

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION PLAN OF PROPOSED IMPROVEMENT

T OF DARLINGTON, AMES ROAD AMES BRANCH BRIDGE B-33-0141 LOC STR LAFAYETTE COUNTY

STATE PROJECT NUMBER 5671-00-77

Table with columns: STATE PROJECT, FEDERAL PROJECT, PROJECT, CONTRACT. Values: 5671-00-77, WISC 2022162, 1.

ORDER OF SHEETS table with columns: Section No., Title. Lists sections 1 through 9.

TOTAL SHEETS = 40



PROJECT LOCATION

DESIGN DESIGNATION 5671-00-77 table with columns: Parameter, Value. Includes A.A.D.T., D.H.V., D.D., T., DESIGN SPEED, ESALS.

CONVENTIONAL SYMBOLS

Table of symbols for PLAN, PROFILE, and MARSH AREA. Includes symbols for corporate limits, property lines, lot lines, easements, slopes, culverts, and various utilities.

Table of symbols for PROFILE. Includes symbols for grade line, original ground, marsh/rock profile, special ditch, grade elevation, culvert, and utilities (electric, fiber optic, gas, sanitary sewer, storm sewer, telephone, water, utility pedestal, power pole, telephone pole).

Table of symbols for MARSH AREA. Includes symbols for rock, label, and various marsh types.



END PROJECT STA 13+41.25

STRUCTURE B-33-0141 STA 12+49.98

BEGIN PROJECT STA 11+58.71 Y = 154 512.205 X = 483 075.298

LAYOUT SCALE 0 1 MI TOTAL NET LENGTH OF CENTERLINE = 0.0346 MI

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

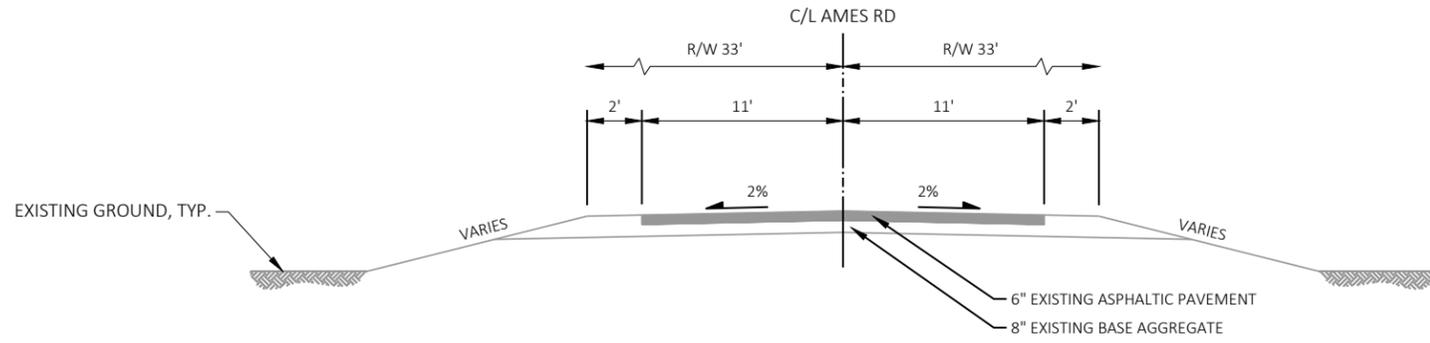
ACCEPTED FOR LAFAYETTE COUNTY. Signature of Don Kelly, Commissioner, dated 10/6/2021.

ORIGINAL PLANS PREPARED BY WESTBROOK Associated Engineers, Inc. 619 EAST HOXE STREET P.O. BOX 429 SPRING GREEN, WISCONSIN 53588 PHONE (608) 588-7866 FAX (608) 588-7954

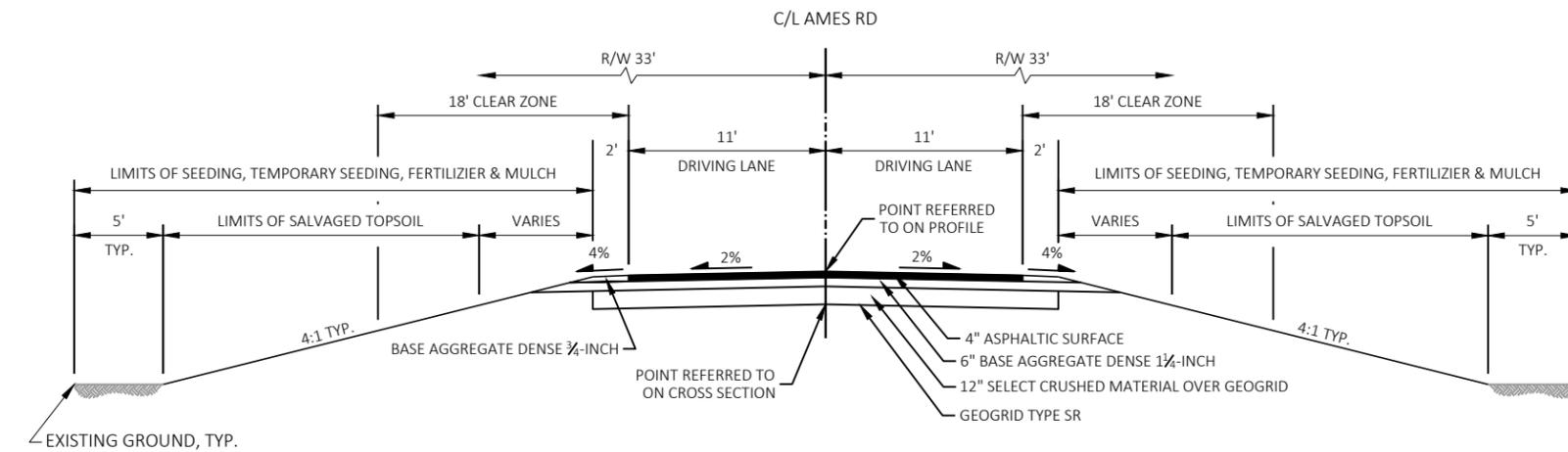
Professional Engineer Seal for Aaron B. Palmer, E-35695, Richland Center, WI. Signature of Aaron B. Palmer, dated 10/6/21.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION. PREPARED BY: Surveyor WESTBROOK ASSOCIATED ENGINEERS, INC., Designer WESTBROOK ASSOCIATED ENGINEERS, INC., Project Manager ALEIGHA BURG, PE, Regional Examiner SW REGION, Regional Supervisor JOHN STOLZMAN, PE.

APPROVED FOR THE DEPARTMENT. Signature of Aleigha Burg, P.E., dated 10/7/2021.



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

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									
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.30	.19	.28	.38
MEDIAN STRIP-TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
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 = 0.28 ACRES  
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.17 ACRES

GENERAL NOTES

- EROSION CONTROL ITEMS TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER. SILT FENCE AND TURBIDITY BARRIER SHALL BE IN PLACE PRIOR TO CONSTRUCTION.
- EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
- DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TEMPORARILY SEEDED, AND MULCHED AS DIRECTED BY THE ENGINEER.
- SEED ALL DISTURBED AREAS WITH SEED MIX NO. 75 AT AN EQUIVALENT RATE OF 0.7 LBS PER 1000 SF. OVERSOW ALL DISTURBED AREAS WITH SEED MIX NO. 30 AT A RATE OF 2 LBS PER 1000 SF.
- ALL RIPRAP ABOVE THE "ORDINARY HIGH WATER MARK" (OHWM) MUST BE TOP-DRESSED WITH 6-INCHES OF SALVAGED TOPSOIL AND SEEDED WITH SEED MIX NO. 75 AND SEED MIX NO. 30.
- NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
- WETLANDS ARE PRESENT IN THE LOCATIONS SHOWN ON THE PLANS. DO NOT OPERATE MACHINERY OUTSIDE OF THE SLOPE INTERCEPTS IN THESE LOCATIONS.
- REMOVAL OF ASPHALTIC SURFACES WHERE AN ABUTTING ASPHALTIC SURFACE IS TO REMAIN IN PLACE SHALL REQUIRE A SAWCUT MEETING THE APPROVAL OF THE ENGINEER IN THE FIELD.
- 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. MONUMENT IS TO BE FURNISHED BY THE STATE AND PLACED BY THE CONTRACTOR IN THE SAME WING THAT THE PROPOSED NAME PLATE WILL BE PLACED, AS DIRECTED BY THE ENGINEER.
- COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCSS), LAFAYETTE COUNTY, HORIZONTAL DATUM NAD83 (2011), ELEVATION DATUM NAVD88 (2012).
- THE 4-INCH ASPHALTIC SURFACE SHALL BE CONSTRUCTED USING A 2 1/4-INCH LOWER LAYER OF 19 MM NOMINAL SIZE AGGREGATE AND A 1 3/4-INCH UPPER LAYER OF 12.5 MM NOMINAL SIZE AGGREGATE.
- ASPHALTIC SURFACE CALCULATIONS ARE BASED ON 112 LB/SY/IN.

COMMUNICATIONS

LUMEN  
DOUG MCGOWAN  
135 N. BONSON ST.  
DARLINGTON, WI 53530  
  
(608) 482-5377  
Doug.Mcgowan1@lumen.com

CONTACTS

CONSULTANT LIAISON

WESTBROOK ASSOCIATED ENGINEERS, INC.  
619 EAST HOXIE STREET  
SPRING GREEN, WI 53588

ATTN: AARON PALMER, P.E.  
PH: (608) 588-7866  
FAX: (608) 588-7954  
apalmer@westbrookeng.com

WDNR LIAISON

DNR SOUTH CENTRAL REGION HEADQUARTERS  
3911 FISH HATCHERY ROAD  
FITCHBURG, WI 53711

ATTN: SHELLEY NELSON  
PH: (608) 444-2835  
Shelley.Nelson@wisconsin.gov

COUNTY LIAISON

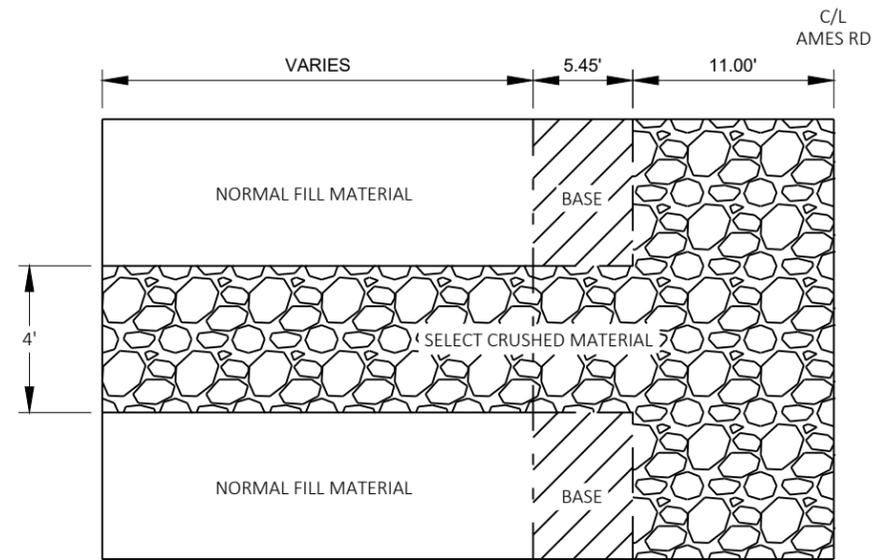
LAFAYETTE COUNTY HIGHWAY DEPARTMENT  
12016 HILL STREET  
P.O. BOX 100  
DARLINGTON, WI 53530

ATTN: DAN RIELLY  
PH: (608) 776-4917  
dan.rielly@lafayettecountywi.org

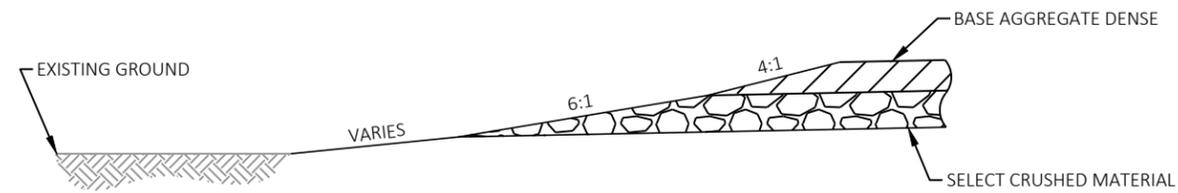
STANDARD ABBREVIATIONS

AADT	ANNUAL AVERAGE DAILY TRAFFIC	L.F.	LINEAR FEET	REQ'D	REQUIRED
AAG.	AGGREGATE	L.H.F.	LEFT HAND FORWARD	RT.	RIGHT
B.M.	BENCH MARK	L.S.	LUMP SUM	R/W	RIGHT-OF-WAY
C OR CL	CENTERLINE	LT.	LEFT	RD.	ROAD
CR.	CRUSHED	MAX.	MAXIMUM	RDWY.	ROADWAY
C.T.H.	COUNTY TRUNK HIGHWAY	MIN.	MINIMUM	S.	SOUTH
CWT.	HUNDREDWEIGHT	N.	NORTH	SE	SOUTHEAST
C.Y.	CUBIC YARD	NOR.	NORMAL	SHRK.	SHRINKAGE
D.H.	DOUBLE HEADED	PAVT.	PAVEMENT	S.R.	SIDE ROAD
D.H.V.	DESIGN HOURLY VOLUME	P.C.	POINT OF CURVE	STD.	STANDARD
DIR.	DIRECTED	P.I.	POINT OF INTERSECTION	S.T.H.	STATE TRUNK HIGHWAY
E.	EAST	P.E.	PRIVATE ENTRANCE	STA.	STATION
COR.	CORNER	P.K.	PARKER-KALON NAIL	S.Y.	SQUARE YARD
EL. OR ELEV.	ELEVATION	P OR PL	PROPERTY LINE	T	TANGENT LENGTH OF CURVE
F.E.	FIELD ENTRANCE	P.P.	POWER POLE	T	TRANSIT LINE
FT.	FOOT (FEET)	PROJ.	PROJECT	UNCL.	UNCLASSIFIED EXCAVATION
GAL.	GALLON	P.T.	POINT OF TANGENCY	V.	DESIGN SPEED
H.W.	HIGH WATER	PVMT.	PAVEMENT	V.C.	VERTICAL CURVE
IN.	INCHES	R.	RADIUS	VAR.	VARIABLE
K	SIGHT DISTANCE	R.R.	RAILROAD	W.	WEST
L.	LENGTH OF CURVE	REINF.	REINFORCED		

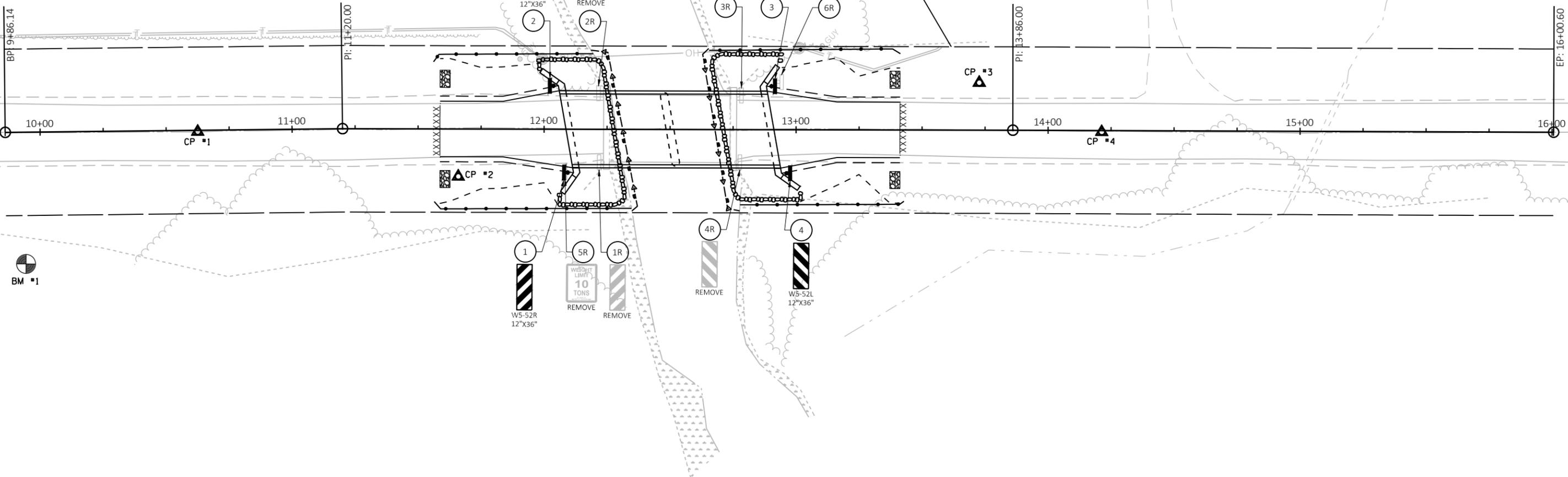




RELIEF TRENCH PLAN VIEW

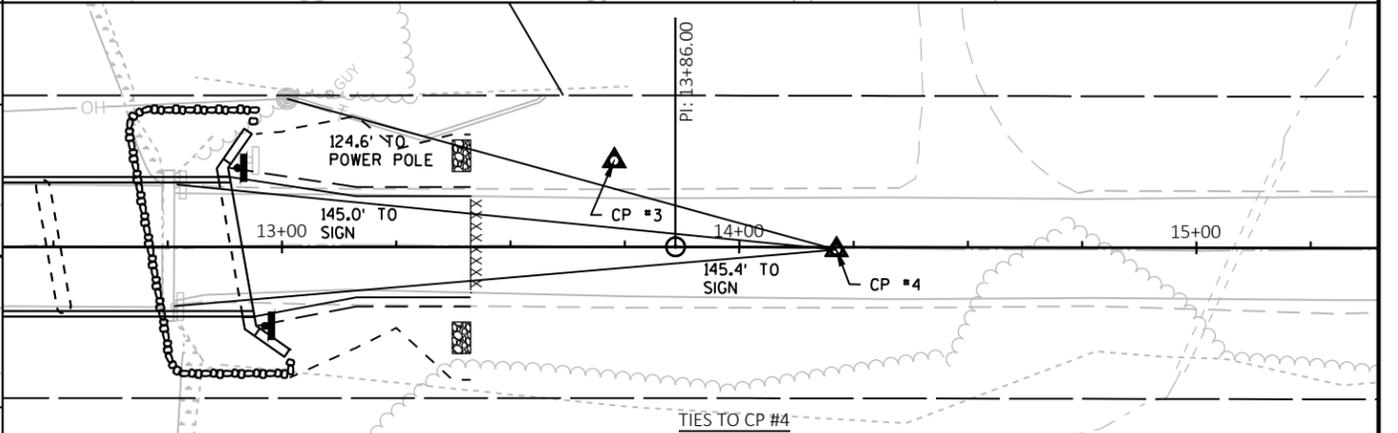
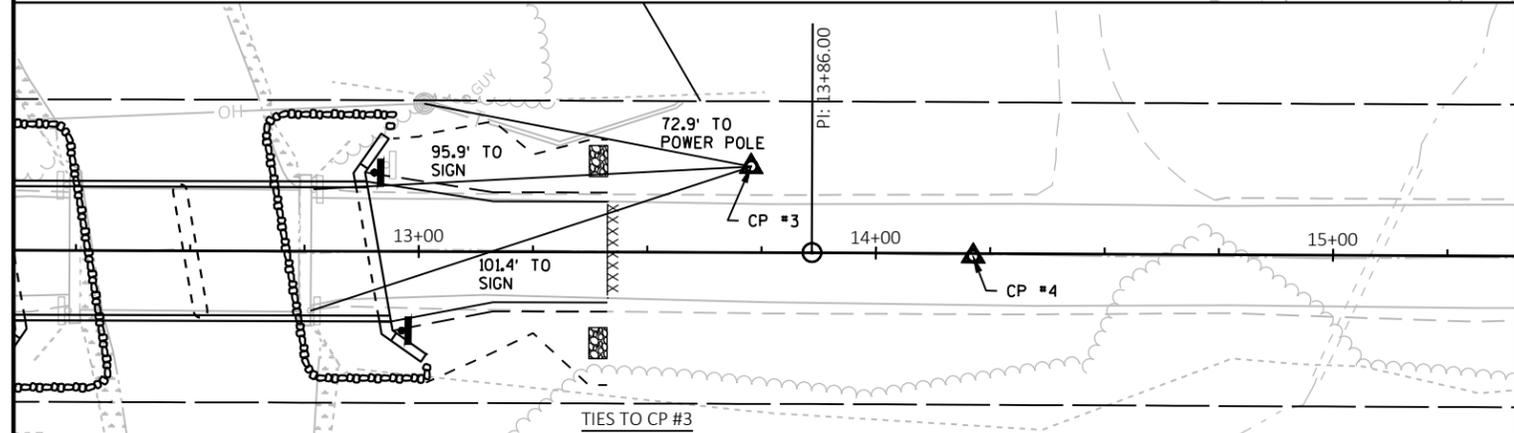
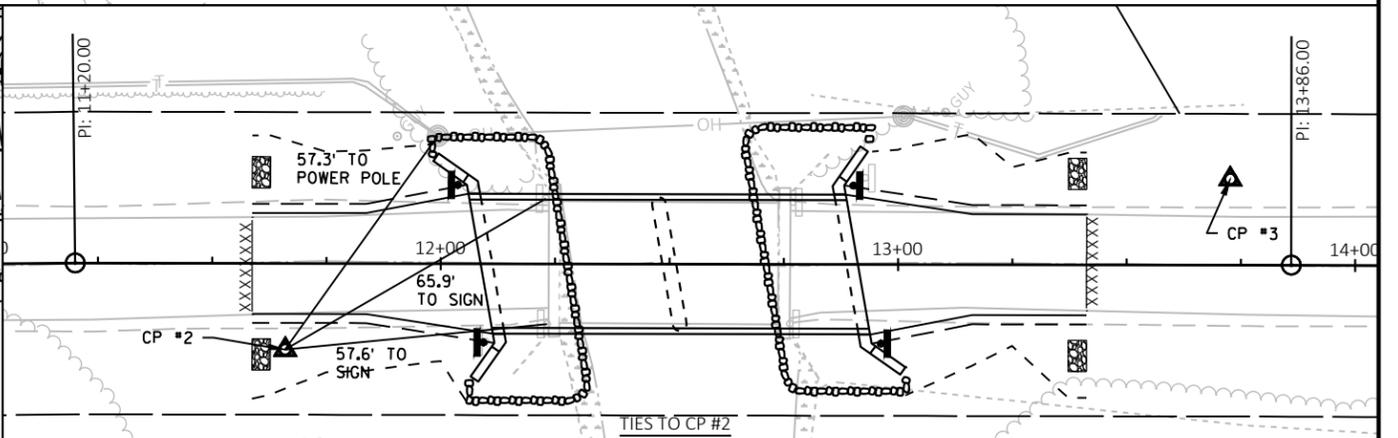
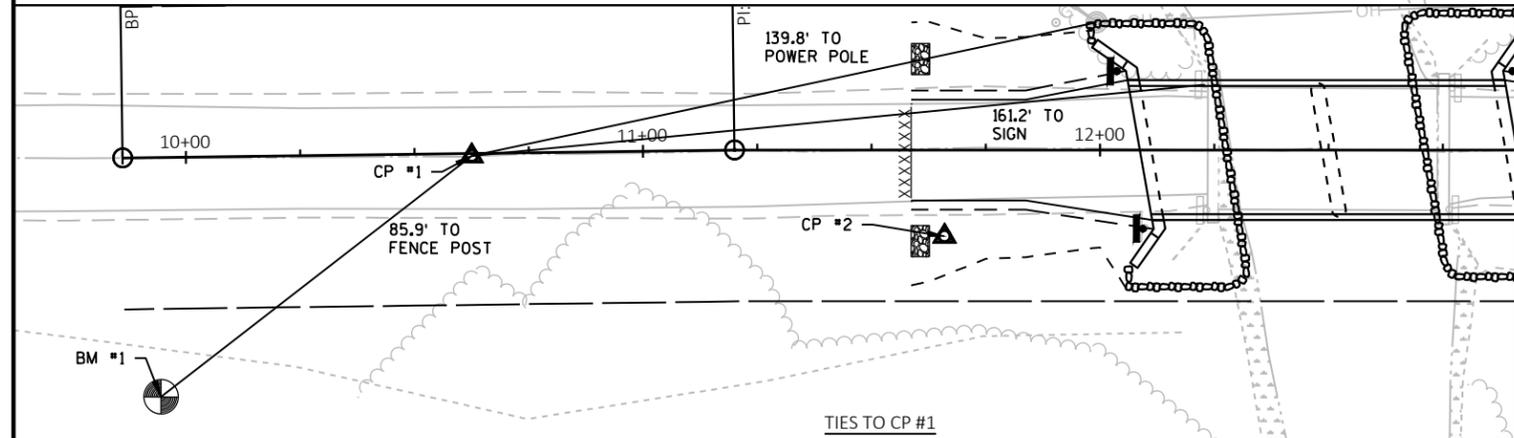
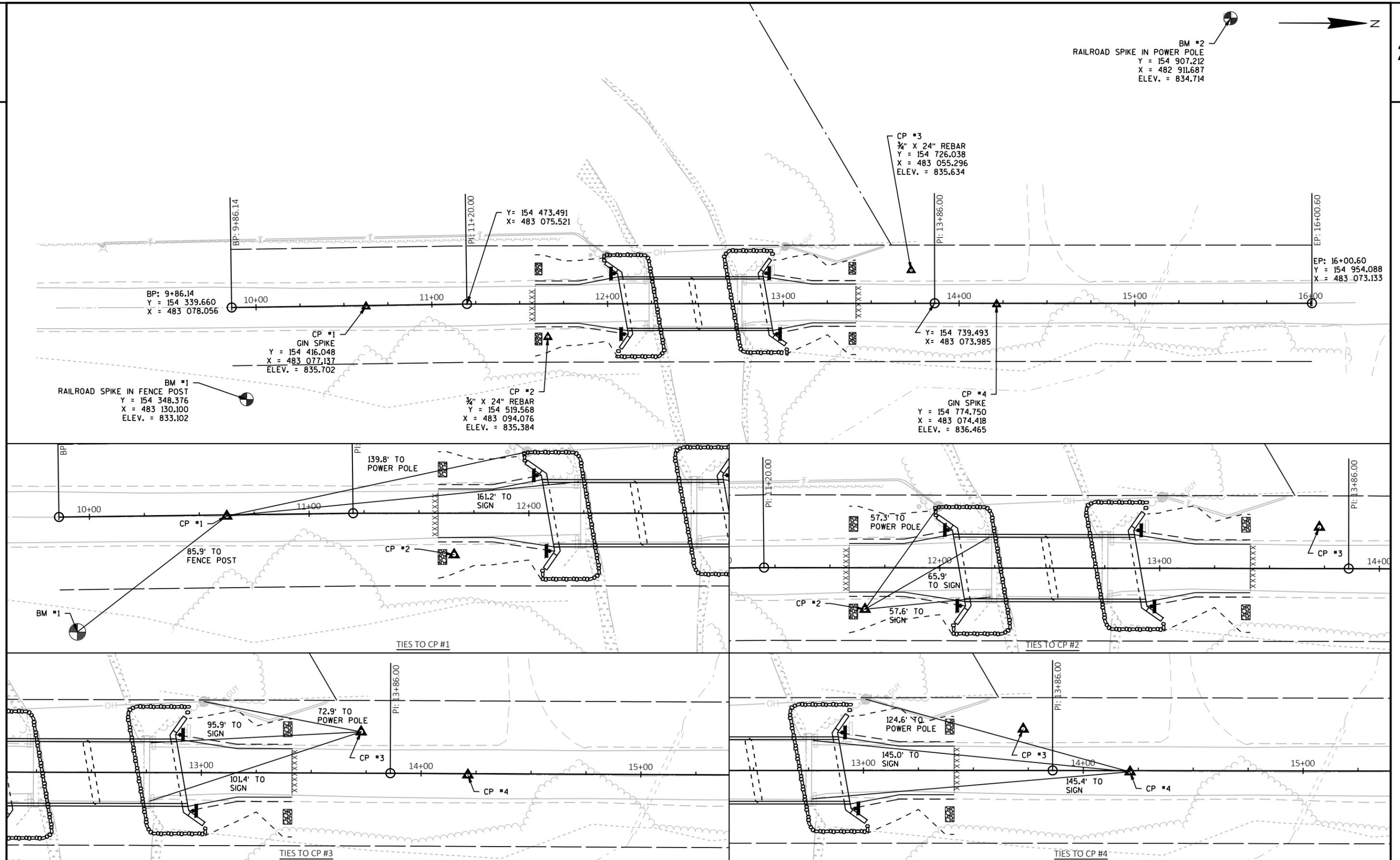


