

MAD AUGUST 2023

PROJECT ID: 5721-00-76
WITH: N/A

COUNTY: GRANT

ORDER OF SHEETS

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

TOTAL SHEETS = 48



04

DESIGN DESIGNATION

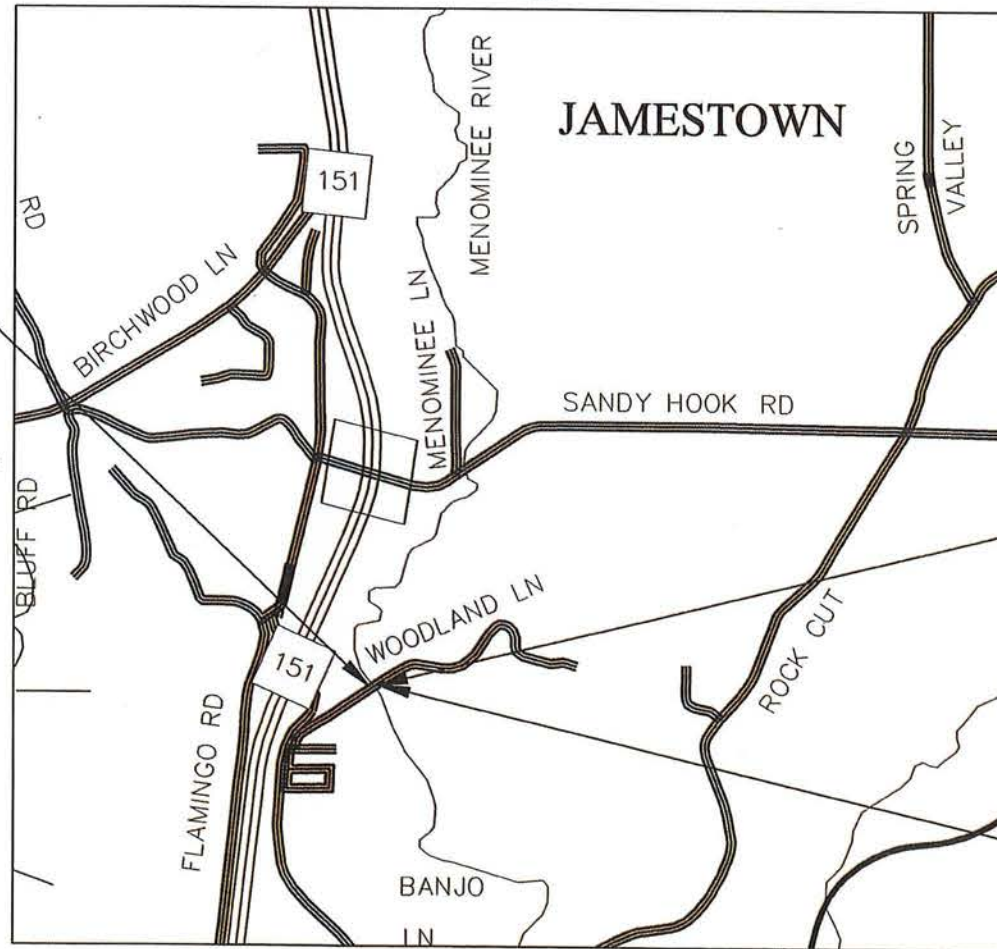
A.A.D.T. (2024)	=	50
A.A.D.T. (2044)	=	52
D.H.V.	=	N/A
D.D.	=	50/50
T.	=	2.0%
DESIGN SPEED	=	30 MPH
ESALS	=	2,800

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	

BEGIN PROJECT
STA. 9+00.00
X = 846,895.39
Y = 409,319.56



SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.041 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), GRANT COUNTY NAD83 (2022), IN U.S. SURVEY FEET.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2022).

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

T JAMESTOWN, WOODLAND LANE

MENOMONIE RIVER BRIDGE, B-22-0301

LOC STR
GRANT COUNTY

STATE PROJECT NUMBER
5721-00-76

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5721-00-76	WISC 2023588	1

ACCEPTED FOR
TOWN OF JAMESTOWN
SIGNATURE: *Stephyn Freeze*
TITLE: *Chairman*
DATE: *5/1/2023*

ORIGINAL PLANS PREPARED BY
SA
STRAND ASSOCIATES®
126 N. JEFFERSON STREET, SUITE 350
MILWAUKEE, WISCONSIN 53202
(414) 271-0771

WISCONSIN
ERIC P ANDERSON
E-48285
NEW BERLIN WI
PROFESSIONAL ENGINEER
[Signature]
04/28/23

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PREPARED BY
Surveyor: STRAND ASSOCIATES, INC.
Designer: STRAND ASSOCIATES, INC.
Project Manager: BRANDAN BURGER, P.E.
Regional Examiner: _____
Regional Supervisor: KYLE HEMP, P.E.

APPROVED FOR THE DEPARTMENT
DATE: Brandan Burger
[Signature]
Digitally signed by Brandan Burger
DN: cn=Eric P. Anderson, o=Strand Associates, Inc., ou=Engineering, email=eric@strandassoc.com, c=WI
Date: 2023.05.01 08:10:36 -0500

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.

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

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY AND WITHIN TLE AND PLE SHALL BE RESTORED AS DIRECTED BY THE ENGINEER.

ELEVATIONS SHOWN ON THE PLANS ARE ALONG THE EDGE OF LANE OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

A SAWED JOINT SHALL BE REQUIRED WHEN NEW PAVEMENT IS TO MEET AN EXISTING PAVED SURFACE.

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

PROPOSED SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

UTILITY CONTACTS

** ALLIANT ENERGY
RANDY MARTIN
761 ENTERPRISE DRIVE
PLATTEVILLE, WI 53818
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RANDYMARTIN@ALLIANTENERGY.COM

OTHER CONTACTS

TOWN OF JAMESTOWN CONTACT

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GRANT COUNTY

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ANDREW.BARTA@WISCONSIN.GOV

WISDOT REGION CONTACT

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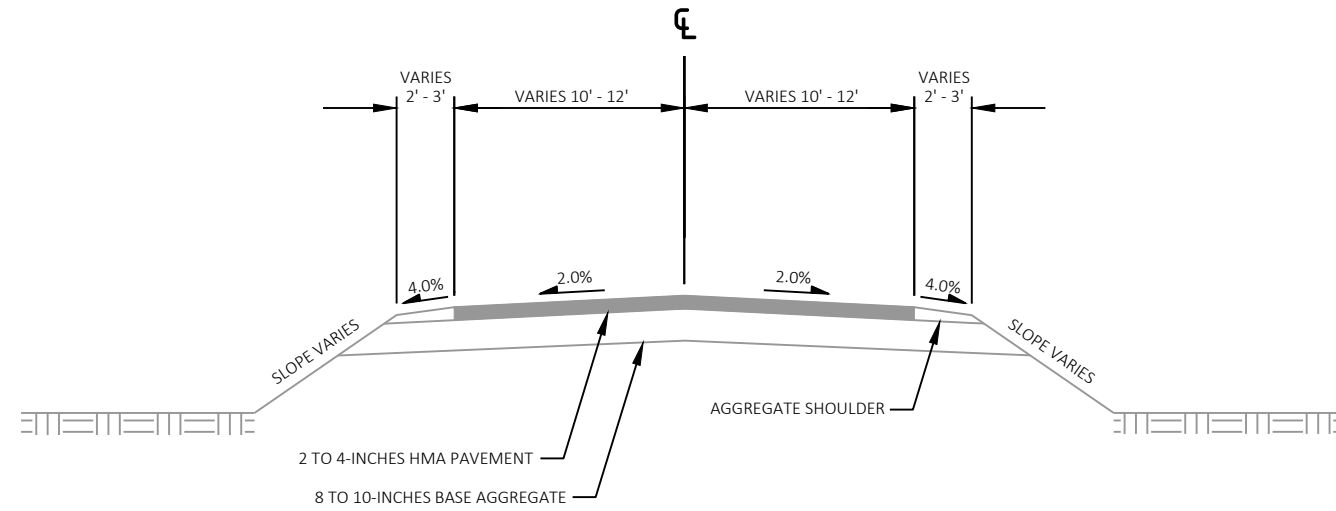
HMA PAVEMENT SUMMARY TABLE

LAYER	THICKNESS	BID/MIX SPECIFICATION
UPPER	1.75-INCHES	4 LT 58-28 S
LOWER	2.25-INCHES	3 LT 58-28 S

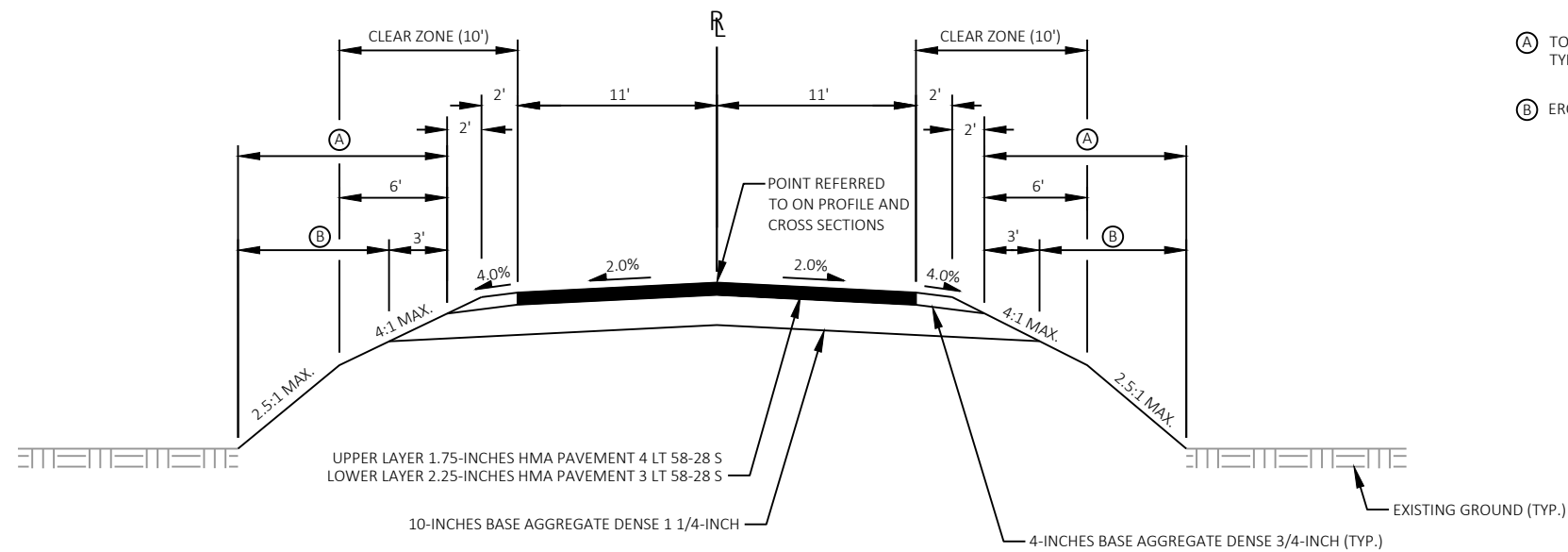


Dial **811** or (800)242-8511
www.DiggersHotline.com

** DENOTES DIGGERS HOTLINE MEMBER

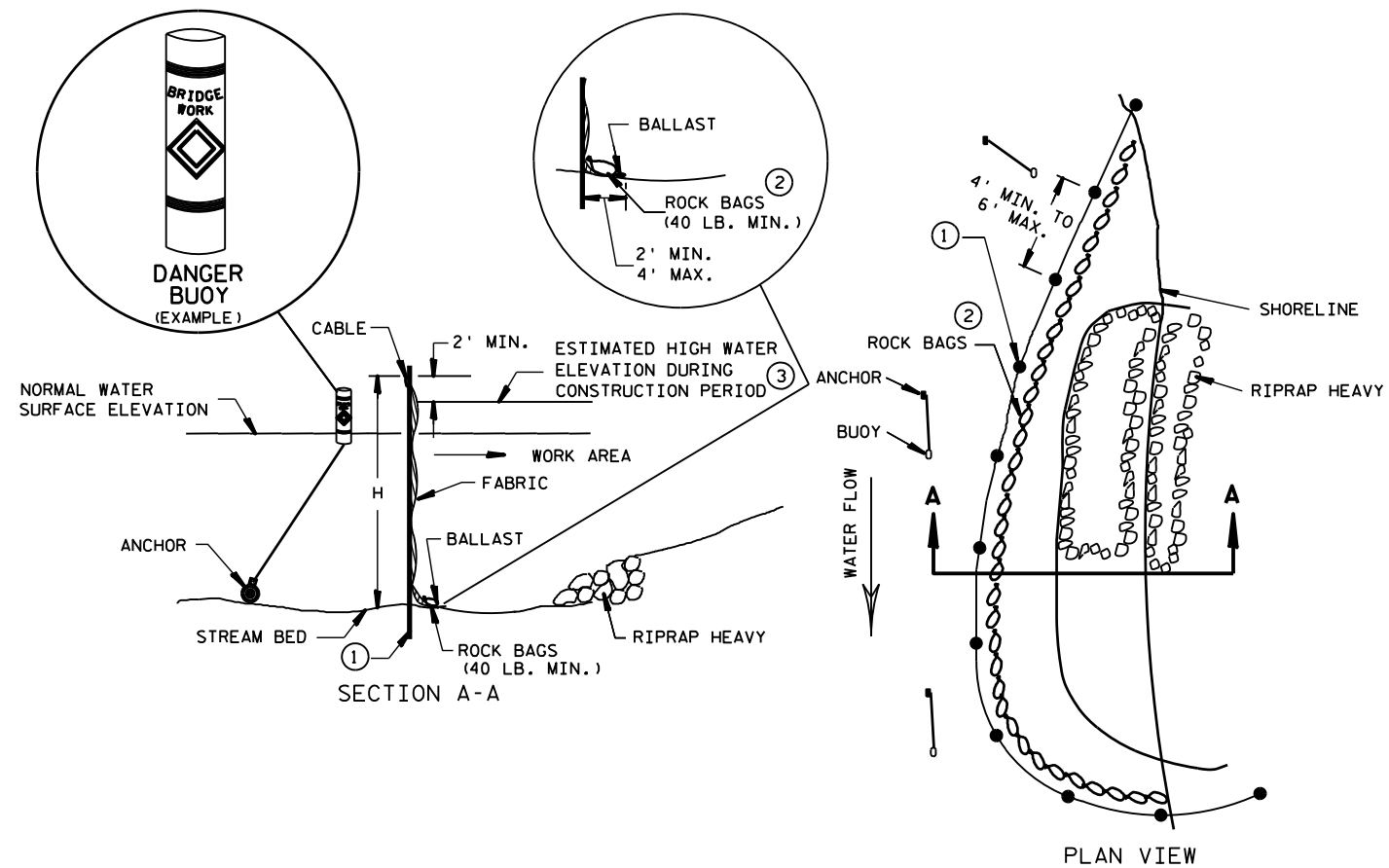


TYPICAL EXISTING SECTION
WOODLAND LANE
(STA. 9+00.00 - STA. 11+15.00)



- Ⓐ TOPSOIL, SEEDING MIXTURE NO. 30 AND FERTILIZER TYPE B
- Ⓑ EROSION MAT URBAN CLASS 1 TYPE B

TYPICAL FINISHED SECTION
WOODLAND LANE
(STA. 9+00.00 - STA. 11+15.00)



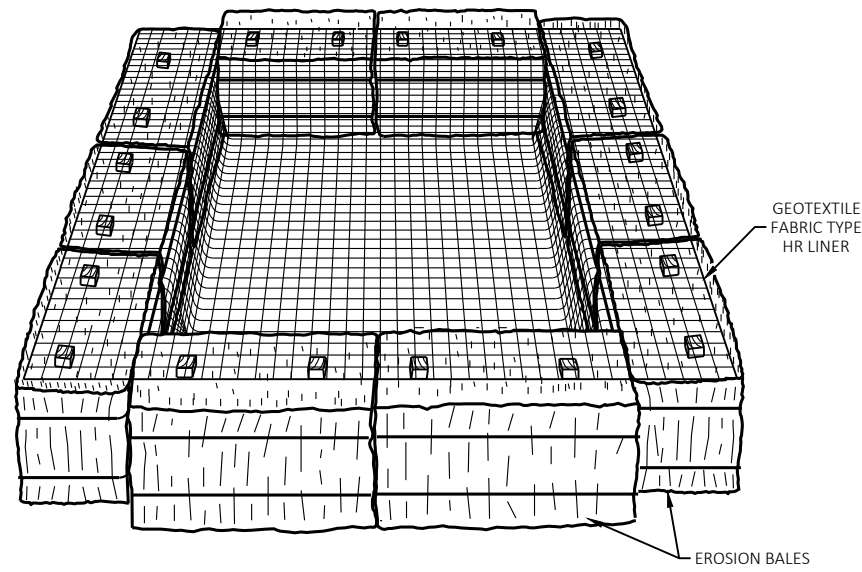
NOTES:

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. SEE SDD 08E11-02 TURBIDITY BARRIER FOR ADDITIONAL INFORMATION.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEER'S 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 INSTALL A CONTINUOUS LINE OF ROCK BAGS TO ANCHOR THE BARRIER TO THE STREAM BED.
- ③ ESTIMATE HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2 FEET GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.

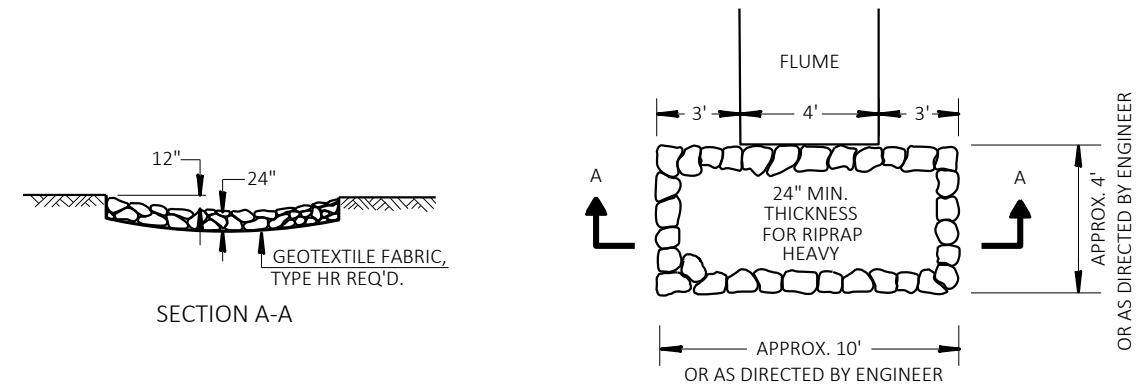
ENHANCED TURBIDITY BARRIER DETAIL



EXAMPLE TEMPORARY SETTLING BASIN DETAIL

NOTES

1. CONTRACTOR SHALL PUMP TURBID WATER FROM EXCAVATION TO SEDIMENT BAG PLACED INSIDE FABRIC LINED STAKED BALE ENCLOSURE PRIOR TO DISCHARGING TO DITCHES/INLETS/WETLANDS OR WATERWAYS.
2. SEDIMENT BAG TO BE PLACED IN AN UPLAND VEGETATED AREA OR EQUIVALENT LOCATION APPROVED BY THE ENGINEER.
3. BASIN TO BE KEPT LESS THAN 10% FULL OF SEDIMENT. GEOTEXTILE FABRIC AND SEDIMENTS TO BE DISPOSED BY THE CONTRACTOR OFF OF THE PROJECT SITE.
4. TEMPORARY SETTLING BASIN AND SEDIMENT BAG TO BE INCIDENTAL TO CONTRACT.
5. SEDIMENT BAG, BALES AND FABRIC TO BE REPLACED AS NECESSARY AND IS INCIDENTAL TO CONTRACT.
6. SIZE TO BE DETERMINED BY THE CONTRACTOR AS PART OF THE ECIP SUBMITTAL.










RIPRAP HEAVY TREATMENT AT ASPHALTIC FLUMES
SEE EROSION CONTROL SHEETS FOR LOCATIONS

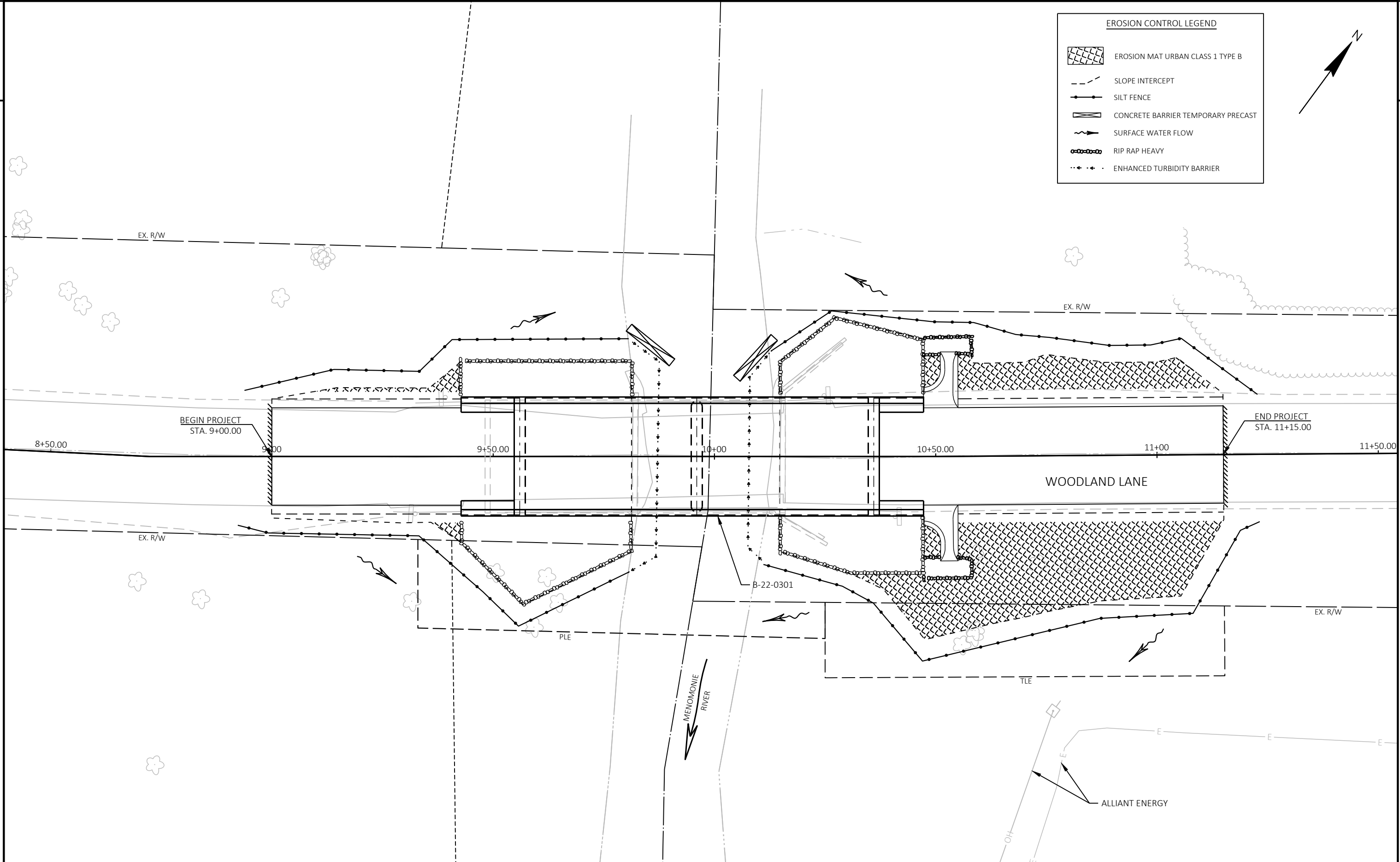
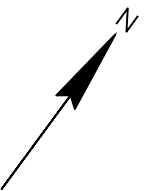
RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 0.27 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.21 ACRES



EROSION CONTROL LEGEND

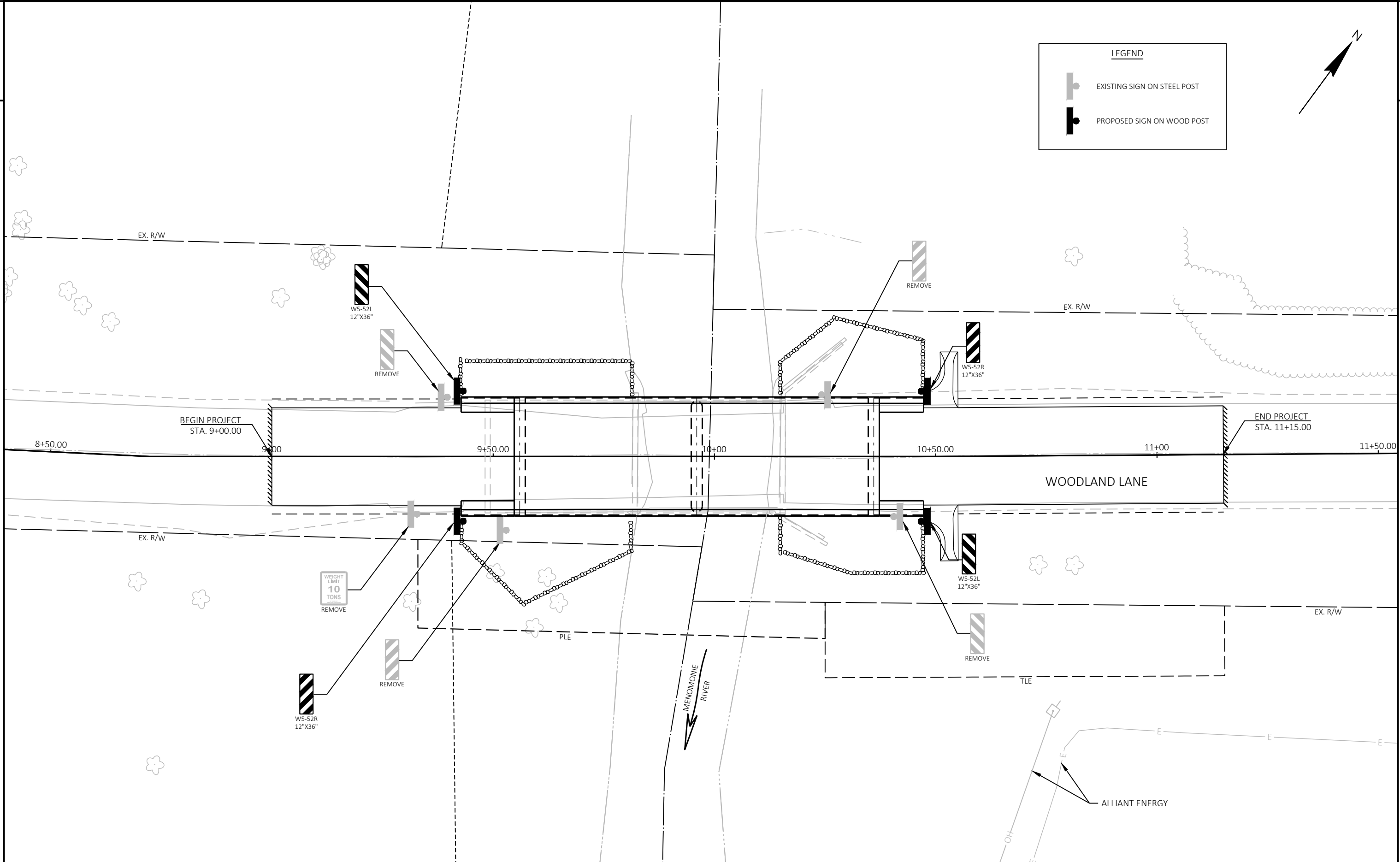
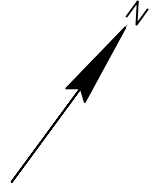
-  EROSION MAT URBAN CLASS 1 TYPE B
-  SLOPE INTERCEPT
-  SILT FENCE
-  CONCRETE BARRIER TEMPORARY PRECAST
-  SURFACE WATER FLOW
-  RIP RAP HEAVY
-  ENHANCED TURBIDITY BARRIER



PROJECT NO: 5721-00-76	HWY: LOC STR	COUNTY: GRANT	EROSION CONTROL	SHEET	E
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LEGEND

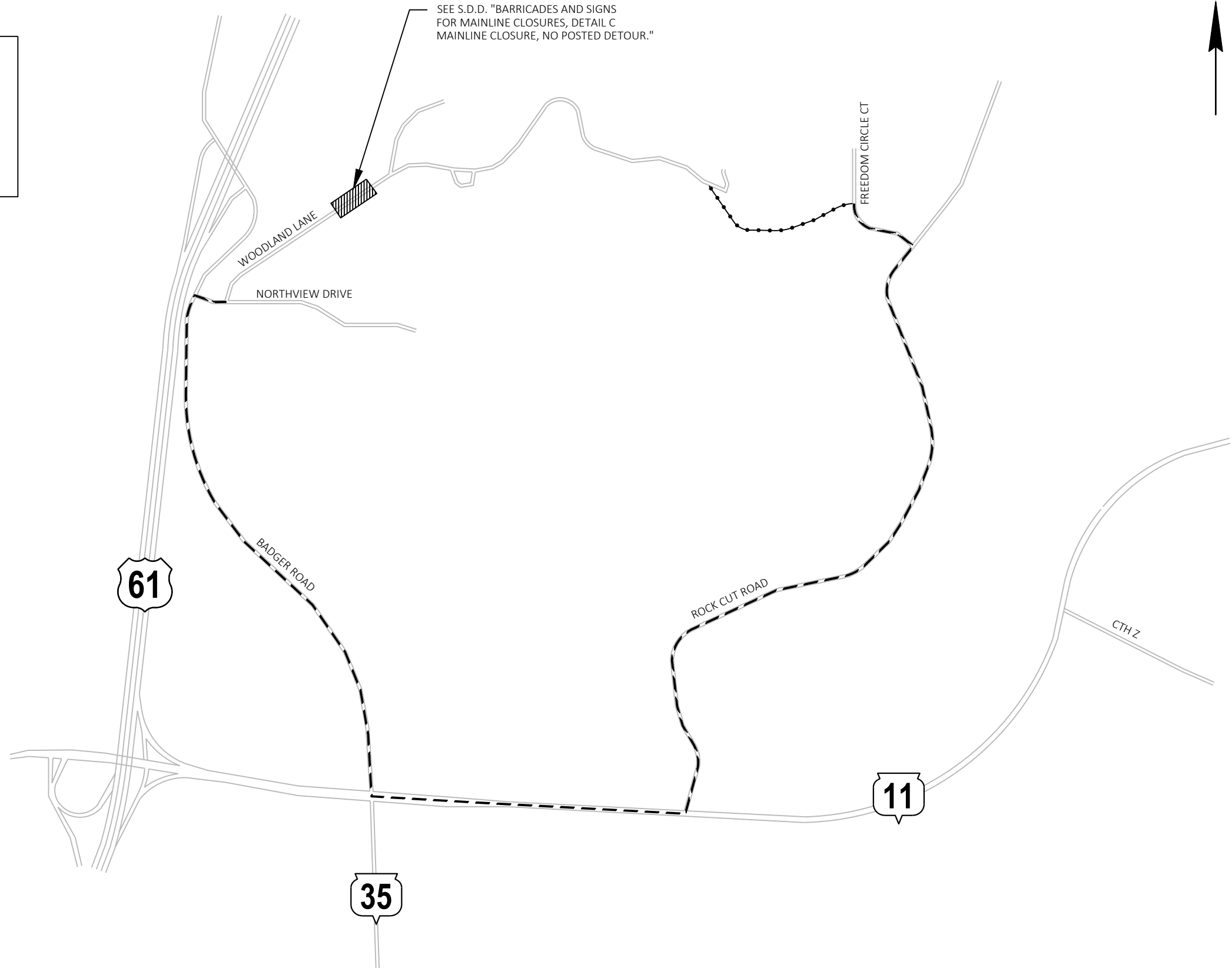
-  EXISTING SIGN ON STEEL POST
-  PROPOSED SIGN ON WOOD POST



PROJECT NO: 5721-00-76	HWY: LOC STR	COUNTY: GRANT	PERMANENT SIGNING	SHEET	E
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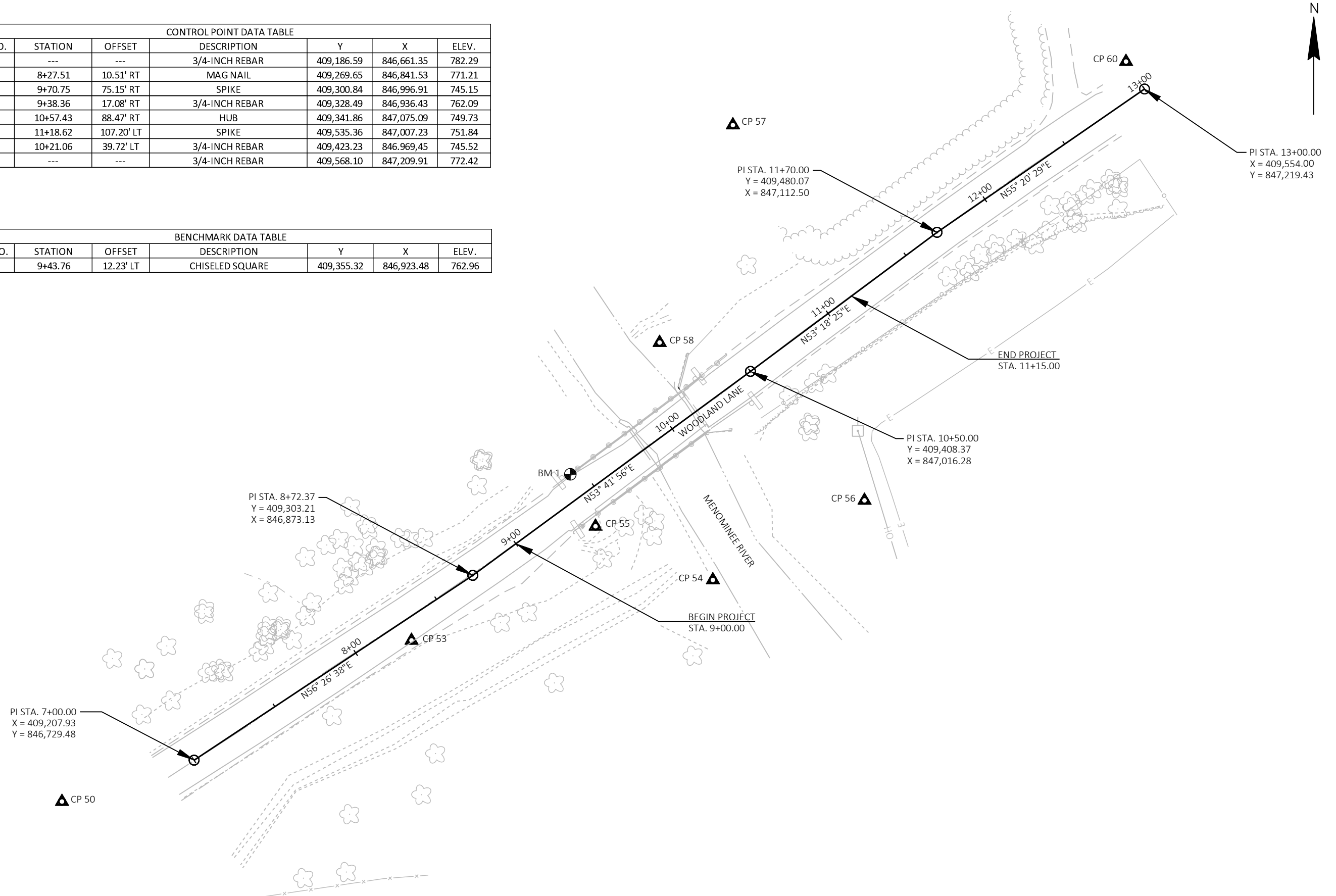
LEGEND

