EAU

FEBRUARY 2018

PROJECT ID: 7287-00-71

WITH: N/A

COUNTY: TREMPEALEAU

ORDER OF SHEETS

TOTAL SHEETS = 40

DESIGN DESIGNATION

A.A.D.T.	(2018)	= < 100
A.A.D.T.	(2038)	= < 100
D.H.V.		= N/A
D.D. (%)		= 50/50
T. (% OF ADT)		= 10%
DESIGN SPEED		= 55 MPH
ESALS		= 22,000

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
RIPRAP		GRADE LINE	
CORPORATE LIMITS		ORIGINAL GROUND	
PROPERTY LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LOT LINE		SPECIAL DITCH	LABEL
LIMITED HIGHWAY EASEMENT		GRADE ELEVATION	95.36
EXISTING RIGHT OF WAY		CULVERT (Profile View)	
PROPOSED OR NEW R/W LINE			
SLOPE INTERCEPT			
REFERENCE LINE	300'EB'	UTILITIES	
EXISTING CULVERT		ELECTRIC	E
PROPOSED CULVERT (Box or Pipe)		OVERHEAD UTILITIES	OH
COMBUSTIBLE FLUIDS	CAUTION	FIBER OPTIC	FO
		GAS	G
HIGH VOLTAGE	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
MARSH AREA		TELEPHONE	T
		WATER	W
		UTILITY PEDESTAL	
WOODED OR SHRUB AREA		POWER POLE	
		TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

T SUMNER RIPHENBERG ROAD

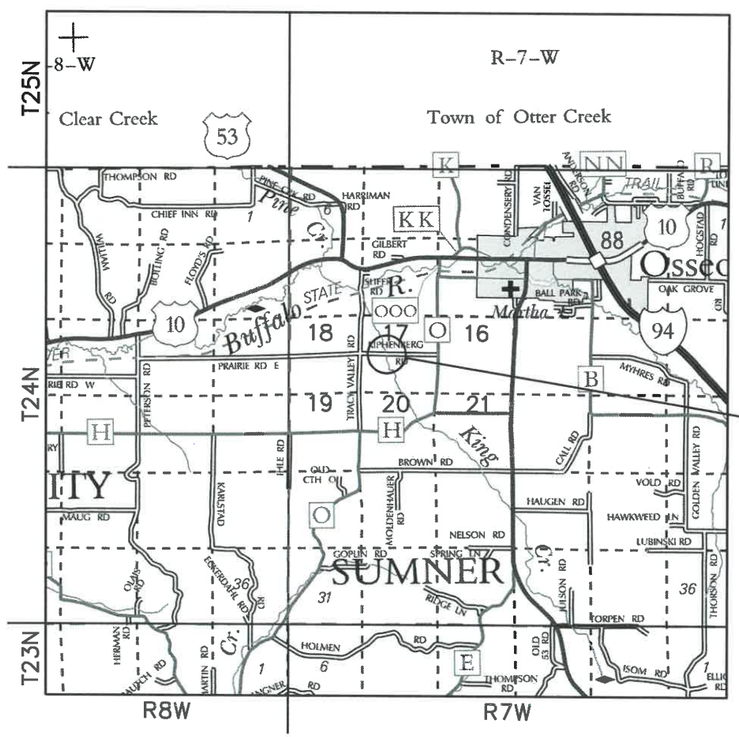
KING CREEK BRIDGE B610219

LOC STR

TREMPEALEAU COUNTY

STATE PROJECT NUMBER
7287-00-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7287-00-71	WISC 2018102	1



LAYOUT
SCALE 0 2 MILE

BEGIN PROJECT
STA 8+50.00
Y – 510425.796
X – 870378.554

STRUCTURE
B-61-0219

END PROJECT
STA 11+50.00
Y – 510423.942
X – 870678.548

TOTAL NET LENGTH OF CENTERLINE = 0.057 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, TREMPEALEAU COUNTY, NAD88 (1991), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES. GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ACCEPTED FOR
TREMPEALEAU COUNTY
6/28/17 DATE — Dave Hugar COUNTY COMMISSIONER

ACCEPTED FOR
TOWN OF SUMNER
6-28-17 DATE — Tony Amundson TOWN CHAIRMAN

ORIGINAL PLANS PREPARED BY

Cedar corporation

MENOMONIE - MADISON - GREEN BAY
www.cedarcorp.com
800-472-7372

WISCONSIN
JOSHUA A. WEISS
37150
OREGON
WI
PROFESSIONAL ENGINEER

6.27.2017 DATE — (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor: CEDAR CORPORATION
Designer: CEDAR CORPORATION
Management Consultant: KNIGHT E/A, INC.

APPROVED FOR THE DEPARTMENT
7/25/17 DATE — (Management Consultant Signature)

E

FILE NAME : I:\CLIENTS-MENO\W\W3916 WDOT NW REGION - KNIGHT\004 7287-00-01 RIPHENBERG ROAD BRIDGE\100 CAD\DWG\010101_TI_39160004.DWG PLOT DATE : 6/20/2017 8:41 AM
LAYOUT NAME - TITLE SHEET

PLOT BY : BRIAN GENSKOW PLOT NAME :

WISDOT/CADDS SHEET 10

GENERAL NOTES

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

SILT FENCE TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER. SILT FENCE TO BE PLACED PRIOR TO CONSTRUCTION AND IN PLACE PRIOR TO BRIDGE REMOVAL.

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS, BUT IS MEASURED AND PAID FOR AS EXCAVATION COMMON. THE LOCATION OF EBS WILL BE DETERMINED BY THE ENGINEER.

SHRINKAGE IS ESTIMATED AT 25%.

THE 3 1/2" ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A 1 3/4" LOWER LAYER AND A 1 3/4" UPPER LAYER. PAVEMENT MIX SHALL CONFORM TO HMA PAVEMENT 4 LT 58-28 S.

BEARINGS REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), TREMPEALEAU COUNTY.

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE FERTILIZED AND SEEDED AS DIRECTED BY THE ENGINEER. USE SEED MIX NO. 10.

WHEN THE QUANTITY OF THE ITEM OF BASE LAYER OR SURFACE LAYER IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OF THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

THE BENCHMARK IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD88).

WETLANDS ARE PRESENT WITHIN THE PROJECT LIMITS. DO NOT OPERATE EQUIPMENT OUTSIDE THE SLOPE INTERCEPTS.

DNR LIAISON

DNR SERVICE CENTER
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
(608) 785-9115
KAREN KALVELAGE
karen.kalvelage@wisconsin.gov

DESIGN CONSULTANT

CEDAR CORPORATION
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MENOMONIE, WI 54751
(715) 235-9081
TROY L. PETERSON, P.E. troy.peterson@cedarcorp.com

TREMPEALEAU COUNTY

TREMPEALEAU CO. HIGHWAY DEPART. P.O. BOX 97
N36258 COUNTY ROAD QQ
WHITEHALL, WI 54773
(715) 538-4799
DAVE LYGA - COMMISSIONER
tcisd@tremplocounty.com

TOWN OF SUMNER

SUMNER TOWN HALL
4310 5TH STREET (CTY RD O)
OSSEO, WI 54758
(715) 597-3082
LARRY AMUNDSON - CHAIRMAN
tcisd@tremplocounty.com

UTILITIES

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1414 WEST HAMILTON AVENUE
P.O. BOX 8
EAU CLAIRE, WI 54702
(715) 737-1431
JOHN KELSER
john.kelser@xcelenergy.com

CENTURYLINK
835 RED IRON ROAD
BLACK RIVER FALLS, WI 54615
(715) 284-4375
DONNA SMOTHERS
donna.smothers@centurylink.com

TRI-COUNTY COMMUNICATIONS
417 5th AVENUE N
STRUM, WI 54770
(715) 695-2801
BRIAN MELSNESS
bmelsness@tcc.corp

DAIRYLAND POWER COOPERATIVE
3200 EAST AVENUE N
LA CROSSE, WI 54601
(608) 788-4000
KURT D. CHILDS
kdc@dairynet.com

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	OFF	OFFSET
AGG	AGGREGATE	PC	POINT OF CURVATURE
ET AL	AND OTHERS	PI	POINT OF INTERSECTION
AADT	ANNUAL AVERAGE DAILY TRAFFIC	PT	POINT OF TANGENCY
BF	BACK FACE	POL	POINT ON LINE
BM	BENCHMARK	PE	PRIVATE ENTRANCE
C/L OR ℄	CENTERLINE	PL	PROPERTY LINE
Δ	CENTRAL ANGLE OR DELTA	PSI	POUNDS/SQUARE INCH
CLR	CLEAR	PROP	PROPOSED
CONC	CONCRETE	R	RADIUS
CONST	CONSTRUCTION	RR	RAILROAD
COR	CORNER	REBAR	REINFORCEMENT BAR
CMP	CORRUGATED METAL PIPE	REQ'D	REQUIRED
CTH	COUNTY TRUNK HIGHWAY	RT	RIGHT
CR	CREEK	RHF	RIGHT-HAND FORWARD
CFS	CUBIC FEET/SECOND	R/W	RIGHT-OF-WAY
CULV	CULVERT	RD	ROAD
D	DEGREE OF CURVE	SEC	SECTION
DHV	DESIGN HOUR VOLUME	S	SOUTH
DIA	DIAMETER	SE	SOUTHEAST
E	EAST	SW	SOUTHWEST
EL	ELEVATION	STH	STATE TRUNK HIGHWAY
EST	ESTIMATED	STA	STATION
FPS	FEET PER SECOND	SE	SUPER ELEVATION
FE	FIELD ENTRANCE	T	TANGENT
FT	FOOT (FEET)	TEL	TELEPHONE
FTG	FOOTING	TEMP	TEMPORARY
FDN	FOUNDATION	TI	TEMPORARY INTEREST
FF	FRONT FACE	TLE	TEMPORARY LIMITED EASEMENT
IP	IRON PIN	TL OR T/L	TRANSIT LINE
LT	LEFT	T	TRUCKS
LHF	LEFT-HAND FORWARD	TYP	TYPICAL
L	LENGTH OF CURVE	U/G	UNDERGROUND
LF	LINEAR FOOT	USH	UNITED STATES HIGHWAY
MAX	MAXUMUM	VAR	VARIABLE
MI	MILE	V	VELOCITY
MIN	MINIMUM	VPC	VERTICAL POINT OF CURVATURE
NC	NORMAL CROWN	VPI	VERTICAL POINT OF INTERSECTION
N	NORTH	VPT	VERTICAL POINT OF TANGENCY
NE	NORTHEAST	W	WEST
NW	NORTHWEST	YD	YARD
NO	NUMBER		

RUNOFF COEFFICIENT TABLE

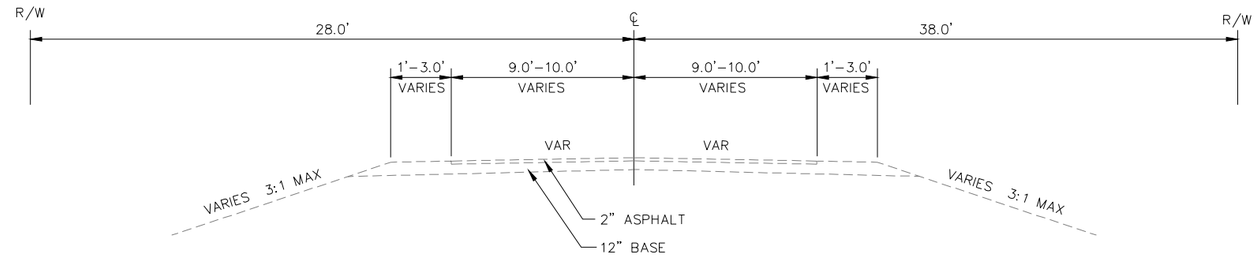
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33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

TOTAL PROJECT AREA = 0.41 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.41 ACRES

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

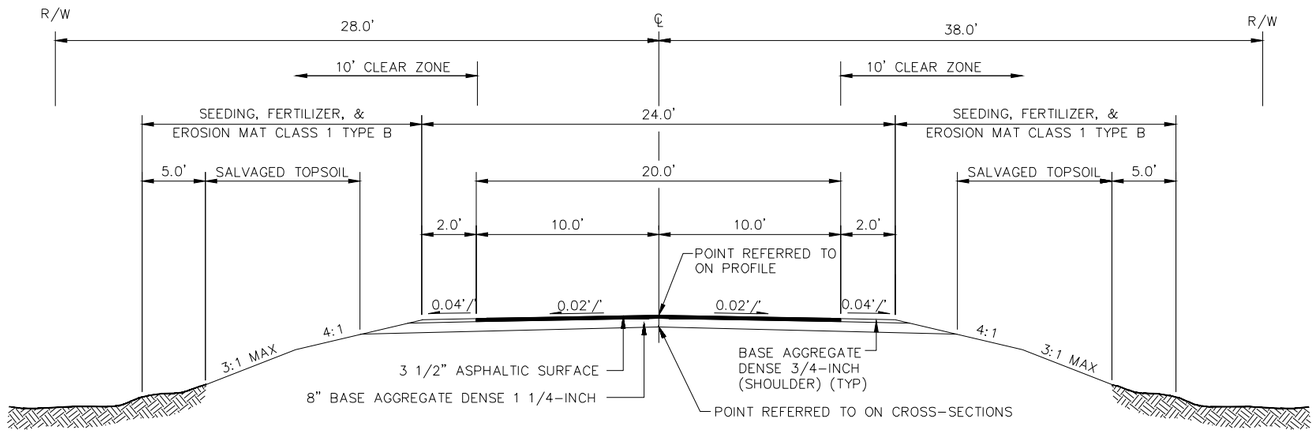
** DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

PROJECT NO: 7287-00-71	HWY: RIPHENBERG ROAD	COUNTY: TREMPEALEAU	GENERAL NOTES	SHEET 2



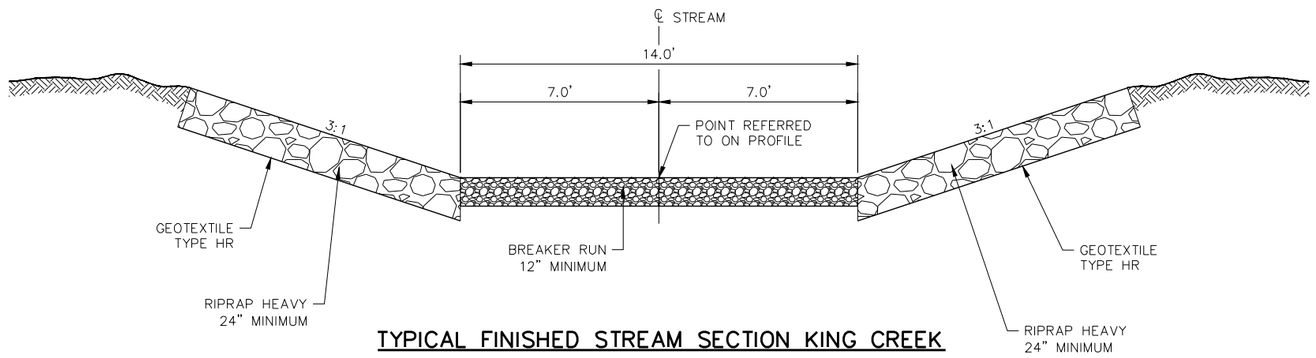
EXISTING TYPICAL SECTION RIPHENBERG ROAD

STA 8+50.00 – STA 11+50.00



TYPICAL FINISHED SECTION RIPHENBERG ROAD

STA 8+50.00 – STA 9+90.67
STA 10+29.33 – STA 11+50.00



TYPICAL FINISHED STREAM SECTION KING CREEK

STA 100+00.00 – STA 101+60.00

PROJECT NO: 7287-00-71	HWY: RIPHENBERG ROAD	COUNTY: TREMPEALEAU	TYPICAL SECTIONS	SHEET 3

2

N

EXISTING STRUCTURE P-61-0114 TO BE REMOVED

PROPOSED STRUCTURE B-61-0219 STA 10+10

PROPOSED CHANNEL CHANGE

AGGREGATE SHOULDER EDGE (TYP)

AGGREGATE SHOULDER (TYP)

R/W

RIPHENBERG ROAD

ASPHALT

9+00

10+00

11+00

ASHPALT

101+60

101+00

100+00

KING CREEK

TLE

PLE

EXISTING CHANNEL

BEGIN PROJECT
STA 8+50.00
Y = 510425.796
X = 870378.554

END PROJECT
STA 11+50.00
Y = 510423.942
X = 870678.558

LEGEND

- DRAINAGE FLOW
- SLOPE INTERCEPT
- SILT FENCE
- RIPRAP
- TURBIDITY BARRIER
- SALVAGED TOPSOIL, TEMPORARY SEEDING, SEEDING MIXTURE NO.10, FERTILIZER TYPE B AND EROSION MAT CLASS I, TYPE B
- SALVAGED TOPSOIL, MULCH, TEMPORARY SEEDING, SEEDING MIXTURE NO.10, AND FERTILIZER TYPE B

PROJECT NO: 7287-00-71	HWY: RIPHENBERG ROAD	COUNTY: TREMPEALEAU	EROSION CONTROL	SHEET 4	E

FILE NAME : I:\CLIENTS-MENO\W\W3916 WDOT NW REGION - KNIGHT\004 7287-00-01 RIPHENBERG ROAD BRIDGE\100 CAD\DWG\022001_EC_391601.DWG
LAYOUT NAME - EROSIION CONTROL
PLOT DATE : 7/25/2017 10:14 AM PLOT BY : BRIAN GENSKOW PLOT NAME : PLOT SCALE : ##########

7287-00-71

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	1.000	1.000
0004	201.0205	Grubbing	STA	1.000	1.000
0006	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 10+00	LS	1.000	1.000
0008	205.0100	Excavation Common	CY	302.000	302.000
0010	206.1000	Excavation for Structures Bridges (structure) 01. B-61-219	LS	1.000	1.000
0012	208.0100	Borrow	CY	239.000	239.000
0014	210.1500	Backfill Structure Type A	TON	230.000	230.000
0016	213.0100	Finishing Roadway (project) 01. 7287-00-71	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	30.000	30.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	372.000	372.000
0022	311.0110	Breaker Run	TON	150.000	150.000
0024	455.0605	Tack Coat	GAL	36.000	36.000
0026	465.0105	Asphaltic Surface	TON	113.000	113.000
0028	502.0100	Concrete Masonry Bridges	CY	127.000	127.000
0030	502.3200	Protective Surface Treatment	SY	140.000	140.000
0032	505.0400	Bar Steel Reinforcement HS Structures	LB	3,140.000	3,140.000
0034	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	15,390.000	15,390.000
0036	513.4061	Railing Tubular Type M (structure) 01. B-61-219	LF	122.000	122.000
0038	516.0500	Rubberized Membrane Waterproofing	SY	16.000	16.000
0040	550.2108	Piling CIP Concrete 10 3/4 X 0.50-Inch	LF	400.000	400.000
0042	606.0300	Riprap Heavy	CY	246.000	246.000
0044	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	160.000	160.000
0046	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7287-00-71	EACH	1.000	1.000
0048	619.1000	Mobilization	EACH	1.000	1.000
0050	624.0100	Water	MGAL	6.600	6.600
0052	625.0500	Salvaged Topsoil **P**	SY	950.000	950.000
0054	627.0200	Mulching **P**	SY	286.000	286.000
0056	628.1504	Silt Fence	LF	761.000	761.000
0058	628.1520	Silt Fence Maintenance	LF	761.000	761.000
0060	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0062	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0064	628.2004	Erosion Mat Class I Type B	SY	664.000	664.000
0066	628.6005	Turbidity Barriers	SY	141.000	141.000
0068	629.0210	Fertilizer Type B **P**	CWT	0.640	0.640
0070	630.0110	Seeding Mixture No. 10 **P**	LB	14.000	14.000
0072	630.0200	Seeding Temporary **P**	LB	25.000	25.000
0074	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000

7287-00-71

Line	Item	Item Description	Unit	Total	Qty
0076	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0078	638.2602	Removing Signs Type II	EACH	6.000	6.000
0080	638.3000	Removing Small Sign Supports	EACH	6.000	6.000
0082	642.5001	Field Office Type B	EACH	1.000	1.000
0084	643.0420	Traffic Control Barricades Type III	DAY	1,278.000	1,278.000
0086	643.0705	Traffic Control Warning Lights Type A	DAY	1,704.000	1,704.000
0088	643.0900	Traffic Control Signs	DAY	994.000	994.000
0090	643.5000	Traffic Control	EACH	1.000	1.000
0092	645.0111	Geotextile Type DF Schedule A	SY	30.000	30.000
0094	645.0120	Geotextile Type HR	SY	421.000	421.000
0096	650.4500	Construction Staking Subgrade	LF	261.000	261.000
0098	650.5000	Construction Staking Base	LF	261.000	261.000
0100	650.9910	Construction Staking Supplemental Control (project) 01. 7287-00-71	LS	1.000	1.000
0102	650.9920	Construction Staking Slope Stakes	LF	421.000	421.000
0104	690.0150	Sawing Asphalt	LF	40.000	40.000
0106	715.0502	Incentive Strength Concrete Structures	DOL	762.000	762.000
0108	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000	1,200.000
0110	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	300.000	300.000

CLEARING & GRUBBING

STATION - STATION	LOCATION	201.0105 CLEARING STA.	201.0205 GRUBBING STA.
9+50 - 10+50	RT	1	1
TOTAL		1	1

FINISHING ROADWAY

PROJECT	213.0100 EACH	REMARKS
7287-00-71	1	
TOTAL	1	

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110 3/4 - INCH TON	305.0120 1 1/4 - INCH TON
8+50 - 11+50	RIPHENBERG RD	30	372
TOTAL		30	372

DIVISION	STATIONING	LOCATION	205.0100 COMMON EXCAVATION (CY) **P** CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL (1)	AVAILABLE MATERIAL (CY) (2)	UNEXPANDED FILL	EXPANDED FILL FACTOR 1.30	MASS ORDINATE +/- (3)	208.0100 BORROW (CY)
1	8+50 - 9+91	WEST APPROACH	155	122	33	80	104	-71	71
	10+30 - 11+50	EAST APPROACH	95	104	-9	122	159	-168	168
DIVISION 1 SUBTOTAL			250	226	24	202	263	-239	239
2	100+00 - 100+80	KING CREEK	52	0	52	40	52	0	0
DIVISION 2 SUBTOTAL			52	0	52	40	52	0	0
GRAND TOTAL			302	226	76	242	315	-239	239
		TOTAL COMMON EXCAVATION	302						239