RELIEF TRENCH PROFILE VIEW



PROJECT NO: 5671-00-77	HWY: AMES ROAD	COUNTY: LAFAYETTE	SIGNING	SHEET	E
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BM #2  
RAILROAD SPIKE IN POWER POLE  
Y = 154 907.212  
X = 482 911.687  
ELEV. = 834.714



PROJECT NO: 5671-00-77	HWY: AMES ROAD	COUNTY: LAFAYETTE	ALIGNMENT DETAILS AND CONTROL POINTS	SHEET	E
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Estimate Of Quantities

5671-00-77

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. P-33-0173	EACH	1.000	1.000
0008	205.0100	Excavation Common	CY	212.000	212.000
0010	206.1000	Excavation for Structures Bridges (structure) 01. B-33-0141	LS	1.000	1.000
0012	210.1500	Backfill Structure Type A	TON	300.000	300.000
0014	213.0100	Finishing Roadway (project) 01. 5671-00-77	EACH	1.000	1.000
0016	305.0110	Base Aggregate Dense 3/4-Inch	TON	14.000	14.000
0018	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	116.000	116.000
0020	312.0110	Select Crushed Material	TON	206.000	206.000
0022	455.0605	Tack Coat	GAL	20.000	20.000
0024	465.0105	Asphaltic Surface	TON	62.000	62.000
0026	502.0100	Concrete Masonry Bridges	CY	226.000	226.000
0028	502.3200	Protective Surface Treatment	SY	358.000	358.000
0030	505.0400	Bar Steel Reinforcement HS Structures	LB	7,990.000	7,990.000
0032	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	37,280.000	37,280.000
0034	513.4061	Railing Tubular Type M	LF	170.000	170.000
0036	516.0500	Rubberized Membrane Waterproofing	SY	12.000	12.000
0038	550.0020	Pre-Boring Rock or Consolidated Materials	LF	72.000	72.000
0040	550.2104	Piling CIP Concrete 10 3/4 X 0.25-Inch	LF	350.000	350.000
0042	550.2144	Piling CIP Concrete 14 X 0.25-Inch	LF	150.000	150.000
0044	606.0300	Riprap Heavy	CY	172.000	172.000
0046	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	150.000	150.000
0048	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5671-00-77	EACH	1.000	1.000
0050	619.1000	Mobilization	EACH	1.000	1.000
0052	624.0100	Water	MGAL	1.400	1.400
0054	625.0500	Salvaged Topsoil	SY	155.000	155.000
0056	627.0200	Mulching	SY	450.000	450.000
0058	628.1504	Silt Fence	LF	375.000	375.000
0060	628.1520	Silt Fence Maintenance	LF	600.000	600.000
0062	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0064	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0066	628.6005	Turbidity Barriers	SY	178.000	178.000
0068	629.0210	Fertilizer Type B	CWT	0.350	0.350
0070	630.0130	Seeding Mixture No. 30	LB	12.000	12.000
0072	630.0175	Seeding Mixture No. 75	LB	8.000	8.000
0074	630.0200	Seeding Temporary	LB	20.000	20.000
0076	630.0500	Seed Water	MGAL	9.500	9.500
0078	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0080	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0082	638.2602	Removing Signs Type II	EACH	6.000	6.000
0084	638.3000	Removing Small Sign Supports	EACH	6.000	6.000
0086	642.5001	Field Office Type B	EACH	1.000	1.000
0088	643.0420	Traffic Control Barricades Type III	DAY	1,840.000	1,840.000
0090	643.0705	Traffic Control Warning Lights Type A	DAY	3,680.000	3,680.000
0092	643.0900	Traffic Control Signs	DAY	1,472.000	1,472.000
0094	643.5000	Traffic Control	EACH	1.000	1.000
0096	645.0111	Geotextile Type DF Schedule A	SY	68.000	68.000
0098	645.0120	Geotextile Type HR	SY	303.000	303.000

Estimate Of Quantities

5671-00-77

Line	Item	Item Description	Unit	Total	Qty
0100	645.0220	Geogrid Type SR	SY	314.000	314.000
0102	650.4500	Construction Staking Subgrade	LF	100.000	100.000
0104	650.5000	Construction Staking Base	LF	100.000	100.000
0106	650.6500	Construction Staking Structure Layout (structure) 01. B-33-0141	LS	1.000	1.000
0108	650.9910	Construction Staking Supplemental Control (project) 01. 5671-00-77	LS	1.000	1.000
0110	650.9920	Construction Staking Slope Stakes	LF	100.000	100.000
0112	690.0150	Sawing Asphalt	LF	42.000	42.000
0114	715.0502	Incentive Strength Concrete Structures	DOL	1,344.000	1,344.000
0116	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 12+50	EACH	1.000	1.000
0118	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0120	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000
0122	SPV.0180	Special Special 01. Salvaged Topsoil Over Riprap	SY	238.000	238.000

NOTE:  
ALL ITEMS CATEGORY 0010  
UNLESS OTHERWISE NOTED.

**EARTHWORK SUMMARY**

STATION - STATION	LOCATION	COMMON EXCAVATION (1) (ITEM # 205.0100)	SALVAGED / UNUSABLE PAVEMENT MATERIAL (3)	AVAILABLE MATERIAL (4)	UNEXPANDED FILL	EXPANDED FILL (5) FACTOR 1.25	MASS ORDINATE +/- (6)	BORROW  (ITEM # 208.0100)	COMMENT:
		CUT (2)							
11+59 - 12+09	SOUTH APPROACH	111	19	92	0	0	92	0	
12+91 - 13+41	NORTH APPROACH	101	19	82	0	0	82	0	
TOTALS		212	38	174	0	0	174	0	

- 1) COMMON EXCAVATION IS THE CUT. ITEM # 205.0100.
- 2) SALVAGED/UNUSABLE MATERIAL IS INCLUDED IN CUT.
- 3) SALVAGED/UNUSABLE MATERIAL INCLUDES ASPHALTIC PAVEMENT.
- 4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE MATERIAL
- 5) EXPANDED FILL FACTOR = 1.25; EXPANDED FILL = (UNEXPANDED FILL)\*1.25
- 6) THE MASS ORDINATE + OR - CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL IN THE DIVISION.

**CLEARING AND GRUBBING**

STATION - STATION	LOCATION	201.0105 CLEARING (STA)	201.0205 GRUBBING (STA)
12+00 - 14+00	MAINLINE	2	2
TOTALS		2	2

**BASE AGGREGATE DENSE**

STATION - STATION	LOCATION	305.0110 3/4-INCH BASE (TON)	305.0120 1 1/4-INCH BASE (TON)	312.0110 SELECT CRUSHED MATERIAL (TON)	624.0100 WATER (MGAL)	645.022 GEOGRID TYPE SR (SY)
11+59 - 12+09	MAINLINE	7	58	103	0.7	157
12+91 - 13+41	MAINLINE	7	58	103	0.7	157
TOTALS		14	116	206	1.4	314

**ASPHALTIC ITEMS**

STATION - STATION	LOCATION	455.0600 TACK COAT (GAL)	465.0105 ASPHALTIC SURFACE (TON)
11+59 - 12+09	MAINLINE	10	31
12+91 - 13+41	MAINLINE	10	31
TOTALS		20	62

**MOBILIZATIONS EROSION CONTROL**

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)
ID 5671-00-77	3	2
TOTALS	3	2

**SILT FENCE**

STATION - STATION	LOCATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)
11+59 - 12+09	MAINLINE, LT	67	134
11+59 - 12+09	MAINLINE, RT	82	164
12+91 - 13+41	MAINLINE, LT	82	164
12+91 - 13+41	MAINLINE, RT	69	138
UNDISTRIBUTED		75	---
TOTALS		375	600

**TURBIDITY BARRIER**

LOCATION	628.6005 (SY)
SOUTH APPROACH	96
NORTH APPROACH	82
TOTALS	178

PROJECT NO: 5671-00-77

HWY: AMES ROAD

COUNTY: LAFAYETTE

MISCELLANEOUS QUANTITIES

SHEET

E

NOTE:  
ALL ITEMS CATEGORY 0010  
UNLESS OTHERWISE NOTED.

**FINISHING ITEMS**

STATION - STATION	LOCATION	625.0500	627.0200	629.0210	630.0130	630.0175	630.0200	630.0500	SPV.0180.01
		SALVAGED TOPSOIL (SY)	MULCHING (SY)	FERTILIZER TYPE B (CWT)	SEEDING MIX NO. 30 (LB)	SEEDING MIX NO. 75 (LB)	SEEDING TEMPORARY (LB)	SEED WATER (MGAL)	SALVAGED TOPSOIL OVER RIPRAP (SY)
11+59 - 12+09	MAINLINE, LT	34	34	0.03	1	1	2	0.9	--
11+59 - 12+09	MAINLINE, RT	33	33	0.03	1	1	2	0.9	--
12+91 - 13+41	MAINLINE, LT	36	36	0.04	1	1	2	0.7	--
12+91 - 13+41	MAINLINE, RT	20	20	0.02	1	1	1	0.9	--
	SOUTH RIPRAP	--	115	0.07	2	1	4	2.1	115
	NORTH RIPRAP	--	123	0.08	3	1	4	2.0	123
	UNDISTRIBUTED	32	89	0.08	3	2	5	2.0	--
<b>TOTALS</b>		<b>155</b>	<b>450</b>	<b>0.35</b>	<b>12</b>	<b>8</b>	<b>20</b>	<b>9.5</b>	<b>238</b>

**SIGNING**

STATION	LOCATION	SIGN NUMBER	SIGN CODE	634.0612	637.2230	638.2602	638.3000	NOTES
				POSTS WOOD 4X6-INCH X 12-FT (EACH)	SIGNS TYPE II REFLECTIVE TYPE F (SF)	REMOVING SIGN TYPE II (EACH)	REMOVING SMALL SIGN SUPPORTS (EACH)	
12+04	LT	2	W5-52L	1	3	--	--	BRIDGE HASH MARKS
12+09	RT	1	W5-52R	1	3	--	--	BRIDGE HASH MARKS
12+10	RT	5R	--	--	--	1	1	LOAD POSTING
12+23	LT	2R	W5-52L	--	--	1	1	BRIDGE HASH MARKS
12+23	RT	1R	W5-52R	--	--	1	1	BRIDGE HASH MARKS
12+77	LT	3R	W5-52R	--	--	1	1	BRIDGE HASH MARKS
12+77	RT	4R	W5-52L	--	--	1	1	BRIDGE HASH MARKS
12+90	LT	3	W5-52R	1	3	--	--	BRIDGE HASH MARKS
12+93	LT	6R	--	--	--	1	1	LOAD POSTING
12+96	RT	4	W5-52L	1	3	--	--	BRIDGE HASH MARKS
<b>TOTAL</b>				<b>4</b>	<b>12</b>	<b>6</b>	<b>6</b>	

**TRAFFIC CONTROL**

LOCATION	DURATION	643.0420		643.0705		643.0900		643.5000
		TRAFFIC CONTROL BARRICADES TYPE III (NO.)	(DAY)	TRAFFIC CONTROL WARNING LIGHTS TYPE A (NO.)	(DAY)	TRAFFIC CONTROL SIGNS (NO.)	(DAY)	TRAFFIC CONTROL (EACH)
NORTH APPROACH	92	9	828	18	1656	7	644	1
SOUTH APPROACH	92	9	828	18	1656	7	644	--
UNDISTRIBUTED	92	2	184	4	368	2	184	--
<b>TOTAL</b>		<b>20</b>	<b>1840</b>	<b>40</b>	<b>3680</b>	<b>16</b>	<b>1472</b>	<b>1</b>

PLACE TRAFFIC CONTROL IN ACCORDANCE WITH SDD 15C2.  
PLACEMENT SUBJECT TO ENGINEER APPROVAL.

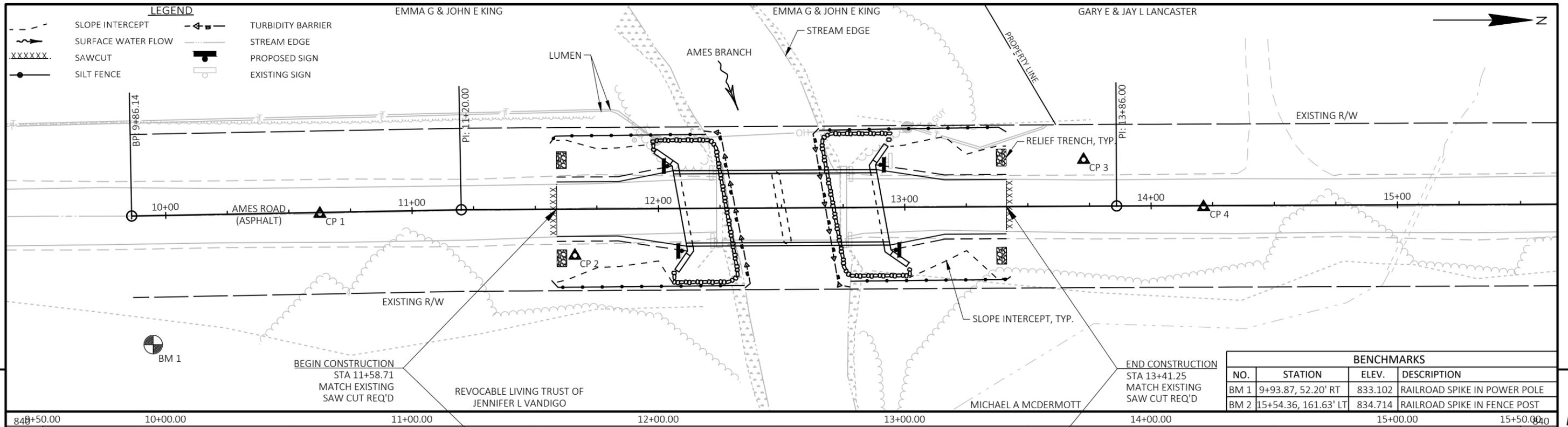
**CONSTRUCTION STAKING**

STATION	LOCATION	650.4500	650.5000	650.6500	650.9910	650.992
		SUBGRADE (LF)	BASE (LF)	STRUCTURE LAYOUT 01. B-60-0153 (LS)	SUPPLEMENTAL CONTROL (LS)	SLOPE STAKES (LF)
11+59 - 12+09	MAINLINE	50	50	--	--	50
12+91 - 13+41	MAINLINE	50	50	--	--	50
--	PROJECT	--	--	1	1	--
<b>TOTALS</b>		<b>100</b>	<b>100</b>	<b>1*</b>	<b>1</b>	<b>100</b>

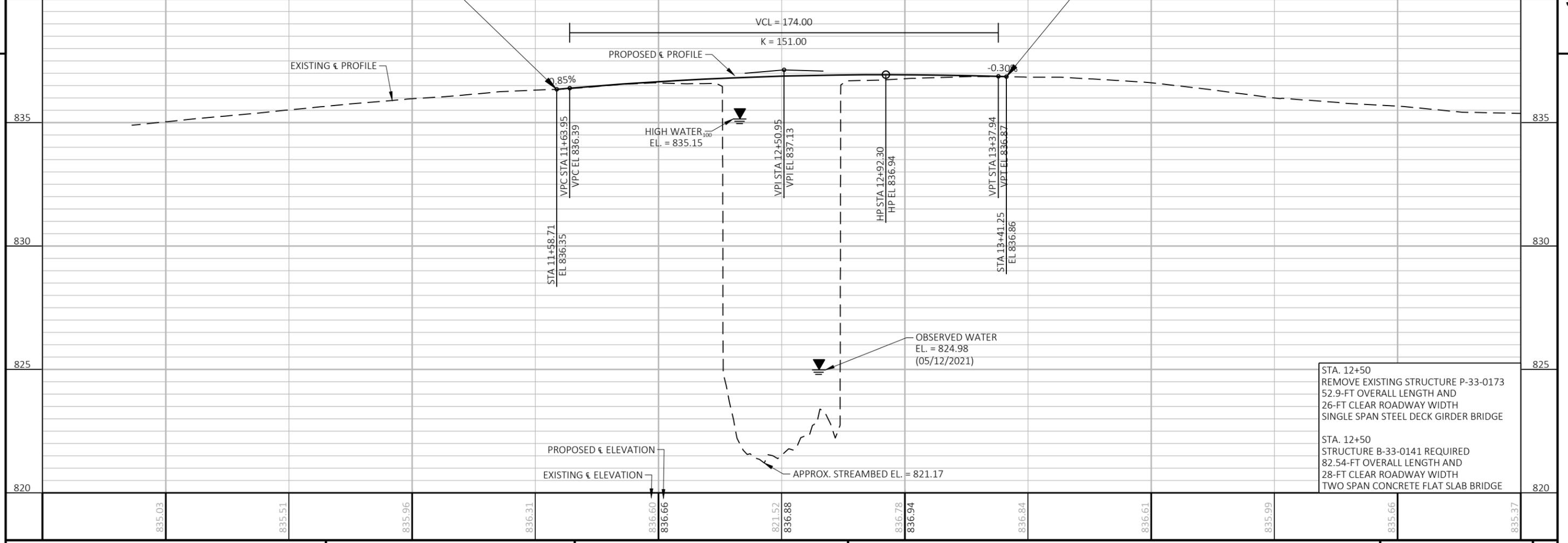
\* CATEGORY 0020

**SAWING ASPHALT**

STATION	LOCATION	690.0150 (LF)
11+59	MAINLINE	21
13+41	MAINLINE	21
<b>TOTAL</b>		<b>42</b>



BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM 1	9+93.87, 52.20' RT	833.102	RAILROAD SPIKE IN POWER POLE
BM 2	15+54.36, 161.63' LT	834.714	RAILROAD SPIKE IN FENCE POST



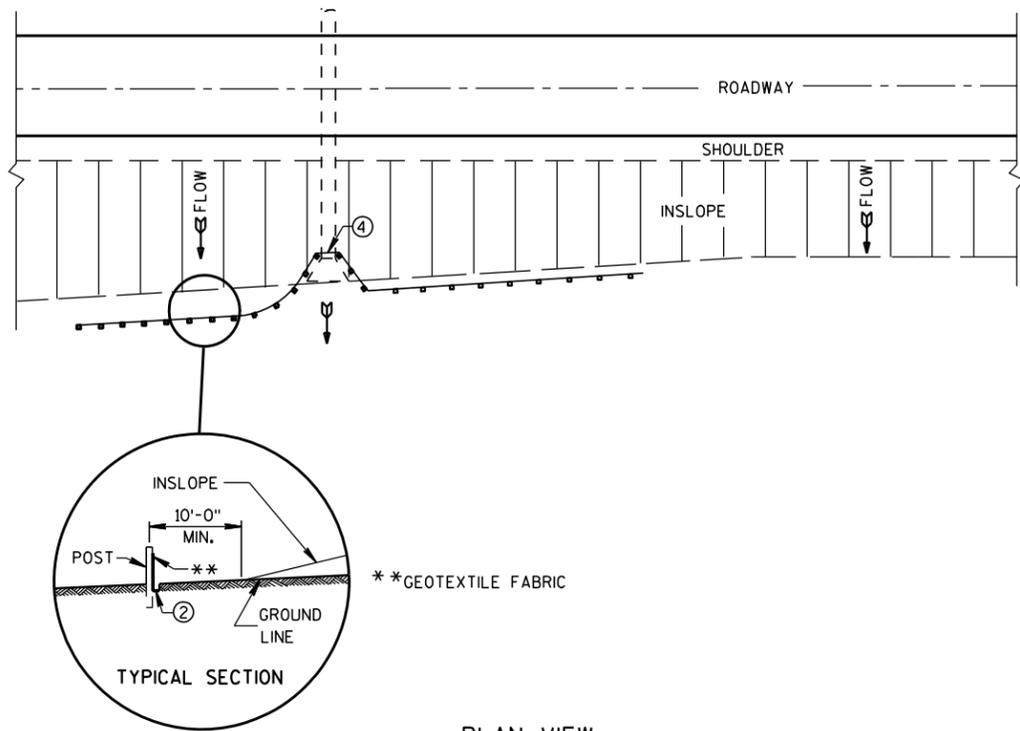
STA. 12+50  
 REMOVE EXISTING STRUCTURE P-33-0173  
 52.9-FT OVERALL LENGTH AND  
 26-FT CLEAR ROADWAY WIDTH  
 SINGLE SPAN STEEL DECK GIRDER BRIDGE

STA. 12+50  
 STRUCTURE B-33-0141 REQUIRED  
 82.54-FT OVERALL LENGTH AND  
 28-FT CLEAR ROADWAY WIDTH  
 TWO SPAN CONCRETE FLAT SLAB BRIDGE

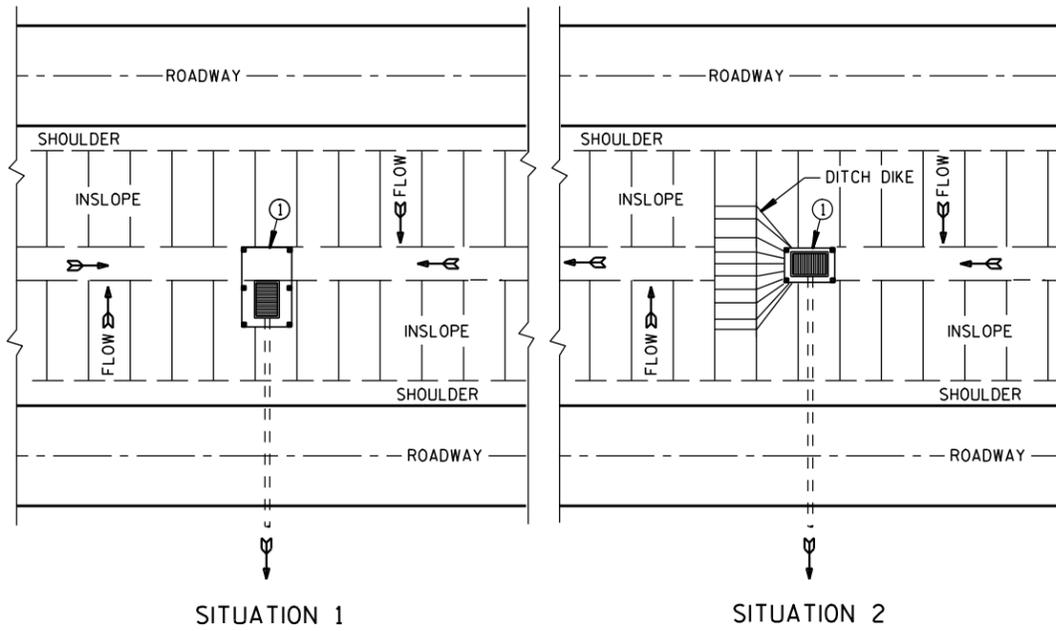
PROJECT NO: 5671-00-77	HWY: AMES ROAD	COUNTY: LAFAYETTE	PLAN AND PROFILE	SHEET	<b>E</b>
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## Standard Detail Drawing List

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
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS



PLAN VIEW  
TYPICAL APPLICATION OF SILT FENCE

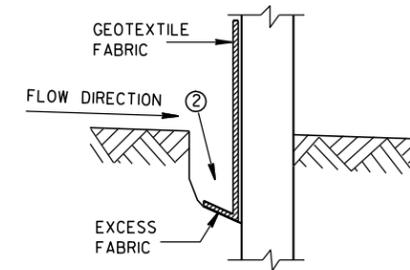


SITUATION 1 SITUATION 2  
PLAN VIEW  
SILT FENCE AT MEDIAN SURFACE DRAINS

**GENERAL NOTES**

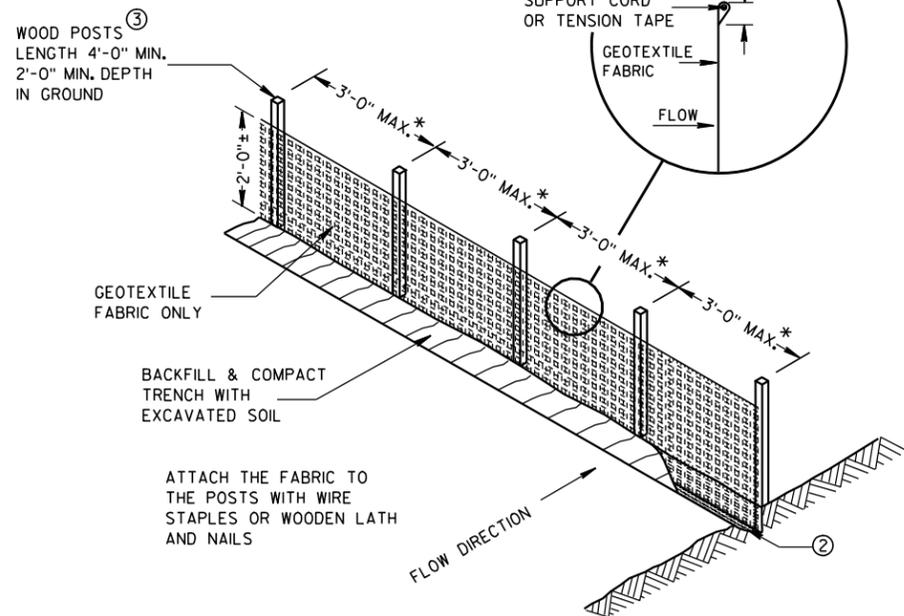
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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



