EAU APRIL 2021

PROJECT ID: WITH: 7286-00-70

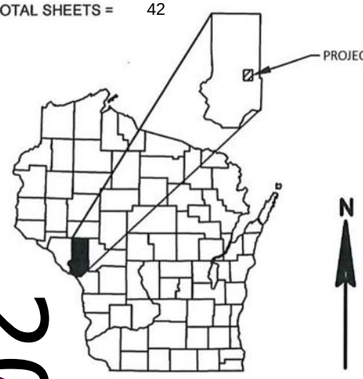
COUNTY: TREMPEALEAU

20

ORDER OF SHEETS

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

TOTAL SHEETS = 42



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

T PRESTON, BRADLEY ROAD

SALVA COULEE CREEK BRIDGE B-61-0248

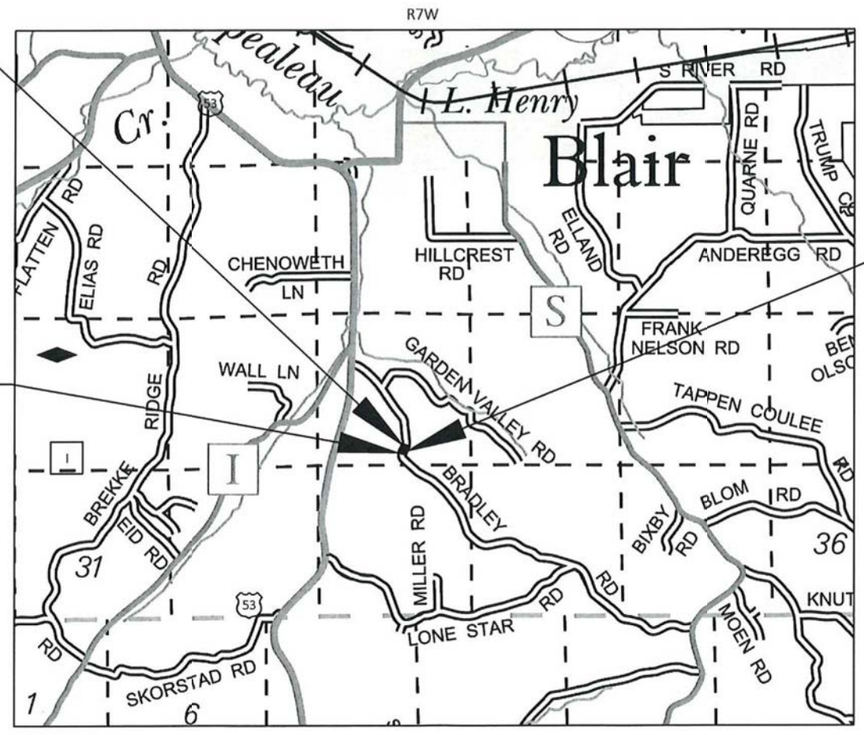
LOCAL STREET
TREMPEALEAU COUNTY

STATE PROJECT NUMBER
7286-00-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7286-00-70		

BEGIN PROJECT 7286-00-70
STA 9+32.25
Y = 401419.80
X = 846061.96

END PROJECT 7286-00-70
STA 10+67.75
Y = 401305.66
X = 845989.15



STRUCTURE B-61-0248

ACCEPTED FOR
TOWN OF PRESTON
Date 10-27-20 Daniel Nelson
(Signature and Title of Official)

ACCEPTED FOR
COUNTY OF TREMPEALEAU
Date 10/29/20
(Signature and Title of Official)

ORIGINAL PLANS PREPARED BY

KNIGHT
Engineering Technologies
831 Critter Court
Suite 400
Onalaska, WI 54650
Phone: (608) 519-1455

WISCONSIN
RYAN B. McKANE
E-37669
HOLMEN, WI
PROFESSIONAL ENGINEER

DATE: 10/6/20
(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	KNIGHT E/A
Designer	KNIGHT E/A
Project Manager	MATTHEW THORNSEN
Regional Examiner	TOU YANG
Regional Supervisor	ANDREW STENSLAND

APPROVED FOR THE DEPARTMENT
DATE: 11/02/2020
(Signature)

E

DESIGN DESIGNATION

A.A.D.T.	2021	=	<100
A.A.D.T.	2041	=	130
D.H.V.		=	N/A
D.D.		=	50/50
T.		=	5%
DESIGN SPEED		=	30 MPH
ESALS		=	36,500

CONVENTIONAL SYMBOLS

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

LAYOUT
SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = .026 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), TREMPEALEAU COUNTY, IN U.S. SURVEY FEET.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

FILE NAME : W:\7638_01\CAD\I 7286-00-00\SHEETSPLAN\010101_TI.DWG PLOT DATE : 9/21/2020 8:06 AM PLOT BY : MARZOLF, ROBBI PLOT NAME :

STANDARD ABBREVIATIONS

AC	ACRE
AGG	AGGREGATE
AH	AHEAD
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ASPH	ASPHALTIC
AVG	AVERAGE
BK	BACK
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
BR	BRIDGE
CL or C/L	CENTER LINE
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CO	COUNTY
CTH	COUNTY TRUNK HIGHWAY
CR	CREEK
CABC	CRUSHED AGGREGATE BASE COURSE
CSD	COMMUNITY SENSITIVE DESIGN
CY or CUYD	CUBIC YARD
CULV	CULVERT
CP	CULVERT PIPE
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DIA	DIAMETER
DISCH	DISCHARGE
E	EAST
EB	EASTBOUND
EL or ELEV	ELEVATION
EW	ENDWALL
ENT	ENTRANCE
EXC	EXCAVATION
EX	EXISTING
FERT	FERTILIZER
FE	FIELD ENTRANCE
FL or F/L	FLOW LINE
FT	FOOT
HE	HIGHWAY EASEMENT
HMA	HOT MIX ASPHALT
CWT	HUNDREDWEIGHT
INL	INLET
INV	INVERT
JCT	JUNCTION
LT	LEFT
L	LENGTH OF CURVE
LIN FT or LF	LINEAR FOOT
LS	LUMP SUM
NC	NORMAL CROWN
N	NORTH
NB	NORTHBOUND
NO	NUMBER
PT	POINT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PCC	PORTLAND CEMENT CONCRETE
LB	POUND
PE	PRIVATE ENTRANCE
R	RADIUS
RL or R/L	REFERENCE LINE
RT	RIGHT
R/W	RIGHT-OF-WAY
RD	ROAD
SHLDR	SHOULDER
SB	SOUTHBOUND
SF or SQ FT	SQUARE FEET
SY or SQ YD	SQUARE YARD
SDD	STANDARD DETAIL DRAWINGS
STH	STATE TRUNK HIGHWAYS
SE	SUPERELEVATION
T	TANGENT
TEMP	TEMPORARY
TWLTL	TWO-WAY LEFT-TURN LANE
UG	UNDERGROUND
USH	UNITED STATES HIGHWAY
V	VELOCITY OR DESIGN SPEED
VC	VERTICAL CURVE
WB	WESTBOUND
YD	YARD

GENERAL NOTES

- NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.
- DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE SALVAGED TOPSOILED, FERTILIZED, SEEDED, AND E-MATTED AS DIRECTED BY THE ENGINEER.
- MATCH EXISTING DRIVEWAYS WITH IN-KIND MATERIALS.
- PAVING LIMITS ARE TO BE DETERMINED BY THE ENGINEER.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- ASPHALT SURFACE TO BE PLACED IN LIFTS AS FOLLOWS: LOWER- 1.75" UPPER-1.75"
- SURFACE WEIGHT CALCULATIONS ARE BASED ON 115 LB/SY/IN.
- WHEN THE QUANTITY OF BASE AGGREGATE IS MEASURED FOR PAVEMENT BY THE TON OR CUBIC YARD, THE DEPTH OR 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.
- WHEN PORTIONS OF EXISTING ASPHALTIC SURFACES ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT JOINT THROUGH THE ASPHALTIC SURFACE SO THAT REMOVAL OF THE ASPHALT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS. THE LOCATION OF SAW JOINTS AND THE AMOUNT REMOVED AT SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

UTILITY CONTACTS

CENTURYLINK
COMMUNICATION
BRIAN STELPLUGH
333 N FRONT ST
LA CROSSE, WI 54601
(608) 780-1238
BRIAN.STELPLUGH@CENTURYLINK.COM

RIVERLAND ENERGY COOPERATIVE
ELECTRIC
TIM HOLTAN
N28988 STATE ROAD 93
ARCADIA WI 54612-0277
(608) 323-3381
THOLTAN@RIVERLANDENERGY.COM

AREA CONTACTS

WISDOT PROJECT MANAGER
MATTHEW THORNSEN, PE
718 W. CLAIREMONT AVE.
EAU CLAIRE, WI 54701
(715) 225-4159
MATTHEW.THORNSEN@DOT.WI.GOV

WISCONSIN DNR
AMY LESIK
1300 W CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
(715) 836-6571
AMYL.LESIK@WISCONSIN.GOV

TREMPEALEAU COUNTY HIGHWAY DEPT
AL RINKA
W20699 STATE ROAD 121
WHITEHALL, WI 54733
(715) 538-9402
AL.RINKA@CO.TREMPEALEAU.WI.US

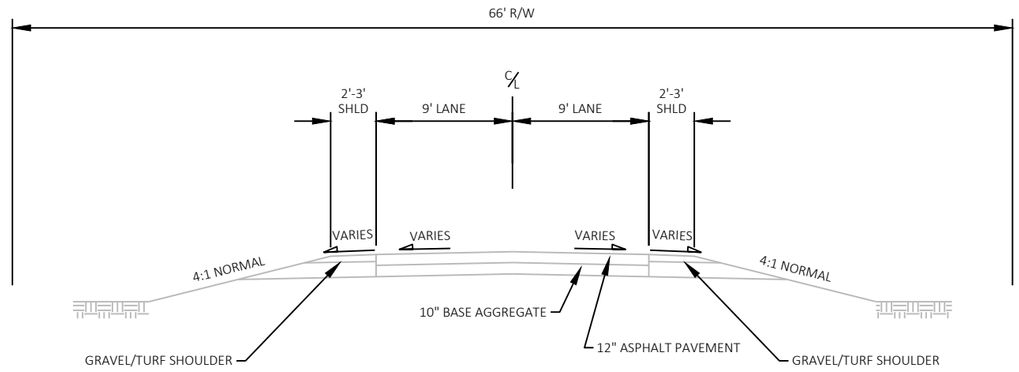
DESIGN CONTACT
KNIGHT E/A, INC.
RYAN MCKANE, PE
831 CRITTER COURT
ONALASKA, WI 54650
(608) 713-9274
RMCKANE@KNIGHTEA.COM

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

PROJECT NO: 7286-00-70	HWY: BRADLEY RD	COUNTY: TREMPEALEAU	GEN NOTES, STAND ABBR, & CONTACTS	SHEET 2 E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

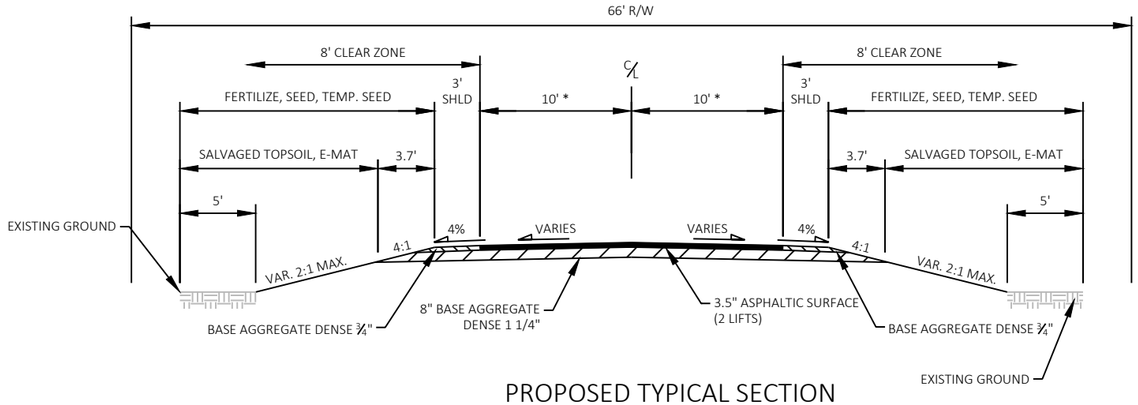
2



EXISTING TYPICAL SECTION

STA 9+32.25 - STA 9+88.00
STA 10+13.00 - STA 10+67.75

NOTE: THICKNESS BASED ON BORINGS TAKEN.

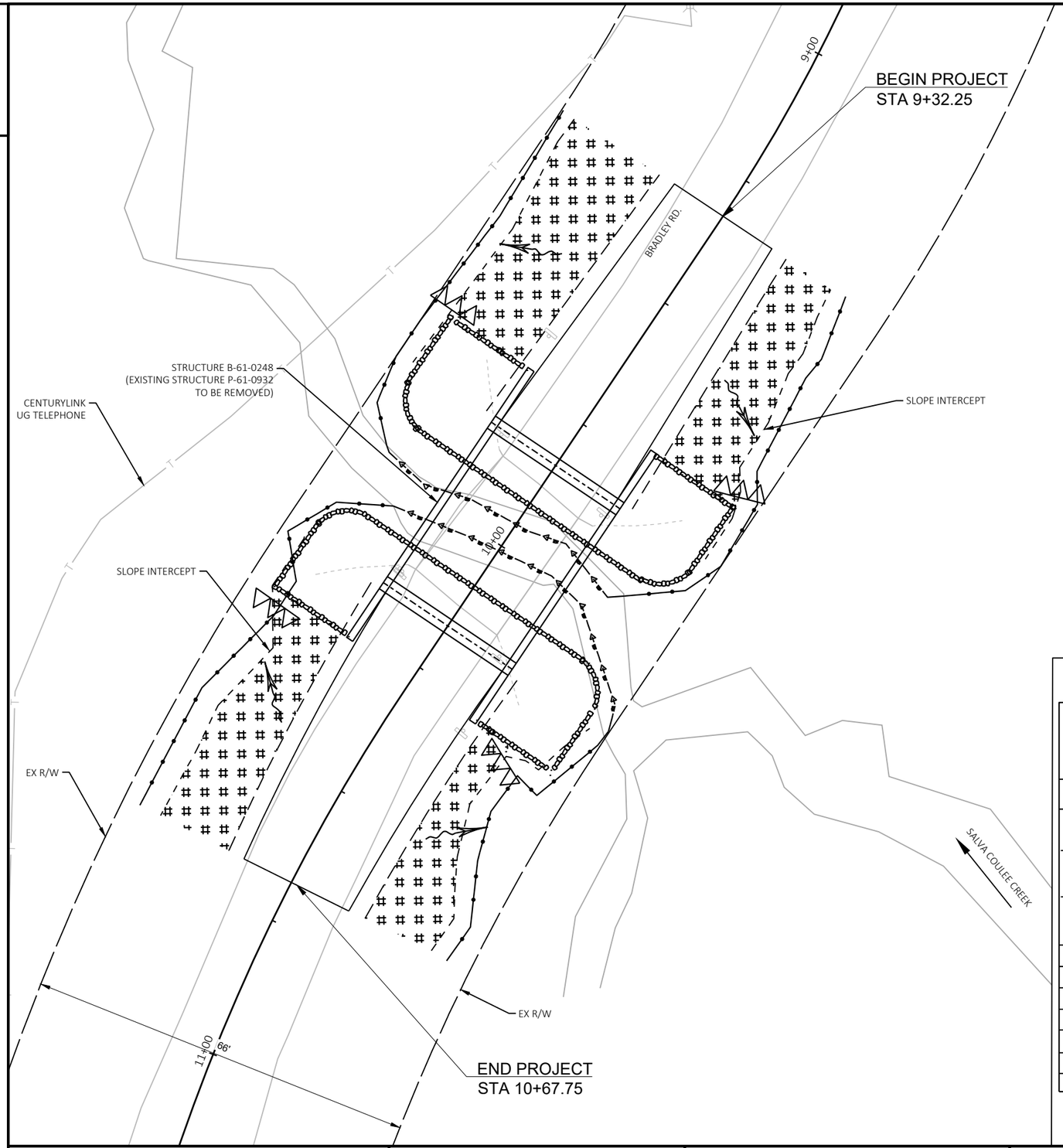


PROPOSED TYPICAL SECTION

STA 9+32.25 - STA 9+82.25
STA 10+17.75 - STA 10+67.75

*NOTE: ASPHALTIC SURFACE SHALL BE PLACED 26.5' WIDE AT ENDS OF BRIDGE AND TAPER TO 20' WIDE AT ROADWAY 50' FROM THE ENDS OF THE BRIDGE.

PROJECT NO: 7286-00-70	HWY: BRADLEY RD.	COUNTY: TREMPEALEAU	TYPICAL SECTIONS	SHEET 3	E



LEGEND

- EROSION MAT CLASS I TYPE B, FERTILIZER TYPE B, SEEDING MIXTURE NO. 20
- SILT FENCE
- TURBIDITY BARRIER
- RIPRAP HEAVY
- DRAINAGE DIRECTION
- TEMPORARY DITCH CHECK

HIGH WATER$_2$ ELEV. = 888.07

SCALE, FEET 0 10 20

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 = 0.20 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.17 ACRES

PROJECT NO: 7286-00-70	HWY: BRADLEY RD.	COUNTY: TREMPEALEAU	EROSION CONTROL	SHEET 4	E

2

BP: 7+14.93
Y = 401627.27
X = 846106.74

CP 1

N

CURVE 1
PI STA = 8+29.96
Y = 401513.719
X = 846125.123
DELTA = 43°06'45"
D = 19°40'36"
T = 115.03'
L = 219.10'
R = 291.19'
PC STA = 7+14.93
Y = 401627.272
X = 846106.742
PT STA = 9+34.03
Y = 401418.261
X = 846060.935
BK = S09°11'40.6"E
AH = S33°55'04.6"W

CURVE 1

8+00

BRADLEY RD.

9+00

BEGIN PROJECT
STA 9+25.25
Y = 401419.80
X = 846061.96

CP 5

94.76'
S33° 55' 04.6"W

CP 4

PT: 9+34.03

10+00

BM 6

END PROJECT
STA 10+67.75
Y = 401305.66
X = 845989.15

PC: 10+28.80

SALVA COULEE CREEK

11+00

CURVE 2

CP 2

Mid: 11+19.40

POST

CURVE 2
PI STA = 11+21.68
Y = 401262.550
X = 845956.230
DELTA = 30°59'31"
D = 17°06'12"
T = 92.88'
L = 181.21'
R = 335.00'
PC STA = 10+28.80
Y = 401339.624
X = 846008.057
PT STA = 12+10.00
Y = 401169.792
X = 845951.489
BK = S33°55'04.6"W
AH = S02°55'33.3"W

12+00

Y = 401169.79
X = 845950.56
EP: 12+10.00

BENCHMARKS AND CONTROL POINTS						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
BM 6	9+88.95	-11.179 LT	401366.51	846039.61	894.192	6-INCH NAIL IN WING
CP 1	7+37.79	-21.226 LT	401606.40	846130.65	897.116	IRON ROD W/ CAP
CP 2	11+33.97	14.850 RT	401248.35	845950.66	894.066	IRON ROD W/ CAP
CP 4	9+53.50	-11.023 LT	401396.02	846059.26	894.046	IRON ROD W/ CAP
CP 5	9+92.14	16.865 RT	401379.51	846014.55	887.671	IRON ROD W/ CAP

SCALE, FEET 0 25 50

ADDRESS SIGN
CHICKEN COOP CORNER
9.74'
CP 1: IR W/ CAP
30.45'
42.97'
CHICKEN COOP CORNER

TELEPHONE PEDESTAL
CP 2: IR W/ CAP
Mid: 11+19.40
16.41'
35.37'
31.52'
POST
TELEPHONE SIGN
MAILBOX

PT: 9+34.03
BRIDGE CORNER
38.47'
94.76'
S33° 55' 04.6"W
35.42'
CP 4: IR W/ CAP
10+00
BRIDGE CORNER

WING WALL CORNER
17.35'
CP 5: IR W/ CAP
94.76'
S33° 55' 04.6"W
WING WALL CORNER
30.45'
10+00

15.42'
10+00
CP 6: 6" NAIL IN WING WALL
WING WALL CORNER
32.67'
WING WALL CORNER
PC: 10+28

2

PROJECT NO: 7286-00-70	HWY: BRADLEY RD.	COUNTY: TREMPEALEAU	ALIGNMENT DETAILS	SHEET 5	E

FILE NAME : W:\7638_01\CAD\! 7286-00-00\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - Plan 1 IN 50 FT
PLOT DATE : 8/11/2020 4:11 PM
PLOT BY : MARZOLF, ROBBI
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

Estimate Of Quantities

7286-00-70

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	112.000	112.000
0010	206.1000	Excavation for Structures Bridges (structure) 01. B-61-0248	LS	1.000	1.000
0012	208.0100	Borrow	CY	20.000	20.000
0014	210.1500	Backfill Structure Type A	TON	190.000	190.000
0016	213.0100	Finishing Roadway (project) 01. 7286-00-70	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	18.000	18.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	166.000	166.000
0022	455.0605	Tack Coat	GAL	14.000	14.000
0024	465.0105	Asphaltic Surface	TON	48.000	48.000
0026	502.0100	Concrete Masonry Bridges	CY	99.000	99.000
0028	502.3200	Protective Surface Treatment	SY	124.000	124.000
0030	505.0400	Bar Steel Reinforcement HS Structures	LB	3,360.000	3,360.000
0032	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	15,520.000	15,520.000
0034	513.4061	Railing Tubular Type M	LF	116.000	116.000
0036	516.0500	Rubberized Membrane Waterproofing	SY	14.000	14.000
0038	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	690.000	690.000
0040	606.0300	Riprap Heavy	CY	124.000	124.000
0042	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	156.000	156.000
0044	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7286-00-70	EACH	1.000	1.000
0046	619.1000	Mobilization	EACH	1.000	1.000
0048	624.0100	Water	MGAL	4.000	4.000
0050	625.0500	Salvaged Topsoil	SY	220.000	220.000
0052	628.1504	Silt Fence	LF	285.000	285.000
0054	628.1520	Silt Fence Maintenance	LF	285.000	285.000
0056	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0058	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0060	628.2004	Erosion Mat Class I Type B	SY	220.000	220.000
0062	628.6005	Turbidity Barriers	SY	50.000	50.000
0064	628.7504	Temporary Ditch Checks	LF	40.000	40.000
0066	629.0210	Fertilizer Type B	CWT	0.500	0.500
0068	630.0120	Seeding Mixture No. 20	LB	9.000	9.000
0070	630.0200	Seeding Temporary	LB	9.000	9.000
0072	630.0500	Seed Water	MGAL	13.000	13.000
0074	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000

