MAD

PROJECT ID: 5659-00-74

WITH: N/A

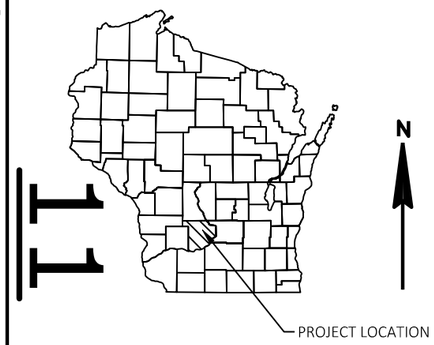
COUNTY: SAUK

DECEMBER 2026

ORDER OF SHEETS

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

TOTAL SHEETS = 92



DESIGN DESIGNATION 5659-00-04

A.A.D.T.	2027	=	470
A.A.D.T.	2047	=	480
D.H.V.		=	65
D.D.		=	62/38
T.		=	7.1%
DESIGN SPEED		=	30 MPH
ESALS		=	73,000

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'FB')
- 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

CTH W - V NORTH FREEDOM

BARABOO RIVER BRIDGE B-56-0255

CTH PF

SAUK COUNTY

STATE PROJECT NUMBER

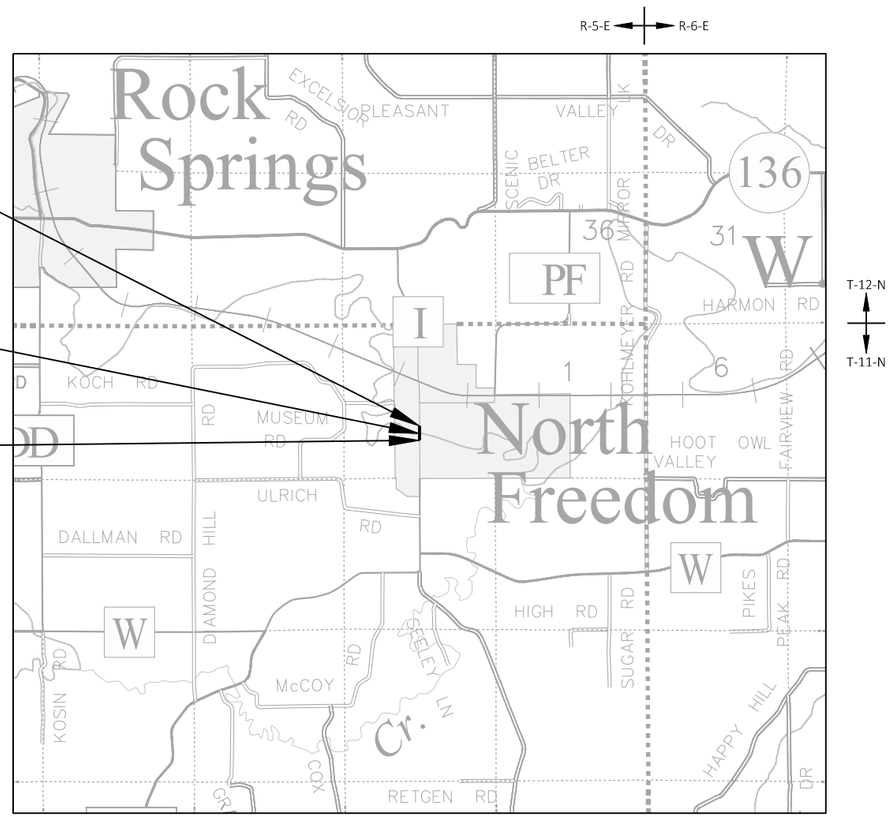
5659-00-74

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5659-00-74		

END PROJECT
STA 7+75
Y = 232,681.51
X = 617,840.66

STRUCTURE B-56-0255

BEGIN PROJECT
STA 3+70
Y = 232,276.52
X = 617,843.47



LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.077 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), SAUK COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

ACCEPTED FOR

SAUK COUNTY

Date 7/20/26 HIGHWAY COMMISSIONER

ORIGINAL PLANS PREPARED BY

MSA
1702 Pankratz Street, Madison WI 53704
(608)242-7779 www.msa-ps.com

WISCONSIN
CONNOR E. GIRTEN
101789-6
LODI, WI
PROFESSIONAL ENGINEER

7-16-26

DATE: _____ (PROFESSIONAL ENGINEER)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	MSA PROFESSIONAL SERVICES, INC.
Designer	MSA PROFESSIONAL SERVICES, INC.
Project Manager	PEGGY WISCHHOFF
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	DELLA KOENIG

APPROVED FOR THE DEPARTMENT

DATE: 07/20/2026 Peggy Wischhoff, P.E. (Signature)

E

UTILITIES CONTACTS

ALLIANT ENERGY
ELECTRIC
JOSH LOBENSTEIN
520 COMMERCE AVENUE
BARABOO, WI 53913
PHONE: 608-356-0671
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ALLIANT ENERGY
GAS
JOSH LOBENSTEIN
520 COMMERCE AVENUE
BARABOO, WI 53913
PHONE: 608-356-0671
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COMMUNICATIONS
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SPECTRUM
COMMUNICATIONS
BRAD WAGNER
2701 DANIELS STREET
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GEORGE STAUBHARR
105 N MAPLE STREET PO BOX 300
NORTH FREEDOM, WI 53951
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EMAIL: NFREEDOMDPW@GMAIL.COM

VILLAGE OF NORTH FREEDOM
WATER
GEORGE STAUBHARR
105 N MAPLE STREET PO BOX 300
NORTH FREEDOM, WI 53951
PHONE: 608-522-4522
EMAIL: NFREEDOMDPW@GMAIL.COM

* = NOT A MEMBER OF DIGGERS HOTLINE

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

WISCONSIN DNR LIAISON

ANDY BARTA
WDNR SOUTHERN REGION
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
PHONE: 608-235-2955
EMAIL: ANDREW.BARTA@WISCONSIN.GOV

DESIGN PROJECT MANAGER

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MADISON, WI 53704
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EMAIL: PEGGYF.WISCHHOFF@DOT.WI.GOV

DESIGN PROJECT LEADER

CONNOR GIRTEN, P.E.
MSA PROFESSIONAL SERVICES, INC.
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PHONE: 608-355-8916
EMAIL: CGIRTEN@MSA-PS.COM

SAUK COUNTY

PATRICK GAVINSKI, P.E.
HIGHWAY COMMISSIONER
620 LINN ST
BARABOO, WI 53913
PHONE: 608-355-4380
EMAIL: PATRICK.GAVINSKI@SAUKCOUNTYWI.GOV

GENERAL NOTES

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

RESHAPE AND SEED ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY OPERATIONS, OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

DO NOT USE FERTILIZER WITHIN 20 FEET OF WATERWAYS OR WETLANDS.

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

APPLY TACK COAT AT A RATE OF 0.05 GAL/SY BETWEEN LAYERS OF ASPHALTIC SURFACE.

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

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT APPROXIMATE LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S EROSION CONTROL IMPLEMENTATION PLAN (ECIP) AND APPROVED BY THE ENGINEER. MAINTAIN EROSION CONTROL MEASURES UNTIL SUCH A TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE FLANGE LINE UNLESS OTHERWISE NOTED.

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

PAVING OPERATION SHALL BE CONSISTENT WITH THE TYPICAL SECTIONS.

DO NOT DRIVE OR STORE EQUIPMENT, OR STORE CONSTRUCTION MATERIALS IN ENVIRONMENTALLY SENSITIVE AREAS, WETLANDS OR WATERWAYS.

MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PAVING OR PIPE LAYING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAYS SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

2

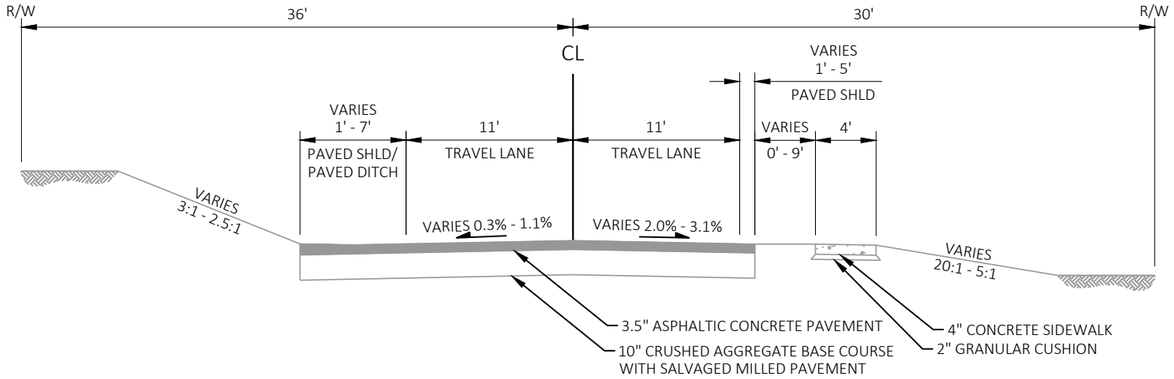
RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 0.94 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.59 ACRES

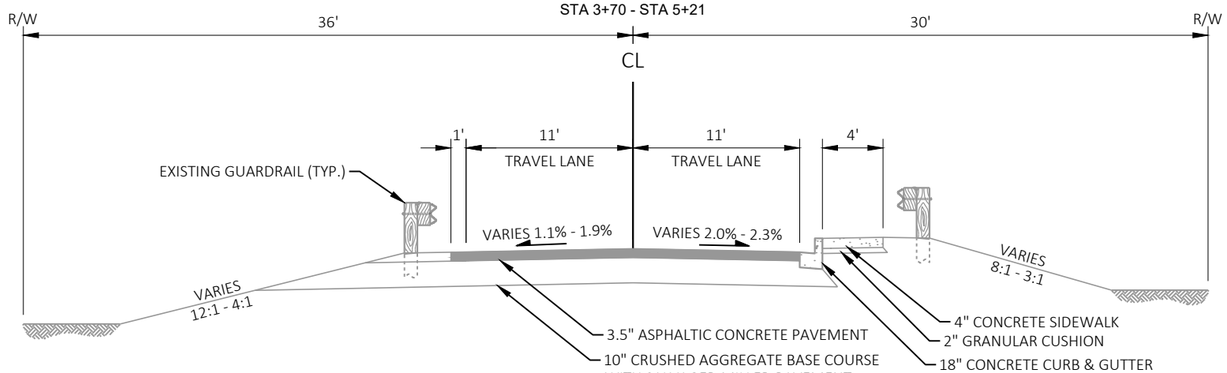
ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
EROSION CONTROL
STORM SEWER
TRAFFIC CONTROL



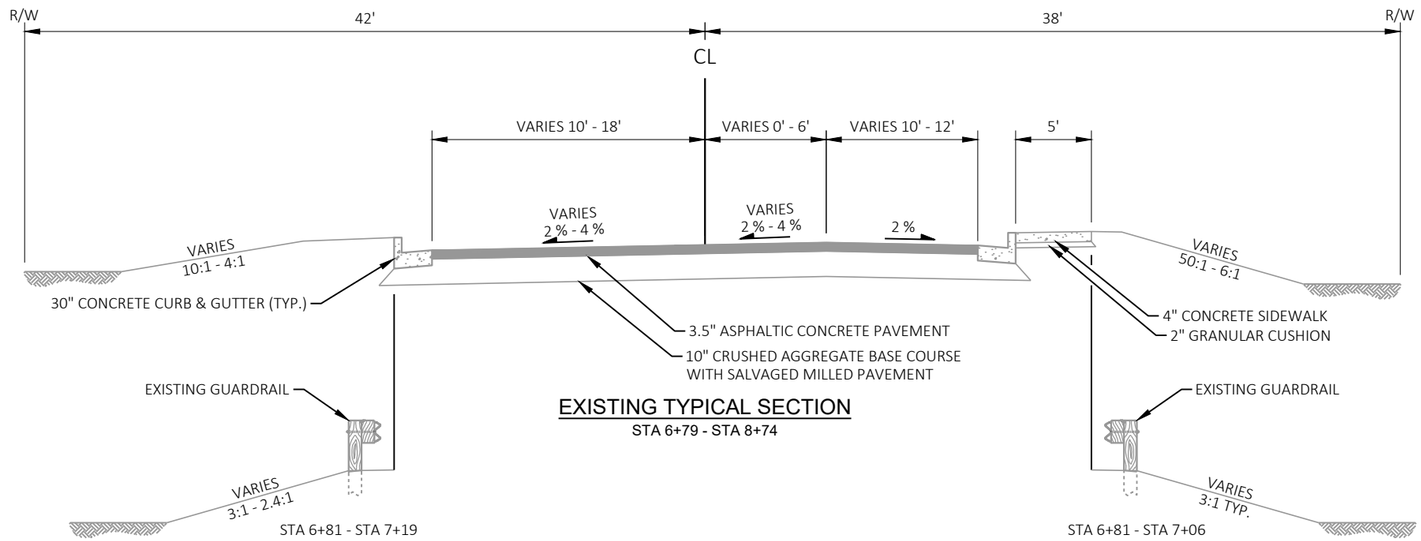
EXISTING TYPICAL SECTION

STA 3+70 - STA 5+21



EXISTING TYPICAL SECTION

STA 5+21 - STA 5+48



EXISTING TYPICAL SECTION

STA 6+79 - STA 8+74

STA 6+81 - STA 7+19

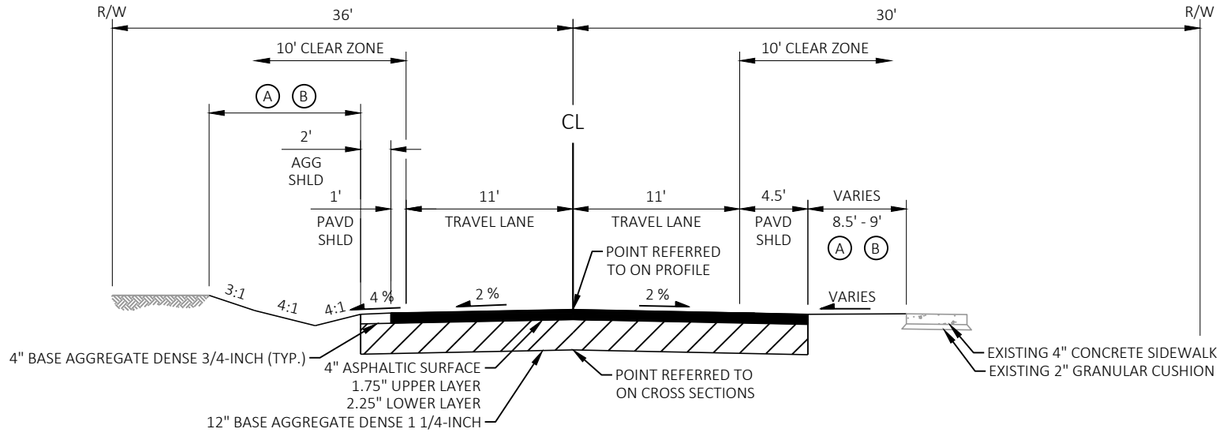
STA 6+81 - STA 7+06

PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	TYPICAL SECTIONS	SHEET 3	E

FILE NAME : G:\03\03060\03060035\CADD\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020301-ts

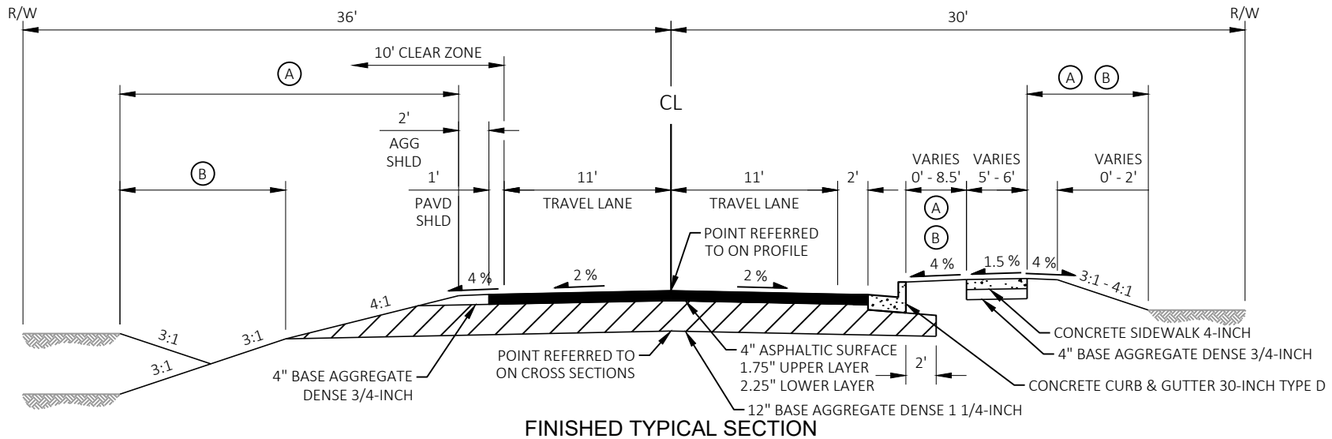
PLOT DATE : 6/29/2026 4:43 PM PLOT BY : CONNOR GIRTEN PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



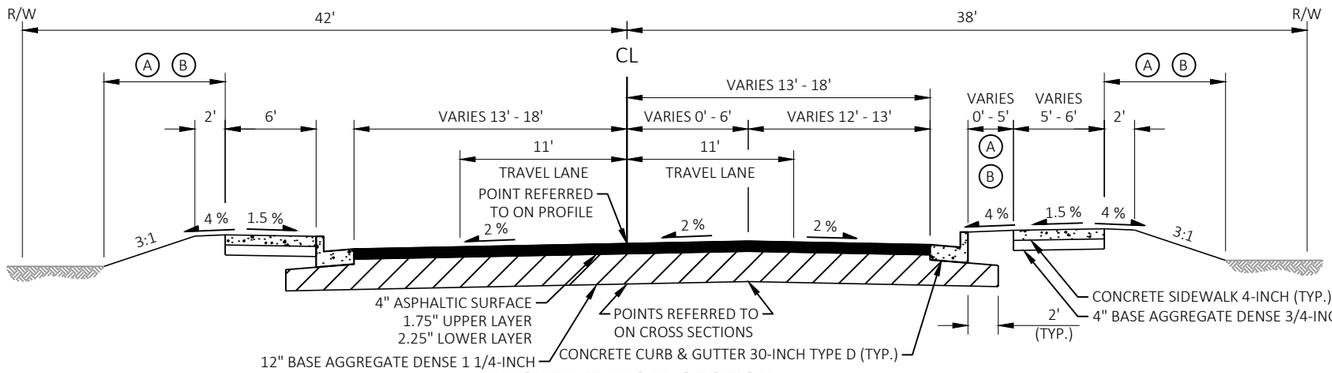
FINISHED TYPICAL SECTION

STA 3+70 - STA 3+94



FINISHED TYPICAL SECTION

STA 3+94 - STA 5+39.75



FINISHED TYPICAL SECTION

STA 6+90.25 - STA 7+75

LEGEND

(A) LIMITS OF FERTILIZER TYPE B, SEEDING MIXTURE NO. 40, & SEEDING TEMPORARY

(B) LIMITS OF SALVAGED TOPSOIL & EROSION MAT URBAN CLASS I TYPE B

NOTES

SEE DETAILS FOR LIMITS OF CONCRETE SIDEWALK 6-INCH SPECIAL.

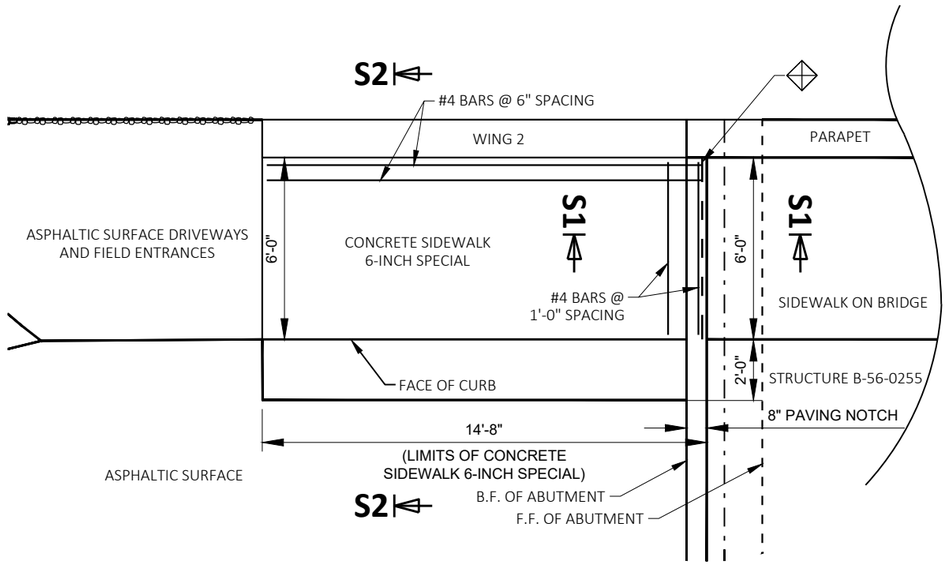
PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	TYPICAL SECTIONS	SHEET 4	E

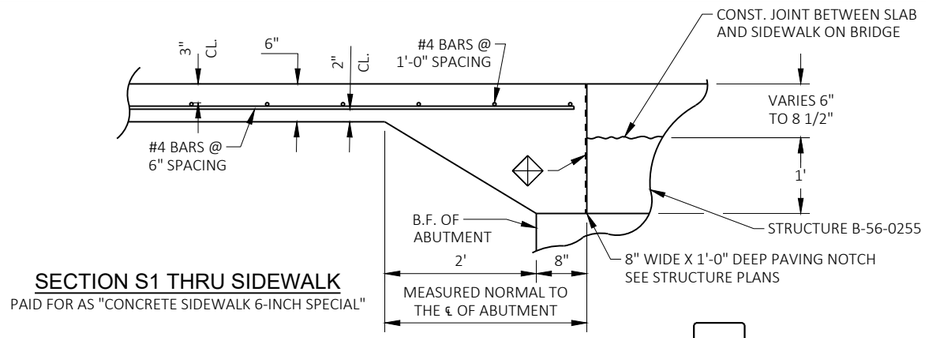
2

LEGEND

- ½" FILLER. EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER, (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE), INCLUDED IN BID ITEM "CONCRETE SIDEWALK 6-INCH SPECIAL".

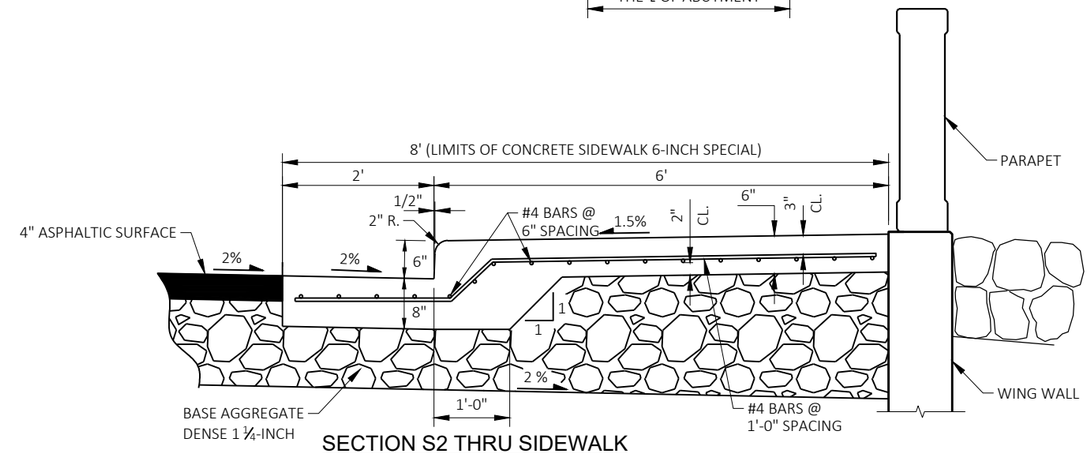
- ¾" FILLER @ END OF SLAB. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER, (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE), INCLUDED IN BID ITEM "CONCRETE SIDEWALK 6-INCH SPECIAL".



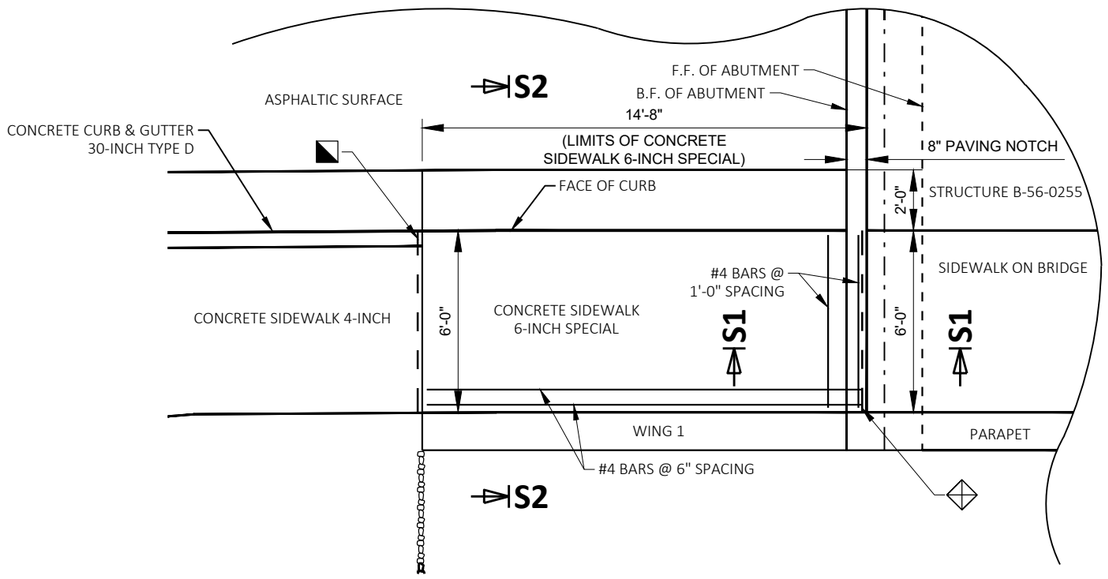


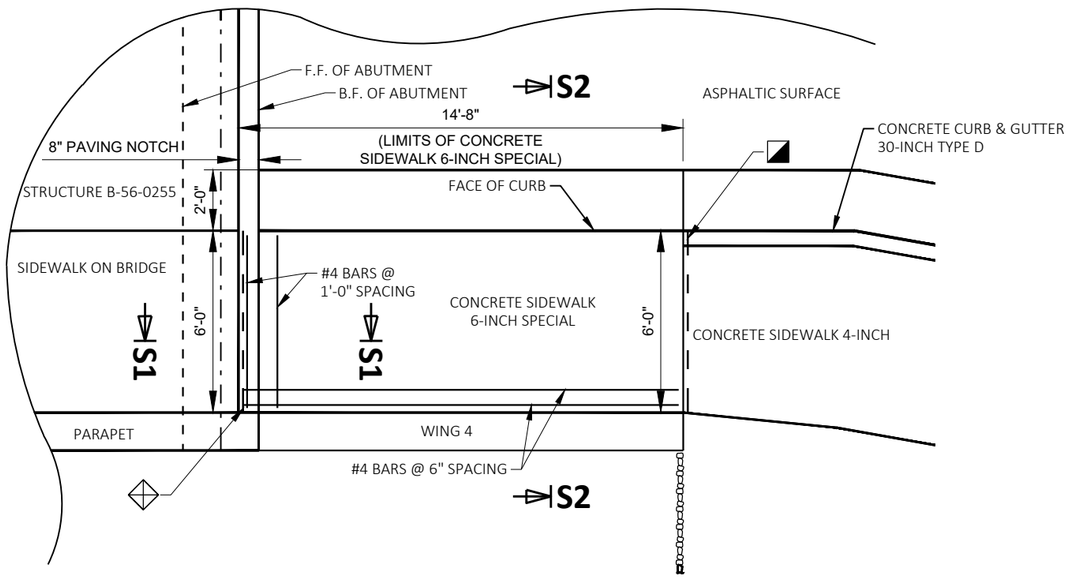
SECTION S1 THRU SIDEWALK

PAID FOR AS "CONCRETE SIDEWALK 6-INCH SPECIAL"



SECTION S2 THRU SIDEWALK

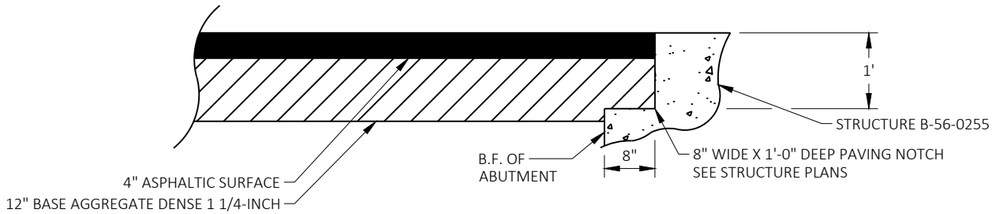




CONCRETE SIDEWALK 6-INCH SPECIAL DETAIL

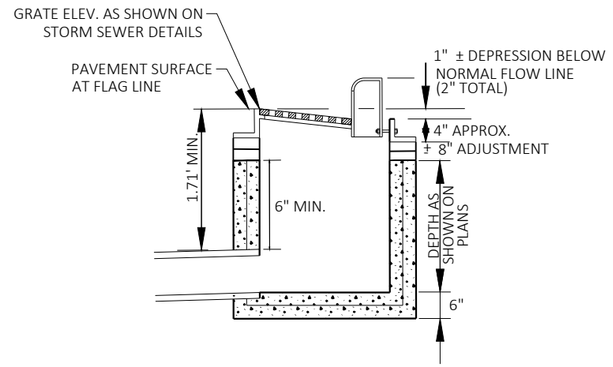
WING 3 IS SIMILAR TO WING 1 AND WING 4

PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	CONSTRUCTION DETAILS	SHEET 5	E



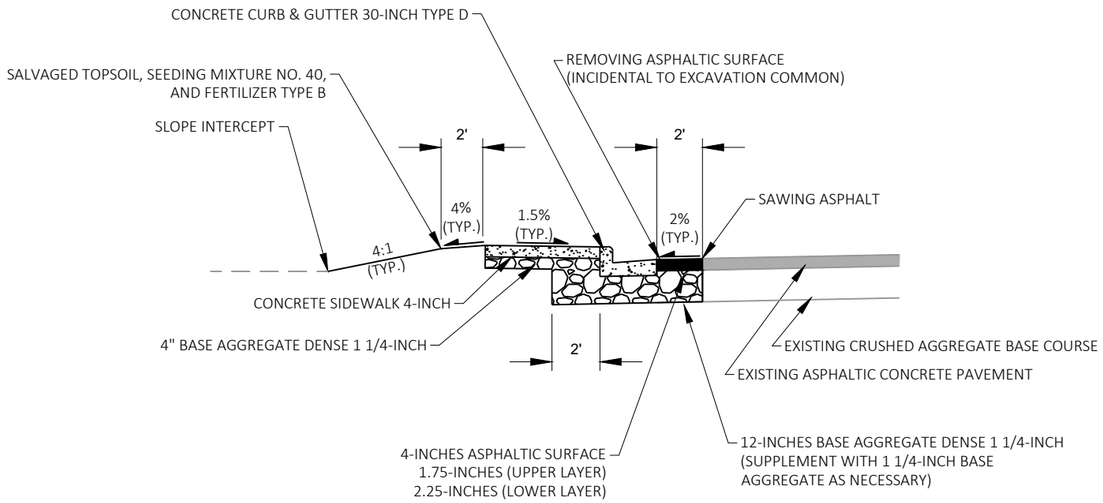
PAVING NOTCH DETAIL

NOTE: DETAIL APPLIES BETWEEN LIMITS OF "CONCRETE SIDEWALK 6-INCH SPECIAL"



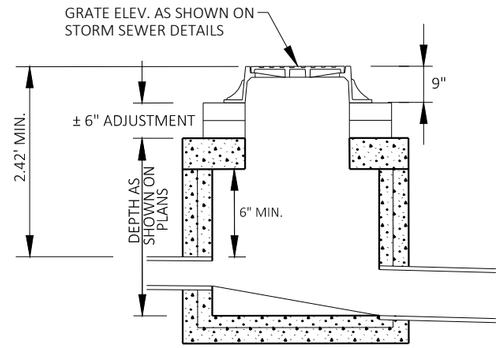
DETAIL FOR COMPUTING INLET ELEVATIONS

INLET COVERS - H



CURB & GUTTER REPLACEMENT DETAIL

STA 8+01 - STA 8+29 LT



DETAIL FOR COMPUTING MANHOLE ELEVATIONS

PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	CONSTRUCTION DETAILS	SHEET 6	E

FILE NAME : G:\03\03060\03060035\CADD\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 021002-cd
PLOT DATE : 10/21/2026 8:10 AM
PLOT BY : CONNOR GIRTEN
PLOT NAME :
PLOT SCALE : 1:10
WISDOT/CADDS SHEET 42

2

LEGEND

- 4" ASPHALTIC SURFACE
- 3" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- CONCRETE DRIVEWAY 6-INCH
- CONCRETE SIDEWALK 6-INCH SPECIAL

N

STA 5+04 LT
BAD FE

+96.64, 56.50' LT
TLE
+10.64, 56.50' LT

6" BASE AGGREGATE DENSE 3/4-INCH

BARABOO RIVER

STRUCTURE B-56-0255

EXISTING R/W

+30.43, 30.97' LT
R20'
+18.61, 22.31' LT
EL 867.07

+76.64, 31.00' LT
R20'

8.0%
0.5%
6.0%
4.5%

+05.56, 12.00' LT
+18.56, 15.02' LT

CTH PF
(ASPHALT)

4+00
5+00
6+00

MATCH LINE STA 6+15

+94, 13' RT
+79.47, 18.50' RT

+94, 24.06' RT
+18.75, 22.45' RT
EL 869.81
+28.73, 21.80' RT
EL 869.48
+44.75, 20.76' RT
EL 868.98

5"
5.5"

CONCRETE CURB & GUTTER 30-INCH TYPE D

+18.08, 21.00' RT

CAUTION

EXISTING R/W

+04, 28.42' RT

CONCRETE SIDEWALK 4-INCH

TLE

PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	PLAN DETAILS	SHEET 7	E

FILE NAME : G:\03\03060\03060035\CADD\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021201-pd

PLOT DATE : 10/20/2026 2:38 PM PLOT BY : CONNOR GIRTEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- 4" ASPHALTIC SURFACE
- 3" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- CONCRETE DRIVEWAY 6-INCH
- CONCRETE SIDEWALK 6-INCH SPECIAL

N

STREAMBANK EASEMENT

BARABOO RIVER

MATCH LINE STA 6+15

STA 8+15 LT
CONC FE (TYPE X)

EXISTING R/W

CONCRETE SIDEWALK 4-INCH

CONCRETE CURB & GUTTER 30-INCH TYPE D

+09.33, 21.50' LT

CONCRETE SIDEWALK 4-INCH

+21.39, 29.50' LT

+09.39, 29.50' LT

+47.91, 30.82' LT

6"

5.5%

1.5%

7.6%

+52.35, 25.82' LT

+74.27, 25.82' LT

+33.03, 20.51' LT

+01.39, 18.00' LT

XXXXXXXXXXXXXXXXXXXX

+29.39, 18.00' LT

CONCRETE CURB & GUTTER 30-INCH TYPE D

+38.43, -18' LT

+10.07, -13' LT

+11.21, 0'

7+00

8+00

9+00

CTH PF
(ASPHALT)

CTH PF CROWN

+10.07, 13' RT

+45.24, 6' RT

+75, 6' RT

+38.43, 18' RT

CONCRETE CURB & GUTTER 30-INCH TYPE D

6.6%

1.5%

6.6%

+49.55, 22.50' RT

+66.57, 25.50' RT

+75, 25.78' RT

6"

+31.30, 28.37' RT

+19.30, 28.37' RT

+60.14, 30.46' RT

EXISTING R/W

STRUCTURE B-56-0255

+09.33, 21.50' RT

CONCRETE SIDEWALK 4-INCH

STA 7+25 RT
CONC PE (TYPE X)

PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	PLAN DETAILS	SHEET 8	E

2

LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- RIPRAP HEAVY
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- INLET PROTECTION
- A B C — INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- COFFERDAMS

N

WETLANDS (TYP.)

BARABOO RIVER

TLE

STA 4+90.41 - STA 5+29.18
CP CLASS IV 18-INCH
INV I: 864.55, 23.87' LT
INV E: 862.43, 26.62' LT
LENGTH: 39 FT
SLOPE: 5.41%
SKEW 83° RHF

STA 4+90.41, 23.87' LT
APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 6 TO 1

STA 5+29.18, 26.62' LT
APRON ENDWALLS FOR CULVERT PIPE 18-INCH

CONNECT TURBIDITY BARRIER TO COFFERDAM (TYP.)

EXISTING R/W

CTH PF
(ASPHALT)

4+00

5+00

6+00

C C C

EXISTING R/W

CAUTION

STRUCTURE B-56-0255

TLE

MATCH LINE STA 6+15

2

PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	EROSION CONTROL	SHEET 9	E

FILE NAME : G:\03\03060\03060035\CADD\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-ec

PLOT DATE : 6/29/2026 4:43 PM PLOT BY : CONNOR GIRTEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

N

LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- RIPRAP HEAVY
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- INLET PROTECTION
- A B C — INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- COFFERDAMS

STREAMBANK EASEMENT

BARABOO RIVER

WETLANDS (TYP.)

EROSION CONTROL LIMITS SHOWN ARE BASED ON FINAL GRADING LIMITS. MAKE ADJUSTMENTS TO ACCOMMODATE THE TEMPORARY PEDESTRIAN PORTAGE.

CONNECT TURBIDITY BARRIER TO COFFERDAM (TYP.)

EXISTING R/W

MATCH LINE STA 6+15

7+00

8+00

9+00

CTH PF
(ASPHALT)

C

CAUTION

STRUCTURE B-56-0255

EXISTING R/W

EROSION CONTROL LIMITS SHOWN ARE BASED ON FINAL GRADING LIMITS. MAKE ADJUSTMENTS TO ACCOMMODATE THE TEMPORARY PEDESTRIAN PORTAGE.

PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	EROSION CONTROL	SHEET 10	E

CTH PF
(ASPHALT)

5+00

1.3 INLETS 2x3-H
STA = 5+08.61, 14.50' RT
RIM = 867.21
I.E. = 864.16 (12" N)

1.2 INLETS 2x3-H
STA = 5+22.61, 14.50' RT
RIM = 867.09
I.E. = 863.60 (12" S)
I.E. = 863.51 (12" E)

REMOVING INLETS

REMOVING STORM SEWER (15-INCH)

CAUTION

EXISTING SANITARY SEWER MANHOLE
DISCONTINUED 4' BELOW GRADE

CAUTION

STRUCTURE B-56-0255

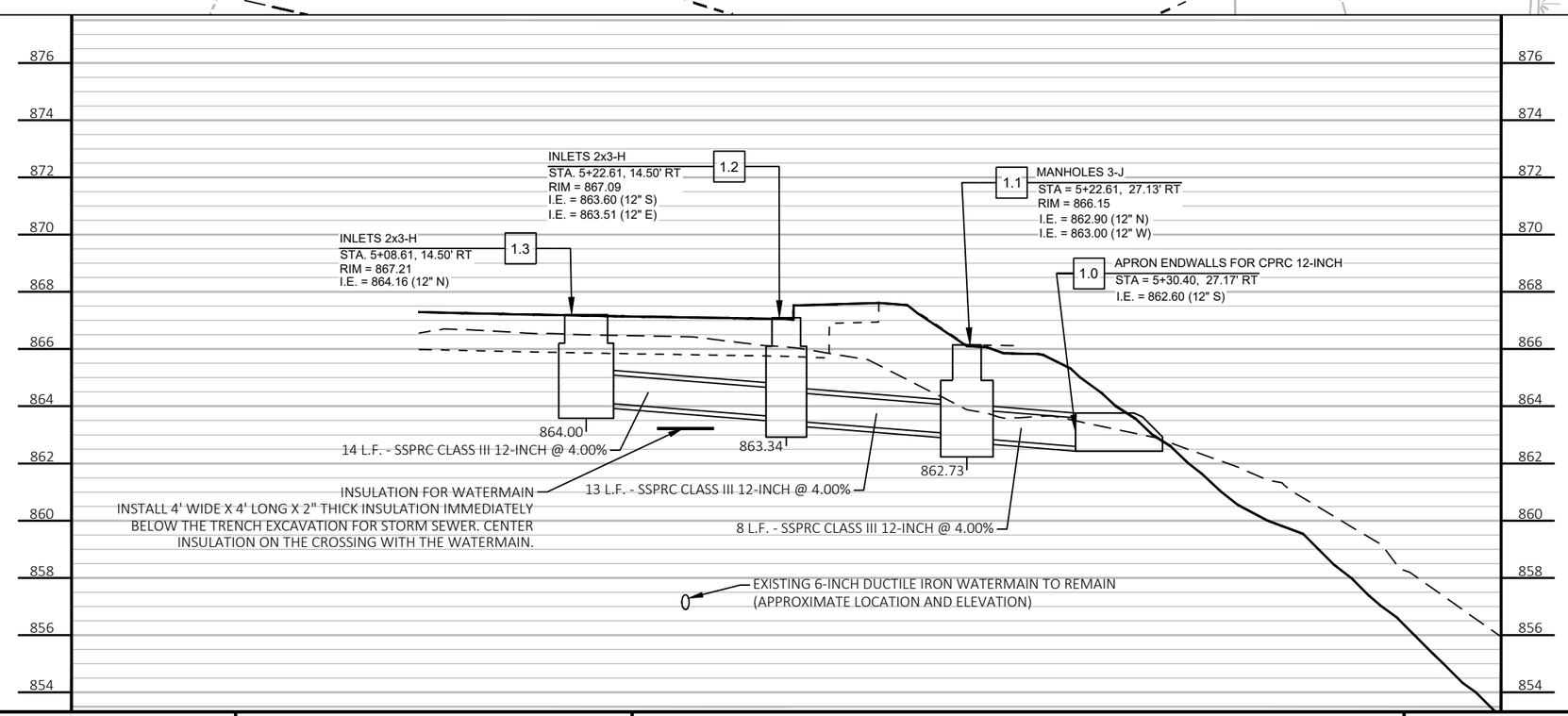
EXISTING R/W

1.1 MANHOLES 3-J
STA = 5+22.61, 27.13' RT
RIM = 866.15
I.E. = 862.90 (12" N)
I.E. = 863.00 (12" W)

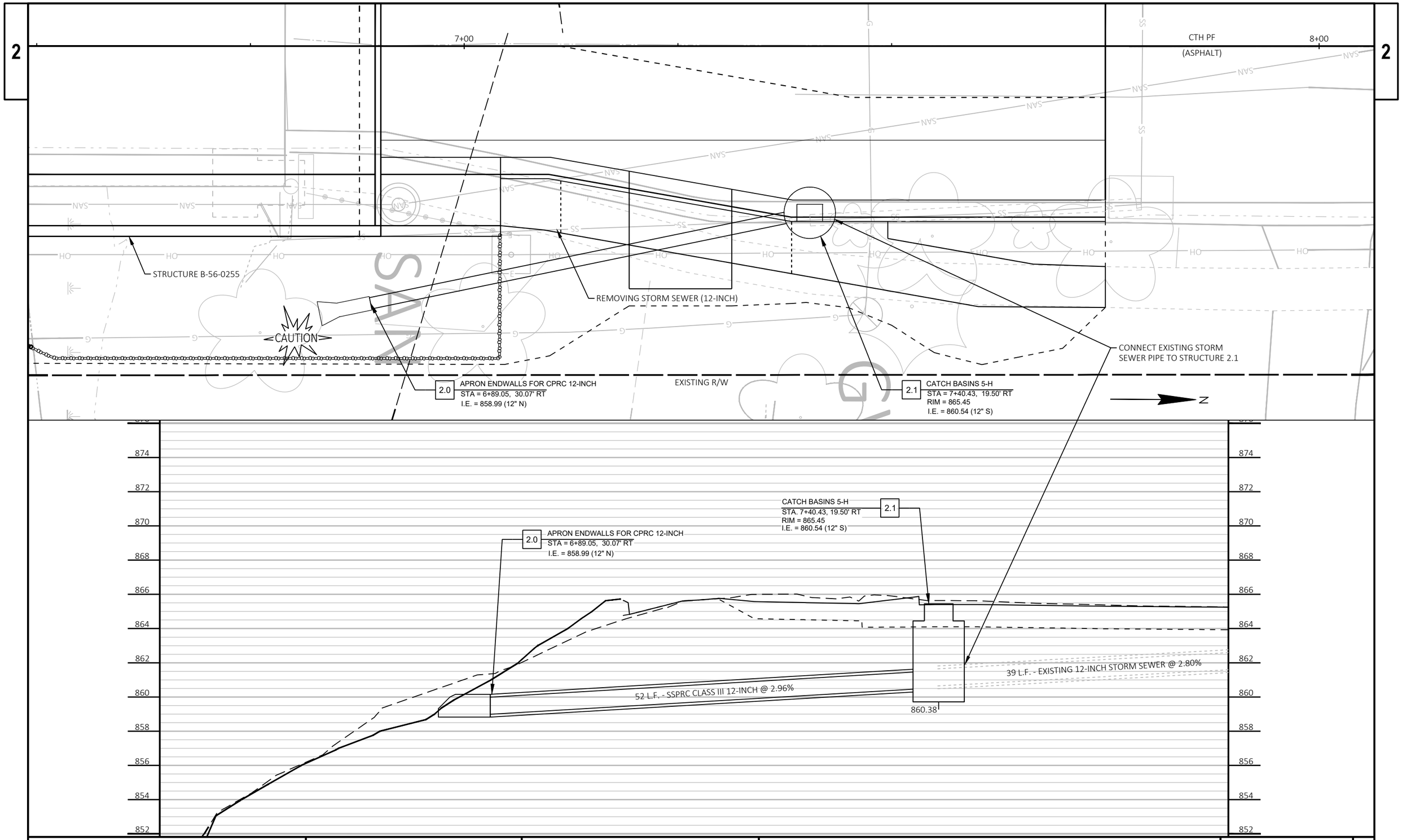
1.0 APRON ENDWALLS FOR CPRC 12-INCH
STA = 5+30.40, 27.17' RT
I.E. = 862.60 (12" S)

TLE

N



PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	STORM SEWER	SHEET 11	E



PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	STORM SEWER	SHEET 12	E

LEGEND

SIGN ON PERMANENT SUPPORT

FENCE SAFETY

TEMPORARY PEDESTRIAN PORTAGE ROUTE

ROAD WORK AHEAD W20-1A

INSTALL 500 FEET WEST OF BRIDGE

BARABOO RIVER

EXISTING STREAMBANK EASEMENT

DETOUR M4-9BL 30"X24"

DETOUR M4-9BR 30"X24"

DETOUR M4-9BL 30"X24"

TLE

STRUCTURE B-56-0255

EXISTING STRUCTURE B-56-0672 (TO BE REMOVED)

EXISTING R/W

PI: 5+28.13

5+00 6+00 7+00 8+00

CTH PF

CAUTION

DETOUR M4-9BR 30"X24"

DETOUR M4-9BL 30"X24"

DETOUR M4-9BR 30"X24"

EXISTING STREAMBANK EASEMENT

INSTALL 500 FEET EAST OF BRIDGE

ROAD WORK AHEAD W20-1A

NOTES:

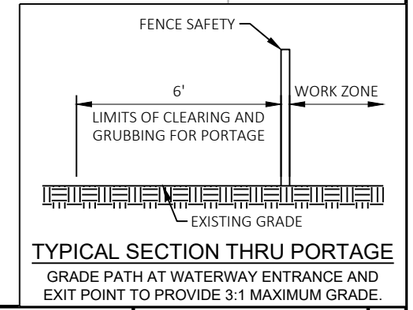
OBTAIN THE NECESSARY WATERWAY MARKER PERMIT PER STANDARD SPEC 107.19. COORDINATE THE BUOY PLACEMENT WITH THE DNR. ALL COSTS FOR COORDINATING, CONSTRUCTING, INSTALLING, AND MAINTAINING THE BUOYS ARE INCIDENTAL TO "TEMPORARY PEDESTRIAN PORTAGE".

INSTALL ALL SAFETY MEASURES PRIOR TO THE START OF BRIDGE REMOVAL.

REMOVE ANY TREES AND BRUSH NECESSARY TO ESTABLISH THE PORTAGE PATH.

MAINTAIN A 25' MINIMUM CLEARANCE FROM ACTIVE CONSTRUCTION OPERATIONS WHEN PEDESTRIANS ARE PRESENT.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.



TYPICAL SECTION THRU PORTAGE

GRADE PATH AT WATERWAY ENTRANCE AND EXIT POINT TO PROVIDE 3:1 MAXIMUM GRADE.

PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	TRAFFIC CONTROL - TEMPORARY PEDESTRIAN PORTAGE	SHEET 13 E

Estimate Of Quantities

5659-00-74

Line	Item	Item Description	Unit	Total	Qty
0002	201.0110	Clearing	SY	75.000	75.000
0004	201.0120	Clearing	ID	102.000	102.000
0006	201.0210	Grubbing	SY	75.000	75.000
0008	201.0220	Grubbing	ID	114.000	114.000
0010	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. B-56-672	EACH	1.000	1.000
0012	204.0150	Removing Curb & Gutter	LF	239.000	239.000
0014	204.0155	Removing Concrete Sidewalk	SY	121.000	121.000
0016	204.0165	Removing Guardrail	LF	118.000	118.000
0018	204.0170	Removing Fence	LF	122.000	122.000
0020	204.0220	Removing Inlets	EACH	1.000	1.000
0022	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	63.000	63.000
0024	204.0245	Removing Storm Sewer (size) 02. 15-Inch	LF	38.000	38.000
0026	205.0100	Excavation Common	CY	355.000	355.000
0028	206.1001	Excavation for Structures Bridges (structure) 01. B-56-255	EACH	1.000	1.000
0030	206.5001	Cofferdams (structure) 01. B-56-255	EACH	1.000	1.000
0032	210.1500	Backfill Structure Type A	TON	420.000	420.000
0034	213.0100	Finishing Roadway (project) 01. 5659-00-74	EACH	1.000	1.000
0036	305.0110	Base Aggregate Dense 3/4-Inch	TON	100.000	100.000
0038	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	680.000	680.000
0040	455.0605	Tack Coat	GAL	41.000	41.000
0042	465.0105	Asphaltic Surface	TON	180.000	180.000
0044	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	7.000	7.000
0046	502.0100	Concrete Masonry Bridges	CY	804.000	804.000
0048	502.3200	Protective Surface Treatment	SY	713.000	713.000
0050	502.3210	Pigmented Surface Sealer	SY	235.000	235.000
0052	502.9000.S	Underwater Substructure Inspection (structure) 01. B-56-255	EACH	2.000	2.000
0054	505.0400	Bar Steel Reinforcement HS Structures	LB	13,800.000	13,800.000
0056	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	113,150.000	113,150.000
0058	516.0500	Rubberized Membrane Waterproofing	SY	22.000	22.000
0060	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	1.000	1.000
0062	520.4118	Culvert Pipe Class IV 18-Inch	LF	39.000	39.000
0064	521.1518	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 6 to 1	EACH	1.000	1.000
0066	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	2.000	2.000
0068	550.0020	Pre-Boring Rock or Consolidated Materials	LF	143.000	143.000
0070	550.0500	Pile Points	EACH	29.000	29.000
0072	550.1100	Piling Steel HP 10-Inch x 42 Lb	LF	1,650.000	1,650.000
0074	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	302.000	302.000
0076	602.0405	Concrete Sidewalk 4-Inch	SF	2,010.000	2,010.000
0078	602.0810	Concrete Driveway 6-Inch	SY	26.000	26.000
0080	606.0300	Riprap Heavy	CY	595.000	595.000
0082	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	87.000	87.000
0084	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0086	611.0624	Inlet Covers Type H	EACH	3.000	3.000
0088	611.1005	Catch Basins 5-FT Diameter	EACH	1.000	1.000
0090	611.2003	Manholes 3-FT Diameter	EACH	1.000	1.000
0092	611.3230	Inlets 2x3-FT	EACH	2.000	2.000
0094	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	200.000	200.000
0096	616.0700.S	Fence Safety	LF	195.000	195.000
0098	618.0100	Maintenance and Repair of Haul Roads (project) 01. 5659-00-74	EACH	1.000	1.000

5659-00-74

Line	Item	Item Description	Unit	Total	Qty
0100	619.1000	Mobilization	EACH	1.000	1.000
0102	624.0100	Water	MGAL	15.000	15.000
0104	625.0500	Salvaged Topsoil	SY	885.000	885.000
0106	627.0200	Mulching	SY	300.000	300.000
0108	628.1504	Silt Fence	LF	880.000	880.000
0110	628.1520	Silt Fence Maintenance	LF	880.000	880.000
0112	628.1905	Mobilizations Erosion Control	EACH	7.000	7.000
0114	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0116	628.2008	Erosion Mat Urban Class I Type B	SY	885.000	885.000
0118	628.6005	Turbidity Barriers	SY	290.000	290.000
0120	628.7015	Inlet Protection Type C	EACH	6.000	6.000
0122	628.7504	Temporary Ditch Checks	LF	16.000	16.000
0124	628.7555	Culvert Pipe Checks	EACH	2.000	2.000
0126	629.0210	Fertilizer Type B	CWT	0.700	0.700
0128	630.0140	Seeding Mixture No. 40	LB	43.000	43.000
0130	630.0200	Seeding Temporary	LB	27.000	27.000
0132	630.0500	Seed Water	MGAL	23.000	23.000
0134	638.2102	Moving Signs Type II	EACH	1.000	1.000
0136	638.4000	Moving Small Sign Supports	EACH	1.000	1.000
0138	642.5001	Field Office Type B	EACH	1.000	1.000
0140	643.0300	Traffic Control Drums	DAY	500.000	500.000
0142	643.0420	Traffic Control Barricades Type III	DAY	2,638.000	2,638.000
0144	643.0705	Traffic Control Warning Lights Type A	DAY	4,101.000	4,101.000
0146	643.0900	Traffic Control Signs	DAY	3,594.000	3,594.000
0148	643.1000	Traffic Control Signs Fixed Message	SF	64.000	64.000
0150	643.5000	Traffic Control	EACH	1.000	1.000
0152	644.1810	Temporary Pedestrian Barricade	LF	60.000	60.000
0154	645.0111	Geotextile Type DF Schedule A	SY	86.000	86.000
0156	645.0120	Geotextile Type HR	SY	935.000	935.000
0158	646.1020	Marking Line Epoxy 4-Inch	LF	1,620.000	1,620.000
0160	646.8120	Marking Curb Epoxy	LF	46.000	46.000
0162	650.4000	Construction Staking Storm Sewer	EACH	6.000	6.000
0164	650.4500	Construction Staking Subgrade	LF	255.000	255.000
0166	650.5000	Construction Staking Base	LF	255.000	255.000
0168	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	302.000	302.000
0170	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
0172	650.6501	Construction Staking Structure Layout (structure) 01. B-56-255	EACH	1.000	1.000
0174	650.9500	Construction Staking Sidewalk (project) 01. 5659-00-74	EACH	1.000	1.000
0176	650.9911	Construction Staking Supplemental Control (project) 01. 5659-00-74	EACH	1.000	1.000
0178	650.9920	Construction Staking Slope Stakes	LF	354.000	354.000
0180	690.0150	Sawing Asphalt	LF	94.000	94.000
0182	690.0250	Sawing Concrete	LF	24.000	24.000
0184	715.0502	Incentive Strength Concrete Structures	DOL	4,824.000	4,824.000
0186	999.1001.S	Seismograph (project) 01. 5659-00-74	EACH	1.000	1.000
0188	999.1501.S	Crack and Damage Survey	EACH	1.000	1.000
0190	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 6+15	EACH	1.000	1.000
0192	SPV.0060	Special 01. Temporary Pedestrian Portage	EACH	1.000	1.000
0194	SPV.0060	Special 02. Salvage and Stockpile Signs	EACH	4.000	4.000
0196	SPV.0060	Special 03. Adjusting Water Valves	EACH	2.000	2.000

5659-00-74

Line	Item	Item Description	Unit	Total	Qty
0198	SPV.0060	Special 04. Adjusting Sanitary Manhole Covers	EACH	1.000	1.000
0200	SPV.0165	Special 01. Concrete Sidewalk 6-Inch Special	SF	472.000	472.000
0202	SPV.0165	Special 02. Insulation	SF	16.000	16.000
0204	SPV.0195	Special 01. Infill Riprap B-56-255	TON	20.000	20.000

CLEARING AND GRUBBING

CATEGORY	STATION	TO	STATION	LOCATION	201.0110 CLEARING SY	201.0120 CLEARING ID	201.0210 GRUBBING SY	201.0220 GRUBBING ID
0010	4+59	-	---	LT	---	12	---	12
0010	5+50	-	5+81	RT	28	---	28	---
0010	6+76	-	---	RT	---	24	---	24
0010	7+02	-	---	RT	---	30	---	30
0010	7+47	-	7+75	LT	21	---	21	---
0010	7+52	-	---	RT	---	12	---	12
0010	7+55	-	---	RT	---	12	---	12
0010	7+76	-	---	RT	---	12	---	12
				TOTAL 0010	49	102	49	102
0030	7+75	-	8+10	LT	26	---	26	---
0030	8+40	-	---	LT	---	---	---	12
				TOTAL 0030	26	0	26	12
				PROJECT TOTAL	75	102	75	114

REMOVALS

CATEGORY	STATION	TO	STATION	LOCATION	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	204.0165 REMOVING GUARDRAIL LF	204.0170 REMOVING FENCE LF	204.0220 REMOVING INLETS EACH	204.0245.01 REMOVING STORM SEWER (SIZE) (01. 12-INCH) LF	204.0245.02 REMOVING STORM SEWER (SIZE) (02. 15-INCH) LF
0010	3+94	-	5+48	RT	---	68	27	---	---	---	---
0010	4+46	-	5+52	RT	---	---	---	122	---	---	---
0010	5+21	-	5+47	LT	---	---	26	---	---	---	---
0010	5+29	-	5+48	RT	19	---	---	---	---	---	---
0010	5+41	-	---	RT	---	---	---	---	1	---	38
0010	6+77	-	7+40	RT	---	---	---	---	---	63	---
0010	6+80	-	7+75	LT	96	---	39	---	---	---	---
0010	6+80	-	7+75	RT	96	53	26	---	---	---	---
				TOTAL 0010	211	121	118	122	1	63	38
0030	8+01	-	8+29	LT	28	---	---	---	---	---	---
				TOTAL 0030	28	0	0	0	0	0	0
				PROJECT TOTAL	239	121	118	122	1	63	38

DIVISION	FROM/TO STATION	LOCATION	EXCAVATION COMMON (1) CUT (2)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE	COMMENT
DIVISION 1									
CTH PF - CATEGORY 0010	3+70.00/7+75.00	CTH PF	337	97	109	136	104		
CTH PF - CATEGORY 0030	7+75.00/8+74.27	LT	18	1	12	15	2		
DIVISION 1 SUBTOTAL			355	98	121	151	106	106	
GRAND TOTAL	PROJECT 5659-00-74		355	98	121	151	106	106	
	TOTAL COMMON EXC		355						

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(13) EXPANDED FILL FACTOR = 1.25
EXPANDED FILL = (UNEXPANDED FILL) * FILL FACTOR
(14) 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.
(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

3

BASE AGGREGATE ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
0010	3+70	-	5+40	CTH PF	27	394	7
0010	6+90	-	7+75	CTH PF	27	264	6
0010	5+04	-	---	FE LT	27	---	1
				TOTAL 0010	81	658	14
0030	7+75	-	8+74	LT	19	22	1
				TOTAL 0030	19	22	1
				PROJECT TOTAL	100	680	15

ASPHALT ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	THICKNESS (INCHES)	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
0010	3+70	-	5+40	CTH PF	4	25	110	---
0010	6+90	-	7+75	CTH PF	4	16	68	---
0010	4+83	-	5+26	LT	3	---	---	7
					TOTAL 0010	41	178	7
0030	8+03	-	8+27	LT	3.5	---	2	---
					TOTAL 0030	0	2	0
					PROJECT TOTAL	41	180	7

3

CULVERT ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	520.4118 CULVERT PIPE CLASS IV 18-INCH LF	521.1518 APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 6 TO 1 EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH
0010	4+86	-	5+32	LT	1	39	1	1
				TOTAL 0010	1	39	1	1

NOTES:

PIPE LENGTH BASED ON THE USE OF CONCRETE PIPE AND ENDWALLS

THICKNESS FOR STEEL PIPE SHALL BE 0.064 INCHES MINIMUM

CONCRETE ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0810 CONCRETE DRIVEWAY 6-INCH SY	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	SPV.0165.01 SPECIAL (01. CONCRETE SIDEWALK 6-INCH SPECIAL) SF
0010	4+18	-	5+40	RT	132	726	---	132	118
0010	5+26	-	5+40	LT	---	---	---	---	118
0010	6+90	-	7+75	RT	71	354	14	71	118
0010	6+90	-	7+75	LT	71	426	---	71	118
				TOTAL 0010	274	1,506	14	274	472
0030	7+75	-	8+74	LT	28	504	12	28	---
				TOTAL 0030	28	504	12	28	0
				PROJECT TOTAL	302	2,010	26	302	472

STORM SEWER ITEMS

CATEGORY	STRUCTURE	TO	STRUCTURE	LOCATION	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	611.0530 MANHOLE COVERS TYPE J EACH	611.0624 INLET COVERS TYPE H EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.2003 MANHOLES 3-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	SPV.0165.02 SPECIAL (02. INSULATION) SF
0010	1.0	-	---	RT	1	---	---	---	---	---	---	1	---
0010	1.0	-	1.1	RT	---	8	---	---	---	---	---	---	---
0010	1.1	-	---	RT	---	---	1	---	---	1	---	1	---
0010	1.1	-	1.2	RT	---	13	---	---	---	---	---	---	---
0010	1.2	-	---	RT	---	---	---	1	---	---	1	1	---
0010	1.2	-	1.3	RT	---	14	---	---	---	---	---	---	16
0010	1.3	-	---	RT	---	---	---	1	---	---	1	1	---
0010	2.0	-	---	RT	1	---	---	---	---	---	---	1	---
0010	2.0	-	2.1	RT	---	52	---	---	---	---	---	---	---
0010	2.1	-	---	RT	---	---	---	1	1	---	---	1	---
				TOTAL 0010	2	87	1	3	1	1	2	6	16

EROSION CONTROL ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	628.7015 INLET PROTECTION TYPE C EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH
0010	3+90	-	4+40	LT	---	16	---
0010	4+87	-	---	LT	---	---	2
0010	5+09	-	---	RT	1	---	---
0010	5+23	-	---	RT	1	---	---
0010	5+41	-	---	RT	1	---	---
0010	7+40	-	---	RT	1	---	---
0010	7+79	-	---	LT	1	---	---
0010	7+79	-	---	RT	1	---	---
				TOTAL 0010	6	16	2

RESTORATION ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
0010	3+70	-	5+32	LT	208	---	208	0.1	10	6	5
0010	3+80	-	5+82	RT	282	---	282	0.1	13	8	7
0010	6+41	-	7+75	LT	71	---	71	0.1	4	2	2
0010	7+04	-	7+75	RT	57	---	57	0.1	3	2	2
0010	UNDISTRIBUTED			----	155	200	155	0.1	8	5	4
				TOTAL 0010	773	200	773	0.5	38	23	20
0030	7+75	-	8+74	LT	89	---	89	0.1	4	3	2
0030	UNDISTRIBUTED			----	23	100	23	0.1	1	1	1
				TOTAL 0030	112	100	112	0.2	5	4	3
				PROJECT TOTAL	885	300	885	0.7	43	27	23

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EROSION CONTROL BARRIERS

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.6005 TURBIDITY BARRIERS SY
0010	3+73	-	5+71	RT	200	200	---
0010	4+59	-	5+67	LT	133	133	---
0010	5+66		5+94	S. PIER	---	---	123
0010	6+35		6+58	N. PIER	---	---	108
0010	6+48	-	7+75	LT	131	131	---
0010	6+56	-	7+75	RT	128	128	---
0010	UNDISTRIBUTED			---	148	148	59
				TOTAL 0010	740	740	290
0030	7+75	-	8+78	LT	110	110	---
0030	UNDISTRIBUTED			---	30	30	---
				TOTAL 0030	140	140	0
				PROJECT TOTAL	880	880	290

SIGNING ITEMS

CATEGORY	STATION	LOCATION	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	SPV.0060.02 SPECIAL (02. SALVAGE AND STOCKPILE SIGNS) EACH	REMARKS
0010	4+61	LT	1	1	---	25 MPH
0010	5+48	LT	---	---	1	TIGER BOARD
0010	5+48	RT	---	---	1	TIGER BOARD
0010	6+80	LT	---	---	1	TIGER BOARD
0010	6+80	RT	---	---	1	TIGER BOARD
		TOTAL 0010	1	1	4	

MOBILIZATIONS EROSION CONTROL

CATEGORY	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	PROJECT 5659-00-74	7	4
	TOTAL 0010	7	4

PAVEMENT MARKINGS

CATEGORY	STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH LF	646.8120 MARKING CURB EPOXY LF	REMARKS
0010	3+70	-	7+75	CL	810	---	DOUBLE YELLOW
0010	3+70	-	7+75	LT EDGELINE	405	---	WHITE
0010	3+70	-	7+75	RT EDGELINE	405	---	WHITE
0010	7+09	-	7+38	LT	---	29	YELLOW
0010	7+09	-	7+38	RT	---	17	YELLOW
				TOTAL 0010	1,620	46	

TRAFFIC CONTROL ITEMS

CATEGORY	LOCATION	DAYS	616.0700.S FENCE SAFETY LF	TRAFFIC CONTROL DRUMS EACH	643.0300 TRAFFIC CONTROL DRUMS DAY	TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	TRAFFIC CONTROL SIGNS EACH	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF	SPV.0060.01 SPECIAL (01. TEMPORARY PEDESTRIAN PORTAGE) EACH	REMARKS
0010	PROJECT BEGIN	7	---	---	---	---	---	---	---	---	---	32	---	---	G20-57B INSTALLED PRIOR TO PROJECT START
0010	PROJECT END	7	---	---	---	---	---	---	---	---	---	32	---	---	G20-57B INSTALLED PRIOR TO PROJECT START
0010	PROJECT BEGIN	133	---	---	---	7	931	10	1,330	4	532	---	---	---	USH 12 NB MAINLINE CLOSURE, NO POSTED DETOUR
0010	PROJECT END	133	---	---	---	7	931	10	1,330	4	532	---	---	---	USH 12 SB MAINLINE CLOSURE, NO POSTED DETOUR
0010	USH 12 & URICH RD	133	---	---	---	2	266	4	532	3	399	---	---	---	ROAD CLOSED TO THRU TRAFFIC 0.5 MILES AHEAD
0010	USH 12 & WALNUT ST	133	---	---	---	2	266	4	532	3	399	---	---	---	ROAD CLOSED TO THRU TRAFFIC 0.2 MILES AHEAD
0010	NORTH APPROACH	100	195	---	---	---	---	---	---	10	1,000	---	---	1	TEMPORARY PEDESTRIAN PORTAGE
0010	PROJECT BEGIN, SIDEWALK RT	133	---	---	---	---	---	---	---	1	133	---	24	---	SIDEWALK CLOSED
0010	PROJECT END, SIDEWALK RT	133	---	---	---	---	---	---	---	1	133	---	18	---	SIDEWALK CLOSED
0010	PROJECT END, SIDEWALK LT	133	---	---	---	---	---	---	---	1	133	---	18	---	SIDEWALK CLOSED
0010	UNDISTRIBUTED	---	---	---	500	---	244	---	377	---	333	---	---	---	
		TOTAL 0010	195		500		2,638		4,101		3,594	64	60	1	

3

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.6501.01 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) (01. B-56-0255) EACH	650.9500.01 CONSTRUCTION STAKING SIDEWALK (PROJECT) (01. 5659-00-74) EACH	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 5659-00-74) EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010	---	-	---	PROJECT 5659-00-74	---	---	1	1	1	---
0010	3+70	-	5+40	CTH PF	170	170	---	---	---	170
0010	6+90	-	7+75	CTH PF	85	85	---	---	---	85
				TOTAL 0010	255	255	1	1	1	255
0030	7+75	-	8+74	LT	---	---	---	---	---	99
				TOTAL 0030	0	0	0	0	0	99
				PROJECT TOTAL	255	255	1	1	1	354

3

SAWING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	3+70	-	---	CTH PF	26	---
0010	3+94	-	---	RT	---	4
0010	7+75	-	---	CTH PF	36	10
				TOTAL 0010	62	14
0030	8+01	-	8+29	LT	32	5
0030	8+74	-	---	LT	---	5
				TOTAL 0030	32	10
				PROJECT TOTAL	94	24

BIRD DETERRENT

CATEGORY	LOCATION	999.2000.S.01 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (01. 6+15) EACH
0010	B-56-0672	1
	TOTAL 0010	1

WATER AND SANITARY ADJUSTMENTS

CATEGORY	STATION	LOCATION	SPV.0060.03 SPECIAL (03. ADJUSTING WATER VALVES) EACH	SPV.0060.04 SPECIAL (04. ADJUSTING SANITARY MANHOLE COVERS) EACH
0030	4+11	LT	---	1
0030	5+15	RT	1	---
0030	7+28	LT	1	---
		TOTAL 0030	2	1

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
EXISTING CENTERLINE
CORPORATE LIMITS
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
BUILDING
TO BE REMOVED
BRIDGE
CULVERT

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND SURVEY MONUMENT (SEE FOUND MONUMENT TABLE)
GEODETIC SURVEY MONUMENT
NON-PERMITTED SIGN
PERMITTED SIGN
ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25
PARALLEL OFFSETS



END RELOCATION ORDER
STA 6+13.44
Y=232,519.955
X=617,841.358
APPROXIMATELY 1573 FEET NORTH OF AND 6 FEET WEST OF THE SOUTH 1/4 CORNER OF SECTION 2, T11N, R5E, VILLAGE OF NORTH FREEDOM, WI.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), SAUK COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, CENTERLINE OF EXISTING PAVEMENTS AND/OR EXISTING OCCUPATIONAL LINES.

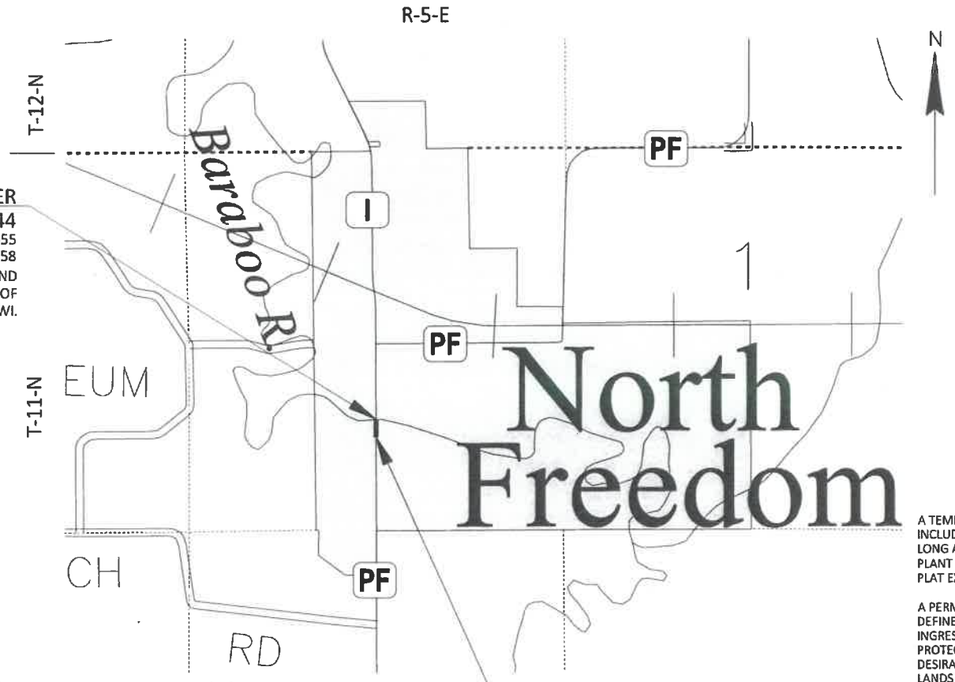
DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

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

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF SAUK COUNTY.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE DETAIL PAGES.

RECEIVED
DEC 08 2025
SAUK COUNTY CLERK
BARABOO, WISCONSIN



BEGIN RELOCATION ORDER
STA 3+59.83
Y=232,266.355
X=617,843.582
APPROXIMATELY 1320 FEET NORTH OF AND 4 FEET WEST OF THE SOUTH 1/4 CORNER OF SECTION 2, T11N, R5E, VILLAGE OF NORTH FREEDOM, WI.

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA ABBREVIATIONS

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

CONVENTIONAL UTILITY SYMBOLS

UTILITY NUMBER 40

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

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

LAYOUT
SCALE 0 2000 FT.

TOTAL NET LENGTH OF CENTERLINE = 253.60 FT.

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
5659-00-04		
FEDERAL PROJECT NUMBER	1	2

PLAT OF RIGHT OF WAY REQUIRED FOR

CTH W - V NORTH FREEDOM
BARABOO RIVER BRIDGE B-56-0672

CTH PF	SAUK COUNTY

CONSTRUCTION PROJECT NUMBER
5659-00-74

PREPARED BY
MSA
1702 Pankratz Street, Madison, Wi 53704
608-242-7779 1-800-466-0679 Fax: 608-242-5664

WISCONSIN
BRADLEY L. TISDALE
S-2824
WAUNAKEE
WI
LAND SURVEYOR

10/14/2025 (DATE)
Bradley L Tisdale (Professional Land Surveyor)

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

PROPERTY LINES SHOWN ON THIS PLAT FOR PROPERTIES BEING IMPACTED ARE DRAWN FROM DATA DERIVED FROM FILED/RECORDED MAPS AND DOCUMENTS OF PUBLIC RECORD. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

THIS PLAT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES AND ACCESS RIGHTS.

REVISION DATE	SAUK COUNTY HIGHWAY DEPARTMENT
	APPROVED FOR THE DEPARTMENT
	DATE: 12/8/2025 (Signature)

FILE NAME : G:\03\03060\03060035\CADD\RW\DWG\03060035_N FREEDOM_CTH PF_PLAT.DWG
PLOT DATE : 10/14/2025 8:26 AM
PLOT BY : SASHA SCHALLERT
PLOT NAME :

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), SAUK COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF SAUK COUNTY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: CSM 639; 1996 BRENEMAN PLAT OF SURVEY; CSM 5198 (NOT SHOWN); 2000 ROLOFF PLAT OF SURVEY (NOT SHOWN); 1986 BLAKESLEE PLAT OF SURVEY (NOT SHOWN)

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE COUNTY.

PARCEL NUMBER	OWNER(S)	INTEREST(S) REQUIRED	FEE R/W ACRES REQUIRED			TLE ACRES
			NEW	EXISTING	TOTAL	
1	ROBERT F. SCHULTZ, A SINGLE PERSON, AND ELIZABETH A. HAYES, A SINGLE PERSON, AS JOINT TENANTS	TLE	--	--	--	0.032
2	ROBERT C. ZIMMERLY, AN UNMARRIED PERSON	TLE	--	--	--	0.061

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	PARCEL AFFECTED	INTEREST REQUIRED	EASEMENT AFFECTING
80	BRIGHTSPEED	1	RELEASE OF RIGHTS	NO EASEMENT OF RECORD
81	ALLIANT ENERGY	2	RELEASE OF RIGHTS	NO EASEMENT OF RECORD

RW STATION OFFSET TABLE

POINT	STATION	OFFSET
100	3+59.85	-2.49'
101	3+60.14	-35.49'
102	6+13.66	-34.49'
103	6+13.45	-1.49'
104	6+13.44	0.00'
105	6+13.24	31.51'
106	3+59.56	30.51'
107	3+59.83	0.00'

TLE STATION OFFSET TABLE

POINT	STATION	OFFSET
500	4+82.00	-34.73'
501	4+82.00	-62.00'
502	5+32.00	-62.00'
503	5+32.00	-34.45'
504	4+40.00	31.01'
505	4+60.00	40.00'
506	5+25.00	55.00'
507	5+45.00	55.00'
508	6+13.21	38.51'

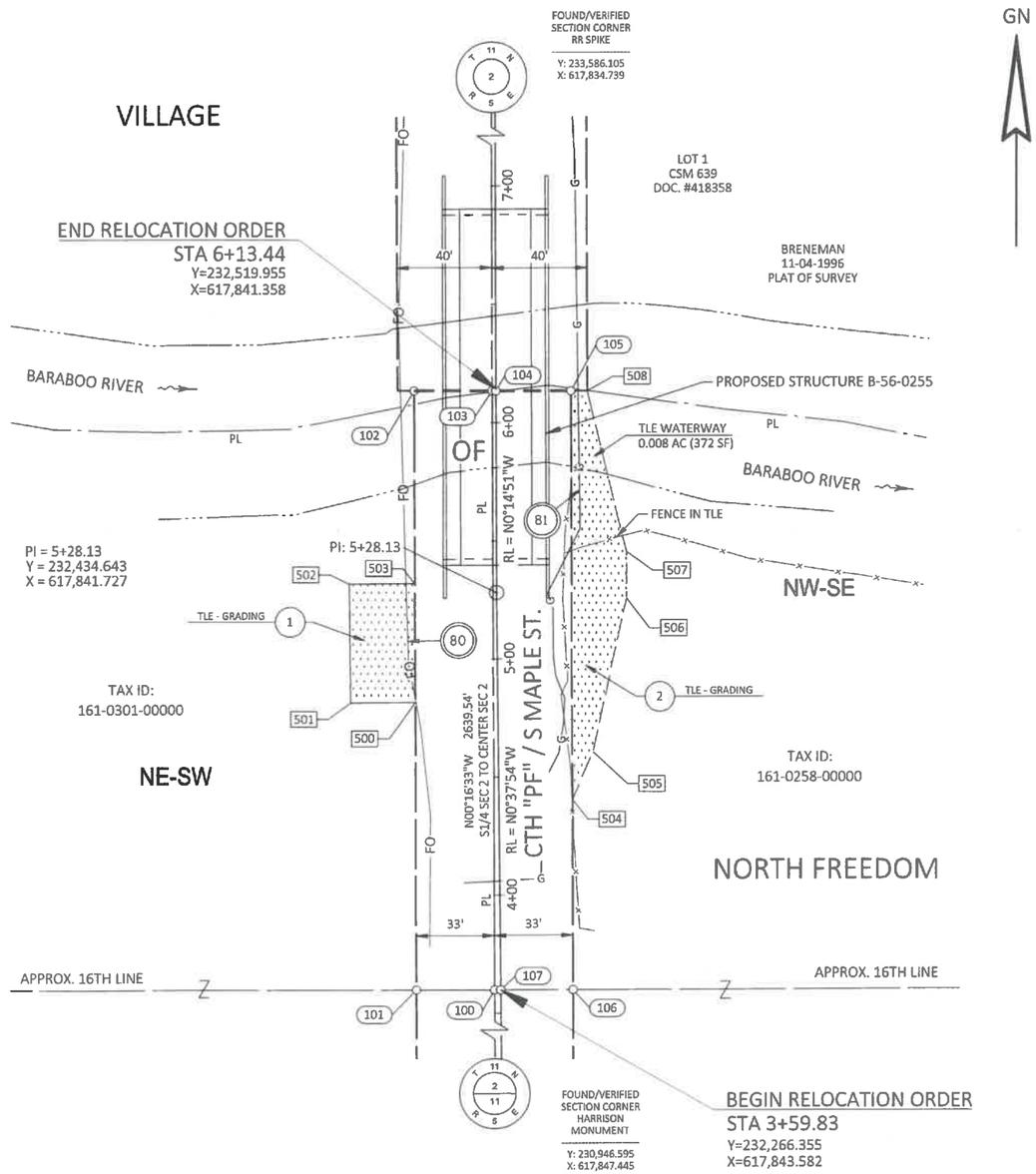
RW COURSE TABLE

COURSE	BEARING	DISTANCE
SEC S2 - 100	N00° 16' 33"W	1319.77'
100 - 101	S89° 52' 27"W	33.00'
101 - 102	N00° 16' 33"W	253.75'
102 - 103	S89° 53' 00"E	33.00'
103 - SEC C2	N00° 16' 33"W	1066.16'
103 - 104	S89° 53' 00"E	1.49'
104 - 105	S89° 53' 00"E	31.51'
105 - 106	S00° 16' 33"E	253.47'
106 - 107	S89° 52' 45"W	30.51'
107-100	S89° 52' 45"W	2.49'
100 - 103	N00° 16' 33"W	253.61'

TLE COURSE TABLE

COURSE	BEARING	DISTANCE
101 - 500	N00° 16' 33"W	121.86'
500 - 501	S89° 22' 06"W	27.27'
501 - 502	N00° 36' 02"W	50.42'
502 - 503	N89° 45' 09"E	27.55'
503 - 500	S00° 16' 33"E	50.23'
105 - 508	N90° 00' 00"E	7.00'
508 - 507	S13° 50' 08"E	70.17'
507 - 506	S00° 18' 18"E	19.63'
506 - 505	S12° 21' 47"W	66.71'
505 - 504	S23° 34' 30"W	21.93'
504 - 105	N00° 16' 33"W	173.03

WISCONSIN
BRADLEY L. TISDALE
S-2824
WAUNAKEE
WI
LAND SURVEYOR



REVISION DATE	DATE 10/14/2025	SCALE, FEET 0 30 60	HWY: CTH PF	STATE R/W PROJECT NUMBER 5659-00-04	PLAT SHEET 4. 02	
	GRID FACTOR		COUNTY: SAUK	CONSTRUCTION PROJECT NUMBER 5659-00-74	PS&E SHEET	E

FILE NAME : 03060035_N FREEDOM_CTH PF_PLAT.DWG
LAYOUT NAME - RW 1 IN 100 FT

PLOT DATE : 10/14/2025 8:26 AM PLOT BY : SASHA SCHALLERT PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 75

BENCH MARKS			
NO.	STATION, OFFSET	DESCRIPTION	ELEV.
200	5+48.91, 17.2' RT	CHISELED CROSS SQUARE SE WING	867.15
201	3+89.06, 22.9' RT	HYDRANT EAST FLANGE BOLT BETWEEN E&L	872.64
202	6+79.30, 14.4' LT	CHISELED CROSS NW WING	867.11
203	6+79.32, 17.3' RT	CHISELED SQUARE NE WING	867.12

CONTROL POINTS				
NO.	STATION, OFFSET	DESCRIPTION	Y	X
1	2+49.53, 17.4' RT	3/4" IRON ROD W/ CAP	232,156.25	617,862.17
2	4+93.22, 22.4' RT	3/4" IRON ROD W/ CAP	232,399.98	617,864.56
3	7+01.20, 20.3' LT	3/4" IRON ROD W/ CAP	232,607.62	617,820.65
4	10+08.12, 24.0' LT	3/4" IRON ROD W/ CAP	232,914.64	617,816.48

BEGIN PROJECT
STA 3+70
Y = 232,276.52
X = 617,843.47

END PROJECT
STA 7+75
Y = 232,681.51
X = 617,840.66

ROBERT SCHULTZ
ELIZABETH HAYES

ROBERT ZIMMERLY

JOHN NAWOR
MARY BETH NAWOR

WAYNE JANISCH
MICHELLE JANISCH

RITA SCHIPPER
DELORES RADDATZ

BURIED SANITARY SEWER (VILLAGE OF NORTH FREEDOM)
WETLANDS (TYP.)
STA 5+04 LT BAD FE
STA 4+90 - STA 5+29 LT CP CLASS IV 18-INCH SKEW 83° RHF
BARABOO RIVER
STREAMBANK EASEMENT
TLE
ASPHALT RAMP
ADJUSTING SANITARY MANHOLE COVERS
SLOPE INTERCEPT (TYP.)
EXISTING R/W
STRUCTURE B-56-0255
EXISTING STRUCTURE B-56-0672 (TO BE REMOVED)
P.I. 5+28.13
P.I.
BURIED COMMUNICATION (BRIGHTSPEED)
CONCRETE SIDEWALK 6-INCH SPECIAL (TYP.)
ADJUSTING WATER VALVES
STA 8+15 LT CONC FE (TYPE X)
BURIED STORM SEWER (VILLAGE OF NORTH FREEDOM)
P.I. 8+30.97
GRUBBING REQ'D TREE CLEARED BY VILLAGE
END CONSTRUCTION STA 8+74
CP 3
BM 202
BM 203
BM 200
CP 2
BM 201
CTH PF (ASPHALT)
N0°37'54"W
N0°14'51"W
N0°00'25"E
4+00
5+00
6+00
7+00
8+00
9+00
36'
30'
42'
38'
BURIED WATER (VILLAGE OF NORTH FREEDOM)
BURIED GAS (ALLIANT ENERGY)
REMOVING INLETS
REMOVING STORM SEWER 15-INCH
REMOVING FENCE
SEE STORM SEWER DETAILS
ADJUSTING WATER VALVES
SANITARY SEWER ON EXISTING BRIDGE (VILLAGE OF NORTH FREEDOM)
STA 7+25 RT CONC PE (TYPE X)
CONNECT EXISTING PIPE TO NEW STRUCTURE
REMOVING STORM SEWER 12-INCH
OVERHEAD COMMUNICATIONS (SPECTRUM)
OVERHEAD ELECTRIC (ALLIANT ENERGY)
OVERHEAD COMMUNICATIONS (BRIGHTSPEED)
CAUTION

LEGEND
CLEAR & GROUP
RIPRAP
SAWING ASPHALT
SAWING CONCRETE

N

VCL = 140.00
K = 37.87
-4.50%
-9.00%
-0.80%
-0.81%
FINISHED C/L PROFILE
EXISTING C/L PROFILE
SPECIAL DITCH LT
VPT STA 5+13.00
VPT EL 867.45
STA 3+70.00
EL 871.30
VPC STA 3+73.00
VPC EL 871.16
VPI STA 4+43.00
VPI EL 868.01
STA 7+31.00
EL 865.70
STA 7+75.00
EL 865.34
EXISTING GROUND
FINISHED
874.21 872.34 869.88 870.04 867.85 868.48 866.73 867.58 866.27 867.15 866.32 866.75 866.21 866.35 866.08 865.95 865.54 865.54 865.39 865.92 867.15
875
870
865
860
3+15
4+00
5+00
6+00
7+00
8+00
9+00

REMOVE EXISTING BRIDGE B-56-0672
STA 6+13.70
THREE SPAN STEEL DECK GIRDER BRIDGE
24.0 FT CLEAR ROADWAY WIDTH
130.8 FT OVERALL LENGTH
NO SKEW

STRUCTURE B-56-0255
STA 6+15
THREE SPAN HAUNCHED SLAB BRIDGE
30.0 FT CLEAR ROADWAY WIDTH
150.5 FT OVERALL LENGTH
NO SKEW

EARTHWORK SUMMARY	
STA 3+70 - STA 8+74	
EXC. COMMON	355 CY
FILL	121 CY
FILL EXPANSION	25%
WASTE	106 CY

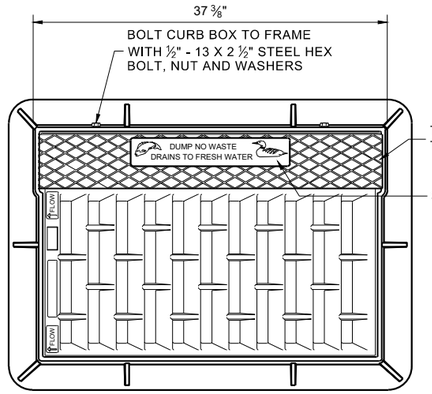
PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	PLAN AND PROFILE: CTH PF	SHEET 24	E

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PLOT DATE : 6/29/2026 4:43 PM
PLOT BY : CONNOR GIRTEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

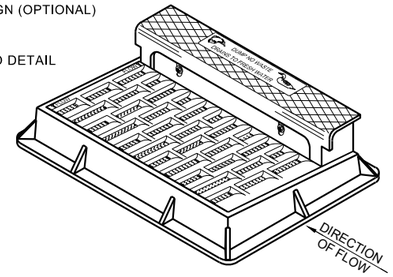
Standard Detail Drawing List

08A05-22A	INLET COVERS TYPE A, H, A-S, H-S AND Z
08A05-22E	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L AND M
08A08-03	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08B09-04	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08D01-24A	CONCRETE CURB AND GUTTER
08D01-24B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPES A, B, C AND D
08E11-02	TURBIDITY BARRIER
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS
09A11-01	DRIVEWAY AND SIDEWALK RAMPS TYPES X AND Y
09A14-01	DRIVEWAYS WITHOUT CURB AND GUTTER
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
15C02-10A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-10B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-12	SIGNING AND MARKING FOR TWO LANE BRIDGES
15C11-11B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D30-12A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

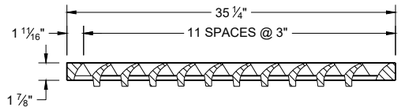
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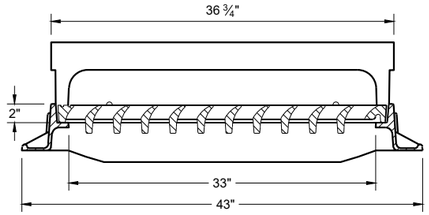


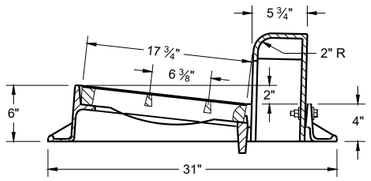
NOTE: EITHER CASTING IS ACCEPTABLE

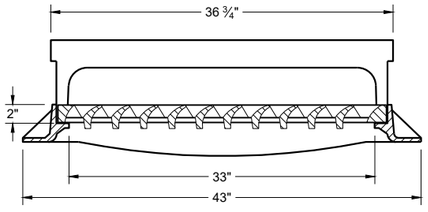


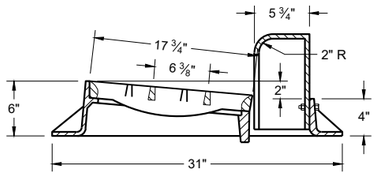
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







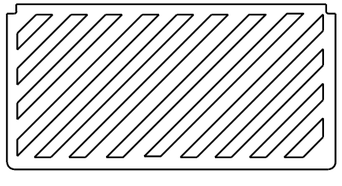




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

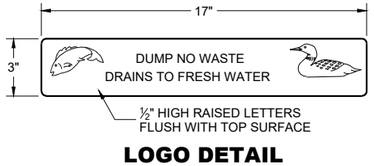
1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



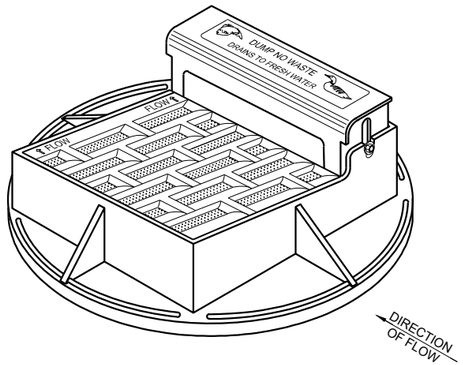
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

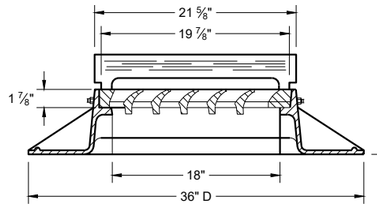


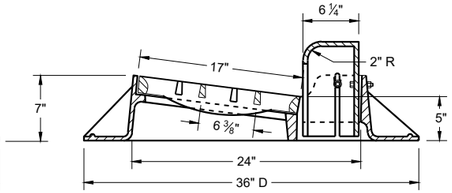
LOGO DETAIL



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE





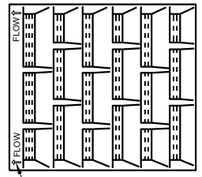
TYPE "A"

GENERAL NOTES

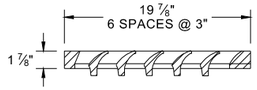
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

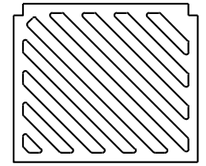
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



DIRECTION OF FLOW ARROWS



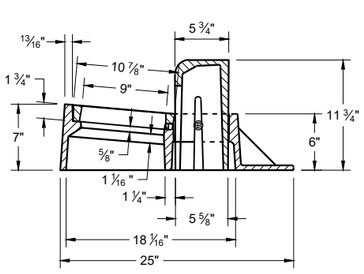
1" DIAGONAL BARS WITH 1 1/2" OPENINGS

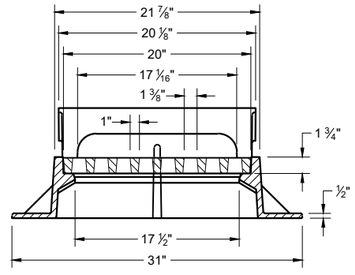


SPECIAL GRATE FOR TYPE "A" COVER

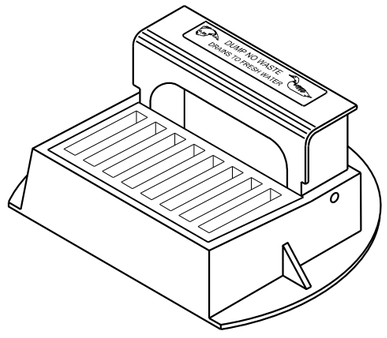
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



INLET COVERS
TYPES A, H, A-S, H-S AND Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA

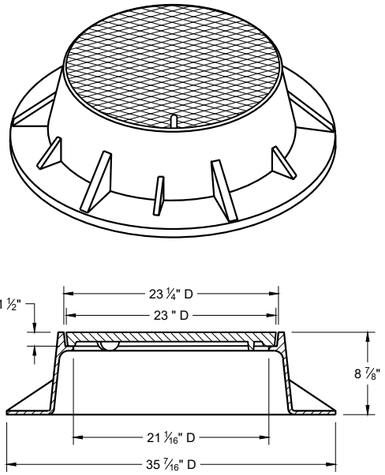
6
SDD 08A05-22a

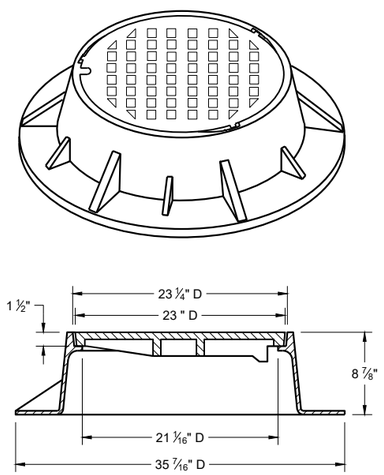
GENERAL NOTES

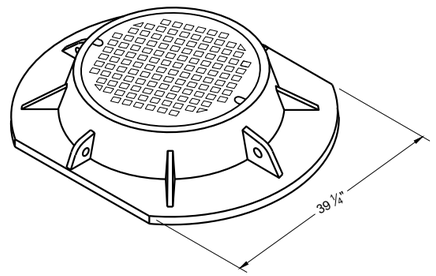
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

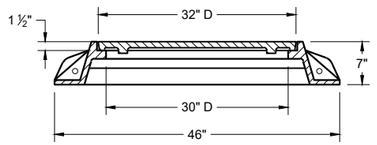
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

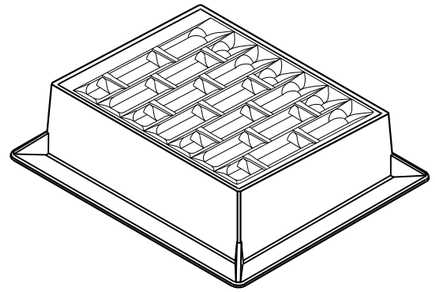


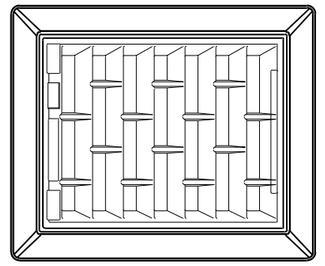


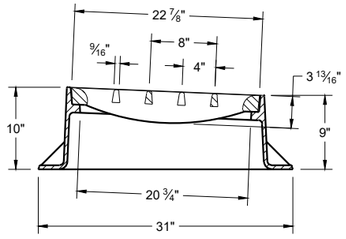


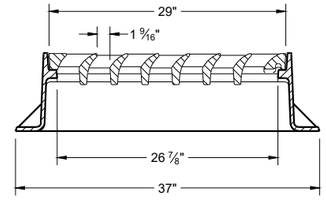


TYPE "K"

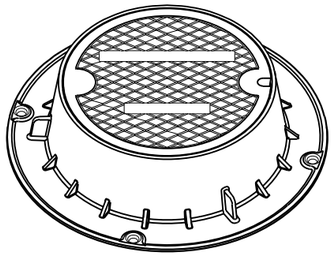


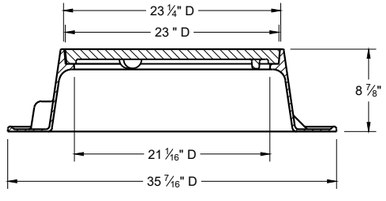






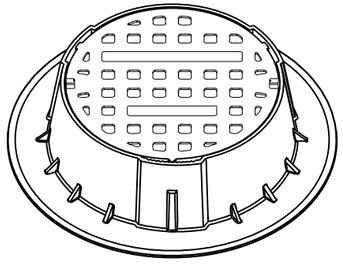
INLET COVER TYPE "BW"

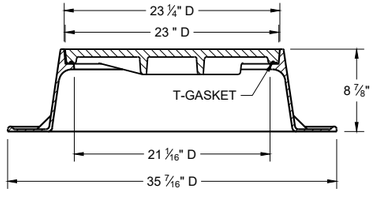




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

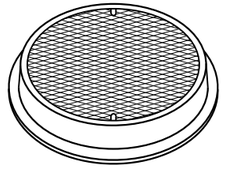


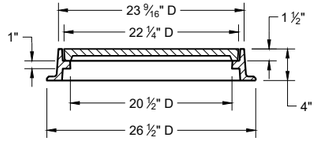


TYPE "J" SPECIAL

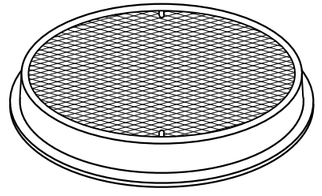
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

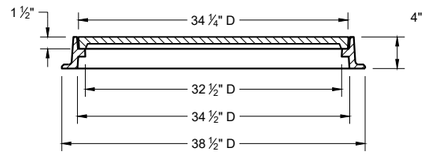
NOTE: EITHER CASTING IS ACCEPTABLE





TYPE "L"





TYPE "M"

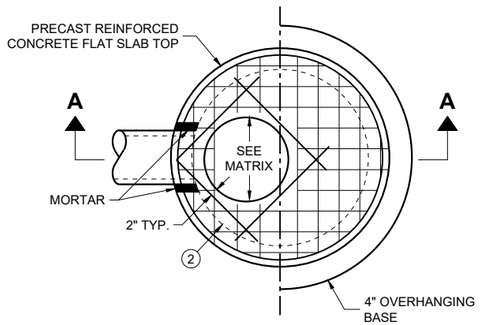
INLET COVERS TYPES BW
MANHOLE COVERS TYPES K, J, J-S, L, AND M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

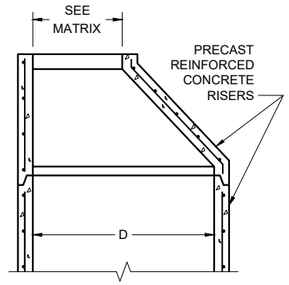
APPROVED
February 2025 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

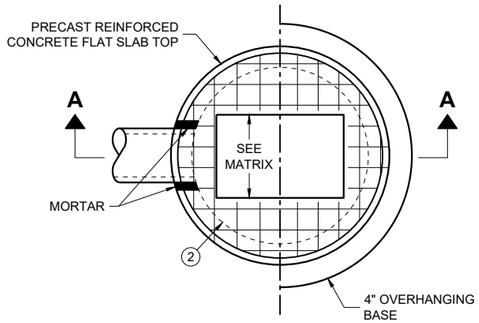
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SDD 08A05-22e



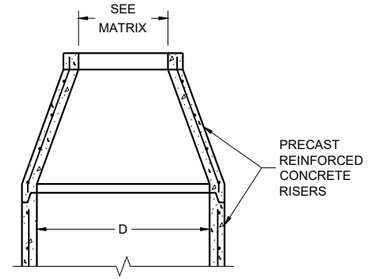
PLAN VIEW CIRCULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



PLAN VIEW RECTANGULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

COVER MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V V-B	VV-B	WM	Z
	OPENING SIZE (FT.)												
3-FT	2 X 2	X	X					X		X			
	2 DIA.				X								X
4-FT TO 6-FT	2 X 2	X	X					X		X			
	2 X 2.5			X				X	X	X		X	
	2 DIA.				X								X
	2 X 3						X						
	2.5 X 3					X							
	2 X 3.5*										X*		

* REQUIRES 5-FT DIAMETER OR LARGER STRUCTURE

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

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

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

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

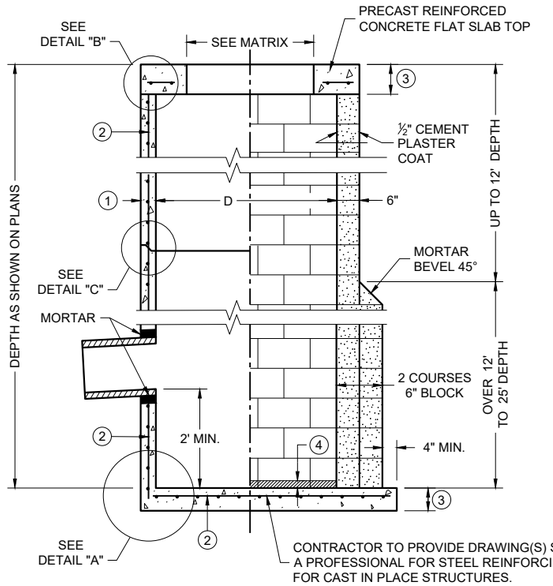
(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

(2) FOR PRECAST CATCH BASINS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

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

(4) 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

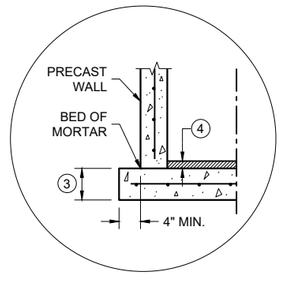
(5) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFROMING TO ASTM C443.