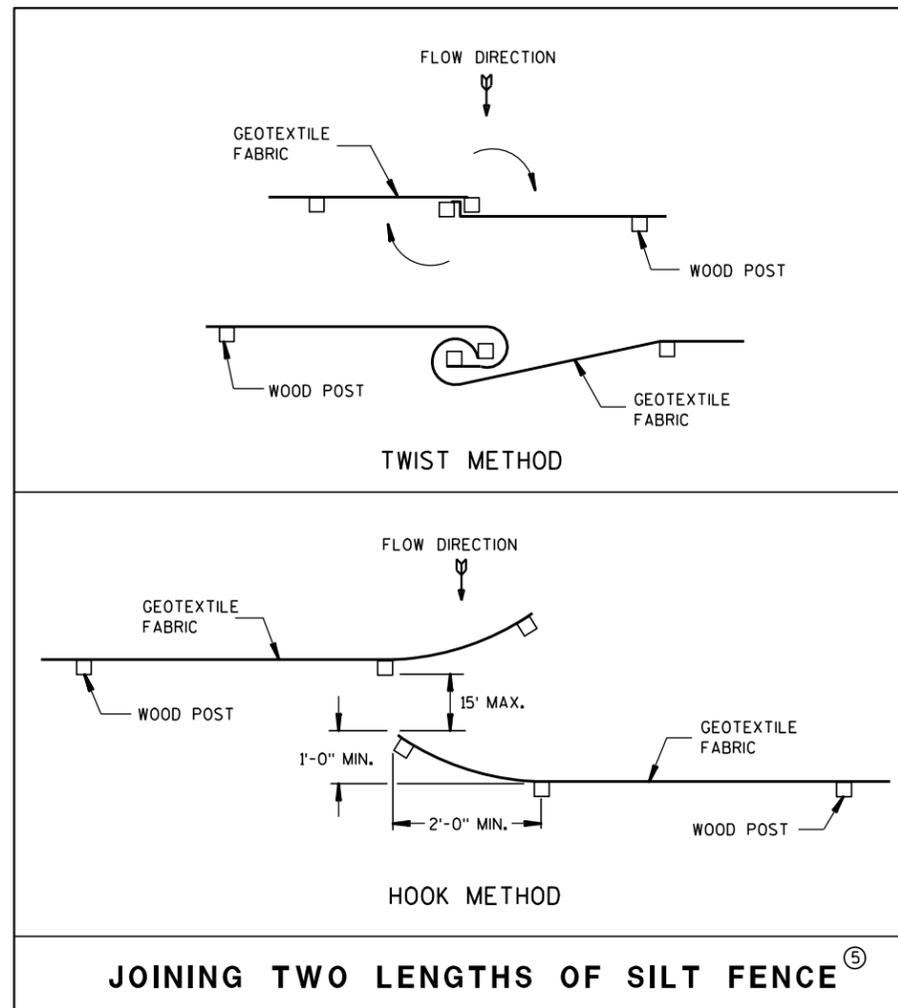
TRENCH DETAIL

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

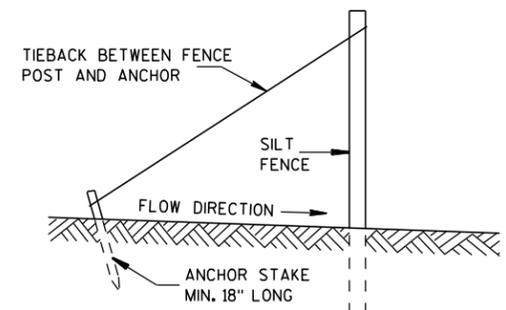


SILT FENCE

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



JOINING TWO LENGTHS OF SILT FENCE ⑤

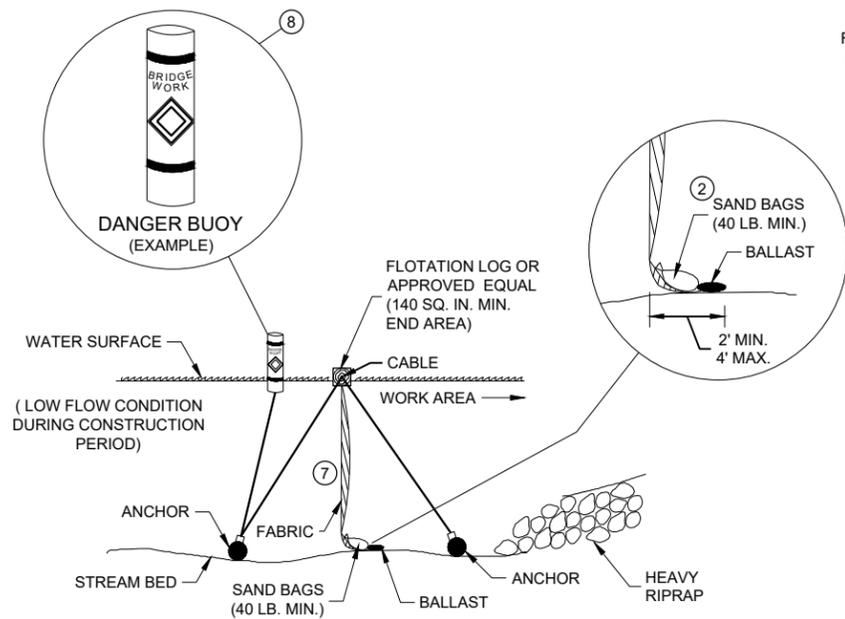


SILT FENCE TIE BACK  
(WHEN REQUIRED BY THE ENGINEER)

**SILT FENCE**

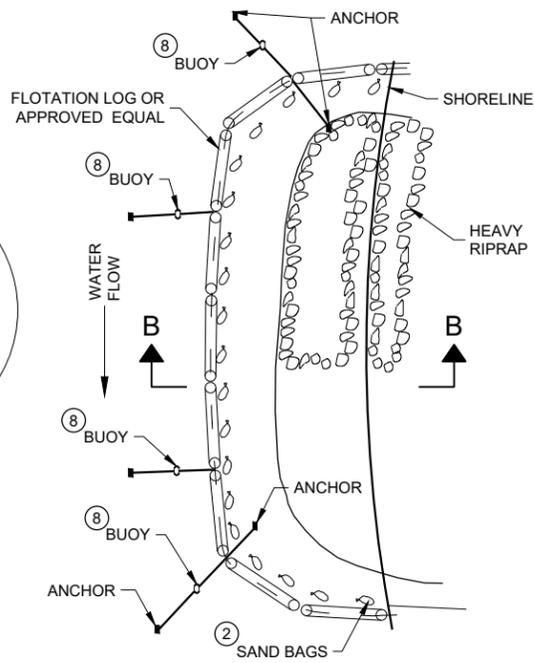
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

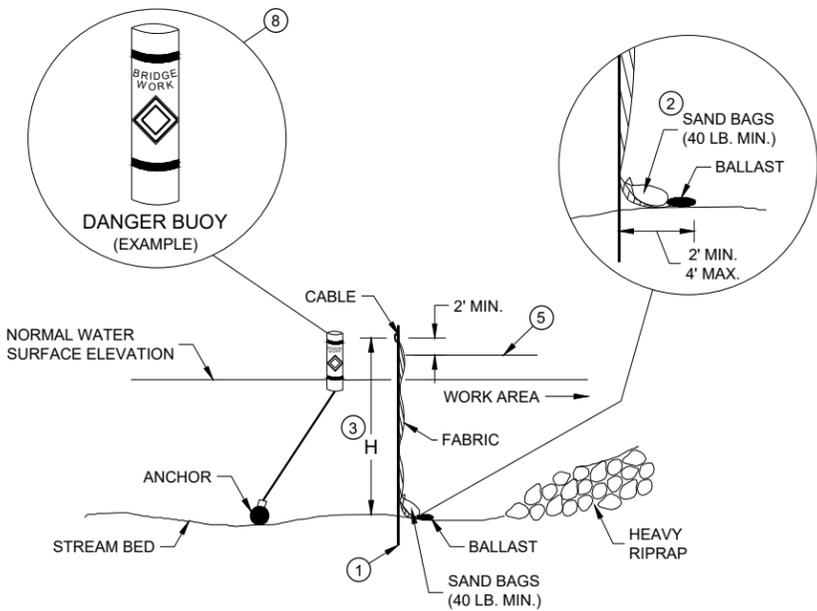


**SECTION B - B**

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

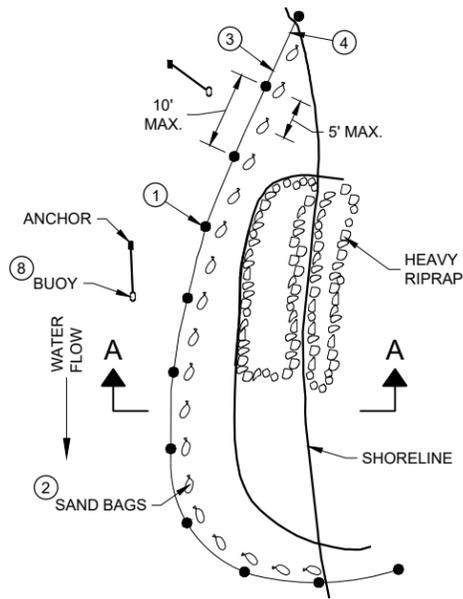


**PLAN VIEW**



**SECTION A - A**

**TURBIDITY BARRIER - STANDARD POST INSTALLATION**



**PLAN VIEW**

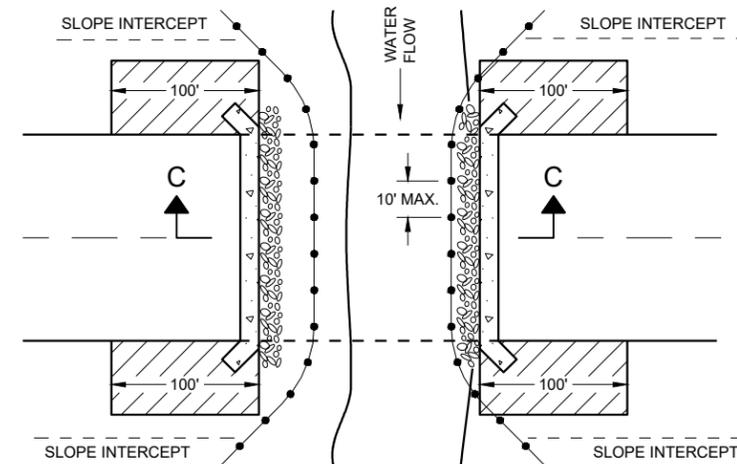
**TURBIDITY BARRIER PLACEMENT DETAILS**

**GENERAL NOTES**

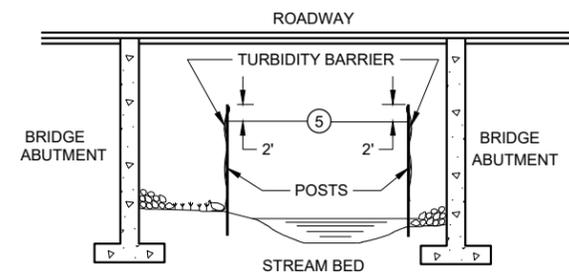
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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**

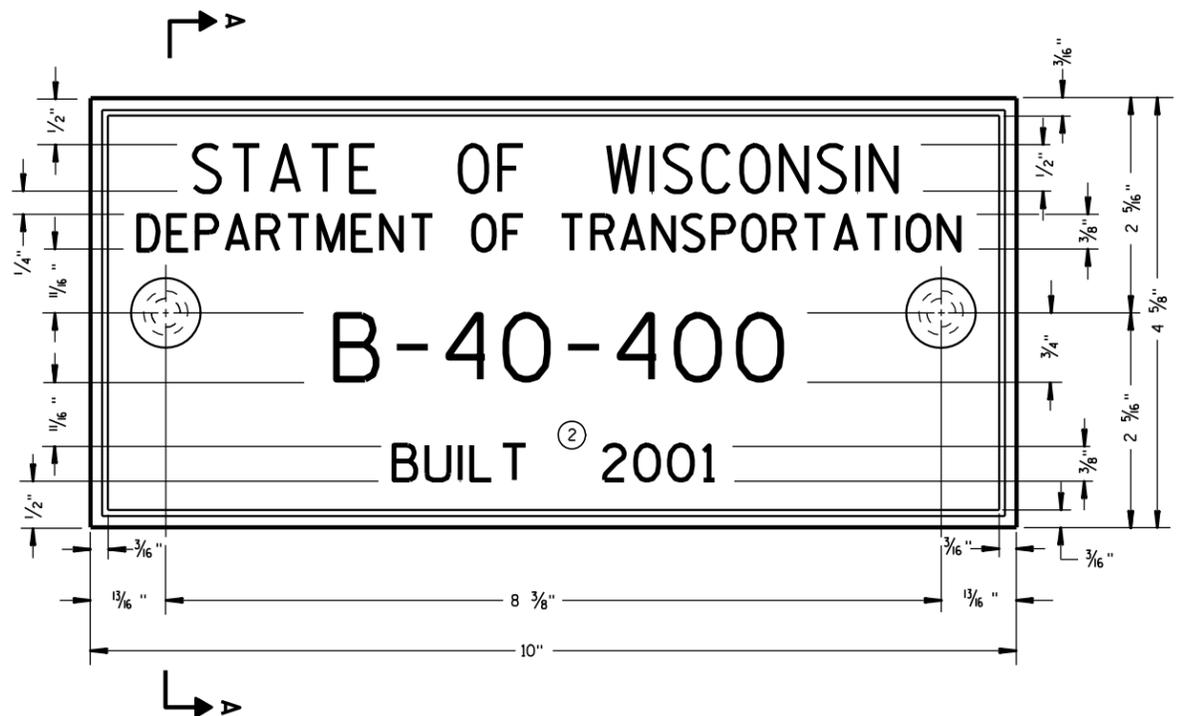
**TURBIDITY BARRIER DETAIL SHOWING  
TYPICAL PLACEMENT AT STRUCTURES**

**TURBIDITY BARRIER**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

FHWA



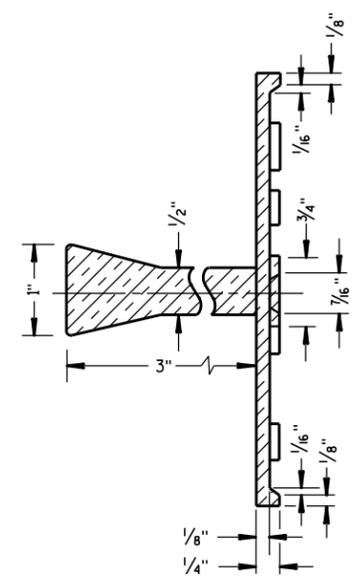
**TYPICAL NAME PLATE**  
(BRIDGES, CULVERTS, AND RETAINING WALLS)

**GENERAL NOTES**

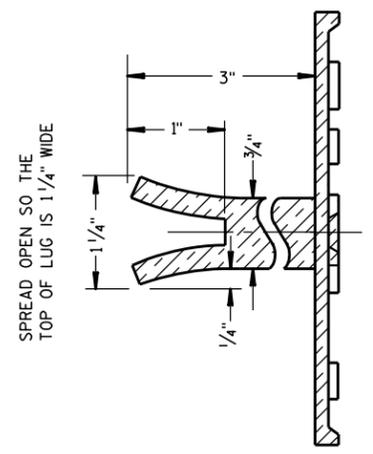
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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**



**ALTERNATE LUG**

6

6

FOR MULTI-UNIT STRUCTURES  
LINE 3 ABOVE SHALL READ

B = BRIDGE  
C = CULVERT  
R = RETAINING WALL

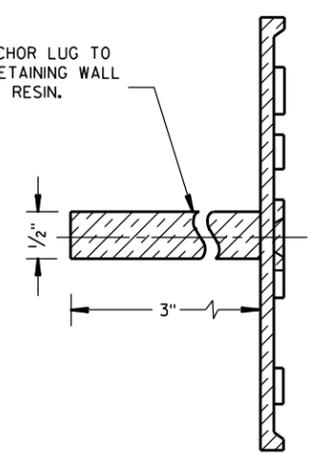
COUNTY NO.      BRIDGE NO.

UNIT NO. FOR MULTIPLE  
UNIT BRIDGE

**B-40-400-1A**

**NUMBERING DESIGNATION  
MULTI-UNIT STRUCTURES**

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

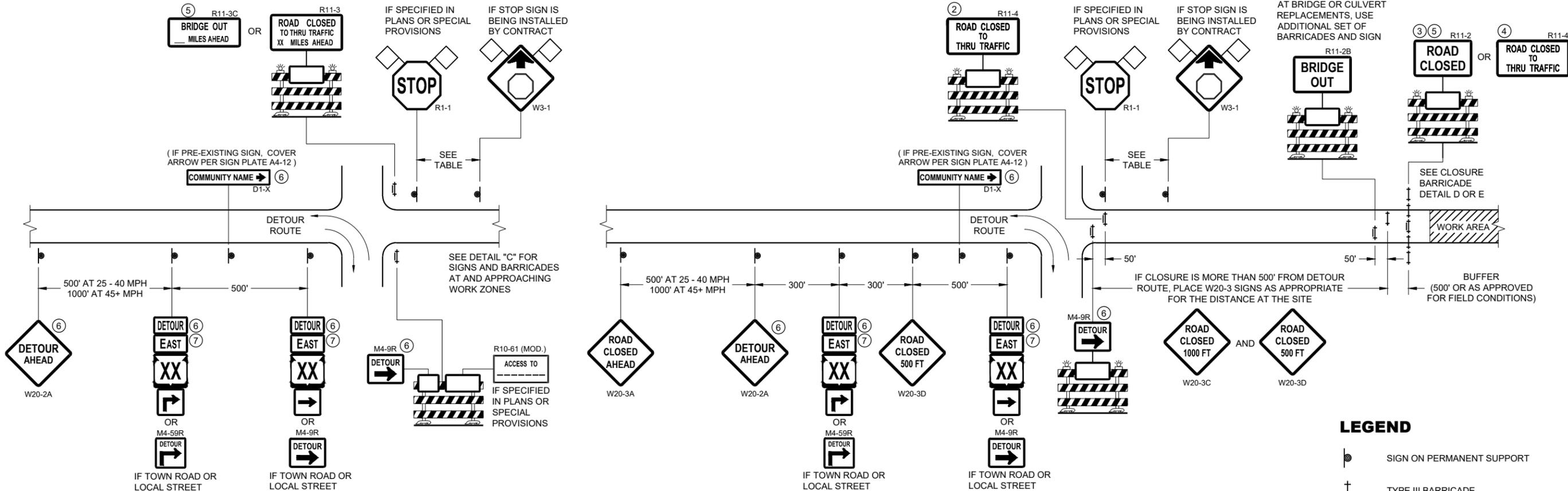


**ALTERNATE LUG**  
(FOR ATTACHMENT TO PRECAST STRUCTURES)

S.D.D. 12 A 3-10

S.D.D. 12 A 3-10

<b>NAME PLATE (STRUCTURES)</b>	
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 )

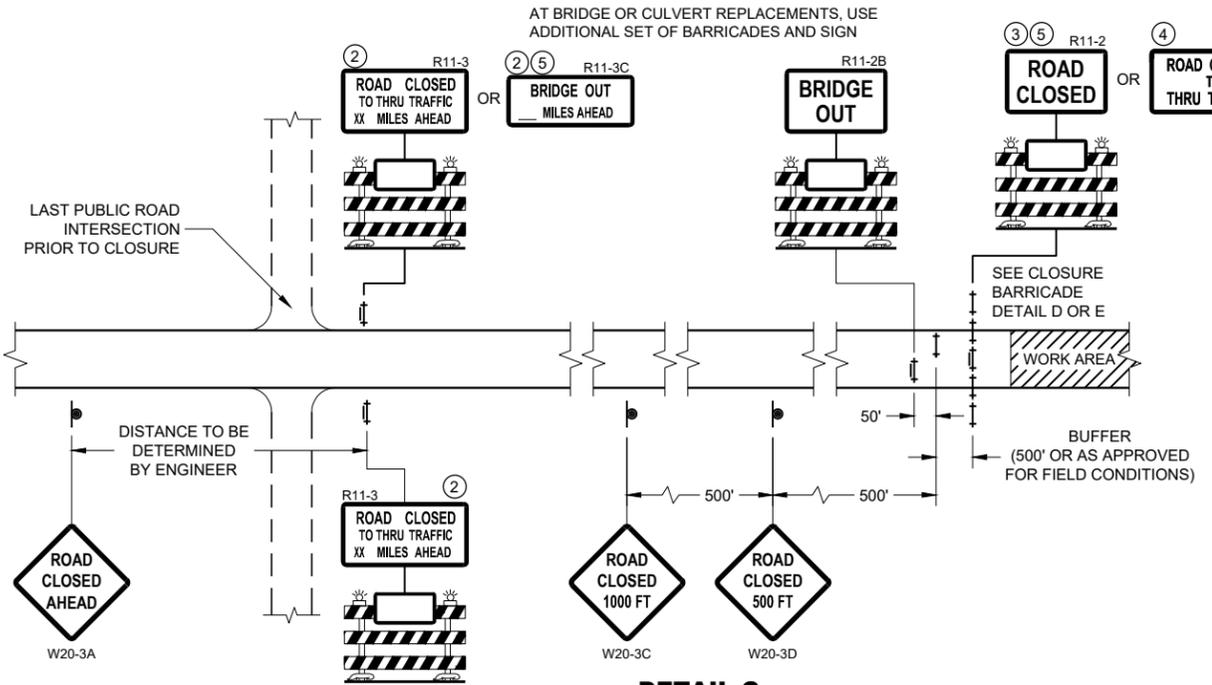
**LEGEND**

- 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)

M4 - 8  
 M3 - X  
 OR OR 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



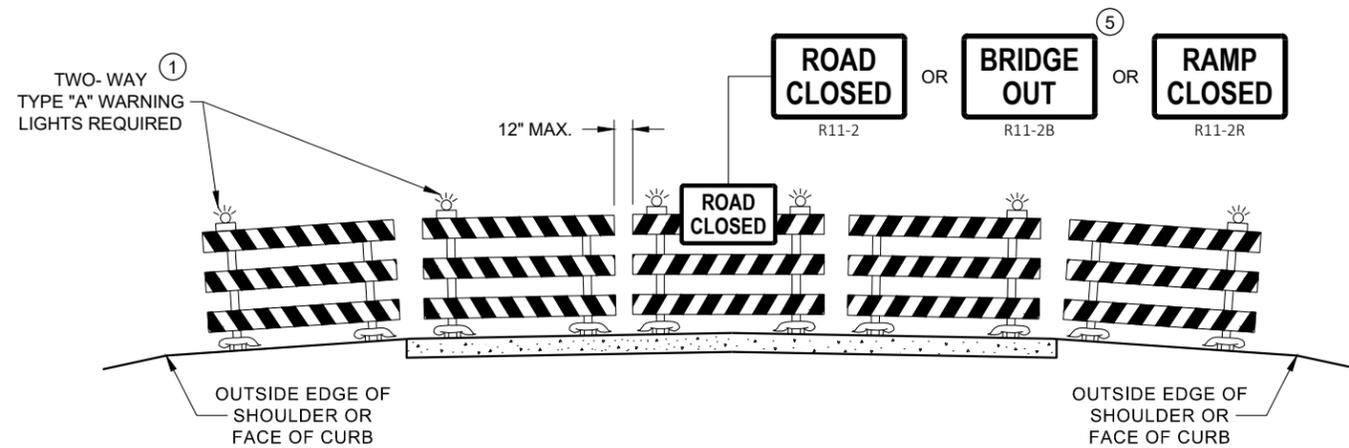
**DETAIL C  
MAINLINE CLOSURE, NO POSTED DETOUR**

**BARRICADES AND SIGNS  
FOR MAINLINE CLOSURES**

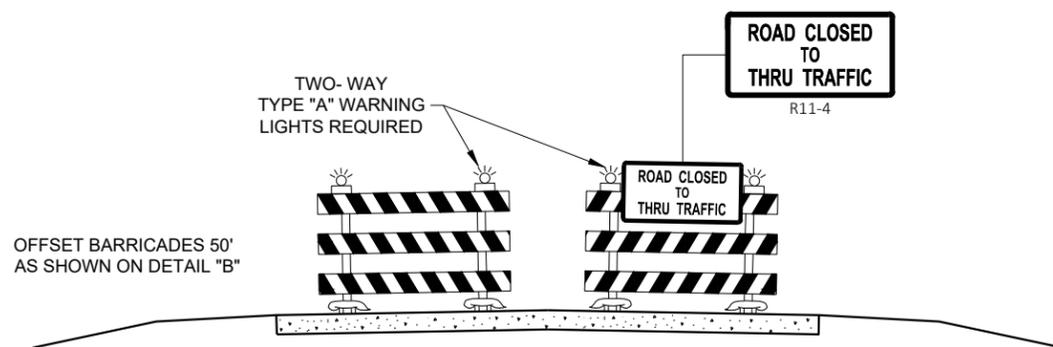
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

### GENERAL NOTES

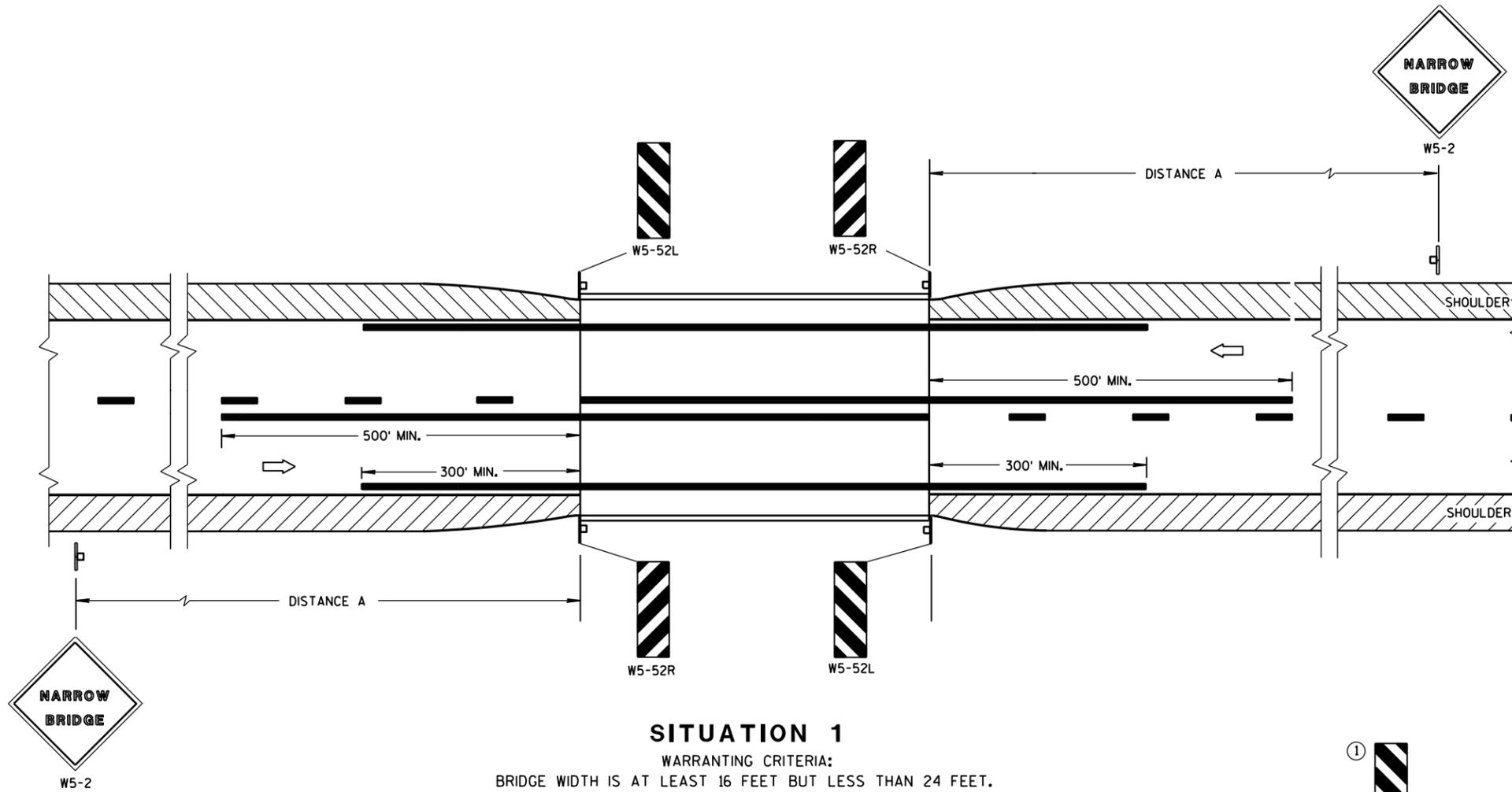
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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.

