

EAU

PROJECT ID:

7282-00-72

COUNTY:

TREMPEALEAU

NOVEMBER 2025

ORDER OF SHEETS

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

TOTAL SHEETS = 68



DESIGN DESIGNATION			
A.A.D.T.	(2025)	=	<100
A.A.D.T.	(2045)	=	<100
D.H.V.		=	10
D.D.		=	50/50
T.		=	5%
DESIGN SPEED		=	40 MPH
ESALS		=	36,500

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	

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

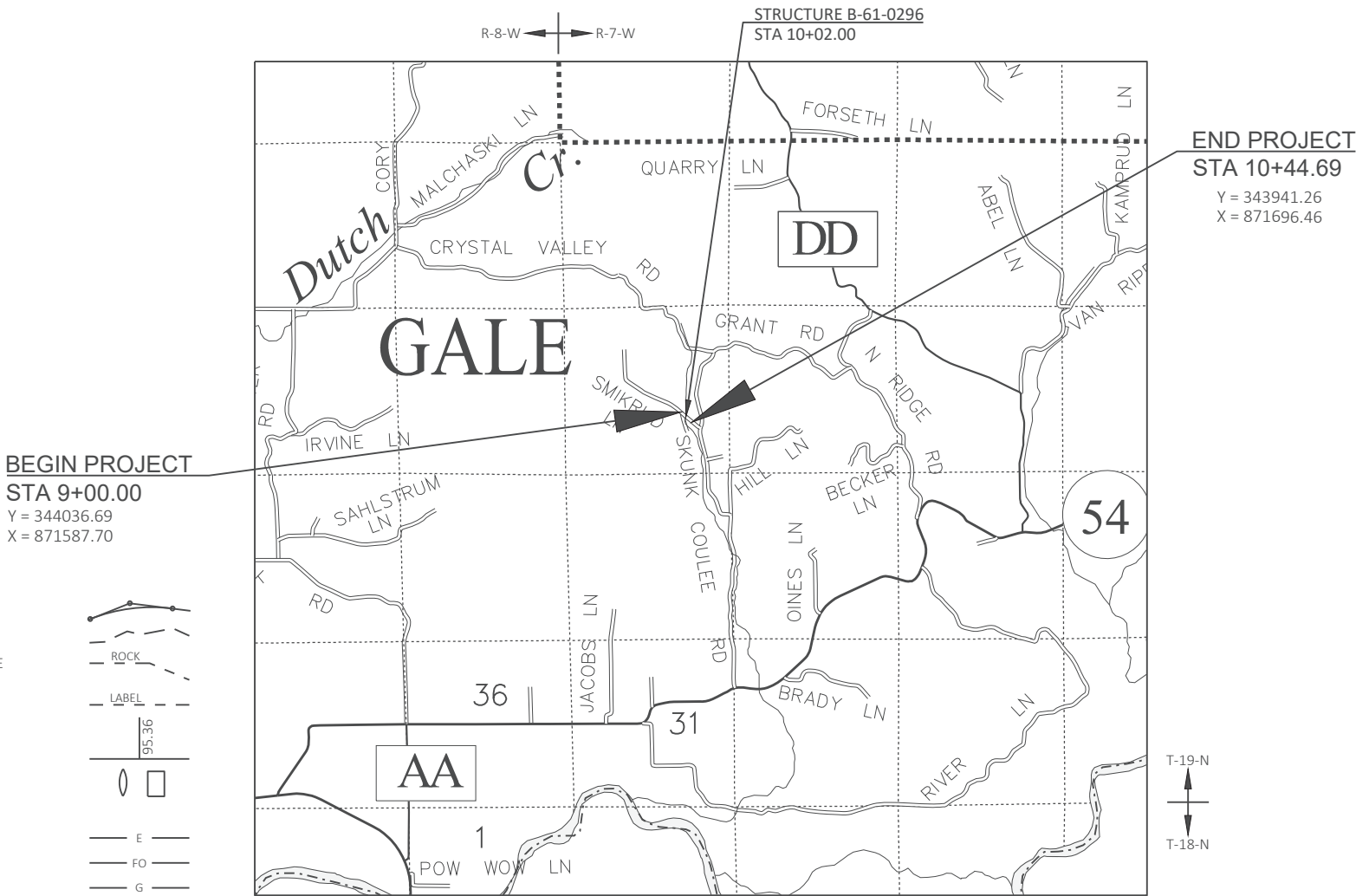
T GALE, SMIKRUD ROAD

GRANT CREEK BRIDGE B-61-0296

LOC STR

TREMPEALEAU COUNTY

STATE PROJECT NUMBER
7282-00-72



LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.027 MI

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

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

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7282-00-72		

ACCEPTED FOR	
County	of Trempealeau
7-10-2025	Neil Olson
(Date)	(Highway Commissioner)

ORIGINAL PLANS PREPARED BY	
AYRES	
DANIEL N. SYDOW E-38363 WI PROFESSIONAL ENGINEER	
07/16/2025	
(Date)	(Signature)

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	AYRES ASSOCIATES, INC.
Designer	AYRES ASSOCIATES, INC.
Project Manager	TOU YANG, PE
Regional Examiner	NW REGION
Regional Supervisor	TOU YANG, PE

APPROVED FOR THE DEPARTMENT	
DATE: 7/23/2025	

E

UTILITIES CONTACTS

BRIGHTSPEED
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LA CROSSE, WI 54601
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WISCONSIN DNR LIAISON

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WDNR
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EAU CLAIRE, WI 54701
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CELL: 715-495-1903
EMAIL: AmyL.lesik@wisconsin.gov

DESIGN PROJECT MANAGER

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DESIGN PROJECT LEADER

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COUNTY HIGHWAY COMMISSIONER

NEIL OLSON, COMMISSIONER
TREMPEALEAU COUNTY
20699 STATE ROAD 121
P.O. BOX 97
WHITEHALL, WI 54773
PHONE: 715-538-9402
EMAIL: neil.olson@co.trempealeau.wi.us

TOWN CONTACT

PAUL HALDERSON, CHAIRMAN
TOWN OF GALE
20037 GIBSON STREET
GALESVILLE, WI 54630
PHONE: 608-582-9933
EMAIL: clerk@townofgalewi.gov

GENERAL NOTES

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

FILL EXPANSION FACTOR IS 30%

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

RIGHT OF WAY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE.

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

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SUBGRADE SHOULDER POINTS ARE TO BE SEEDED AND MULCHED OR EROSION MATTED AS DIRECTED BY THE ENGINEER.

SEED MIXTURE NO. 20 AND SEEDING TEMPORARY SHALL BE USED IN THE PROJECT AND SHALL BE PLACED AS SHOWN IN THE PLANS AND/OR DIRECTED BY THE ENGINEER.

ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A 2" UPPER LAYER AND A 2" LOWER LAYER. ASPHALTIC SURFACE SHALL USE 12.5 mm NOMINAL AGGREGATE SIZE.

THE PROPOSED SHOULDER WIDTH SHOWN IN THE TYPICAL SECTIONS ARE MINIMUM WIDTH. PERPETUATE EXISTING SHOULDERS THAT ARE WIDER THAN WHAT IS SHOWN IN THE TYPICAL SECTIONS.

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

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

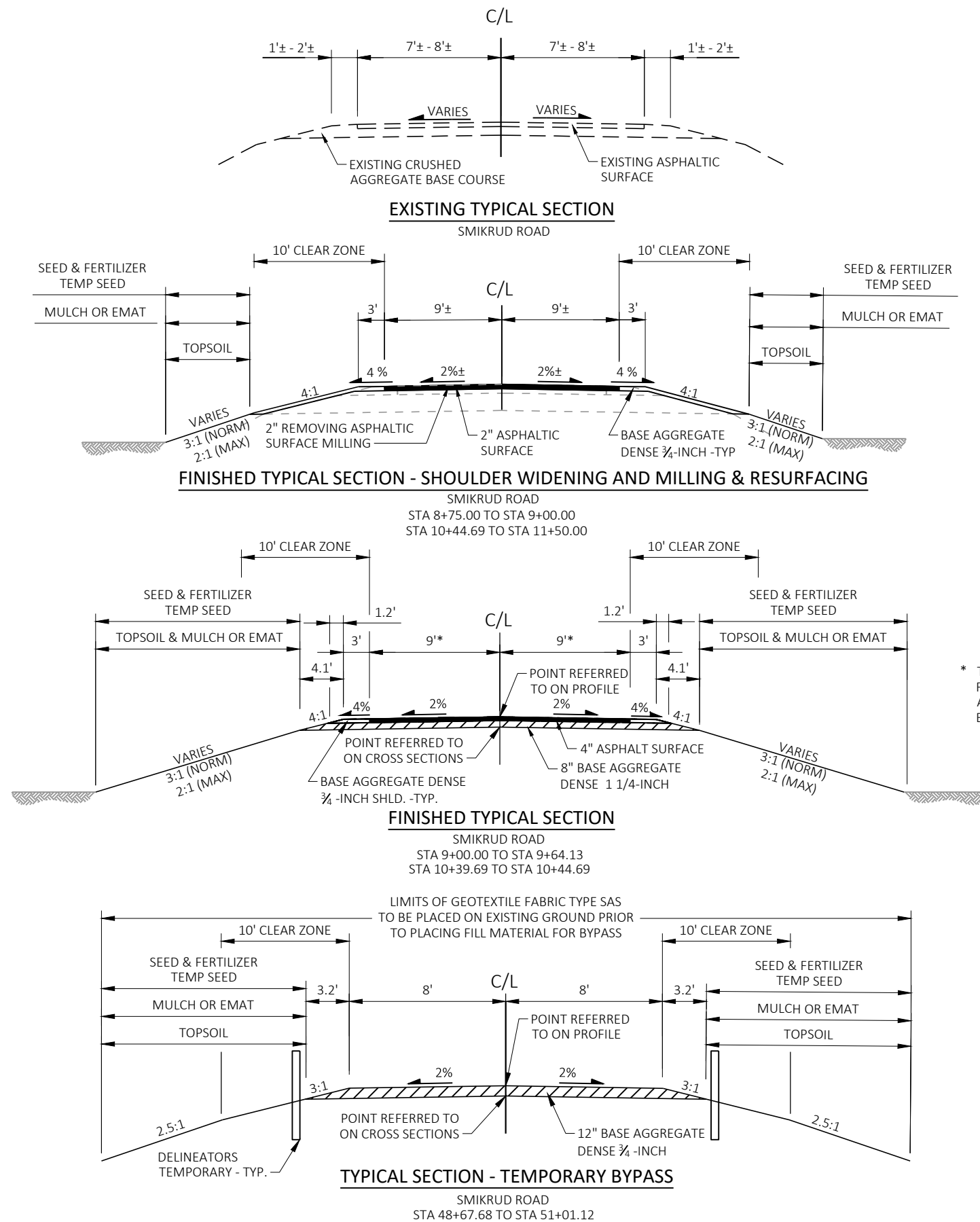
THE DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR WITH A MONUMENT TO BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

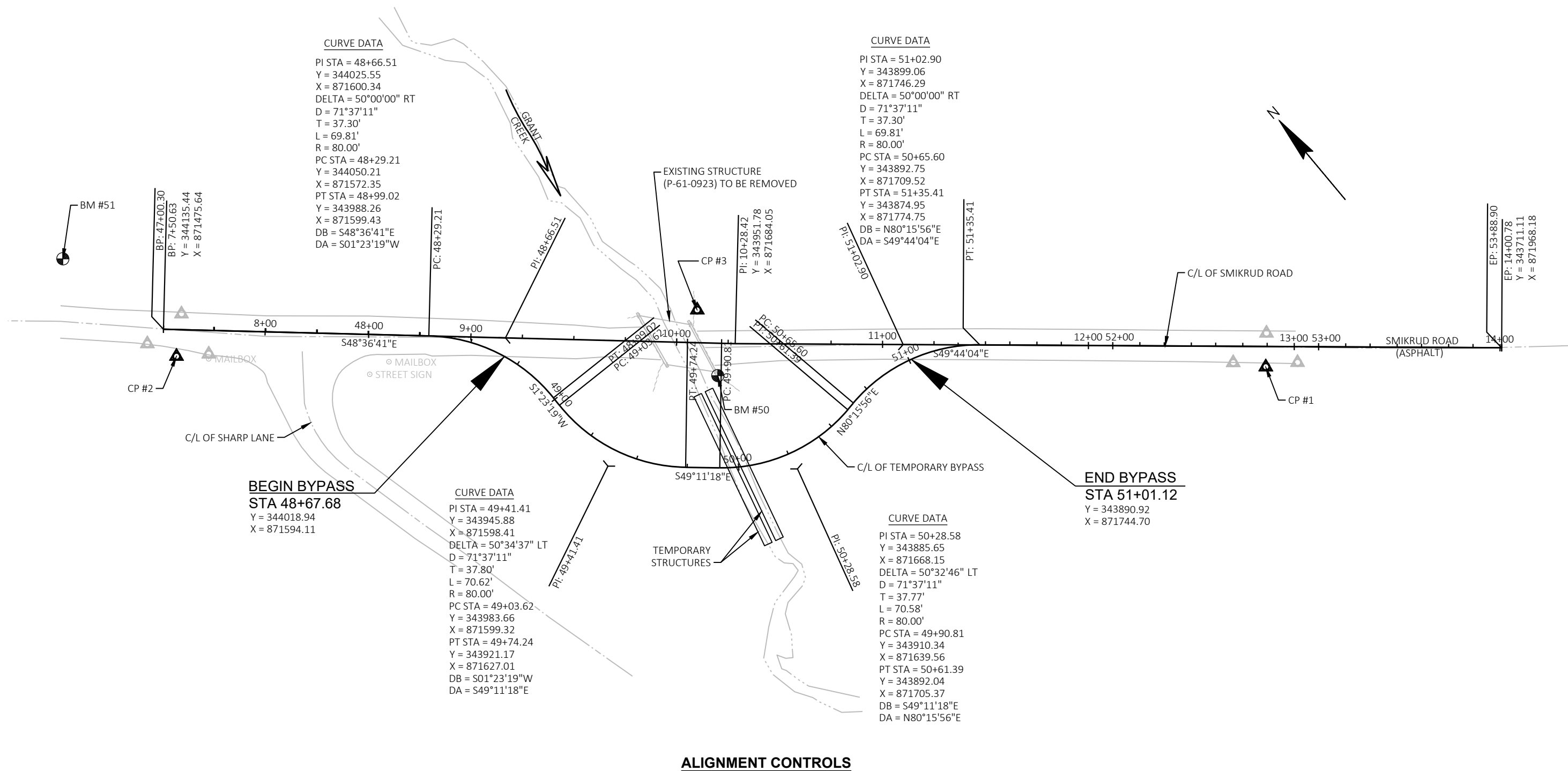
DO NOT DRIVE OR STORE EQUIPMENT, OR STORE CONSTRUCTION MATERIALS IN ENVIRONMENTALLY SENSITIVE AREAS, WETLANDS OR WATERWAYS.

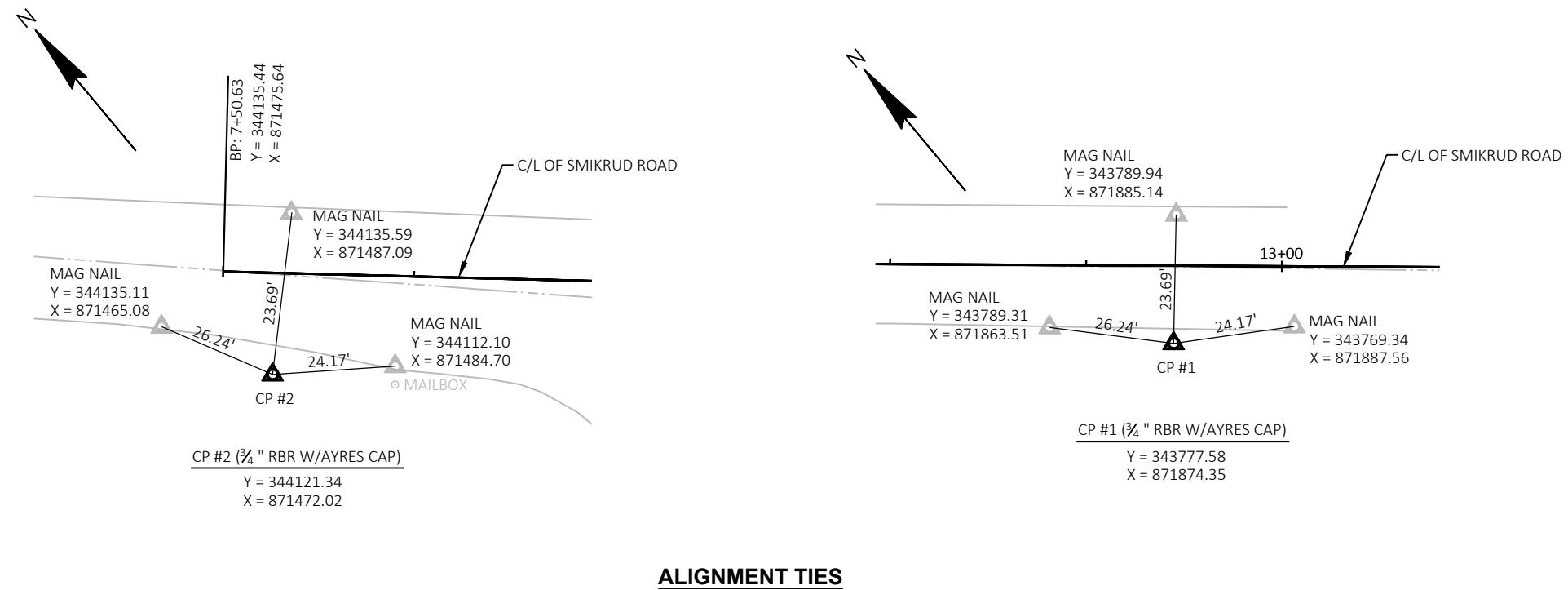
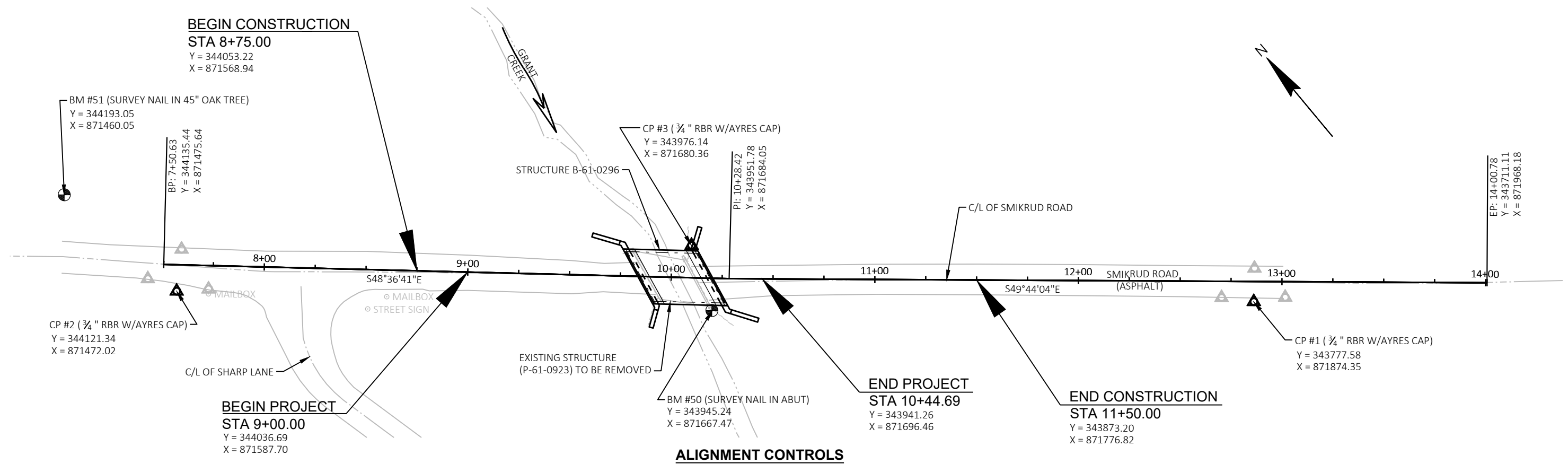
RUNOFF COEFFICIENT TABLE

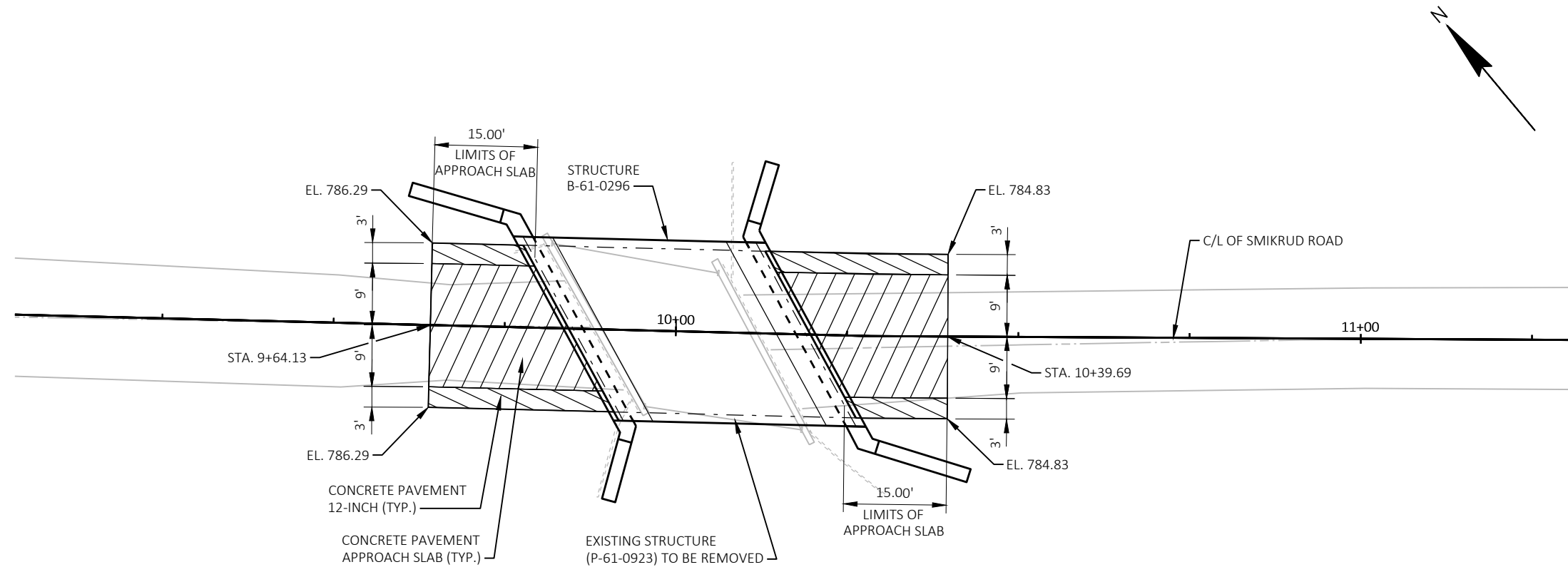
LAND USE:	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS:	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26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

TOTAL PROJECT AREA = 0.639 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.496 ACRES

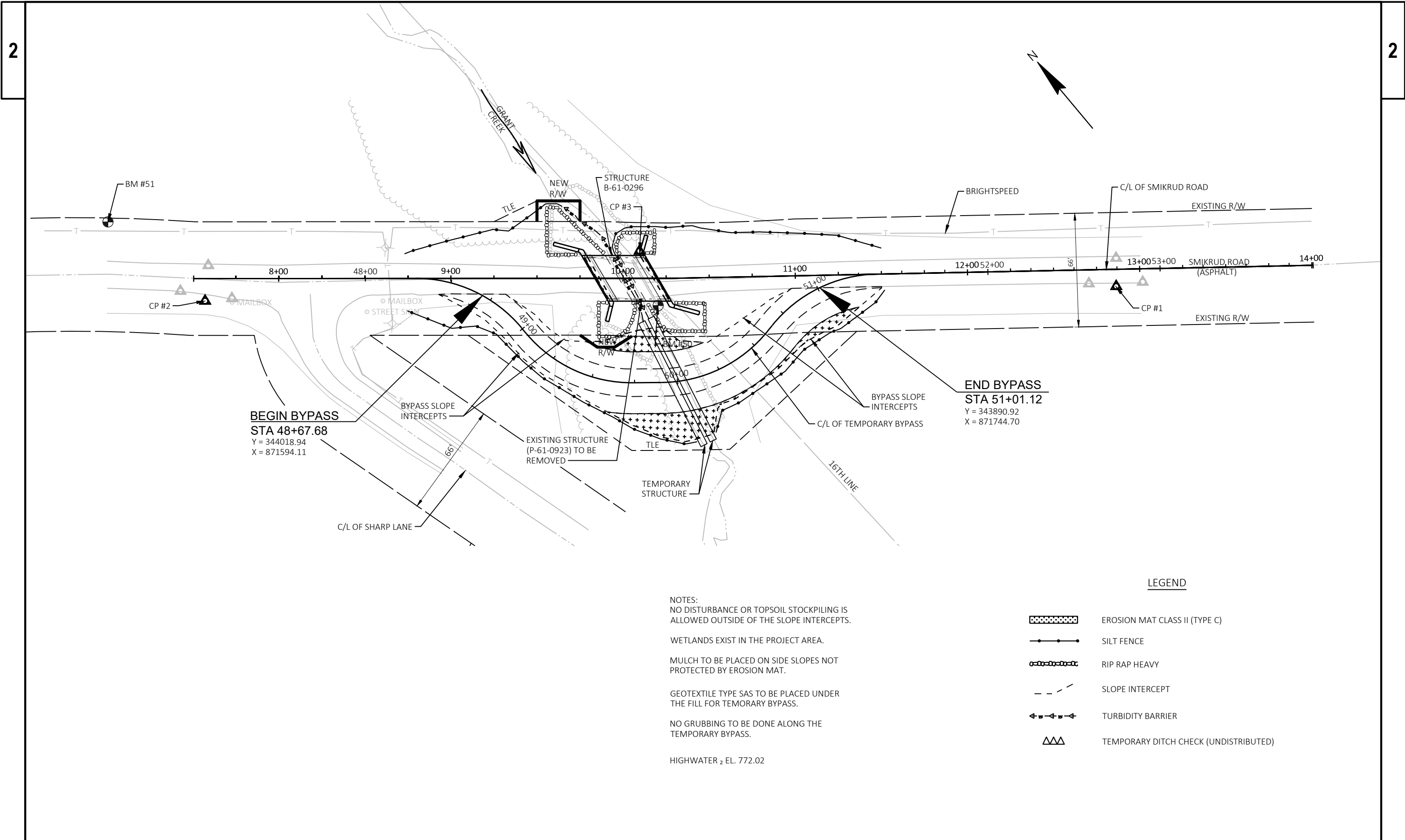






**APPROACH SLAB DETAIL**

NOTE: ELEVATIONS WILL BE FIELD VERIFIED BY THE ENGINEER



NOTES:
NO DISTURBANCE OR TOPSOIL STOCKPILING IS ALLOWED OUTSIDE OF THE SLOPE INTERCEPTS.

WETLANDS EXIST IN THE PROJECT AREA.

MULCH TO BE PLACED ON SIDE SLOPES NOT PROTECTED BY EROSION MAT.

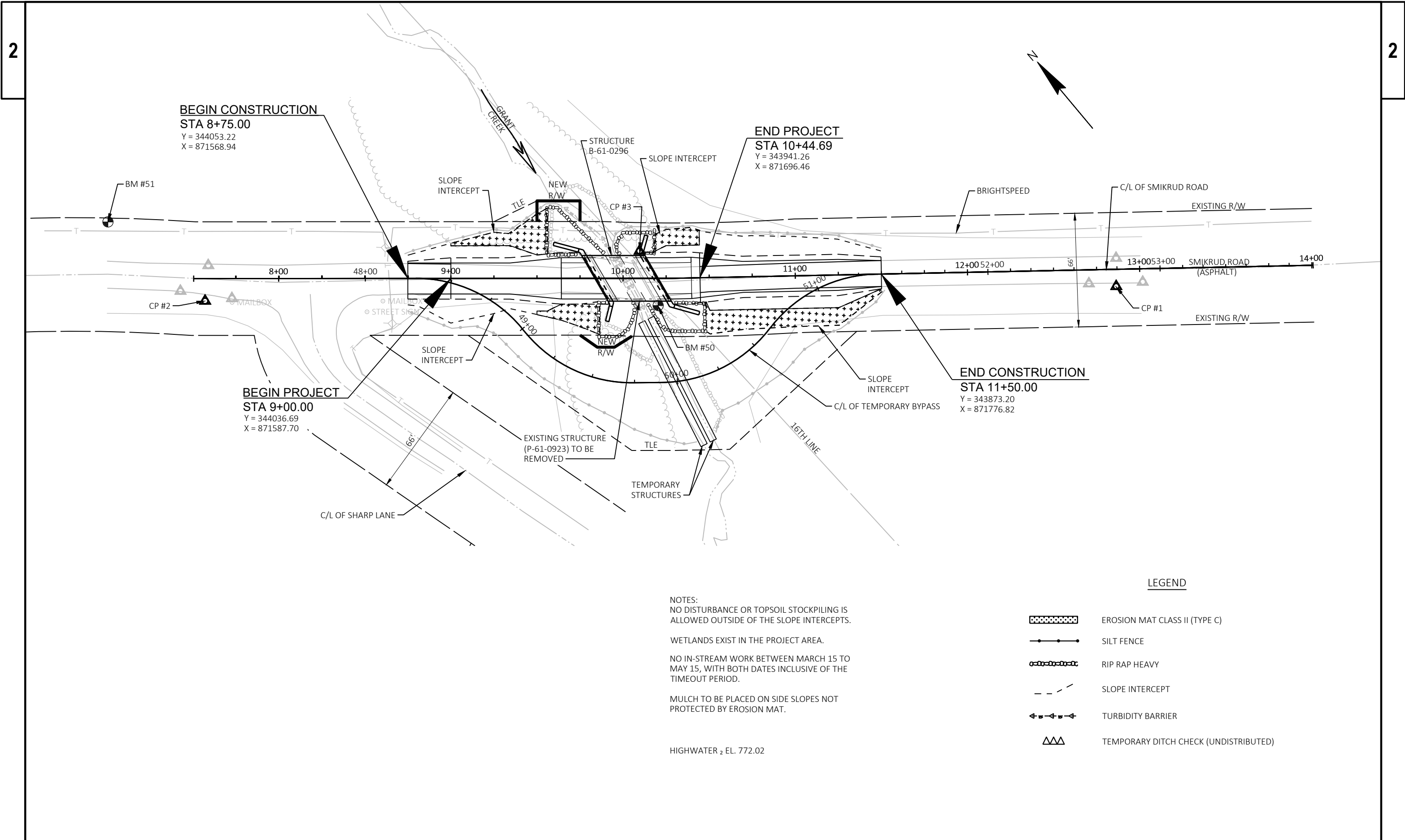
GEOTEXTILE TYPE SAS TO BE PLACED UNDER THE FILL FOR TEMPORARY BYPASS.

NO GRUBBING TO BE DONE ALONG THE TEMPORARY BYPASS.

HIGHWATER ₂ EL. 772.02

LEGEND

- EROSION MAT CLASS II (TYPE C)
- SILT FENCE
- RIP RAP HEAVY
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK (UNDISTRIBUTED)



Estimate Of Quantities

7282-00-72

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006	203.0250	Removing Structure Over Waterway Remove Debris (structure) 01. P-61-0923	EACH	1.000	1.000
0008	204.0115	Removing Asphaltic Surface Butt Joints	SY	38.000	38.000
0010	204.0120	Removing Asphaltic Surface Milling	SY	265.000	265.000
0012	205.0100	Excavation Common	CY	1,343.000	1,343.000
0014	205.0508.S	Excavation, Hauling, and Disposal of Potential Creosote Contaminated Soil	TON	252.000	252.000
0016	206.1001	Excavation for Structures Bridges (structure) 01. B-61-0296	EACH	1.000	1.000
0018	208.0100	Borrow	CY	1,232.000	1,232.000
0020	210.1500	Backfill Structure Type A	TON	800.000	800.000
0022	213.0100	Finishing Roadway (project) 01. 7282-00-72	EACH	1.000	1.000
0024	305.0110	Base Aggregate Dense 3/4-Inch	TON	435.000	435.000
0026	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	160.000	160.000
0028	415.0120	Concrete Pavement 12-Inch	SY	30.000	30.000
0030	415.0410	Concrete Pavement Approach Slab	SY	82.000	82.000
0032	455.0605	Tack Coat	GAL	25.000	25.000
0034	465.0105	Asphaltic Surface	TON	75.000	75.000
0036	502.0100	Concrete Masonry Bridges	CY	174.000	174.000
0038	502.3200	Protective Surface Treatment	SY	205.000	205.000
0040	505.0400	Bar Steel Reinforcement HS Structures	LB	5,200.000	5,200.000
0042	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	15,370.000	15,370.000
0044	513.4061	Railing Tubular Type M	LF	78.000	78.000
0046	516.0500	Rubberized Membrane Waterproofing	SY	12.000	12.000
0048	526.0101	Temporary Structure (station) 01. 50+00	EACH	1.000	1.000
0050	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	910.000	910.000
0052	606.0300	Riprap Heavy	CY	200.000	200.000
0054	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	180.000	180.000
0056	618.0100	Maintenance and Repair of Haul Roads (project) 01. 7282-00-72	EACH	1.000	1.000
0058	619.1000	Mobilization	EACH	1.000	1.000
0060	624.0100	Water	MGAL	77.000	77.000
0062	625.0100	Topsoil	SY	1,395.000	1,395.000
0064	627.0200	Mulching	SY	1,545.000	1,545.000
0066	628.1504	Silt Fence	LF	745.000	745.000
0068	628.1520	Silt Fence Maintenance	LF	1,490.000	1,490.000
0070	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0072	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0074	628.2027	Erosion Mat Class II Type C	SY	525.000	525.000
0076	628.6005	Turbidity Barriers	SY	155.000	155.000
0078	628.7504	Temporary Ditch Checks	LF	50.000	50.000
0080	629.0210	Fertilizer Type B	CWT	1.300	1.300
0082	630.0120	Seeding Mixture No. 20	LB	94.000	94.000
0084	630.0200	Seeding Temporary	LB	56.000	56.000
0086	630.0300	Seeding Borrow Pit	LB	41.000	41.000
0088	630.0500	Seed Water	MGAL	46.000	46.000
0090	633.1100	Delineators Temporary	EACH	33.000	33.000
0092	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	4.000	4.000
0094	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0096	638.2602	Removing Signs Type II	EACH	4.000	4.000
0098	638.3000	Removing Small Sign Supports	EACH	4.000	4.000

Estimate Of Quantities

7282-00-72

Line	Item	Item Description	Unit	Total	Qty
0100	642.5001	Field Office Type B	EACH	1.000	1.000
0102	643.0300	Traffic Control Drums	DAY	1,260.000	1,260.000
0104	643.0420	Traffic Control Barricades Type III	DAY	360.000	360.000
0106	643.0705	Traffic Control Warning Lights Type A	DAY	360.000	360.000
0108	643.0715	Traffic Control Warning Lights Type C	DAY	900.000	900.000
0110	643.0900	Traffic Control Signs	DAY	2,610.000	2,610.000
0112	643.5000	Traffic Control	EACH	1.000	1.000
0114	645.0111	Geotextile Type DF Schedule A	SY	120.000	120.000
0116	645.0120	Geotextile Type HR	SY	370.000	370.000
0118	645.0140	Geotextile Type SAS	SY	1,345.000	1,345.000
0120	650.4500	Construction Staking Subgrade	LF	473.000	473.000
0122	650.5000	Construction Staking Base	LF	473.000	473.000
0124	650.6501	Construction Staking Structure Layout (structure) 01. B-61-0296	EACH	1.000	1.000
0126	650.9911	Construction Staking Supplemental Control (project) 01. 7282-00-72	EACH	1.000	1.000
0128	650.9920	Construction Staking Slope Stakes	LF	473.000	473.000
0130	690.0150	Sawing Asphalt	LF	32.000	32.000
0132	715.0502	Incentive Strength Concrete Structures	DOL	1,044.000	1,044.000
0134	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 10+00	EACH	1.000	1.000
0136	SPV.0090	Special 01. Removing Existing Timber Piling	LF	120.000	120.000

CLEARING & GRUBBING

STATION	TO	STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
8+75	-	11+50	MAINLINE	2	2
TOTAL 0010				2	2

EXCAVATION, HAULING, AND DISPOSAL OF POTENTIAL CREOSOTE CONTAMINATED SOIL

205.0508.S EXCAVATION, HAULING, AND DISPOSAL OF POTENTIAL CREOSOTE CONTAMINATED SOIL		
STATION	LOCATION	TON
10+00	P-61-0923	252
TOTAL 0010		252

NOTE: EXCAVATE A 5' OFFSET AROUND EACH EXISTING BRIDGE TIMBER SUBSTRUCTURE AND 3' DEEP

FINISHING ROADWAY

PROJECT	213.0100.01 FINISHING ROADWAY (PROJECT) (01. 7282-00-72) EACH
7282-00-72	1
TOTAL 0010	1

BASE AGGREGATE DENSE

305.0110 BASE AGGREGATE DENSE 3/4-INCH				305.0120 BASE AGGREGATE DENSE 1 1/4- INCH
STATION	TO	STATION	LOCATION	TON
48+67.68	-	51+01.12	TEMP BYPASS	340
8+75	-	9+00	MAINLINE	10
9+00	-	9+83.55	MAINLINE	20
10+20.45	-	10+44.69	MAINLINE	5
10+44.69	-	11+50	MAINLINE	60
TOTAL 0010				435

REMOVING ASPHALTIC SURFACE MILLING

STATION	TO	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
8+75	-	9+00	MAINLINE	20	50
10+44.69	-	11+50	MAINLINE	18	215
TOTAL 0010				38	265

SMIKRUD ROAD EARTHWORK SUMMARY

From/To Station	Location	Excavation Common (1) 205.0100	Salvaged / Unuseable Pavement Material (5)	Unexpanded Fill	Expanded Fill (2)	Mass Ordinate +/- (3)	Waste	Borrow
		Cut			Factor 1.30			
8+75 - 9+86.21	SMIKRUD ROAD	47	18	51	67	-39	0	39
10+17.79 - 11+50	SMIKRUD ROAD	24	5	99	128	-109	0	109
48+67.68 - 51+01.12	TEMP. BYPASS	18	0	848	1,102	-1,084	0	1,084
48+67.68 - 51+01.12	TEMP. BYPASS REMOVAL	1,254	0	18	23	1,231	1231	0
TOTAL		1,343	23	1,015	1,320			1,232

- 1) Excavation Common is the Cut. Item number 205.0100.
- 2) Expanded Fill. Factor = 1.30; Expanded Fill = Unexpanded Fill * Fill Factor
- 3) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material on the project.
- 4) All quantities shown in CY.
- 5) Salvaged/unuseable pavement material

CONCRETE PAVEMENT

STATION	TO	STATION	LOCATION	415.0120 CONCRETE PAVEMENT 12- INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY
9+64.13	-	9+83.55	MAINLINE	15	41
10+20.45	-	10+39.69	MAINLINE	15	41
TOTAL 0010				30	82

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

ASPHALTIC SURFACE					
STATION	TO	STATION	LOCATION	455.0605	465.0105
				TACK COAT GAL	ASPHALTIC SURFACE TON
8+75	-	9+00	MAINLINE	3	10
9+00	-	9+64.13	MAINLINE	10	35
10+39.69	-	10+44.69	MAINLINE	1	5
10+44.69	-	11+50	MAINLINE	11	25
TOTAL 0010				25	75

MAINTENANCE AND REPAIR OF HAUL ROADS

618.0100.01 MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) (01. 7282-00-72) EACH		
CATEGORY	LOCATION	
0030	PROJECT LIMITS	1
TOTAL 0030		1

MOBILIZATION

LOCATION	619.1000 MOBILIZATION EACH
PROJECT LIMITS	1
TOTAL 0010	1

WATER

LOCATION	624.0100 WATER MGAL
COMPACTION DUST CONTROL	9 68
TOTAL 0010	77

EROSION CONTROL ITEMS

STATION	TO	STATION	LOCATION	628.1504	628.1520	628.2027	628.6005	628.7504
				SILT FENCE LF	SILT FENCE MAINTENANCE LF	EROSION MAT CLASS II TYPE C SY	TURBIDITY BARRIERS SY	TEMPORARY DITCH CHECKS LF
48+50	-	51+25	TEMP BYPASS	595	1,190	170	125	--
9+00	-	11+50	MAINLINE	--	--	250	--	--
			UNDISTRIBUTED	150	300	105	30	50
TOTAL 0010				745	1,490	525	155	50

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905	628.1910
	MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT LIMITS	4	4
TOTAL 0010	4	4

RESTORATION ITEMS

STATION	TO	STATION	LOCATION	625.0100	627.0200	629.0210	630.0120	630.0200	630.0300	630.0500
				TOPSOIL SY	MULCHING SY	FERTILIZER TYPE B CWT	SEEDING MIXTURE NO. 20 LB	SEEDING TEMPORARY LB	SEEDING BORROW PIT LB	SEED WATER MGAL
48+50	-	51+25	TEMP BYPASS	550	670	0.5	38	23		19
9+00	-	11+50	MAINLINE	565	565	0.5	37	22	33	18
	-		UNDISTRIBUTED	280	310	0.3	19	11	8	9
TOTAL 0010				1,395	1,545	1.3	94	56	41	46

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

DELINEATORS TEMPORARY

LOCATION	633.1100 DELINEATORS TEMPORARY EACH
BYPASS PER SDD 15D31	26
UNDISTRIBUTED	7
TOTAL 0010	33

SIGNS TYPE II

				634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
STATION	LOCATION	SIGN CODE	SIGN SIZE (INCHES)				
9+75	LT	W5-52L	12x36	1	3	--	--
9+79	LT	W5-52L	12x36	--	--	1	1
9+85	RT	W5-52R	12x36	--	--	1	1
9+90	RT	W5-52R	12x36	1	3	--	--
10+08	LT	W5-52R	12x36	--	--	1	1
10+14	LT	W5-52R	12x36	1	3	--	--
10+21	RT	W5-52L	12x36	--	--	1	1
10+29	RT	W5-52L	12x36	1	3	--	--
TOTAL 0010				4	12	4	4

FIELD OFFICE TYPE B

LOCATION	642.5001 FIELD OFFICE TYPE B EACH
PROJECT LIMITS	1
TOTAL 0010	1

TRAFFIC CONTROL

		643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.5000 TRAFFIC CONTROL EACH
LOCATION	DURATION DAYS	EACH	EACH	EACH	EACH	EACH	EACH
PER SDD 15D31	90	14	1,260	4	360	4	360
PER SDD 15D45	90	--	--	--	--	--	--
UNDISTRIBUTED		--	--	--	--	--	--
TOTAL 0010			1,260	360	360	900	2,610

GEOTEXTILE TYPE SAS

STATION	TO	STATION	LOCATION	645.0140 GEOTEXTILE TYPE SAS SY
48+67.88	-	51+01.12	TEMP BYPASS UNDISTRIBUTED	1,075 270
TOTAL 0010				1,345

CONSTRUCTION STAKING STRUCTURE LAYOUT

				650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	650.6501.01 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) (01. B-61-0296) EACH
STATION	TO	STATION	LOCATION				
48+67.68	-	51+01.12	TEMP BYPASS	234	234	234	
8+75	-	9+83.55	MAINLINE	109	109	109	
10+20.45	-	11+50	MAINLINE	130	130	130	
TOTAL 0010				473	473	473	

CATEGORY	STATION	LOCATION	EACH
0020	10+00	MAINLINE	1
TOTAL 0020			1

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL

PROJECT	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 7282-00-72) EACH
7282-00-72	1
TOTAL 0010	1

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

SAWING ASPHALT

		690.0150
		SAWING
		ASPHALT
STATION	LOCATION	LF
9+00	MAINLINE	17
10+44.69	MAINLINE	15
TOTAL 0010		32

INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM

		999.2000.S.01
		INSTALLING AND MAINTAINING
		BIRD DETERRENT SYSTEM
		(STATION) (01. 10+00)
STATION	LOCATION	EACH
10+00	P-61-0923	1
TOTAL 0010		1

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), TREMPLEAU COUNTY, NAD83 (2011) IN US 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 AND PERMANENT EASEMENT MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

FOR CURRENT ACCESS/DRIVEWAY INFORMATION CONTACT THE TOWN OF GALE.