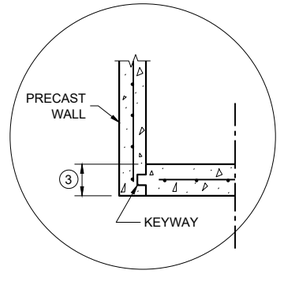
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (2)

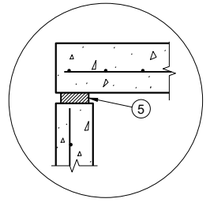


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

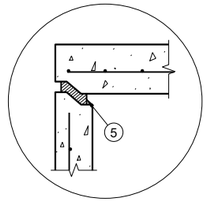


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

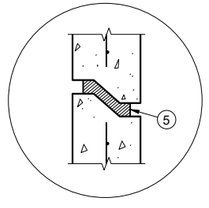
DETAIL "A"



TOP WITH PLAIN END JOINT

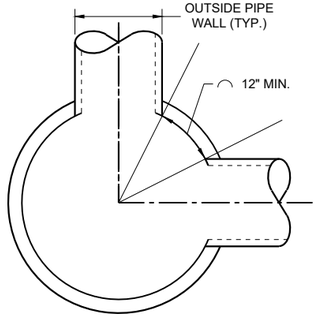


TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B" **DETAIL "C"**



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

CATCH BASINS, 3-FT. 4-FT., 5 FT., AND 6-FT. DIAMETER

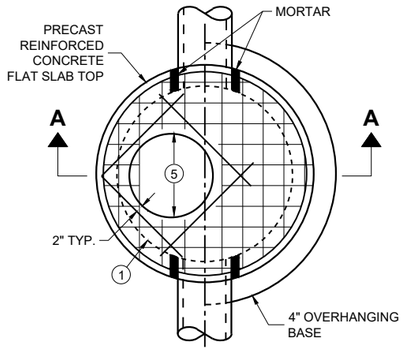
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

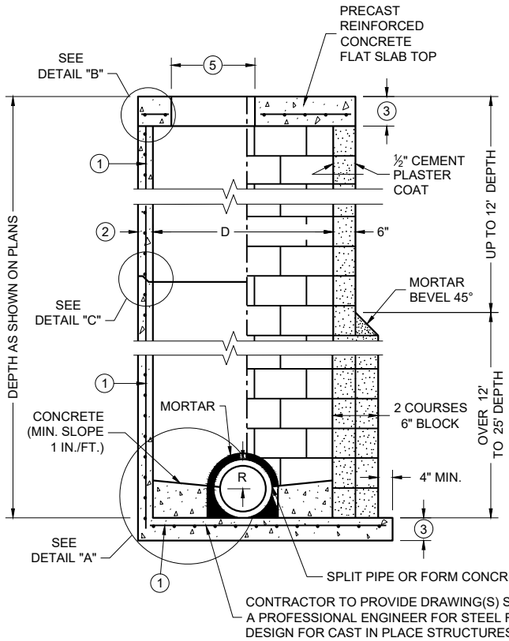
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PLAN VIEW

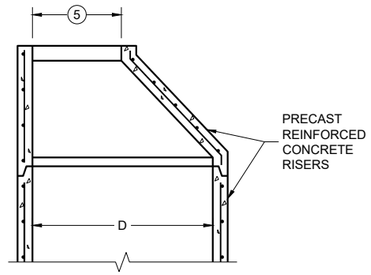
CIRCULAR OPENING



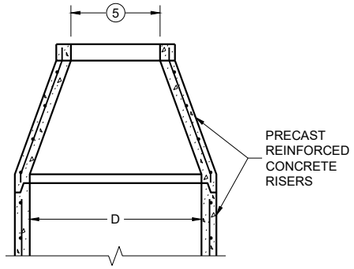
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

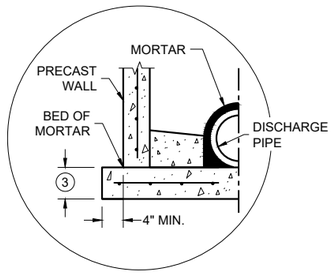
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)



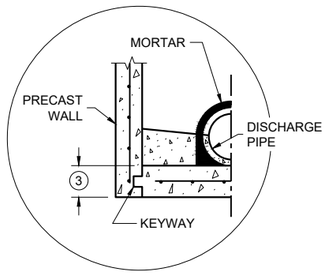
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

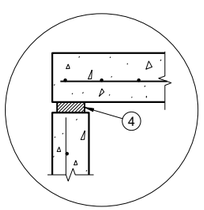


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

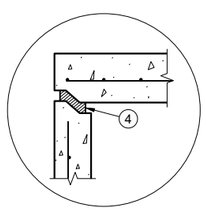


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

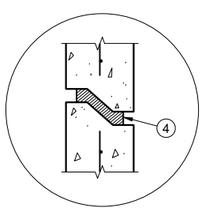
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

DETAIL "C"

MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) (5) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42 *	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION 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.

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

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. 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 IMENSION OF 1 INCH.

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

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

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

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

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

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

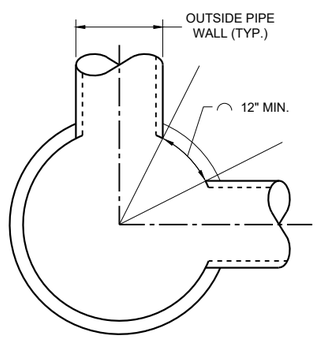
(1) FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.

(5) SEE MANHOLE COVER OPENING MATRIX.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

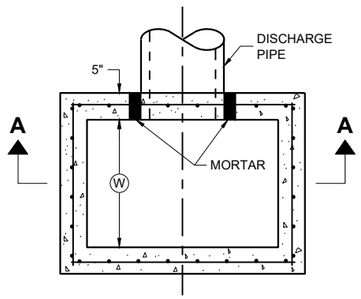
STATE OF WISCONSIN
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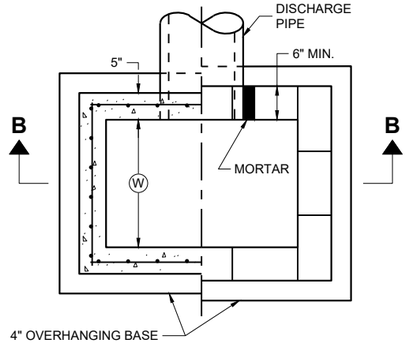
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MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

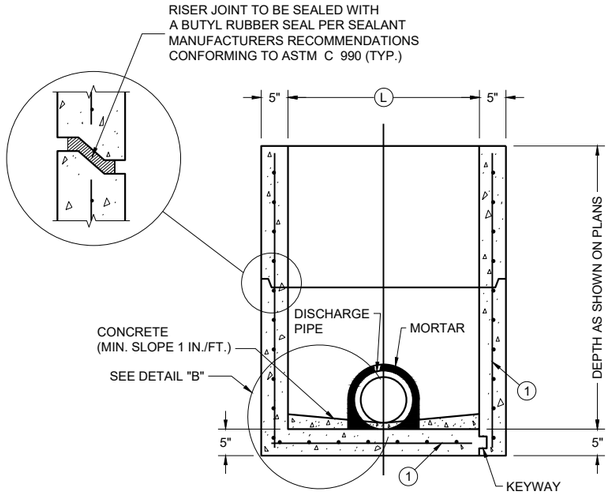
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SDD 08B09-04



PLAN VIEW



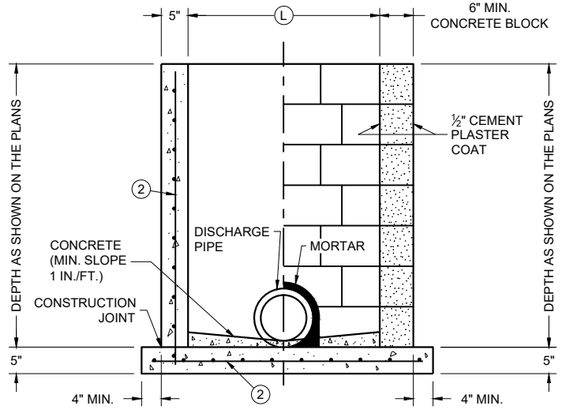
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

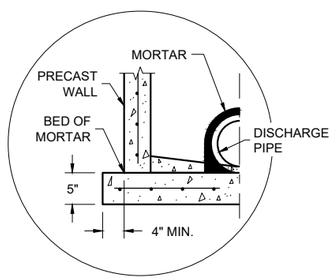
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

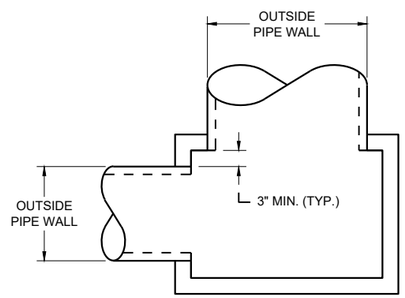
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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

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

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

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF 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 INLETS AND REINFORCED CONCRETE BASES 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.

CATCH BASIN COVER MATRIX

INLET SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE									
			ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM	V V-B
2 X 2-FT	2	2	X	X				X				
2 X 2.5-FT	2	2.5			X			X	X	X	X	
2 X 3-FT	2	3					X					
2.5 X 3-FT	2.5	3				X						
2 X 3.5-FT	2	3.5										X

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2 X 2-FT	12	12
2 X 2.5-FT	12	18
2 X 3-FT	12	24
2.5 X 3-FT	18	24
2 X 3.5-FT	12	30

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

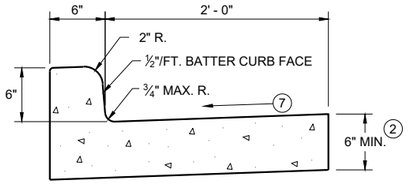
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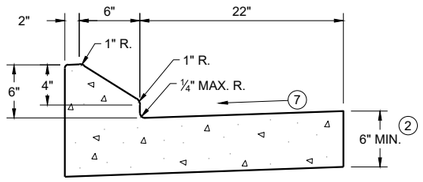
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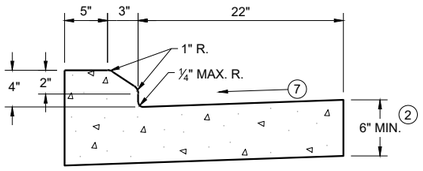
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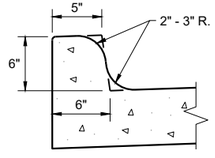
TYPES A (1) & D



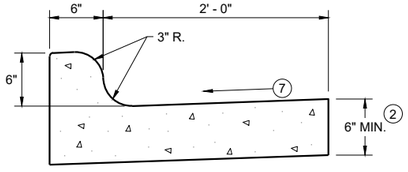
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

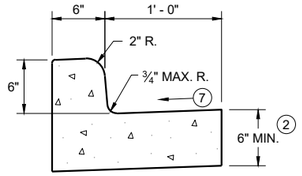


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



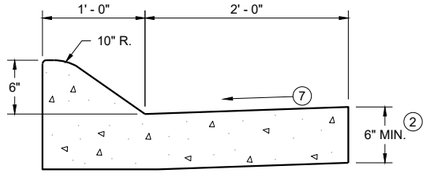
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

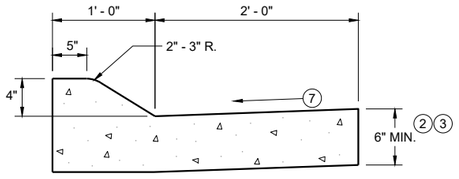


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

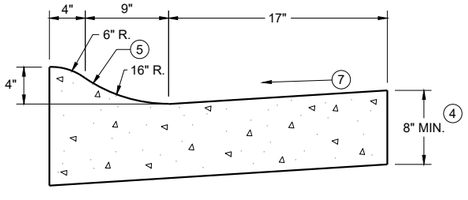


6" SLOPED CURB TYPES A (1) & D



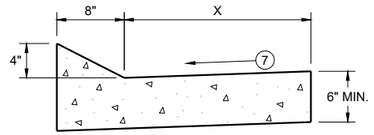
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T
CONCRETE CURB AND GUTTER 30"

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

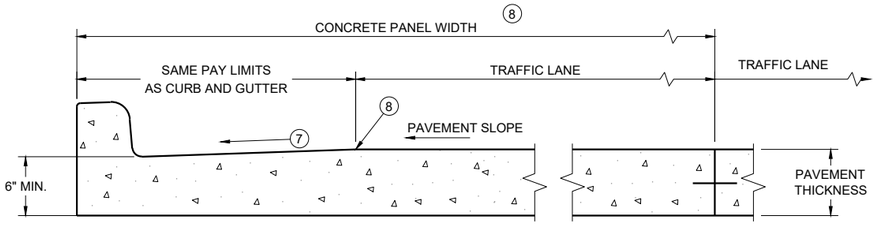


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

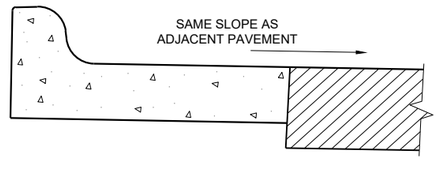
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

DETAILS OF CONSTRUCTION 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 AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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 GUTTERS 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.

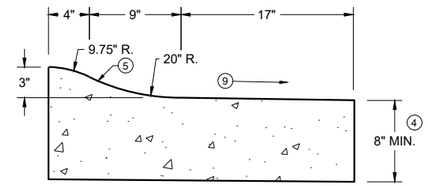
(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(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.

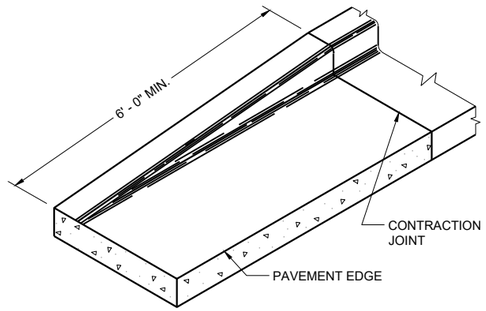
(9) SLOPE TO BE REVERSE SLOPE MATCHING THE SLOPE OF THE PAVEMENT AND THE CIRCULATORY ROADWAY



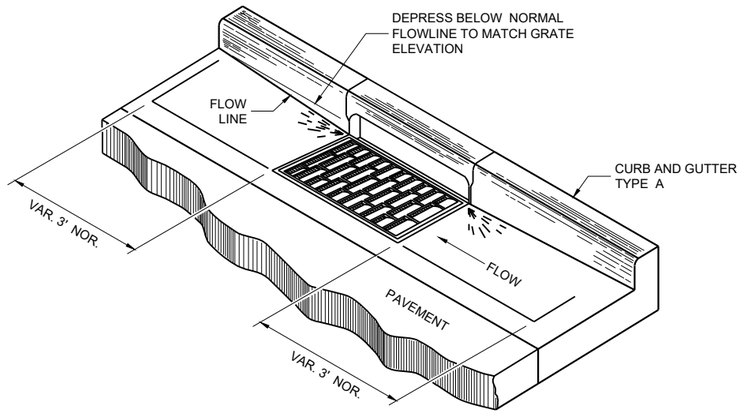
3" SLOPED CURB TYPES R (1) & T

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION 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.

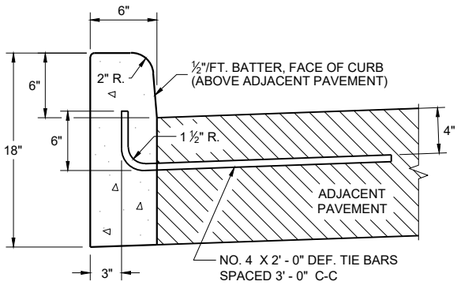
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

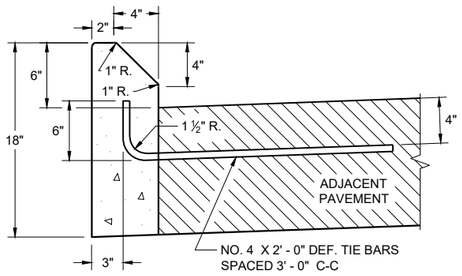
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

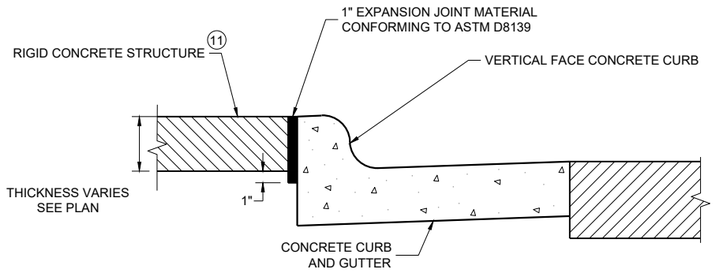


TYPES A (1) & D

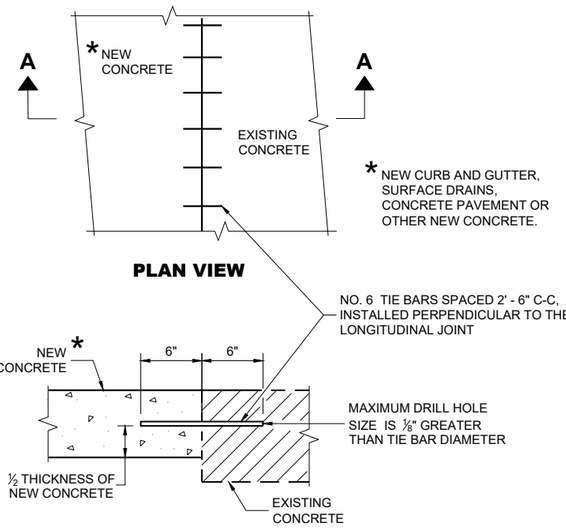


TYPES G (1) & J

CONCRETE CURB



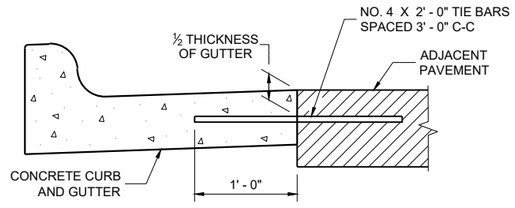
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



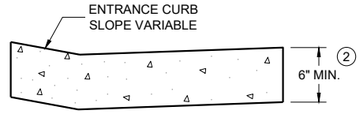
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

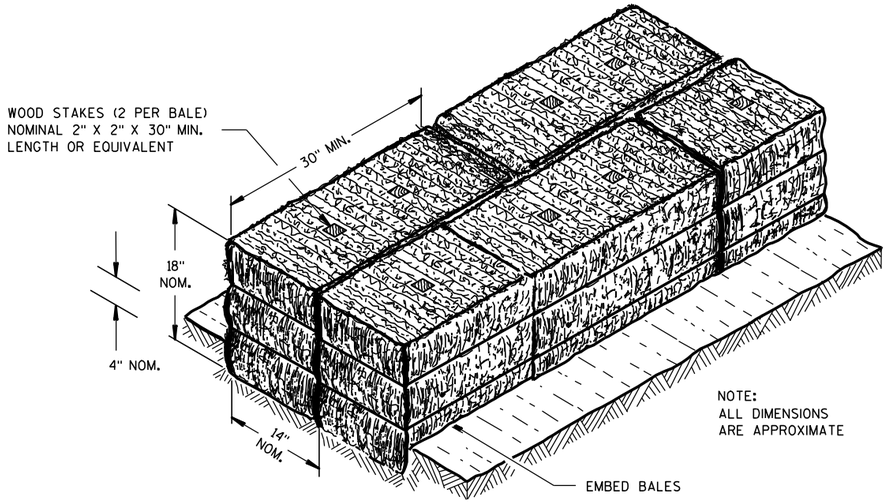
CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

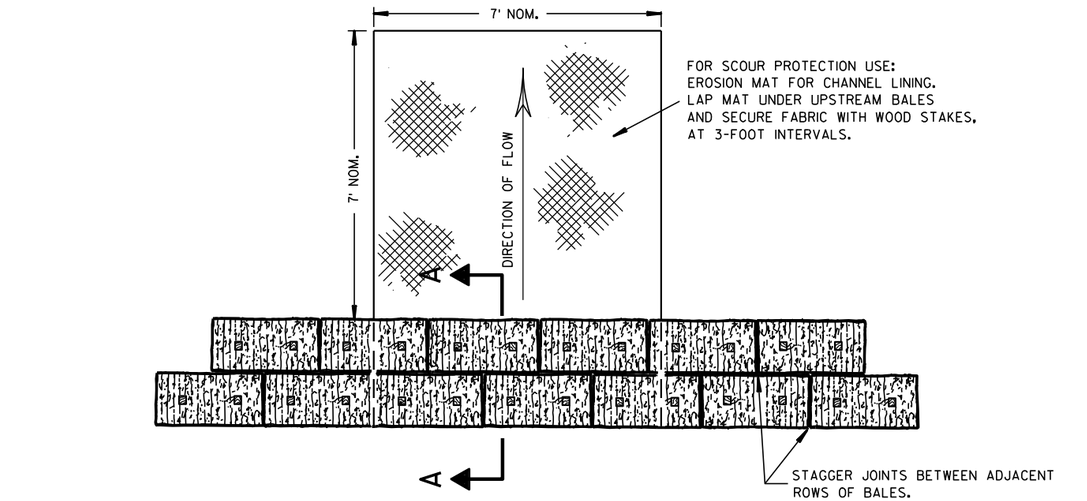
APPROVED
February 2025 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

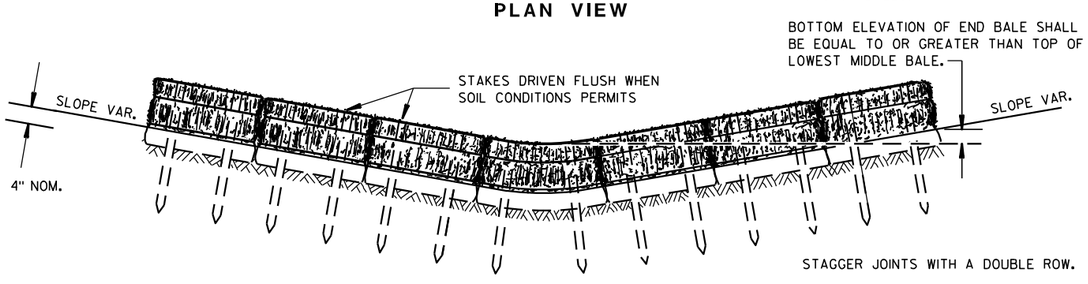
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SDD 08D01-24b



SECTION A-A



PLAN VIEW



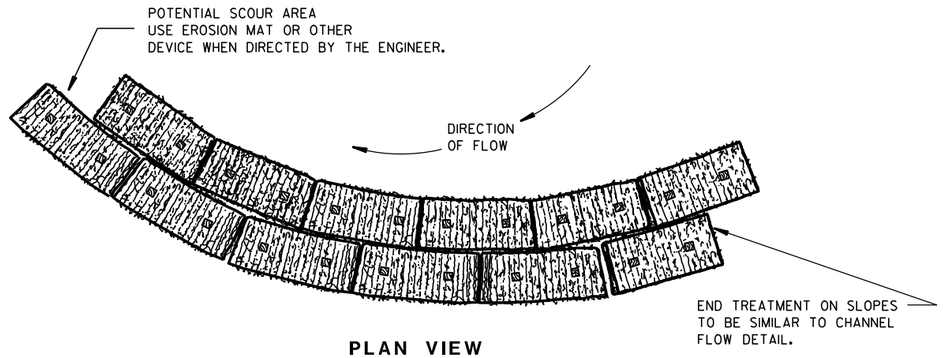
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

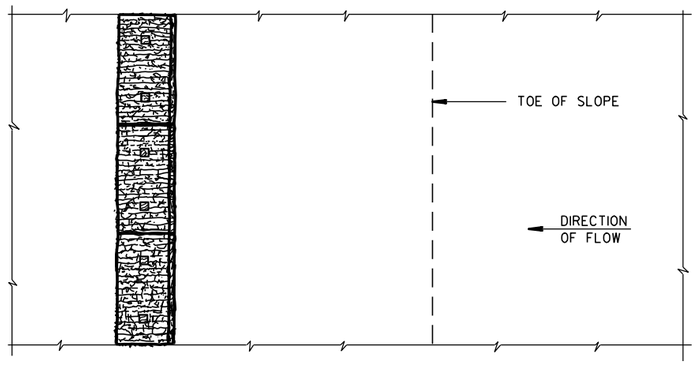
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

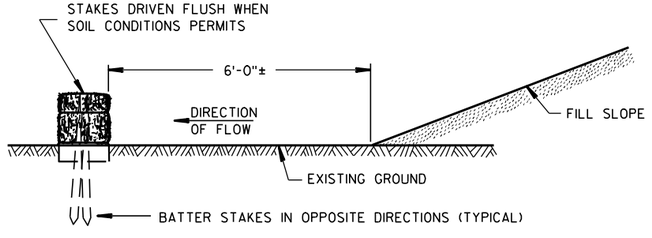


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

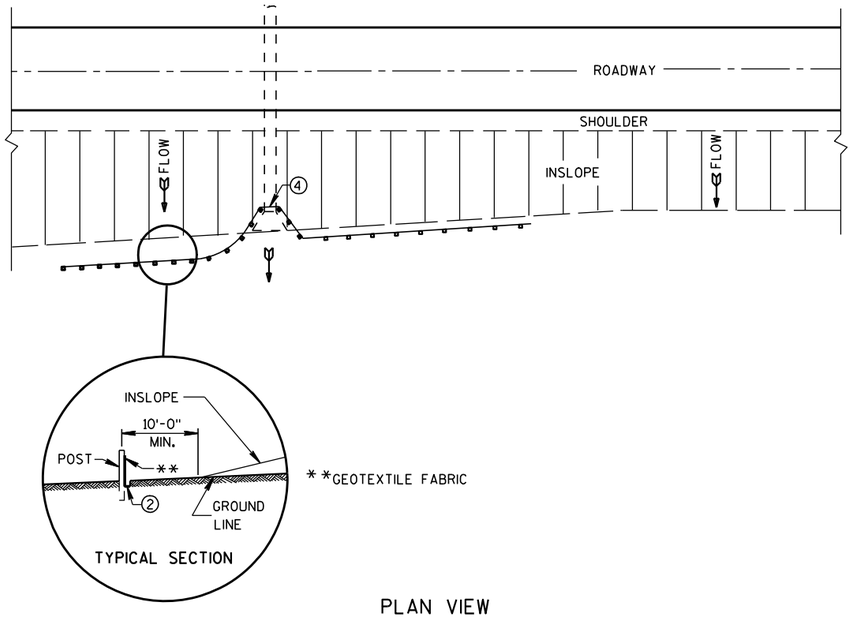
APPROVED

6/04/02 DATE — /S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

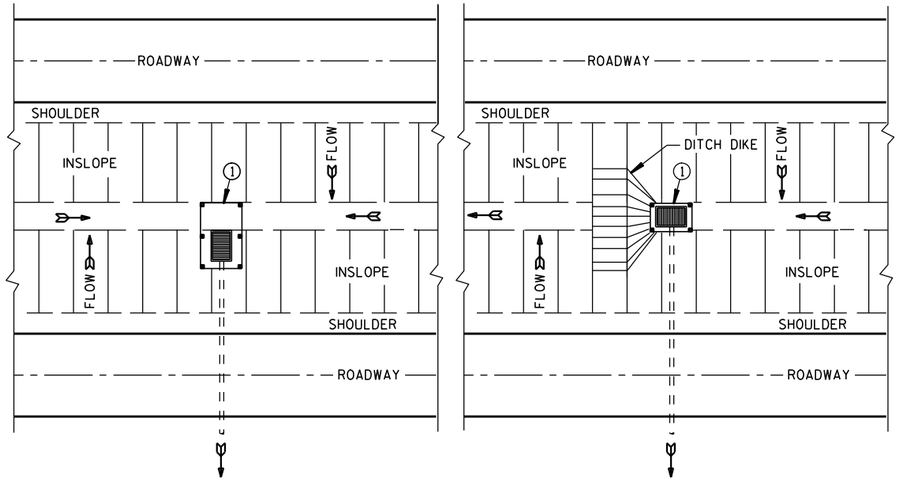
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

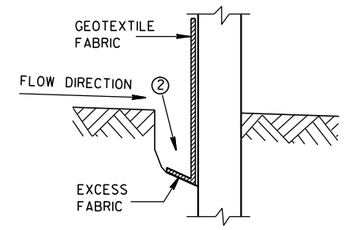
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

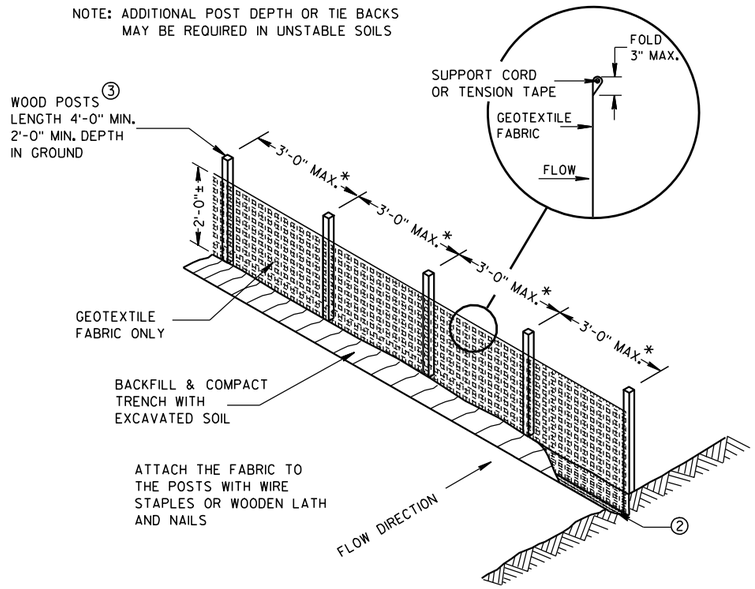
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

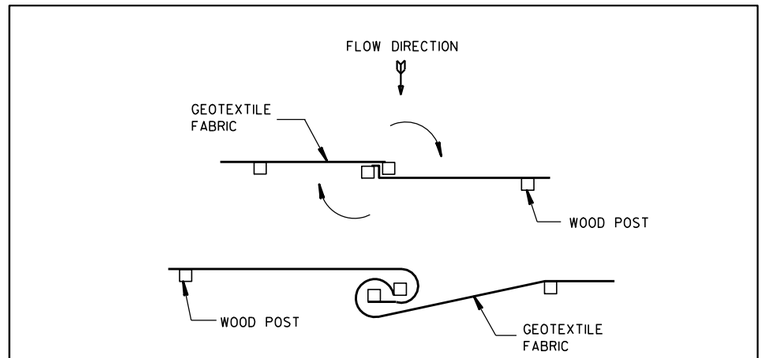
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



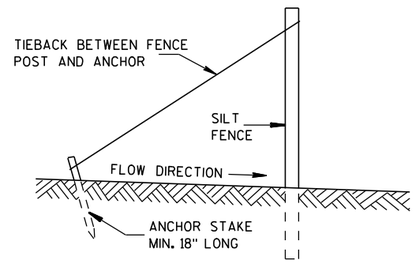
TRENCH DETAIL



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

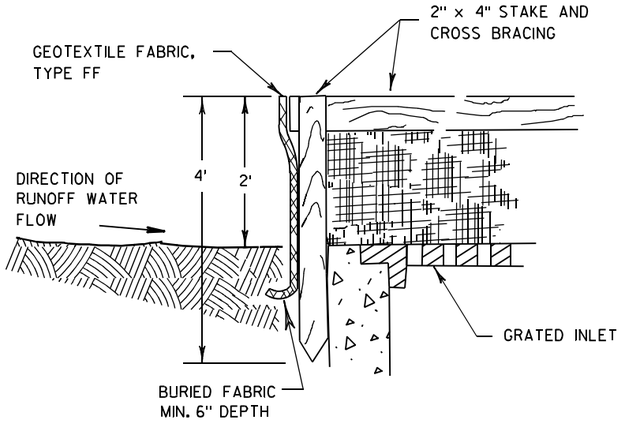
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

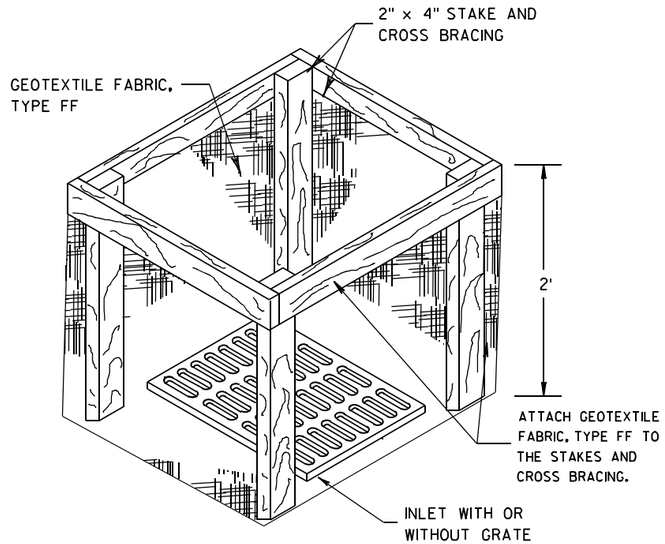
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S.D.D. 8 E 9-6

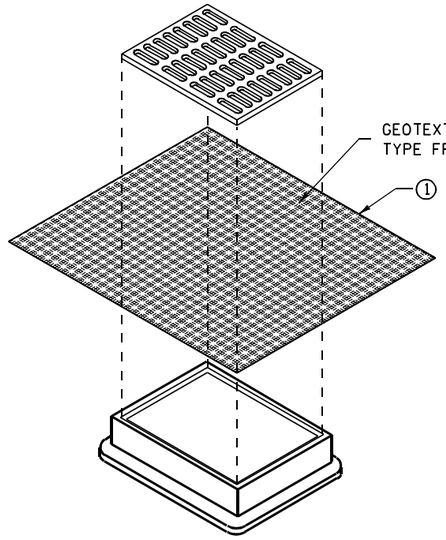
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S.D.D. 8 E 9-6



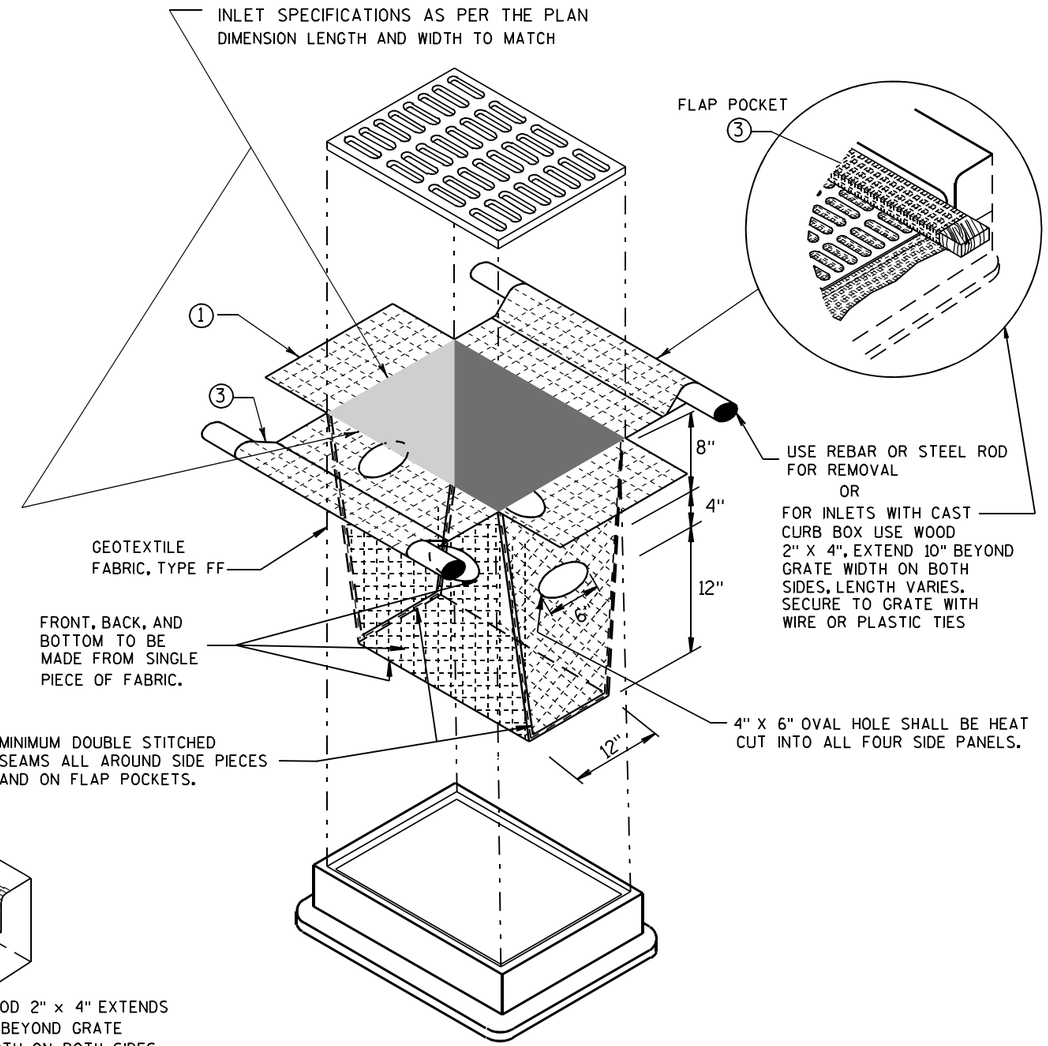


INLET PROTECTION, TYPE A



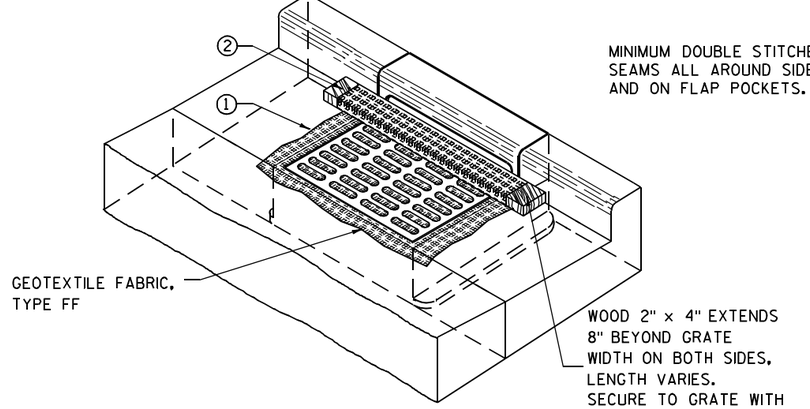
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE 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.

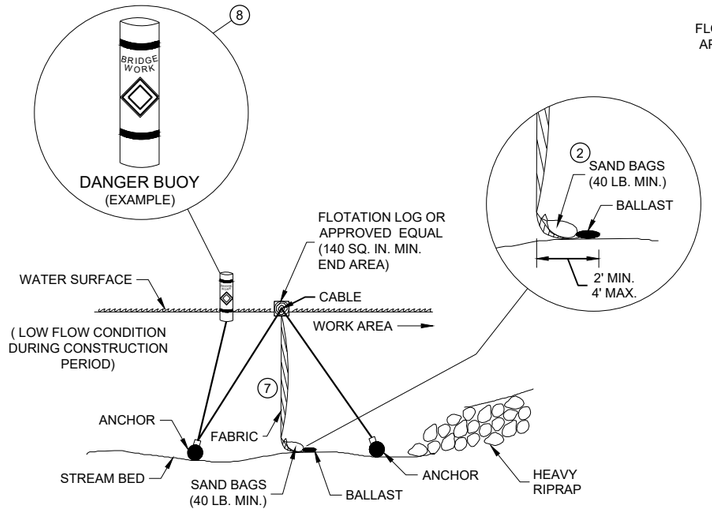
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

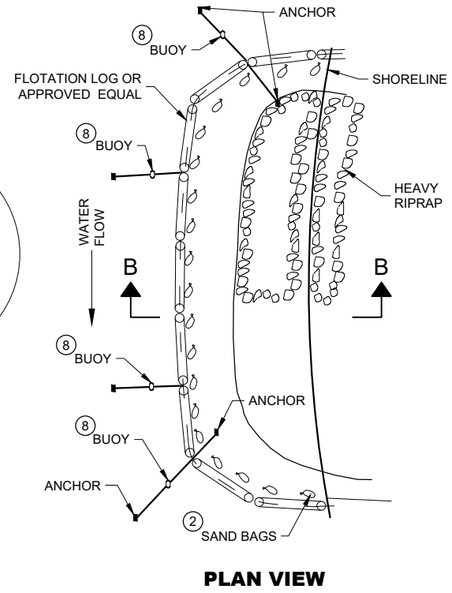
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 10-2

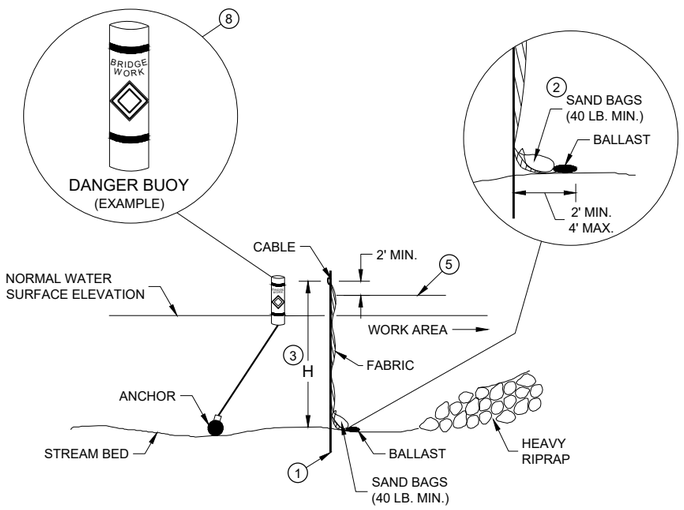


SECTION B - B

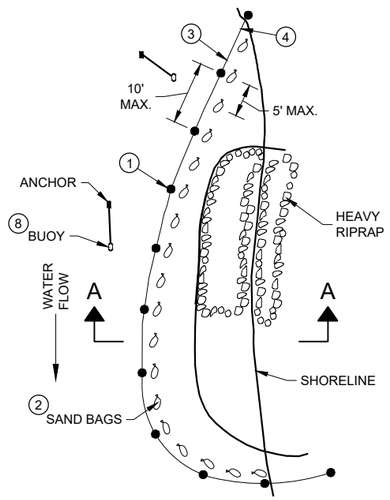


PLAN VIEW

TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A - A



PLAN VIEW

TURBIDITY BARRIER - STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

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

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

(1) DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

(2) SAND BAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

(3) WHEN BARRIER HEIGHT "H" EXCEEDS 8 FEET, POST SPACING MAY NEED TO BE DECREASED.

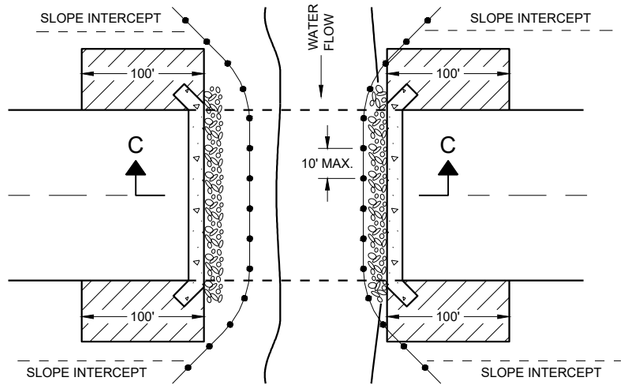
(4) IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

(5) ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.

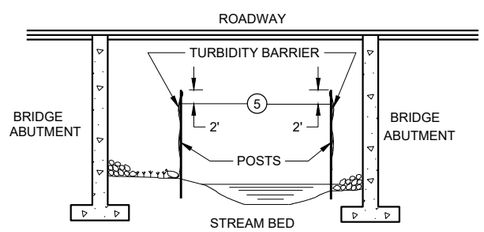
(6) FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.

(7) ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

(8) USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

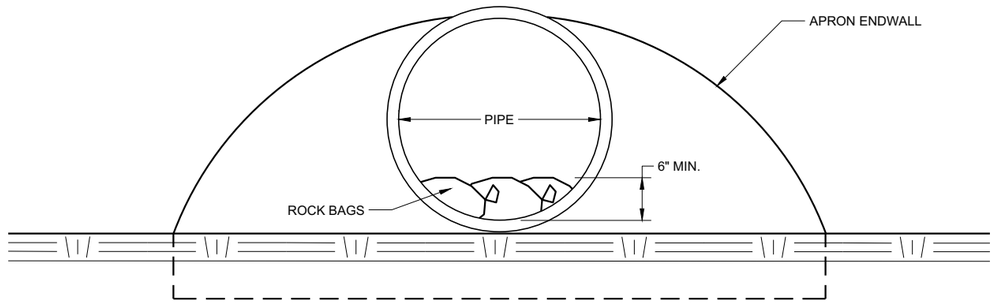
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/4/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

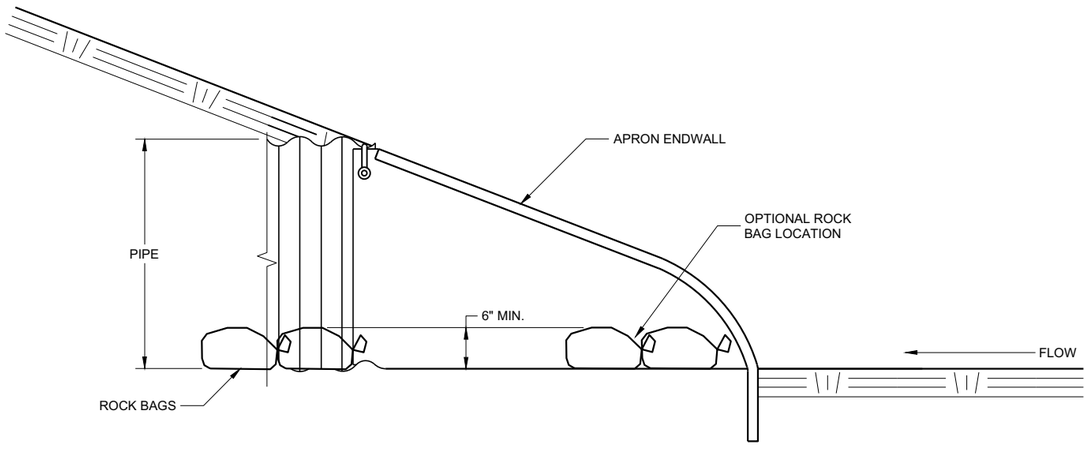
FHWA

6

SDD 08E11 - 02



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI
FHWA	

6

SDD 08E15 - 01

METAL APRON ENDWALLS

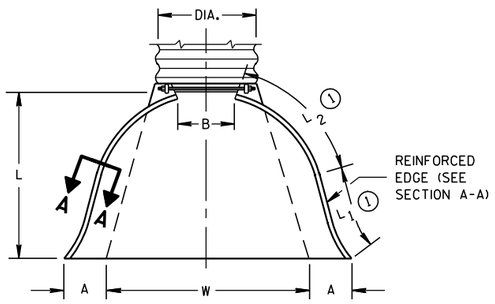
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

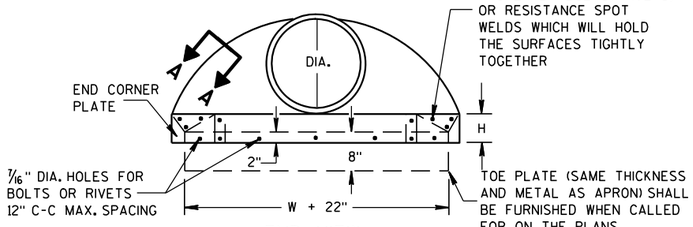
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

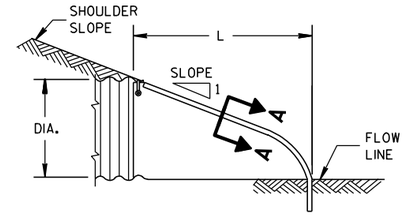
*MINIMUM
**MAXIMUM



PLAN VIEW

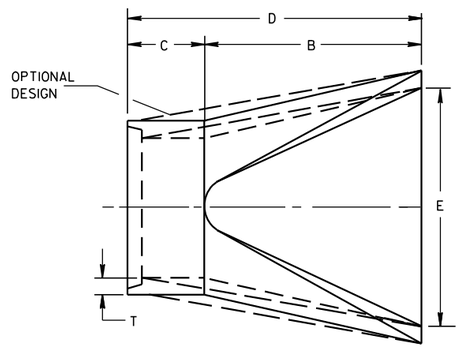


END VIEW

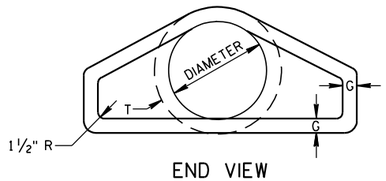


SIDE ELEVATION

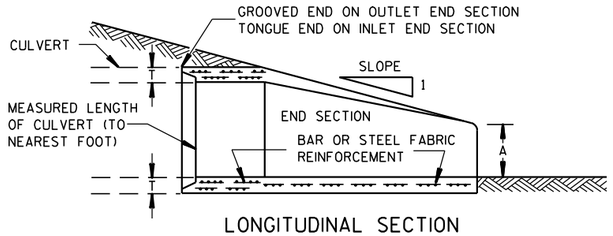
METAL ENDWALLS



PLAN

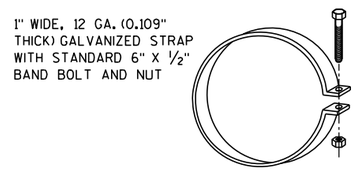


END VIEW



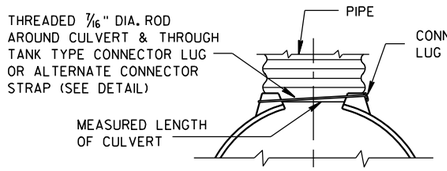
LONGITUDINAL SECTION

CONCRETE ENDWALLS

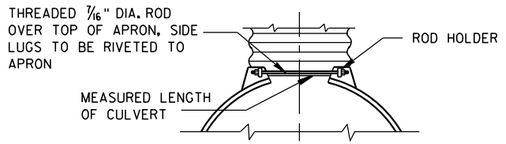


ALTERNATE FOR TYPE 1 CONNECTION

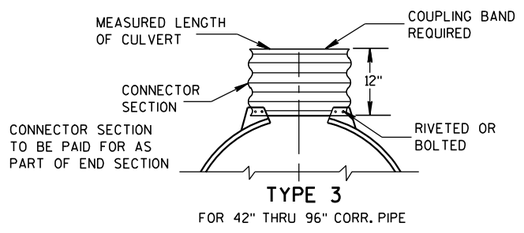
END SECTION CONNECTOR STRAP



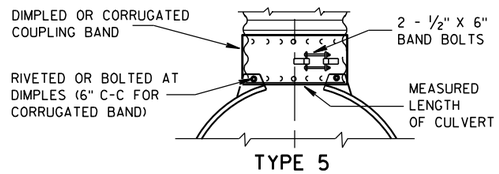
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

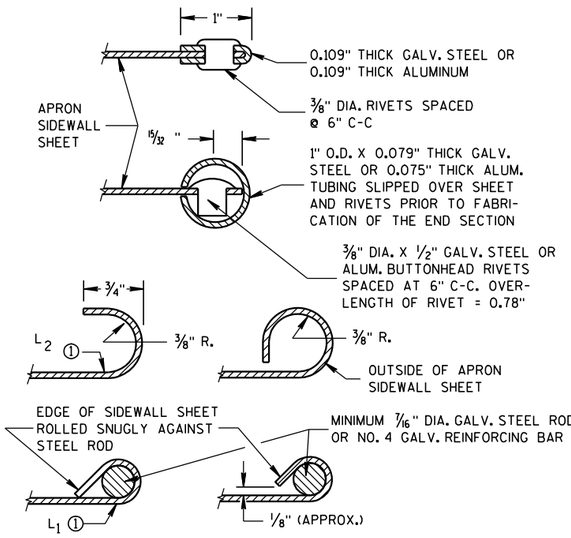
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

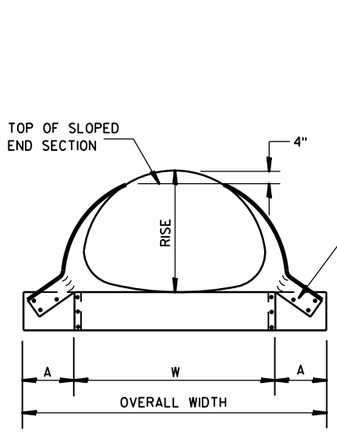
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

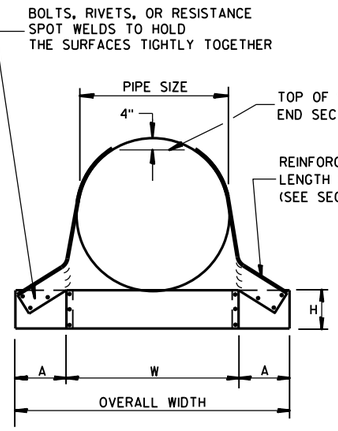
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 — DATE
/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENGINEER
FHWA

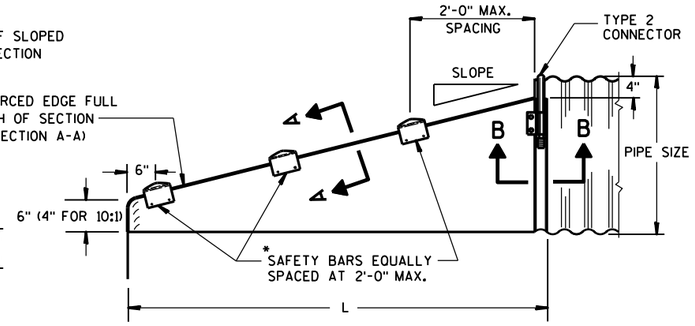
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S.D.D. 8 F 1-11



FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

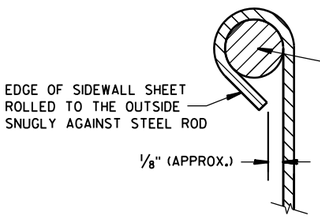
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

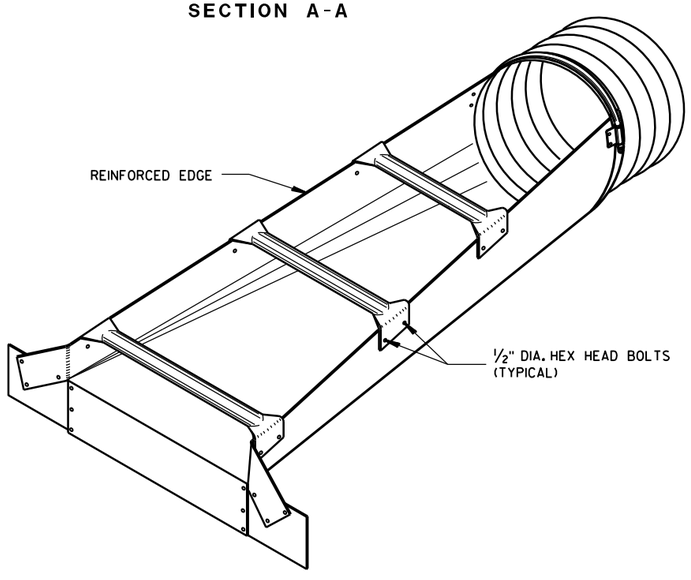
SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE
SLOPED SIDE DRAINS

PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	6:1	300	——	——



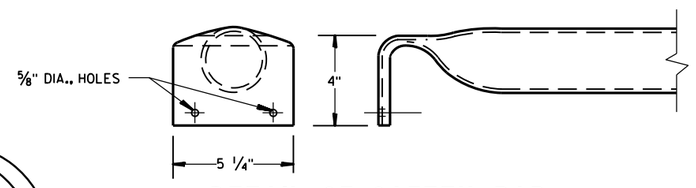
SECTION A-A



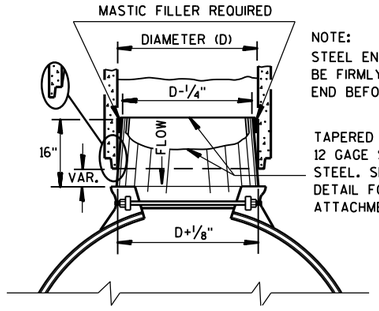
ISOMETRIC VIEW

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.



