

EAU

PROJECT ID: 7856-00-71

WITH: N/A

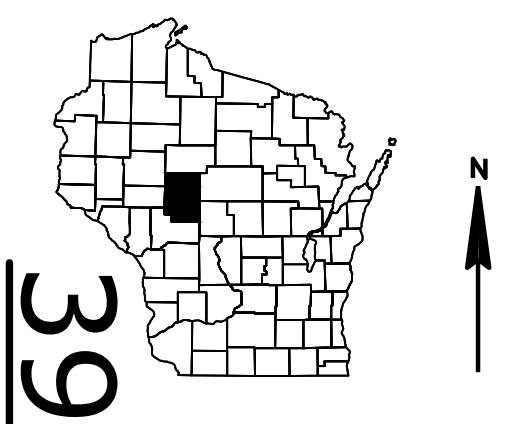
COUNTY: CLARK

DECEMBER 2025

ORDER OF SHEETS

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

TOTAL SHEETS = 48



DESIGN DESIGNATION

A.A.D.T.	(2026)	=	60
A.A.D.T.	(2046)	=	70
D.H.V.	(2046)	=	15
D.D.		=	60/40
T.		=	5%
DESIGN SPEED		=	40 MPH
ESALS		=	30,000

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
MARSH AREA	STORM SEWER
WOODED OR SHRUB AREA	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

T LYNN, CATLIN AVENUE

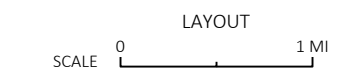
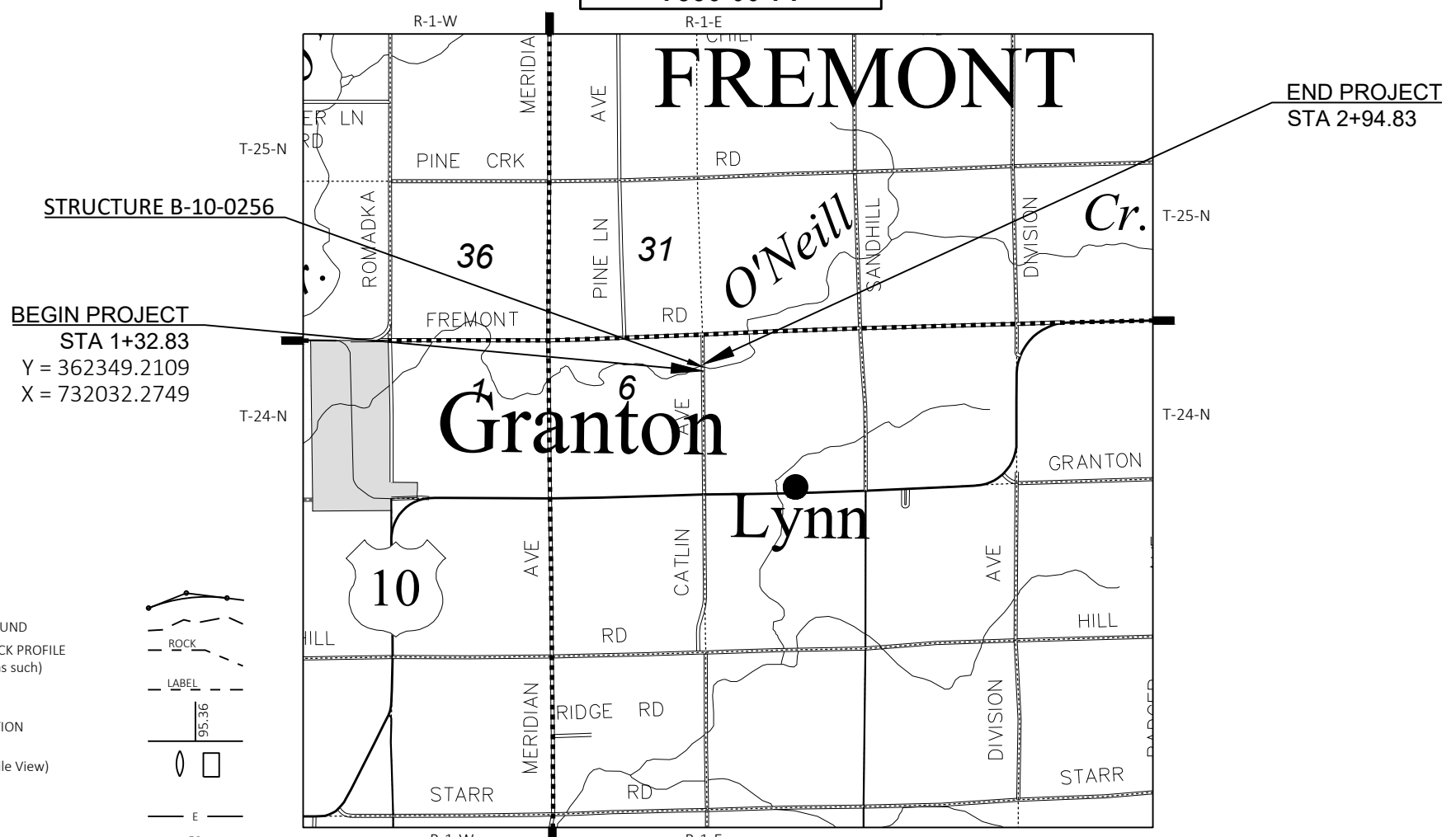
S BR O'NEILL CREEK BRIDGE B-10-0256

LOC STR

CLARK COUNTY

STATE PROJECT NUMBER

7856-00-71



TOTAL NET LENGTH OF CENTERLINE = 0.031 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), CLARK 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 12A.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7856-00-71	WISC2026089	1

ACCEPTED FOR

TOWN OF LYNN

Date: 7/30/25 *Ben L Kayhart*
(Signature and Title of Official)

ORIGINAL PLANS PREPARED BY

AECOM

DATE: 7/25/2025 *James A. Rhoad-Drogalis*
(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	AECOM
Designer	AECOM
Project Manager	TOU YANG, PE
Regional Examiner	NWR
Regional Supervisor	TOU YANG, PE

APPROVED FOR THE DEPARTMENT

DATE: 7/30/2025 *[Signature]*
(Signature)

E

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.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

RIGHT OF WAY INFORMATION, AS SHOWN ON THE PLANS, IS APPROXIMATE.

RADII, ELEVATIONS, AND DIMENSIONS ARE GIVEN AT THE PAVEMENT EDGES, UNLESS OTHERWISE NOTED IN THE PLANS.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, AND SEEDED.

CATLIN AVENUE WILL BE CLOSED DURING CONSTRUCTION. USE THE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" TO CLOSE CATLIN AVENUE AT FREMONT ROAD AND US HWY 10.

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

MATERIALS UNIT WEIGHT

MATERIAL	UNIT WEIGHT
BASE AGGREGATE DENSE 3/4-INCH	2.1 TON/CY
BASE AGGREGATE DENSE 1 1/4-INCH	2.0 TON/CY

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP-TURF	.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 SLOPE-TURF			.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 = 0.245 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.224 ACRES

WDNR CONTACT

WISCONSIN DNR
BRAD BETTHAUSER
910 HWY 54 E
BLACK RIVER FALLS, WI 54615
T: (715) 213-9064
BRADLEY.BETTHAUSER@WISCONSIN.GOV

ELECTRIC

XCEL ENERGY , INC.
JOHN KELSER
1400 WESTERN AVE
EAU CLAIRE, WI 54703
T: (715) 737-6020
JOHN.KELSER@XCELENERGY.COM

LOCAL CONTACT

TOWN OF LYNN
BEN KAYHART
W1877 US-10
GRANTON, WI 54436
T: (715) 238-8122
INFO@BELKAFURNISHINGS.COM

DESIGN CONTACT

AECOM
JAMES RHOAD-DROGALIS
1350 DEMING WAY
MIDDLETON, WI 53562
T: (608) 828-8166
JAMES.DROGALIS@AECOM.COM

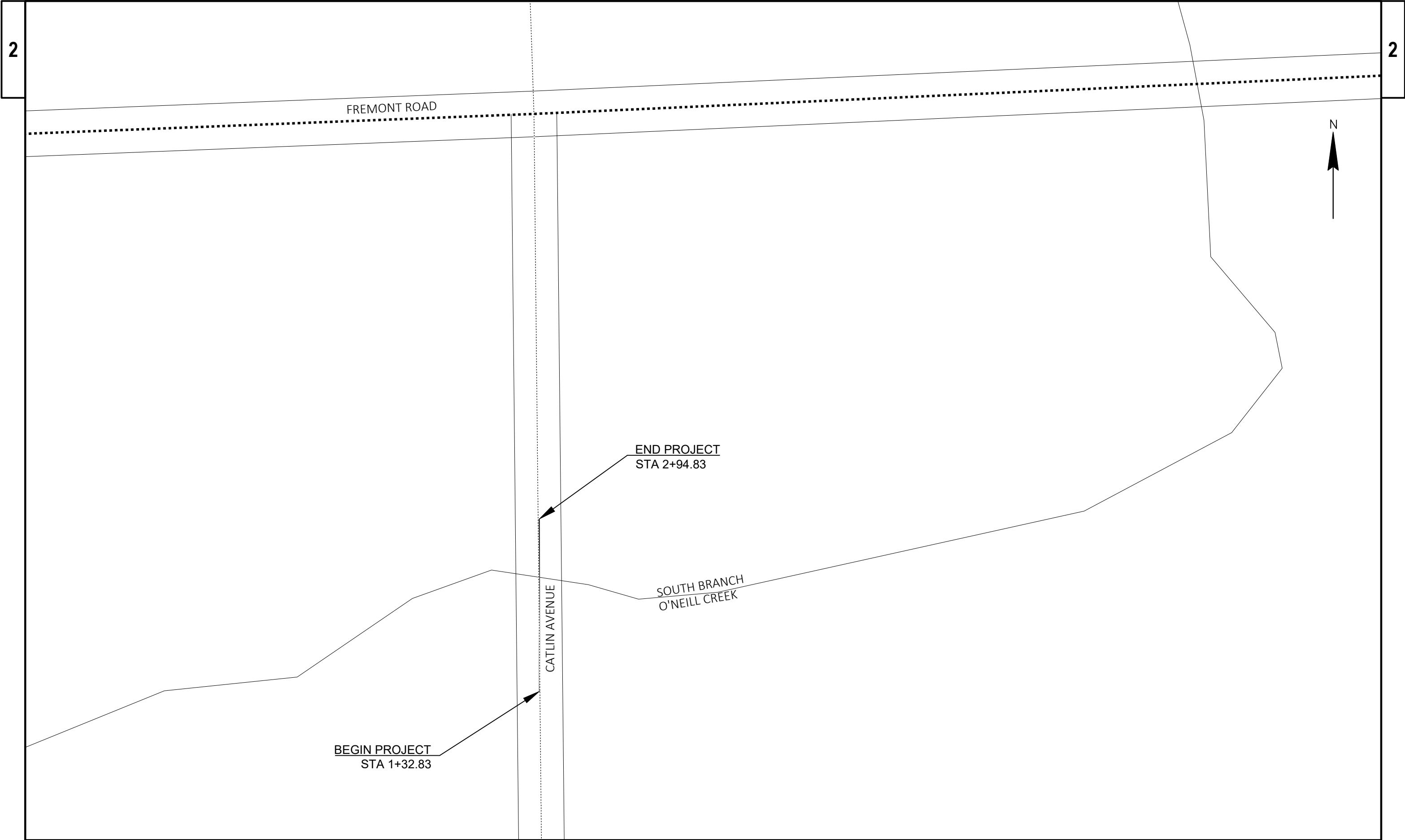
DESIGN PROJECT MANAGER

TOU YANG
718 W CLAIREMONT AVE
EAU CLAIRE, WI 54701
T: (715) 833-5570
TOU.YANG@DOT.WI.GOV

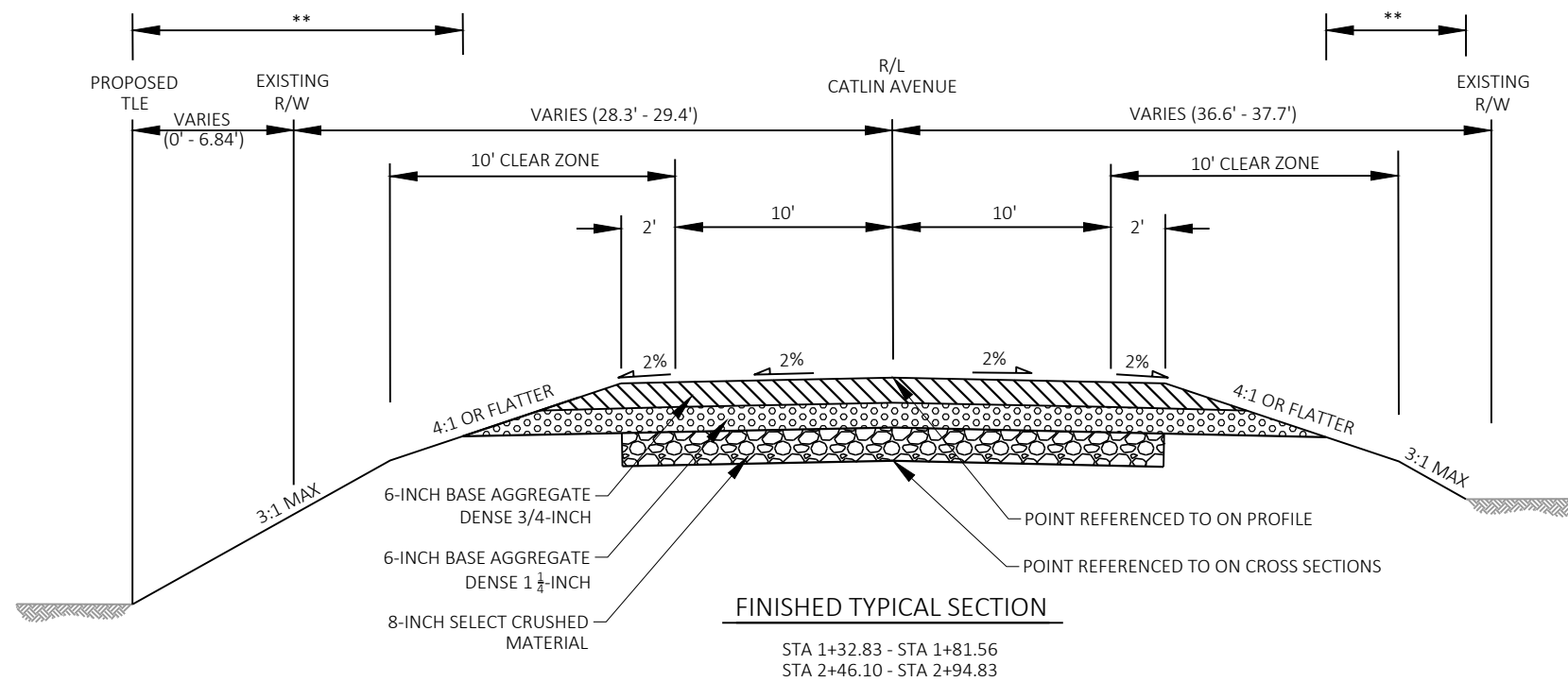
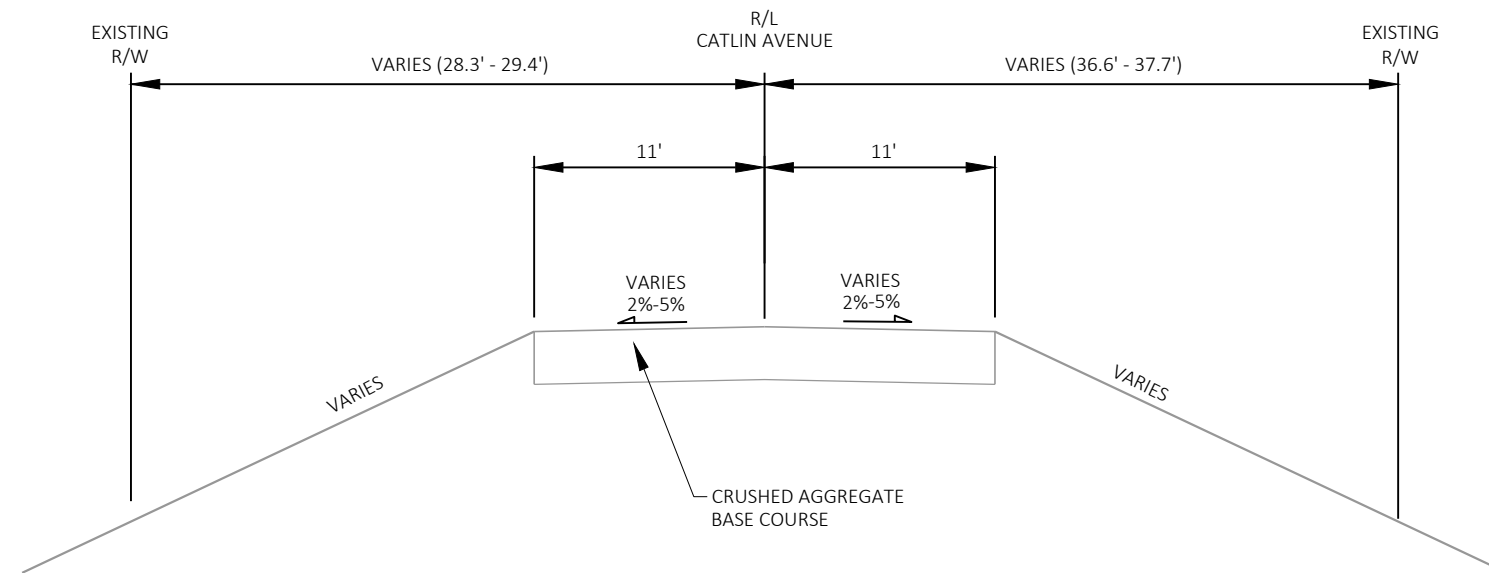
DIGGERSHOTLINE

Dial 811 or (800)242-8511

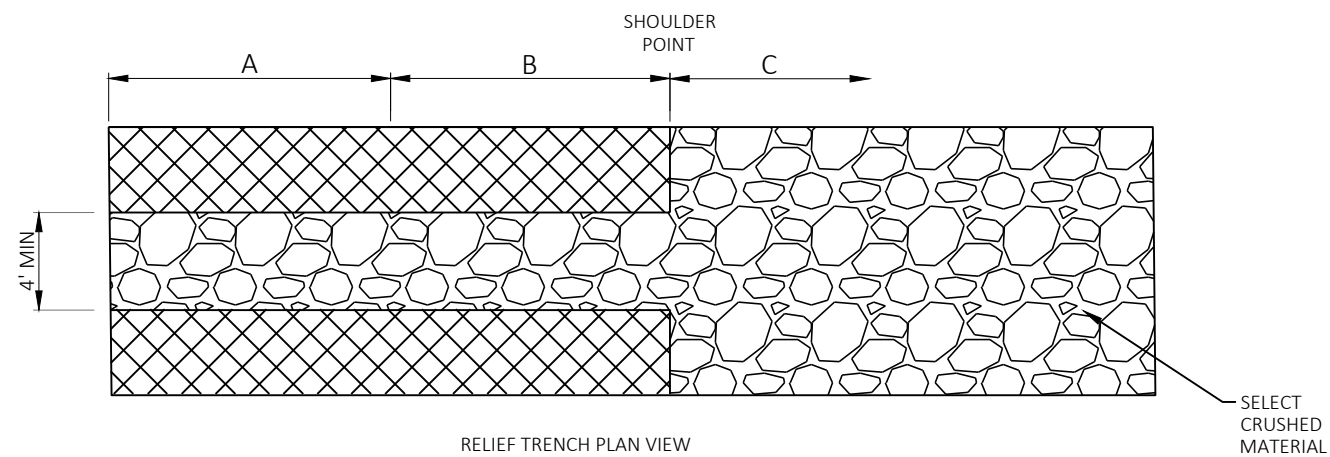
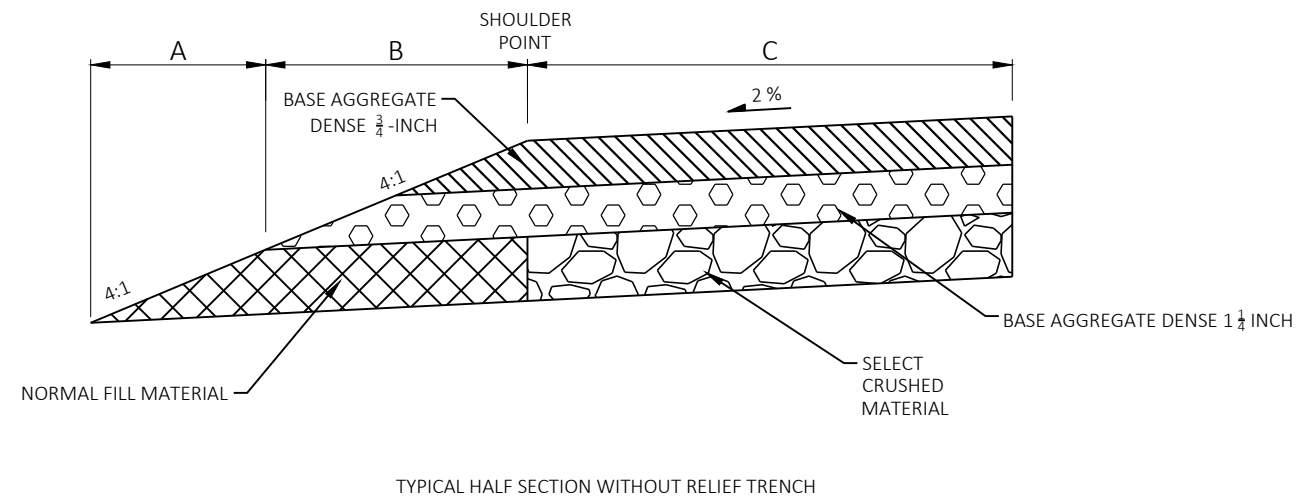
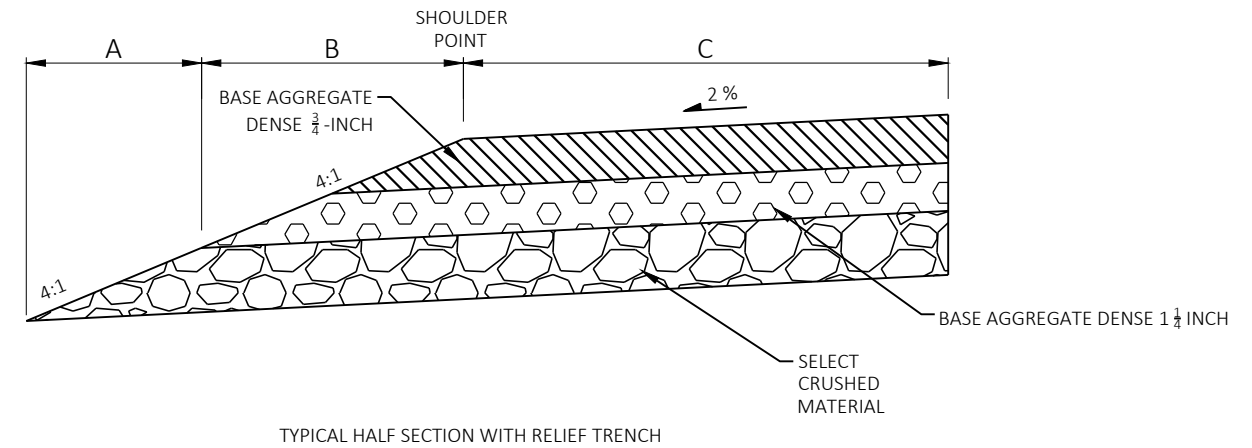
www.DiggersHotline.com



PROJECT NO: 7856-00-71	HWY: LOC STR	COUNTY: CLARK	PROJECT OVERVIEW	SHEET	E
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**TOPSOIL, FERTILIZER TYPE B, EROSION MAT
URBAN CLASS I TYPE B, SEED NO. 20 FOR
DITCHES AND SIDE SLOPES OR SEED NO. 60 FOR
WET AREAS, AS NEEDED.

RELIEF TRENCH

Estimate Of Quantities

7856-00-71

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	1.000	1.000
0004	201.0205	Grubbing	STA	1.000	1.000
0006	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. P-10-244	EACH	1.000	1.000
0008	204.0170	Removing Fence	LF	80.000	80.000
0010	205.0100	Excavation Common	CY	136.000	136.000
0012	206.1001	Excavation for Structures Bridges (structure) 01. B-10-256	EACH	1.000	1.000
0014	206.5001	Cofferdams (structure) 01. B-10-256	EACH	1.000	1.000
0016	208.0100	Borrow	CY	38.000	38.000
0018	210.1500	Backfill Structure Type A	TON	300.000	300.000
0020	213.0100	Finishing Roadway (project) 01. 7856-00-71	EACH	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	113.000	113.000
0024	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	126.000	126.000
0026	312.0110	Select Crushed Material	TON	115.000	115.000
0028	502.0100	Concrete Masonry Bridges	CY	178.000	178.000
0030	502.3200	Protective Surface Treatment	SY	270.000	270.000
0032	502.9000.S	Underwater Substructure Inspection (structure) 01. B-10-256	EACH	1.000	1.000
0034	505.0400	Bar Steel Reinforcement HS Structures	LB	5,470.000	5,470.000
0036	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	22,380.000	22,380.000
0038	506.0105	Structural Steel Carbon	LB	530.000	530.000
0040	513.4061	Railing Tubular Type M	LF	134.000	134.000
0042	516.0500	Rubberized Membrane Waterproofing	SY	12.000	12.000
0044	550.0500	Pile Points	EACH	6.000	6.000
0046	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	540.000	540.000
0048	606.0300	Riprap Heavy	CY	105.000	105.000
0050	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	120.000	120.000
0052	618.0100	Maintenance and Repair of Haul Roads (project) 01. 7586-00-71	EACH	1.000	1.000
0054	619.1000	Mobilization	EACH	1.000	1.000
0056	624.0100	Water	MGAL	3.600	3.600
0058	625.0100	Topsoil	SY	441.000	441.000
0060	628.1504	Silt Fence	LF	214.000	214.000
0062	628.1520	Silt Fence Maintenance	LF	214.000	214.000
0064	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0066	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0068	628.2008	Erosion Mat Urban Class I Type B	SY	441.000	441.000
0070	628.6005	Turbidity Barriers	SY	155.000	155.000
0072	628.7504	Temporary Ditch Checks	LF	50.000	50.000
0074	629.0210	Fertilizer Type B	CWT	0.500	0.500
0076	630.0120	Seeding Mixture No. 20	LB	10.000	10.000
0078	630.0160	Seeding Mixture No. 60	LB	3.000	3.000
0080	630.0500	Seed Water	MGAL	8.800	8.800
0082	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0084	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0086	638.2602	Removing Signs Type II	EACH	4.000	4.000
0088	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0090	642.5001	Field Office Type B	EACH	1.000	1.000
0092	643.0420	Traffic Control Barricades Type III	DAY	1,188.000	1,188.000
0094	643.0705	Traffic Control Warning Lights Type A	DAY	1,848.000	1,848.000
0096	643.0900	Traffic Control Signs	DAY	924.000	924.000
0098	643.5000	Traffic Control	EACH	1.000	1.000

Estimate Of Quantities

7856-00-71

Line	Item	Item Description	Unit	Total	Qty
0100	645.0111	Geotextile Type DF Schedule A	SY	60.000	60.000
0102	645.0120	Geotextile Type HR	SY	180.000	180.000
0104	650.4500	Construction Staking Subgrade	LF	98.000	98.000
0106	650.5000	Construction Staking Base	LF	98.000	98.000
0108	650.6501	Construction Staking Structure Layout (structure) 01. B-10-256	EACH	1.000	1.000
0110	650.9911	Construction Staking Supplemental Control (project) 01. 7586-00-71	EACH	1.000	1.000
0112	650.9920	Construction Staking Slope Stakes	LF	98.000	98.000
0114	715.0502	Incentive Strength Concrete Structures	DOL	1,068.000	1,068.000
0116	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 2+13	EACH	1.000	1.000
0118	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0120	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	300.000	300.000
0122	SPV.0195	Special 501. Select Crushed Material for Travel Corridor	TON	14.000	14.000

CLEARING AND GRUBBING

		201.0105	201.0205
		CLEARING	GRUBBING
STATION	- STATION	STA	STA
2+61	- 2+75	1	1
PROJECT TOTAL		1	1

REMOVING FENCE

		204.0170
		REMOVING FENCE
STATION	- STATION	LF
1+33	- 2+95	80
PROJECT TOTAL		80

CATEGORY 0030

EARTHWORK

DIVISION	FROM/TO STATION	205.0100 COMMON EXCAVATION		SALVAGED/UNUSABLE PAVEMENT MATERIAL	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL	MASS ORDINATE +/- (7)	WASTE	208.0100 BORROW	COMMENT
		(1)					(6)				
		CUT (2)	EBS EXCAVATION				FACTOR				
							1.25				
CATLIN AVE (SOUTH OF BRIDGE)	1+32.83/1+81.56	74	0	0	74	39	49	25	0	0	
CATLIN AVE (NORTH OF BRIDGE)	2+46.10/2+94.83	62	0	0	62	80	100	-38	0	38	
GRAND TOTAL		136	0	0	136	119	149	-13	0	38	
	TOTAL COMMON EXC	136									

NOTES:

- (1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
- (2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
- (5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
- (6) EXPANDED FILL FACTOR = 1.25
- (7) 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.