-  WORK ZONE - BRIDGE OUT
-  LOCAL TRAFFIC DETOUR ROUTE (NOT POSTED)
-  TEMPORARY ACCESS ROAD (BY OTHERS)



CONTROL POINT DATA TABLE						
CP NO.	STATION	OFFSET	DESCRIPTION	Y	X	ELEV.
50	---	---	3/4-INCH REBAR	409,186.59	846,661.35	782.29
53	8+27.51	10.51' RT	MAG NAIL	409,269.65	846,841.53	771.21
54	9+70.75	75.15' RT	SPIKE	409,300.84	846,996.91	745.15
55	9+38.36	17.08' RT	3/4-INCH REBAR	409,328.49	846,936.43	762.09
56	10+57.43	88.47' RT	HUB	409,341.86	847,075.09	749.73
57	11+18.62	107.20' LT	SPIKE	409,535.36	847,007.23	751.84
58	10+21.06	39.72' LT	3/4-INCH REBAR	409,423.23	846,969.45	745.52
60	---	---	3/4-INCH REBAR	409,568.10	847,209.91	772.42

BENCHMARK DATA TABLE						
BM NO.	STATION	OFFSET	DESCRIPTION	Y	X	ELEV.
1	9+43.76	12.23' LT	CHISELED SQUARE	409,355.32	846,923.48	762.96



Estimate Of Quantities

5721-00-76

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	2.000	2.000
0004	203.0250	Removing Structure Over Waterway Remove Debris (structure) 01. P-22-956	EACH	1.000	1.000
0006	205.0100	Excavation Common	CY	226.000	226.000
0008	206.1001	Excavation for Structures Bridges (structure) 01. B-22-301	EACH	1.000	1.000
0010	210.1500	Backfill Structure Type A	TON	180.000	180.000
0012	213.0100	Finishing Roadway (project) 01. 5721-00-76	EACH	1.000	1.000
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	16.000	16.000
0016	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	282.000	282.000
0018	311.0110	Breaker Run	TON	106.000	106.000
0020	455.0605	Tack Coat	GAL	22.000	22.000
0022	460.2000	Incentive Density HMA Pavement	DOL	60.000	60.000
0024	460.5223	HMA Pavement 3 LT 58-28 S	TON	45.000	45.000
0026	460.5224	HMA Pavement 4 LT 58-28 S	TON	34.000	34.000
0028	465.0315	Asphaltic Flumes	SY	16.000	16.000
0030	502.0100	Concrete Masonry Bridges	CY	269.000	269.000
0032	502.3200	Protective Surface Treatment	SY	220.000	220.000
0034	502.3210	Pigmented Surface Sealer	SY	103.000	103.000
0036	505.0400	Bar Steel Reinforcement HS Structures	LB	6,850.000	6,850.000
0038	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	34,650.000	34,650.000
0040	516.0500	Rubberized Membrane Waterproofing	SY	17.000	17.000
0042	550.0020	Pre-Boring Rock or Consolidated Materials	LF	120.000	120.000
0044	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	380.000	380.000
0046	603.8000	Concrete Barrier Temporary Precast Delivered	LF	25.000	25.000
0048	603.8125	Concrete Barrier Temporary Precast Installed	LF	25.000	25.000
0050	606.0300	Riprap Heavy	CY	287.000	287.000
0052	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	182.000	182.000
0054	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5721-00-76	EACH	1.000	1.000
0056	619.1000	Mobilization	EACH	1.000	1.000
0058	624.0100	Water	MGAL	4.500	4.500
0060	625.0100	Topsoil	SY	307.000	307.000
0062	628.1504	Silt Fence	LF	443.000	443.000
0064	628.1520	Silt Fence Maintenance	LF	443.000	443.000
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	262.000	262.000
0072	629.0210	Fertilizer Type B	CWT	19.200	19.200
0074	630.0130	Seeding Mixture No. 30	LB	5.500	5.500
0076	630.0500	Seed Water	MGAL	6.800	6.800
0078	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	4.000	4.000
0080	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0082	638.2602	Removing Signs Type II	EACH	5.000	5.000
0084	638.3000	Removing Small Sign Supports	EACH	5.000	5.000
0086	642.5201	Field Office Type C	EACH	1.000	1.000
0088	643.0420	Traffic Control Barricades Type III	DAY	3,780.000	3,780.000
0090	643.0705	Traffic Control Warning Lights Type A	DAY	7,560.000	7,560.000
0092	643.0900	Traffic Control Signs	DAY	2,940.000	2,940.000
0094	643.5000	Traffic Control	EACH	1.000	1.000
0096	645.0111	Geotextile Type DF Schedule A	SY	38.000	38.000
0098	645.0120	Geotextile Type HR	SY	483.000	483.000

Estimate Of Quantities

5721-00-76

Line	Item	Item Description	Unit	Total	Qty
0100	650.4500	Construction Staking Subgrade	LF	133.000	133.000
0102	650.5000	Construction Staking Base	LF	133.000	133.000
0104	650.6501	Construction Staking Structure Layout (structure) 01. B-22-301	EACH	1.000	1.000
0106	650.9911	Construction Staking Supplemental Control (project) 01. 5721-00-76	EACH	1.000	1.000
0108	650.9920	Construction Staking Slope Stakes	LF	133.000	133.000
0110	690.0150	Sawing Asphalt	LF	44.000	44.000
0112	715.0502	Incentive Strength Concrete Structures	DOL	1,614.000	1,614.000
0114	SPV.0180	Special 01. Enhanced Turbidity Barriers	SY	108.000	108.000

EARTHWORK SUMMARY

CATEGORY	LOCATION	STA	TO	STA	(C) CUT CY	(E)	(2)	(S)	(4)	(5)	(6)	(7)	(8)	(9)	
						EXCAVATION BELOW SUBGRADE CY	205.0100 EXCAVATION COMMON CY	SALVAGED/ UNUSABLE PAVEMENT MATERIAL CY		AVAILABLE MATERIAL CY	REDUCED EBS IN FILL CY		EXPANDED EBS BACKFILL CY	UNDISTRIBUTED 311.0110 BREAKER RUN TON***	130.00% EXPANDED FILL CY
0010	WOODLAND LANE	9+00	-	9+55	73	18	91	16	57	18	24	0	43	--	57
		10+37	-	11+15	108	27	135	20	88	27	35	89	63	115	(27)
TOTAL					181		226	36	145	45	59	89	106	115	30

NOTES

- 1) EXCAVATION BELOW SUBGRADE (E) = 25% OF CUT (C)
- 2) EXCAVATION COMMON IS THE SUM OF THE CUT (C) AND EXCAVATION BELOW SUBGRADE.
- 3) EBS EXCAVATION (E) TO BE BACKFILLED WITH BREAKER RUN.
- 4) AVAILABLE MATERIAL = CUT (C) - (S).
- 5) SOILS REMOVED AS EBS MUST BE WASTED OFFSITE AND NOT REUSED AS FILL.
- 6) EXPANDED EBS BACKFILL. THIS IS TO BE FILLED WITH BREAKER RUN. EBS EXPANSION FACTOR 1.30.
- 7) UNDISTRIBUTED QUANTITY OF BREAKER RUN USED TO FILL EBS.
- 8) EXPANDED FILL = {UNEXPANDED FILL * 130% FILL FACTOR}.
- 9) MASS ORDINATE =AVAILABLE MATERIAL (4) - EXPANDED FILL (8) = BORROW AND SELECT BORROW OR WASTE

** FILL EXPANSION FACTOR = 1.30
 *** CY TO TON CONVERSION FACTOR = 1.80 TON/CY

GRUBBING SUMMARY

CATEGORY	STATION - STATION	LOCATION	201.0205
			GRUBBING STA
0010	9+00 - 9+55	LT/RT	1
	10+37 - 11+15	LT/RT	1
TOTALS			2

BASE AGGREGATE SUMMARY

CATEGORY	STATION - STATION	LOCATION	305.0110	305.0120	624.0100
			BASE AGGREGATE DENSE 3/4-INCH TON	BASE AGGREGATE DENSE 1 1/4-INCH TON	WATER MGAL
0010	9+00 - 9+55	LT & RT	6	108	1.7
	10+37 - 11+15	LT & RT	8	154	2.4
	UNDISTRIBUTED		2	20	0.4
TOTALS			16	282	4.5

FINISHING ROADWAY

CATEGORY	PROJECT I.D.	213.0100
		EACH
0010	5721-00-76	1

ASPHALT ITEMS

CATEGORY	LOCATION	455.0605	460.5223	460.5224
		TACK COAT GAL	HMA PAVEMENT 3 LT 58-28 S TON	HMA PAVEMENT 4 LT 58-28 S TON
0010	9+00 - 9+55	9	19	14
	10+37 - 11+15	13	26	20
TOTALS		22	45	34

ASPHALTIC FLUMES			
CATEGORY	STATION	LOCATION	465.0315 SY
0010	10+53	LT	8
	10+53	RT	8
TOTALS			16

MOBILIZATION		
CATEGORY	PROJECT I.D.	619.1000 EACH
0010	5721-00-76	1

MOBILIZATIONS EROSION CONTROL	
CATEGORY	628.1905 EACH
0010	5

RIPRAP				
CATEGORY	STATION	LOCATION	606.0300 RIPRAP HEAVY CY	645.0120 GEOTEXTILE TYPE HR SY
0010	10+53	LT	5	7
	10+53	RT	4	6
TOTALS			9	13

MOBILIZATIONS EMERGENCY EROSION CONTROL	
CATEGORY	628.1910 EACH
0010	3

FINISHING ITEMS							
CATEGORY	STATION	LOCATION	625.0100 TOPSOIL SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0500 SEED WATER MGAL
0010	9+00 - 9+55	LT/RT	22	7	1.4	0.4	0.5
	10+37 - 11+15	LT/RT	215	185	13.5	3.9	4.8
	UNDISTRIBUTED		20	20	1.5	0.4	0.5
	WASTE SITE		50	50	2.8	0.8	1.0
TOTALS			307	262	19.2	5.5	6.8

TRAFFIC CONTROL ITEMS					
CATEGORY	STATION	LOCATION	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0900 TRAFFIC CONTROL SIGNS DAY
0010	9+00	WEST OF B-22-301	1,890	3780	1470
	11+15	EAST OF B-22-301	1,890	3780	1470
TOTAL			3,780	7,560	2,940

SILT FENCE SUMMARY				
CATEGORY	STATION - STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
0010	9+00 - 9+55	LT	92	92
	9+00 - 9+55	RT	100	100
	10+37 - 11+15	LT	118	118
	10+37 - 11+15	RT	133	133
TOTALS			443	443

ENHANCED TURBIDITY BARRIERS					
CATEGORY	STATION	LOCATION	SPV.0180.01 ENHANCED TURBIDITY BARRIERS SY	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 PRECAST INSTALLED LF
0010	9+00 - 9+55	LT & RT	58	12.5	12.5
	10+37 - 11+15	LT & RT	50	12.5	12.5
TOTALS			108	25.0	25.0

3

SIGNING QUANTITIES

CATEGORY	STATION	LOCATION	SIGN CODE	SIGN MESSAGE	SIGN SIZE (W x H) IN X IN	634.0616	637.2230	638.2602	638.3000
						POSTS WOOD 4X6-INCH 16-FT EACH	SIGNS TYPE II REFLECTIVE F SF	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH
0010	9+22	RT	R12-1	WEIGHT LIMIT 10 TONS	24 x 30	---	---	1	1
	9+43	LT	W5-52L	BRIDGE HASH MARKS	12 x 36	1	3.0	1	1
	9+43	RT	W5-52R	BRIDGE HASH MARKS	12 x 36	1	3.0	1	1
	10+47	LT	W5-52L	BRIDGE HASH MARKS	12 x 36	1	3.0	1	1
	10+47	RT	W5-52R	BRIDGE HASH MARKS	12 x 36	1	3.0	1	1
TOTALS						4	12	5	5

FIELD OFFICE TYPE C

CATEGORY	PROJECT I.D.	642.5201 EACH
0010	5721-00-76	1

TRAFFIC CONTROL

CATEGORY	PROJECT I.D.	643.5000 EACH
0010	5721-00-76	1

CONSTRUCTION STAKING SUMMARY

CATEGORY	STATION	LOCATION	650.4500	650.5000	650.9920
			SUBGRADE LF	BASE LF	SLOPE STAKES LF
0010	9+00 - 9+55	LT & RT	55	55	55
	10+37 - 11+15	LT & RT	78	78	78
TOTALS			133	133	133

CONSTRUCTION STAKING STRUCTURE LAYOUT

CATEGORY	STRUCTURE	650.6501 EACH
0010	B-22-301	1

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL

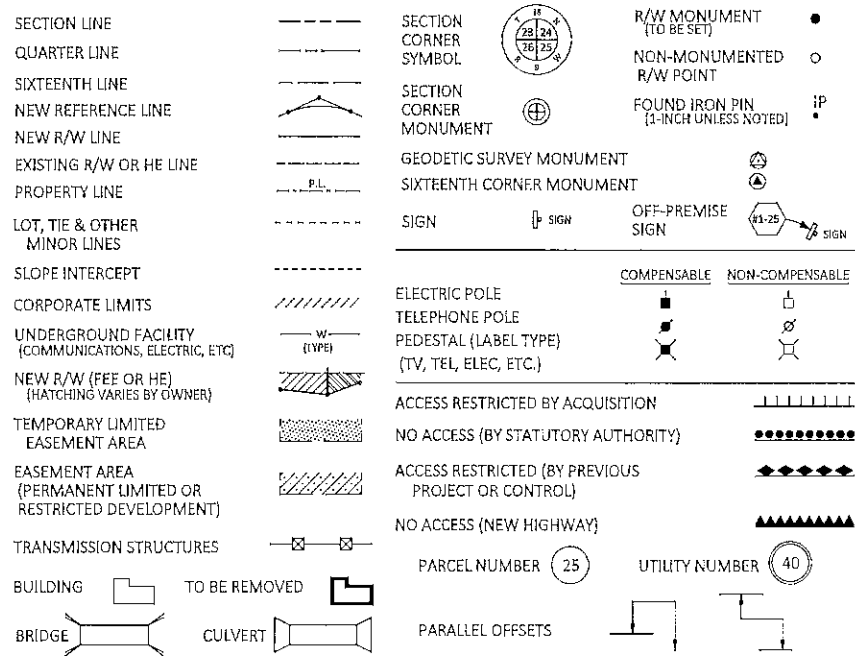
CATEGORY	PROJECT	650.9911 EACH
0010	5721-00-76	1

SAWING ASPHALT

CATEGORY	STATION	LOCATION	690.0150
			LF
0010	9+00	LT & RT	22
	11+15	LT & RT	22
TOTAL			44

3

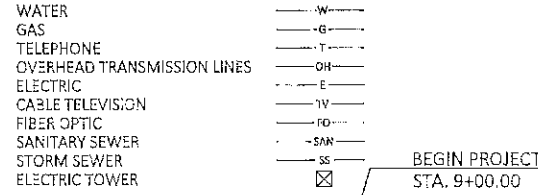
CONVENTIONAL SYMBOLS



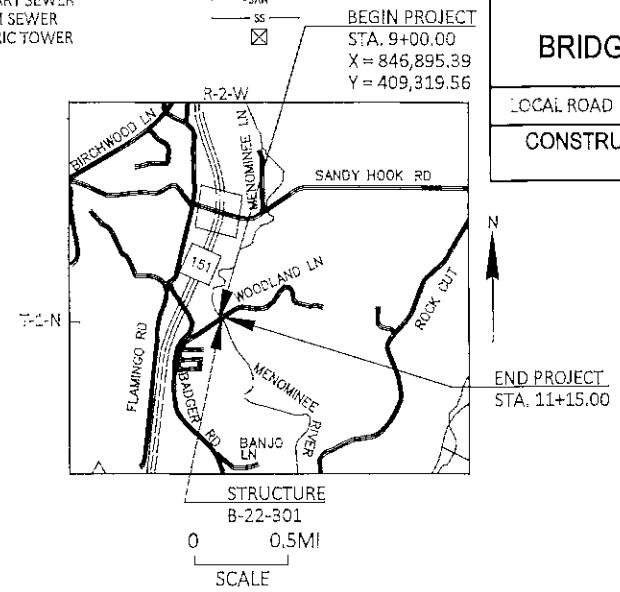
CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS (100')	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	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	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SQUARE FEET	SF
CORNER	COR	STATE TRUNK HIGHWAY	STH
DOCUMENT NUMBER	DOC	STATION	STA
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TTP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT IDENTIFICATION	HE	VOLUME	V
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY NUMBER	NGS		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CONVENTIONAL UTILITY SYMBOLS



R/W PROJECT NUMBER	5721-00-06	SHEET NUMBER	4.01	TOTAL SHEETS	
FEDERAL PROJECT NUMBER		PLAT OF RIGHT OF WAY REQUIRED FOR WOODLAND LANE BRIDGE OVER MENOMINEE RIVER, B-22-301			
LOCAL ROAD		GRANT COUNTY			
CONSTRUCTION PROJECT NUMBER	5721-00-76				



POSITIONS ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WICRS), GRANT COUNTY SHOWN ON THIS PLAT ARE NAD83(2011), IN U.S. SURVEY FEET. VALUES SHOWN 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 GRANT COUNTY HIGHWAY COMMISSIONER.

EXISTING HIGHWAY RIGHT-OF-WAY ON WOODLAND DRIVE IS BASED ON CSM 939 AND LARRY AUSTIN PLAT OF SURVEY DATED 04-26-98.

CURVE DATA ABBREVIATIONS

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

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNERS	INTERESTS REQUIRED	R/W NEW	S.F. REQUIRED EXISTING	TOTAL	P.L.E. S.F.	T.L.E. S.F.
1	MARYVILLE SANITARY DISTRICT #2	PLE	---	---	---	1250	---
2	DENNIS H SCHULT & ROXANE M FORD	PLE, TLE	---	---	---	242	1481

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

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
100-101	S56°18'04"E	17.90'
101-102	N55°10'56"E	29.03'
102-103	S56°18'04"E	20.03'
103-104	N55°10'26"E	92.04'
104-105	N56°18'04"W	8.17'
105-106	N54°12'50"E	90.23'
106-107	N86°41'35"W	34.22'
107-108	N86°41'35"W	51.79'
108-109	S54°12'50"W	115.11'
109-110	N34°52'47"W	12.27'
110-111	S55°10'56"W	55.79'
111-112	S00°22'60"E	58.52'

POINT TABLE		
POINT NAME	NORTH	EAST
100	409319.560	846895.389
101	409305.134	846905.587
102	409323.980	846933.086
103	409507.837	846944.921
104	409360.417	847320.482
105	409366.999	847015.646
106	409419.768	847388.843
107	409447.203	847368.395
108	409472.692	847049.401
109	409405.381	846956.024
110	409415.445	846949.008
111	409577.883	846894.999

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WICRS), GRANT 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.

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 (TLE)S 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.

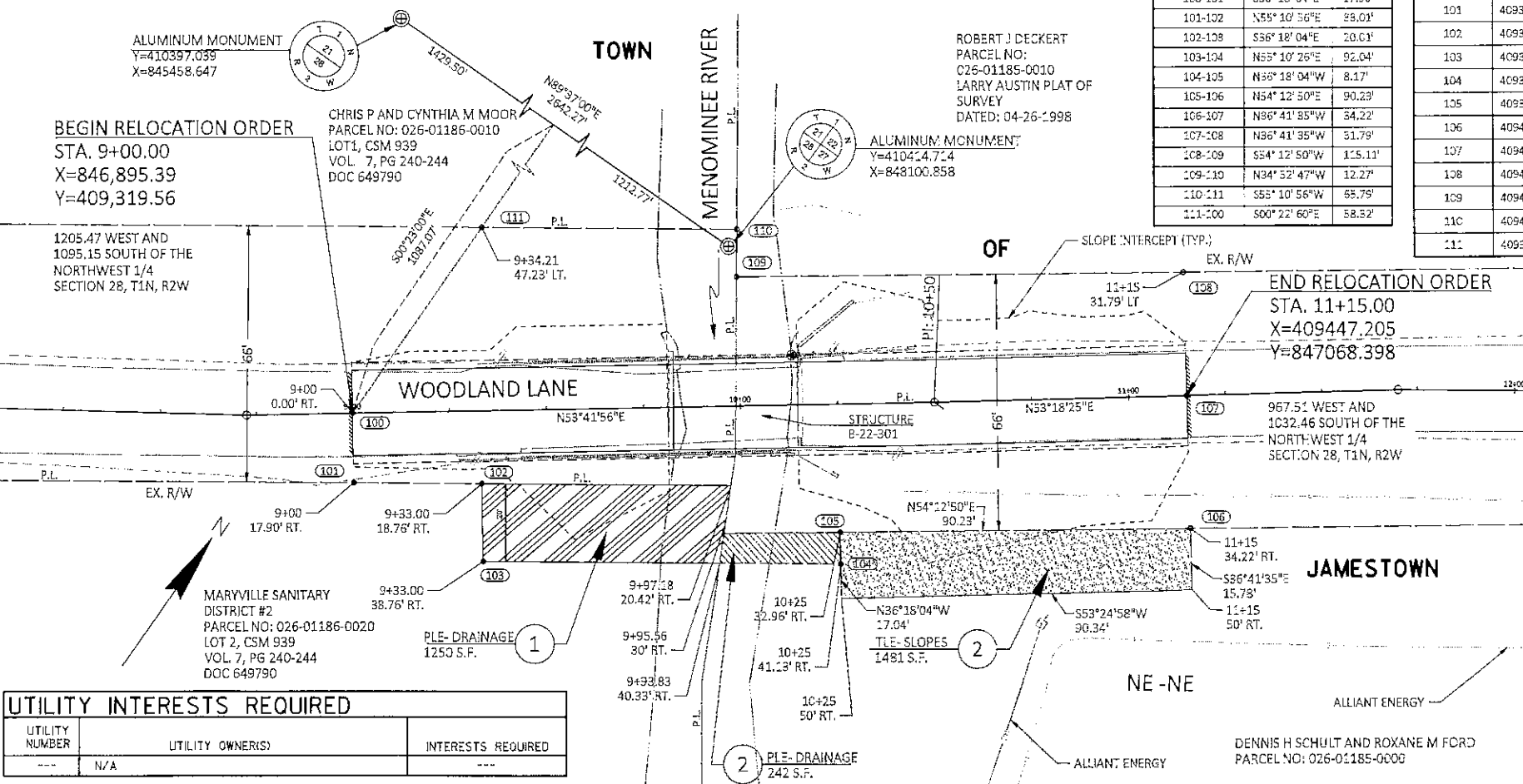
AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

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.

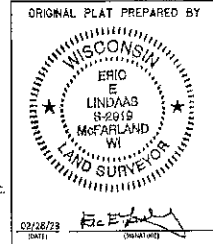
FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF GRANT COUNTY.

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

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



UTILITY NUMBER	UTILITY OWNER(S)	INTERESTS REQUIRED
---	N/A	---



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

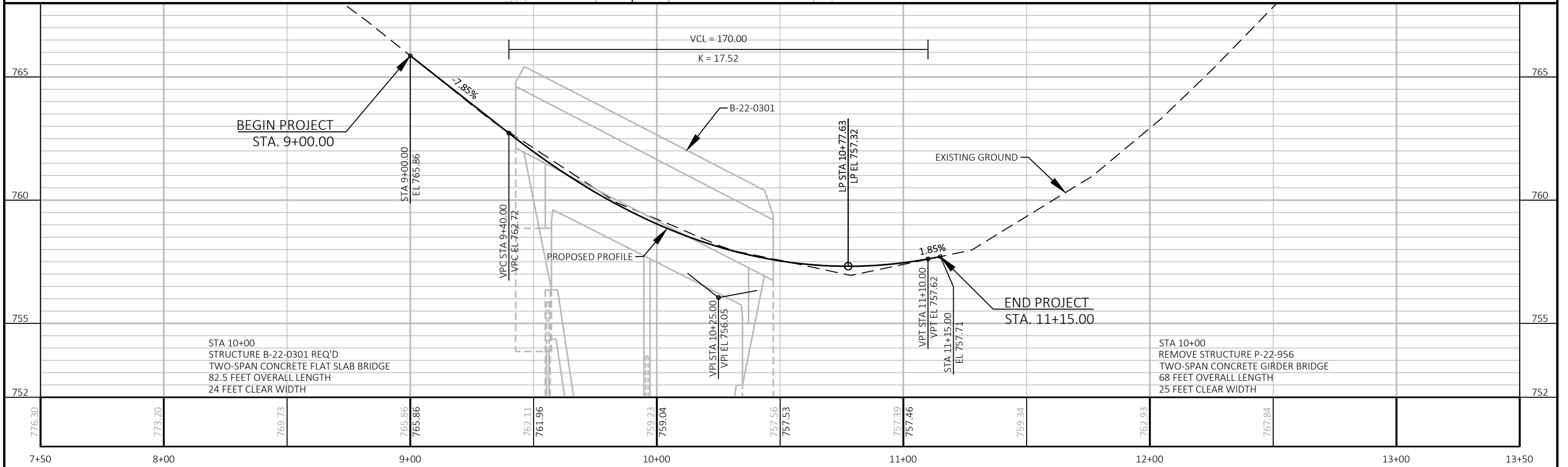
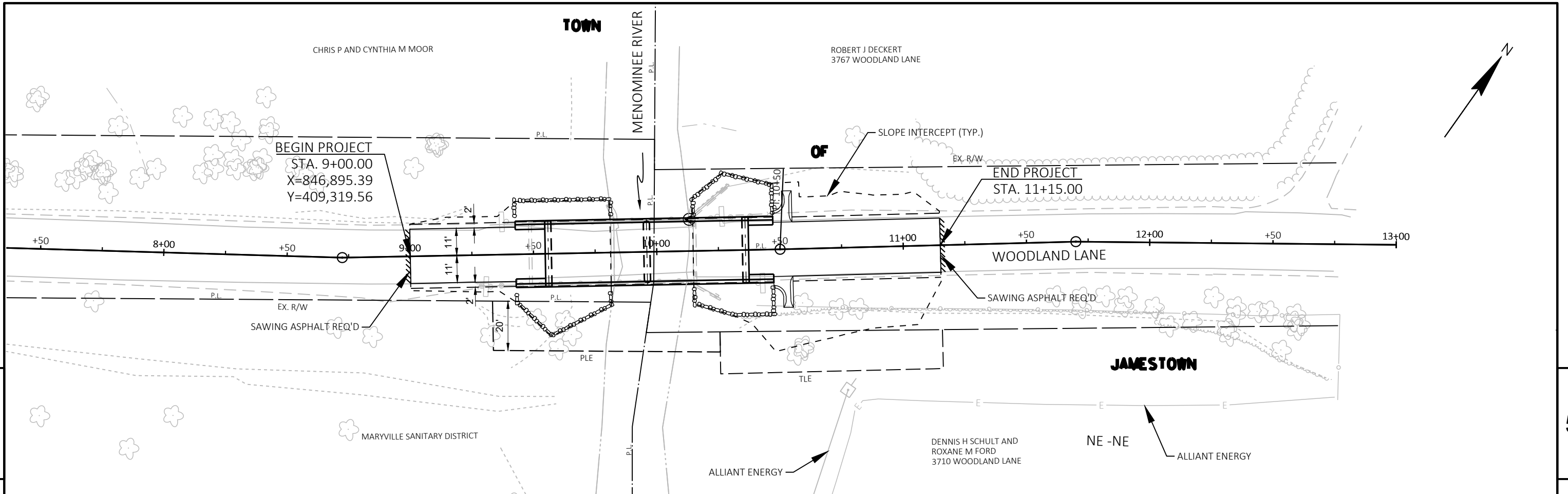
REVISION DATE

GRANT COUNTY

APPROVED FOR GRANT COUNTY

DATE: 3/14/2023

(Authorized Signature, Title)



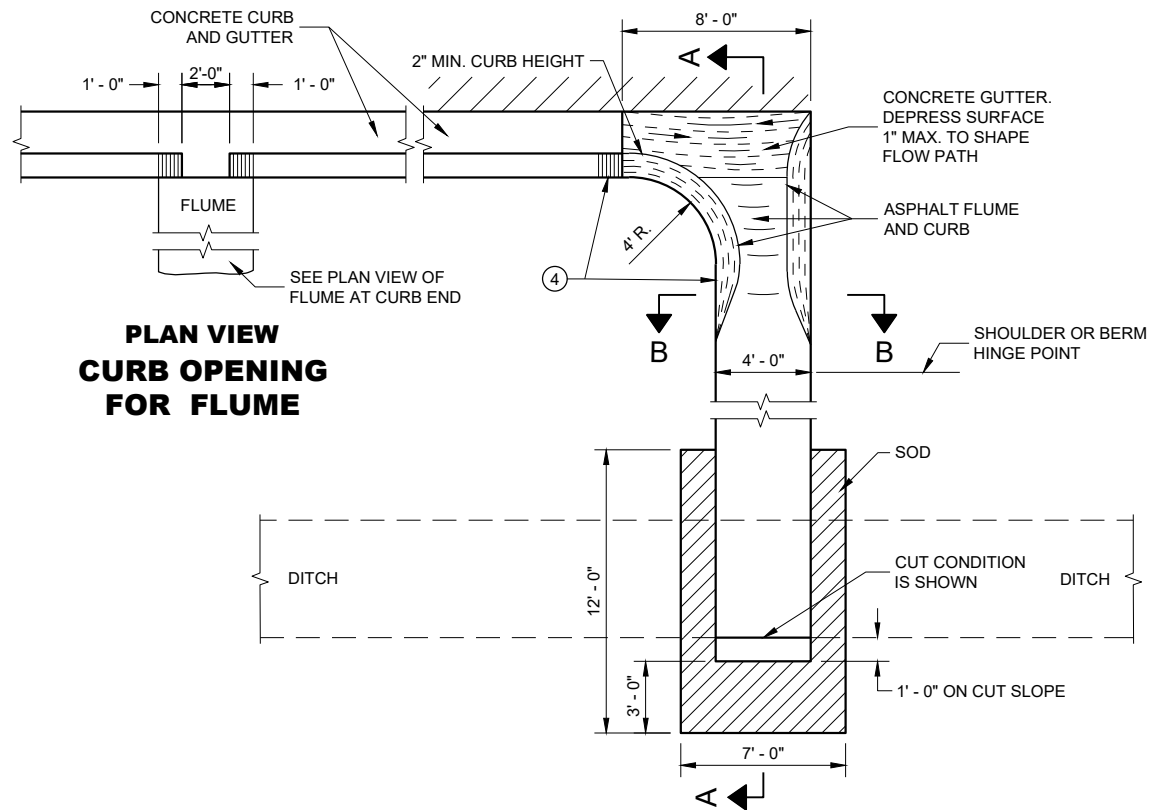
PROJECT NO: 5721-00-76	HWY: LOC STR	COUNTY: GRANT	PLAN AND PROFILE: WOODLAND LANE	SHEET	E
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Standard Detail Drawing List

08D04-06	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C11-10B	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**

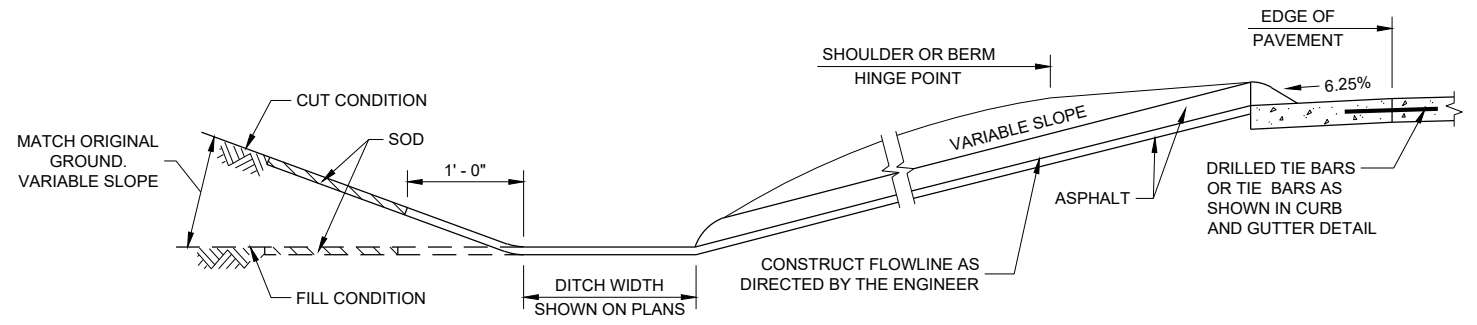
**PLAN VIEW
FLUME AT CURB END**

GENERAL NOTES

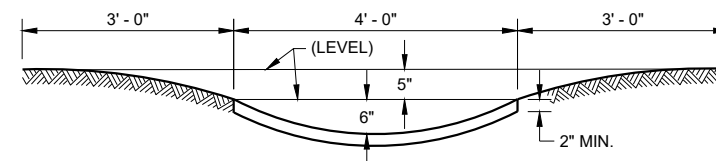
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

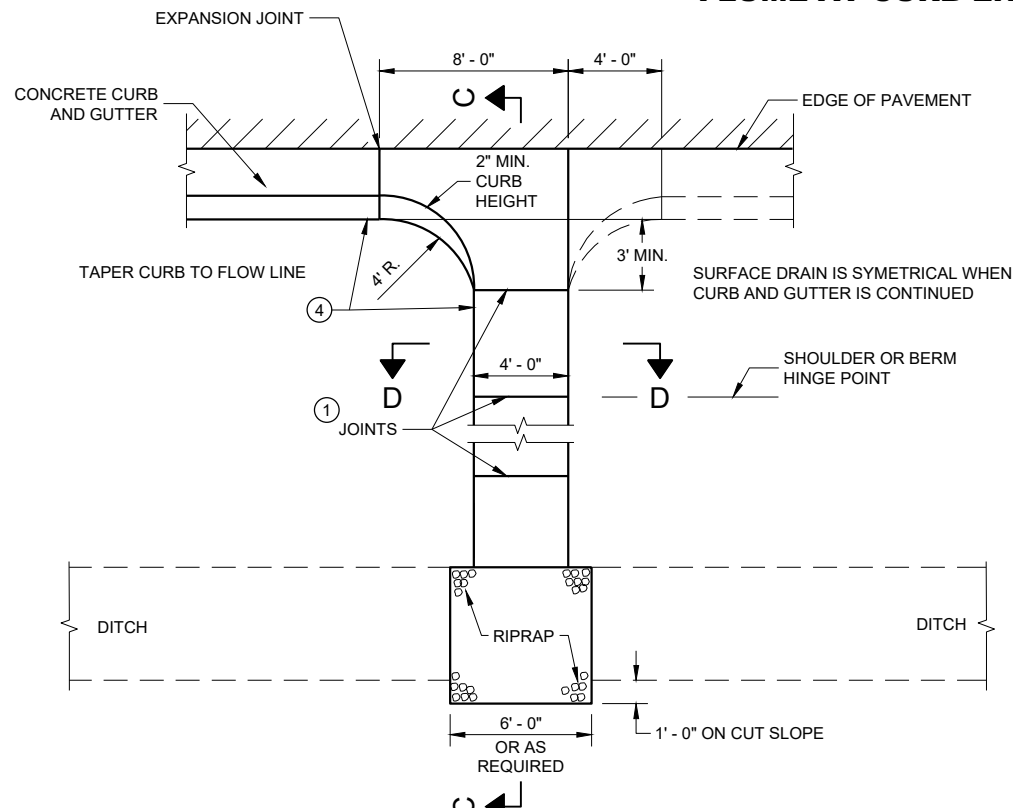
- ① JOINTS SHALL BE 1/8" TO 1/4" WIDE BY 1 1/2" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- ② GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- ③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
- ④ 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.