DETAIL OF SAFETY BAR



NOTE:
STEEL END SECTION SHALL BE FIRMLY WEDGED INTO PIPE END BEFORE BACKFILLING

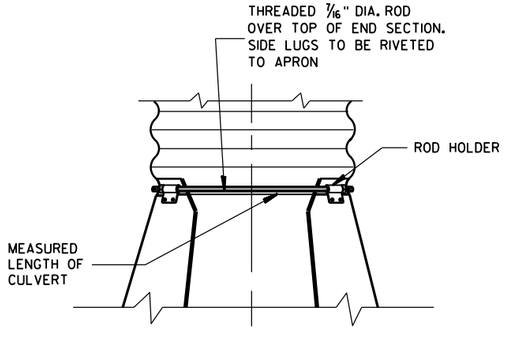
TAPERED SLEEVE TO BE 12 GAGE SMOOTH GALVANIZED STEEL. SEE SECTION B-B DETAIL FOR END SECTION ATTACHMENT.

STEEL ADAPTER SLEEVE FOR CONCRETE PIPE

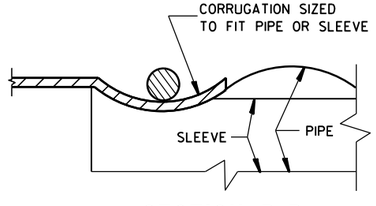
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



TYPE 2
CONNECTION DETAIL



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

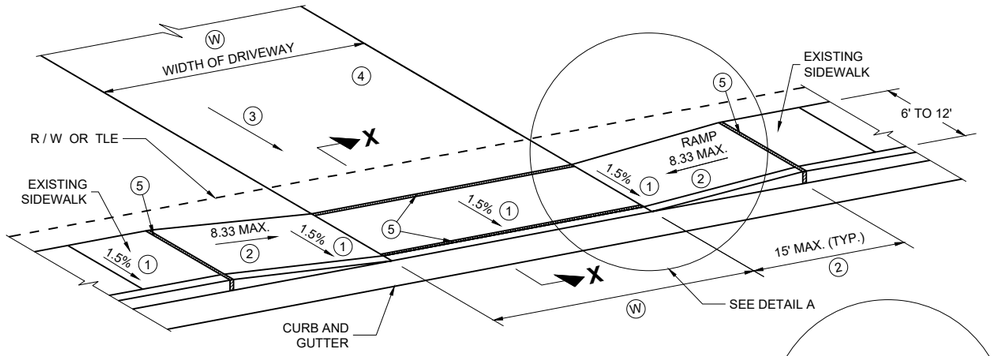
APPROVED
9/14/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

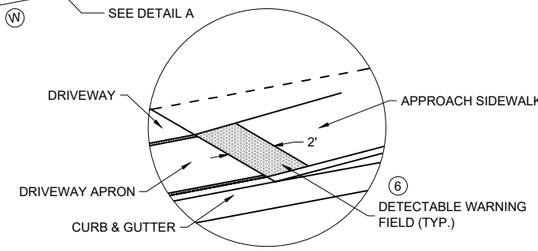
S.D.D. 8 F 7-5

6

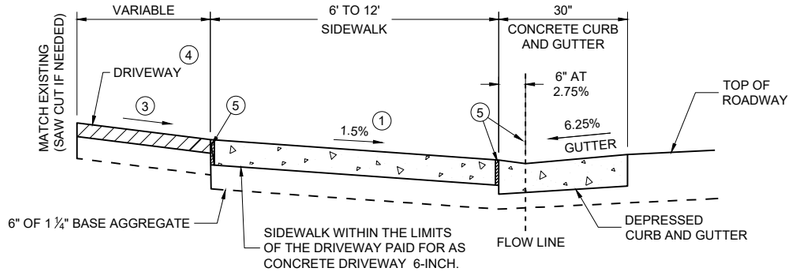
S.D.D. 8 F 7-5



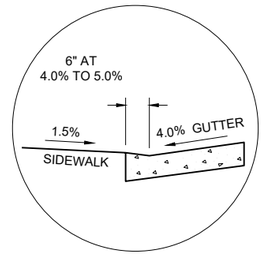
TYPE X
SIDEWALK ABUTS CURB AND GUTTER
TERRACE VARIES 0 TO 3 FEET



DETAIL A



SECTION X - X

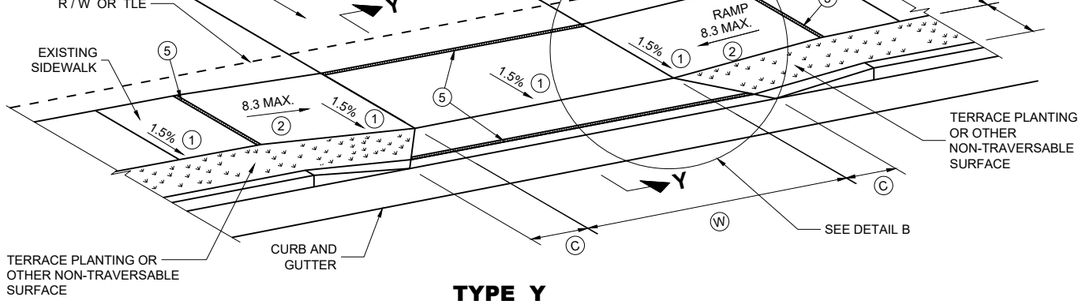


SECTION X - X
4% GUTTER SLOPE

Ⓦ : DRIVEWAY WIDTHS (MEASURED AT ROW LINE)
- ~ COMMERCIAL & INDUSTRIAL 16' MIN. - 35' MAX.
- ~ RESIDENTIAL & AGRICULTURAL (NONCOMMERCIAL) 16' MIN. - 24' MAX.

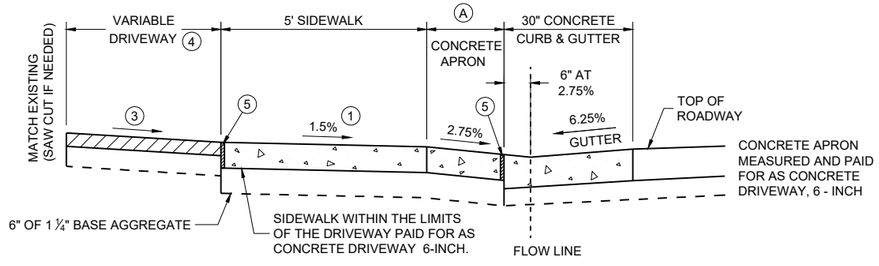
TABLE Y

Ⓐ FEET	Ⓒ FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

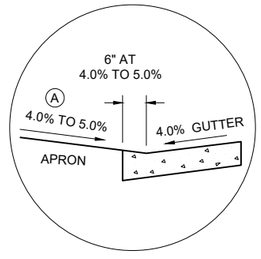


TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET

Ⓐ:MEASURE FROM BACK OF CURB



NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS



SECTION Y - Y
4% GUTTER SLOPE

SECTION Y - Y

DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER

(URBAN AND SUBURBAN)

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

Ⓦ IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

① CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1%.

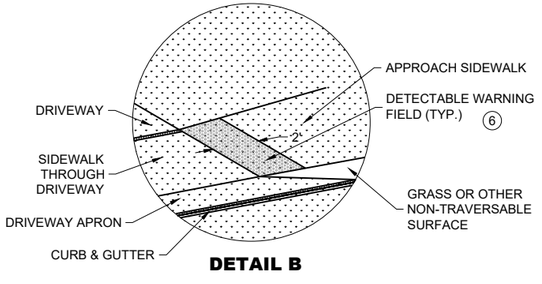
② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

③ DRIVEWAY SLOPES: DESIRABLE MAXIMUM
10.5% UP AWAY FROM SIDEWALK (SAG)
8.5% DOWN AWAY FROM SIDEWALK (CREST)
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

④ DRIVEWAY TYPES
- * 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- * 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- * 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

⑤ 1/2" EXPANSION JOINT FILLER

⑥ DETECABLE WARNING FIELDS ARE REQUIRED WHEN A PEDESTRIAN CIRCULATION ROUTE CROSSES A DRIVEWAY THAT IS TRAFFIC SIGNAL, STOP, OR YIELD SIGN CONTROLLED. DETECTABLE WARNING FIELDS TO BE 2 FT DEEP AND EXTEND THE WIDTH OF THE PEDESTRIAN CIRCULATION ROUTE.



DETAIL B

DRIVEWAY AND SIDEWALK RAMPS TYPES X AND Y

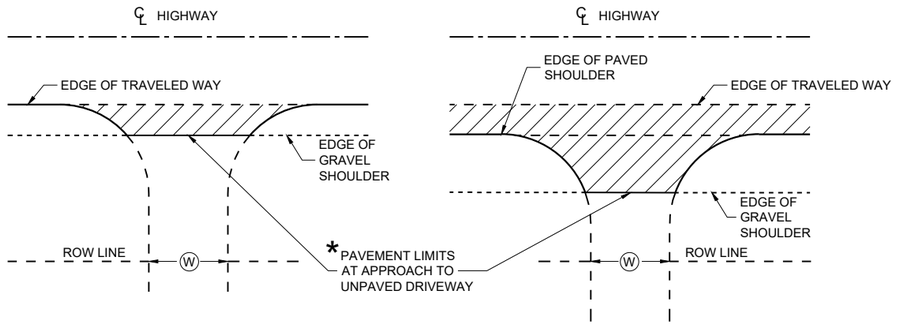
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

SDD 09A11-01

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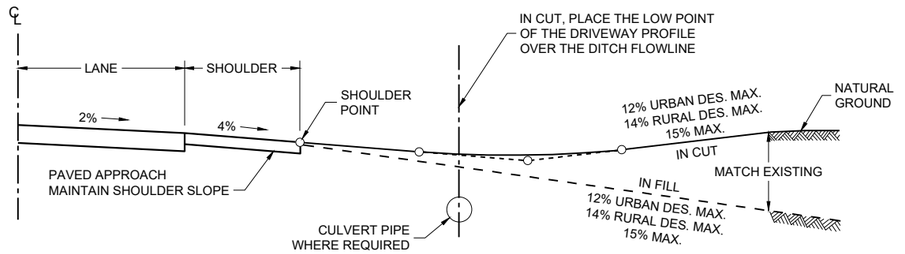


* WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

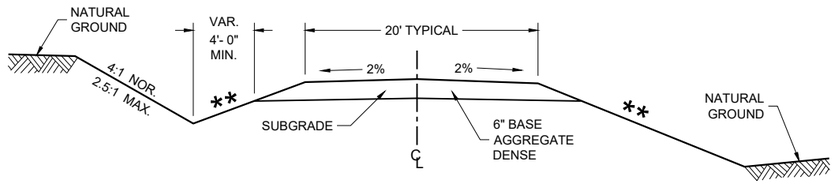
PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL (NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

Ⓦ : DRIVEWAY WIDTHS (MEASURED AT ROW LINE)
~ COMMERCIAL & INDUSTRIAL 16' MIN. - 35' MAX.
~ RESIDENTIAL & AGRICULTURAL (NONCOMMERCIAL) 16' MIN. - 24' MAX.

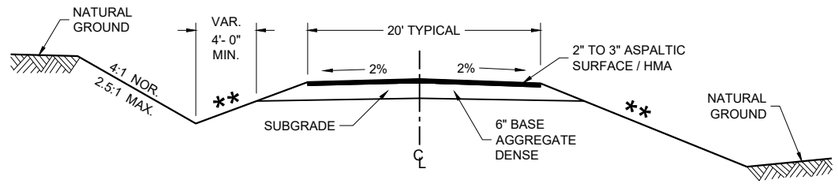


IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT IN FILL

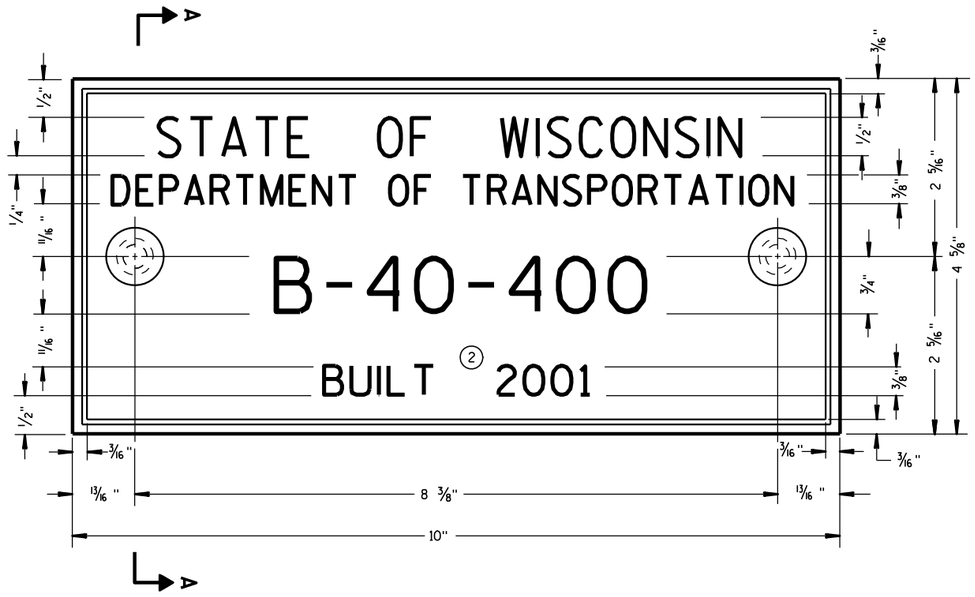
TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

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SDD 09A14-01



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

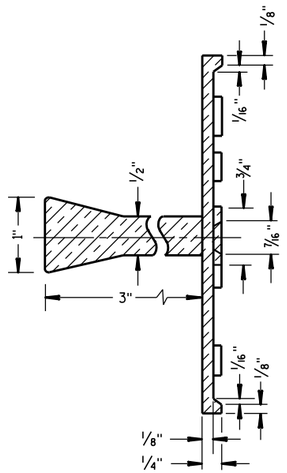
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

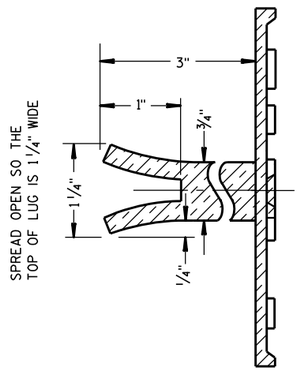
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.

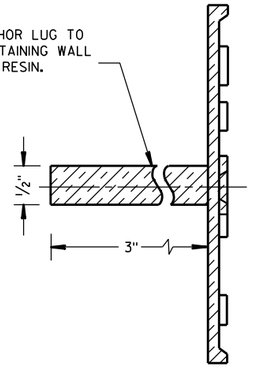


SECTION A-A



ALTERNATE LUG

(1) ADHERE ANCHOR LUG TO PRECAST RETAINING WALL WITH EPOXY RESIN.



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

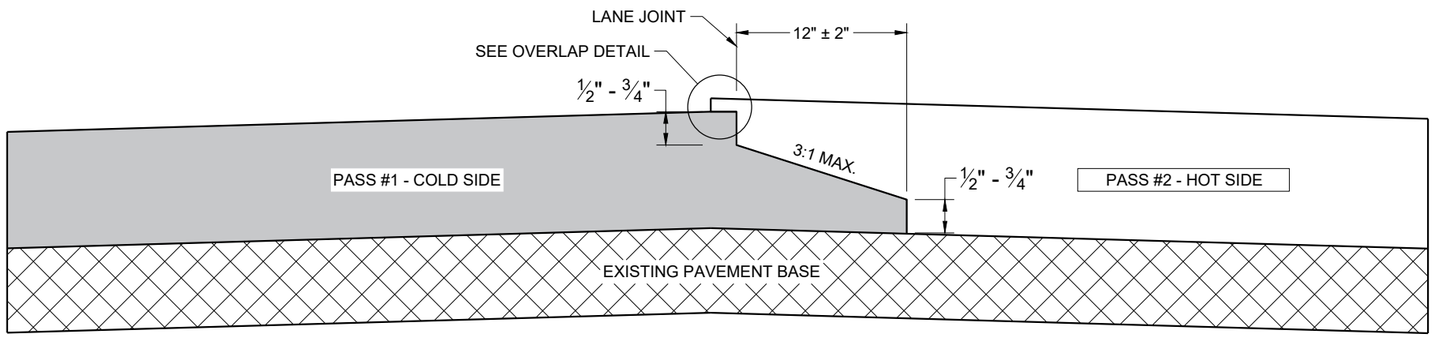
3/26/10 DATE

/S/ Scot Beck CHIEF STRUCTURAL DEVELOPMENT ENGINEER

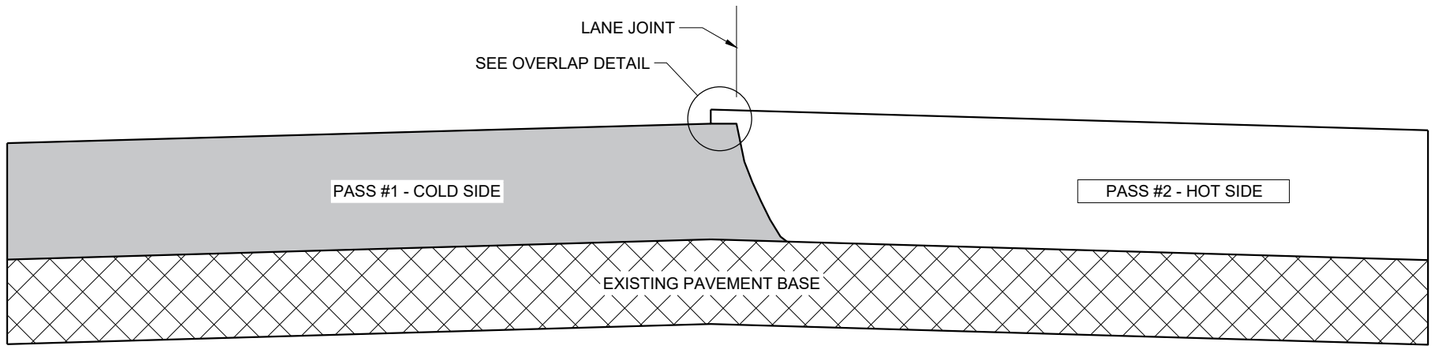
FHWA

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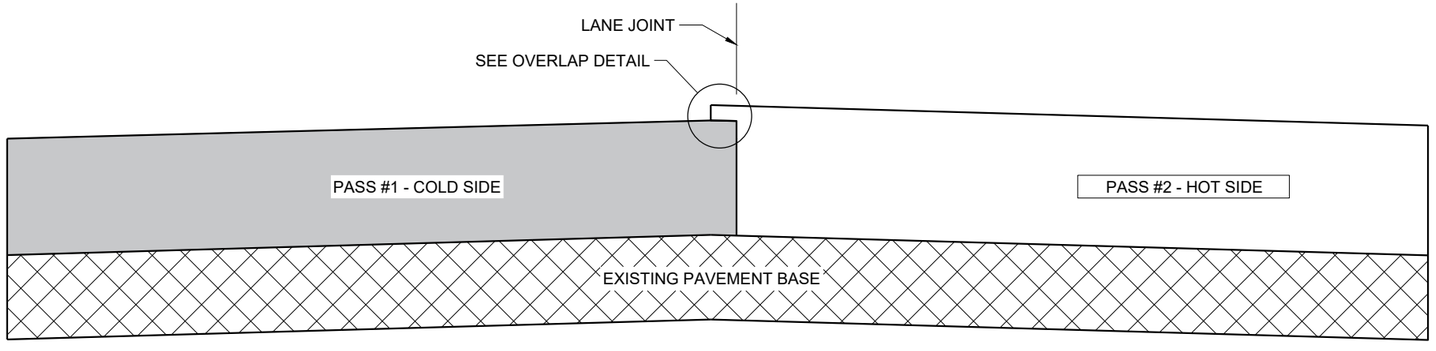
S.D.D. 12 A 3-10



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

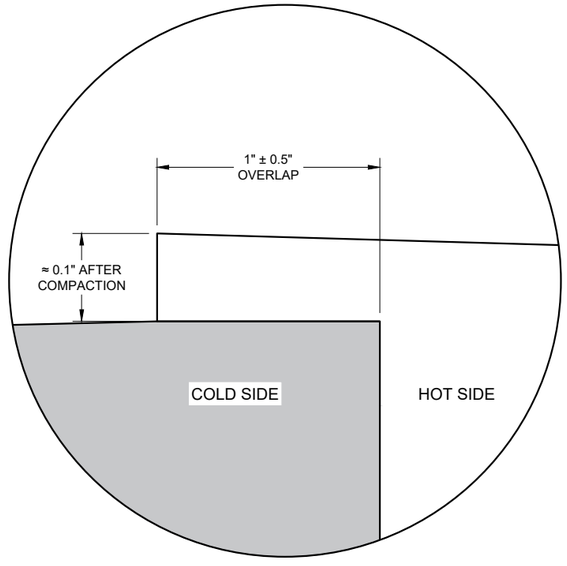
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

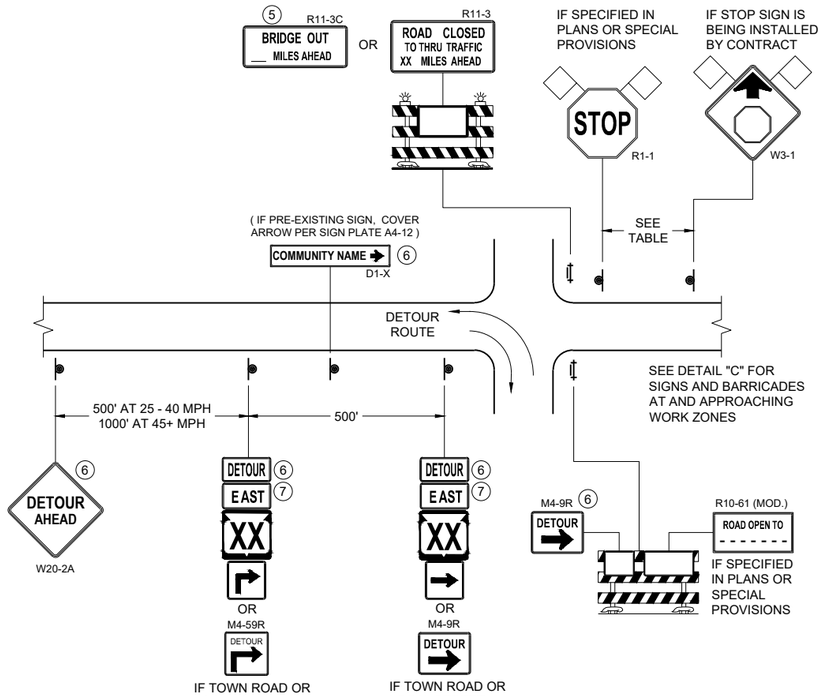
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

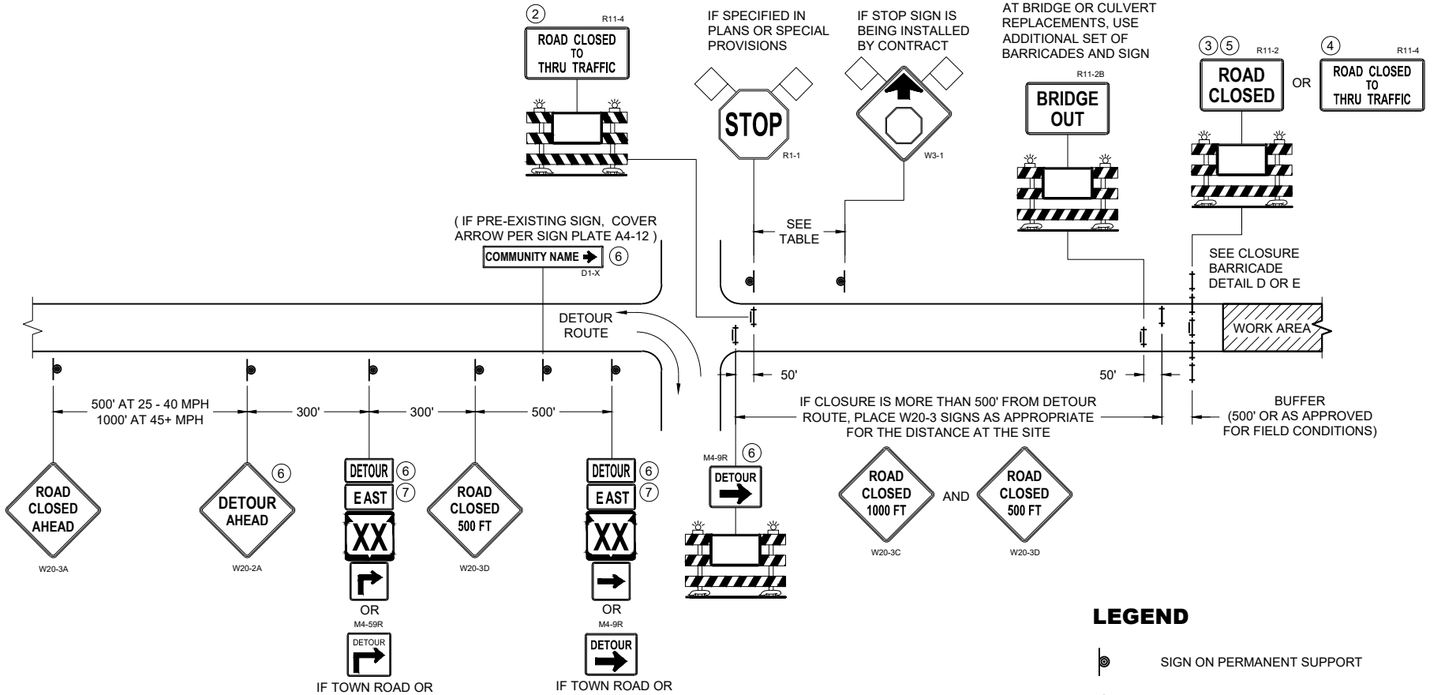
FHWA



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

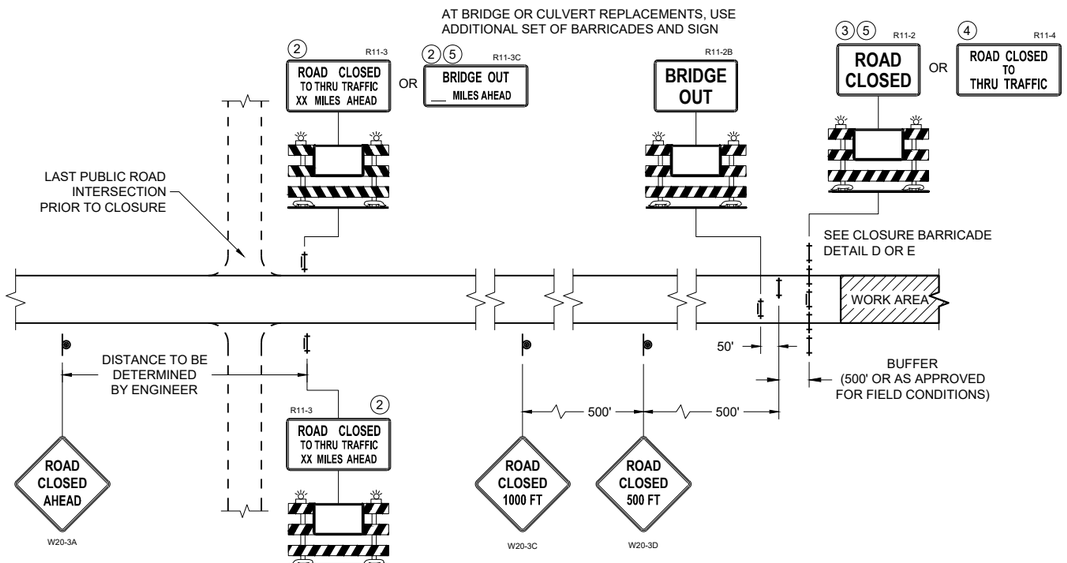
WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



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
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

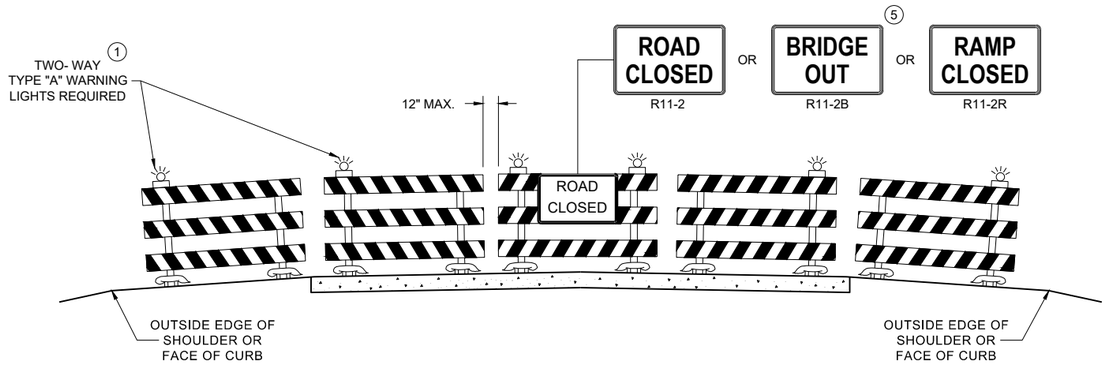
DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

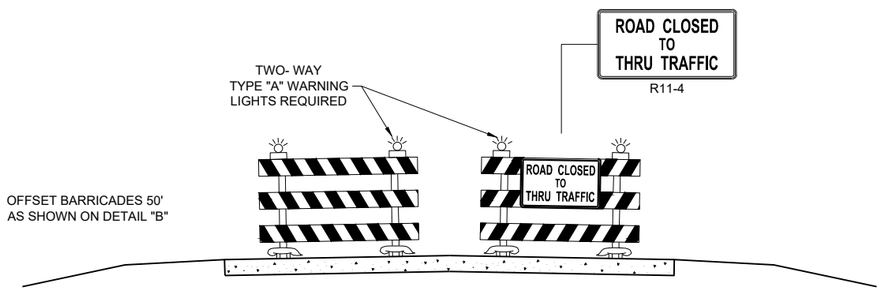
6
SDD 15C02-10a



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.

PARTIAL NUMBERS ON SIGNS SHALL BE DISPLAYED AS A WHOLE NUMBER(AS NEEDED) FOLLOWED BY A FRACTION. SIGNS SHALL NOT DISPLAY NUMBERS IN DECIMAL FORM.

"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 SHALL, 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" (36" X 18" 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)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

SIGNS PLACED ON TYPE III BARRICADES THAT ARE SIZES OTHER THAN 48"X30" SHALL HAVE A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE.

(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 AN 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 ROAD 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 VARIOUS CLOSURES

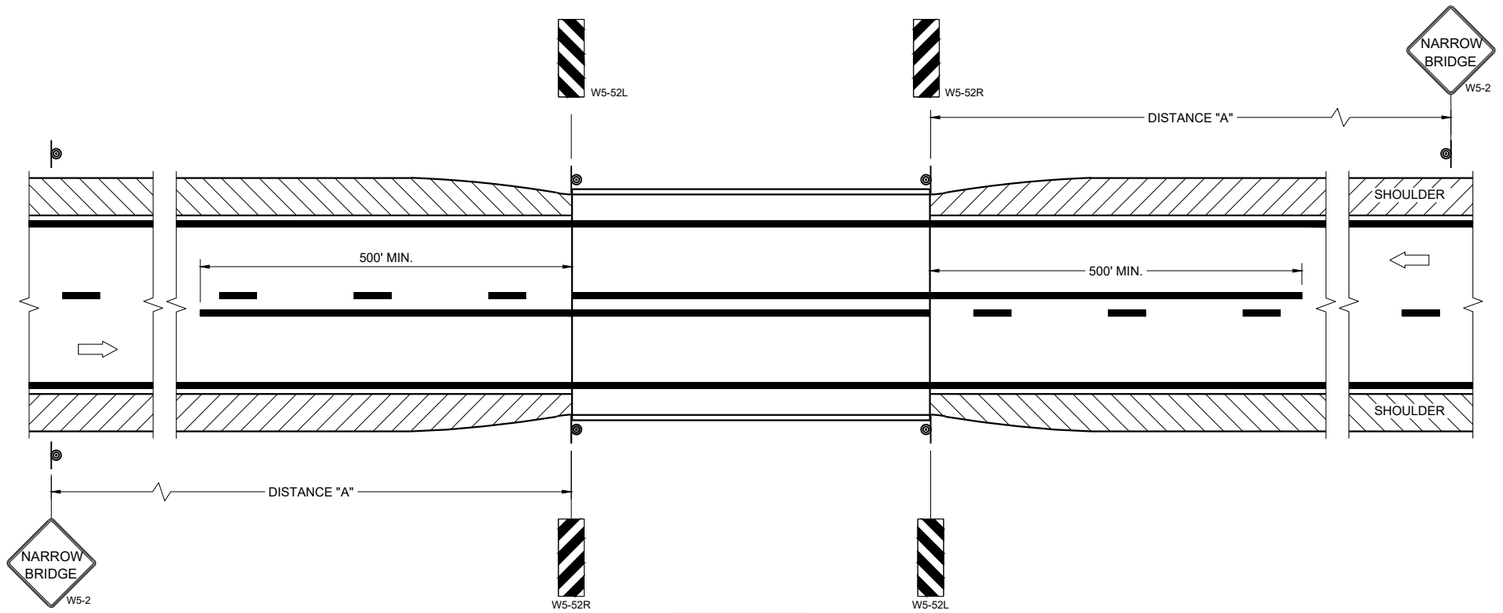
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

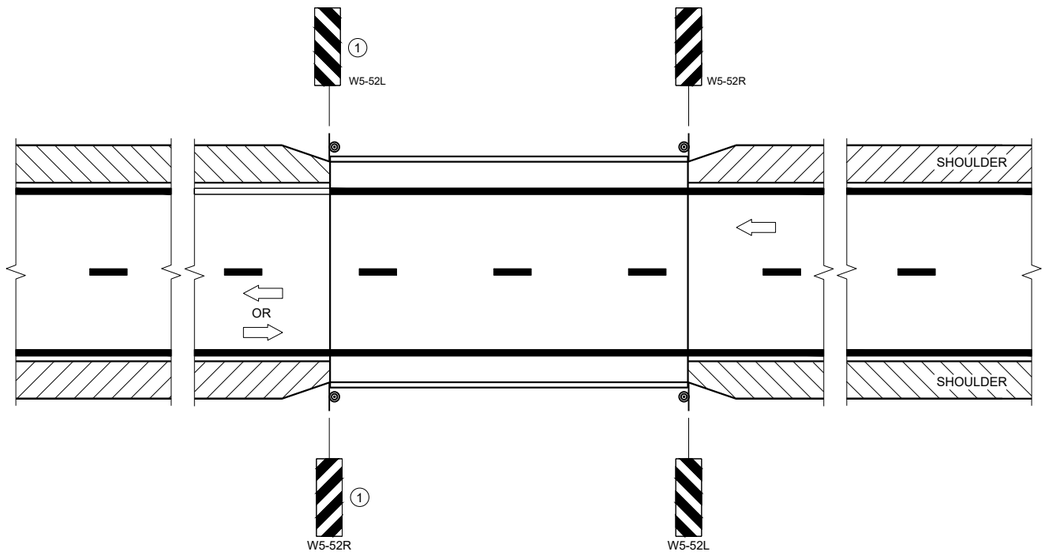
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SDD 15C02-10b



SITUATION 1

WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.



SITUATION 2

WARRANTING CRITERIA:
1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THE DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

ON BRIDGE ONLY PROJECTS, PLACE 300 FEET OF EDGELINE.

OMIT EDGELINES ON ROADWAYS WITHOUT EXISTING EDGELINES.

(1) OMIT ON ONE-WAY TRAVELED WAYS.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	700'

SIGNING AND MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

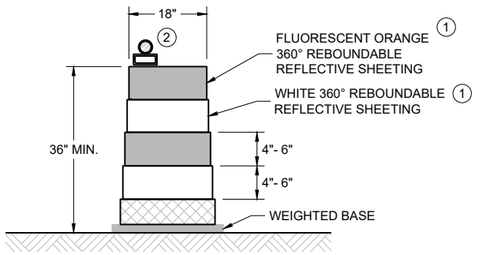
APPROVED
May 2023
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer
FHWA

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SDD 15C06-12

GENERAL NOTES

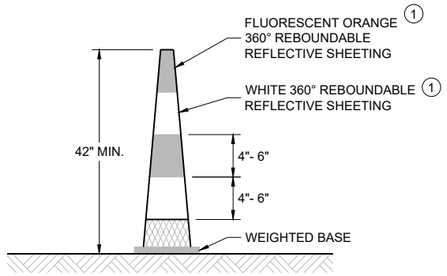
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

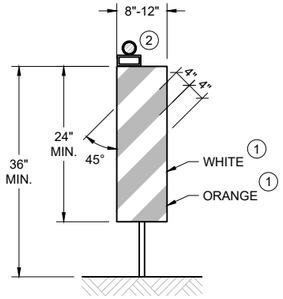
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

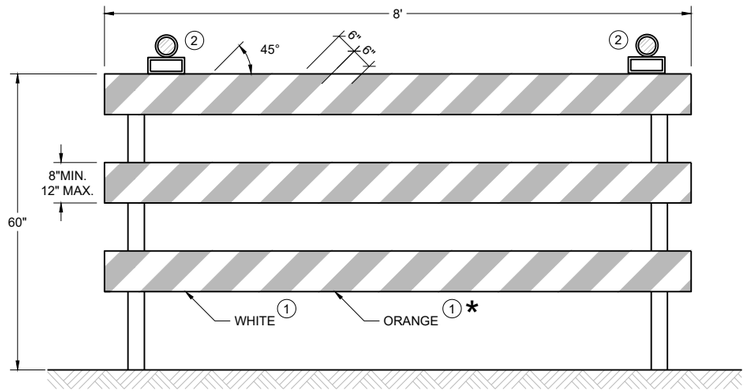
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III 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

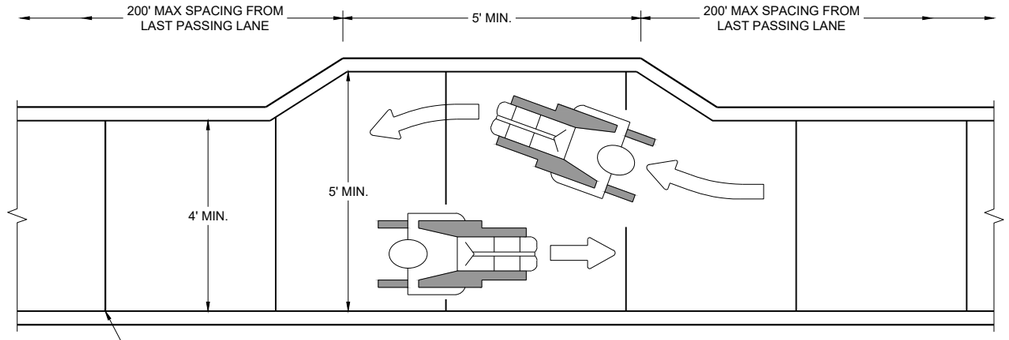
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2026 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

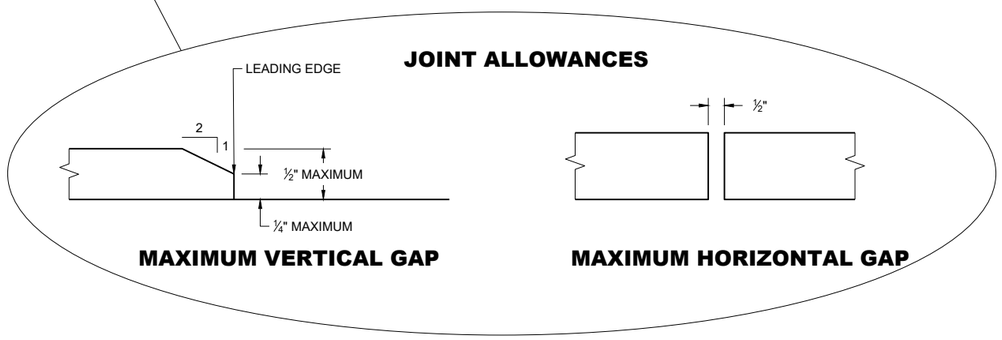
FHWA

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NARROW SIDEWALK PASSING DETAIL



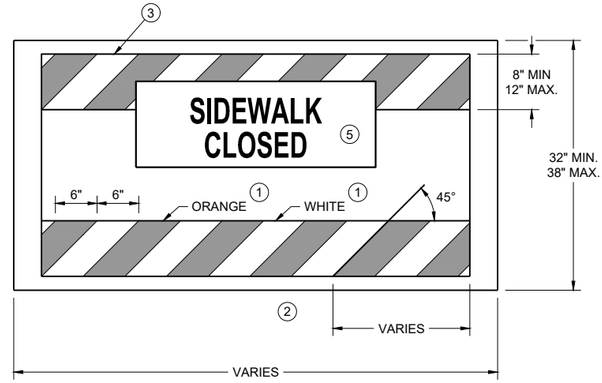
MAXIMUM VERTICAL GAP

MAXIMUM HORIZONTAL GAP

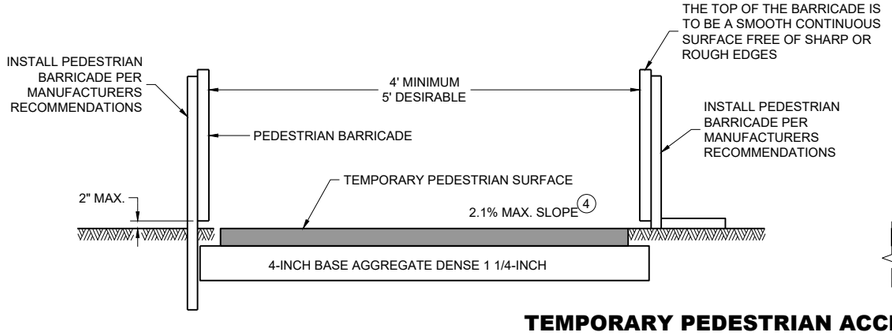
GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

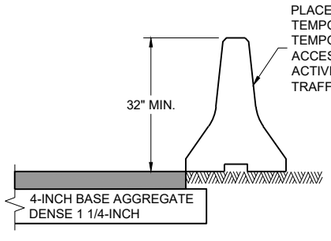
1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
3. PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.
4. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.
5. WHERE SIGNS FOR TEMPORARY PEDESTRIAN ACCOMMODATIONS ARE SHOWN BEING PLACED BEHIND TEMPORARY PEDESTRIAN BARRICADE, THE SIGNS MAY BE MOUNTED ON THE TEMPORARY PEDESTRIAN BARRICADE INSTEAD. A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE SHALL BE USED IF MOUNTED ON THE BARRICADE. THE TOP OF THE SIGN SHALL BE MOUNTED BELOW THE TOP OF THE BARRICADE TO ALLOW A CONTINUOUS HAND-TRAILING EDGE.



TEMPORARY PEDESTRIAN BARRICADE *



TEMPORARY PEDESTRIAN ACCESS





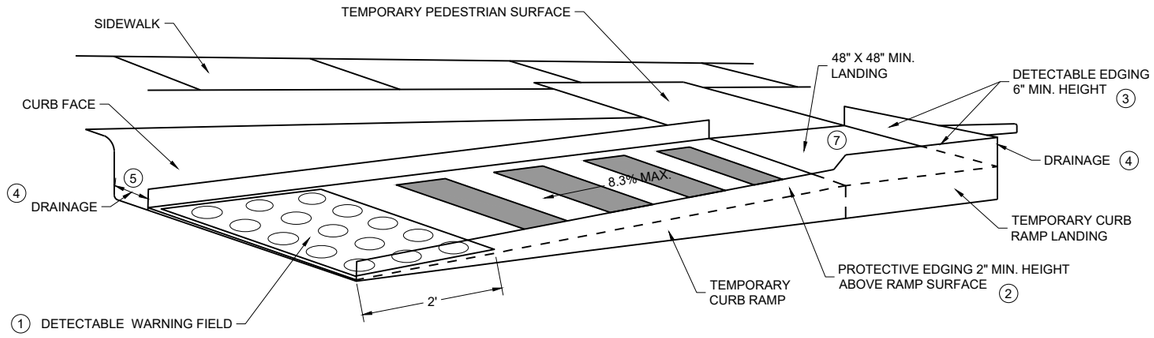
TEMPORARY PEDESTRIAN FLAGGING

LEGEND

- TEMPORARY PEDESTRIAN BARRICADE
- AUDIBLE MESSAGE DEVICE
- TEMPORARY SIGN SUPPORT
- WORK AREA

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PERSPECTIVE VIEW

GENERAL NOTES

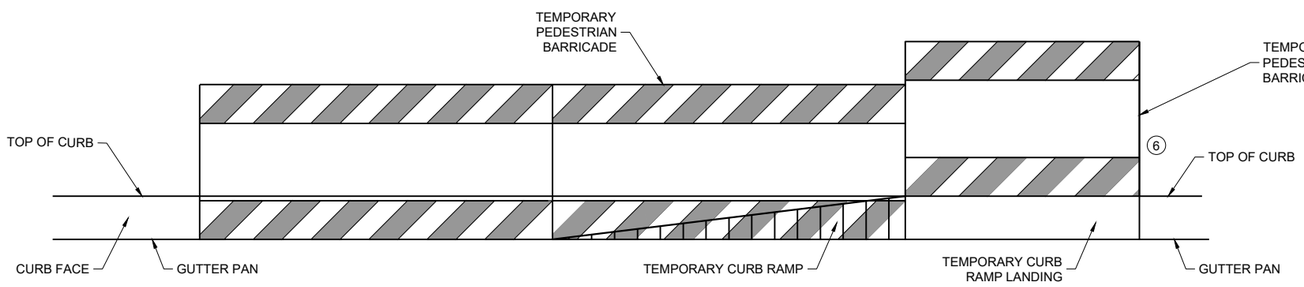
CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

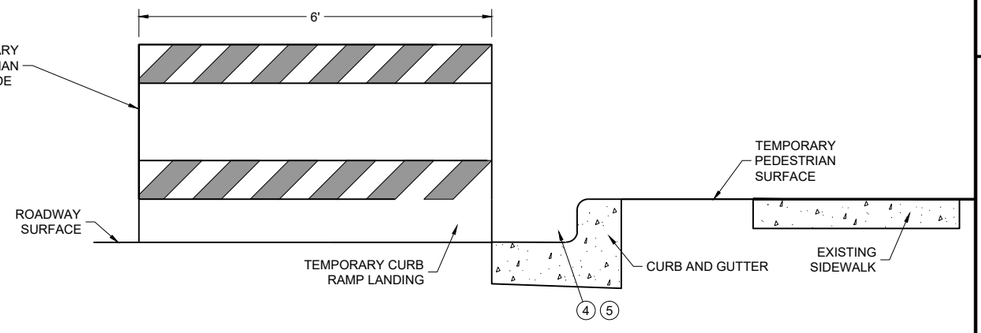
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

1. INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
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. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
5. ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
6. IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.
7. LANDING TO BE SLOPED A MAXIMUM OF 2.1% IN ALL DIRECTIONS OF PEDESTRIAN TRAVEL.



