

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 Plan
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 = 42



PROJECT LOCATION

DESIGN DESIGNATION

A.A.D.T. (2023)	=	100
A.A.D.T. (2043)	=	110
D.H.V.	=	N/A
D.D.	=	50/50
T.	=	10%
DESIGN SPEED	=	N/A
ESALS	=	22,000

CONVENTIONAL SYMBOLS

PLAN

CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

PROFILE

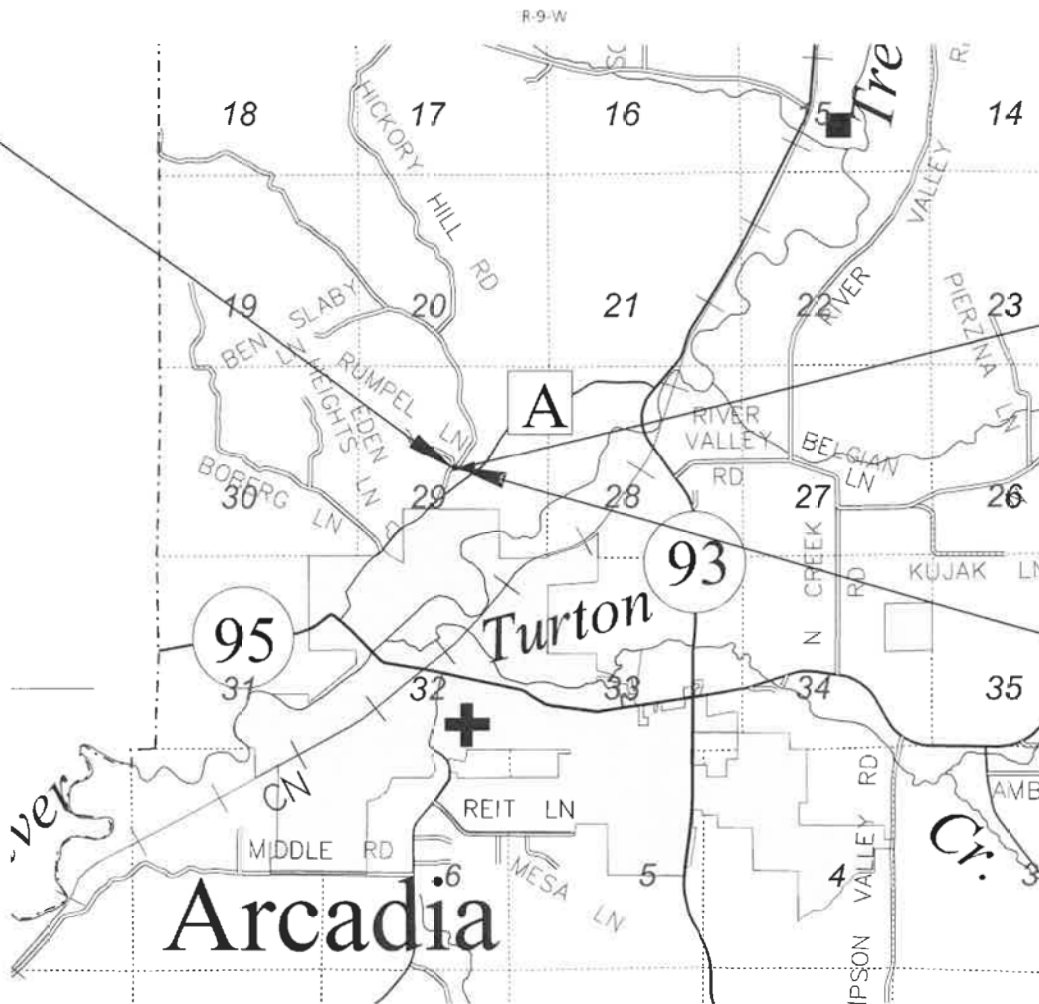
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
OVERHEAD	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

ROCK	
LABEL	
95.36	
E	
FO	
G	
OH	
SAN	
SS	
T	
W	

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 PLAN OF PROPOSED IMPROVEMENT
 T ARCADIA, RAINEY VALLEY ROAD
 RAINEY VALLEY CREEK BRIDGE B-61-0244
 LOCAL STREET
 TREMPLEALEAU COUNTY

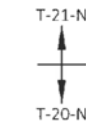
STATE PROJECT NUMBER
7276-00-74

BEGIN PROJECT
 STA 9+46.50
 Y = 403,479.987
 X = 808,486.843



STRUCTURE B-61-0244
 STA 9+80.57 - STA 10+19.33

END PROJECT
 STA 10+85



LAYOUT
 SCALE 0 1 M.
 TOTAL NET LENGTH OF CENTERLINE = 0.027 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), TREMPLEALEAU COUNTY NAD83 (2007), 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 (2007). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7276-00-74		

ACCEPTED FOR TREMPLEALEAU COUNTY

DATE: 7/12/22
 (Signature)

ORIGINAL PLANS PREPARED BY



DATE: _____
 (Signature)

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	CORRE, INC.
Designer	CORRE, INC.
Project Manager	MATTHEW THORNSEN, PE
Regional Examiner	TOU YANG, PE
Regional Supervisor	TYLER RONGSTAND, PE

APPROVED FOR THE DEPARTMENT
 DATE: 7/13/22
 (Signature)

E

PROJECT ID: 7276-00-74

COUNTY: TREMPLEALEAU

37

WITH: N/A

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.

D.O.T. BRIDGE BENCHMARK MONUMENT TO BE FURNISHED BY THE STATE AND PLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

RIGHT OF WAY LINES SHOWN ON THE CROSS SECTIONS ARE APPROXIMATE.

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

3.5 INCH ASPHALTIC SURFACE, SHALL BE CONSTRUCTED WITH 1.75 INCH UPPER LAYER AND 1.75 INCH LOWER LAYER.

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

THE QUANTITY OF THE ITEMS FOR EROSION PROTECTION INCLUDES AN UNDISTRIBUTED AMOUNT FOR PROTECTION, CONTROL AND ABATEMENT OF WATER POLLUTION RESULTING FROM SOIL EROSION. THE DISTRIBUTION AND LOCATION OF THESE MATERIALS ARE TO BE DETERMINED BY THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED (SALVAGED), FERTILIZED, SEEDED, AND EMATTED AS DIRECTED BY THE ENGINEER.

DNR LIAISON

DEPARTMENT OF NATURAL RESOURCES
DNR WEST CENTRAL REGION HEADQUARTERS
1300 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701

ATTN: MS. AMY LESIK
TELEPHONE: (715) 495-1903
E-MAIL: AMYL.LESIK@WISCONSIN.GOV

COUNTY CONTACT

TREMPEALEAU COUNTY HIGHWAY COMMISSIONER
PO BOX 97, N36258 CTH QQ,
WHITEHALL, WI 54773

ATTN: MR. AL RINKA
TELEPHONE: (715) 538-4799
E-MAIL: AL.RINKA@CO.TREMPEALEAU.WI.US

CONSULTANT CONTACT

CORRE, INC.
1802 WARDEN STREET
EAU CLAIRE, WI 54703

ATTN: MR. KEVIN MEYER, P.E.
TELEPHONE: (715) 299-1894
E-MAIL: KMEYER@CORREINC.COM

UTILITY CONTACTS

RIVERLAND ELECTRIC ENERGY COOPERATIVE

ELECTRIC
ATTN: MR. JOSH ABRAMCZAK
N 28988 STATE ROAD 93
P.O. BOX 277
ARCADIA, WI 54612

TELEPHONE: (608) 323-3381
E-MAIL: JABRAMCZAK@RIVERLANDENERGY.COM

LUMEN

COMMUNICATION LINE
ATTN: MR. BRIAN STELPLUGH
333 NORTH FRONT STREET
LA CROSSE, WI 54601

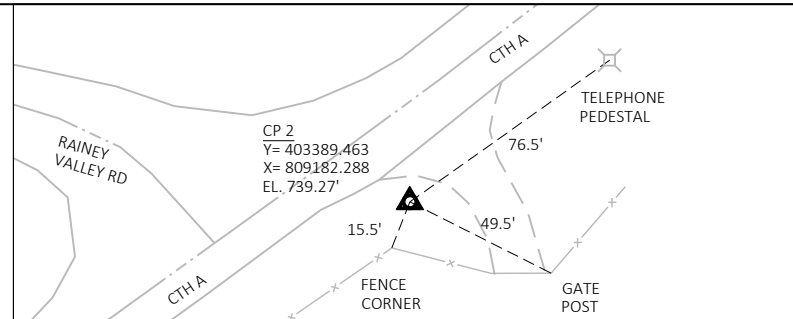
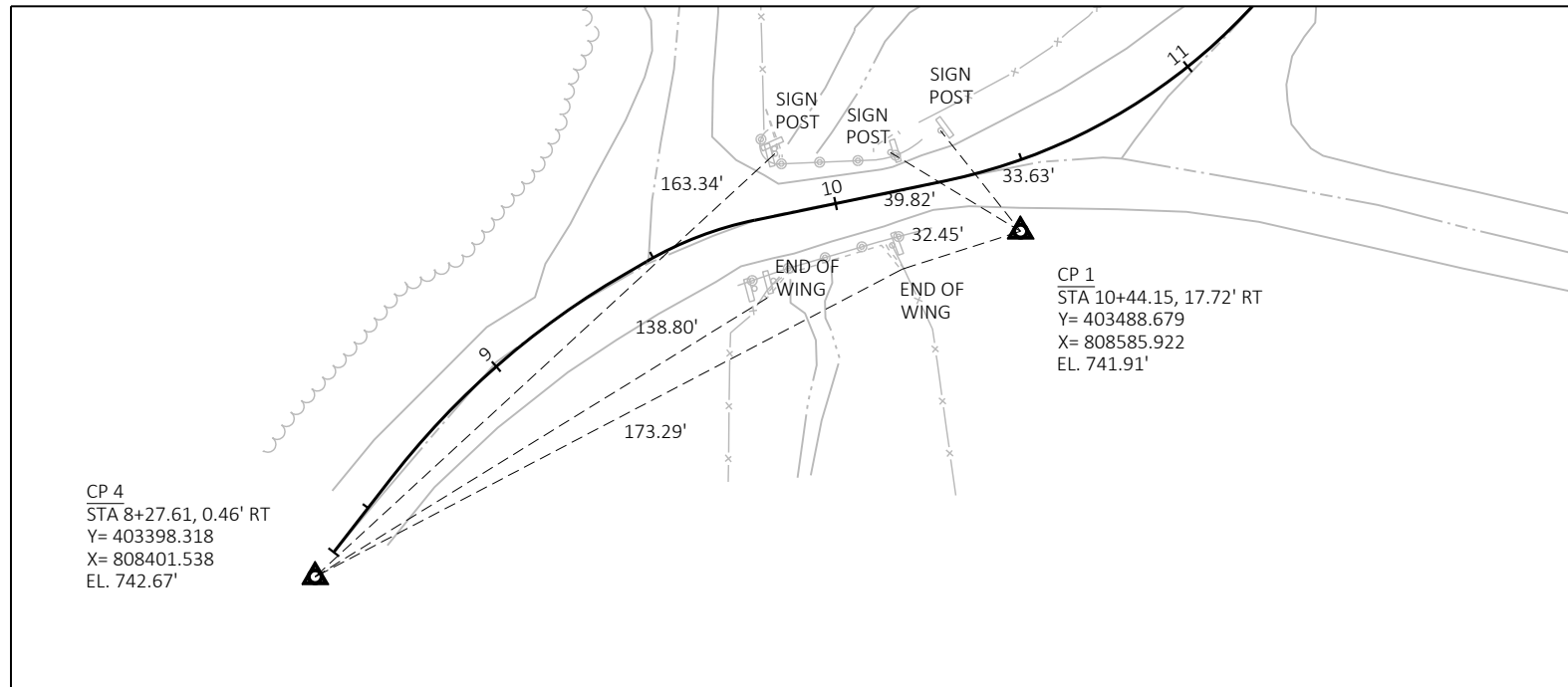
TELEPHONE: (608) 780-1238
E-MAIL: BRIAN.STELPLUGH@LUMEN.COM

WESTERN WISCONSIN COMMUNICATIONS LLC

COMMUNICATION LINE
ATTN: MR. BUCK WEBB
23669 WASHINGTON DTREET
INDEPENDENCE, WI 54747

TELEPHONE: (715) 695-2691
E-MAIL: BWEBB@TCCPRO.NET

CONTROL POINT TIES

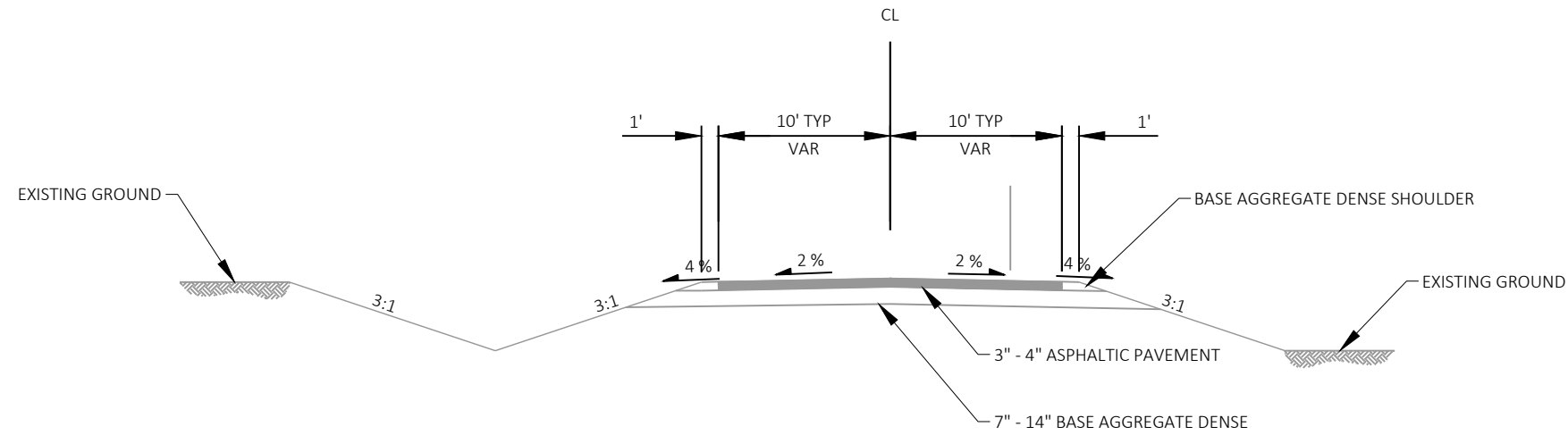


DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

RUNOFF COEFFICIENT TABLE

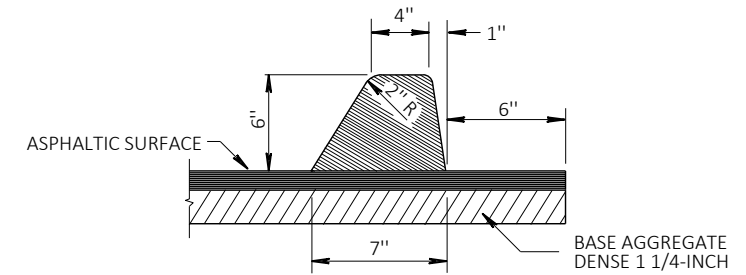
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0 - 2	2 - 6	6 & OVER	0 - 2	2 - 6	6 & OVER	0 - 2	2 - 6	6 & OVER	0 - 2	2 - 6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15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

TOTAL PROJECT AREA = 0.28 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.19 ACRES

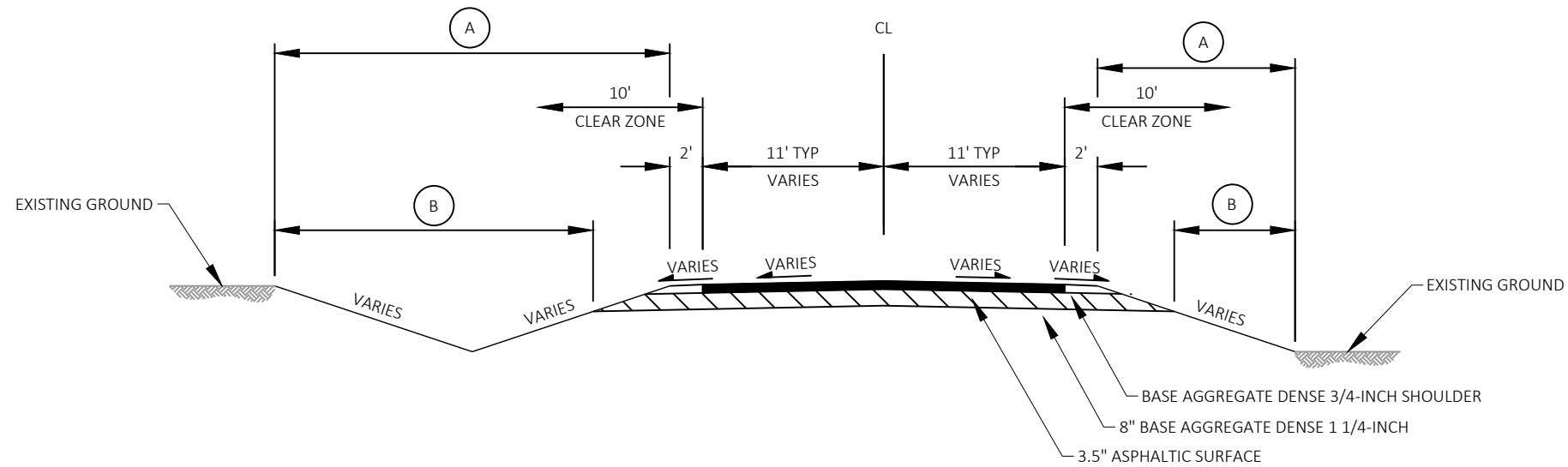


EXISTING TYPICAL SECTION

STA 9+46.50 - 9+80.57
STA 10+19.33 - 10+85.00



ASPHALTIC CURB DETAIL



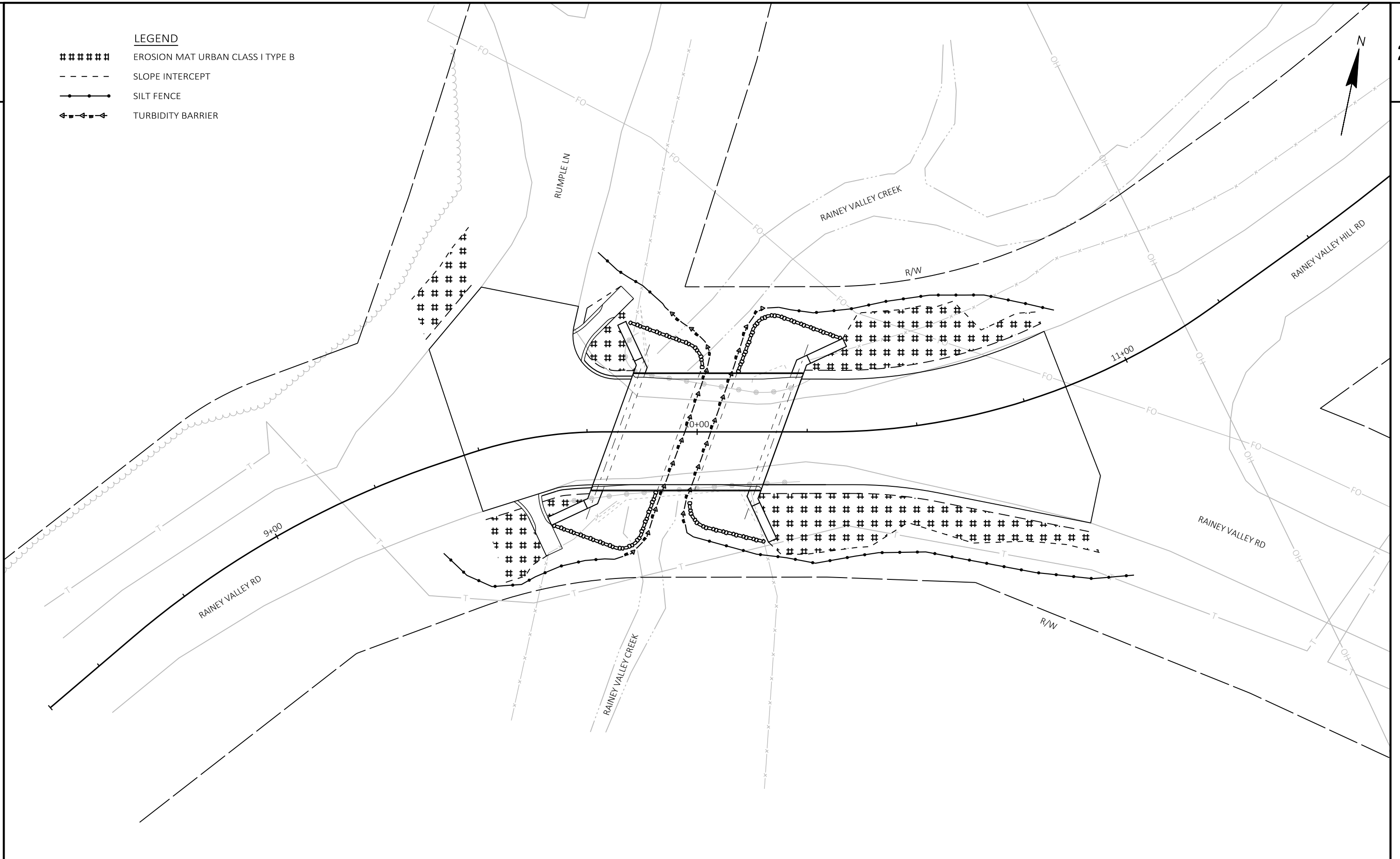
FINISHED TYPICAL SECTION

STA 9+46.50 - 9+80.57
STA 10+19.33 - 10+85.00

- (A) FERTILIZER TYPE B; SEEDING NO. 20
- (B) SALVAGED TOPSOIL; EROSION MAT URBAN CLASS I TYPE B

LEGEND

- ##### EROSION MAT URBAN CLASS I TYPE B
- - - - - SLOPE INTERCEPT
- SILT FENCE
- ←-←-←-← TURBIDITY BARRIER



PROJECT NO: 7276-00-74

HWY: LOCAL STREET

COUNTY: TREMPLEALEU

EROSION CONTROL

SHEET

E

Estimate Of Quantities

7276-00-74

Line	Item	Item Description	Unit	Total	Qty
0002	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. P-61-165	EACH	1.000	1.000
0004	205.0100	Excavation Common	CY	137.000	137.000
0006	206.1001	Excavation for Structures Bridges (structure) 01. B-61-244	EACH	1.000	1.000
0008	210.1500	Backfill Structure Type A	TON	290.000	290.000
0010	213.0100	Finishing Roadway (project) 01. 7276-00-74	EACH	1.000	1.000
0012	305.0110	Base Aggregate Dense 3/4-Inch	TON	11.000	11.000
0014	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	203.000	203.000
0016	455.0605	Tack Coat	GAL	19.000	19.000
0018	465.0105	Asphaltic Surface	TON	76.000	76.000
0020	465.0310	Asphaltic Curb	LF	24.000	24.000
0022	465.0315	Asphaltic Flumes	SY	20.000	20.000
0024	502.0100	Concrete Masonry Bridges	CY	135.000	135.000
0026	502.3200	Protective Surface Treatment	SY	104.000	104.000
0028	502.3210	Pigmented Surface Sealer	SY	38.000	38.000
0030	505.0400	Bar Steel Reinforcement HS Structures	LB	4,280.000	4,280.000
0032	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	18,380.000	18,380.000
0034	516.0500	Rubberized Membrane Waterproofing	SY	14.000	14.000
0036	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	875.000	875.000
0038	606.0300	Riprap Heavy	CY	140.000	140.000
0040	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	170.000	170.000
0042	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7276-00-74	EACH	1.000	1.000
0044	619.1000	Mobilization	EACH	1.000	1.000
0046	624.0100	Water	MGAL	1.000	1.000
0048	625.0500	Salvaged Topsoil	SY	76.000	76.000
0050	628.1504	Silt Fence	LF	200.000	200.000
0052	628.1520	Silt Fence Maintenance	LF	200.000	200.000
0054	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0056	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0058	628.2008	Erosion Mat Urban Class I Type B	SY	76.000	76.000
0060	628.6005	Turbidity Barriers	SY	100.000	100.000
0062	629.0210	Fertilizer Type B	CWT	0.100	0.100
0064	630.0120	Seeding Mixture No. 20	LB	4.000	4.000
0066	630.0200	Seeding Temporary	LB	4.000	4.000
0068	630.0500	Seed Water	MGAL	32.000	32.000
0070	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	4.000	4.000
0072	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0074	638.2602	Removing Signs Type II	EACH	6.000	6.000
0076	638.3000	Removing Small Sign Supports	EACH	6.000	6.000
0078	642.5001	Field Office Type B	EACH	1.000	1.000
0080	643.0420	Traffic Control Barricades Type III	DAY	1,640.000	1,640.000
0082	643.0705	Traffic Control Warning Lights Type A	DAY	2,624.000	2,624.000
0084	643.0900	Traffic Control Signs	DAY	1,558.000	1,558.000
0086	643.5000	Traffic Control	EACH	1.000	1.000
0088	645.0111	Geotextile Type DF Schedule A	SY	100.000	100.000
0090	645.0120	Geotextile Type HR	SY	190.000	190.000
0092	650.4500	Construction Staking Subgrade	LF	101.000	101.000
0094	650.5000	Construction Staking Base	LF	101.000	101.000
0096	650.6501	Construction Staking Structure Layout (structure) 01. B-61-244	EACH	1.000	1.000
0098	650.9911	Construction Staking Supplemental Control (project) 01. 7276-00-74	EACH	1.000	1.000

Estimate Of Quantities

7276-00-74

Line	Item	Item Description	Unit	Total	Qty
0100	650.9920	Construction Staking Slope Stakes	LF	101.000	101.000
0102	690.0150	Sawing Asphalt	LF	108.000	108.000
0104	715.0502	Incentive Strength Concrete Structures	DOL	810.000	810.000
0106	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 10+00	EACH	1.000	1.000

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)		SALVAGED/UNUSABLE PAVEMENT MATERIAL (3)	AVAILABLE MATERIAL (4)	UNEXPANDED FILL	EXPANDED FILL (5)	MASS ORDINATE +/- (6)	WASTE
			CUT (2)	EBS EXCAVATION				FACTOR 1.25		
DIVISION 1 -- RAINEY VALLEY RD	9+46.50 TO 10+85	RAINEY VALLEY RD	137	--	37	100	2	3	98	98
DIVISION 1 SUBTOTAL			137	0	37	100	2	3	98	
GRAND TOTAL			137	0	37	100	2	3	98	98
TOTAL COMMON EXC			137							

NOTES:

- (1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
- (2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
- (3) SALVAGED/UNUSABLE PAVEMENT MATERIAL
- (4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
- (5) EXPANDED FILL FACTOR = 1.25
- (6) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
- (7) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4- INCH TON
9+47	-	9+80	RAINEY VALLEY RD	3	83
10+20	-	10+85	RAINEY VALLEY RD	8	120
				11	203

STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON
9+47	-	9+80	RAINEY VALLEY RD	8	32
10+20	-	10+85	RAINEY VALLEY RD	11	44
				19	76

STATION	TO	STATION	LOCATION	465.0310 ASPHALTIC CURB LF	465.0315 ASPHALTIC FLUMES SY
9+55	-	9+76	SW QUADRANT	12	10
9+72	-	9+84	NW QUADRANT/RUMPLE LN	12	10
TOTAL 0010				24	20

LOCATION	624.0100 WATER MGAL
RAINEY VALLEY ROAD	1
TOTAL 0010	1

LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.6005 TURBIDITY BARRIERS SY
RAINEY VALLEY RD	50	50	50
	150	150	50
TOTAL 0010	200	200	100