BASE AGGREGATE DENSE

		305.0110	305.0120	312.0110	624.0100
		BASE AGGREGATE DENSE	BASE AGGREGATE DENSE	SELECT CRUSHED MATERIAL	
		3/4-INCH	1 1/4-INCH		WATER
STATION	- STATION	TON	TON	TON	MGAL
1+33	- 1+82	51	57	52	---
2+46	- 2+95	51	57	52	---
UNDISTRIBUTED		11	12	11	3.6
PROJECT TOTAL		113	126	115	3.6

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE SPECIFIED.

EROSION CONTROL

		628.1504		628.1520		628.6005		628.7504	
		SILT		SILT		TURBIDITY		TEMPORARY	
		FENCE		FENCE		BARRIERS		DITCH	
				MAINTENANCE				CHECKS	
STATION	-	STATION	LF	LF		SY		LF	
1+33	-	1+82	84	84		62		20	
2+46	-	2+95	87	87		62		20	
UNDISTRIBUTED			43	43		31		10	
PROJECT TOTAL			214	214		155		50	

EROSION CONTROL MOBILIZATION

		628.1905		628.1910	
		MOBILIZATIONS		MOBILIZATIONS	
		EROSION		EMERGENCY	
		CONTROL		EROSION CONTROL	
LOCATION		EACH		EACH	
PROJECT LIMITS		3		3	
PROJECT TOTAL		3		3	

TRAFFIC CONTROL

		643.0420		643.0705		643.0900	
		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL	
		BARRICADES		WARNING LIGHTS		SIGNS	
		TYPE III		TYPE A			
LOCATION	SERVICE	NO.	DAY	NO.	DAY	NO.	DAY
CATLIN AVENUE	66	18	1,188	28	1,848	14	924
PROJECT TOTAL		1,188		1,848		924	

BIRD DETERRENT SYSTEM

		999.2005.S	
		INSTALLING AND MAINTAINING	
		BIRD DETERRENT SYSTEM	
		STATION 2+13	
STA	EACH		
2+13	1		
PROJECT TOTAL		1	

LANDSCAPING

		625.0100		628.2008		629.0210		630.0120		630.0160		630.0500	
		TOPSOIL		EROSION MAT		FERTILIZER		SEEDING		SEEDING		SEED	
				URBAN CLASS I		TYPE B		MIXTURE		MIXTURE		WATER	
				TYPE B				NO. 20		NO. 60			
STATION	-	STATION	SY	SY		CWT		LB		LB		MGAL	
1+33	-	1+82	160	160		0.2		4		1		3.0	
2+46	-	2+95	193	193		0.2		4		1		4.0	
UNDISTRIBUTED			88	88		0.1		2		1		1.8	
PROJECT TOTAL			441	441		0.5		10		3		8.8	

PERMANENT SIGNING

				634.0612		637.2230		638.2602		638.3000	
				POSTS		SIGNS		REMOVING		REMOVING	
				WOOD		TYPE II		SIGNS		SMALL	
				4X6-INCH		REFLECTIVE		TYPE II		SIGN	
				X 12-FT		F				SUPPORTS	
LOCATION	SIGN	SIGN	SIZE								
	CODE	MESSAGE	IN	X	IN	EACH	SF	EACH		EACH	
NE	W5-52L	BRIDGE HASH MARKS	12		36	1	3	1		1	
SE	W5-52R	BRIDGE HASH MARKS	12		36	1	3	1		1	
NW	W5-52R	BRIDGE HASH MARKS	12		36	1	3	1		1	
SW	W5-52L	BRIDGE HASH MARKS	12		36	1	3	1		1	
PROJECT TOTAL						4	12	4		4	

CONSTRUCTION STAKING

		650.4500		650.5000		650.6501		650.9911		650.9920	
		CONSTRUCTION		CONSTRUCTION		CONSTRUCTION		CONSTRUCTION		CONSTRUCTION	
		STAKING		STAKING		STAKING		STAKING		STAKING	
		SUBGRADE		BASE		STRUCTURE		SUPPLEMENTAL		SLOPE	
						LAYOUT		CONTROL		STAKES	
						B-10-256		7856-00-71			
STATION	-	STATION	LF	LF		EACH		EACH		LF	
1+33	-	1+82	49	49		1		1		49	
2+46	-	2+95	49	49				---		49	
PROJECT TOTAL			98	98		1		1		98	

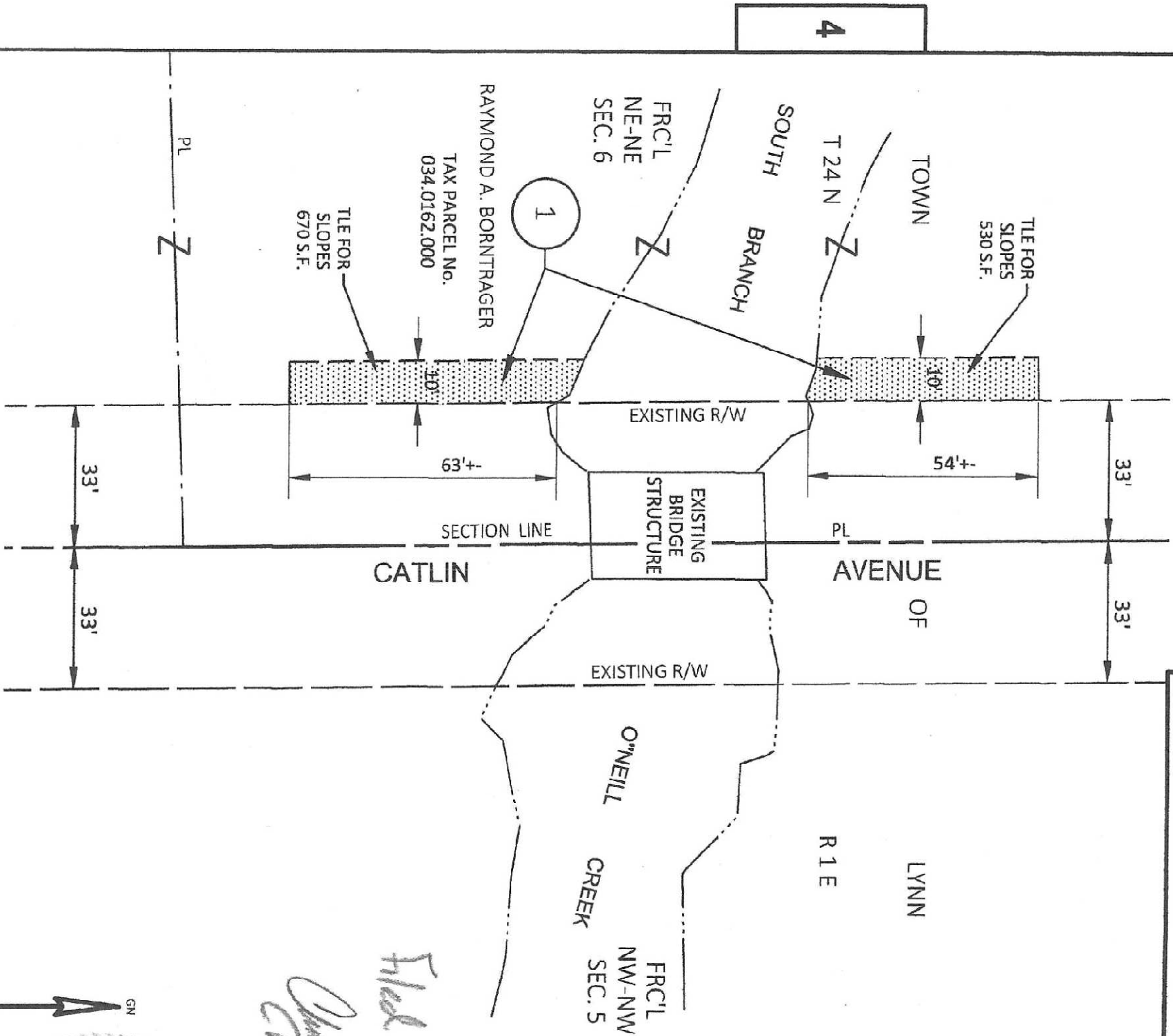
ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE SPECIFIED.

NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

R/W PROJECT NUMBER: 7856-00-01 EXHIBIT NUMBER: 1

TILE ACQUISITION EXHIBIT
T LYNN, CATLIN AVENUE
S BR ONEILL CREEK BRIDGE P-10-0244
CLARK COUNTY

PART OF THE FRC'L NE-NE OF SECTION 6, T24N, R1E, TOWN OF LYNN,
CLARK COUNTY, WISCONSIN.



SCHEDULE OF LANDS
& INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE
PURPOSES ONLY AND ARE SUBJECT TO CHANGE
PRIOR TO THE TRANSFER OF LAND INTERESTS TO
THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TILE S.F.
1	RAYMOND A. BORNTZRAGER	TILE	1200

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
N/A	N/A	N/A

FILE NAME : C40101-TLE.DWG

PLOT DATE : 5/1/2025 9:17 AM

R/W PROJECT: 7856-00-01

THIS MAP IS APPROVED FOR THE TOWN OF LYNN.

THIS MAP PREPARED BY AECOM FOR THE
WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE:
PRINT NAME:

[Signature]

DATE:

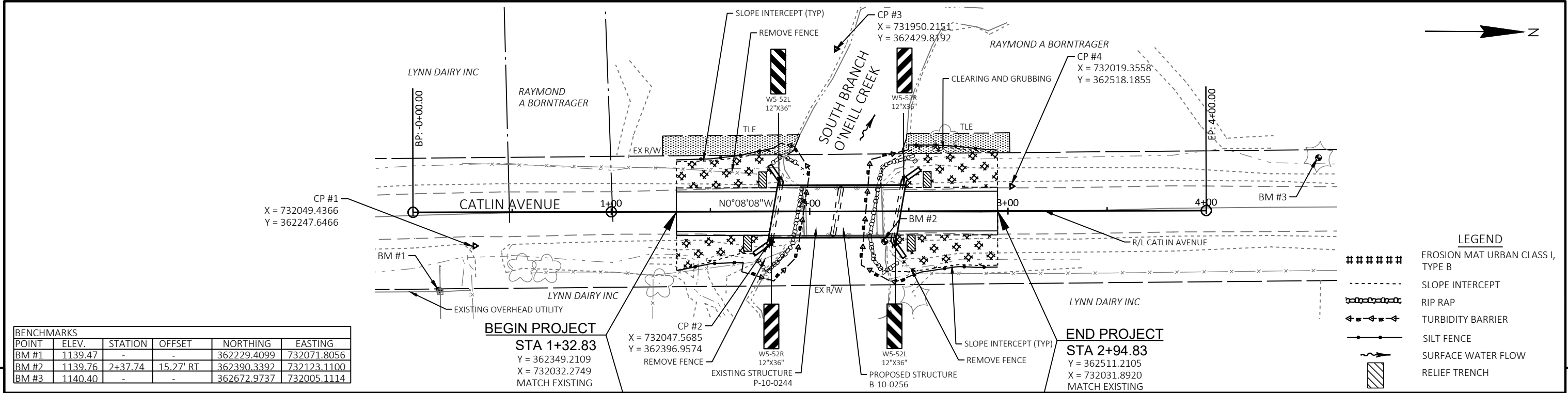
May 9 2025



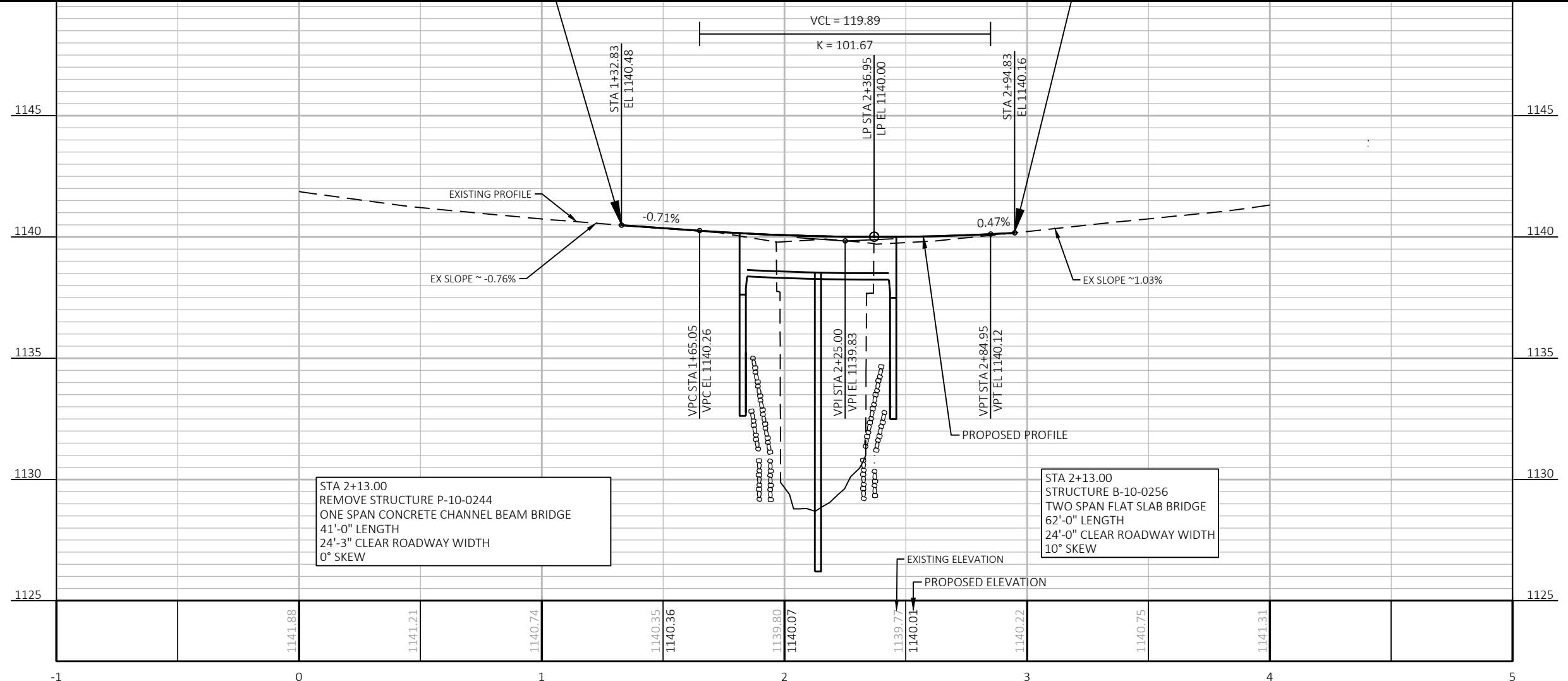
GN



*Filed with Clark County Clerk
5-13-2025
Christina M. Jensen*

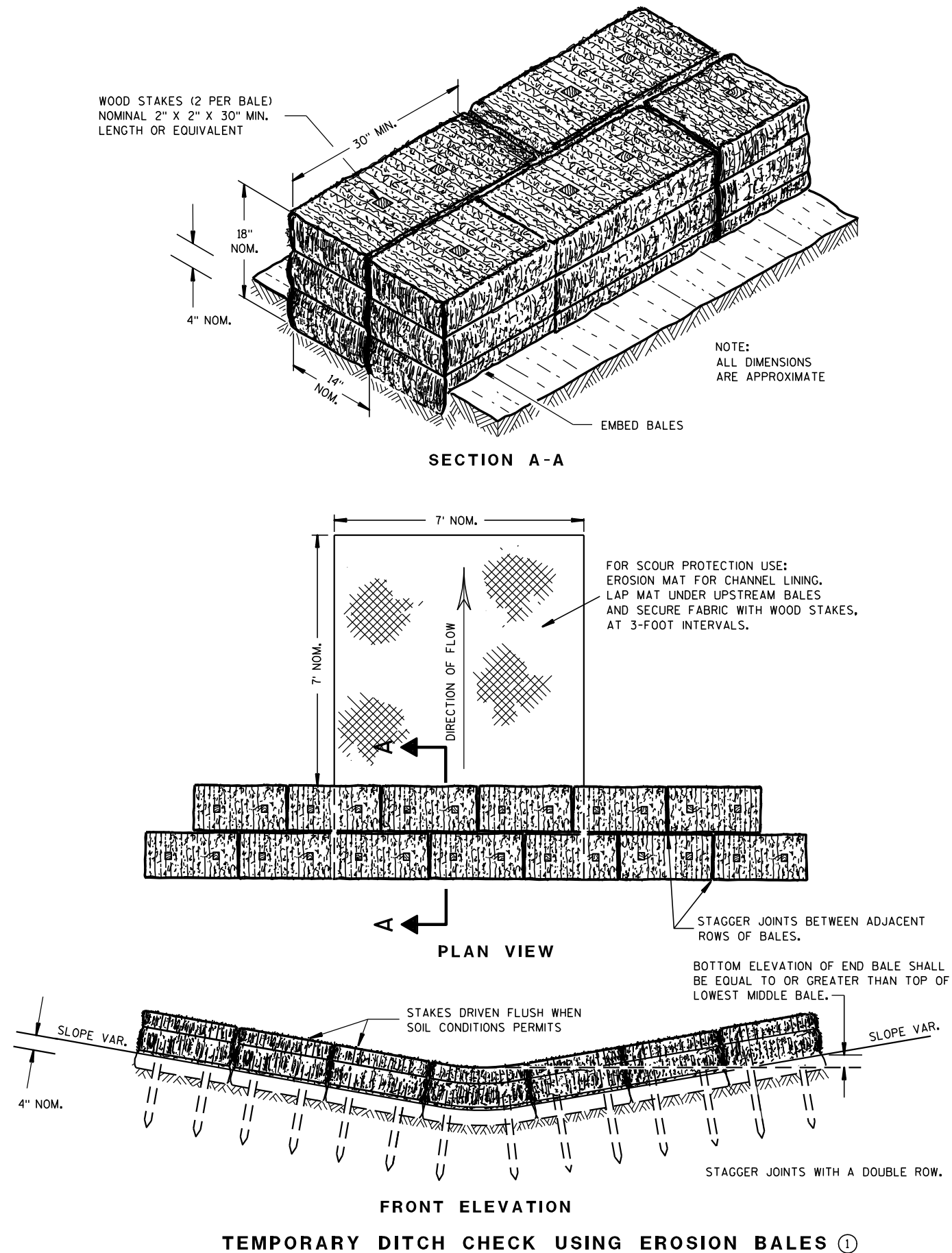


BENCHMARKS					
POINT	ELEV.	STATION	OFFSET	NORTHING	EASTING
BM #1	1139.47	-	-	362229.4099	732071.8056
BM #2	1139.76	2+37.74	15.27' RT	362390.3392	732123.1100
BM #3	1140.40	-	-	362672.9737	732005.1114



Standard Detail Drawing List

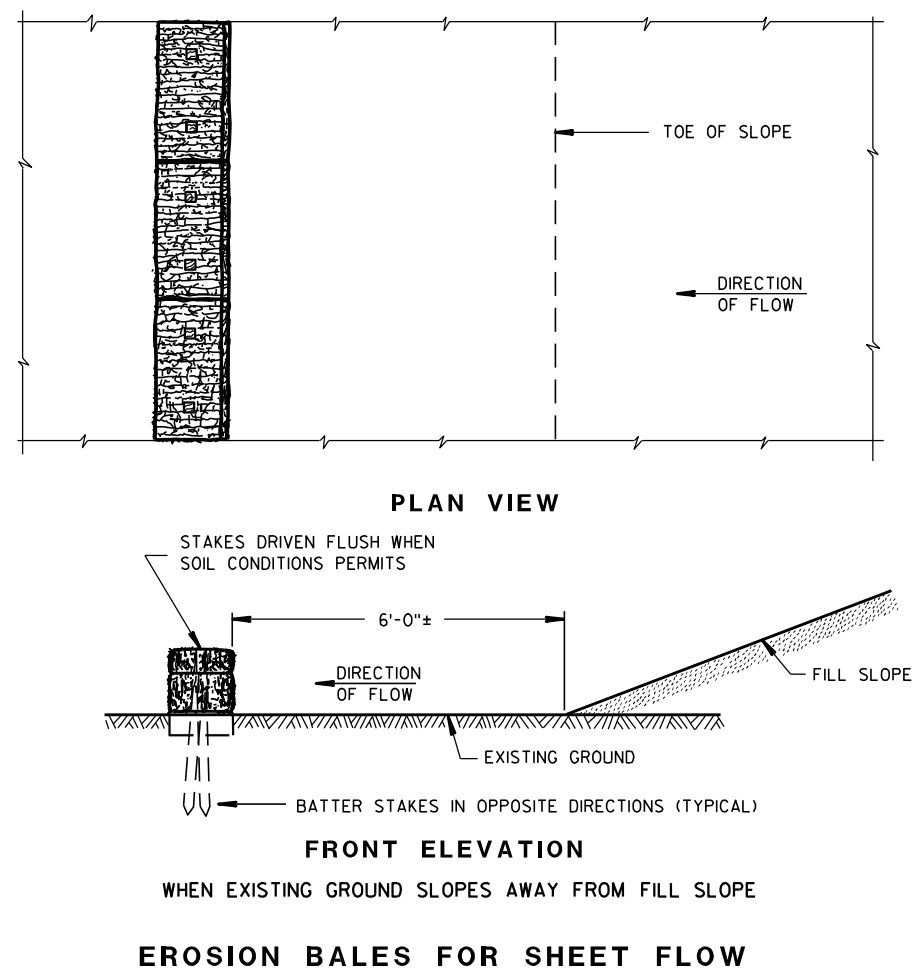
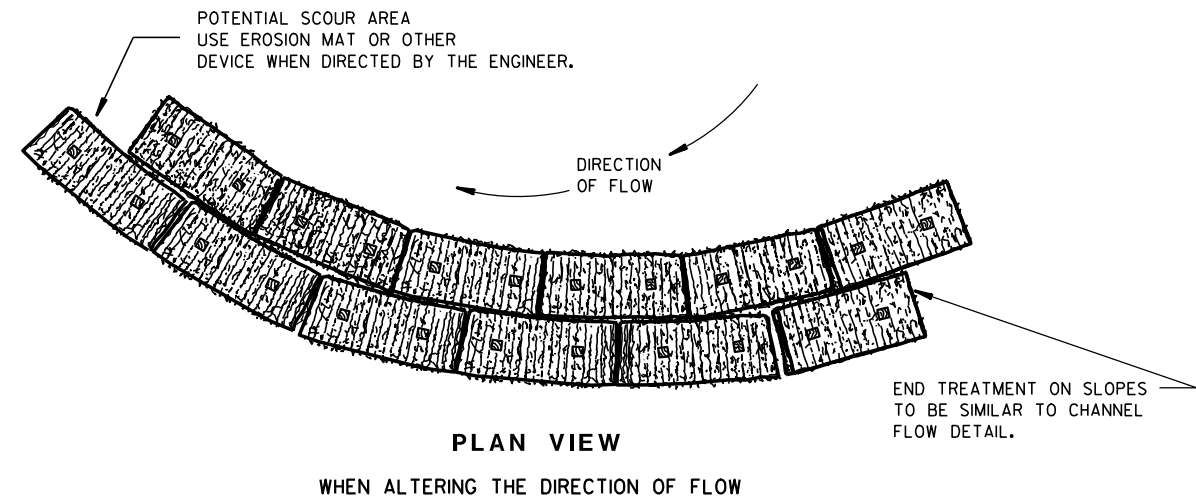
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-12	SIGNING & MARKING FOR TWO LANE BRIDGES
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS



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

FHWA

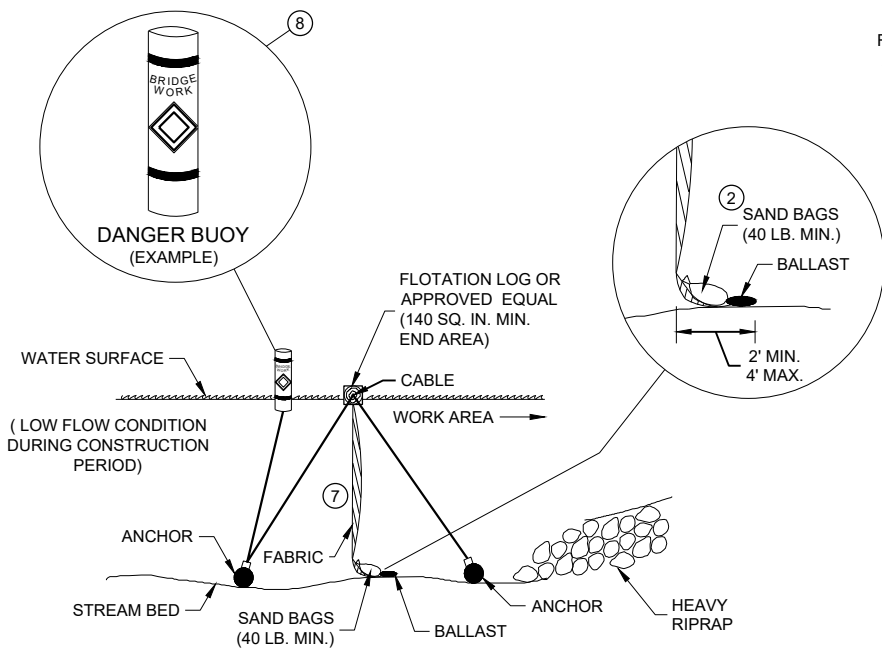
/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



- 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.