FRONT VIEW



SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB

6

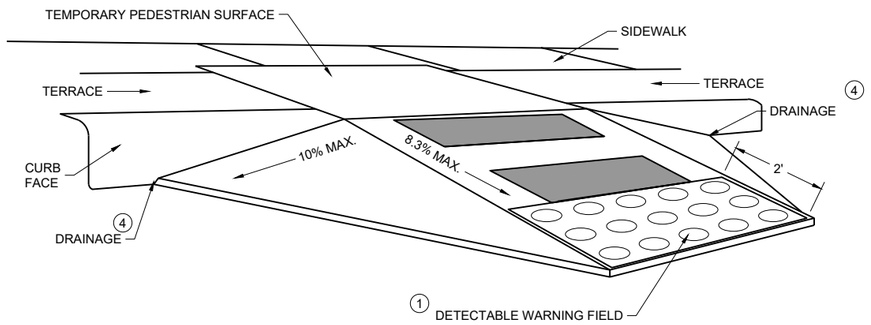
SDD 15D30-12b

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

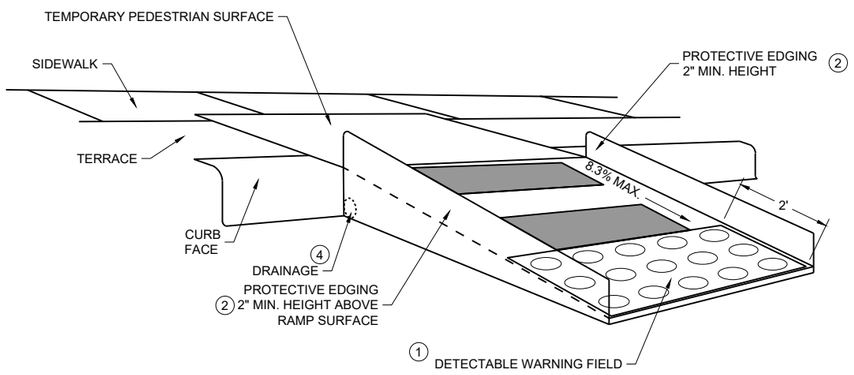
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15D30-12b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

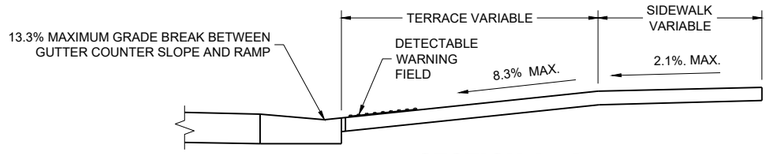
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

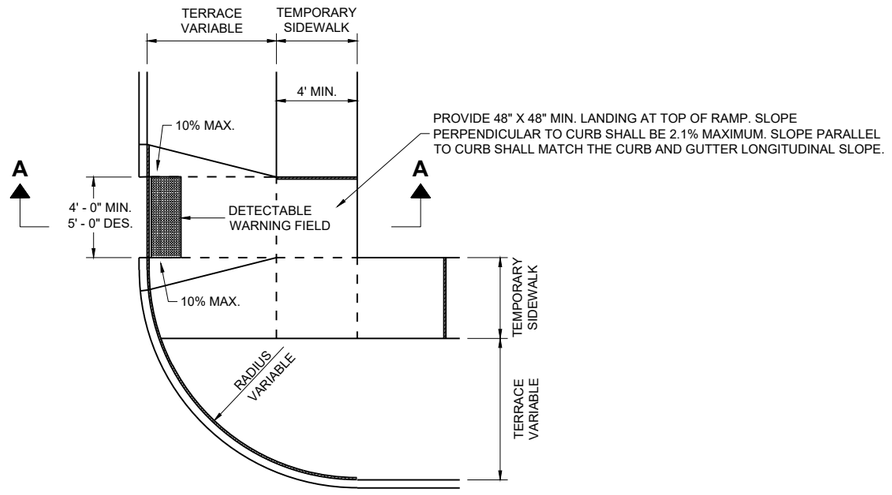
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

GENERAL NOTES



SECTION A - A



PLAN VIEW
TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

6

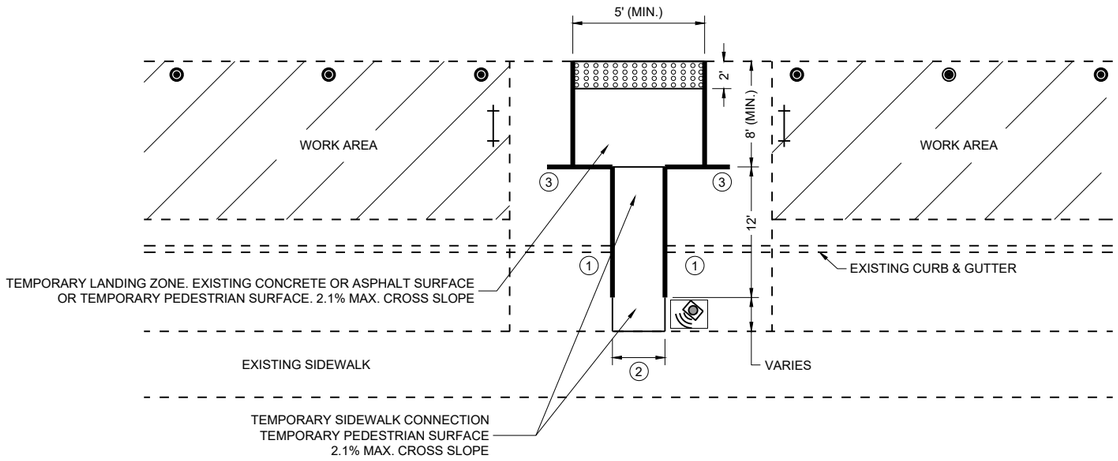
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TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

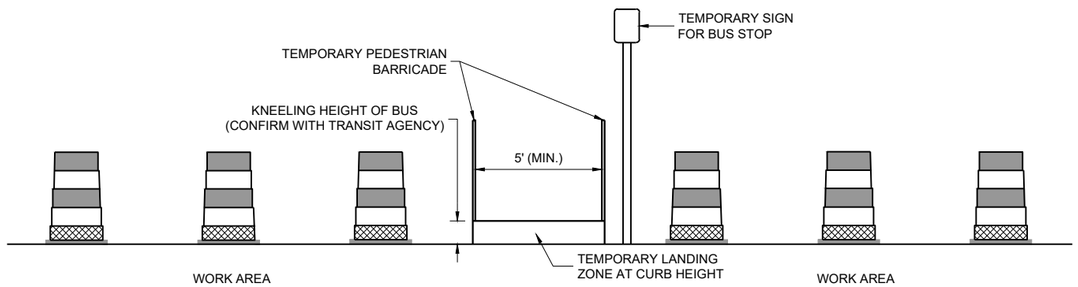
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15D30-12d



PLAN VIEW



PROFILE VIEW TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

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.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

6

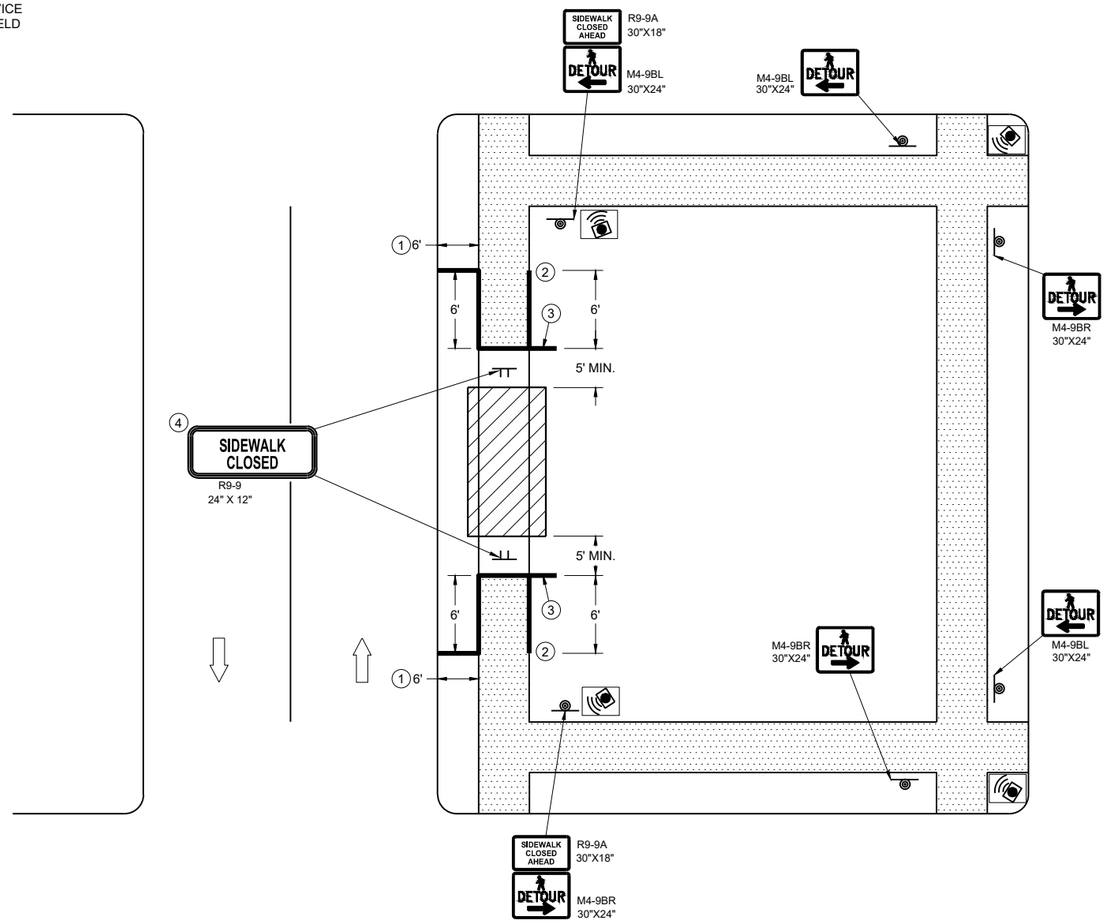
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TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-12f

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

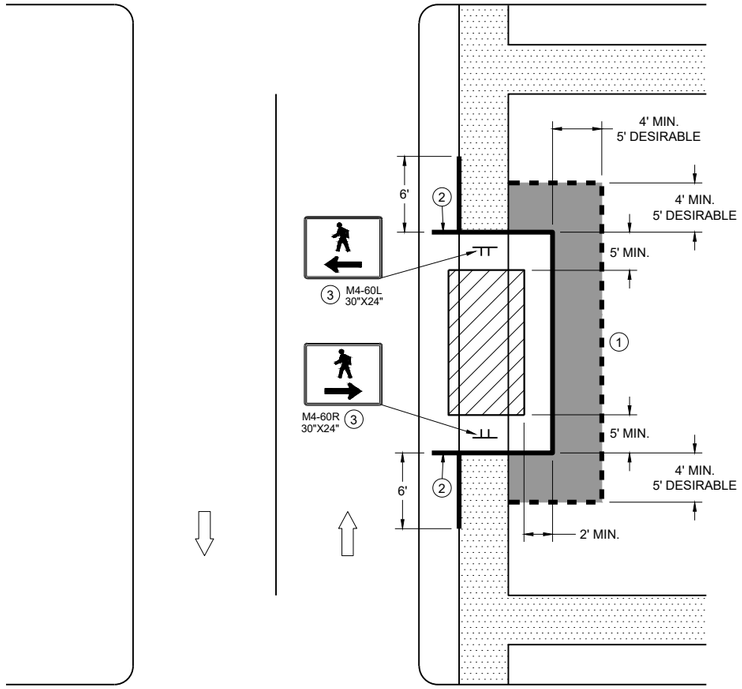
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

(1) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(2) IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.

(3) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK BYPASS
SINGLE SIDE

6

SDD 15D30-12g

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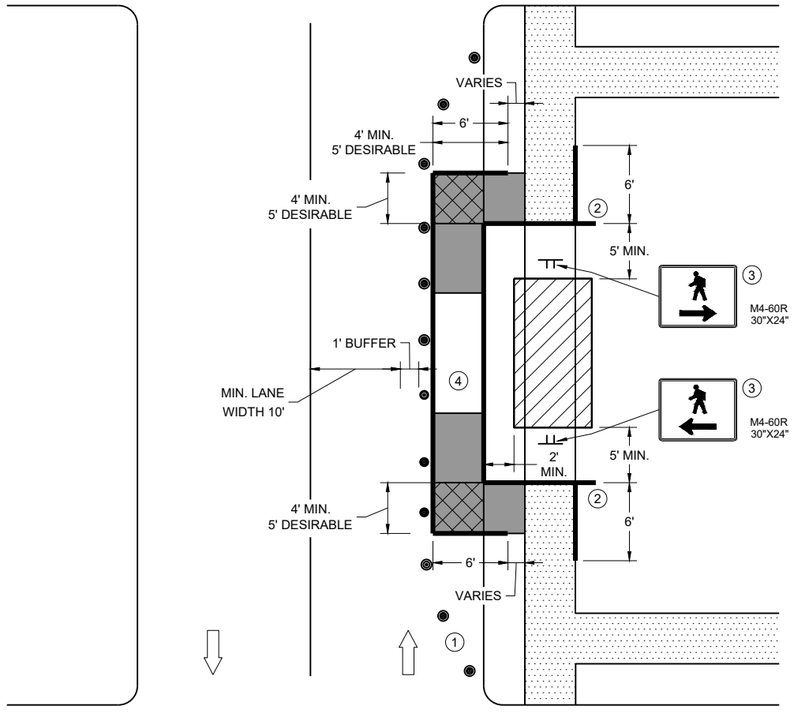
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TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



SIDEWALK BYPASS, SINGLE SIDE

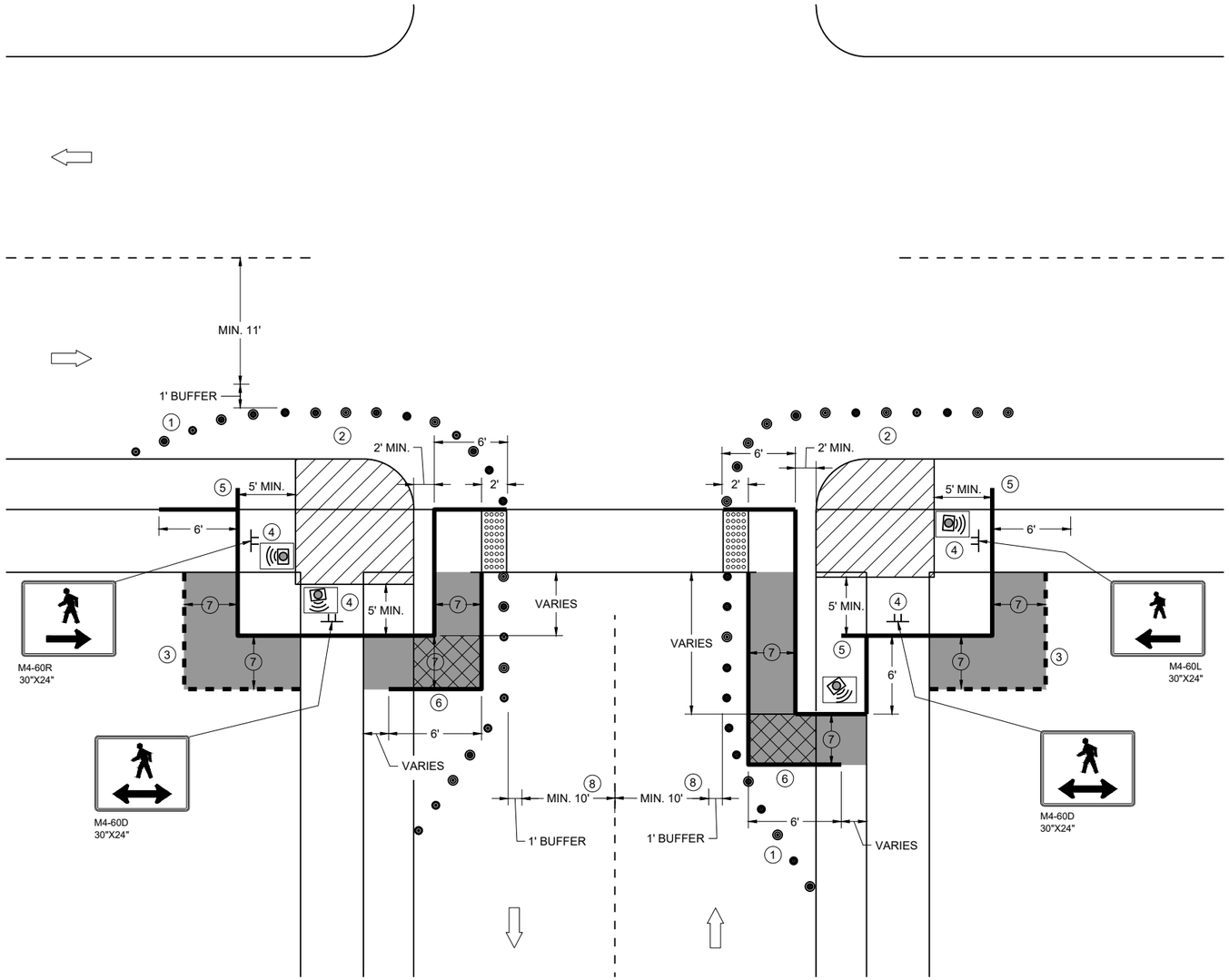
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
2. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
4. USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURFACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

6



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
7. 4 FEET MINIMUM, 5 FEET DESIRABLE
8. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

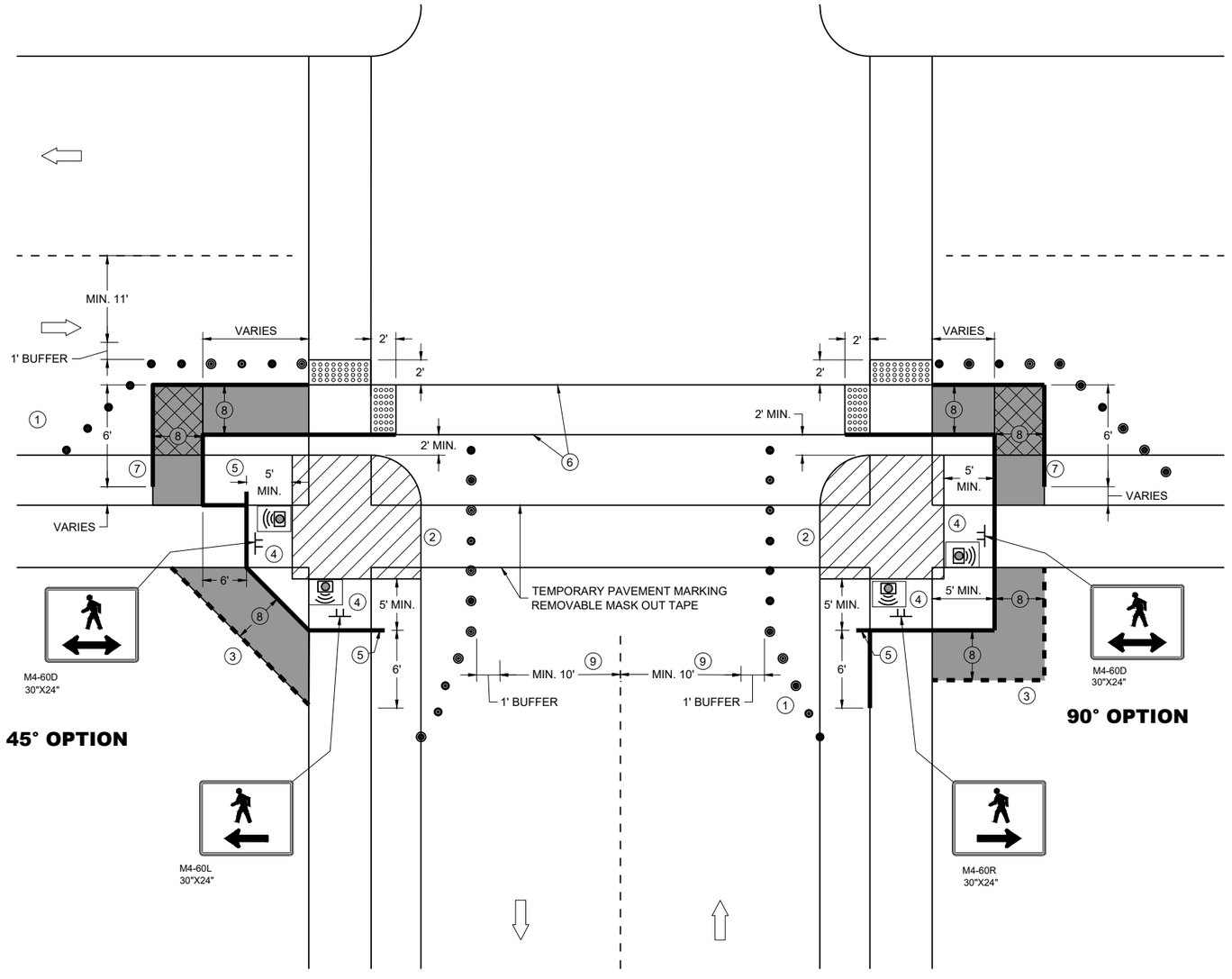
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15D30-12i



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS

(3) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(4) MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.

(5) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.

(6) WHITE 6" TEMPORARY PAVEMENT MARKING

(7) IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.

(8) 4 FEET MINIMUM, 5 FEET DESIRABLE

(9) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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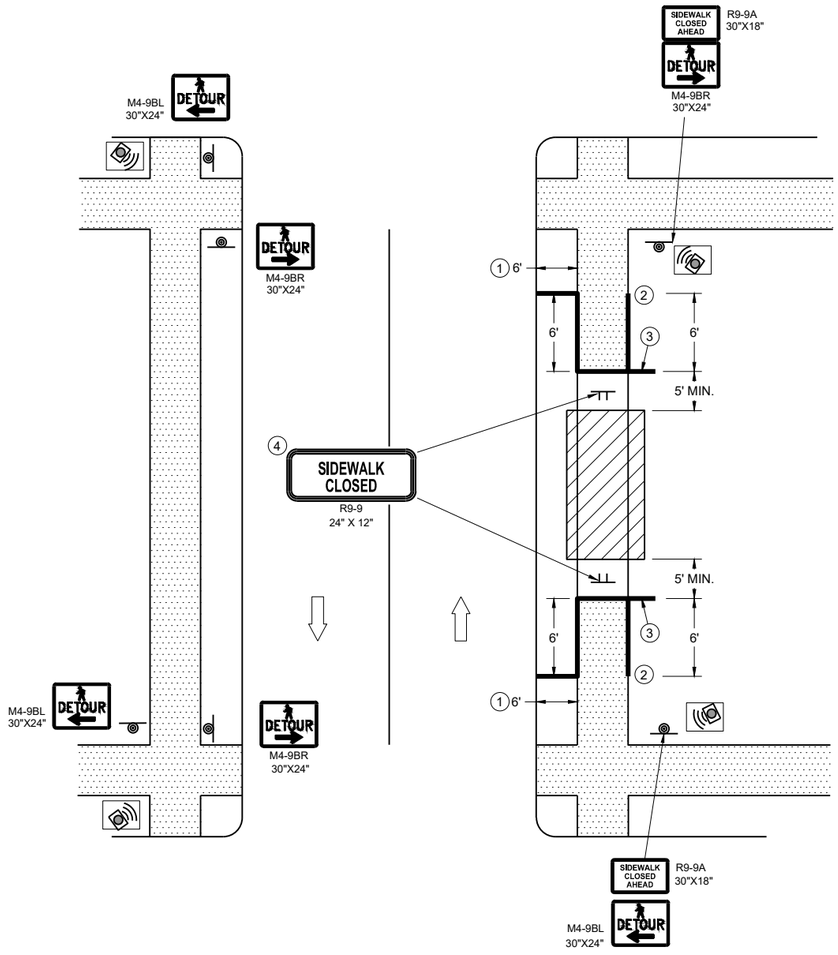
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LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

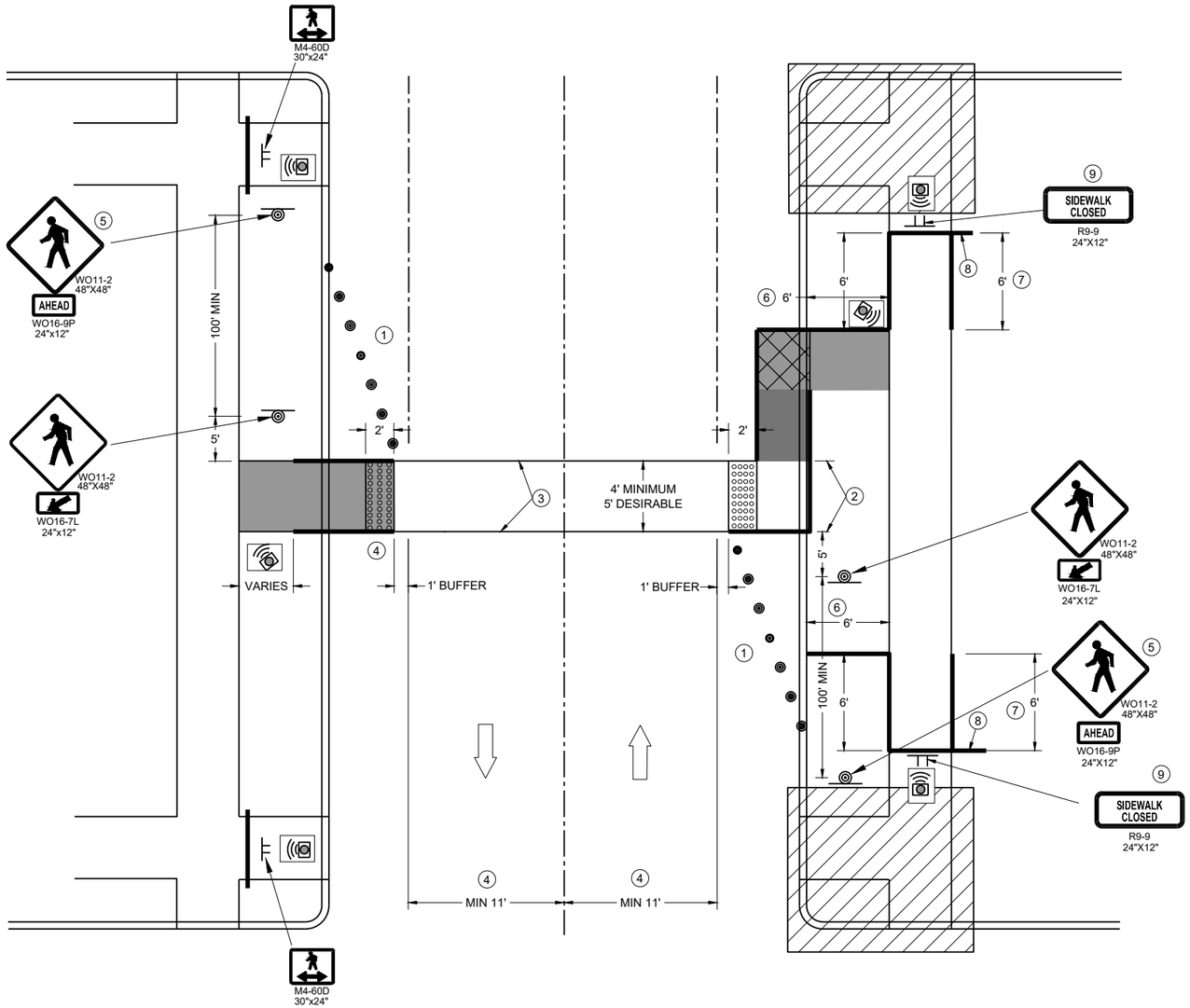
SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

1. SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.
2. 4 FEET MINIMUM, 5 FEET DESIRABLE.
3. WHITE 6" TEMPORARY PAVEMENT MARKING.
4. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.
5. IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.
6. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
7. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
8. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
9. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

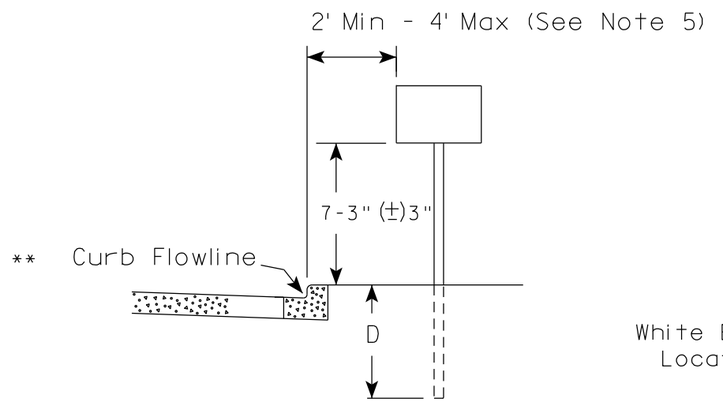
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

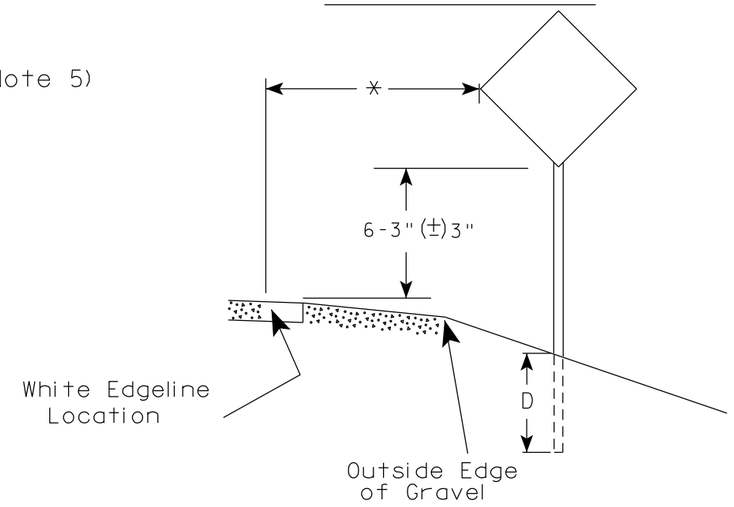
APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

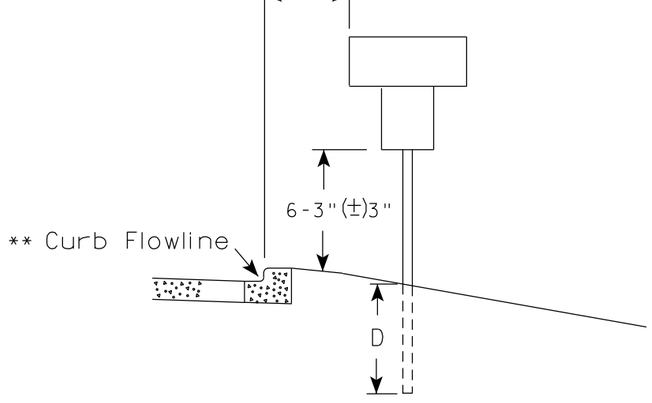
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SDD 15D30-12I

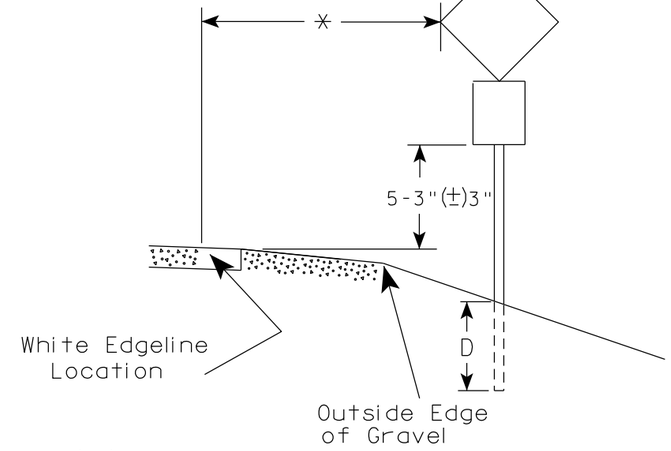
URBAN AREA



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 or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 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" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

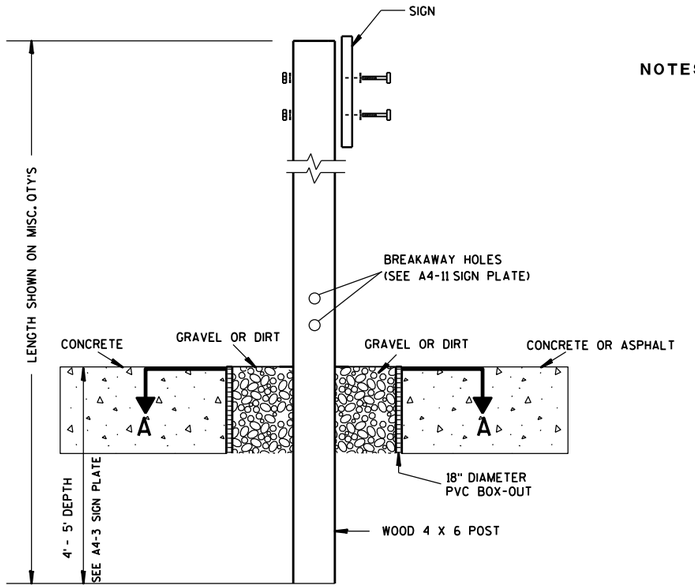
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

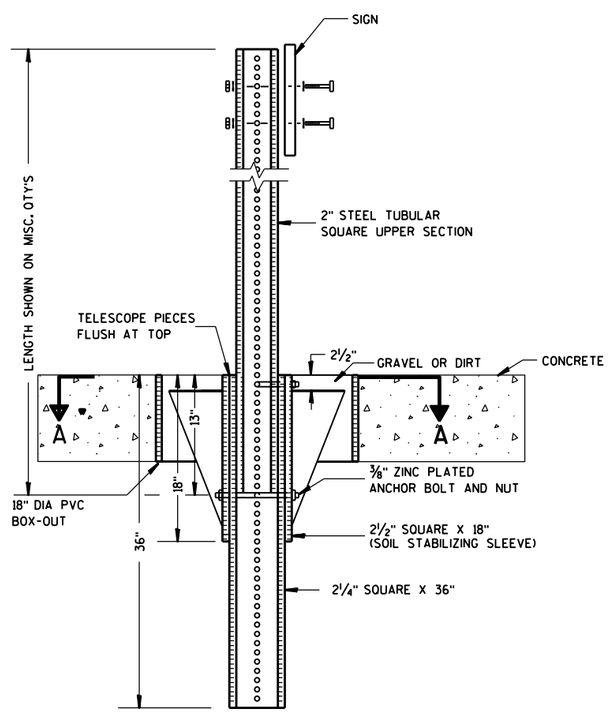
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 60	E



ELEVATION VIEW

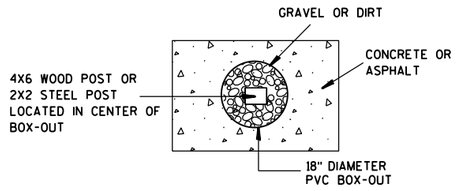
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

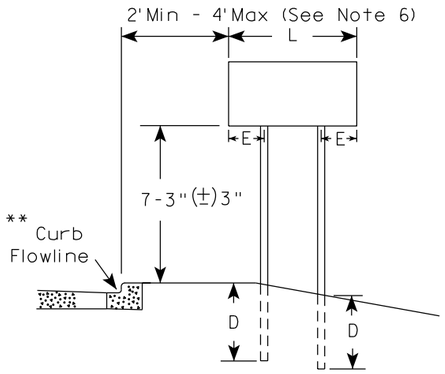
APPROVED Matthew R Rauch
for State Traffic Engineer

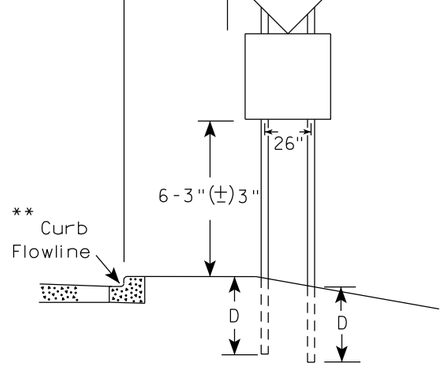
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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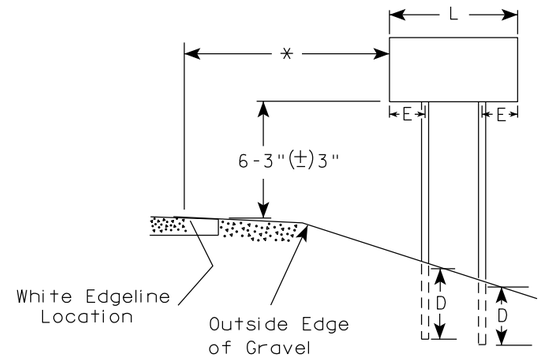
URBAN AREA

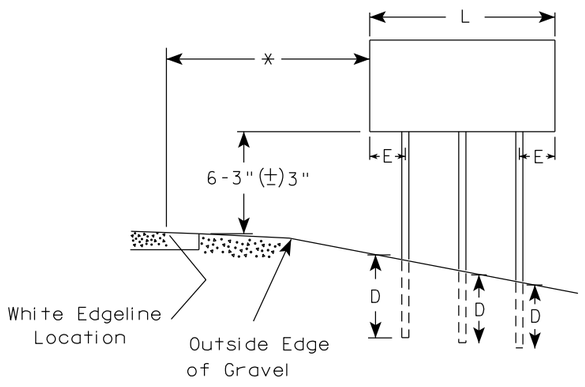


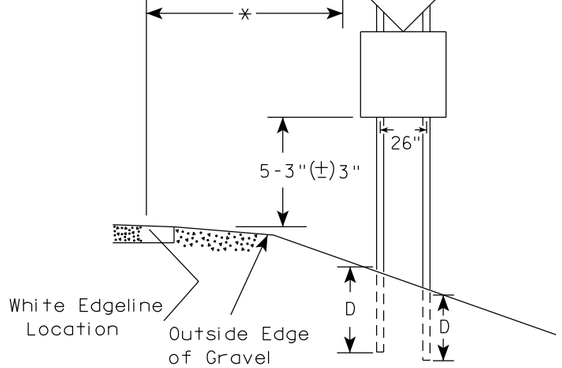


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

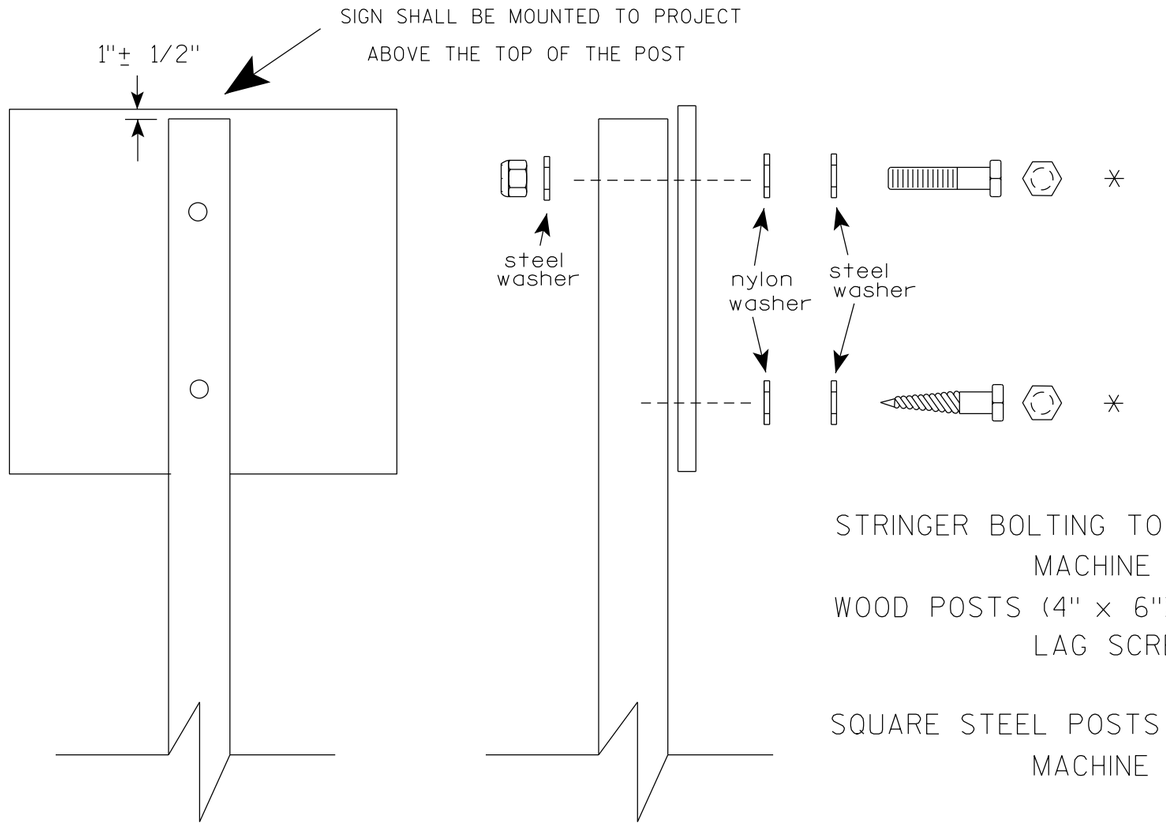
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 62	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

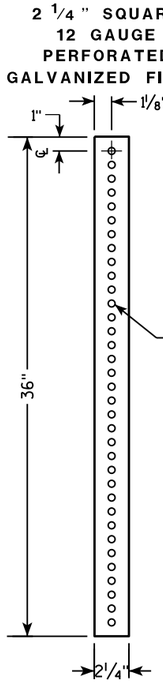
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

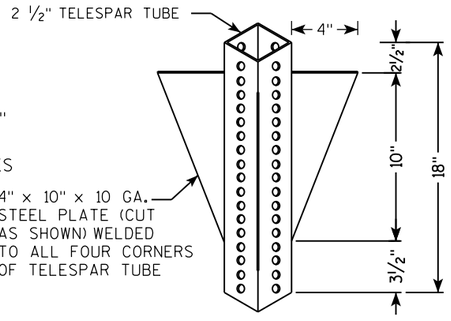
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

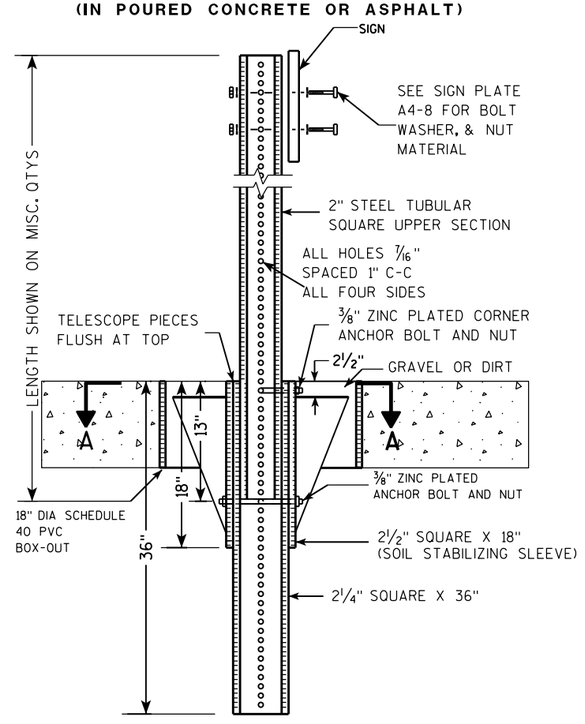
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



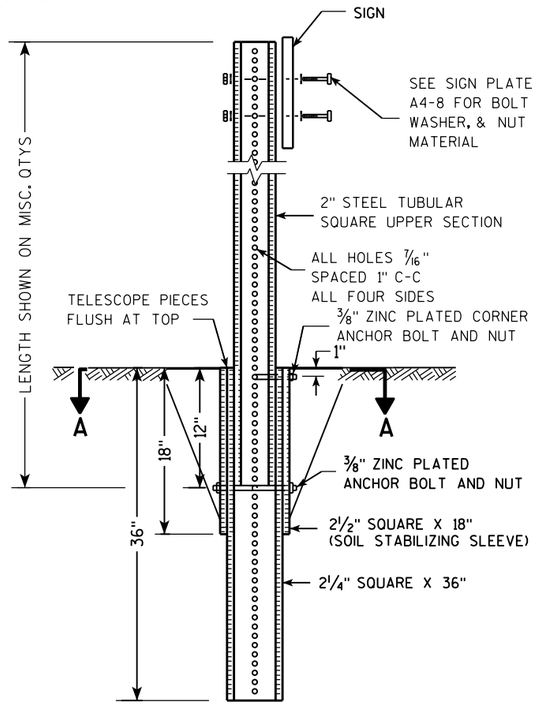
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

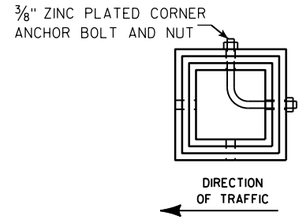


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

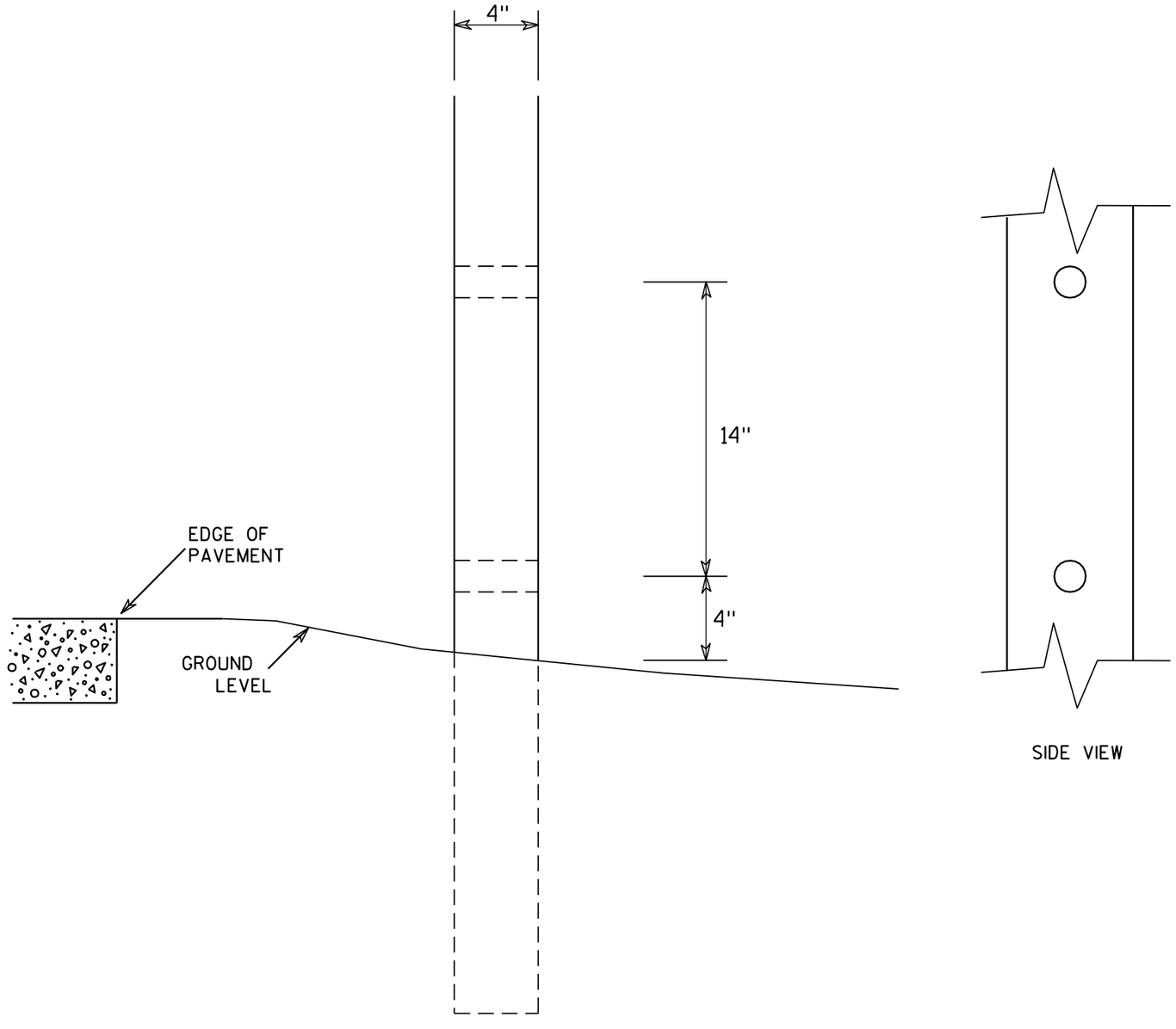
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 64 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

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7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

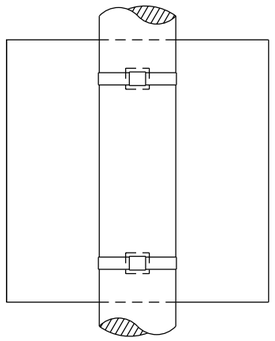
APPROVED Chester J Spang for State Traffic Engineer

