

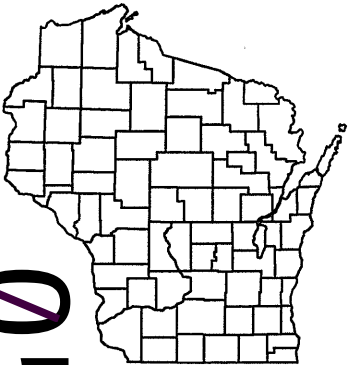
7387-0-72

COUNTY:

JUNEAU

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

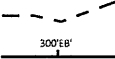
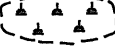
TOTAL SHEETS = 48



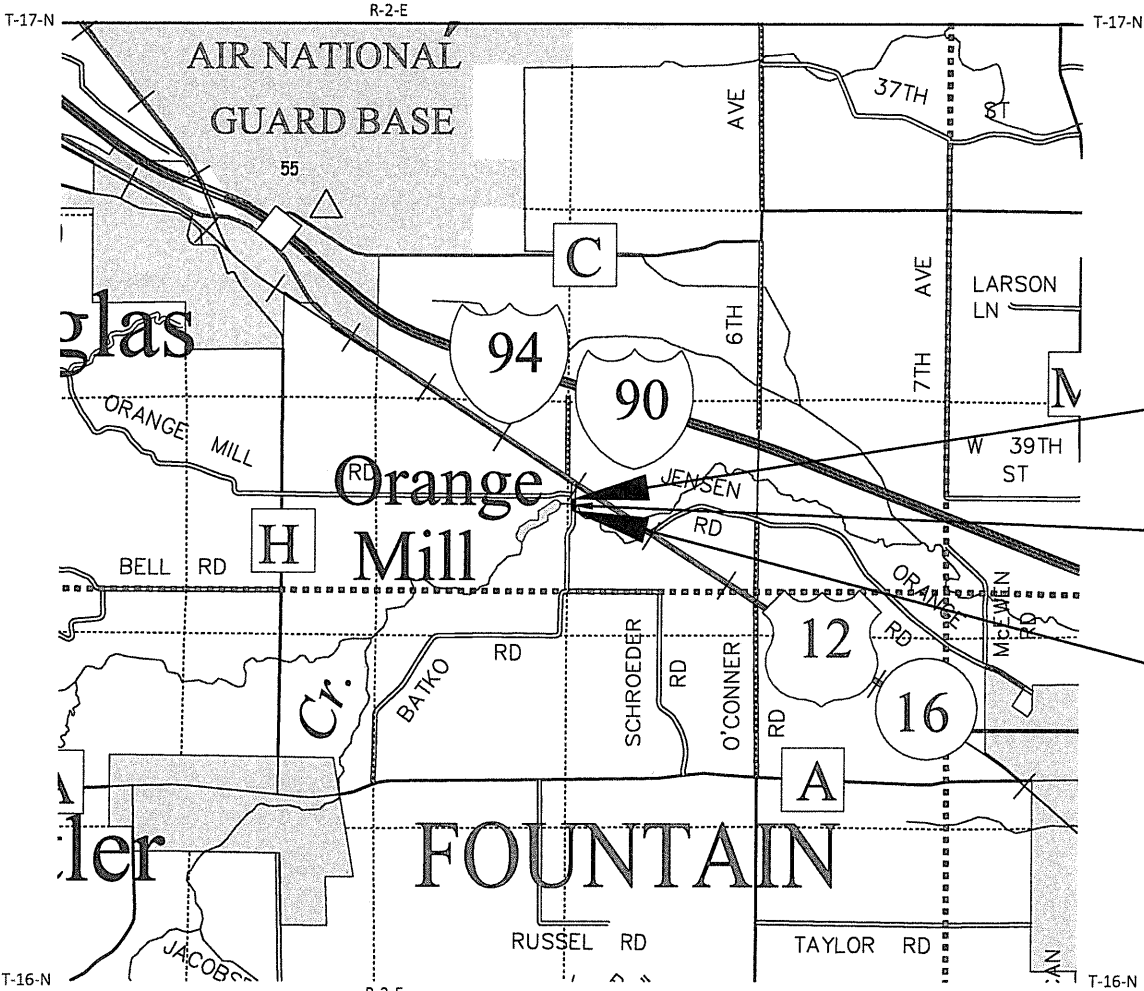
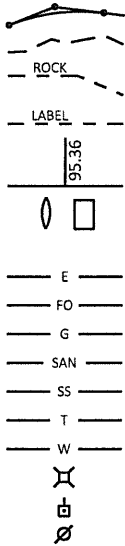
DESIGN DESIGNATION 7387-00-02

A.A.D.T.	2027	=	100
A.A.D.T.	2047	=	110
D.H.V.		=	N/A
D.D.		=	50/50
T.		=	12.9%
DESIGN SPEED		=	55 MPH
ESALS		=	15,000

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	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

PROFILE
GRADE LINE
ORIGINAL GROUND
MARSH OR ROCK PROFILE
(To be noted as such)
SPECIAL DITCH
GRADE ELEVATION
CULVERT (Profile View)
UTILITIES
ELECTRIC
FIBER OPTIC
GAS
SANITARY SEWER
STORM SEWER
TELEPHONE
WATER
UTILITY PEDESTAL
POWER POLE
TELEPHONE POLE



LAYOUT
 SCALE 0 1 MI
 TOTAL NET LENGTH OF CENTERLINE = 0.034 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN
COORDINATE REFERENCE SYSTEM (WISCRS), JUNEAU 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-WI.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7387-00-72	WISC 2026418	1

ACCEPTED FOR

TOWN OF ORANGE

Date May 12, 2014 Mark Leber
(Signature and Title of Official)

ORIGINAL PLANS PREPARED BY

CORRE

ENGINEERING

MADISON | EAU CLAIRE | WAUKESHA | APPLETON | TOMAH | WAUSAU



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CORRE, INC.
Designer	CORRE, INC.
Project Manager	DELLA KOENIG, P.E.
Regional Examiner	SW REGION
Regional Supervisor	KYLE HEMP, P.E.

APPROVED FOR THE DEPARTMENT

DATE: _____ (Signature)

E

UTILITIES CONTACTS

ALLIANT ENERGY
ELECTRIC
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528 INDUSTRIAL AVENUE
TOMAH, WI 54660
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EMAIL: PETERFRITZ@ALLIANTENERGY.COM

LEMONWEIR VALLEY TELEPHONE CO.
COMMUNICATION
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127 US HIGHWAY 12, PO BOX 267
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ATC MANAGEMENT, INC.
ELECTRICITY-TRANSMISSION
BRYAN SCHILLING
W234N2000 RIDGEVIEW PARKWAY CT
WAUKESHA, WI 53188
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EMAIL: BSCHILLING@ATCLLC.COM

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
TYPICAL SECTIONS
EROSION CONTROL

WISCONSIN DNR LIAISON

KAREN KALVELAGE
CENTRAL REGION
3550 MORMOM COULEE ROAD
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PHONE: (608) 785-9115
EMAIL: KAREN.KALVELAGE@WISCONSIN.GOV

TOWN OF ORANGE CONTACT

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TOWN CHAIRMAN
N8024 KEICHINGER ROAD
CAMP DOUGLAS, WI 54618
PHONE: (608) 547-3507
EMAIL: CHAIR@TOWNORANGE.COM

WISDOT PROJECT MANAGER

DELLA KOENIG, P.E.
SOUTH WEST REGION
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MADISON, WI 53704-2583
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DESIGN CONSULTANT

CORRE, INC.
ERIC PRICE, P.E.
6510 GRAND TETON PLAZA, SUITE 314
MADISON, WI 53719
PHONE: (608) 826-6146
EMAIL: EPRICE@CORREINC.COM

GENERAL NOTES

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES BY CALLING DIGGERS HOTLINE AND CONTACTING UTILITIES DIRECTLY AS NEEDED.

WHEN THE QUANTITY OF BASE AGGREGATE OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYERS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

THE EXACT LOCATION OF EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

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

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN.

TACK COAT CALCULATIONS ARE BASED ON AN APPLICATION OF 0.07 GAL/SY.

RUNOFF COEFFICIENT TABLE

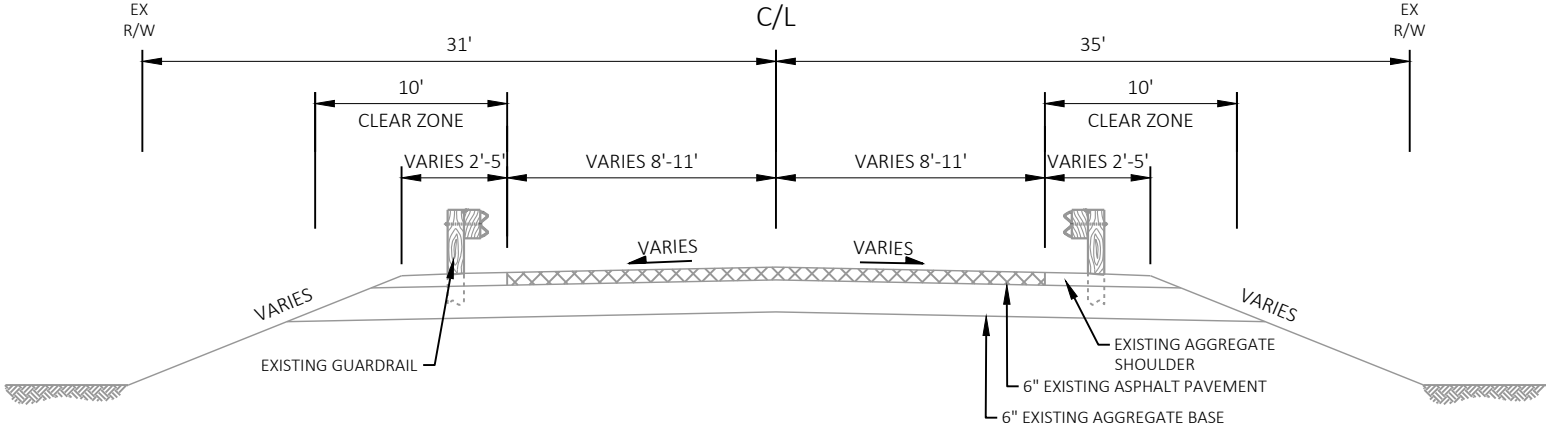
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS:	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIPTURF:	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPETURF:			.25			.27			.28			.30
			.32			.34			.36			.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 = 0.267 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.093 ACRES

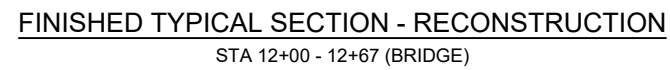
DIGGERSHOTLINE

Dial 811 or (800)242-8511

www.DiggersHotline.com



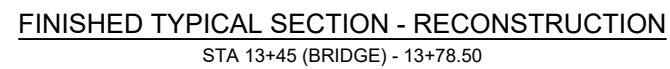
EXISTING TYPICAL SECTION - SCHROEDER ROAD
STA 12+00 - 13+78.50



LEGEND

(A) FERTILIZER TYPE A, SEEDING MIXTURE NO. 20 & SEEDING TEMPORARY

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





2 YEAR FREQUENCY
FLOW = 1,010 C.F.S.
HW = 893.7±
VEL. = 2.6 F.P.S.

Estimate Of Quantities

7387-00-72

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	1.000	1.000
0004	201.0205	Grubbing	STA	1.000	1.000
0006	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. P-29-127	EACH	1.000	1.000
0008	204.0165	Removing Guardrail	LF	163.000	163.000
0010	205.0100	Excavation Common	CY	147.000	147.000
0012	205.0506.S	Excavation, Hauling, and Disposal of Creosote Contaminated Soil	TON	130.000	130.000
0014	206.1001	Excavation for Structures Bridges (structure) 01. B-29-169	EACH	1.000	1.000
0016	206.5001	Cofferdams (structure) 01. B-29-169	EACH	1.000	1.000
0018	210.1500	Backfill Structure Type A	TON	210.000	210.000
0020	213.0100	Finishing Roadway (project) 01. 7387-00-72	EACH	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	14.000	14.000
0024	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	150.000	150.000
0026	455.0605	Tack Coat	GAL	18.000	18.000
0028	465.0105	Asphaltic Surface	TON	55.000	55.000
0030	465.0315	Asphaltic Flumes	SY	14.000	14.000
0032	502.0100	Concrete Masonry Bridges	CY	241.000	241.000
0034	502.3200	Protective Surface Treatment	SY	210.000	210.000
0036	502.3210	Pigmented Surface Sealer	SY	97.000	97.000
0038	502.9000.S	Underwater Substructure Inspection (structure) 01. B-29-169	EACH	1.000	1.000
0040	505.0400	Bar Steel Reinforcement HS Structures	LB	4,910.000	4,910.000
0042	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	33,800.000	33,800.000
0044	516.0500	Rubberized Membrane Waterproofing	SY	18.000	18.000
0046	550.0500	Pile Points	EACH	15.000	15.000
0048	550.1100	Piling Steel HP 10-Inch x 42 Lb	LF	825.000	825.000
0050	606.0300	Riprap Heavy	CY	310.000	310.000
0052	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	210.000	210.000
0054	618.0100	Maintenance and Repair of Haul Roads (project) 01. 7387-00-72	EACH	1.000	1.000
0056	619.1000	Mobilization	EACH	1.000	1.000
0058	624.0100	Water	MGAL	5.000	5.000
0060	625.0500	Salvaged Topsoil	SY	240.000	240.000
0062	628.1504	Silt Fence	LF	220.000	220.000
0064	628.1520	Silt Fence Maintenance	LF	220.000	220.000
0066	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0068	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0070	628.2008	Erosion Mat Urban Class I Type B	SY	300.000	300.000
0072	628.6005	Turbidity Barriers	SY	450.000	450.000
0074	629.0205	Fertilizer Type A	CWT	0.300	0.300
0076	630.0120	Seeding Mixture No. 20	LB	20.000	20.000
0078	630.0200	Seeding Temporary	LB	15.000	15.000
0080	630.0500	Seed Water	MGAL	9.000	9.000
0082	634.0614	Posts Wood 4x6-Inch x 14-FT	EACH	4.000	4.000
0084	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0086	638.2602	Removing Signs Type II	EACH	6.000	6.000
0088	638.3000	Removing Small Sign Supports	EACH	6.000	6.000
0090	642.5001	Field Office Type B	EACH	1.000	1.000
0092	643.0420	Traffic Control Barricades Type III	DAY	1,570.000	1,570.000
0094	643.0705	Traffic Control Warning Lights Type A	DAY	2,440.000	2,440.000
0096	643.0900	Traffic Control Signs	DAY	1,220.000	1,220.000
0098	643.5000	Traffic Control	EACH	1.000	1.000

Estimate Of Quantities

7387-00-72

Line	Item	Item Description	Unit	Total	Qty
0100	645.0111	Geotextile Type DF Schedule A	SY	52.000	52.000
0102	645.0120	Geotextile Type HR	SY	485.000	485.000
0104	650.4500	Construction Staking Subgrade	LF	100.000	100.000
0106	650.5000	Construction Staking Base	LF	100.000	100.000
0108	650.6501	Construction Staking Structure Layout (structure) 01. B-29-169	EACH	1.000	1.000
0110	650.9911	Construction Staking Supplemental Control (project) 01. 7387-00-72	EACH	1.000	1.000
0112	650.9920	Construction Staking Slope Stakes	LF	100.000	100.000
0114	690.0150	Sawing Asphalt	LF	40.000	40.000
0116	715.0502	Incentive Strength Concrete Structures	DOL	1,446.000	1,446.000
0118	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 13+06	EACH	1.000	1.000
0120	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0122	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000

3

CATEGORY	STATION	TO	STATION	LOCATION	201.0105	201.0205
					CLEARING STA	GRUBBING STA
0010	12+17	-	12+81	SW QUADRANT	1	1
				TOTAL 0010	1	1

205.0506.S EXCAVATION, HAULING, AND DISPOSAL OF CREOSOTE CONTAMINATED SOIL			
CATEGORY	LOCATION	TON	REMARKS
0010	SOUTH ABUTMENT	130	5' BEHIND EXISTING SOUTH ABUTMENT TO DEPTH OF BOTTOM OF PROPOSED ABUTMENT
	TOTAL 0010	130	

					204.0165
					REMOVING GUARDRAIL
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	12+00	-	12+67	SOUTH APPROACH	81
0010	13+45	-	13+79	NORTH APPROACH	82
TOTAL 0010					163

			690.0150
			SAWING ASPHALT
CATEGORY	STATION	LOCATION	LF
0010	12+00	BOP	20
0010	13+79	EOP	20
		TOTAL 0010	40

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (CY) (1)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13)	MASS ORDINATE +/- (14)	WASTE	COMMENT
			CUT (2)				FACTOR 1.25			
SOUTH APPROACH	12+00/12+57	SCHROEDER ROAD	124	19	105	46	58	48	48	
NORTH APPROACH	13+55/13+79	SCHROEDER ROAD	23	8	15	0	0	15	15	
TOTAL			147	27	120	46	58	63	63	

(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.

					305.0110	305.0120	624.0100
					BASE AGGREGATE	BASE AGGREGATE DENSE	
CATEGORY	STATION	TO	STATION	LOCATION	DENSE 3/4-INCH	1 1/4-INCH	WATER
					TON	TON	MGAL
0010	12+00	-	12+67	SOUTH APPROACH	9	100	3
0010	13+45	-	13+79	NORTH APPROACH	5	50	2
TOTAL 0010					14	150	5

CATEGORY	STATION	TO	STATION	LOCATION	455.0605	465.0105	465.0315
					TACK COAT GAL	ASPHALTIC SURFACE TON	ASPHALTIC FLUMES SY
0010	12+00	-	12+67	SOUTH APPROACH	12	35	14
0010	13+45	-	13+79	NORTH APPROACH	6	20	-
TOTAL 0010					18	55	14

E

LANDSCAPING & EROSION CONTROL												
		625.0500	628.1504	628.1520	628.1905	628.1910	628.2008	628.6005	629.0205	630.0120	630.0200	630.0500
		SALVAGED TOPSOIL	SILT FENCE	SILT FENCE	MOBILIZATIONS	MOBILIZATIONS	EROSION MAT URBAN	TURBIDITY BARRIERS	FERTILIZER TYPE A	SEEDING MIXTURE	SEEDING TEMPORARY	SEED WATER
CATEGORY	LOCATION	SY	LF	LF	EROSION CONTROL	EMERGENCY EROSION CONTROL	CLASS I TYPE B	SY	CWT	NO. 20 LB	LB	MGAL
0010	ENTIRE PROJECT	240	170	170	5	3	240	250	0.2	15	10	7
0010	UNDISTRIBUTED	-	50	50	-	-	60	200	0.1	5	5	2
TOTAL 0010		240	220	220	5	3	300	450	0.3	20	15	9

SIGNING							REMARKS
CATEGORY	LOCATION	634.0614 POSTS WOOD 4X6-INCH X 14-FT	637.2230 SIGNS TYPE II REFLECTIVE F	638.2602 REMOVING SIGNS TYPE II	638.3000 REMOVING SMALL SIGN SUPPORTS		
		EACH	SF	EACH	EACH		
0010	SW QUADRANT	1	3.0	1	1		PROPOSED BRIDGE MARKER SIGNS, W5-52L & W5-52R. INSTALL ACCORDING TO S.D.D. "SIGNING AND MARKING FOR TWO LANE BRIDGES".
0010	SE QUADRANT	1	3.0	2	2		
0010	NW QUADRANT	1	3.0	2	2		
0010	NE QUADRANT	1	3.0	1	1		
TOTAL 0010		4	12	6	6		

TRAFFIC CONTROL										
		643.0420 TRAFFIC CONTROL BARRICADES TYPE III			643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A			643.0900 TRAFFIC CONTROL SIGNS		643.5000
CATEGORY	LOCATION	DEVICES	DAYS	DAY	DEVICES	DAYS	DAY	DEVICES	DAYS	TRAFFIC CONTROL EACH
0010	ENTIRE PROJECT	18	87	1,570	28	87	2,440	14	87	1,220
TOTAL 0010				1,570			2,440			1,220

CONSTRUCTION STAKING									
		650.4500	650.5000	650.6501.01	650.9911.01	650.9920			
		CONSTRUCTION STAKING SUBGRADE	CONSTRUCTION STAKING BASE	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) (01. B-29-169)	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 7387-00-72)	CONSTRUCTION STAKING SLOPE STAKES			
CATEGORY	STATION	TO	STATION	LOCATION	LF	LF	EACH	EACH	LF
0010	12+00	-	13+79	MAINLINE	100	100	-	1	100
TOTAL 0010					100	100	0	1	100
0020	12+67	-	13+45	MAINLINE	-	-	1	-	-
TOTAL 0020					0	0	1	0	0

BIRD DETERRENT SYSTEM		
		999.2000.S.01 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (01. 13+06)
CATEGORY	LOCATION	EACH
0010	ENTIRE PROJECT	1
TOTAL 0010		1

CONVENTIONAL SYMBOLS			
SECTION LINE		SECTION CORNER SYMBOL	
QUARTER LINE		FOUND SURVEY MONUMENT	
SIXTEENTH LINE		NON-MONUMENTED R/W POINT	
NEW REFERENCE LINE		GEODETIC SURVEY MONUMENT	
NEW R/W LINE		NON-PERMITTED SIGN	
EXISTING R/W OR HE LINE		PERMITTED SIGN	
PROPERTY LINE		ACCESS RESTRICTED BY ACQUISITION	
LOT, TIE & OTHER MINOR LINES		NO ACCESS (BY STATUTORY AUTHORITY)	
EXISTING CENTERLINE		ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)	
CORPORATE LIMITS		NO ACCESS (NEW HIGHWAY)	
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)		PARCEL NUMBER	
TEMPORARY LIMITED EASEMENT AREA			
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)			
BUILDING		TO BE REMOVED	
BRIDGE		CULVERT	

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	RDE
CERTIFIED SURVEY MAP	CSM	EASEMENT	
CONCRETE	CONC	RIGHT	RT
COUNTY TRUNK HIGHWAY	CTH	RIGHT OF WAY	R/W
CORNER	COR	SECTION	SEC
DOCUMENT NUMBER	DOC	SEPTIC VENT	SEPV
EASEMENT	EASE	SQUARE FEET	SF
EXISTING	EX	STATE TRUNK HIGHWAY	STH
GAS VALVE	GV	STATION	STA
GRID NORTH	GN	TELEPHONE PEDESTAL	TP
IDENTIFICATION	ID	TRANSPORTATION PROJECT PLAT	TTP
INTERSTATE HIGHWAY	IH	UNITED STATES HIGHWAY	USH
LEFT	LT	VOLUME	V
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		

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), JUNEAU 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 AND PERMANENT EASEMENT 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.

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

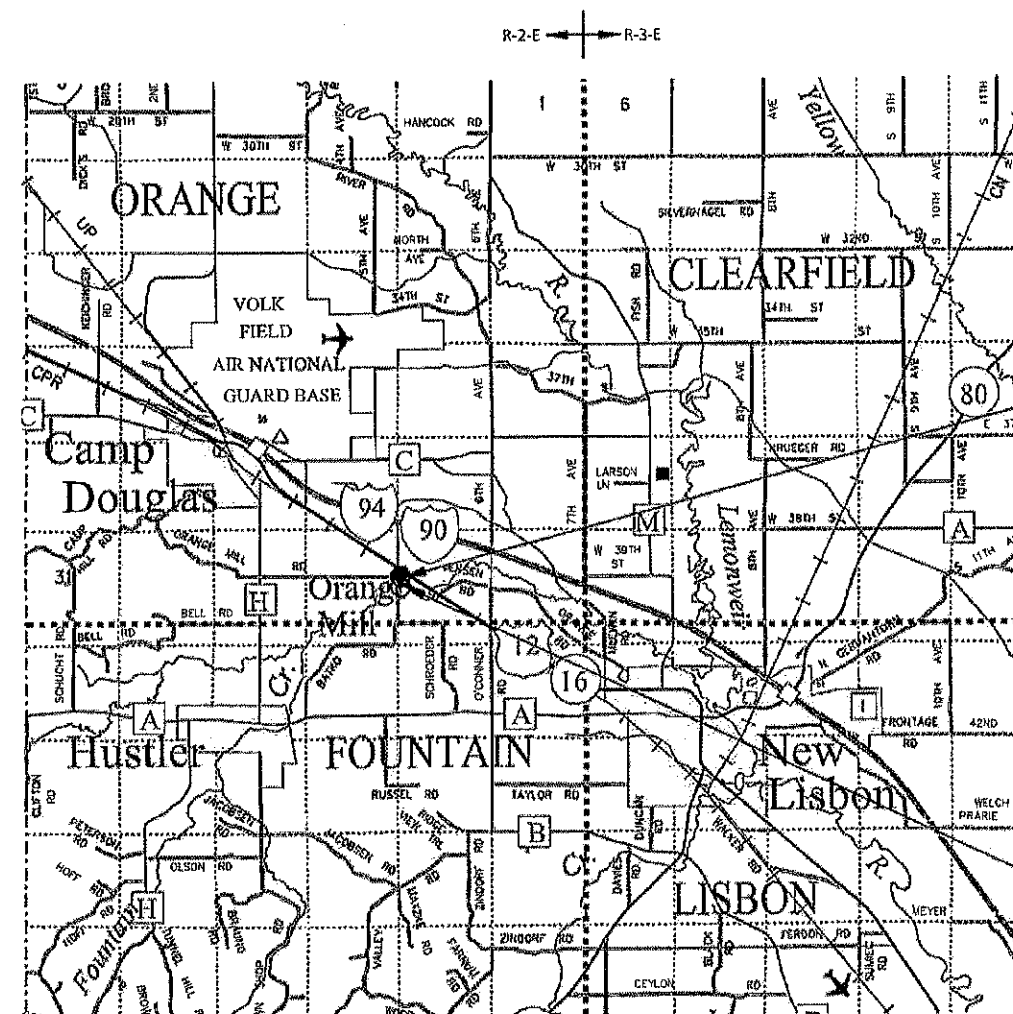
DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

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

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.

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

CONVENTIONAL UTILITY SYMBOLS	
UTILITY NUMBER	
WATER	
GAS	
TELEPHONE	
OVERHEAD TRANSMISSION LINES	
ELECTRIC	
CABLE TELEVISION	
FIBER OPTIC	
SANITARY SEWER	
STORM SEWER	
COMBINED SEWER	
ELECTRIC TOWER	
TRANSMISSION STRUCTURES	
ELECTRIC POLE	
TELEPHONE POLE	
PEDESTAL (LABEL TYPE)	
(TV, TEL, ELEC, ETC.)	



END RELOCATION ORDER
STA 14 +00.00
165.31' EAST AND 178.56' SOUTH OF THE
WEST QUARTER CORNER OF SEC 35, T-27-N, R-2-E

BEGIN RELOCATION ORDER
STA 11+50.00
154.17' EAST AND 428.56' SOUTH OF THE
WEST QUARTER CORNER OF SEC 35, T-27-N, R-2-E

LAYOUT
SCALE 0 2 MI.
TOTAL NET LENGTH OF CENTERLINE = 0.047

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

R/W PROJECT NUMBER 7387-00-02	SHEET NUMBER 4.01	TOTAL SHEETS 2
PLAT OF RIGHT OF WAY REQUIRED FOR T ORANGE, SCHROEDER ROAD LTL LEMONWEIR RVR BRIDGE B-29-0169		
LOCAL STREET	JUNEAU COUNTY	
CONSTRUCTION PROJECT NUMBER 7387-00-72		

CORRE
ENGINEERING
MADISON | EAU CLAIRE | WAUKESHA | APPLETON | TOMAH | WAUSAU

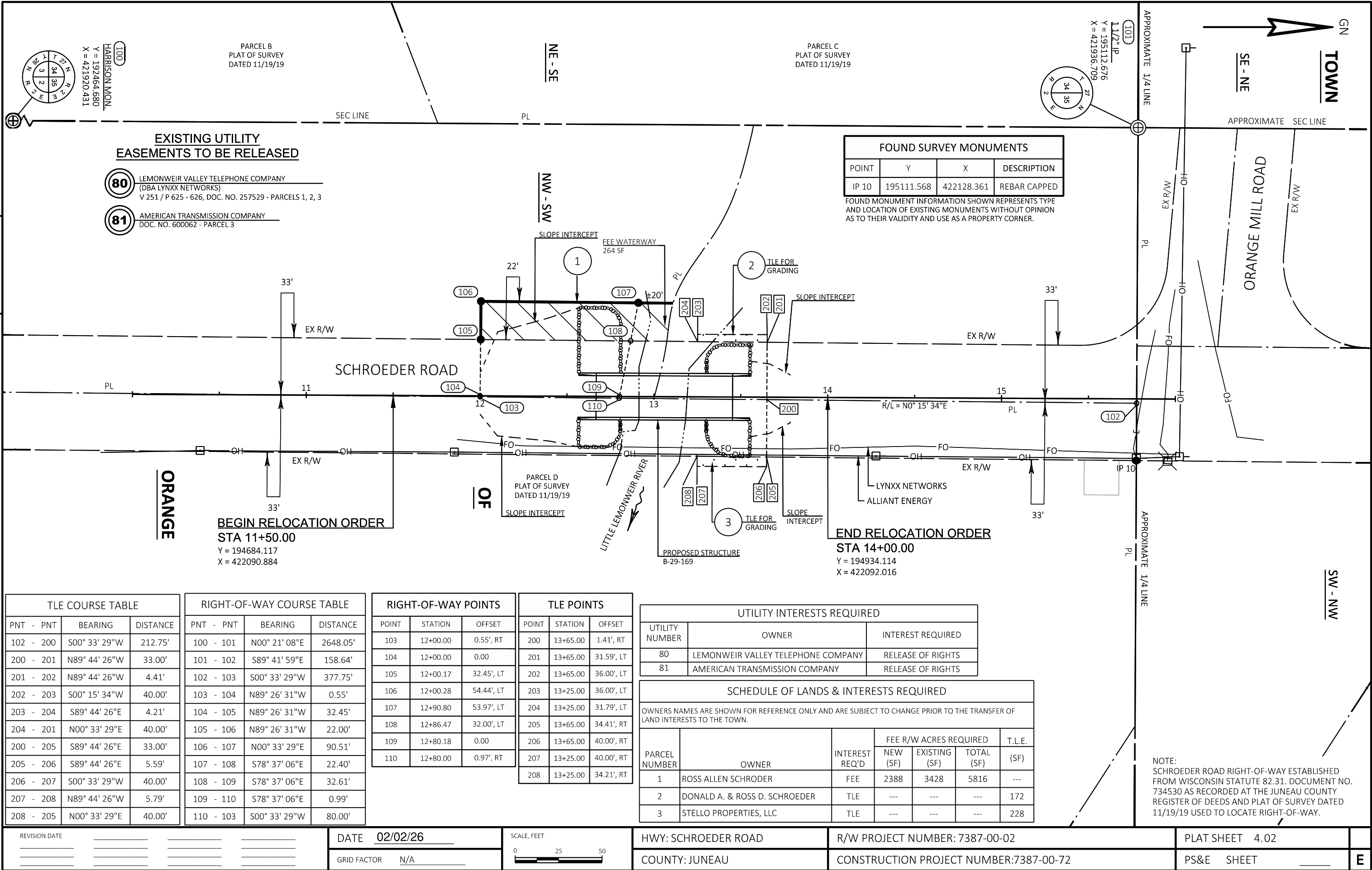
I, BRYON J. MOTZKO, PROFESSIONAL LAND SURVEYOR, S-2346, HEREBY CERTIFY THAT I HAVE SURVEYED THE LAND DESCRIBED HEREON AND THAT THE MAP HEREON IS A CORRECT REPRESENTATION OF THAT SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE: 2/2/2025

REVISION DATE

TOWN OF ORANGE

APPROVED FOR THE TOWNSHIP
DATE: 2-2-2025



TLE COURSE TABLE		
PNT - PNT	BEARING	DISTANCE
102 - 200	S00° 33' 29"W	212.75'
200 - 201	N89° 44' 26"W	33.00'
201 - 202	N89° 44' 26"W	4.41'
202 - 203	S00° 15' 34"W	40.00'
203 - 204	S89° 44' 26"E	4.21'
204 - 201	N00° 33' 29"E	40.00'
200 - 205	S89° 44' 26"E	33.00'
205 - 206	S89° 44' 26"E	5.59'
206 - 207	S00° 33' 29"W	40.00'
207 - 208	N89° 44' 26"W	5.79'
208 - 205	N00° 33' 29"E	40.00'

RIGHT-OF-WAY COURSE TABLE		
PNT - PNT	BEARING	DISTANCE
100 - 101	N00° 21' 08"E	2648.05'
101 - 102	S89° 41' 59"E	158.64'
102 - 103	S00° 33' 29"W	377.75'
103 - 104	N89° 26' 31"W	0.55'
104 - 105	N89° 26' 31"W	32.45'
105 - 106	N89° 26' 31"W	22.00'
106 - 107	N00° 33' 29"E	90.51'
107 - 108	S78° 37' 06"E	22.40'
108 - 109	S78° 37' 06"E	32.61'
109 - 110	S78° 37' 06"E	0.99'
110 - 103	S00° 33' 29"W	80.00'

RIGHT-OF-WAY POINTS		
POINT	STATION	OFFSET
103	12+00.00	0.55', RT
104	12+00.00	0.00
105	12+00.17	32.45', LT
106	12+00.28	54.44', LT
107	12+90.80	53.97', LT
108	12+86.47	32.00', LT
109	12+80.18	0.00
110	12+80.00	0.97', RT

TLE POINTS		
POINT	STATION	OFFSET
200	13+65.00	1.41', RT
201	13+65.00	31.59', LT
202	13+65.00	36.00', LT
203	13+25.00	36.00', LT
204	13+25.00	31.79', LT
205	13+65.00	34.41', RT
206	13+65.00	40.00', RT
207	13+25.00	40.00', RT
208	13+25.00	34.21', RT

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER	INTEREST REQUIRED
80	LEMONWEIR VALLEY TELEPHONE COMPANY	RELEASE OF RIGHTS
81	AMERICAN TRANSMISSION COMPANY	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED						
OWNERS NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE TOWN.						
PARCEL NUMBER	OWNER	INTEREST REQ'D	FEE R/W ACRES REQUIRED			T.L.E. (SF)
			NEW (SF)	EXISTING (SF)	TOTAL (SF)	
1	ROSS ALLEN SCHRODER	FEE	2388	3428	5816	---
2	DONALD A. & ROSS D. SCHROEDER	TLE	---	---	---	172
3	STELLO PROPERTIES, LLC	TLE	---	---	---	228

NOTE:
SCHROEDER ROAD RIGHT-OF-WAY ESTABLISHED FROM WISCONSIN STATUTE 82.31. DOCUMENT NO. 734530 AS RECORDED AT THE JUNEAU COUNTY REGISTER OF DEEDS AND PLAT OF SURVEY DATED 11/19/19 USED TO LOCATE RIGHT-OF-WAY.

