S: 41.5' LT

STATION: 25+59.94
O/S: 41.5' LT

STATION: 25+79.62
O/S: 32.7' LT

STATION: 25+79.57
O/S: 27.7' LT

STATION: 25+79.72
O/S: 21.1' LT

EP: 26+73.15

PI: 402+47.88

SUPERIOR AVENUE

STATION: 21+74.98
O/S: 34.1' RT

ASPH.

STATION: 20+83.43
O/S: 34.2' RT

ASPH.

STATION: 21+74.84
O/S: 53.4' RT

30TH STREET

STATION: 22+23.02
O/S: 53.5' RT

STATION: 22+85.45
O/S: 34.0' RT

STATION: 22+33.04
O/S: 53.5' RT

STATION: 22+28.16
O/S: 53.5' RT

CONC.

STATION: 23+61.11
O/S: 34.0' RT

CAUTION

STATION: 24+01.66
O/S: 34.0' RT

STATION: 24+35.39
O/S: 33.8' RT

PI: 401+81.87

STATION: 25+02.23
O/S: 39.8' RT

STATION: 25+07.15
O/S: 39.9' RT

STATION: 25+09.84
O/S: 47.6' RT

29TH STREET

STATION: 25+50.85
O/S: 48.0' RT

STATION: 25+80.84
O/S: 20.1' RT

STATION: 25+81.06
O/S: 25.5' RT

STATION: 25+81.12
O/S: 31.4' RT

STATION: 25+59.29
O/S: 43.0' RT

STATION: 25+54.12
O/S: 43.0' RT

END PROJECT 4996-01-73
STA. 25+80.32

PLAN NOTES

1. REPLACE PAVEMENT REMOVED FROM PARKING LOT ON LOT SIDE OF SIDEWALK. MATCH EXISTING PAVEMENT STRUCTURE. ASPHALT PAVEMENT REMOVAL IN THE PARKING LOT AND TERRACE IS INCIDENTAL TO THE ROADWAY EXCAVATION. FIELD LOCATE PAVED OVER WATER SERVICE BOX BEFORE SAWCUTTING OPERATIONS BEGIN.
2. DO NOT REPLACE ASPHALT PAVEMENT IN TERRACE AREA. USE TYPICAL RESTORATION, SEE TYPICAL SECTIONS.
3. DO NOT REPLACE CONCRETE PAVEMENT IN TERRACE AREA. USE TYPICAL RESTORATION, SEE TYPICAL SECTIONS.

GENERAL NOTES

1. CURB RAMPS MATCH CONFIGURATIONS AND REQUIREMENTS AS SHOWN ON S.D.D "CURB RAMPS TYPES 2 AND 3." SEE CURB RAMP DETAIL SHEETS FOR MORE INFORMATION.

= SLOPE INTERCEPT

VCL = 100.00
K = 169.70

VCL = 100.00
K = 95.05

-0.91%
-1.40%
-0.35%
-0.85%

VPC STA 21+04.65
VPC EL 92.93

VPI STA 21+54.65
VPI EL 92.18

VPT STA 22+04.65
VPT EL 91.72

P.I. 22+40.00
EL 91.40

VPC STA 24+25.00
VPC EL 88.81

VPI STA 24+75.00
VPI EL 88.11

VPT STA 25+25.00
VPT EL 87.94

P.I. 25+30.62
EL 87.92

P.I. 25+80.36
EL 87.49

30TH STREET PROFILE

P.I. 301+58.81
EL 91.96

P.I. 301+95.96
EL 91.39

P.I. 302+12.49
EL 91.72

-1.52%
2.00%

29TH STREET PROFILE

P.I. 401+72.13
EL 87.91

P.I. 401+98.61
EL 87.59

P.I. 402+14.92
EL 87.92

P.I. 402+30.61
EL 87.61

P.I. 402+58.26
EL 88.00

-1.20%
2.00%
-2.00%
1.44%

EX:93.13 PR:93.00
EX:92.31 PR:92.31
EX:91.93 PR:91.76
EX:91.59 PR:91.26
EX:90.86 PR:90.56
EX:90.14 PR:89.86
EX:89.38 PR:89.16
EX:88.76 PR:88.49
EX:88.13 PR:88.06
EX:87.85 PR:87.75
EX:87.47 PR:
EX: PR:
EX: PR:

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN AND PROFILE: CTH O	SHEET 93	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-PP - 050103-PP

PLOT DATE : 1/10/2019 4:34 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

STATION: 100+15.62
O/S: 51.0' LT

STATION: 100+12.43
O/S: 51.0' LT

STATION: 100+20.09
O/S: 52.8' LT

STATION: 100+32.05
O/S: 52.9' LT

STATION: 100+32.07
O/S: 47.5' LT

STATION: 101+49.73
O/S: 47.9' LT

STATION: 101+49.72
O/S: 51.3' LT

BP: 100+00.00

BP: 100+00.00

APPROXIMATE LOCATION OF NEW 21-INCH ATC POWER POLE, BY OTHERS

APPROXIMATE LOCATION OF NEW 21-INCH ATC POWER POLE, BY OTHERS

TAYLOR DRIVE

SUPERIOR AVENUE

PI: 102+19.84

PI: 102+19.80

TLE

RW

101+00

102+00

103+00

104+00

105+00

12+00

13+00

PI: 11+59.99

PI: 103+04.53

PI: 12+10.84

PI: 13+04.47

STATION: 103+50.40
O/S: 41.9' LT

STATION: 103+58.40
O/S: 44.6' LT

STATION: 103+58.40
O/S: 41.9' LT

STATION: 103+50.35
O/S: 7.7' LT

STATION: 103+58.34
O/S: 7.9' LT

EP: 103+99.89

STATION: 103+58.33
O/S: 0.0' T

STATION: 103+50.33
O/S: 0.0' T

STATION: 100+12.69
O/S: 26.7' RT

STATION: 100+12.70
O/S: 31.3' RT

STATION: 100+12.63
O/S: 36.3' RT

STATION: 100+57.76
O/S: 51.3' RT

STATION: 100+52.80
O/S: 51.4' RT

CLEAR AND GRUB

CAUTION

STATION: 103+58.29
O/S: 24.0' RT

STATION: 103+58.29
O/S: 26.7' RT

STATION: 103+50.29
O/S: 24.0' RT

STATION: 103+50.29
O/S: 30.7' RT

STATION: 103+50.30
O/S: 36.7' RT

BEGIN CONSTRUCTION
STA. 100+12.73

END CONSTRUCTION
STA. 103+58.33

N

5

5

GENERAL NOTES

1. CURB RAMPS MATCH CONFIGURATIONS AND REQUIREMENTS AS SHOWN ON S.D.D "CURB RAMPS TYPES 2 AND 3." SEE CURB RAMP DETAIL SHEETS FOR MORE INFORMATION.

- - - - - - = SLOPE INTERCEPT

P.I. 100+12.60
EL 102.90

P.I. 102+19.92
EL 100.61

P.I. 102+66.70
EL 100.40

P.I. 103+04.47
EL 99.93

P.I. 103+50.33
EL 99.25

-1.11%

-0.45%

-1.25%

-1.48%

TAYLOR DR. NB PROFILE

110
100
90
80

EX: PR:
EX:103.14 PR:
EX:102.40 PR:102.49
EX:101.66 PR:101.94
EX:100.94 PR:101.38
EX:100.25 PR:100.83
EX:99.98 PR:100.47
EX:99.56 PR:99.98
EX:99.25 PR:99.25

99+50 100+00 101+00 102+00 103+00 104+00 105+00 105+50

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN AND PROFILE: TAYLOR DRIVE NB	SHEET 94	E

STATION: 100+15.62
O/S: 51.0' LT

STATION: 100+12.43
O/S: 51.0' LT

STATION: 100+20.09
O/S: 52.8' LT

STATION: 100+32.05
O/S: 52.9' LT

STATION: 100+32.07
O/S: 47.5' LT

STATION: 101+49.73
O/S: 47.9' LT

STATION: 101+49.72
O/S: 51.3' LT

BP: 100+00.00

BP: 100+00.00

APPROXIMATE LOCATION OF NEW
21-INCH ATC POWER POLE,
BY OTHERS

APPROXIMATE LOCATION OF NEW
21-INCH ATC POWER POLE,
BY OTHERS

TAYLOR DRIVE

PI: 102+19.84

PI: 102+19.80

SUPERIOR AVENUE

STATION: 100+12.69
O/S: 26.7' RT

STATION: 100+12.70
O/S: 31.3' RT

STATION: 100+12.63
O/S: 36.3' RT

TLE
CLEAR AND GRUB

STATION: 100+57.76
O/S: 51.3' RT

STATION: 100+52.80
O/S: 51.4' RT

CLEAR AND GRUB

CLEAR AND GRUB

CAUTION

BEGIN CONSTRUCTION
STA. 100+12.73

STATION: 103+50.40
O/S: 41.9' LT

STATION: 103+58.40
O/S: 44.6' LT

PI: 11+59.99

PI: 103+04.53

STATION: 103+58.40
O/S: 41.9' LT

STATION: 103+50.35
O/S: 7.7' LT

PI: 12+10.84

STATION: 103+58.34
O/S: 7.9' LT

EP: 103+99.89

STATION: 103+58.33
O/S: 0.0' T

STATION: 103+50.33
O/S: 0.0' T

TAYLOR DRIVE

PI: 103+04.47

CAUTION

STATION: 103+58.29
O/S: 24.0' RT

STATION: 103+58.29
O/S: 26.7' RT

STATION: 103+50.29
O/S: 24.0' RT

STATION: 103+50.29
O/S: 30.7' RT

STATION: 103+50.30
O/S: 36.7' RT

END CONSTRUCTION
STA. 103+58.57

N

GENERAL NOTES

1. CURB RAMPS MATCH CONFIGURATIONS AND REQUIREMENTS AS SHOWN ON S.D.D "CURB RAMPS TYPES 2 AND 3." SEE CURB RAMP DETAIL SHEETS FOR MORE INFORMATION.

= SLOPE INTERCEPT

P.I. 100+12.72 EL 103.15
P.I. 100+75.00 EL 102.19
P.I. 101+25.00 EL 101.52
P.I. 101+76.31 EL 100.88
P.I. 102+19.86 EL 100.48
P.I. 102+66.51 EL 100.22
P.I. 103+04.53 EL 99.80
P.I. 103+50.46 EL 99.29

-1.54% -1.34% -1.25% -0.92% -0.56% -1.11% -1.11%

TAYLOR DR. SB PROFILE

110 100 90 80

EX: PR:
EX:103.40 PR:
EX:102.68 PR:102.58
EX:101.91 PR:101.86
EX:101.14 PR:101.21
EX:100.36 PR:100.66
EX:99.97 PR:100.31
EX:99.66 PR:99.85
EX:99.29 PR:99.29

99+50 100+00 101+00 102+00 103+00 104+00 105+00 105+50

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	PLAN AND PROFILE: TAYLOR DRIVE SB	SHEET 95	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-PP - 050105-PP

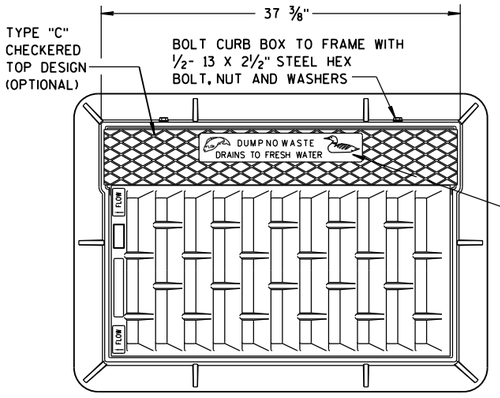
PLOT DATE : 1/10/2019 4:35 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

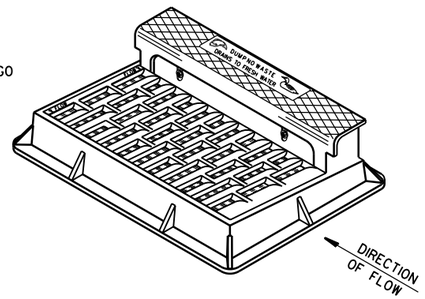
Standard Detail Drawing List

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
08A09-02	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-19F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-19G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-10	CONCRETE BASE TYPE 10
09C12-09A	CONCRETE BASE TYPE 13
09C12-09B	CONCRETE BASE TYPE 13
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09D03-02	POST MOUNTED CONTROLLER SERVICE INSTALLATION
09D04-02	LIGHTING CONTROL CABINET 120/240 VOLT
09D05-01	L30 LIGHTING CONTROL CABINET 240/480 VOLT
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-08B	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-08D	TYPE 13 POLE 35'-55' MONOTBE ARM
09E08-08E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
11B02-02	CONCRETE MEDIAN NOSE
13C13-09	URBAN DOWELED CONCRETE PAVEMENT
13C18-06A	CONCRETE PAVEMENT JOINTING
13C18-06B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-06C	CONCRETE PAVEMENT JOINT TYPES
13C18-06D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-14A	PAVEMENT MARKING SYMBOLS
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C07-14E	PAVEMENT MARKING FOR BIKE LANES
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C08-19B	PAVEMENT MARKING (TURN LANES)
15C08-19C	PAVEMENT MARKING (TURN LANES)
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C29-06A	BICYCLE LANE MARKING
15C29-06B	PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-03A	PAVEMENT MARKING (INTERSECTIONS)
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D30-04B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

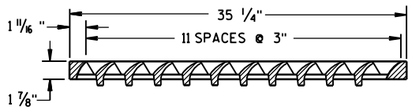
6

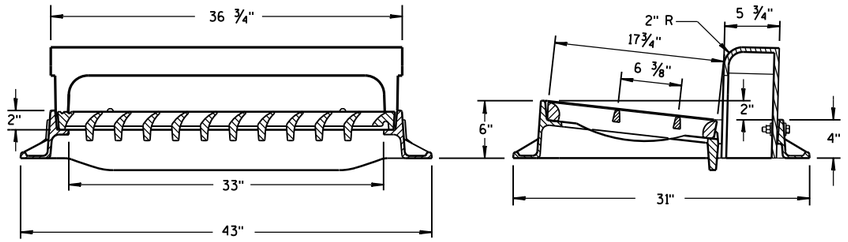


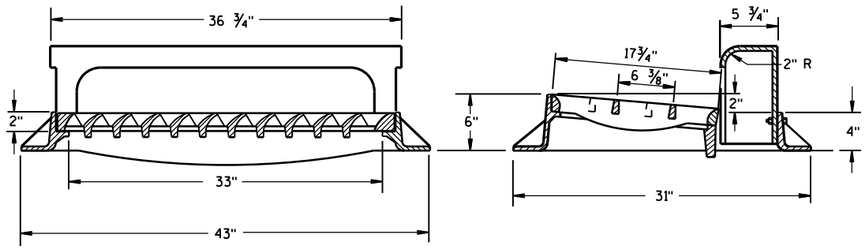
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

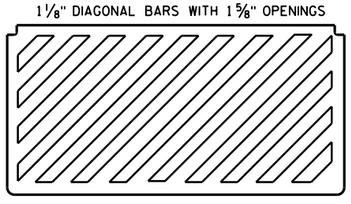






TYPE "H"

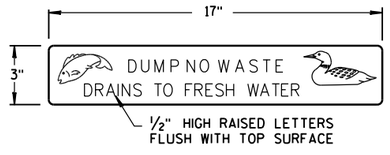
NOTE: EITHER CASTING IS ACCEPTABLE



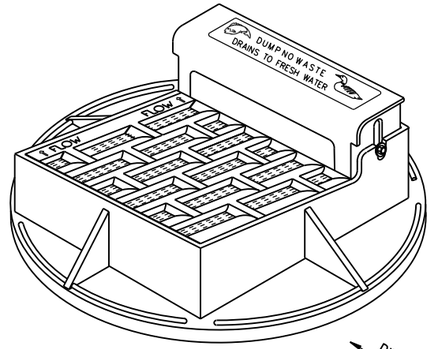
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

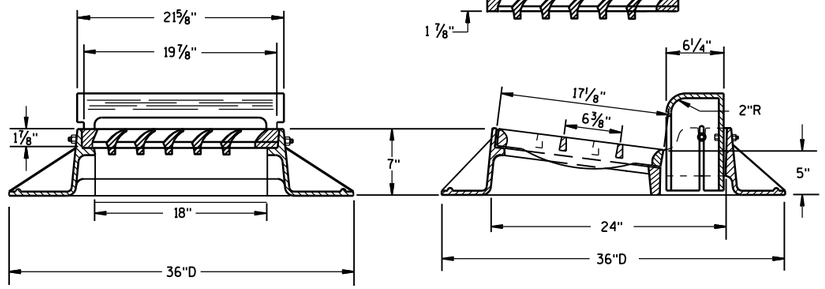


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



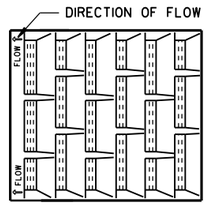
TYPE "A"

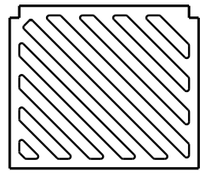
GENERAL NOTES

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.

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.

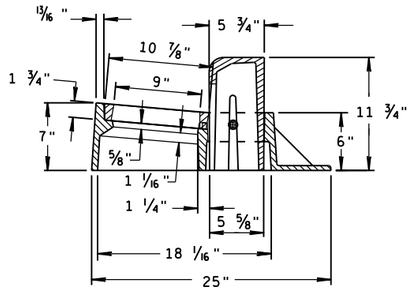


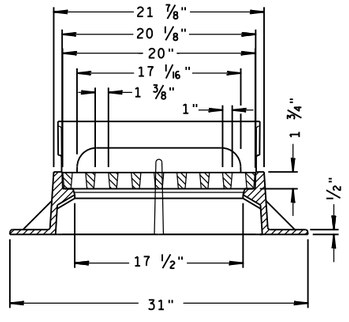


SPECIAL GRATE FOR TYPE "A" COVER

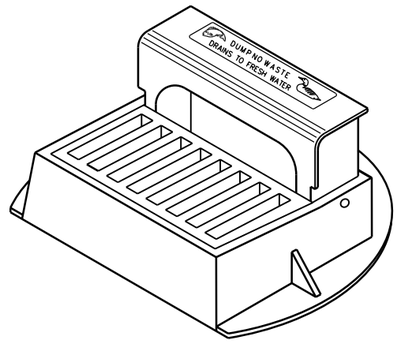
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"

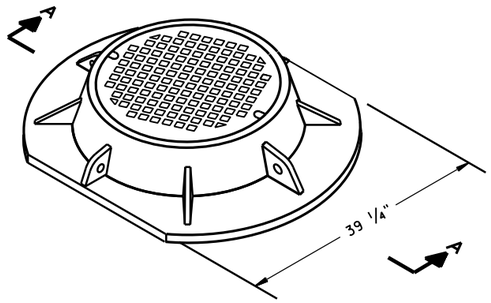


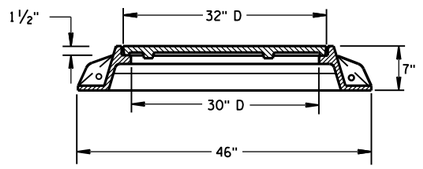
INLET COVERS TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

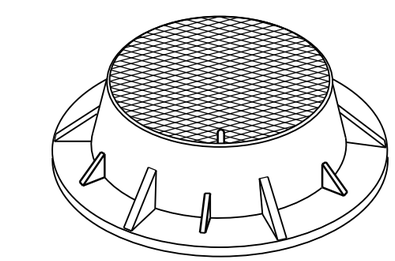
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

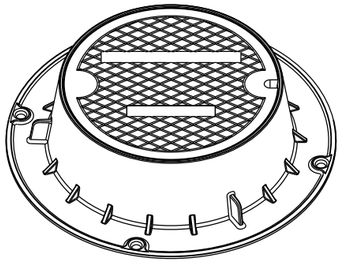
S.D.D. 8 A 5-19a

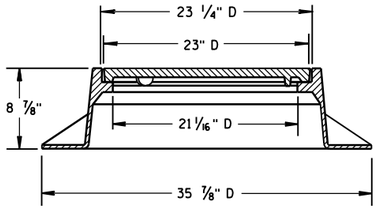


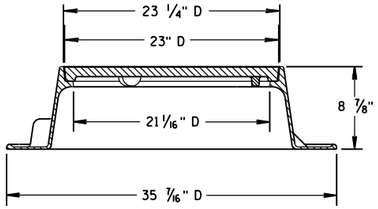


SECTION A-A
TYPE "K"









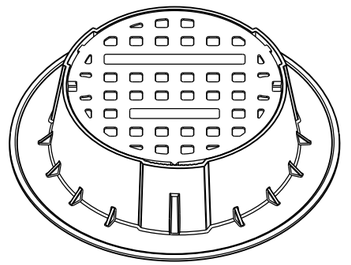
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

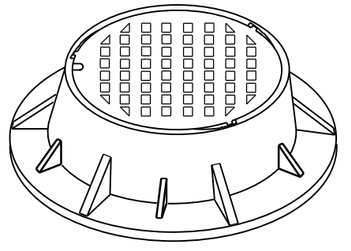
GENERAL NOTES

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.

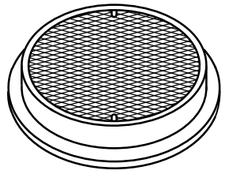
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

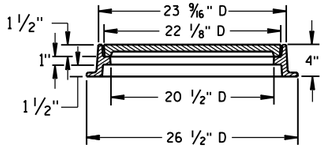
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



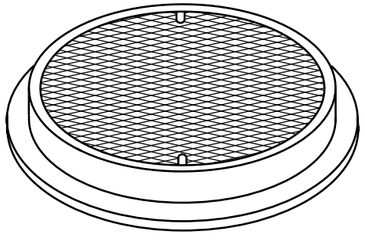


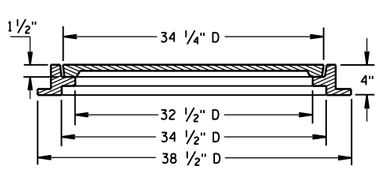
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



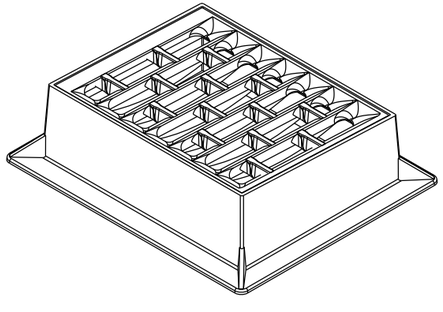


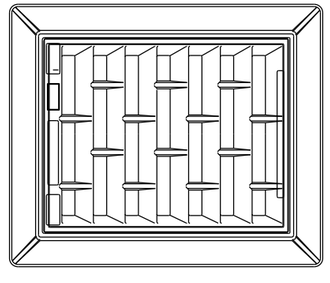
TYPE "L"

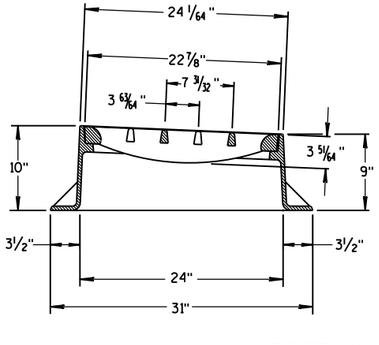


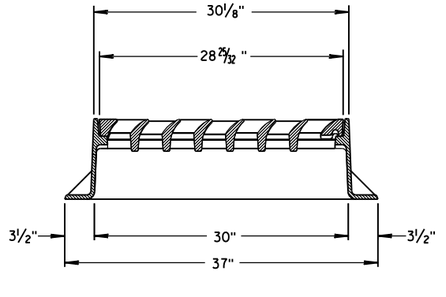


TYPE "M"









INLET COVER TYPE "BW"

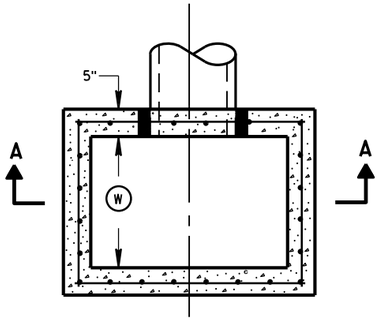
INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

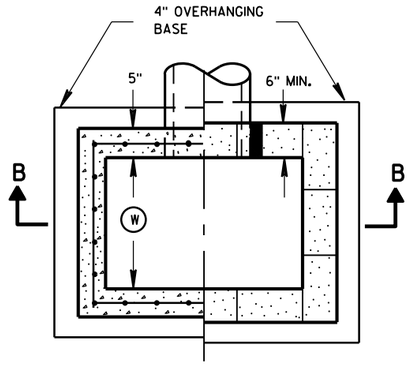
APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

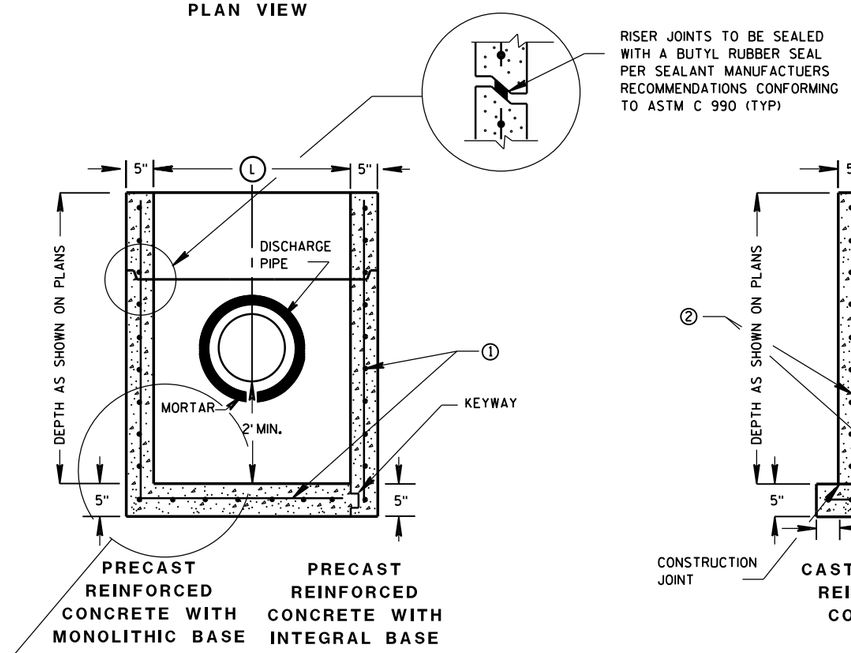
S.D.D. 8 A 5-19d



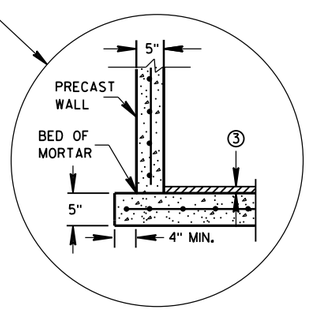
PLAN VIEW



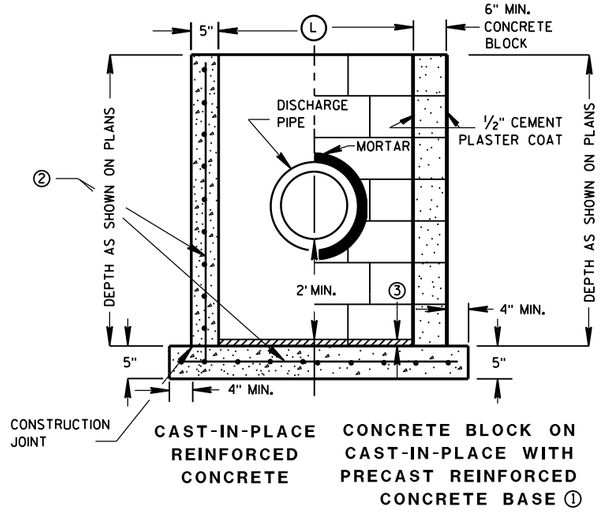
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST CATCH BASIN UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

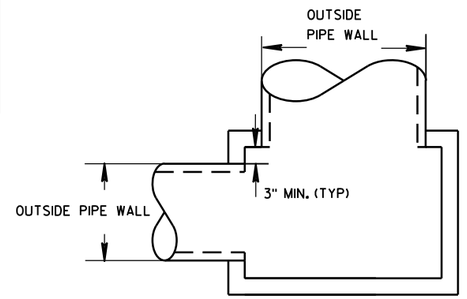
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

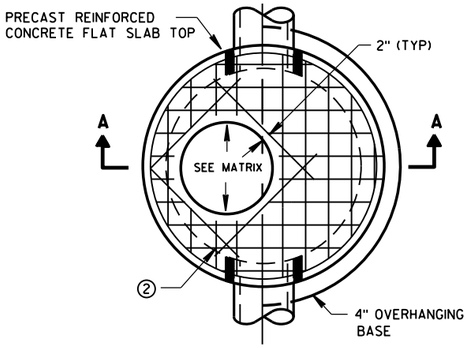
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

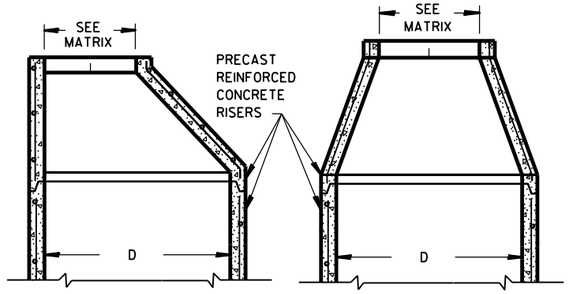
APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

6

S.D.D. 8 A 9-2

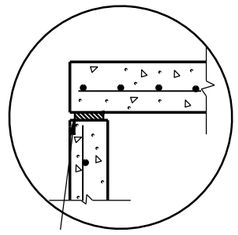


PLAN VIEW CIRCULAR OPENING

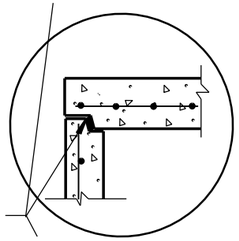


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

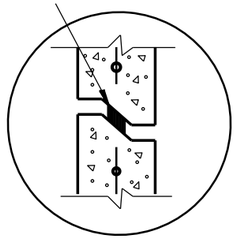


TOP WITH PLAIN END JOINT



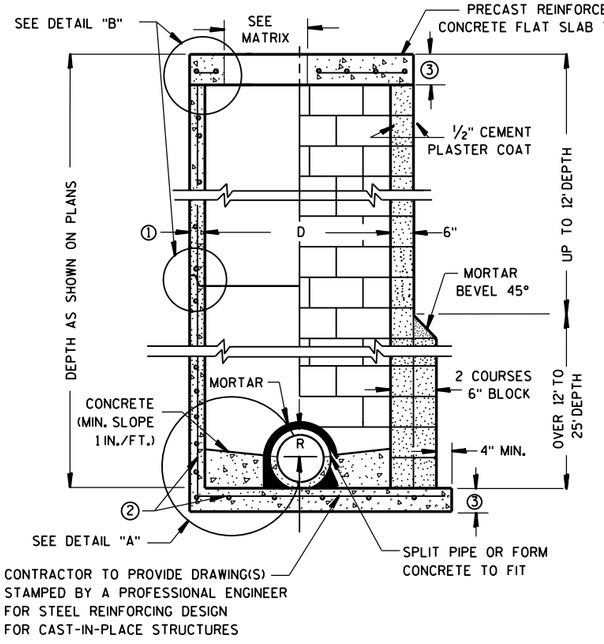
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



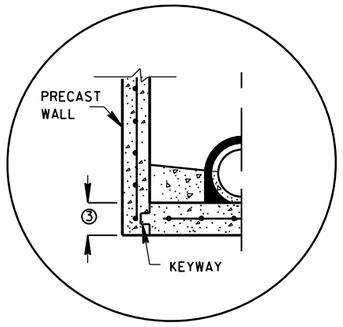
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

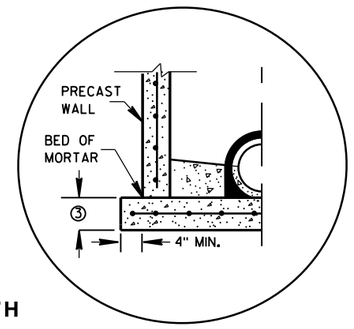


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

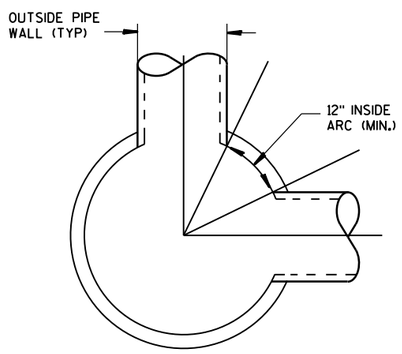


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

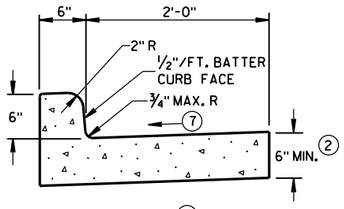
APPROVED

Sept., 2016
DATE

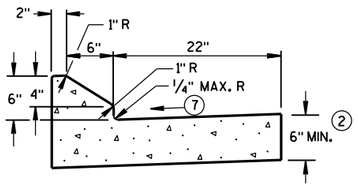
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

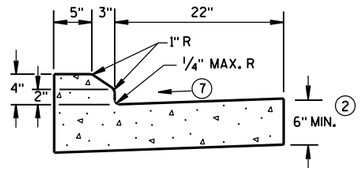
6
S.D.D. 8 B 9-2



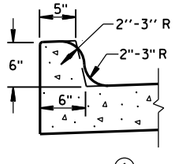
TYPES A (1) & D



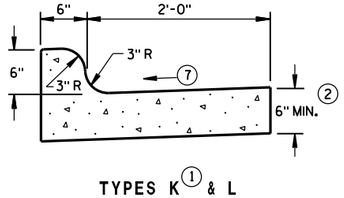
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

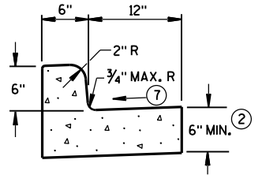


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



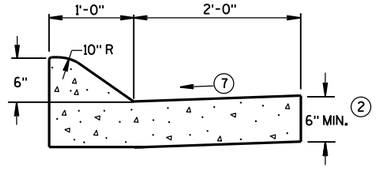
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

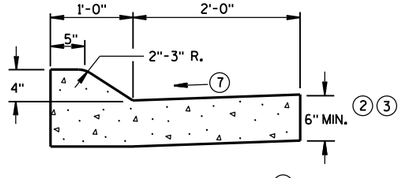


TYPES A (1) & D

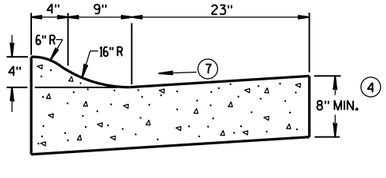
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

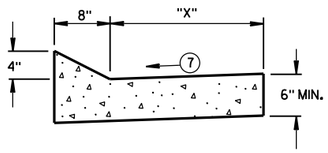


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

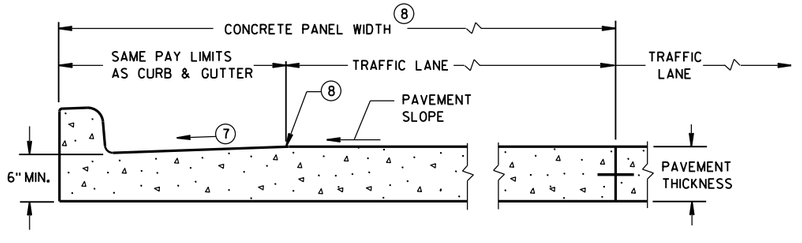
CONCRETE CURB & GUTTER 36"



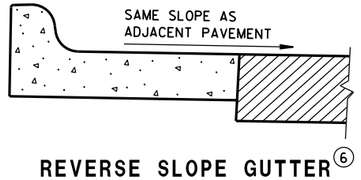
TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'

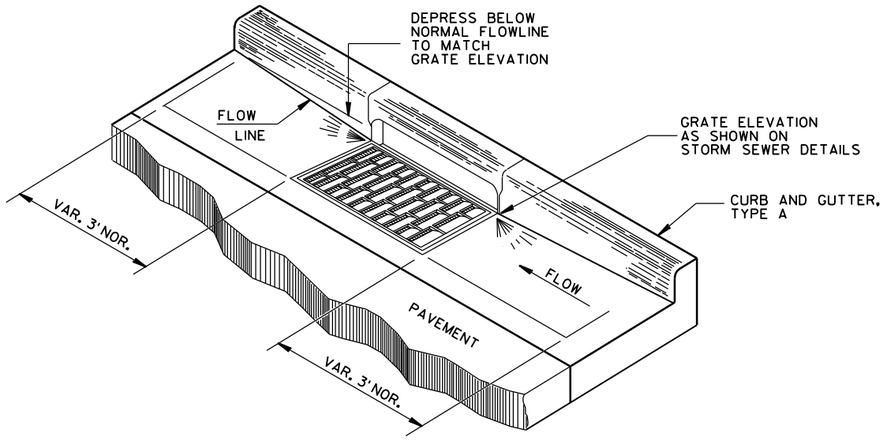
* BIKE LANE IS NOT SHOWN.

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

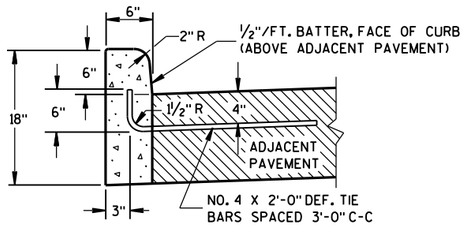
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

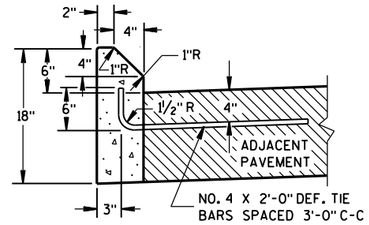
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

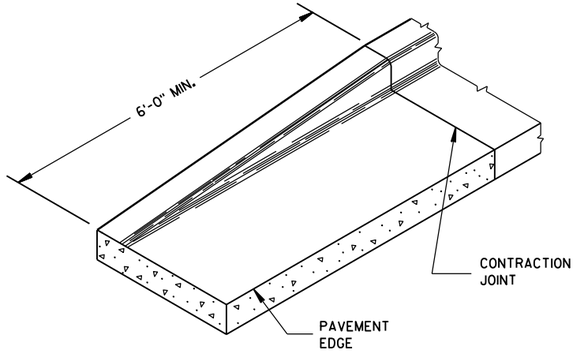


TYPES A(1) & D

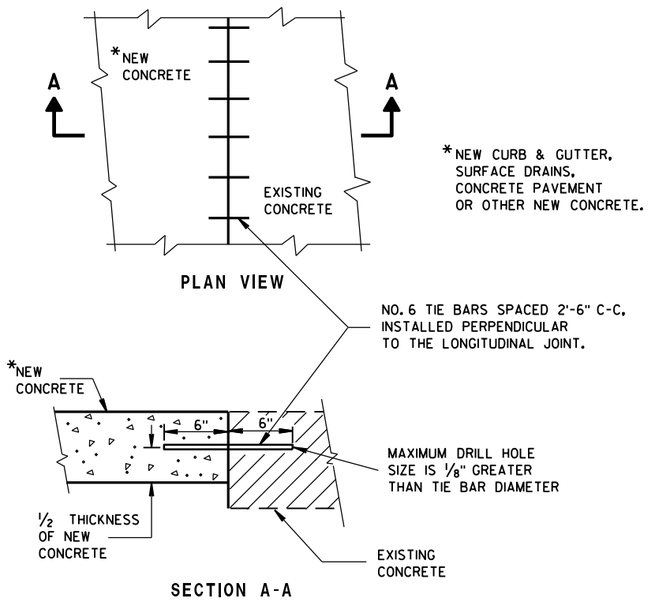


TYPES G(1) & J

CONCRETE CURB



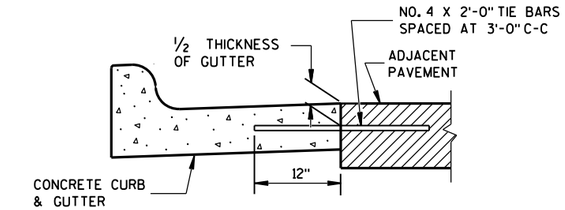
END SECTION CURB & GUTTER



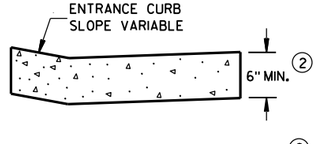
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

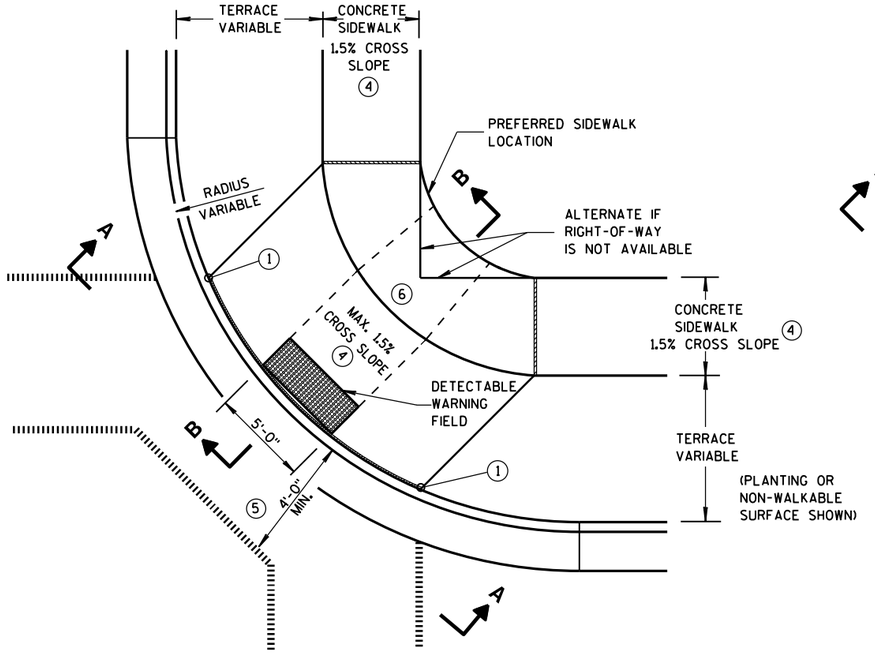
CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

6

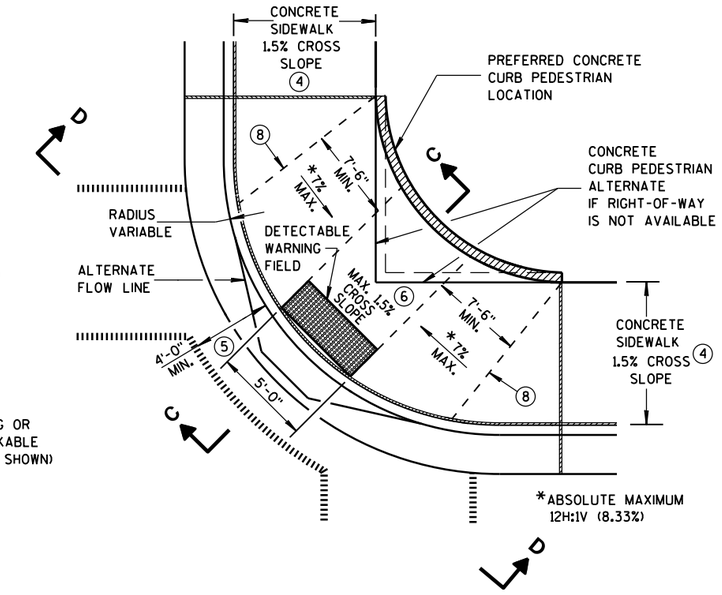
S.D.D. 8 D 1-20b



PLAN VIEW

TYPE 1 RAMP

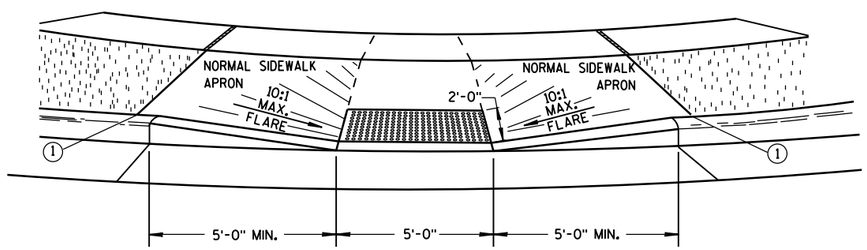
(CENTER OF CORNER RADIUS)



PLAN VIEW

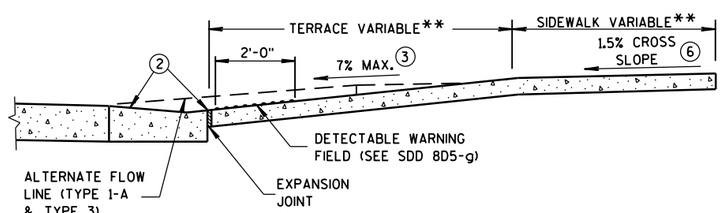
TYPE 1-A RAMP

(NO TERRACE)

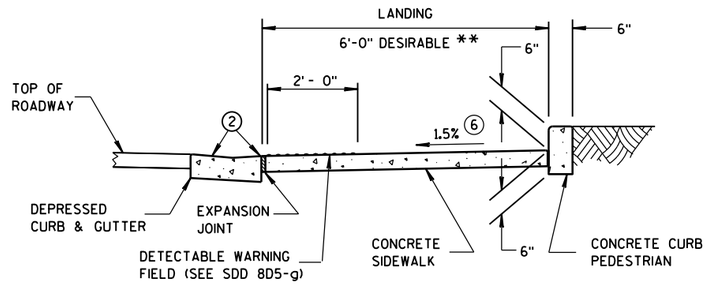


VIEW A-A

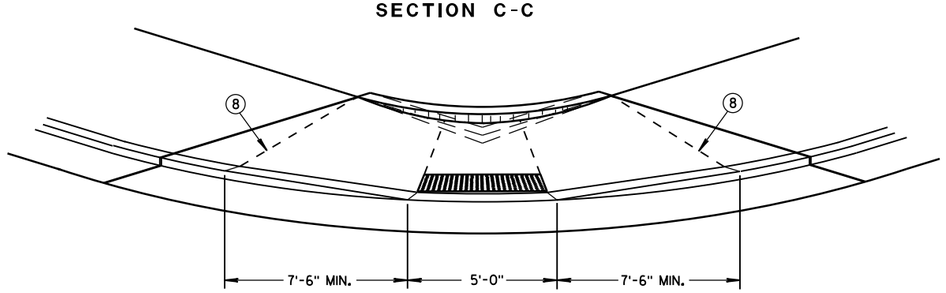
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

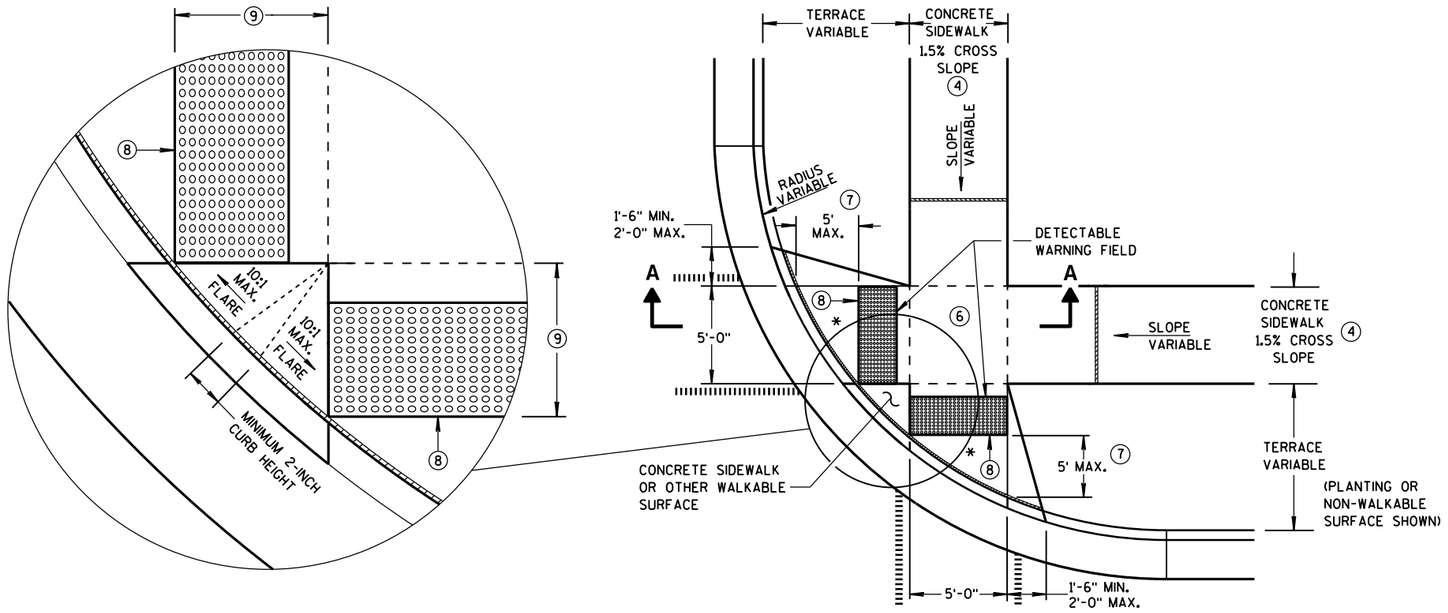
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

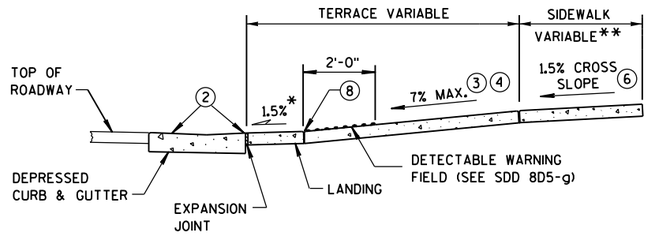
6

S.D.D. 8 D 5-19a



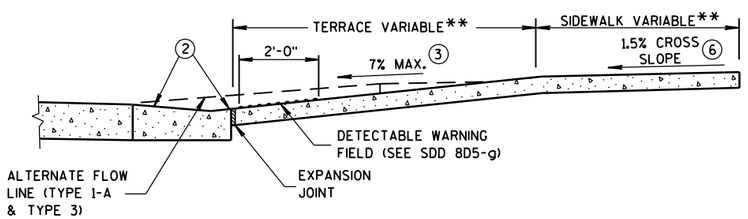
PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

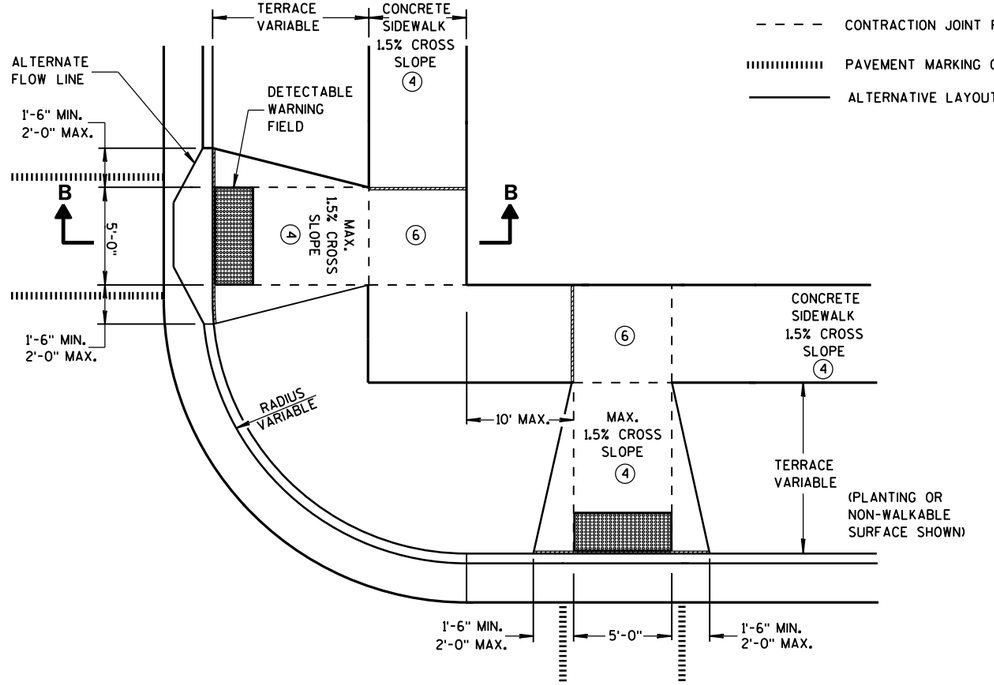
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



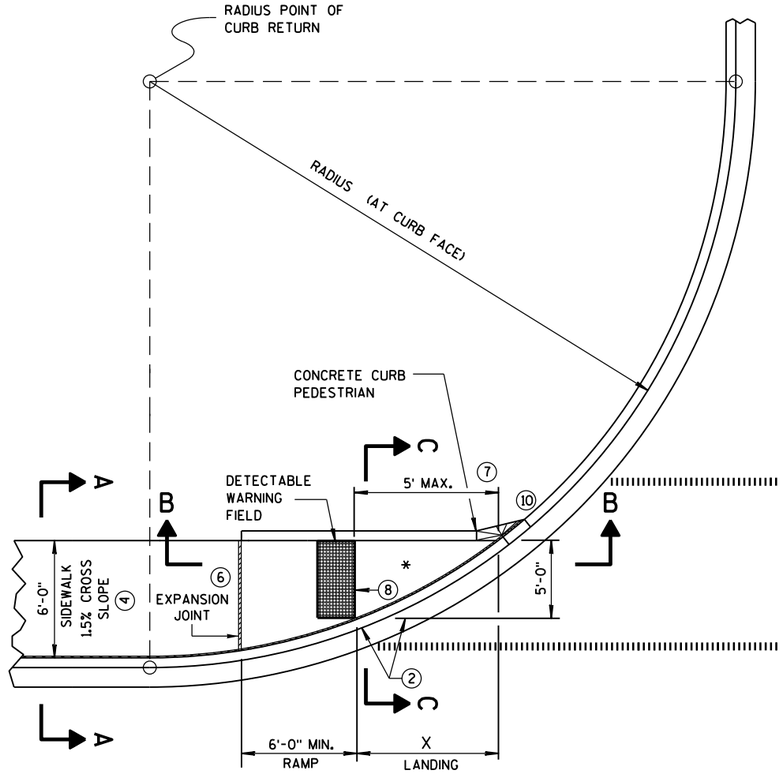
PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

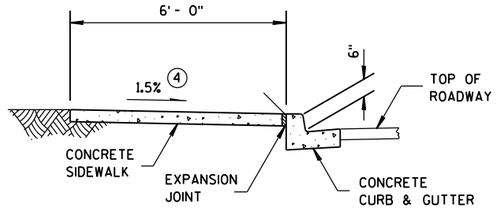
S.D.D. 8 D 5-19b



CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X
10 FEET	4'-7"
15 FEET	6'-5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

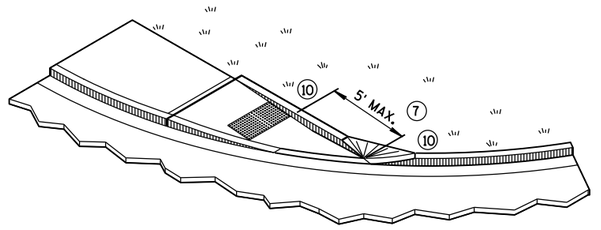
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

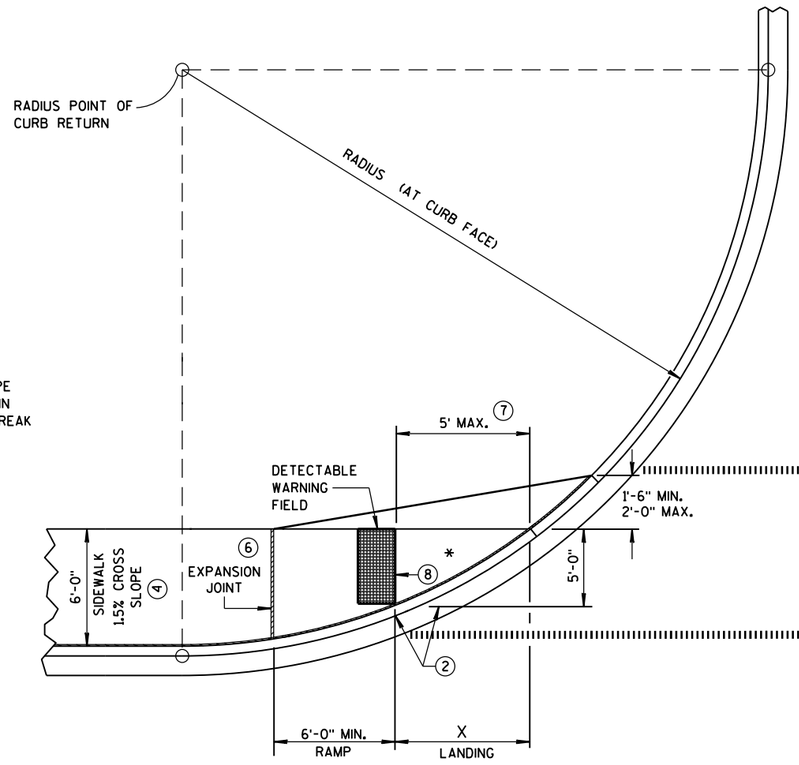
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

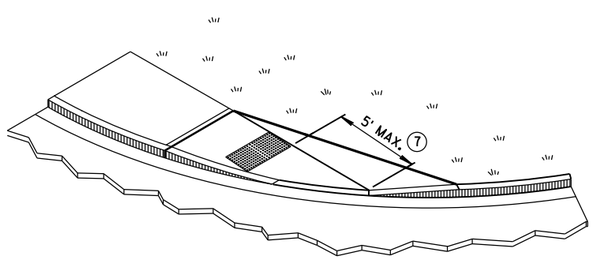
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



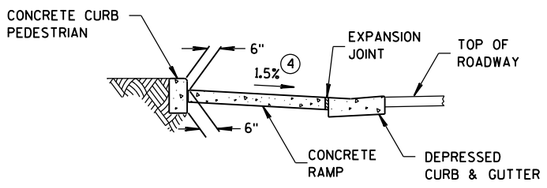
ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW

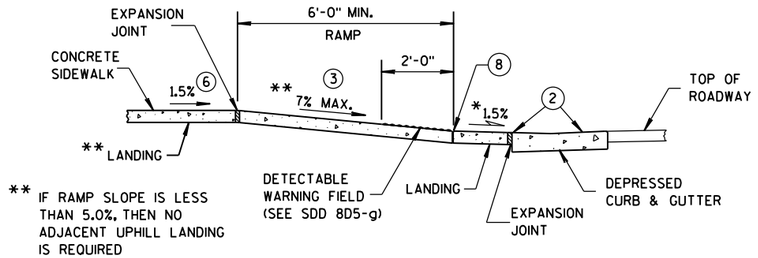


ISOMETRIC VIEW FOR TYPE 4A1



SECTION C-C FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4A

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

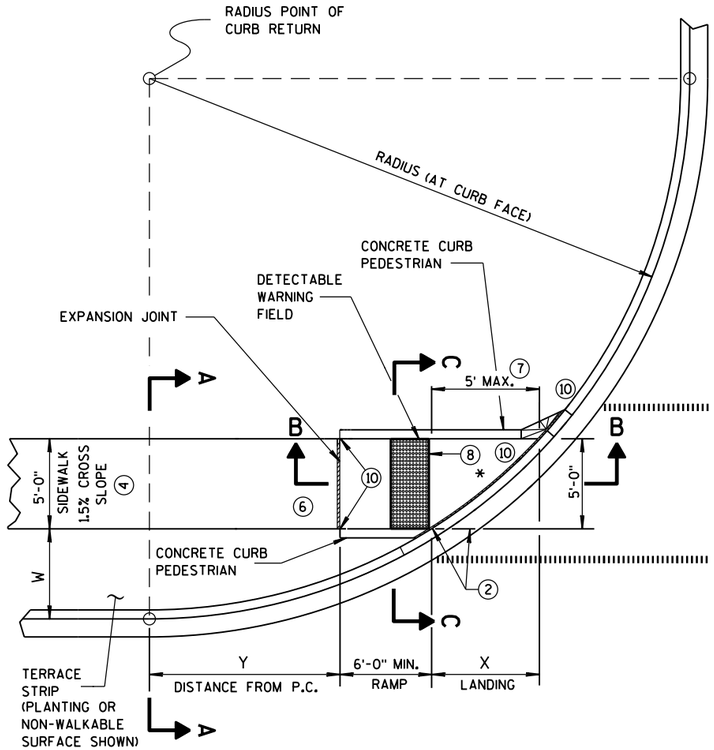
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 4A AND 4A1

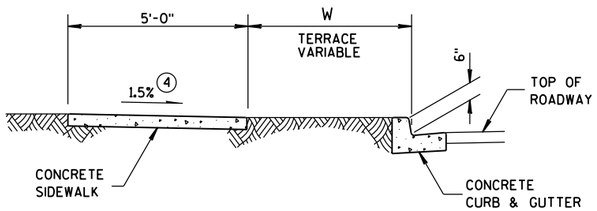
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

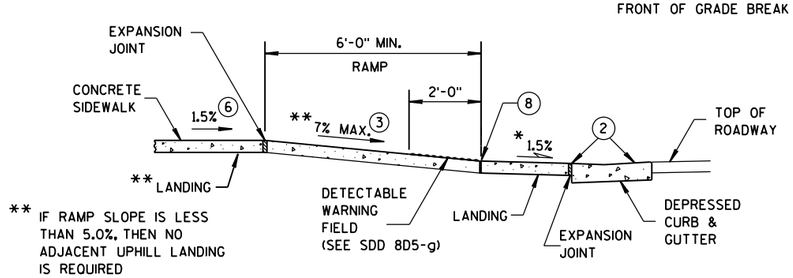
S.D.D. 8 D 5-19c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



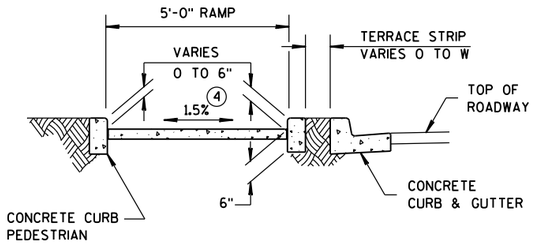
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"		W = 8'-0"		W = 9'-0"		W = 10'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2'-10¼"	0'-5"	2'-1"	1'-4½"	1'-5"	2'-1"	0'-10"	2'-7½"	0'-3¼"	3'-0¼"						
15 FEET	4'-6¾"	2'-1¾"	3'-9"	3'-5¼"	3'-1¼"	4'-6"	2'-6¾"	5'-4½"	2'-1"	6'-1"	1'-8"	6'-8½"	1'-3¼"	7'-2½"	0'-10¾"	7'-7¼"
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-7"	3'-3"	8'-6½"	2'-10"	9'-4½"	2'-5½"	10'-1¼"	2'-1¼"	10'-9"
30 FEET			6'-9¼"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"	4'-5½"	13'-7¾"	4'-0¾"	14'-8½"	3'-8½"	15'-8¼"
40 FEET									6'-1¾"	15'-8½"	5'-8"	17'-2"	5'-3"	18'-5¾"	4'-10¾"	19'-8¼"
50 FEET															5'-10¼"	23'-2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C-C FOR TYPE 4B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

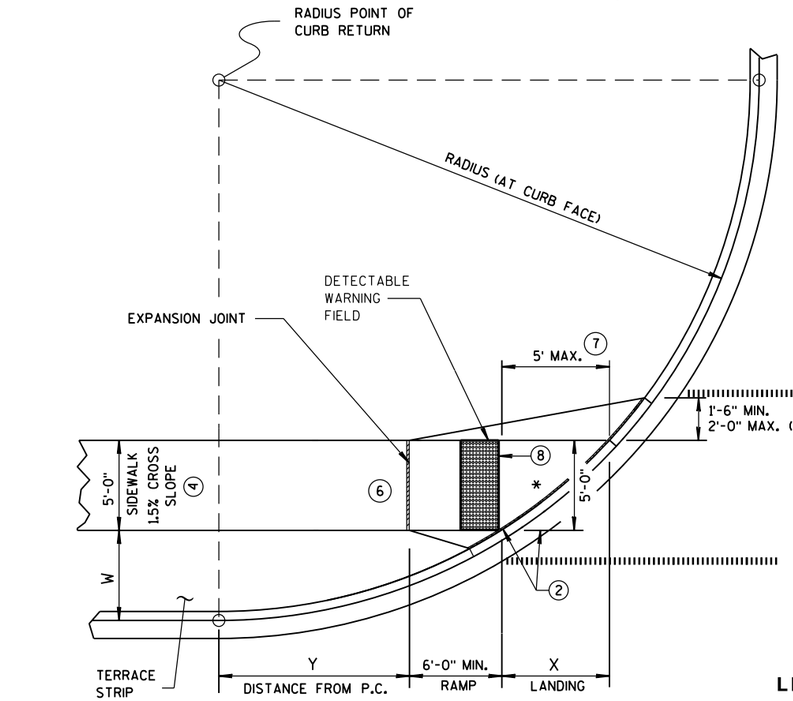
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

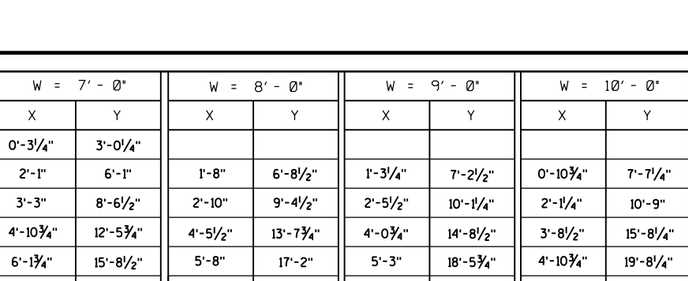
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

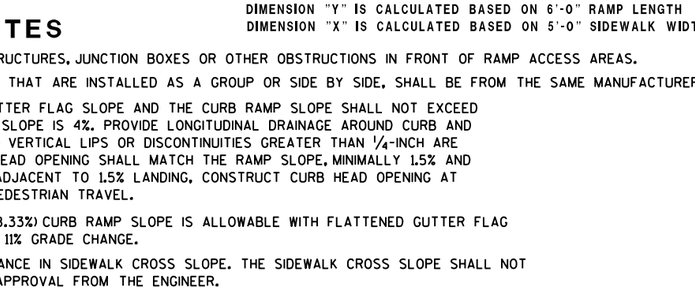
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

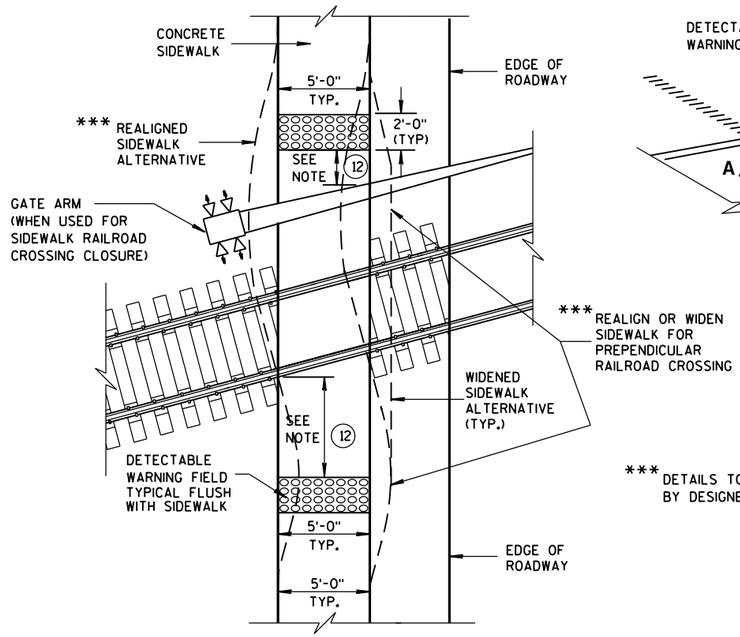
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

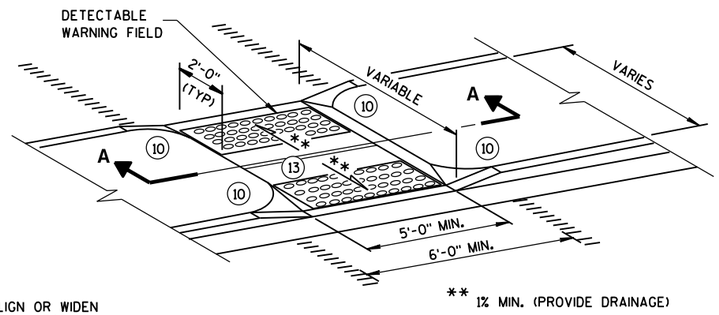
6

S.D.D. 8 D 5-19d



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING
TYPE 5

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

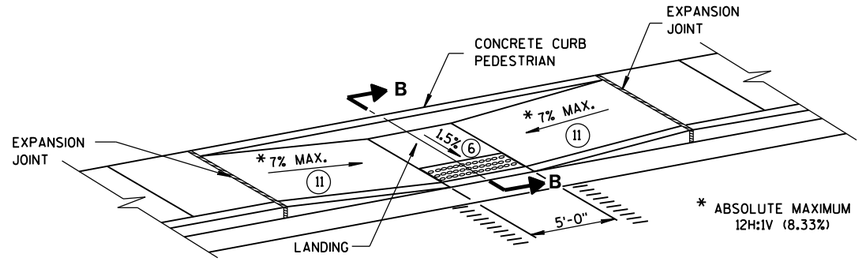
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

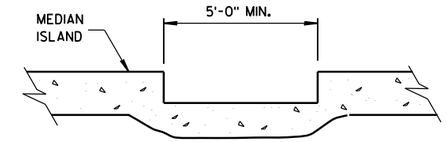
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

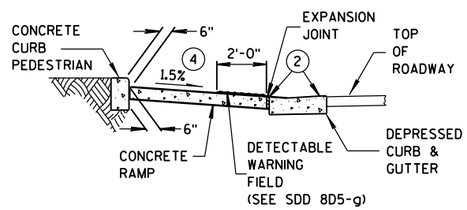
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.