3

3

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT	5	2
TOTAL 0010	5	2

LOCATION	625.0500 SALVAGED TOPSOIL SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
RAINEY VALLEY RD	76	76	0.10	4	4	32
TOTAL 0010	76	76	0.10	4	4	32

STATION	LOCATION	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
9+70	RT	1	3	1	1
9+75	RT	1	3	1	1
9+84	LT	-	-	1	1
10+14	RT	-	-	1	1
10+25	LT	1	3	1	1
10+30	LT	1	3	1	1
TOTAL 0010		4	12	6	6

LOCATION	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.5000 TRAFFIC CONTROL EACH
PROJECT	1,640	2,624	1,558	1
TOTAL 0010	1,640	2,624	1,558	1

NOTE: PLACE TRAFFIC CONTROL PER STANDARD DETAIL DRAWING, "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" & "BARRICADES AND SIGN FOR VARIOUS CLOSURES"

STATION TO STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.6501.01 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) (01. B-61-244) EACH	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 7276-00-74) EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
9+47 - 9+81	RAINEY VALLEY ROAD	35	35	-	-	35
10+19 - 10+85	RAINEY VALLEY ROAD	66	66	-	-	66
-	RAINEY VALLEY ROAD	-	-	1	1	-
TOTAL 0010		101	101	1	1	101

STATION	LOCATION	690.0150 SAWING ASPHALT LF
9+47	BEGIN PROJECT	39
9+65	RUMPLE LN	23
10+85	END PROJECT	46
TOTAL 0010		108

PROJECT NO: 7276-00-74

HWY: LOCAL STREET

COUNTY: TREMPLEALEAU

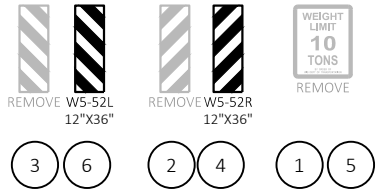
MISCELLANEOUS QUANTITIES

SHEET

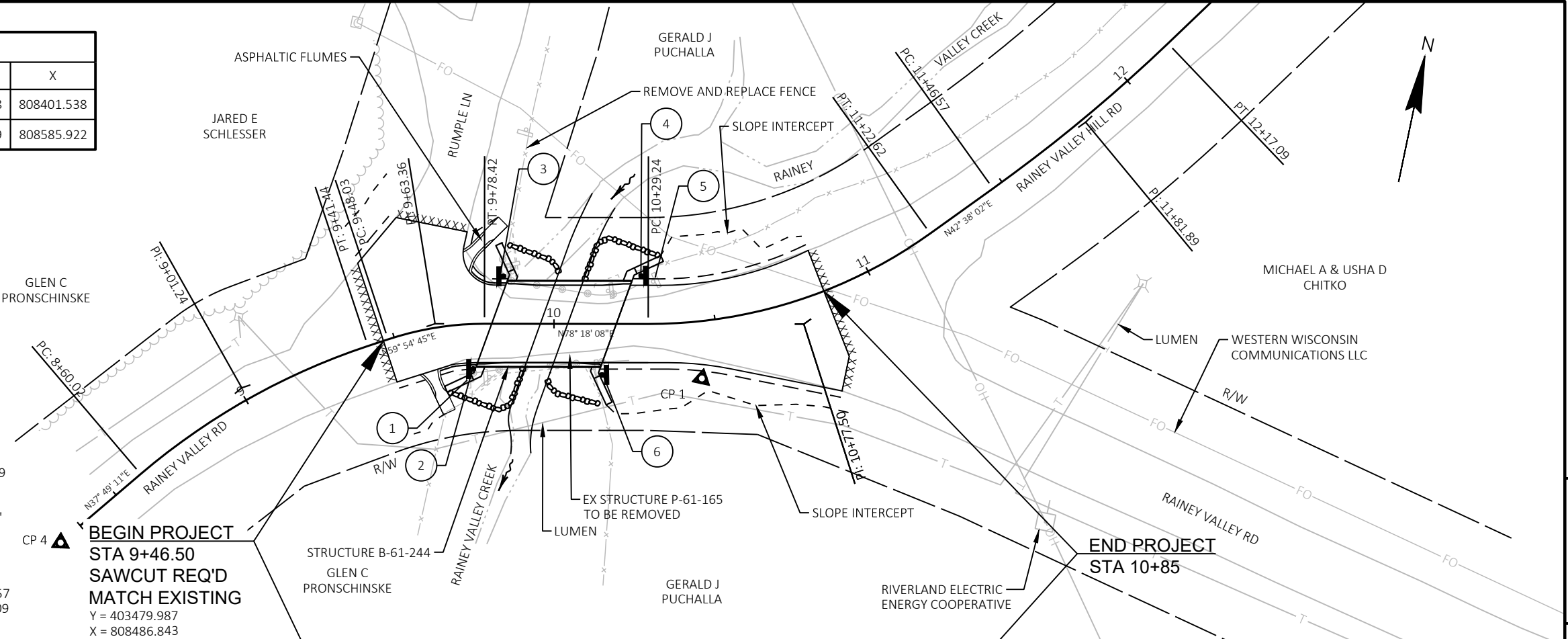
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BENCH MARK / CONTROL POINT						
POINT	STATION	OFFSET	DESCRIPTION	ELEV	Y	X
CP 4	8+27.61	0.46, RT	3/4" REBAR W/ CAP	742.67	403398.318	808401.538
CP 1	10+44.15	17.72, RT	3/4" REBAR W/ CAP	741.91	403488.679	808585.922

REMOVE AND REPLACE SIGNS

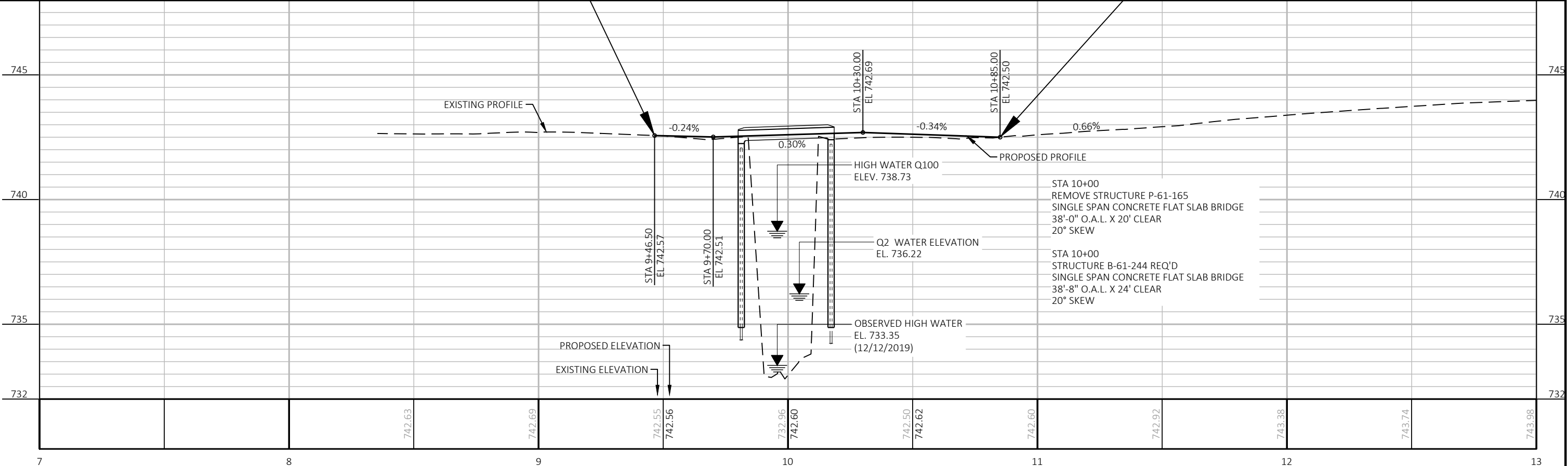


PI STA	Y	X	DELTA	D	T	L	R	PC STA	PT STA
9+01.24	403456.786	808446.799	22°05'34"	27°08'10"	41.22'	81.42'	211.14'	8+60.02	9+41.44
9+63.36	403488.439	808501.432	18°23'23"	60°30'17"	15.33'	30.39'	94.70'	9+48.03	9+78.42
10+77.50	403511.635	808613.463	35°40'06"	38°11'50"	48.26'	93.38'	150.00'	10+29.24	11+22.62
11+81.89	403590.741	808686.291	8°04'50"	11°27'33"	35.32'	70.52'	500.00'	11+46.57	12+17.09



5

5



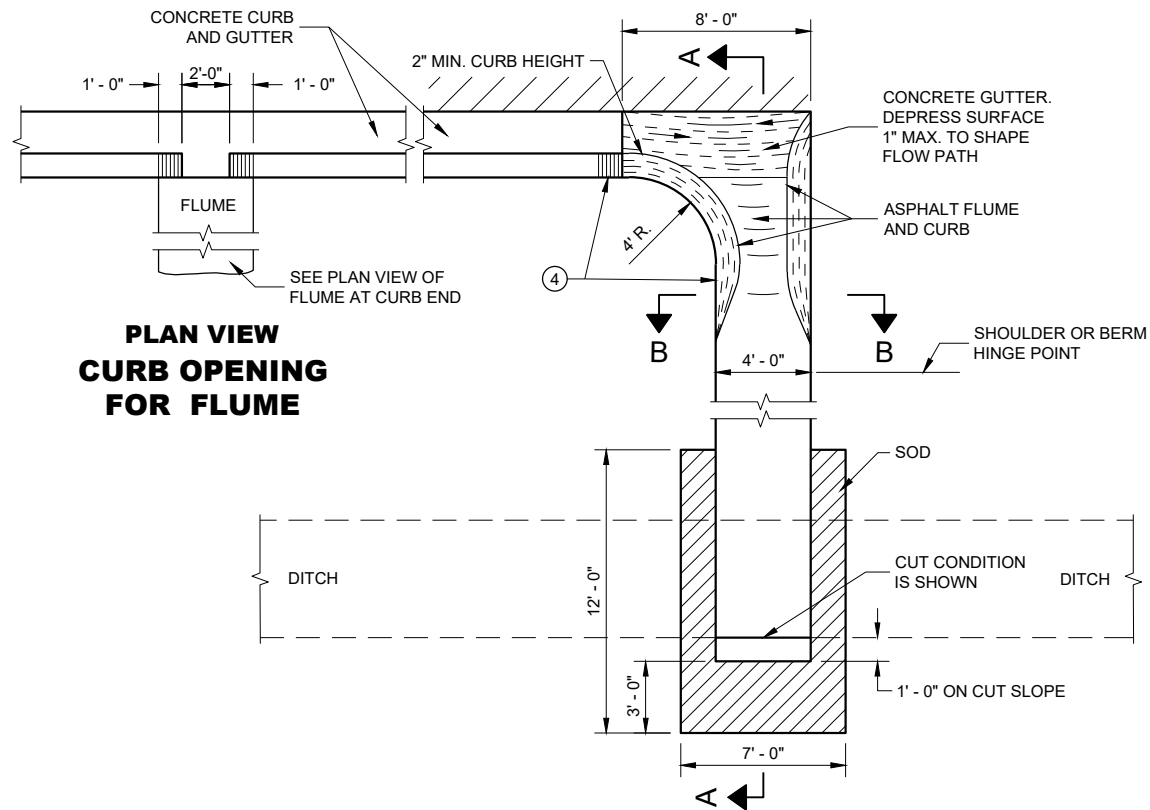
PROJECT NO: 7276-00-74	HWY: LOCAL STREET	COUNTY: TREMPLEALEU	PLAN AND PROFILE: RAINEY VALLEY ROAD	SHEET: E
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Standard Detail Drawing List

08D04-06	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES

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

ASPHALTIC FLUME



**PLAN VIEW
CURB OPENING
FOR FLUME**

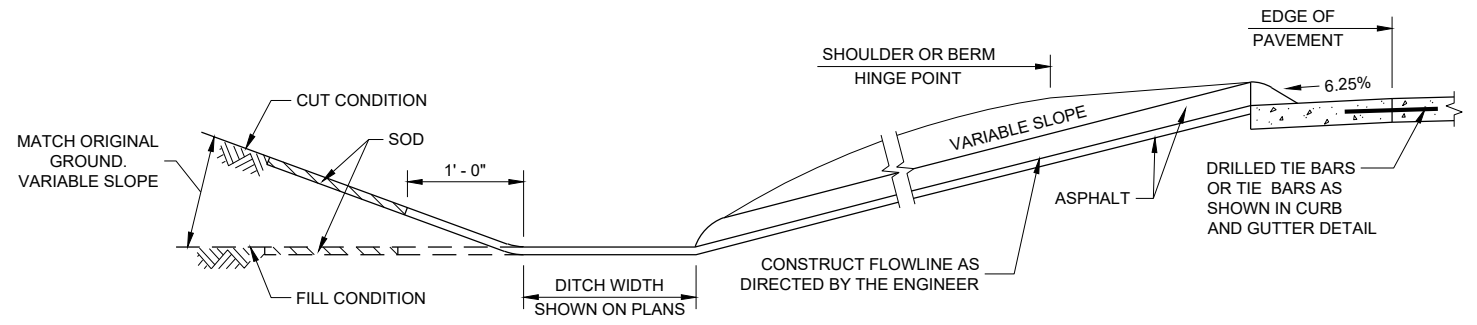
**PLAN VIEW
FLUME AT CURB END**

GENERAL NOTES

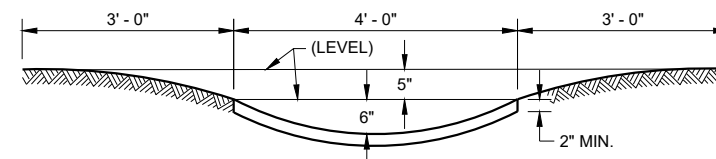
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

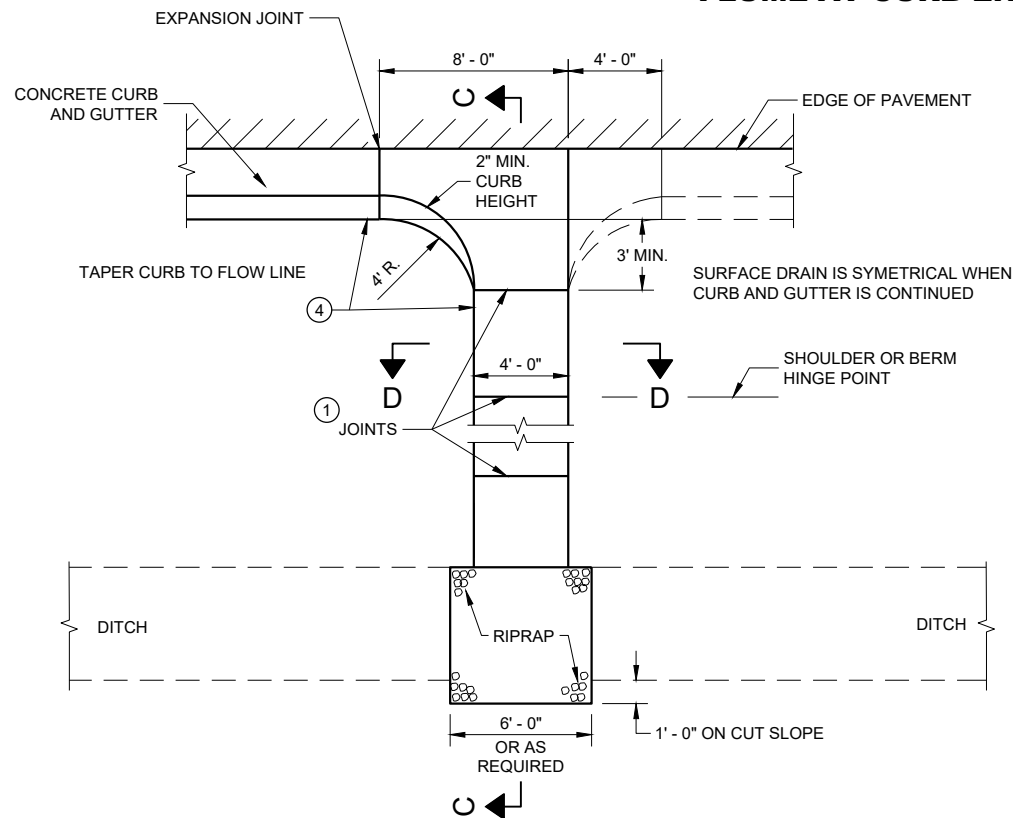
- ① JOINTS SHALL BE 1/8" TO 1/4" WIDE BY 1 1/2" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- ② GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- ③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
- ④ ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.



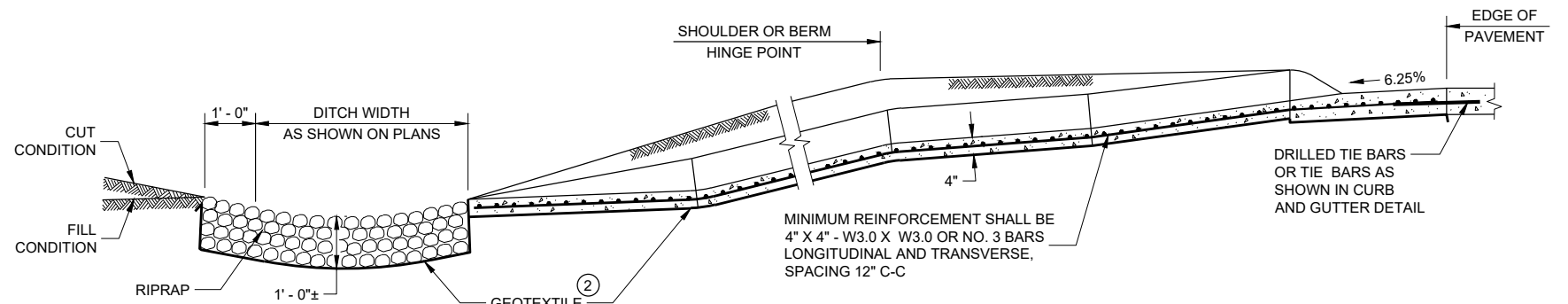
SECTION A - A



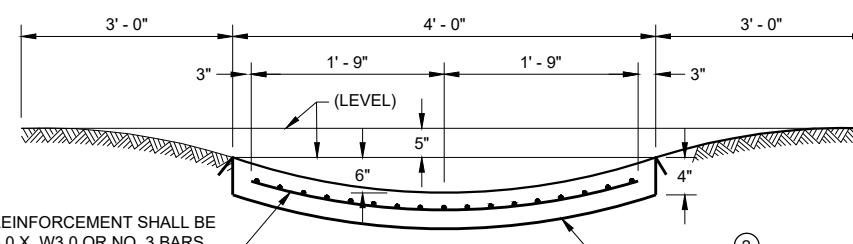
SECTION B - B



**PLAN VIEW
CONCRETE SURFACE DRAIN**



SECTION C - C



SECTION D - D

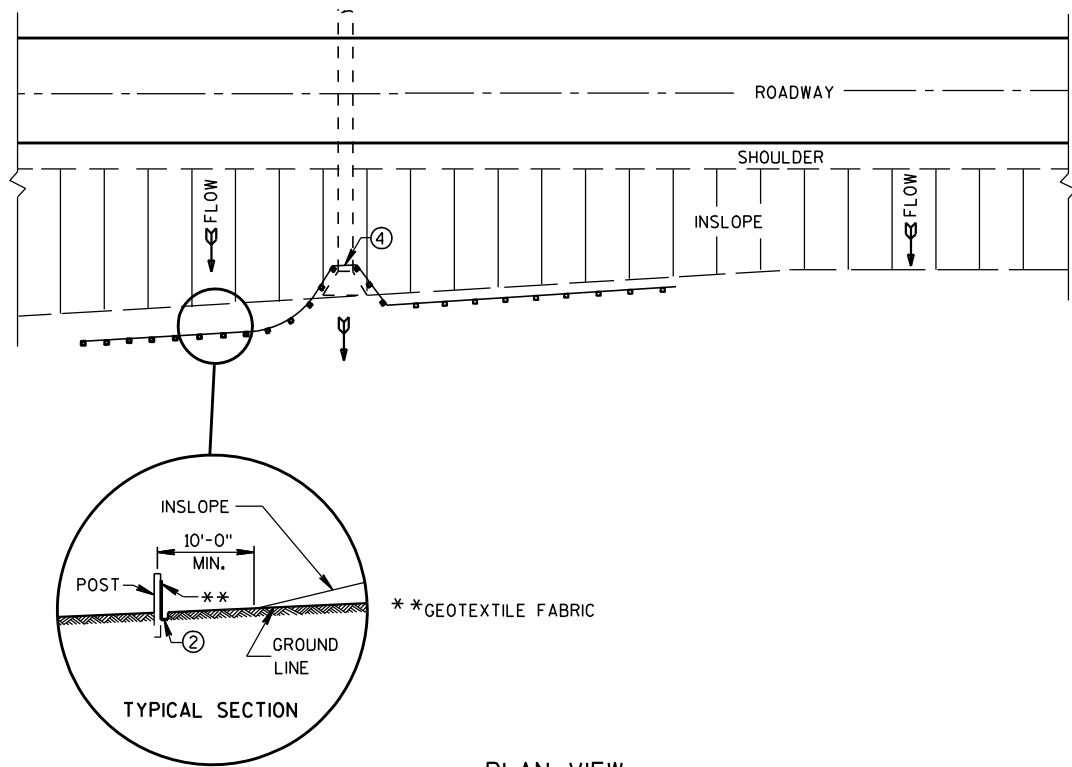
MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE, SPACING 12" C-C

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

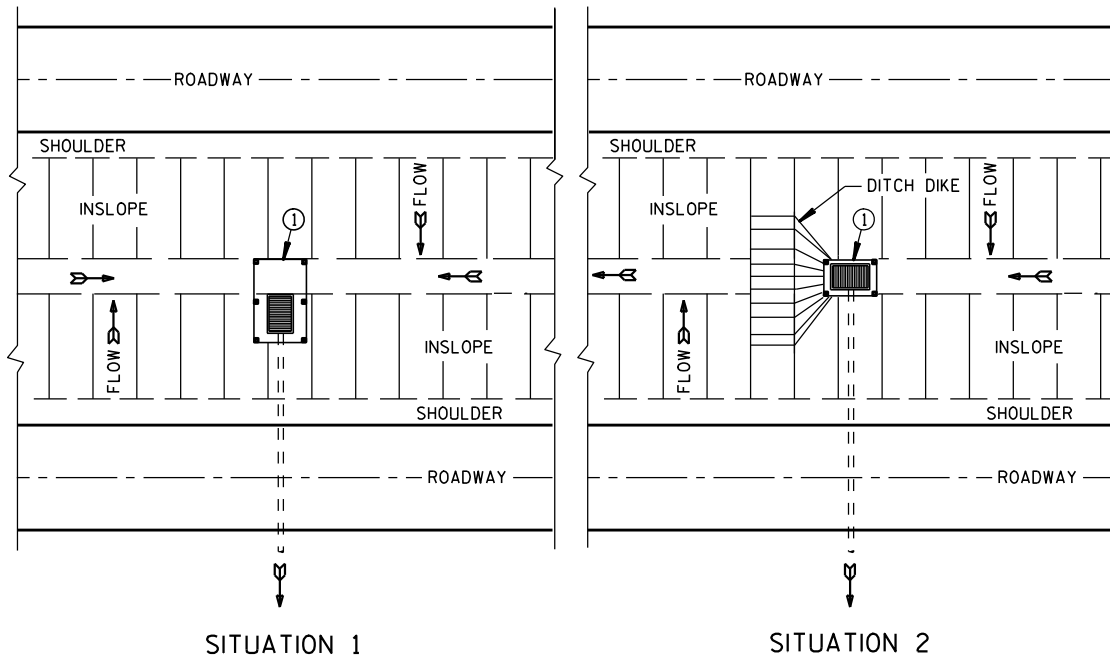
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

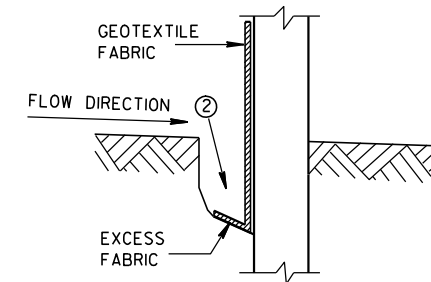


SITUATION 1 SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

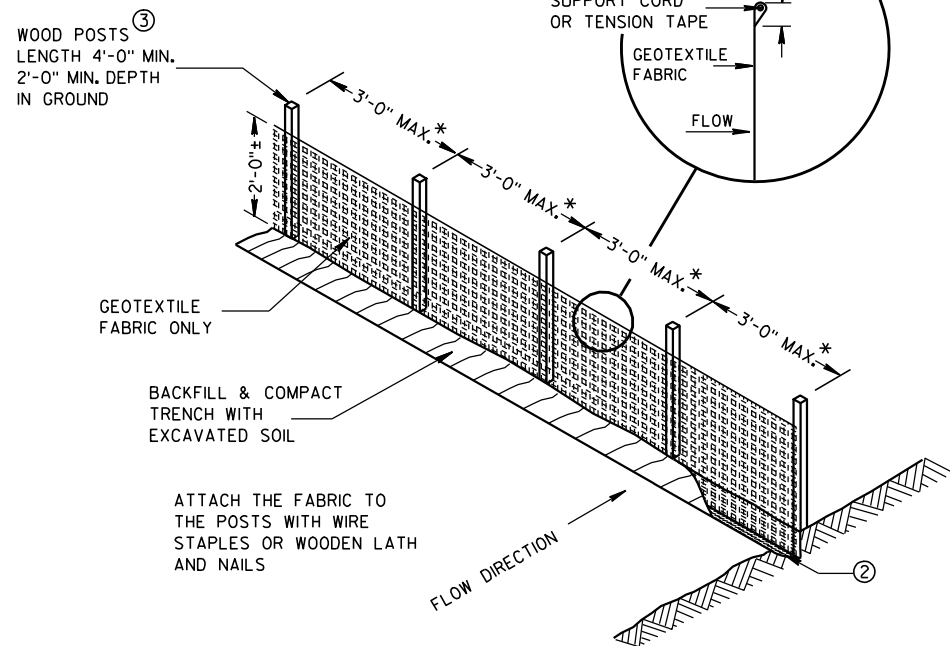
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