7286-00-70

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	7.000	7.000
0080	638.3000	Removing Small Sign Supports	EACH	7.000	7.000
0082	642.5001	Field Office Type B	EACH	1.000	1.000
0084	643.0420	Traffic Control Barricades Type III	DAY	804.000	804.000
0086	643.0705	Traffic Control Warning Lights Type A	DAY	1,608.000	1,608.000
0088	643.0900	Traffic Control Signs	DAY	938.000	938.000
0090	643.5000	Traffic Control	EACH	1.000	1.000
0092	645.0111	Geotextile Type DF Schedule A	SY	150.000	150.000
0094	645.0120	Geotextile Type HR	SY	373.000	373.000
0096	650.4500	Construction Staking Subgrade	LF	100.000	100.000
0098	650.5000	Construction Staking Base	LF	100.000	100.000
0100	650.6500	Construction Staking Structure Layout (structure) 01. B-61-0248	LS	1.000	1.000
0102	650.9910	Construction Staking Supplemental Control (project) 01. 7286-00-70	LS	1.000	1.000
0104	650.9920	Construction Staking Slope Stakes	LF	100.000	100.000
0106	690.0150	Sawing Asphalt	LF	36.000	36.000
0108	715.0502	Incentive Strength Concrete Structures	DOL	594.000	594.000
0110	SPV.0090	Special 01. Flashing Stainless Steel	LF	71.000	71.000

3

CLEARING & GRUBBING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	CLEARING 201.0105 STA	GRUBBING 201.0205 STA	REMARKS
0010	9+50	-	10+50	BRADLEY RD	1	1	
PROJECT TOTALS =					**1**	**1**	

ASPHALT ITEMS SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	ASPHALTIC SURFACE 465.0105 TON	TACK COAT 455.0605 GAL	REMARKS
0010	9+33	-	10+68	BINDER LAYER	24	14	
0010	9+33	-	10+68	SURFACE LAYER	24	-	
PROJECT TOTALS =					**48**	**14**	

EXCAVATION SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	EXCAVATION COMMON 205.0100 CY	BORROW 208.0100 CY	REMARKS
0010	9+33	-	9+83	BRADLEY RD	53	20	
0010	10+18	-	10+68	BRADLEY RD	59	0	
					112	**20**	

WATER

CATEGORY	LOCATION	624.0100 MGAL	REMARKS
0010	BRADLEY RD	1	SHOULDERS
0010	BRADLEY RD	3	ROADWAY
PROJECT TOTAL =		**4**	

BASE AGGREGATE DENSE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	BASE AGGREGATE DENSE 3/4-INCH 305.0110 TON	BASE AGGREGATE DENSE 1 1/4-INCH 305.0120 TON	REMARKS
0010	9+33	-	9+83	NORTH APPROACH	9	-	LT & RT
0010	10+18	-	10+68	SOUTH APPROACH	9	-	LT & RT
0010	9+33	-	9+83	NORTH APPROACH	-	83	LT & RT
0010	10+18	-	10+68	SOUTH APPROACH	-	83	LT & RT
PROJECT TOTALS =					**18**	**166**	

EROSION CONTROL MOBILIZATION SUMMARY

CATEGORY	LOCATION	MOBILIZATIONS EROSION CONTROL 628.1905 EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL 628.1910 EACH	REMARKS
0010	PROJECT LIMITS	3	3	
PROJECT TOTALS =		**3**	**3**	

EROSION CONTROL SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	SALVAGED TOPSOIL 625.0500 SY	SILT FENCE 628.1504 LF	SILT FENCE MAINENANCE 628.1520 LF	EROSION MAT CLASS I TYPE B 628.2004 SY	TURBIDITY BARRIERS 628.6005 SY	TEMPORARY DITCH CHECKS 628.7504 LF	FERTILIZER TYPE B 629.0210 CWT	SEEDING TEMPORARAY 630.0200 LB	SEEDING MIXTURE NO. 20 630.0120 LB	SEED WATER 630.0500 MGAL	REMARKS
0010				NORTH OF STREAM	-	-	-	-	23	-	-	-	-	-	
0010				SOUTH OF STREAM	-	-	-	-	27	-	-	-	-	-	
0010	9+32	-	9+98	NW QUAD	71	68	68	71	-	10	0.1	2	2	4	
0010	9+32	-	9+97	NE QUAD	52	73	73	52	-	10	0.1	2	2	3	
0010	10+05	-	10+68	SW QUAD	53	76	76	53	-	10	0.1	2	2	3	
0010	10+13	-	10+68	SE QUAD	37	59	59	37	-	10	0.1	1	1	2	
0010				UNDISTRIBUTED	7	9	9	7	-	-	0.1	2	2	1	
				PROJECT TOTALS =	**220**	**285**	**285**	**220**	**50**	**40**	**0.5**	**9**	**9**	**13**	

PERMANENT SIGN SUMMARY

CAT	SIGN NO.	STA	LOC.	SIZE IN	X	IN	SIGN CODE	DESCRIPTION	POSTS WOOD 4X6-INCH X 12-FT 634.0612 EACH	SIGNS TYPE II REFLECTIVE F 637.2230 SF	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGNS SUPPORTS 638.3000 EACH	REMARKS
0010	1	9+66	RT	24	X	30	R12-1	WEIGHT LIMIT 20 TONS	-	-	1	1	
0010	2	9+84	RT	12	X	36	W5-52R	BRIDGE HASH MARKS	1	3	1	1	
0010	3	9+86	LT	12	X	36	W5-52L	BRIDGE HASH MARKS	1	3	1	1	
0010	4	10+13	RT	12	X	36	W5-52L	BRIDGE HASH MARKS	-	-	1	1	
0010	5	10+13	RT	12	X	36	W5-52L	BRIDGE HASH MARKS	1	3	1	1	
0010	6	10+16	LT	12	X	36	W5-52R	BRIDGE HASH MARKS	1	3	1	1	
0010	7	10+30	LT	24	X	30	R12-1	WEIGHT LIMIT 20 TONS	-	-	1	1	
								PROJECT TOTAL =	**4**	**12**	**7**	**7**	

TRAFFIC CONTROL SUMMARY

CATEGORY	LOCATION	BARRICADES TYPE III 643.0420 NO.	BARRICADES TYPE III 643.0420 DAYS	WARNING LIGHTS TYPE A 643.0705 NO.	WARNING LIGHTS TYPE A 643.0705 DAYS	SIGNS 643.0900 NO.	SIGNS 643.0900 DAYS	TRAFFIC CONTROL 643.5000 EACH	REMARKS
0010	BRADLEY RD	12	804	24	1608	14	938	1	PER SDD BARRICADES AND SIGN FOR VARIOUS CLOSURES
	PROJECT TOTAL =		**804**		**1,608**		**938**	**1**	

CONSTRUCTION STAKING SUMMARY

CAT	STA	TO	STA	DESCRIPTION	CONSTRUCTION STAKING SUBGRADE 650.4500 LF	CONSTRUCTION STAKING BASE 650.5000 LF	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. B-61-248 650.6500 LS	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 7286-00-70 650.9910 LS	CONSTRUCTION STAKING SLOPE STAKES 650.9920 LF	REMARKS
0010	9+33	-	10+68	BRADLEY RD	100	100	1	1	100	
				PROJECT TOTAL =	**100**	**100**	**1**	**1**	**100**	

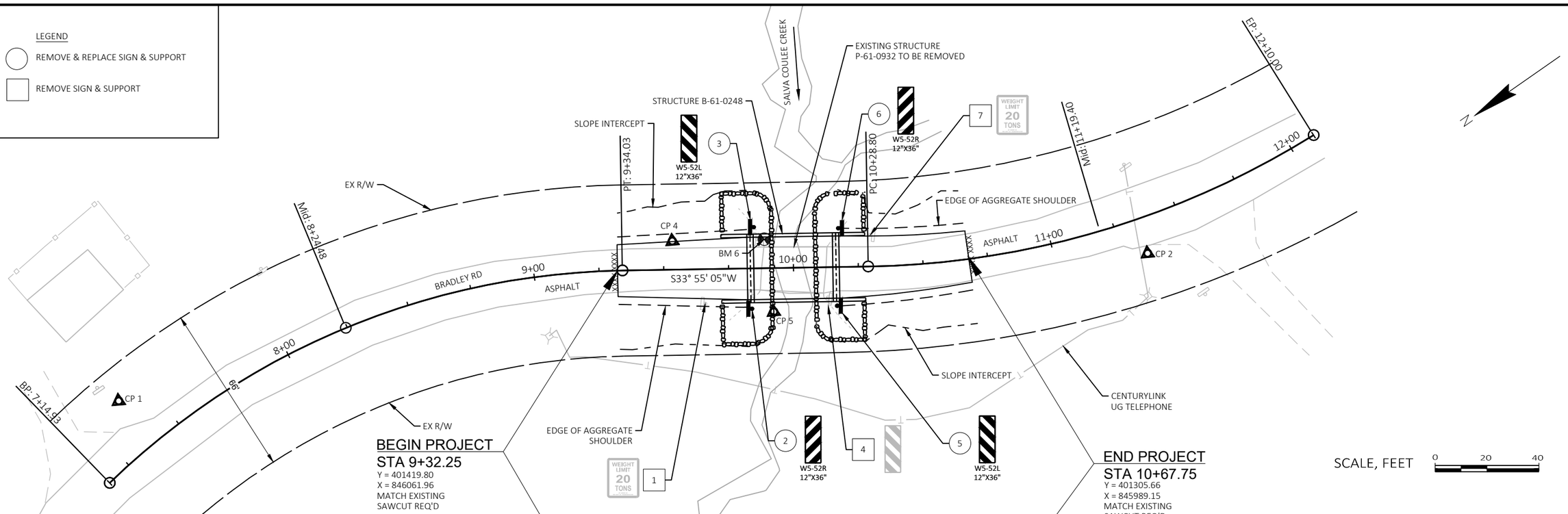
SAWING ASPHALT

CATEGORY	STATION	LOCATION	690.0150 LF	REMARKS
0010	9+32.25	BOP	18	
0010	10+67.75	EOP	18	
		PROJECT TOTAL =	**36**	

LEGEND

REMOVE & REPLACE SIGN & SUPPORT

REMOVE SIGN & SUPPORT



BEGIN PROJECT
STA 9+32.25
Y = 401419.80
X = 846061.96
MATCH EXISTING
SAWCUT REQ'D

END PROJECT
STA 10+67.75
Y = 401305.66
X = 845989.15
MATCH EXISTING
SAWCUT REQ'D

SCALE, FEET 0 20 40

EARTHWORK SUMMARY

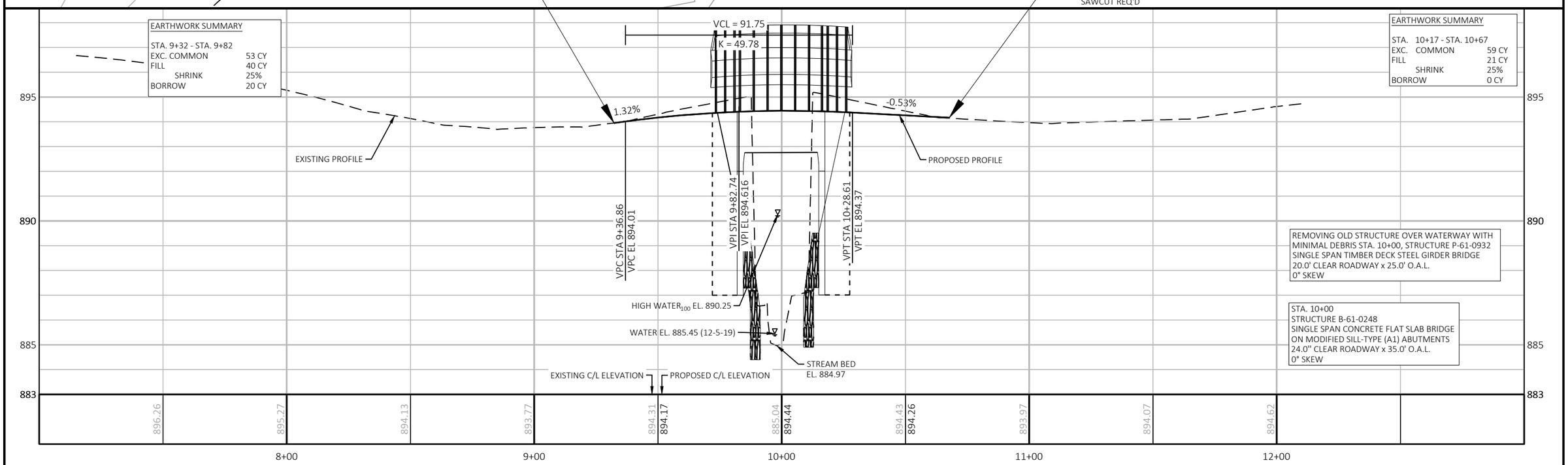
STA. 9+32 - STA. 9+82

EXC. COMMON	53 CY
FILL	40 CY
SHRINK	25%
BORROW	20 CY

EARTHWORK SUMMARY

STA. 10+17 - STA. 10+67

EXC. COMMON	59 CY
FILL	21 CY
SHRINK	25%
BORROW	0 CY



REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 10+00, STRUCTURE P-61-0932
SINGLE SPAN TIMBER DECK STEEL GIRDER BRIDGE
20.0' CLEAR ROADWAY x 25.0' O.A.L.
0° SKEW

STA. 10+00
STRUCTURE B-61-0248
SINGLE SPAN CONCRETE FLAT SLAB BRIDGE
ON MODIFIED SILL-TYPE (A1) ABUTMENTS
24.0'' CLEAR ROADWAY x 35.0' O.A.L.
0° SKEW

PROJECT NO: 7286-00-70	HWY: BRADLEY RD.	COUNTY: TREMPEALEAU	PLAN AND PROFILE: BRADLEY RD.	SHEET 11	E

FILE NAME : W:\7638_01\CAD\! 7286-00-00\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - PLAN 1 IN 40 FT

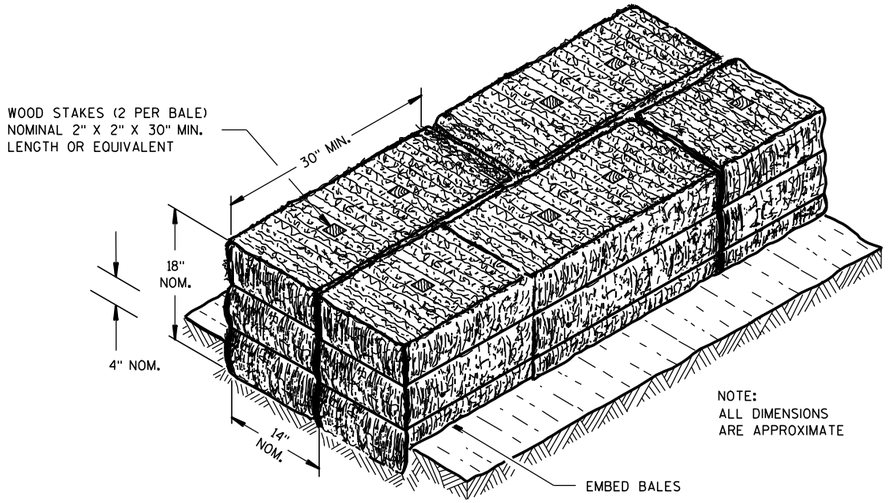
PLOT DATE : 9/21/2020 9:08 AM PLOT BY : MARZOLF, ROBBI PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

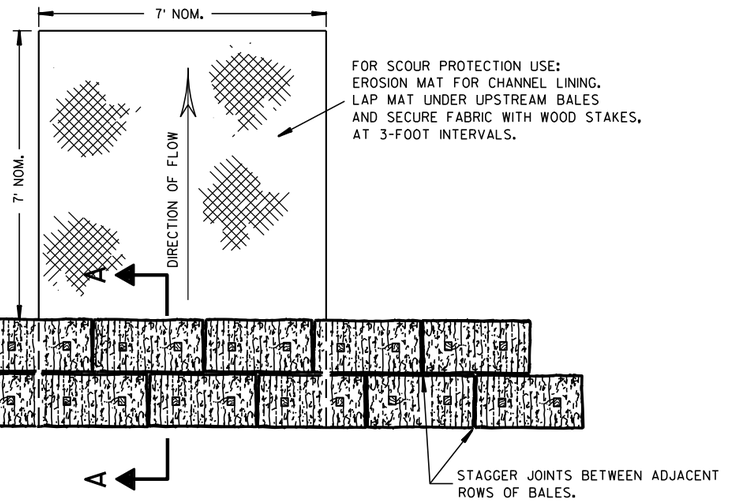
Standard Detail Drawing List

08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

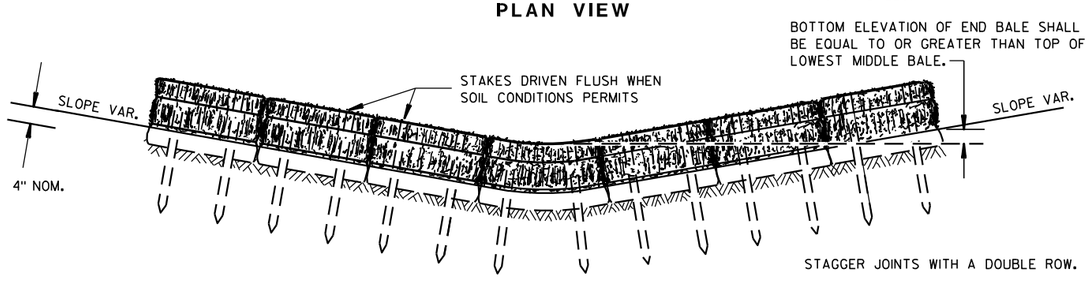
6



SECTION A-A



PLAN VIEW



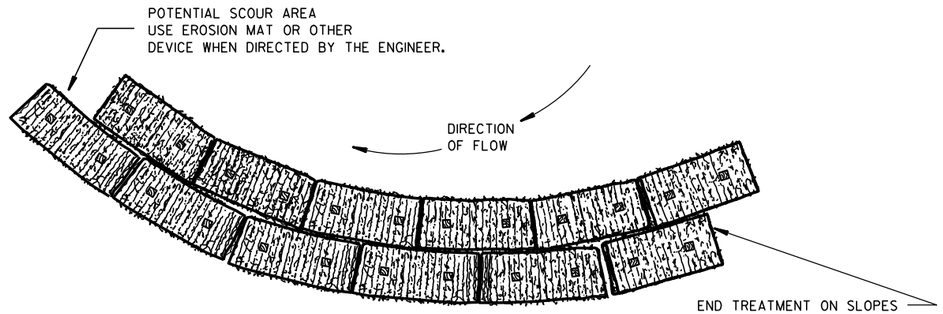
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

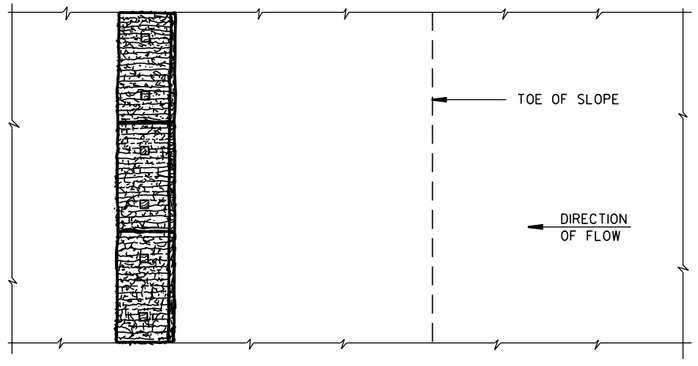
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

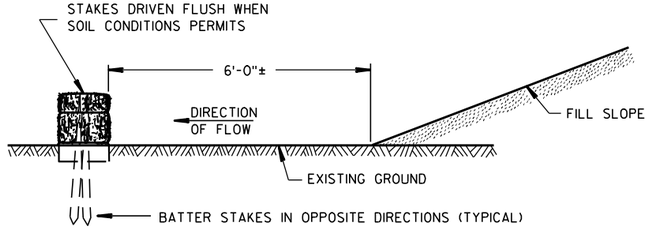


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

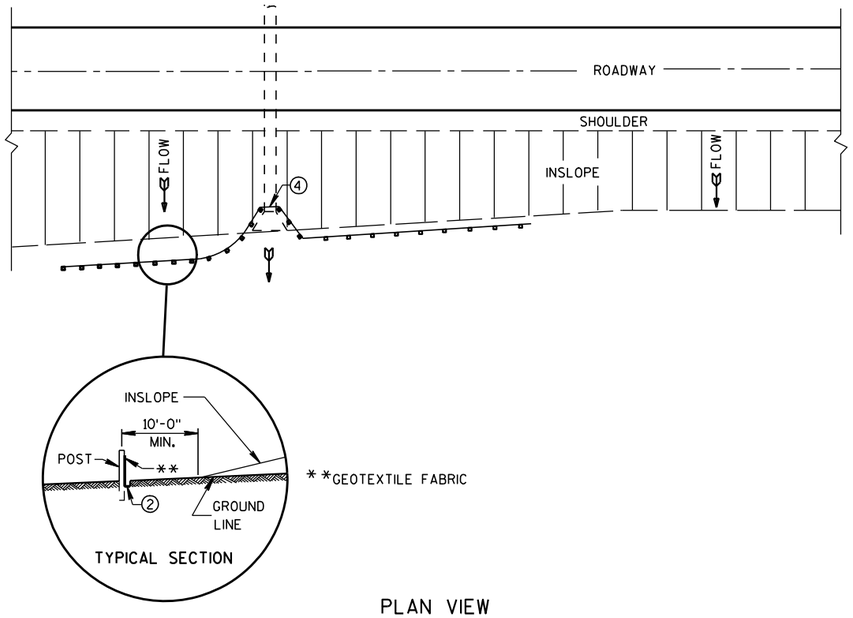
FHWA

6

S.D.D. 8 E 8-3

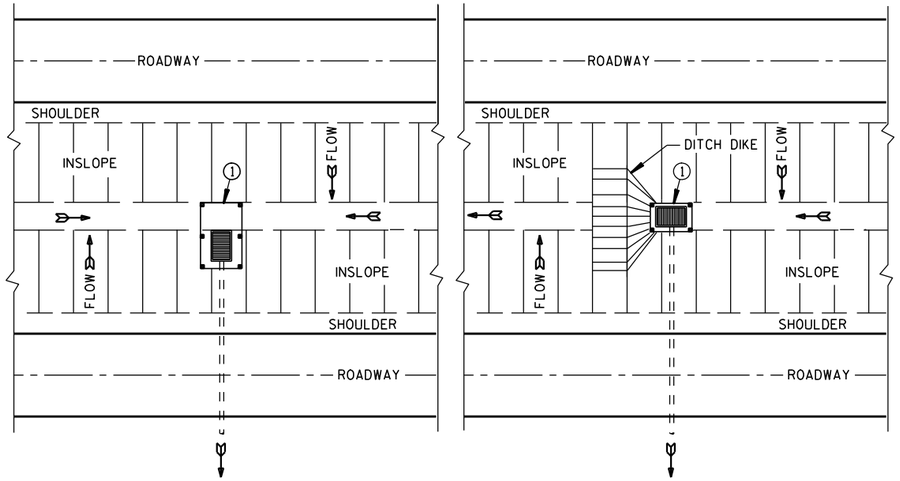
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



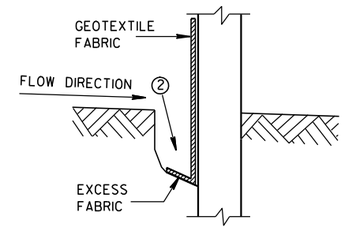
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

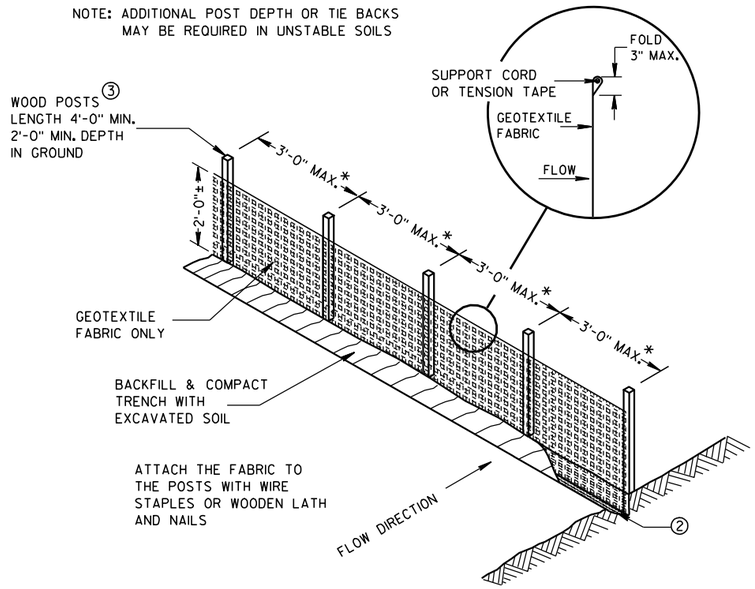
GENERAL NOTES

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

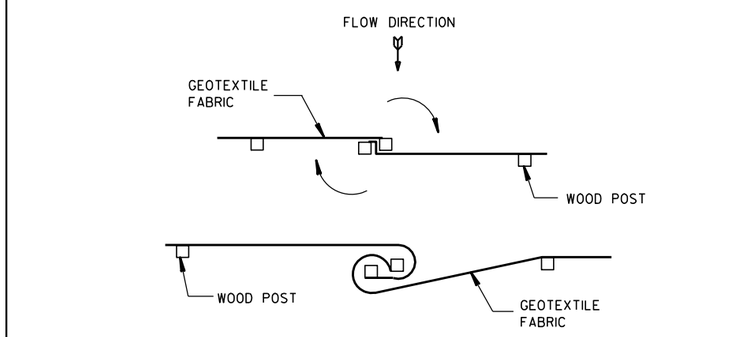
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 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.