MID-BLOCK CROSSING
TYPE 7A

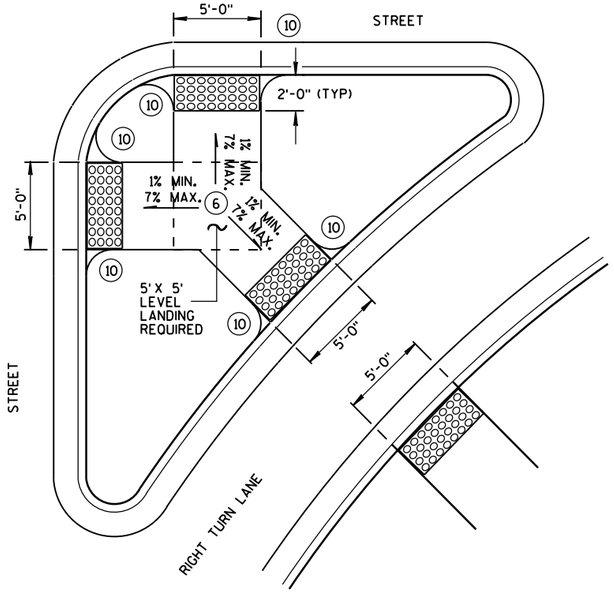


SECTION A-A

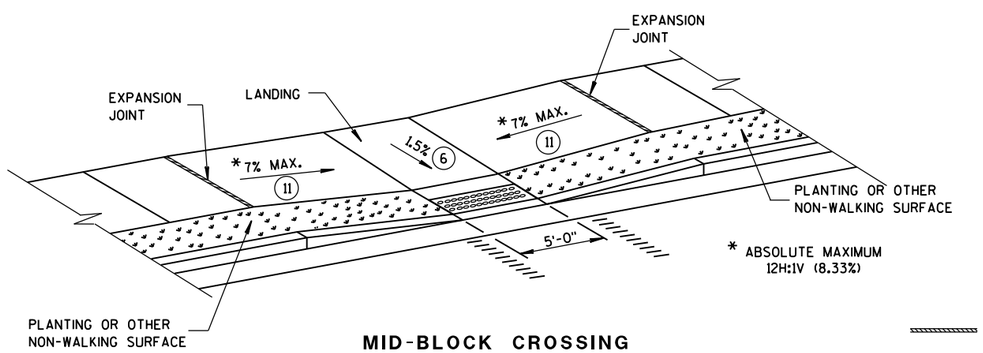


SECTION B-B

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

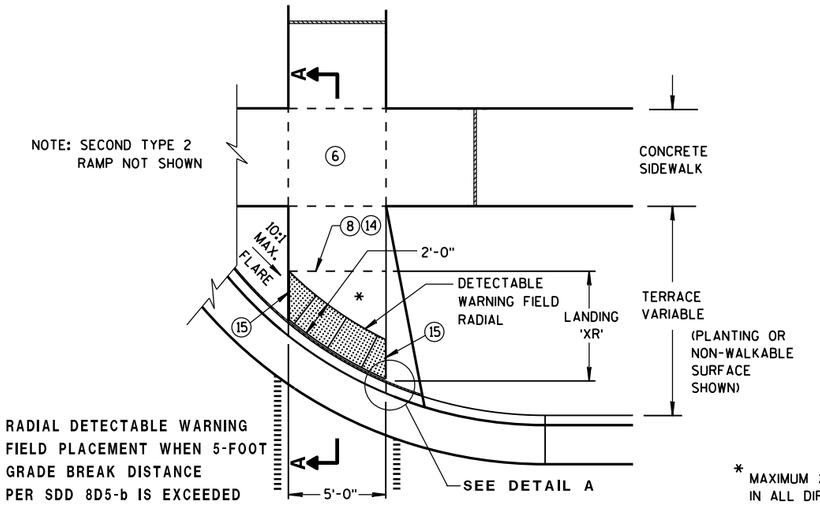
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

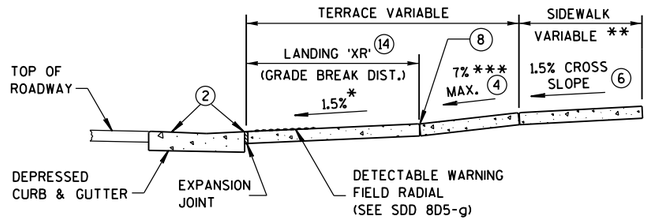
6

S.D.D. 8 D 5-19e



TYPE 2 RAMP
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION A-A

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS (DWFs) THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

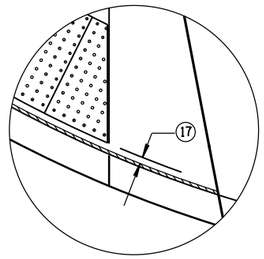
(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION 'XR') REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

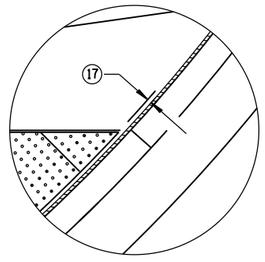
(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1'X 2' RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2'-0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

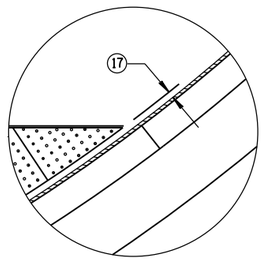
(17) A MAXIMUM 3-INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.



DETAIL A

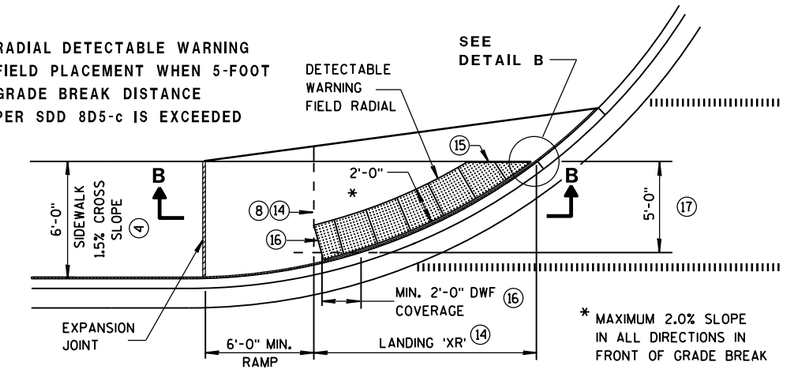


DETAIL C



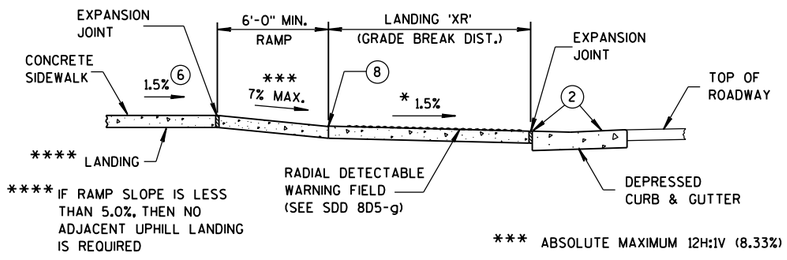
DETAIL B

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5-FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

CURB RAMP TYPE 4A1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

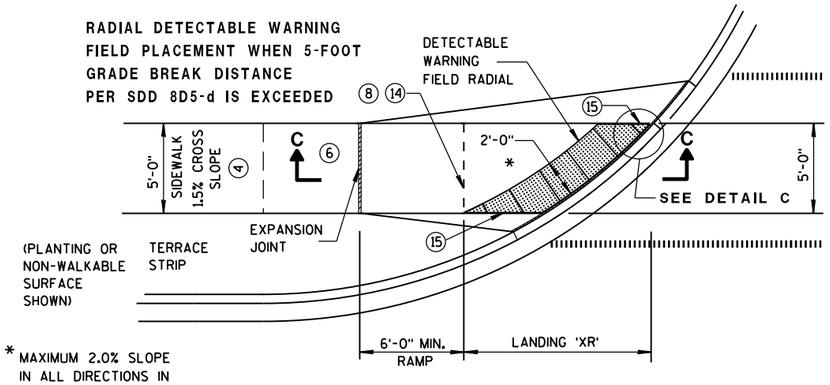


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

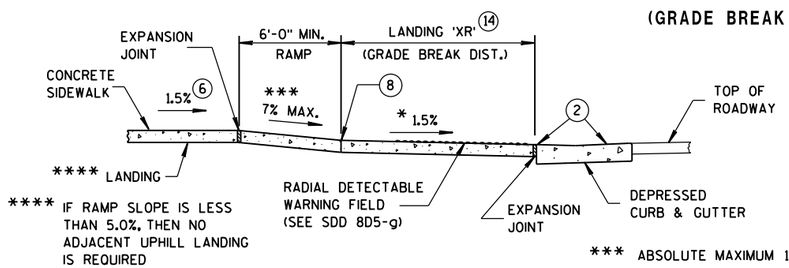
SECTION B-B FOR TYPE 4A1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5-FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

CURB RAMP TYPE 4B1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION C-C FOR TYPE 4B1

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

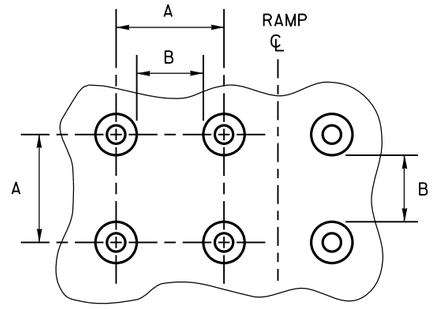
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

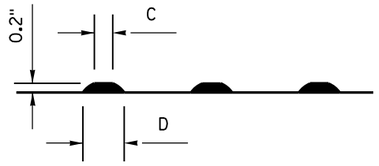
S.D.D. 8 D 5-19f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES

DETECTABLE WARNING PATTERN DETAIL

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

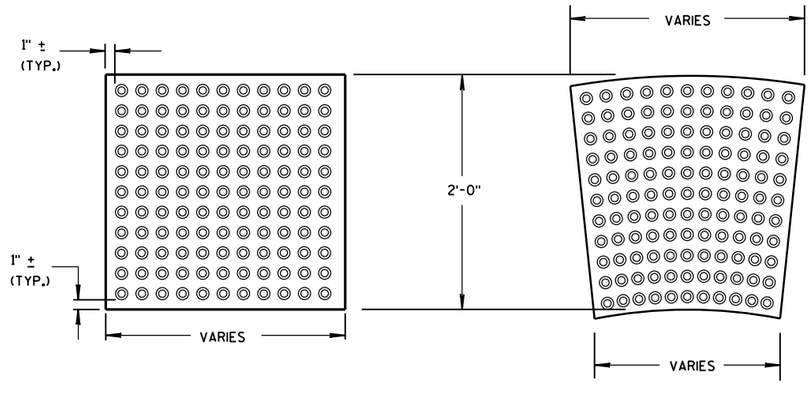
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGES IN COMBINATION WITH SQUARE PANELS ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

⑮ FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

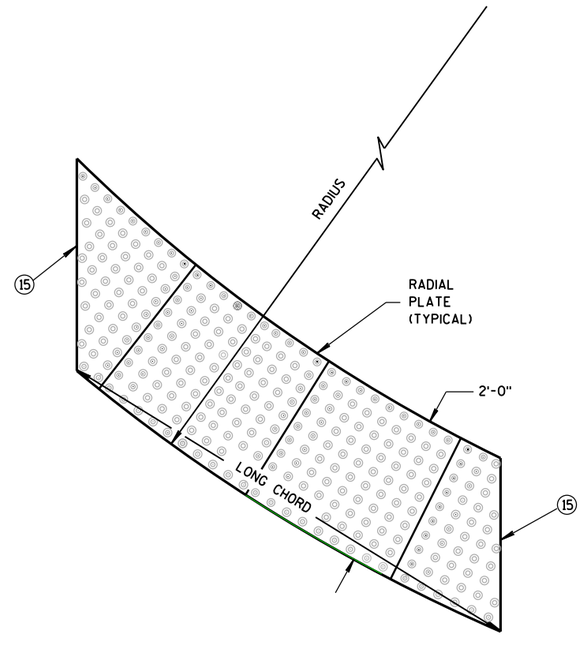


RECTANGULAR PLATES

RADIAL PLATES

DETECTABLE WARNING FIELDS (TYPICAL)

PLAN VIEW



RADIAL DETECTABLE WARNING FIELD ATTRIBUTES

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

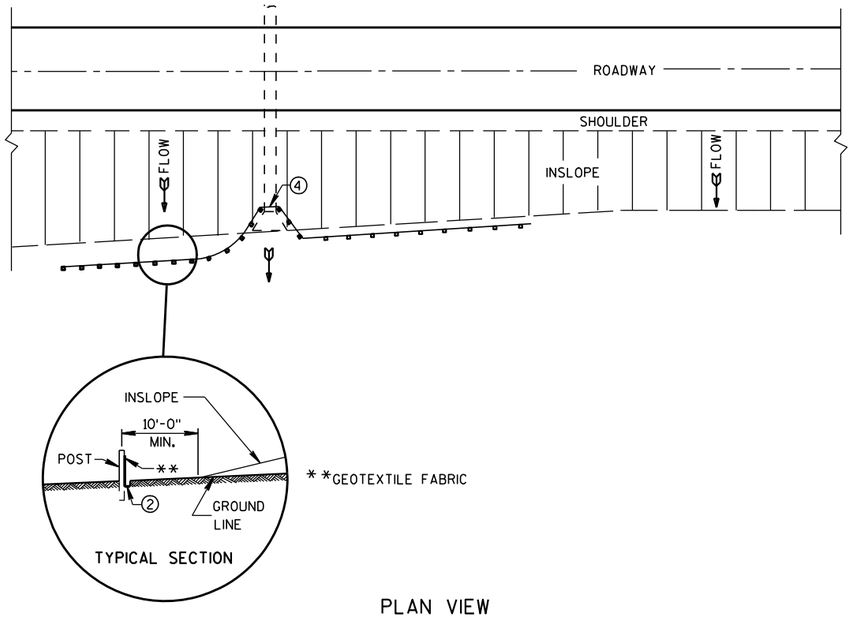
APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

6

S.D.D. 8 D 5-19g

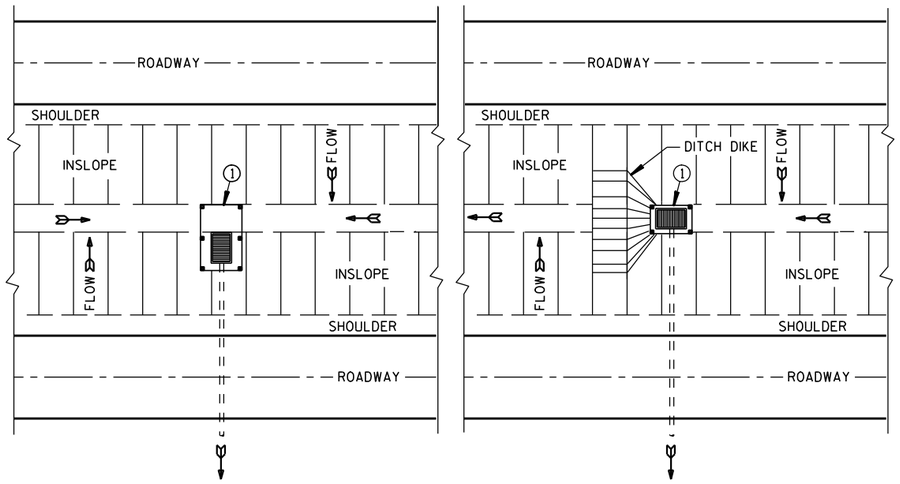
6

S.D.D. 8 D 5-19g



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



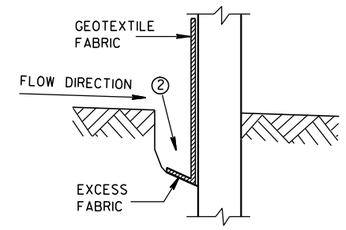
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

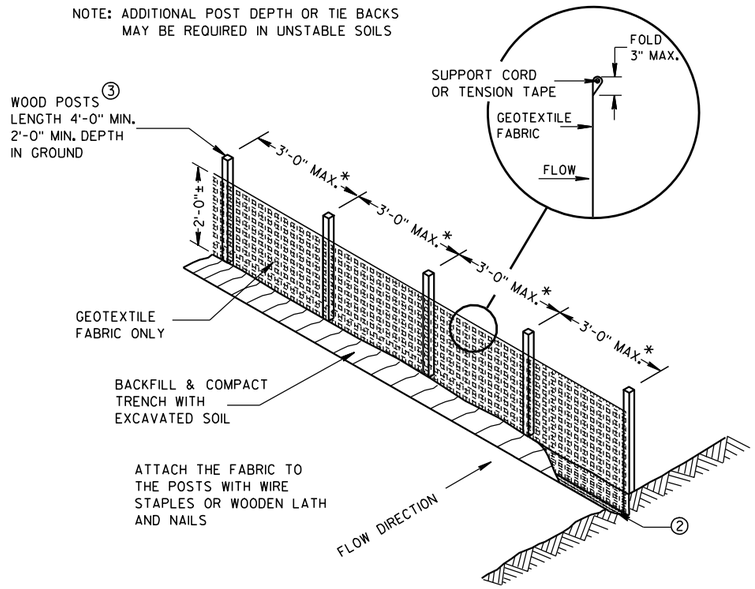
GENERAL NOTES

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.

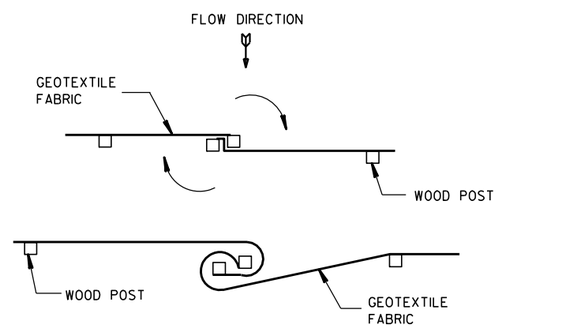


TRENCH DETAIL

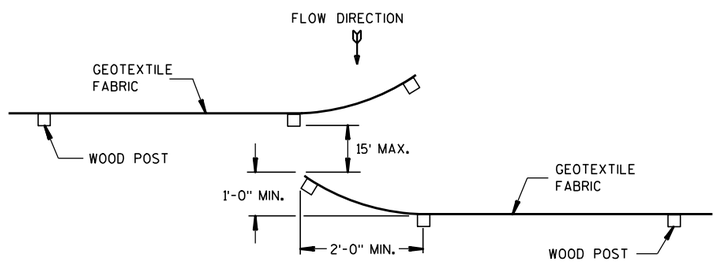


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

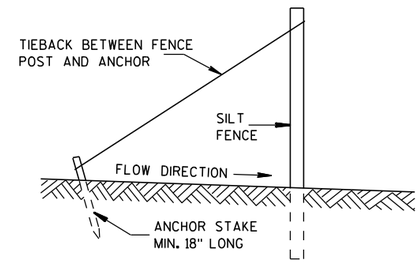


TWIST METHOD



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

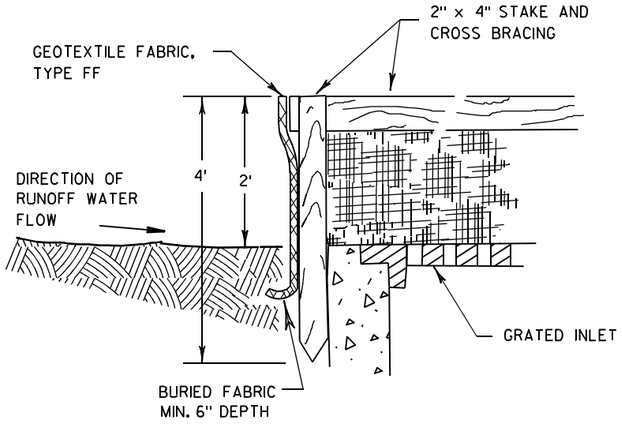
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

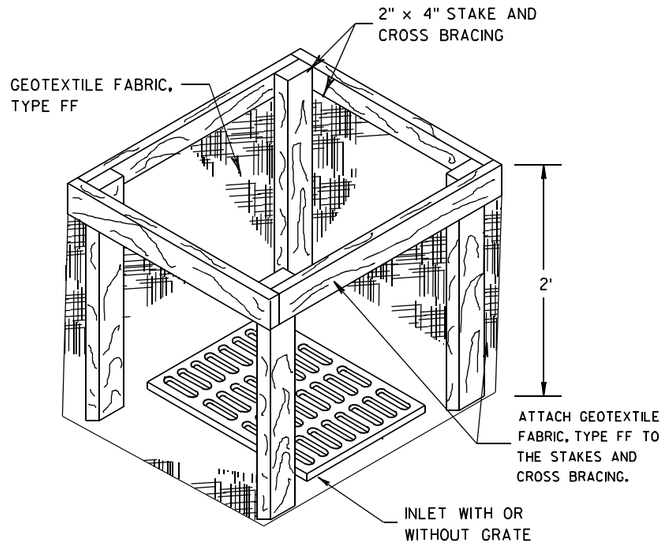
6

S.D.D. 8 E 9-6

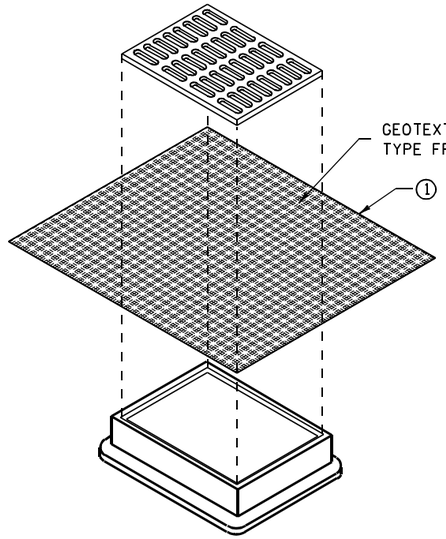
6

S.D.D. 8 E 9-6



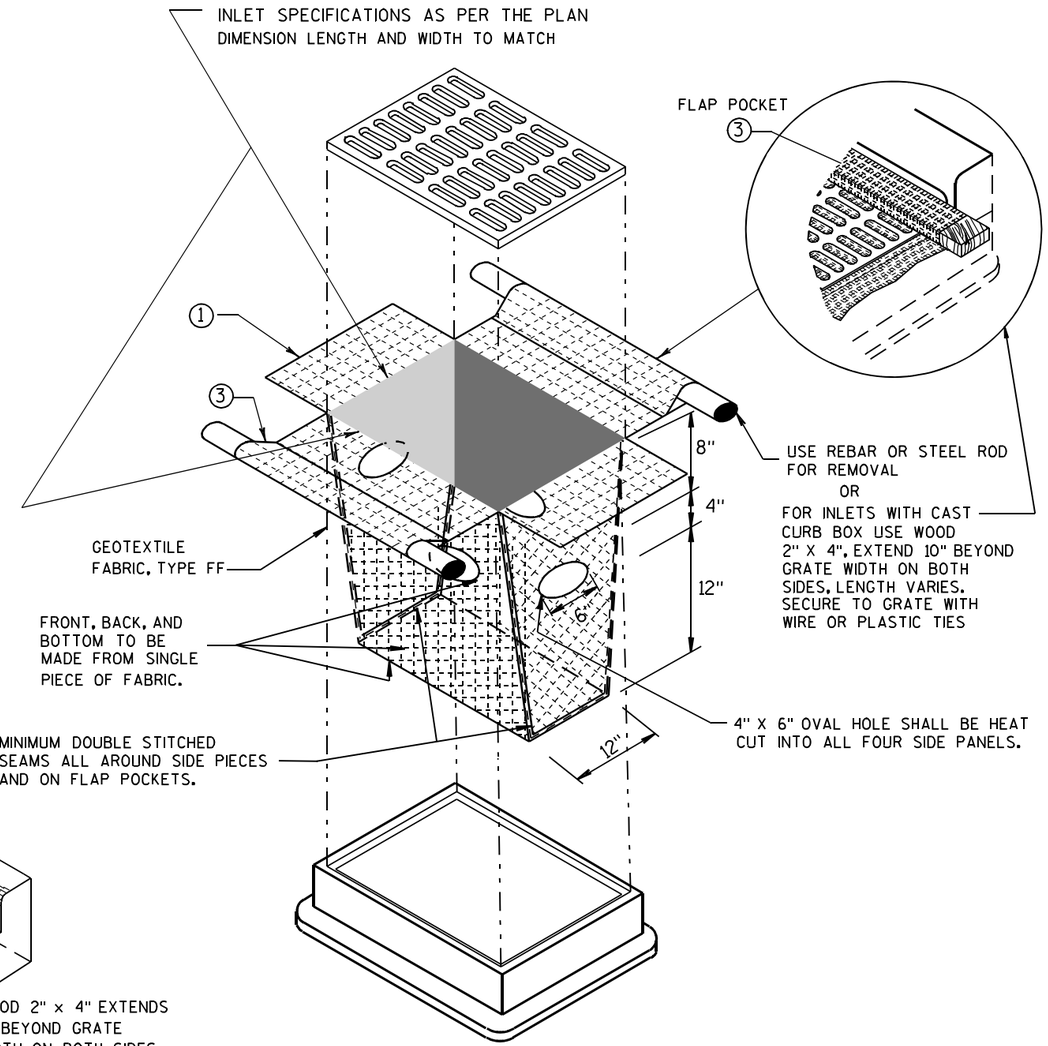


INLET PROTECTION, TYPE A



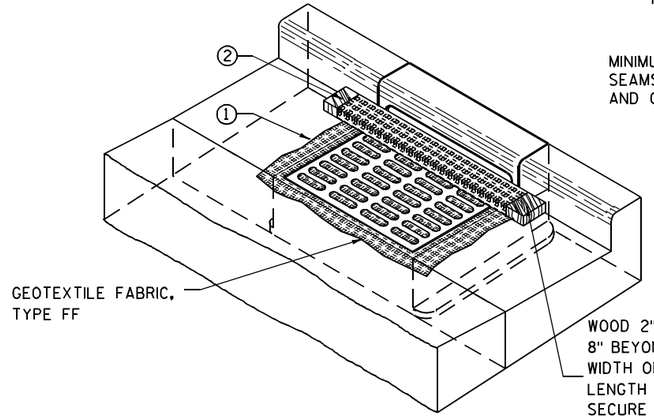
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)



INLET PROTECTION, TYPE C (WITH CURB BOX)

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

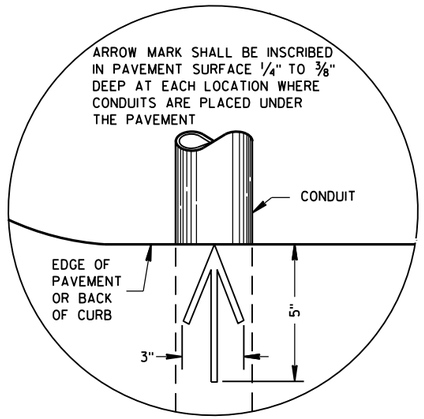
10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

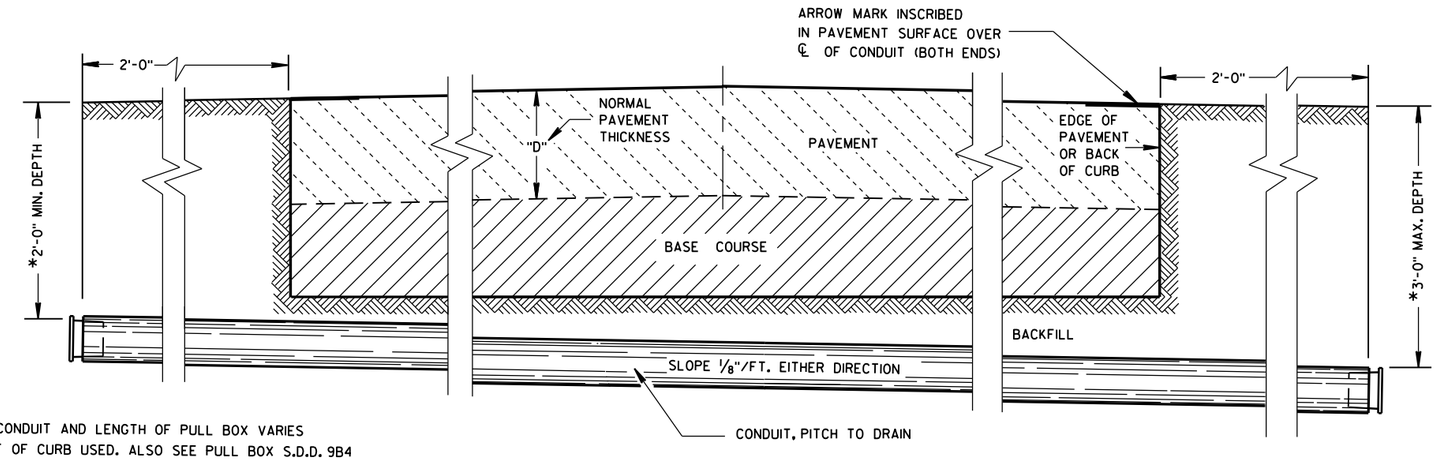
6

S.D.D. 8 E 10-2



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

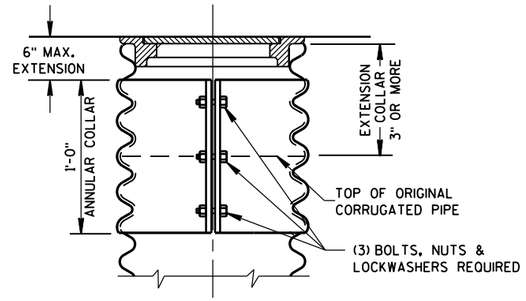
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

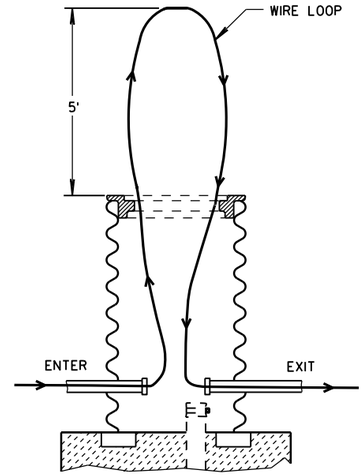
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

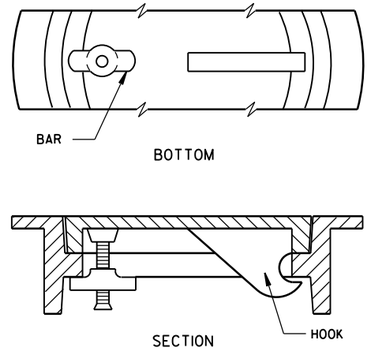
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

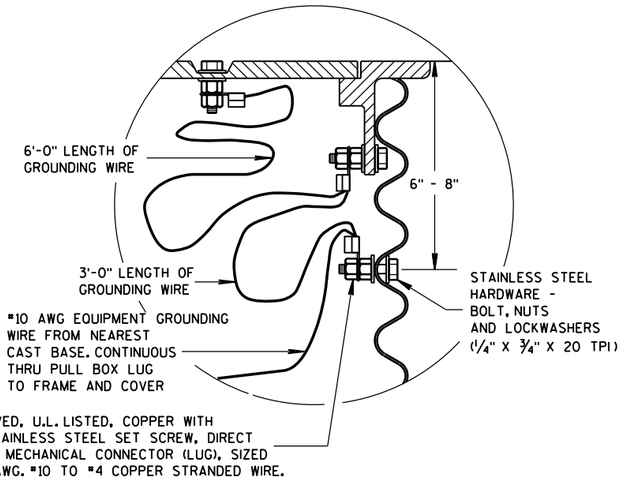


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

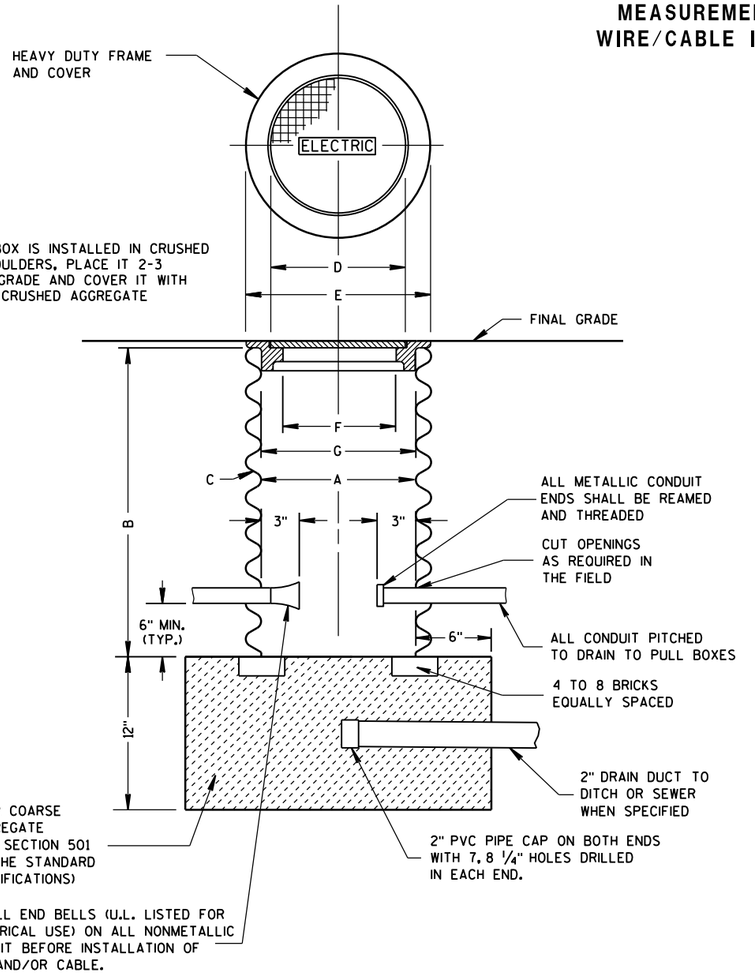


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

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.

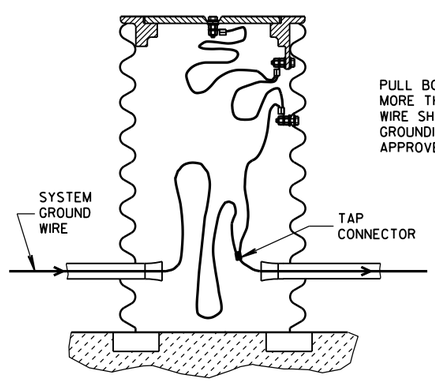
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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 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

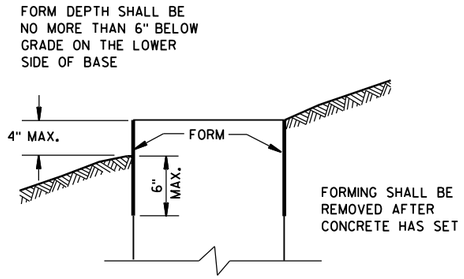
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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.

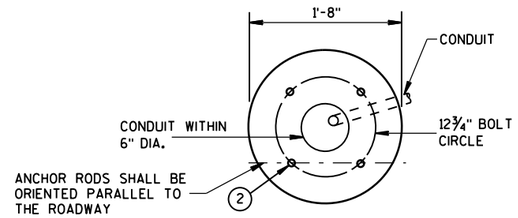
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

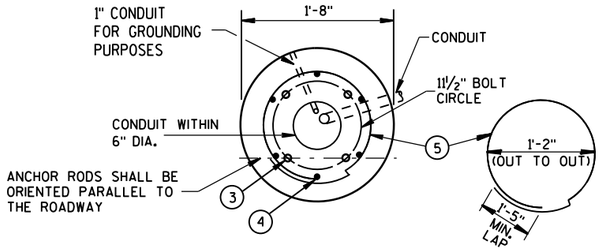
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

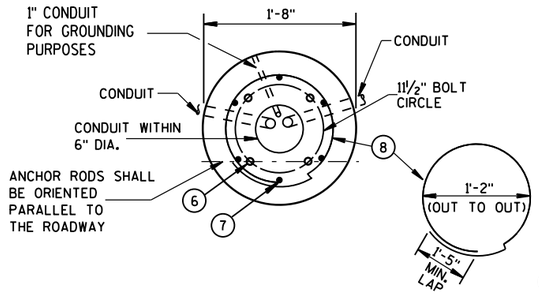
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

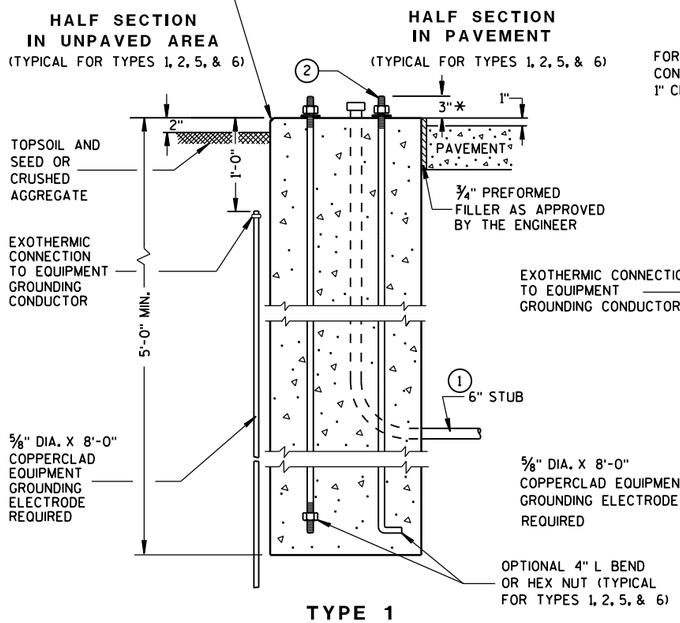
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

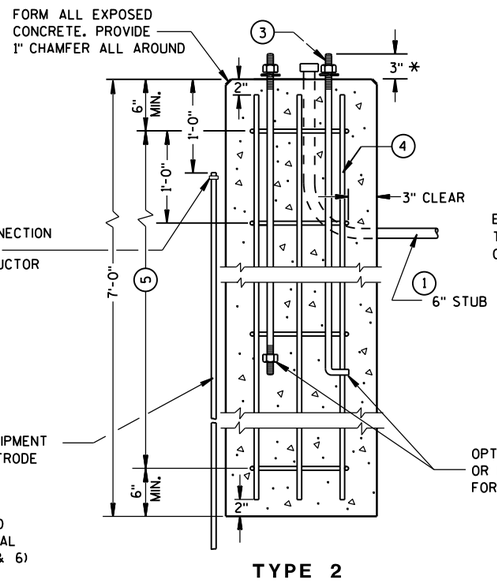
(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

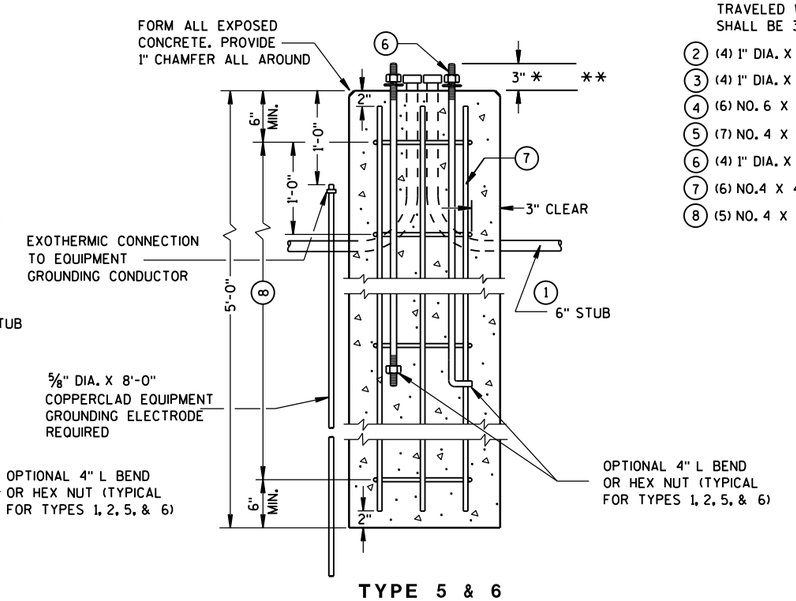












CONCRETE BASES

* 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.

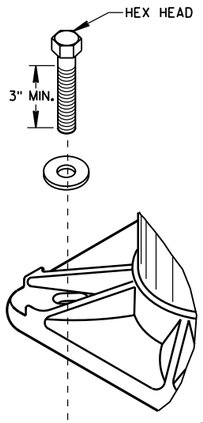
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

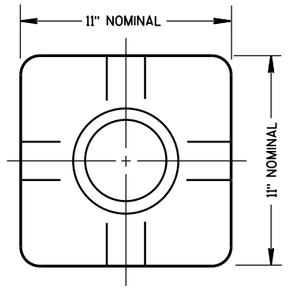
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

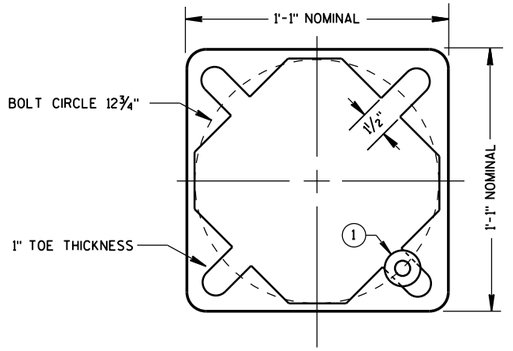
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

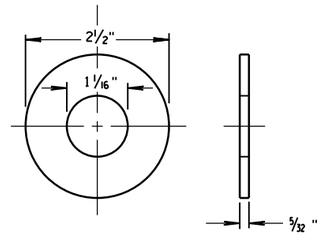




TOP VIEW
(PEDESTAL BASE)

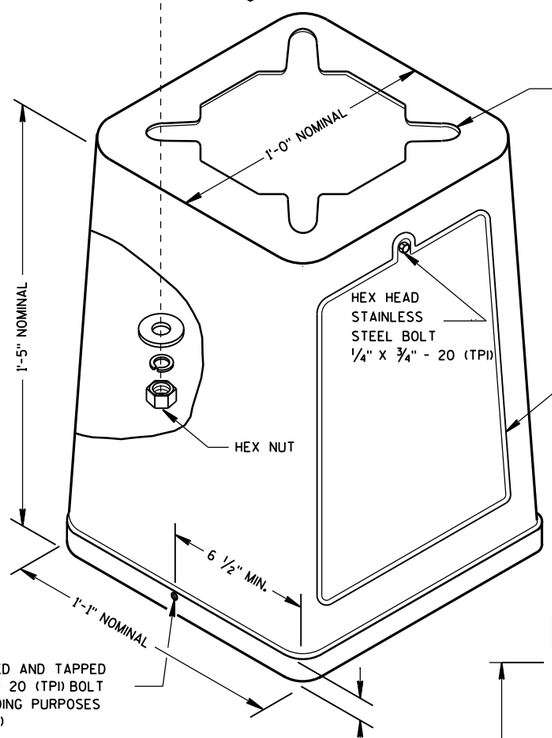


BOTTOM VIEW
(PEDESTAL BASE)

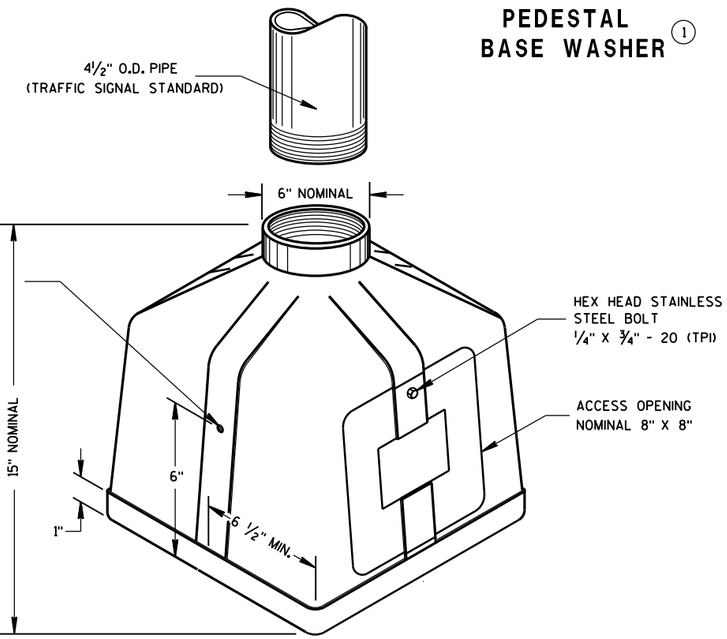


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

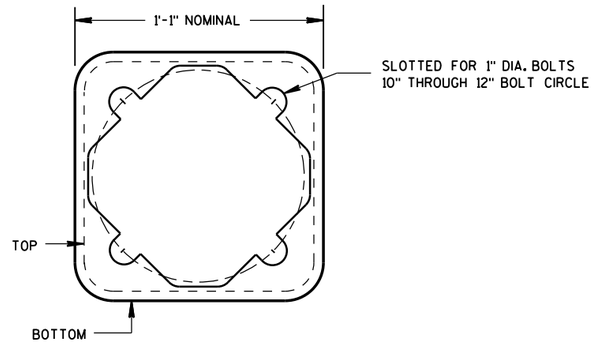


ISOMETRIC VIEW

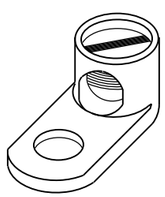


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

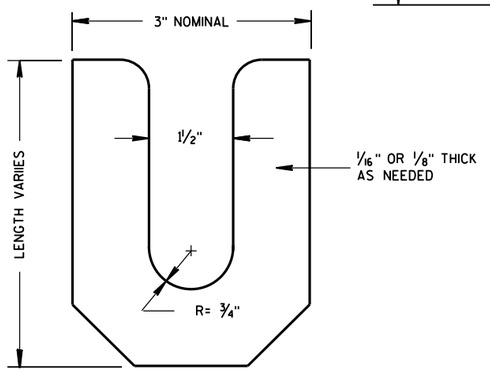


TYPICAL MECHANICAL CONNECTOR LUG

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

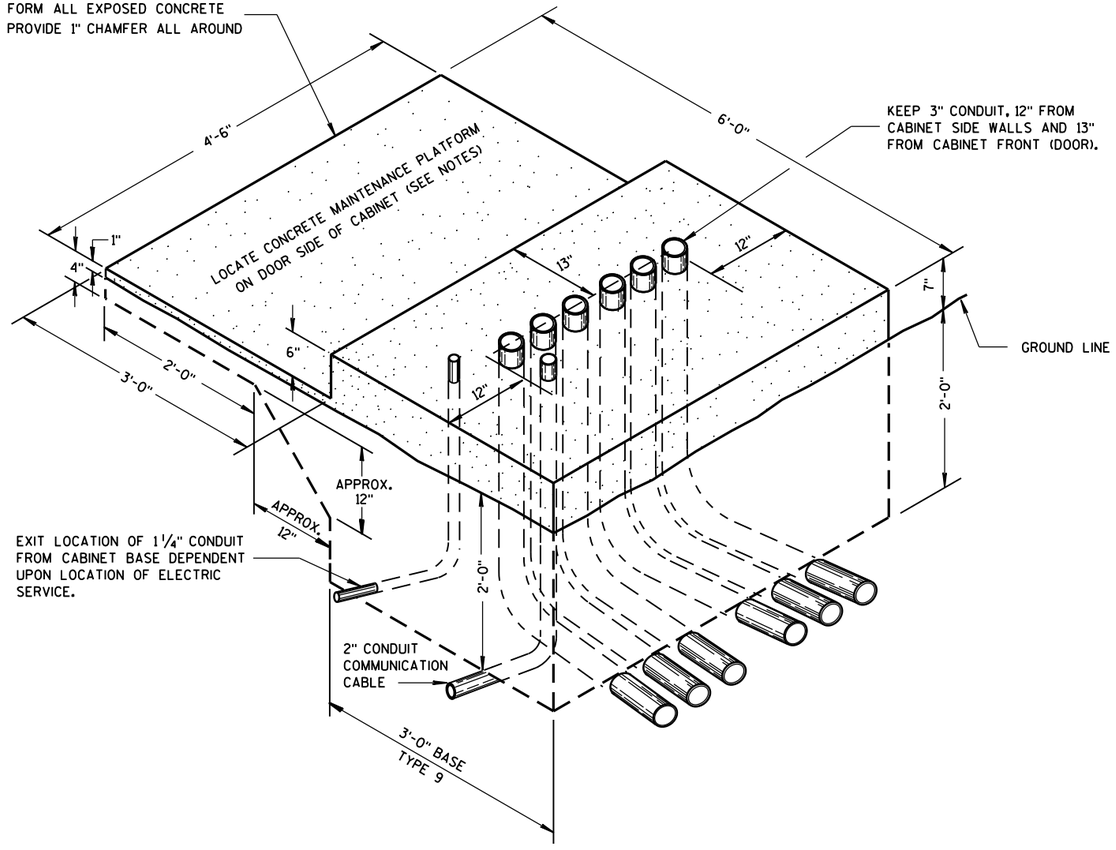
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 3-4

6

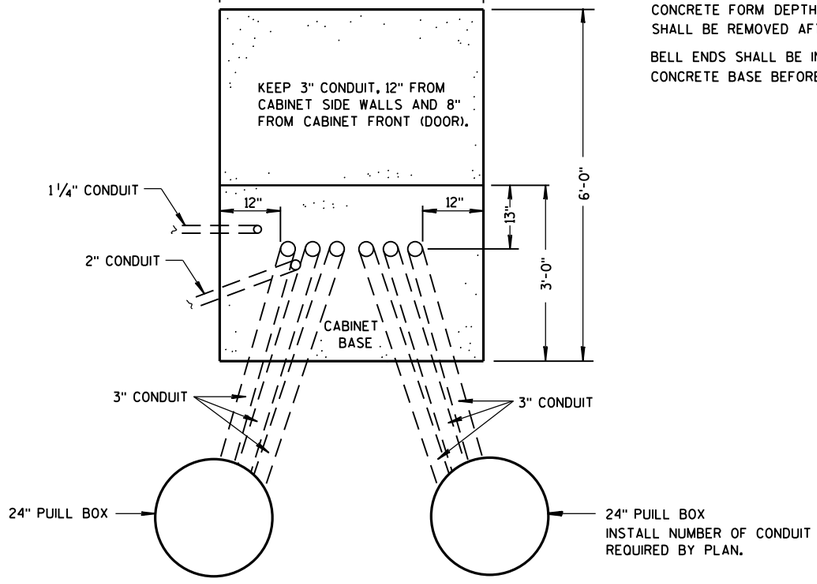
S.D.D. 9 C 3-4



ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUIT IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

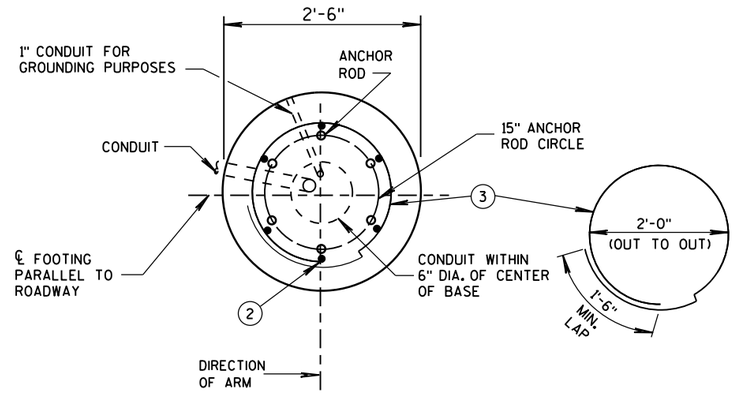
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

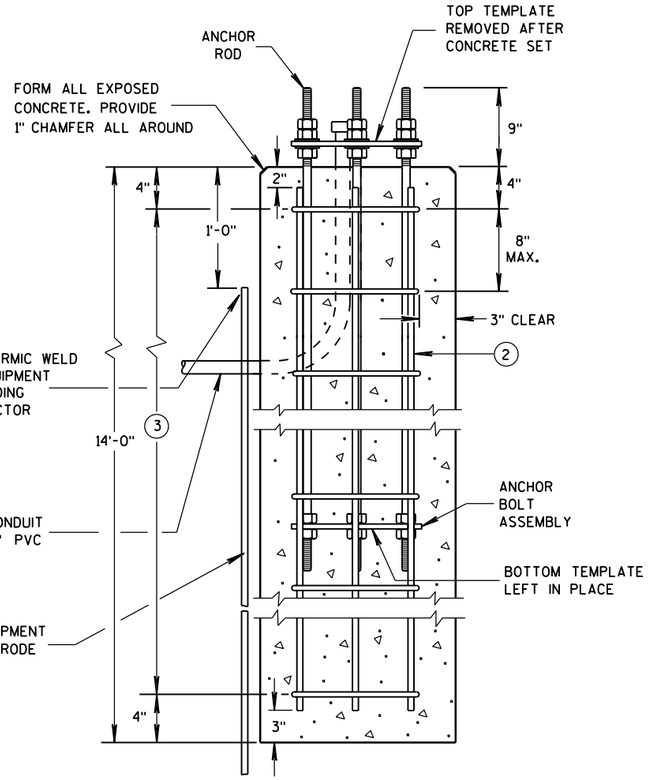
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATION)	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.

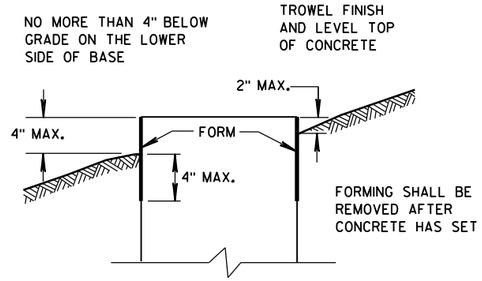




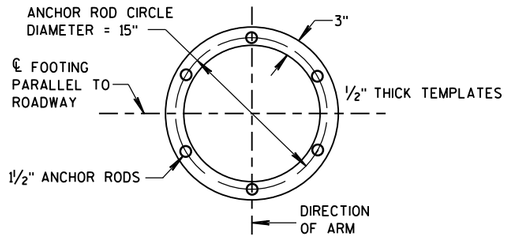
CONCRETE BASE TYPE 10

(FOR TYPE 9 & 10 & OVER HEIGHT (OH) POLES)

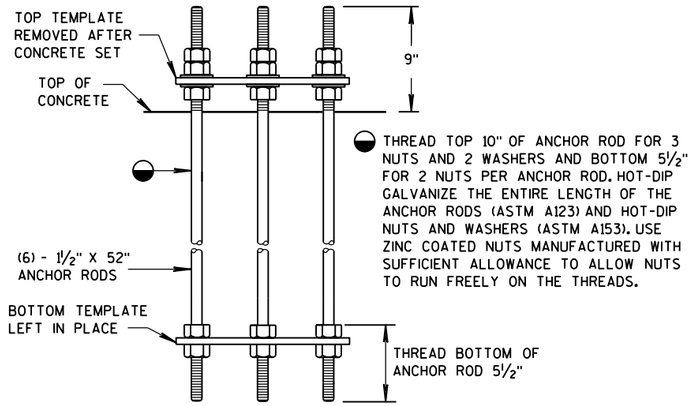
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2017 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL

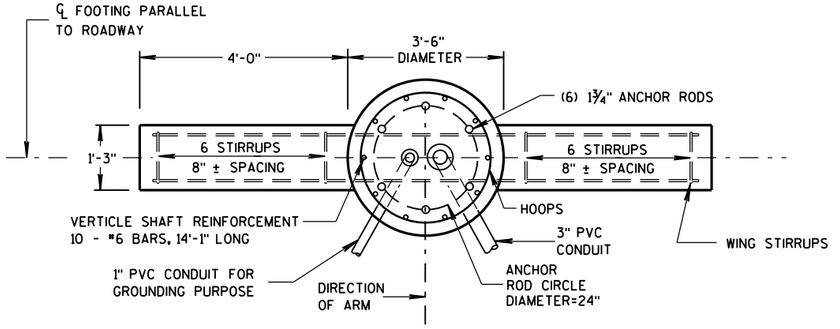
FHWA

6

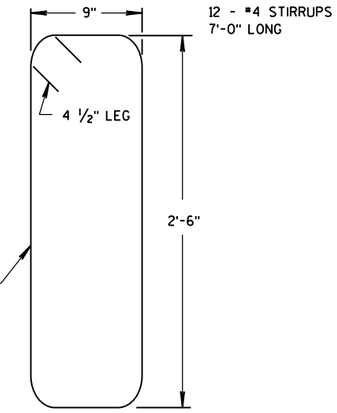
S.D.D. 9 C 11-10

6

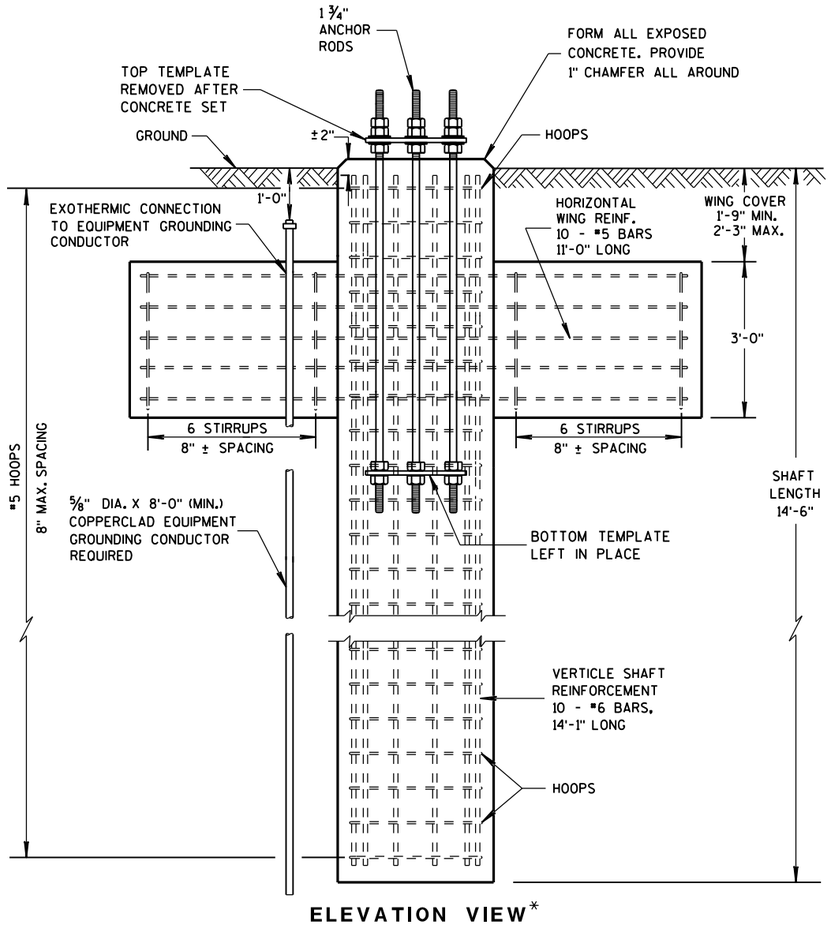
S.D.D. 9 C 11-10



PLAN VIEW

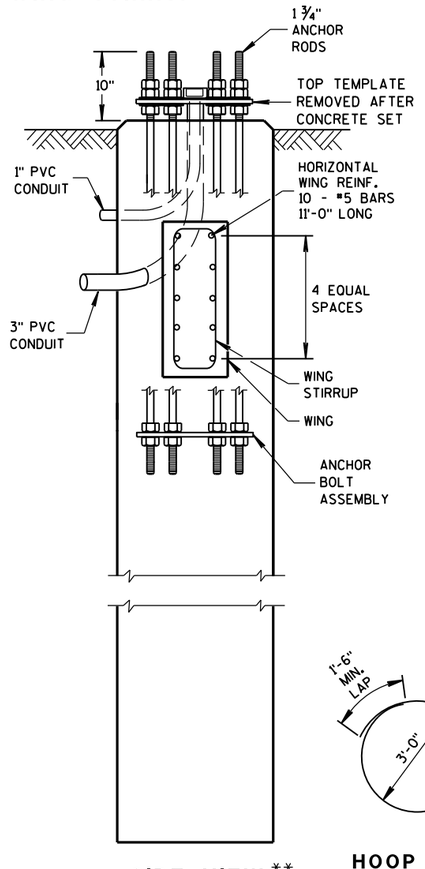


WING STIRRUP



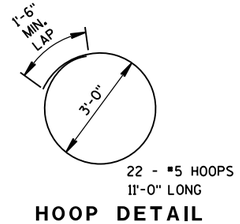
ELEVATION VIEW*

* CONDUITS ARE NOT SHOWN ON THIS VIEW FOR CLARITY



SIDE VIEW**

** HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY



HOOP DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF THE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1-INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4-FOOT COIL OF WIRE ABOVE THE CONCRETE BASE, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL WAY SHALL BE 24-INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36-INCHES, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATIONS	fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36	fy=36,000 p.s.i.