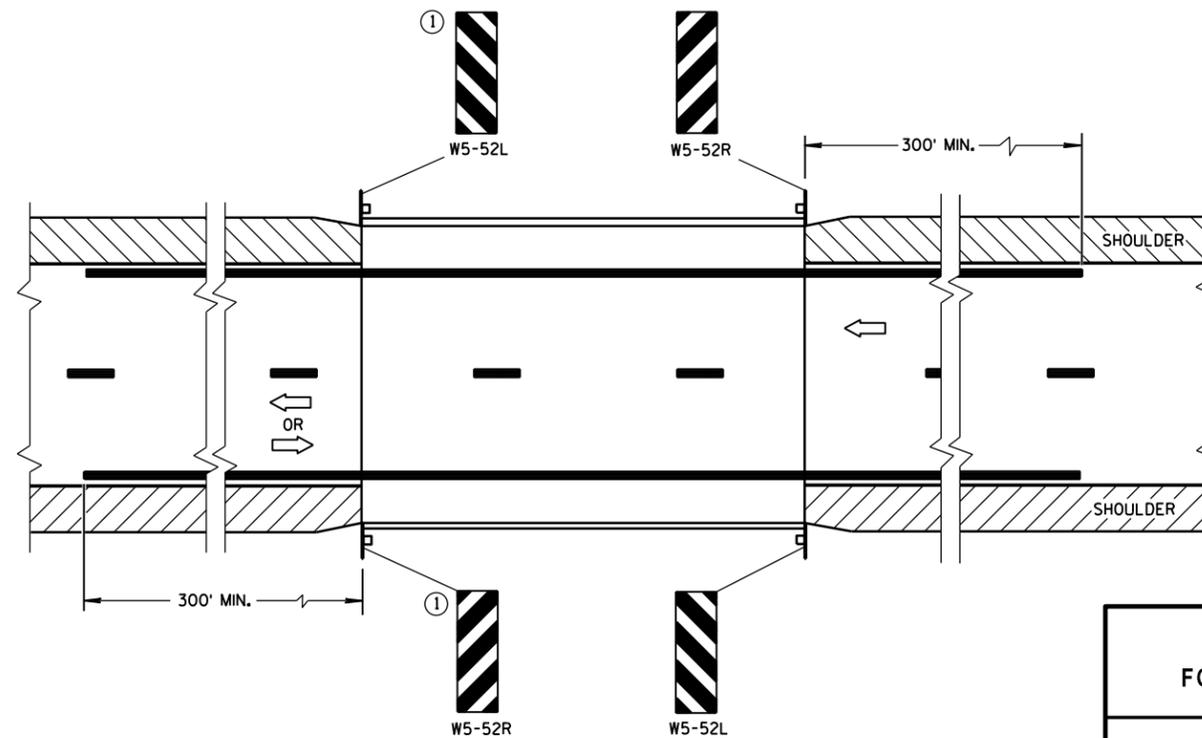
① OMIT ON ONE-WAY TRAVELLED WAYS.

➡ DIRECTION OF TRAFFIC



### 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.

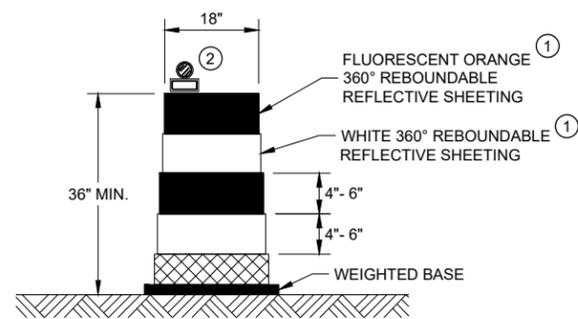
### DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

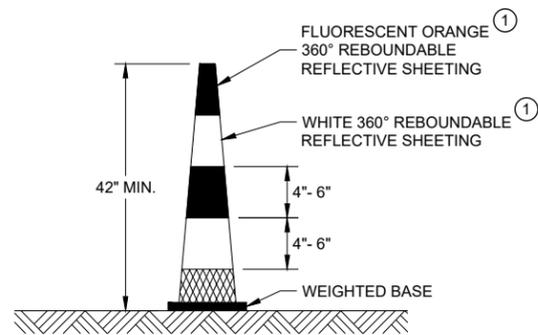
### SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June 2017 /S/ Matthew R. Rauch  
DATE STATE SIGNING AND MARKING ENGINEER  
FHWA



**DRUM**

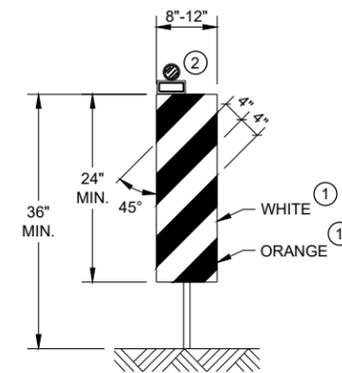


**42" CONE**

DO NOT USE IN TAPERS  
1/2 SPACING OF DRUMS

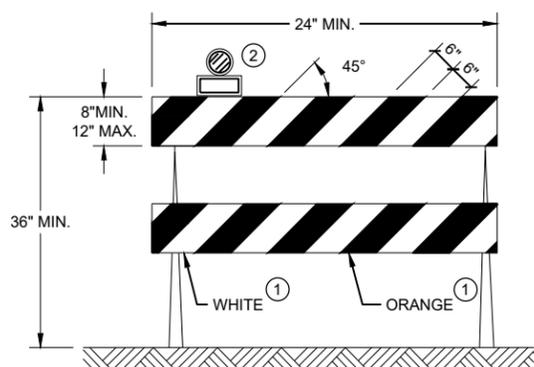
**GENERAL NOTES**

- 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.



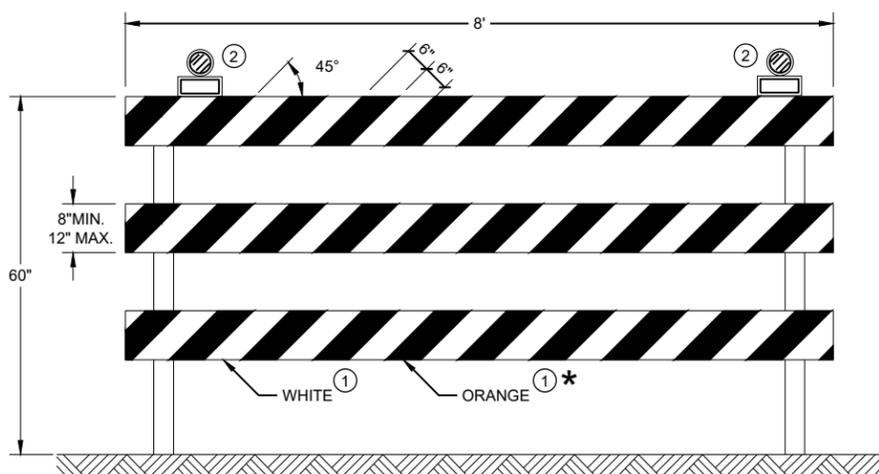
**VERTICAL PANEL**

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.

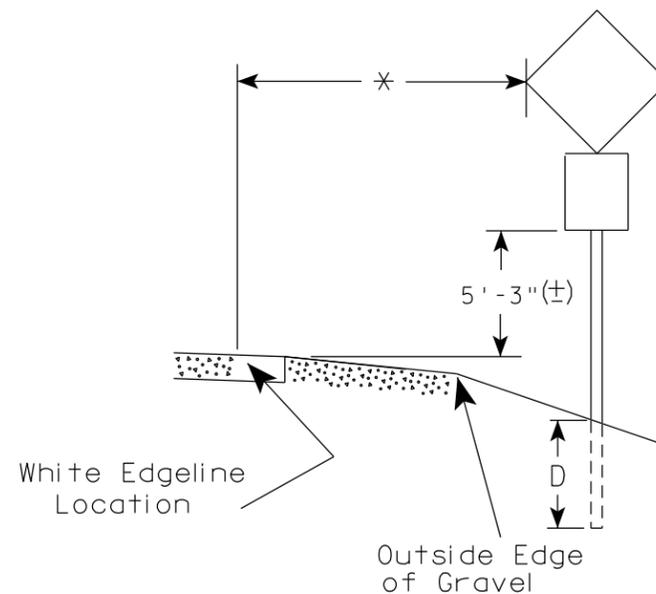
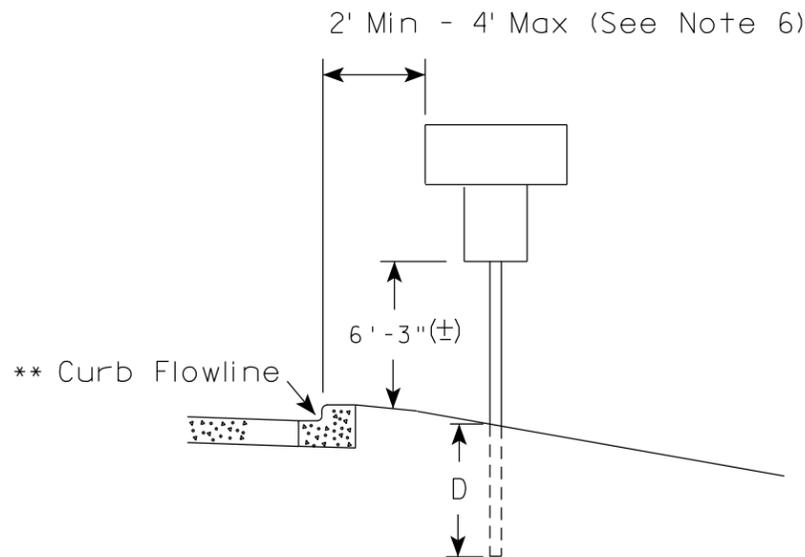
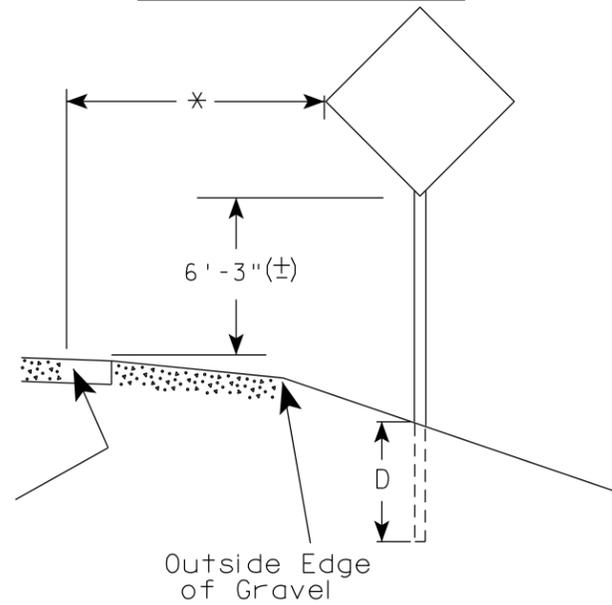
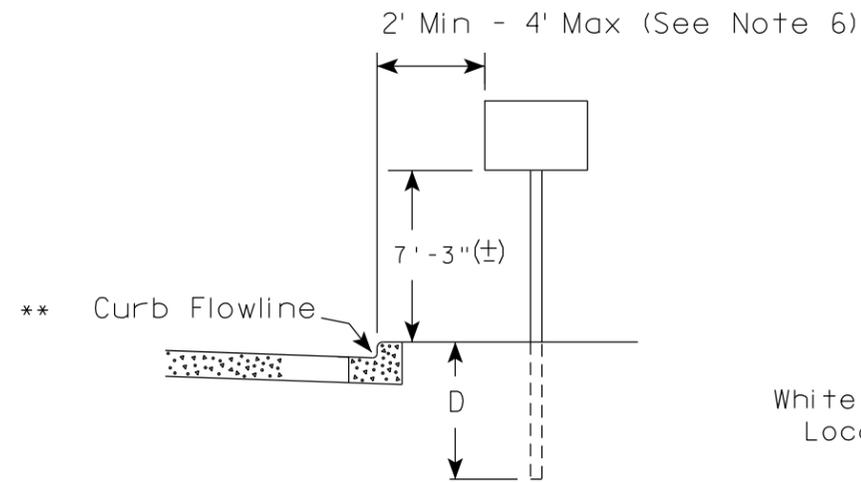
**CHANNELIZING DEVICES  
DRUMS, CONES, BARRICADES  
AND VERTICAL PANELS**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
May 2021 /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.

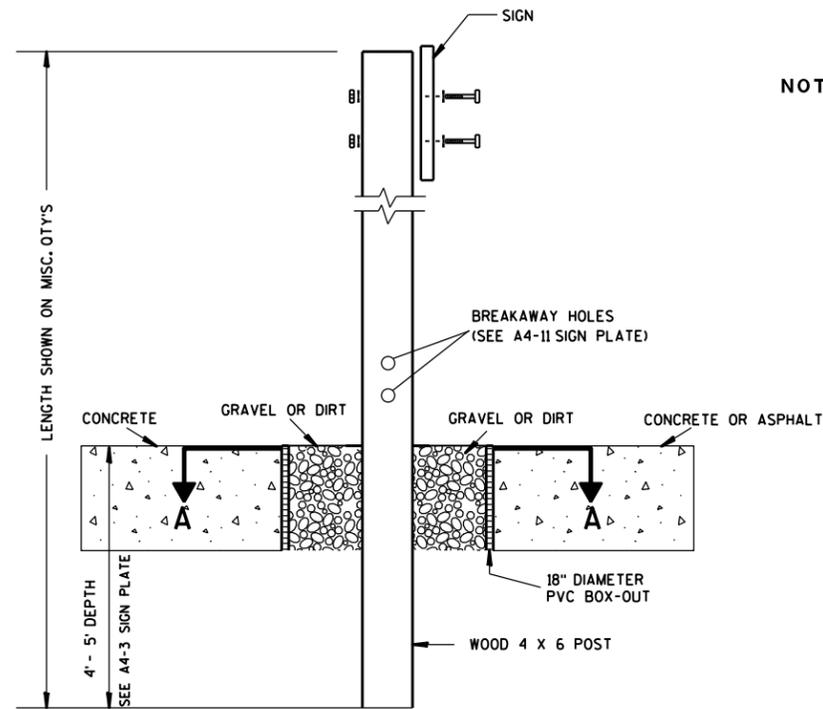
\* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

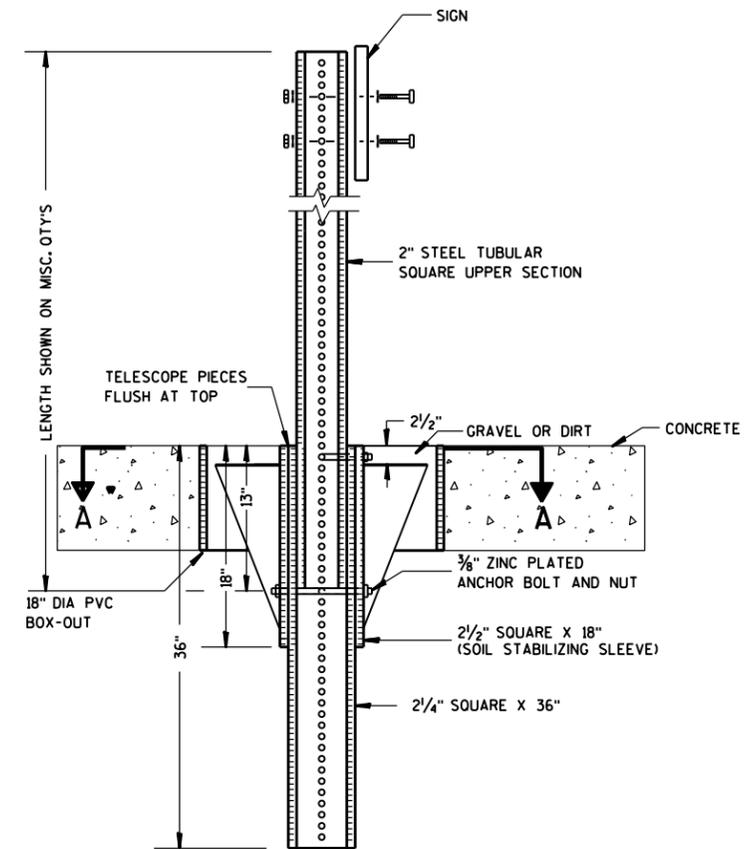
DATE 5/13/2020 PLATE NO. A4-3.22



**ELEVATION VIEW**

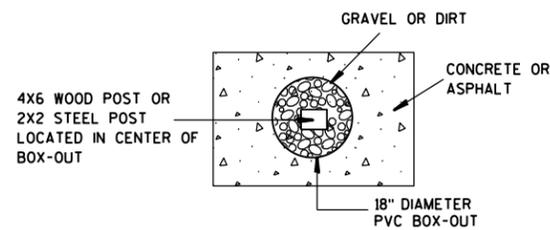
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

- 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

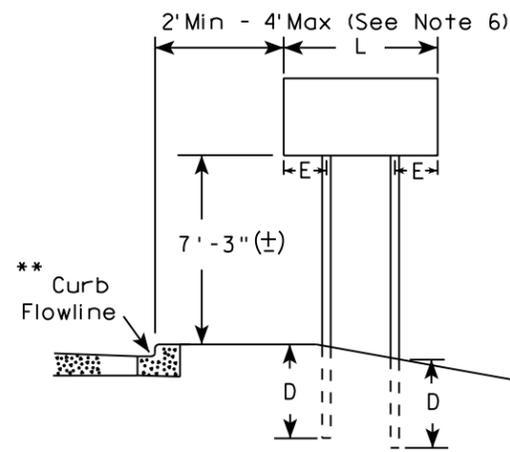
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

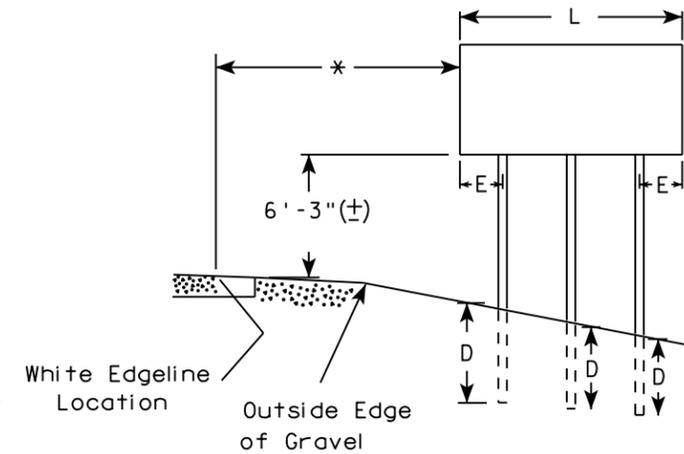
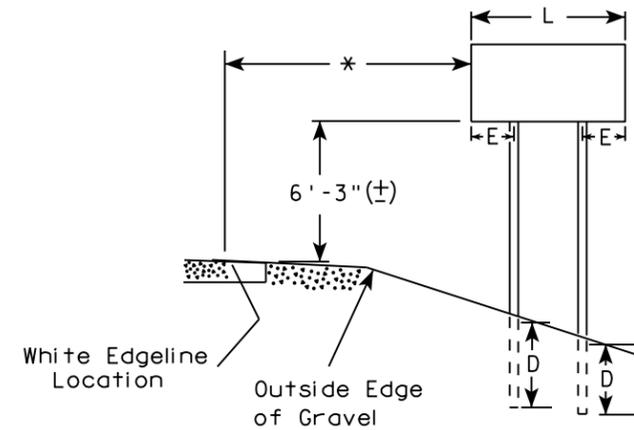
GENERAL NOTES

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" (±).

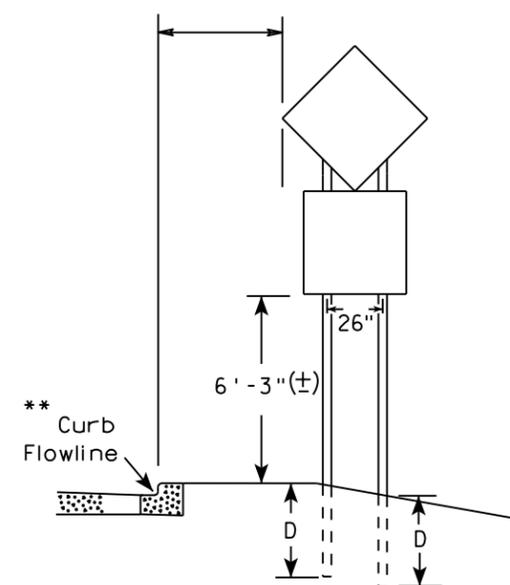
URBAN AREA



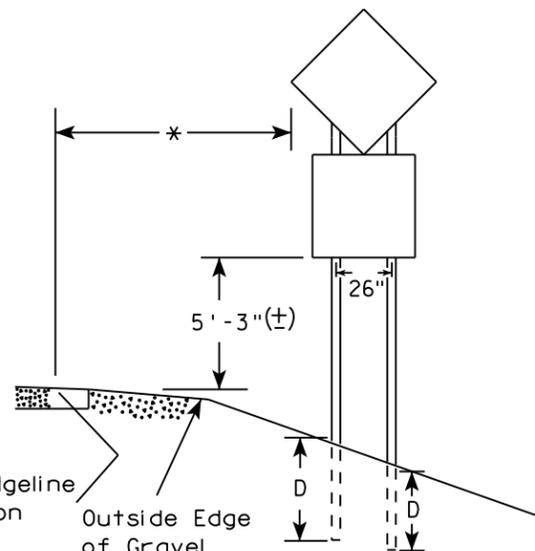
RURAL AREA (See Note 3)



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

\*\*\*

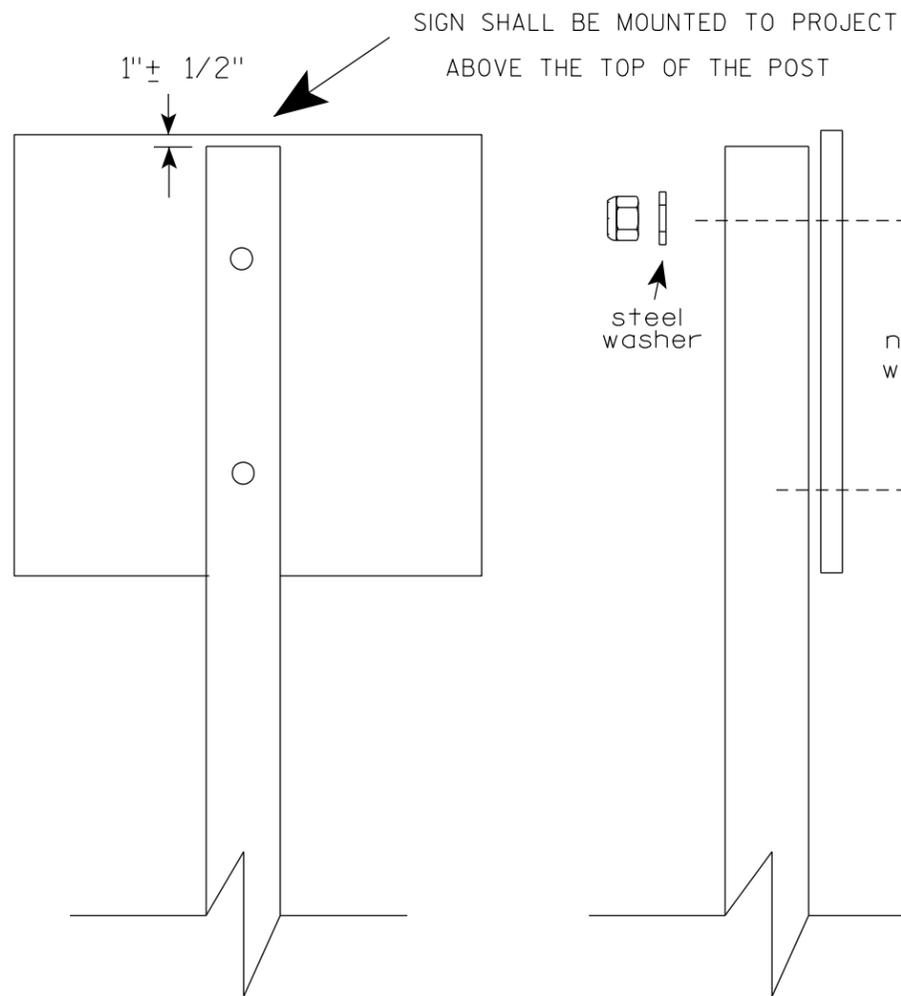
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

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



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

1"± 1/2"

steel washer

nylon washer

steel washer

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 - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)  
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)  
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 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 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 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

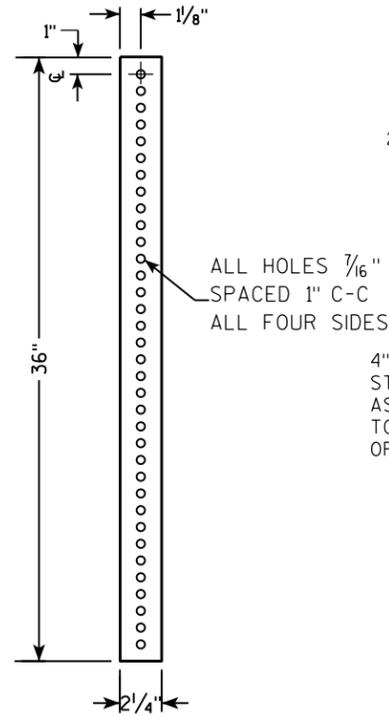
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*  
For State Traffic Engineer

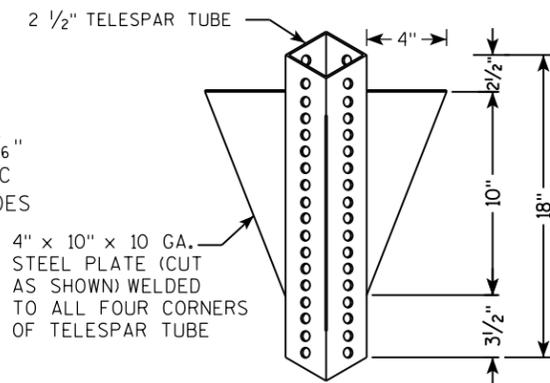
DATE 4/1/2020 PLATE NO. A4-8.9

**TELESCOPIC TUBING ANCHORS  
TWO PIECE SYSTEM**

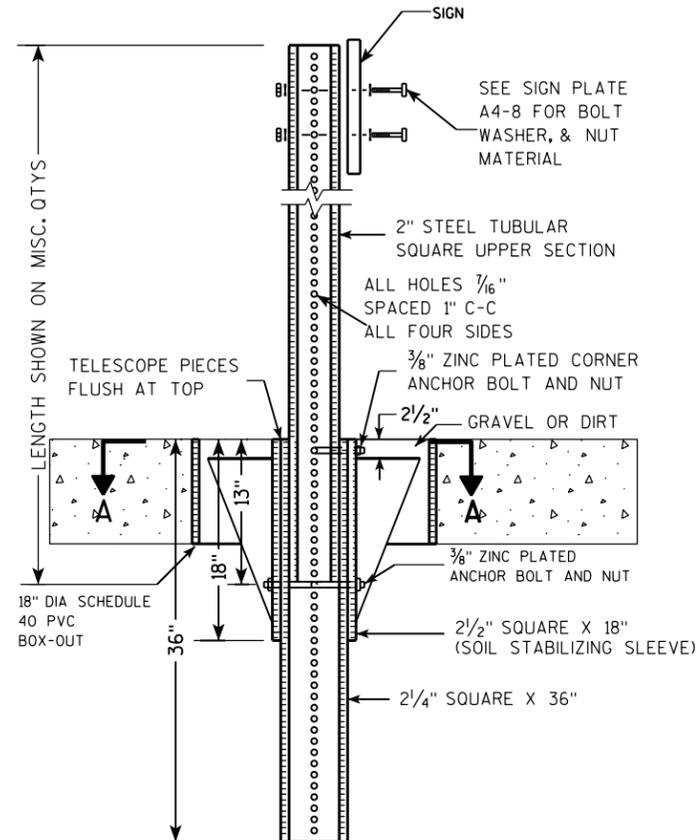
**2 1/4" SQUARE  
12 GAUGE  
PERFORATED  
GALVANIZED FINISH**