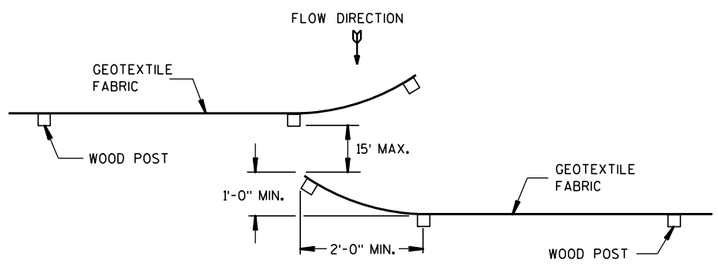
TRENCH DETAIL



SILT FENCE

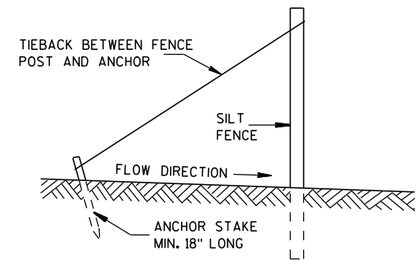


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

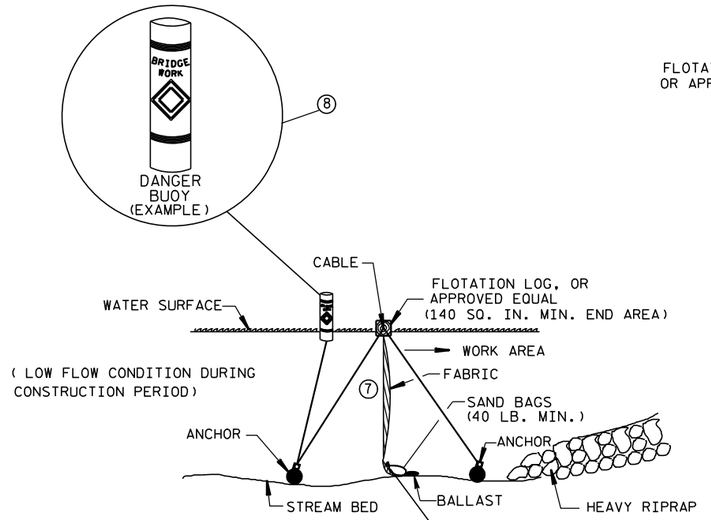
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

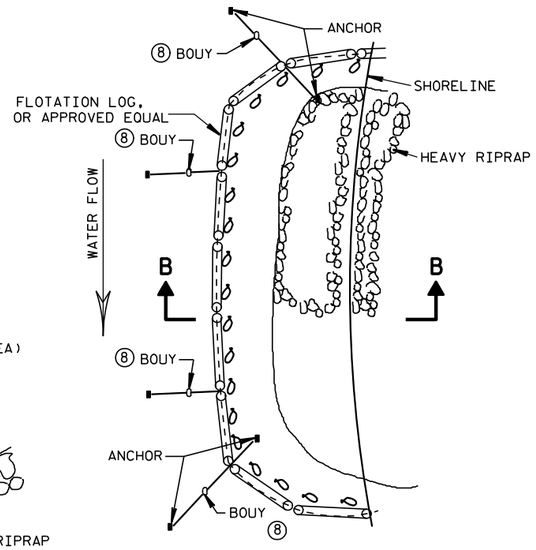
S.D.D. 8 E 9-6

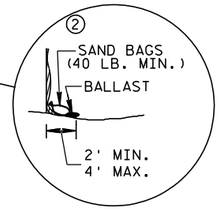
6

S.D.D. 8 E 9-6

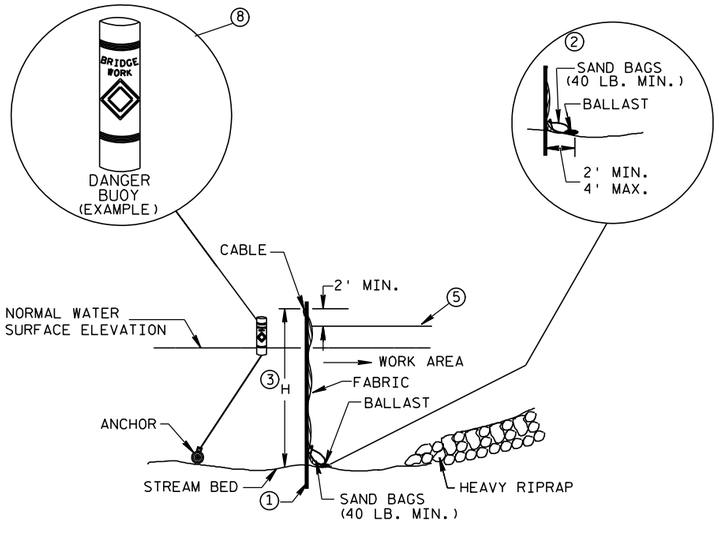


SECTION B-B

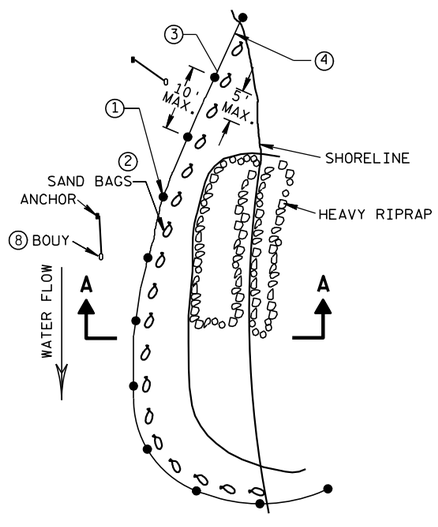




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



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.

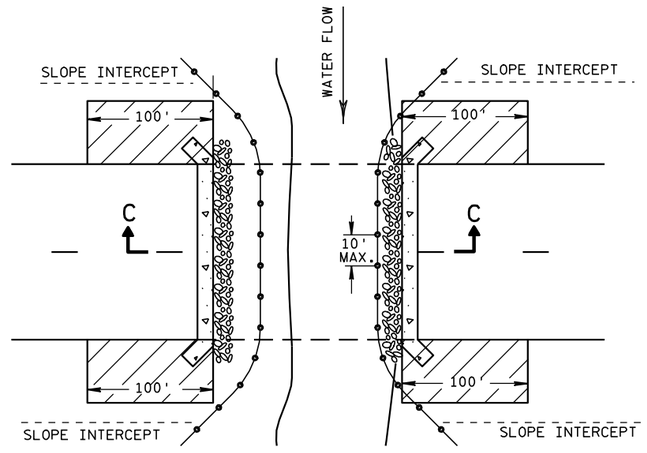
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE 02 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

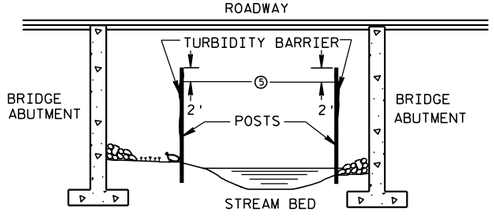
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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



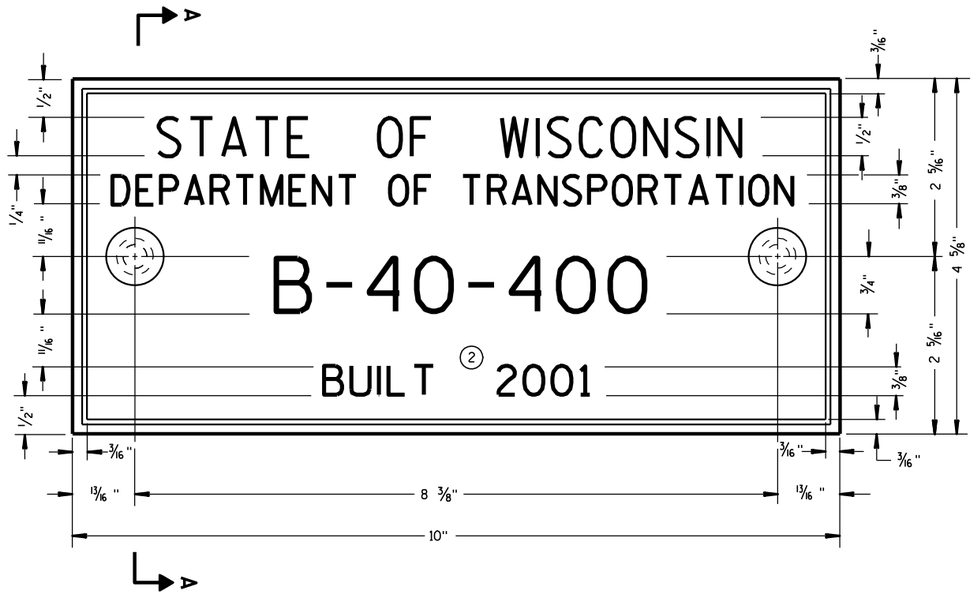
SECTION C-C

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	

6

S.D.D. 8 E 11-2



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)

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

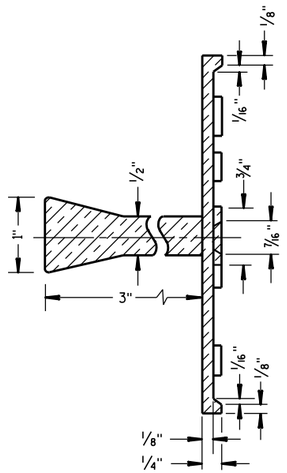
GENERAL NOTES

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.

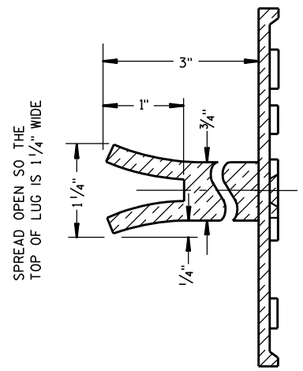
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

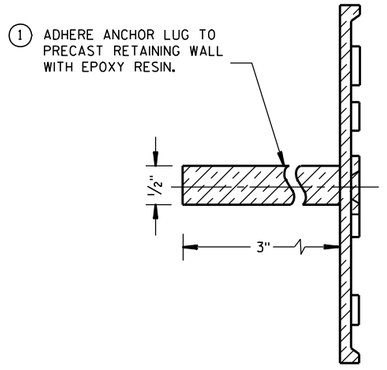
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



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

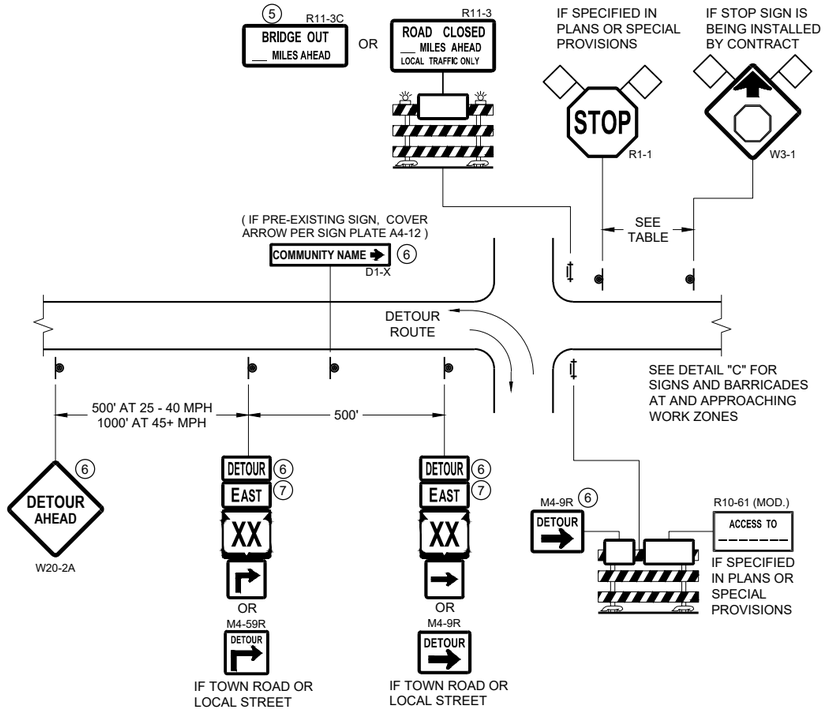
FHWA

6

S.D.D. 12 A 3-10

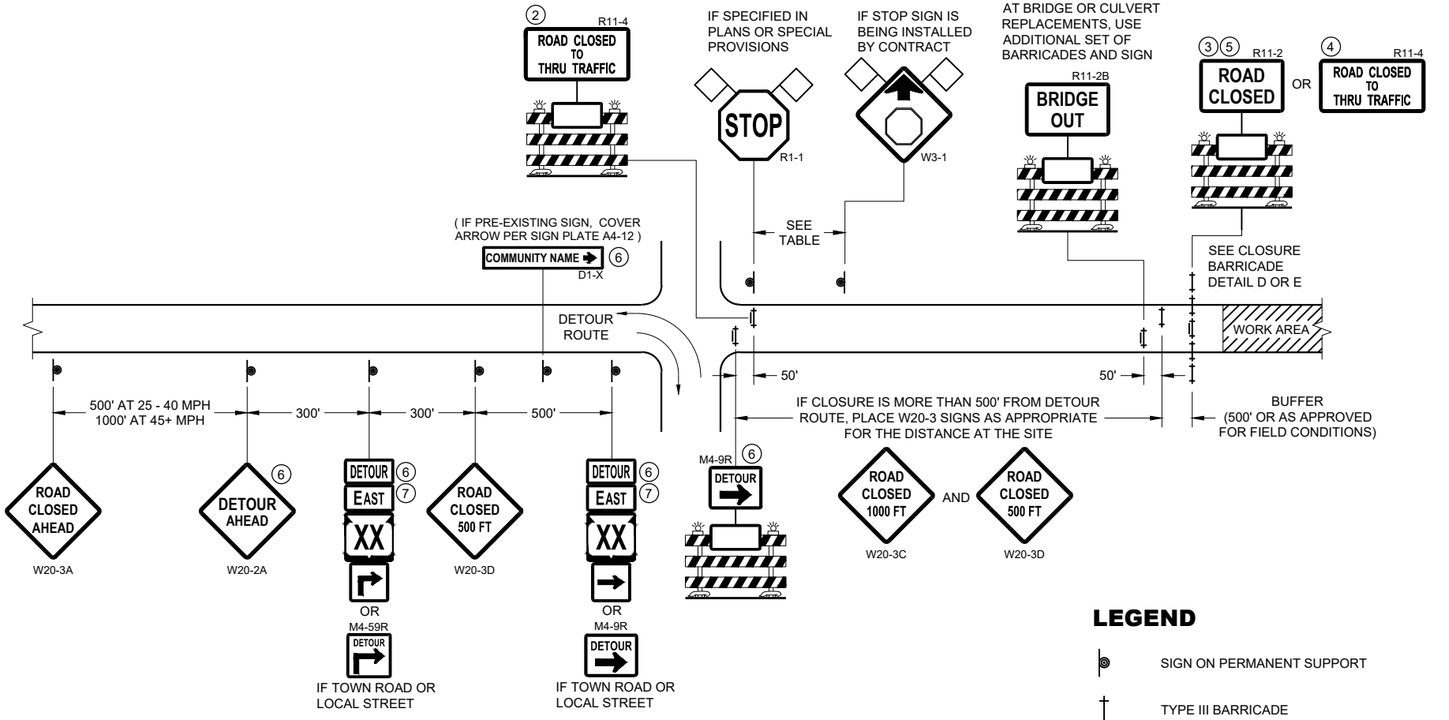
6

S.D.D. 12 A 3-10



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

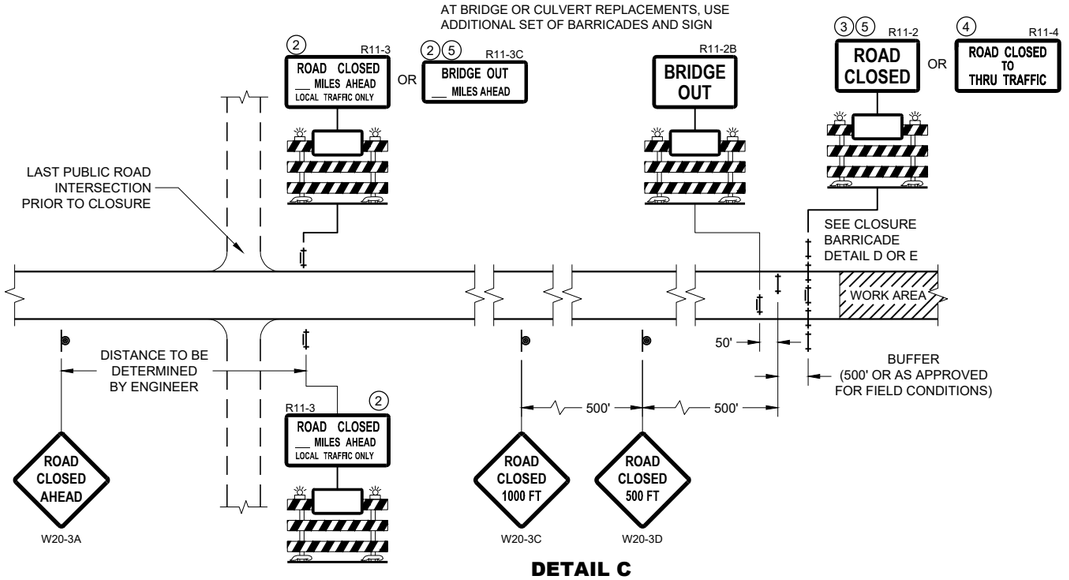


DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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

LEGEND

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



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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

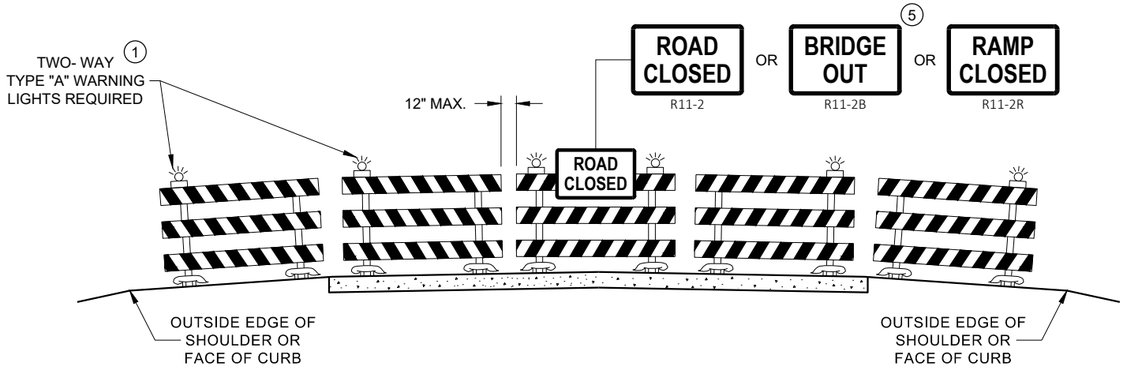
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

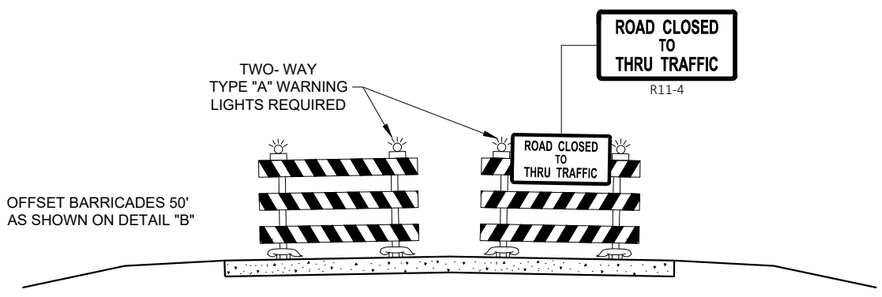
6

SDD 15C02 - 08a

SDD 15C02 - 08a



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
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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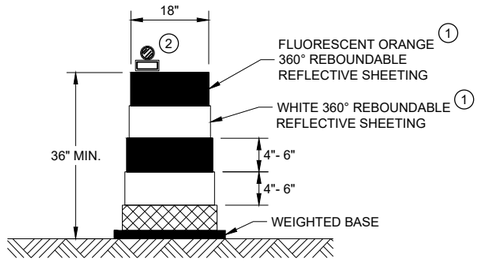
SDD 15C02 - 08b

6

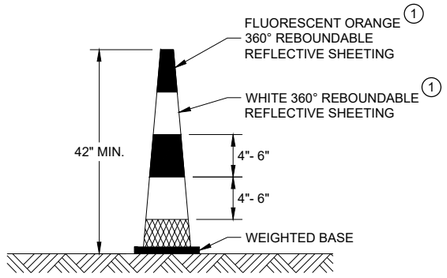
SDD 15C02 - 08b

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.