(FOR TYPE 12 & 13 & OVER HEIGHT (OH) POLES)

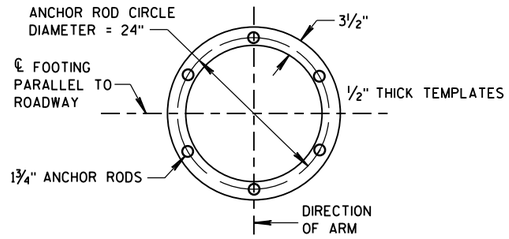
CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 635 LBS.

TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.
SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

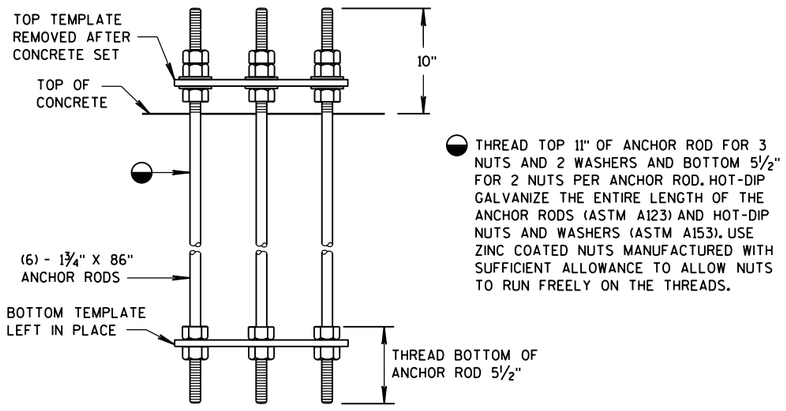
CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 9 C 12-9a

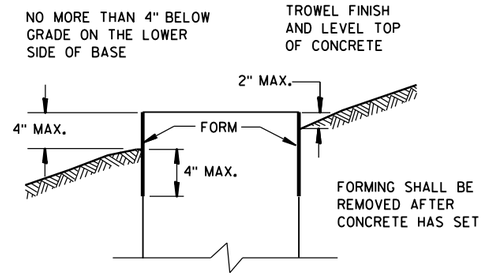


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



FORMING DETAIL

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

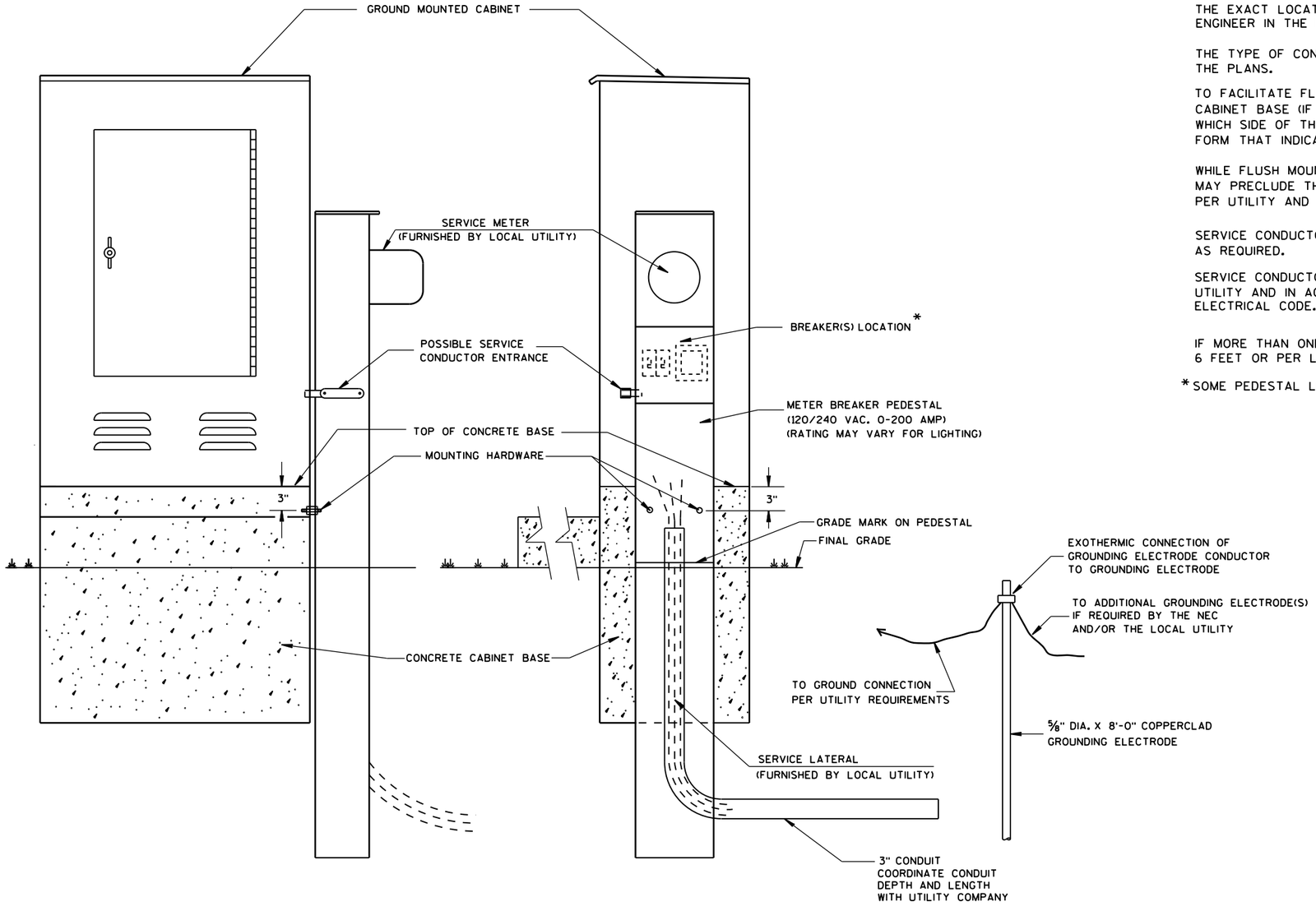
APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 12-9b

6

S.D.D. 9 C 12-9b



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.

6

S.D.D. 9 D 1-5

6

S.D.D. 9 D 1-5

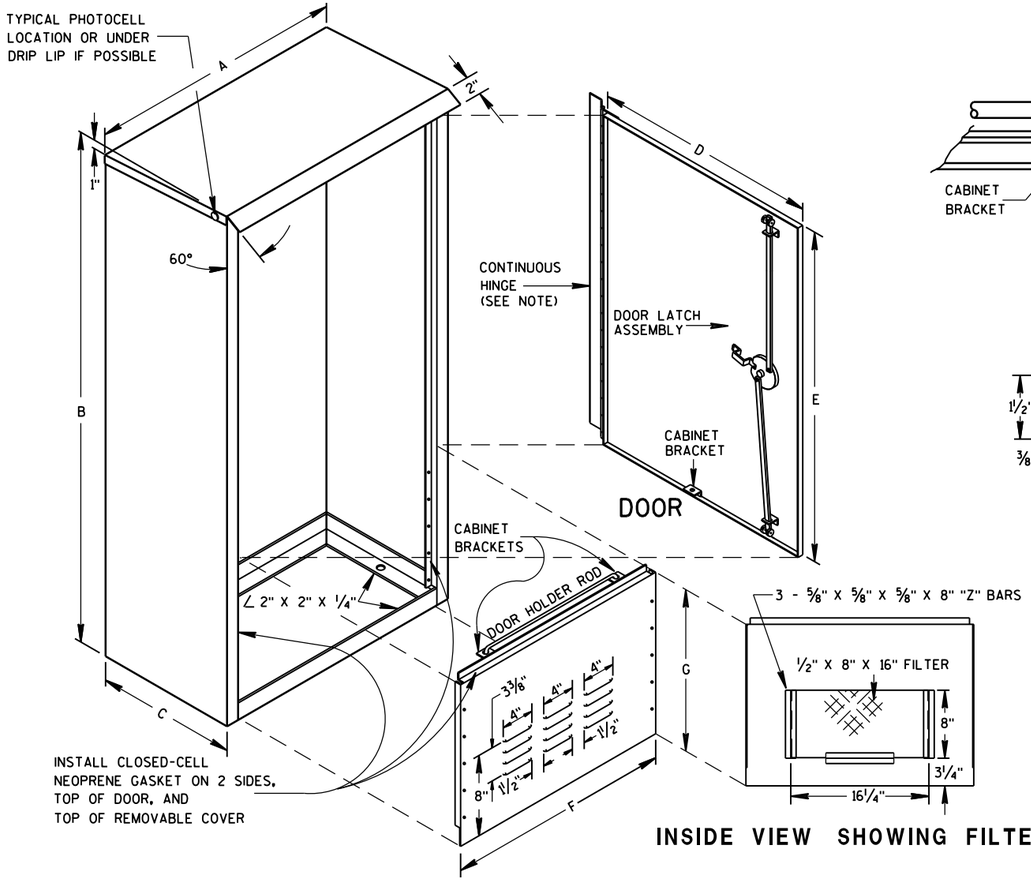
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

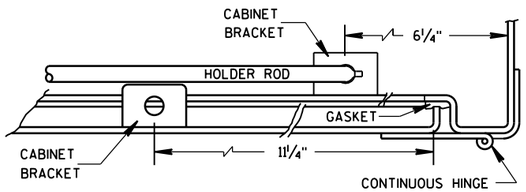
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

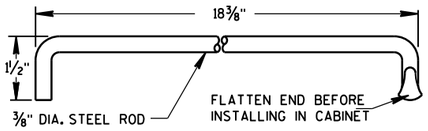


REMOVABLE COVER

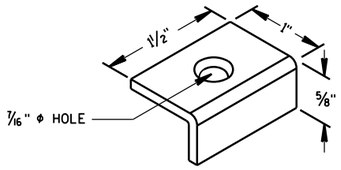
INSIDE VIEW SHOWING FILTER



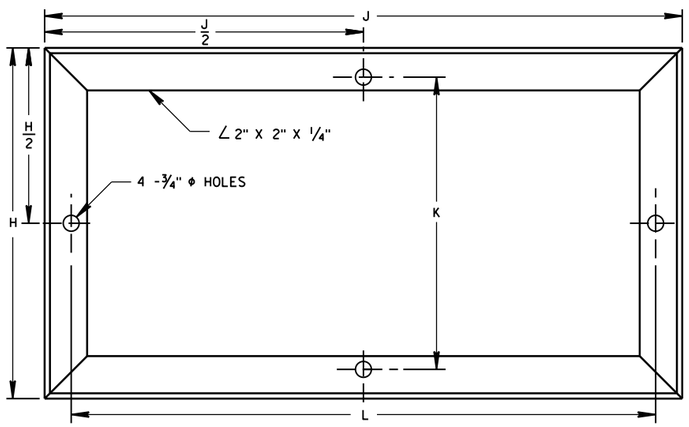
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

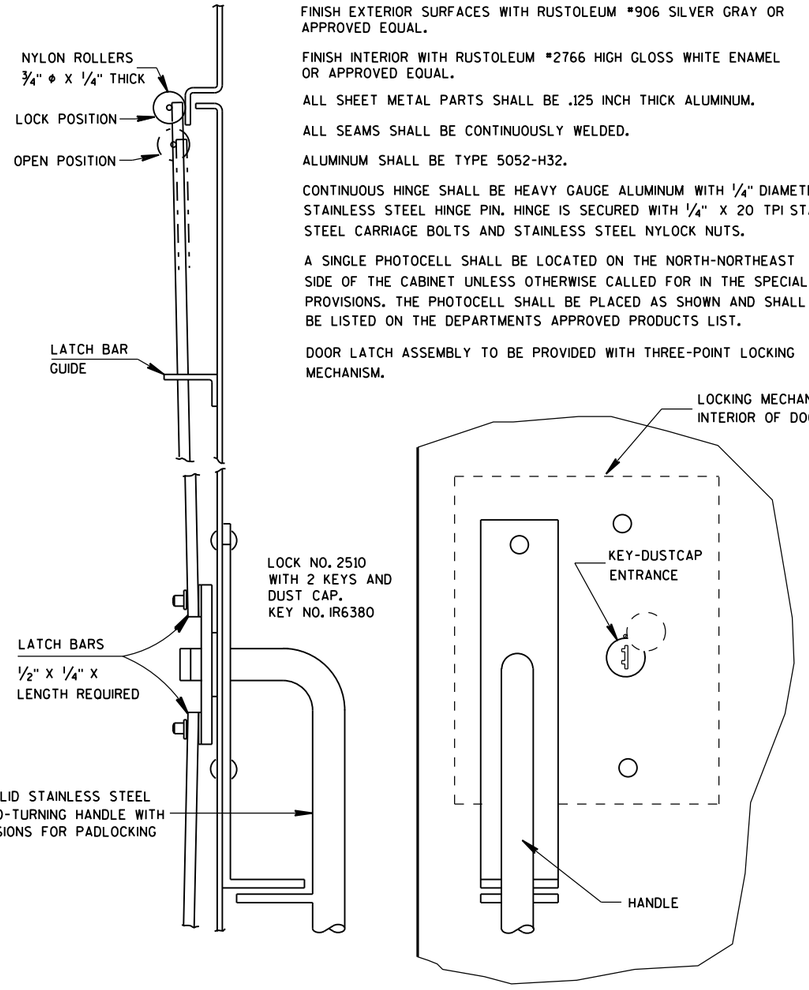
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

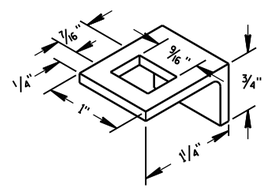
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

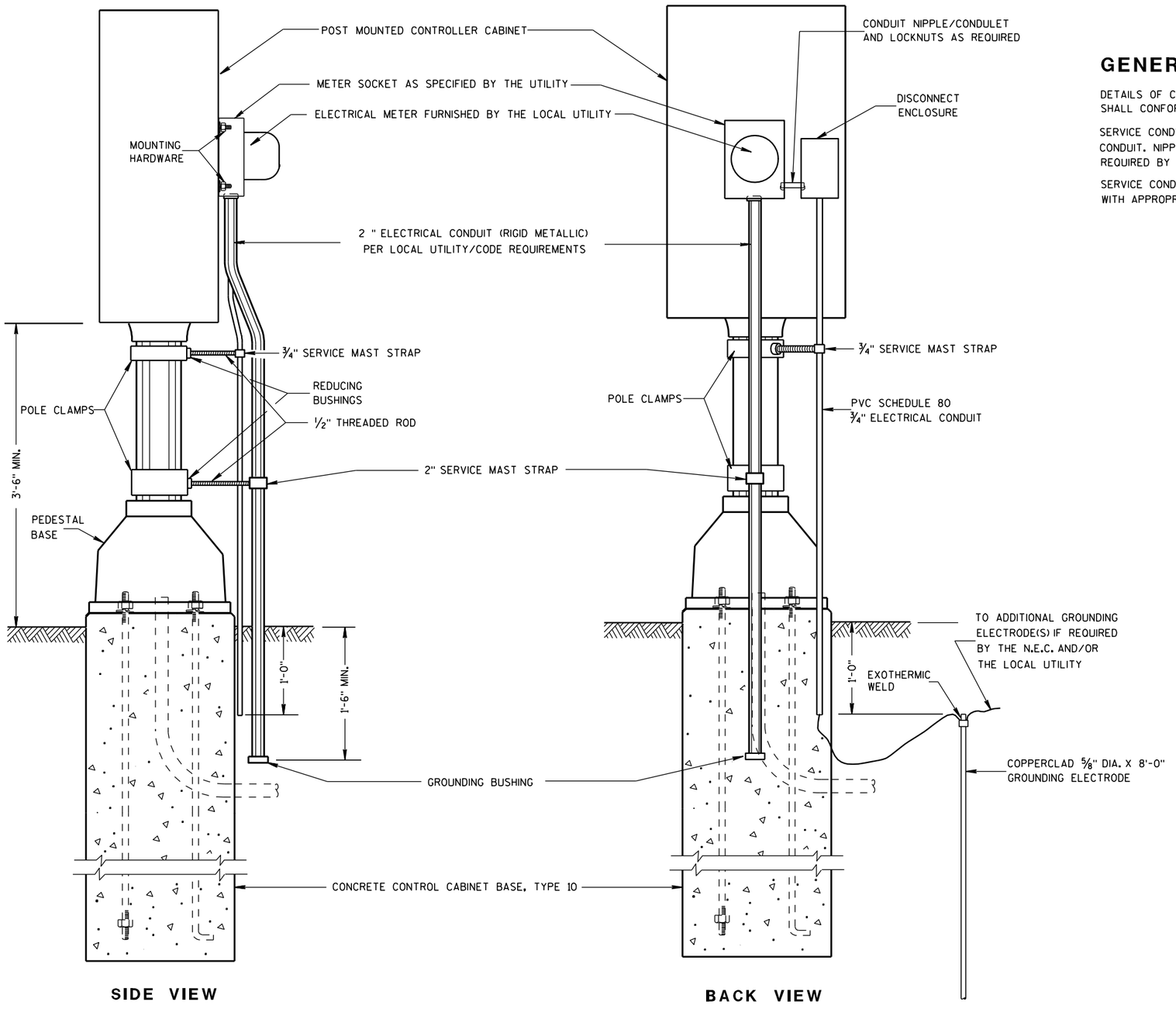
FHWA

6

S.D.D. 9 D 2-3

6

S.D.D. 9 D 2-3



POST MOUNTED CONTROLLER SERVICE INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID STEEL OR SCHEDULE 80 PVC ELECTRICAL CONDUIT. NIPPLES AND/OR CONDULETS, WITH LOCK NUTS AND GROUNDING BUSHINGS AS REQUIRED BY THE N.E.C. OR THE LOCAL UTILITY.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AS REQUIRED AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED ELECTRICAL CODE.

POST MOUNTED CONTROLLER SERVICE INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2003 DATE
/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI
FHWA

6
S.D.D. 9 D 3-2

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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.

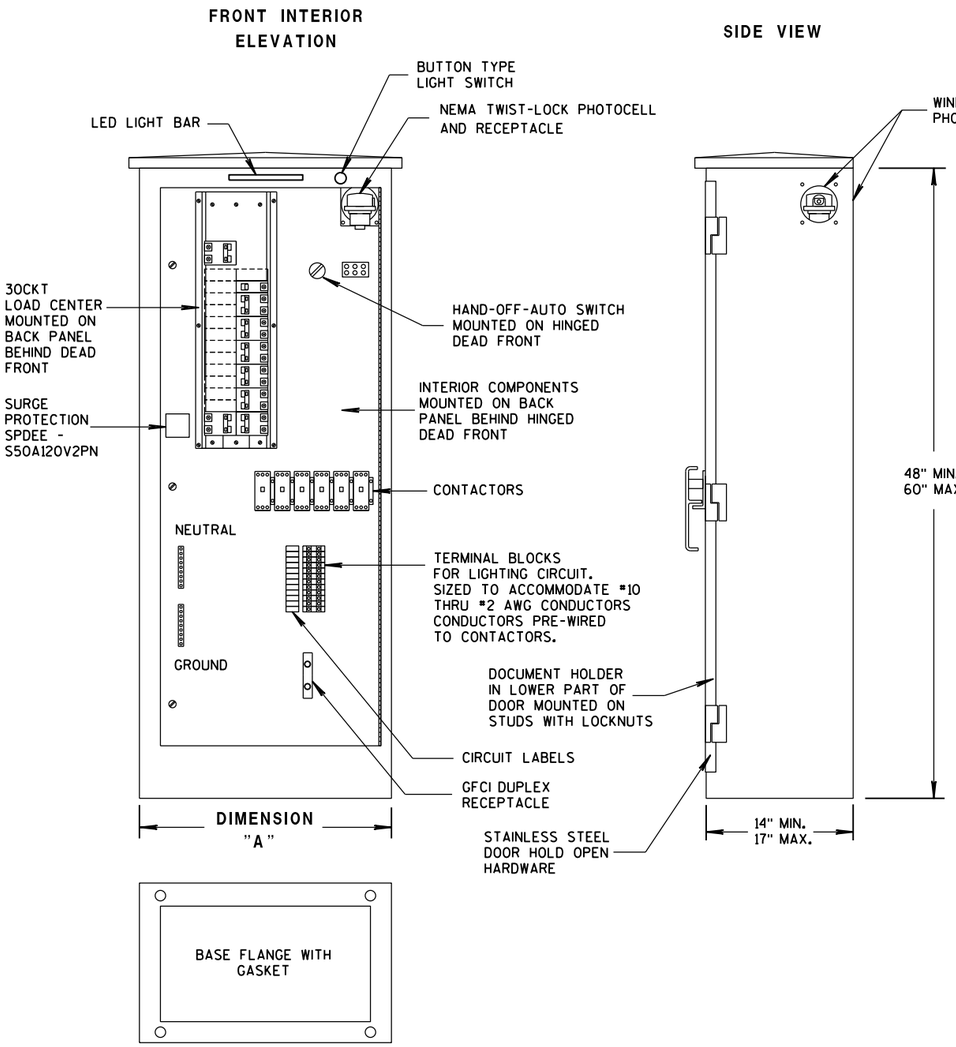
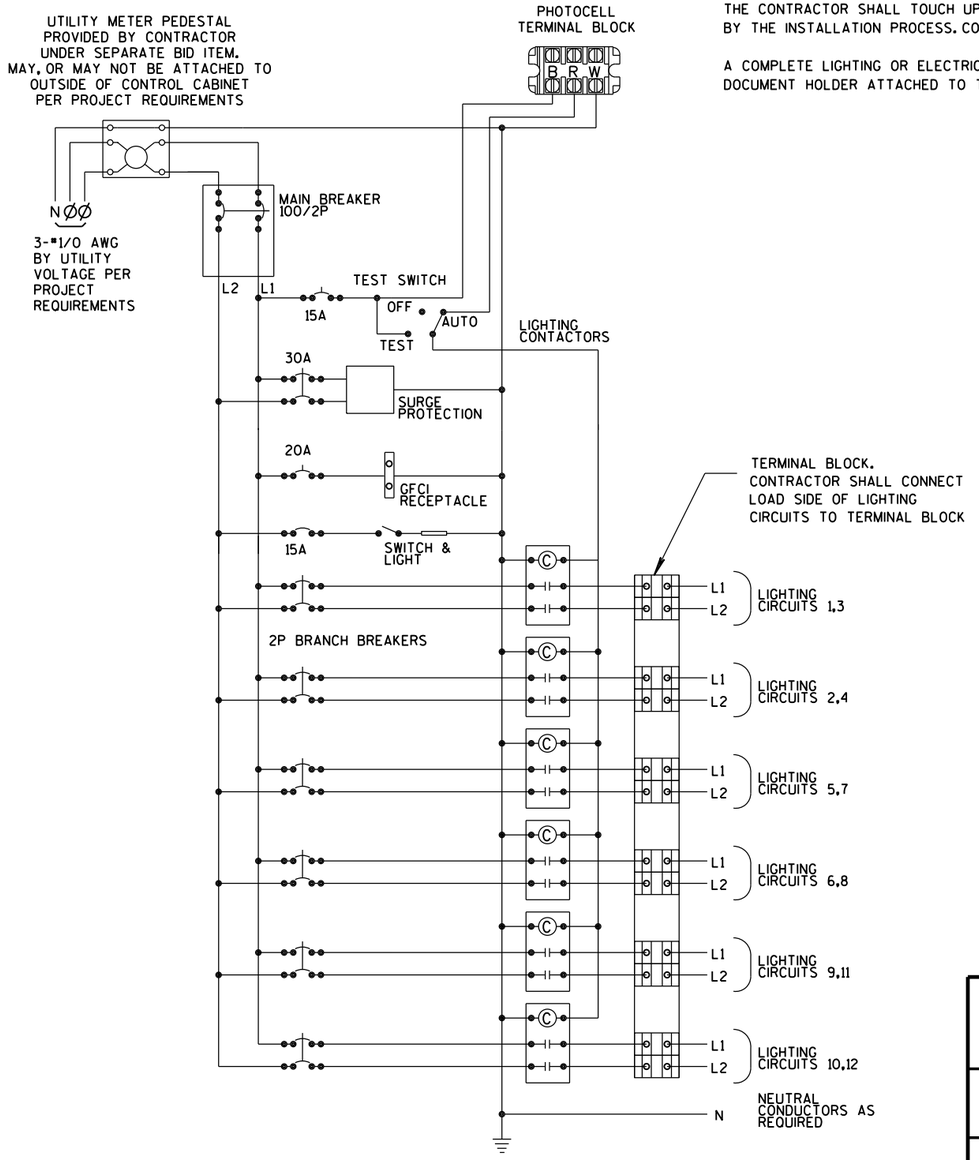


TABLE OF DIMENSIONS (INCHES)

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

6
S.D.D. 9 D 4-2

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

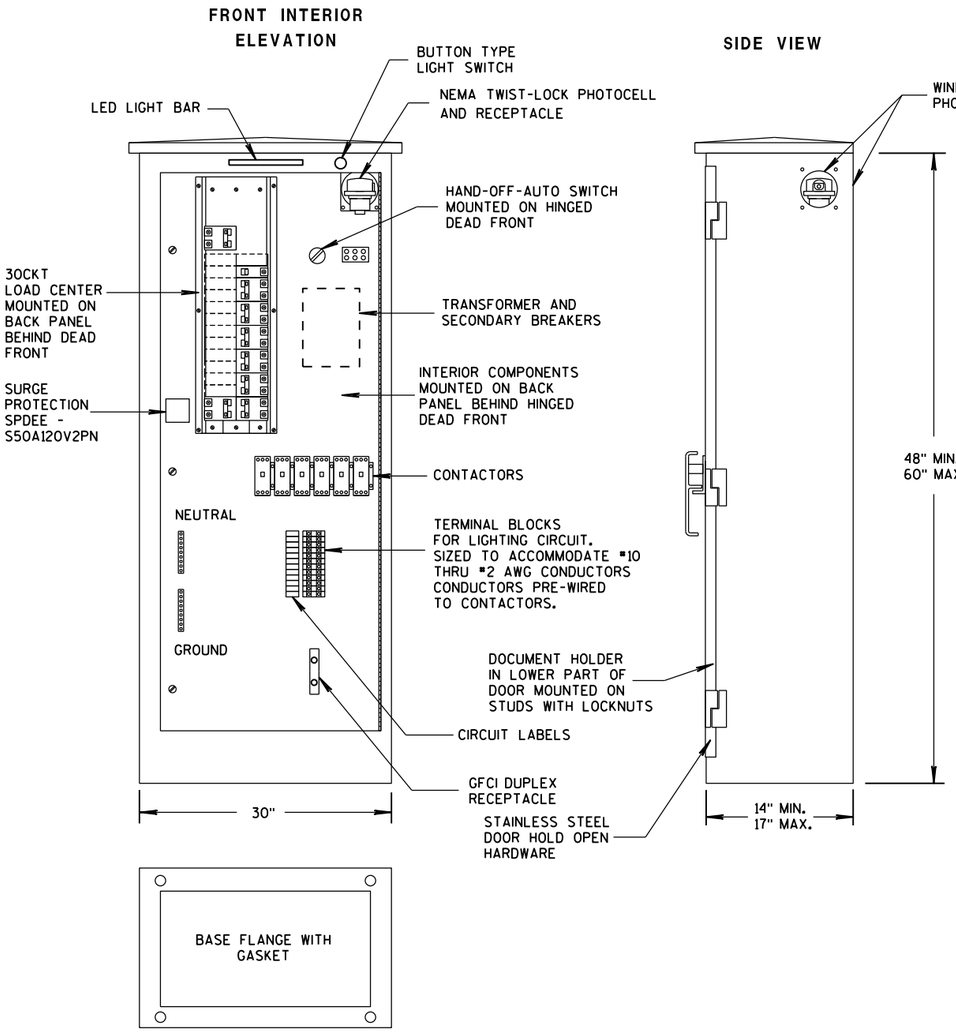
ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

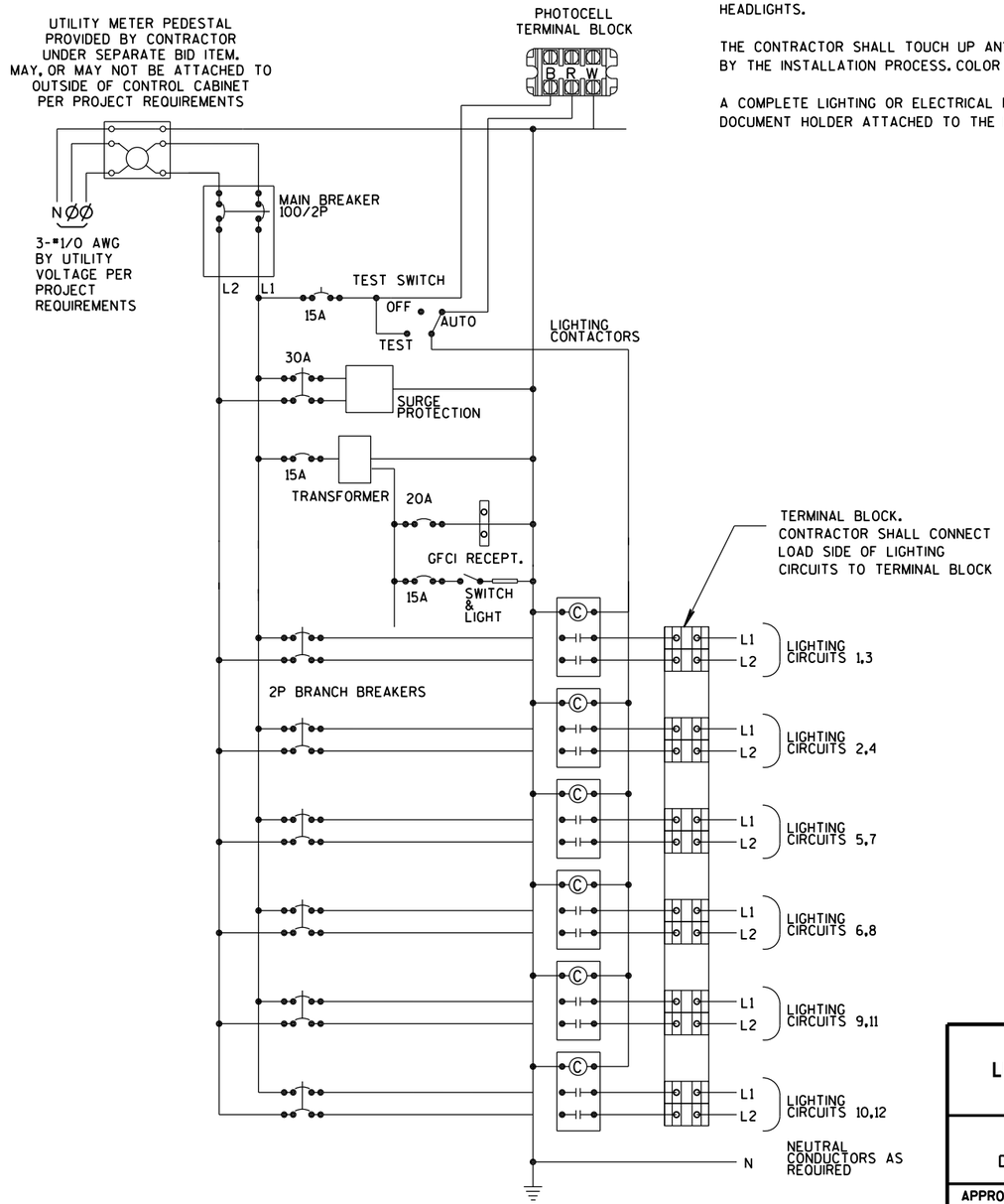
ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.



LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

L30
LIGHTING CONTROL CABINET
240/480 VOLT

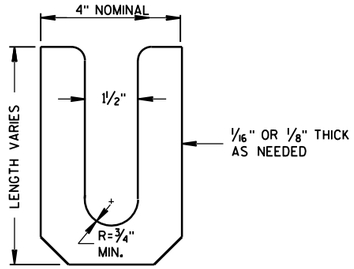
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015	/S/ Thomas Gonring	
DATE	STATE LIGHTING ENGINEER	MYS.

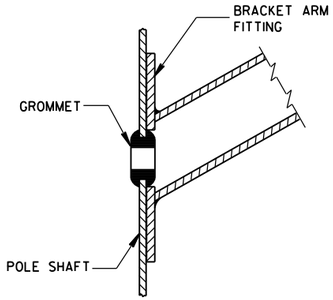
FHWA

6
S.D.D. 9 D 5-1

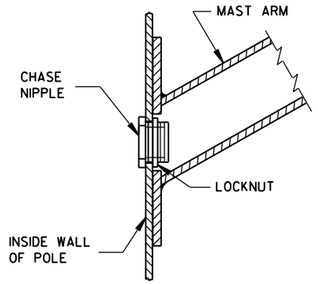


LEVELING SHIM (13)

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.

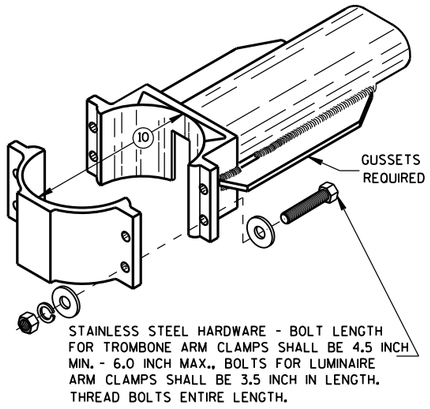
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

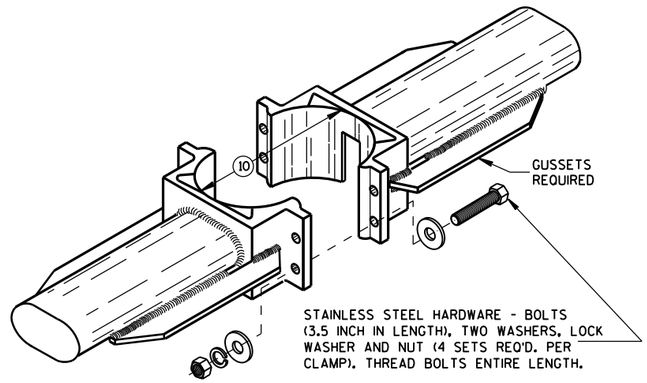
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

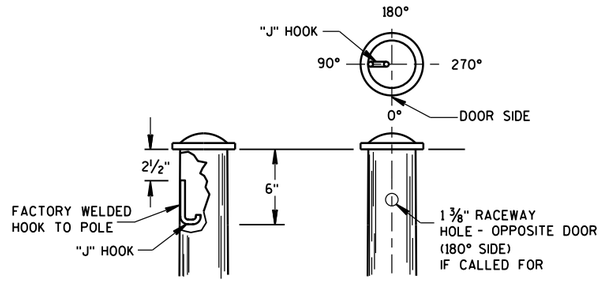
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



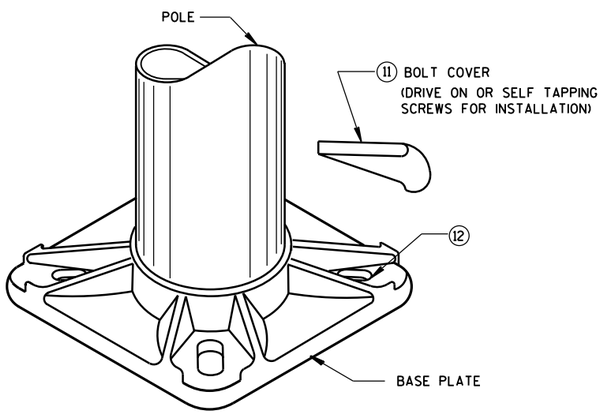
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



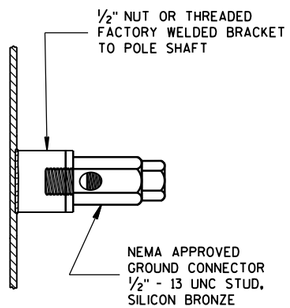
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

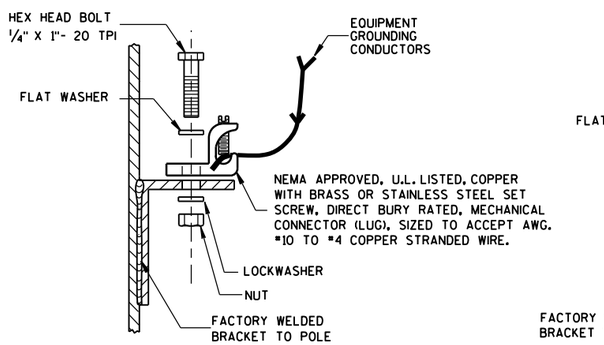


TYPICAL "J" HOOK LOCATION



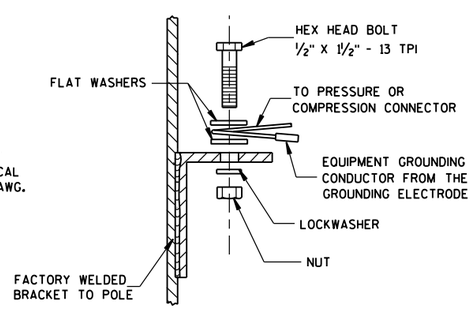
BASE PLATE





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

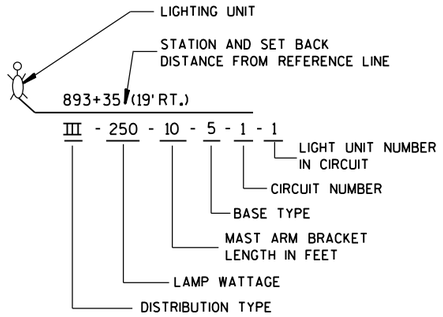
FHWA

6

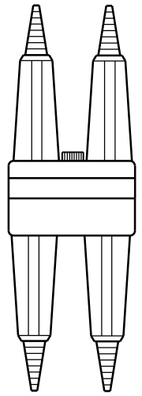
S.D.D. 9 E 1-14g

6

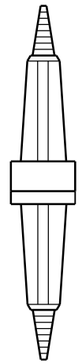
S.D.D. 9 E 1-14g



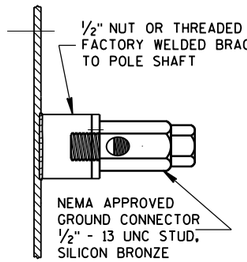
LIGHTING UNIT CODE
(TYPICAL)

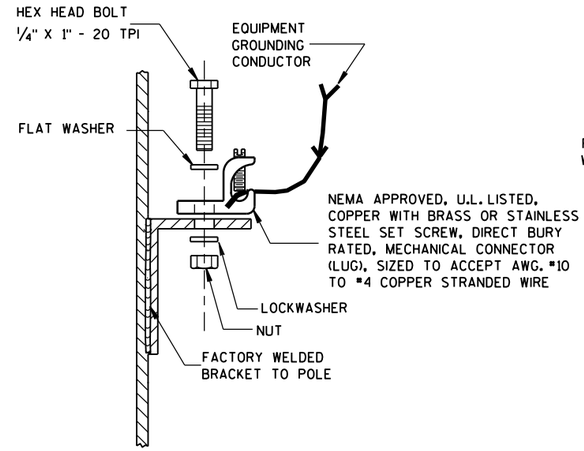


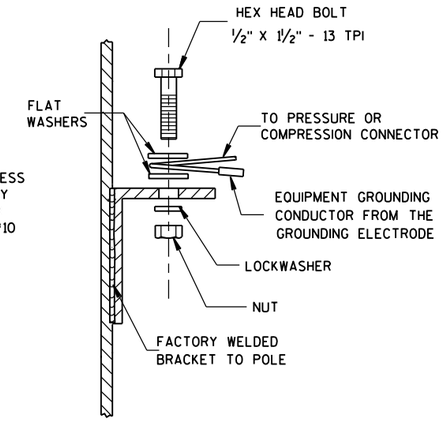
DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



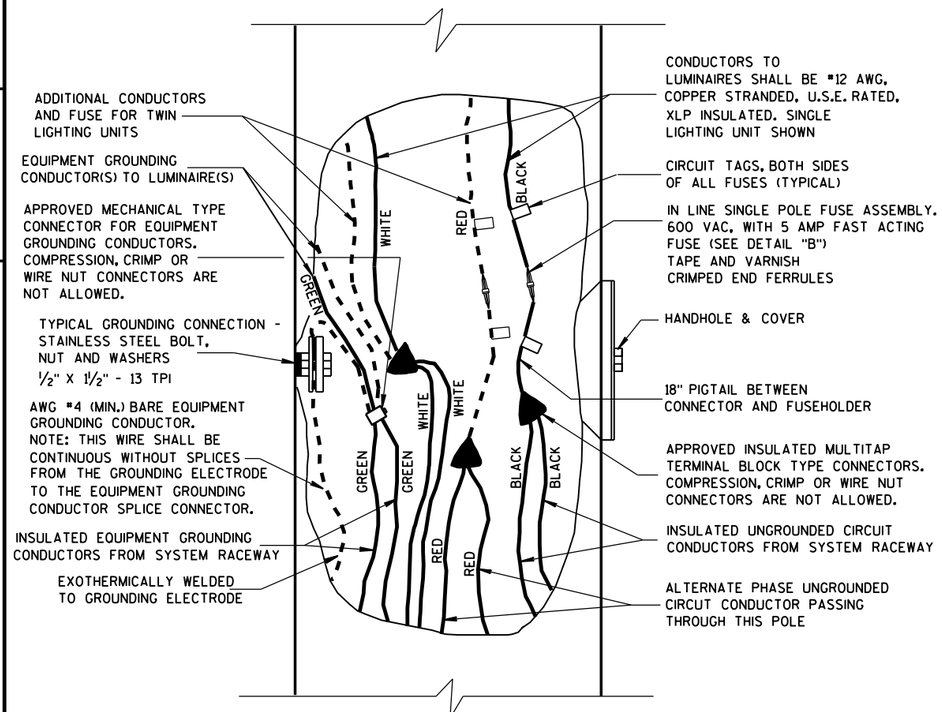
DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT



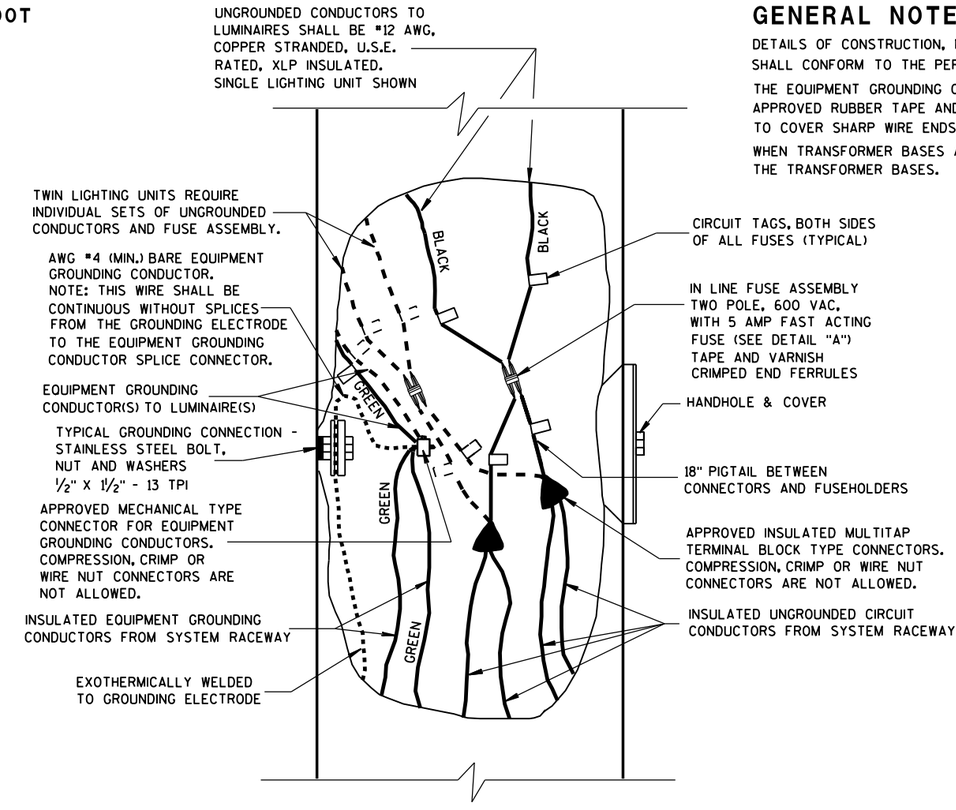




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

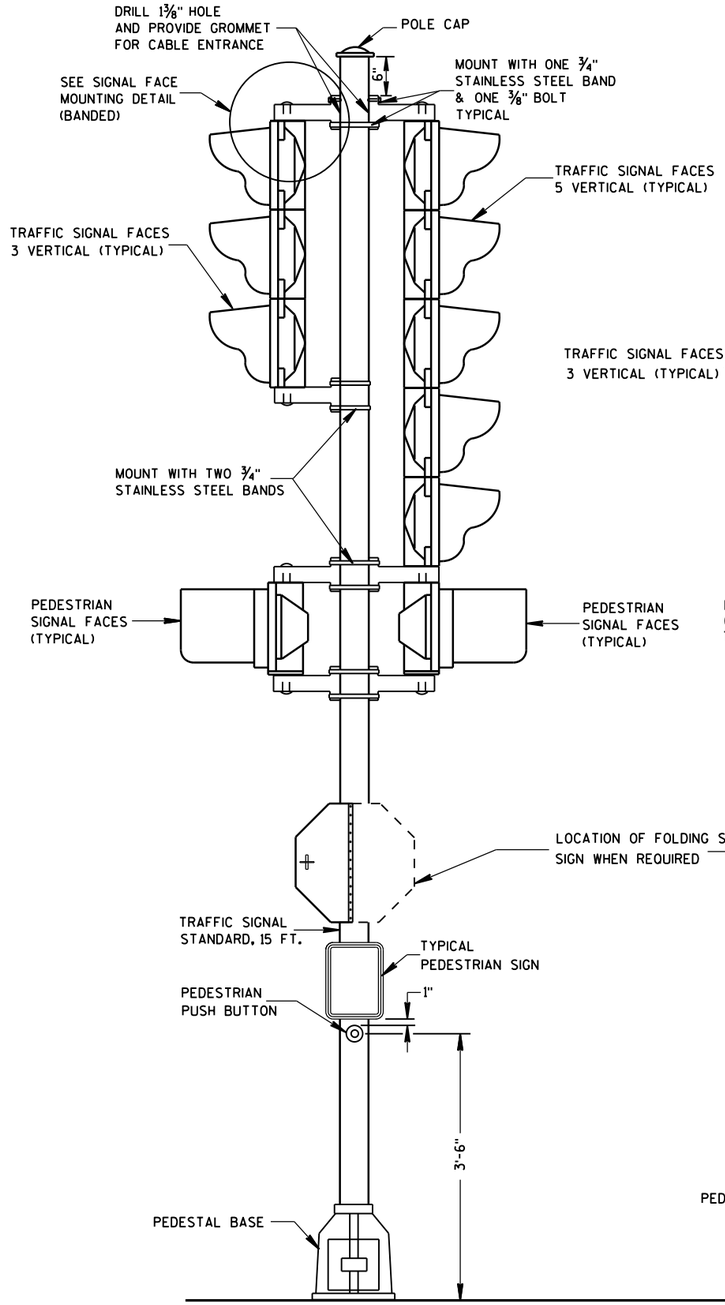
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

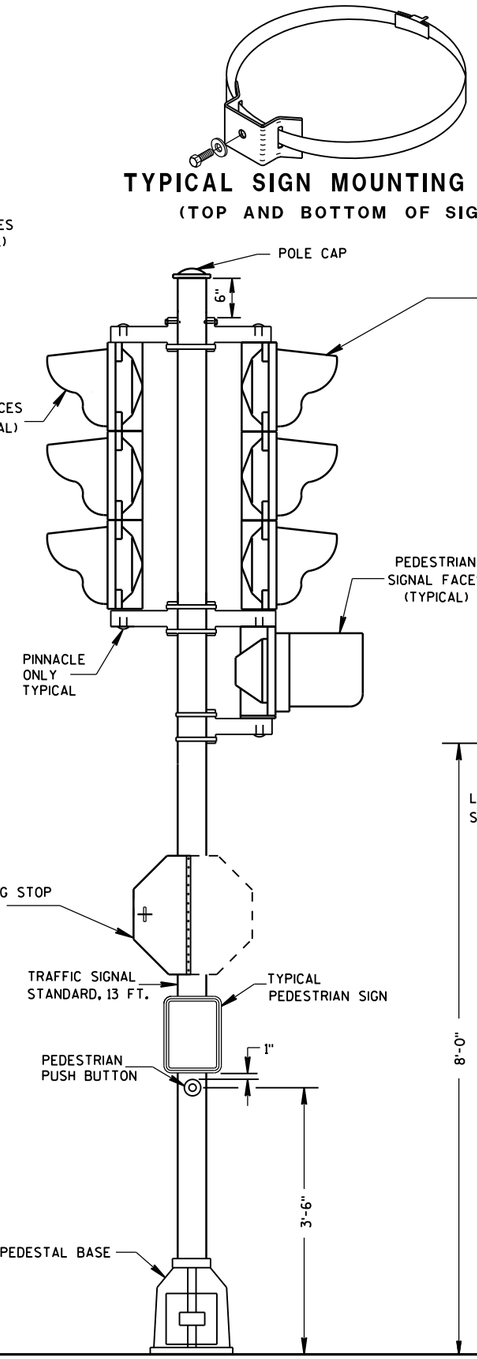
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 E 3-5

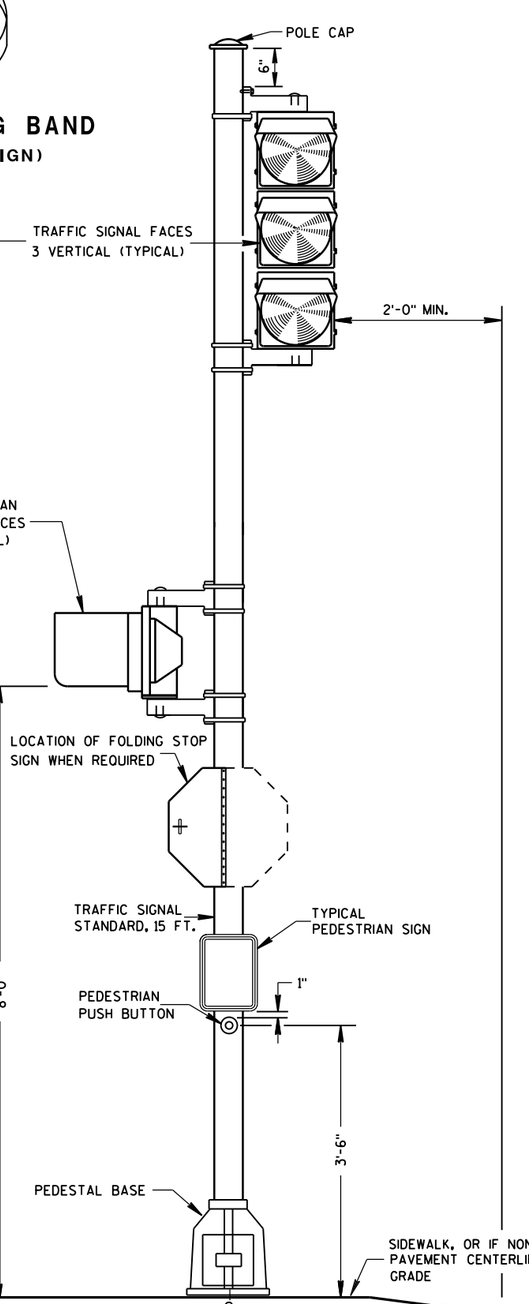


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

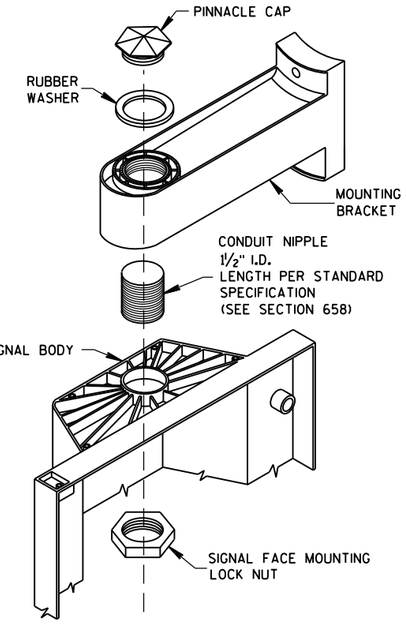
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



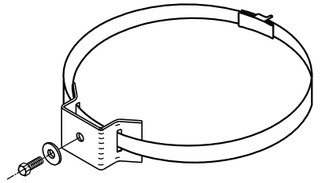
SIGNAL FACE MOUNTING DETAIL
(BANDED)

TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

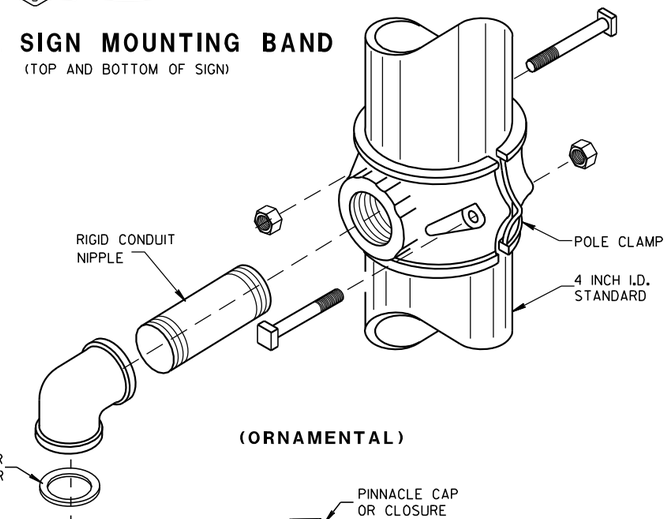
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

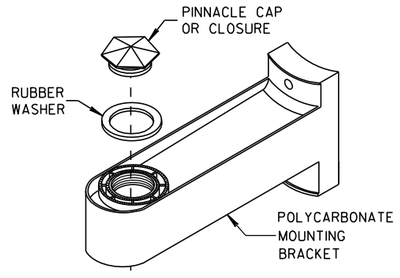
6
S.D.D. 9 E 6-5



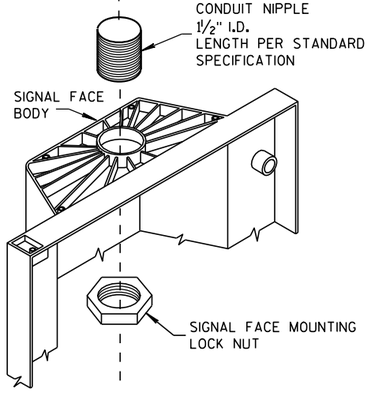
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



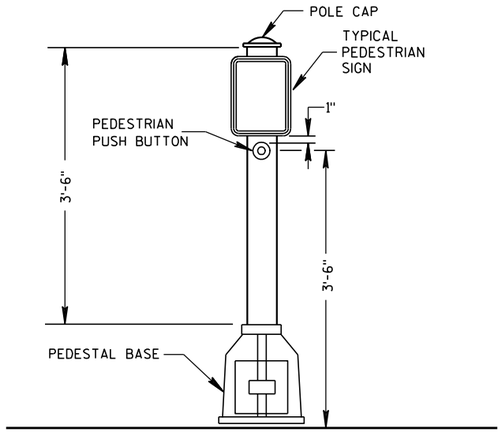
(ORNAMENTAL)



(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.