REVISION DATE	DATE 02/02/26	SCALE, FEET	HWY: SCHROEDER ROAD	R/W PROJECT NUMBER: 7387-00-02	PLAT SHEET 4.02
	GRID FACTOR N/A	0 25 50	COUNTY: JUNEAU	CONSTRUCTION PROJECT NUMBER:7387-00-72	PS&E SHEET

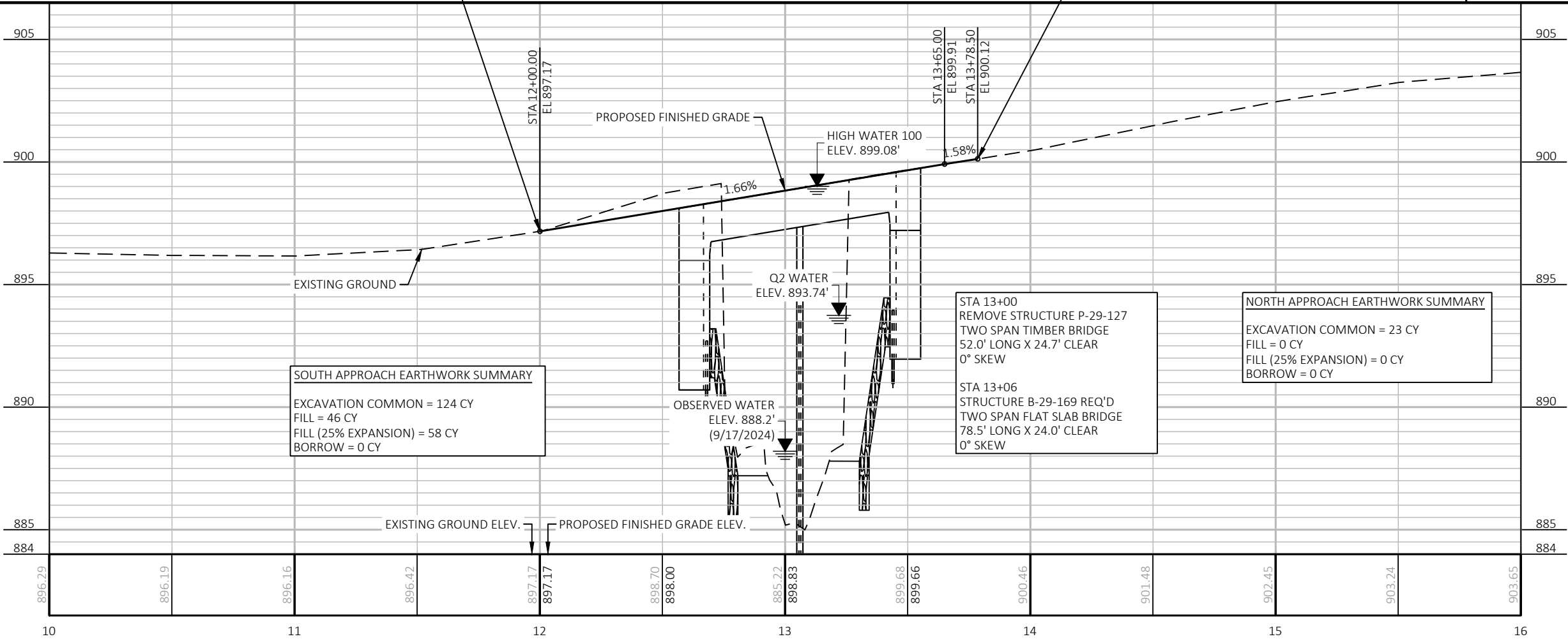
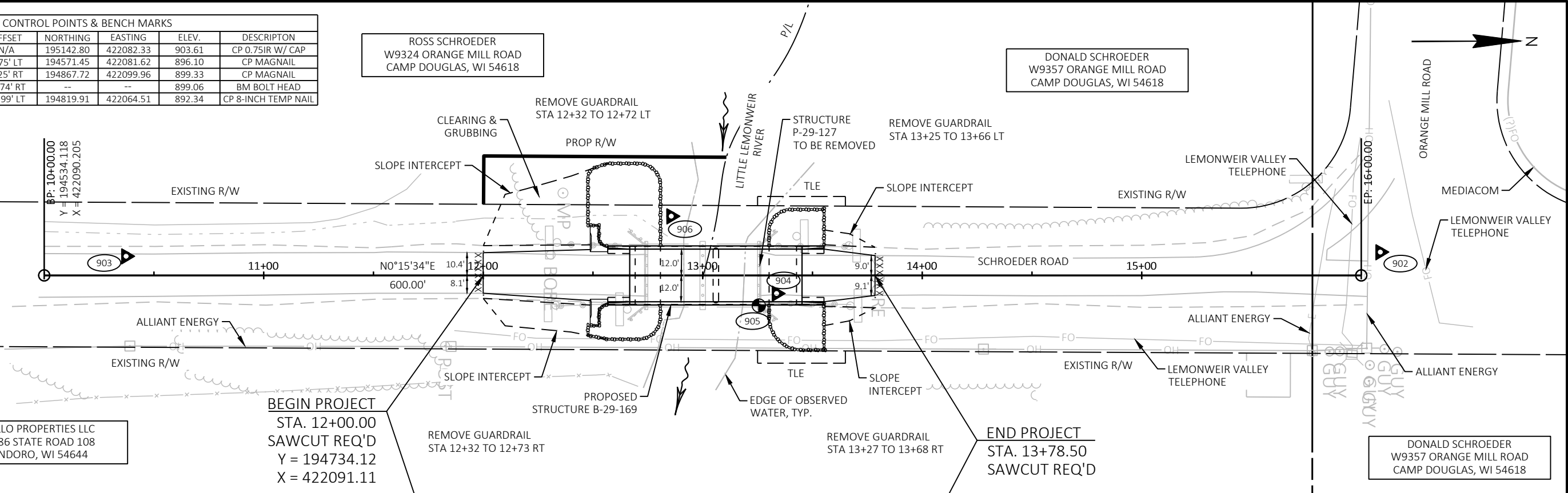
CONTROL POINTS & BENCH MARKS						
POINT NO.	STATION	OFFSET	NORTHING	EASTING	ELEV.	DESCRIPTION
902	N/A	N/A	195142.80	422082.33	903.61	CP 0.75IR W/ CAP
903	10+37.29	8.75' LT	194571.45	422081.62	896.10	CP MAGNAIL
904	13+33.64	8.25' RT	194867.72	422099.96	899.33	CP MAGNAIL
905	13+25.54	13.74' RT	--	--	899.06	BM BOLT HEAD
906	12+85.67	26.99' LT	194819.91	422064.51	892.34	CP 8-INCH TEMP NAIL

ROSS SCHROEDER
W9324 ORANGE MILL ROAD
CAMP DOUGLAS, WI 54618

DONALD SCHROEDER
W9357 ORANGE MILL ROAD
CAMP DOUGLAS, WI 54618

STELLO PROPERTIES LLC
N8886 STATE ROAD 108
MINDORO, WI 54644

DONALD SCHROEDER
W9357 ORANGE MILL ROAD
CAMP DOUGLAS, WI 54618



SOUTH APPROACH EARTHWORK SUMMARY
EXCAVATION COMMON = 124 CY
FILL = 46 CY
FILL (25% EXPANSION) = 58 CY
BORROW = 0 CY

STA 13+00
REMOVE STRUCTURE P-29-127
TWO SPAN TIMBER BRIDGE
52.0' LONG X 24.7' CLEAR
0° SKEW

STA 13+06
STRUCTURE B-29-169 REQ'D
TWO SPAN FLAT SLAB BRIDGE
78.5' LONG X 24.0' CLEAR
0° SKEW

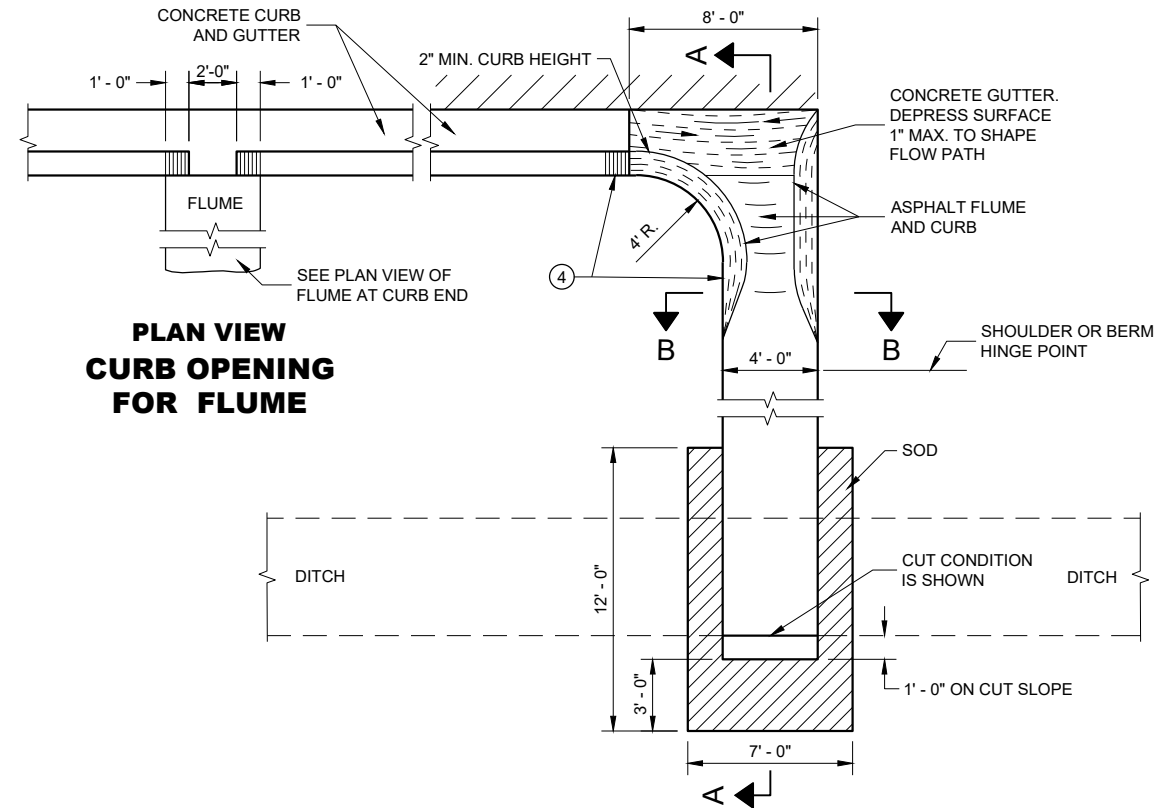
NORTH APPROACH EARTHWORK SUMMARY
EXCAVATION COMMON = 23 CY
FILL = 0 CY
FILL (25% EXPANSION) = 0 CY
BORROW = 0 CY

Standard Detail Drawing List

08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
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 & MARKING FOR TWO LANE BRIDGES
15C11-11B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

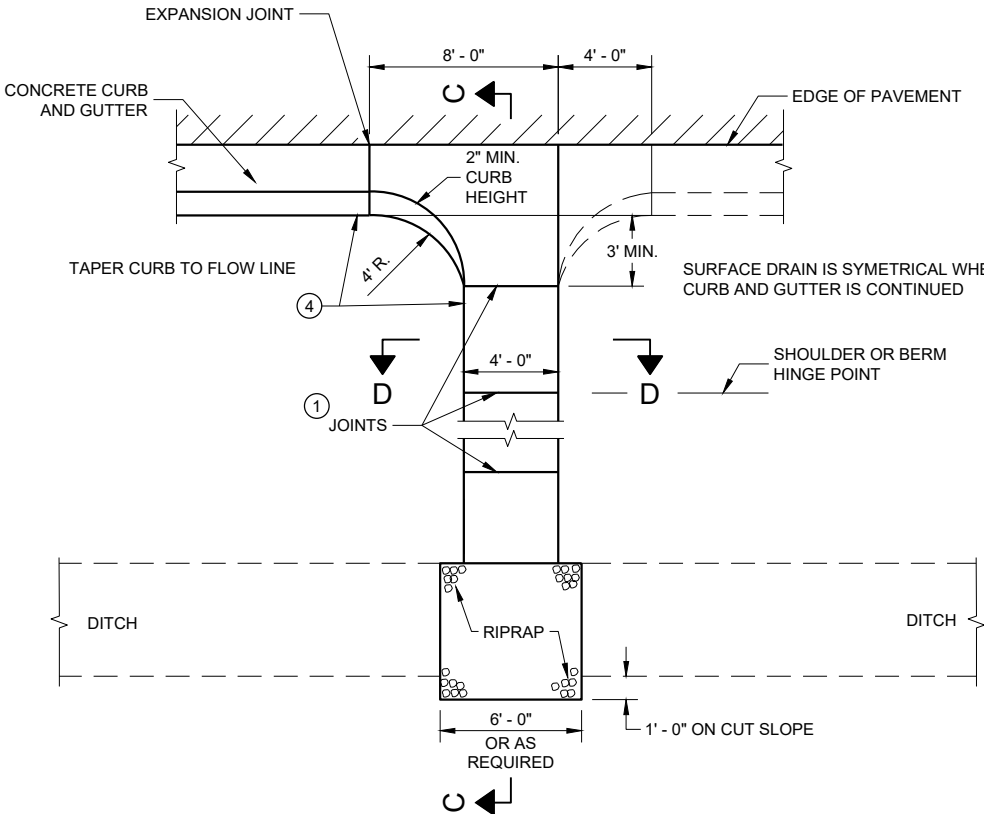
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING
FOR FLUME

PLAN VIEW
FLUME AT CURB END



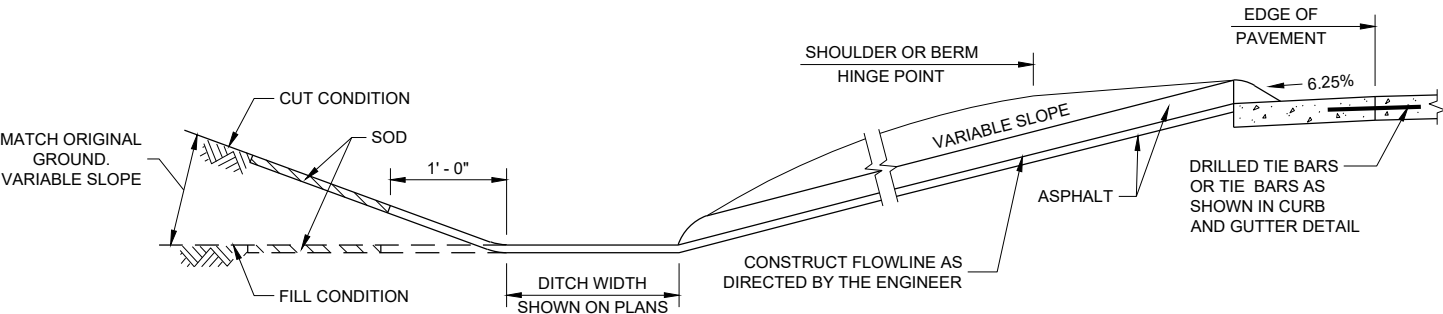
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

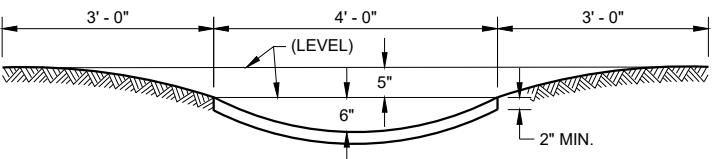
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

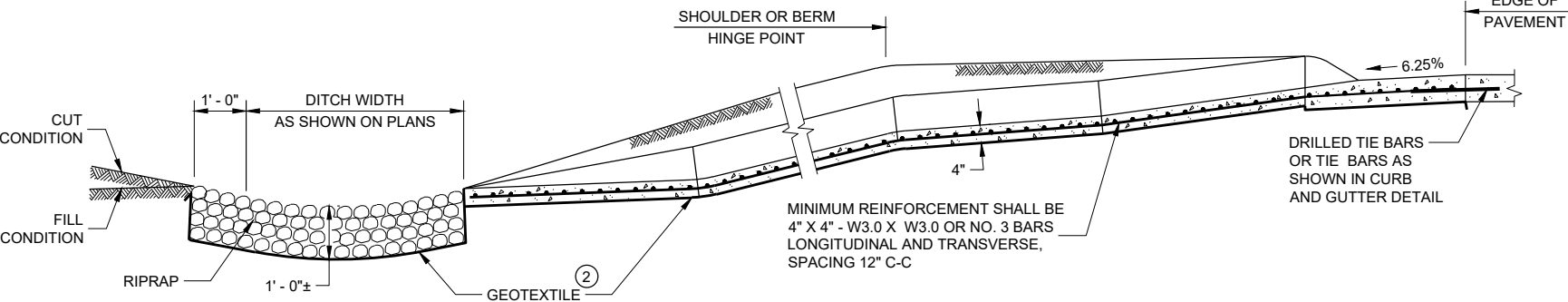
- JOINTS SHALL BE $\frac{1}{8}$ " TO $\frac{1}{4}$ " WIDE BY $\frac{1}{2}$ " DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
- ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.



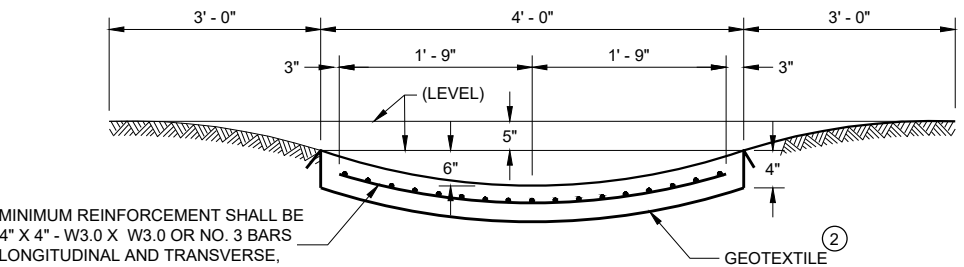
SECTION A - A



SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE
DRAINS AND
ASPHALTIC FLUMES

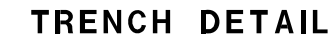
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

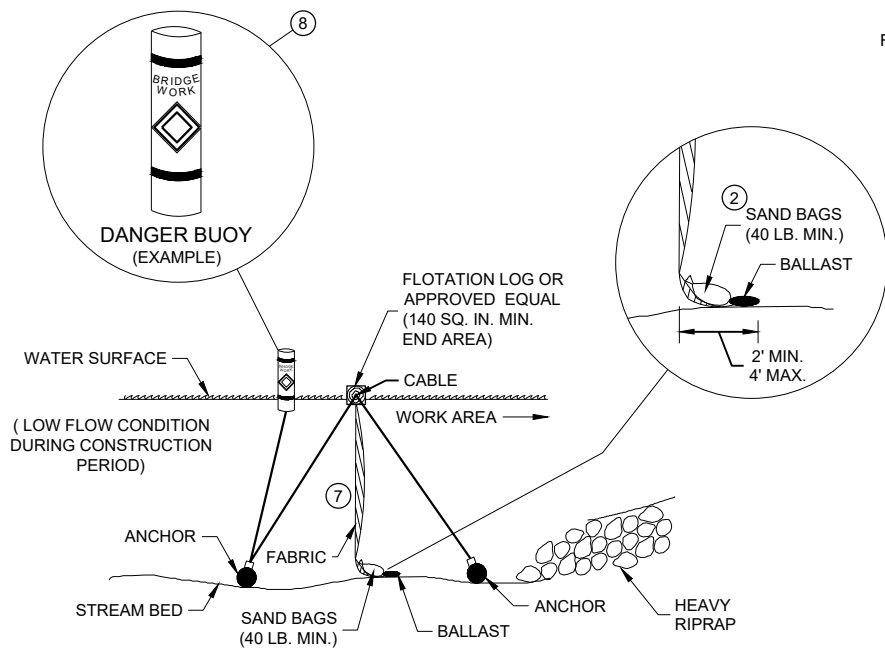
FHWA



- 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 1½" X 1½" 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.

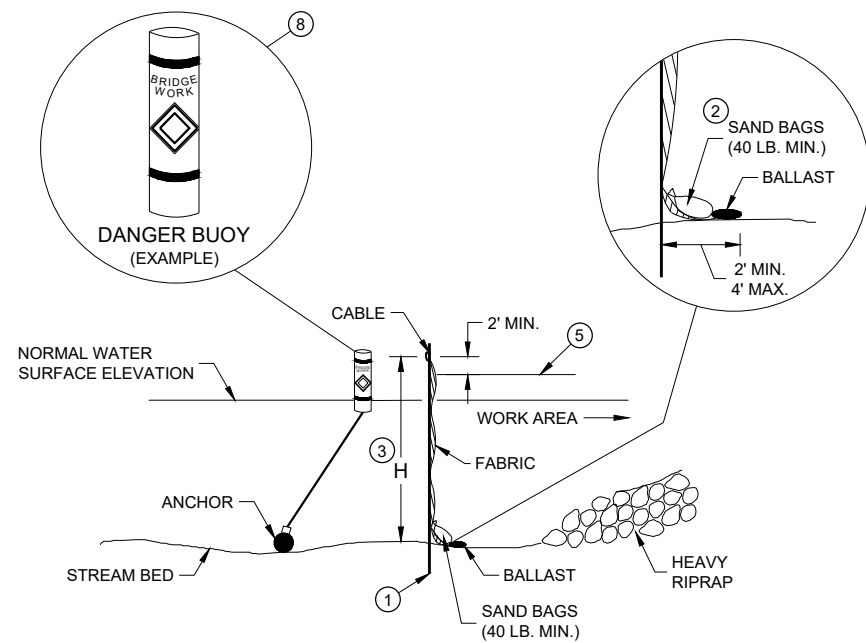


SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED <u>4-29-05</u> DATE	<u>/S/ Beth Canestra</u> CHIEF ROADWAY DEVELOPMENT ENGINEER



SECTION B - B

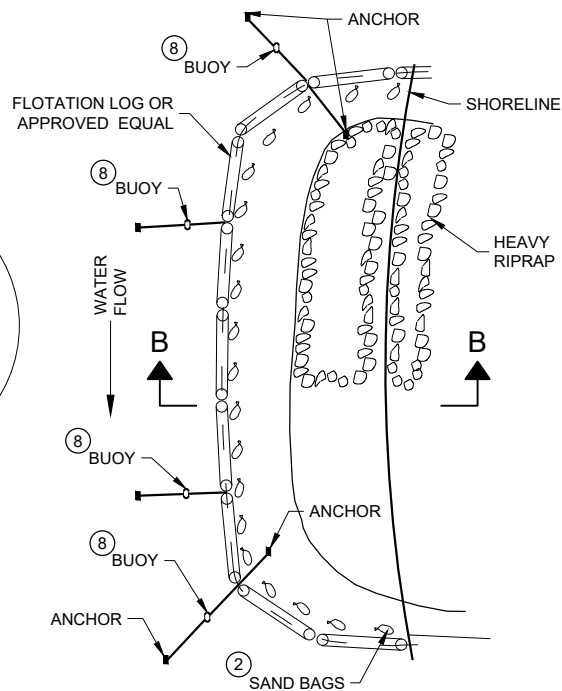
TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



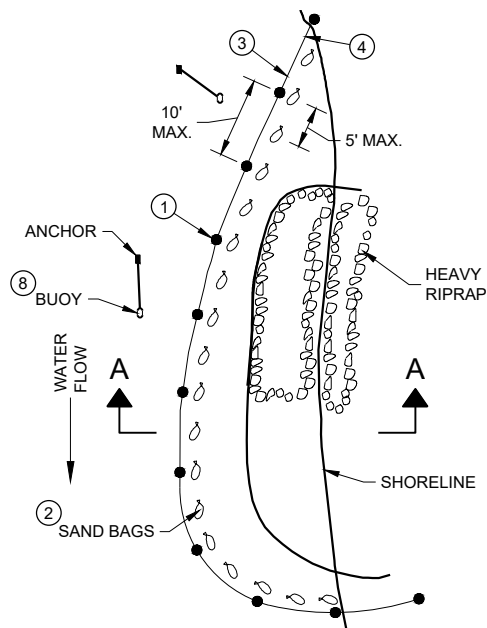
SECTION A - A

TURBIDITY BARRIER - STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS



PLAN VIEW



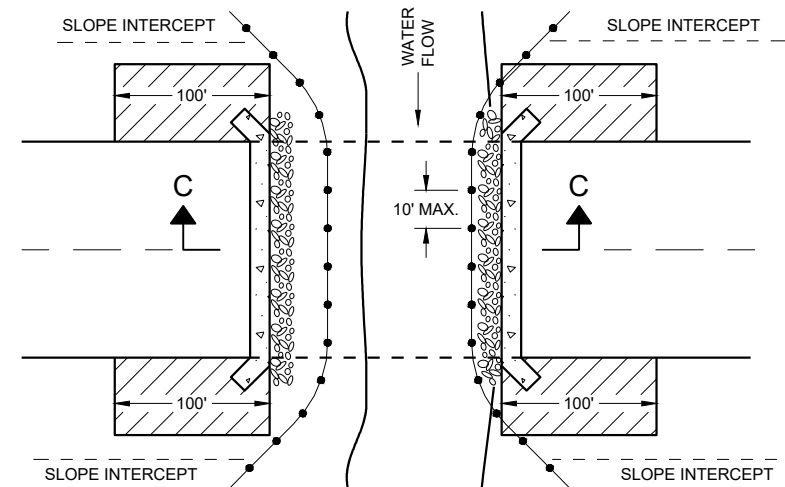
PLAN VIEW

GENERAL NOTES

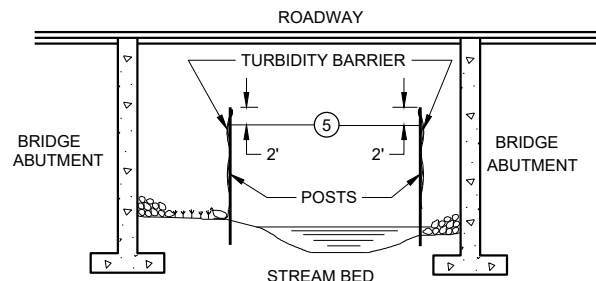
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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



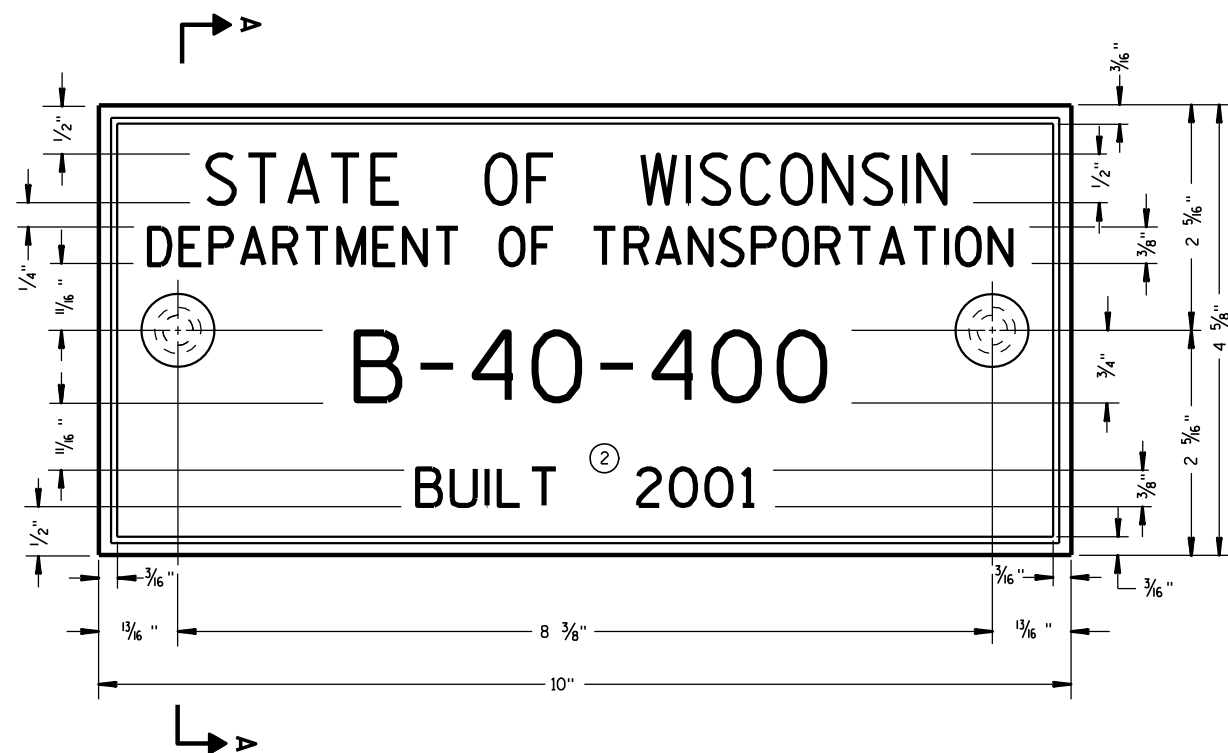
SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING
TYPICAL PLACEMENT AT STRUCTURES

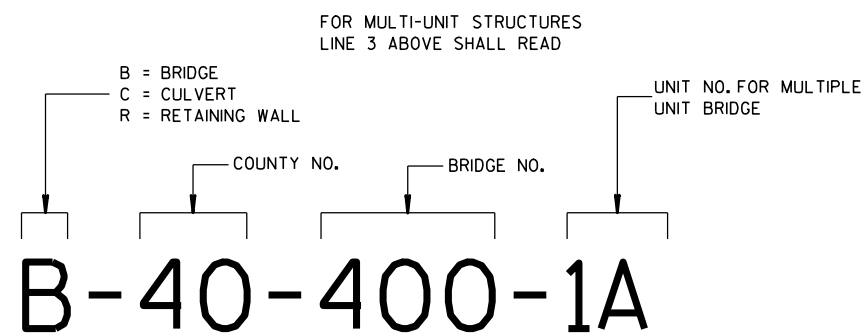
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



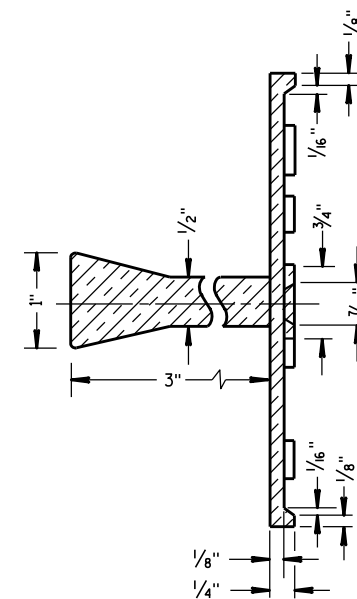
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

GENERAL NOTES

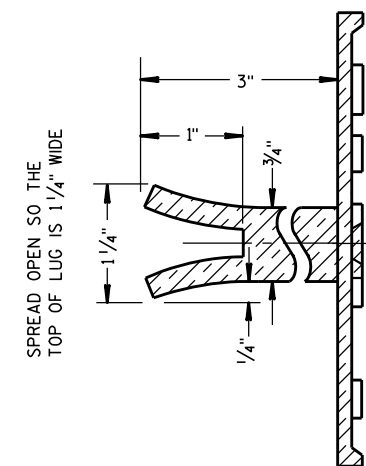
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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.