EXISTING ROAD RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE:
SMIKRUD WAS ESTABLISHED FROM STATUTE 82.31 USING THE CENTERLINE OF THE EXISTING ROADWAY AND A PRESUMED 66 FEET WIDTH.

SHARPE LANE WAS ESTABLISHED FROM STATUTE 82.31 USING THE CENTERLINE OF THE EXISTING ROADWAY AND A PRESUMED 66 FEET WIDTH.

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

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

SCHEDULE OF LANDS AND INTERESTS REQUIRED						
PARCEL NO.	OWNER(S)	INTEREST(S) REQUIRED	FEE R/W (ACRES)			TLE AC.
			NEW	EXISTING	TOTAL	
1	SARAH L. SKREDE	FEE & TLE	0.010	0.416	0.426	0.215
50	BRIGHTSPEED	RELEASE OF RIGHTS				

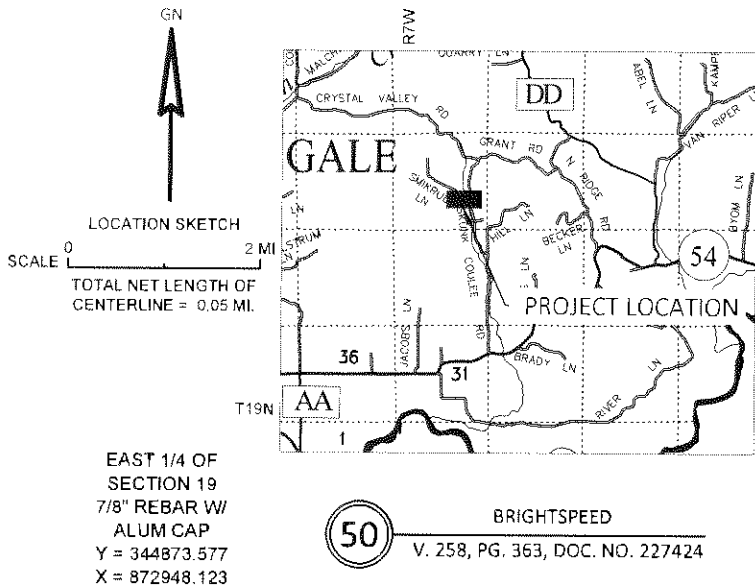
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE TOWN.

R/W COURSE TABLE					
COURSE	BEARING	DISTANCE	COURSE	BEARING	DISTANCE
100-101	N41°23'19"E	33.00'	109-110	S40°15'56"W	33.00'
101-102	S48°36'41"E	75.00'	110-111	N49°44'04"W	48.45'
102-103	N41°23'19"E	12.00'	111-112	SEE CURVE 2	
103-104	S48°36'41"E	25.00'	112-113	N80°54'09"W	12.02'
104-105	S41°23'19"W	12.00'	113-114	N48°36'41"W	10.00'
105-106	S48°36'41"E	13.17'	114-105	N13°37'10"W	12.21'
106-107	SEE CURVE 1		115-116	N48°36'41"W	100.00'
107-108	S49°44'04"E	49.97'	116-100	N41°23'19"E	33.00'
108-109	S40°15'56"W	33.00'			

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
100	8+75.00	0.00'
101	8+75.00	33.00' LT
102	9+50.00	33.00' LT
103	9+50.00	45.00' LT
104	9+75.00	45.00' LT
105	9+75.00	33.00' LT
106	9+88.17	33.00' LT
107	11+00.03	33.00' LT
108	11+50.00	33.00' LT
109	11+50.00	0.00'
110	11+50.00	33.00' RT
111	11+05.16	33.00' RT
112	10+05.16	33.58' RT
113	9+95.00	40.00' RT
114	9+85.00	40.00' RT
115	9+75.00	33.00' RT
116	8+75.00	33.00' RT

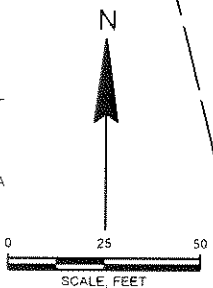
TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T150	9+25.00	33.00' LT
T151	11+35.00	33.00' RT
T152	10+60.00	100.00' RT
T153	10+05.00	100.00' RT
T154	9+10.00	33.00' RT

R/W PROJECT NUMBER 7282-00-02	SHEET NUMBER 4.01	TOTAL SHEETS 1
CONSTRUCTION PROJECT NUMBER 7282-00-72		
PLAT OF RIGHT OF WAY REQUIRED FOR T GALE, SMIKRUD ROAD GRANT CREEK BRIDGE B-61-0296		
LOC STR	TREMPEALEAU COUNTY	



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

BEGIN RELOCATION ORDER
STA 8+75.00
Y = 344053.215
X = 871568.945
LOCATED 820.36 FEET SOUTH AND
1379.18 FEET WEST OF THE EAST 1/4
CORNER OF SECTION 19, TOWNSHIP 19
NORTH, RANGE 7 WEST.



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

CONVENTIONAL SYMBOLS			
SECTION LINE	---	SECTION CORNER SYMBOL	⊙
QUARTER LINE	---	SECTION CORNER MONUMENT	⊕
SIXTEENTH LINE	---	FOUND SURVEY MONUMENT (SEE FOUND MONUMENT TABLE)	⊙
NEW REFERENCE LINE	---	GEODETIC SURVEY MONUMENT	⊙
NEW R/W LINE	---	SIGN	⊙
EXISTING R/W OR HE LINE	---	PERMITTED SIGN	⊙
PROPERTY LINE	---	ACCESS RESTRICTED BY ACQUISITION	---
LOT, TIE & OTHER MINOR LINES	---	NO ACCESS (BY STATUTORY AUTHORITY)	---
EXISTING CENTERLINE	---	ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)	---
CORPORATE LIMITS	---	NO ACCESS (NEW HIGHWAY)	---
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	---	PARCEL NUMBER	25
TEMPORARY LIMITED EASEMENT AREA	---	UTILITY NUMBER	40
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	---	PARALLEL OFFSETS	---
BUILDING	---	TO BE REMOVED	---
BRIDGE	---	CULVERT	---

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

R/W COURSE TABLE				
CURVE #	LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	111.27'	1036.25'	S49°19'52"E	111.21'
C2	97.07'	1102.25'	N49°48'11"W	97.04'

END RELOCATION ORDER
STA 11+50.00
Y = 343873.199
X = 871776.819
LOCATED 1000.38 FEET SOUTH AND
1171.30 FEET WEST OF THE EAST 1/4
CORNER OF SECTION 19, TOWNSHIP 19
NORTH, RANGE 7 WEST.

SOUTHEAST 1/4
SECTION 19
7/8" REBAR W/
ALUM CAP
Y = 342201.287
X = 873025.343

REVISION DATE
04/30/2025

APPROVED FOR
TOWN OF GALE

5-6-25
DATE

TOWN CHAIRMAN

PLAT PREPARED BY
AYRES

THE SURVEY IS PREPARED AT THE REQUEST OF THE TOWN OF GALE.

THE FIELD SURVEY WAS PERFORMED IN MARCH 2024.

THIS SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

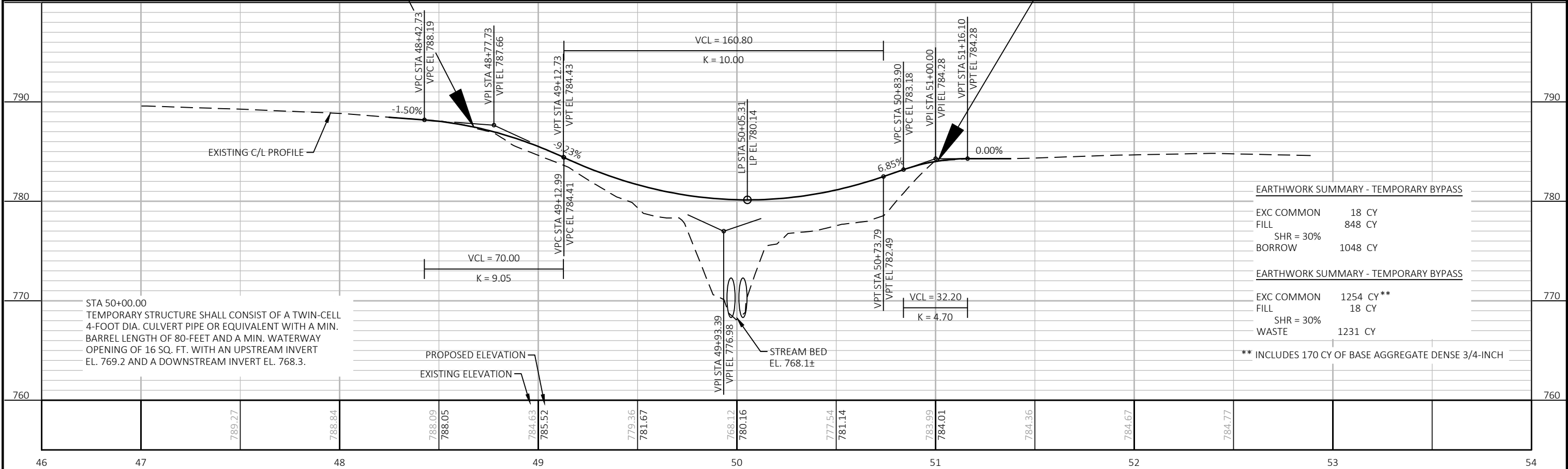
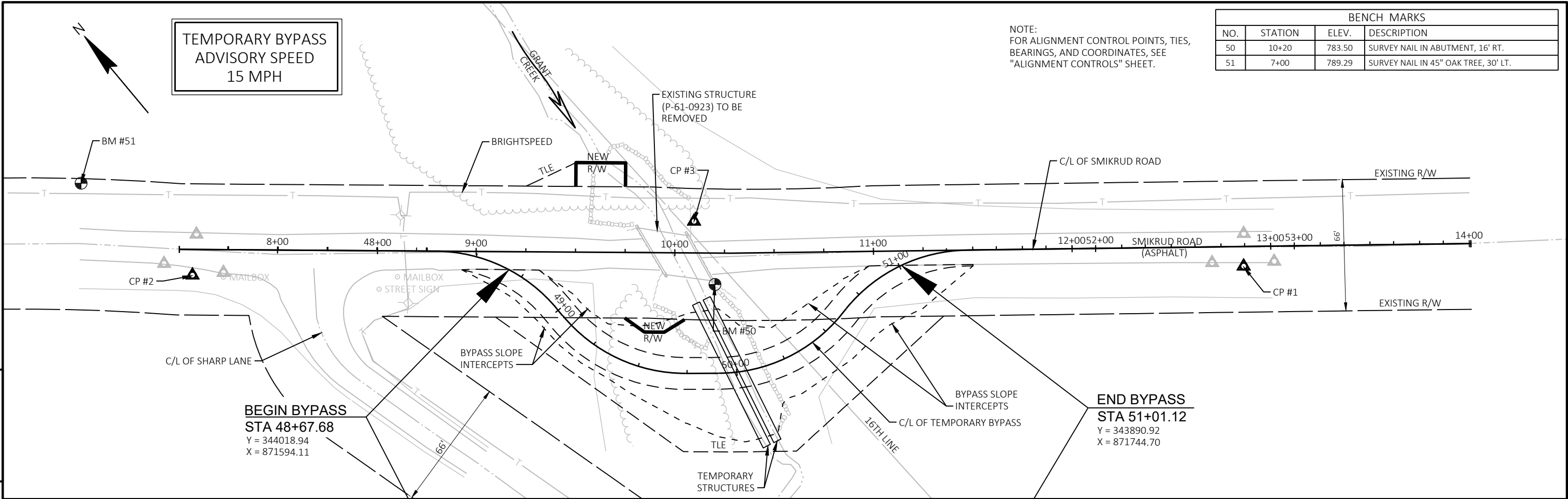
RECEIVED
MAY 7 2025

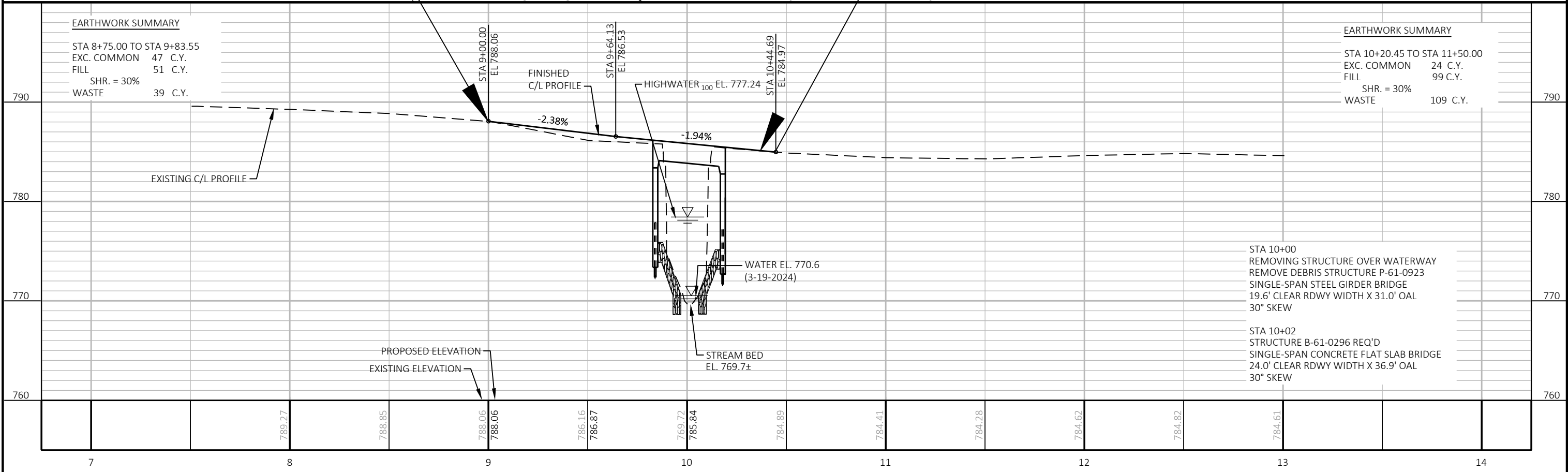
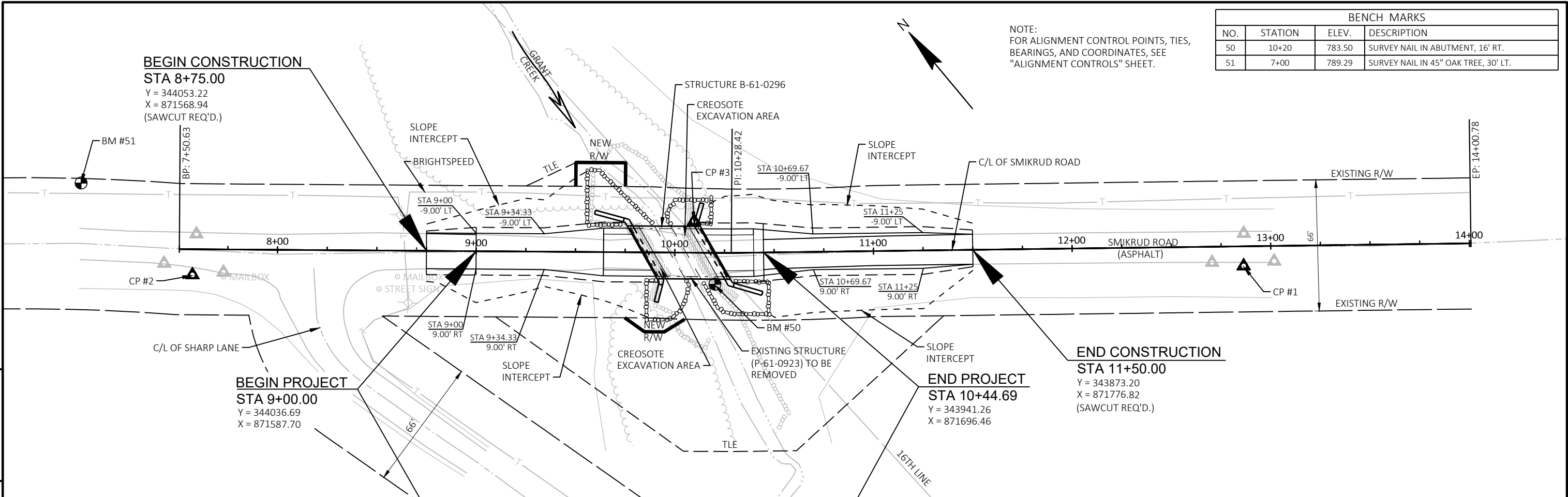
CHRISTOPHER R. BADTKE
S-3150
EAU CLAIRE WI

LAND SURVEYOR

03/05/2025
DATE

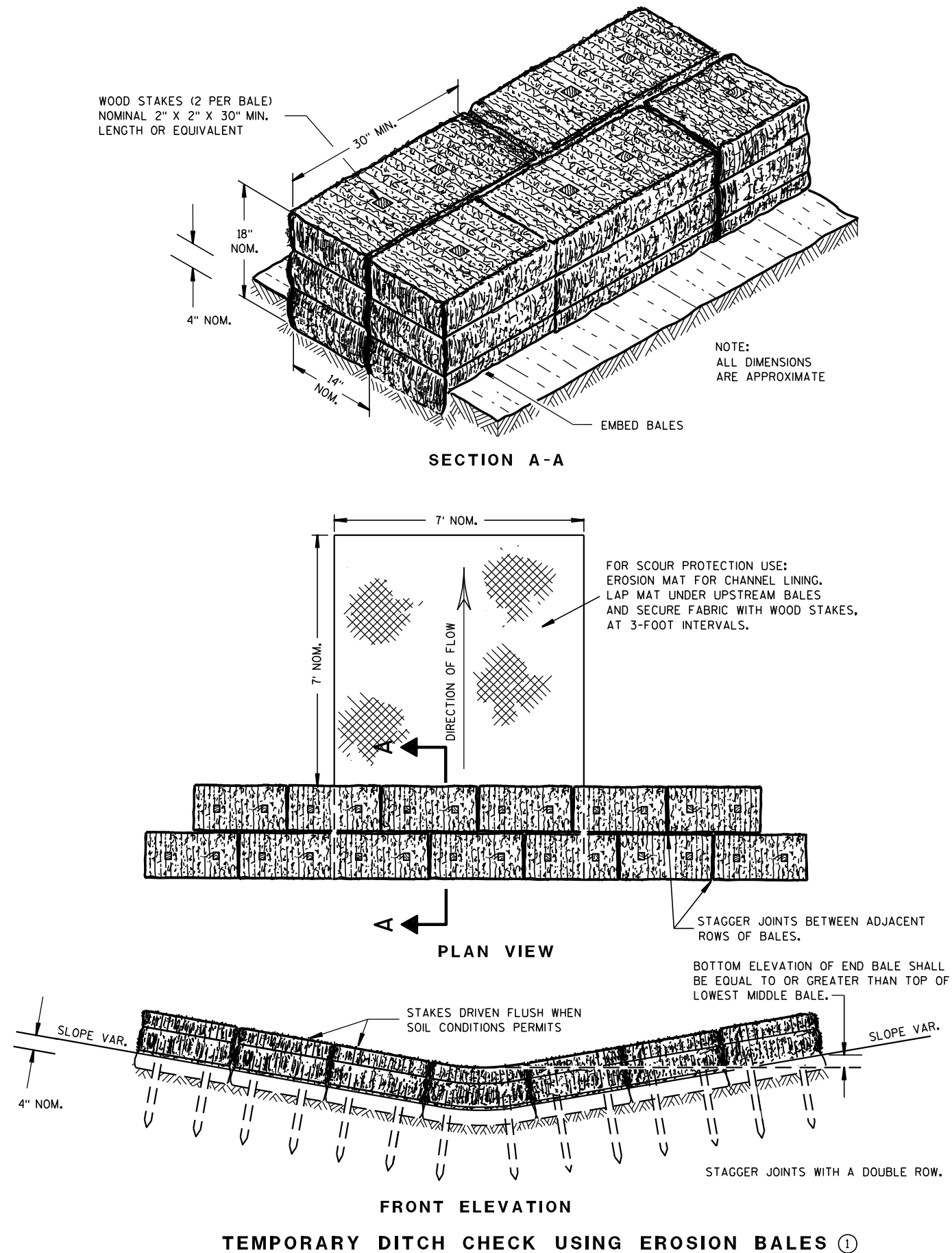
CHRISTOPHER R. BADTKE, P.L.S.
S-3150





Standard Detail Drawing List

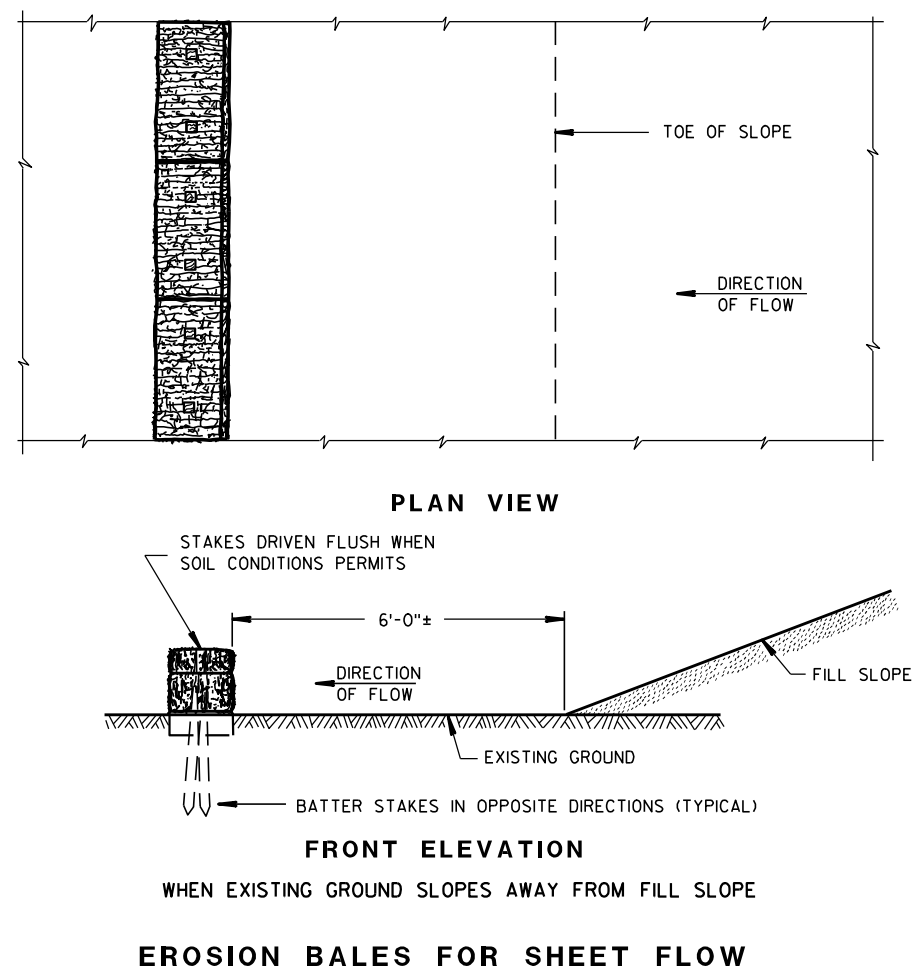
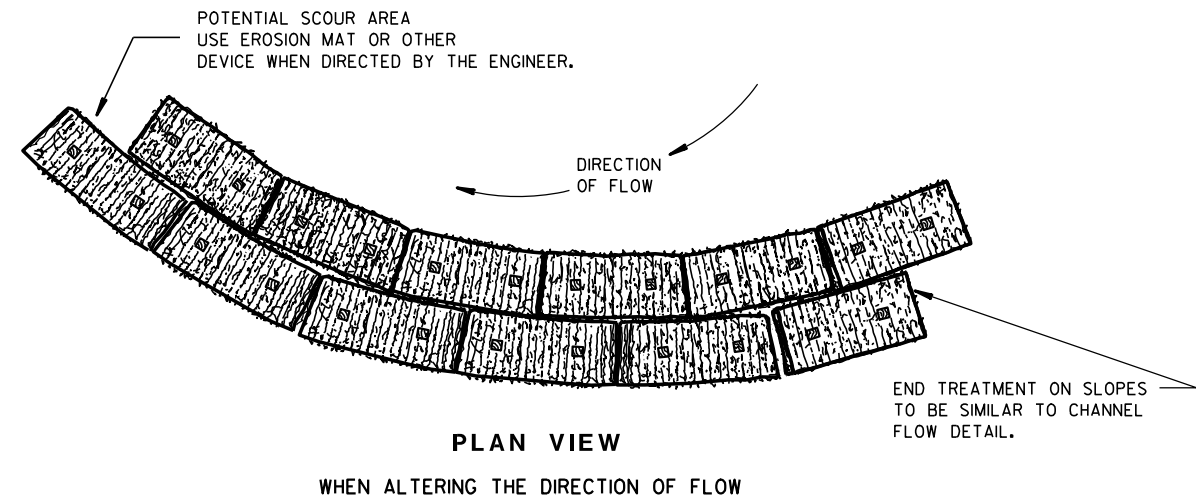
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C19-03	HMA LONGITUDINAL JOINTS
15C06-12	SIGNING & MARKING FOR TWO LANE BRIDGES
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D31-05	TRAFFIC CONTROL, TEMPORARY BYPASS ROADWAY
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL



GENERAL NOTES

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

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

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

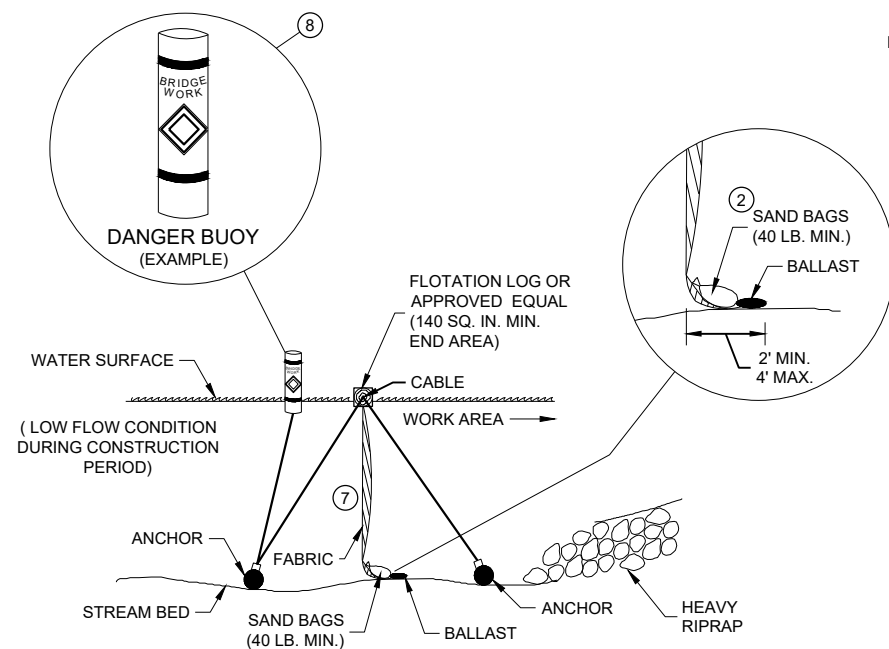
FHWA



- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

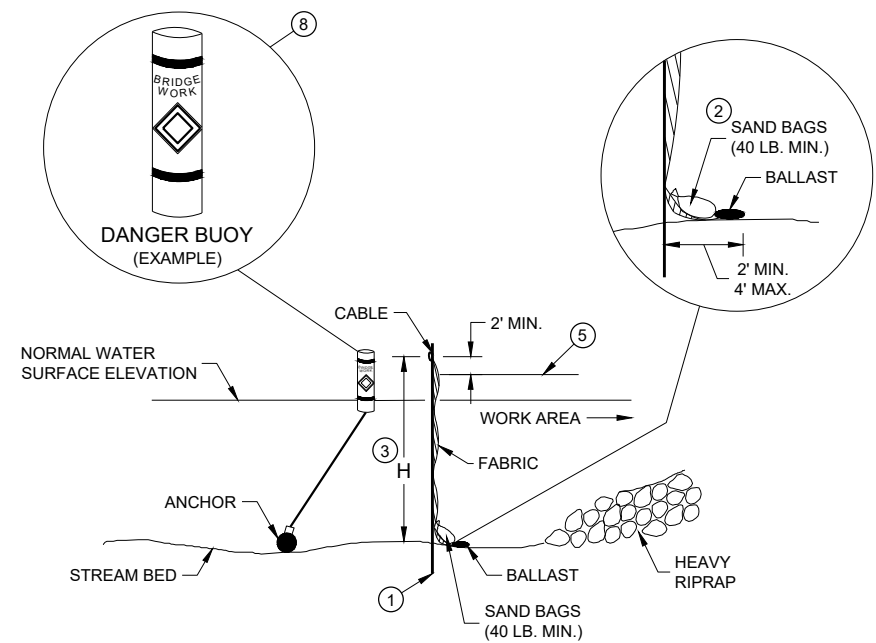


SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/s/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER



SECTION B - B

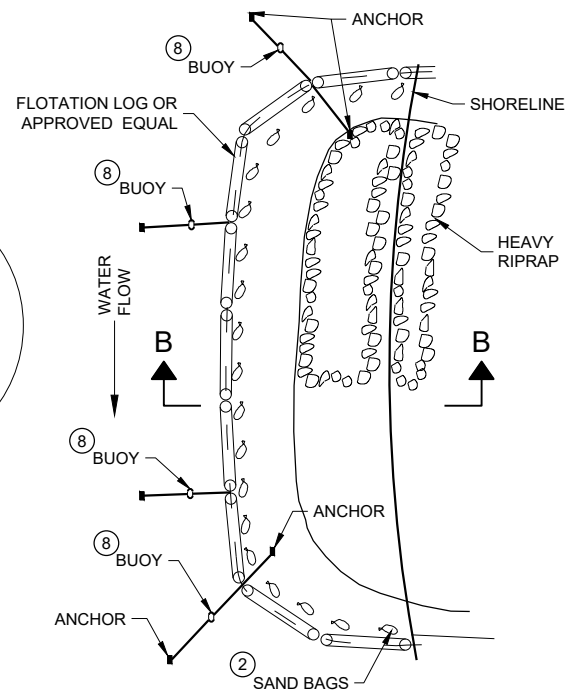
TURBIDITY BARRIER - FLOAT ALTERNATIVE CAUTION - SEE NOTE 6



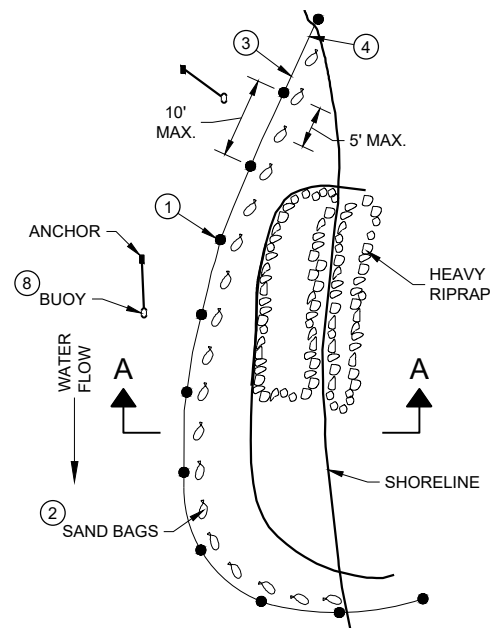
SECTION A - A

TURBIDITY BARRIER - STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS



PLAN VIEW



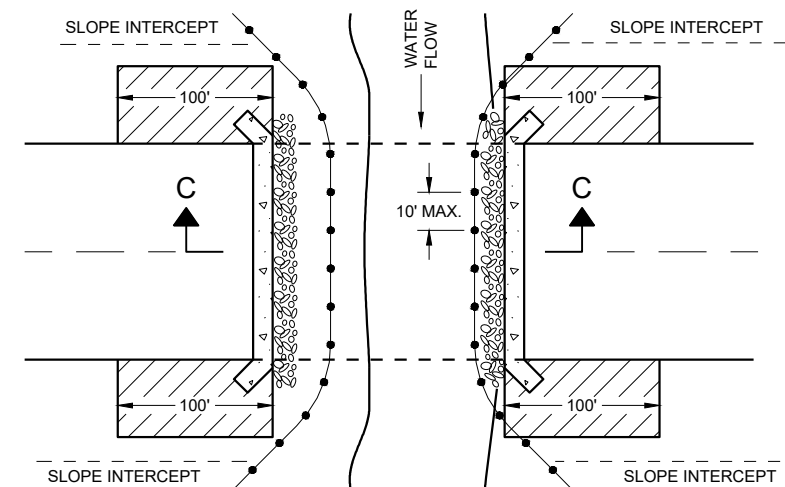
PLAN VIEW

GENERAL NOTES

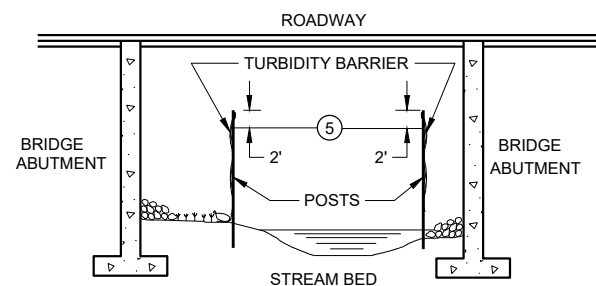
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

- 1 DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
- 2 SAND BAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
- 3 WHEN BARRIER HEIGHT "H" EXCEEDS 8 FEET, POST SPACING MAY NEED TO BE DECREASED.
- 4 IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
- 5 ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
- 6 FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.
- 7 ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
- 8 USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

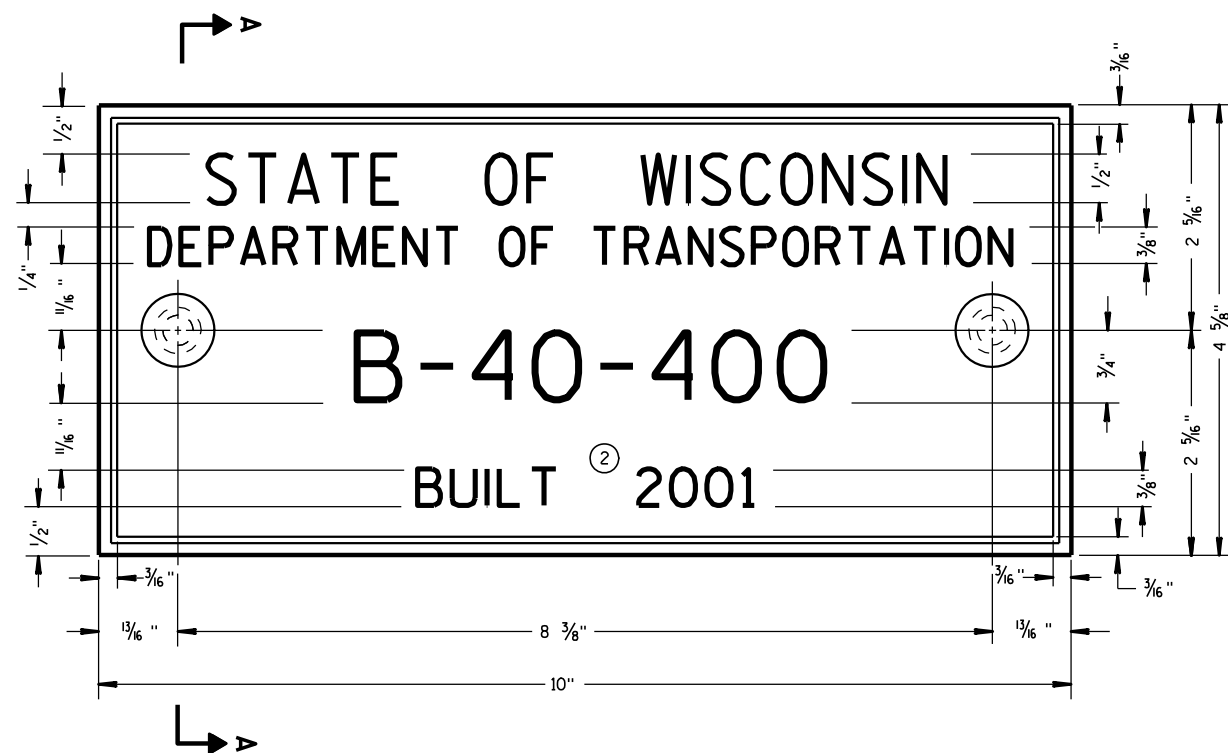
APPROVED

6/4/02

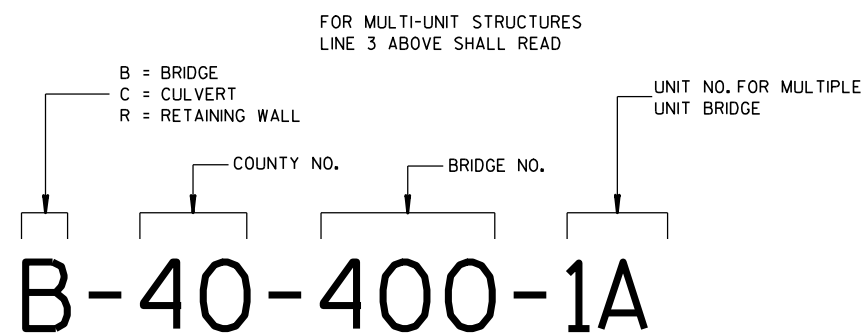
DATE

FHWA

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT
ENGINEER



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



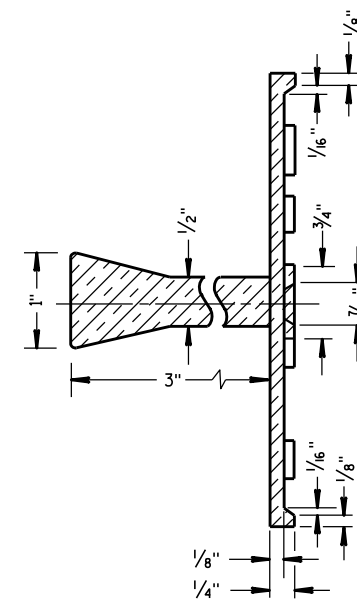
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

GENERAL NOTES

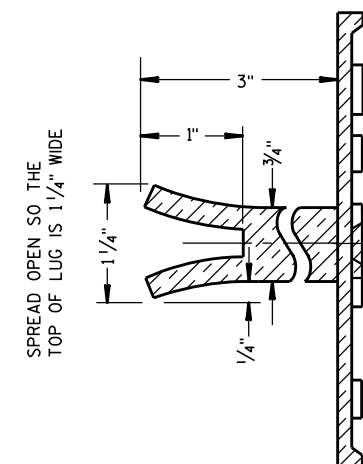
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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

- ① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ② REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.