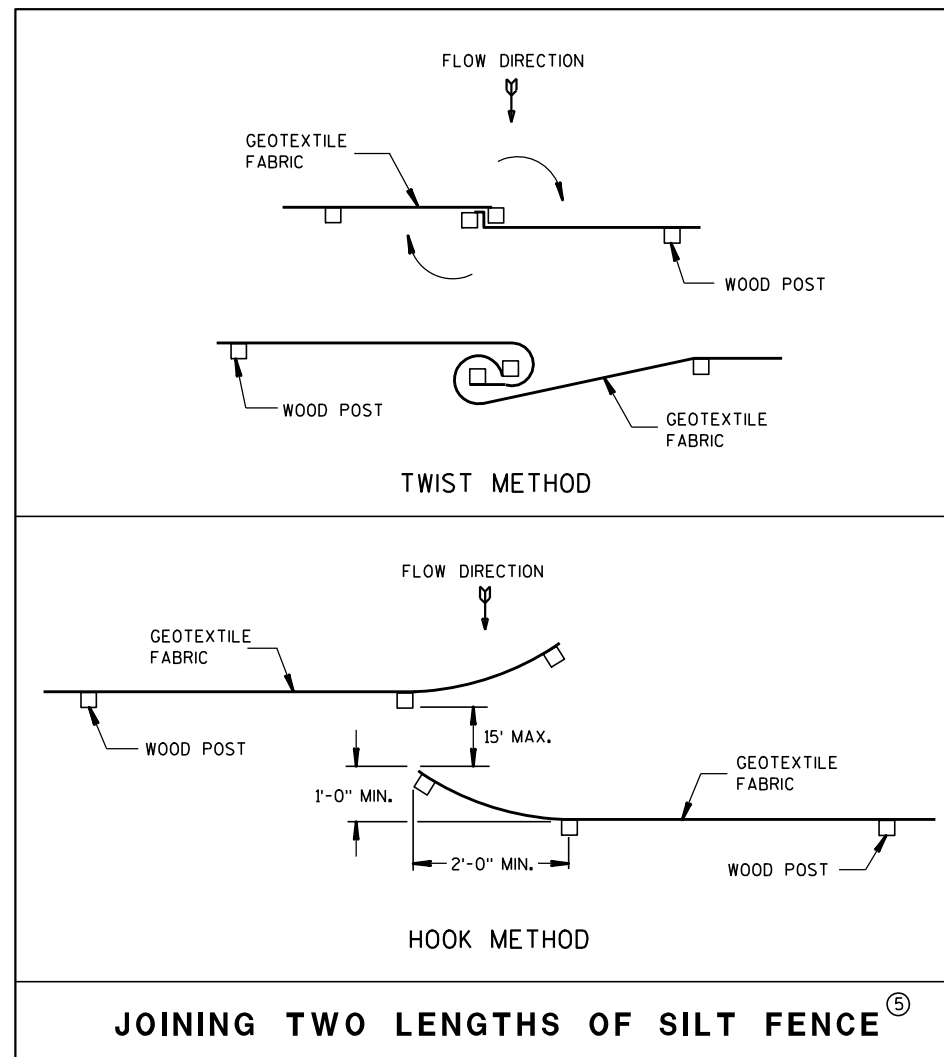


TRENCH DETAIL

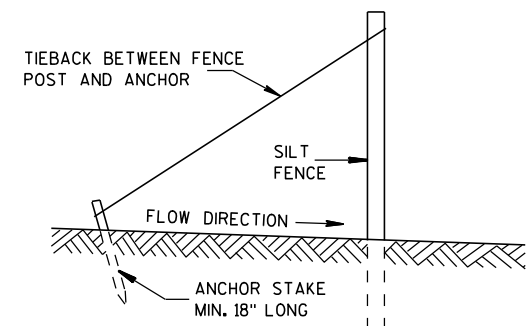
NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE ⑤

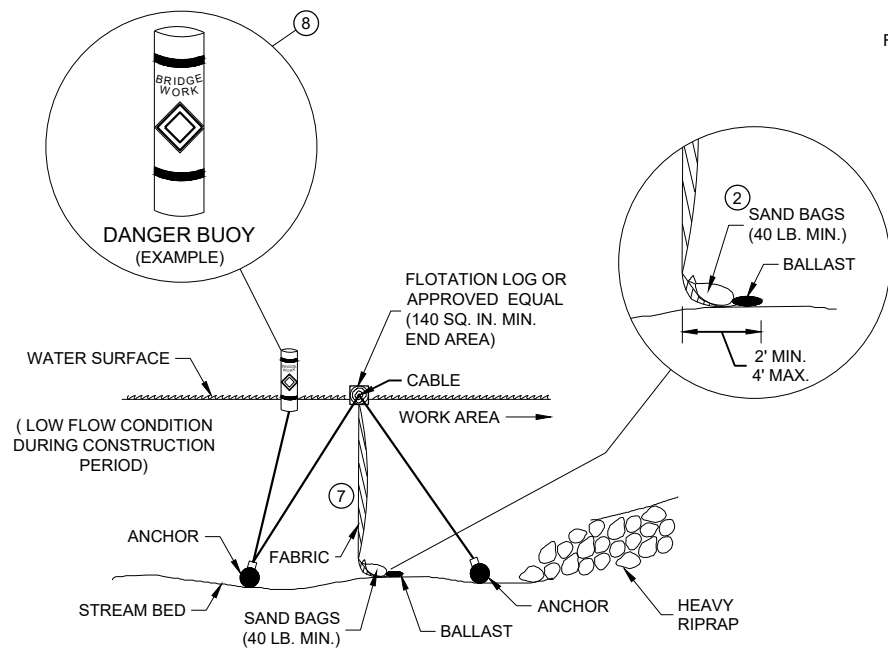


SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

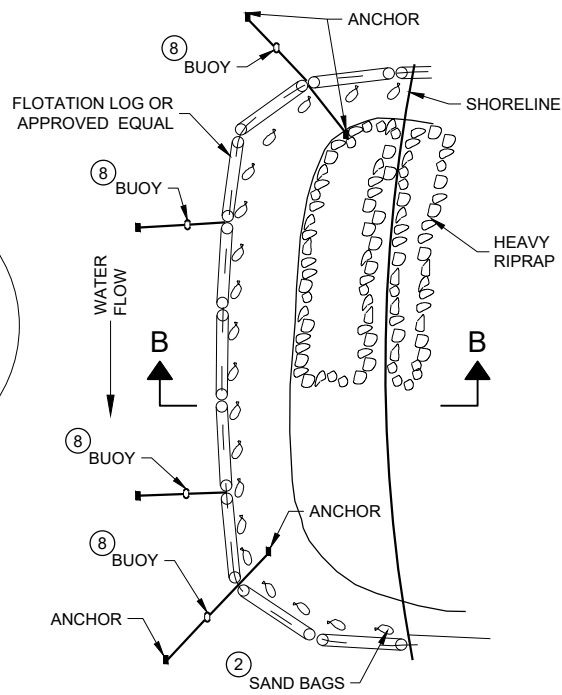
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

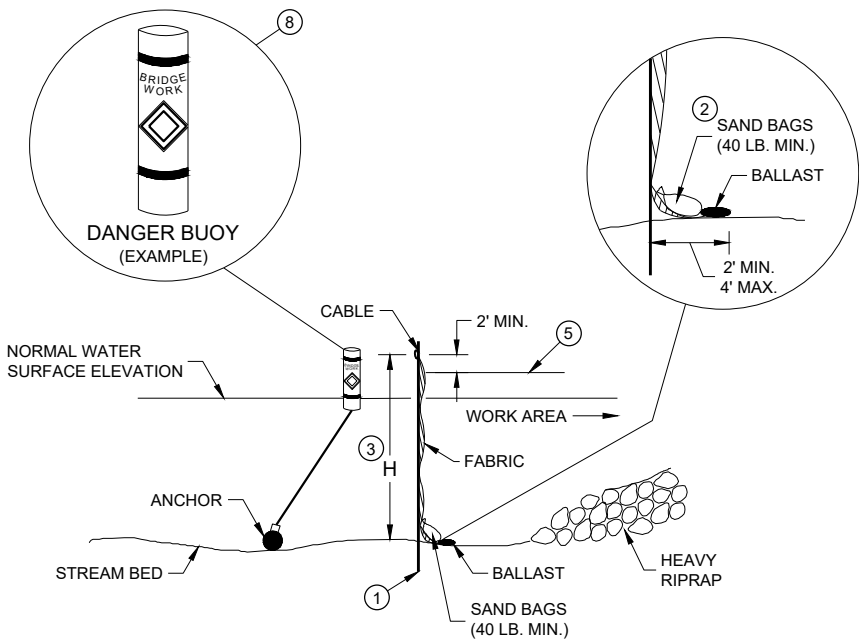


SECTION B - B

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

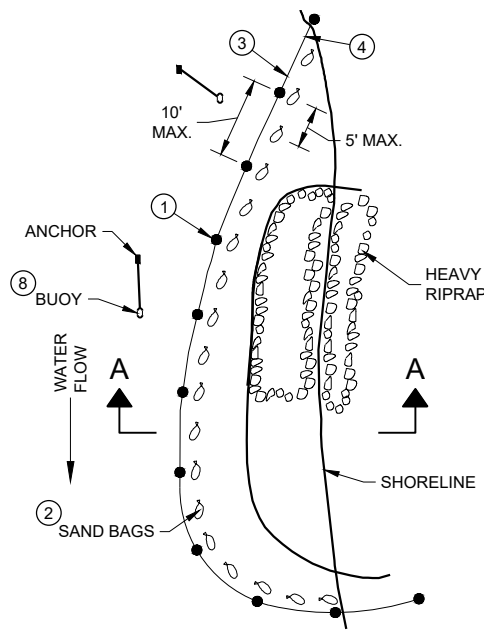


PLAN VIEW



SECTION A - A

TURBIDITY BARRIER - STANDARD POST INSTALLATION



PLAN VIEW

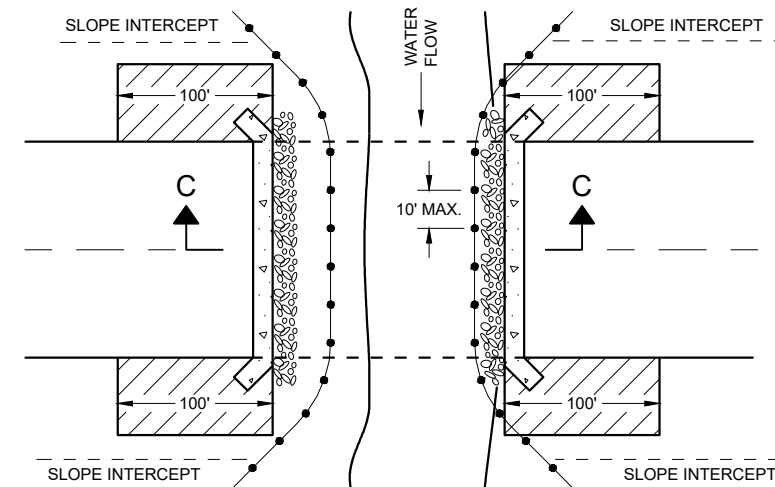
TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

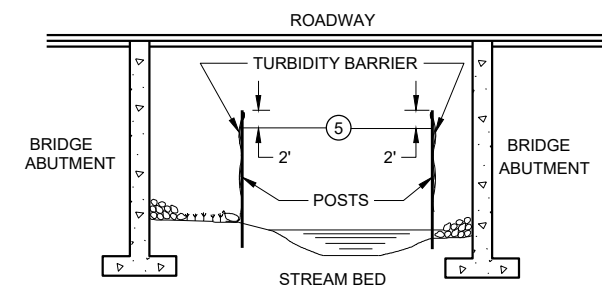
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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



PLAN VIEW



SECTION C - C

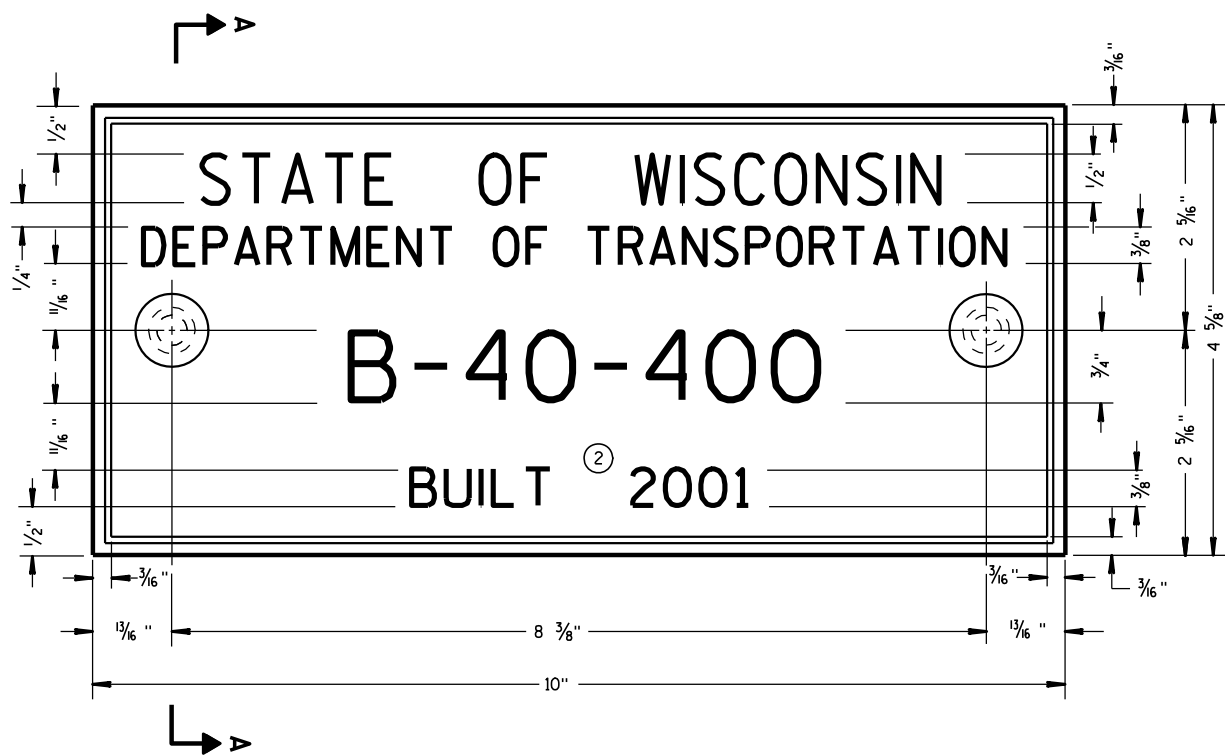
**TURBIDITY BARRIER DETAIL SHOWING
TYPICAL PLACEMENT AT STRUCTURES**

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



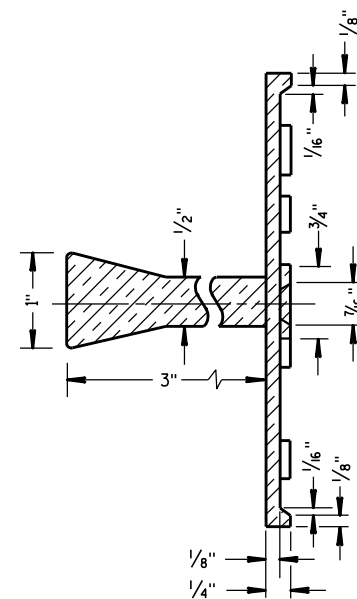
TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

GENERAL NOTES

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

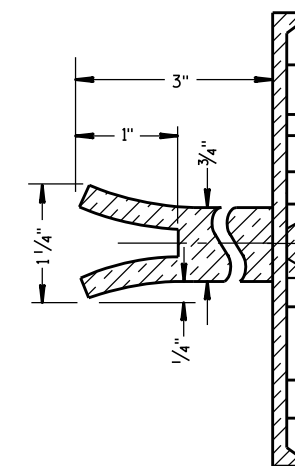
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

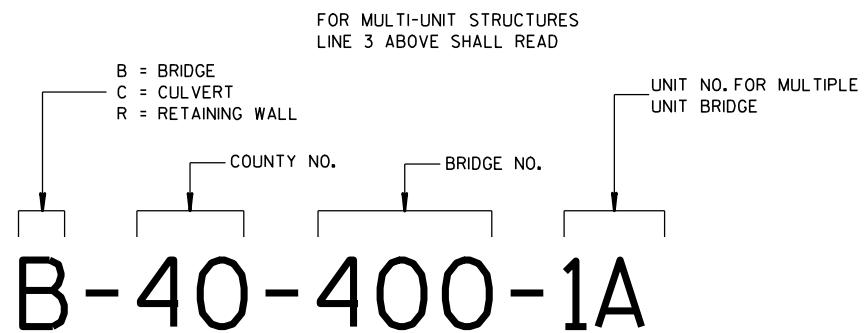


SECTION A-A

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

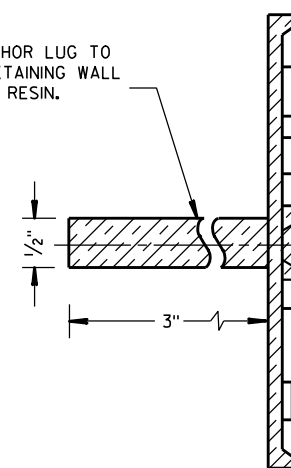


ALTERNATE LUG



**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

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

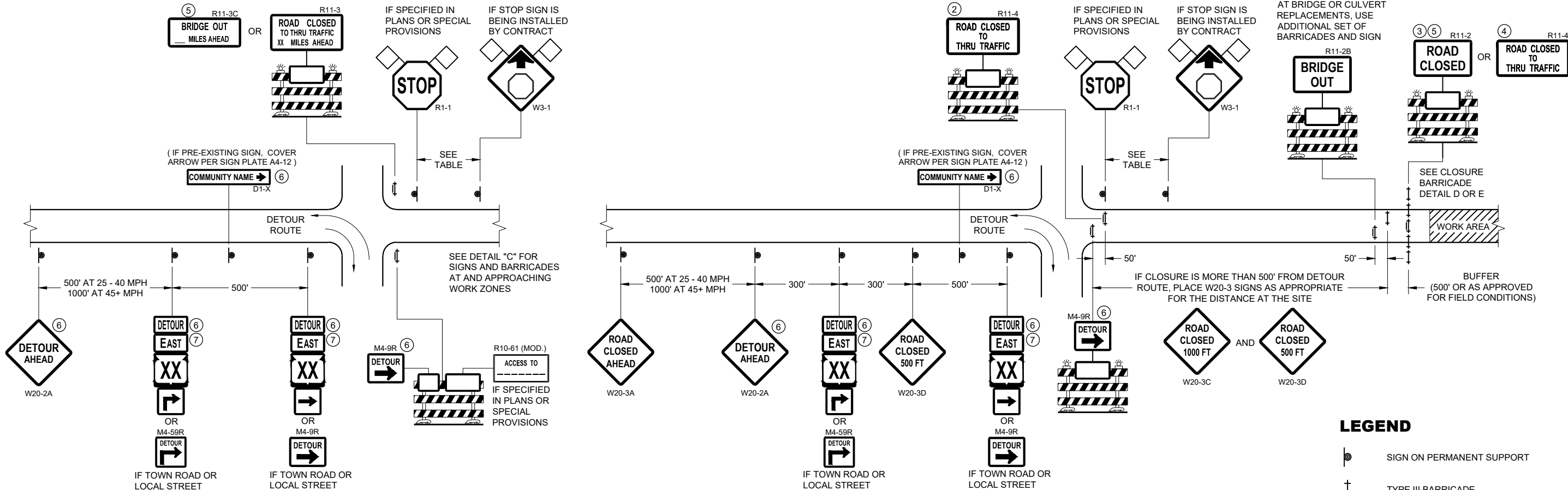


ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

**NAME PLATE
(STRUCTURES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE 3/26/10 /S/ Scot Becker
CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA



**DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR**

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

**DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR**

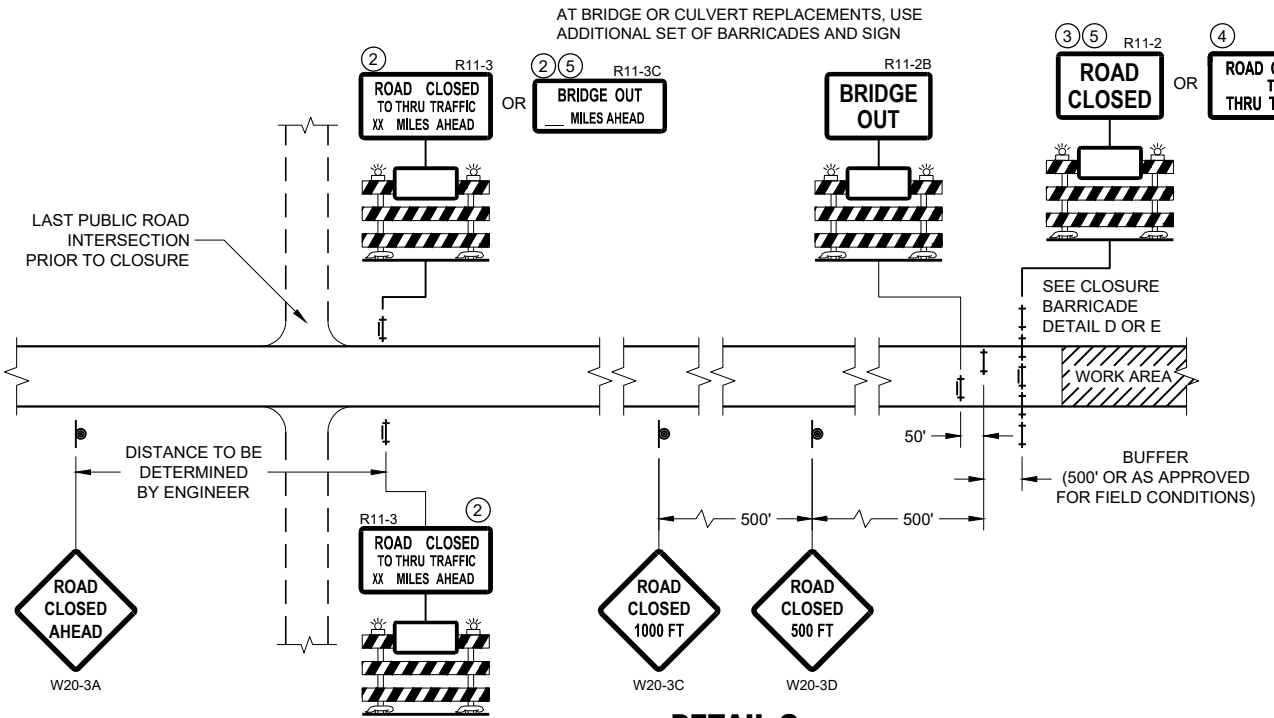
WORK ZONE LESS THAN 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

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

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

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



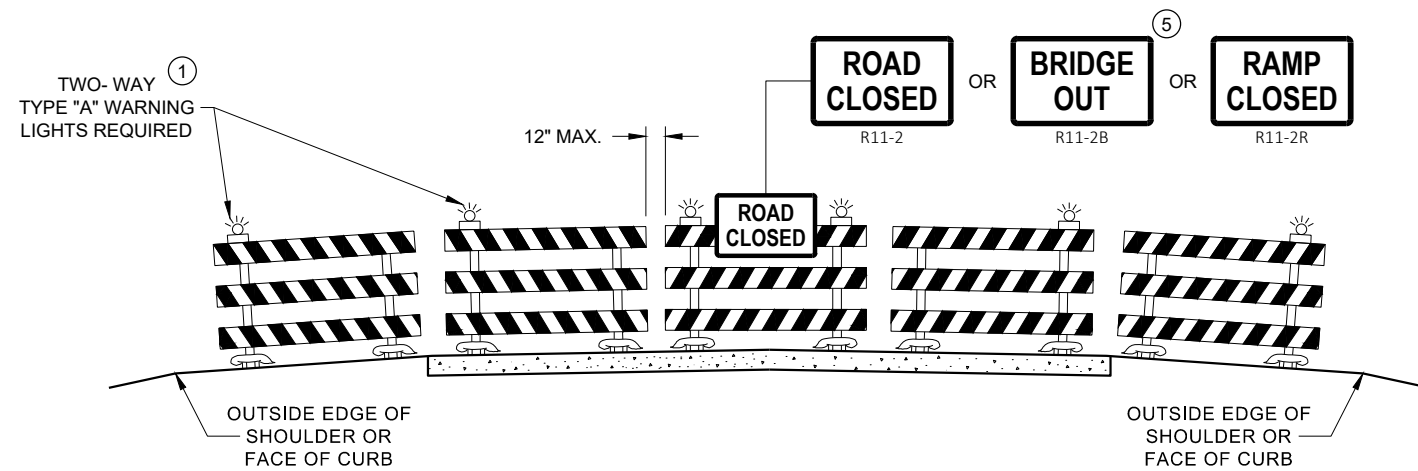
**DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR**

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

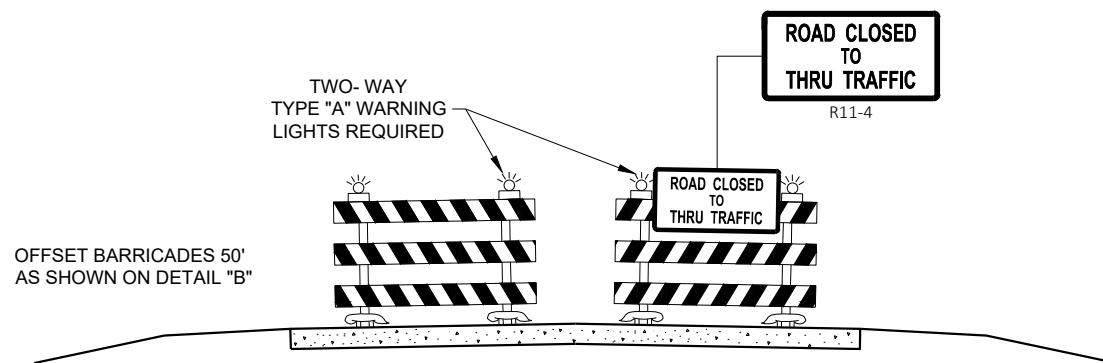
**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



**DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW**



**DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW**

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60" X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

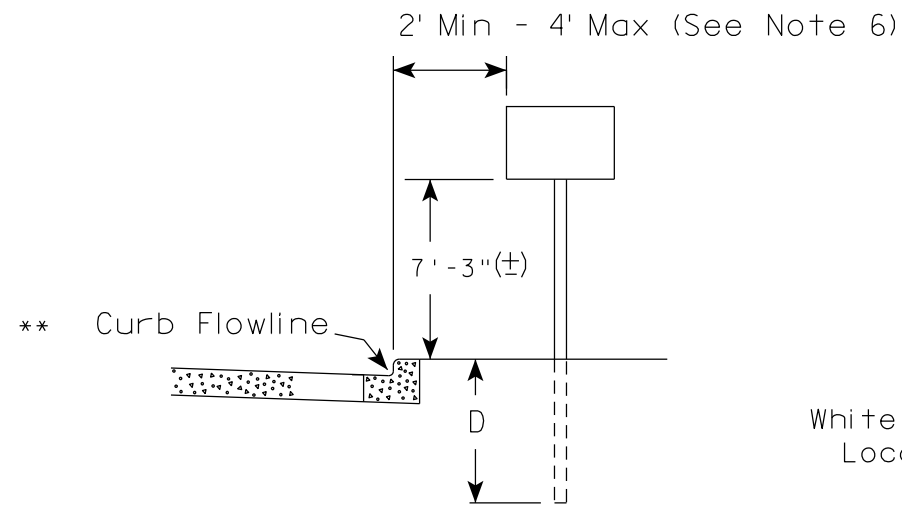
- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

**BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES**

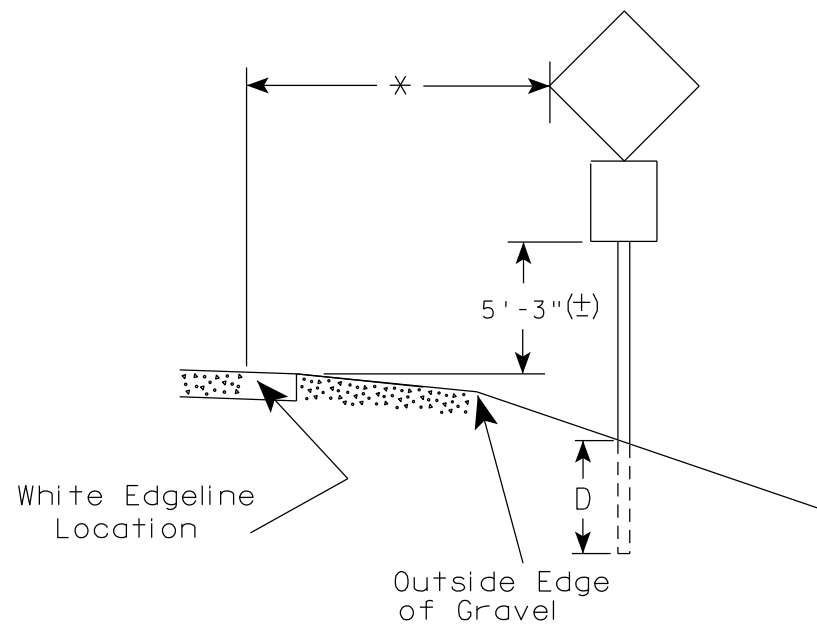
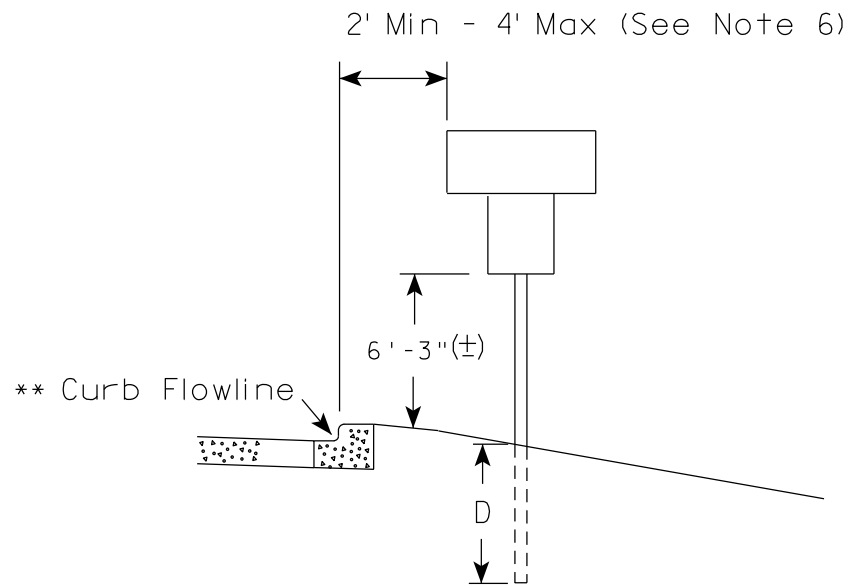
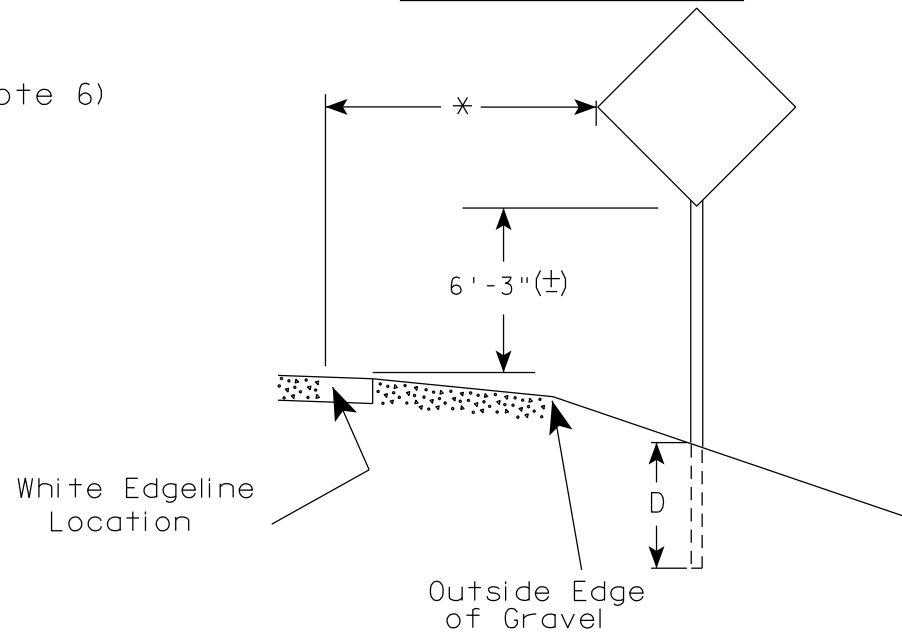
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.