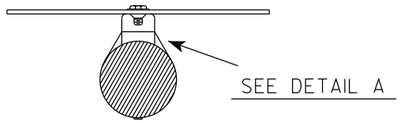
DATE 3/27/97 PLATE NO. A4-11.2

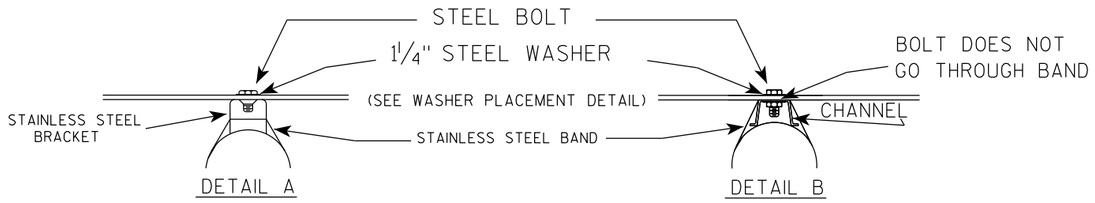
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BANDING

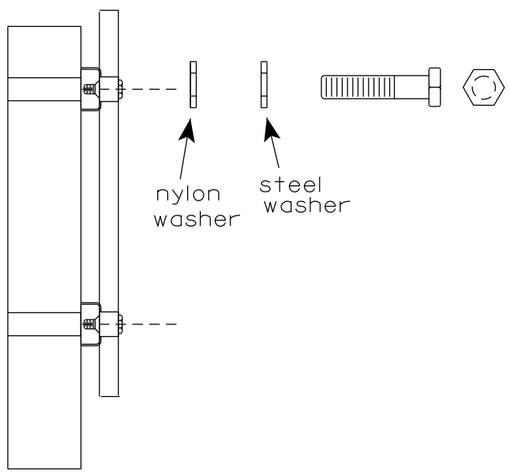
SINGLE SIGN







WASHER PLACEMENT

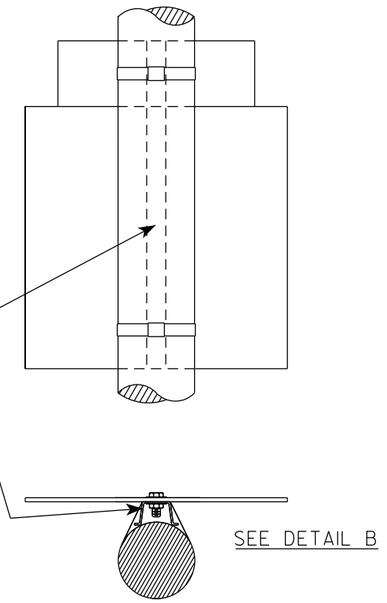


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

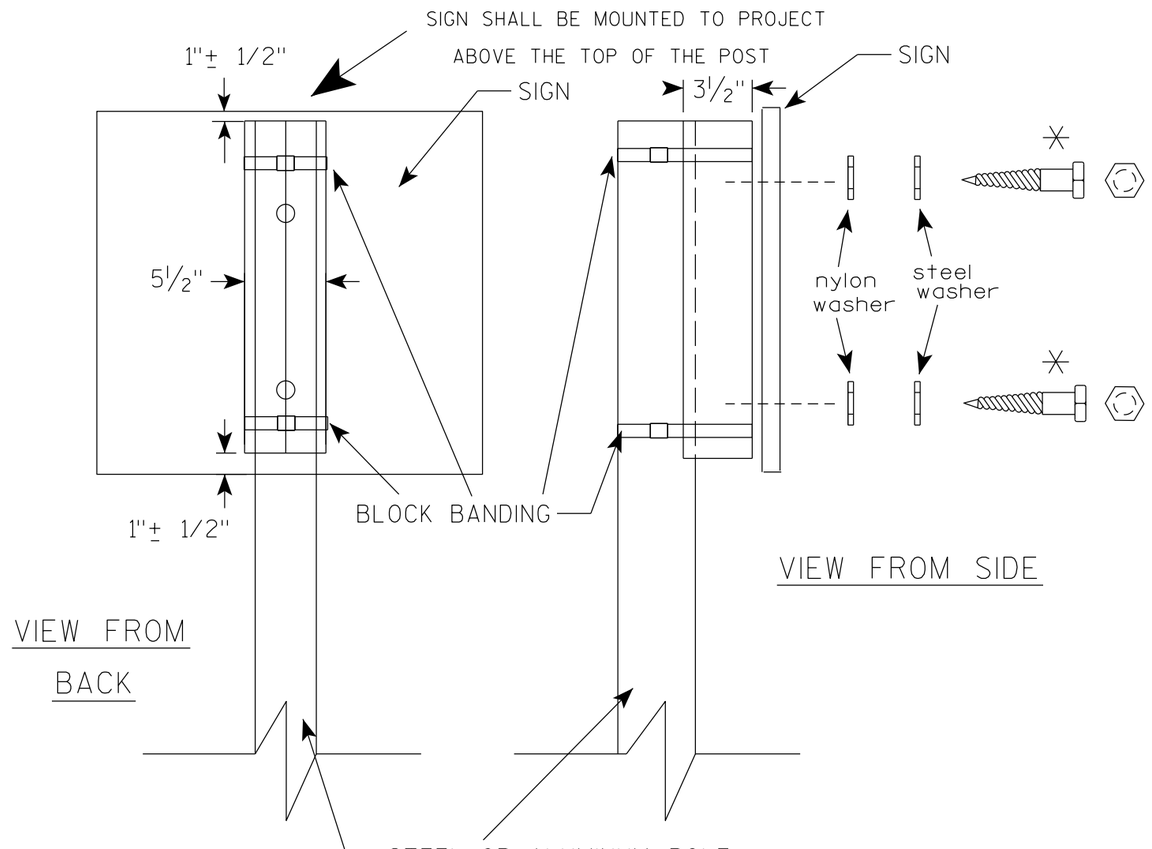
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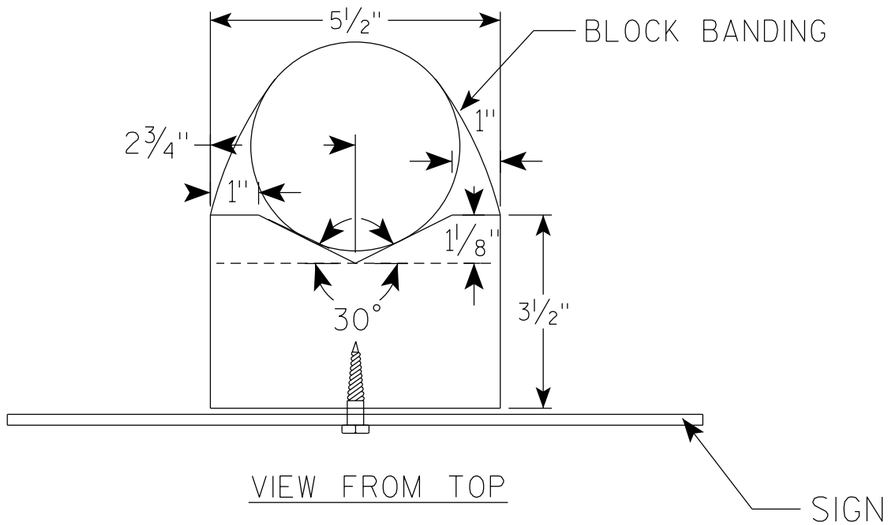
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7

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GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

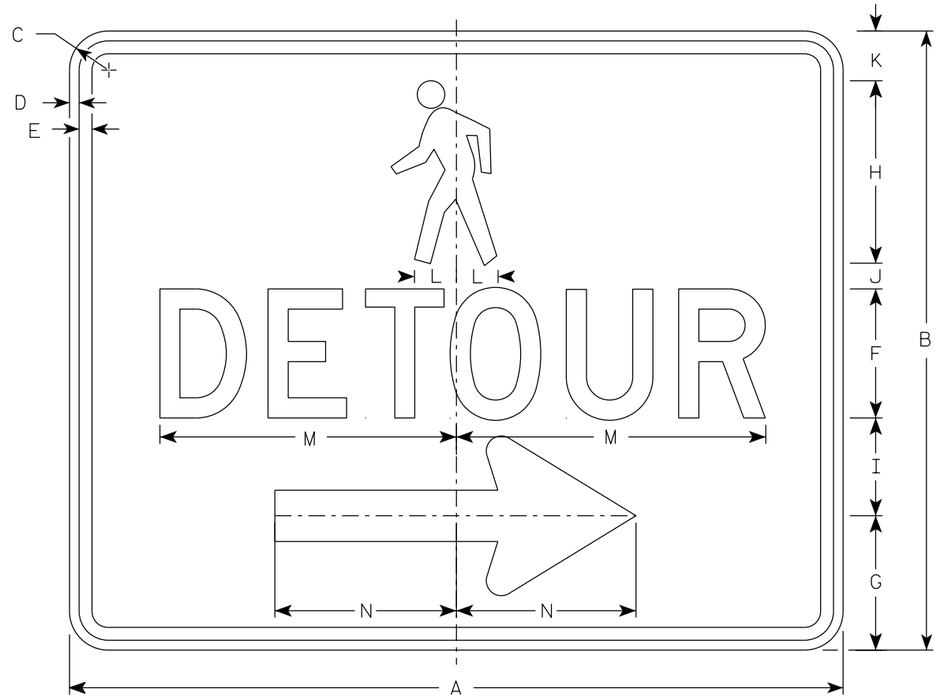
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

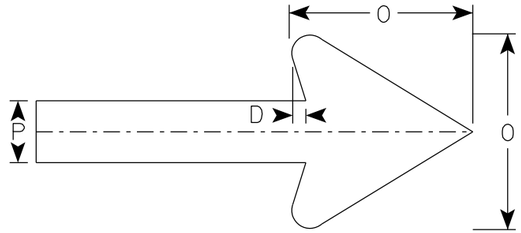
SHEET NO: 67 E



M4-9BR

NOTES

1. Sign is Type II-Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9BL is the same as M4-9BR except the arrow 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																											
2S	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
2M	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
3																											
4																											
5																											

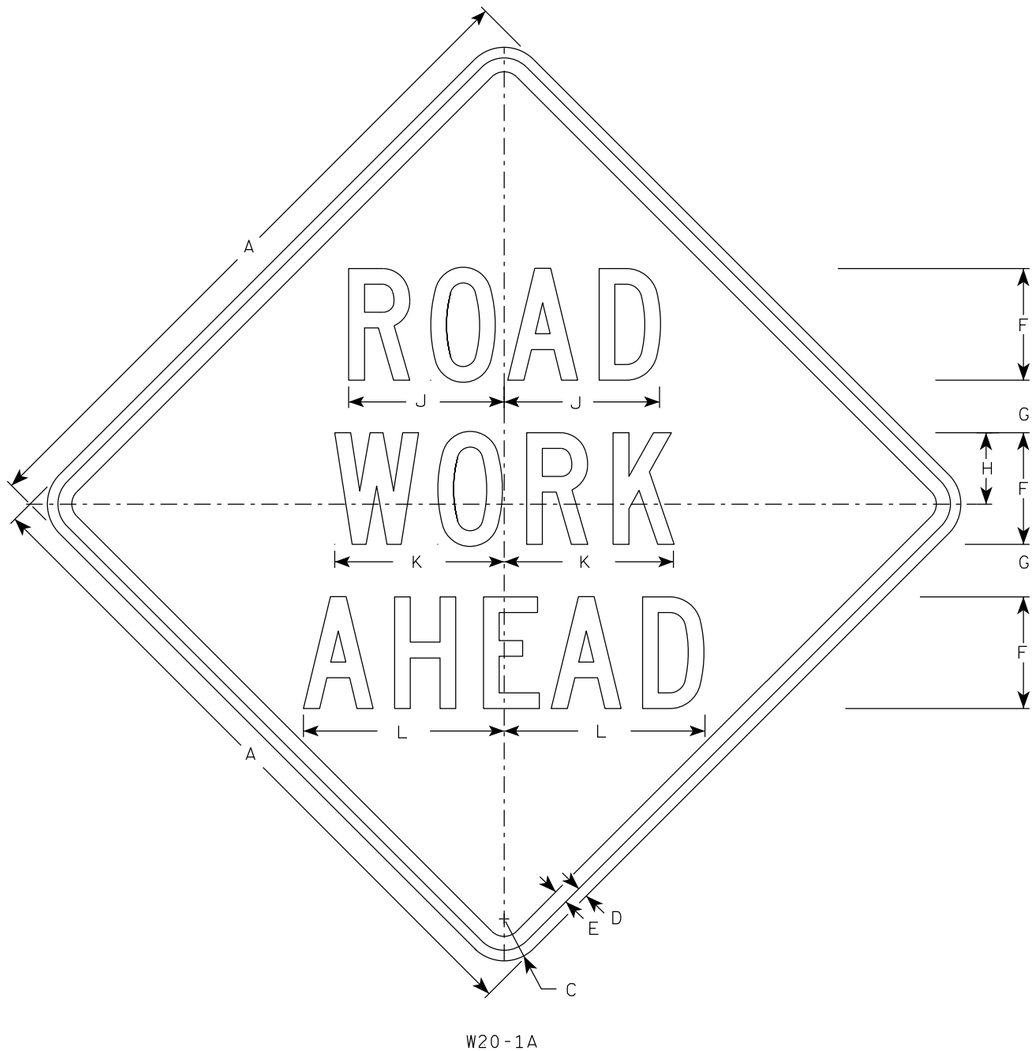
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

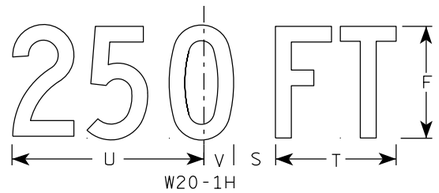
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9B.4

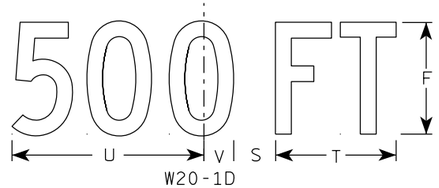
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 68 | E



W20-1A



W20-1H



W20-1D



W20-1C



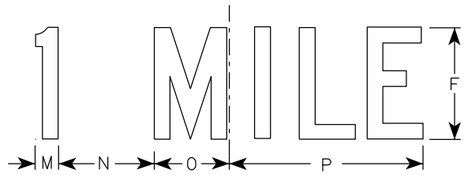
W20-1B

NOTES

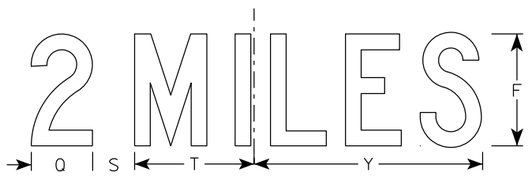
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

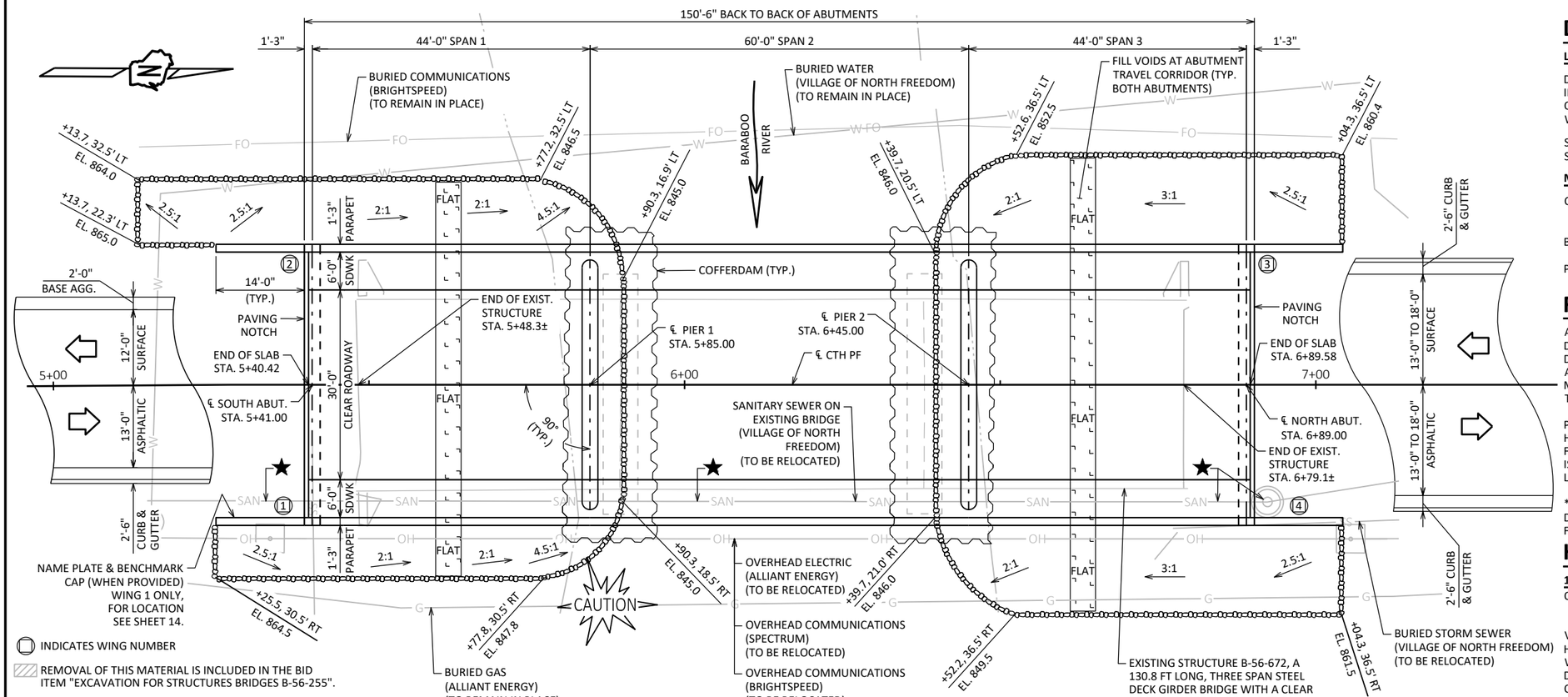
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

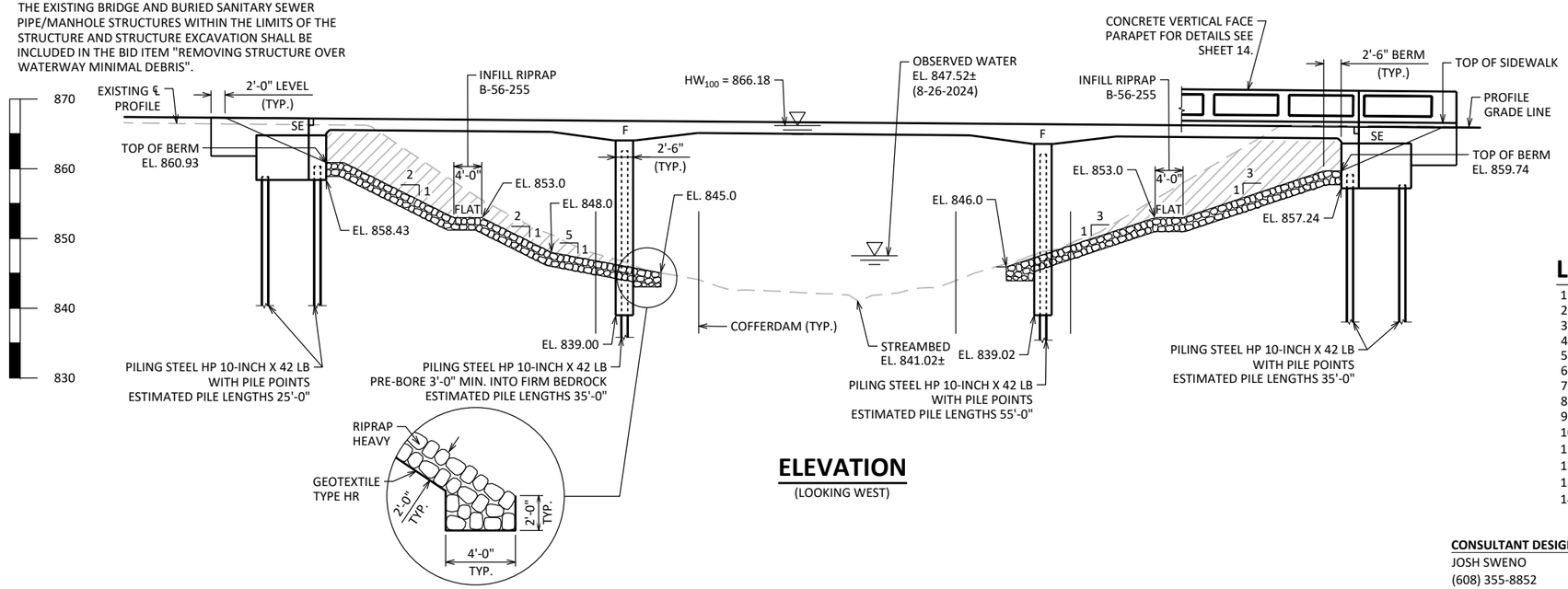
SHEET NO: 69 E



PLAN

(THREE SPAN HAUNCHED CONCRETE SLAB BRIDGE)

- INDICATES WING NUMBER
- REMOVAL OF THIS MATERIAL IS INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-56-255".
- INFILL RIPRAP B-56-255
- ★ SANITARY SEWER PIPE ATTACHED TO EXISTING BRIDGE AND SANITARY SEWER PIPE/MANHOLE STRUCTURES IN THE ROAD APPROACH HAVE BEEN DISCONTINUED IN PLACE. REMOVAL OF THE SANITARY SEWER PIPE ATTACHED TO THE EXISTING BRIDGE AND BURIED SANITARY SEWER PIPE/MANHOLE STRUCTURES WITHIN THE LIMITS OF THE STRUCTURE AND STRUCTURE EXCAVATION SHALL BE INCLUDED IN THE BID ITEM "REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS".



ELEVATION

(LOOKING WEST)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.12
OPERATING RATING: RF = 1.45
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
- SUPERSTRUCTURE — f'_c = 4,000 PSI
- ALL OTHER — f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT:
- GRADE 60 — f_y = 60,000 PSI

PILING STEEL:
- HP 10-INCH X 42 LB — f_y = 50,000 PSI

FOUNDATION DATA

ABUTMENTS AND PIER 2 TO BE SUPPORTED ON HP 10-INCH X 42 LB PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. AT THE SOUTH ABUTMENT DRIVE PILES AT A MINIMUM TO EL. 836.0. AT PIER 2 DRIVE PILES AT A MINIMUM TO EL. 807.0. AT THE NORTH ABUTMENT DRIVE PILES AT A MINIMUM TO EL. 826.0.

PIER 1 TO BE SUPPORTED ON HP 10-INCH X 42 LB PILING SEATED IN PRE-BORED HOLES CORED 3 FEET MINIMUM INTO ROCK. PILE DRIVING IS NOT REQUIRED. THE FACTORED AXIAL RESISTANCE OF THE PILES IN COMPRESSION USED FOR DESIGN IS 180 TONS MULTIPLIED BY A RESISTANCE FACTOR OF 0.5. ESTIMATED PILE LENGTHS ARE 35'-0" AT PIER 1.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE PILE CAPACITY.

HYDRAULIC DATA

100-YEAR FREQUENCY:

Q_{100} - TOTAL = 11,254 C.F.S.
- THRU BRIDGE = 11,015 C.F.S.
- OVERTOPPING ROADWAY = 239 C.F.S.

V_{100}= 5.43 F.P.S.
HW_{100}= EL. 866.18
WATERWAY AREA = 2,030 SQ. FT.
DRAINAGE AREA = 491 SQ. MI.
OVERTOPPING = 93 YEARS
SCOUR CRITICAL CODE = 5

2-YEAR FREQUENCY:

Q_2= 1,963 C.F.S.
V_2= 2.87 F.P.S.
HW_2= EL. 853.95

ROADWAY OVERTOPPING

FREQUENCY = 93 YEARS
Q_{93} = 10,800 C.F.S.
HW_{93} = EL. 865.32

TRAFFIC DATA

CTH PF:

A.A.D.T. (2027) = 470
A.A.D.T. (2047) = 480
R.D.S. = 30 MPH

JOSHUA R. SWENO E-44384 WAUNAKEE WI PROFESSIONAL ENGINEER WISCONSIN
Joshua R. Sweno
7/21/2026

LIST OF DRAWINGS:

1. GENERAL PLAN
2. CROSS SECTION, QUANTITIES & NOTES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. PIER 1
9. PIER 2
10. SUPERSTRUCTURE
11. SUPERSTRUCTURE SECTIONS
12. SIDEWALK SECTIONS
13. SUPERSTRUCTURE DETAILS
14. PARAPET DETAILS

CONSULTANT DESIGN CONTACT:
JOSH SWENO
(608) 355-8852

BRIDGE OFFICE CONTACT:
AARON BONK
(608) 261-0261

NO.	DATE	REVISION	BY

MSA
ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
1702 PANKRATZ STREET, MADISON WI 53704
(608) 242-7779 www.msa-ps.com

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/13/26
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STATE PROJECT NUMBER
5659-00-74

STRUCTURE B-56-255

CTH PF OVER BARABOO RIVER

COUNTY	~~TOWN/CITY~~/VILLAGE
SAUK	NORTH FREEDOM

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGN CK'D	DRAWN BY	PLANS CK'D
NRT	JDH	EKK	NRT/JDH

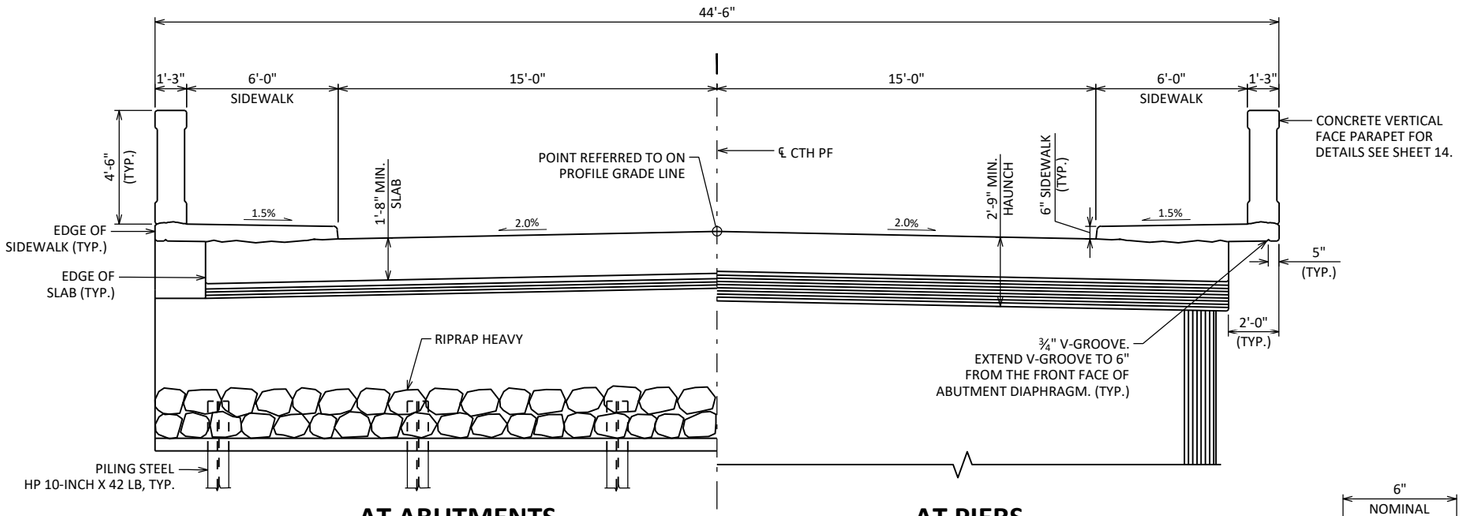
GENERAL PLAN

SHEET 1 OF 14
70

8

STATE PROJECT NUMBER

5659-00-74



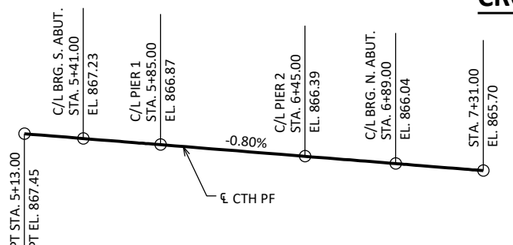
AT ABUTMENTS

AT PIERS

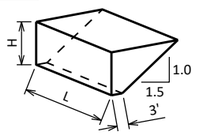
(PILING NOT SHOWN)

CROSS SECTION THRU BRIDGE

(LOOKING NORTH)



PROFILE GRADE LINE

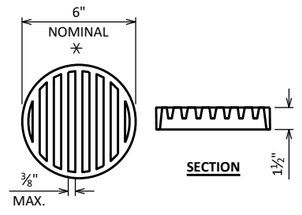


ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)
V_{CY} = V_{CF}(EF)/27
V_{TON} = V_{CY}(2.0)

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	SOUTH ABUT.	PIER 1	PIER 2	NORTH ABUT.	SUPER	TOTAL
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS B-56-672	EACH	-	-	-	-	-	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-56-255	EACH	-	-	-	-	-	1
206.5001	COFFERDAMS B-56-255	EACH	-	-	-	-	-	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	210	-	-	210	-	420
502.0100	CONCRETE MASONRY BRIDGES	CY	47.1	89.8	88.0	47.1	532.2	804
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	-	-	-	713	713
502.3210	PIGMENTED SURFACE SEALER	SY	20	-	-	20	195	235
502.9000.S	UNDERWATER SUBSTRUCTURE INSPECTION B-56-255	EACH	-	1	1	-	-	2
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2,700	4,220	4,180	2,700	-	13,800
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,730	80	80	1,730	109,530	113,150
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	11	-	-	11	-	22
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	-	143	-	-	-	143
550.0500	PILE POINTS	EACH	8	-	13	8	-	29
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	200	455	715	280	-	1,650
606.0300	RIPRAP HEAVY	CY	274	-	-	321	-	595
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	100	-	-	100	-	200
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	43	-	-	43	-	86
645.0120	GEOTEXTILE TYPE HR	SY	430	-	-	505	-	935
999.1001.S	SEISMOGRAPH	EACH	-	-	-	-	-	1
999.1501.S	CRACK AND DAMAGE SURVEY	EACH	-	-	-	-	-	1
SPV.0195	INFILL RIPRAP B-56-255	TON	9	-	-	11	-	20
	NON-BID ITEMS							
	FILLER	SIZE						½", ¾"

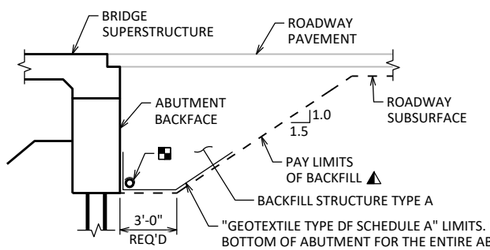


RODENT SHIELD DETAIL

⚹ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



TYPICAL SECTION THRU ABUTMENT

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

▪ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE LIMITS SHOWN ON SHEET 1 AND THE ABUTMENT SHEETS.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-56-255" SHALL BE THE EXISTING GROUNDLINE.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

AT BACK FACE OF ABUTMENT, ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURAL BACKFILL TYPE A.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO USGS NAVD 88 (2012 ADJUSTED). BENCHMARK REFERENCES AT THE PROJECT SITE WERE SET BY THE CONSULTANT USING GPS TECHNOLOGY.

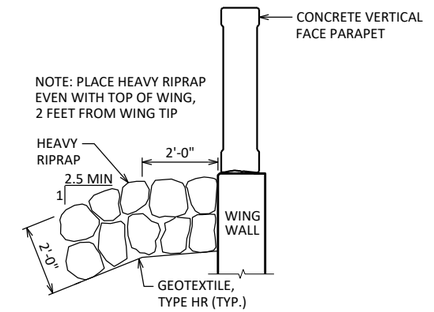
THE QUANTITY FOR BACKFILL STRUCTURES IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO "EXCAVATION FOR STRUCTURES BRIDGES B-56-255".

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF SLAB AND TO THE FACE AND TOP OF SIDEWALKS.

AT PIERS COFFERDAMS REQUIRED, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS. CONCRETE POURED UNDER WATER SHALL NOT EXCEED 10.0 FEET IN DEPTH, UNLESS APPROVED OTHERWISE.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE INSIDE FACES, THE TOP FACES, AND THE VERTICAL ENDS OF THE PARAPETS.



TYPICAL FILL SECTION AT WING TIPS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-56-255

DRAWN BY EKK | PLANS CK'D NRT/JDH

CROSS SECTION, QUANTITIES & NOTES

SHEET 2
71

8

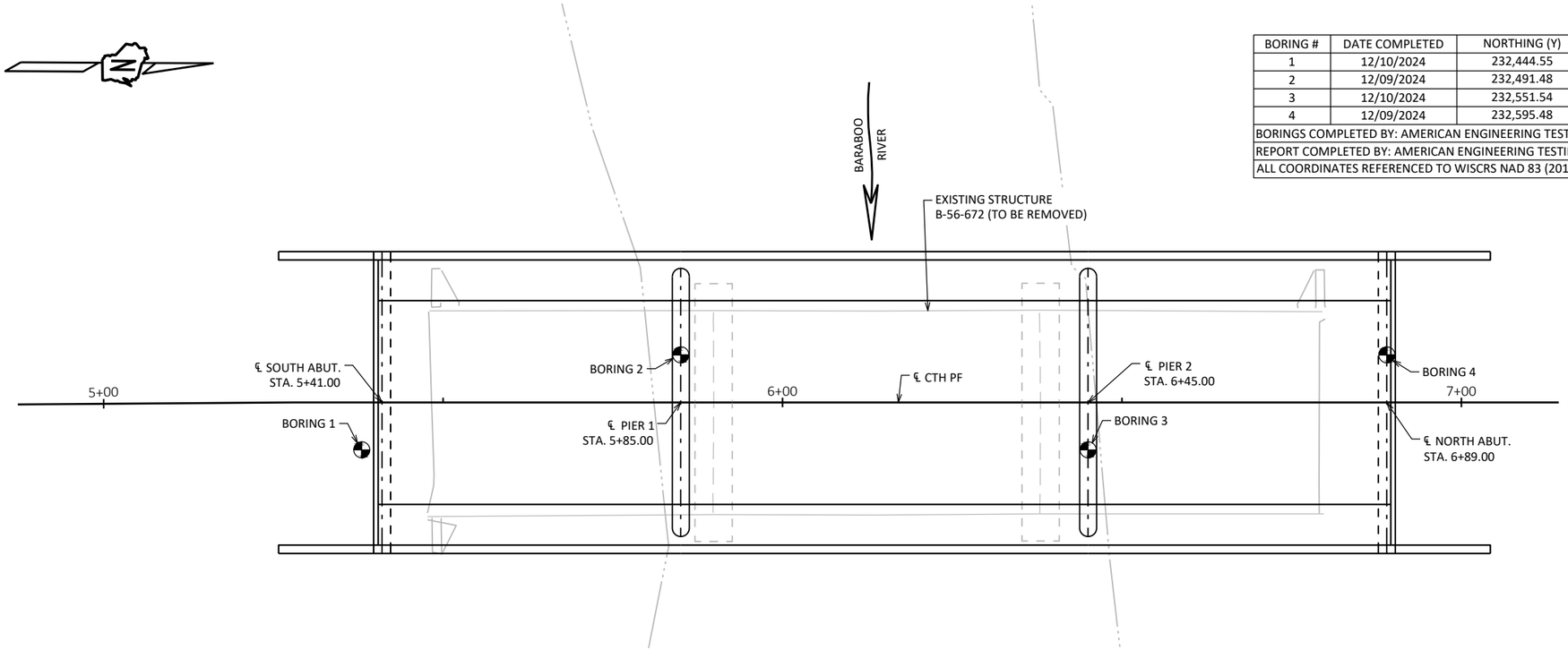
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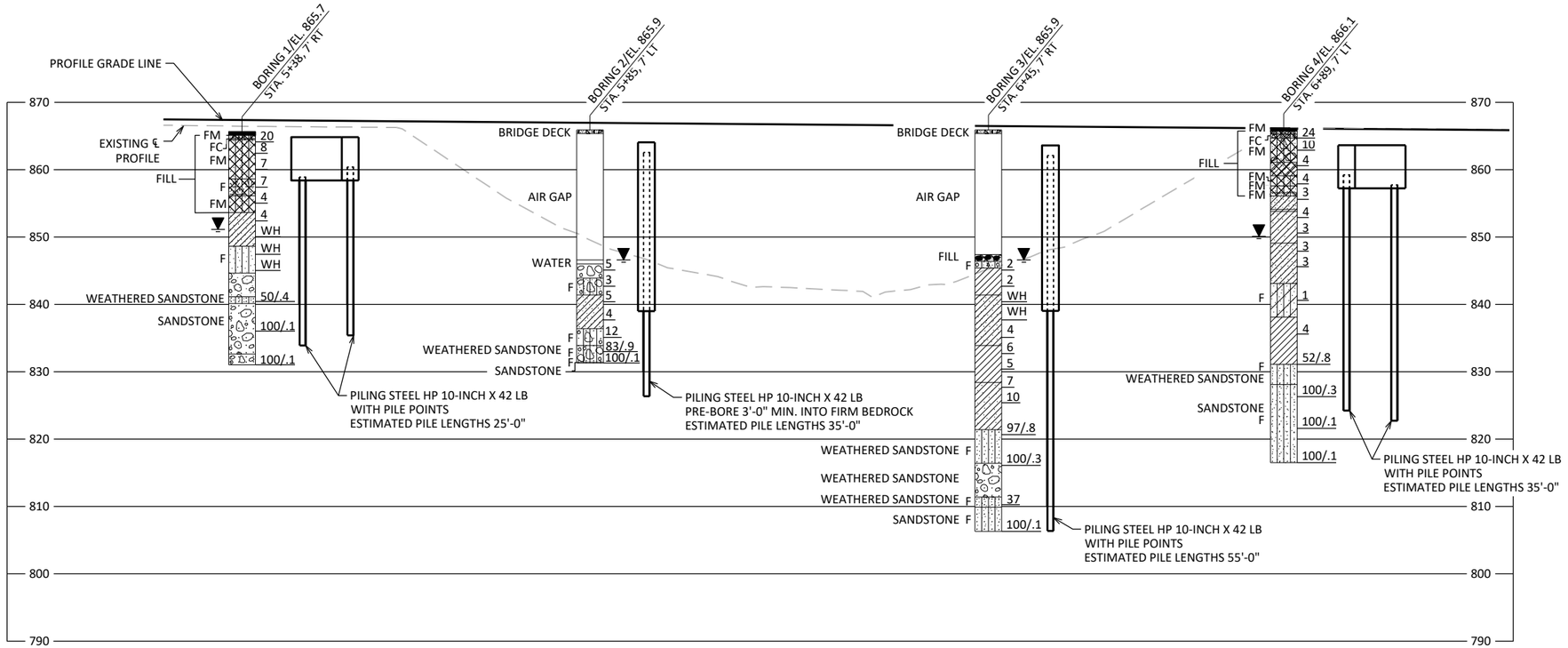
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	12/10/2024	232,444.55	617,848.68
2	12/09/2024	232,491.48	617,834.48
3	12/10/2024	232,551.54	617,848.22
4	12/09/2024	232,595.48	617,834.03

BORINGS COMPLETED BY: AMERICAN ENGINEERING TESTING

REPORT COMPLETED BY: AMERICAN ENGINEERING TESTING

ALL COORDINATES REFERENCED TO WISCRS NAD 83 (2011) SAUK COUNTY





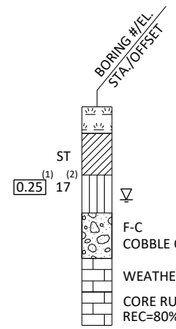
STATE PROJECT NUMBER

5659-00-74

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

AT TIME OF DRILLING

END OF DRILLING

AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-56-255

DRAWN BY EKK | PLANS CK'D NRT/JDH

SUBSURFACE EXPLORATION

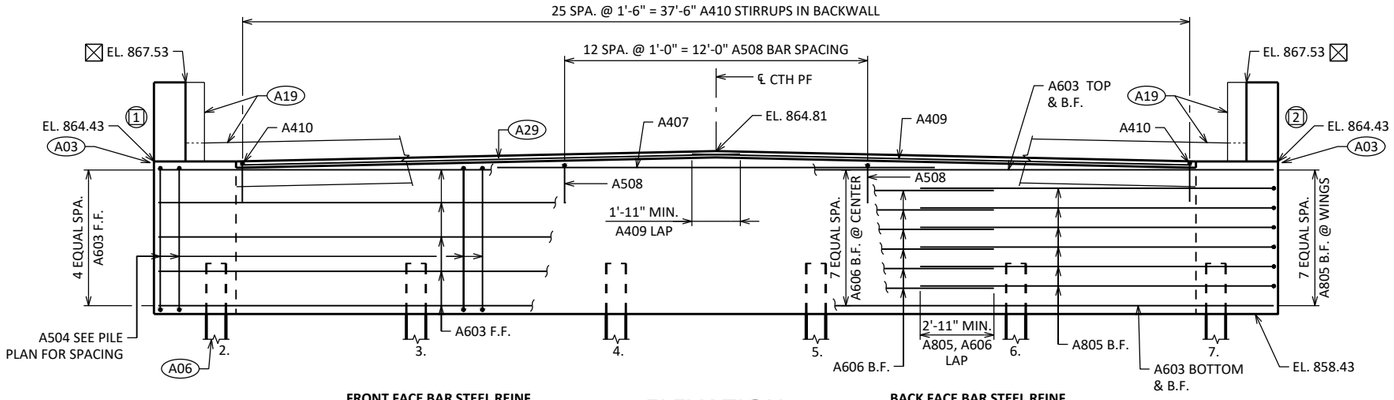
SHEET 3
72

8

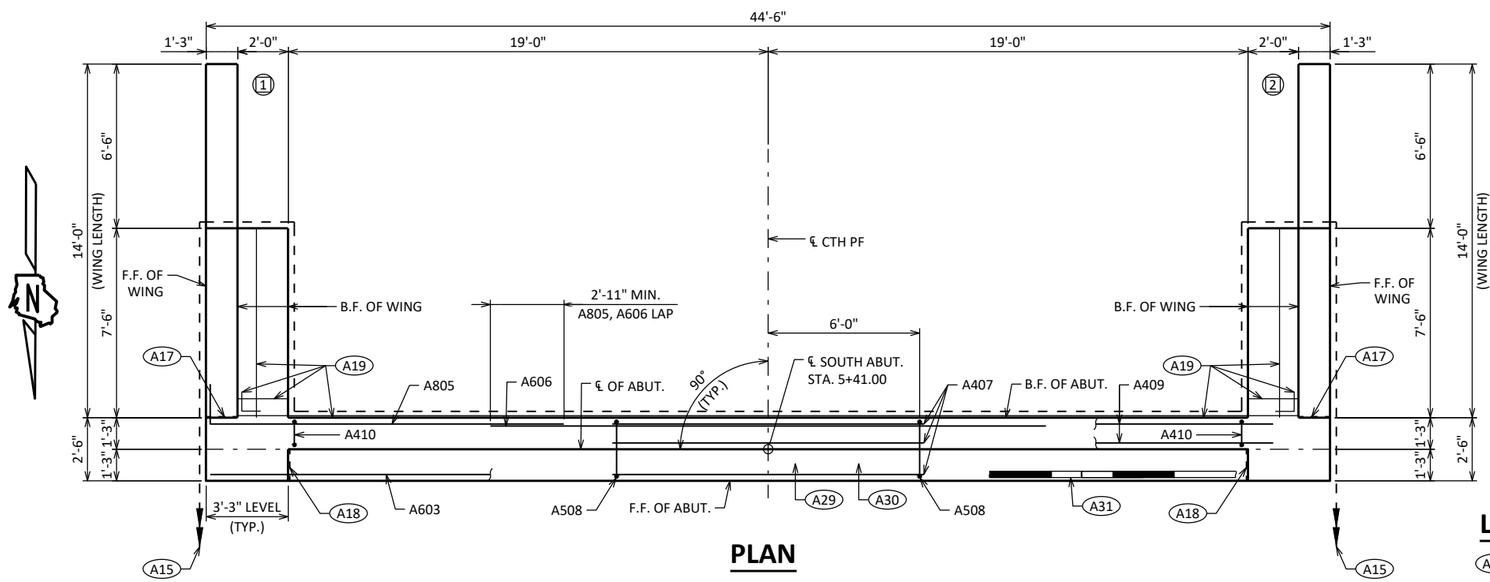
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STATE PROJECT NUMBER

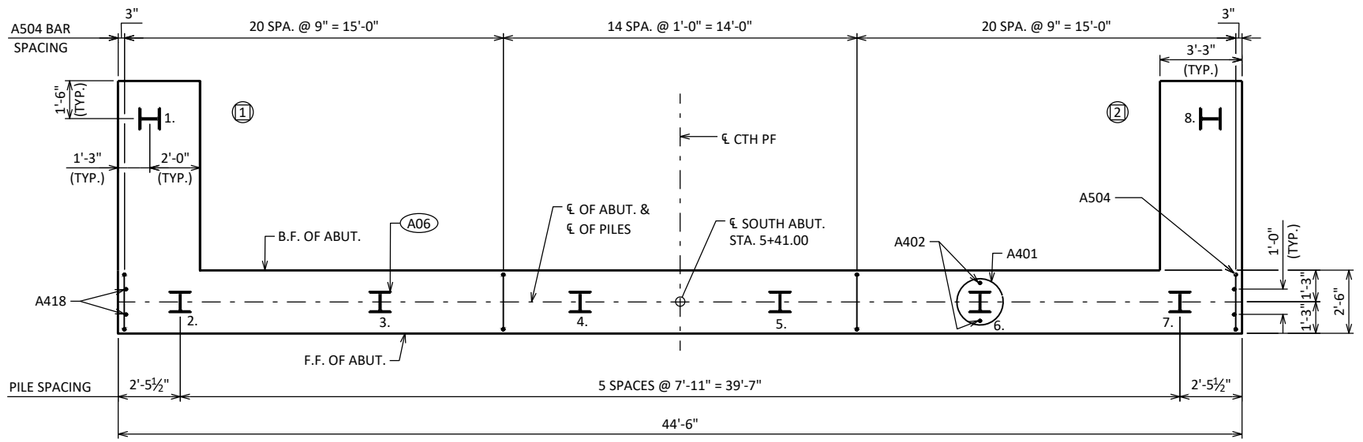
5659-00-74



ELEVATION
(LOOKING SOUTH)

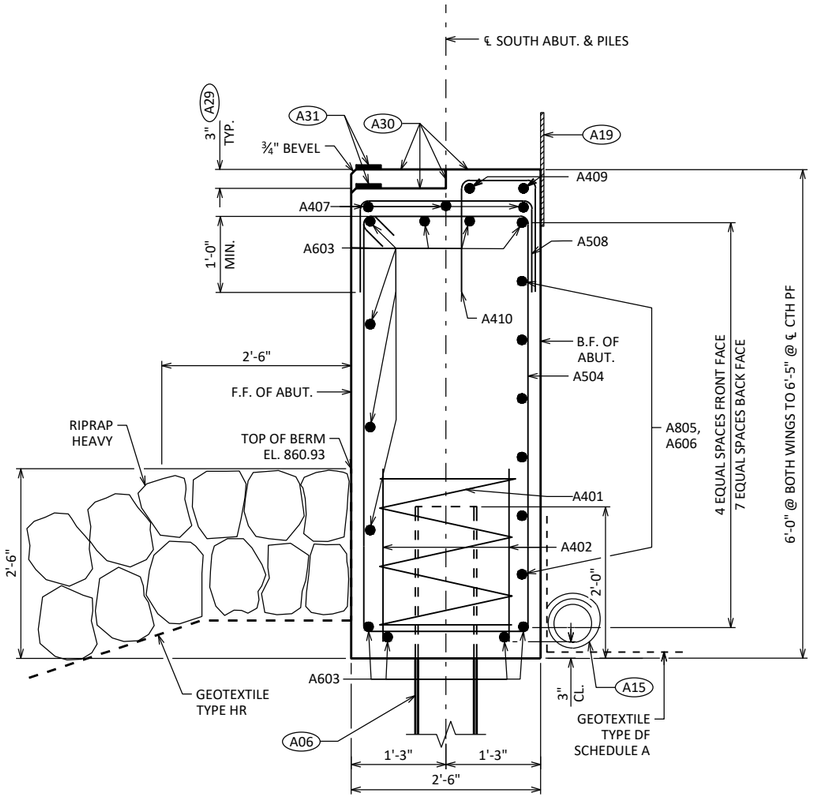


PLAN



PILE PLAN

NOTES:
FOR WING DETAILS SEE SHEET 5.
☒ ELEVATIONS GIVEN AT THE B.F. OF ABUTMENT.