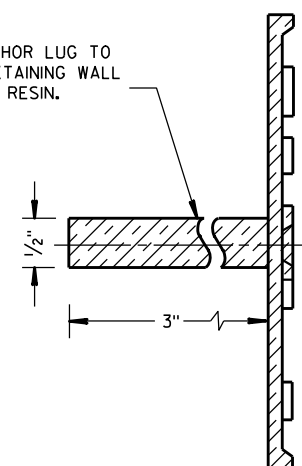


SECTION A-A



ALTERNATE LUG

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



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

**NAME PLATE
(STRUCTURES)**

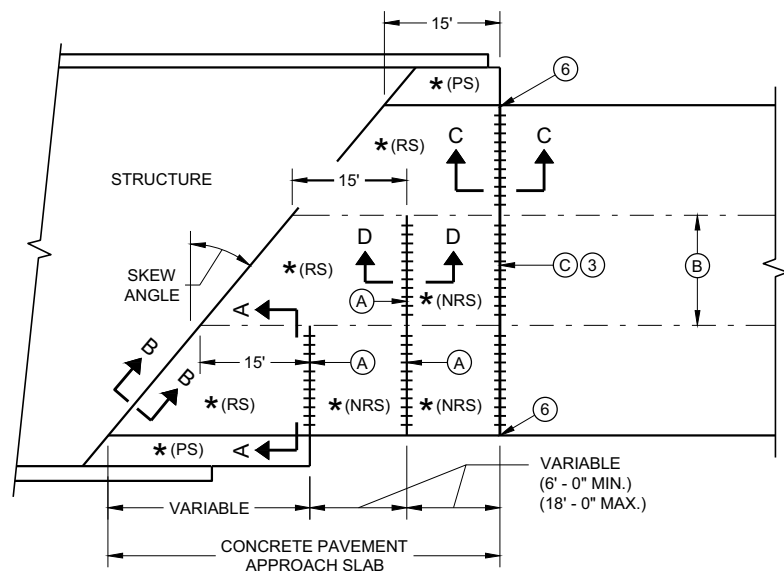
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

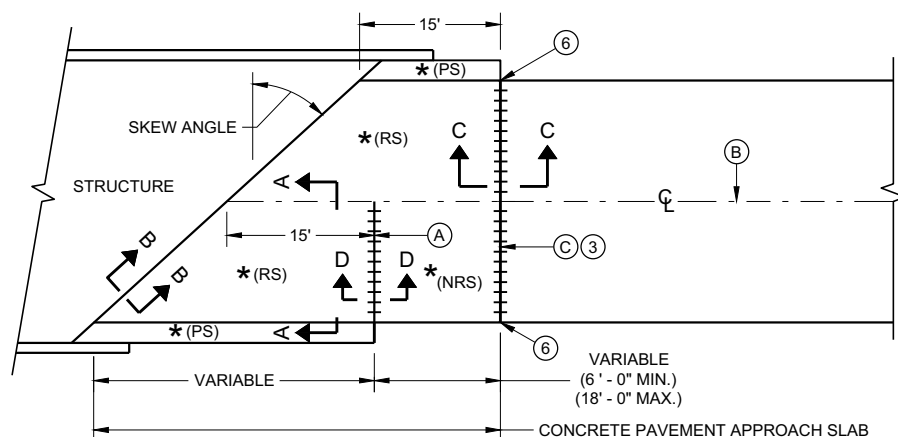
3/26/10
DATE

FHWA

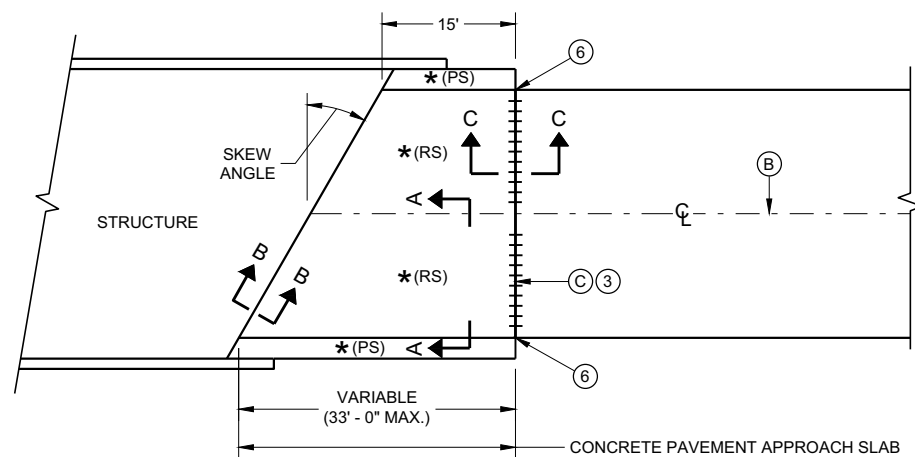
/S/ Scot Becker
CHIEF STRUCTURAL DEVELOPMENT ENGINEER



**SKewed APPROACH
(PAVEMENT MORE THAN TWO LANES)**



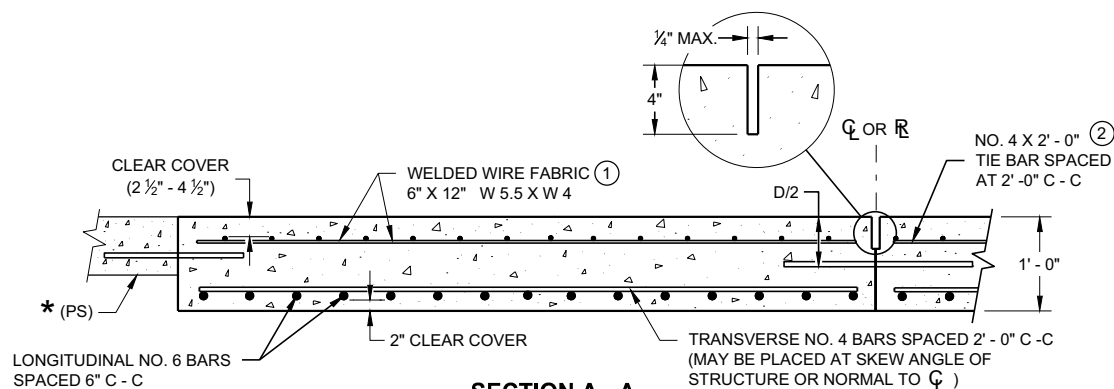
**SKews > 20°
(PAVEMENT WIDTH ≤ 30')**



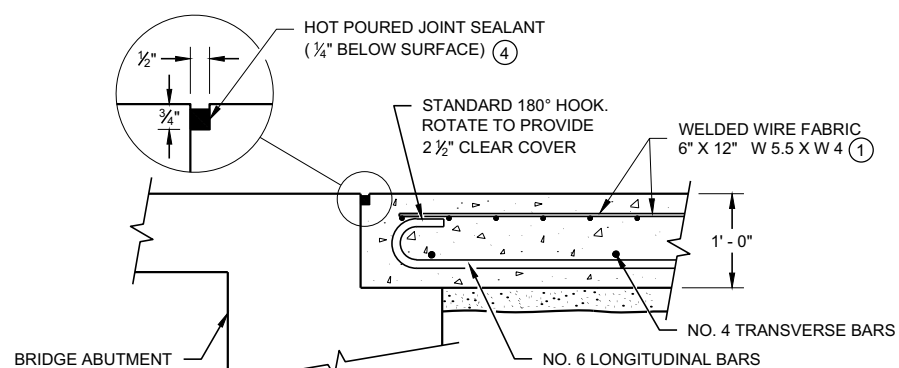
**SKews ≤ 20°
(PAVEMENT WIDTH ≤ 30')**

APPROACH SLAB AND ADJACENT PAVEMENT

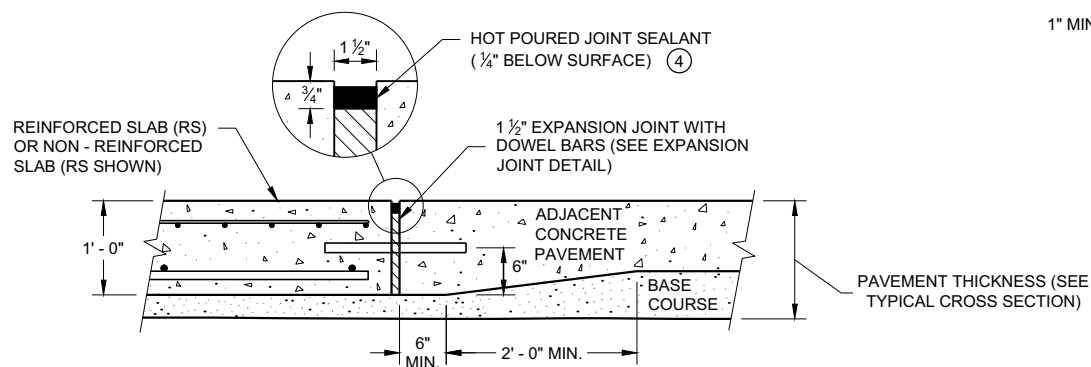
- * (RS) = REINFORCED CONCRETE SLAB
- * (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
- * (NRS) = NON - REINFORCED CONCRETE SLAB
- *** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



**SECTION A - A
REINFORCEMENT POSITIONING DETAIL**



**SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT**



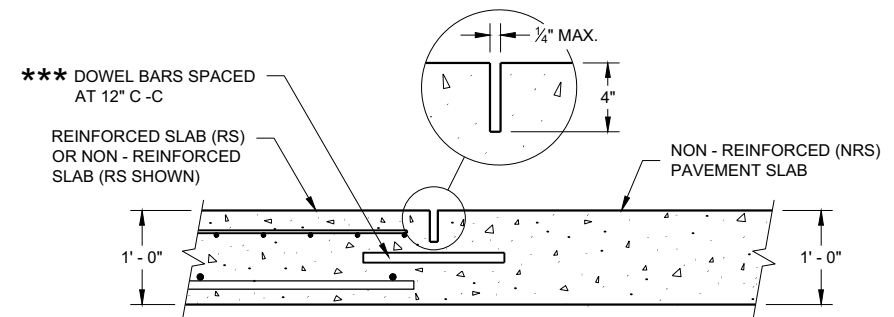
**SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT**

GENERAL NOTES

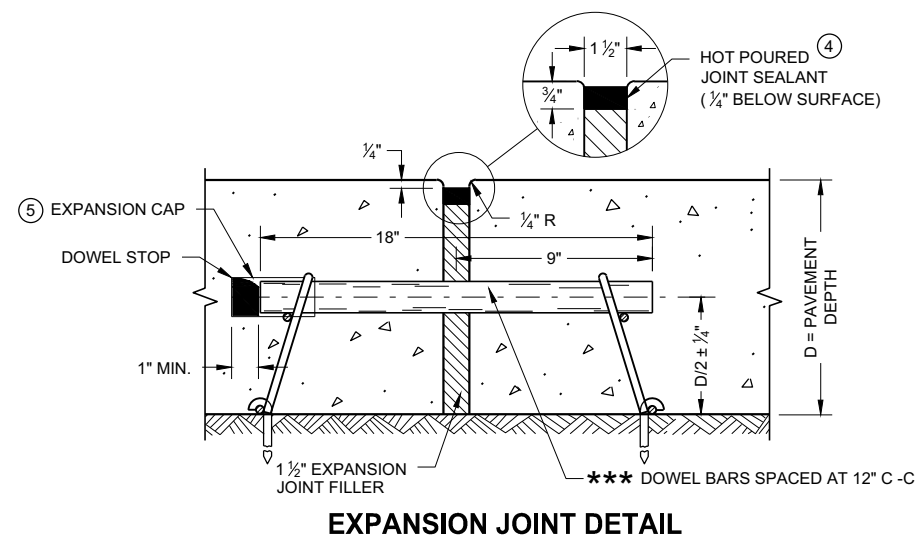
THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

- ① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0" C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.
- ② THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.
- ③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.
- ④ USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
- ⑤ PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.
- ⑥ EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.
- (A) STANDARD CONTRACTION JOINT NORMAL TO $\mathcal{C}$ OR $\mathcal{R}$.
- (B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.
- (C) 1 1/2" EXPANSION JOINT WITH DOWEL BARS NORMAL TO $\mathcal{C}$ OR $\mathcal{R}$.



**SECTION D - D
CONTRACTION JOINT**



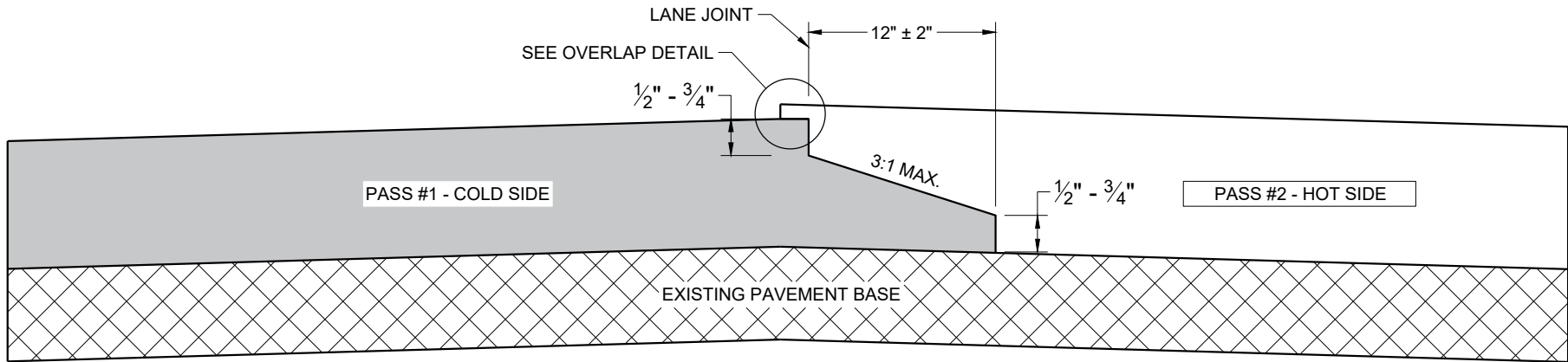
EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

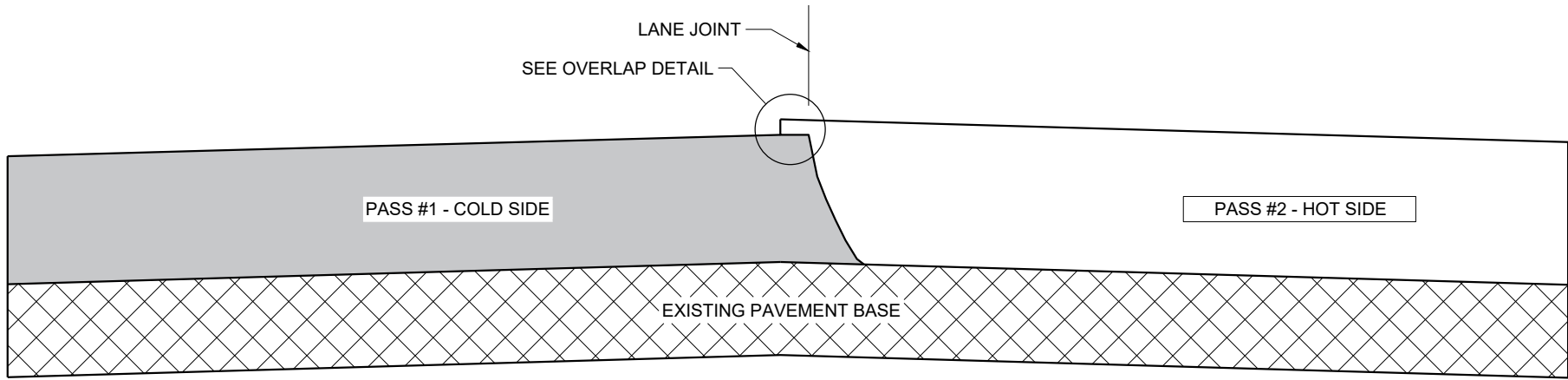
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPERVISOR

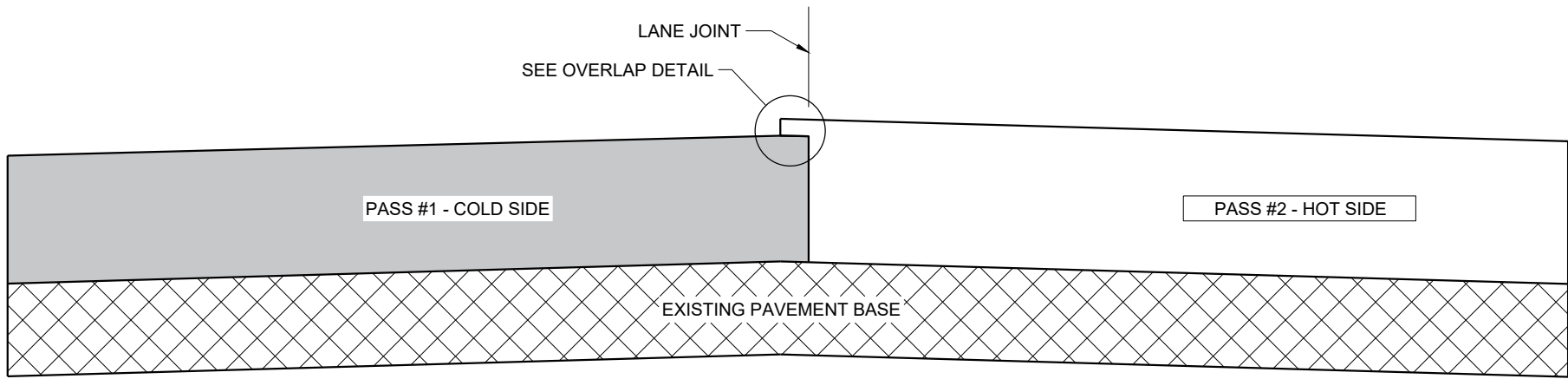
FHWA



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

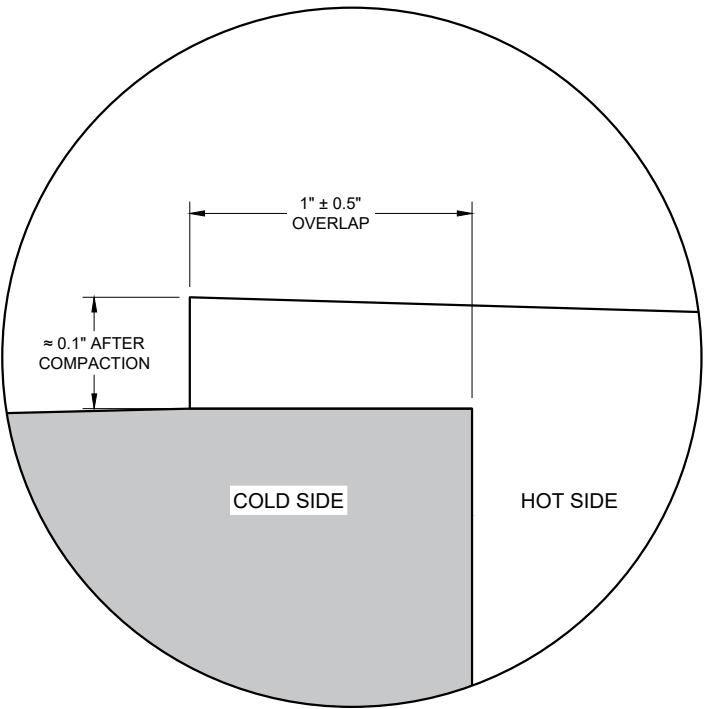
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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.

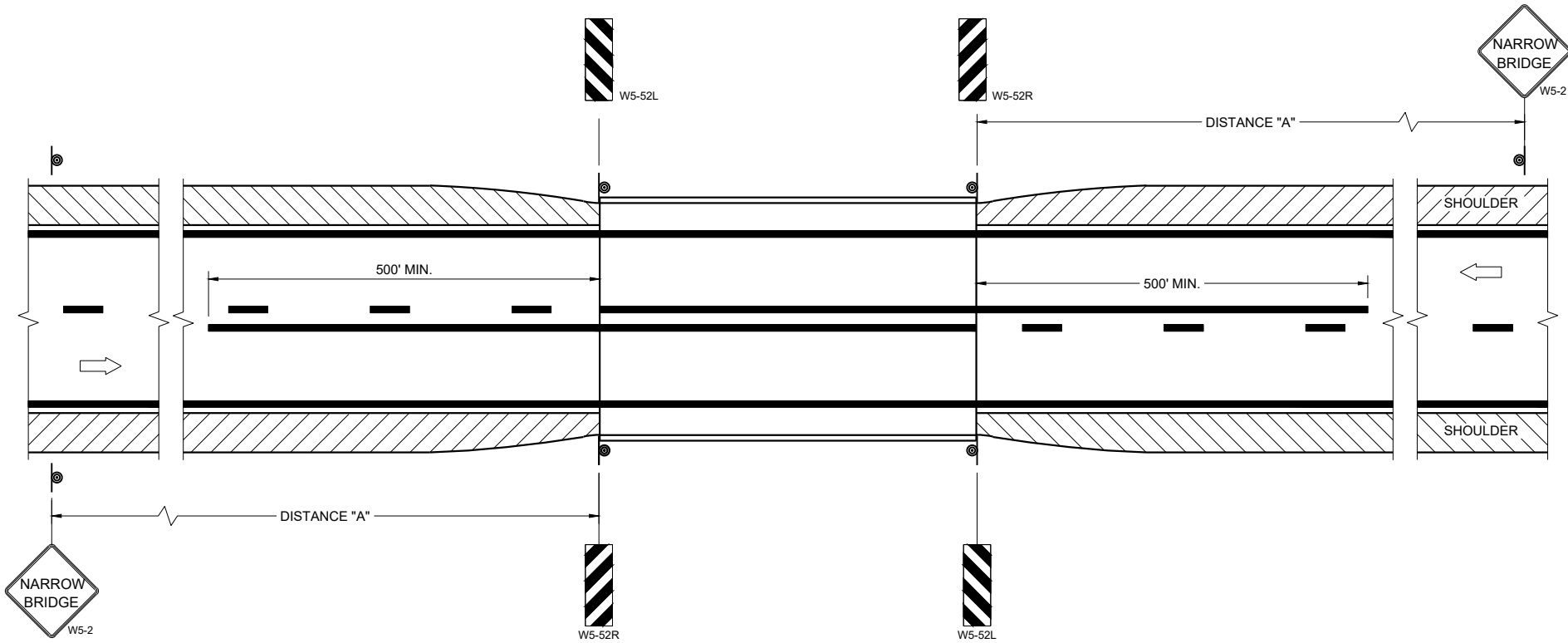


OVERLAP DETAIL (TYPICAL)

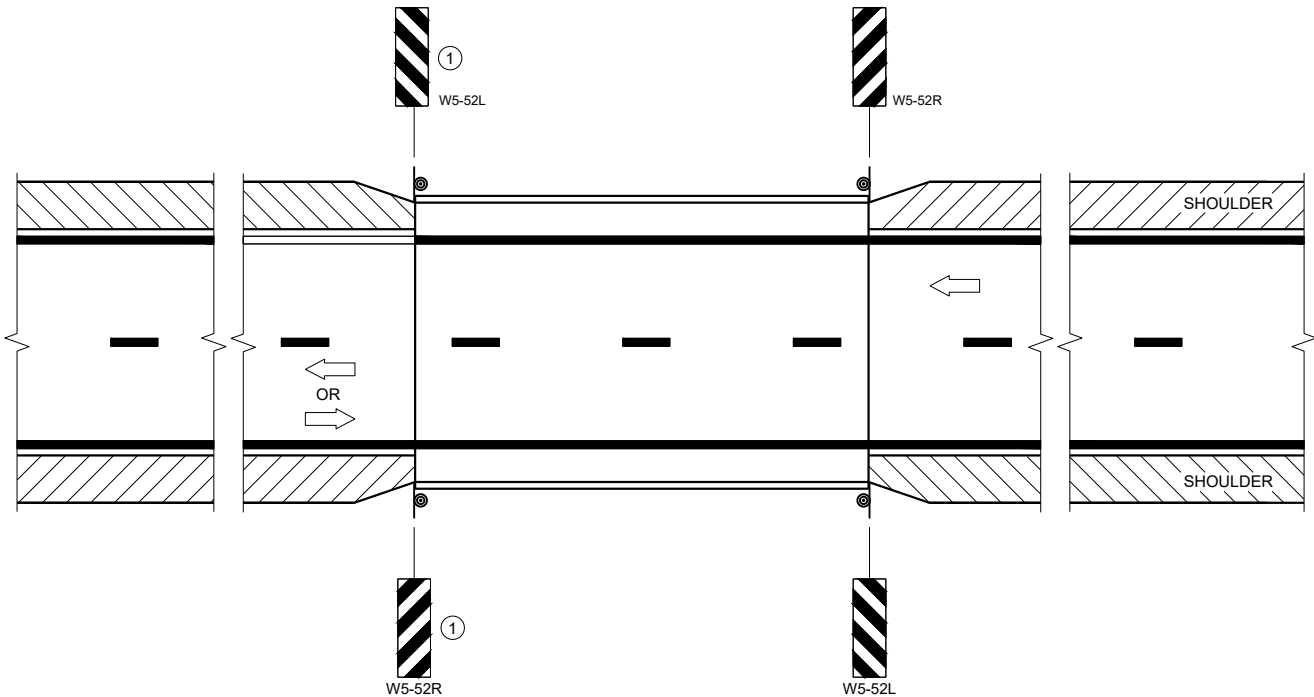
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



SITUATION 1
WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.



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

GENERAL NOTES

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

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

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

ON BRIDGE ONLY PROJECTS, PLACE 300 FEET OF EDGELINE.

OMIT EDGELINES ON ROADWAYS WITHOUT EXISTING EDGELINES.

① OMIT ON ONE-WAY TRAVELED WAYS.

LEGEND

⊙ SIGN ON PERMANENT SUPPORT

➡ DIRECTION OF TRAFFIC

DISTANCE TABLE

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

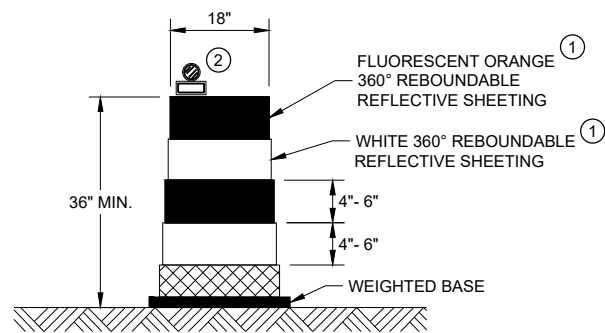
**SIGNING AND MARKING
FOR TWO LANE BRIDGES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

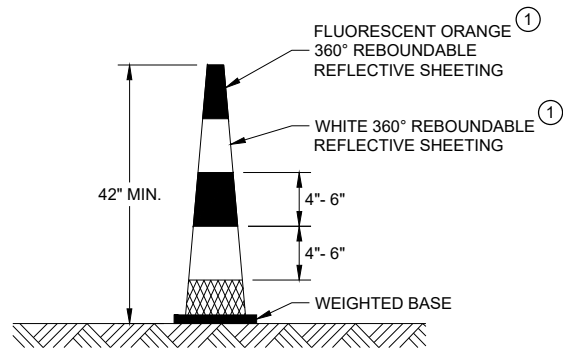
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA



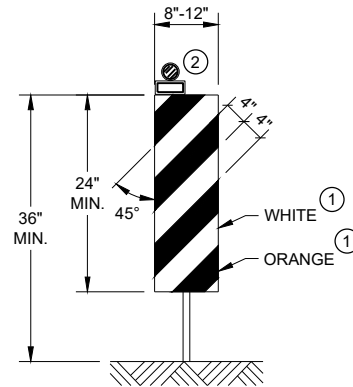
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



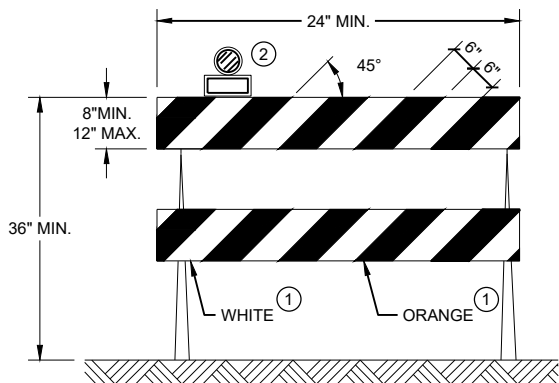
42" CONE

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



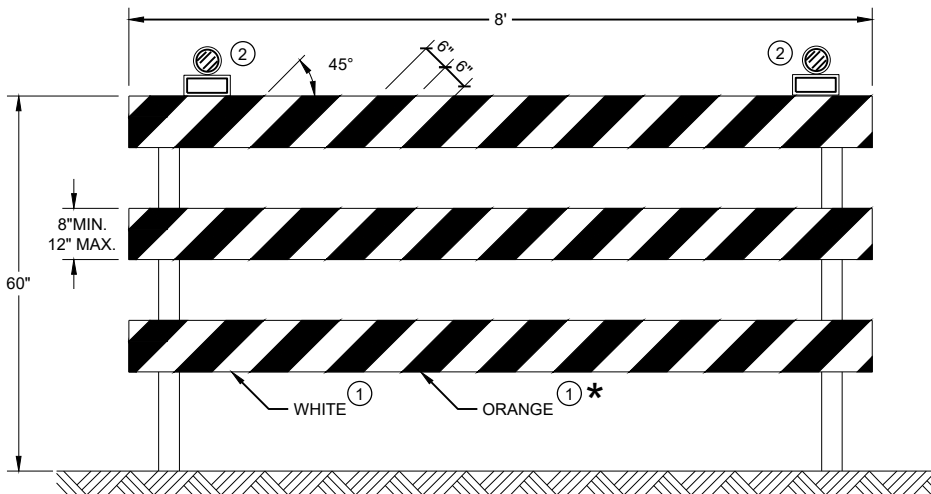
VERTICAL PANEL

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



TYPE 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.

GENERAL NOTES

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
-  TEMPORARY DELINEATOR (WHITE, SINGLE DELINEATOR)
-  TYPE III BARRICADE
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  TEMPORARY RAISED PAVEMENT MARKERS (TWO WAY YELLOW)
-  TEMPORARY STEEL PLATE BEAM GUARD AND END TREATMENT
-  DIRECTION OF TRAFFIC
-  REMOVE PAVEMENT MARKINGS
-  WORK AREA

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

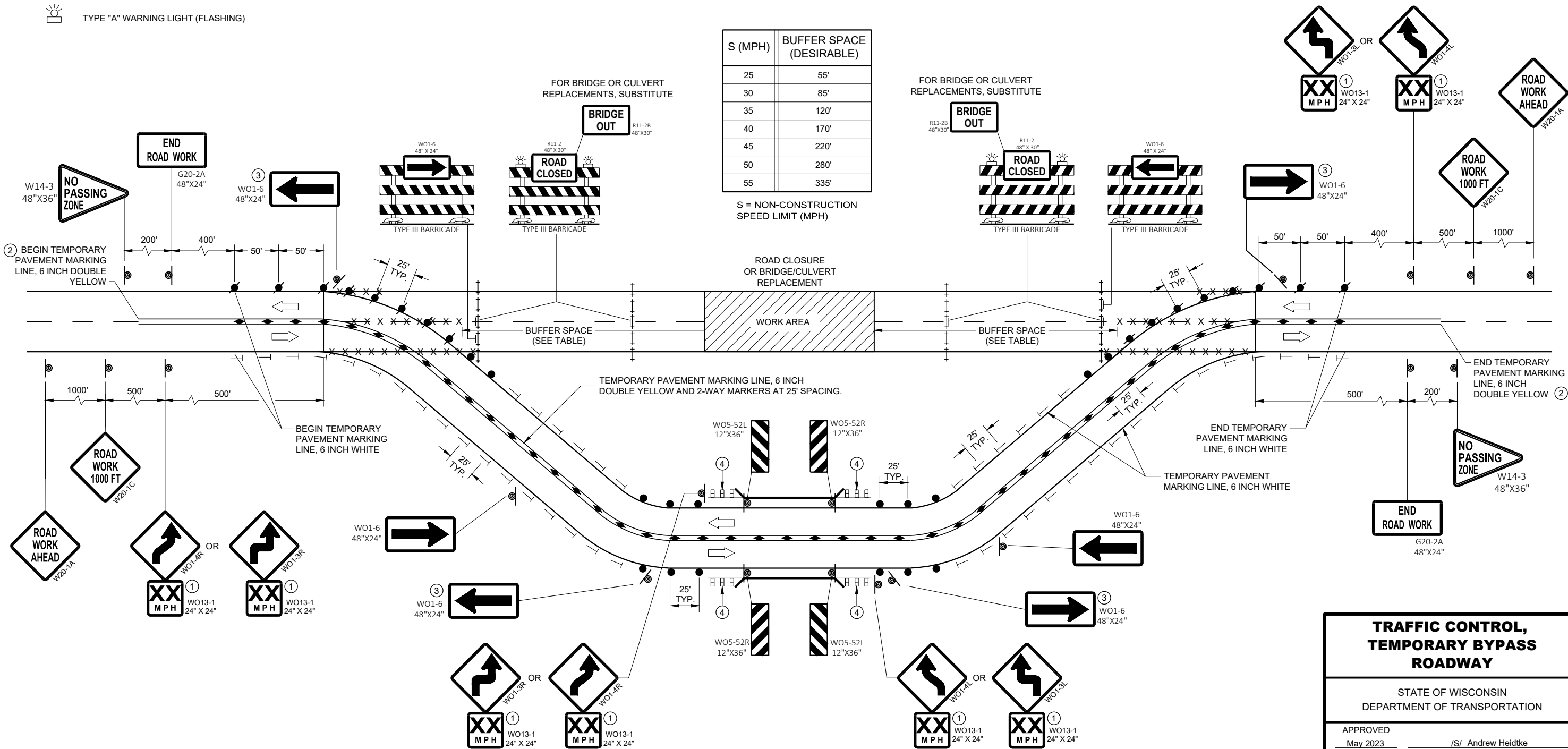
THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL ON STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

EQUIPMENT, VEHICLES, OR MATERIAL SHOULD NOT BE STORED IN BUFFER SPACE.

- IF ADVISORY SPEED IS GREATER THAN 30 MPH, USE THE WO1-4 SIGN. IF ADVISORY SPEED IS 30 MPH OR LESS, USE THE WO1-3 SIGN.
- WHEN THE DISTANCE TO / FROM THE NEXT CLOSEST NO-PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.
- OMIT THESE WO1-6 SIGNS IF THE ADVISORY SPEED OF THE CURVE IS GREATER THAN 30 MPH.
- TEMPORARY STEEL PLATE BEAM GUARD AND END TREATMENT WHEN INCLUDED IN THE CONTRACT. FOR LAYOUT, SEE DETAILS ELSEWHERE IN THE PLAN.



TRAFFIC CONTROL, TEMPORARY BYPASS ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

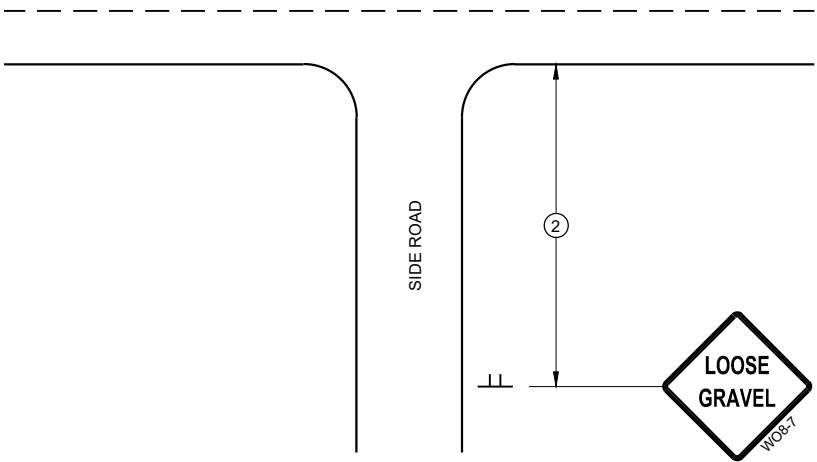
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

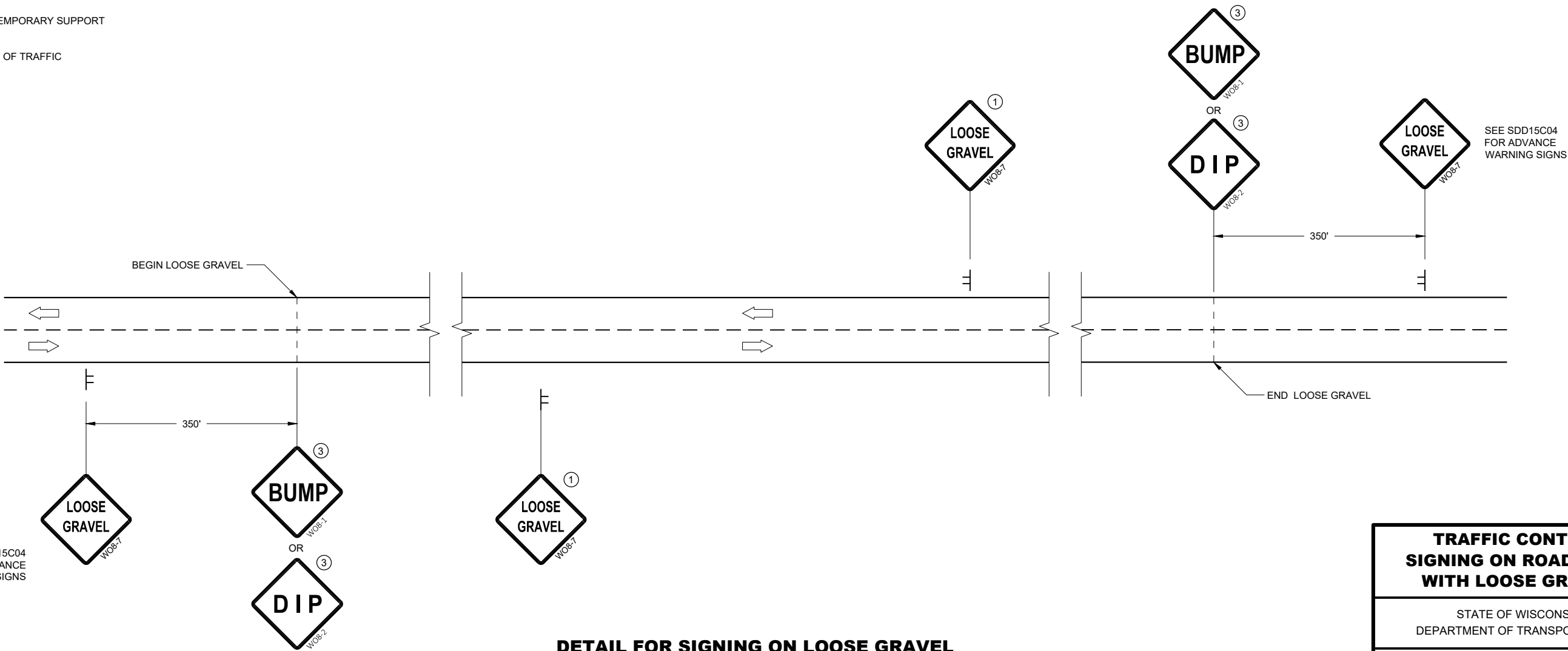
- 1 PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- 2 PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.
- 3 ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL
OR CHIP SEALED SURFACES

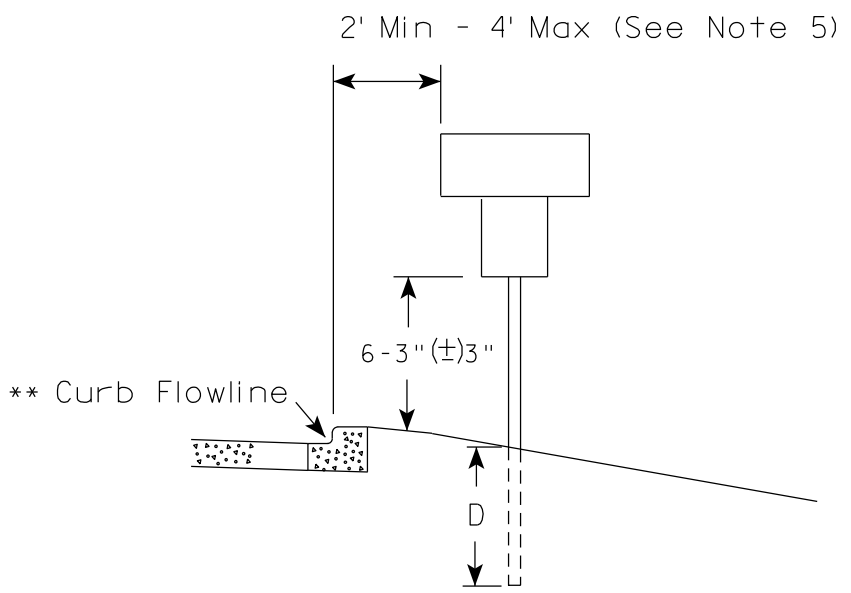
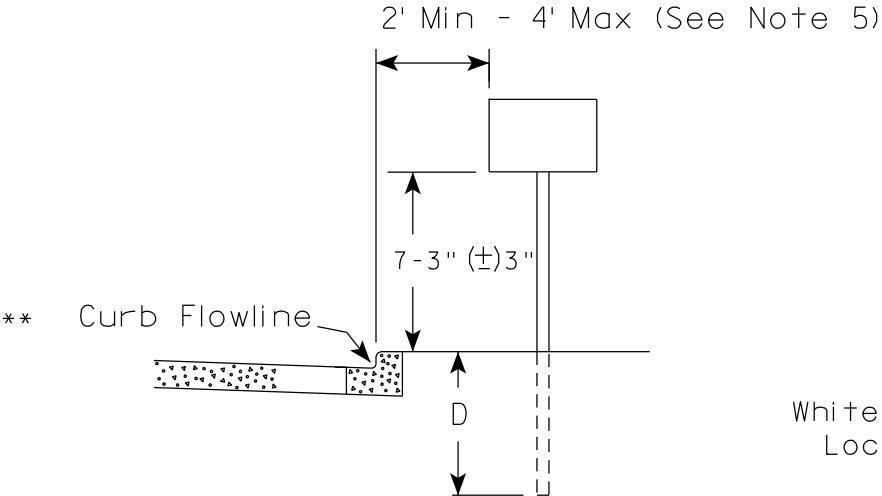
TRAFFIC CONTROL
SIGNING ON ROADWAYS
WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

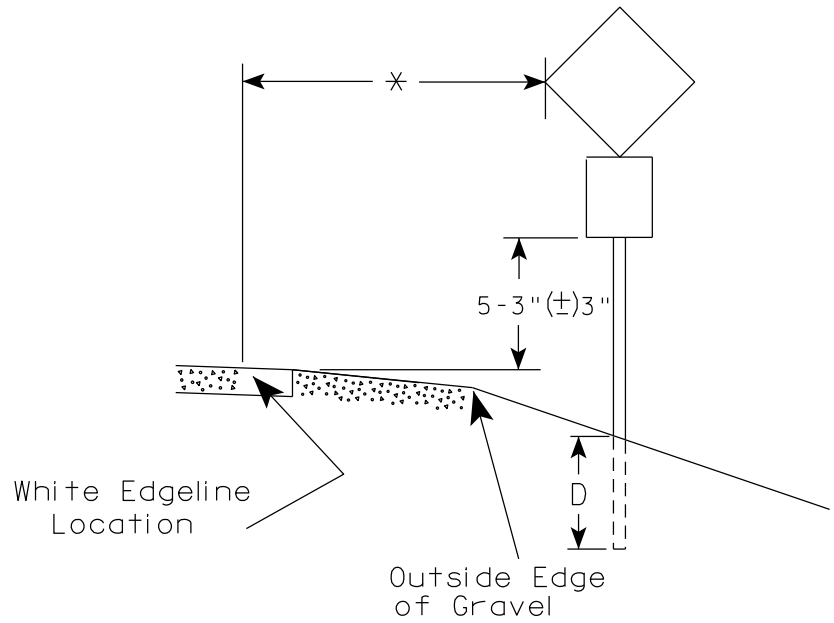
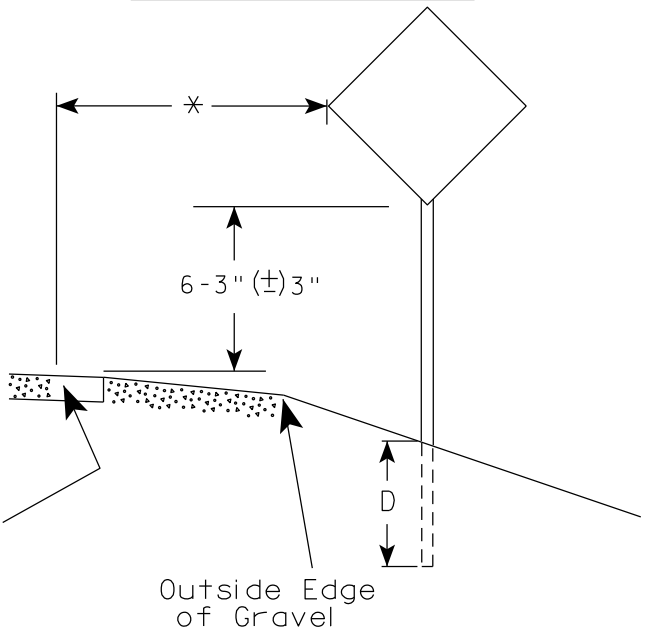
APPROVED
February 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

URBAN AREA



RURAL AREA (See Note 2)



POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the 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.