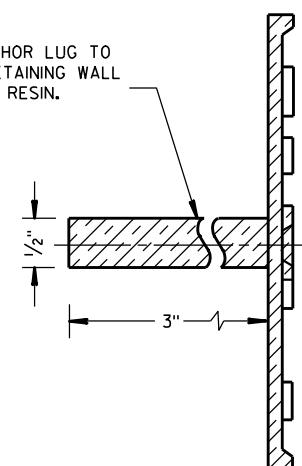
SECTION A-A



SPREAD OPEN SO THE
TOP OF LUG IS 1 1/4" WIDE

ALTERNATE LUG

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



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

**NAME PLATE
(STRUCTURES)**

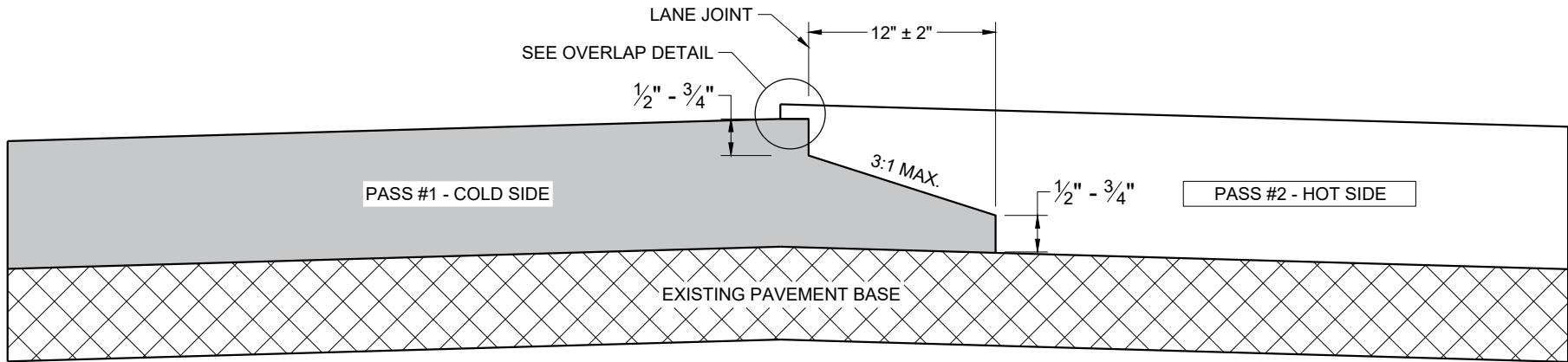
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

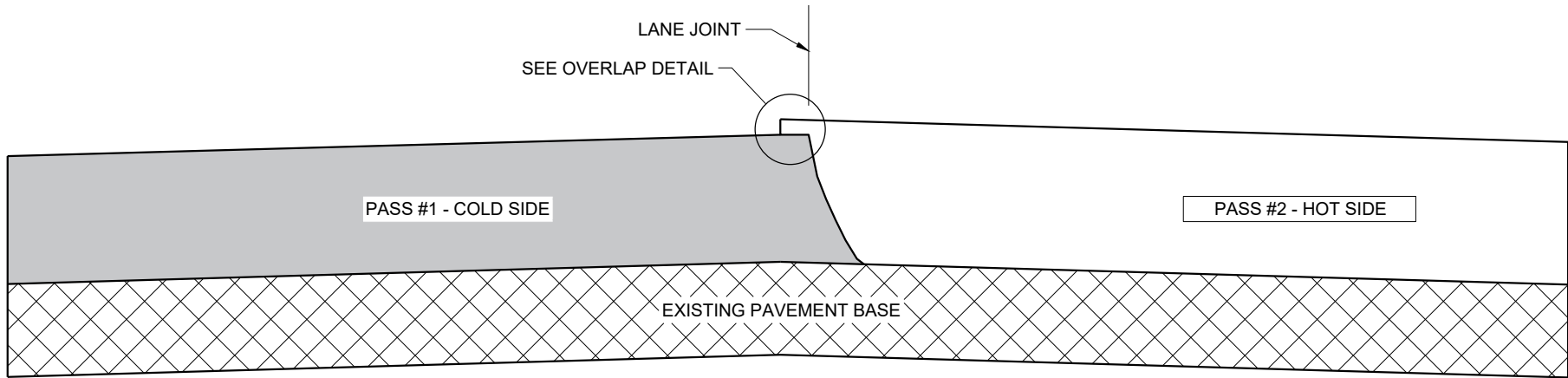
3/26/10
DATE

FHWA

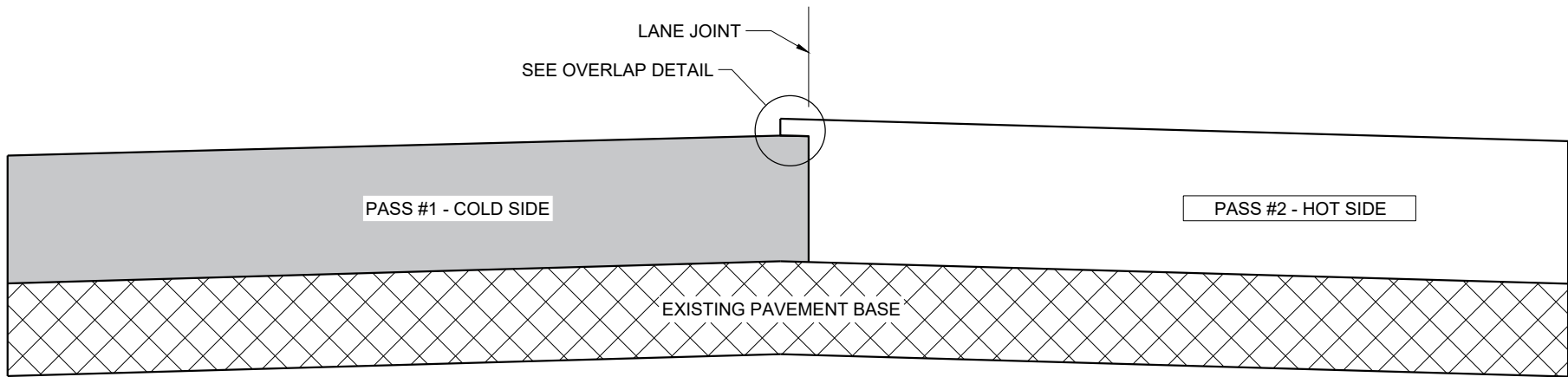
/S/ Scot Becker
CHIEF STRUCTURAL DEVELOPMENT ENGINEER



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

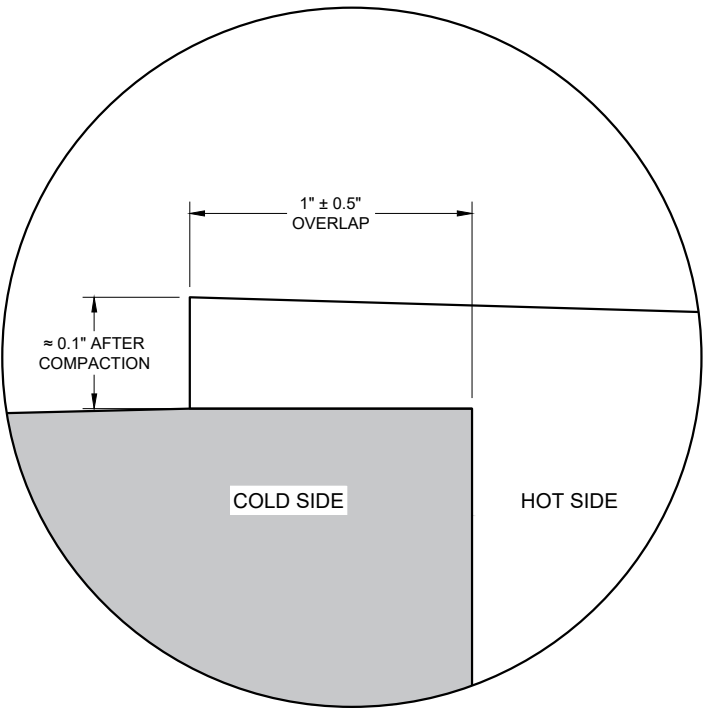
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY $1" \pm 0.5"$ 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.

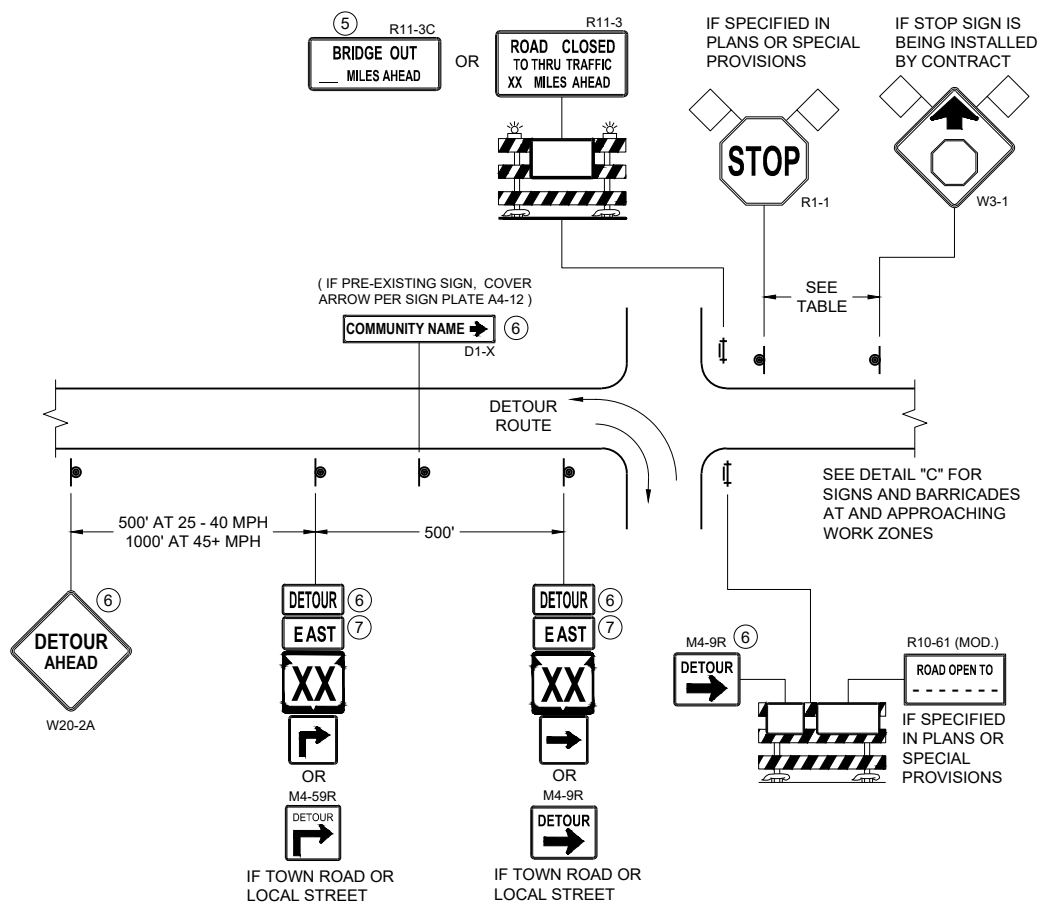


OVERLAP DETAIL (TYPICAL)

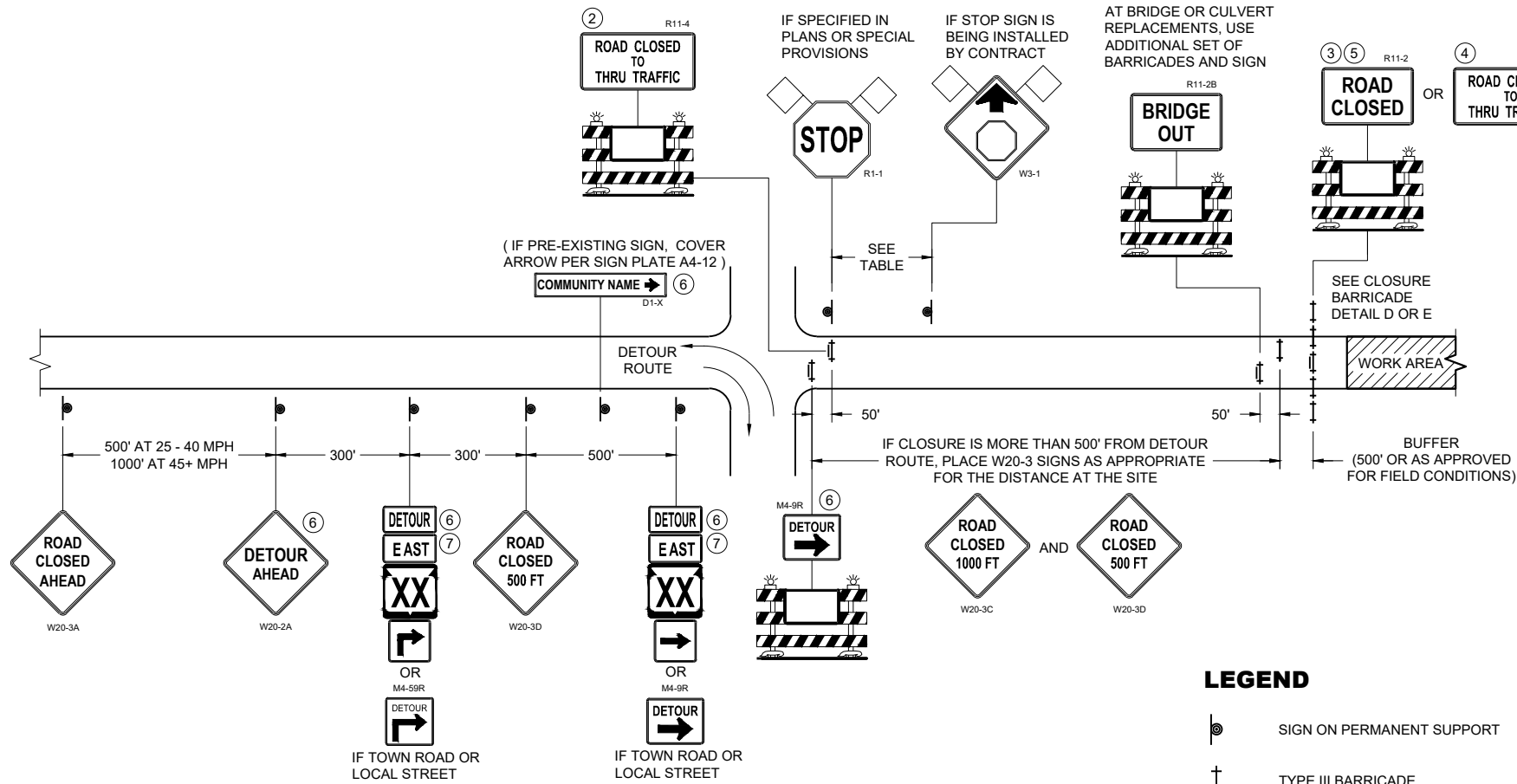
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

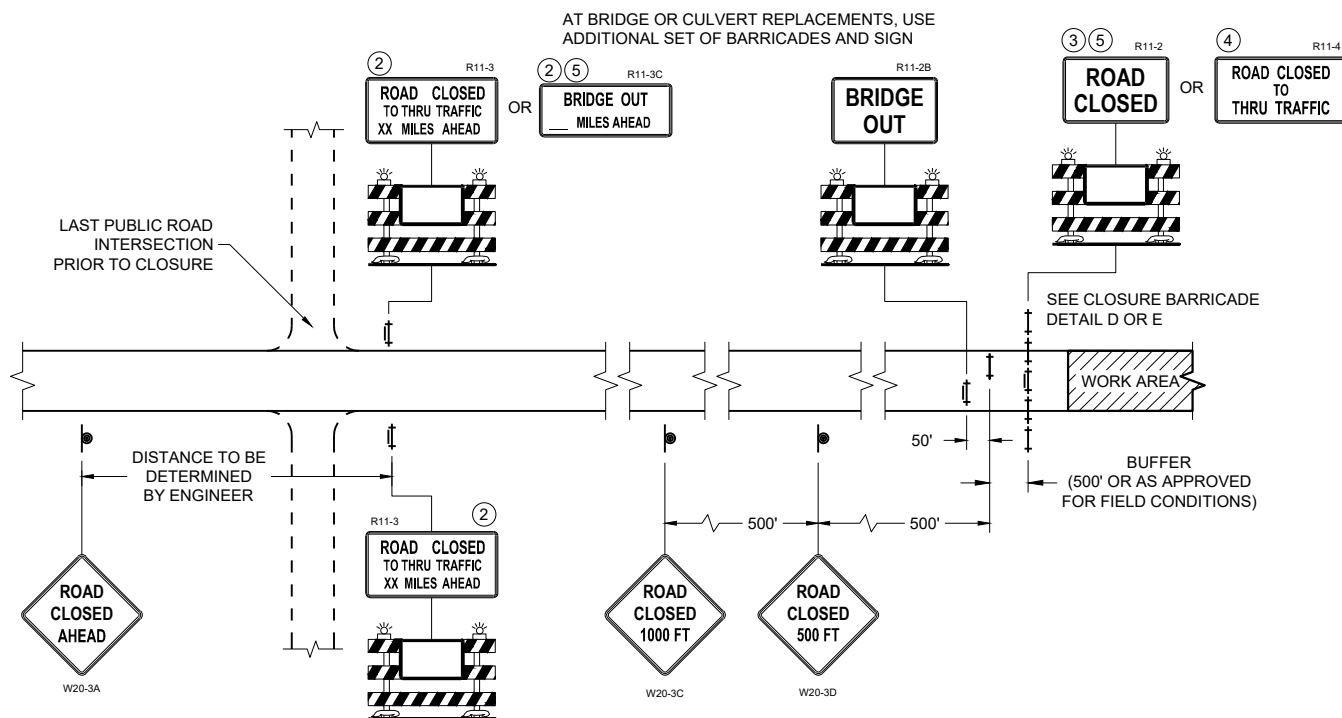
APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGINEER
FHWA



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

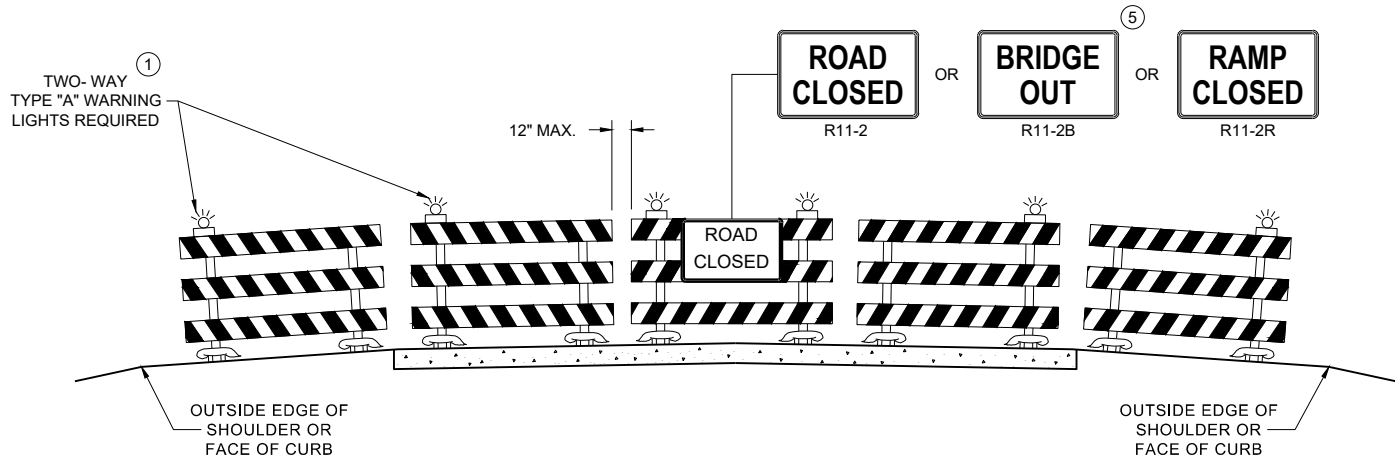
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

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

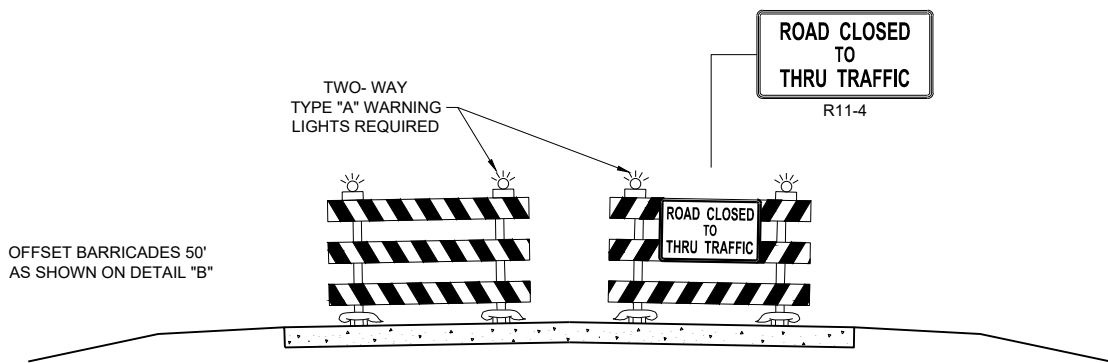
**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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.

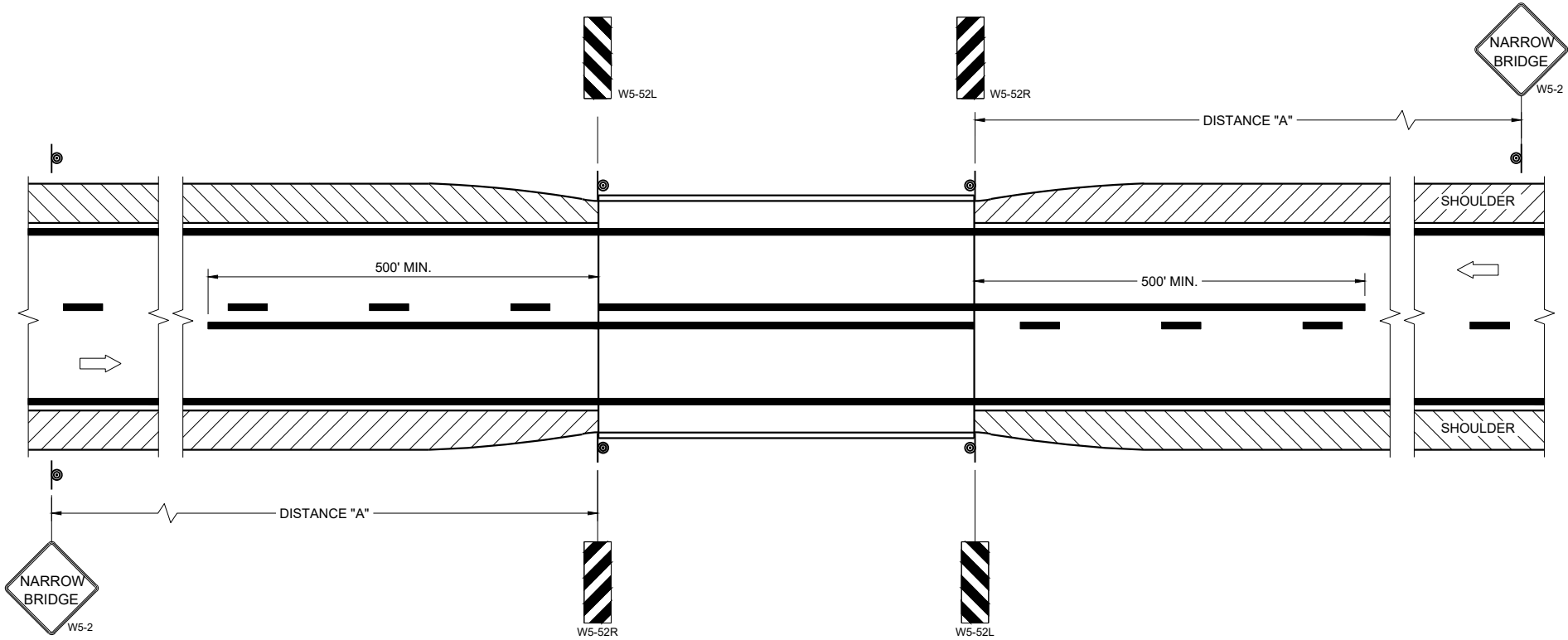
"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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"

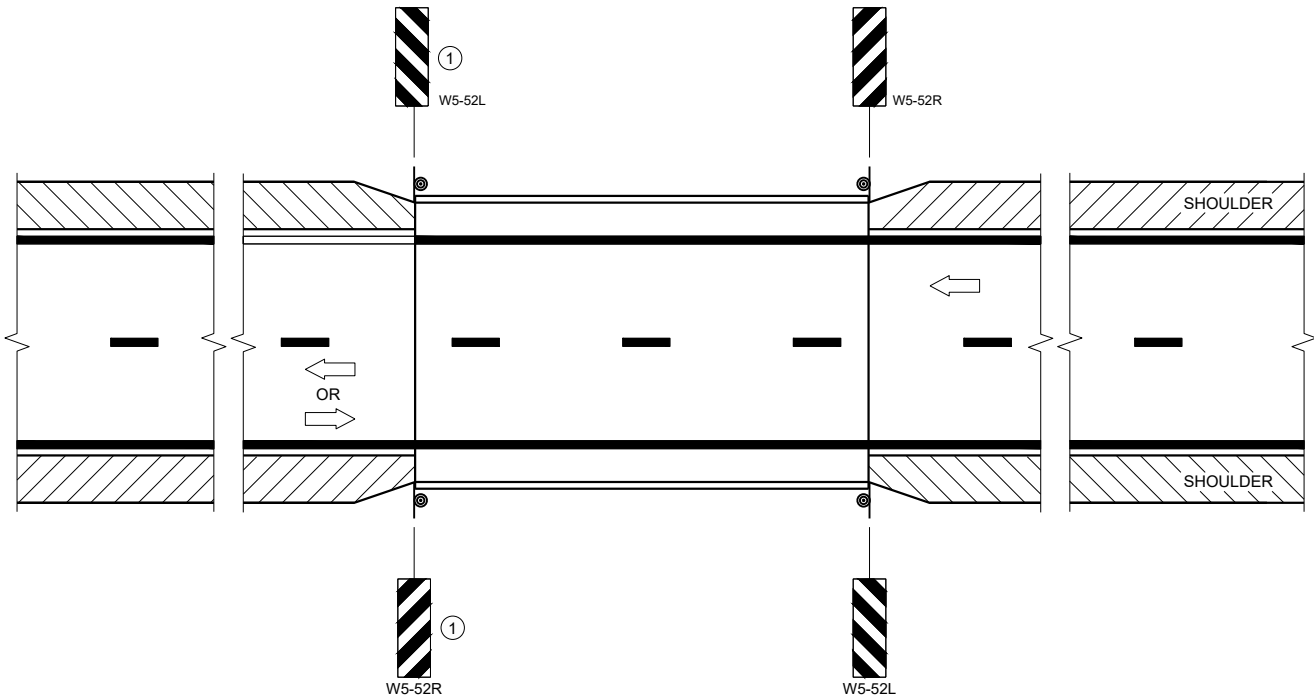
SIGNS PLACED ON TYPE III BARRICADES THAT ARE SIZES OTHER THAN 48"X30" SHALL HAVE A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE.