1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
2) AVAILABLE MATERIAL = CUT MINUS THE SALVAGED/UNUSABLE PAVEMENT MATERIAL
3) THE MASS ORDINATE = A + OR - QUANTITY CALCULATED FOR THE DIVISON. A POSITIVE QUANTITY INDICATES AN EXCESS OF MATERIAL.
P PAY PLAN QUANTITY

ASPHALTIC SURFACE

STATION - STATION	LOCATION	455.0605* TACK COAT GAL	465.0105 TON
8+50 - 9+91	WEST APPROACH	19	61
10+30 - 11+50	EAST APPROACH	17	52
TOTAL		36	113

*APPLICATION RATE = 0.060 GAL/SY

WATER

PROJECT	LOCATION	624.0100 MGAL	REMARKS
8+50 - 11+50	RIPHENBERG RD	6.6	BASE COMPACTION DUST CONTROL
TOTAL		6.6	

MOBILIZATION

PROJECT	619.1000 EACH	REMARKS
7287-00-71	1	
TOTAL	1	

RESTORATION ITEMS

STATION - STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY **P**	627.0200 MULCHING SY **P**	629.0210 FERTILIZER TYPE B CWT **P**	630.0110 SEEDING MIXTURE NO. 10 LB **P**	630.0200 SEEDING TEMPORARY LB **P**
8+50- 9+91	RT/LT	359	--	0.23	5	10
10+30 - 11+50	RT/LT	305	--	0.19	4	8
KING CREEK		186	186	0.12	3	5
UNDISTRIBUTED		100	100	0.10	2	2
TOTAL		950	286	0.64	14	25

P PAY PLAN QUANTITY

EROSION CONTROL ITEMS

STATION - STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2004 EROSION MAT CLASS I TYPE B SY	628.6005 TURBIDITY BARRIER SY	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
8+50 - 9+91	WEST APPROACH	296	296	359	--	--	--
10+30 - 11+50	EAST APPROACH	263	263	305	--	--	--
KING CREEK		202	202	--	--	--	--
UNDISTRIBUTED		--	--	--	141	2	2
TOTAL		761	761	664	141	2	2

SIGNING QUANTITIES

LOCATION	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	DESCRIPTION
NW BRIDGE CORNER	3.00	1	1	1	W5-52 L
SW BRIDGE CORNER	3.00	1	1	1	W5-52 R
NE BRIDGE CORNER	3.00	1	1	1	W5-52 R
SE BRIDGE CORNER	3.00	1	1	1	W5-52 L
9+80	RT	--	1	1	
10+21	LT	--	1	1	
TOTAL	12.00	4	6	6	

FIELD OFFICE TYPE B

PROJECT	642.5001 EACH	REMARKS
7287-00-01	1	
TOTAL	1	

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.9910 SUPPLEMENTAL CONTROL 7287-00-71 LS	650.9920 SLOPE STAKES LF
8+50 - 11+50	RIPHENBERG ROAD	261	261	--	261
100+00 - 101+60	KING CREEK	--	--	--	160
PROJECT 7287-00-71		--	--	1	--
TOTAL		261	261	1	421

SAWING ASPHALT

STATION	LOCATION	690.0150 LF
8+50	BEGIN PROJECT	20
11+50	END PROJECT	20
TOTAL		40

TRAFFIC CONTROL

LOCATION	643.5000 TRAFFIC CONTROL EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0900 TRAFFIC CONTROL SIGNS DAY
RIPHENBERG ROAD	1	1278	1704	994
TOTAL	1	1278	1704	994

MISCELLANEOUS (STREAM REALIGNMENT)

STATION - STATION	LOCATION	311.0110 BREAKER RUN TON	606.0300 RIPRAP HEAVY CY	645.0120 GEOTEXTILE TYPE HR SY
100+00 - 101+60	KING CREEK	150	91	136
TOTAL		150	91	136

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE TOWN. ALL AREAS SHOWN IN ACRES

PARCEL NUMBER	OWNER(S) NAME	INTEREST REQUIRED	PLE ACRES	TLE ACRES
1	CURTISS A. FREMSTAD	PLE, TLE	0.23	0.11

EXISTING HIGHWAY RIGHT OF WAY SHOWN IS BASED ON THE EXISTING CENTERLINE OF RIPENBERG ROAD (WI STATUTE 82.31).

LAYOUT

SCALE 0 1M 2M

TOTAL NET LENGTH OF CENTERLINE = 300'

TOWN

PROJECT LOCATION

4

4

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS	ROR
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	SECTION	SEC.
CENTERLINE	C/L	STATION	STA.
CERTIFIED SURVEY MAP	CSM	TEMPORARY LIMITED EASEMENT	TLE
CORNER	COR.	VOLUME	V.
DOCUMENT	DOC.		
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(DOC)		
REFERENCE LINE	R/L		

CURVE DATA

LONG CHORD	LCH		
LONG CHORD BEARING	LCB		
RADIUS	R		
DEGREE OF CURVE	D		
CENTRAL ANGLE OR DELTA	DELTA		
LENGTH OF CURVE	L		
TANGENT	TAN		

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD	OH	
TRANSMISSION LINES ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN		PROPOSED R/W LINE	
R/W MONUMENT	■ <SET>	EXISTING H.E. LINE	
R/W STANDARD	▲ <SET>	PROPERTY LINE	
SIGN	SIGN	LOT & TIE LINES	
SECTION CORNER MONUMENT		SLOPE INTERCEPTS	
SECTION CORNER SYMBOL		CORPORATE LIMITS	
FEE (HATCH VARIES)		NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY ACQUISITION)	
PERMANENT LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
R/W BOUNDARY POINT	RW20	SECTION LINE	
PARCEL NUMBER	04	QUARTER LINE	
UTILITY PARCEL NUMBER	32	SIXTEENTH LINE	
SIGN NUMBER (OFF PREMISE)	21H	EXISTING CENTERLINE	
BUILDING		PROPOSED REFERENCE LINE	
		PARALLEL OFFSET	

R/W PROJECT NUMBER	7287-00-01	SHEET NUMBER	TOTAL NUMBER
FEDERAL PROJECT NUMBER		4.01	1

PLAT OF RIGHT OF WAY REQUIRED FOR

TOWN OF SUMNER – RIPHENBERG ROAD

TREMPEALEAU COUNTY

CONSTRUCTION PROJECT NUMBER 7287-00-71

GN

SCALE: FEET 0 25 50

BEGIN RELOCATION ORDER
STA. 8+50
Y = 510425.796
X = 870378.554
1628.94 FEET EAST AND 8.14 FEET SOUTH OF WEST QUARTER CORNER SEC. 17, T24N, R7W

END RELOCATION ORDER
STA. 11+50
Y = 510423.943
X = 870678.548
3490.80 FT WEST AND 32.97 FT NORTH OF EAST QUARTER CORNER SEC.17, T24N, R7W

SE - NW

OF

33'

R/W

RIPHENBERG ROAD

Y = 510433.941
X = 868749.613
ALUM. CAP FND

T24N R7W 18 17

S89°42'49"E 1628.96'

PL

S89°32'45"E 5419.91'

9+00

111.00'

10+00

100.00'

B-61-0219

89.00'

11+00

S89°38'46"E

S89°27'32"E 3490.96'

Y = 510390.974
X = 874169.353
ALUM. CAP FND

T24N R7W 17 16

EAST-WEST 1/4 LINE

S00°21'14"W 33.00'

N00°21'14"E 33.00'

S89°38'46"E 100.00'

NE - SW

15' TLE SLOPES

35' TLE SLOPES

100.00'

N00°21'14"E

S00°21'14"W

KING CREEK

N89°38'46"W 100.00'

9+46.00 33.00', 133.00

9+61.00 33.00', 133.00

10+61.00 33.00', 133.00

10+96.00 33.00', 133.00

TLE

TLE, PLE

TLE, PLE

TLE

1 CURTISS A. FREMSTAD 100'x100' PLE DRAINAGE MAINTENANCE

SUMNER

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), TREMPEALEAU COUNTY, NAD83 (1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"X24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD. PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

THE EXISTING RIGHT OF WAY IS BASED ON THE EXISTING CENTERLINE OF RIPENBERG ROAD, WI STATUTE 82.39

APPROVED FOR TREMPEALEAU COUNTY

4/4/17 DATE

HIGHWAY COMMISSIONER

ORIGINAL PLAT PREPARED BY

Cedar corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751
715-235-9081
800-472-7372
FAX 715-235-2227
www.cedarcorp.com
engineers • architects • planners • environmental specialists
land surveyors • landscape architects • interior designers

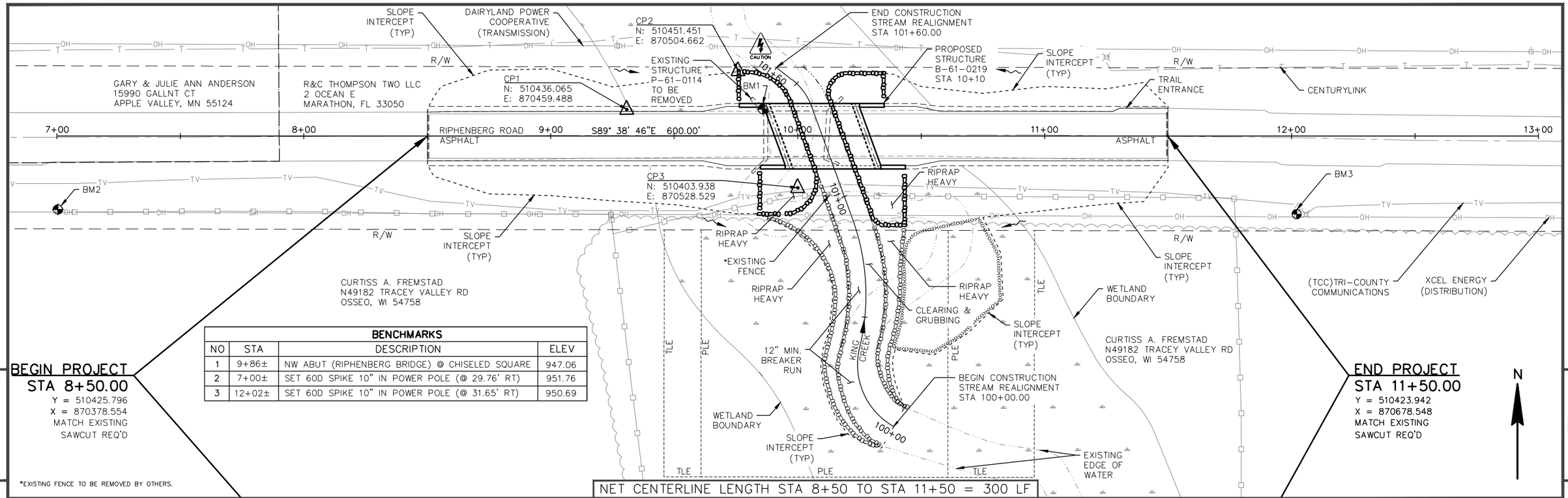
WISCONSIN
DUSTIN J. LaBLONDE
S 3096
MENOMONIE
WI
LAND SURVEYOR

04/04/17 DATE

(Signature)

REVISION DATE:

FILE NAME : I:\CLIENTS-MENO\W\W3916 WDOT NW REGION - KNIGHT\004 7287-00-01 RIPHENBERG ROAD BRIDGE\100 CAD\DWG\RW_39160004_REVISED.DWG
APPRAISAL PLAT DATE : ----------



BENCHMARKS			
NO	STA	DESCRIPTION	ELEV
1	9+86±	NW ABUT (RIPHENBERG BRIDGE) @ CHISELED SQUARE	947.06
2	7+00±	SET 60D SPIKE 10" IN POWER POLE (@ 29.76' RT)	951.76
3	12+02±	SET 60D SPIKE 10" IN POWER POLE (@ 31.65' RT)	950.69

PROJECT NO: 7287-00-71	HWY: RIPHENBERG ROAD	COUNTY: TREMPEALEAU	PLAN AND PROFILE: RIPHENBERG ROAD	SHEET 11

PI STA = 100+21.83
Y = 510317.834
X = 870547.760
DELTA = 74°21'32"
D = 199°04'52"
T = 21.83'
L = 37.35'
R = 28.78'
PC STA = 100+00.00
Y = 510307.006
X = 870566.714
PT STA = 100+37.35
Y = 510339.006
X = 870553.077
BK = N60°15'38.4"W
AH = N14°05'53.2"E

PI STA = 100+64.65
Y = 510365.480
X = 870559.726
DELTA = 33°44'39"
D = 63°39'43"
T = 27.30'
L = 53.01'
R = 90.00'
PC STA = 100+37.35
Y = 510339.006
X = 870553.077
PT STA = 100+90.36
Y = 510391.187
X = 870550.549
BK = N14°05'53.2"E
AH = N19°38'45.7"W

*EXISTING FENCE TO BE REMOVED BY OTHERS.

CURTISS A. FREMSTAD
N49182 TRACEY VALLEY RD
OSSEO, WI 54758

CURTISS A. FREMSTAD
N49182 TRACEY VALLEY RD
OSSEO, WI 54758

WETLAND BOUNDARY

BEGIN CONSTRUCTION STREAM REALIGNMENT
STA 100+00.00
Y = 510307.006
X = 870566.714
MATCH EXISTING

SLOPE INTERCEPT (TYP)

12" MIN. BREAKER RUN

RIPRAP HEAVY

BACKFILL EXISTING STREAM BED

*EXISTING FENCE

KING CREEK

PC: 100+37.35

PT: 100+90.36

PC: 101+00

PT: 101+52.43

PC: 101+38.56

100+00

101+00

101+60

N19° 38' 45.71"W

TLE

PLE

R/W

XCEL ENERGY (DISTRIBUTION)

CP3
N: 510403.938
E: 870528.529

RIPHENBERG ROAD

9+00

CP1
N: 510436.065
E: 870459.488

DAIRYLAND POWER COOPERATIVE (TRANSMISSION)

R&C THOMPSON TWO LLC
2 OCEAN E
MARATHON, FL 33050

EXISTING STRUCTURE P-61-0114 TO BE REMOVED

CP2
N: 510451.451
E: 870504.662

END CONSTRUCTION STREAM REALIGNMENT
STA 101+60.00
Y = 510452.670
X = 870520.191
MATCH EXISTING

CENTURYLINK

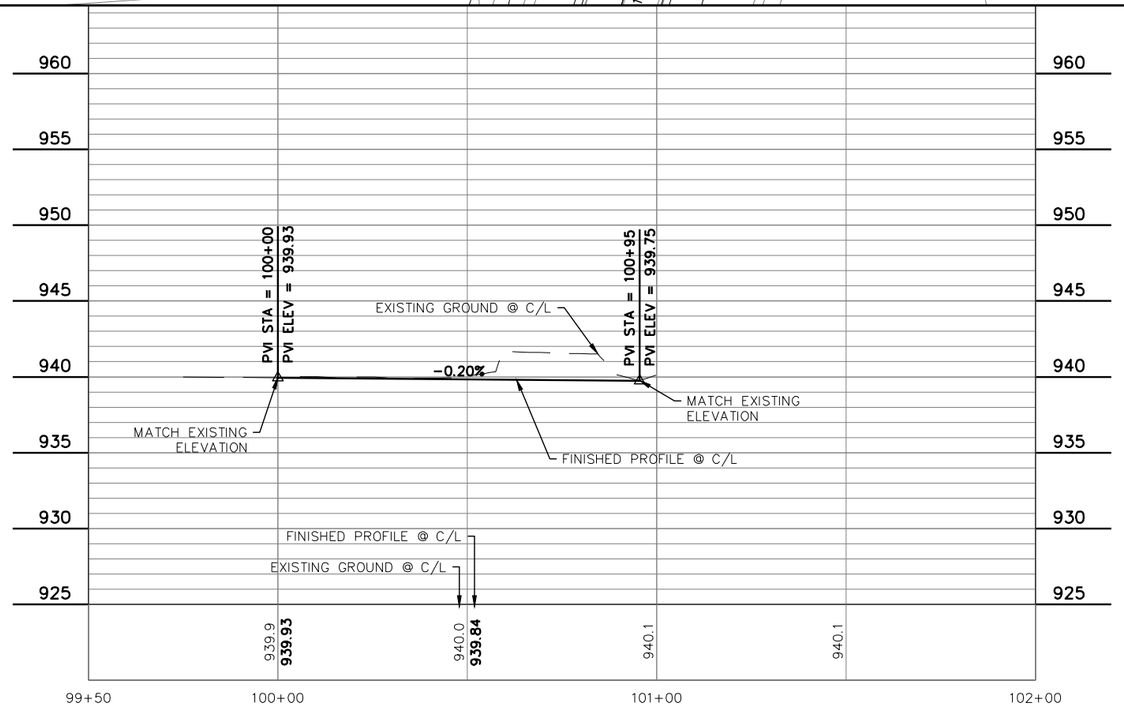
PROPOSED STRUCTURE B-61-0219 STA 10+10

(TCC)TRI-COUNTY COMMUNICATIONS

11+00

PI STA = 101+45.68
Y = 510443.291
X = 870531.949
DELTA = 31°46'26"
D = 229°10'59"
T = 7.12'
L = 13.86'
R = 25.00'
PC STA = 101+38.56
Y = 510436.590
X = 870534.341
PT STA = 101+52.43
Y = 510447.728
X = 870526.387
BK = N19°38'45.7"W
AH = N51°25'11.5"W

N



PROJECT NO: 7287-00-71	HWY: RIPHENBERG ROAD	COUNTY: TREMPEALEAU	PLAN AND PROFILE: KING CREEK STREAM REALIGNMENT	SHEET 12 E

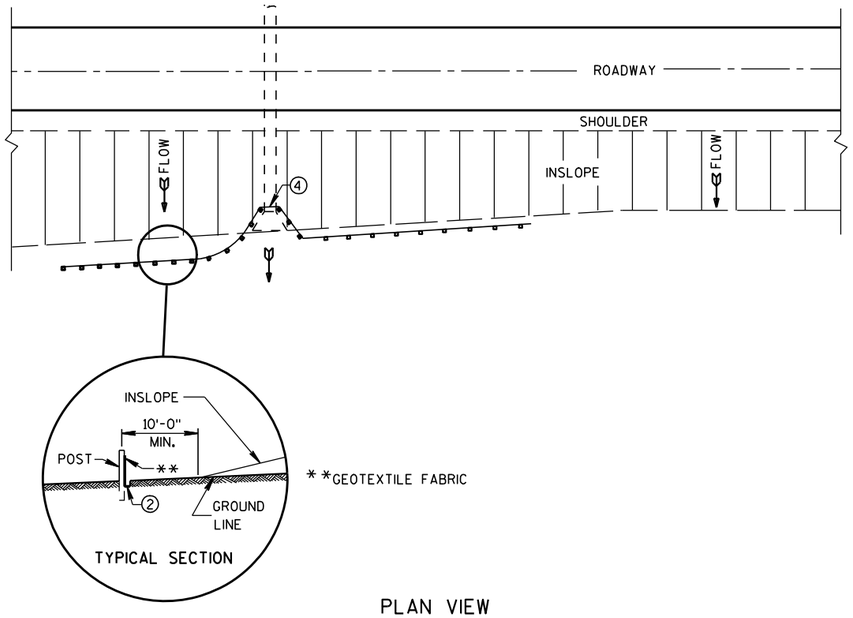
FILE NAME : I:\CLIENTS-MENO\W\W3916 WDOT NW REGION - KNIGHT\004 7287-00-01 RIPHENBERG ROAD BRIDGE\100 CAD\DWG\050102_PP_391600.DWG PLOT DATE : 7/25/2017 10:15 AM PLOT BY : BRIAN GENSKOW PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

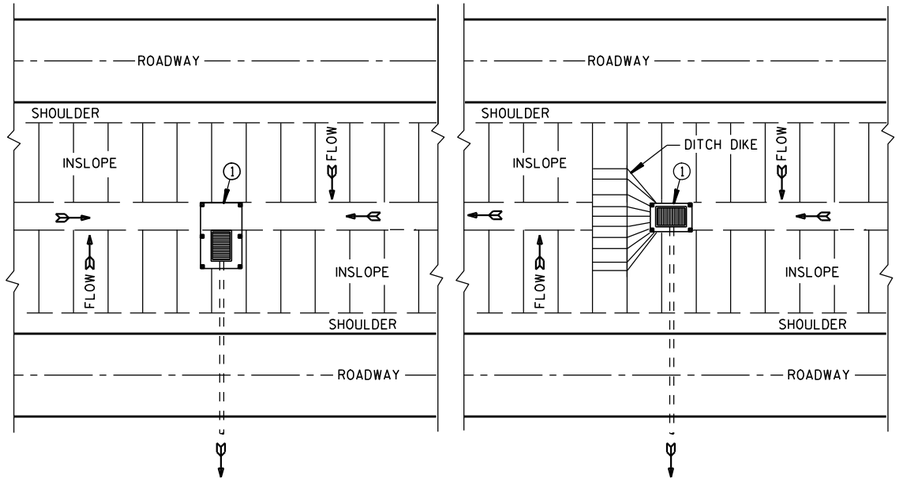
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C06-08	SIGNING & MARKING FOR TWO LANE BRIDGES
15D38-01A	TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS
15D38-01B	ATTACHMENT OF SIGNS TO POSTS