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

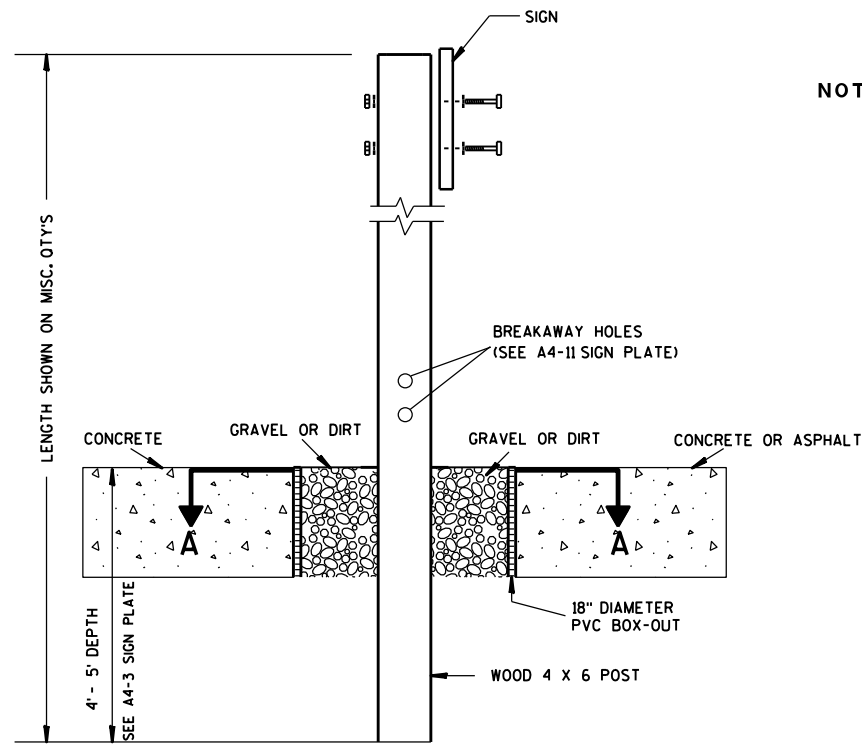
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

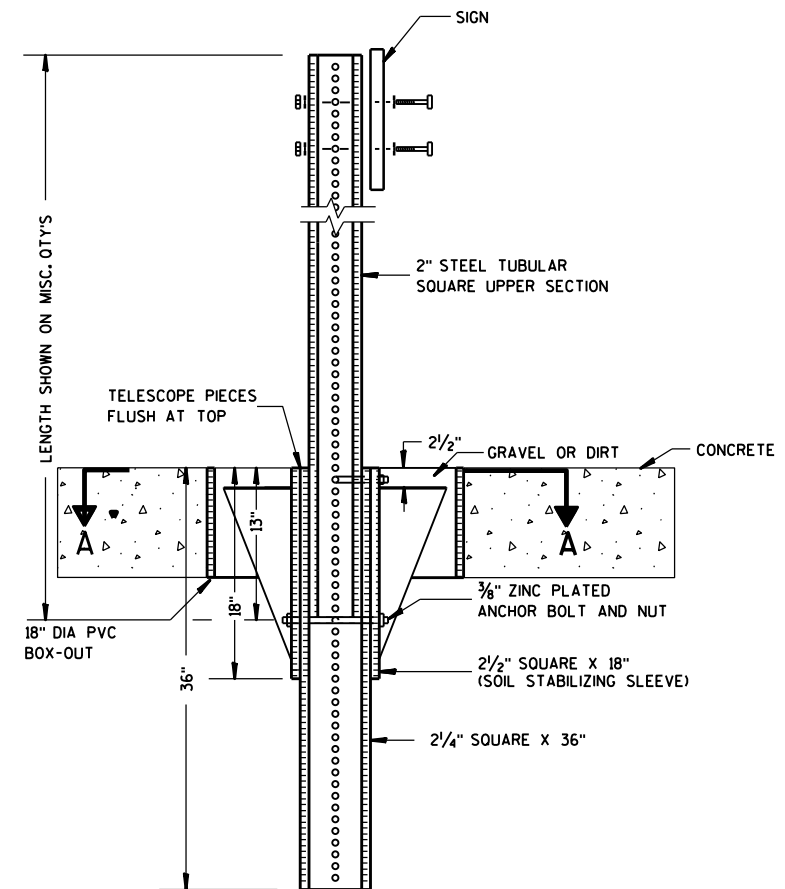
DATE 5/13/2020 PLATE NO. A4-3.22



ELEVATION VIEW

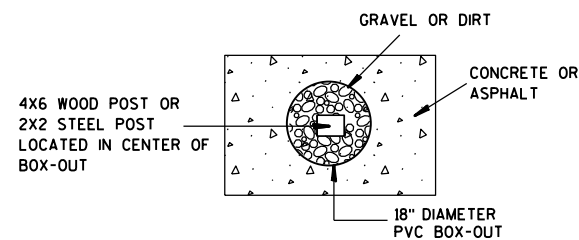
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ ASPHALT INSTALLATIONS

**SIGN POST
BOX-OUTS
A4-3B**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

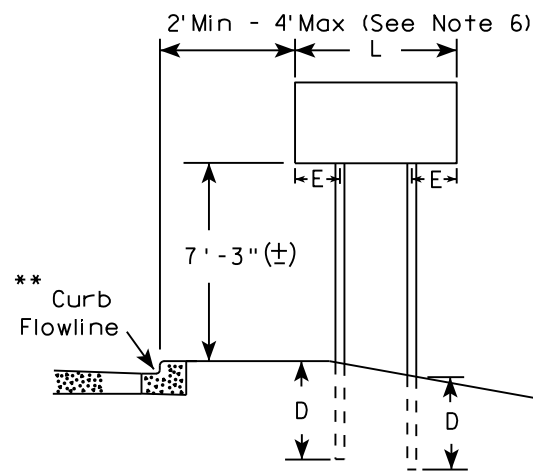
7

7

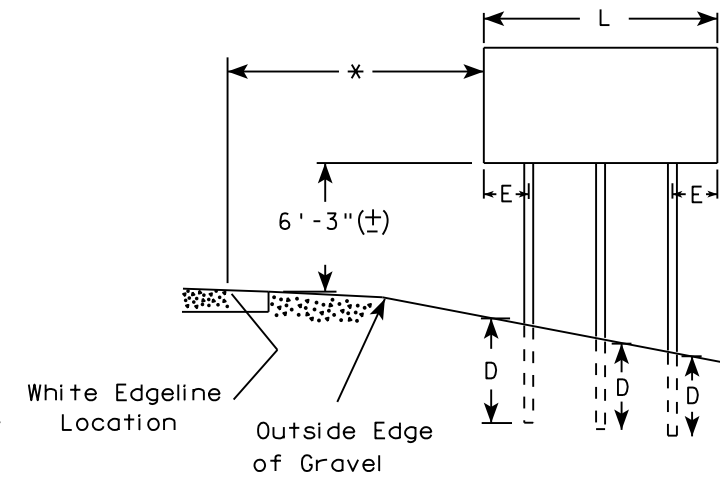
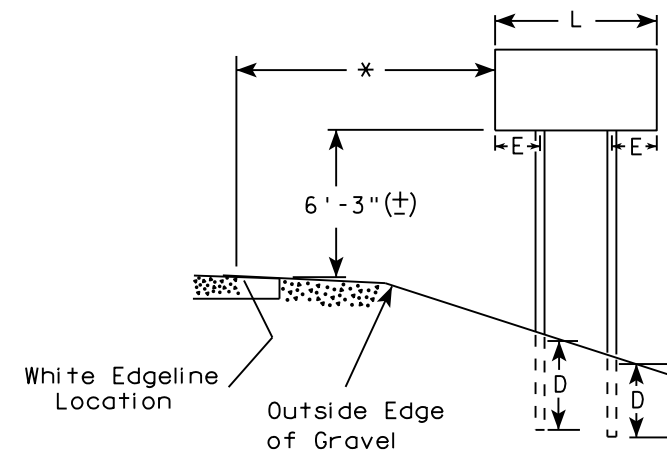
GENERAL NOTES

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

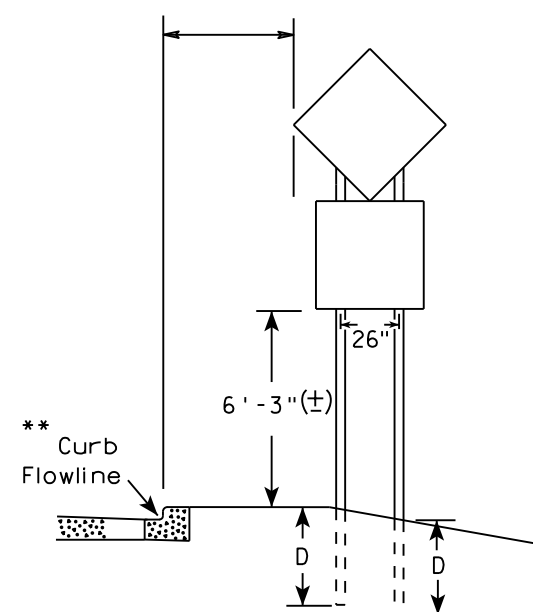
URBAN AREA



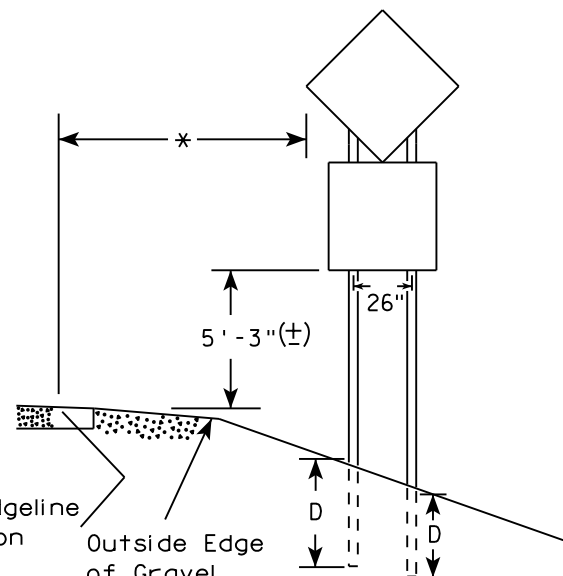
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

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

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

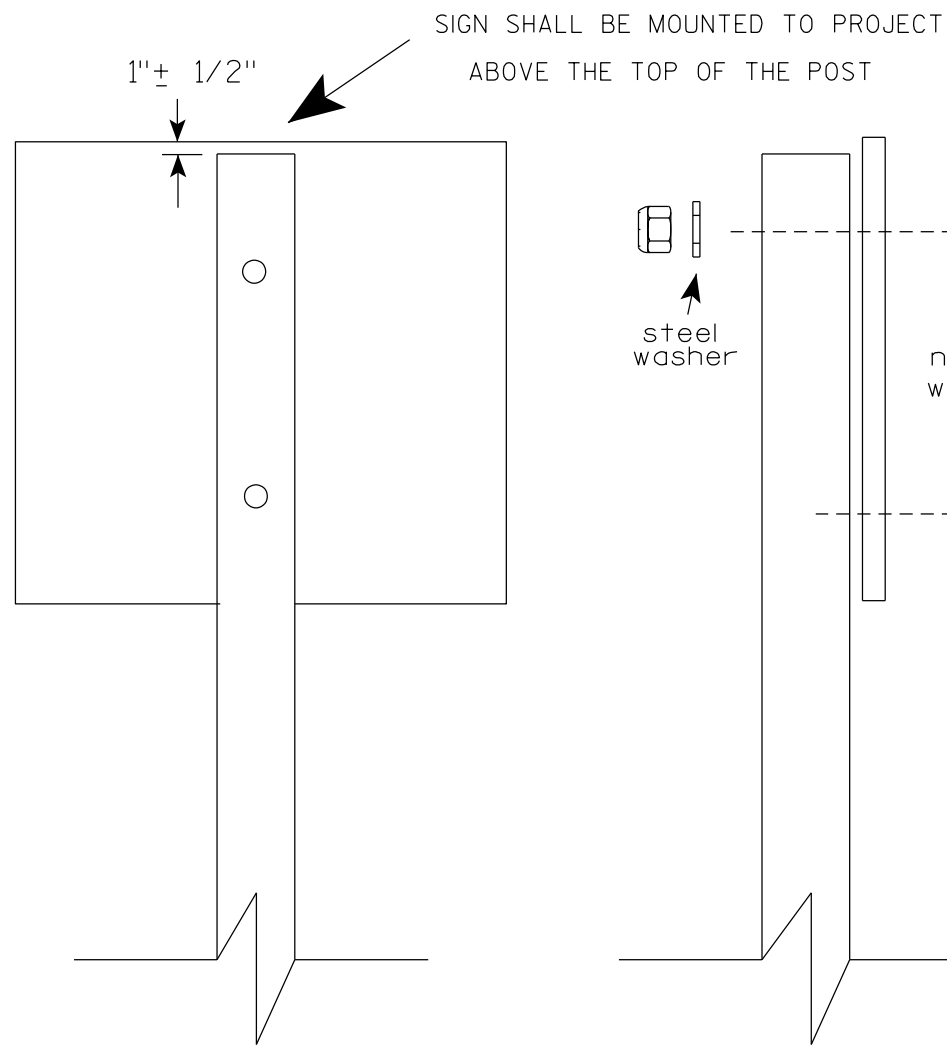
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION
 APPROVED *Matthew R. Rauch*
 For State Traffic Engineer
 DATE 8/21/17 PLATE NO. A4-4.15



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

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

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

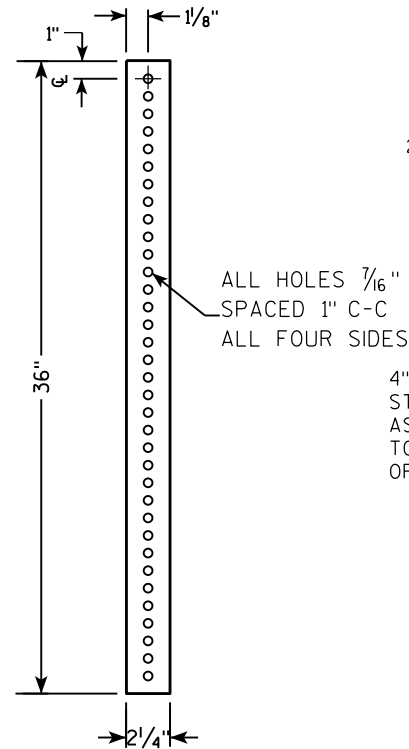
- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 - $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE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

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

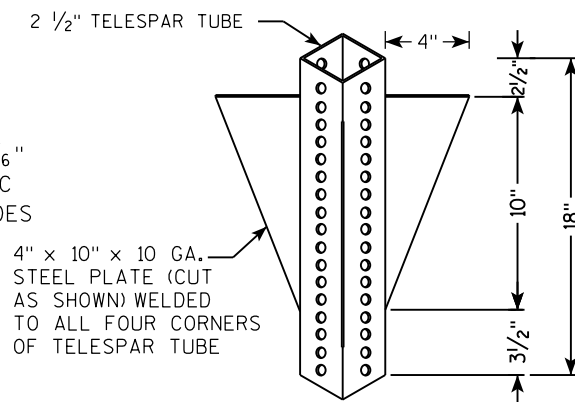
ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

**TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM**

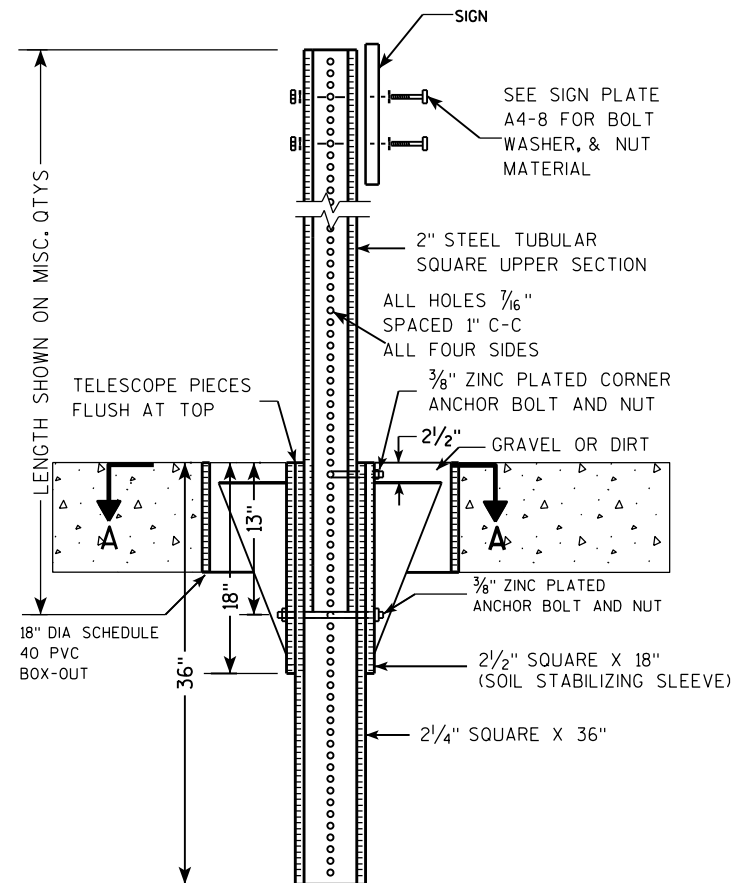
**2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**



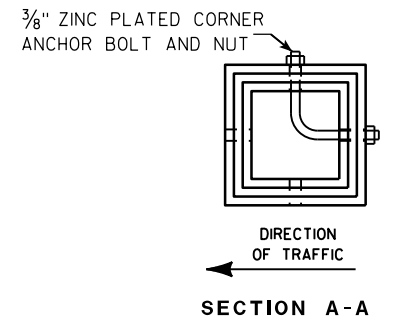
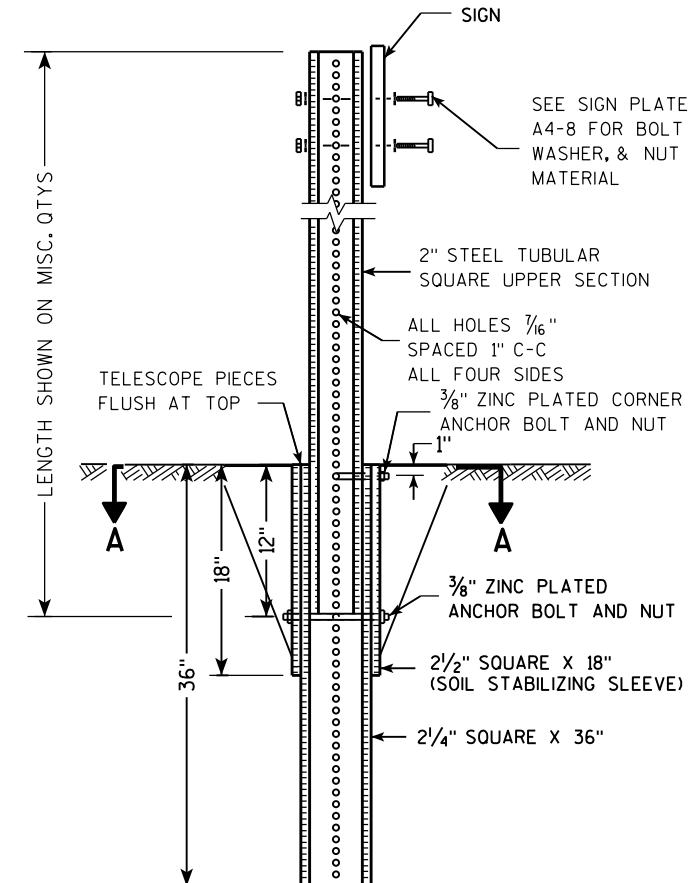
**2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH**



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



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



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

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

**TUBULAR STEEL
SIGN POST
A4-9**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

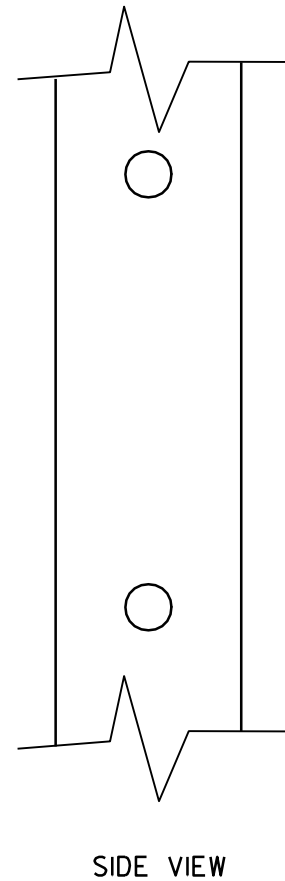
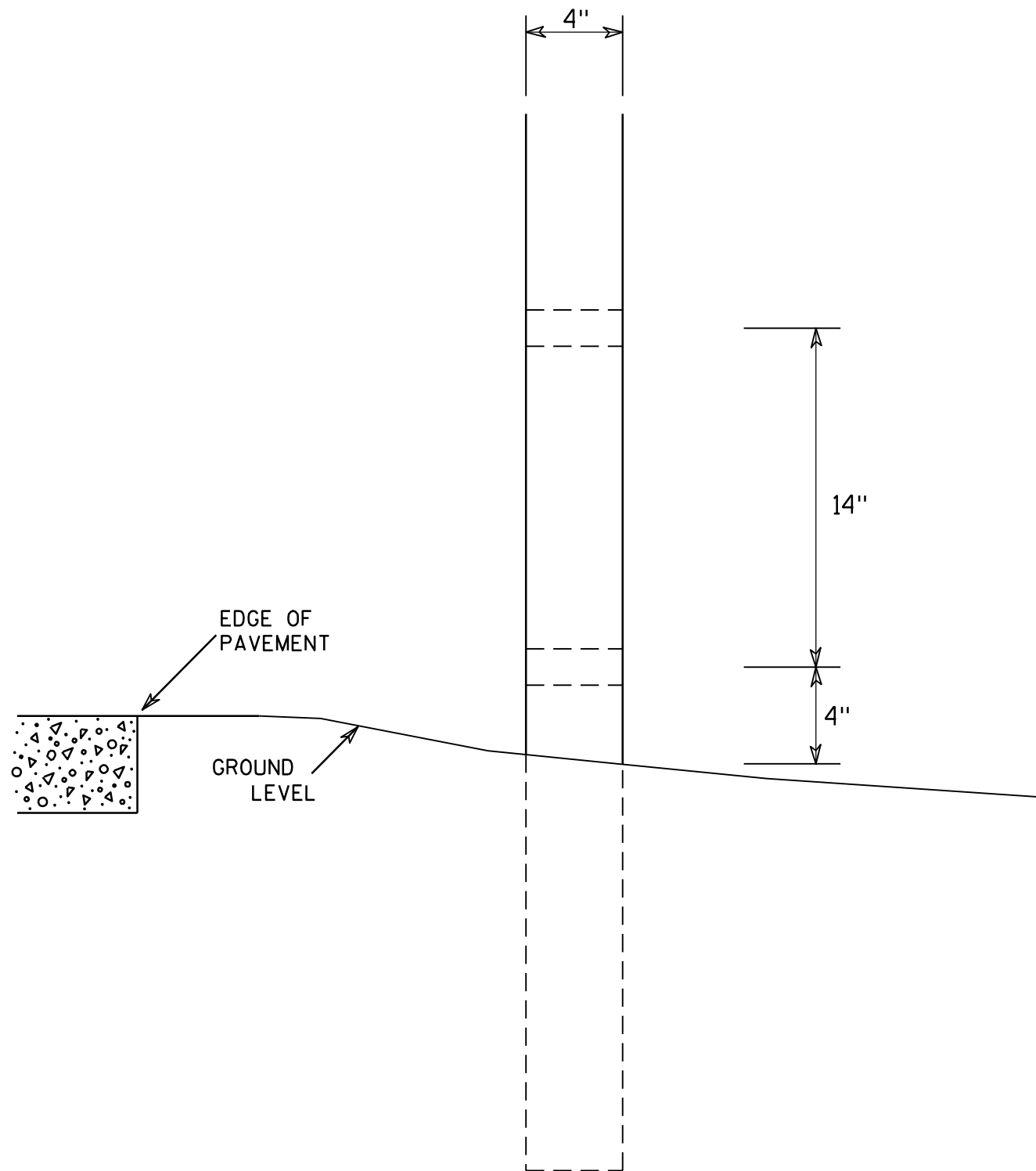
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



