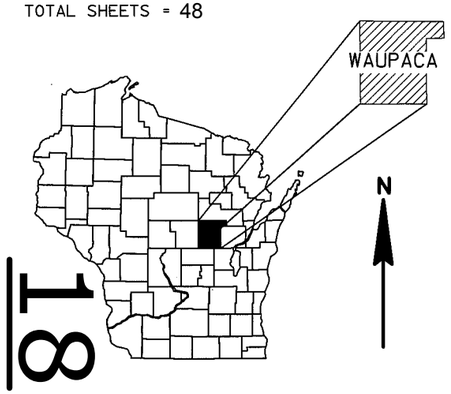
NCL JUL 2016

PROJECT ID: 6882-01-70
WITH: N/A

COUNTY: WAUPACA

ORDER OF SHEETS

TOTAL SHEETS = 48



18

DESIGN DESIGNATION

A.A.D.T.	2016	= 150
A.A.D.T.	2036	= 165
D.H.V.		= N/A
D.D.		= 60/40
T.		= 5.9%
DESIGN SPEED		= 40 MPH
ESALS		= 14,600

CONVENTIONAL SYMBOLS

PLAN

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

- HIGH VOLTAGE (CAUTION)

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CTH C - MUD LAKE ROAD

LITTLE WOLF RIVER BRIDGE B-68-0138

CTH J

WAUPACA COUNTY

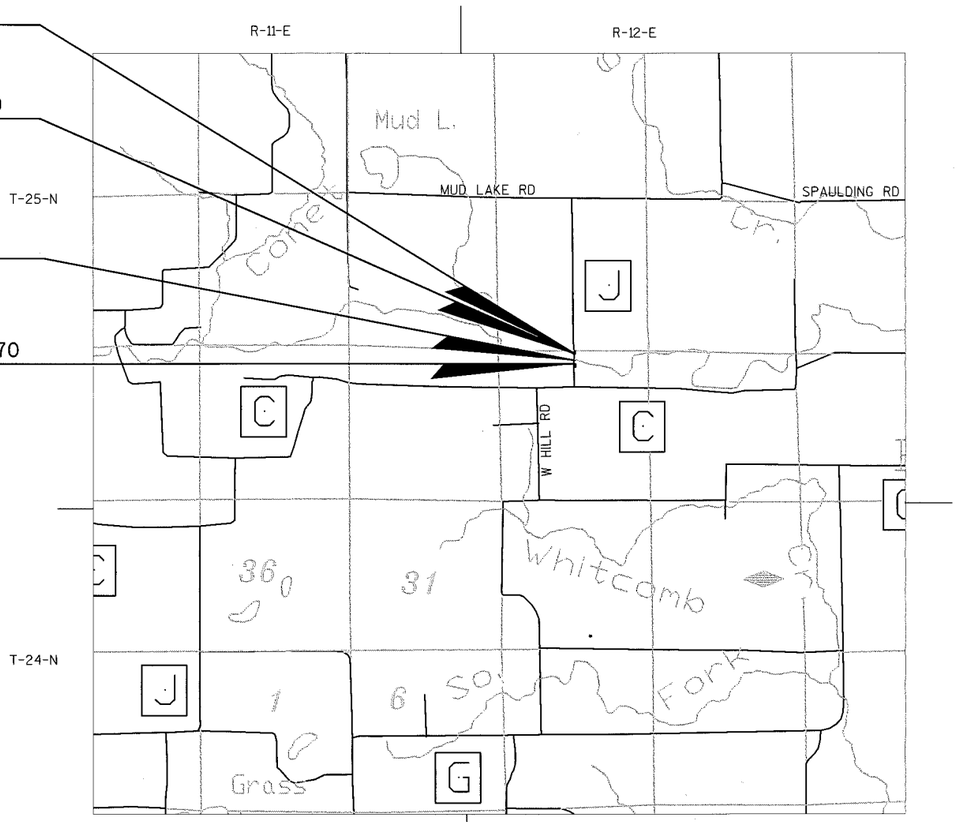
STATE PROJECT NUMBER
6882-01-70

END CONSTRUCTION
STA 15+75
N=437272.144
E=540492.397

END PROJECT 6882-01-70
STA 15+50
N=437247.145
E=540492.491

STRUCTURE B-68-0138
STA 13+33

BEGIN PROJECT 6882-01-70
STA 12+00
N=436897.147
E=540493.804



LAYOUT
SCALE 0 1/2 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, WAUPACA COUNTY.

TOTAL NET LENGTH OF CENTERLINE = 0.066 MI

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6882-01-70	WISC 2016256	1

ACCEPTED FOR

COUNTY of WAUPACA

1/29/2016 (Date) (SIGNATURE COMMISSIONER)

ORIGINAL PLANS PREPARED BY

Mead & Hunt
Mead & Hunt, Inc.
1345B North Road
Green Bay, WI 54313
920.496.0500
fax: 920.496.0576
www.meadhunt.com

WISCONSIN ANGELA B. KERRIGAN NO. 39383-006 De Pere, WI PROFESSIONAL ENGINEER

1/29/16

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	MEAD & HUNT
Designer	MEAD & HUNT
Managment Consultant	CEDAR CORPORATION

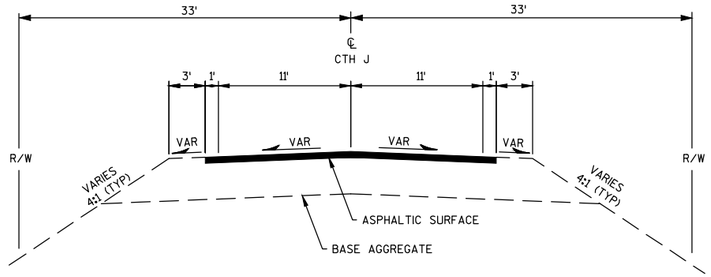
APPROVED FOR THE DEPARTMENT

DATE: 2-1-2016 (Signature)

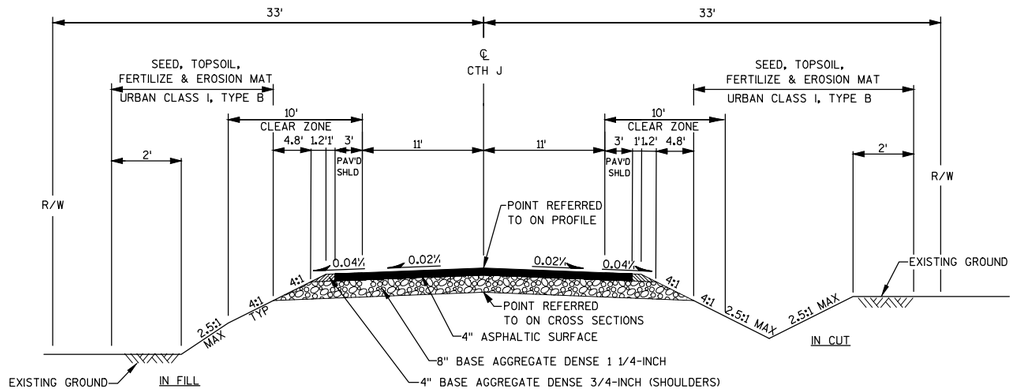
E

2

SECTION 2 SHEET ORDER



EXISTING TYPICAL SECTION



TYPICAL FINISHED SECTION

GENERAL NOTES

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

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

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE TOPSOIL, FERTILIZER, SEED, AND EROSION MAT URBAN CLASS 1 TYPE B.

4-INCH ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH AN 1 3/4-INCH UPPER LAYER AND A 2 1/4-INCH LOWER LAYER.

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

KEEP ALL EQUIPMENT AND MATERIALS OUT OF ADJACENT WETLANDS.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING PAVEMENT AT REMOVAL LIMITS.

FILL EXPANSION OF EARTHWORK AT 30%.

WHEN THE QUANTITY OF BASE AGGREGATE OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT 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.

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD. SILT FENCE IS TO BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, AND IN PLACE PRIOR TO BRIDGE REMOVAL.

ASPHALTIC PAVEMENT REMOVAL IS INCLUDED IN BID ITEM "COMMON EXCAVATION".

STANDARD ABBREVIATIONS

ADT	AVERAGE DAILY TRAFFIC
ASPH	ASPHALTIC
BM	BENCH MARK
℄	CENTERLINE
CWT	HUNDREDWEIGHT
CY	CUBIC YARD
DHV	DESIGN HOURLY VOLUME
DWY	DRIVEWAY
EL	ELEVATION
EXC	EXCAVATION
FT	FOOT
FTG	FOOTING
LB	POUND
LF	LINEAR FOOT
LHF	LEFT-HAND FORWARD
LS	LUMP SUM
LT	LEFT
NO	NUMBER
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
RHF	RIGHT-HAND FORWARD
RT	RIGHT
R/W	RIGHT-OF-WAY
SF	SQUARE FOOT
SHLDR	SHOULDER
STA	STATION
SY	SQUARE YARD
T	TRUCKS (PERCENT OF)
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
VAR	VARIABLE
VC	VERTICAL CURVE
VPC	VERTICAL POINT OF CURVE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY

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 = 0.55 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.46 ACRES

UTILITY CONTACTS

CENTRAL WI ELECTRIC COOP (CWEC)
PO BOX 100
ROSHOLT, WI 54437-0100
TEL: (715) 677-2211

CONTACT:
JEFF RICE
CELL: (715) 701-2038
EMAIL: Jeff.rice@cwecoop.com

FRONTIER COMMUNICATIONS OF WISCONSIN
26 W. 12TH STREET
CLINTONVILLE, WI 54929
TEL: (715) 823-1373

CONTACT:
JAMES JASKOLSKI
CELL: (715) 823-6843
EMAIL: James.jaskolski@ftr.com

CONTACTS

WAUPACA COUNTY CONTACT
LANCE PENNEY, INTERIM HIGHWAY COMMISSIONER
WAUPACA COUNTY HIGHWAY DEPARTMENT
515 EAST FULTON STREET
WAUPACA, WI 54981
TEL: (715) 258-7152

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

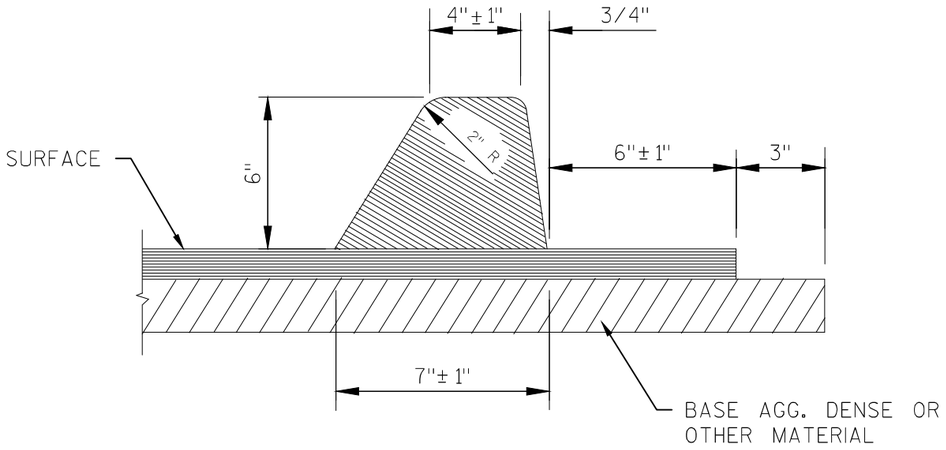
WDNR

BOBBI JO FISCHER
WDNR
427 EAST TOWER DRIVE, SUITE 100
WAUTOMA, WI 54982
TEL: (920) 787-3015
EMAIL:bobbi.fischer@wisconsin.gov

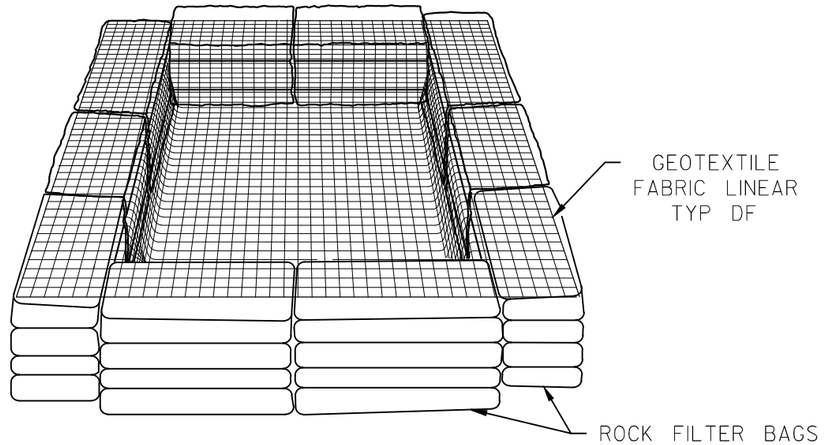
DESIGN CONSULTANT

Mead & Hunt, Inc.
1345B North Road
Green Bay, WI 54313
920.496.0500
www.meadhunt.com

ATTN: ANGELA KERRIGAN, P.E.
TEL: (920) 496-0500
EMAIL: angie.kerrigan@meadhunt.com



ASPHALTIC CURB DETAIL



DETAIL OF TEMPORARY SETTLING BASIN*

(SIZE TO BE DETERMINED IN FIELD AS INDICATED BELOW:)

STORAGE VOLUME (C.F.) = 16 X GPM (PUMP RATE)

EXAMPLE:
CONTRACTOR INDICATES PUMP CAPABLE OF 50 GPM
HEIGHT OF FILTER BAGS = 1.5 FT.

SOLUTION:
SV (C.F.) = 16 X 50
SV = 800 C.F.

$\frac{800\ C.F.}{1.5\ FT.}$ = 533 S.F.

USE A 20 FT. X 27 FT. BASIN

* ALL MATERIALS AND CONSTRUCTION ARE INCIDENTAL TO EXCAVATION FOR STRUCTURES BRIDGE

NOTE:
THE CONTRACTOR SHALL PROVIDE A TREATMENT TRAIN FOR SEDIMENT REMOVAL TO BE IMPLEMENTED AT THE DISCHARGE END OF THE DEWATERING PIPE. THE TREATMENT TRAIN IS TO INCLUDE A POLYMER SOCK INSIDE A TYPE II FILTERBAG THAT EMPTIES INTO A DRAINAGE FABRIC LINED ROCK FILTER BAG BASIN. EXAMPLE OF THE DRAINAGE FABRIC LINED ROCK FILTER BAG BASIN SHOWN.

2

N

EROSION MAT URBAN CLASS I, TYPE B (TYP)

BEGIN PROJECT 6882-01-70
STA 12+00.00
N=436897.1470
E=540493.8035
MATCH EXISTING
SAWCUT REQUIRED

SILT FENCE (TYP)

LITTLE WOLF RIVER

COFFER DAMS, TO BE CONSTRUCTED WITH TEMPORARY SHEET PILING

END PROJECT 6882-01-70
STA 15+50.00
N=437247.1445
E=540492.4910
MATCH EXISTING
SAWCUT REQUIRED

R/W

11+00 12+00 13+00 14+00 15+00 16+00

CTH J

SLOPE INTERCEPT (TYP)

TEMPORARY DITCH CHECK (TYP)

RIPRAP HEAVY GEOTEXTILE FABRIC TYPE 'HR' (SEE STRUCTURE PLANS)

RIPRAP HEAVY GEOTEXTILE FABRIC TYPE 'HR' (SEE STRUCTURE PLANS)

WETLAND BOUNDARY

PROJECT NO: 6882-01-70	HWY: CTH J	COUNTY: WAUPACA	EROSION CONTROL PLAN	SHEET 4	E

2

N

BEGIN PROJECT 6882-01-70
STA 12+00.00
N=436897.1470
E=540493.8035
MATCH EXISTING
SAWCUT REQUIRED

END PROJECT 6882-01-70
STA 15+50.00
N=437247.1445
E=540492.4910
MATCH EXISTING
SAWCUT REQUIRED

REMOVE

W5-52L
12"X36"

LITTLE WOLF RIVER

LITTLE WOLF RIVER
REMOVE

LITTLE
WOLF RIVER
I-3
60" X 24"

W5-52R
12"X36"

REMOVE

WEIGHT LIMITS
2 AXL VEHICLE 15 TONS
3 OR MORE AXL VEHICLES 20 TONS
COMBINATION VEHICLES 30 TONS

REMOVE

300'

R/W

11+00

12+00

13+00

14+00

12.5' (TYP)

15+00

37.5' (TYP)

16+00

CTH J

BM

R/W

WEIGHT LIMITS
2 AXL VEHICLE 15 TONS
3 OR MORE AXL VEHICLES 20 TONS
COMBINATION VEHICLES 30 TONS

REMOVE

REMOVE

W5-52R
12"X36"

LITTLE
WOLF RIVER
I-3
60" X 24"

LITTLE WOLF RIVER

REMOVE

W5-52L
12"X36"

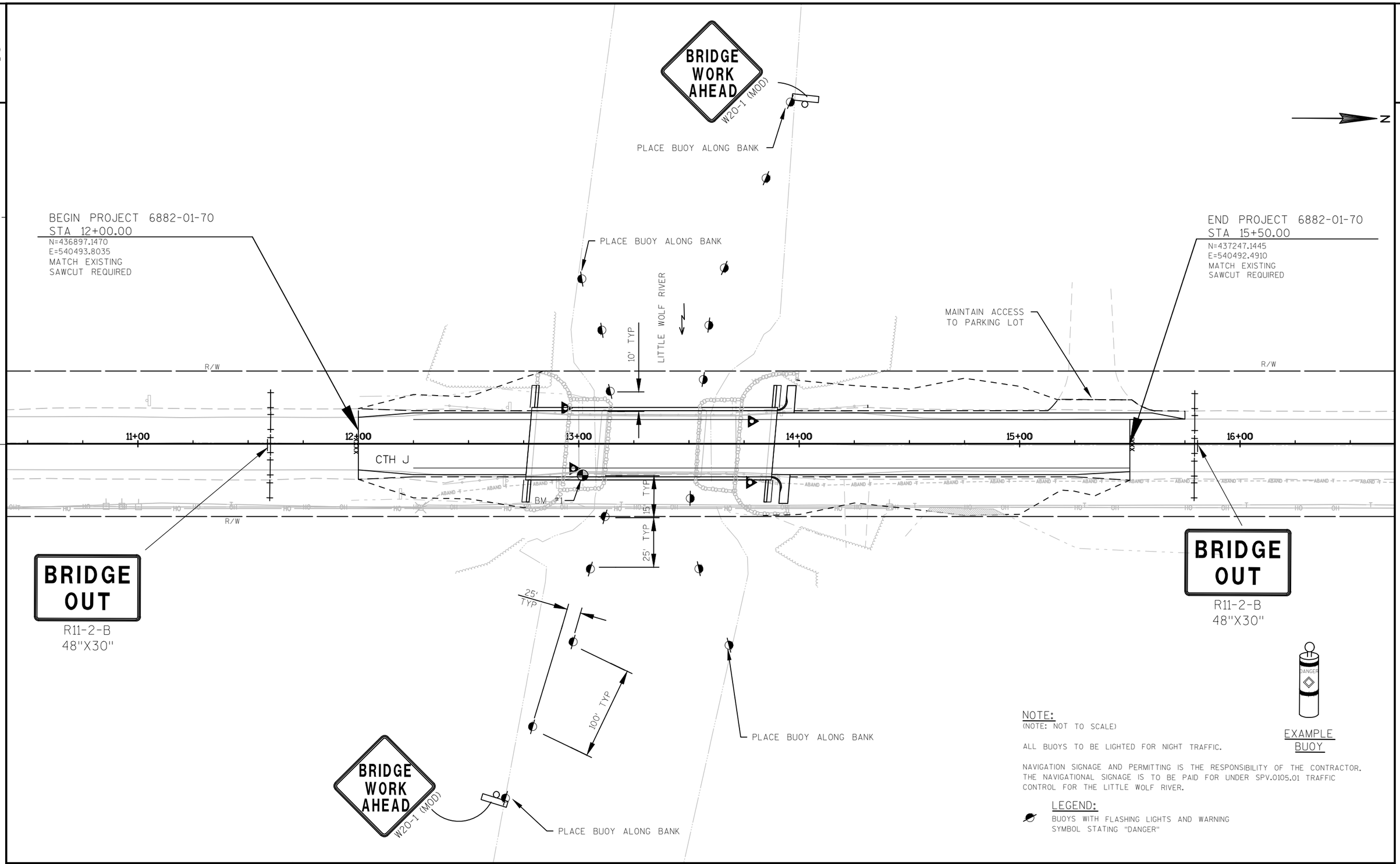
REMOVE

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

PROJECT NO: 6882-01-70	HWY: CTH J	COUNTY: WAUPACA	SIGNING AND PAVEMENT MARKING	SHEET 5	E

2



NOTE:
(NOTE: NOT TO SCALE)

ALL BUOYS TO BE LIGHTED FOR NIGHT TRAFFIC.

NAVIGATION SIGNAGE AND PERMITTING IS THE RESPONSIBILITY OF THE CONTRACTOR. THE NAVIGATIONAL SIGNAGE IS TO BE PAID FOR UNDER SPV.0105.01 TRAFFIC CONTROL FOR THE LITTLE WOLF RIVER.

LEGEND:

BUOYS WITH FLASHING LIGHTS AND WARNING SYMBOL STATING "DANGER"

PROJECT NO: 6882-01-70	HWY: CTH J	COUNTY: WAUPACA	TRAFFIC CONTROL DETAIL	SHEET 6	E

DATE 16MAY16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6882-01-70 QUANTITY
0010	201.0205	Grubbing	STA	3.000	3.000
0020	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. STA 13+35.5	LS	1.000	1.000
0030	204.0165	Removing Guardrail	LF	224.000	224.000
0040	205.0100	Excavation Common	CY	350.000	350.000
0050	206.1000	Excavation for Structures Bridges (structure) 01. B-68-0138	LS	1.000	1.000
0060	206.5000	Cofferdams (structure) 01. B-68-0138	LS	1.000	1.000
0070	210.0100	Backfill Structure	CY	280.000	280.000
0080	213.0100	Finishing Roadway (project) 01. 6882-01-70	EACH	1.000	1.000
0090	305.0110	Base Aggregate Dense 3/4-Inch	TON	22.000	22.000
0100	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	462.000	462.000
0110	455.0605	Tack Coat	GAL	19.000	19.000
0120	465.0105	Asphaltic Surface	TON	178.000	178.000
0130	465.0310	Asphaltic Curb	LF	34.000	34.000
0140	465.0315	Asphaltic Flumes	SY	14.000	14.000
0150	502.0100	Concrete Masonry Bridges	CY	350.000	350.000
0160	502.3200	Protective Surface Treatment	SY	372.000	372.000
0170	502.3210	Pigmented Surface Sealer	SY	91.000	91.000
0180	505.0400	Bar Steel Reinforcement HS Structures	LB	6,940.000	6,940.000
0190	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	56,320.000	56,320.000
0200	516.0500	Rubberized Membrane Waterproofing	SY	14.000	14.000
0210	550.0500	Pile Points	EACH	24.000	24.000
0220	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	600.000	600.000
0230	606.0200	Riprap Medium	CY	80.000	80.000
0240	606.0300	Riprap Heavy	CY	145.000	145.000
0250	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	126.000	126.000
0260	619.1000	Mobilization	EACH	1.000	1.000
0270	624.0100	Water	MGAL	7.000	7.000
0280	625.0100	Topsoil **P**	SY	692.000	692.000
0290	628.1504	Silt Fence	LF	365.000	365.000
0300	628.1520	Silt Fence Maintenance	LF	122.000	122.000
0310	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0320	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0330	628.2008	Erosion Mat Urban Class I Type B	SY	692.000	692.000
0340	628.6005	Turbidity Barriers	SY	83.000	83.000
0350	628.6505	Soil Stabilizer Type A	ACRE	0.150	0.150
0360	628.7504	Temporary Ditch Checks	LF	30.000	30.000
0370	629.0210	Fertilizer Type B **P**	CWT	0.400	0.400
0380	630.0120	Seeding Mixture No. 20 **P**	LB	20.000	20.000
0390	630.0200	Seeding Temporary **P**	LB	20.000	20.000
0400	634.0416	Posts Wood 4x4-Inch X 16-FT	EACH	4.000	4.000
0410	637.2210	Signs Type II Reflective H	SF	20.000	20.000
0420	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0430	638.2602	Removing Signs Type II	EACH	8.000	8.000
0440	638.3000	Removing Small Sign Supports	EACH	8.000	8.000
0450	642.5001	Field Office Type B	EACH	1.000	1.000
0460	643.0100	Traffic Control (project) 01. 6882-01-70	EACH	1.000	1.000
0470	643.0420	Traffic Control Barricades Type III	DAY	1,162.000	1,162.000
0480	643.0705	Traffic Control Warning Lights Type A	DAY	2,323.000	2,323.000
0490	643.0900	Traffic Control Signs	DAY	232.000	232.000
0500	645.0120	Geotextile Type HR	SY	465.000	465.000

3

DATE 16MAY16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6882-01-70 QUANTITY
0510	646.0106	Pavement Marking Epoxy 4-Inch	LF	1,530.000	1,530.000
0520	650.4500	Construction Staking Subgrade	LF	275.000	275.000
0530	650.5000	Construction Staking Base	LF	275.000	275.000
0540	650.6500	Construction Staking Structure Layout (structure) 01. B-68-0138	LS	1.000	1.000
0550	650.9910	Construction Staking Supplemental Control (project) 01. 6882-01-70	LS	1.000	1.000
0560	650.9920	Construction Staking Slope Stakes	LF	275.000	275.000
0570	690.0150	Sawing Asphalt	LF	48.000	48.000
0580	715.0502	Incentive Strength Concrete Structures	DOL	2,100.000	2,100.000
0590	ASP.1T0A	On-the-Job Training Apprentice at $5. 00/HR	HRS	150.000	150.000
0600	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	300.000	300.000
0610	SPV.0035	Special 01. Excavation Boulders	CY	90.000	90.000
0620	SPV.0035	Special 02. Backfill Boulder Excavation	CY	110.000	110.000
0630	SPV.0105	Special 01. Traffic Control Little Wolf River	LS	1.000	1.000
0640	SPV.0180	Special 03. Salvaged Pier Excavation	SY	140.000	140.000

GRUBBING SUMMARY

STATION - STATION			OFFSET	201.0205 GRUBBING STA
12+00	-	13+00	LT	1
14+00	-	15+00	LT	1
14+00	-	15+00	RT	1
TOTAL				**3**

REMOVING GUARDRAIL

STATION - STATION	OFFSET	204.0165 REMOVING GUARDRAIL LF
12+39 - 13+00	LT	61
12+38 - 13+00	RT	62
13+71 - 14+31	LT	60
13+71 - 14+12	RT	41
TOTAL		**224**

FINISHING ROADWAY (6882-01-70)

STATION - STATION	213.0100 FINISHING ROADWAY EACH
6882-01-70	1
TOTAL	**1**

BASE AGGREGATE DENSE FOR ROADWAY

STATION - STATION			LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
12+00	-	12+77.25	CTH J	6	146	2
13+88.75	-	15+75	CTH J	16	315	5
TOTAL				**22**	**462**	**7**

ASPHALT ITEMS SUMMARY

STATION - STATION	OFFSET	AREA SY	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON	465.0310 ASPHALTIC CURB LF	465.0315 ASPHALTIC FLUMES SY
12+00.00 - 12+77.25		235	6	56	--	--
13+93.9	RT	7	--	--	18	7
13+95.6	LT	7	--	--	16	7
13+88.75 - 15+75.00		506	13	121	--	--
TOTAL			**19**	**178**	**34**	**14**

EARTHWORK SUMMARY

DIVISION	FROM/TO STATION	Item # 205.0100 EXCAVATION COMMON **P** (1) CUT	EBS EXCAVATION (2)	AVAILABLE MATERIAL (3)	UNEXPANDED FILL	EXPANDED FILL (4) 1.3	MASS ORDINATE +/- (5)	WASTE
CTH J SOUTH OF BRIDGE	12+00.00 - 12+77.25	98	0	98	5	7	91	91
CTH J NORTH OF BRIDGE	13+88.75 - 15+75.00	242	0	242	38	49	193	193
CTH J	UNDISTRIBUTED	0	10	0	10	13	-13	--
GRAND TOTAL		340	10	340	53	69	271	284
TOTAL EXCAVATION COMMON =		**350**	**CY**					

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

2) EBS Excavation to be backfilled with Borrow or Cut.