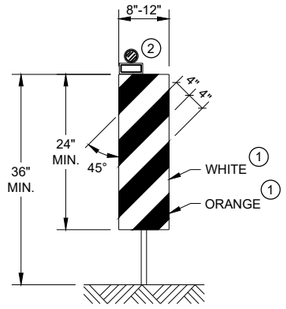


DRUM



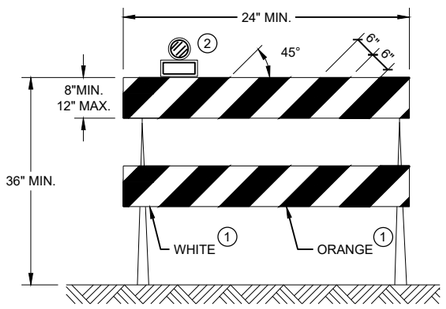
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



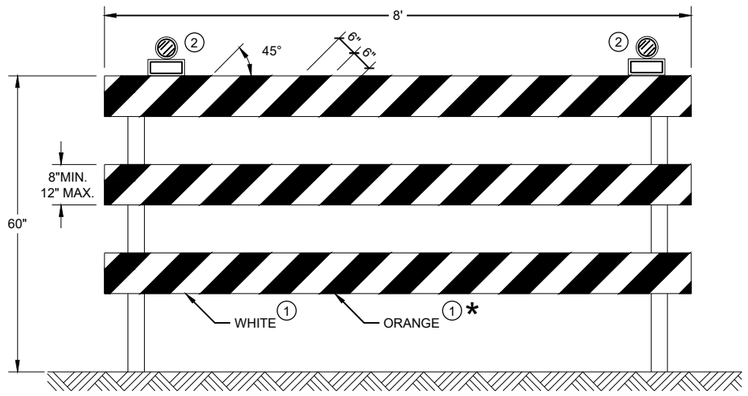
VERTICAL PANEL

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
June 2017 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEE
FHWA

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SDD 15C11 - 07b

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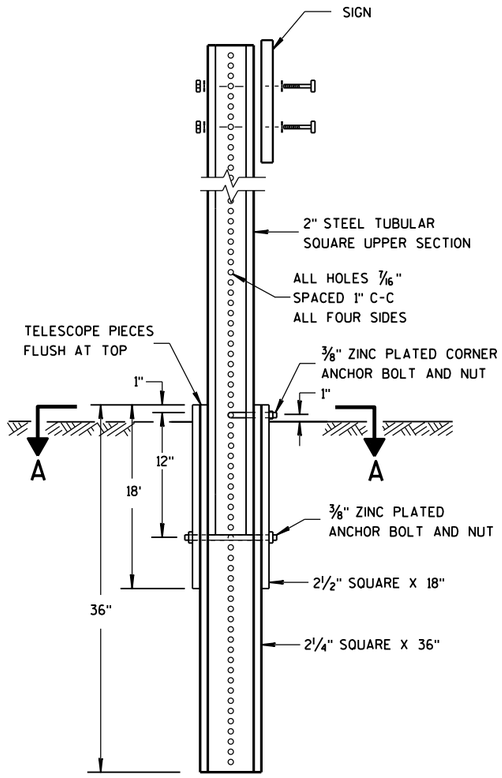
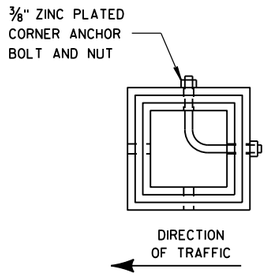
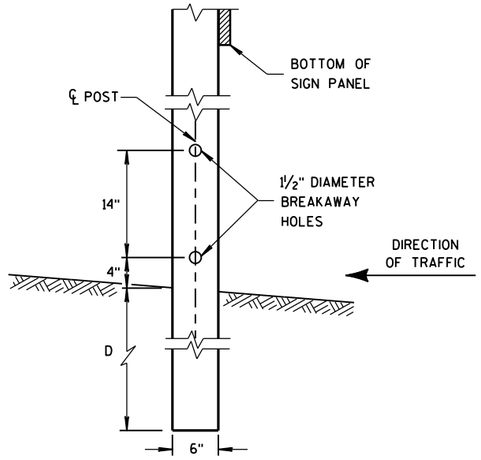
SDD 15C11 - 07b



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



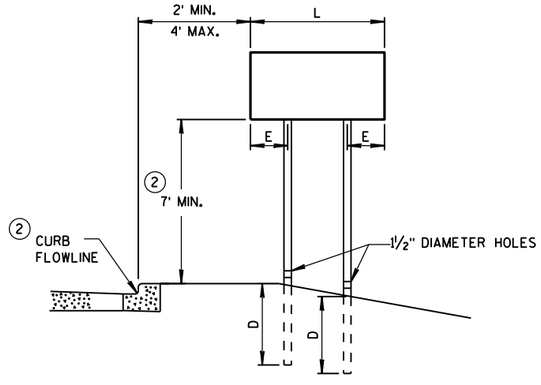
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

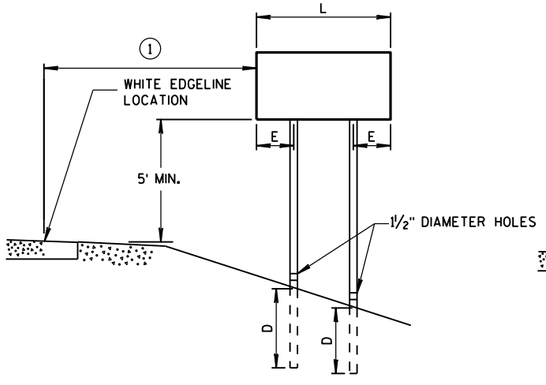
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

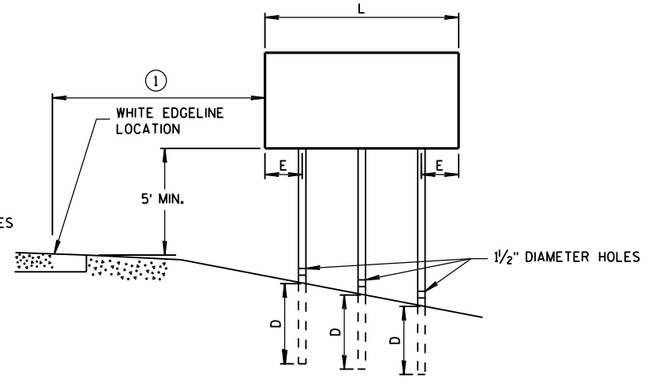
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK 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 SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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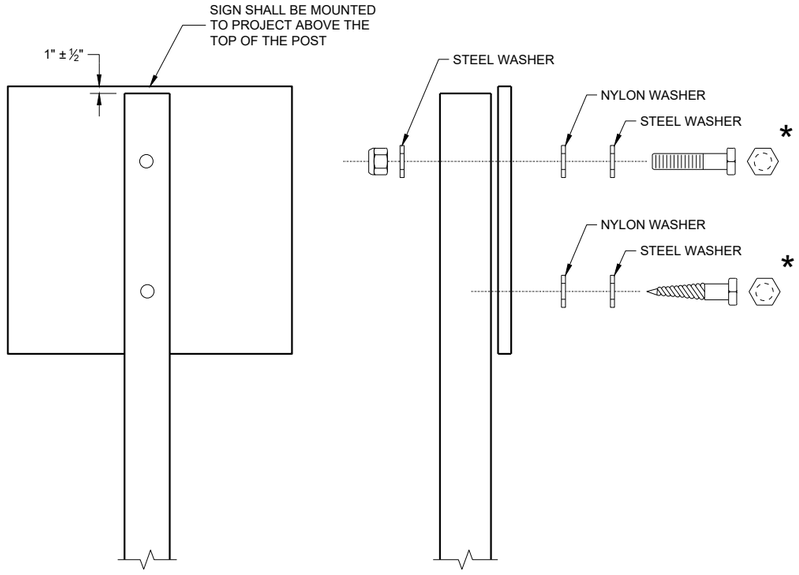
S.D.D. 15 D 38-2a



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 POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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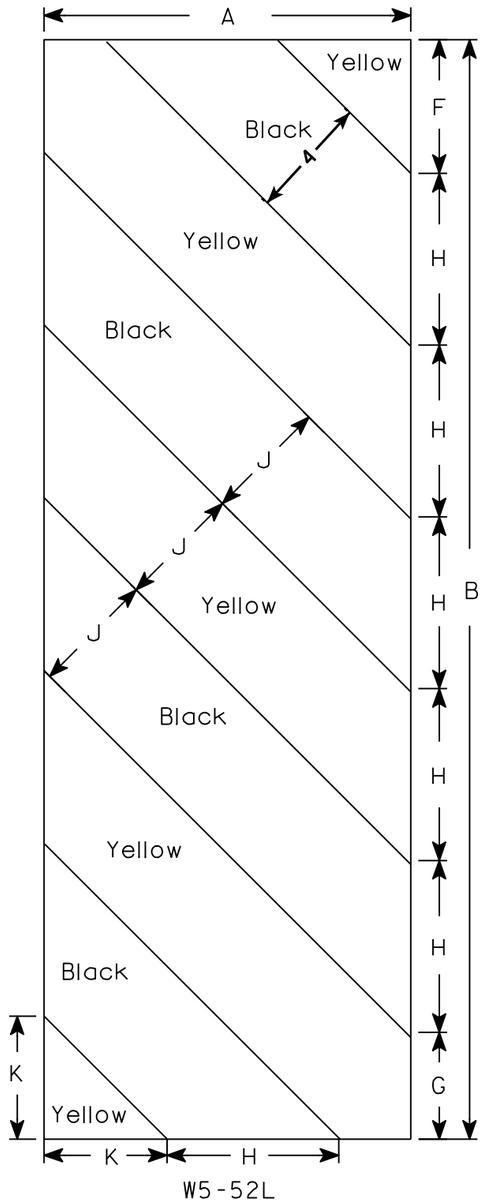
SDD 15D38 - 02b

SDD15D38 - 02b

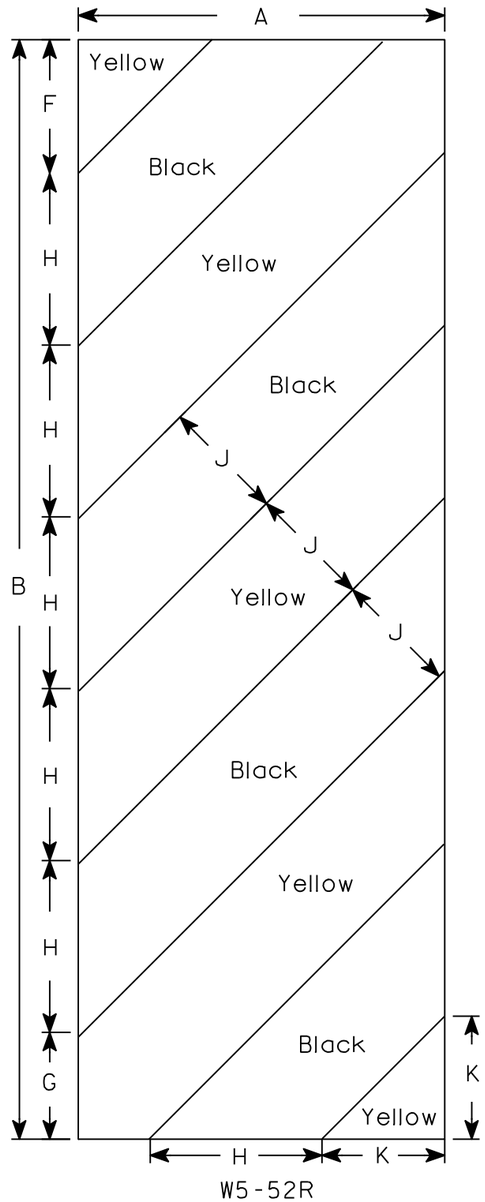
ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA



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

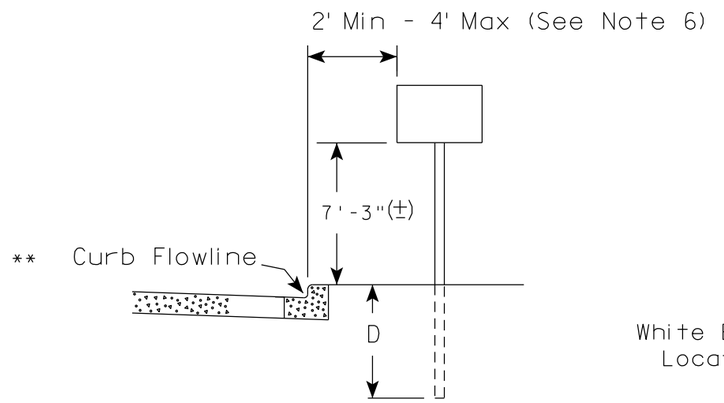
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

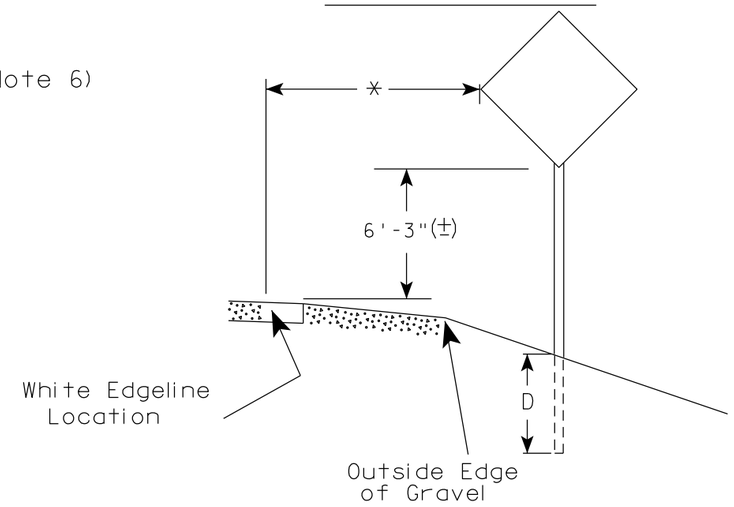
DATE 5/29/12 PLATE NO. W5-52.9

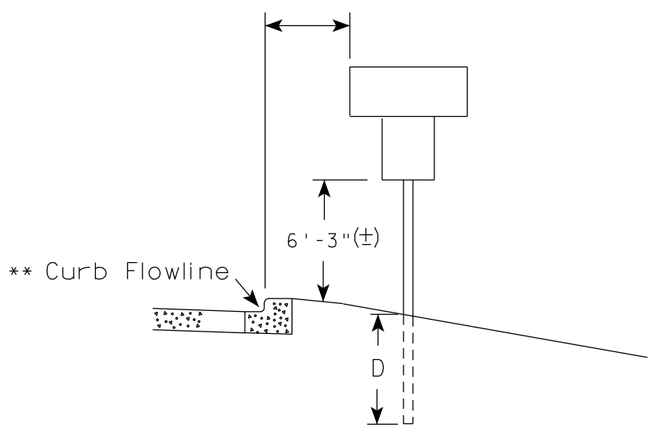
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 22 | E

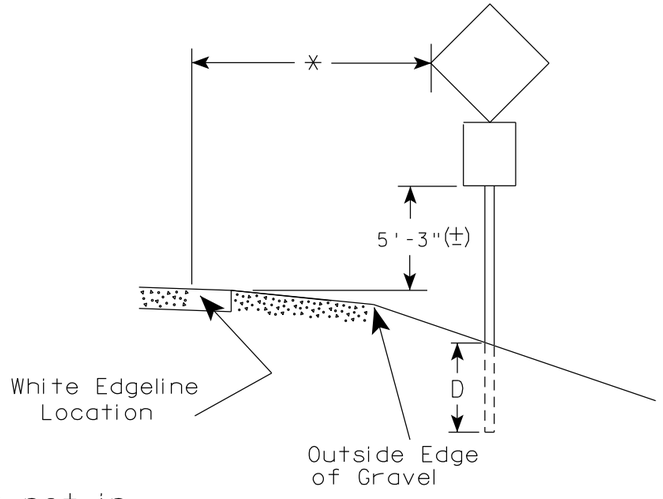
URBAN AREA



RURAL AREA (See Note 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. 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.

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 directd by the Engineer.

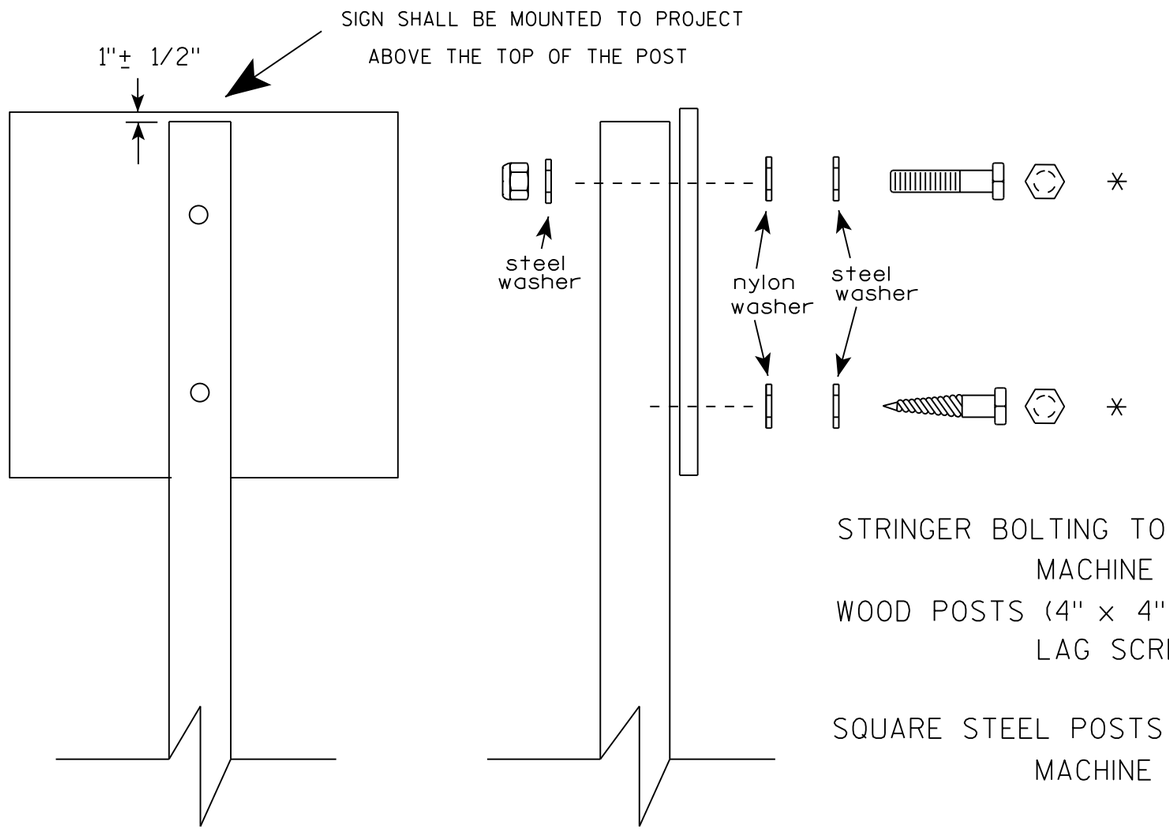
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 23	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.

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 4" or 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.

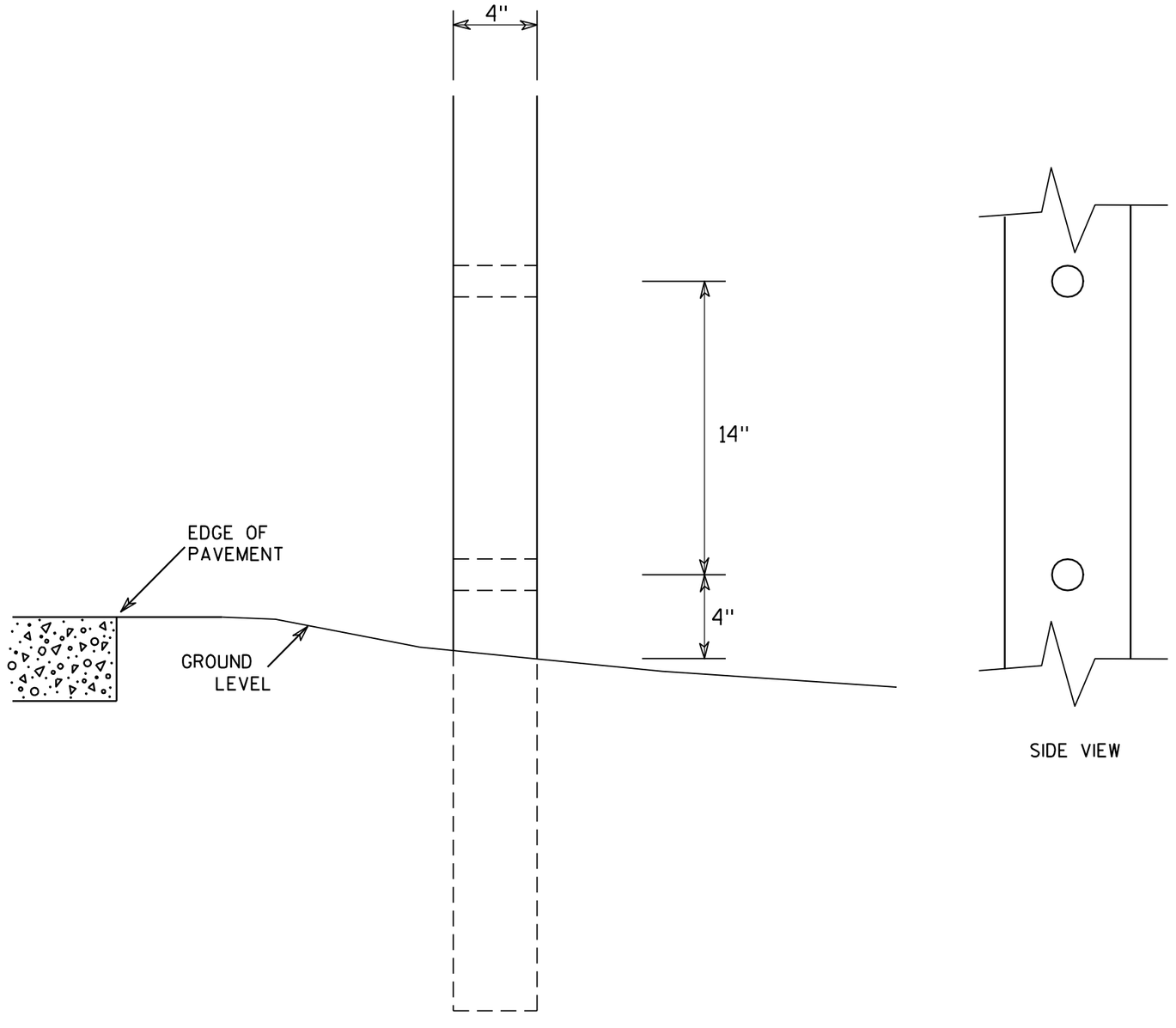
ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E



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.