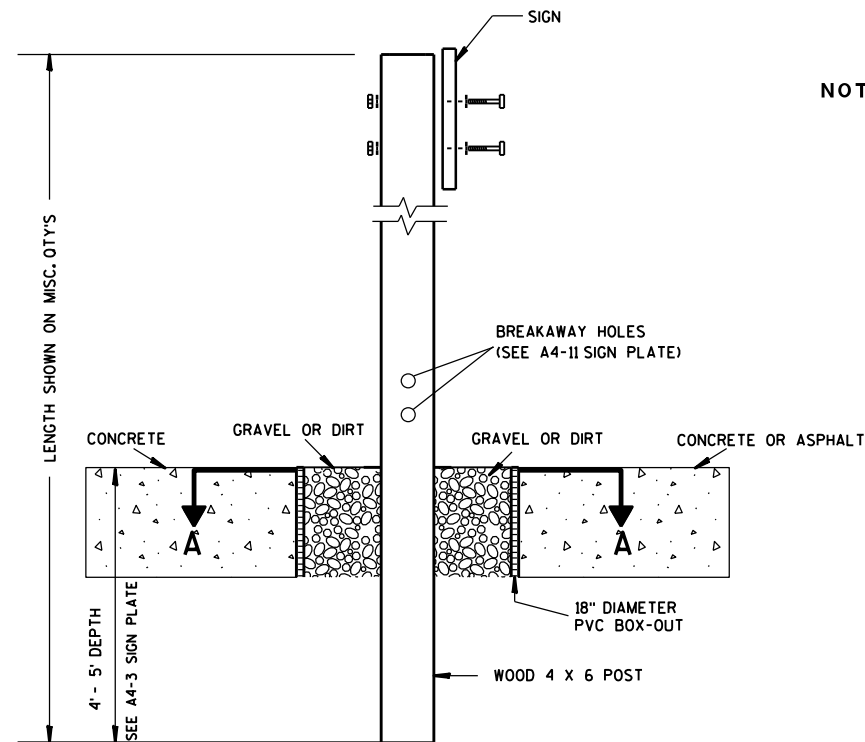
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

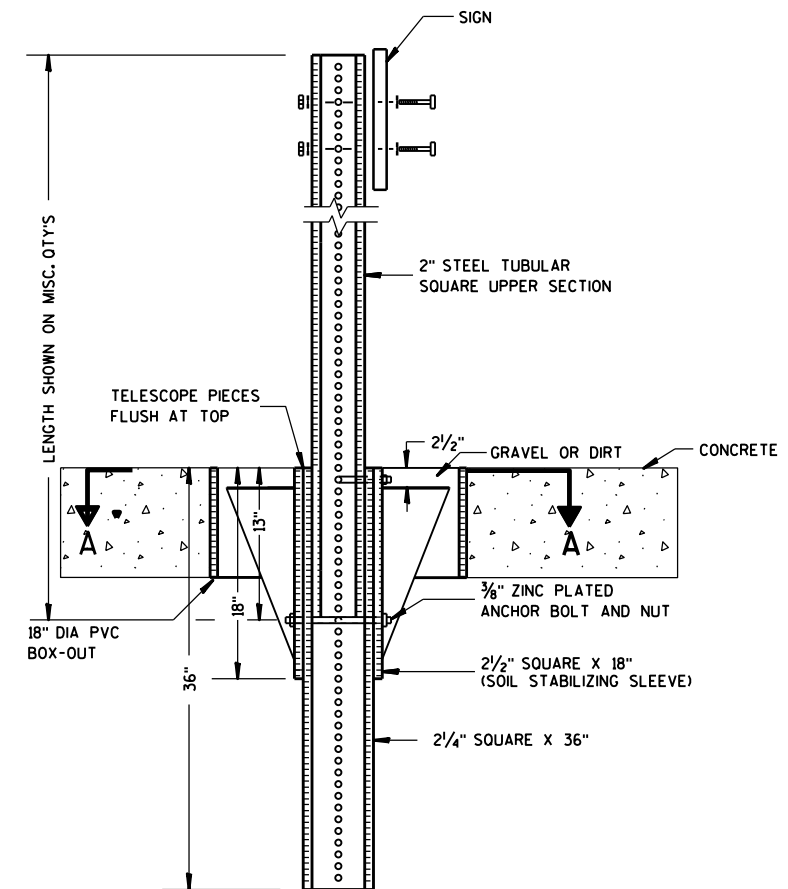
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

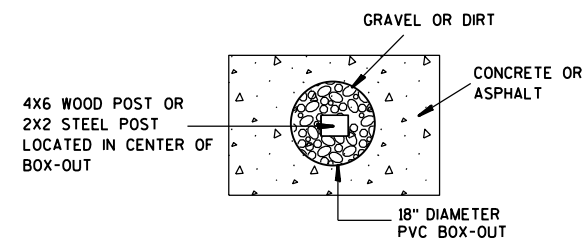
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

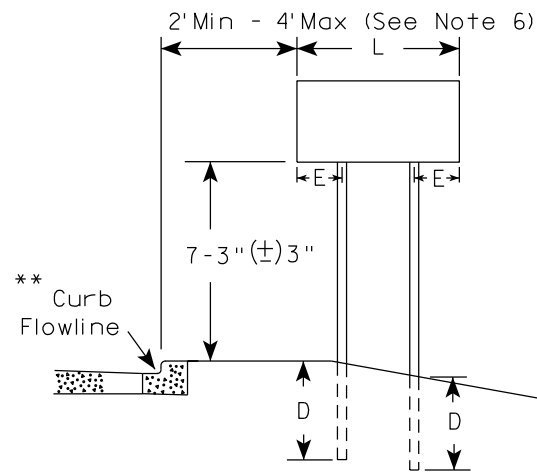
HWY:

COUNTY:

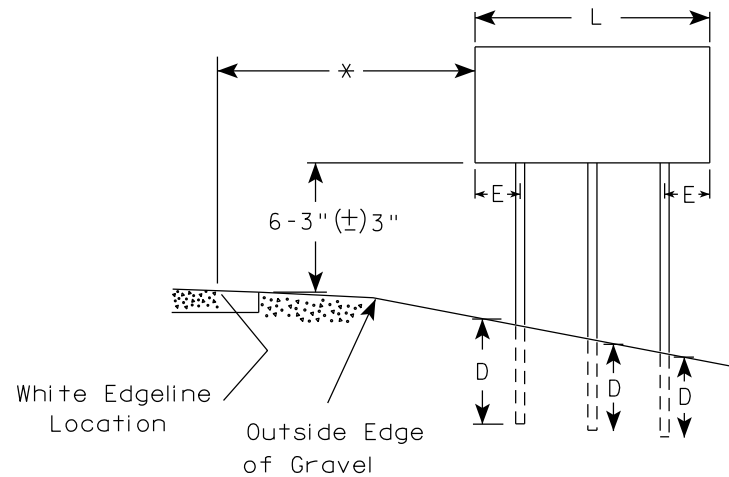
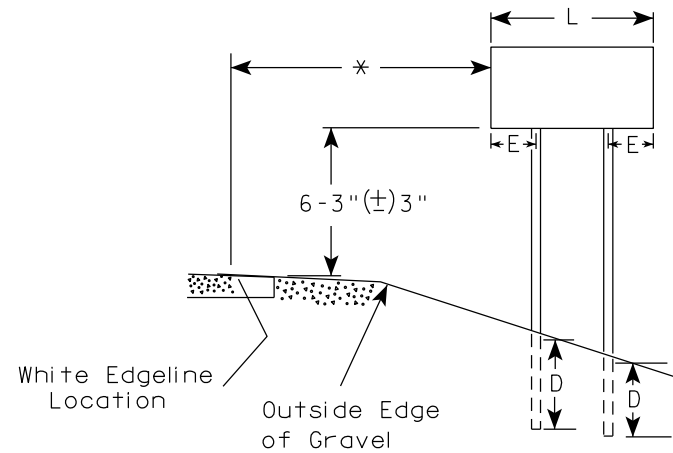
SHEET NO:

E

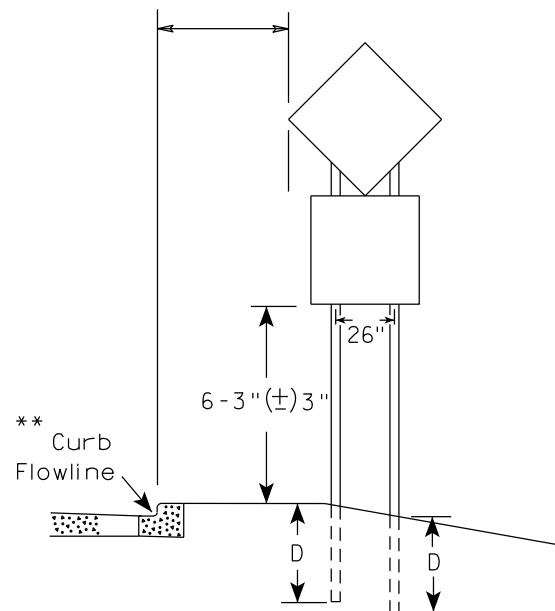
URBAN AREA



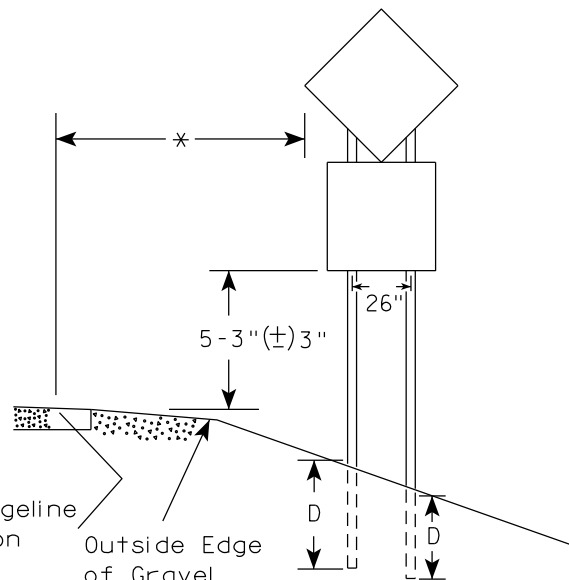
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 12/6/23	PLATE NO. A4-4.16

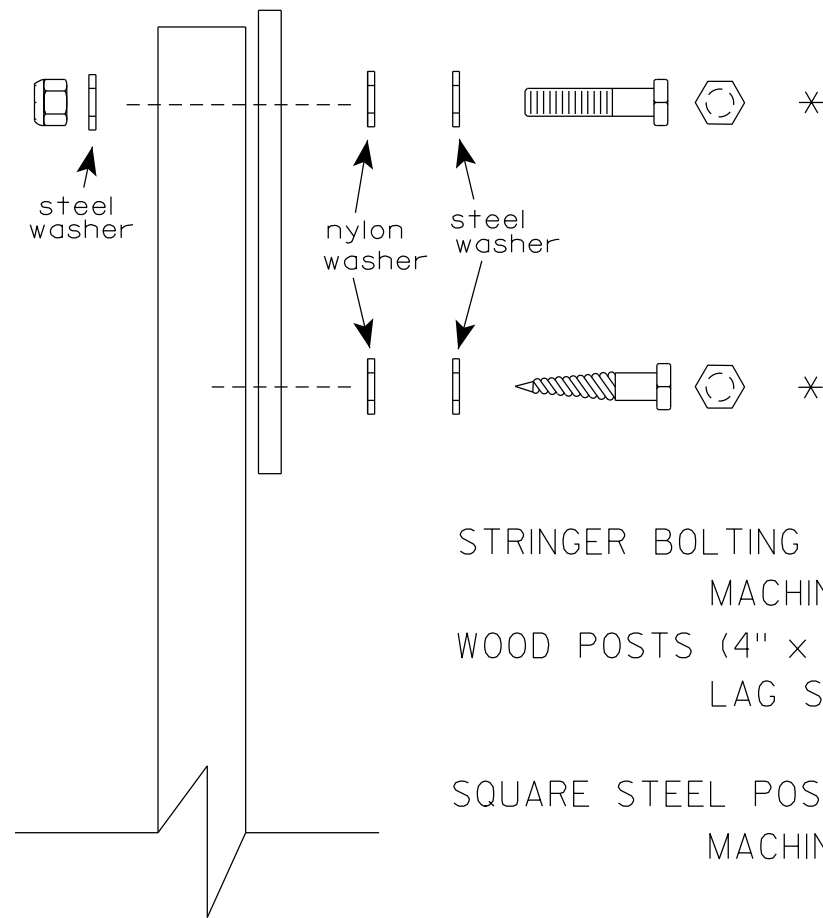
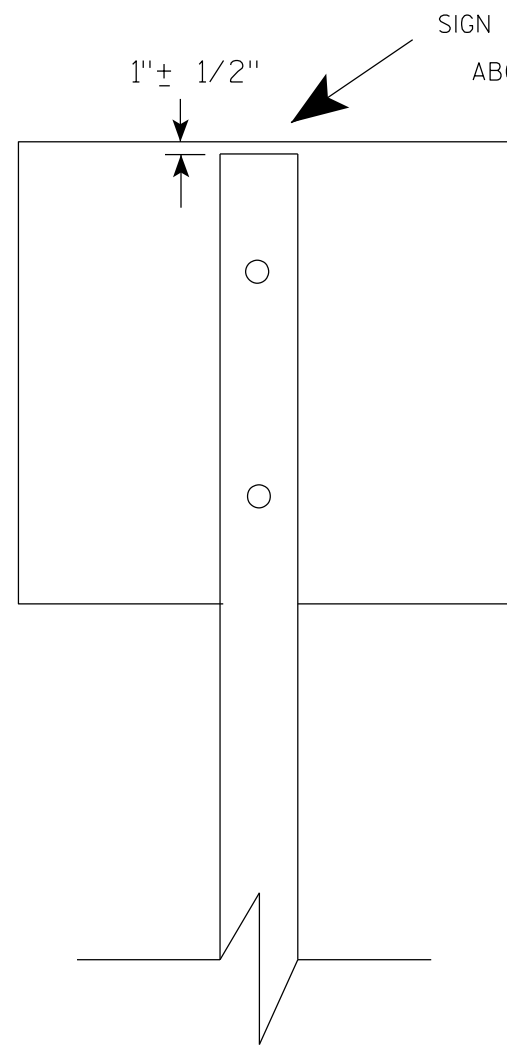
GENERAL NOTES

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

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

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

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



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

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

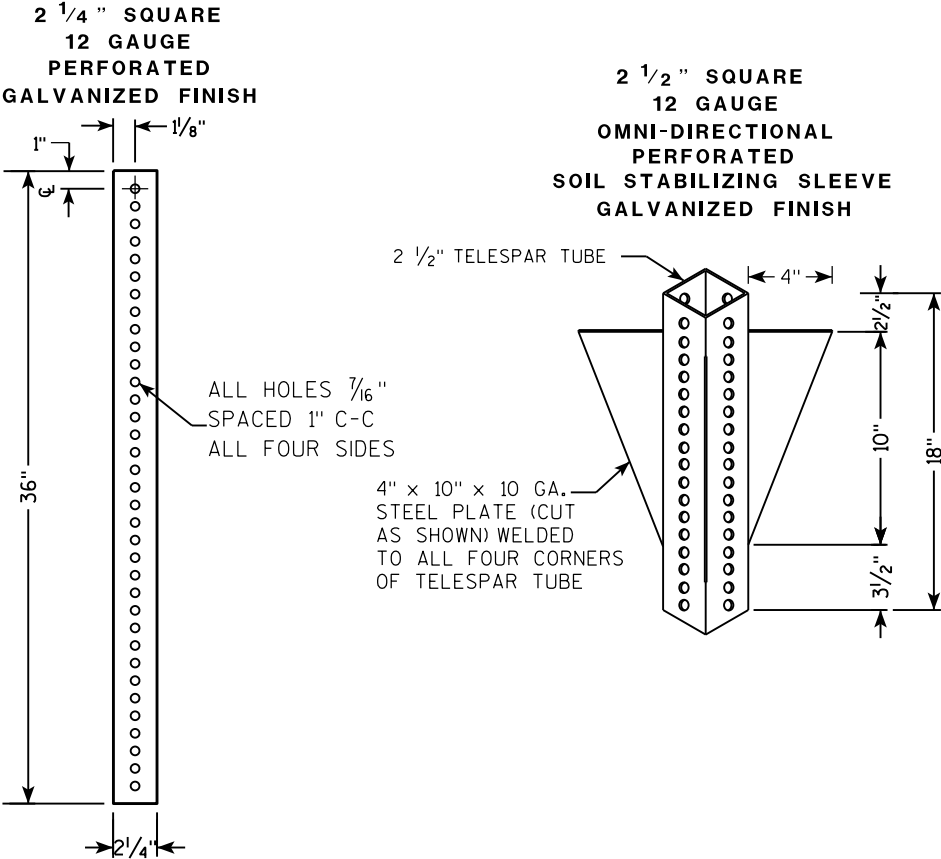
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

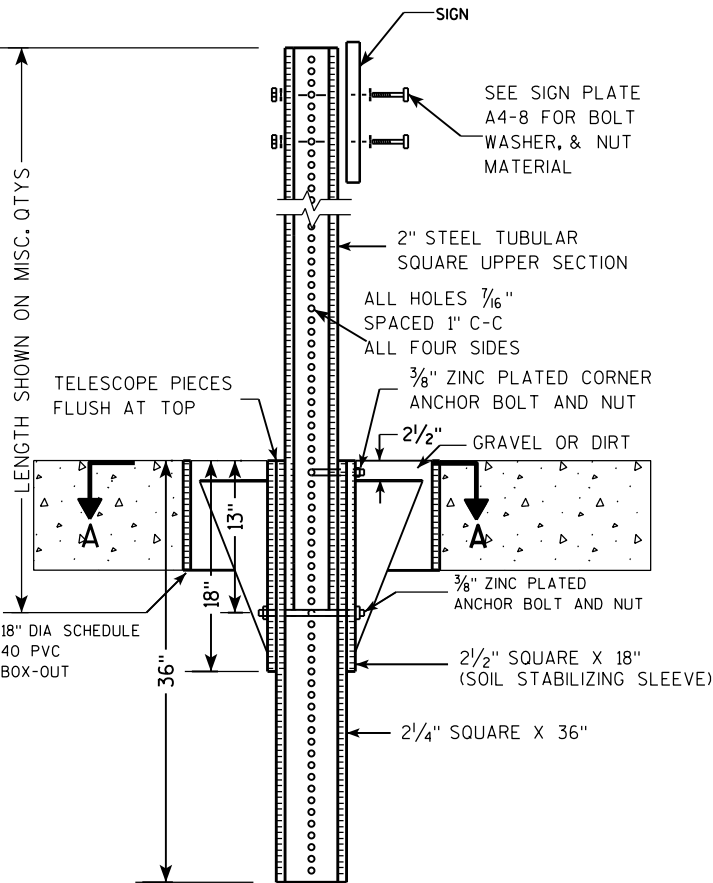
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

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

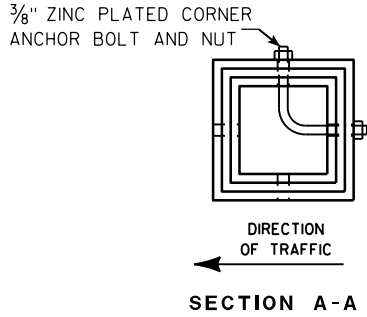
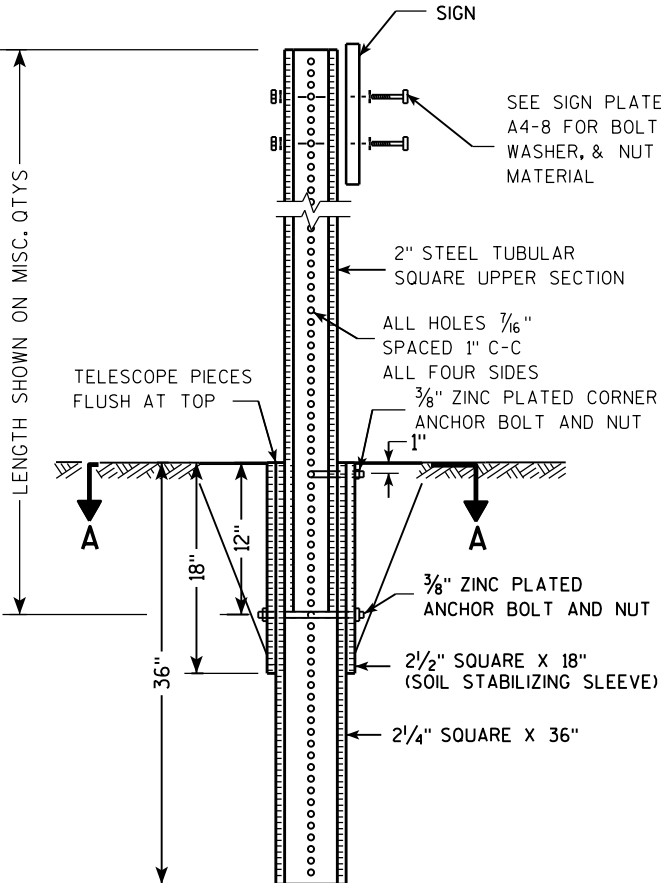
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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).

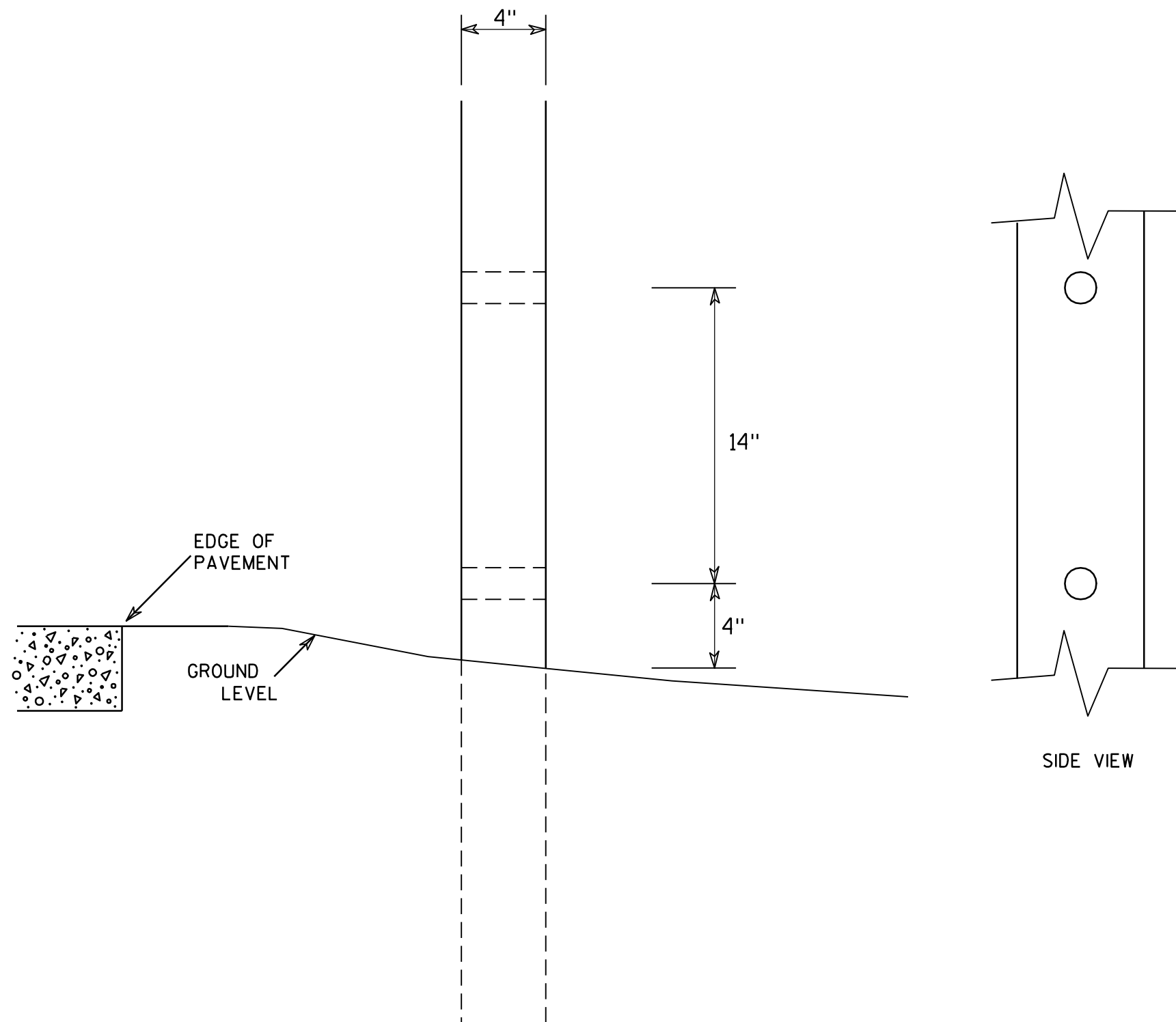
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

7



GENERAL NOTES

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

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

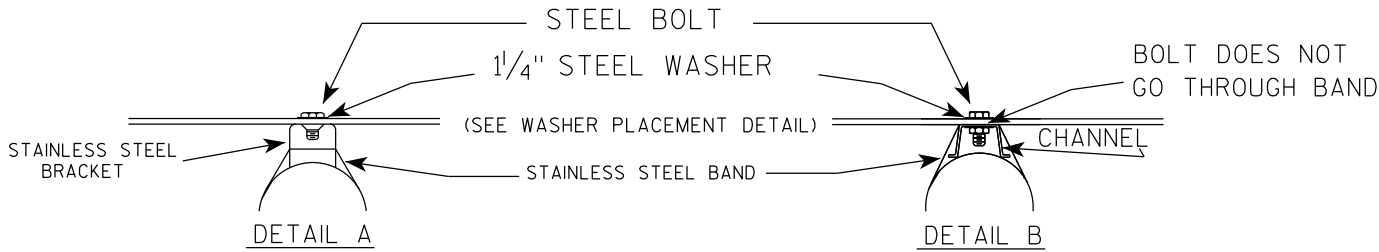
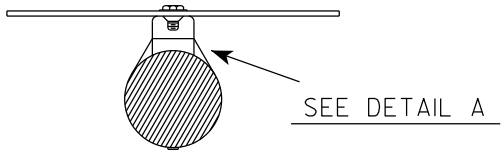
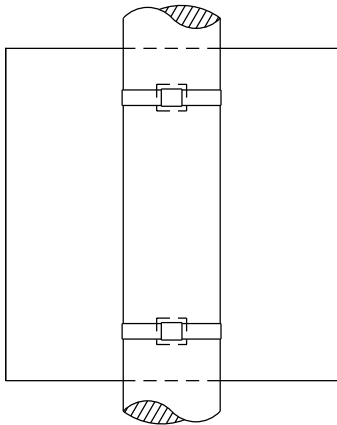
COUNTY:

SHEET NO:

E

BANDING

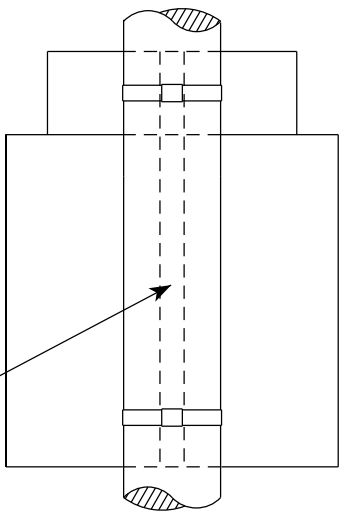
SINGLE SIGN



GENERAL NOTES

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

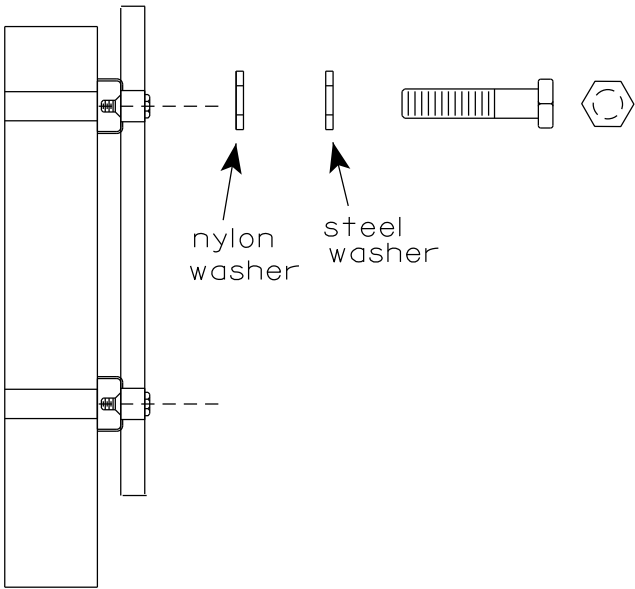
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

SEE DETAIL B

WASHER PLACEMENT

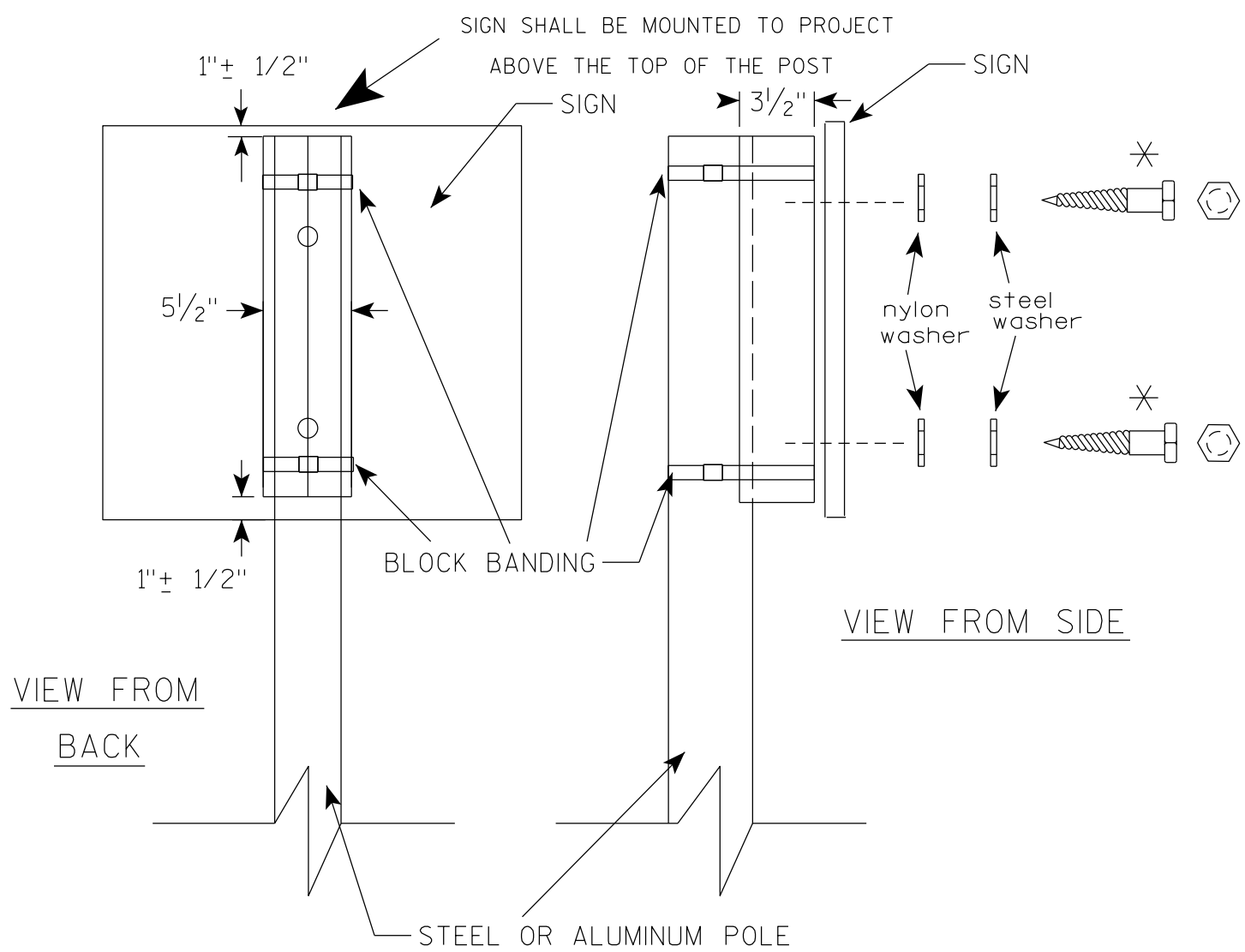


WASHERS (ALL POSTS) -
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

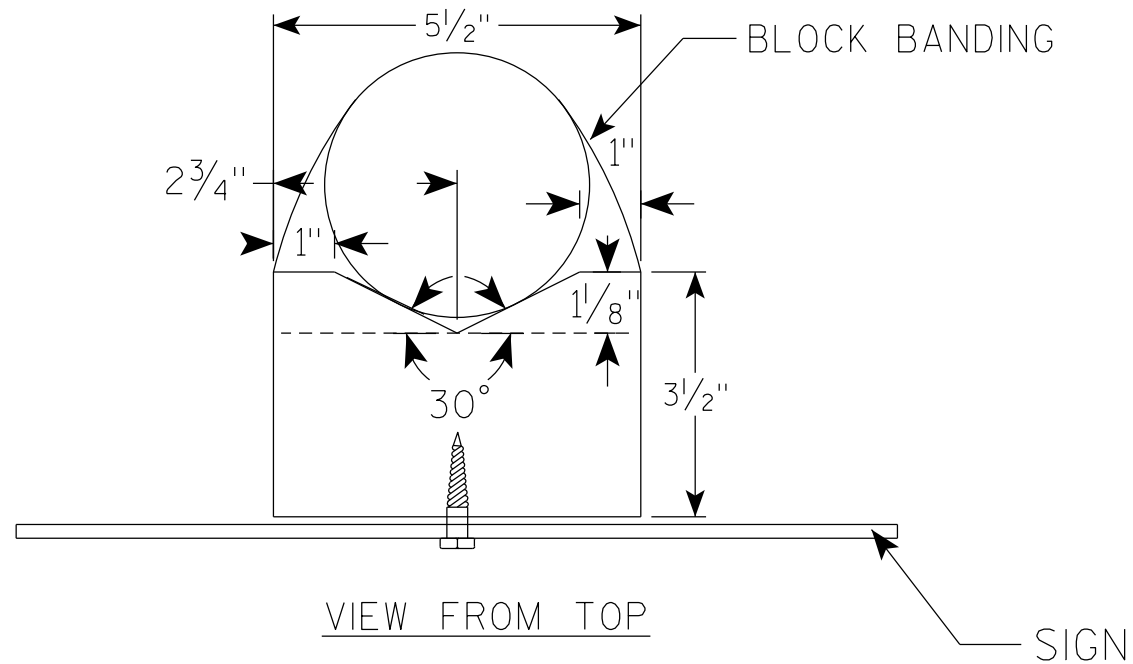
WISCONSIN DEPT OF TRANSPORTATION

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



VIEW FROM
BACK

VIEW FROM SIDE



VIEW FROM TOP

GENERAL NOTES

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

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

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

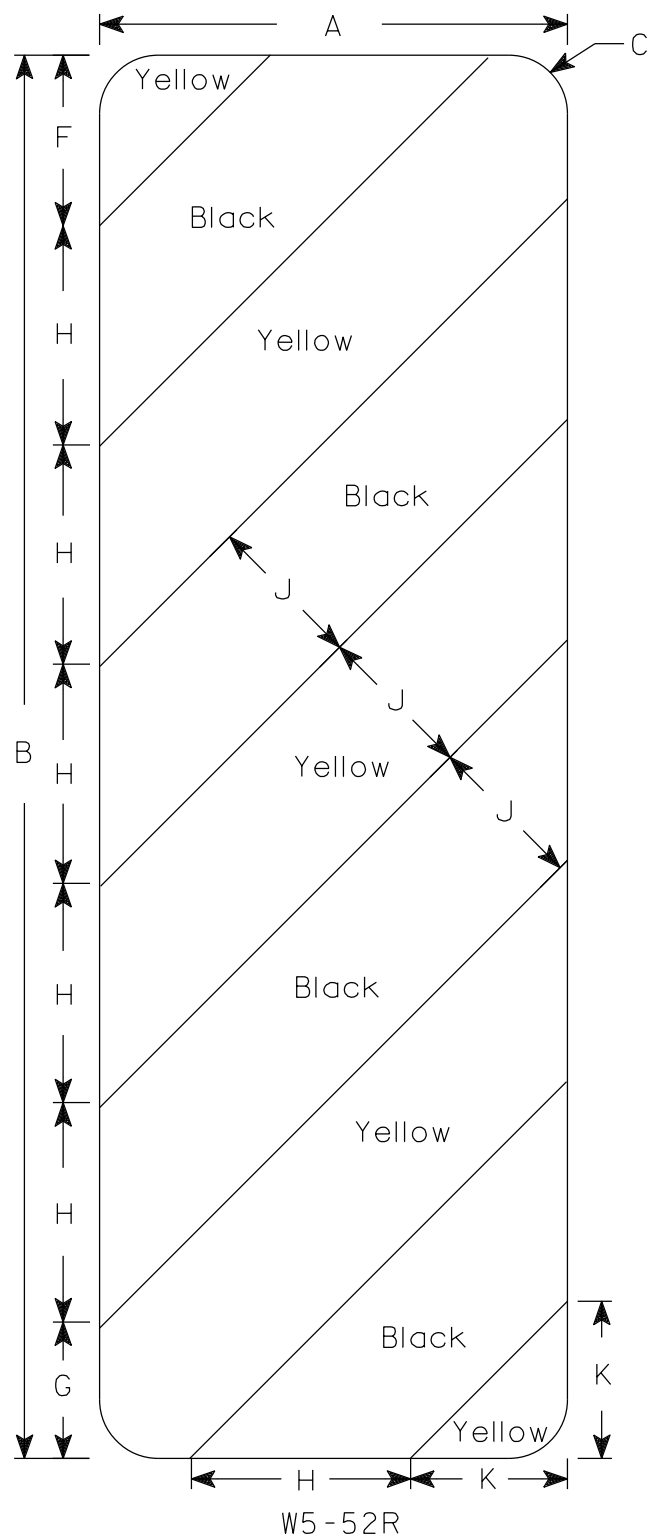
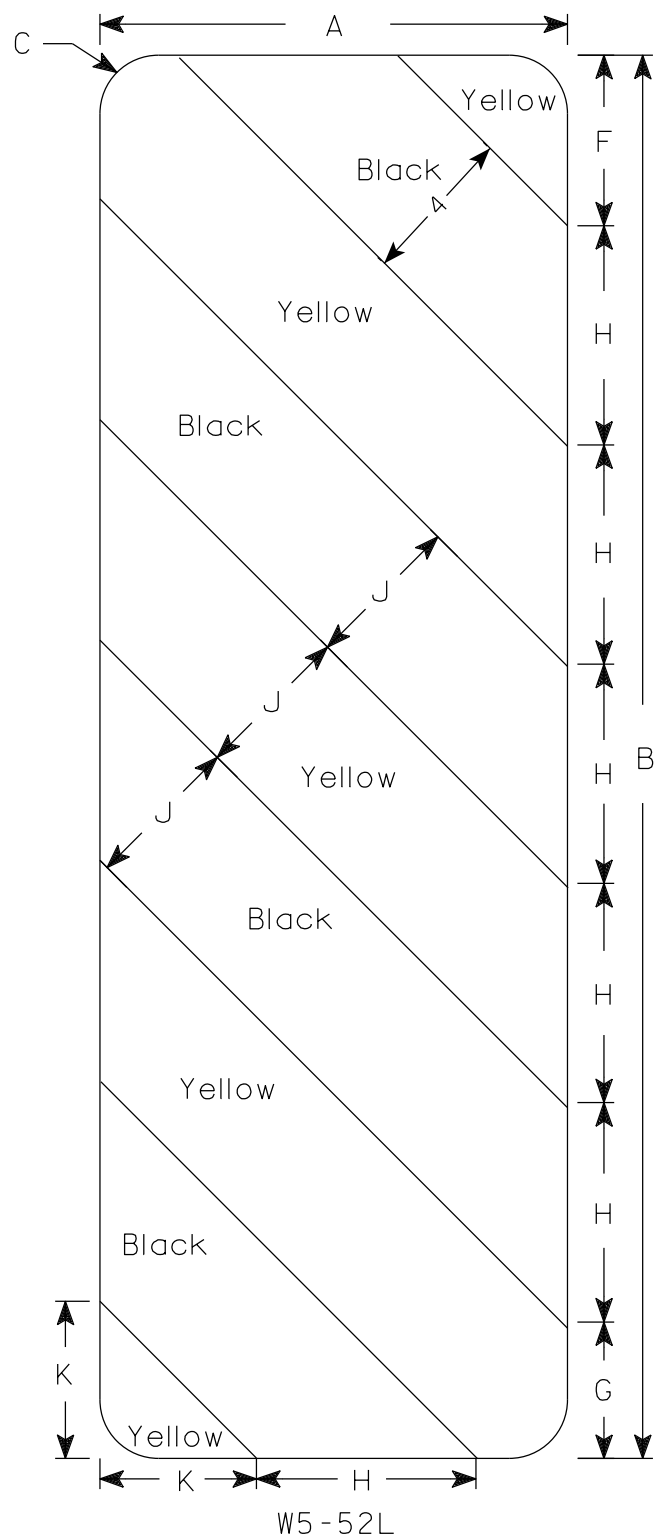
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

SHEET NO:

E



NOTES

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

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

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.05
OPERATING RATING: RF = 1.37
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

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

MATERIAL PROPERTIES:

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

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 65'-0" LONG AT WEST ABUTMENT.
ESTIMATED 65'-0" LONG AT EAST ABUTMENT.