SECTION THRU BODY

LEGEND

- (A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).
- (A06) SUPPORT ABUTMENT ON HP 10-INCH X 42 LB STEEL PILING, ESTIMATED 25'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A18) ¾" CORK FILLER UP VERT. SEAT FACES THAT RUN PARALLEL WITH ROADWAY.
- (A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- (A29) SEMI-EXPANSION STEP, CONSTRUCT 3" DEEPER THAN ABUTMENT BACKWALL.
- (A30) STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03 INCHES.
- (A31) 4" X ¾" FILLER, EXTEND FULL LENGTH OF ABUTMENT BETWEEN EDGES OF SLAB.
- ⬡ INDICATES WING NUMBER

F.F. - FRONT FACE B.F. - BACK FACE CL. - CLEAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-56-255

DRAWN BY EKK | PLANS CK'D JDH

SOUTH ABUTMENT

SHEET 4
73

8

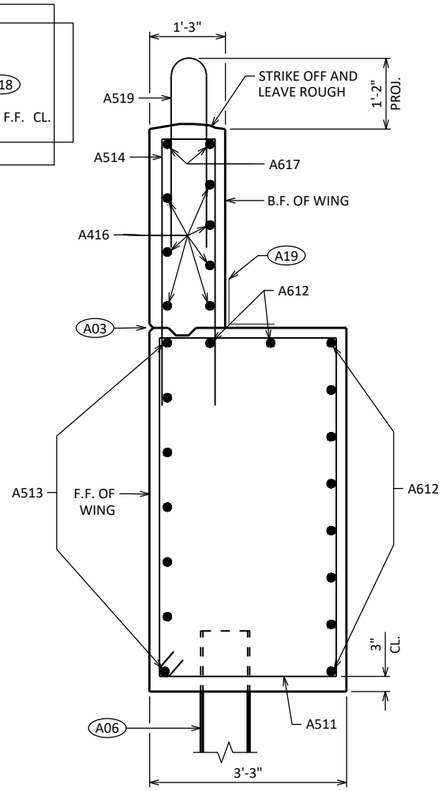
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STATE PROJECT NUMBER

5659-00-74

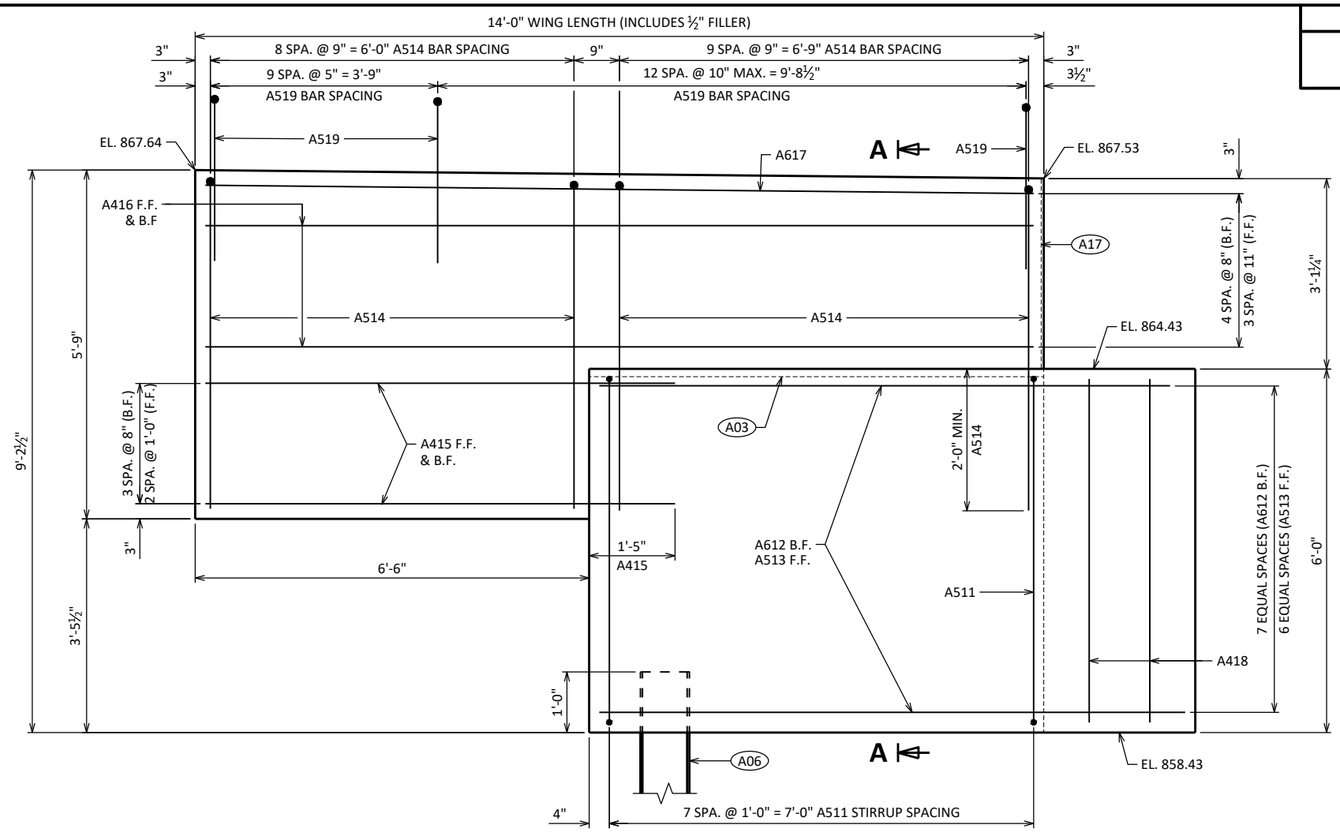
SEE SHEET 4 LEGEND FOR DESCRIPTION OF

A03 A06 A17 A18 A19 A29 A30 B.F. F.F. CL.



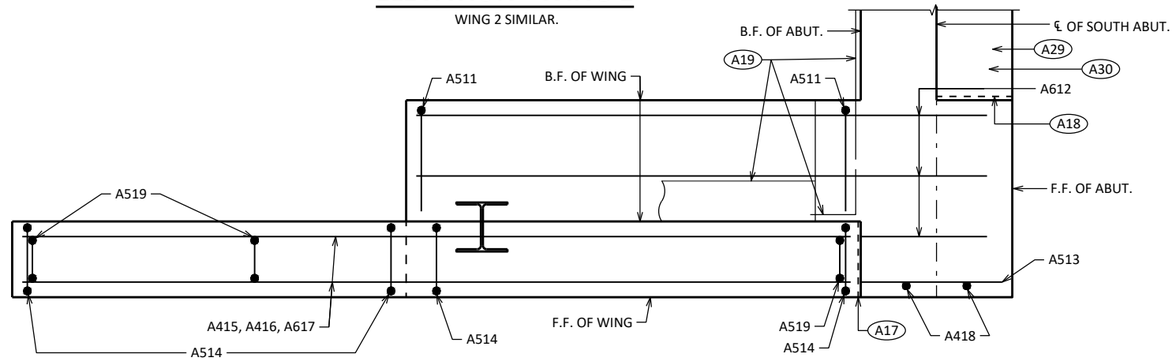
SECTION A-A THRU WING 1

WING 2 SIMILAR.



ELEVATION - WING 1

WING 2 SIMILAR.



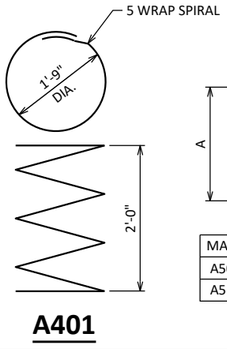
PLAN - WING 1

WING 2 SIMILAR.

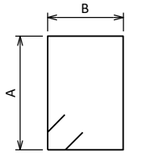
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

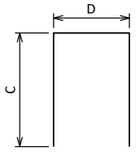
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A401		6	28'-0"	X		ABUT. BODY PILES - 1 SPIRAL WRAP @ EACH PILE
A402		12	2'-3"			ABUT. BODY PILES - 2 @ EACH PILE - VERT.
A603		11	44'-2"			ABUT. BODY - F.F., TOP & BOTTOM - HORIZ.
A504		55	16'-2"	X		ABUT. BODY - STIRRUPS - VERT.
A805		12	15'-2"	X		ABUT. BODY - B.F. @ WINGS - HORIZ.
A606		6	22'-0"			ABUT. BODY - B.F. @ CENTER - HORIZ.
A407		3	12'-4"			ABUT. BODY - TOP - HORIZ.
A508		13	4'-11"	X		ABUT. BODY - TOP - TIES - VERT.
A409		4	21'-0"			ABUT. BODY - TOP @ BACKWALL - HORIZ.
A410		26	4'-1"	X		ABUT. BODY - TOP @ BACKWALL - TIES - VERT.
A511	X	16	17'-8"	X		WINGS 1 & 2 - BASE - STIRRUP - VERT.
A612	X	20	9'-5"			WINGS 1 & 2 - BASE - B.F. & TOP - HORIZ.
A513	X	14	9'-8"			WINGS 1 & 2 - BASE - F.F. - HORIZ.
A514	X	38	11'-6"	X		WINGS 1 & 2 - TOP - STIRRUP - VERT.
A415	X	14	7'-9"			WINGS 1 & 2 - TOP BASE - F.F. & B.F. - HORIZ.
A416	X	14	13'-7"			WINGS 1 & 2 - TOP - F.F. & B.F. - HORIZ.
A617	X	4	13'-7"			WINGS 1 & 2 - TOP - F.F. & B.F. - HORIZ.
A418		4	5'-7"			ABUT. BODY - ENDS @ WINGS - VERT.
A519	X	44	5'-11"	X		WINGS 1 & 2 - TOP - PARAPET STIRRUP - VERT.



A401



MARK	A	B
A504	5'-7"	2'-2"
A511	5'-7"	2'-11"

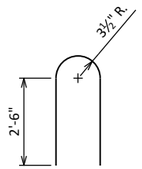


MARK	C	D
A508	1'-6"	2'-2"
A410	1'-8"	11"
A514	5'-5"	11"



A805

STD. 90° HOOK



A519

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-56-255

DRAWN BY EKK | PLANS CK'D JDH

SOUTH ABUTMENT DETAILS

SHEET 5
74

8

8

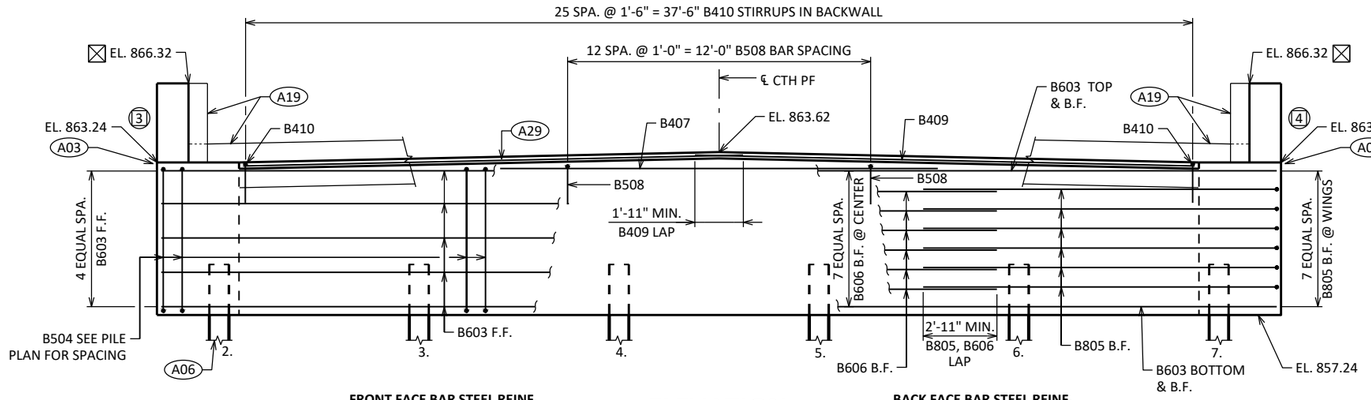
STATE PROJECT NUMBER

5659-00-74

NOTES:

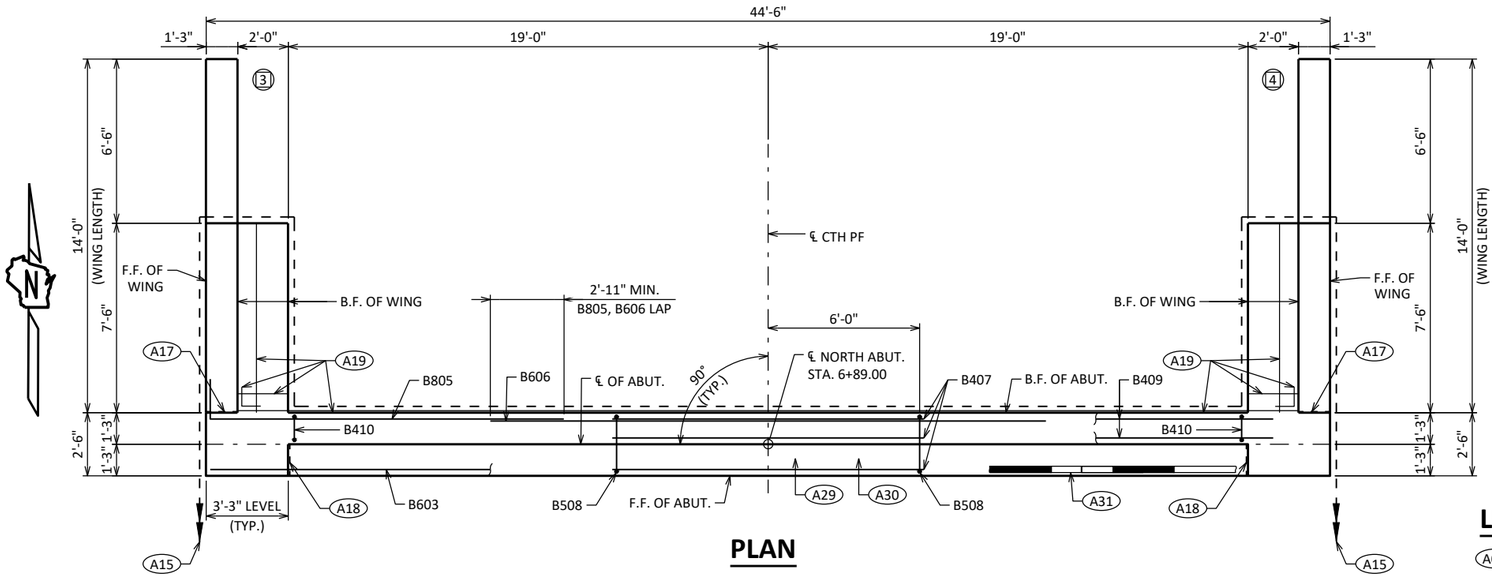
FOR WING DETAILS SEE SHEET 7.

⊠ ELEVATIONS GIVEN AT THE B.F. OF ABUTMENT.

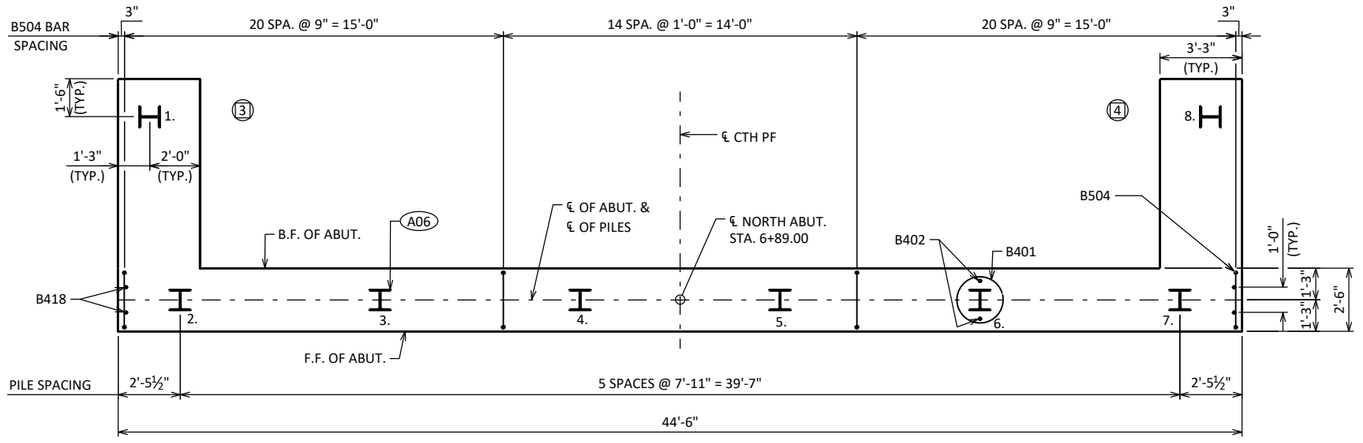


ELEVATION

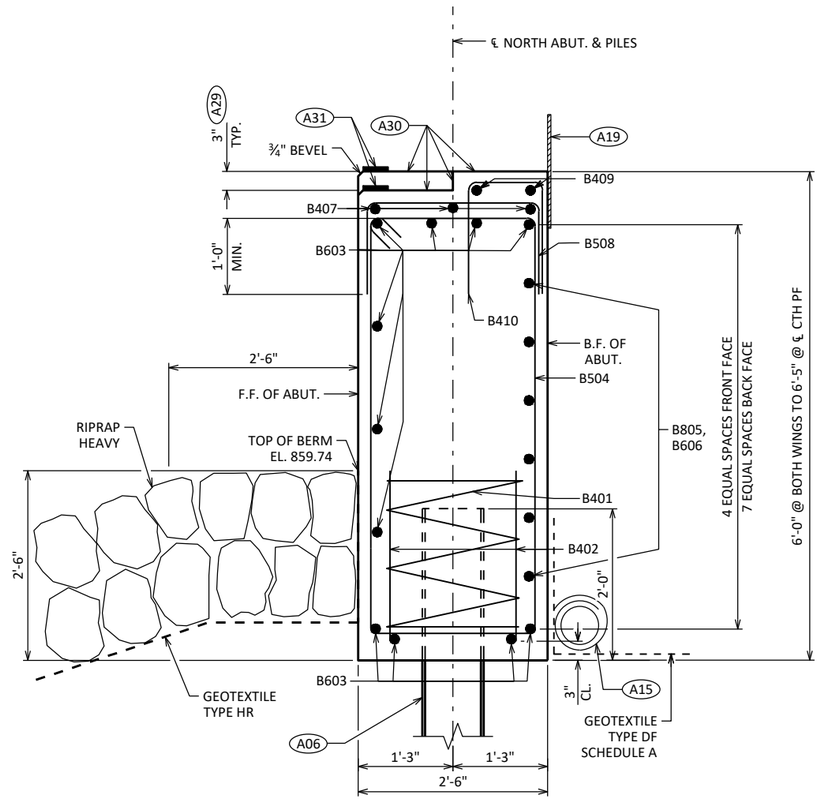
(LOOKING NORTH)



PLAN



PILE PLAN



SECTION THRU BODY

LEGEND

- A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).
- A06 SUPPORT ABUTMENT ON HP 10-INCH X 42 LB STEEL PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A17 ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- A18 ¾" CORK FILLER UP VERT. SEAT FACES THAT RUN PARALLEL WITH ROADWAY.
- A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- A29 SEMI-EXPANSION STEP, CONSTRUCT 3" DEEPER THAN ABUTMENT BACKWALL.
- A30 STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03 INCHES.
- A31 4" X ¾" FILLER, EXTEND FULL LENGTH OF ABUTMENT BETWEEN EDGES OF SLAB.
- ⬡ INDICATES WING NUMBER

F.F. - FRONT FACE B.F. - BACK FACE CL. - CLEAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-56-255

DRAWN BY EKK | PLANS CK'D JDH

NORTH ABUTMENT

SHEET 6
75

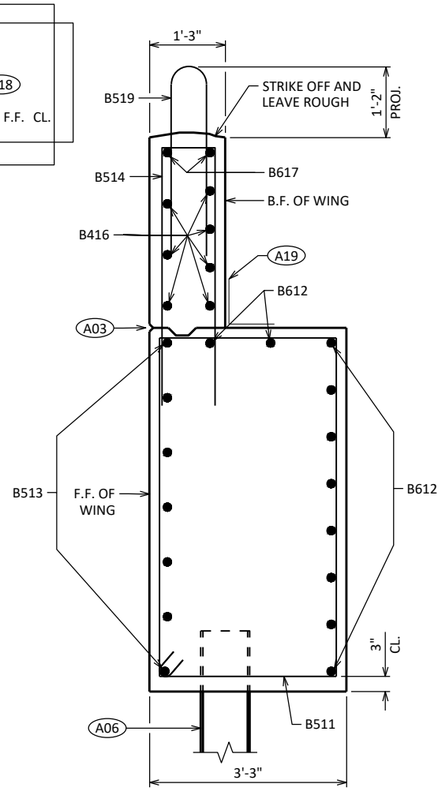
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STATE PROJECT NUMBER

5659-00-74

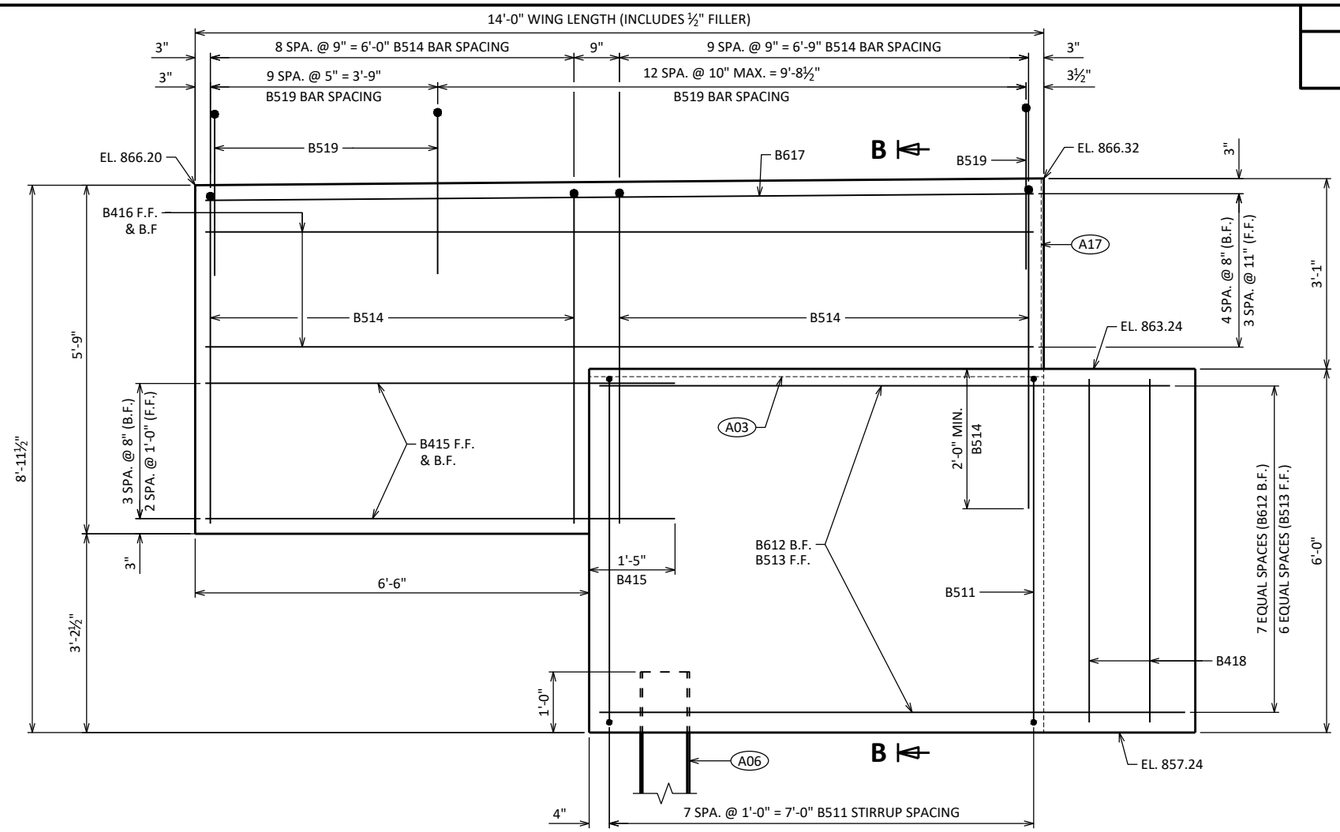
SEE SHEET 6 LEGEND FOR DESCRIPTION OF

A03 A06 A17 A18 A19 A29 A30 B.F. F.F. CL.



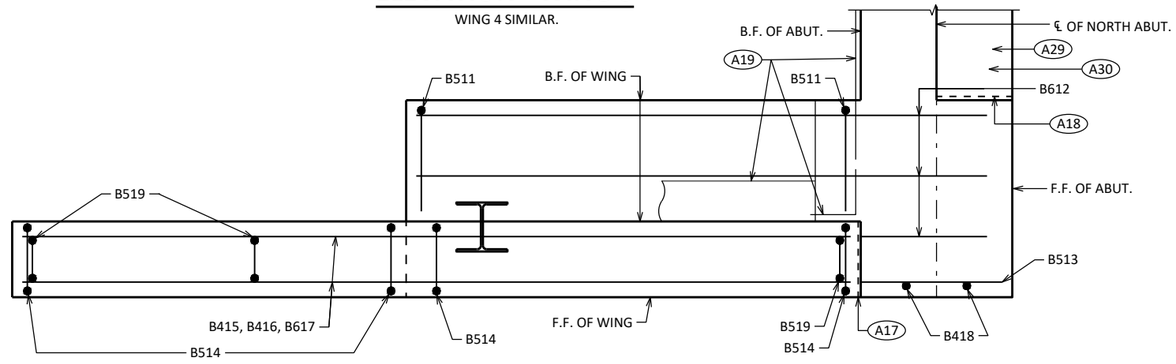
SECTION B-B THRU WING 3

WING 4 SIMILAR.



ELEVATION - WING 3

WING 4 SIMILAR.



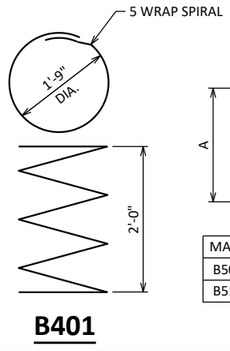
PLAN - WING 3

WING 4 SIMILAR.

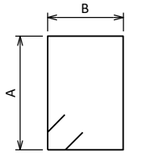
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

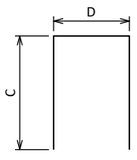
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B401		6	28'-0"	X		ABUT. BODY PILES - 1 SPIRAL WRAP @ EACH PILE
B402		12	2'-3"			ABUT. BODY PILES - 2 @ EACH PILE - VERT.
B603		11	44'-2"			ABUT. BODY - F.F., TOP & BOTTOM - HORIZ.
B504		55	16'-2"	X		ABUT. BODY - STIRRUPS - VERT.
B805		12	15'-2"	X		ABUT. BODY - B.F. @ WINGS - HORIZ.
B606		6	22'-0"			ABUT. BODY - B.F. @ CENTER - HORIZ.
B407		3	12'-4"			ABUT. BODY - TOP - HORIZ.
B508		13	4'-11"	X		ABUT. BODY - TOP - TIES - VERT.
B409		4	21'-0"			ABUT. BODY - TOP @ BACKWALL - HORIZ.
B410		26	4'-1"	X		ABUT. BODY - TOP @ BACKWALL - TIES - VERT.
B511	X	16	17'-8"	X		WINGS 3 & 4 - BASE - STIRRUP - VERT.
B612	X	20	9'-5"			WINGS 3 & 4 - BASE - B.F. & TOP - HORIZ.
B513	X	14	9'-8"			WINGS 3 & 4 - BASE - F.F. - HORIZ.
B514	X	38	11'-6"	X		WINGS 3 & 4 - TOP - STIRRUP - VERT.
B415	X	14	7'-9"			WINGS 3 & 4 - TOP BASE - F.F. & B.F. - HORIZ.
B416	X	14	13'-7"			WINGS 3 & 4 - TOP - F.F. & B.F. - HORIZ.
B617	X	4	13'-7"			WINGS 3 & 4 - TOP - F.F. & B.F. - HORIZ.
B418		4	5'-7"			ABUT. BODY - ENDS @ WINGS - VERT.
B519	X	44	5'-11"	X		WINGS 3 & 4 - TOP - PARAPET STIRRUP - VERT.



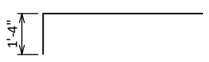
B401



MARK	A	B
B504	5'-7"	2'-2"
B511	5'-7"	2'-11"

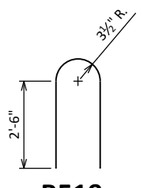


MARK	C	D
B508	1'-6"	2'-2"
B410	1'-8"	11"
B514	5'-5"	11"



B805

STD. 90° HOOK



B519

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-56-255

DRAWN BY EKK PLANS CK'D JDH

NORTH ABUTMENT DETAILS

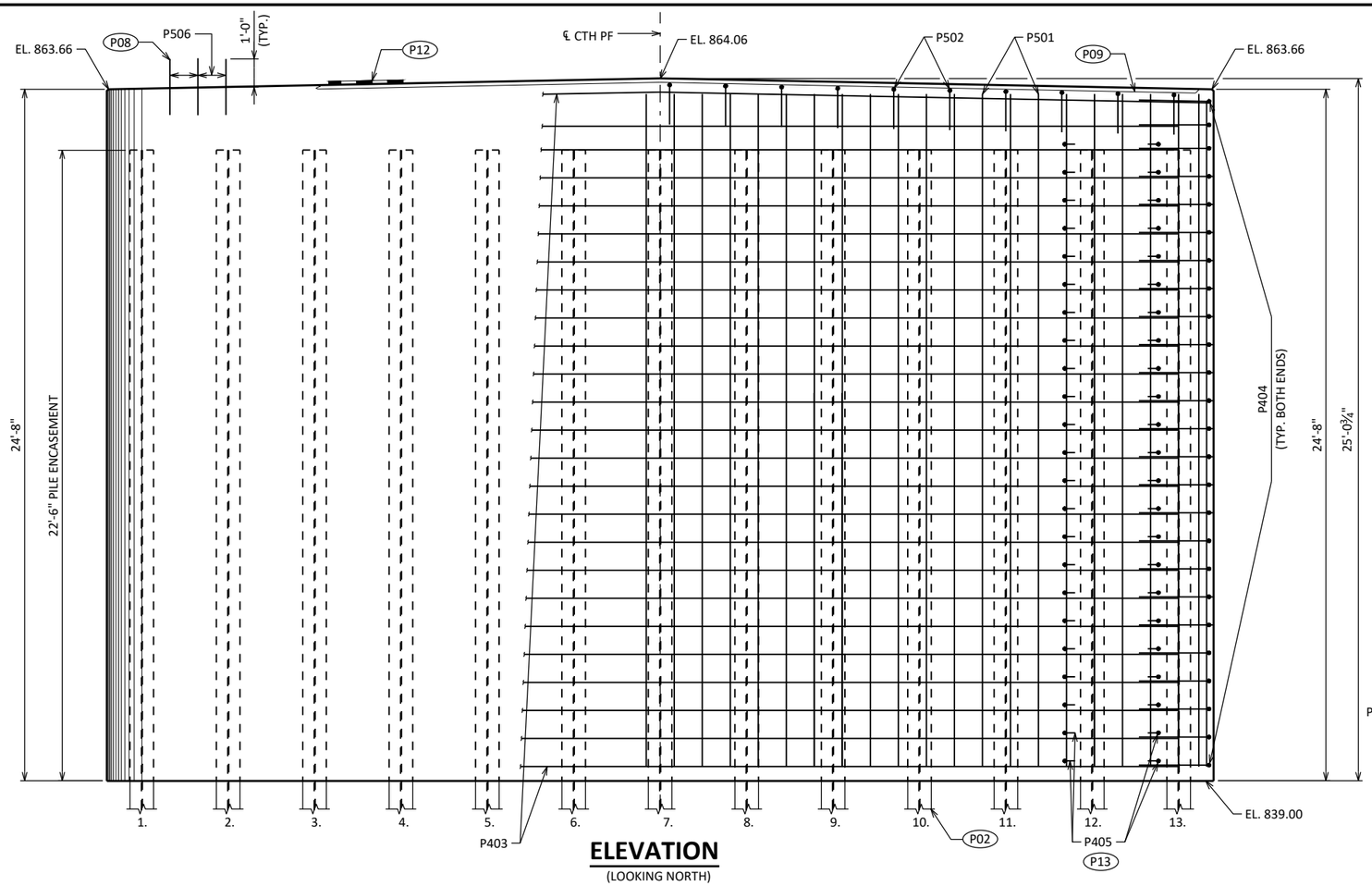
SHEET 7
76

8

8

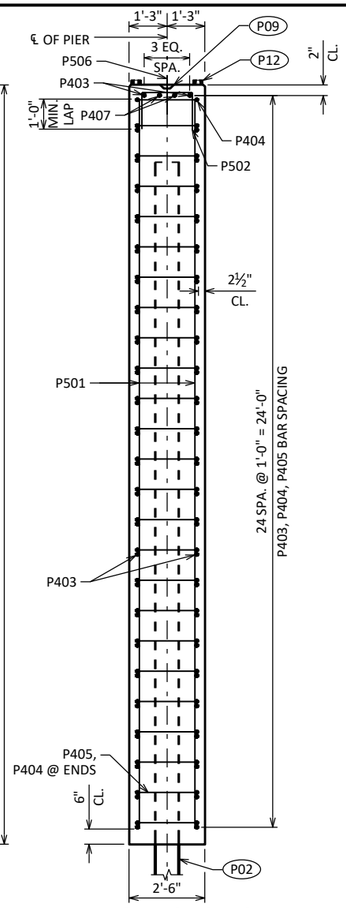
STATE PROJECT NUMBER

5659-00-74



ELEVATION

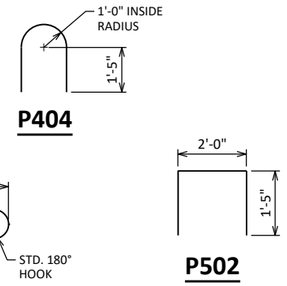
(LOOKING NORTH)

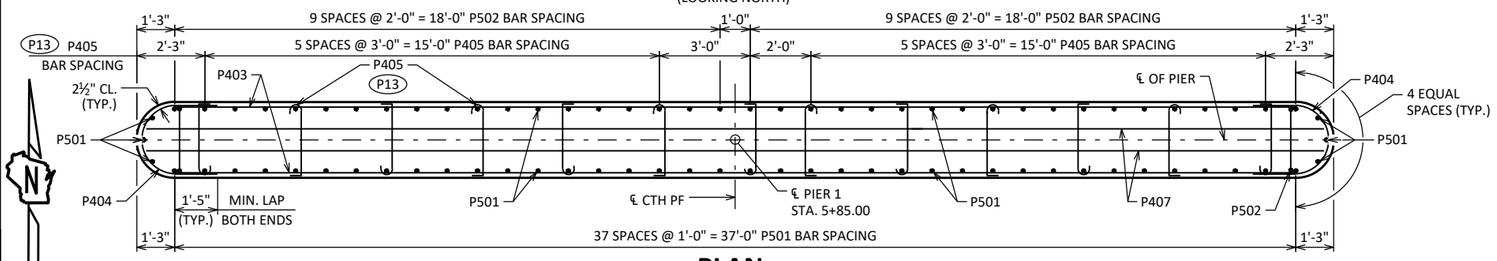


TYPICAL SECTION THRU PIER

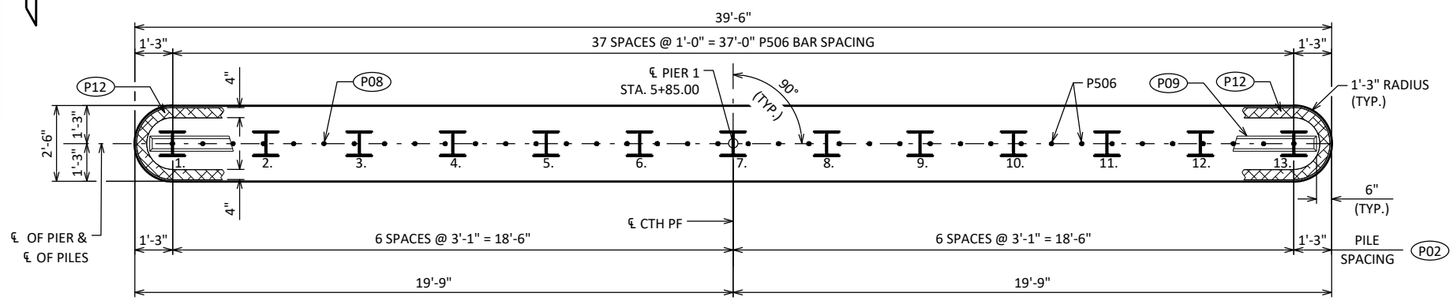
LEGEND

- (P02) SUPPORT PIER ON HP 10-INCH X 42 LB STEEL PILING SEATED IN PRE-BORED HOLES CORED 3 FEET MINIMUM INTO ROCK. PILE DRIVING IS NOT REQUIRED. ESTIMATED PILE LENGTHS ARE 35'-0".
- (P08) BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- (P09) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 X 6.
- (P12) 4" X ¾" FILLER, TYPICAL ALL AROUND TOP EDGES OF PIER.
- (P13) ADJACENT TO EACH PILE ONE SIDE ONLY. ALTERNATE THE POSITION OF 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.
- CL. CLEAR

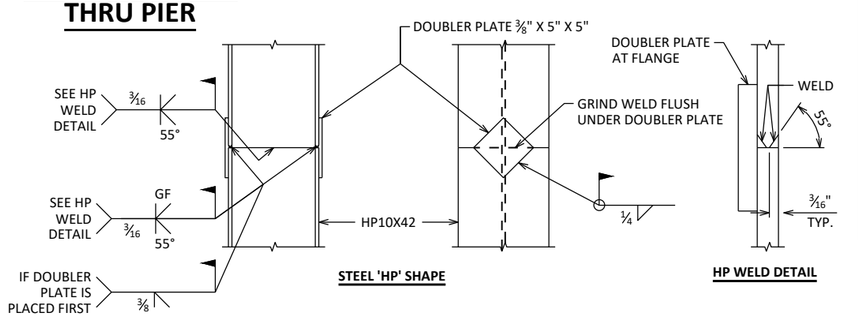




PLAN



PILE PLAN



'HP' PILE DETAILS

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	LOCATION
P501		82	24'-0"		PIER - VERT.
P502		20	4'-7"	X	PIER - STIRRUPS - TOP - VERT.
P403		50	37'-0"		PIER - SIDES - HORIZ.
P404		50	6'-1"	X	PIER - AT ENDS - HORIZ.
P405		299	2'-11"	X	PIER - TIES - HORIZ.
P506	X	38	2'-0"		PIER - DOWELS @ TOP - VERT.
P407		2	38'-10"		PIER - TOP - HORIZ.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-56-255

DRAWN BY EKK | PLANS CK'D JDH

PIER 1

SHEET 8
77

8

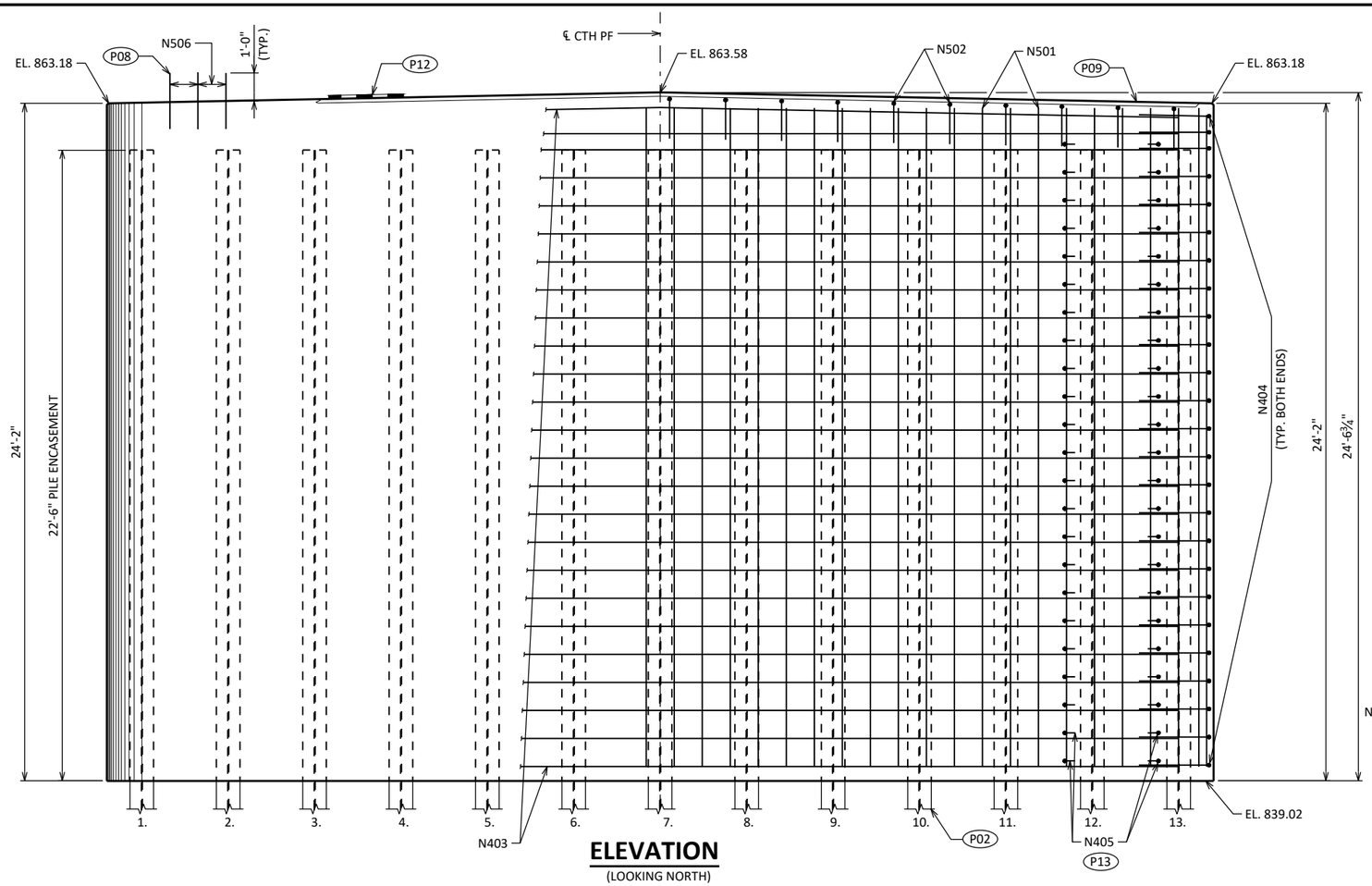
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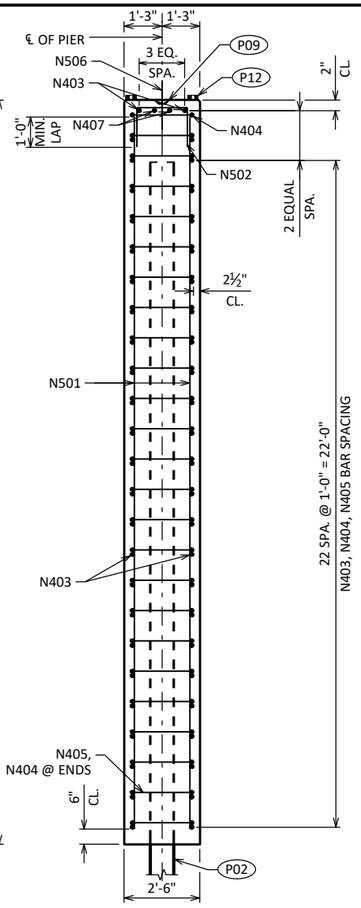
STATE PROJECT NUMBER

5659-00-74

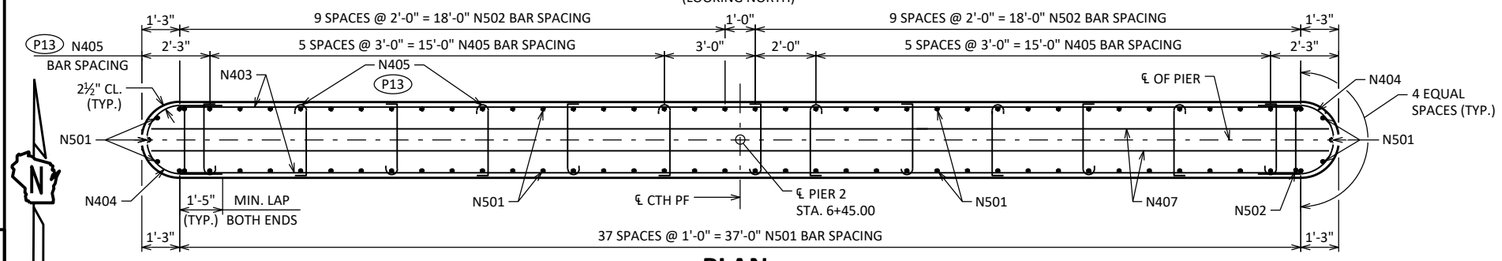


ELEVATION

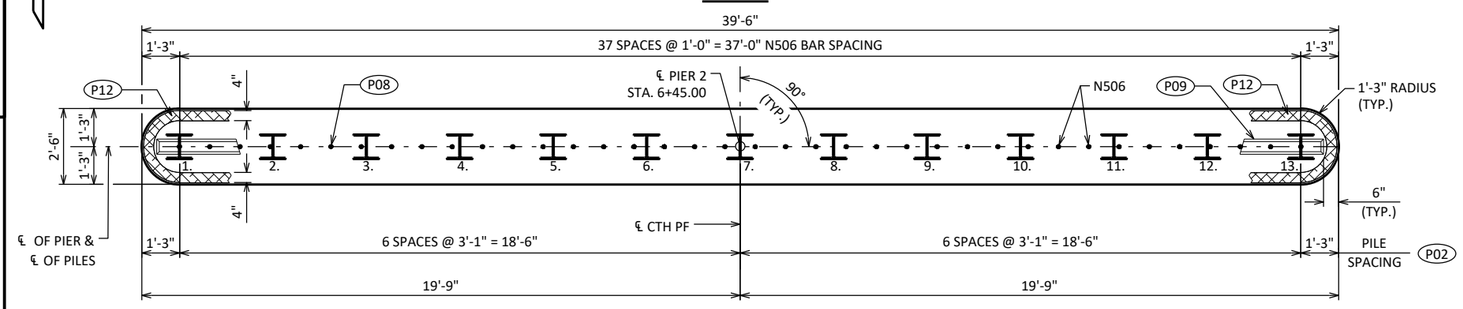
(LOOKING NORTH)



TYPICAL SECTION THRU PIER



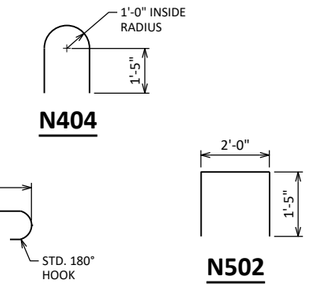
PLAN



PILE PLAN

LEGEND

- (P02) SUPPORT PIER ON HP 10-INCH X 42 LB STEEL PILING, ESTIMATED 55'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- (P08) BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- (P09) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 X 6.
- (P12) 4" X ¾" FILLER, TYPICAL ALL AROUND TOP EDGES OF PIER.
- (P13) ADJACENT TO EACH PILE ONE SIDE ONLY. ALTERNATE THE POSITION OF 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.
- CL. CLEAR



BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	LOCATION
N501		82	23'-6"		PIER - VERT.
N502		20	4'-7"	X	PIER - STIRRUPS - TOP - VERT.
N403		50	37'-0"		PIER - SIDES - HORIZ.
N404		50	6'-1"	X	PIER - AT ENDS - HORIZ.
N405		299	2'-11"	X	PIER - TIES - HORIZ.
N506	X	38	2'-0"		PIER - DOWELS @ TOP - VERT.
N407		2	38'-10"		PIER - TOP - HORIZ.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-56-255

DRAWN BY EKK | PLANS CK'D JDH

PIER 2

SHEET 9
78

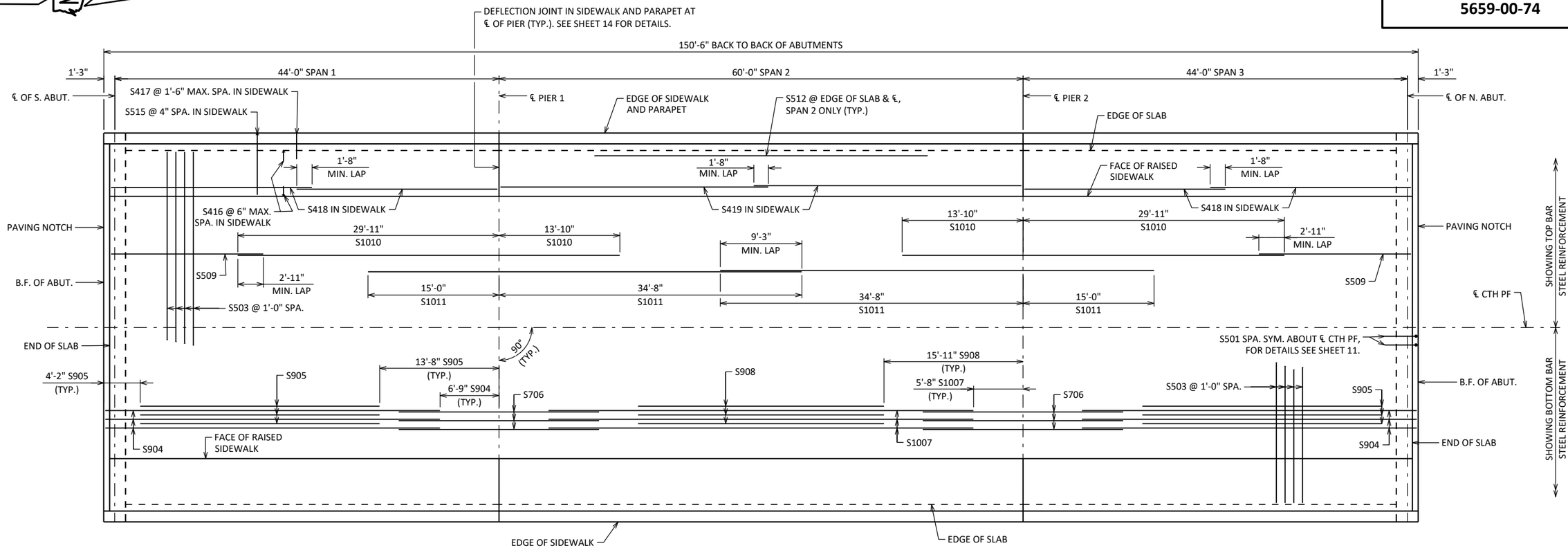
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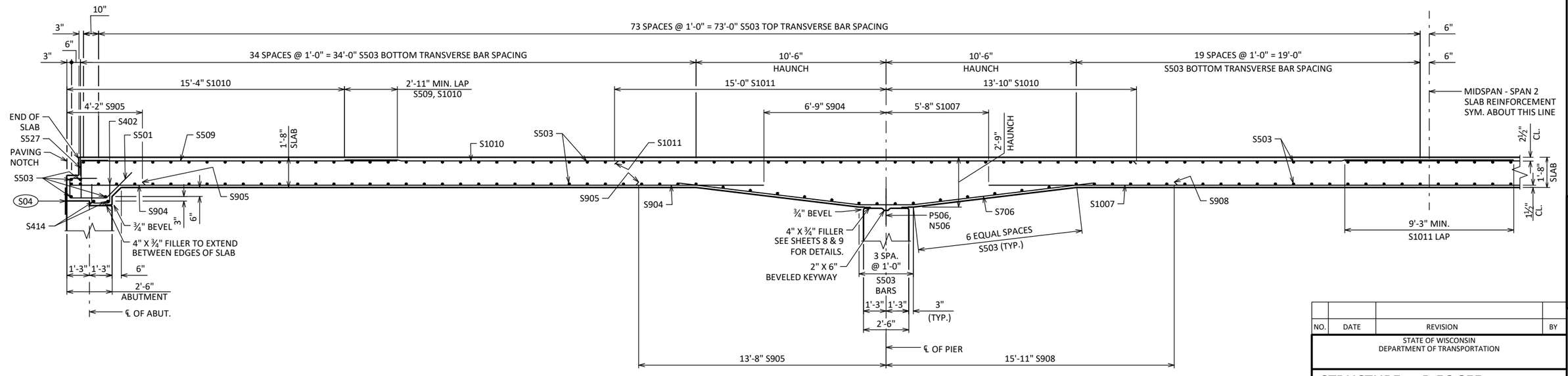
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STATE PROJECT NUMBER
5659-00-74



PLAN



PART LONGITUDINAL SECTION

LEGEND

(S04) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING.