- 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	



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

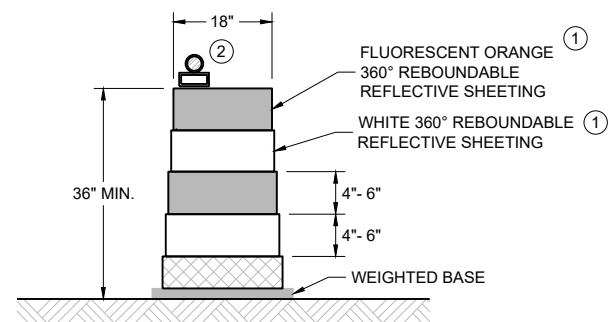
DISTANCE TABLE

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

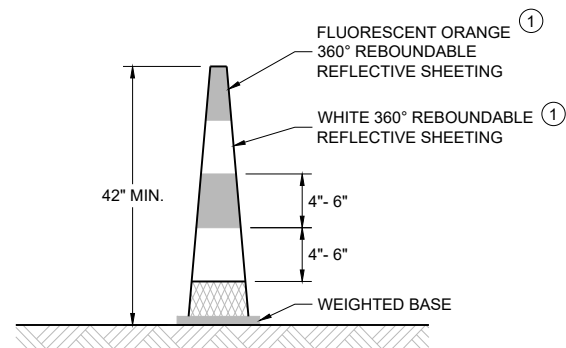
**SIGNING AND MARKING
FOR TWO LANE BRIDGES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

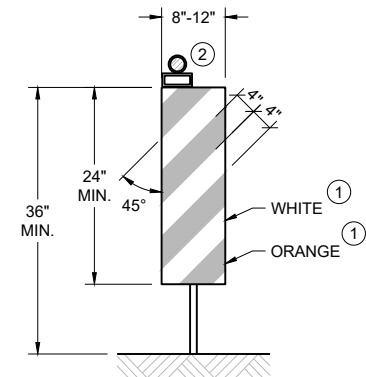
**DRUM**

BALLAST WIDTHS
RANGE FROM 24"-36"

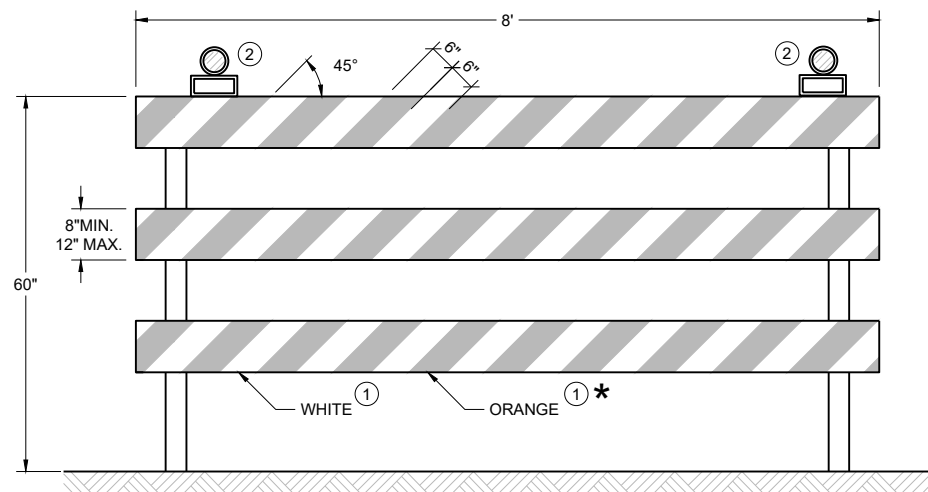
**42" CONE**

DO NOT USE IN TAPERS
 $\frac{1}{2}$ 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.

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.

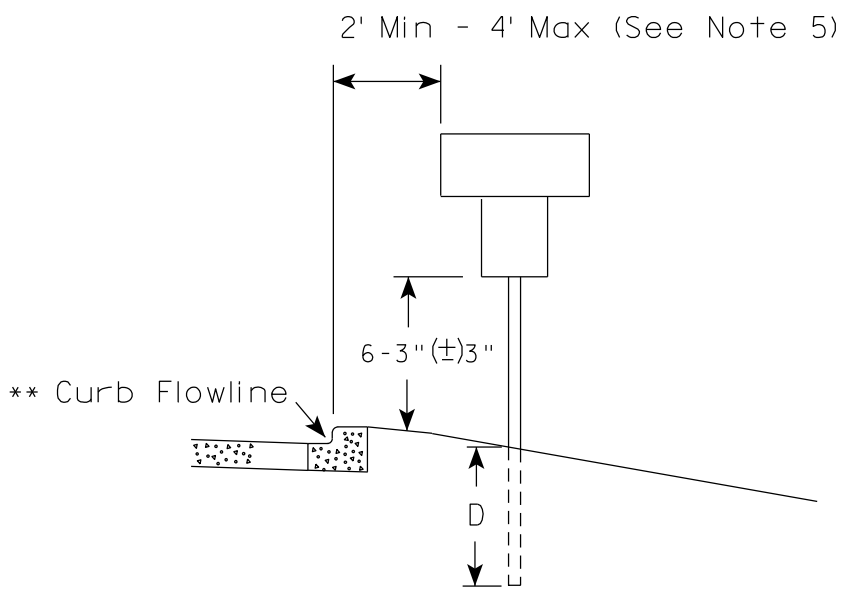
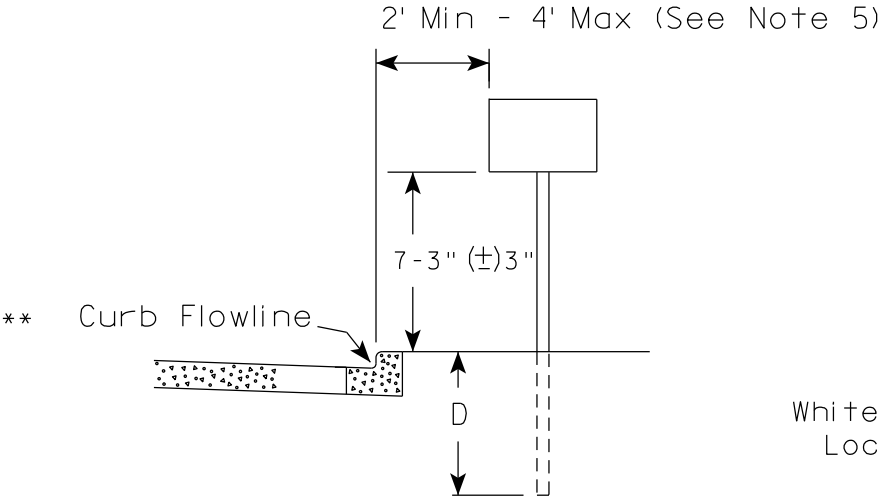
**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

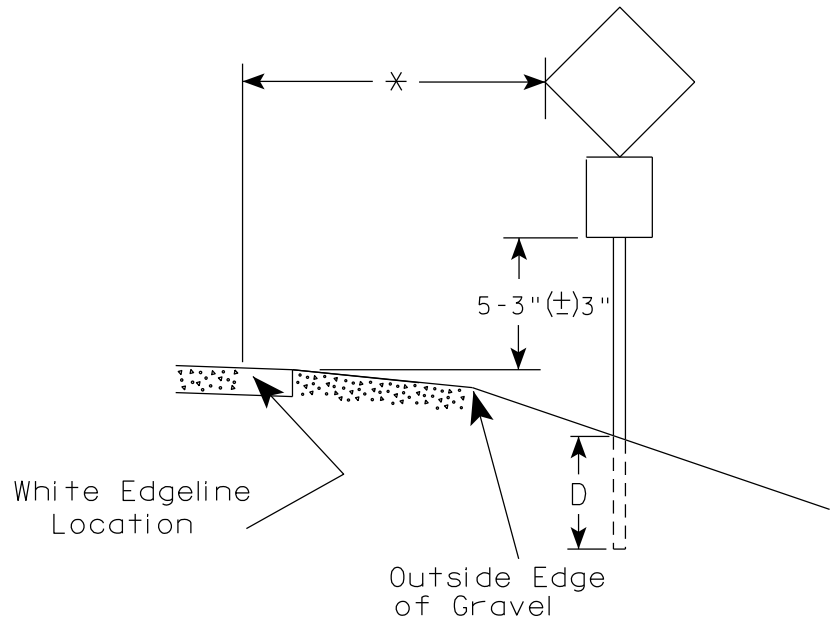
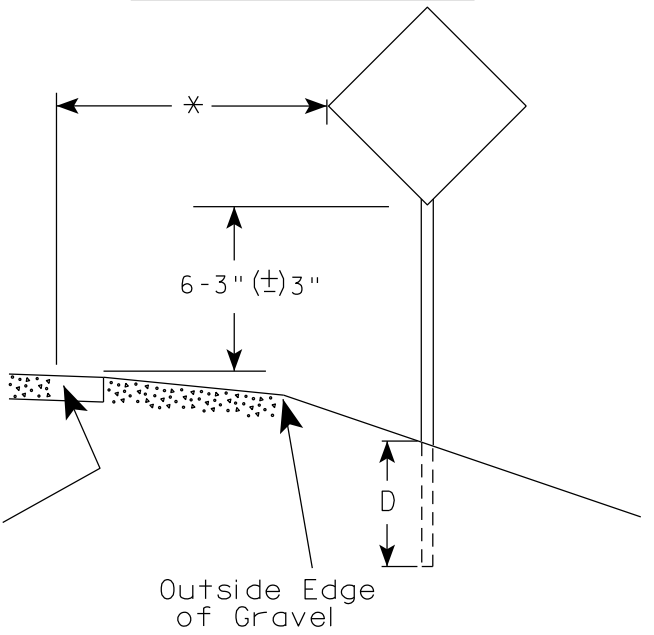
APPROVED
February 2026 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

URBAN AREA



RURAL AREA (See Note 2)



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 directed by the Engineer.

POST EMBEDMENT DEPTH

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

* * 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.

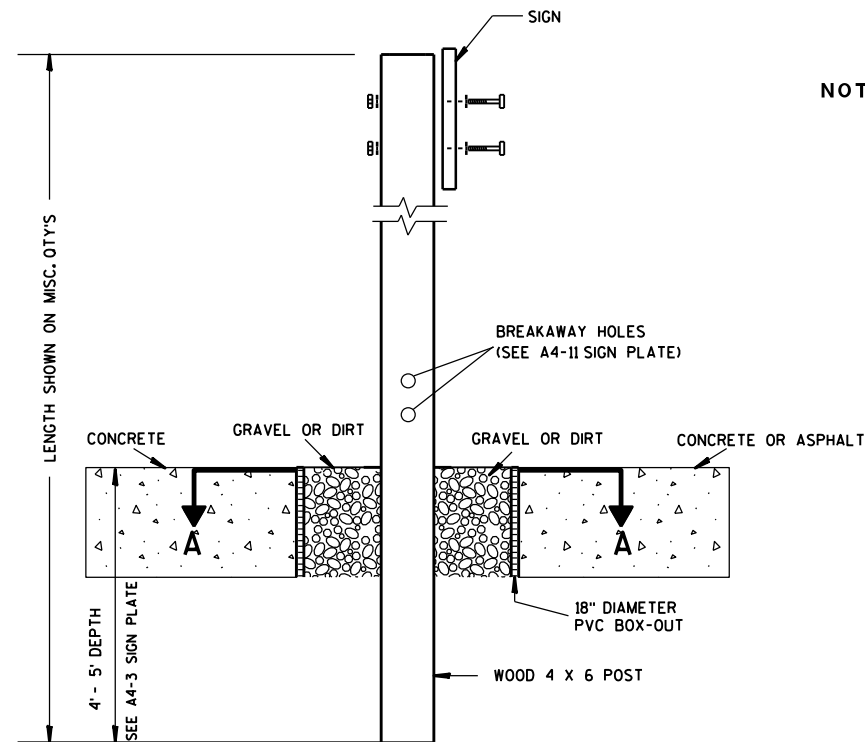
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED 
for State Traffic Engineer

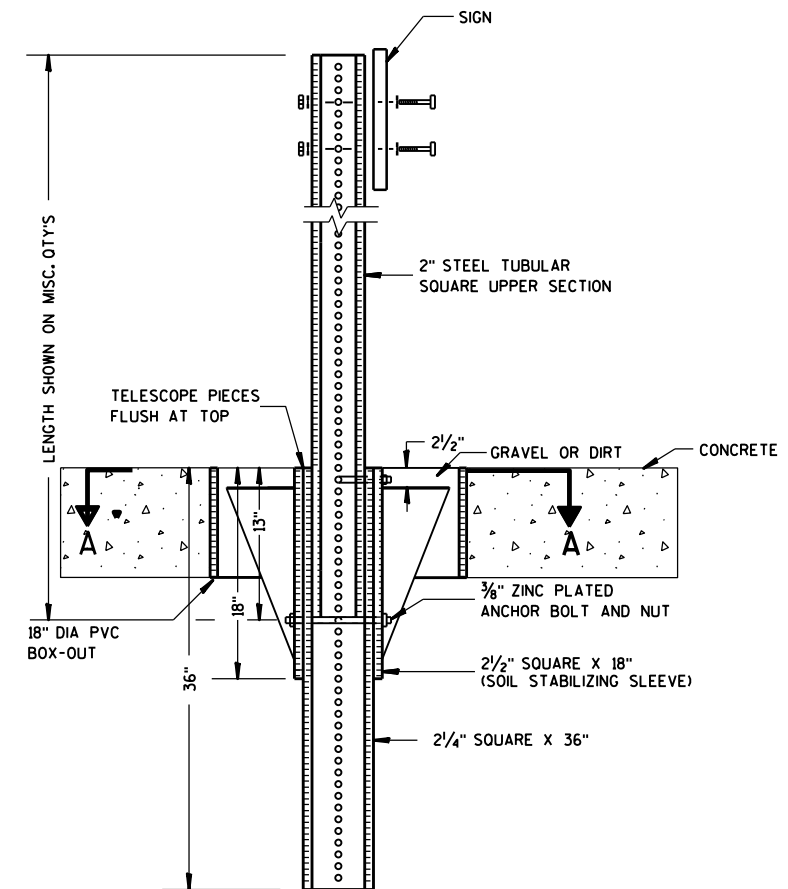
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

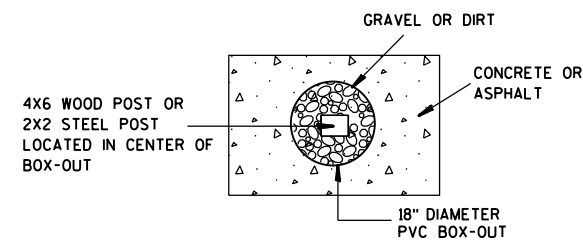
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

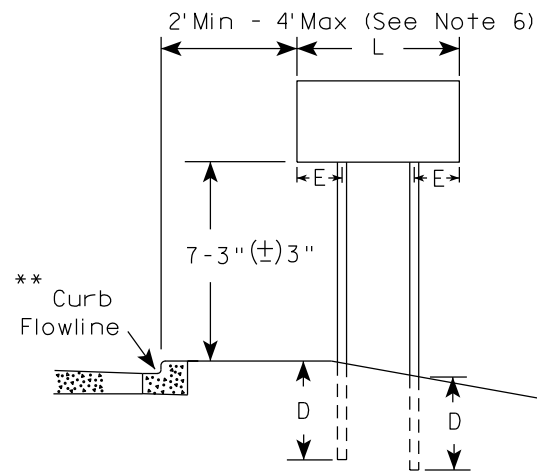
HWY:

COUNTY:

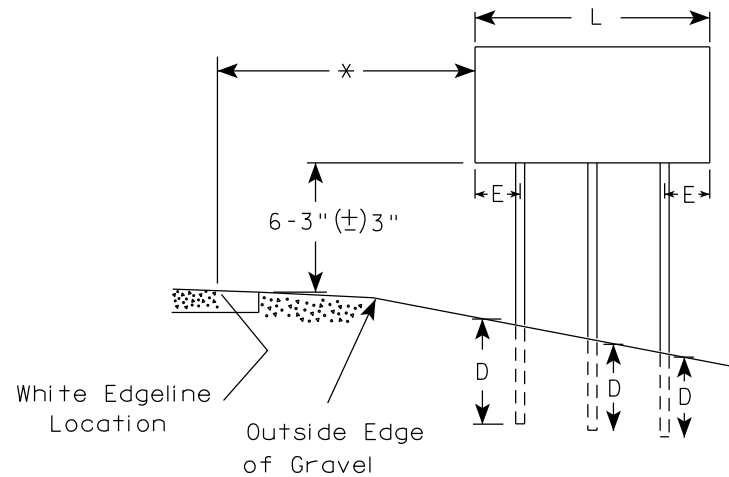
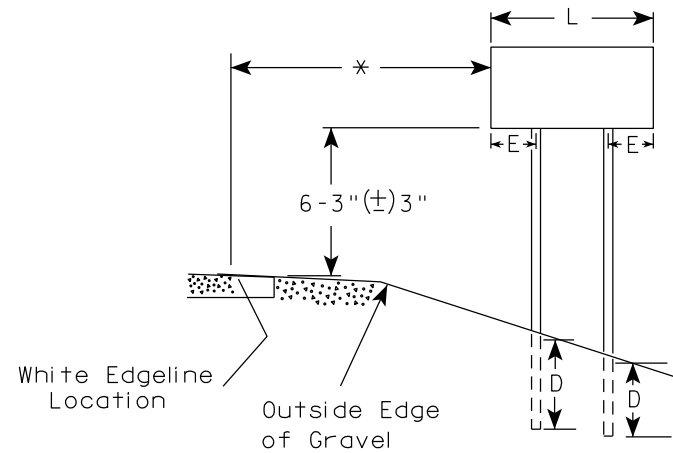
SHEET NO:

E

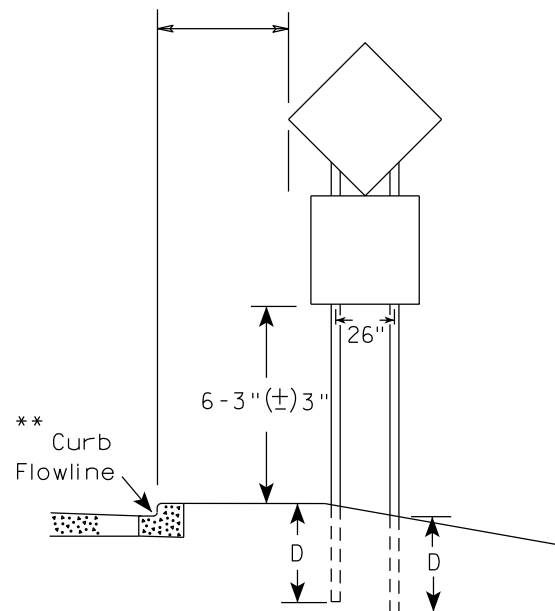
URBAN AREA



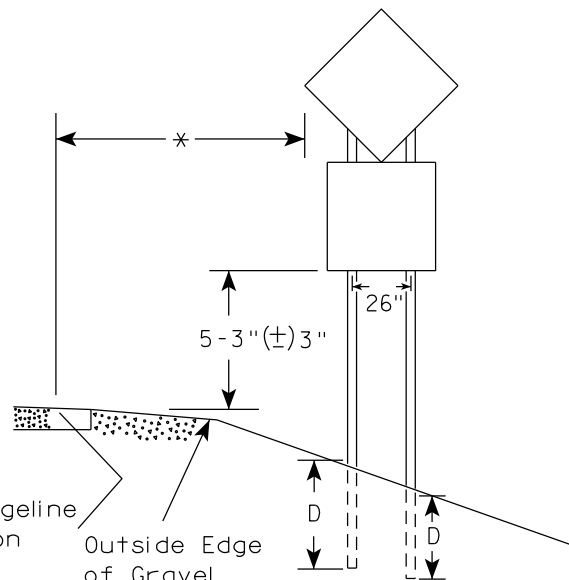
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

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

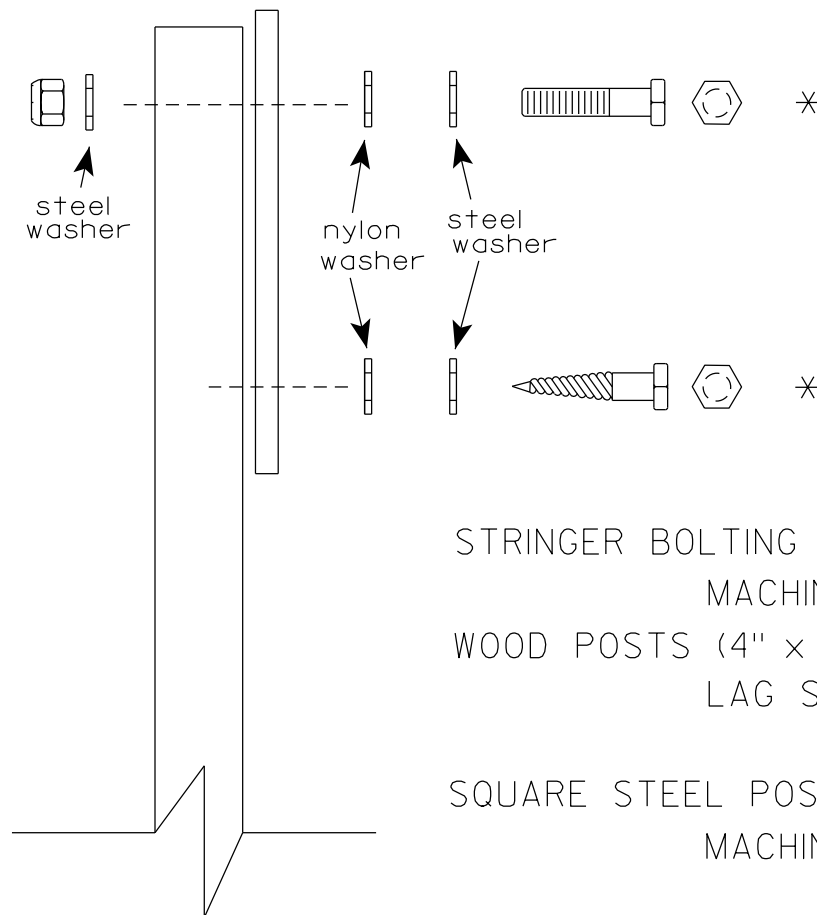
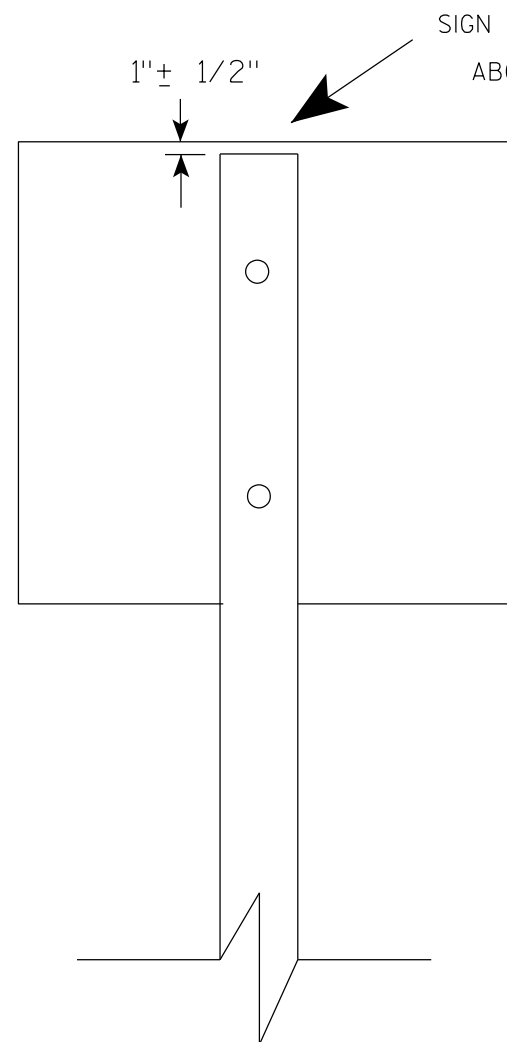
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

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.

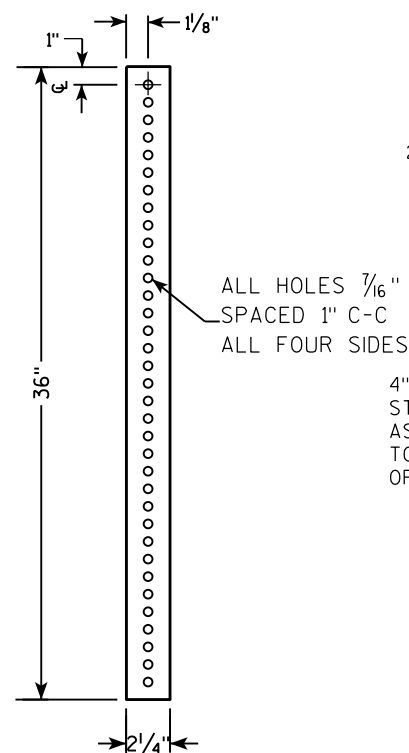
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (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 $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

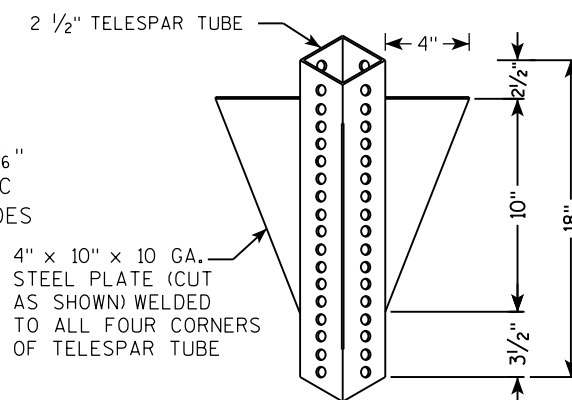
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

**2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**



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



TELESCOPE PIECES
FLUSH AT TOP

18" DIA SCHEDULE
40 PVC
BOX-OUT

36"

13"

18"

2 1/2" GRAVEL OR DIRT

3/8" ZINC PLATED CORNER
ANCHOR BOLT AND NUT

2 1/2" SQUARE X 18"
(SOIL STABILIZING SLEEVE)

2 1/4" SQUARE X 36"

2" STEEL TUBULAR
SQUARE UPPER SECTION

ALL HOLES 7/16"
SPACED 1" C-C
ALL FOUR SIDES

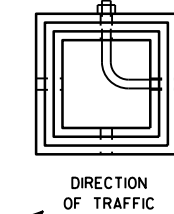
SEE SIGN PLATE
A4-8 FOR BOLT
WASHER, & NUT
MATERIAL

SIGN

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY:

- Dimensions:**
 - Overall height: LENGTH SHOWN ON MISC. QTYS
 - Top section height: 36"
 - Section below top: 18"
 - Section below that: 12"
- Components and Labels:**
 - SIGN
 - SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
 - 2" STEEL TUBULAR SQUARE UPPER SECTION
 - ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C
 - ALL FOUR SIDES
 - $\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT
 - TELESCOPE PIECES FLUSH AT TOP
 - $\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT
 - 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
 - 2 1/4" SQUARE X 36"

3/8" ZINC PLATED CORNER
ANCHOR BOLT AND NUT



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 NO. A4-9.9

PROJECT NO:

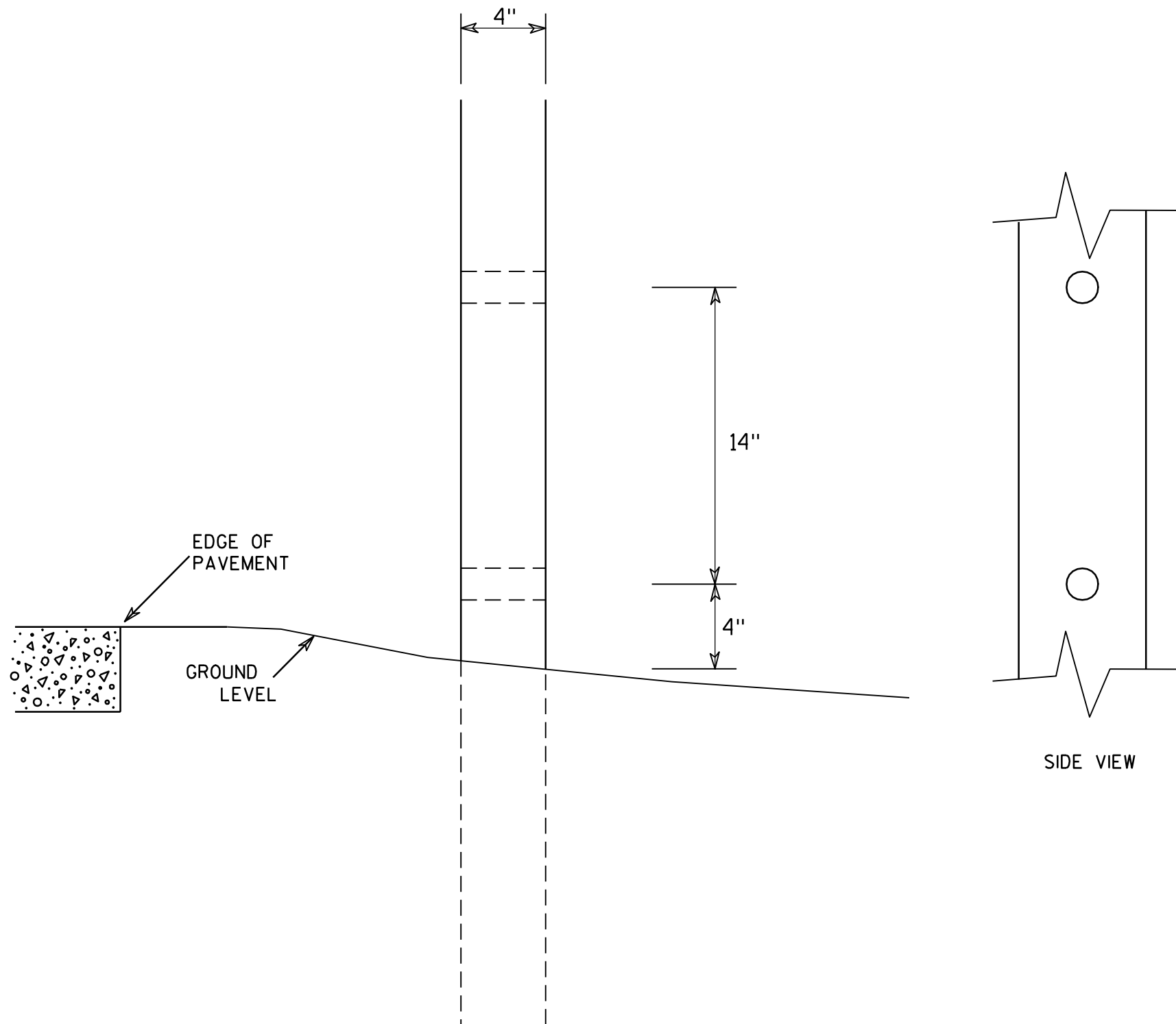
HWY:

COUNTY:

SHEET NO:

E

7



GENERAL NOTES

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

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

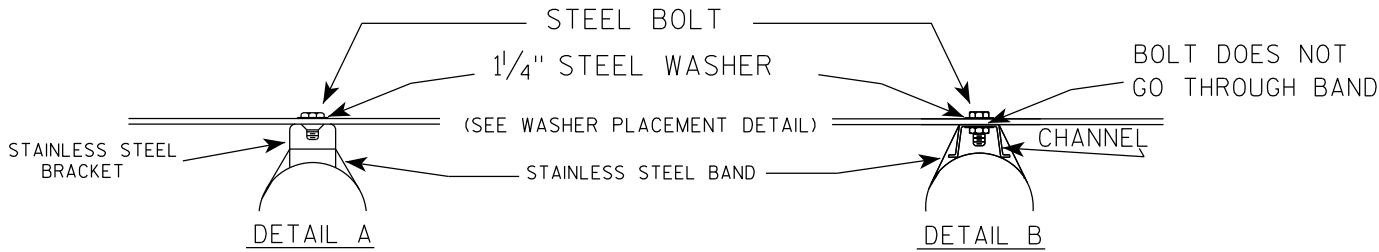
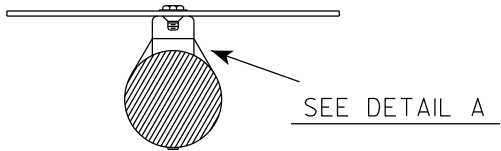
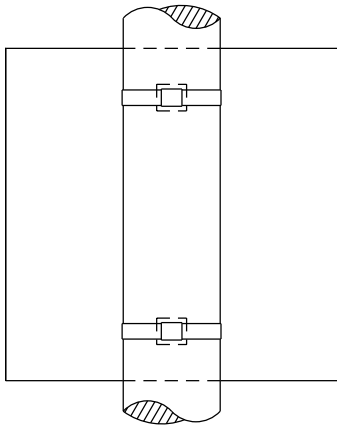
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SHEET NO:

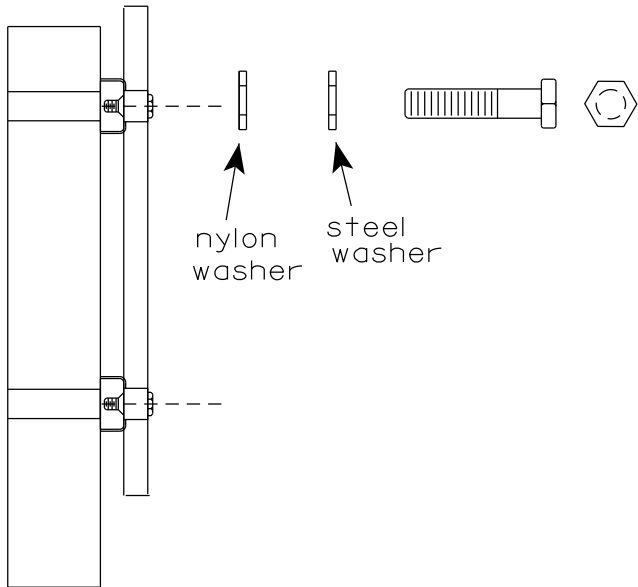
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

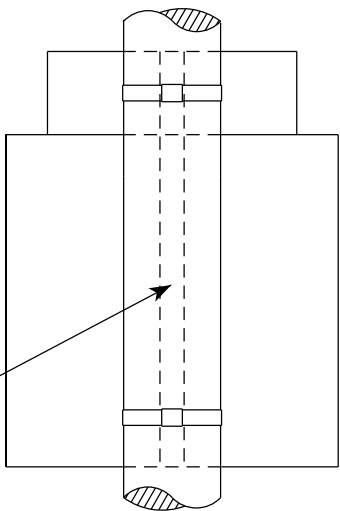


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

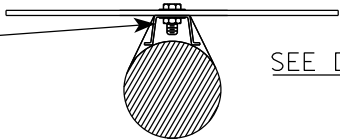
GENERAL NOTES

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 3/4" 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



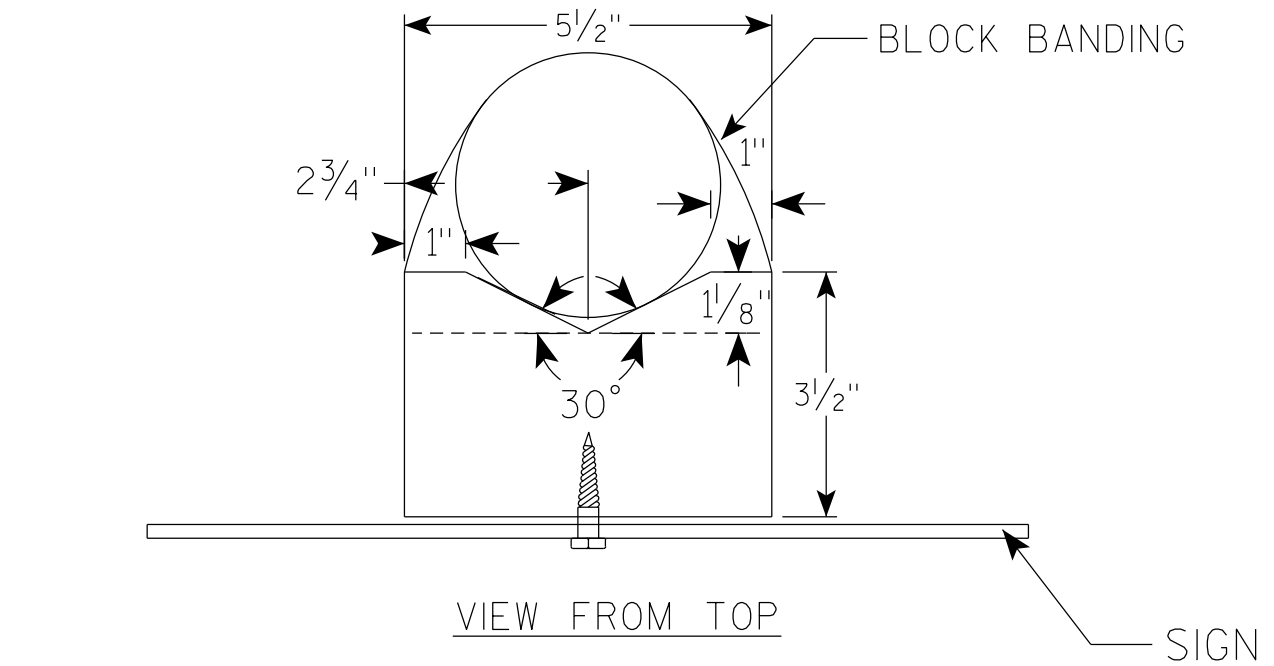
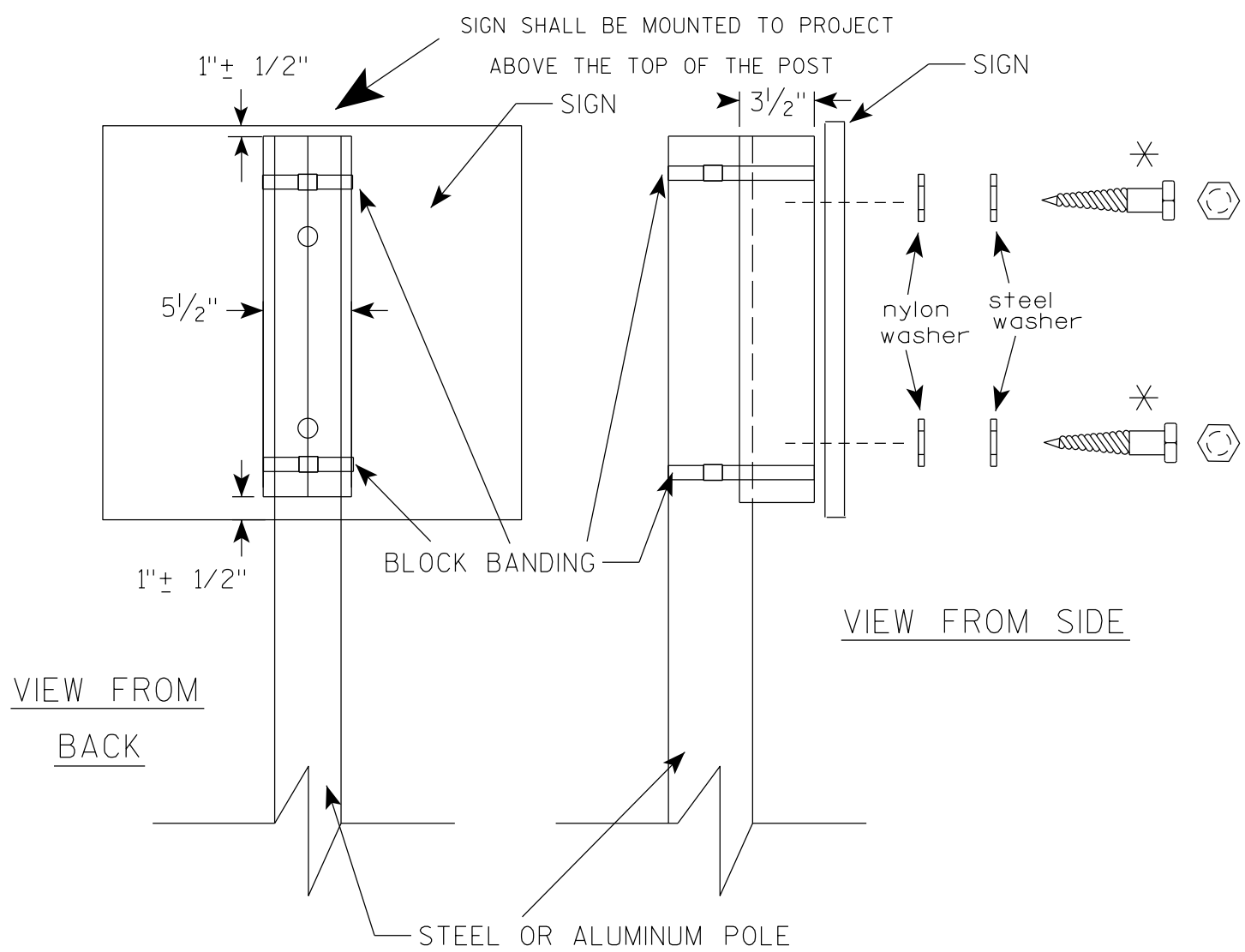
CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4

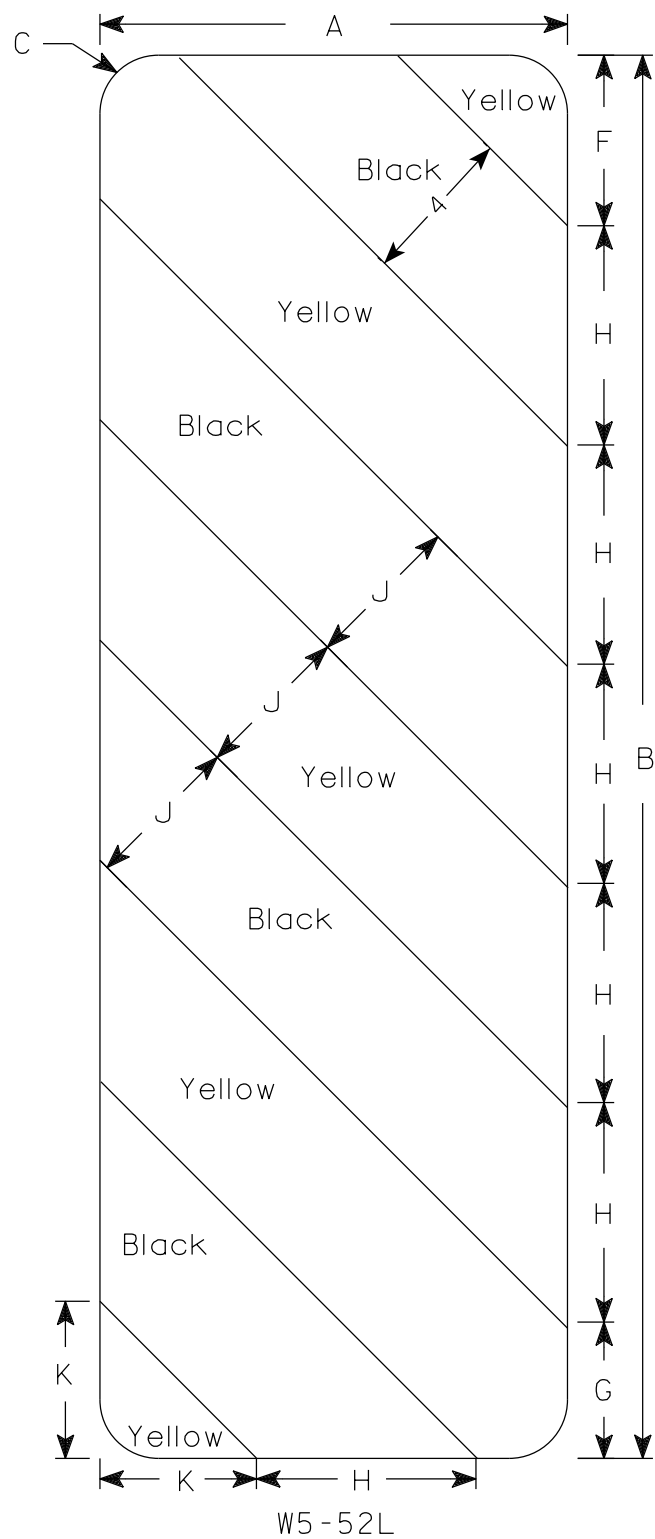


GENERAL NOTES

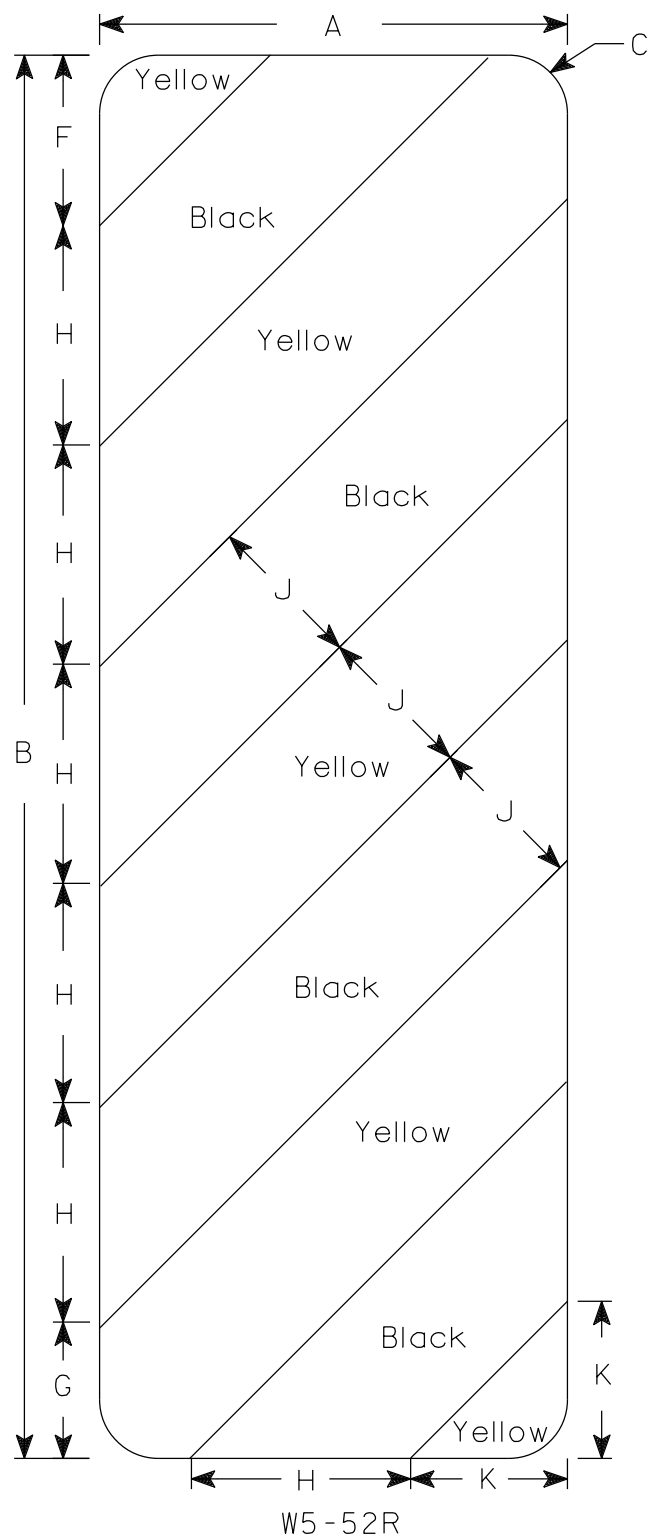
1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WISDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, $\frac{3}{4}$ " WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY 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 $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL (V-BLOCK OPTION)	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 4/19/2022	PLATE NO. A5-10.3



W5-52L



W5-52R

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Yellow
 - Message - Black
- 3. Alternate colors of stripes as shown.

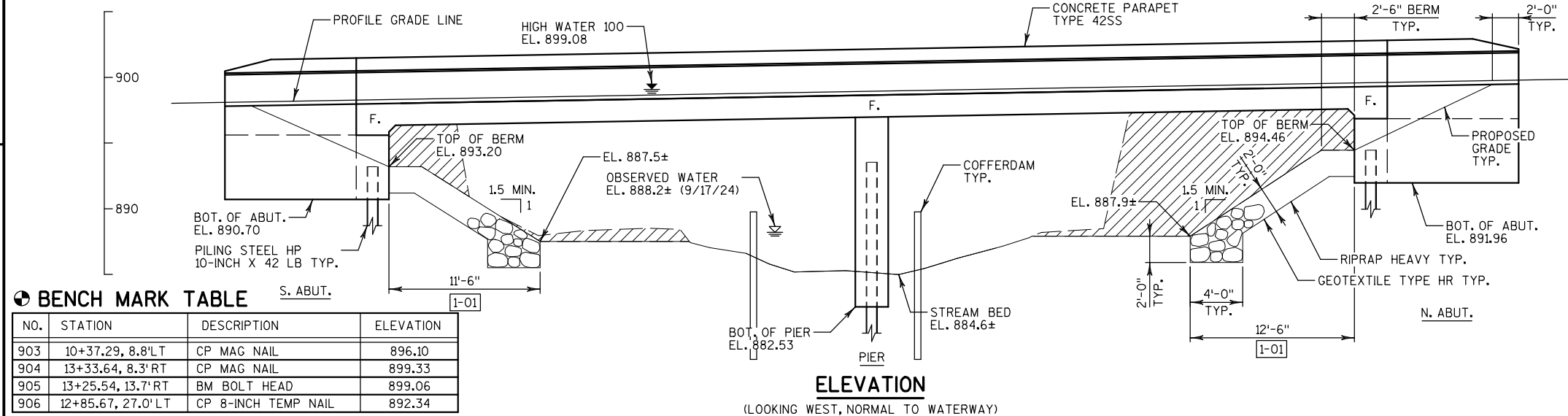
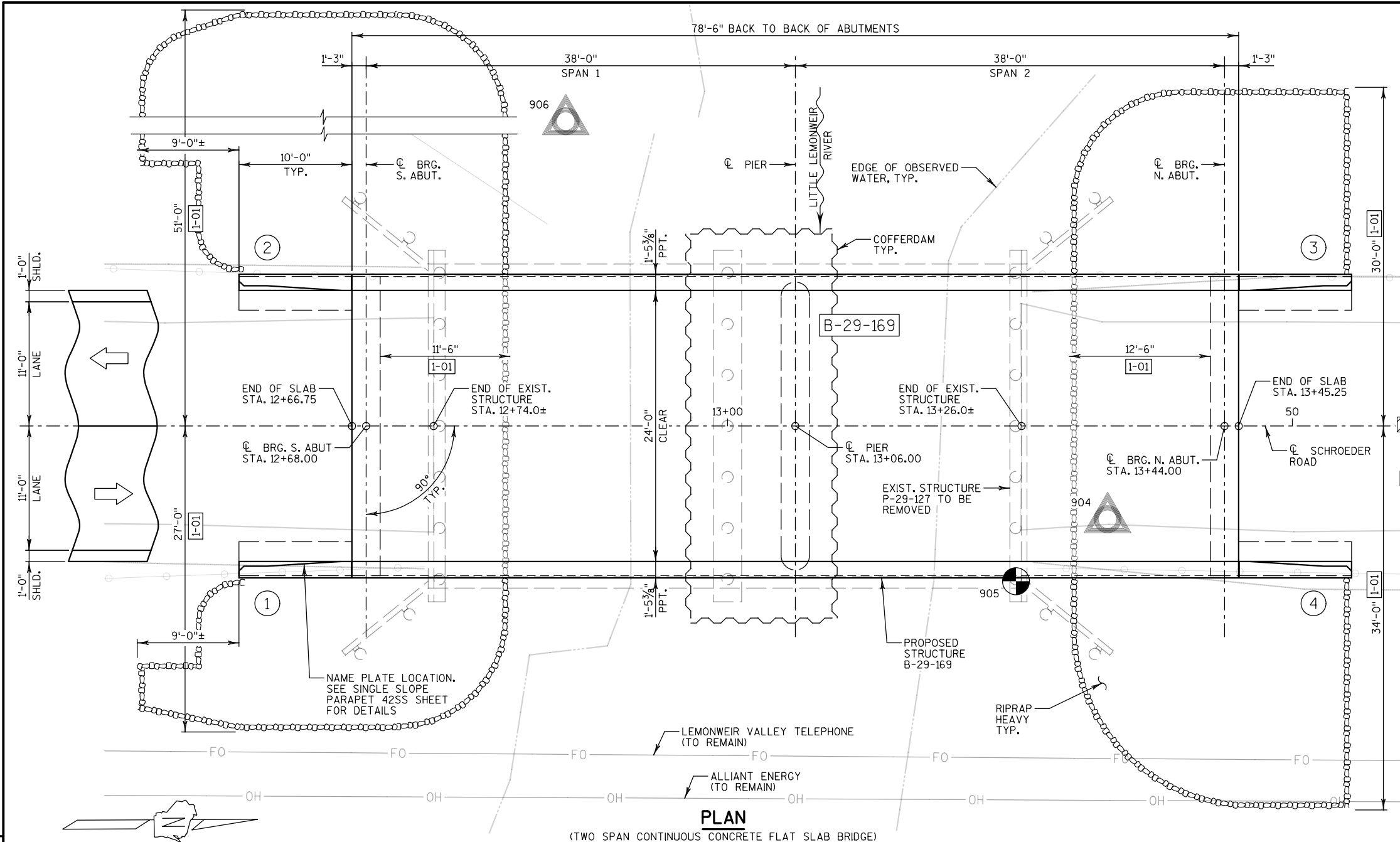
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54	1 1/2			6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/4/2024 PLATE NO. W5-52.10



BENCH MARK TABLE			
NO.	STATION	DESCRIPTION	ELEVATION
903	10+37.29, 8.8'LT	CP MAG NAIL	896.10
904	13+33.64, 8.3'RT	CP MAG NAIL	899.33
905	13+25.54, 13.7'RT	BM BOLT HEAD	899.06
906	12+85.67, 27.0'LT	CP 8-INCH TEMP NAIL	892.34

DESIGN DATA

LIVE LOAD:
DESIGN LOADING _____ HL-93
INVENTORY RATING _____ 1.10
OPERATING RATING _____ 1.42
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) _____ 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 PSF.

MATERIAL PROPERTIES

CONCRETE MASONRY:
SUPERSTRUCTURE _____ $f'_c = 4,000$ PSI
ALL OTHER _____ $f'_c = 3,500$ PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT:
GRADE 60 _____ $f_y = 60,000$ PSI

TRAFFIC DATA

ADT (2027) = 100
ADT (2047) = 110
DESIGN SPEED = 55 MPH

LEGEND

- (X) INDICATES WING NUMBER.
AREA TO EXCAVATE INCLUDED IN "EXCAVATION FOR STRUCTURES BRIDGES B-29-169".
[1-01] LIMITS OF RIPRAP HEAVY AND GEOTEXTILE TYPE HR.

HYDRAULIC DATA

100 YEAR FREQUENCY
Q₁₀₀ _____ 4,900 C.F.S.
Q_{BR} _____ 2,861 C.F.S.
Q_{RD} _____ 2,039 C.F.S.
VEL₁₀₀ _____ 4.5 F.P.S.
HW₁₀₀ _____ EL. 899.08
WATERWAY AREA _____ 631 SQ. FT.
DRAINAGE AREA _____ 52.8 SQ. MI.
SCOUR CRITICAL CODE _____ 5

2 YEAR FREQUENCY
Q₂ _____ 1,010 C.F.S.
VEL₂ _____ 2.6 F.P.S.
HW₂ _____ EL. 893.74

ROAD OVERTOPPING FREQUENCY
FREQUENCY _____ 10 YEARS
Q₁₀ _____ 2,430 C.F.S.
HW₁₀ _____ EL. 896.60

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQUIRED RESISTANCE OF 135 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. PILE POINTS REQUIRED.
ESTIMATED 40' LONG AT THE SOUTH ABUTMENT.
ESTIMATED 70' LONG AT THE NORTH ABUTMENT.

PIER TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 165 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. PILE POINTS REQUIRED.
ESTIMATED 55' LONG AT THE PIER.

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

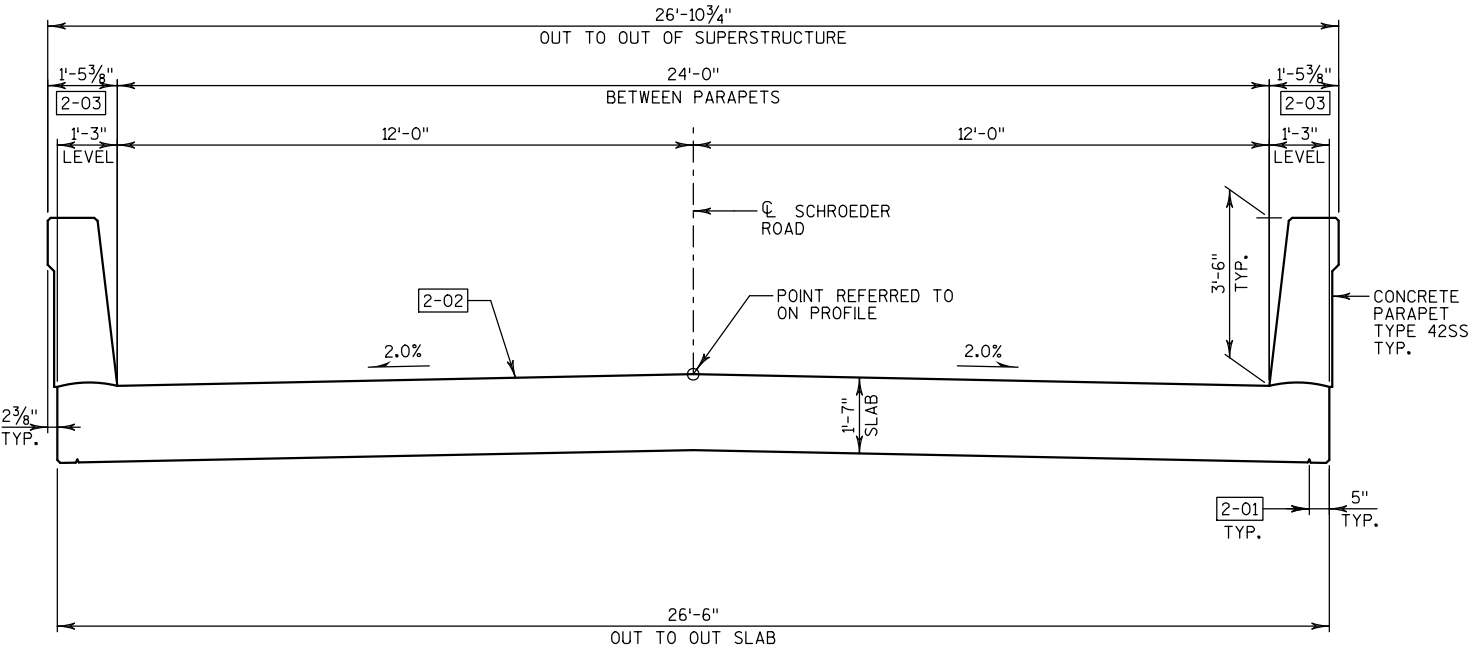
LIST OF DRAWINGS

- GENERAL PLAN
- CROSS SECTION & QUANTITIES
- MISCELLANEOUS DETAILS
- SUBSURFACE EXPLORATION
- ABUTMENTS
- ABUTMENT DETAILS
- PIER
- SUPERSTRUCTURE DETAILS-1
- SUPERSTRUCTURE DETAILS-2
- SUPERSTRUCTURE DETAILS-3
- SINGLE SLOPE PARAPET 42SS



BUREAU OF STRUCTURES CONTACT:
AARON BONK, P.E. (608) 261-0261
CONSULTANT CONTACT:
ERIC PRICE, P.E. (608) 826-6146

NO.	DATE	REVISION	BY
CORRE			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	JLR		05/11/26
CHIEF STRUCTURES DESIGN ENGINEER			
STRUCTURE B-29-169			
SCHROEDER ROAD OVER LITTLE LEMONWEIR RIVER			
COUNTY	JUNEAU	TOWN/VILLAGE	ORANGE
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	SMS	CKD.	ETP
DRAWN BY	TKB	PLANS CKD.	ETP
GENERAL PLAN			SHEET 1 OF 11



PROPOSED CROSS SECTION THRU ROADWAY
(LOOKING NORTH)

LEGEND

- [2-01] 3/4" V-GROOVE, TERMINATE 6" FROM FRONT FACE OF ABUTMENTS.
- [2-02] COAT WITH "PROTECTIVE SURFACE TREATMENT" AS PER THE WISDOT STANDARD SPECIFICATIONS.
- [2-03] COAT FRONT FACE AND TOP OF PARAPETS WITH "PIGMENTED SURFACE SEALER".