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

HYDRAULIC DATA

100-YEAR FREQUENCY:

$Q_{100} = 470$ C.F.S.
 $V_{100} = 5.4$ F.P.S.
 $HW_{100} = EL. 777.24$
WATERWAY AREA = 87 SQ. FT.
DRAINAGE AREA = 1.28 SQ. MI.
SCOUR CRITICAL CODE = 5

2-YEAR FREQUENCY:

$Q_2 = 70$ C.F.S.
 $V_2 = 5.1$ F.P.S.
 $HW_2 = EL. 772.02$

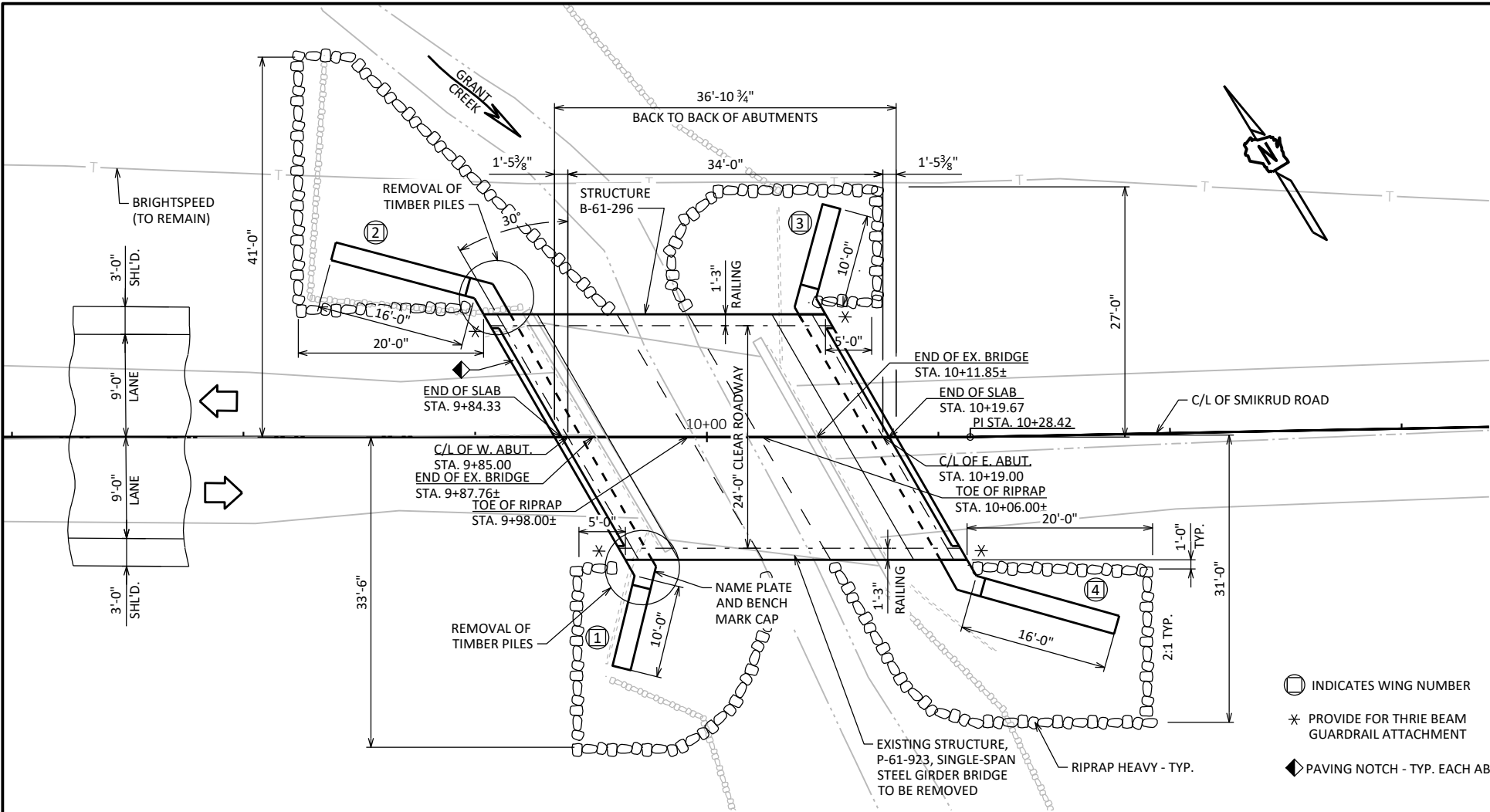
5-YEAR FREQUENCY:

$Q_5 = 130$ C.F.S.
MIN. BR. AREA = 16 SQ. FT.
 $HW_5 = EL. 773.57$

TRAFFIC DATA

FEATURE ON:

ADT = <100 (2026)
ADT = <100 (2046)
R.D.S. = 40 MPH



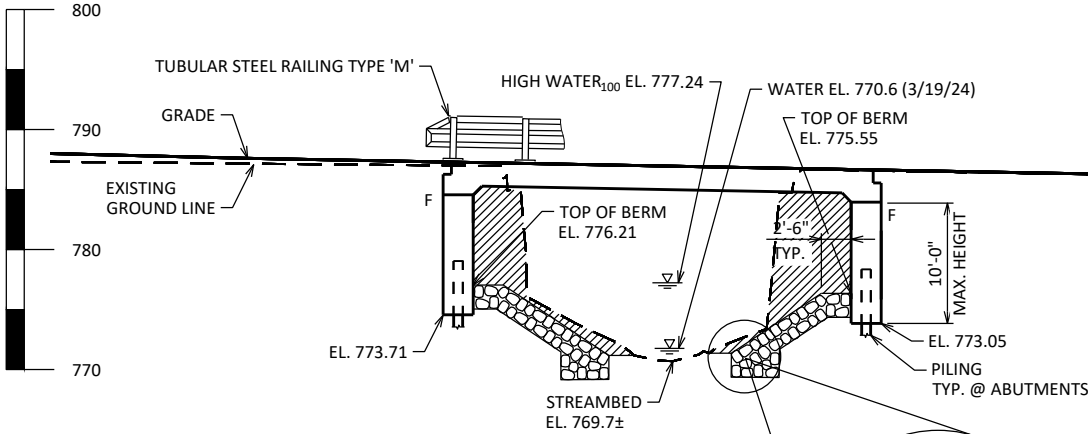
PLAN

SINGLE-SPAN CONCRETE FLAT SLAB BRIDGE

- ⊖ INDICATES WING NUMBER
- * PROVIDE FOR THRIE BEAM GUARDRAIL ATTACHMENT
- ◆ PAVING NOTCH - TYP. EACH ABUT.

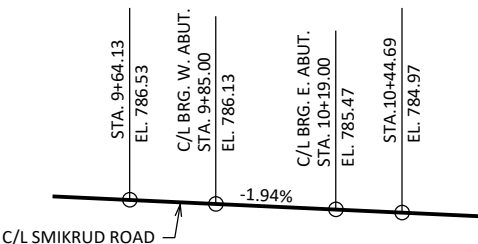
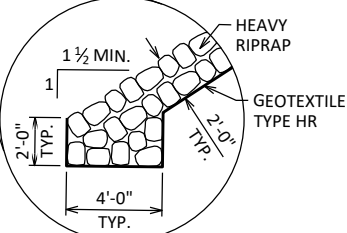
COST OF EXCAVATION OR FILL IN THE HATCHED AREAS SHALL BE INCLUDED IN THE CONTRACT PRICE FOR "EXCAVATION FOR STRUCTURES BRIDGES B-61-296".

REMOVE EXISTING STRUCTURE AS NEEDED. COST INCLUDED IN "REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS" AND "REMOVING TIMBER PILING" ITEMS. TYPICAL AT ALL SUBSTRUCTURES.



ELEVATION

NORMAL TO C/L OF WATERWAY



PROFILE GRADE LINE

(SMIKRUD ROAD)

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
50	10+20	SURVEY NAIL IN ABUTMENT, 16' RT.	783.50
51	7+00	SURVEY NAIL IN 45" OAK TREE, 30' LT.	789.29

LIST OF DRAWINGS:

- GENERAL PLAN
- QUANTITIES AND NOTES
- STRUCTURE DETAILS
- SUBSURFACE EXPLORATION
- WEST ABUTMENT
- WEST ABUTMENT WING 1 DETAILS
- WEST ABUTMENT WING 2 DETAILS
- WEST ABUTMENT DETAILS AND BILL OF BARS
- EAST ABUTMENT
- EAST ABUTMENT WING 3 DETAILS
- EAST ABUTMENT WING 4 DETAILS
- EAST ABUTMENT DETAILS AND BILL OF BARS
- SUPERSTRUCTURE
- SUPERSTRUCTURE PLAN
- TUBULAR STEEL RAILING TYPE "M"

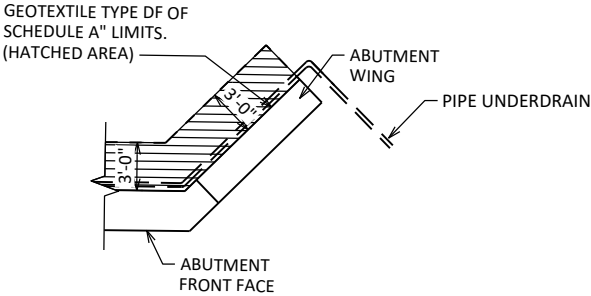


09/10/2025

STRUCTURE DESIGN CONTACTS:

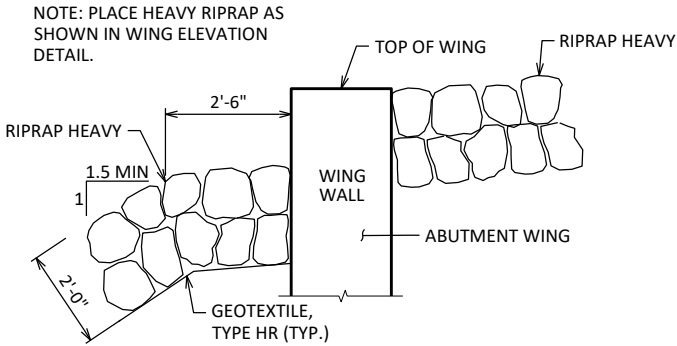
AARON BONK 608-261-0261
DANIEL SYDOW 715-834-3161

NO.		DATE		REVISION		BY	
ORIGINAL PLANS PREPARED BY							
AYRES		3433 Oakwood Hills Parkway Eau Claire, WI 54701 www.AyresAssociates.com					
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION							
ACCEPTED		 CHIEF STRUCTURES DESIGN ENGINEER				JLJR 09/10/25 DATE	
STRUCTURE B-61-296							
SMIKRUD ROAD OVER GRANT CREEK							
COUNTY		TREMPEALEAU		TOWN		GALE	
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATION							
DESIGNED BY		DESIGNED CK'D		DRAWN JMC		PLANS DRS/CLP	
NBE		CK'D		JMC		CK'D DNS	
GENERAL PLAN						SHEET 1 OF 15	

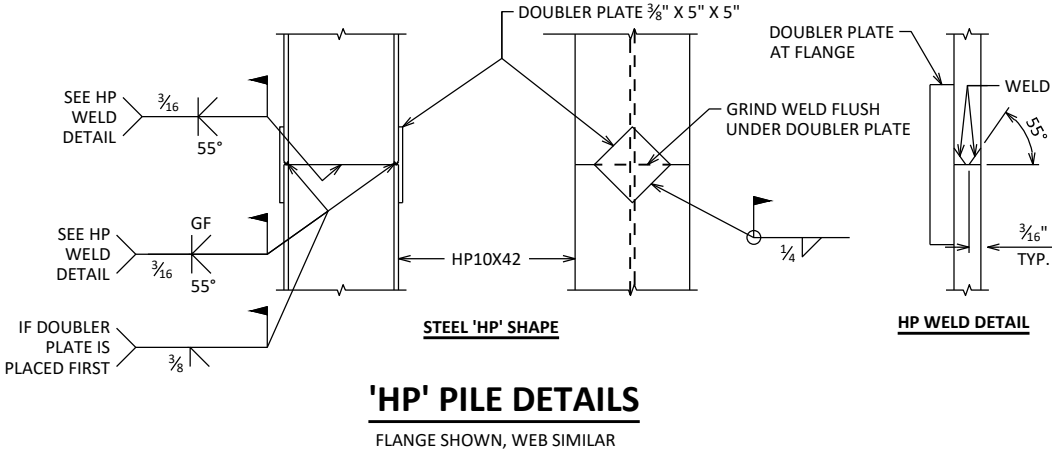


BACKFILL STRUCTURE LIMITS

ABUTMENT PLAN WITH WING

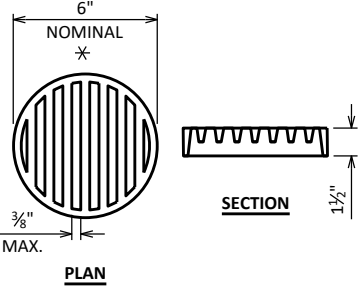


TYPICAL FILL SECTION AT WING



'HP' PILE DETAILS

FLANGE SHOWN, WEB SIMILAR



RODENT SHIELD DETAIL

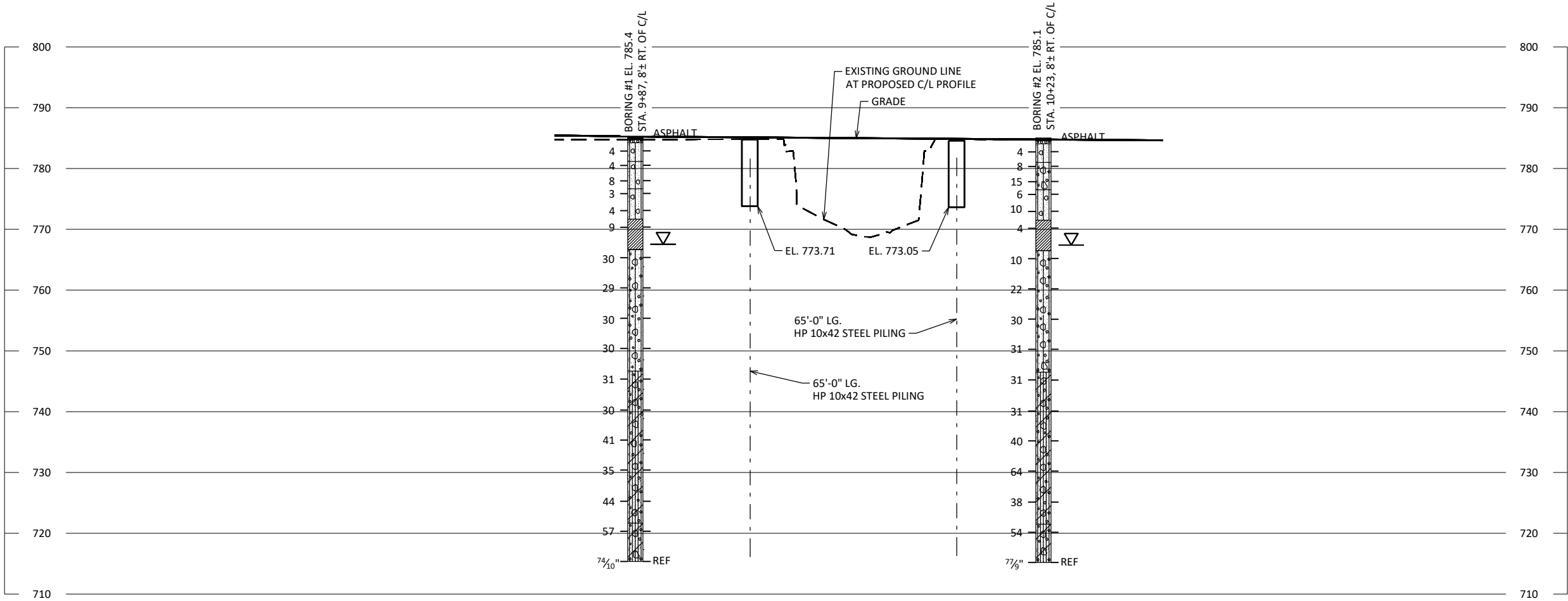
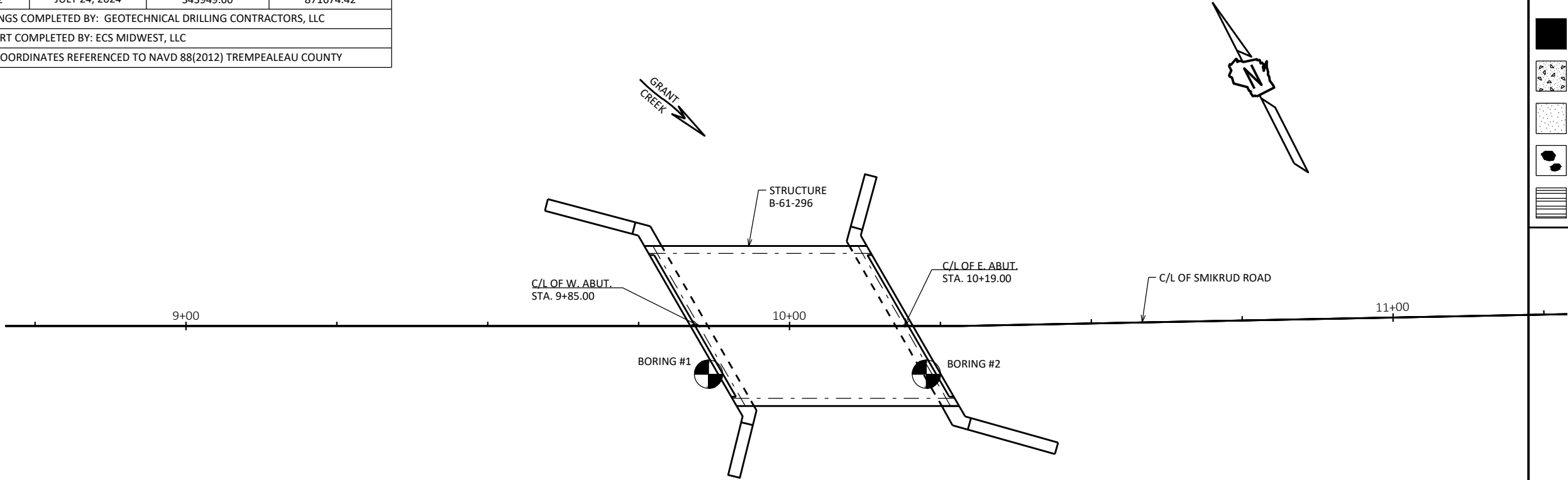
* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

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

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS 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.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-296			
DRAWN BY		CLP	PLANS CK'D JMC
STRUCTURE DETAILS		SHEET 3 OF 15	

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	JULY 24, 2024	343973.46	871647.34
2	JULY 24, 2024	343949.60	871674.42
BORINGS COMPLETED BY: GEOTECHNICAL DRILLING CONTRACTORS, LLC			
REPORT COMPLETED BY: ECS MIDWEST, LLC			
ALL COORDINATES REFERENCED TO NAVD 88(2012) TREMPPEALEAU COUNTY			



STATE PROJECT NUMBER

7282-00-72

MATERIAL SYMBOLS

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

LEGEND OF BORING

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

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

GROUND WATER ELEVATION

▽	AT TIME OF DRILLING
▼	END OF DRILLING
▽	AFTER DRILLING

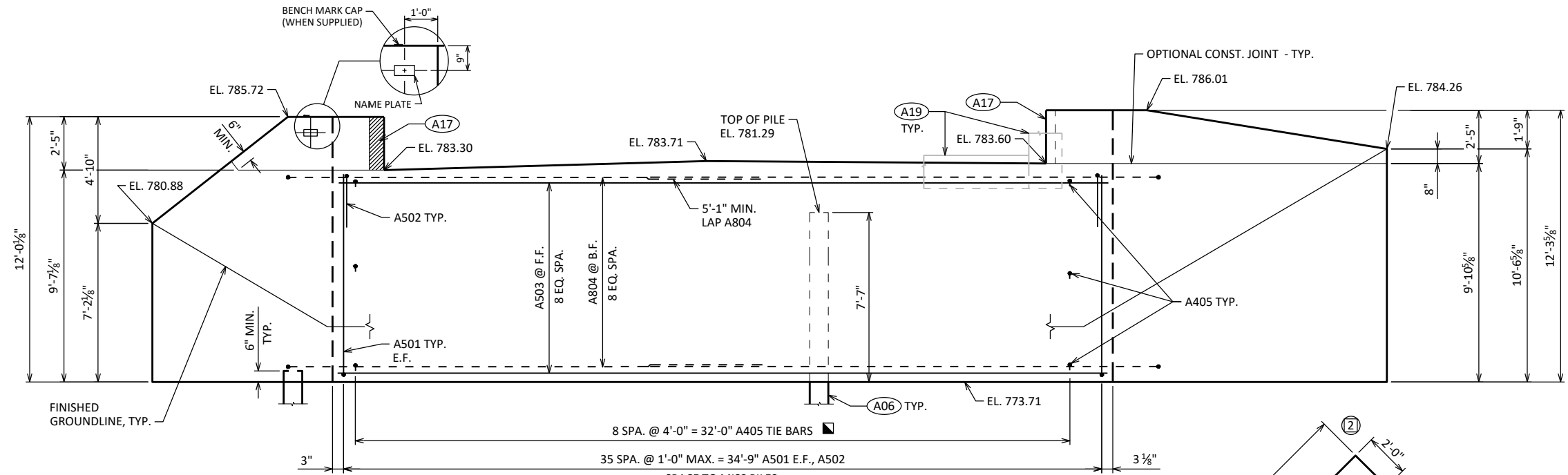
ABBREVIATIONS

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

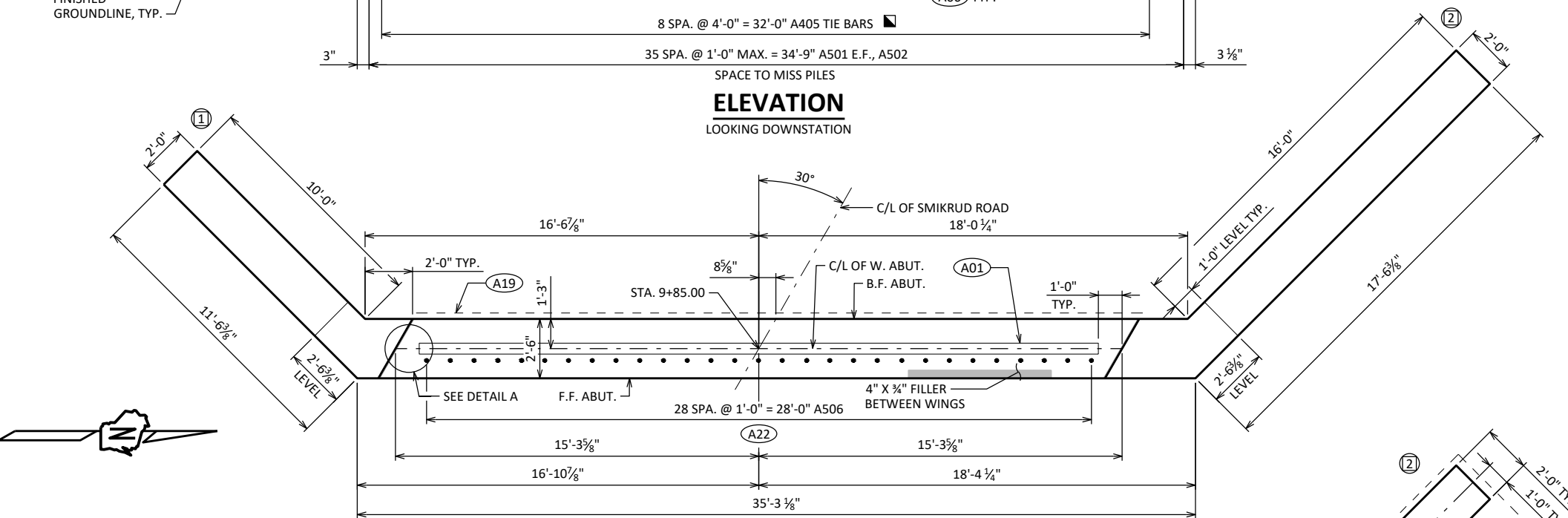
SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

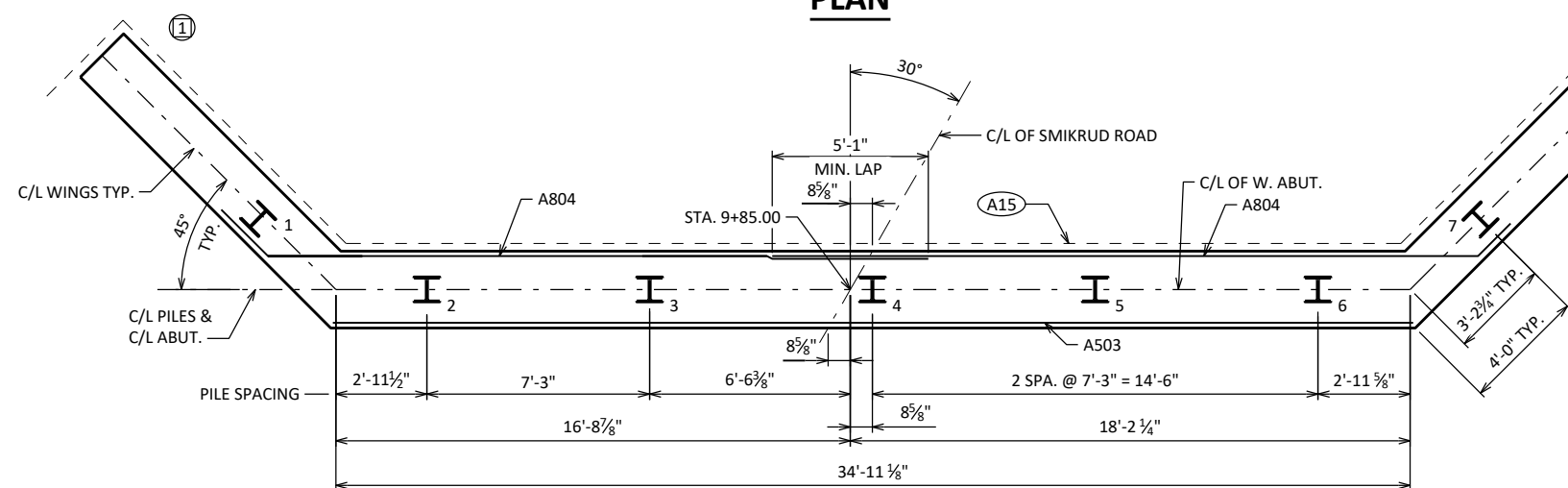
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-296			
DRAWN BY		CLP	PLANS CK'D JMC
SUBSURFACE EXPLORATION		SHEET 4 OF 15	



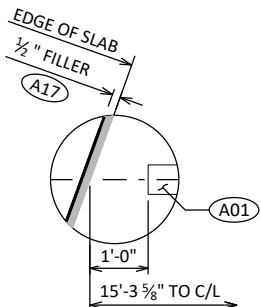
ELEVATION
LOOKING DOWNSTATION



PLAN



PILE PLAN

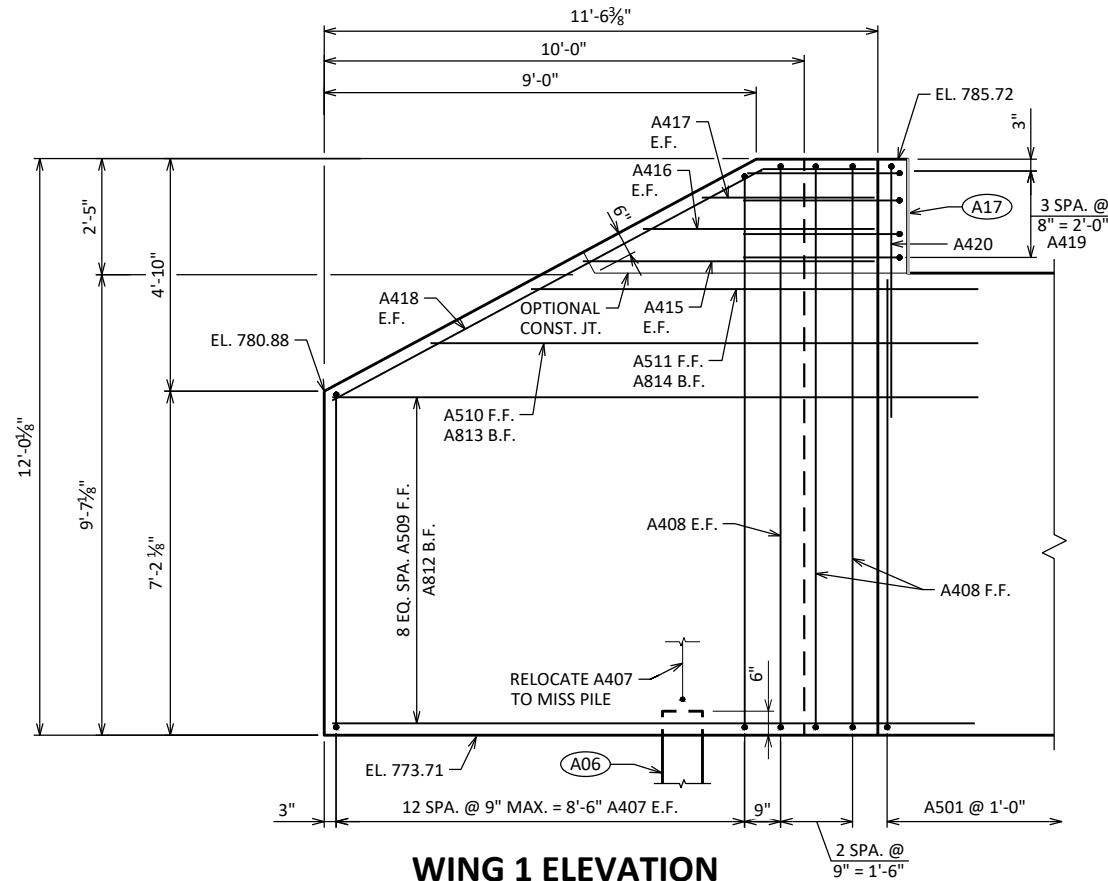


DETAIL A

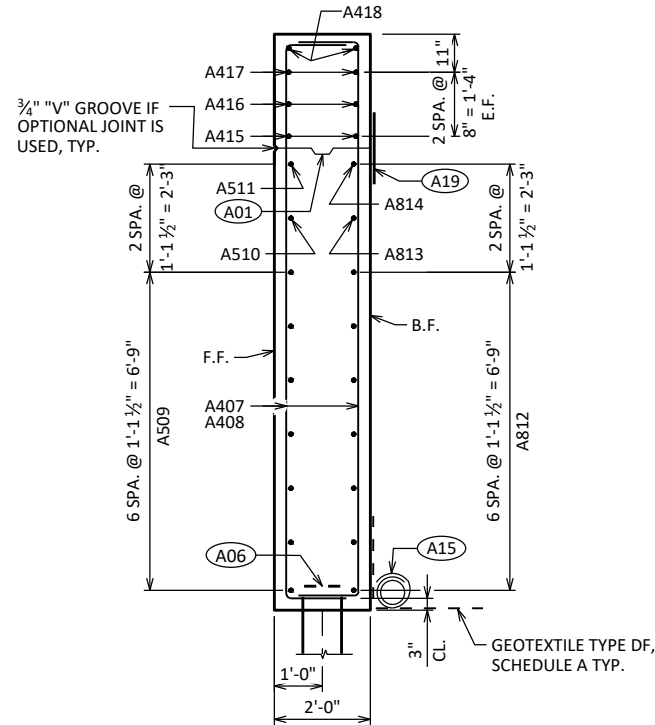
- A01** CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6.
- A06** SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING. ESTIMATED 65' LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- A15** PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A17** 1/2" FILLER: 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.
- A19** 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- A22** A506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-296			
DRAWN BY		CLP	PLANS CK'D JMC
WEST ABUTMENT		SHEET 5 OF 15	

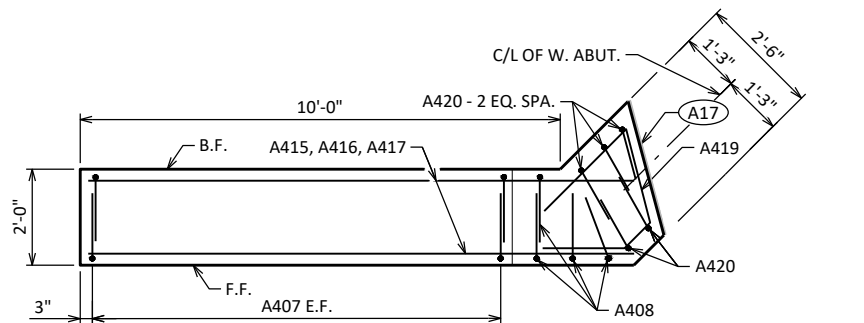
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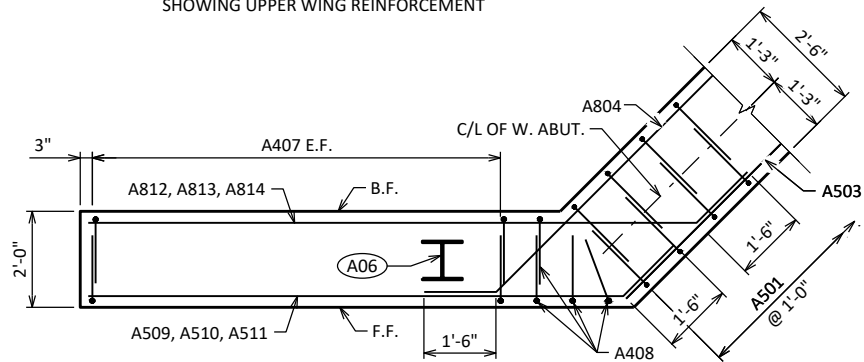
WING 1 ELEVATION
SHOWING F.F. WING



SECTION THRU WING 1



WING 1 PLAN
SHOWING UPPER WING REINFORCEMENT



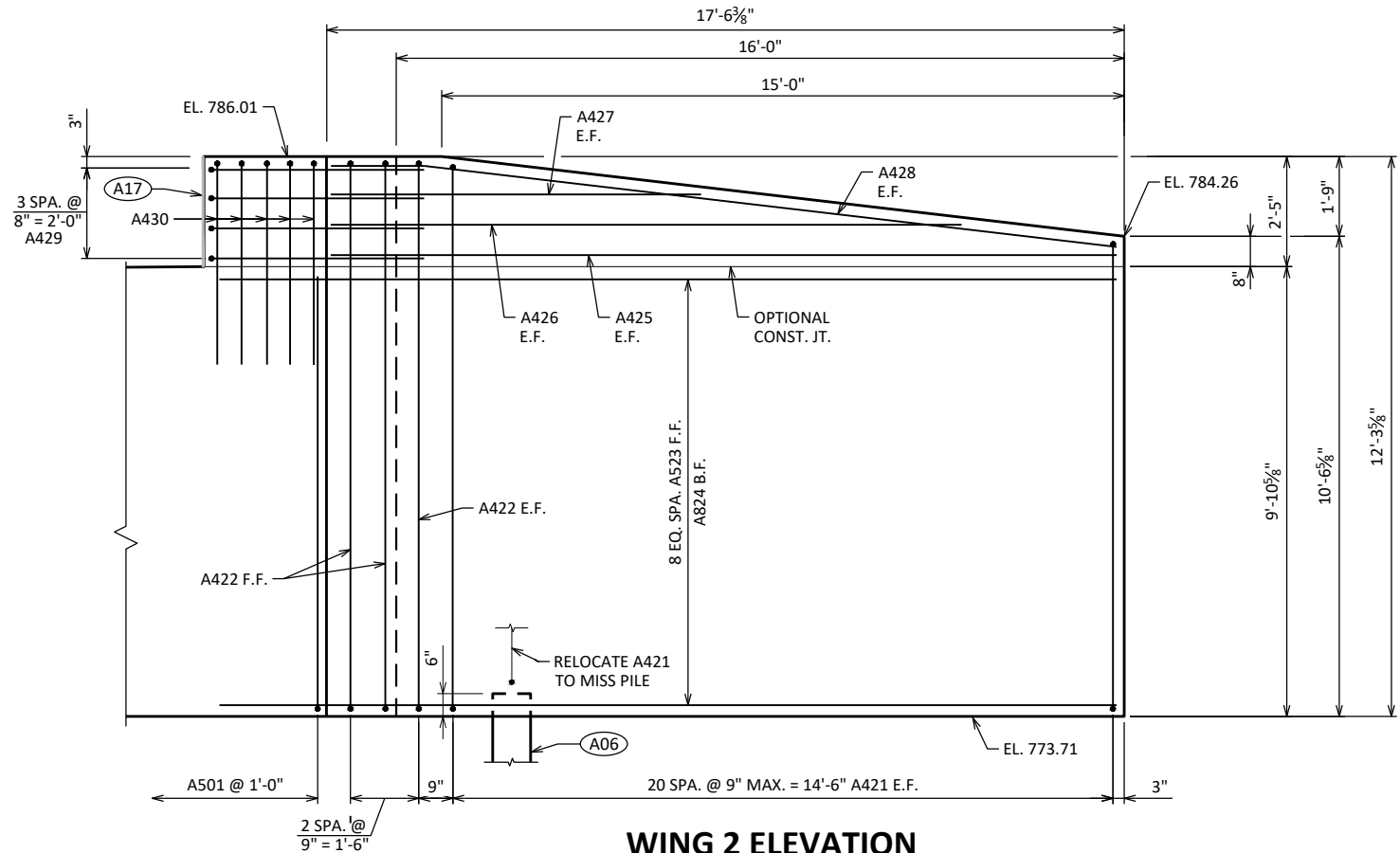
WING 1 PLAN
SHOWING LOWER WING REINFORCEMENT

- (A01) OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6. PROVIDE 3/4" "V" GROOVE ON F.F. OF WINGWALL IF JOINT IS USED.
- (A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING. ESTIMATED 65' LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

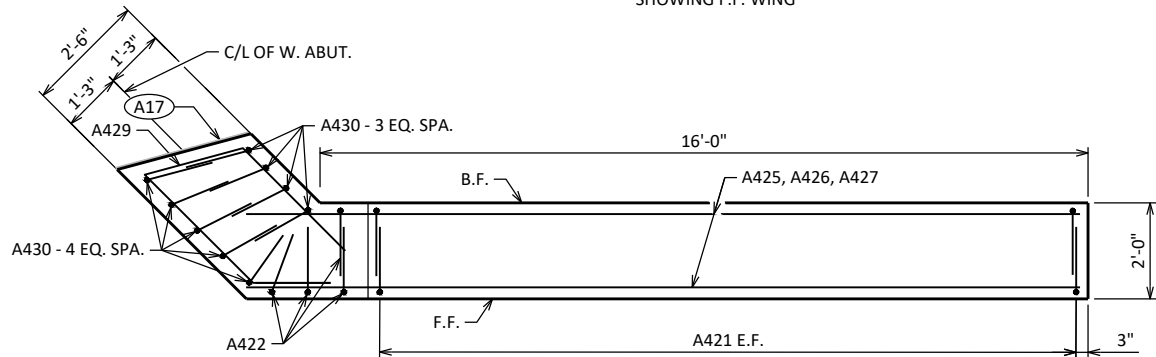
- (A17) 1/2" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/2" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A19) 18" RUBBERIZED MEMBRANE WATERPROOFING, ONLY IF OPTIONAL CONSTRUCTION JOINT IS USED. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY STRUCTURES".