6



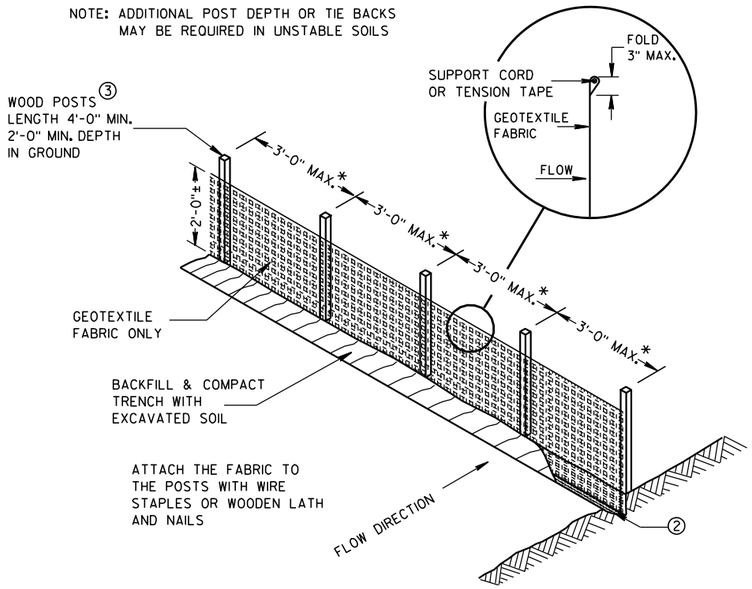
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



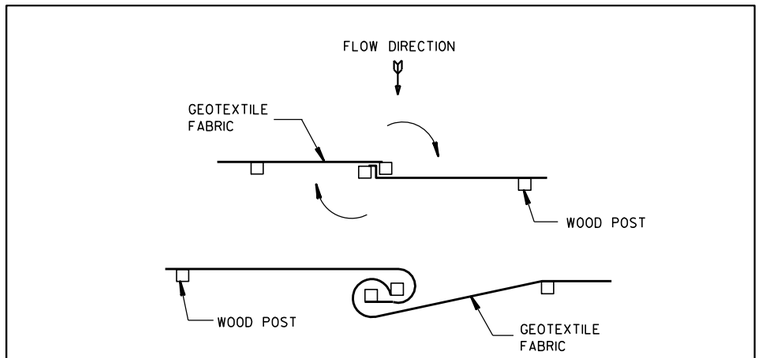
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS



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

SILT FENCE

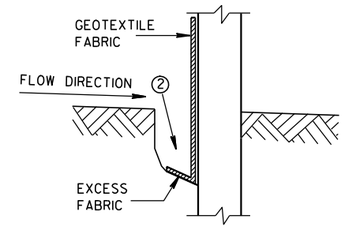


JOINING TWO LENGTHS OF SILT FENCE 5

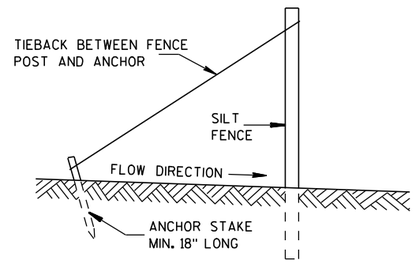
GENERAL NOTES

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 1⅛" X 1⅛" 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



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

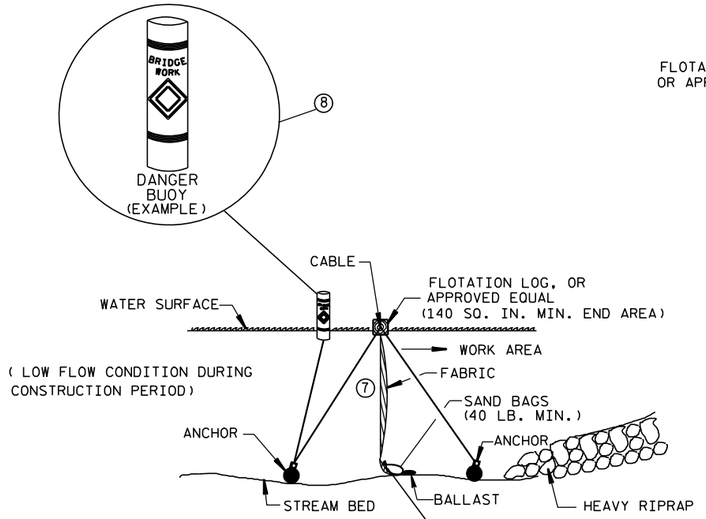
SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

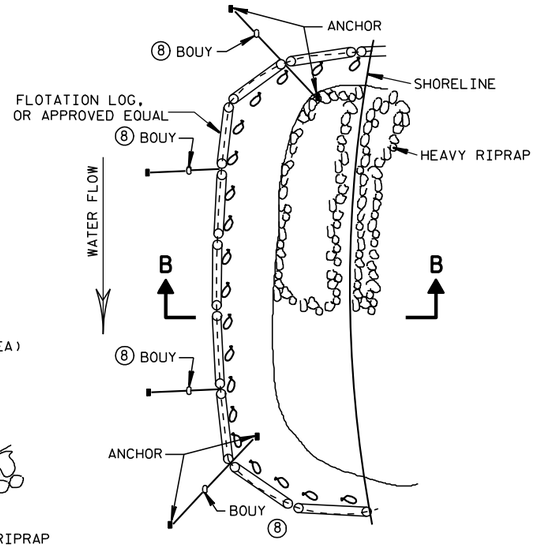
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

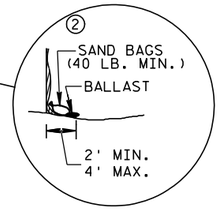
S.D.D. 8 E 9-6

S.D.D. 8 E 9-6

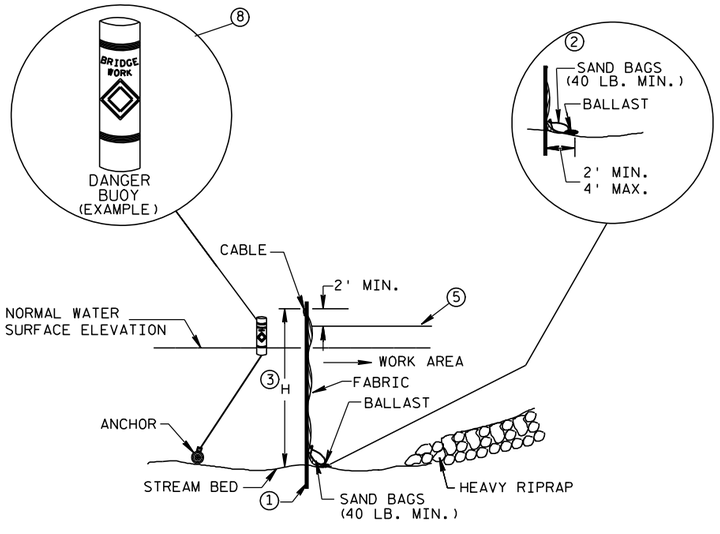


SECTION B-B

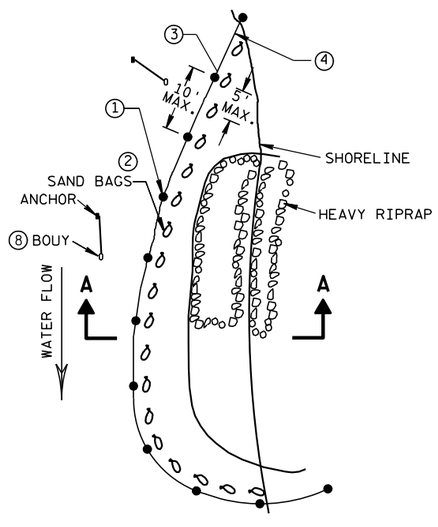




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

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 SANDBAGS 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 FT., POST SPACING MAY NEED TO BE DECREASED.

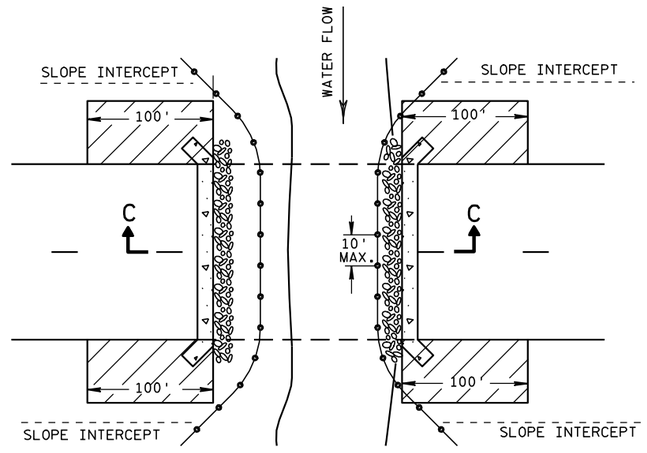
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE O2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

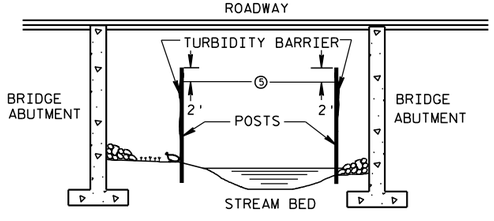
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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



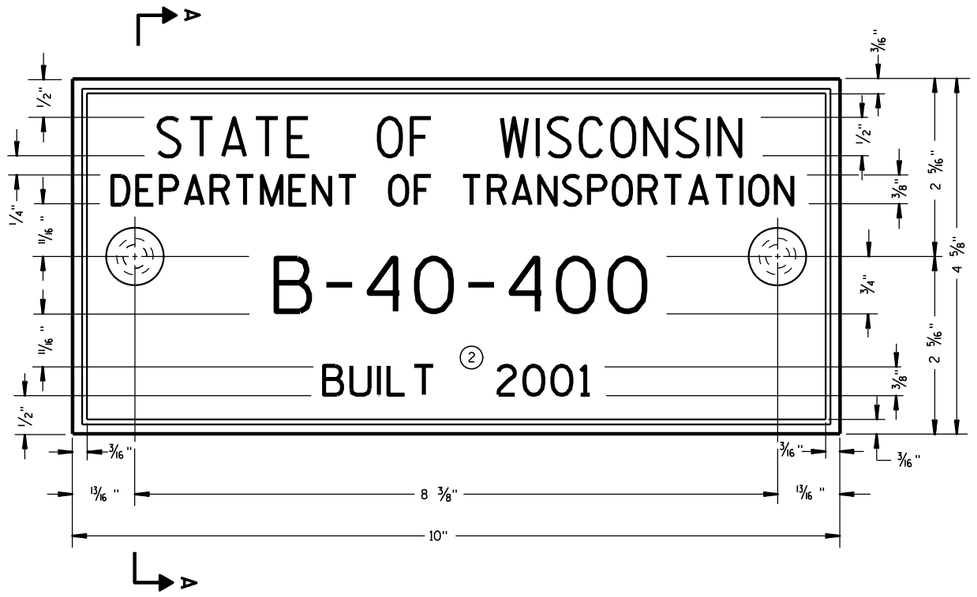
SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

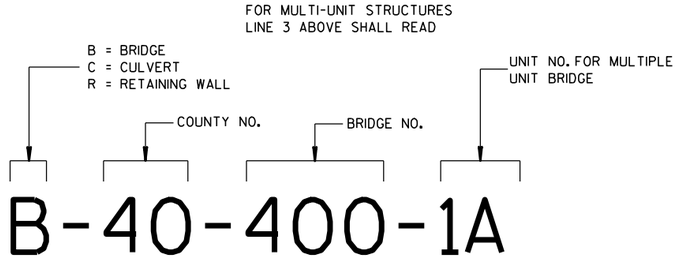
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/04/02 DATE
/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



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



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

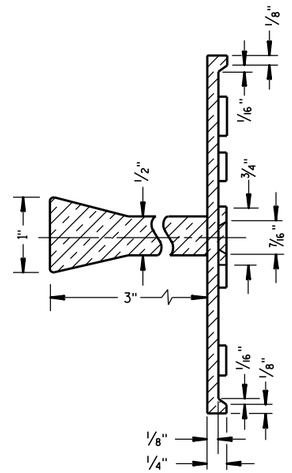
GENERAL NOTES

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

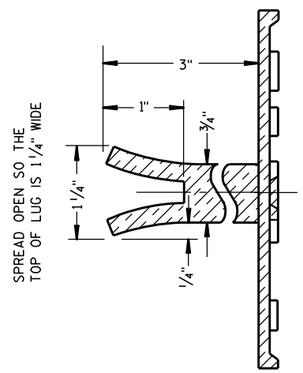
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

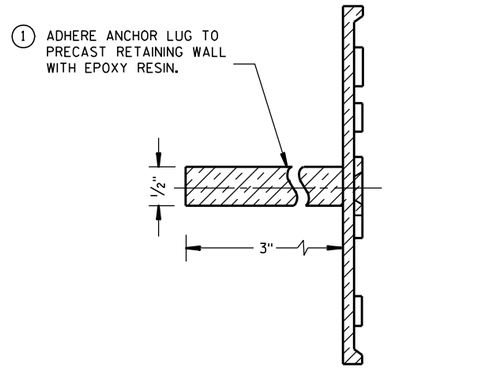
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER

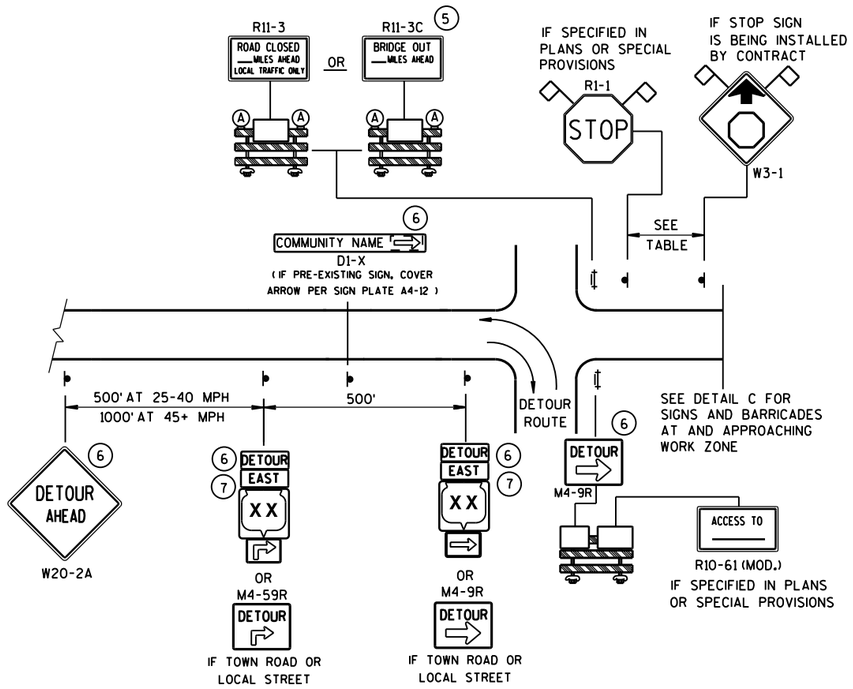
FHWA

6

S.D.D. 12 A 3-10

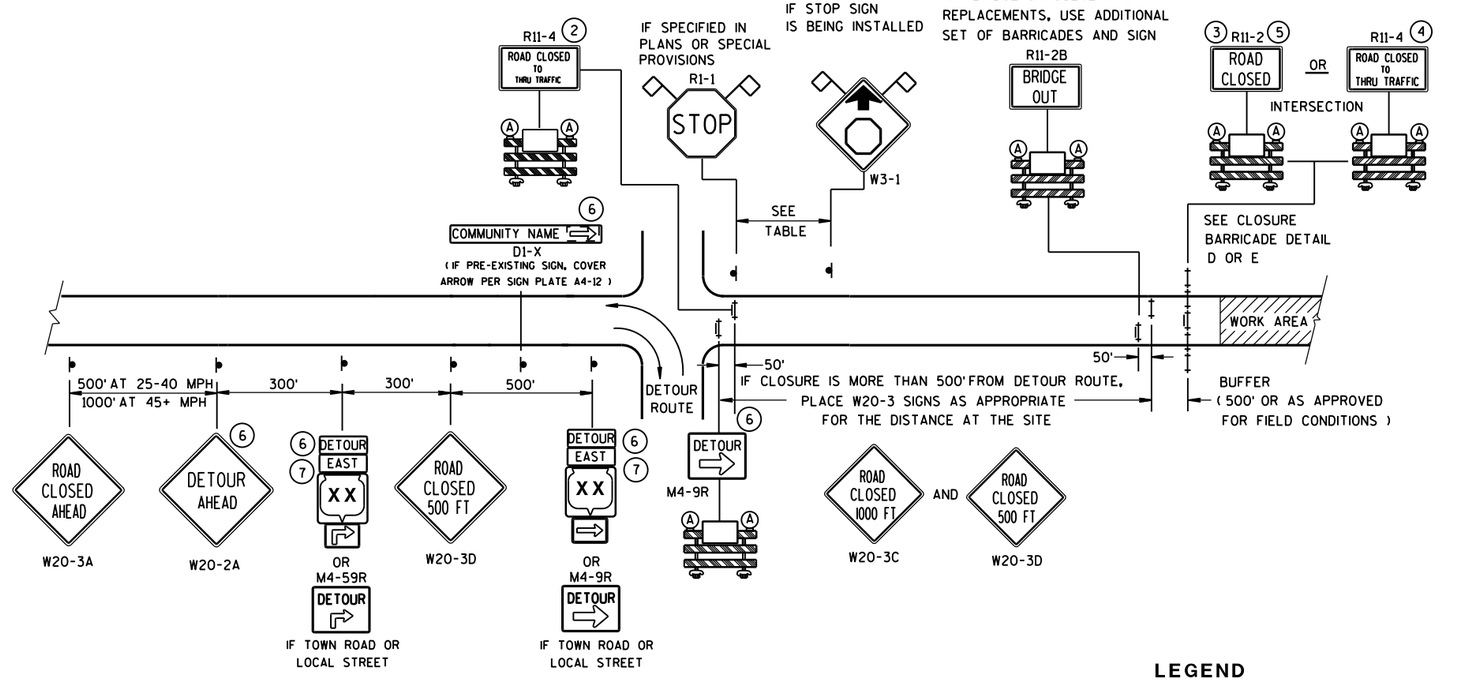
6

S.D.D. 12 A 3-10



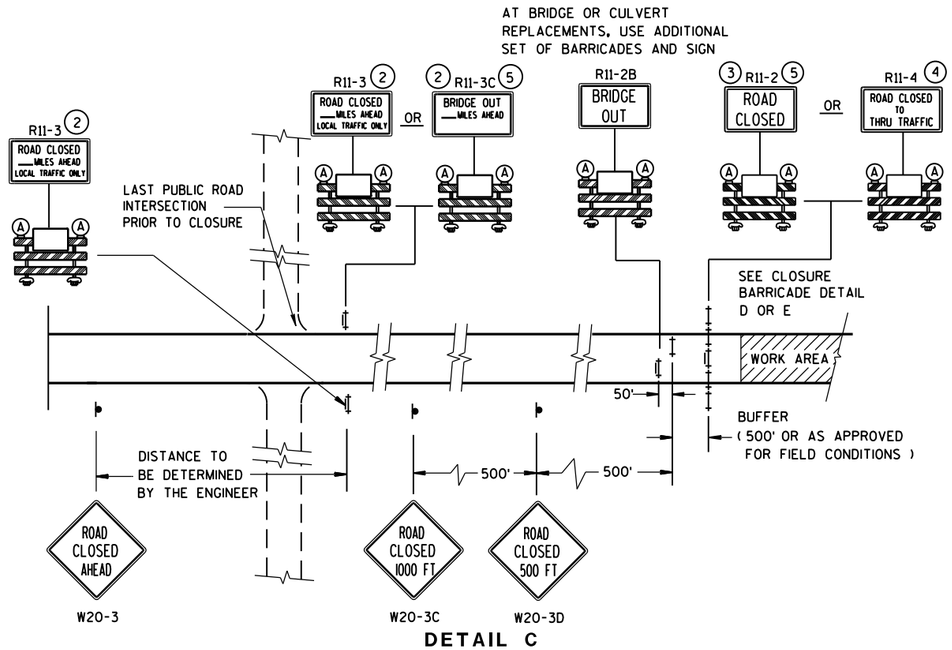
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

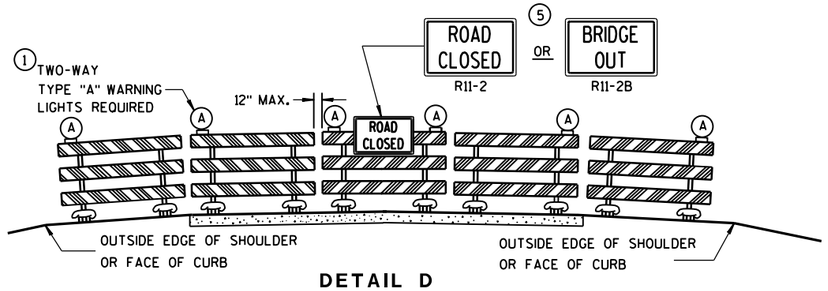
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

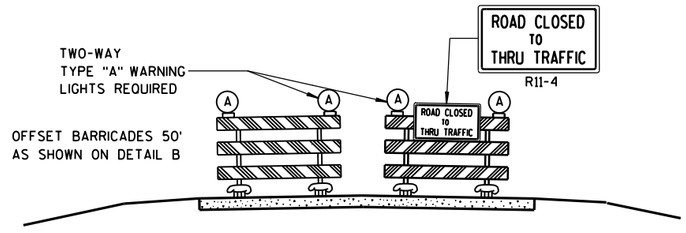
S.D.D. 15 C 2-6a



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 BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE 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, 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". (30" X 15" 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.)
- M05-1 AND M06-1 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 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 LANE 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 MAINLINE CLOSURES