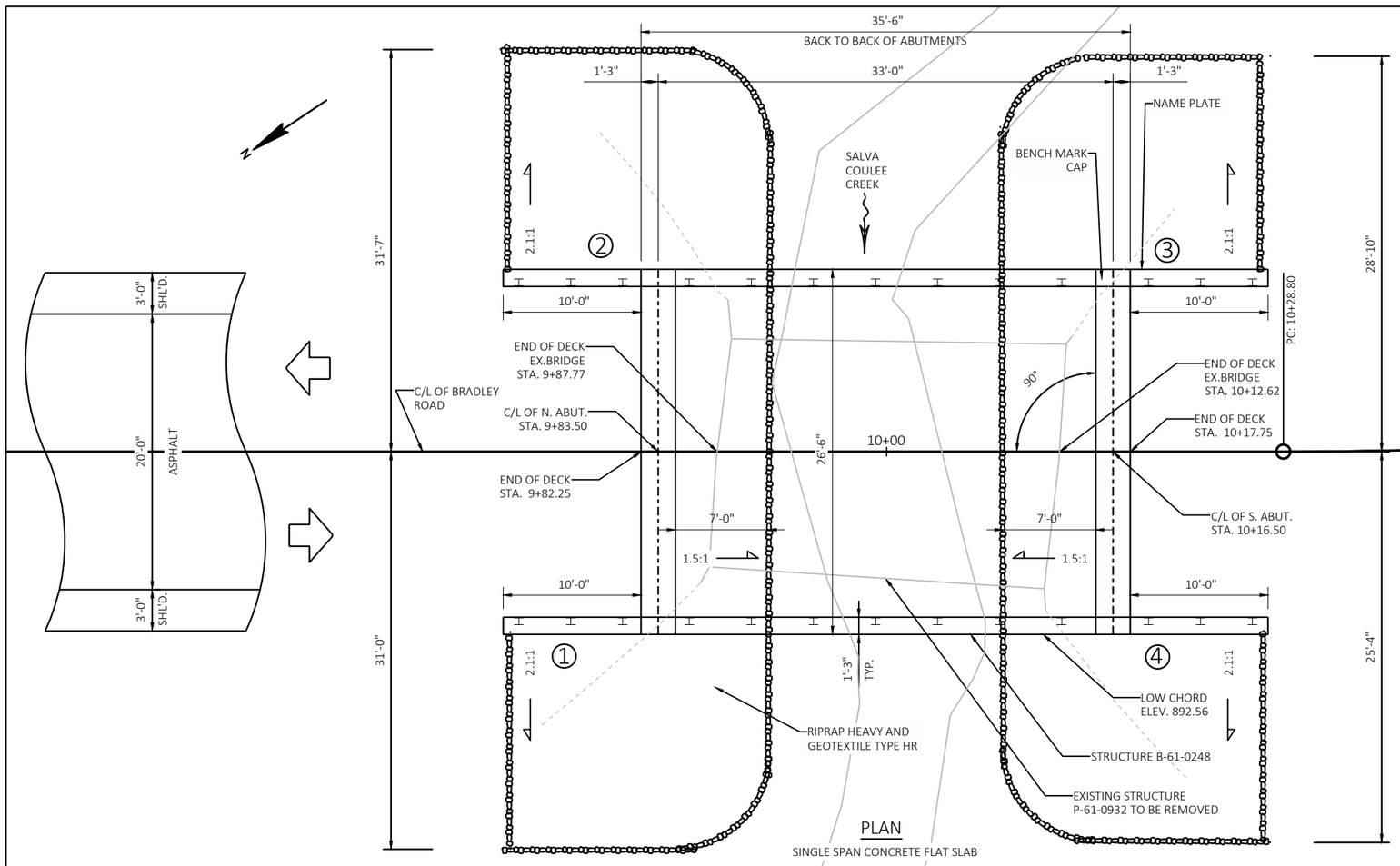
4 X 6 WOOD POST MODIFICATIONS

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: 25	E



PLAN

SINGLE SPAN CONCRETE FLAT SLAB

DENOTES WING NUMBER

PI STA = 11+21.68
Y = 401262.550
X = 845956.230
DELTA = 30°59'31"
D = 17°06'12"
T = 92.88'
L = 181.21'
R = 335.00'
PC STA = 10+28.80
Y = 401339.624
X = 846008.057
PT STA = 12+10.00
Y = 401169.792
X = 845951.489
BK = S33°55'04.6"W
AH = S02°55'33.3"W

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.20
OPERATIONAL RATING FACTOR: 1.56
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIP
STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT

MATERIAL PROPERTIES

CONCRETE MASONRY	- SLAB	f'c = 4000 PSI
	- ALL OTHER	f'c = 3500 PSI
HIGH-STRENGTH BAR REINFORCEMENT AASHTO GRADE 60		fy = 60000 PSI

FOUNDATION DATA:
ABUTMENTS TO BE SUPPORTED ON HP 10 x 42 STEEL PILES WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS* PER PILE AT SOUTH ABUTMENT AND 100 TONS* AT NORTH ABUTMENT AS DETERMINED BY USING MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 60'-0" FT LONG AT THE NORTH ABUTMENT AND 55'-0" FT LONG AT THE SOUTH ABUTMENT.

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

HYDRAULIC DATA:
100 YEAR FREQUENCY
Q_{100} = 293 CFS
VELOCITY = 3.8 FT/S
HW_{100} = EL. 890.25
DRAINAGE AREA = 0.93 SQ. MI
SCOUR CRITICAL CODE = 5
WATERWAY AREA = 79 SQ. FT.
DATUM = NAVD 88
ROADWAY OVERTOP = N/A

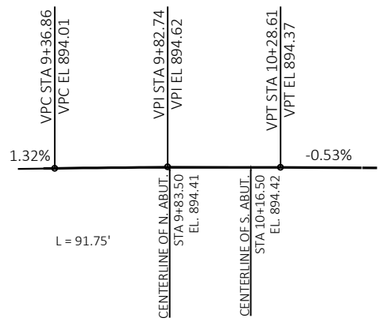
2 YEAR FREQUENCY
Q_2 = 61 CFS
VEL. = 1.8 FT/S
HW_2 = EL. 888.07

TRAFFIC DATA
ADT (2021) = 100
ADT (2041) = 130
DESIGN SPEED = 30 MPH

STATE PROJECT NUMBER
7286-00-70

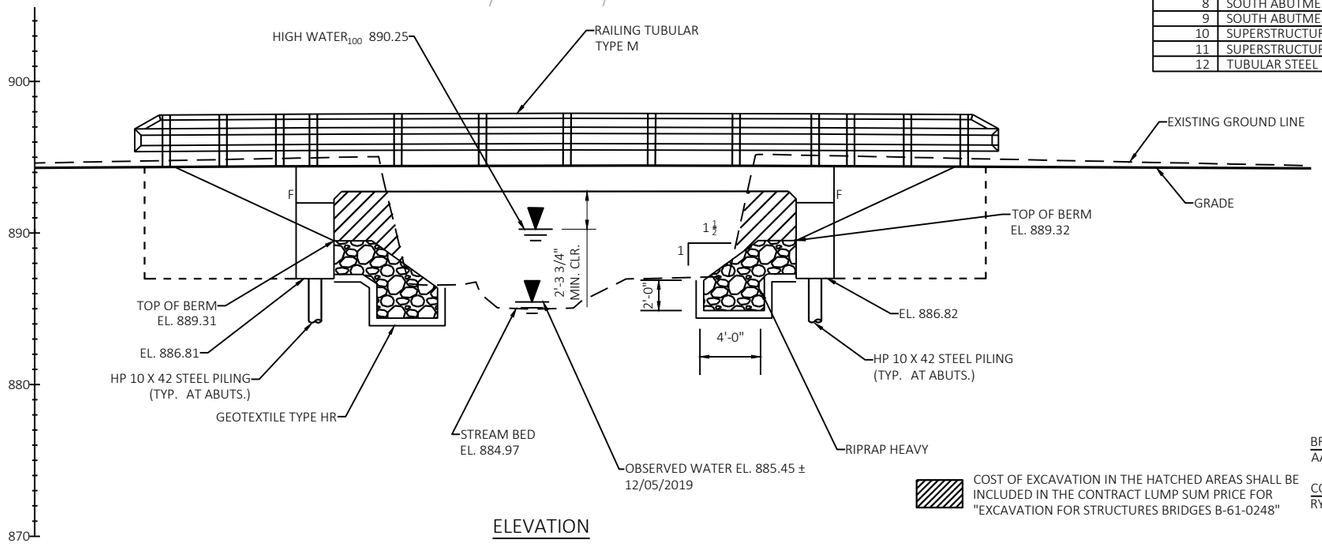
LIST OF DRAWINGS	
Sheet Number	SHEET TITLE
1	GENERAL PLAN
2	QUANTITIES AND NOTES
3	SUBSURFACE EXPLORATION
4	NORTH ABUTMENT
5	NORTH ABUTMENT DETAILS
6	NORTH ABUTMENT WING DETAILS
7	SOUTH ABUTMENT
8	SOUTH ABUTMENT DETAILS
9	SOUTH ABUTMENT WING DETAILS
10	SUPERSTRUCTURE
11	SUPERSTRUCTURE DETAILS & BILL OF BARS
12	TUBULAR STEEL RAILING TYPE M

BENCHMARK			
NO.	STA.	DESCRIPTION	ELEV.
1	9+88.95	6-INCH NAIL IN EXISTING NORTHEAST WING	894.192



PROFILE GRADE LINE

(C/L OF BRADLEY ROAD)



ELEVATION

COST OF EXCAVATION IN THE HATCHED AREAS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR "EXCAVATION FOR STRUCTURES BRIDGES B-61-0248"

WISCONSIN
LORI A. SOMMER
E-30620
LIBERTYVILLE, IL
PROFESSIONAL ENGINEER

10/8/2020

BRIDGE OFFICE CONTACT
AARON BONK (608) 261-0261

CONSULTANT CONTACT
RYAN MCKANE, PE (608) 519-1455

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY:
KNIGHT
831 Critter Court
Suite 400
Onalaska, WI 54650
Engineers & Architects Phone: (608) 519-1455

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED SDR 11/05/20
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-61-0248

LOCATION BRADLEY ROAD OVER SALVA COULEE CREEK
COUNTY TREMPEALEAU
TOWN PRESTON
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
KA	LS	CJO	KA

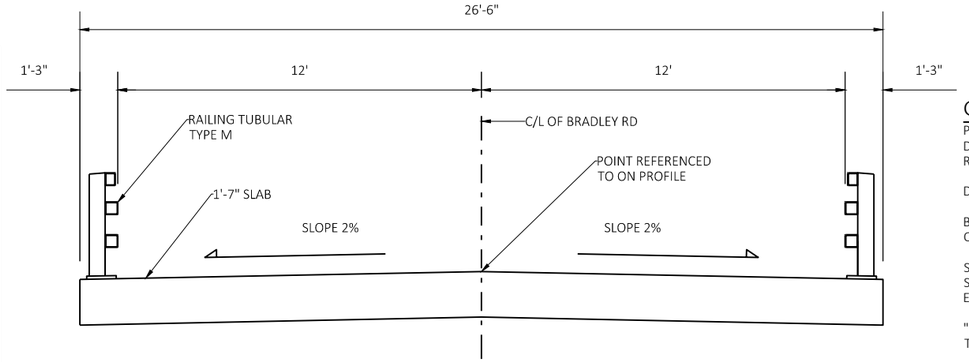
GENERAL PLAN

SHEET 1 OF 12

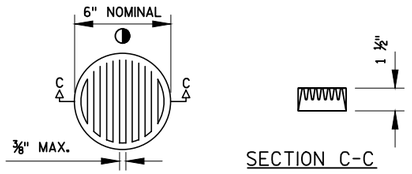
STATE PROJECT NUMBER
7286-00-70

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	N. ABUT	S. ABUT	SUPER.	TOTAL
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 10+00	LS	---	---	---	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-61-0248	LS	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	95	95	---	190
502.0100	CONCRETE MASONRY BRIDGES	CY	20	20	59	99
502.3200	PROTECTIVE SURFACE TREATMENT	SY	---	---	124	124
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1680	1680	---	3360
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1380	1380	12760	15520
513.4061	RAILING TUBULAR TYPE M	LF	---	---	116	116
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	7	7	---	14
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	360	330	---	690
606.0300	RIPRAP HEAVY	CY	62	62	---	124
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	78	78	---	156
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	75	75	---	150
645.0120	GEOTEXTILE TYPE HR	SY	188	185	---	373
SPV.0090.01	FLASHING STAINLESS STEEL	LF	---	---	71	71



TYPICAL SECTION THRU BRIDGE



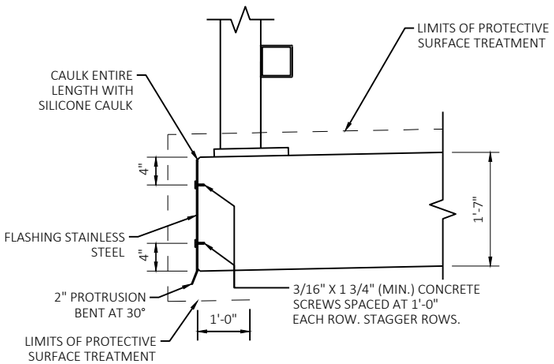
SECTION C-C

PIPE UNDERDRAIN RODENT SHIELD DETAIL

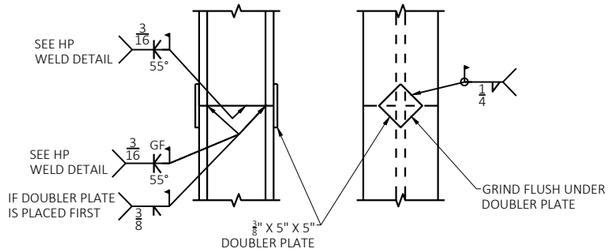
DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

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

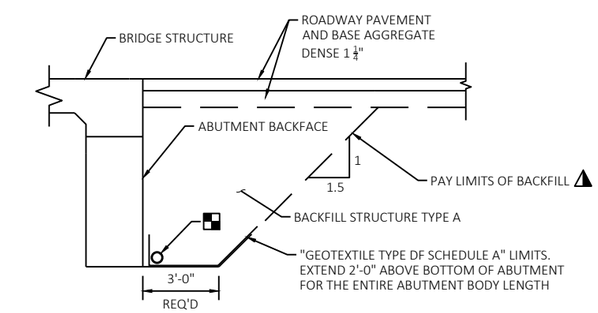
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL.
THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER.
A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X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



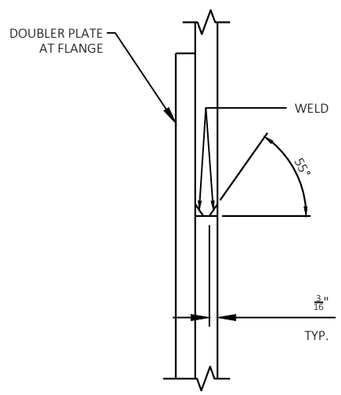
PROTECTIVE SURFACE TREATMENT AND FLASHING DETAIL



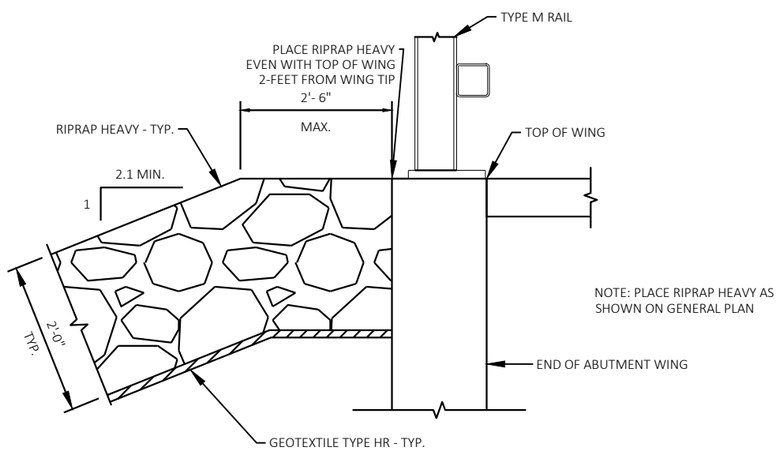
HP 10 x 42 SPLICE DETAIL



BACKFILL STRUCTURE DETAIL
(TYPICAL AT BOTH ABUTMENTS)



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR



NOTE: PLACE RIPRAP HEAVY AS SHOWN ON GENERAL PLAN

TYPICAL FILL SECTION AT WING TIPS

GENERAL NOTES

P-61-0932, BUILT IN 1962, IS A SINGLE SPAN STEEL BEAM, TIMBER DECK **WITH A TIMBER ABUTMENT SUPPORTED ON TIMBER PILES**, 20' CLEAR ROADWAY WIDTH X 25' O.A.L.

DRAWINGS SHALL NOT BE SCALED.

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

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

"PROTECTIVE SURFACE TREATMENT" SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE CONCRETE AND AS SHOWN.

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

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

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.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-61-0248" SHALL BE THE EXISTING GROUNDLINE. 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 INCIDENTAL TO EXCAVATION FOR STRUCTURES.

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.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

THE BID ITEM "FLASHING STAINLESS STEEL" SHALL INCLUDE PROVIDING AND INSTALLING THE STAINLESS STEEL FLASHING, SILICONE CAULK AND 3/16" CONCRETE SCREWS.

FLASHING TO BE INSTALLED AFTER PROTECTIVE SURFACE TREATMENT APPLICATION.

CONCRETE SCREWS SHALL BE 410 STAINLESS STEEL.

EXTEND FLASHING TO B.F. OF ABUTMENT DIAPHRAGM.

TOP OF FLASHING TO BEGIN APPROX. 1-INCH BELOW TOP OF DECK/SLAB SURFACE.

THE FLASHING IS TO BE A CONSTANT HEIGHT BASED ON THE THINNEST SLAB DEPTH OVER THE BRIDGE LENGTH.

LEGEND

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

▩ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. (SEE DETAIL ON THIS SHEET)

NO.	DATE	REVISION	BY

KNIGHT
Engineers & Architects
831 Critter Court
Suite 400
Onalaska, WI 54650
Phone: (608) 519-1455

STRUCTURE B-61-0248

DRAWN BY CJO | PLANS CK'D. KA

QUANTITIES AND NOTES

SHEET 2 OF 12

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	12/4/2019	182667.8392	441437.8051
2	12/4/2019	182670.0796	441549.7825
BORINGS COMPLETED BY: CHOSEN VALLEY TESTING			
REPORT COMPLETED BY: CHOSEN VALLEY TESTING 1/31/2020			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) TREMPEALEAU COUNTY			

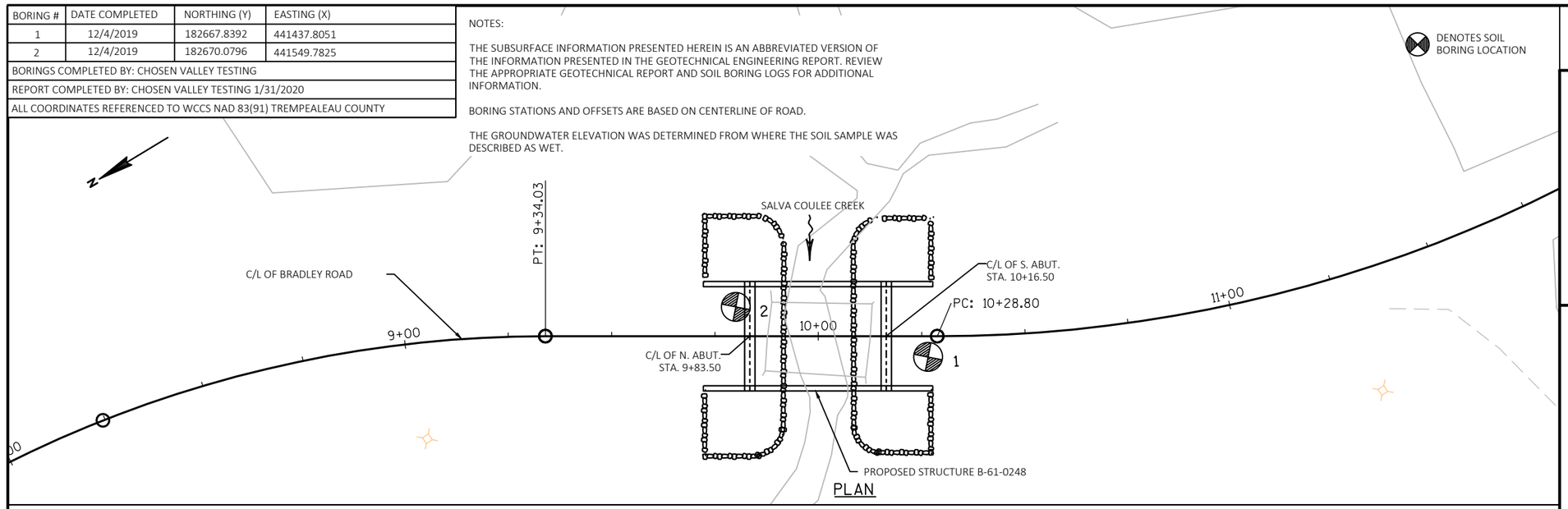
NOTES:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL INFORMATION.