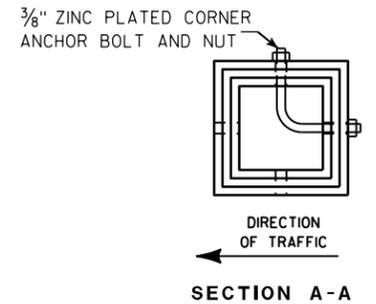
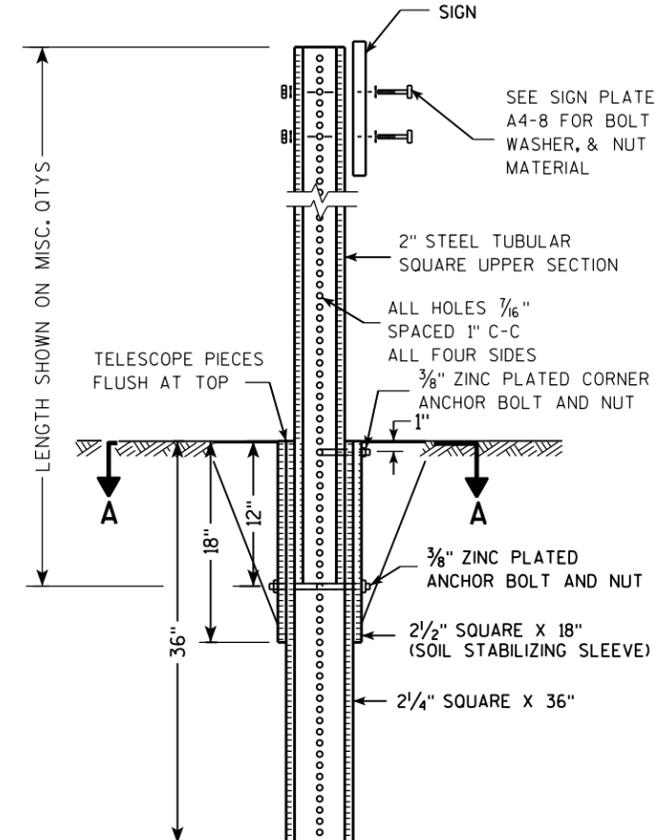
**2 1/2" SQUARE  
12 GAUGE  
OMNI-DIRECTIONAL  
PERFORATED  
SOIL STABILIZING SLEEVE  
GALVANIZED FINISH**



**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

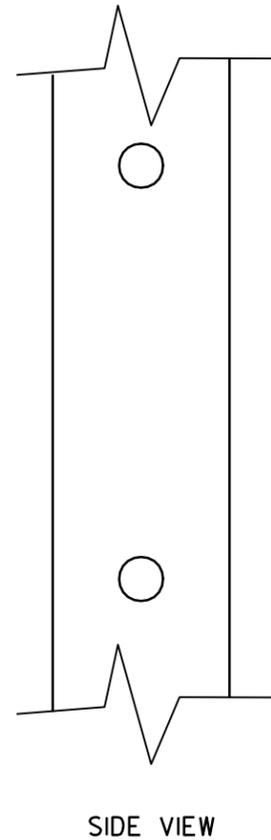
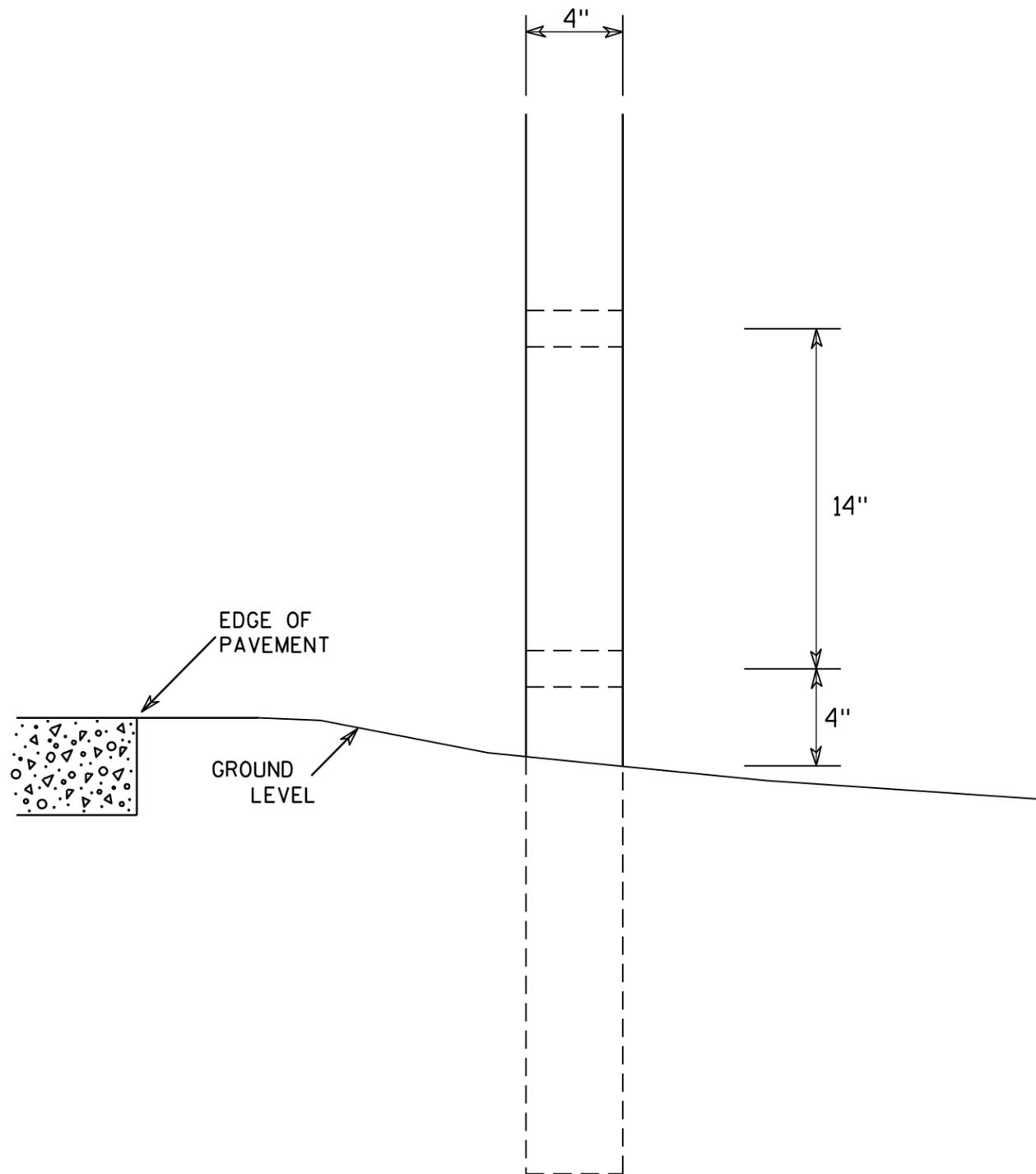
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



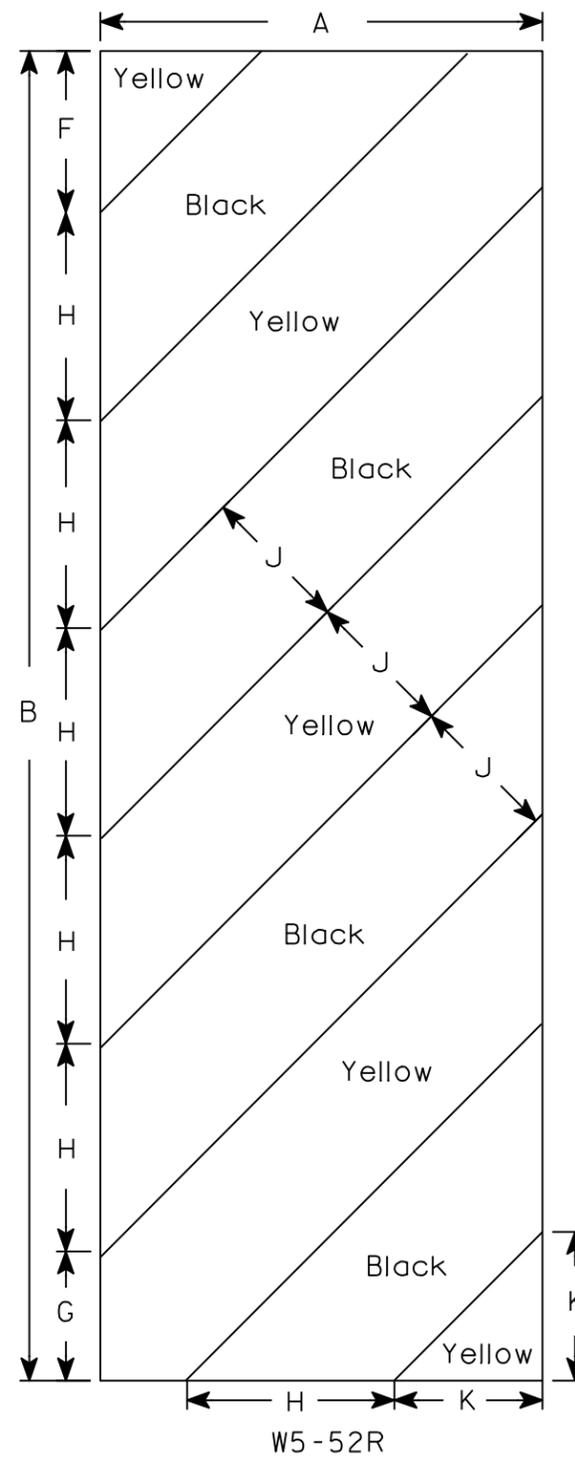
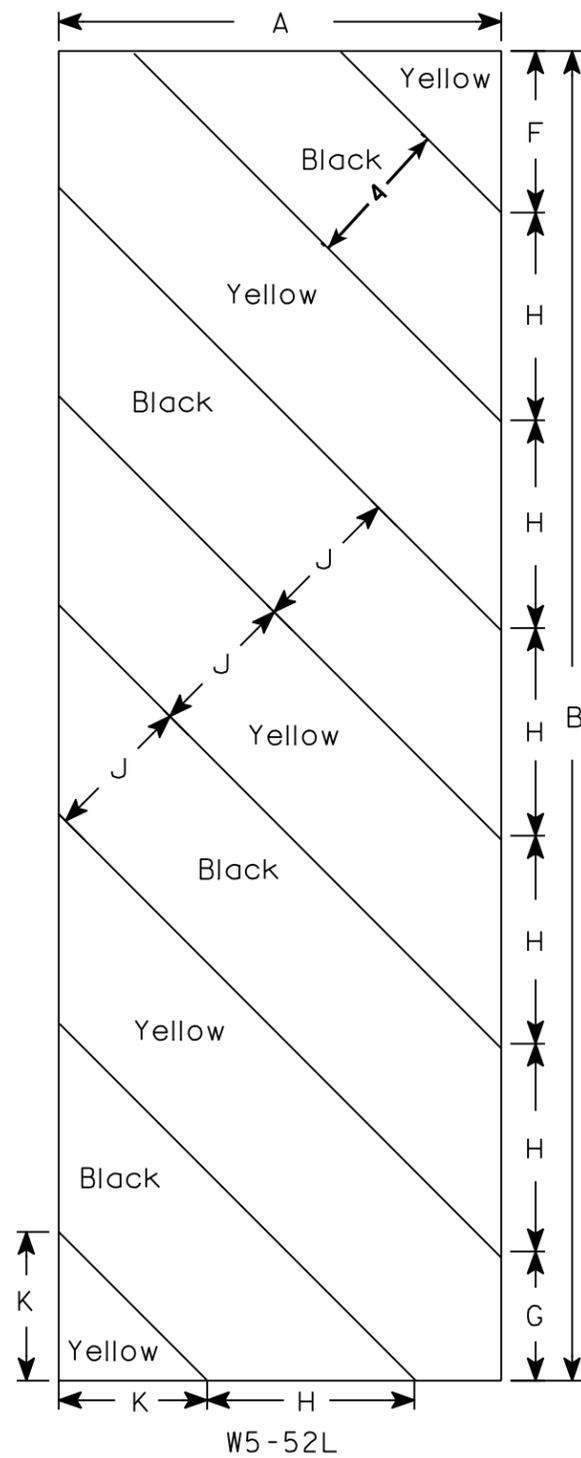
GENERAL NOTES

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

7

7

<b>4 X 6 WOOD POST MODIFICATIONS</b>	
<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



**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 3/4" UNLESS OTHERWISE NOTED.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON THE "GENERAL PLAN" SHEET AND THE ABUTMENT SHEETS.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCLUDED WITH THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-33-141".

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.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE SUPERSTRUCTURE SLAB PER THE STANDARD SPECIFICATION.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-33-141" SHALL BE THE EXISTING GROUND LINE.

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

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

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

AT THE BACKFACE 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.

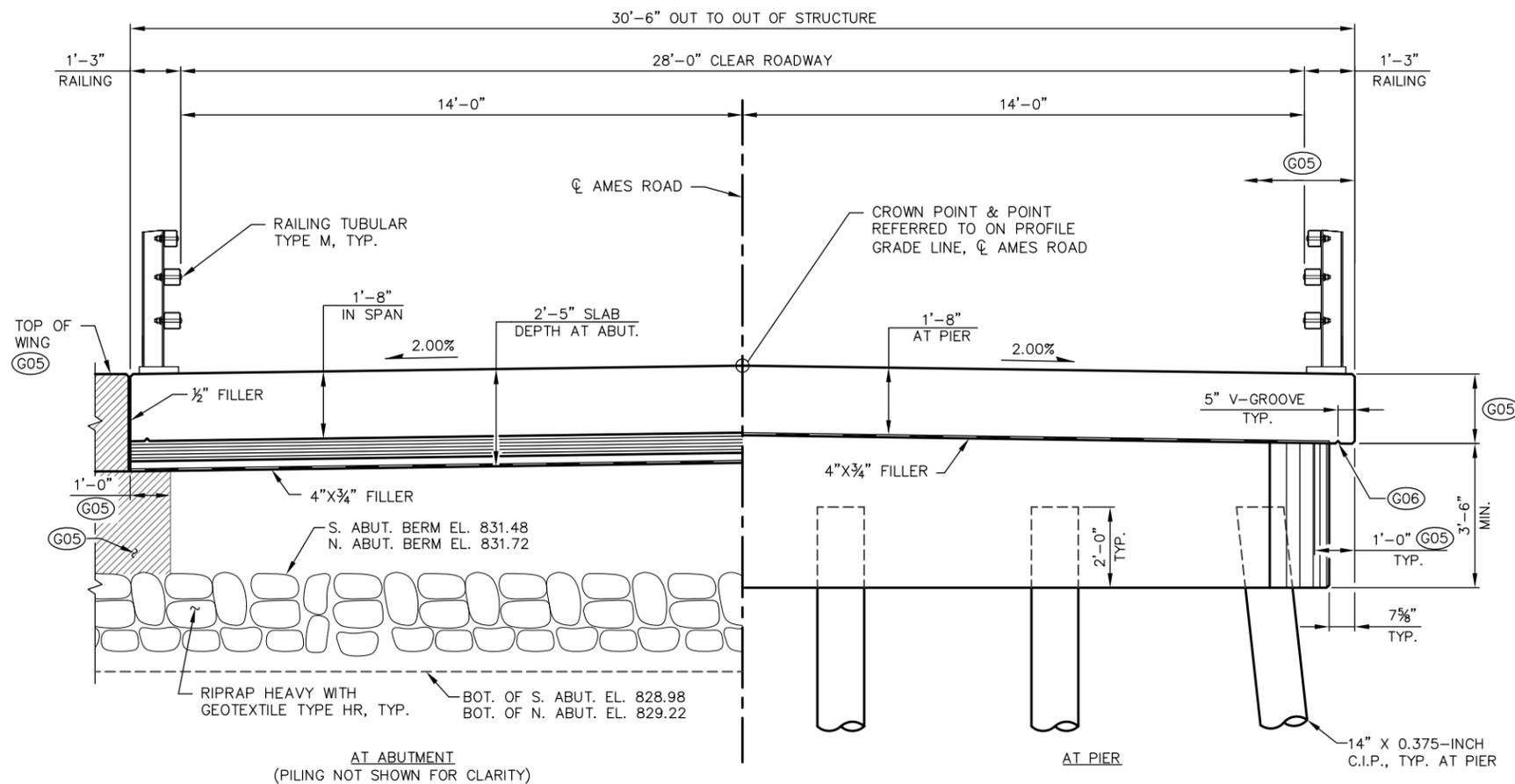
DO NOT PLACE FILL ABOVE 3'-0" FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

A MINIMUM OF 3- FEET OF PRE-BORE AT THE PIER INTO SUITABLE BEDROCK IS REQUIRED IF THE MINIMUM 10- FEET OF PILE PENETRATION INTO NATURAL GROUND CANNOT BE ACHIEVED. THE CONTRACTOR AND THE CONSTRUCTION ENGINEER SHOULD ANTICIPATE VARIABLE PILE PENETRATION AND POSSIBLE ADDITIONAL LOCATIONS OF PRE-BORING.

PILES PLACED IN PREBORED HOLES CORED INTO ROCK DO NOT REQUIRE DRIVING. PILES SHALL BE "FIRMLY SEATED" ON ROCK AFTER PLACEMENT IN PREBORED HOLES.

DURING PREBORING, MAINTAIN AN OPEN HOLE FOR PILE INSTALLATION USING TEMPORARY CASING FIRMLY SEATED INTO THE ROCK. DO NOT REMOVE CASING UNTIL THE PILE IS PLACED IN THE PRE-BORE HOLE AND HAS BEEN BACKFILLED WITHIN THE ROCK WITH A CEMENT GROUT. CLEAR DEBRIS FROM THE PRE-BORE HOLE BEFORE INSTALLING THE PILE.

THE EXISTING STRUCTURE (P-33-173) IS A SINGLE SPAN STEEL GIRDER CONCRETE DECK STRUCTURE WITH AN OVERALL LENGTH OF 52.9-FT AND A CLEAR ROADWAY WIDTH OF 26-FT TO BE REMOVED. SUPERSTRUCTURE AND ABUTMENTS SHALL BE REMOVED IN ACCORDANCE WITH THE BID ITEM "REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS P-33-173".



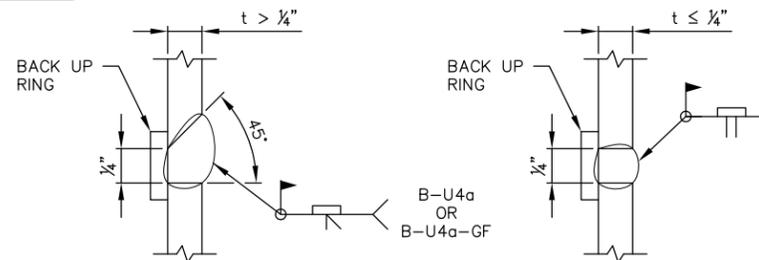
**CROSS SECTION THRU ROADWAY**  
(LOOKING NORTH)

**NOTES**

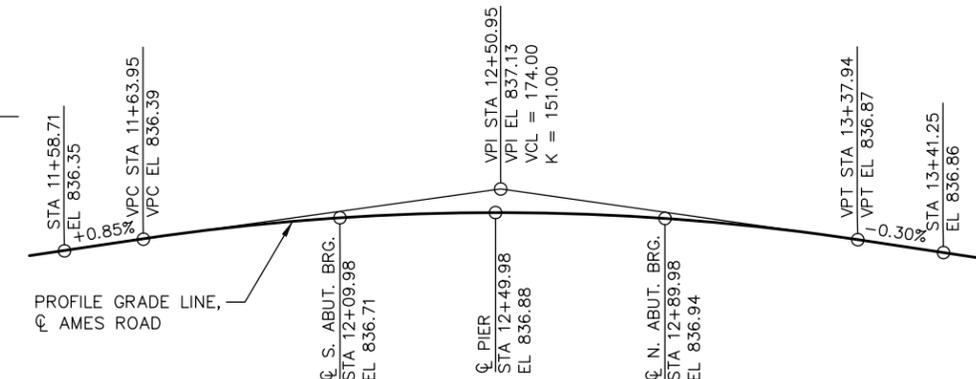
- G05 COAT WITH "PROTECTIVE SURFACE TREATMENT" AS PER THE STANDARD SPECIFICATIONS. PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO ENTIRE EXPOSED TOP OF SLAB, INCLUDING THE SLAB EDGES AND 1'-0" UNDER THE SLAB, THE TOP AND EXTERIOR EXPOSED FACE OF WINGS, AND THE FRONT FACE OF THE ABUTMENTS TO 1'-0" PAST THE EDGE OF SLAB.
- G06 3/4" V-GROOVE. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENT DIAPHRAGM. V-GROOVES ARE REQUIRED.

**TOTAL ESTIMATED QUANTITIES**

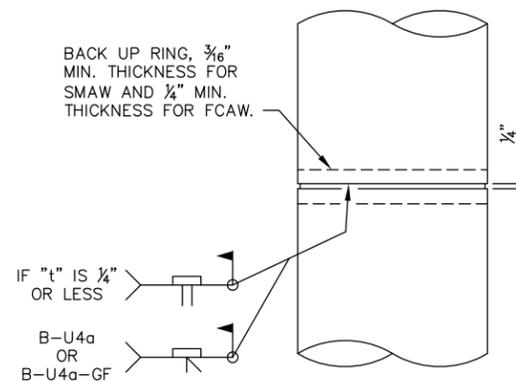
ITEM NO.	BID ITEMS	UNIT	S. ABUT.	PIER	N. ABUT.	SUPER.	TOTALS
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS P-33-173	EACH	---	---	---	---	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-33-141	LS	---	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	130	---	130	---	260
502.0100	CONCRETE MASONRY BRIDGES	CY	26.9	11.7	26.9	160.4	226
502.3200	PROTECTIVE SURFACE TREATMENT	SY	16	---	16	326	358
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2260	3470	2260	---	7990
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1395	70	1395	34420	37280
513.4061	RAILING TUBULAR TYPE M	LF	---	---	---	170	170
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	6	---	6	---	12
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	---	72	---	---	72
550.2104	PILING CIP CONCRETE 10 3/4 X 0.25-INCH	LF	175	---	175	---	350
550.2146	PILING CIP CONCRETE 14 X 0.375-INCH	LF	---	150	---	---	150
606.0300	RIPRAP HEAVY	CY	90	---	82	---	172
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	75	---	75	---	150
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	34	---	34	---	68
645.0120	GEOTEXTILE TYPE HR	SY	155	---	148	---	303
(NON-BID ITEM)	FILLER	SIZE					1/2" & 3/4"



**C.I.P. PILE WELD DETAIL**

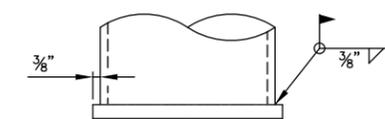


**PROFILE GRADE LINE, C AMES ROAD**



**CAST-IN-PLACE 'PIPE PILE'**

NOTE: CAST-IN-PLACE PILE SHELL MATERIAL SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATION.



**END PLATE DETAIL FOR CIP PILING**

NO.	DATE	REVISION	BY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-33-141**

DRAWN BY: JDO PLANS OK'D: ACK

**CROSS SECTION, GENERAL NOTES & QUANTITIES**

SHEET 2 OF 9

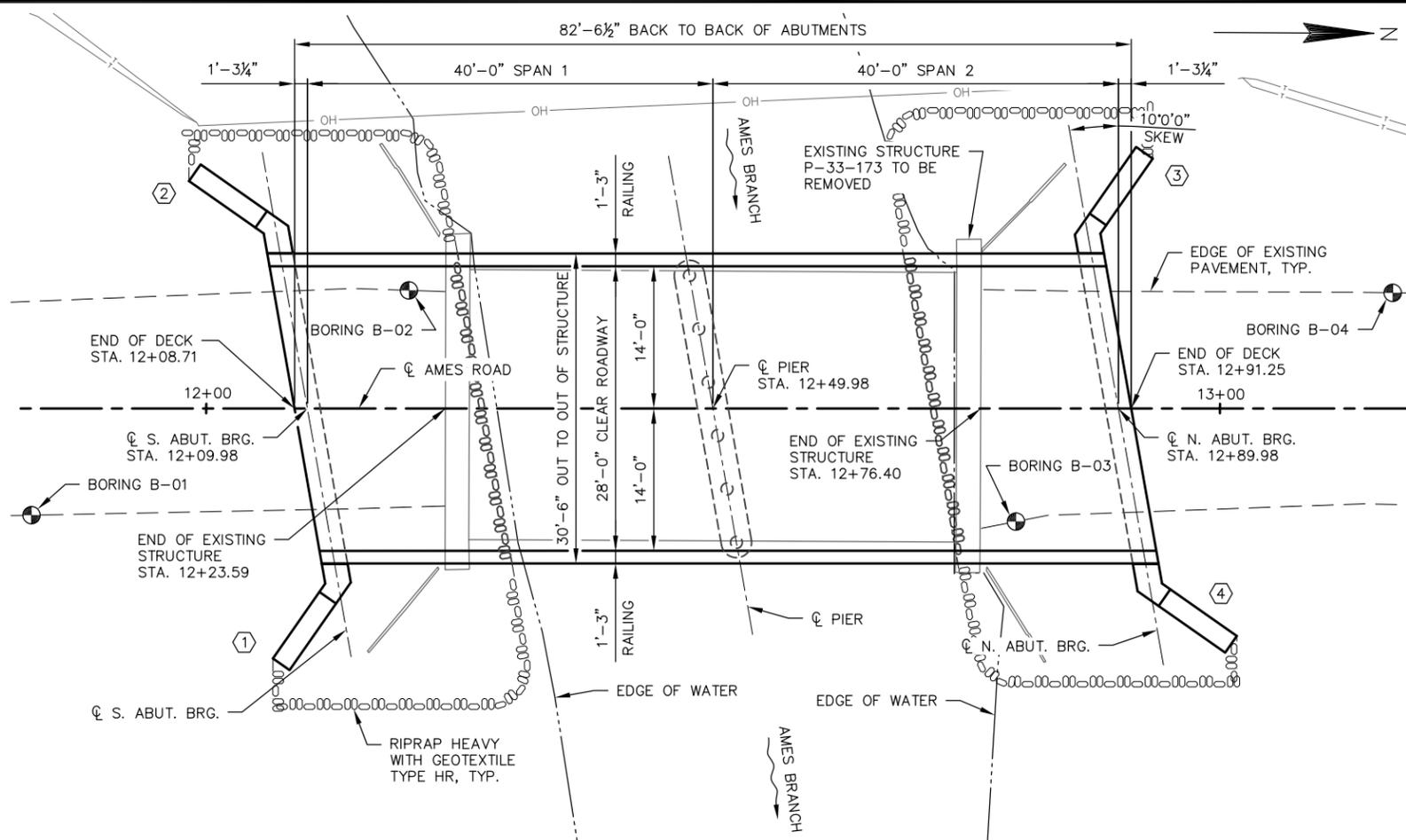
**B-33-141 BORINGS**

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BORING B-01	5/19/2021	154536.32	483085.66
BORING B-02	5/19/2021	154573.43	483063.32
BORING B-03	5/19/2021	154633.43	483085.72
BORING B-04	5/19/2021	154670.46	483063.00