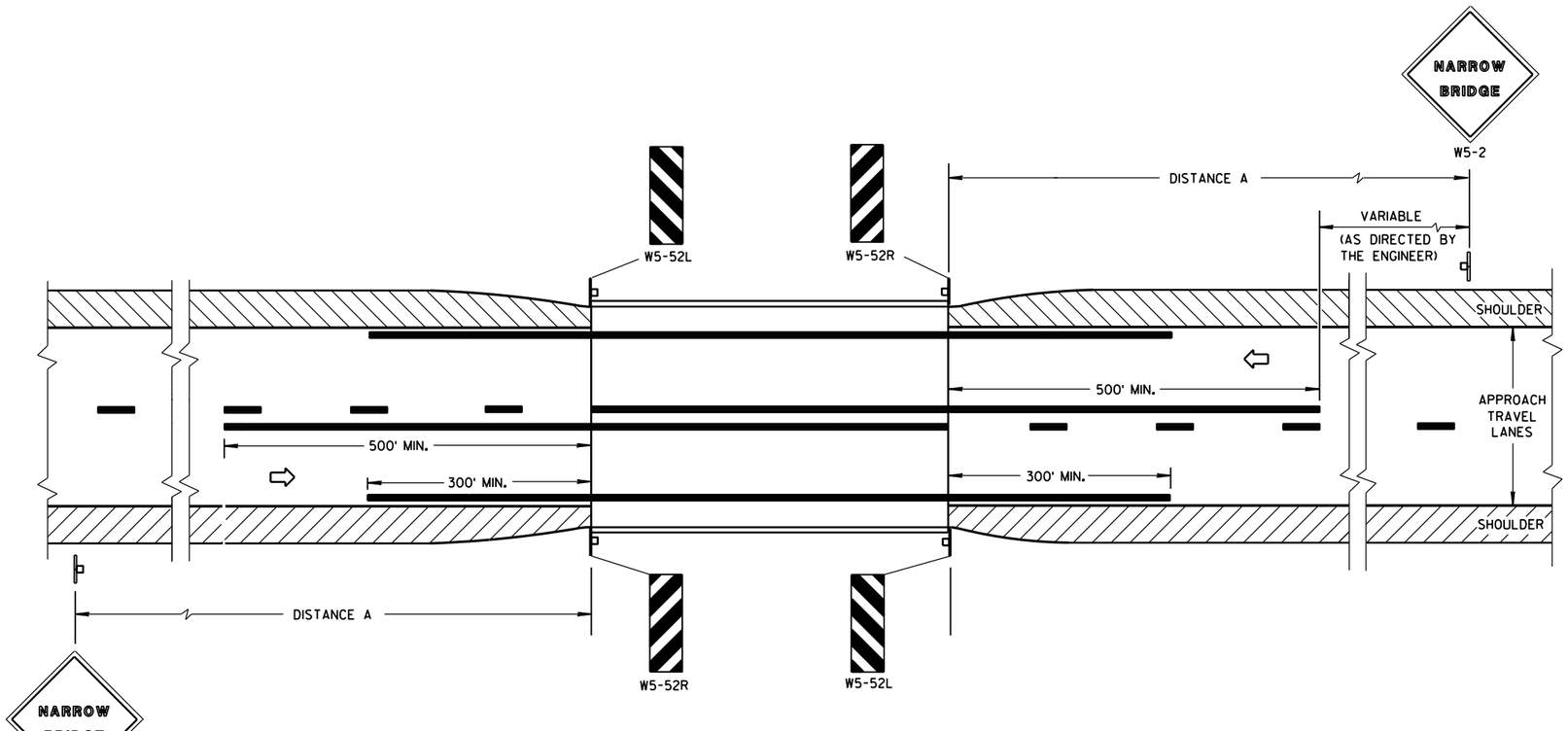
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI — FHWA — FIC

6

S.D.D. 15 C 2-6b



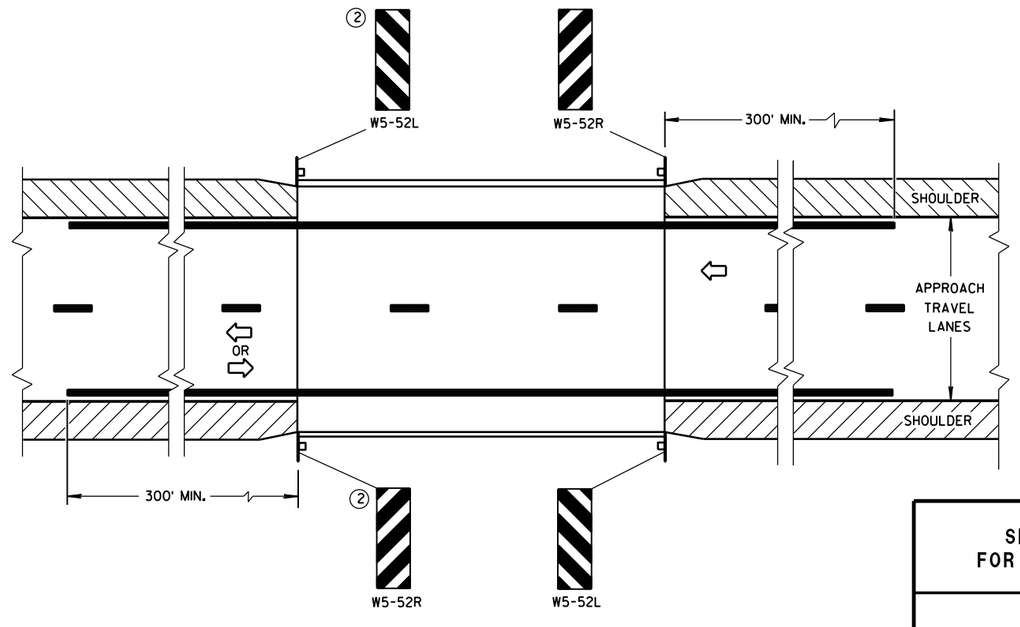
SITUATION 1

WARRANTING CRITERIA:

BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.

DISTANCE TABLE

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



SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET.

GENERAL NOTES

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

① LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

② OMIT ON ONE-WAY TRAVELLED WAYS.

③ EDGE OF W5-52 SIGN SHALL BE PLACED IN LINE WITH FACE OF CURB OR PARAPET.

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-18-16 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR ...EER
FHWA

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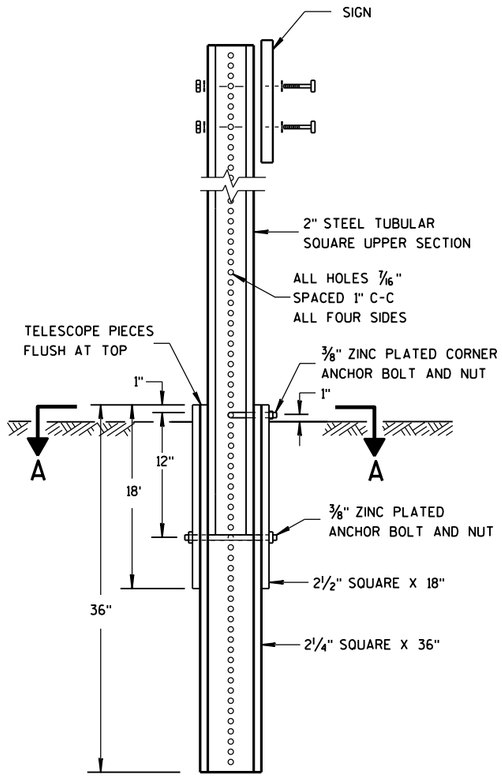
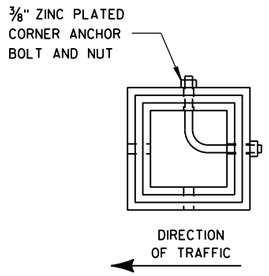
S.D.D. 15 C 6-8

6

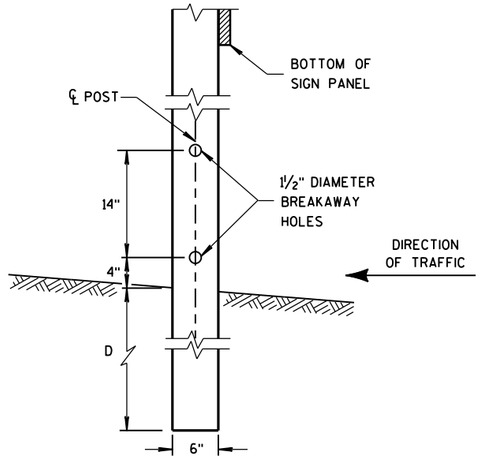
S.D.D. 15 C 6-8



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



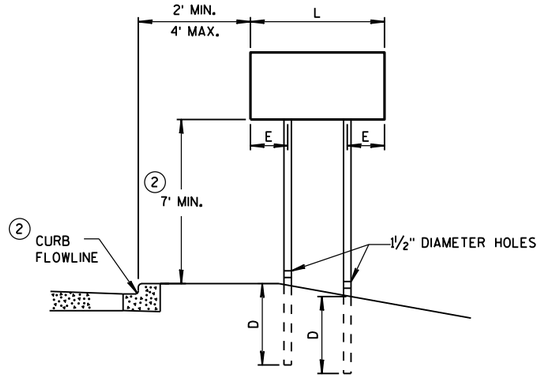
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

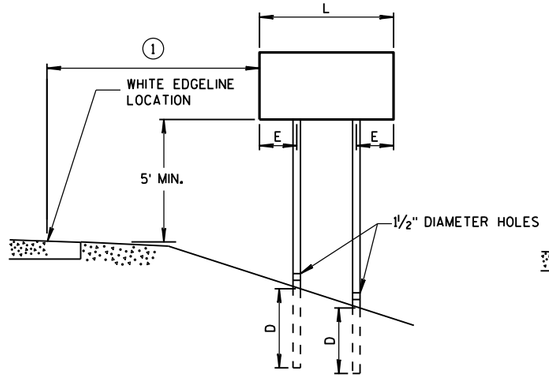
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

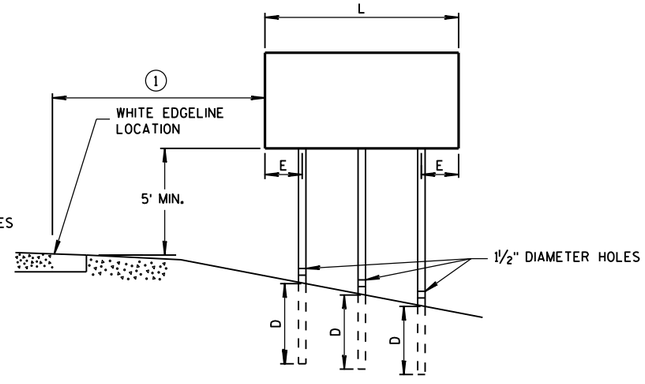
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL 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).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

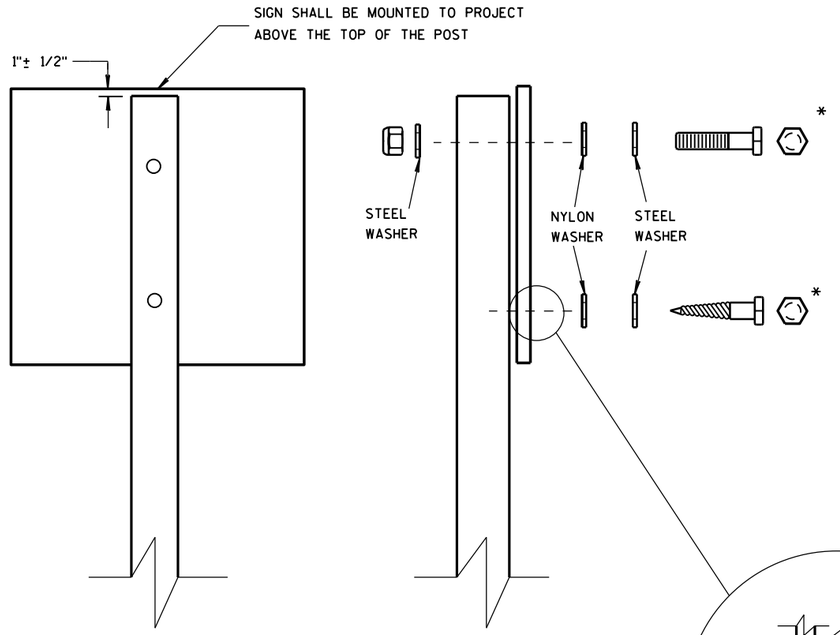
SEE NOTE (3)

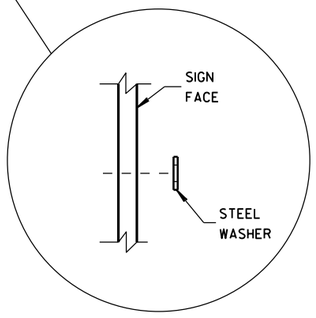
TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 38-1a





WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

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.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

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 FOR ALL TYPE H SIGNS

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

S.D.D. 15 D 38-1b

S.D.D. 15 D 38-1b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

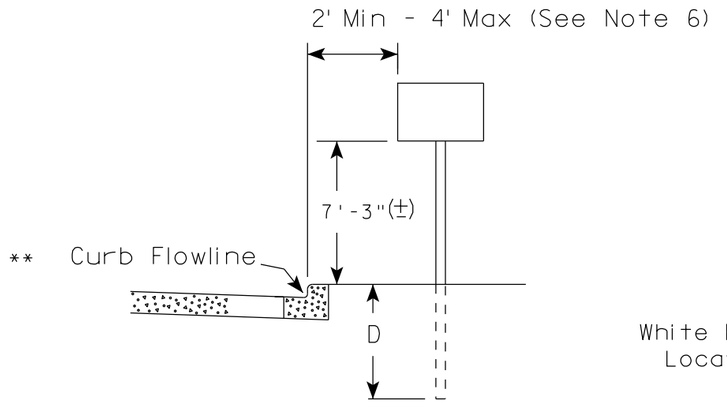
Feb. 2015 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

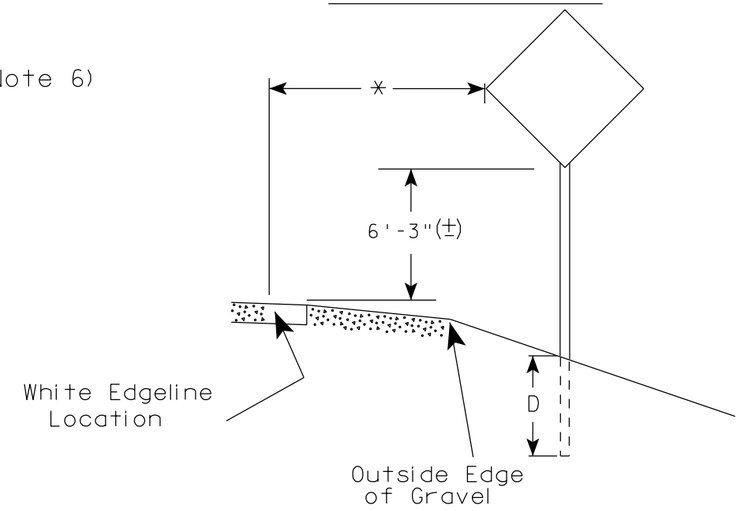
FHWA

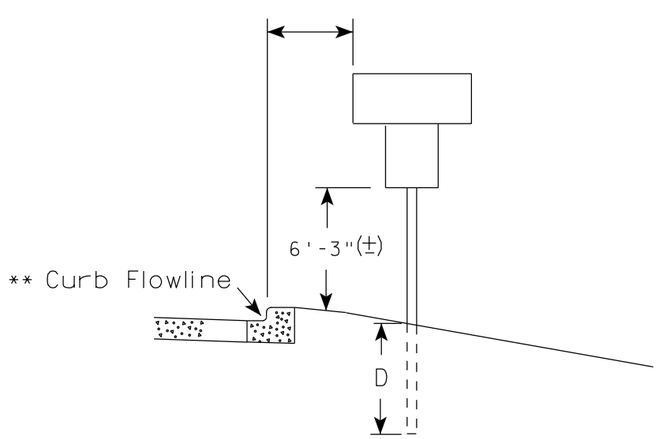
SIGN

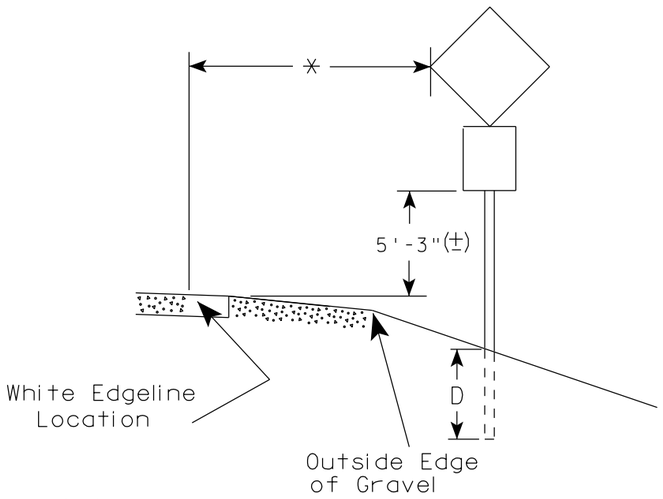
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
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 J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. 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), 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" (±).

POST EMBEDMENT DEPTH

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

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

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

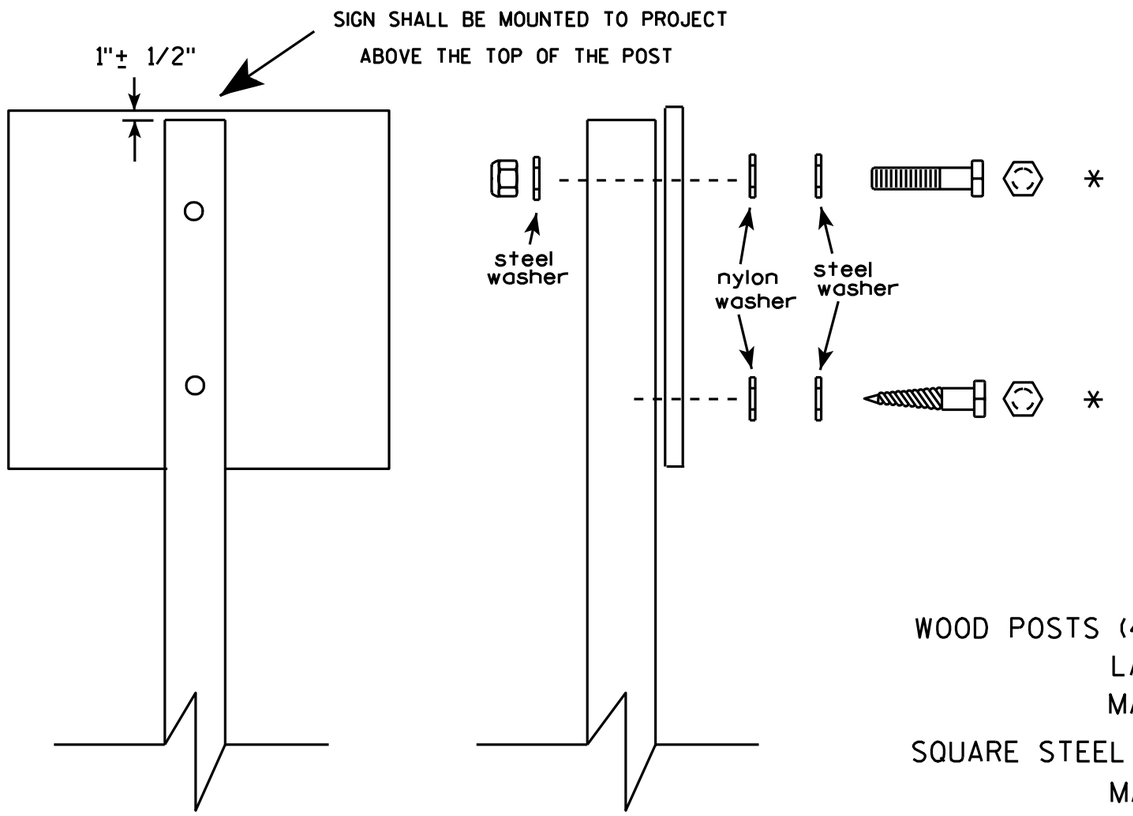
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-3.19

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

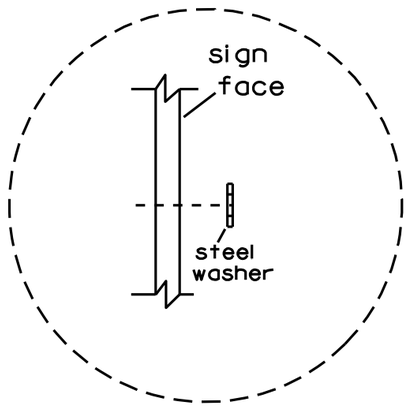
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
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 for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

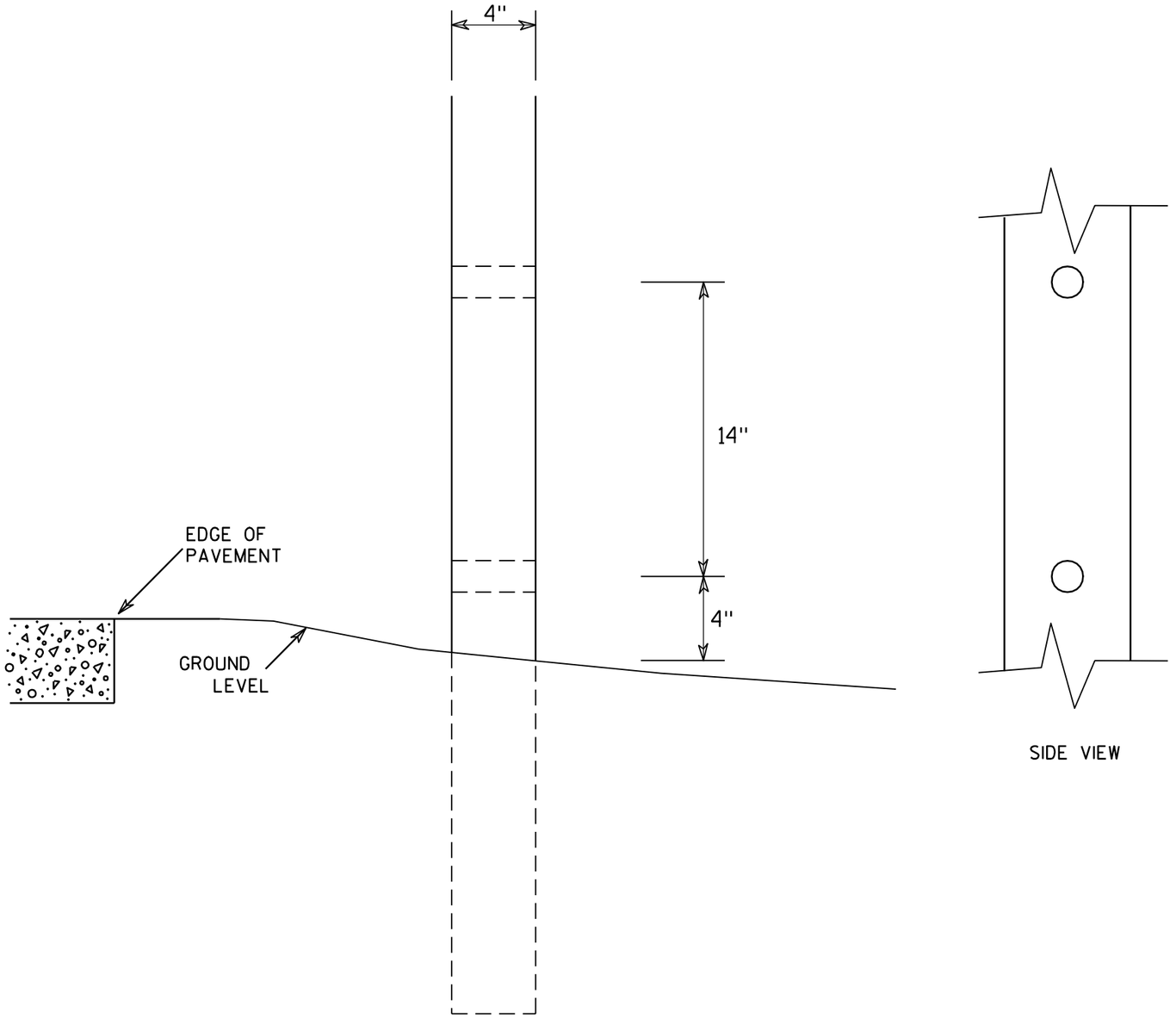
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7