NO.	DATE	REVISION	BY

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STRUCTURE B-56-255

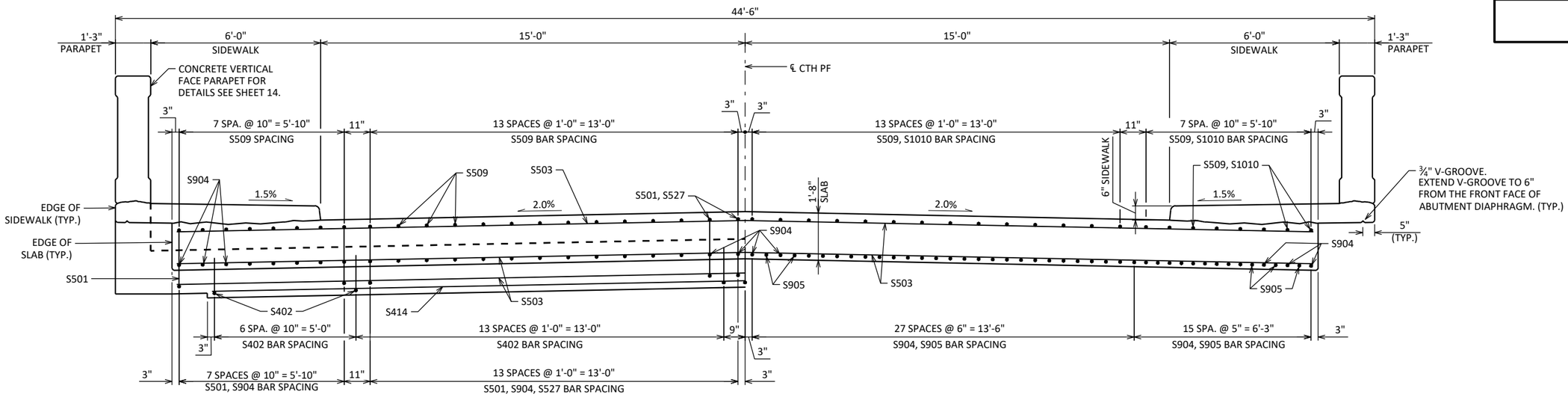
DRAWN BY EKK | PLANS CK'D JDH

SUPERSTRUCTURE

SHEET 10
79

STATE PROJECT NUMBER

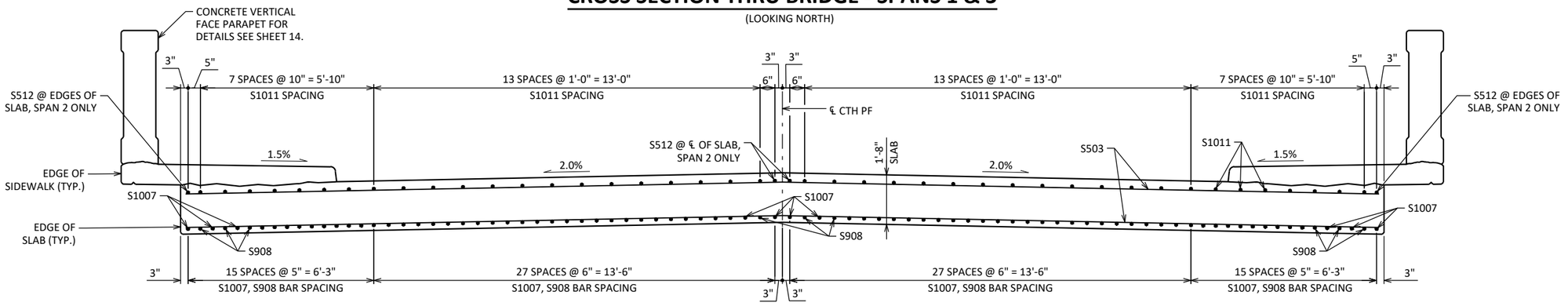
5659-00-74



AT ABUTMENTS **IN SPAN**

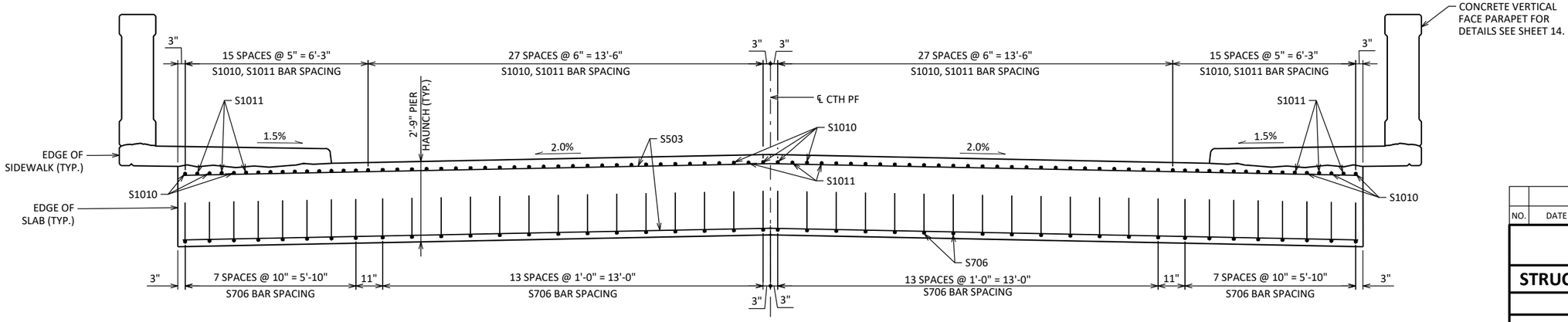
CROSS SECTION THRU BRIDGE - SPANS 1 & 3

(LOOKING NORTH)



CROSS SECTION THRU BRIDGE - SPAN 2

(LOOKING NORTH)



SECTION THRU BRIDGE AT PIERS

(LOOKING NORTH)

8

8

NO.	DATE	REVISION	BY

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STRUCTURE B-56-255

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SUPERSTRUCTURES SECTIONS

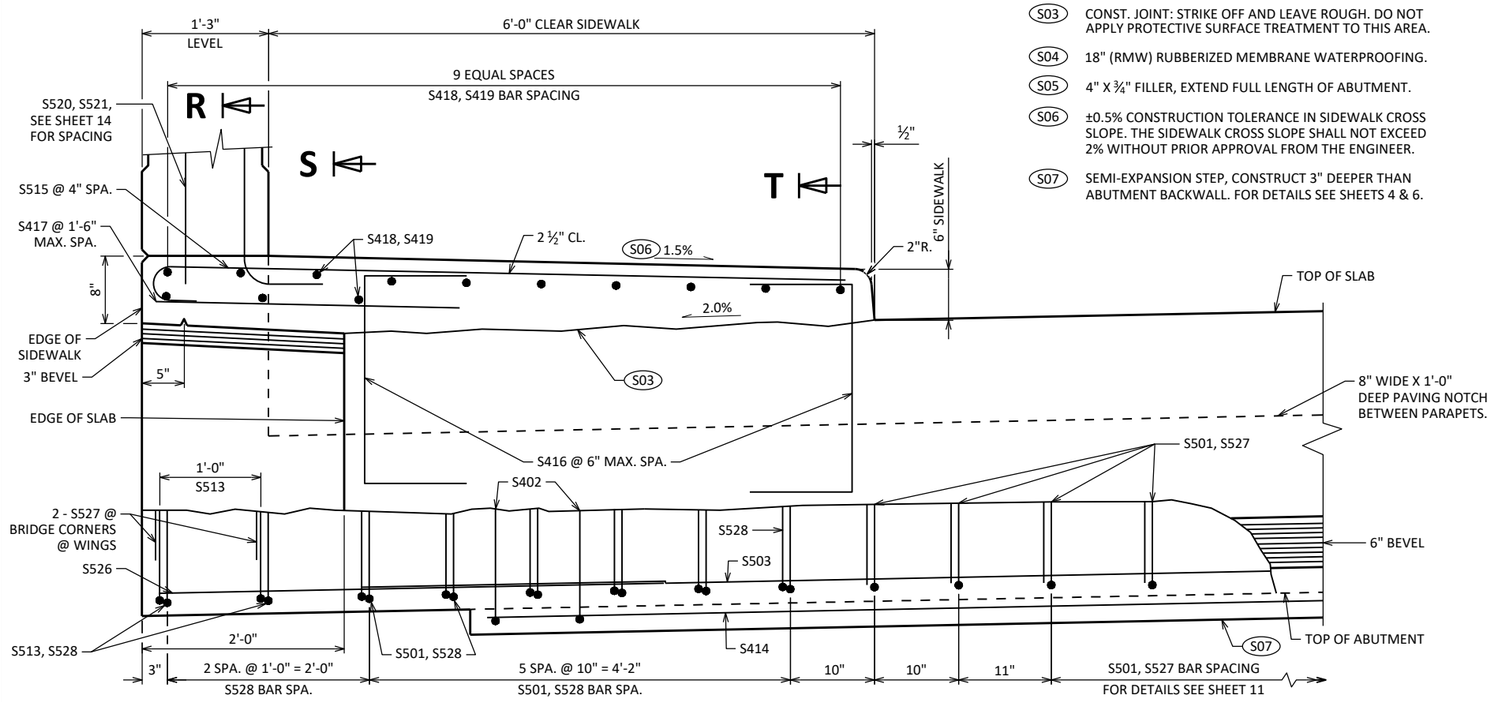
SHEET 11
80

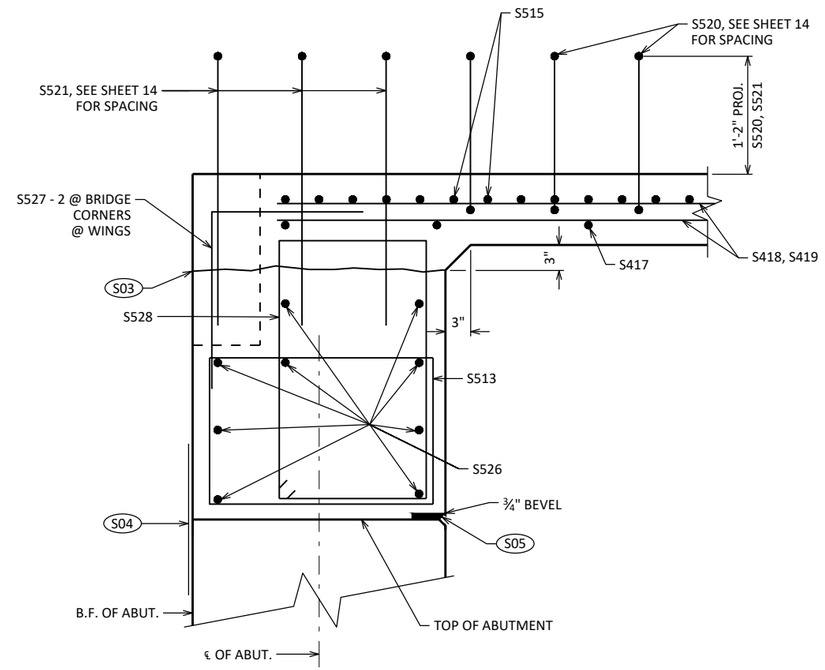
STATE PROJECT NUMBER

5659-00-74

LEGEND

- S03 CONST. JOINT: STRIKE OFF AND LEAVE ROUGH. DO NOT APPLY PROTECTIVE SURFACE TREATMENT TO THIS AREA.
- S04 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING.
- S05 4" X ¾" FILLER, EXTEND FULL LENGTH OF ABUTMENT.
- S06 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- S07 SEMI-EXPANSION STEP, CONSTRUCT 3" DEEPER THAN ABUTMENT BACKWALL. FOR DETAILS SEE SHEETS 4 & 6.

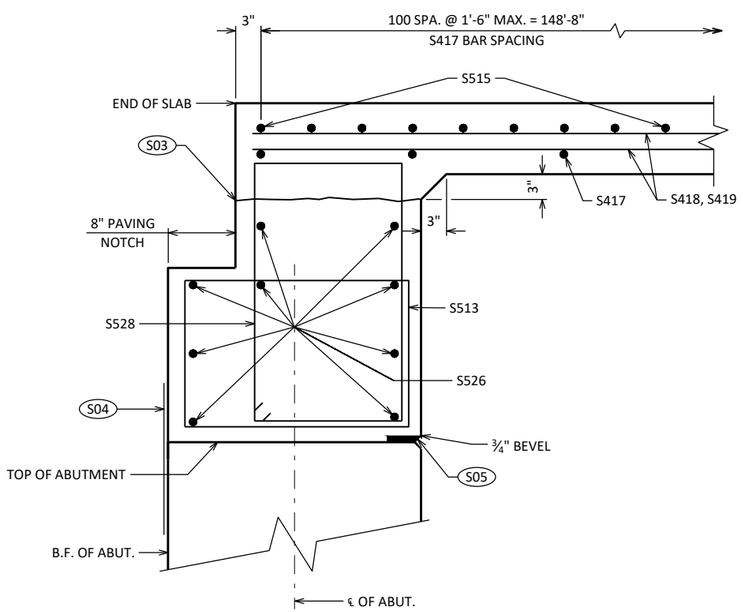




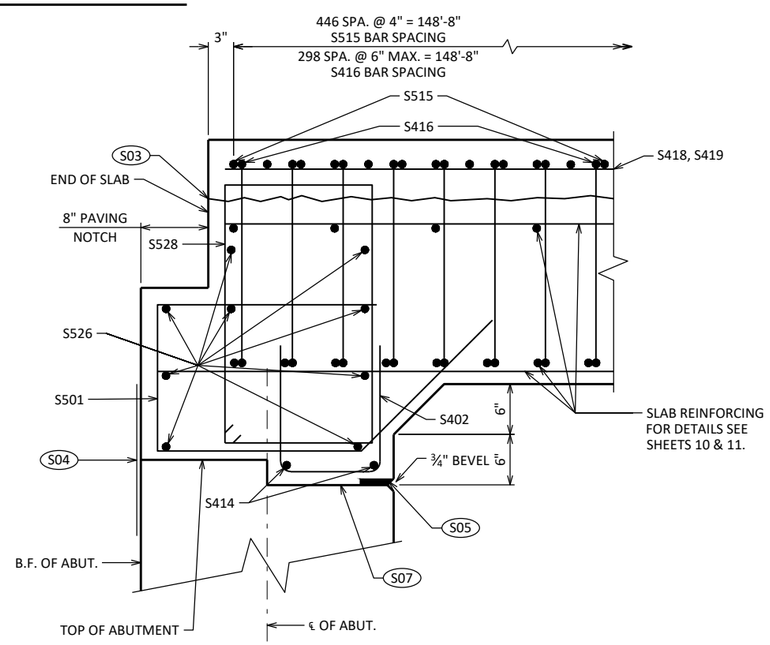
SECTION R-R THRU PARAPET ON SIDEWALK

R S T

SECTION THRU SIDEWALK AT ABUTMENT



SECTION S-S THRU SIDEWALK OVERHANG



SECTION T-T THRU SIDEWALK & SLAB

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-56-255

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SIDEWALK SECTIONS

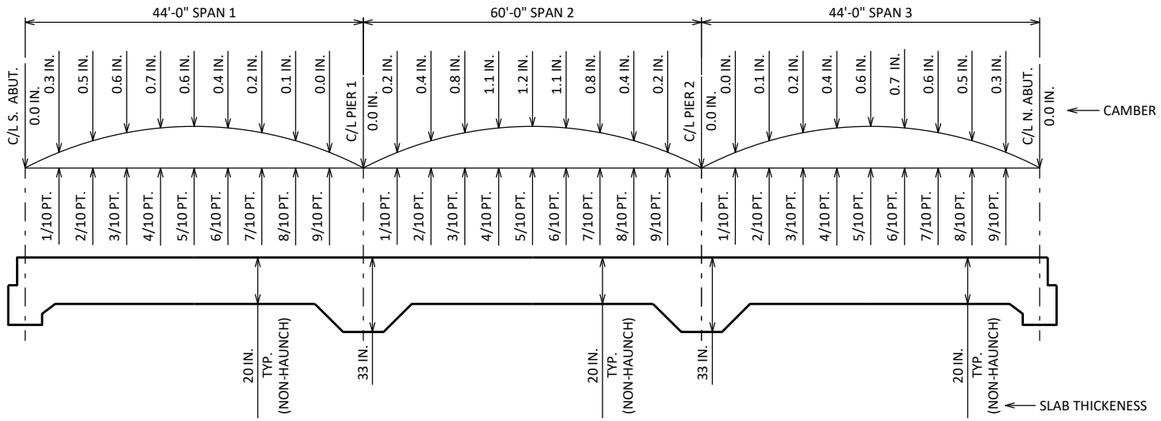
SHEET 12
81

8

8

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CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

PARAPETS AND SIDEWALKS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

	TOP OF SLAB ELEVATION AT FINAL GRADE
LESS	SLAB THICKNESS
PLUS	CAMBER
PLUS	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS	TOP OF SLAB FALSEWORK ELEVATION

TOP OF SLAB ELEVATIONS

SPAN	LOCATION	C/L BRG. S. ABUT.	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	C/L PIER 1
1	WEST EDGE OF SLAB	866.82	866.78	866.75	866.71	866.68	866.64	866.61	866.57	866.54	866.50	866.46
	C/L CTH PF	867.23	867.19	867.15	867.12	867.08	867.05	867.01	866.98	866.94	866.91	866.87
	EAST EDGE OF SLAB	866.82	866.78	866.75	866.71	866.68	866.64	866.61	866.57	866.54	866.50	866.46

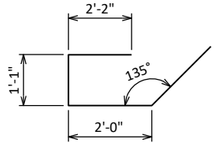
SPAN	LOCATION	C/L PIER 1	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	C/L PIER 2
2	WEST EDGE OF SLAB	866.46	866.42	866.37	866.32	866.27	866.22	866.18	866.13	866.08	866.03	865.98
	C/L CTH PF	866.87	866.82	866.77	866.73	866.68	866.63	866.58	866.53	866.48	866.44	866.39
	EAST EDGE OF SLAB	866.46	866.42	866.37	866.32	866.27	866.22	866.18	866.13	866.08	866.03	865.98

SPAN	LOCATION	C/L PIER 2	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	C/L BRG. N. ABUT.
3	WEST EDGE OF SLAB	865.98	865.95	865.91	865.88	865.84	865.81	865.77	865.74	865.70	865.66	865.63
	C/L CTH PF	866.39	866.35	866.32	866.28	866.25	866.21	866.18	866.14	866.10	866.07	866.04
	EAST EDGE OF SLAB	865.98	865.95	865.91	865.88	865.84	865.81	865.77	865.74	865.70	865.66	865.63

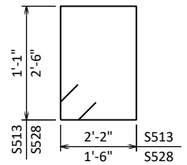
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

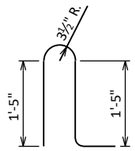
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S501	X	88	6'-10"	X		DIAPHRAGM @ ABUTS. - VERT.
S402	X	82	3'-3"	X		DIAPHRAGM @ ABUTS. - S.E. POCKET - VERT.
S503	X	298	40'-2"			SLAB - TOP & BOTTOM - TRANS.
S904	X	88	38'-4"			SLAB - BOTTOM - SPANS 1 & 3 - LONGIT.
S905	X	84	27'-5"			SLAB - BOTTOM - SPANS 1 & 3 - LONGIT.
S706	X	88	23'-2"	X		SLAB - BOTTOM @ PIER HAUNCH - LONGIT.
S1007	X	44	48'-8"			SLAB - BOTTOM - SPAN 2 - LONGIT.
S908	X	42	28'-2"			SLAB - BOTTOM - SPAN 2 - LONGIT.
S509	X	88	17'-5"			SLAB - TOP - @ ABUTS. & SPAN 1 - LONGIT.
S1010	X	88	43'-9"			SLAB - TOP - OVER PIERS - LONGIT.
S1011	X	84	49'-8"			SLAB - TOP - OVER PIERS - LONGIT.
S512	X	4	38'-2"			SLAB - TOP - SPAN 2 @ EDGE OF SLAB & C/L - LONGIT.
S513	X	8	7'-2"	X		DIAPHRAGM @ ABUT. ENDS. - VERT.
S414	X	4	37'-8"			DIAPHRAGM @ ABUTS. - S.E. POCKET - TRANS.
S515	X	894	7'-5"	X		SIDEWALK - TOP - TRANS.
S416	X	1196	3'-6"	X		SLAB & INTO SIDEWALK - VERT.
S417	X	202	3'-0"			SIDEWALK - BOTTOM - TRANS.
S418	X	104	23'-0"			SIDEWALK - SPANS 1 & 3 - LONGIT.
S419	X	52	30'-8"			SIDEWALK - SPAN 2 - LONGIT.
S520	X	354	4'-8"	X		PARAPET STIRRUP ON SLAB - VERT.
S521	X	12	5'-11"	X		PARAPET STIRRUP OVER ABUT. DIAPHRAGM - VERT.
S522	X	454	8'-8"	X		PARAPET STIRRUP - TOP - VERT.
S523	X	40	13'-7"			PARAPET - ON WINGS - LONGIT.
S524	X	40	44'-11"			PARAPET - SPANS 1 & 3 - LONGIT.
S525	X	20	59'-8"			PARAPET - SPAN 2 - LONGIT.
S526	X	36	5'-0"			DIAPHRAGM @ ABUTS. - TRANS.
S527	X	72	3'-5"	X		DIAPHRAGM @ ABUTS. - VERT.
S528	X	32	8'-8"	X		DIAPHRAGM @ ABUT. ENDS - VERT.



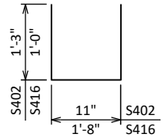
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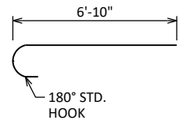
S513, S528



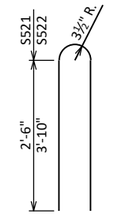
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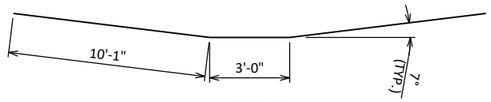
S402, S416



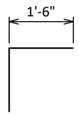
S515



S521, S522



S706



S527

SURVEY TOP OF SLAB ELEVATIONS

LOCATION	SOUTH ABUTMENT	5/10 PT.	PIER 1	5/10 PT.	PIER 2	5/10 PT.	NORTH ABUTMENT
WEST EDGE OF SLAB							
C/L CTH PF							
EAST EDGE OF SLAB							

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS, THE C/L OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG SLAB EDGES AND CROWN OR C/L. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-56-255

DRAWN BY EKK | PLANS CK'D JDH

SUPERSTRUCTURE DETAILS

SHEET 13
82

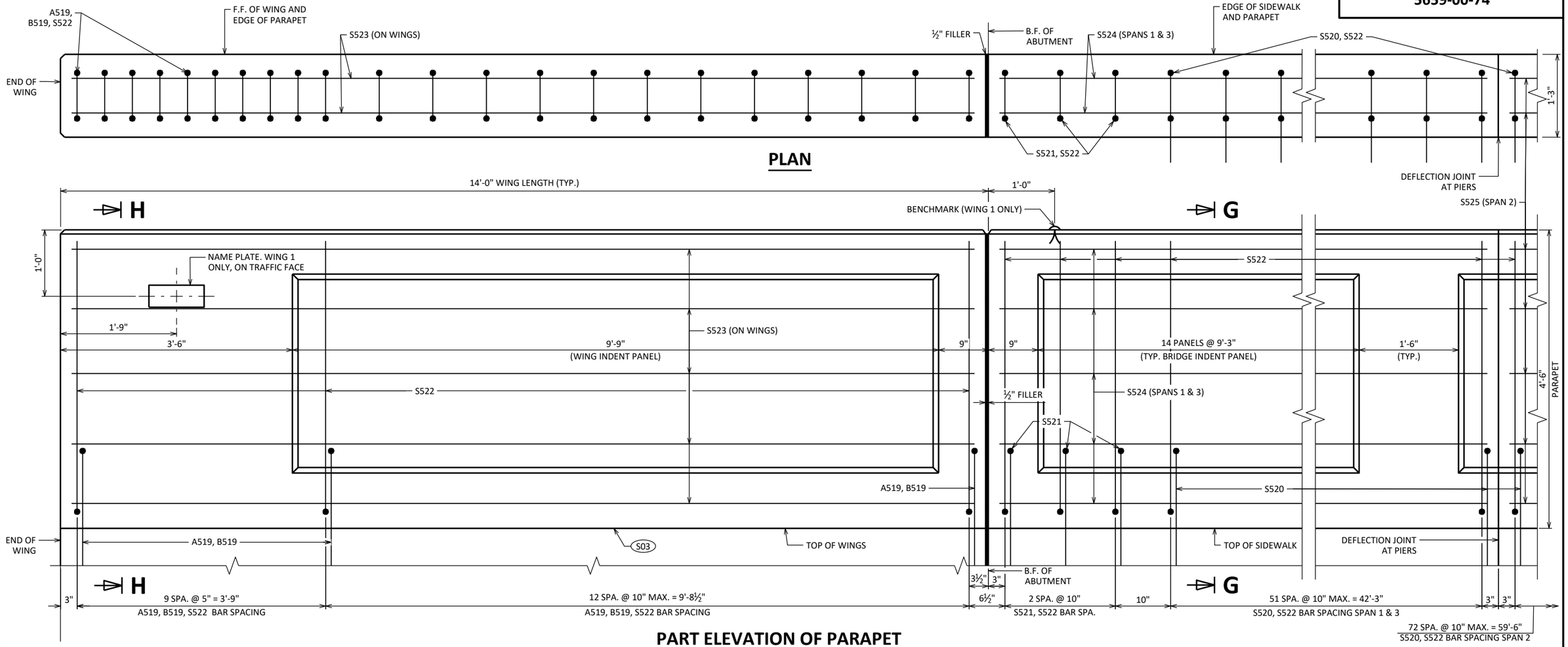
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STATE PROJECT NUMBER

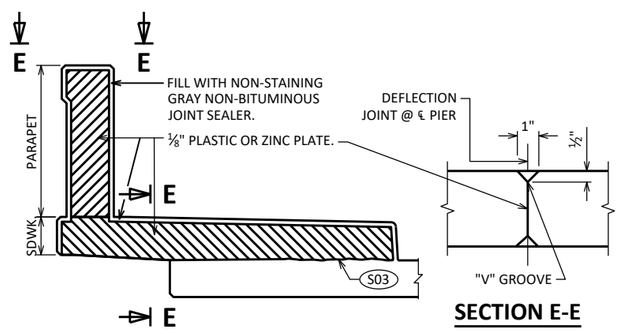
5659-00-74



PLAN

PART ELEVATION OF PARAPET

(TYPICAL FOR BOTH TRAFFIC FACE AND EXTERIOR FACE)

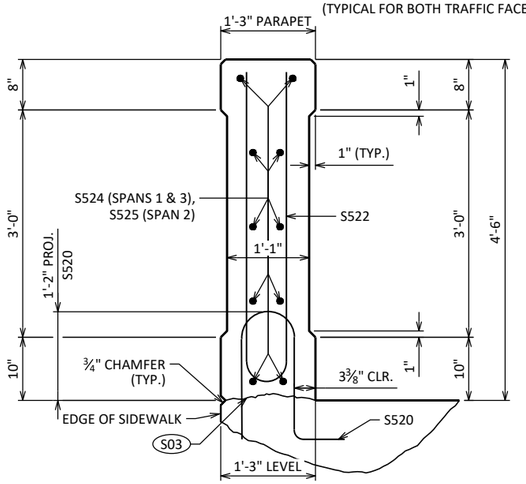


SECTION E-E

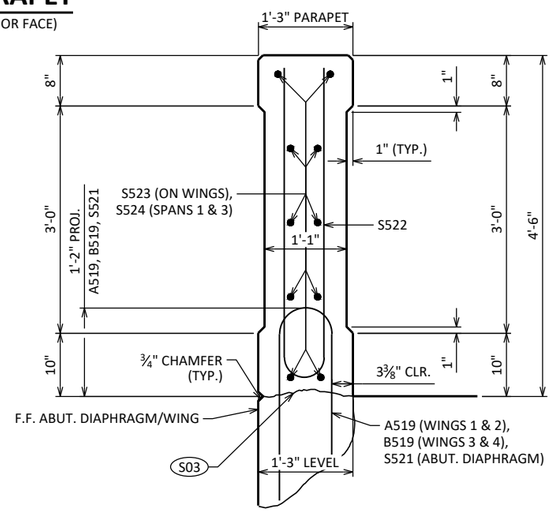
SECTION THRU DEFLECTION JOINT

(SHOWING DEFLECTION JOINT IN PARAPET AND SIDEWALK.)

WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF ⅛" ZINC OR PLASTIC PLATE CUT AS SHOWN IN THE "SECTION THRU DEFLECTION JOINT" BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.



SECTION G-G THRU PARAPET ON BRIDGE



SECTION H-H THRU PARAPET AT DIAPHRAGM AND WINGS

LEGEND

S03 CONST. JOINT: STRIKE OFF AND LEAVE ROUGH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-56-255

DRAWN BY EKK | PLANS CK'D JDH

PARAPET DETAILS

SHEET 14
83

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8

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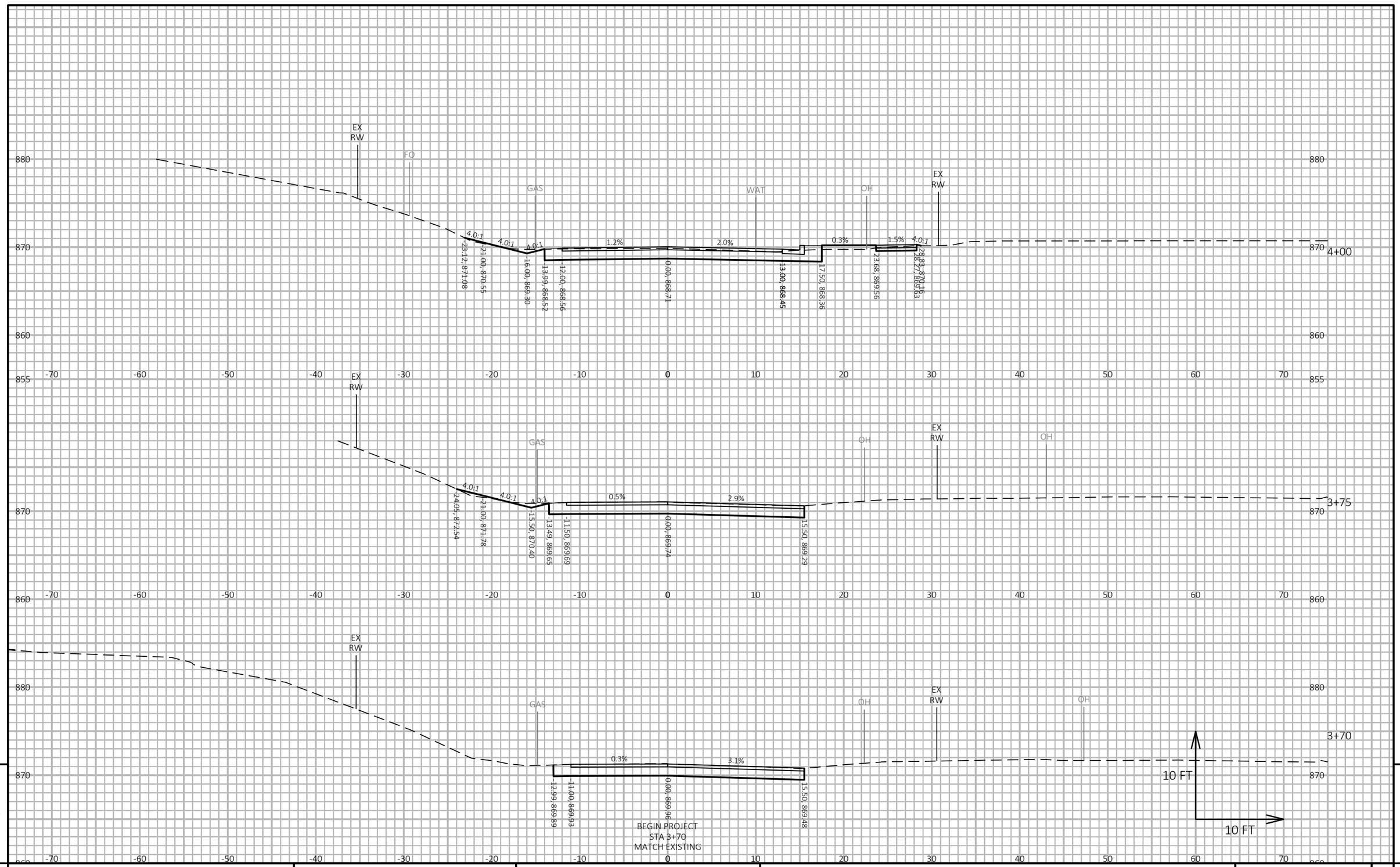
DIVISION 1 - CTH PF - CATEGORY 0010

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
3+70.00	0.00	39.75	8.19	0.00	0	0	0	0	0	0
3+75.00	5.00	44.52	9.66	0.82	8	2	0	8	0	6
4+00.00	25.00	42.26	10.14	2.89	40	9	2	48	3	35
4+25.00	25.00	37.29	8.85	7.17	37	9	5	85	9	56
4+50.00	25.00	23.99	7.54	13.69	28	8	10	113	21	64
4+75.00	25.00	28.62	8.00	17.61	24	7	14	137	39	63
4+85.00	10.00	16.16	6.35	17.02	8	3	6	145	46	61
4+95.00	10.00	19.64	8.99	34.20	7	3	9	152	58	54
5+03.64	8.64	18.10	8.49	47.88	6	3	13	158	74	40
5+15.00	11.36	16.74	9.04	42.60	7	4	19	165	98	20
5+25.90	10.90	9.04	7.83	63.29	5	3	21	170	124	-5
7+04.25	178.35	57.09	14.91	12.59				170	124	-5
7+15.00	10.75	61.92	15.84	2.33	24	6	3	194	128	10
7+19.30	4.30	71.72	16.90	1.14	11	3	0	205	128	18
7+25.00	5.70	70.50	17.87	2.64	15	4	0	220	128	29
7+31.30	6.30	66.42	18.19	3.96	16	4	1	236	129	39
7+35.00	3.70	62.30	18.63	4.16	9	3	1	245	130	44
7+50.00	15.00	60.74	18.09	3.45	34	10	2	279	133	66
7+75.00	25.00	65.28	16.73	2.64	58	16	3	337	136	104

DIVISION 1 - CTH PF - CATEGORY 0030

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
7+75.00	0.00	2.35	0.00	2.52	0	0	0	0	0	0
7+80.00	5.00	2.18	0.00	1.66	0	0	0	0	0	0
8+00.00	20.00	1.33	0.00	1.93	1	0	1	1	1	0
8+11.39	11.39	17.37	2.03	0.10	4	0	0	5	1	4
8+15.39	4.00	15.82	2.05	0.13	2	0	0	7	1	6
8+19.39	4.00	15.74	2.07	0.29	2	0	0	9	1	8
8+25.00	5.61	11.35	2.07	2.90	3	0	0	12	1	11
8+50.00	25.00	0.17	0.00	8.99	5	1	6	17	9	7
8+65.00	15.00	1.23	0.00	5.43	0	0	4	17	14	2
8+74.27	9.27	3.28	0.00	0.75	1	0	1	18	15	2

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	[CUT - SALVAGED PAVT - (FILL * FILL FACTOR)]



9

9

PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	CROSS SECTIONS: CTH PF	SHEET 85	E

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LAYOUT NAME - 090201-xs

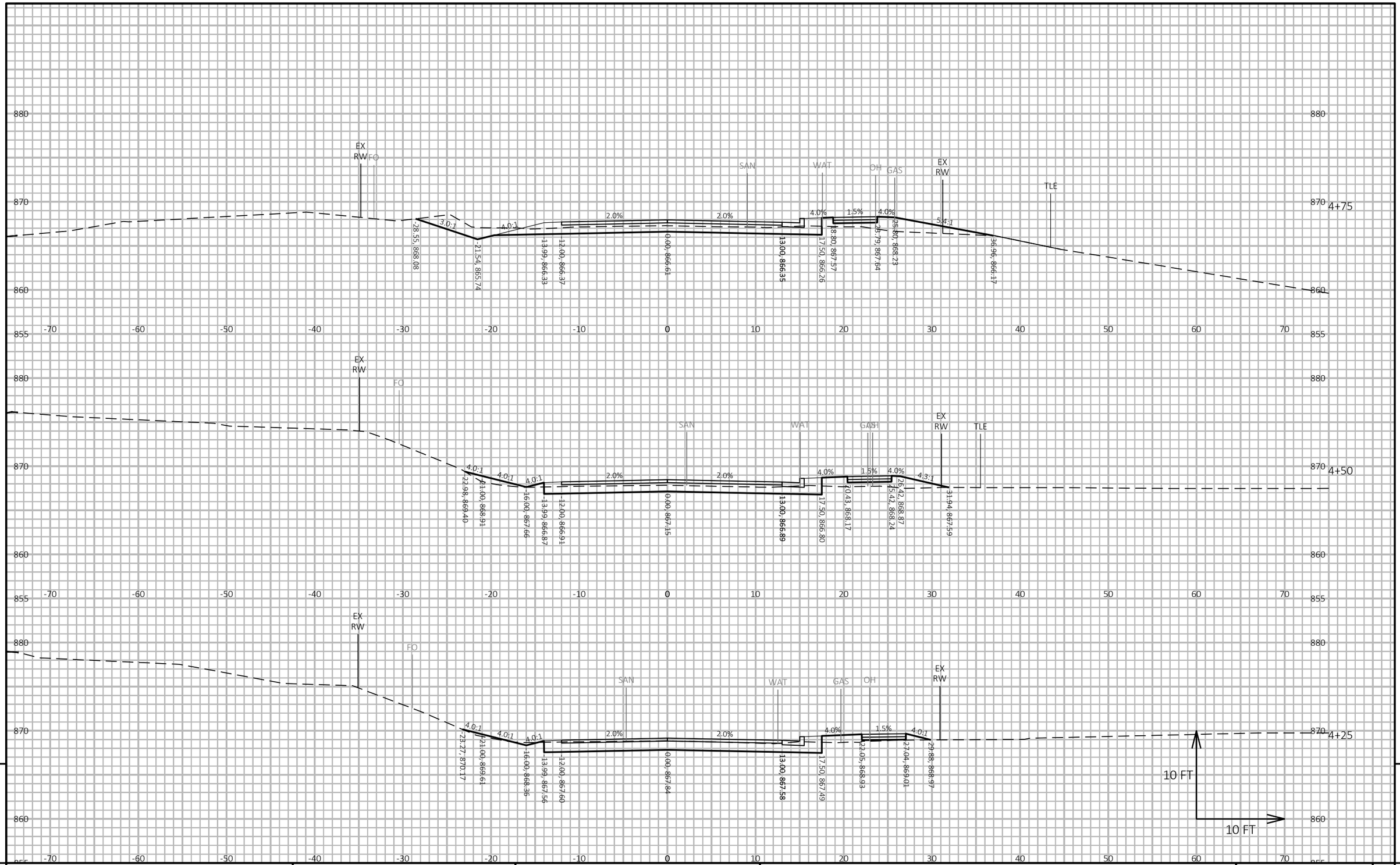
PLOT DATE : 6/29/2026 4:43 PM

PLOT BY : CONNOR GIRTEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	CROSS SECTIONS: CTH PF	SHEET 86	E

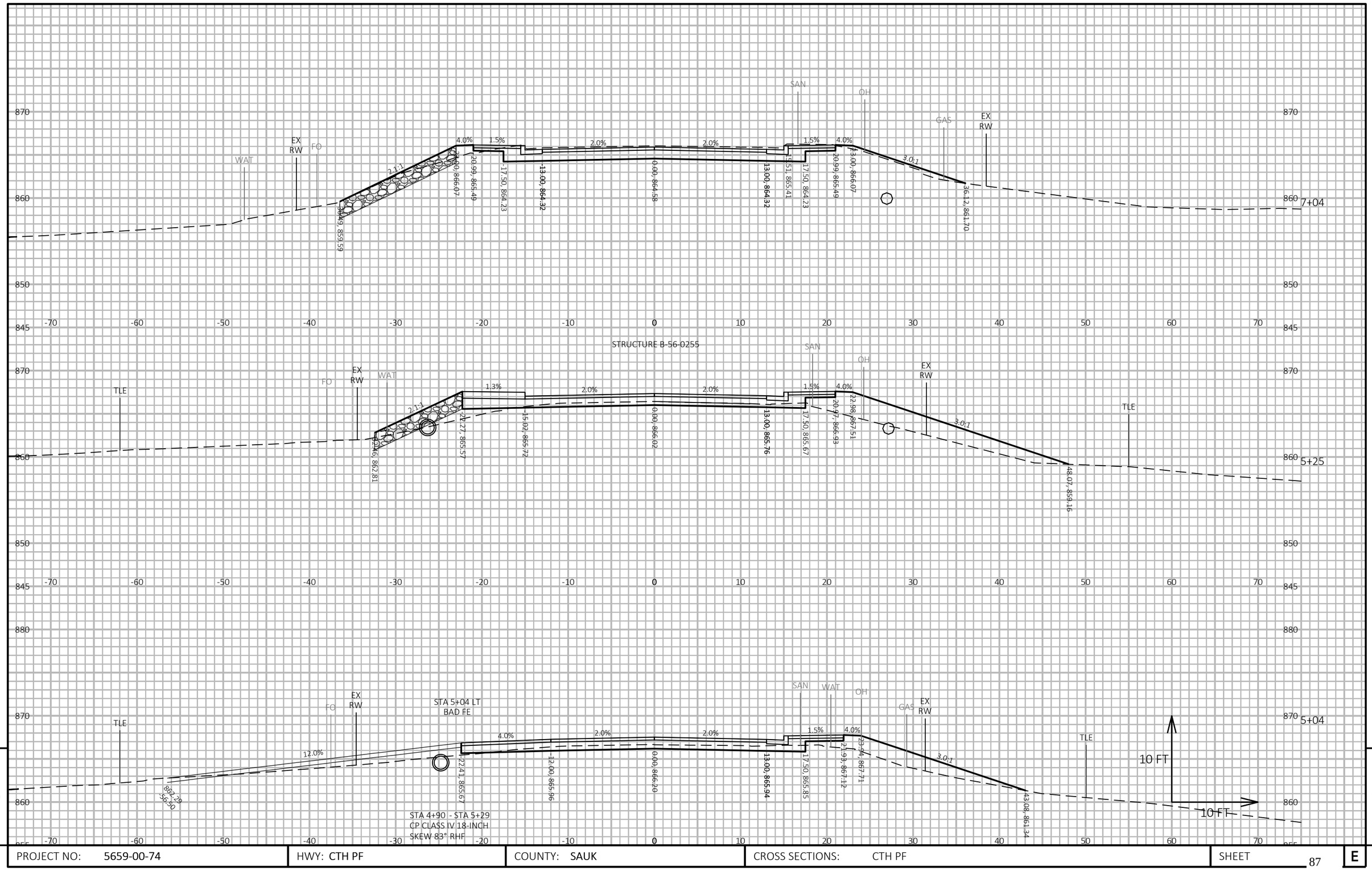
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LAYOUT NAME - 090202-xs

PLOT DATE : 6/29/2026 4:43 PM

PLOT BY : CONNOR GIRTEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	CROSS SECTIONS: CTH PF	SHEET 87 E

FILE NAME : G:\03\03060\03060035\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090203-xs

PLOT DATE : 6/29/2026 4:43 PM

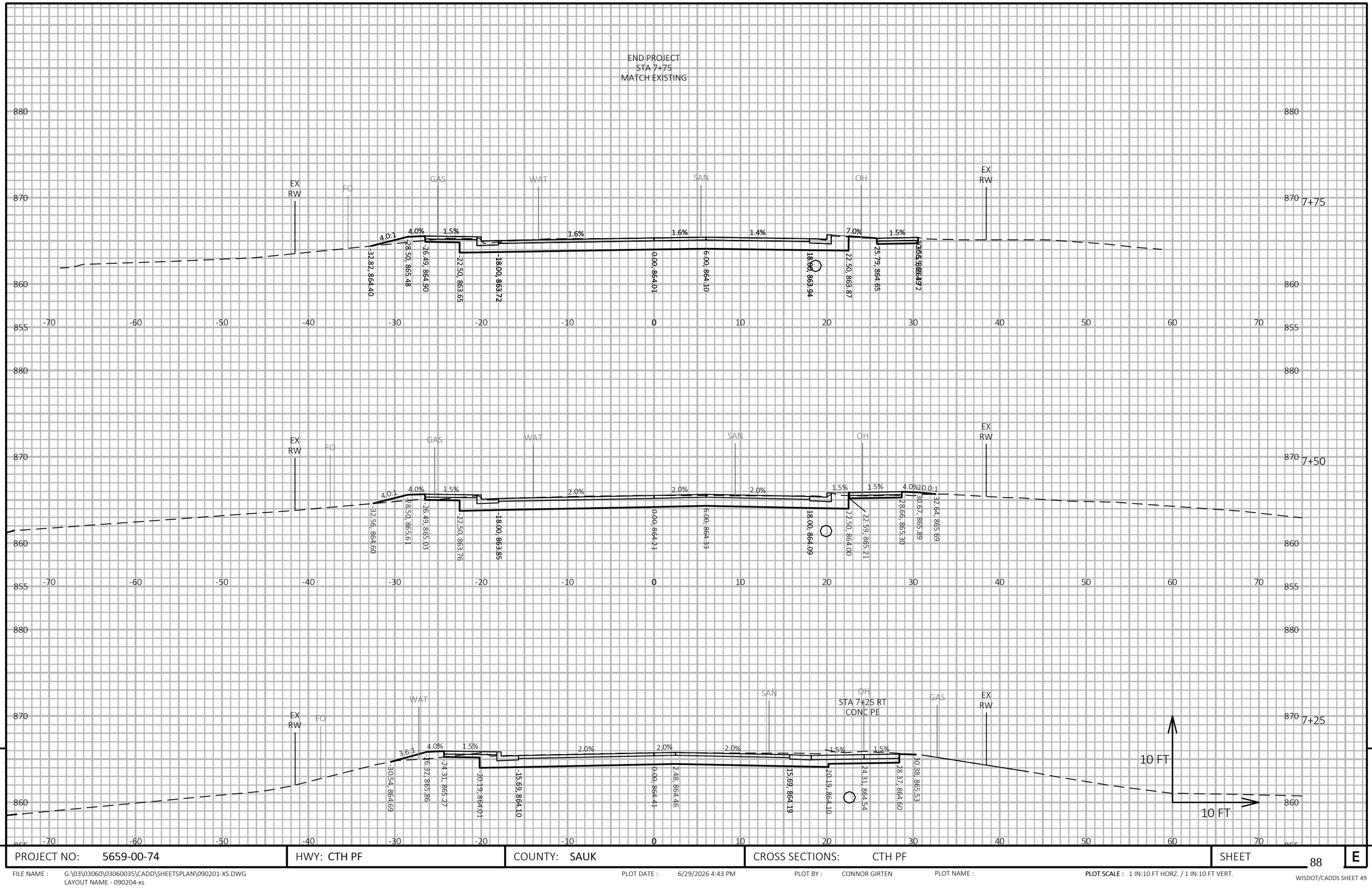
PLOT BY : CONNOR GIRTEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END PROJECT
STA 7+75
MATCH EXISTING



PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	CROSS SECTIONS: CTH PF	SHEET 88	E

FILE NAME : G:\03\03060\03060035\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090204-xs

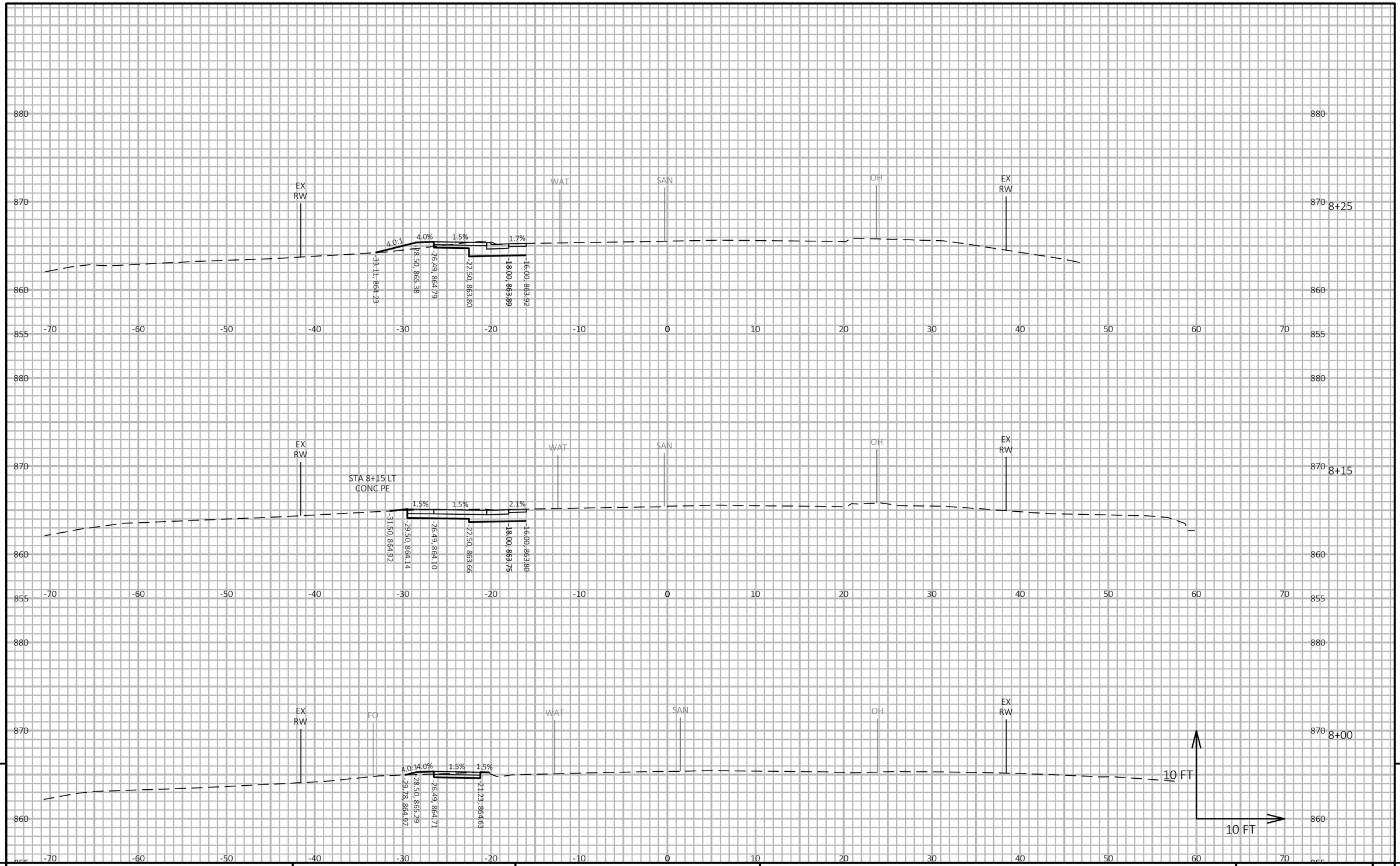
PLOT DATE : 6/29/2026 4:43 PM

PLOT BY : CONNOR GIRTEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	CROSS SECTIONS: CTH PF	SHEET 89	E

FILE NAME : G:\03\03060\03060035\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090205-xs

PLOT DATE : 6/29/2026 4:43 PM

PLOT BY : CONNOR GIRTEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

END CONSTRUCTION
STA 8+74
MATCH EXISTING

880

EX RW

WAT

SAN

OH

EX RW

880

870

8+74

1.7%

6.0%

25.83, 865.23

860

855

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

880

EX RW

WAT

SAN

OH

EX RW

870

8+50

3.0:1

4.0%

0.2%

1.5%

39.16, 863.80

31.82, 865.91

30.81, 865.33

25.19, 865.32

10 FT

10 FT

860

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

9

9

PROJECT NO: 5659-00-74	HWY: CTH PF	COUNTY: SAUK	CROSS SECTIONS: CTH PF	SHEET 90	E

FILE NAME : G:\03\03060\03060035\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090206-xs

PLOT DATE : 6/29/2026 4:43 PM

PLOT BY : CONNOR GIRTEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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