3) Available Material = Cut

4) Expanded Fill. Factor = 1.30

5) 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.

MOBILIZATION

STATION - STATION	619.1000 MOBILIZATION EACH
PROJECT	1
TOTAL	**1**

ALL ITEMS ARE IN CATEGORY 0010 UNLESS NOTED OTHERWISE

FINISHING ITEMS

STATION - STATION			OFFSET	625.0100 TOPSOIL **P** SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.6505 SOIL STABILIZER TYPE A ACRE	629.0210 FERTILIZER TYPE B **P** CWT	630.0120 SEEDING MIXTURE NO. 20 **P** LB	630.0200 SEEDING TEMPORARY **P** LB
12+00.00	-	12+77.75	LT	70	70	--	0.0	1.9	1.9
12+00.00	-	12+77.75	RT	80	80	--	0.1	3.0	3.0
13+88.75	-	15+75.00	LT	164	164	--	0.1	4.4	4.4
13+88.75	-	15+75.00	RT	240	240	--	0.2	7.0	7.0
UNDISTRIBUTED			--	138	138	0.15	0.1	4.1	4.1
TOTAL				**692**	**692**	**0.15**	**0.4**	**20**	**20**

SILT FENCE

STATION - STATION			OFFSET	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
12+50	-	12+77.25	LT	35	12
12+50	-	12+77.25	RT	30	10
13+88.75	-	15+75	LT	130	43
13+88.75	-	15+75	RT	170	57
TOTAL				**365**	**122**

EROSION CONTROL MOBILIZATION

STATION - STATION	628.1905 EROSION CONTROL MOBILIZATION EA	628.1910 EMERGENCY EROSION CONTROL MOBILIZATION EA
PROJECT	5	3
TOTAL	**5**	**3**

TURBIDITY BARRIER

STATION	LOCATION	628.6005 TURBIDITY BARRIER SY
13+08.00	CTH J	40
13+58.00	CTH J	43
TOTAL		**83**

TEMPORARY DITCH CHECKS

STATION	LOCATION	628.7504 TEMPORARY DITCH CHECKS LF
12+50.00	LT	22
12+50.00	RT	8
TOTAL		**30**

SIGNING SUMMARY

STATION	OFFSET	638.2602 REMOVING SIGNS TYPE II EA	638.3000 REMOVING SMALL SIGN SUPPORTS EA	634.0416 POSTS WOOD 4X6-INCH X 16-FT EA	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	COMMENT
12+20	RT	1	1	--		--	
12+68	LT	1	1	--	--	--	
12+68	RT	1	1	--	--	--	
12+77	LT	--	--	1	--	3.00	W5-52L 12"x36"
12+77	RT	--	--	1	10.00	3.00	W5-52R 12"x36" I-3 60"x24"
12+93	RT	1	1	--	--	--	
13+78	LT	1	1		--	--	
13+87	RT	--	--	1	--	3.00	W5-52L 12"x36"
13+87	LT	--	--	1	10.00	3.00	W5-52R 12"x36" I-3 60"x24"
13+90	LT	1	1	--	--	--	
13+90	RT	1	1	--	--	--	
14+20	LT	1	1	--	--	--	
TOTAL		**8**	**8**	**4**	**20.00**	**12.00**	

FIELD OFFICE TYPE B

STATION - STATION	642.5001 FIELD OFFICE TYPE B EACH
PROJECT	1
TOTAL	**1**

ALL ITEMS ARE IN CATEGORY 0010 UNLESS NOTED OTHERWISE

TRAFFIC CONTOL (PROJECT)

STATION - STATION	643.0100 TRAFFIC CONTROL 6882-01-70 EACH
PROJECT	1
TOTAL	**1**

TRAFFIC CONTOL (LITTLE WOLF RIVER)

STATION - STATION	SPV.0105.01 TRAFFIC CONTROL LITTLE WOLF RIVER LS
LITTLE WOLF RIVER	1
TOTAL	**1**

TRAFFIC CONTROL ITEMS

LOCATION	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	643.0900 TRAFFIC CONTROL SIGNS DAYS
NORTH OF BRIDGE	505	1010	101
SOUTH OF BRIDGE	505	1010	101
UNDISTRIBUTED	152	303	30
TOTAL	**1,162**	**2,323**	**232**

PAVEMENT MARKING SUMMARY

STATION - STATION			OFFSET	646.0106 PAVEMENT MARKING EPOXY 4-INCH YELLOW LF	PAVEMENT MARKING EPOXY 4-INCH WHITE LF
9+77.75	-	16+88.75	LT	--	715
9+77.75	-	16+88.75	RT	--	715
12+00	-	15+50	CL	100	
SUBTOTAL				100	1430
TOTAL				**1,530**	

CONSTRUCTION STAKING SUMMARY

STATION - STATION			650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT 01.B-68-0138 LS	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL .01 6882-01-70 LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
PROJECT			--	--	1	1	--
12+00	-	STRUCTURE	77	77	--	--	77
STRUCTURE	-	15+75	198	198	--	--	198
TOTAL			**275**	**275**	**1**	**1**	**275**

SAWCUTTING SUMMARY

STATION	LOCATION	690.0150 SAWING ASPHALT LF
12+00	--	24
15+50	--	24
TOTAL		**48**

ALL ITEMS ARE IN CATEGORY 0010 UNLESS NOTED OTHERWISE

CONTROL POINTS					
NO.	STATION	DESCRIPTION	ELEV.	NORTHING	EASTING
CP#10	12+93.9, 16.2' LT	SPIKE IN SW CORNER OF BRIDGE	933.26	436990.972	540477.271
CP#11	13+77.6, 17.5' RT	SPIKE IN NE CORNER OF BRIDGE	932.81	437074.844	540510.662
CP#12	12+97.5, 11.3' RT	MAG NAIL SE CORNER OF BRIDGE	934.62	436994.644	540504.699
CP#13	13+78.5, 10.3' LT	MAG NAIL NW CORNER OF BRIDGE	934.76	437075.579	540482.868

BENCH MARKS					
NO.	STATION	DESCRIPTION	ELEV.	NORTHING	EASTING
BM#1	13+01.7	Chiseled "X" in SE Wingwall	934.54	436998.865	540507.708
BM#2	17+58.9	Railroad Spike in Power Pole	923.62	437456.121	540520.517

PARCEL ID 22-29-21-1
CALEB CHARITABLE TRUST, C/O
RICHARD AMUNDSEN

PARCEL ID 22-29-21-2
STATE OF WISCONSIN
CONSERVATION COMMITTEE

GRAVEL

STA. 15+33, LT
CONSTRUCT C.E.

STA 15+60
14' LT

R/W

END CONSTRUCTION
STA 15+75.00

N

EXISTING BRIDGE
P-68-50

STA 12+25
14' LT

33'

CP#10

ASPHALTIC FLUMES

CP#13

11+00 | 12+00 | N0° 12' 54"W | 13+00 | 14+00 | 15+00 | 16+00

CTH J

CP#12

CP#11

33'

BM #1

R/W

STA 12+25
14' RT

STA 15+25
14' RT

BEGIN PROJECT 6882-01-70
STA 12+00.00
N=436897.1470
E=540493.8035
MATCH EXISTING
SAWCUT REQUIRED

SLOPE INTERCEPT
(TYP)

STRUCTURE B-68-0138
STA 13+33

LITTLE WOLF RIVER

WET MEADOW WETLAND IMPACT
0.002 AC

STA. 14+26, RT
CONSTRUCT F.E.

CENTRAL WISCONSIN
ELECTRIC COOP

END PROJECT 6882-01-70
STA 15+50.00
N=437247.1445
E=540492.4910
MATCH EXISTING
SAWCUT REQUIRED

FRONTIER COMMUNICATIONS
OF WISCONSIN

PARCEL ID 22-29-12-2
TIMOTHY & BARBARA WRASE

PARCEL ID 22-29-12-1
TIMOTHY & BARBARA WRASE

5

5

VCL = 150.00
K = 115.72

EXISTING PROFILE

PROPOSED PROFILE

STA 12+05.00
EL 935.54

STA 12+85.00
EL 934.88

STA 15+50.00
EL 934.85

1.15%

-0.82%

-0.50%

0.80%

STA 12+00.00
EL 935.60

HIGH WATER ELEVATION Q100
ELEV. 931.30'

VPC STA 13+75.00
VPC EL 934.43

VPI STA 14+50.00
VPI EL 934.06

VPT STA 15+25.00
VPT EL 934.66

OBSERVED WATER SURFACE
ELEV. 923.16
(12/23/2014)

STREAMBED
ELEV. 919.41'

EXISTING ELEVATION | PROPOSED ELEVATION

940
930
920
915

STA 13+35.5 REMOVE EXISTING STRUCTURE (P68-50)
71.5' OVERALL LENGTH & 26.3' CLEAR ROADWAY WIDTH
SINGLE-SPAN STEEL DECK GIRDER BRIDGE

STA 13+33 STRUCTURE B-68-0138 REQ.D
111'-6" OVERALL LENGTH & 30' CLEAR ROADWAY WIDTH
THREE-SPAN REINFORCED CONCRETE HAUNCHED SLAB BRIDGE

938.70 | 937.65 | 936.52 | 935.60 / 935.60 | 935.14 / 935.17 | 934.66 / 934.81 | 920.25 / 934.56 | 934.75 / 934.33 | 934.60 / 934.30 | 934.57 / 934.48 | 934.85 / 934.85 | 935.41 | 936.29

10+00 | 11+00 | 12+00 | 13+00 | 14+00 | 15+00 | 16+00 | 16+00

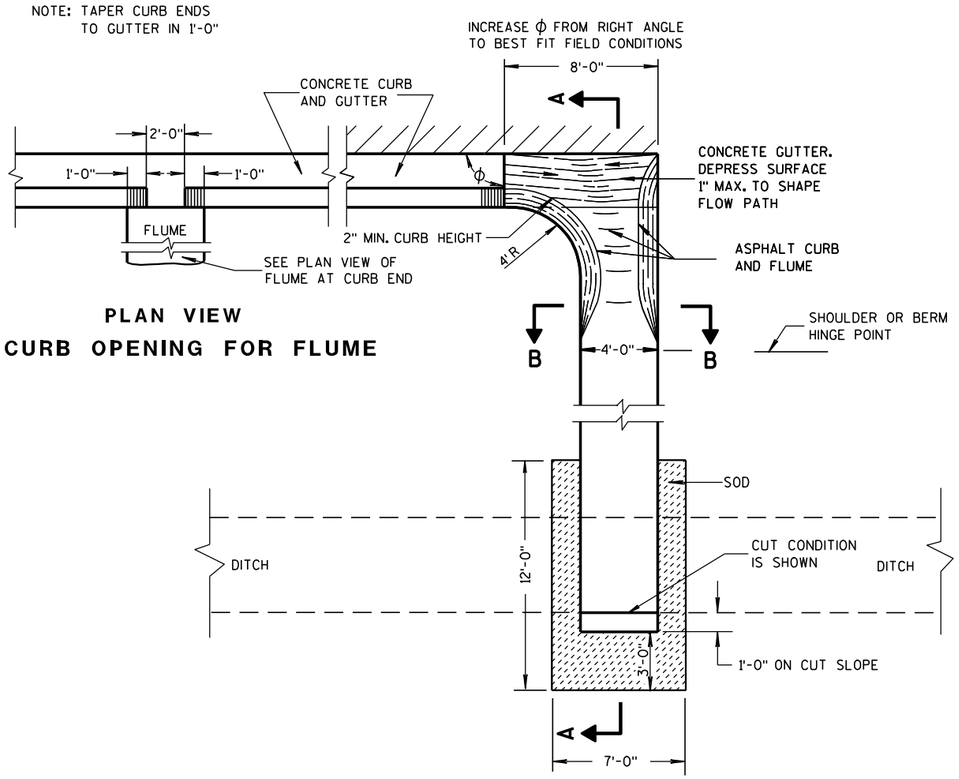
PROJECT NO: 6882-01-70	HWY: CTH J	COUNTY: WAUPACA	PLAN AND PROFILE: CTH J	SHEET 12	E

Standard Detail Drawing List

08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
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
15C06-07	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-16A	PAVEMENT MARKING (MAINLINE)

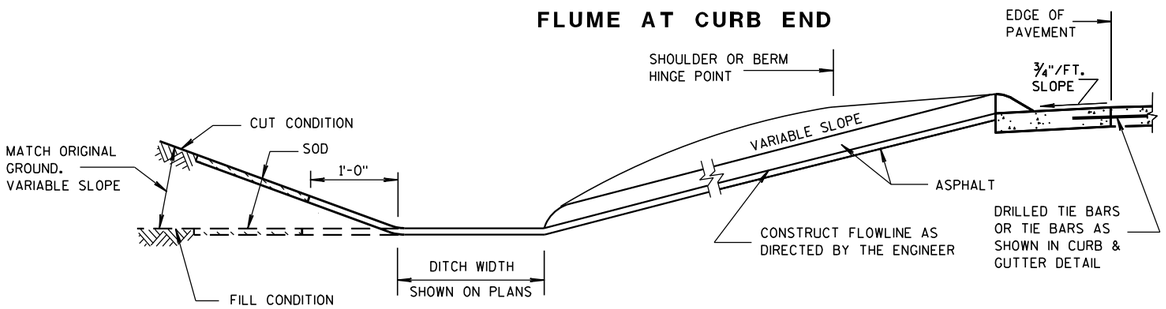
6

ASPHALTIC FLUME

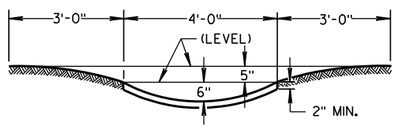


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

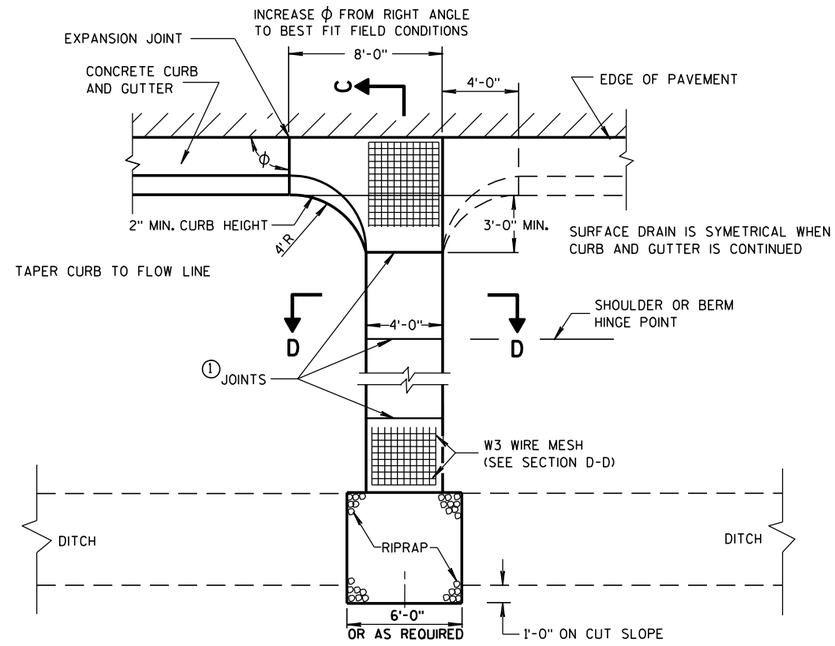
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

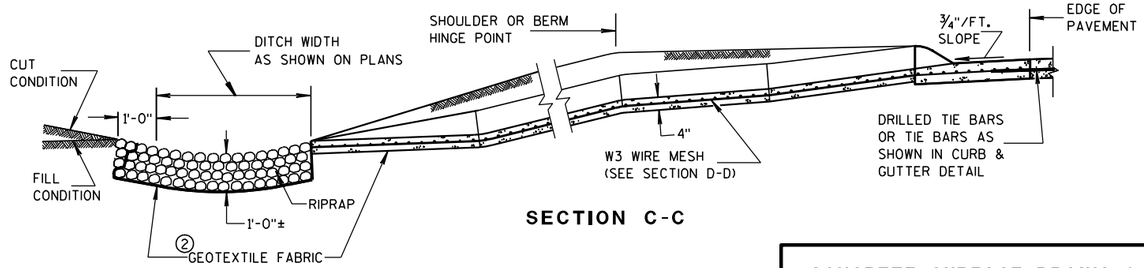
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

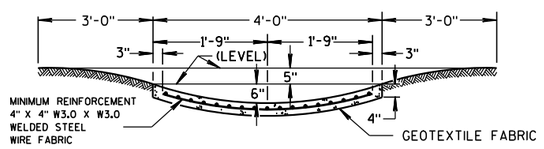
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT

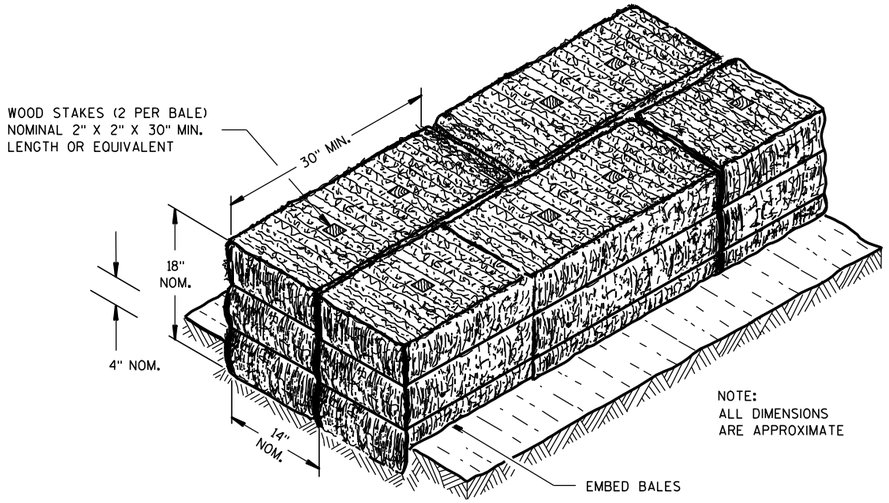
FHWA

6

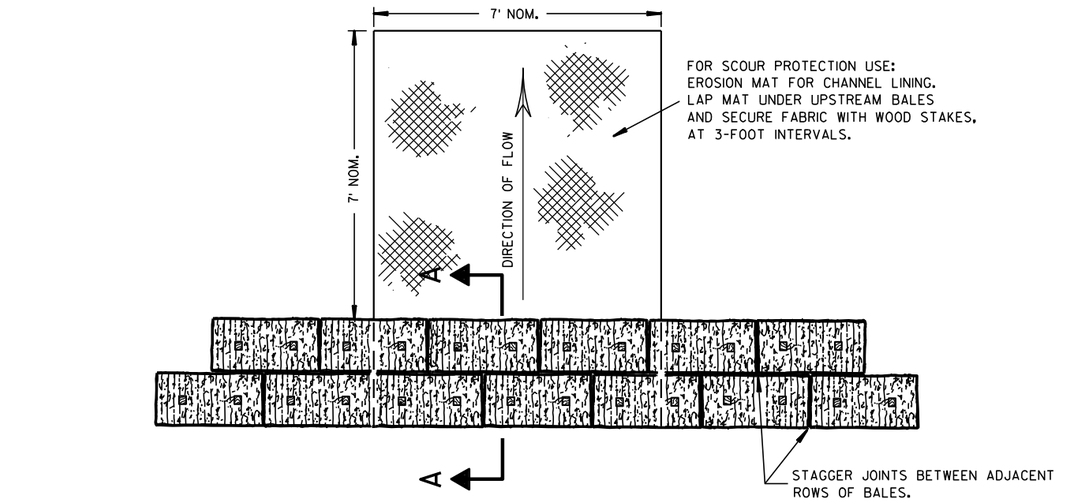
S.D.D. 8 D 4-5

6

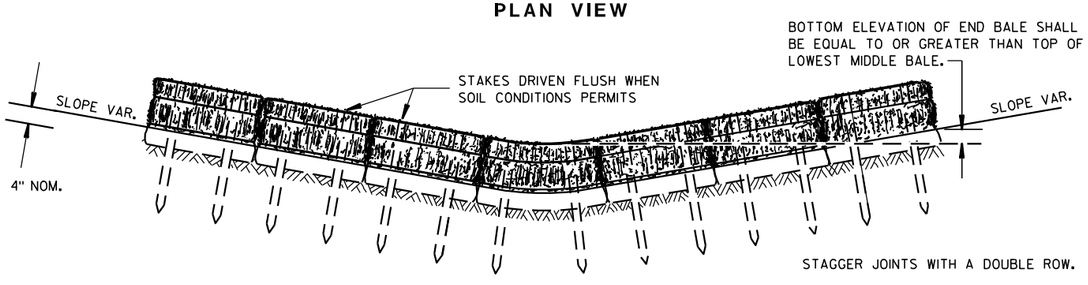
S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



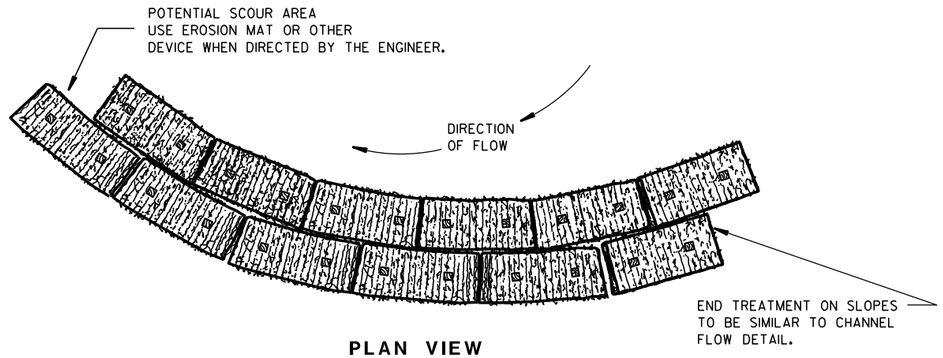
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

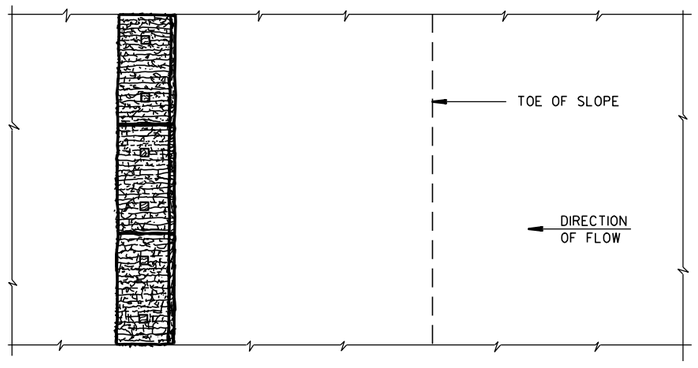
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

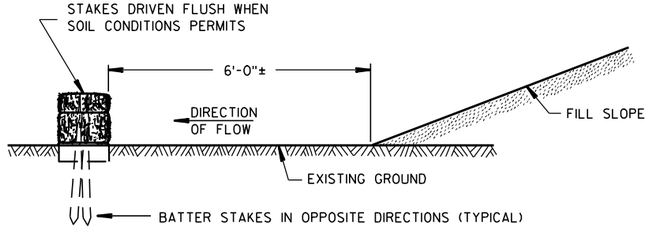


PLAN VIEW

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

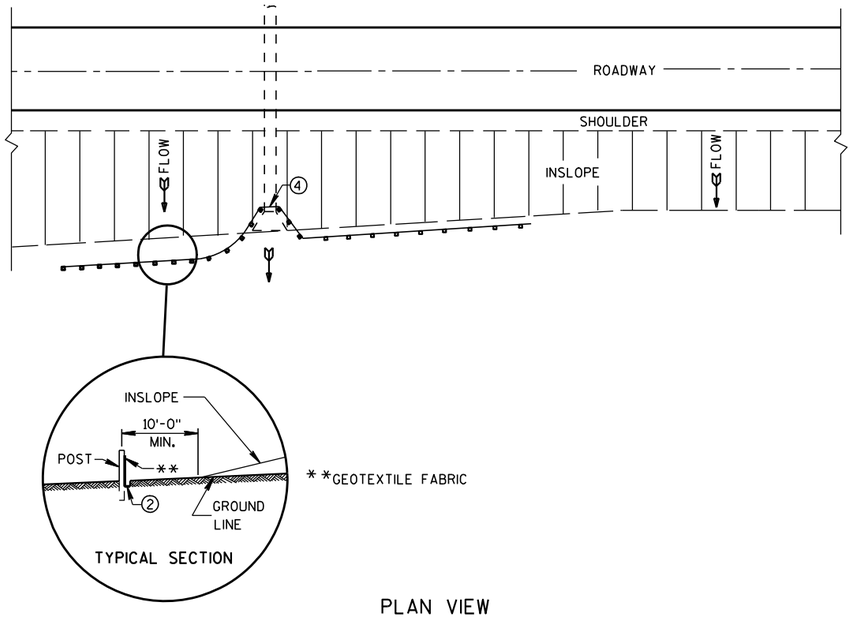
FHWA

6

S.D.D. 8 E 8-3

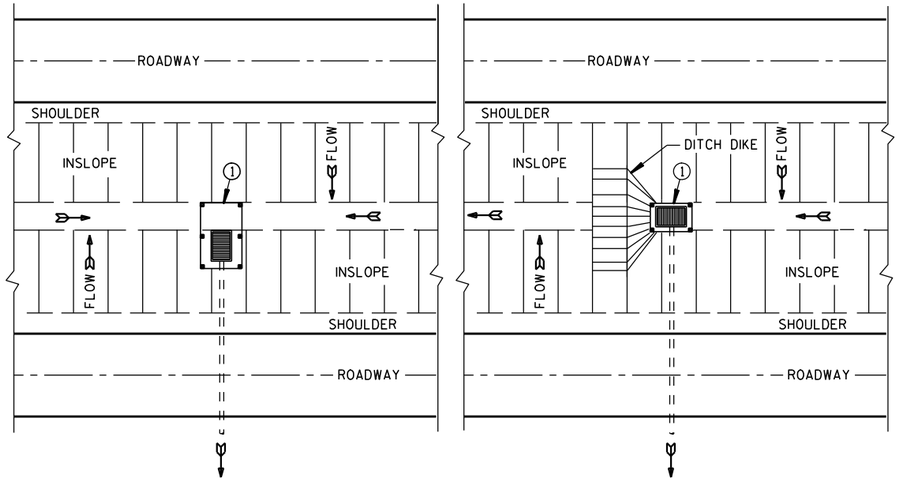
6

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.