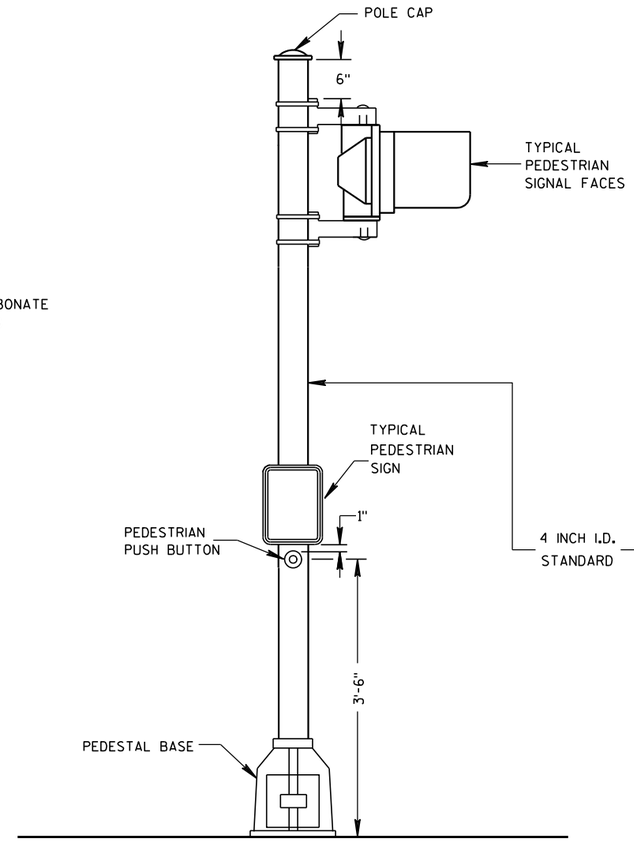
POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

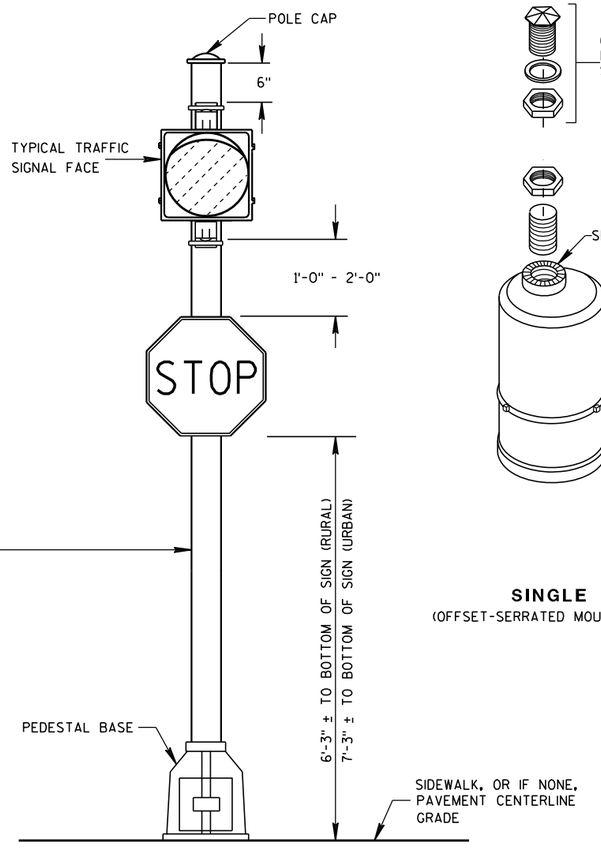
MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

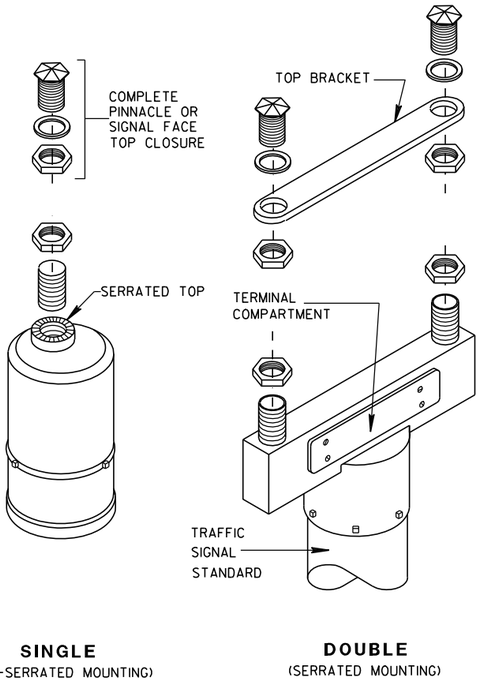
FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



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

HWYS

6

S.D.D. 9 E 7-5

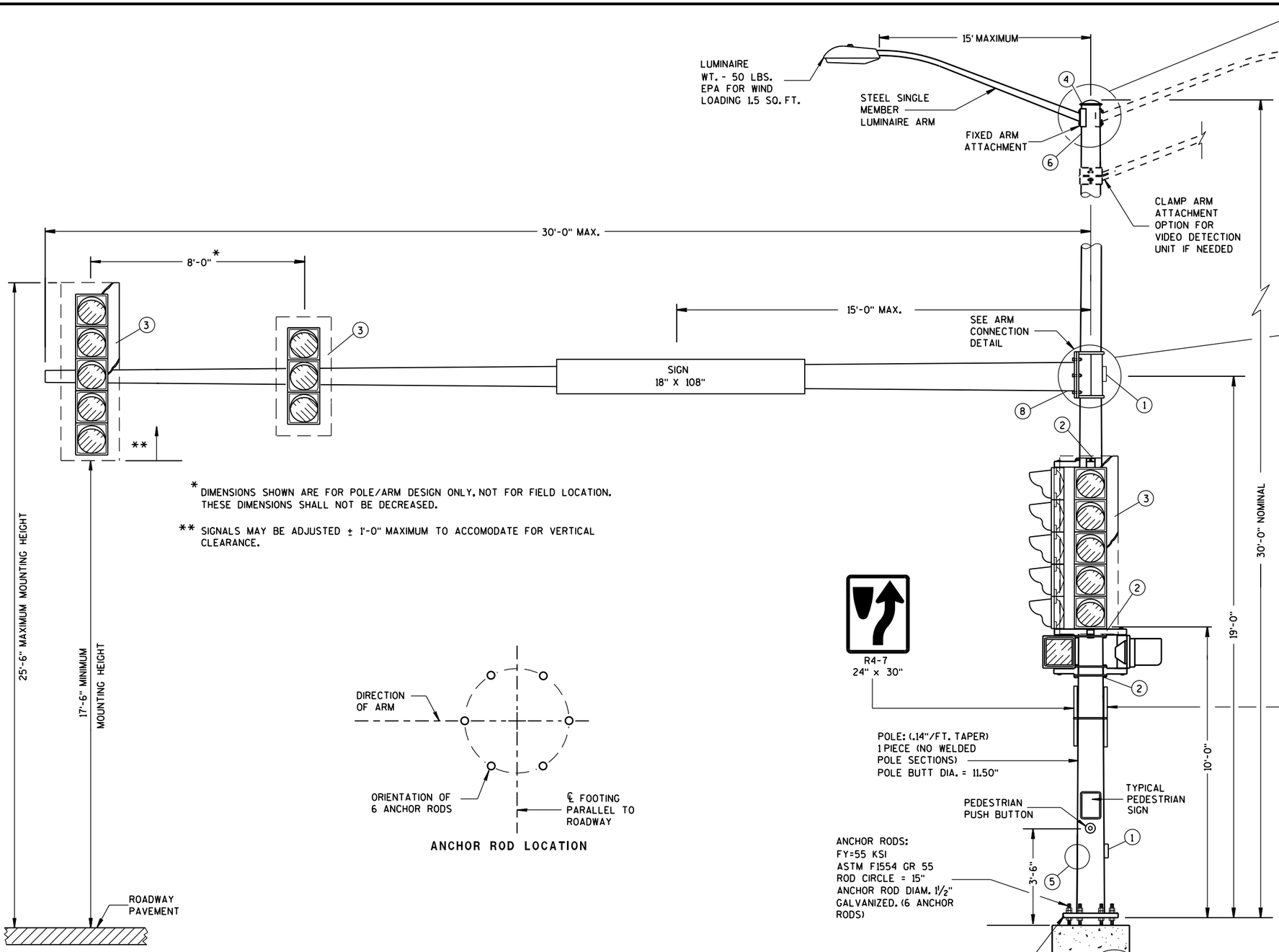
6

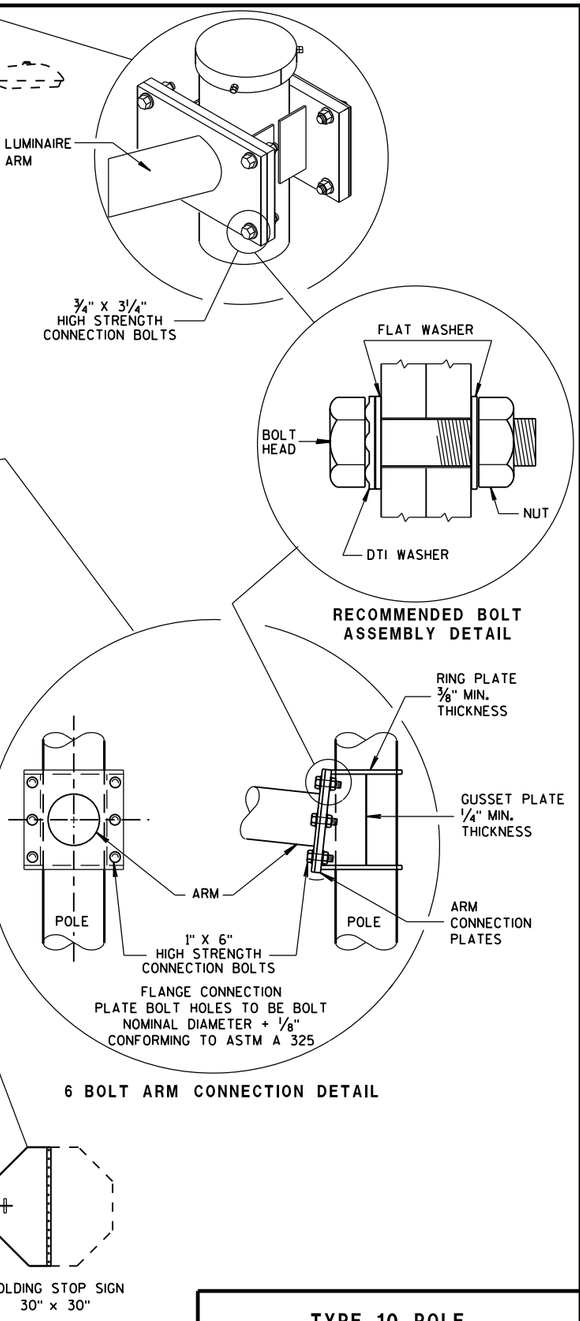
S.D.D. 9 E 7-5

ANCHOR ROD LOCATION

* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



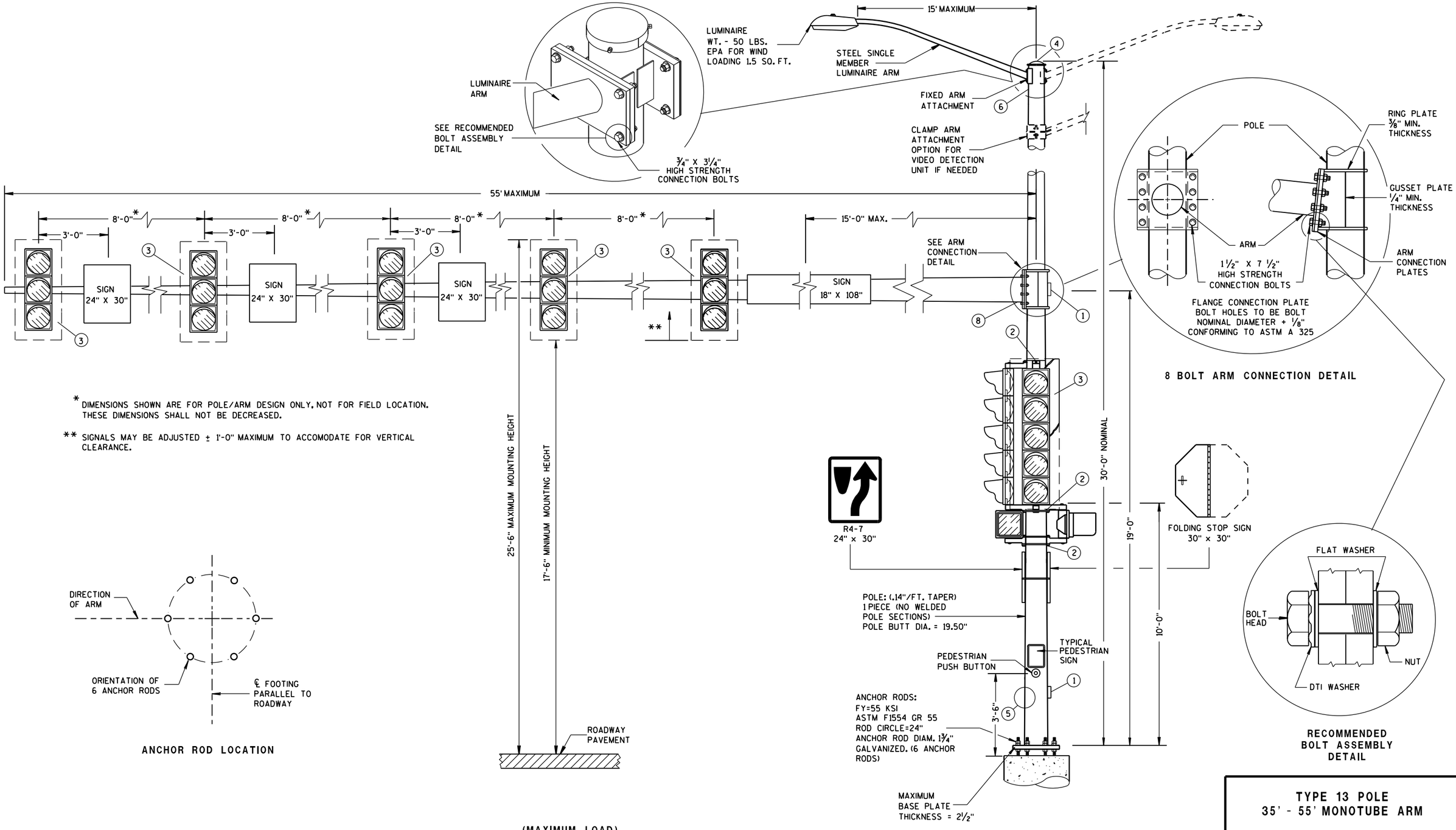


(MAXIMUM LOAD)

TYPE 10 POLE
15'- 30' MONOTUBE ARM

TYPE 10 POLE 15' - 30' MONOTUBE ARM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May, 2016 DATE FHWA	/S/ Ahmet Demirbilek STATE ELECTRICAL

6
S.D.D. 9 E 8-8b



* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

8 BOLT ARM CONNECTION DETAIL

RECOMMENDED BOLT ASSEMBLY DETAIL

ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 13 POLE 35'- 55' MONOTUBE ARM

TYPE 13 POLE
35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

S.D.D. 9 E 8-8d

6

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

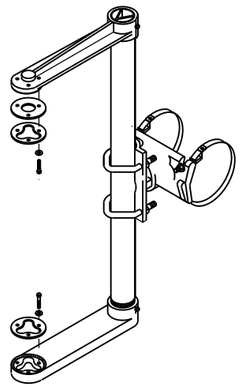
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

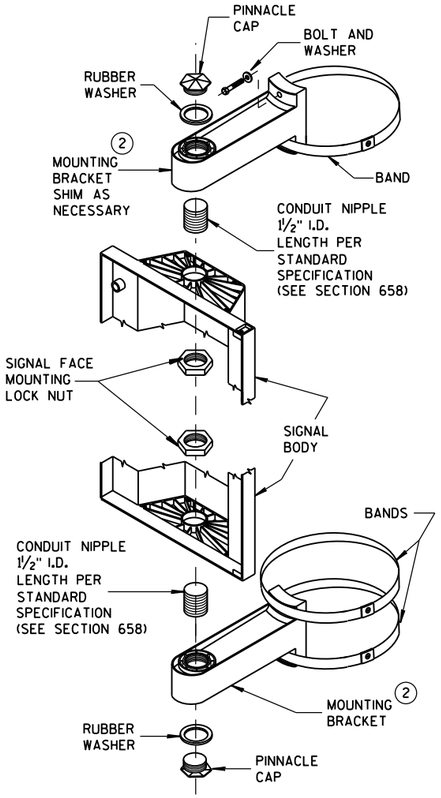
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

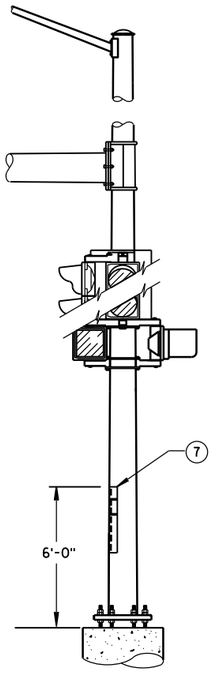


SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM

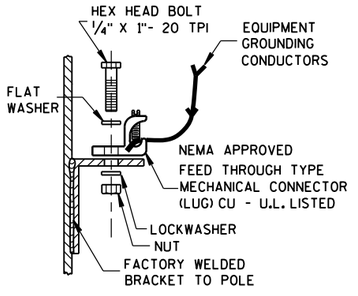
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE
VERTICAL MOUNTING DETAIL

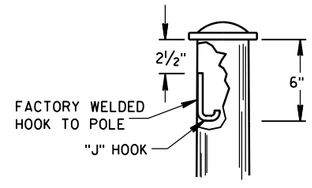


STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL
BE STAINLESS STEEL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

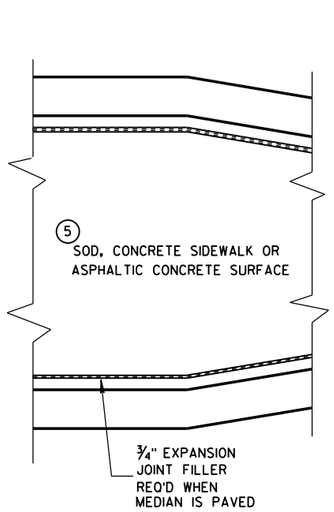
APPROVED
May 2016
DATE

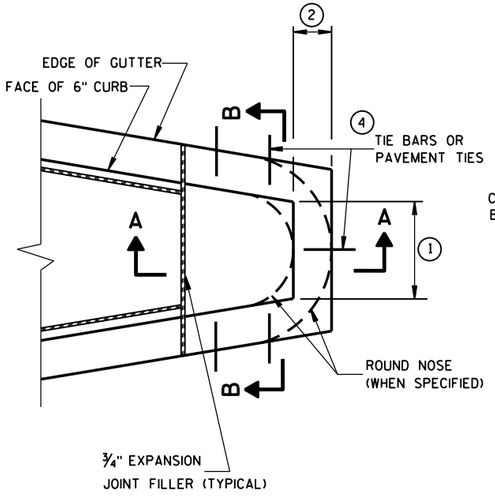
/S/ Ahmet Demirbilek
STATE ELECTRICAL

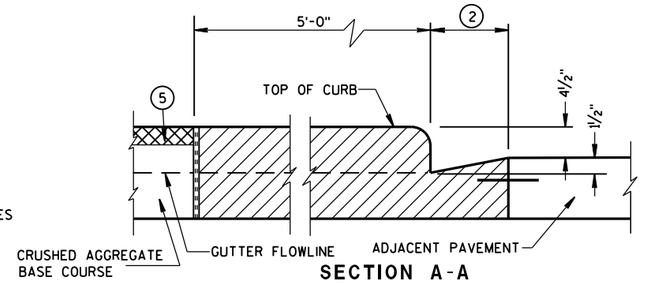
FHWA

6

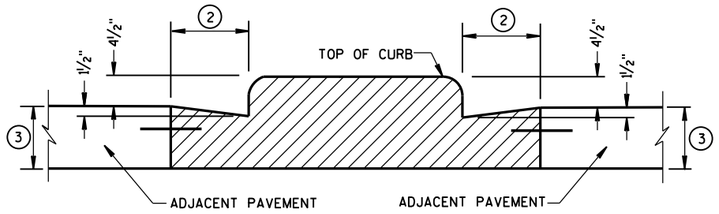
S.D.D. 9 E 8-8e







SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

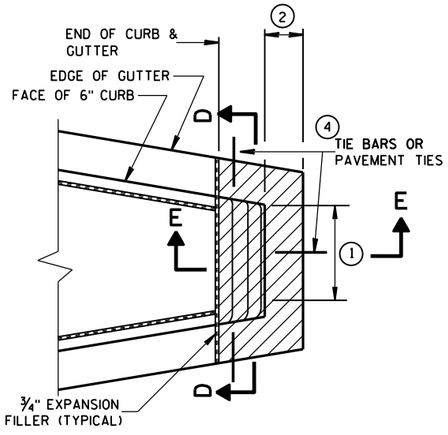
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

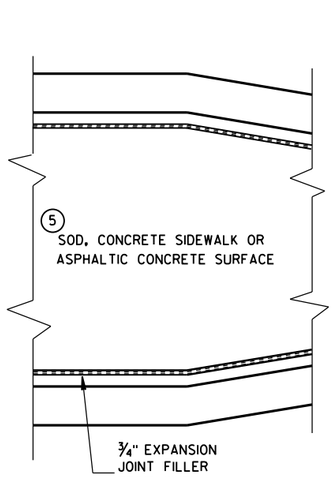
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

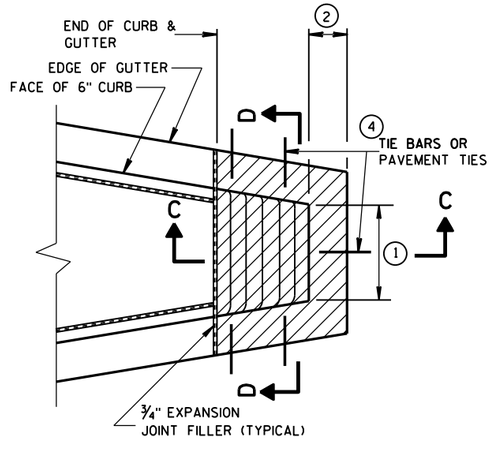
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

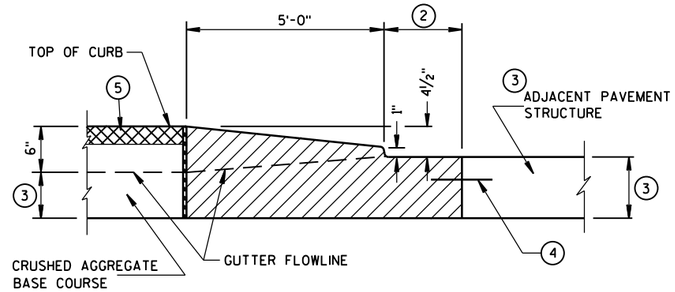
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



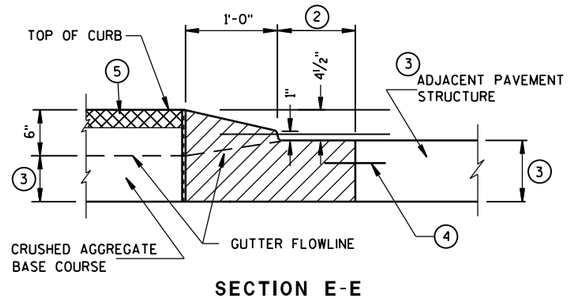




CONCRETE MEDIAN SLOPED NOSE TYPE 1

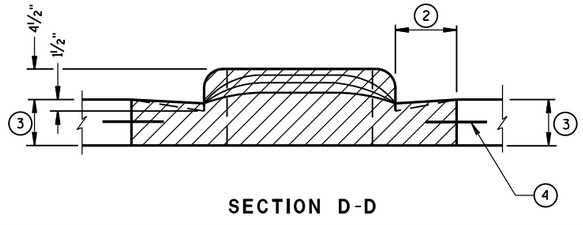


SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

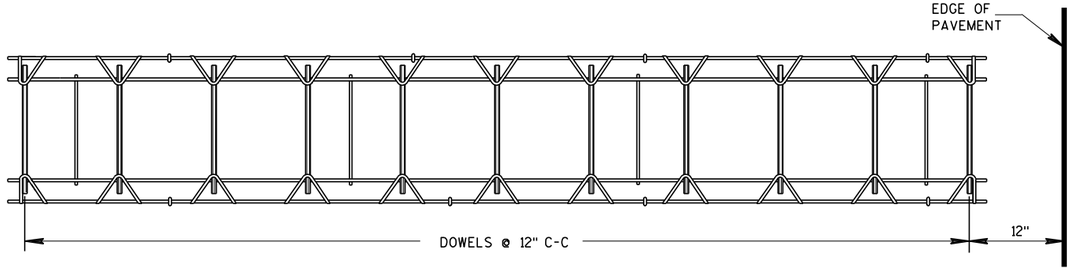
APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

6

S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2



PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①

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'

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

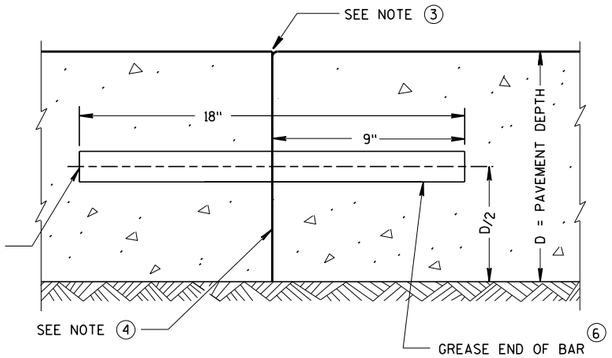
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

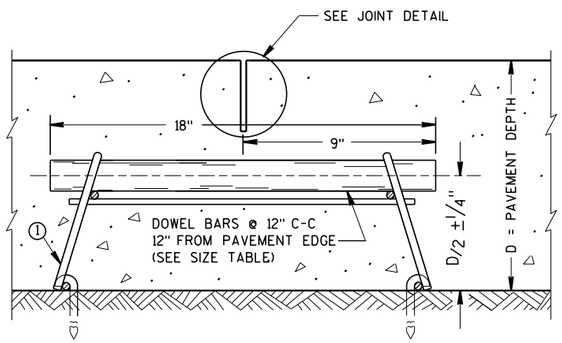
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

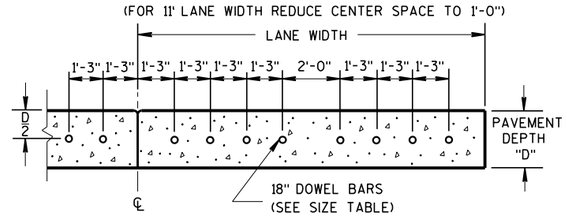
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



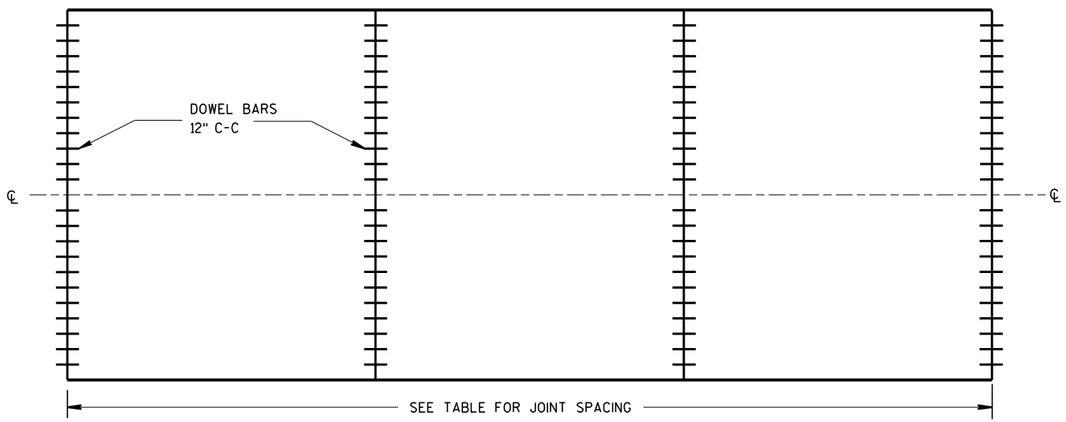
TRANSVERSE CONSTRUCTION JOINT



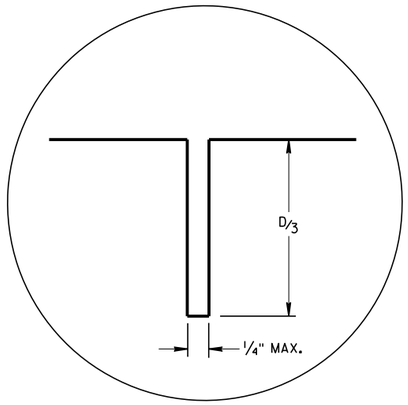
DOWELED CONTRACTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS



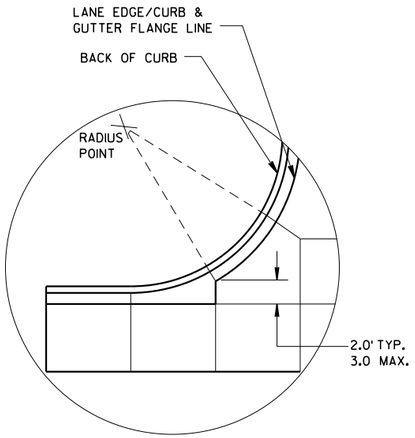
JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

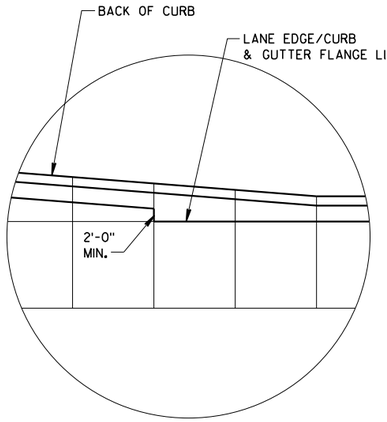
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUP
FHWA

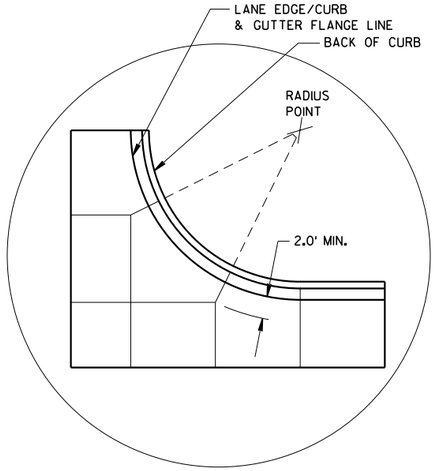
6
S.D.D. 13 C 13-9



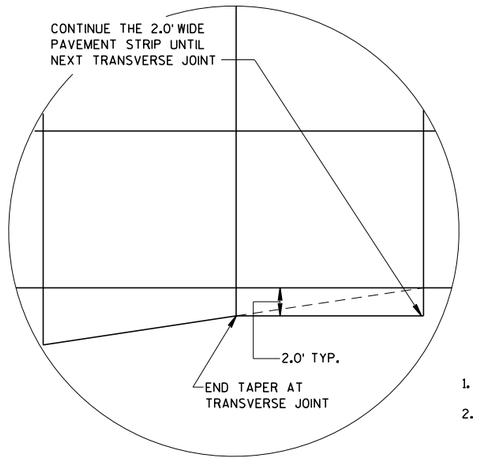
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

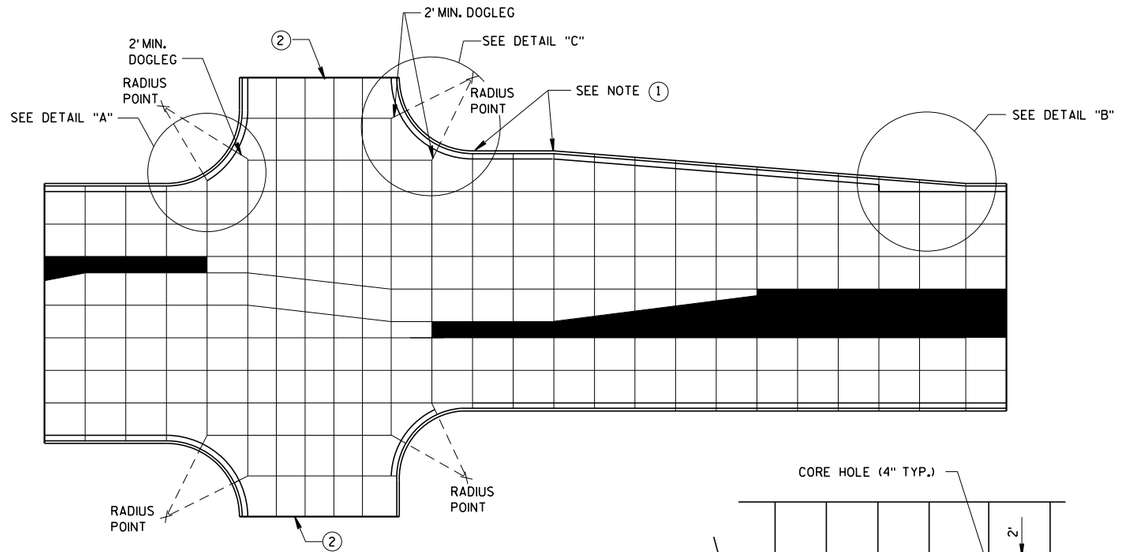
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

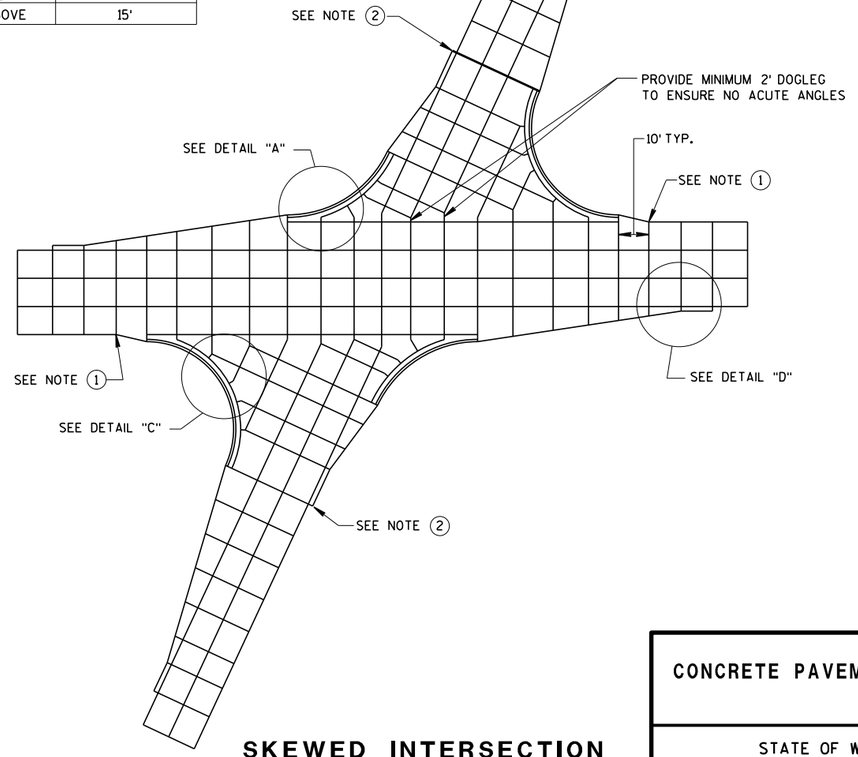
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



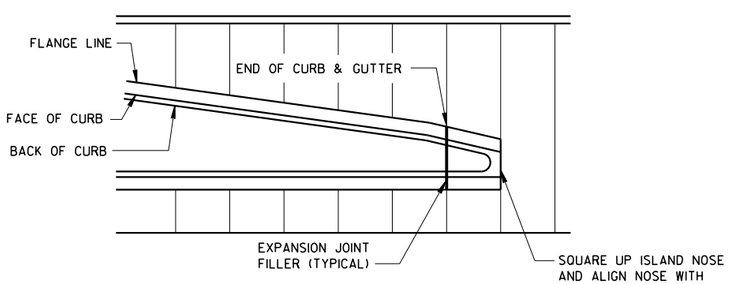
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

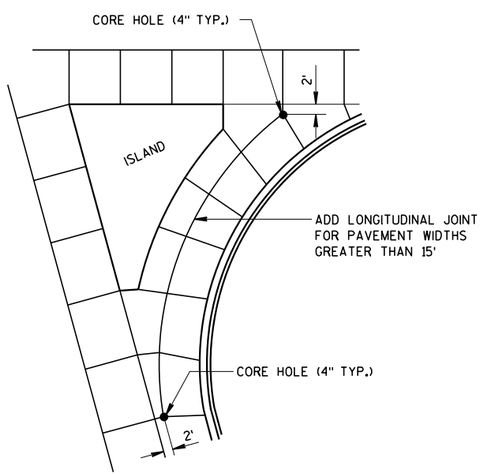
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 18-6a

6

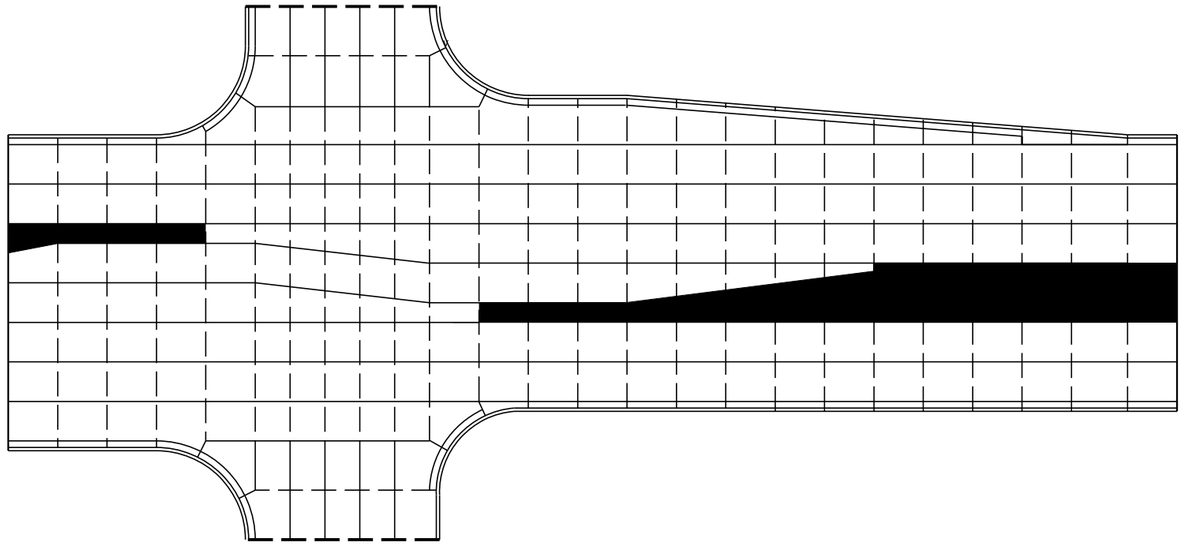
S.D.D. 13 C 18-6a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

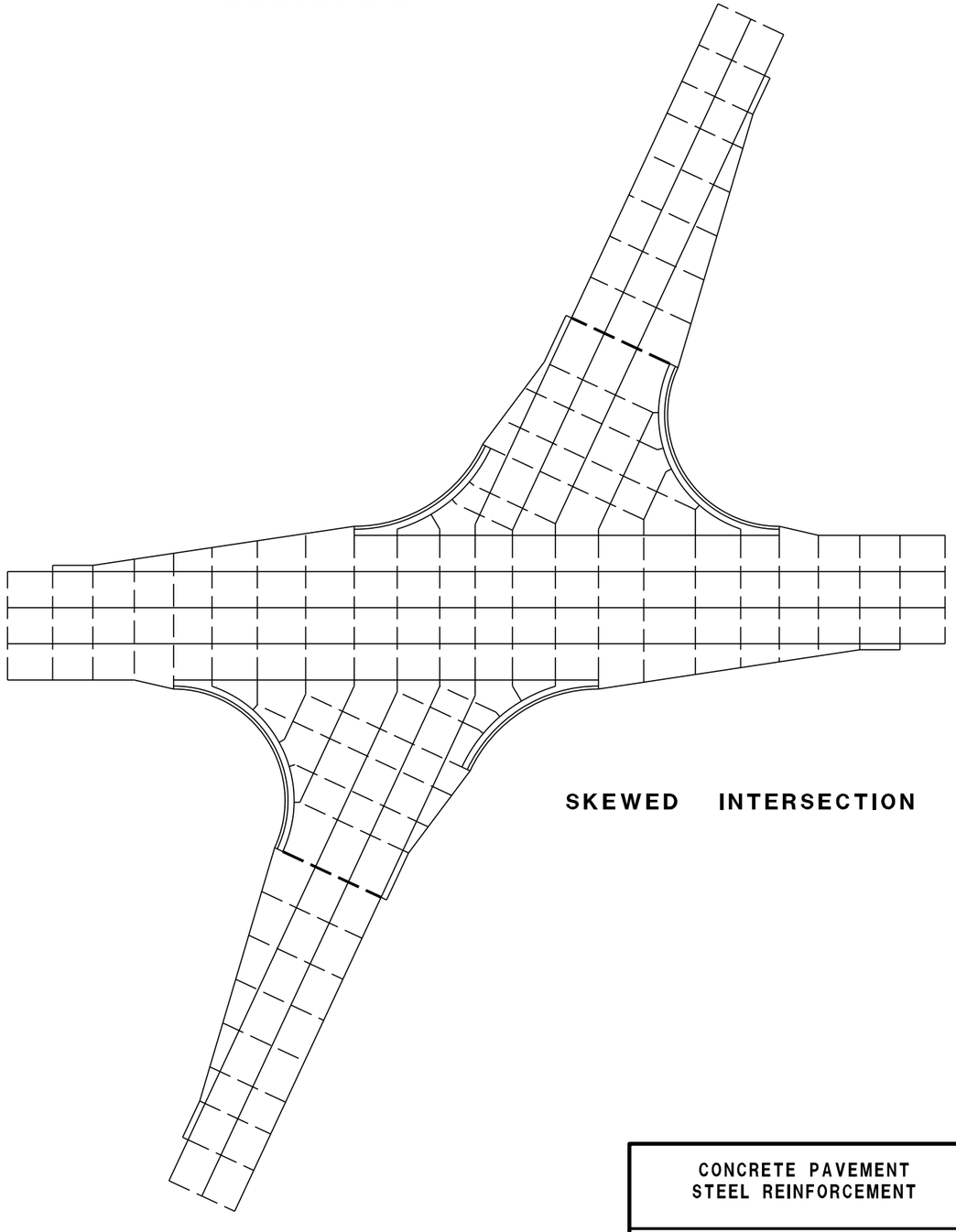
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

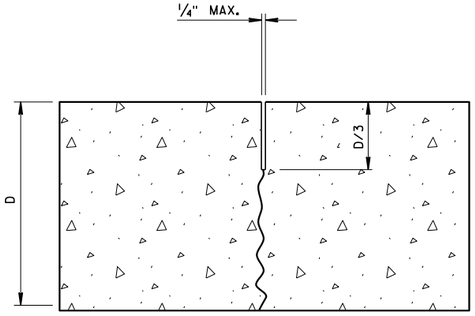
S.D.D. 13 C 18-6b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

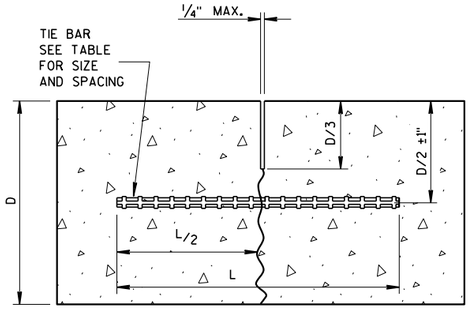
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 18-6b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

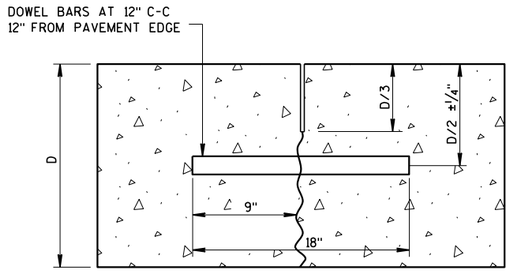
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

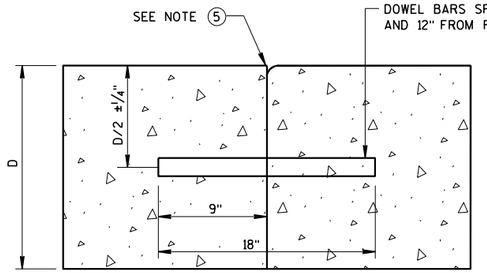
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



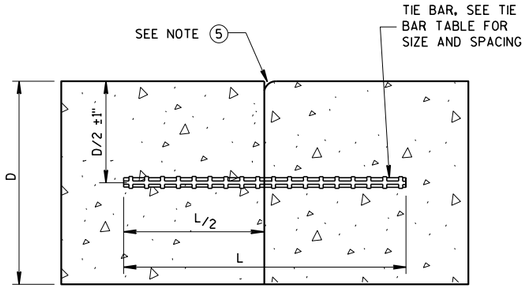
DOWELED-TRANSVERSE

CONTRACTION JOINTS

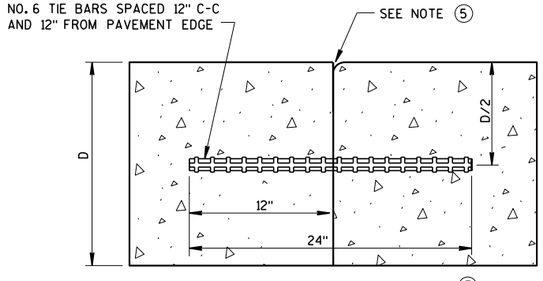
SEE NOTE (2)



DOWELED TRANSVERSE (3)

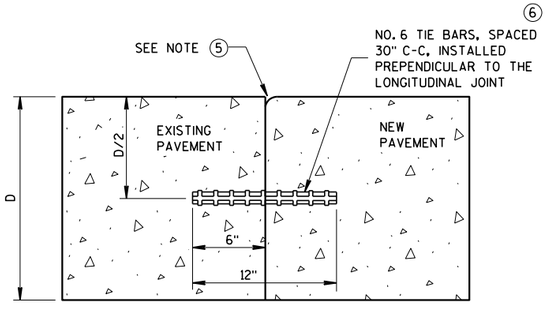


TIED LONGITUDINAL



TIED TRANSVERSE (3)

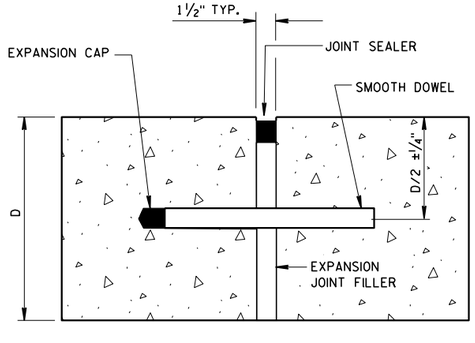
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

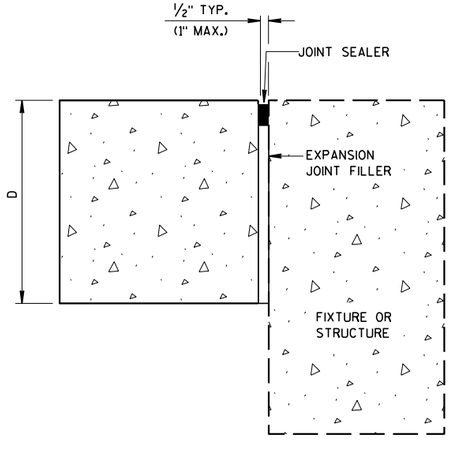
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

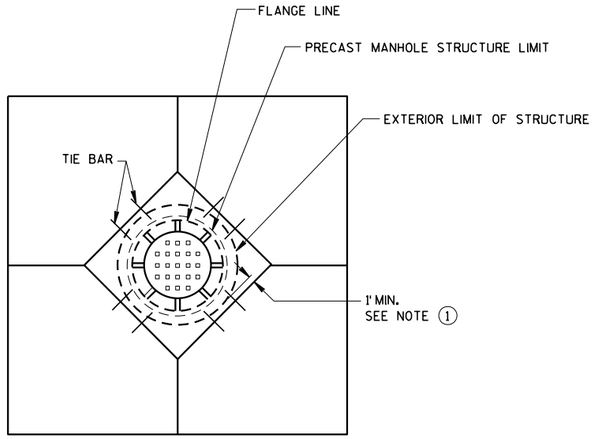
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

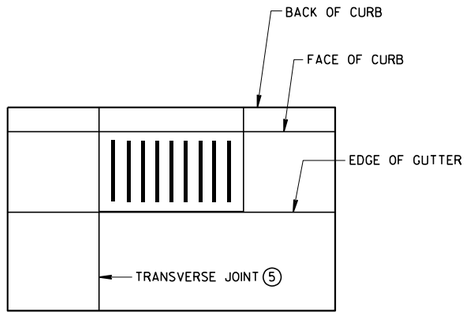
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

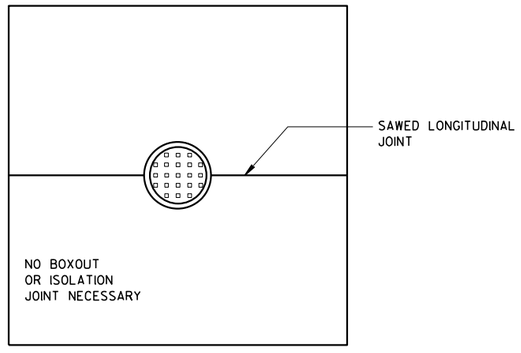
S.D.D. 13 C 18-6c



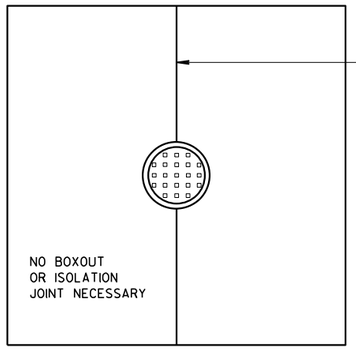
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



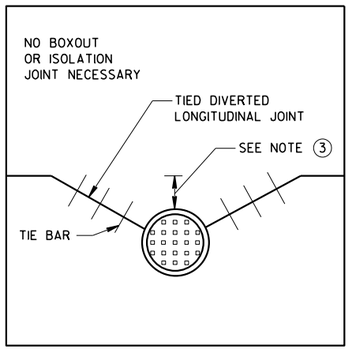
INLET WITH TRANSVERSE JOINT



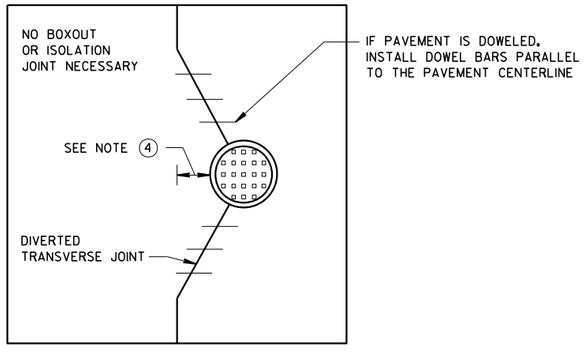
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

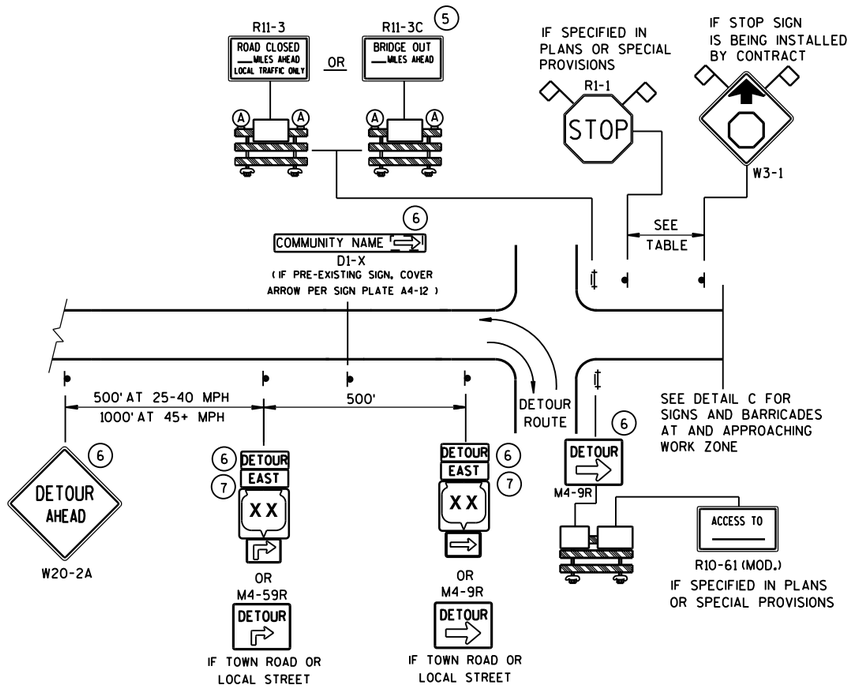
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter K... P.E. — PAVEMENT SUPT
FHWA

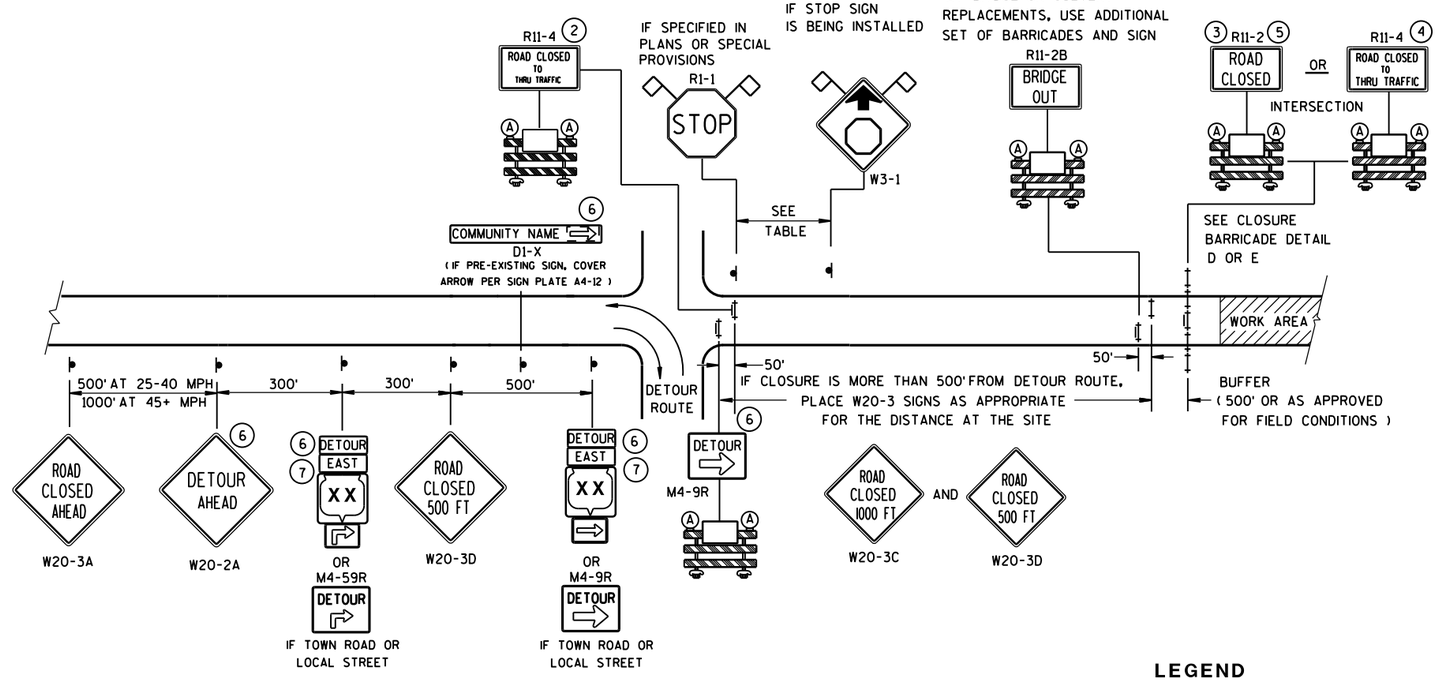
6

S.D.D. 13 C 18-6d



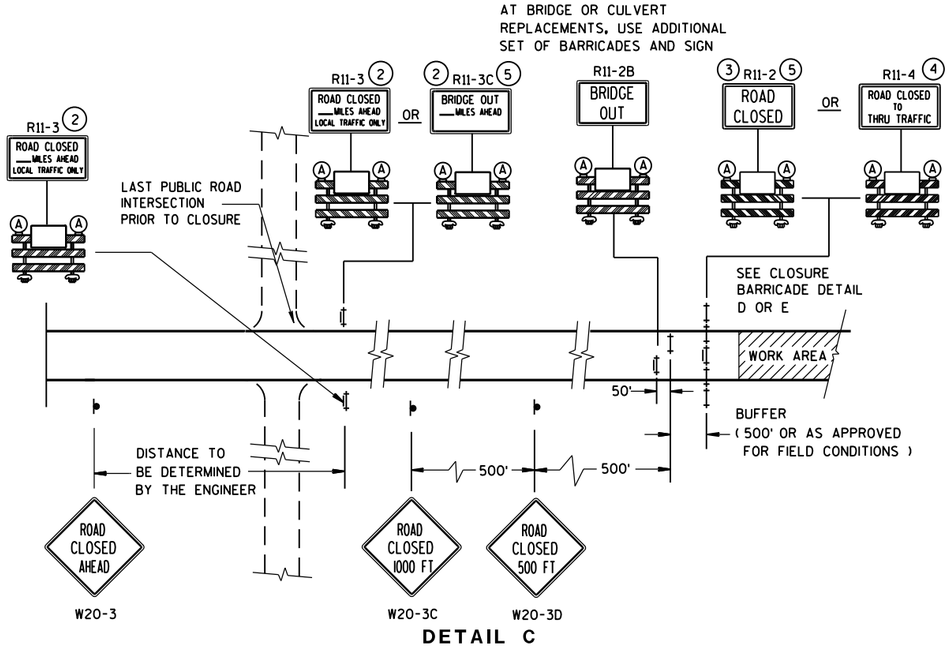
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES (1) THROUGH (7)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

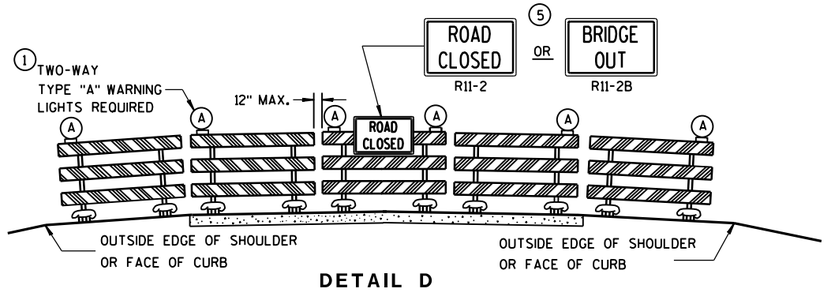
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

S.D.D. 15 C 2-6a

6

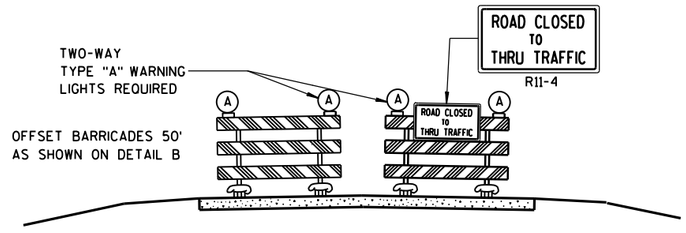
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI — FIC

FHWA

6

S.D.D. 15 C 2-6b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

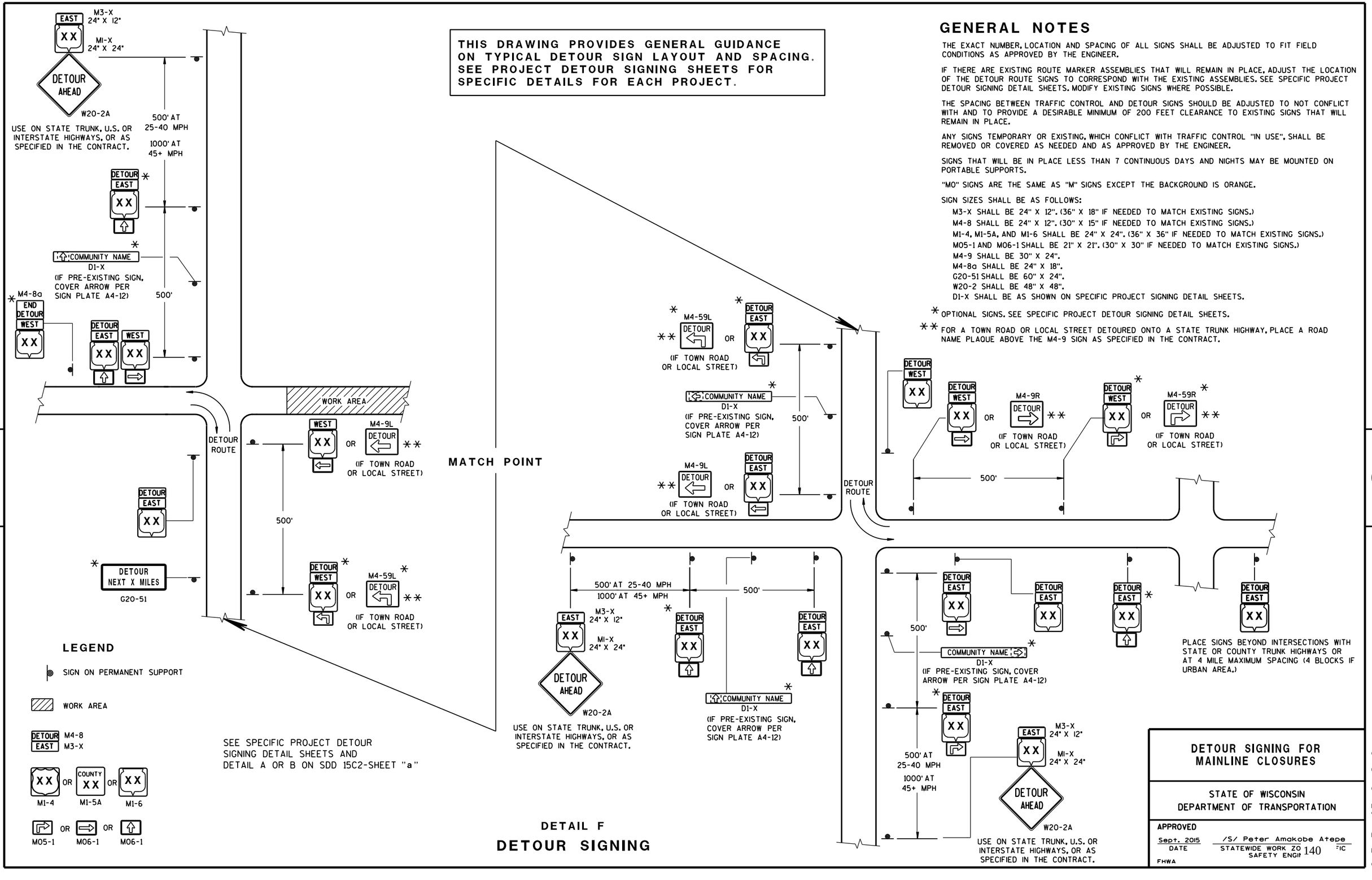
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8 / M3-X
- XX OR COUNTY XX OR XX — M1-4 / M1-5A / M1-6
- MO5-1 OR MO6-1 OR MO6-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

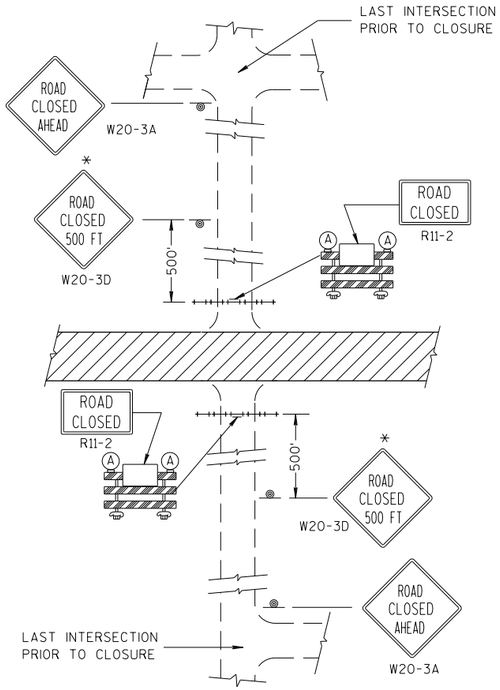
APPROVED

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] FIC
SAFETY ENGI[illegible]

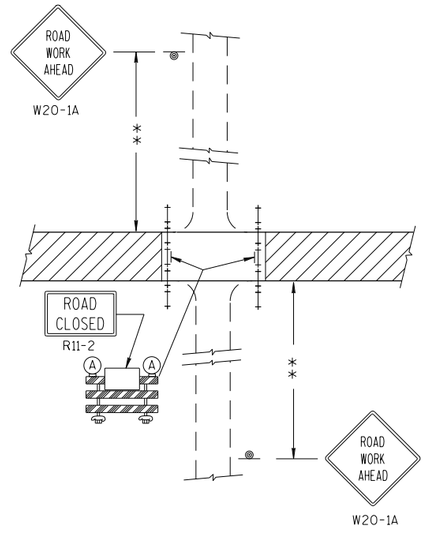
FHWA

6 S.D.D. 15 C 2-6c



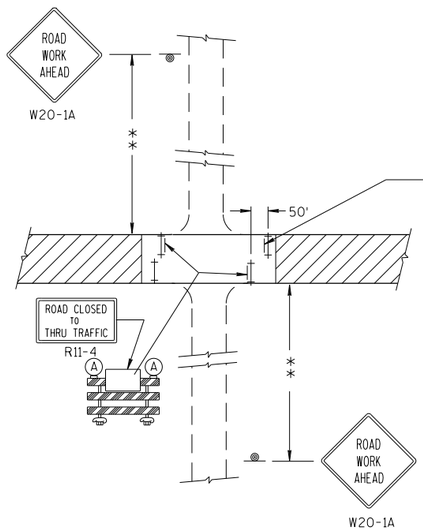
DETAIL 1

(NO ACCESS TO PROJECT)



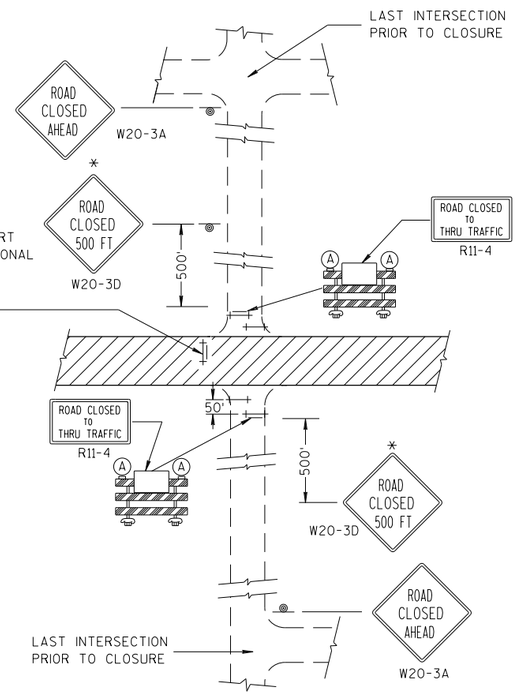
DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR,
LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

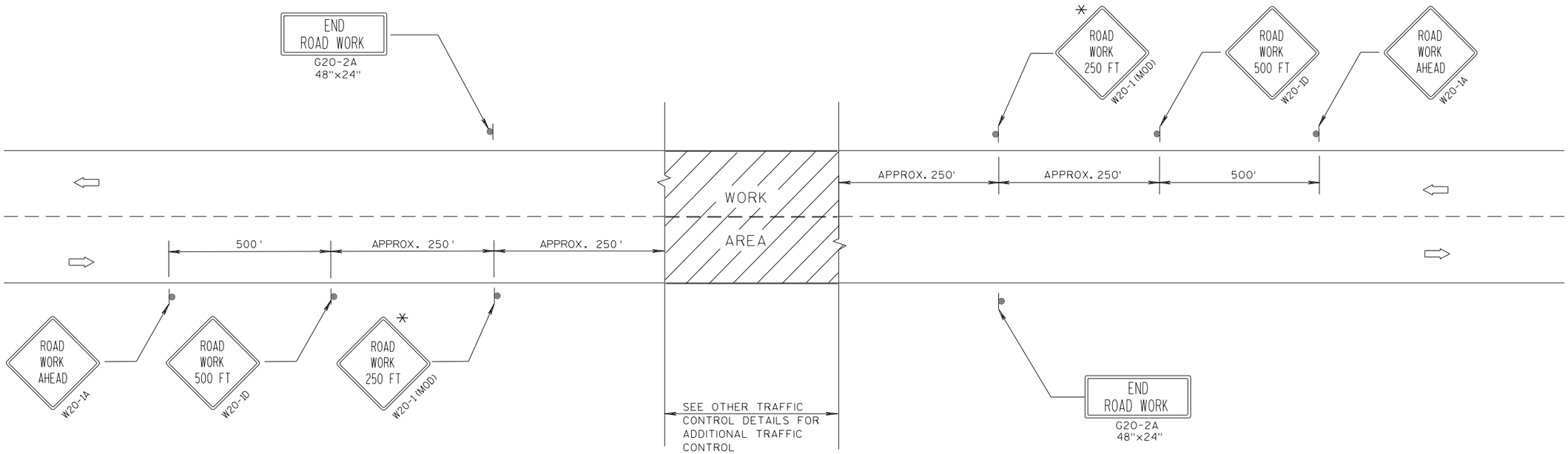
/S/ Andrew Heidtke
WORK ZONE ENGI

FHWA

6

S.D.D. 15 C 3-5

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

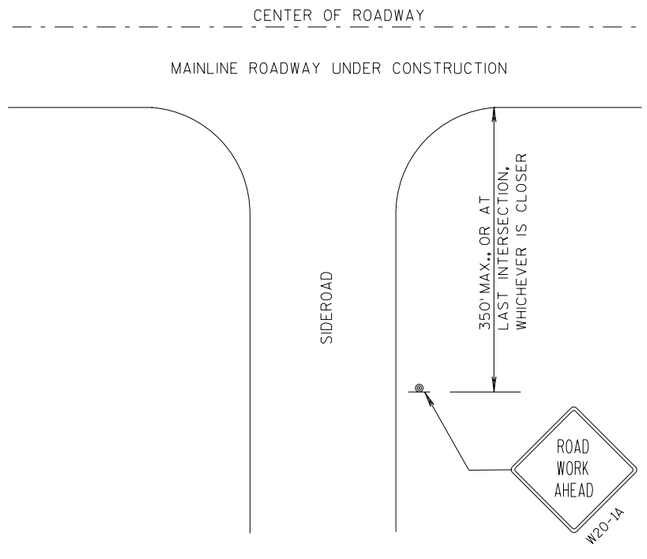
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Andrew Heldtke
WORK ZONE ENGI

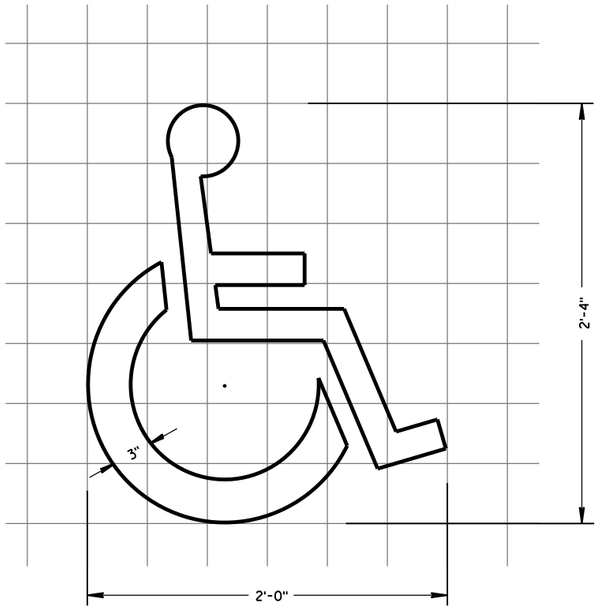
FHWA

6

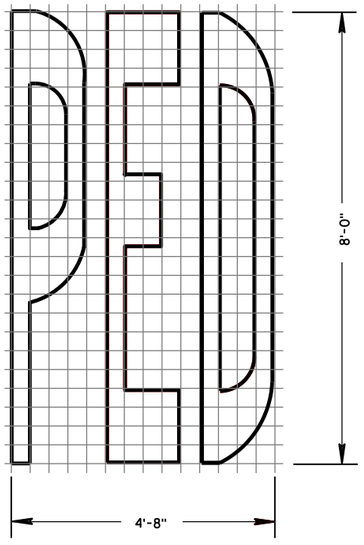
S.D.D. 15 C 5-5

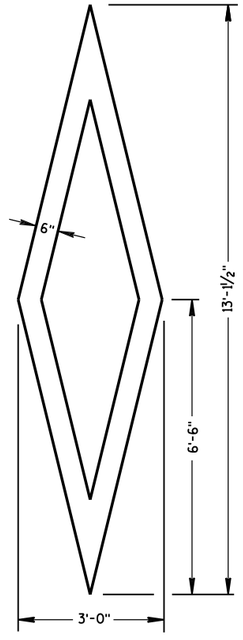
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



HANDICAP SYMBOL





PREFERENTIAL LANE SYMBOL

6

6

S.D.D. 15 C 7-14a

S.D.D. 15 C 7-14a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

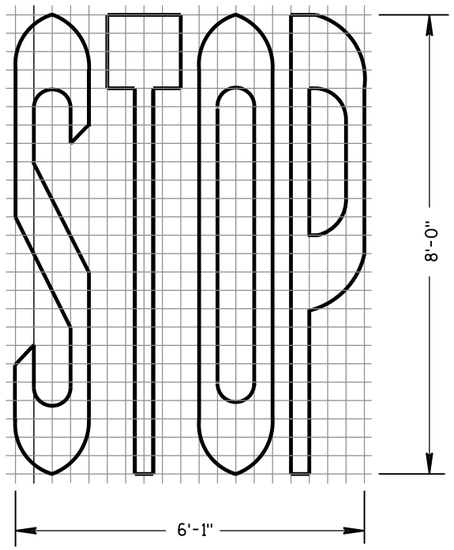
June 2017 — DATE

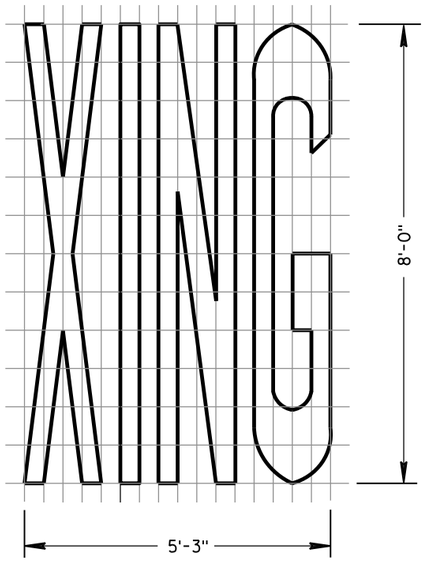
/S/ Matthew R. Rauch — STATE SIGNING AND MARK EER