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-296			
DRAWN BY		CLP	PLANS CK'D JMC
WEST ABUTMENT WING 1 DETAILS		SHEET 6 OF 15	

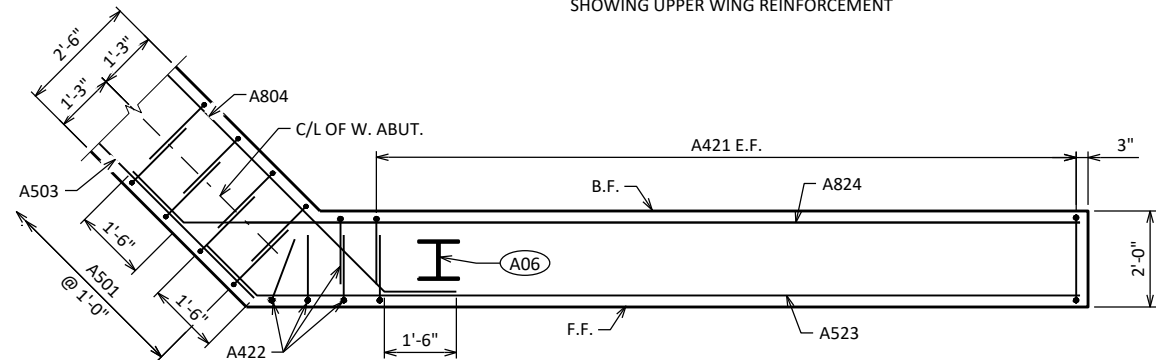
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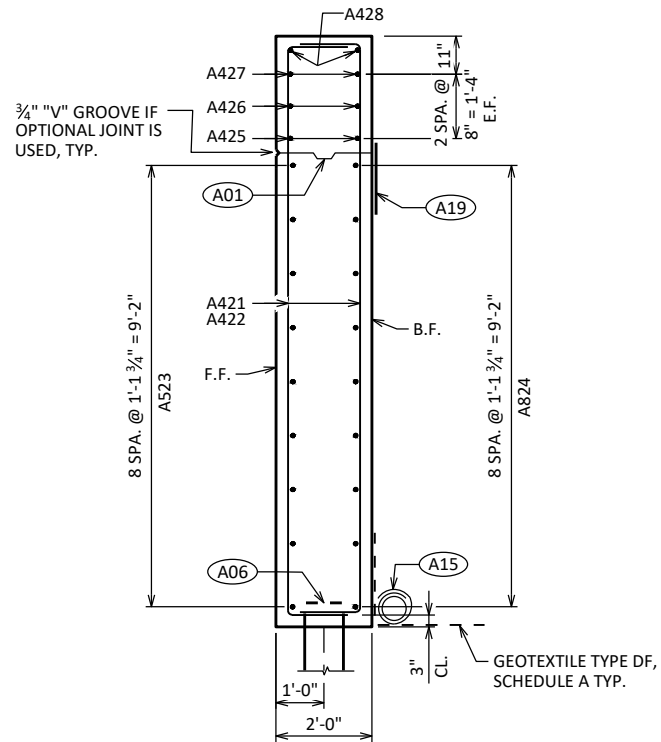
WING 2 ELEVATION
SHOWING F.F. WING



WING 2 PLAN
SHOWING UPPER WING REINFORCEMENT



WING 2 PLAN
SHOWING LOWER WING REINFORCEMENT



SECTION THRU WING 2

- (A01) OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6. PROVIDE 3/4" "V" GROOVE ON F.F. OF WINGWALL IF JOINT IS USED.
- (A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING. ESTIMATED 65' LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A17) 1/2" FILLER: 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.
- (A19) 18" RUBBERIZED MEMBRANE WATERPROOFING, ONLY IF OPTIONAL CONSTRUCTION JOINT IS USED. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY STRUCTURES".

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-296			
DRAWN BY		CLP	PLANS CK'D JMC
WEST ABUTMENT WING 2 DETAILS		SHEET 7 OF 15	

SCALE =

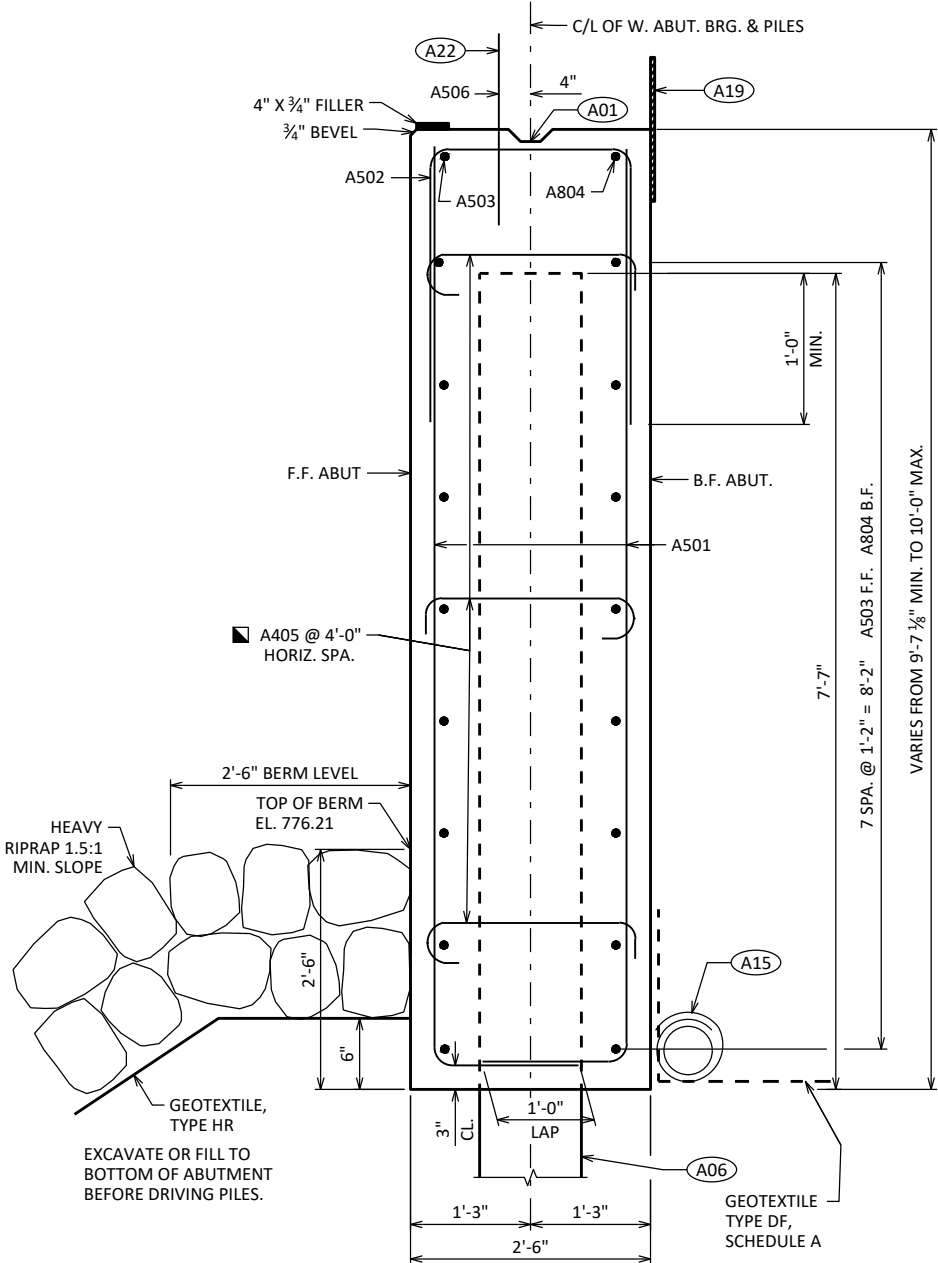
BILL OF BARS

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

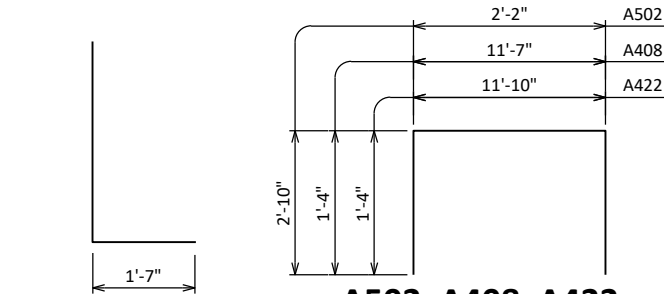
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		72	10'-7"	X		ABUT BODY STIRRUPS
A502		36	7'-7"	X		ABUT BODY STIRRUPS - TOP U-BAR
A503		9	35'-2"			ABUT BODY HORIZ. - F.F.
A804		18	23'-9"	X		ABUT BODY HORIZ. - B.F.
A405		27	2'-11"	X		ABUT BODY TIE BARS
A506	X	29	2'-0"			ABUT BODY DOWEL BARS
A407	X	26	11'-8"	X	▲	WING 1 STIRRUPS
A408	X	4	14'-1"	X		WING 1 STIRRUPS
A509	X	7	12'-9"	X		WING 1 LOWER HORIZ - F.F.
A510	X	1	10'-9"	X		WING 1 LOWER HORIZ - F.F.
A511	X	1	8'-8"	X		WING 1 LOWER HORIZ - F.F.
A812	X	7	14'-5"	X		WING 1 LOWER HORIZ. - B.F.
A813	X	1	12'-2"	X		WING 1 LOWER HORIZ. - B.F.
A814	X	1	10'-4"	X		WING 1 LOWER HORIZ. - B.F.
A415	X	2	6'-1"			WING 1 UPPER HORIZ.
A416	X	2	4'-10"			WING 1 UPPER HORIZ.
A417	X	2	3'-7"			WING 1 UPPER HORIZ.
A418	X	2	12'-6"	X		WING 1 UPPER DIAG.
A419	X	4	7'-0"	X		WING 1 TOP HORIZ. CORNER
A420	X	5	5'-9"	X		WING 1 TOP VERT. CORNER
A421	X	42	13'-7"	X	▲	WING 2 STIRRUPS
A422	X	4	14'-4"	X		WING 2 STIRRUPS
A523	X	9	18'-9"	X		WING 2 LOWER HORIZ - F.F.
A824	X	9	20'-5"	X		WING 2 LOWER HORIZ. - B.F.
A425	X	2	17'-3"			WING 2 UPPER HORIZ.
A426	X	2	13'-10"			WING 2 UPPER HORIZ.
A427	X	2	8'-1"			WING 2 UPPER HORIZ.
A428	X	2	17'-4"	X		WING 2 UPPER DIAG.
A429	X	4	9'-11"	X		WING 2 TOP HORIZ. CORNER
A430	X	9	5'-9"	X		WING 2 TOP VERT. CORNER

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

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

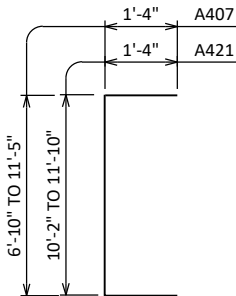


SECTION THRU BODY



A501

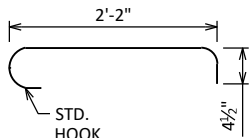
A502, A408, A422



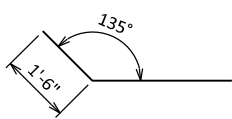
A407, A421



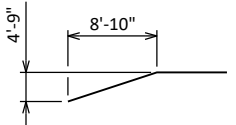
A420, A430



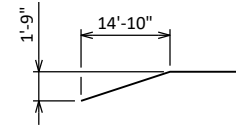
A405



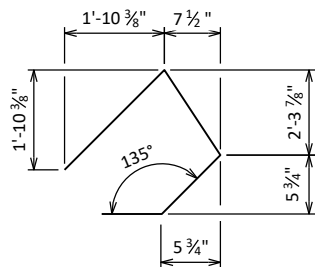
A804, A509, A510
A511, A812, A813, A814
A523, A824



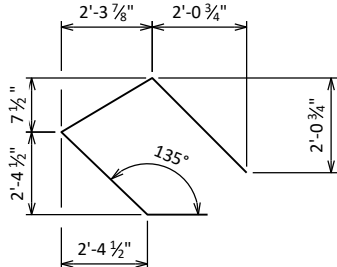
A418



A428



A419



A429

BAR SERIES TABLE

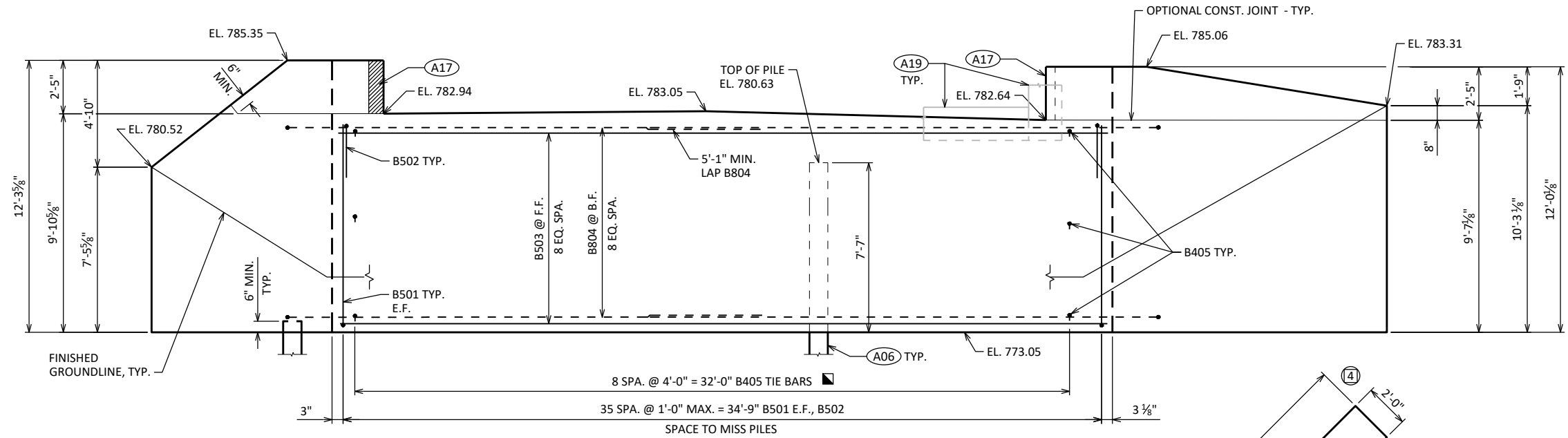
BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
A407	2 SERIES OF 13	9'-4" TO 13'-11"
A421	2 SERIES OF 21	12'-8" TO 14'-4"

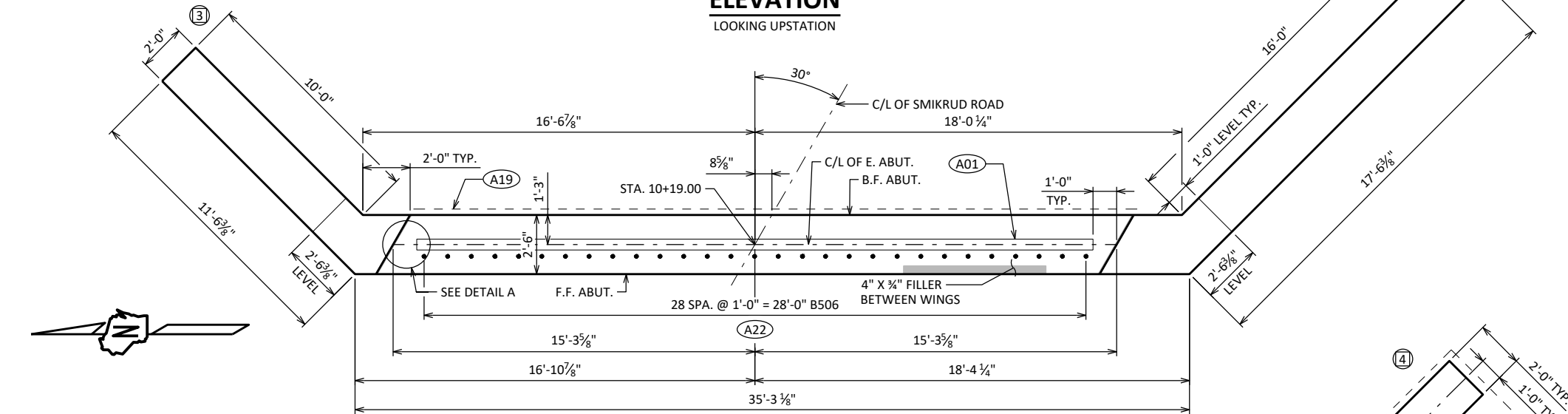
- A01 CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6.
- A06 SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING. ESTIMATED 65' LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A19 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- A22 A506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-296			
DRAWN BY		CLP	PLANS CK'D JMC
WEST ABUTMENT DETAILS AND BILL OF BARS		SHEET 8 OF 15	

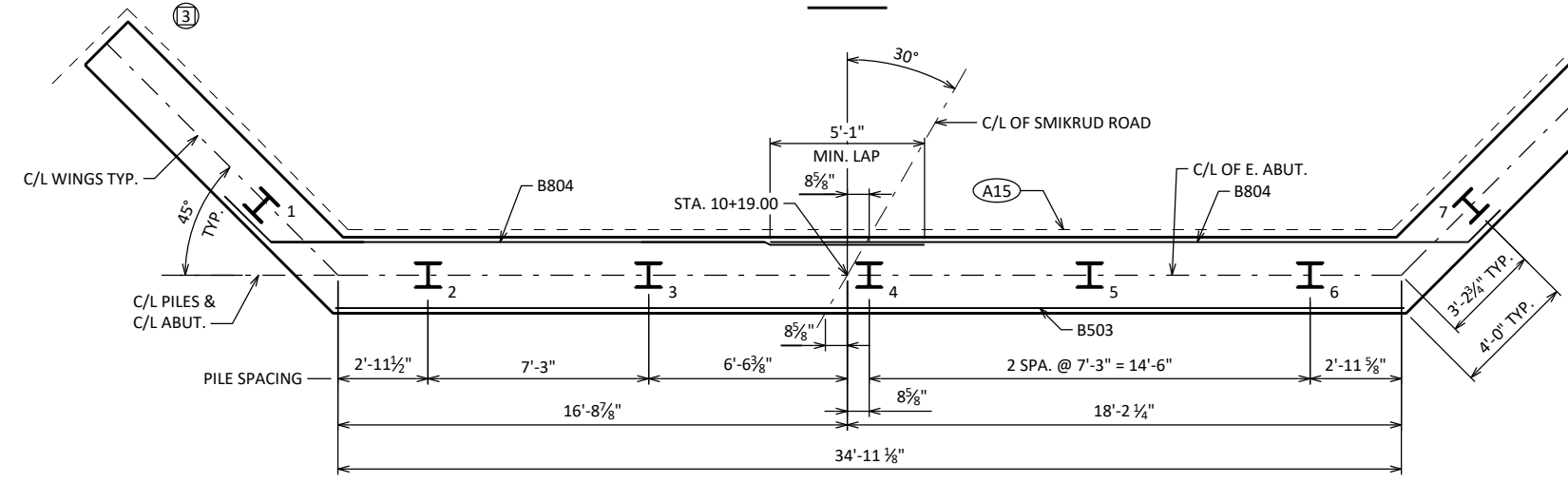
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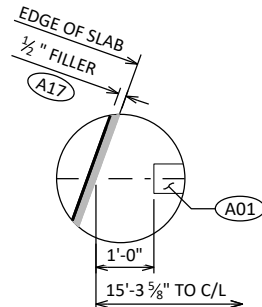
ELEVATION
LOOKING UPSTATION



PLAN



PILE PLAN

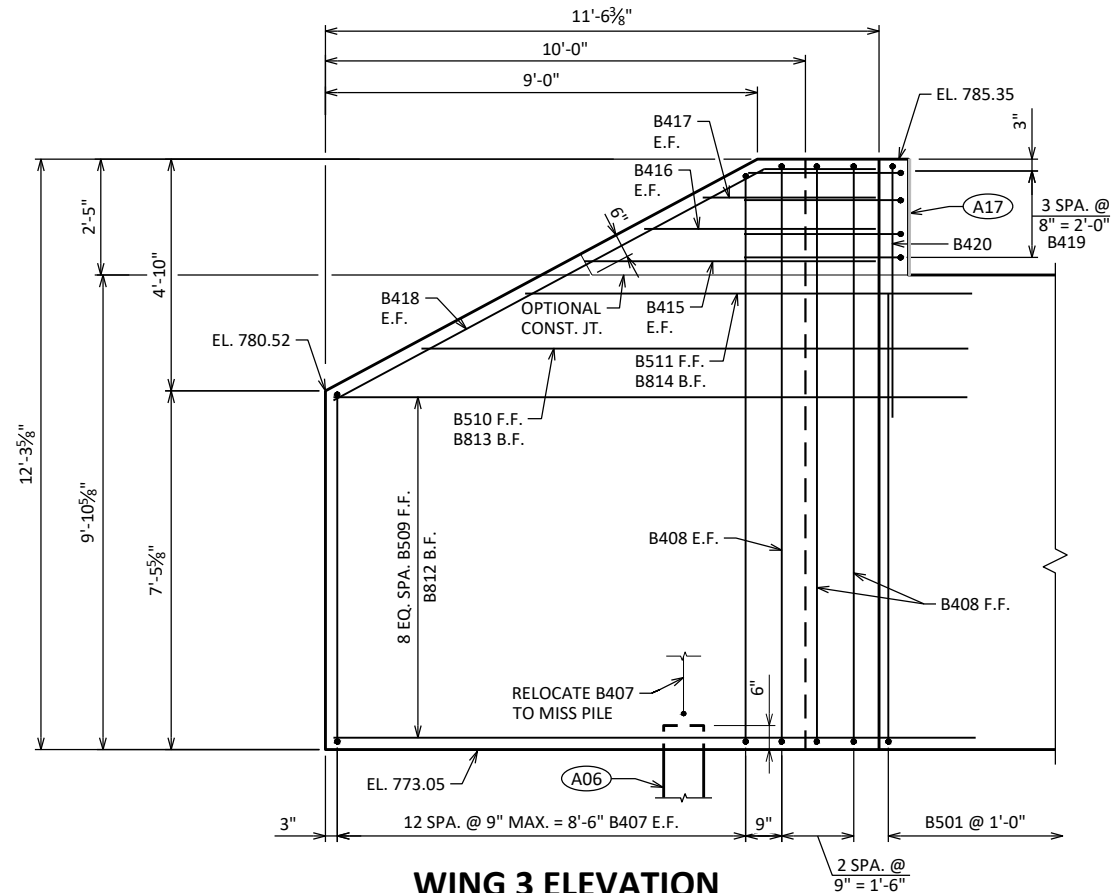


DETAIL A

- A01 CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6.
- A06 SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING. ESTIMATED 65' LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A17 1/2" FILLER: 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.
- A19 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- A22 B506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.

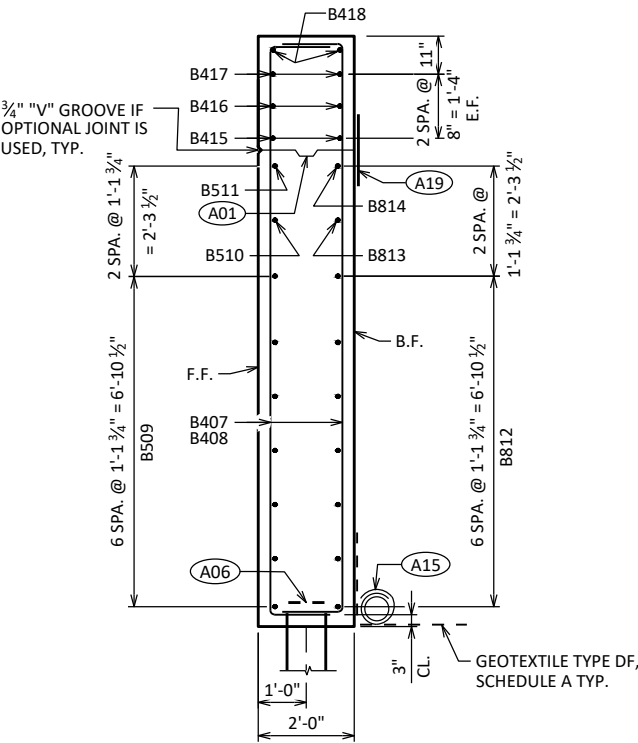
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-296			
DRAWN BY		CLP	PLANS CK'D JMC
EAST ABUTMENT		SHEET 9 OF 15	

SCALE =

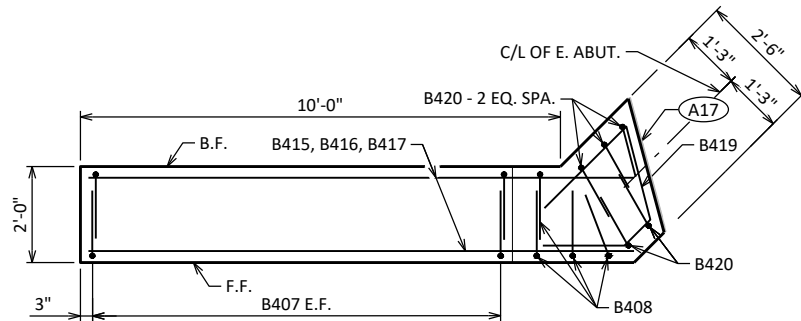


WING 3 ELEVATION

SHOWING F.F. WING

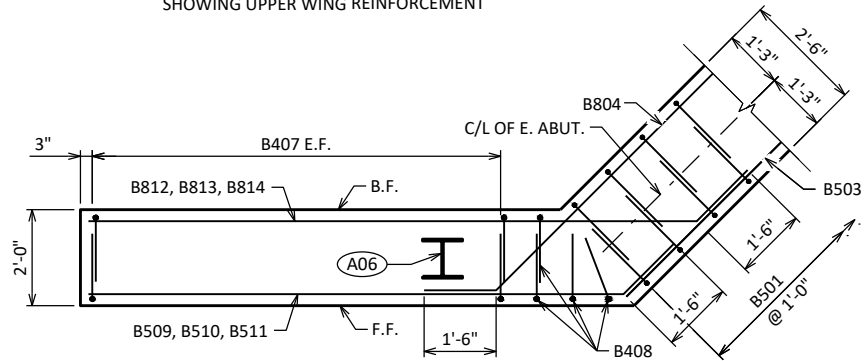


SECTION THRU WING 3



WING 3 PLAN

SHOWING UPPER WING REINFORCEMENT



WING 3 PLAN

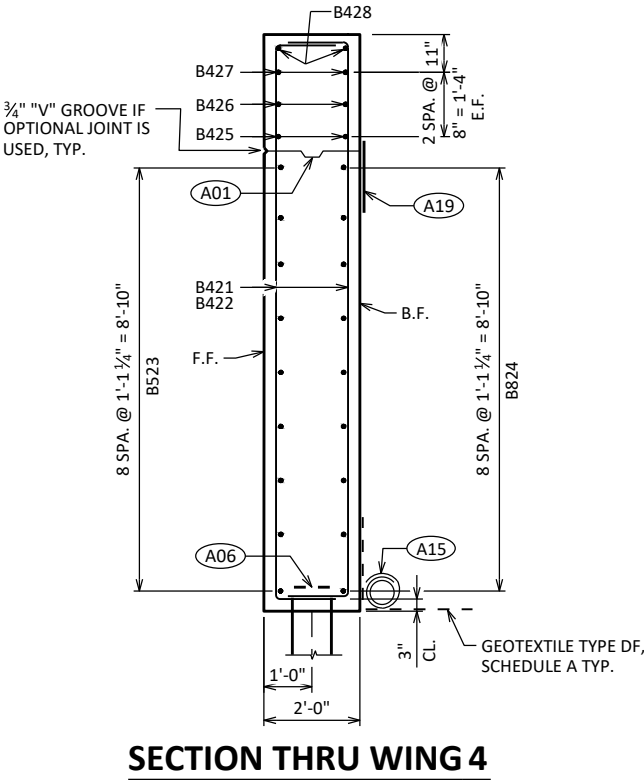
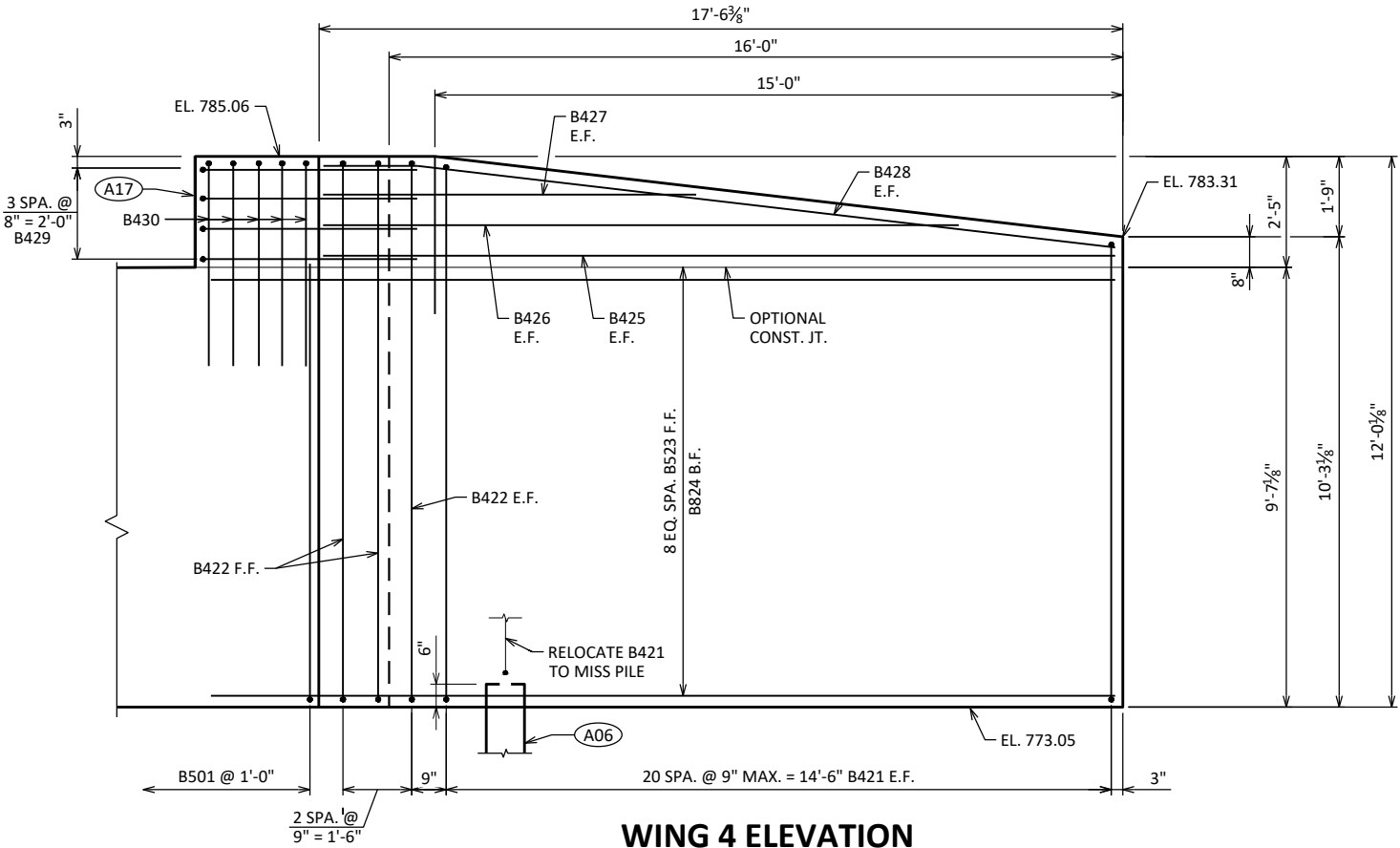
SHOWING LOWER WING REINFORCEMENT

- (A01) OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6. PROVIDE 3/4" "V" GROOVE ON F.F. OF WINGWALL IF JOINT IS USED.
- (A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING. ESTIMATED 65' LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

- (A17) 1/2" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A19) 18" RUBBERIZED MEMBRANE WATERPROOFING, ONLY IF OPTIONAL CONSTRUCTION JOINT IS USED. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY STRUCTURES".

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-296			
DRAWN BY		CLP	PLANS CK'D JMC
EAST ABUTMENT WING 3 DETAILS		SHEET 10 OF 15	

SCALE =

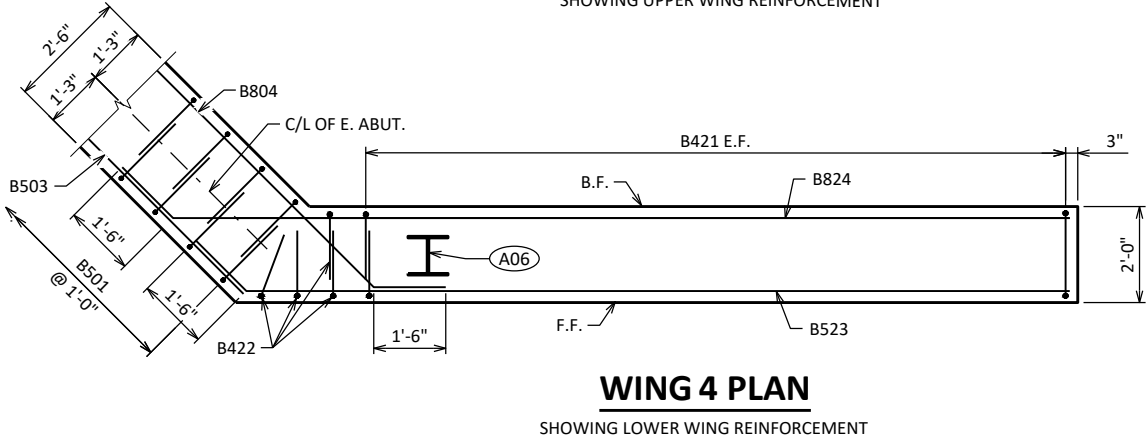
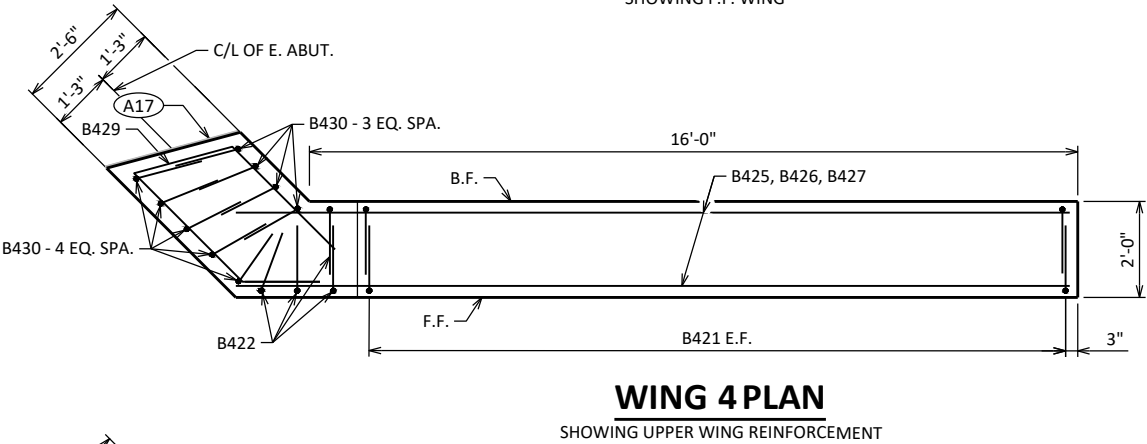


- (A01)** OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6. PROVIDE 3/4" "V" GROOVE ON F.F. OF WINGWALL IF JOINT IS USED.

(A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING. ESTIMATED 65' LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

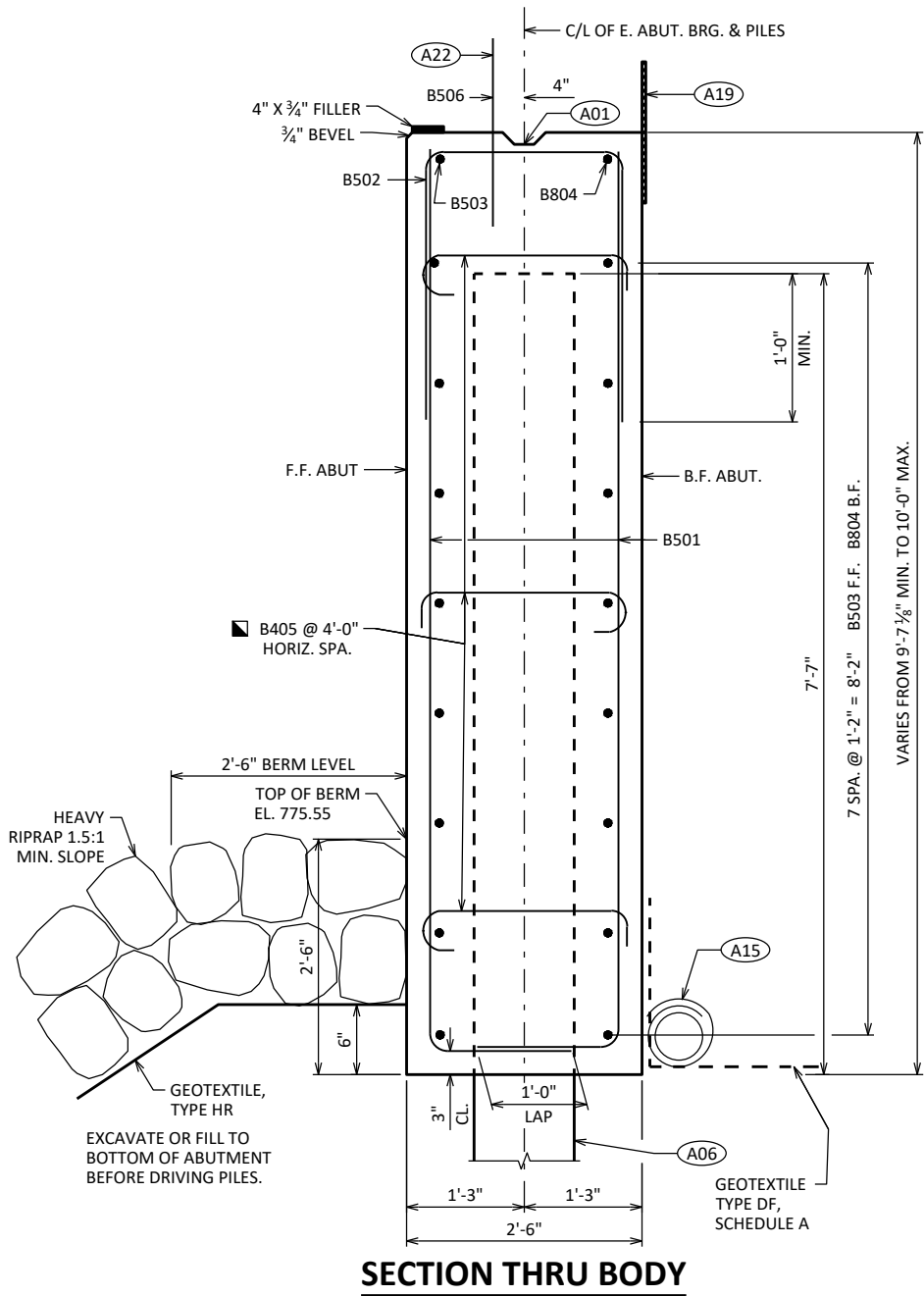
(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A17)** 1/2" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" RUBBERIZED MEMBRANE WATERPROOFING, ONLY IF OPTIONAL CONSTRUCTION JOINT IS USED. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY STRUCTURES".