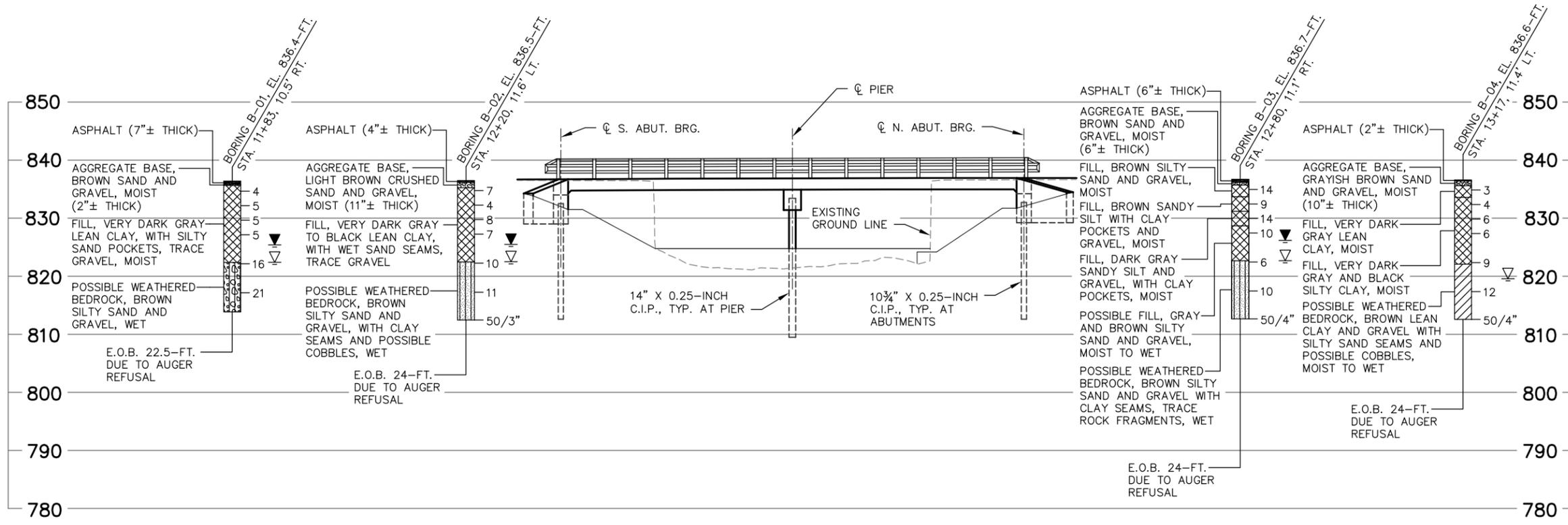
BORINGS COMPLETED BY: PROFESSIONAL SERVICE INDUSTRIES, INC.  
 SUBSURFACE INVESTIGATION REPORT: PROFESSIONAL SERVICE INDUSTRIES, INC.  
 ALL COORDINATES REFERENCED TO WCCS, LAFAYETTE COUNTY

**NOTE**

⊙ INDICATES WING NUMBER



**PLAN B-33-141**



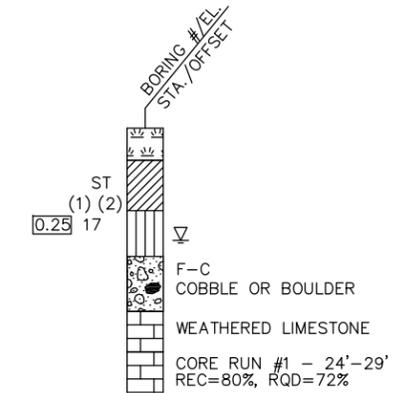
STATE PROJECT NUMBER

**5671-00-77**

**MATERIAL SYMBOLS**

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

**LEGEND OF BORING**



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

**GROUND WATER ELEVATION**

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

**ABBREVIATIONS**

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

**SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION**

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

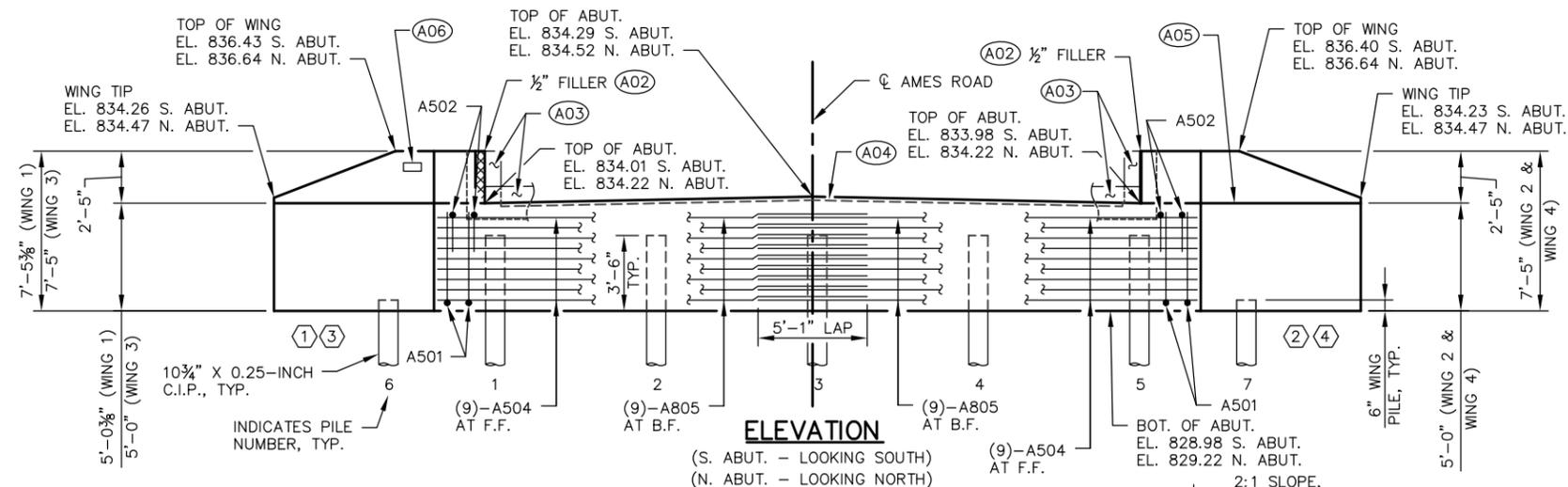
NO.	DATE	REVISION	BY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-33-141**

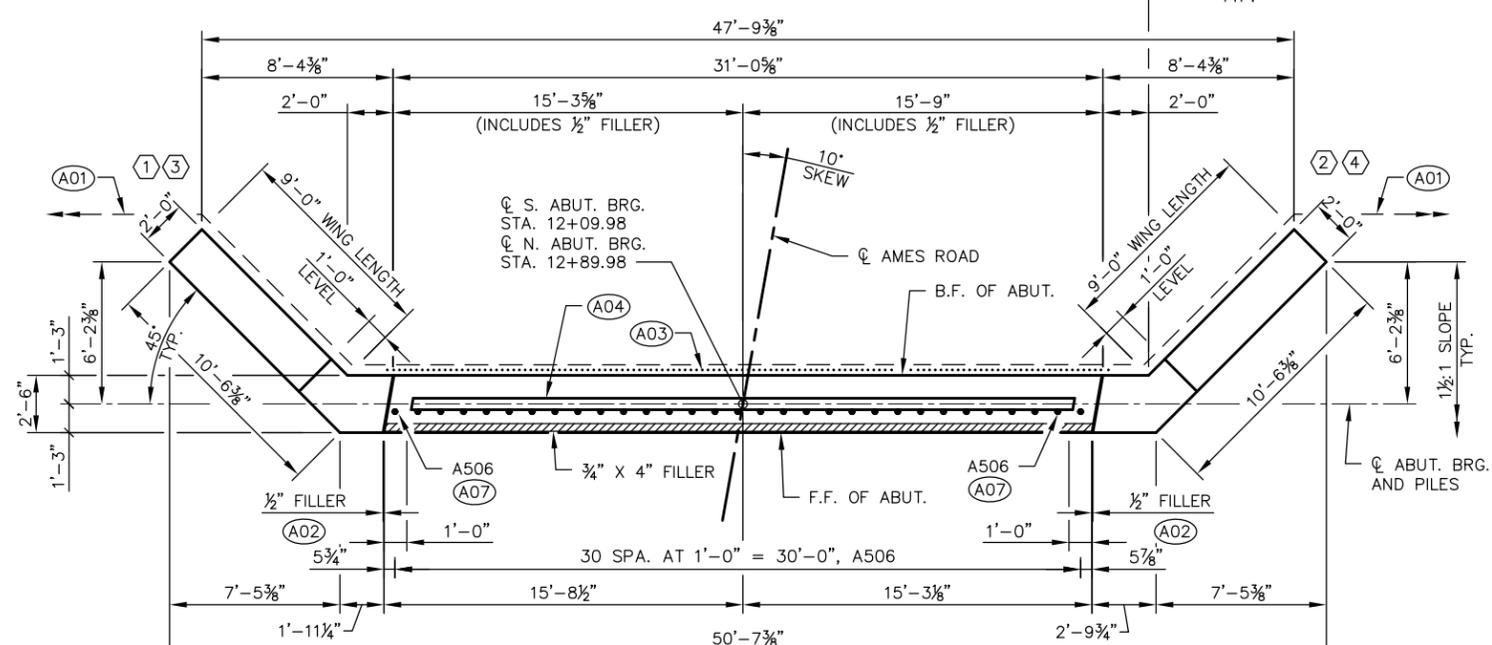
DRAWN BY JDO PLANS OK'D ACK

**SUBSURFACE EXPLORATION** SHEET 3 OF 9

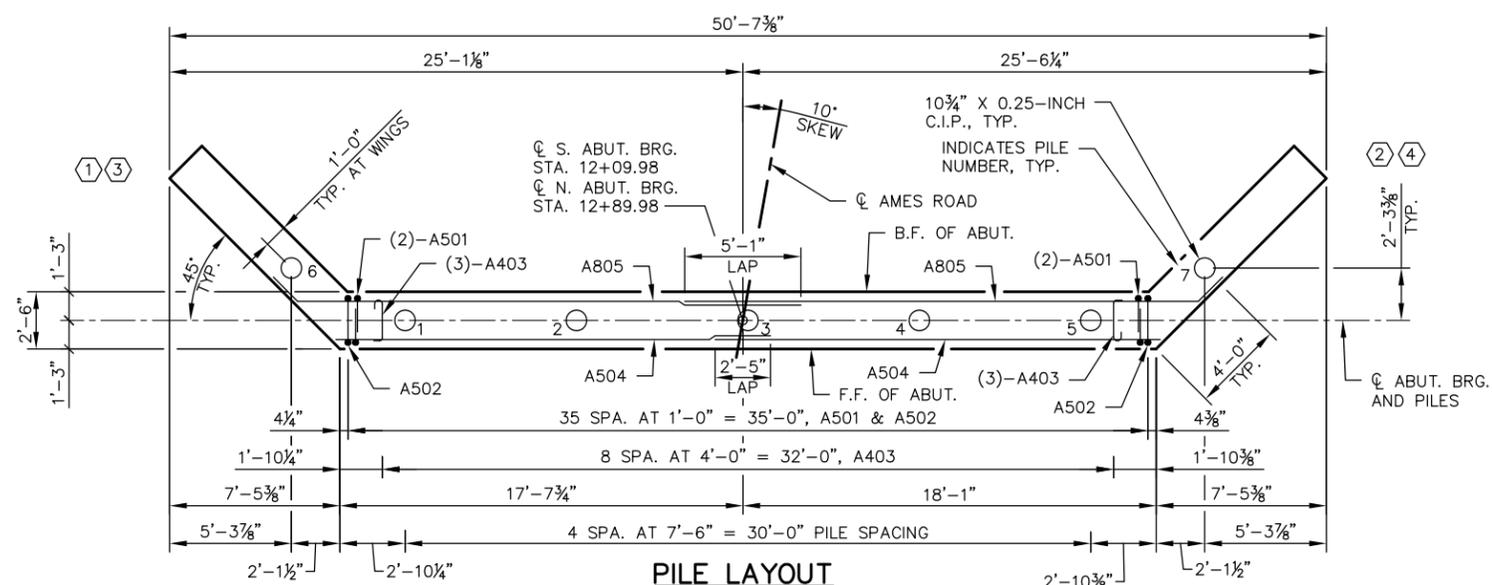


**ELEVATION**

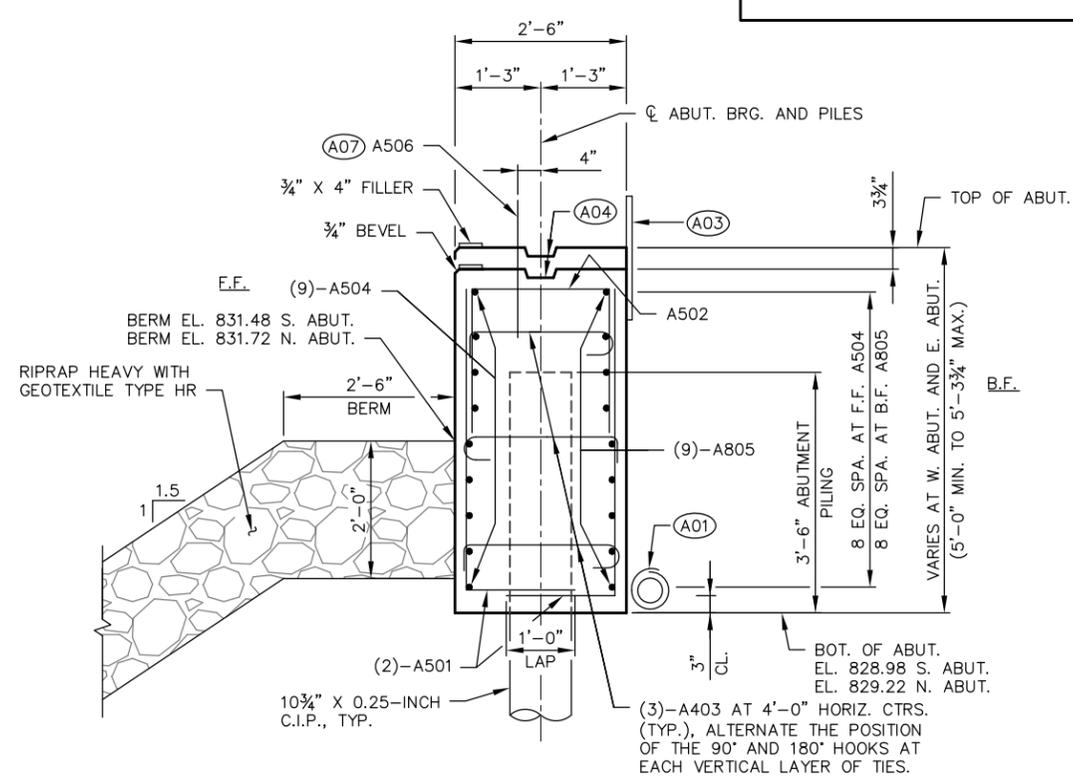
(S. ABUT. - LOOKING SOUTH)  
(N. ABUT. - LOOKING NORTH)



**PLAN**



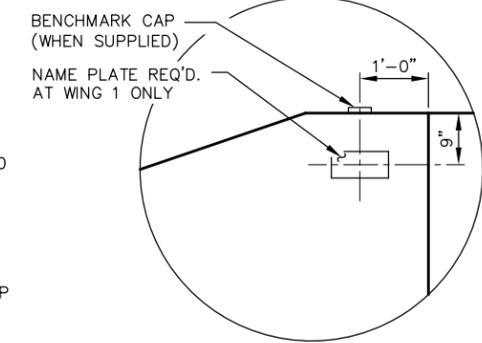
**PILE LAYOUT**



**TYPICAL SECTION THRU ABUTMENT**

**NOTES**

- DO NOT PLACE FILL ABOVE 3'-0" FROM THE BOTTOM OF THE ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.
- SOUTH AND NORTH ABUTMENTS TO BE SUPPORTED ON 10 3/4" X 0.25-INCH C.I.P. DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 120 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA AT THE SOUTH ABUTMENT AND 120 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA AT THE NORTH ABUTMENT. ESTIMATED 25 FT PILE LENGTHS AT THE SOUTH ABUTMENT AND 25 FT PILE LENGTHS AT THE NORTH ABUTMENT.
- SEE "CROSS SECTION, GENERAL NOTES & QUANTITIES" SHEET FOR CIP PILE SPLICE DETAILS.
- (A01) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON "ABUTMENT DETAILS" SHEET. RODENT SHIELD SHALL BE INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".
- (A02) 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). 1/2" FILLER TO EXTEND FROM BRIDGE SEAT TO TOP OF WING.
- (A03) 18" RUBBERIZED MEMBRANE WATERPROOFING (R.M.W.), SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- (A04) KEYED CONST. JT. FORMED BY BEVELED 2 X 6
- (A05) OPTIONAL KEYED CONST. JT. FORMED BY BEVELED 2 X 6, TYP.
- (A06) NAME PLATE & BENCHMARK CAP (WHEN SUPPLIED) AT WING 1 ONLY. SEE "NAME PLATE DETAIL", THIS SHEET.
- (A07) A506 BARS MAY BE PLACED AFTER CONCRETE HAS BEEN POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. EMBED 1'-0" INTO ABUTMENT BODY.
- INDICATES WING NUMBER



**NAME PLATE DETAIL**

F.F. - FRONT FACE  
B.F. - BACK FACE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-33-141</b>			
DRAWN BY JDO		PLANS OK'D ACK	
<b>ABUTMENTS</b>			SHEET 4 OF 9

8

8

**BILL OF BARS  
BOTH ABUTMENTS**

**COATED = 2,790 LBS.  
UNCOATED = 4,520 LBS.**

MARK	NUMBER		LENGTH	BENT	BAR SERIES	LOCATION
	COATED	UNCOATED				
A501	144		5'-11"	X		BODY - STIRRUP - F.F. & B.F. VERT.
A502	72		6'-7"	X		BODY - STIRRUP - TOP VERT.
A403	54		3'-1"	X		BODY - TIES HORIZ.
A504	36		19'-1"			BODY - F.F. HORIZ.
A805	36		24'-0"	X		BODY - B.F. HORIZ.
A506	62		2'-0"			BODY - TOP DOWELS VERT.
A407	96		8'-5"	X	▲	WINGS 1 THRU 4 - STIRRUP - F.F. & B.F. VERT.
A408	36		7'-0"			WINGS 1 THRU 4 - F.F. & B.F. VERT.
A509	36		11'-9"	X		WINGS 1 THRU 4 - F.F. HORIZ.
A410	4		9'-9"			WINGS 1 THRU 4 - F.F. HORIZ.
A411	4		7'-6"			WINGS 1 THRU 4 - F.F. HORIZ.
A412	4		5'-2"			WINGS 1 THRU 4 - F.F. HORIZ.
A413	4		10'-4"	X		WINGS 1 THRU 4 - F.F. - TOP HORIZ.
A814	36		13'-3"	X		WINGS 1 THRU 4 - B.F. HORIZ.
A415	4		8'-3"			WINGS 1 THRU 4 - B.F. HORIZ.
A416	4		5'-11"			WINGS 1 THRU 4 - B.F. HORIZ.
A417	4		3'-10"			WINGS 1 THRU 4 - B.F. HORIZ.
A418	4		8'-9"	X		WINGS 1 THRU 4 - B.F. - TOP HORIZ.
A419	8		3'-10"	X		WINGS 1 AND 3 - F.F. CORNER HORIZ.
A420	8		4'-7"	X		WINGS 2 AND 4 - F.F. CORNER HORIZ.
A421	16		2'-9"	X		WINGS 1 THRU 4 - B.F. CORNER HORIZ.

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

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

**NOTES**

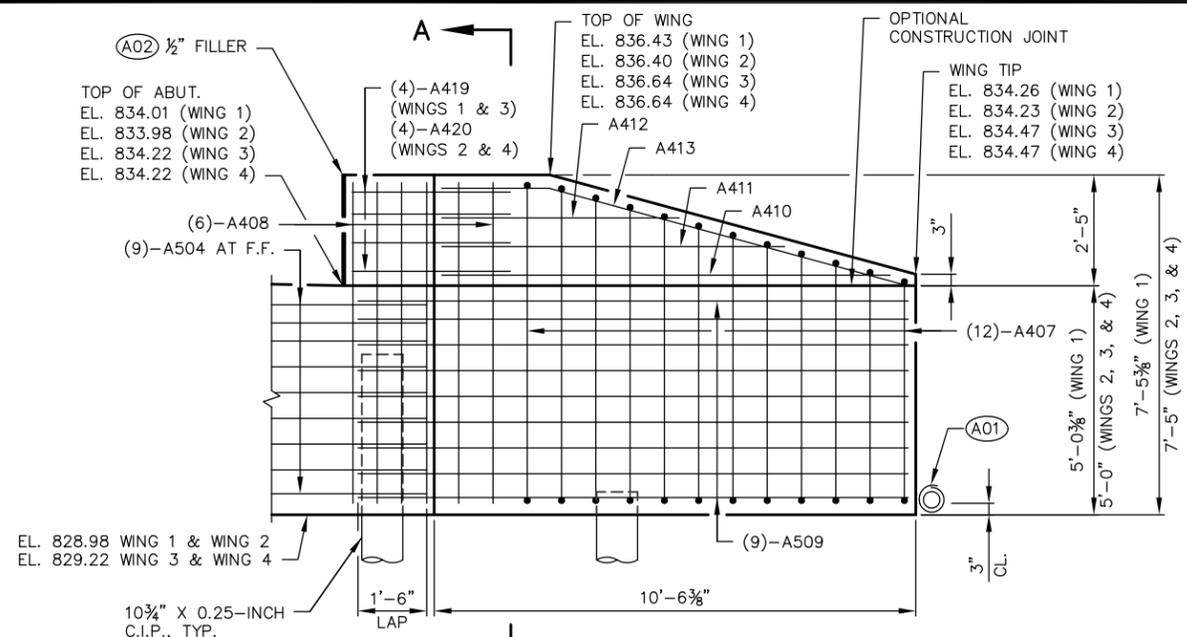
DO NOT PLACE FILL ABOVE 3'-0" FROM THE BOTTOM OF THE ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

SOUTH AND NORTH ABUTMENT TO BE SUPPORTED ON 10 3/4" X 0.25-INCH C.I.P. DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 120 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA AT THE SOUTH ABUTMENT AND 120 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA AT THE NORTH ABUTMENT. ESTIMATED 25 FT PILE LENGTHS AT THE SOUTH ABUTMENT AND 25 FT PILE LENGTHS AT THE NORTH ABUTMENT.

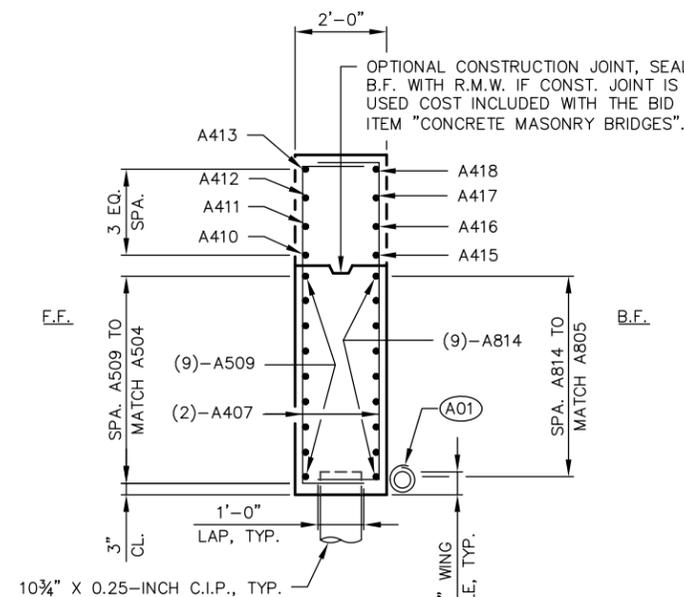
SEE "CROSS SECTION, GENERAL NOTES & QUANTITIES" SHEET FOR CIP PILE SPLICE DETAILS.

(A01) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET. RODENT SHIELD SHALL BE INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(A02) 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.) 1/2" FILLER TO EXTEND FROM BRIDGE SEAT TO TOP OF WING.

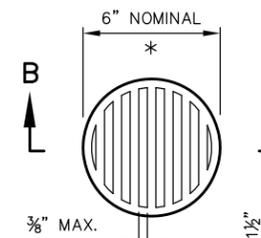


**F.F. ELEVATION - WINGS 2 & 4**  
(WING 1 & 3 SIMILAR)



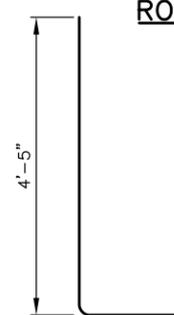
**SECTION A-A**

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

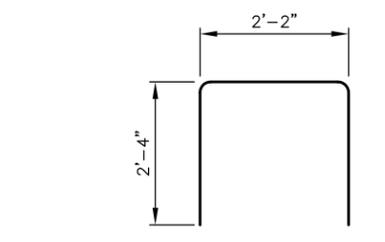


**SECTION B-B**

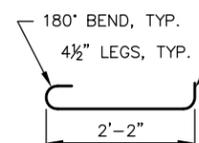
**RODENT SHIELD DETAIL**



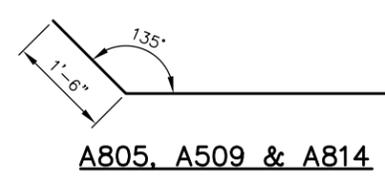
**A501**



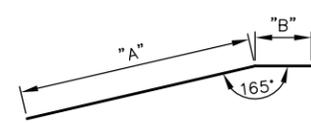
**A502**



**A403**



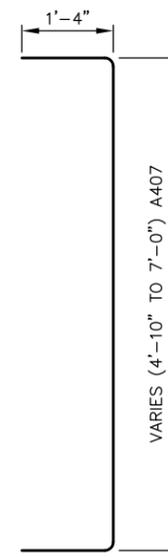
**A805, A509 & A814**



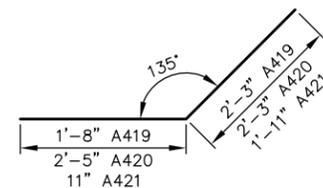
**A413 & A418**

**BAR BEND DIMENSIONS**

MARK	"A"	"B"
A413	8'-0"	2'-4"
A418	8'-0"	0'-9"



**A407**

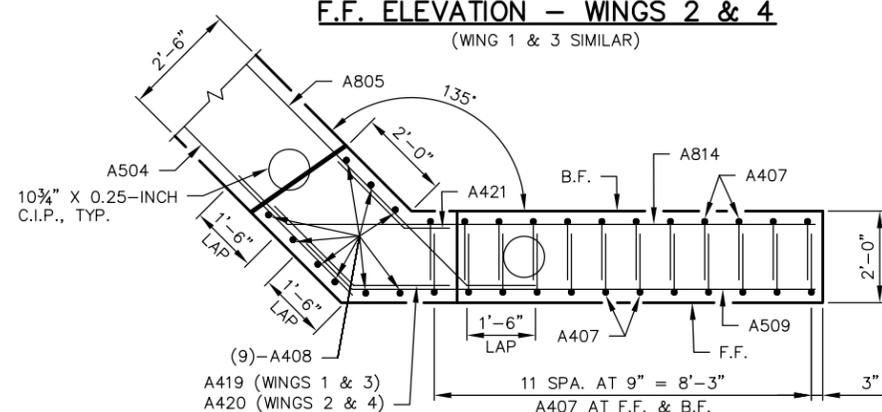


**A419, A420, & A421**

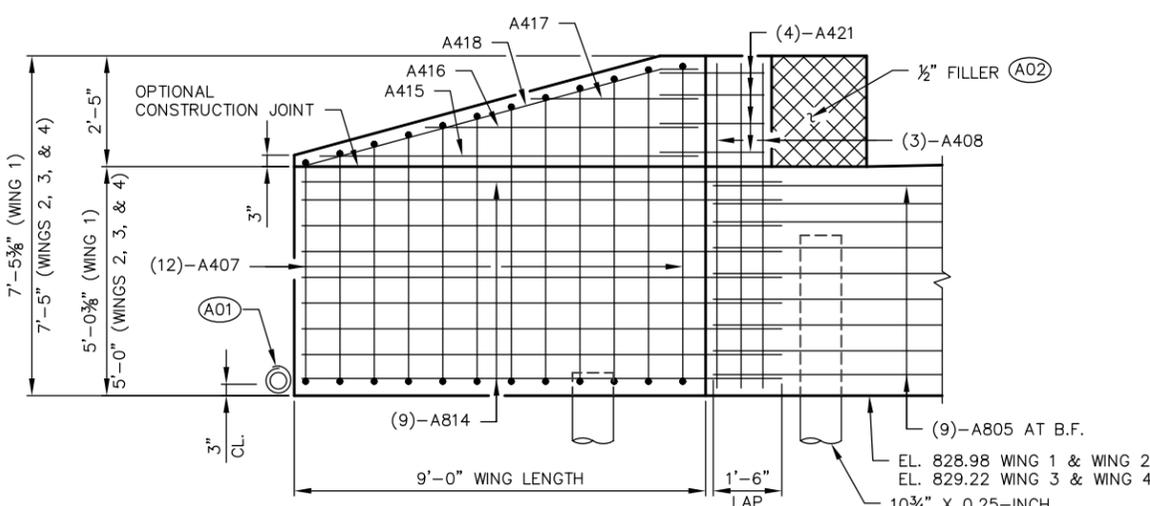
**BAR SERIES TABLE**

MARK	NO. REQ'D	LENGTH
A407	8 SERIES OF 12	7'-4" TO 9'-6"

BUNDLE AND TAG EACH SERIES SEPARATELY.