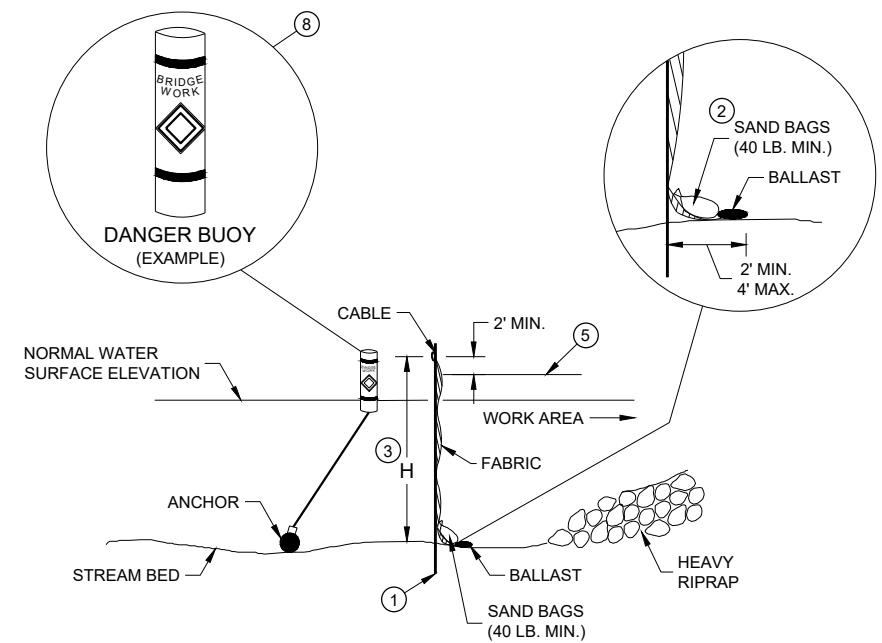


SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/s/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	



SECTION B - B

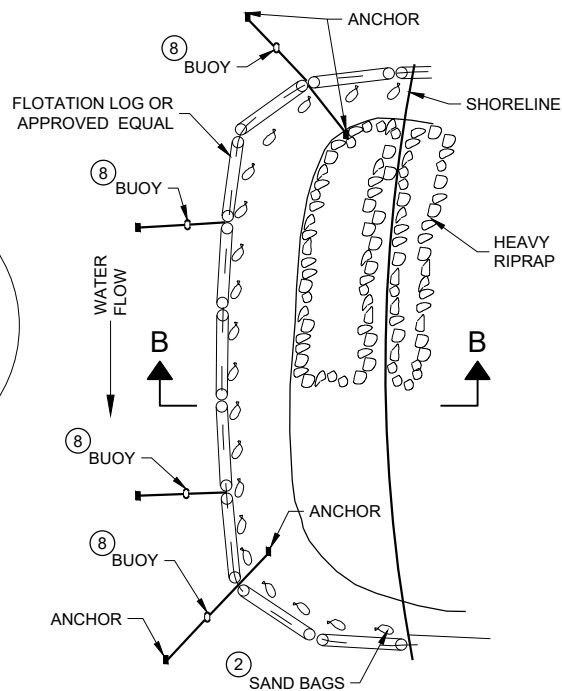
TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



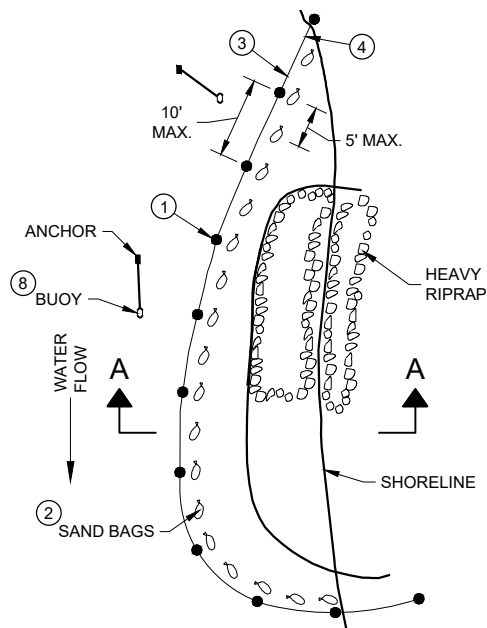
SECTION A - A

TURBIDITY BARRIER - STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS



PLAN VIEW



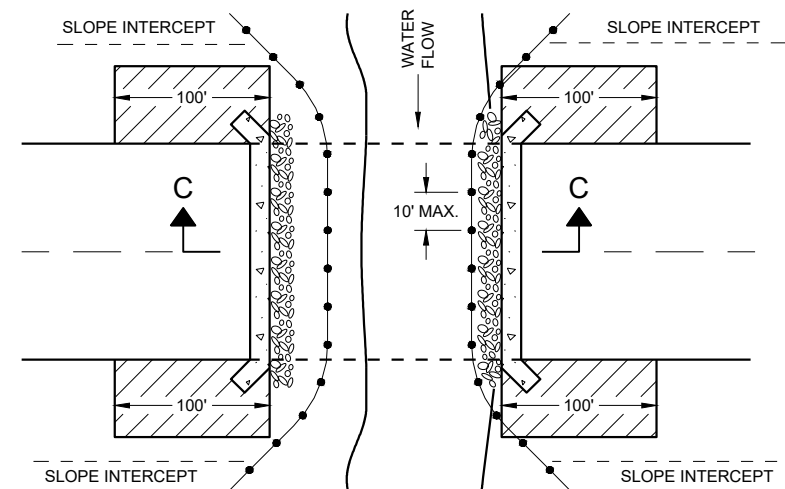
PLAN VIEW

GENERAL NOTES

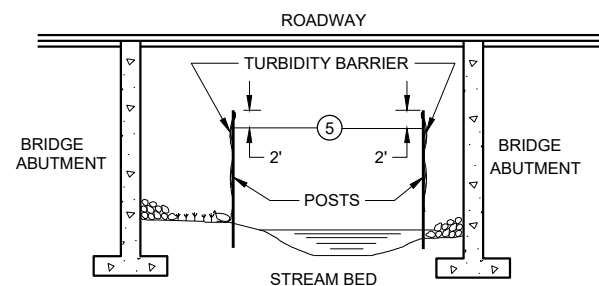
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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



PLAN VIEW



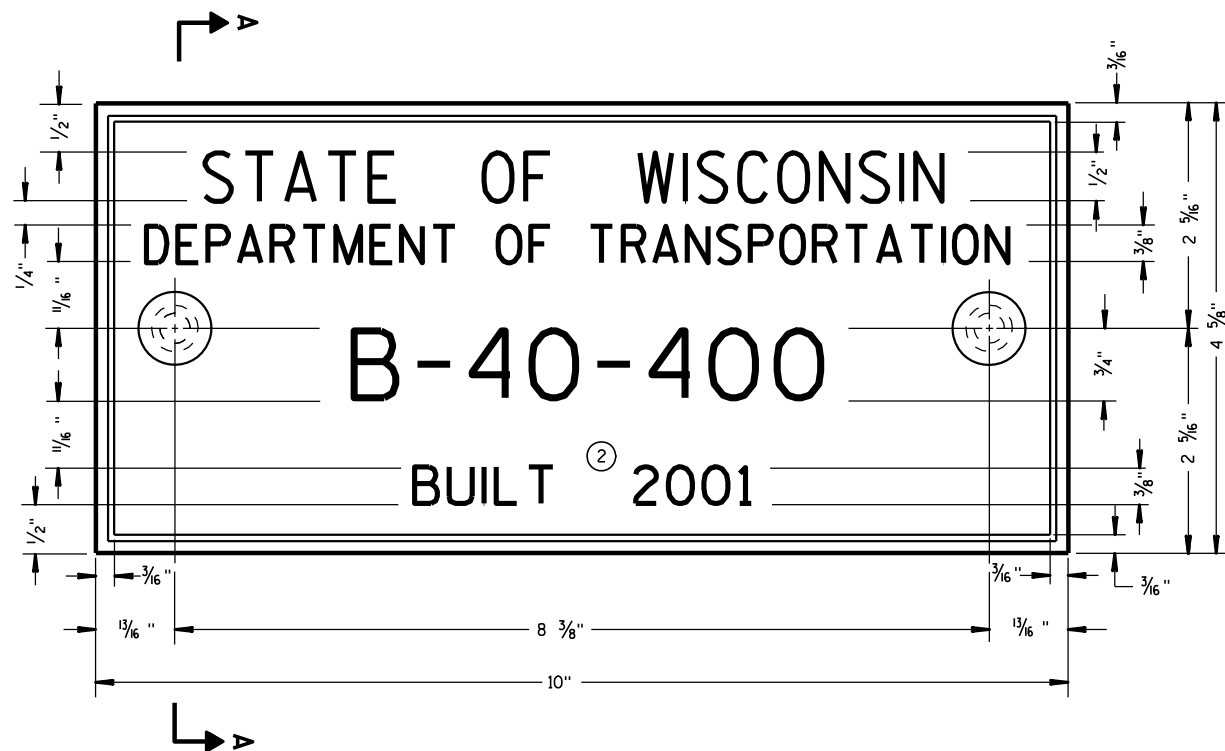
SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING
TYPICAL PLACEMENT AT STRUCTURES

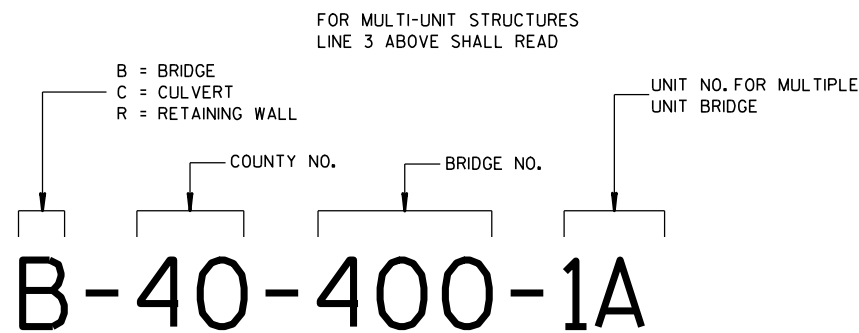
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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



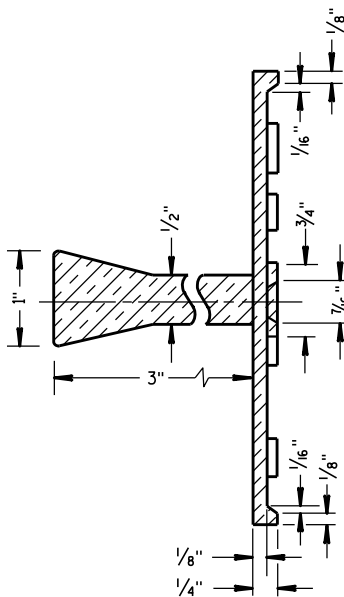
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

GENERAL NOTES

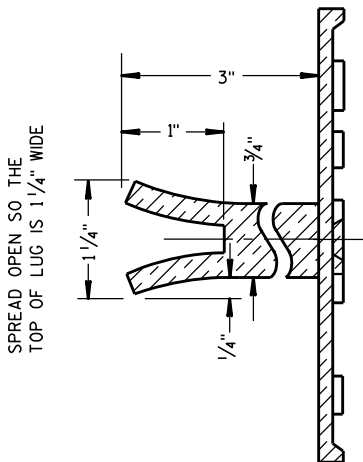
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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

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

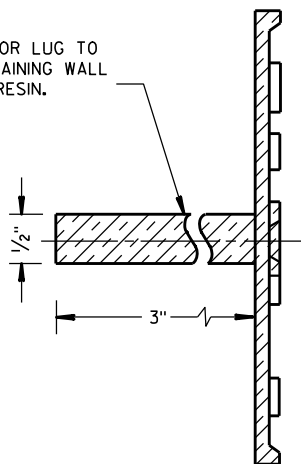


SECTION A-A



ALTERNATE LUG

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

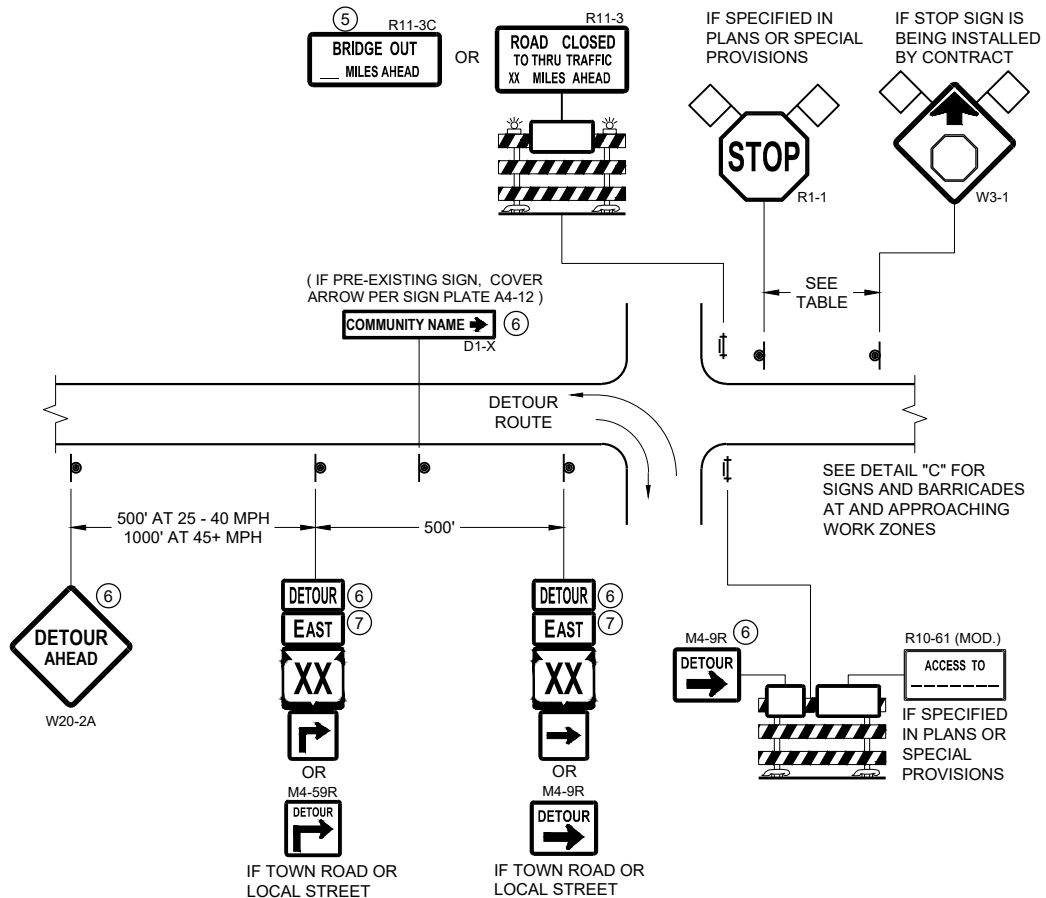


ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

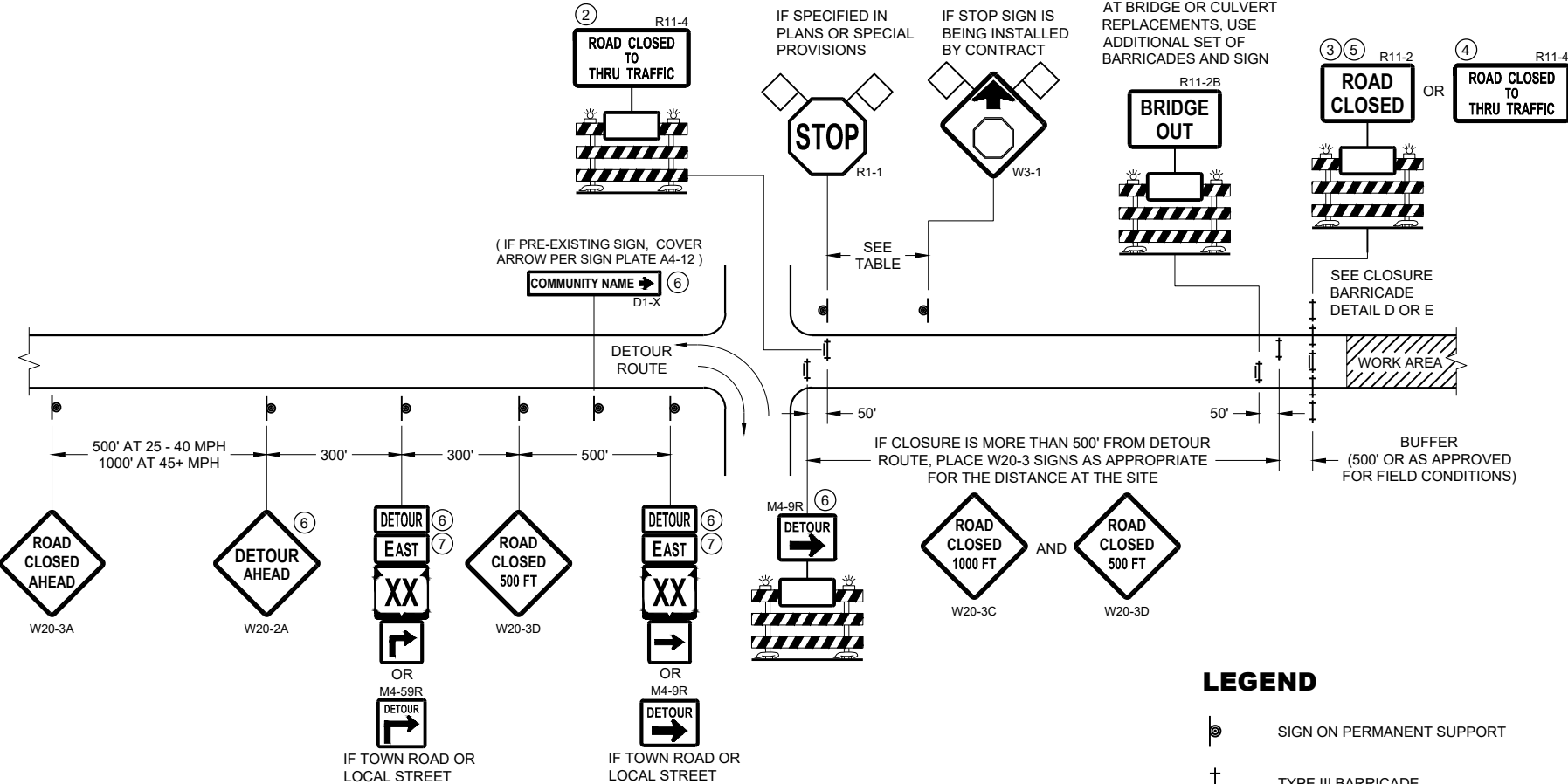
**NAME PLATE
(STRUCTURES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

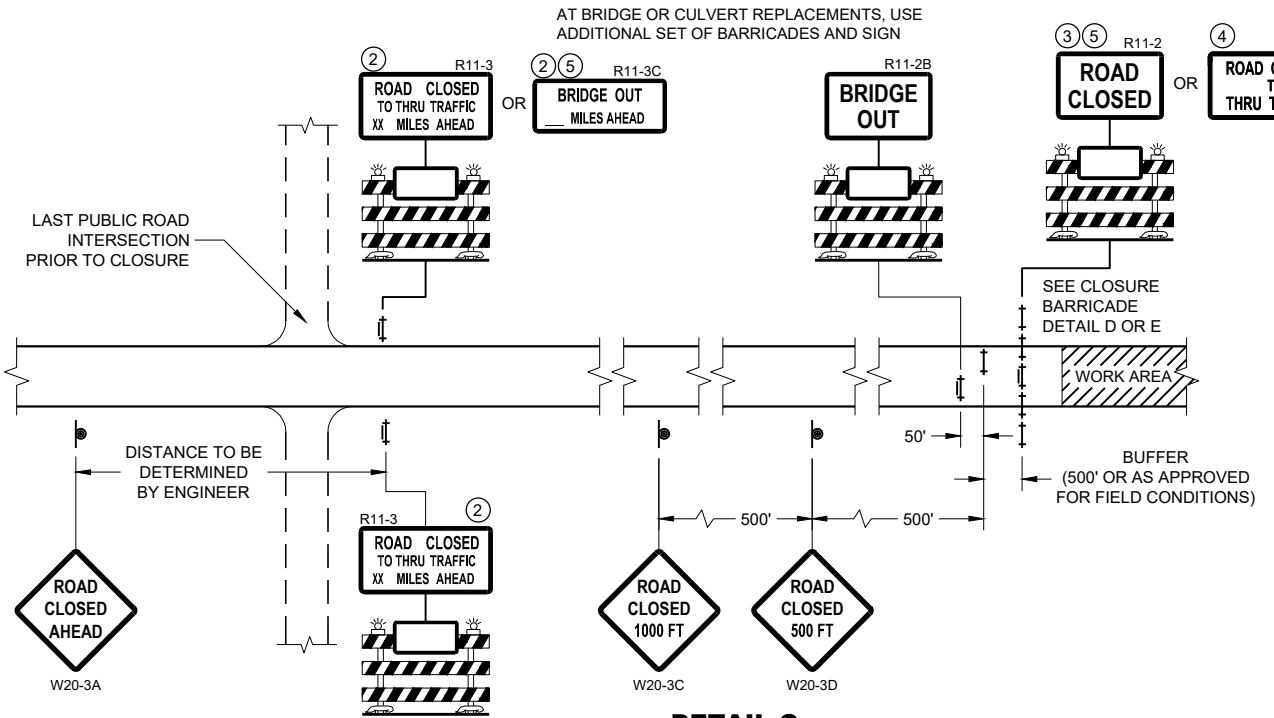
LEGEND

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

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

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

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



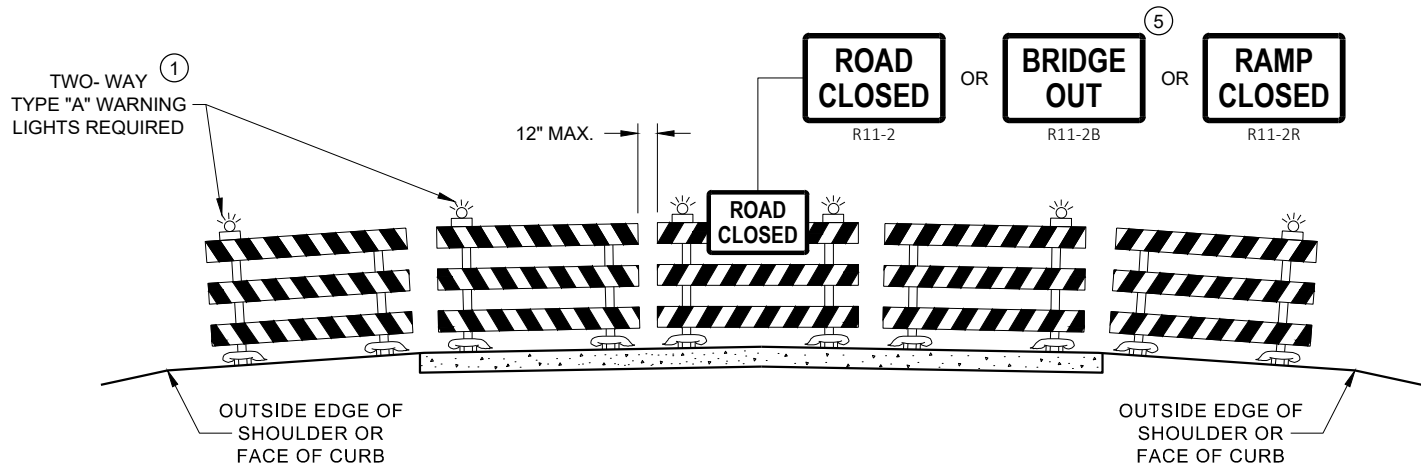
DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

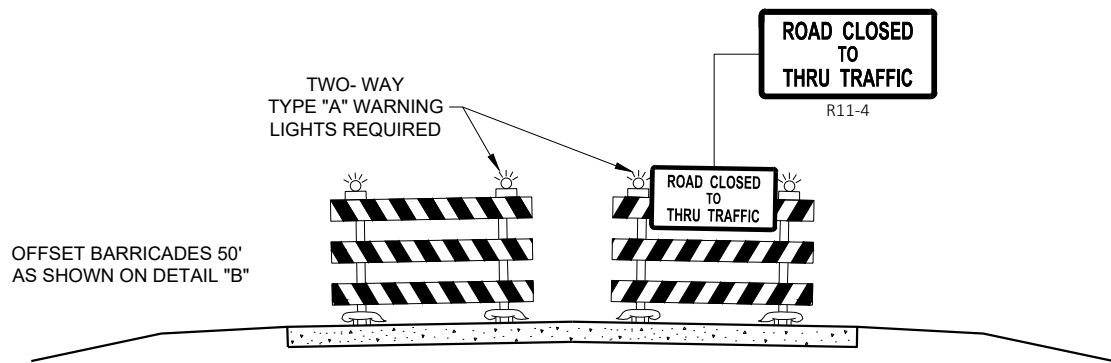
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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"

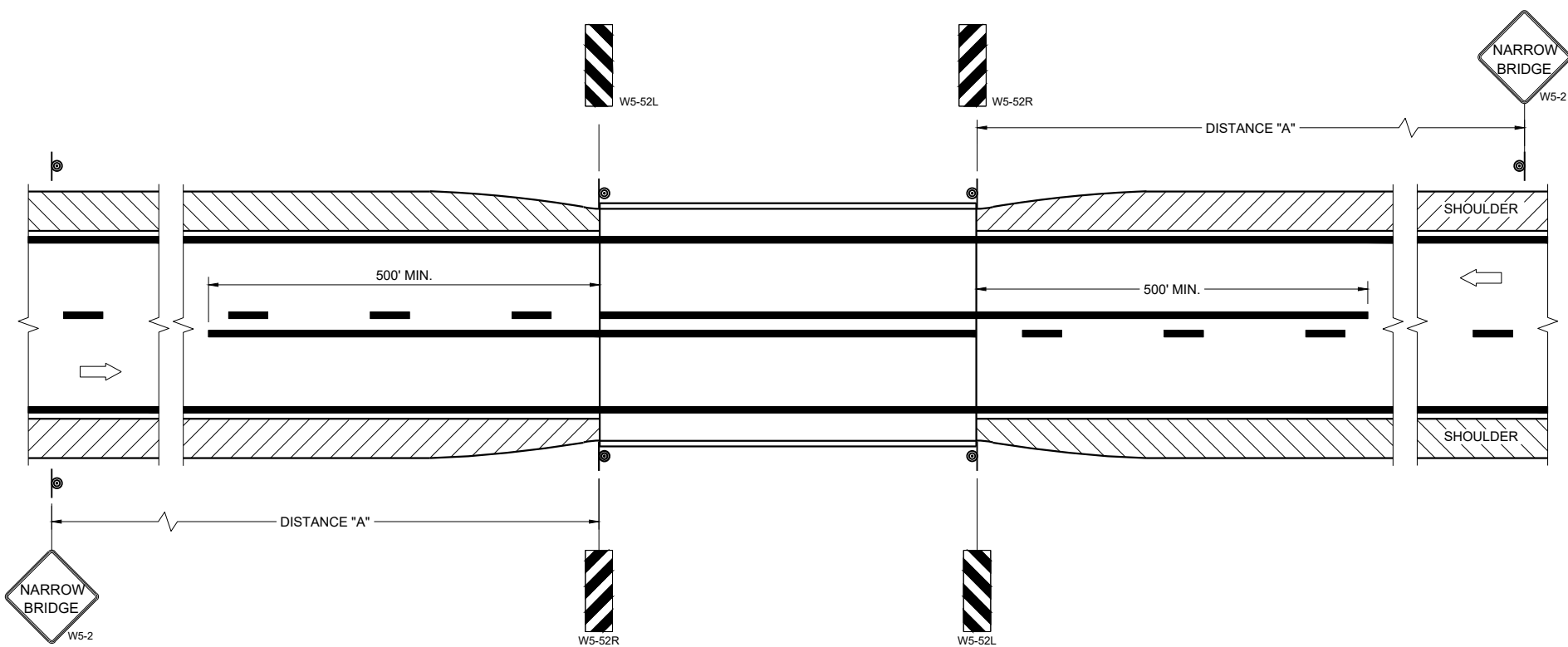
- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- 2 THESE SIGNS 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

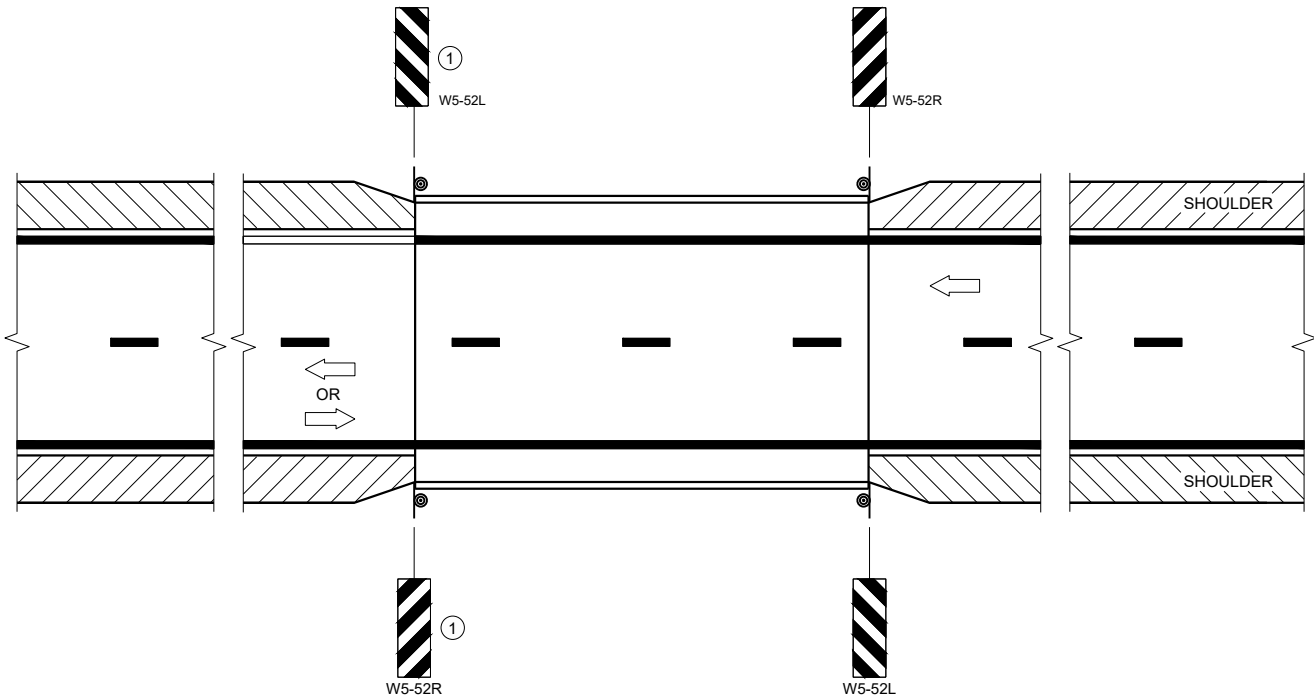
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA



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



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

GENERAL NOTES

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

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

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

ON BRIDGE ONLY PROJECTS, PLACE 300 FEET OF EDGELINE.

OMIT EDGELINES ON ROADWAYS WITHOUT EXISTING EDGELINES.

① OMIT ON ONE-WAY TRAVELED WAYS.