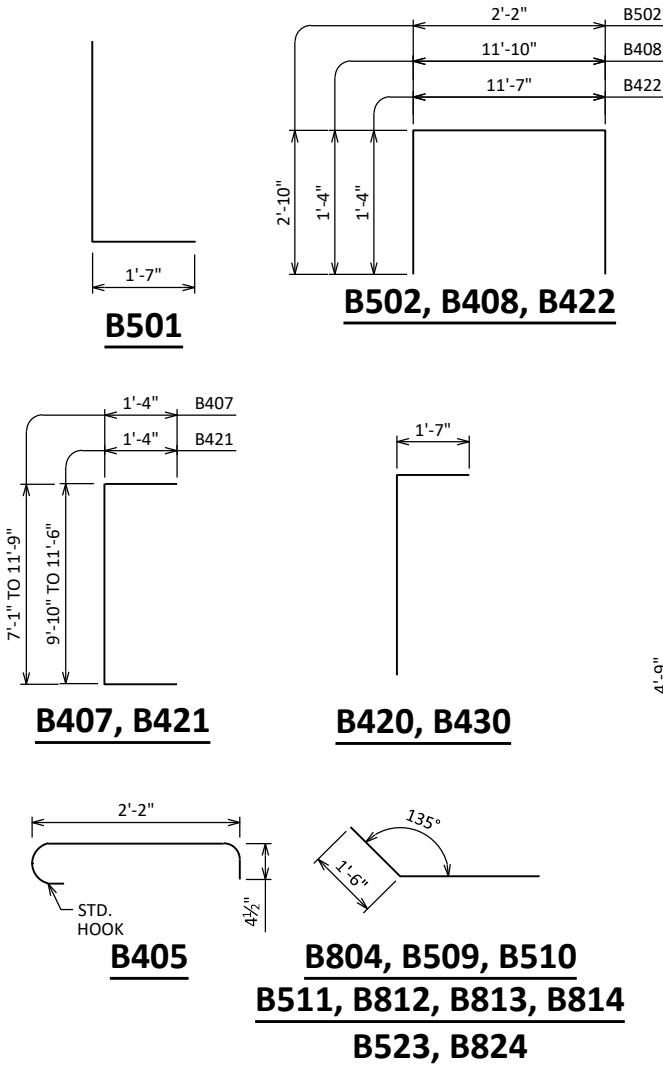


NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-296			
DRAWN BY		CLP	PLANS CK'D JMC
EAST ABUTMENT WING 4 DETAILS		SHEET 11 OF 15	

SCALE =



- (A01)** CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6.
- (A06)** SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING. ESTIMATED 65' LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- (A15)** PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A19)** 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- (A22)** B506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.



BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
B407	2 SERIES OF 13	9'-7" TO 14'-3"
B421	2 SERIES OF 21	12'-4" TO 14'-0"

BILL OF BARS

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

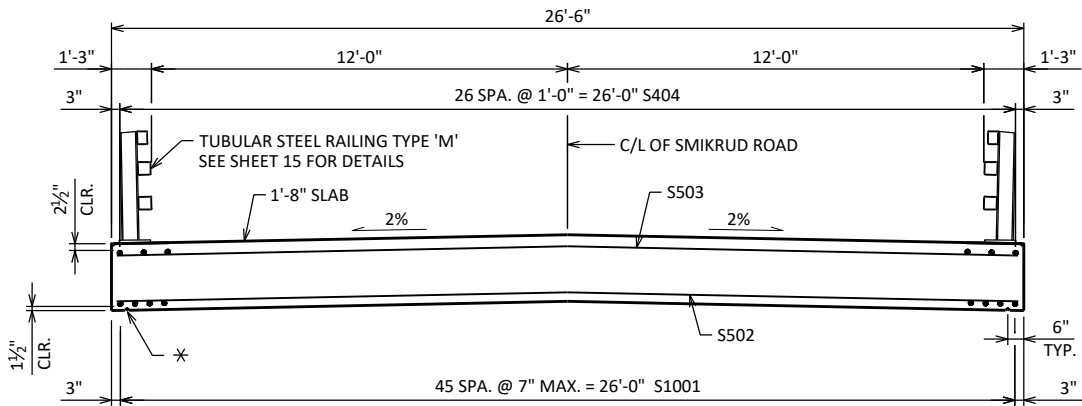
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		72	10'-7"	X		ABUT BODY STIRRUPS
B502		36	7'-7"	X		ABUT BODY STIRRUPS - TOP U-BAR
B503		9	35'-2"			ABUT BODY HORIZ. - F.F.
B804		18	23'-9"	X		ABUT BODY HORIZ. - B.F.
B405		27	2'-11"	X		ABUT BODY TIE BARS
B506	X	29	2'-0"			ABUT BODY DOWEL BARS
B407	X	26	11'-11"	X	▲	WING 3 STIRRUPS
B408	X	4	14'-4"	X		WING 3 STIRRUPS
B509	X	7	12'-9"	X		WING 3 LOWER HORIZ. - F.F.
B510	X	1	10'-9"	X		WING 3 LOWER HORIZ. - F.F.
B511	X	1	8'-8"	X		WING 3 LOWER HORIZ. - F.F.
B812	X	7	14'-5"	X		WING 3 LOWER HORIZ. - B.F.
B813	X	1	12'-5"	X		WING 3 LOWER HORIZ. - B.F.
B814	X	1	10'-4"	X		WING 3 LOWER HORIZ. - B.F.
B415	X	2	6'-1"			WING 3 UPPER HORIZ.
B416	X	2	4'-10"			WING 3 UPPER HORIZ.
B417	X	2	3'-7"			WING 3 UPPER HORIZ.
B418	X	2	12'-6"	X		WING 3 UPPER DIAG.
B419	X	4	7'-0"	X		WING 3 TOP HORIZ. CORNER
B420	X	5	5'-9"	X		WING 3 TOP VERT. CORNER
B421	X	42	13'-2"	X	▲	WING 4 STIRRUPS
B422	X	4	14'-1"	X		WING 4 STIRRUPS
B523	X	9	18'-9"	X		WING 4 LOWER HORIZ. - F.F.
B824	X	9	20'-5"	X		WING 4 LOWER HORIZ. - B.F.
B425	X	2	17'-3"			WING 4 UPPER HORIZ.
B426	X	2	13'-6"			WING 4 UPPER HORIZ.
B427	X	2	7'-10"			WING 4 UPPER HORIZ.
B428	X	2	17'-4"	X		WING 4 UPPER DIAG.
B429	X	4	9'-11"	X		WING 4 TOP HORIZ. CORNER
B430	X	9	5'-9"	X		WING 4 TOP VERT. CORNER

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

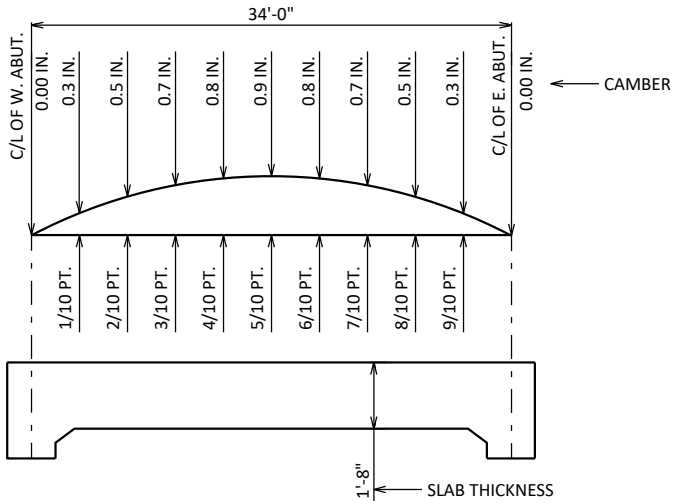
▲ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-296			
DRAWN BY		CLP	PLANS CK'D JMC
EAST ABUTMENT DETAILS AND BILL OF BARS		SHEET 12 OF 15	

SCALE =



TYPICAL SECTION THRU BRIDGE



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.

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
PLUS	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS	TOP OF SLAB FALSEWORK ELEVATION

TOP OF SLAB ELEVATIONS

LOCATION	C/L W. ABUT.	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	C/L E. ABUT.
N. EDGE OF SLAB	786.01	785.95	785.88	785.81	785.75	785.68	785.62	785.55	785.49	785.42	785.35
C/L OF SMIKRUD RD	786.13	786.06	786.00	785.93	785.87	785.80	785.73	785.67	785.60	785.54	785.47
S. EDGE OF SLAB	785.72	785.65	785.58	785.52	785.45	785.39	785.32	785.25	785.19	785.12	785.06

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT 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 TOLERANCE NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

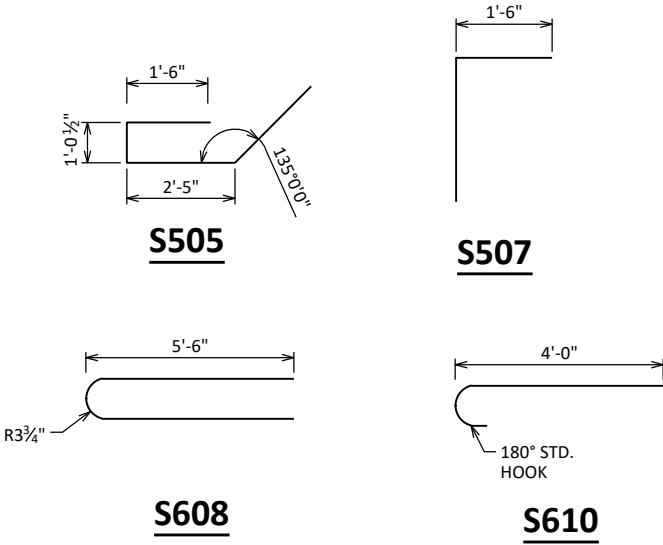
* 3/4" V-GROOVE. EXTEND V-GROOVE TO 6" FROM F.F. OF ABUT.

BILL OF BARS

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

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S1001	x	46	31'-8"			SLAB LONG. BOT.
S502	x	50	30'-1"			SLAB TRANS. BOT.
S503	x	36	30'-1"			SLAB TRANS. TOP
S404	x	27	34'-11"			SLAB LONG. TOP
S505	x	54	6'-10"	X		SLAB @ ABUT. DIAPHRAGM STIRRUPS
S506	x	6	30'-1"			SLAB @ ABUT. DIAPHRAGM TRANS.
S507	x	54	3'-4"	X		SLAB @ ABUT.
S608	x	28	11'-3"	X		SLAB @ RAIL POSTS
S609	x	40	6'-0"			SLAB @ INT. RAIL POSTS
S610	x	16	4'-8"	X		SLAB @ END RAIL POSTS

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



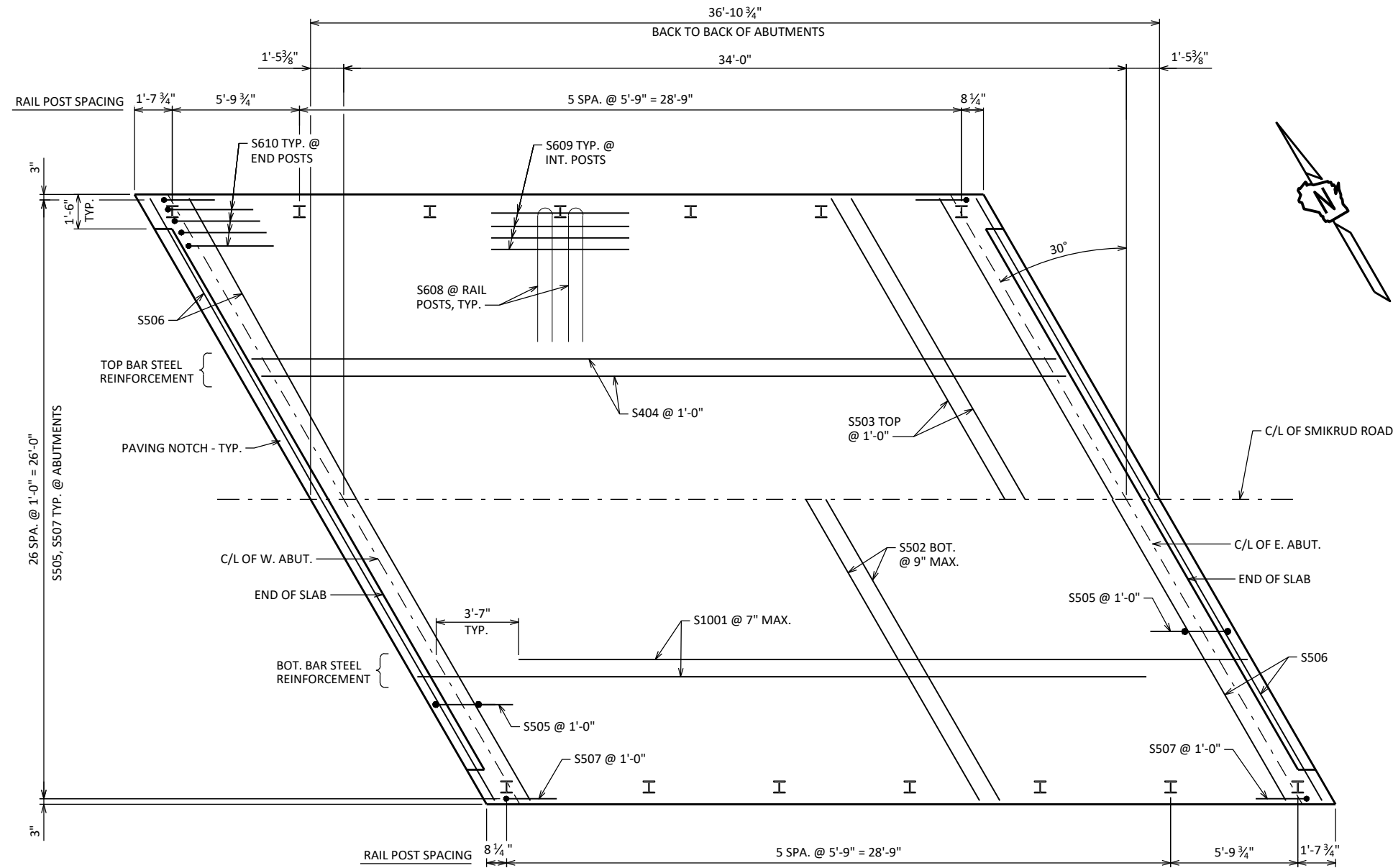
SURVEY TOP OF SLAB ELEVATIONS

	ABUTMENT	5/10 PT.	ABUTMENT
N. EDGE OF SLAB			
C/L OF SMIKRUD RD			
S. EDGE OF SLAB			

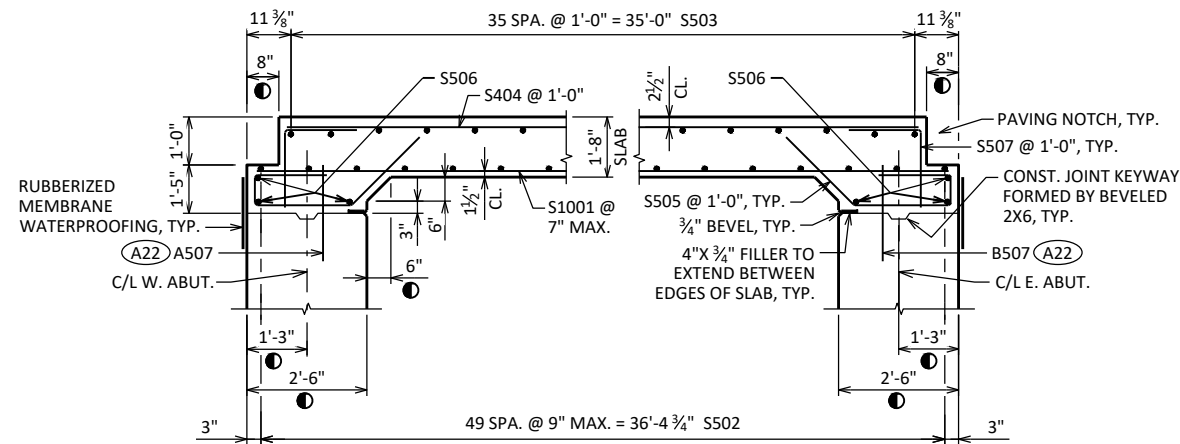
PRIOR TO RELEASING SLAB FORMWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF SUBSTRUCTURES, AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF SLAB AND C/L. RECORD ELEVATIONS IN THE TABLE ABOVE FOR THE "AS BUILT" PLANS.

	NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION				
STRUCTURE B-61-296				
		DRAWN BY	CLP	PLANS CK'D JMC
SUPERSTRUCTURE		SHEET 13 of 15		

SCALE =



PLAN



LONGITUDINAL SECTION

DIMENSIONS ARE GIVEN PARALLEL TO C/L ROADWAY UNLESS OTHERWISE NOTED.

MEASURED NORMAL TO THE C/L OF ABUTMENT. DIMENSIONS ARE TYPICAL FOR BOTH ABUTMENTS.

A22 A507, B507 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-296			
DRAWN BY		CLP	PLANS CK'D JMC
SUPERSTRUCTURE PLAN		SHEET 14 OF 15	

SCALE =

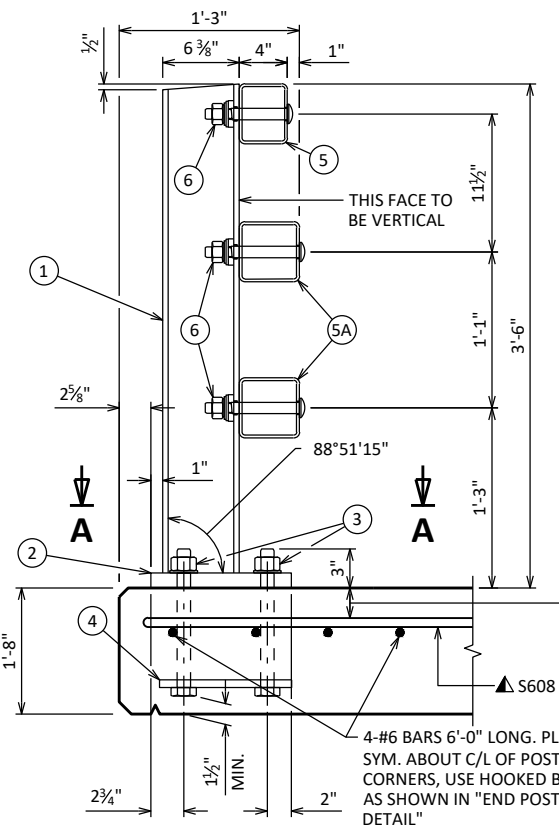
LEGEND

- 1 W6 X 25 WITH 1 1/8" X 1 1/2" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.
- 2 PLATE 1 1/4" X 11 3/4" X 1'-8" WITH 1 1/16" DIA. OVERSIZED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN.
- 3 ASTM A449 - 1 1/8" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED). 5 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 1'-9" LONG IN ABUTMENT WINGS. AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 16" USE 1'-3" LONG. USE 10 3/4" LONG AT ALL OTHER LOCATIONS. (AN EQUIVALENT THREADED ROD WITH NUTS AND HARDENED WASHERS MAY BE SUBSTITUTED FOR ANCHOR BOLTS IN WINGS IF REQ'D. FOR CONSTRUCTABILITY.)
- 4 5/8" X 11" X 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1 3/16" DIA. HOLES FOR ANCHOR BOLTS NO. 3
- 5 TS 5 X 4 X 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
- 5A TS 5 X 5 X 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
- 6 7/8" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, 3/16" X 1 5/8" X 1 5/8" MIN. WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION.)
- 7 1/2" THK. BACK-UP PLATE WITH 2 - 7/8" X 1 1/2" THREADED SHOP WELDED STUDS (NO. 12). BOLT TO RAIL AS SHOWN IN DETAIL. REQUIRED AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYMMETRICALLY ABOUT TUBES NO. 5A.
- 8 1" DIA. HOLES IN PLATE NO. 7 & TUBES NO. 5A FOR 7/8" DIA. A325 BOLTS WITH HEX NUTS AND WASHERS. 6 HOLES IN TUBES AND PLATE NO. 7.
- 9 SPLICE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT".
- 10 3/8" X 3 5/8" X 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
- 10A 3/8" X 2 5/8" X 2'-4" PLATE USED IN NO. 5, 3/8" X 3 5/8" X 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.
- 11 7/8" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 1 5/16" X 1 1/4" LONGIT. SLOTTED HOLES IN PLATE NO. 10A. AT FIELD JOINTS AND 1 5/16" X 2 1/4" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 10A. PROVIDE 1 5/16" DIA. ROUND HOLES IN TUBES NO. 5 AND NO. 5A.
- 12 7/8" DIA. X 1 1/2" LONG THREADED SHOP WELDED STUDS (2 REQ'D.).
- 13 3/8" X 8" X 1'-6" PLATE. BOLT TO RAIL AS SHOWN IN DETAIL. REQ'D. AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYM. ABOUT TUBES NO. 5A.
- 14 7/8" DIA. X 2" LONG A325 HEX BOLT WITH NUT AND WASHER (5 REQ'D.).
- 15 1" DIA. HOLES IN TUBES NO. 5A FOR 7/8" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER AND LOCK WASHER (4 REQ'D.). 4 HOLES IN TUBES.

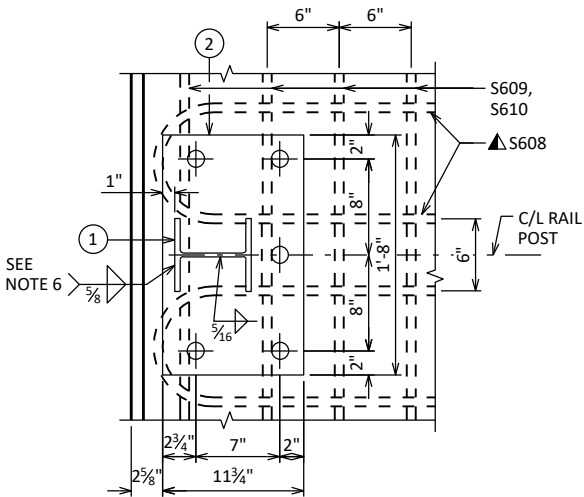
GENERAL NOTES

1. BID ITEM SHALL BE "RAILING TUBULAR TYPE M" WHICH INCLUDES ALL ITEMS SHOWN.
2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY = 50 KSI. ANCHOR PLATES, AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.
3. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.
4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE. RAILS SHALL BE SPLICED IN A PANEL OVER EXPANSION JOINTS.
5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
6. WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
7. FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 AND CAULK AROUND PERIMETER OF PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
8. POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
9. ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY SSPC SPECIFICATIONS.

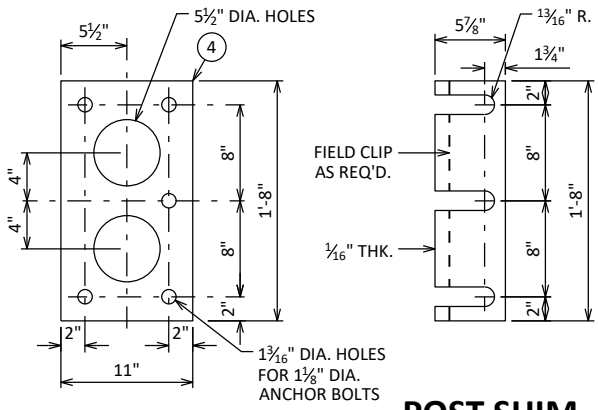
- ▲ TIE TO TOP MAT OF STEEL.
- * ANCHOR BOLT ASSEMBLY MAY BE TACK WELDED, EITHER IN THE SHOP, OR IN THE FIELD AFTER THE ANCHOR PLATE IS PLACED.



SECTION THRU RAILING ON DECK

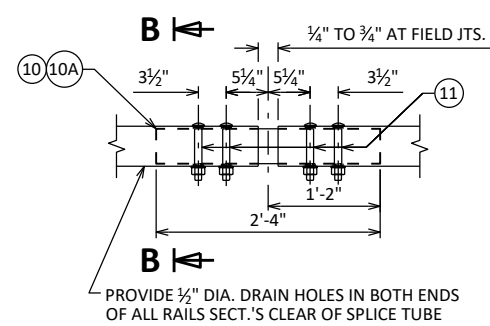


SECTION A-A

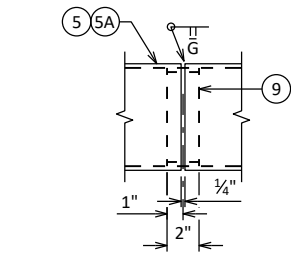


ANCHOR PLATE
AT RAIL TO DECK CONNECTION

POST SHIM
DETAIL

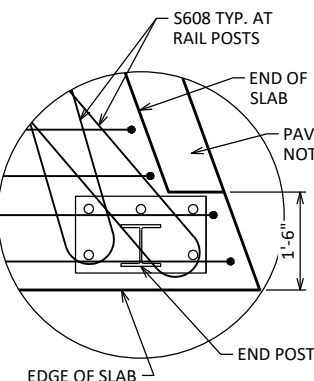


FIELD ERECTION JOINT DETAIL

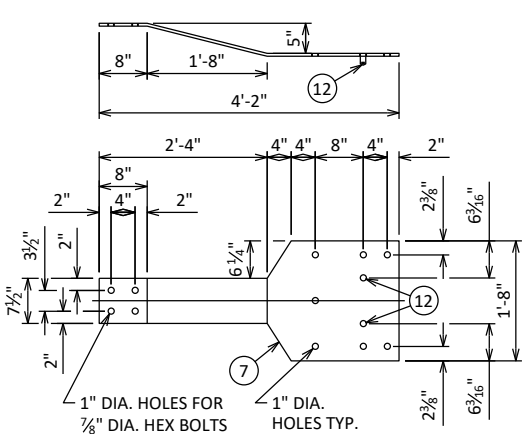


SHOP RAIL SPLICE DETAIL

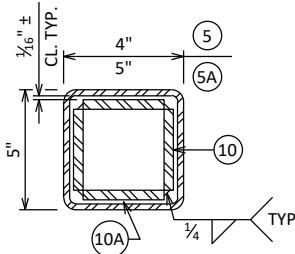
LOCATION MUST BE SHOWN
ON SHOP DRAWINGS



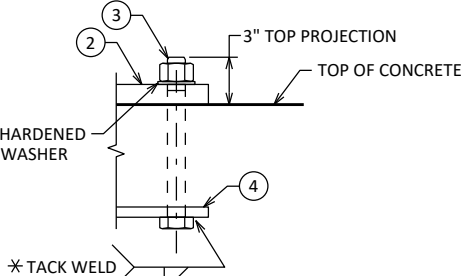
END POST DETAIL
REINFORCEMENT AT CORNERS



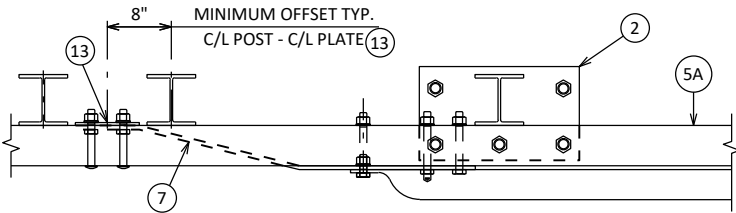
BACK-UP PLATE DETAIL
AT BEAM GUARD ATTACHMENT



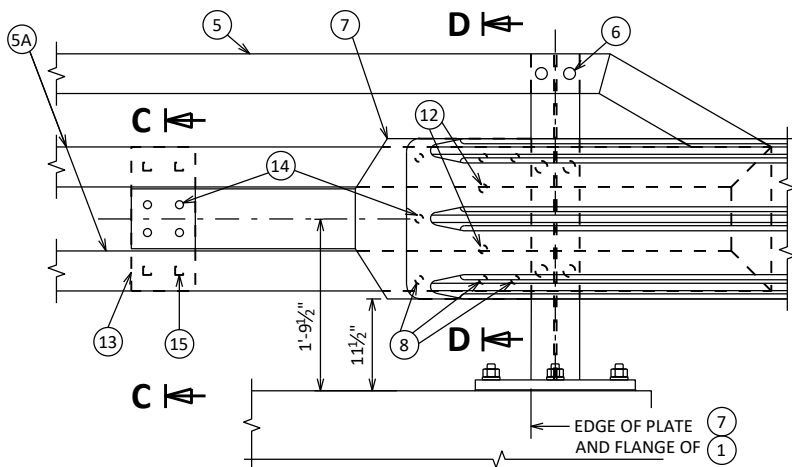
SECTION B-B



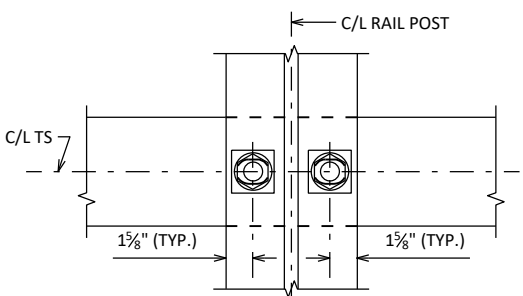
ANCHOR BOLTS



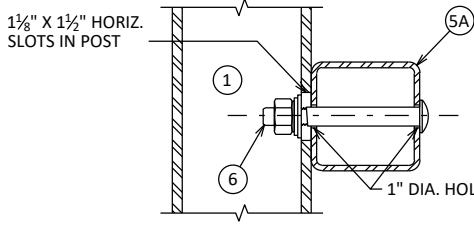
TOP VIEW AT END POST
THRIE BEAM RAIL ATTACHMENT



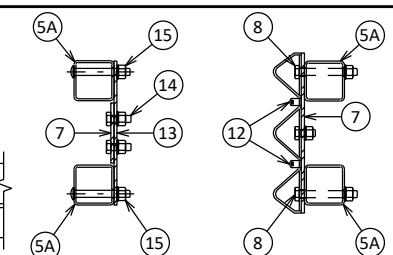
DETAIL AT END POST
THRIE BEAM RAIL ATTACHMENT



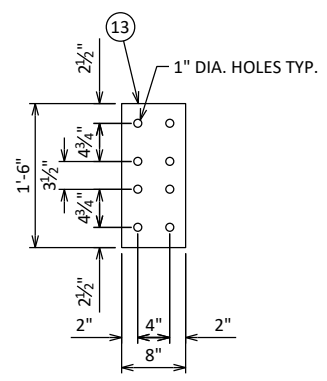
SECTION THRU POST WEB



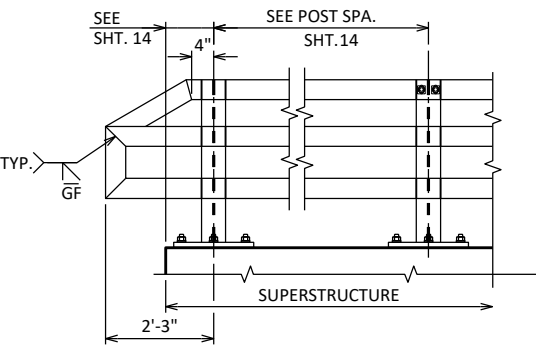
SECTION THRU RAIL
NOTE: CONNECTIONS AT LOWER RAILS SHOWN.
CONNECTIONS AT TOP RAIL SIMILAR.



SECTION C-C SECTION D-D



ANCHOR PLATE
AT BEAM GUARD ATTACHMENT

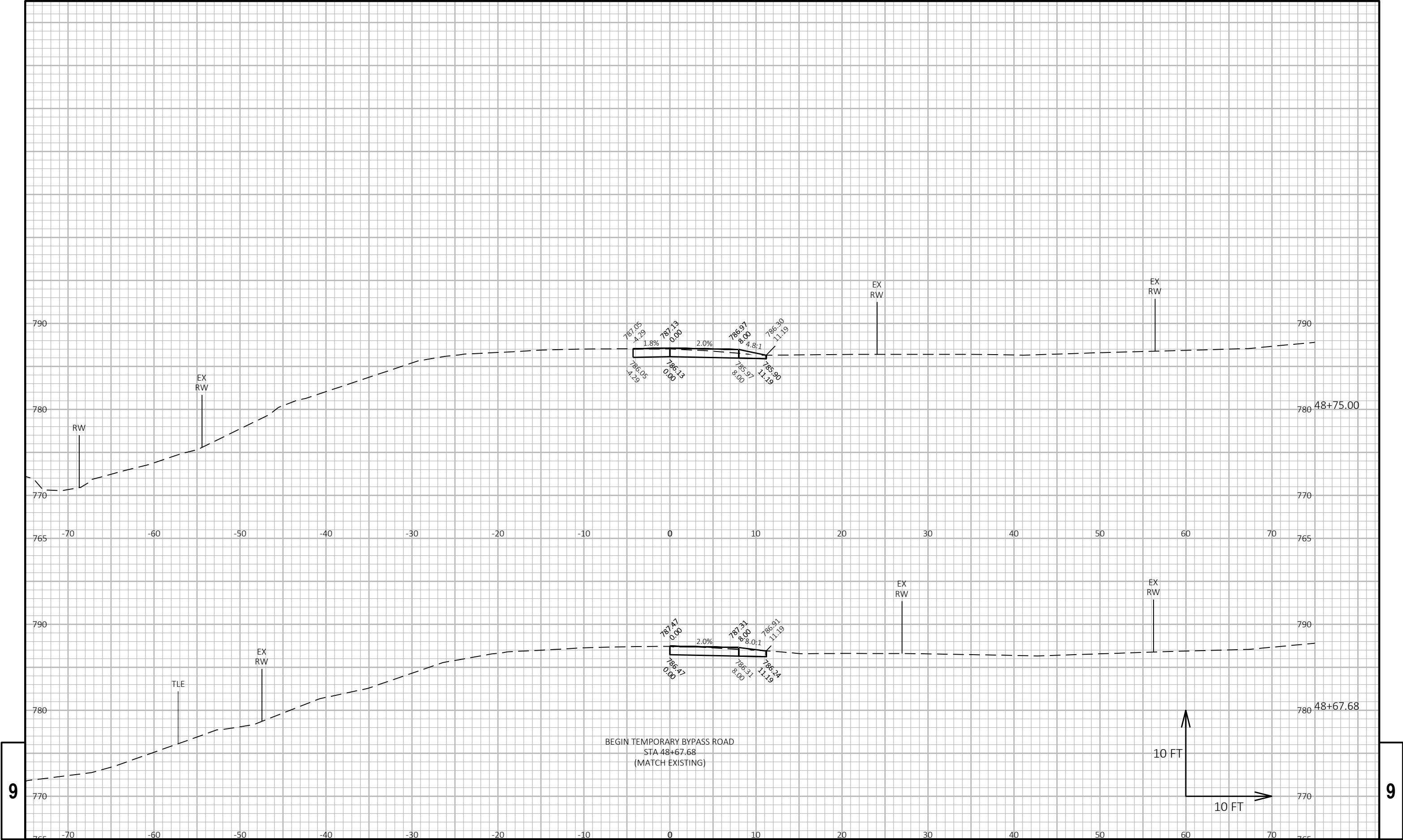


PART ELEVATION OF RAILING

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-296			
DRAWN BY		CLP	PLANS CK'D JMC
TUBULAR STEEL RAILING TYPE "M"		SHEET 15 OF 15	

SMIKRUD ROAD TEMPORARY BYPASS COMPUTER EARTHWORK										
Station	Distance	Area (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
		Cut	Unuseable Pavement Material	Fill	Salvaged /			Expanded		
					Cut	Unuseable Pavement Material	Fill	Cut 1.00	Fill 1.30	
48+67.68	--	9.5	0.0	0.0						
48+75	7.32	11.6	0.0	0.0	3	0	0	3	0	3
49+00	25.00	6.7	0.0	0.0	8	0	0	11	0	11
49+25	25.00	2.3	0.0	4.7	4	0	2	15	3	13
49+50	25.00	0.0	0.0	42.6	1	0	22	17	31	-15
49+75	25.00	0.0	0.0	178.1	0	0	102	17	164	-148
50+00	25.00	0.0	0.0	451.9	0	0	292	17	543	-527
50+25	25.00	0.0	0.0	79.2	0	0	246	17	863	-846
50+50	25.00	0.0	0.0	73.0	0	0	70	17	955	-938
50+75	25.00	0.0	0.0	67.0	0	0	65	17	1039	-1022
51+00	25.00	2.3	0.0	34.6	1	0	47	18	1100	-1082
51+01.12	1.12	2.2	0.0	33.2	0	0	1	18	1102	-1084
					18	0	848			

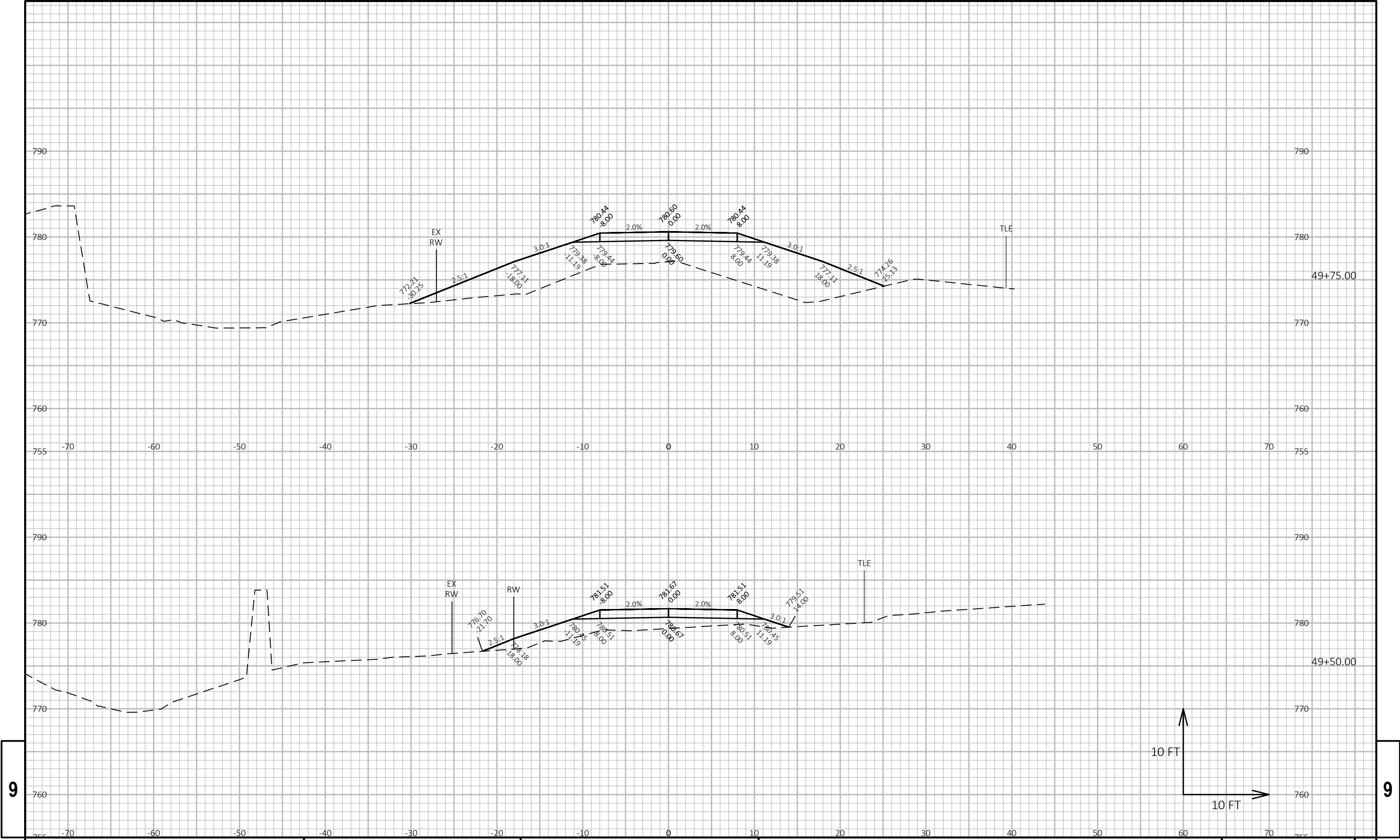
SMIKRUD ROAD REMOVAL OF TEMPORARY BYPASS COMPUTER EARTHWORK										
Station	Distance	Area (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
		Cut	Unuseable Pavement Material	Fill	Salvaged /			Expanded		
					Cut	Unuseable Pavement Material	Fill	Cut 1.00	Fill 1.30	
					Note 1	Note 4	Note 2	Note 5		Note 3
48+67.68	--	--	--	--						
51+01.12	233.44	--	--	--	1254	0	18	1254	23	1231