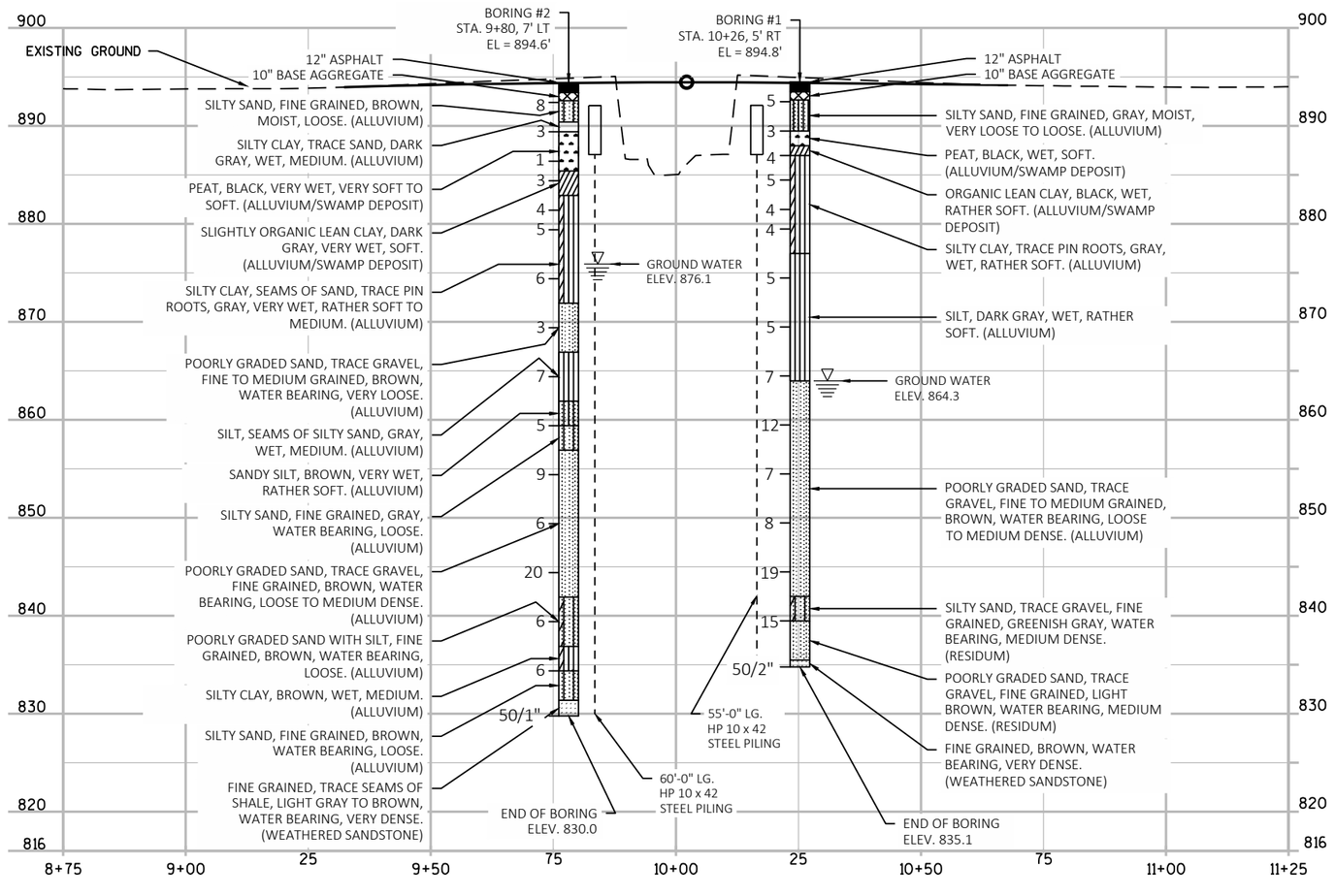
BORING STATIONS AND OFFSETS ARE BASED ON CENTERLINE OF ROAD.

THE GROUNDWATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

DENOTES SOIL BORING LOCATION



PLAN



STATE PROJECT NUMBER

7286-00-70

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.

GROUNDWATER 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

ORIGINAL PLANS PREPARED BY:

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Suite 400
Onalaska, WI 54650
Engineers & Architects Phone: (608) 519-1455

STRUCTURE B-61-0248

DRAWN BY AWM | PLANS CK'D. KA

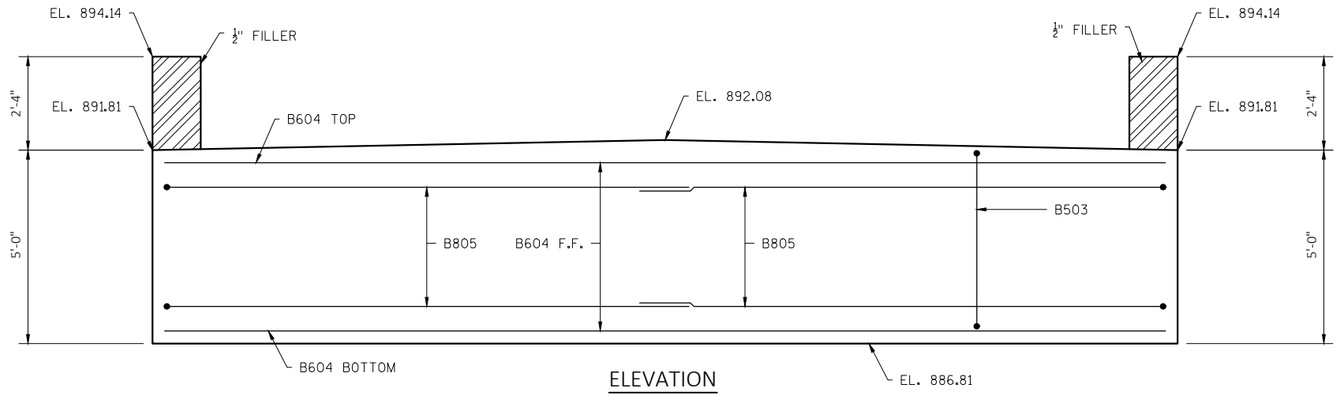
SUBSURFACE EXPLORATION

SHEET 3 OF 12

28

8

8



ELEVATION

NOTES:

KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"X6".

(X) DENOTES WING NUMBER

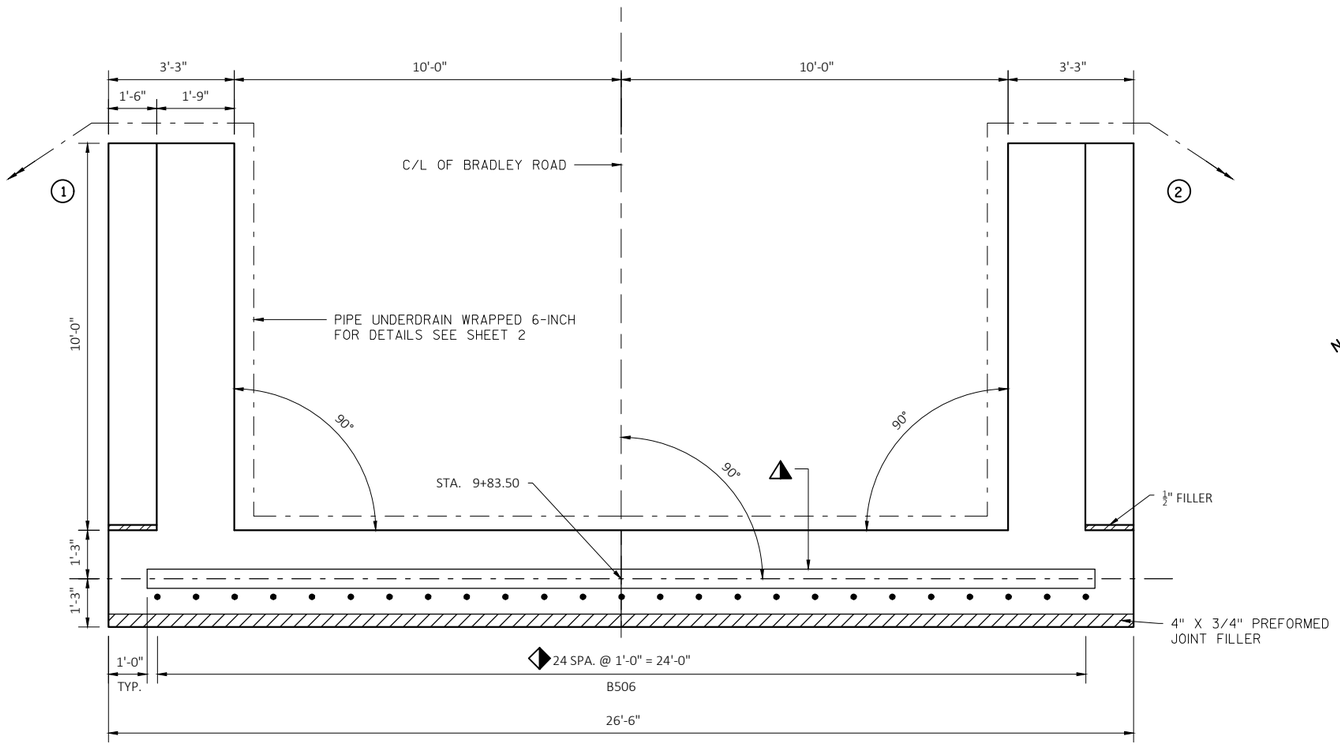
THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.

1/2" FILLER

F.F DENOTES FRONT FACE

E.F. DENOTES EACH FACE

B.F. DENOTES BACK FACE



PLAN

STATE PROJECT NUMBER

7286-00-70

8

8

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY:

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Engineers & Architects

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Onalaska, WI 54650
Phone: (608) 519-1455

STRUCTURE B-61-0248

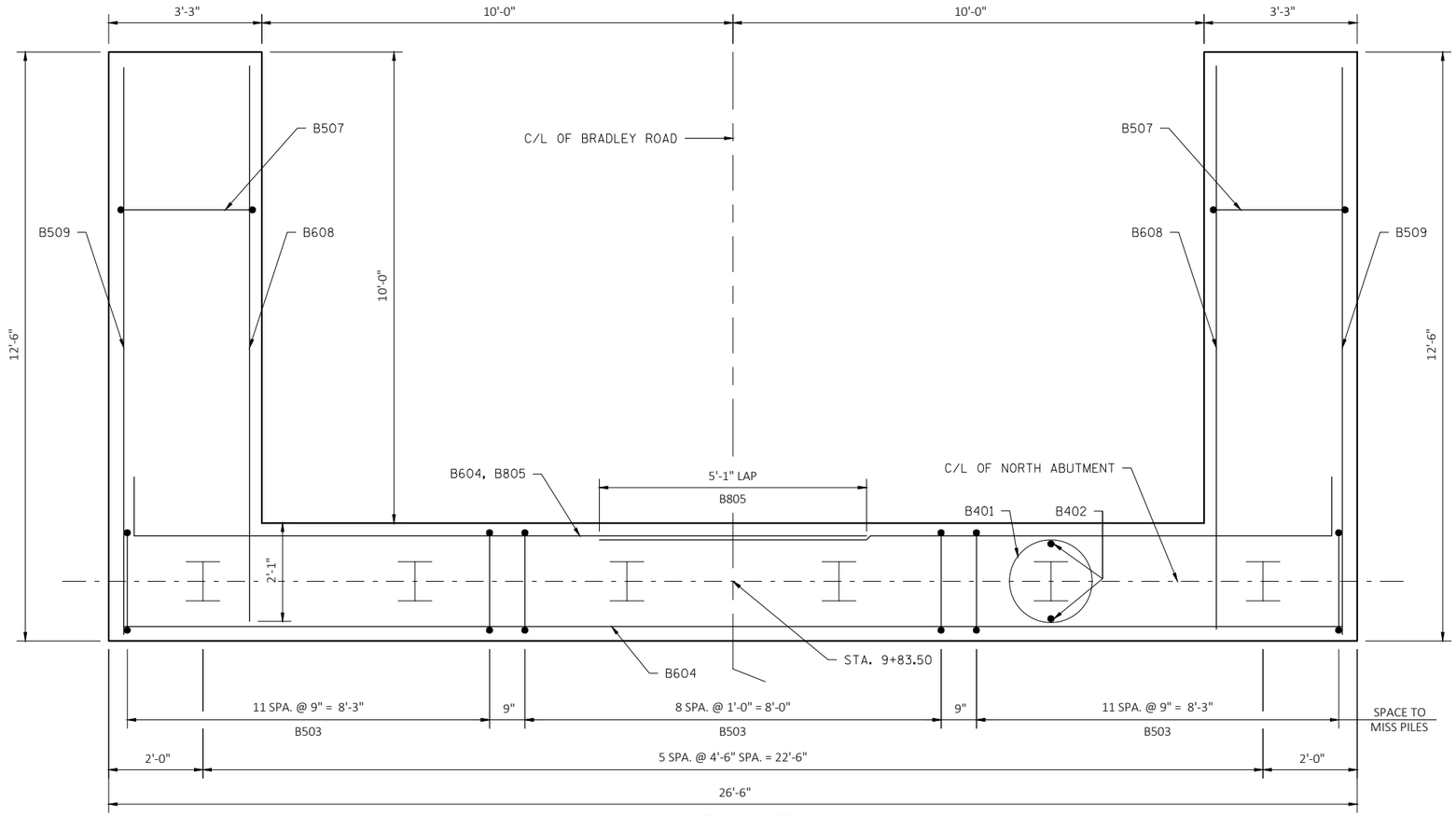
DRAWN BY CJO | PLANS CK'D. LS

NORTH ABUTMENT

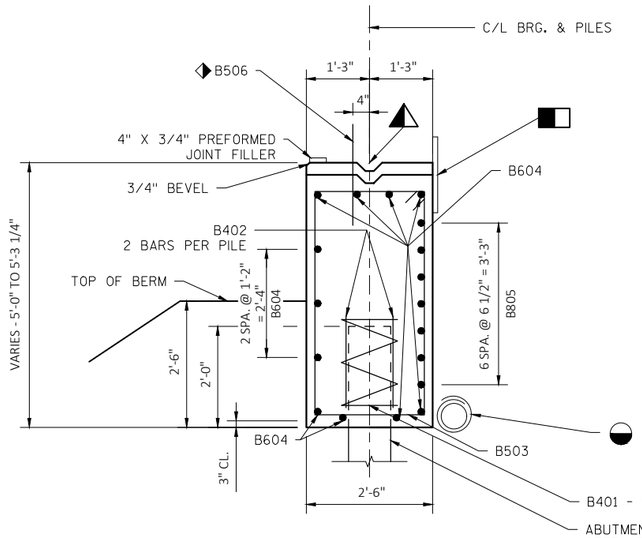
SHEET 4 OF 12

29

STATE PROJECT NUMBER
7286-00-70



PILE LAYOUT



SECTION THRU BODY

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 STEEL PILES WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS* PER PILE AS DETERMINED BY USING MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 60-FT LONG AT NORTH ABUT.

- PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 2. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".
- OPTIONAL CONST. JOINT FORMED BY BEVELED 2" X 6" KEYWAY WITH MEMBRANE ON BACKFACE
- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.
- F.F DENOTES FRONT FACE
- E.F. DENOTES EACH FACE
- B.F. DENOTES BACK FACE
- THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.

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STRUCTURE B-61-0248

DRAWN BY CJO | PLANS CK'D. LS

NORTH ABUTMENT DETAILS

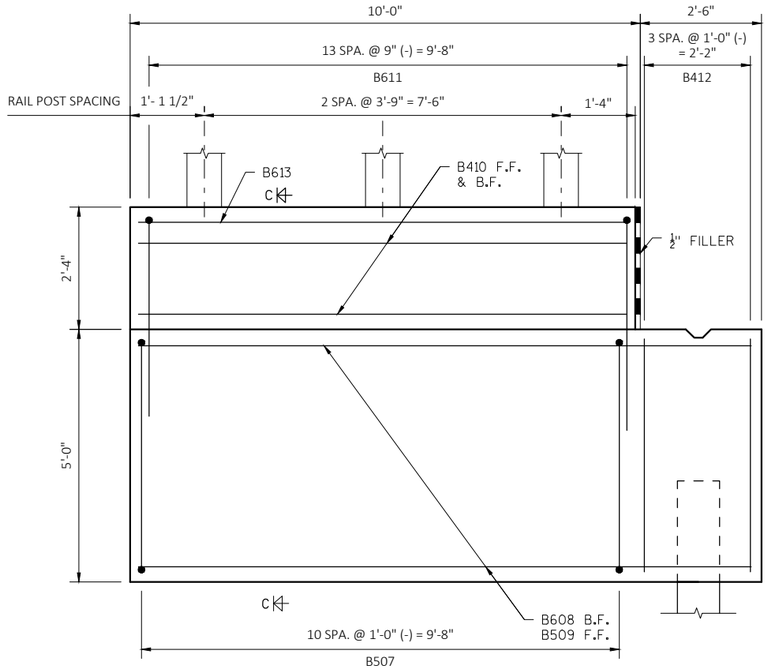
SHEET 5 OF 12

30

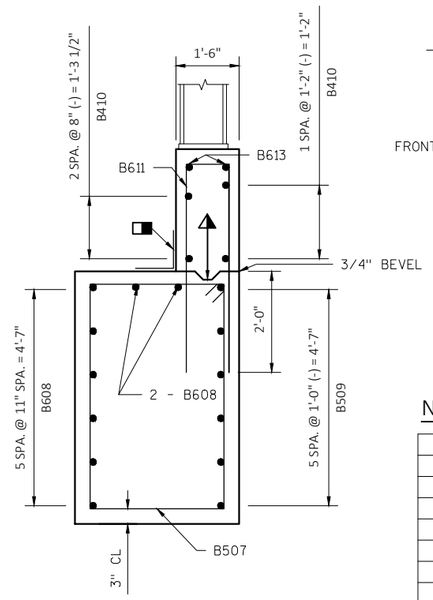
8

8

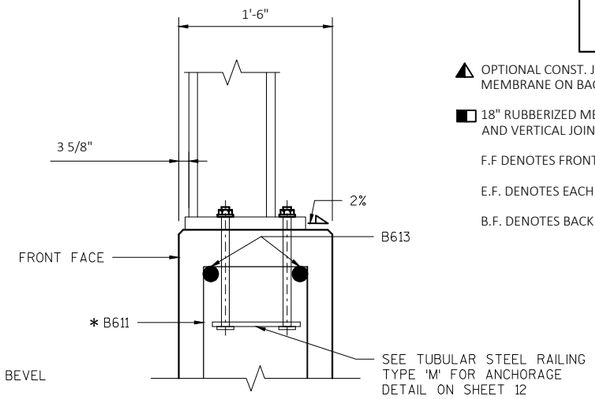
STATE PROJECT NUMBER
7286-00-70



WING 1 ELEVATION



SECTION C-C



TYPE M RAILING

* SPACE B611 BARS TO MISS CONNECTORS FOR RAIL POSTS

▲ OPTIONAL CONST. JOINT FORMED BY BEVELED 2" X 6" KEYWAY WITH MEMBRANE ON BACKFACE

■ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.

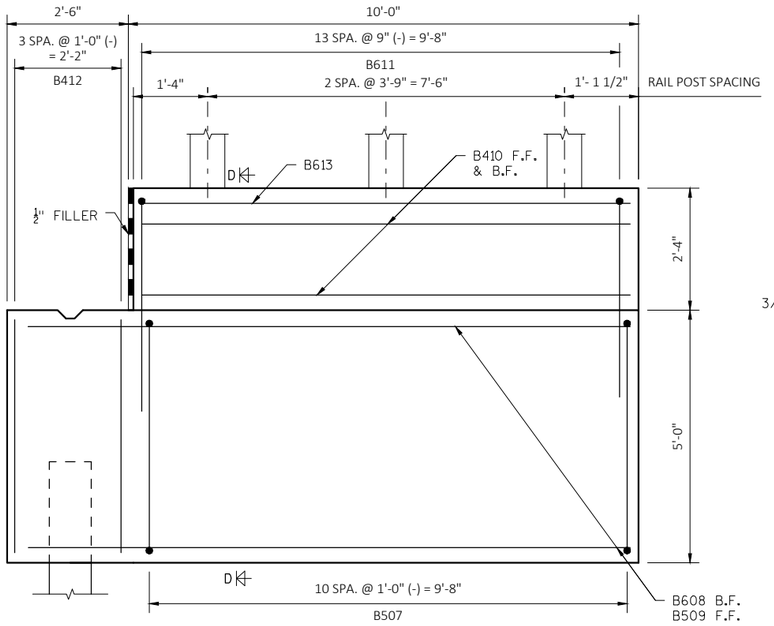
F.F DENOTES FRONT FACE

E.F. DENOTES EACH FACE

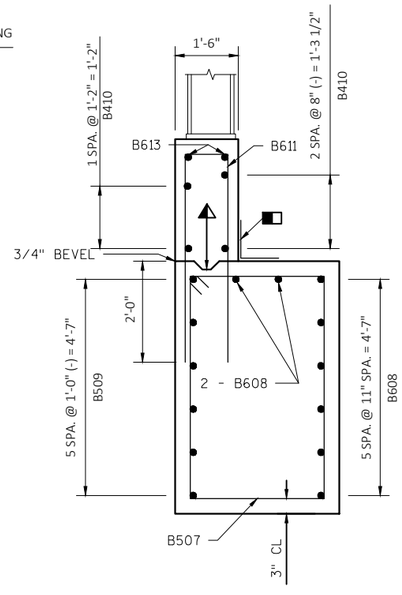
B.F. DENOTES BACK FACE

NORTH ABUTMENT BILL OF BARS

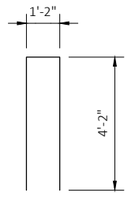
BAR MARK	NUMBER REQUIRED	LENGTH	BENT	COAT	LOCATION
B401	6	28-0	X		BODY AT PILES
B402	12	2-3			BODY AT PILES
B503	33	14-0	X		BODY VERT.
B604	11	26-2			BODY HORIZ.
B805	14	16-10	X		BODY HORIZ.
B506	25	2-0		X	BODY DOWELS
B507	22	15-6	X	X	WING 1 & 2 VERT.
B608	16	11-11		X	WING 1 & 2 HORIZ. B.F.
B509	12	12-2		X	WING 1 & 2 HORIZ. F.F.
B410	10	9-8		X	WING 1 & 2 TOP
B611	28	9-2	X	X	WING 1 & 2 VERT.
B412	8	4-7		X	WING 1 & 2 VERT.
B613	4	9-8		X	WING 1 & 2 TOP



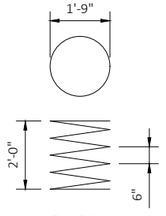
WING 2 ELEVATION



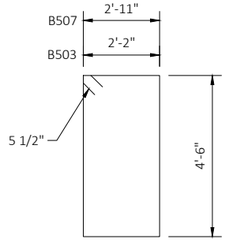
SECTION D-D



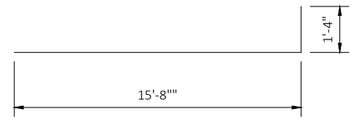
B611



B401



B503, B507



B805

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY:

KNIGHT
Engineers & Architects
831 Critter Court
Suite 400
Onalaska, WI 54650
Phone: (608) 519-1455

STRUCTURE B-61-0248

DRAWN BY CJO | PLANS CK'D. LS

NORTH ABUTMENT WING DETAILS

SHEET 6 OF 12

31

8

8

STATE PROJECT NUMBER
7286-00-70

NOTES:

KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"X6".