LEGEND

⊙ SIGN ON PERMANENT SUPPORT

➡ DIRECTION OF TRAFFIC

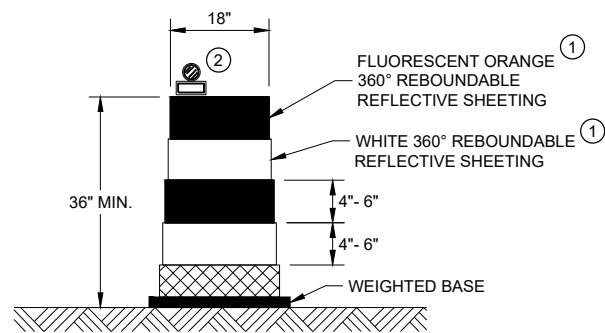
DISTANCE TABLE

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

**SIGNING AND MARKING
FOR TWO LANE BRIDGES**

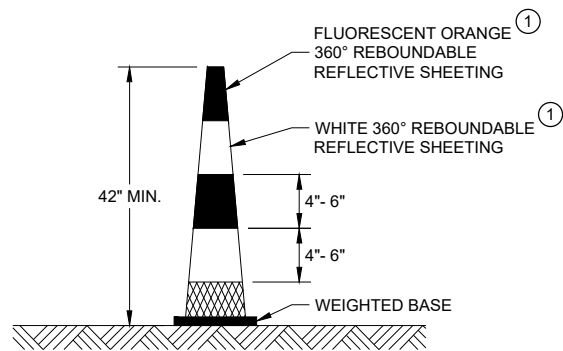
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



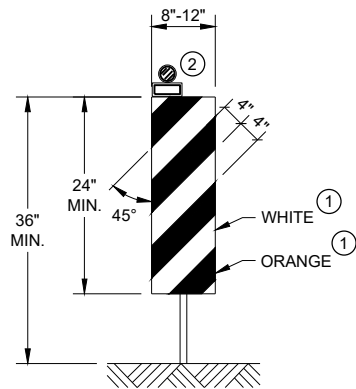
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



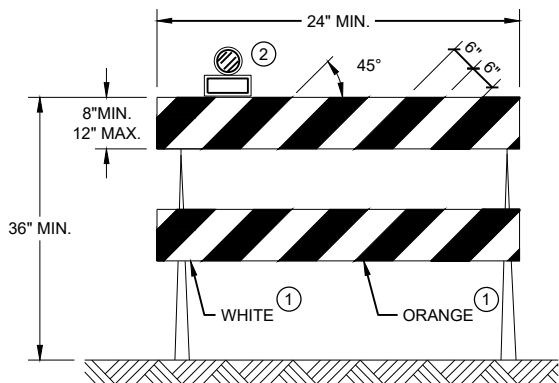
42" CONE

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



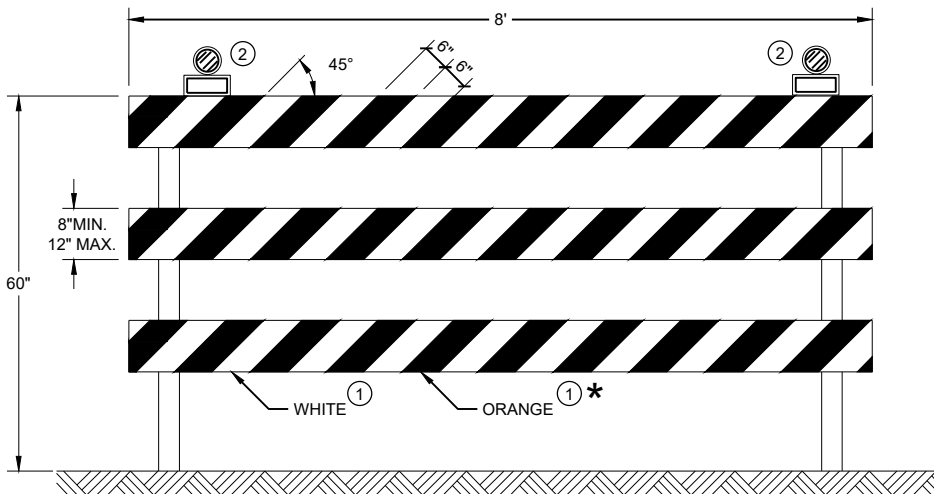
VERTICAL PANEL

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.

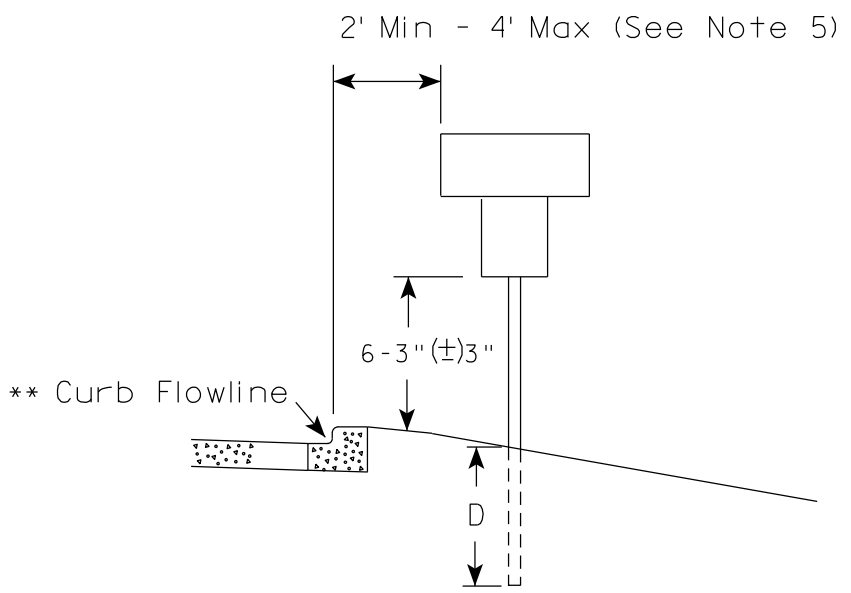
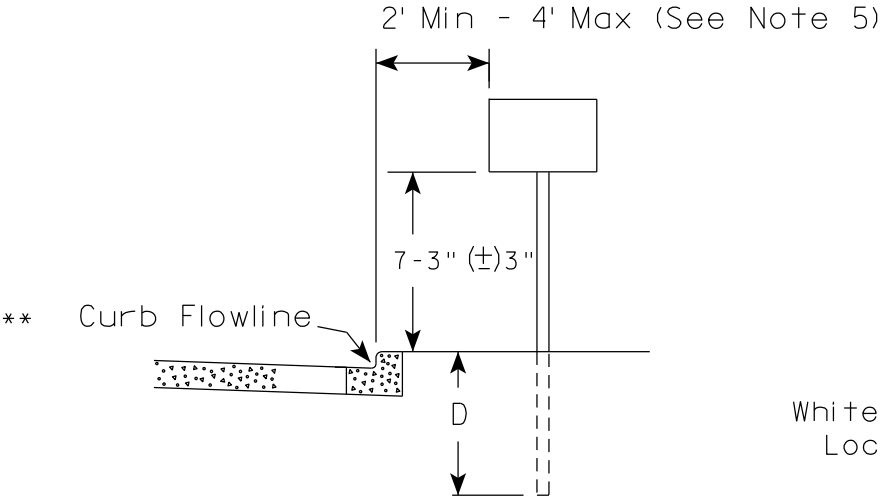
**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

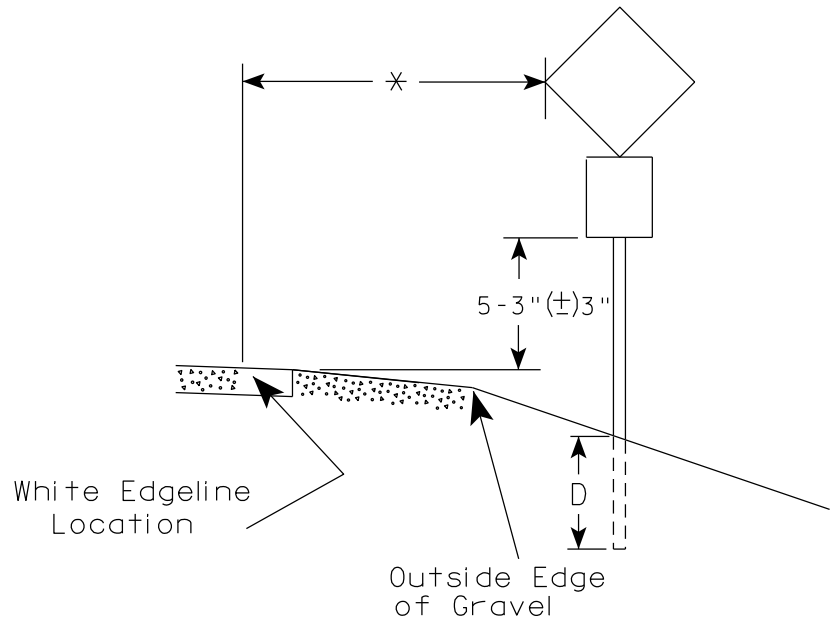
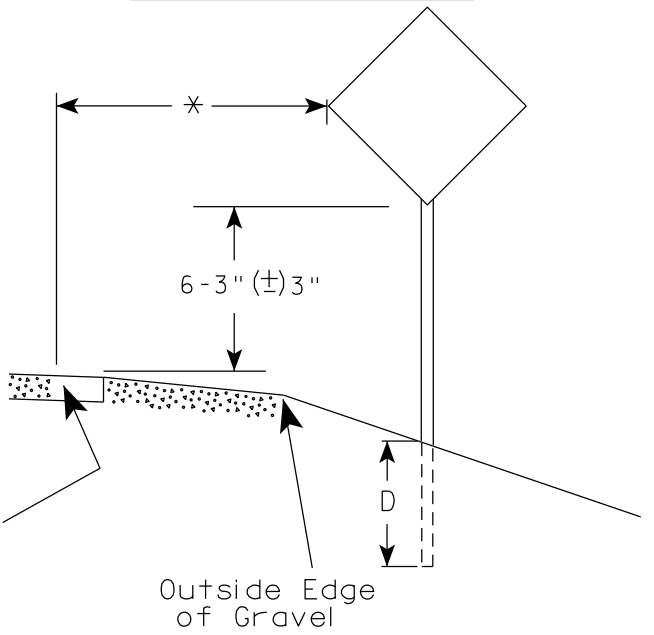
APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

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

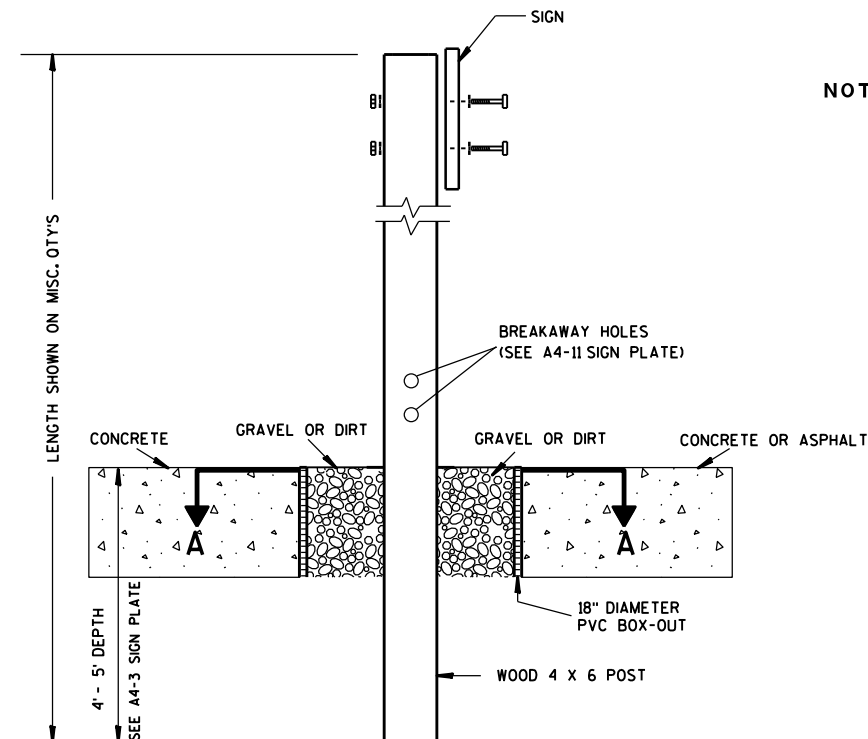
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

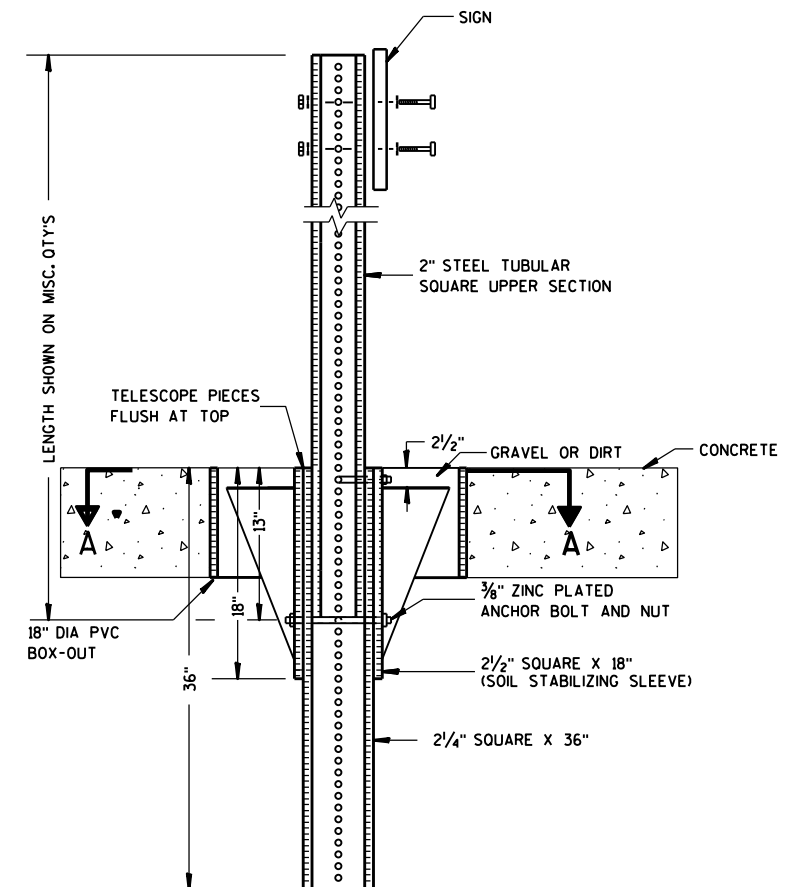
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

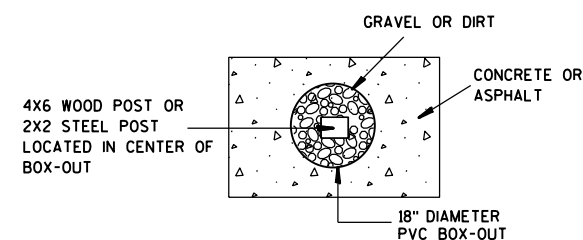
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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:

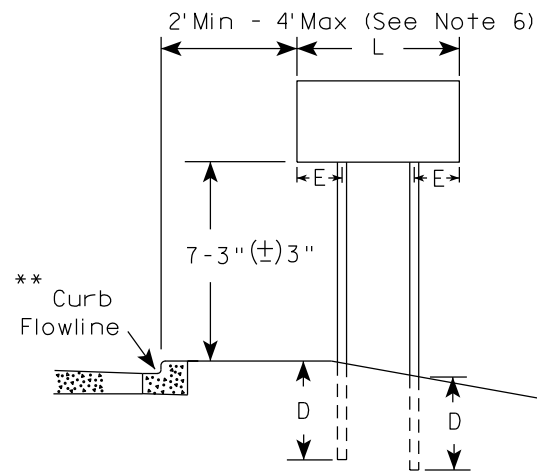
HWY:

COUNTY:

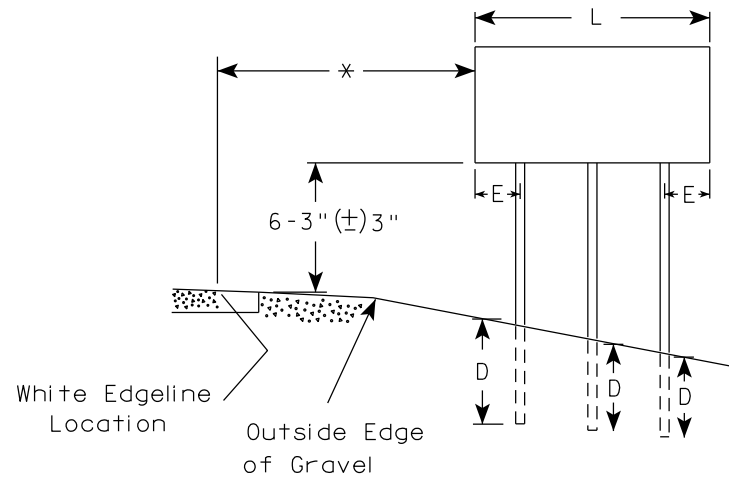
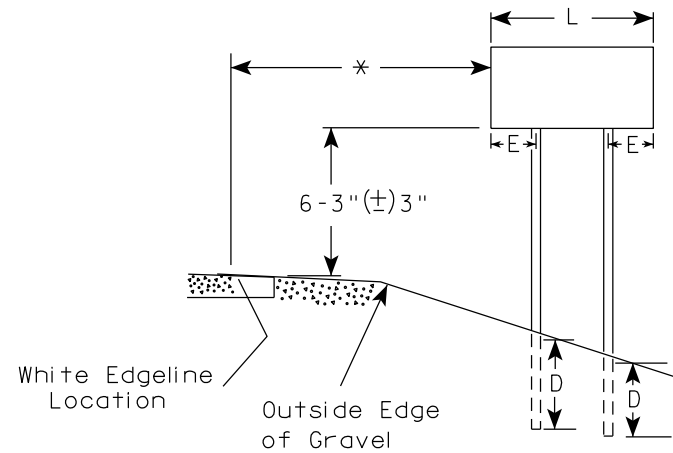
SHEET NO:

E

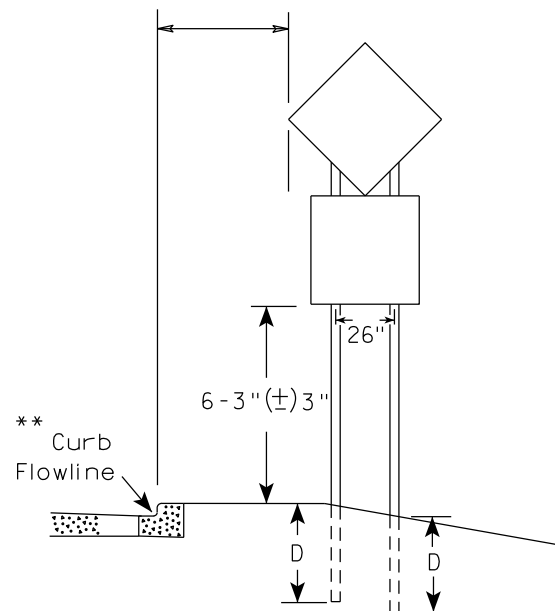
URBAN AREA



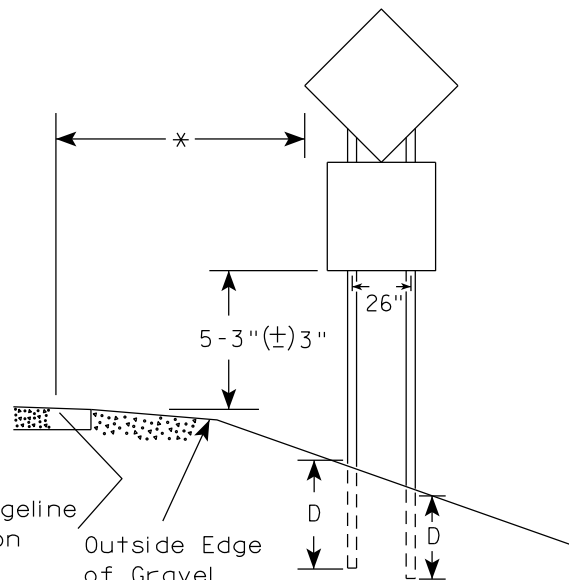
RURAL AREA (See Note 3)



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

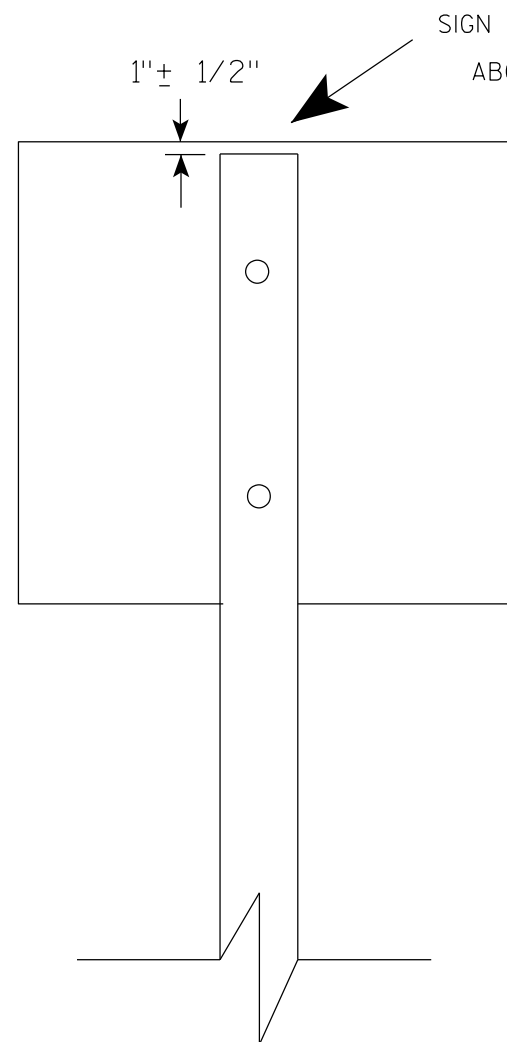
Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

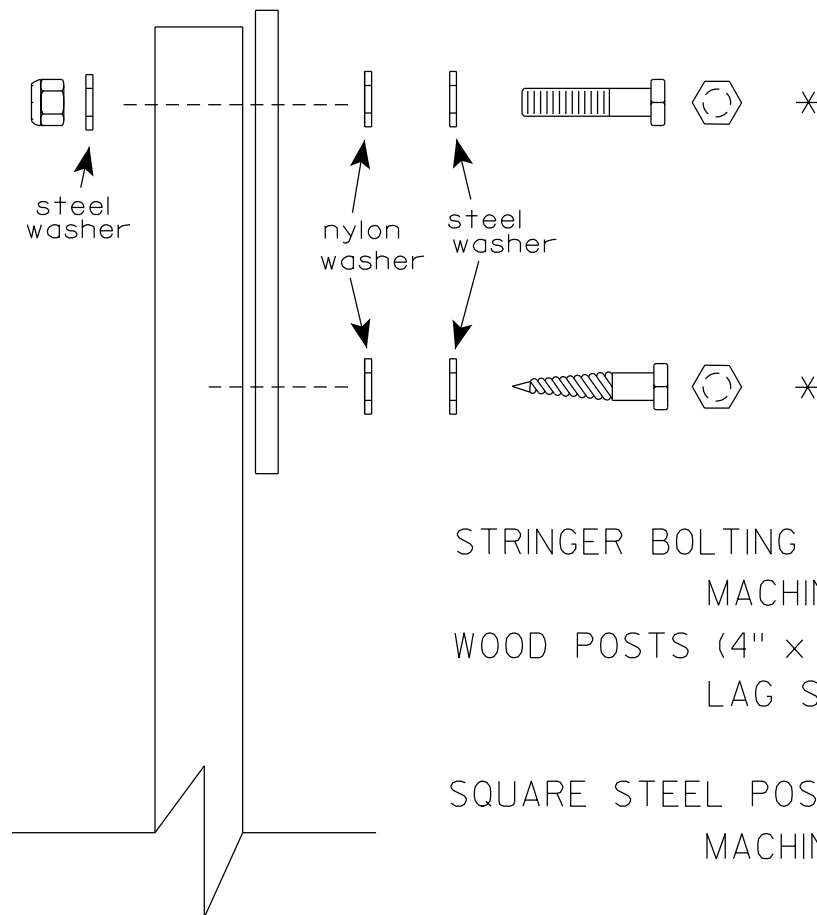
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



SIGN SHALL BE MOUNTED TO PROJECT
ABOVE THE TOP OF THE POST



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.

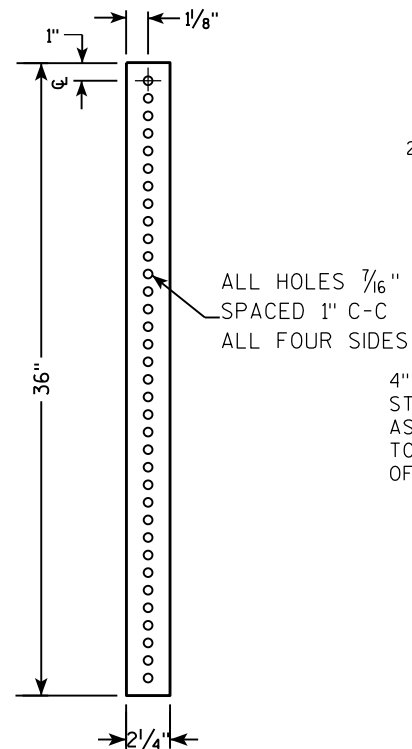
ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

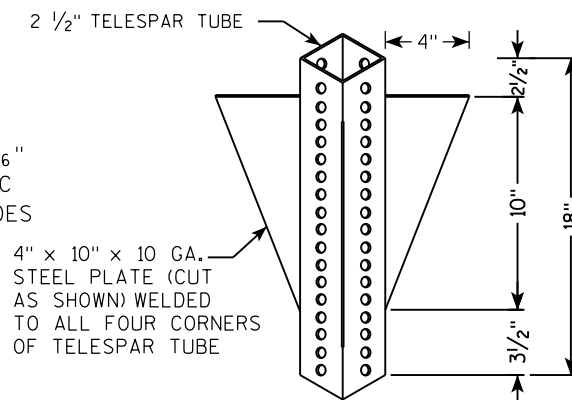
APPROVED Matthew R. Rauch
For State Traffic Engineer

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

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



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



LENGTH SHOWN ON MISC. QTY'S

TELESCOPE PIECES FLUSH AT TOP

18" DIA SCHEDULE 40 PVC BOX-OUT

36"

18"

13"

2"

2 1/2"

2 1/4" SQUARE X 36"

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

3/8" ZINC PLATED CORNER ANCHOR BOLT AND NUT

3/8" ZINC PLATED ANCHOR BOLT AND NUT

2" STEEL TUBULAR SQUARE UPPER SECTION

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

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

SIGN

GRAVEL OR DIRT

LENGTH SHOWN ON MISC. QTY'S

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

2" STEEL TUBULAR SQUARE UPPER SECTION

ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES

$\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT

1"

TELESCOPE PIECES FLUSH AT TOP

18"

12"

36"

$\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT

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

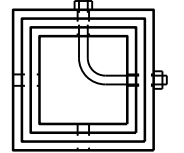
2 1/4" SQUARE X 36"

A

B

C

3/8" ZINC PLATED CORNER
ANCHOR BOLT AND NUT



DIRECTION
OF TRAFFIC

SECTION A-A

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthieu R. Rauch

for State Traffic Engineer

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

PROJECT NO:

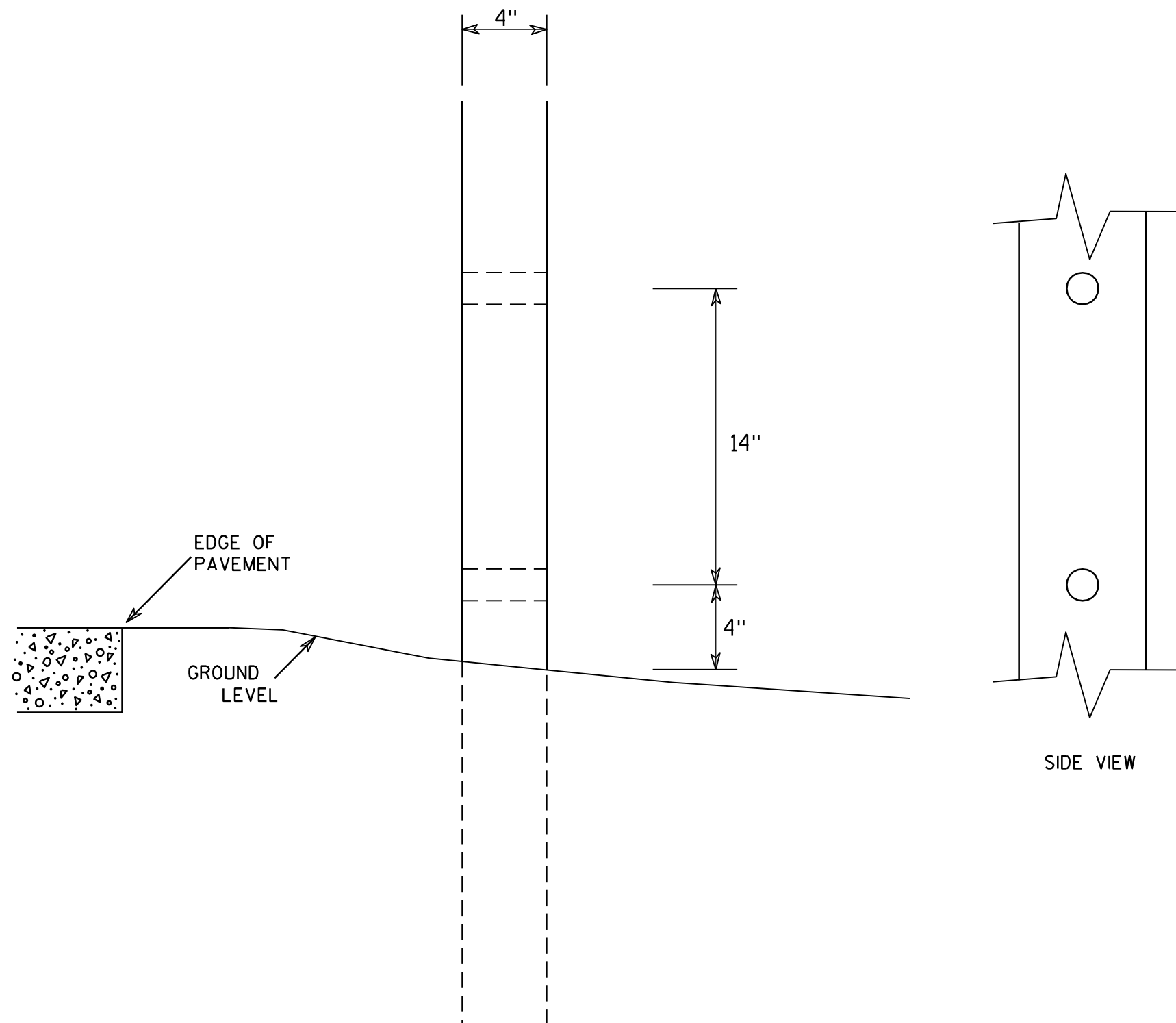
HWY:

COUNTY:

SHEET NO:

11

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:

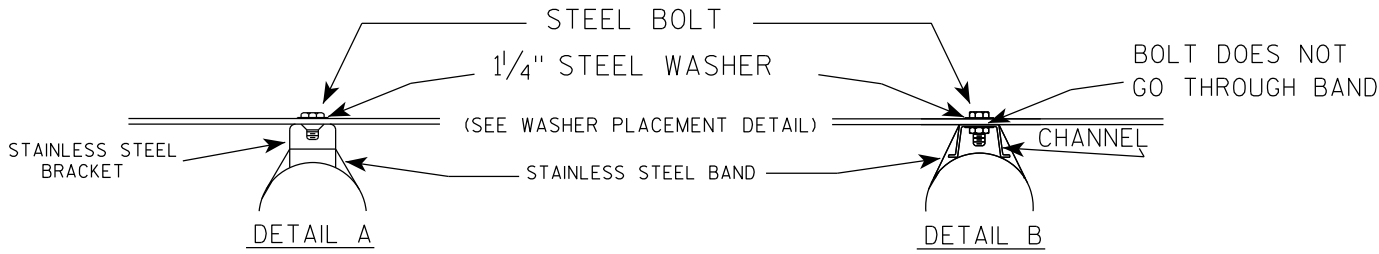
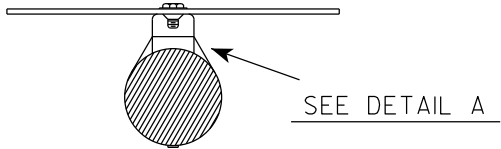
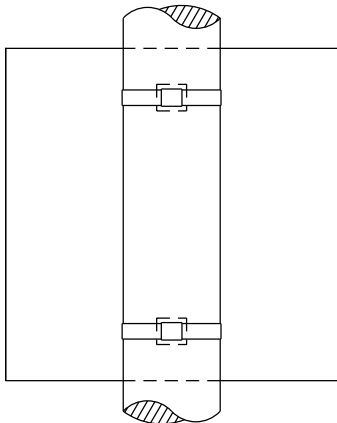
COUNTY:

SHEET NO:

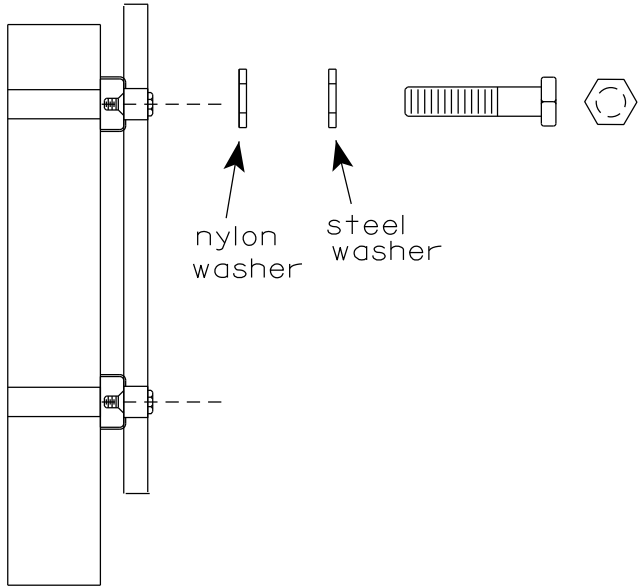
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

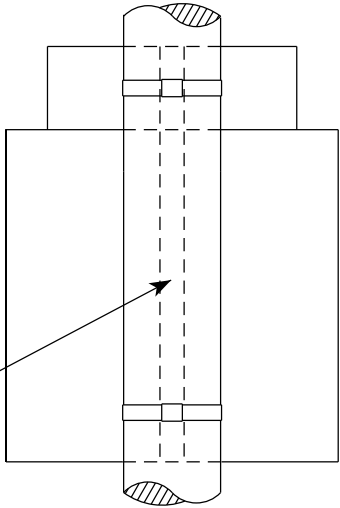


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

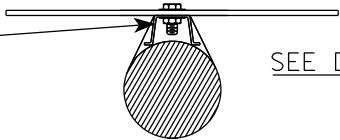
GENERAL NOTES

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

"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

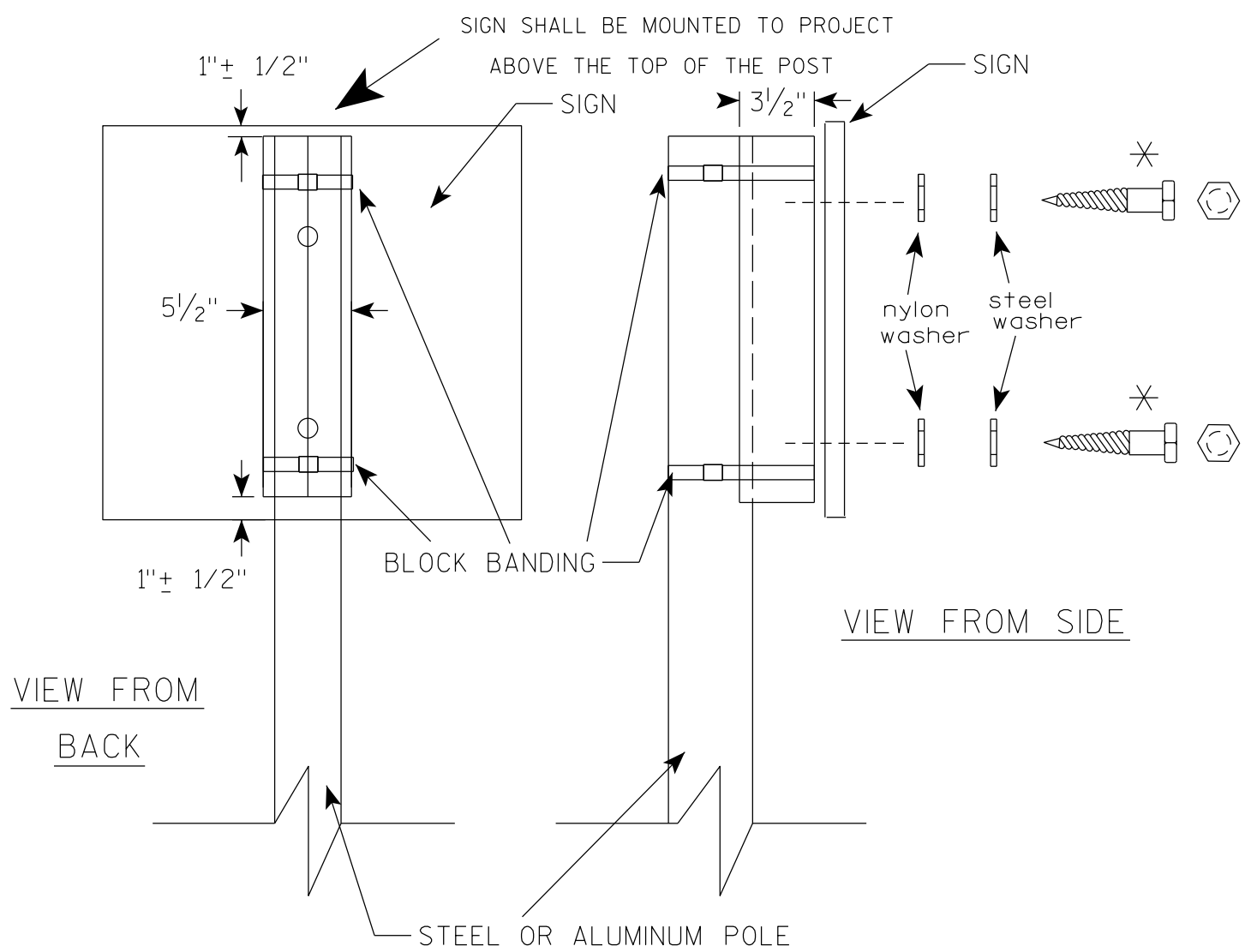


STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

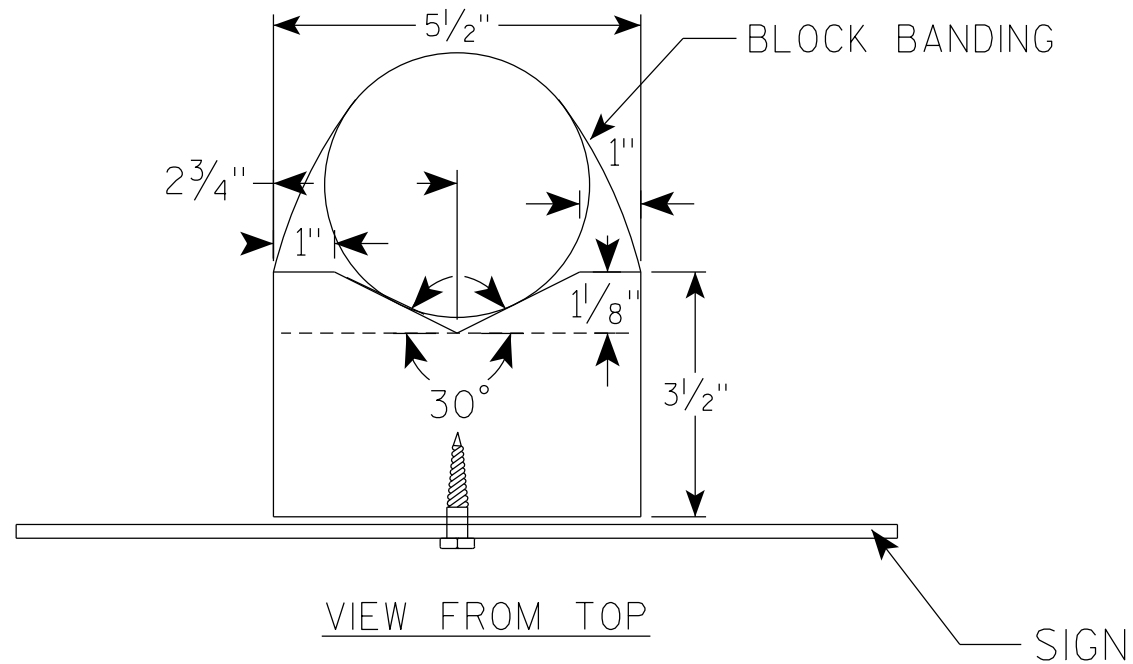
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4



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

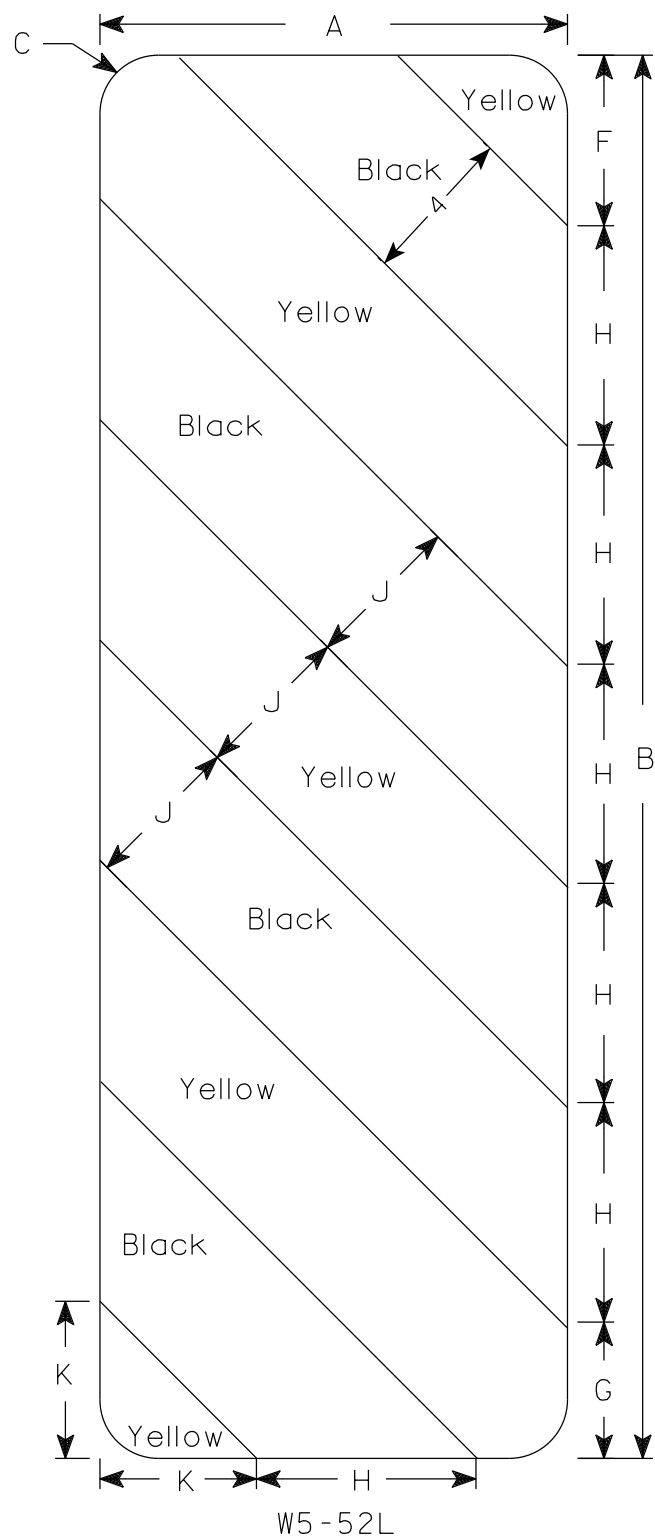
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

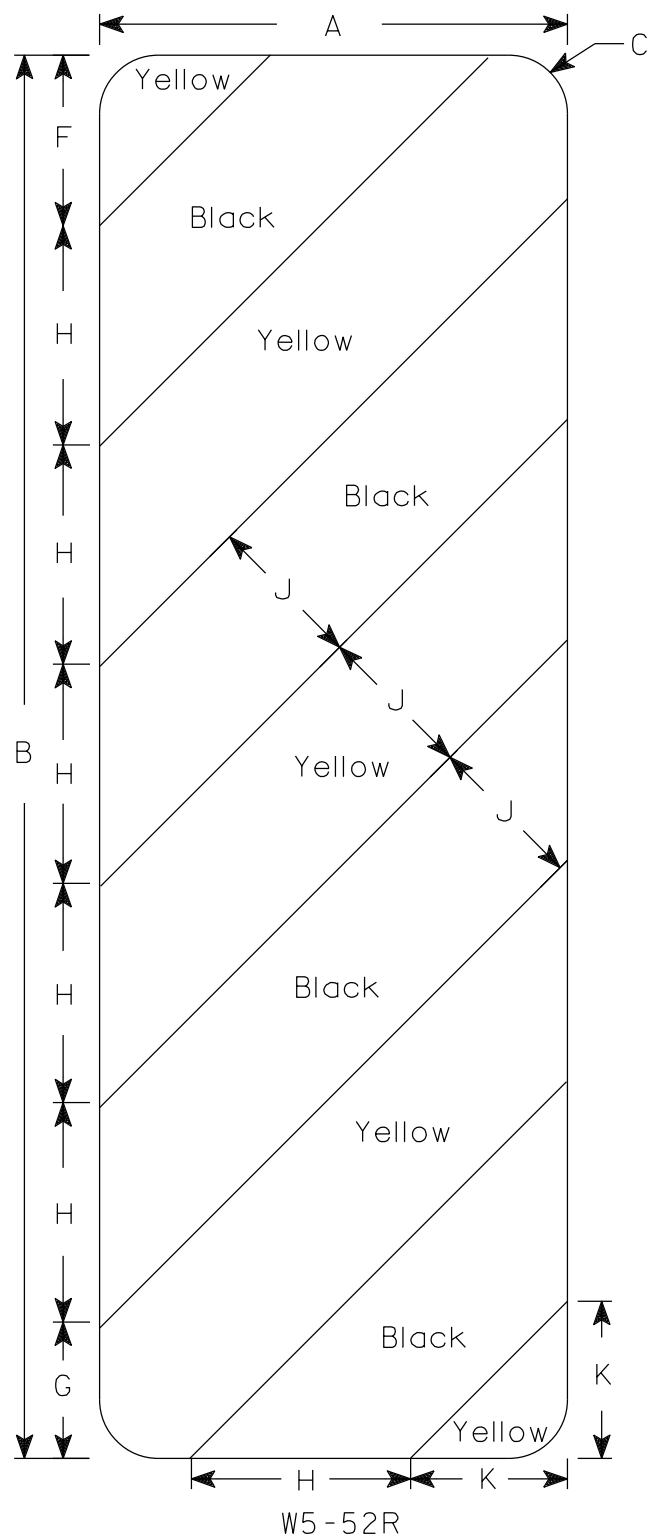
PROJECT NO:

SHEET NO:

E



W5-52L



W5-52R

NOTES

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

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

STANDARD SIGN
W5-52L & W5-52R

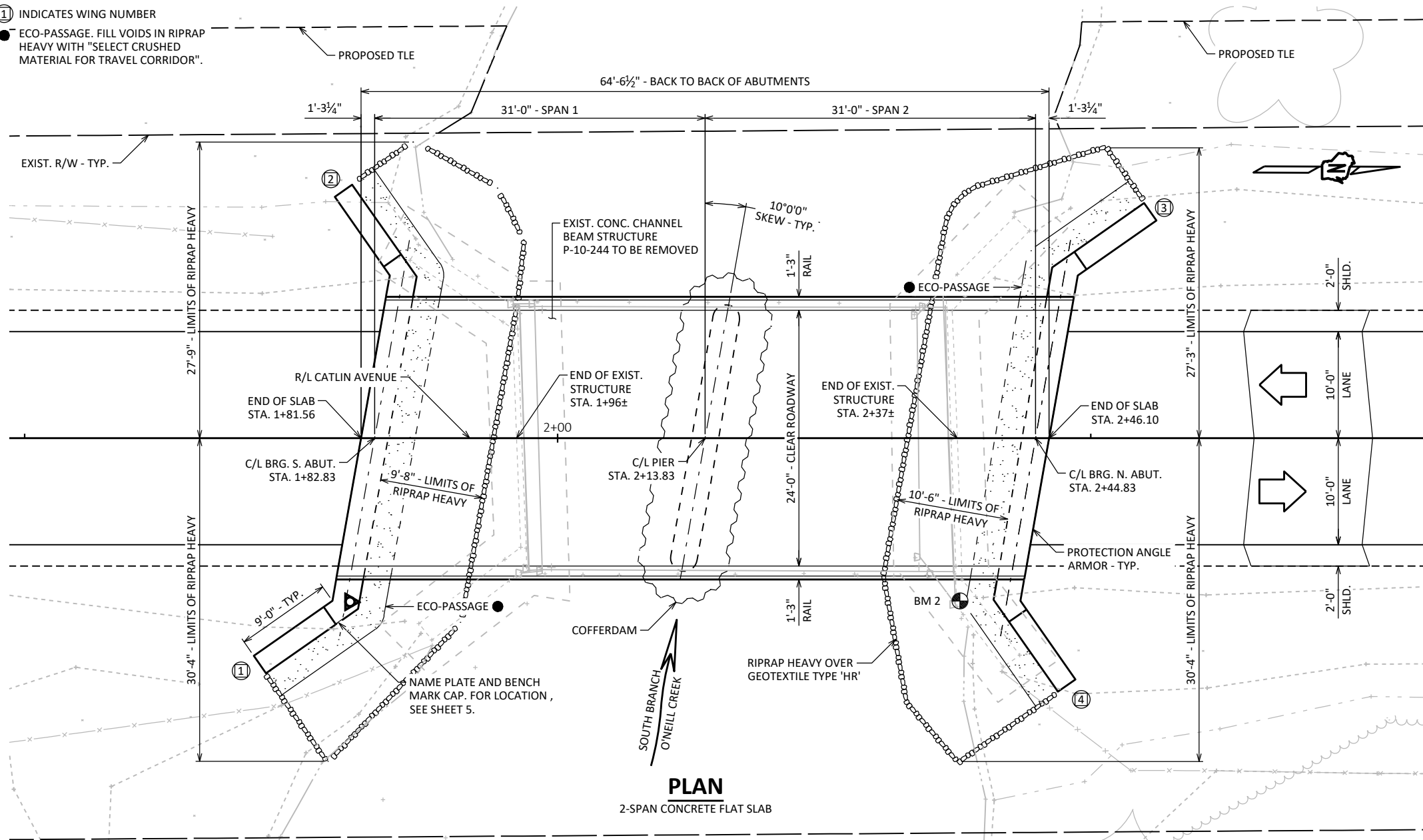
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

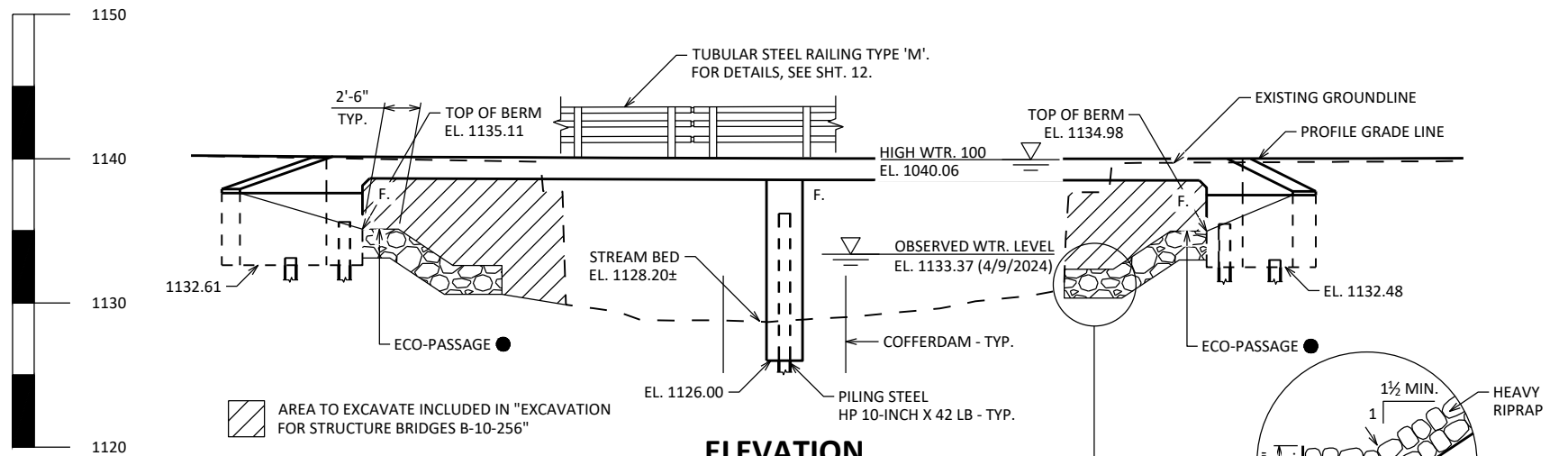
① INDICATES WING NUMBER

● ECO-PASSAGE. FILL VOIDS IN RIPRAP HEAVY WITH "SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR".



PLAN

2-SPAN CONCRETE FLAT SLAB



ELEVATION

LOOKING DOWNSTREAM
NORMAL TO WATER FLOW

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
1	1+12.93, 39.26' RT	TELEPHONE POLE	1139.47
2	2+37.74, 15.27 RT	EXISTING BRIDGE WING	1139.76
3	4+56.64, 26.40 LT	TREE	1140.40

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.16
OPERATING RATING: RF = 1.50
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

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

MATERIAL PROPERTIES:

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

BAR STEEL REINFORCEMENT
GRADE 60 _____
 $f_y = 60,000$ PSI

STRUCTURAL CARBON STEEL:
ASTM A709, GRADE 36 _____
 $f_y = 36,000$ PSI

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10-INCH X 42 LB PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 30'-0" LONG. AT SOUTH ABUTMENT
ESTIMATED 30'-0" LONG. AT NORTH ABUTMENT

PIER TO BE SUPPORTED ON HP 10-INCH X 42 LB PILING (WITH PILE POINTS) DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 160 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 30'-0" LONG.

**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:

$Q_{100} = 3250$ C.F.S.
 $V_{100} = 7.9$ F.P.S.
 $HW_{100} = EL. 1140.06$
WATERWAY AREA = 409 SQ. FT.
DRAINAGE AREA = 11.2 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 5

2-YEAR FREQUENCY:

$Q_2 = 670$ C.F.S.
 $V_2 = 2.6$ F.P.S.
 $HW_2 = EL. 1135.73$

STATE PROJECT NUMBER

7856-00-71

TRAFFIC DATA

CATLIN AVENUE:

ADT = 68 (2047)
R.D.S. = 40 MPH

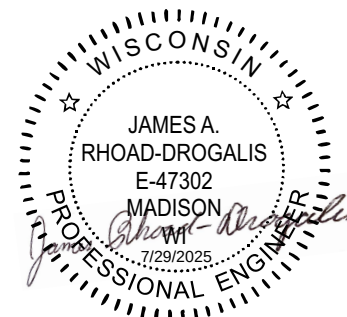
LIST OF DRAWINGS:

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. CONSTRUCTION DETAILS
4. SUBSURFACE EXPLORATION
5. SOUTH ABUTMENT
6. SOUTH ABUTMENT DETAILS
7. NORTH ABUTMENT
8. NORTH ABUTMENT DETAILS
9. PIER
10. SUPERSTRUCTURE
11. SUPERSTRUCTURE DETAILS
12. TUBULAR STEEL RAILING TYPE "M"

STRUCTURE DESIGN CONTACTS:

JAMES RHOAD-DROGALIS 608-828-8166
AARON BONK 608-261-0261

NO.	DATE	REVISION	BY
AECOM			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED		JLR	08/04/25
CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-10-256			
CATLIN AVENUE OVER SOUTH BRANCH O'NEILL CREEK			
COUNTY	CLARK	TOWN	LYNN
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATION 9TH ED.			
DESIGNED BY	TRA	DESIGNED CK'D	JRD
DRAWN BY	UD	PLANS CK'D	JRD
GENERAL PLAN			SHEET 1 OF 12



I.D. 7856-00-01

DATE: JUN 2025

SCALE =

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE EXISTING STRUCTURE (P-10-244) IS A SINGLE-SPAN CONCRETE CHANNEL BEAM BRIDGE, 41.0' LONG X 24.8' WIDE, TO BE REMOVED.

ALL REQUIRED REMOVAL OF THE EXISTING SUBSTRUCTURES IS INCLUDED IN THE BID ITEM "REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS P-10-244".

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES B-10-256" SHALL BE THE EXISTING GROUNDLINE.