ABBREVIATIONS:

- ABUT. - ABUTMENT
BTWN. - BETWEEN
B.F. - BACK FACE
BOT. - BOTTOM
BRG. - BEARING
CL. - CLEAR
CONST. - CONSTRUCTION
DIA. - DIAMETER
E.F. - EACH FACE
EXIST. - EXISTING
F.F. - FRONT FACE
HORIZ. - HORIZONTAL
JT. - JOINT
LONG. - LONGITUDINAL
PPT. - PARAPET
PROJ. - PROJECTION
S.E. - SEMI-EXPANSION
SPA. - SPACED
STD. - STANDARD
SYMM. - SYMMETRICAL
T&B - TOP AND BOTTOM
TRANS. - TRANSVERSE
TYP. - TYPICAL
VERT. - VERTICAL
U.N.O. - UNLESS NOTED OTHERWISE

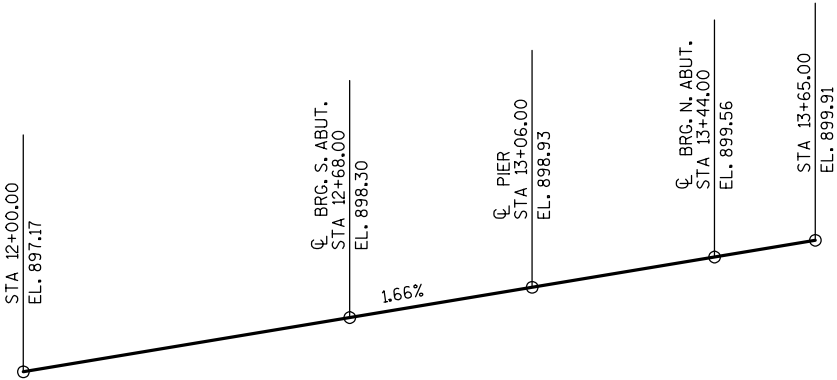
GENERAL NOTES:

- DRAWINGS SHALL NOT BE SCALED.
- THE EXISTING STRUCTURE, P-29-127, TO BE REMOVED, IS A TWO SPAN FLAT TIMBER SLAB BRIDGE, 52.0' LONG WITH A 24.7' CLEAR WIDTH BETWEEN RAILINGS.
- BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
- THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
- SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.
- BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.
- 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 UNDERWATER SHALL NOT EXCEED 10.0 FEET IN DEPTH, UNLESS APPROVED OTHERWISE.
- 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.
- THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-29-169" SHALL BE THE EXISTING GROUNDLINE.
- AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.
- THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.
- SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.
- PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF SLAB.
- PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE, TOP AND THE ENDS OF THE PARAPETS.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM	UNIT	SOUTH ABUTMENT	PIER	NORTH ABUTMENT	SUPER.	TOTALS
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS P-29-127	EACH	--	--	--	--	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-29-169	EACH	--	--	--	--	1
206.5001	COFFERDAMS B-29-169	EACH	--	--	--	--	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	105	--	105	--	210
502.0100	CONCRETE MASONRY BRIDGES	CY	29.5	33.9	29.7	147.8	241
502.3200	PROTECTIVE SURFACE TREATMENT	SY	--	--	--	210	210
502.3210	PIGMENTED SURFACE SEALER	SY	10	--	10	77	97
502.9000.S	UNDERWATER SUBSTRUCTURE INSPECTION B-29-169	EACH	--	--	--	--	1
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1,640	1,630	1,640	--	4,910
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,950	50	1,950	29,850	33,800
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	9	--	9	--	18
550.0500	PILE POINTS	EACH	4	7	4	--	15
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	160	385	280	--	825
606.0300	RIPRAP HEAVY	CY	190	--	120	--	310
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	105	--	105	--	210
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	25	--	26	--	52
645.0120	GEOTEXTILE TYPE HR	SY	295	--	190	--	485
	NON-BID ITEMS						
	FILLER	SIZE	--	--	--	--	1/2" & 3/4"

ALL ITEMS ARE CATEGORY 0020



PROFILE

SCHROEDER ROAD

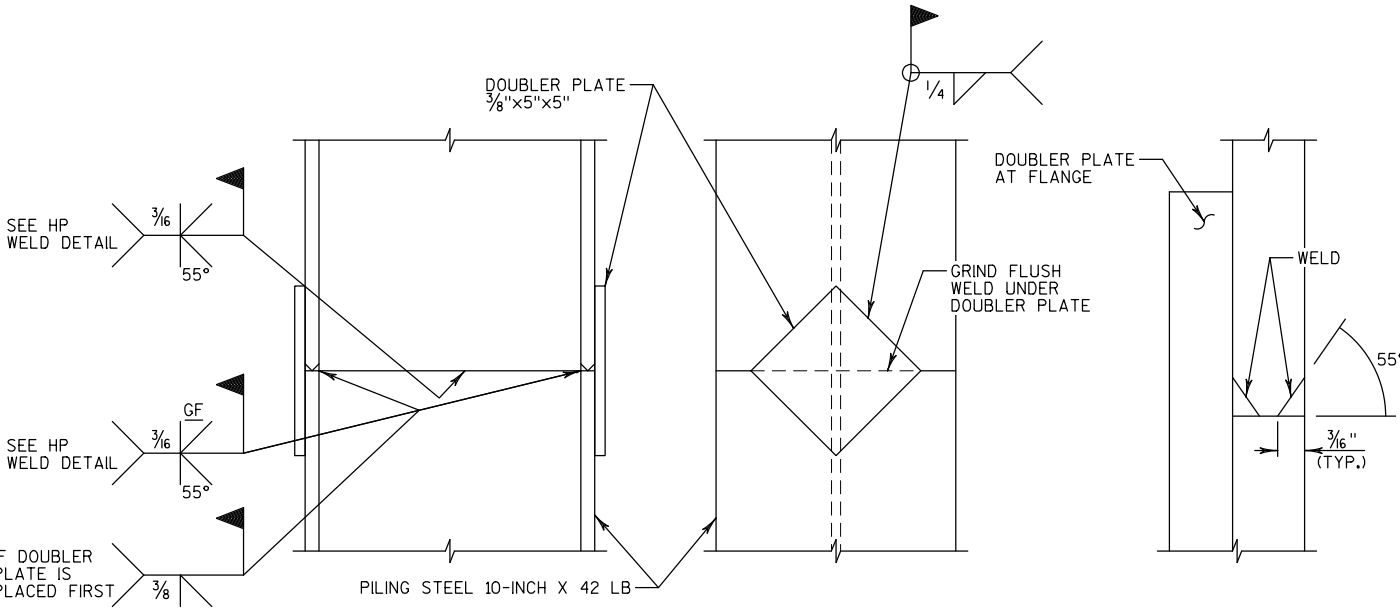
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-29-169			
DRAWN BY TKB		PLANS CK'D. ETP	
CROSS SECTION & QUANTITIES		SHEET 2 OF 11	

LEGEND

- 3-01
- BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

3-02

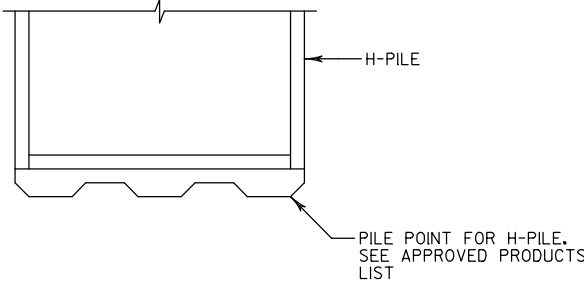
3-03



STEEL 'HP' PILING

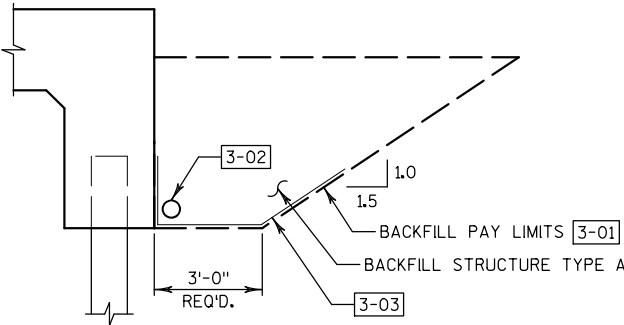
'HP' WELD DETAILS
FLANGE SHOWN, WEB SIMILAR

PILE SPLICE DETAILS



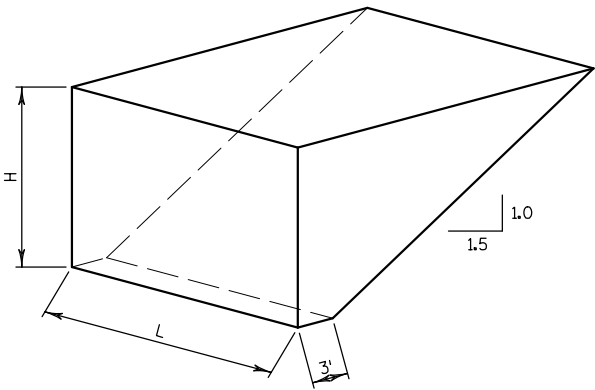
PILE POINT FOR H-PILE

PILE POINT SHALL BE INSTALLED ACCORDING TO THE PILE POINT MANUFACTURER'S INSTRUCTIONS.



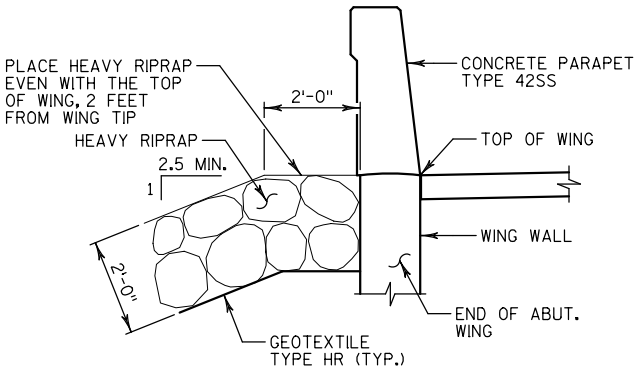
STRUCTURE BACKFILL LIMITS

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET.



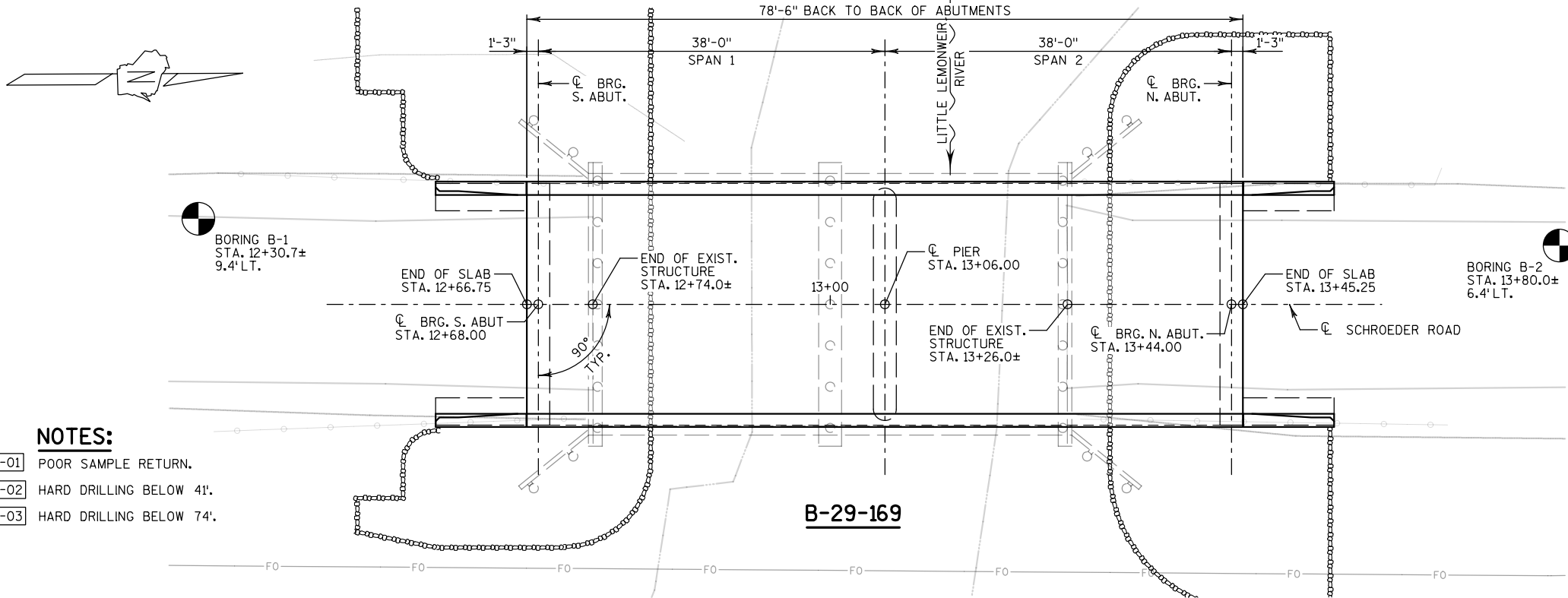
ABUTMENT BACKFILL PAY LIMIT DIAGRAM

- L = OUT TO OUT OF ABUTMENT, 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)
 $V_{CF} = (L)(3.0')(H) + (L)(0.5')(1.5H)(H)$
 $V_{CY} = V_{CF} (EF) / 27$
 $V_{TON} = V_{CY} (2.0)$



TYPICAL FILL SECTION AT WING TIPS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-29-169			
DRAWN BY		TKB	PLANS CK'D. ETP
MISCELLANEOUS DETAILS			SHEET 3 OF 11



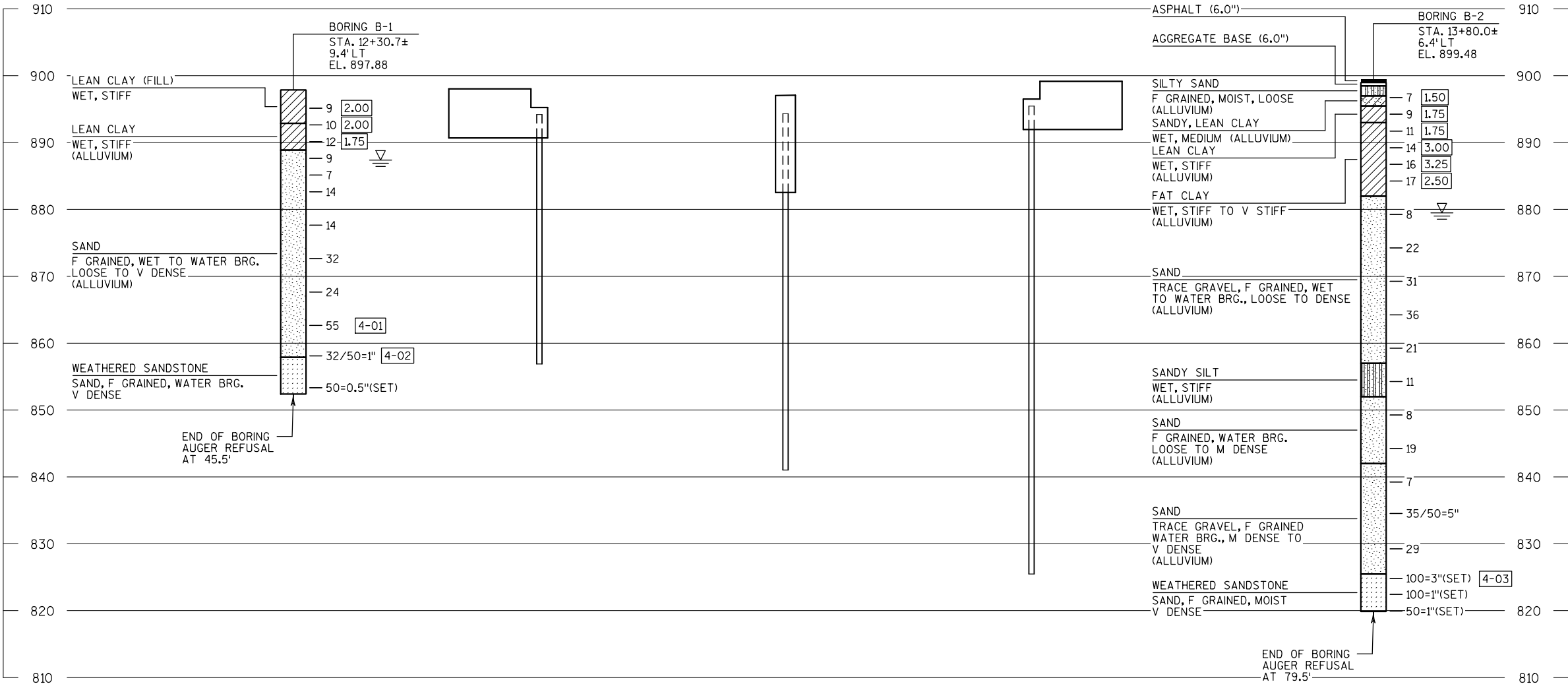
GEOTECHNICAL REPORT &
SOIL BORINGS PERFORMED BY:
CHOSEN VALLEY TESTING
1019 2ND AVENUE SW
ONALASKA, WJ 54650
(608)-782-5505

BORING B-1
PERFORMED ON 9/11/24
BORING B-2
PERFORMED ON 9/11/24

NOTES:

- 4-01 POOR SAMPLE RETURN.
- 4-02 HARD DRILLING BELOW 41'.
- 4-03 HARD DRILLING BELOW 74'.

B-29-169



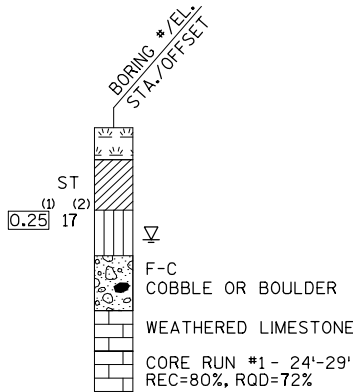
STATE PROJECT NUMBER

7387-00-72

MATERIAL SYMBOLS

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

LEGEND OF BORING



- (1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)
- (2) UNLESS OTHERWISE SPECIFIED, THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- ▽ AT TIME OF DRILLING
- ▽ END OF DRILLING
- ▽ AFTER DRILLING

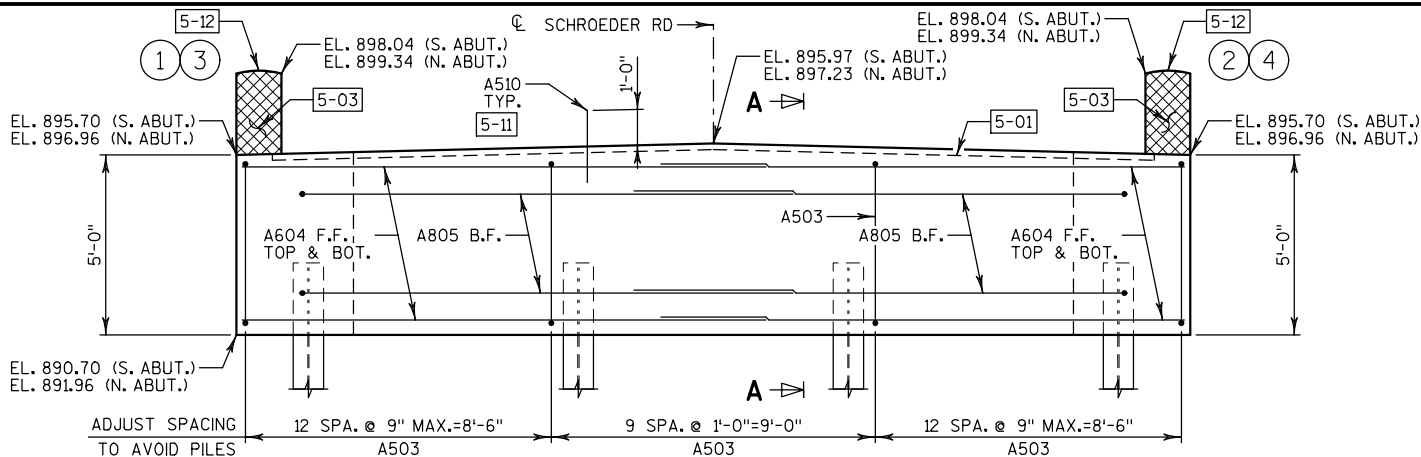
ABBREVIATIONS

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

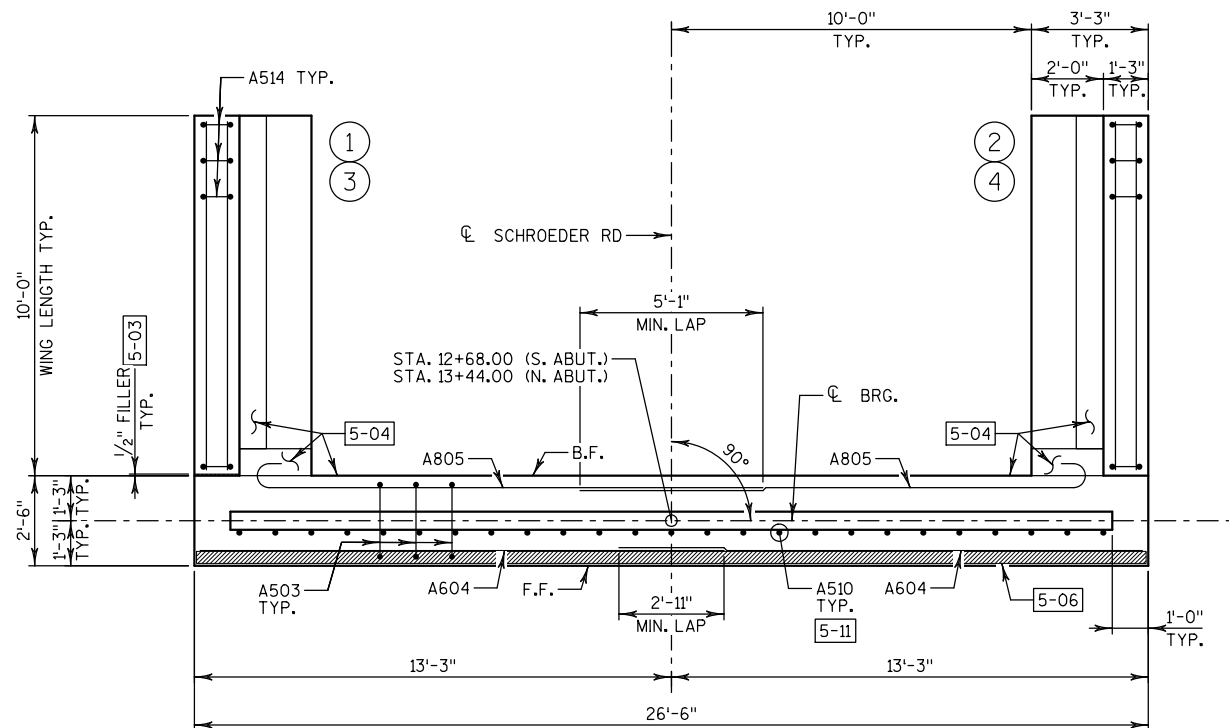
SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

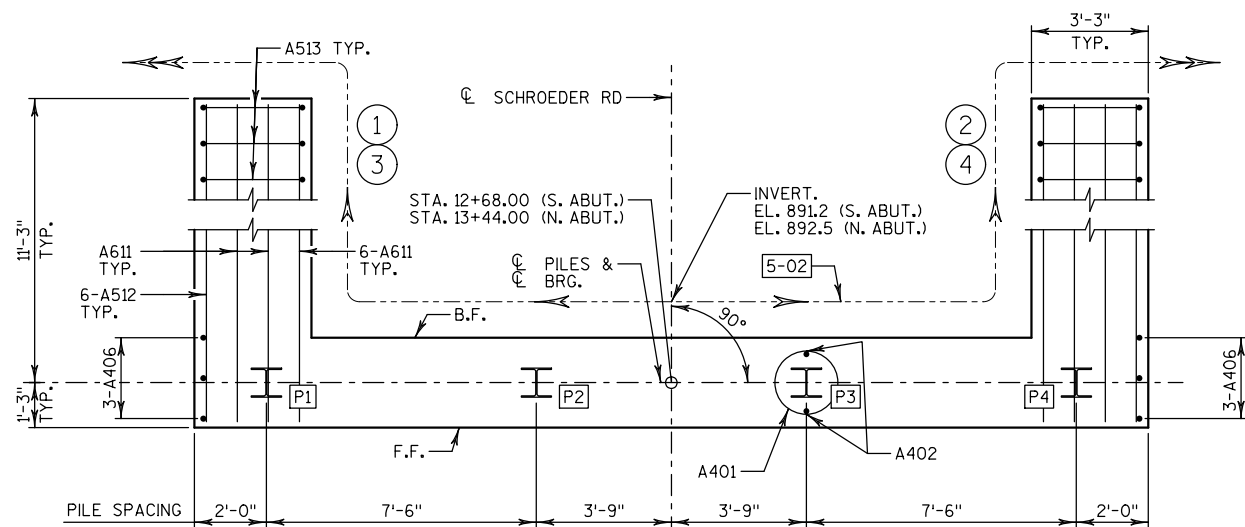
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-29-169			
DRAWN BY TKB		PLANS CK'D. ETP	
SUBSURFACE EXPLORATION			SHEET 4 OF 11



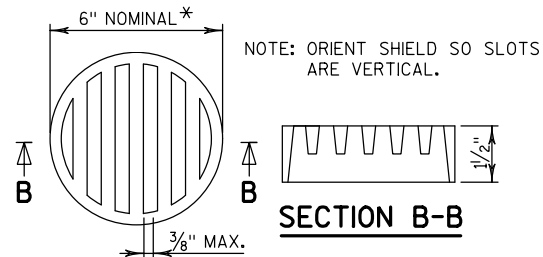
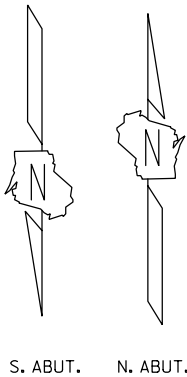
ELEVATION 5-08
(LOOKING SOUTH @ S. ABUT.)
(LOOKING NORTH @ N. ABUT.)



PLAN 5-08



PILE PLAN 5-08



* DIMENSION IS APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

RODENT SHIELD DETAIL

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

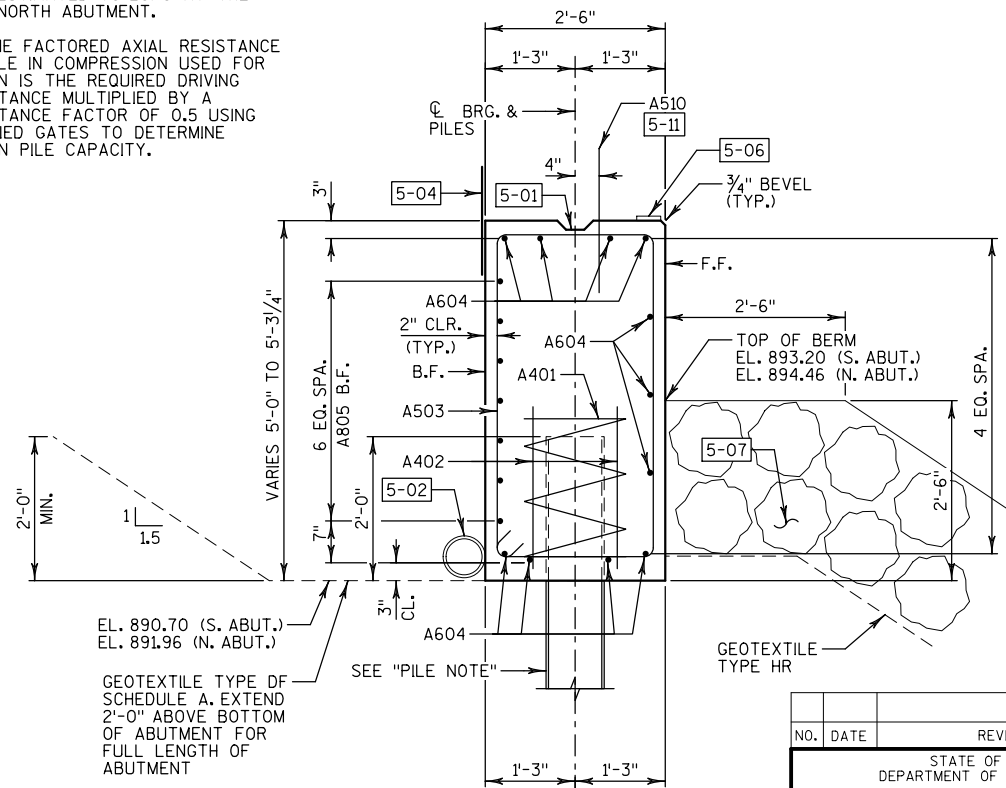
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL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

PILE NOTES

ABUTMENTS TO BE SUPPORTED ON PILING STEEL 10-INCH X 42 LB DRIVEN TO A REQUIRED RESISTANCE OF 135* TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. PILE POINTS REQUIRED.

ESTIMATED 40' LONG AT THE SOUTH ABUTMENT
ESTIMATED 70' LONG AT THE NORTH ABUTMENT.

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



SECTION A-A

STATE PROJECT NUMBER

7387-00-72

LEGEND

- (X) INDICATES WING NUMBER.
- (PX) INDICATES PILE NUMBER.
- 5-01 KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"x6".
- 5-02 PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD TO ENDS OF PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".
- 5-03 1/2" FILLER (INCLUDED IN WING LENGTH). SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).
- 5-04 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- 5-05 PULL UP TO 2" CLEAR.
- 5-06 3/4"x4" PREFORMED JOINT FILLER TO EXTEND BETWEEN EDGES OF SLAB.
- 5-07 HEAVY RIPRAP. SEE SHEET 1 FOR ADDITIONAL DETAILS.
- 5-08 SOUTH ABUTMENT SHOWN. NORTH ABUTMENT SIMILAR.
- 5-09 OPTIONAL CONSTRUCTION JOINT FORMED BY BEVELED 2"x6" KEYWAY WITH MEMBRANE ON BACKFACE.
- 5-10 SEE "SINGLE SLOPE PARAPET 42SS" SHEET FOR PARAPET REINFORCEMENT.
- 5-11 A510 BARS SPACED AT 1'-0" ON CENTER MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.
- 5-12 CONSTRUCTION JOINT. STRIKE OFF AS SHOWN.
- 5-13 3/4" 'V' GROOVE ON FRONT FACE OF WINGWALL.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-29-169			
DRAWN BY TKB		PLANS CK'D. ETP	
ABUTMENTS			SHEET 5 OF 11

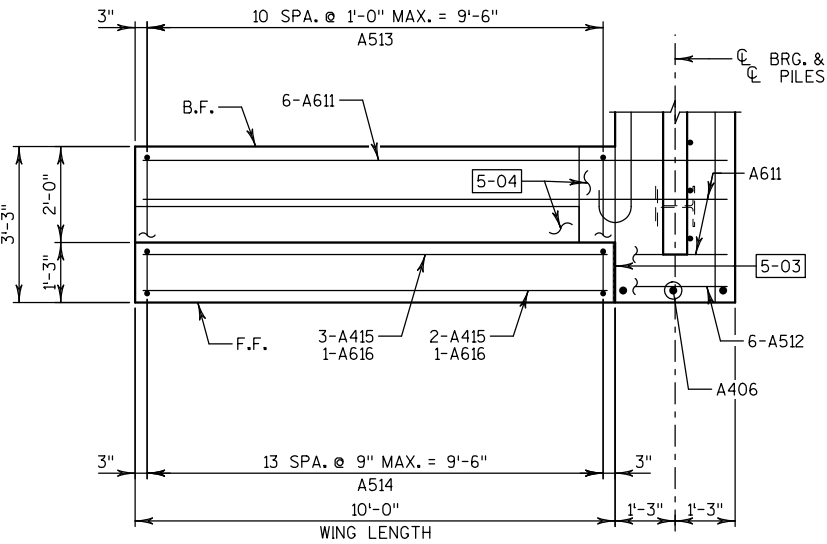
LEGEND

5-XX SEE SHEET 5 FOR CALLOUTS.

BILL OF BARS - ABUTMENTS

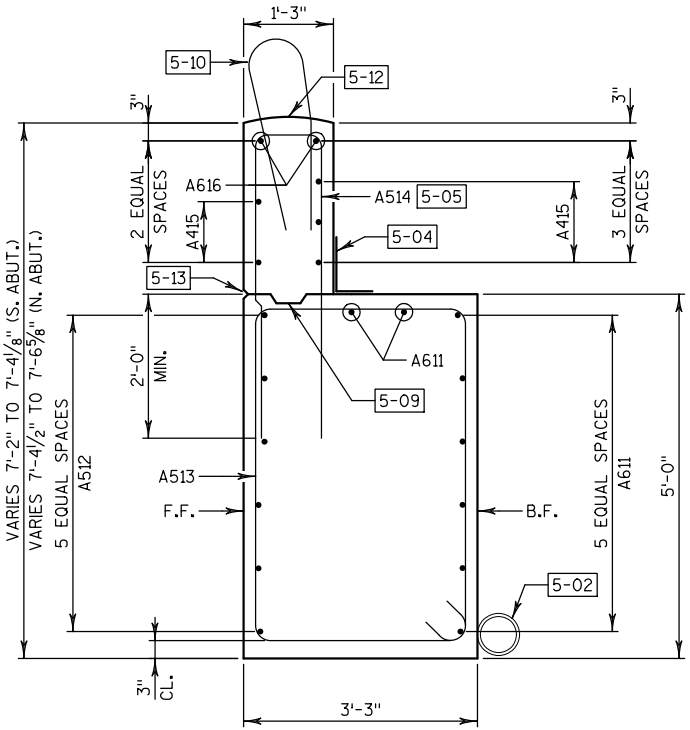
BAR MARK	NO. REQD	LENGTH	BENT	BAR SERIES	LOCATION	
UNCOATED BARS					TOTAL WEIGHT = 3,280 LBS	
A401	8	28'-0"	X		BODY - AT PILES - 1 PER PILE	VERT.
A402	16	2'-3"			BODY - AT PILES - 2 PER PILE	VERT.
A503	68	14'-2"	X		BODY - STIRRUPS	VERT.
A604	44	14'-7"			BODY - TOP, F.F. & BOT.	HORIZ.
A805	28	14'-9"	X		BODY - B.F.	HORIZ.
A406	12	4'-7"			BODY - ENDS	VERT.
COATED BARS					TOTAL WEIGHT = 2,500 LBS	
A510	50	2'-0"			BODY - TOP	VERT.
A611	32	11'-11"			WING FTG. - B.F. & TOP	HORIZ.
A512	24	12'-2"			WING FTG. - F.F.	HORIZ.
A513	44	15'-8"	X		WING FTG. - STIRRUPS	VERT.
A514	56	9'-6"	X		WINGS - STIRRUPS	VERT.
A415	20	9'-8"			WINGS - F.F. & B.F.	HORIZ.
A616	8	9'-8"			WINGS - TOP	HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR.