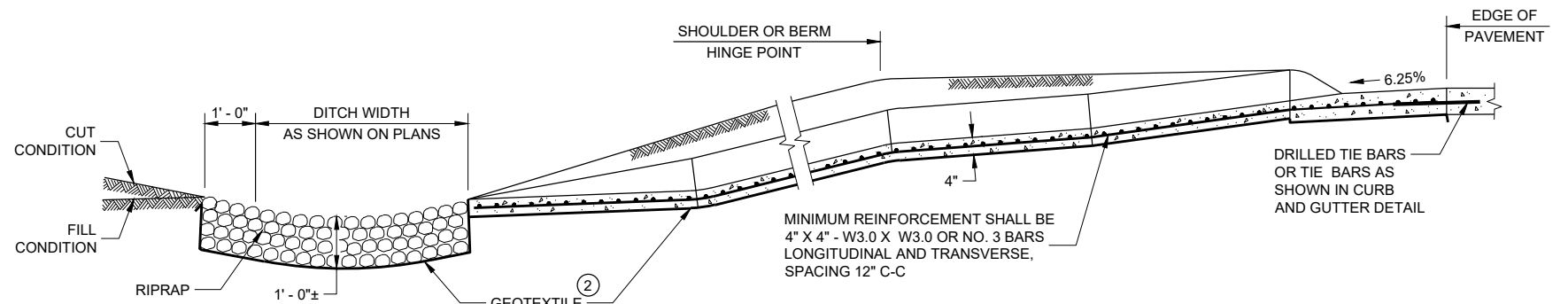
SECTION A - A



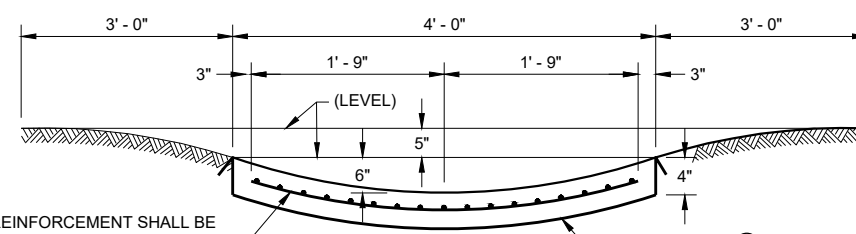
SECTION B - B



**PLAN VIEW
CONCRETE SURFACE DRAIN**



SECTION C - C



SECTION D - D

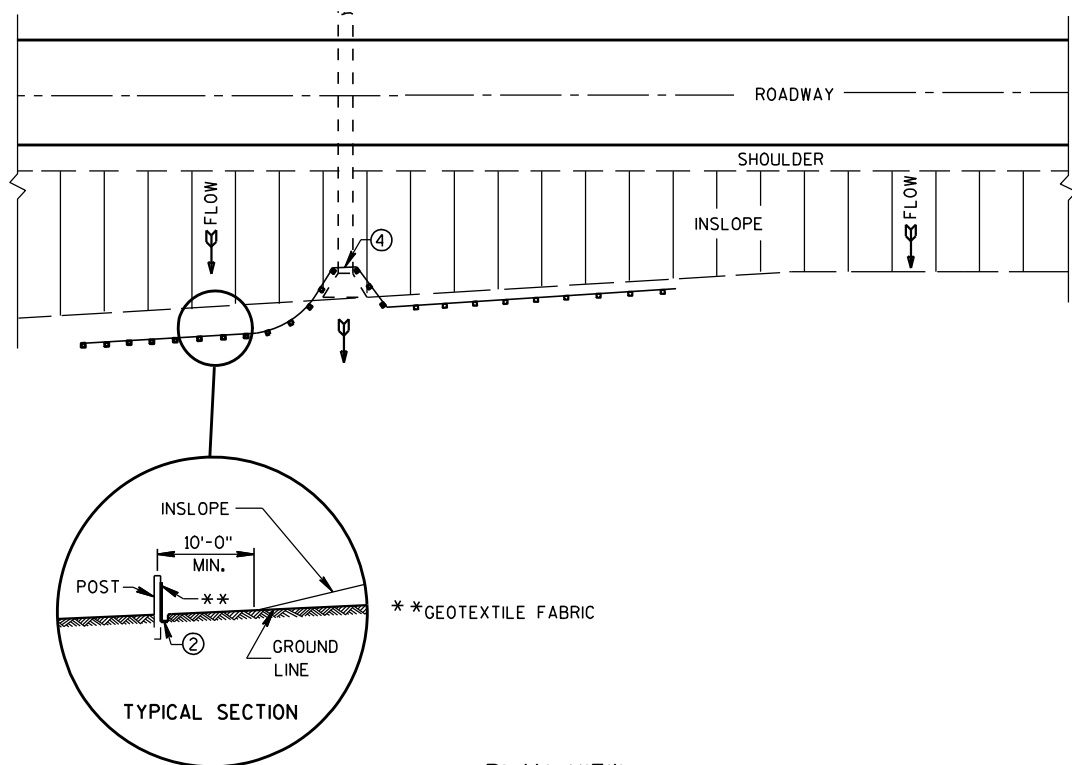
MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE, SPACING 12" C-C

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

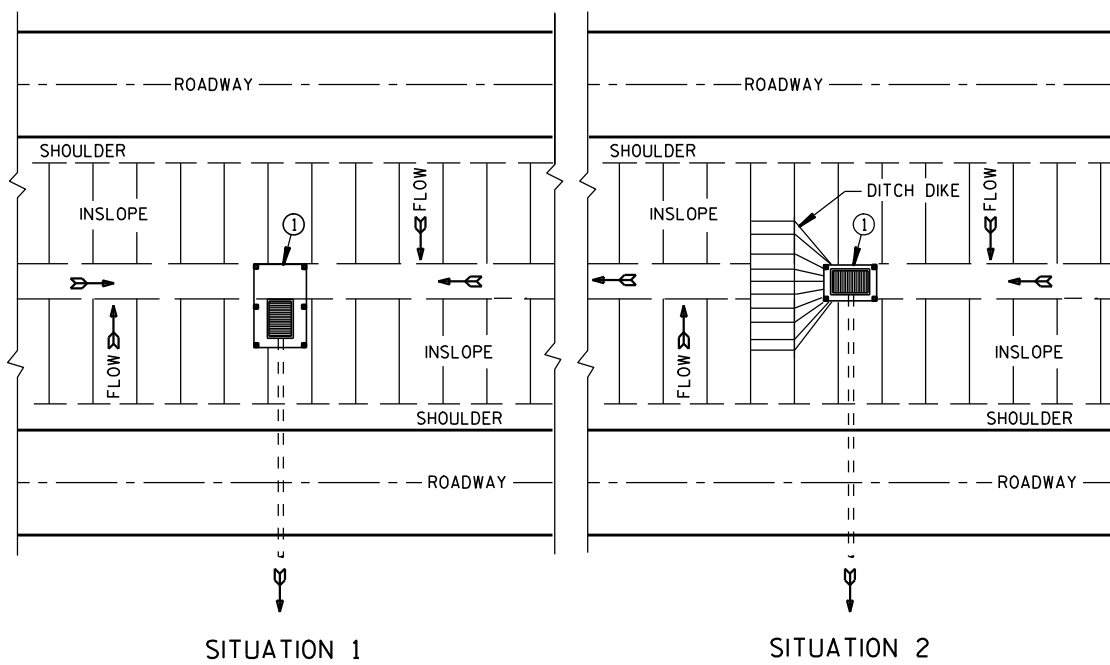
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

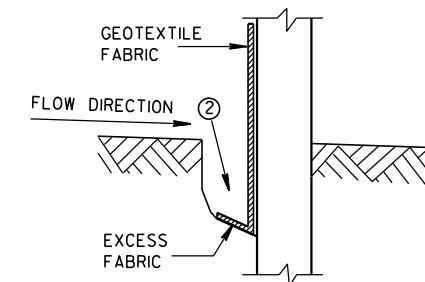


SITUATION 1 SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

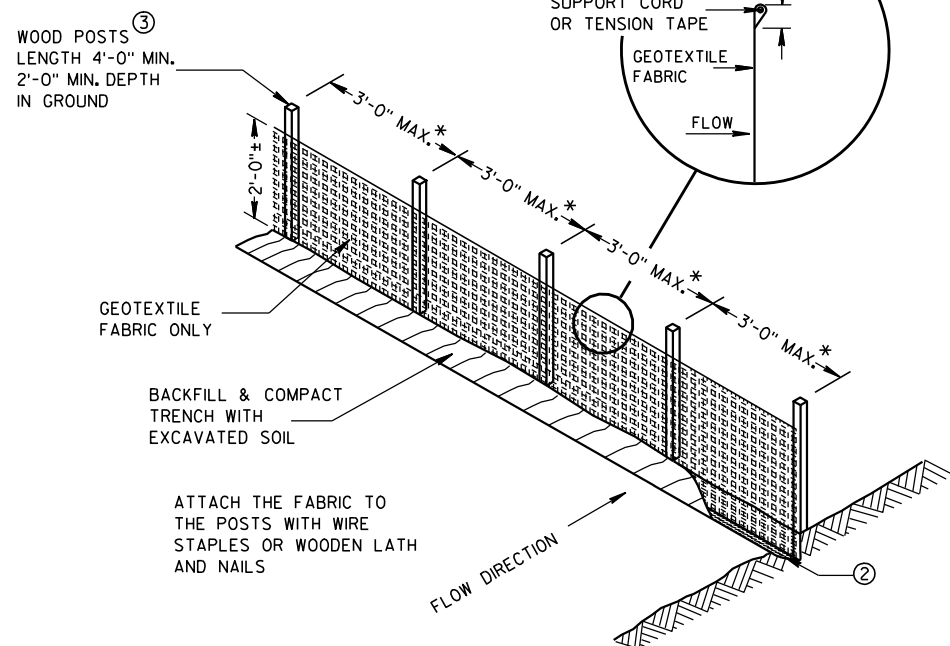
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- 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 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



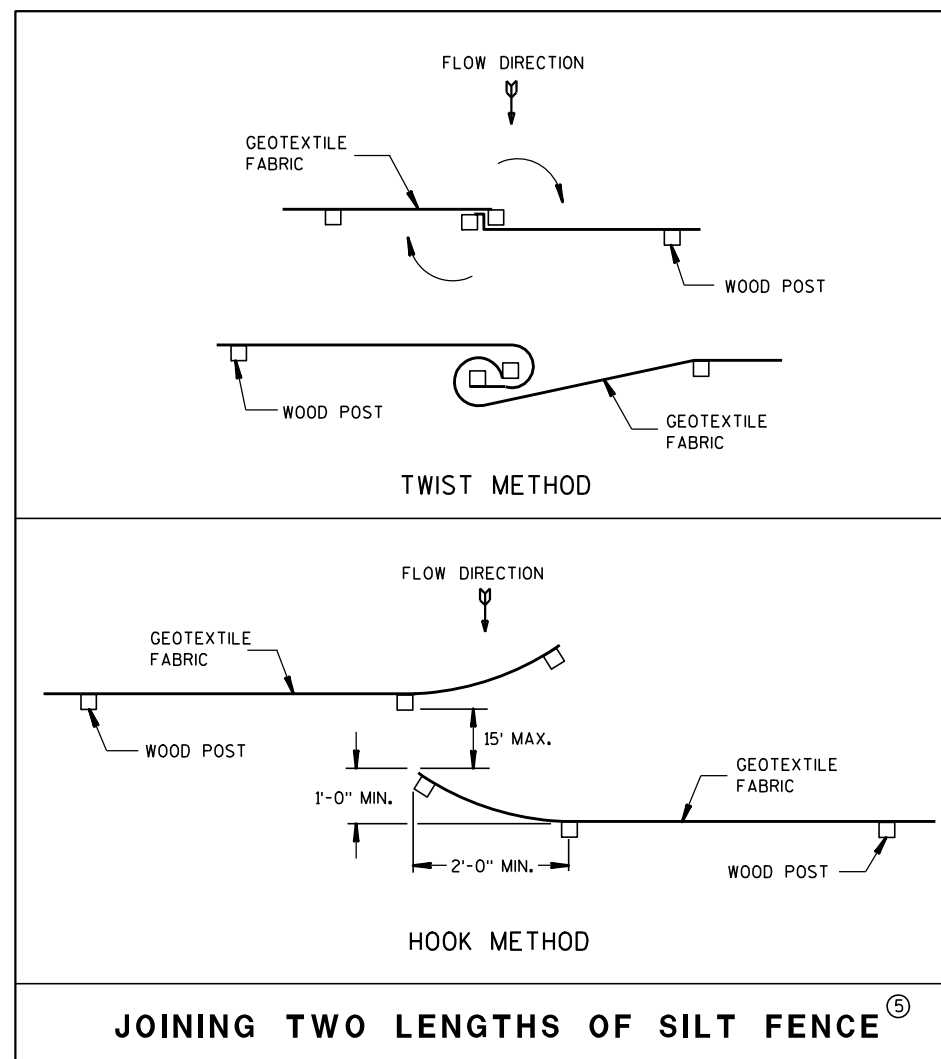
TRENCH DETAIL

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

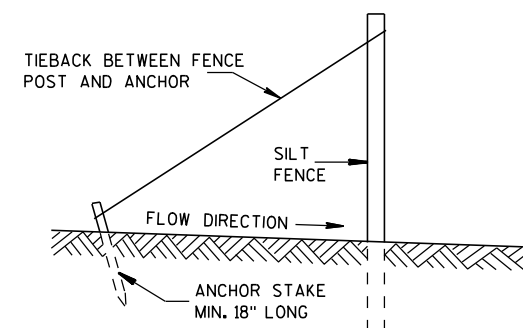


SILT FENCE

* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

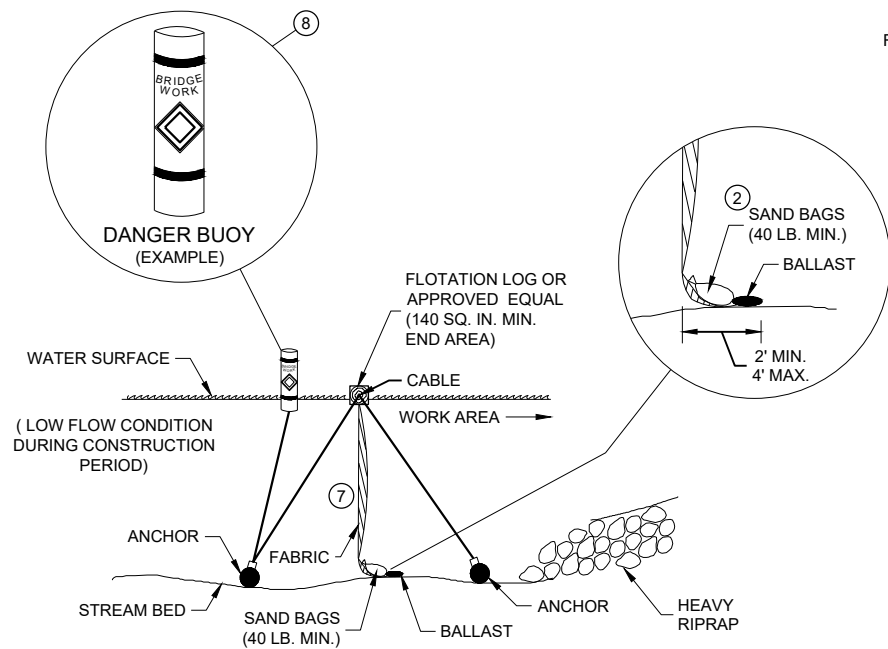
APPROVED

4-29-05

DATE

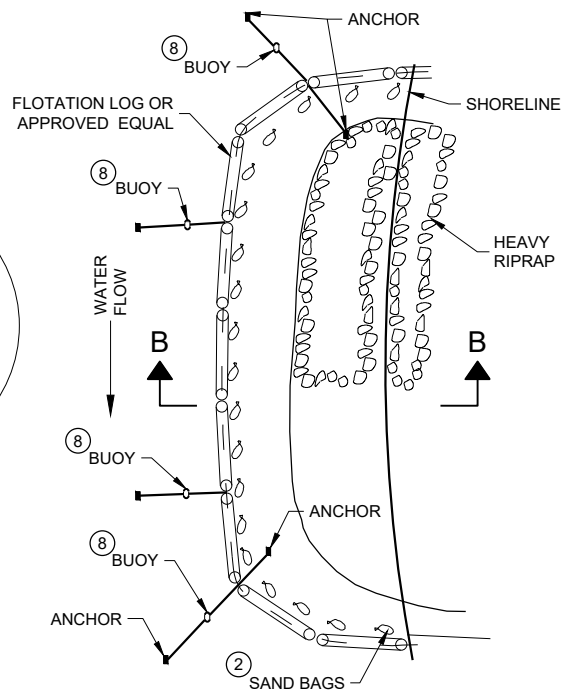
FHWA

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

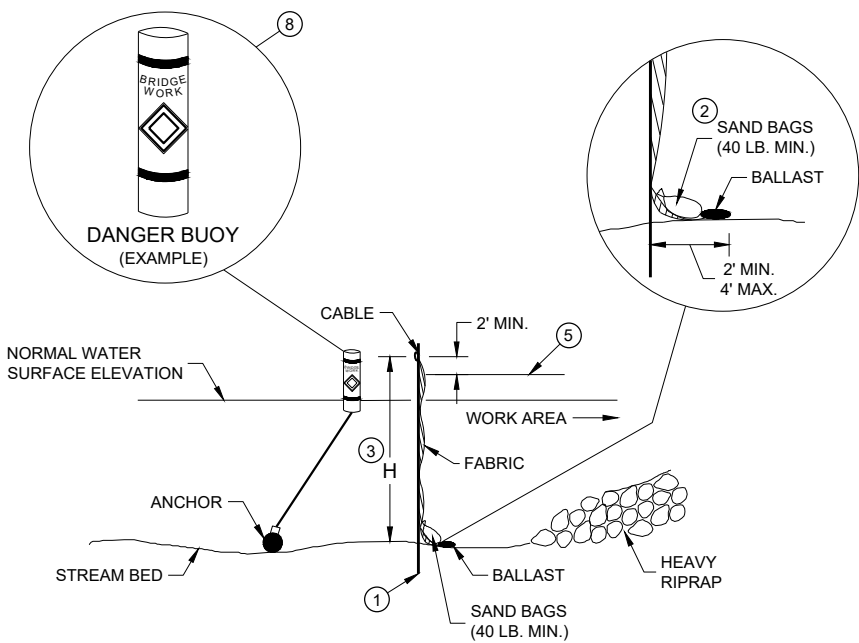


SECTION B - B

**TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6**

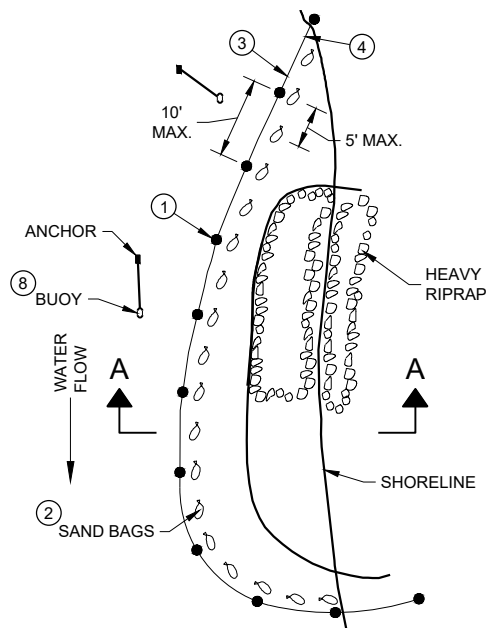


PLAN VIEW



SECTION A - A

TURBIDITY BARRIER - STANDARD POST INSTALLATION



PLAN VIEW

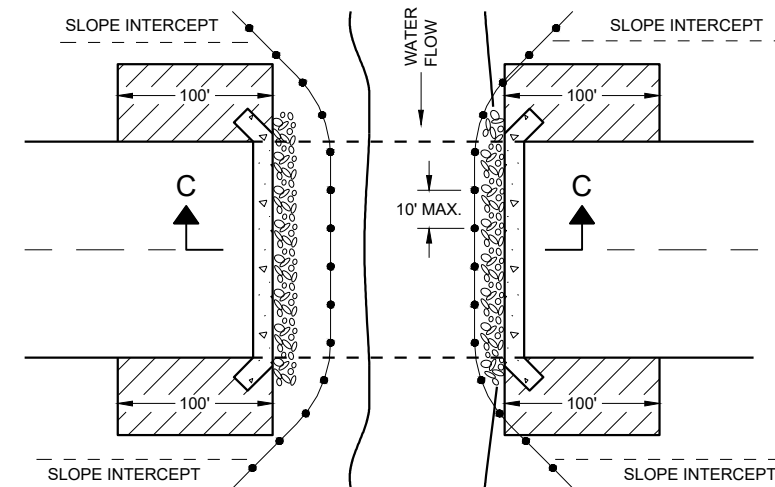
TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

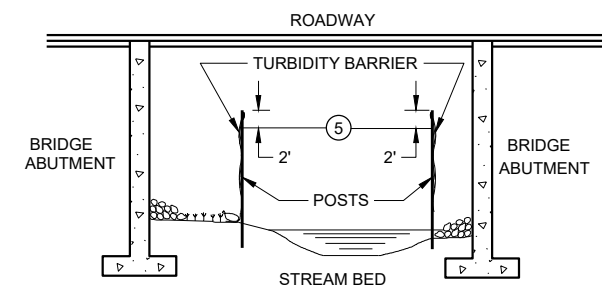
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

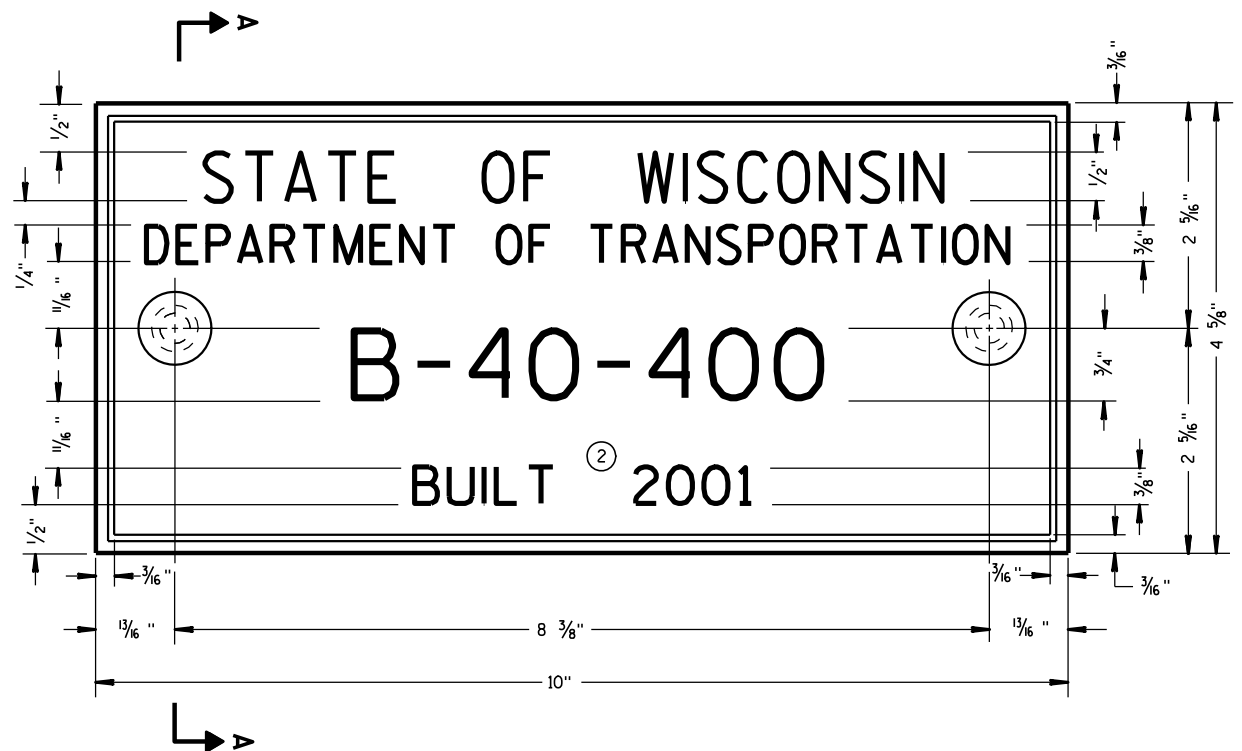
**TURBIDITY BARRIER DETAIL SHOWING
TYPICAL PLACEMENT AT STRUCTURES**

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



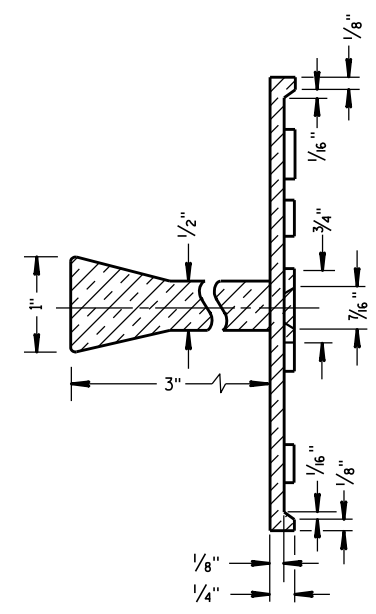
TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

GENERAL NOTES

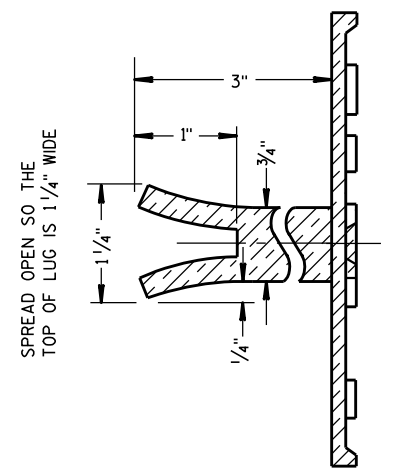
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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.