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

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 QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

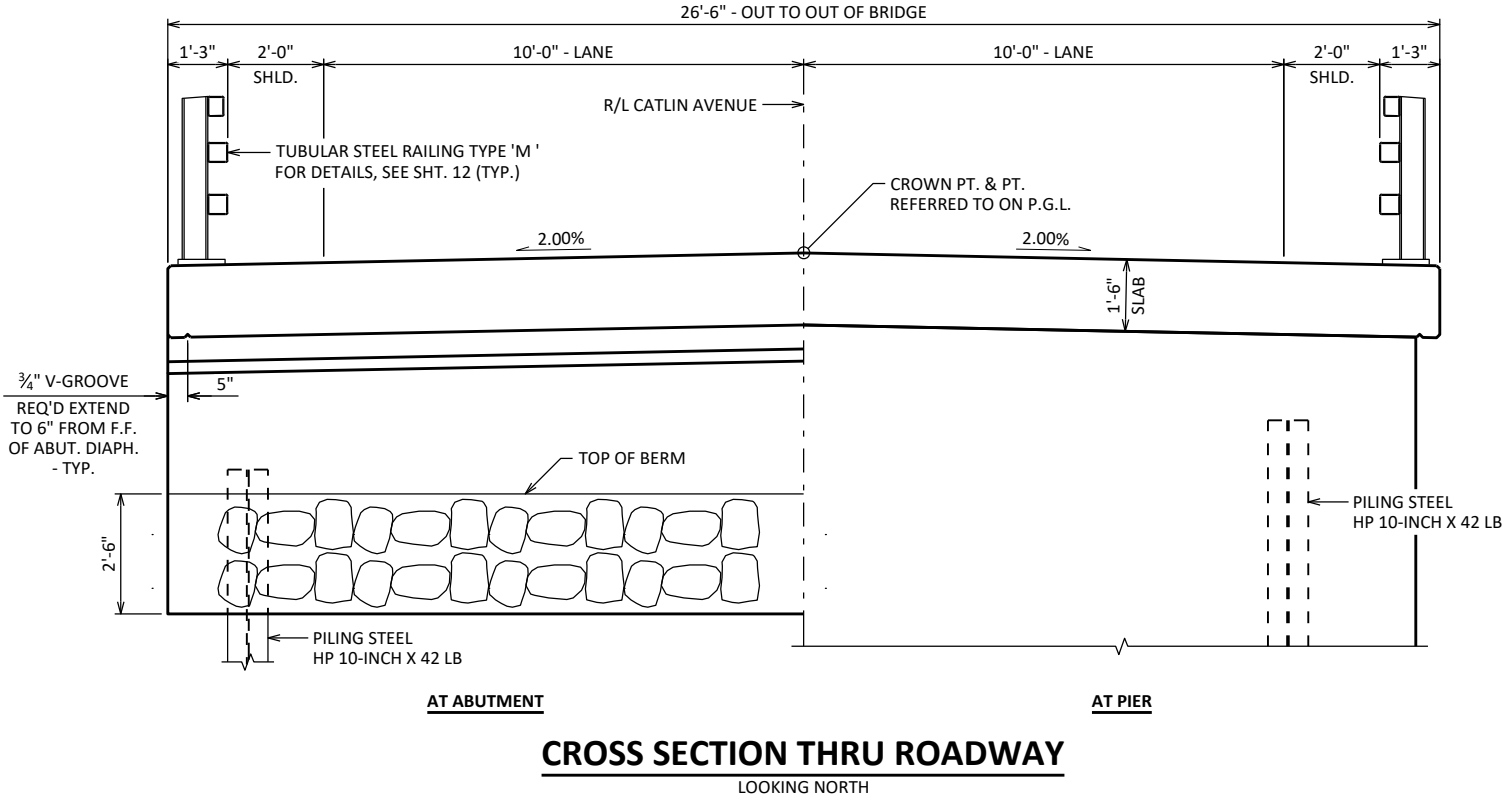
PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF SLAB, TOP AND EXTERIOR EXPOSED FACE OF WINGS, AND THE END 1'-0" OF THE FRONT FACE OF ABUTMENT.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP, SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR, AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

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

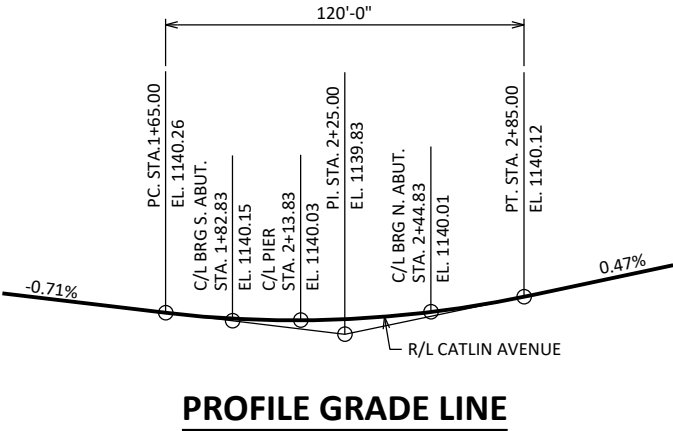
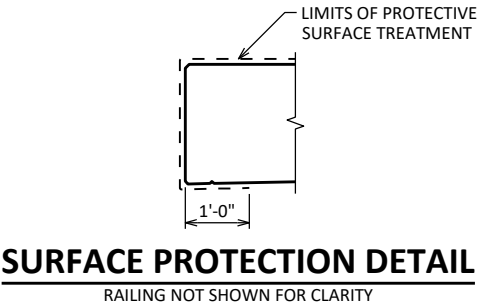
THE EXISTING STREAM BED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIER.

COFFERDAM REQUIRED AT PIER. CONCRETE POURED UNDER WATER WILL BE ALLOWED AT THE ABUTMENTS AND PIER AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.



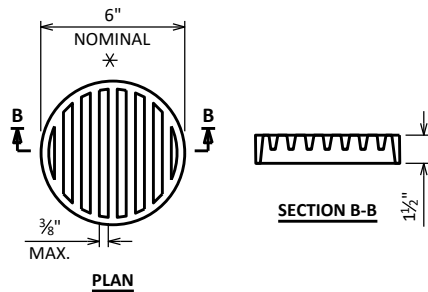
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER	SOUTH ABUT.	PIER	NORTH ABUT.	TOTALS
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS P-10-244	EACH	---	---	---	---	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-10-256	EACH	---	---	---	---	1
206.5001	COFFERDAMS B-10-256	EACH	---	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	---	150	---	150	300
502.0100	CONCRETE MASONRY BRIDGES	CY	99	25	29	25	178
502.3200	PROTECTIVE SURFACE TREATMENT	SY	230	20	---	20	270
502.9000.S	UNDERWATER SUBSTRUCTURE INSPECTION B-10-256	EACH	---	---	---	---	1
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	1990	1490	1990	5,470
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	19540	1390	60	1390	22,380
506.0105	STRUCTURAL STEEL CARBON	LB	530	---	---	---	530
513.4061	RAILING TUBULAR TYPE M	LF	134	---	---	---	134
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	6	---	6	12
550.0500	PILE POINTS	EACH	---	---	6	---	6
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	---	180	180	180	540
606.0300	RIPRAP HEAVY	CY	---	50	---	55	105
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	60	---	60	120
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	---	30	---	30	60
645.0120	GEOTEXTILE TYPE HR	SY	---	90	---	90	180
SPV.0195.501	SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR	TON	---	7	---	7	14
	NON-BID ITEMS						
	FILLER	SIZE	---	---	---	---	½", ¾"



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-10-256			
DRAWN BY		UD	PLANS CK'D JRD
CROSS SECTION & QUANTITIES		SHEET 2 OF 12	

SCALE =

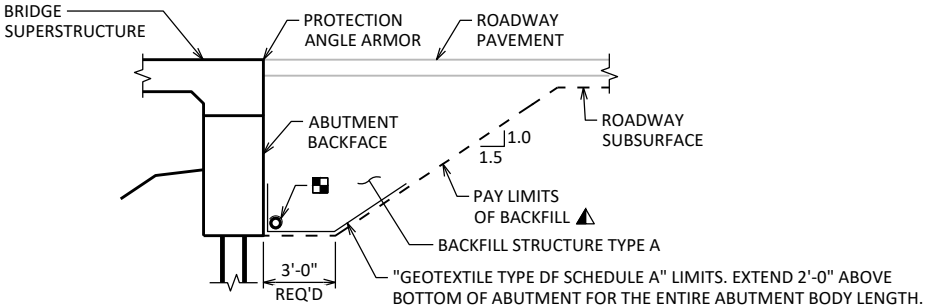


RODENT SHIELD DETAIL

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

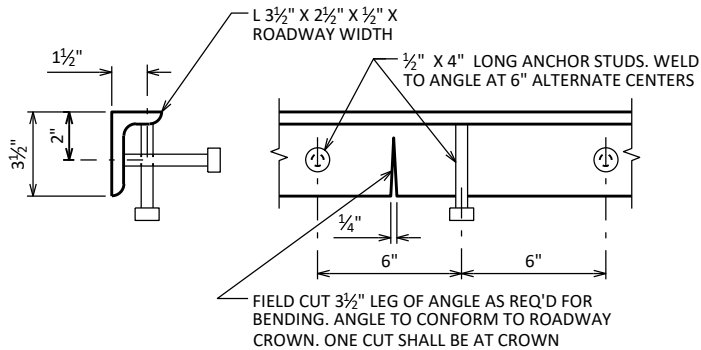
THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

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.



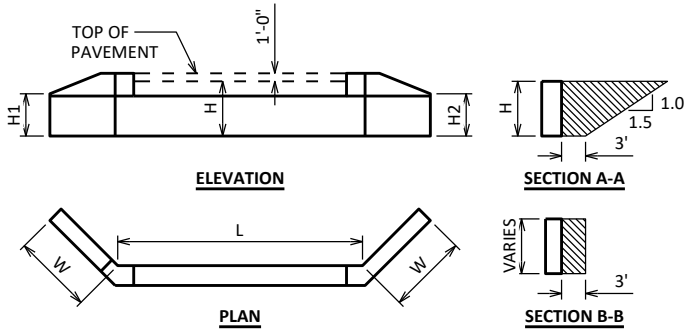
TYPICAL SECTION THRU ABUTMENT

- ▲ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



PROTECTION ANGLE ARMOR

SANDBLAST PROTECTION ANGLE AFTER FABRICATION PER NOTES. AFTER BLAST CLEANING, THE PROTECTION ANGLE SHALL BE HOT DIPPED GALVANIZED.



ABUTMENT BACKFILL DIAGRAM

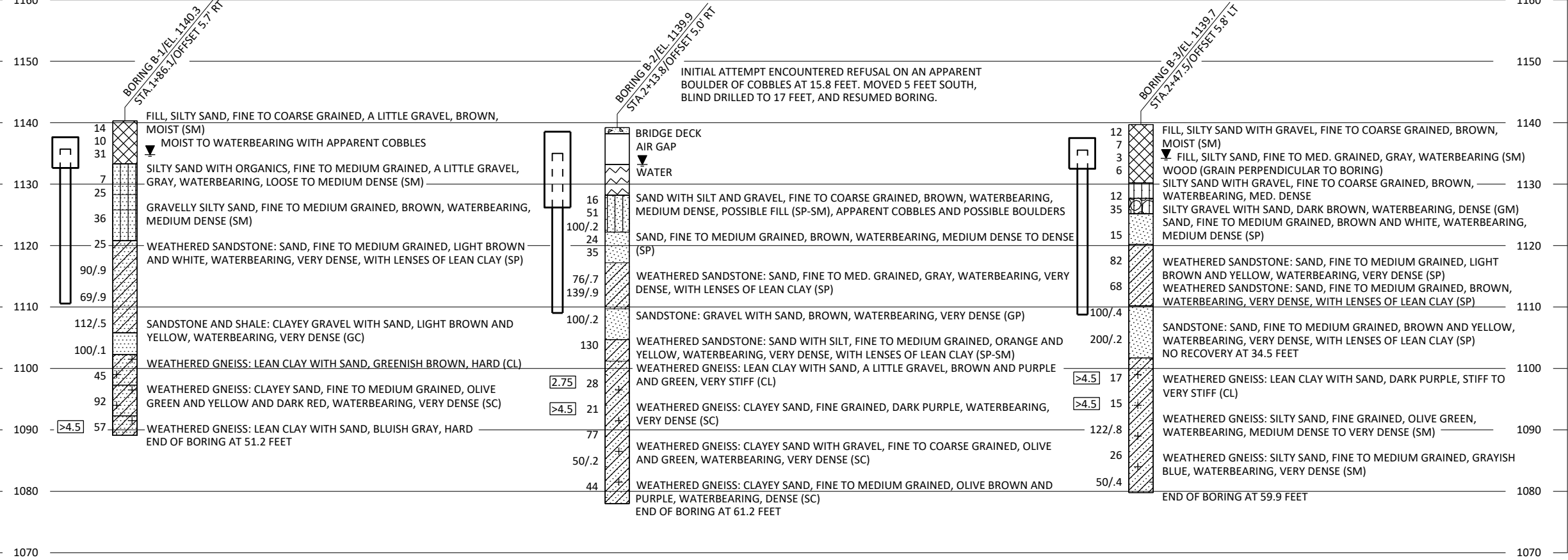
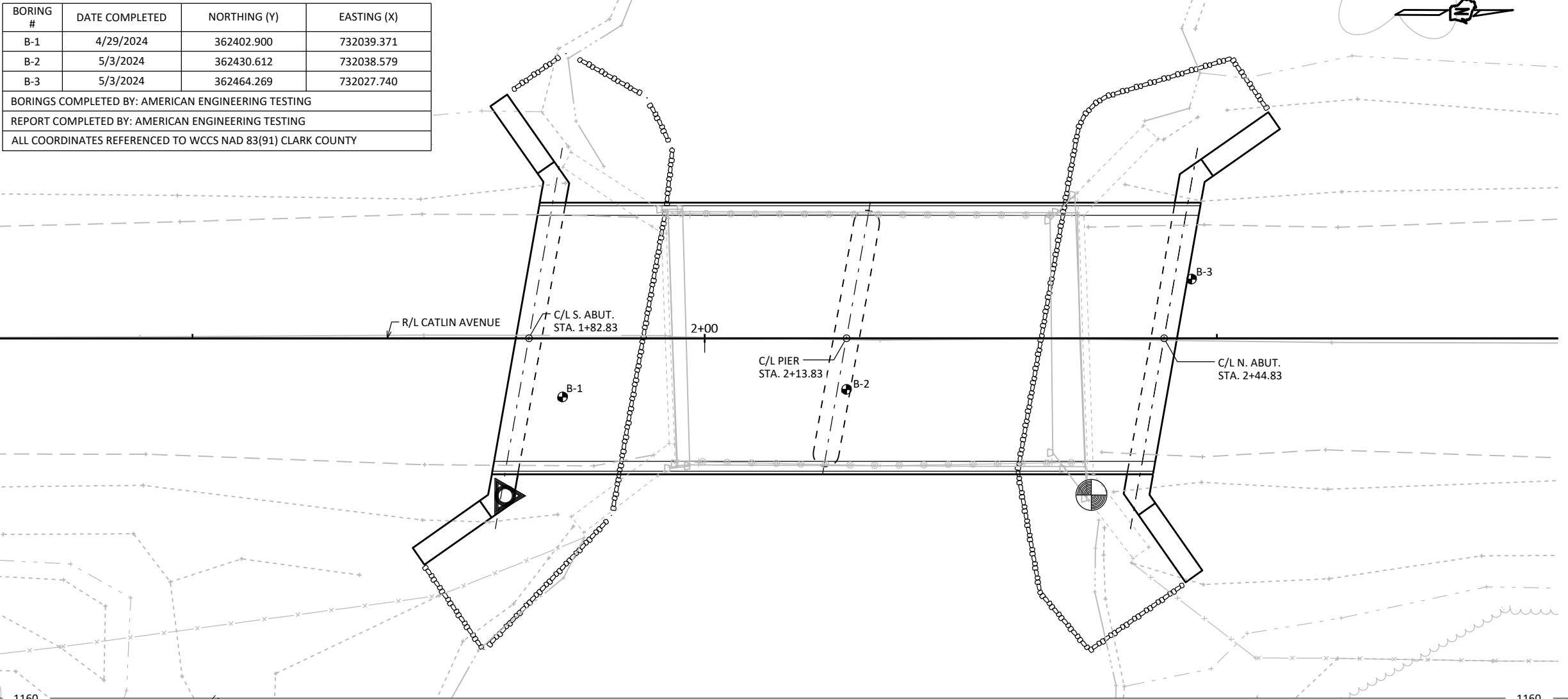
- L** = ABUTMENT BODY LENGTH AT BACKFACE (FT)
- H** = AVERAGE ABUTMENT FILL HEIGHT (FT)
- H1** = WING 1 HEIGHT AT TIP (FT)
- H2** = WING 2 HEIGHT AT TIP (FT)
- W** = WING LENGTH (FT)
- EF** = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
- $V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H) + (3')(0.5)(H1+H2+H+H)(W)$
- $V_{CY} = V_{CF}(EF)/27$
- $V_{TON} = V_{CY}(2.0)$

NOTES

SANDBLAST PLATES, SUPPORTS AND EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS AND EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-10-256			
DRAWN BY		UD	PLANS CK'D JRD
CONSTRUCTION DETAILS		SHEET 3 OF 12	

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	4/29/2024	362402.900	732039.371
B-2	5/3/2024	362430.612	732038.579
B-3	5/3/2024	362464.269	732027.740
BORINGS COMPLETED BY: AMERICAN ENGINEERING TESTING			
REPORT COMPLETED BY: AMERICAN ENGINEERING TESTING			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) CLARK COUNTY			



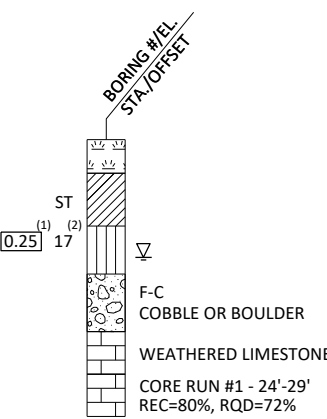
STATE PROJECT NUMBER

7856-00-71

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
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-10-256

DRAWN BY	MES	PLANS CK'D	JRD
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SUBSURFACE
EXPLORATION

SHEET 4 OF 12



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-10-256			
	DRAWN BY	UD	PLANS CK'D JRD
SOUTH ABUTMENT			SHEET 5 OF 12

BILL OF BARS

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

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
NON-COATED BARS					TOTAL WEIGHT = 1990	
A501	64	6-1	X		ABUT. BODY - E.F.	VERT.
A502	32	9-3	X		ABUT. BODY - TOP	VERT.
A503	9	31-7			ABUT. BODY - F.F.	HORIZ.
A804	9	38-5	X		ABUT. BODY - B.F.	HORIZ.
A405	27	3-0	X		ABUT. BODY TIES	HORIZ.
MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
COATED BARS					TOTAL WEIGHT = 1390	
A506	27	2-0			ABUT. BODY DOWELS	VERT.
A407	44	8-3	X	▲	WING 1 & 2 - E.F.	VERT.
A408	10	9-4	X		WING 1 & 2	VERT.
A409	10	5-7	X		WING 1 & 2	VERT.
A510	18	11-8	X		WING 1 & 2	HORIZ.
A811	18	13-2	X		WING 1 & 2	HORIZ.
A412	12	7-8		▲	WING 1 & 2 - E.F.	HORIZ.
A413	4	10-6	X		WING 1 & 2 - TOP	HORIZ.
A414	4	9-6	X		WING 1	HORIZ.
A415	4	8-7	X		WING 2	HORIZ.

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

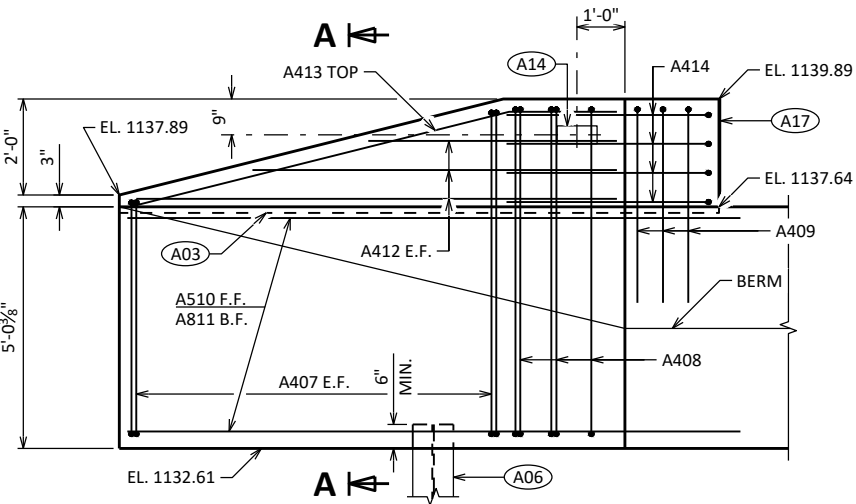
BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

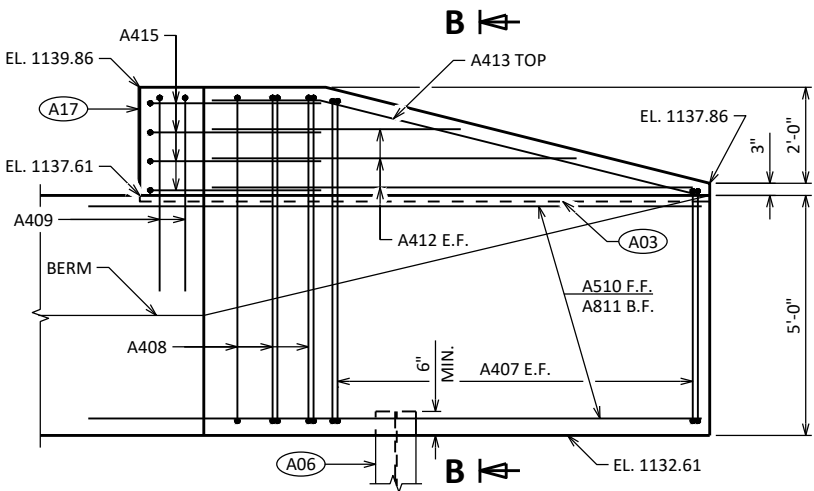
BAR MARK	NO. REQ'D.	LENGTH
A407	4 SERIES OF 11	7'-4" TO 9'-3"
A412	4 SERIES OF 3	5'-3" TO 10'-1"

LEGEND

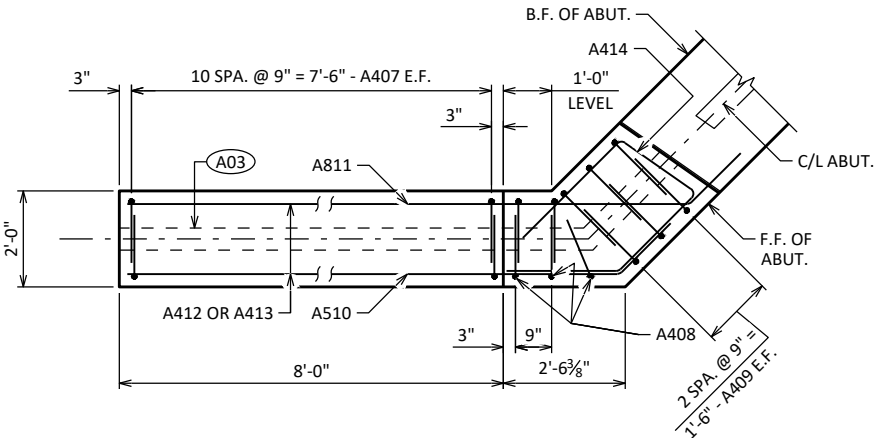
FOR SYMBOL DESCRIPTIONS SEE SHEET 5.



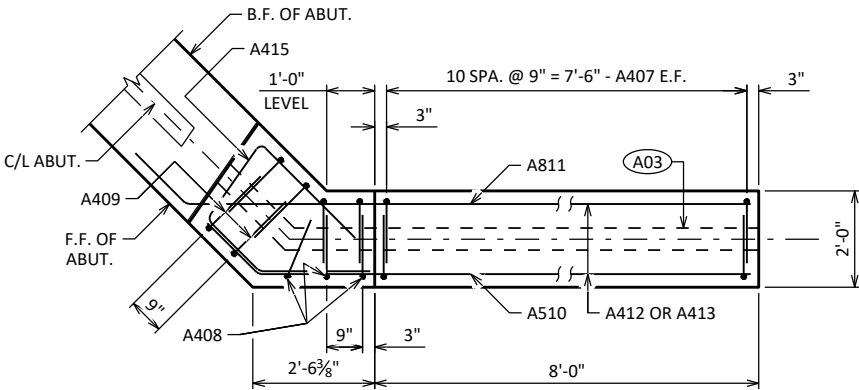
ELEVATION - WING 1



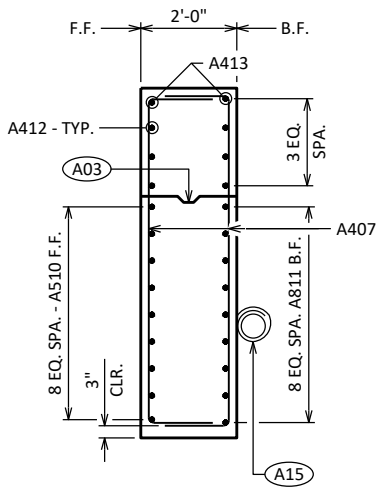
ELEVATION - WING 2



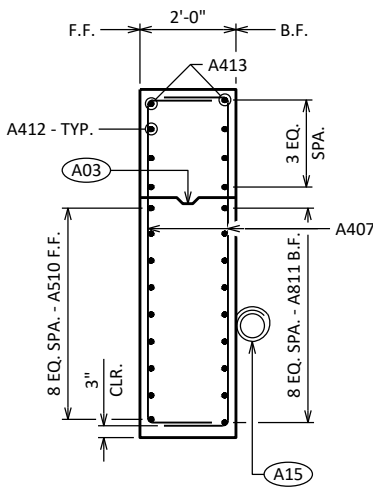
PLAN - WING 1



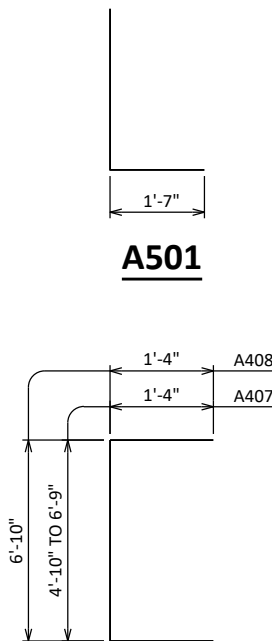
PLAN - WING 2



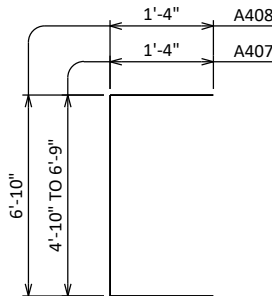
SECTION A-A



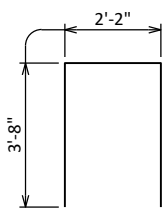
SECTION B-B



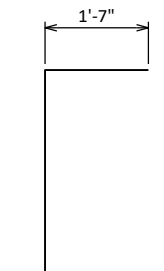
A501



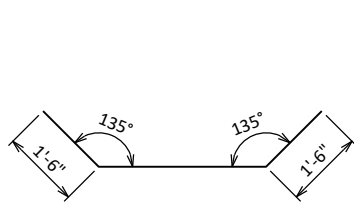
A407 & A408



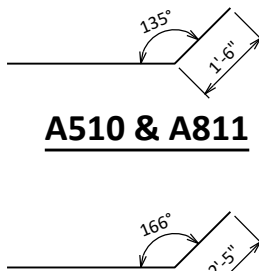
A502



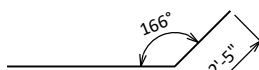
A409



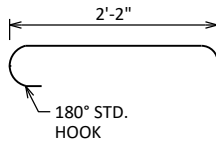
A804



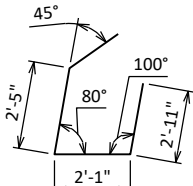
A510 & A811



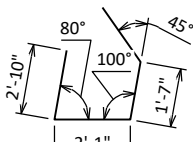
A413



A405



A414



A415

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-10-256			
DRAWN BY		UD	PLANS CK'D JRD
SOUTH ABUTMENT DETAILS		SHEET 6 OF 12	



- (A01) CONST. JOINT. KEYWAY FORMED BY A BEVELED 2 x 6.
- (A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & $\frac{3}{4}$ " "V" GROOVE @ F.F. IF JOINT IS USED). (COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES".)
- (A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 30'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE.
- (A14) CONTRACTOR SHALL SUPPLY A NEW NAME PLATE PER 502.3.11 OF STD. SPEC.
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH). PLACE ABOVE NORMAL WATER AND SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A17) $\frac{1}{2}$ " FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF $\frac{1}{2}$ " FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD $\frac{3}{8}$ " BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- (A22) BARS @ 1'-0" CTRS. 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-10-256			
	DRAWN BY	UD	PLANS CK'D JRD
NORTH ABUTMENT			SHEET 7 OF 12

BILL OF BARS

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

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
NON-COATED BARS					TOTAL WEIGHT = 1990	
B501	64	6-1	X		ABUT. BODY - E.F.	VERT.
B502	32	9-3	X		ABUT. BODY - TOP	VERT.
B503	9	31-7			ABUT. BODY - F.F.	HORIZ.
B804	9	38-5	X		ABUT. BODY - B.F.	HORIZ.
B405	27	3-0	X		ABUT. BODY TIES	HORIZ.
COATED BARS					TOTAL WEIGHT = 1390	
B506	27	2-0			ABUT. BODY DOWELS	VERT.
B407	44	8-3	X	▲	WING 3 & 4 - E.F.	VERT.
B408	10	9-4	X		WING 3 & 4	VERT.
B409	10	5-7	X		WING 3 & 4	VERT.
B510	18	11-8	X		WING 3 & 4	HORIZ.
B811	18	13-2	X		WING 3 & 4	HORIZ.
B412	12	7-8		▲	WING 3 & 4 - E.F.	HORIZ.
B413	4	10-6	X		WING 3 & 4 - TOP	HORIZ.
B414	4	9-6	X		WING 3	HORIZ.
B415	4	8-7	X		WING 4	HORIZ.