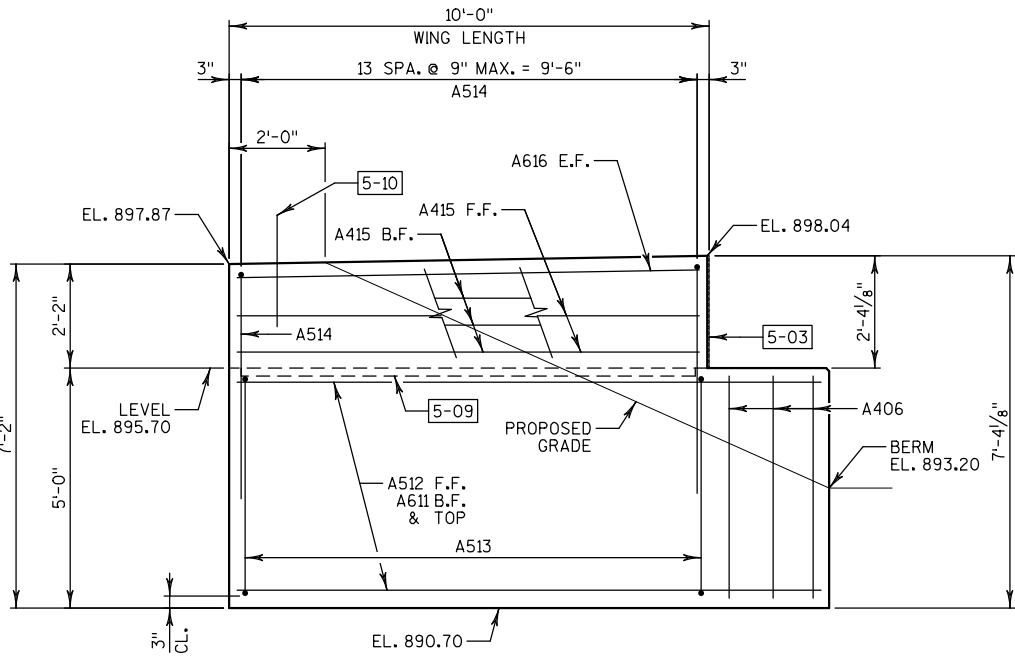


PLAN-WINGS

(WING 1 SHOWN, WINGS 2-4 SIMILAR)

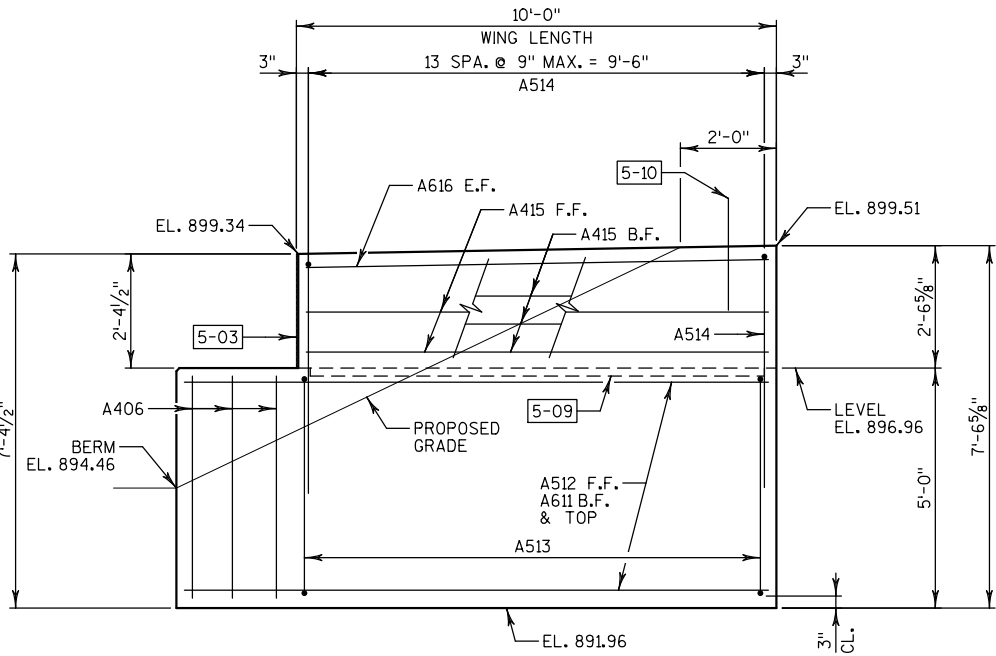


TYPICAL SECTION THRU WINGS



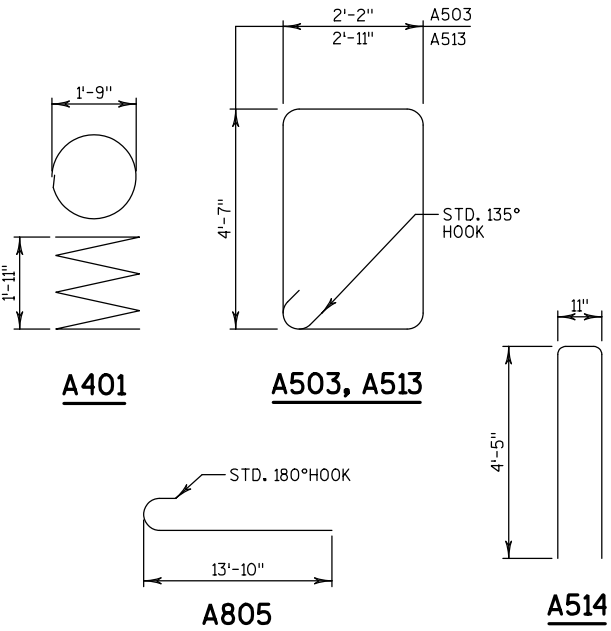
ELEVATION-WING 1

(WING 1 SHOWN, WING 2 SIMILAR)

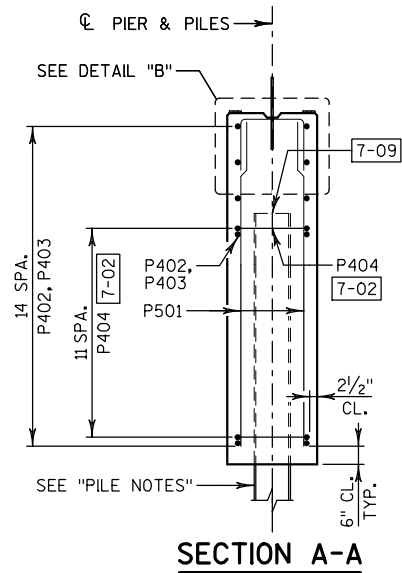
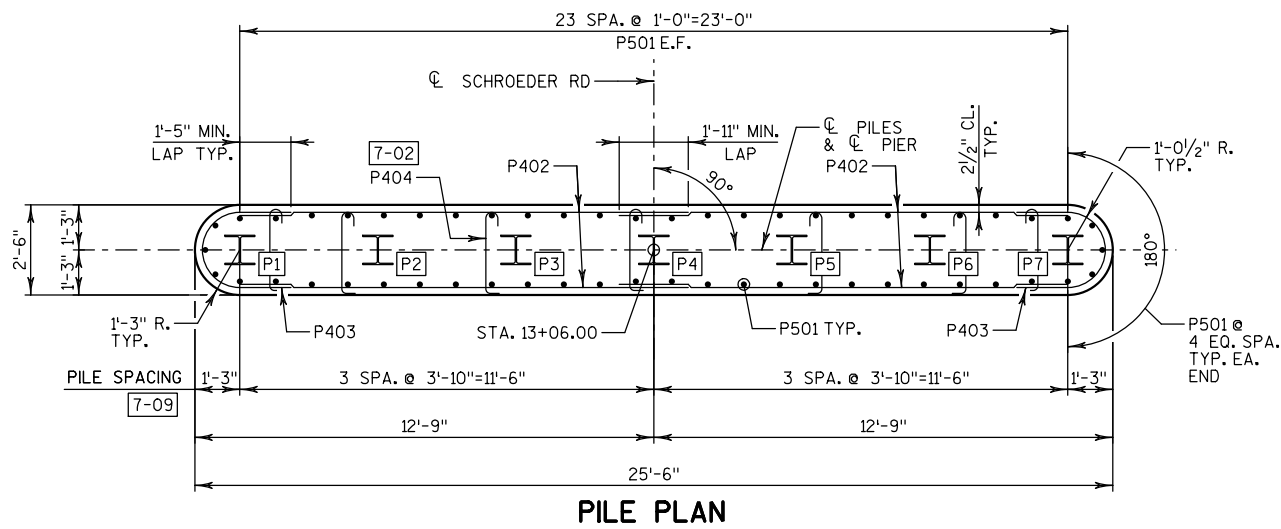
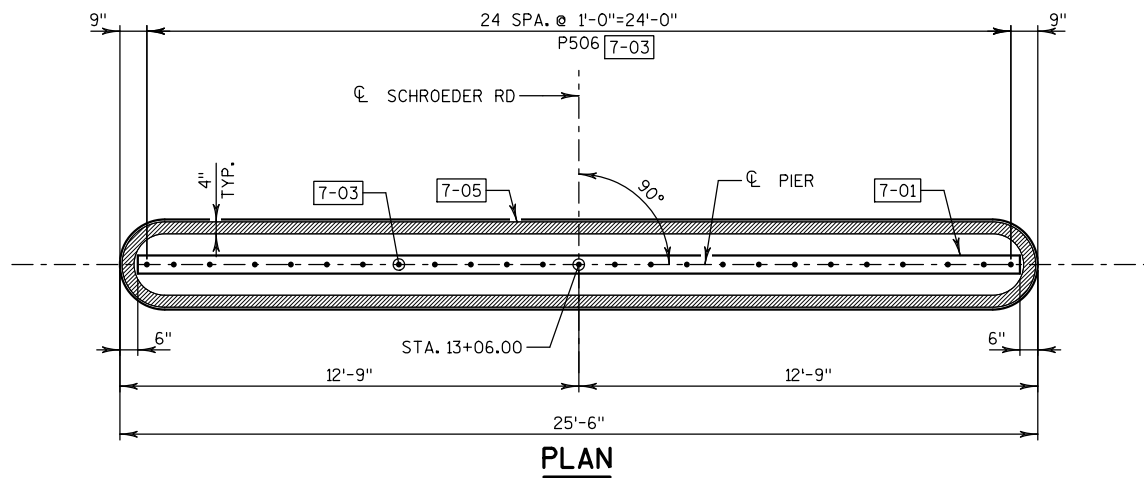
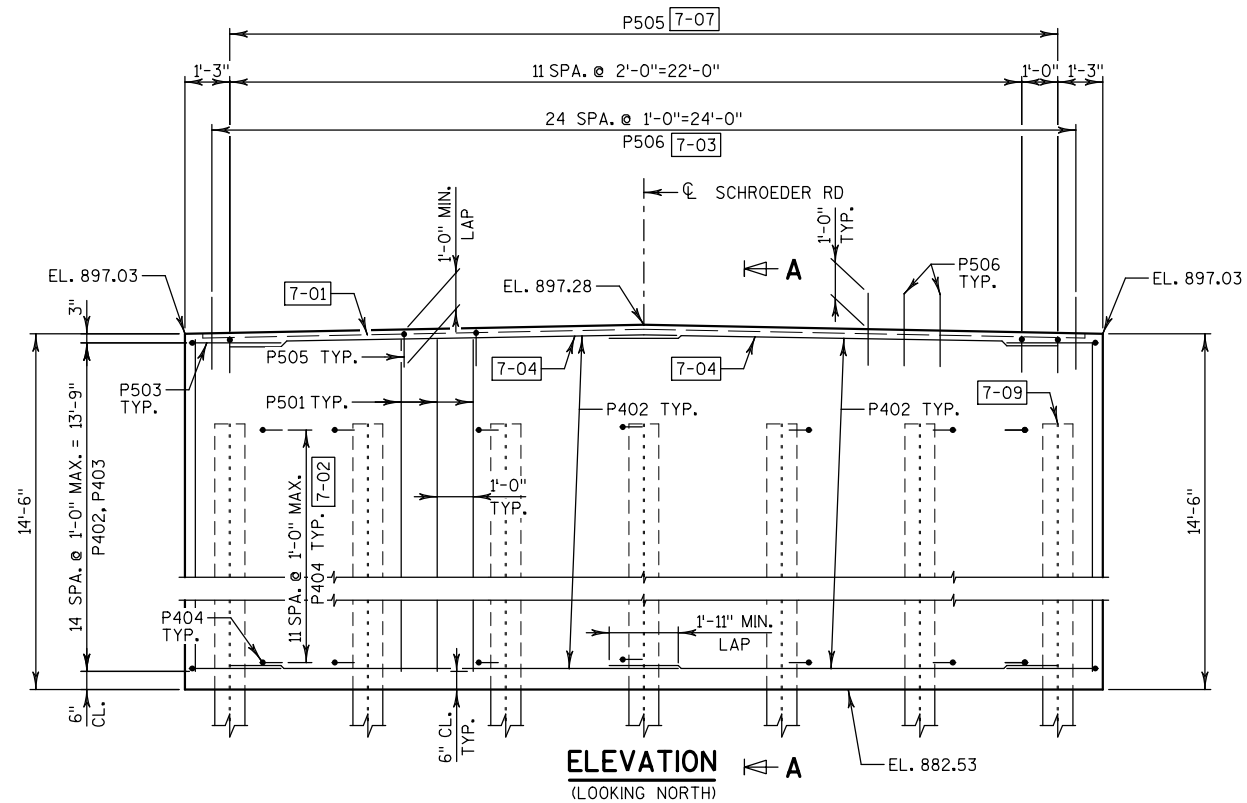


ELEVATION-WING 4

(WING 4 SHOWN, WING 3 SIMILAR)



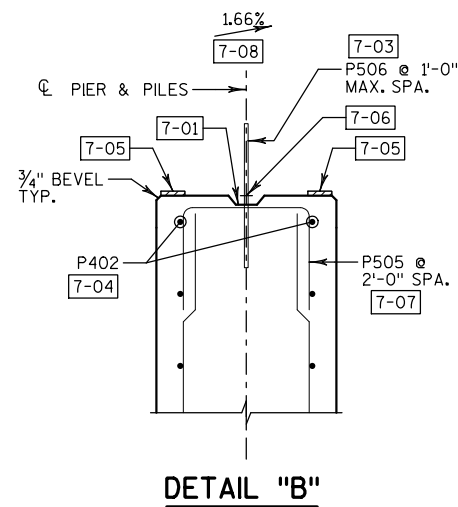
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-29-169			
DRAWN BY TKB		PLANS CK'D. ETP	
ABUTMENT DETAILS			SHEET 6 OF 11



PILE NOTES

PIER TO BE SUPPORTED ON PILING STEEL 10-INCH X 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 165* TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA, PILE POINTS REQUIRED. ESTIMATED 55' LONG AT PIER.

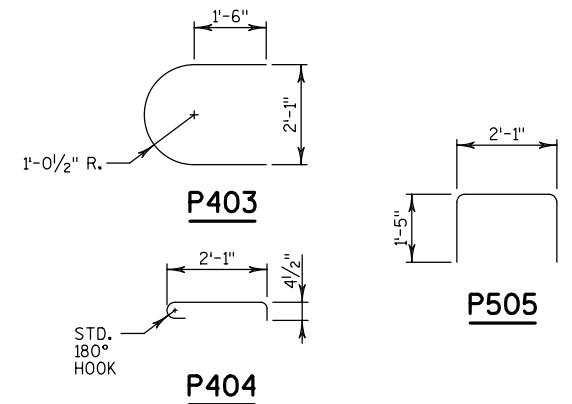
*THE FACTORED AXIAL RESISTANCE OF THE PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.



BILL OF BARS - PIER

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
UNCOATED BARS					TOTAL WEIGHT = 1,630 LBS
P501	54	13'-10"			E.F. VERT.
P402	60	12'-6"			E.F. HORIZ.
P403	30	6'-4"	X		ENDS HORIZ.
P404	84	2'-11"	X		TIE BAR HORIZ.
P505	13	4'-8"	X		TOP TIE VERT.
COATED BARS					TOTAL WEIGHT = 50 LBS
P506	25	2'-0"			DOWEL BAR VERT.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE. DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR.



LEGEND

- [PX] INDICATES PILE NUMBER.
- [7-01] KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2"x6".
- [7-02] P404 BARS PLACED ADJACENT TO EACH PILE ONLY. TIE TO THE NEAREST P501 BAR, VERTICAL SPACING TO MATCH TYPICAL P402, P403 SPACING. ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.
- [7-03] P506 BARS @ 1'-0" MAX. CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONCRETE).
- [7-04] FIELD BEND TO FOLLOW TOP OF PIER SLOPE.
- [7-05] 4"x3/4" PREFORMED JOINT FILLER TYP.
- [7-06] ELEVATION SHOWN IS TAKEN AT THE CL OF PIER.
- [7-07] PULL UP TO 2" CLEAR.
- [7-08] SLOPE TOP OF PIER AS SHOWN.
- [7-09] TYPICAL TOP OF PILE EL. 894.53. SEE "PILE NOTES".

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-29-169			
DRAWN BY TKB		PLANS CK'D. ETP	
PIER			SHEET 7 OF 11

NOTES

THE TOP TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY.

THE BOTTOM LONGITUDINAL BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

TRANSVERSE BARS SHALL BE PLACED PARALLEL TO SUBSTRUCTURE UNITS.

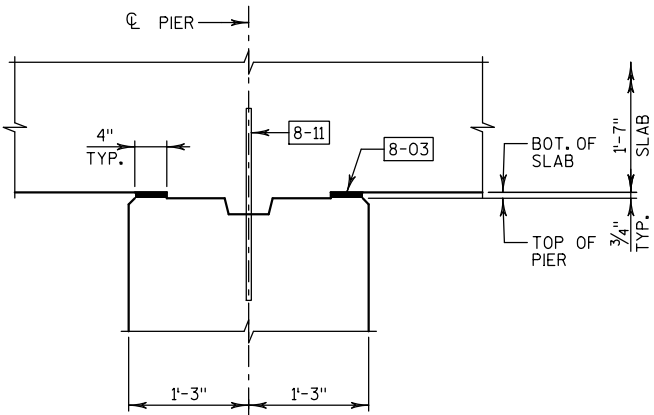
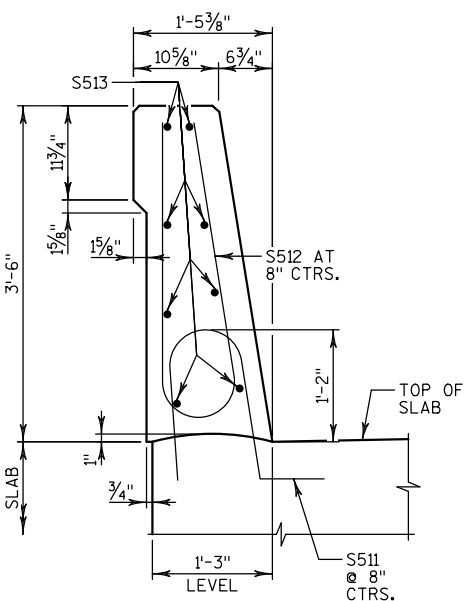
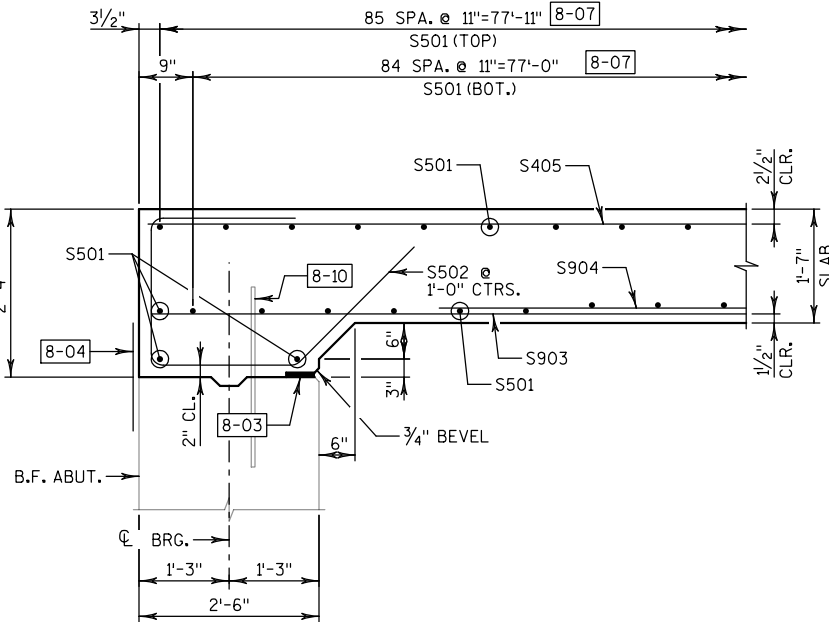
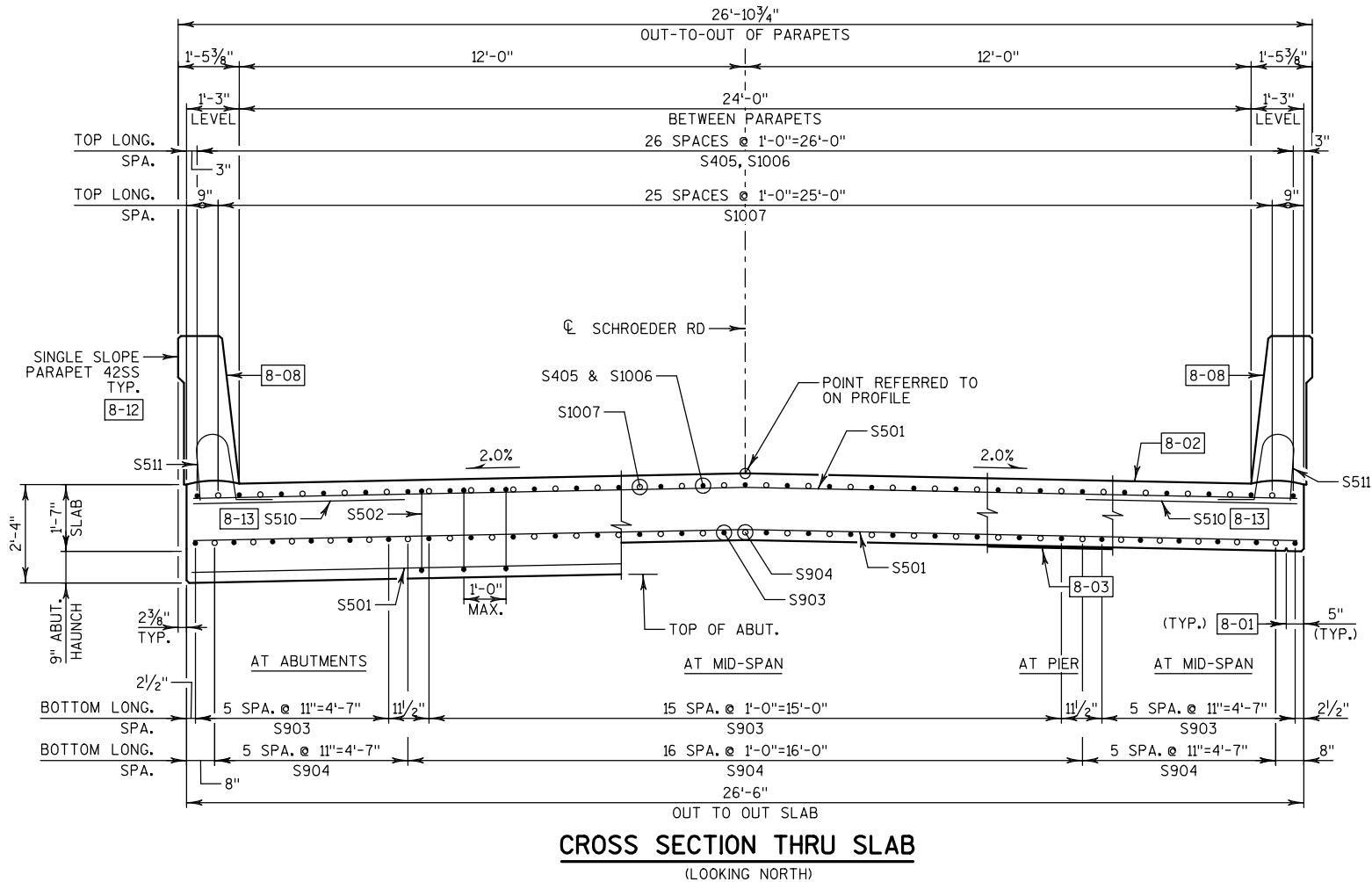
ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE CL OF ABUTMENTS, THE CL PIER AND AT 5/10 POINTS TO VERIFY CAMBER. TAKE ELEVATIONS ALONG THE GUTTER LINES AND CL SCHROEDER RD/CROWN POINT. RECORD THE ELEVATIONS IN THE "SURVEY TOP OF SLAB ELEVATIONS" TABLE ON "SUPERSTRUCTURE DETAILS-3" SHEET FOR THE "AS BUILT" PLANS.

PARAPETS SHALL BE POURED AFTER THE FALSEWORK HAS BEEN RELEASED.

LEGEND

- 8-01 3/4" CONTINUOUS DRIP "V" GROOVE. END 6" FROM FRONT FACE OF ABUTMENTS.
- 8-02 COAT WITH "PROTECTIVE SURFACE TREATMENT" AS PER THE STANDARD SPECIFICATION.
- 8-03 3/4"x4" PREFORMED JOINT FILLER TO EXTEND BETWEEN EDGES OF SLAB OR AROUND ENTIRE OUTSIDE EDGE OF TOP OF PIER.
- 8-04 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.
- 8-05 NOT USED.
- 8-06 DIMENSION IS TAKEN PARALLEL TO CL SCHROEDER RD.
- 8-07 BARS PLACED PARALLEL TO SKEW AND SPACED ALONG CL SCHROEDER RD.
- 8-08 PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE ROADWAY FACE AND TOP OF PARAPETS.
- 8-09 NOT USED.
- 8-10 SEE ABUTMENT SHEETS FOR DOWEL INFO.
- 8-11 SEE PIER SHEETS FOR DOWEL INFO.
- 8-12 SEE "SINGLE SLOPE PARAPET 42SS" SHEET FOR DETAILS.
- 8-13 S510 TOP TRANSVERSE SLAB BARS SPACED BETWEEN ALL S501 TOP TRANSVERSE SLAB REINFORCEMENT ALONG EDGE OF SLAB AT EACH EDGE.
- 8-14 INTERIOR SPACING SHOWN. SEE "CROSS SECTION THRU SLAB" DETAIL ON SHEET 8 FOR EXTERIOR SPACING.

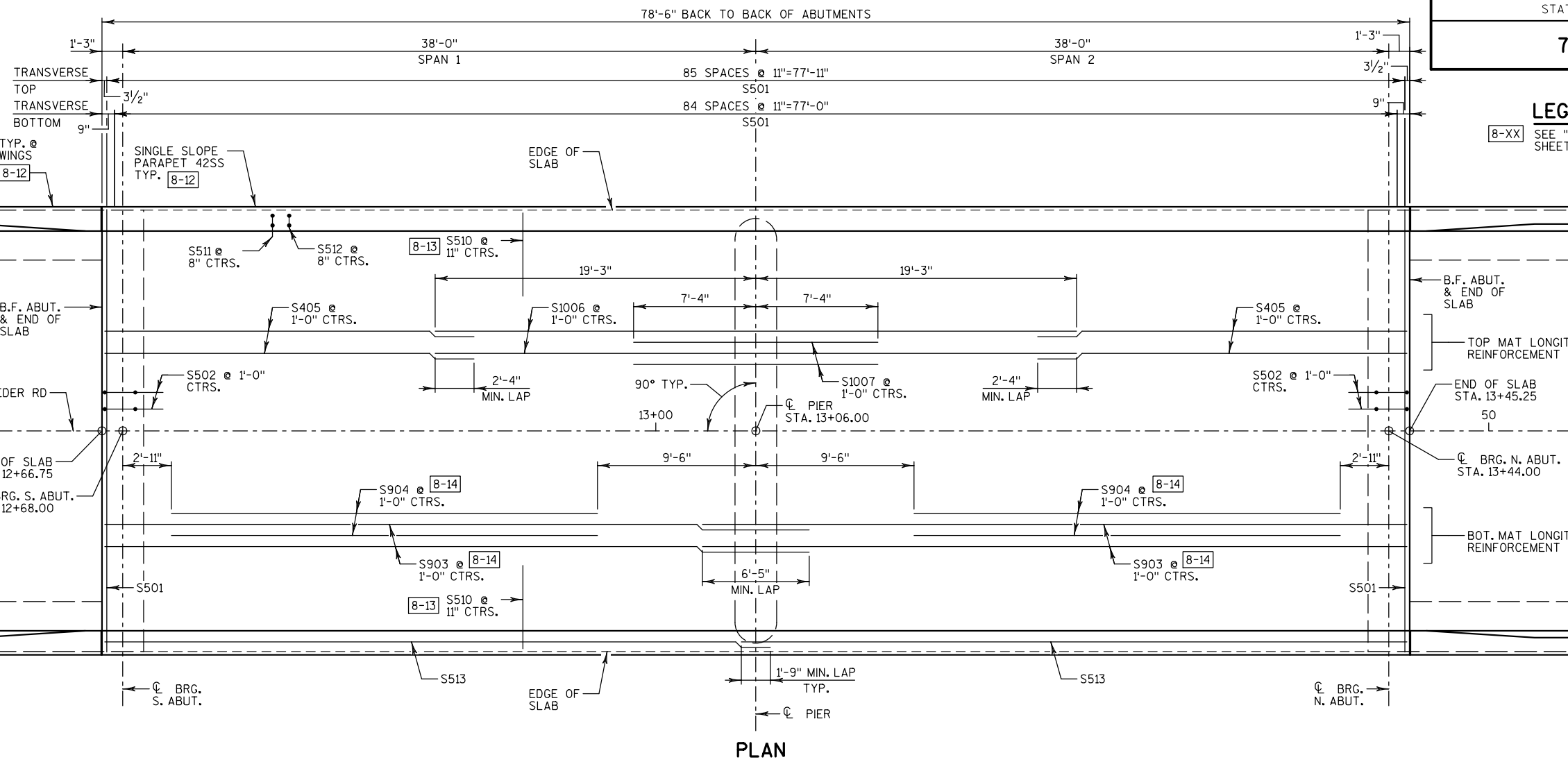


PARTIAL LONGITUDINAL SECTION AT ABUTMENTS

SECTION THRU PARAPET ON SLAB

PIER BEARING SEAT DETAIL
(DIMENSIONS TAKEN PERPENDICULAR TO CL PIER)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-29-169			
DRAWN BY TKB		PLANS CK'D. ETP	
SUPERSTRUCTURE DETAILS-1			SHEET 8 OF 11

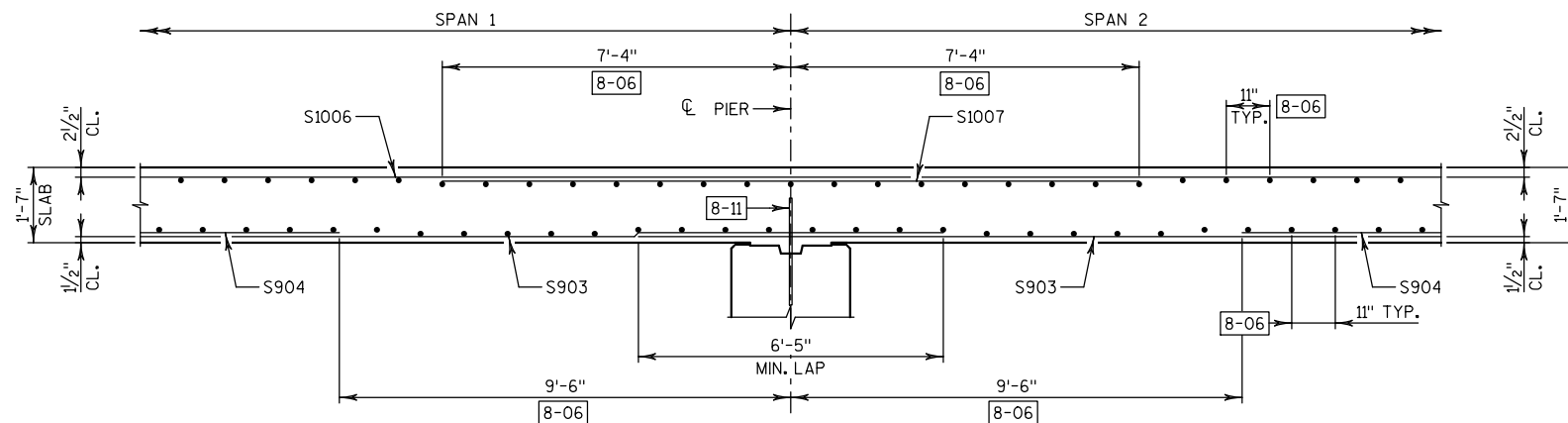


STATE PROJECT NUMBER

7387-00-72

LEGEND

8-XX SEE "SUPERSTRUCTURE DETAILS-1" SHEET FOR CALLOUTS AND NOTES.