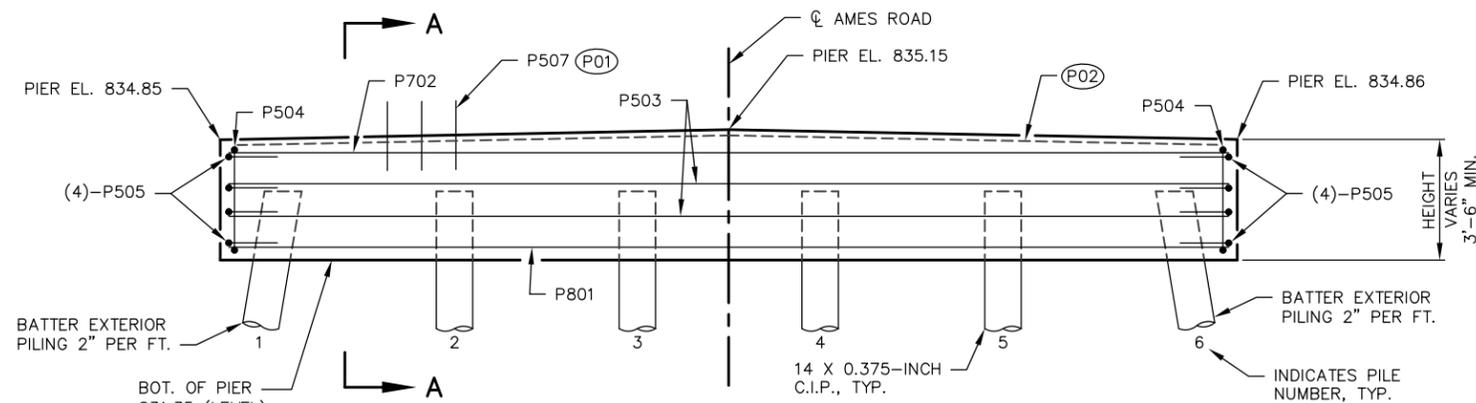
**PLAN - WINGS 2 & 4**  
(WING 1 & 3 SIMILAR)



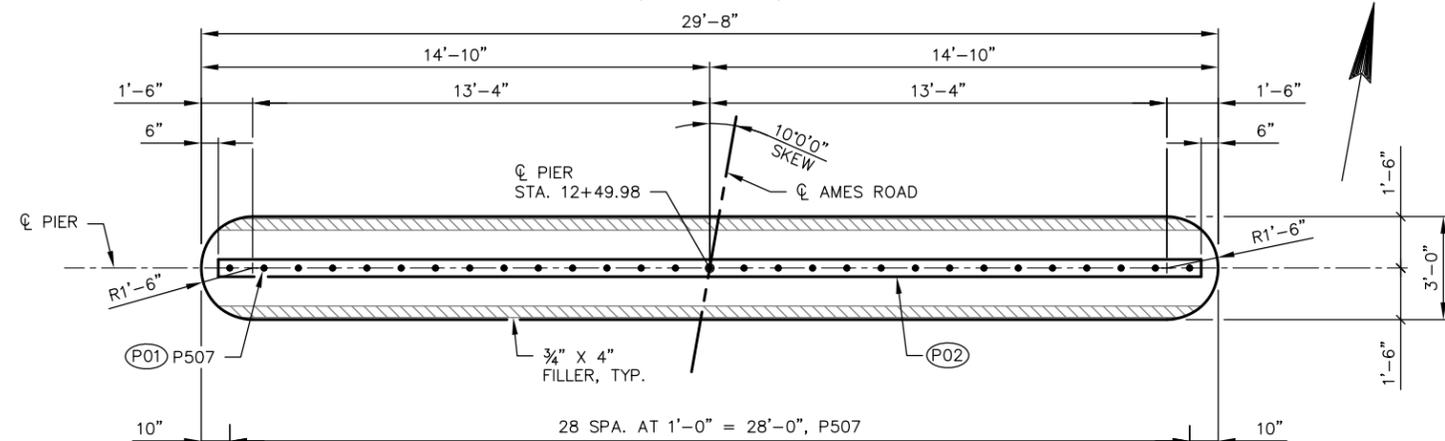
**B.F. ELEVATION - WINGS 2 & 4**  
(WING 1 & 3 SIMILAR)

F.F. - FRONT FACE  
B.F. - BACK FACE

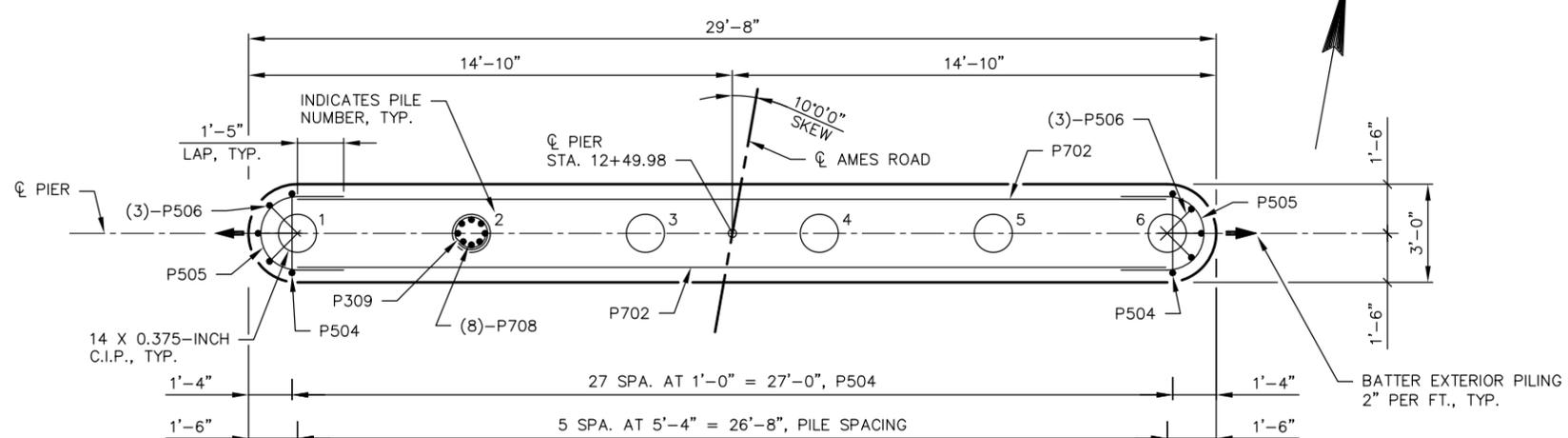
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-33-141</b>			
DRAWN BY JDO		PLANS OK'D ACK	
<b>ABUTMENT DETAILS</b>			SHEET 5 OF 9



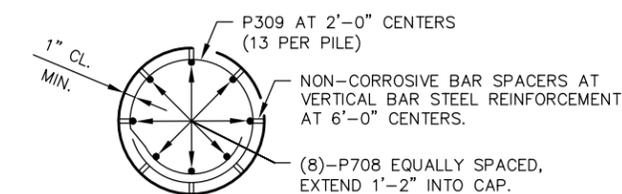
**ELEVATION**  
(LOOKING NORTH)



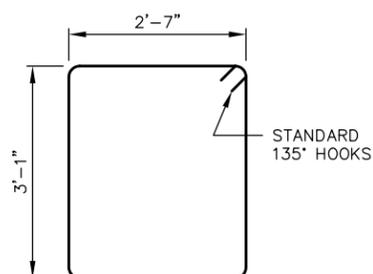
**PLAN**



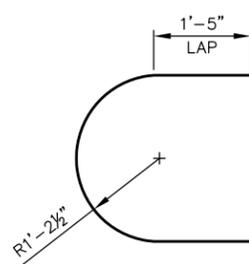
**PIER AND REINFORCEMENT PLAN**



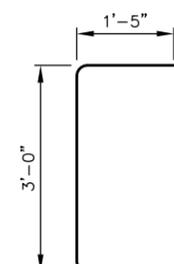
**SECTION THRU CONCRETE CAST-IN-PLACE PILING AT PIER**



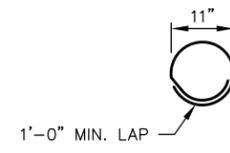
**P504**



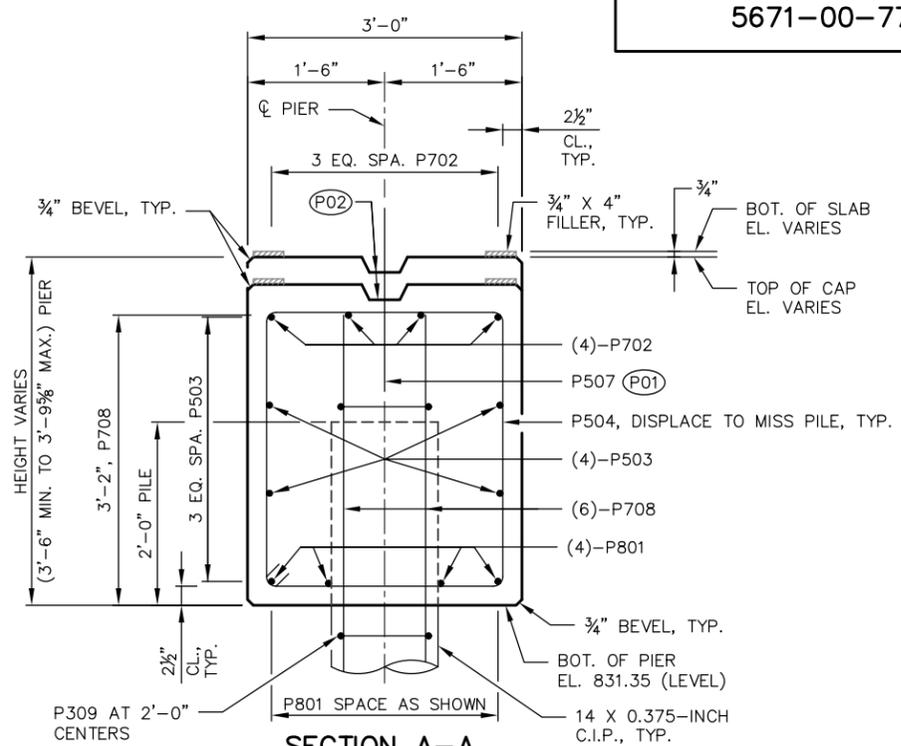
**P506**



**P507**



**P309**



**SECTION A-A**

**BILL OF BARS**

COATED = 70 LBS.  
UNCOATED = 3,470 LBS

MARK	NUMBER		LENGTH	BENT	BAR SERIES	LOCATION
	COATED	UNCOATED				
P801		4	26'-7"			PIER CAP - BOTTOM
P702		4	26'-7"			PIER CAP - TOP
P503		4	26'-7"			PIER CAP - SIDES
P504		28	12'-0"	X		PIER CAP - STIRRUP
P505		8	6'-8"	X		PIER CAP - END STIRRUP
P506		6	5'-7"	X		PIER CAP - END STIRRUP
P507		29	2'-0"			PIER CAP - DOWELS
P708		48	23'-5"			PILE VERT.
P309		78	3'-11"	X		PILE TIES

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

**NOTES**

THE PIER TO BE SUPPORTED ON 14 X 0.375-INCH C.I.P. PILING AND SHALL BE PRE-BORED A MINIMUM OF 3'-FT INTO THE BEDROCK. THE MAXIMUM FACTORED AXIAL COMPRESSION DESIGN LOAD IS 115 TONS PER PILE AT THE PIER. ESTIMATED 25 FT PILE LENGTHS AT THE PIER.

PILES SHALL BE PAINTED IN ACCORDANCE WITH SECTION 550.3.11.3 OF THE STANDARD SPECIFICATIONS.

FOR PILE SPLICE DETAILS SEE "CROSS SECTION, GENERAL NOTES & QUANTITIES" SHEET.

(P01) P505 BARS MAY BE PLACED AFTER CONCRETE IS POURED, BUT BEFORE INITIAL SET HAS TAKEN PLACE.

(P02) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"x6".

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-33-141</b>			
DRAWN BY JDO		PLANS OK'D ACK	
<b>PIER DETAILS</b>			SHEET 6 OF 9

**NOTES**

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

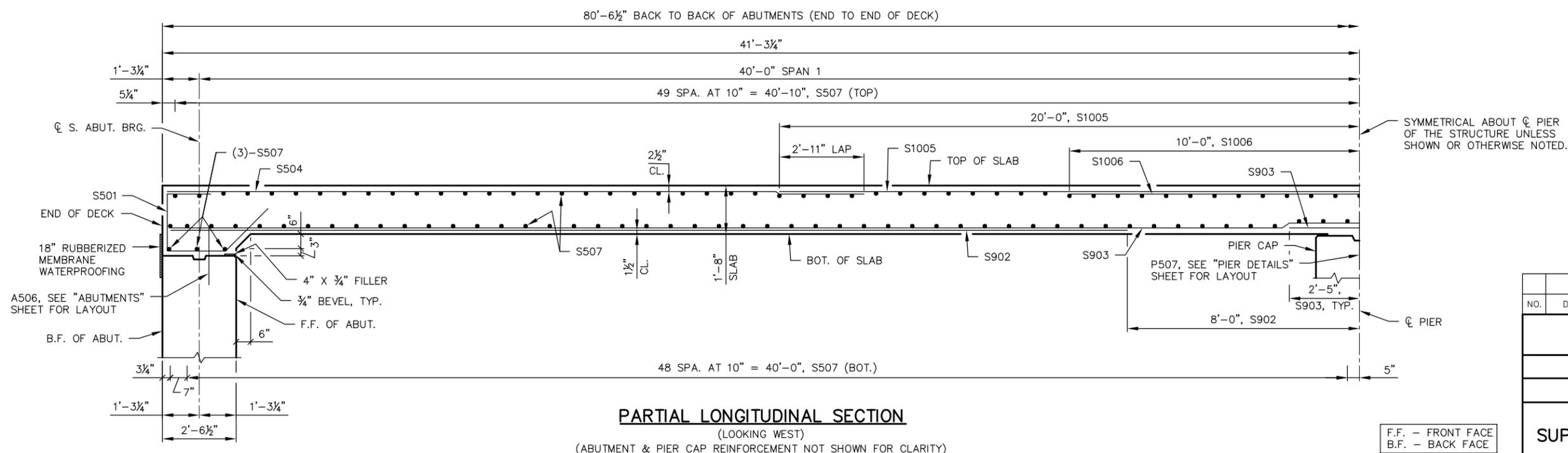
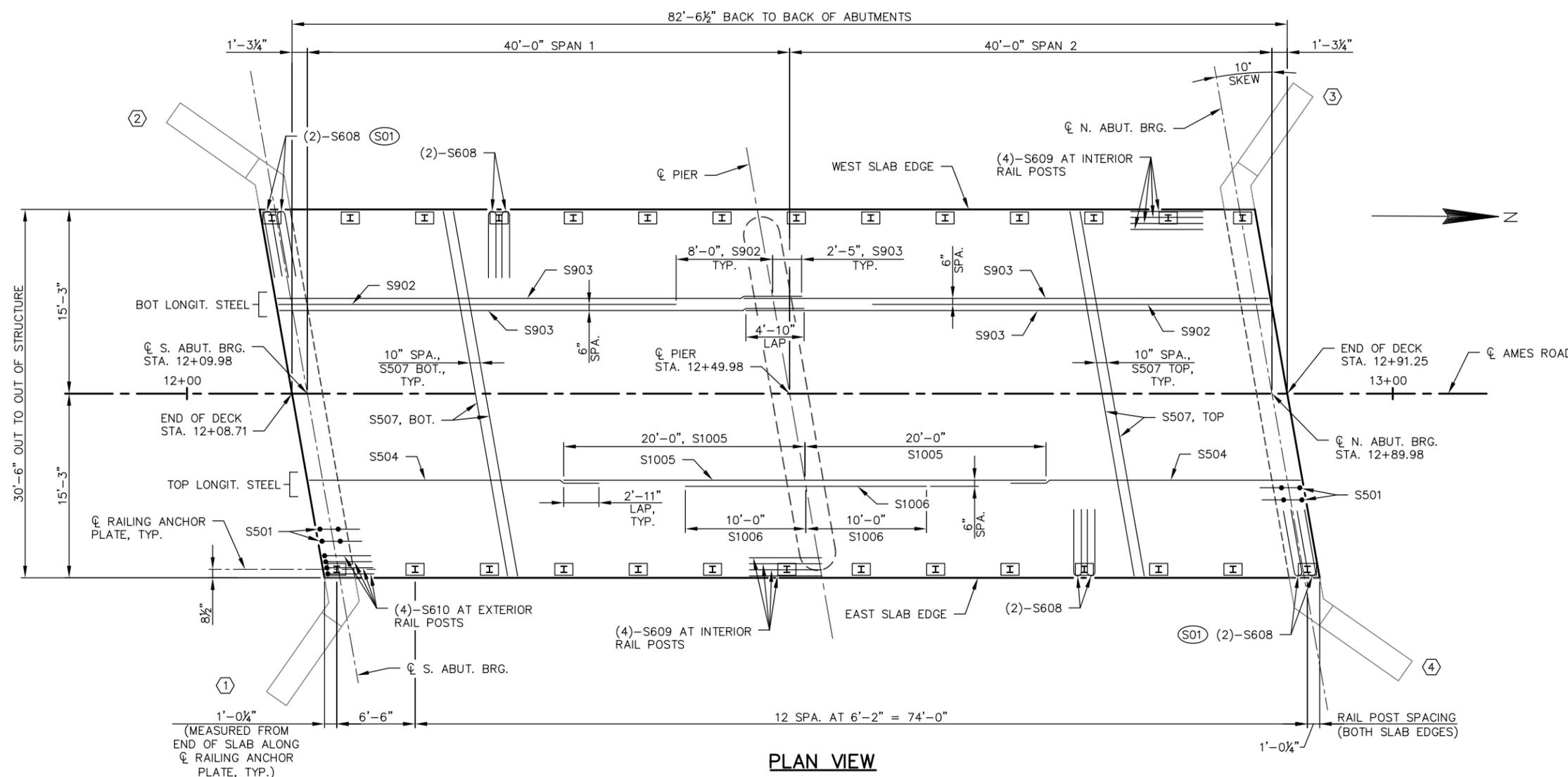
BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

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

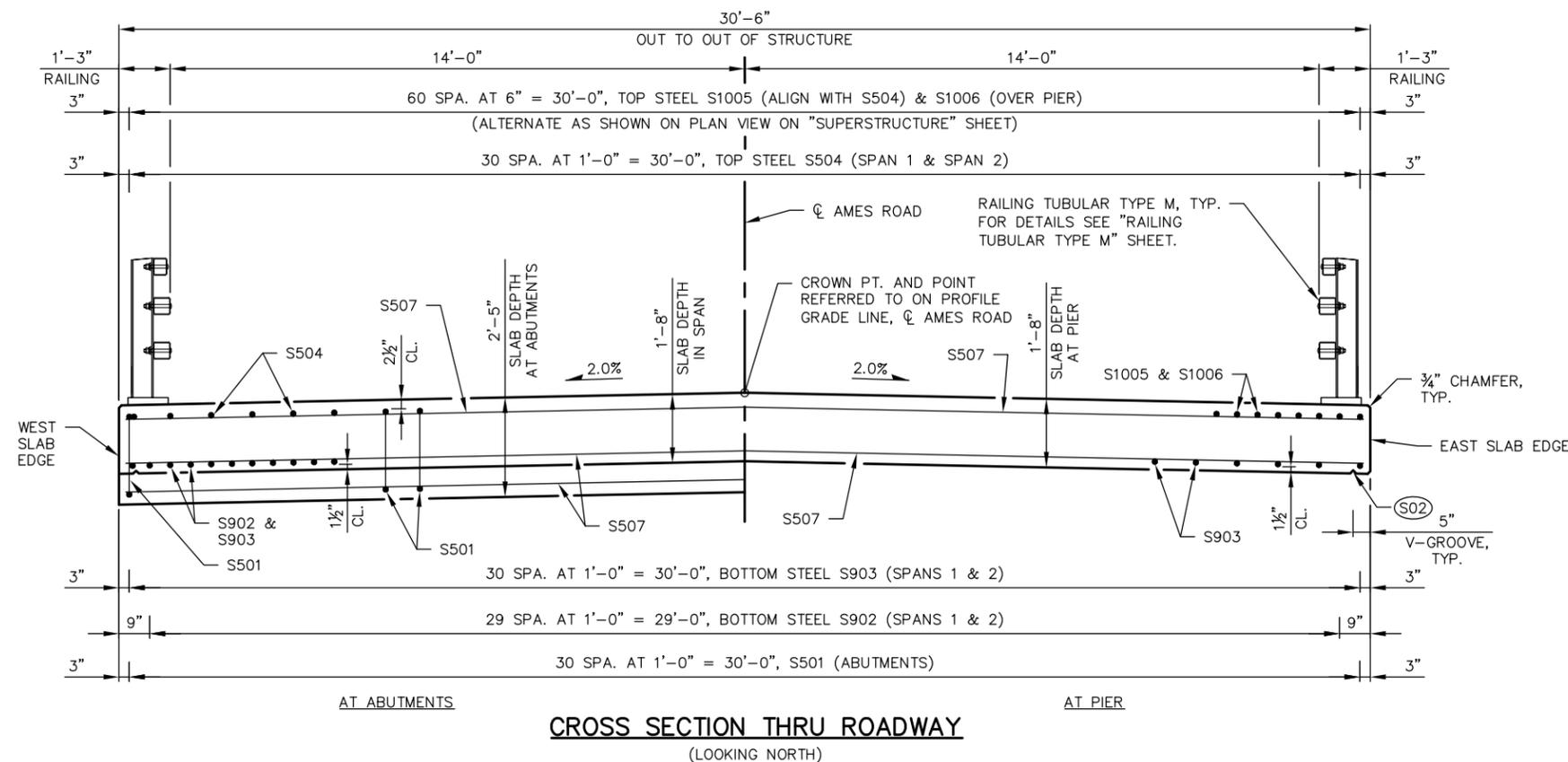
RAILING TO BE INSTALLED ON THE SLAB AFTER FALSEWORK HAS BEEN RELEASED.

(S01) ADJUST ORIENTATION OF S608 BAR AT END POST NEAR WINGS 2 & 4 TO ENSURE CLEAR COVER AT END OF DECK.

⬡ INDICATES WING NUMBER



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-33-141</b>			
DRAWN BY JDO		PLANS OK'D ACK	
<b>SUPERSTRUCTURE</b>			SHEET 7 OF 9



**BILL OF BARS SUPERSTRUCTURE**

COATED = 34,420 LBS.

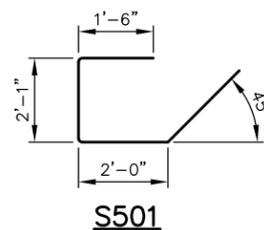
MARK	NUMBER		LENGTH	BENT	BAR SERIES	LOCATION
	COATED	UNCOATED				
S501	62		7'-4"	X		SLAB AT ABUTMENT - TIES LONGIT.
S902	60		33'-1"			SLAB - BOTTOM SPAN 1 & 2 LONGIT.
S903	62		43'-7"			SLAB - BOTTOM SPAN 1 & 2 LONGIT.
S504	62		24'-1"			SLAB - TOP SPAN 1 & 2 LONGIT.
S1005	31		40'-0"			SLAB - TOP OVER PIER LONGIT.
S1006	30		20'-0"			SLAB - TOP OVER PIER LONGIT.
S507	205		30'-7"			SLAB - TOP & BOTTOM TRANS.
S608	56		12'-0"	X		SLAB - TOP AT RAIL POSTS TRANS.
S609	96		6'-0"			SLAB - TOP AT INTERIOR RAIL POSTS LONGIT.
S610	16		4'-8"	X		SLAB - TOP AT EXTERIOR RAIL POSTS LONGIT.

THE FIRST OR FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.  
ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

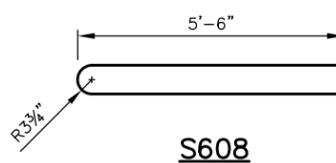
**SURVEY TOP OF SLAB ELEVATIONS**

	CL S. ABUT. BRG.	5/10 PT.	CL PIER	5/10 PT.	CL N. ABUT. BRG.
WEST SLAB EDGE					
CL AMES ROAD					
EAST SLAB EDGE					

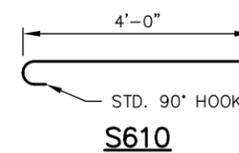
PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE CL OF ABUTMENTS, CL OF PIER AND AT 5/10 POINTS TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF SLAB AND REFERENCE LINE. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.



S501



S608



S610

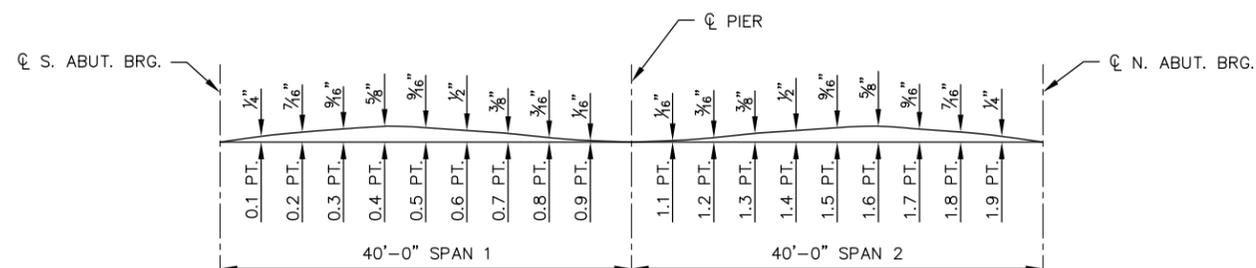
**NOTES**

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

(S02) 3/4" V-GROOVE. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENT BODY. V-GROOVES ARE REQUIRED.