SIDE VIEW

GENERAL NOTES

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

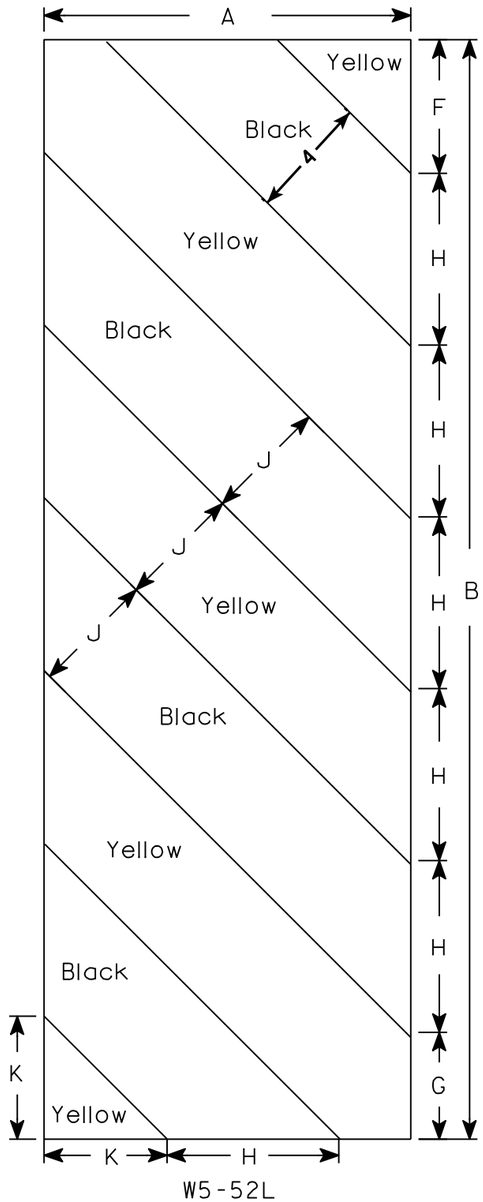
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

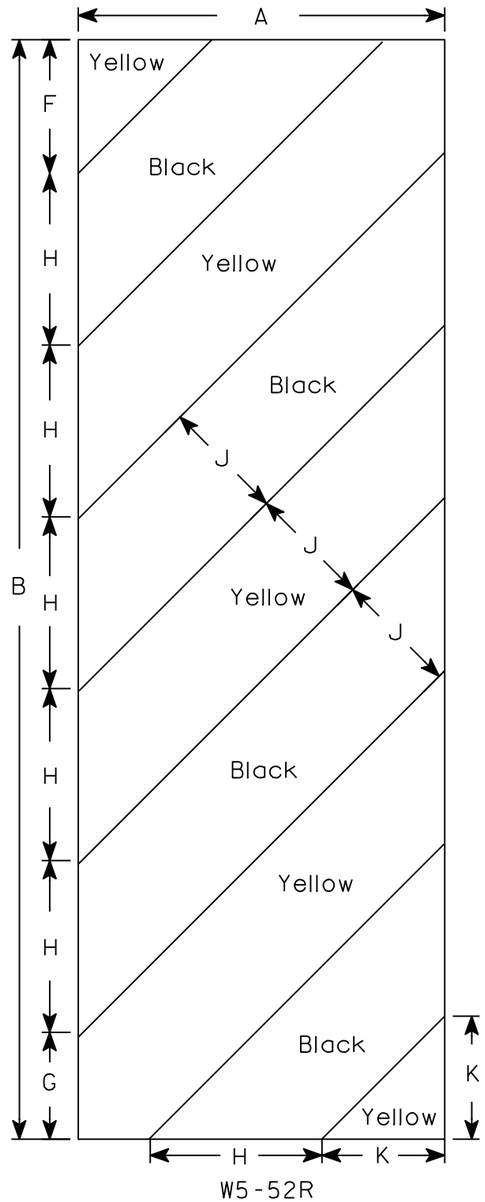
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 24	E



W5-52L



W5-52R

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.

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

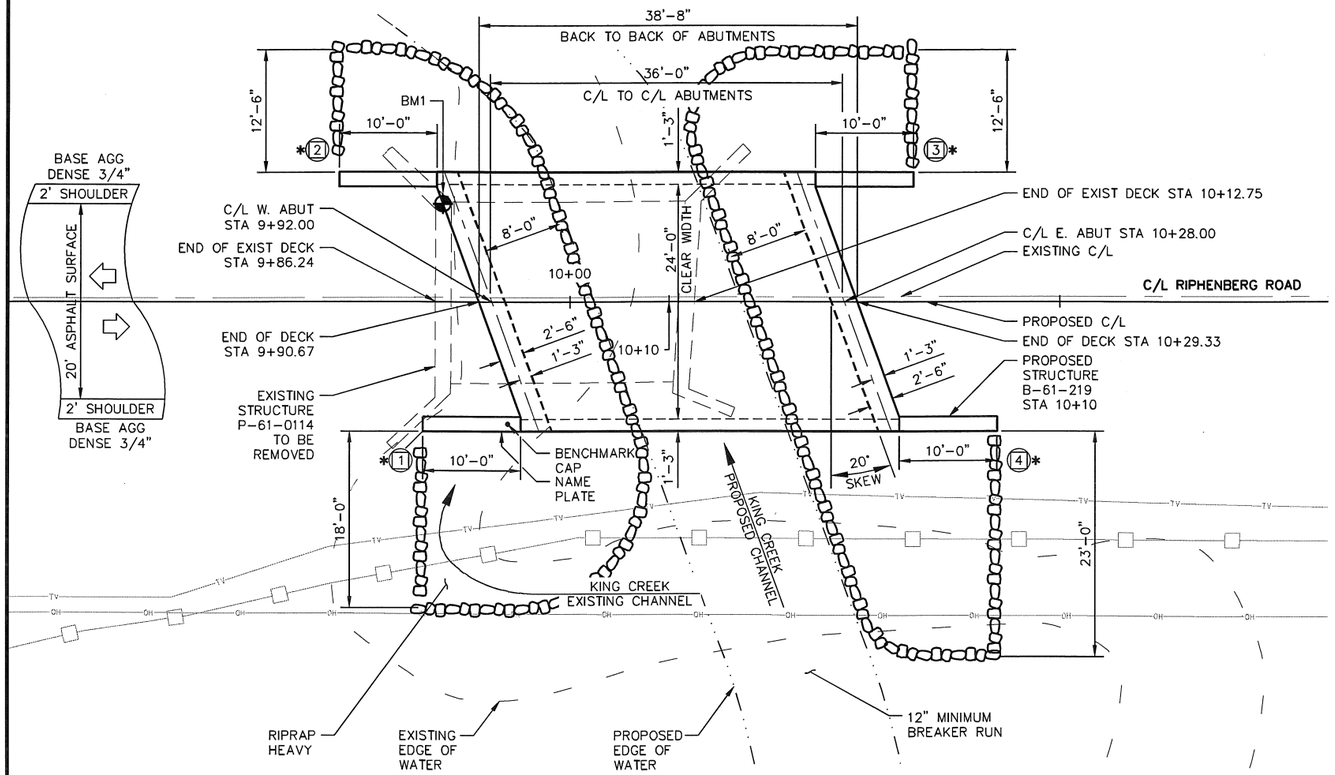
W5-52L & W5-52R

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: 25	E



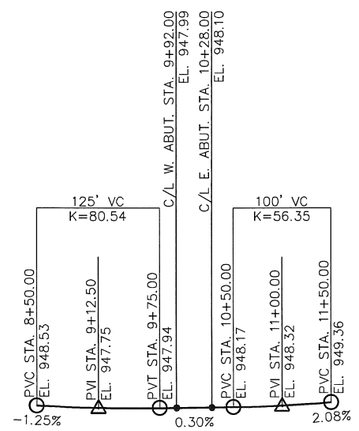
PLAN
SINGLE SPAN CONCRETE FLAT-SLAB BRIDGE

ELEVATION
NORMAL TO C/L OF KING CREEK

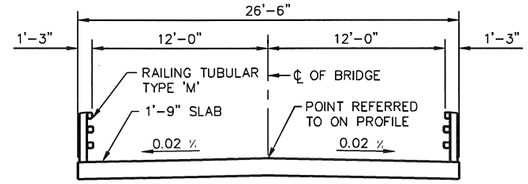
EXCAVATION IN THESE AREAS SHALL BE INCLUDED IN EXCAVATION FOR STRUCTURE (TYP)

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT

(n) INDICATES WING NUMBER



PROPOSED GRADE LINE



CROSS-SECTION THRU ROADWAY

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

LIVE LOAD:
- DESIGN LOADING — HL-93
- INVENTORY RATING FACTOR — RF = 1.17
- OPERATING RATING FACTOR — RF = 1.52
- WISCONSIN STANDARD PERMIT VEHICLE (Wis-SPV) 250 KIPS

MATERIAL PROPERTIES:
- CONCRETE MASONRY
  - SLAB — f'c = 4,000 PSI
  - ALL OTHER — f'c = 3,500 PSI
- BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 PSI

HYDRAULIC DATA
100 YEAR FREQUENCY
- DRAINAGE AREA — 12.2 SQ MILES
- Q_{100} TOTAL — 1400 CFS
  - THRU STRUCTURE — 1378 CFS
  - ROADWAY OVERFLOW — 22 CFS
- VELOCITY - THRU STRUCTURE — 8.20 FPS
- WATERWAY AREA THRU STRUCTURE — 168.15 SQ FT
- HIGH WATER$_{100}$ ELEVATION — 948.09 FT
- SCOUR CRITICAL CODE = 8

2 YEAR FREQUENCY
- Q_2 TOTAL — 400 CFS
- HIGH WATER$_2$ ELEVATION — 945.08 FT

FREQUENCY OF ROADWAY OVERTOPPING
- Q_{97} TOTAL — 1390 CFS
- HIGH WATER$_{97}$ ELEVATION — 947.90 FT

TRAFFIC DATA
- AADT (2018) — < 100
- AADT (2038) — < 100
- DESIGN SPEED — 55 MPH

WISCONSIN
TROY L PETERSON
E-31102
MENOMONIE
WI
PROFESSIONAL ENGINEER
6-1-17

FOUNDATION DATA
ABUTMENTS TO BE SUPPORTED ON PILING C.I.P. CONCRETE 10 3/4 X 0.50 INCH, WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS ‡ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED LENGTH 45' W ABUTMENT
ESTIMATED LENGTH 55' E ABUTMENT

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

BENCHMARK
STA. 9+85.84, 10.83' RT.
CHISELED "□" TOP OF NW. CORNER BRIDGE ABUTMENT
EL. 947.06'

LIST OF DRAWINGS

DESIGN CONTACT:
TROY PETERSON
(715) 235-9081

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608) 266-8489

STATE PROJECT NUMBER
7287-00-71

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
Cedar corporation
MENOMONIE - MADISON - GREEN BAY
www.cedarcorp.com 800-472-7372

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher SDR 08/28/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-61-219
RIPHENBERG ROAD OVER KING CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
TREMPEALEAU	SUMNER

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
ATA	TLP	NJT	TLP

GENERAL PLAN

SHEET 1 OF 8

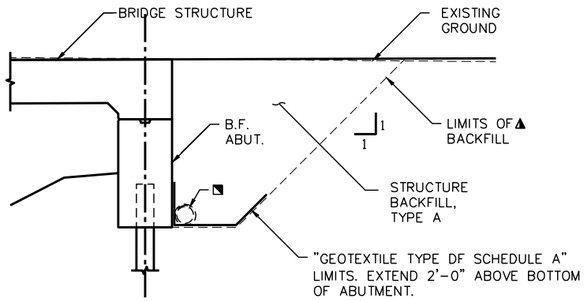
SCALE = 1:15

STATE PROJECT NUMBER

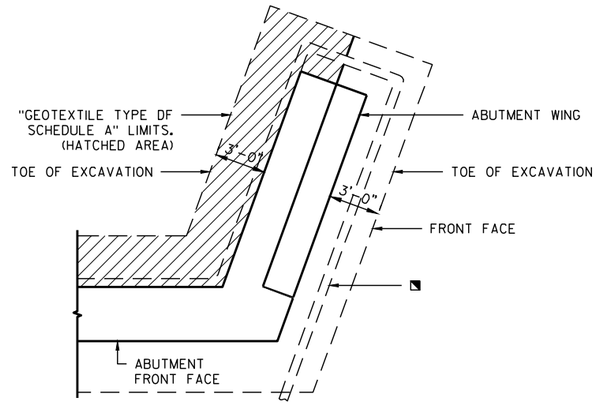
7287-00-71

TOTAL ESTIMATED QUANTITIES

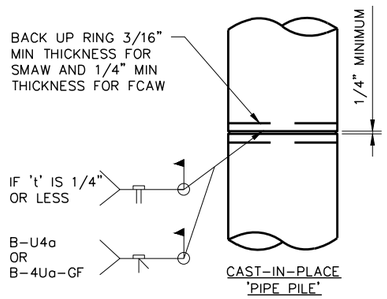
ITEM NUMBER	BID ITEMS	UNIT	W ABUT	E ABUT	SUPER	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA 10+00	LS	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-61-219	LS	———	———	———	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	115	115	———	230
502.0100	CONCRETE MASONRY BRIDGES	CY	28.2	28.2	70.6	127.0
502.3200	PROTECTIVE SURFACE TREATMENT	SY	———	———	140	140
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1570	1570	———	3140
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1380	1380	12630	15390
550.2108	PILING CIP CONCRETE 10 3/4 x 0.50-INCH	LF	180	220	———	400
513.4061	RAILING TUBULAR TYPE 'M' B-61-219	LF	———	———	122	122
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	8	8	———	16
606.0300	RIPRAP HEAVY	CY	75	80	———	155
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	80	80	———	160
645.0120	GEOTEXTILE TYPE HR	SY	135	150	———	285
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	15	15	———	30
	NON-BID ITEMS					
	FILLER	SIZE	———	———	———	1/2 & 3/4

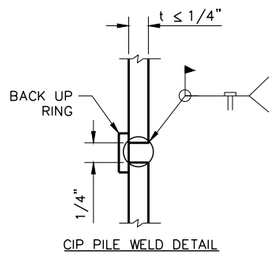


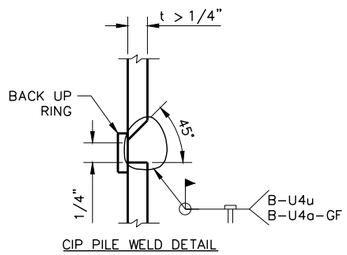
STRUCTURE BACKFILL & LIMITS



ABUTMENT PLAN WITH WING







PILE SPLICE DETAIL

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

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

ALL REINFORCING BARS ARE ENGLISH. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE 'HR' TO THE EXTENT SHOWN ON SHEET 1 AND AND IN THE ABUTMENT DETAILS.

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

THE EXISTING STRUCTURE (P-61-0114) IS A 28.2' LONG BY 17.0' CLEAR WIDTH PRESTRESSED CONCRETE DOUBLE T GIRDER.

THE PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP AND EDGES OF THE SLAB AND TO THE OUTSIDE 1'-0" OF THE UNDERSIDE OF THE SLAB.

▲ AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE IN PLACE BEFORE ABUTMENT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

THE GRADATION OF THE BACKFILL STRUCTURE SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

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

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

THE QUANTITY FOR BACKFILL STRUCTURE, BID ITEM 210.1500, IS CALCULATED BASED ON THE APPLICABLE FIGURES 12.6-1 AND 12.6-2 IN THE WISCONSIN DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-61-219

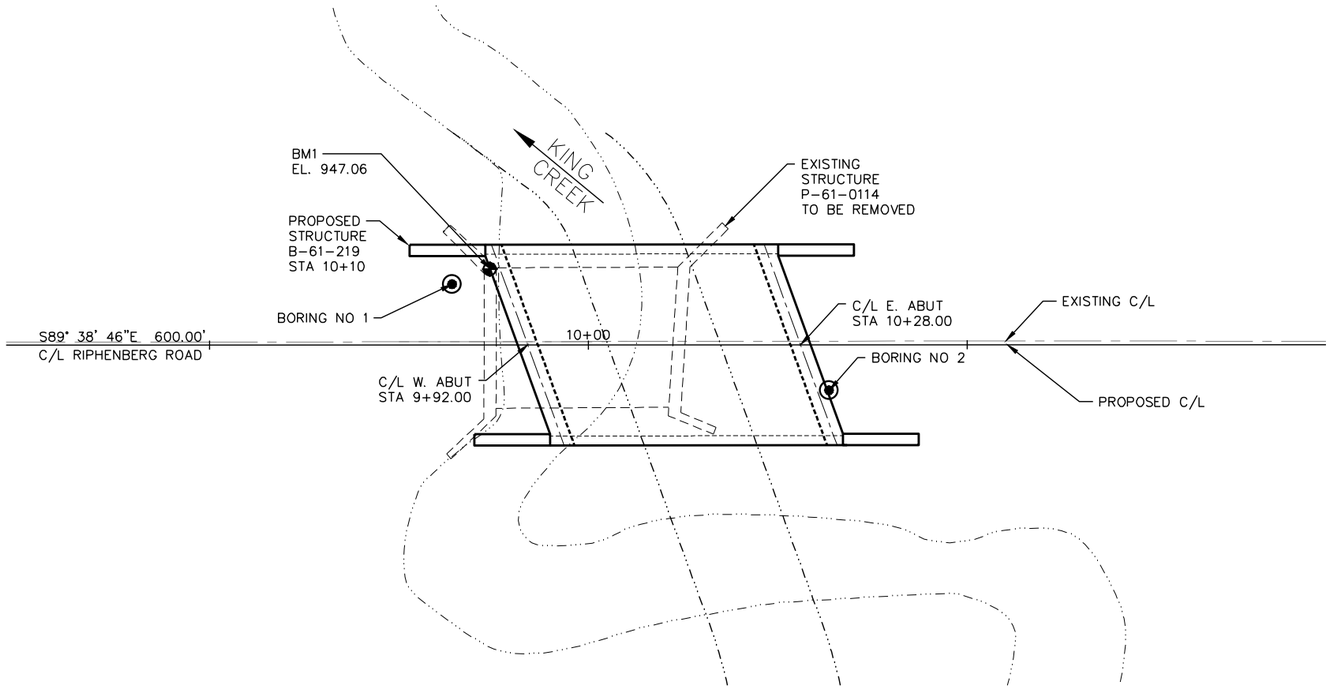
DRAWN BY NJT | PLANS CK'D. TLP

QUANTITIES & NOTES

SHEET 2 OF 8

27

SCALE = 1:2



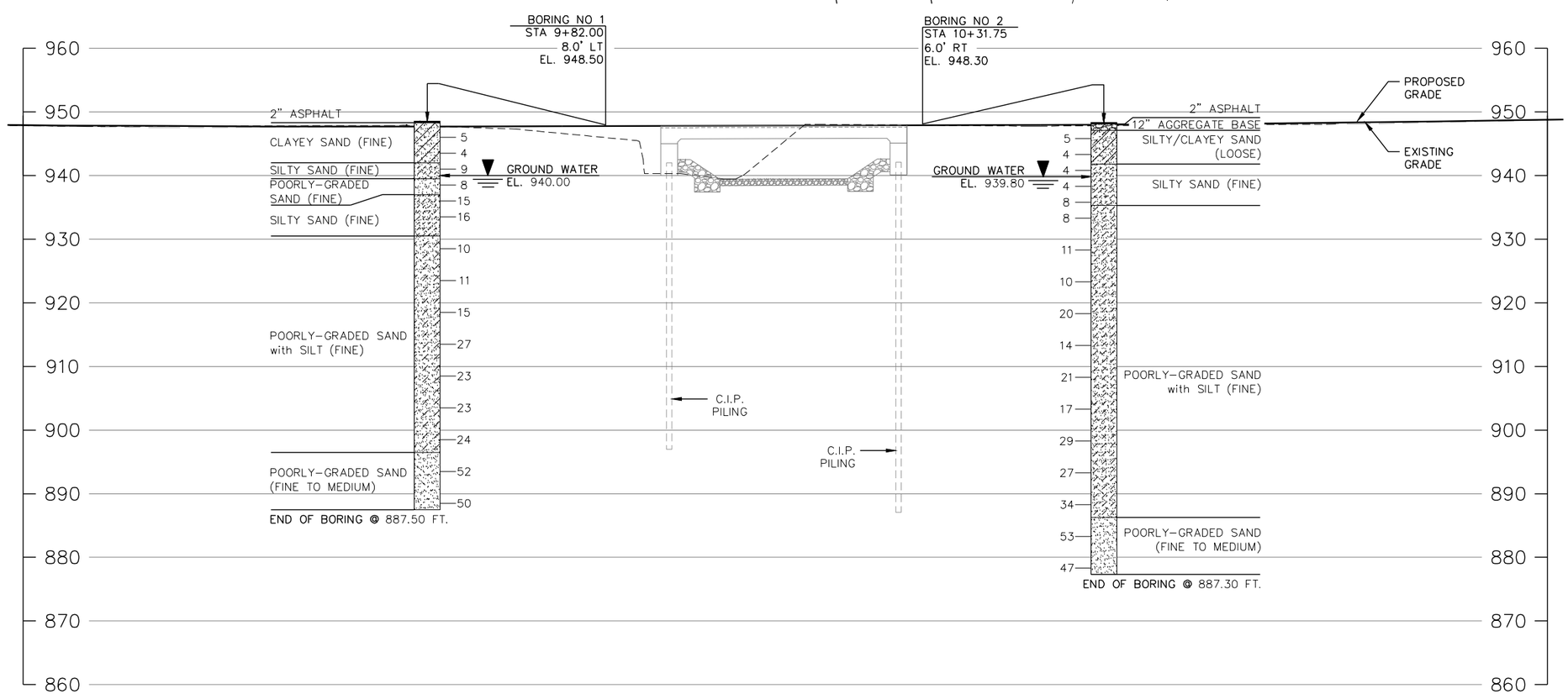
BORINGS TAKEN BY:

CHOSEN VALLEY TESTING, INC.