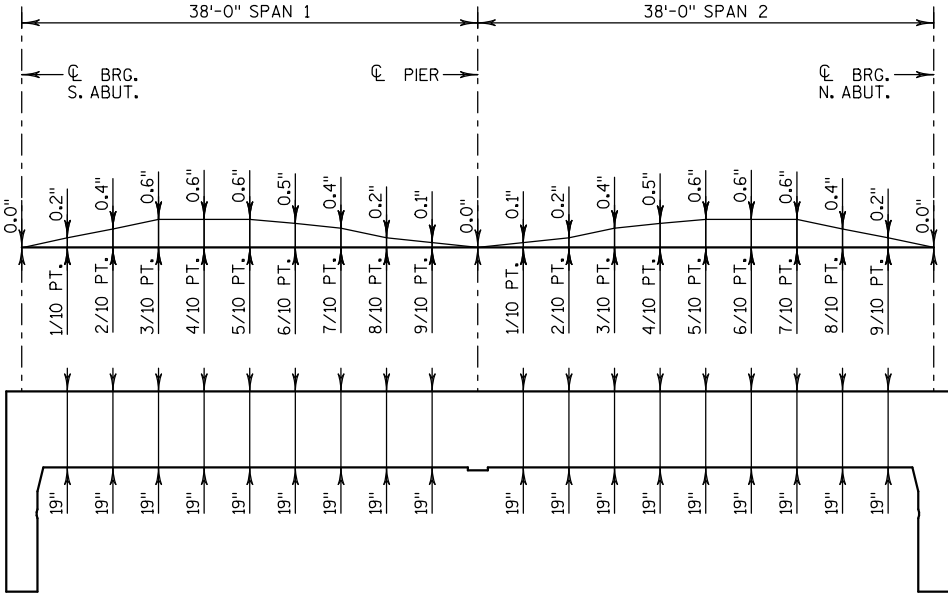
PARTIAL LONGITUDINAL SECTION AT PIER

(DIMENSIONS ARE PERPENDICULAR TO CL PIER U.N.O.)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-29-169			
DRAWN BY TKB		PLANS CK'D. ETP	
SUPERSTRUCTURE DETAILS-2		SHEET 9 OF 11	

TOP OF SLAB ELEVATIONS

LOCATION	S. ABUT.	1.1 PT	1.2 PT	1.3 PT	1.4 PT	1.5 PT	1.6 PT	1.7 PT	1.8 PT	1.9 PT	PIER	2.1 PT	2.2 PT	2.3 PT	2.4 PT	2.5 PT	2.6 PT	2.7 PT	2.8 PT	2.9 PT	N. ABUT.
WEST GUTTER	898.06	898.12	898.18	898.25	898.31	898.37	898.44	898.50	898.56	898.63	898.69	898.75	898.82	898.88	898.94	899.01	899.07	899.13	899.19	899.26	899.32
CROWN	898.30	898.36	898.42	898.49	898.55	898.61	898.68	898.74	898.80	898.87	898.93	898.99	899.06	899.12	899.18	899.25	899.31	899.37	899.43	899.50	899.56
EAST GUTTER	898.06	898.12	898.18	898.25	898.31	898.37	898.44	898.50	898.56	898.63	898.69	898.75	898.82	898.88	898.94	899.01	899.07	899.13	899.19	899.26	899.32



CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS.
CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION & FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.
PARAPETS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK IS RELEASED.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR CENTERLINE FOLLOW THIS PROCEDURE:
TOP OF SLAB ELEVATION AT FINAL GRADE
MINUS (-) 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.

SURVEY TOP OF SLAB ELEVATIONS

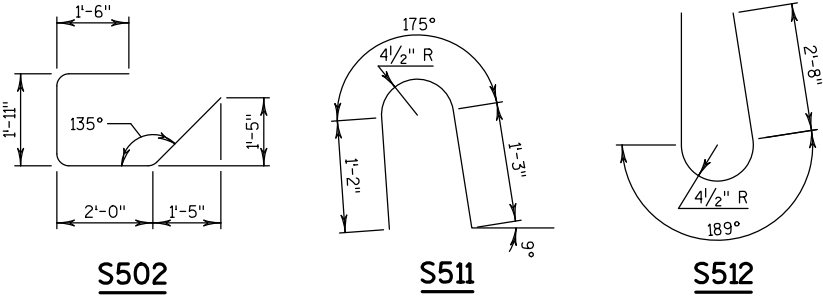
LOCATION	S. ABUT.	5/10 PT	PIER	5/10 PT	N. ABUT.
WEST GUTTER					
CROWN					
EAST GUTTER					

STATE PROJECT NUMBER
7387-00-72

BILL OF BARS - SUPERSTRUCTURE

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
COATED BARS					TOTAL WEIGHT = 29,850 LBS
S501	177	26'-2"			SLAB - TOP & BTM. TRANS.
S502	54	7'-2"	X		SLAB - AT ABUTMENTS VERT.
S903	56	42'-4"			SLAB - BTM. LONGIT.
S904	54	25'-7"			SLAB - BTM. LONGIT.
S405	54	22'-2"			SLAB - TOP LONGIT.
S1006	27	38'-6"			SLAB - TOP - OVER PIER LONGIT.
S1007	26	14'-8"			SLAB - TOP - OVER PIER LONGIT.
S510	170	5'-0"			SLAB - TOP - AT EDGES TRANS.
S511	236	4'-5"	X		PARAPET VERT.
S512	236	6'-8"	X		PARAPET VERT.
S513	32	40'-0"			PARAPET HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR.



CAMBER NOTES:

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C OF ABUTMENTS, THE C OF PIER AND AT 5/10 POINTS, TO VERIFY CAMBER. TAKE ELEVATIONS ALONG THE GUTTER LINES AND CROWN POINT. RECORD THE ELEVATIONS IN THE "SURVEY TOP OF SLAB ELEVATIONS" TABLE FOR THE "AS BUILT" PLANS.
ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-29-169			
DRAWN BY TKB		PLANS CK'D. ETP	
SUPERSTRUCTURE DETAILS-3			SHEET 10 OF 11

BILL OF BARS - PARAPETS

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
COATED BARS					TOTAL WEIGHT = 1,400 LBS
R501	8	5'-10"	X		PARAPET - WINGS VERT.
R502	8	6'-8"	X		PARAPET - WINGS VERT.
R503	48	3'-0"	X		PARAPET - WINGS VERT.
R504	68	5'-7"	X		PARAPET - WINGS VERT.
R505	20	6'-5"	X		PARAPET - WINGS VERT.
R506	24	6'-6"	X		PARAPET - WINGS VERT.
R507	4	9'-5"	X		PARAPET - WINGS HORIZ.
R508	20	9'-7"			PARAPET - WINGS HORIZ.
R509	24	5'-5"	X	X	PARAPET - WINGS VERT.
R510	8	9'-7"	X		PARAPET - WINGS HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR.
TABLE INCLUDES BARS FOR BOTH ABUTMENTS.

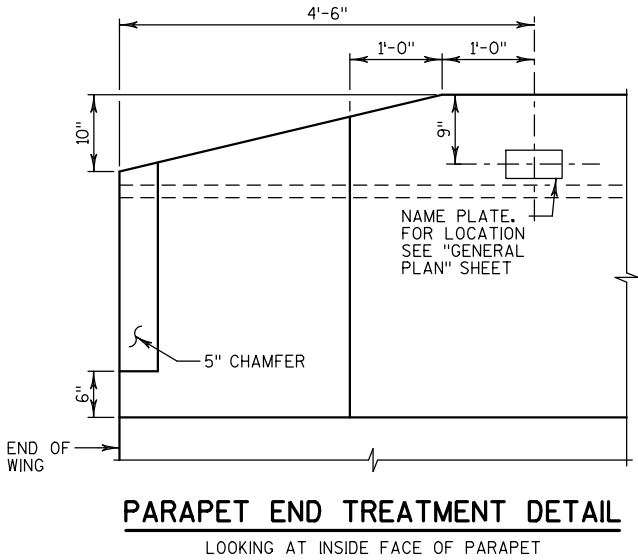
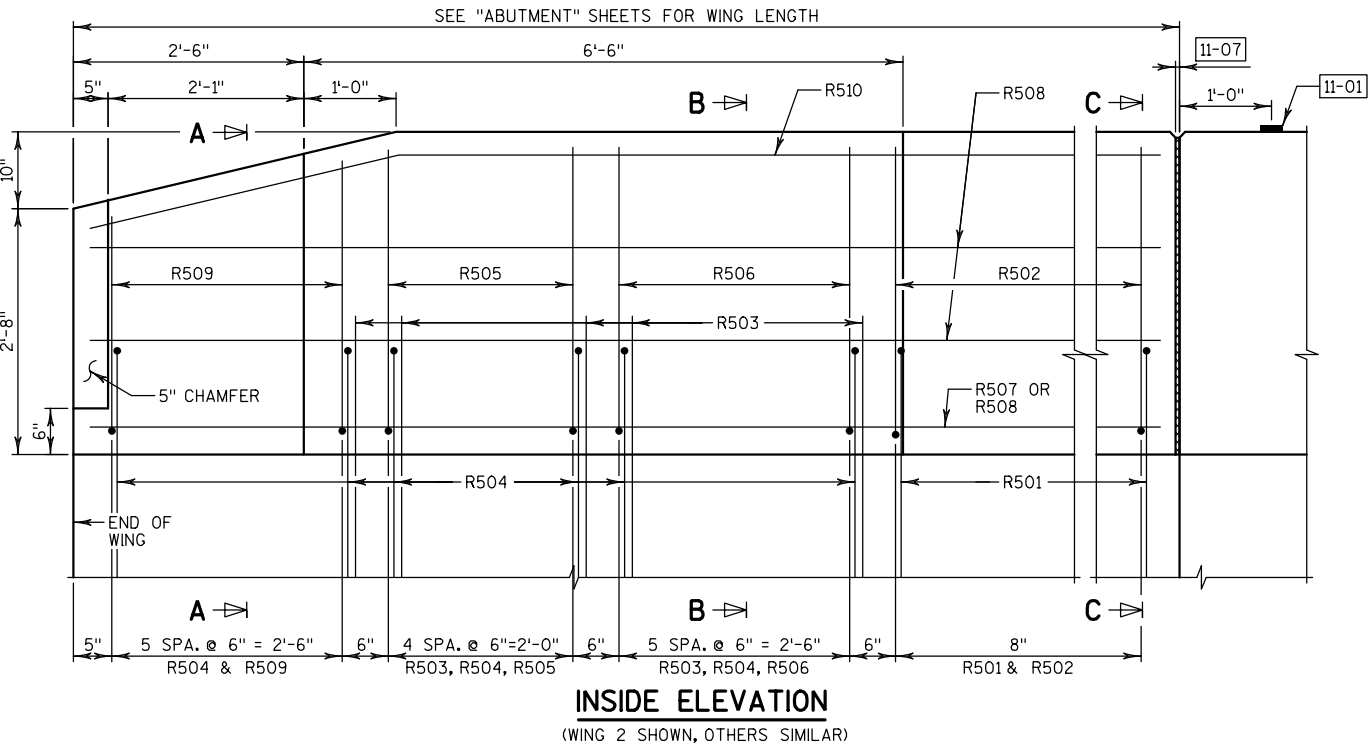
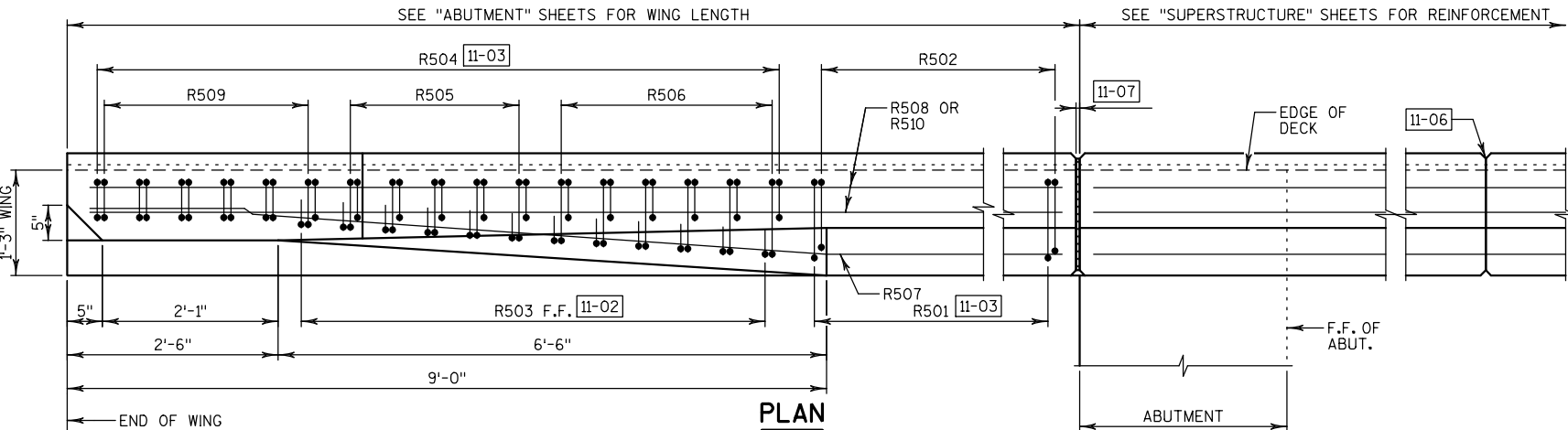
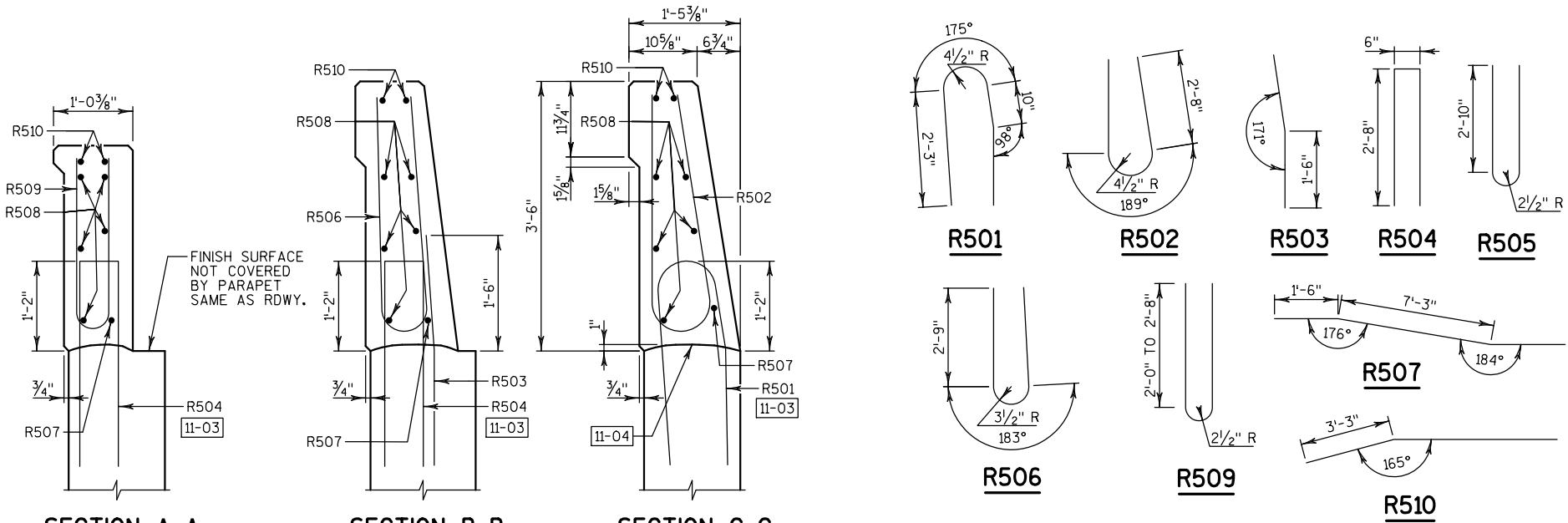
BAR SERIES TABLE

BAR MARK	NO. REQ'D	LENGTH
R509	4 SERIES OF 6	4'-9" TO 5'-1"

BUNDLE AND TAG EACH SERIES SEPARATELY.

LEGEND

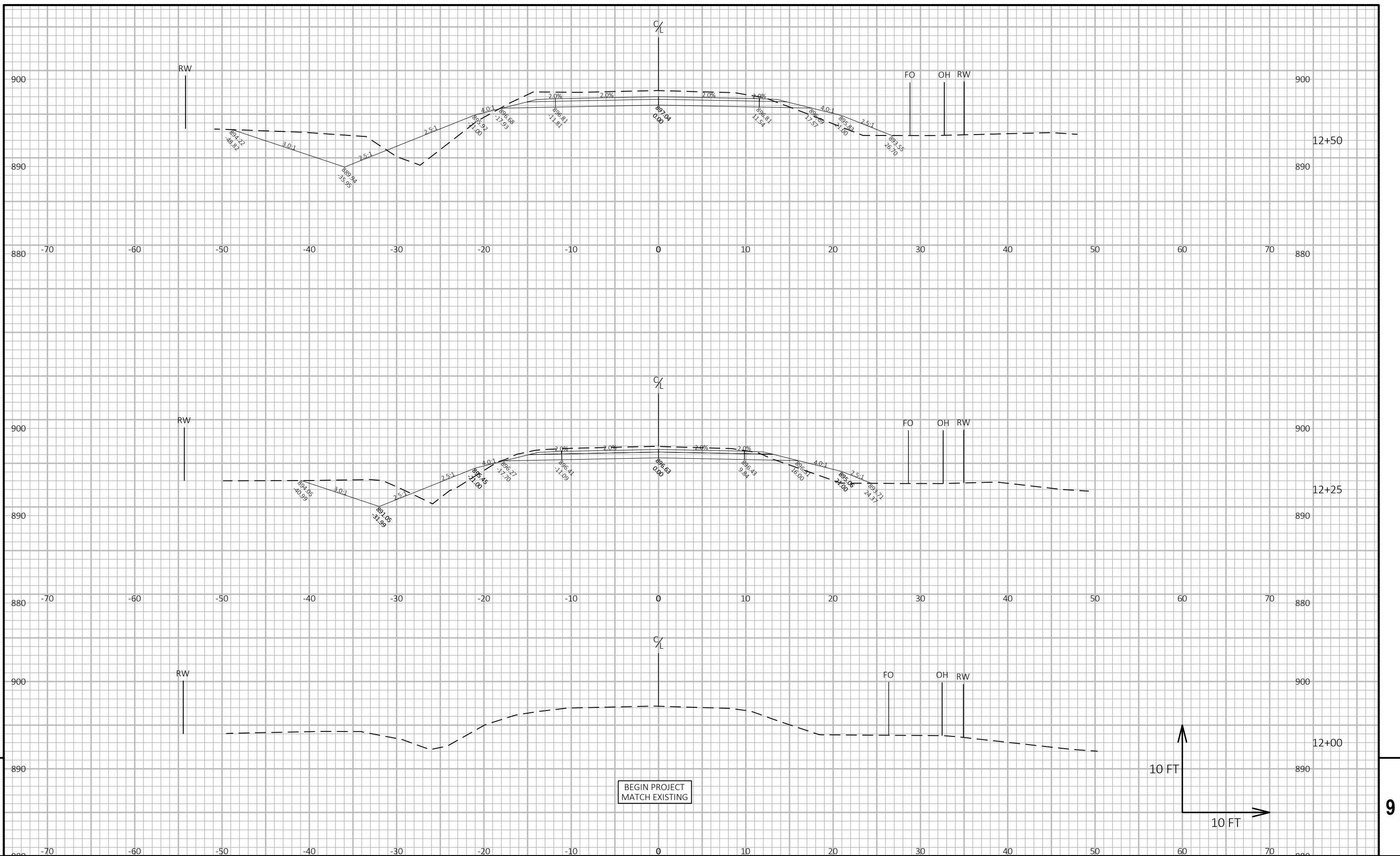
- 11-01 BENCH MARK CAP (WHEN SUPPLIED).
- 11-02 R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.
- 11-03 R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.
- 11-04 CONSTRUCTION JOINT, STRIKE OFF AS SHOWN.
- 11-05 LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.
- 11-06 OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINFORCEMENT THRU THE JOINT. LAP LONGITUDINAL BARS A MINIMUM OF 1'-9". MINIMUM JOINT SPACING OF 80'-0". DEFINE CONSTRUCTION JOINT WITH A 3/4"-V GROOVE.
- 11-07 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).



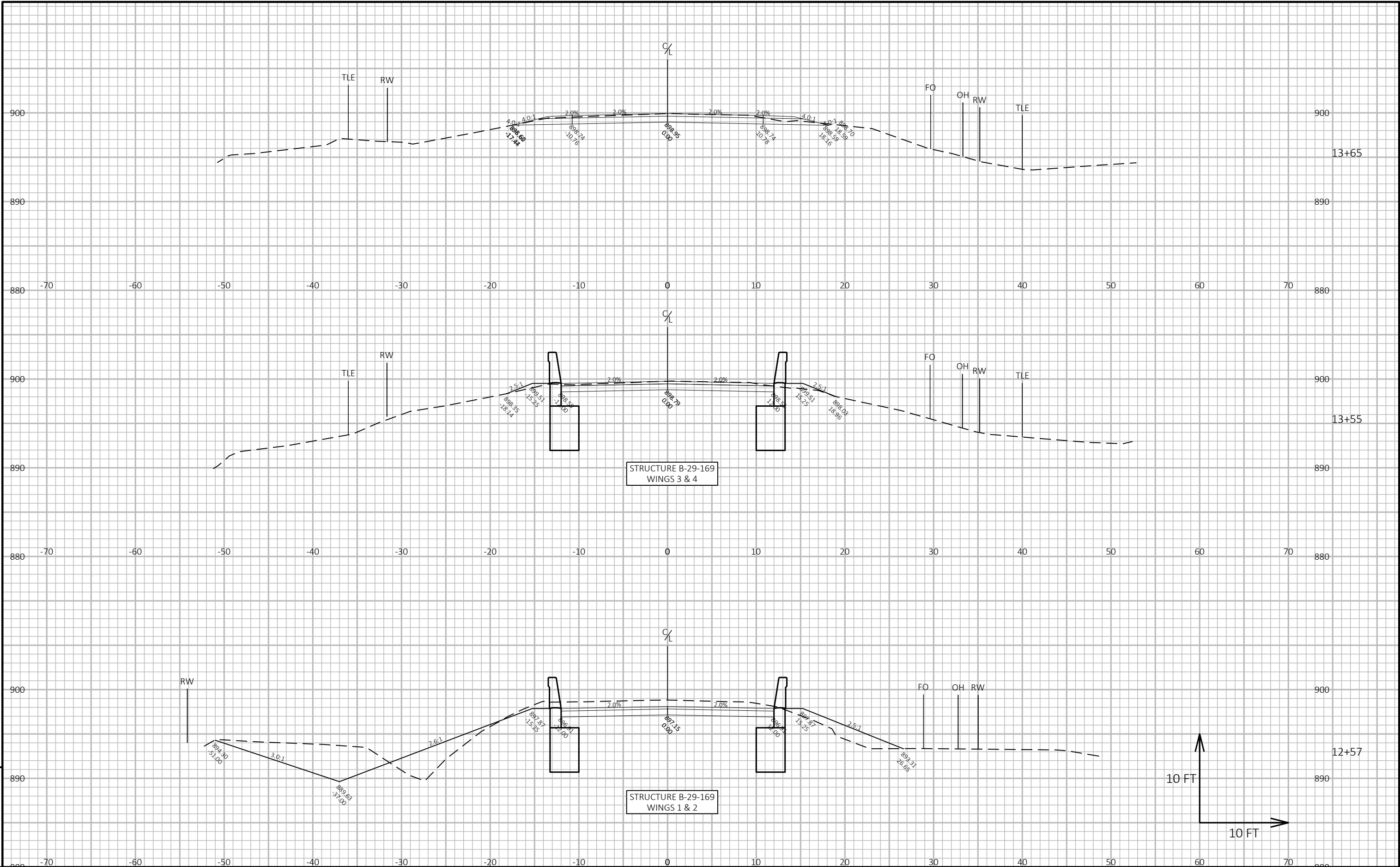
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-29-169			
DRAWN BY TKB		PLANS CK'D. ETP	
SINGLE SLOPE PARAPET 42SS			SHEET 11 OF 11

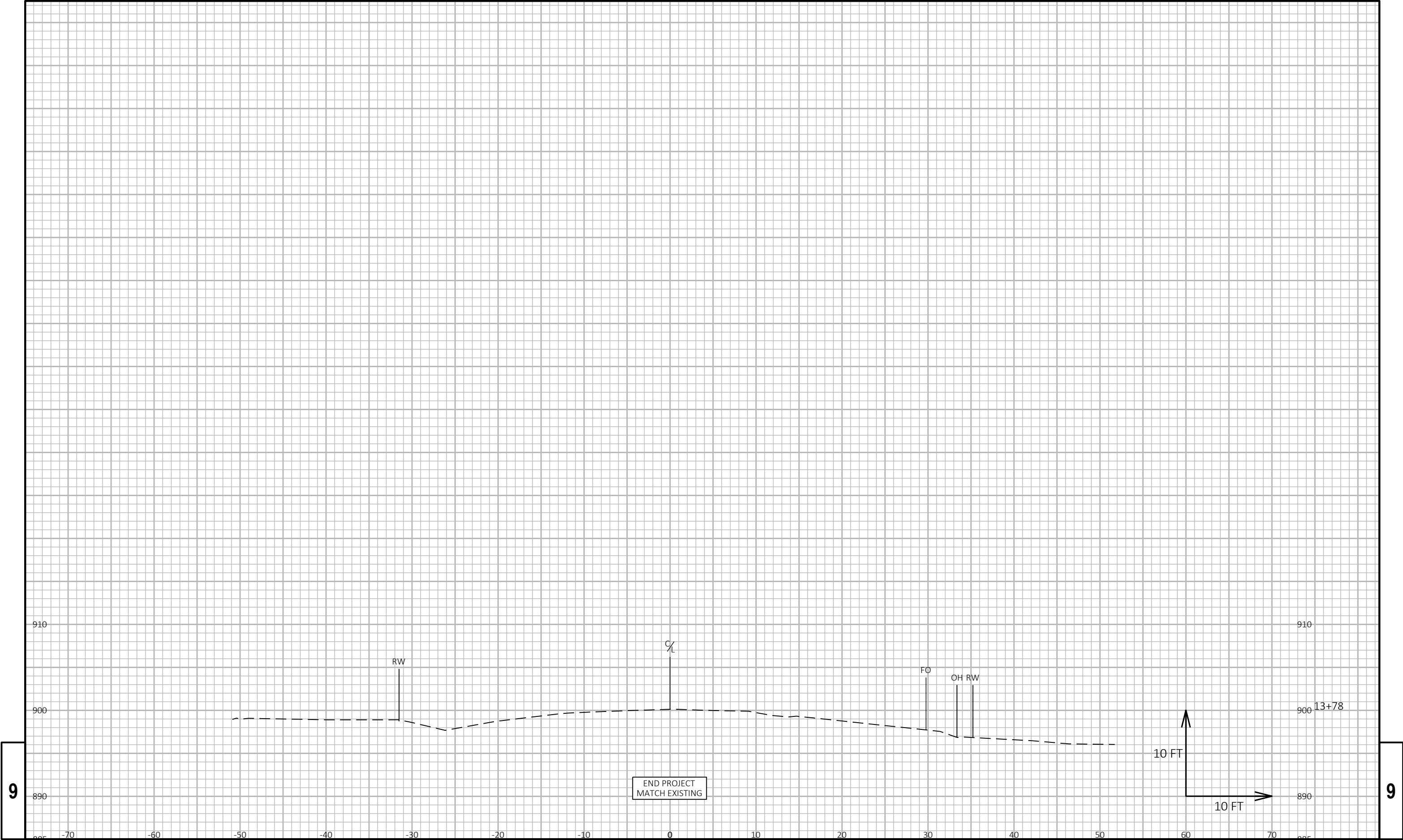
STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
12+00.00	1200.00	0.00	27.06	11.74	0	0	0	0	0	0
12+25.00	1225.00	25.00	54.78	19.68	38	7	15	38	19	12
12+50.00	1250.00	25.00	82.68	30.87	64	5	23	102	48	43
12+56.75	1256.75	6.75	91.68	37.00	22	7	8	124	58	48
STRUCTURE B-29-169										
13+55.25	1355.25	98.50	27.34	0.31	0	0	0	124	58	48
13+65.00	1365.00	9.75	26.34	0.03	10	4	0	134	58	54
13+78.50	1378.50	13.50	25.90	0.00	13	4	0	147	58	63

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
4 - MASS ORDINATE	(CUT - SALVAGED PAVT) - (FILL*FILL FACTOR)



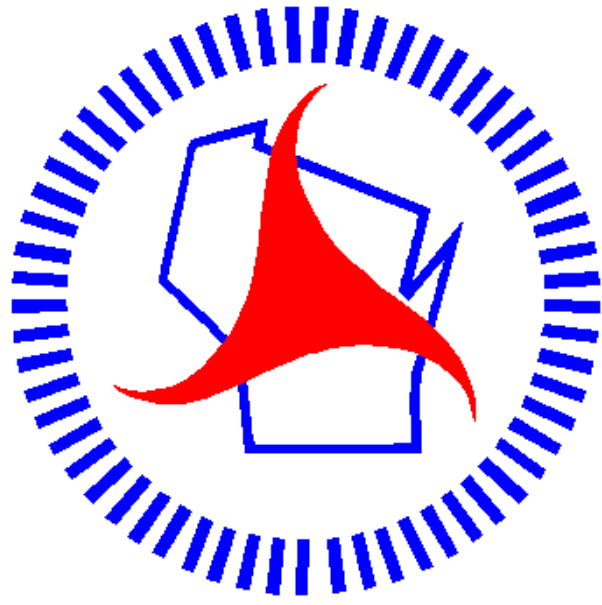
PROJECT NO:	7387-00-72	HWY: SCHROEDER ROAD	COUNTY: JUNEAU	CROSS SECTIONS:	SCHROEDER ROAD	SHEET	E
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PROJECT NO:	7387-00-72	HWY: SCHROEDER ROAD	COUNTY: JUNEAU	CROSS SECTIONS:	SCHROEDER ROAD	SHEET	E
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Notes



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