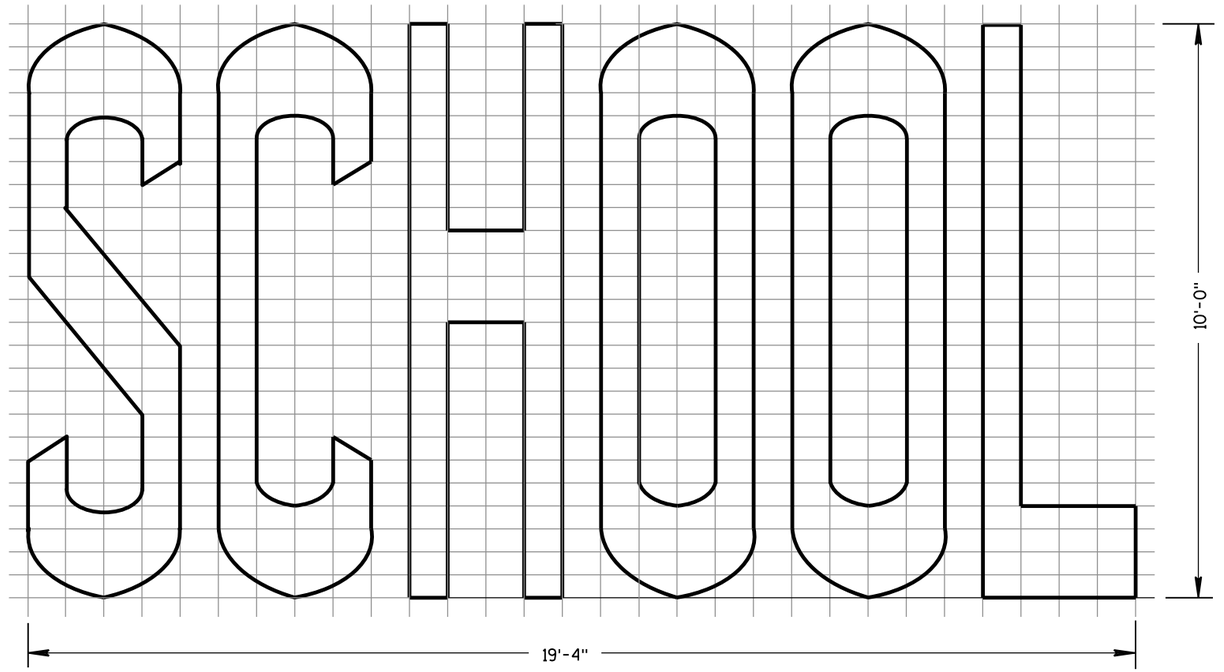
FHWA

GENERAL NOTES

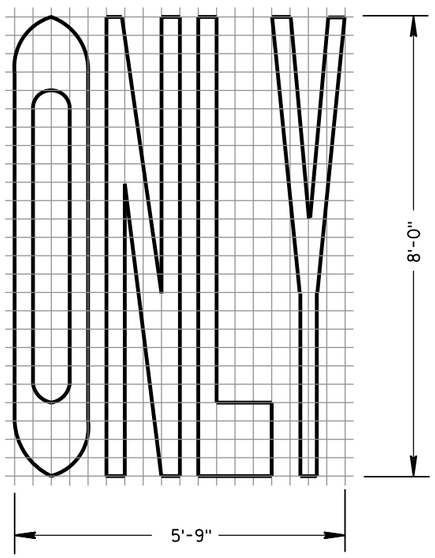
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

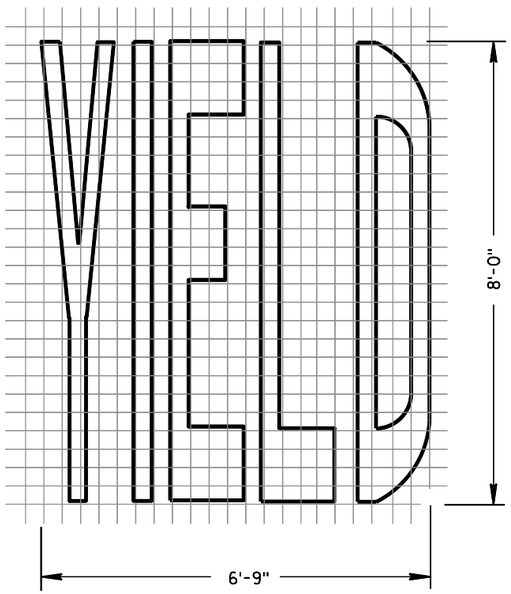


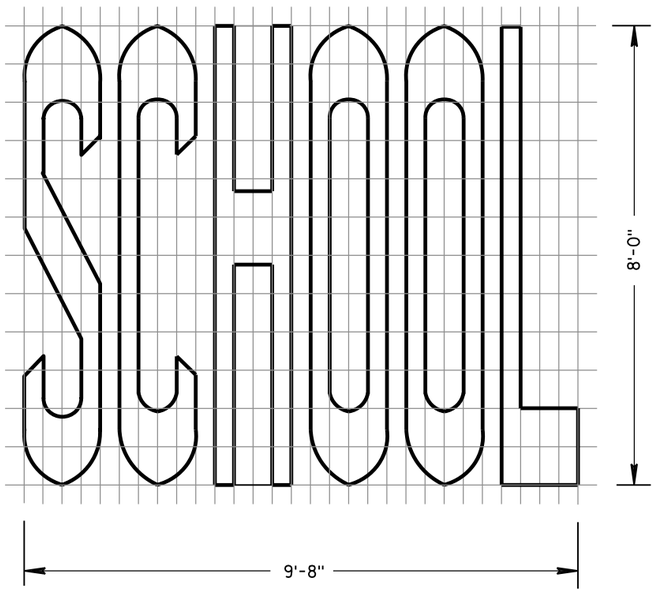




TWO-LANE







SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
EER
FHWA

6

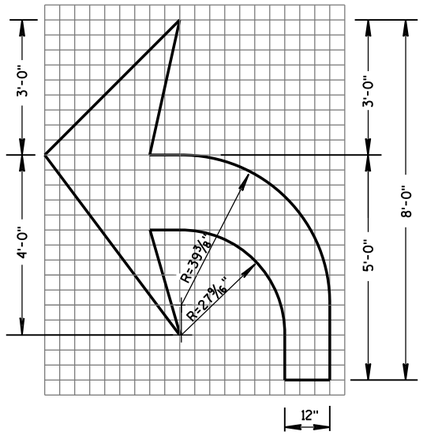
S.D.D. 15 C 7-14b

6

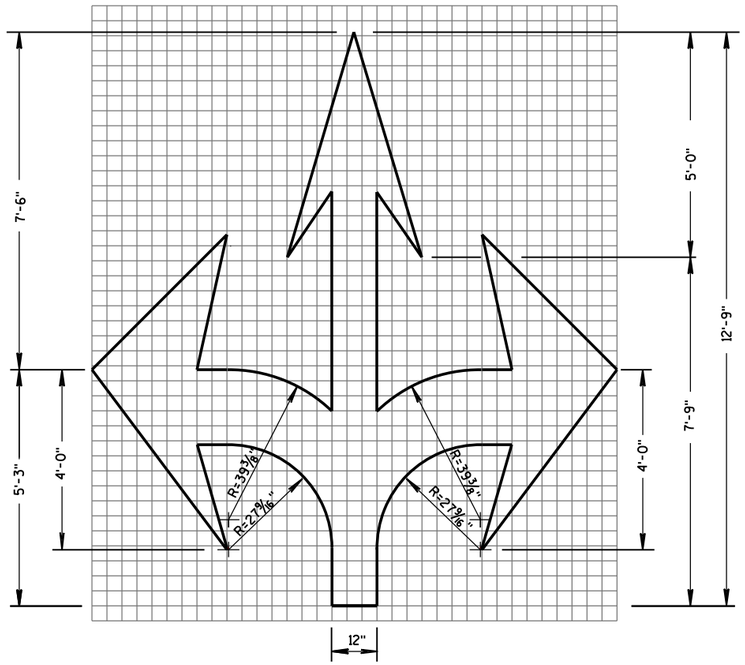
S.D.D. 15 C 7-14b

GENERAL NOTES

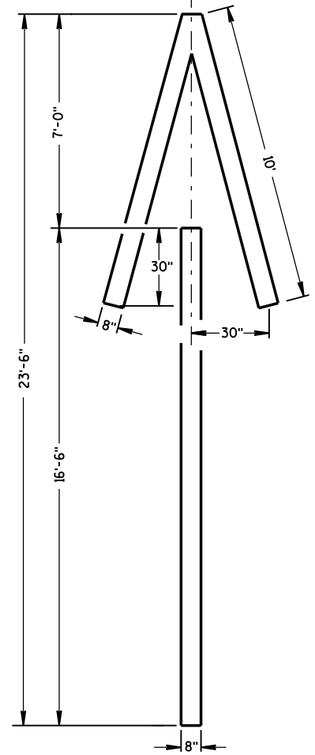
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



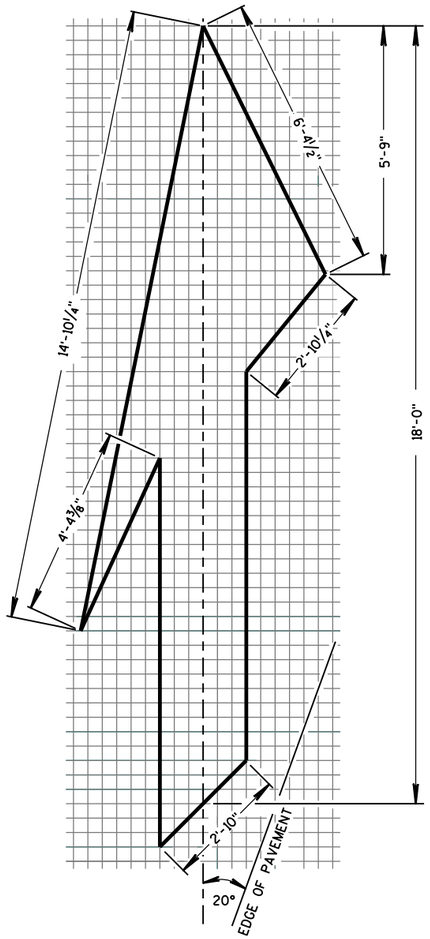
TYPE 2



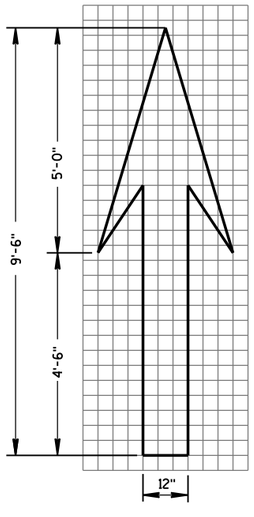
TYPE 6



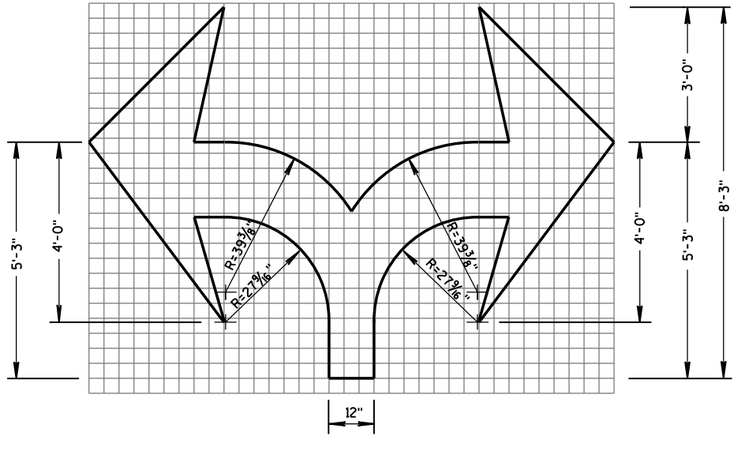
TYPE 4



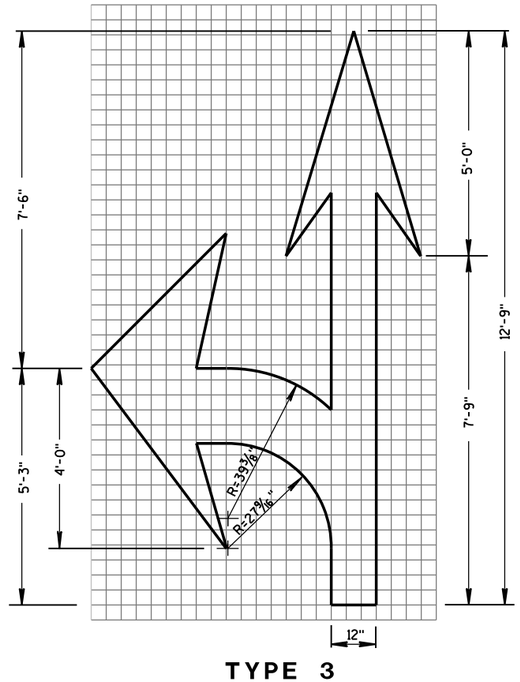
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

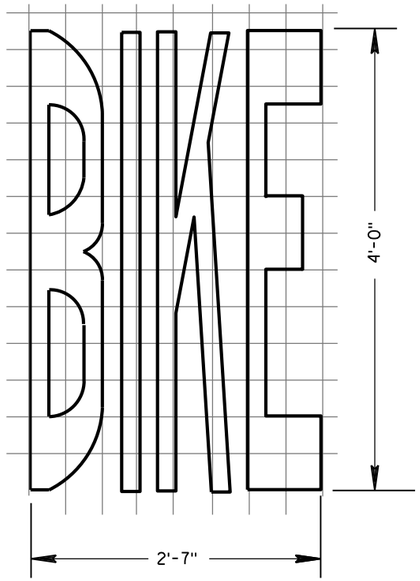
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]NEER
FHWA

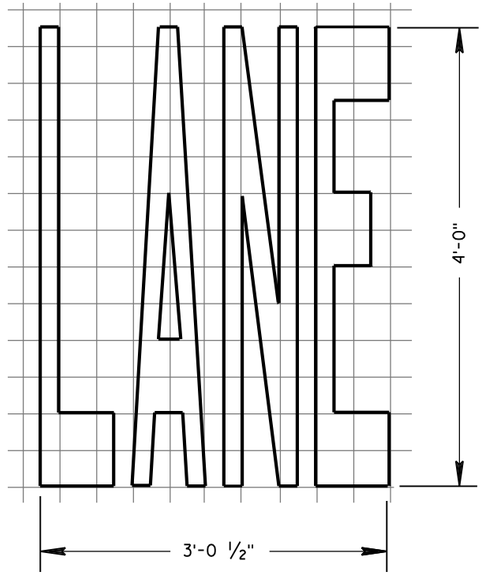
6

S.D.D. 15 C 7-14c

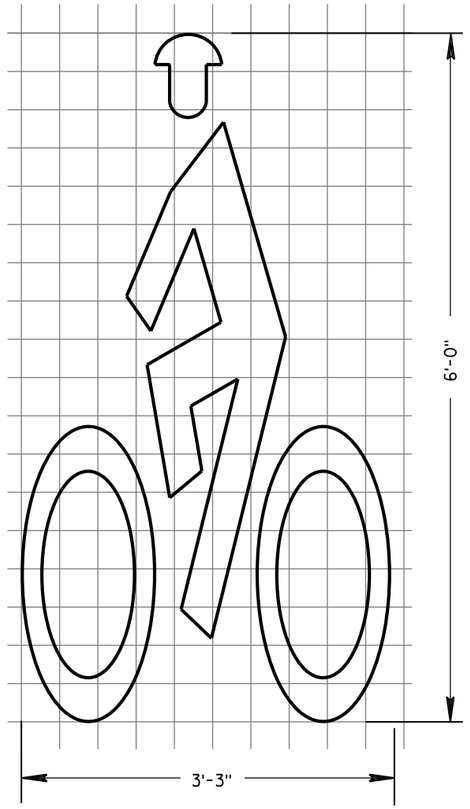
6

S.D.D. 15 C 7-14c

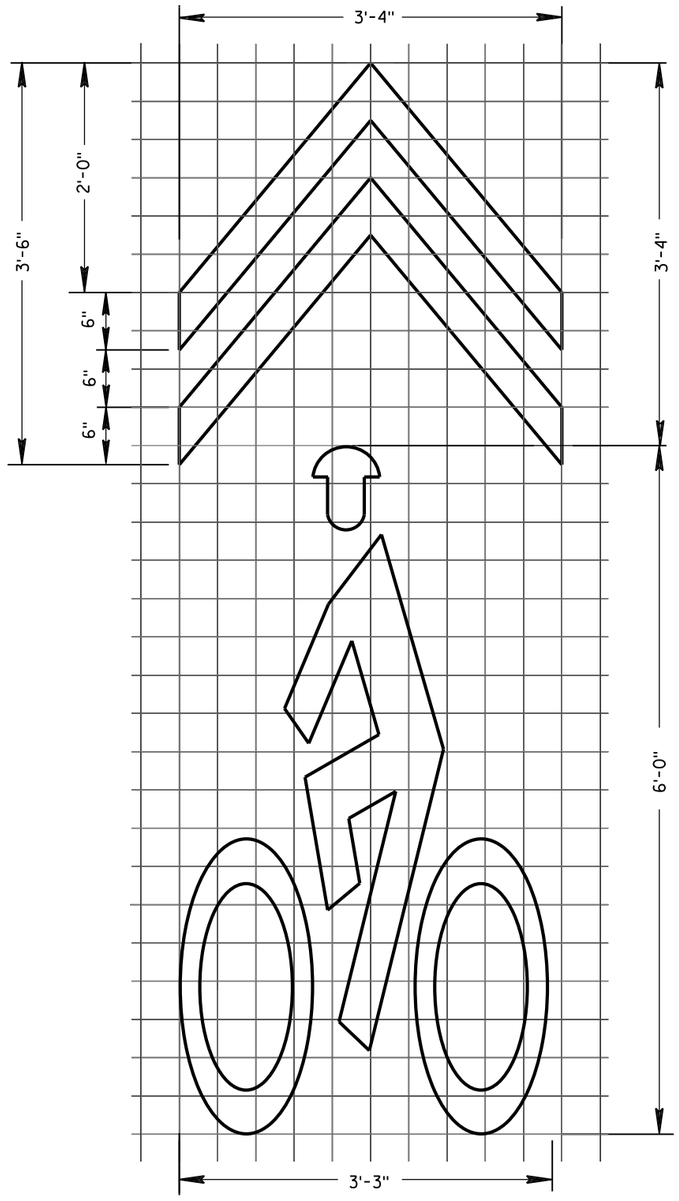




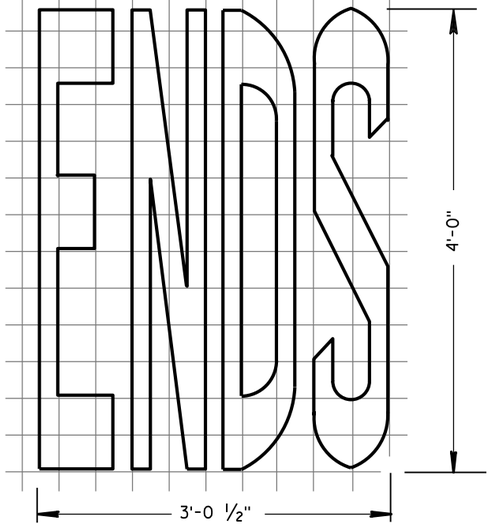
BIKE LANE WORDS



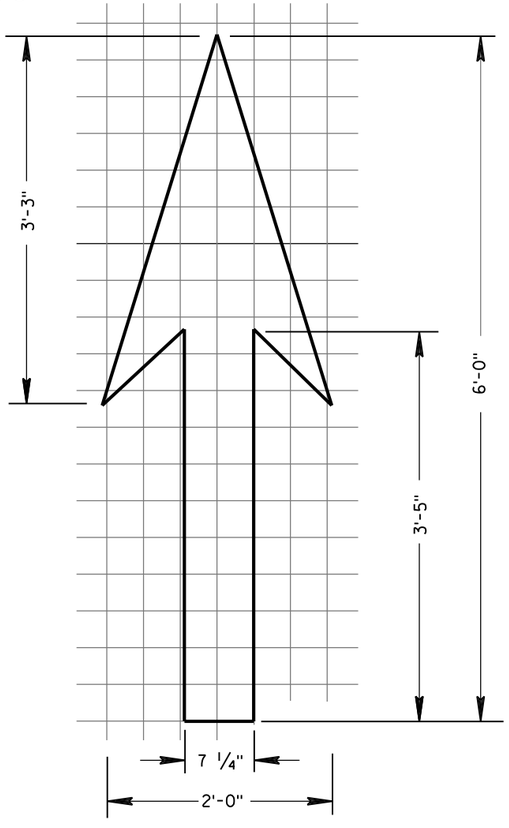
BIKE LANE SYMBOL



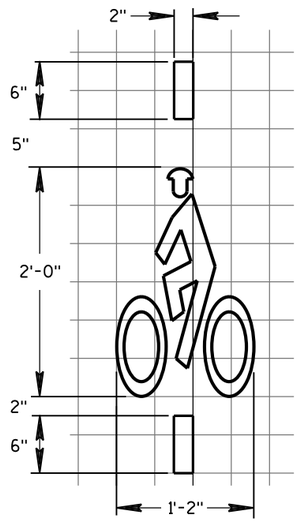
BIKE SYMBOL FOR SHARED LANE



BIKE LANE WORDS



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING

GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

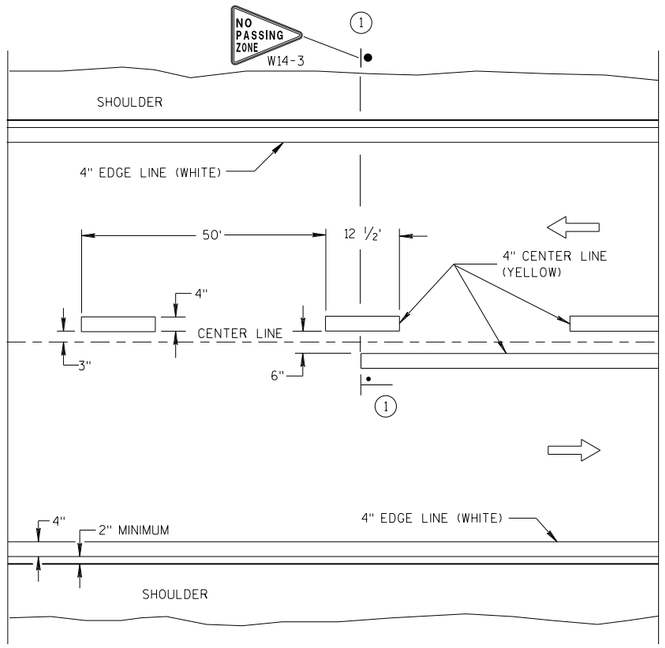
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK[ER]
FHWA

6

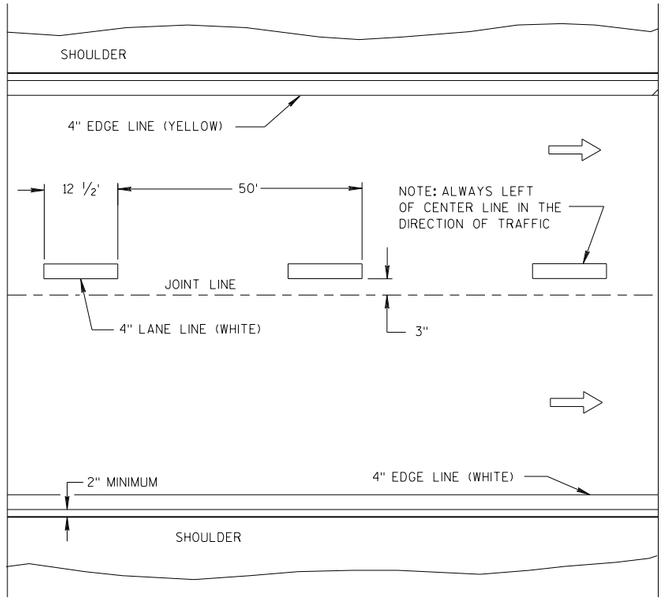
S.D.D. 15 C 7-14e

6

S.D.D. 15 C 7-14e



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

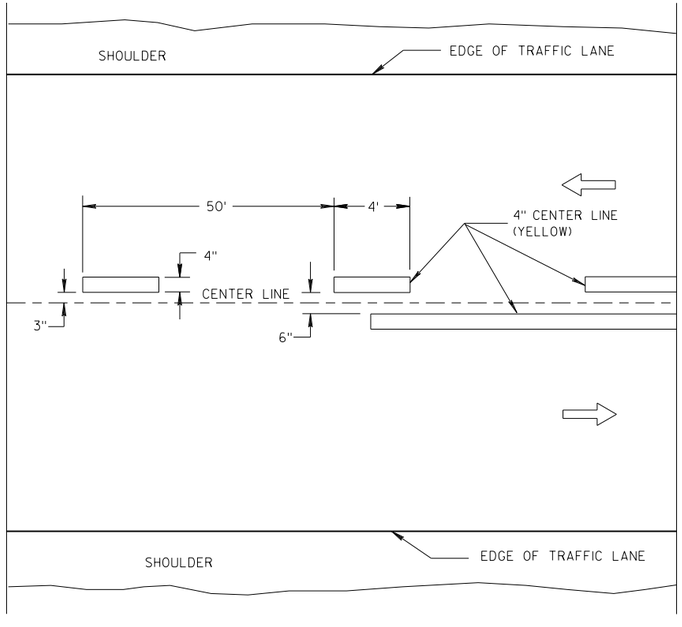
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

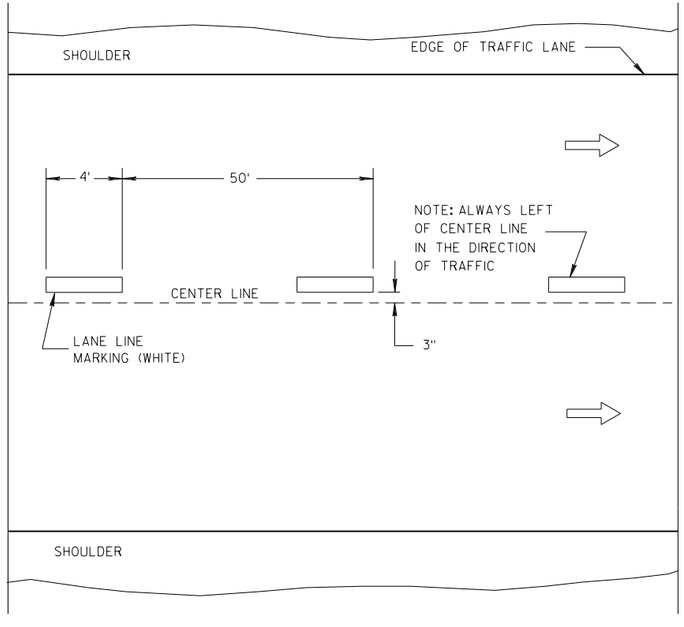
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

6

S.D.D. 15 C 8-19a

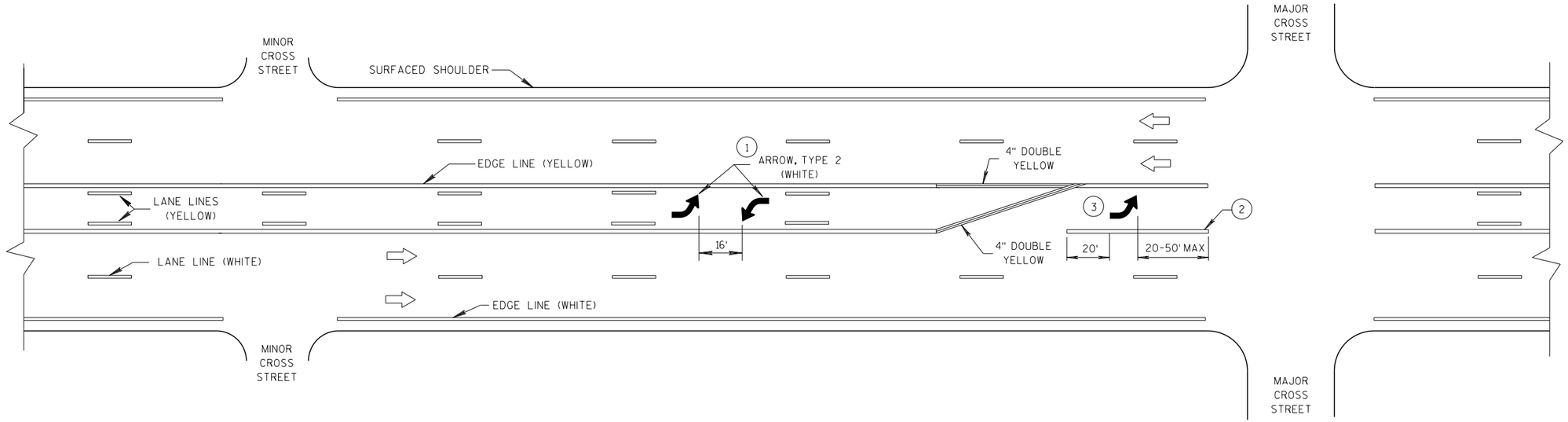
6

S.D.D. 15 C 8-19a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48'DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT

DIRECTION OF TRAFFIC



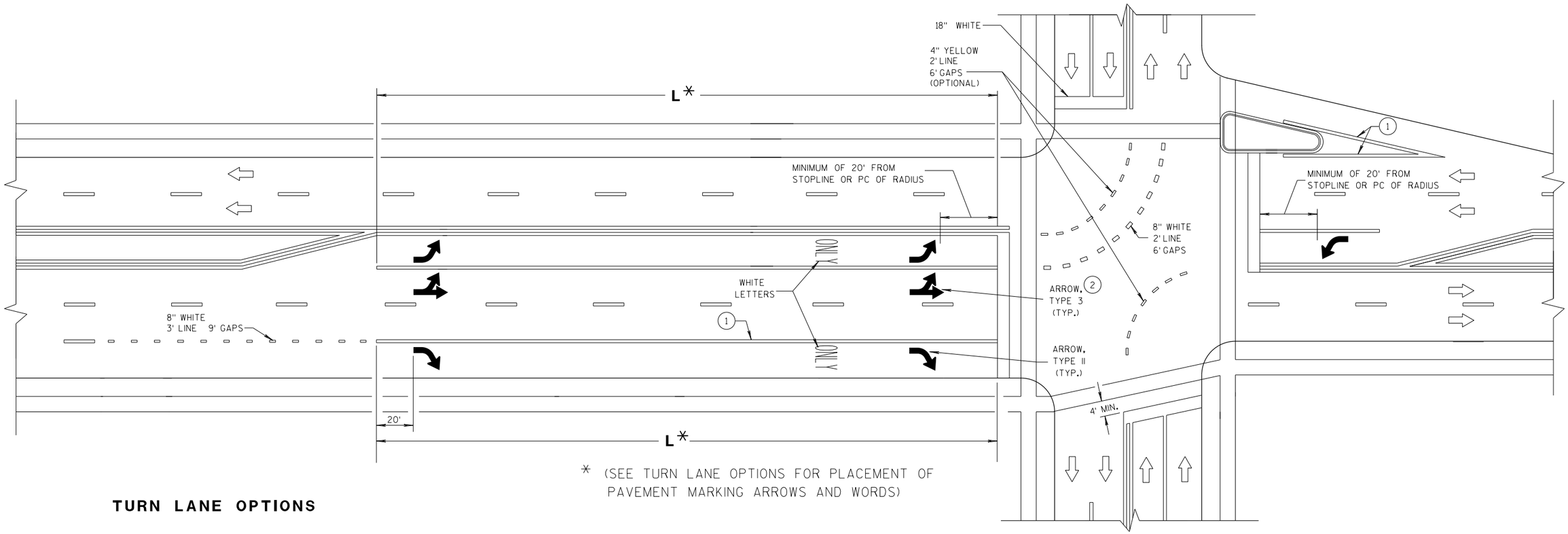
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

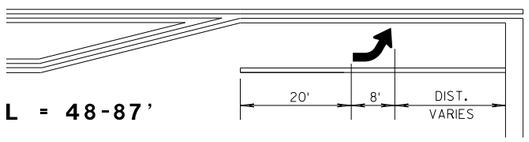
S.D.D. 15 C 8-19b



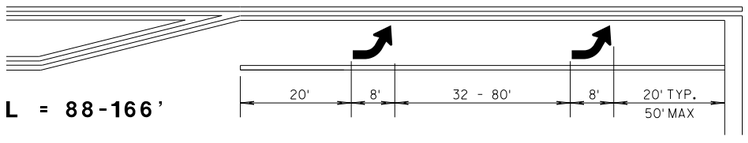
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

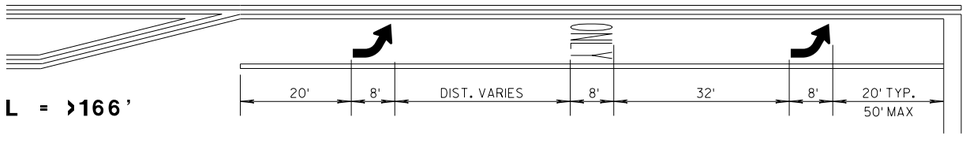
LENGTH OF TURN BAY (**L**) OF 0-47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48-87'



L = 88-166'



L = >166'

GENERAL NOTES

(1) 8" WHITE

(2) QUANTITY AND LOCATION OF TYPE 3 ARROW ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION, THE ARROWS AND ONLY MARKING ARE ELIMINATED.

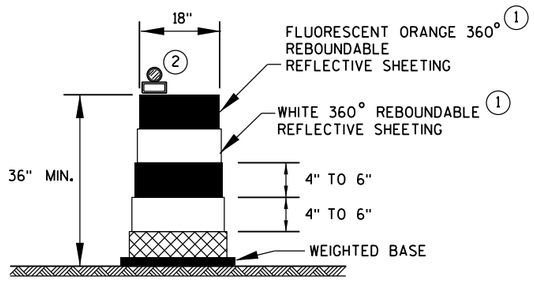
⇨ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

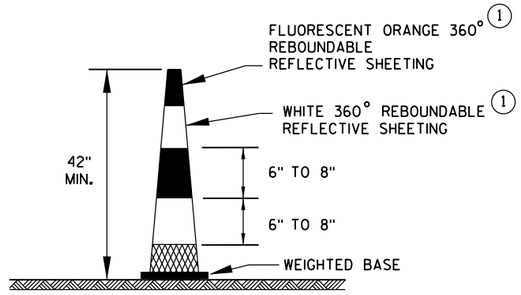
PAVEMENT MARKING (TURN LANES)

6

S.D.D. 15 C 8-19c



DRUM

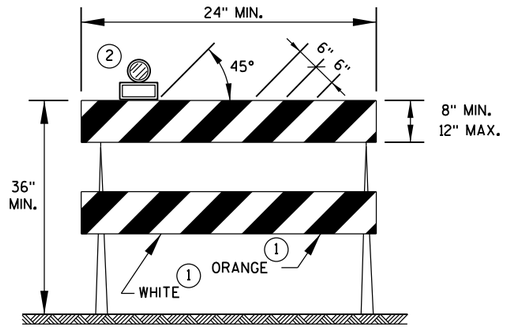


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

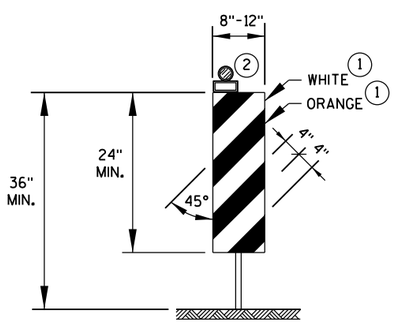
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



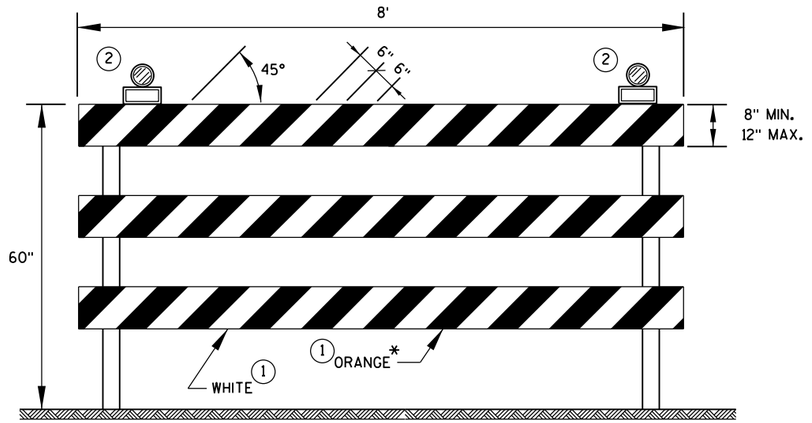
TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE 3 BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

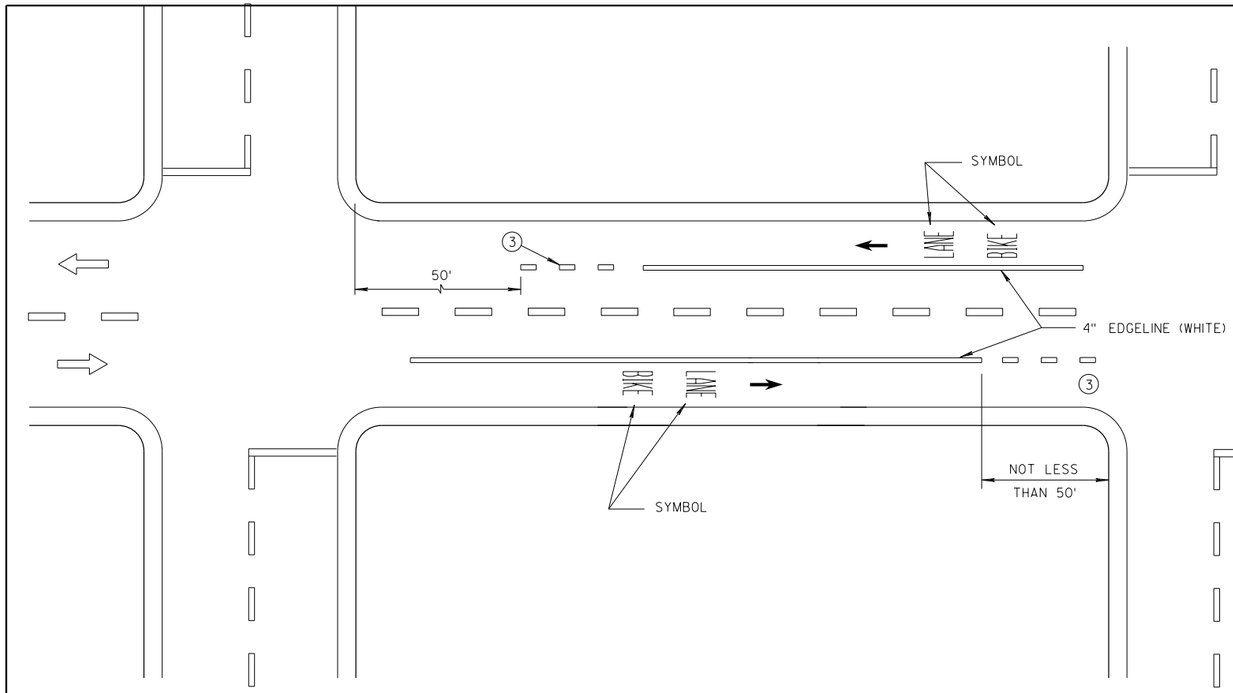
June 2017 — DATE

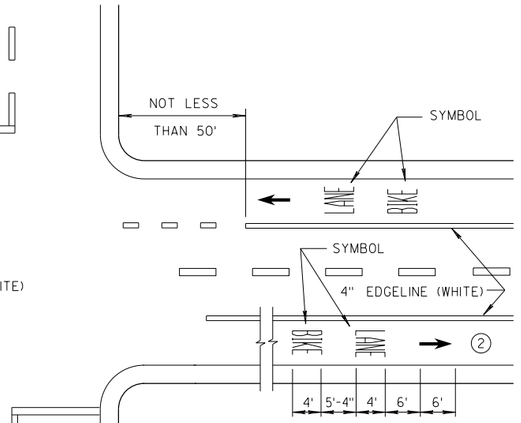
/S/ Andrew Heidtke — WORK ZONE ENG

FHWA

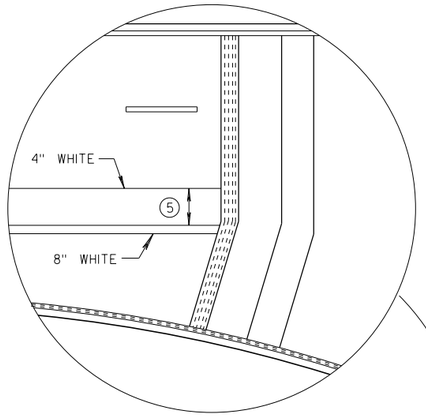
6

S.D.D. 15 C 11-7b

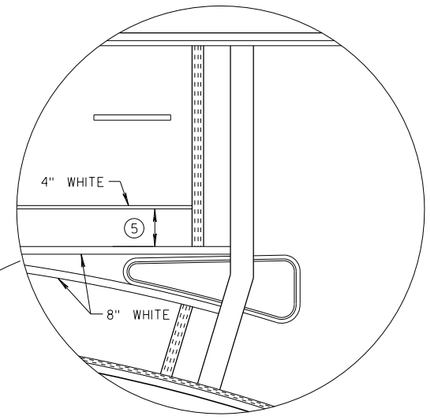




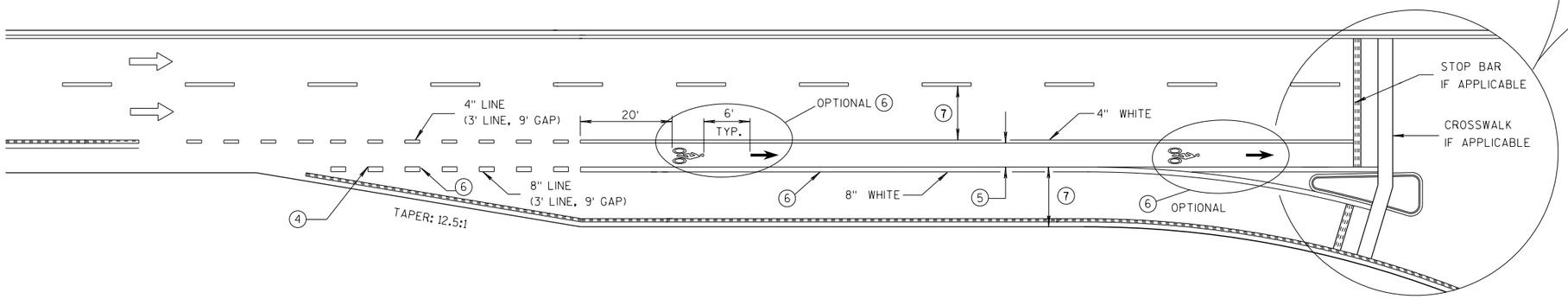
DESIGNATED BICYCLE LANE
NO PARKING



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS
(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3' LINE, 9' GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMODATION IS TYPICALLY 5 FEET WIDE AND A MINIMUM OF 4 FEET FROM A LONGITUDINAL JOINT. USE 5 FEET AT 45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FEET WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

DIRECTION OF TRAVEL

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 151 NEER

FHWA

6

S.D.D. 15 C 29-6a

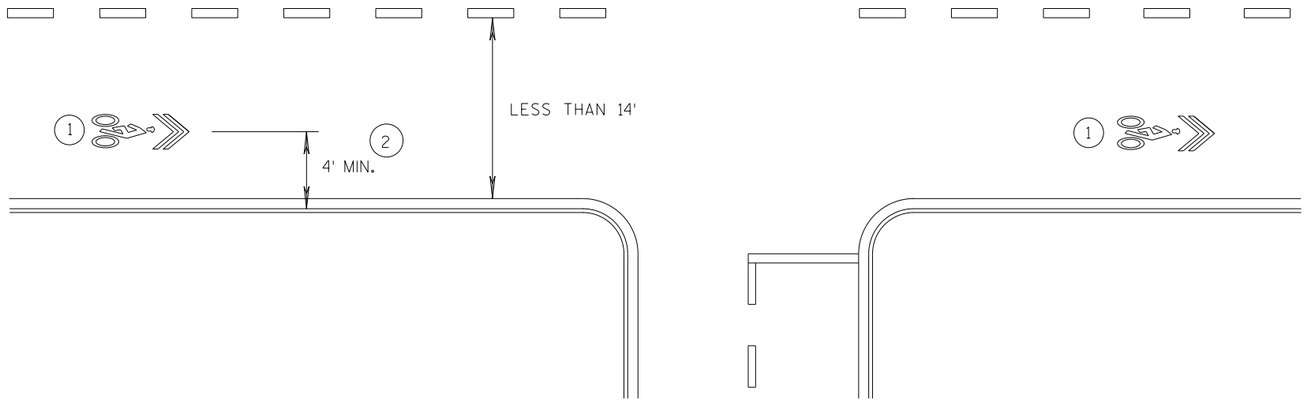
6

S.D.D. 15 C 29-6a

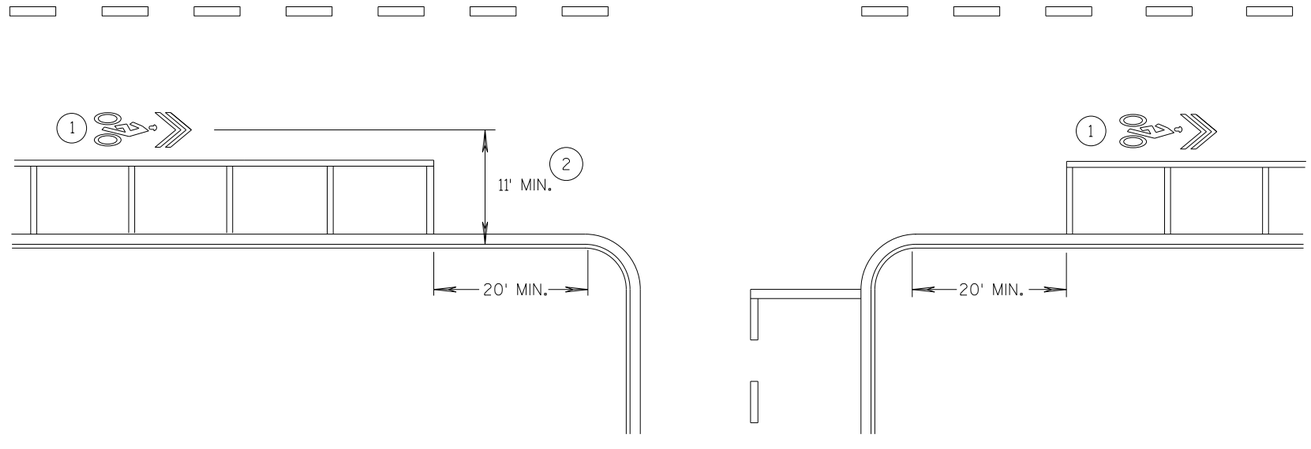
GENERAL NOTES

(1) MINIMUM OF ONE PER BLOCK, MAXIMUM OF 250 FEET.

(2) OR TO EDGE OF PAVEMENT WITHOUT CURB.



WITHOUT PARKING



WITH PARKING

PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARKI ER

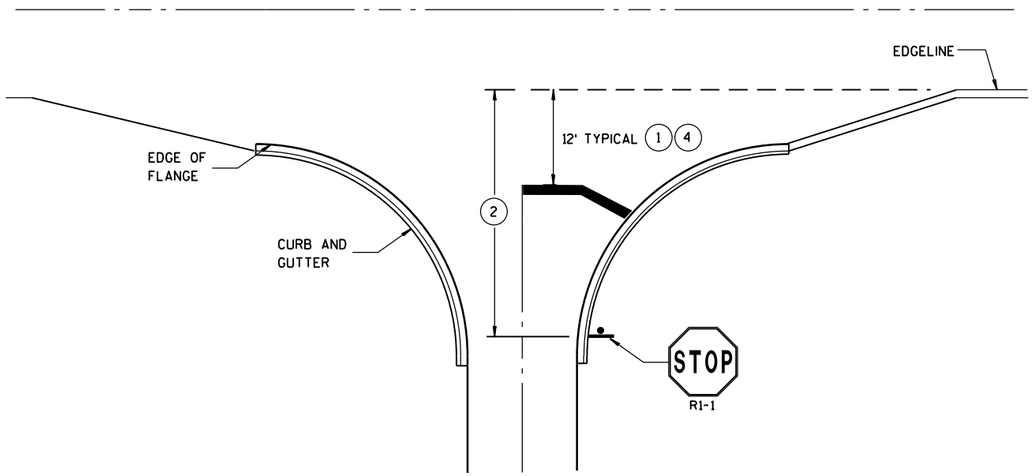
FHWA

6

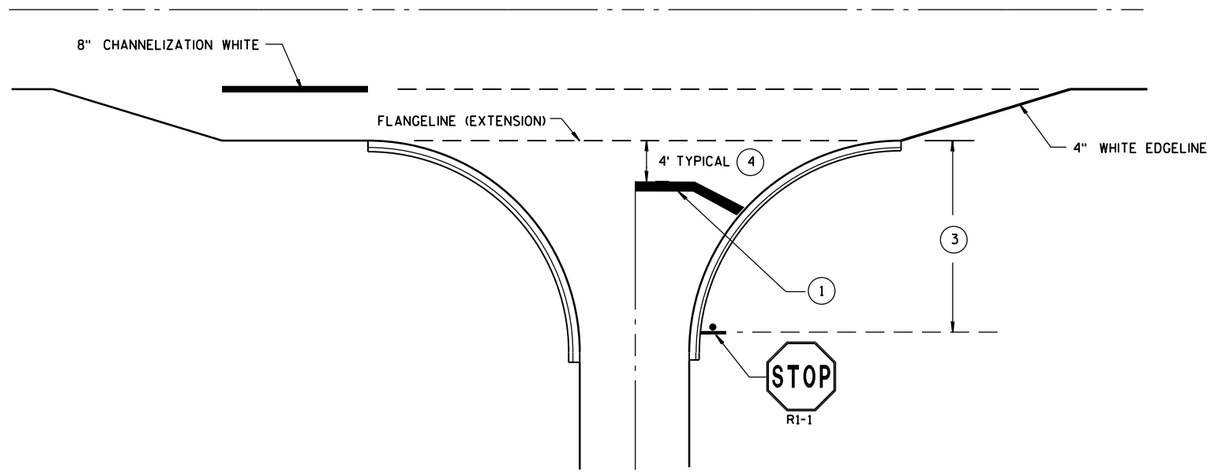
S.D.D. 15 C 29-6b

6

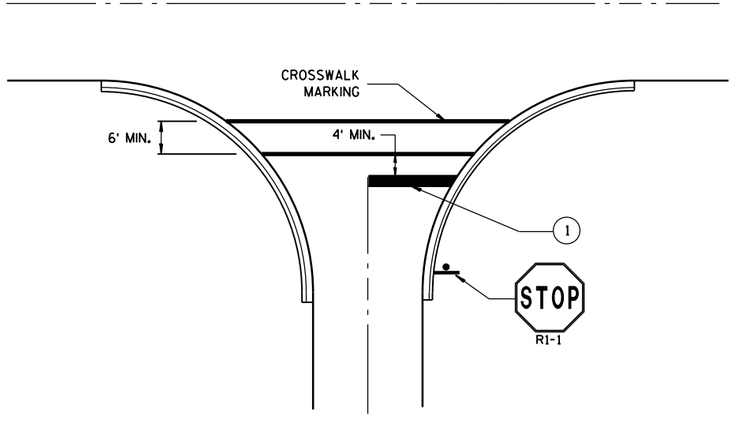
S.D.D. 15 C 29-6b



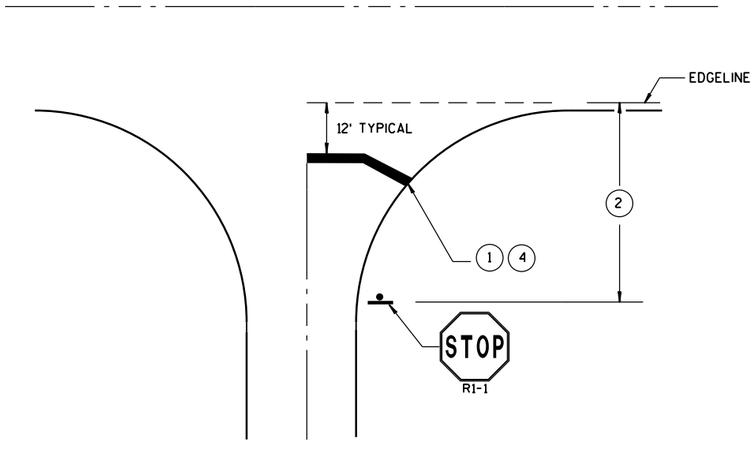
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

(1) 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

(2) IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.

(3) IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.

(4) MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

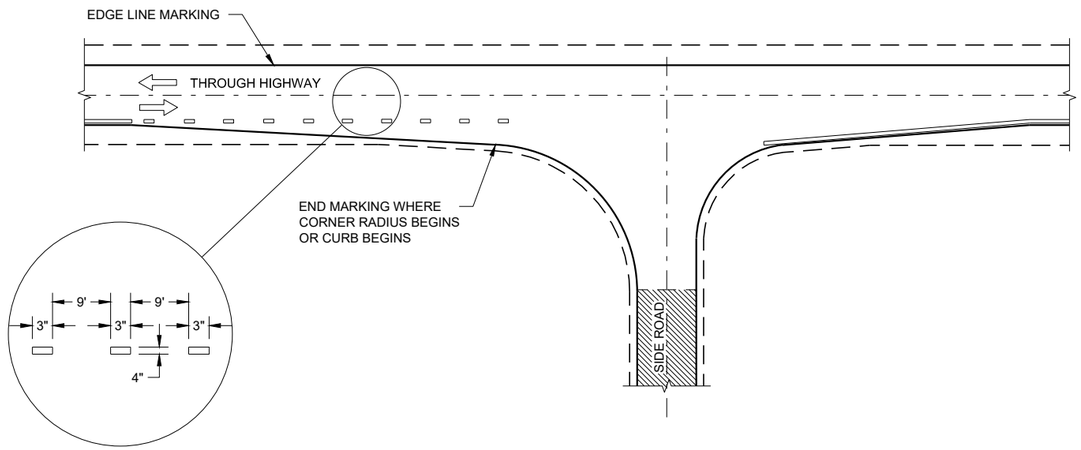
Sept., 2017
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR

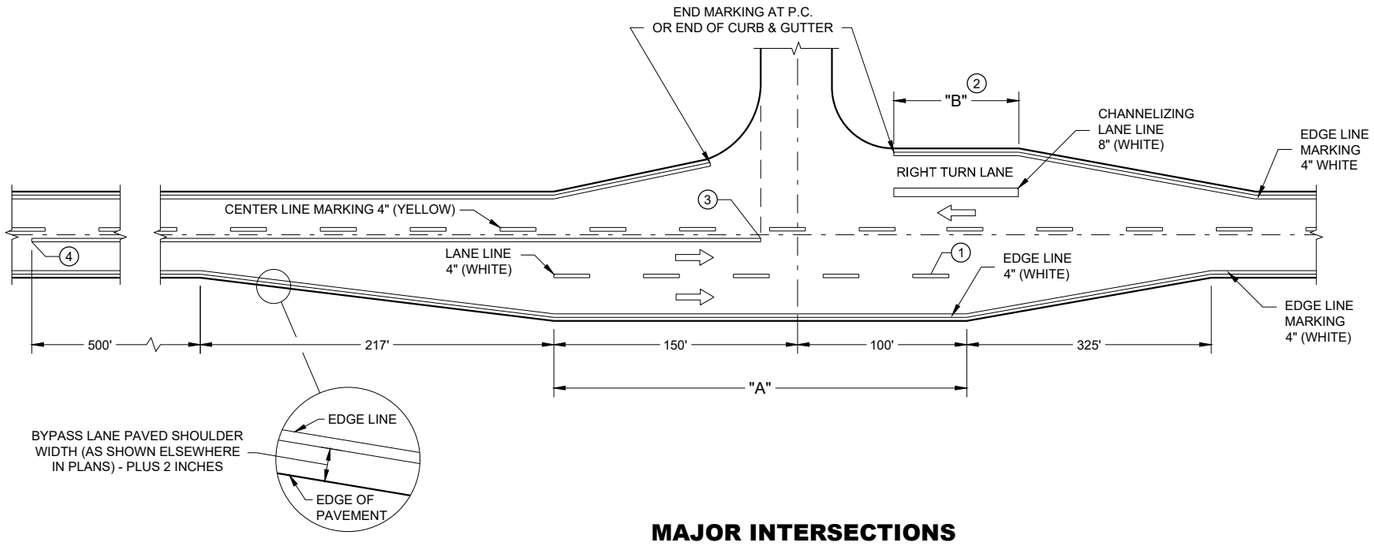
FHWA

6

S.D.D. 15 C 33-3



MINOR INTERSECTION



MAJOR INTERSECTIONS

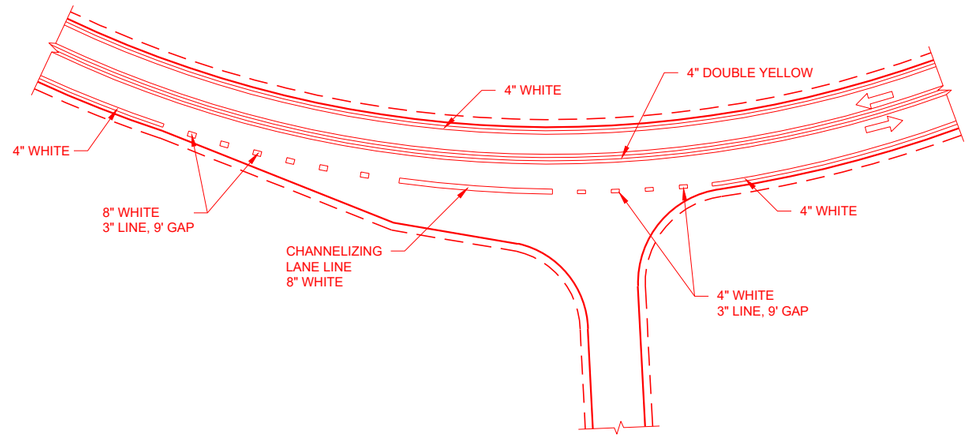
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

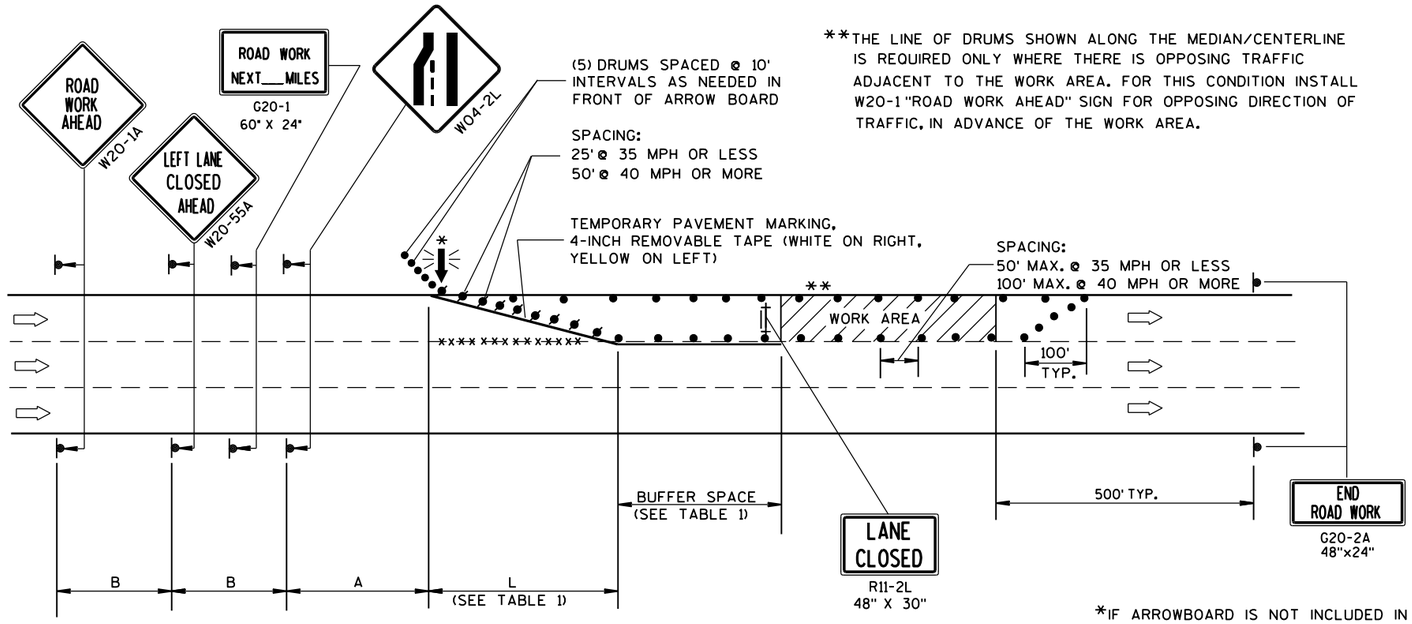
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 03a

6

SDD 15C35 - 03a



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

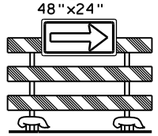


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

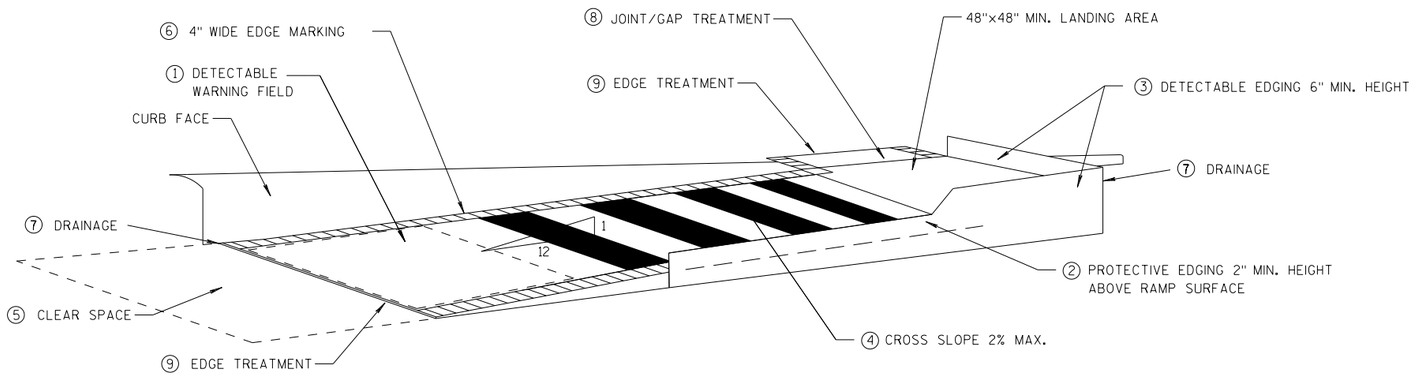
TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

6

S.D.D. 15 D 20-4



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.