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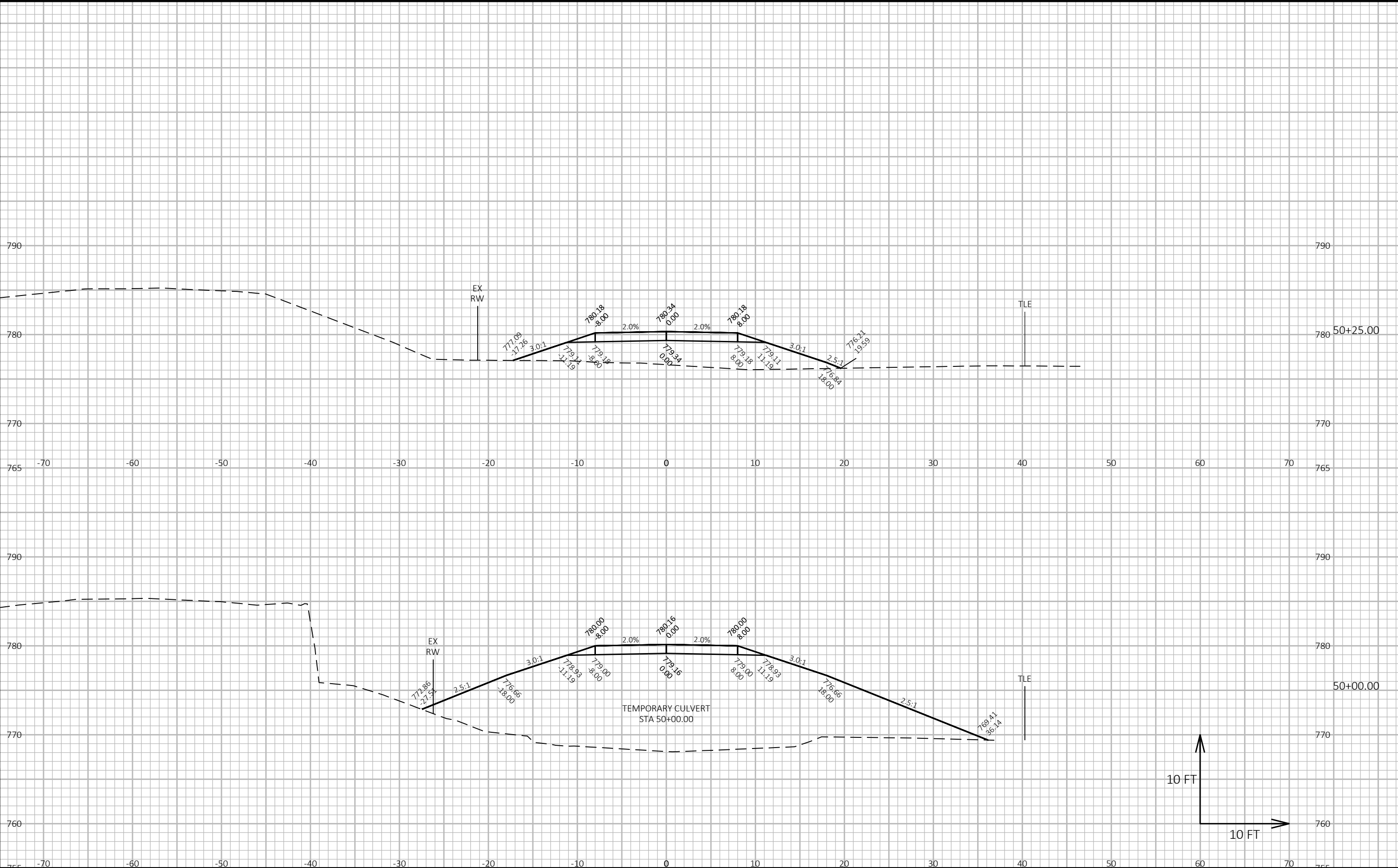
PROJECT NO: 7282-00-72	HWY: SMIKRUD ROAD	COUNTY: TREMPLEALEU	CROSS SECTIONS: TEMPORARY BYPASS	SHEET E
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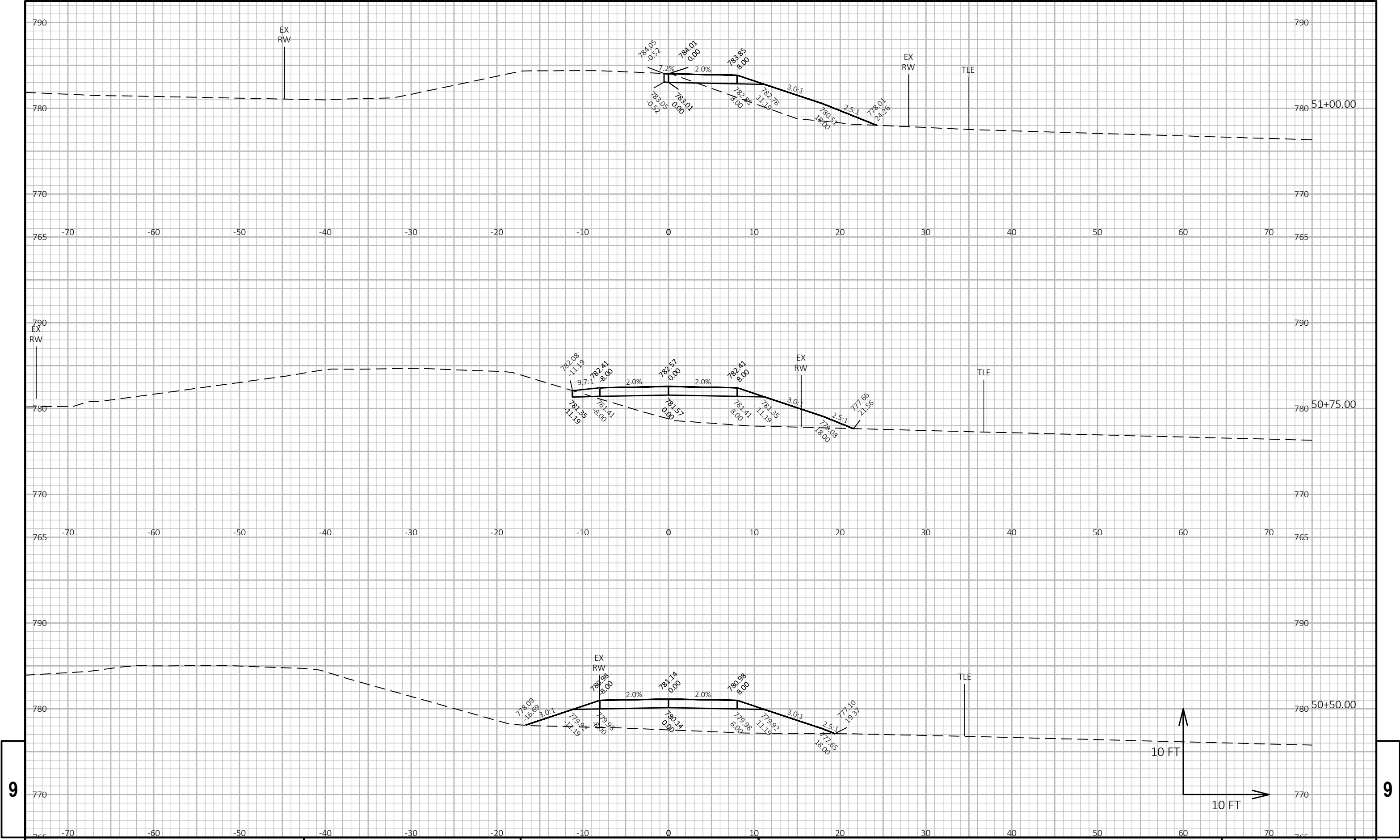


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PROJECT NO: 7282-00-72	HWY: SMIKRUD ROAD	COUNTY: TREMPPEALEAU	CROSS SECTIONS: TEMPORARY BYPASS	SHEET E
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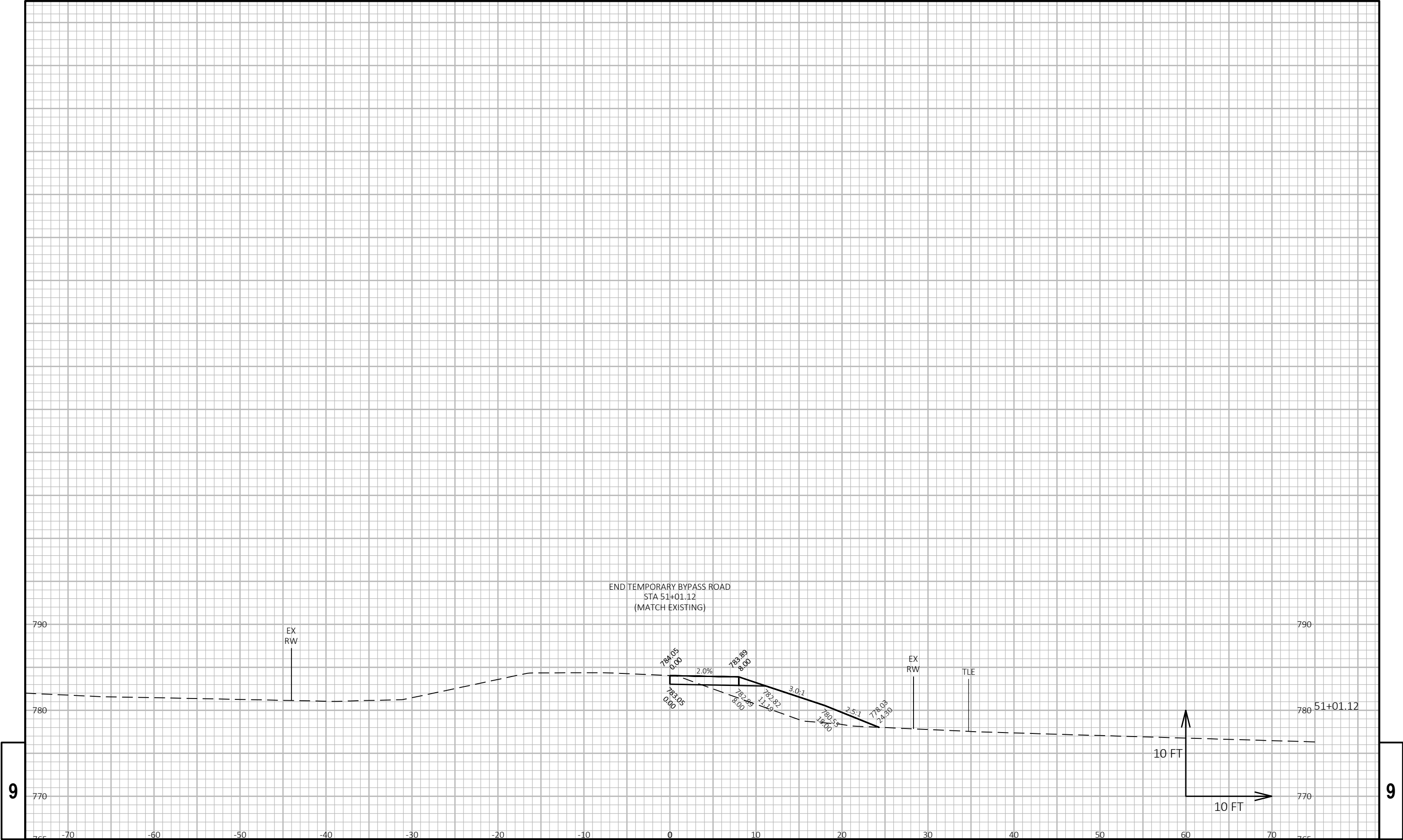




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PROJECT NO: 7282-00-72	HWY: SMIKRUD ROAD	COUNTY: TREMPLEALEU	CROSS SECTIONS: TEMPORARY BYPASS	SHEET	E
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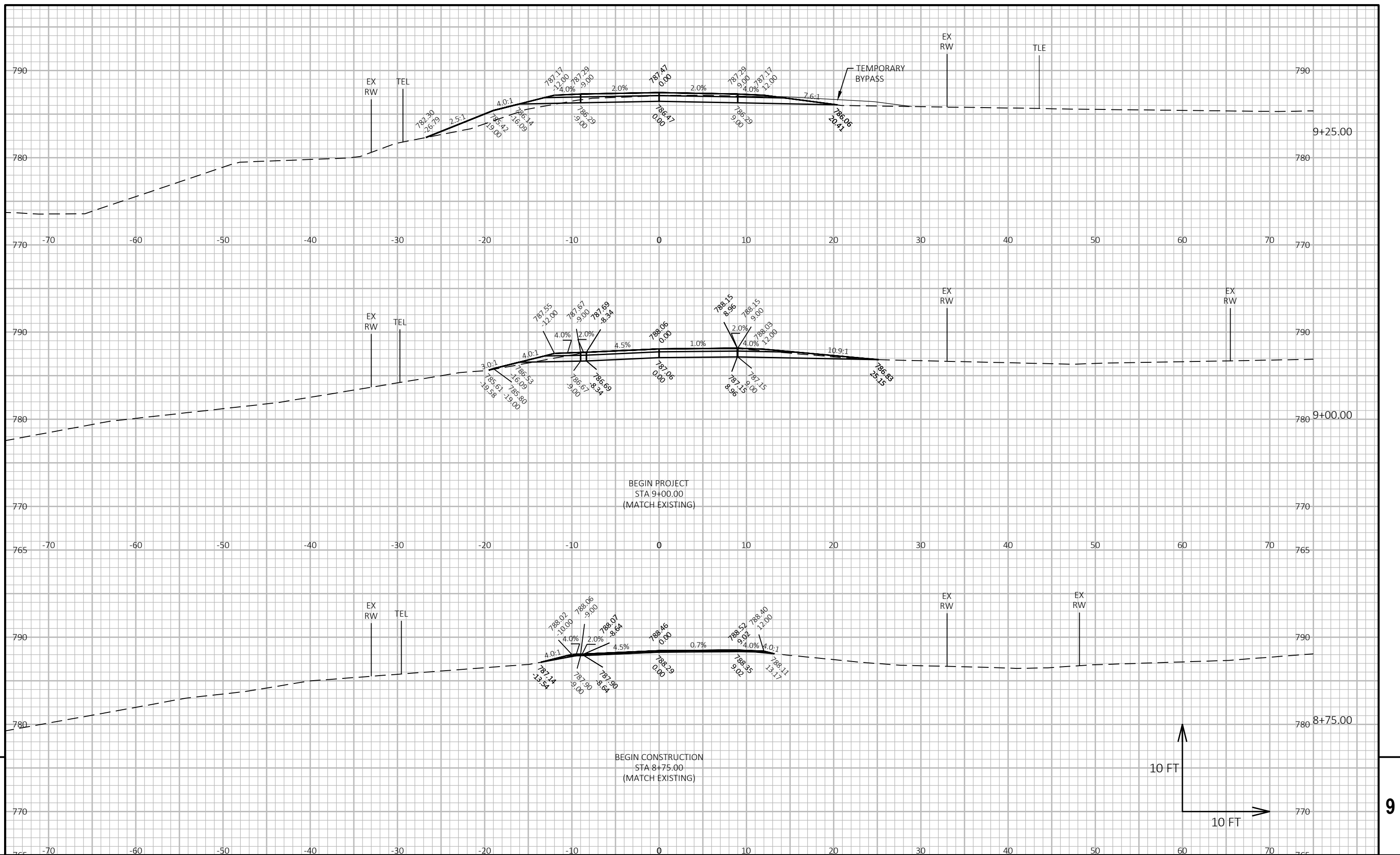
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PROJECT NO: 7282-00-72	HWY: SMIKRUD ROAD	COUNTY: TREMPPEALEAU	CROSS SECTIONS: TEMPORARY BYPASS	SHEET	E
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SMIKRUD ROAD COMPUTER EARTHWORK

Station	Distance	Area (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
		Cut	Unuseable Pavement Material	Fill	Salvaged / Unuseable Pavement Material			Expanded		
					Cut	Unuseable Pavement Material	Fill	Cut 1.00	Fill 1.30	
Note 1	Note 4	Note 2	Note 5	Note 3						
8+75	--	0.0	0.0	0.0						
9+00	25.00	0.0	0.0	0.8	0	0	0	0	0	0
9+00	--	27.2	6.5	0.8	--	--	--	--	--	--
9+25	25.00	18.1	6.3	10.6	21	6	5	15	7	8
9+34.23	9.23	12.7	6.2	11.4	5	2	4	18	12	6
9+50	15.77	5.3	4.8	36.3	5	3	14	20	30	-10
9+55.91	5.91	5.5	4.9	48.8	1	1	9	20	42	-22
9+64.13	8.22	12.7	6.0	7.4	3	2	9	21	54	-32
9+75	10.87	14.1	5.9	11.6	5	2	4	24	59	-34
9+86.21	11.21	14.9	3.8	19.7	6	2	6	28	67	-39
BRIDGE	--	--	--	--	--	--	--	--	--	--
10+17.79	--	20	2.2	4	--	--	--	--	--	--
10+25	7.21	29.5	5.4	20.9	7	1	3	34	71	-37
10+39.69	14.69	20.0	5.5	8.5	13	3	8	44	82	-37
10+44.69	5.00	20.4	5.6	8.1	4	1	2	47	84	-36
10+44.69	--	0.0	0.0	8.1	--	--	--	--	--	--
10+48.09	3.40	0.0	0.0	27.0	0	0	2	47	86	-39
10+50	1.91	0.0	0.0	37.9	0	0	2	47	89	-42
10+69.67	19.67	0.0	0.0	28.1	0	0	24	47	121	-74
10+75	5.33	0.0	0.0	24.1	0	0	5	47	127	-80
11+00	25.00	0.0	0.0	11.4	0	0	16	47	149	-102
11+25	25.00	0.0	0.0	32.7	0	0	20	47	175	-128
11+50	25.00	0.0	0.0	0.0	0	0	15	47	195	-148
					71	23	150			



PROJECT NO:	7282-00-72
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HWY: SMIKRUD ROAD

COUNTY: TREMPEALEAU

CROSS SECTIONS: SMIKRUD ROAD

SHEET

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FILE NAME : I:\42\42-1423.00 - TREMPLEAU CO, TN GALE, SMIKRU D LANE\C3D\DSGN\CRDR\CRDR_SMIKRU D RD.DWG
LAYOUT NAME - 07

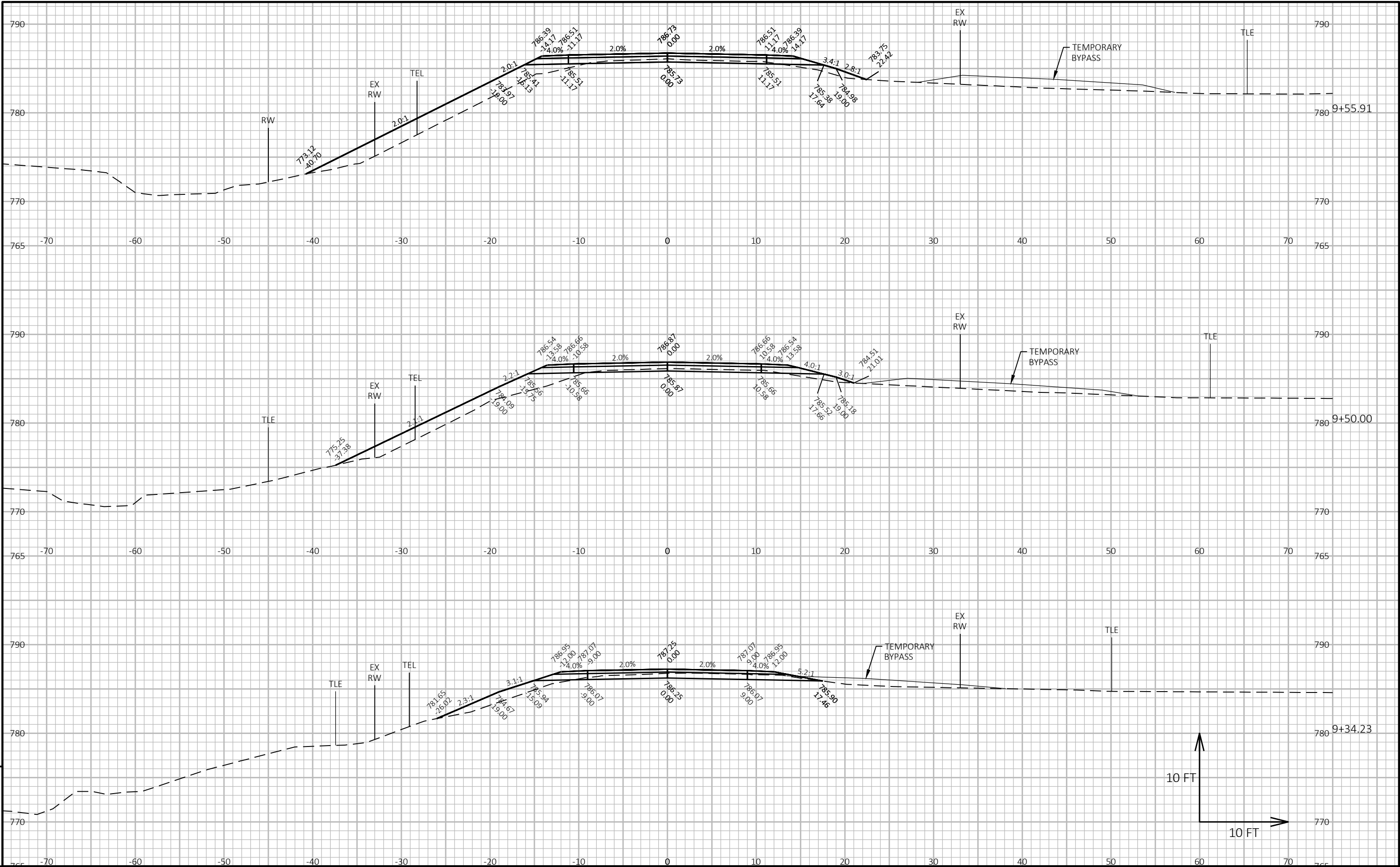
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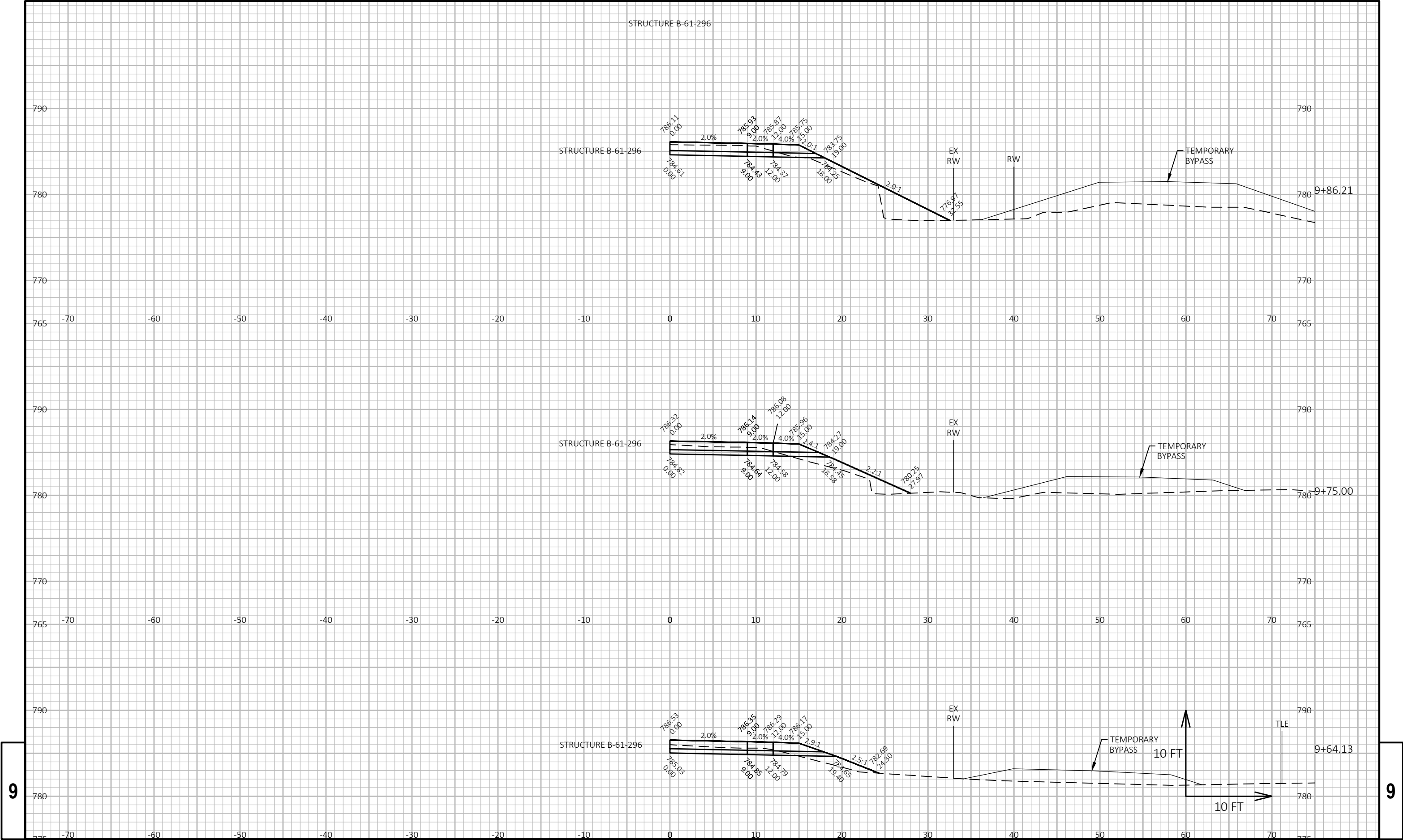
PLOT BY : PEPIN, STEFFANIE

PLOT NAME :

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

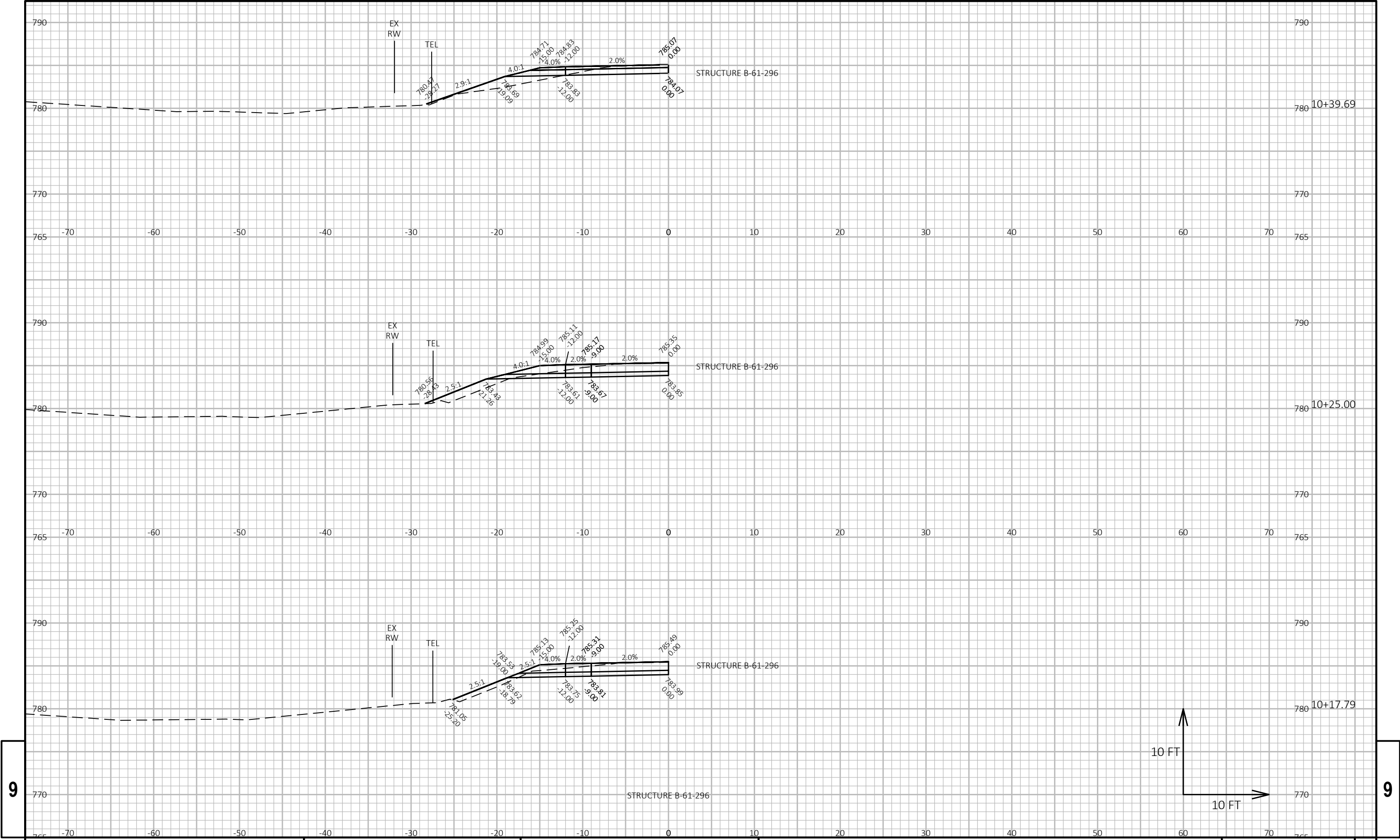
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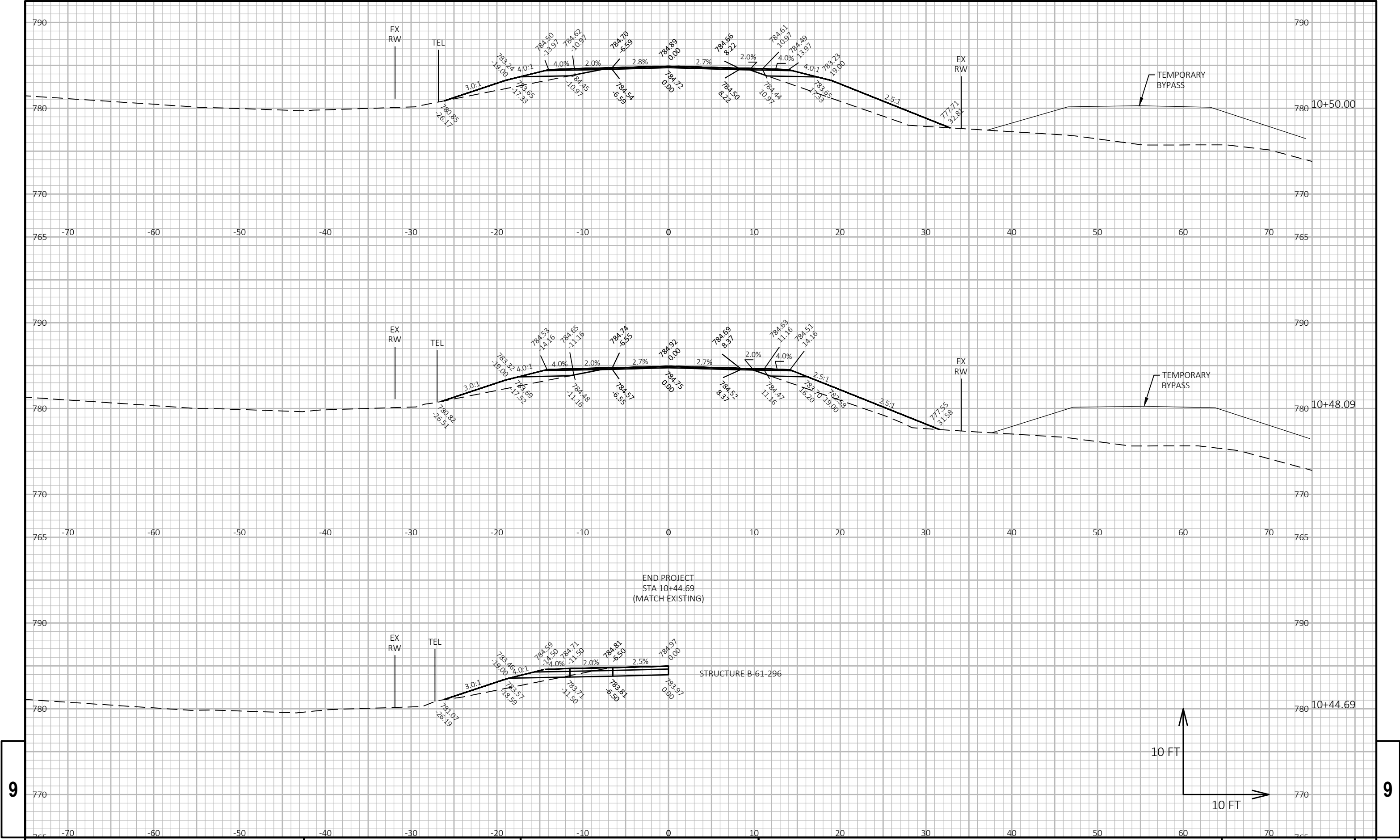
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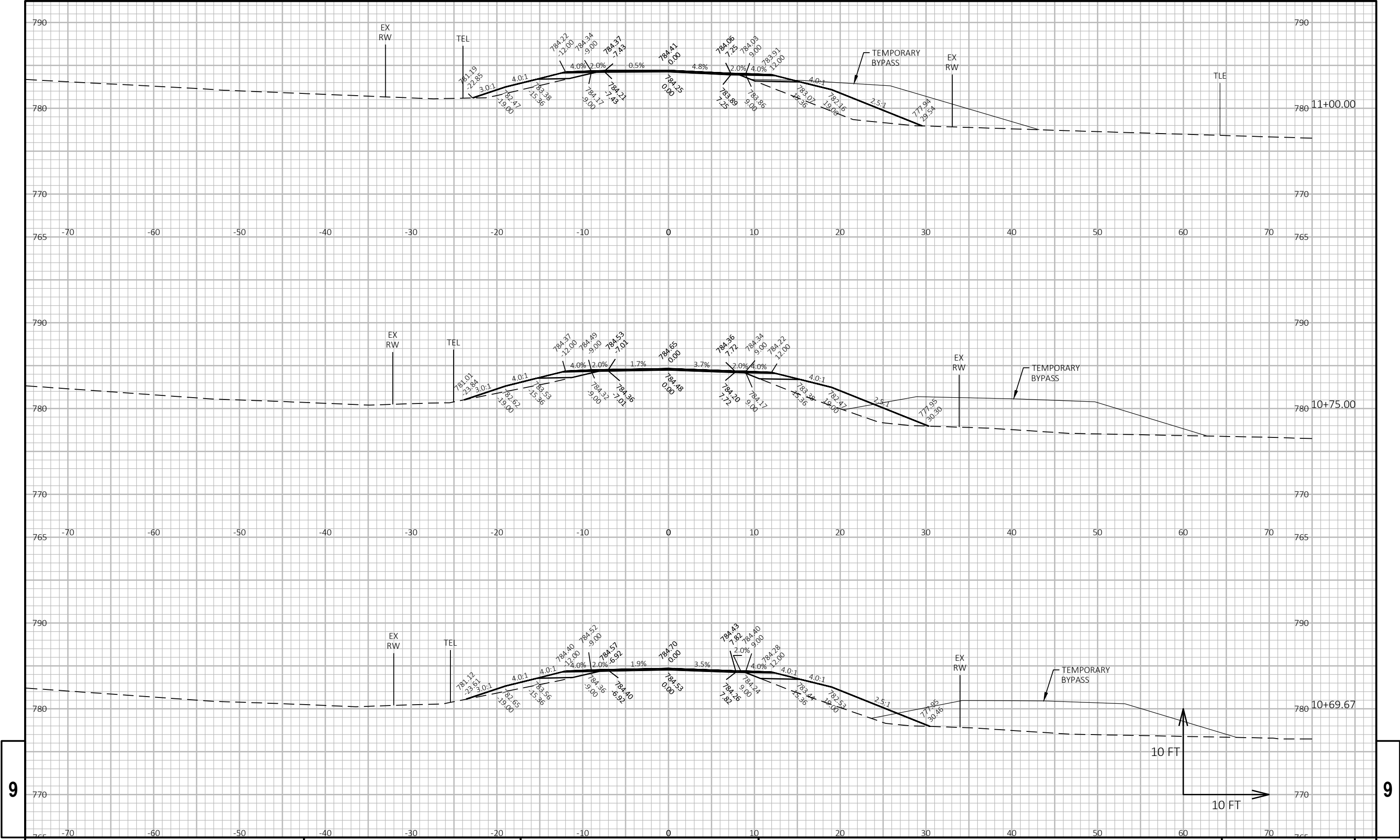
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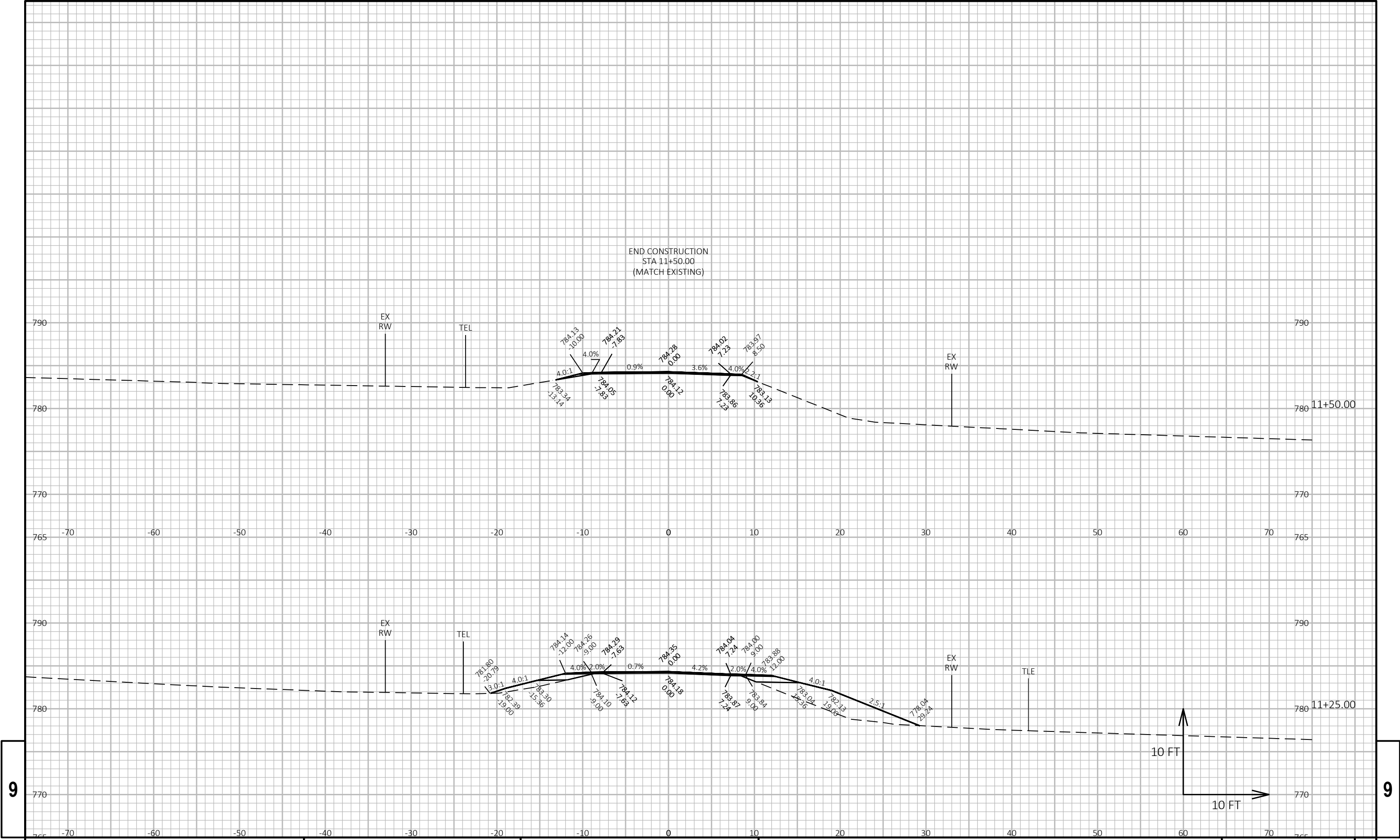


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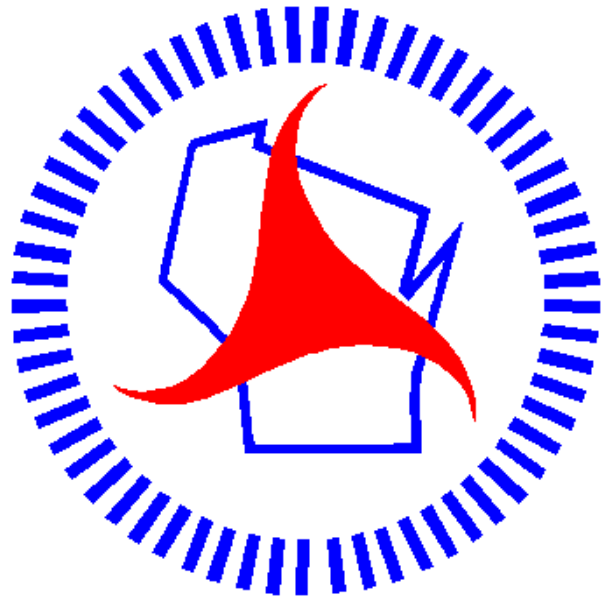
PROJECT NO: 7282-00-72	HWY: SMIKRUD ROAD	COUNTY: TREMPLEALEU	CROSS SECTIONS: SMIKRUD ROAD	SHEET E
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Wisconsin Department of Transportation

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through innovation and exceptional service.

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