WISCONSIN OFFICE
135 BUCKNER PLACE
LA CROSSE, WI 54603
(608)782-5505

MINNESOTA OFFICE
1410 7TH STREET NW
ROCHESTER, MN 55901
(507) 281-0968

BORINGS 1 & 2
PERFORMED ON 12/15/2015



STATE PROJECT NUMBER

7287-00-71

ABBREVIATIONS

F— FINE M—MEDIUM C— COARSE
WS— WEATHERED SO — SOUND

MATERIAL SYMBOLS

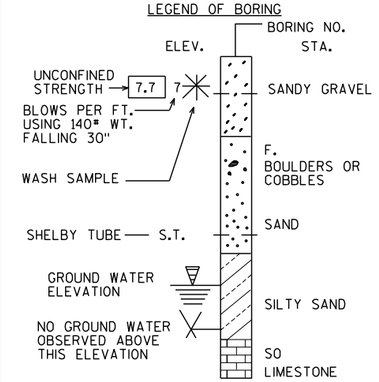
TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-61-219

DRAWN BY NJT | PLANS CK'D. TLP

SUBSURFACE EXPLORATION

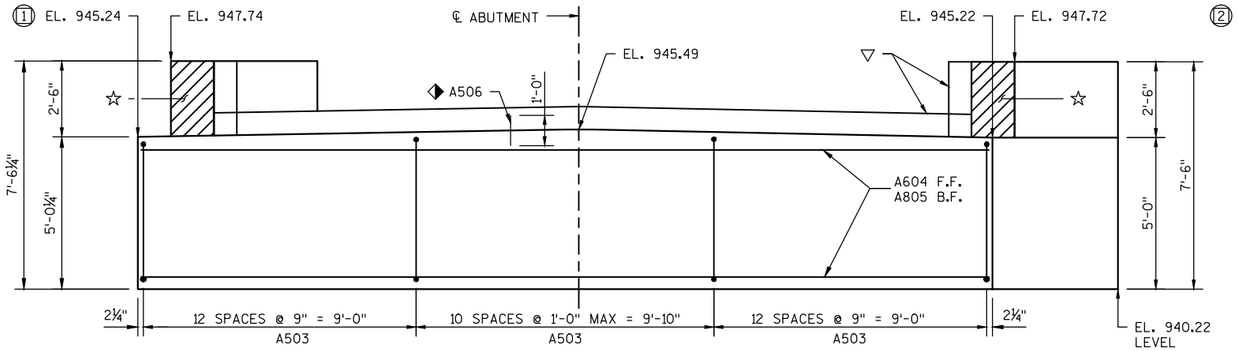
SHEET 3 OF 8

28

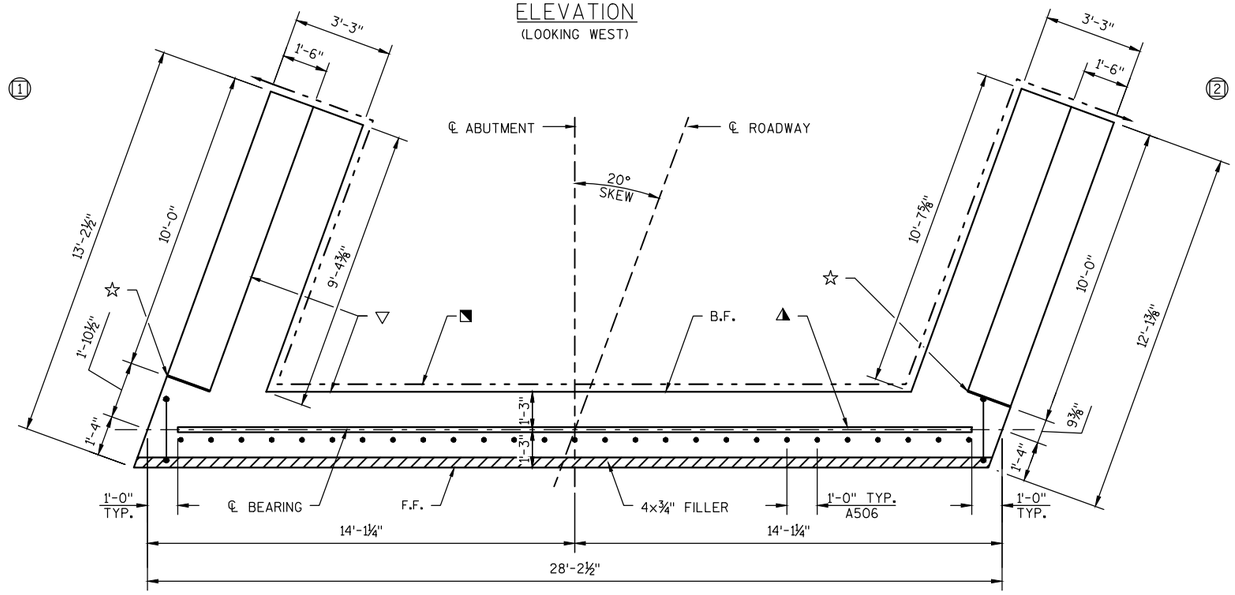
8

STATE PROJECT NUMBER

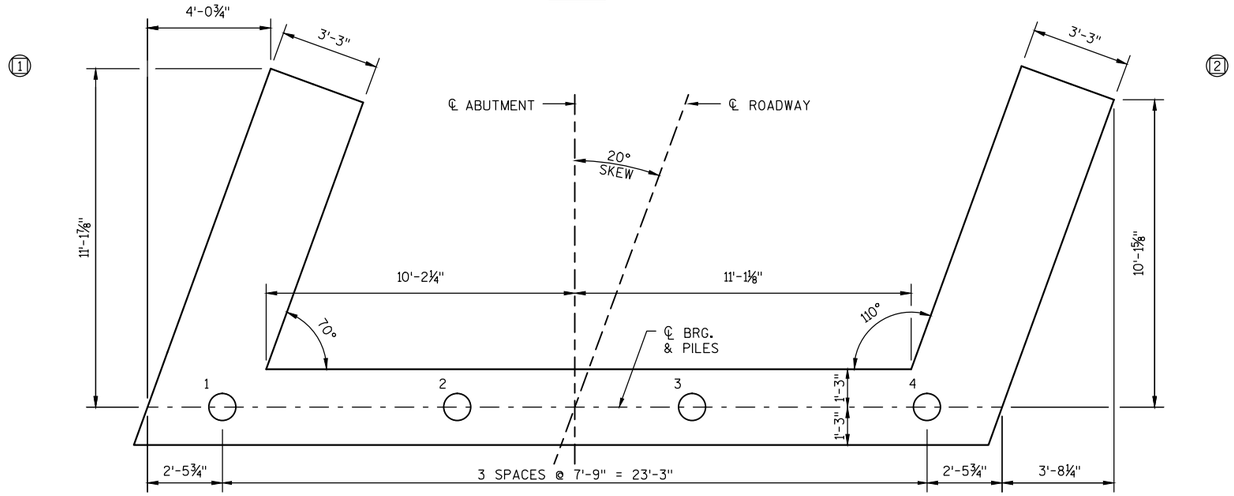
7287-00-71



ELEVATION
(LOOKING WEST)



PLAN



PILE PLAN

BILL OF BARS

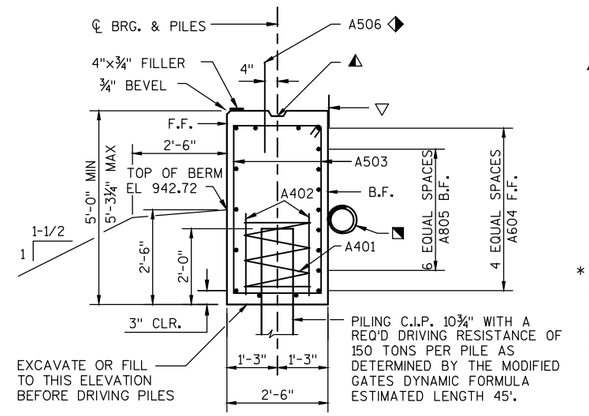
1570# UNCOATED 1380# COATED

BAR MARK	COAT	NO. REQUIRED	LENGTH	BENT	BAR SERIES	LOCATION
A401		4	28'-0"	X		BODY - ONE PER PILE
A402		8	2'-3"			BODY - TWO PER PILE
A503		35	13'-9"	X		BODY - STIRRUPS
A604		11	27'-10"			BODY - HORIZ.
A805		7	27'-10"			BODY - HORIZ. B.F.
A506	X	27	2'-0"			BODY - VERT DOWELS
A607	X	4	9'-8"			WING 1 & 2 - HORIZ. TOP
A408	X	10	9'-8"			WING 1 & 2 - HORIZ.
A609	X	28	9'-8"	X		WING 1 & 2 - VERT. TOP
A510	X	22	15'-6"	X		WING 1 & 2 - VERT. BASE
A511	X	6	12'-10"			WING 1 BASE HORIZ. F.F.
A512	X	6	11'-7"			WING 2 BASE HORIZ. F.F.
A613	X	6	11'-3"			WING 1 BASE HORIZ. B.F. & TOP
A614	X	6	12'-5"			WING 2 BASE HORIZ. B.F. & TOP
A615	X	2	11'-11"			WING 1 BASE HORIZ. TOP
A616	X	2	11'-11"			WING 2 BASE HORIZ. TOP

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

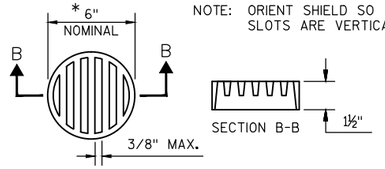
LEGEND

- ⓘ INDICATES WING NUMBER
- ▽ 18" RUBBERIZED MEMBRANE WATERPROOFING (RMW). SEAL ALL HORIZ. & VERT. JOINTS ON BACK FACE.
- ◭ KEYED CONST. JOINT FORMED BY BEVELED 2" x 6".
- ◆ BARS MAY BE PLACED AFTER CONCRETE IS POURED, BUT BEFORE INITIAL SET HAS TAKEN PLACE.
- ☆ SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE).
- ◥ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MINIMUM TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".



SECTION THRU BODY

ALL HORIZ BARS ARE A604
UNLESS OTHERWISE SPECIFIED



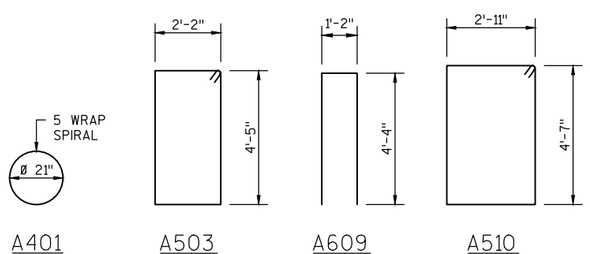
NOTE: ORIENT SHIELD SO SLOTS ARE VERTICAL.

RODENT SHIELD DETAIL

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

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

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-61-219

DRAWN BY NJT | PLANS CK'D. TLP

WEST ABUTMENT

SHEET 4 OF 8

29

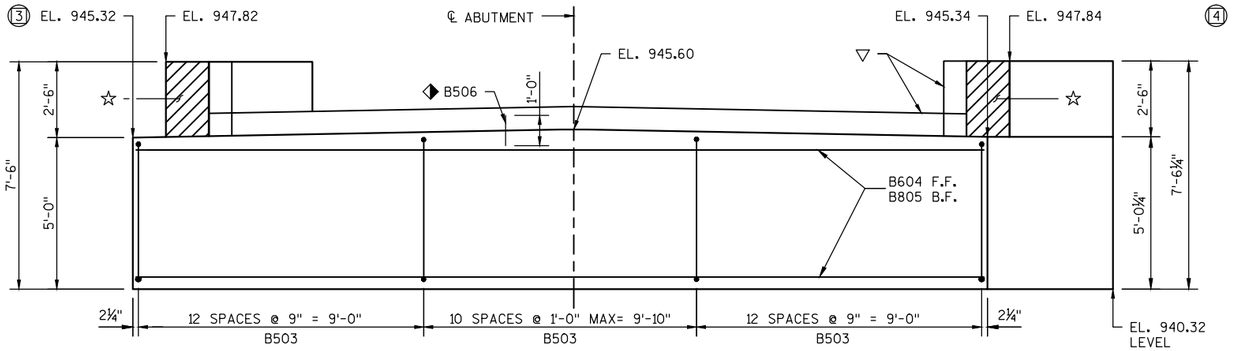
SCALE = 10:1

8

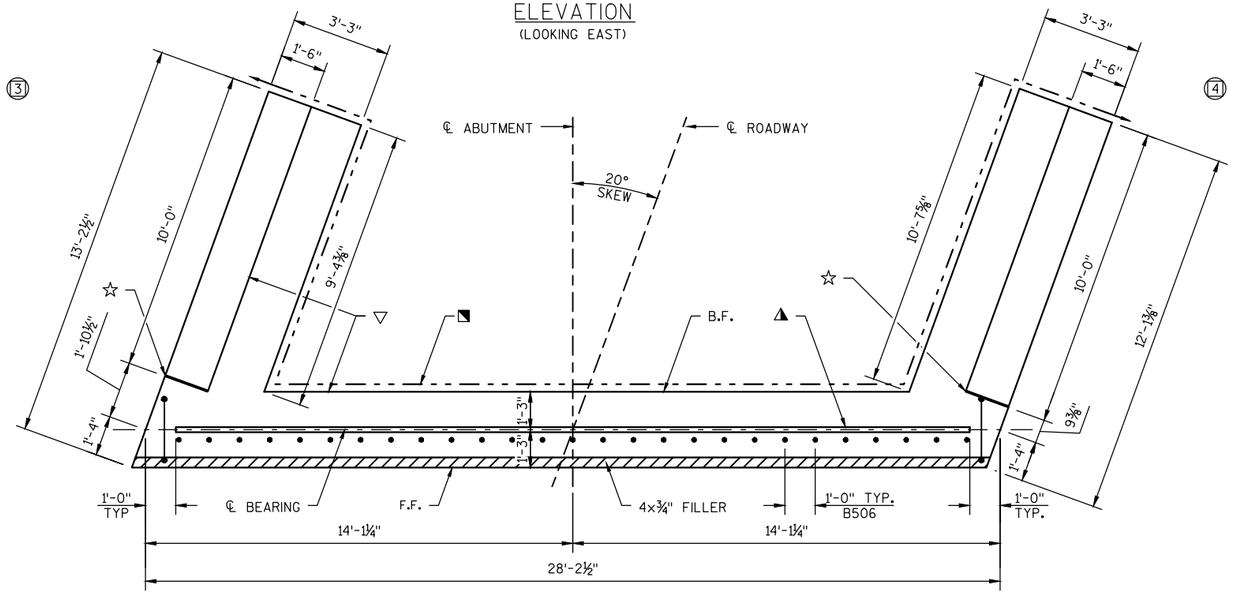
8

STATE PROJECT NUMBER

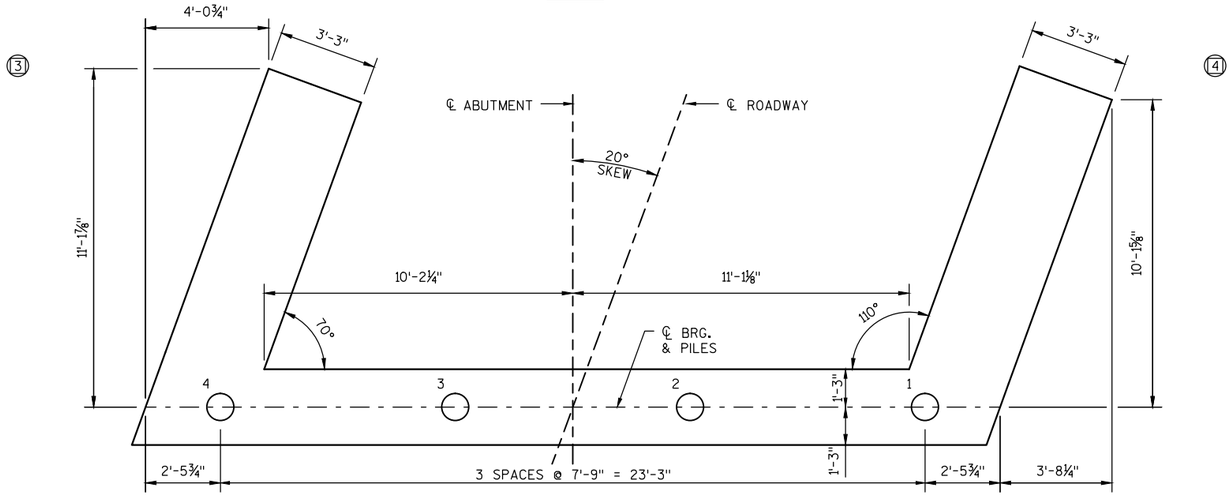
7287-00-71



ELEVATION
(LOOKING EAST)



PLAN



PILE PLAN

BILL OF BARS

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B607	X	4	9'-8"			WING 3 & 4 - HORIZ. TOP
B408	X	10	9'-8"			WING 3 & 4 - HORIZ.
B609	X	28	9'-8"	X		WING 3 & 4 - VERT. TOP
B510	X	22	15'-6"	X		WING 3 & 4 - VERT. BASE
B511	X	6	12'-10"			WING 3 BASE HORIZ. F.F.
B512	X	6	11'-7"			WING 4 BASE HORIZ. F.F.
B613	X	6	11-3"			WING 3 BASE HORIZ. B.F. & TOP
B614	X	6	12'-5"			WING 4 BASE HORIZ. B.F. & TOP
B615	X	2	11'-11"			WING 3 BASE HORIZ. TOP
B616	X	2	11'-11"			WING 4 BASE HORIZ. TOP

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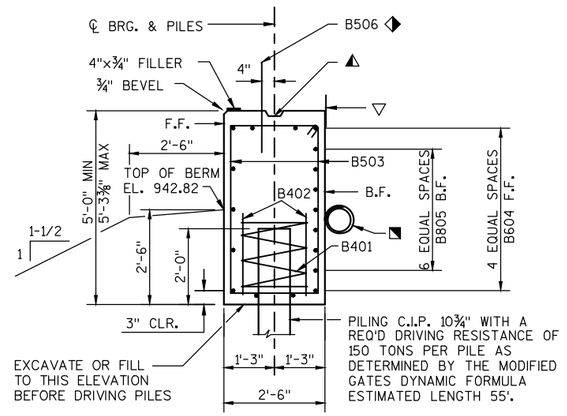
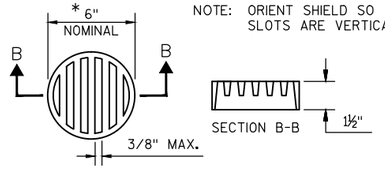
- ☆ SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE).
- ◥ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MINIMUM TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".



SECTION THRU BODY

ALL HORIZ BARS ARE B604
UNLESS OTHERWISE SPECIFIED



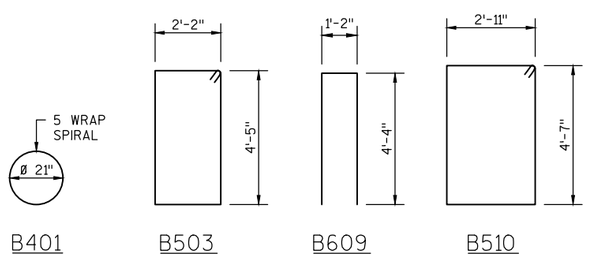
NOTE: ORIENT SHIELD SO SLOTS ARE VERTICAL.