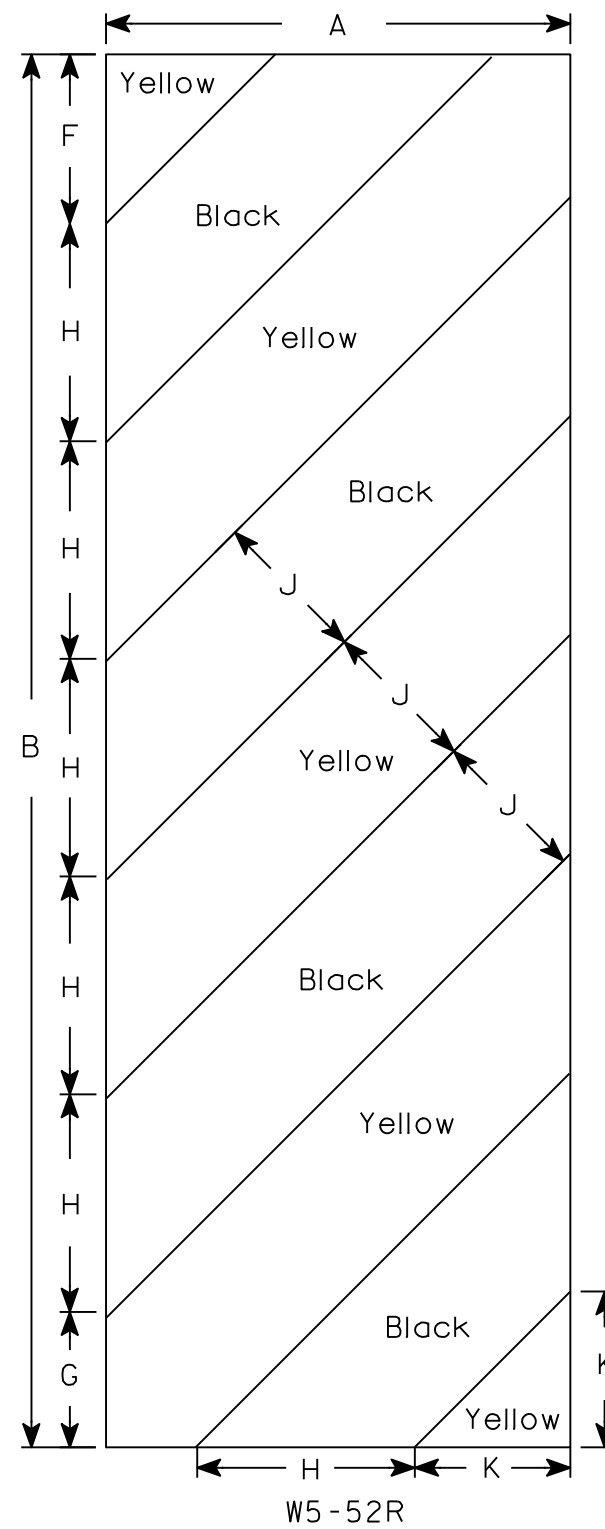
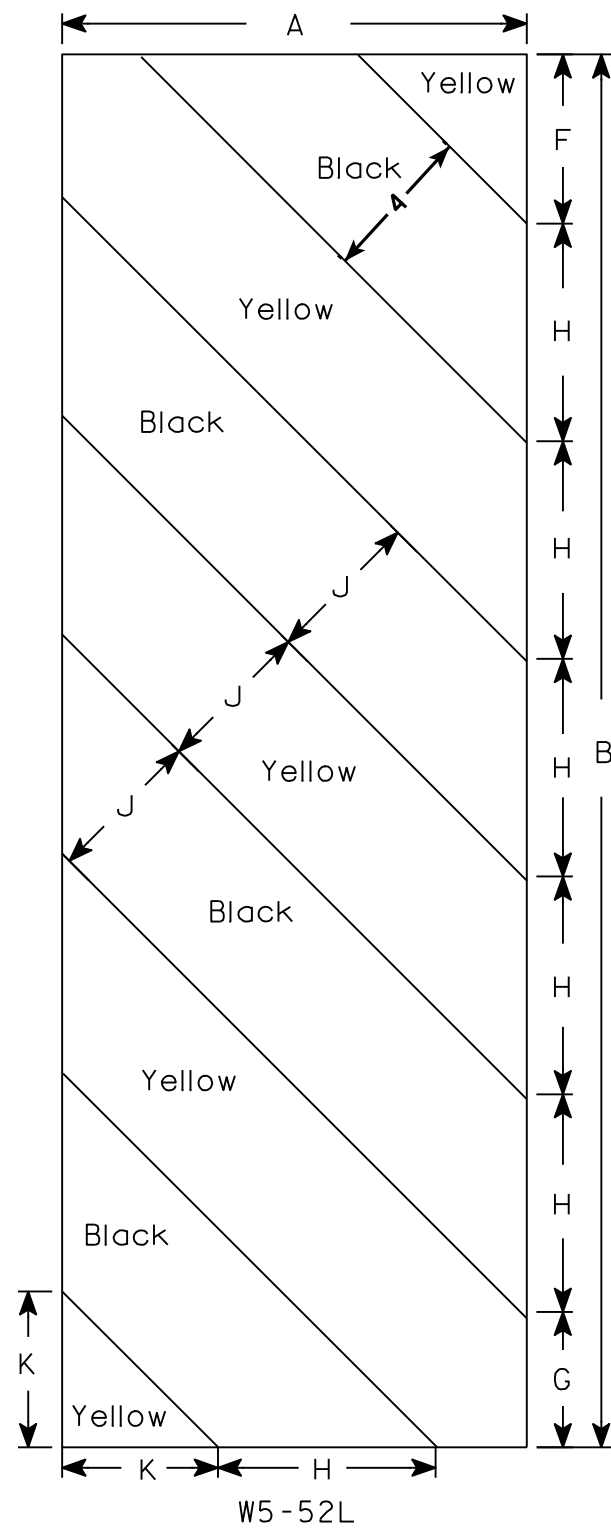
GENERAL NOTES

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

7

7

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



NOTES

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

7

7

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

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

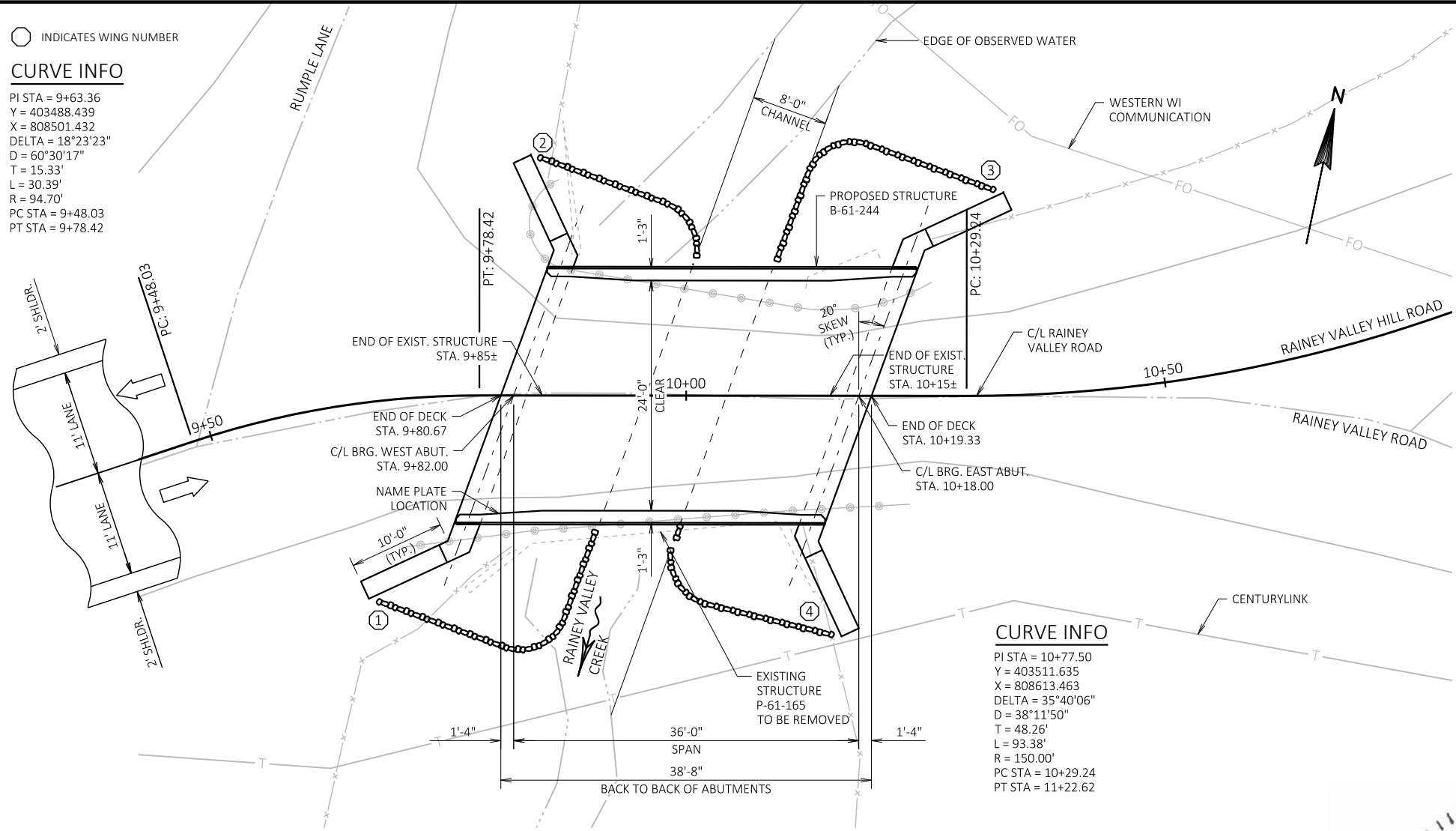
DATE 5/29/12 PLATE NO. W5-52.9

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

○ INDICATES WING NUMBER

CURVE INFO

PI STA = 9+63.36
 Y = 403488.439
 X = 808501.432
 DELTA = 18°23'23"
 D = 60°30'17"
 T = 15.33'
 L = 30.39'
 R = 94.70'
 PC STA = 9+48.03
 PT STA = 9+78.42



CURVE INFO

PI STA = 10+77.50
 Y = 403511.635
 X = 808613.463
 DELTA = 35°40'06"
 D = 38°11'50"
 T = 48.26'
 L = 93.38'
 R = 150.00'
 PC STA = 10+29.24
 PT STA = 11+22.62

PLAN

(SINGLE SPAN CONCRETE FLAT SLAB BRIDGE)

DESIGN DATA

LIVE LOAD: _____
 DESIGN LOADING _____ HL-93
 INVENTORY RATING FACTOR _____ 1.16
 OPERATIONAL RATING FACTOR _____ 1.51
 WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) _____ 250 KIPS
 STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 PSF.

MATERIAL PROPERTIES

CONCRETE MASONRY, SUPERSTRUCTURE _____ $f_c = 4,000$ PSI
 ALL OTHER _____ $f_c = 3,500$ PSI
 HIGH STRENGTH BAR STEEL REINFORCEMENT _____ $f_y = 60,000$ PSI

TRAFFIC DATA

ADT (2023) = 100
 ADT (2043) = 110
 DESIGN SPEED = < 15 MPH

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10-INCH X 42 LB STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 120* TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 50' LONG AT WEST ABUTMENT AND 75' AT THE 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 DRIVEN PILE CAPACITY.

HYDRAULIC DATA

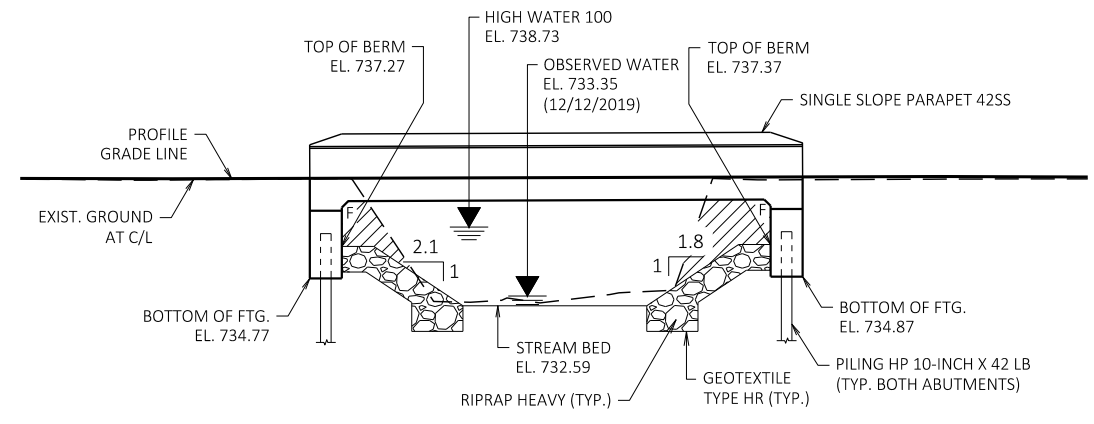
100 YEAR FREQUENCY
 $Q_{100} = 540$ C.F.S.
 VEL. = 4.8 F.P.S.
 HW₁₀₀ = EL. 738.73
 WATERWAY AREA = 112 SQ. FT.
 DRAINAGE AREA = 2.1 SQ. MI.
 SCOUR CRITICAL CODE = 5
 OVERTOPPING FREQUENCY = NA

2 YEAR FREQUENCY

$Q_2 = 120$ C.F.S.
 VEL. = 2.3 F.P.S.
 HW₂ = EL. 736.22

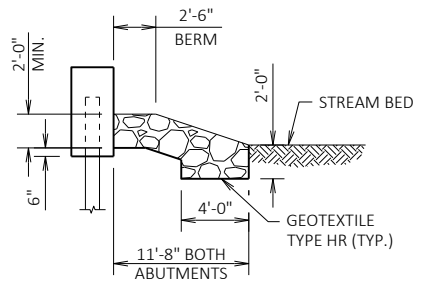
LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. EAST ABUTMENT
7. EAST ABUTMENT DETAILS
8. SUPERSTRUCTURE
9. SUPERSTRUCTURE DETAILS
10. SINGLE SLOPE PARAPET 42SS



ELEVATION

(LOOKING NORTH)



RIPRAP DETAIL

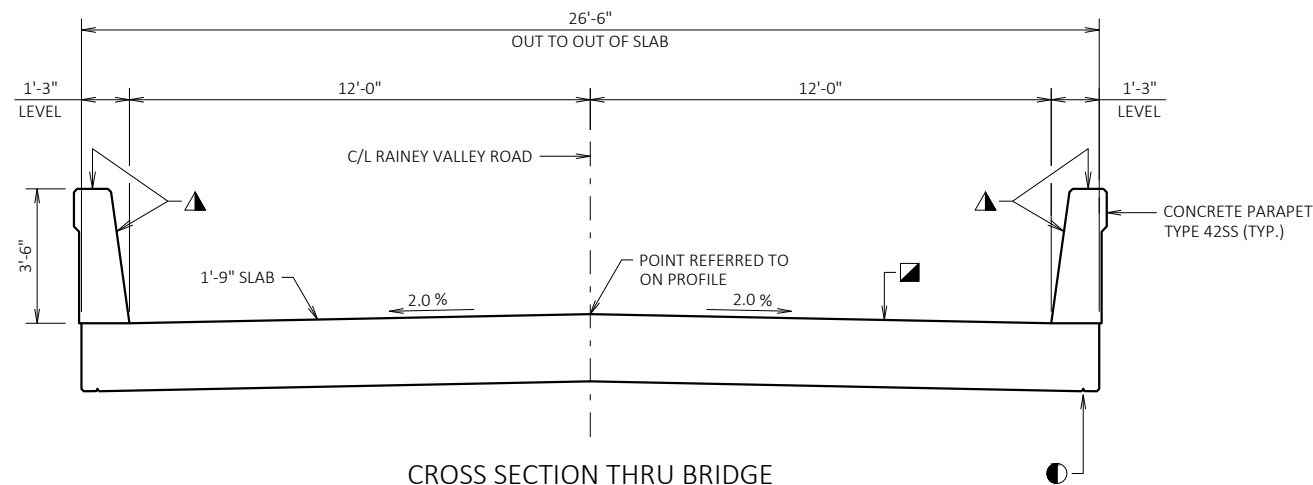
AREA TO EXCAVATE INCLUDED IN "EXCAVATION FOR STRUCTURES BRIDGES B-61-244"

BENCH MARK / CONTROL POINT						
POINT	STATION	OFFSET	DESCRIPTION	ELEV	Y	X
CP 4	8+27.61	0.46, RT	3/4" REBAR W/ CAP	742.67	403398.318	808401.538
CP 1	10+44.15	17.72, RT	3/4" REBAR W/ CAP	741.91	403488.679	808585.922

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED		SDR	08/19/22
STRUCTURE B-61-244 RAINEY VALLEY ROAD OVER RAINEY VALLEY CREEK			
COUNTY		TOWN/CITY/VILLAGE	
TREMPEALEAU		ARCADIA	
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	ETP	DESIGN CK'D.	BH
DRAWN BY	PKF	PLANS CK'D.	ETP
GENERAL PLAN			SHEET 1 OF 10

BRIDGE OFFICE CONTACT
 AARON BONK, P.E.
 TELEPHONE: (608) 261-0261

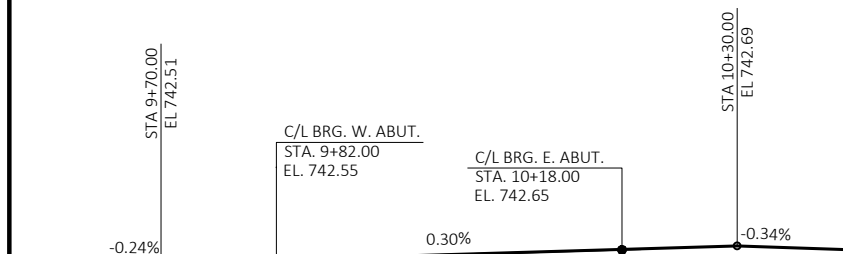
CONSULTANT CONTACT
 ERIC PRICE, P.E.
 TELEPHONE: (608) 826-6146



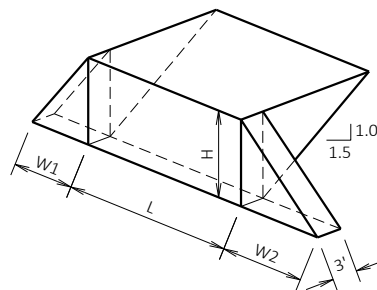
CROSS SECTION THRU BRIDGE
(LOOKING EAST)

LEGEND

- 3/4" V-GROOVE REQ'D. EXTEND 6" FROM F.F. OF ABUTMENT BODY.
- COAT WITH "PROTECTIVE SURFACE TREATMENT" AS PER THE STANDARD SPECIFICATIONS.
- ▲ COAT WITH "PIGMENTED SURFACE SEALER" AS PER THE STANDARD SPECIFICATIONS.



PROFILE GRADE LINE
(RAINEY VALLEY ROAD)



ABUTMENT BACKFILL DIAGRAM

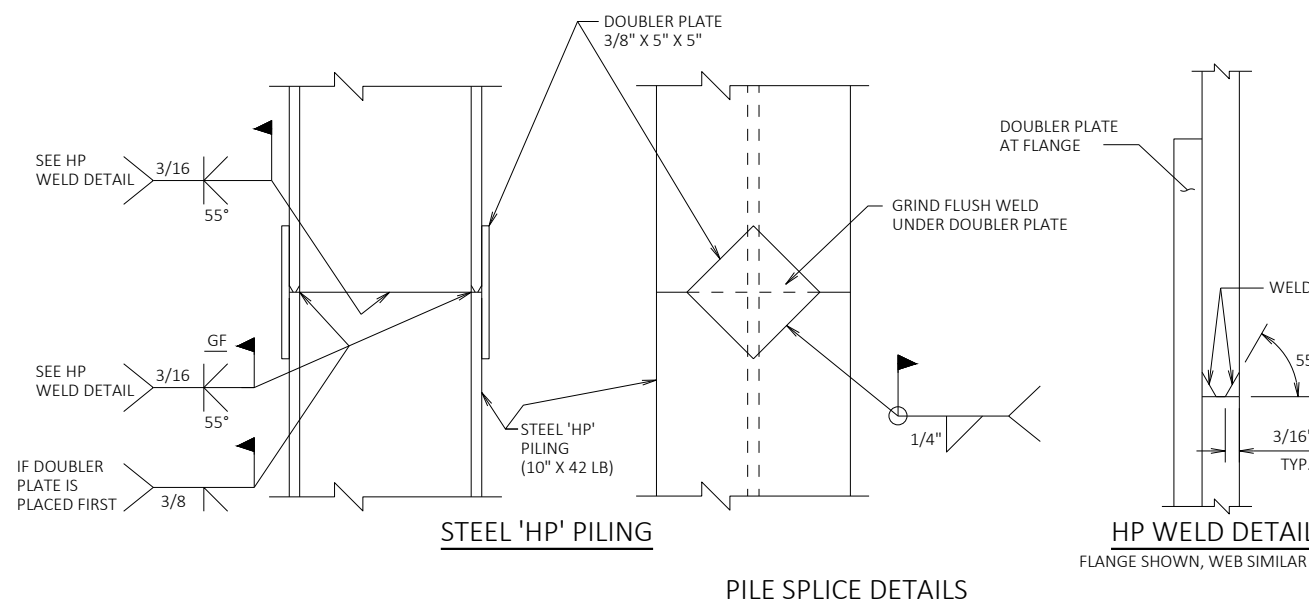
- L = LENGTH OF ABUTMENT BODY BETWEEN WINGS AT B.F. (FT)
- H = AVERAGE ABUTMENT FILL HEIGHT (FT)
- W1 = WING 1 LENGTH (FT)
- W2 = WING 2 LENGTH (FT)
- EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
- $V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H) + (3.0' \times 0.5)(W1+W2)(H)$
- $V_{CY} = V_{CF}(EF)/27$
- $V_{TON} = V_{CF}(2.0)$

TOTAL ESTIMATED QUANTITIES

BID NUMBER	BID ITEM	UNIT	WEST ABUT.	EAST ABUT.	SUPER	TOTALS
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS P-61-165	EACH	----	----	----	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-61-244	EACH	----	----	----	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	145	145	----	290
502.0100	CONCRETE MASONRY BRIDGES	CY	27.5	26.2	81.2	135
502.3200	PROTECTIVE SURFACE TREATMENT	SY	----	----	104	104
502.3210	PIGMENTED SURFACE SEALER	SY	----	----	38	38
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2,140	2,140	----	4,280
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,550	1,490	15,340	18,380
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	7	7	----	14
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	350	525	----	875
606.0300	RIPRAP HEAVY	CY	70	70	----	140
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	85	85	----	170
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	50	50	----	100
645.0120	GEOTEXTILE TYPE HR	SY	95	95	----	190
NON-BID ITEMS						
	FILLER	SIZE	----	----	----	1/2" & 3/4"

GENERAL NOTES

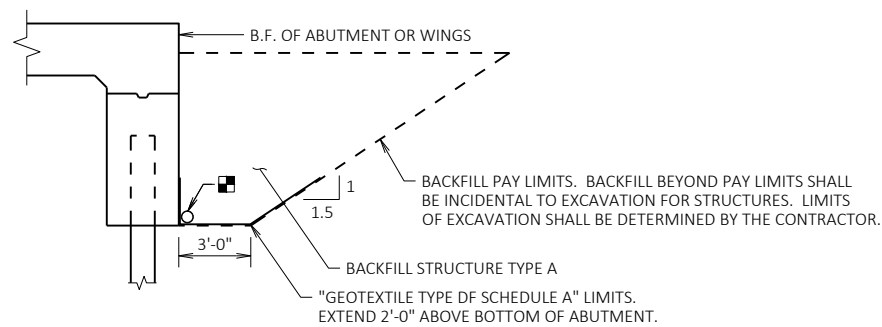
- DRAWINGS SHALL NOT BE SCALED.
- BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
- THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.
- JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M153 TYPE I, II OR III OR AASHTO DESIGNATION M213.
- THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON THE GENERAL PLAN SHEET AND IN THE ABUTMENT DETAILS, OR AS DIRECTED BY THE ENGINEER.
- SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.
- EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.
- THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-61-244" SHALL BE THE EXISTING GROUNDLINE.
- THE EXISTING STRUCTURE P-61-165, TO BE REMOVED, IS A SINGLE SPAN STEEL DECK GIRDER BRIDGE, 30.0 FT. LONG WITH A 24.3 FT. CLEAR ROADWAY WIDTH.
- THE BACKFILL QUANTITIES ARE BASED ON THE LIMITS SHOWN ON THIS SHEET AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.
- PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE ENTIRE INSIDE FACE AND TOP SURFACE OF THE PARAPETS ON THE STRUCTURE.