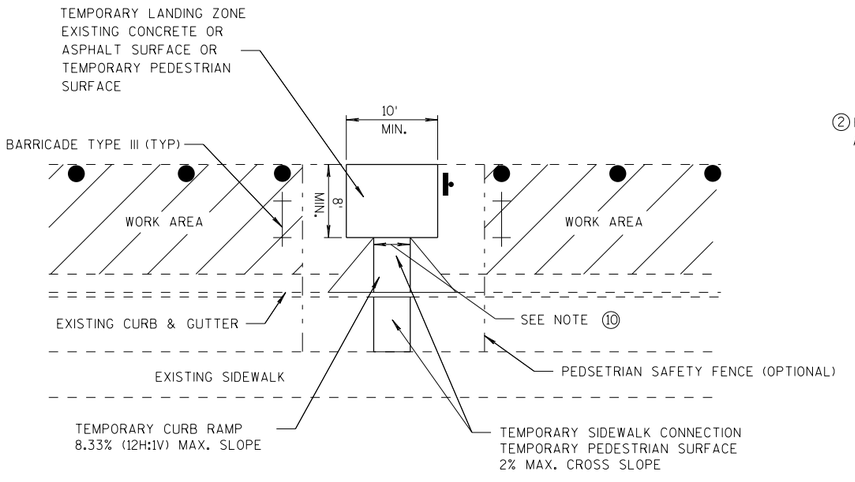
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

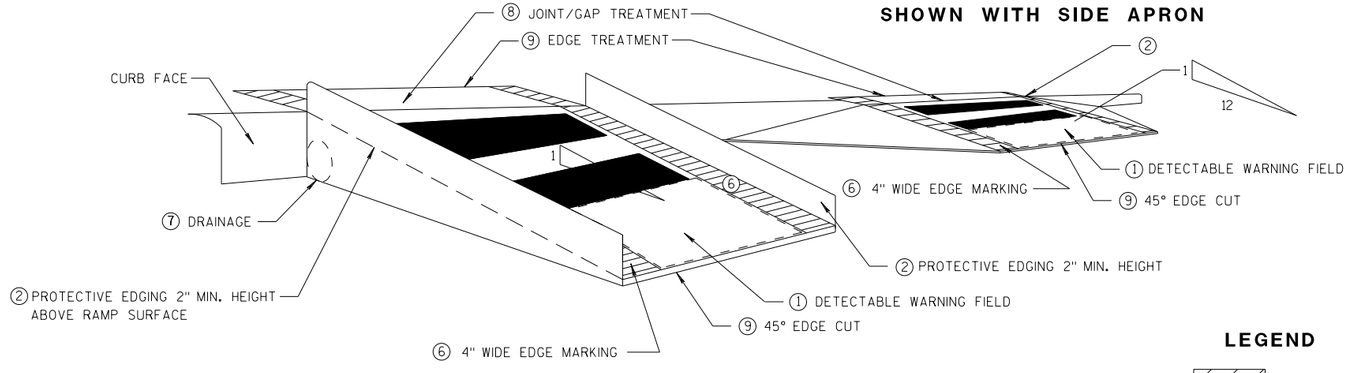
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

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 SIDE APRON

SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

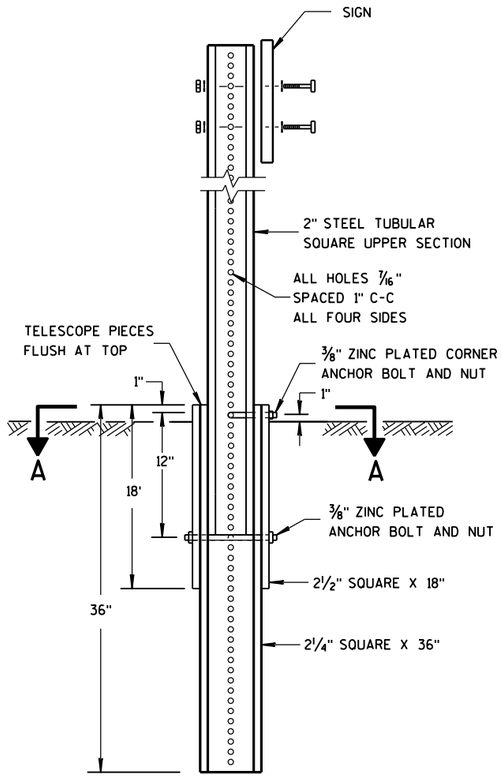
7/2018 DATE

/S/ Andrew Heidtke
WORK ZONE ENG

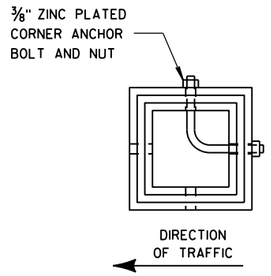
FHWA

6

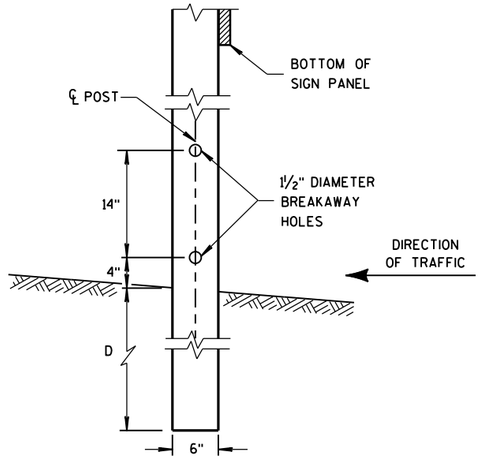
S.D.D. 15 D 30-4b



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



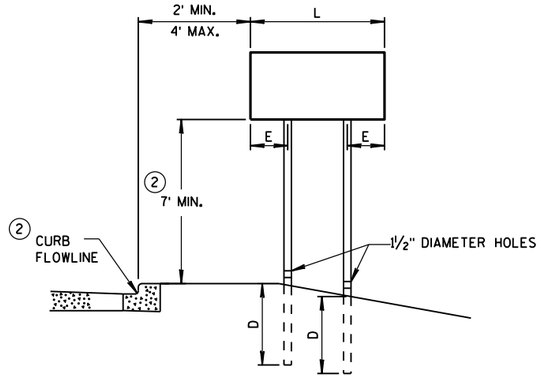
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

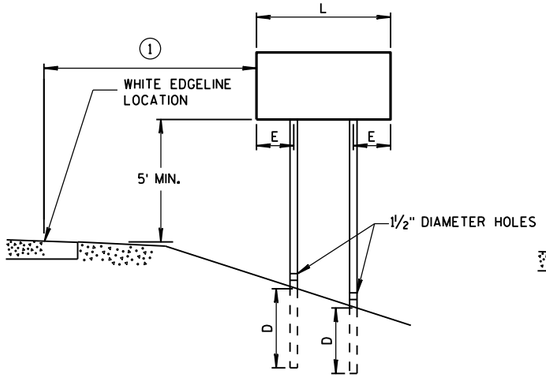
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

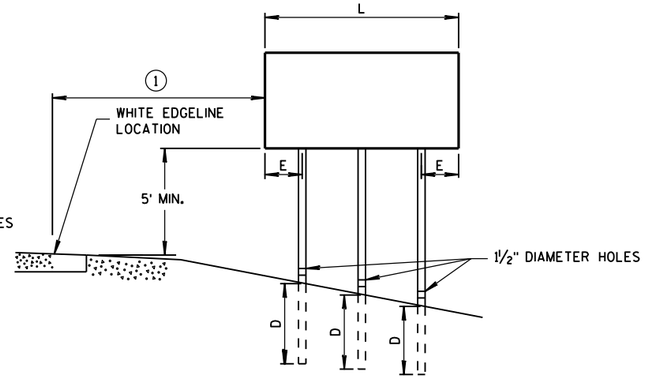
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

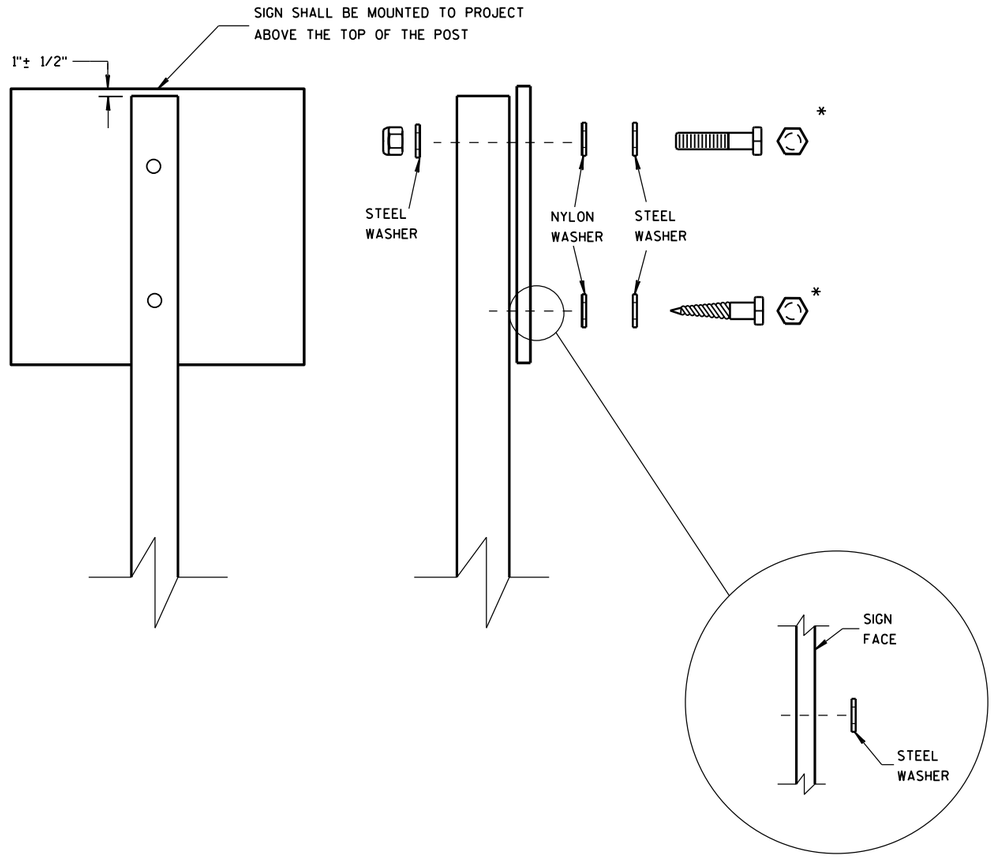
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 D 38-2a

6

S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

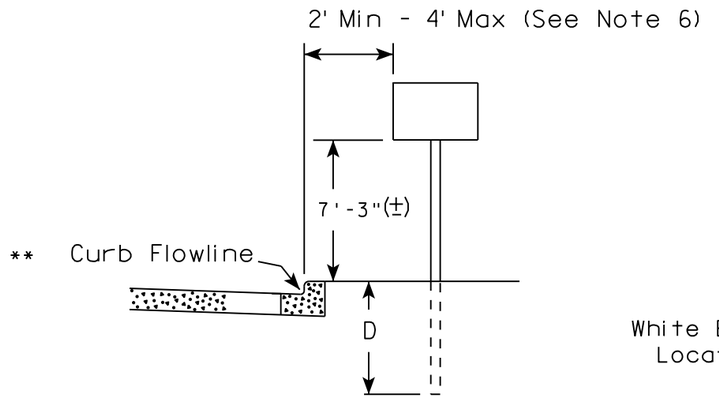
APPROVED

June 2017
DATE

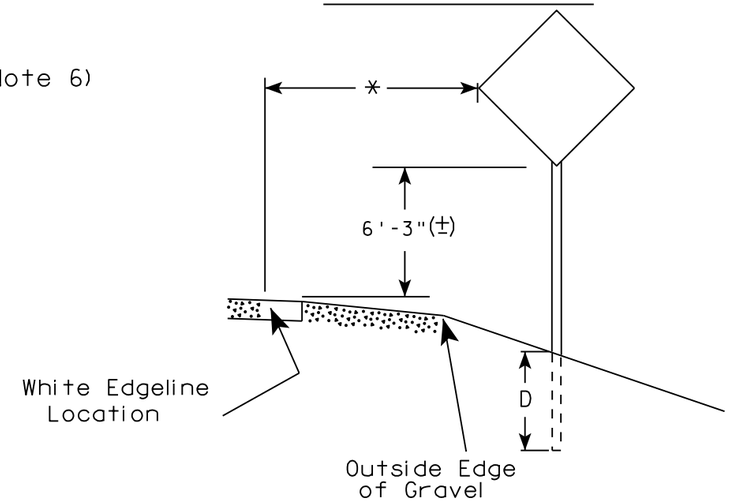
/S/ Andrew Heldtke
WORK ZONE ENG

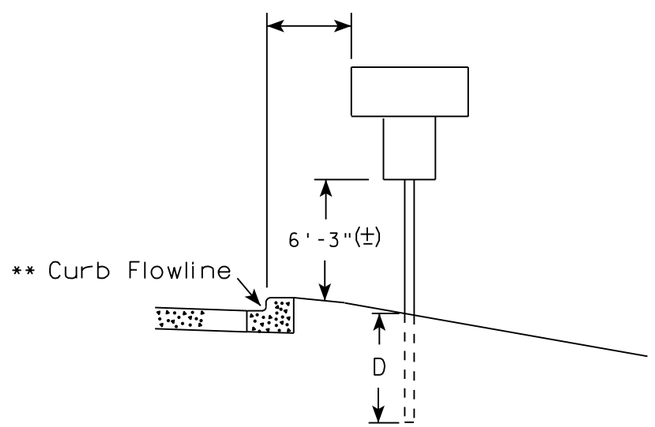
FHWA

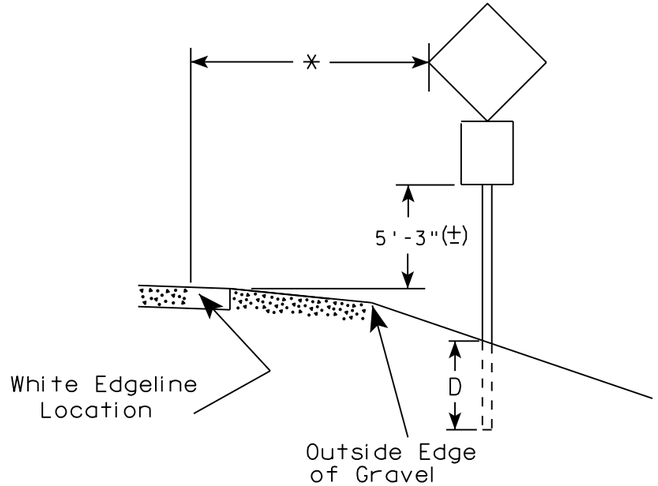
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

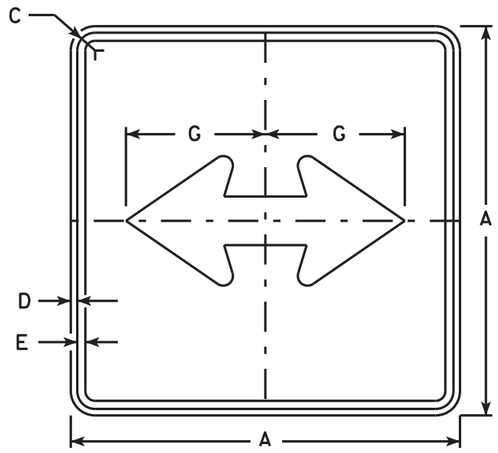
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

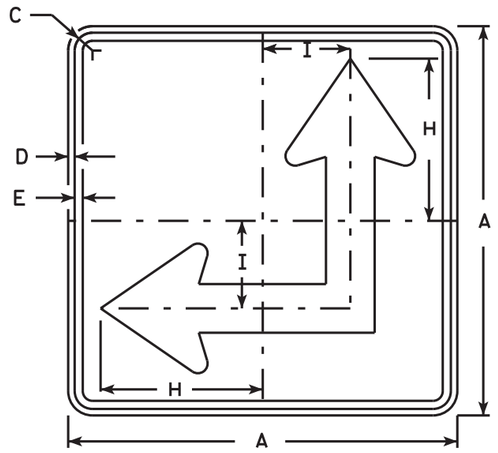
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

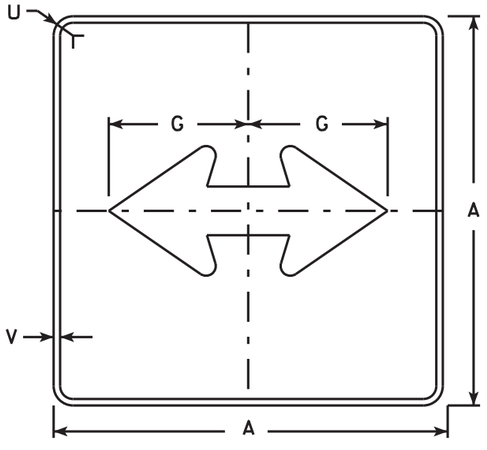
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 159	E



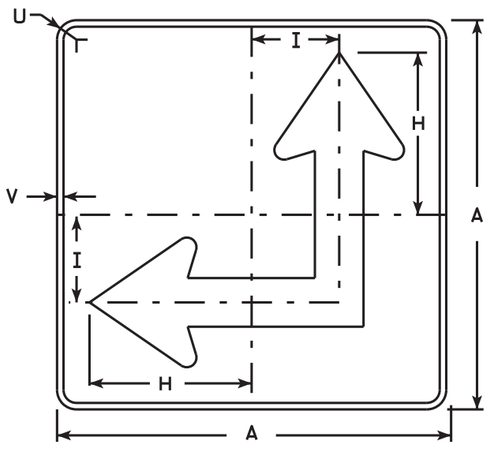
M6-4
MM6-4
MO6-4
MP6-4



M6-6
MM6-6
MO6-6
MP6-6



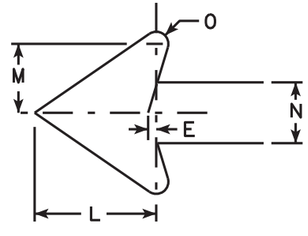
MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6

NOTES

1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

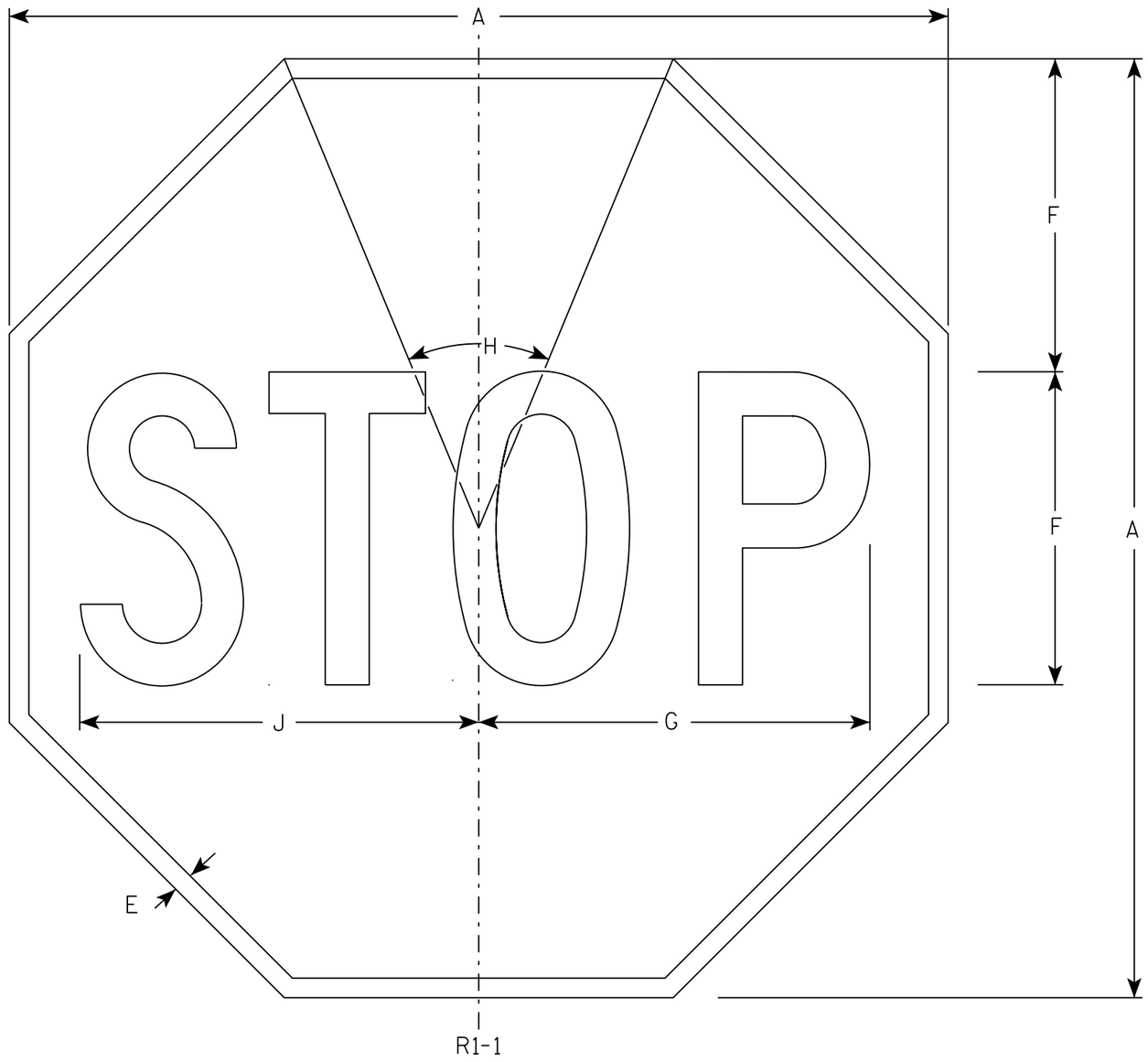
STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-4.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

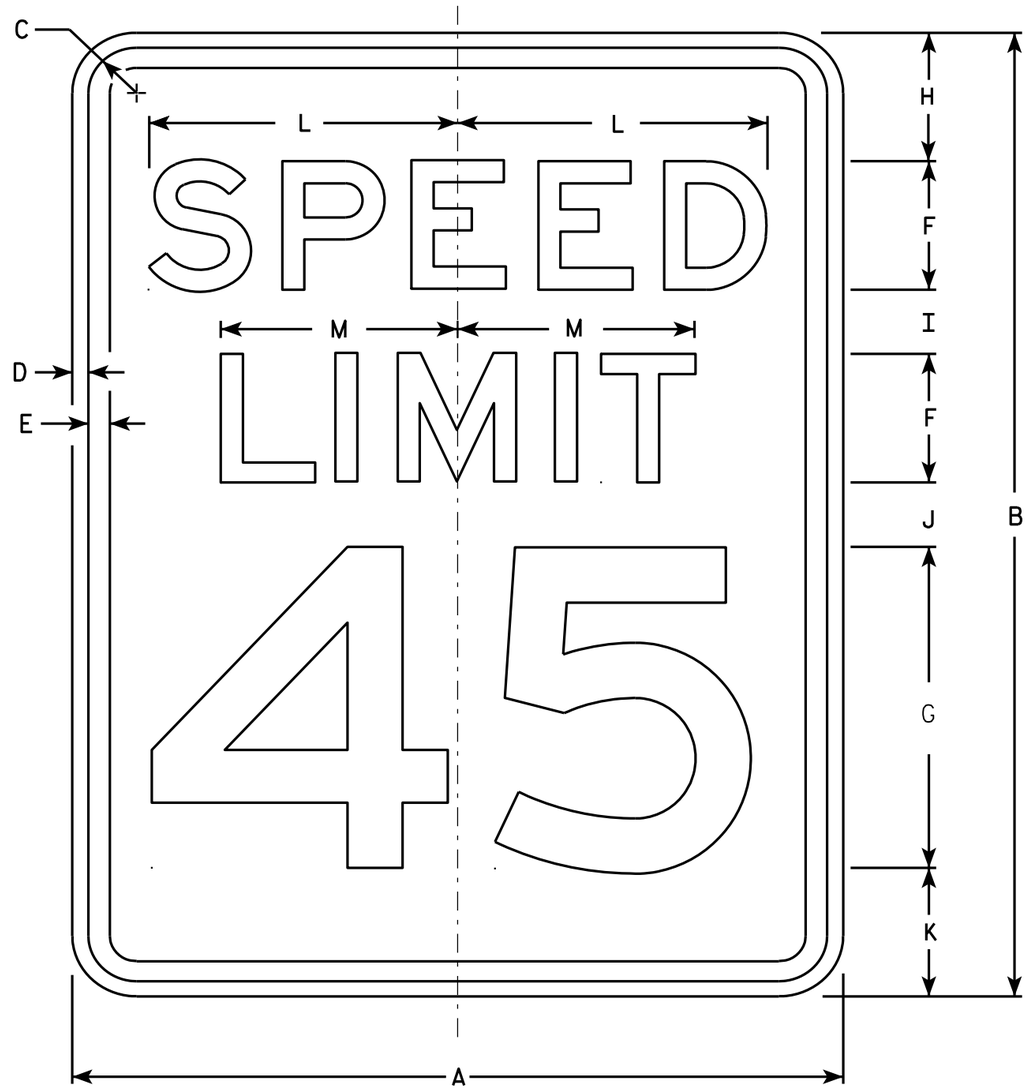
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 161	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

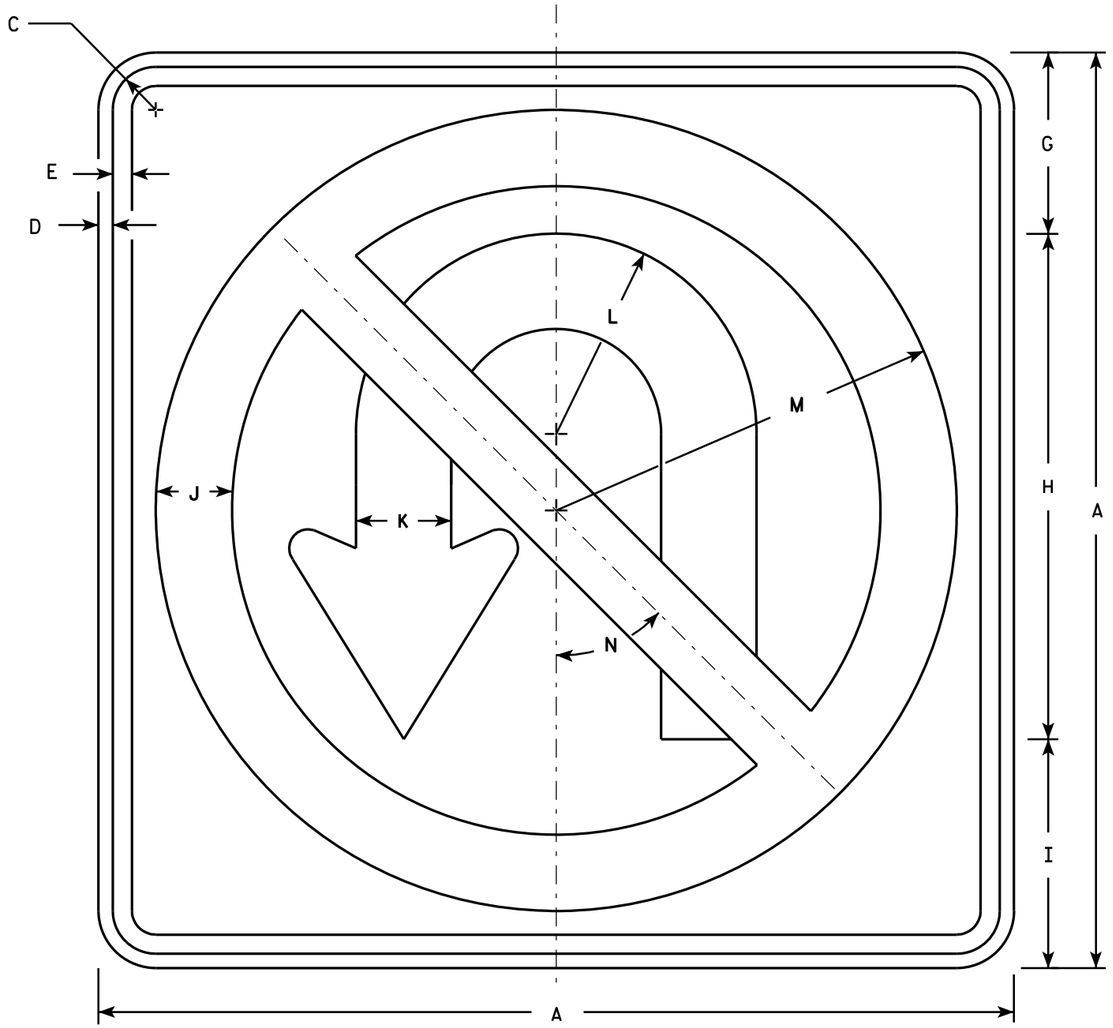
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 162 | E

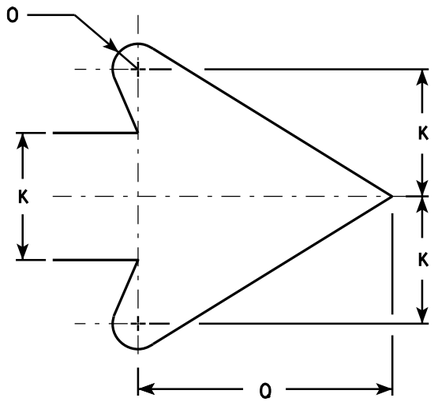
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000
WISDOT/CADDS SHEET 42



R3-4

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 - 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. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		4 3/4	13 1/4	6	2	2 1/2	5 1/4	10 1/2	45°	1/2		5										4.0
2M	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
3	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
4	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
5	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0

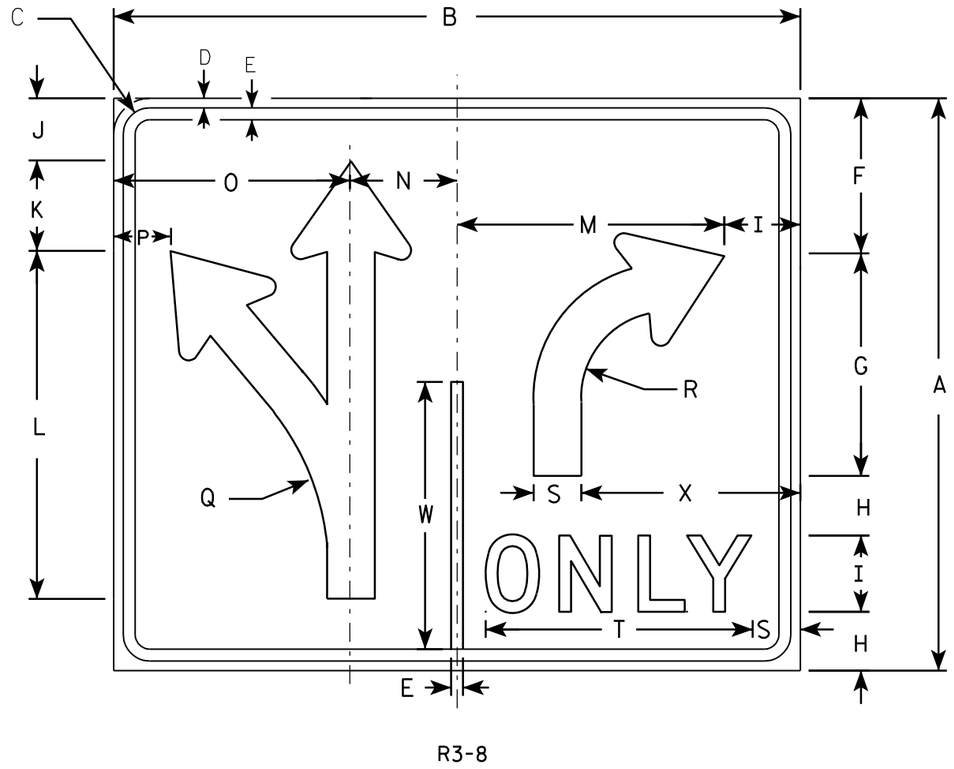
STANDARD SIGN
R3-4

WISCONSIN DEPT OF TRANSPORTATION

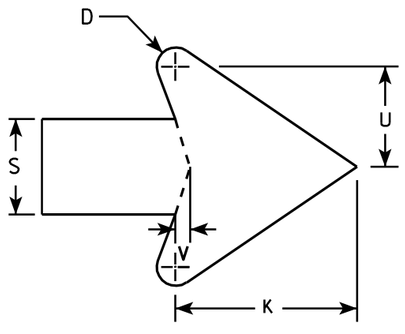
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 163	E



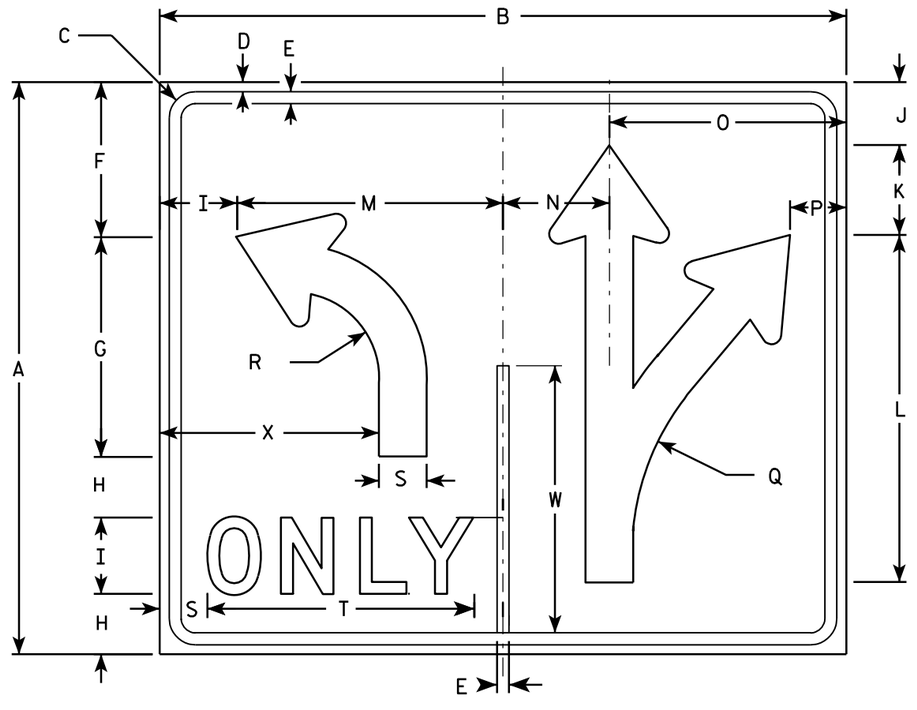
R3-8



ARROW DETAIL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-8A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0

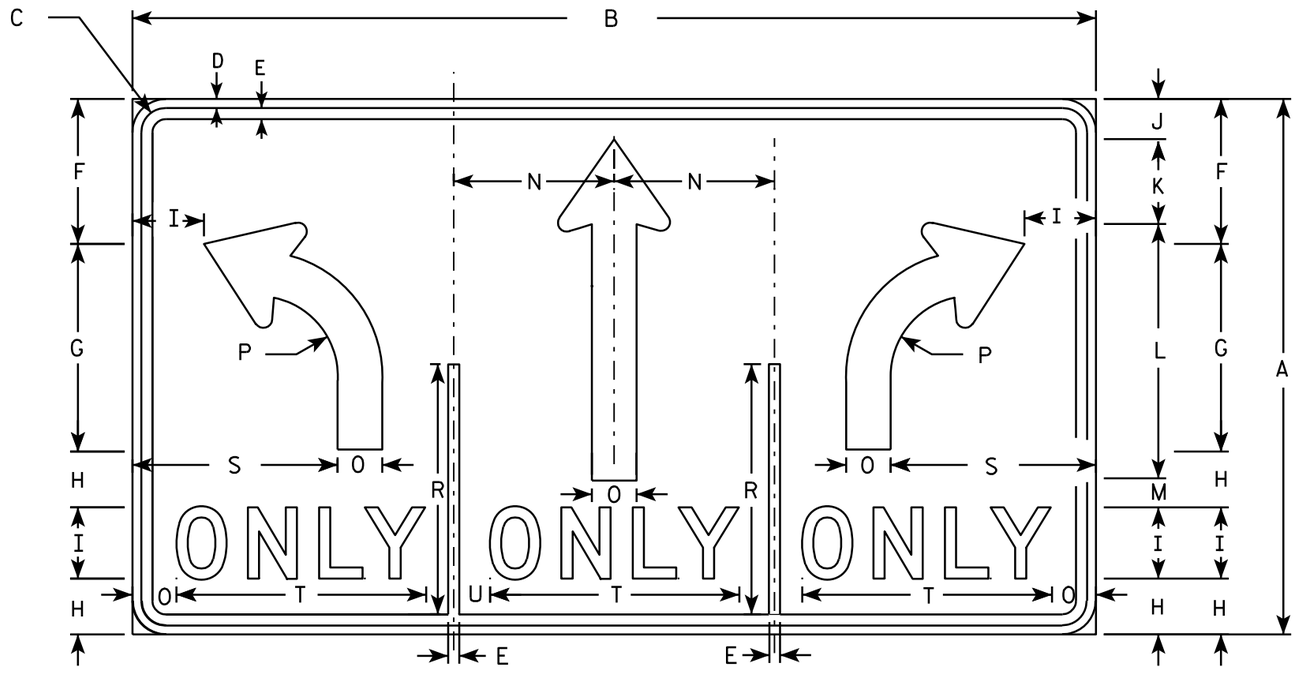
STANDARD SIGN
R3-8 & R3-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8.5

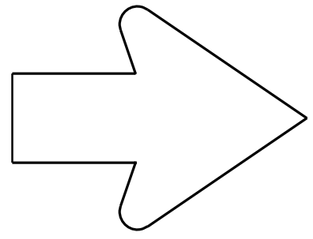
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 164	E



R3-8W

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SEE R3-8 FOR ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
3																											
4	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 3/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0
5	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 7/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0

STANDARD SIGN
R3-8W

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8W.4

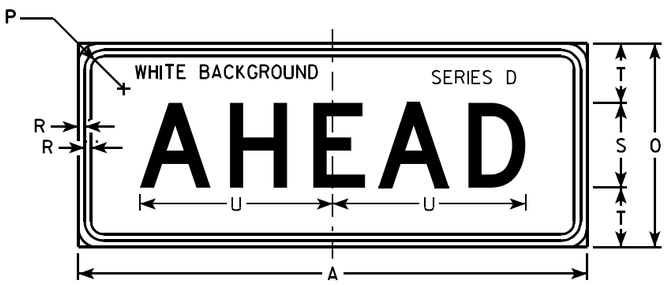
PROJECT NO:

SHEET NO: 165 E

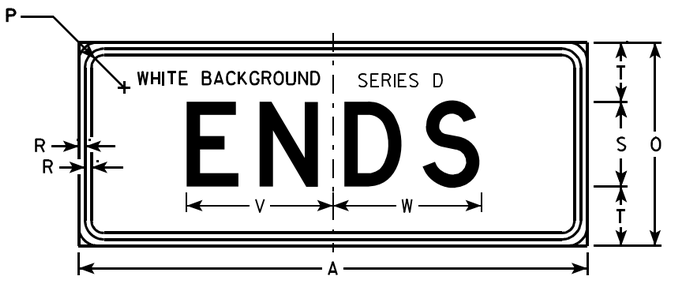
R3-17

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

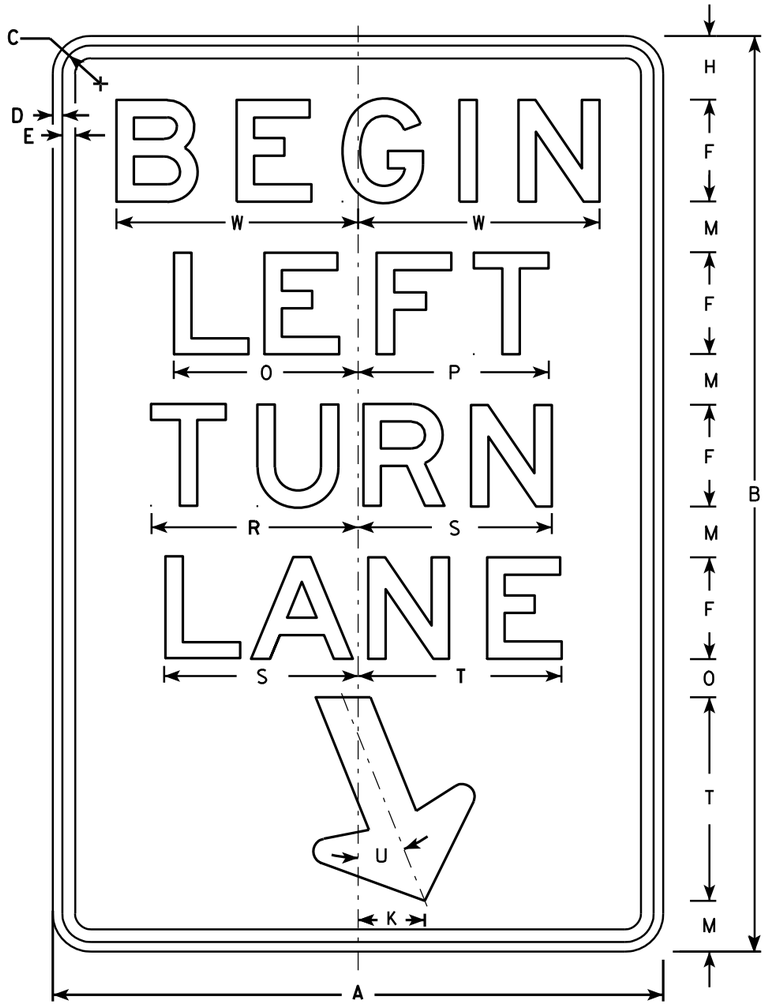
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/12/2011 PLATE NO. R3-17.2

PROJECT NO:

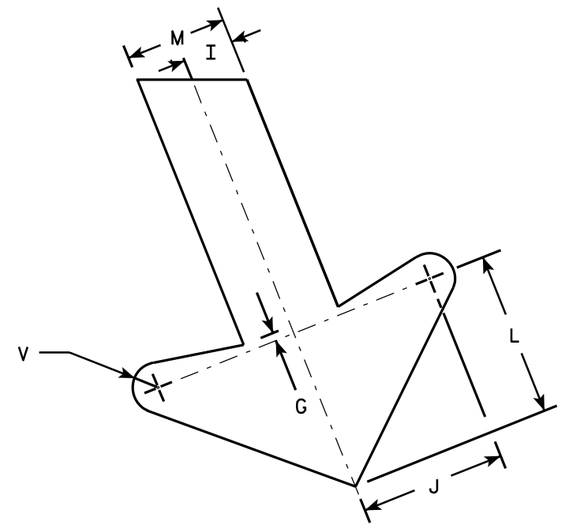
SHEET NO: 166 E



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

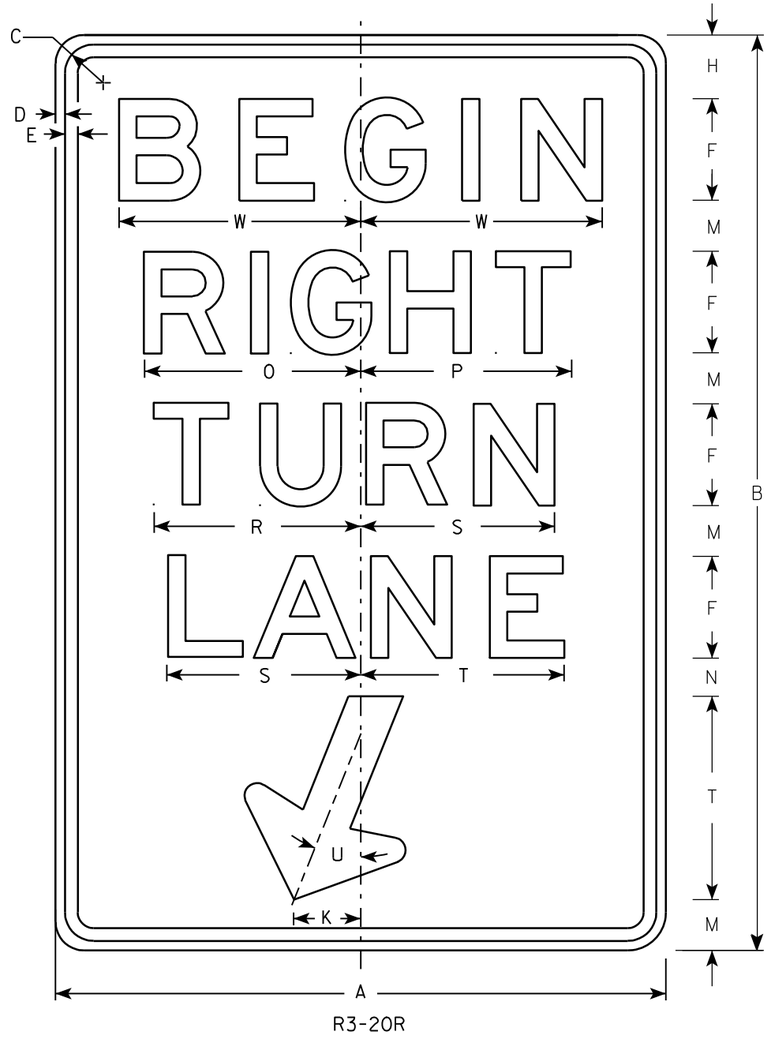
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

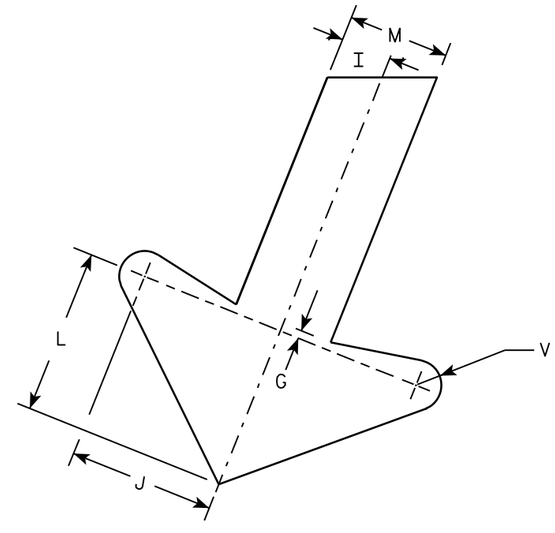
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 167 | E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

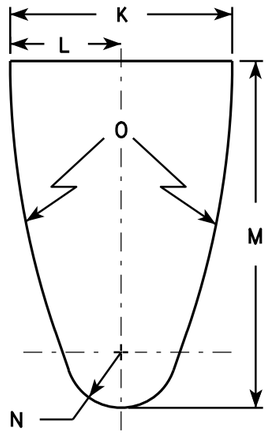
STANDARD SIGN
R3-20R

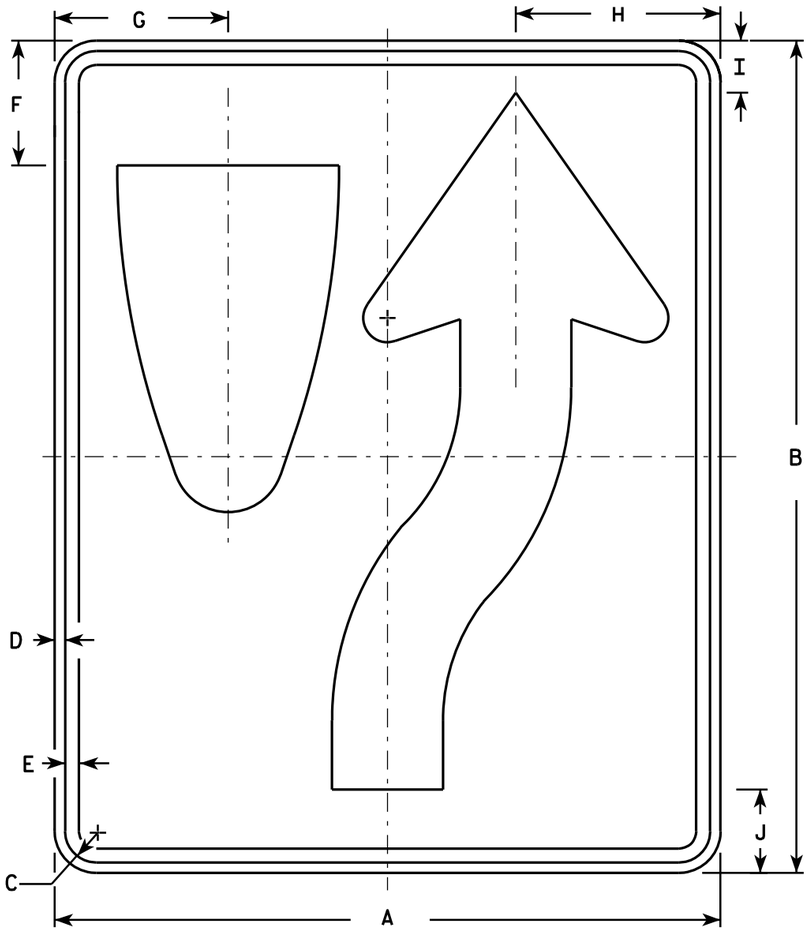
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 168 | E

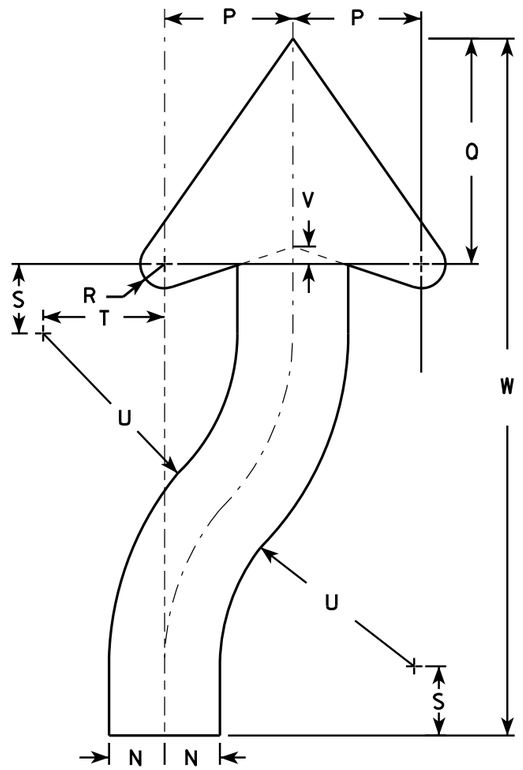




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

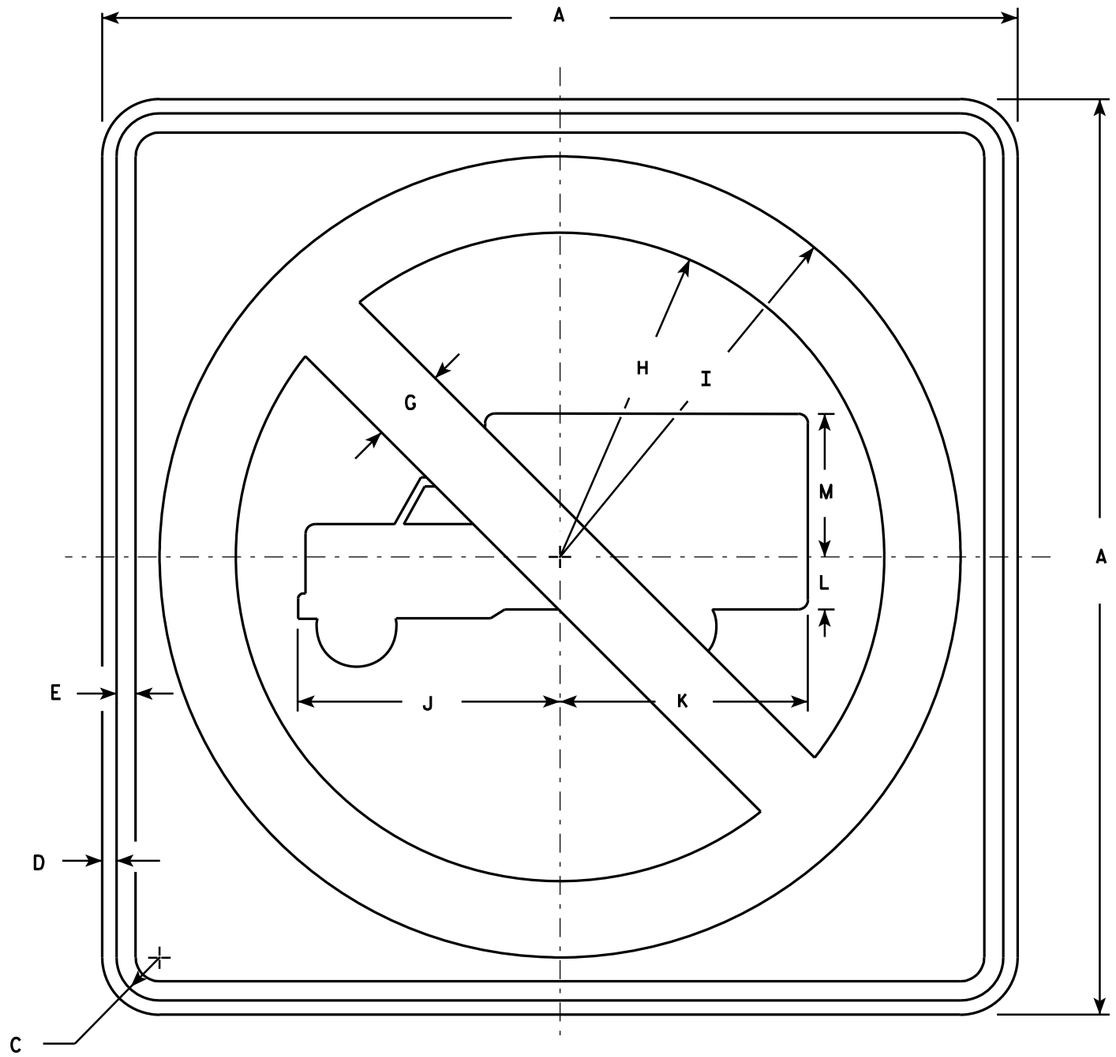
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 169	E



R5-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Circle & Diagonal - Reflective red.
   Truck Symbol & Border - Non-reflective black.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
2M	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
3	30		1 3/8	1/2	5/8		2 1/2	10 5/8	13 1/8	8 1/2	8 1/8	1 5/8	4 3/4														6.25
4	36		1 5/8	5/8	3/4		3	12 3/4	15 3/4	10 1/4	9 3/4	2	5 3/4														9.0
5	48		2 1/4	3/4	1		4	17	21	13 5/8	13	2 5/8	7 5/8														16.0

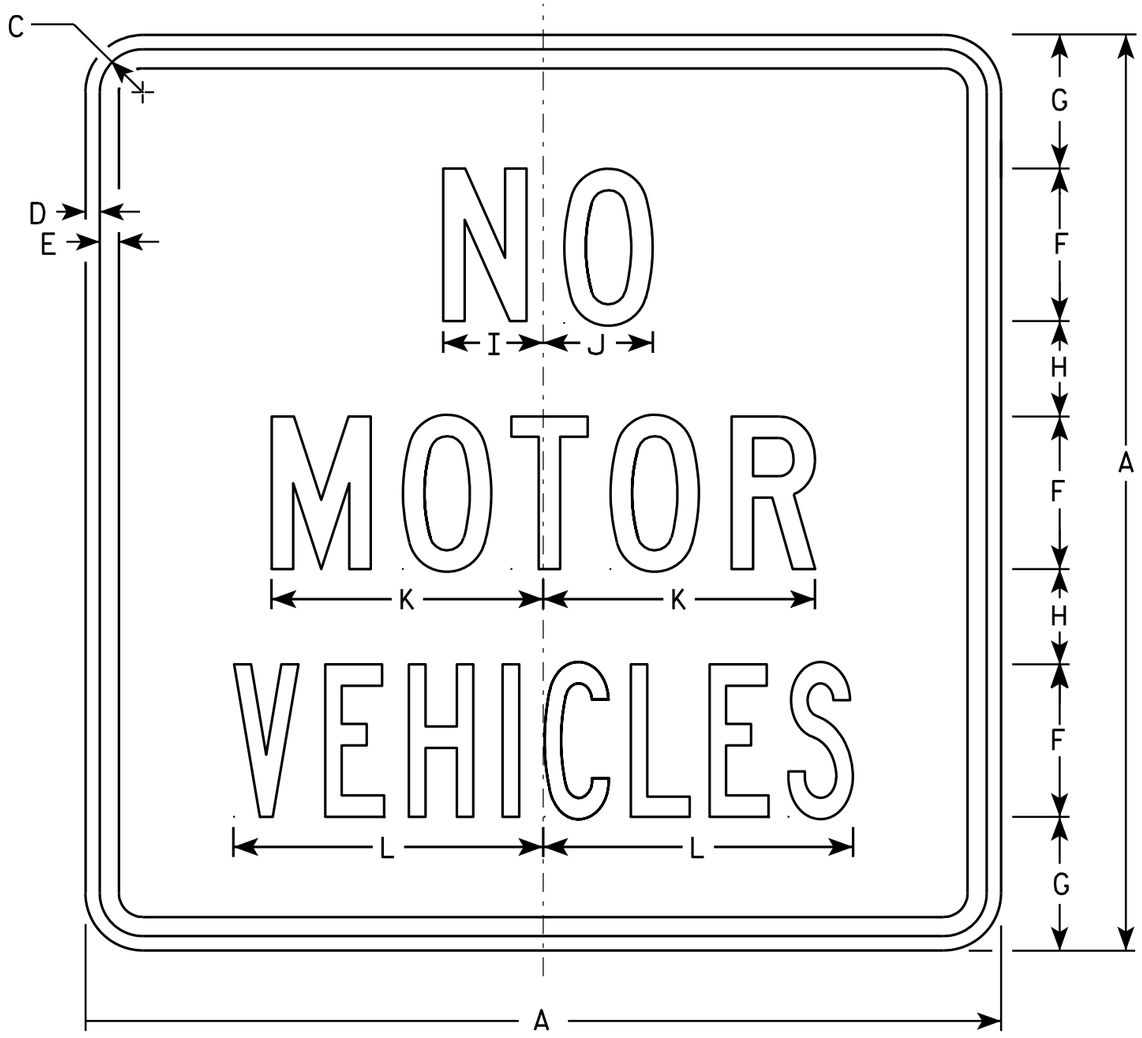
STANDARD SIGN
R5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-2.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 170 | E



R5-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 5.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 & 2 are Series C.
   Line 3 is Series B.