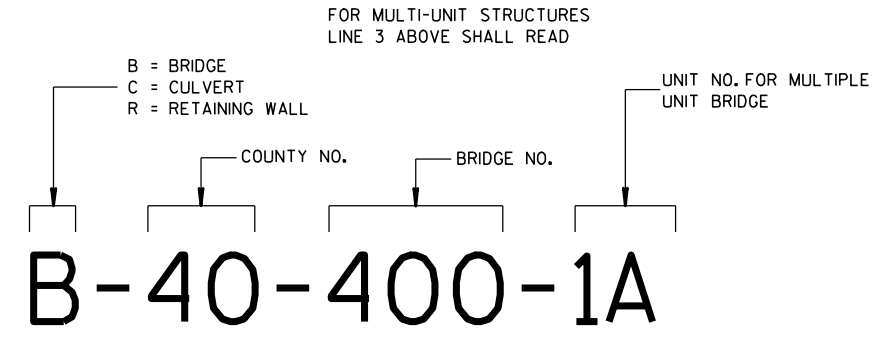
SECTION A-A



ALTERNATE LUG

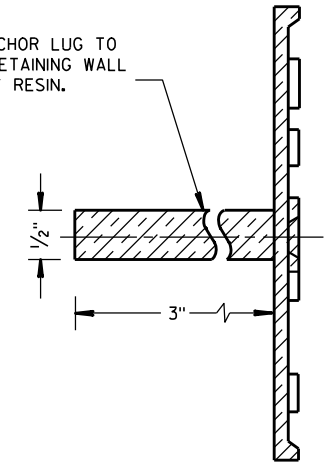
6

6



**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

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

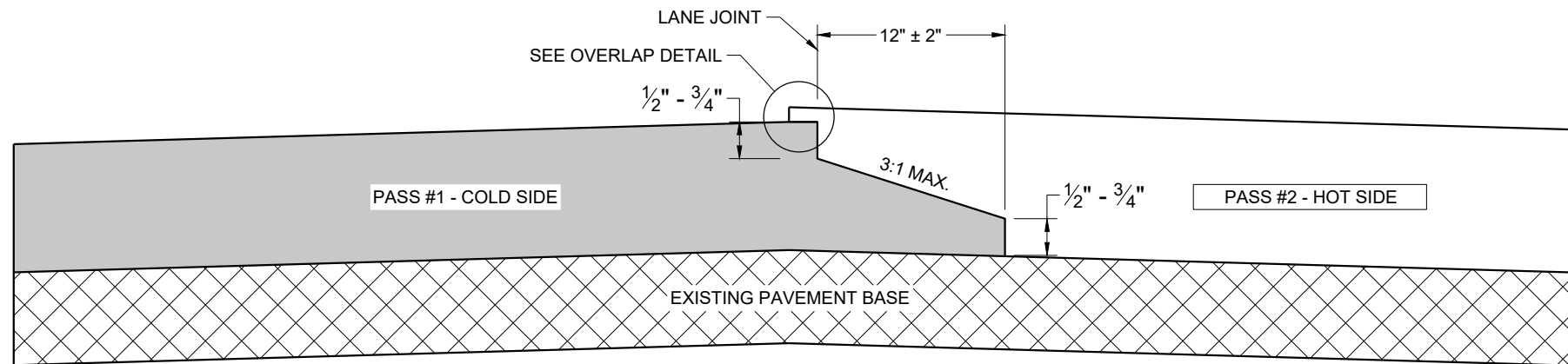


ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

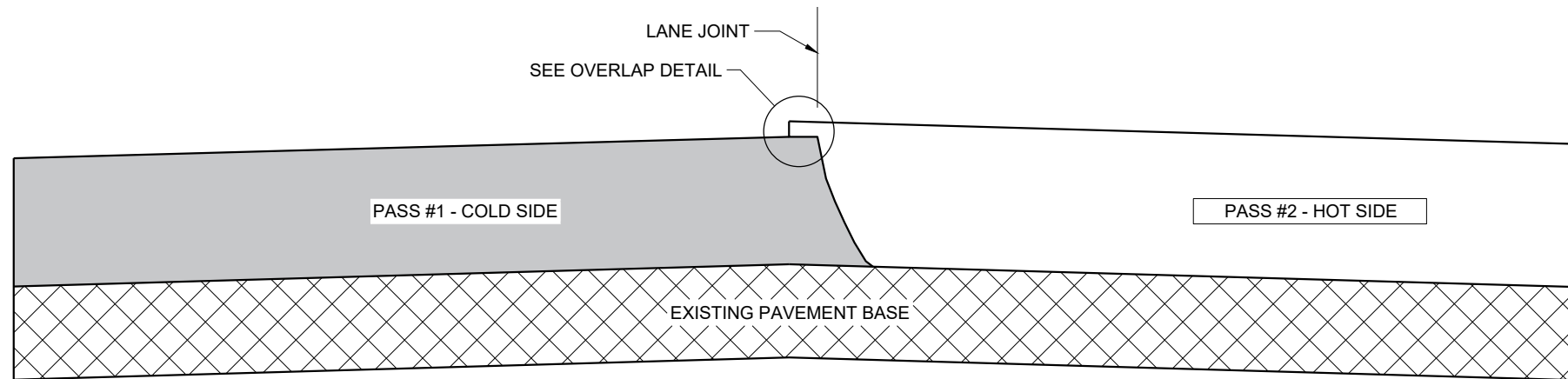
S.D.D. 12 A 3-10

S.D.D. 12 A 3-10

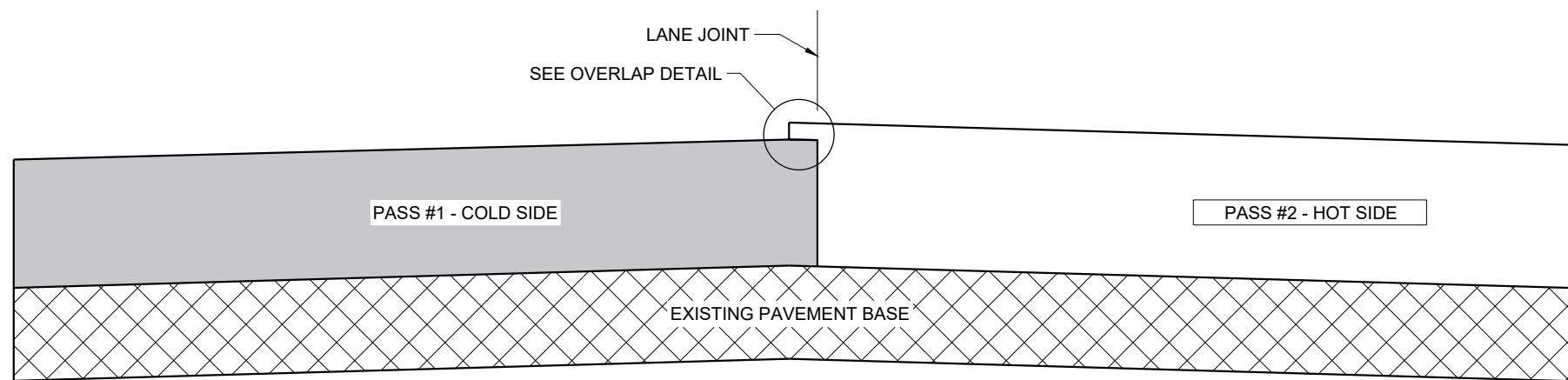
NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 3/26/10	/S/ Scot Becker CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA	



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)**

GENERAL NOTES

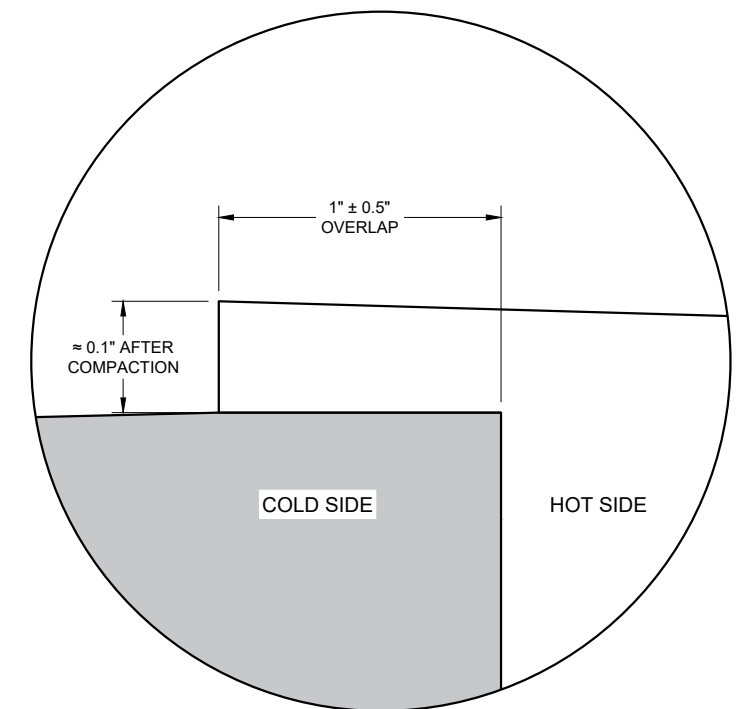
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)

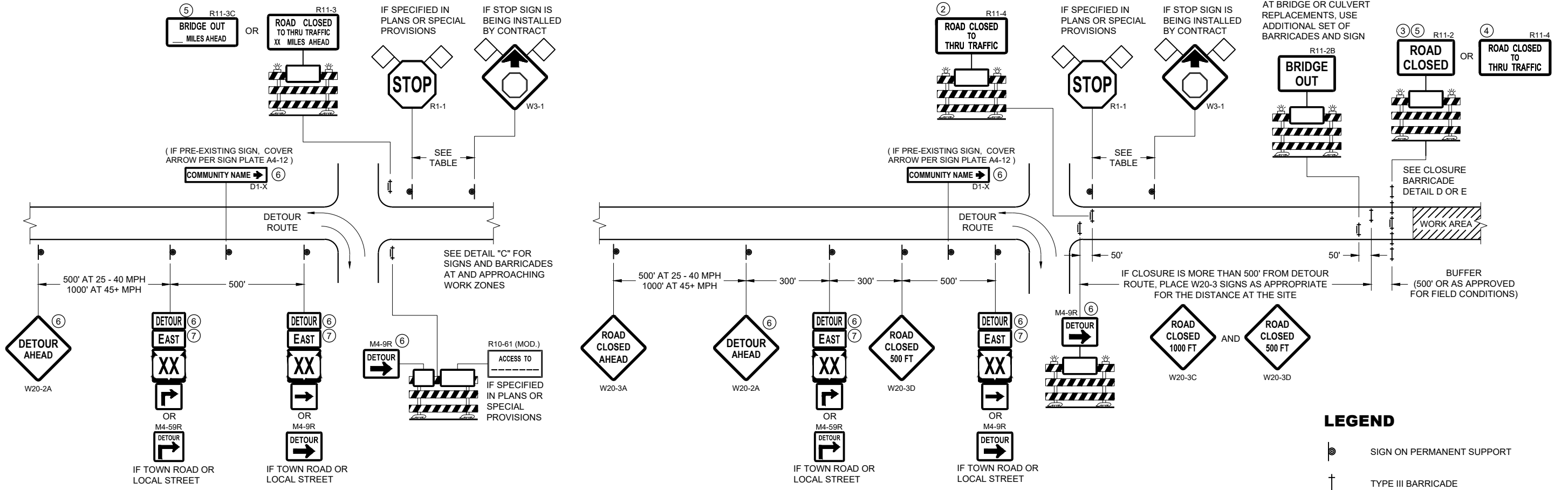
6

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 ENGINEER
FHWA	



**DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE GREATER THAN OR EQUAL TO 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

**DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR**

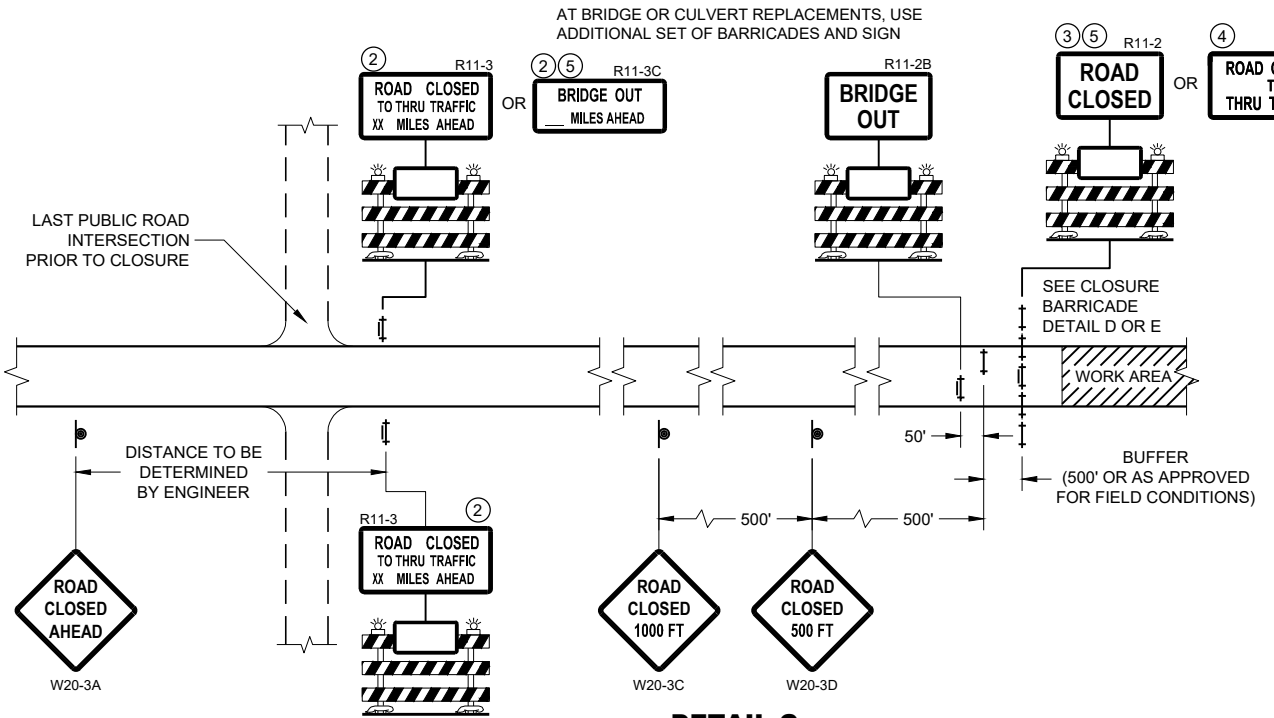
WORK ZONE LESS THAN 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

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)

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

- M4 - 8
- M3 - X
- M1 - 4
- M1 - 6
- M1 - 5A
- M05 - 1
- M06 - 1



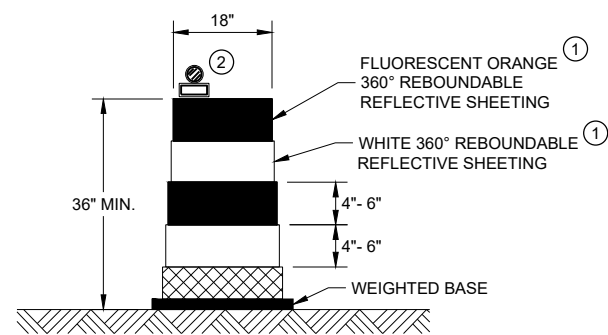
**DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR**

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

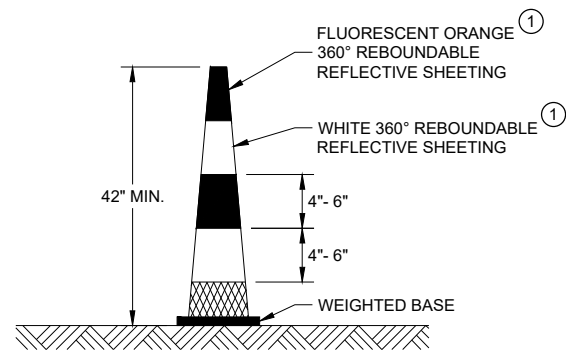
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER



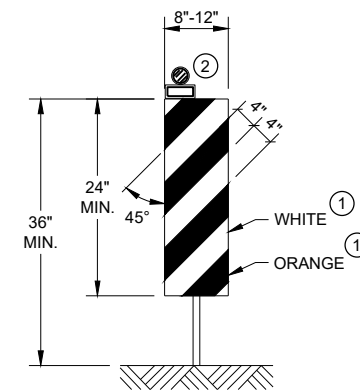
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS
BALLAST WIDTHS
RANGE FROM 14"-20"

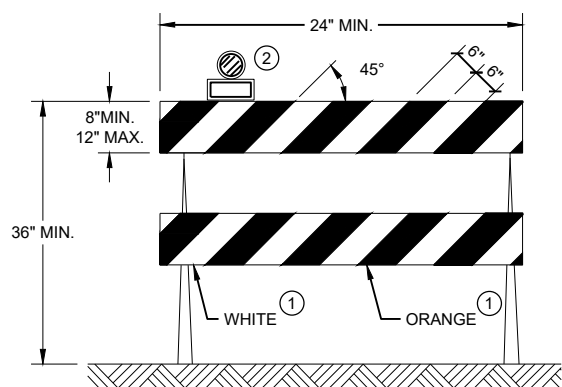


VERTICAL PANEL

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

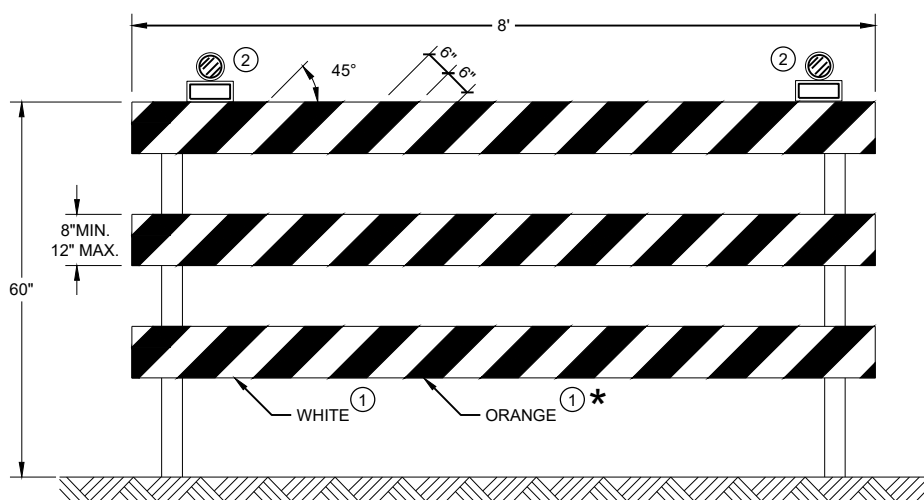
GENERAL NOTES

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL 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.

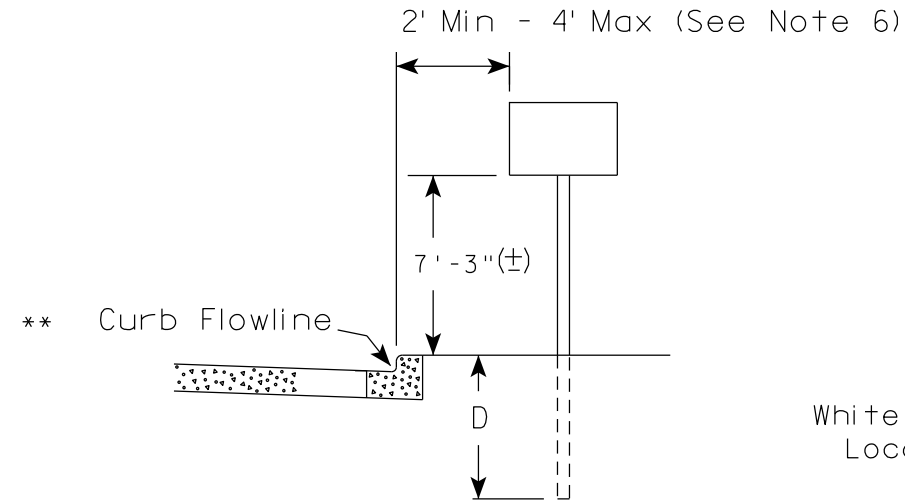
**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

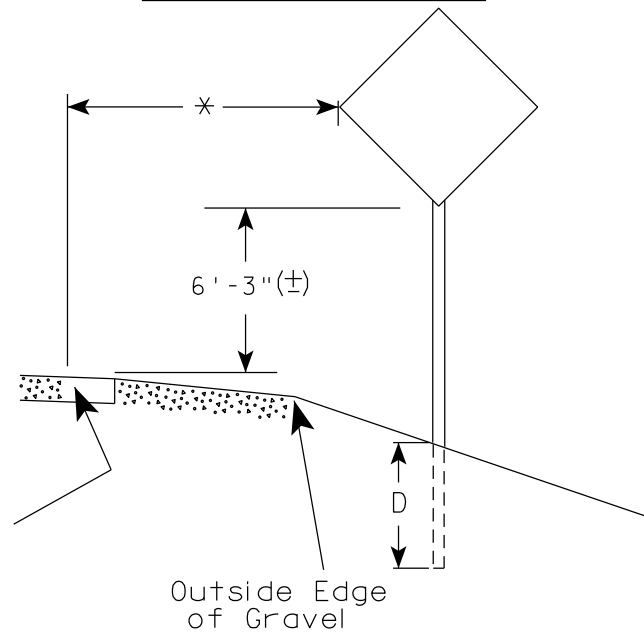
APPROVED
 November 2022 /S/ Andrew Heidtke
 DATE WORK ZONE ENGINEER
 FHWA

URBAN AREA

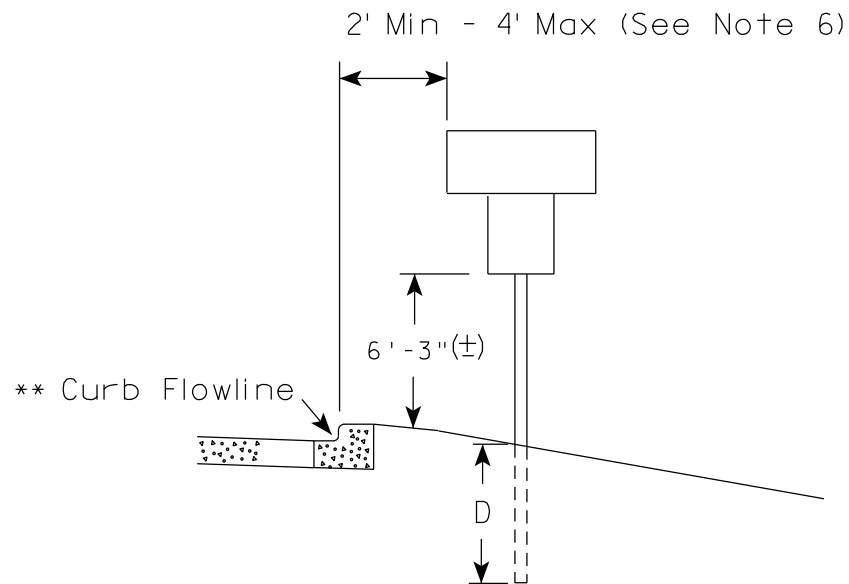
RURAL AREA (See Note 2)



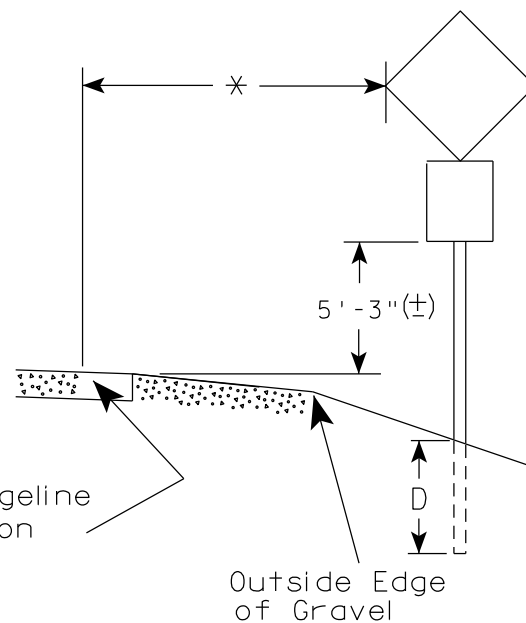
White Edgeline Location



Outside Edge of Gravel



White Edgeline Location



Outside Edge of Gravel

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" (±). 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. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.

7

7

* * 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.

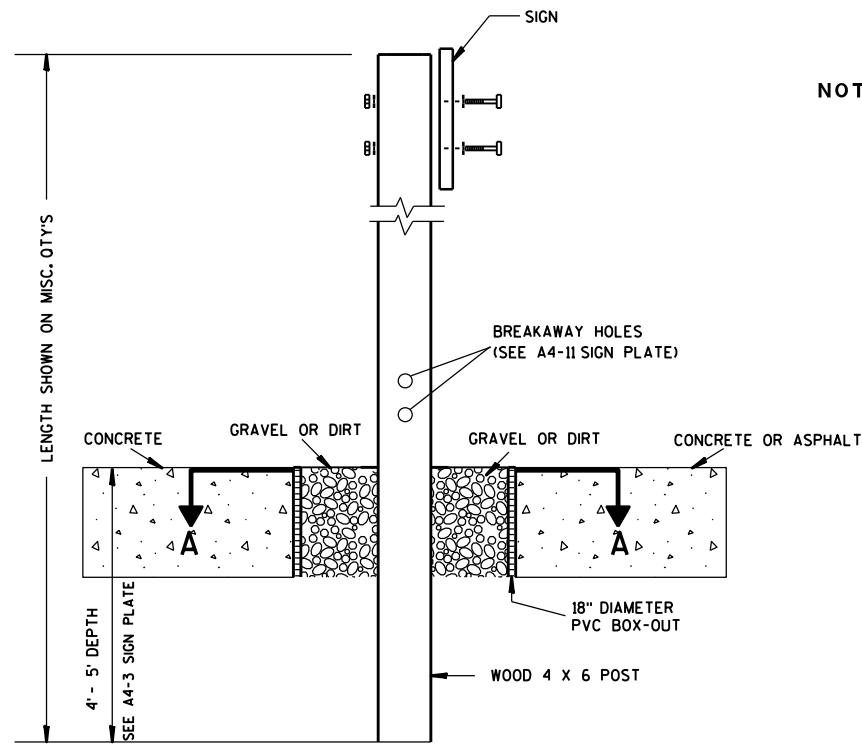
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

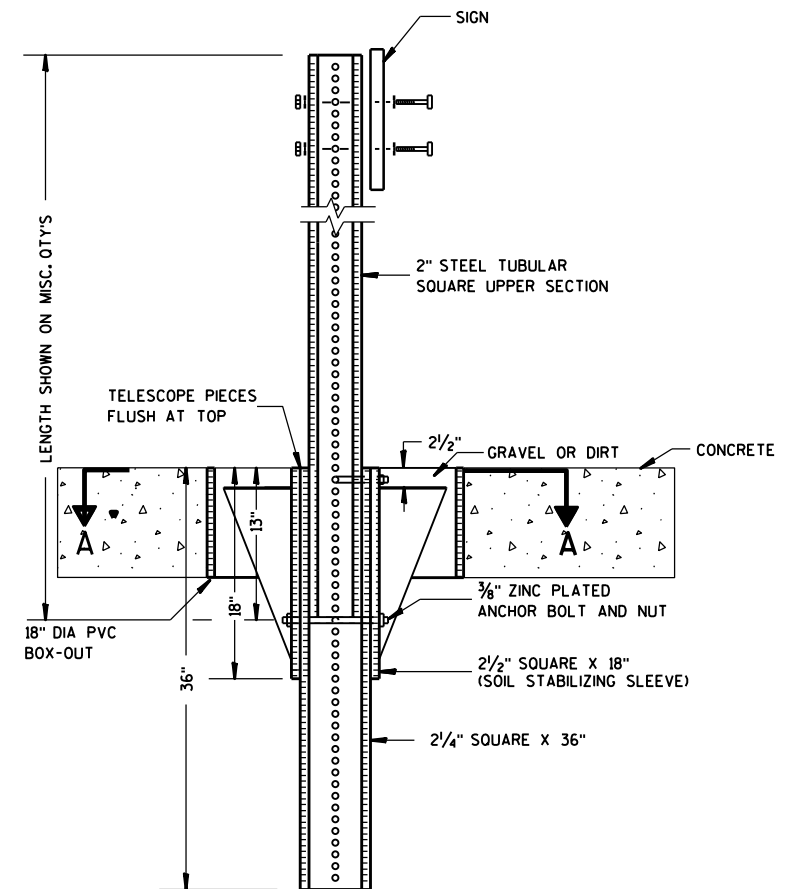
DATE 5/13/2020 PLATE NO. A4-3.22



ELEVATION VIEW

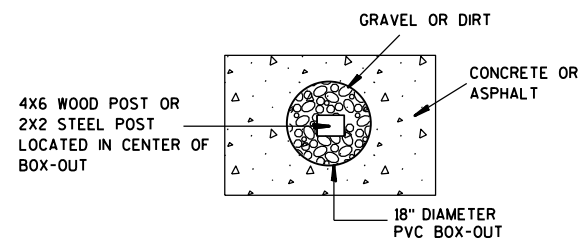
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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

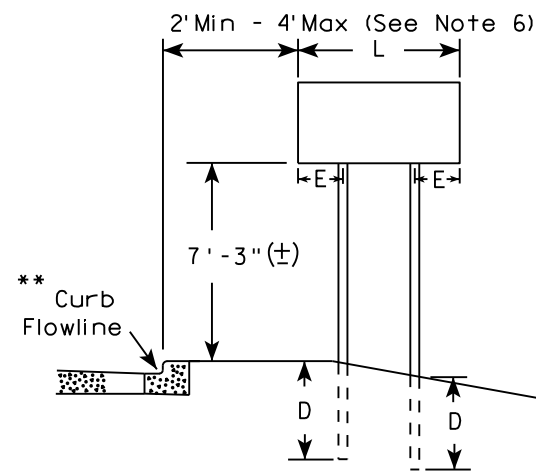
FOR NEW CONCRETE/ ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B	
<small>WISCONSIN DEPT OF TRANSPORTATION</small>	
APPROVED <i>Matthew R. Rauch</i> <small>for State Traffic Engineer</small>	
<small>DATE 1/27/14</small>	<small>PLATE NO. A4-3B.1</small>

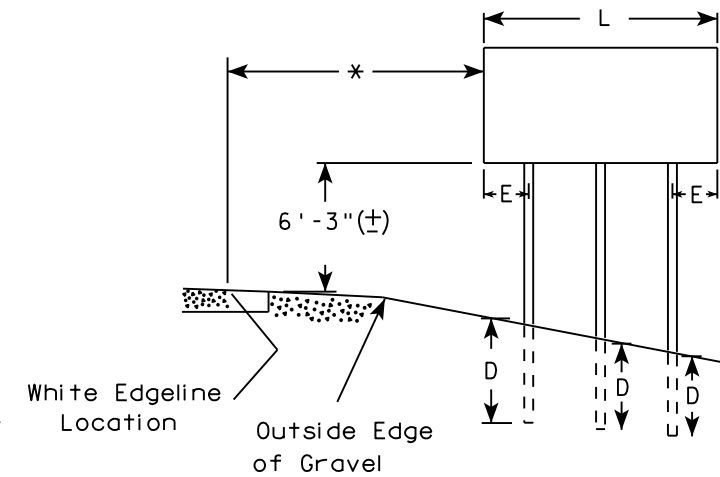
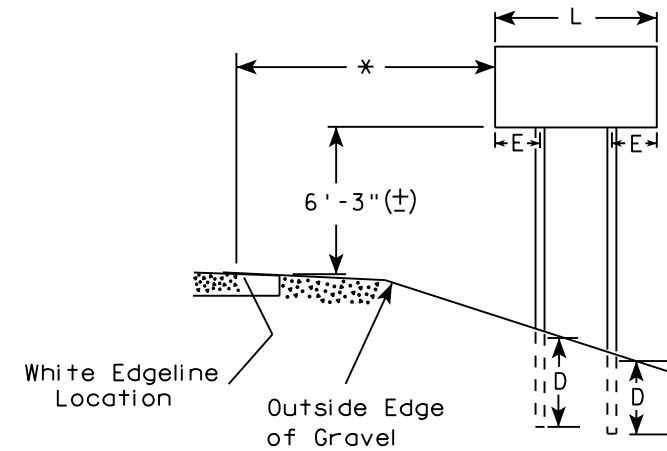
GENERAL NOTES

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

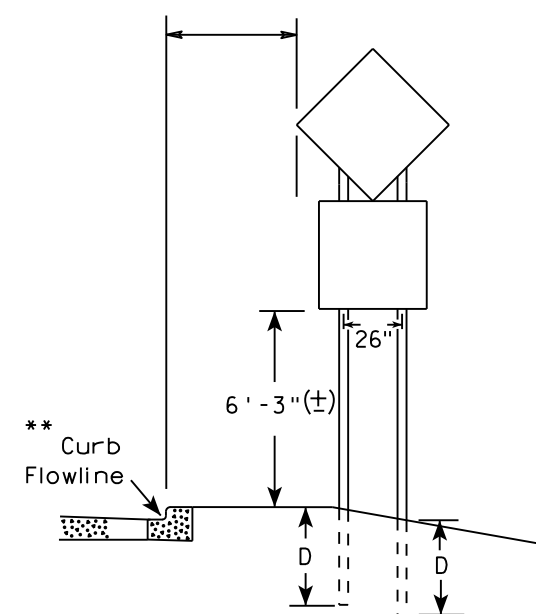
URBAN AREA



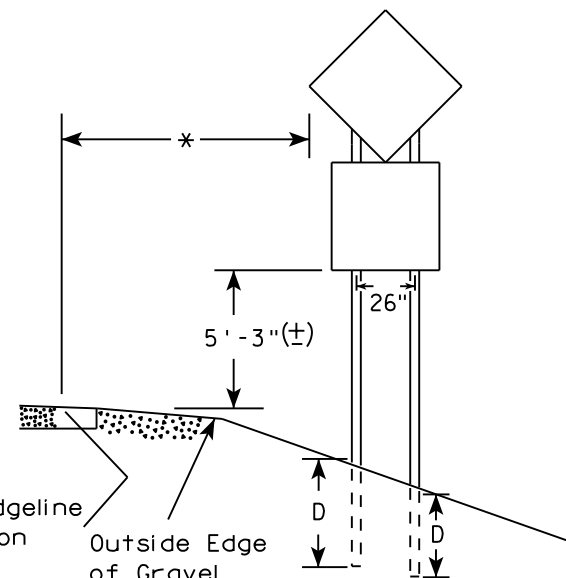
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

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

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

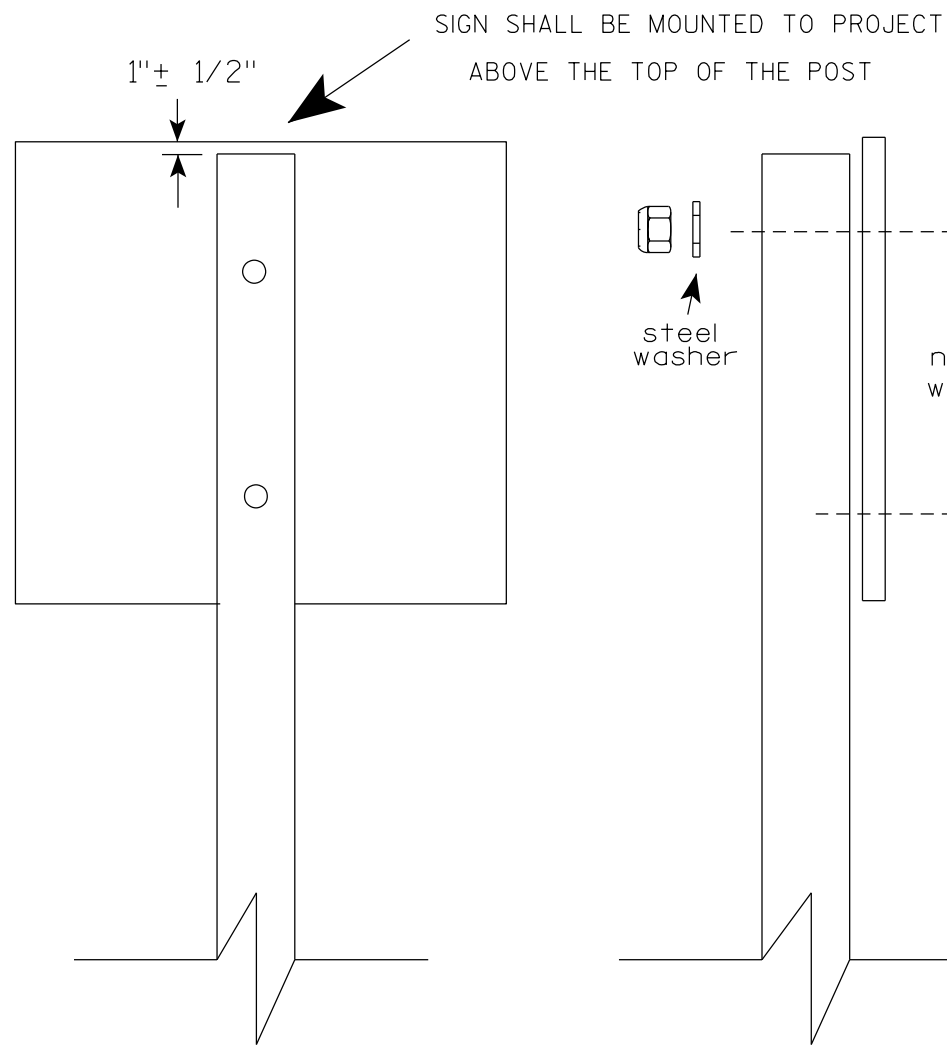
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