STEEL 'HP' PILING

PILE SPICE DETAILS

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

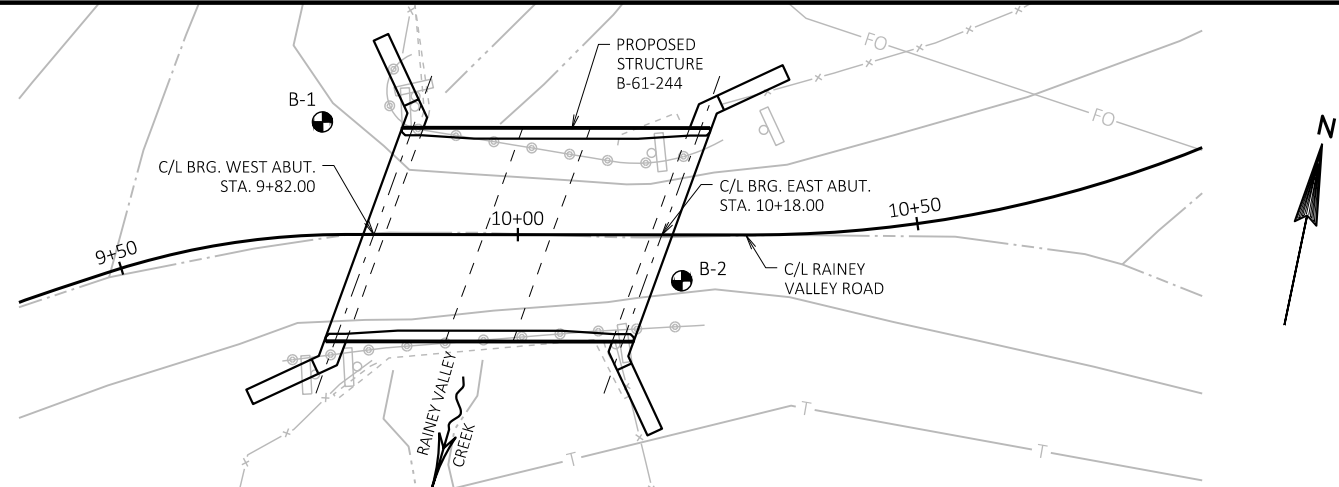


STRUCTURE BACKFILL LIMITS

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

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-244			
DRAWN BY		PKF	PLANS CK'D. ETP
CROSS SECTION & QUANTITIES			SHEET 2 OF 10





SOIL BORINGS COMPLETED BY:
 CHOSEN VALLEY TESTING, INC.
 1019 SECOND AVENUE SW
 ONALASKA, WI 54650
 (608) 782-5505
 MAY 11, 2021

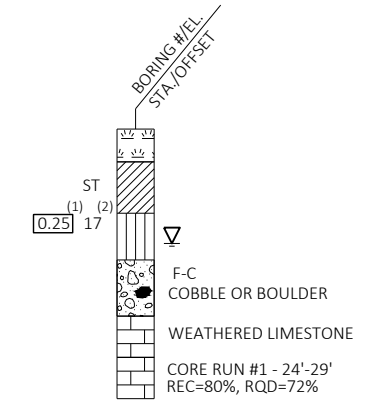
STATE PROJECT NUMBER

7276-00-74

MATERIAL SYMBOLS

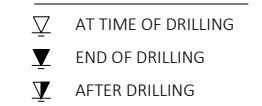
ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/META

LEGEND OF BORING



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

GROUND WATER ELEVATION

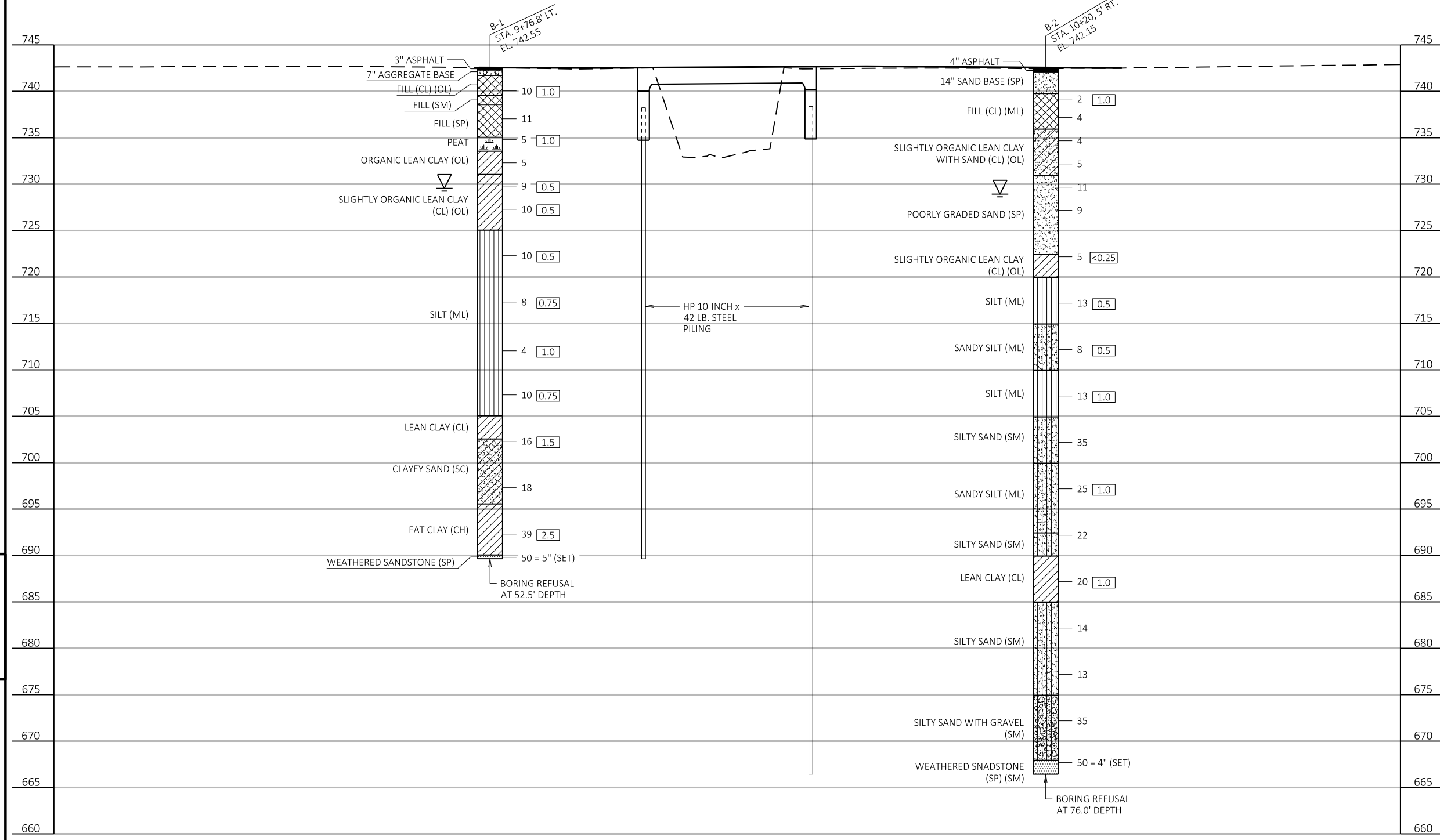


ABBREVIATIONS

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.



8

8

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-244			
DRAWN BY PKF		PLANS CK'D. ETP	
SUBSURFACE EXPLORATION			SHEET 3 OF 10

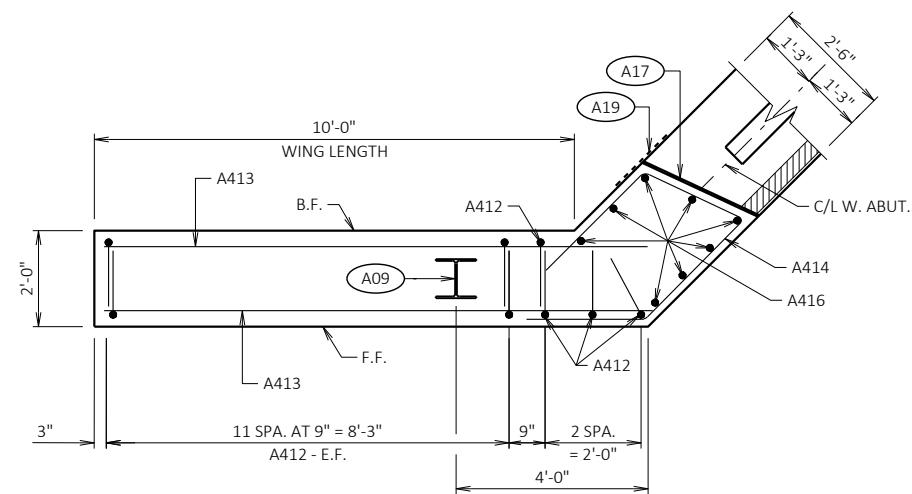
BILL OF BARS - WEST ABUTMENT

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
NON-COATED BARS					TOTAL WEIGHT = 2,140 LBS
A801	18	22'-8"	X		BODY - B.F. HORIZ.
A502	18	17'-7"			BODY - F.F. HORIZ.
A503	66	6'-1"	X		BODY - E.F. VERT.
A504	33	7'-1"	X		BODY - TOP VERT.
A405	27	3'-0"	X		BODY - TIES LONGIT.
COATED BARS					TOTAL WEIGHT = 1,550 LBS
A509	28	2'-0"			BODY - TOP VERT.
A810	18	14'-5"	X		WINGS 1 & 2 - B.F. HORIZ.
A511	18	12'-9"	X		WINGS 1 & 2 - F.F. HORIZ.
A412	56	9'-7"	X		WINGS 1 & 2 - E.F. VERT.
A413	16	11'-2"			WINGS 1 & 2 - E.F. HORIZ.
A414	4	9'-5"	X		WING 1 - TOP HORIZ.
A415	4	7'-7"	X		WING 2 - TOP HORIZ.
A416	14	3'-10"			WINGS 1 & 2 - TOP VERT.

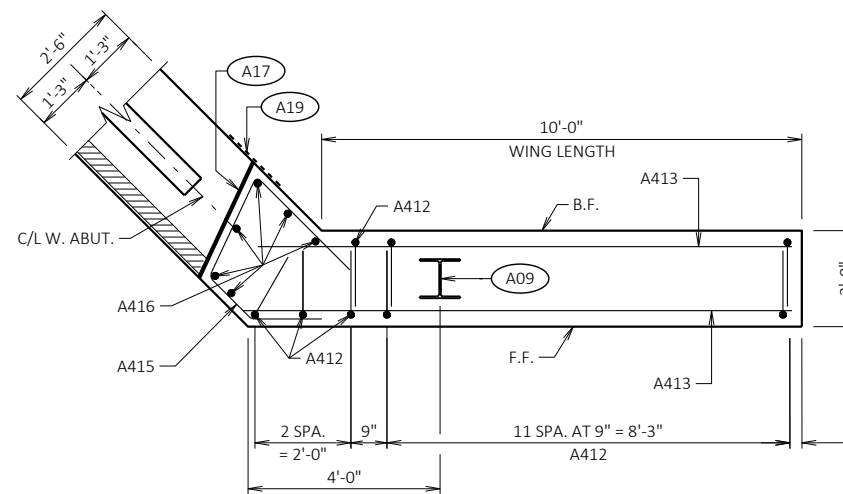
THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR.

LEGEND

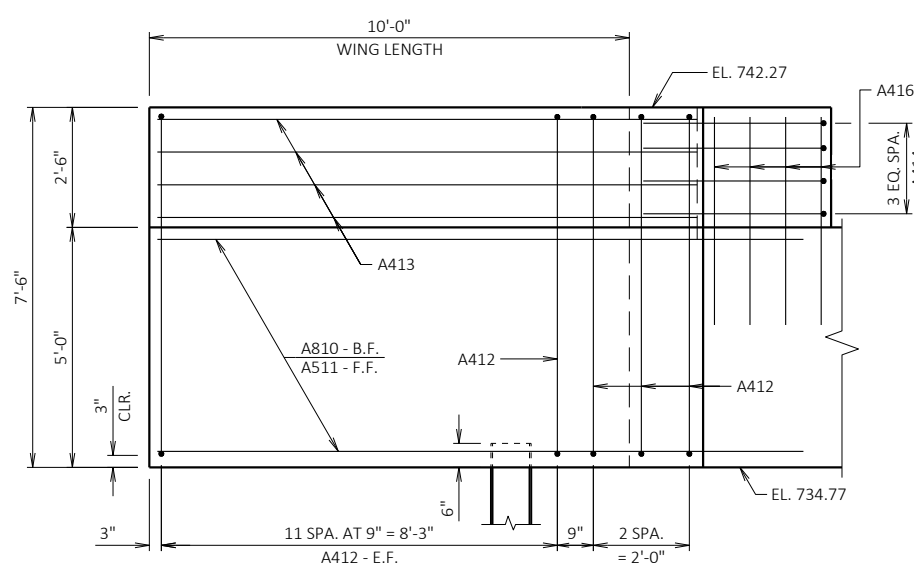
(AXX) FOR SYMBOL DESCRIPTIONS SEE SHEET 4.



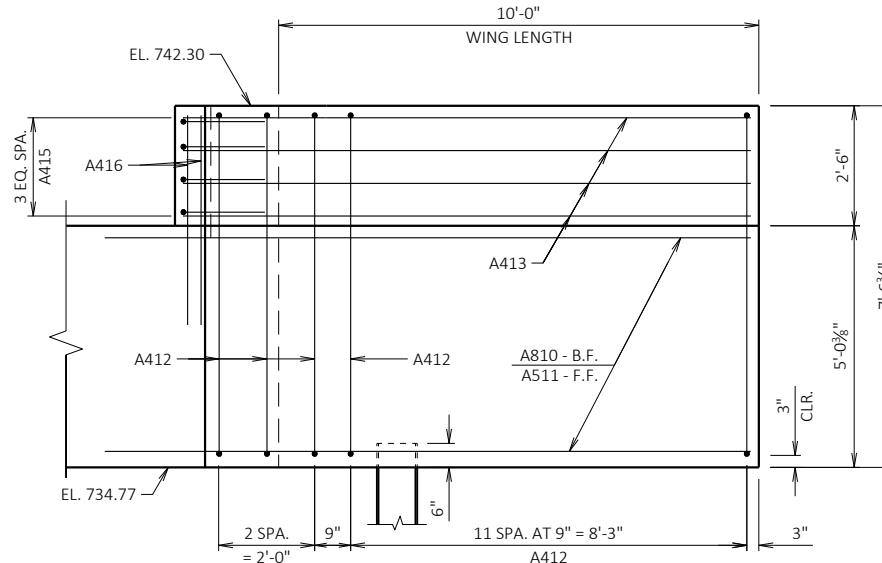
PLAN - WING 1
(A810 & A511 NOT SHOWN FOR CLARITY)



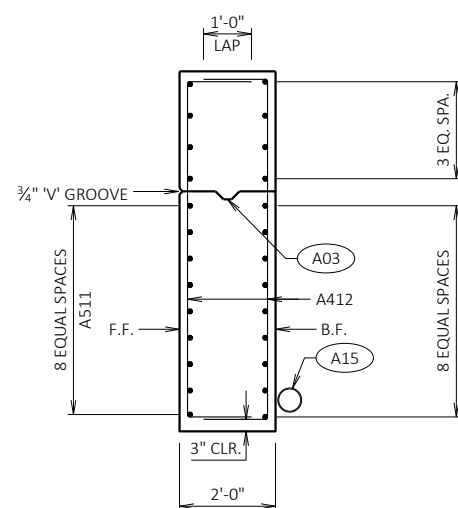
PLAN - WING 2
(A810 & A511 NOT SHOWN FOR CLARITY)



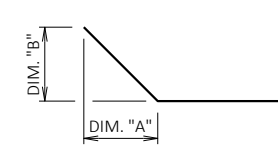
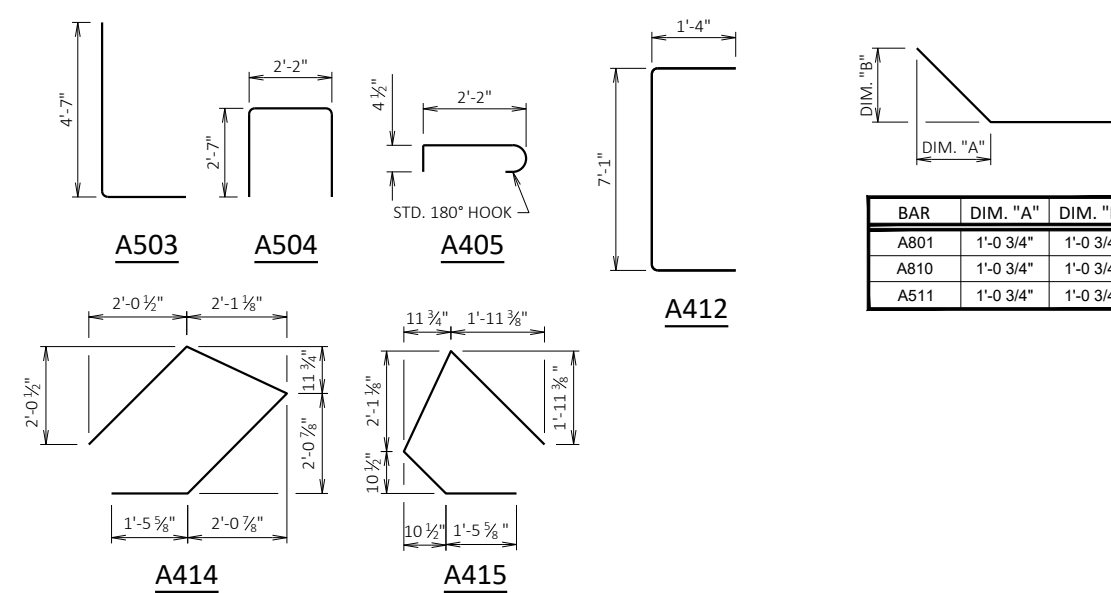
ELEVATION - WING 1



ELEVATION - WING 2



SECTION THRU WINGS



BAR	DIM. "A"	DIM. "B"
A801	1'-0 3/4"	1'-0 3/4"
A810	1'-0 3/4"	1'-0 3/4"
A511	1'-0 3/4"	1'-0 3/4"

8

8

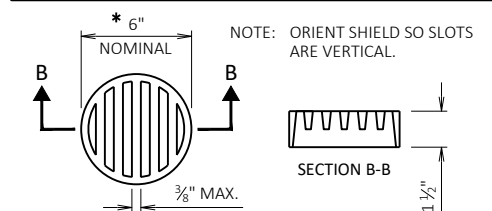
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-244			
DRAWN BY PKF		PLANS CK'D. ETP	
WEST ABUTMENT DETAILS			SHEET 5 OF 10



LEGEND

- INDICATES WING NUMBER
- (A01) KEYED CONST. JOINT FORMED BY BEVELED 2" x 6".
- (A03) OPTIONAL KEYED CONST. JOINT FORMED BY BEVELED 2"x6". SEAL JOINT ON B.F. WITH RUBBERIZED MEMBRANE WATERPROOFING IF USED (COST INCIDENTAL TO CONCRETE MASONRY BRIDGES).
- (A09) SUPPORT ABUTMENT ON PILING STEEL HP 10-INCH x 42 LB, DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 120 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 75' LONG.
- (A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".
- (A17) 1/2" FILLER: SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.)
- (A19) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.
- (A22) B509 BARS AT 1'-0". THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.

B.F. DENOTES BACK FACE
 F.F. DENOTES FRONT FACE
 E.F. DENOTES EACH FACE

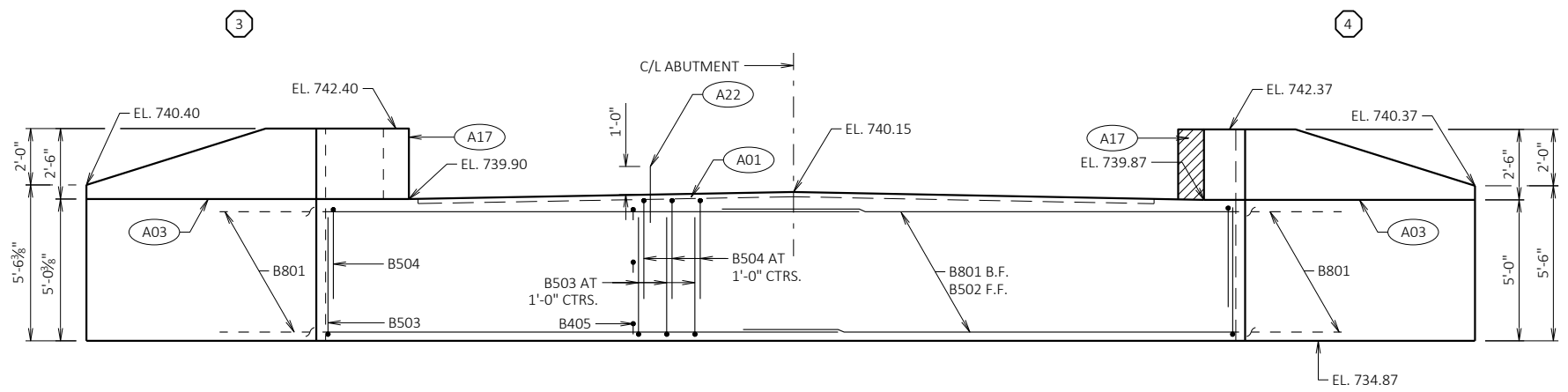


* DIMENSION IS APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

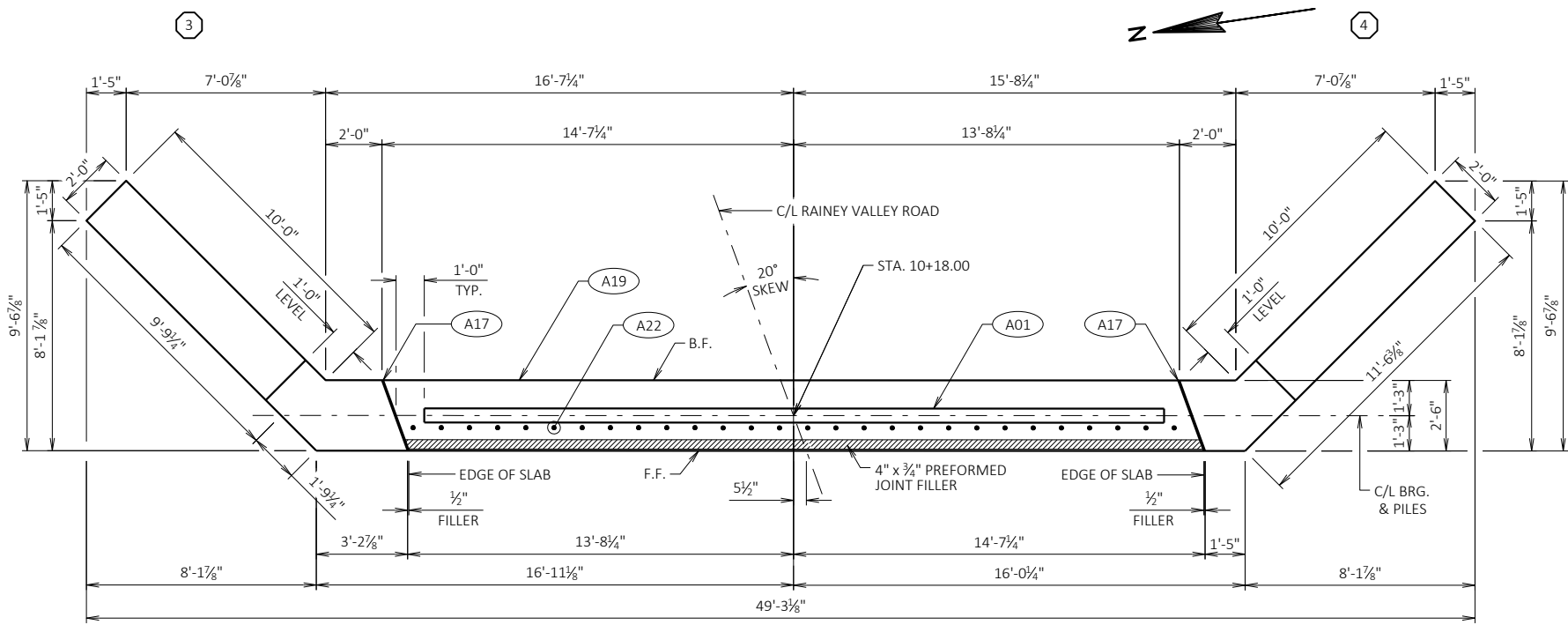
RODENT SHIELD DETAIL

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

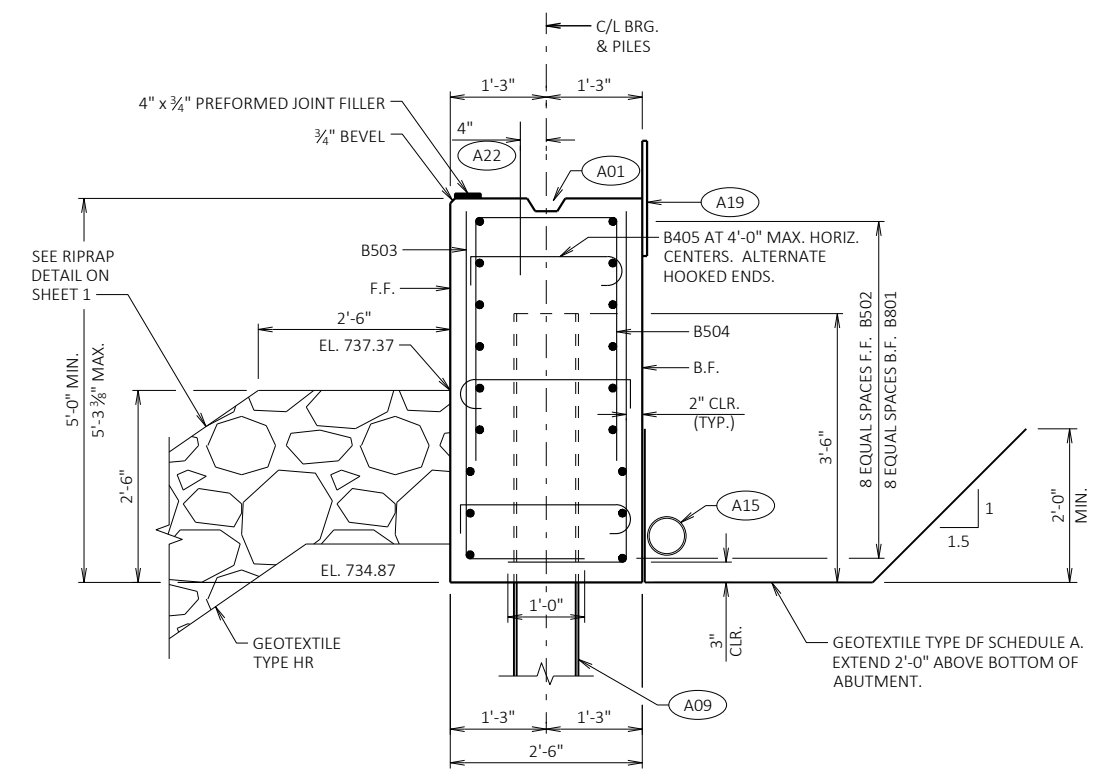
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH.



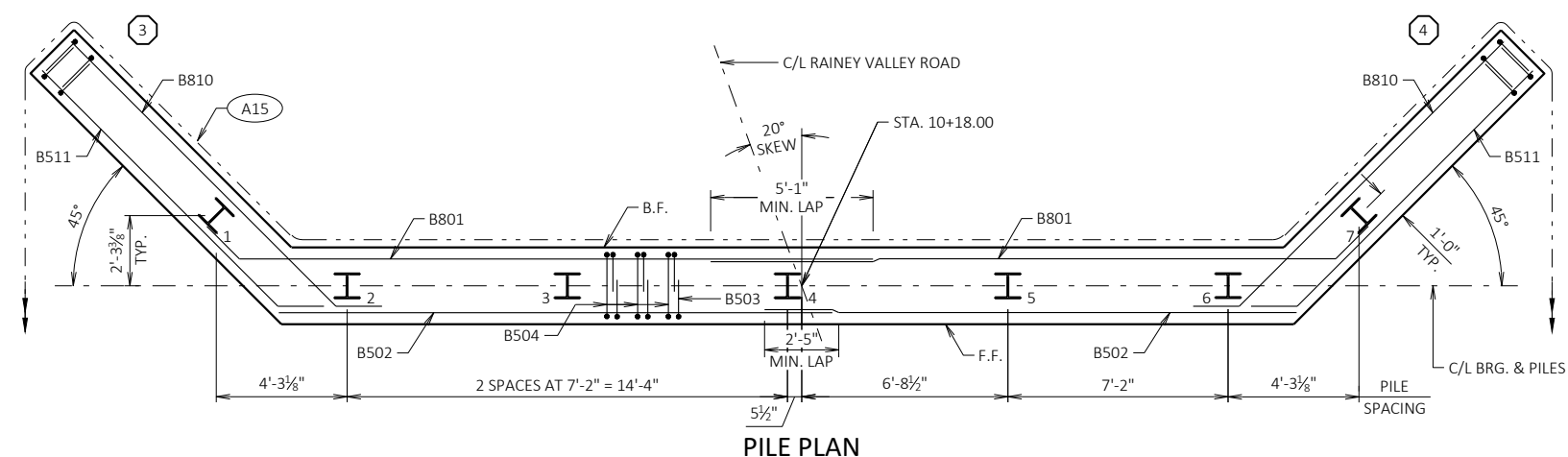
ELEVATION (LOOKING EAST)



PLAN



SECTION THRU BODY
 DO NOT PLACE FILL ABOVE 3'-0" FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.