(X) DENOTES WING NUMBER

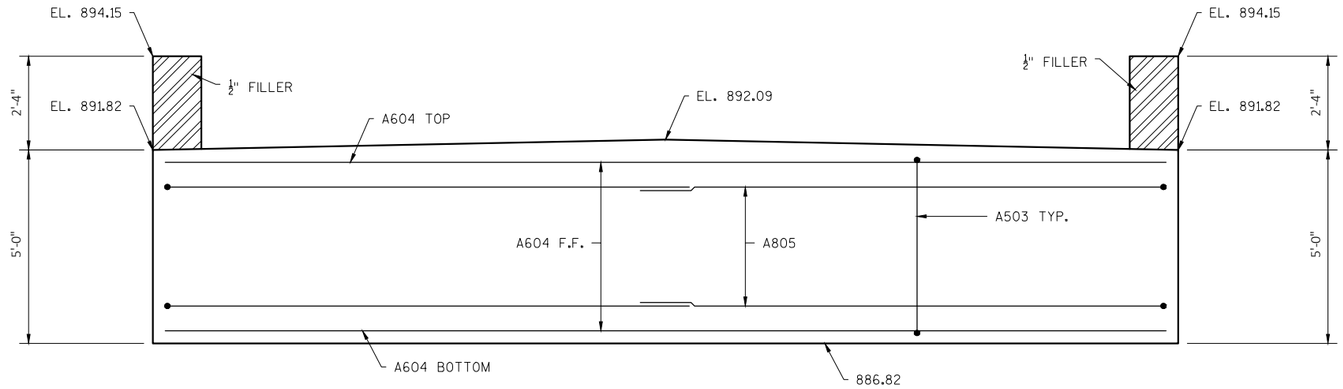
THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.

1/2" FILLER

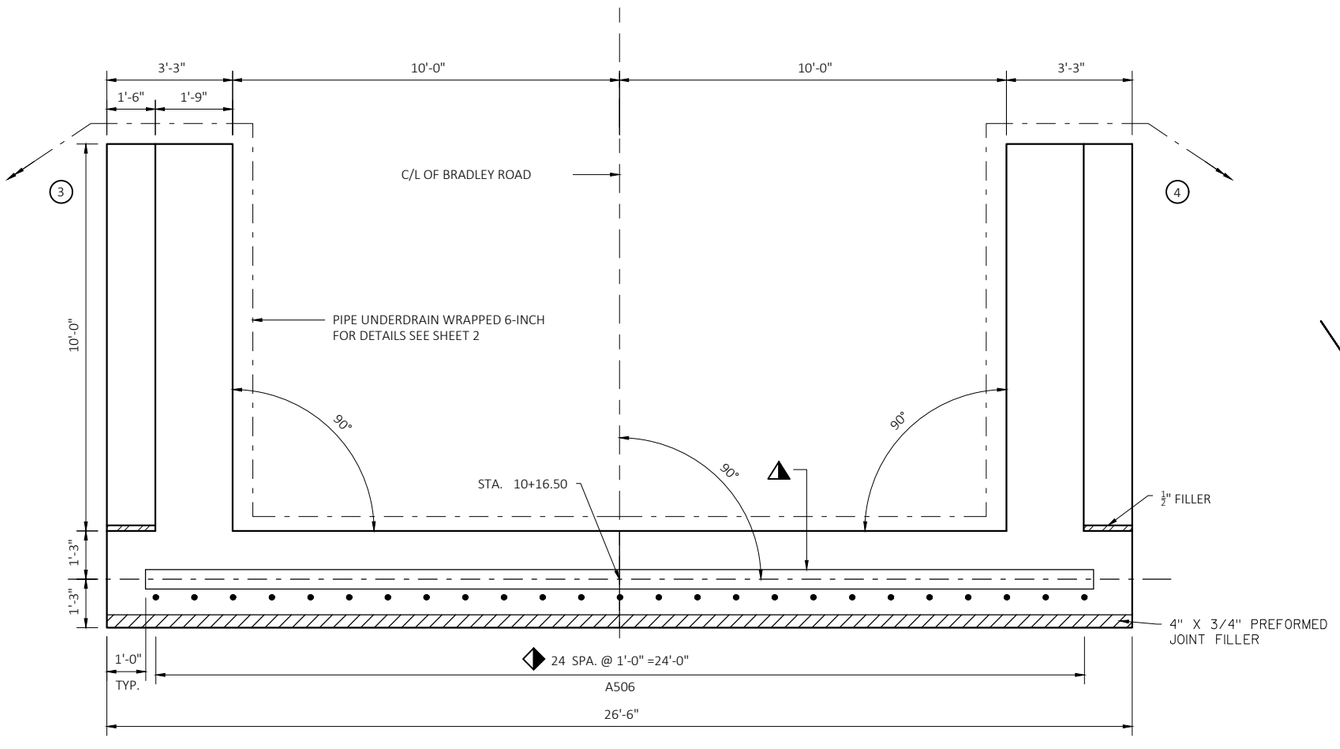
B.F. DENOTES BACK FACE

F.F. DENOTES FRONT FACE

E.F. DENOTES EACH FACE



ELEVATION



PLAN

8

8

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SOUTH ABUTMENT

SHEET 7 OF 12

32

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PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 2. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".

OPTIONAL CONST. JOINT FORMED BY BEVELED 2" X 6" KEYWAY WITH MEMBRANE ON BACKFACE

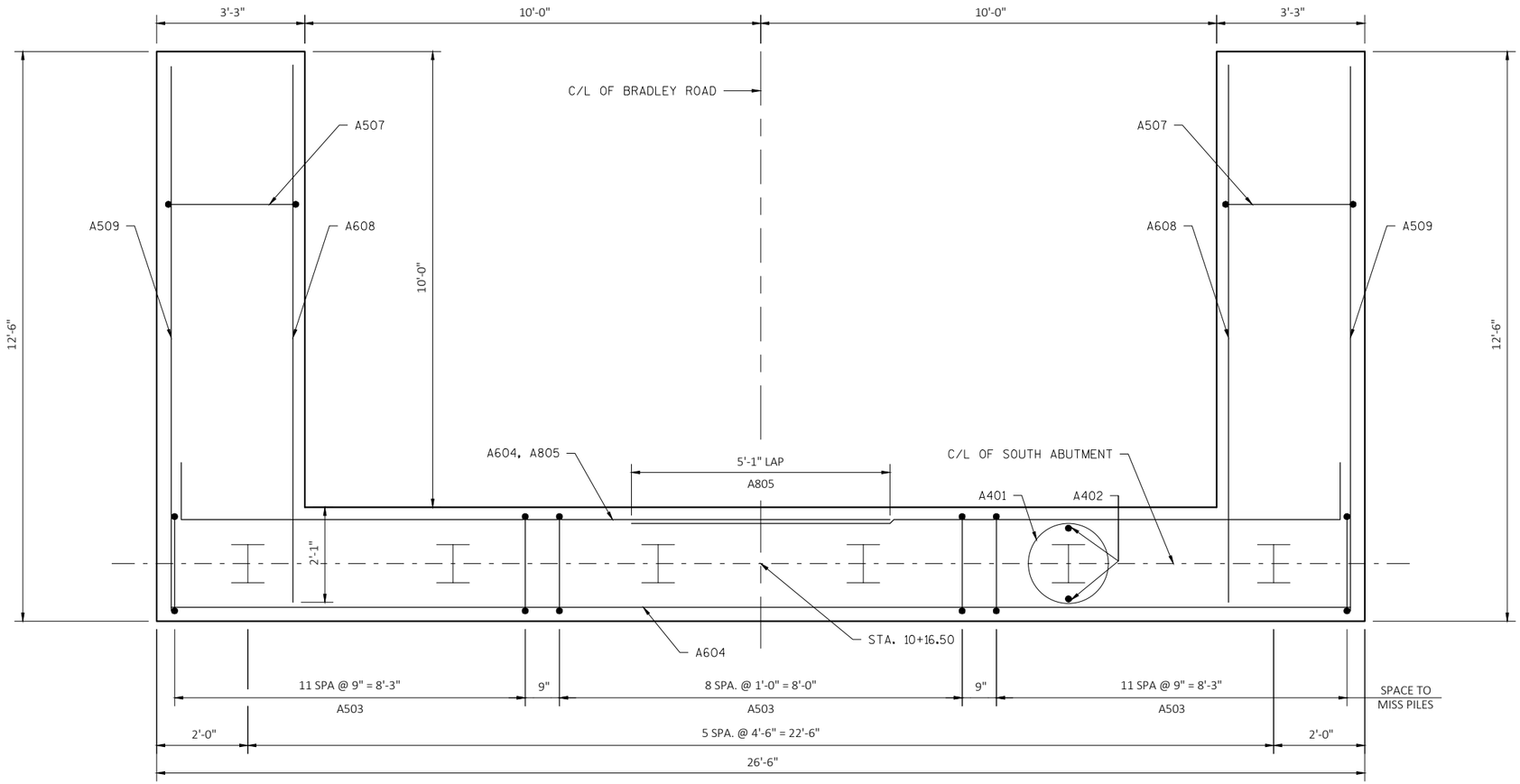
18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.

F.F DENOTES FRONT FACE

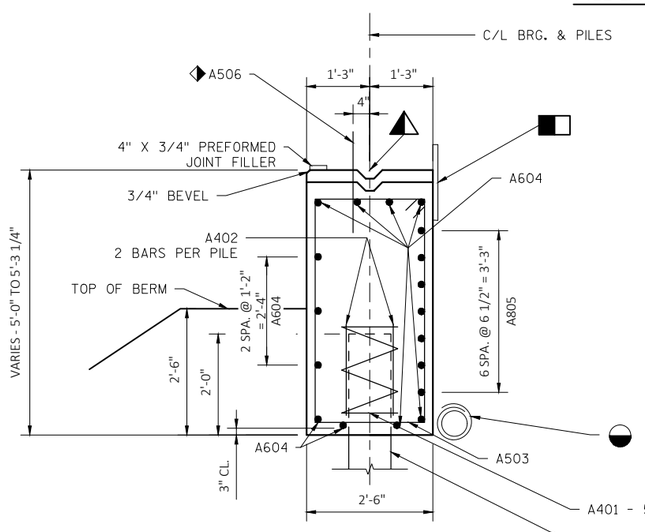
E.F. DENOTES EACH FACE

B.F. DENOTES BACK FACE

THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.



PILE LAYOUT



SECTION THRU BODY

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 STEEL PILES WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS* PER PILE AS DETERMINED BY USING MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 60-FT LONG AT NORTH ABUT.

8

8

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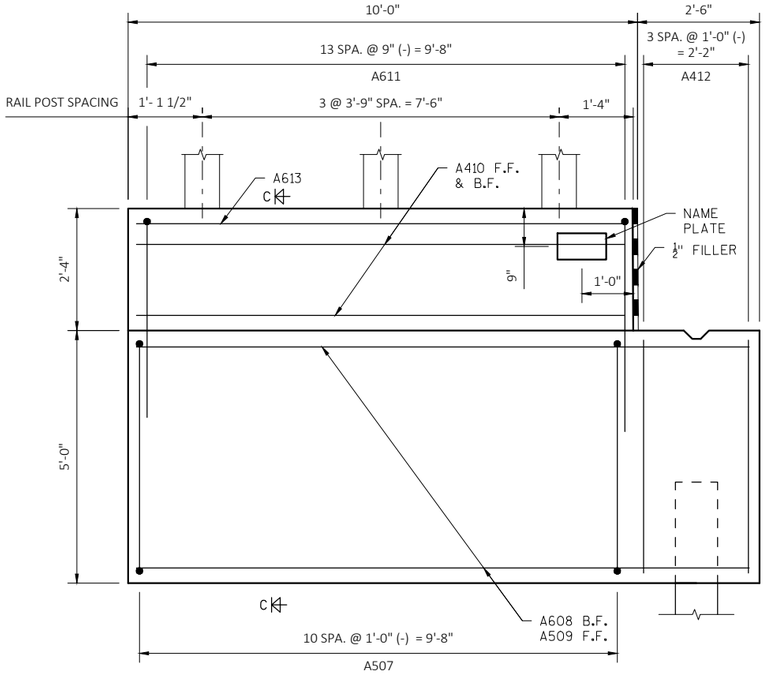
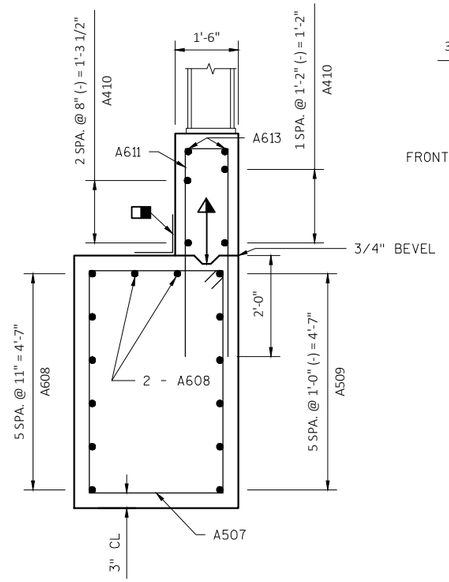
SOUTH ABUTMENT DETAILS

SHEET 8 OF 12

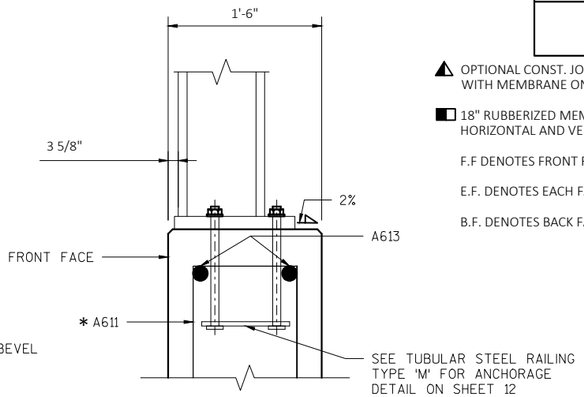
33



WING 3 ELEVATION



SECTION C-C



TYPE M RAILING

* SPACE A611 BARS TO MISS CONNECTORS FOR RAIL POSTS

OPTIONAL CONST. JOINT FORMED BY BEVELED 2" X 6" KEYWAY WITH MEMBRANE ON BACKFACE

18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.

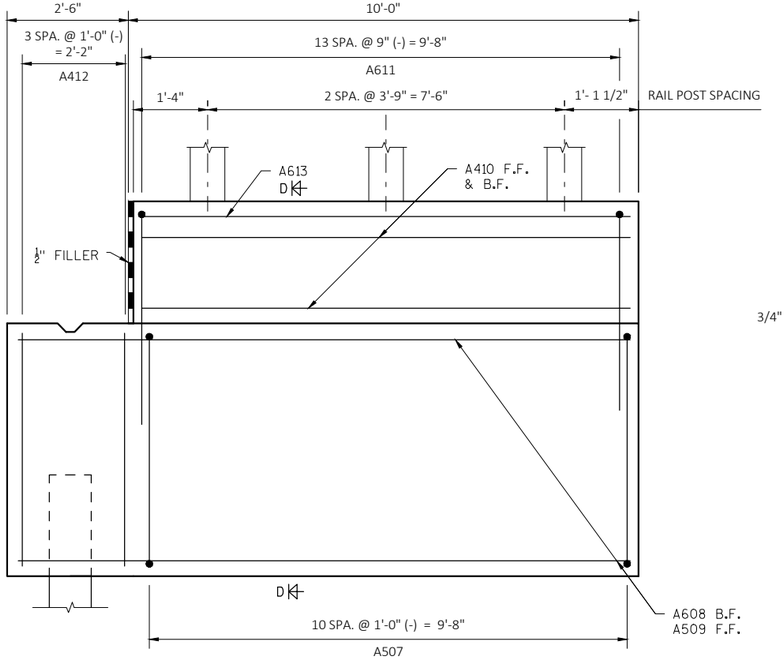
F.F DENOTES FRONT FACE

E.F. DENOTES EACH FACE

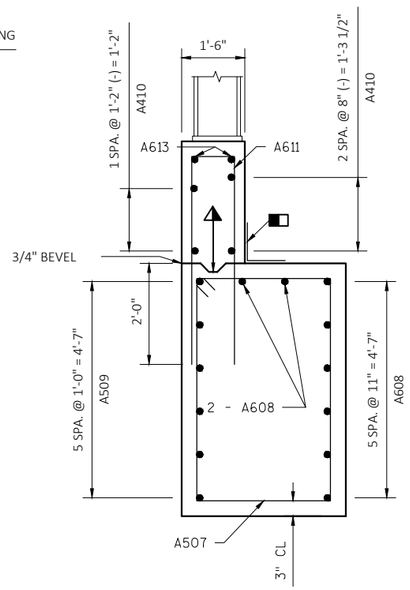
B.F. DENOTES BACK FACE

SOUTH ABUTMENT BILL OF BARS

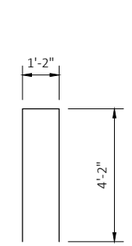
BAR MARK	NUMBER REQUIRED	LENGTH	BENT	COAT	LOCATION
A401	6	28-0	X		BODY AT PILES
A402	12	2-3			BODY AT PILES
A503	33	14-0	X		BODY VERT.
A604	11	26-2			BODY HORIZ.
A805	14	16-10	X		BODY HORIZ.
A506	25	2-0		X	BODY DOWELS
A507	22	15-6	X	X	WING 3 & 4 VERT.
A608	16	11-11		X	WING 3 & 4 HORIZ. B.F.
A509	12	12-2		X	WING 3 & 4 HORIZ. F.F.
A410	10	9-8		X	WING 3 & 4 TOP
A611	28	9-2	X	X	WING 3 & 4 VERT.
A412	8	4-7		X	WING 3 & 4 VERT.
A613	4	9-8		X	WING 3 & 4 TOP



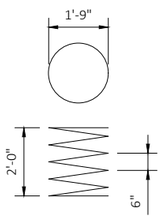
WING 4 ELEVATION



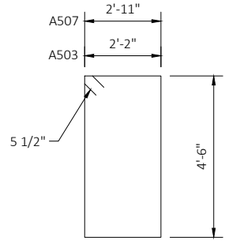
SECTION D-D



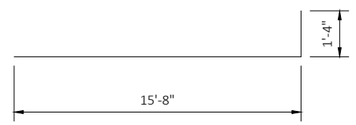
A611



A401



A503, A507



A805

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SOUTH ABUTMENT WING DETAILS

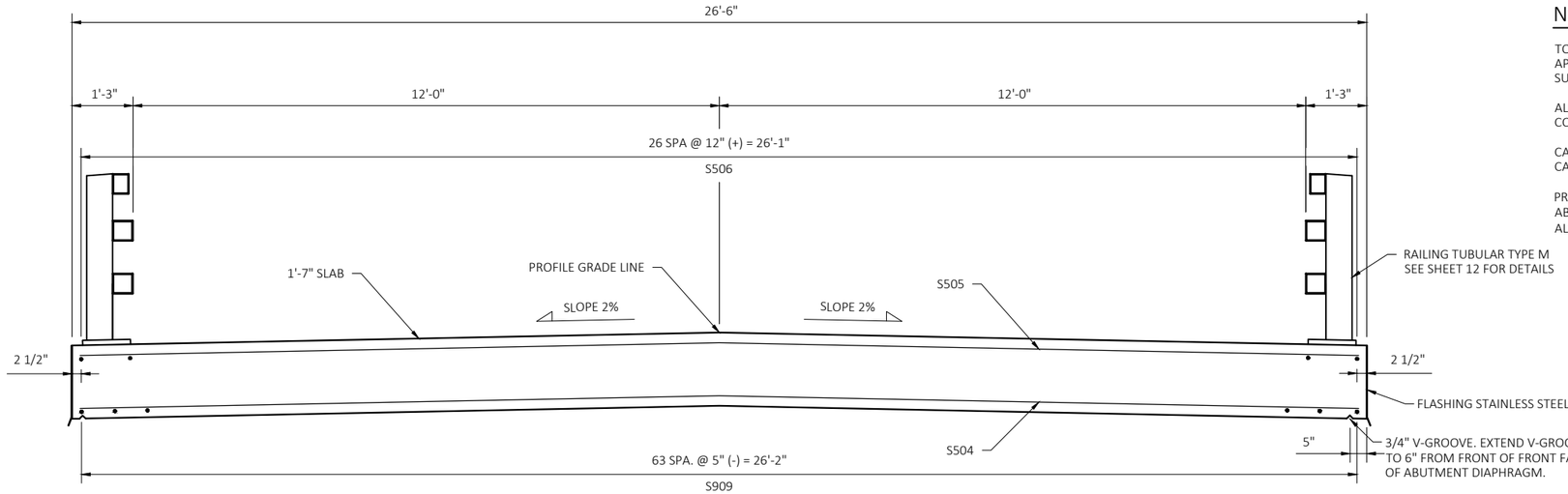
SHEET 9 OF 12

34

8

8

STATE PROJECT NUMBER
7286-00-70



CROSS SECTION THRU ROADWAY

LOOKING SOUTH

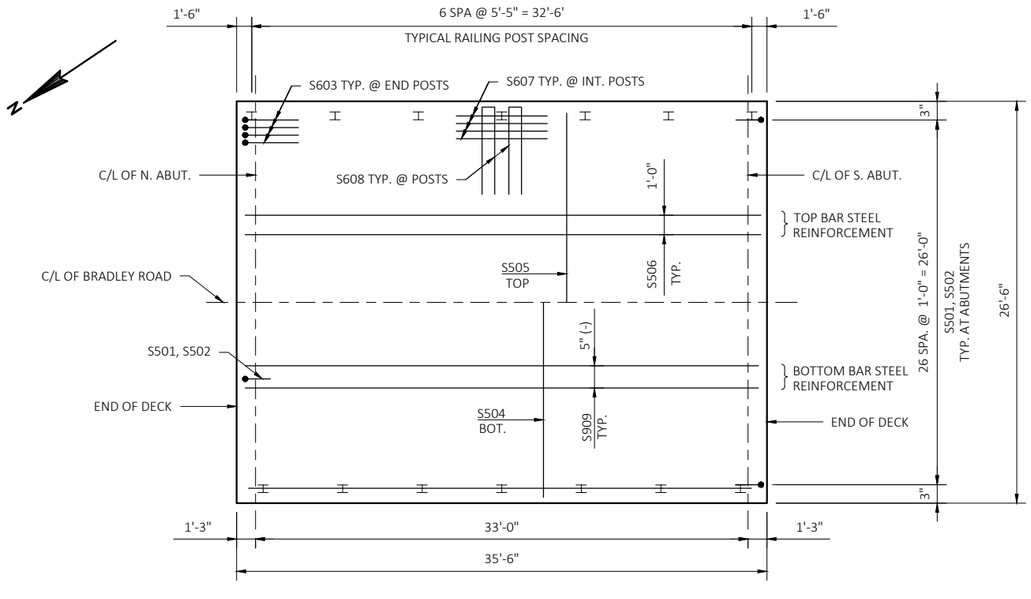
NOTES:

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

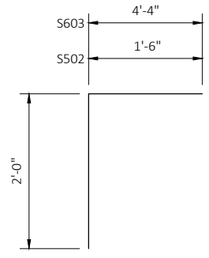
ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

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

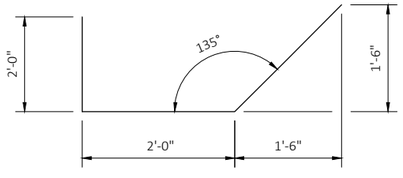
PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS, THE C/L OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR C/L.