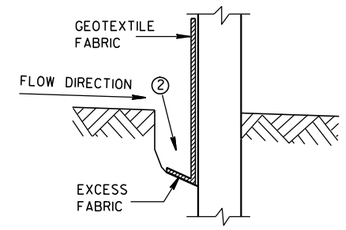
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

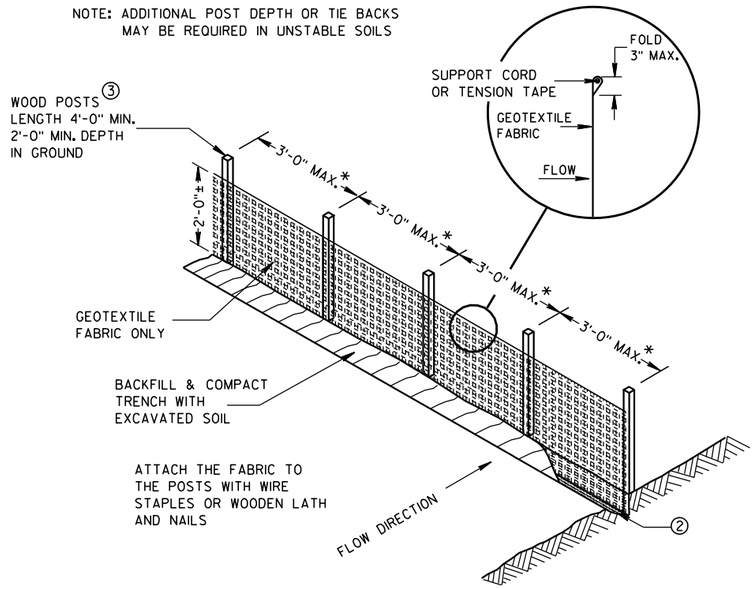
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

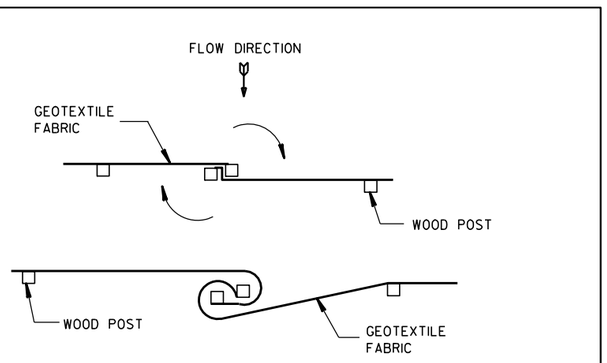
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



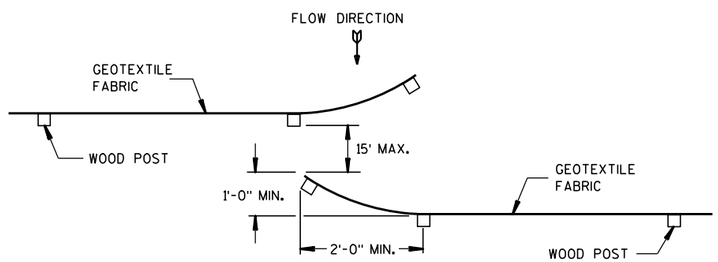
TRENCH DETAIL



SILT FENCE

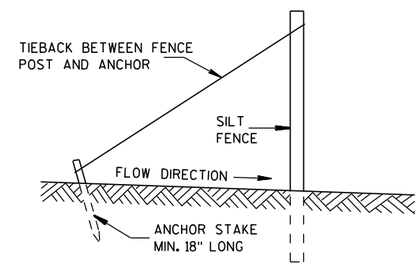


TWIST METHOD



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

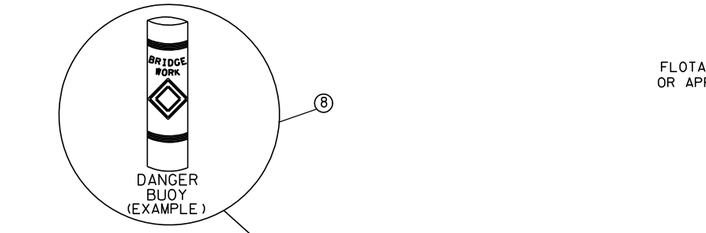
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

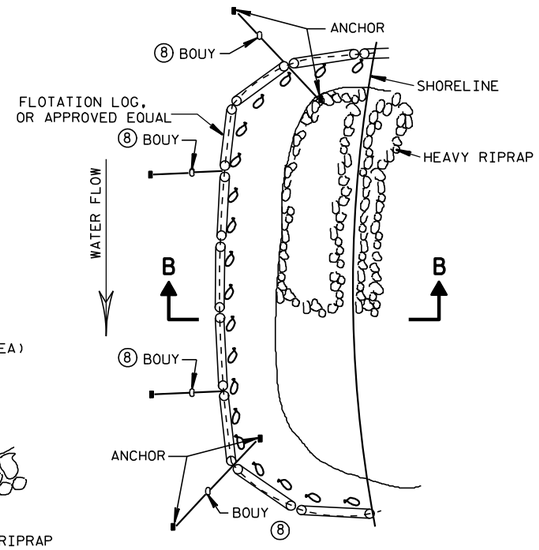
S.D.D. 8 E 9-6

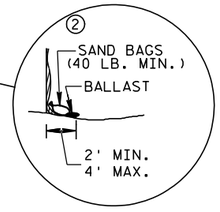
6

S.D.D. 8 E 9-6

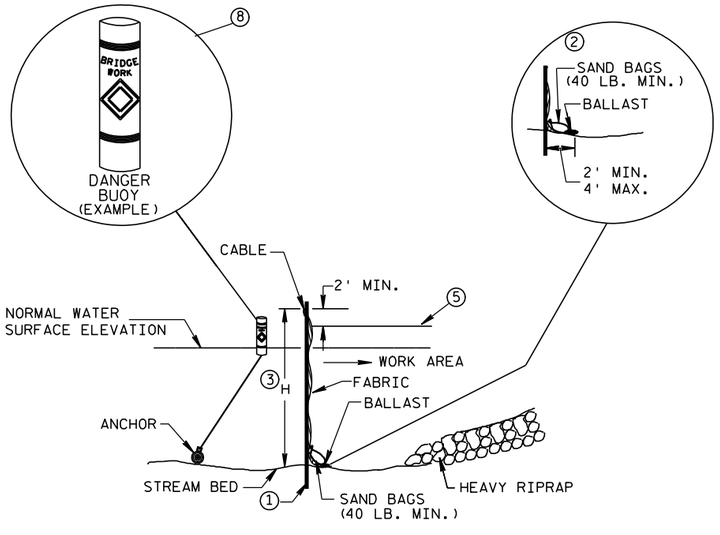


SECTION B-B

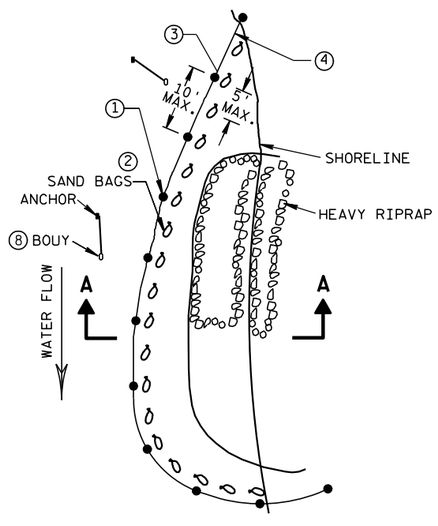




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



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.

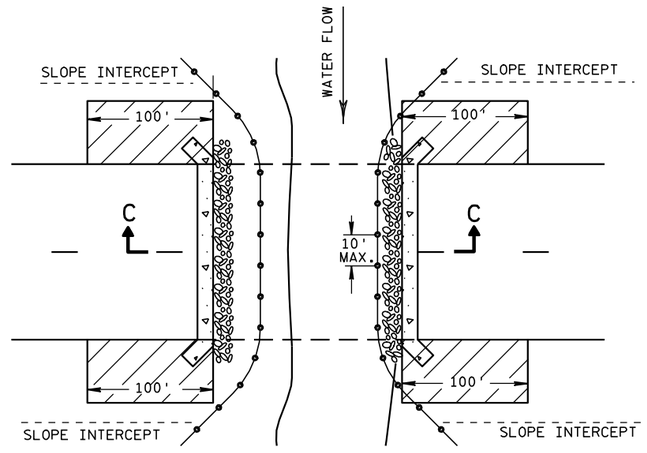
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

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.

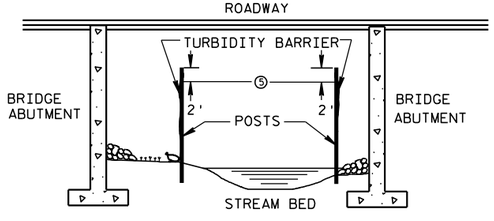
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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

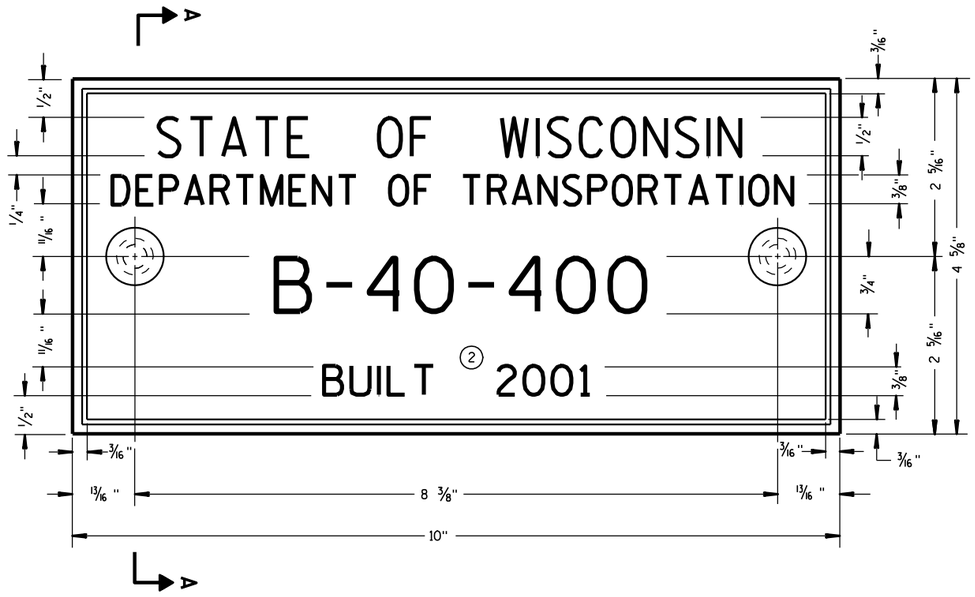
APPROVED
6/04/02 DATE
/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 11-2

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

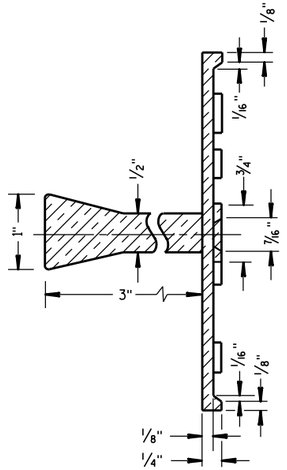
GENERAL NOTES

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.

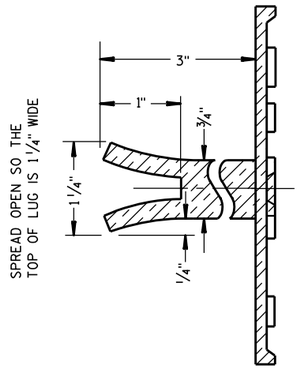
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

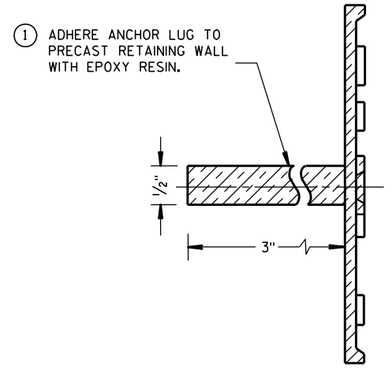
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



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

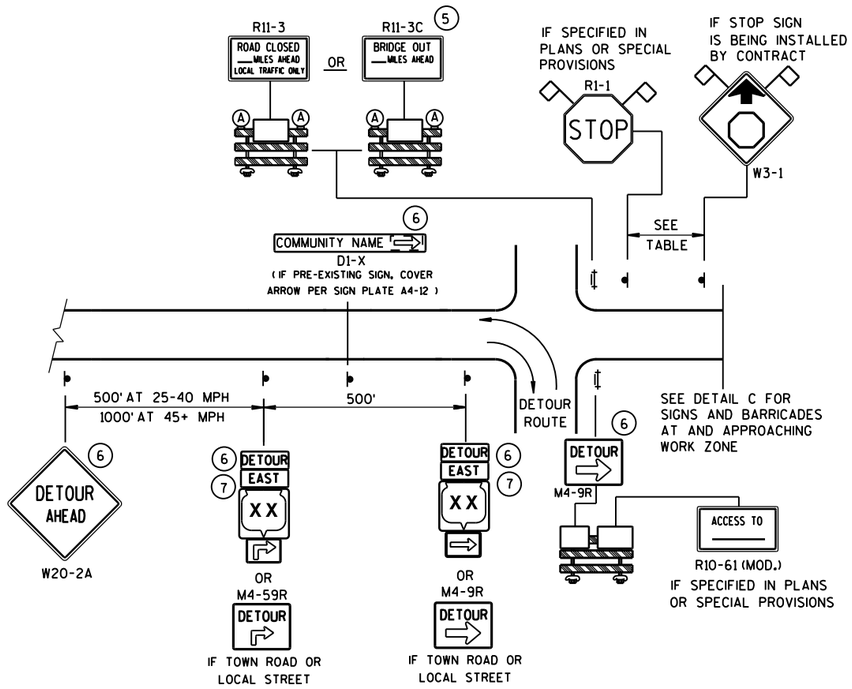
FHWA

6

S.D.D. 12 A 3-10

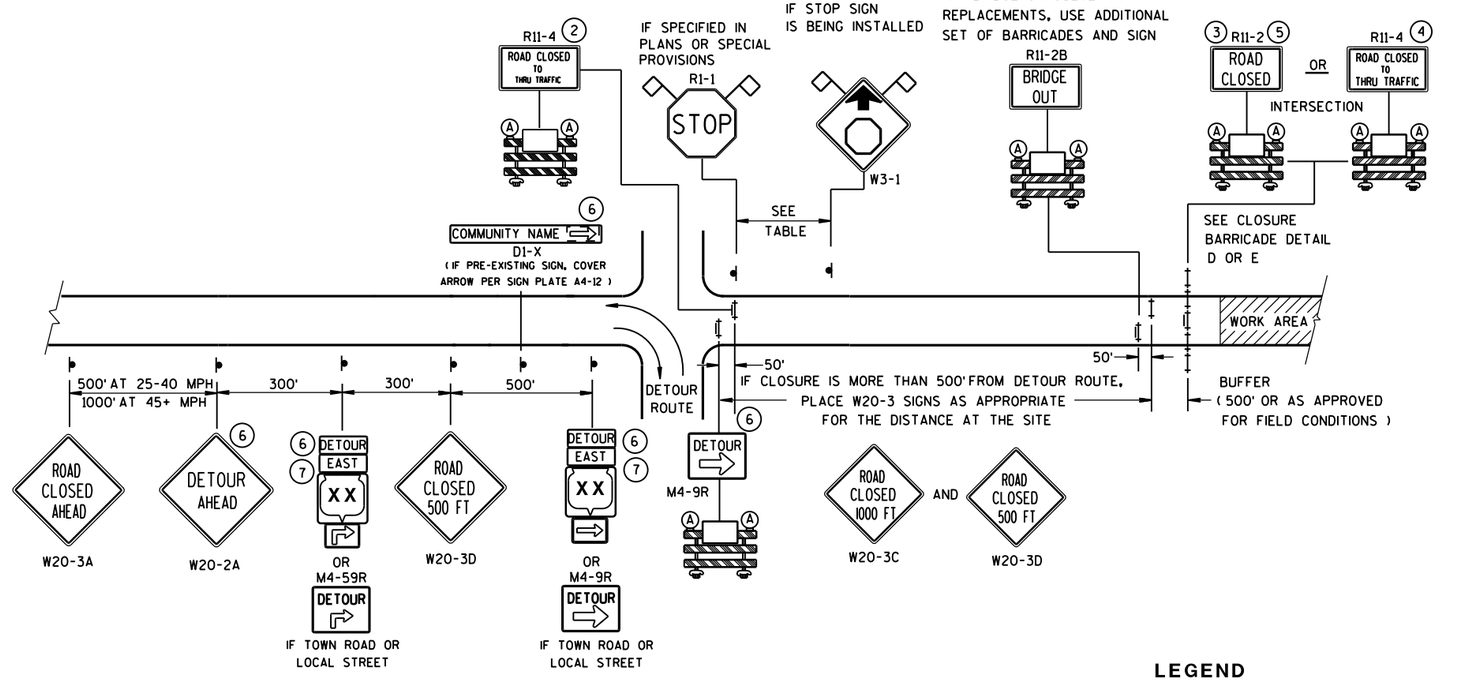
6

S.D.D. 12 A 3-10



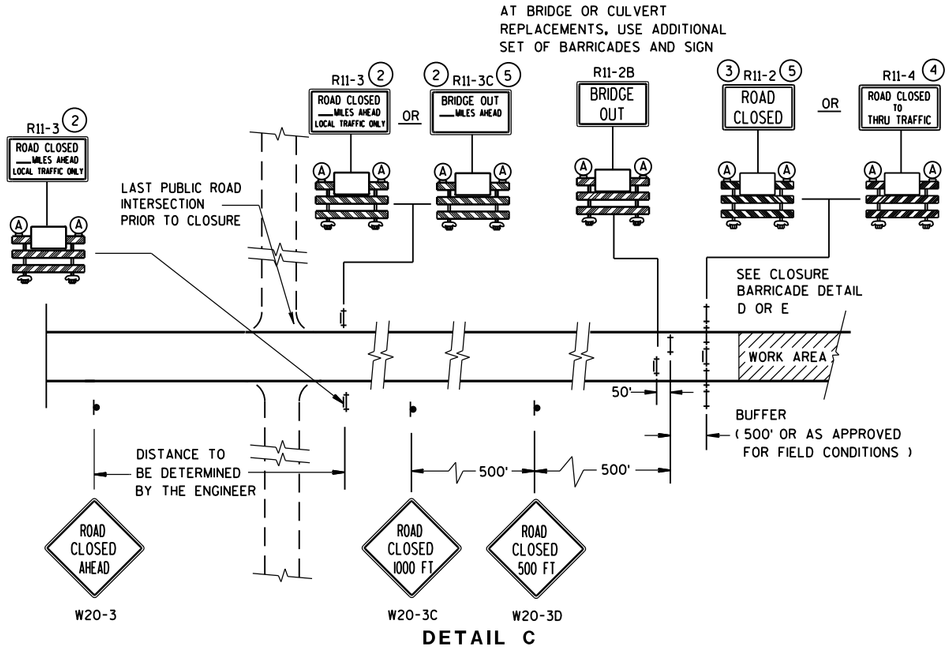
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN 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)

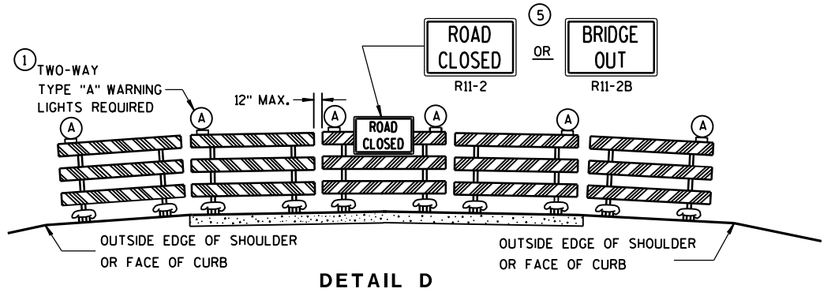
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

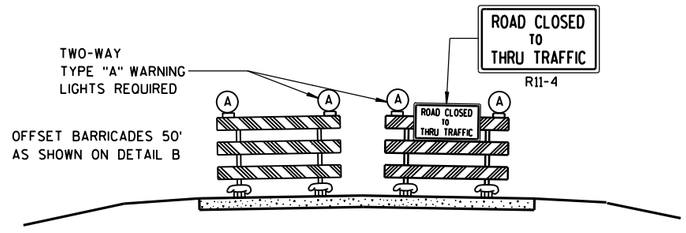
S.D.D. 15 C 2-6a



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

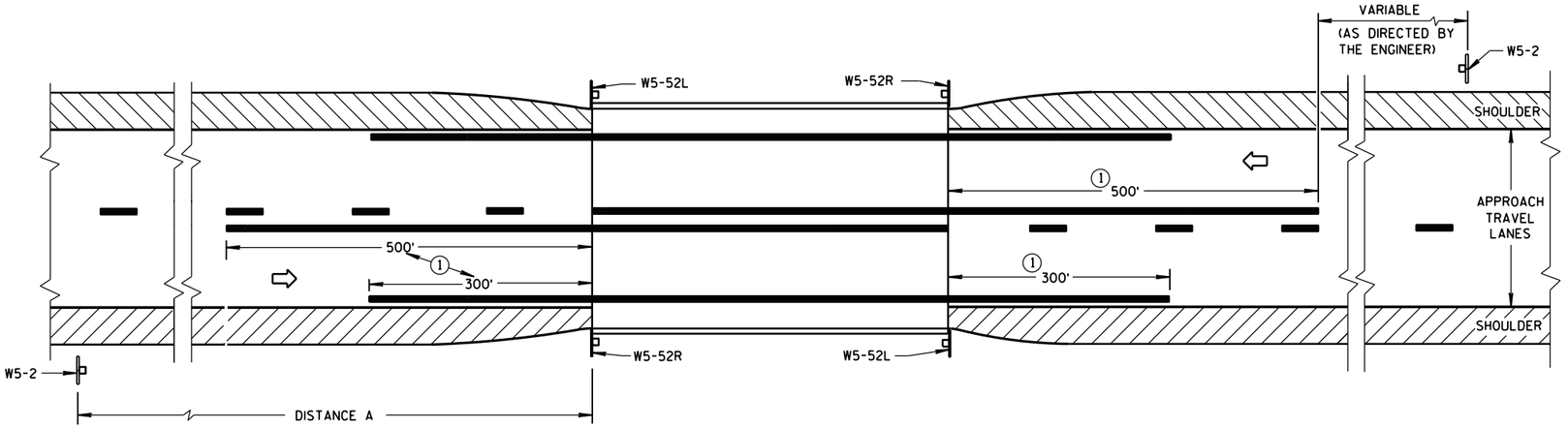
FIC

6

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

6

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



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.

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

(1) MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.

(2) FACE OF OBJECT MARKERS W5-52R, AND W5-52L SHALL BE COVERED WITH TYPE F REFLECTIVE SHEETING.

(3) LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.

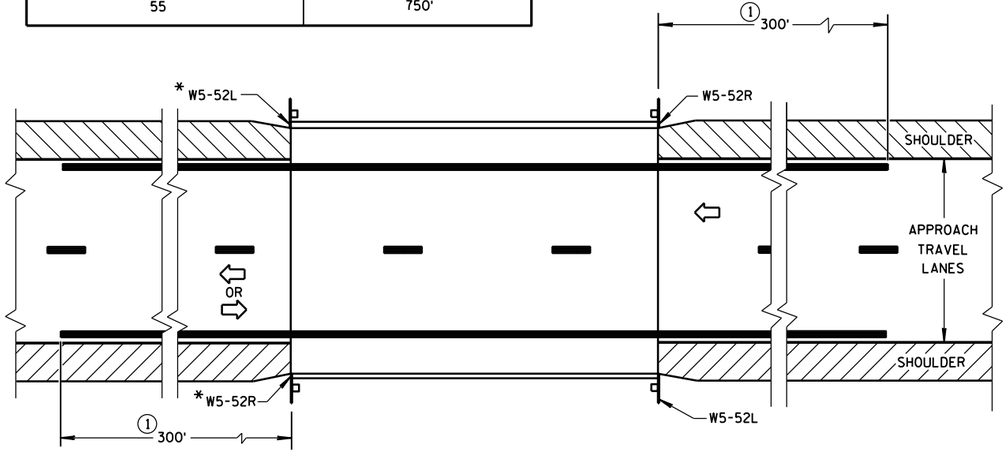
DISTANCE TABLE

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

SITUATION 1

WARRANTING CRITERIA:

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

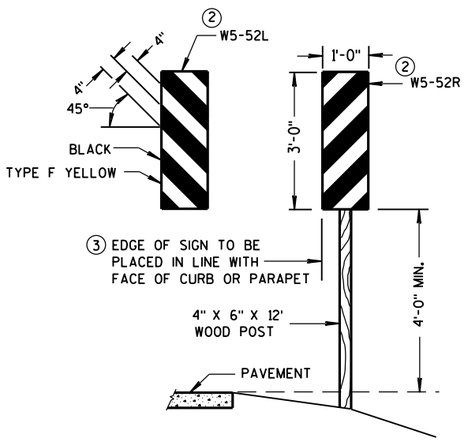


*OMIT ON ONE-WAY TRAVELLED WAYS

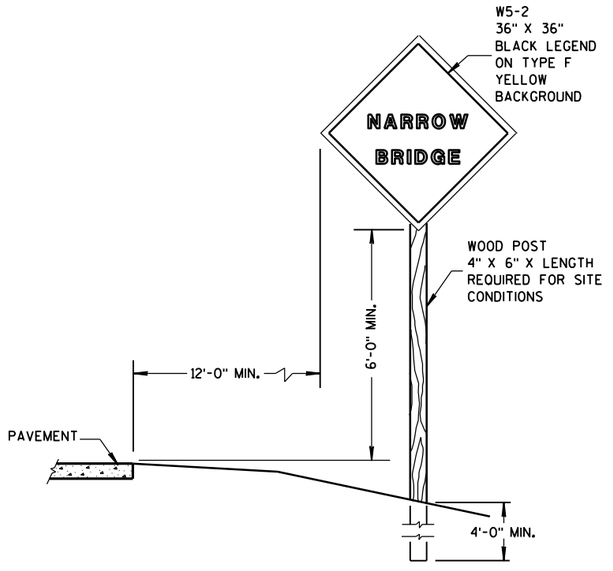
SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE IS LESS THAN 6 FEET WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.