**TOP OF SLAB ELEVATIONS**

SPAN PT	WEST SLAB EDGE	CL AMES ROAD	EAST SLAB EDGE
CL S. ABUT. BRG.	836.40	836.71	836.43
0.1	836.42	836.73	836.45
0.2	836.44	836.75	836.47
0.3	836.46	836.77	836.48
0.4	836.48	836.79	836.50
0.5	836.50	836.81	836.52
0.6	836.51	836.82	836.53
0.7	836.53	836.84	836.55
0.8	836.54	836.85	836.56
0.9	836.56	836.87	836.57
CL PIER	836.57	836.88	836.58
1.1	836.58	836.89	836.59
1.2	836.59	836.90	836.60
1.3	836.60	836.91	836.61
1.4	836.61	836.91	836.62
1.5	836.62	836.92	836.62
1.6	836.62	836.93	836.63
1.7	836.62	836.93	836.63
1.8	836.63	836.93	836.64
1.9	836.63	836.94	836.64
CL N. ABUT. BRG.	836.64	836.94	836.64



**SLAB CAMBER DIAGRAM**

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.

NO.	DATE	REVISION	BY

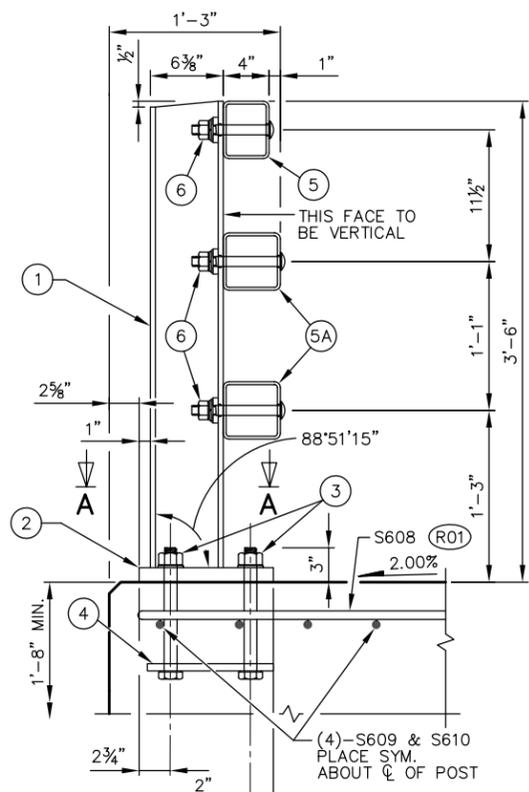
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-33-141**

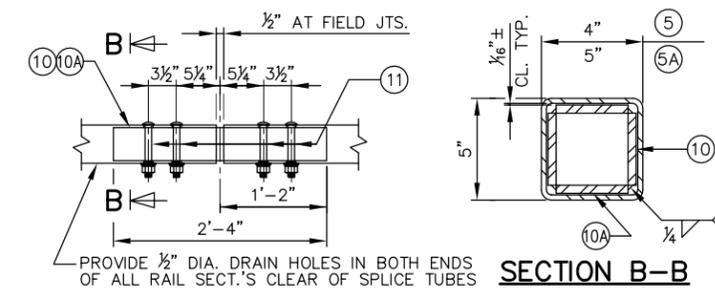
DRAWN BY JDO PLANS OK'D ACK

**SUPERSTRUCTURE DETAILS**

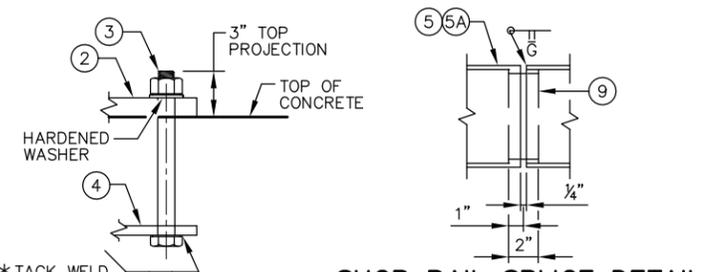
SHEET 8 OF 9



SECTION THRU RAILING ON DECK



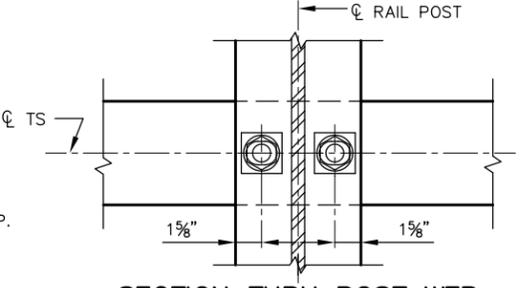
FIELD ERECTION JOINT DETAIL



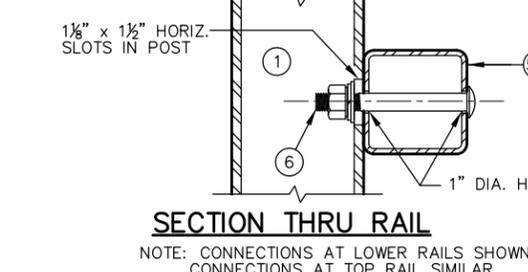
SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)

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



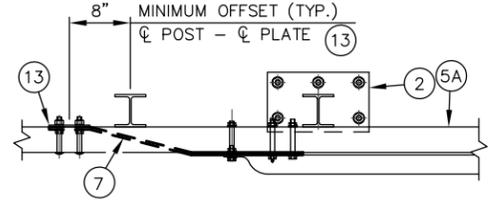
SECTION THRU POST WEB



SECTION THRU RAIL

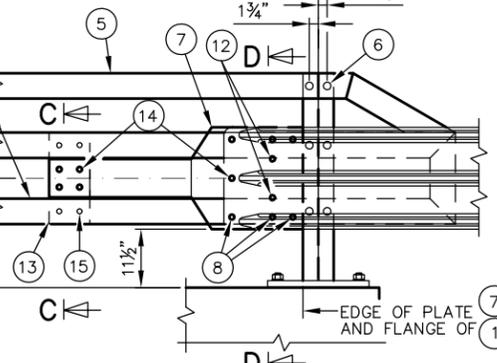
NOTE: CONNECTIONS AT LOWER RAILS SHOWN. CONNECTIONS AT TOP RAIL SIMILAR.

TYPICAL RAIL TO POST CONNECTIONS



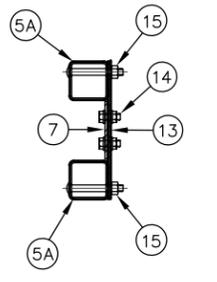
TOP VIEW AT END POST

(THREE BEAM RAIL ATTACHMENT)

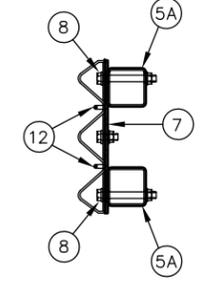


DETAIL AT END POST

(THREE BEAM RAIL ATTACHMENT)



SECTION C-C



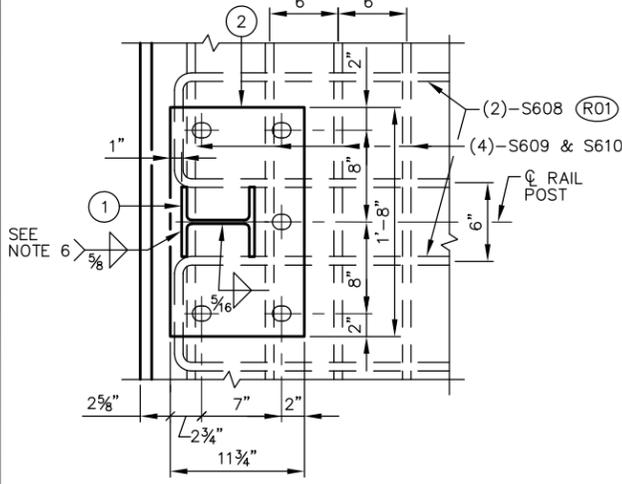
SECTION D-D

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 1/8" 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 1/8" 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 1/2" x 1 1/2" 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 3/8" 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 3/8" 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 1/8" x 1 1/4" LONGIT. SLOTTED HOLES IN PLATE NO. 10A. AT FIELD JOINTS AND 1 1/8" x 2 1/4" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 10A. PROVIDE 1 1/8" 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. REQUIRED AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYMMETRICALLY 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.

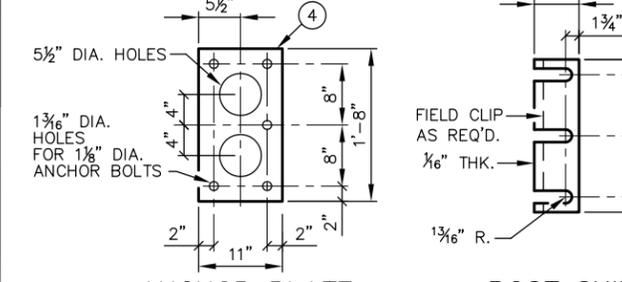
NOTES

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.
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 S.S.P.C. SPECIFICATIONS.
10. SEE BRIDGE MANUAL 30.2 FOR ALLOWED USE.

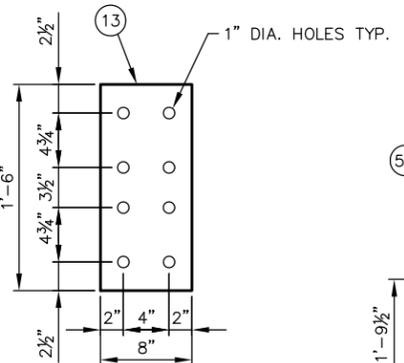


SECTION A-A

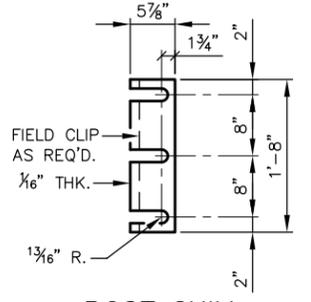
(R01) TIE TO TOP MAT OF STEEL.



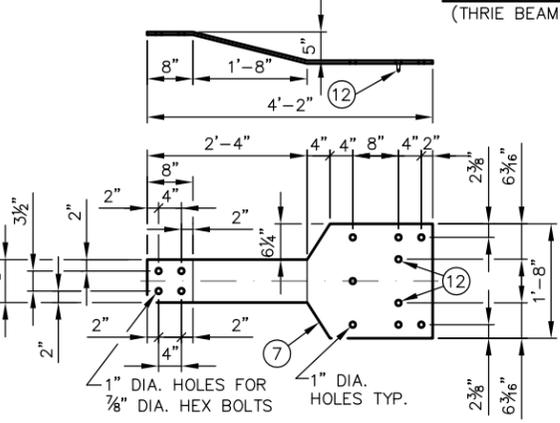
ANCHOR PLATE AT RAIL TO DECK CONNECTION



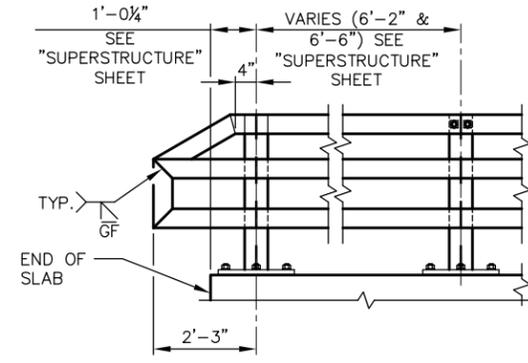
ANCHOR PLATE AT BEAM GUARD ATTACHMENT



POST SHIM DETAIL



BACK-UP PLATE DETAIL AT BEAM GUARD ATTACHMENTS



PART ELEVATION OF RAILING

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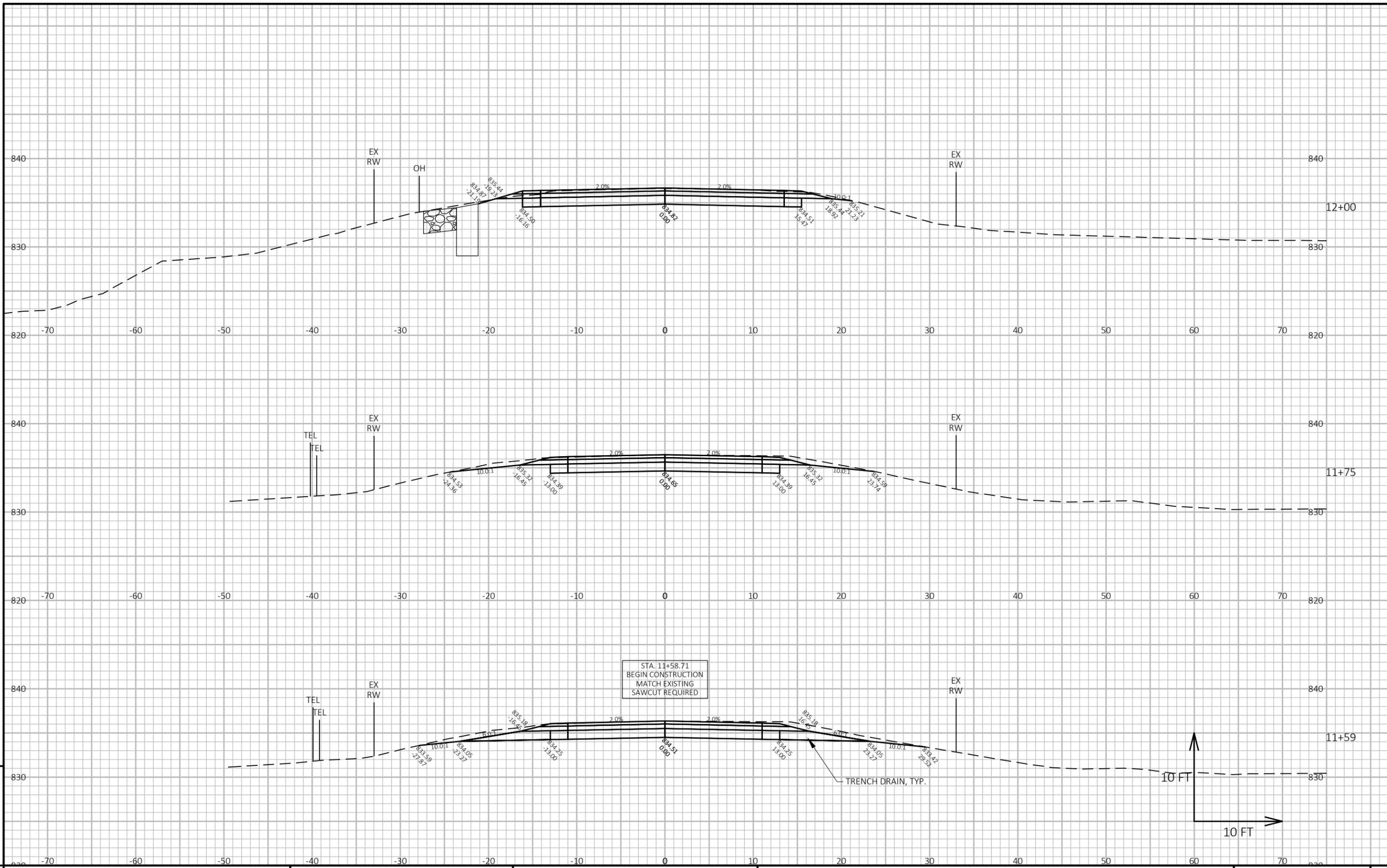
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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-33-141</b>			
DRAWN BY JDO		PLANS OK'D ACK	
RAILING TUBULAR TYPE M			SHEET 9 OF 9

STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)						MASS ORDINATE		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT 1.00	EXPANDED FILL 1.25	EXPANDED MARSH		EXPANDED EBS 1.30	REDUCED MARSH		REDUCED EBS 0.80	
																BACKFILL 1.50	EXPANDED ROCK 1.10		IN FILL 0.60			IN FILL 0.80
Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	Note 8															
11+58.71	-	78.06	10.50	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11+62.72	4.01	77.64	10.50	0.00	0	0	12	2	0	0	0	12	0	0	0	0	0	0	0	0	0	10
11+75.00	12.28	57.82	10.50	0.00	0	0	31	5	0	0	0	43	0	0	0	0	0	0	0	0	0	35
11+83.71	8.71	56.00	10.50	0.00	0	0	18	3	0	0	0	61	0	0	0	0	0	0	0	0	0	51
12+00.00	16.29	61.49	10.50	0.82	0	0	35	6	0	0	0	96	0	0	0	0	0	0	0	0	0	80
12+08.71	8.71	33.12	5.25	1.39	0	0	15	3	0	0	0	111	0	0	0	0	0	0	0	0	0	92
STRUCTURE B-33-0141																						
DIVISION 1 TOTALS		111	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)						MASS ORDINATE		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT 1.00	EXPANDED FILL 1.25	EXPANDED MARSH		EXPANDED EBS 1.30	REDUCED MARSH		REDUCED EBS 0.80	
																BACKFILL 1.50	EXPANDED ROCK 1.10		IN FILL 0.60			IN FILL 0.80
Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	Note 8															
STRUCTURE B-33-0141																						
12+91.25	-	33.14	5.25	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13+00.00	8.75	60.94	10.50	0.00	0	0	15	3	0	0	0	15	0	0	0	0	0	0	0	0	0	12
13+16.25	16.25	53.69	10.50	0.00	0	0	34	6	0	0	0	49	0	0	0	0	0	0	0	0	0	41
13+25.00	8.75	50.85	10.50	0.00	0	0	17	3	0	0	0	66	0	0	0	0	0	0	0	0	0	55
13+37.25	12.25	63.68	10.50	1.69	0	0	26	5	0	0	0	92	0	0	0	0	0	0	0	0	0	76
13+41.25	4.00	63.63	10.50	1.68	0	0	9	2	0	0	0	101	0	0	0	0	0	0	0	0	0	83
DIVISION 2 TOTALS		101	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROJECT TOTALS		212	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

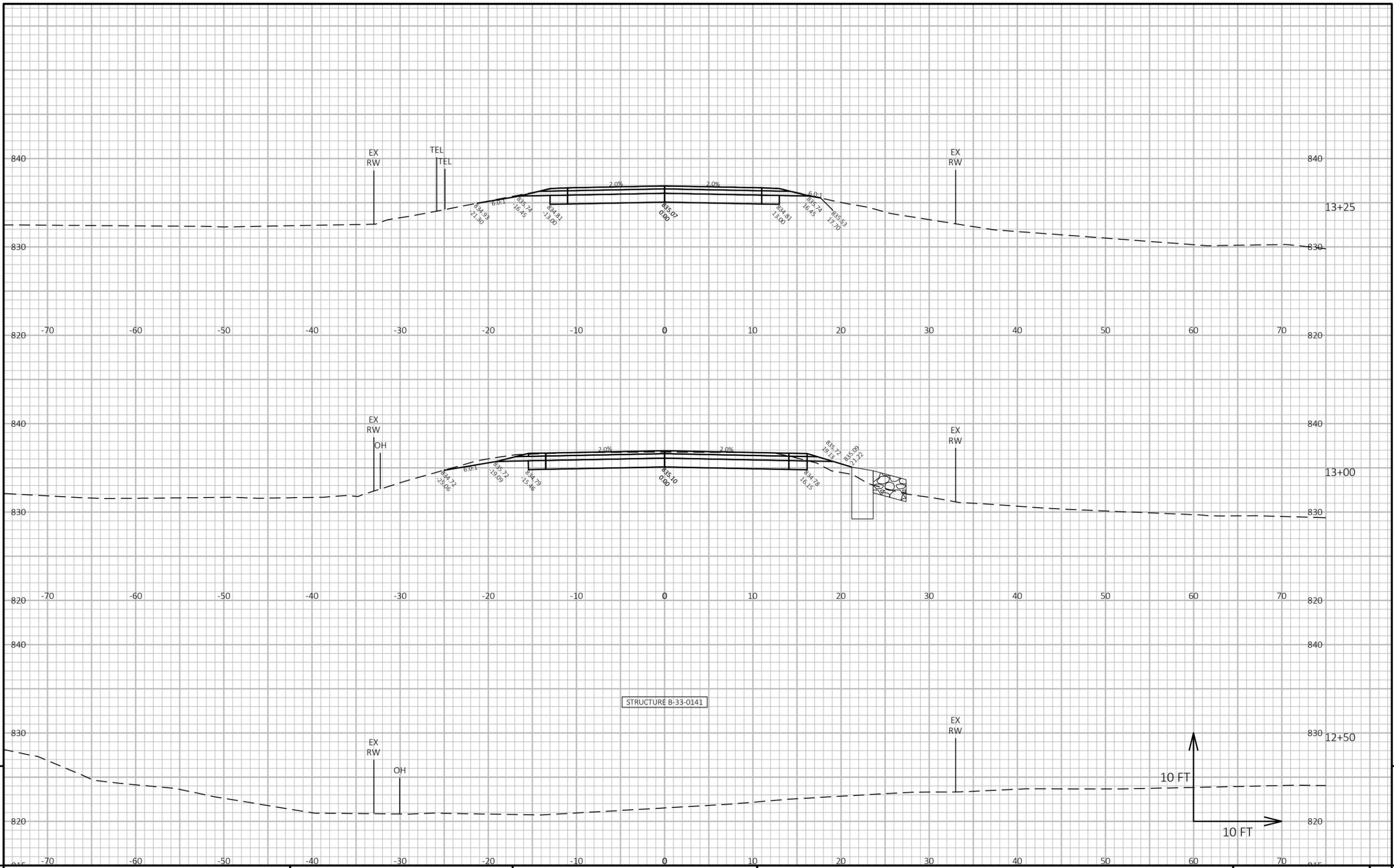
NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MAT	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
6 - REDUCED MARSH IN FILL	REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH CUT OR BORROW: $[(CUT + MARSH EXC + EBS) - ((FILL - REDUCED MARSH IN FILL) - (REDUCED EBS IN FILL) - EXPANDED ROCK) * FILL FACTOR]$
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: $[(CUT + EBS + MARSH EXC) - ((FILL - (REDUCED MARSH IN FILL) - (REDUCED EBS IN FILL) - (EXPANDED ROCK)) * FILL FACTOR)]$
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: $[(CUT) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]$
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH CUT OR BORROW: $[(CUT) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]$



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PROJECT NO: 5671-00-77	HWY: AMES ROAD	COUNTY: LAFAYETTE	CROSS SECTIONS:	SHEET	E
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PROJECT NO: 5671-00-77

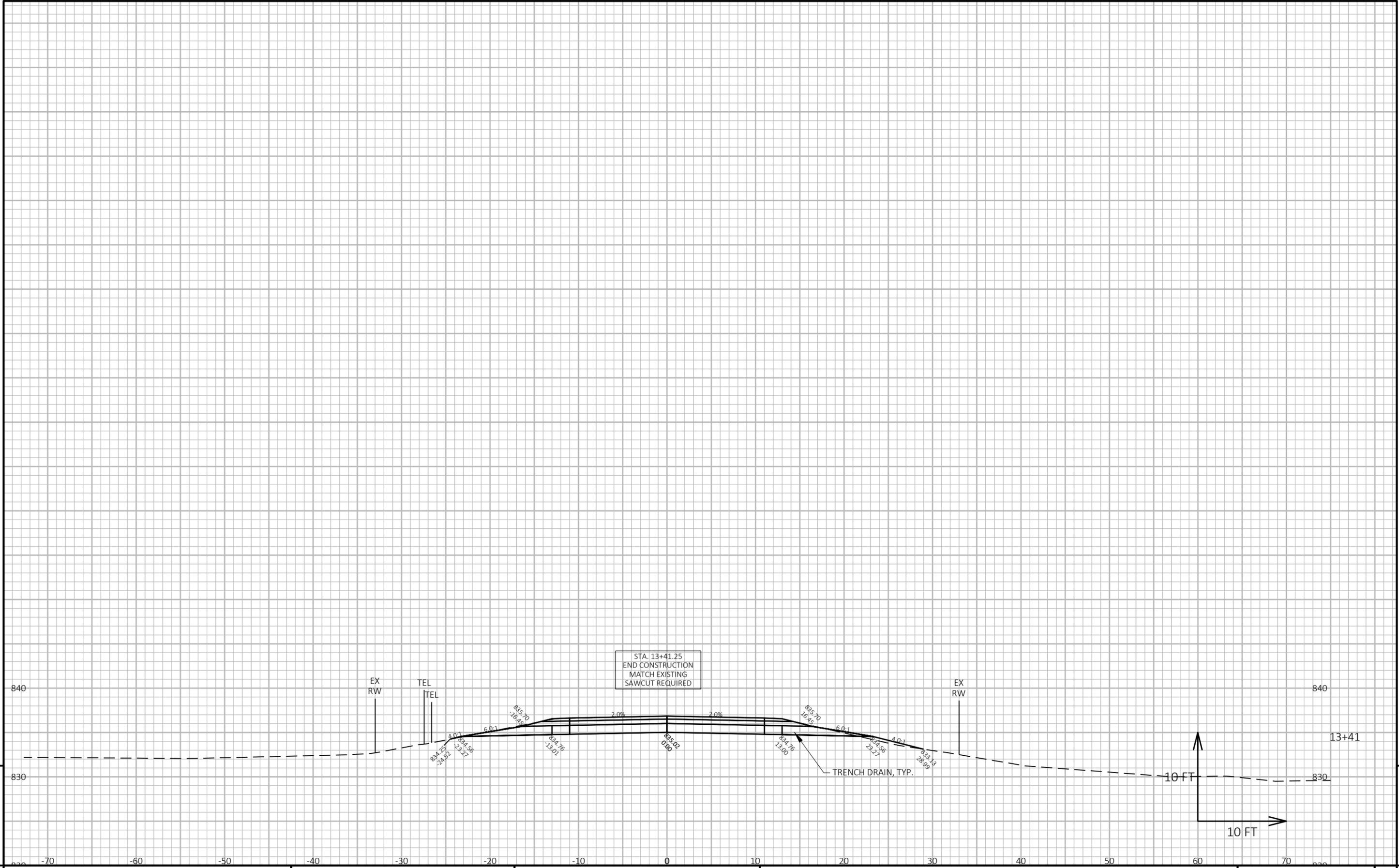
HWY: AMES ROAD

COUNTY: LAFAYETTE

CROSS SECTIONS:

SHEET

E



9

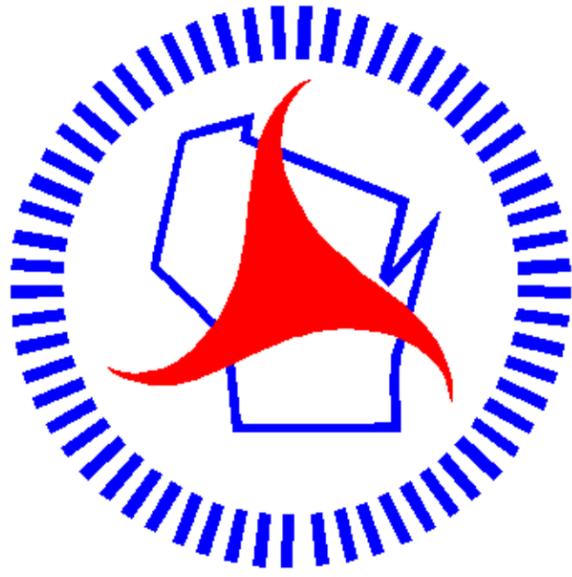
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PROJECT NO: 5671-00-77      HWY: AMES ROAD      COUNTY: LAFAYETTE      CROSS SECTIONS:      SHEET      E

FILE NAME : G:\00-PROJECT FILES\2021\21109 5671-00-07 AMES RD, B-33-0141, LAFAYETTE COUNTY\0-CAD\DESIGN\CORRIDORS\CRDR\_FINAL.DWG      PLOT DATE : 10/7/2021 10:06 AM      PLOT BY : ERIK MEYER      PLOT NAME :      PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.      WISDOT/CADD SHEET 49

LAYOUT NAME - 090203\_xs

Notes



## ***Wisconsin Department of Transportation***

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