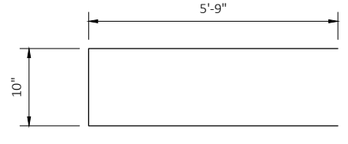
PLAN



S502, S603



S501



S608

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STRUCTURE B-61-0248

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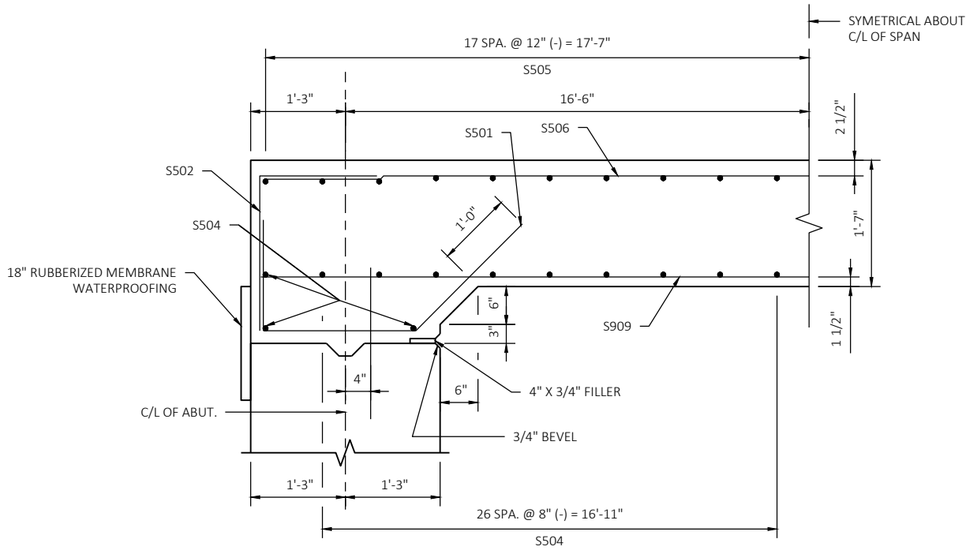
SUPERSTRUCTURE

SHEET 10 OF 12

35

8

8



HALF LONGITUDINAL SECTION

STATE PROJECT NUMBER

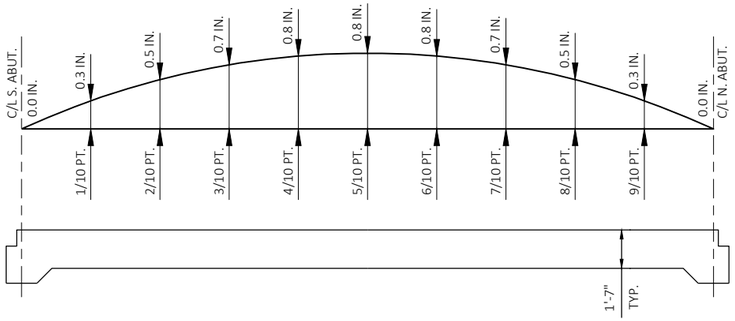
7286-00-70

NOTES

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

SUPERSTRUCTURE BILL OF BARS

BAR MARK	NUMBER REQUIRED	LENGTH	BENT	COAT	LOCATION
S501	54	6-0	X	X	SLAB AT ABUT.
S502	54	3-5	X	X	SLAB AT ABUT.
S603	16	6-2	X	X	SLAB AT RAIL END POSTS
S504	58	26-2		X	SLAB TRANS. BOT.
S505	36	26-2		X	SLAB TRANS. TOP
S506	27	35-2		X	SLAB LONG. TOP
S607	40	6-0		X	SLAB AT INT. RAIL POSTS
S608	28	12-0	X	X	SLAB AT RAIL POSTS
S909	64	35-2		X	SLAB LONG. BOT.



CAMBER DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT. PARAPETS, SIDEWALKS AND MEDIANS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED, EXCEPT FOR STAGED CONSTRUCTION.

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

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

SURVEY TOP OF SLAB ELEVATIONS

	N. ABUT.	5/10 PT.	S. ABUT.
E. GUTTER			
C/L			
W. GUTTER			

TOP OF DECK ELEVATIONS

LOCATION	C/L BRG. N. ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	C/L BRG. S. ABUT.
E. GUTTER	894.14	894.15	894.16	894.17	894.18	894.18	894.18	894.18	894.17	894.17	894.16
C/L OF SUPERSTRUCTURE	894.41	894.42	894.43	894.44	894.44	894.44	894.44	894.44	894.44	894.43	894.42
W. GUTTER	894.14	894.15	894.16	894.17	894.18	894.18	894.18	894.18	894.17	894.17	894.16

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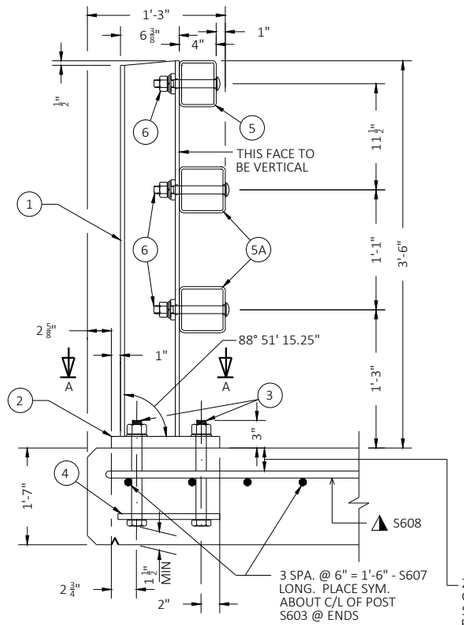
SUPERSTRUCTURE DETAILS & BILL OF BARS

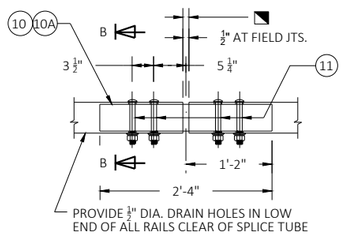
SHEET 11 OF 12

36

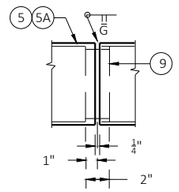
STATE PROJECT NUMBER
7286-00-70



SECTION THRU RAILING ON DECK

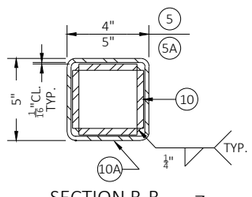


FIELD ERECTION JOINT DETAIL

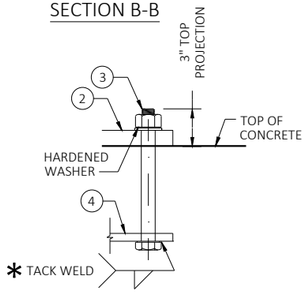


SHOP RAIL SPLICE DETAIL

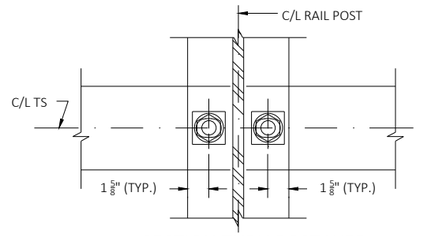
(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



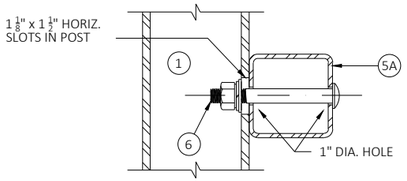
SECTION B-B



ANCHOR BOLTS



SECTION THRU POST WEB



SECTION THRU RAIL

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

TYPICAL RAIL TO POST CONNECTIONS

LEGEND

(1) W6 x 25 WITH 1 3/8" 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 5/16" X 1 5/8" SLOTTED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN. SLOTS PARALLEL TO SHORT SIDE OF PLATE.

(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 CONSTRUCTIBILITY.)

(4) 5/8" x 11" x 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1 3/16" DIA. HOLES FOR ANCHOR BOLTS NO. 3

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

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

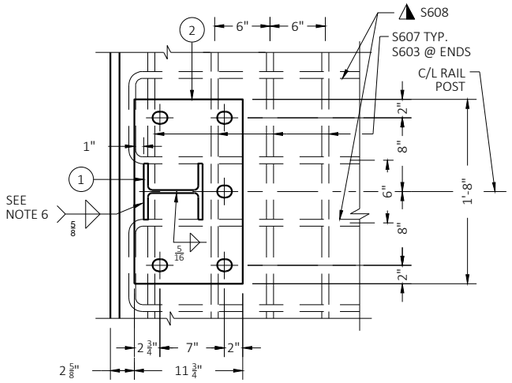
(6) 7/8" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, 3/16" X 1 5/8" X 1 5/8" WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION.)

(9) SPLICE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT".

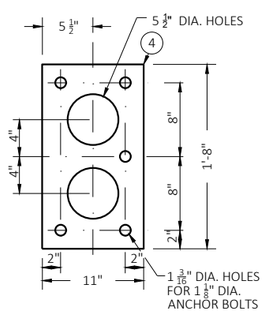
(10) 3/8" X 3 5/8" X 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.

(10A) 3/8" X 2 5/8" X 2'-4" PLATE USED IN NO. 5 3/8" X 3 5/8" X 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.

(11) 7/8" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 15/16" X 1 1/4" LONGIT. SLOTTED HOLES AT FIELD JOINTS AND 15/16" X 2 1/4" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 10A.

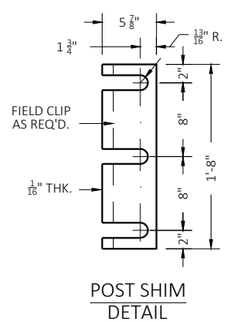


SECTION A-A

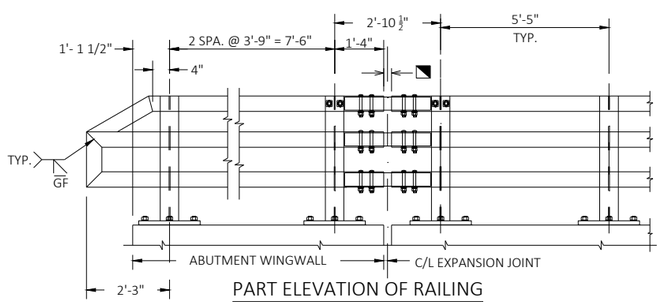


ANCHOR PLATE

AT RAIL TO DECK CONNECTION



POST SHIM DETAIL



PART ELEVATION OF RAILING

GENERAL NOTES

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

▲ TIE TO TOP MAT OF STEEL.

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

◥ RDWY. OPENING OR 2 1/2" MIN. FOR STRIP SEAL EXP. JOINT & 1/2" OPENING FOR A1 ABUTMENT.

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY:

KNIGHT
Engineers & Architects
831 Critter Court
Suite 400
Onalaska, WI 54650
Phone: (608) 519-1455

STRUCTURE B-61-0248

DRAWN BY CJO | PLANS CK'D. LS

TUBULAR STEEL RAILING TYPE M

SHEET 12 OF 12

37

8

8

Division	From/To Station	Location	205.0100 Common Excavation (1)		Salvaged / Unusable Pavement Material (4)	Available Material (5)	205.0500 Marsh Excavation (6)	205.0200 Rock Excavation (7)	Reduced Marsh in Fill (8)	Reduced EBS in Fill (9)	Expanded Marsh Backfill (10)	Expanded EBS Backfill (11)	Expanded Rock (12)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate +/- (14)	Waste	208.0100 Borrow	Comment:
			Cut (2)	EBS Excavation (3)					Factor 0.60	Factor 0.80	Factor 1.50	Factor 1.30	Factor 1.10		Factor 1.25				
Division 1																			
NORTH Approach	9+32.25/9+82.25	Bradley Rd	53	0	33	20	0	0	0	0	0	0	0	32	40	-20	0	20	
Division 1 Subtotal			53	0	33	20	0	0	0	0	0	0	0	32	40	-20	0	20	
Division 2																			
SOUTH Approach	10+17.75/10+67.75	Bradley Rd	59	0	33	26	0	0	0	0	0	0	0	17	21	5	5	0	
Division 2 Subtotal			59	0	33	26	0	0	0	0	0	0	0	17	21	5	5	0	
Grand Total			112	0	66	46	0	0	0	0	0	0	0	49	61	-15	5	20	
Total Common Exc			112																

Notes:

(1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100

(2) Salvaged/Unsuable Pavement Material is included in Cut.

(3) EBS Excavation to be backfilled with Select Borrow material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.

(4) Salvaged/Unusable Pavement Material

5) Available Material = Cut - Salvaged/Unusuable Pavement Material

(6) Marsh Excavation - to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well. Item number 205.0500

(7) Rock Excavation item number 205.0200

(8) Reduced Marsh in Fill - Excavated Marsh material is usuable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6

(9) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8

(10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor = 1.5. Item number 208.1100

(11) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.3. Item number 208.1100

(12) Expanded Rock Factor = 1.1

(13) Expanded Fill Factor = 1.25

Depending on selections: **Expanded Fill = (Unexpanded Fill - Expanded Rock - Reduced Marsh - Reduced EBS) * Fill Factor**

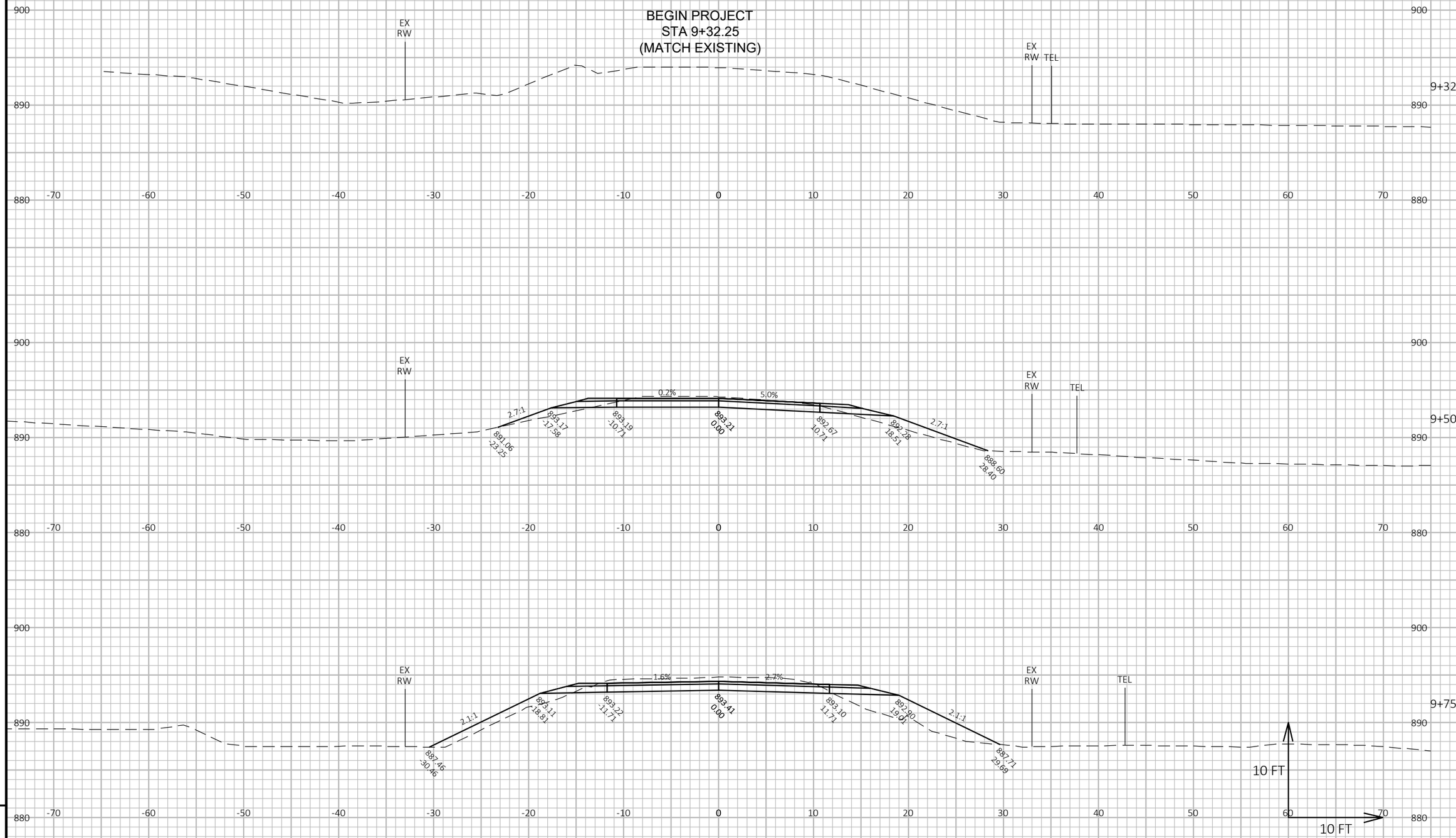
Or Expanded Fill = (Unexpanded Fill - Expanded Rock - Reduced EBS) * Fill Factor

Or Expanded Fill = (Unexpanded Fill - Expanded Rock - Reduced Marsh) * Fill Factor

Or Expanded Fill = (Unexpanded Fill - Expanded Rock) * Fill Factor

(14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

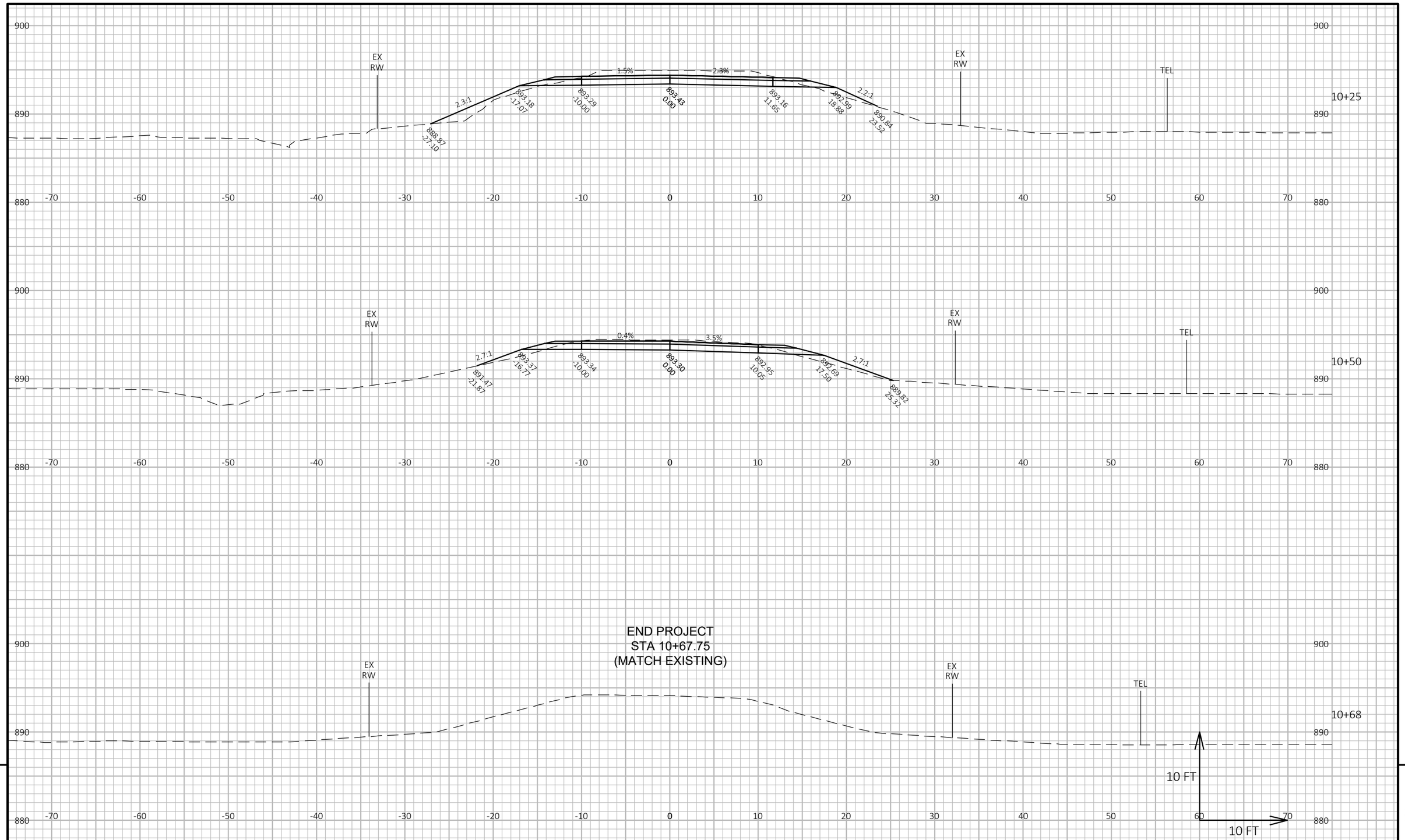
BEGIN PROJECT
STA 9+32.25
(MATCH EXISTING)



STRUCTURE B-61-0248
STA 9+82.25 - STA 10+17.75

PROJECT NO: 7286-00-70	HWY: BRADLEY RD.	COUNTY: TREMPEALEAU	CROSS SECTIONS: BRADLEY RD.	SHEET 39	E

FILE NAME : W:\7638_01\CAD\! 7286-00-00\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 1
PLOT DATE : 6/8/2020 1:30 PM
PLOT BY : MARZOLF, ROBBI
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 7286-00-70	HWY: BRADLEY RD.	COUNTY: TREMPEALEAU	CROSS SECTIONS: BRADLEY RD.	SHEET 40	E

FILE NAME : W:\7638_01\CAD\! 7286-00-00\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 2

PLOT DATE : 6/8/2020 1:30 PM PLOT BY : MARZOLF, ROBBI PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

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through innovation and exceptional service.

http://www.dot.wisconsin.gov