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

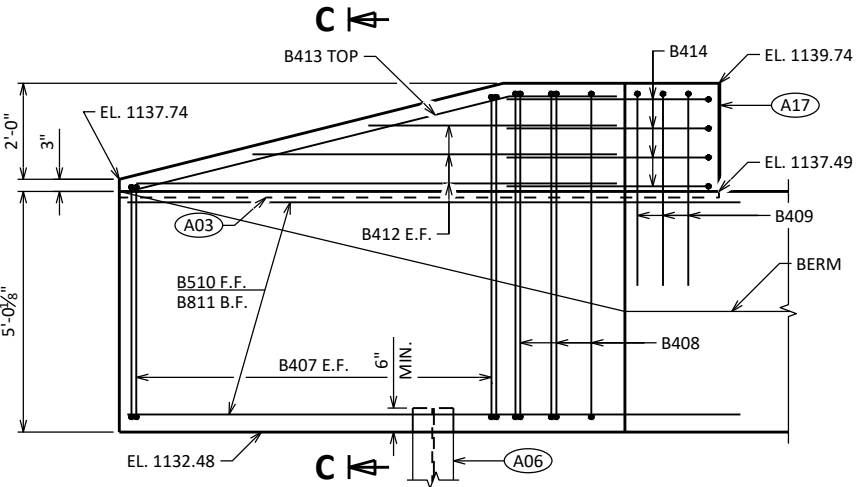
BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

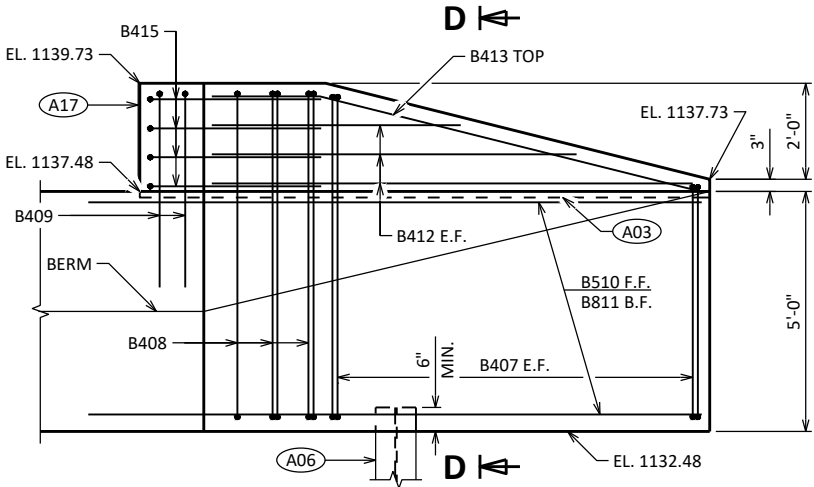
BAR MARK	NO. REQ'D.	LENGTH
B407	4 SERIES OF 11	7'-4" TO 9'-3"
B412	4 SERIES OF 3	5'-3" TO 10'-1"

LEGEND

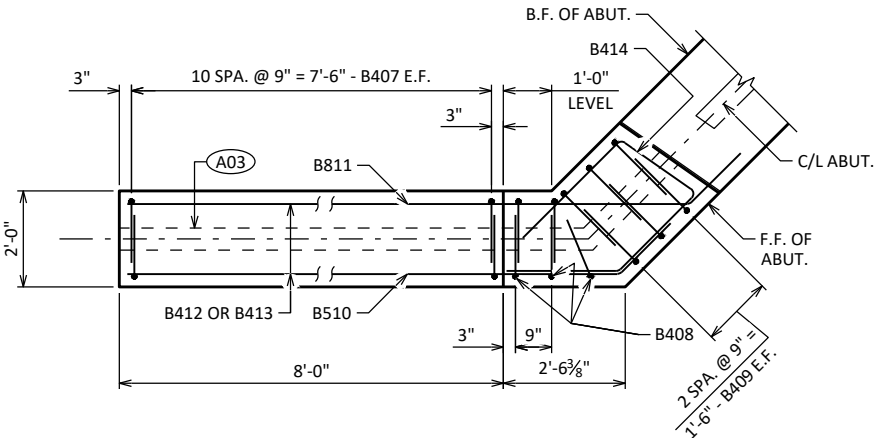
FOR SYMBOL DESCRIPTIONS, SEE SHEET 7.



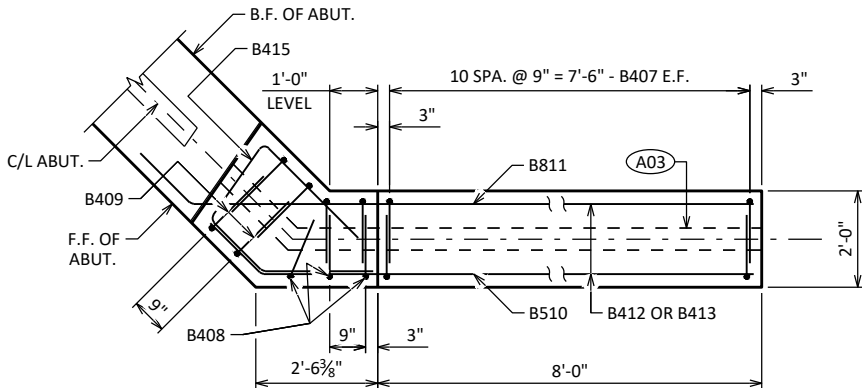
ELEVATION - WING 3



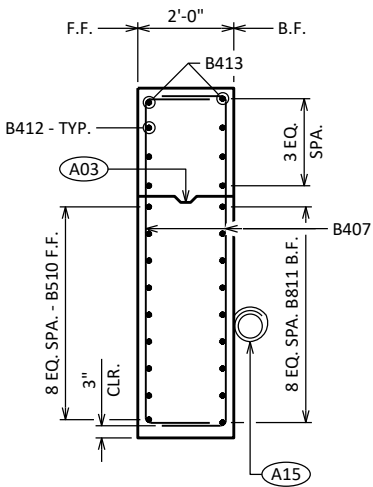
ELEVATION - WING 4



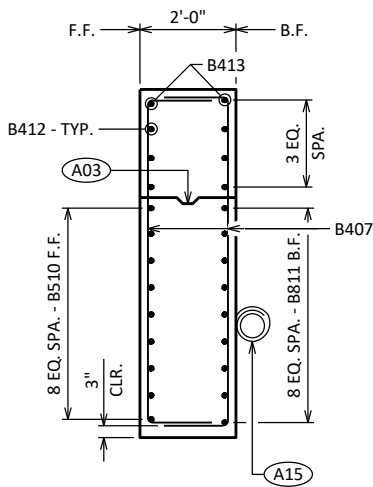
PLAN - WING 3



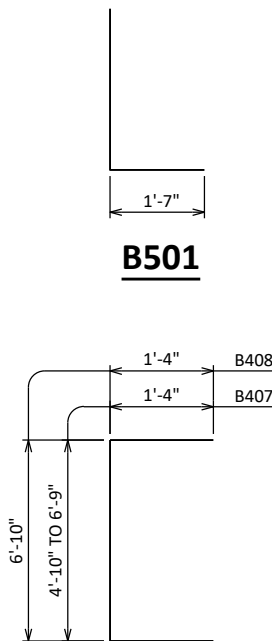
PLAN - WING 4



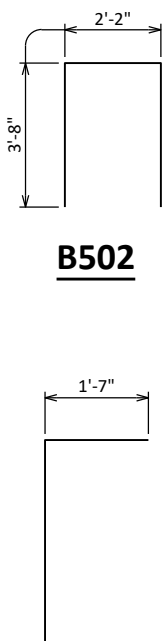
SECTION C-C



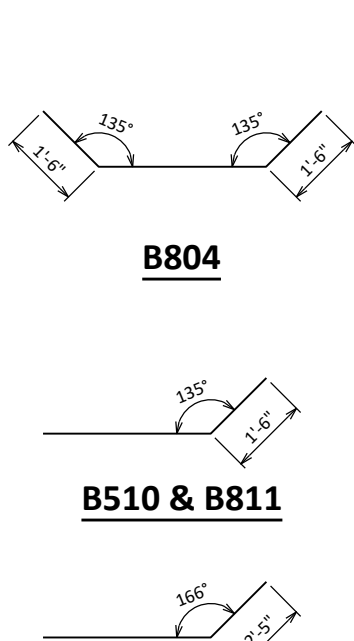
SECTION D-D



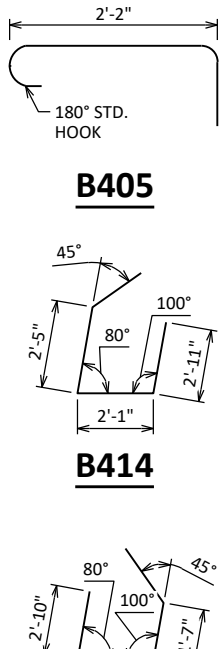
B501



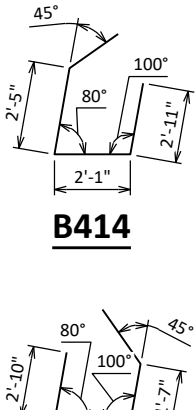
B502



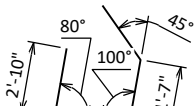
B804



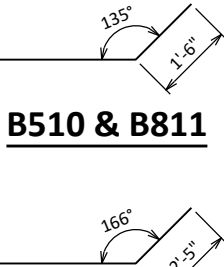
B405



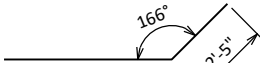
B414



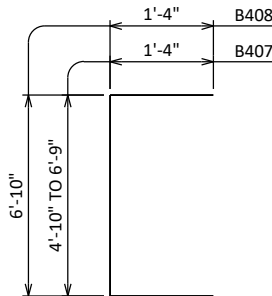
B415



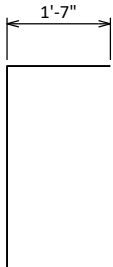
B510 & B811



B413



B407 & B408



B409

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-10-256			
DRAWN BY		UD	PLANS CK'D JRD
NORTH ABUTMENT DETAILS		SHEET 8 OF 12	

BILL OF BARS

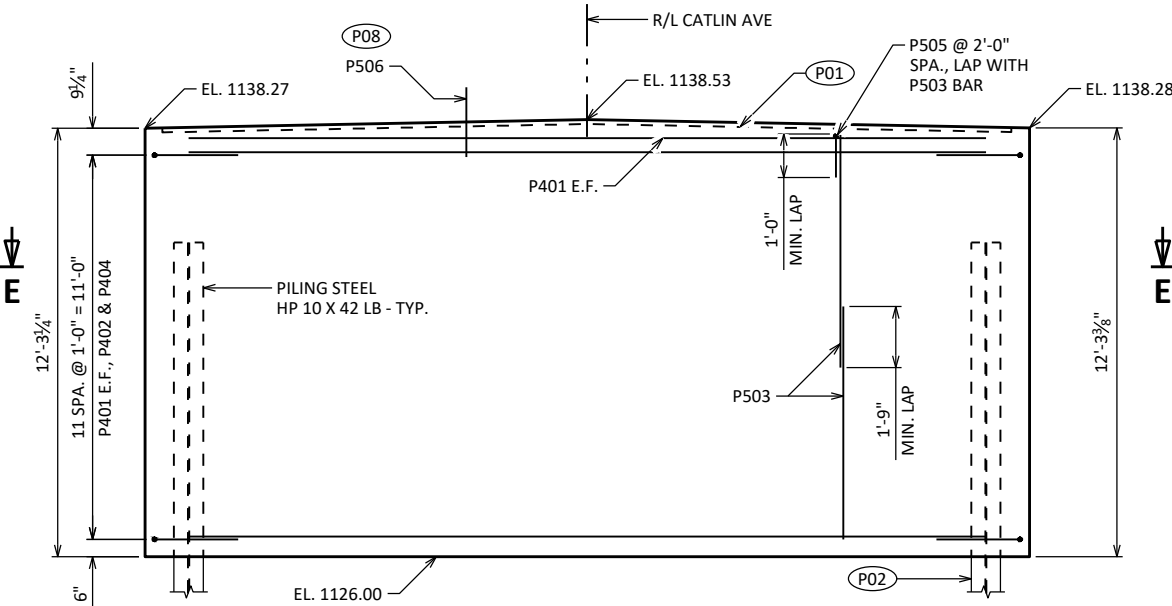
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
NON-COATED BARS					TOTAL WEIGHT = 1490	
P401	26	22-10			PIER BODY	HORIZ.
P402	24	6-2	X		PIER BODY - ENDS	HORIZ.
P503	112	6-10			PIER BODY	VERT.
P404	72	2-11	X		PIER BODY - TIES	HORIZ.
P505	12	4-3	X		PIER BODY - TOP	VERT.
COATED BARS					TOTAL WEIGHT = 60	
P506	25	2-0			PIER BODY - DOWELS	VERT.

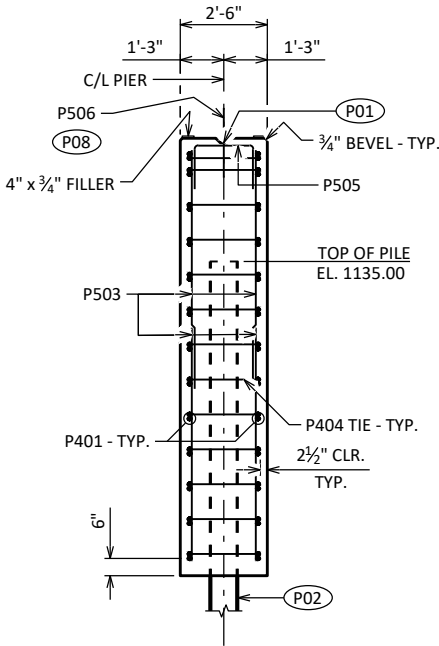
NOTES

EXCAVATE TO EL. 1126.00 BEFORE DRIVING PILING.
EXCAVATION IS INCIDENTAL TO BID ITEM "EXCAVATION FOR STRUCTURES B-10-256".

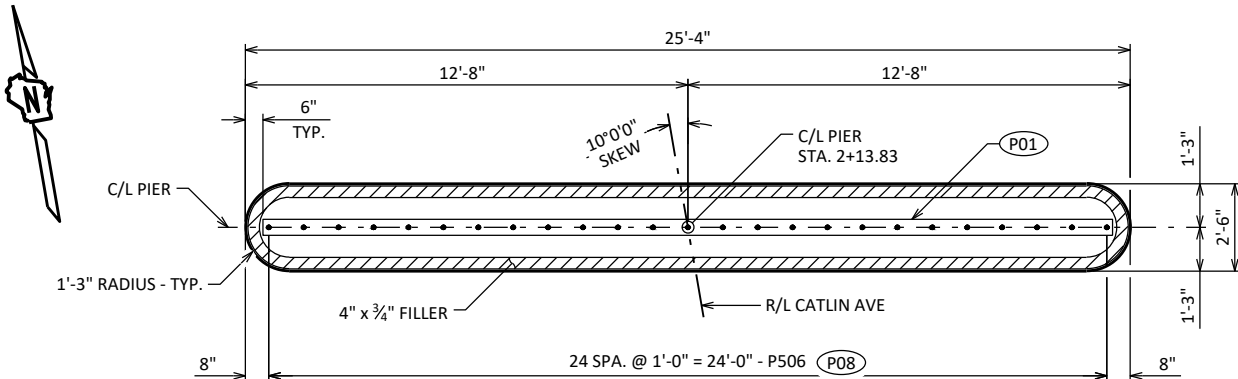
- (P01) 2" x 6" CONST. JOINT FORMED BY BEVELED KEYWAY.
- (P02) SUPPORT PIER ON HP 10 x 42 STEEL PILING, ESTIMATED 30'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 160 TONS PER PILE. PILE POINTS REQUIRED.
- (P08) BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)



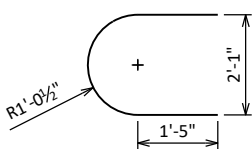
ELEVATION
LOOKING NORTH



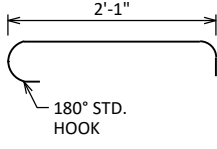
SECTION THRU PIER
LOOKING WEST



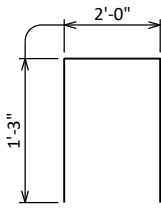
PLAN



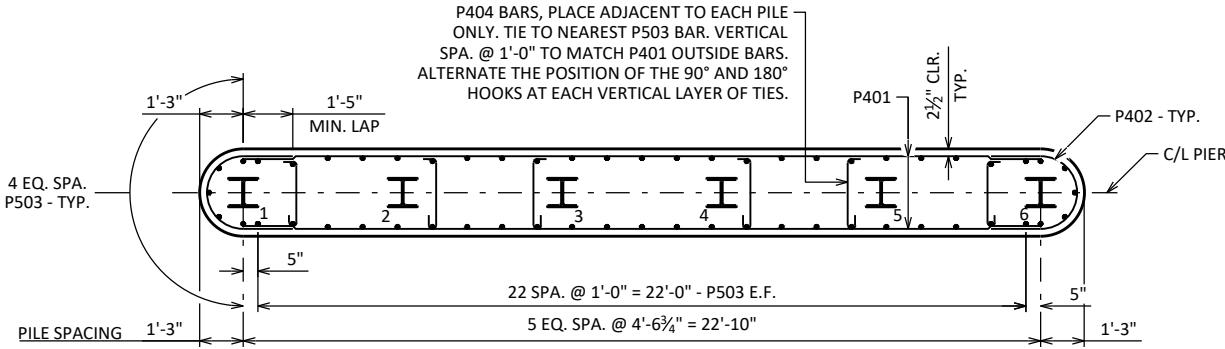
P402



P404



P505



SECTION E-E

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-10-256			
DRAWN BY		UD	PLANS CK'D JRD
PIER		SHEET 9 OF 12	

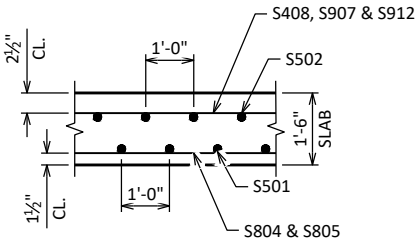
NOTES

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

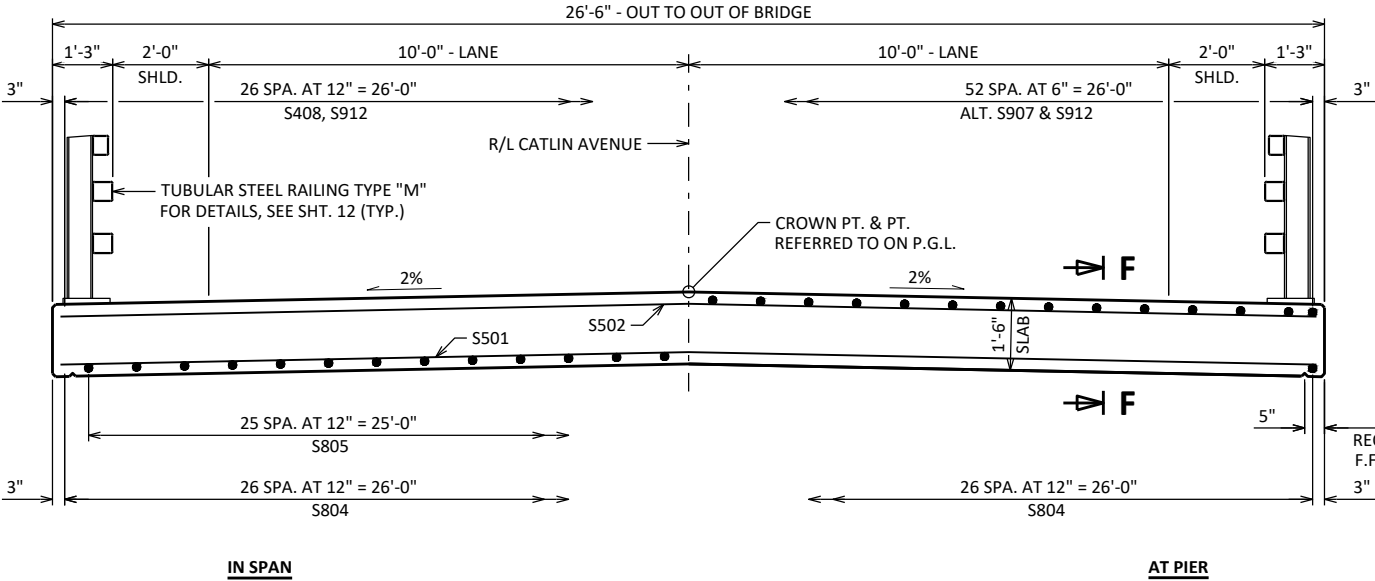
ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

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

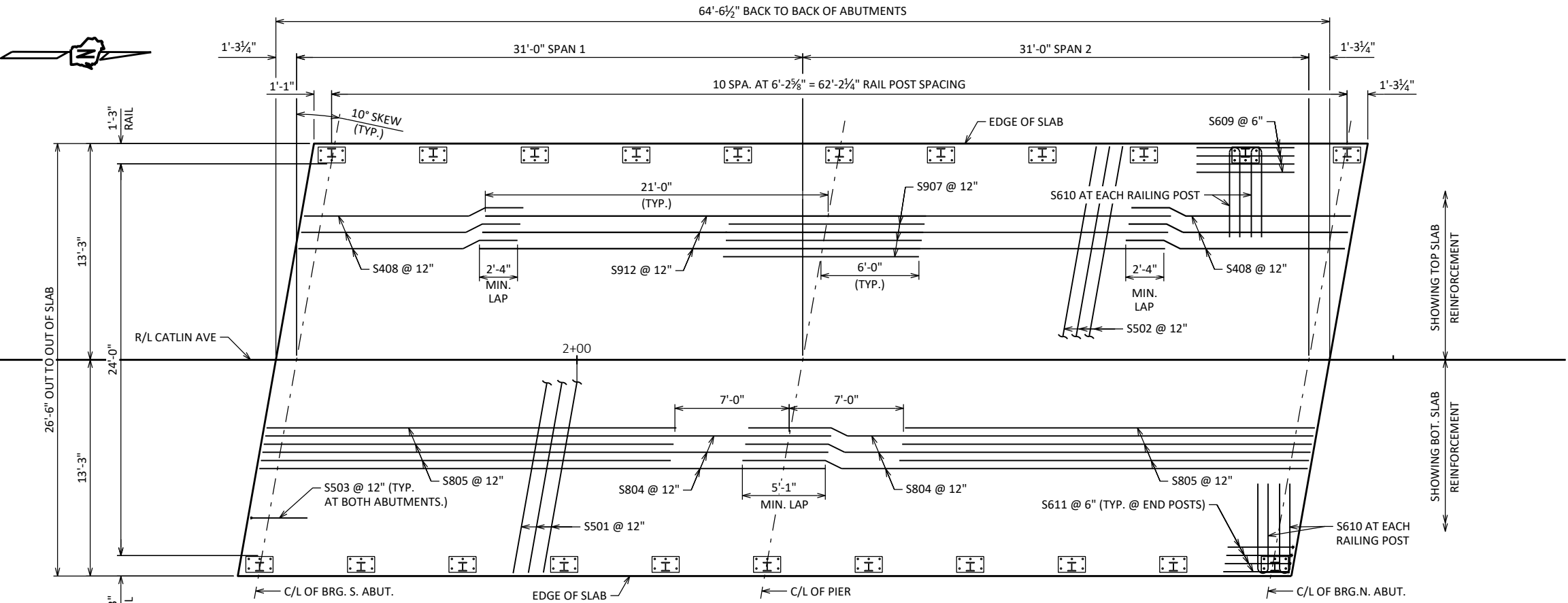
PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS, AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF SLAB AND CROWN OR R/L. RECORD ELEVATIONS ON AS BUILT PLANS. SEE SHEET 11.



SECTION F-F



CROSS SECTION THRU BRIDGE
LOOKING NORTH



PLAN

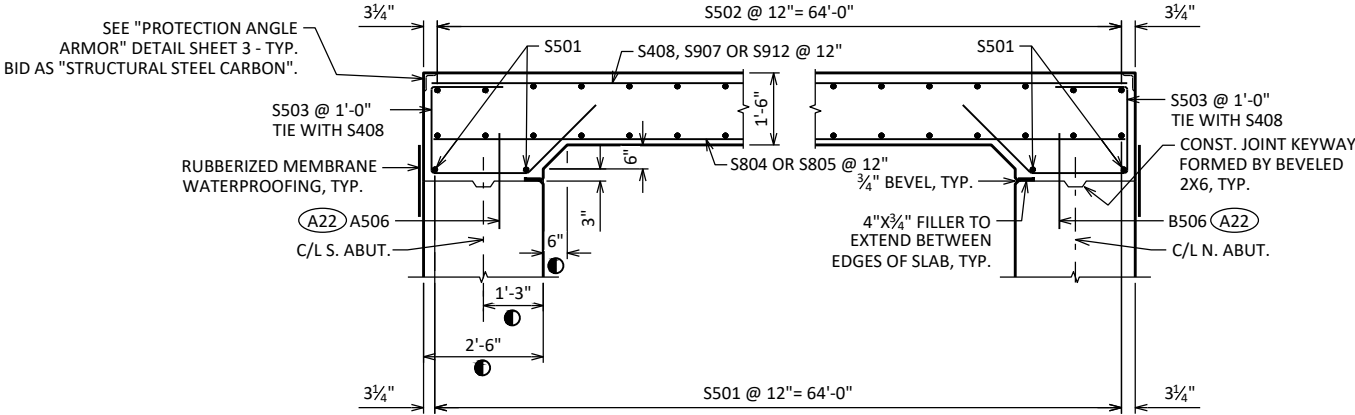
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-10-256			
DRAWN BY		MES	PLANS CK'D JRD
SUPERSTRUCTURE		SHEET 10 OF 12	

SCALE =

BILL OF BARS

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

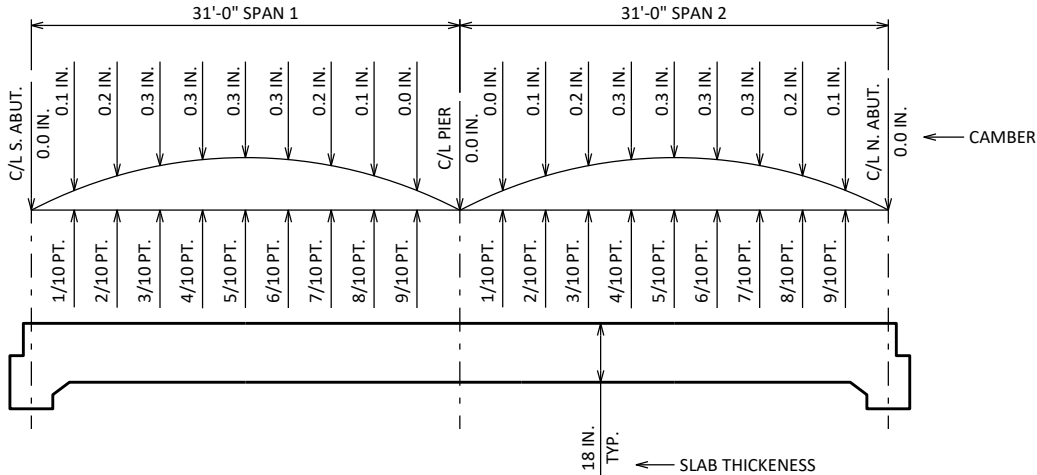
MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
COATED BARS					TOTAL WEIGHT = 19540	
S501	69	26- 6			SLAB - BOTTOM	TRANS.
S502	65	26- 6			SLAB - TOP	TRANS.
S503	54	7- 2	X		SLAB - TIES AT ABUTMENT	LONGIT.
S804	54	34- 8			SLAB - BOTTOM	LONGIT.
S805	52	25- 2			SLAB - BOTTOM	LONGIT.
S907	27	12- 0			SLAB - TOP	LONGIT.
S408	54	13- 6			SLAB - TOP	LONGIT.
S609	72	6- 0			SLAB - INT. POSTS - 4 PER POST	LONGIT.
S610	44	11- 0	X		SLAB - INT. & EXT. POSTS - 2 PER POST	TRANS.
S611	16	4- 8	X		SLAB - EXT. POSTS - 4 PER POST	LONGIT.
S912	27	42- 0			SLAB - TOP	LONGIT.



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.
- A506, 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.)



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.

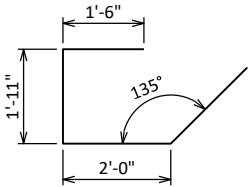
TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

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

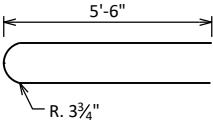
TOP OF SLAB ELEVATIONS

SPAN	LOCATION	C/L BRG. S. ABUT.	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	C/L PIER
1	W. EDGE OF SLAB	1139.86	1139.85	1139.83	1139.82	1139.81	1139.80	1139.79	1139.78	1139.77	1139.76	1139.75
	CROWN OR R/L	1140.15	1140.13	1140.12	1140.10	1140.09	1140.08	1140.06	1140.05	1140.04	1140.04	1140.03
	E. EDGE OF SLAB	1139.89	1139.87	1139.86	1139.84	1139.83	1139.81	1139.80	1139.79	1139.78	1139.77	1139.76

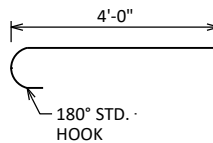
SPAN	LOCATION	C/L PIER	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	C/L BRG. N. ABUT.
2	W. EDGE OF SLAB	1139.75	1139.75	1139.74	1139.74	1139.74	1139.73	1139.73	1139.73	1139.73	1139.73	1139.74
	CROWN OR R/L	1140.03	1140.02	1140.02	1140.01	1140.01	1140.00	1140.00	1140.00	1140.00	1140.00	1140.01
	E. EDGE OF SLAB	1139.76	1139.76	1139.75	1139.74	1139.74	1139.74	1139.73	1139.73	1139.73	1139.73	1139.73



S503



S610



S611

SURVEY TOP OF SLAB ELEVATIONS

LOCATION	ABUTMENT	5/10 PT.	PIER	5/10 PT.	ABUTMENT
W. GUTTER					
CROWN OR R/L					
E. GUTTER					

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

NOTES

FILL IN THE TABLE OF "SURVEY TOP OF SLAB ELEVATIONS" FOR EACH SPAN ON AS BUILT PLANS.