PILE PLAN

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-244			
DRAWN BY PKF		PLANS CK'D. ETP	
EAST ABUTMENT			SHEET 6 OF 10



BILL OF BARS - EAST ABUTMENT

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
NON-COATED BARS					TOTAL WEIGHT = 2,140 LBS
B801	18	22'-8"	X		BODY - B.F. HORIZ.
B502	18	17'-7"			BODY - F.F. HORIZ.
B503	66	6'-1"	X		BODY - E.F. VERT.
B504	33	7'-1"	X		BODY - TOP VERT.
B405	27	3'-0"	X		BODY - TIES LONGIT.
COATED BARS					TOTAL WEIGHT = 1,490 LBS
B509	28	2'-0"			BODY - TOP VERT.
B810	18	14'-5"	X		WINGS 3 & 4 - B.F. HORIZ.
B511	18	12'-9"	X		WINGS 3 & 4 - F.F. HORIZ.
B412	8	9'-7"	X		WINGS 3 & 4 - E.F. VERT.
B413	48	8'-6"	X	X	WINGS 3 & 4 - E.F. VERT.
B414	4	9'-5"	X		WING 3 - TOP HORIZ.
B415	4	7'-7"	X		WING 4 - TOP HORIZ.
B416	14	3'-10"			WINGS 3 & 4 - TOP VERT.
B417	4	11'-2"			WINGS 3 & 4 - TOP HORIZ.
B418	4	8'-9"			WINGS 3 & 4 - TOP HORIZ.
B419	4	5'-6"			WINGS 3 & 4 - TOP HORIZ.
B420	4	11'-4"	X		WINGS 3 & 4 - TOP HORIZ.

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

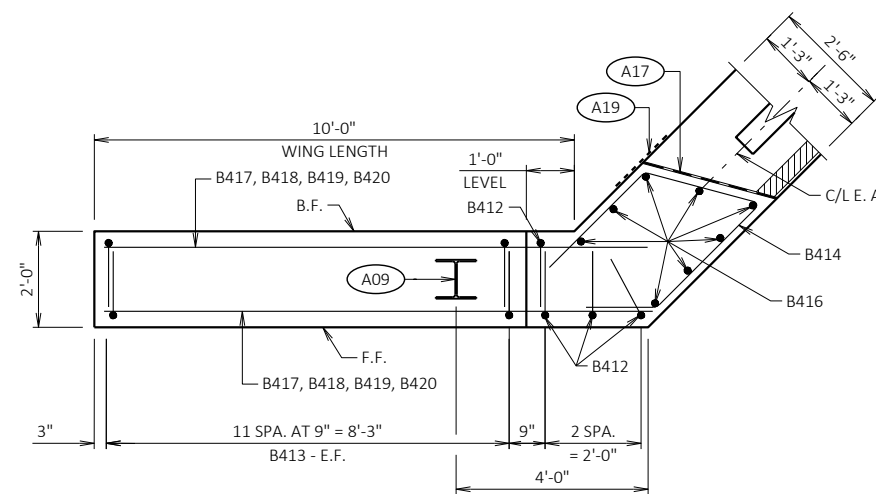
BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
B413	4 SERIES OF 12	7'-7" TO 9'-5"

BUNDLE AND TAG EACH SERIES SEPARATELY.

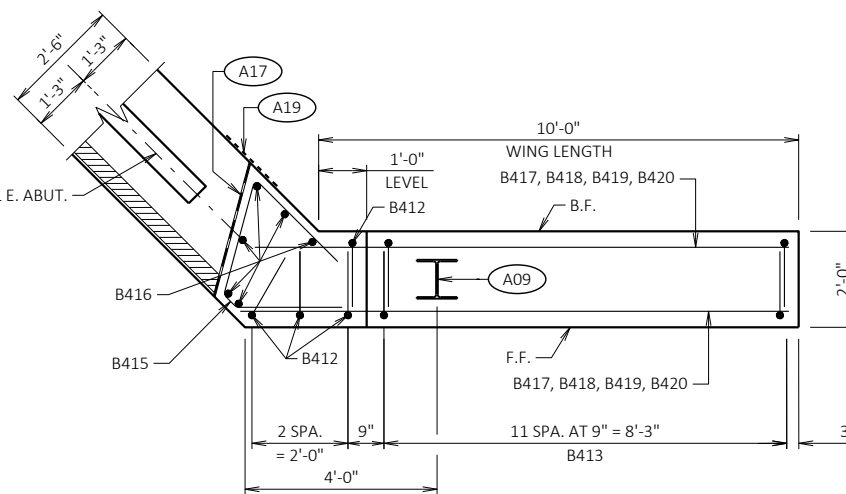
LEGEND

(AXX) FOR SYMBOL DESCRIPTIONS SEE SHEET 6.



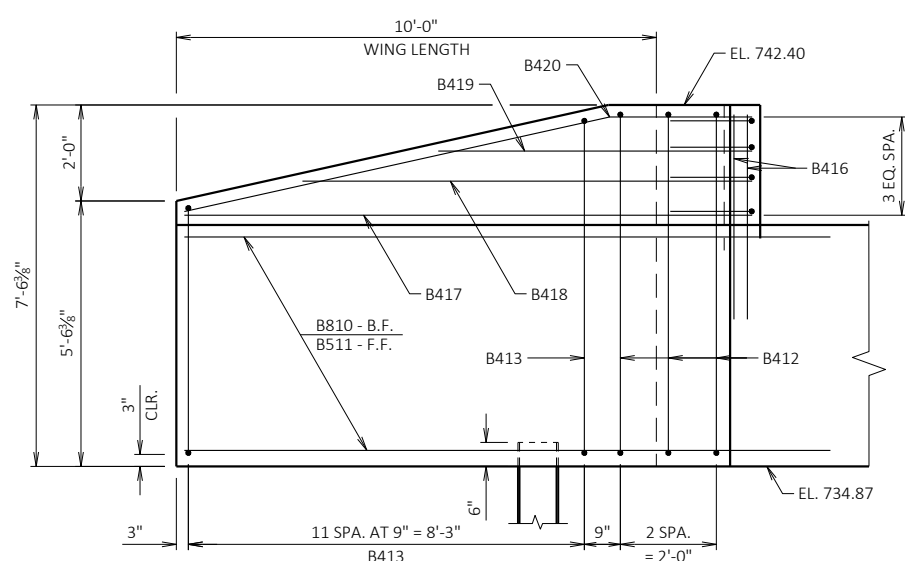
PLAN - WING 3

(B810 & B511 NOT SHOWN FOR CLARITY)

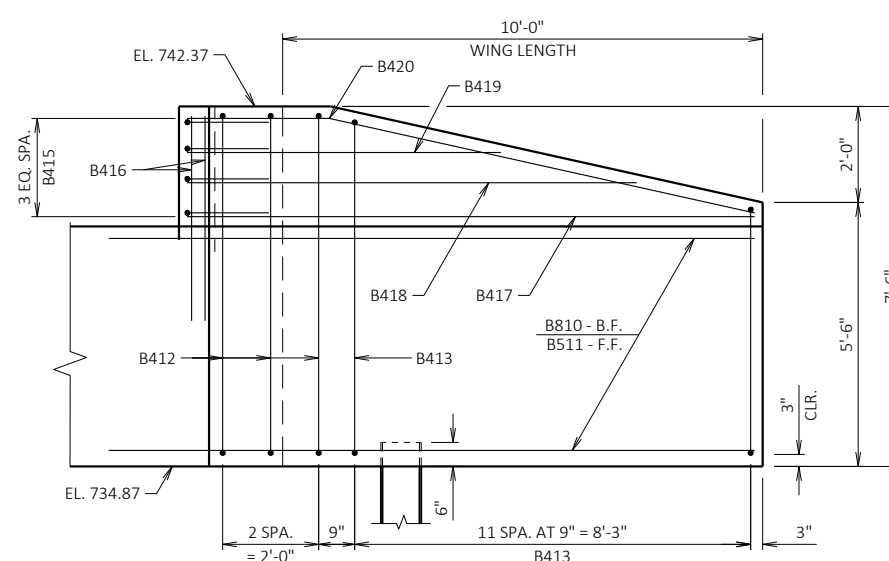


PLAN - WING 4

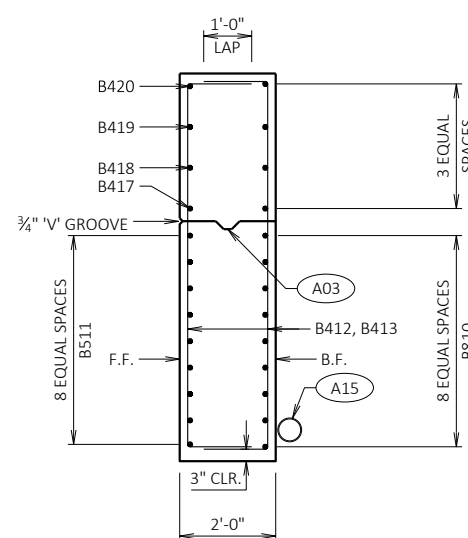
(B810 & B511 NOT SHOWN FOR CLARITY)



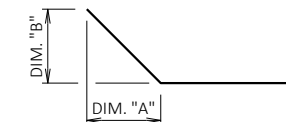
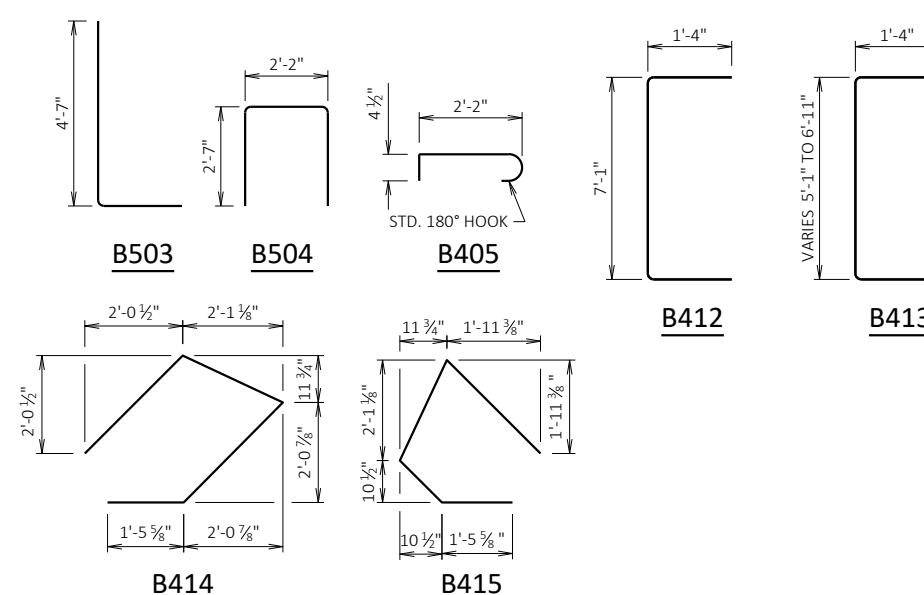
ELEVATION - WING 3



ELEVATION - WING 4



SECTION THRU WINGS



BAR	DIM. "A"	DIM. "B"
B801	1'-0 3/4"	1'-0 3/4"
B810	1'-0 3/4"	1'-0 3/4"
B420	2'-3 1/8"	6"

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-244			
DRAWN BY		PKF	PLANS CK'D. ETP
EAST ABUTMENT DETAILS			SHEET 7 OF 10



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NOTES

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

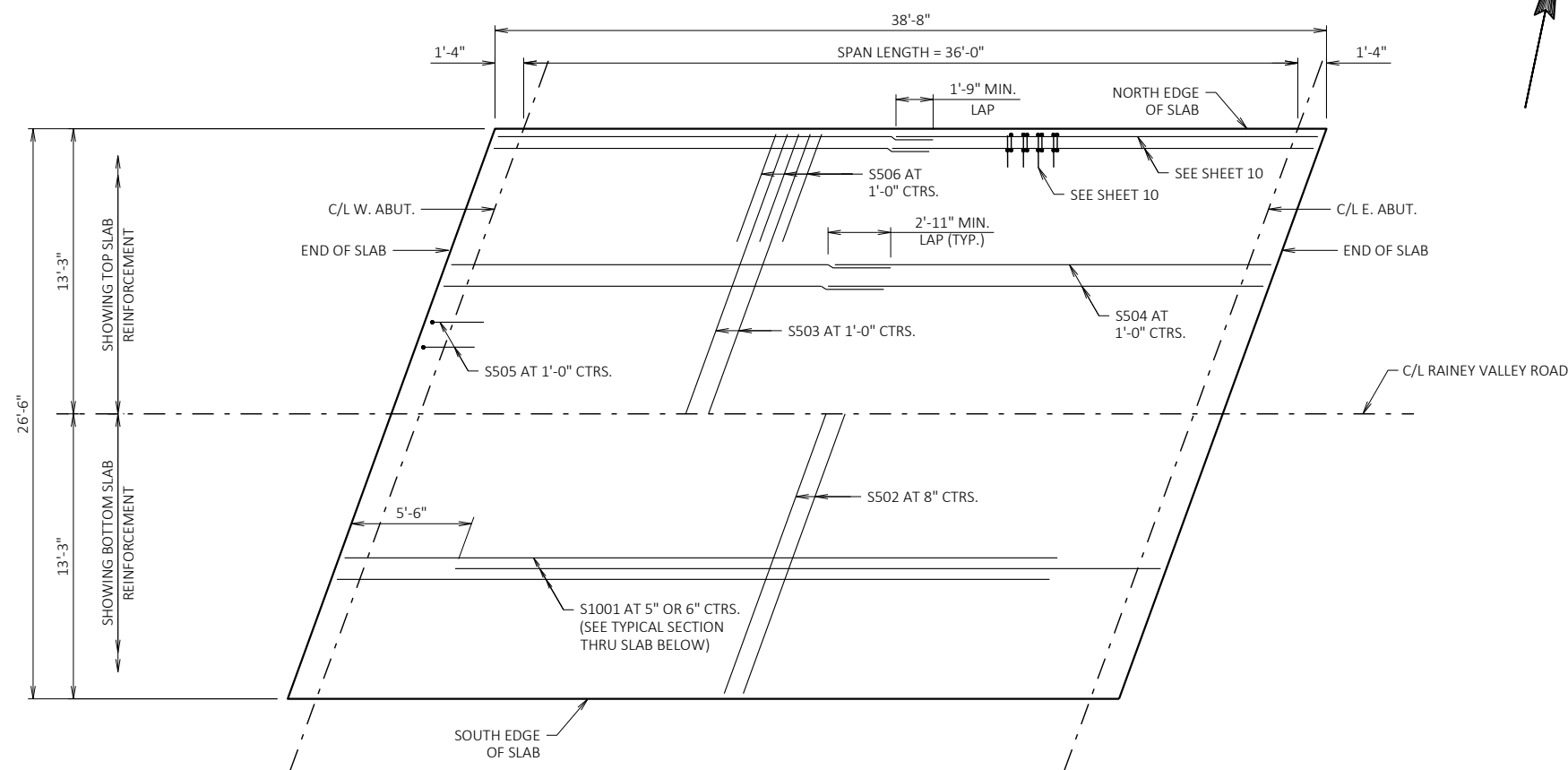
TRANSVERSE BARS SHALL BE PLACED PARALLEL TO THE C/L OF SUBSTRUCTURE UNITS.

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

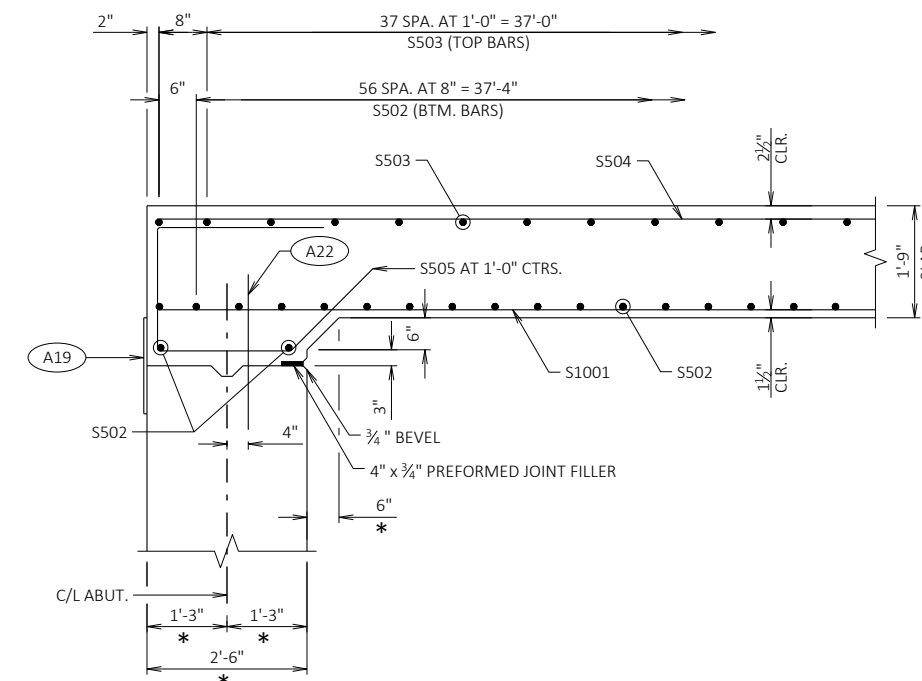
PARAPETS SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

LEGEND

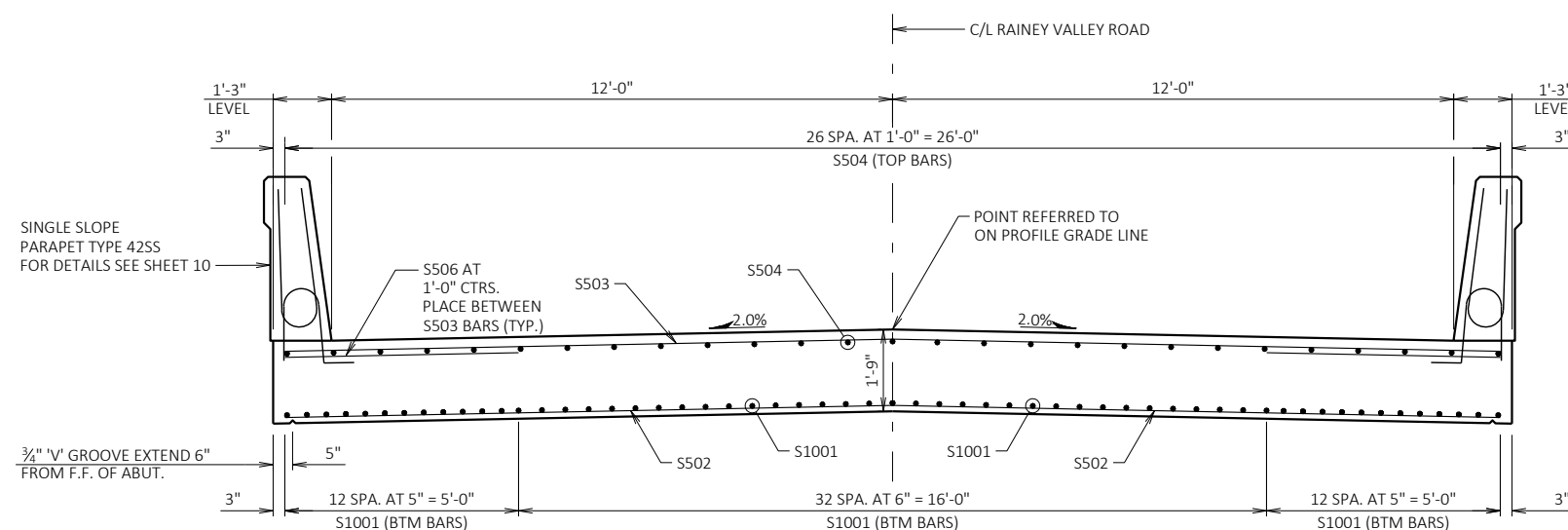
- (A19) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.
- (A22) A509 OR B509 BARS AT 1'-0" CTRS. THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.
- * DIMENSION IS NORMAL TO C/L SUBSTRUCTURE.



PLAN



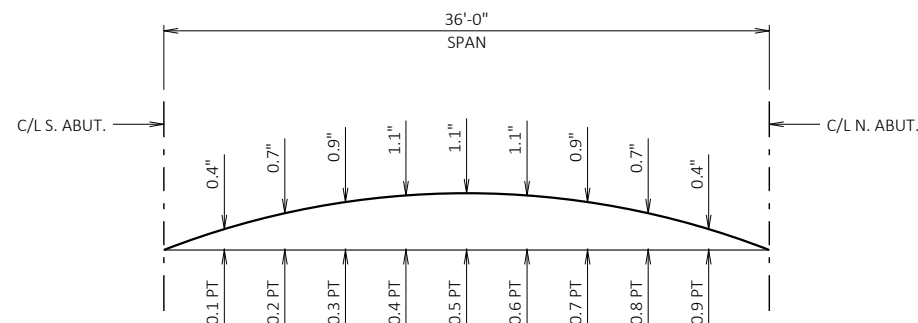
PARTIAL LONGITUDINAL SECTION



TYPICAL SECTION THRU SLAB

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-244			
DRAWN BY PKF		PLANS CK'D. ETP	
SUPERSTRUCTURE			SHEET 8 OF 10





CAMBER DIAGRAM

PROVIDE CAMBER AS SHOWN ABOVE TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. THIS DOES NOT INCLUDE ANY ALLOWANCE FOR FORM SETTLEMENT.

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS AND AT 5/10 POINTS TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR R/L.

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTION.

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

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

EQUALS TOP OF SLAB FALSEWORK ELEVATION.

BILL OF BARS - SUPERSTRUCTURE

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
TOTAL WEIGHT = 15,340 LBS					
S1001	57	33'-0"			SLAB - BTM LONGIT.
S502	63	27'-10"			SLAB - BTM TRANS.
S503	40	27'-10"			SLAB - TOP TRANS.
S504	54	20'-8"			SLAB - TOP LONGIT.
S505	54	7'-8"	X		SLAB - AT ABUTMENTS VERT.
S506	78	5'-0"			SLAB - EDGES TRANS.
S510	62	4'-5"	X		PARAPETS VERT.
S511	62	6'-8"	X		PARAPETS VERT.
S512	44	2'-9"	X		PARAPETS VERT.
S513	68	4'-4"	X		PARAPETS VERT.
S514	20	6'-5"	X		PARAPETS VERT.
S515	24	6'-6"	X		PARAPETS VERT.
S516	4	10'-6"	X		PARAPETS HORIZ.
S517	20	19'-10"			PARAPETS HORIZ.
S518	24	5'-5"	X	X	PARAPETS VERT.
S519	8	10'-5"	X		PARAPETS HORIZ.
S520	6	20'-5"			PARAPETS HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR.

SEE SHEET 10 FOR PARAPET REINFORCEMENT DETAILS.

BAR SERIES TABLE

BAR MARK	NO. REQ'D	LENGTH
S518	4 SERIES OF 6	4'-9" TO 6'-1"

TOP OF SLAB ELEVATIONS

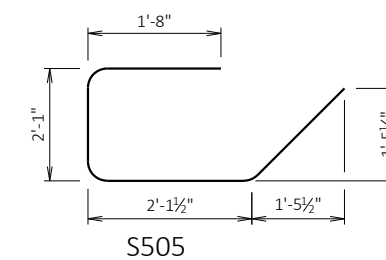
LOCATION	C/L OF W. ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	C/L OF E. ABUT.
NORTH FLOW LINE	742.32	742.33	742.34	742.35	742.36	742.37	742.38	742.39	742.41	742.42	742.43
C/L STRUCTURE	742.55	742.56	742.57	742.58	742.59	742.60	742.61	742.62	742.63	742.64	742.65
SOUTH FLOW LINE	742.29	742.30	742.31	742.33	742.34	742.35	742.36	742.37	742.38	742.39	742.40

ELEVATIONS SHOWN ARE FINISHED SLAB AND DO NOT INCLUDE ALLOWANCES OF DEAD LOAD DEFLECTION AND FUTURE CREEP.

SURVEY TOP OF SLAB ELEVATIONS

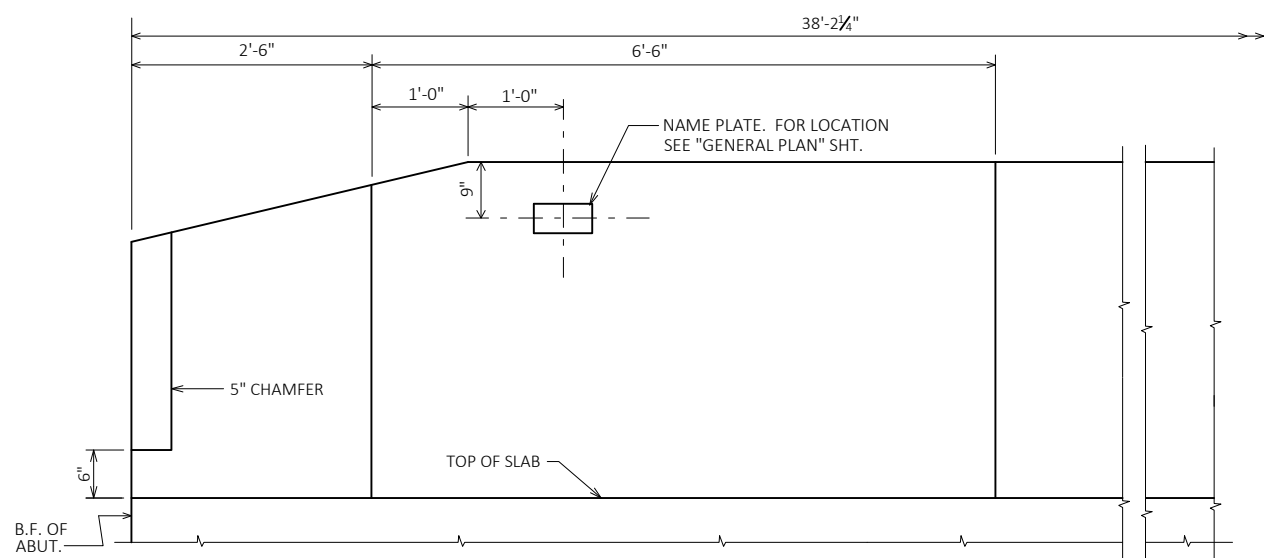
SPAN POINT	W. ABUT.	0.5	E. ABUT.
NORTH FLOW LINE			
C/L STRUCTURE			
SOUTH FLOW LINE			

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

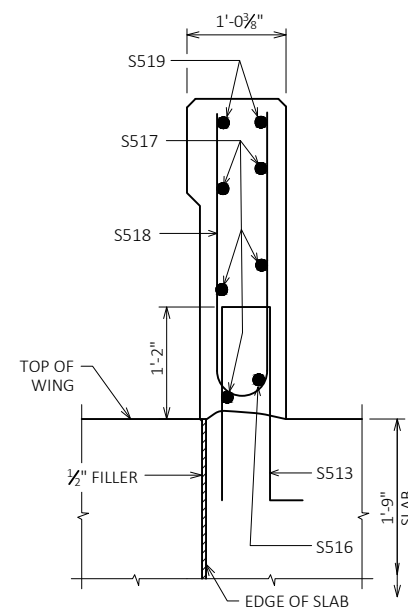


NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-244			
DRAWN BY PKF		PLANS CK'D. ETP	
SUPERSTRUCTURE DETAILS			SHEET 9 OF 10