OBJECT MARKER PLACEMENT



SIGN PLACEMENT

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

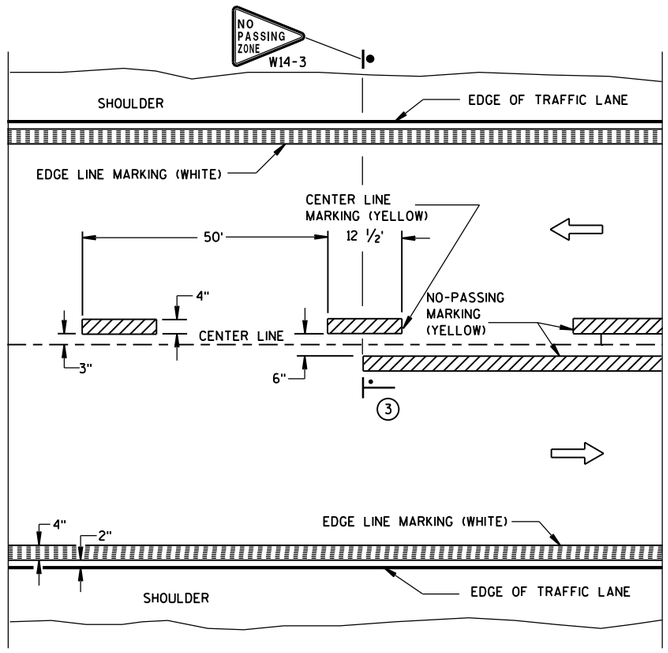
3-2014 DATE

/S/ Travis Feltes STATE TRAFFIC ENGINEER

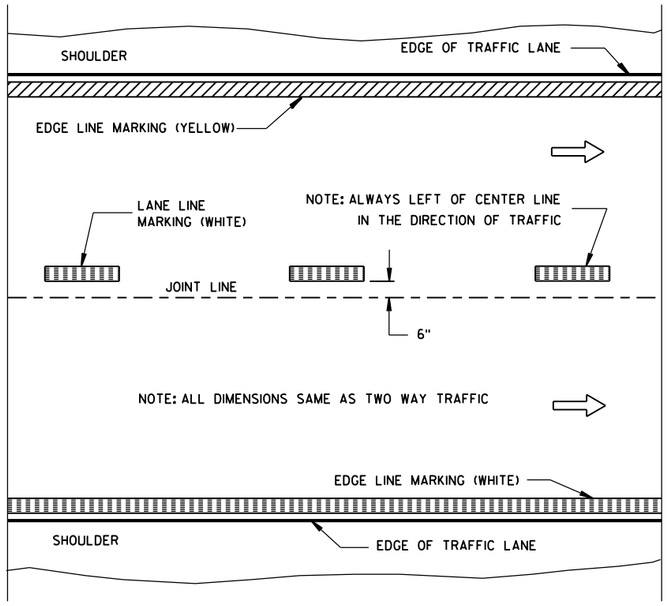
FHWA

6

S.D.D. 15 C 6-7

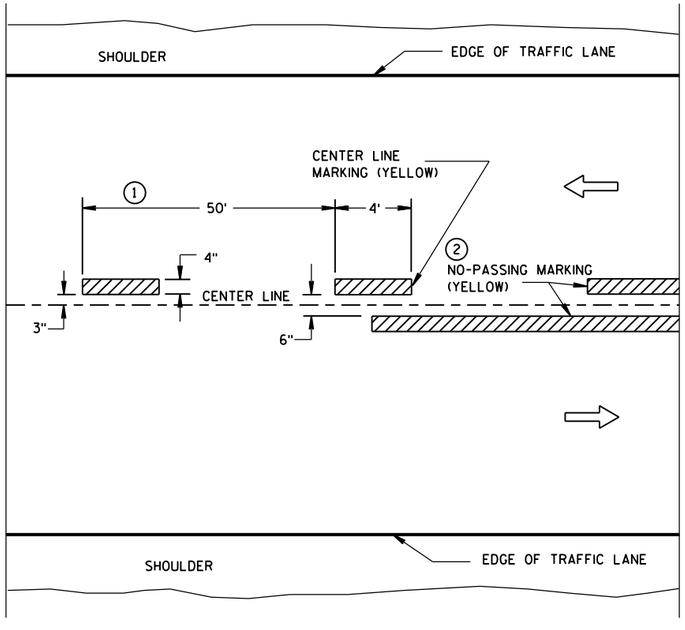


TWO WAY TRAFFIC

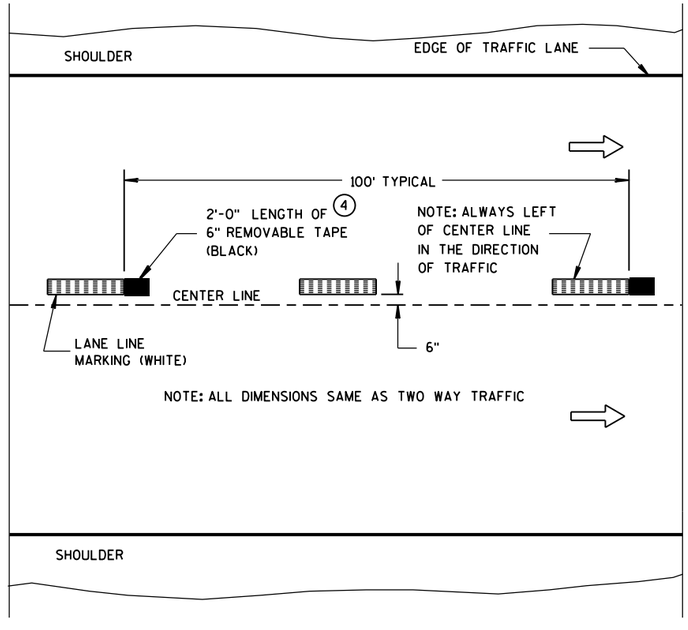


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

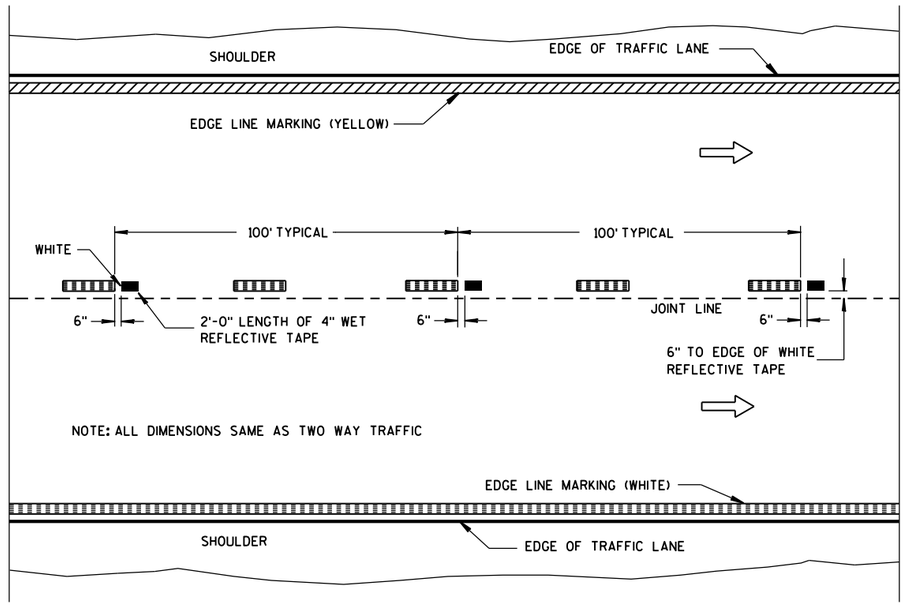
GENERAL NOTES

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

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

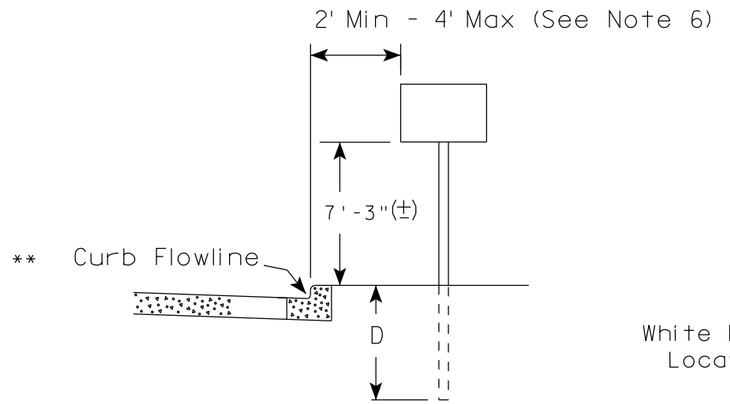
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

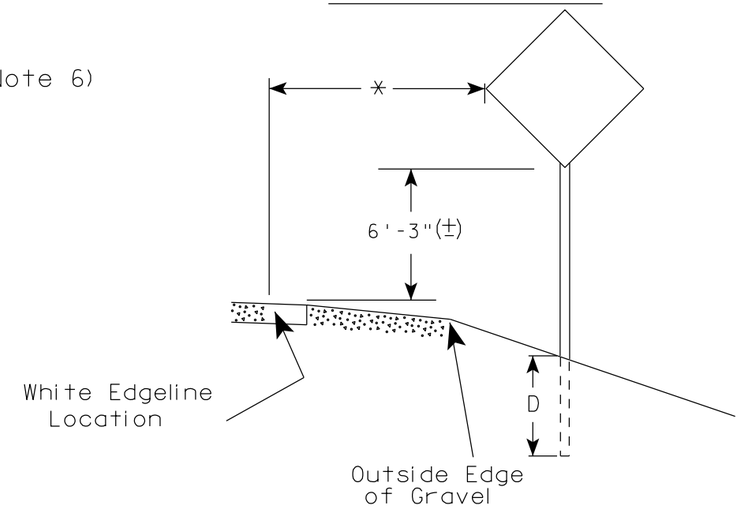
6

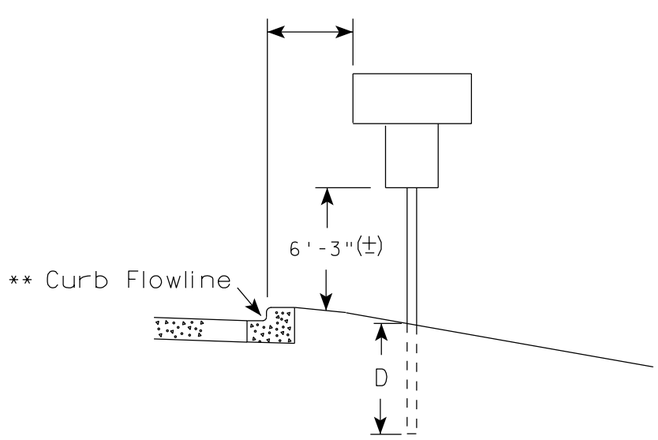
S.D.D. 15 C 8-16a

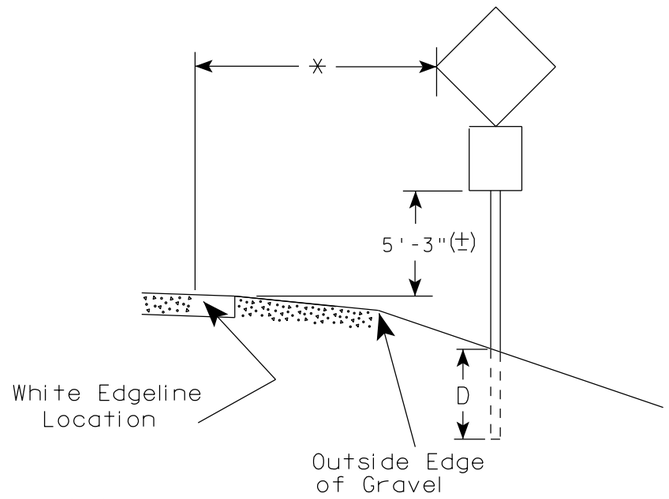
URBAN AREA



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 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" (±).

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

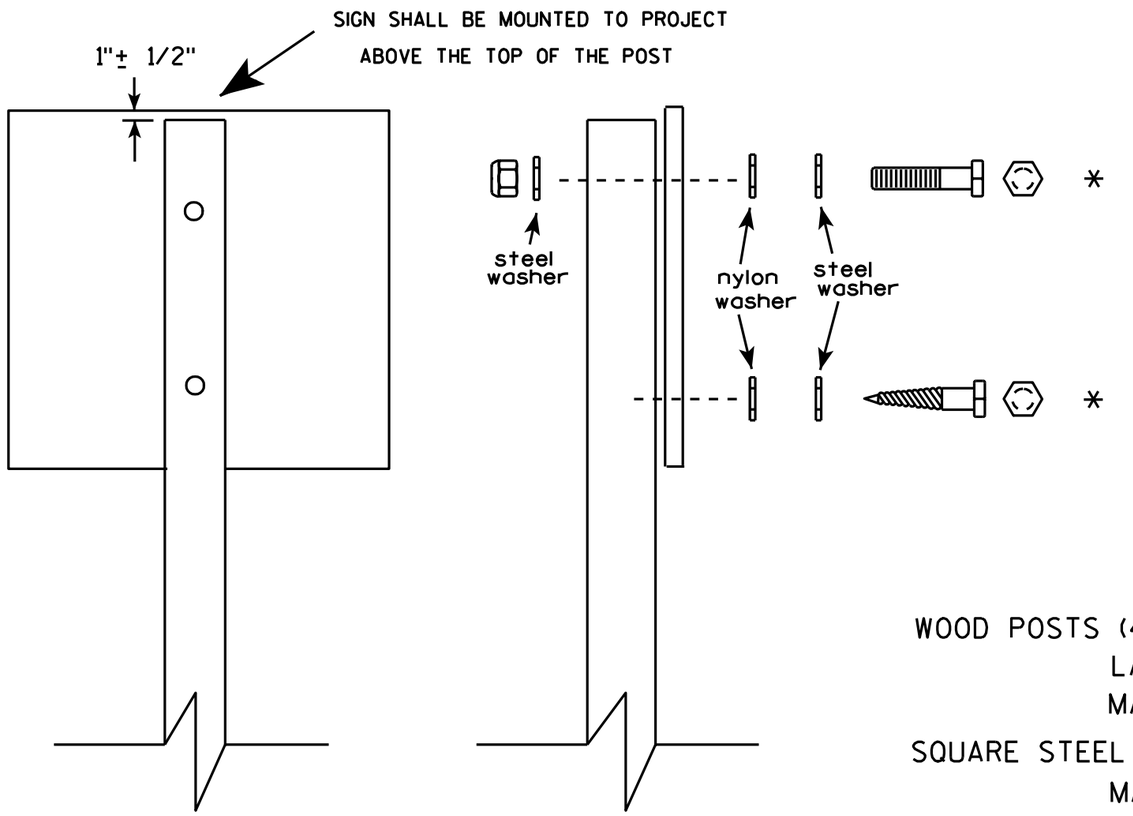
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

PROJECT NO: 6882-01-70	HWY: CTH J	COUNTY: WAUPACA	SIGN PLATES	SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A43.DGN PLOT DATE : 23-JUL-2015 15:21 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 99.237937:1.000000
WISDOT/CADDS SHEET 42



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

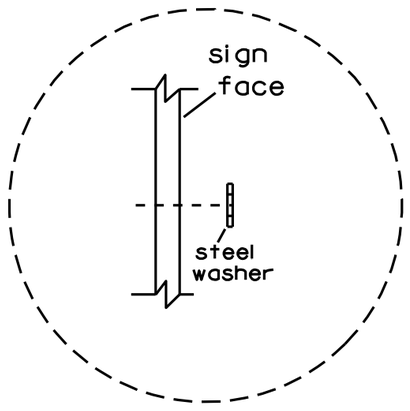
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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.

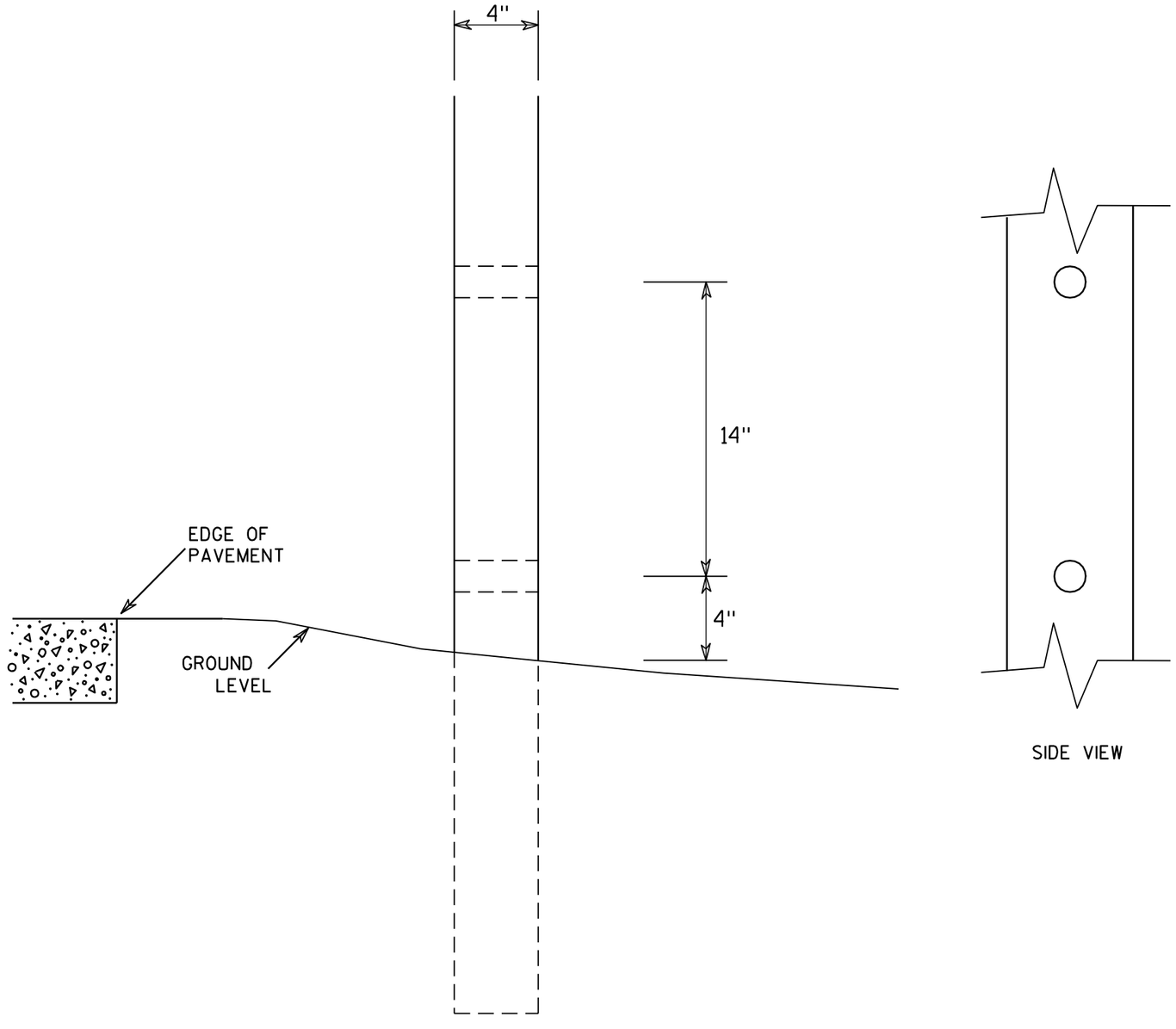
ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: 6882-01-70	HWY: CTH J	COUNTY: WAUPACA	SIGN PLATES	SHEET NO: 24	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.

7

7

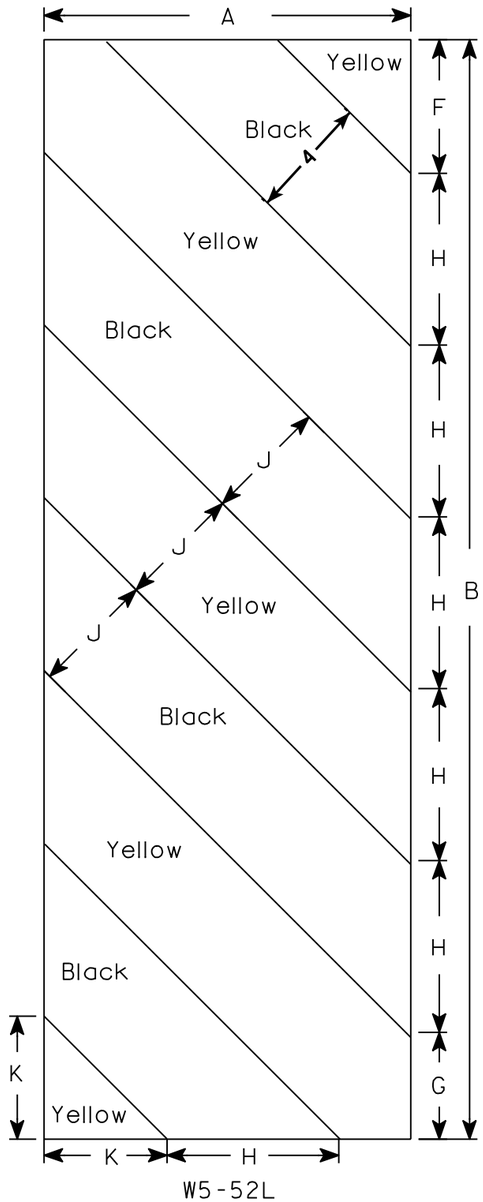
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

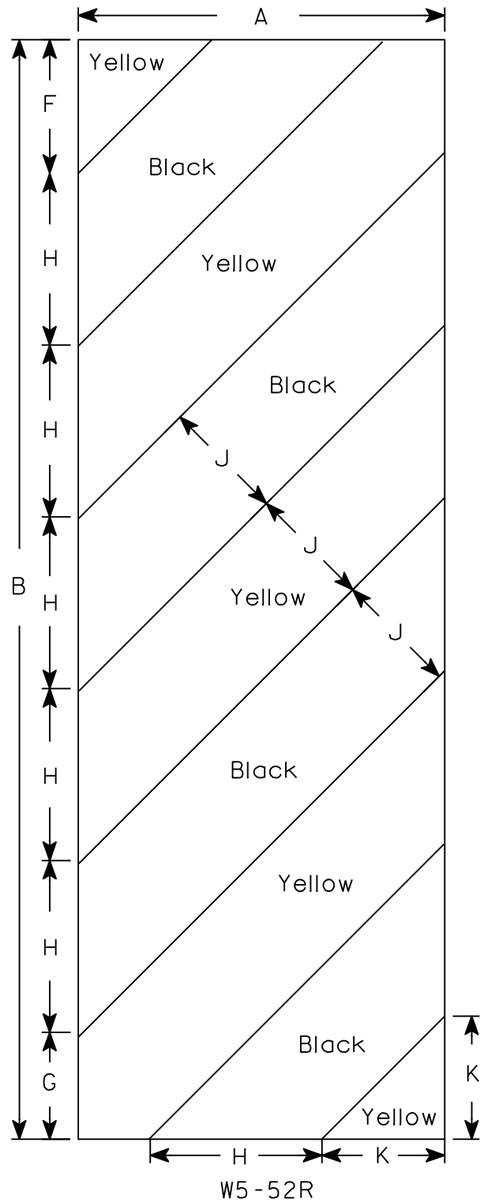
APPROVED Chester J Spang
for State Traffic Engineer

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

PROJECT NO: 6882-01-70	HWY: CTH J	COUNTY: WAUPACA	SIGN PLATES	SHEET NO: 25	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

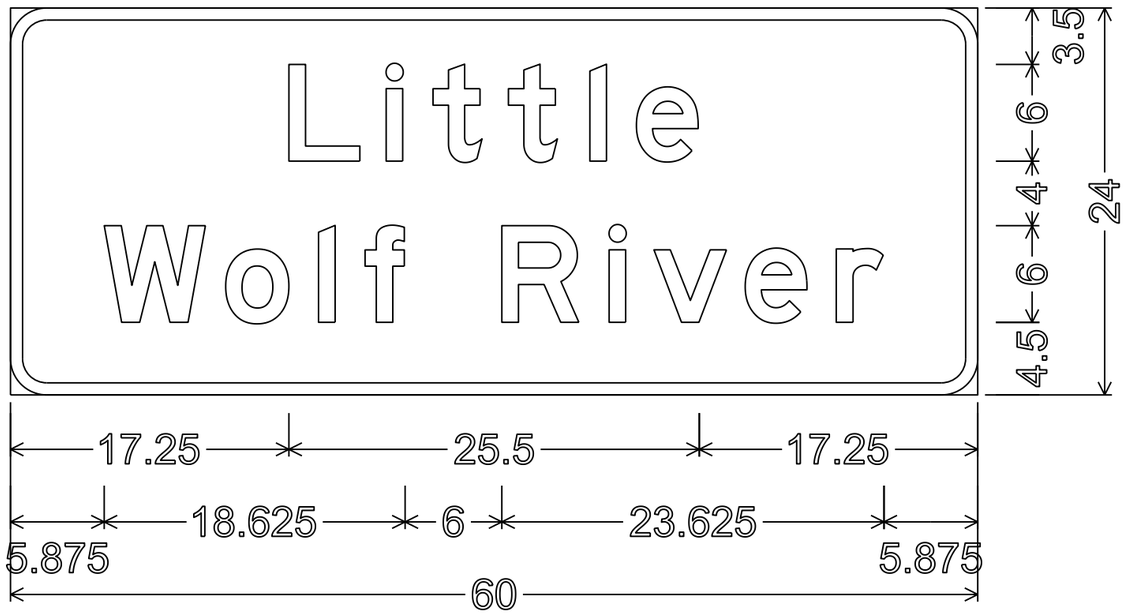
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: 6882-01-70	HWY: CTH J	COUNTY: WAUPACA	SIGN PLATES	SHEET NO: 26	E

NOTES

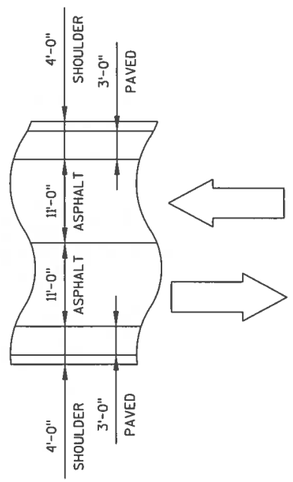
1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E

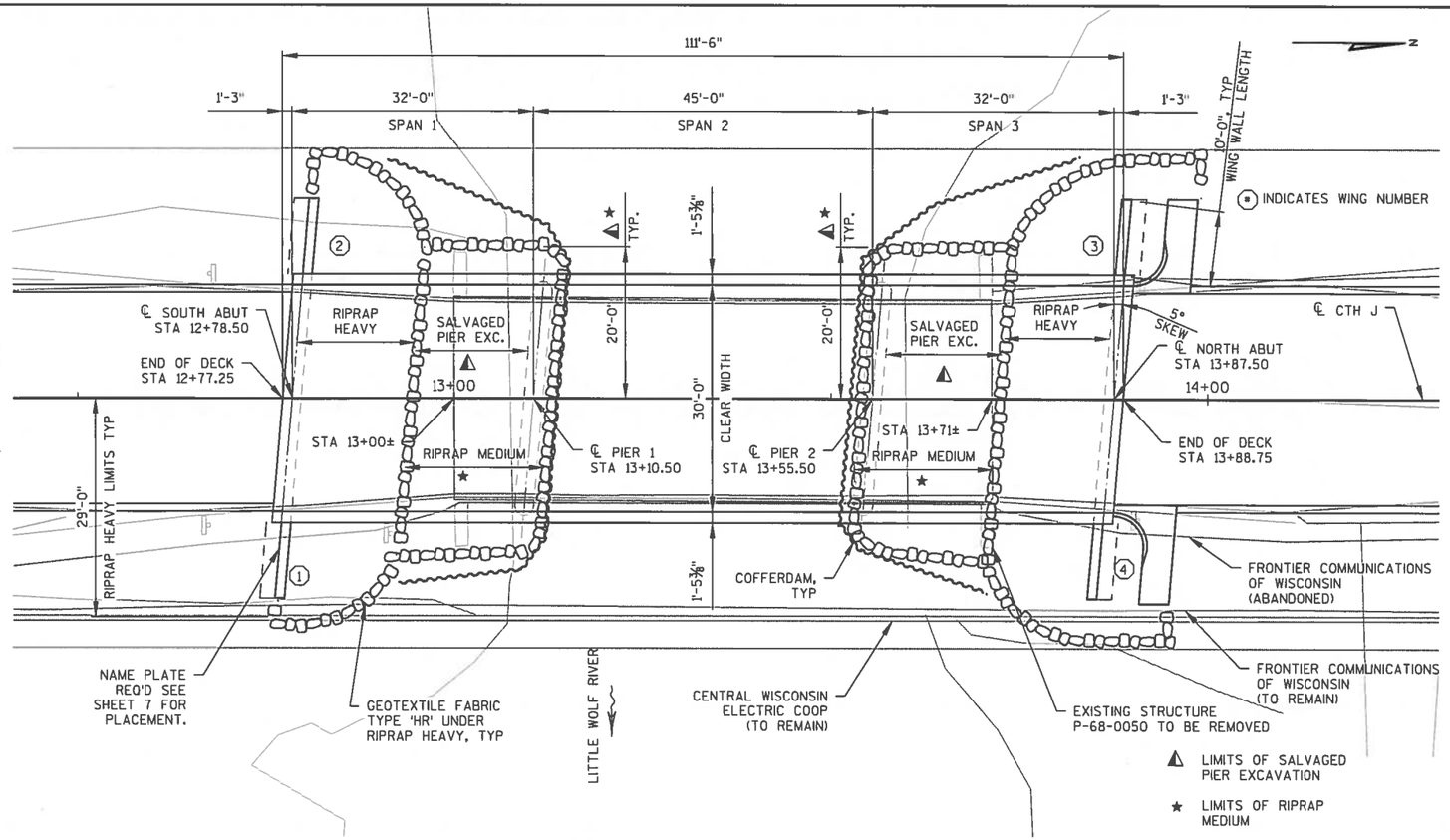


I3-1;

2.250" Radius, 0.750" Border

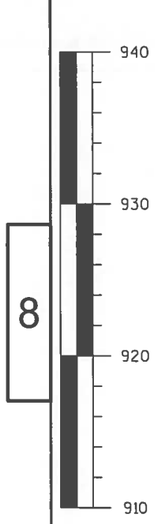
PROJECT NO: 6882-01-00	HWY: CTH J	COUNTY: WAUPACA	PERMANENT SIGNING	SHEET NO:	E

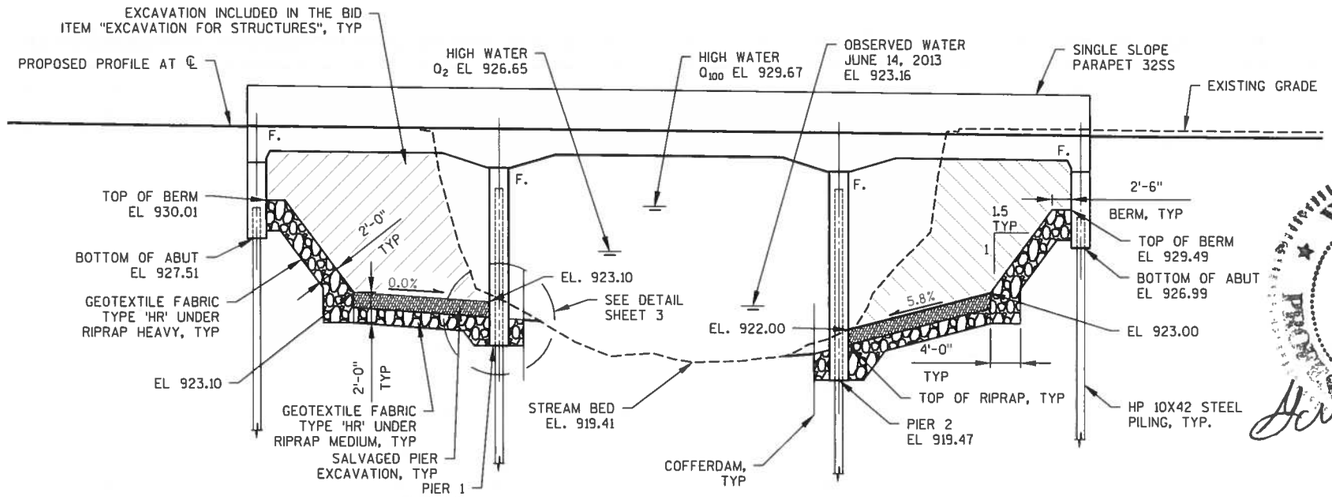




PLAN B-68-138

(THREE-SPAN REINFORCED CONCRETE HAUNCHED SLAB BRIDGE)





ELEVATION

(NORMAL TO ℄ OF STREAM)

DESIGN DATA:

DESIGN LOADING	HL-93
INVENTORY RATING FACTOR	1.28
OPERATING RATING FACTOR	1.65
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV)	250 KIPS

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

MATERIAL PROPERTIES:

CONCRETE MASONRY, SUPERSTRUCTURE	f'c = 4000 psi
ALL OTHER	f'c = 3500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 psi

TRAFFIC DATA:

ADT (2016) = 170

ADT (2036) = 250

DESIGN SPEED = 40 MPH

FOUNDATION DATA:

ABUTMENTS AND PIERS SUPPORTED ON HP 10-INCH X 42 LB STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 100* TONS PER PILE AT THE ABUTMENTS AND 180* TONS PER PILE AT THE PIERS AS REQUIRED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 25' LONG AT THE SOUTH ABUTMENT, 25' LONG AT THE NORTH ABUTMENT, AND 25' LONG AT THE PIERS. PILE POINTS REQUIRED. PIER PILES SHALL BE DRIVEN TO A MINIMUM PILE TIP ELEVATION OF 907.0.