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

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

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-10-256			
DRAWN BY		MES	PLANS CK'D JRD
SUPERSTRUCTURE DETAILS		SHEET 11 OF 12	

SCALE =

LEGEND

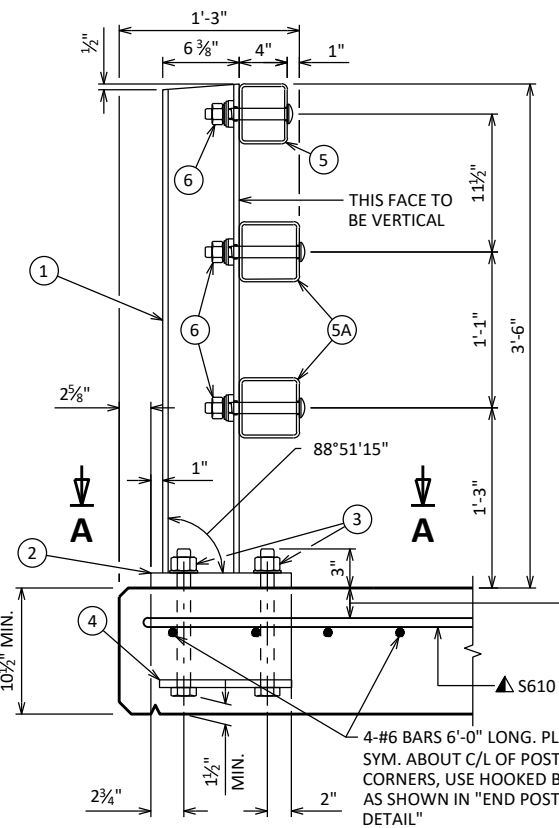
- 1 W6 X 25 WITH 1 1/8" X 1 1/2" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.
- 2 PLATE 1 1/4" X 11 3/4" X 1'-8" WITH 1 1/16" DIA. OVERSIZED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN.
- 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

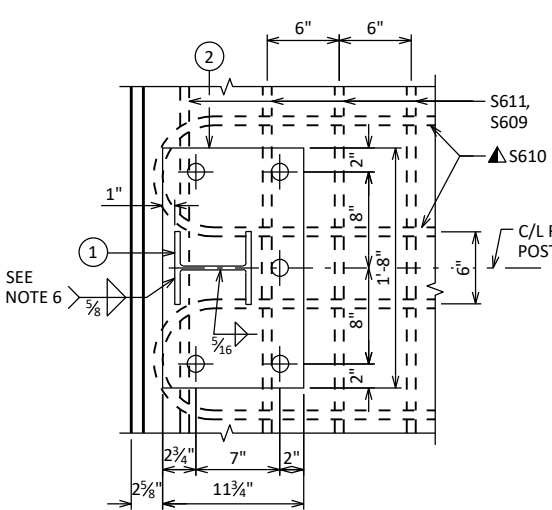
1. BID ITEM SHALL BE "RAILING TUBULAR TYPE M" WHICH INCLUDES ALL ITEMS SHOWN.
2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY = 50 KSI. ANCHOR PLATES, 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.

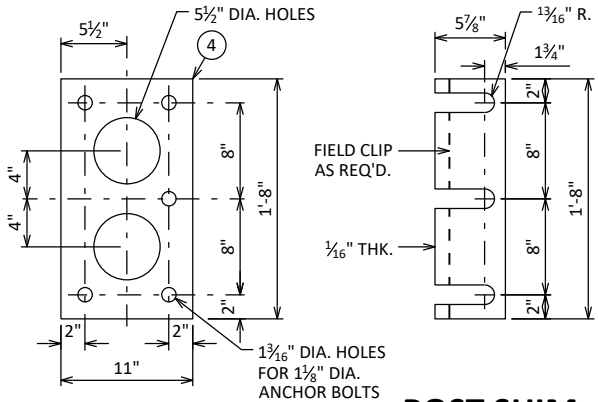
* ANCHOR BOLT ASSEMBLY MAY BE TACK WELDED, EITHER IN THE SHOP, OR IN THE FIELD AFTER THE ANCHOR PLATE IS PLACED.



SECTION THRU RAILING ON DECK

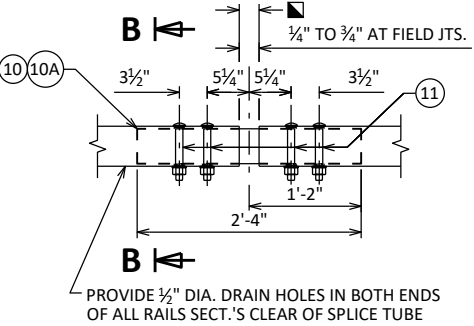


SECTION A-A

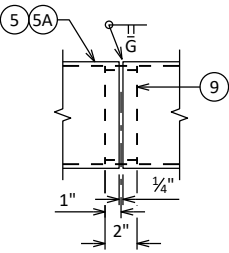


ANCHOR PLATE
AT RAIL TO DECK CONNECTION

POST SHIM
DETAIL



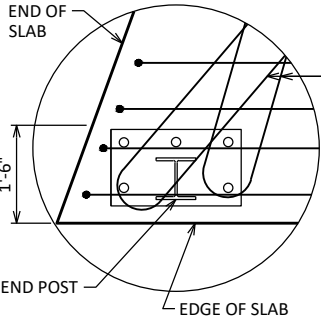
FIELD ERECTION JOINT DETAIL



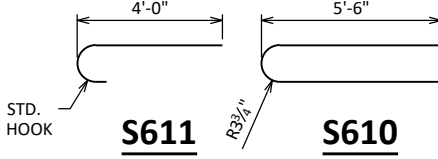
SHOP RAIL SPLICE DETAIL

LOCATION MUST BE SHOWN ON SHOP DRAWINGS

2 1/2" FOR SLABS ON GIRDERS; FOR OTHER STRUCTURES, PLACE BELOW TOP MAT SLAB REINFORCEMENT

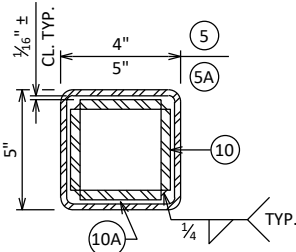


END POST DETAIL
REINFORCEMENT AT CORNERS

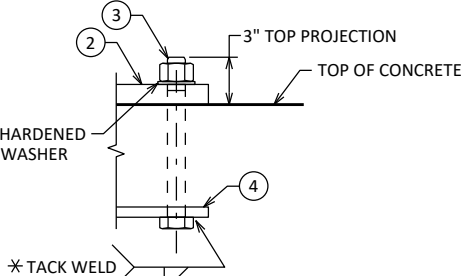


S611

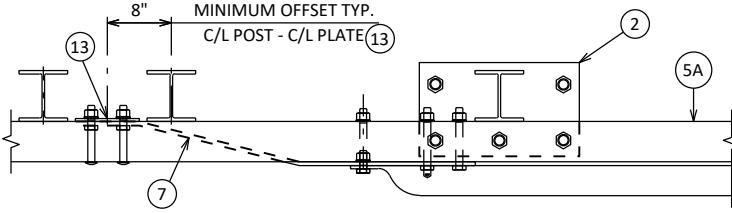
S610



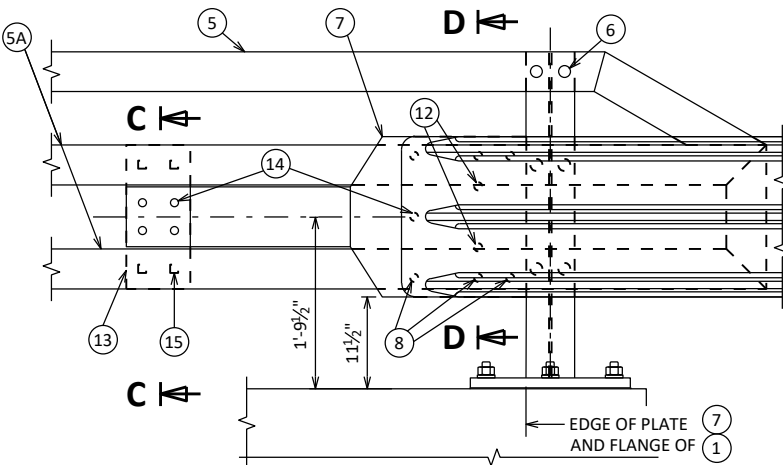
SECTION B-B



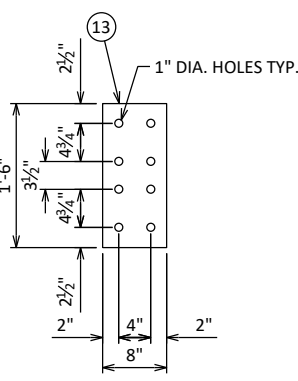
ANCHOR BOLTS



TOP VIEW AT END POST
THRIE BEAM RAIL ATTACHMENT



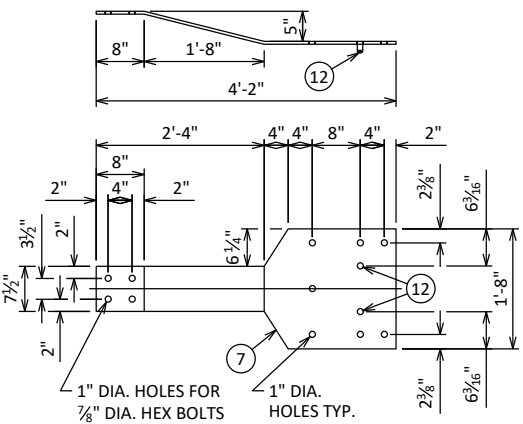
SECTION C-C SECTION D-D



ANCHOR PLATE
AT BEAM GUARD ATTACHMENT

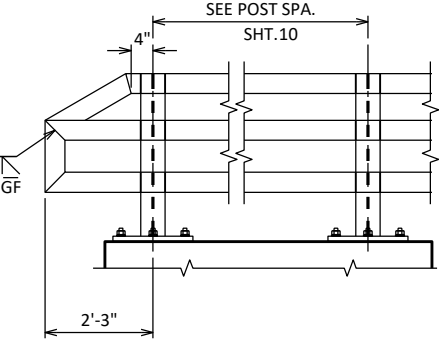
DETAIL AT END POST

THRIE BEAM RAIL ATTACHMENT



BACK-UP PLATE DETAIL

AT BEAM GUARD ATTACHMENT



PART ELEVATION OF RAILING

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-10-256			
DRAWN BY		MES	PLANS CK'D JRD
TUBULAR STEEL RAILING TYPE "M"		SHEET 12 OF 12	

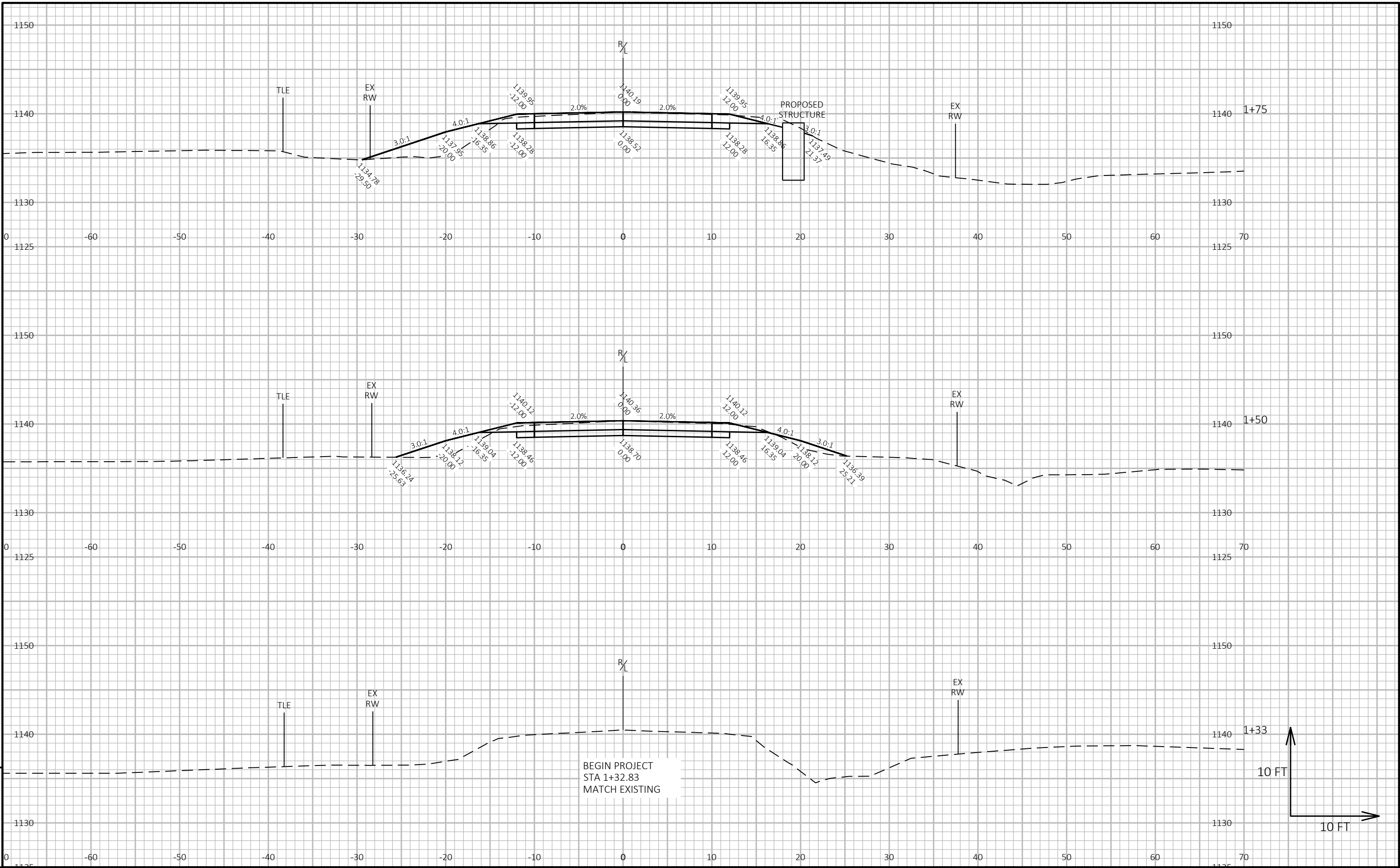
DIVISION - ALI_CL_CATLIN-SOUTH OF BRIDGE

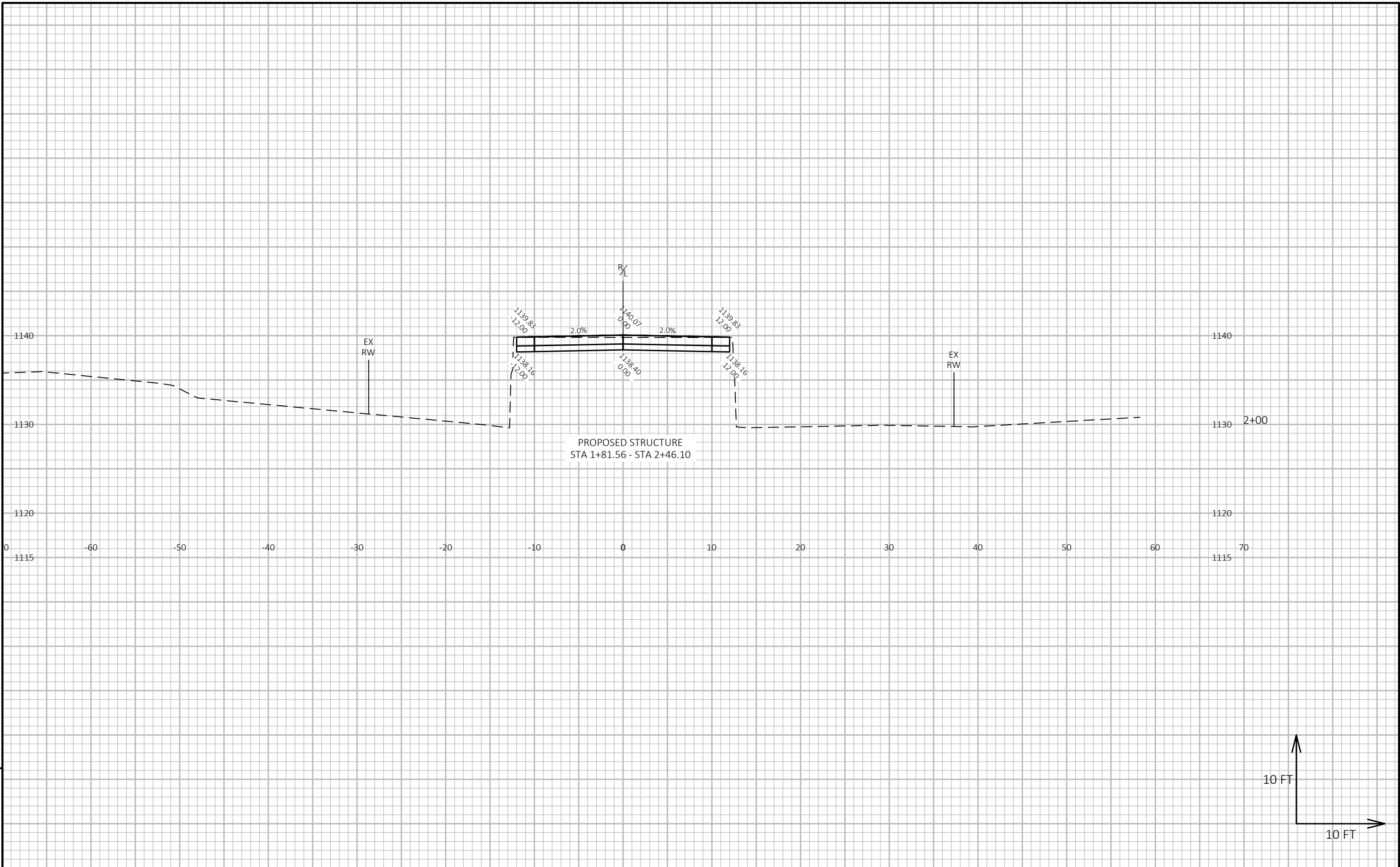
STATION	REAL STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1	1.25	NOTE 8
1+32.83	132.83	0.00	0.00	0.00	0	0	0	0	0	0
1+35.00	135.00	39.39	0.00	29.73	2	0	1	2	1	1
1+50.00	150.00	40.77	0.00	14.71	22	0	12	24	16	8
1+75.00	175.00	44.35	0.00	22.68	39	0	17	63	38	26
1+81.56	181.56	42.15	0.00	48.96	11	0	9	74	49	25

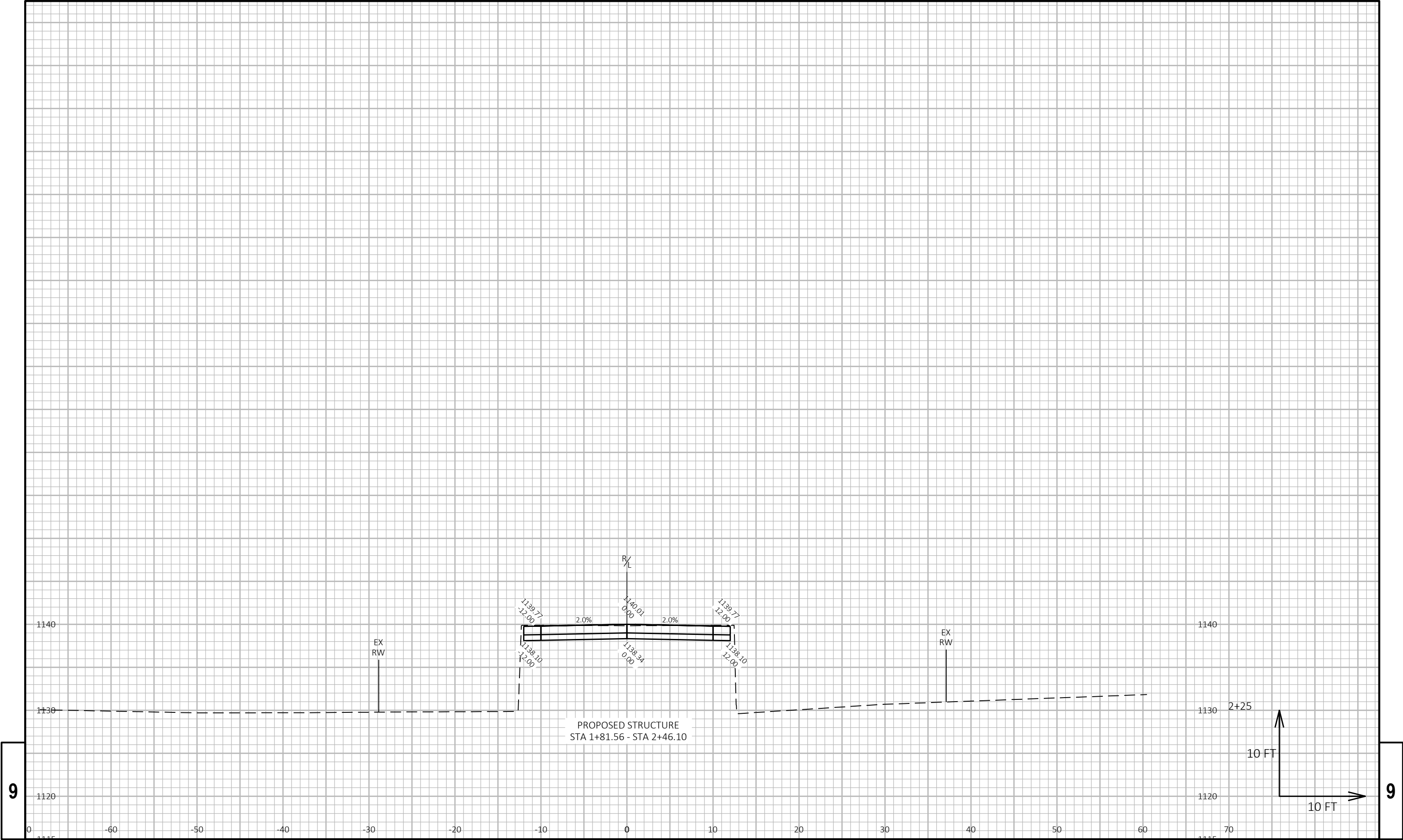
DIVISION - ALI_CL_CATLIN-NORTH OF BRIDGE

STATION	REAL STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1	1.25	NOTE 8
2+46.10	246.10	33.86	0.00	64.38	0	0	0	0	0	0
2+50.00	250.00	33.98	0.00	62.39	5	0	9	5	11	-6
2+75.00	275.00	37.29	0.00	39.34	33	0	47	38	70	-32
2+90.00	290.00	38.46	0.00	36.06	21	0	21	59	96	-37
2+94.83	294.83	0.00	0.00	0.00	3	0	3	62	100	-38

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	NO SALVAGED/UNUSEABLE PAVEMENT MATERIAL DUE TO AGGREGATE SURFACE
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: $[(\text{CUT} - \text{SALVAGED PAVT} - \text{EXPANDED MARSH EXC} - \text{EXPANDED EBS}) - ((\text{FILL} - \text{REDUCED MARSH IN FILL} - \text{REDUCED EBS IN FILL} - \text{EXPANDED ROCK}) * \text{FILL FACTOR})]$
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: $[\text{CUT} - \text{SALVAGED PAVT} - ((\text{FILL} - \text{REDUCED MARSH IN FILL} - \text{REDUCED EBS IN FILL} - \text{EXPANDED ROCK}) * \text{FILL FACTOR})]$
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: $[(\text{CUT} - \text{SALVAGED PAVT} - \text{EXPANDED MARSH EXC} - \text{EXPANDED EBS}) - ((\text{FILL} - \text{EXPANDED ROCK}) * \text{FILL FACTOR})]$
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: $[\text{CUT} - \text{SALVAGED PAVT} - ((\text{FILL} - \text{EXPANDED ROCK}) * \text{FILL FACTOR})]$

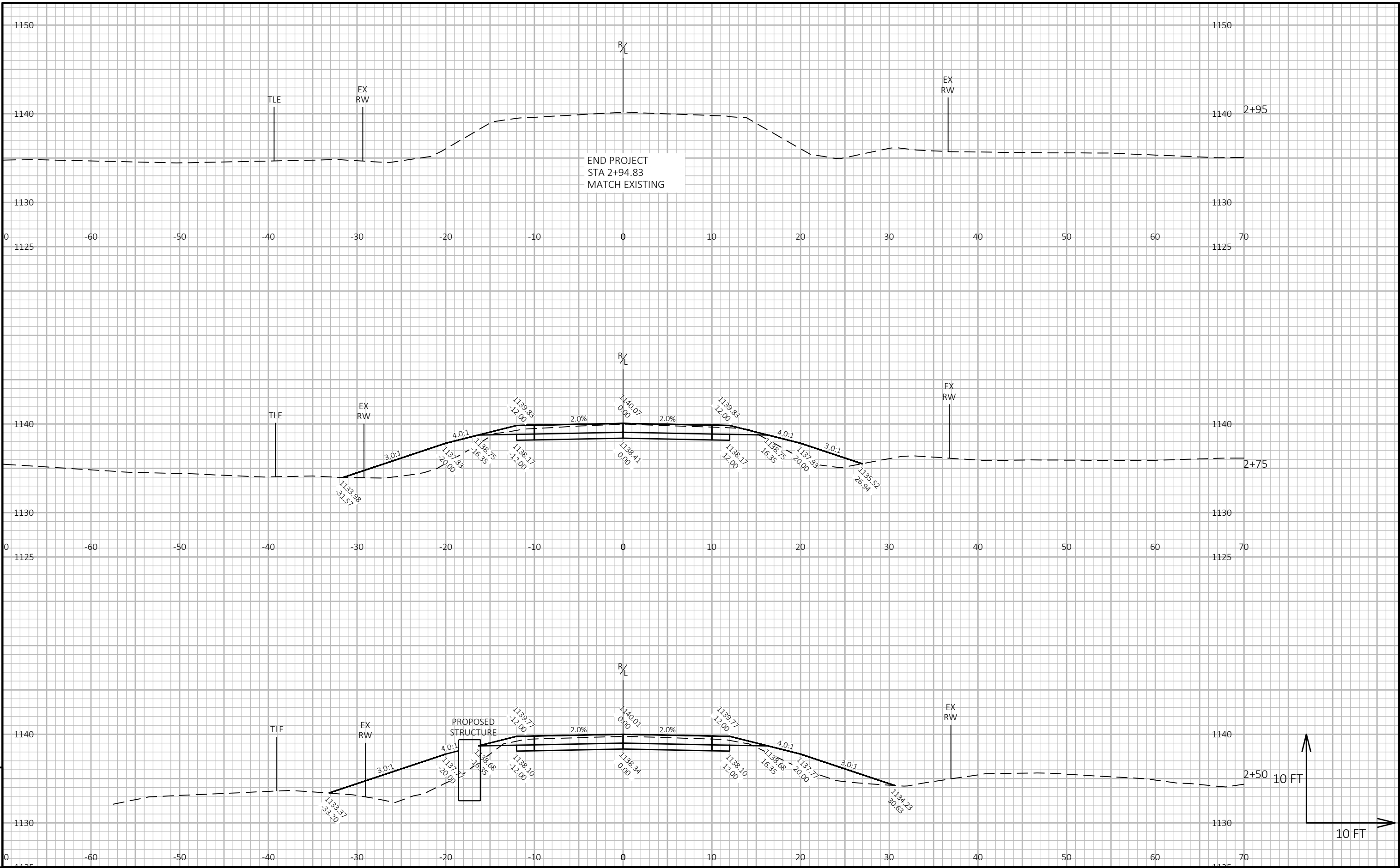




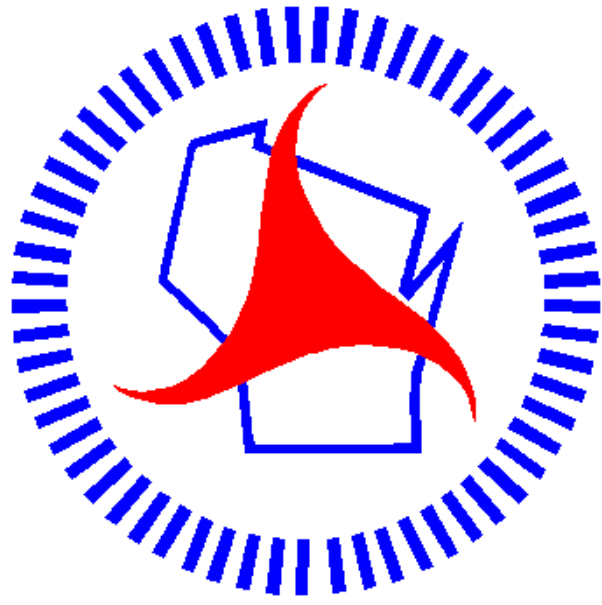


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Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

<http://www.dot.wisconsin.gov>