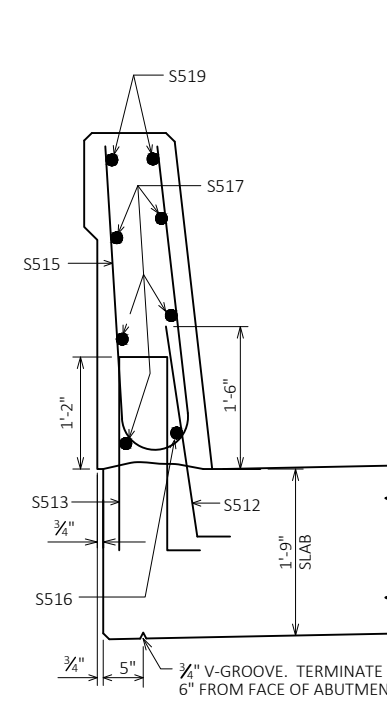




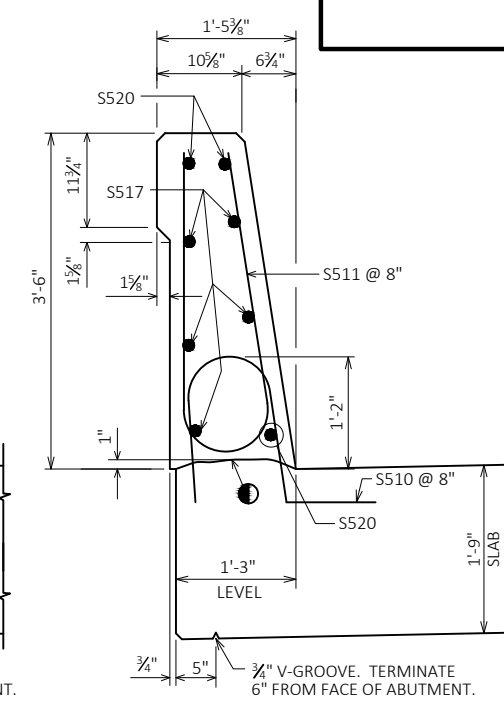
INSIDE ELEVATION



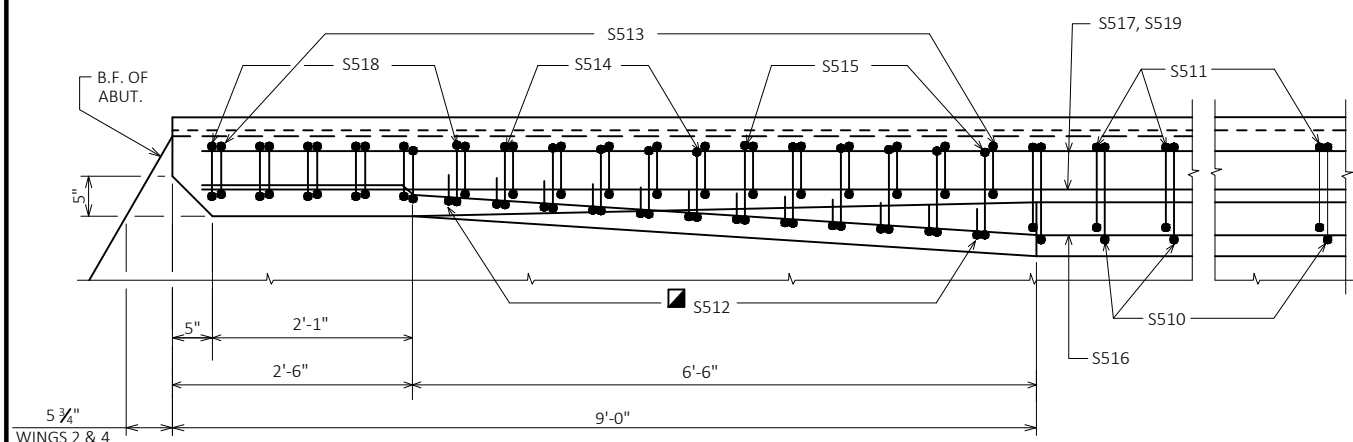
SECTION A



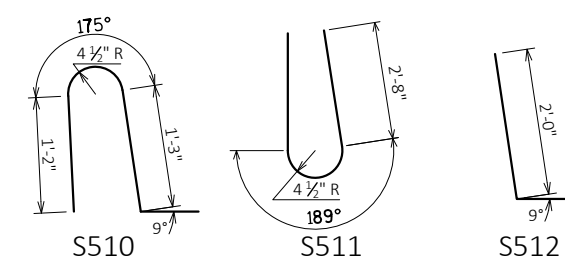
SECTION B



SECTION C



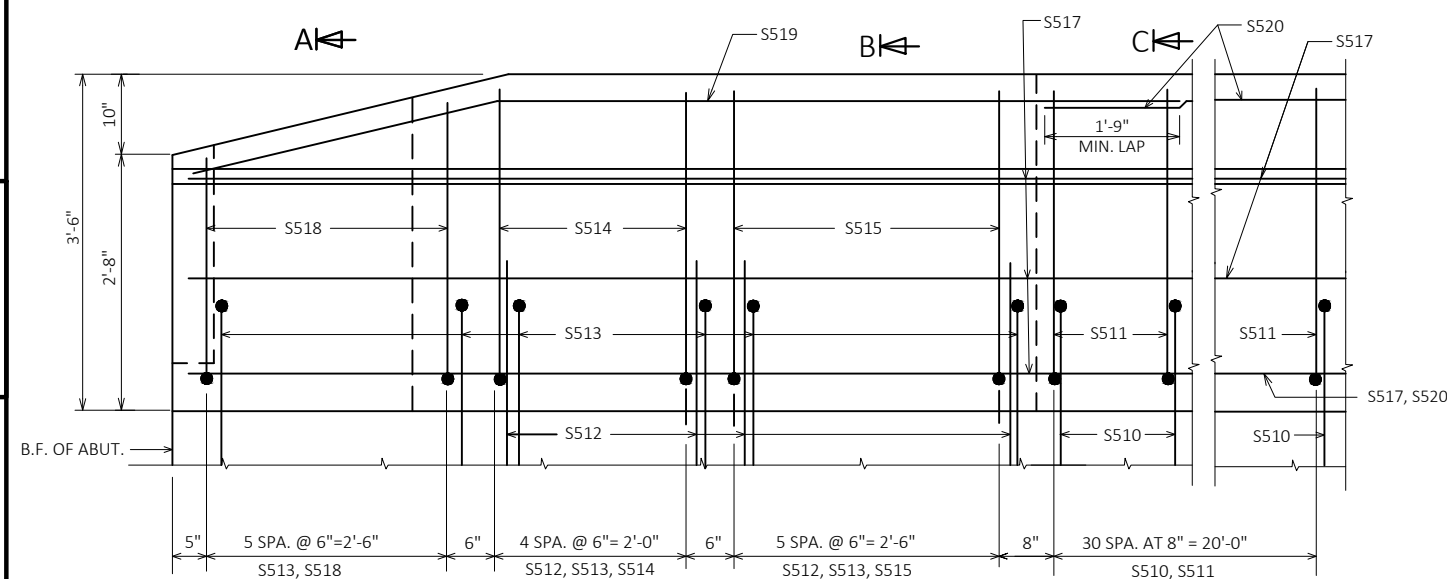
PLAN



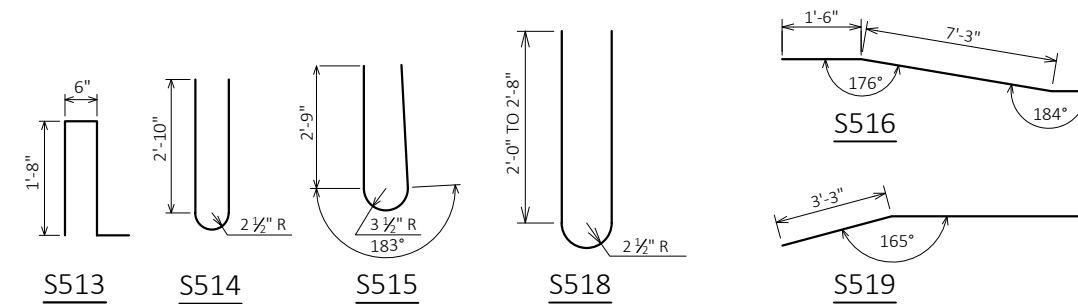
S510

S511

S512



OUTSIDE ELEVATION



S513

S514

S515

S518

S519

● CONST. JOINT - STRIKE OFF AS SHOWN.

■ S512 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE S512 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-61-244			
DRAWN BY PKF		PLANS CK'D. ETP	
SINGLE SLOPE PARAPET 42SS			SHEET 10 OF 10

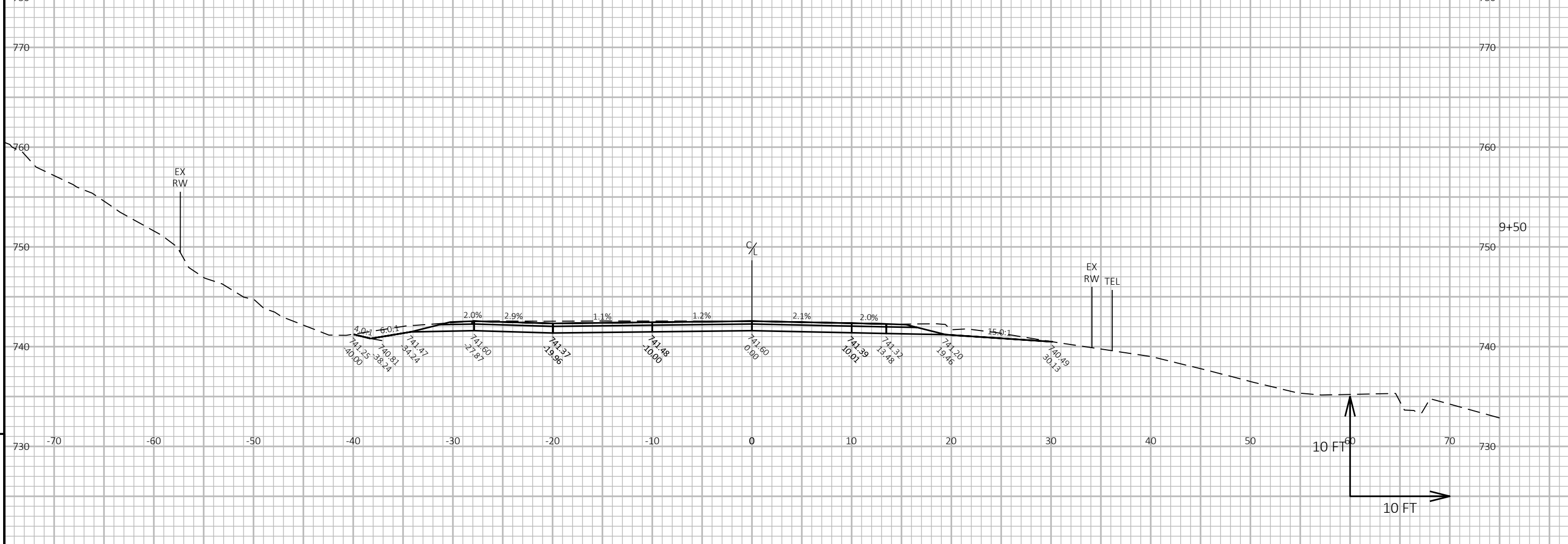
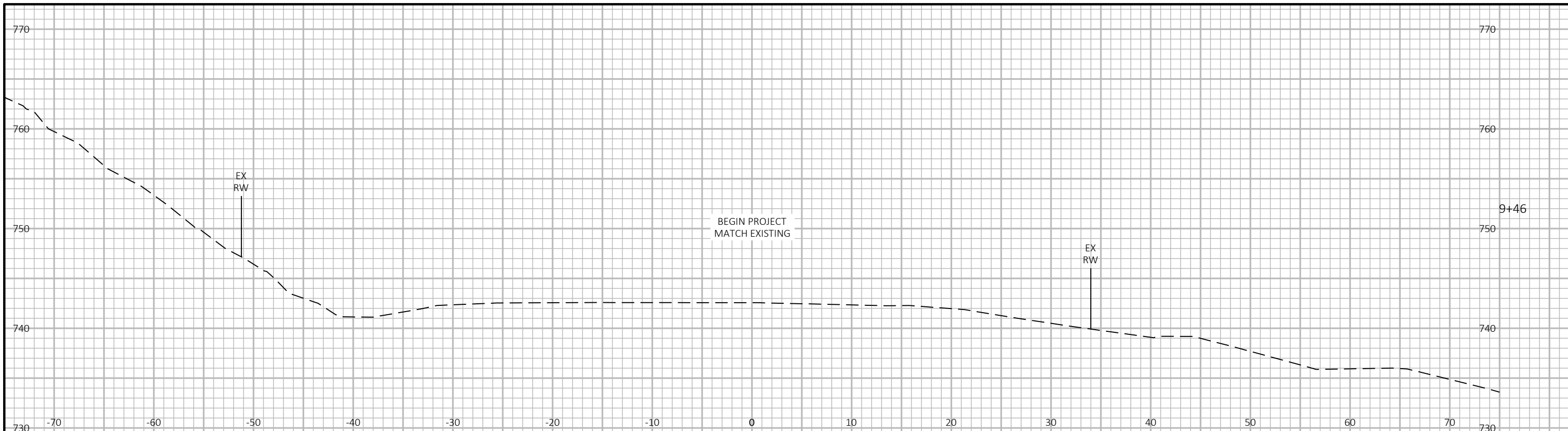
DIVISION 1 -- RAINEY VALLEY RD

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 4
09+46.5	0.00	59.17	13.33	0.00	0	0	0	0	0	0
09+50	3.50	62.14	13.33	0.00	8	2	0	8	0	6
09+55	5.00	66.82	15.00	0.00	12	3	0	20	0	15
09+60	5.00	58.69	16.00	0.00	12	3	0	32	0	24
09+65	5.00	52.78	15.00	0.00	10	3	0	42	0	31
09+70	5.00	49.02	14.00	0.00	9	3	0	51	0	37
09+75	5.00	26.08	10.67	0.00	7	2	0	58	0	42
EXISTING STRUCTURE P-61-165										
10+25	0.00	20.79	8.00	4.87	0	0	0	58	0	42
10+35	10.00	20.61	8.00	2.00	8	3	1	66	1	46
10+50	15.00	33.87	8.00	0.00	15	4	1	81	3	56
10+60	10.00	39.43	10.67	0.00	14	3	0	95	3	67
10+70	10.00	44.36	12.00	0.00	16	4	0	111	3	79
10+80	10.00	50.25	14.00	0.00	18	5	0	129	3	92
10+84.995	4.99	36.28	11.00	0.00	8	2	0	137	3	98

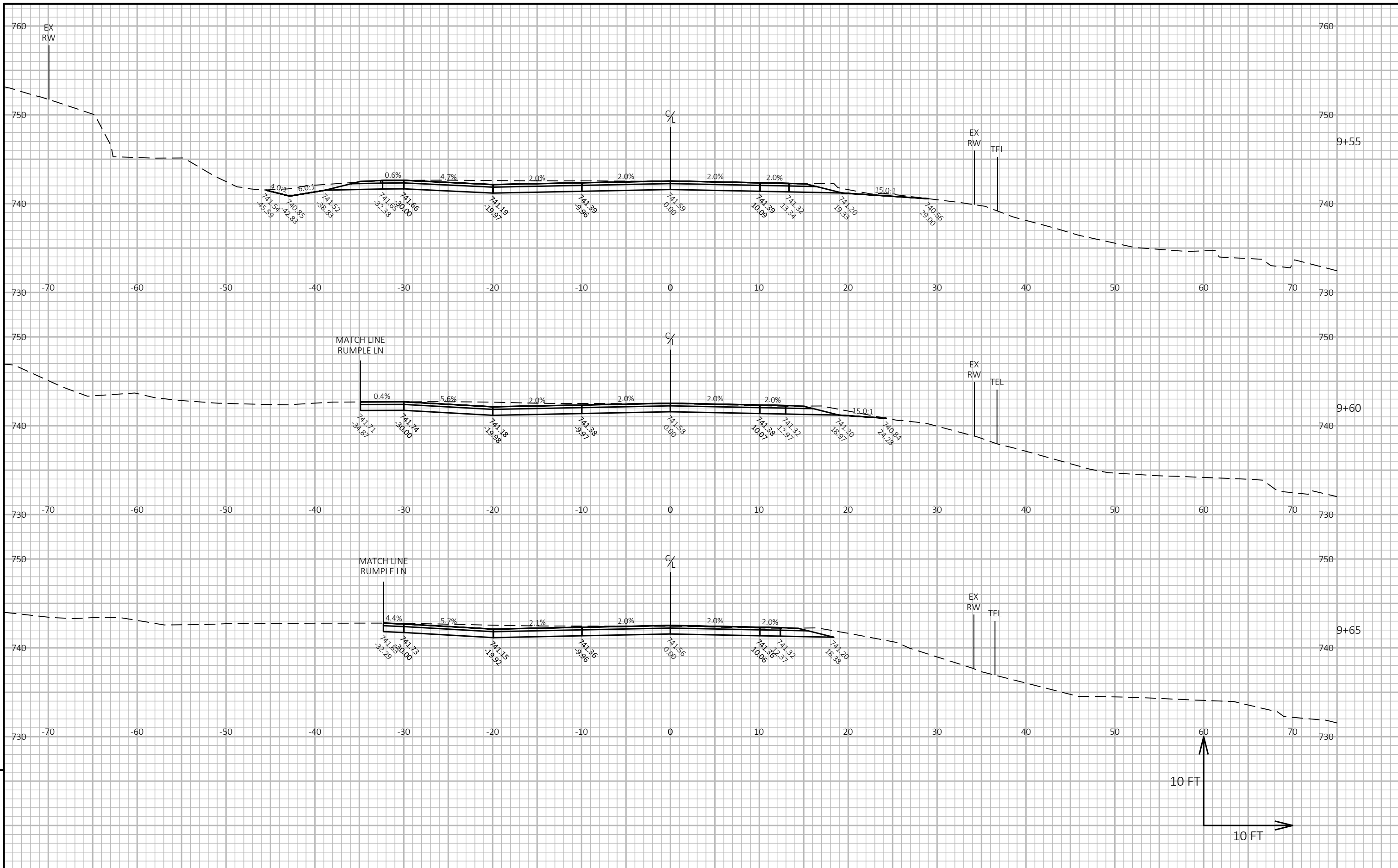
Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - MASS ORDINATE	{CUT - SALVAGED PAVI (FILL * FILL FACTOR)}

9

9



PROJECT NO: 7276-00-74	HWY: LOCAL STREET	COUNTY: TREMPLEALEU	CROSS SECTIONS: RAINEY VALLEY ROAD	SHEET	E
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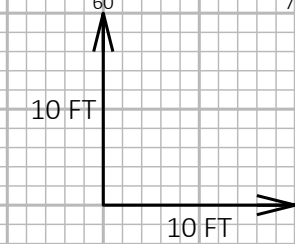


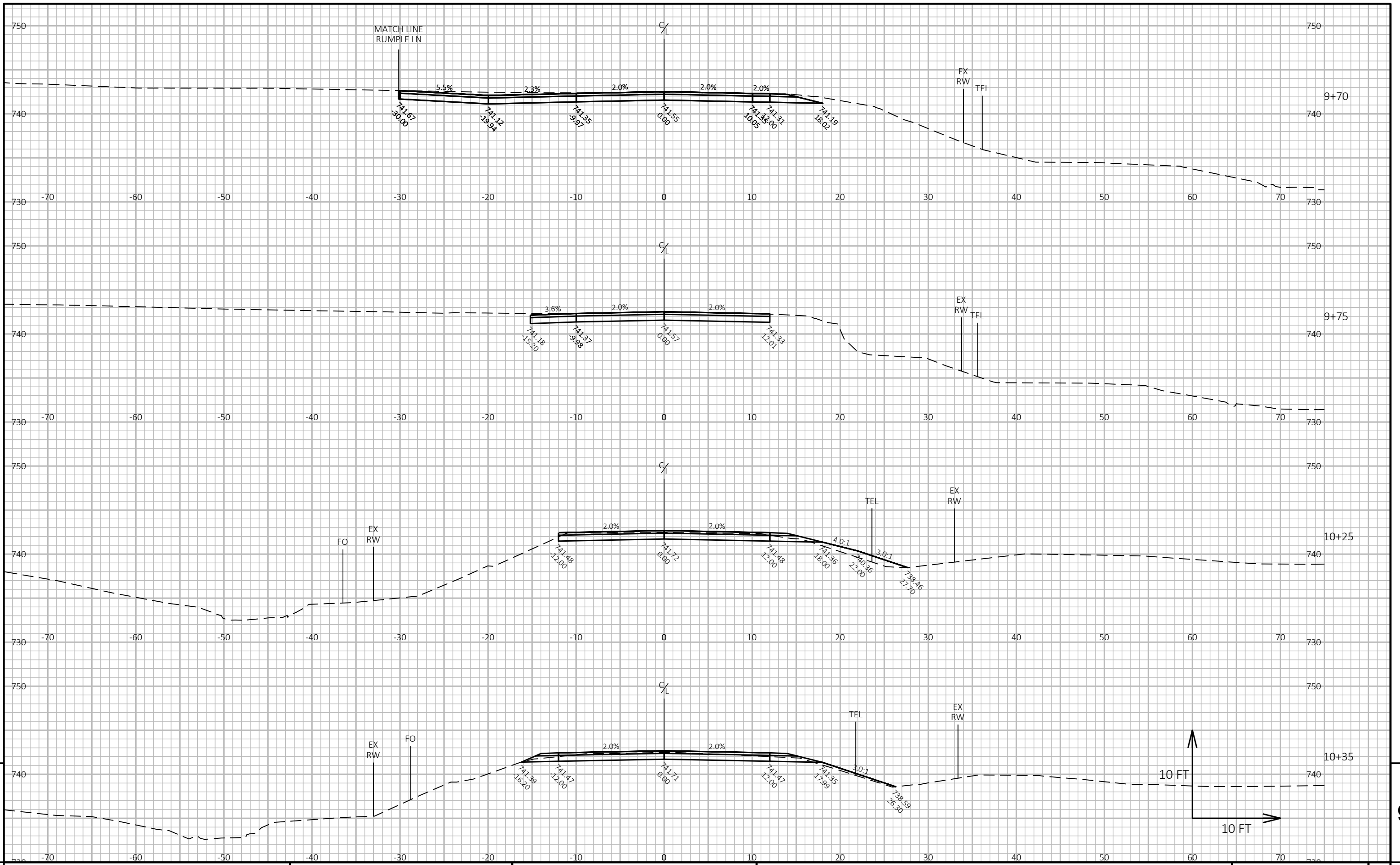
9

9

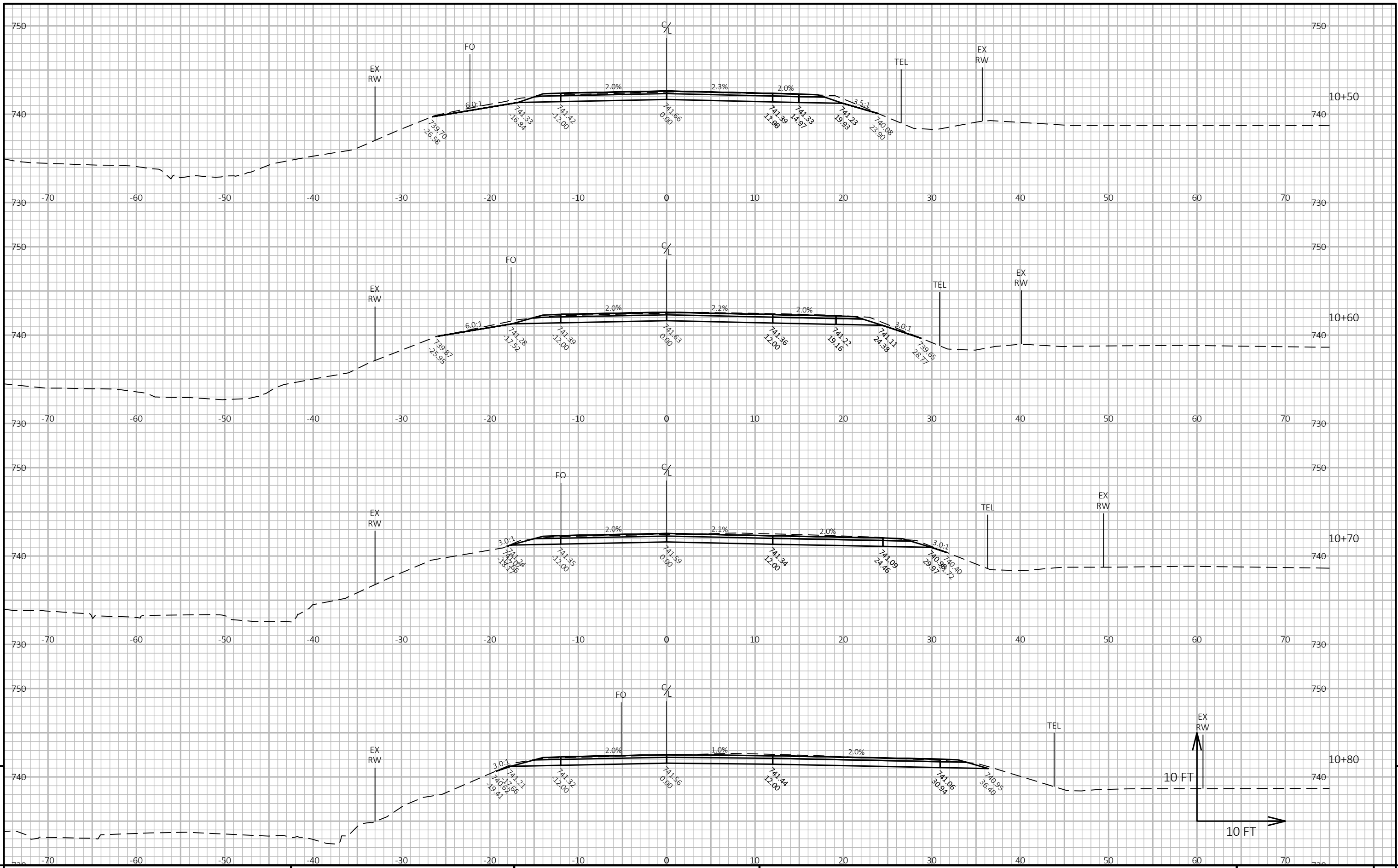
PROJECT NO: 7276-00-74 HWY: LOCAL STREET COUNTY: TREMPLEAU CROSS SECTIONS: RAINEY VALLEY ROAD SHEET E

FILE NAME: C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NW REGION\7276-00-04_TREMPLEAU CO_RAINEY VALLEY ROAD\500_CADD\501_C3D_2018\7276-00-04\SHEETS\PLAN\090201-XS.DWG PLOT DATE: 5/10/2022 12:03 PM PLOT BY: NICHOLAS WATHKE PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

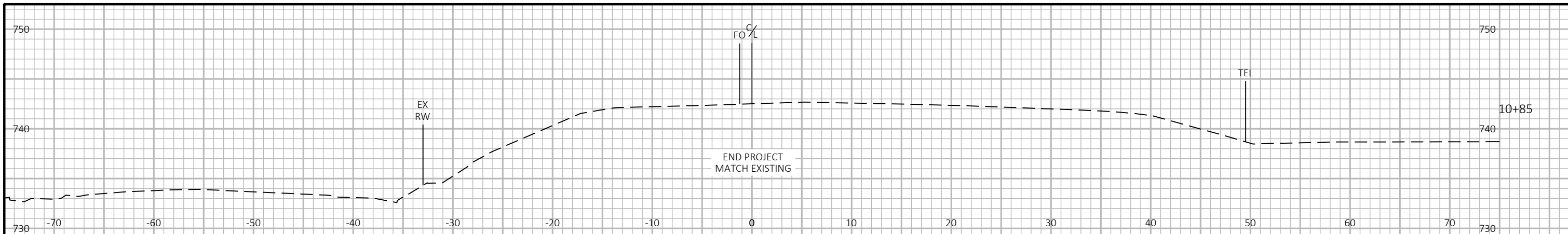




PROJECT NO: 7276-00-74 HWY: LOCAL STREET COUNTY: TREMPLEAU CROSS SECTIONS: RAINEY VALLEY ROAD SHEET 9

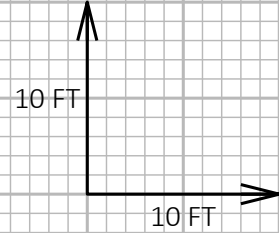


PROJECT NO: 7276-00-74 HWY: LOCAL STREET COUNTY: TREMPLEALEU CROSS SECTIONS: RAINEY VALLEY ROAD SHEET E



9

9



PROJECT NO: 7276-00-74	HWY: LOCAL STREET	COUNTY: TREMPLEALEU	CROSS SECTIONS: RAINEY VALLEY ROAD	SHEET	E
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Notes



Wisconsin Department of Transportation

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