RODENT SHIELD DETAIL

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

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

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-61-219

DRAWN BY NJT | PLANS CK'D. TLP

EAST ABUTMENT

SHEET 5 OF 8

30

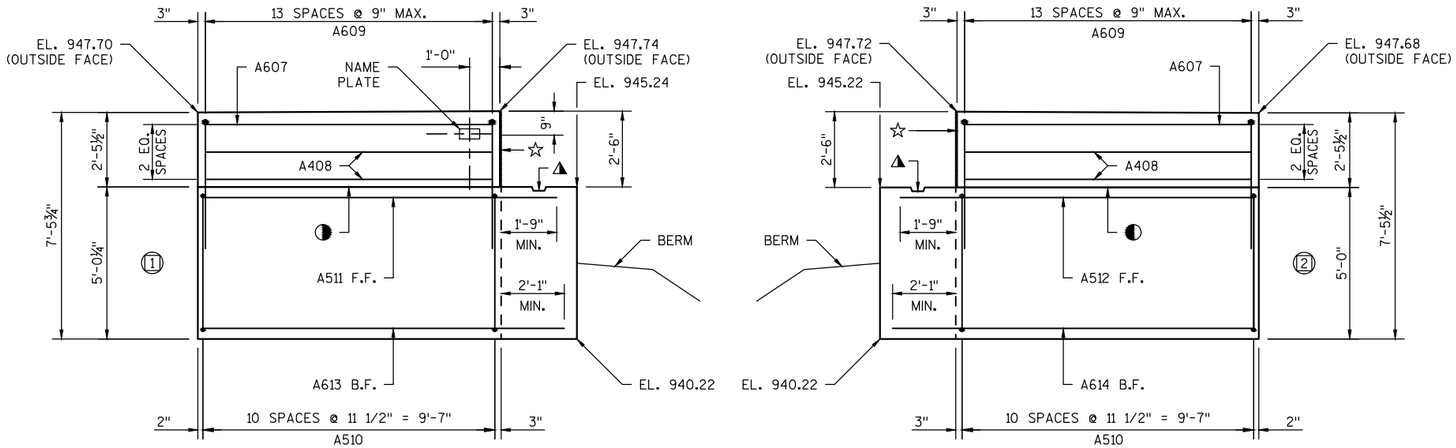
SCALE = 10:1

8

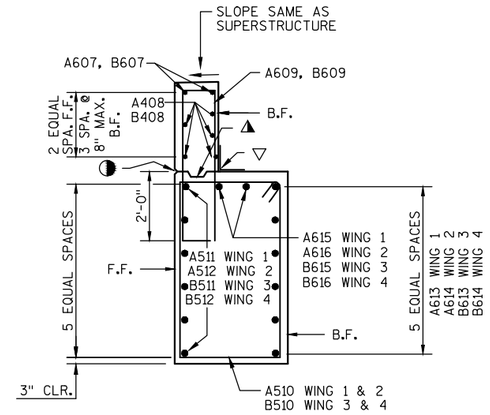
8

STATE PROJECT NUMBER

7287-00-71

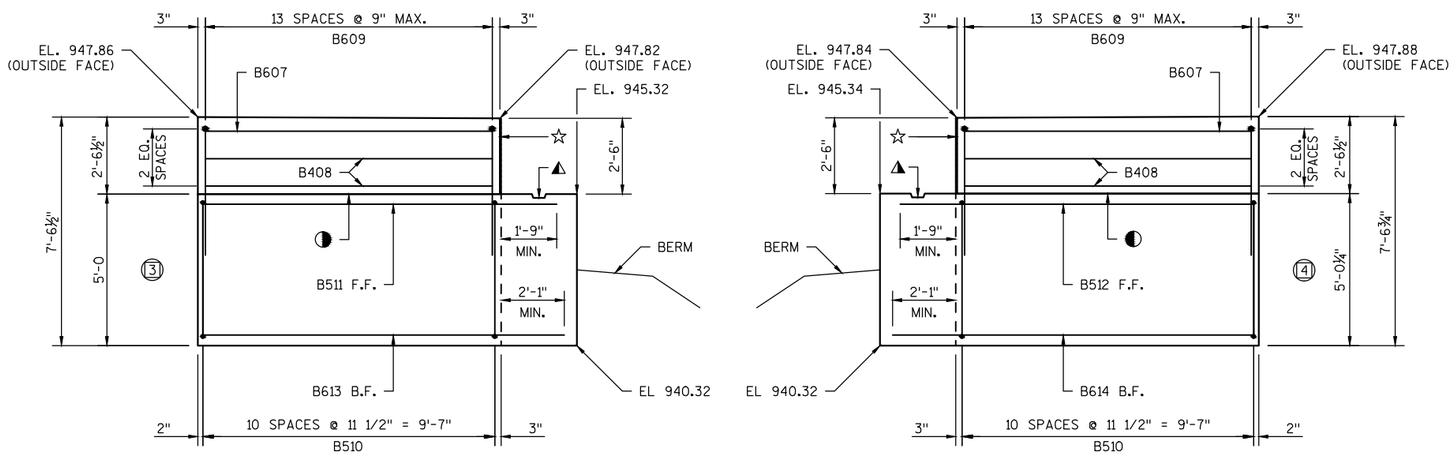


WEST ABUTMENT WINGS

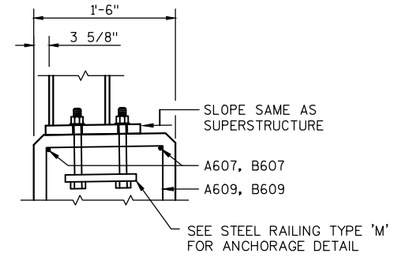


B.F. = BACK FACE
F.F. = FRONT FACE

TYPICAL SECTION THRU WING



EAST ABUTMENT WINGS



SPACE A607 & B607 BARS TO MISS ANCHORS FOR RAIL POSTS

SECTION AT TOP OF WING

LEGEND

- ⃝ INDICATES WING NUMBER
- ▽ 18" RUBBERIZED MEMBRANE WATERPROOFING (RMW). SEAL ALL HORIZ. & VERT. JOINTS ON BACK FACE.
- ◑ OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" × 6". (18" RMW @ BF & 3/4" 'V' GROOVE @ FF OF WING WALL IF JOINT IS USED).
- ◭ KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" × 6".
- ☆ 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-61-219

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ABUTMENT DETAILS

SHEET 6 OF 8

31

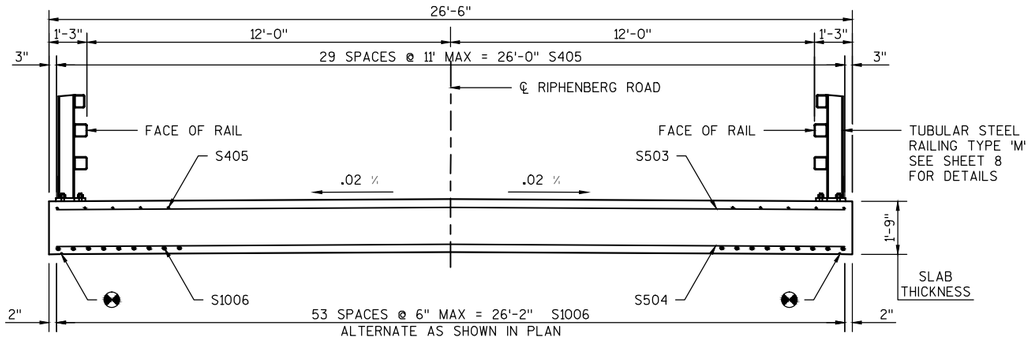
8

8

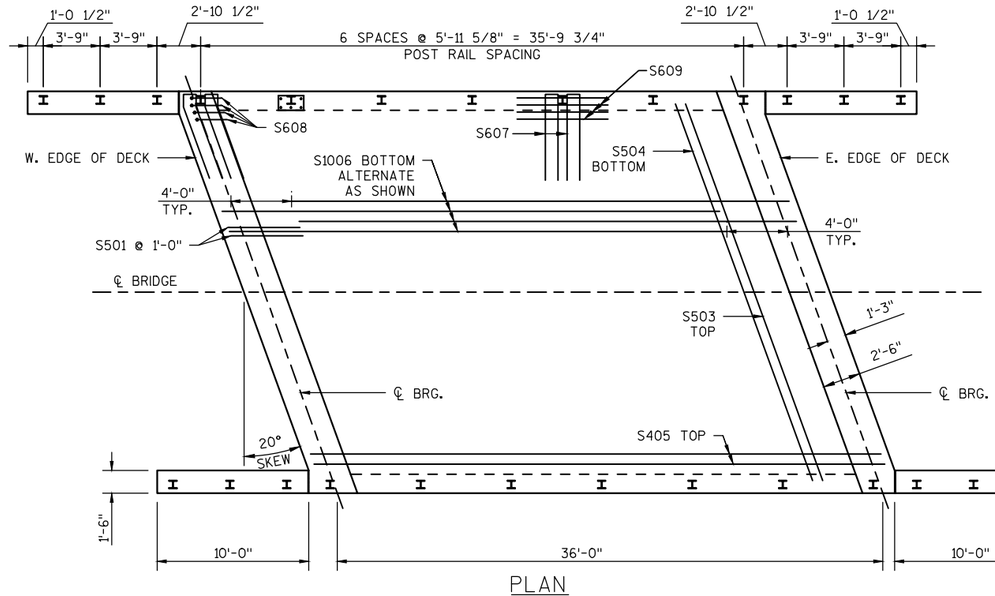
SCALE = 10:1

STATE PROJECT NUMBER

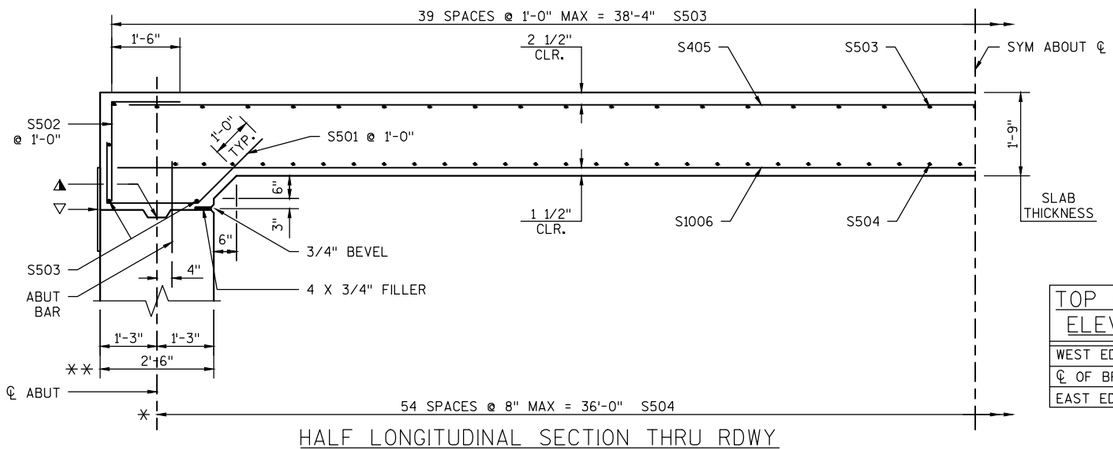
7287-00-71



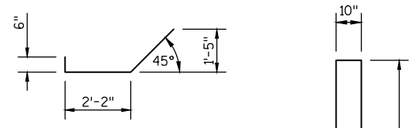
CROSS SECTION THRU ROADWAY
(LOOKING EAST)



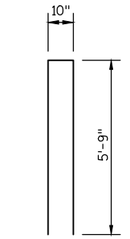
PLAN



HALF LONGITUDINAL SECTION THRU RDWY



S501



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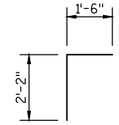

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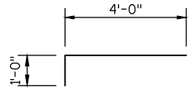

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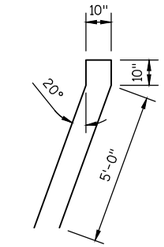


S610

BILL OF BARS

12630# COATED

BAR MARK	COAT	NO. REQUIRED	LENGTH	BENT	BAR SERIES	LOCATION
S501	X	54	4'-6"	X		AT END OF DECK
S502	X	54	3'-6"	X		AT END OF DECK
S503	X	44	27'-10"			SLAB, TOP, TRANSVERSE
S504	X	55	27'-10"			SLAB, BOTTOM, TRANSVERSE
S405	X	30	38'-4"			SLAB, TOP, LONGITUDINAL
S1006	X	54	32'-6"			SLAB, BOTTOM, LONGITUDINAL
S607	X	20	12'-0"	X		AT RAIL POSTS
S608	X	16	5'-0"	X		AT END RAIL POSTS
S609	X	40	6'-0"			AT INTERIOR RAIL POSTS
S610	X	8	12'-0"	X		AT END RAIL POSTS

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

GENERAL NOTES

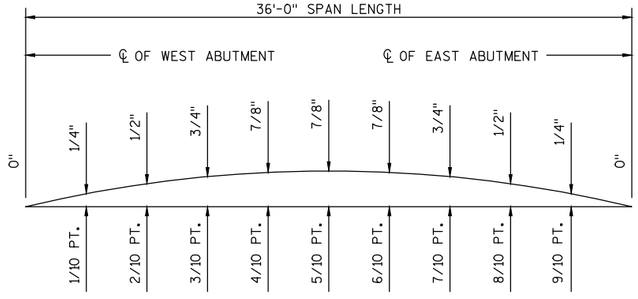
TOP TRANSVERSE BARS BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS TO BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

TRANSVERSE BARS SHALL BE PLACED PARALLEL TO THE ℄ OF SUBSTRUCTURE UNITS.

THE SLAB THICKNESS DIMENSION IS MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

CAMBER SPAN AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION & FUTURE CREEP. DEAD LOAD DEFLECTIONS ONLY EQUAL APPROXIMATELY 1/3 OF CAMBER VALUES SHOWN. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

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



CAMBER DIAGRAM

TOP OF DECK ELEVATIONS	WEST ABUT	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	EAST ABUT
WEST EDGE OF DECK	947.72	947.73	947.74	947.75	947.76	947.77	947.78	947.80	947.81	947.82	947.83
℄ OF BRIDGE DECK	947.99	948.00	948.01	948.02	948.03	948.04	948.05	948.07	948.08	948.09	948.10
EAST EDGE OF DECK	947.74	947.75	947.76	947.77	947.78	947.79	947.80	947.82	947.83	947.83	947.84

LEGEND

- ▽ 18" RUBBERIZED MEMBRANE WATERPROOFING (RMW). SEAL ALL HORIZONTAL & VERTICAL JOINTS ON BACK FACE.
- ◭ KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" x 6".
- ⊠ 3/4" CONTINUOUS 'V' DRIP GROOVE LOCATED 5" FROM EDGE OF DECK. BEGIN 6" AWAY FROM ABUTMENT FACE.
- ⁎ DIMENSIONS MEASURED ALONG ℄ OF BRIDGE.
- ⁎⁎ DIMENSIONS MEASURED ALONG ℄ OF SUBSTRUCTURE.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-61-219

DRAWN BY NJT | PLANS CK'D. TLP

SUPERSTRUCTURE

SHEET 7 OF 8

32

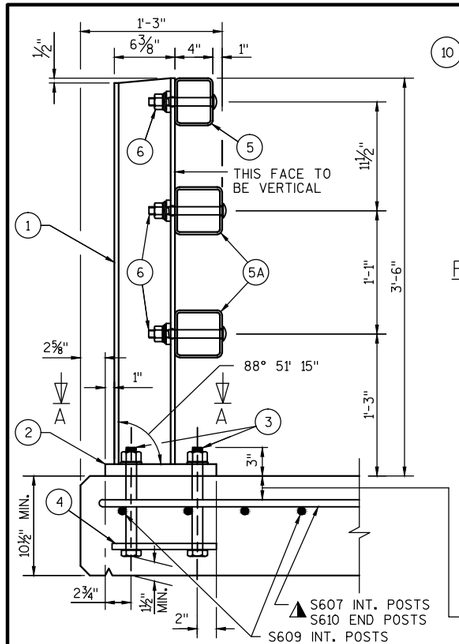
8

8

SCALE = 10:1

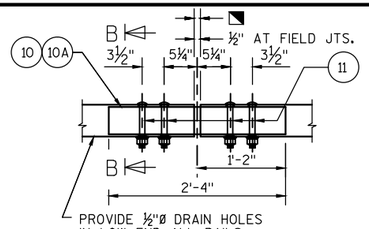
STATE PROJECT NUMBER

7287-00-71



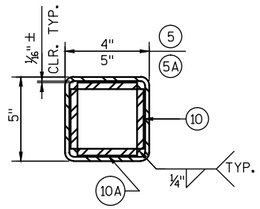
SECTION THRU RAILING ON DECK

2½" FOR SLABS ON GIRDERS; FOR OTHER STRUCTURES, PLACE BELOW TOP MAT SLAB REINFORCEMENT.

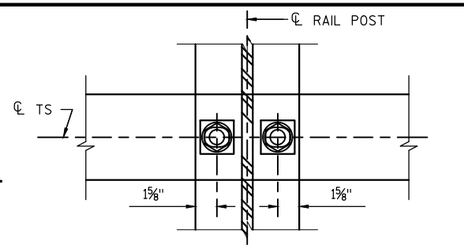


PROVIDE ½"ø DRAIN HOLES IN LOW END ALL RAILS CLEAR OF SPLICE TUBE

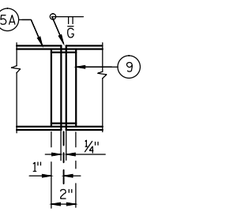
FIELD ERECTION JOINT DETAIL



SECTION B-B

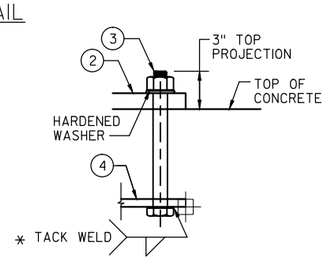


SECTION THRU POST WEB

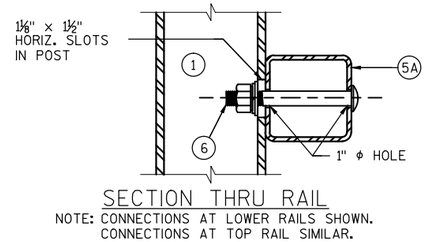


SHOP RAIL SPLICE DETAIL

LOCATION MUST BE SHOWN ON SHOP DRAWINGS



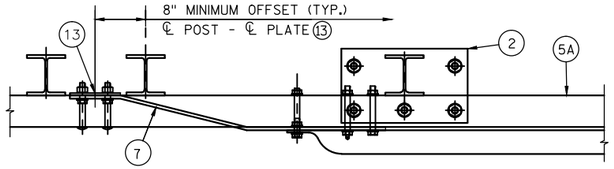
ANCHOR BOLTS



SECTION THRU RAIL

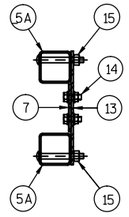
NOTE: CONNECTIONS AT LOWER RAILS SHOWN. CONNECTIONS AT TOP RAIL SIMILAR.

TYPICAL RAIL TO POST CONNECTIONS



TOP VIEW AT END POST

THRIE BEAM RAIL ATTACHMENT



SECTION C-C

GENERAL NOTES

1. BID ITEM SHALL BE "RAILING TUBULAR TYPE 'M' B-61-219 WHICH INCLUDES ALL ITEMS SHOWN.
2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY = 50 ksi. ANCHOR PLATES, AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.
3. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.
4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE. RAILS SHALL BE SPLICED IN A PANEL OVER EXPANSION JOINTS.
5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
6. WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
7. FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 AND CAULK AROUND PERIMETER OF PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
8. POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
9. ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY SSPC SPECIFICATIONS.
10. THIS RAILING MEETS NCHRP REPORT 350 EVALUATION CRITERIA FOR TEST LEVEL 4 (TL-4).

LEGEND

(1) W6 x 25 WITH 1⅛" X 1½" 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 1¼" x 11¾" x 1'-8" WITH 1⅝" X 1⅝" SLOTTED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN. SLOTS PARALLEL TO SHORT SIDE OF PLATE.

(3) ASTM A449 - 1⅛" 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 10¾" 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) ⅝" x 11" x 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1³⁄₁₆" DIA. HOLES FOR ANCHOR BOLTS NO. 3

(5) TS 5 x 4 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.

(5A) TS 5 x 5 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.

(6) ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, ⅜" X 1⅝" X 1⅝" WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION.)

(7) 1/2" THK. BACK-UP PLATE WITH 2 - ⅞" X 1½" 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 ⅞" DIA. A325 BOLTS WITH HEX NUTS AND WASHERS. 6 HOLES IN TUBES AND PLATE NO. 7.

(9) SPLICE SLEEVE FABRICATED FROM ¼" PLATE. PROVIDE "SLIDING FIT".

(10) ⅜" X 3⅝" X 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.

(10A) ⅜" X 2⅝" X 2'-4" PLATE USED IN NO. 5, ⅜" X 3⅝" X 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.

(11) ⅞" ϕ A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 15⁄16" X 1¼" LONGIT. SLOTTED HOLES AT FIELD JOINTS AND 15⁄16" X 2¼" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 10A.

(12) ⅞" DIA. X 1½" LONG THREADED SHOP WELDED STUDS (2 REQ'D).

(13) ⅜" X 8" X 1'-6" PLATE. BOLT TO RAIL AS SHOWN IN DETAIL. REQ'D. AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYM. ABOUT TUBES NO. 5A.

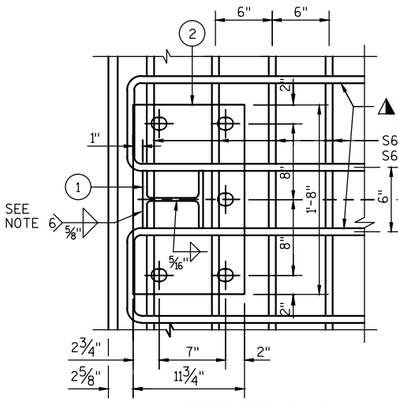
(14) ⅞" DIA. X 2" LONG A325 HEX BOLT WITH NUT AND WASHER (5 REQ'D.).

(15) 1" ϕ HOLES IN TUBES NO. 5A FOR ⅞" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER AND LOCK WASHER (4 REQ'D.). 4 HOLES IN TUBES.

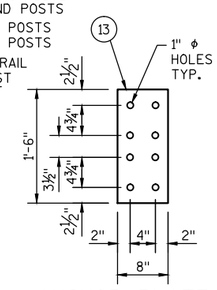
▲ TIE TO TOP MAT OF STEEL.

* FOR ANCHOR BOLTS IN WINGS, TACK WELD MAY BE USED IN FIELD AFTER ANCHOR PLATE IS IN POSITION IF REQ'D. FOR CONSTRUCTABILITY.

◪ RDWY. OPENING OR 2½" MIN. FOR STRIP SEAL EXP. JOINT & ½" OPENING FOR A1 ABUTMENT.