* 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 DYNAMIC EQUATION TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA:

100 YEAR FREQUENCY

Q_{100}	3100 cfs
STREAM VELOCITY	4.87 fps
HIGH WATER	EL. 929.67
WATERWAY AREA	631 ft²
DRAINAGE AREA	179.5 mi²
SCOUR CRITICAL CODE	5
OVERTOPPING FREQUENCY	N/A

2 YEAR FREQUENCY

Q_2	1150 cfs
HIGH WATER	EL. 926.65

LIST OF DRAWINGS

SEE SHEET 2 FOR COMPLETE LIST OF DRAWINGS

STATE PROJECT NUMBER

6882-01-70

WISCONSIN GARY A. RUCHTI E-30936 MADISON WI PROFESSIONAL ENGINEER

5-10-16

BRIDGE OFFICE CONTACT
WILLIAM DREHER, P.E.
TELEPHONE: (608) 266-8489

CONSULTANT CONTACT
GARY RUCHTI, P.E.
TELEPHONE: (608) 273-6380

NO.	DATE	REVISION	BY

Mead & Hunt, Inc.
2440 Deming Way
Middleton, WI 53562
608.273.6380
www.meadhunt.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 05/11/16
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-68-138

CTH J OVER LITTLE WOLF RIVER

COUNTY: WAUPACA	TOWN/~~CITY/VILLAGE~~: WYOMING
DESIGN SPEC.: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS	
DESIGNED BY: RCP	DESIGN CK'D.: MKG
DRAWN BY: JAK	PLANS CK'D.: GAR

GENERAL PLAN

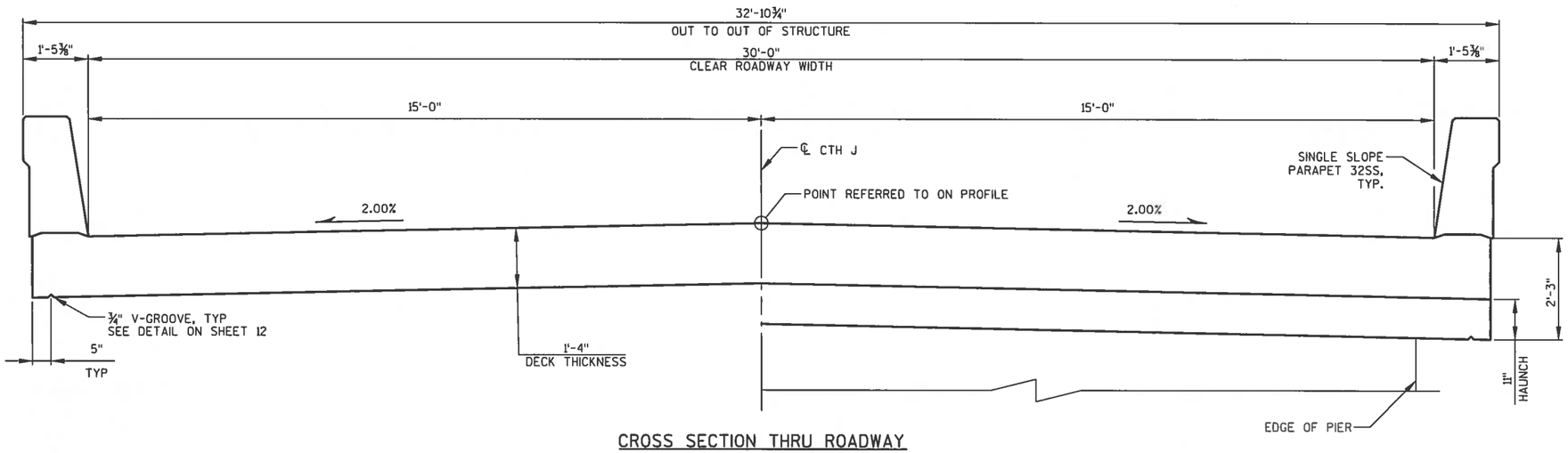
SHEET 1 OF 14
28

8

8

STATE PROJECT NUMBER

6882-01-70



CROSS SECTION THRU ROADWAY

(LOOKING NORTH)

GENERAL NOTES

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.

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

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

AT THE BACKFACE OF ABUTMENT ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL

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

PROTECTIVE SURFACE TREATMENT AND PIGMENTED SURFACE SEALER IS TO BE APPLIED TO THE LIMITS SHOWN IN THE DETAIL ON THIS SHEET.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

THE EXISTING STRUCTURE, TO BE REMOVED, IS A 71.5-FOOT LONG SINGLE-SPAN STEEL GIRDER BRIDGE, WITH A 26.2-FOOT CLEAR BRIDGE WIDTH (P-68-0050).

THE EXISTING GROUNDLINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT PIERS.

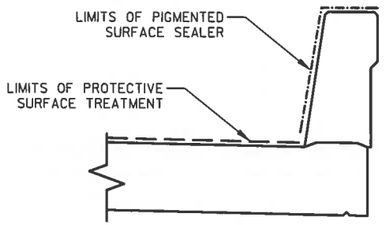
⚠ COFFERDAMS MUST BE DEWATERED BEFORE CONCRETE PLACEMENT. COFFERDAM TO BE CONSTRUCTED OF INTERLOCKING STEEL SHEET PILING.

■ REMOVAL OF ROCK AND BOULDER REQUIRED AT SOUTH ABUTMENT PRIOR TO PILE DRIVING. SEE STRUCTURE BACKFILL AND PIPE UNDERDRAIN DETAIL ON SHEET 3 FOR EXCAVATION AND BACKFILL LIMITS.

PLACE RIPRAP HEAVY BETWEEN EXCAVATED PIER AND EDGE OF COFFERDAM/EXCAVATION LIMIT. SEE DETAIL ON SHEET 3.

BENCH MARKS ★

NO.	STATION	DESCRIPTION	ELEV.
BM#1	13+01.7	CHISELED "X" IN SE WINGWALL	934.54
BM#2	17+58.9	RAILROAD SPIKE IN POWER POLE	923.62



PROTECTIVE SURFACE TREATMENT LIMITS

(TYPICAL BOTH EDGES OF DECK)

WISCONSIN
GARY A. RUCHTI
E-30936
MADISON
WI
PROFESSIONAL ENGINEER

5-10-16

TOTAL ESTIMATED QUANTITIES

	BID ITEM NO.	BID ITEMS	UNIT	N ABUT	S ABUT	PIER 1	PIER 2	SUPER	TOTALS
	203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS, STA 13+35.5	LS	---	---	---	---	---	1
	206.1000	EXCAVATION FOR STRUCTURES, BRIDGES B-68-138	LS	---	---	---	---	---	1
⚠	206.5000	COFFERDAMS B-68-138	LS	---	---	---	---	---	1
	210.0100	BACKFILL STRUCTURE	CY	110	170	---	---	---	280
	502.0100	CONCRETE MASONRY BRIDGE	CY	26	26	31	36	231	350
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	---	---	---	---	372	372
	502.3210	PIGMENTED SURFACE SEALER	SY	---	---	---	---	91	91
	505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1840	1840	1560	1700	---	6940
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	660	660	---	---	55000	56320
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	7	7	---	---	---	14
	550.0500	PILE POINTS	EACH	5	5	7	7	---	24
	550.1100	PILING STEEL HP 10-INCH X 42LB	LF	125	125	175	175	---	600
	606.0200	RIPRAP MEDIUM	CY	40	40	---	---	---	80
	606.0300	RIPRAP HEAVY	CY	75	70	---	---	---	145
	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	63	63	---	---	---	126
	645.0120	GEOTEXTILE FABRIC TYPE 'HR'	SY	235	230	---	---	---	465
■	SPV.0035.01	EXCAVATION BOULDERS	CY	---	90	---	---	---	90
■	SPV.0035.02	BACKFILL BOULDER EXCAVATION	CY	---	110	---	---	---	110
	SPV.0180.01	SALVAGED PIER EXCAVATION	SY	70	70	---	---	---	140
		NON BID ITEMS							
		FILLER	SIZE						1/2" & 3/4"

*NOTE: ALL ITEMS ARE IN CATEGORY 0020 UNLESS OTHERWISE NOTED.

LIST OF DRAWINGS:

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-68-138

DRAWN BY JAK | PLANS CK'D. GAR

CROSS SECTION GENERAL NOTES AND QUANTITIES

SHEET 2 OF 14

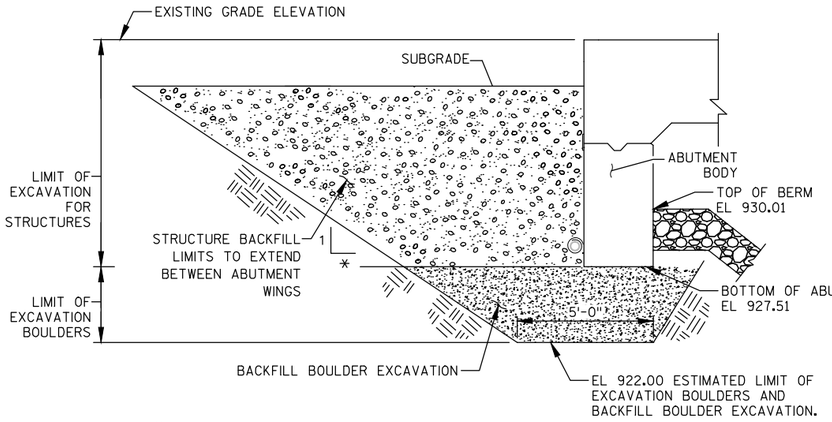
8

8

FILE NAME : X:±23147-00±130592.01±TECH±CAD±6882010O±DESIGN±STRUCTURE±080102_TS.DWG PLOT DATE : 5/10/2016 PLOT BY : JASON KLEIST PLOT SCALE : 1" = 1'

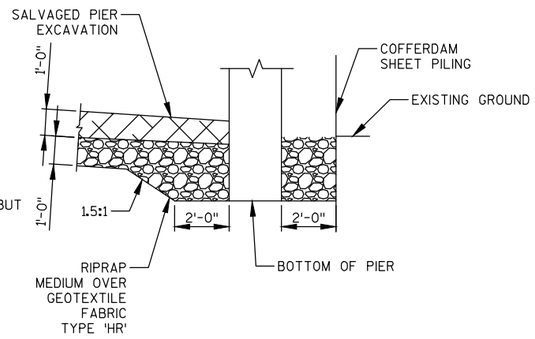
STATE PROJECT NUMBER

6882-01-70



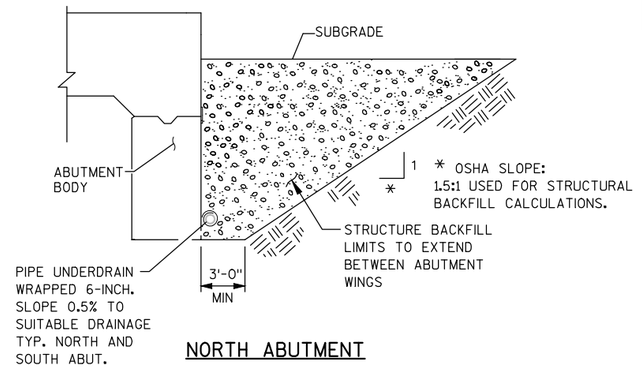
* OSHA SLOPE: 1.5:1 USED FOR STRUCTURAL BACKFILL CALCULATIONS.

SOUTH ABUTMENT



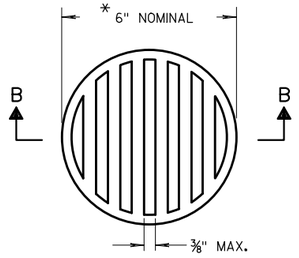
PIERS

(TYPICAL FOR PIERS 1 & 2)



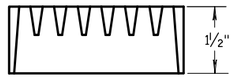
NORTH ABUTMENT

STRUCTURE BACKFILL & PIPE UNDERDRAIN DETAIL



② RODENT SHIELD

NOTE: ORIENT SHIELD SO SLOTS ARE VERTICAL.



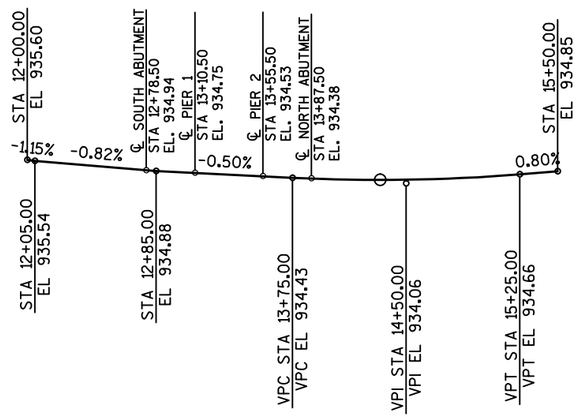
SECTION B-B

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

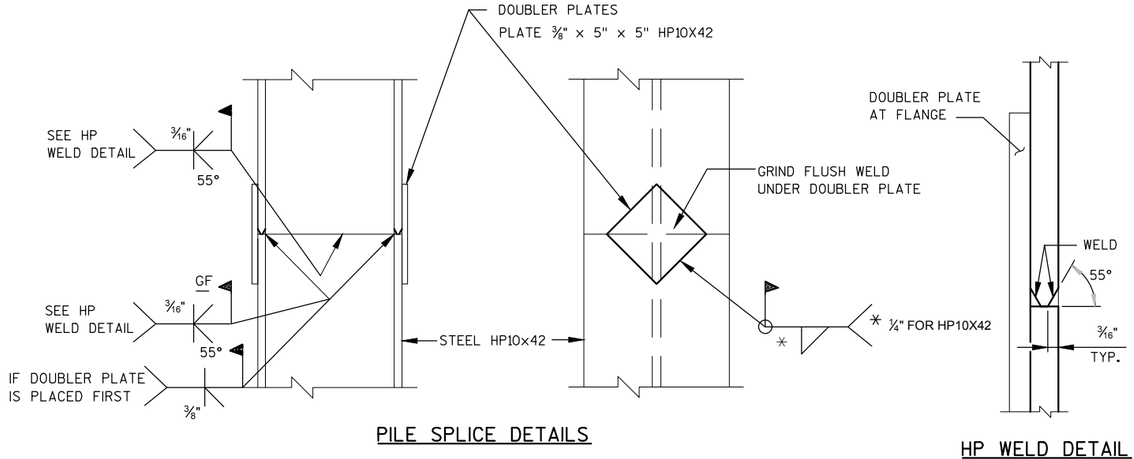
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS. THE RODENT SHIELD SHALL BE INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

VCL = 150.00

K = 115.72



PROFILE GRADE LINE, ℄ CTH J



PILE SPLICE DETAILS

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-68-138

DRAWN BY JAK | PLANS CK'D. GAR

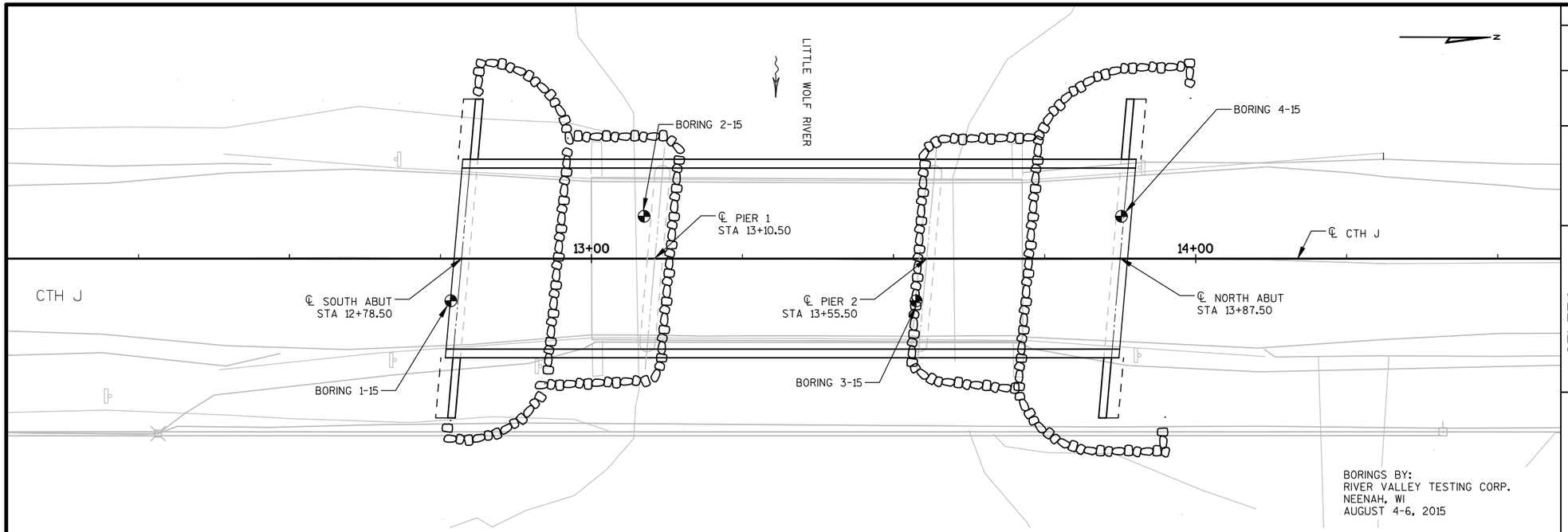
GENERAL DETAILS

SHEET 3 OF 14

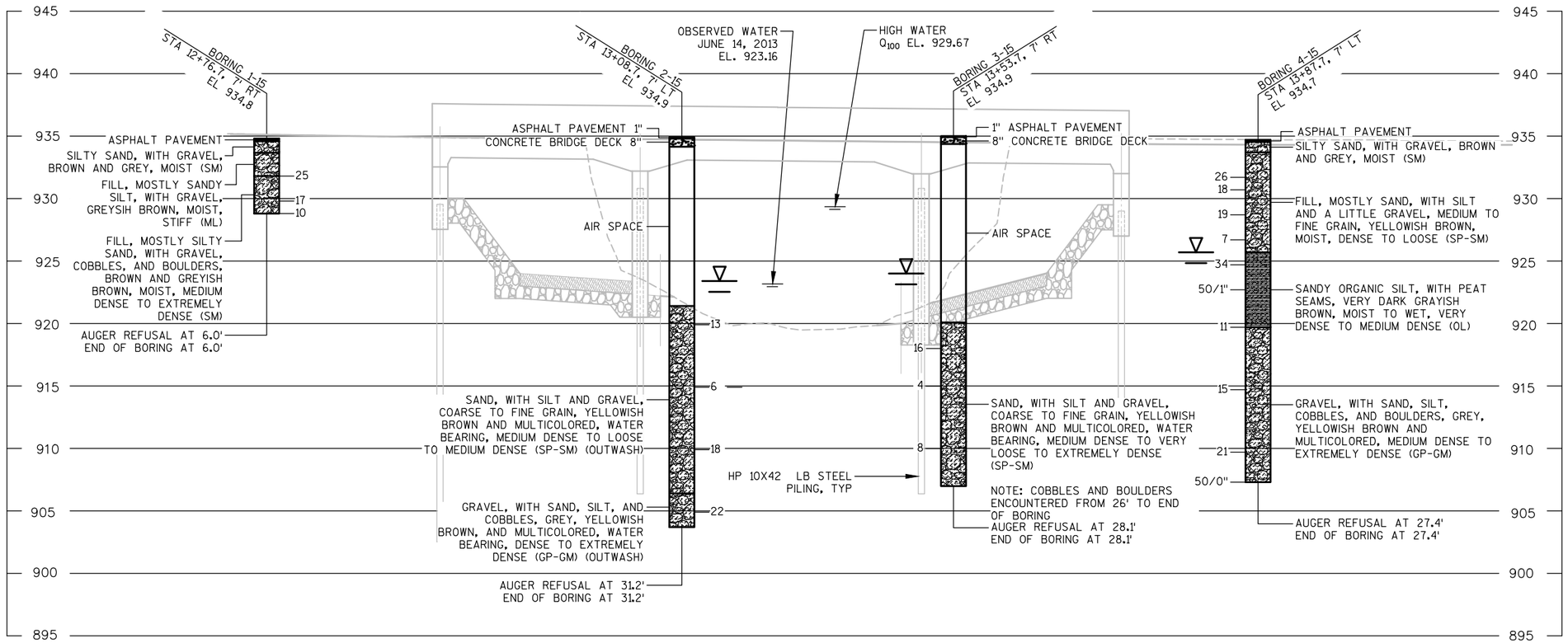
30

8

8



BORINGS BY:
RIVER VALLEY TESTING CORP.
NEENAH, WI
AUGUST 4-6, 2015



STATE PROJECT NUMBER

6882-01-70

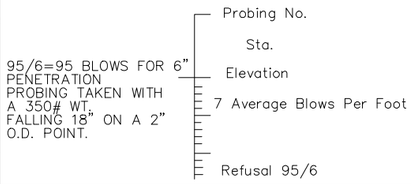
ABBREVIATIONS

F— Fine M—Medium C— Coarse
Ws— Weathered So —Sound

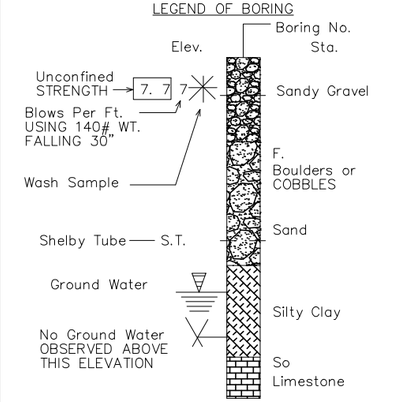
MATERIAL SYMBOLS

Asphalt, Silt, Sand, Concrete, Organic Soil, Air, Gravel, Clay, Water

LEGEND OF PROBING



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-68-138

DRAWN BY JAK | PLANS CK'D. GAR

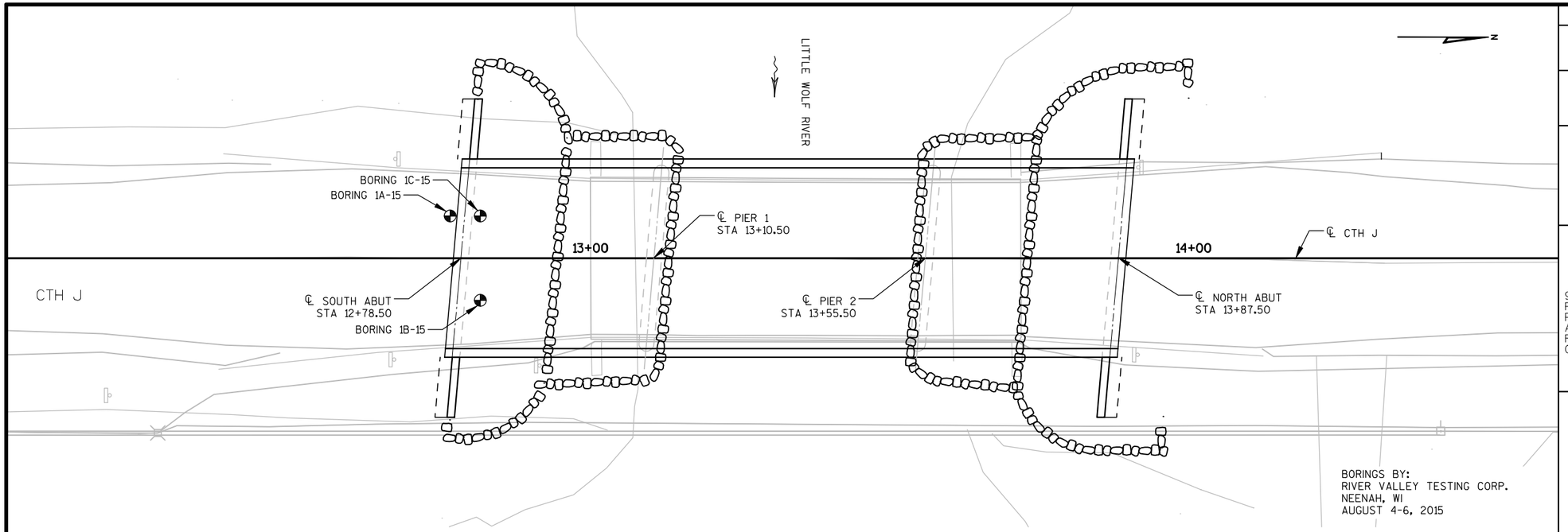
SUBSURFACE EXPLORATION

SHEET 4 OF 14
31

8

8

FILE NAME : X:±23147-00±130592.01±TECH±CAD±68820100±DESIGN±STRUCTURE±080104_SE.DWG PLOT DATE : 5/10/2016 PLOT BY : JASON KLEIST PLOT SCALE : 1:1



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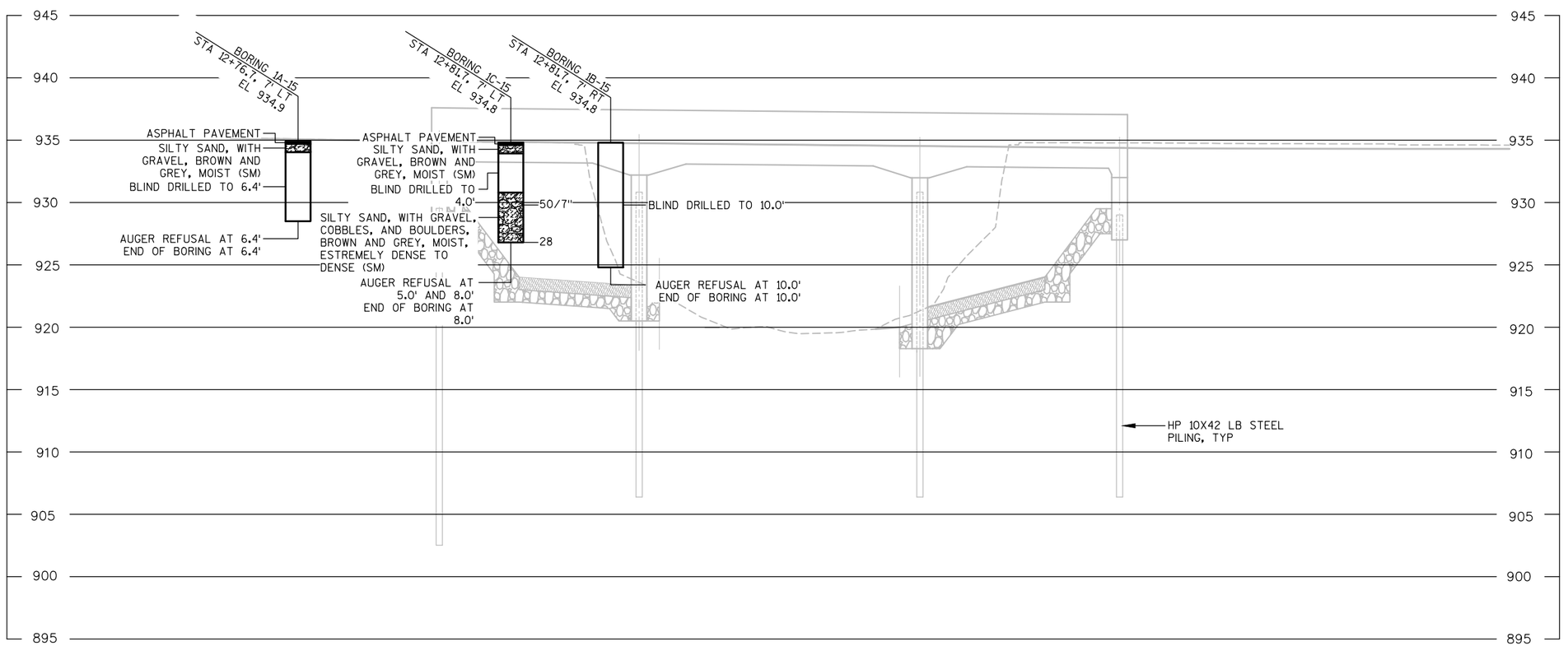

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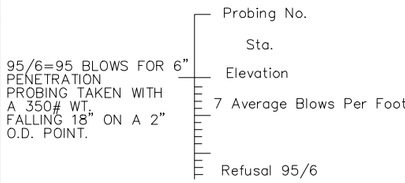
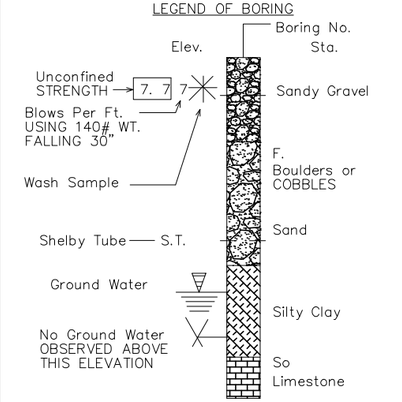


LEGEND OF BORING



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-68-138

DRAWN BY JAK | PLANS CK'D. GAR

SUBSURFACE EXPLORATION – 2

SHEET 5 OF 14
32

8

8

STATE PROJECT NUMBER
6882-01-70

NOTES

FOR PILE SPLICE SEE SHEET 3

FILL/EXCAVATE TO BOTTOM OF ABUTMENT EL 927.51 BEFORE DRIVING PILING.