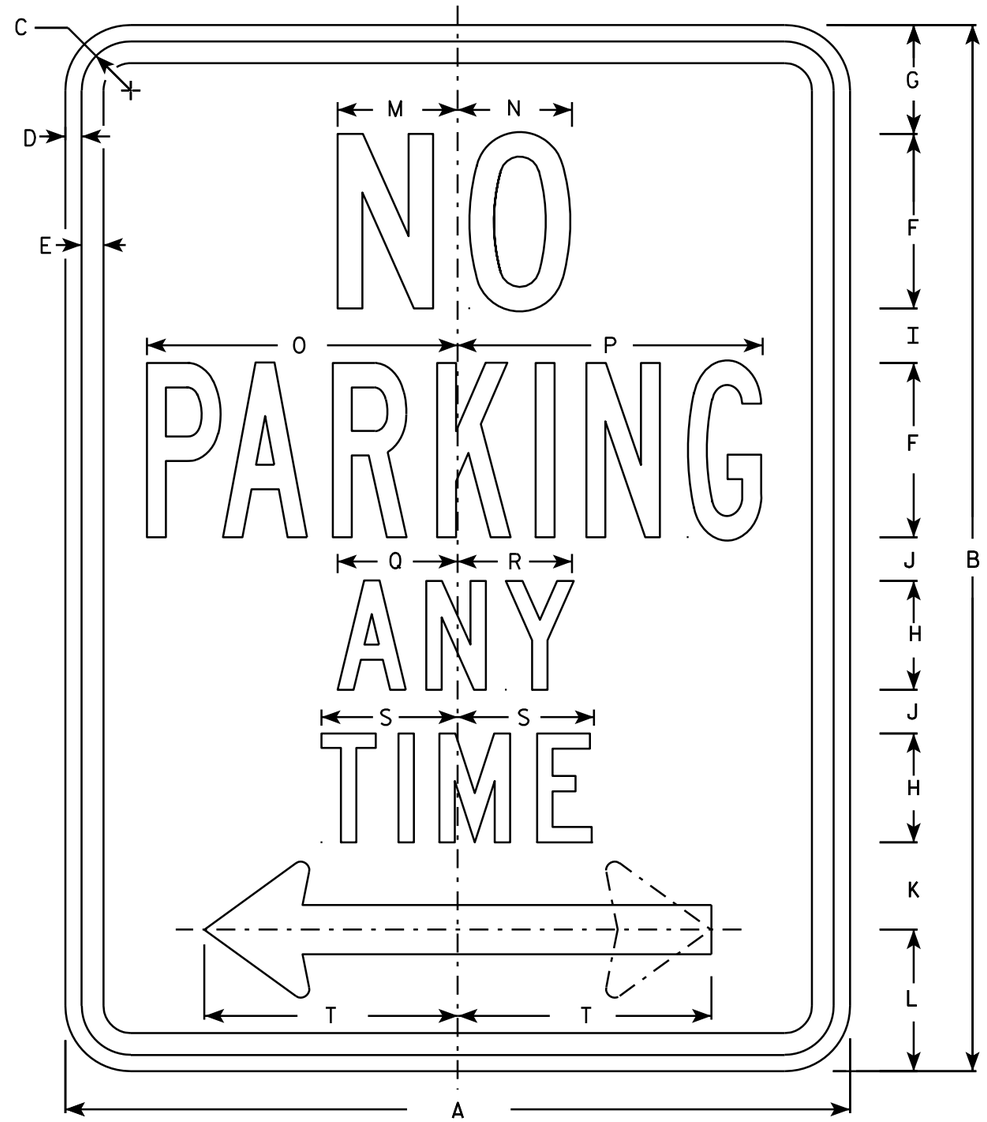
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2	4	3 1/2	2 1/2	2 5/8	2 7/8	7 1/8	8 1/8															4.0
2M	24		1 1/8	3/8	1/2	4	3 1/2	2 1/2	2 5/8	2 7/8	7 1/8	8 1/8															4.0
3																											
4																											
5																											

STANDARD SIGN
R5-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/29/2011 PLATE NO. R5-3.2

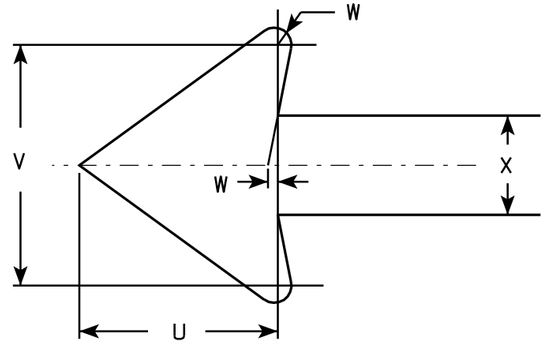
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 171 | E



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

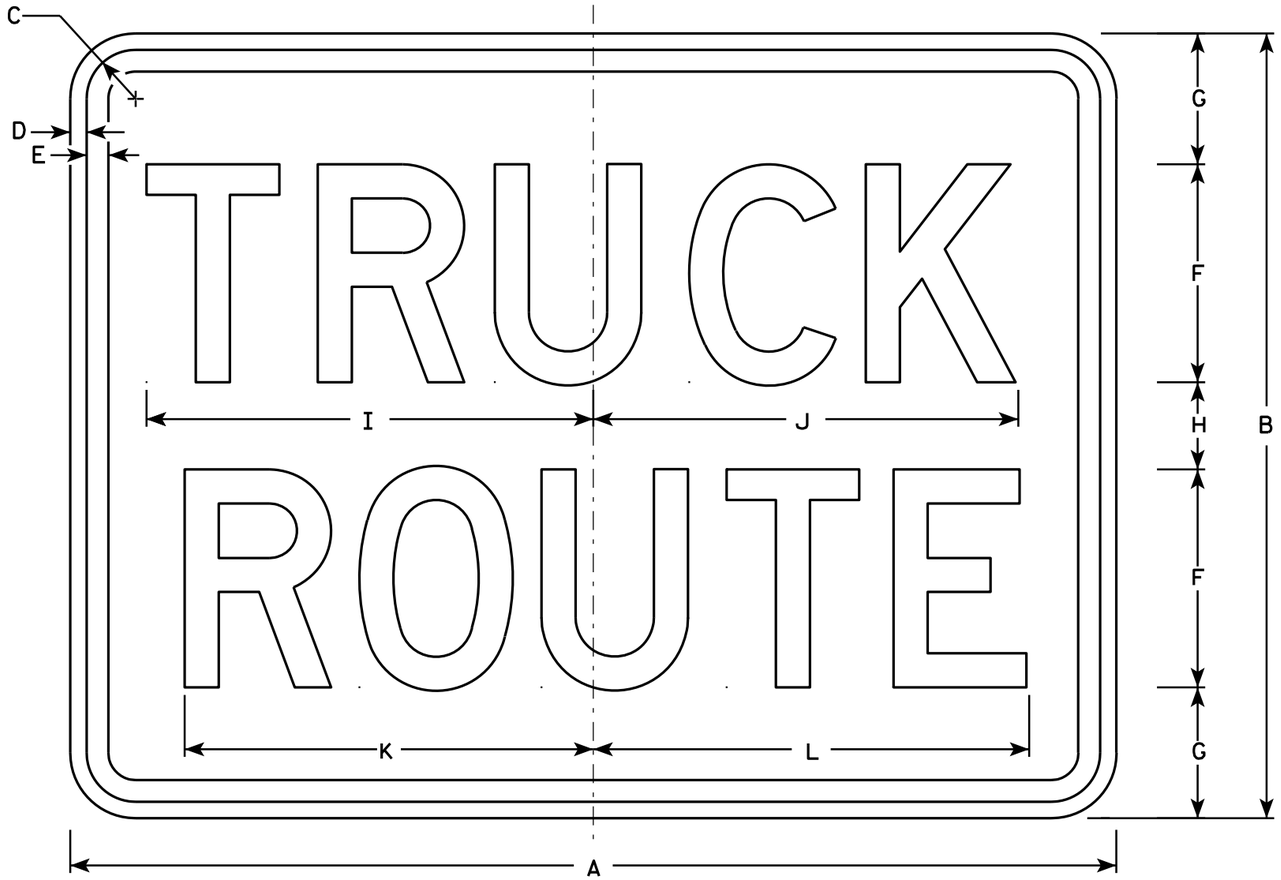
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 172	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R71.DGN PLOT DATE : 31-MAR-2011 09:20 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.476110:1.000000

WISDOT/CADDS SHEET 42



R14-1

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 - 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																											
2	24	18	1 1/8	3/8	1/2	5	3	2	10 1/4	9 3/4	9 3/8	10															3.0
2	24	18	1 1/8	3/8	1/2	5	3	2	10 1/4	9 3/4	9 3/8	10															3.0
3	30	24	1 1/8	3/8	1/2	6	4	4	12 1/4	11 3/4	11 1/4	12															5.0
4																											
5																											

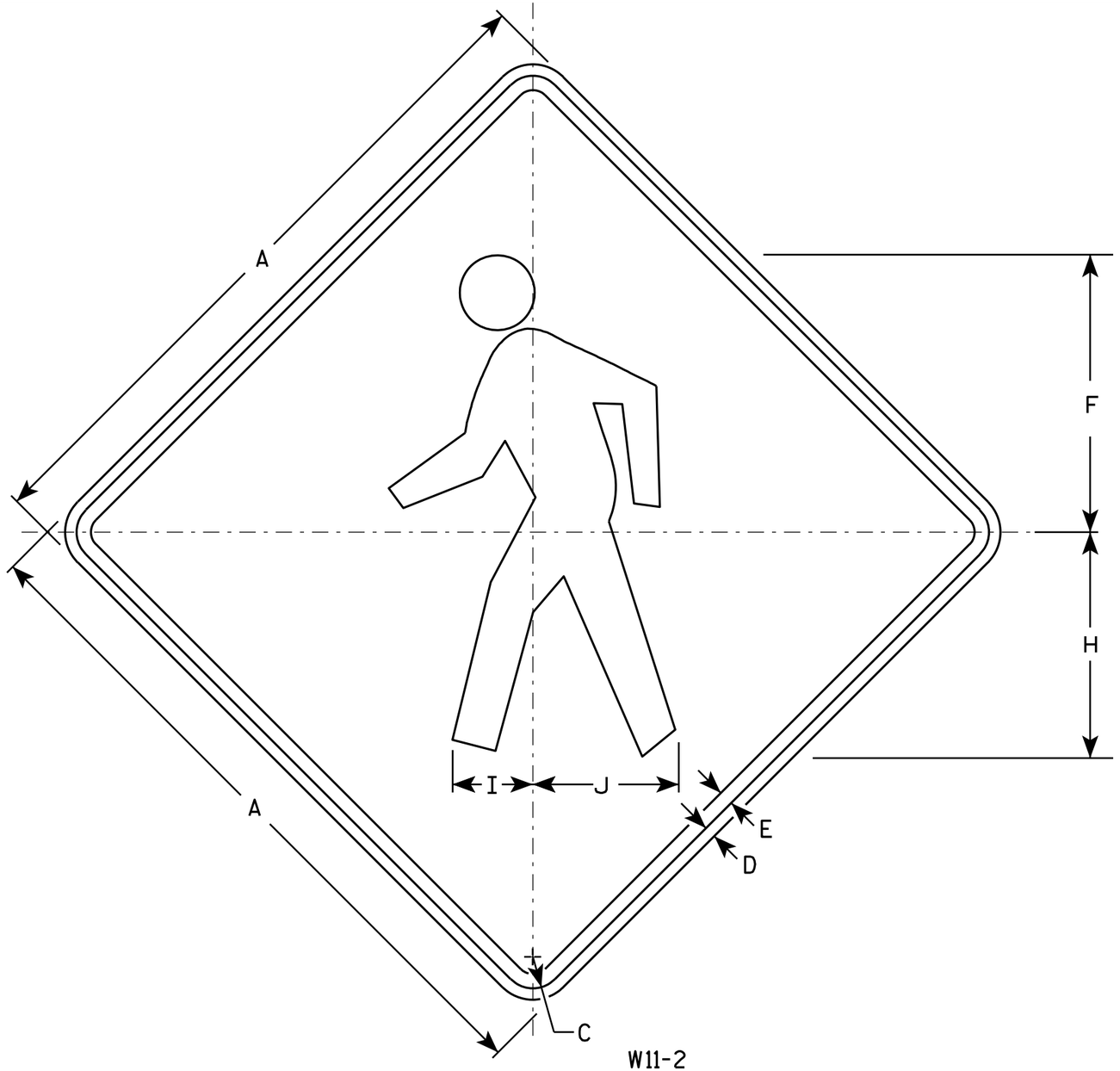
STANDARD SIGN
R14-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R14-1.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 173	E



W11-2

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 174	E

SUPERIOR AVENUE
9+70.33 - 25+79.83

Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
9+70.330	90.55	0	0	0	0	0	0	0	0
10+00.000	94.69	101.78	101.78	0	0	101.78	101.78	0	101.78
10+50.000	118.5	197.4	197.4	0.06	0.06	299.18	299.18	0.06	299.12
10+90.000	126.55	181.52	181.52	0	0.05	480.7	480.7	0.11	480.59
11+00.000	123.95	46.39	46.39	0	0	527.09	527.09	0.11	526.98
11+00.000	123.95	0	0	0	0	527.09	527.09	0.11	526.98
11+56.000	128.62	261.92	261.92	0.76	0.78	789.01	789.01	0.89	788.12
13+00.000	192.64	856.41	856.41	0.09	2.26	1645.41	1645.41	3.15	1642.26
13+50.000	201.37	364.82	364.82	0	0.08	2010.24	2010.24	3.23	2007.01
14+00.000	193.99	366.08	366.08	0	0	2376.31	2376.31	3.23	2373.08
14+50.000	177.13	343.63	343.63	0	0	2719.94	2719.94	3.23	2716.71
14+83.000	158.88	205.34	205.34	0.12	0.07	2925.28	2925.28	3.3	2921.98
14+91.000	157.3	46.84	46.84	0.11	0.03	2972.12	2972.12	3.33	2968.79
15+00.000	166.01	53.89	53.89	0	0.02	3026	3026	3.35	3022.65
15+50.000	134.15	277.92	277.92	0	0	3303.93	3303.93	3.35	3300.58
16+00.000	116.27	231.87	231.87	0	0	3535.8	3535.8	3.35	3532.45
16+50.000	117.03	216.02	216.02	0	0	3751.82	3751.82	3.35	3748.47
16+53.000	117.08	13.01	13.01	0	0	3764.83	3764.83	3.35	3761.47
17+00.000	114.93	201.94	201.94	0	0	3966.76	3966.76	3.35	3963.41
17+50.000	121.81	219.21	219.21	0	0	4185.97	4185.97	3.35	4182.62
18+00.000	121.28	225.09	225.09	0	0	4411.06	4411.06	3.35	4407.71
18+31.305	112.03	135.26	135.26	0	0	4546.32	4546.32	3.35	4542.97
18+50.000	196.83	106.93	106.93	0	0	4653.24	4653.24	3.35	4649.89
18+72.812	211.42	172.46	172.46	0	0	4825.71	4825.71	3.35	4822.36
19+00.000	153.6	183.78	183.78	0	0	5009.49	5009.49	3.35	5006.14
19+14.000	129.29	73.34	73.34	0	0	5082.83	5082.83	3.35	5079.48
19+40.000	125.69	122.77	122.77	1.08	0.52	5205.6	5205.6	3.87	5201.73
19+50.000	121.94	45.86	45.86	1.43	0.46	5251.46	5251.46	4.33	5247.12
19+53.000	119.42	13.41	13.41	1.56	0.17	5264.86	5264.86	4.5	5260.36
20+00.000	114.17	203.3	203.3	0	1.36	5468.17	5468.17	5.86	5462.31
20+36.000	116.6	153.85	153.85	0	0	5622.01	5622.01	5.86	5616.15
20+50.000	102.86	56.9	56.9	2.88	0.75	5678.91	5678.91	6.6	5672.31
20+60.000	103.52	38.22	38.22	2.84	1.06	5717.13	5717.13	7.66	5709.47
20+93.000	115.22	133.67	133.67	0.25	1.89	5850.8	5850.8	9.55	5841.25
21+00.000	119.38	30.41	30.41	0	0.03	5881.21	5881.21	9.58	5871.63
21+03.000	119.34	13.26	13.26	0	0	5894.47	5894.47	9.58	5884.89
21+50.000	98.25	189.38	189.38	1.93	1.68	6083.85	6083.85	11.26	6072.59
21+63.531	96.32	48.75	48.75	2.13	1.02	6132.61	6132.61	12.27	6120.33
22+00.000	200.06	200.16	200.16	0	1.44	6332.77	6332.77	13.71	6319.05
22+04.822	201.84	35.89	35.89	0	0	6368.65	6368.65	13.71	6354.94
22+21.000	190.78	117.63	117.63	0	0	6486.28	6486.28	13.71	6472.57
22+46.000	111.78	140.07	140.07	0.36	0.17	6626.36	6626.36	13.88	6612.48
22+50.000	110.12	16.44	16.44	0.38	0.06	6642.79	6642.79	13.94	6628.86
23+00.000	118.93	212.08	212.08	0	0.36	6854.88	6854.88	14.29	6840.59
23+08.000	118.66	35.2	35.2	0	0	6890.07	6890.07	14.29	6875.78
23+50.000	108.48	176.67	176.67	1.14	0.89	7066.74	7066.74	15.18	7051.56
24+00.000	116.56	208.37	208.37	0.03	1.08	7275.11	7275.11	16.27	7258.84
24+23.000	121.54	101.41	101.41	0	0.01	7376.52	7376.52	16.28	7360.24
24+46.000	117.31	101.73	101.73	0	0	7478.25	7478.25	16.28	7461.97
24+50.000	114.44	17.17	17.17	0.26	0.02	7495.42	7495.42	16.3	7479.12
24+87.410	100.32	148.78	148.78	1.57	1.26	7644.2	7644.2	17.56	7626.64
25+00.000	113.41	49.83	49.83	0	0.36	7694.03	7694.03	17.93	7676.1
25+30.706	341.26	258.53	258.53	0	0	7952.56	7952.56	17.93	7934.63
25+50.000	204.24	194.91	194.91	0	0	8147.47	8147.47	17.93	8129.54
25+79.827	69.7	151.31	151.31	0	0	8298.78	8298.78	17.93	8280.86

9

9

PROJECT NO: 4996-01-73 | HWY: SUPERIOR AVE (CTH O) | COUNTY: SHEBOYGAN | EARTHWORK QUANTITIES | SHEET 175 | E

TAYLOR DRIVE
100+12.60 - 103+58.00

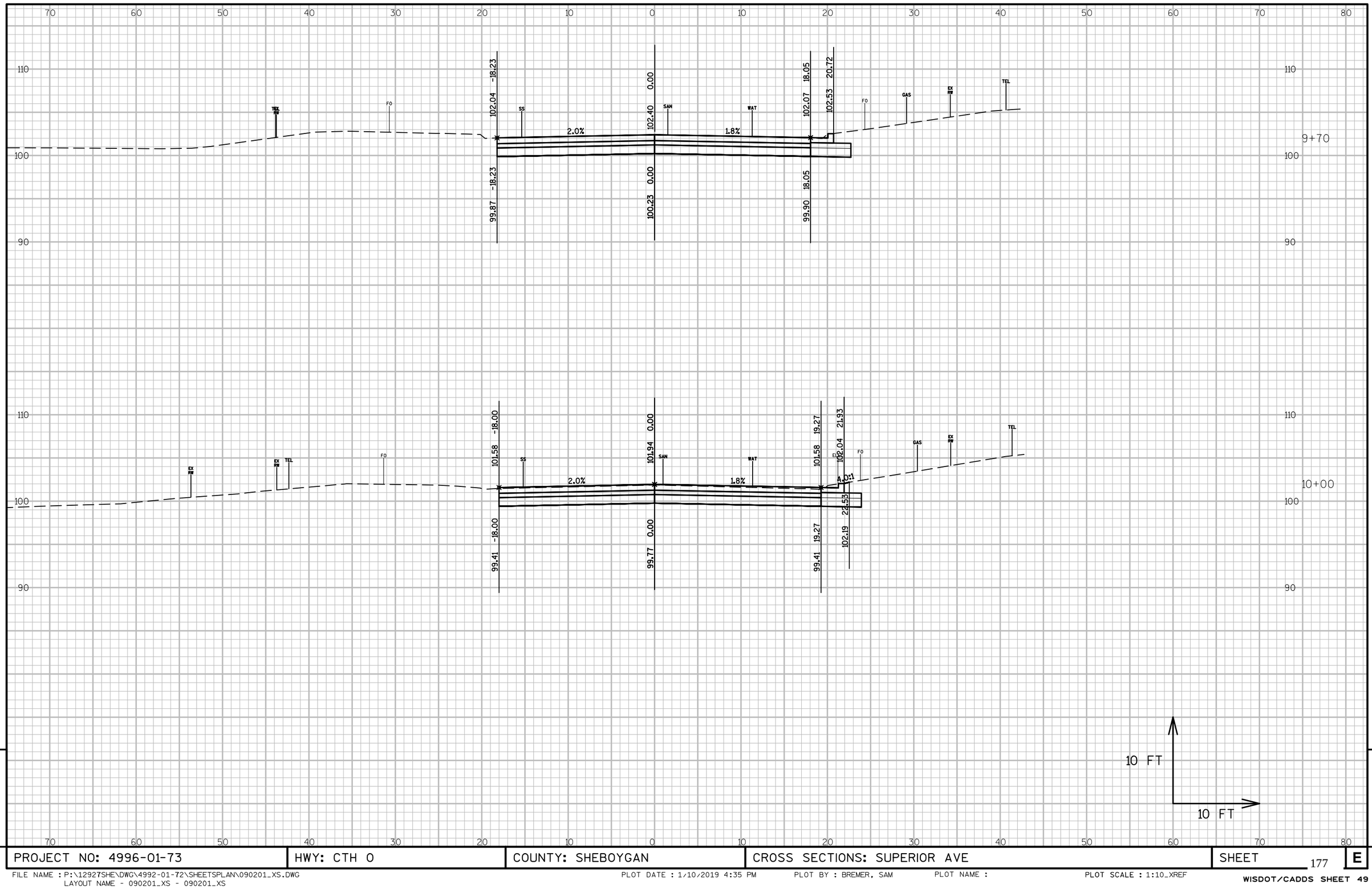
Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
100+12.598	165.05	0	0	0.79	0	0	0	0	0
100+50.000	185.43	242.76	242.76	0.5	0.9	242.76	242.76	0.9	241.86
100+69.711	190.49	137.22	137.22	0	0.18	379.98	379.98	1.08	378.9
101+00.000	208.66	223.88	223.88	0	0	603.86	603.86	1.08	602.78
101+50.000	222.98	399.66	399.66	0.04	0.04	1003.52	1003.52	1.12	1002.4
102+00.000	214.85	405.39	405.39	2.52	2.37	1408.91	1408.91	3.49	1405.42
102+19.803	216.06	158.03	158.03	1.76	1.57	1566.94	1566.94	5.06	1561.88
102+50.000	239.03	254.67	254.67	0	0.96	1821.61	1821.61	6.02	1815.59
102+75.000	287.18	243.62	243.62	0	0	2065.22	2065.22	6.02	2059.2
103+00.000	299.98	271.83	271.83	0.98	0.45	2337.06	2337.06	6.47	2330.58
103+04.467	295.68	49.27	49.27	1.07	0.17	2386.32	2386.32	6.64	2379.68
103+25.000	176.64	179.22	179.22	1.16	0.86	2565.54	2565.54	7.5	2558.04
103+50.000	166.33	158.78	158.78	0.08	0.58	2724.32	2724.32	8.07	2716.25

TAYLOR DRIVE - HOSPITAL TURN LANE
109+07.03 - 110+50.00

Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
109+07.034	32.28	0	0	0	0	0	0	0	0
109+12.252	39.71	6.96	6.96	0	0	6.96	6.96	0	6.96
109+50.000	39.69	55.5	55.5	0	0	62.46	62.46	0	62.45
109+82.156	39.97	47.43	47.43	0	0	109.89	109.89	0	109.89
110+00.000	31.25	23.53	23.53	0	0	133.42	133.42	0	133.42
110+50.000	11.65	39.72	39.72	0	0	173.14	173.14	0	173.14

9

9

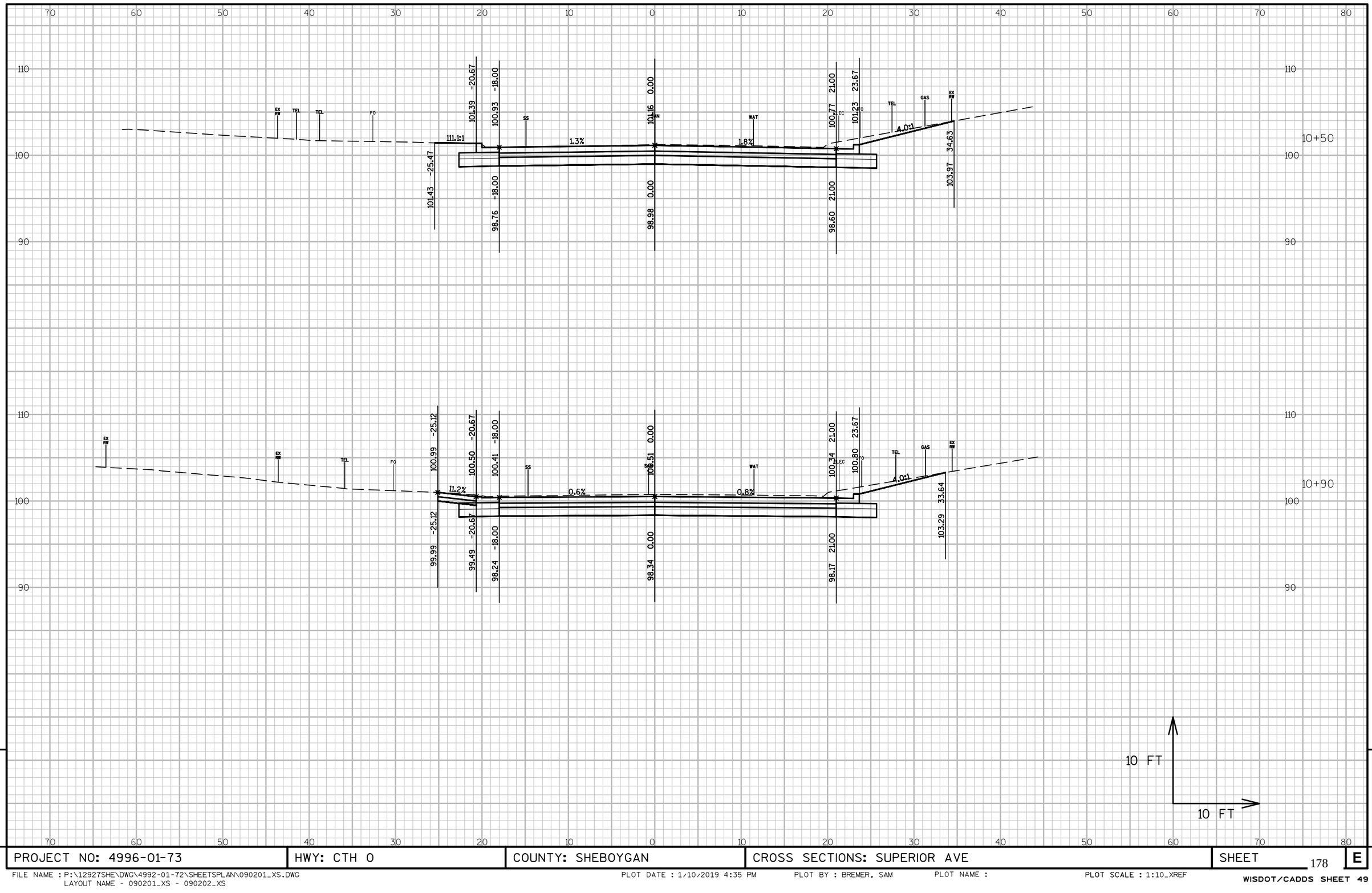


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 177	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090201_XS

PLOT DATE : 1/10/2019 4:35 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



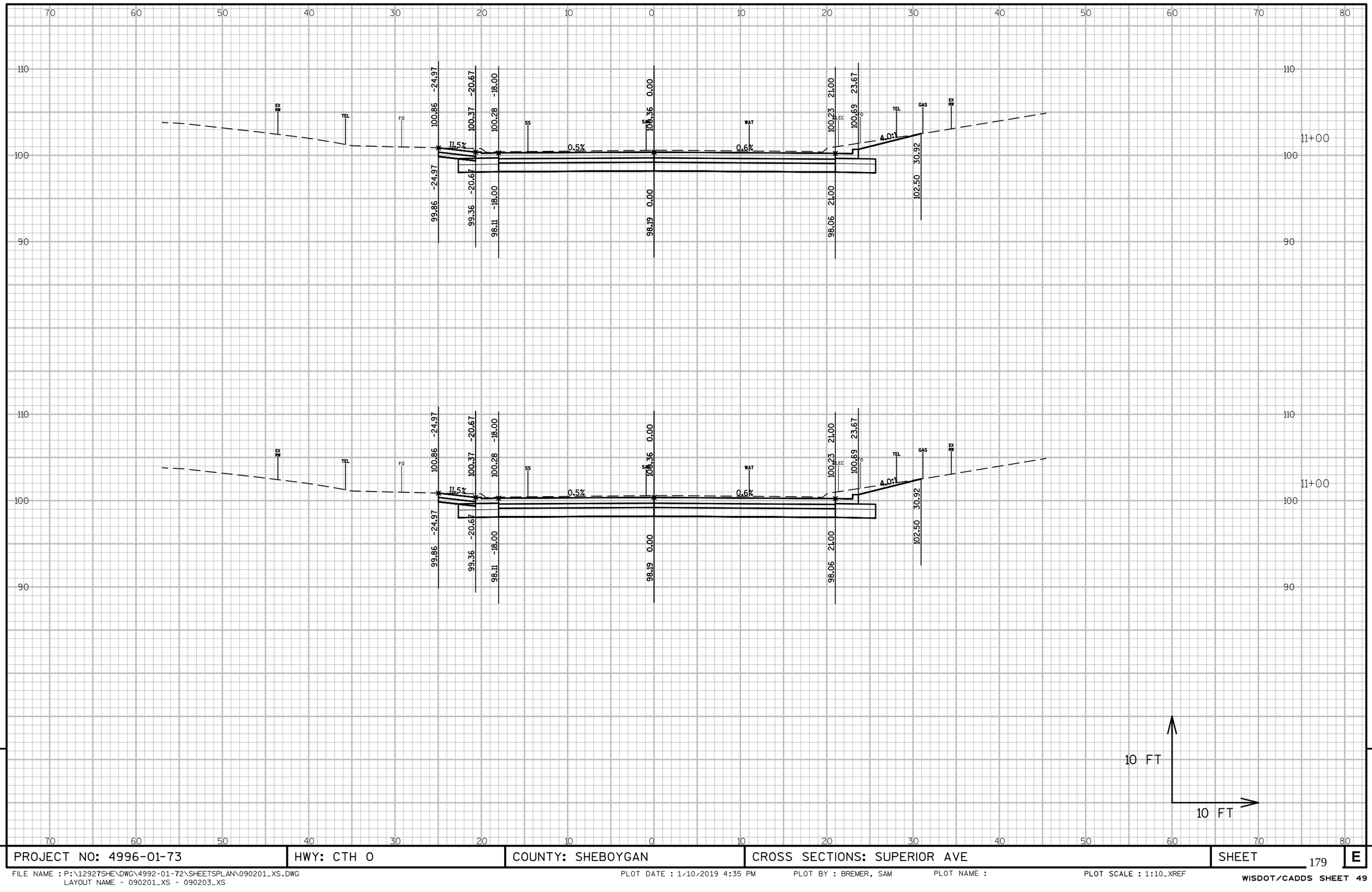
9

9

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 178	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090202_XS

PLOT DATE : 1/10/2019 4:35 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF



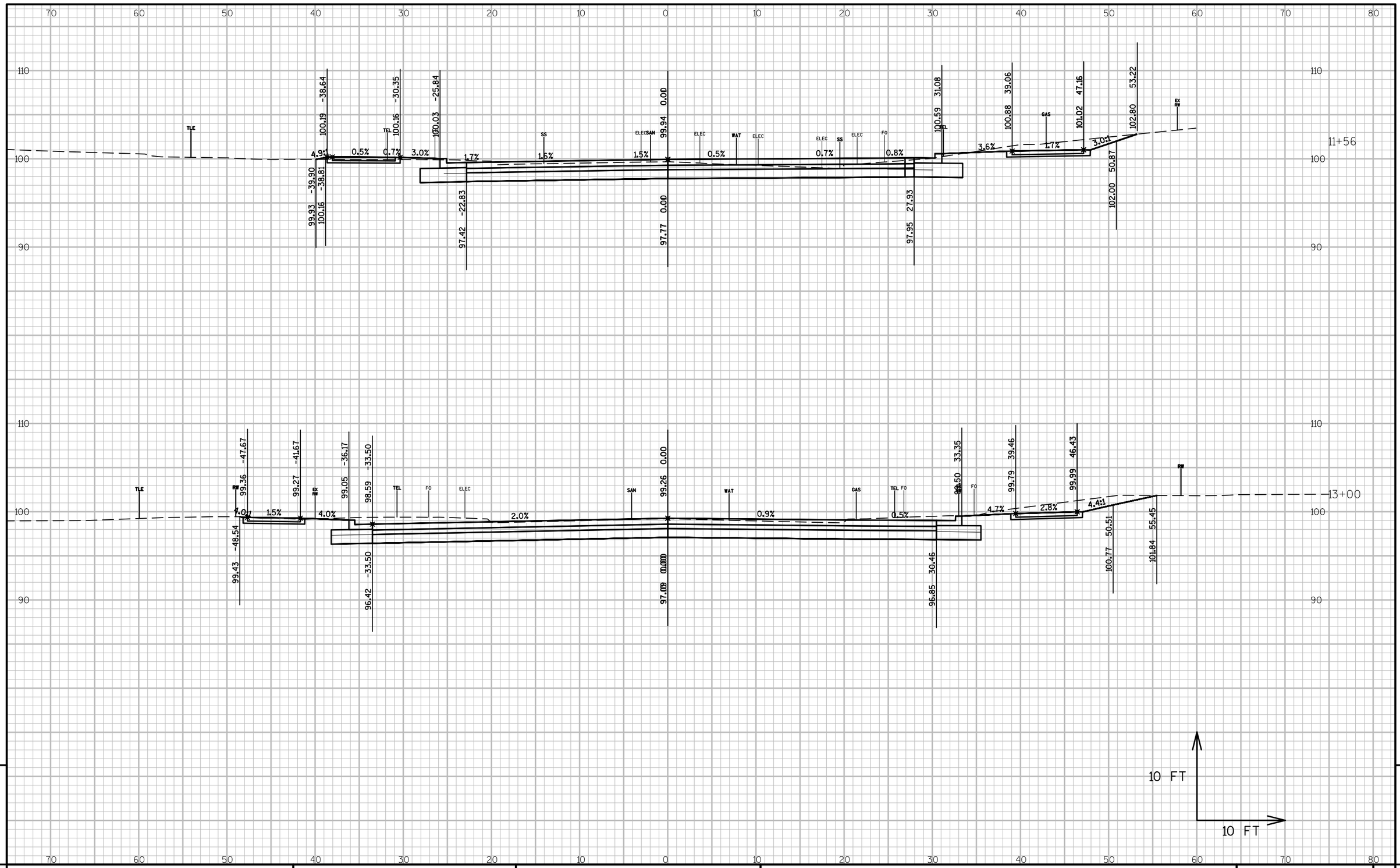
9

9

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 179	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090203_XS

PLOT DATE : 1/10/2019 4:35 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF



9

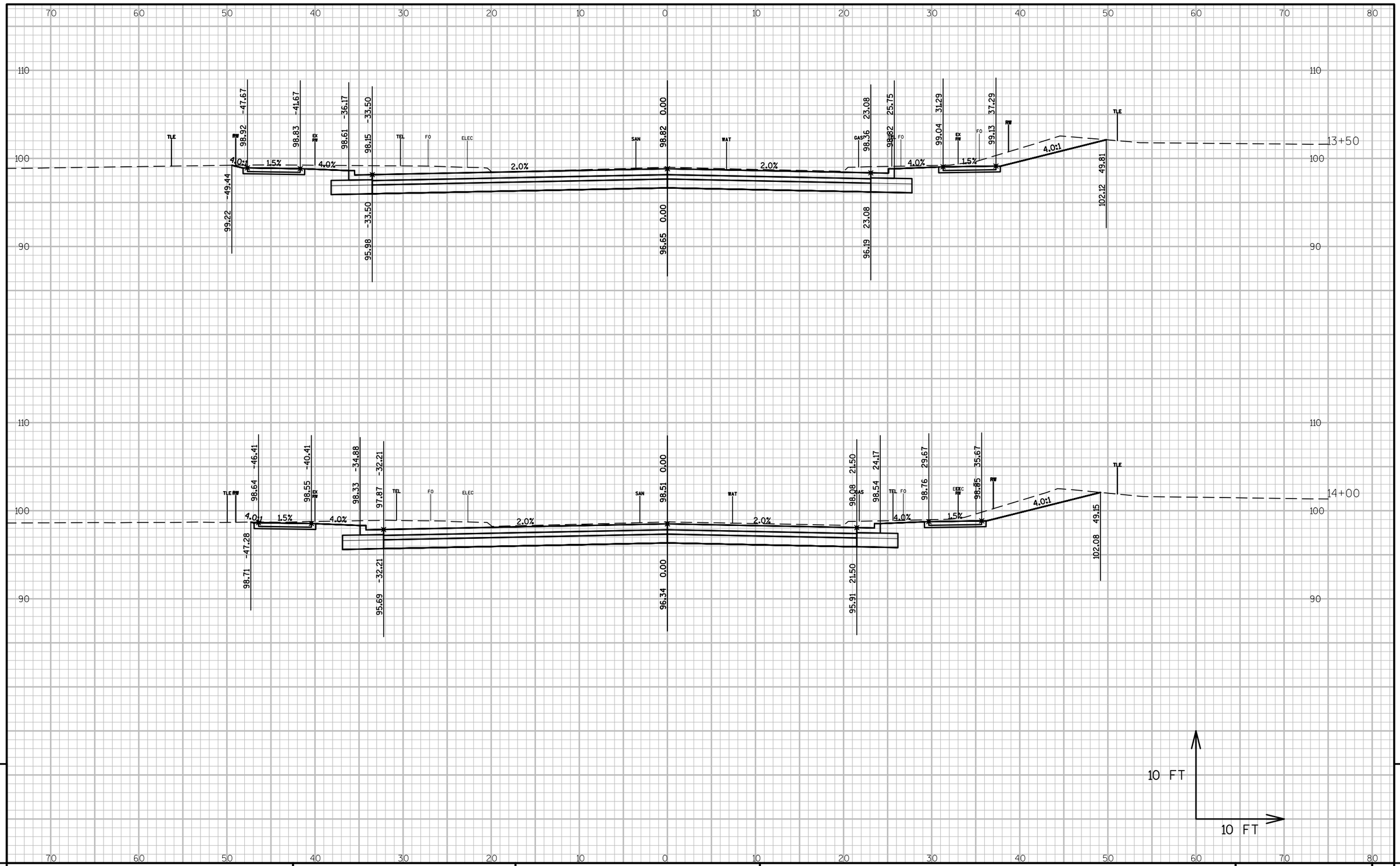
9

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 180	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090204_XS

PLOT DATE : 1/10/2019 4:35 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

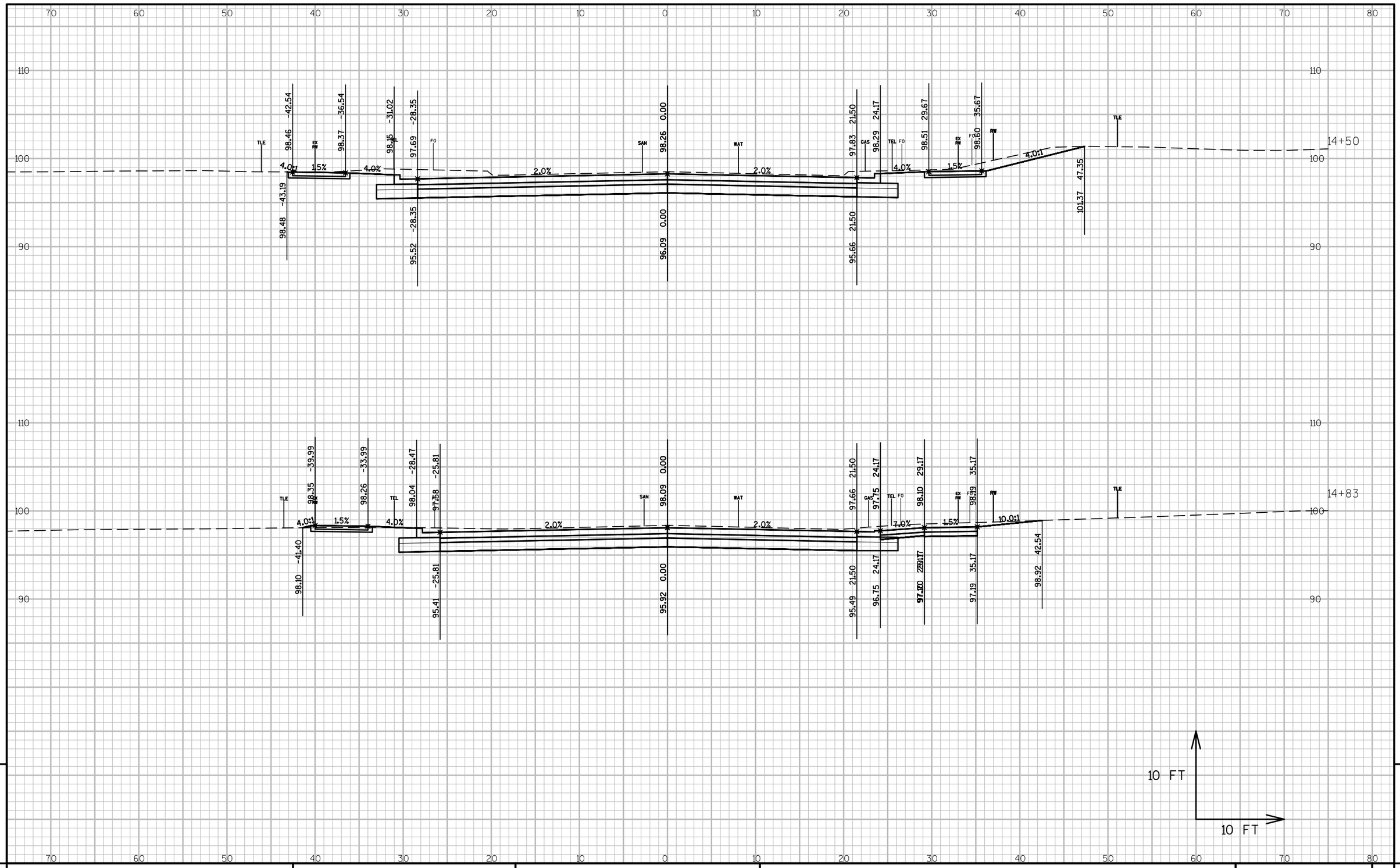


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 181	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090205_XS

PLOT DATE : 1/10/2019 4:35 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

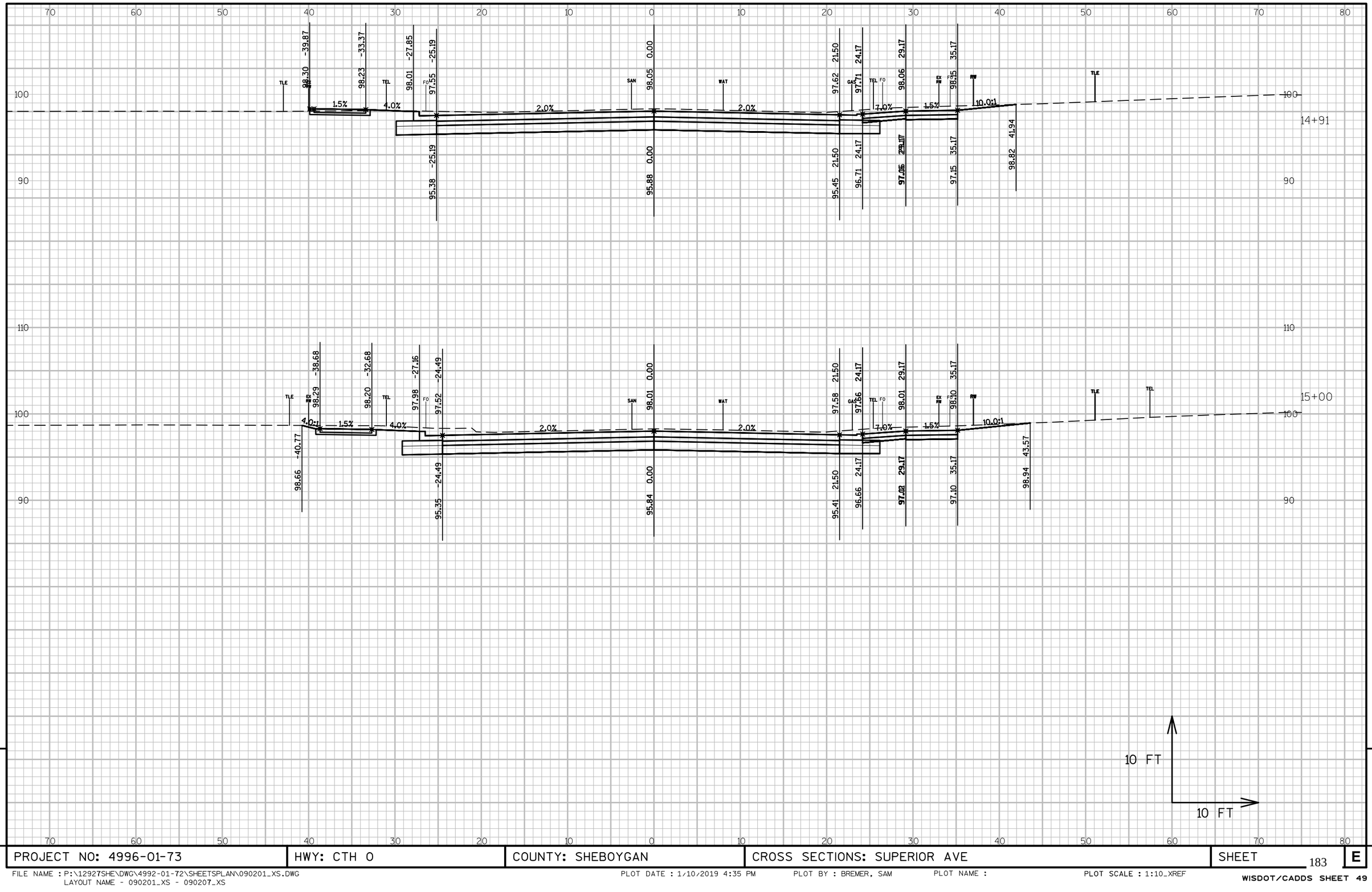


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 182	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090206_XS

PLOT DATE : 1/10/2019 4:35 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

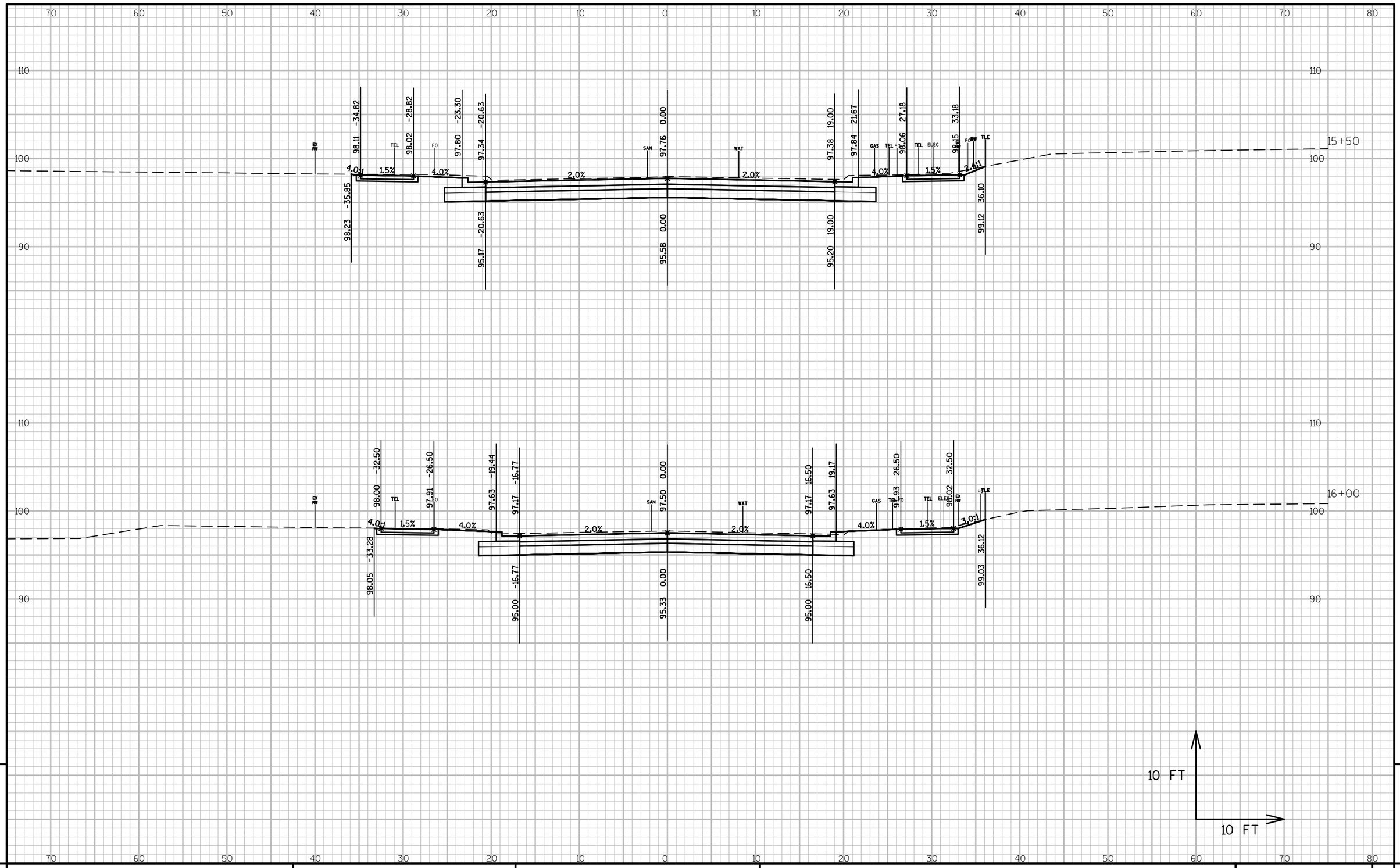


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 183	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090207_XS

PLOT DATE : 1/10/2019 4:35 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

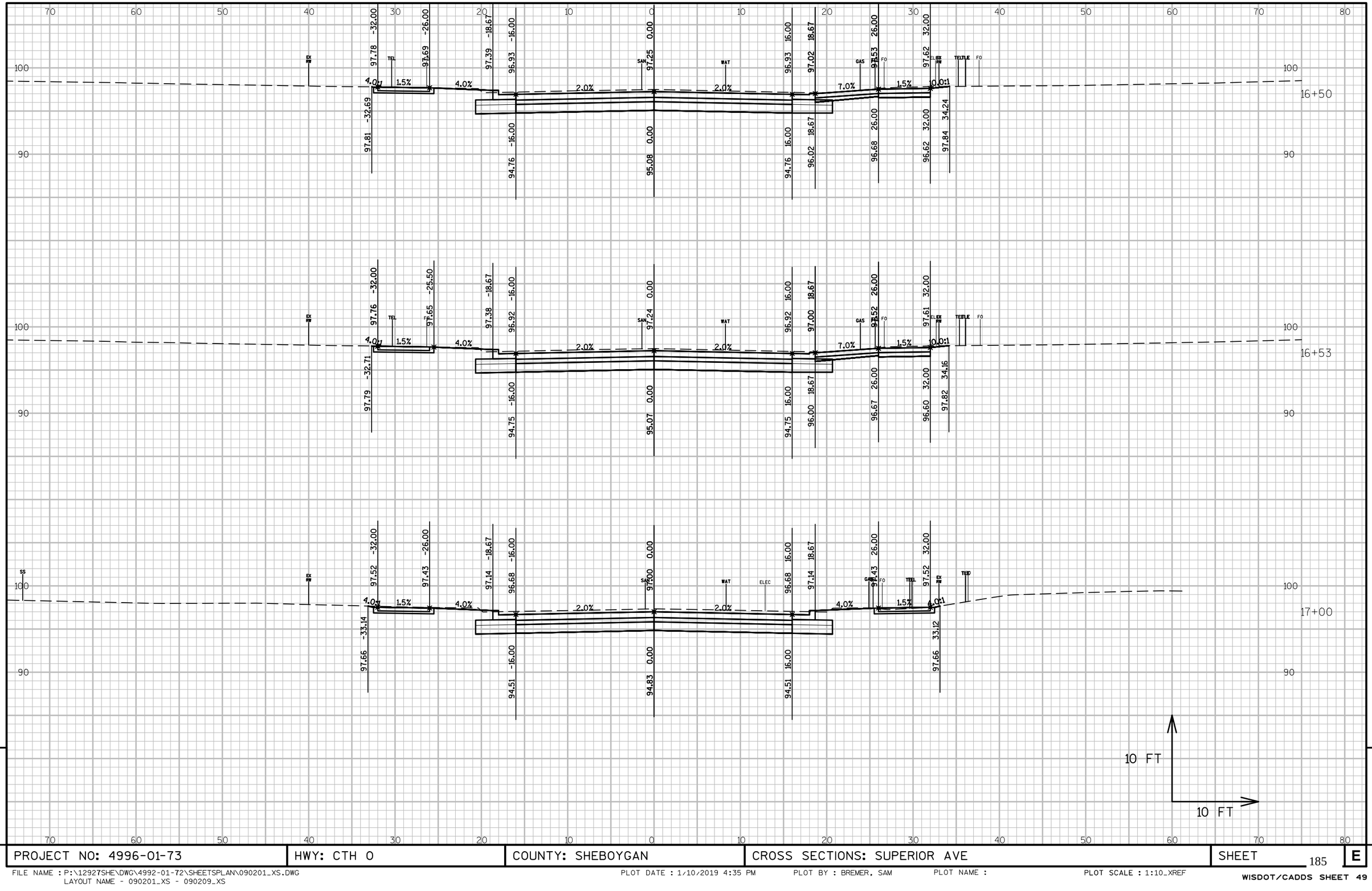


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 184	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090208_XS

PLOT DATE : 1/10/2019 4:35 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

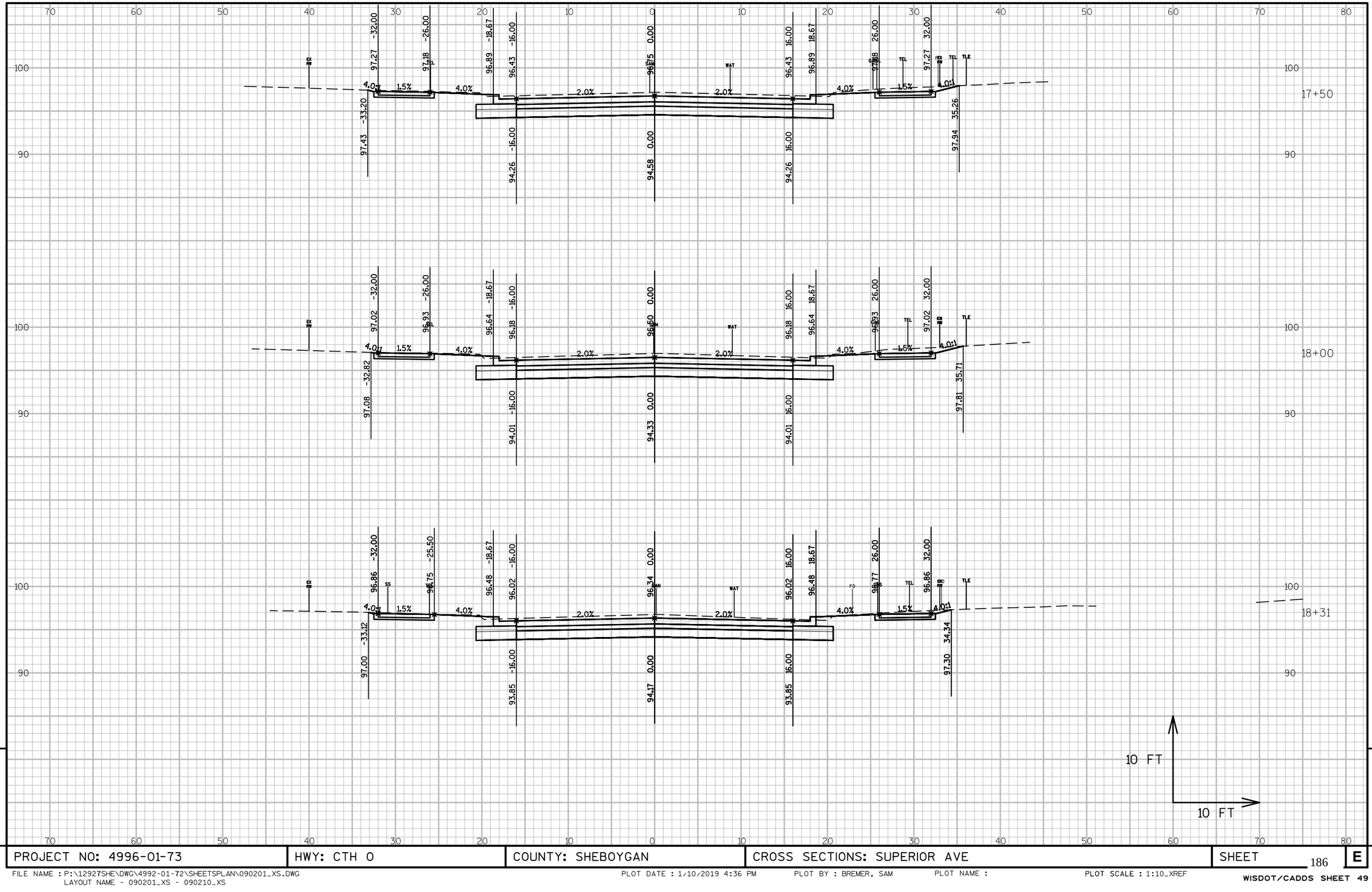


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 185	E

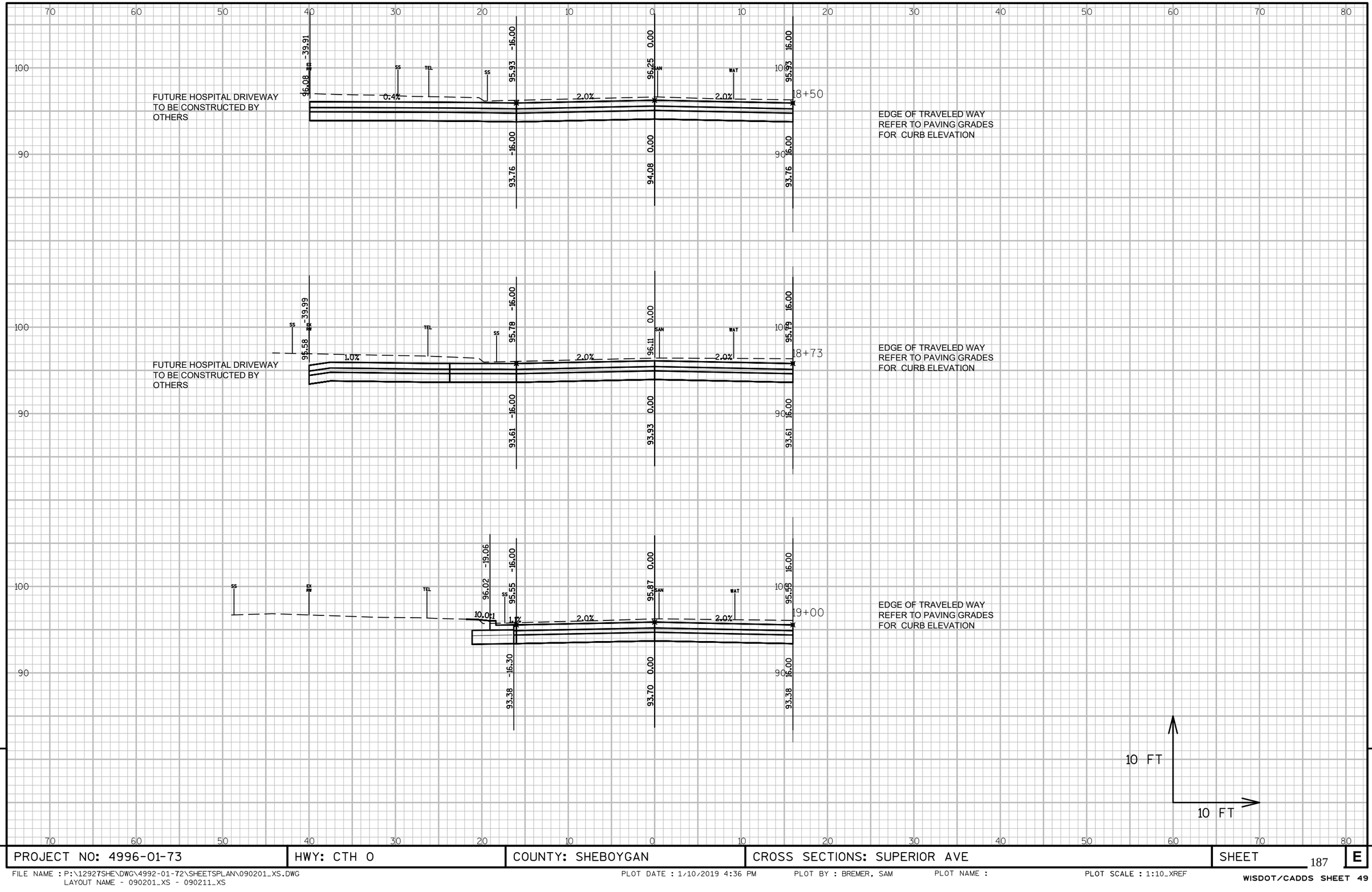
FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090209_XS

PLOT DATE : 1/10/2019 4:35 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

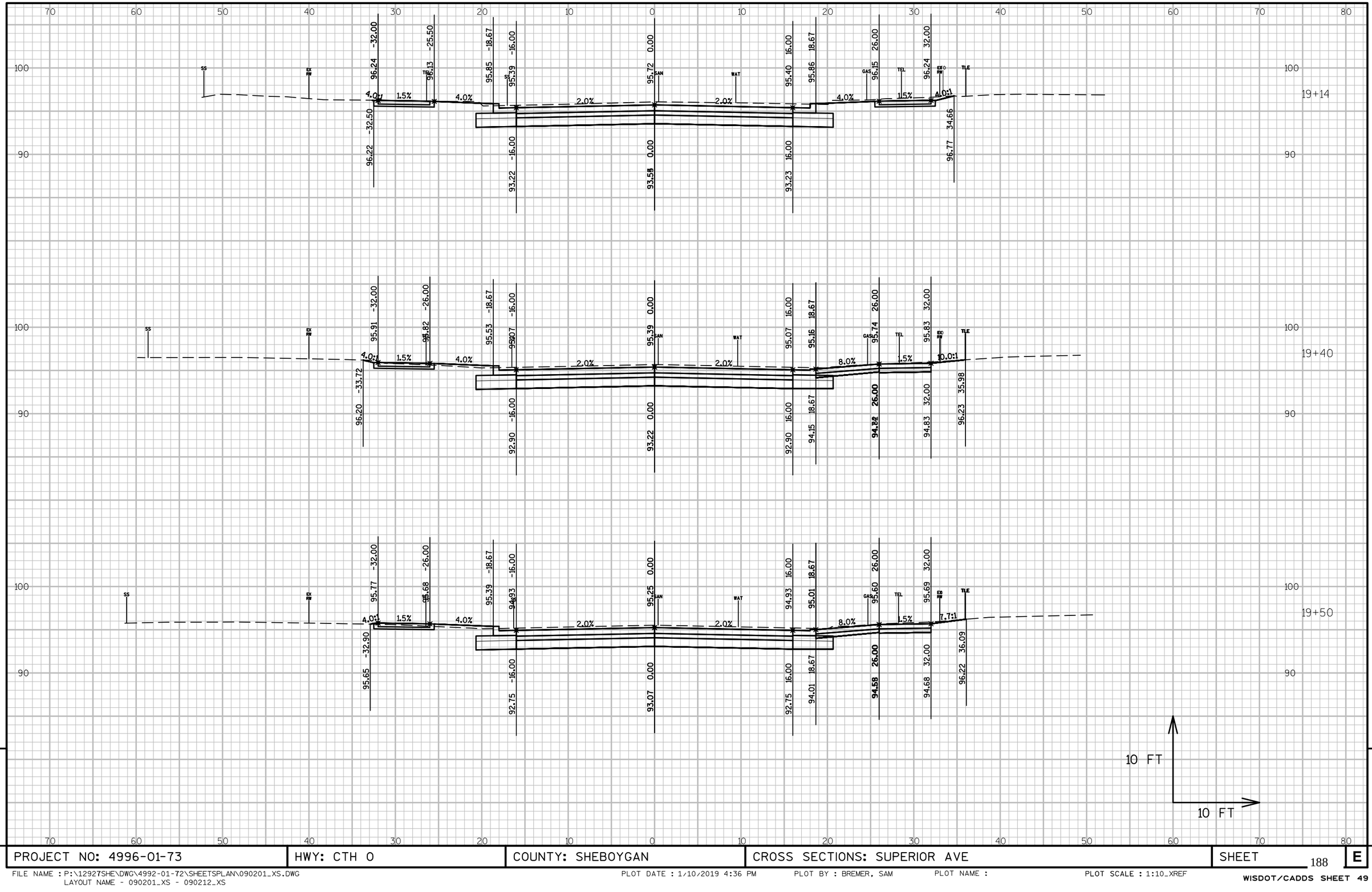


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 186 E



PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 187	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090211_XS
PLOT DATE : 1/10/2019 4:36 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49

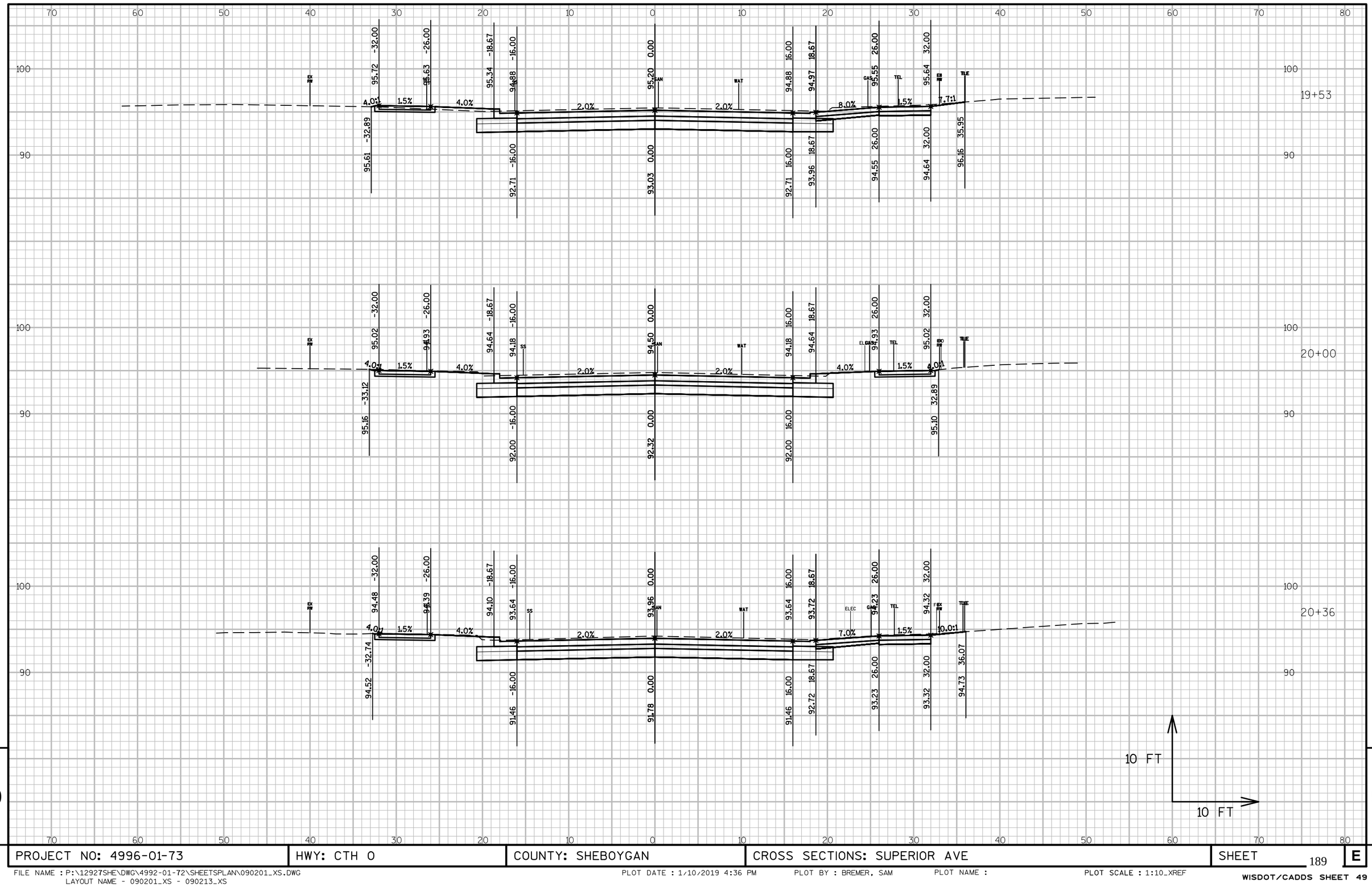


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 188	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090212_XS

PLOT DATE : 1/10/2019 4:36 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

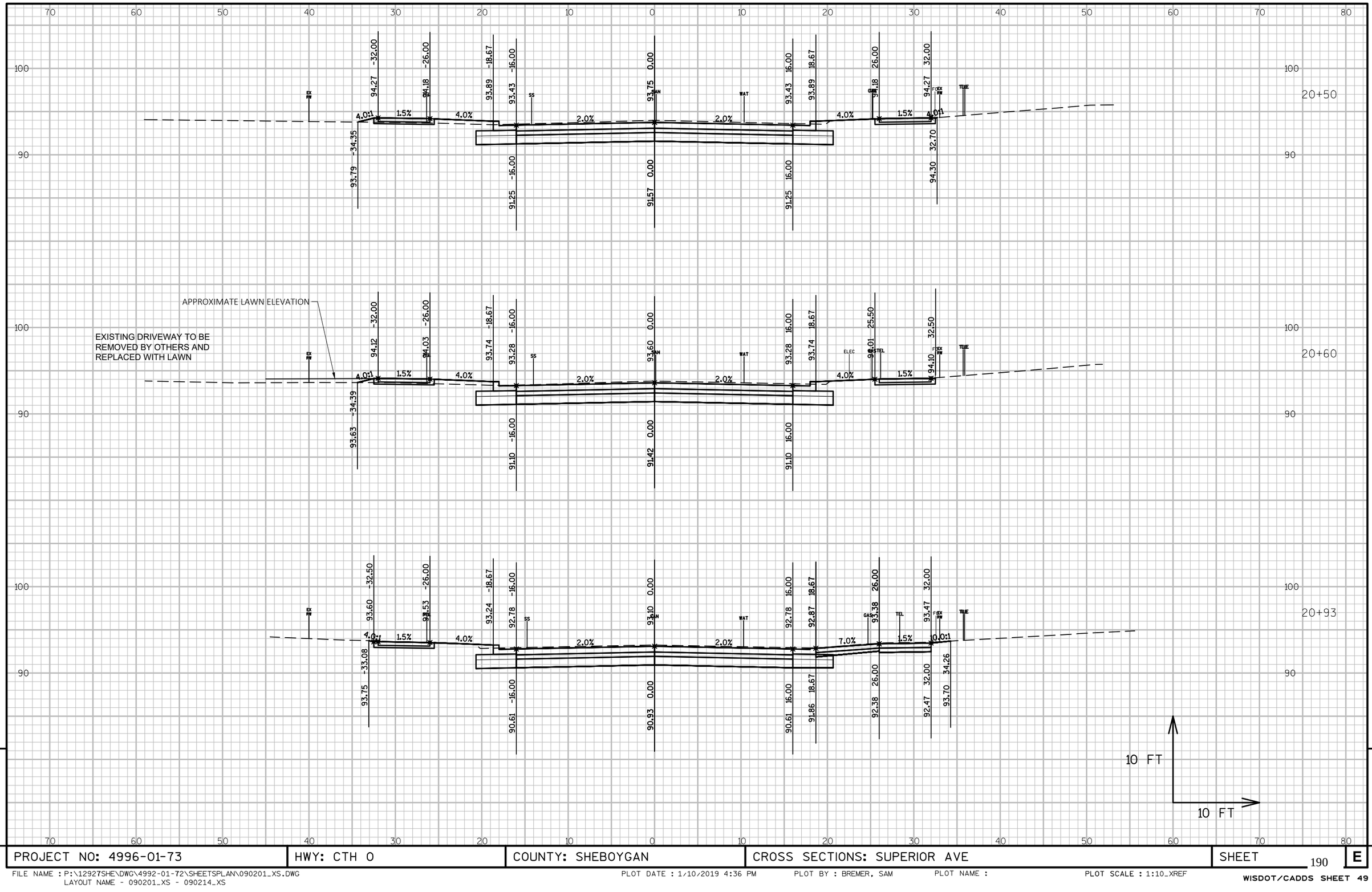


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 189	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090213_XS