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 8/21/17 PLATE NO. A4-4.15



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

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

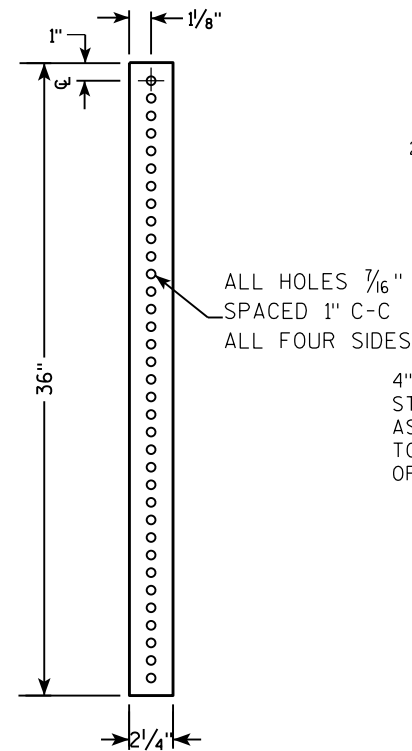
- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 - $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE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

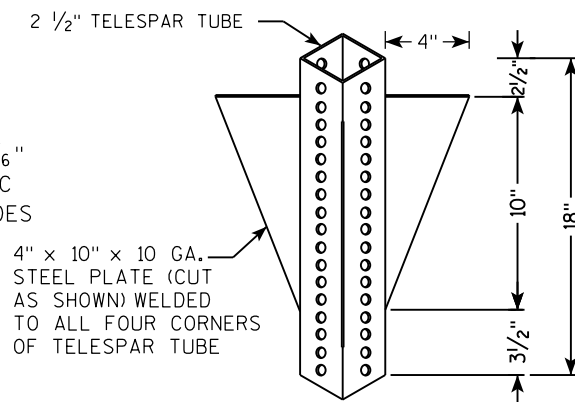
ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

**TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM**

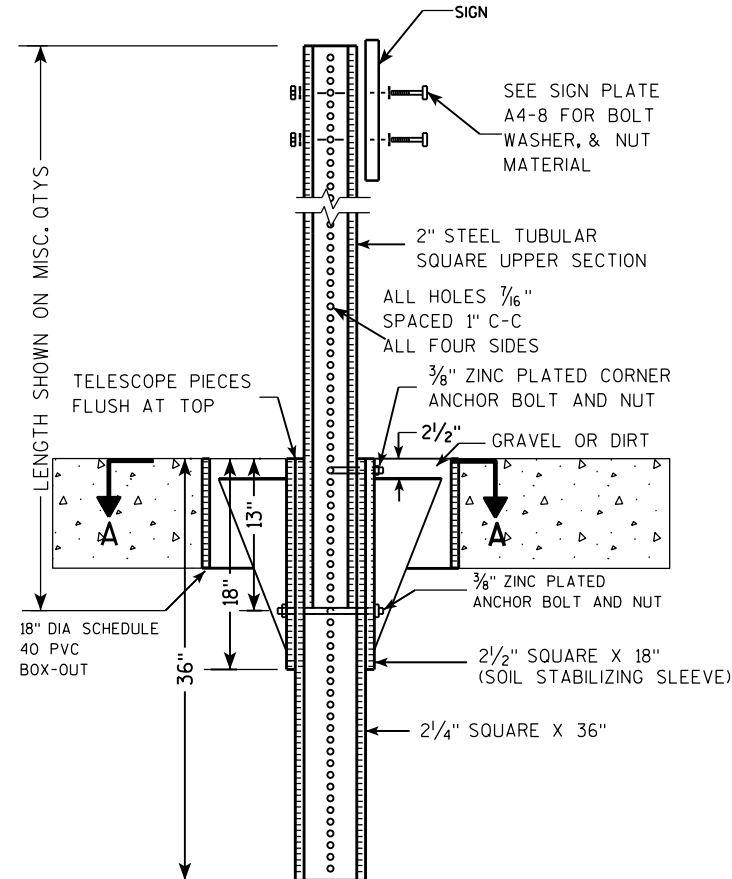
2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



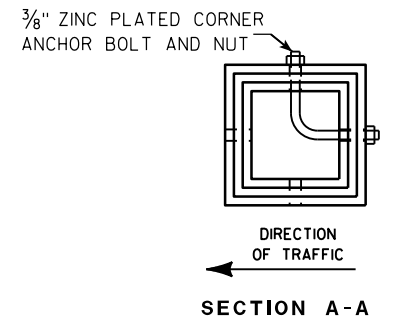
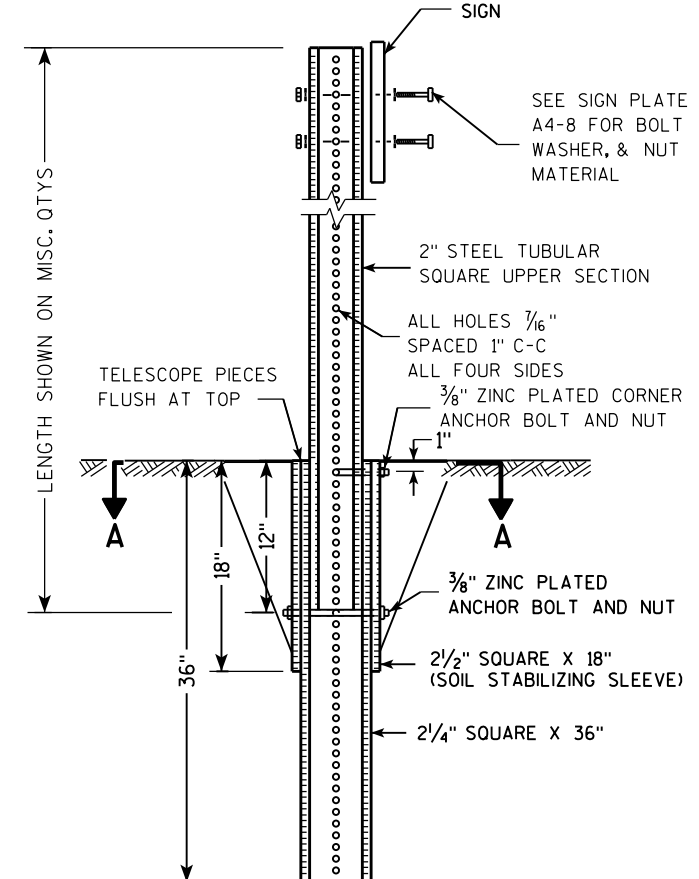
2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH



**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)**



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

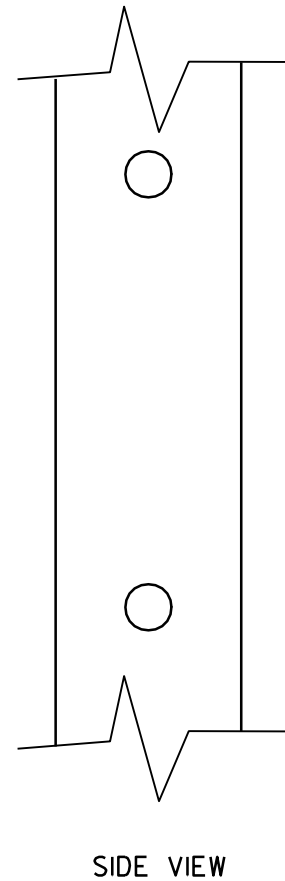
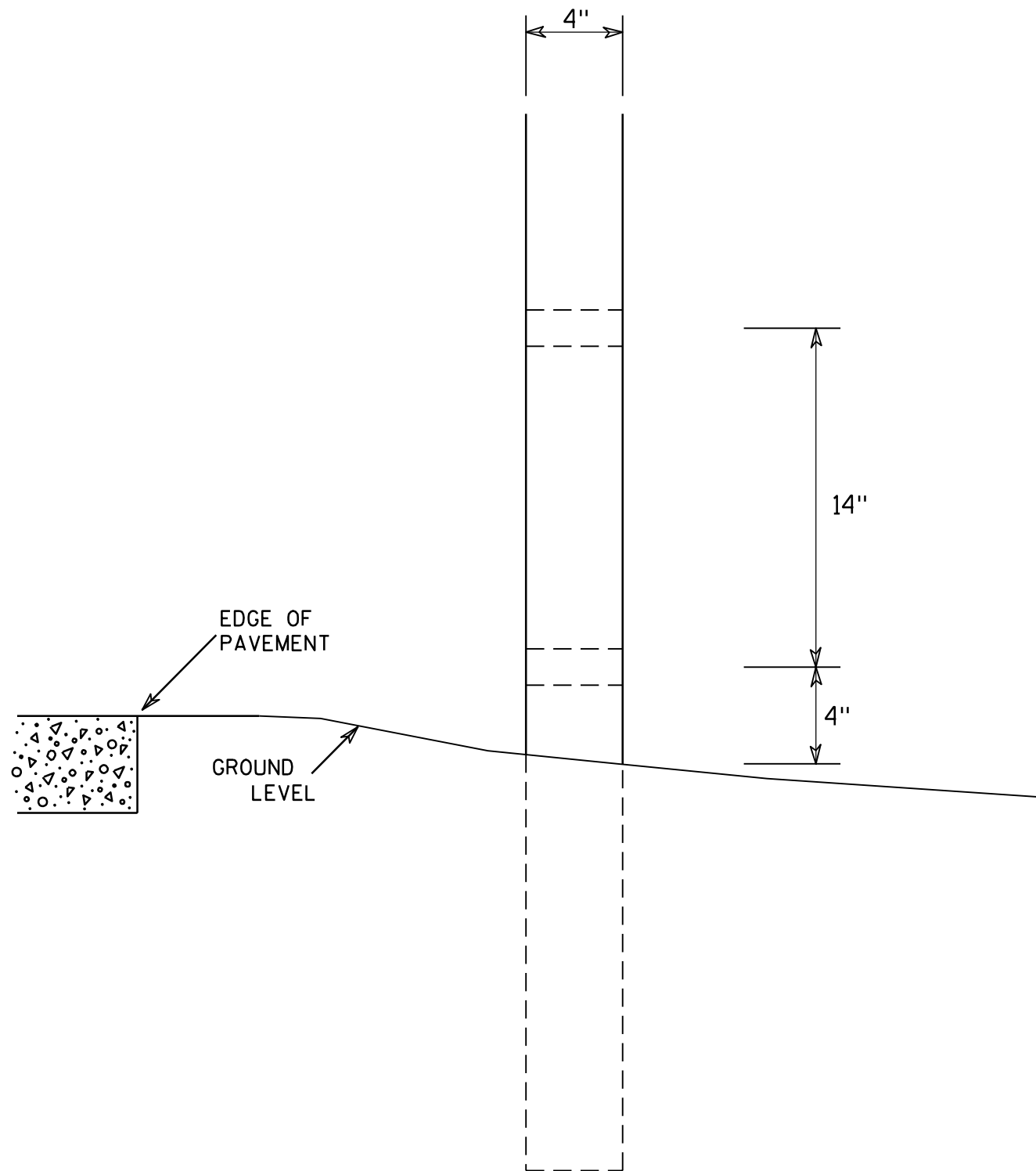
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

**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




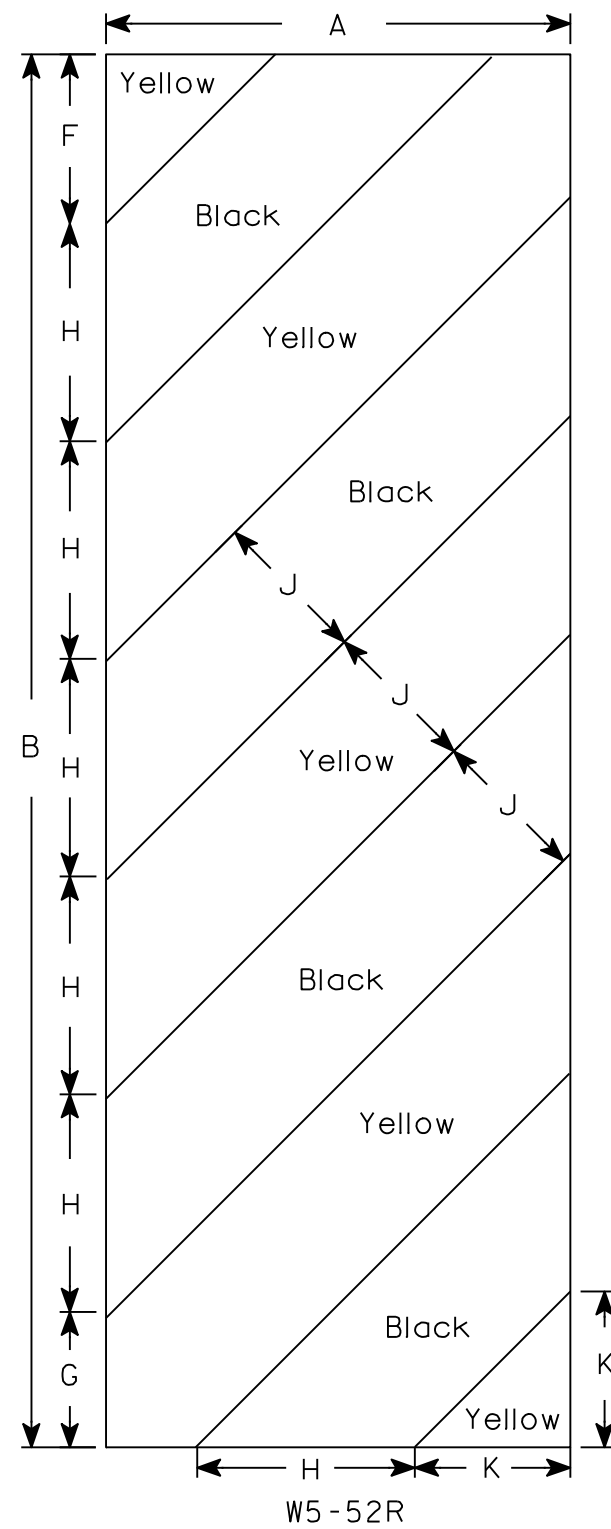
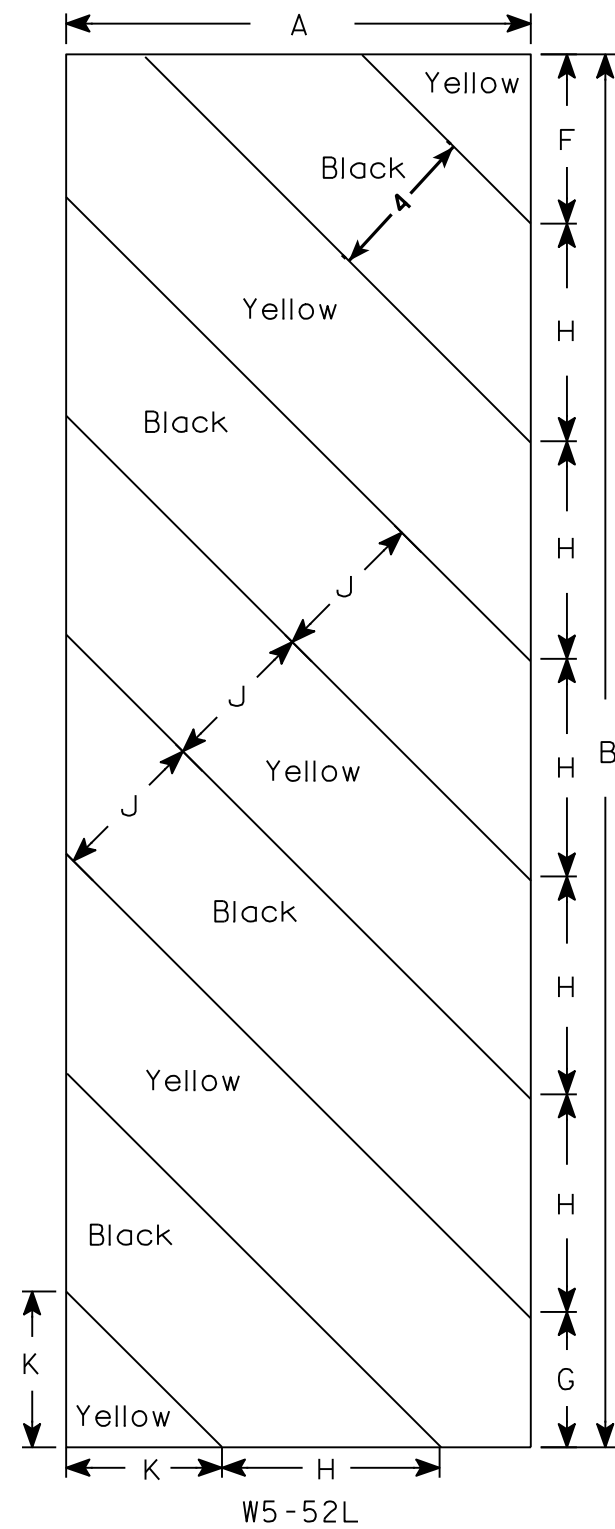
GENERAL NOTES

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

7

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4 X 6 WOOD POST MODIFICATIONS	
<i>WISCONSIN DEPT OF TRANSPORTATION</i>	
APPROVED	 <small>for State Traffic Engineer</small>
DATE <u>3/27/97</u>	PLATE NO. <u>A4-11.2</u>



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

7

7

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

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
 INVENTORY RATING: RF = 1.16
 OPERATING RATING: RF = 1.50
 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 SUPERSTRUCTURE $f'_c = 4,000$ PSI
 CONCRETE SUBSTRUCTURE $f'_c = 3,500$ PSI
 HIGH STRENGTH BAR
 STEEL REINFORCEMENT $f_y = 60,000$ PSI

TRAFFIC DATA

A.D.T. (2024): 50
 A.D.T. (2044): 50
 DESIGN SPEED: 25 MPH

FOUNDATION DATA

ABUTMENTS AND PIER TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42-LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS * * PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

DEPTH OF BEDROCK IS VARIABLE AT THE SITE. PILING SHALL MEET THE FOLLOWING REQUIREMENTS:

IF PILES ARE NOT PRE-BORED, THE MINIMUM PILE LENGTH, MEASURED FROM BOTTOM OF SUBSTRUCTURE TO PILE TIP, SHALL BE 10 FEET EACH.

PRE-BORING IS REQUIRED WHERE PILING CANNOT REACH THE MINIMUM 10-FOOT PILE LENGTH. IF PILES ARE PRE-BORED, THEY CAN BE LESS THAN 10 FEET IN LENGTH SO LONG AS THEY ARE PRE-BORED AT LEAST 3 FEET INTO COMPETENT ROCK. IF 3 FEET OF COMPETENT ROCK IS NOT ENCOUNTERED WITHIN 10 FEET, PRE-BORING SHALL CONTINUE FOR A MINIMUM OF 12 FEET AND UNTIL A MINIMUM OF 1 FOOT EMBEDMENT INTO COMPETENT ROCK IS ACHIEVED. PILE SHALL BE FIRMLY SEATED IN THE BOTTOM OF THE PRE-BORED HOLE AND BACKFILLED FULL DEPTH WITH CEMENT GROUT. PILES PLACED INTO PRE-BORED HOLES CORED INTO ROCK DO NOT REQUIRE DRIVING.

* * 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.

ESTIMATED PILE LENGTHS:

WEST ABUTMENT 15 FEET EACH
 PIER 30 FEET EACH
 EAST ABUTMENT 20 FEET EACH



HYDRAULIC DATA

100-YEAR FREQUENCY:

$Q_{100} = 4,480$ C.F.S.
 $V_{100} = 9.42$ F.P.S.
 $HW_{100} = EL. 753.07$
 WATERWAY AREA = 513.59 SQ. FT.
 DRAINAGE AREA = 12.4 SQ. MI.
 ROADWAY OVERTOPPING = N/A
 SCOUR CRITICAL CODE = 5

2-YEAR FREQUENCY:

$Q_2 = 965$ C.F.S.
 $V_2 = 4.55$ F.P.S.
 $HW_2 = EL. 746.07$

LIST OF DRAWINGS

- GENERAL PLAN
- CROSS SECTION, QUANTITIES, NOTES & DETAILS
- SUBSURFACE EXPLORATION
- WEST ABUTMENT
- WEST ABUTMENT DETAILS
- EAST ABUTMENT
- EAST ABUTMENT DETAILS
- PIER DETAILS
- SUPERSTRUCTURE PLAN, SECTION, & DETAILS
- SUPERSTRUCTURE CROSS SECTION & DETAILS
- SINGLE SLOPE PARAPET 42SS

STRUCTURE DESIGN CONTACTS

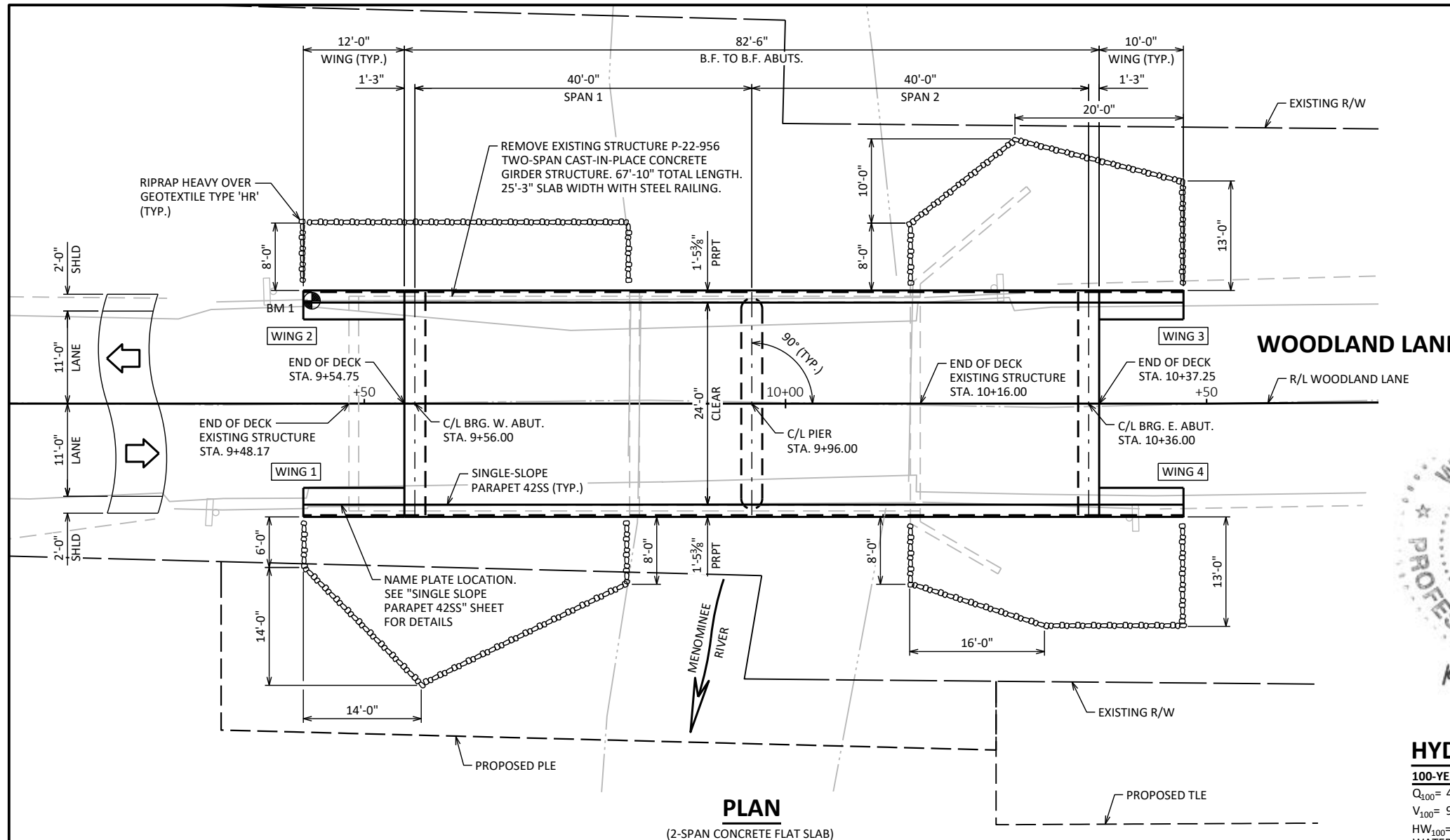
DESIGN CONSULTANT CONTACT:
 KEITH BEHREND (608) 251-4843

BUREAU OF STRUCTURES CONTACT:
 AARON BONK (608) 261-0261

BENCH MARK

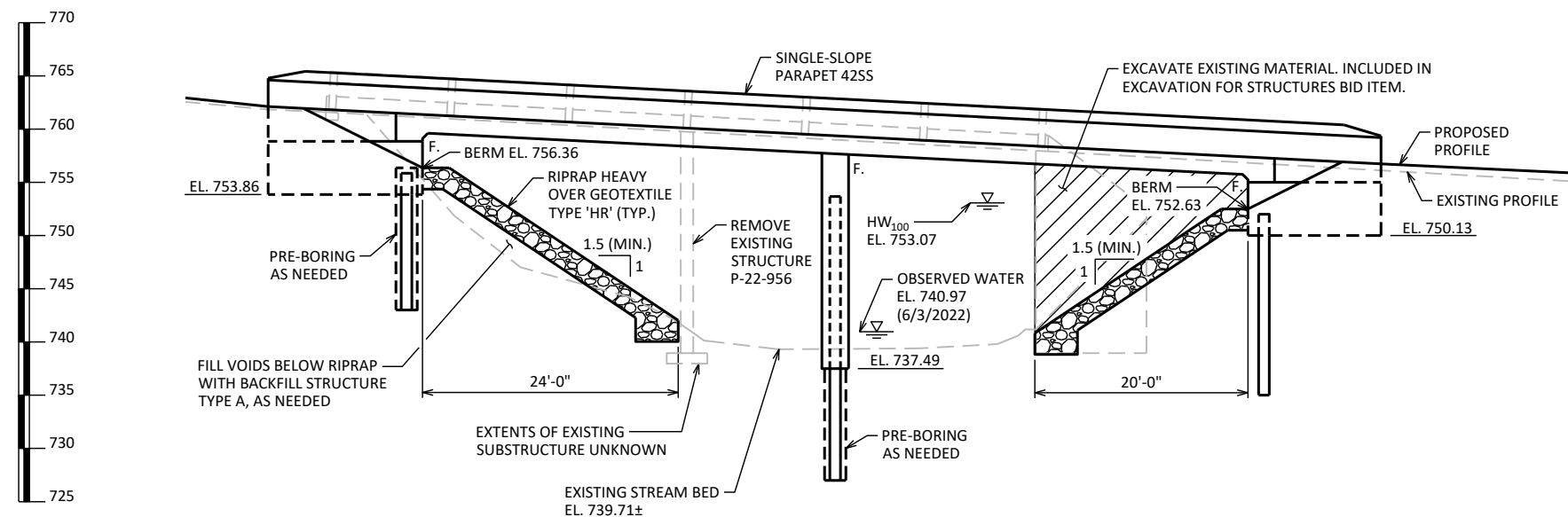
NO.	STATION	DESCRIPTION	ELEV.
1	9+43.76	CHISELED SQUARE ON TOP CURB, NW OF EXIST. BRIDGE	763.00

NOTE: SEE ROADWAY PLANS FOR ADDITIONAL BENCHMARK AND CONTROL POINT INFORMATION.



PLAN

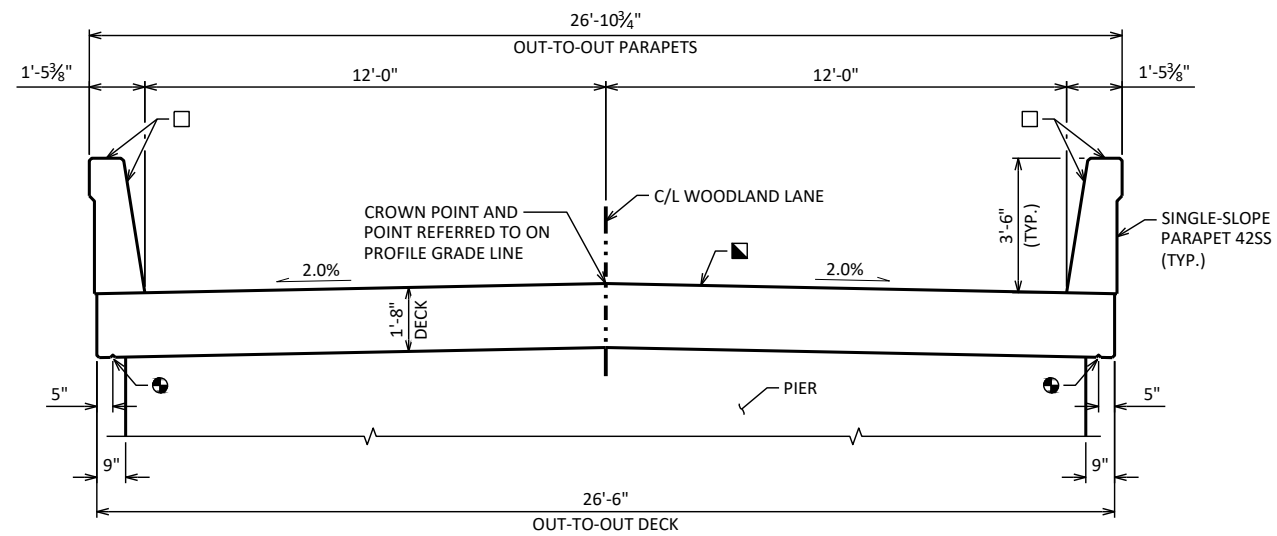
(2-SPAN CONCRETE FLAT SLAB)



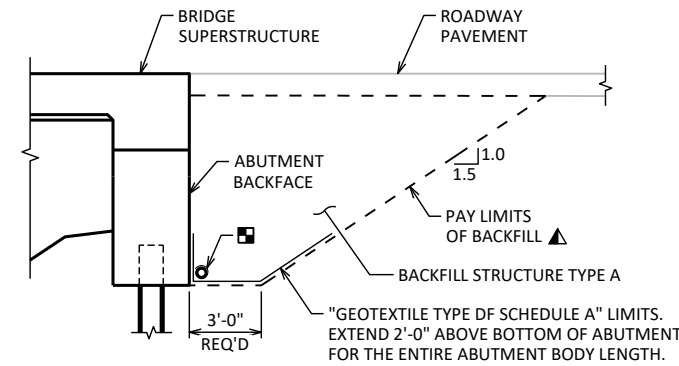
ELEVATION

(NORMAL TO SUBSTRUCTURE, LOOKING UPSTREAM)

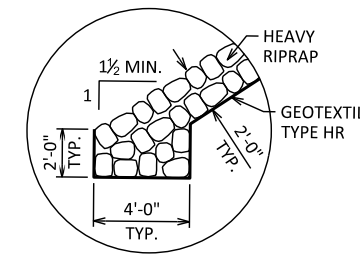
NO.	DATE	REVISION	BY
MADISON, WISCONSIN 53715 (608)-251-4843 (608) 251-8655 FAX WWW.STRAND.COM			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	SDR CHIEF STRUCTURES DESIGN ENGINEER		DATE 05/10/23
STRUCTURE B-22-301			
WOODLAND LANE OVER MENOMINEE RIVER			
COUNTY	GRANT	TOWN/CITY/VILLAGE	JAMESTOWN
DESIGN SPEC.			
AASHTO LRFD BRIDGE DESIGN SPECIFICATION			
DESIGNED BY	DESIGNED CK'D	DRAWN KRB	PLANS CK'D KRB
GENERAL PLAN			SHEET 1 OF 11



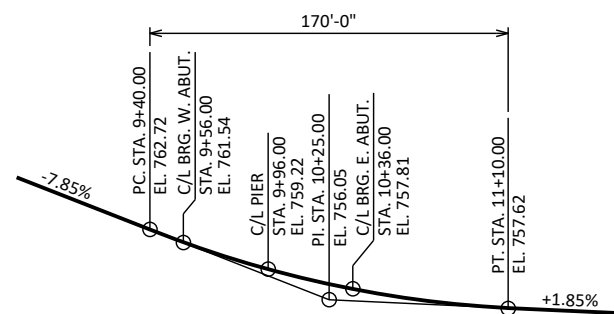
CROSS SECTION THRU SUPERSTRUCTURE
(LOOKING UPSTATION)



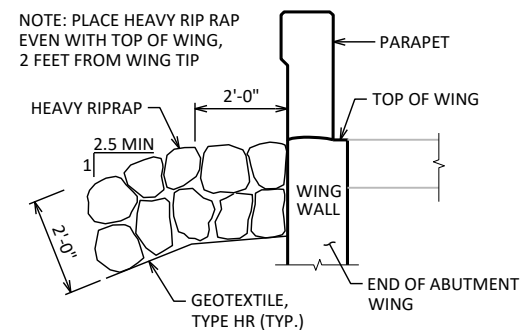
TYPICAL SECTION THRU ABUTMENT



RIPRAP HEAVY DETAIL



PROFILE GRADE LINE



TYPICAL FILL SECTION AT WING TIPS

ABUTMENT BACKFILL DIAGRAM FOR WINGS PARALLEL TO ROADWAY

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)
 $V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)$
 $V_{CY} = V_{CF}/27$
 $V_{TON} = V_{CY}(2.0)$

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
 ALL STATIONS AND ELEVATIONS ARE IN FEET.
 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.
 BAR DIMENSIONS FOR BENDING ARE OUT-TO-OUT OF BARS.
 THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-22-301 SHALL BE THE EXISTING GROUND LINE.
 THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENT SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

AT THE BACKFACE OF ABUTMENTS ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH "BACKFILL STRUCTURE TYPE A".

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. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

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

THE EXISTING STRUCTURE P-22-956, A TWO SPAN CONCRETE GIRDER BRIDGE, IS TO BE REMOVED.

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

AT PIER, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH STANDARD SPEC. 502.3.5.3. CONCRETE POURED UNDER WATER SHALL NOT EXCEED 10.0 FEET IN DEPTH, UNLESS APPROVED OTHERWISE.

THE EXISTING STREAMBED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIER.