SEE SHEET 3 FOR STRUCTURE BACKFILL AND PIPE UNDERDRAIN DETAIL.

ABUTMENT SUPPORTED ON HP 10-INCH X 42 LB STEEL PILING WITH REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 25' LONG. PILE POINTS REQUIRED.

[1] A506 BARS MAY BE PLACED AFTER CONCRETE IS POURED, BUT BEFORE INITIAL SETTING HAS TAKEN PLACE.

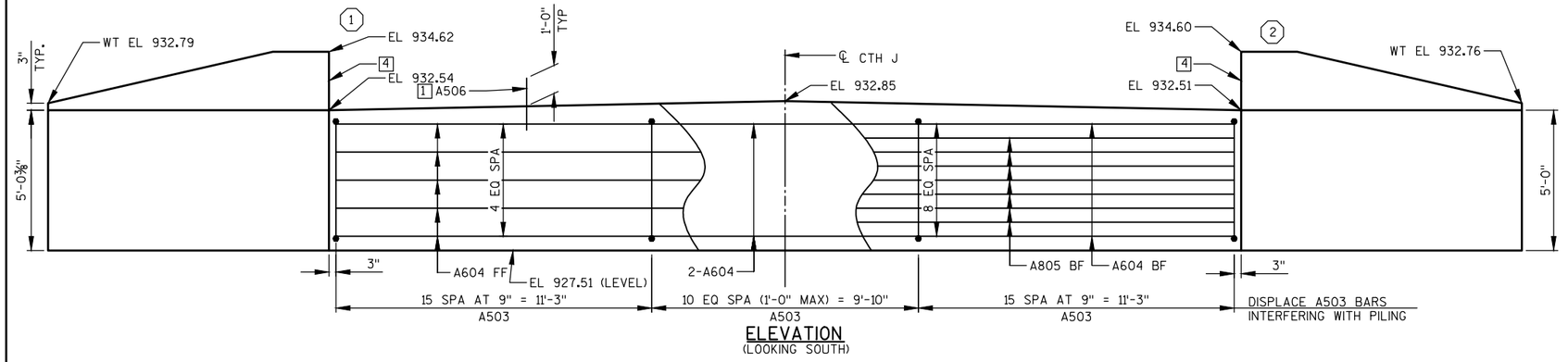
[2] 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE. EXTEND FROM BRIDGE SEAT TO TOP OF WING.

[3] KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" KEYWAY. TERMINATE 1'-0" FROM ABUTMENT ENDS.

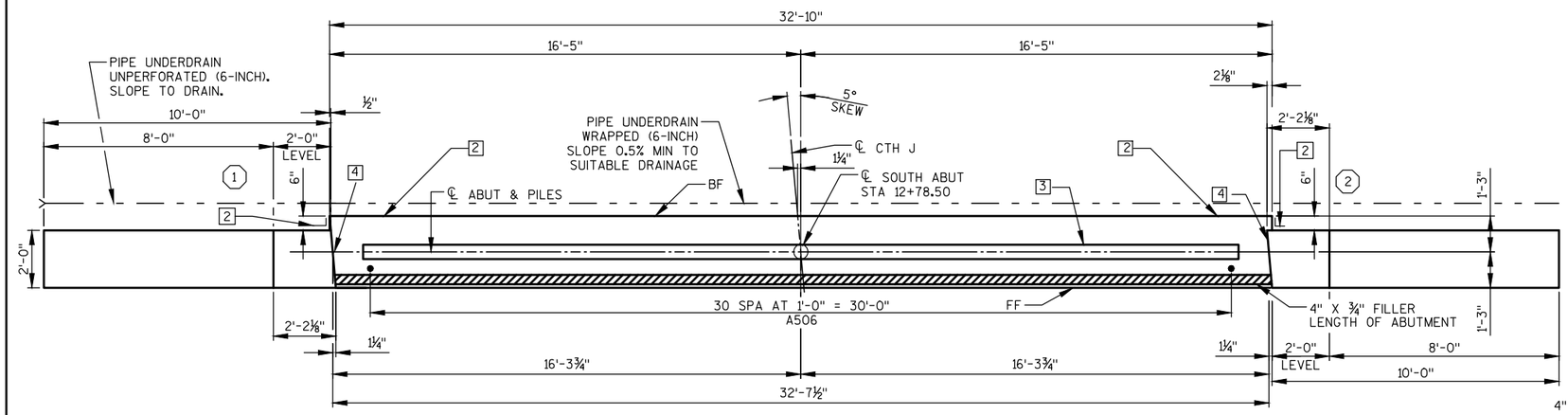
[4] ½" FILLER - TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. FILLER INCLUDED IN WING LENGTH. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

FF - FRONT FACE
BF - BACK FACE
WT - WING TIP

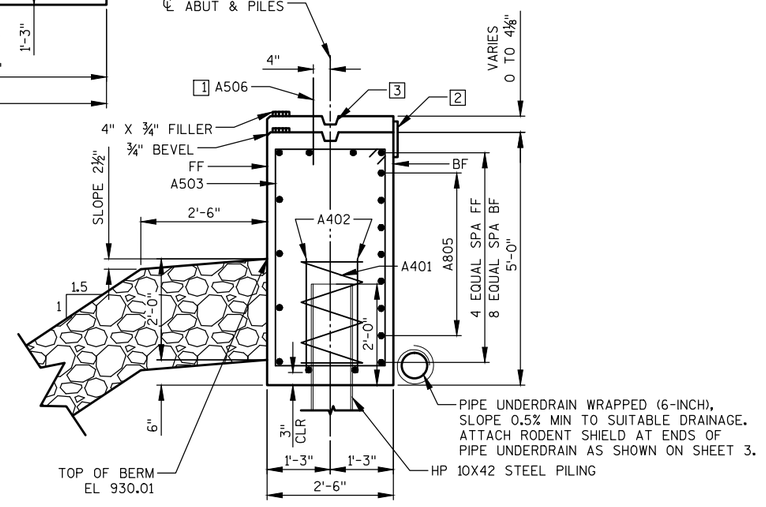
(#) INDICATES WING NUMBER



ELEVATION
(LOOKING SOUTH)

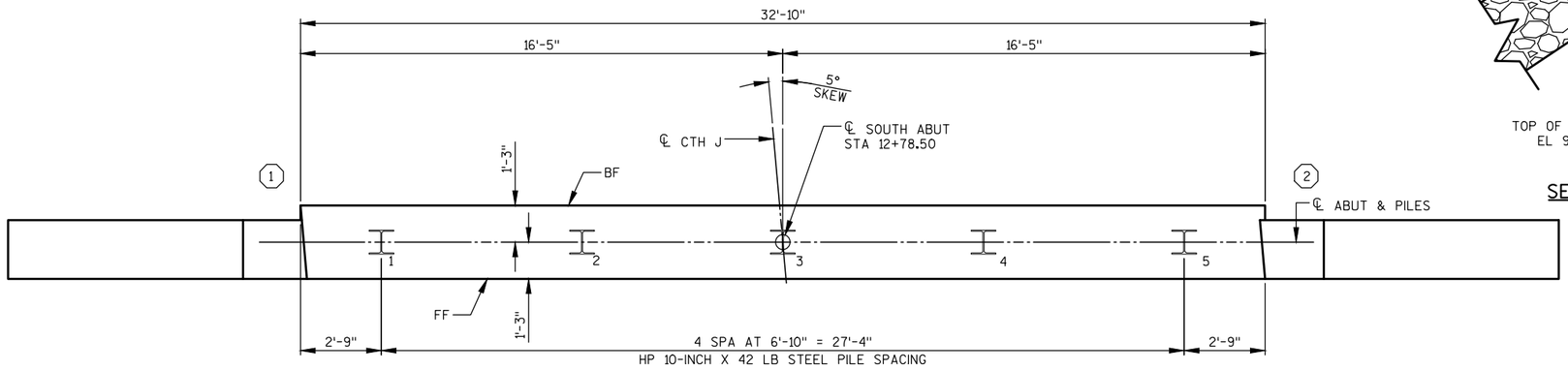


PLAN



SECTION THRU ABUTMENT BODY

ALL HORIZONTAL BARS NOT LABELED ARE A604 BARS.



PILE PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-68-138

DRAWN BY	JAK	PLANS CK'D.	GAR

SOUTH ABUTMENT

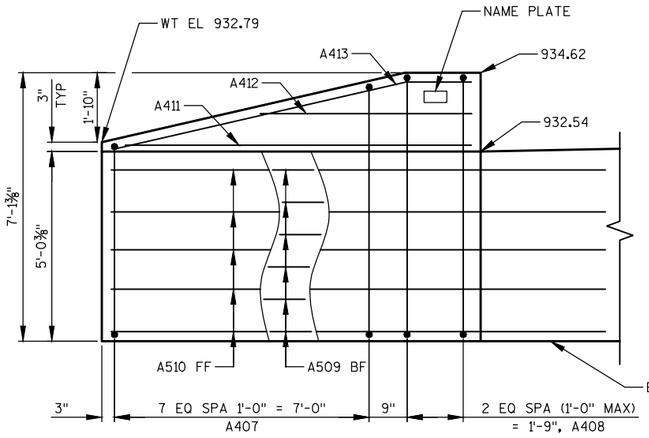
SHEET 6 OF 14
33

8

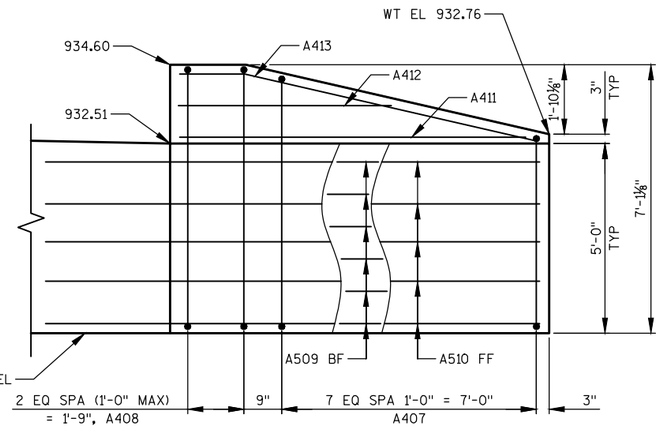
FILE NAME : X:±23147-00±130592.01±TECH±CAD±68820100±DESIGN±STRUCTURE±080106_SA.DWG PLOT DATE : 5/10/2016 PLOT BY : JASON KLEIST PLOT SCALE : 1" = 1'

STATE PROJECT NUMBER

6882-01-70



WING 1 ELEVATION



WING 2 ELEVATION

BILL OF BARS
SOUTH ABUTMENT

COATED= 660 LBS.
UNCOATED= 1840 LBS.

MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH FT - IN	BENT	BAR SERIES	LOCATION	
A401		5	28 - 0	X		ABUTMENT BODY - 1 PER PILE	SPIRAL
A402		10	2 - 3			ABUTMENT BODY - 2 PER PILE	VERT
A503		41	13 - 8	X		ABUTMENT BODY - STIRRUPS	VERT
A604		11	32 - 6			ABUTMENT BODY - FF, TOP, BTM	HORIZ
A805		7	32 6			ABUTMENT BODY - BF	HORIZ
A506	31		2 - 0			ABUTMENT BODY - DOWELS	VERT
◪ A407	32		8 - 5	X	X	WING WALL - BODY	VERT
A408	12		9 - 5	X		WING WALL - BODY	VERT
A509	12		11 - 9			WING WALL - BF OF BODY	HORIZ
A510	10		11 - 9			WING WALL - FF BODY	HORIZ
A411	4		9 - 6			WING WALL - TOP	HORIZ
A412	4		5 - 6			WING WALL - TOP	HORIZ
A413	4		9 - 8	X		WING WALL - TOP	HORIZ
			-				

FF - FRONT FACE
BF - BACK FACE

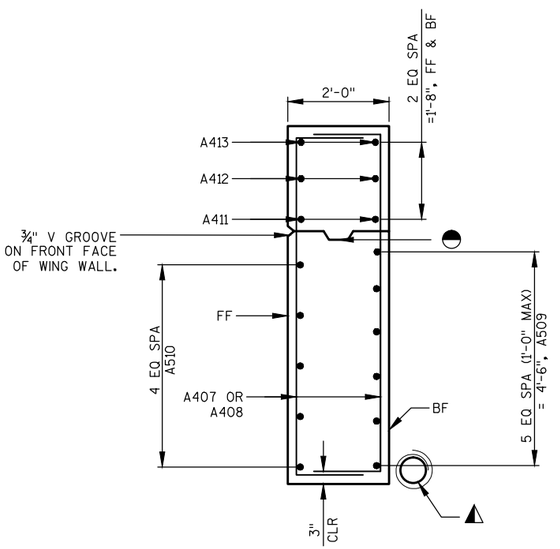
BAR DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BARS.

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

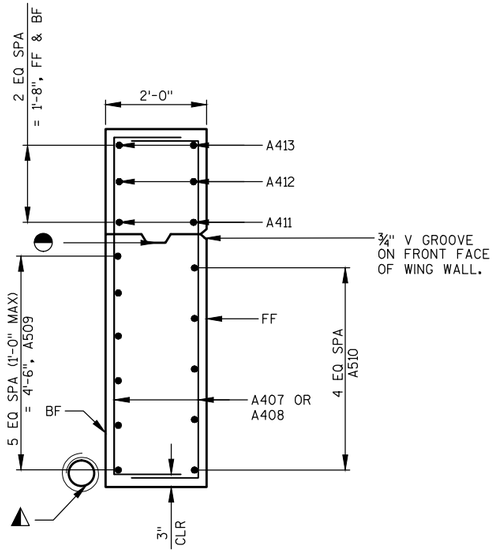
◓ OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" KEYWAY, WITH MEMBRANE ON BACK FACE. RUBERIZED MEMBRANE WATERPROOFING IF CONSTRUCTION JOINT IS USED (COST INCIDENTAL TO BIT ITEM "CONCRETE MASONRY BRIDGES")

◭ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN TO SUITABLE DRAINAGE.

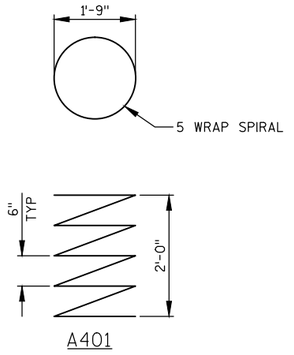
◪ LENGTH SHOWN IS AN AVERAGE LENGTH FOR USE IN CALCULATING BAR WEIGHT ONLY. SEE BAR SERIES TABLES FOR ACTUAL LENGTH.



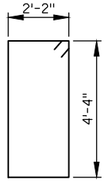
WING 1 SECTION



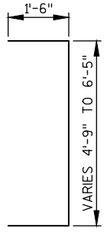
WING 2 SECTION



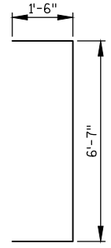
A401



A503



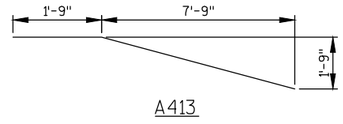
A407



A408

BAR SERIES TABLE ◪

MARK	NO. REQUIRED	LENGTH
A407	4 SERIES OF 8	7'-7" TO 9'-3"



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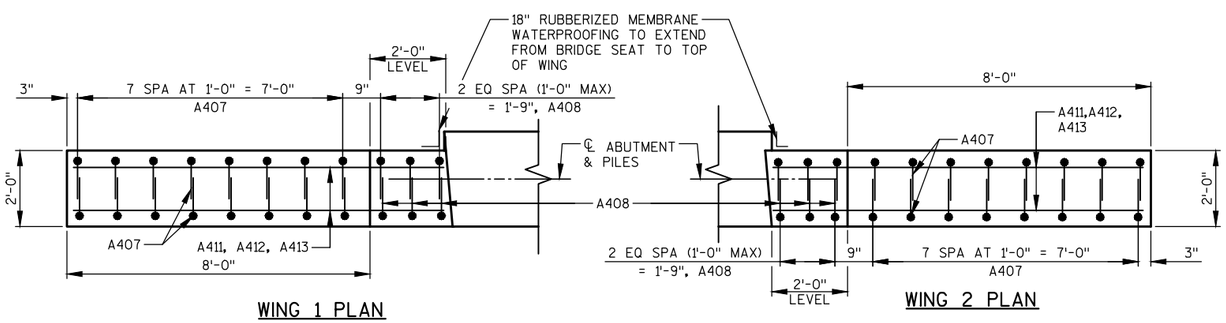
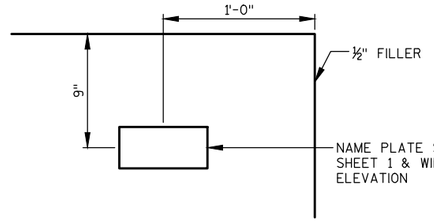


WING 1 PLAN

WING 2 PLAN



NAME PLATE LOCATION
ON WING 1

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-68-138

DRAWN BY JAK | PLANS CK'D. GAR

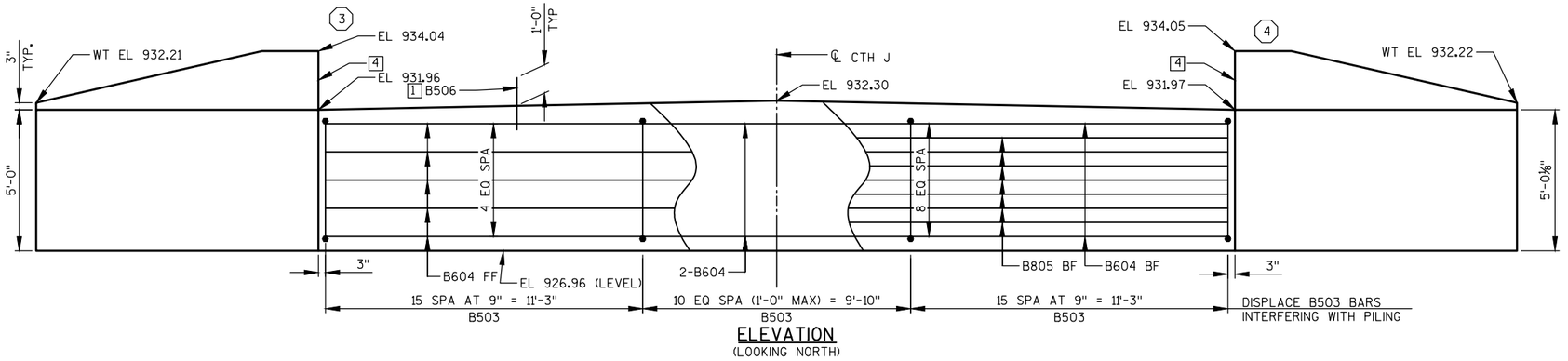
SOUTH ABUTMENT DETAILS

SHEET 7 OF 14
34

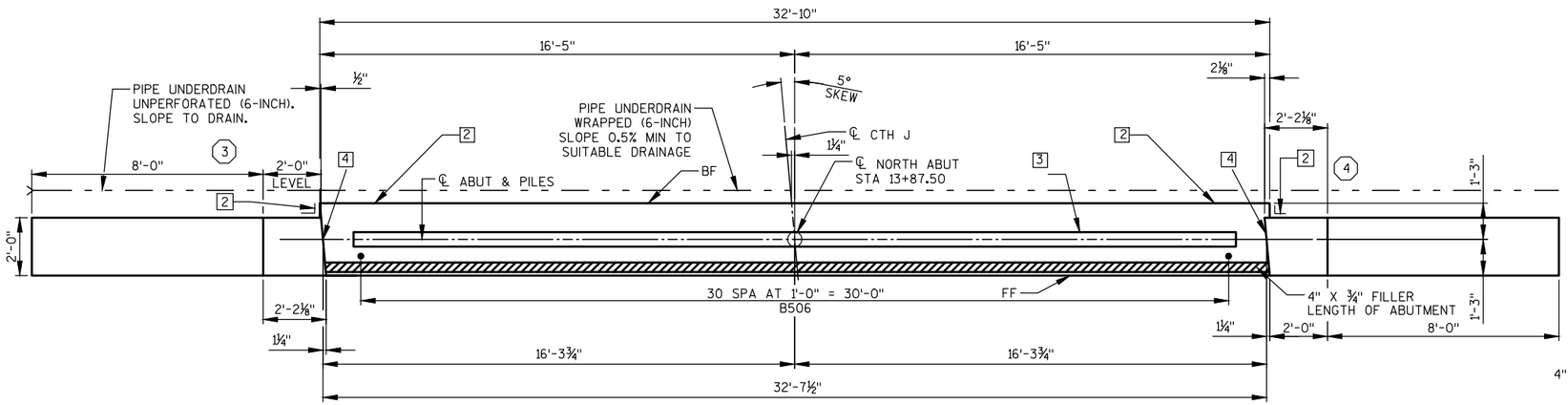
8

8

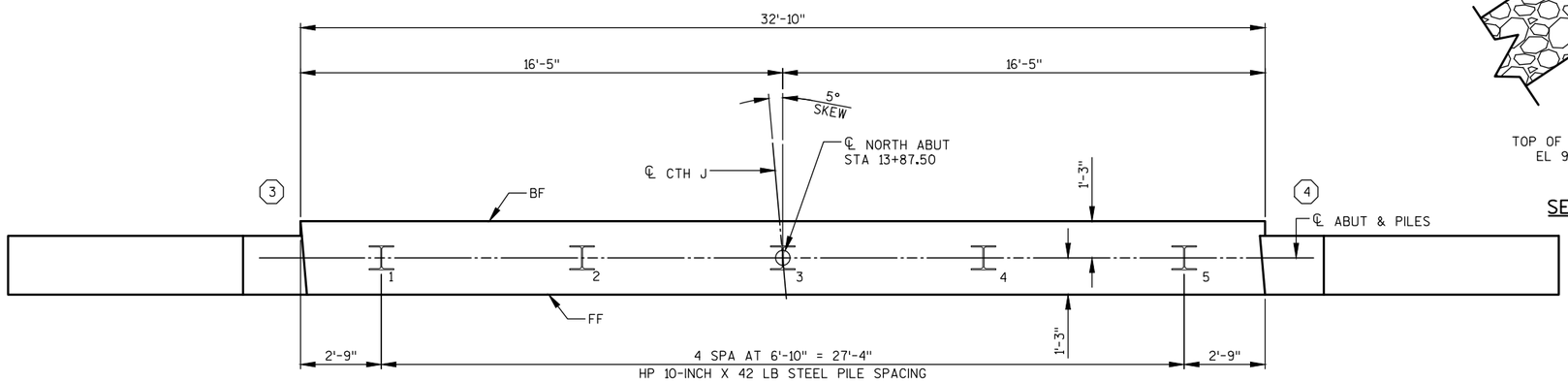
FILE NAME : X:±23147-00±130592.01±TECH±CAD±68820100±DESIGN±STRUCTURE±080106_SA.DWG PLOT DATE : 5/10/2016 PLOT BY : JASON KLEIST PLOT SCALE : 1" = 1'



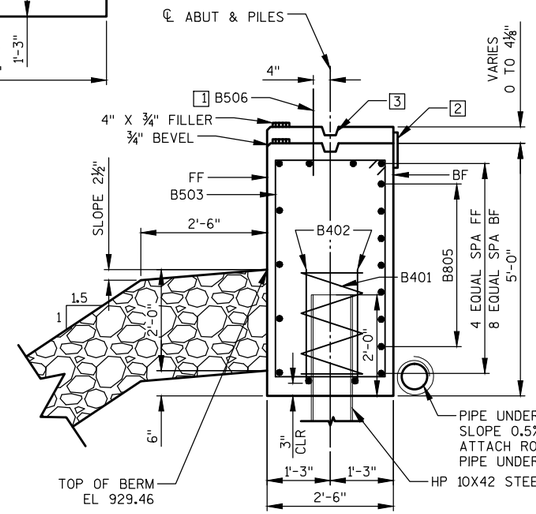
ELEVATION
(LOOKING NORTH)



PLAN



PILE PLAN



SECTION THRU ABUTMENT BODY

ALL HORIZONTAL BARS NOT LABELED ARE B604 BARS.

NOTES

FOR PILE SPLICE SEE SHEET 3

FILL/EXCAVATE TO BOTTOM OF ABUTMENT EL 926.96 BEFORE DRIVING PILING.

SEE SHEET 3 FOR STRUCTURE BACKFILL AND PIPE UNDERDRAIN DETAIL.

ABUTMENT SUPPORTED ON HP 10-INCH X 42 LB STEEL PILING WITH REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 25' LONG. PILE POINTS REQUIRED

1. B506 BARS MAY BE PLACED AFTER CONCRETE IS POURED, BUT BEFORE INITIAL SETTING HAS TAKEN PLACE.
2. 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE. EXTEND FROM BRIDGE SEAT TO TOP OF WING.
3. KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" KEYWAY. TERMINATE 1'-0" FROM ABUTMENT ENDS.
4. ½" FILLER - TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. FILLER INCLUDED IN WING LENGTH. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

FF - FRONT FACE
BF - BACK FACE
WT - WING TIP

(#) INDICATES WING NUMBER

STATE PROJECT NUMBER
6882-01-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-68-138

DRAWN BY JAK | PLANS CK'D. GAR

NORTH ABUTMENT

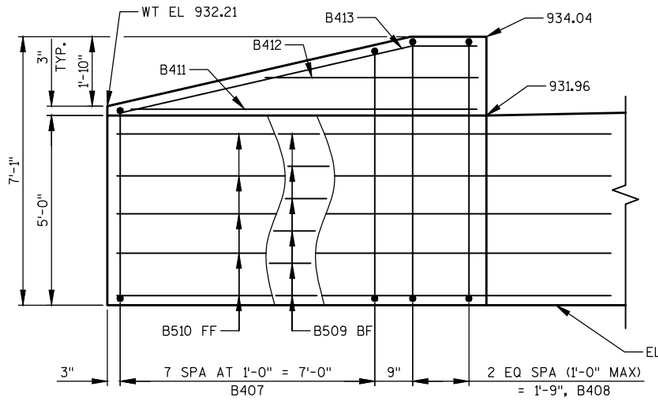
SHEET 8 OF 14
35

8

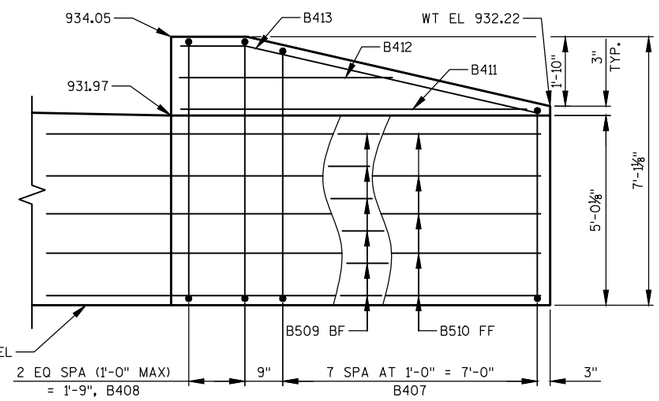
8

STATE PROJECT NUMBER

6882-01-70



WING 3 ELEVATION



WING 4 ELEVATION

BILL OF BARS
NORTH ABUTMENT

COATED= 660 LBS.
UNCOATED= 1840 LBS.

MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH FT - IN	BENT	BAR SERIES	LOCATION	
B401		5	28 - 0	X		ABUTMENT BODY - 1 PER PILE	SPIRAL
B402		10	2 - 3			ABUTMENT BODY - 2 PER PILE	VERT
B503		41	13 - 8	X		ABUTMENT BODY - STIRRUPS	VERT
B604		11	32 - 6			ABUTMENT BODY - FF, TOP, BTM	HORIZ
B805		7	32 6			ABUTMENT BODY - BF	HORIZ
B506	31		2 - 0			ABUTMENT BODY - DOWELS	VERT
◪ B407	32		8 - 5	X	X	WING WALL - BODY	VERT
B408	12		9 - 6	X		WING WALL - BODY	VERT
B509	12		11 - 9			WING WALL - BF OF BODY	HORIZ
B510	10		11 - 9			WING WALL - FF BODY	HORIZ
B411	4		9 - 6			WING WALL - TOP	HORIZ
B412	4		5 - 6			WING WALL TOP	HORIZ
B413	4		9 - 8	X		WING WALL - TOP	HORIZ
			-				

FF - FRONT FACE
BF - BACK FACE

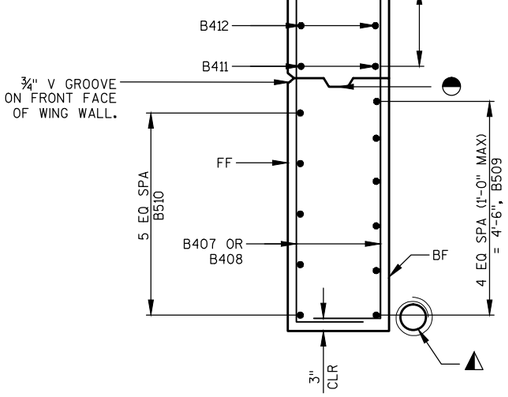
BAR DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BARS.

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

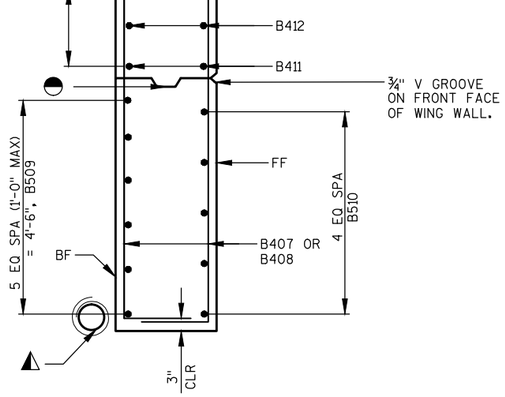
◓ OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" KEYWAY, WITH MEMBRANE ON BACK FACE. RUBBERIZED MEMBRANE WATERPROOFING IF CONST. JOINT IS USED (COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES")

◭ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN TO SUITABLE DRAINAGE.

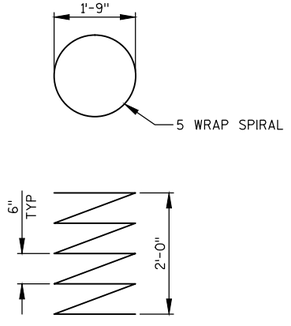
◪ LENGTH SHOWN IS AN AVERAGE LENGTH FOR USE IN CALCULATING BAR WEIGHT ONLY. SEE BAR SERIES TABLES FOR ACTUAL LENGTH.



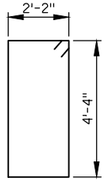
WING 3 SECTION



WING 4 SECTION



B401



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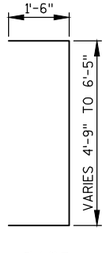
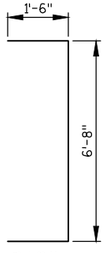


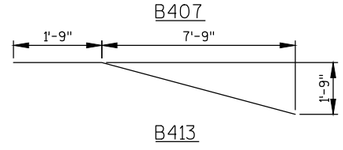
B407



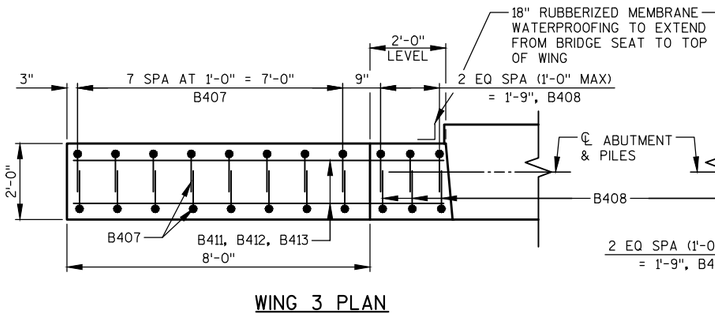
B408

BAR SERIES TABLE ◪

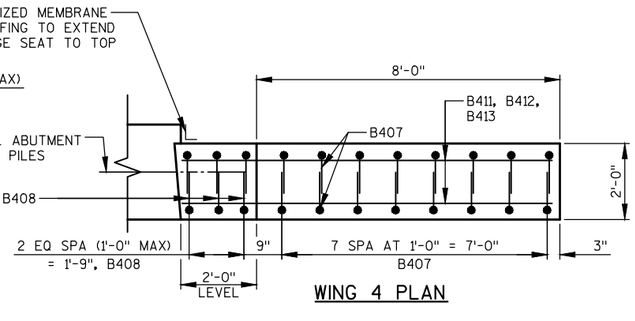
MARK	NO. REQUIRED	LENGTH
B407	4 SERIES OF 8	7'-7" TO 9'-3"



B413



WING 3 PLAN



WING 4 PLAN

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

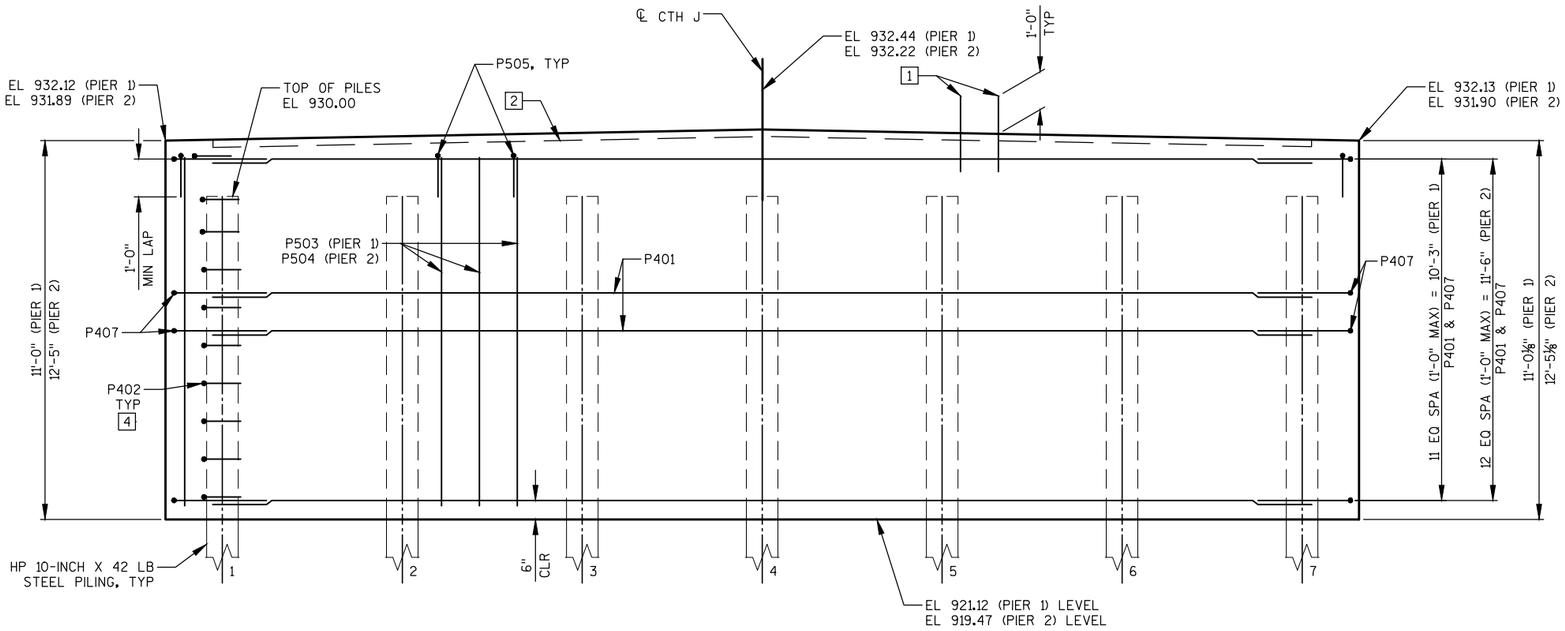
STRUCTURE B-68-138

DRAWN BY JAK | PLANS CK'D. GAR

NORTH ABUTMENT DETAILS

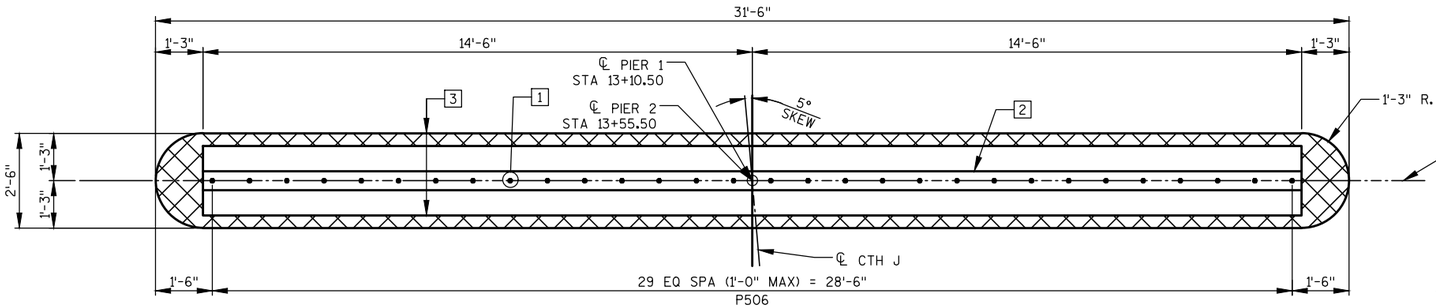
SHEET 9 OF 14
36

STATE PROJECT NUMBER
6882-01-70

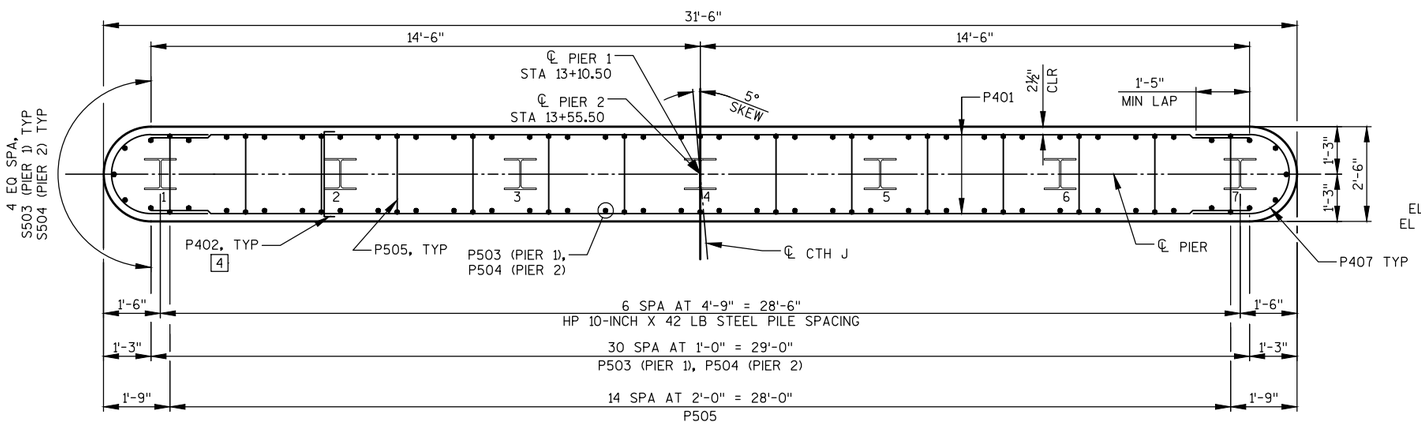


ELEVATION

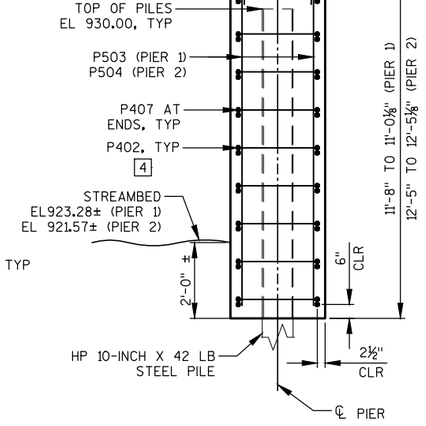
(LOOKING NORTH)



PLAN



PILE AND REINFORCEMENT PLAN



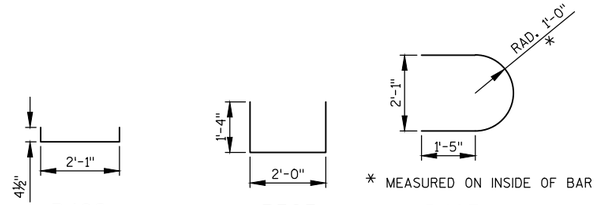
TYPICAL SECTION THRU PIER

BILL OF BARS
PIERS 1 & 2

PIER 1 COATED= 0 LBS.
PIER 1 UNCOATED= 1560 LBS.
PIER 2 COATED= 0 LBS.
PIER 2 UNCOATED= 1700 LBS.

MARK	PIER 1 NUMBER COATED	PIER 1 NUMBER UNCOATED	PIER 2 NUMBER COATED	PIER 2 NUMBER UNCOATED	LENGTH FT - IN	BENT	BAR SERIES	LOCATION
P401		24		26	29 - 0			SHAFT HORIZ
P402		70		70	2 - 8	X		SHAFT - TIES HORIZ
P503		68			10 - 4			SHAFT - PIER 1 VERT
P504				68	11 - 9			SHAFT - PIER 2 VERT
P505		15		15	4 - 5	X		SHAFT AT TOP VERT
P506		30		30	2 - 0			SHAFT DOWELS VERT
P407		24		26	6 - 1	X		SHAFT AT ENDS HORIZ
					-			

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



NOTES

PIERS TO BE SUPPORTED ON HP 10-INCH X 42 LB STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 25'-0" LONG AT PIER 1 AND 25'-0" LONG AT PIER 2. PILES SHALL BE DRIVEN TO A MINIMUM PILE TIP ELEVATION OF 907.0. PILE POINTS REQUIRED.

FOR PILE SPLICE DETAILS SEE SHEET 3

1. P506 BARS MAY BE PLACED AFTER CONCRETE IS PLACED, BUT BEFORE INITIAL SET HAS TAKEN PLACE.
2. KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" KEYWAY. TERMINATE 1'-3" FROM PIER ENDS.
3. 4" X ¾" FILLER LENGTH OF PIER.
4. P402 PLACED ADJACENT TO EACH PILE AT 1'-0" VERTICAL CENTERS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-68-138

DRAWN BY JAK | PLANS CK'D. GAR

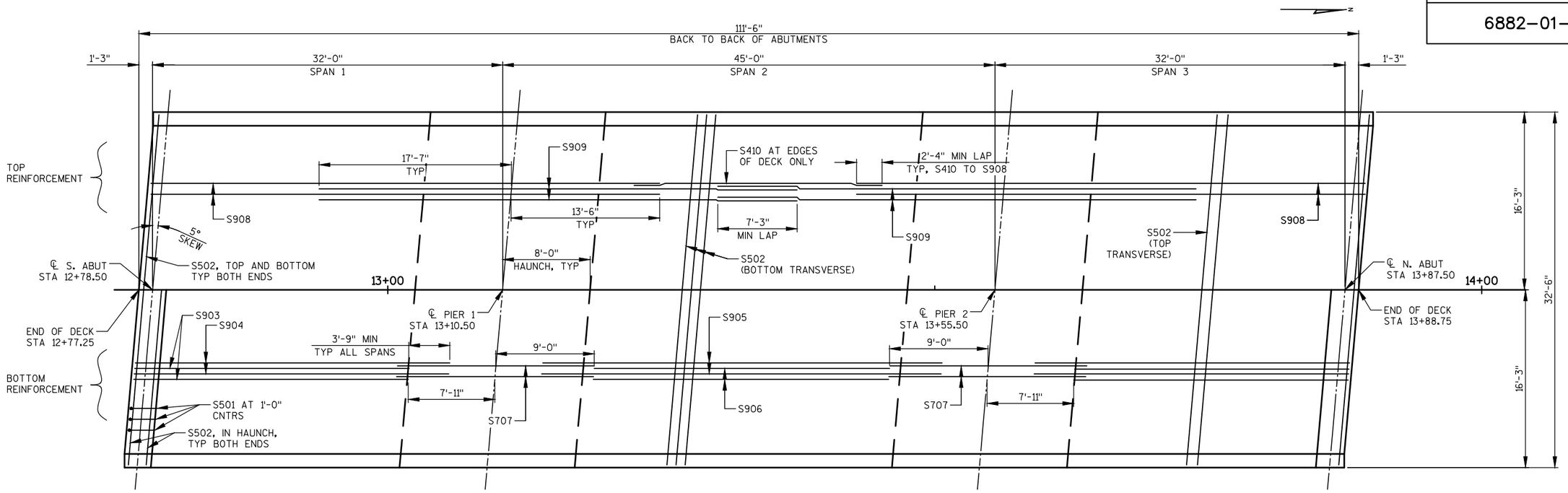
PIER DETAILS

SHEET 10 OF 14
37

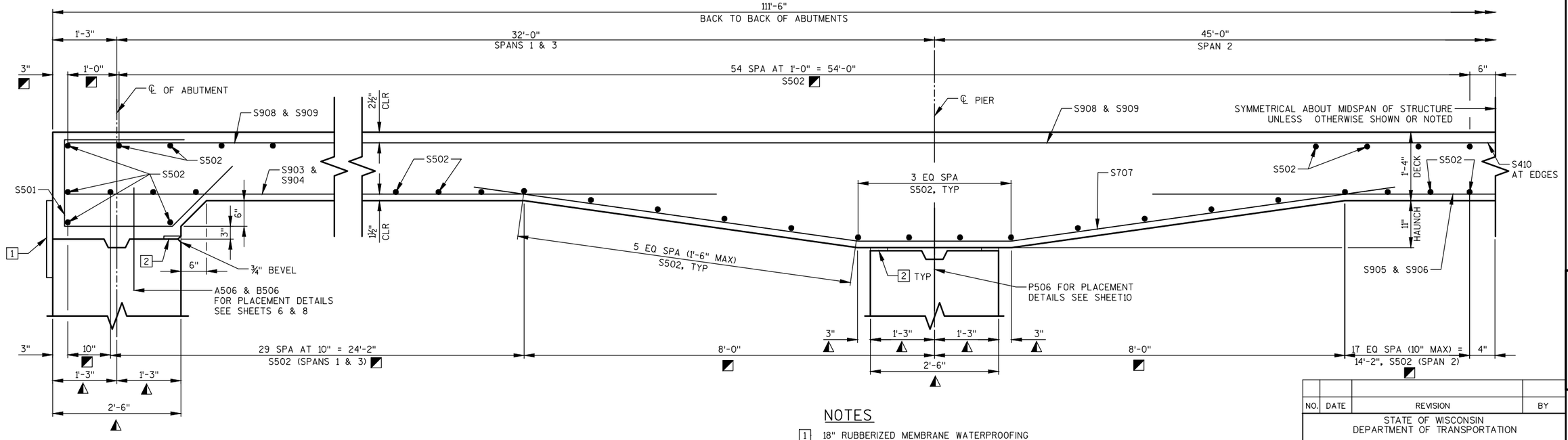
8

8

STATE PROJECT NUMBER
6882-01-70



PLAN



PART LONGITUDINAL SECTION

NOTES

1. 18" RUBBERIZED MEMBRANE WATERPROOFING
2. 4" X ¾" FILLER LENGTH OF ABUTMENT & PIER
- MEASURED PARALLEL TO ℄ CTH J
- MEASURED NORMAL TO ℄ SUBSTRUCTURE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-68-138

DRAWN BY JAK | PLANS CK'D. GAR

SUPERSTRUCTURE

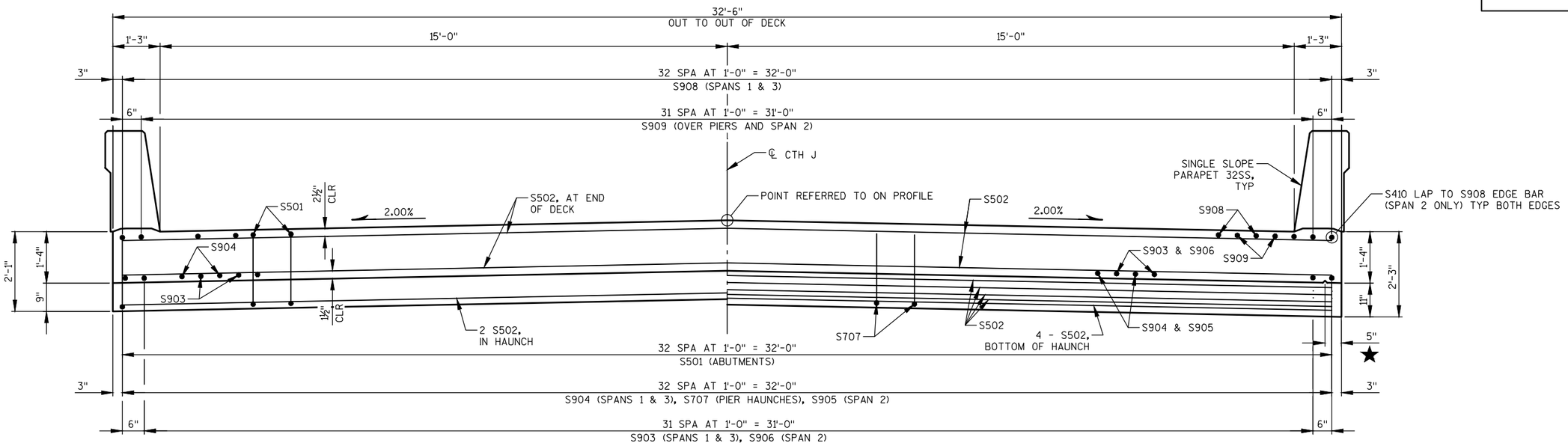
SHEET 11 OF 14
38

8

8

FILE NAME : X:±23147-00±130592.01±TECH±CAD±68820100±DESIGN±STRUCTURE±080111_SS.DWG PLOT DATE : 5/10/2016 PLOT BY : JASON KLEIST PLOT SCALE : 1" = 1'

STATE PROJECT NUMBER
6882-01-70



AT ABUTMENTS

AT PIERS

CROSS SECTION THRU ROADWAY

(LOOKING NORTH)

NOTES

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

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

PARAPET PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED, EXCEPT FOR STAGED CONSTRUCTION.

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

★ ¾' V-GROOVE. TERMINATE 6" FROM CHAMFER AT ABUTMENTS.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-68-138

DRAWN BY JAK | PLANS CK'D. GAR

SUPERSTRUCTURE DETAILS

SHEET 12 OF 14

39

ELEVATION TABLE

SPAN POINT	WEST EDGE *		R/L CTH J		EAST EDGE *	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
S. ABUT	12+79.81	934.62	12+78.50	934.94	12+77.19	934.65
0.1	12+83.01	934.60	12+81.70	934.91	12+80.39	934.62
0.2	12+86.21	934.57	12+84.90	934.88	12+83.59	934.59
0.3	12+89.41	934.56	12+88.10	934.86	12+86.79	934.57
0.4	12+92.61	934.54	12+91.30	934.85	12+89.99	934.56
0.5	12+95.81	934.53	12+94.50	934.83	12+93.19	934.54
0.6	12+99.01	934.51	12+97.70	934.82	12+96.39	934.52
0.7	13+02.21	934.49	13+00.90	934.80	12+99.59	934.51
0.8	13+05.41	934.48	13+04.10	934.78	13+02.79	934.49
0.9	13+08.61	934.46	13+07.30	934.77	13+05.99	934.48
PIER 1	13+11.81	934.45	13+10.50	934.75	13+09.19	934.46
0.1	13+16.31	934.42	13+15.00	934.73	13+13.69	934.44
0.2	13+20.81	934.40	13+19.50	934.71	13+18.19	934.41
0.3	13+25.31	934.38	13+24.00	934.69	13+22.69	934.39
0.4	13+29.81	934.36	13+28.50	934.66	13+27.19	934.37
0.5	13+34.31	934.33	13+33.00	934.64	13+31.69	934.35
0.6	13+38.81	934.31	13+37.50	934.62	13+36.19	934.32
0.7	13+43.31	934.29	13+42.00	934.60	13+40.69	934.30
0.8	13+47.81	934.27	13+46.50	934.57	13+45.19	934.28
0.9	13+52.31	934.24	13+51.00	934.55	13+49.69	934.26
PIER 2	13+56.81	934.22	13+55.50	934.53	13+54.19	934.23
0.1	13+60.01	934.20	13+58.70	934.51	13+57.39	934.22
0.2	13+63.21	934.19	13+61.90	934.50	13+60.59	934.20
0.3	13+66.41	934.17	13+65.10	934.48	13+63.79	934.19
0.4	13+69.61	934.16	13+68.30	934.46	13+66.99	934.17
0.5	13+72.81	934.14	13+71.50	934.45	13+70.19	934.15
0.6	13+76.01	934.13	13+74.70	934.43	13+73.39	934.14
0.7	13+79.21	934.11	13+77.90	934.42	13+76.59	934.12
0.8	13+82.41	934.10	13+81.10	934.40	13+79.79	934.11
0.9	13+85.61	934.08	13+84.30	934.39	13+82.99	934.09
N. ABUT	13+88.81	934.07	13+87.50	934.38	13+86.19	934.08

* ELEVATION AT INSIDE FACE OF PARAPET

BILL OF BARS
SUPERSTRUCTURE

COATED= 55000 LBS.
UNCOATED= 0 LBS.

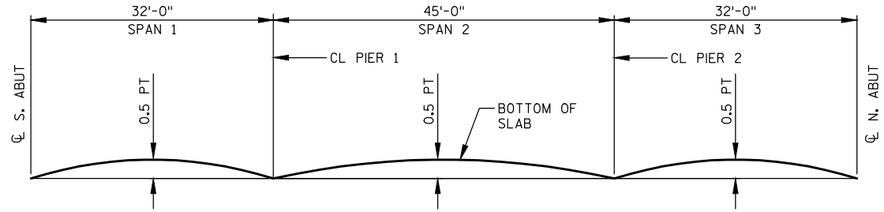
MARK	NUMBER		LENGTH	SPACING	SERIES	BAR LOCATION	
	COATED	UNCOATED	FT - IN				
S501	66		8 - 4	X		SLAB - ABUTMENT TIES	VERT
S502	238		32 - 3			SLAB - TOP & BOTTOM	TRANS
S903	64		25 - 2			SLAB - BOTTOM SPANS 1 & 3	LONGIT
S904	66		28 - 10			SLAB - BOTTOM SPANS 1 & 3	LONGIT
S905	33		36 - 6			SLAB - BOTTOM SPAN 2	LONGIT
S906	32		27 - 0			SLAB - BOTTOM SPAN 2	LONGIT
S707	66		18 - 2	X		SLAB - BOTTOM HAUNCH	LONGIT
S908	66		46 - 7			SLAB - TOP SPANS 1 & 3	LONGIT
S909	64		43 - 9			SLAB - TOP OVER PIERS	LONGIT
S410	2		22 - 8			SLAB - TOP SPAN 2 AT EDGES	LONGIT
S511	68		4 - 4	X		PARAPET - END TIE	VERT
S512	44		4 - 9	X		PARAPET - END STIRRUP	VERT
S513	4		10 - 0	X		PARAPET - END	HORIZ
S514	48		2 - 7	X		PARAPET - END TIE	VERT
S515	24		4 - 10	X		PARAPET - STIRRUP	VERT
S516	284		4 - 5	X		PARAPET - TIE	VERT
S517	284		5 - 0	X		PARAPET - STIRRUP	VERT
S518	20		56 - 6			PARAPET	HORIZ
S519	4		47 - 8			PARAPET	HORIZ.

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

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

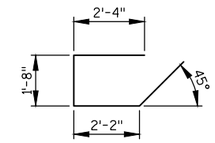
CAMBER

SPAN PT.	CAMBER (IN)
S ABUT	0
0.1	1/8
0.2	1/8
0.3	1/4
0.4	1/4
0.5	1/4
0.6	1/8
0.7	0
0.8	0
0.9	0
PIER 1	0
0.1	0
0.2	1/4
0.3	3/8
0.4	5/8
0.5	5/8
0.6	5/8
0.7	3/8
0.8	1/4
0.9	0
PIER 2	0
0.1	0
0.2	0
0.3	0
0.4	1/8
0.5	1/4
0.6	1/4
0.7	1/4
0.8	1/8
0.9	1/8
N ABUT	0

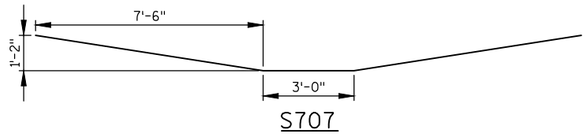


CAMBER DIAGRAM

CAMBER SPAN AS SHOWN TO PROVIDE FOR DEADLOAD DEFLECTION & FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.



S501



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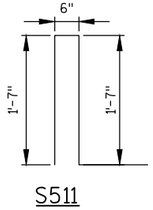

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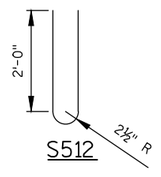

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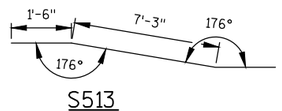

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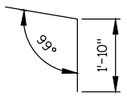

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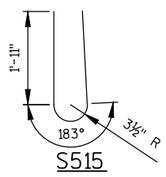

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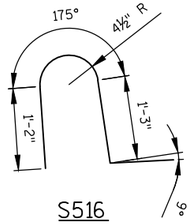

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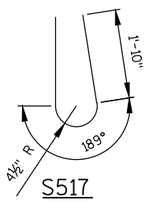


S517

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-68-138

DRAWN BY JAK | PLANS CK'D. GAR

SUPERSTRUCTURE DETAILS

SHEET 13 OF 14
40

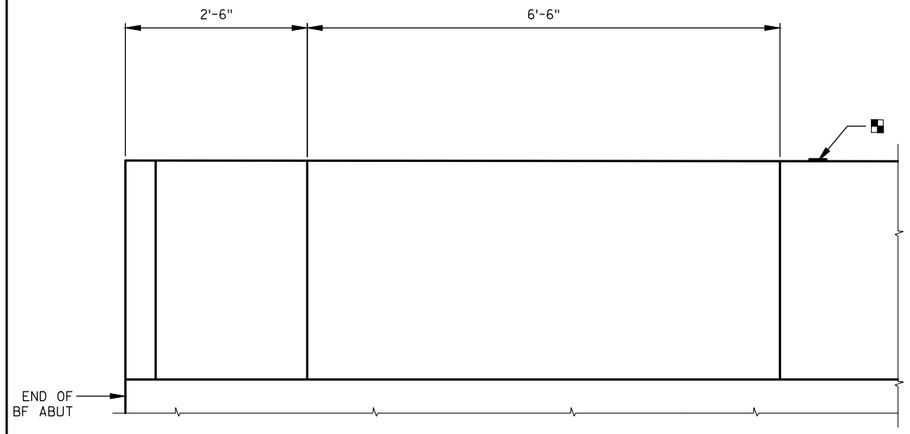
STATE PROJECT NUMBER
6882-01-70

8

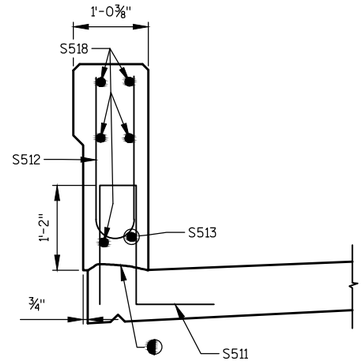
8

FILE NAME : X:±23147-00±130592.01±TECH±CAD±68820100±DESIGN±STRUCTURE±080111_SS.DWG PLOT DATE : 5/10/2016 PLOT BY : JASON KLEIST PLOT SCALE : 1" = 1'

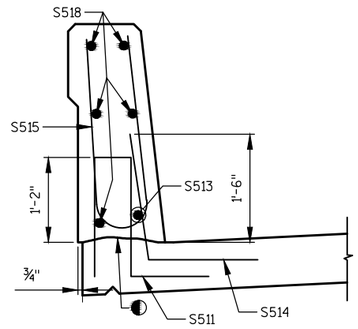
STATE PROJECT NUMBER
6882-01-70



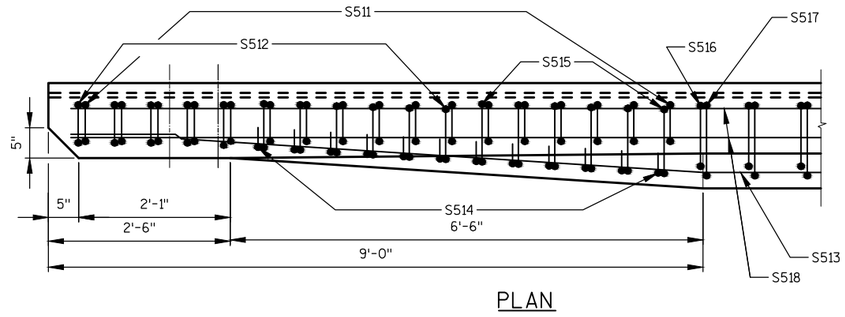
INSIDE ELEVATION



SECTION A

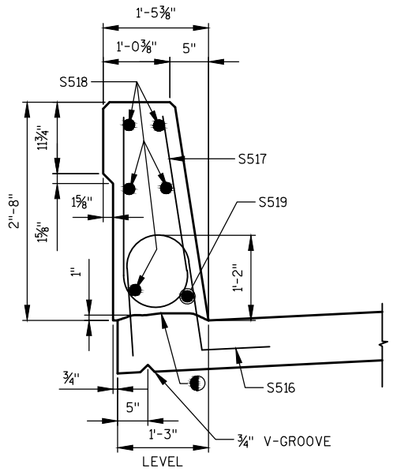


SECTION B

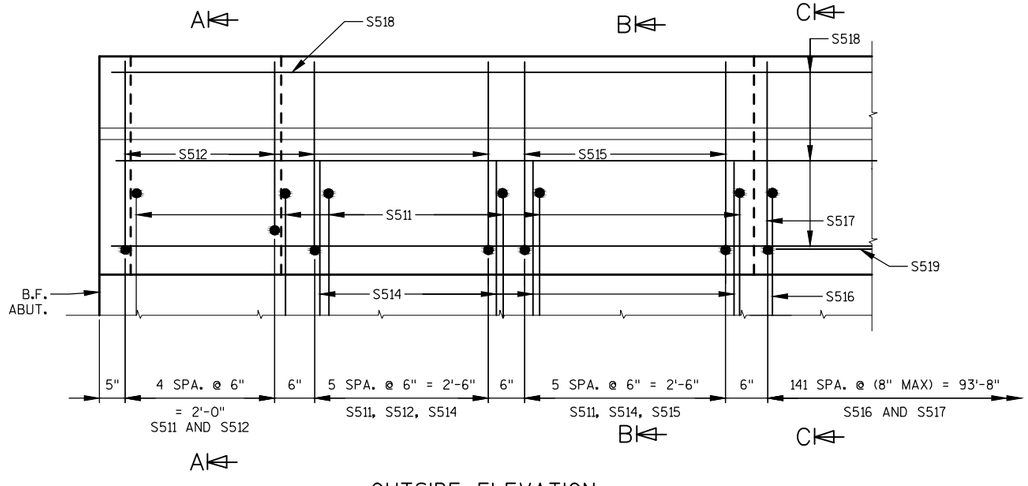


PLAN

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0" DEFINE CONST. JOINT WITH A ¾" - 'V' GROOVE.



SECTION C



OUTSIDE ELEVATION

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

■ BENCH MARK CAP (WHEN SUPPLIED.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-68-138

DRAWN BY JAK | PLANS CK'D. GAR

SINGLE SLOPE PARAPET 32SS

SHEET 14 OF 14
41

8

8

FILE NAME : X:±23147-00±130592.01±TECH±CAD±68820100±DESIGN±STRUCTURE±080114_PA.DWG PLOT DATE : 5/10/2016 PLOT BY : ----

PLOT SCALE : 1" = 1'

CTH J SOUTH OF BRIDGE

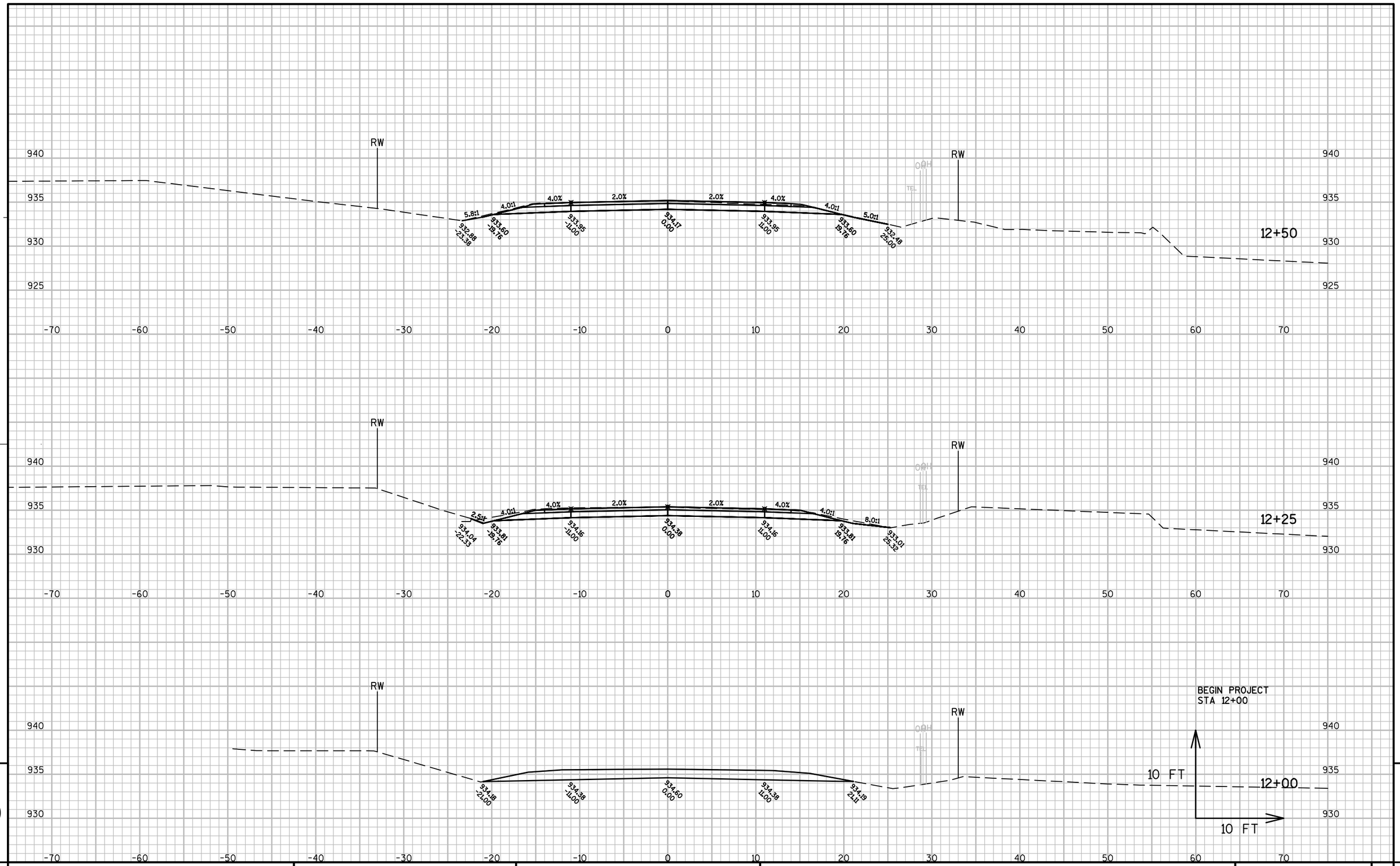
Station	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)			
			Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.30 (1)	Mass Ordinate (2)	Waste
12+00.00	1200.00	0.00	39.79	0.66	0.00	0.00	0.00	0.00	0	0.00
12+25.00	1225.00	25.00	37.02	0.00	35.56	0.31	35.56	0.40	35	35.16
12+50.00	1250.00	25.00	31.74	0.03	31.83	0.01	67.39	0.02	67	66.98
12+77.25	1277.25	27.25	28.90	9.80	30.60	4.96	97.99	6.47	91	91.13
					97.99	5.28				

CTH J NORTH OF BRIDGE

Station	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)			
			Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.30 (1)	Mass Ordinate (2)	Waste
13+88.75	1388.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
14+00.00	1400.00	11.25	44.16	11.87	9.20	2.47	9.20	3.21	6	6
14+25.00	1425.00	25.00	48.65	2.22	42.97	6.52	52.17	11.69	40	40
14+50.00	1450.00	25.00	43.37	3.24	42.60	2.53	94.77	14.98	80	80
14+75.00	1475.00	25.00	39.96	13.53	38.58	7.76	133.35	25.07	108	108
15+00.00	1500.00	25.00	35.02	9.85	34.71	10.82	168.06	39.15	129	129
15+25.00	1525.00	25.00	31.41	0.81	30.75	4.94	198.82	45.56	153	153
15+50.00	1550.00	25.00	29.14	2.58	28.03	1.57	226.85	47.60	179	179
15+75.00	1575.00	25.00	4.08	0.00	15.38	1.19	242.23	49.15	193	193
					242.23	37.81				

1) Expanded Fill. Factor = 1.30

2) 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.



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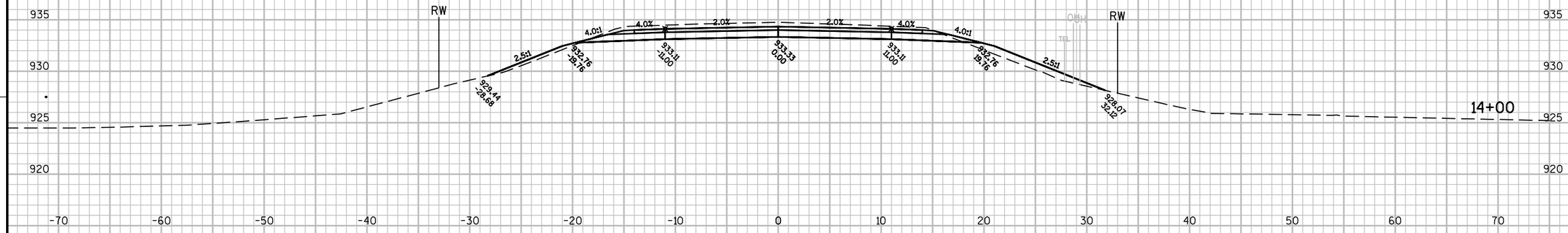
9

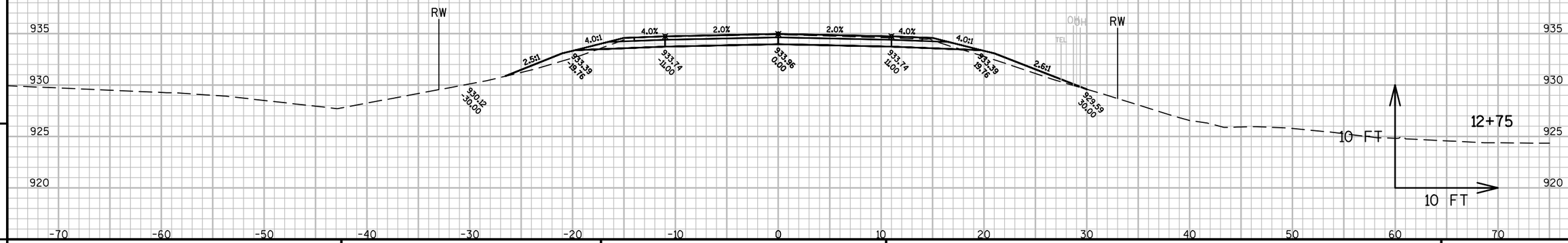
PROJECT NO: 6882-01-70	HWY: CTH J	COUNTY: WAUPACA	CROSS SECTIONS: CTH J	SHEET 43	E

FILE NAME : X:\23147-00\130592.01\TECH\CAD\68820100\DESIGN\CORRIDORS\CTH J_CORRIDOR.DWG PLOT DATE : 1/25/2016 9:50 AM PLOT BY : DOUGLAS HOBYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT

STA 14+26, RT
CONSTRUCT F.E.



CONSTRUCT STRUCTURE B-68-0138
STA 13+33.00



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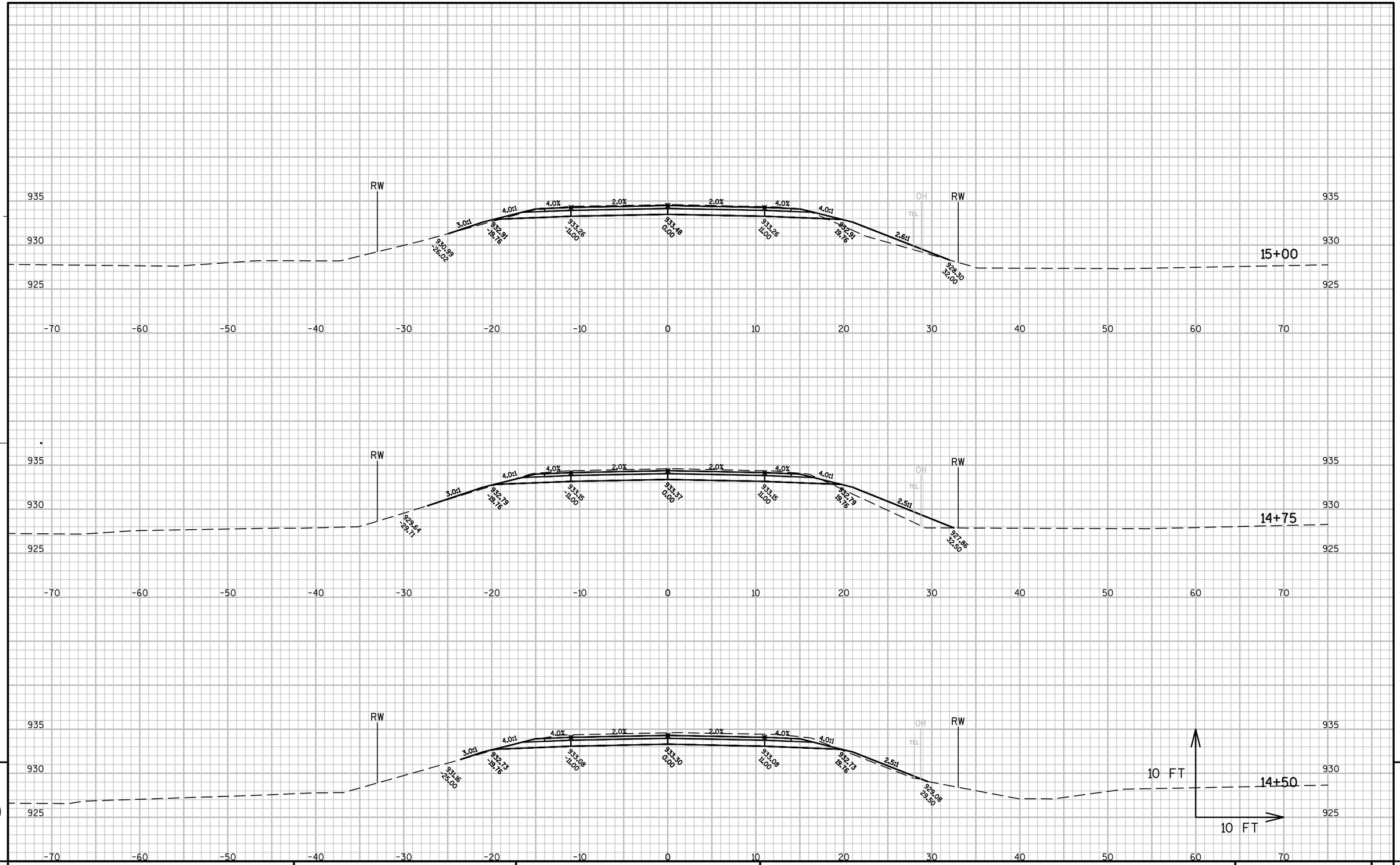
9

PROJECT NO: 6882-01-70	HWY: CTH J	COUNTY: WAUPACA	CROSS SECTIONS: CTH J	SHEET 44	E



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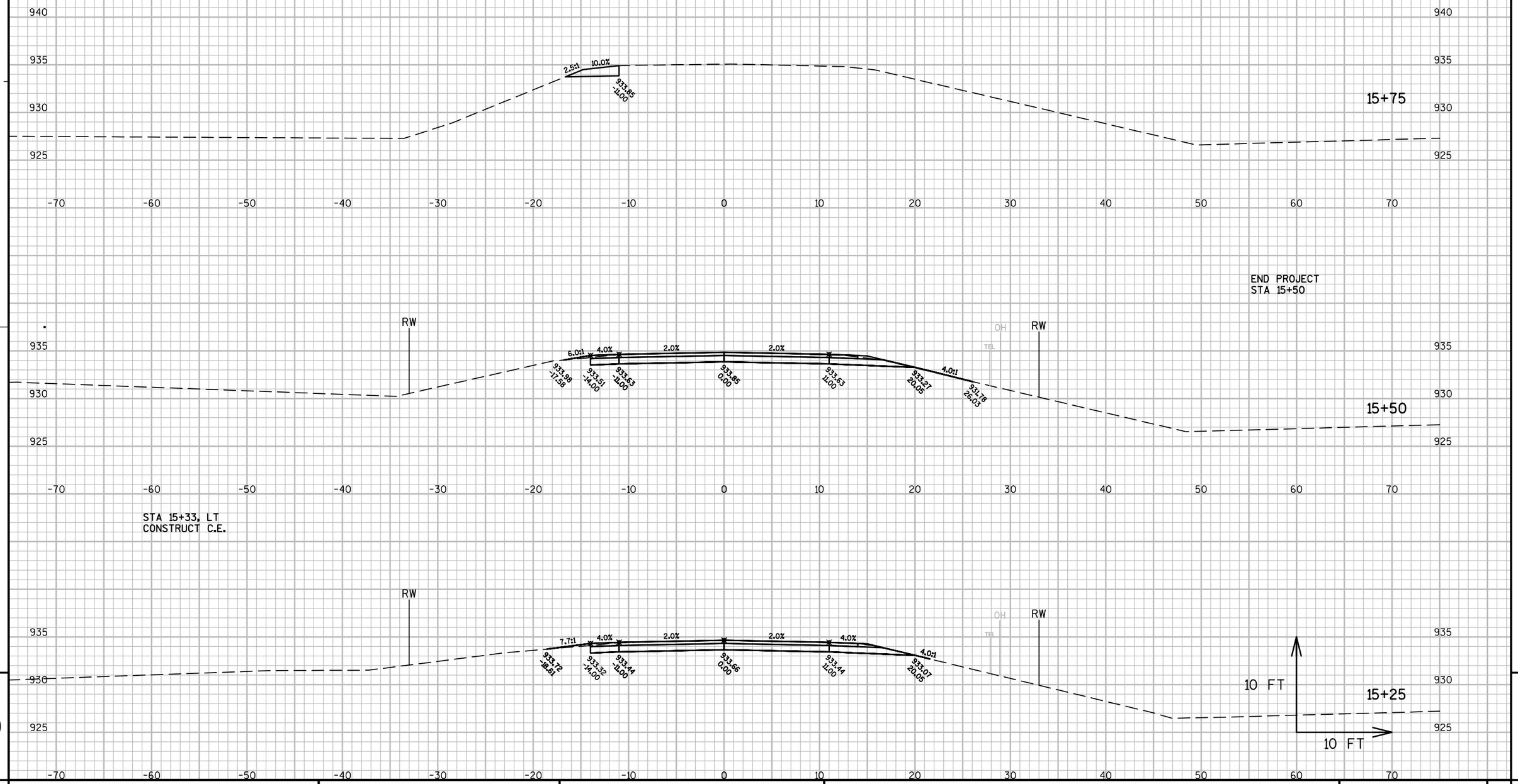
9

PROJECT NO: 6882-01-70	HWY: CTH J	COUNTY: WAUPACA	CROSS SECTIONS: CTH J	SHEET 45	E

FILE NAME : X:\23147-00\130592.01\TECH\CAD\68820100\DESIGN\CORRIDORS\CTH J_CORRIDOR.DWG PLOT DATE : 1/25/2016 9:50 AM PLOT BY : DOUGLAS HOBYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT

END CONSTRUCTION
STA 15+75



END PROJECT
STA 15+50

STA 15+33, LT
CONSTRUCT C.E.

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PROJECT NO: 6882-01-70	HWY: CTH J	COUNTY: WAUPACA	CROSS SECTIONS: CTH J	SHEET 46	E

Notes

Wisconsin Department of Transportation

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