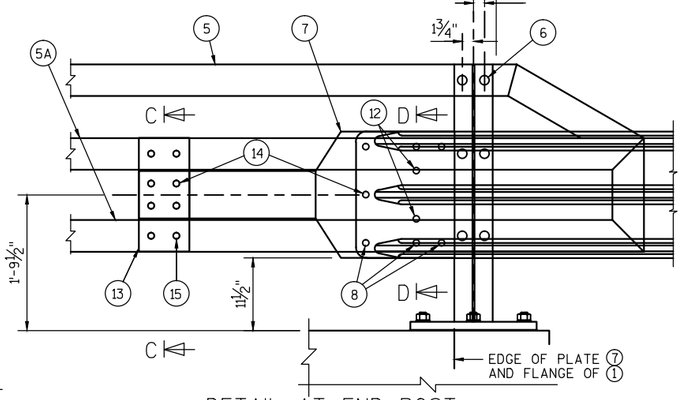


SECTION A-A



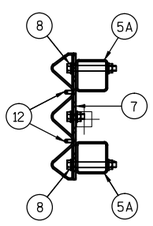
ANCHOR PLATE

AT BEAM GUARD ATTACHMENT

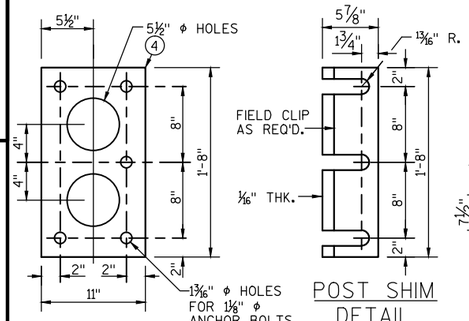


DETAIL AT END POST

THRIE BEAM RAIL ATTACHMENT



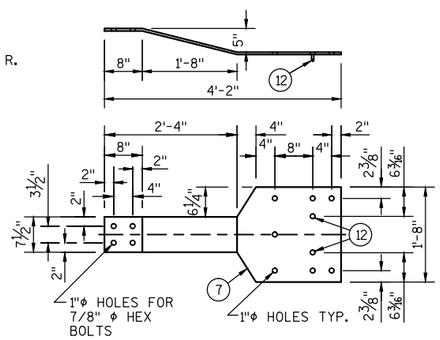
SECTION D-D



ANCHOR PLATE

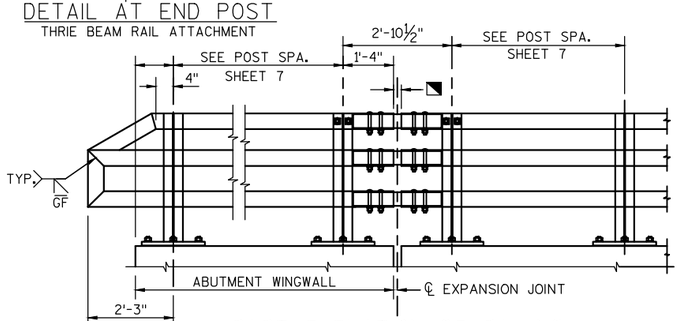
(AT RAIL TO DECK CONNECTION)

POST SHIM DETAIL



BACK-UP PLATE DETAIL

(AT BEAM GUARD ATTACHMENT)



PART ELEVATION OF RAILING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-61-219

DRAWN BY NJT | PLANS CK'D. TLP

TUBULAR STEEL RAILING TYPE 'M'

SHEET 8 OF 8

33

SCALE = VARIES

RIPHENBERG ROAD - WEST APPROACH

INCREMENTAL VOLUME

		END AREA		COMMON* 1.0		FILL 1.3		MASS
	DISTANCE	COMMON	FILL	RAW	ADJ	RAW	ADJ	HAUL
STATION	FT	SF	SF	CY	CY	CY	CY	CY
8+50	0	18.2	0.0	0.0	0.0	0.0	0.0	0.0
9+00	50	22.2	24.1	37.4	37.4	22.3	29.0	8.4
9+50	50	39.7	14.5	57.3	57.3	35.7	46.5	10.9
9+91	41	39.3	14.5	60.0	60.0	22.0	28.6	31.4

*SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT, SEE MQ TABLES

RIPHENBERG ROAD - EAST APPROACH

INCREMENTAL VOLUME

		END AREA		COMMON* 1.0		FILL 1.3		MASS
	DISTANCE	COMMON	FILL	RAW	ADJ	RAW	ADJ	HAUL
STATION	FT	SF	SF	CY	CY	CY	CY	CY
10+30	0	19.5	52.0	0.0	0.0	0.0	0.0	0.0
10+50	20	19.5	55.5	14.4	14.4	39.8	51.8	-37.3
11+00	50	23.5	16.9	39.8	39.8	67.0	87.1	-47.3
11+50	50	20.1	0.0	40.4	40.4	15.6	20.3	20.0

*SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT, SEE MQ TABLES

KING CREEK

INCREMENTAL VOLUME

		END AREA		COMMON* 1.0		FILL 1.3		MASS
	DISTANCE	COMMON	FILL	RAW	ADJ	RAW	ADJ	HAUL
STATION	FT	SF	SF	CY	CY	CY	CY	CY
100+00	0	7.2	0.0	0.0	0.0	0.0	0.0	0.0
100+20	20	9.9	0.0	6.3	6.3	0.0	0.0	6.3
100+40	20	15.5	0.0	9.4	9.4	0.0	0.0	9.4
100+60	20	23.9	29.5	14.6	14.6	10.9	14.2	0.4
100+80	20	33.8	49.1	21.4	21.4	29.1	37.8	-16.5

9

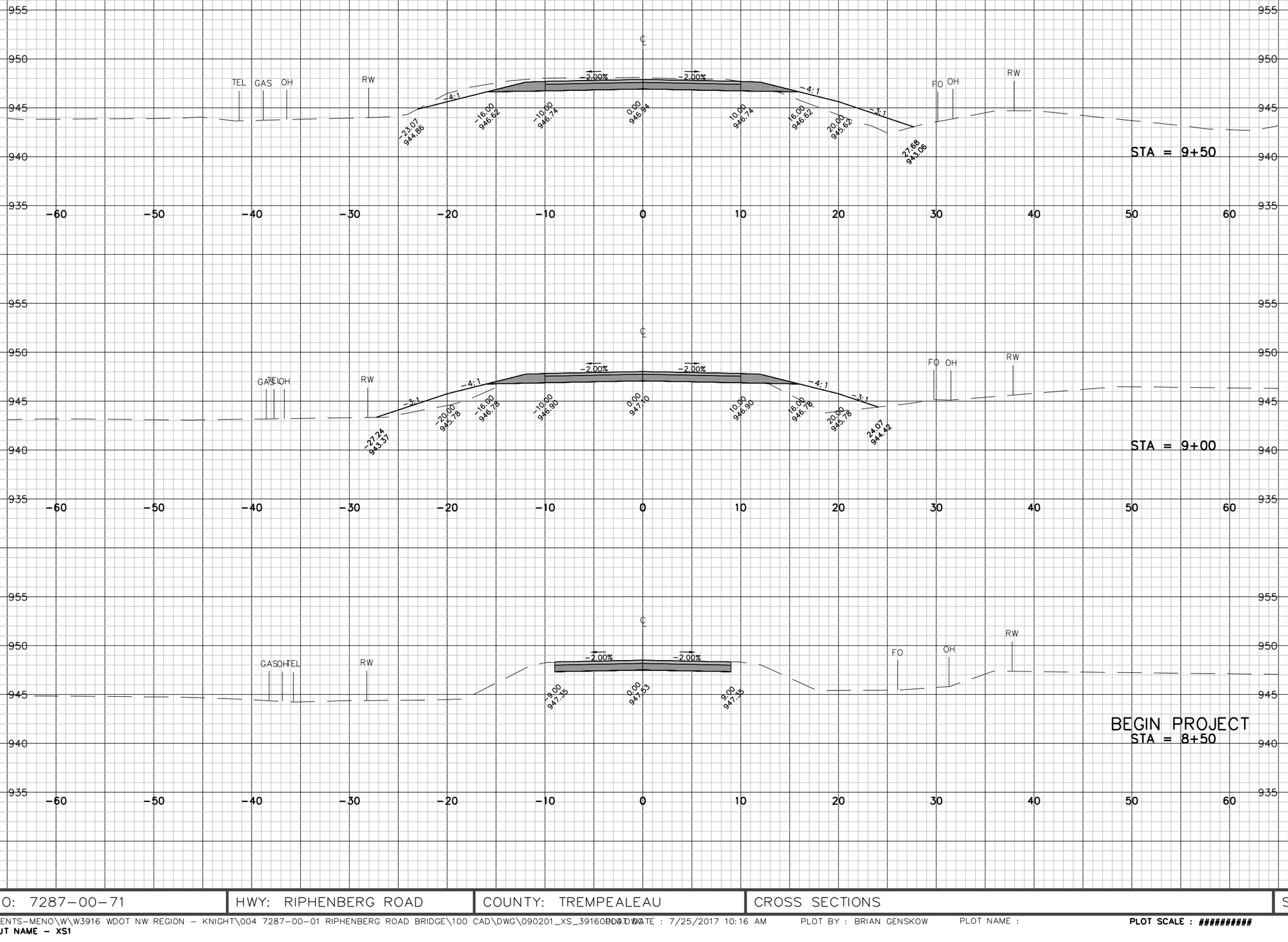
9

PROJECT NO: 7287-00-71	HWY: RIPHENBERG ROAD	COUNTY: TREMPEALEAU	EARTHWORK TABULATIONS	SHEET 34	E

FILE NAME : I:\CLIENTS-MENO\W\W3916 WDOT NW REGION - KNIGHT\004 7287-00-01 RIPHENBERG ROAD BRIDGE\100 CAD\DWG\090101_EW.DWG
LAYOUT NAME - EARTHWORK

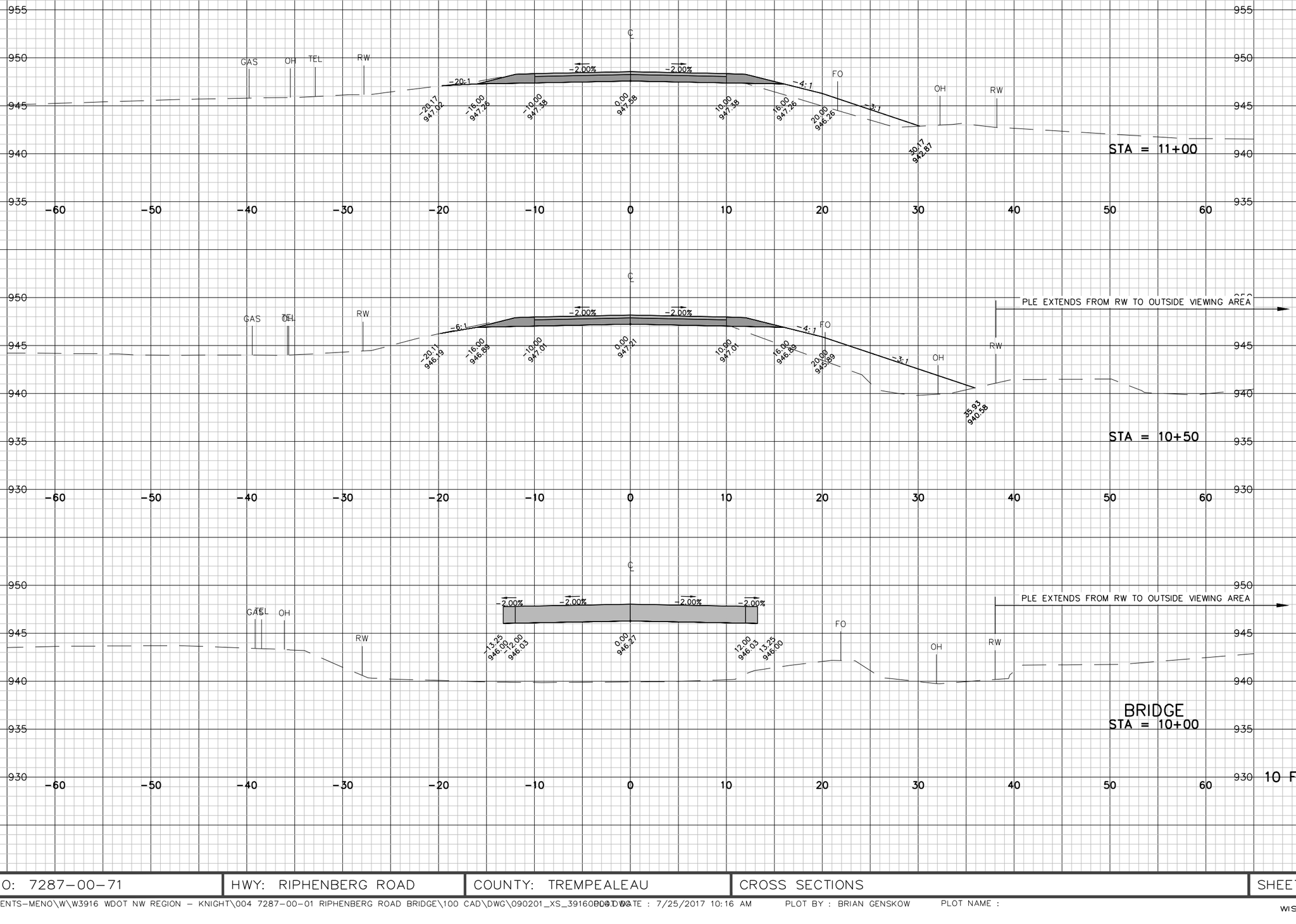
PLOT DATE : 7/25/2017 10:15 AM PLOT BY : BRIAN GENSKOW PLOT NAME : PLOT SCALE : 1" = 1'

WISDOT/CADDS SHEET 49

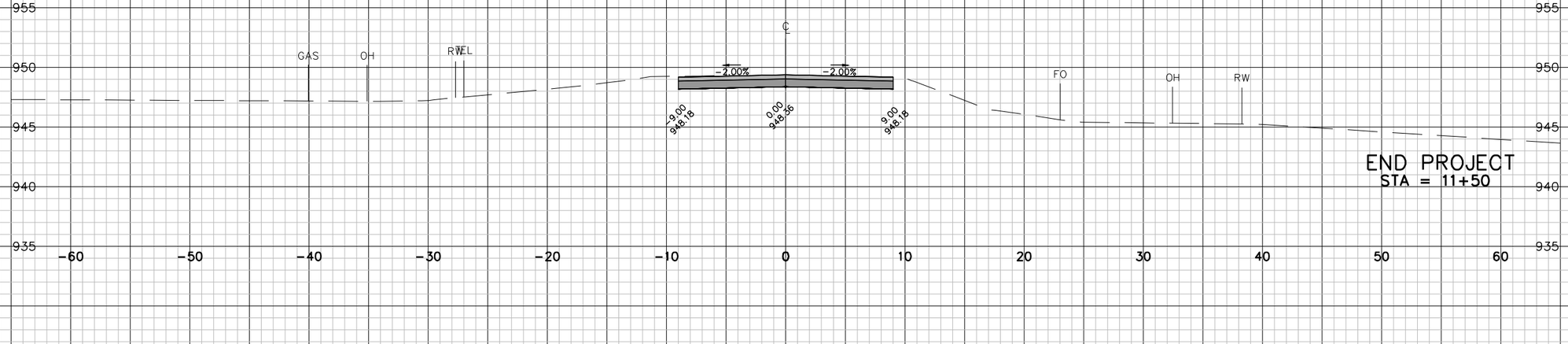


PROJECT NO: 7287-00-71	HWY: RIPHENBERG ROAD	COUNTY: TREMPEALEAU	CROSS SECTIONS	SHEET 35	E

FILE NAME : I:\CLIENTS-MENO\W\W3916 WDOT NW REGION - KNIGHT\004 7287-00-01 RIPHENBERG ROAD BRIDGE\100 CAD\DWG\090201_XS_39160004.DWG
LAYOUT NAME - XS1
PLOT DATE : 7/25/2017 10:16 AM PLOT BY : BRIAN GENSKOW PLOT NAME : PLOT SCALE : ##########

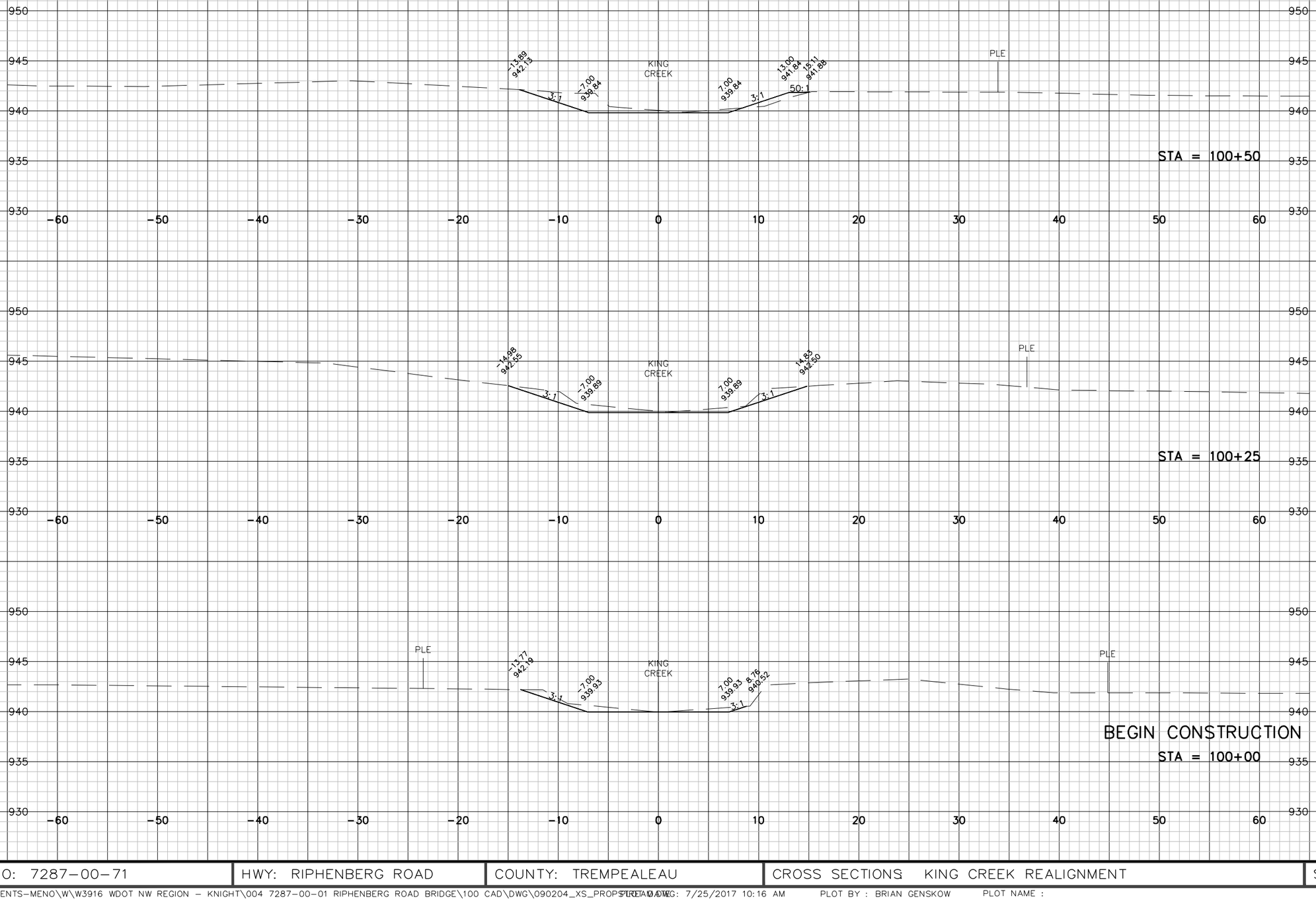


PROJECT NO: 7287-00-71	HWY: RIPHENBERG ROAD	COUNTY: TREMPEALEAU	CROSS SECTIONS	SHEET 36	E



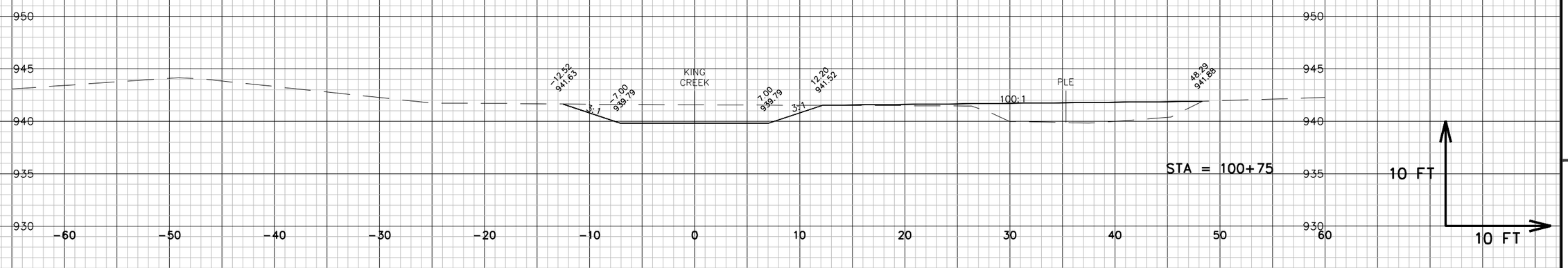
PROJECT NO: 7287-00-71	HWY: RIPHENBERG ROAD	COUNTY: TREMPEALEAU	CROSS SECTIONS	SHEET 37	E

FILE NAME : I:\CLIENTS-MENO\W\W3916 WDOT NW REGION - KNIGHT\004 7287-00-01 RIPHENBERG ROAD BRIDGE\100 CAD\DWG\090201_XS_39160004.DWG PLOT DATE : 7/25/2017 10:16 AM PLOT BY : BRIAN GENSKOW PLOT NAME :



PROJECT NO: 7287-00-71	HWY: RIPHENBERG ROAD	COUNTY: TREMPEALEAU	CROSS SECTIONS KING CREEK REALIGNMENT	SHEET 38	E

END CONSTRUCTION
STA = 101+60



PROJECT NO: 7287-00-71	HWY: RIPHENBERG ROAD	COUNTY: TREMPEALEAU	CROSS SECTIONS KING CREEK REALIGNMENT	SHEET 39	E

FILE NAME : I:\CLIENTS-MENO\W\W3916 WDOT NW REGION - KNIGHT\004 7287-00-01 RIPHENBERG ROAD BRIDGE\100 CAD\DWG\090204_XS_PROPSTREAM.DWG PLOTTED: 7/25/2017 10:16 AM PLOT BY : BRIAN GENSKOW PLOT NAME :

WISDOT/CADDS SHEET 44

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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