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

LEGEND

- ☉ 3/4" V-GROOVE REQ'D. EXTEND TO 6" FROM F.F. OF ABUTMENT DIAPHRAGMS.
- ▣ PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF DECK.
- ▲ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL 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. SEE DETAIL ON "EAST ABUTMENT" SHEET.
- ☐ PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE INSIDE, TOP AND ENDS OF PARAPETS.

TOTAL ESTIMATED QUANTITIES

BID NUMBER	BID ITEM	UNIT	W. ABUT.	PIER	E. ABUT.	SUPER.	TOTAL
203.0250	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS P-22-956	EACH	---	---	---	---	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-22-301	EACH	---	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	90	---	90	---	180
502.0100	CONCRETE MASONRY BRIDGES	CY	33.1	45.0	29.0	161.9	269
502.3200	PROTECTIVE SURFACE TREATMENT	SY	---	---	---	220	220
502.3210	PIGMENTED SURFACE SEALER	SY	12	---	10	81	103
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2,350	2,260	2,240	---	6850
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,580	50	1,250	31,770	34650
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	9	---	8	---	17
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	40	80	---	---	120
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	60	240	80	---	380
606.0300	RIPRAP HEAVY	CY	142	---	136	---	278
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	95	---	87	---	182
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	19	---	19	---	38
645.0120	GEOTEXTILE TYPE HR	SY	241	---	229	---	470
NON-BID ITEMS							
	NAME PLATE	EACH					1
	FILLER	SIZE					1/2" & 3/4"

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-22-301			
DRAWN BY		DTH	PLANS CK'D KRB
CROSS SECTION, QUANTITIES, NOTES & DETAILS			SHEET 2

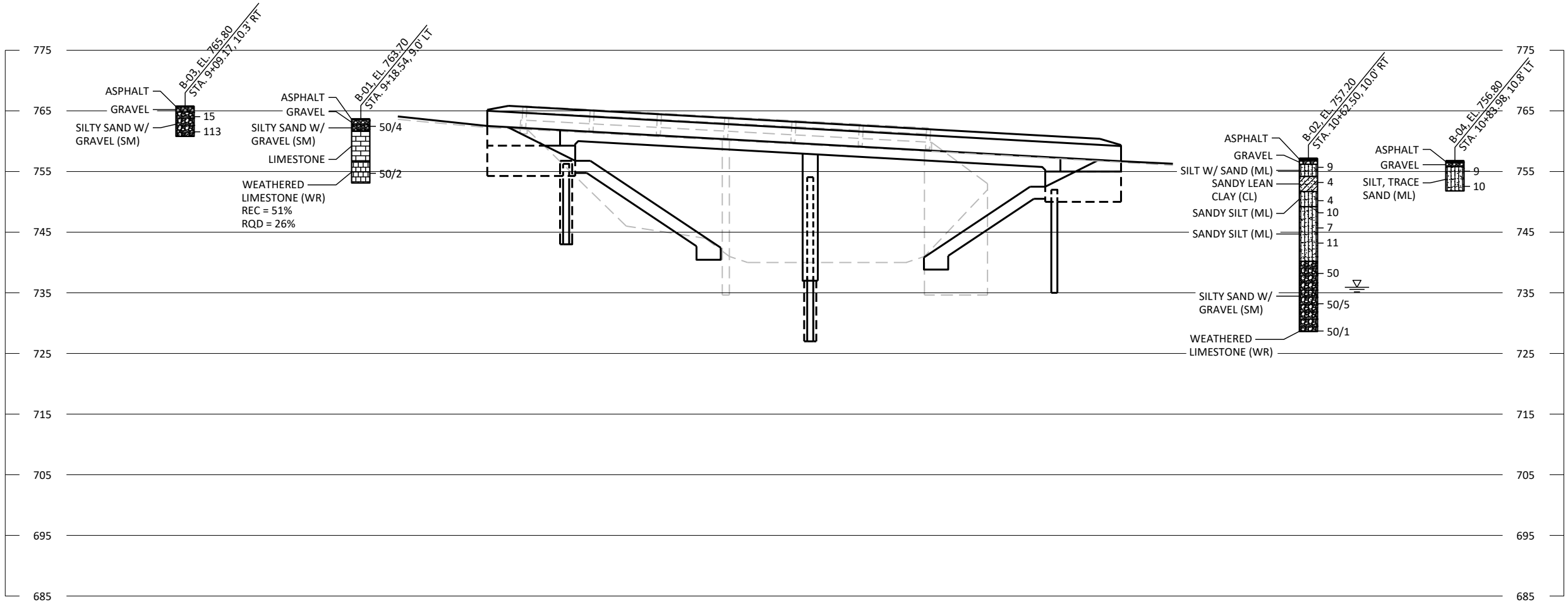
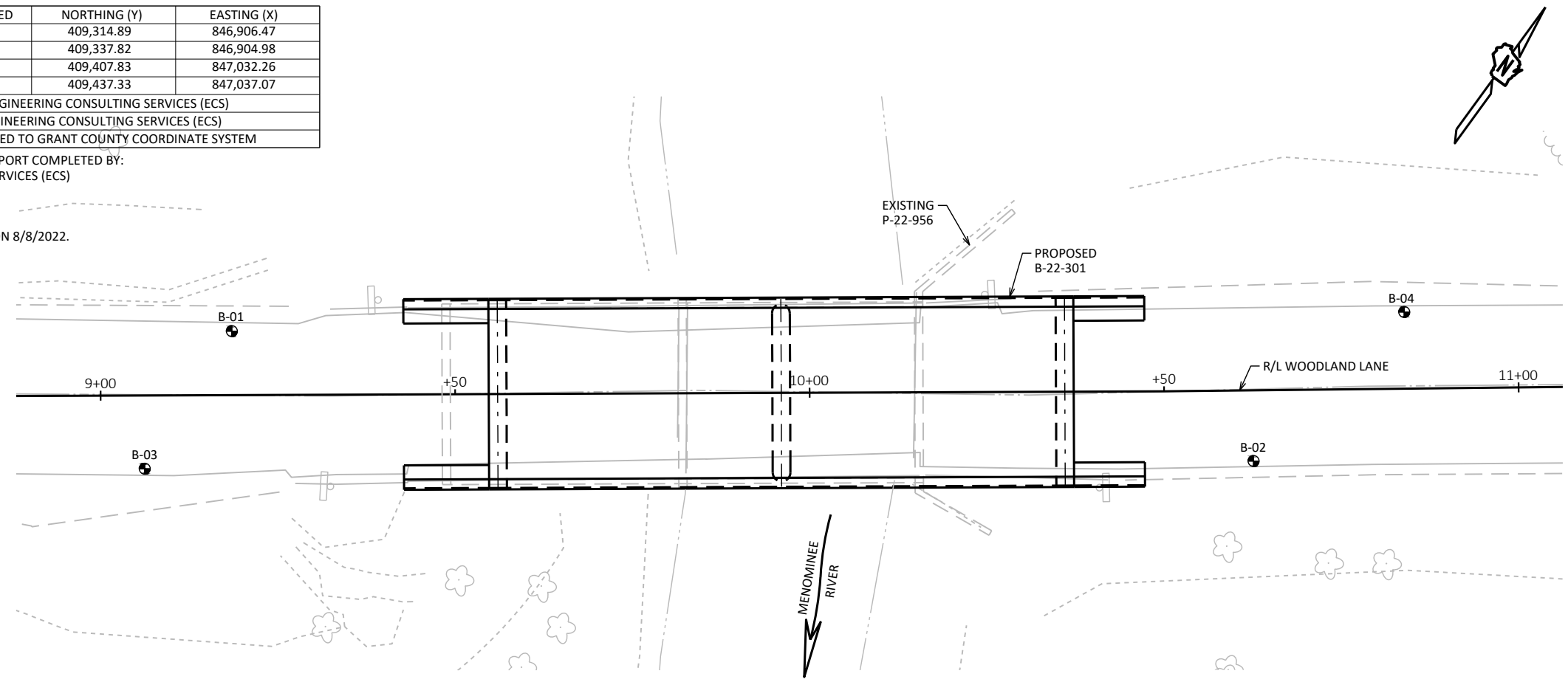
SCALE =

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	8-8-2022	409,314.89	846,906.47
2	8-8-2022	409,337.82	846,904.98
3	8-8-2022	409,407.83	847,032.26
4	8-8-2022	409,437.33	847,037.07

BORINGS COMPLETED BY: ENGINEERING CONSULTING SERVICES (ECS)
 REPORT COMPLETED BY: ENGINEERING CONSULTING SERVICES (ECS)
 ALL COORDINATES REFERENCED TO GRANT COUNTY COORDINATE SYSTEM

BORINGS PERFORMED AND REPORT COMPLETED BY:
 ENGINEERING CONSULTING SERVICES (ECS)
 3695 N. 126TH STREET, UNIT C
 BROOKFIELD, WI 53005

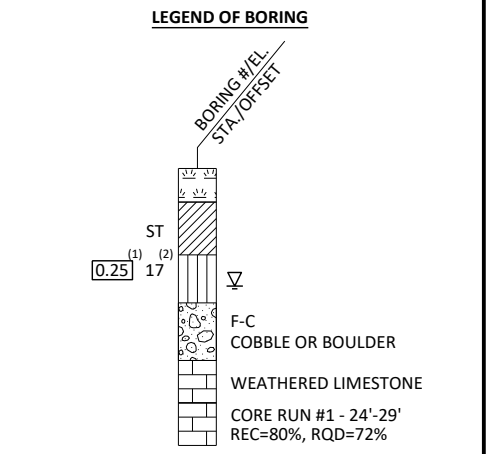
BORINGS WERE PERFORMED ON 8/8/2022.



STATE PROJECT NUMBER
5721-00-76

MATERIAL SYMBOLS

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



⁽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

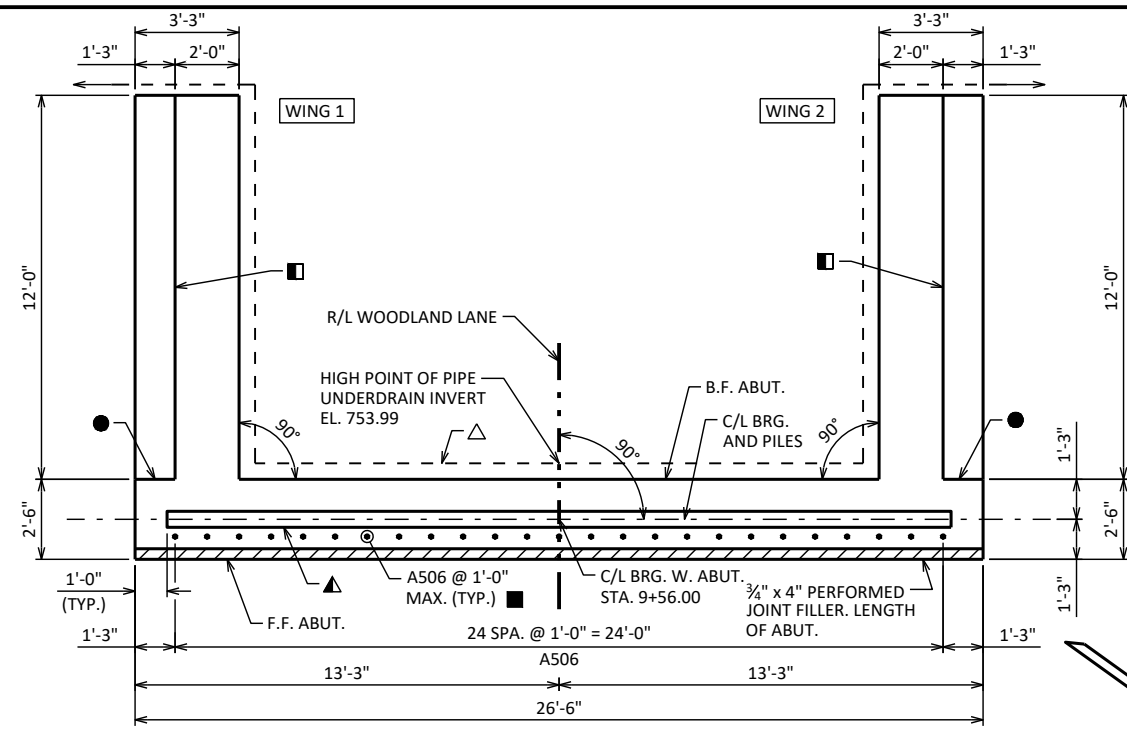
BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT 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-22-301			
DRAWN BY		DTH	PLANS CK'D KRB
SUBSURFACE EXPLORATION			SHEET 3

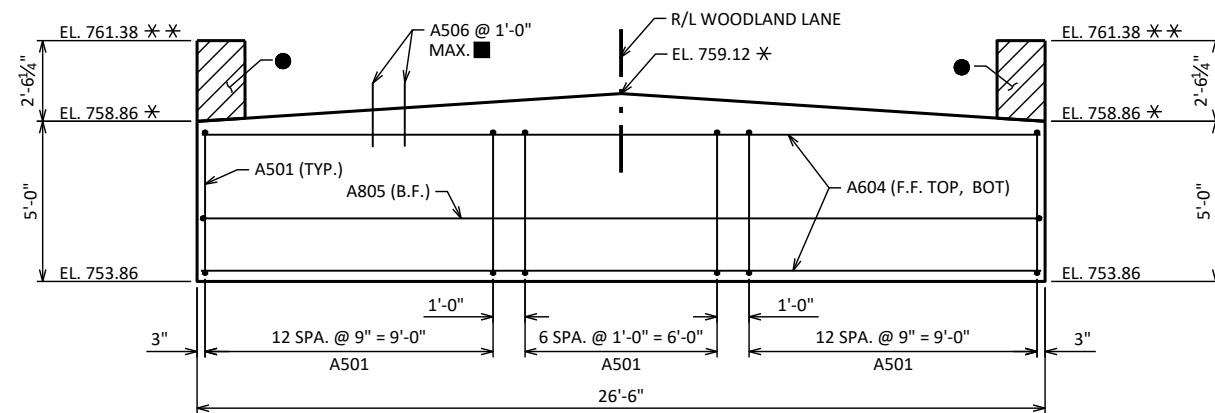
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8

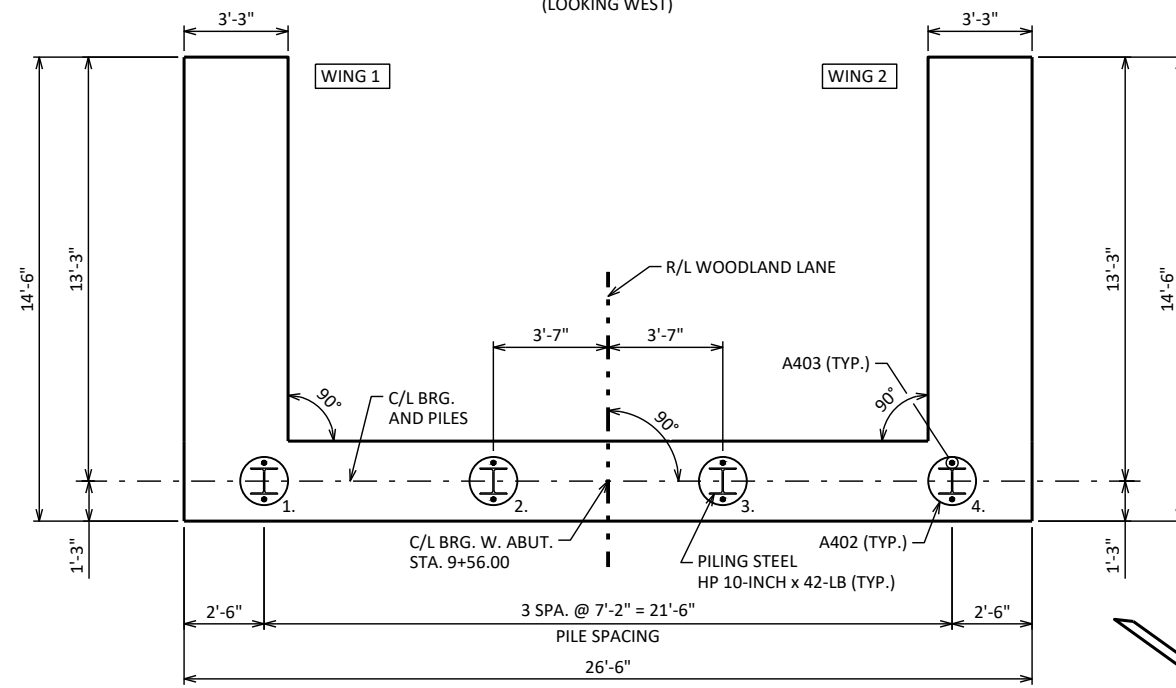
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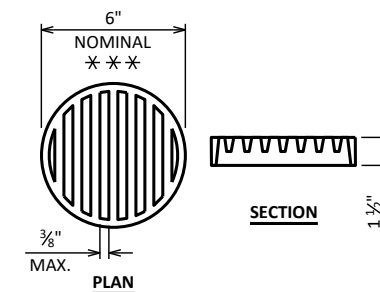
PLAN



ELEVATION
(LOOKING WEST)



PILE PLAN



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 UNDERDRAINING 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 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.

NOTES

SEE SHEET 6 FOR PILES SPLICE DETAILS.

SEE SHEET 5 FOR REINFORCING DETAILS.

SUPPORT WEST ABUTMENT ON PILING STEEL HP 10-INCH x 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

SEE SHEET 2 FOR TYPICAL FILL SECTION AT WING TIPS.

PRE-BORING IS REQUIRED WHERE PILING CANNOT REACH THE MINIMUM 10-FOOT PILE LENGTH. IF PILES ARE PRE-BORED, THEY CAN BE LESS THAN 10 FEET IN LENGTH SO LONG AS THEY ARE PRE-BORED AT LEAST 3 FEET INTO COMPETENT ROCK. IF 3 FEET OF COMPETENT ROCK IS NOT ENCOUNTERED WITHIN 10 FEET, PRE-BORING SHALL CONTINUE FOR A MINIMUM OF 12 FEET AND UNTIL A MINIMUM OF 1 FOOT EMBEDMENT INTO COMPETENT ROCK IS ACHIEVED. PILE SHALL BE FIRMLY SEATED IN THE BOTTOM OF THE PRE-BORED HOLE AND BACKFILLED FULL DEPTH WITH CEMENT GROUT. PILES PLACED INTO PRE-BORED HOLES CORED INTO ROCK DO NOT REQUIRE DRIVING.

LEGEND

- ▲ CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.
- △ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. HIGH POINT EL. 753.99. RODENT SHIELD REQUIRED AT ENDS. SEE DETAIL ON THIS SHEET.
- 1/2" FILLER TO EXTEND FROM ABUTMENT SEAT TO TOP OF CONCRETE PARAPET (INCLUDED IN WING LENGTH). SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 3/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- * THESE ELEVATIONS GIVEN AT C/L BRG. ABUT.
- * * THESE ELEVATIONS GIVEN AT B.F. ABUT.

8

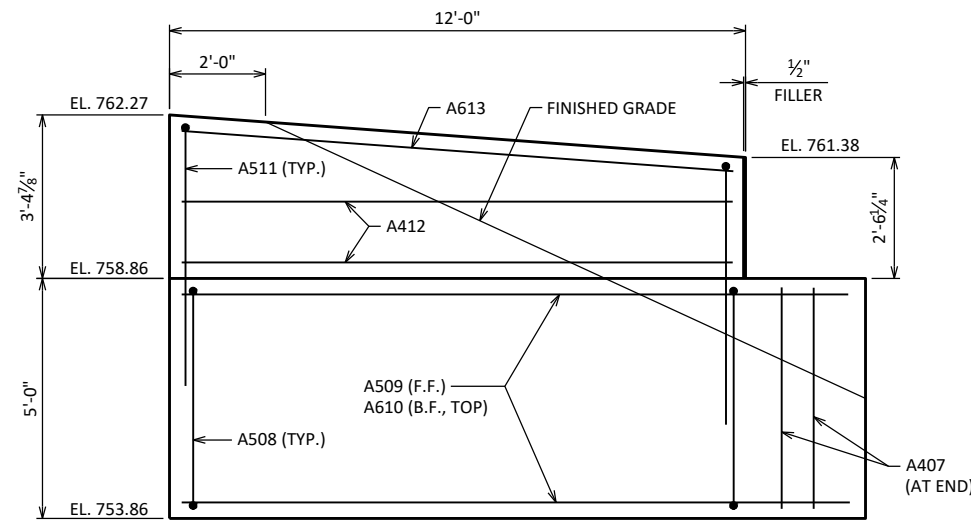
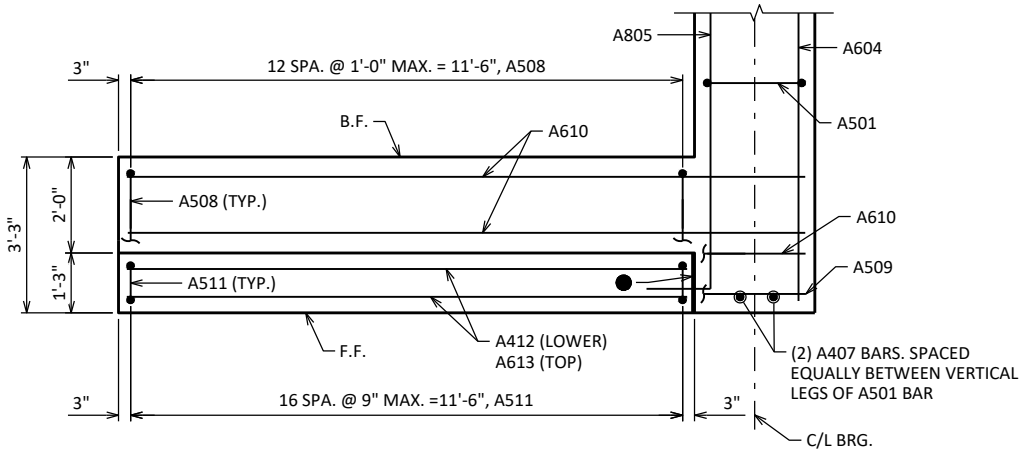
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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-22-301			
DRAWN BY		DTH	PLANS CK'D KRB
WEST ABUTMENT			SHEET 4

SCALE =

LEGEND

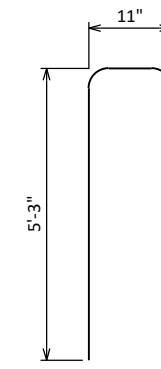
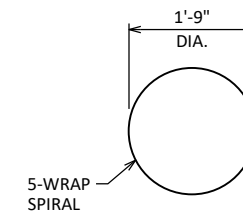
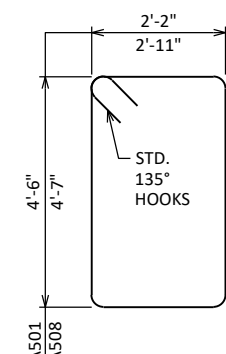
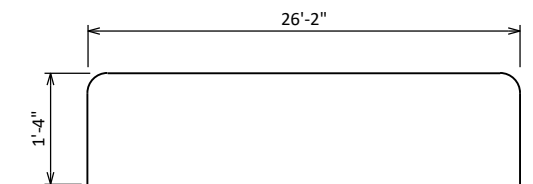
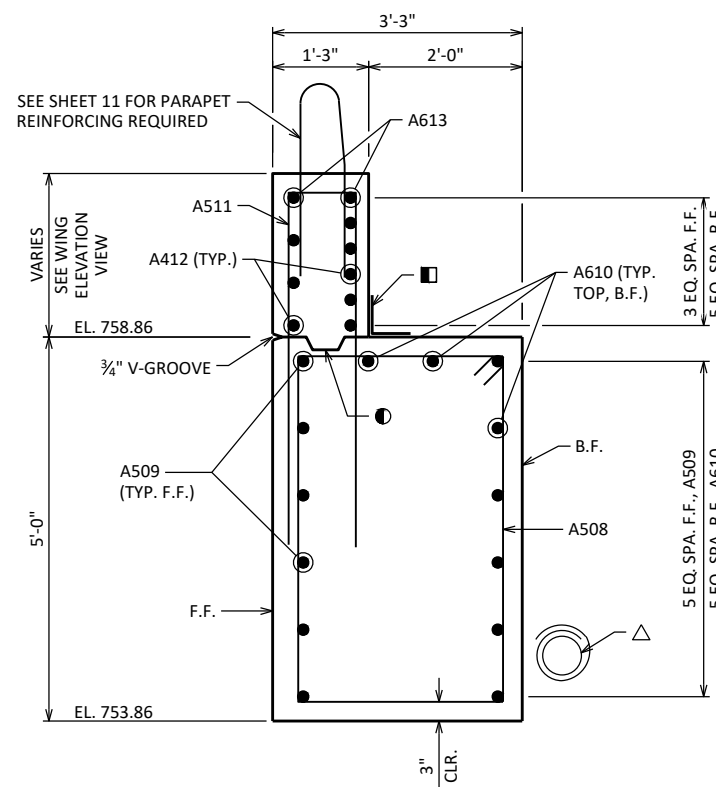
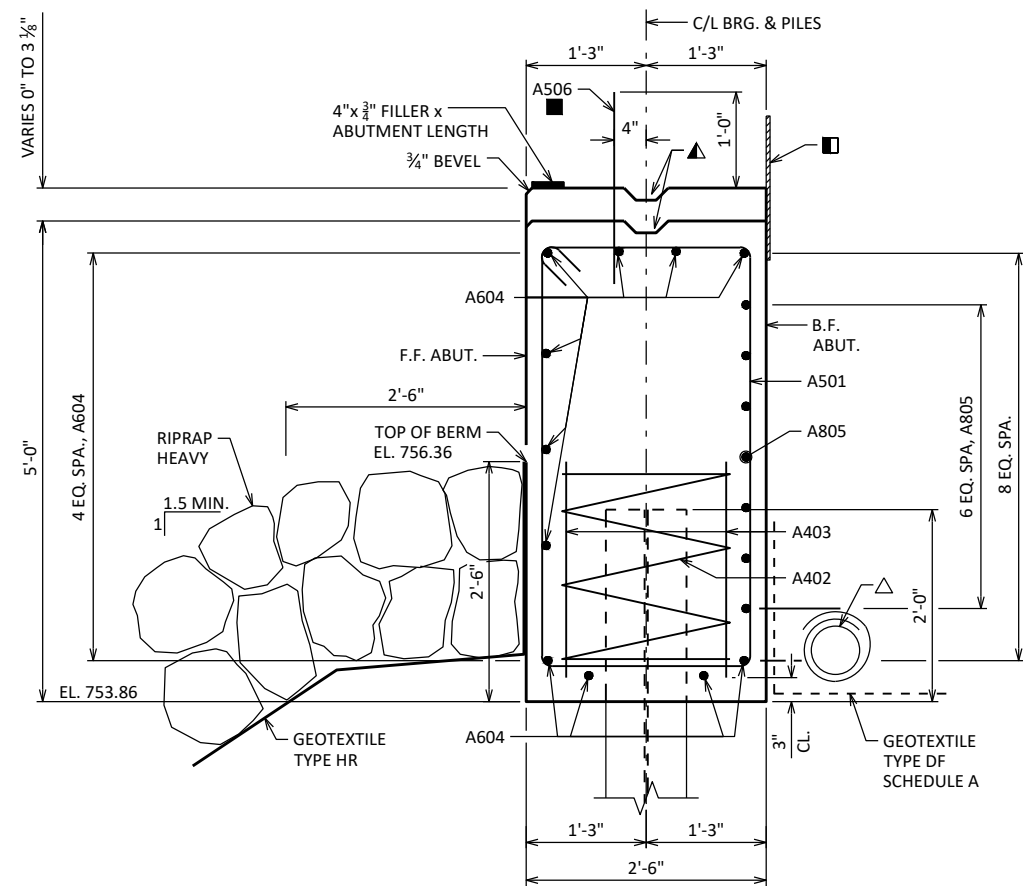
- ▲ CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.
- OPTIONAL CONST. JOINT KEYWAY FORMED BY BEVELED 2 x 6.
- △ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. HIGH POINT EL. 753.99. RODENT SHIELD REQUIRED AT ENDS. SEE DETAIL ON SHEET 4.
- ½" FILLER TO EXTEND FROM ABUTMENT SEAT TO TOP OF CONCRETE PARAPET (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 ½" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- BARS @ 1'-0" CTRS. BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)



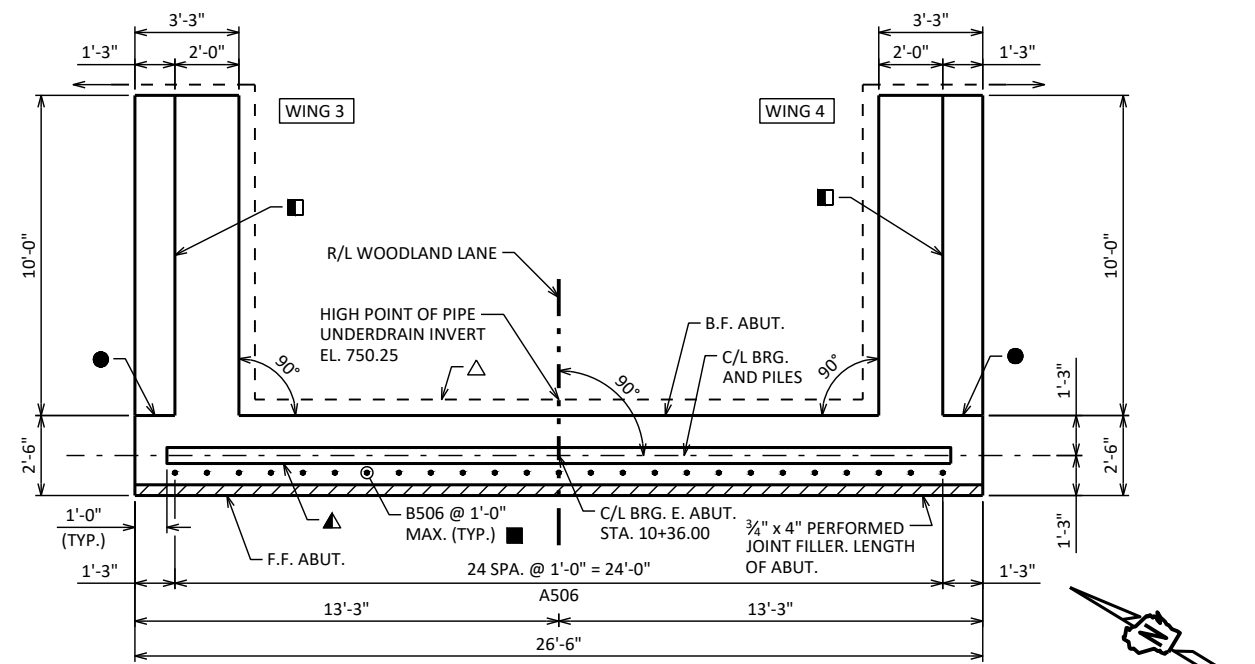
WEST ABUTMENT BILL OF BARS

UNCOATED: 1,540 LBS
COATED: 1,580 LBS

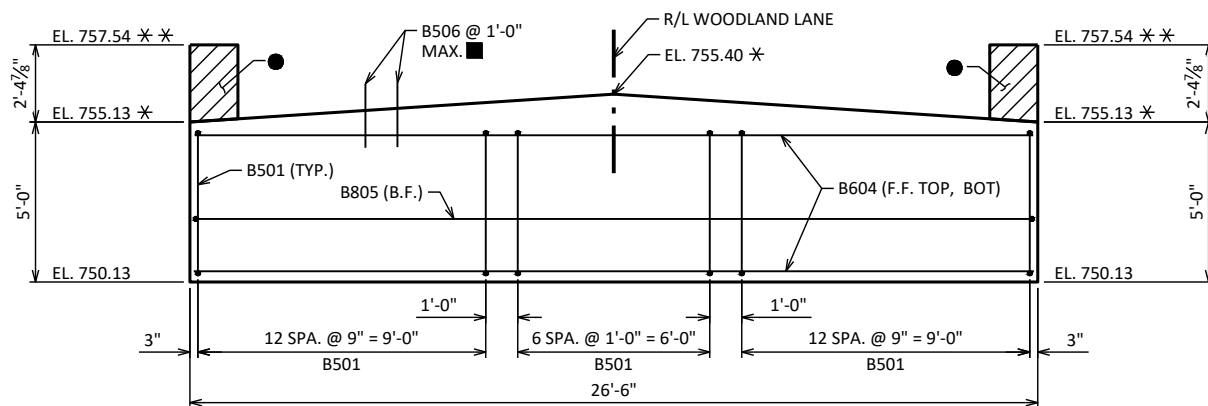
BAR MARK	NO. REQ'D	LENGTH	BEV'T	COAT	LOCATION
A50	33	14'-0"	X		LOWER BCDY - STIRRUPS - VERT.
A432	4	28'-0"	X		LOWER BCDY - PILES - SF. RAL
A433	8	2'-3"			LOWER BCDY - PILES - VERT.
A604	1	26'-2"			LOWER BCDY - F.F. TOP, BOT - HORIZ.
A835	7	28'-5"	X		LOWER BCDY - B.F. - HORIZ.
A506	25	2'-0"		X	LOWER BCDY - DWELS - VERT.
A437	4	4'-7"			LOWER W'GS - VERT. - ENDS
A508	26	15'-8"	X	X	LOWER W'GS - STIRRUPS - VERT.
A509	12	14'-2"		X	LOWER W'GS - F.F. - HORIZ.
A610	16	14'-2"		X	LOWER W'GS - B.F. TOP - HORIZ.
A51	34	11'-2"	X	X	UPPER W'GS - VERT.
A412	16	11'-7"		X	UPPER W'GS - HORIZ.
A613	4	11'-7"		X	UPPER W'GS - TOP - HORIZ.



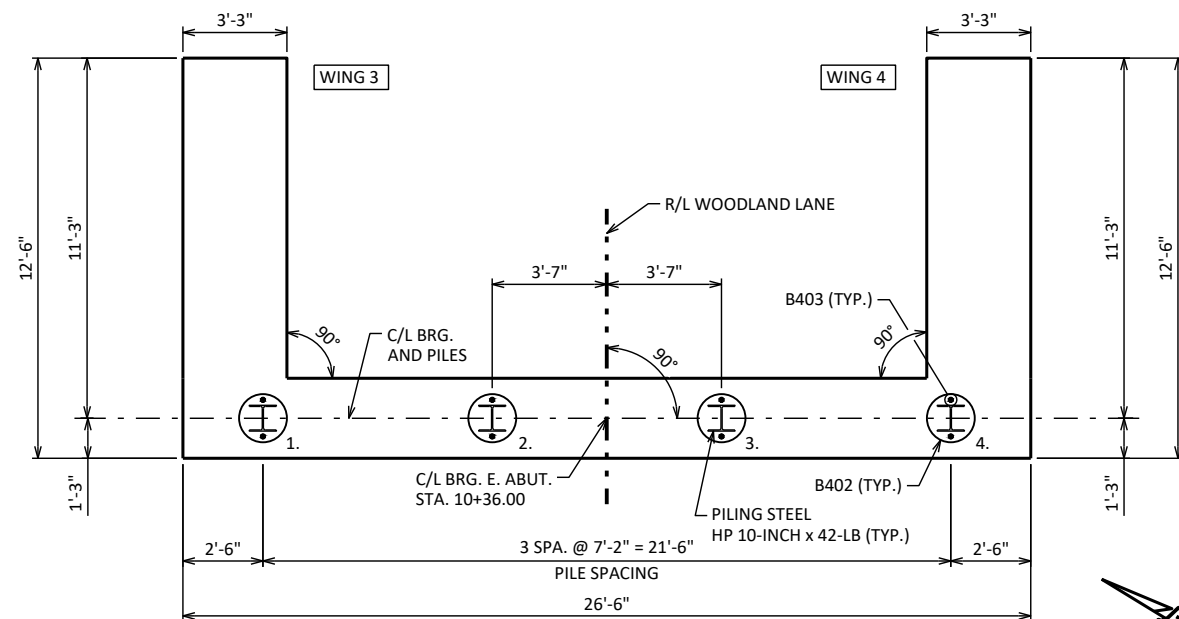
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-22-301			
DRAWN BY		DTH	PLANS CK'D KRB
WEST ABUTMENT DETAILS			SHEET 5



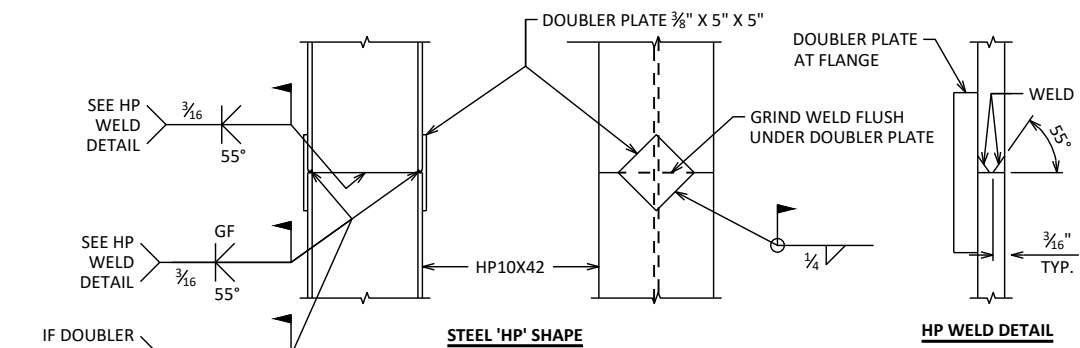
PLAN



ELEVATION
(LOOKING EAST)



PILE PLAN



'HP' PILE DETAILS

NOTES

SEE THIS SHEET FOR SPLICE DETAILS.

SEE SHEET 7 FOR REINFORCING DETAILS.

SUPPORT EAST ABUTMENT ON PILING STEEL HP 10-INCH x 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

SEE SHEET 2 FOR TYPICAL FILL SECTION AT WING TIPS.

LEGEND

- ▲ CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.
- △ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. HIGH POINT EL. 750.25. RODENT SHIELD REQUIRED AT ENDS. SEE DETAIL ON SHEET 6.
- 1/2" FILLER TO EXTEND FROM ABUTMENT SEAT TO TOP OF CONCRETE PARAPET (INCLUDED IN WING LENGTH). SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 3/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- * THESE ELEVATIONS GIVEN AT C/L BRG. ABUT.
- * * THESE ELEVATIONS GIVEN AT B.F. ABUT.

8

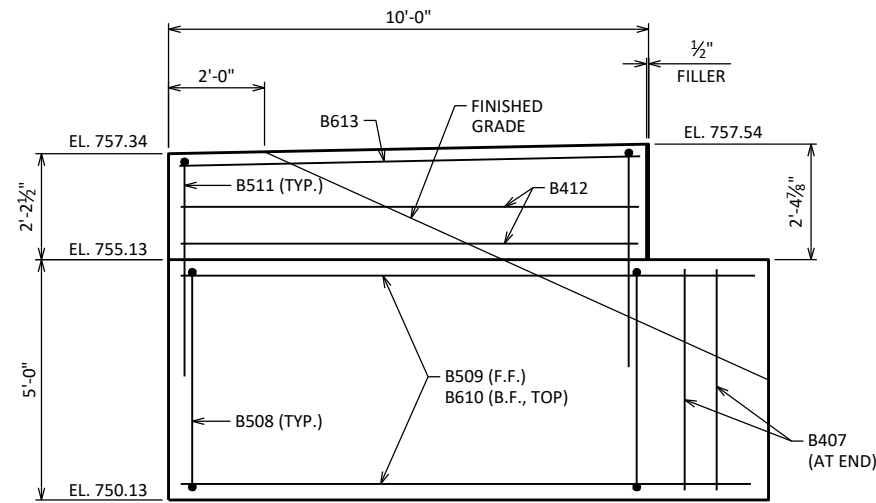
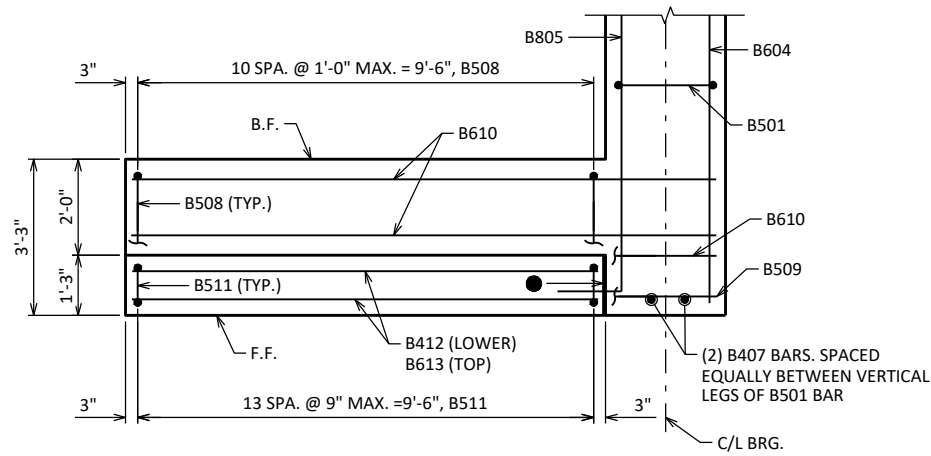
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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-22-301			
DRAWN BY DTH		PLANS CK'D KRB	
EAST ABUTMENT			SHEET 6

SCALE =

LEGEND

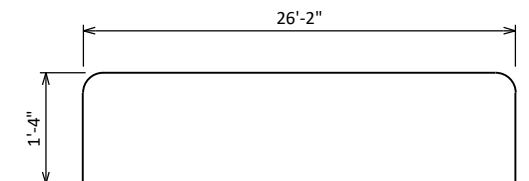
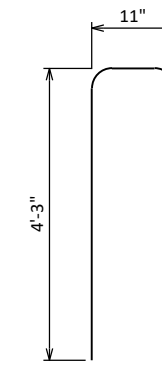
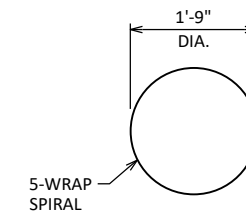
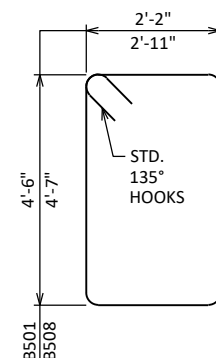
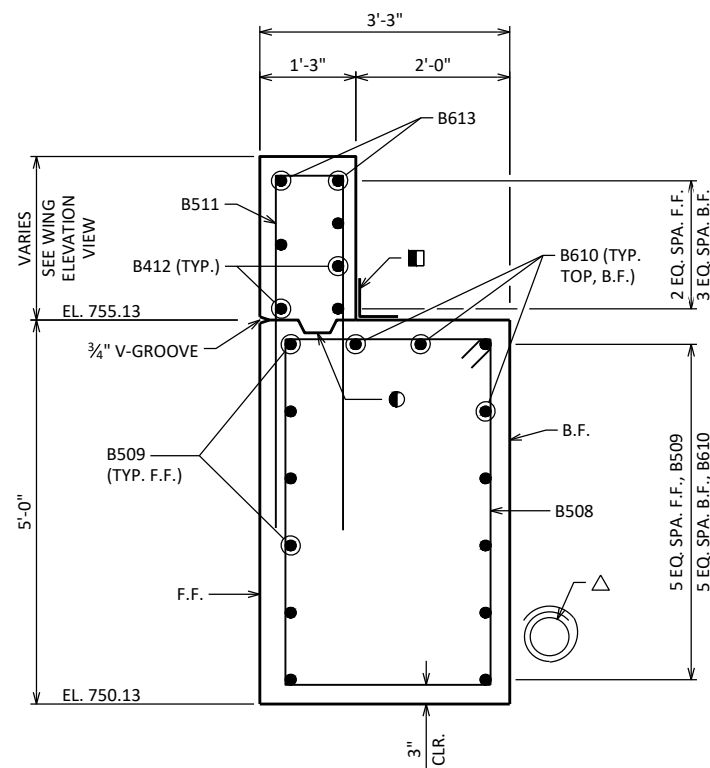
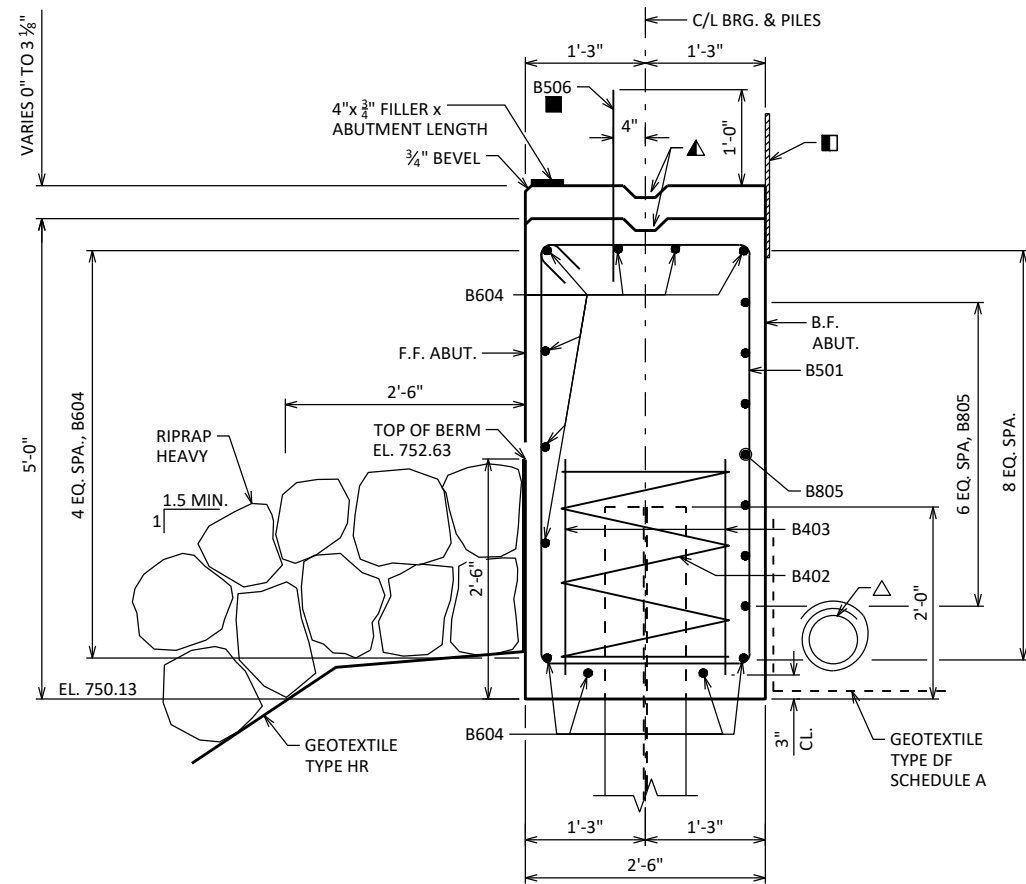
- ▲ CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.
- OPTIONAL CONST. JOINT KEYWAY FORMED BY BEVELED 2 x 6.
- △ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. HIGH POINT EL. 750.25. RODENT SHIELD REQUIRED AT ENDS. SEE DETAIL ON SHEET 4.
- ½" FILLER TO EXTEND FROM ABUTMENT SEAT TO TOP OF CONCRETE PARAPET (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 ⅜" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- BARS @ 1'-0" CTRS. BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)



EAST ABUTMENT BILL OF BARS

UNCOATED: 1,540 LBS
COATED: 1,250 LBS

BAR MARK	NO. REQ'D	LENGTH	BENT	COAT	LOCATION
B501	33	14'-0"	X		LOWER BODY - STIRRUPS - VERT.
B402	4	28'-0"	X		LOWER BODY - PILES - SPIRAL
B403	8	2'-3"			LOWER BODY - PILES - VERT.
B604	11	26'-2"			LOWER BODY - F.F., TOP, BOT. - HORIZ
B805	7	28'-5"	X		LOWER BODY - B.F. - HORIZ
B506	25	2'-0"		X	LOWER BODY - DOWELS - VERT
B407	4	4'-7"			LOWER WINGS - VERT. - ENDS
B508	22	15'-8"	X	X	LOWER WINGS - STIRRUPS - VERT.
B509	12	12'-2"		X	LOWER WINGS - F.F. - HORIZ
B610	16	12'-2"		X	LOWER WINGS - B.F., TOP - HORIZ
B511	28	9'-2"	X	X	UPPER WINGS - VERT.
B412	10	9'-7"		X	UPPER WINGS - HORIZ
B613	4	9'-7"		X	UPPER WINGS - TOP - HORIZ

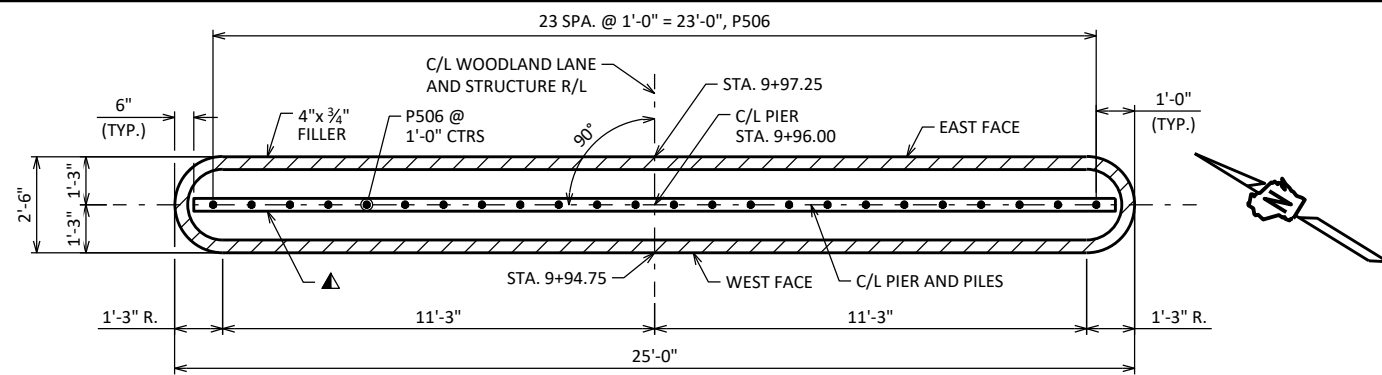


NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-22-301			
DRAWN BY		DTH	PLANS CK'D KRB
EAST ABUTMENT DETAILS			SHEET 7

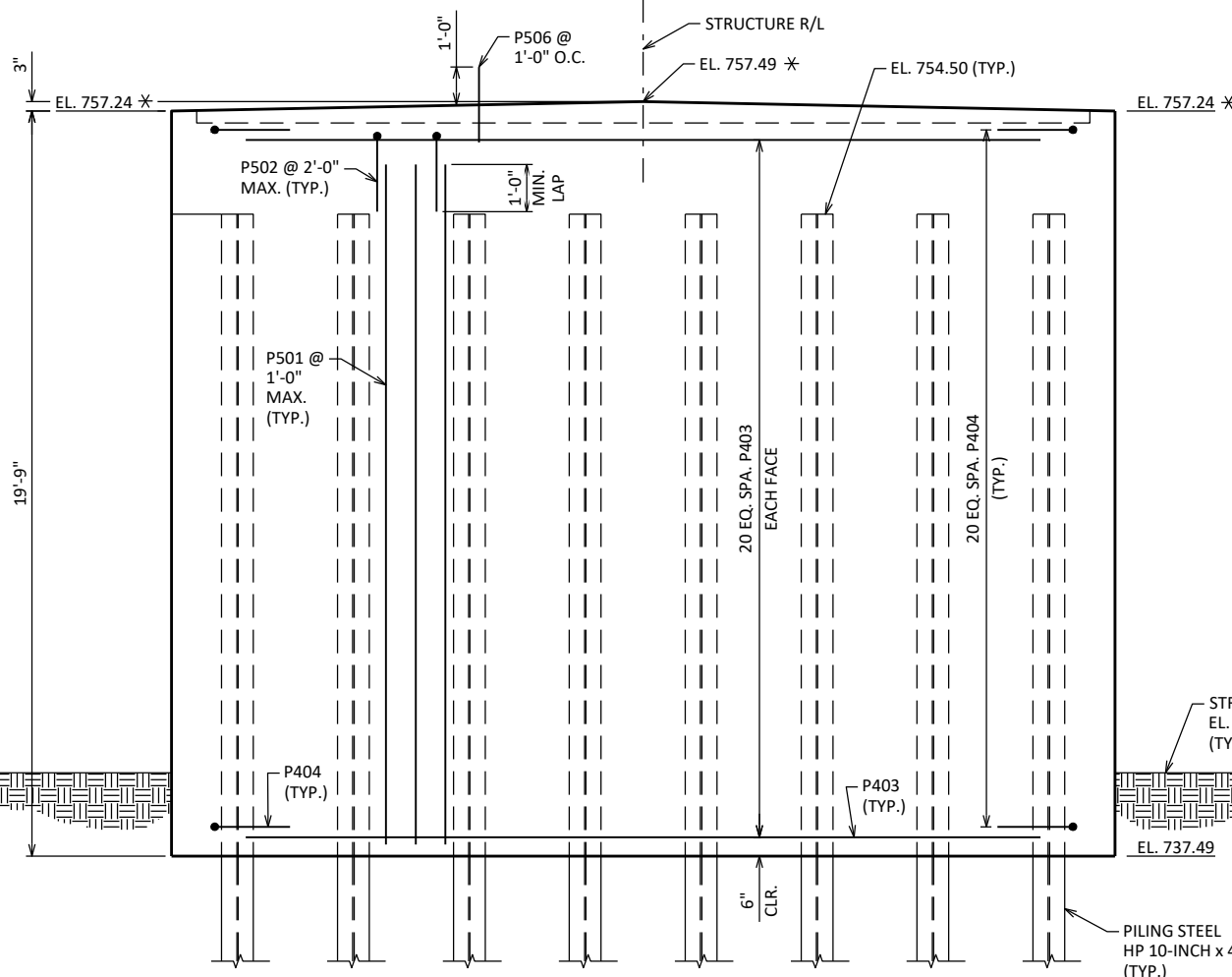
**PIER
BILL OF BARS**

**UNCOATED: 2,260 LBS
COATED: 50 LBS**

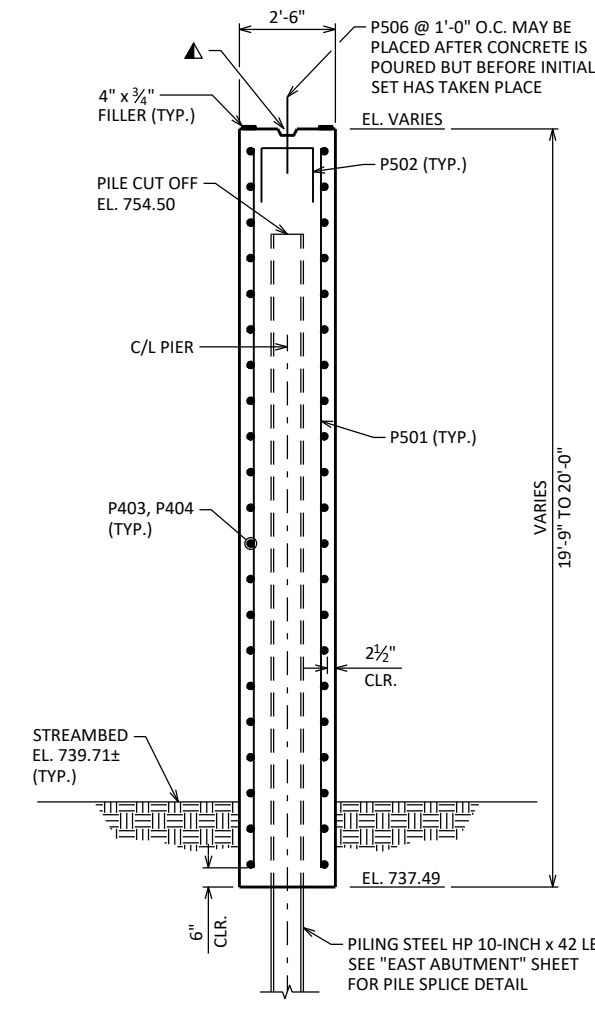
BAR MARK	NO. REQ'D	LENGTH	BENT	COAT	LOCATION
P501	54	19'-0"			PIER - VERT.
P502	13	4'-3"	X		PIER - STIRRUPS - TOP - VERT.
P403	42	22'-6"			PIER - SIDES - HORIZ.
P404	42	6'-1"	X		PIER - ENDS - HORIZ.
P405	168	2'-11"	X		PIER - TIES - HORIZ.
P506	24	2'-0"		X	PIER - DOWELS - VERT.



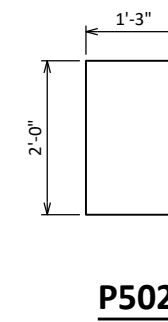
PLAN



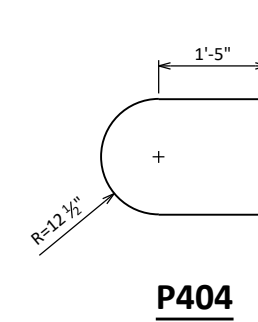
ELEVATION



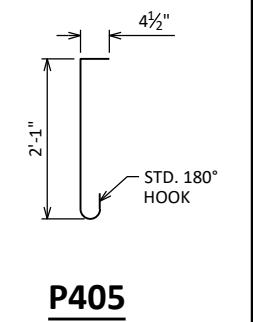
END VIEW



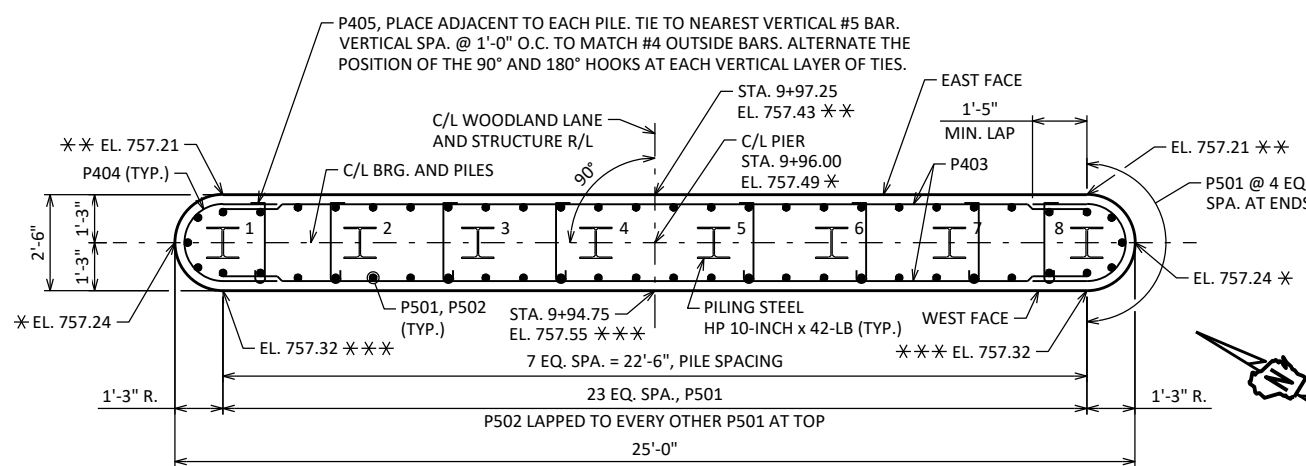
P502



P404



P405



PILE PLAN

NOTES

PIER TO BE SUPPORTED ON PILING STEEL HP 10-INCH x 42-LB WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION.

PRE-BORING IS REQUIRED WHERE PILING CANNOT REACH THE MINIMUM 10-FOOT PILE LENGTH. IF PILES ARE PRE-BORED, THEY CAN BE LESS THAN 10 FEET IN LENGTH SO LONG AS THEY ARE PRE-BORED AT LEAST 3 FEET INTO COMPETENT ROCK. IF 3 FEET OF COMPETENT ROCK IS NOT ENCOUNTERED WITHIN 10 FEET, PRE-BORING SHALL CONTINUE FOR A MINIMUM OF 12 FEET AND UNTIL A MINIMUM OF 1 FOOT EMBEDMENT INTO COMPETENT ROCK IS ACHIEVED. PILE SHALL BE FIRMLY SEATED IN THE BOTTOM OF THE PRE-BORED HOLE AND BACKFILLED FULL DEPTH WITH CEMENT GROUT. PILES PLACED INTO PRE-BORED HOLES CORED INTO ROCK DO NOT REQUIRE DRIVING.

LEGEND

- ▲ KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"x6".
- * TOP OF PIER ELEVATION GIVEN AT C/L PIER.
- ** TOP OF PIER ELEVATION GIVEN AT EAST FACE PIER.
- *** TOP OF PIER ELEVATION GIVEN AT WEST FACE PIER.

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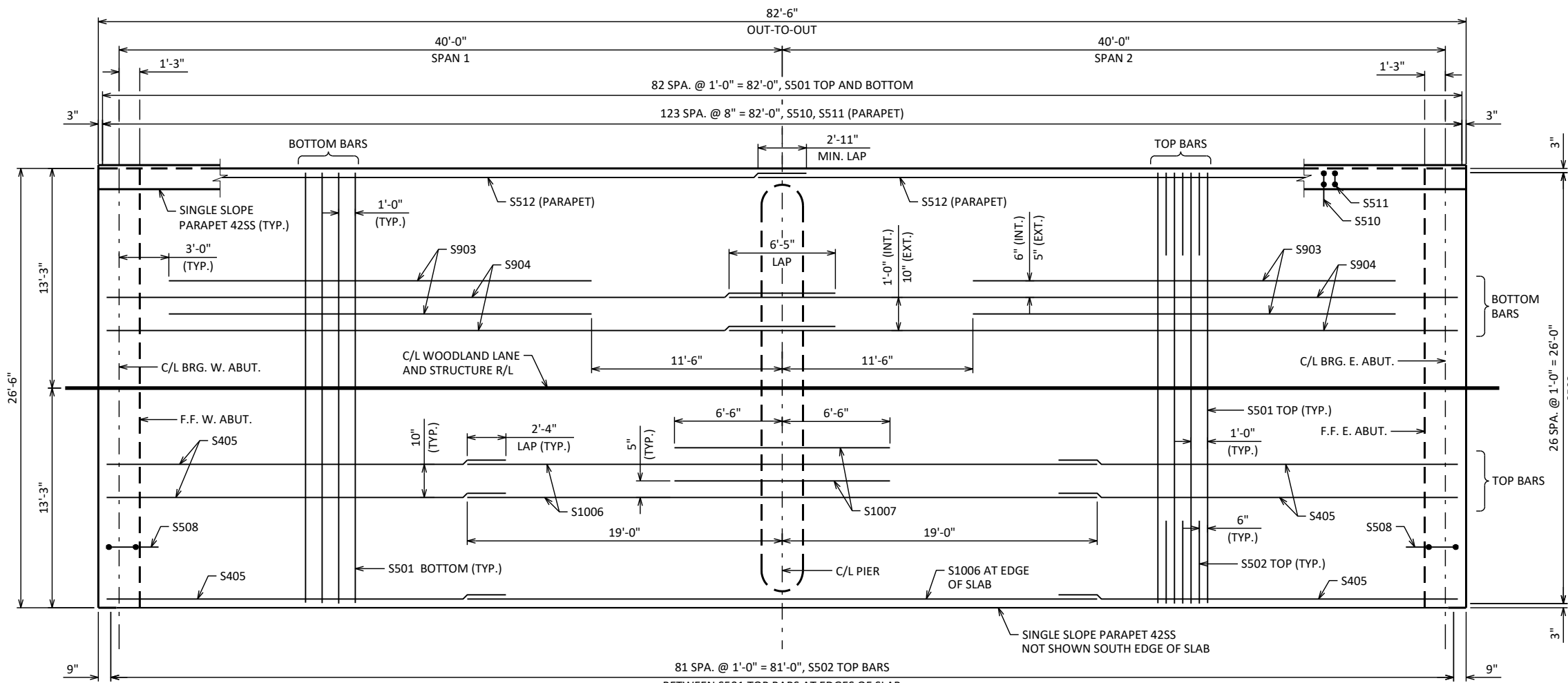
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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-22-301			
DRAWN BY		DTH	PLANS CK'D KRB
PIER DETAILS			SHEET 8

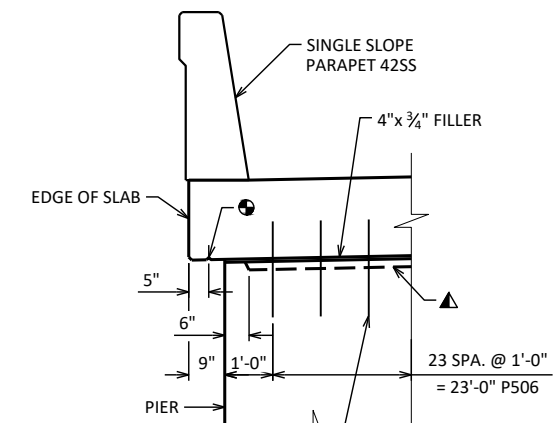
SCALE =

LEGEND

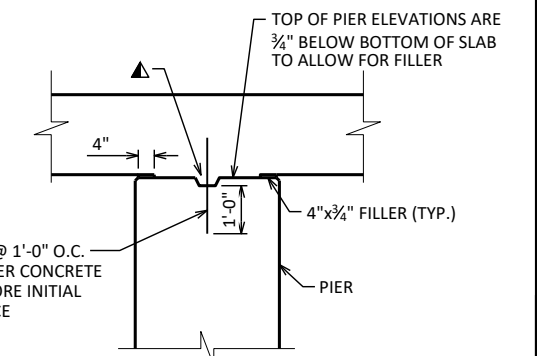
- 18" RUBBERIZED MEMBRANE WATERPROOFING.
- ▲ KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"x6".
- 3/4" V-GROOVE REQ'D EXTEND TO 6" FROM F.F. OF ABUT. DIAPHRAGMS.



PLAN

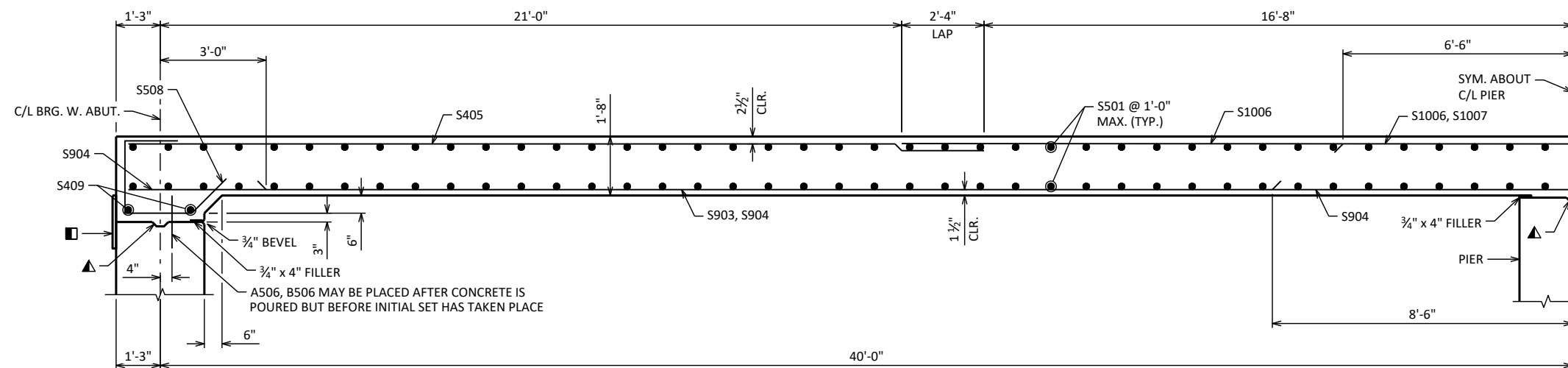


P506 PIER DOWELS @ 1'-0" O.C. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE



P506 PIER DOWELS @ 1'-0" O.C. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE

PIER DETAILS



HALF LONGITUDINAL SECTION

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-22-301			
DRAWN BY		DTH	PLANS CK'D KRB
SUPERSTRUCTURE PLAN, SECTION, & DETAILS			SHEET 9

SCALE =

**SUPERSTRUCTURE
BILL OF BARS**

COATED: 31,770 LBS

BAR MARK	QC REQ'D	LENGTH	EENT	COAT	LOCATION
S501	168	28'-2"		X	SLAB - TRANSVERSE - TCP & 3C"
S502	164	5'-0"		X	SLAB - TRANSVERSE - TCP
S903	58	25'-2"		X	SLAB - LONG - BOTTOM
S904	58	44'-4"		X	SLAB - LONG - BOTTOM
S405	64	24'-5"		X	SLAB - LONG - TCP
S1006	32	38'-0"		X	SLAB - LONG - TCP
S1007	31	13'-0"		X	SLAB - LONG - TCP
S508	54	7'-5"	X	X	ABUT. DIAPHRAGM - VERT.
S409	4	28'-2"		X	ABUT. DIAPHRAGM - HORIZ.
S510	248	4'-5"	X	X	PARAPET - VERT.
S511	248	2'-6"	X	X	PARAPET - VERT.
S512	32	42'-8"		X	PARAPET - HORIZ.

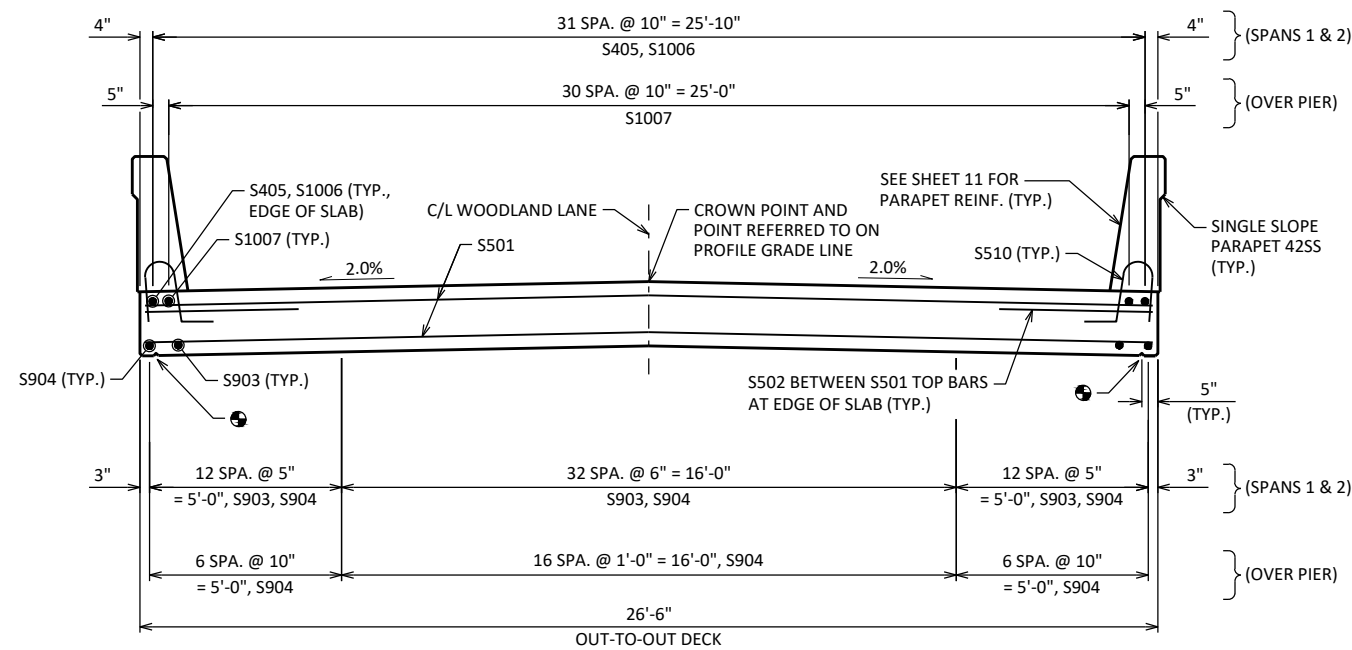
NOTES

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

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

LEGEND

⊙ 3/4" V-GROOVE REQ'D EXTEND TO 6" FROM F.F. OF ABUT. DIAPHRAGMS.



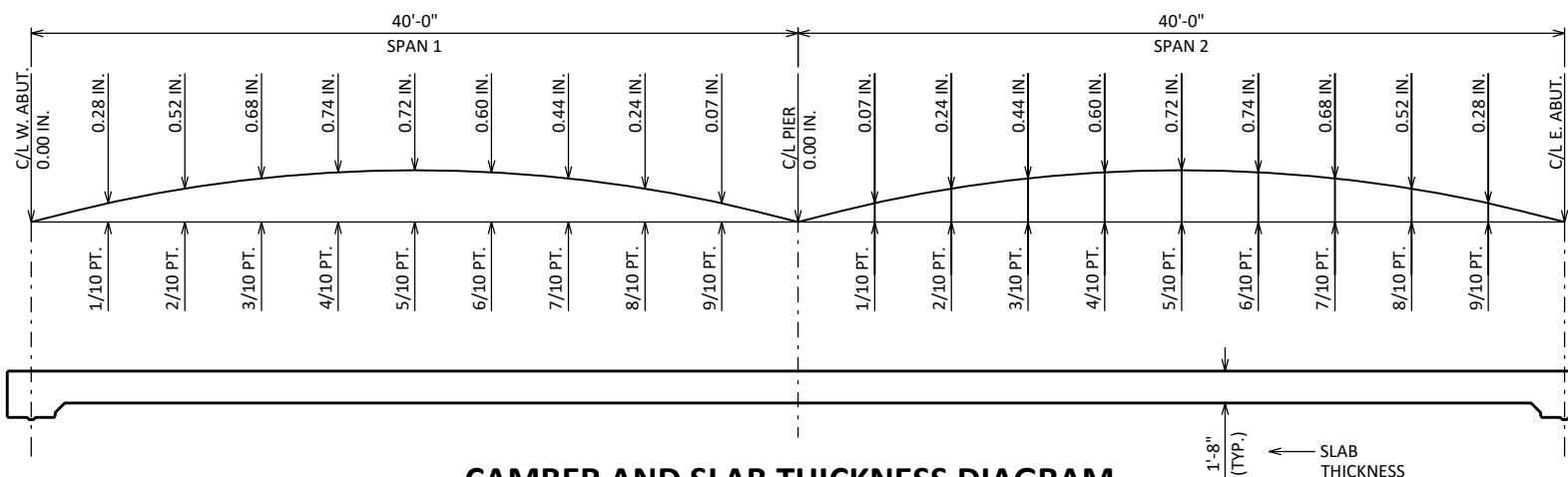
CROSS SECTION THRU SUPERSTRUCTURE

(LOOKING EAST)

SURVEY TOP OF SLAB ELEVATIONS

	W. ABUT	5/10 PT.	PIER	5/10 PT.	E. ABUT.
NORTH GUTTER					
CROWN OR R/L					
SOUTH GUTTER					

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



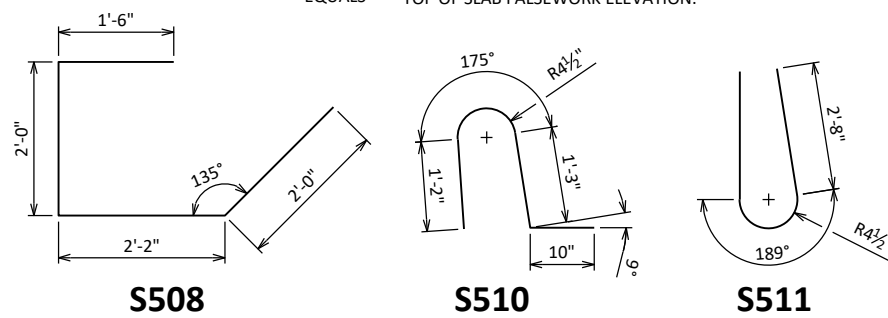
CAMBER AND SLAB THICKNESS DIAGRAM

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, 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:

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



TOP OF DECK ELEVATIONS

LOCATION	NORTH EDGE OF DECK 3.25' LT *		C/L BRIDGE		SOUTH EDGE OF DECK 13.25' RT *	
	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.
C/L BRG. W. ABUT.	9+56.00	761.30	9+56.00	761.54	9+56.00	761.30
1.1L POINT	9+60.00	761.02	9+60.00	761.26	9+60.00	761.02
1.2L POINT	9+64.00	760.76	9+64.00	761.00	9+64.00	760.76
1.3L POINT	9+68.00	760.51	9+68.00	760.75	9+68.00	760.51
1.4L POINT	9+72.00	760.26	9+72.00	760.50	9+72.00	760.26
1.5L POINT	9+76.00	760.02	9+76.00	760.26	9+76.00	760.02
1.6L POINT	9+80.00	759.80	9+80.00	760.04	9+80.00	759.80
1.7L POINT	9+84.00	759.58	9+84.00	759.82	9+84.00	759.58
1.8L POINT	9+88.00	759.37	9+88.00	759.61	9+88.00	759.37
1.9L POINT	9+92.00	759.17	9+92.00	759.41	9+92.00	759.17
C/L PIER	9+96.00	758.98	9+96.00	759.22	9+96.00	758.98
1.1L POINT	10+00.00	758.80	10+00.00	759.04	10+00.00	758.80
1.2L POINT	10+04.00	758.62	10+04.00	758.86	10+04.00	758.62
1.3L POINT	10+08.00	758.46	10+08.00	758.70	10+08.00	758.46
1.4L POINT	10+12.00	758.31	10+12.00	758.55	10+12.00	758.31
1.5L POINT	10+16.00	758.16	10+16.00	758.40	10+16.00	758.16
1.6L POINT	10+20.00	758.03	10+20.00	758.27	10+20.00	758.03
1.7L POINT	10+24.00	757.90	10+24.00	758.14	10+24.00	757.90
1.8L POINT	10+28.00	757.78	10+28.00	758.02	10+28.00	757.78
1.9L POINT	10+32.00	757.67	10+32.00	757.91	10+32.00	757.67
C/L BRG. E. ABUT.	10+36.00	757.57	10+36.00	757.81	10+36.00	757.57

ELEVATIONS SHOWN ARE FINISHED GRADE ELEVATIONS.

* DECK ELEVATIONS AT THE INSIDE FACE OF PARAPET (12.00' LT & RT) ARE THE SAME AS AT OUTSIDE EDGE OF DECK (DECK LEVEL UNDER PARAPET, SEE "SINGLE SLOPE PARAPET 4255" SHEET FOR DETAILS).

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-22-301			
DRAWN BY		DTH	PLANS CK'D KRB
SUPERSTRUCTURE CROSS SECTION & DETAILS			SHEET 10

SCALE =

SINGLE SLOPE PARAPET 42SS
BILL OF BARS

COATED: 1,510 LBS

BAR MARK	NO. REQ'D W. ABUT.	NO. REQ'D E. ABUT.	LENGTH	BEN	COA	LOCATION
R501	10	4	5'-10"	X	X	PARAPET - VERT.
R502	10	4	5'-8"	X	X	PARAPET - VERT.
R503	24	24	3'-0"	X	X	PARAPET - VERT.
R504	34	34	5'-7"	X	X	PARAPET - VERT.
R505	10	10	5'-5"	X	X	PARAPET - VERT.
R506	12	12	5'-6"	X	X	PARAPET - VERT.
R507	12	12	5'-5"	X	X	PARAPET - VERT.
R508	2	2	1'-5"	X	X	PARAPET - HORIZ - WINGS 1 & 2
R509	10	2	1'-7"		X	PARAPET - HORIZ - WINGS 1 & 2
R510	4	2	1'-7"	X	X	PARAPET - HORIZ - WINGS 1 & 2
R511	2	2	5'-6"	X	X	PARAPET - HORIZ - WINGS 3 & 4
R512	2	10	5'-7"		X	PARAPET - HORIZ - WINGS 3 & 4
R513	2	4	5'-7"	X	X	PARAPET - HORIZ - WINGS 3 & 4

PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

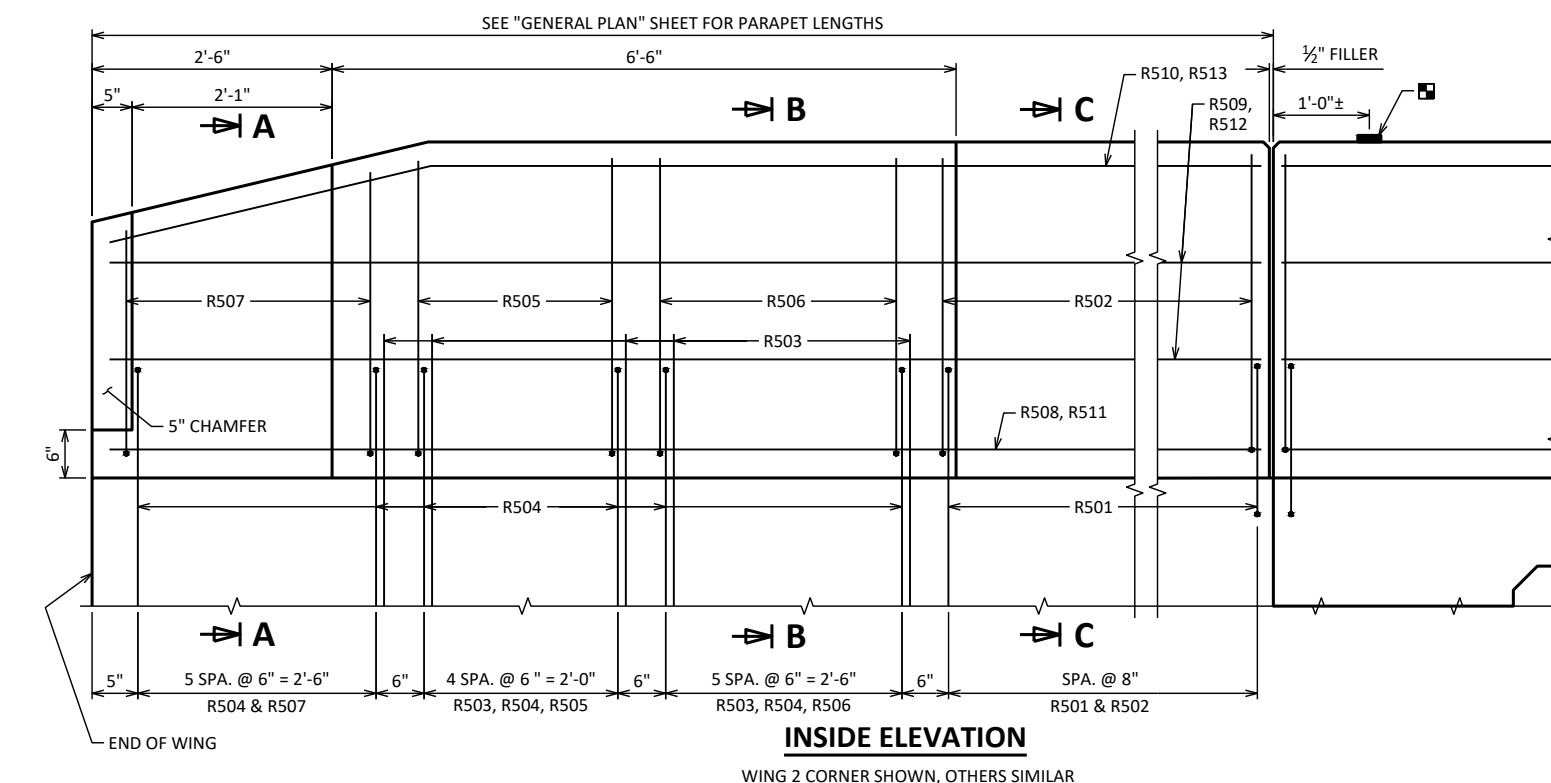
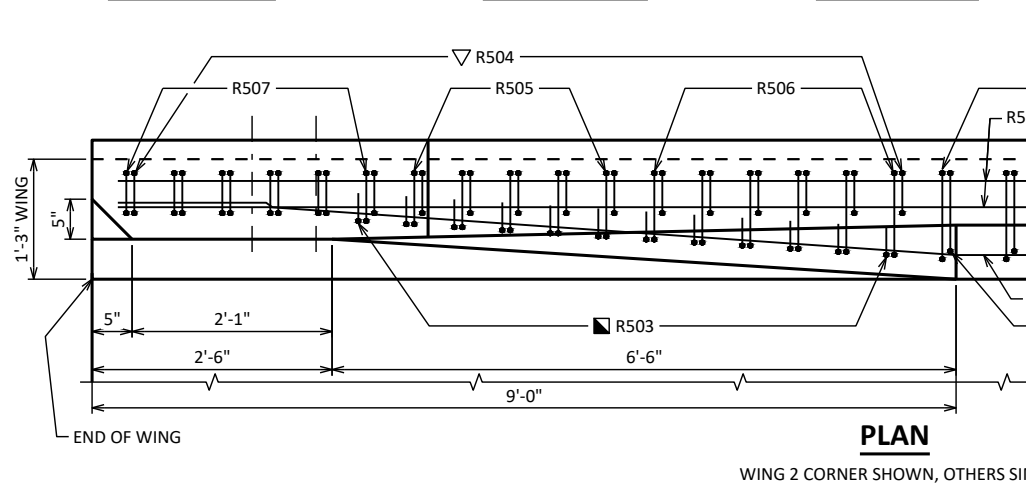
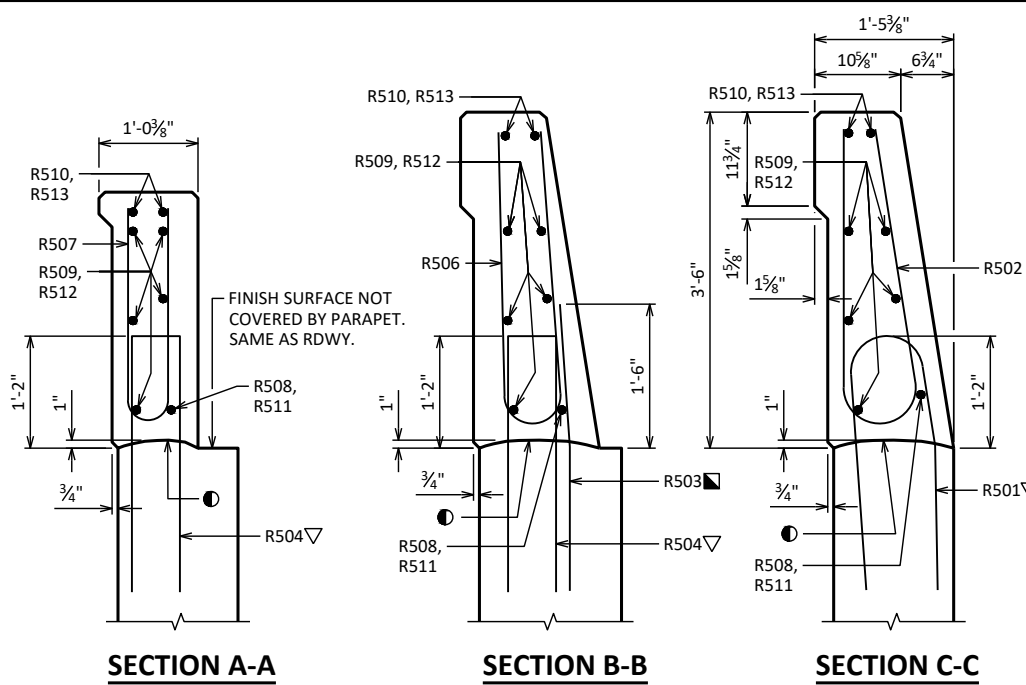
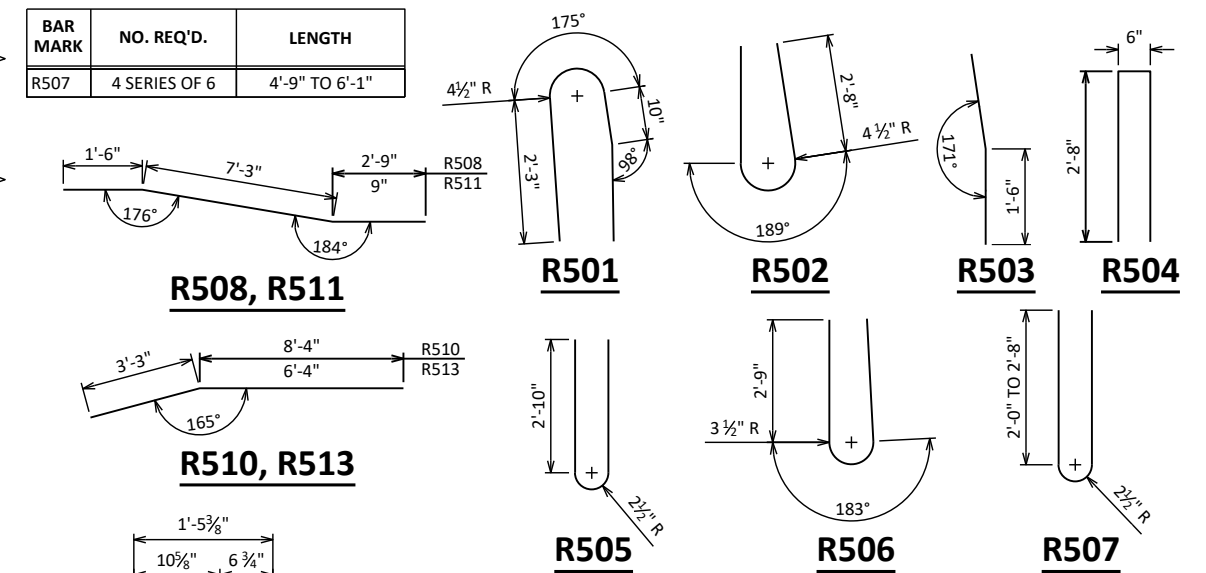
OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A 3/4" - "V" GROOVE

BAR SERIES TABLE

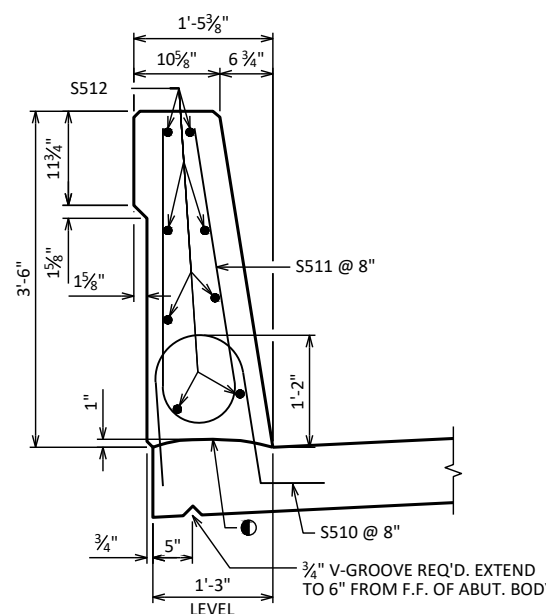
▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
R507	4 SERIES OF 6	4'-9" TO 6'-1"



SECTION THRU PARAPET ON DECK



LEGEND

- CONST. JOINT - STRIKE OFF AS SHOWN.
- 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.
- ▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.
- BENCH MARK CAP (WHEN SUPPLIED).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-22-301

DRAWN BY: DTH, PLANS CK'D: KRB

SINGLE SLOPE PARAPET 42SS

SHEET 11

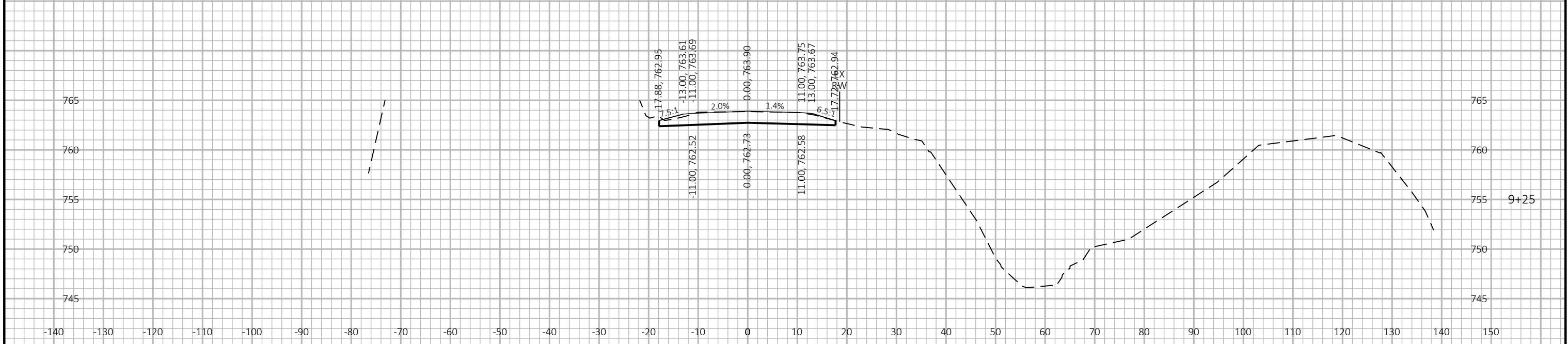
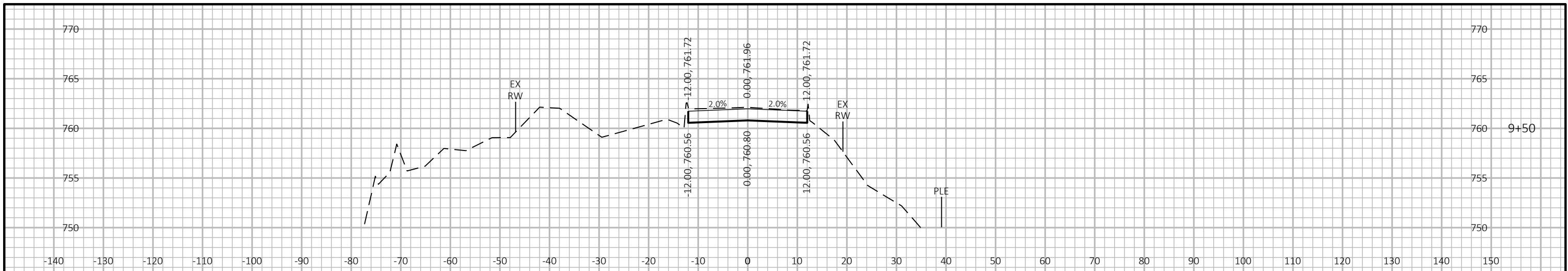
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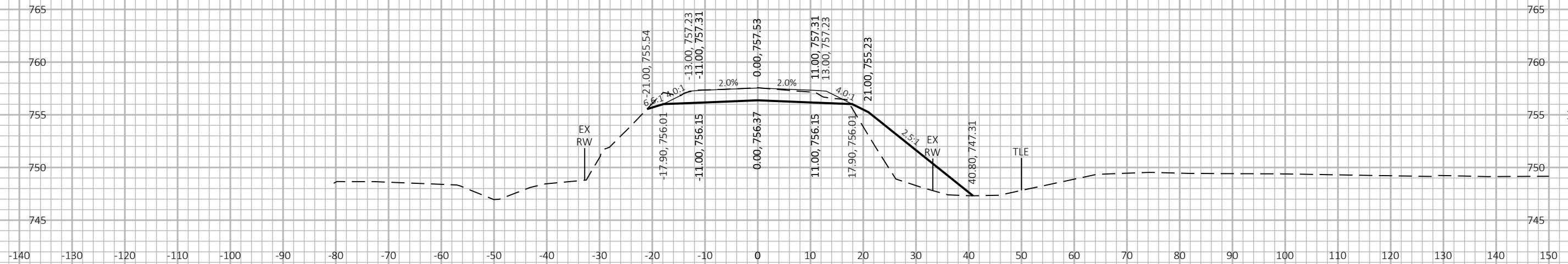
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WOODLAND LANE

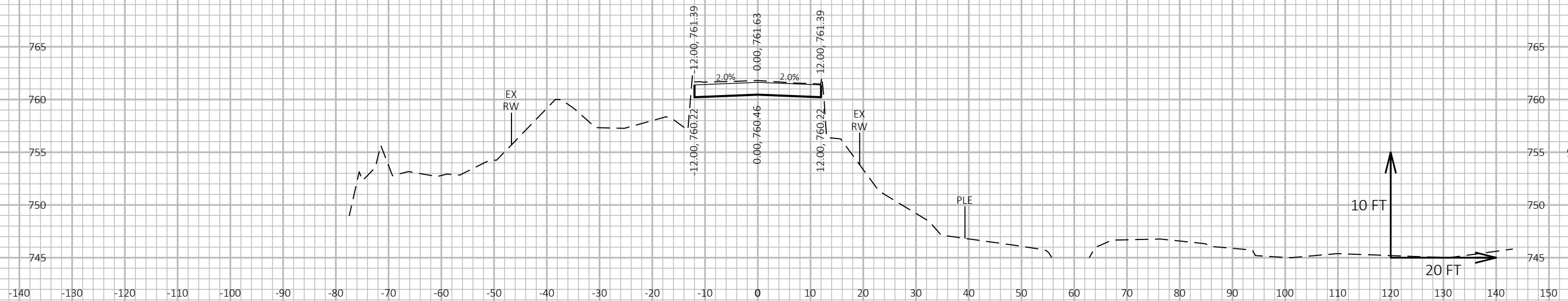
CATEGORY	REFERENCE LINE STATION	EXCAVATION				EMBANKMENT					EXCESS/ (SHORTAGE) CUMM VOLUME (CY)
		DISTANCE (FT)	END AREA CUT (SF)	VOLUME CUT (CY)	CUMM VOLUME CUT (CY)	END AREA FILL (SF)	VOLUME FILL (CY)	FILL FACTOR	EXPANDED VOLUME FILL (CY)	CUMM VOLUME FILL (CY)	
0010	9+00		39			0					
		25	35	35		0	1.3	1	1	34	
	9+25		36			1					
		25	32	67		0	1.3	1	1	65	
	9+50		32			0					
		5	6	73		0	1.3	0	1	71	
	9+55		32			0					
	10+37		32			0					
		13	17	89		14	1.3	18	19	70	
	10+50		37			58					
		50	71	161		69	1.3	90	109	52	
11+00		39			17						
	15	20	181		5	1.3	6	115	66		
11+15		34			1						
TOTAL				181					115	66	



PROJECT NO: 5721-00-76 HWY: LOC STR COUNTY: GRANT CROSS SECTIONS: WOODLAND LANE BRIDGE SHEET E

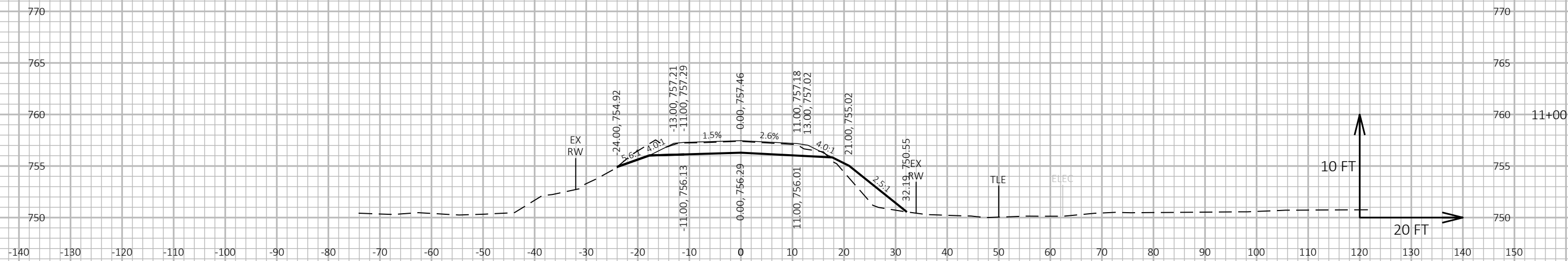
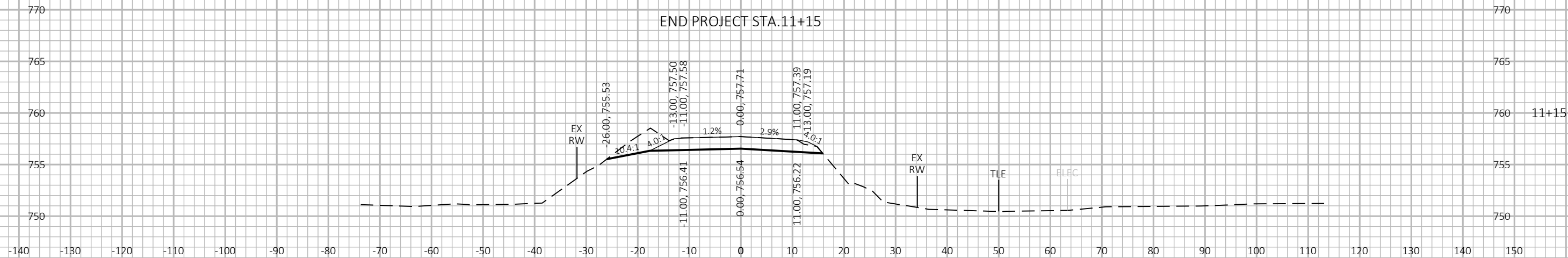


STRUCTURE B-22-301
STA. 9+54.75 - STA. 10+37.25



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PROJECT NO: 5721-00-76

HWY: LOC STR

COUNTY: GRANT

CROSS SECTIONS: WOODLAND LANE BRIDGE

SHEET

E

Notes



Wisconsin Department of Transportation

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