PLOT DATE : 1/10/2019 4:36 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

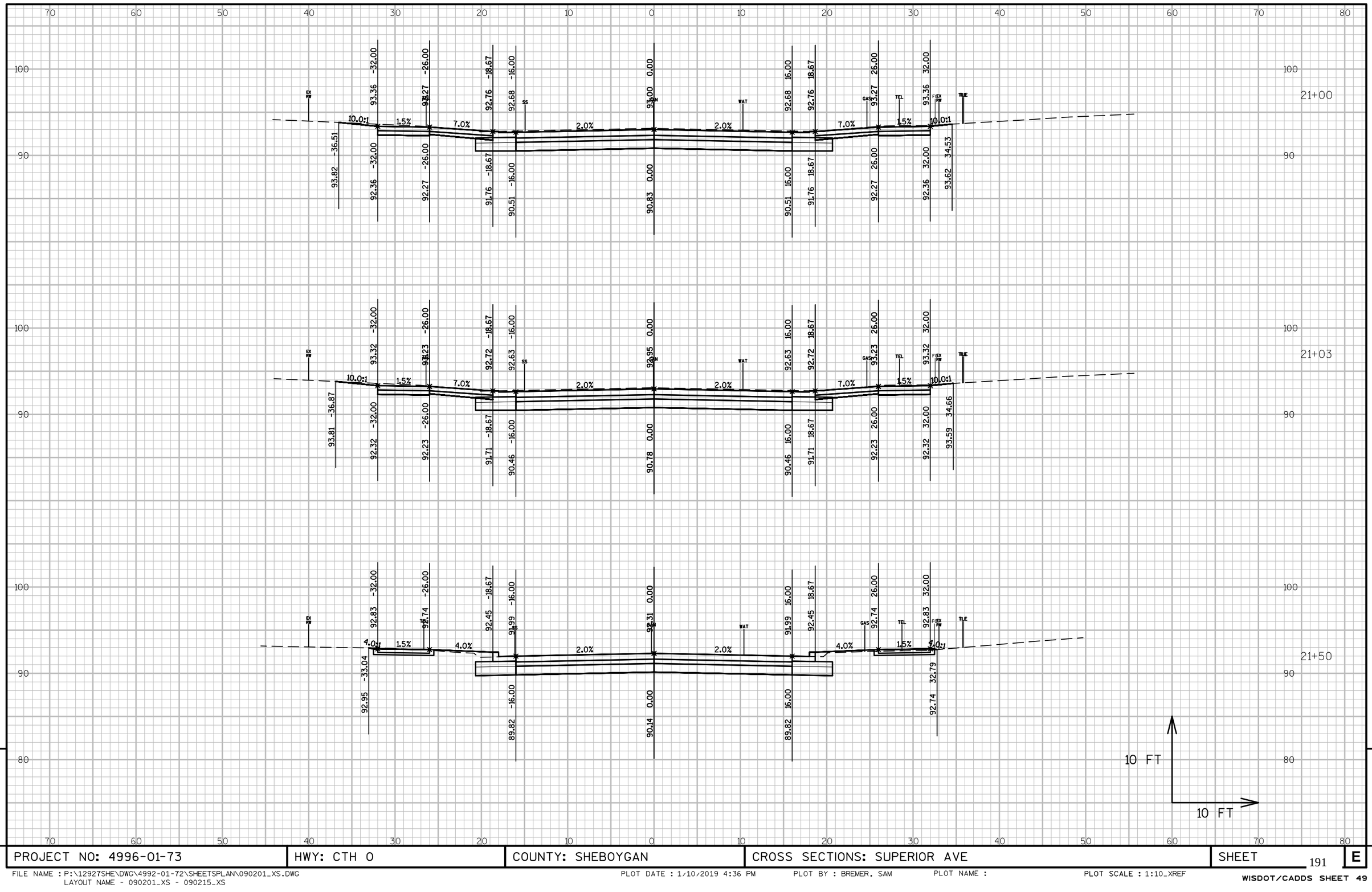


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 190	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090214_XS

PLOT DATE : 1/10/2019 4:36 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

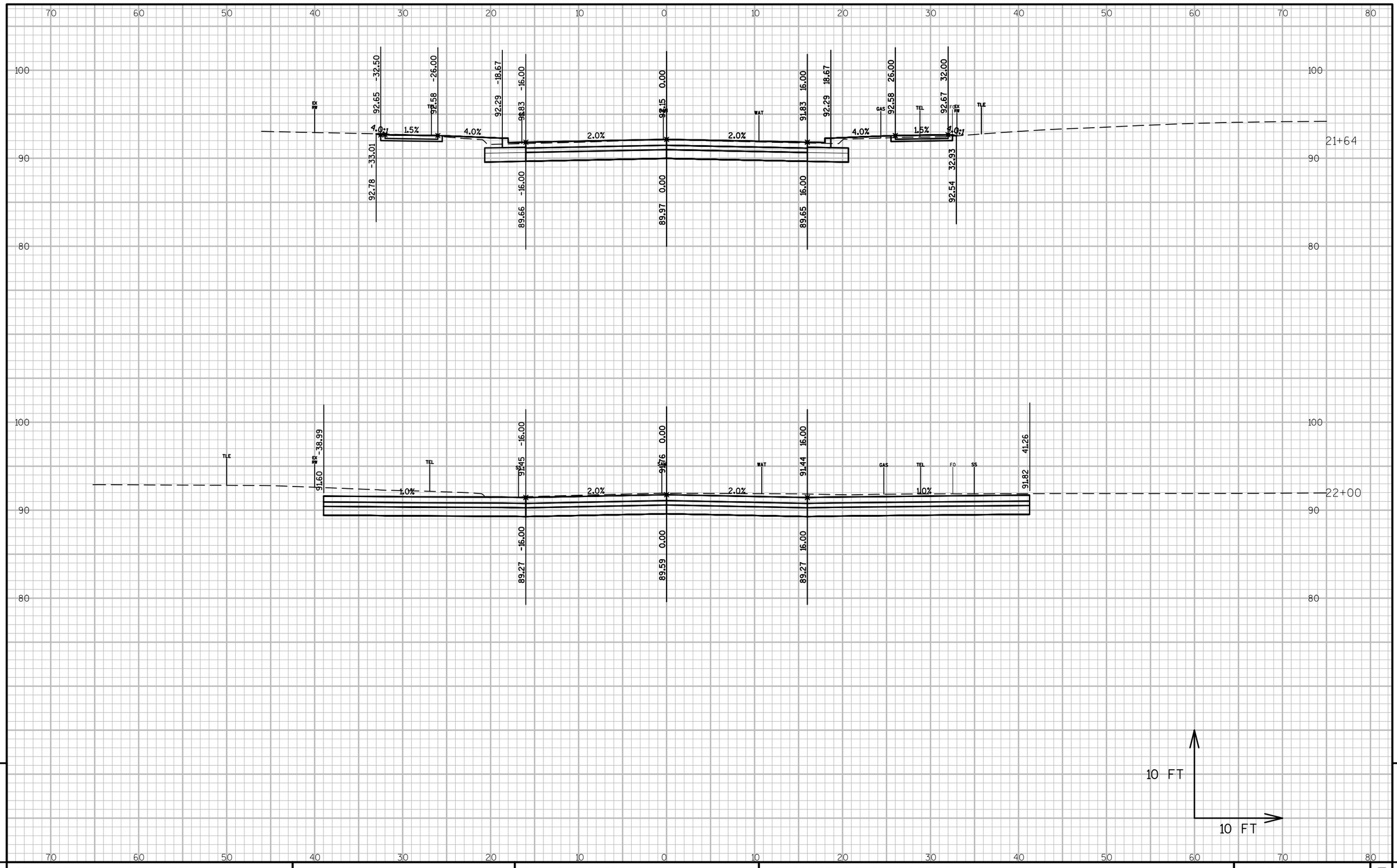
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 191	E

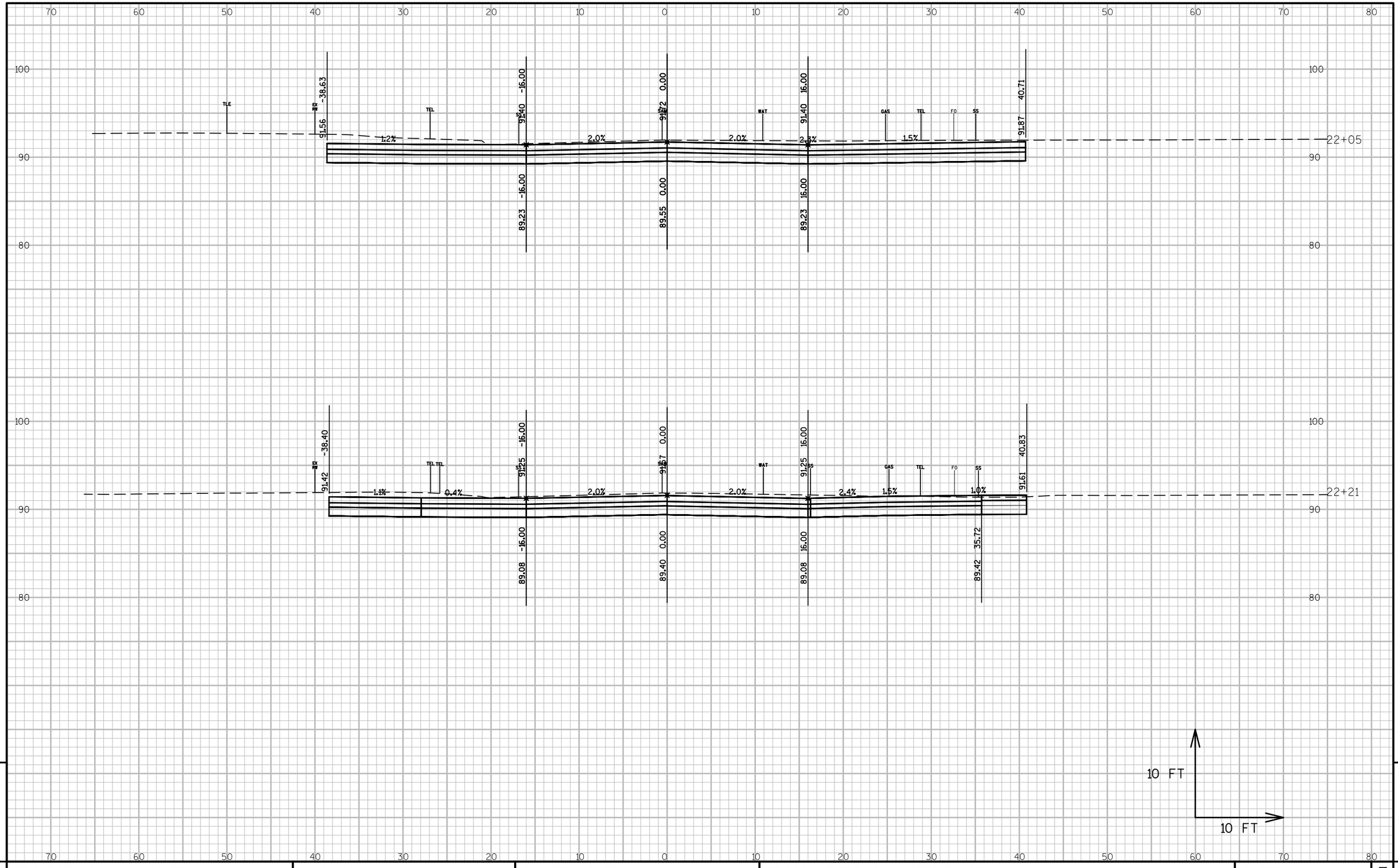


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 192	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090216_XS

PLOT DATE : 1/10/2019 4:36 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



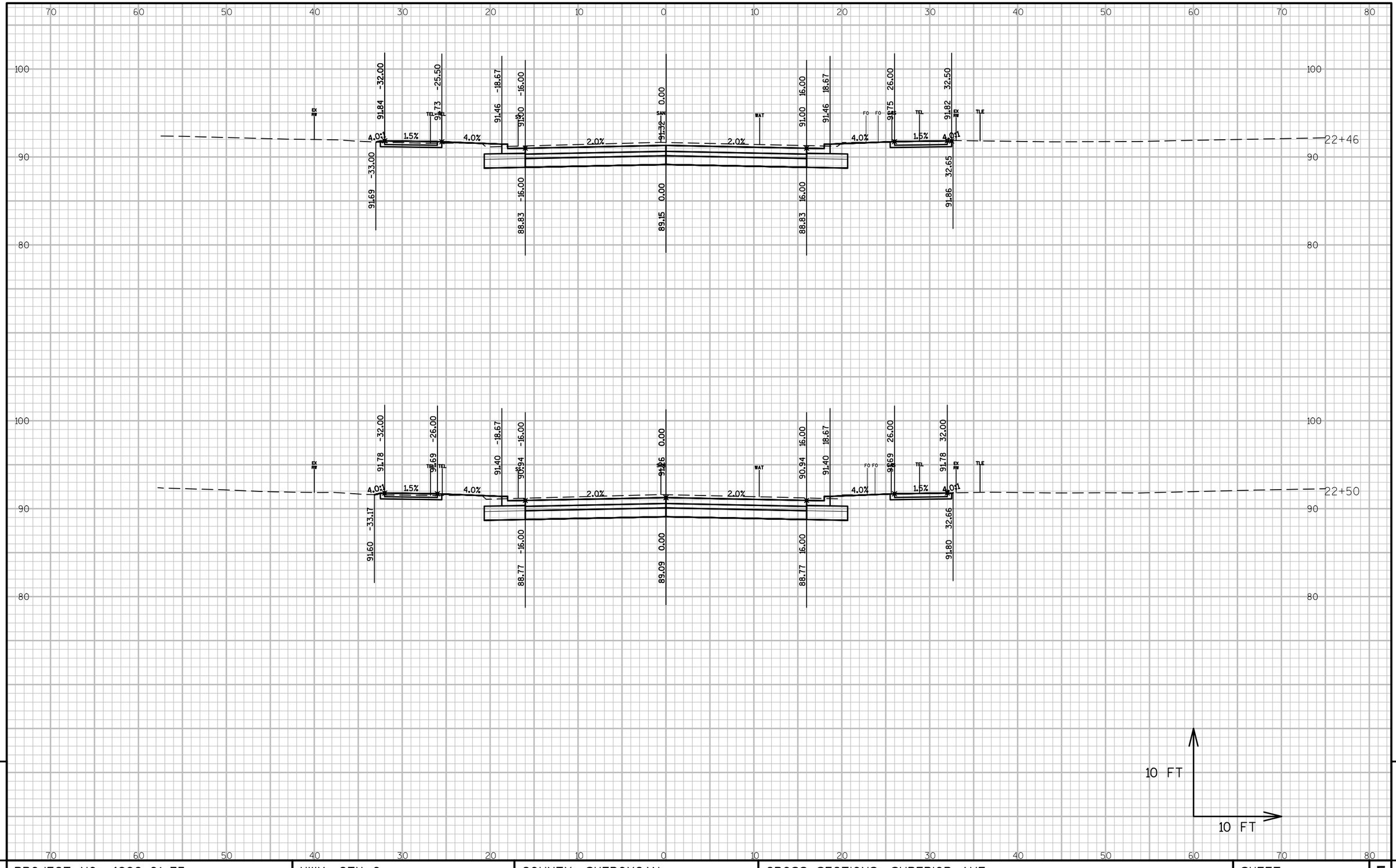
9

9

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 193	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090217_XS

PLOT DATE : 1/10/2019 4:36 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

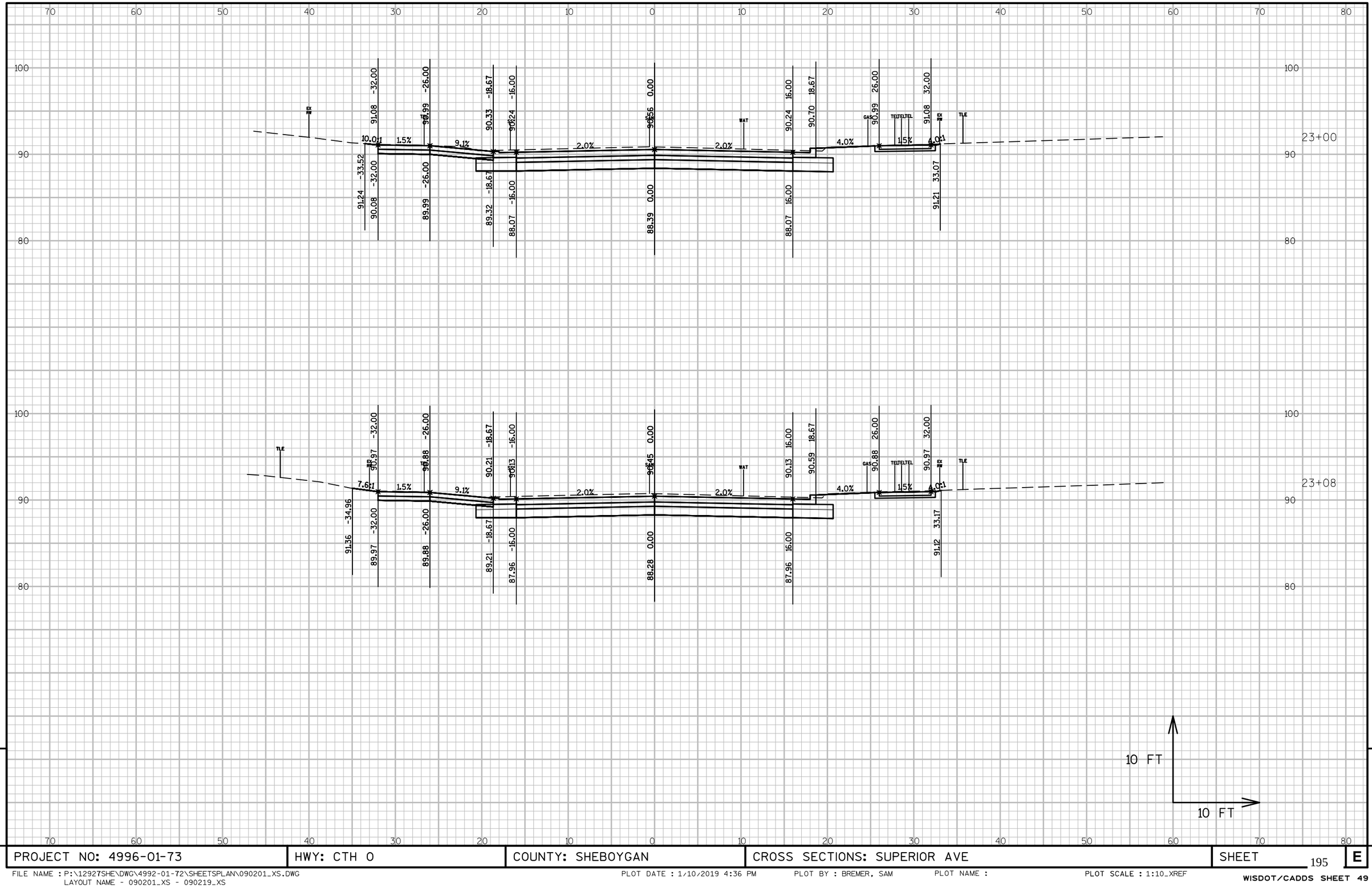


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 194	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090218_XS

PLOT DATE : 1/10/2019 4:36 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

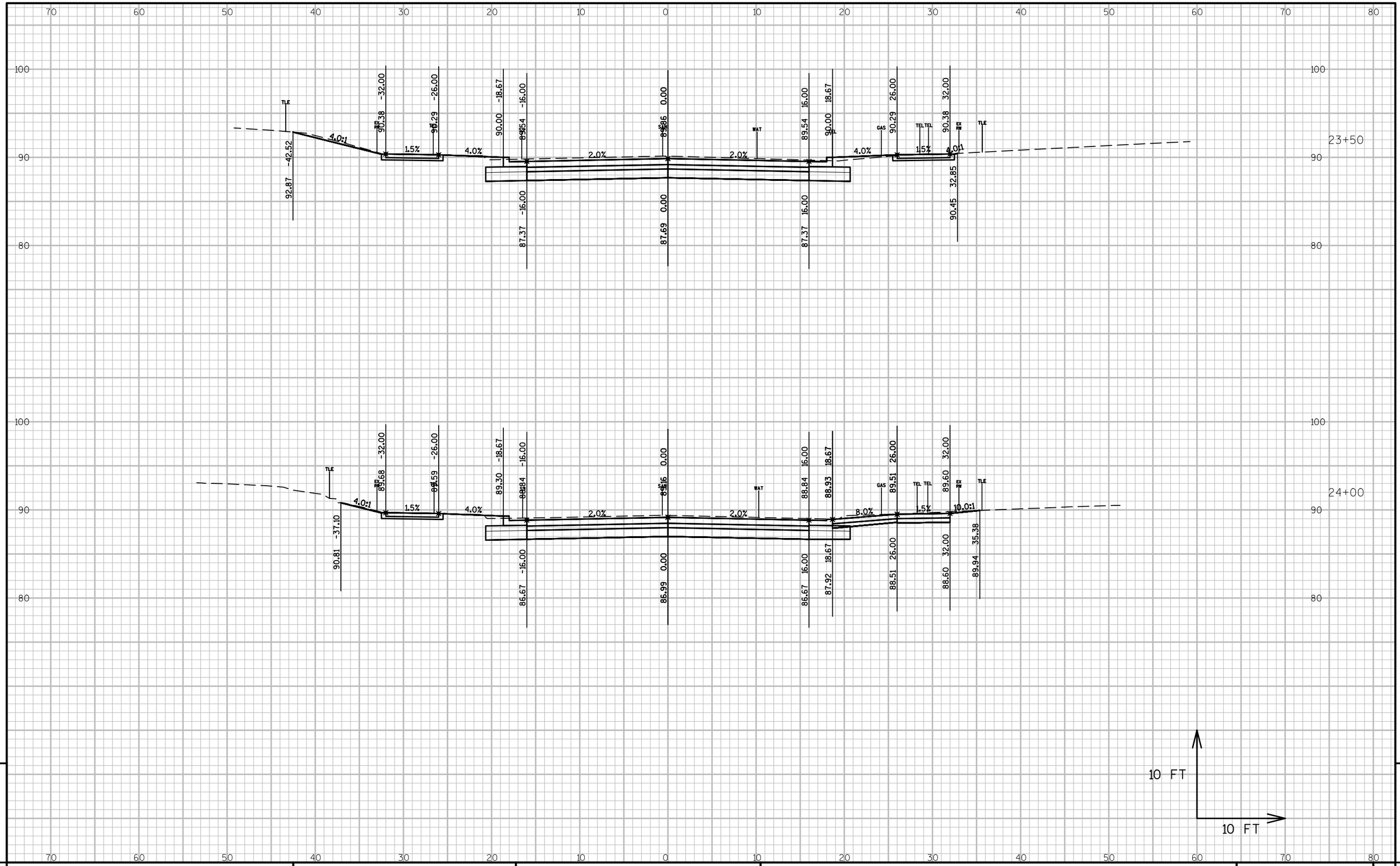


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 195	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090219_XS

PLOT DATE : 1/10/2019 4:36 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

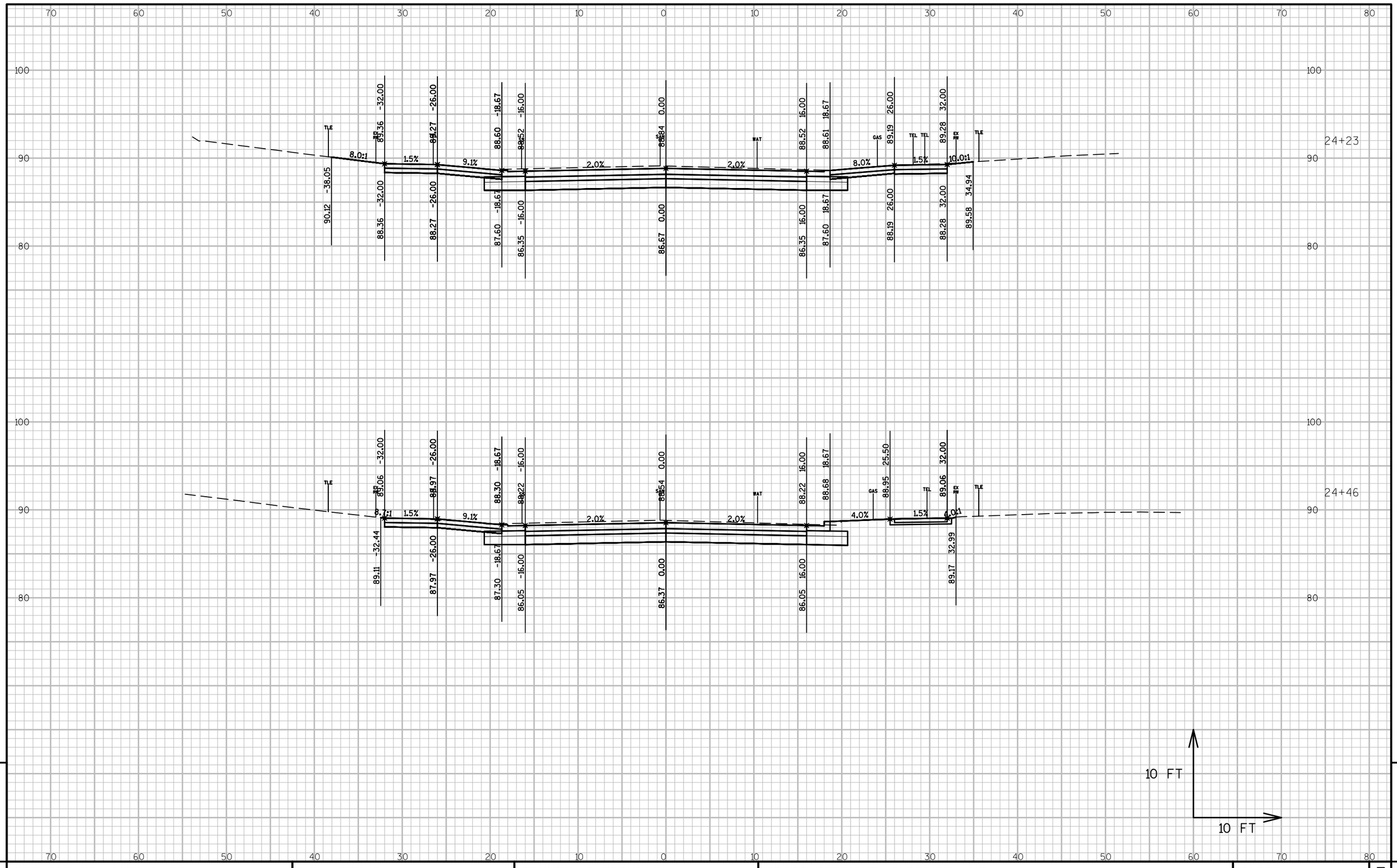


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 196	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090220_XS

PLOT DATE : 1/10/2019 4:36 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

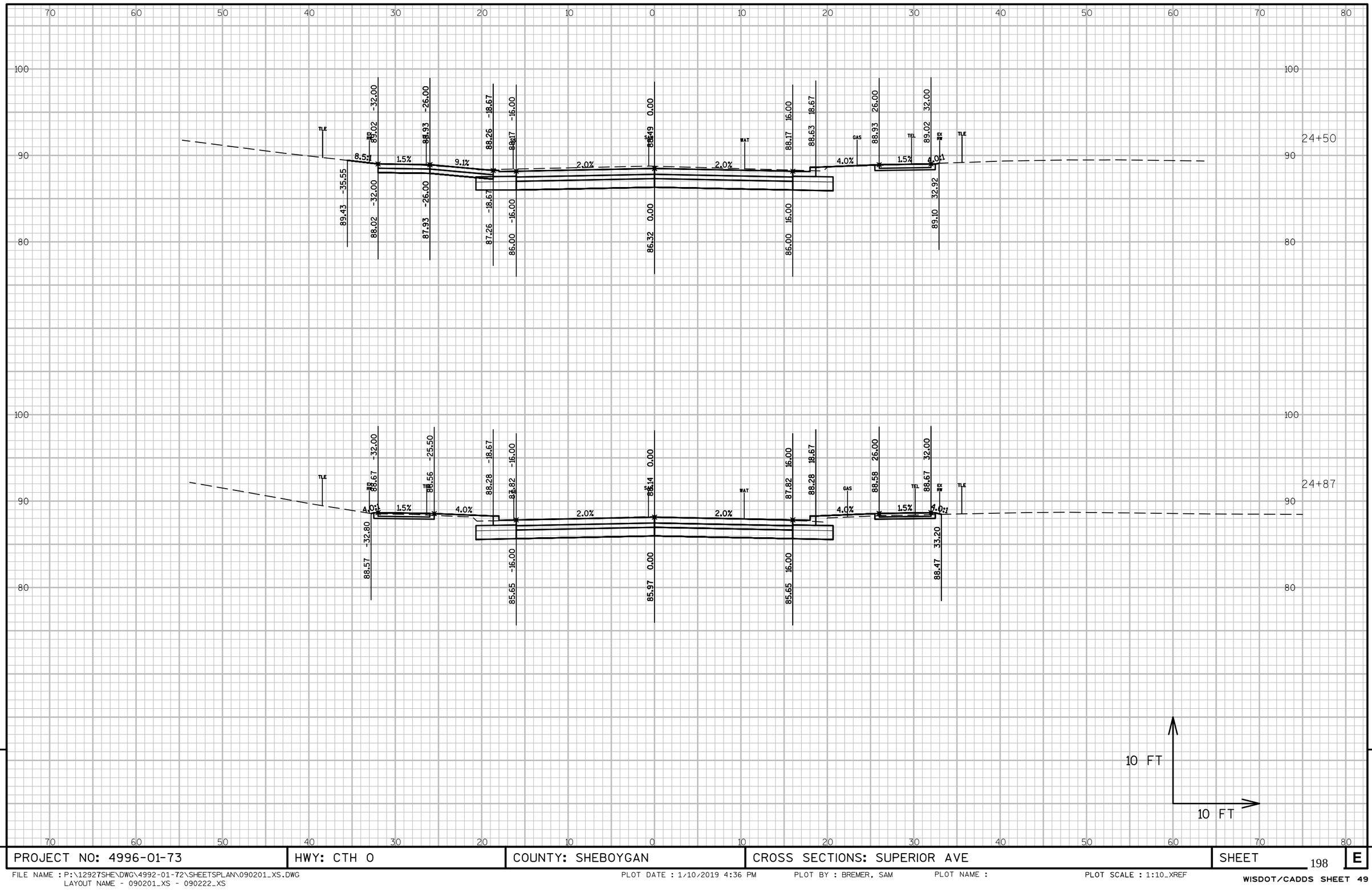


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 197	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090221_XS

PLOT DATE : 1/10/2019 4:36 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

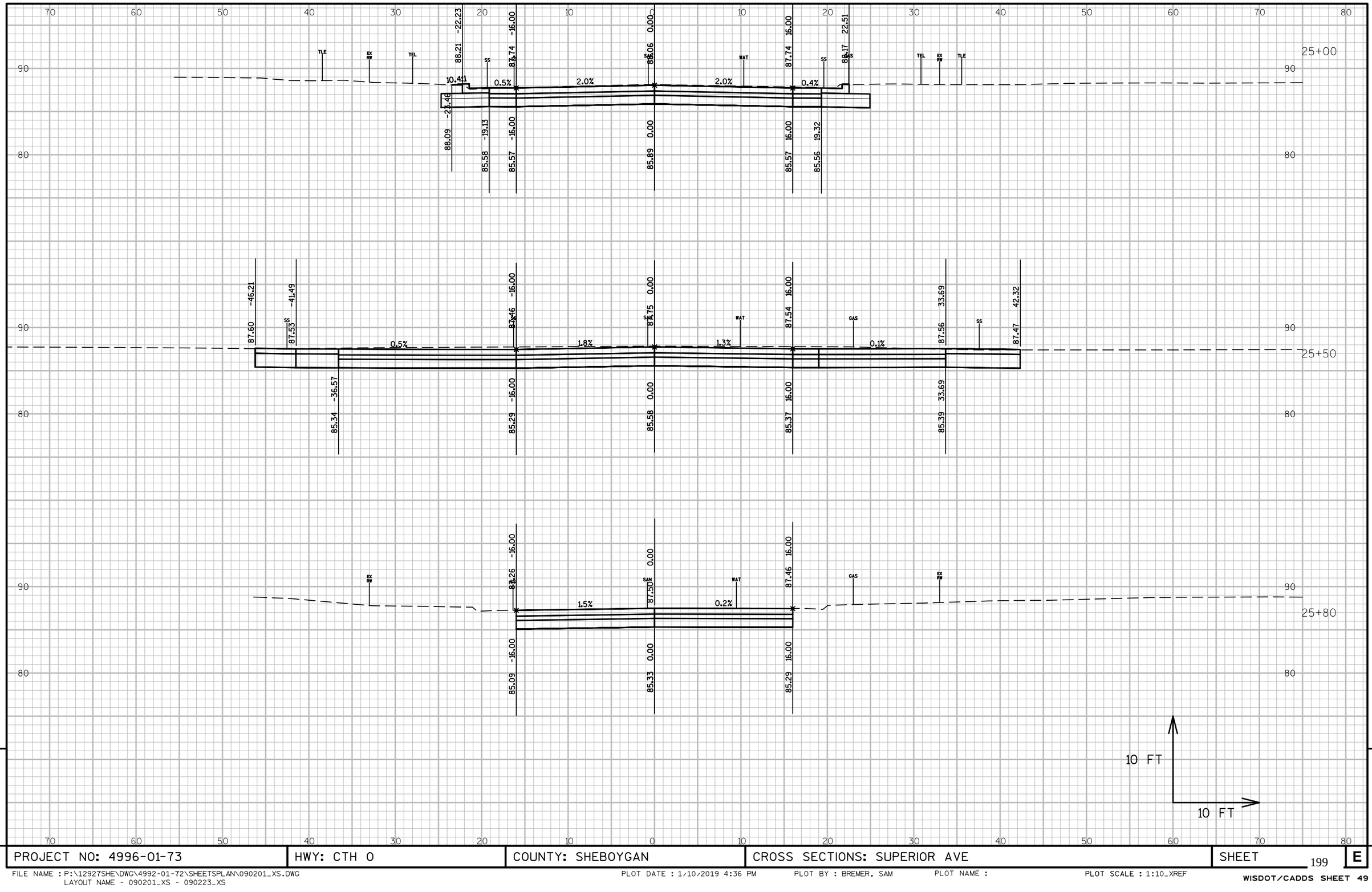


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 198	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090222_XS

PLOT DATE : 1/10/2019 4:36 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



9

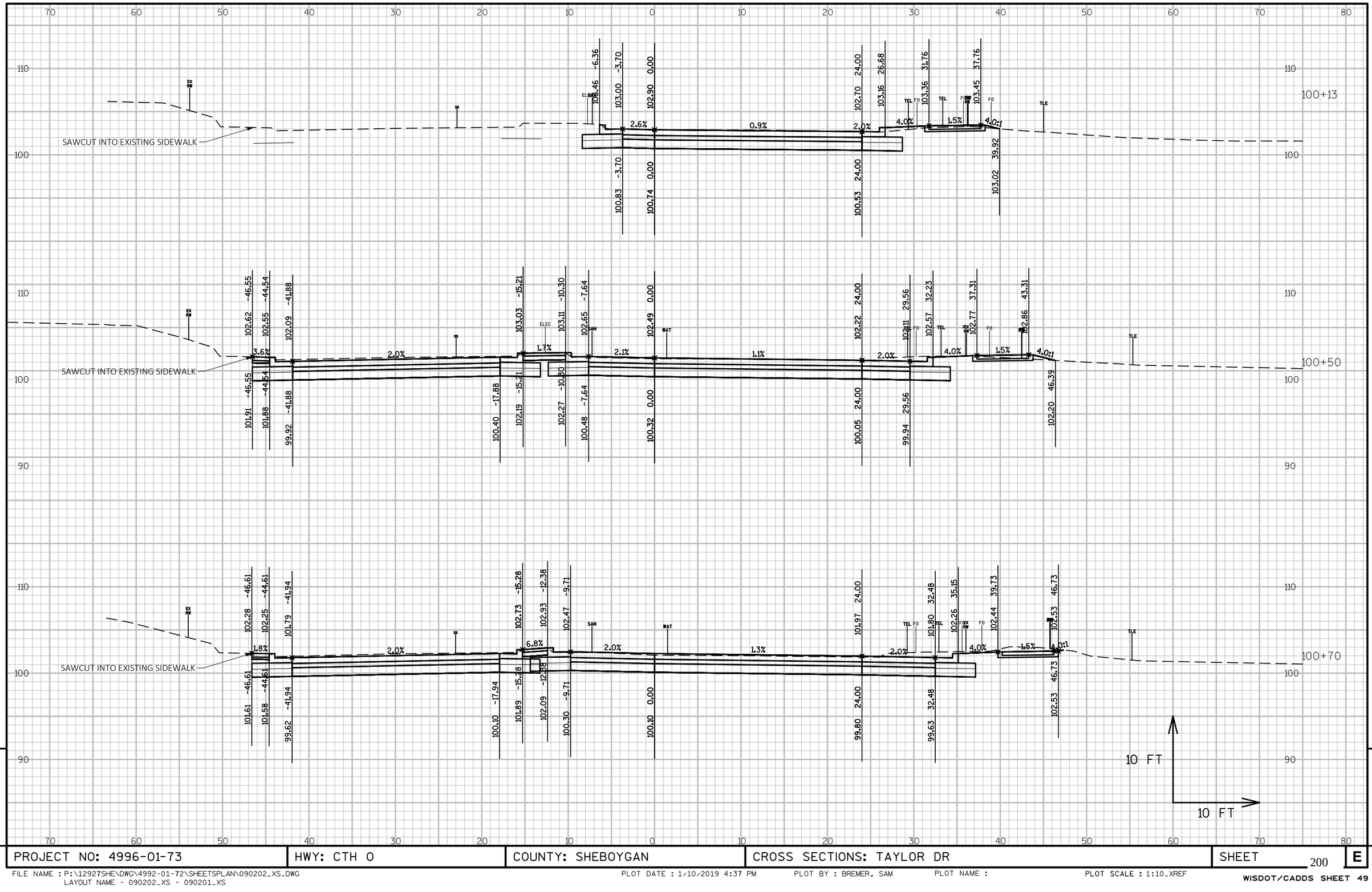
9

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: SUPERIOR AVE	SHEET 199	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS - 090223_XS

PLOT DATE : 1/10/2019 4:36 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

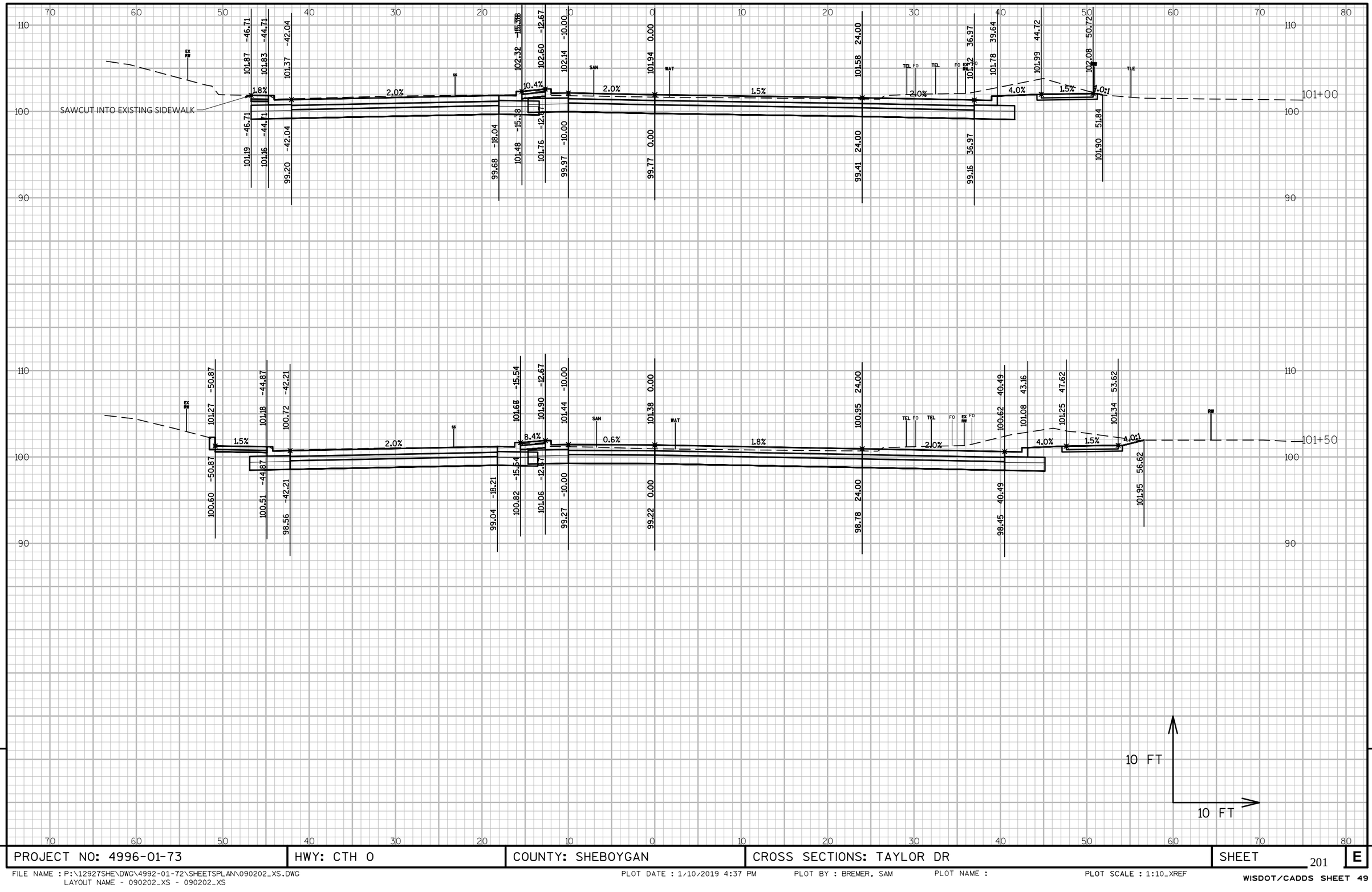


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: TAYLOR DR	SHEET 200	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 090202_XS - 090201_XS

PLOT DATE : 1/10/2019 4:37 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

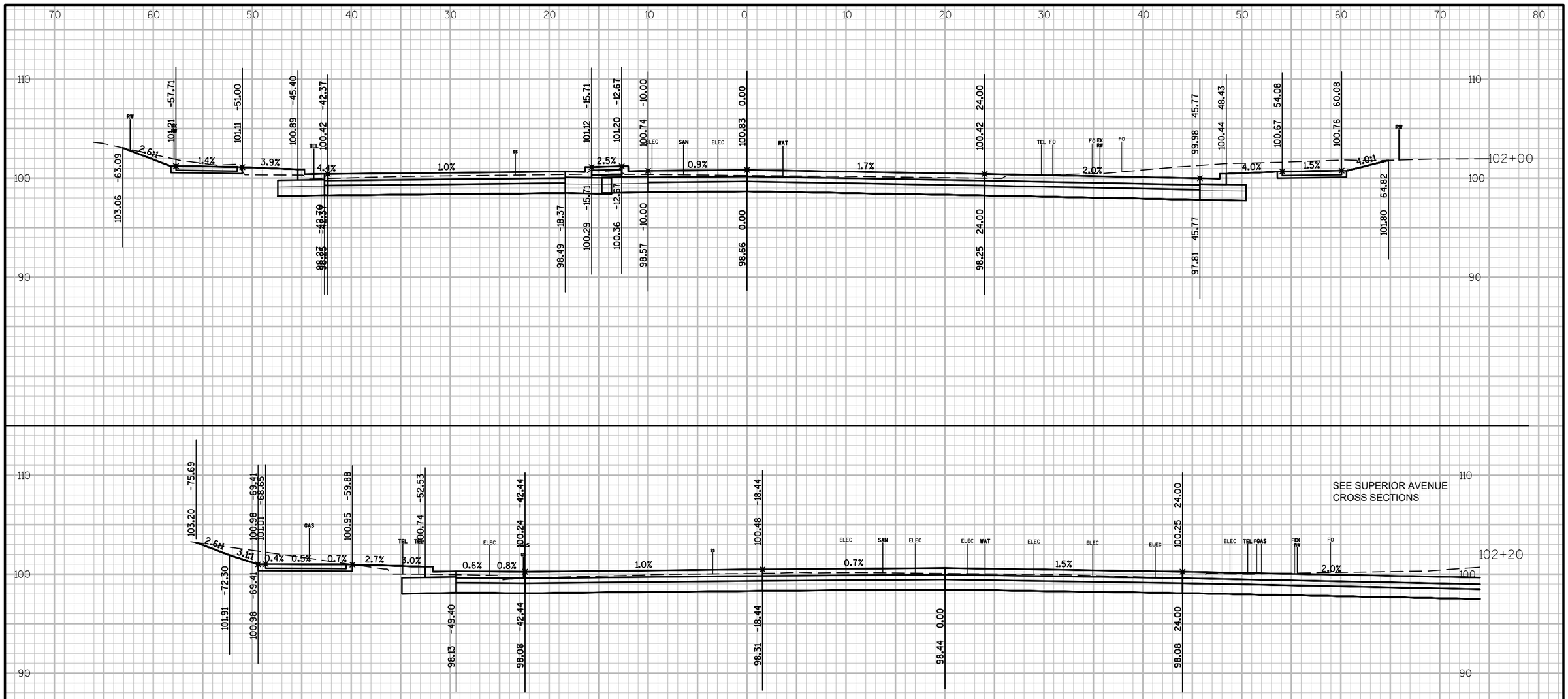


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: TAYLOR DR	SHEET 201	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 090202_XS - 090202_XS

PLOT DATE : 1/10/2019 4:37 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: TAYLOR DR	SHEET 202	E

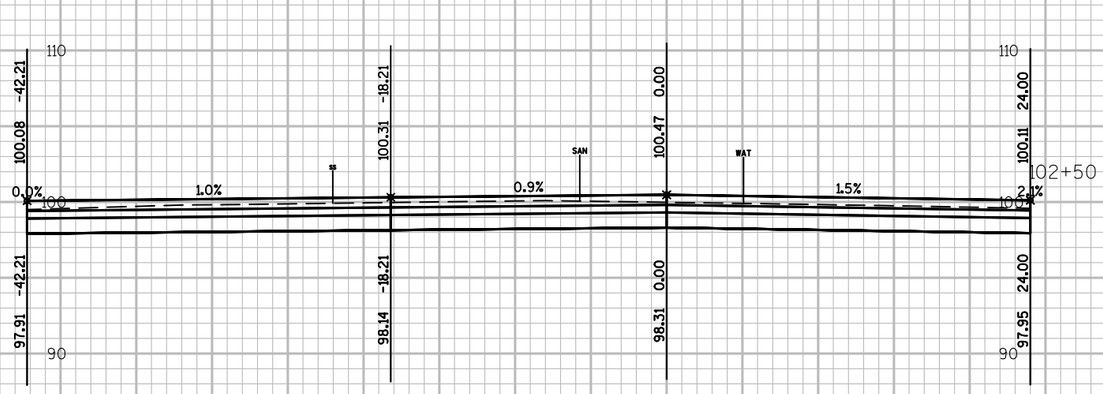
FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 090202_XS - 090203_XS

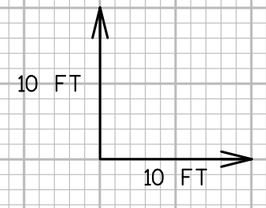
PLOT DATE : 1/10/2019 4:37 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

SEE SUPERIOR AVENUE
CROSS SECTIONS

SEE SUPERIOR AVENUE
CROSS SECTIONS





9

9

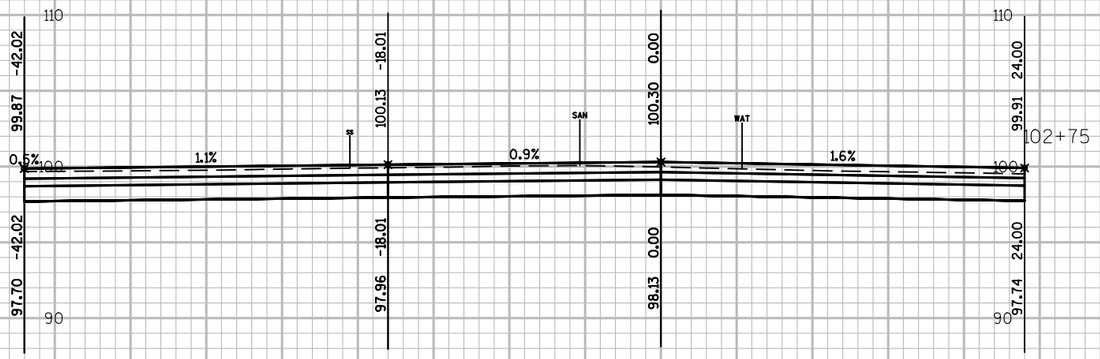
PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: TAYLOR DR	SHEET 203	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 090202_XS - 090204_XS

PLOT DATE : 1/10/2019 4:37 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

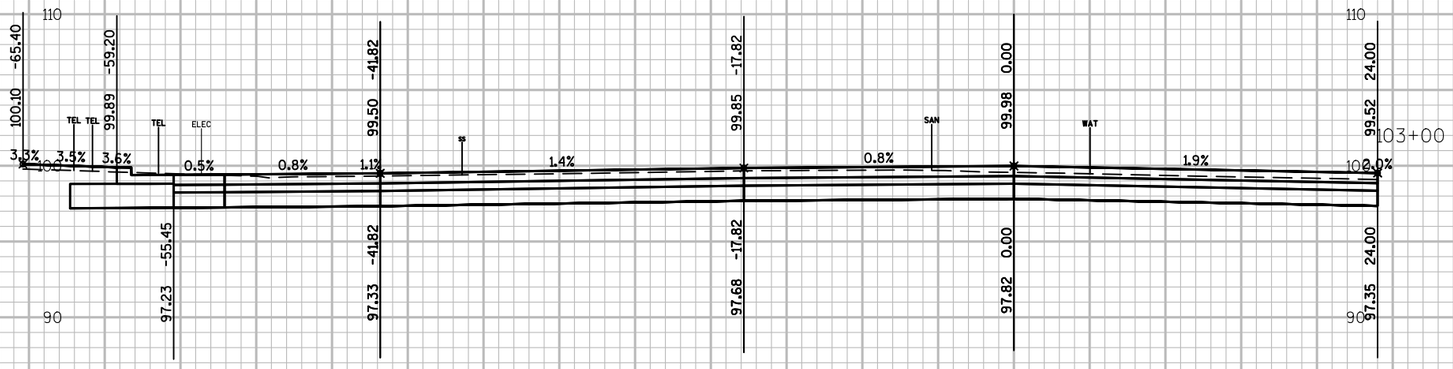
WISDOT/CADDS SHEET 49

SEE SUPERIOR AVENUE
CROSS SECTIONS

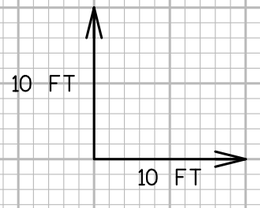


SEE SUPERIOR AVENUE
CROSS SECTIONS

SEE SUPERIOR AVENUE
CROSS SECTIONS



SEE SUPERIOR AVENUE
CROSS SECTIONS



9

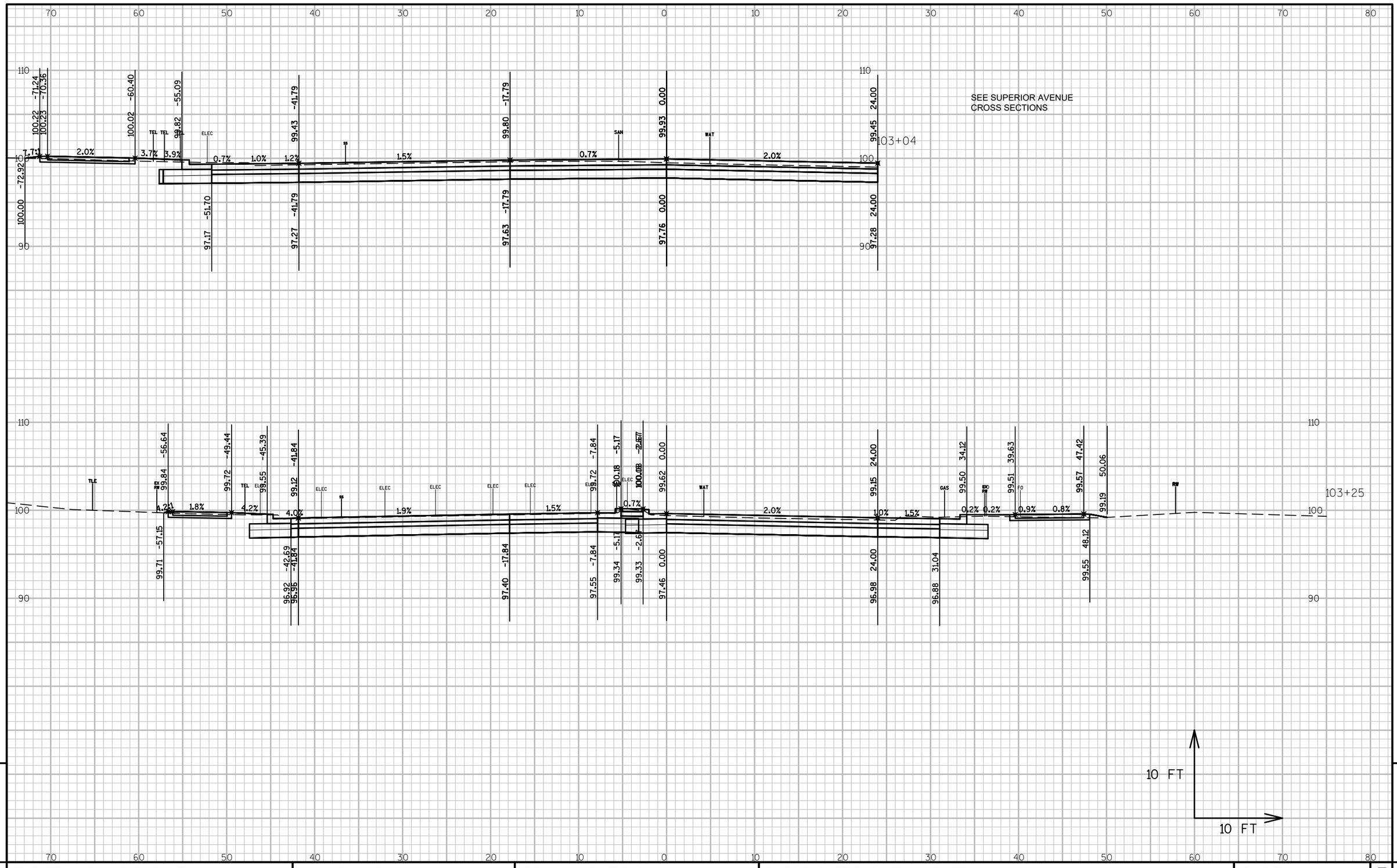
9

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: TAYLOR DR	SHEET 204	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 090202_XS - 090205_XS

PLOT DATE : 1/10/2019 4:37 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



9

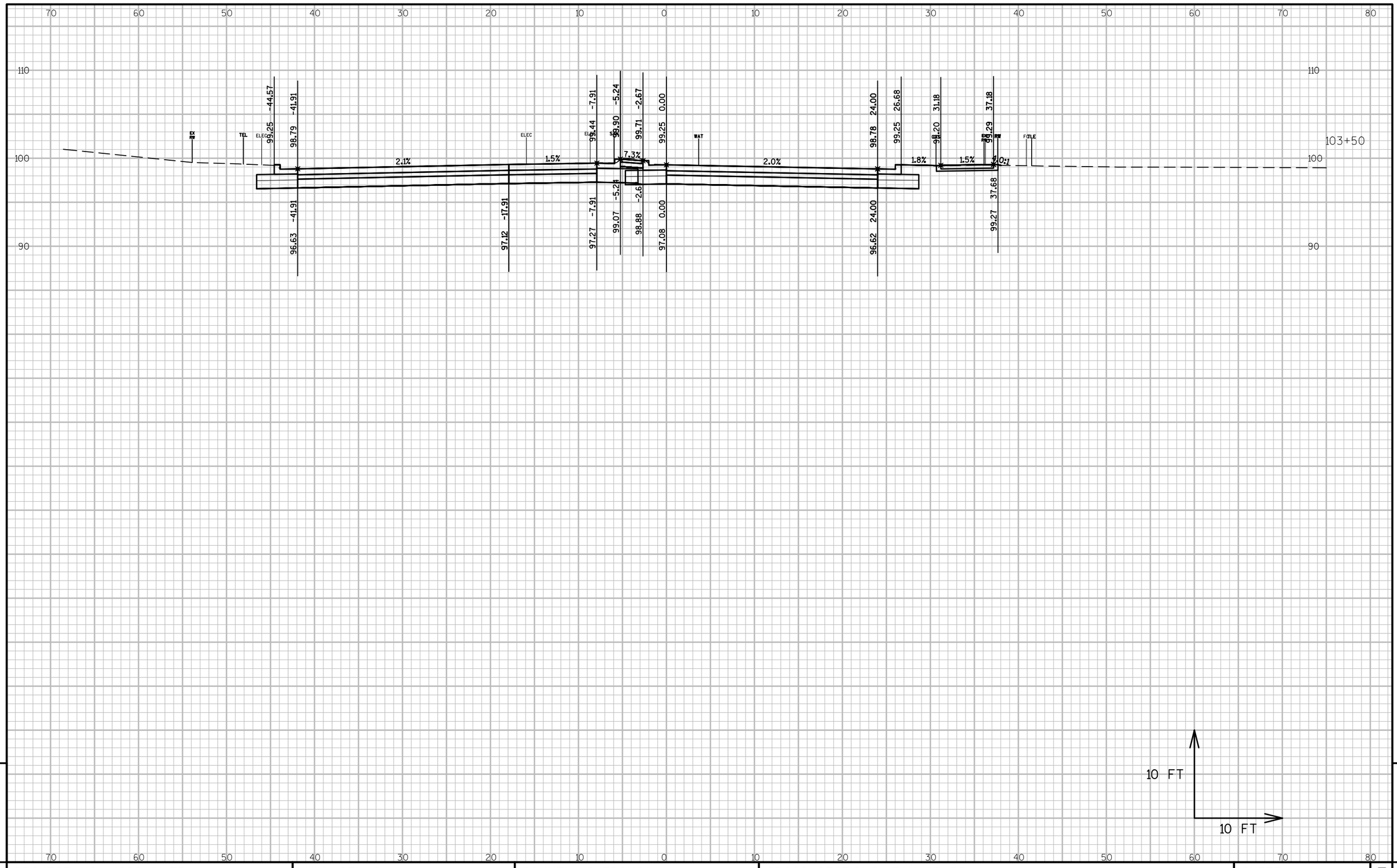
9

PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: TAYLOR DR	SHEET 205	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 090202_XS - 090206_XS

PLOT DATE : 1/10/2019 4:37 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

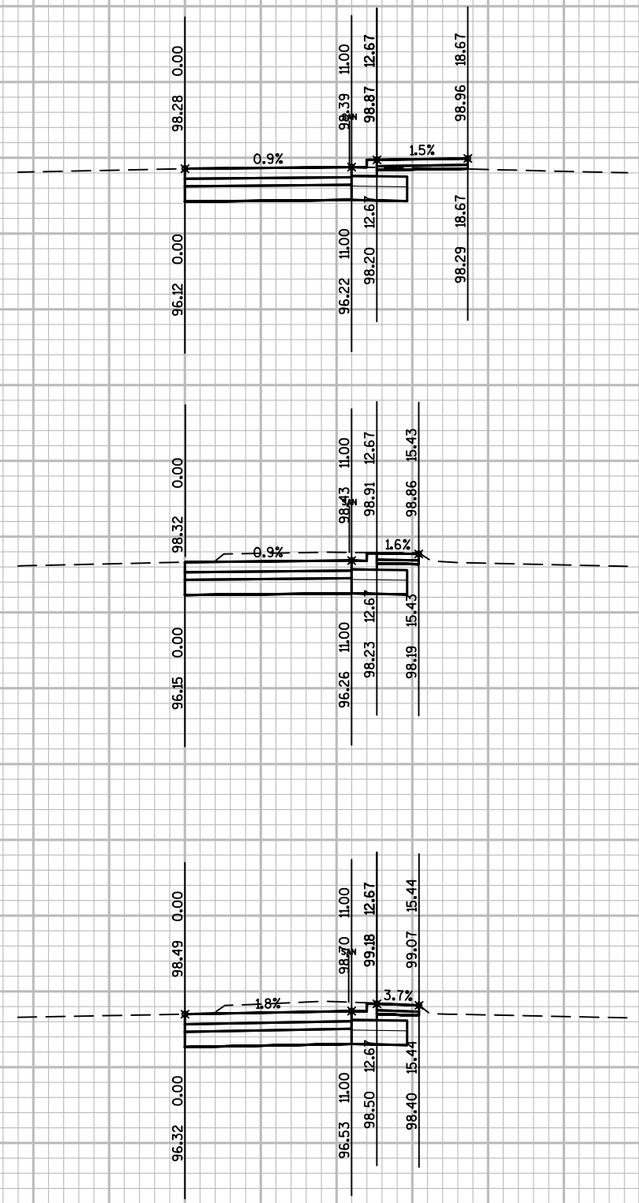


PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: TAYLOR DR	SHEET 206	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 090202_XS - 090207_XS

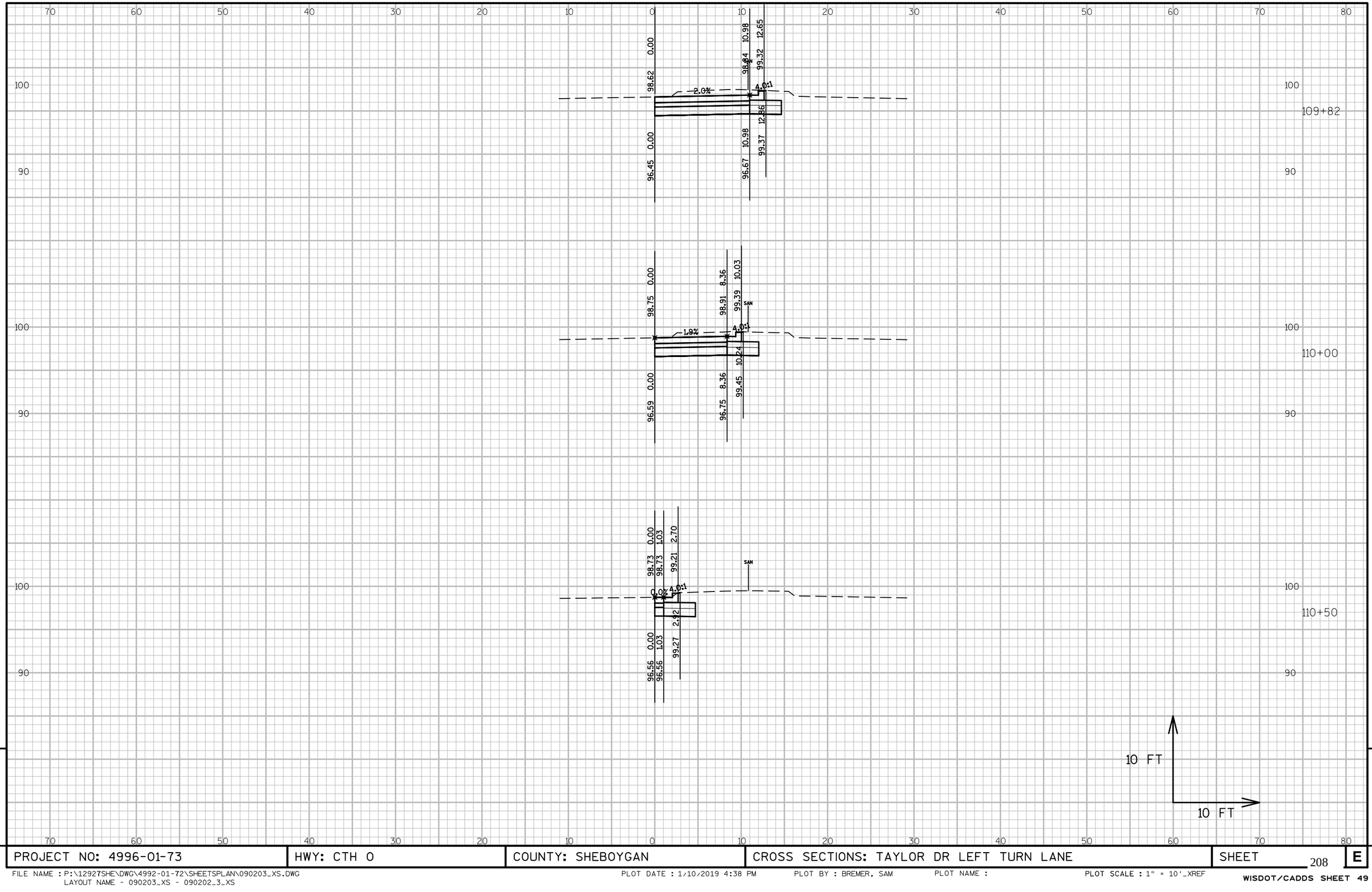
PLOT DATE : 1/10/2019 4:37 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: TAYLOR DR LEFT TURN LANE	SHEET 207	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090203_XS - 090201_3_XS
PLOT DATE : 1/10/2019 4:38 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 4996-01-73	HWY: CTH O	COUNTY: SHEBOYGAN	CROSS SECTIONS: TAYLOR DR LEFT TURN LANE	SHEET 208	E

FILE NAME : P:\12927SHE\DWG\4992-01-72\SHEETSPLAN\090203_XS.DWG
LAYOUT NAME - 090203_XS - 090202_3_XS

PLOT DATE : 1/10/2019 4:38 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov