WKE

MARCH 2019

PROJECT ID: WITH: 3849-00-73

3849-00-72

COUNTY: **WALWORTH**

ORDER OF SHEETS

TOTAL SHEETS = 62

24

N

DESIGN DESIGNATION

A.A.D.T.	2019	=	2300
A.A.D.T.	2039	=	2800
D.H.V.	2039	=	336
D.D.		=	60/40
T.		=	3.1%
DESIGN SPEED		=	30 MPH
ESALS		=	130,000

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 (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

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

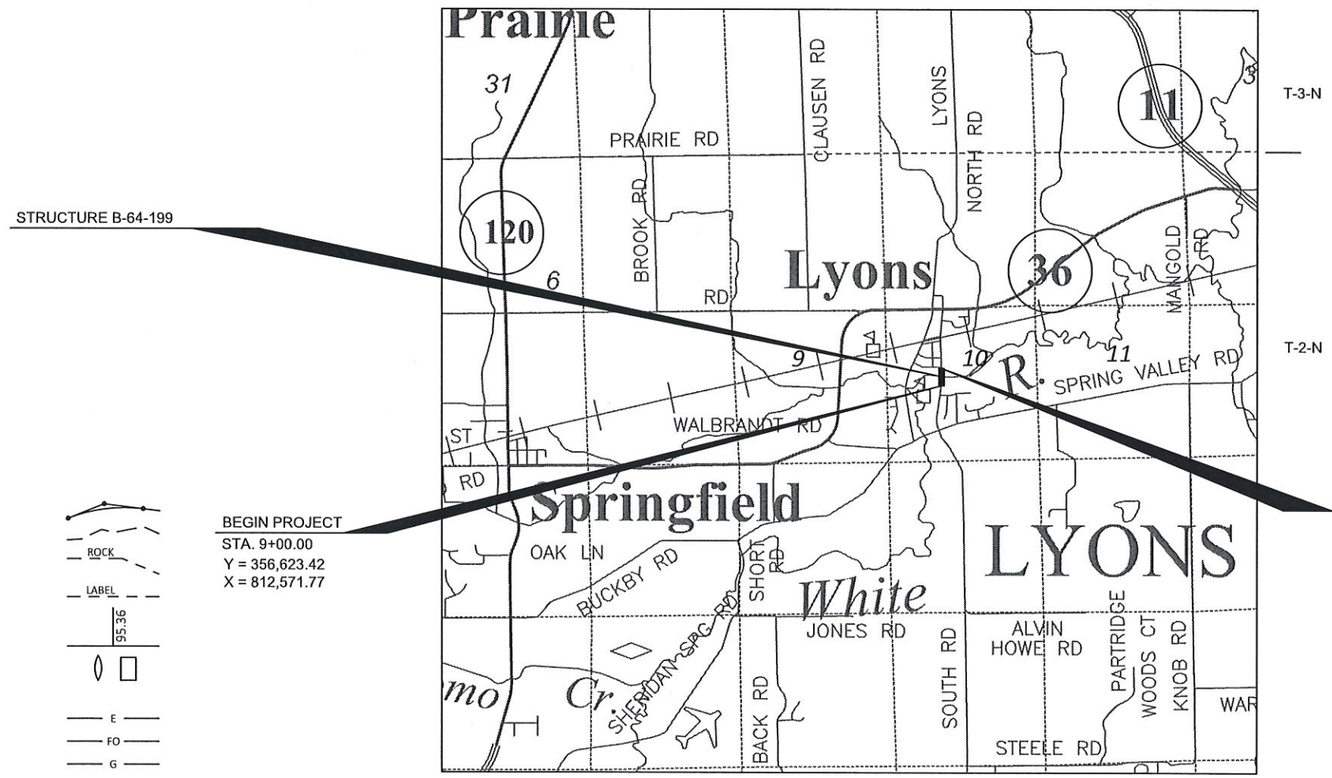
MILL STREET

(WHITE RIVER BRIDGE B-64-0260)

LOCAL STREET
WALWORTH COUNTY

STATE PROJECT NUMBER
3849-00-72

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3849-00-72	WISC 2019162	1



STRUCTURE B-64-199

BEGIN PROJECT
STA. 9+00.00
Y = 356,623.42
X = 812,571.77

END PROJECT
STA. 11+50.00
Y = 356,873.37
X = 812,571.72

LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.047 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATES, WALWORTH COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ACCEPTED FOR
TOWN of LYONS
10/18/18 (Date) Karla Hill (Town Clerk)

ORIGINAL PLANS PREPARED BY
MSA

WISCONSIN
MICHAEL J. STATZ
E-31249
MADISON
WI
PROFESSIONAL ENGINEER

10-12-18 (Date) Michael J. Statz (Professional Engineer)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

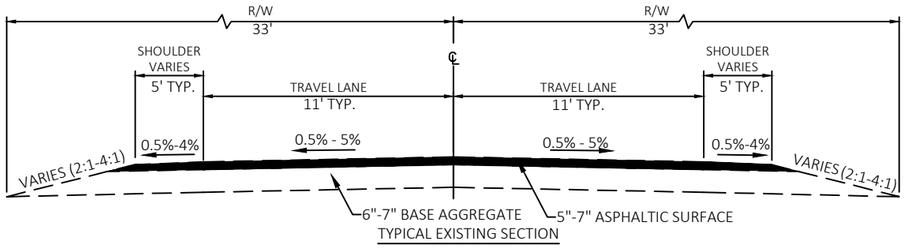
PREPARED BY

Surveyor	BAXTER & WOODMAN
Designer	MSA PROFESSIONAL SERVICES, INC.
Project Manager	MSA PROFESSIONAL SERVICES, INC.
Regional Examiner	WisDOT
Regional Supervisor	WisDOT

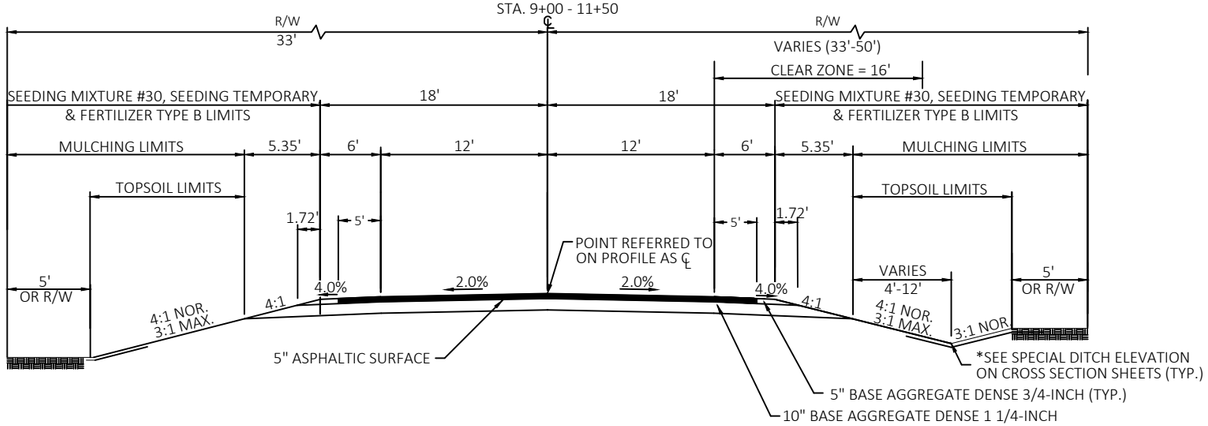
APPROVED FOR THE DEPARTMENT
DATE: 10/24/18 K Kramer (Signature)

E

FILE NAME : P:\92005\92905\9294\09294002\C3D\SHEETSPLAN\010101_TI.DWG PLOT DATE : 10/4/2018 2:30 PM PLOT BY : ERIN JORDAN PLOT NAME :



TYPICAL EXISTING SECTION
MILL STREET
STA. 9+00 - 11+50



TYPICAL FINISHED SECTION
MILL STREET
STA. 9+00 - 11+50

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 = 0.57 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.44 ACRES

GENERAL NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS SHALL BE FERTILIZED, SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER. OVERSOW PERMANENT SEEDING AREAS WITH TEMPORARY SEED AT 1.5 LBS PER 1000 SQUARE FEET. DO NOT STOCKPILE MATERIALS IN WETLANDS, WATERWAYS, OR FLOODPLAINS. SEED AND MULCH STOCKPILES, WINDROWS OF SOIL AND ANY GRADED AREA THAT WILL NOT ULTIMATELY BE PAVED, WITHIN 48 HOURS OF THE INITIAL OR ANY NEW DISTURBANCE IF PERMANENT FINAL RESTORATION WILL NOT OCCUR WITHIN 10-DAYS.

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

EXISTING SIGNS AND POSTS WILL BE REMOVED BY TOWN. CONTACT DAVE HELD TWO WEEKS PRIOR TO CONSTRUCTION AT (262) 763-7256.

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

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, WALWORTH COUNTY. ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD88 DATUM USING NGS STATION B3NH0003 LOCATED IN LYONS, WI.

THE 5" ASPHALTIC SURFACE SHALL BE CONSTRUCTED USING A 3" LOWER LAYER OF 19 MM NOMINAL SIZE AGGREGATE AND A 2" UPPER LAYER OF 12.5 MM NOMINAL SIZE AGGREGATE.

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

TEMPORARY DITCH CHECKS, IF NEEDED, SHALL BE PLACED AS DIRECTED BY ENGINEER.

WETLANDS EXIST FROM STA. 9+05 - 9+70, LEFT, AND FROM STA. 10+20 - 10+75, RIGHT AND LEFT, THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE SLOPE INTERCEPTS IN THESE AREAS.

SLOPES STEEPER THAN 3:1 REQUIRE EROSION MAT.

DESIGN CONTACT

MSA PROFESSIONAL SERVICES, INC.
ATTN: MICHAEL J. STATZ, P.E.
2901 INTERNATIONAL LANE, SUITE 300
MADISON, WI 53704-3133
PHONE: (608) 242-7779
EMAIL: MSTATZ@MSA-PS.COM

TOWN OF LYONS
ATTN: KARLA HILL, TOWN CLERK
6339 HOSPITAL ROAD
PO BOX 337
LYONS, WI 53148
PHONE: (262) 763-9936
EMAIL: TOWNOFLYONS@WI.RR.COM

DNR LIAISON

DEPARTMENT OF NATURAL RESOURCES
ATTN: CRAIG WEBSTER
141 NW BARSTOW ROOM 180
WAUKESHA, WI 53188
PHONE: (262) 574-2141
EMAIL: CRAIG.WEBSTER@WISCONSIN.GOV

UTILITIES

TELEPHONE:
AT&T
ATTN: MATT DINNAUER
2005 PEWAUKEE ROAD
WAUKESHA, WI 53188
PHONE: (262) 896-7690
EMAIL: MD9542@ATT.COM

ELECTRIC:
WE ENERGIES
ATTN: ALEX DANTINNE
500 S 116TH STREET
WEST ALLIS, WI 53214
PHONE: (920) 621-6903
EMAIL: ALEX.DANTINNE@WE-ENERGIES.COM

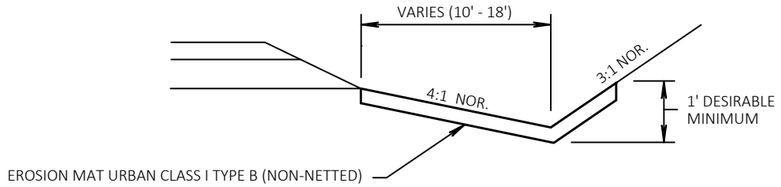
GAS:
WE ENERGIES
ATTN: SCOTT HOLSTEIN
700 S. KANE STREET
BURLINGTON, WI 53105
PHONE: (262) 763-1084
EMAIL: SCOTT.HOLSTEIN@WE-ENERGIES.COM

COMMUNICATIONS:
CHARTER COMMUNICATIONS
ATTN: RANDY WOLFGRAM
3520 E. DESTINATION DRIVE
APPLETON, WI 54915
PHONE: (920) 378-0378
EMAIL: RANDY.WOLFGRAM@CHARTER.COM

SANITARY:
LYONS SANITARY DISTRICT NO. 2 **
ATTN: BOB BIEDRZYCKI
5996 CLEARWATER COURT
PO BOX 237
LYONS, WI 53148
PHONE: (262) 763-4627
EMAIL: LYNSDT2@EXECPC.COM

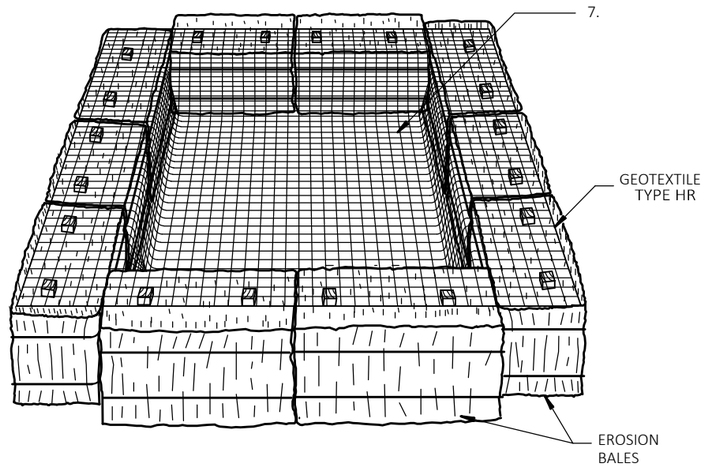
**-DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

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



EROSION MAT DITCH DETAIL
NE QUADRANT DITCH

1. CONTRACTOR SHALL PUMP WATER FROM WORK AREA EXCAVATION TO BASIN PRIOR TO DISCHARGING.
2. BASIN SHALL BE KEPT LESS THAN 10% FULL OF SEDIMENT. GEOTEXTILE FABRIC AND SEDIMENTS SHALL BE DISPOSED OF BY THE CONTRACTOR OFF THE PROJECT SITE.
3. SIZE TO BE DETERMINED BY THE ENGINEER IN THE FIELD BASED ON WATER QUANTITY AND QUALITY.
4. GEOTEXTILE FABRIC SHALL BE REPLACED AS NEEDED, USED GEOTEXTILE FABRIC AND SEDIMENTS SHALL BE DISPOSED OF BY THE CONTRACTOR OFF THE PROJECT SITE AT NO COST TO THE DEPARTMENT.
5. GEOTEXTILE TYPE HR TO BE PAID FOR SEPARATELY.
6. EROSION BALES TO BE PAID FOR SEPARATELY.
7. DEWATERING BAG SHALL BE PLACED INSIDE TEMPORARY SETTLING BASIN TO MEET WATER QUALITY DISCHARGE STANDARDS.
8. DO NOT PLACE TEMPORARY SETTLING BASIN WITHIN WETLAND AREA.



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

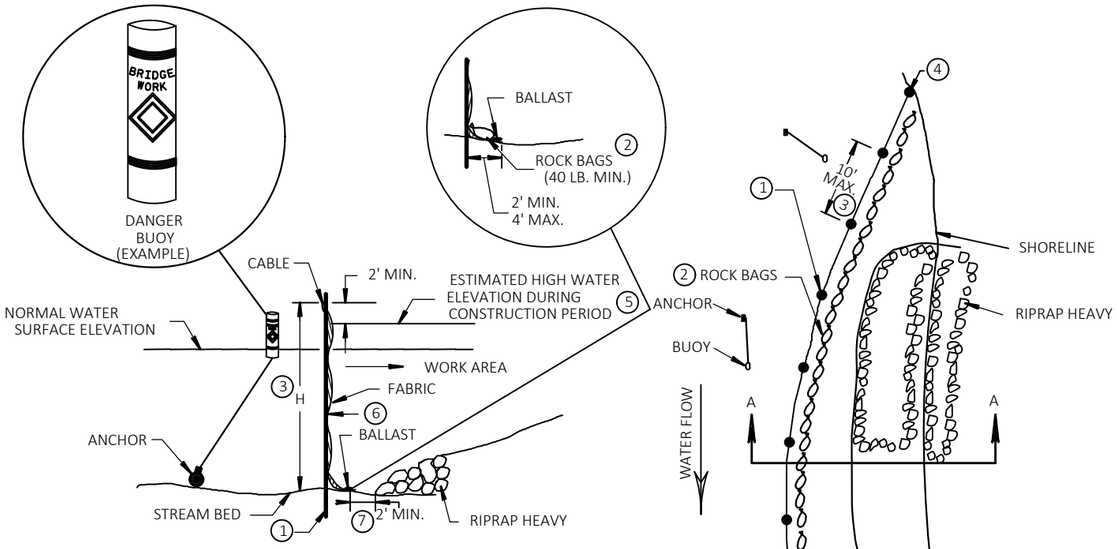
EXAMPLE:
CONTRACTOR INDICATES PUMP CAPABLE OF 50 GPM
HEIGHT OF BALES = 1.5 FT.

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

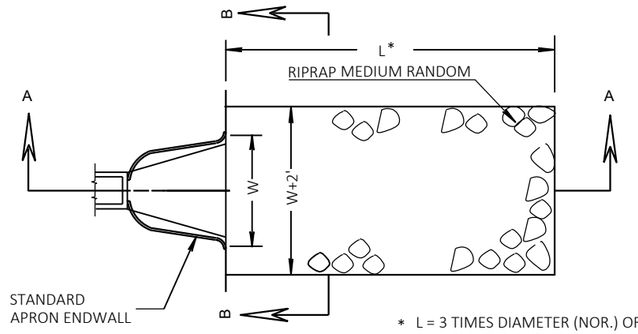
TEMPORARY SETTLING BASIN



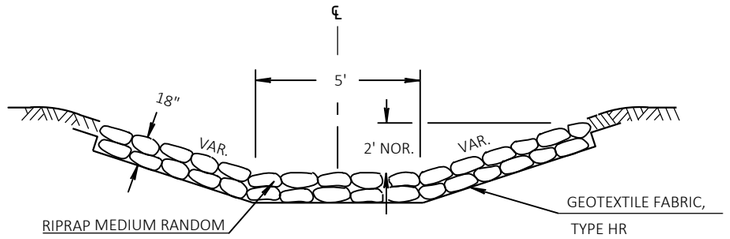
NOTES:

1. DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
2. ROCK BAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. ROCK BAGS SHALL BE CONTINUOUS WITH NO SPACING.
3. WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.
4. IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELECTIONS, 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, MINIMIZE BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
6. ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
7. INSTALL TURBIDITY BARRIER WITH THE BALLAST PLACED NO MORE THAN 1' AWAY FROM THE TOE OF THE RIPRAP.

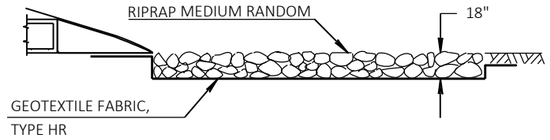
ENHANCED TURBIDITY BARRIER DETAIL



* L = 3 TIMES DIAMETER (NOR.) OR 10' MIN. OR AS DIRECTED BY THE ENGINEER



SECTION B-B

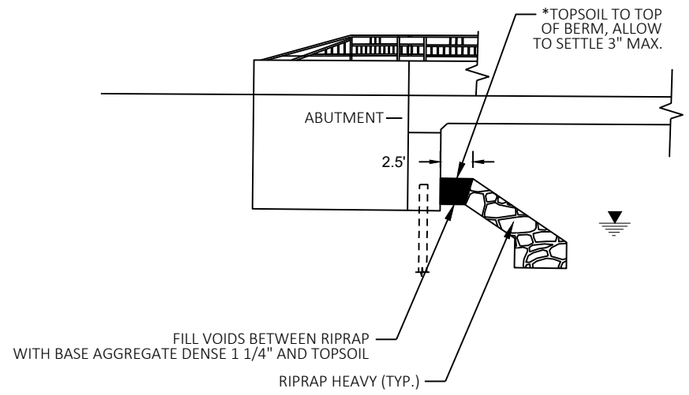


SECTION A-A

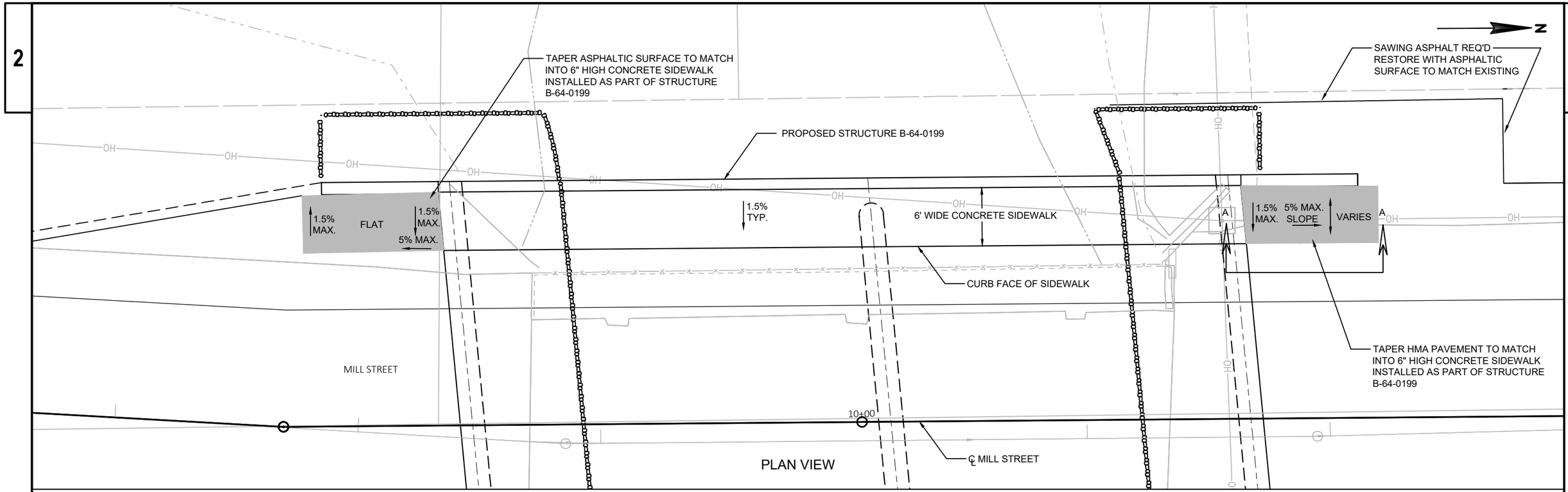
CONSTRUCTION NOTES:

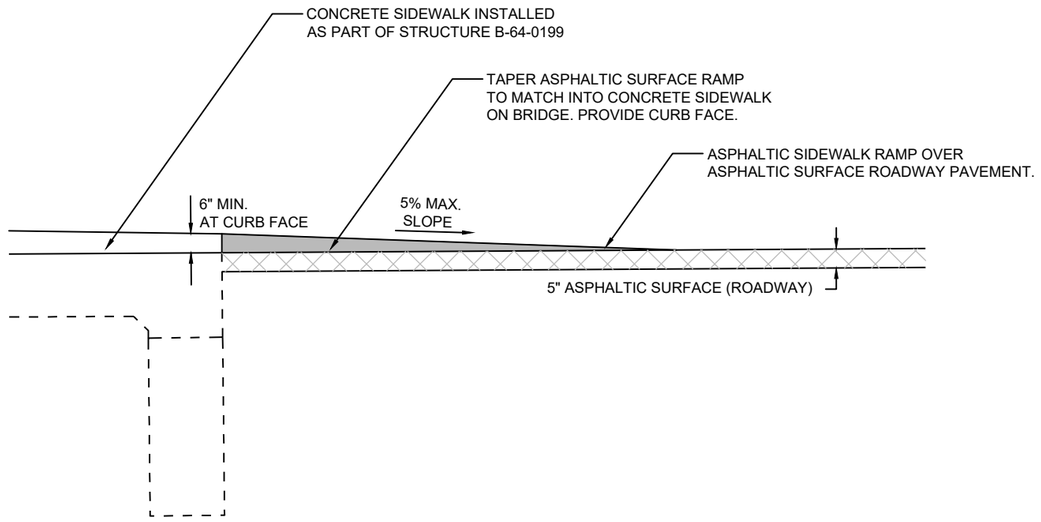
1. EXTEND GEOTEXTILE FABRIC BENEATH THE ENTIRE LENGTH OF THE APRON ENDWALL SECTION. INSTALL ON PREPARED FOUNDATION. GRADE PRIOR TO END WALL INSTALLATION.

RIPRAP MEDIUM DETAIL AT APRON ENDWALL OUTLET



WILDLIFE PATH DETAIL SOUTH ABUTMENT





SECTION A-A
(TYPICAL BOTH ENDS OF BRIDGE)

ASPHALTIC RAMP DETAIL

PROJECT NO: 3849-00-72	HWY: MILL STREET	COUNTY: WALWORTH	PLAN: CONSTRUCTION DETAILS	SHEET 5	E

FILE NAME : P:\9200S\9290S\9294\09294002\C3D\SHEETSPLAN\ASPHALT RAMP DETAIL.DWG
LAYOUT NAME - Asphalt Ramp Detail
PLOT DATE : 8/25/2018 11:38 AM PLOT BY : ERIN JORDAN PLOT NAME : PLOT SCALE : 1 IN: 20 FT

3849-00-72

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	3.000	3.000
0004	201.0205	Grubbing	STA	3.000	3.000
0006	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 10+00	LS	1.000	1.000
0010	205.0100	Excavation Common	CY	434.000	434.000
0012	206.1000	Excavation for Structures Bridges (structure) 01. B-64-199	LS	1.000	1.000
0016	210.1500	Backfill Structure Type A	TON	420.000	420.000
0018	213.0100	Finishing Roadway (project) 01. 3849-00-72	EACH	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	12.000	12.000
0024	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	430.000	430.000
0026	455.0605	Tack Coat	GAL	38.000	38.000
0028	465.0105	Asphaltic Surface	TON	216.000	216.000
0030	502.0100	Concrete Masonry Bridges	CY	402.000	402.000
0032	502.3200	Protective Surface Treatment	SY	444.000	444.000
0034	502.3210	Pigmented Surface Sealer	SY	45.000	45.000
0038	505.0400	Bar Steel Reinforcement HS Structures	LB	7,230.000	7,230.000
0040	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	45,550.000	45,550.000
0042	511.1200	Temporary Shoring (structure) 01. B-64-199	SF	250.000	250.000
0044	513.7021	Railing Steel Type C4 01. B-64-199	LF	105.000	105.000
0046	513.7084	Railing Steel Type NY4 01. B-64-199	LF	109.000	109.000
0048	516.0500	Rubberized Membrane Waterproofing	SY	24.000	24.000
0050	520.1015	Apron Endwalls for Culvert Pipe 15-Inch	EACH	1.000	1.000
0052	550.0020	Pre-Boring Rock or Consolidated Materials	LF	291.000	291.000
0054	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	387.000	387.000
0056	603.8000	Concrete Barrier Temporary Precast Delivered	LF	50.000	50.000
0058	603.8125	Concrete Barrier Temporary Precast Installed	LF	50.000	50.000
0060	606.0200	Riprap Medium	CY	1.000	1.000
0062	606.0300	Riprap Heavy	CY	190.000	190.000
0064	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
0066	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	240.000	240.000
0068	618.0100	Maintenance And Repair of Haul Roads (project) 01. 3849-00-72	EACH	1.000	1.000
0072	619.1000	Mobilization	EACH	0.720	0.720
0074	624.0100	Water	MGAL	24.000	24.000
0076	625.0100	Topsoil	SY	195.000	195.000
0078	625.0500	Salvaged Topsoil	SY	275.000	275.000
0080	627.0200	Mulching	SY	525.000	525.000
0082	628.1104	Erosion Bales	EACH	40.000	40.000
0084	628.1504	Silt Fence	LF	245.000	245.000

3849-00-72

Line	Item	Item Description	Unit	Total	Qty
0086	628.1520	Silt Fence Maintenance	LF	245.000	245.000
0088	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0090	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0092	628.2008	Erosion Mat Urban Class I Type B	SY	70.000	70.000
0094	628.6005	Turbidity Barriers	SY	200.000	200.000
0096	628.7504	Temporary Ditch Checks	LF	20.000	20.000
0098	629.0210	Fertilizer Type B	CWT	0.450	0.450
0100	630.0130	Seeding Mixture No. 30	LB	15.000	15.000
0104	630.0200	Seeding Temporary	LB	20.000	20.000
0106	633.5100	Markers Row	EACH	7.000	7.000
0110	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	3.000	3.000
0112	637.2230	Signs Type II Reflective F	SF	12.750	12.750
0114	642.5001	Field Office Type B	EACH	0.720	0.720
0116	643.0420	Traffic Control Barricades Type III	DAY	2,328.000	2,328.000
0118	643.0705	Traffic Control Warning Lights Type A	DAY	3,880.000	3,880.000
0120	643.0900	Traffic Control Signs	DAY	1,940.000	1,940.000
0122	643.5000	Traffic Control	EACH	1.000	1.000
0124	645.0111	Geotextile Type DF Schedule A	SY	86.000	86.000
0126	645.0120	Geotextile Type HR	SY	456.000	456.000
0128	646.1005	Marking Line Paint 4-Inch	LF	1,000.000	1,000.000
0130	650.4500	Construction Staking Subgrade	LF	168.000	168.000
0132	650.5000	Construction Staking Base	LF	168.000	168.000
0136	650.6500	Construction Staking Structure Layout (structure) 01. B-64-0199	LS	1.000	1.000
0140	650.9910	Construction Staking Supplemental Control (project) 01. 3849-00-72	LS	1.000	1.000
0144	650.9920	Construction Staking Slope Stakes	LF	168.000	168.000
0146	690.0150	Sawing Asphalt	LF	190.000	190.000
0148	715.0502	Incentive Strength Concrete Structures	DOL	2,412.000	2,412.000

3

CLEARING & GRUBBING

CATEGORY	STATION	TO STATION	LOCATION	(201.0105) CLEARING STA	(201.0205) GRUBBING STA
0010	9+00	11+50	RT	3	3
PROJECT TOTALS				**3**	**3**

BASE AGGREGATE DENSE

CATEGORY	STATION	TO STATION	(305.0110) 3/4-INCH TON	(305.0120) 1 1/4-INCH TON	* (624.0100) WATER MGAL
0010	9+00.00	9+58.75	7	155	3
	10+41.25	11+50.00	5	275	6
PROJECT TOTALS			**12**	**430**	**9**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

ASPHALTIC SURFACE

CATEGORY	STATION	TO STATION	(455.0605) TACK COAT GAL	(465.0105) ASPHALTIC SURFACE TON	NOTES
0010	9+00.00	9+58.75	12	68	-
	10+41.25	11+50.00	26	144	-
	9+40.00	9+58.75	0	2	ASPHALTIC SLOPE (LT)
	10+41.25	10+55.00	0	2	ASPHALTIC SLOPE (LT)
PROJECT TOTALS			**38**	**216**	

CULVERT PIPE

CATEGORY	STATION	LOCATION	(520.1015) APRON ENDWALLS FOR CULVERT PIPE 15-INCH EACH
0010	11+10	31' RT	1
PROJECT TOTALS			**1**

CONCRETE BARRIER TEMPORARY PRECAST

CATEGORY	LOCATION	(603.8000) DELIVERED LF	(603.8125) INSTALLED LF
0010	PIER, LT	50	50
PROJECT TOTALS		**50**	**50**

MAINTENANCE AND REPAIR OF HAUL ROADS

CATEGORY	DESCRIPTION	(618.0100) EACH
0030	PROJECT 3849-00-72	1
PROJECT TOTAL		**1**

ADJUSTING MANHOLE COVERS

CATEGORY	STATION	LOCATION	(611.8110) EACH
0030	11+24	3' LT	1
PROJECT TOTAL			**1**

EARTHWORK PROJECT I.D. 3849-00-72

Division	From/To Station	Location	Common Excavation (1) (item # 205.0100) Cut (2)	EBS Excavation (3)	Salvaged /Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (6) Factor 1.30	Mass Ordinate +/- (7)	Waste	Borrow (item #208.0100)	Comment:
1	9+00 - 9+59	South Mill Street	185	0	0	185	4	5	180	180	-180	
2	10+41 - 11+50	North Mill Street	249	0	0	249	4	5	244	244	-244	
	STRUCTURE B-64-0199		0	0	0	0	0	0	0	0	0	
	UNDISTRIBUTED EBS		0	0	0	0	0	0	0	0	0	
Grand Total			434	0	0	434	8	10	424	424	-424	
			434									

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Breaker Run material.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Expanded Fill. Factor = 1.30
7) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

FINISHING ITEMS

CATEGORY	STATION	TO STATION	LOCATION	(625.0100) TOPSOIL SY	(625.0500) SALVAGED TOPSOIL SY	(627.0200) MULCHING SY	(629.0210) FERTILIZER TYPE B CWT	(630.0130) SEEDING MIXTURE NO. 30 LB	(630.0200) SEEDING TEMPORARY LB	* (624.0100) WATER MGAL	NOTES
0010	9+00	9+58.75	RT	-	30	65	0.05	2	3	2	-
	9+00	9+58.75	LT	-	30	30	0.05	1	2	1	-
	9+60	9+60	RT, LT	163	-	-	-	-	-	-	CRITTER CROSSING
	10+41.25	11+50	RT	-	120	270	0.20	6	9	7	-
	UNDISTRIBUTED			33	95	160	0.15	6	6	5	-
	PROJECT TOTALS			**195**	**275**	**525**	**0.45**	**15**	**20**	**15**	

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

RIPRAP

CATEGORY	STATION	LOCATION	(606.0200) RIPRAP MEDIUM CY	* (645.0120) GEOTEXTILE TYPE HR SY
0010	11+10	RT	1	6
	PROJECT TOTALS		**1**	**6**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

MOBILIZATIONS EROSION CONTROL

CATEGORY	DESCRIPTION	(628.1905) EACH	(628.1910) EMERGENCY EACH
0010	PROJECT 3849-00-72	2	2
	PROJECT TOTALS	**2**	**2**

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	(628.7504) LF
0010	10+80	RT	10
	UNDISTRIBUTED		10
	PROJECT TOTAL		**20**

TEMORARY SETTLING BASIN

CATEGORY	LOCATION	(628.1104) EROSION BALES EACH	* (645.0120) GEOTEXTILE TYPE HR SY
0010	B-64-0199	40	80
	PROJECT TOTALS	**40**	**80**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

EROSION MAT URBAN CLASS I TYPE B

CATEGORY	STATION	TO STATION	LOCATION	(628.2008) SY
0010	10+55	11+10	RT	56
	UNDISTRIBUTED			14
	PROJECT TOTAL			**70**

SILT FENCE

CATEGORY	STATION	TO STATION	LOCATION	(628.1504) LF	(628.1520) MAINTENANCE LF
0010	9+00	9+58.75	RT	70	70
	10+41.25	11+50	RT	135	135
	UNDISTRIBUTED			40	40
	PROJECT TOTALS			**245**	**245**

TURBIDITY BARRIERS

CATEGORY	LOCATION	(628.6005) SY
0010	SOUTH ABUT	80
	NORTH ABUT	80
	UNDISTRIBUTED	40
	PROJECT TOTAL	**200**

3

MARKERS ROW

CATEGORY	R/W POINT NO.	STATION	LOCATION	(633.5100) EACH
0010	1	9+00.00	30.34' LT	1
	2	11+50.00	34.12' LT	1
	3	11+50.00	31.88' RT	1
	4	11+00.00	50.00' RT	1
	5	10+25.00	50.00' RT	1
	6	10+25.00	32.51' RT	1
	7	9+00.00	35.82' RT	1
		PROJECT TOTAL		**7**

MARKING LINE PAINT 4-INCH

CATEGORY	STATION	TO STATION	(646.1005) (YELLOW) LF	(WHITE) LF	NOTES
0010	9+00	11+50	500	500	SOLID DOUBLE YELLOW CENTERLINE & EDGELINES
		PROJECT TOTAL	**1,000**		

3

PERMANENT SIGNING

CATEGORY	STATION	LOCATION	SIGN CODE	SIZE	(637.2230) SIGNS TYPE II REFLECTIVE F SF	(634.0612) POSTS WOOD 4X6-INCH X 12-FT EACH	NOTES
0010	9+10	LT	S1-1	36"x36"	6.75	1	SCHOOL ZONE
	9+48	RT	W5-52R	12"x36"	3.00	1	BRIDGE HASH MARKS
	10+55	RT	W5-52L	12"x36"	3.00	1	BRIDGE HASH MARKS
			PROJECT TOTALS		**12.75**	**3**	

CONSTRUCTION STAKING

CATEGORY	STATION	TO STATION	(650.4500) SUBGRADE LF	(650.5000) BASE LF	(650.9910.01) SUPPLEMENTAL CONTROL 3849-00-72 LS	(650.9920) SLOPE STAKES LF
0010	9+00.00	9+58.75	59	59	-	59
	10+41.25	11+50.00	109	109	-	109
		PROJECT TOTALS	**168**	**168**	**1**	**168**

TRAFFIC CONTROL

CATEGORY	LOCATION	DAYS	(643.5000) EACH	TRAFFIC CONTROL BARRICADES TYPE III EACH	(643.0420) TRAFFIC CONTROL BARRICADES TYPE III DAYS	TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	(643.0705) TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	TRAFFIC CONTROL SIGNS EACH	(643.0900) TRAFFIC CONTROL SIGNS DAYS
0010	PROJECT 3849-00-72	-	1	-	-	-	-	-	-
	SPRING VALLEY ROAD INTERSECTION	97	-	2	194	4	388	2	194
	CLEARWATER COURT INTERSECTION	97	-	2	194	4	388	2	194
	BEGINNING OF PROJECT	97	-	7	679	10	970	5	485
	END OF PROJECT	97	-	7	679	10	970	5	485
	WATER STREET	97	-	2	194	4	388	2	194
	STH 36 INTERSECTION	97	-	2	194	4	388	2	194
	UNDISTRUBUTED	97	-	2	194	4	388	2	194
	PROJECT TOTALS		1		2,328		3,880		1,940

SAWING ASPHALT

CATEGORY	STATION	TO STATION	(690.0150) LF	NOTES
0010	9+00	-	34	-
	10+40	11+50	118	DRIVEWAY
	11+50	-	38	-
	PROJECT TOTAL		**190**	

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE, AND OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMP. LIMITED EASEMENT AREA
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
BUILDING (TO BE REMOVED)
BRIDGE

PARCEL NUMBER
UTILITY NUMBER
SECTION CORNER
R/W MONUMENT
NON-MONUMENTED R/W POINT
NOTATION FOR COMBUSTABLE FLUIDS
FOUND IRON PIN
VALVE (GAS, WATER, ETC.)
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
SIGN
OFF-PREMISE SIGN

ACCESS CONTROLLED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
NATIONAL GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
PARALLEL OFFSETS

CONVENTIONAL UTILITY SYMBOLS

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

CURVE DATA ABBREVIATIONS

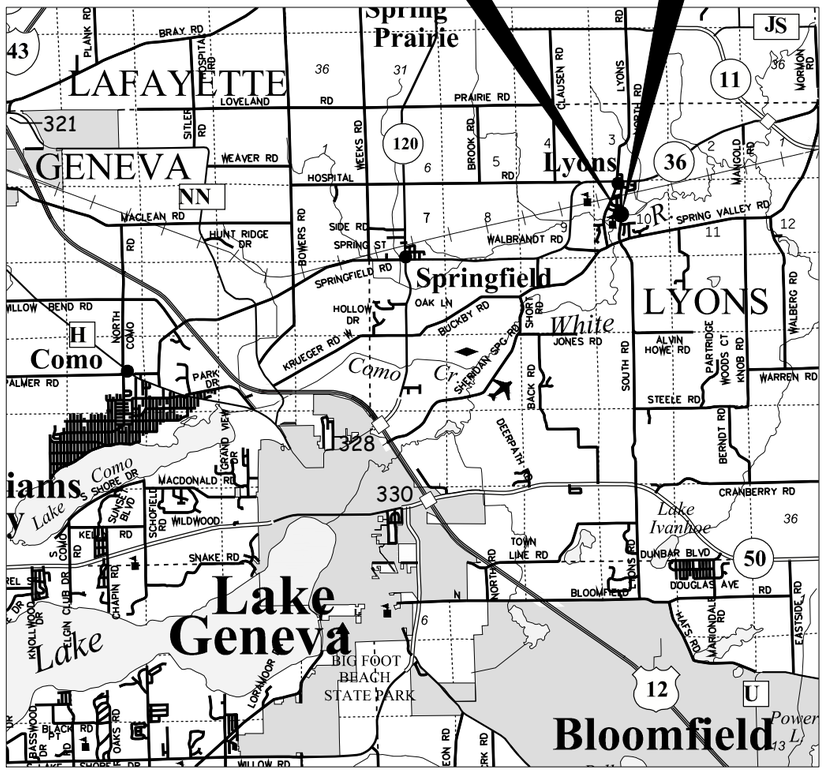
LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	OUTLOT	OL
ACRES	AC	PAGE	P
AHEAD	AH	POINT OF TANGENCY	PT
ALUMINUM	ALUM	PROPERTY LINE	PL
AND OTHERS	ET AL	RECORDED AS	(100')
BACK	BK	REEL / IMAGE	R/I
BLOCK	BLK	REFERENCE LINE	R/L
CENTERLINE	C/L	PERMANENT LIMITED EASEMENT	PLE
CERTIFIED SURVEY MAP	CSM	POINT OF BEGINNING	POB
CONCRETE	CONC	POINT OF CURVATURE	PC
COUNTY	CO	POINT OF COMPOUND CURVE	PCC
COUNTY TRUNK HIGHWAY	CTH	POINT OF INTERSECTION	PI
DISTANCE	DIST	REMAINING	REM
CORNER	COR	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
DOCUMENT NUMBER	DOC	RIGHT	RT
EASEMENT	EASE	RIGHT OF WAY	R/W
EXISTING	EX	SECTION	SEC
GAS VALVE	GV	SEPTIC VENT	SEPV
GRID NORTH	GN	SQUARE FEET	SF
HIGHWAY EASEMENT	HE	STATE TRUNK HIGHWAY	STH
IDENTIFICATION	ID	STATION	STA
LAND CONTRACT	LC	TELEPHONE PEDESTAL	TP
LEFT	LT	TEMPORARY LIMITED EASEMENT	TLE
MONUMENT	MON	TRANSPORTATION PROJECT PLAT	TPP
NATIONAL GEODETIC SURVEY	NGS	UNITED STATES HIGHWAY	USH
NUMBER	NO	VOLUME	V

BEGIN RELOCATION ORDER STA.9+00.00
Y = 356,623.424
X = 812,571.773
APPROXIMATELY 636 FEET WEST OF AND 2,395 FEET SOUTH OF THE NORTH 1/4 CORNER OF SECTION 10, T-2-N, R-18-E, TOWN OF LYONS, WALWORTH COUNTY, WI.

END RELOCATION ORDER STA.11+50.00
Y = 356,873.366
X = 812,571.722
APPROXIMATELY 636 FEET WEST OF AND 2,145 FEET SOUTH OF THE NORTH 1/4 CORNER OF SECTION 10, T-2-N, R-18-E, TOWN OF LYONS, WALWORTH COUNTY, WI.



LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.047

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
3849-00-02	4.01	2

PLAT OF RIGHT OF WAY REQUIRED FOR

TOWN OF LYONS, MILL STREET WHITE RIVER BRIDGE (B-64-0260)

LOCAL STREET — WALWORTH COUNTY

CONSTRUCTION NUMBER: 3849-00-72

CAUTION:
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES.

NOTES:

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

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

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/0R EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING RIGHT-OF-WAY FOR HOSPITAL ROAD IS ESTABLISHED BY DEGEN PLAT OF SURVEY AND KROTT PLAT OF SURVEY.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

ORIGINAL PLAT PREPARED BY

MSA PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL • REMEDIATION • DEVELOPMENT • ENVIRONMENTAL
2901 International Lane, Suite 300 Madison, WI 53704-3133
608-242-7779 1-800-446-0679 Fax: 608-242-5664

WISCONSIN
BRADLEY L. TISDALE S-2824 WAUNAKEE WI
LAND SURVEYOR

07/24/2018 (DATE)

Bradley L Tisdale (BRADLEY L. TISDALE, PLS S-2824)

REVISION DATE

TOWN OF LYONS

APPROVED FOR THE TOWN

DATE: _____ _____ (Signatur`

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE TOWN OF LYONS.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	FEE ACRES REQUIRED			TLE ACRES REQUIRED
			NEW	EXISTING	TOTAL	
1	DEBORAH VINDICK	FEE	0.04	0.19	0.23	--

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
80	LYONS SANITARY DISTRICT NO.2 SANITARY SEWER EASEMENT DOC #56317	RELEASE OF RIGHTS

RW POINT	STATION	OFFSET	Y	X
1	9+00.00	30.34 L	356,625.047	812,541.472
2	11+50.00	34.12 L	356,872.998	812,537.603
3	11+50.00	31.88 R	356,873.696	812,603.600
4	11+00.00	50.00 R	356,823.890	812,622.248
5	10+25.00	50.00 R	356,748.894	812,623.040
6	10+25.00	32.51 R	356,748.709	812,605.550
7	9+00.00	35.82 R	356,621.518	812,607.535

BEESMAN PLAT OF SURVEY
DATED DECEMBER 29, 1978

WISCONSIN
BRADLEY L. TISDALE
S-2824
WAUNAKEE
WI
LAND SURVEYOR

SE-NW

WETZEL PLAT OF SURVEY
DATED APRIL 12, 2007

TOWN

FOUND BRASS DISK
Y = 359,026.243
X = 810,602.966

NW 10 TO N 10
S89°49'51"E 2604.75'

4

N00°53'38"W 247.98'

EXISTING R/W

WE ENERGIES

RL TO #1
N86°56'31"W 30.34'

Y = 356,663.899
X = 812,573.936

RL = N03°03'29"E

BEGIN RELOCATION
ORDER STA.9+00.00
Y = 356,623.424
X = 812,571.773

#7 TO PL
N86°56'31"W 33.08'

#7 TO RL
N86°56'31"W 35.82'

SLOPE INTERCEPT (TYP)

S00°53'38"E 127.21'

LYONS SANITARY DISTRICT NO. 2
40' SANITARY SEWER EASEMENT
VOL. 248, PG. 311
DOCUMENT #56317

TOWN OF LYONS

SE-NW

N 10 TO C 10
S00°21'58"E 2643.70'

FOUND BRASS DISK
Y = 356,374.912
X = 813,224.605

LYONS

WHITE RIVER

PROPOSED STRUCTURE
B-64-0199

PL = N00°53'38"W 250.10'
RL = N00°36'20"W

S89°23'40"W 17.49'

S00°36'20"E 75.00'

S20°31'34"E 53.18'

SLOPE INTERCEPT (TYP)

80

1

DEBORAH VINDICK

DUNHAM PLAT OF SURVEY
DATED APRIL 30, 1959

SLOPE INTERCEPT (TYP)

AT&T AND CHARTER

#2 TO RL
N89°23'40"E 34.12'

RL TO #3
N89°23'40"E 31.88'

PL TO #3
N89°23'40"E 33.00'

TRAV PT TO 11+50.00
S00°10'09"W 2147.07'

END RELOCATION
ORDER STA.11+50.00
Y = 356,873.366
X = 812,571.722

EXISTING R/W

N 10 TO TRAV PT
N89°49'51"W 662.37'

FOUND BRASS DISK
Y = 359,018.558
X = 813,207.709

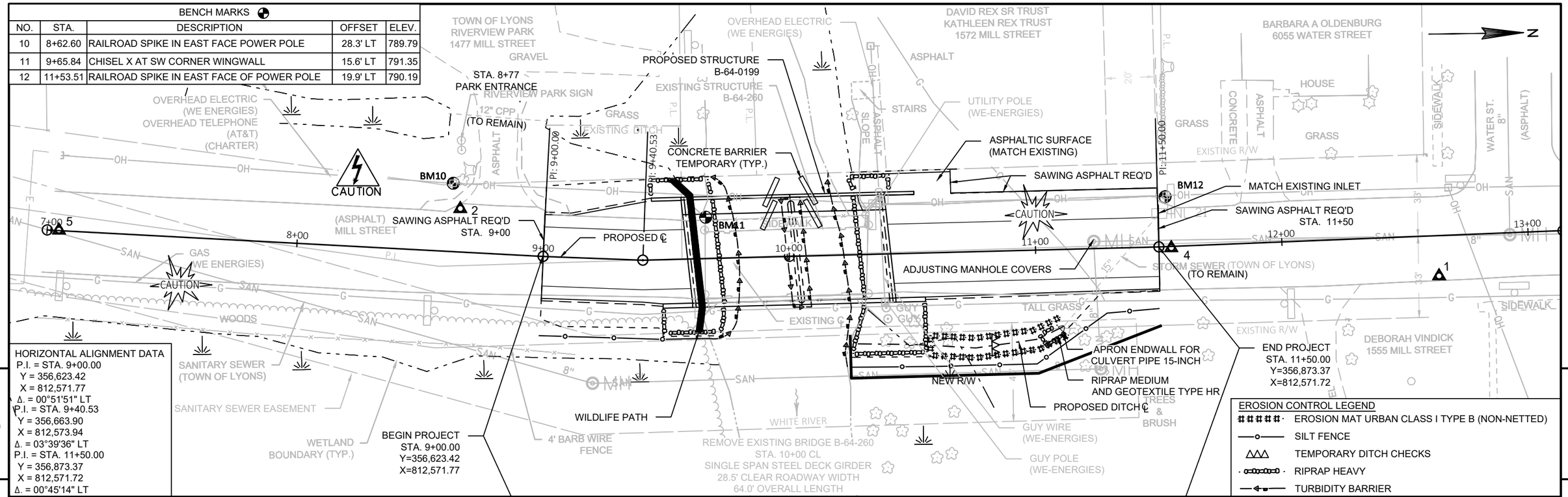
REVISION DATE	DATE 07/24/2018	SCALE, FEET 0 10 20	HWY: MILL STREET	R/W PROJECT NUMBER 3849-00-02	PLAT SHEET 4.02
	GRID FACTOR		COUNTY: WALWORTH	CONSTRUCTION PROJECT NUMBER 3849-00-72	PS&E SHEET 12 E

FILE NAME : MILL STREET_PLAT.DWG
LAYOUT NAME - Plat

PLOT DATE : 7/24/2018 9:26 AM PLOT BY : BRAD TISDALE PLOT NAME : PLOT SCALE : 1 IN:20 FT

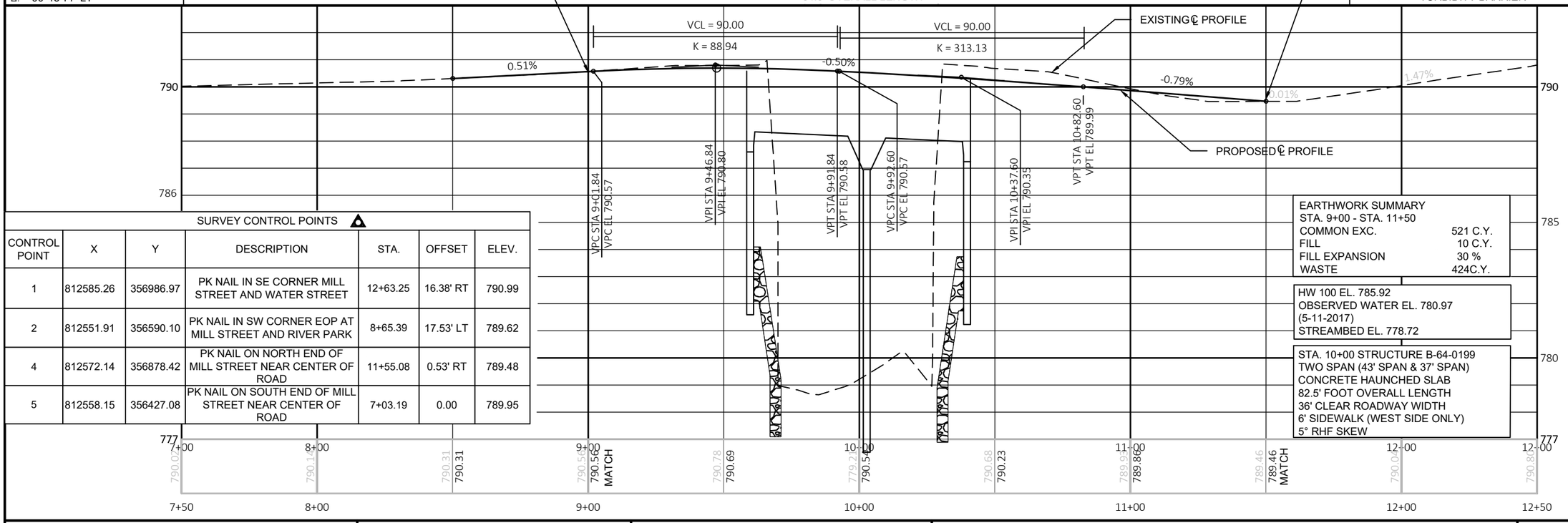
WISDOT/CADDS SHEET 75

BENCH MARKS				
NO.	STA.	DESCRIPTION	OFFSET	ELEV.
10	8+62.60	RAILROAD SPIKE IN EAST FACE POWER POLE	28.3' LT	789.79
11	9+65.84	CHISEL X AT SW CORNER WINGWALL	15.6' LT	791.35
12	11+53.51	RAILROAD SPIKE IN EAST FACE OF POWER POLE	19.9' LT	790.19



HORIZONTAL ALIGNMENT DATA
P.I. = STA. 9+00.00
Y = 356,623.42
X = 812,571.77
Δ. = 00°51'51" LT
P.I. = STA. 9+40.53
Y = 356,663.90
X = 812,573.94
Δ. = 03°39'36" LT
P.I. = STA. 11+50.00
Y = 356,873.37
X = 812,571.72
Δ. = 00°45'14" LT

EROSION CONTROL LEGEND
- EROSION MAT URBAN CLASS I TYPE B (NON-NETTED)
- SILT FENCE
- TEMPORARY DITCH CHECKS
- RIPRAP HEAVY
- TURBIDITY BARRIER



SURVEY CONTROL POINTS						
CONTROL POINT	X	Y	DESCRIPTION	STA.	OFFSET	ELEV.
1	812585.26	356986.97	PK NAIL IN SE CORNER MILL STREET AND WATER STREET	12+63.25	16.38' RT	790.99
2	812551.91	356590.10	PK NAIL IN SW CORNER EOP AT MILL STREET AND RIVER PARK	8+65.39	17.53' LT	789.62
4	812572.14	356878.42	PK NAIL ON NORTH END OF MILL STREET NEAR CENTER OF ROAD	11+55.08	0.53' RT	789.48
5	812558.15	356427.08	PK NAIL ON SOUTH END OF MILL STREET NEAR CENTER OF ROAD	7+03.19	0.00	789.95

EARTHWORK SUMMARY
STA. 9+00 - STA. 11+50

COMMON EXC.	521 C.Y.
FILL	10 C.Y.
FILL EXPANSION	30 %
WASTE	424C.Y.

HW 100 EL. 785.92
OBSERVED WATER EL. 780.97
(5-11-2017)
STREAMBED EL. 778.72

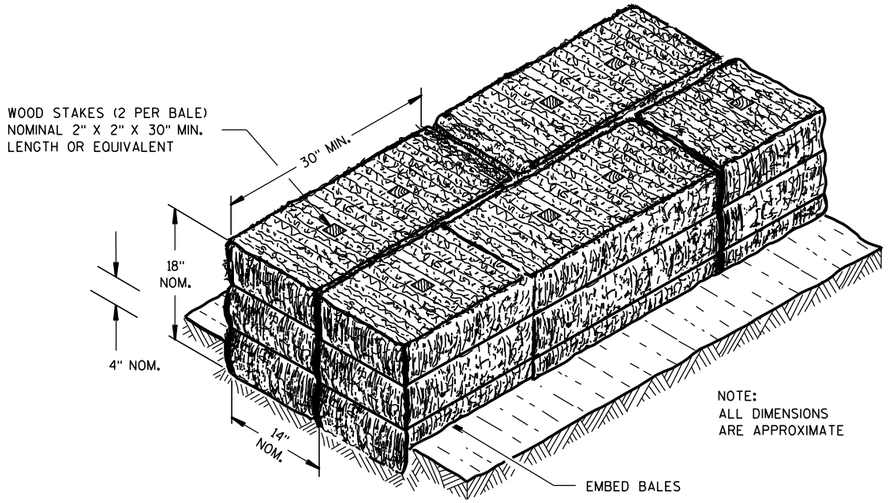
STA. 10+00 STRUCTURE B-64-0199
TWO SPAN (43' SPAN & 37' SPAN)
CONCRETE HAUNCHED SLAB
82.5' FOOT OVERALL LENGTH
36' CLEAR ROADWAY WIDTH
6' SIDEWALK (WEST SIDE ONLY)
5° RHF SKEW

PROJECT NO: 3849-00-72	HWY: MILL STREET	COUNTY: WALWORTH	PLAN AND PROFILE: MILL STREET	SHEET 13	E

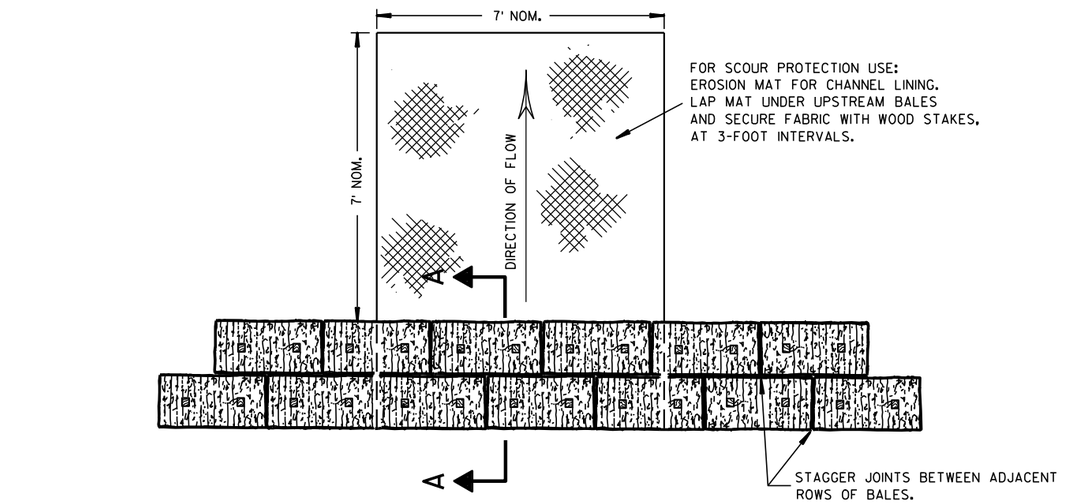
FILE NAME : P:\9200S\9290S\9294\09294002\C3D\DESIGN\ALIPROFS\ALIPROF-MILL STREET.DWG
LAYOUT NAME - Proposed P&P
PLOT DATE : 10/29/2018 3:03 PM
PLOT BY : ERIN JORDAN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

Standard Detail Drawing List

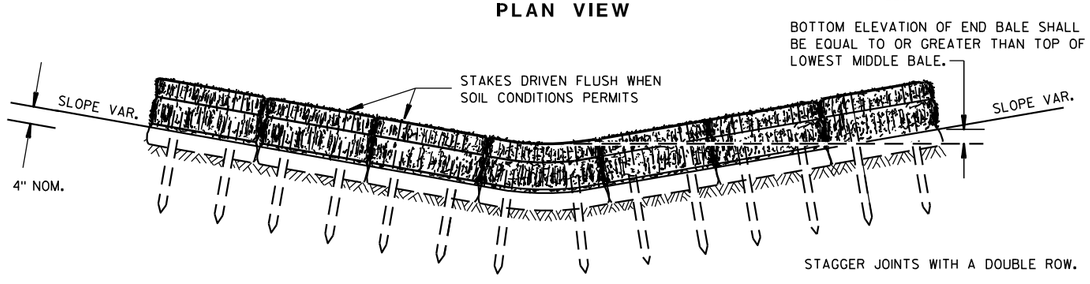
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
12A03-10	NAME PLATE (STRUCTURES)
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



SECTION A-A



PLAN VIEW



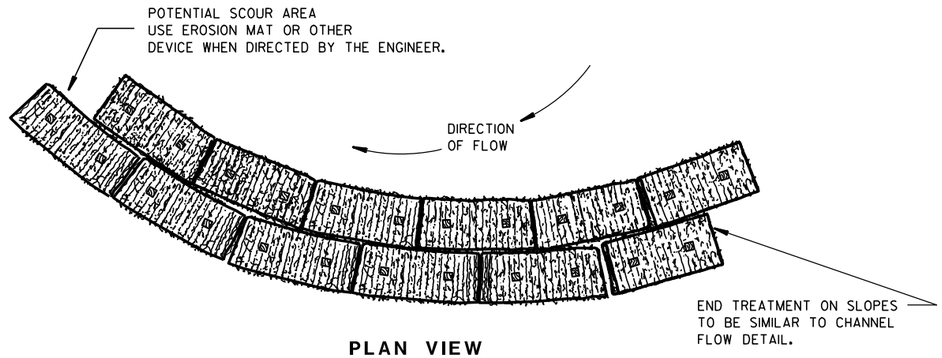
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

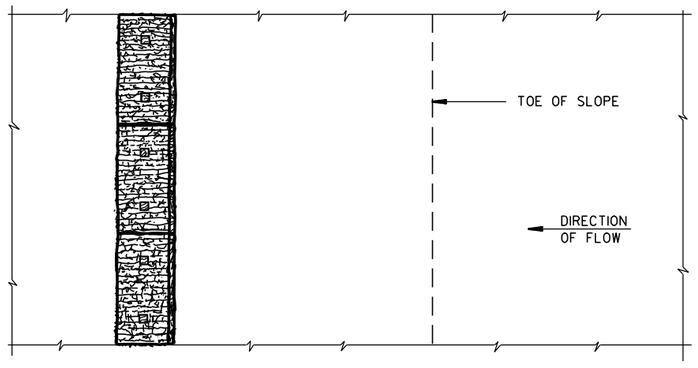
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

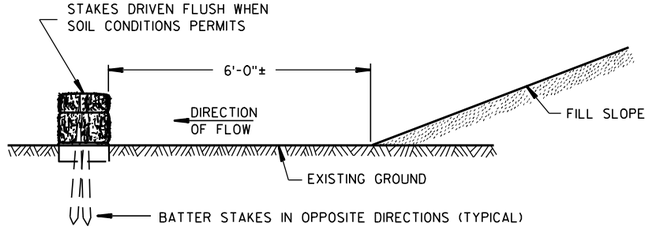


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

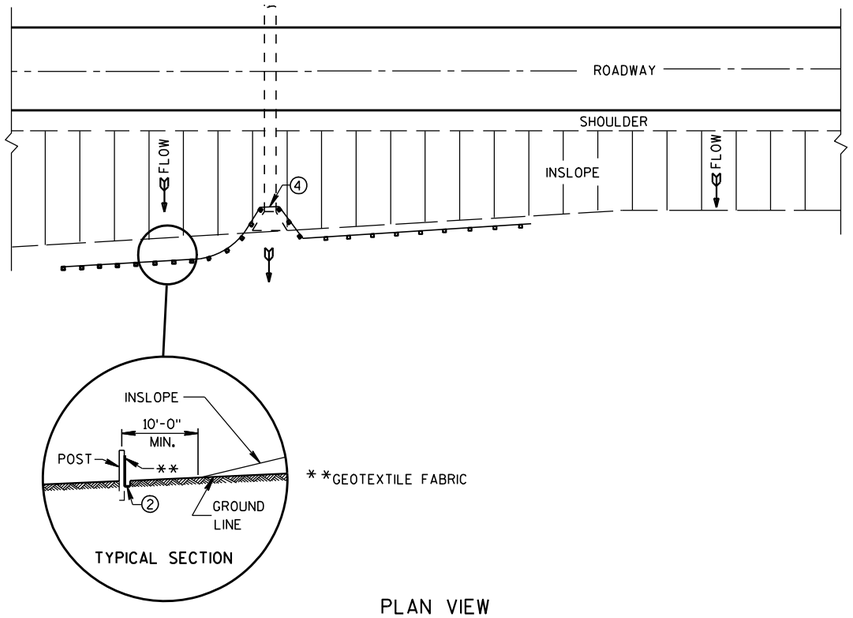
EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

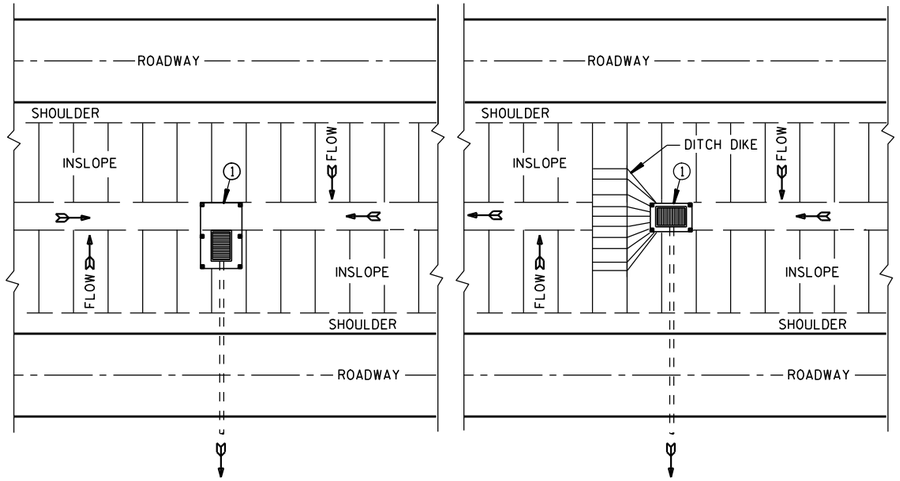
APPROVED
6/04/02 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 8-3



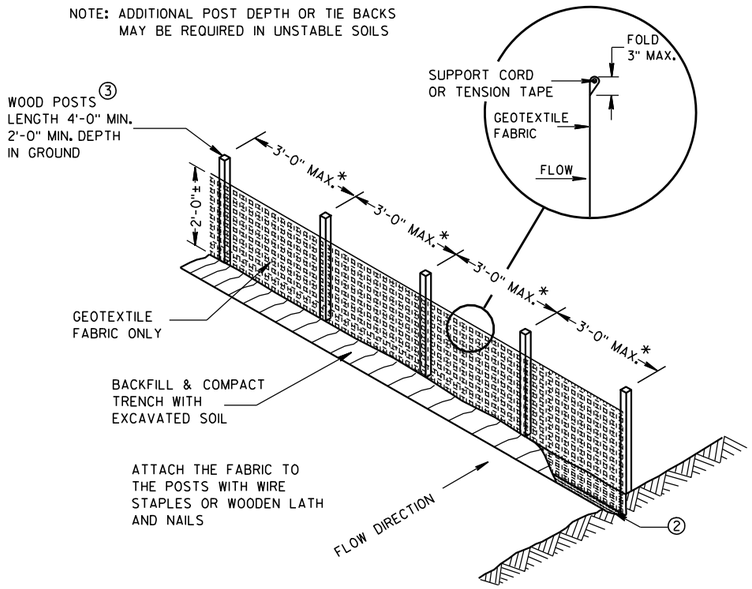
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



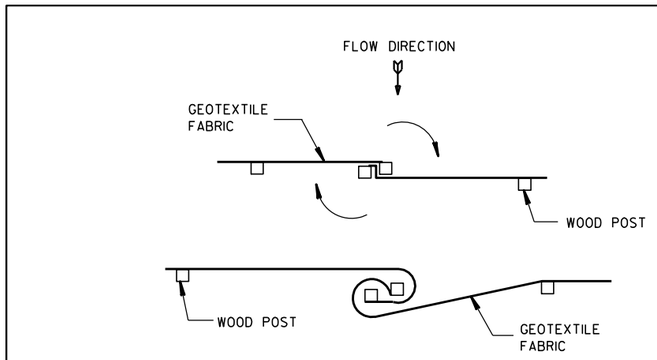
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS



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

SILT FENCE

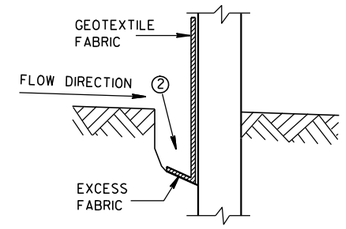


JOINING TWO LENGTHS OF SILT FENCE 5

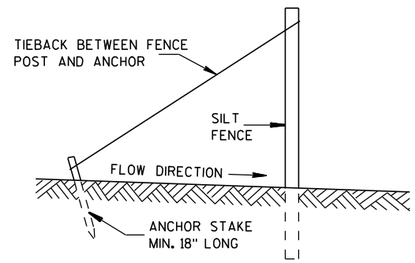
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

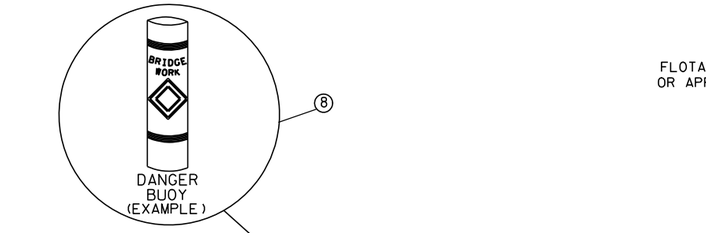
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

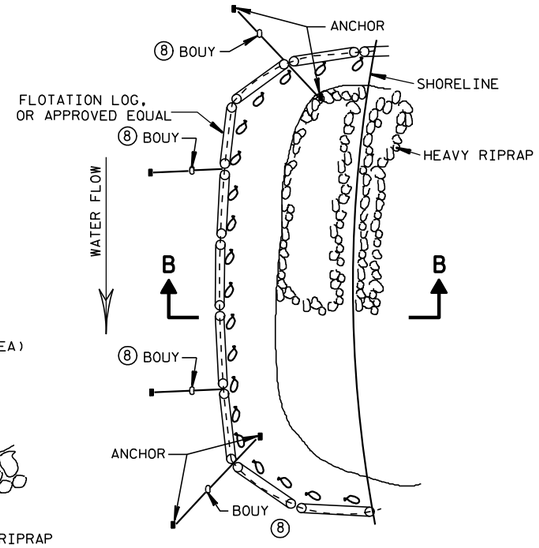
S.D.D. 8 E 9-6

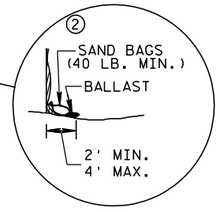
6

S.D.D. 8 E 9-6

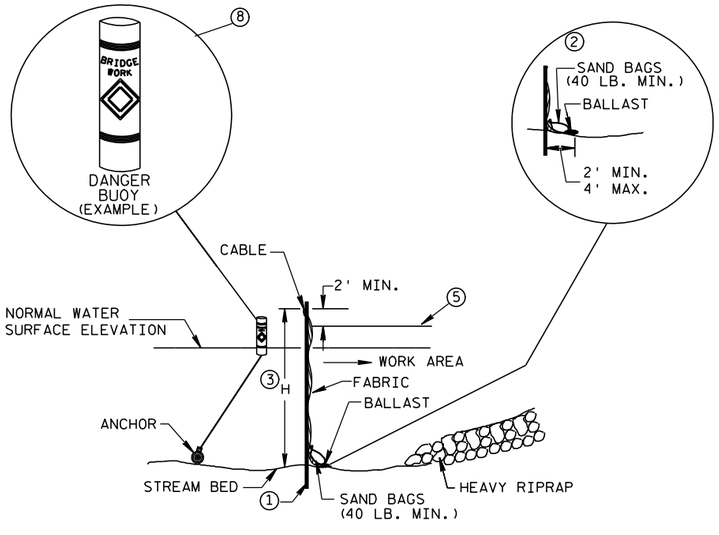


SECTION B-B

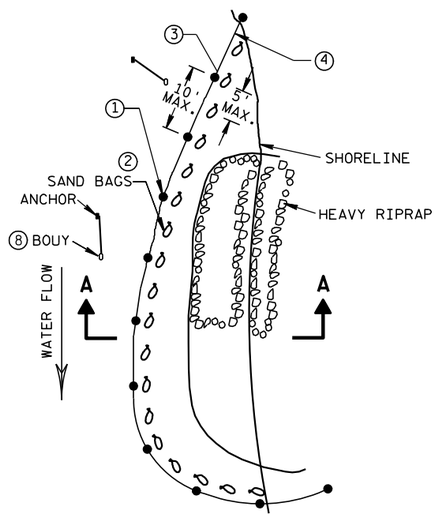




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



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.

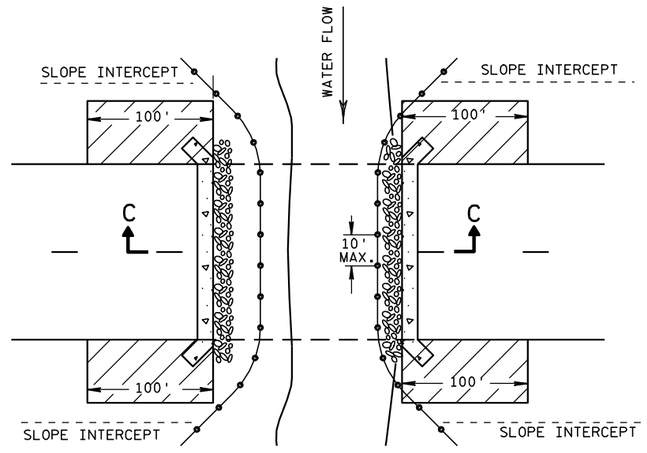
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

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

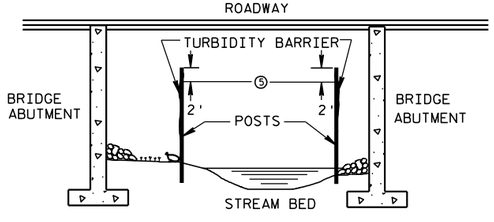
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 8 E 11-2

6

S.D.D. 8 E 11-2

METAL APRON ENDWALLS

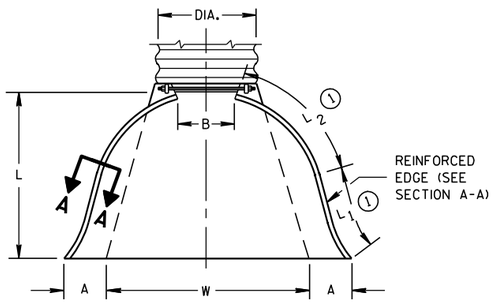
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

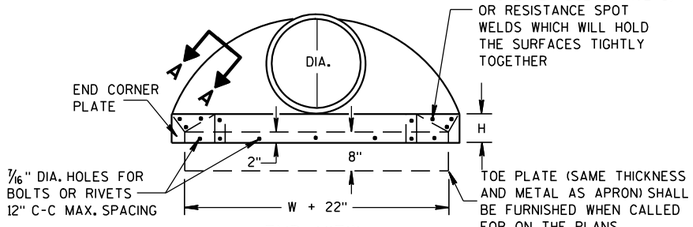
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

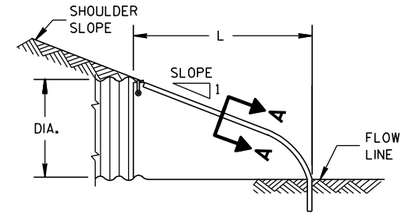
*MINIMUM
**MAXIMUM



PLAN VIEW

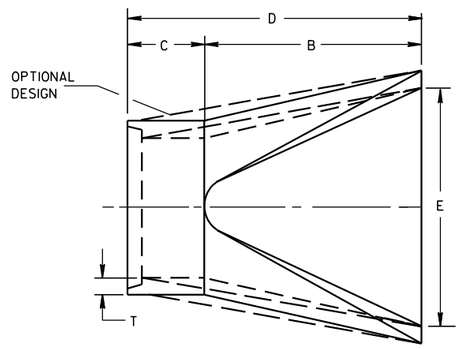


END VIEW

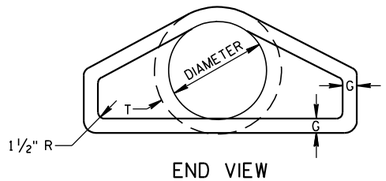


SIDE ELEVATION

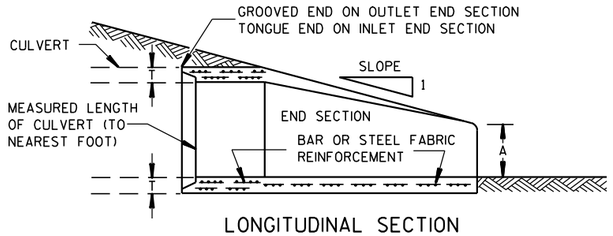
METAL ENDWALLS



PLAN

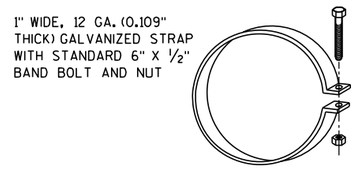


END VIEW



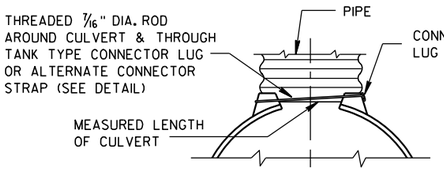
LONGITUDINAL SECTION

CONCRETE ENDWALLS

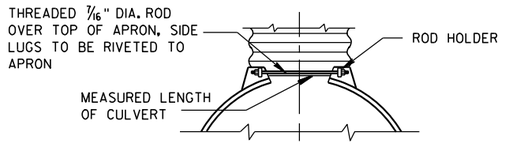


ALTERNATE FOR TYPE 1 CONNECTION

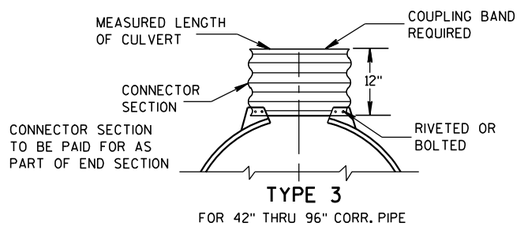
END SECTION CONNECTOR STRAP



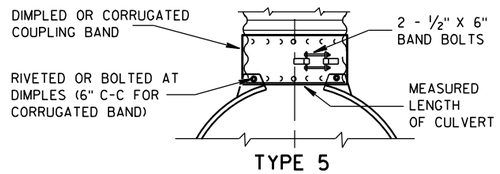
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

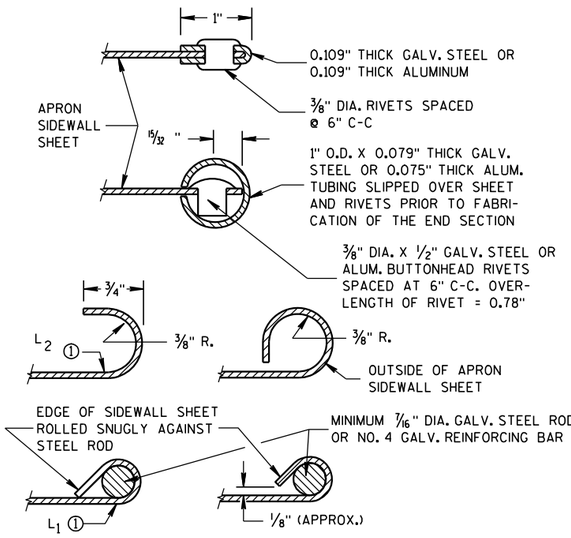
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

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.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

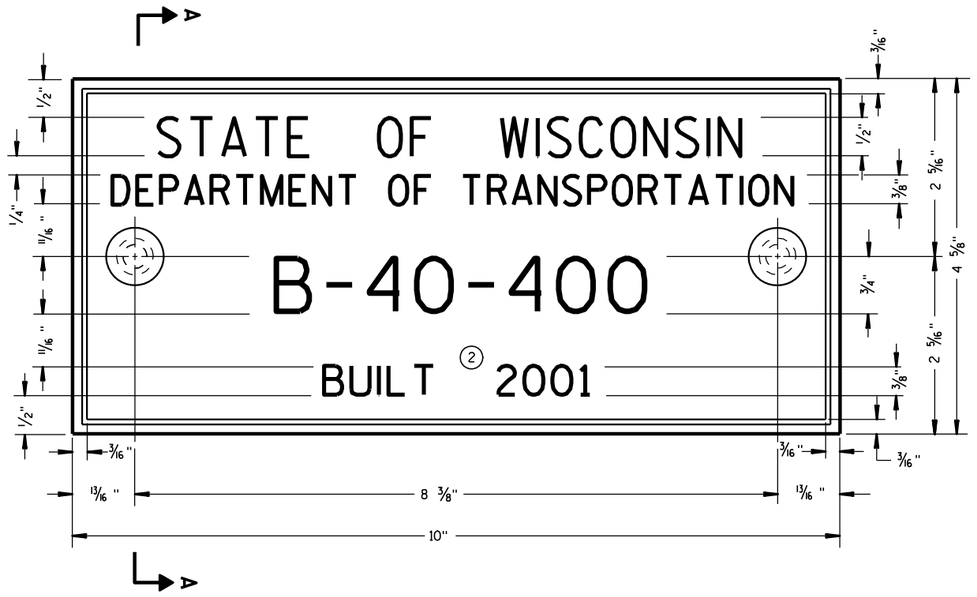
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

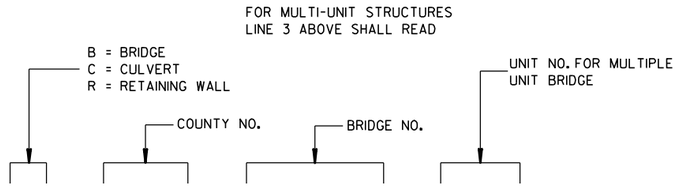
APPROVED
11/30/94 — DATE
/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

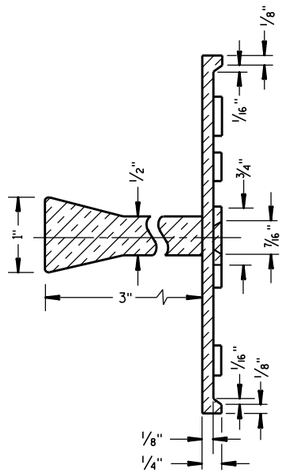
GENERAL NOTES

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

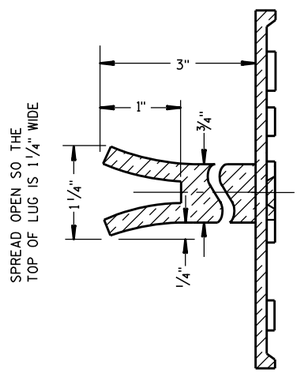
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

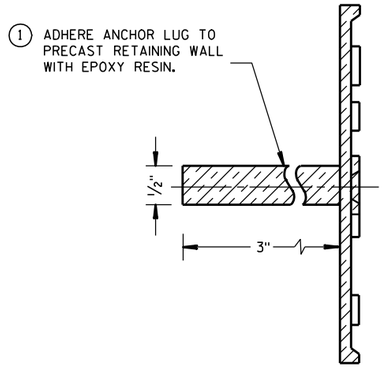
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

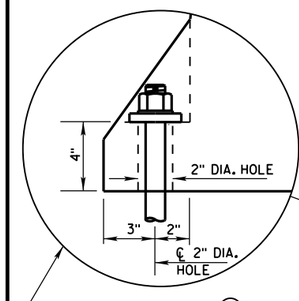
NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
3/26/10 DATE	/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER
FHWA	

6

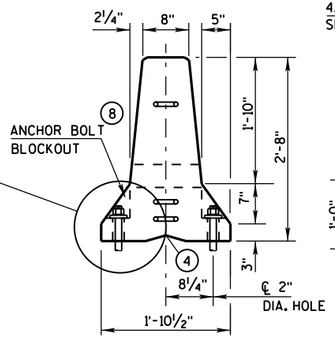
S.D.D. 12 A 3-10

6

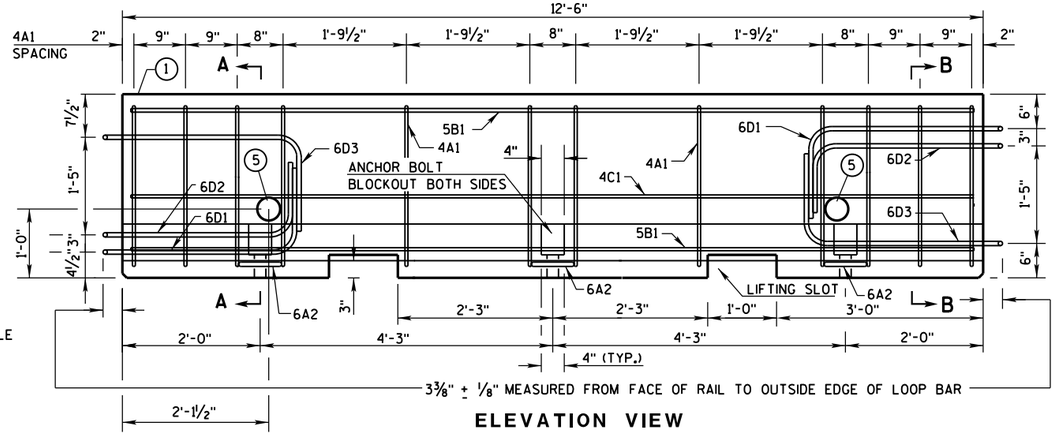
S.D.D. 12 A 3-10



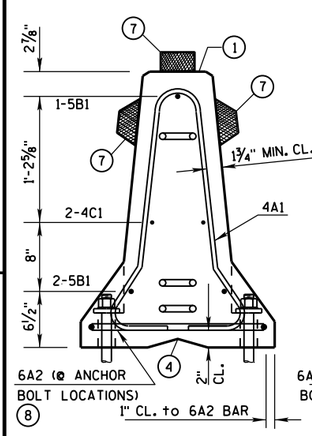
ANCHOR ON TRAFFIC SIDE (8) ONLY WHEN REQUIRED (SEE SHEET D FOR ADDITIONAL ANCHOR DETAIL)



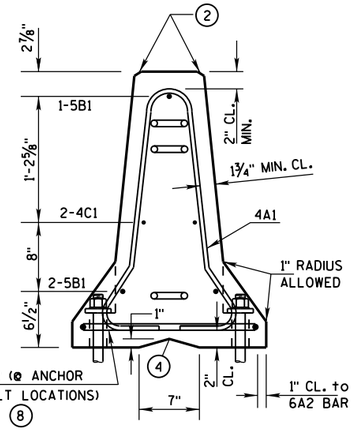
END VIEW



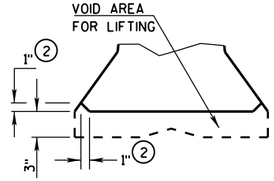
ELEVATION VIEW



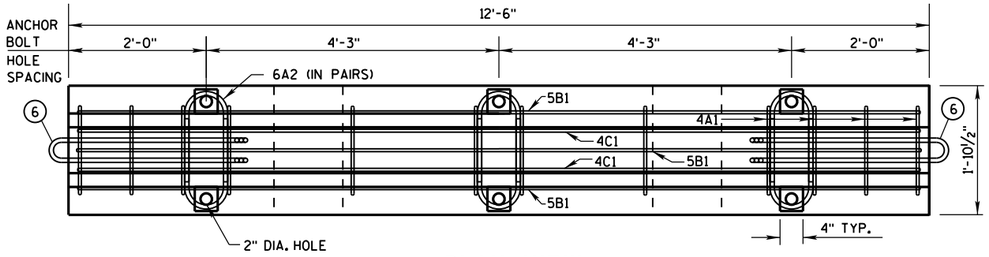
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

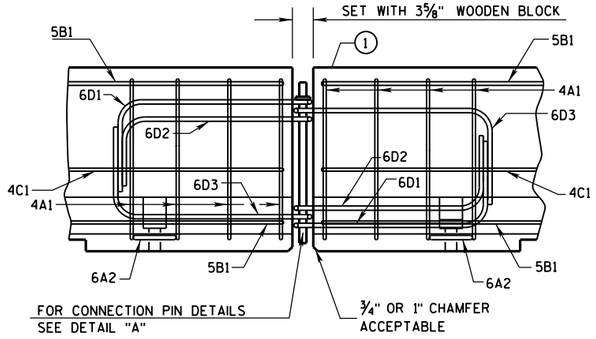


DETAIL "B"
LIFTING SLOT DETAIL

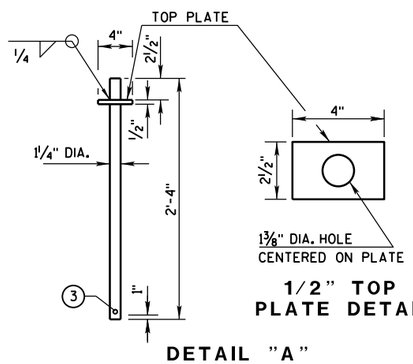


PLAN VIEW

DETAILS OF BARRIER SECTION

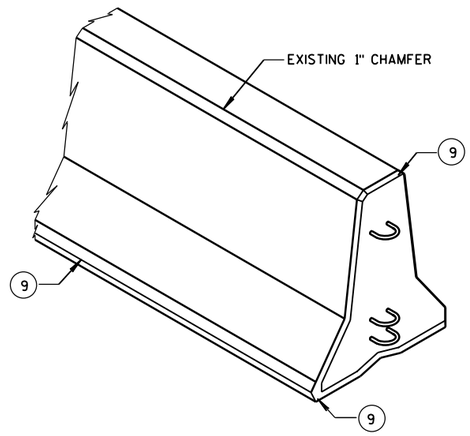


DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-15(a) THRU 14B7-15(i).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

(8) SEE SHEET D FOR HOW TO ANCHOR BARRIER. SEE SHEET E FOR WHEN TO ANCHOR BARRIER.

(9) 1" CHAMFER OPTIONAL.

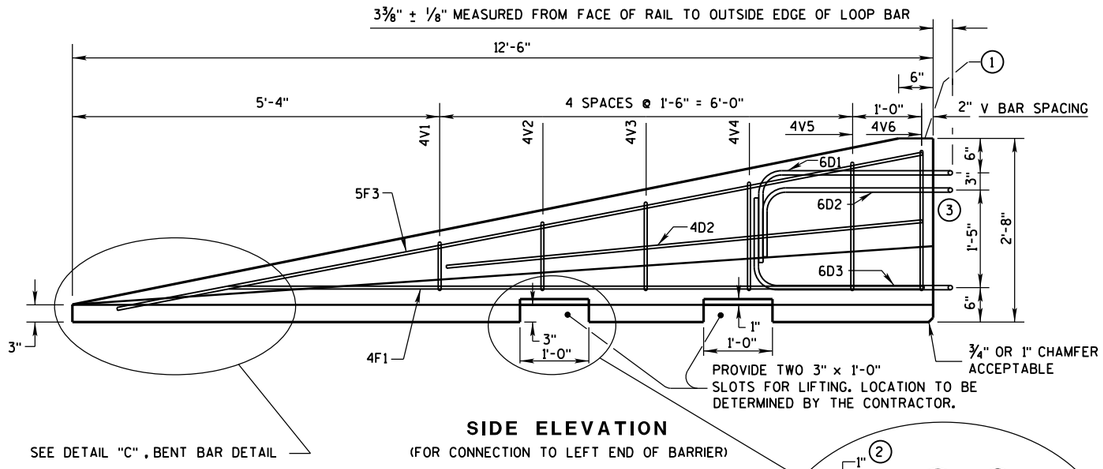
f'c = 4,000 psi

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

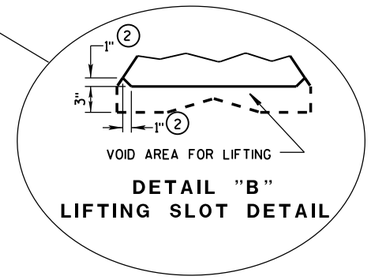
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

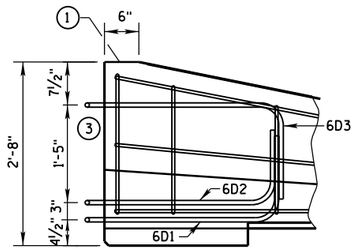
S.D.D. 14 B 7-15a



SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



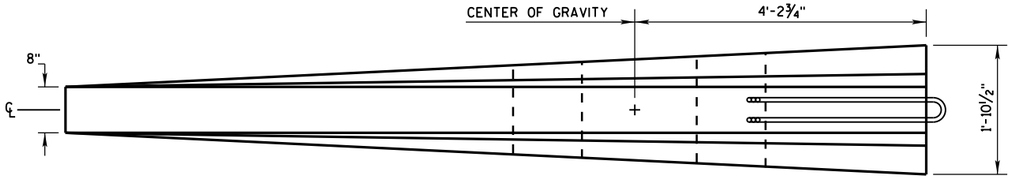
DETAIL "B"
LIFTING SLOT DETAIL



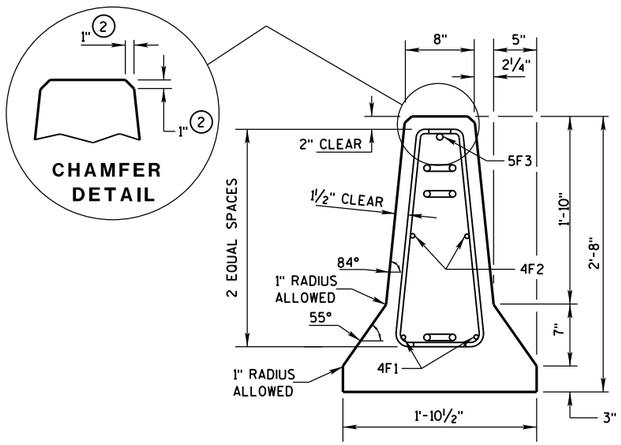
SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

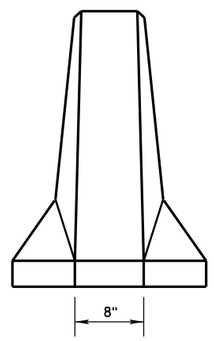
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



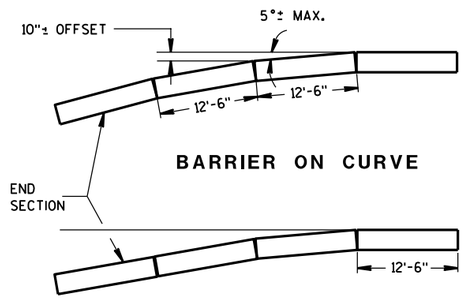
PLAN VIEW



END SECTION



FRONT ELEVATION



BARRIER ON CURVE

FLARE AT BARRIER END

POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

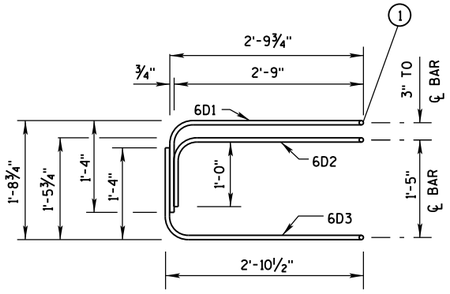
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-15b

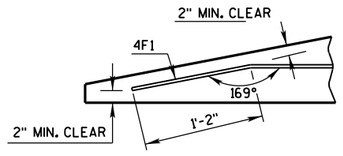
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

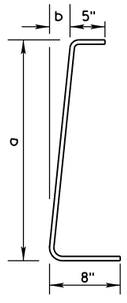
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

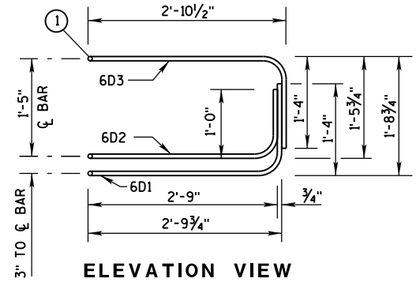
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

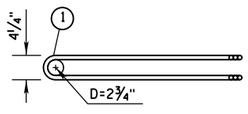
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

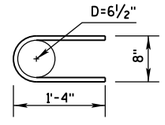
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



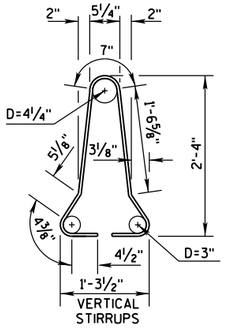
ELEVATION VIEW



PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



4A1

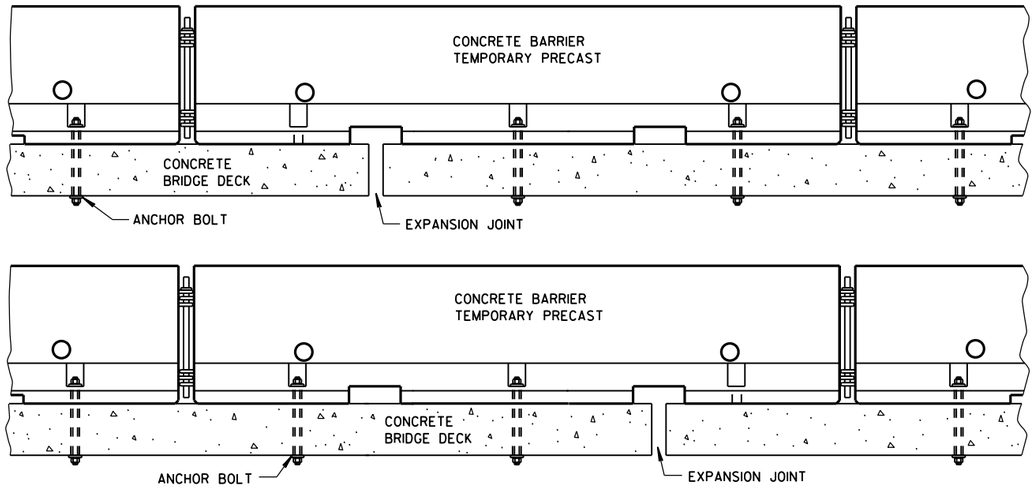
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

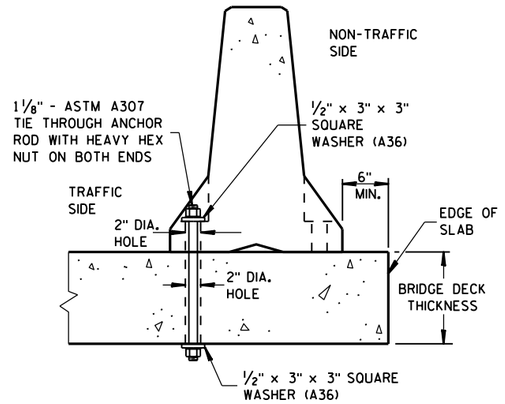
6

S.D.D. 14 B 7-15c



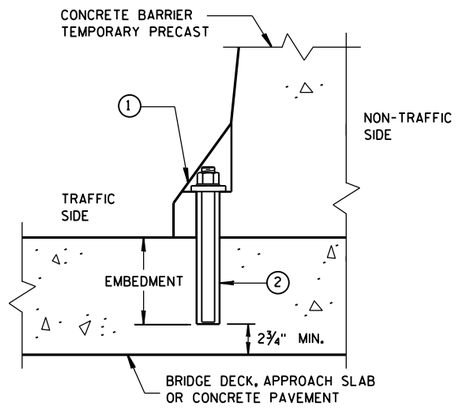
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

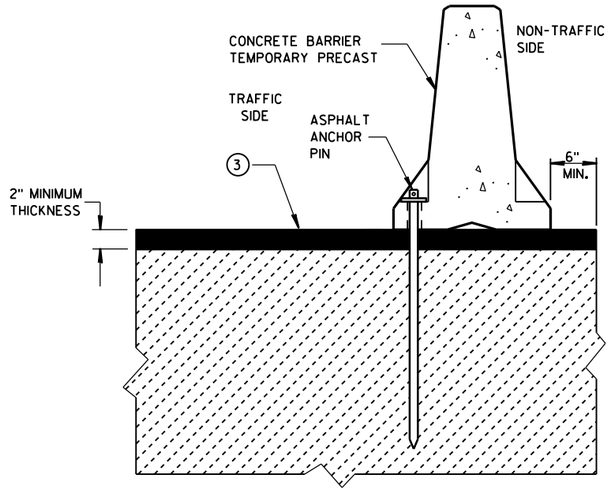
(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

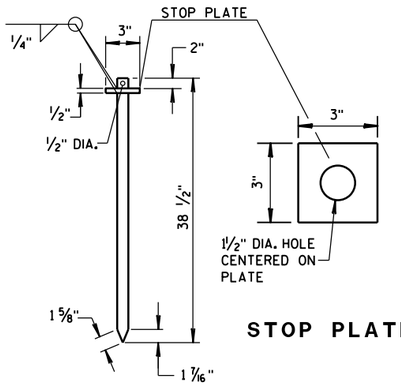
SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERICAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

1. 1⅛" DIAMENTER A307 THREADED ROD. ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL. ASTM A563A HEAVY HEX NUT.
2. ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.
3. ASPHALT SURFACE SHOWN. CONTRACTOR MAY DRILL THROUGH CONCRETE PAVEMENT AND THAN DRIVE ASPHALT ANCHOR PIN.



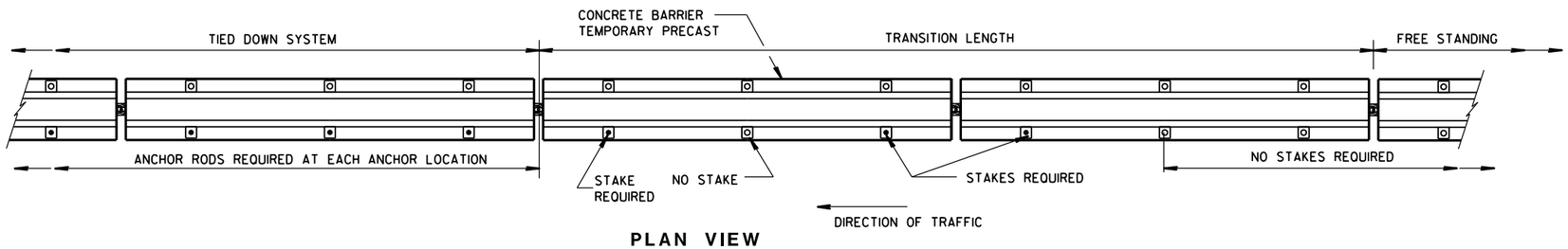
STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE



STOP PLATE

ASPHALT ANCHOR PIN

(ASTM A36 STEEL)



PLAN VIEW

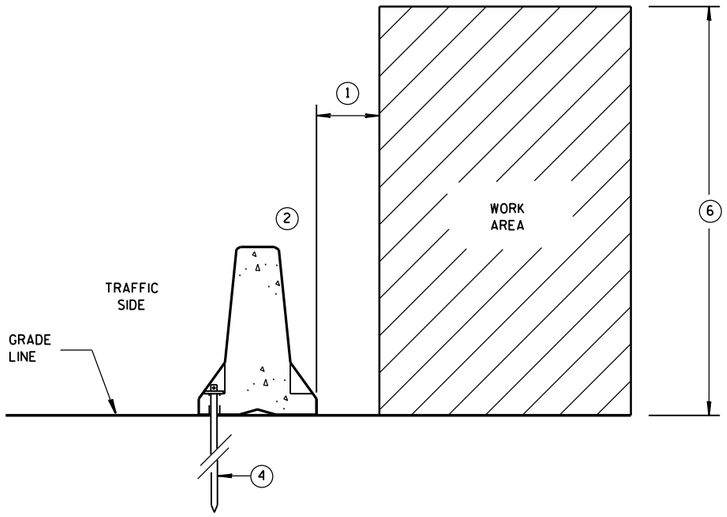
FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

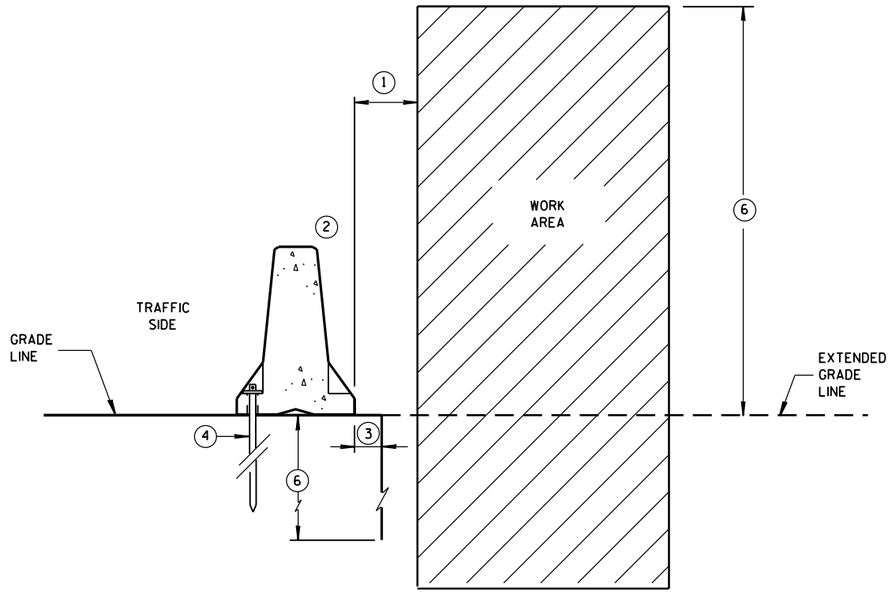
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-15d



ANCHORED BARRIER SPACE REQUIREMENTS FOR HAZARDS EXTENDED ABOVE THE GRADE LINE

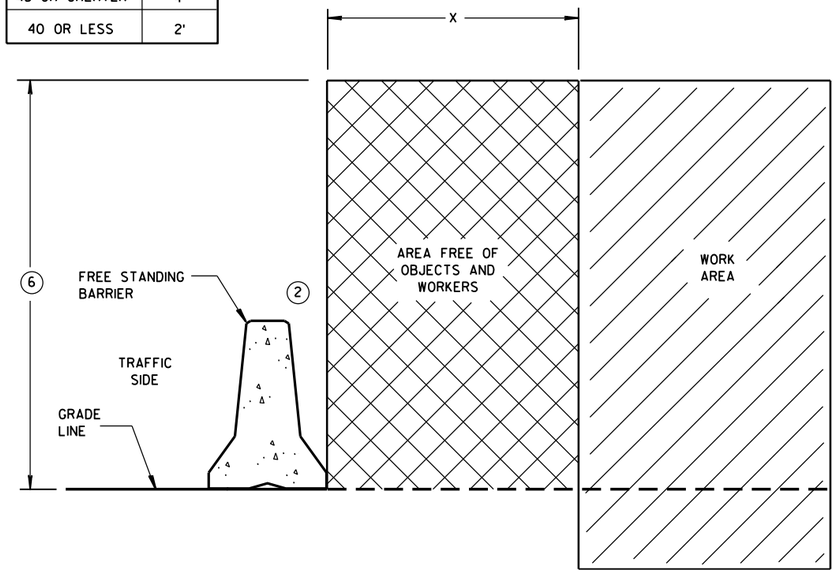


ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS

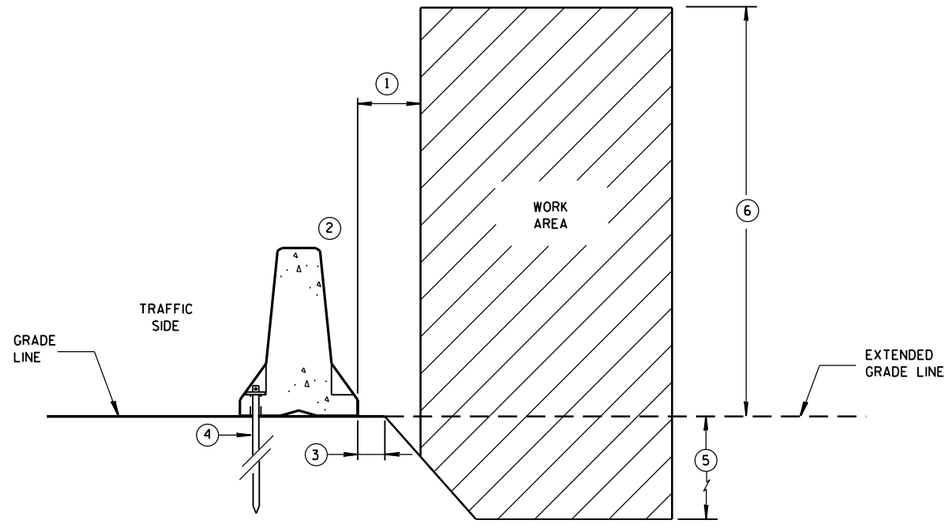
GENERAL NOTES

1. WHEN OBJECTS EXTEND ABOVE THE GRADE, A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT. SEE OTHER DETAILS FOR FOR THE MINIMUM OFFSET FROM BACK OF BARRIER TO SLOPES OR VERTICAL DROPS.
2. OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR LEANED AGAINST THE BARRIER WITHOUT PERMISSION OF THE PROJECT ENGINEER.
3. SEE OTHER DETAIL ON SHEET "D" FOR SPACE REQUIREMENTS.
4. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR A STAKE DOWN FOR ASPHALTIC SURFACE TREATMENT DETAILS. ASPHALTIC ANCHOR SHOWN.
5. DEPTH OF 3 FEET OR MORE.
6. Y = 6'-6".

POSTED SPEED MPH	X
45 OR GREATER	4'
40 OR LESS	2'



FREE STANDING BARRIER SPACE REQUIREMENTS



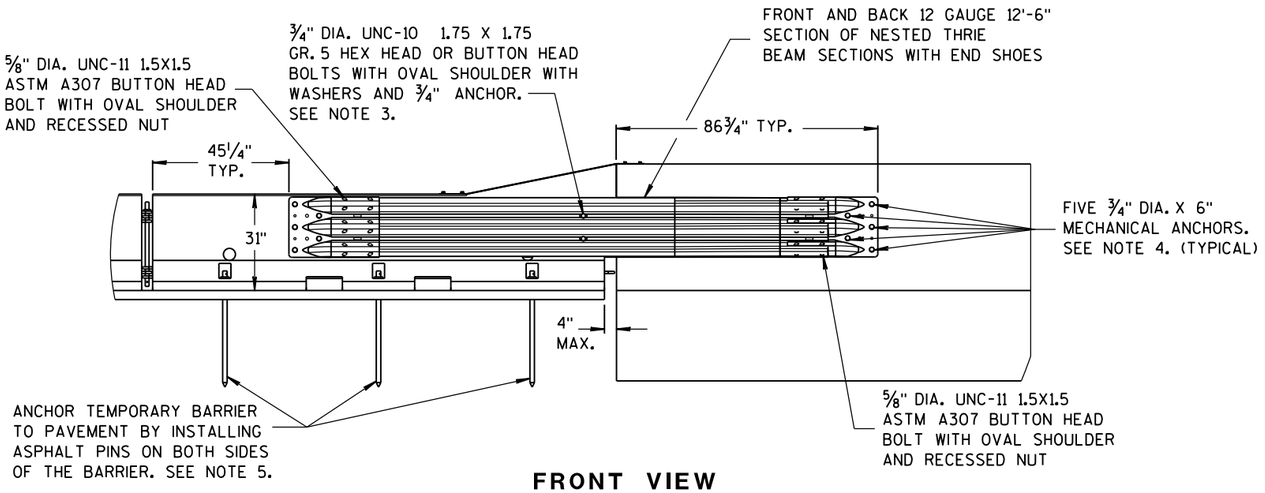
ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

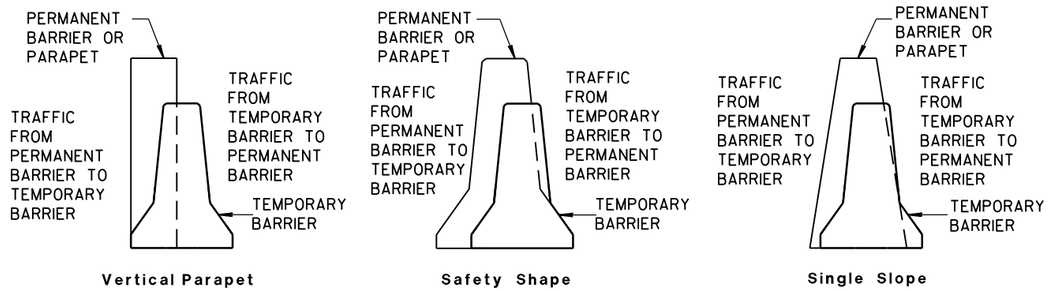
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-15e



FRONT VIEW

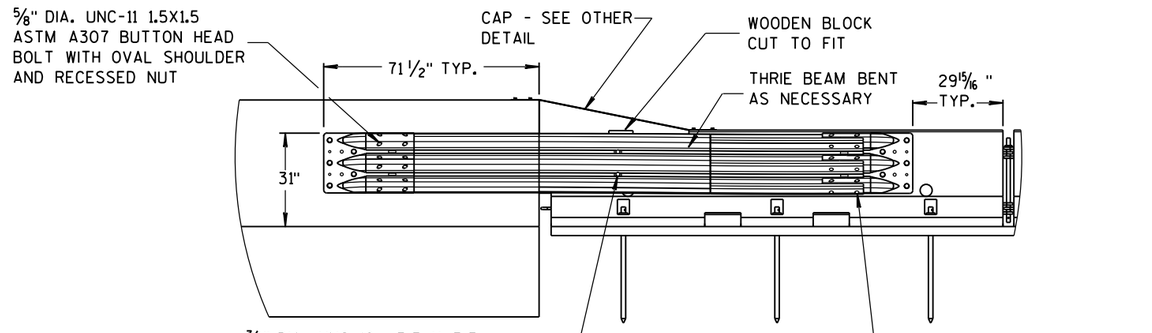


TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

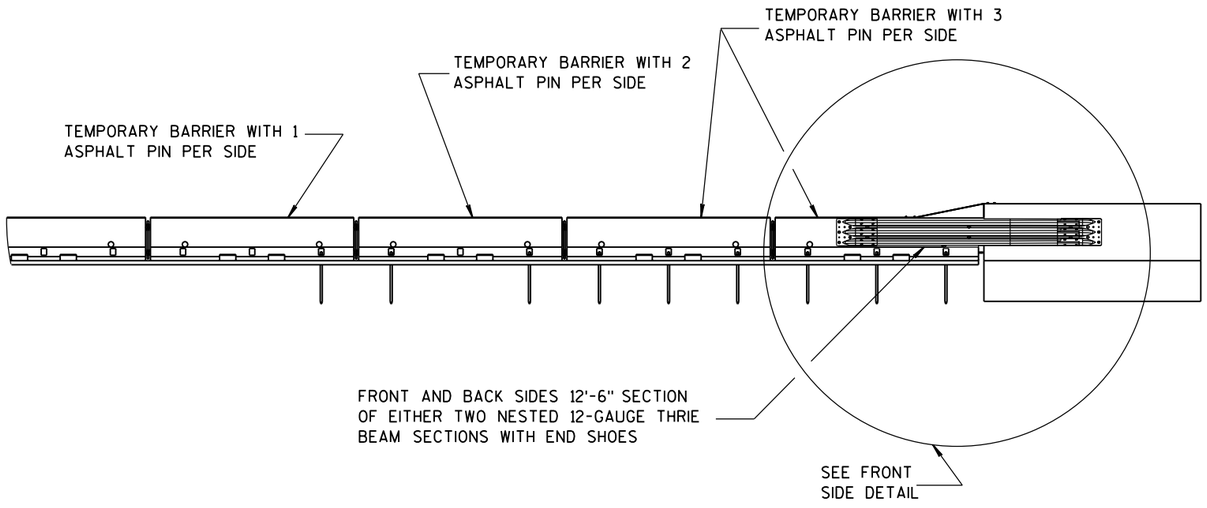
NOTES

NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS REGARDLESS OF TRAFFIC.

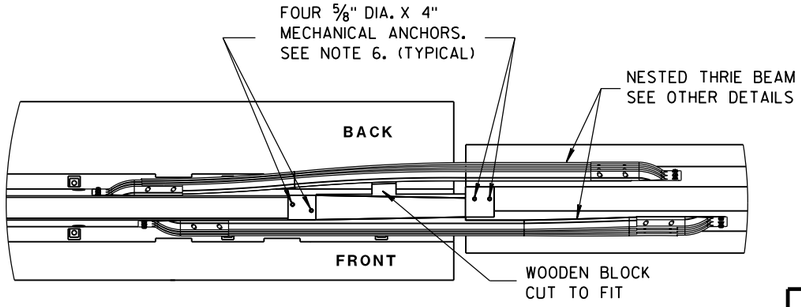
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



BACK VIEW



FRONT VIEW



PLAN VIEW

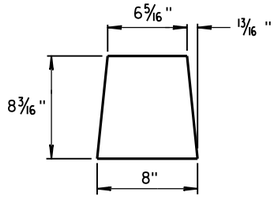
BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

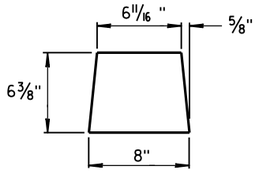
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

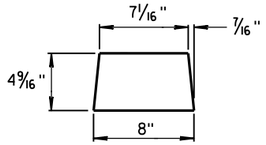
S.D.D. 14 B 7-15f



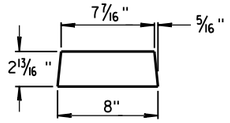
GUSSET 1



GUSSET 2

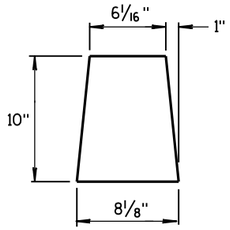


GUSSET 3

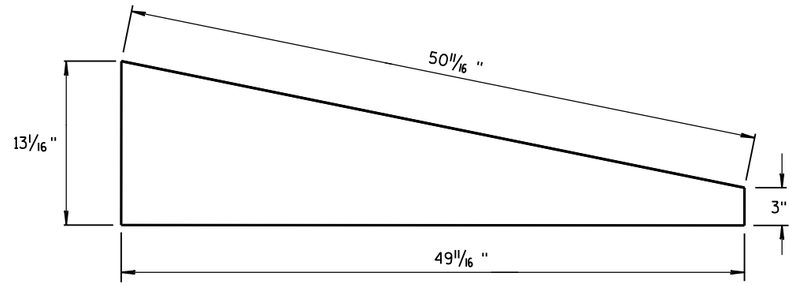


GUSSET 4

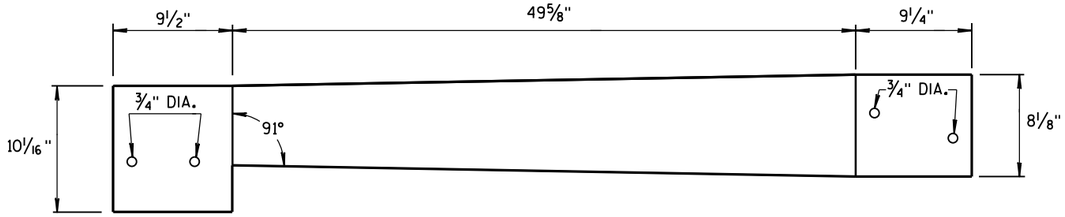
GUSSETS

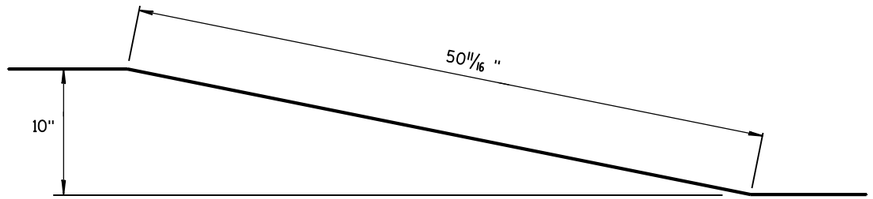


END PLATE



SIDE PLATE

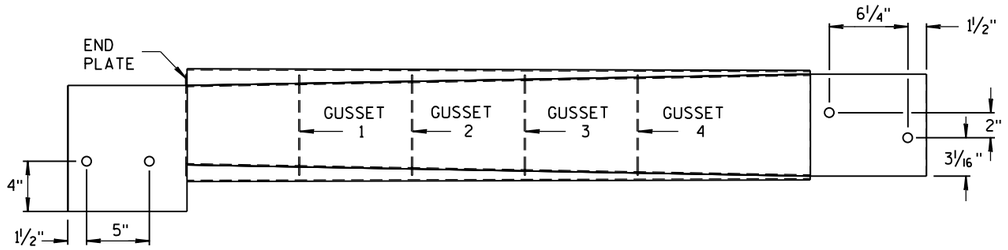


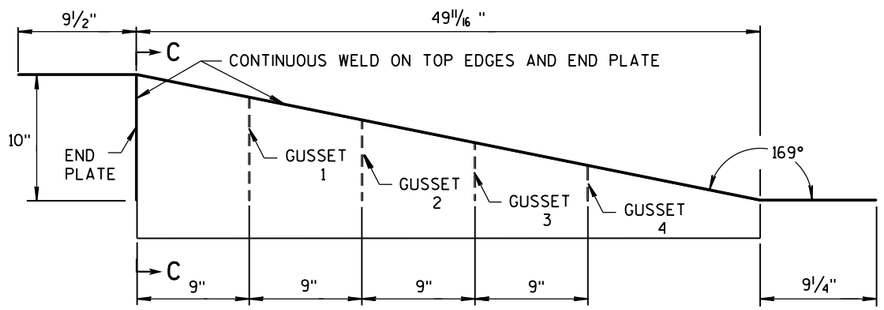


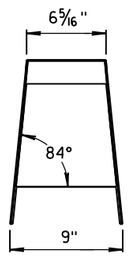
TOP PLATE

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.







SECTION C-C

NOTES

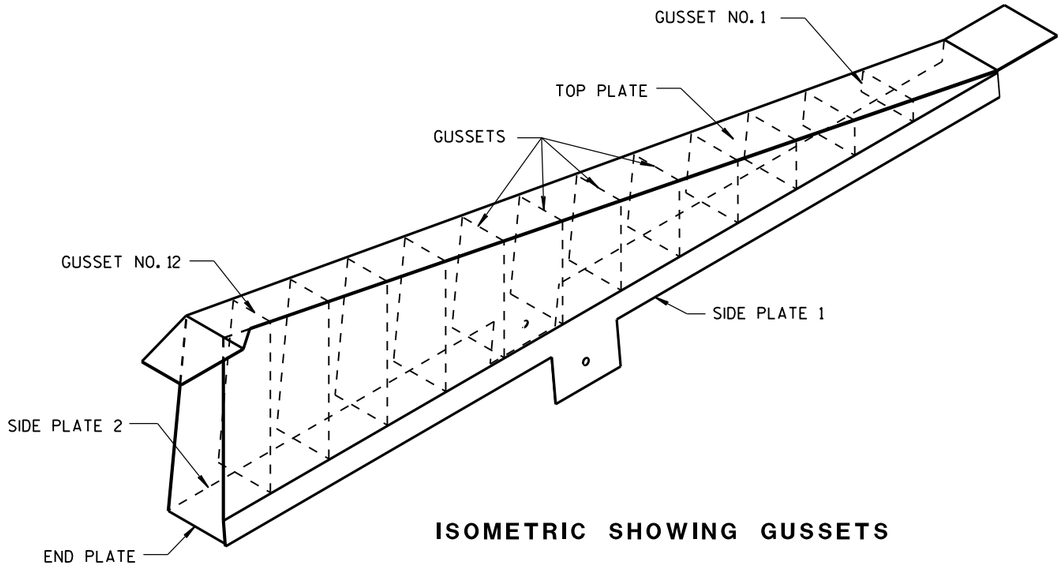
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

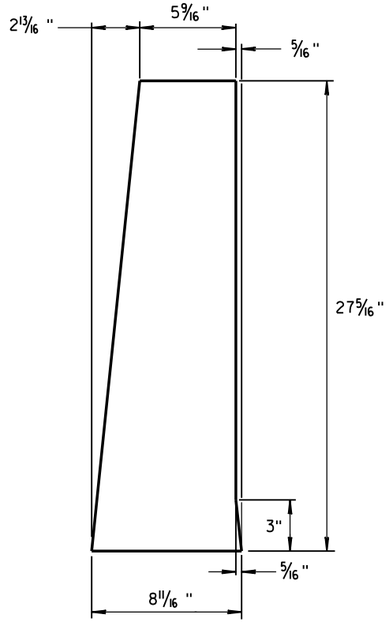
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-15g

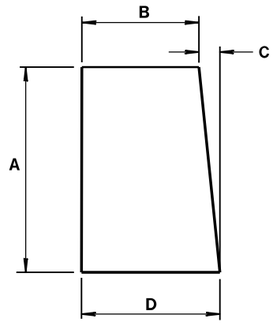


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



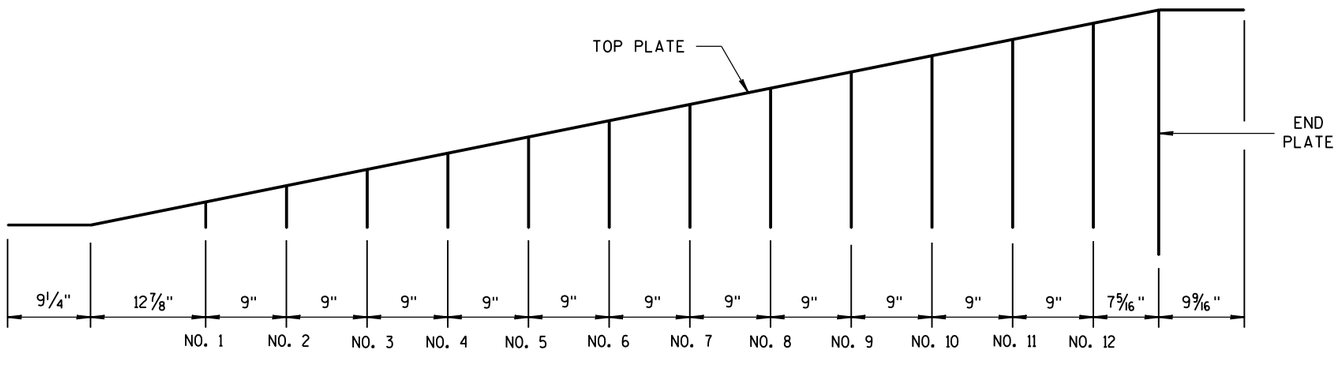
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

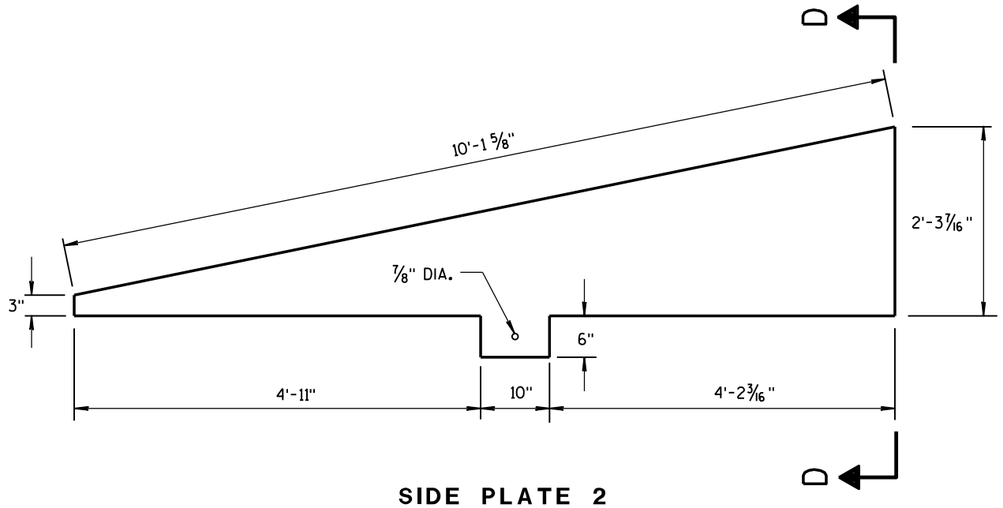
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

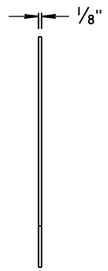
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

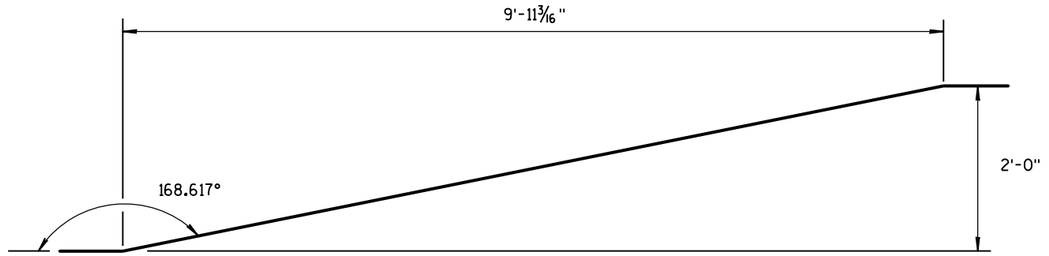
S.D.D. 14 B 7-15h



SIDE PLATE 2

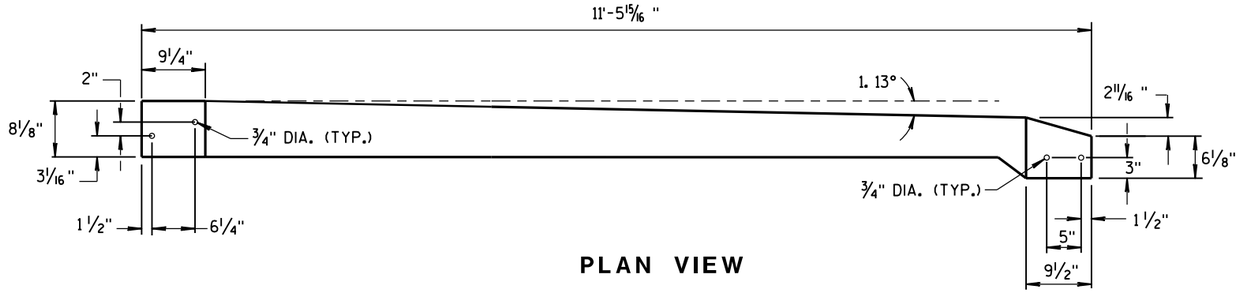


END VIEW



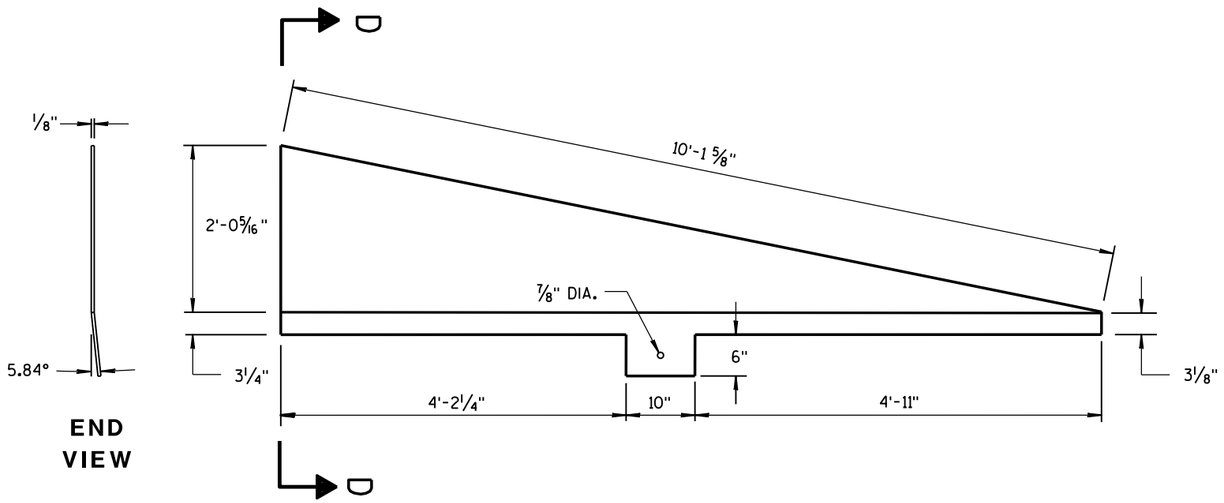
SIDE VIEW

TOP PLATE



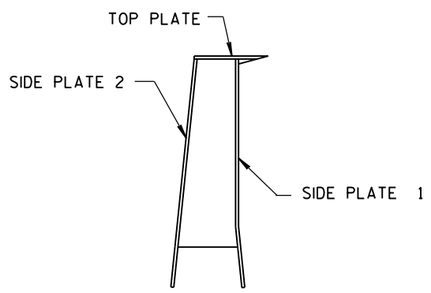
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

28

FHWA

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S.D.D. 14 B 7-15i

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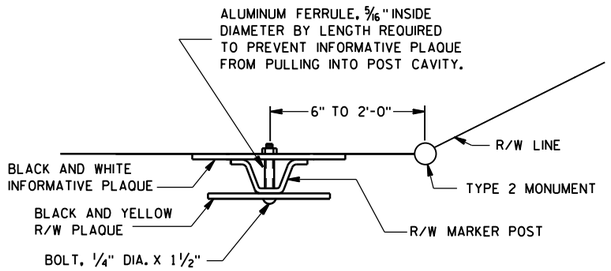
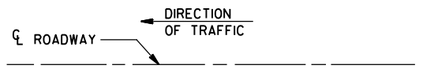
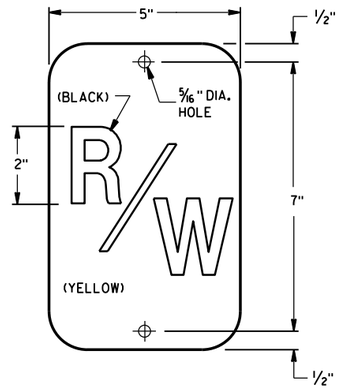
S.D.D. 14 B 7-15i



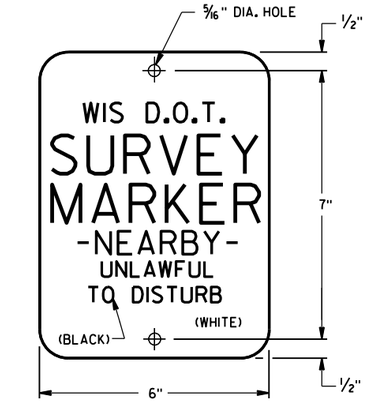


PLAN VIEW



R/W PLAQUE

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



INFORMATIVE PLAQUE

GENERAL NOTES

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

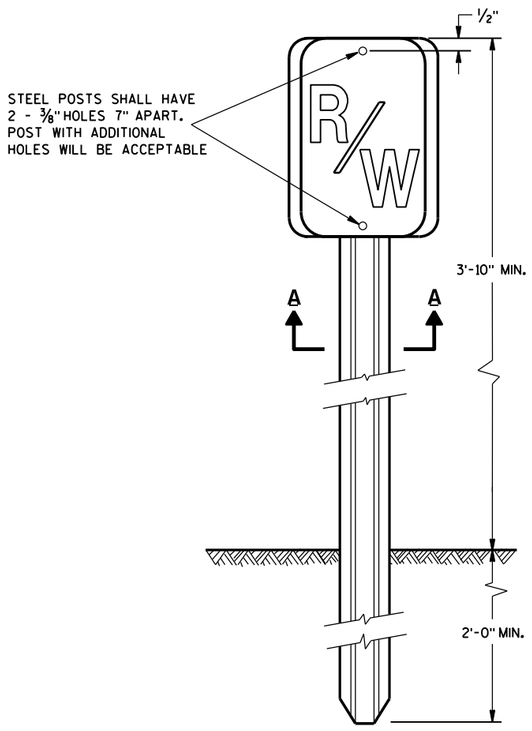
A STEEL MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFORMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. R/W AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE DEPARTMENT OF TRANSPORTATION.

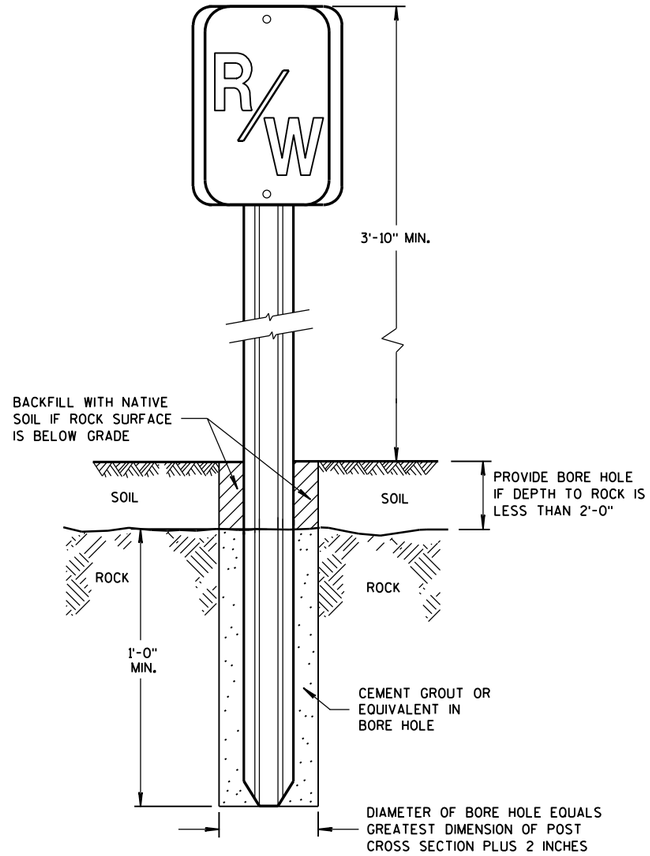
STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

(1) IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK TO A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3'10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR.

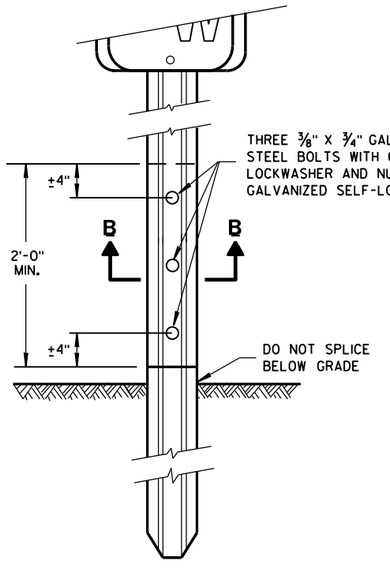
FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT. DEPENDING ON THE STABILITY OF THE ROCK.



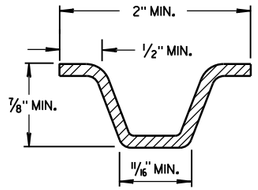
FRONT VIEW
STEEL MARKER POST



FRONT VIEW
ROCK INSTALLATION (1)

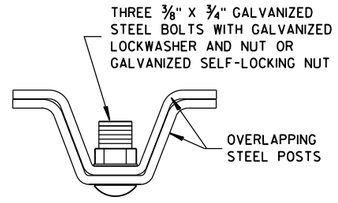


FRONT VIEW
SPLICE DETAIL



MIN. WEIGHT 1.12 LB./FT.

SECTION A-A



SECTION B-B

MARKER POST FOR RIGHT-OF-WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/18/2016 — DATE
/S/ Ray Kumapayi — CHIEF SURVEYING AND MA[illegible]INEER
FHWA

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S.D.D. 15 A 1-13a

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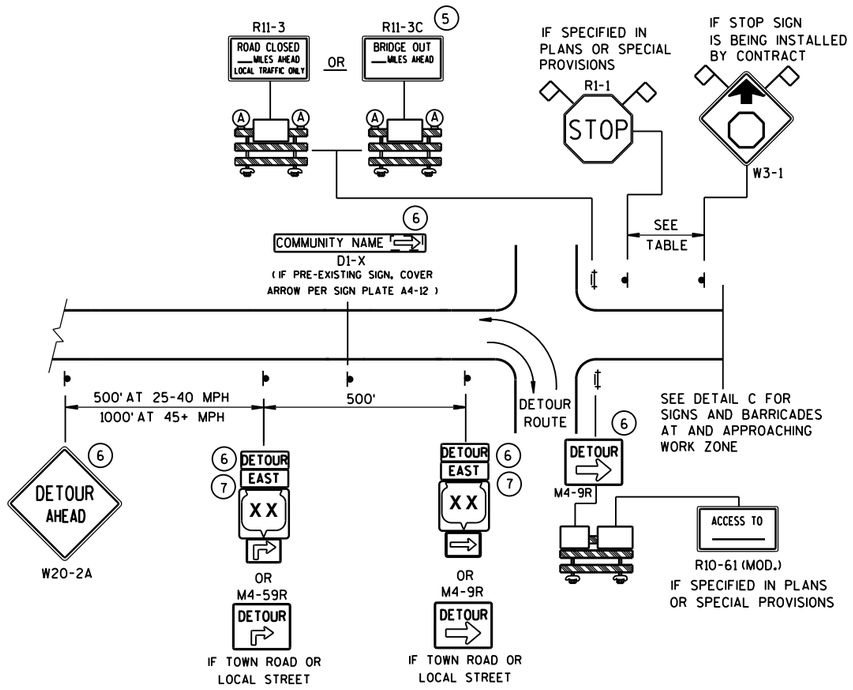
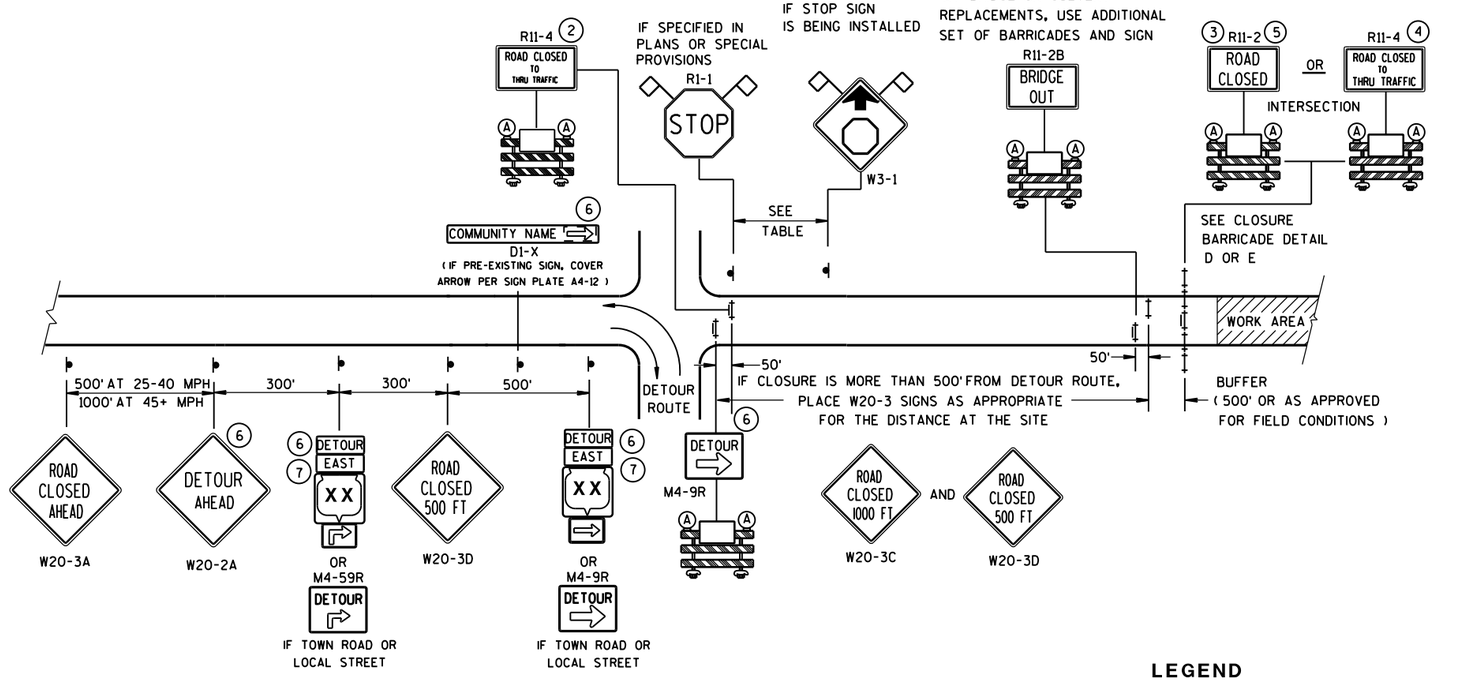
S.D.D. 15 A 1-13a



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

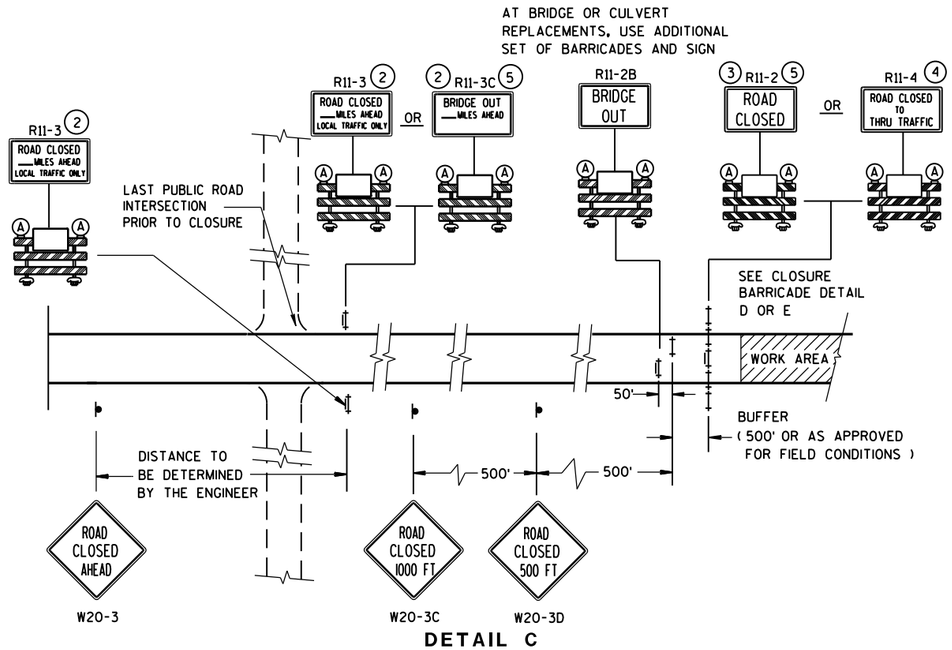
WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

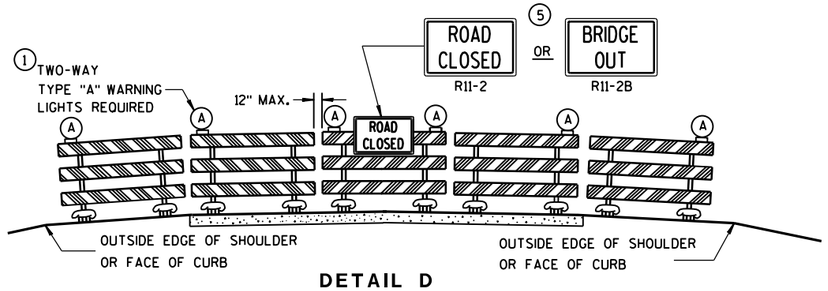
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

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

6

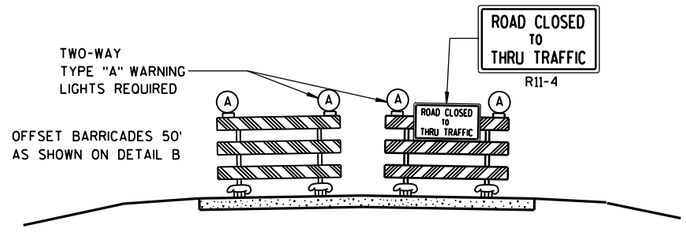
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

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

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

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

FHWA

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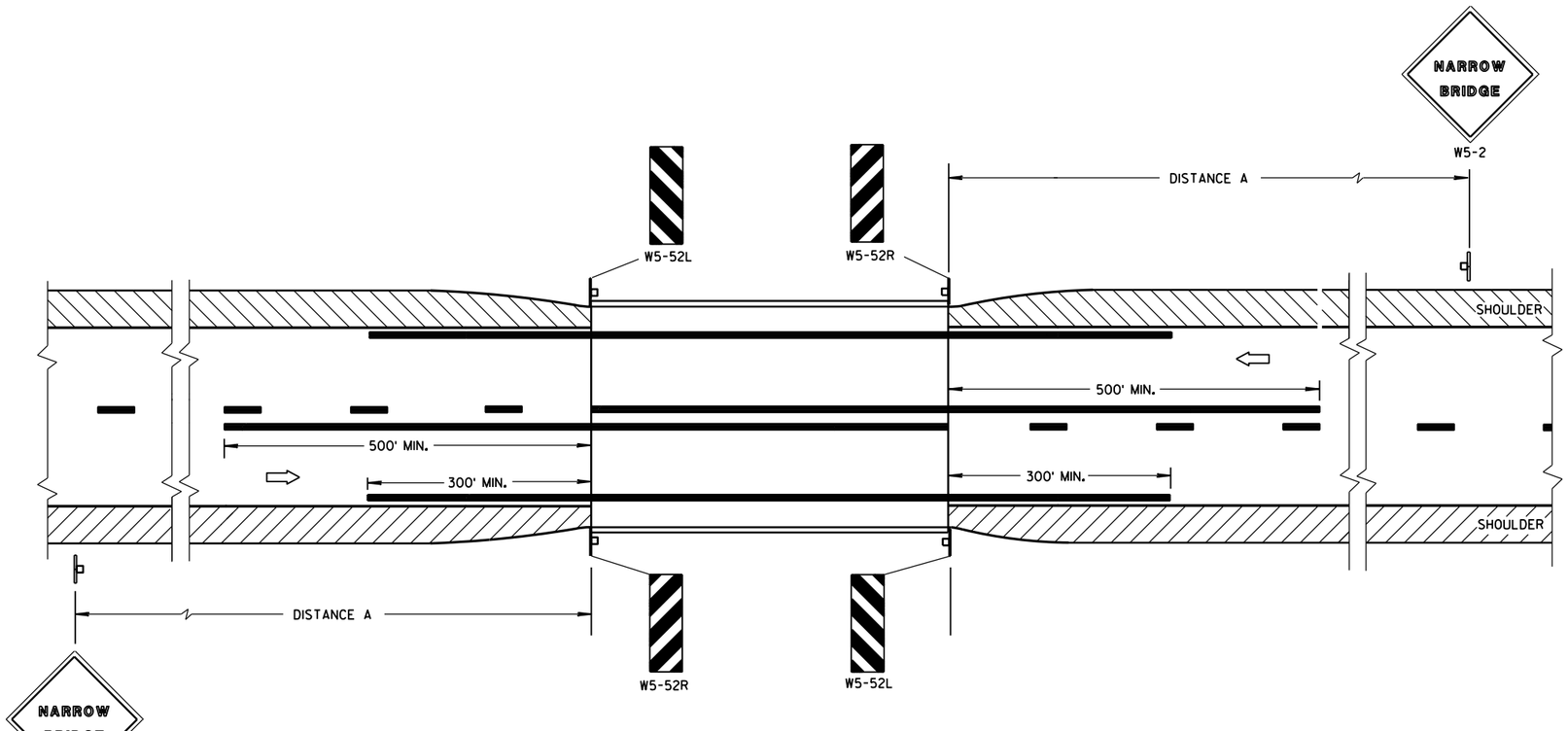
S.D.D. 15 C 2-6b



SITUATION 1

WARRANTING CRITERIA:

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

DISTANCE TABLE

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

GENERAL NOTES

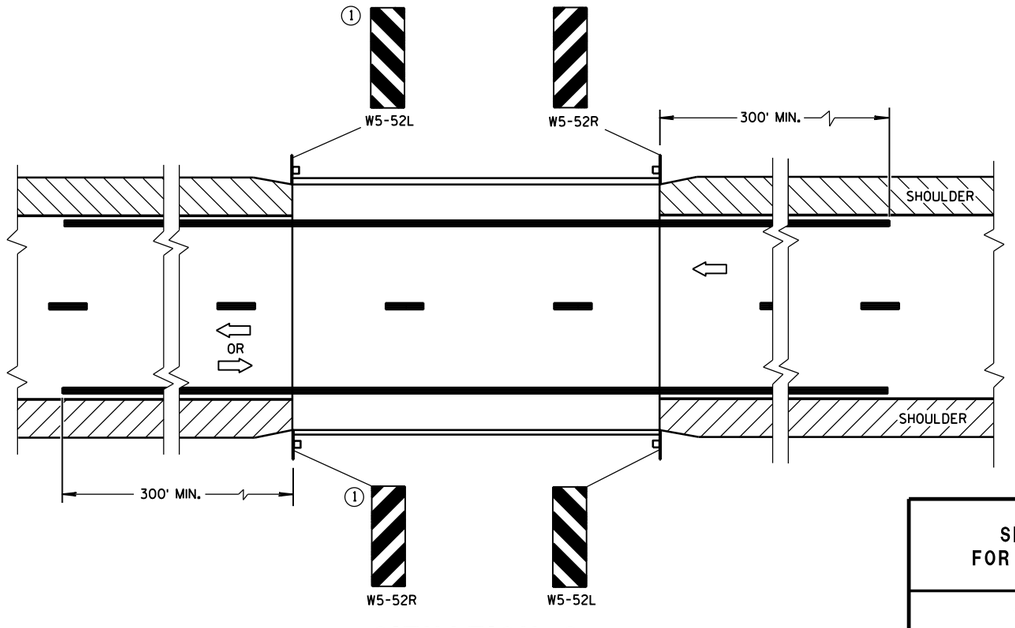
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

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

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]EER
FHWA

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S.D.D. 15 C 6-9

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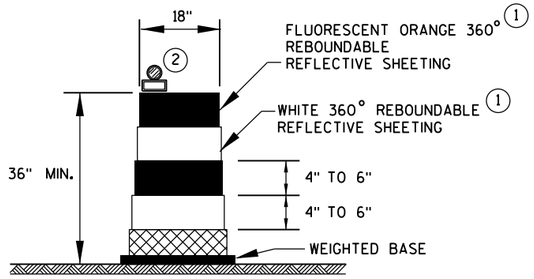
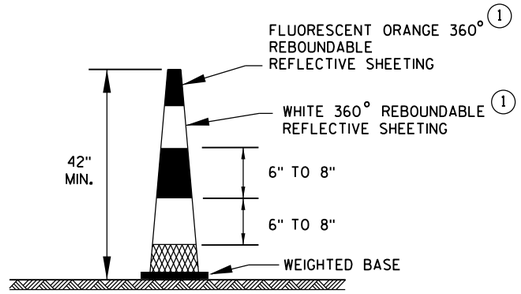
S.D.D. 15 C 6-9



DRUM

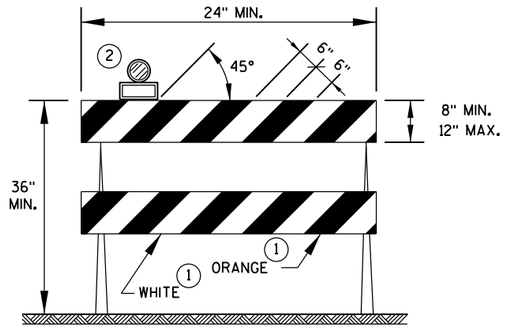


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

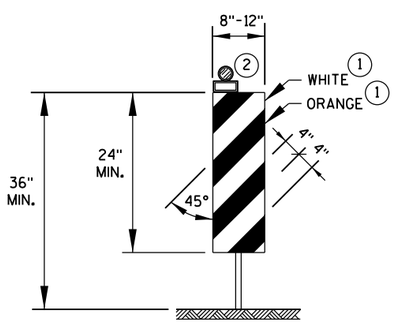
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



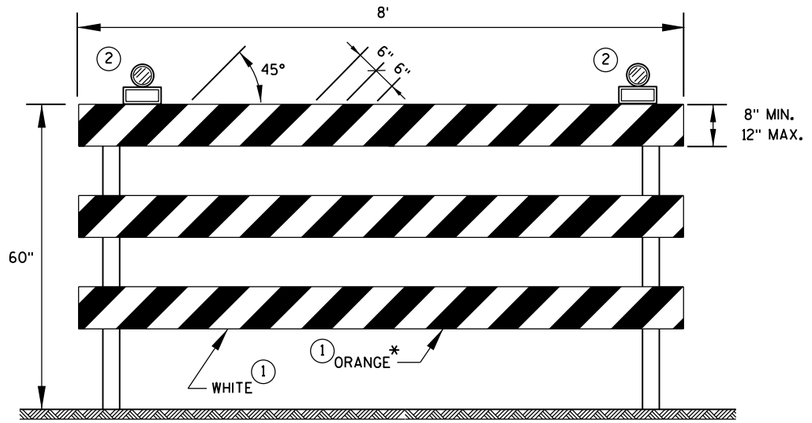
TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE 3 BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017 — DATE

/S/ Andrew Heidtke — WORK ZONE ENG

FHWA

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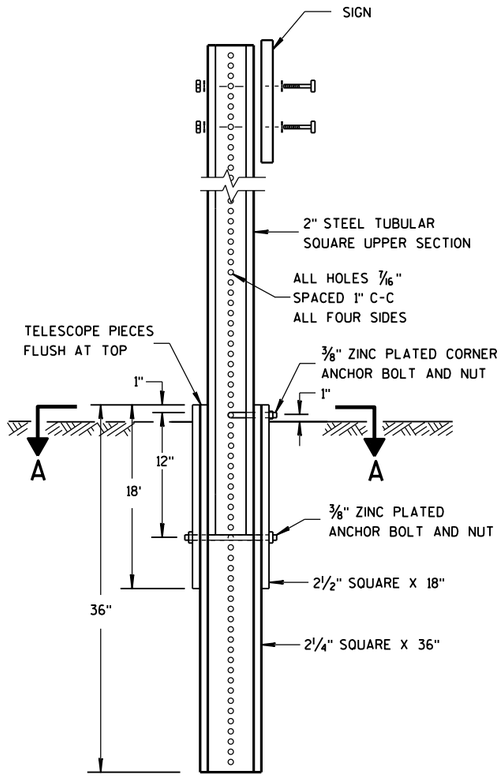
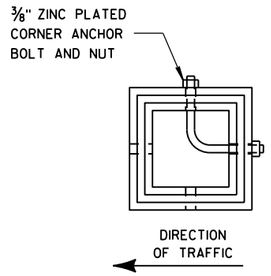
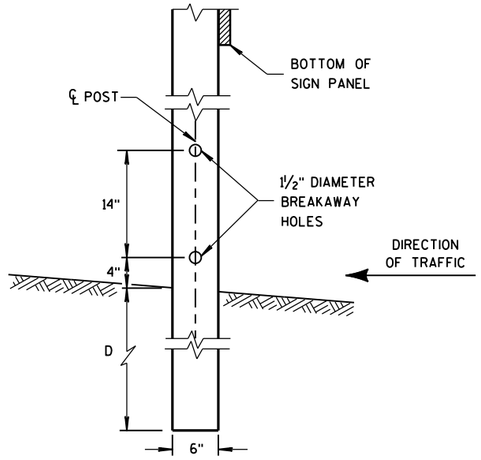
S.D.D. 15 C 11-7b



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



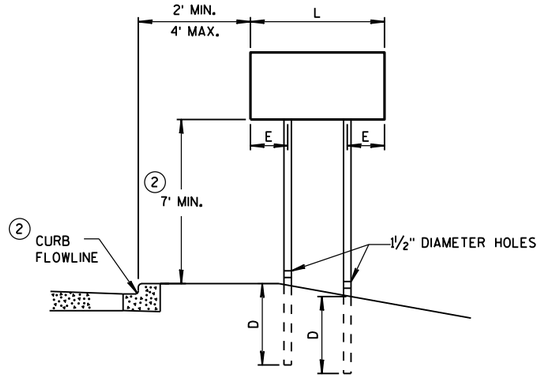
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

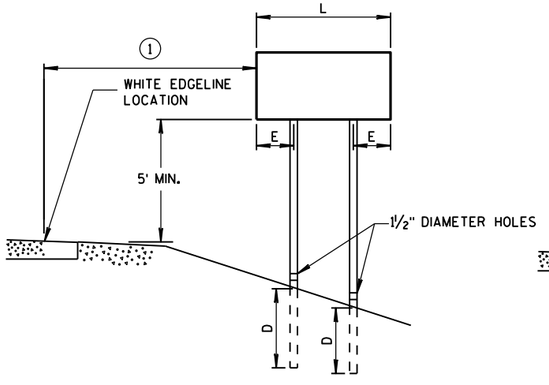
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

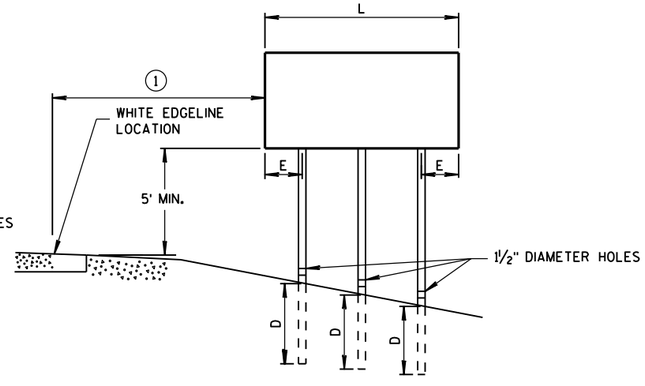
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK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

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



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

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

WOOD POST EMBEDMENT DEPTH

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

4" X 6" WOOD POST

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

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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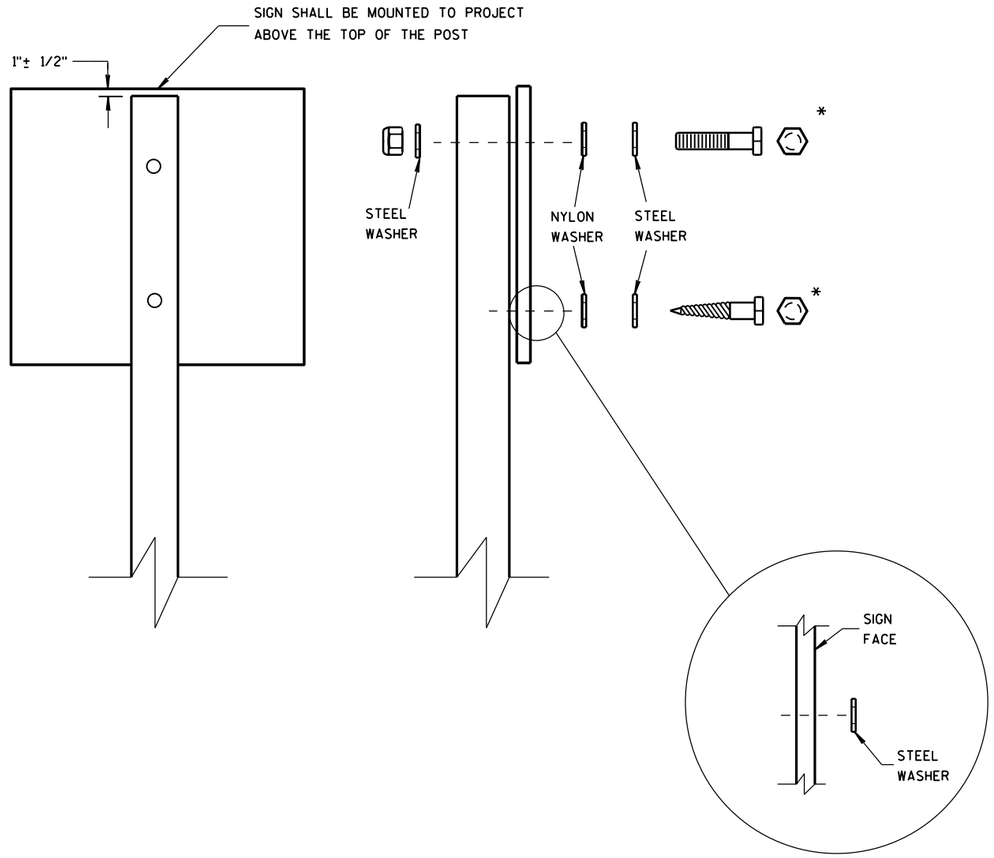
S.D.D. 15 D 38-2a



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

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

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

LAG SCREWS - 3/8" X 3"

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

SQUARE STEEL POSTS (2" x 2")

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

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

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S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

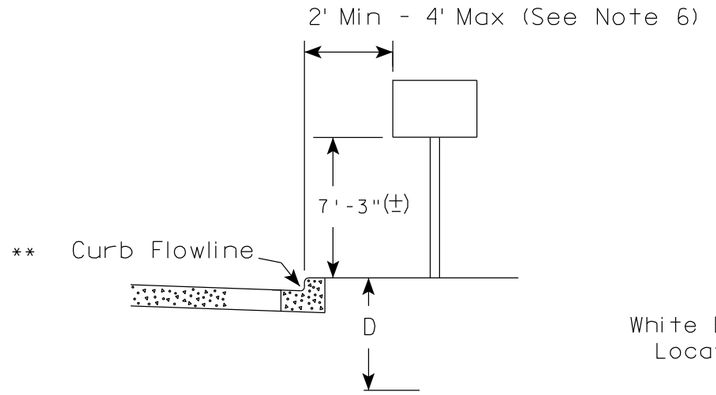
APPROVED

June 2017
DATE

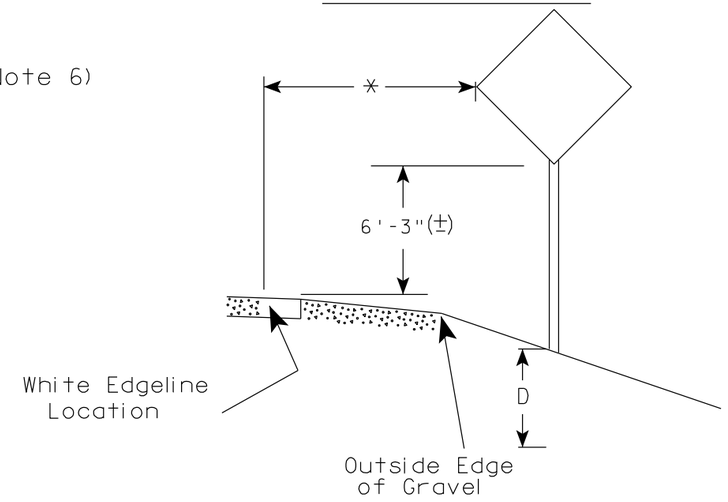
/S/ Andrew Heldtke
WORK ZONE ENG

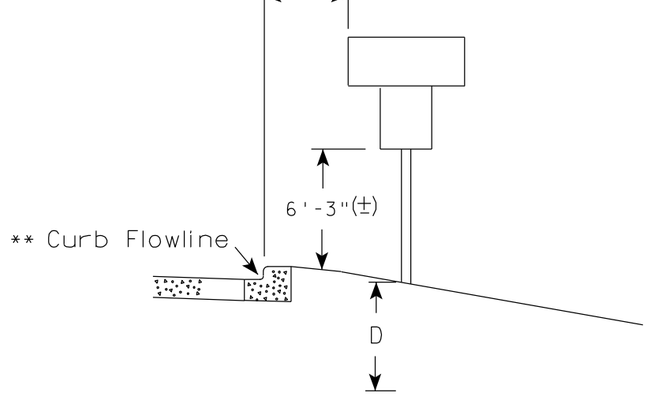
FHWA

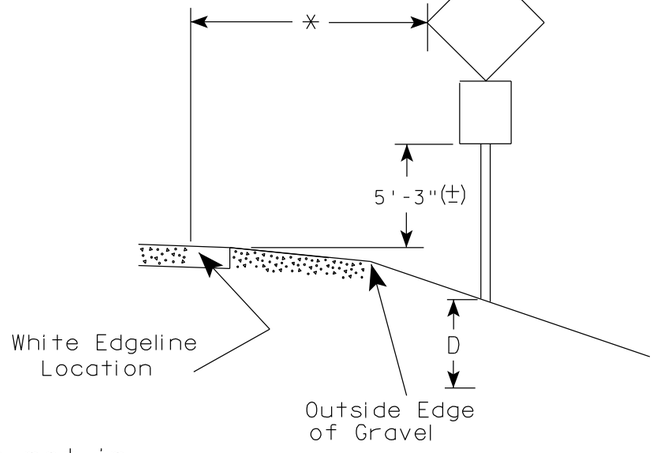
URBAN AREA



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.

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" (±).

POST EMBEDMENT DEPTH

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

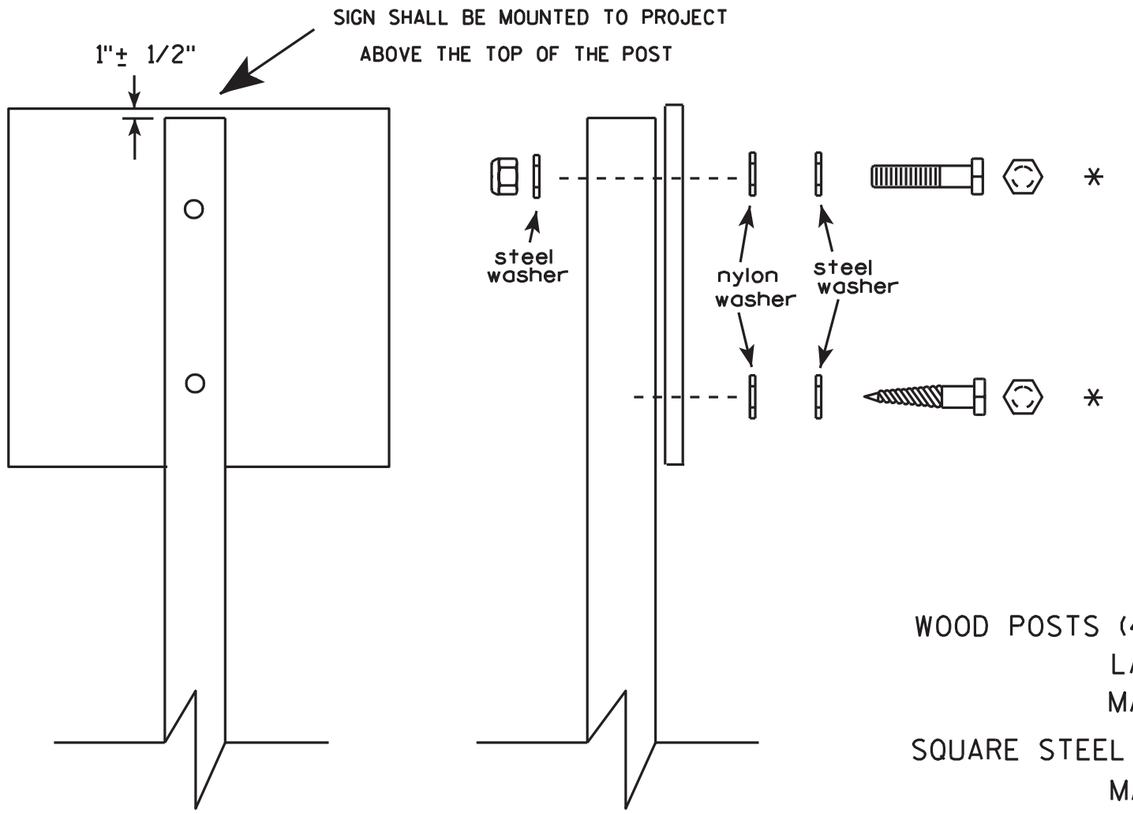
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO: 3849-00-72	HWY: MILL STREET	COUNTY: WALWORTH	SIGN PLATE DETAILS	SHEET NO: 36	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

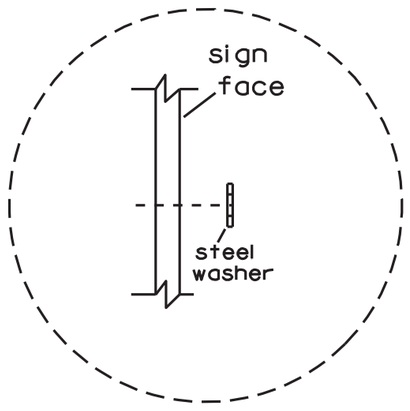
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

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

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



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

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

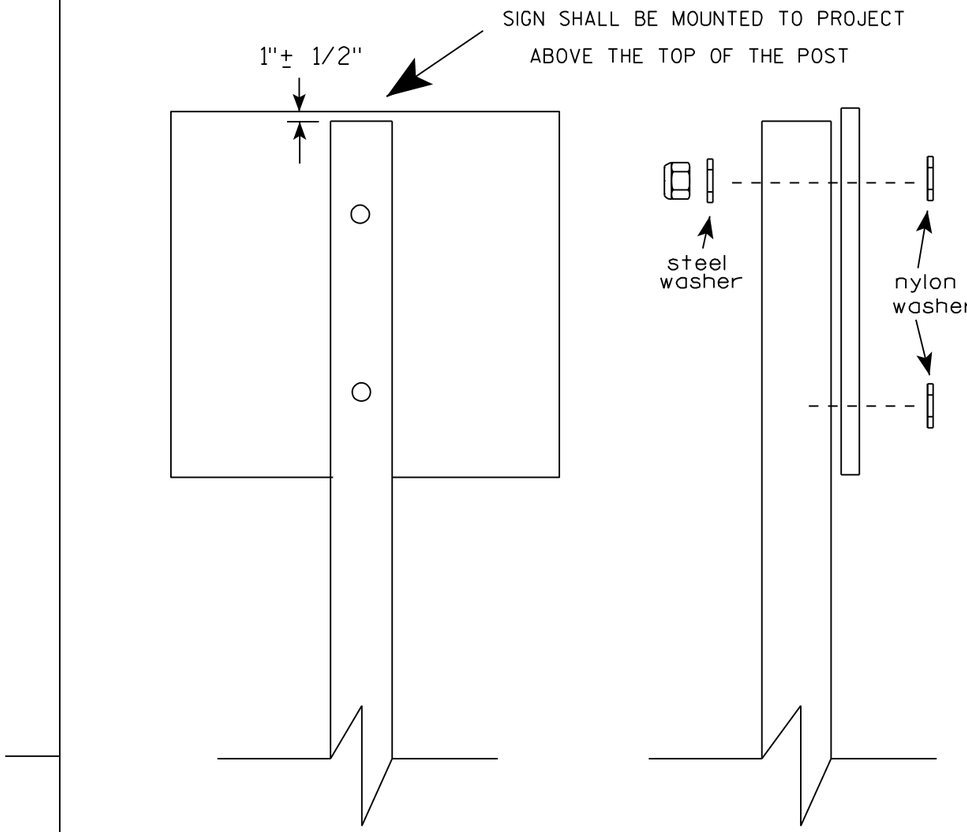
APPROVED Matthew R Rauch
for State Traffic Engineer

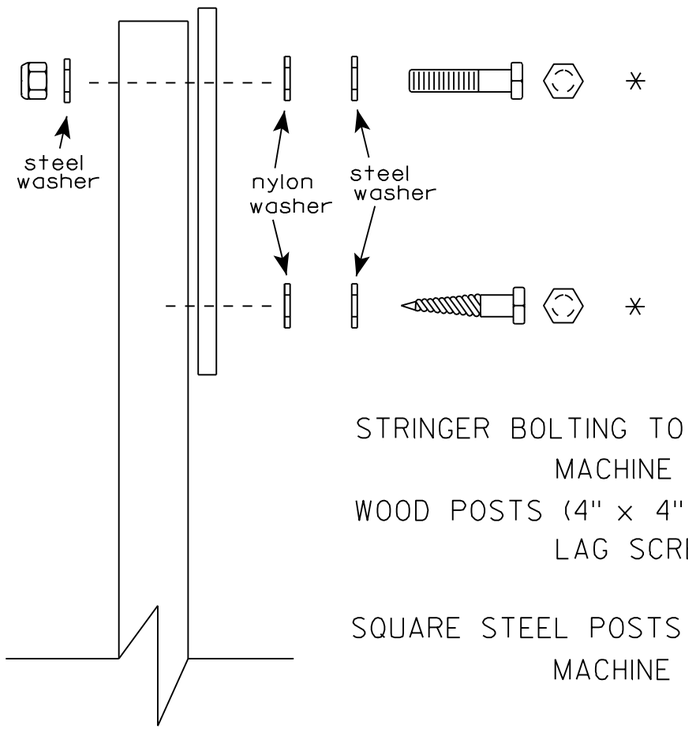
DATE 3/23/10 PLATE NO. A4-8.7

PROJECT NO: 3849-00-72	MILL STREET	WALWORTH	SIGN PLATE DETAILS	SHEET NO: 37	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\A48.DGN PLOT DATE : 23-MAR-2010 10:15 PLOT BY : ditjph

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.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

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

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

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

SQUARE STEEL POSTS (2" x 2")

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

RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

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

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

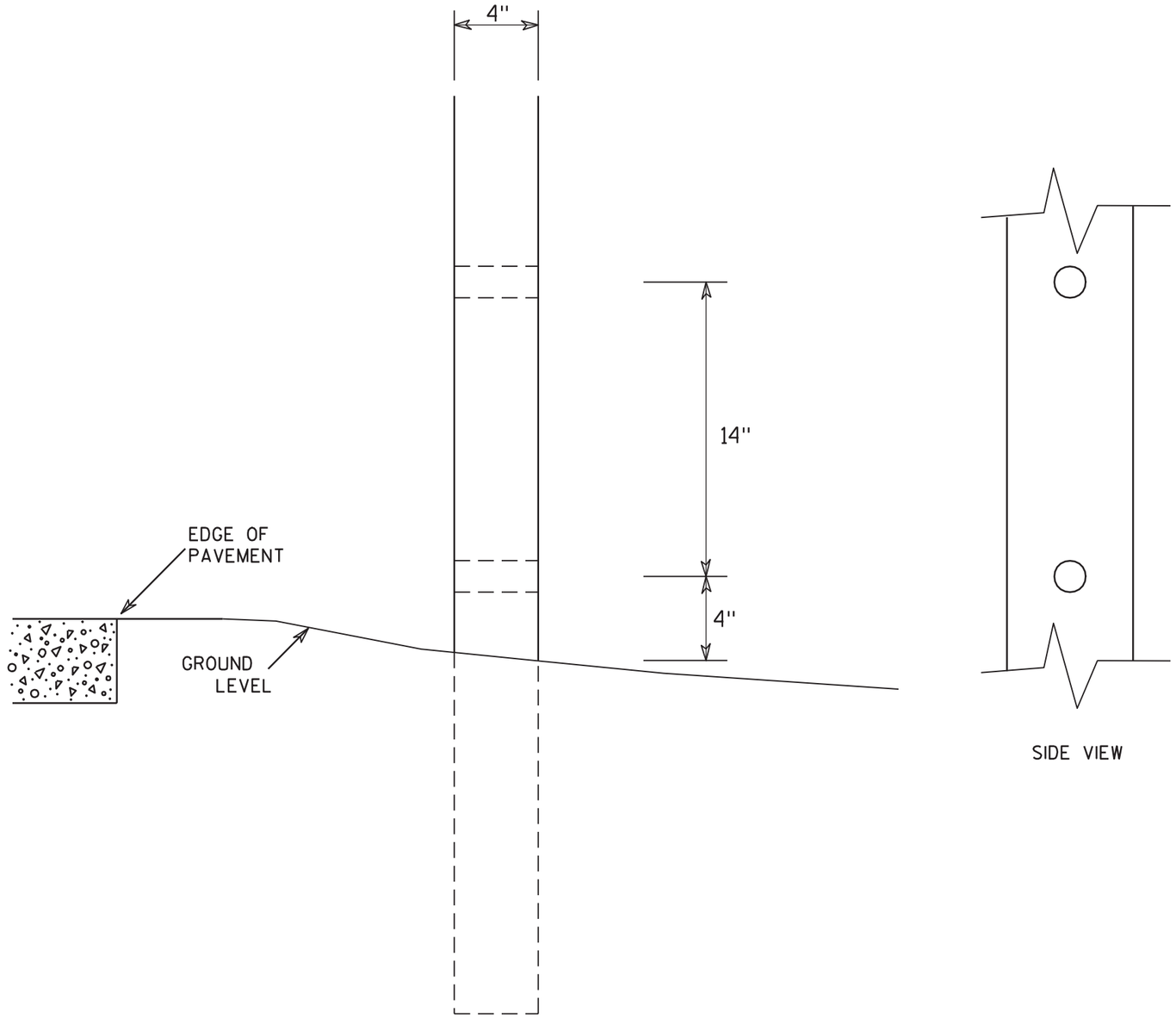
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: 3849-00-72	MILL STREET	WALWORTH	SIGN PLATE DETAILS	SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ platuser $$

7

7



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

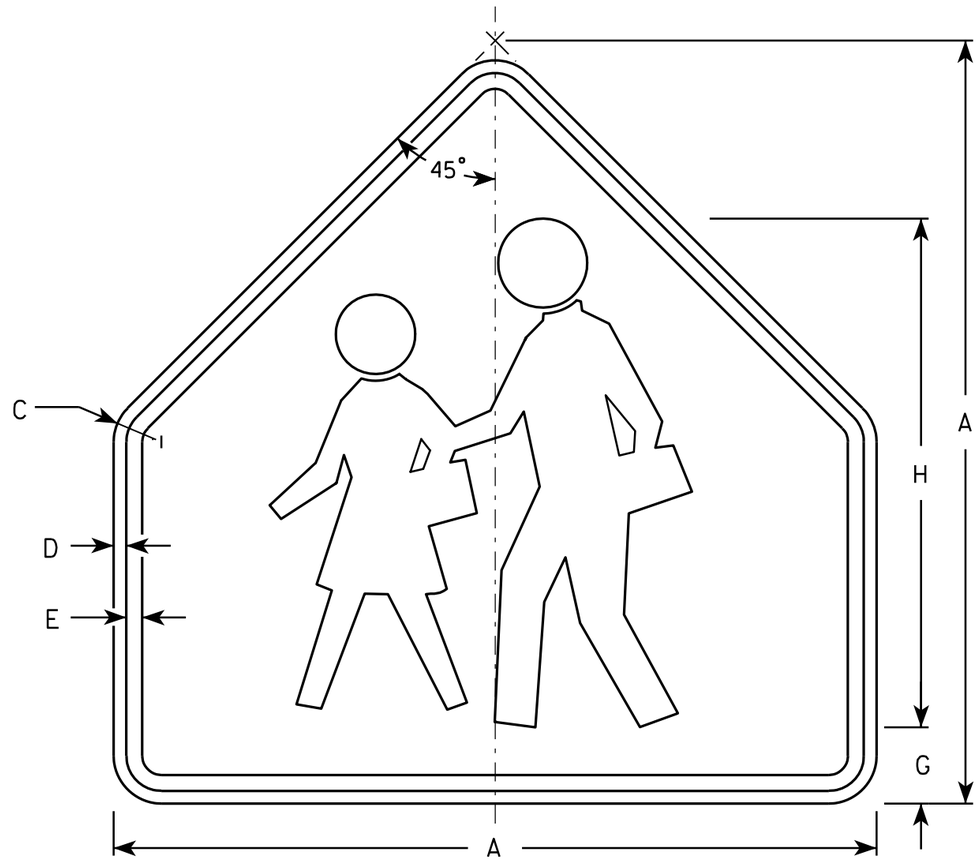
APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO: 3849-00-72	HWY: MILL STREET	COUNTY: WALWORTH	SIGN PLATE DETAILS	SHEET NO: 39	E

FILE NAME : C:\Users\Projects\tr_stdplate\A411.DGN PLOT DATE : 10-NOV-2005 10:09 PLOT BY : DOTSJA PLOT NAME : PLOT SCALE : 6.207338:1.000000

WISDOT/CADDS SHEET 42



S1-1

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-Green
   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.

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	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

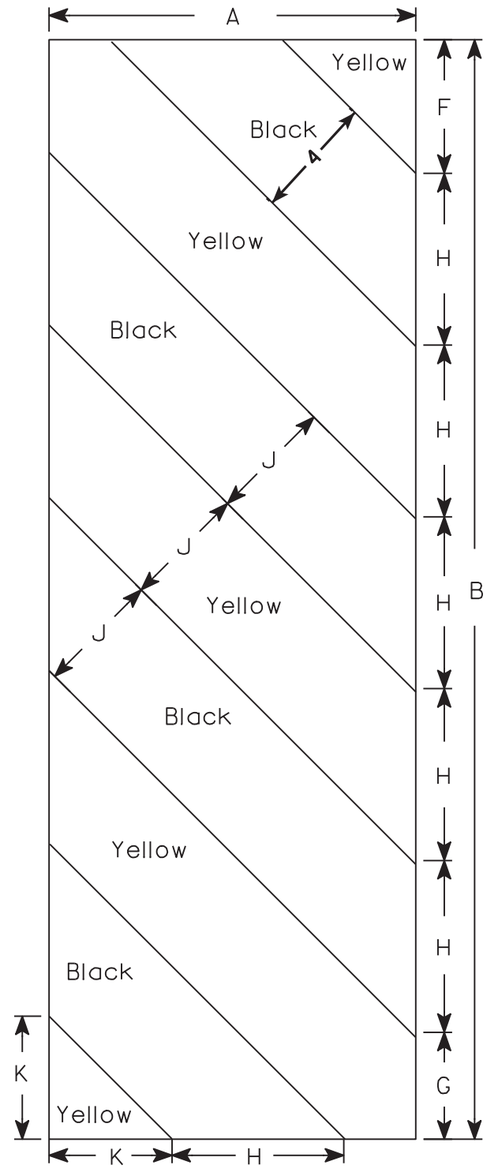
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

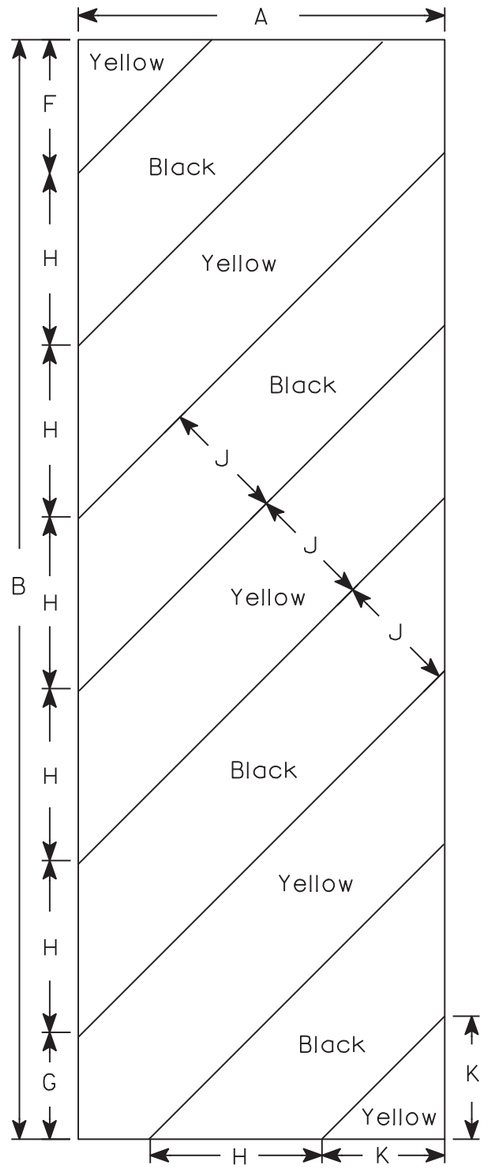
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO: 3849-00-72	HWY: MILL STREET	COUNTY: WALWORTH	SIGN PLATE DETAILS	SHEET NO: 40	E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

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

STANDARD SIGN

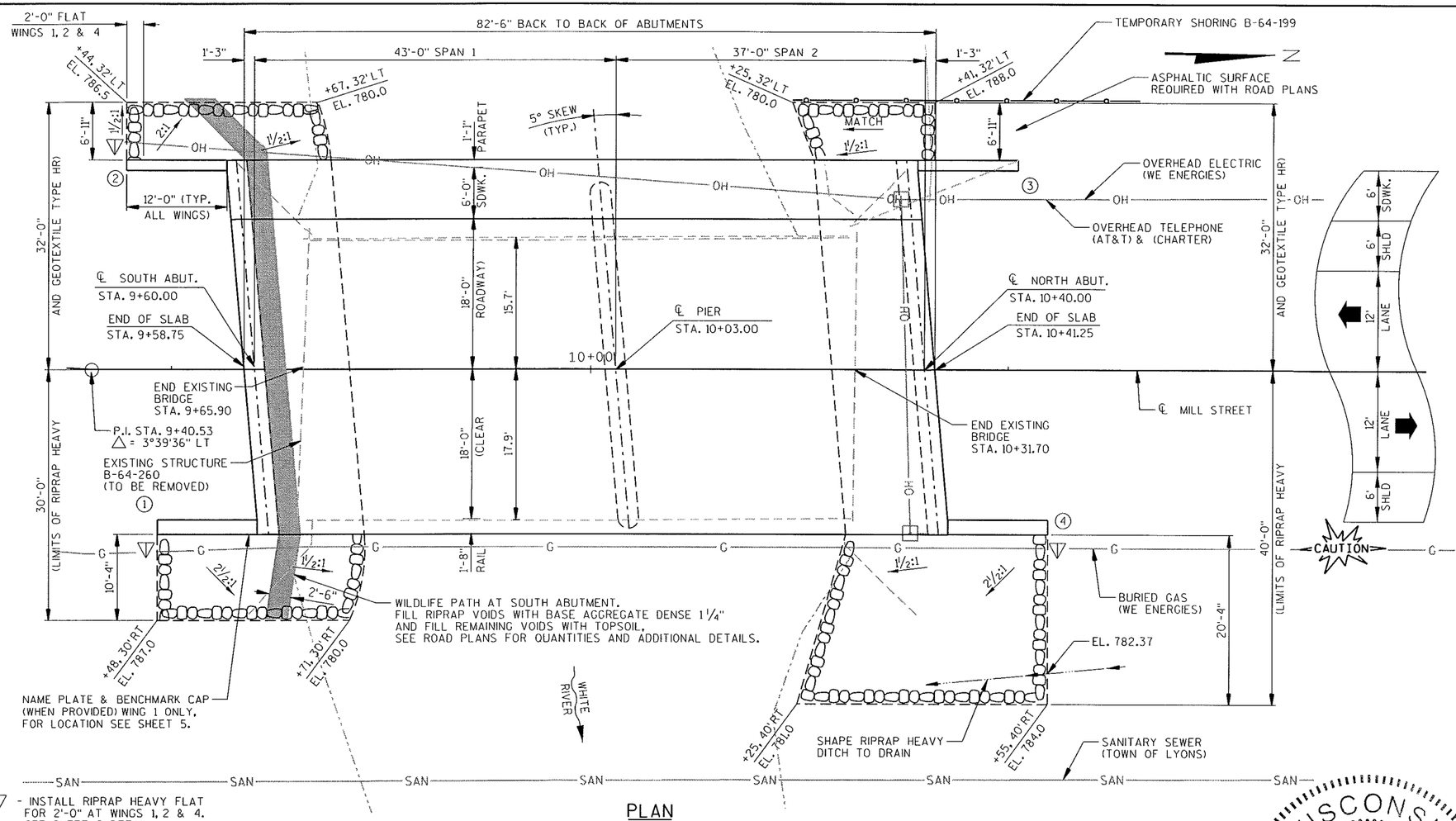
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

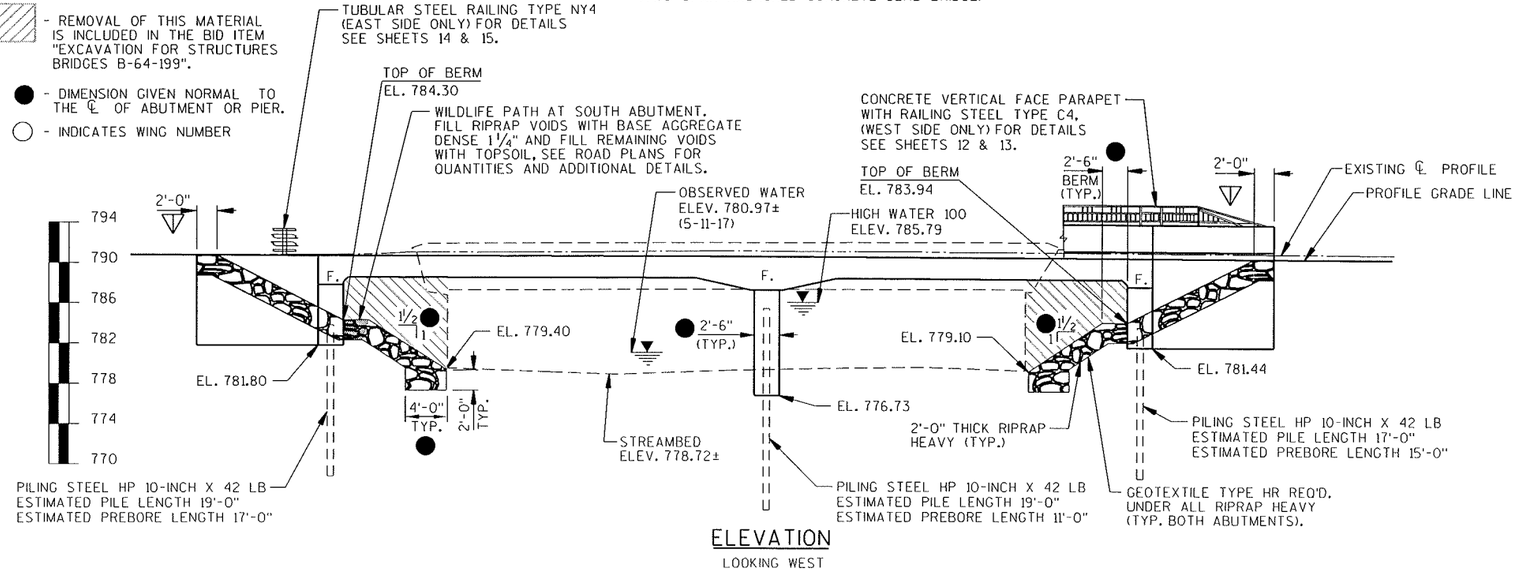
DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 41 | E



PLAN

(TWO SPAN HAUNCHED CONCRETE SLAB BRIDGE)



ELEVATION

LOOKING WEST

STATE PROJECT NUMBER
3849-00-72

BENCHMARKS ⊕ NAVD 88

NO.	STA./OFFSET	DESCRIPTION	ELEV.
10	8+62.60, 28.3' LT	RR SPIKE ON E FACE OF PP	789.79
11	9+65.84, 15.6' LT	CHIS X AT SW CORNER WINGWALL	791.35
12	11+53.51, 19.9' LT	RR SPIKE ON E FACE OF PP	790.19

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.09
OPERATIONAL RATING FACTOR: 1.42

WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS.

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

TRAFFIC DATA:

A.A.D.T. (2019) = 2300
A.A.D.T. (2039) = 2800
R.D.S. = 30 MPH

MATERIAL PROPERTIES

CONCRETE MASONRY, SUPERSTRUCTURE ——— $f'c$ = 4,000 P.S.I.
ALL OTHER ——— $f'c$ = 3,500 P.S.I.

HIGH-STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 ——— fy = 60,000 P.S.I.

FOUNDATION DATA:

ABUTMENTS AND PIER TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB. PILING SHALL BE PREBORED 3'-0" MINIMUM INTO FIRM BEDROCK. SEAT PREBORED PILING. ESTIMATED PILE LENGTHS ARE 19'-0" AT THE SOUTH ABUTMENT, 19'-0" AT THE PIER, AND 17'-0" AT THE NORTH ABUTMENT. SEATED PILES WILL HAVE A FACTORED BEARING RESISTANCE OF 180 TONS ✳.

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

HYDRAULIC DATA:

100 YEAR FREQUENCY

DRAINAGE AREA ——— 82.7 SQ. MI.
Q_{100} ——— 2,800 C.F.S.
VELOCITY ——— 6.93 FT./SEC.
WATERWAY AREA ——— 404 SQ. FT.
SCOUR CRITICAL CODE ——— 5
HIGH WATER $_{100}$ ELEVATION ——— 785.79
Q_2 ELEVATION (640 C.F.S.) ——— 782.44
Q_2 VELOCITY ——— 3.33 FT./SEC.

ROADWAY OVERFLOW DESIGN FREQUENCY

OVERTOPPING FREQUENCY ——— > 100 YEARS

WISCONSIN
JOSHUA R. SWENO
E-44384
WAUNAKEE
WI
PROFESSIONAL ENGINEER
Joshua R. Sweno
11/2/2018

CONSULTANT DESIGN CONTACT:
JOSHUA SWENO
(608) 355-8852

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

LIST OF DRAWINGS

NO.	DATE	REVISION	BY

MSA
ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
1230 SOUTH BLVD., BARABOO WI 53913
(608) 356-2771 www.msa-ps.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 11/06/18
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-64-199

MILL STREET OVER WHITE RIVER

COUNTY	TOWN/~~CITY/VILLAGE~~
WALWORTH	LYONS

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	JAS	DESIGN CK'D.	JRS	DRAWN BY	CAR	PLANS CK'D.	JRS

GENERAL PLAN

SHEET 42 15

FILE= 9294002_01.DGN
DATE= 11-1-2018

09294002_01.dgn 11/1/2018 3:16:47 PM jsweno

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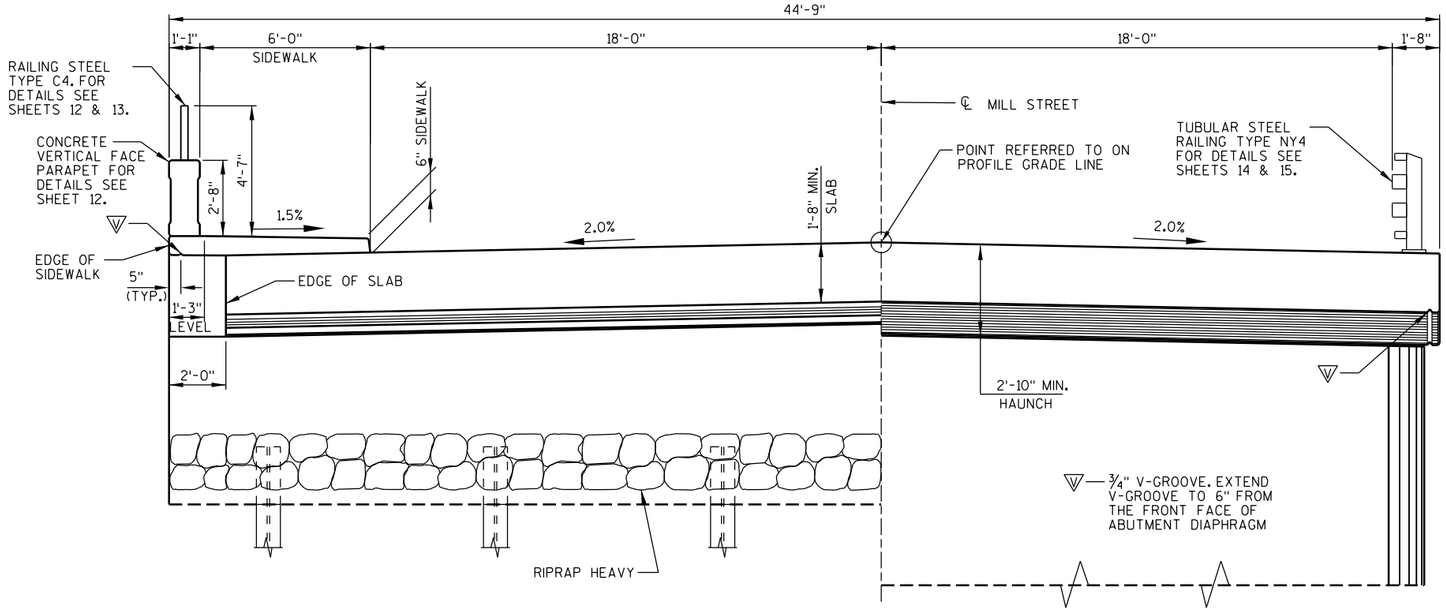
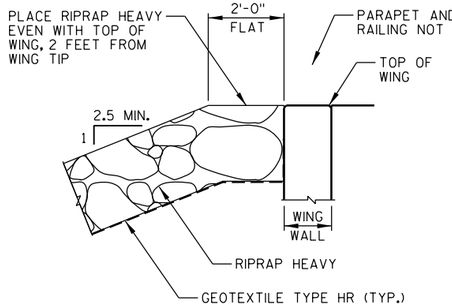


AT ABUTMENTS

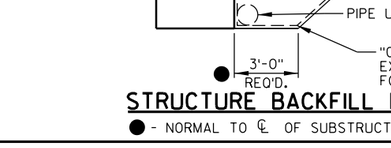
AT PIER

CROSS SECTION THRU BRIDGE

(LOOKING NORTH)

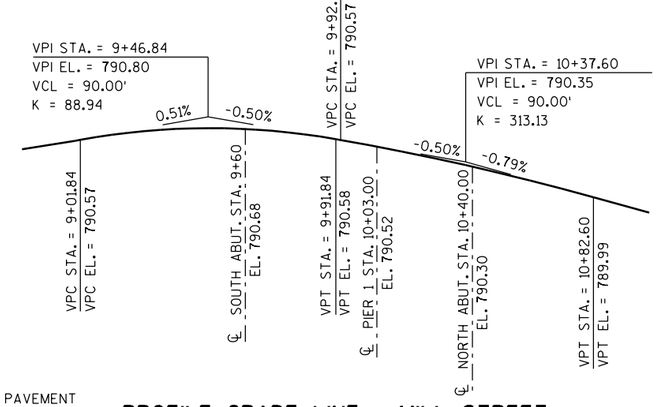


TYPICAL FILL SECTION AT WING TIPS



ABUTMENT BACKFILL DIAGRAM

L = OUT-TO-OUT OF ABUTMENT
H = AVERAGE ABUTMENT FILL HEIGHT
V_{CF} = (L)(3.0')(H)+(L)(0.5)(1.5H)(H)
V_{TON} = V_{CF} (2.0)/27

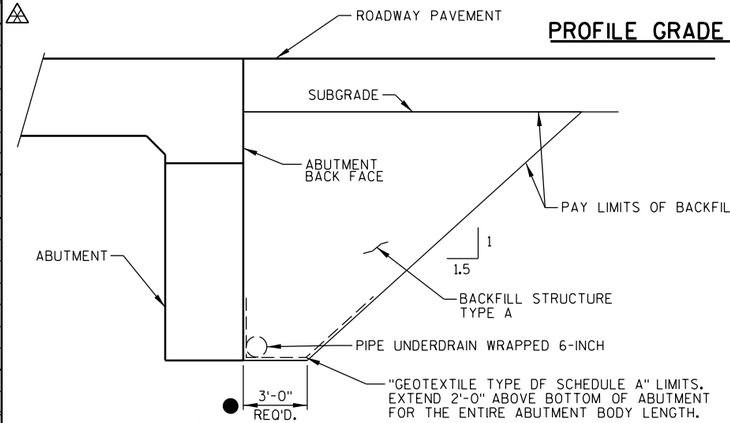


PROFILE GRADE LINE - MILL STREET

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	SOUTH ABUT.	PIER	NORTH ABUT.	SUPER	TOTAL
203.0600.S.01	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 10+00	LS	-	-	-	-	1
206.1000.01	EXCAVATION FOR STRUCTURES BRIDGES B-64-199	LS	-	-	-	-	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	210	-	210	-	420
502.0100	CONCRETE MASONRY BRIDGES	CY	47	41	47	267	402
502.3200	PROTECTIVE SURFACE TREATMENT	SY	7	-	7	430	444
502.3210	PIGMENTED SURFACE SEALER	SY	-	-	-	45	45
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2690	1850	2690	-	7230
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1870	80	1870	41730	45550
511.1200.01	TEMPORARY SHORING B-64-199	SF	-	-	250	-	250
513.7021.01	RAILING STEEL TYPE C4 B-64-199	LF	-	-	-	105	105
513.7084.01	RAILING STEEL TYPE NY4 B-64-199	LF	-	-	-	109	109
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	12	-	12	-	24
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	102	99	90	-	291
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	114	171	102	-	387
606.0300	RIPRAP HEAVY	CY	85	-	105	-	190
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	120	-	120	-	240
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	43	-	43	-	86
645.0120	GEOTEXTILE TYPE HR	SY	170	-	200	-	370
	NON-BID ITEMS						
	PREFORMED FILLER	SIZE					½" & ¾"

⚠ REMOVING ANG SALVAGING THE STEEL PLATES COVERING THE HOLES IN THE EXISTING DECK IS INCIDENTAL TO "REMOVING OLD STRUCTURE".



STRUCTURE BACKFILL DETAIL

● - NORMAL TO ℄ OF SUBSTRUCTURE

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY THE BAR SIZE.

THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE LIMITS SHOWN ON SHEET 1 AND ON THE ABUTMENT SHEET OR AS DIRECTED BY THE ENGINEER.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" AT THE ABUTMENTS AND PIER.

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

THIS STRUCTURE WILL REPLACE EXISTING BRIDGE, B-64-260, A 33.6 FT. WIDE BY 65.8 FT. LONG, SINGLE SPAN, STEEL DECK GIRDER BRIDGE ON CONCRETE SILL ABUTMENTS. THERE ARE STEEL PLATES COVERING THE HOLES IN THE EXISTING DECK. REMOVE AND SALVAGE THE PLATES.

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

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF SLAB, TO THE TOP AND INSIDE FACE OF THE SIDEWALK, TO THE EAST SIDE OF THE SLAB, TO THE OUTSIDE 1'-0" OF THE SLAB UNDERSIDE OF THE SLAB EAST SIDE, TO THE TOP AND EXPOSED FACES OF THE EAST SIDE WINGS AND TO THE EAST END 1'-0" OF FRONT FACE OF ABUTMENTS.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE INSIDE FACE, THE TOP FACE, AND THE VERTICAL ENDS OF THE PARAPET.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD 88 DATUM. BENCHMARK REFERENCES AT THE PROJECT SITE WERE SET BY THE CONSULTANT USING GPS TECHNOLOGY.

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

PARAPET AND SIDEWALK ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

STATE PROJECT NUMBER
3849-00-72

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-199

DRAWN BY CAR | PLANS CK'D. JRS

CROSS SECTION, QUANTITIES & NOTES

SHEET 2 OF 15
43

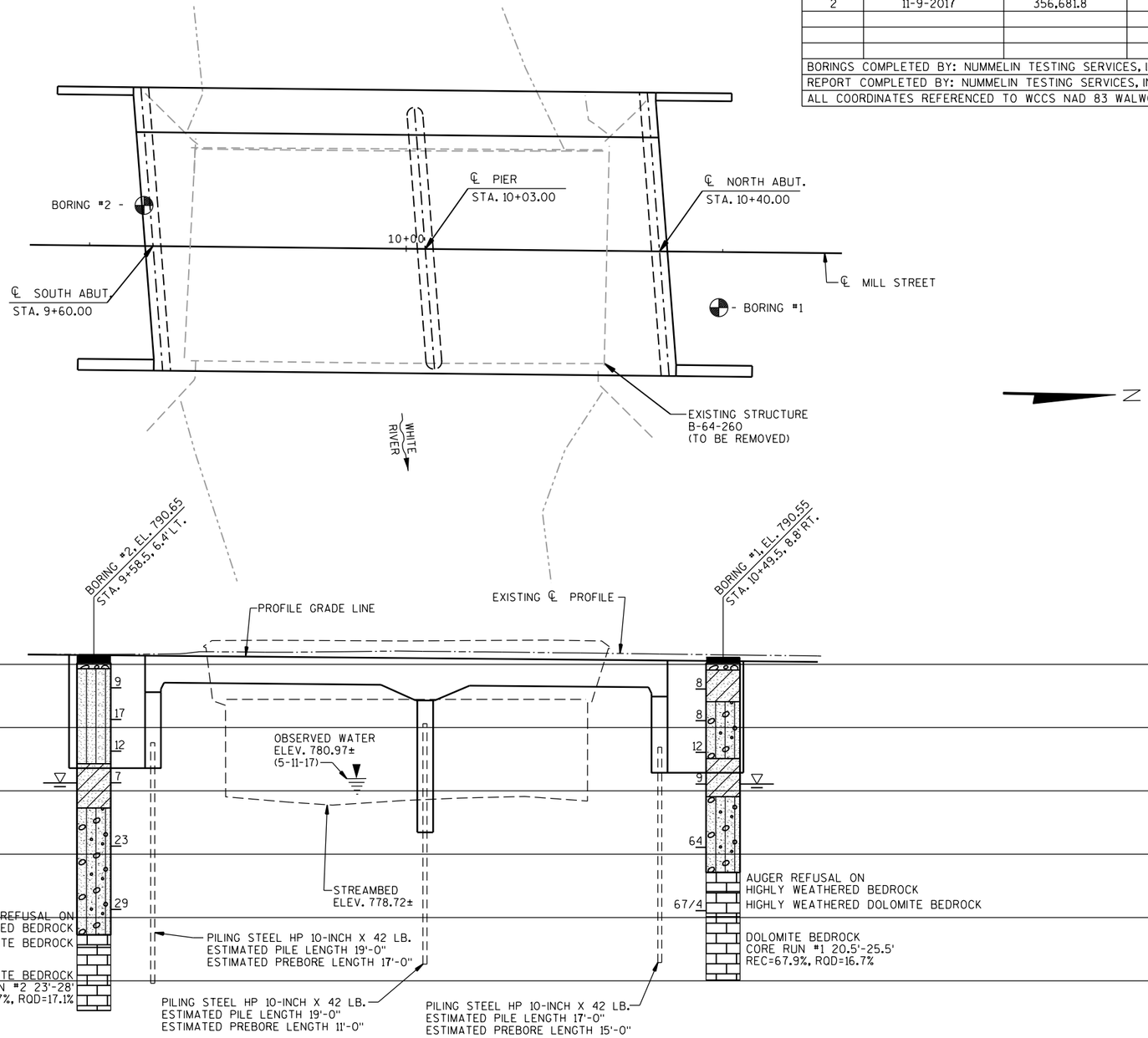
8

8

FILE= 09294002_02.DGN
DATE= 8/28/2018

09294002_02.dgn 8/28/2018 8:40:16 AM rrabska

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	11-9-2017	356,772.9	812,581.6
2	11-9-2017	356,681.8	812,567.3
BORINGS COMPLETED BY: NUMMELIN TESTING SERVICES, INC.			
REPORT COMPLETED BY: NUMMELIN TESTING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83 WALWORTH COUNTY			



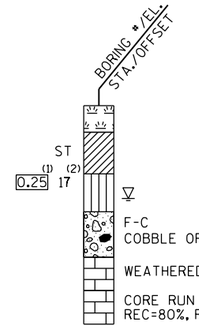
STATE PROJECT NUMBER

3849-00-72

MATERIAL SYMBOLS

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

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

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

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-199

DRAWN BY RLR | PLANS CK'D. JRS

SUBSURFACE EXPLORATION

SHEET 3 OF 15
44

8

8

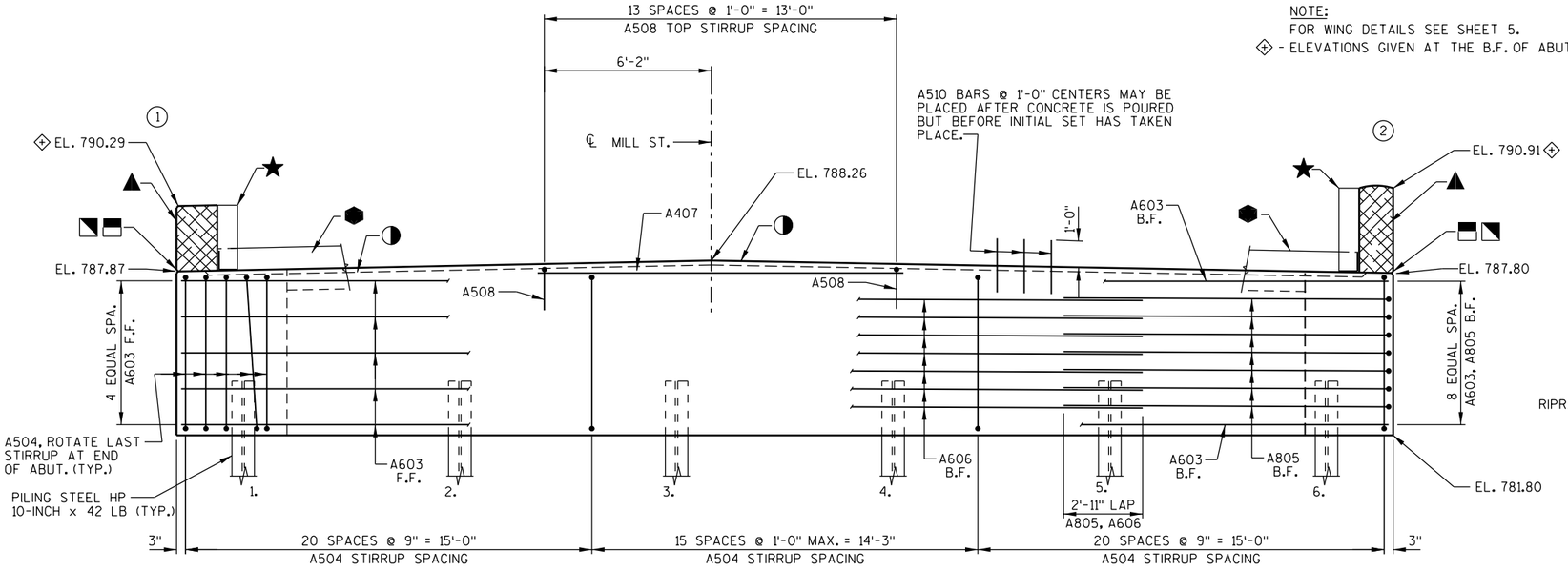
09294002_03.dgn 8/14/2018 2:57:28 PM rrabska

FILE= 9294002_03.DGN

STATE PROJECT NUMBER

3849-00-72

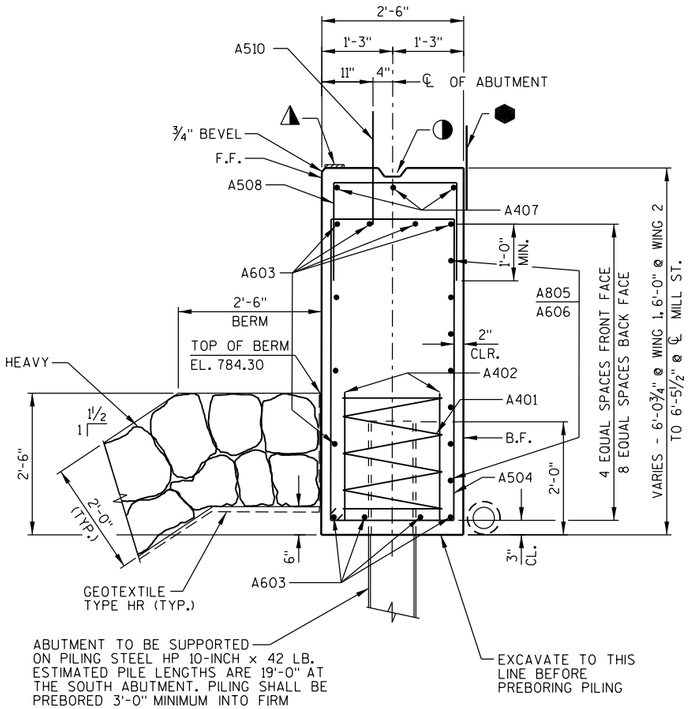
NOTE:
FOR WING DETAILS SEE SHEET 5.
◈ - ELEVATIONS GIVEN AT THE B.F. OF ABUTMENT.



FRONT FACE BAR STEEL REINF.

ELEVATION
(LOOKING SOUTH)

BACK FACE BAR STEEL REINF.

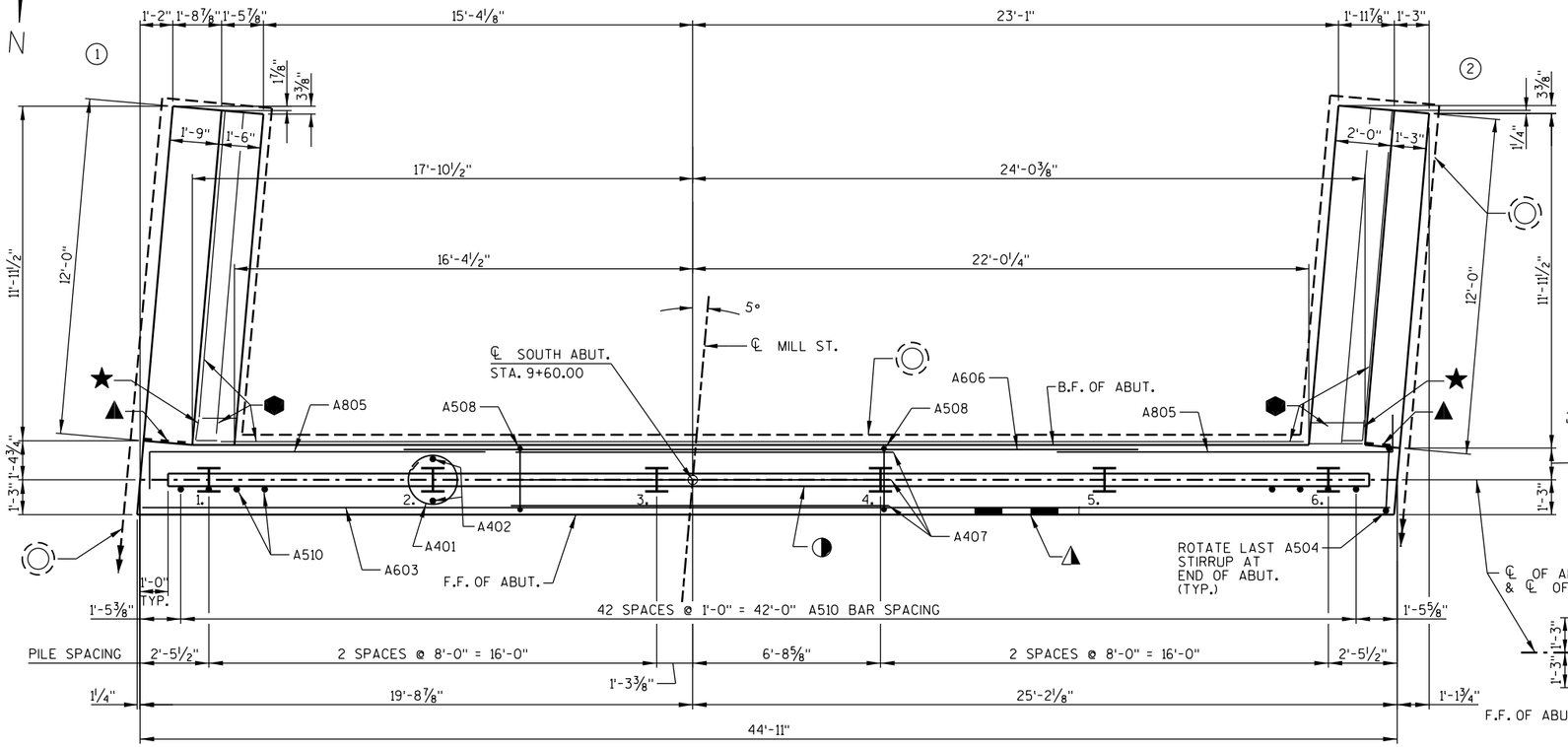


TYPICAL SECTION THRU ABUTMENT

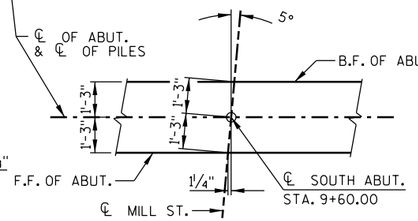
LEGEND

- – OPTIONAL KEYED CONST. JOINT ON WING FORMED BY BEVELED 2x6. IF JOINT IS USED, POUR CONCRETE ABOVE THIS JOINT AFTER DECK IS IN PLACE AND PLACE ⬢ ON B.F. OF WING.
- – ¾" "V" GROOVE ON FRONT FACE OF WING WALL. REQ'D. ONLY WHERE CONST. JOINT IS USED.
- – KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2x6.
- – ½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE).
- – 4"x ¾" FILLER, EXTEND FULL LENGTH OF ABUTMENT BETWEEN EDGES OF SLAB.
- ★ – VERTICAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND FROM BRIDGE SEAT TO TOP OF WINGS.
- ⬢ – HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND BETWEEN WINGS. PLACE BOTTOM HALF HORIZONTAL AT HAUNCHED AREA OF WINGS AT CONSTRUCTION JOINT.
- ◎ – PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND THRU GEOTEXTILE TYPE HR AT FACE OF RIPRAP HEAVY. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE. FOR RODENT SHIELD DETAILS SEE SHEET 5.
- ○ – INDICATES WING NUMBER

F.F. - FRONT FACE B.F. - BACK FACE CL. - CLEAR



PLAN



LAYOUT DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-199

DRAWN BY RLR | PLANS CK'D. JRS

SOUTH ABUTMENT

SHEET 4 OF 15
45

FILE= 9294002_04.DGN
DATE= 8/28/2018

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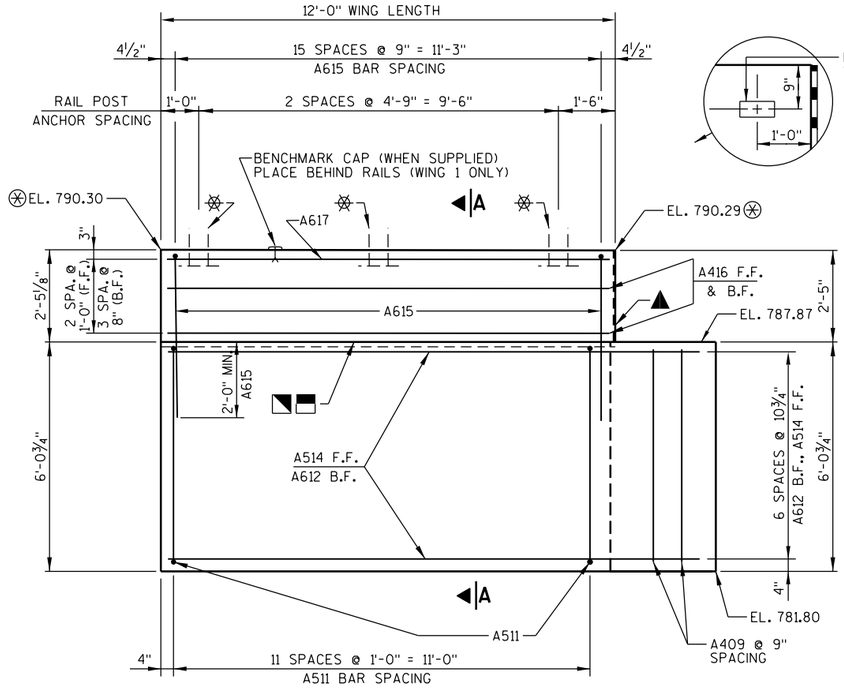
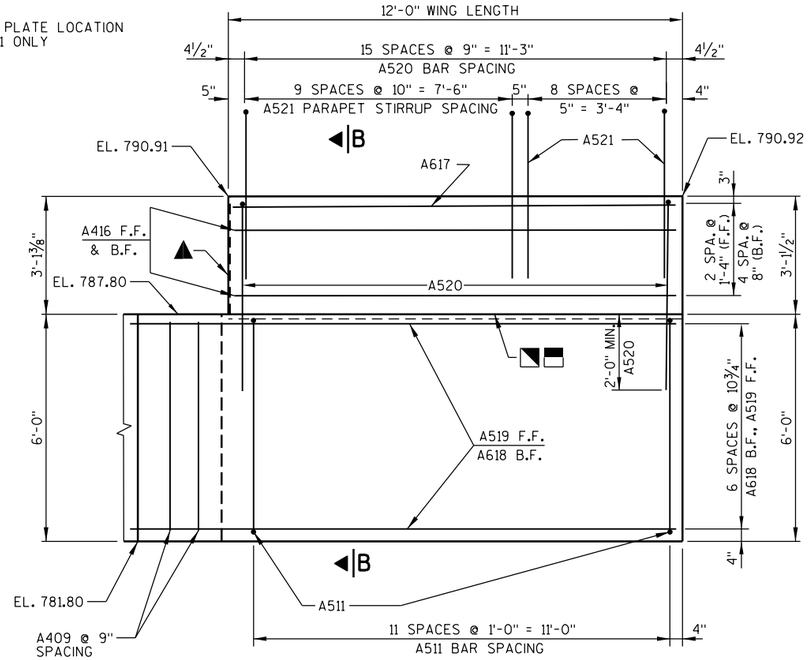
09294002_04.dgn 8/28/2018 12:42:59 PM frabska

STATE PROJECT NUMBER

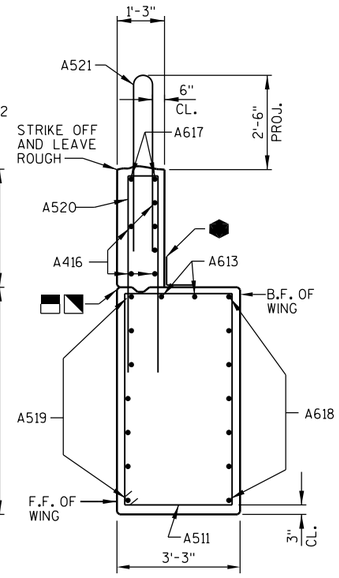
3849-00-72



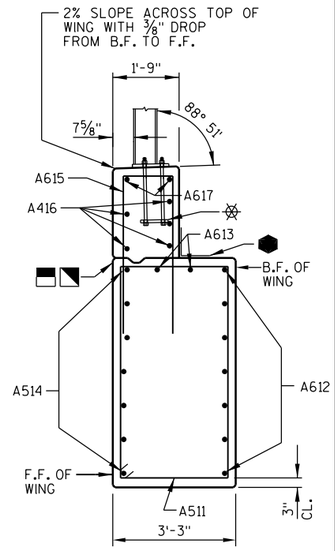
ELEVATION WING 1



ELEVATION WING 2



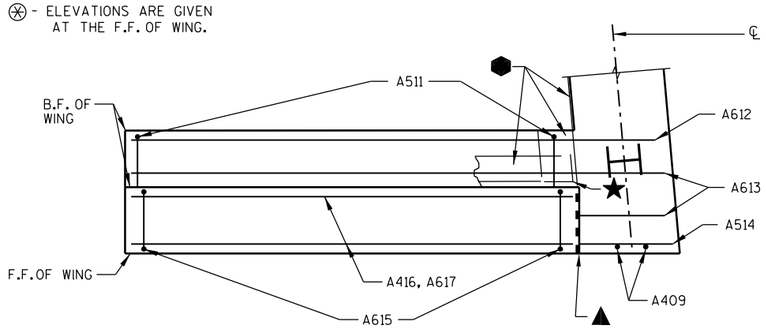
SECTION B-B THRU WING 2



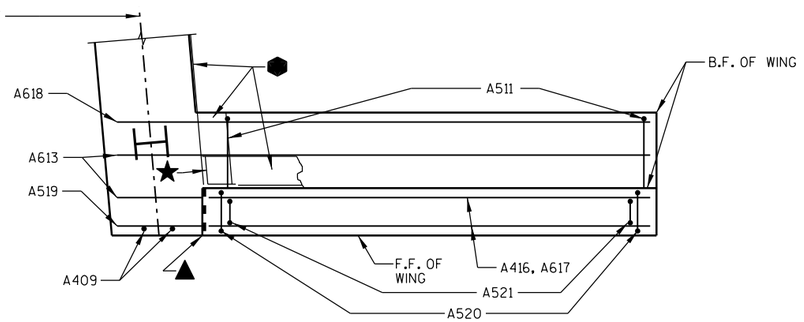
SECTION A-A THRU WING 1

Ⓐ - FOR RAIL POST ANCHOR DETAILS SEE SHEET 14.

Ⓔ - ELEVATIONS ARE GIVEN AT THE F.F. OF WING.



PLAN WING 1



PLAN WING 2

SEE SHEET 4 LEGEND FOR DESCRIPTION OF

BILL OF BARS (SOUTH ABUT.) COATED 1870 LBS. UNCOATED 2690 LBS.

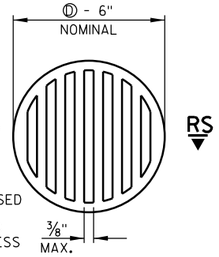
MARK	NUMBER REQUIRED COATED	NUMBER REQUIRED UNCOATED	LENGTH	BENT	LOCATION
A401	-	6	28'-0"	X	ABUT. BODY - 1 SPIRAL WRAP @ EACH PILE
A402	-	12	2'-3"		ABUT. BODY - 2 @ EACH PILE - VERT.
A603	-	11	44'-7"		ABUT. BODY - F.F., TOP & BOTTOM - HORIZ.
A504	-	56	16'-2"	X	ABUT. BODY - STIRRUPS - VERT.
A805	-	14	13'-2"	X	ABUT. BODY - B.F. - HORIZ.
A606	-	7	26'-3"		ABUT. BODY - B.F. - CENTER - HORIZ.
A407	-	3	13'-6"		ABUT. BODY - TOP - HORIZ.
A508	-	14	4'-11"	X	ABUT. BODY - TOP - STIRRUP - VERT.
A409	-	4	5'-7"		ABUT. BODY - END - VERT.
A510	43	-	2'-0"		ABUT. BODY - TOP - DOWEL - VERT.
A511	24	-	17'-8"	X	WINGS - BASE - STIRRUP - VERT.
A612	7	-	13'-10"		WING 1 - BASE - B.F. - HORIZ.
A613	4	-	14'-1"		WINGS - BASE - TOP CENTER - HORIZ.
A514	7	-	14'-3"		WING 1 - BASE - F.F. - HORIZ.
A615	16	-	9'-7"	X	WING 1 - TOP - STIRRUP - VERT.
A416	11	-	11'-7"		WINGS - TOP - F.F. & B.F. - HORIZ.
A617	4	-	11'-7"		WINGS - TOP - F.F. & B.F. - HORIZ.
A618	7	-	14'-1"		WING 2 - BASE - B.F. - HORIZ.
A519	7	-	14'-1"		WING 2 - BASE - F.F. - HORIZ.
A520	16	-	10'-8"	X	WING 2 - TOP - STIRRUP - VERT.
A521	19	-	9'-6"	X	WING 2 - TOP - PARAPET STIRRUP - VERT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

RODENT SHIELD NOTES:

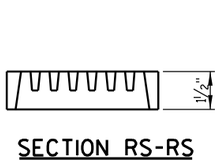
ORIENT SHIELD SO SLOTS ARE VERTICAL.

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

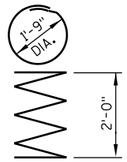


RODENT SHIELD

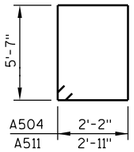
Ⓓ - DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



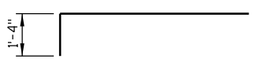
SECTION RS-RS



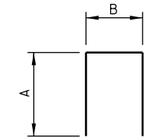
A401
5 WRAPS



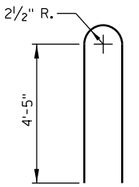
A504, A511



A805
STD. 90° HOOKS



MARK	A	B
A508	1'-6"	2'-2"
A615	4'-3"	1'-5"
A520	5'-0"	11"



A521

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-199

DRAWN BY RLR | PLANS CK'D. JRS

SOUTH ABUTMENT DETAILS

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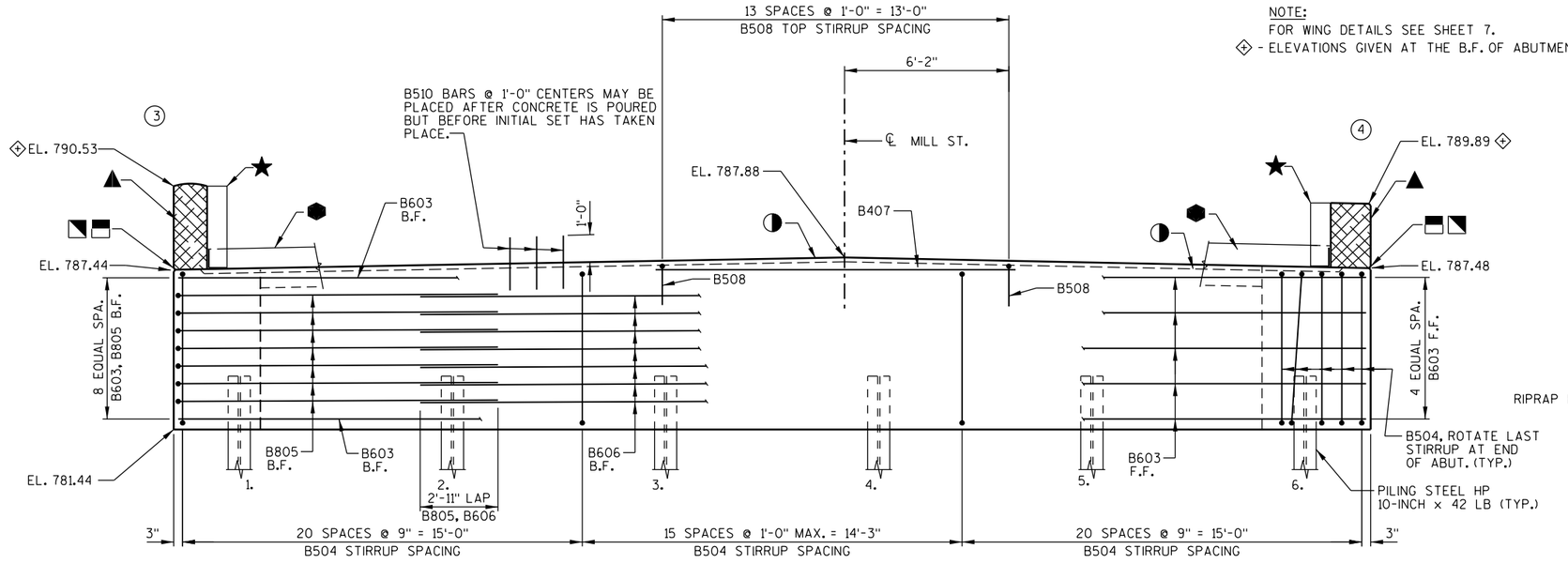
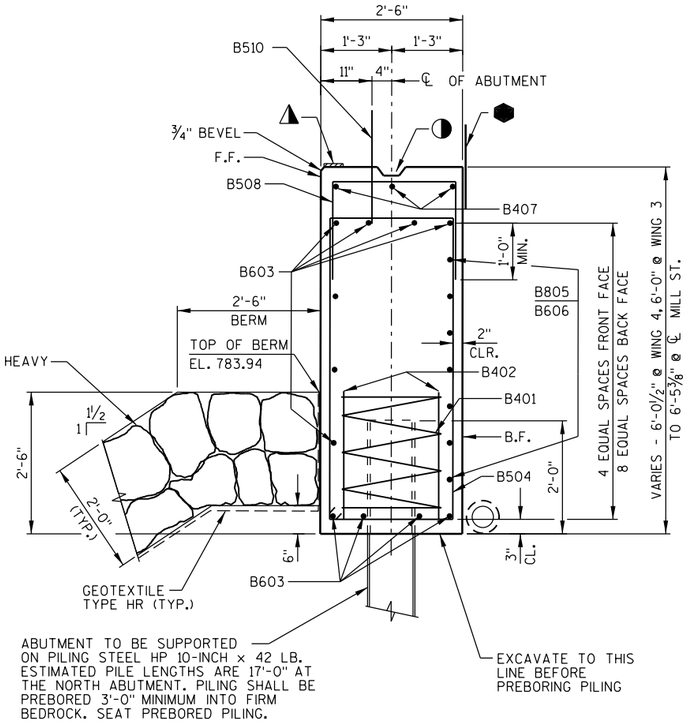
NOTE:
FOR WING DETAILS SEE SHEET 7.
◈ - ELEVATIONS GIVEN AT THE B.F. OF ABUTMENT.



ELEVATION
(LOOKING NORTH)

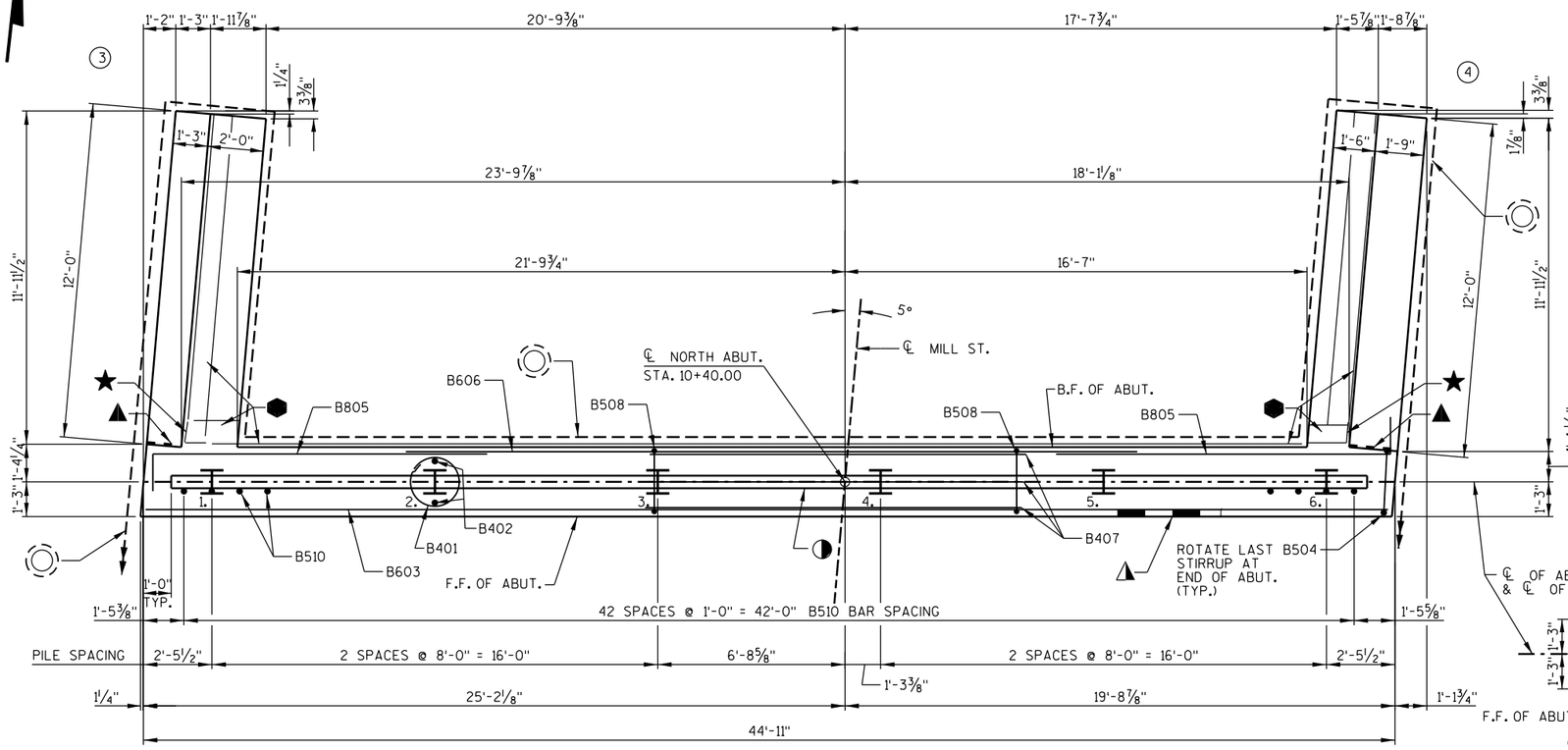


TYPICAL SECTION THRU ABUTMENT

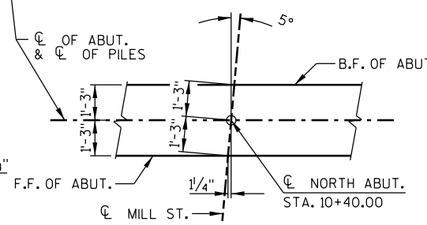
LEGEND

- – OPTIONAL KEYED CONST. JOINT ON WING FORMED BY BEVELED 2x6. IF JOINT IS USED, POUR CONCRETE ABOVE THIS JOINT AFTER DECK IS IN PLACE AND PLACE ⬢ ON B.F. OF WING.
- – ¾" "V" GROOVE ON FRONT FACE OF WING WALL, REQ'D. ONLY WHERE CONST. JOINT IS USED.
- – KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2x6.
- – ½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE).
- – 4"x ¾" FILLER, EXTEND FULL LENGTH OF ABUTMENT BETWEEN EDGES OF SLAB.
- ★ – VERTICAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND FROM BRIDGE SEAT TO TOP OF WINGS.
- ⬢ – HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND BETWEEN WINGS. PLACE BOTTOM HALF HORIZONTAL AT HAUNCHED AREA OF WINGS AT CONSTRUCTION JOINT.
- ◎ – PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND THRU GEOTEXTILE TYPE HR AT FACE OF RIPRAP HEAVY. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE. FOR RODENT SHIELD DETAILS SEE SHEET 5.
- ○ – INDICATES WING NUMBER

F.F. - FRONT FACE B.F. - BACK FACE CL. - CLEAR



PLAN



LAYOUT DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-199

DRAWN BY RLR PLANS CK'D. JRS

NORTH ABUTMENT

SHEET 6 OF 15
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DATE= 8/28/2018

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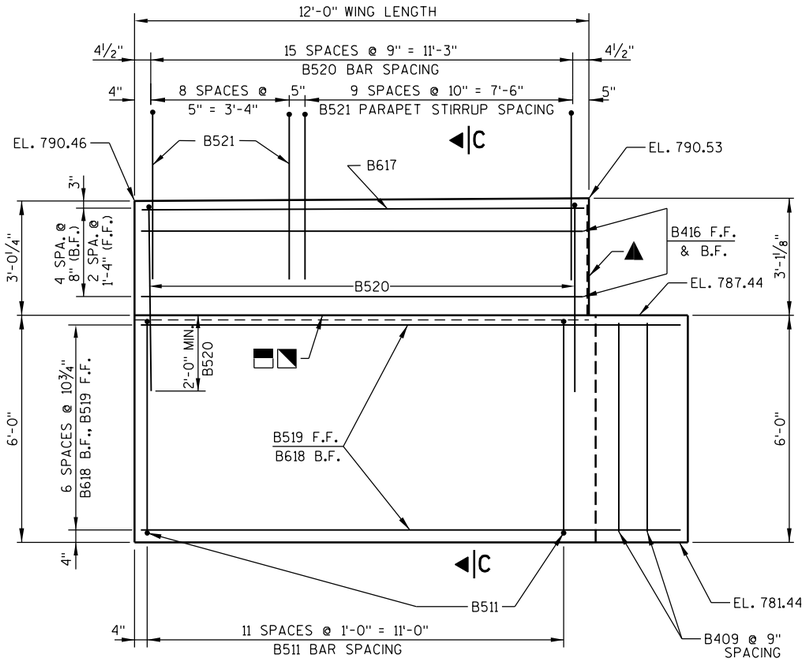
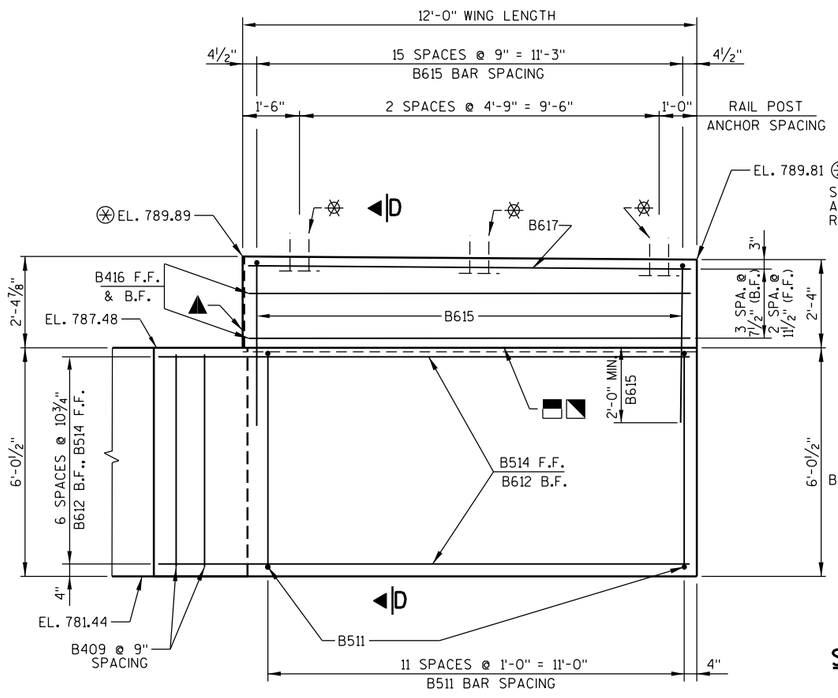
09294002_06.dgn 8/28/2018 12:43:38 PM rrabska

STATE PROJECT NUMBER

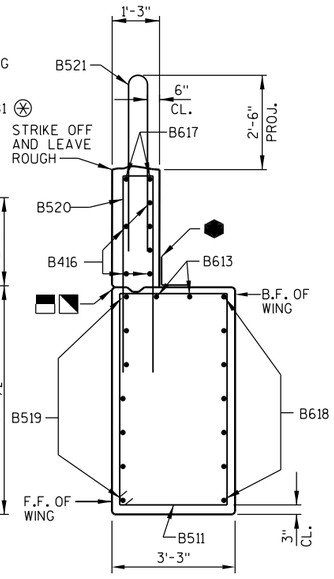
3849-00-72



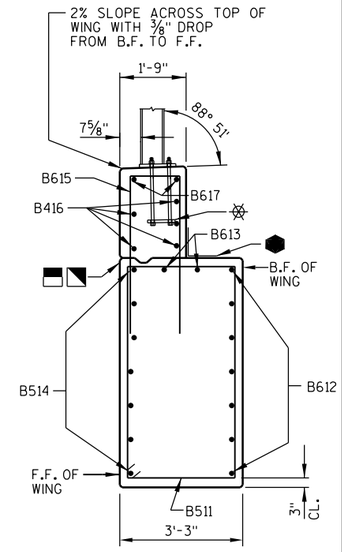
ELEVATION WING 3



ELEVATION WING 4



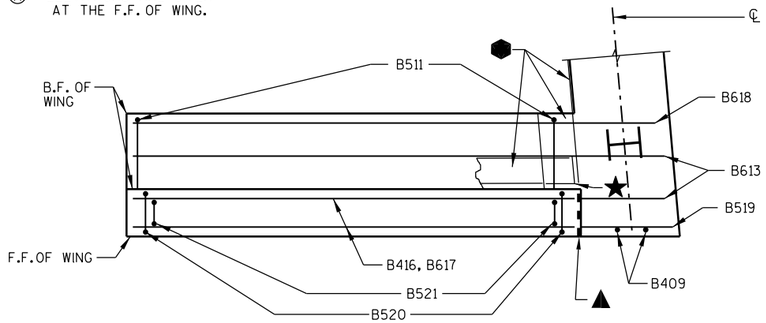
SECTION C-C THRU WING 3



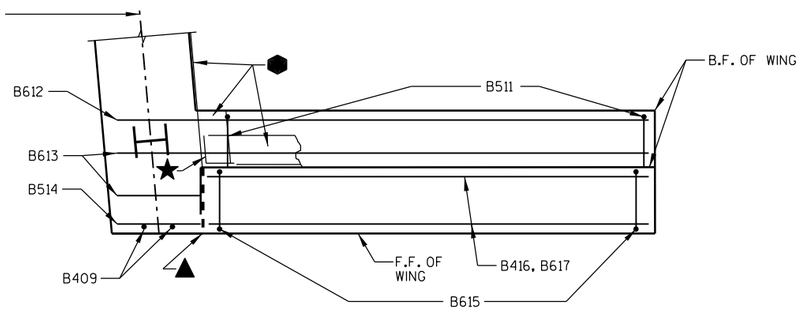
SECTION D-D THRU WING 4

⊛ - FOR RAIL POST ANCHOR DETAILS SEE SHEET 14.

⊛ - ELEVATIONS ARE GIVEN AT THE F.F. OF WING.



PLAN WING 3



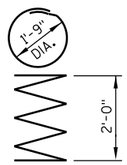
PLAN WING 4

BILL OF BARS (NORTH ABUT.) COATED 1870 LBS. UNCOATED 2690 LBS.

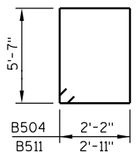
MARK	NUMBER REQUIRED COATED	NUMBER REQUIRED UNCOATED	LENGTH	BENT	LOCATION
B401	-	6	28'-0"	X	ABUT. BODY - 1 SPIRAL WRAP @ EACH PILE
B402	-	12	2'-3"		ABUT. BODY - 2 @ EACH PILE - VERT.
B603	-	11	44'-7"		ABUT. BODY - F.F., TOP & BOTTOM - HORIZ.
B504	-	56	16'-2"	X	ABUT. BODY - STIRRUPS - VERT.
B805	-	14	13'-2"	X	ABUT. BODY - B.F. - HORIZ.
B606	-	7	26'-3"		ABUT. BODY - B.F. - CENTER - HORIZ.
B407	-	3	13'-6"		ABUT. BODY - TOP - HORIZ.
B508	-	14	4'-11"	X	ABUT. BODY - TOP - STIRRUP - VERT.
B409	-	4	5'-7"		ABUT. BODY - END - VERT.
B510	43	-	2'-0"		ABUT. BODY - TOP - DOWEL - VERT.
B511	24	-	17'-8"	X	WINGS - BASE - STIRRUP - VERT.
B612	7	-	14'-1"		WING 4 - BASE - B.F. - HORIZ.
B613	4	-	14'-1"		WINGS - BASE - TOP CENTER - HORIZ.
B514	7	-	14'-1"		WING 4 - BASE - F.F. - HORIZ.
B615	16	-	9'-7"	X	WING 4 - TOP - STIRRUP - VERT.
B416	11	-	11'-7"		WINGS - TOP - F.F. & B.F. - HORIZ.
B617	4	-	11'-7"		WINGS - TOP - F.F. & B.F. - HORIZ.
B618	7	-	13'-10"		WING 3 - BASE - B.F. - HORIZ.
B519	7	-	14'-3"		WING 3 - BASE - F.F. - HORIZ.
B520	16	-	10'-8"	X	WING 3 - TOP - STIRRUP - VERT.
B521	19	-	9'-6"	X	WING 3 - TOP - PARAPET STIRRUP - VERT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

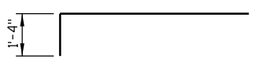
SEE SHEET 6 LEGEND FOR DESCRIPTION OF ⬢ ▬ ◪ ★ ▲



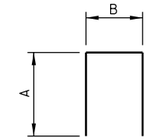
B401
5 WRAPS



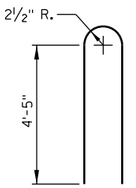
B504, B511



B805
STD. 90° HOOKS



MARK	A	B
B508	1'-6"	2'-2"
B615	4'-3"	1'-5"
B520	5'-0"	11"



B521

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-199

DRAWN BY RLR | PLANS CK'D. JRS

NORTH ABUTMENT DETAILS

SHEET 7 OF 15
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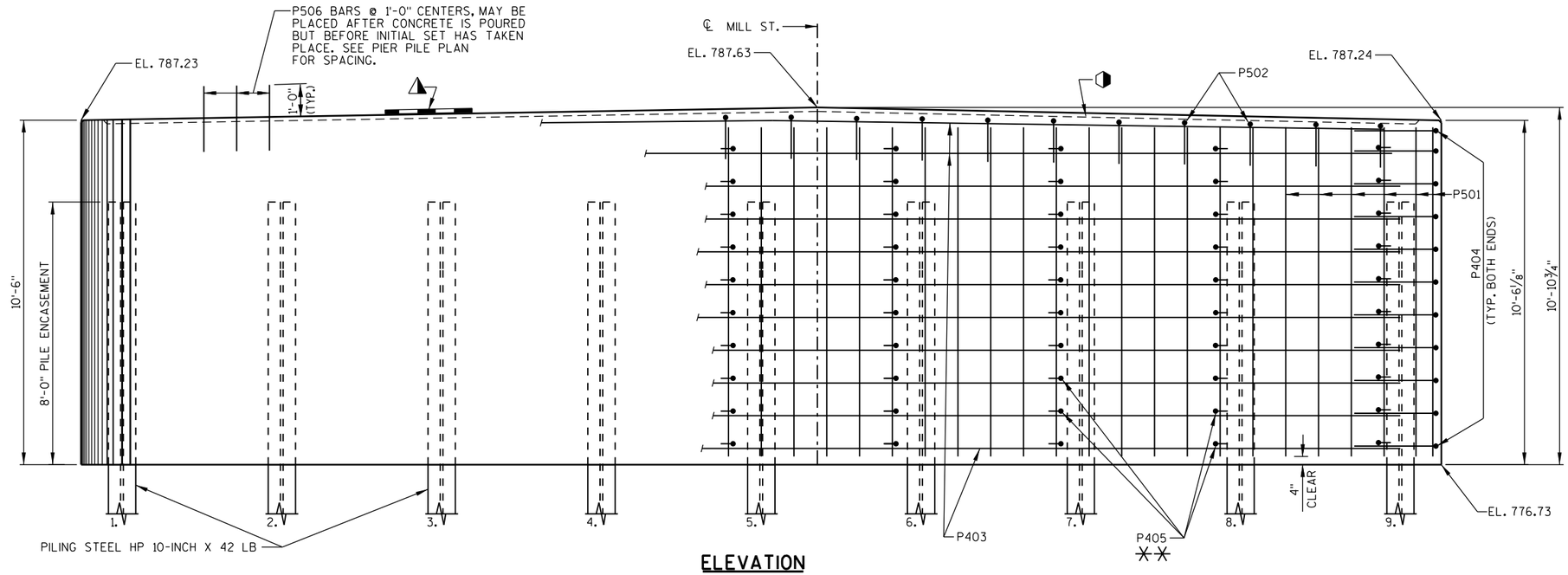


ELEVATION
(LOOKING NORTH)

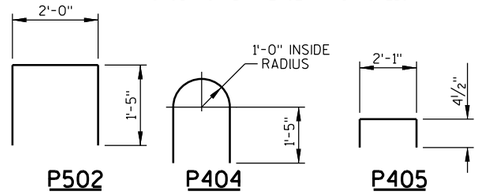
BILL OF BARS

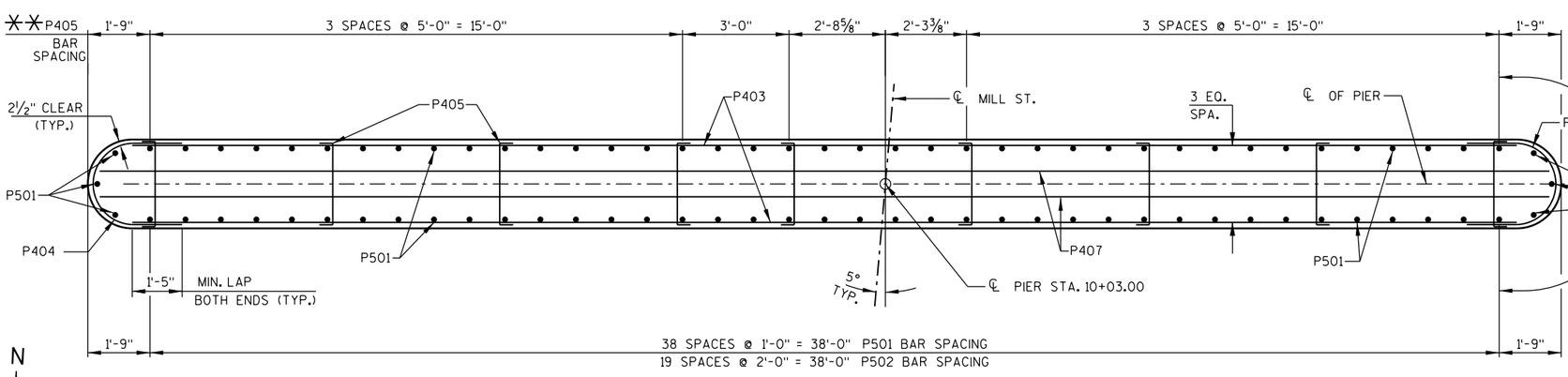
UNCOATED 1850 LBS.
COATED 80 LBS.

MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
P501	84	10'-0"		PIER - VERT.
P502	20	4'-7"	X	PIER - STIRRUPS - TOP - VERT.
P403	22	39'-0"		PIER - TOP & SIDES - HORIZ.
P404	22	6'-1"	X	PIER - AT ENDS - HORIZ.
P405	90	2'-8"	X	PIER - TIES - HORIZ.
Ⓒ P506	40	2'-0"		PIER - DOWELS @ TOP - VERT.
P407	2	40'-10"		PIER - TOP - HORIZ.

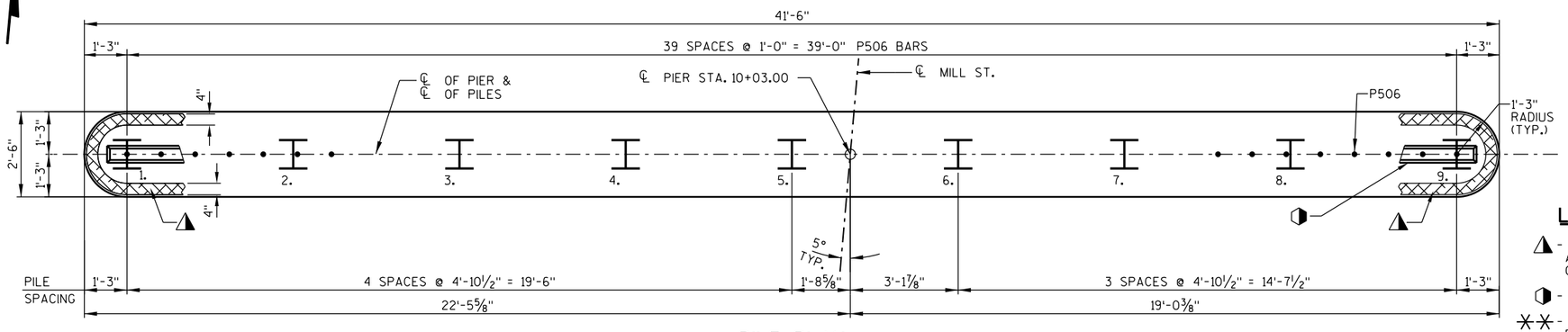
Ⓒ - THESE BARS SHALL BE EPOXY COATED.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR EXCEPT AS NOTED.





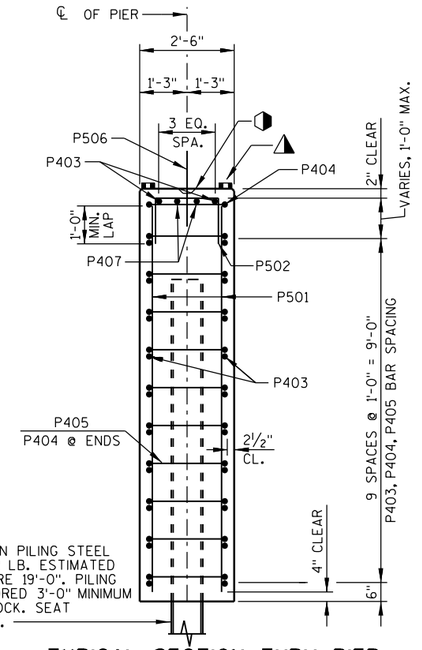
PLAN



PILE PLAN

LEGEND

- △ - 4"x ¾" FILLER, TYPICAL ALL AROUND TOP EDGES OF PIER.
- ◑ - 2"x 6" BEVELED KEYWAY.
- ✳✳ - ADJACENT TO EACH PILE ONE SIDE ONLY.



TYPICAL SECTION THRU PIER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-199

DRAWN BY RLR | PLANS CK'D. JRS

PIER

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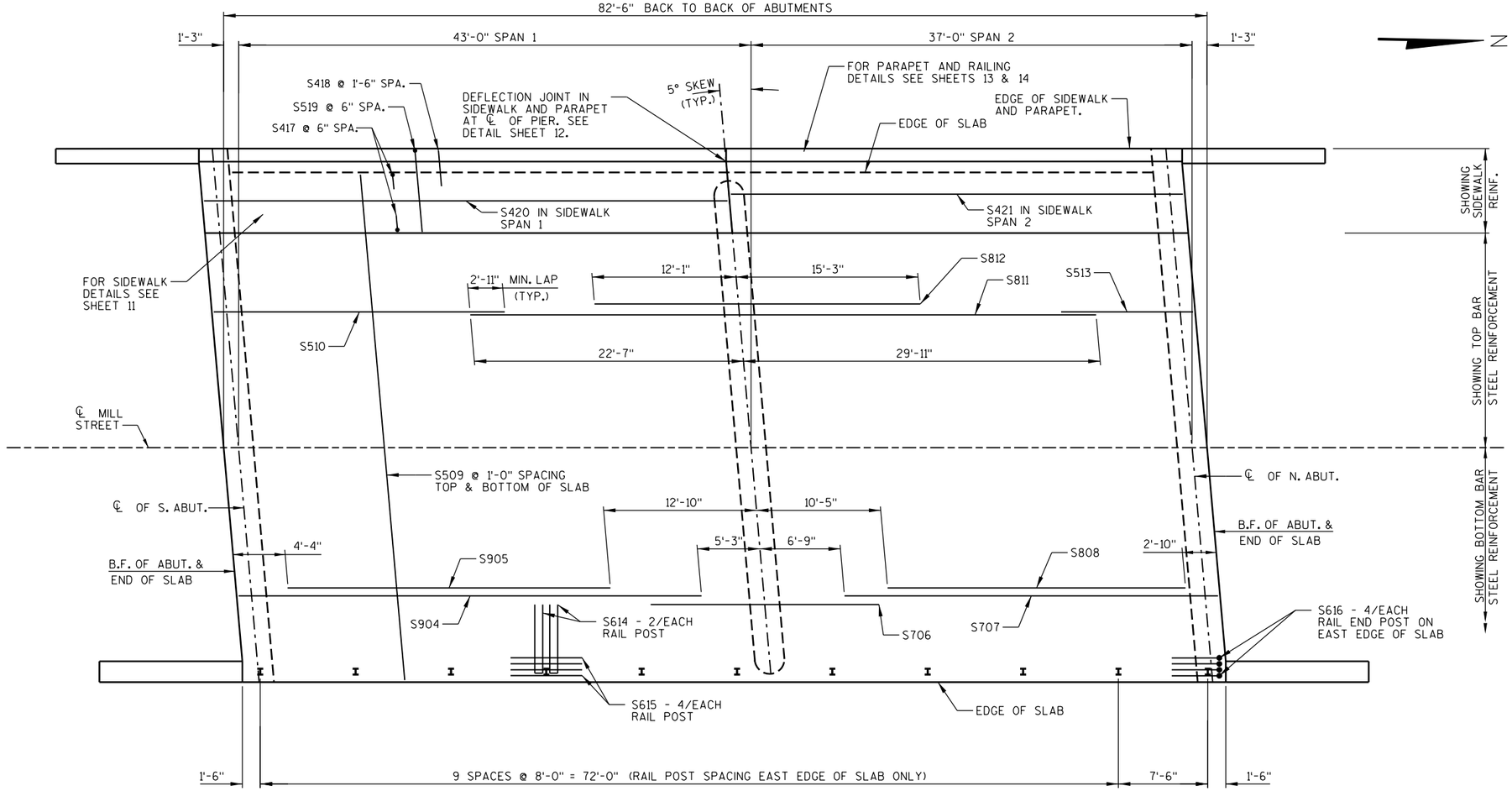


PLAN

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.

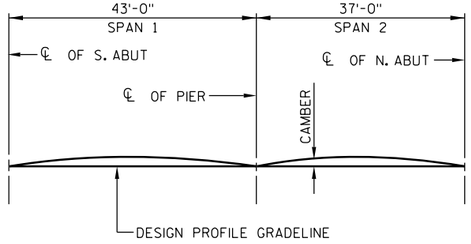
PARAPET AND SIDEWALK PLACED ON TOP OF SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

ALL TRANSVERSE BARS SHALL BE PLACED ON THE SKEW.

TOP OF SLAB ELEVATIONS AND CAMBER VALUES ◈

LOCATION	SPAN POINT	EAST SLAB EDGE	C/L MILL STREET	WEST SLAB EDGE	CAMBER VALUE (INCHES)
SOUTH ABUT.	1	790.28	790.68	790.22	0.0
	1.1	790.28	790.67	790.21	0.3
	1.2	790.27	790.66	790.21	0.6
	1.3	790.25	790.65	790.20	0.7
	1.4	790.24	790.64	790.18	0.8
	1.5	790.22	790.62	790.17	0.8
	1.6	790.20	790.61	790.15	0.6
	1.7	790.18	790.59	790.13	0.4
	1.8	790.16	790.56	790.11	0.2
	1.9	790.14	790.54	790.09	0.1
PIER	2	790.12	790.52	790.07	0.0
	2.1	790.10	790.50	790.05	0.0
	2.2	790.08	790.48	790.03	0.0
	2.3	790.06	790.46	790.01	0.0
	2.4	790.03	790.44	789.99	0.1
	2.5	790.01	790.42	789.97	0.1
	2.6	789.99	790.39	789.94	0.2
	2.7	789.97	790.37	789.92	0.2
	2.8	789.94	790.35	789.90	0.2
	2.9	789.92	790.32	789.88	0.1
NORTH ABUT.	3	789.90	790.30	789.85	0.0

◈ - WEST EDGE OF SLAB ELEVATION IS THE TOP OF SLAB BENEATH SIDEWALK WITH 2% CROWN FULL WIDTH.



CAMBER DIAGRAM

CAMBER SPANS AS SHOWN ABOVE AND IN THE TABLE OF VALUES TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT. DEAD LOAD DEFLECTION APPROXIMATES 1/3 OF CAMBER VALUES SHOWN.

SURVEY TOP OF SLAB ELEVATIONS

LOCATION	SPAN POINT	EAST SLAB EDGE	C/L MILL STREET	WEST SLAB EDGE
SOUTH ABUT.	1.0			
	1.5			
PIER	2.0			
	2.5			
NORTH ABUT	3.0			

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

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

TOP OF SLAB ELEVATION AT FINAL GRADE

- SLAB THICKNESS

+ CAMBER

+ FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)

= TOP OF SLAB FALSEWORK ELEVATION

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STRUCTURE B-64-199

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SUPERSTRUCTURE

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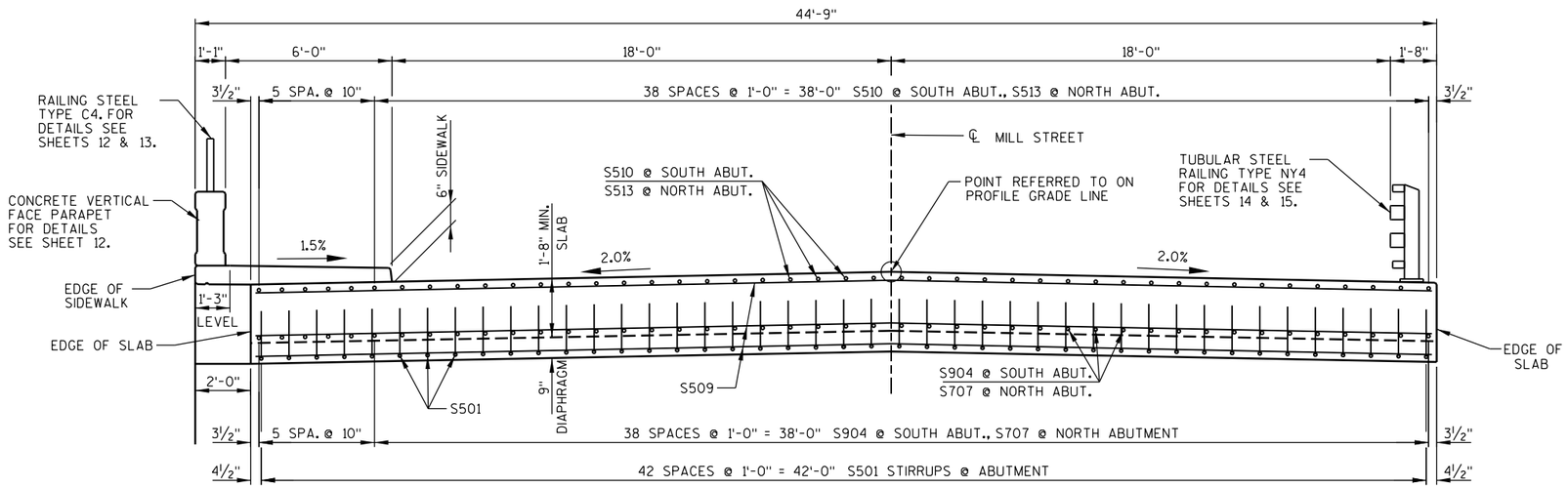
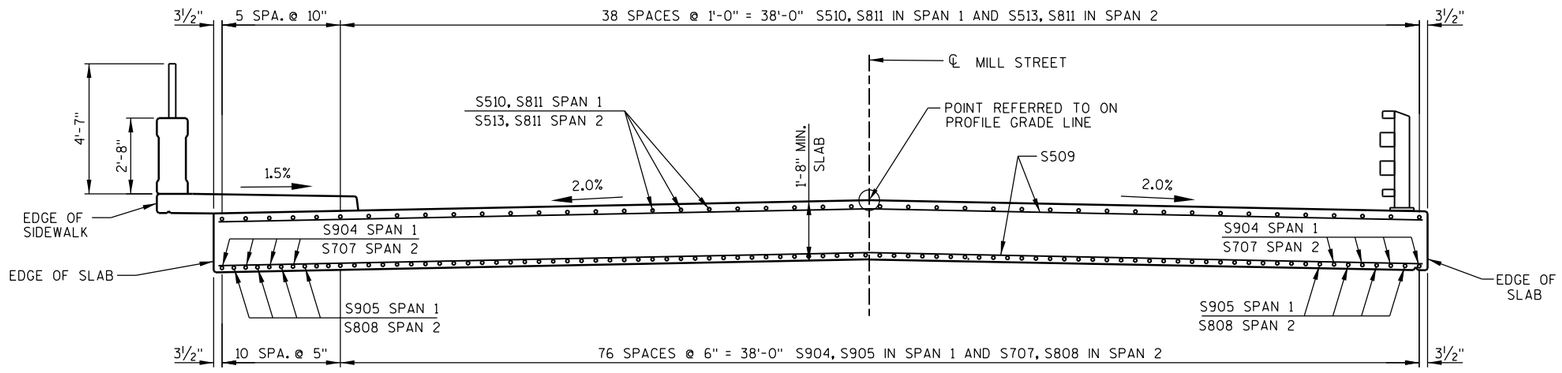


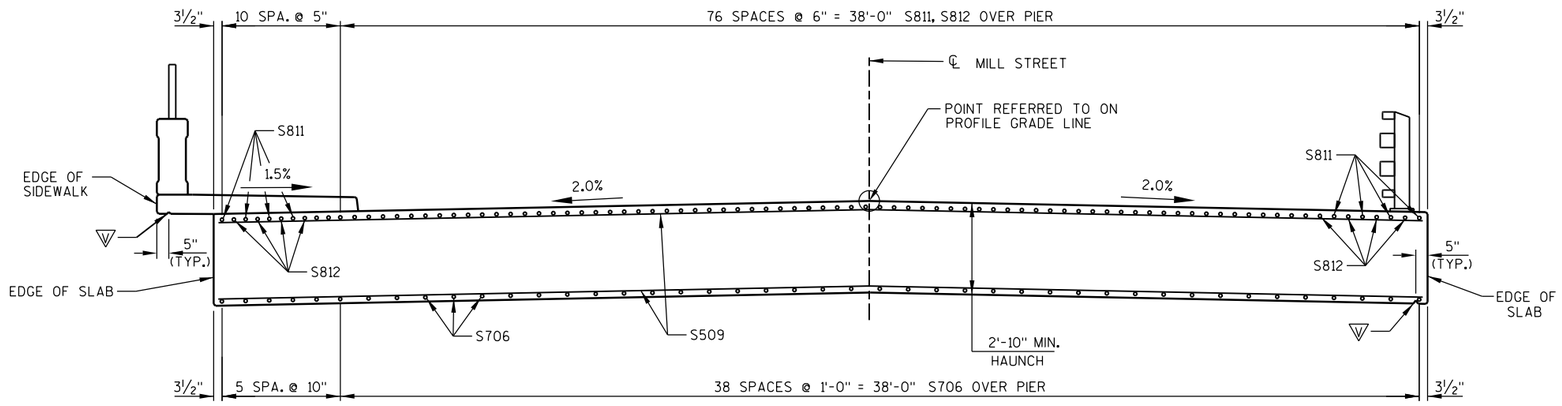
CROSS SECTION THRU BRIDGE - AT ABUTMENTS

(LOOKING NORTH)



CROSS SECTION THRU BRIDGE - IN SPAN

(LOOKING NORTH)



▽ — ¾" V-GROOVE. EXTEND V-GROOVE TO 6" FROM THE FRONT FACE OF ABUTMENT DIAPHRAGM

SECTION THRU BRIDGE - AT PIER

(LOOKING NORTH)

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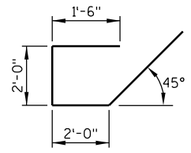
BILL OF BARS (COATED) 41,730 LBS.

MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
S501	86	7'-4"	X	DIAPHRAGM @ ABUTS. - VERT.
S502	16	10'-2"	X	DIAPHRAGM @ ABUTS. - SIDEWALK END - VERT.
S503	12	6'-6"		DIAPHRAGM @ ABUTS. - SIDEWALK END - TRANS.
S904	44	38'-10"		SLAB BOTTOM, SPAN 1 - LONGIT.
S905	43	27'-1"		SLAB BOTTOM, SPAN 1 - LONGIT.
S706	44	20'-8"	X	SLAB HAUNCH OVER PIER - LONGIT.
S707	44	31'-4"		SLAB BOTTOM, SPAN 2 - LONGIT.
S808	43	25'-0"		SLAB BOTTOM, SPAN 2 - LONGIT.
S509	165	42'-6"		SLAB TOP & BOTTOM - TRANS.
S510	44	24'-5"		SLAB TOP @ S. ABUT. & SPAN 1 - LONGIT.
S811	44	52'-6"		SLAB TOP OVER PIER & IN SPANS 1&2 - LONGIT.
S812	43	27'-4"		SLAB TOP OVER PIER - LONGIT.
S513	44	11'-1"		SLAB TOP @ N. ABUT. & SPAN 2 - LONGIT.
S614	22	12'-0"	X	SLAB EAST EDGE @ RAIL POST, 2/POST - TRANS.
S615	36	6'-0"		SLAB EAST EDGE @ RAIL POST, 4/POST - LONGIT.
S616	8	6'-0"	X	SLAB EAST EDGE @ RAIL END POST, 4/POST
S417	330	3'-7"	X	SLAB & INTO SIDEWALK - VERT.
S418	56	3'-0"		SIDEWALK BOTTOM - TRANS.
S519	165	7'-4"	X	SIDEWALK TOP - TRANS.
S420	13	43'-10"		SIDEWALK - SPAN 1 - LONGIT.
S421	13	37'-10"		SIDEWALK - SPAN 2 - LONGIT.
S522	93	6'-9"	X	PARAPET STIRRUP IN SPAN - VERT.
S523	6	9'-6"	X	PARAPET STIRRUP OVER ABUT. - VERT.
S524	8	43'-10"		PARAPET - SPAN 1 - LONGIT.
S525	8	37'-10"		PARAPET - SPAN 2 - LONGIT.
S526	16	11'-7"		PARAPET - ON WINGS - LONGIT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.
EPOXY COAT ALL SUPERSTRUCTURE BAR STEEL REINFORCEMENT.



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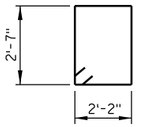

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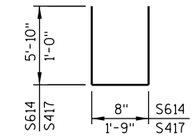
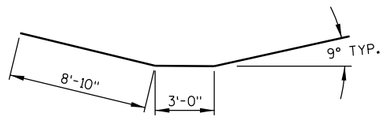


S614, S417



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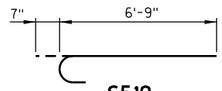
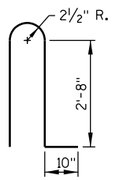
S616



S519
STD. 180° HOOK



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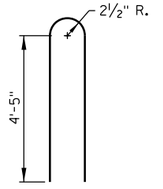

S523

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-199

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SUPERSTRUCTURE SECTIONS & DETAILS

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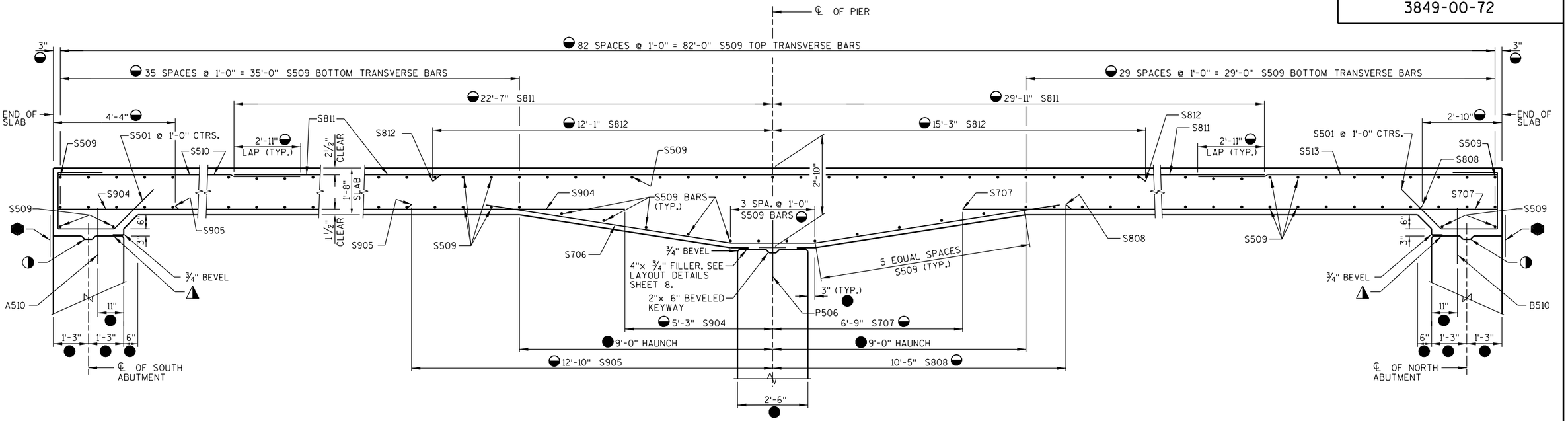
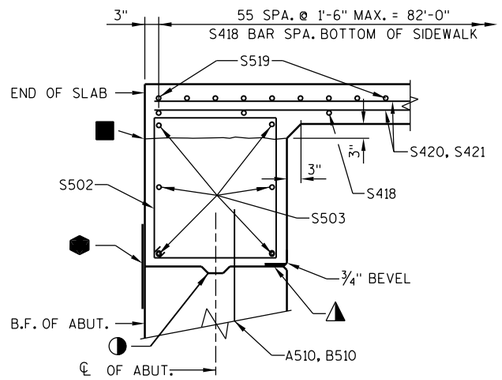


PART LONGITUDINAL SECTION

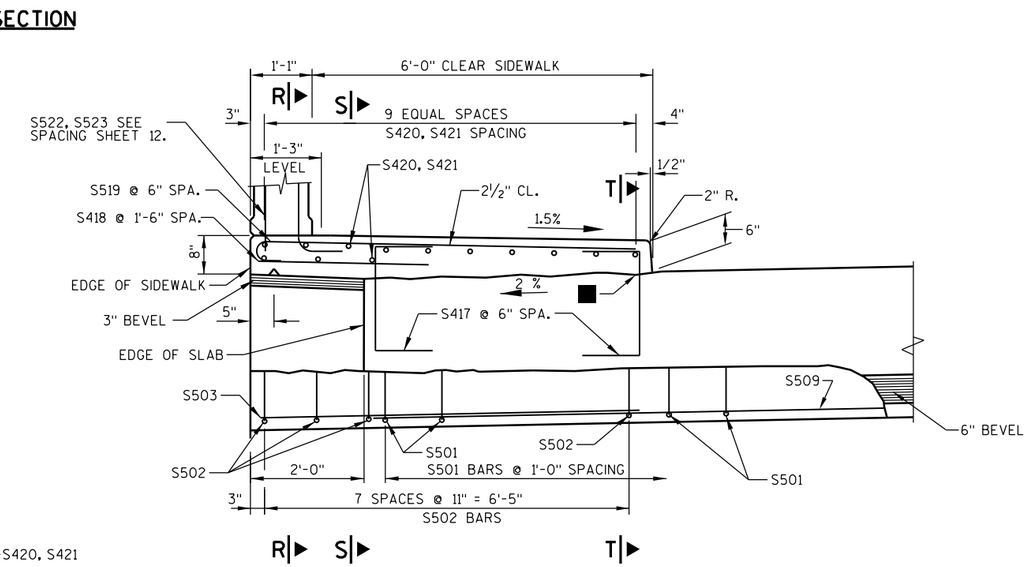


SECTION S-S THRU SIDEWALK OVERHANG

BAR SPACING SHOWN IS NORMAL TO ℄ OF MILL STEET

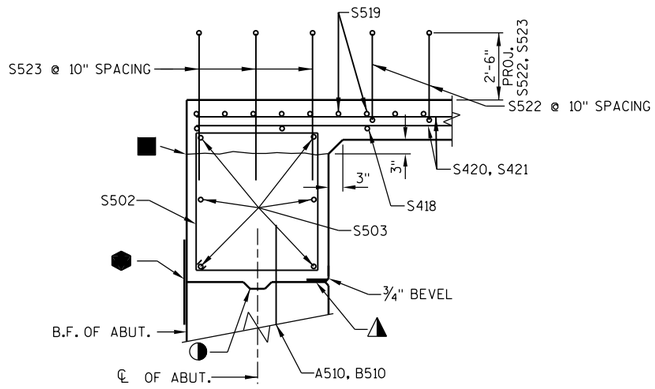
LEGEND

- ◑ - KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2x6.
- ⬢ - 18" RUBBERIZED MEMBRANE WATERPROOFING.
- ■ - CONSTRUCTION JOINT STRIKE OFF AS SHOWN AND LEAVE ROUGH.
- ◭ - 4" x ¾" FILLER, EXTEND FULL LENGTH OF ABUTMENT.
- ● - DIMENSIONS ARE NORMAL TO THE ℄ OF SUBSTRUCTURE UNITS.
- ◒ - DIMENSIONS ARE PARALLEL TO THE ℄ OF MILL STREET.



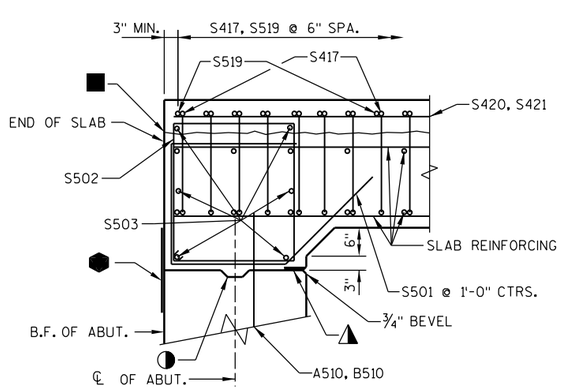
SECTION THRU EDGE OF SLAB AT ABUTMENT

BAR SPACING SHOWN IS NORMAL TO ℄ OF MILL STEET



SECTION R-R @ RAIL

BAR SPACING SHOWN IS NORMAL TO ℄ OF MILL STEET



SECTION T-T THRU SIDEWALK & SLAB

BAR SPACING SHOWN IS NORMAL TO ℄ OF MILL STEET

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STRUCTURE B-64-199

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SUPERSTRUCTURE & WEST SIDEWALK SECTIONS

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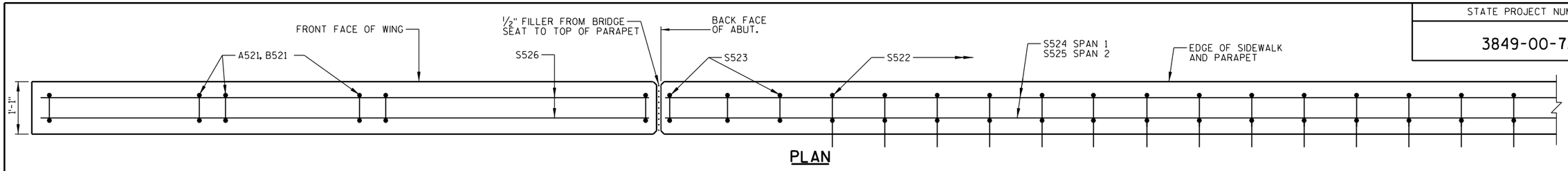
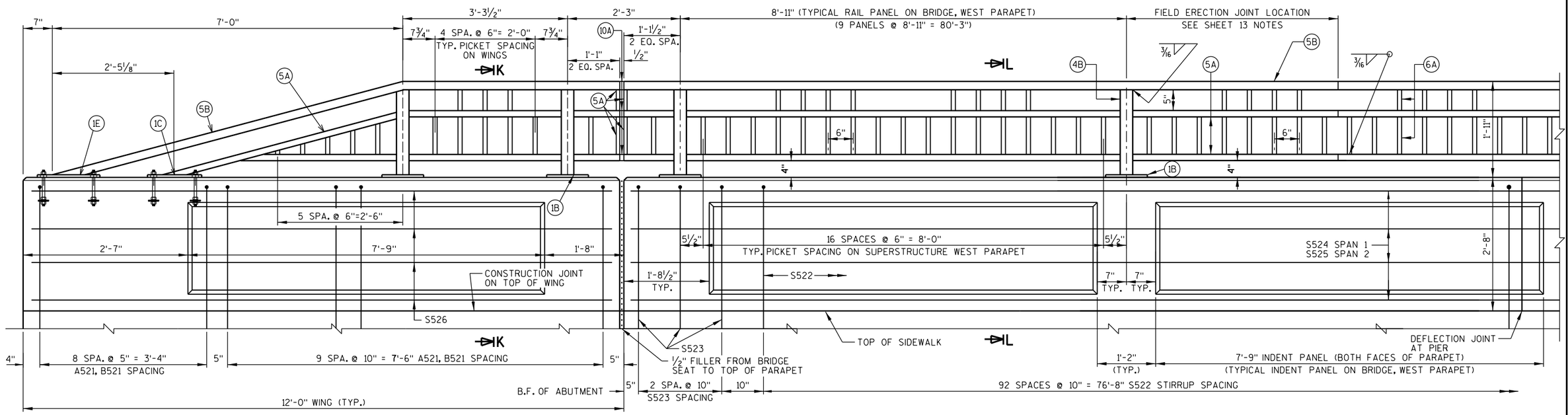
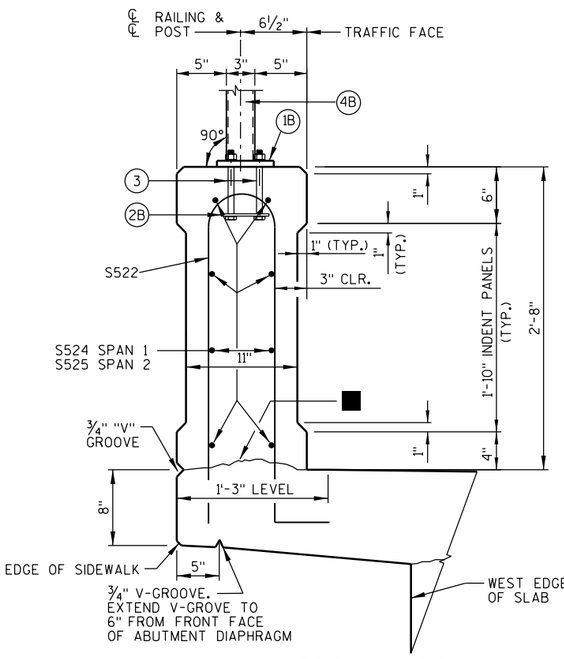


PLAN

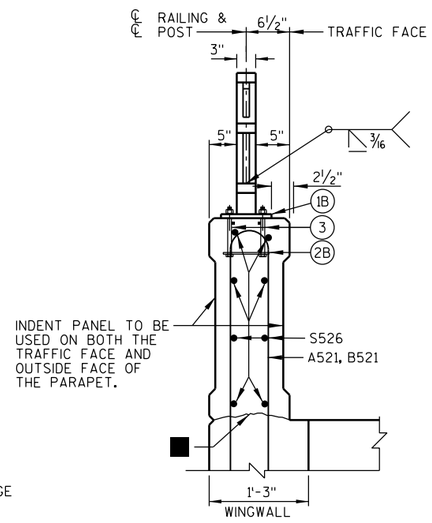


PART ELEVATION OF WEST PARAPET

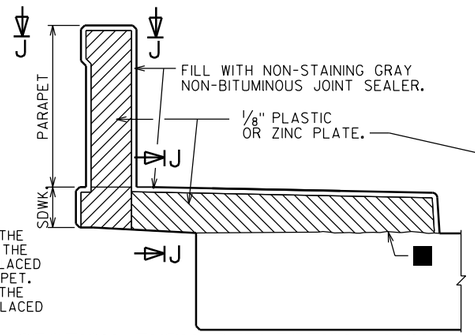
LOOKING AT TRAFFIC FACE



SECTION L-L THRU WEST PARAPET ON BRIDGE



SECTION K-K



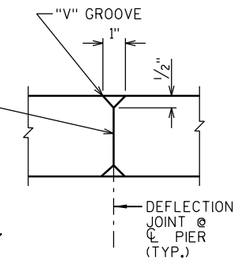
NOTE:

DEFLECTION JOINT IN THE PARAPET AND BELOW THE PARAPET SHALL BE PLACED NORMAL TO THE PARAPET. DEFLECTION JOINT IN THE SIDEWALK SHALL BE PLACED ON THE SKEW.

SECTION THRU DEFLECTION JOINT

(SHOWING DEFLECTION JOINT IN PARAPET AND SIDEWALK.)

WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF 1/8" ZINC OR PLASTIC PLATE CUT AS SHOWN IN THE "SECTION THRU DEFLECTION JOINT" BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.



SECTION J-J

SEE SHEET 11 LEGEND FOR DESCRIPTION OF ■

SEE SHEET 13 LEGEND FOR DESCRIPTION OF

(1B) (1C) (1E) (2B) (3) (4B) (5A) (5B) (6A) (10A)

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-199

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WEST PARAPET & RAILING

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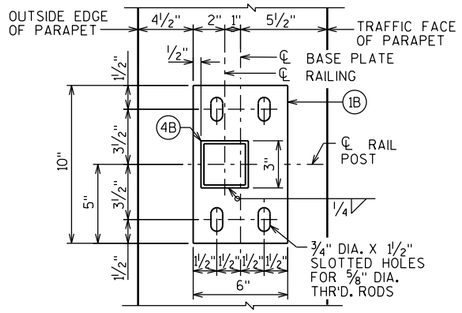
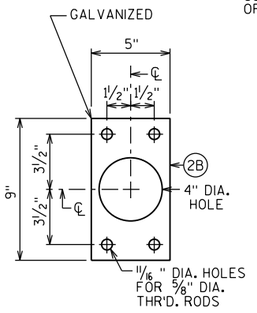
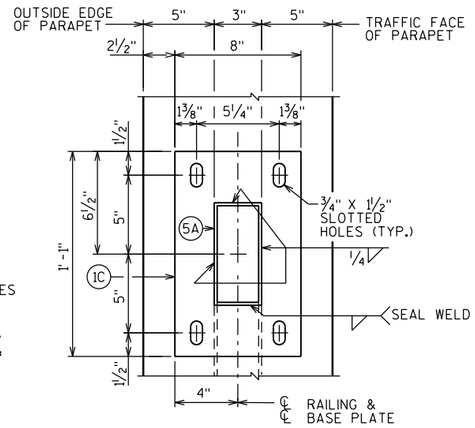


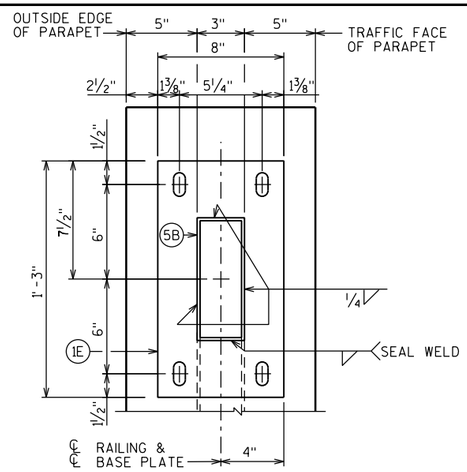
TYPICAL RAIL POST BASE PLATE



ANCHOR PLATE



END RAIL BASE PLATE



END RAIL BASE PLATE

LEGEND

(1B) PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES.

(1C) PLATE ⅝" X 8" X 1'-1" WITH ¾" X 1½" SLOTTED HOLES.

(1E) PLATE ⅝" X 8" X 1'-3" WITH ¾" X 1½" SLOTTED HOLES.

(2B) ¼" X 5" X 9" ANCHOR PLATE WITH 11/16 " DIA. HOLES FOR THR'D. RODS NO. 3.

(2C) ¼" X 2½" X 7¼" ANCHOR PLATE WITH 11/16 " DIA. HOLES FOR THR'D. RODS NO. 3.

(3) ⅝" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS ⅝-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. EMBED 5" IN CONCRETE FOR END RAILS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.

(4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

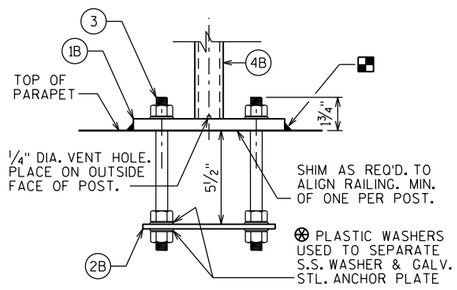
(5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.

(5B) STRUCTURAL TUBING 3" X 2" X 3/16" RAILS. WELD TO NO. 1 & NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.

(6A) BAR 1" X 1" PICKETS. WELD TO NO. 5. PLACE VERTICAL.

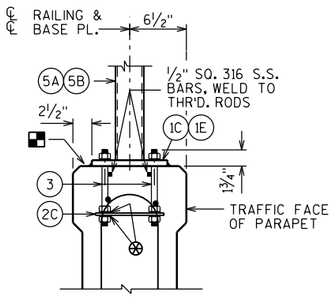
(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ ABUTMENT JTS.)



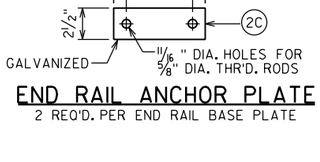
ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



ANCHORAGE FOR END RAIL

NOTE: ANCHOR PLATES NOT REQ'D. WHEN ADHESIVE ANCHORS ARE USED.



END RAIL ANCHOR PLATE

2 REQ'D. PER END RAIL BASE PLATE

RAILING NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C4 B-64-199", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

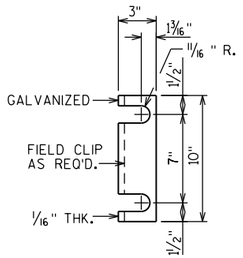
ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3 & 12) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED FEDERAL COLOR NO. 27038, BLACK.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

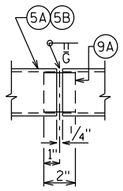
RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.



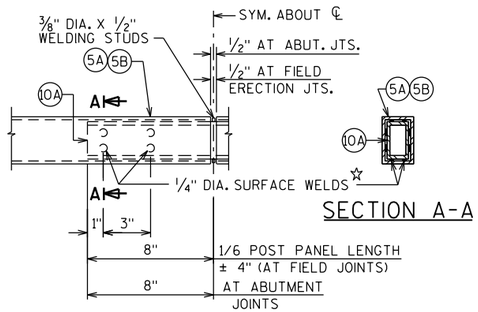
RAIL POST SHIM DETAIL

(2 SETS PER POST)



SHOP RAIL SPLICE DETAIL

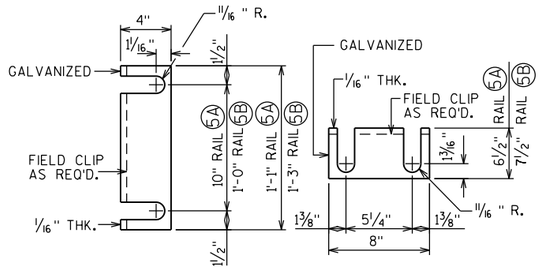
(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



SECTION A-A

FIELD ERECTION JOINT DETAIL

☆ MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



END RAIL SHIM DETAIL

(2 SETS PER POST)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-64-199

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RAILING STEEL TYPE C4 DETAILS

SHEET 13 OF 15

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FILE= 9294002_13.DGN
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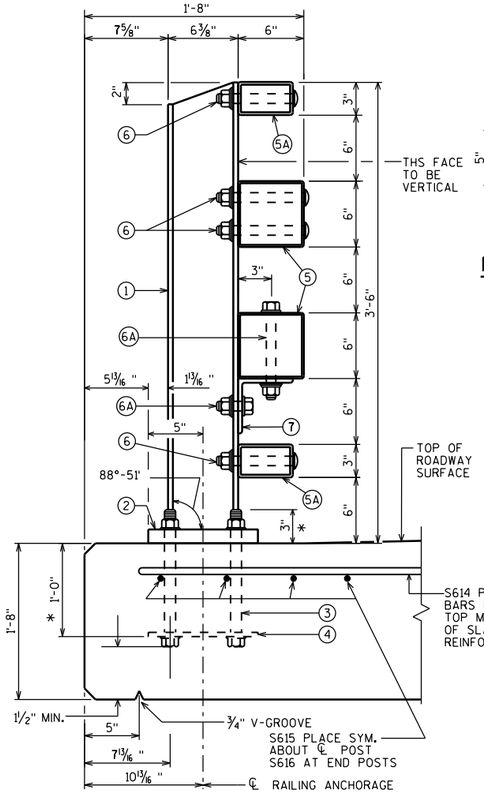
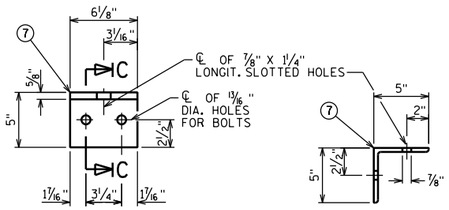
STATE PROJECT NUMBER

3849-00-72



SECTION THRU RAILING ON SLAB

*NORMAL TO BASE PLATE

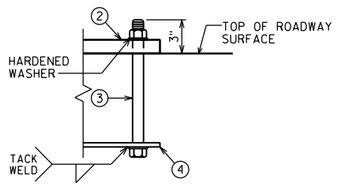


RAILING ANGLE DETAIL

INTERIOR ELEVATION

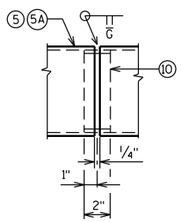
SECTION C-C

ANGLE SECTION



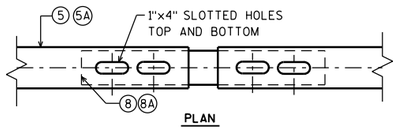
ANCHOR BOLTS

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

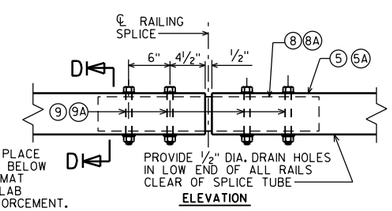


SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)

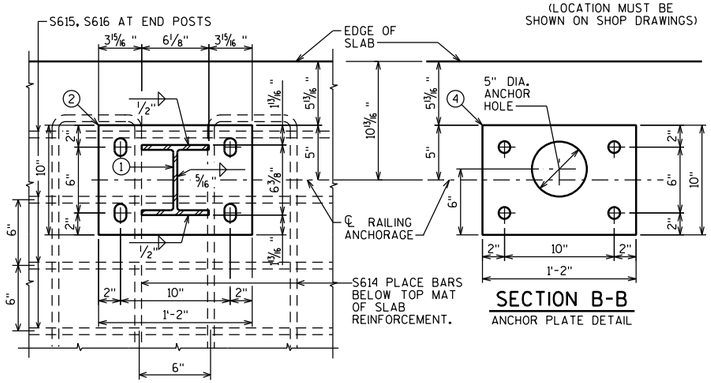


PLAN



ELEVATION

FIELD ERECTION JOINT DETAIL

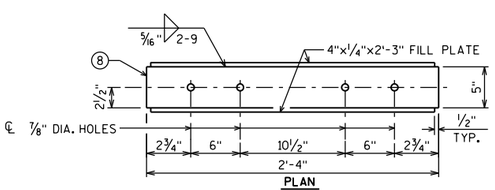


SECTION A-A

BASE PLATE DETAIL

SECTION B-B

ANCHOR PLATE DETAIL



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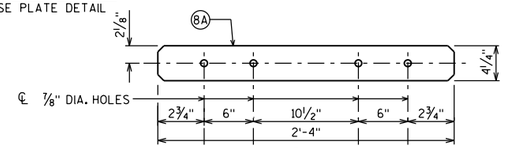

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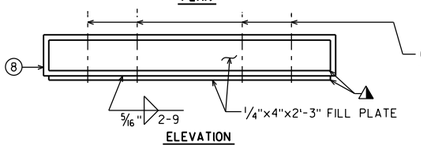
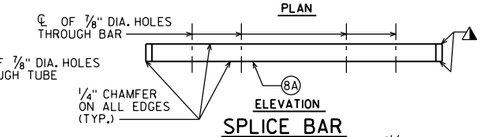


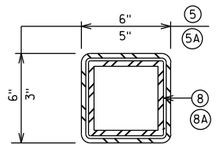
ELEVATION

SPLICE TUBE

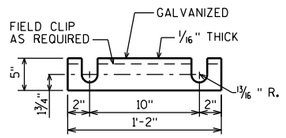


ELEVATION

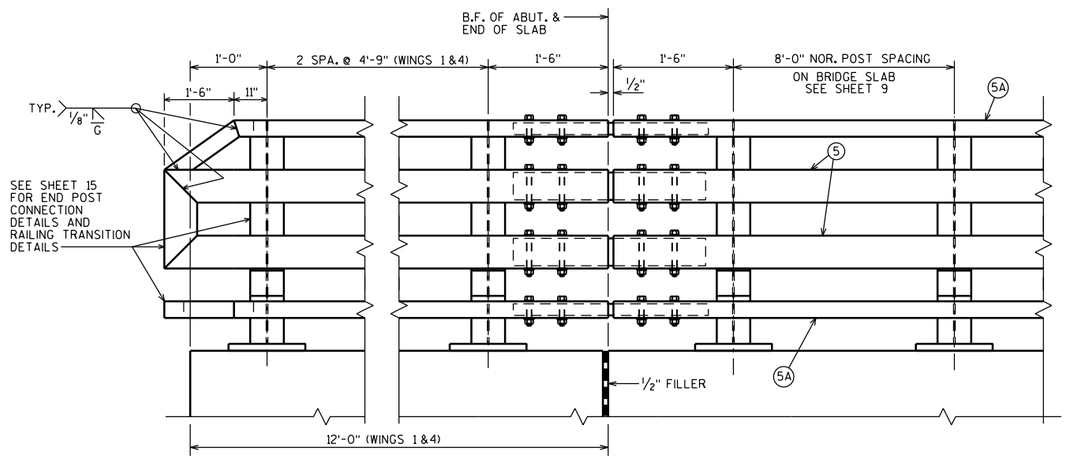
SPLICE BAR



SECTION D-D

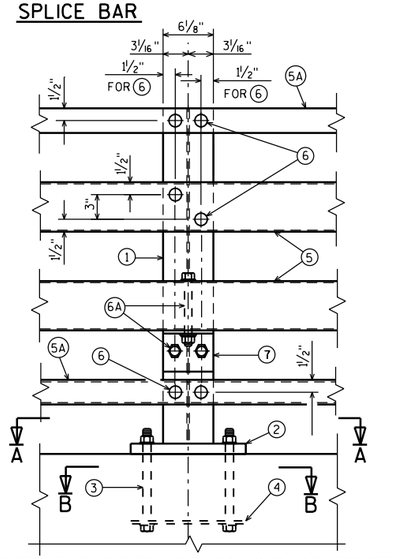


POST SHIM DETAIL



PART ELEVATION OF RAILING

INTERIOR ELEVATION



PART ELEVATION OF RAILING AT POST

INTERIOR ELEVATION

LEGEND

(1) W6 X 25 WITH 1⅛" X 1⅜" HORIZONTAL SLOTTED HOLES ON EACH SIDE OF POST FOR BOLT NO. 6 AT TOP TWO RAILS. USE 1" DIA. HOLES FOR BOLTS NO. 6 AT BOTTOM NO. 5A & FOR BOLT NO. 6A AT NO. 7. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.

(2) PLATE 1¼" X 10" X 1'-2" WITH 1⅛" X 1 7/16" SLOTTED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN. SLOTS PARALLEL TO SHORT SIDE OF PLATE.

(3) ASTM A449 - 1" DIA. ANCHOR BOLTS WITH HEAVY HEX NUT AND 2" O.D. HARDENED WASHER (ALL GALVANIZED). 4 REQUIRED PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 1'-3" LONG BOLT FOR CONCRETE SLAB. USE 1'-9" LONG IN ABUTMENT WINGS. (AN EQUIVALENT THREADED ROD WITH HEAVY HEX NUTS AND HARDENED WASHERS MAY BE SUBSTITUTED FOR ANCHOR BOLTS IN WINGS IF REQUIRED FOR CONSTRUCTABILITY.)

(4) ⅜" X 10" X 1'-2" ANCHOR PLATE (GALVANIZED) WITH 1 1/16" DIA. HOLES FOR ANCHOR BOLTS NO. 3.

(5) TS 6 X 6 X 3/16" STRUCTURAL TUBING. USE 1" DIA. HOLES FOR BOLT NO. 6 (FRONT & BACK) & ⅞" DIA. HOLES FOR BOLT NO. 6A (TOP & BOTTOM).

(5A) TS 5 X 3 X ¼" STRUCTURAL TUBING. USE 1" DIA. HOLES FOR BOLT NO. 6. IN TOP RAIL (FRONT & BACK). USE 1⅛" X 1⅜" HORIZONTAL SLOTTED HOLES FOR BOLT NO. 6 IN BOTTOM RAIL (FRONT & BACK) AND A 2" O.D. WASHER UNDER BOLT HEAD.

(6) ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH HEX NUT, 3/16" X 1¾" X 1¾" WASHER, AND SPRING LOCK WASHER (2 REQUIRED AT RAIL TO POST LOCATIONS SHOWN).

(6A) ¾" DIA. A325 BOLT WITH HEX NUT AND SPRING LOCK WASHER (1 REQUIRED AT RAIL TO ANGLE AND 2 REQUIRED AT ANGLE TO POST LOCATIONS SHOWN WITH 3/16" X 1¾" X 1¾" WASHER).

(7) L 5 X 5 X 5/8" STRUCTURAL ANGLE. ATTACH TO NO. 1 AND NO. 5 AS SHOWN.

(8) TS 5 X 5 X 5/16" X 2'-4" LONG SPLICE TUBE. 1 PER RAIL. USED IN NO. 5.

(8A) 4¼" X 2⅛" X 2'-4" LONG SPLICE BAR. 1 PER RAIL. USED IN NO. 5A.

(9) ¾" DIA. A325 FULLY THREADED BOLTS, 7½" LONG, WITH 2 WASHERS AND HEAVY HEX NUT ON EACH BOLT. NUT TO BE FINGER TIGHT. (4 REQUIRED PER SPLICE). USE 1" X 4" SLOTTED HOLES IN TOP AND BOTTOM OF NO. 5.

(9A) ¾" DIA. A325 FULLY THREADED BOLTS, 4½" LONG, WITH 2 WASHERS AND HEAVY HEX NUT ON EACH BOLT. NUT TO BE FINGER TIGHT. (4 REQUIRED PER SPLICE). USE 1" X 4" SLOTTED HOLES IN TOP AND BOTTOM OF NO. 5A.

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

▲ PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE ADJOINING SURFACES OF THE RAILS, SPLICE TUBES AND FILL PLATES.

NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE NY4 B-64-199", WHICH INCLUDES ALL ITEMS SHOWN.

RAILING SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS, ANGLES, SPLICE TUBES, SPLICE BARS AND STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS.

RAIL POST, BASE PLATES, SPLICE BAR, ANGLES AND SPLICE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED f_y =50 KSI. ANCHOR PLATES & SHIMS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.

THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ⅛ TURN.

FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. CAULK AROUND PERIMETER OF NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER PLATE NO. 2 WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

THIS RAILING MEETS NCHRP REPORT 350 EVALUATION CRITERIA FOR TEST LEVEL 4 (TL-4).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-199

DRAWN BY RLR | PLANS CK'D. JRS

TUBULAR STEEL RAILING TYPE NY4

SHEET 14 OF 15
55

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DATE= 8/20/2018

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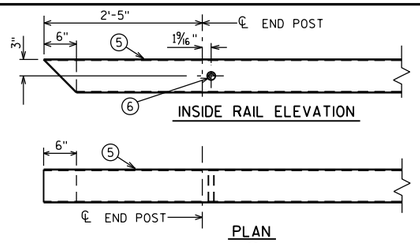
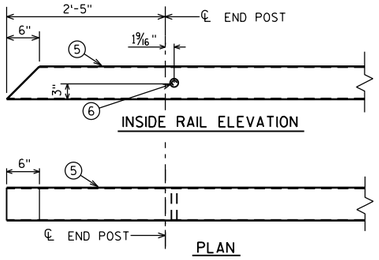
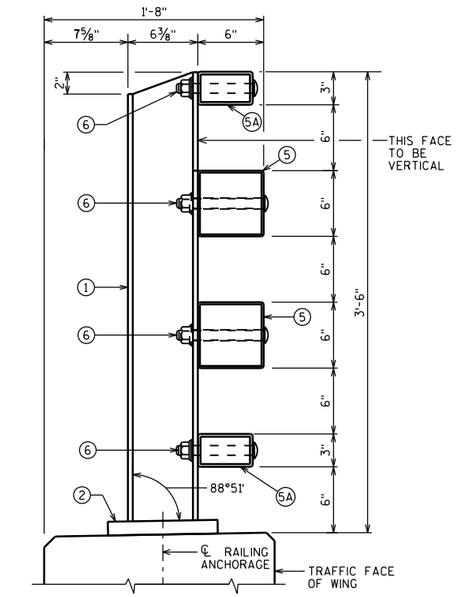
RAILNY4
7-16



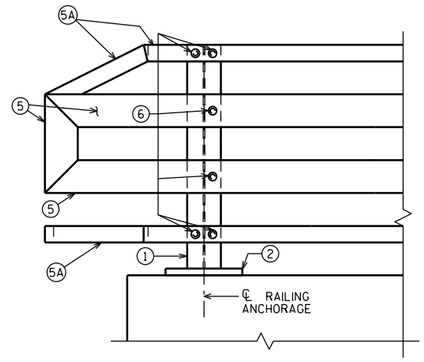
TOP RAIL ⑤ DETAILS



BOTTOM RAIL ⑤ DETAILS

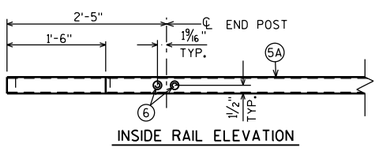


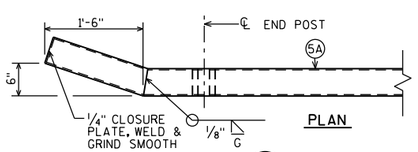
SECTION THRU RAILING END POST



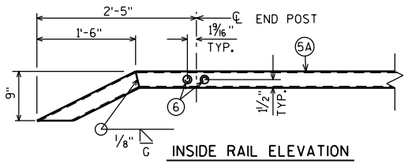
ELEVATION DETAIL AT END POST

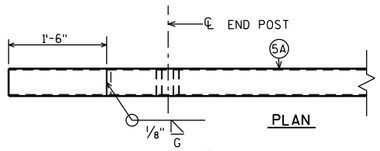
INTERIOR ELEVATION



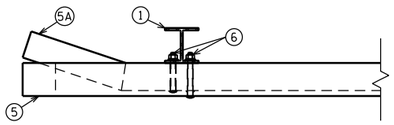


BOTTOM RAIL (5A) DETAILS





TOP RAIL (5A) DETAILS



PLAN OF DETAIL AT END POST

STATE PROJECT NUMBER

3849-00-72

LEGEND

(1) W6 X 25 WITH 1 1/8" X 1 3/8" HORIZONTAL SLOTTED HOLES ON SIDE OF POST FOR BOLT NO. 6 AT NO. 5 & AT TOP RAIL NO. 5A. USE 1" DIA. HOLE FOR BOLT NO. 6 AT NO. 5A BOTTOM RAIL. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.

(2) PLATE 1 1/4" X 10" X 1'-2". SEE SHEET "TUBULAR STEEL RAILING NY4" (SHEET 14) FOR MORE INFORMATION.

(5) TS 6 X 6 X 3/16" STRUCTURAL TUBING. USE 1" DIA. HOLES IN FRONT AND BACK OF RAILS FOR BOLT NO. 6 AS SHOWN IN ELEVATION DETAILS.

(5A) TS 5 X 3 X 1/4" STRUCTURAL TUBING. USE 1" DIA. HOLES FOR TOP RAIL NO. 5A (FRONT & BACK). USE 1 1/8" X 1 3/8" HORIZONTAL SLOTTED HOLES FOR BOLT NO. 6 IN BOTTOM RAIL (FRONT & BACK) AND A 2" O.D. WASHER UNDER BOLT HEAD.

(6) 7/8" DIA. A325 SLOTTED ROUND HEAD BOLT WITH HEX NUT, 3/16" X 1 3/4" X 1 3/4" WASHER, AND SPRING LOCK WASHER (1 REQUIRED AT RAIL NO. 5 TO POST NO. 1 CONNECTION LOCATIONS SHOWN. 2 REQUIRED AT RAIL NO. 5A TO POST NO. 1 CONNECTION LOCATIONS SHOWN).

NOTES

STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED f_y=50 KSI. STRUCTURAL ANGLE SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-199

DRAWN BY RLR | PLANS CK'D. JRS

END POST DETAILS FOR TUBULAR STEEL RAILING TYPE NY4

SHEET 15 OF 15
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FILE= 9294002_15.DGN
DATE= 11/2/2018

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EARTHWORK PROJECT I.D. 3849-00-72 DIVISION 1

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.30	Mass Ordinate Note 8
9+00		55	0	0	0	0	0	0	0	0
9+50	50	85	0	2	157	0	4	157	5	153
9+59	9	85	0	2	28	0	1	185	6	179
B-64-0199										
					185	0	4			

EARTHWORK PROJECT I.D. 3849-00-72 DIVISION 2

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.30	Mass Ordinate Note 8
B-64-0199										
10+41		140	0	0	0	0	0	0	0	0
10+50	9	140	0	0	45	0	0	45	0	45
11+00	50	65	0	2	120	0	4	166	5	161
11+50	50	45	0	0	83	0	0	249	5	244
					249	0	4			

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PROJECT NO: 3849-00-72	HWY: MILL STREET	COUNTY: WALWORTH	CROSS SECTIONS: MAINLINE	SHEET	E

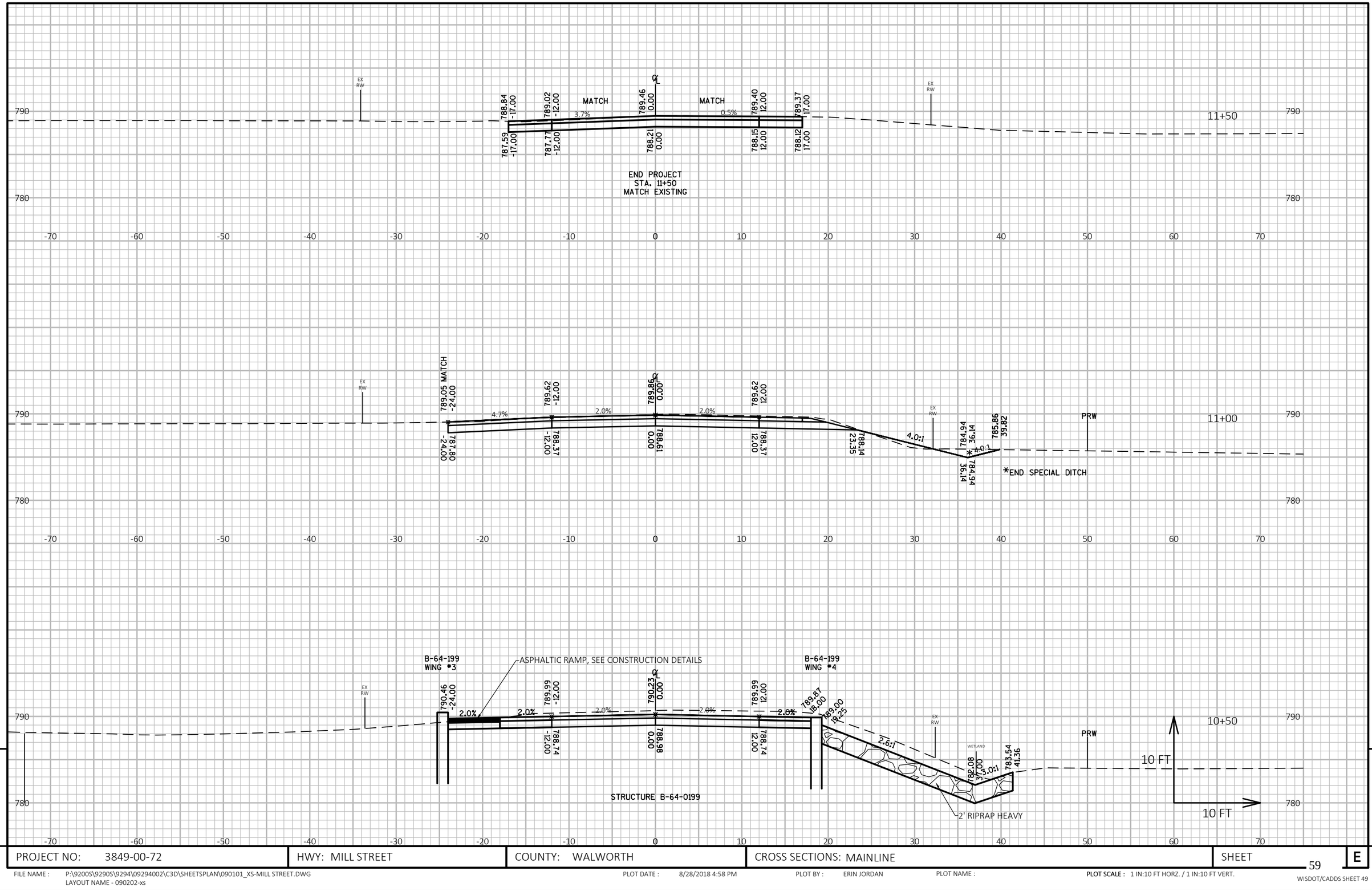
58

9

FILE NAME : P:\9200S\9290S\9294\09294002\C3D\SHEETSPLAN\090101_XS-MILL STREET.DWG
LAYOUT NAME - 090201-xs

PLOT DATE : 8/28/2018 4:58 PM PLOT BY : ERIN JORDAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 3849-00-72	HWY: MILL STREET	COUNTY: WALWORTH	CROSS SECTIONS: MAINLINE	SHEET 59	E

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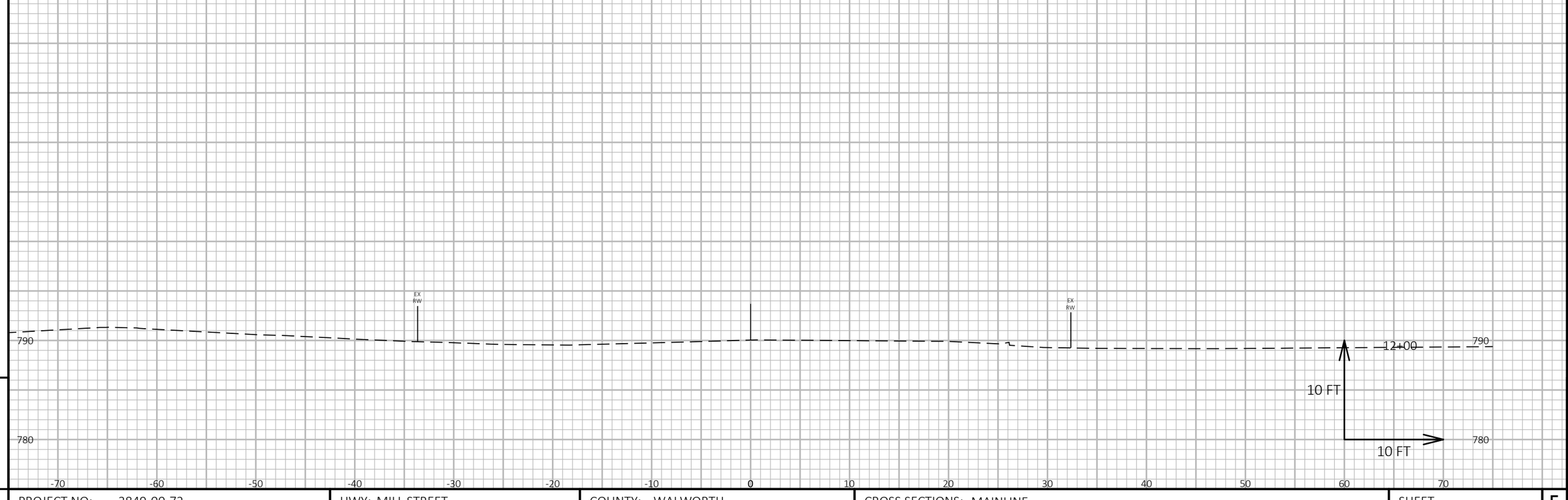
WISDOT/CADDS SHEET 49



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PROJECT NO: 3849-00-72	HWY: MILL STREET	COUNTY: WALWORTH	CROSS SECTIONS: MAINLINE	SHEET 60	E

FILE NAME : P:\9200S\9290S\9294\09294002\C3D\SHEETSPLAN\090101_XS-MILL STREET.DWG
LAYOUT NAME - 090203-xs

PLOT DATE : 8/28/2018 4:58 PM

PLOT BY : ERIN JORDAN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

WKE

MARCH 2019

PROJECT ID: WITH: 3849-00-72

3849-00-73

COUNTY: **WALWORTH**

ORDER OF SHEETS

TOTAL SHEETS = 32

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

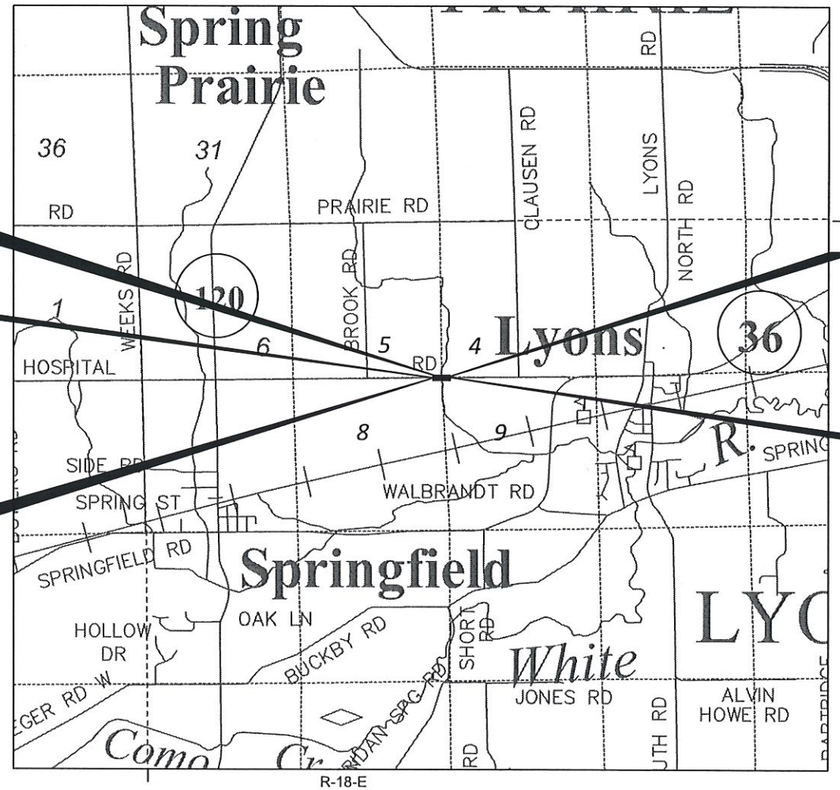
HOSPITAL ROAD

(ORE CREEK BRIDGE P-64-0907)

LOCAL STREET
WALWORTH COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3849-00-73	WISC 2019163	1

STATE PROJECT NUMBER
3849-00-73



STRUCTURE B-64-0200

BEGIN CONSTRUCTION
STA. 9+00.00

BEGIN PROJECT
STA. 9+42.00
Y = 359,062.55
X = 805,150.92

END CONSTRUCTION
STA. 11+00.00

END PROJECT
STA. 10+71.00
Y = 359,061.75
X = 805,279.91

TOTAL NET LENGTH OF CENTERLINE = 0.024 MI

COORDINATES SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, WALWORTH COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

DESIGN DESIGNATION

A.A.D.T.	2019	=	930
A.A.D.T.	2039	=	1000
D.H.V.	2039	=	155
D.D.		=	60/40
T.		=	2.8%
DESIGN SPEED		=	45 MPH
ESALS		=	52,000

CONVENTIONAL SYMBOLS

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

ACCEPTED FOR
TOWN of LYONS
10/18/18 (Date) Karla Hill (Town Clerk)

ORIGINAL PLANS PREPARED BY
MSA

WISCONSIN
MICHAEL J. STATZ
E-31249
MADISON
WI
PROFESSIONAL ENGINEER

10-12-18 (Date) Michael J. Statz (Professional Engineer)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

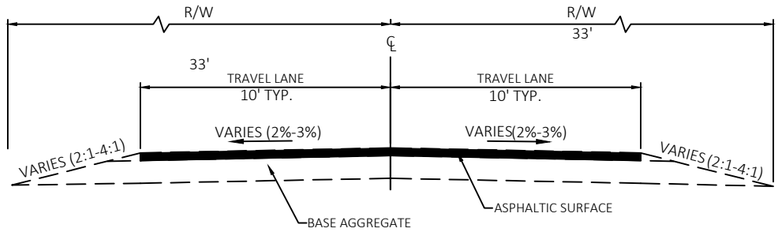
PREPARED BY

Surveyor	BAXTER & WOODMAN
Designer	MSA PROFESSIONAL SERVICES, INC.
Project Manager	MSA PROFESSIONAL SERVICES, INC.
Regional Examiner	WisDOT
Regional Supervisor	WisDOT

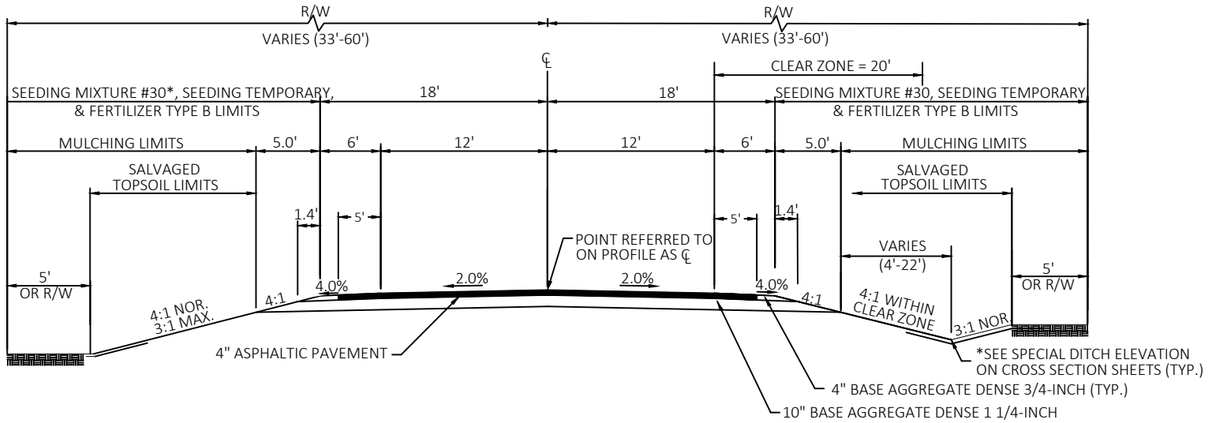
APPROVED FOR THE DEPARTMENT
DATE: 10/24/18 K Kramer (Signature)

E

FILE NAME : P:\9200S\92905\9294\09294003\C3D\SHEETSPLAN\010101_TI.DWG PLOT DATE : 10/11/2018 10:48 AM PLOT BY : ERIN JORDAN PLOT NAME :



TYPICAL EXISTING SECTION
STA. 9+00 - 11+00



*UTILITZE SEEDING MIXTURE #40 IN THE LAWN AREA

TYPICAL FINISHED SECTION
CONSTRUCTION LIMITS: STA. 9+00 - 11+00
PROJECT LIMITS: STA. 9+42 - 10+71

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 = 0.57 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.53 ACRES

GENERAL NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS SHALL BE FERTILIZED, SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER. OVERSOW PERMANENT SEEDING AREAS WITH TEMPORARY SEED AT 1.5 LBS PER 1000 SQUARE FEET. DO NOT STOCKPILE MATERIALS IN WETLANDS, WATERWAYS, OR FLOODPLAINS. SEED AND MULCH STOCKPILES, WINDROWS OF SOIL AND ANY GRADED AREA THAT WILL NOT ULTIMATELY BE PAVED, WITHIN 48 HOURS OF THE INITIAL OR ANY NEW DISTURBANCE IF PERMANENT FINAL RESTORATION WILL NOT OCCUR WITHIN 10-DAYS.

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

EXISTING BRIDGE MARKER SIGNS AND POSTS WILL BE REMOVED BY TOWN OF LYONS PRIOR TO CONSTRUCTION. NOTIFY AND COORDINATE WITH DAVE HELD AT 262-763-8558.

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

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, WALWORTH COUNTY. ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD88 DATUM USING NGS STATION B3NH0003 LOCATED IN LYONS, WI.

THE 4"ASPHALTIC SURFACE SHALL BE CONSTRUCTED USING A 2 1/4" LOWER LAYER OF 19 MM NOMINAL SIZE AGGREGATE AND A 1 3/4" UPPER LAYER OF 12.5 MM NOMINAL SIZE AGGREGATE.

SILT FENCE TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER AND IN PLACE PRIOR TO BRIDGE REMOVAL. SPACING BETWEEN STAKES SHALL BE 3-FT.

TEMPORARY DITCH CHECKS, IF NEEDED, SHALL BE PLACED AS DIRECTED BY ENGINEER.

WETLANDS EXIST FROM STA. 9+00 TO STA. 11+00, THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE SLOPE INTERCEPT IN THESE AREAS.

SLOPES STEEPER THAN 3:1 REQUIRE EROSION MAT.

DESIGN CONTACT

MSA PROFESSIONAL SERVICES, INC.
ATTN: MICHAEL J. STATZ, P.E.
2901 INTERNATIONAL LANE, SUITE 300
MADISON, WI 53704-3133
PHONE: (608) 242-7779
EMAIL: MSTATZ@MSA-PS.COM

TOWN OF LYONS
ATTN: KARLA HILL, TOWN CLERK
6339 HOSPITAL ROAD
PO BOX 337
LYONS, WI 53148
PHONE: (262) 763-9936
EMAIL: TOWNOFLYONS@WI.RR.COM

DNR LIAISON

DEPARTMENT OF NATURAL RESOURCES
ATTN.: CRAIG WEBSTER
141 NW BARSTOW ROOM 180
WAUKESHA, WI 53188
PHONE: (262) 574-2141
EMAIL: CRAIG.WEBSTER@WISCONSIN.GOV

UTILITIES

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WAUKESHA, WI 53188
PHONE: (262) 896-7690
EMAIL: MD9542@ATT.COM

ELECTRIC:
WE ENERGIES
ATTN: ALEX DANTINNE
500 S 116TH STREET
WEST ALLIS, WI 53214
PHONE: (920) 621-6903
EMAIL: ALEX.DANTINNE@WE-ENERGIES.COM

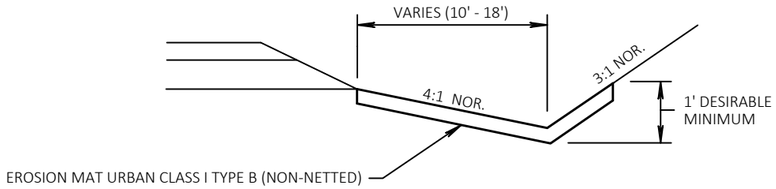
GAS:
WE ENERGIES
PHONE: SCOTT HOLSTEIN
700 S. KANE STREET
BURLINGTON, WI 53105
PHONE: (262) 763-1084
EMAIL: SCOTT.HOLSTEIN@WE-ENERGIES.COM

COMMUNICATIONS:
CHARTER COMMUNICATIONS
ATTN: RANDY WOLFGRAM
3520 E. DESTINATION DRIVE
APPLETON, WI 54915
PHONE: (920) 378-0378
EMAIL: RANDY.WOLFGRAM@CHARTER.COM

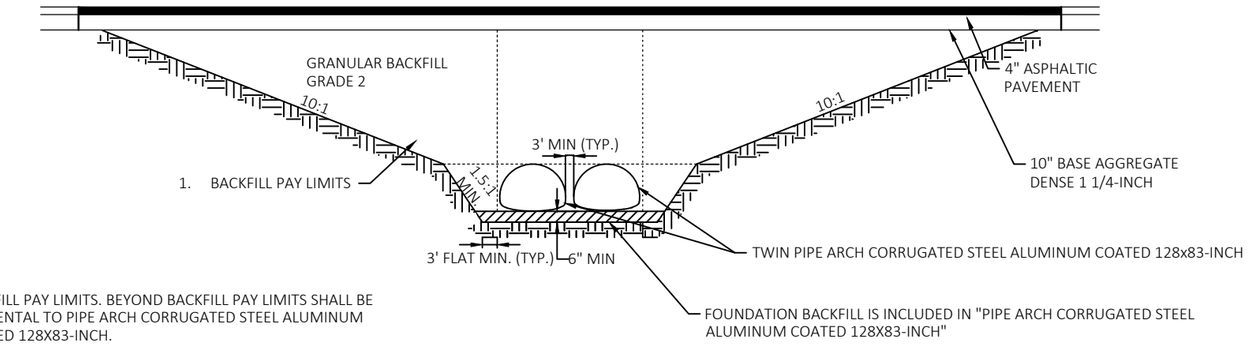
FIBER OPTICS:
STATE LONG DISTANCE TELEPHONE COMPANY/TDS TELECOMMUNICATIONS CORP.
ATTN: MATTHEW SCHULTE
16924 WEST VICTOR ROAD
NEW BERLIN, WI 53151
PHONE: (262) 754-3063
EMAIL: MATT.SCHULTE@TDSTELECOM.COM

**-DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

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



EROSION MAT DITCH DETAIL
SE QUADRANT DITCH

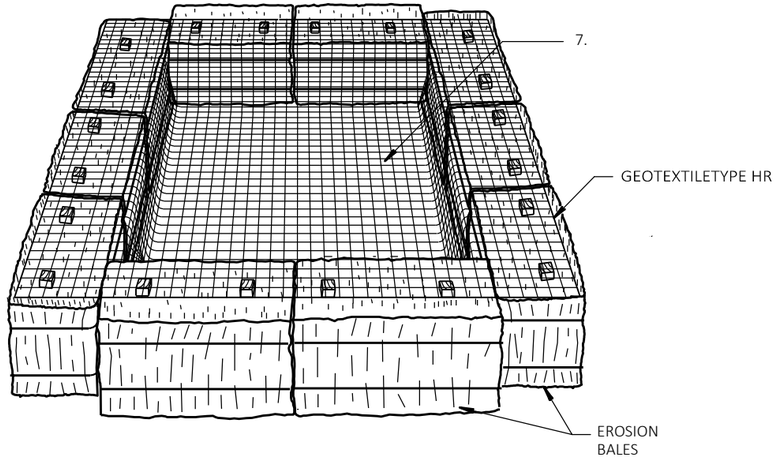


1. BACKFILL PAY LIMITS. BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO PIPE ARCH CORRUGATED STEEL ALUMINUM COATED 128X83-INCH.
2. SLOPES RATIOS ARE HORIZONTAL:VERTICAL

CULVERT BACKFILL DETAIL

2

1. CONTRACTOR SHALL PUMP WATER FROM WORK AREA EXCAVATION TO BASIN PRIOR TO DISCHARGING.
2. BASIN SHALL BE KEPT LESS THAN 10% FULL OF SEDIMENT. GEOTEXTILE FABRIC AND SEDIMENTS SHALL BE DISPOSED OF BY THE CONTRACTOR OFF THE PROJECT SITE.
3. SIZE TO BE DETERMINED BY THE ENGINEER IN THE FIELD BASED ON WATER QUANTITY AND QUALITY.
4. GEOTEXTILE FABRIC SHALL BE REPLACED AS NEEDED, USED GEOTEXTILE FABRIC AND SEDIMENTS SHALL BE DISPOSED OF BY THE CONTRACTOR OFF THE PROJECT SITE AT NO COST TO THE DEPARTMENT.
5. GEOTEXTILE TYPE HR TO BE PAID FOR SEPARATELY.
6. EROSION BALES TO BE PAID FOR SEPARATELY.
7. DEWATERING BAG SHALL BE PLACED INSIDE TEMPORARY SETTLING BASIN TO MEET WATER QUALITY DISCHARGE STANDARDS.
8. DO NOT PLACE TEMPORARY SETTLING BASIN WITHIN WETLAND AREA.



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

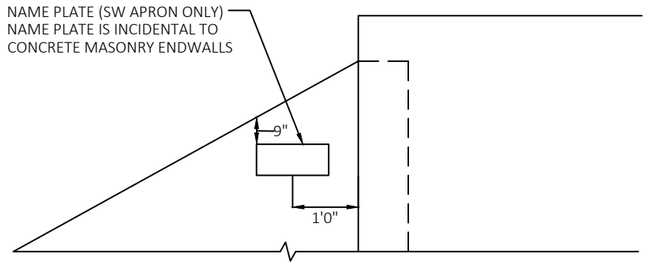
EXAMPLE:
CONTRACTOR INDICATES PUMP CAPABLE OF 50 GPM
HEIGHT OF BALES = 1.5 FT.

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

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

USE A 20 FT. X 27 FT. BASIN

TEMPORARY SETTLING BASIN



NAME PLATE DETAIL
SW APRON (INSIDE FACE)

2

2

N

INLET RIPRAP

8'

10'

EXISTING FENCE

15'

15'

PROPOSED STRUCTURE, B-64-0200

10'

10'

10'

6'

ORE CREEK

10'

10'

RIPRAP HEAVY 2.0' THICK
OVER GEOTEXTILE
TYPE HR (TYP.)

OUTLET RIPRAP

SHAPE RIPRAP HEAVY
TO MATCH SPECIAL
DITCH AND TO DRAIN

PROPOSED SPECIAL DITCH

PROJECT NO: 3849-00-73	HWY: HOSPITAL ROAD	COUNTY: WALWORTH	PLAN: RIPRAP HEAVY LAYOUT DETAIL	SHEET 4	E

FILE NAME : P:\9200S\9290S\9294\09294003\C3D\SHEETSPLAN\RIPRAP LAYOUT_HOSPITAL RD.DWG
LAYOUT NAME - Plan 1 IN 20 FT (2)

PLOT DATE : 8/28/2018 12:25 PM PLOT BY : ERIN JORDAN PLOT NAME : PLOT SCALE : 1 IN: 20 FT

3849-00-73

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0008	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 02. 10+00	LS	1.000	1.000
0010	205.0100	Excavation Common	CY	198.000	198.000
0014	209.2500	Backfill Granular Grade 2	TON	710.000	710.000
0020	213.0100	Finishing Roadway (project) 01. 3849-00-73	EACH	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	17.000	17.000
0024	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	460.000	460.000
0026	455.0605	Tack Coat	GAL	29.000	29.000
0028	465.0105	Asphaltic Surface	TON	129.000	129.000
0036	504.0900	Concrete Masonry Endwalls	CY	19.000	19.000
0062	606.0300	Riprap Heavy	CY	100.000	100.000
0070	618.0100	Maintenance And Repair of Haul Roads (project) 01. 3849-00-73	EACH	1.000	1.000
0072	619.1000	Mobilization	EACH	0.280	0.280
0074	624.0100	Water	MGAL	36.000	36.000
0078	625.0500	Salvaged Topsoil	SY	590.000	590.000
0080	627.0200	Mulching	SY	750.000	750.000
0082	628.1104	Erosion Bales	EACH	40.000	40.000
0084	628.1504	Silt Fence	LF	520.000	520.000
0086	628.1520	Silt Fence Maintenance	LF	520.000	520.000
0088	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0090	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0092	628.2008	Erosion Mat Urban Class I Type B	SY	66.000	66.000
0096	628.7504	Temporary Ditch Checks	LF	20.000	20.000
0098	629.0210	Fertilizer Type B	CWT	0.750	0.750
0100	630.0130	Seeding Mixture No. 30	LB	14.000	14.000
0102	630.0140	Seeding Mixture No. 40	LB	6.000	6.000
0104	630.0200	Seeding Temporary	LB	31.000	31.000
0106	633.5100	Markers Row	EACH	12.000	12.000
0108	633.5200	Markers Culvert End	EACH	4.000	4.000
0114	642.5001	Field Office Type B	EACH	0.280	0.280
0116	643.0420	Traffic Control Barricades Type III	DAY	504.000	504.000
0118	643.0705	Traffic Control Warning Lights Type A	DAY	840.000	840.000
0120	643.0900	Traffic Control Signs	DAY	420.000	420.000
0122	643.5000	Traffic Control	EACH	1.000	1.000
0126	645.0120	Geotextile Type HR	SY	305.000	305.000
0128	646.1005	Marking Line Paint 4-Inch	LF	800.000	800.000
0130	650.4500	Construction Staking Subgrade	LF	200.000	200.000

3849-00-73

Line	Item	Item Description	Unit	Total	Qty
0132	650.5000	Construction Staking Base	LF	200.000	200.000
0134	650.6000	Construction Staking Pipe Culverts	EACH	2.000	2.000
0138	650.6500	Construction Staking Structure Layout (structure) 01. B-64-200	LS	1.000	1.000
0142	650.9910	Construction Staking Supplemental Control (project) 01. 3849-00-73	LS	1.000	1.000
0144	650.9920	Construction Staking Slope Stakes	LF	200.000	200.000
0146	690.0150	Sawing Asphalt	LF	40.000	40.000
0150	SPV.0090	Special 01. Pipe Arch Corrugated Steel Aluminum Coated 128x83-Inch	LF	142.000	142.000
0152	SPV.0105	Special 01. Temporary Water Diversion	LS	1.000	1.000

3

CLEARING AND GRUBBING

CATEGORY	STATION	TO STATION	LOCATION	(201.0105) CLEARING STA	(201.0205) GRUBBING STA
0010	9+00	11+00	RT	2	2
		PROJECT TOTALS		**2**	**2**

BACKFILL GRANULAR

CATEGORY	LOCATION	(1) GRADE 2 CY	(209.2500) GRADE 2 TON
0010	B-64-0200	70	710
	PROJECT TOTALS	**70**	**710**

(1) - NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY

BASE AGGREGATE DENSE

CATEGORY	STATION	TO STATION	(305.0110) 3/4-INCH TON	(305.0120) 1 1/4-INCH TON	* (624.0100) WATER MGAL
0010	9+00.00	11+00.00	17	460	10
		PROJECT TOTAL	**17**	**460**	**10**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

ASPHALTIC SURFACE

CATEGORY	STATION	TO STATION	(455.0605) TACK COAT GAL	(465.0105) ASPHALTIC SURFACE TON
0010	9+00.00	11+00.00	29	129
		PROJECT TOTALS	**29**	**129**

CULVERT PIPE

CATEGORY	STATION	STRUCTURE	(SPV.0090.01) PIPE ARCH CORRUGATED STEEL ALUMINUM COATED 128X83-INCH LF	(504.0900) CONCRETE MASONRY ENDWALL CY	MINIMUM THICKNESS STEEL IN.	CORRUGATION IN.
0010	10+00	B-64-0200	142	19	0.138	3x1
		PROJECT TOTALS	**142**	**19**	**-**	**-**

TEMPORARY WATER DIVERSION, STRUCTURE B-64-0200

CATEGORY	DESCRIPTION	(SPV.0105.01) LS
0010	STRUCTURE B-64-0200	1
	PROJECT TOTALS	**1**

EARTHWORK PROJECT I.D. 3849-00-73

Division	From/To Station	Location	Common Excavation (1) (item # 205.0100) Cut (2)	EBS Excavation (3)	Salvaged /Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (6) Factor 1.30	Mass Ordinate +/- (7)	Waste	Borrow (item #208.0100)	Comment:
1	9+00 - 9+71	West Hospital Road	76	0	0	76	89	111	-35	-35	35	
2	10+33 - 11+00	East Hospital Road	122	0	0	122	53	67	55	55	-55	
	STRUCTURE B-64-0200		0	0	0	0	0	0	0	0	0	
	UNDISTRIBUTED EBS		0	0	0	0	0	0	0	0	0	
Grand Total			198	0	0	198	142	178	20	20	-20	
			198									

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Breaker Run material.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Expanded Fill. Factor = 1.30
7) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

FINISHING ITEMS

CATEGORY	STATION	TO STATION	LOCATION	(625.0500) SALVAGED TOPSOIL SY	(627.0200) MULCHING SY	(629.0210) FERTILIZER TYPE B CWT	(630.0130) SEEDING MIXTURE NO. 30 LB	(630.0140) SEEDING MIXTURE NO. 40 LB	(630.0200) SEEDING TEMPORARY LB	* (624.0100) WATER MGAL
0010	9+00	11+00	LT	175	255	0.35	3	6	14	12
	9+00	11+00	RT	415	495	0.40	11	-	17	14
			PROJECT TOTALS	**590**	**750**	**0.75**	**14**	**6**	**31**	**26**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

RIPRAP

CATEGORY	STATION	TO STATION	LOCATION	(606.0300) RIPRAP HEAVY CY	* (645.0120) GEOTEXTILE TYPE HR SY
0010	9+70	10+26	LT	60	130
	9+78	10+35	RT	40	95
		PROJECT TOTALS		**100**	**225**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

MOBILIZATIONS EROSION CONTROL

CATEGORY	DESCRIPTION	(628.1905) EACH	(628.1910) EMERGENCY EACH
0010	PROJECT 3849-00-73	2	2
	PROJECT TOTALS	**2**	**2**

TEMORARY SETTLING BASIN

CATEGORY	LOCATION	(628.1104) EROSION BALES EACH	* (645.0120) GEOTEXTILE TYPE HR SY
0010	B-64-0200	40	80
	PROJECT TOTALS	**40**	**80**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

EROSION MAT URBAN CLASS I TYPE B

CATEGORY	STATION	TO STATION	LOCATION	(628.2008) SY
0010	10+32	11+00	RT	66
		PROJECT TOTAL		**66**

SILT FENCE

CATEGORY	STATION	TO STATION	LOCATION	(628.1504) FENCE LF	(628.1520) MAINTENANCE LF
0010	9+00	11+00	RT	194	194
	9+00	11+00	LT	233	233
		UNDISTRIBUTED		93	93
		PROJECT TOTALS		**520**	**520**

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	(628.7504) LF
0010	10+70	RT	10
	UNDISTRIBUTED		10
	PROJECT TOTAL		**20**

3

3

MARKERS ROW

CATEGORY	R/W PT POINT NO.	STATION	LOCATION	(633.5100) EACH
0010	1	9+00.00	32.03' LT	1
	2	9+65.00	32.02' LT	1
	3	9+65.00	60.00' LT	1
	4	10+30.00	60.00' LT	1
	5	10+30.00	32.00' LT	1
	6	11+00.00	31.99' LT	1
	7	11+00.00	34.01' RT	1
	8	10+40.00	34.00' RT	1
	9	10+40.00	60.00' RT	1
	10	9+75.00	60.00' RT	1
	11	9+75.00	33.98' RT	1
	12	9+00.00	33.97' RT	1
	PROJECT TOTAL			**12**

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	(633.5200) EACH
0010	9+02	35' LT	1
	9+88	35' RT	1
	10+16	35' LT	1
	10+02	35' RT	1
	PROJECT TOTAL		**4**

MARKING LINE PAINT 4-INCH

CATEGORY	STATION	TO STATION	(646.1005) (YELLOW) LF	(WHITE) LF	NOTES
0010	9+00	11+00	400	400	SOLID DOUBLE YELLOW CENTERLINE & EDGELINES
	PROJECT TOTAL		**800**		

CONSTRUCTION STAKING

CATEGORY	STATION	TO STATION	(650.4500) SUBGRADE LF	(650.5000) BASE LF	(650.6000) PIPE CULVERTS EACH	(650.9910) SUPPLEMENTAL CONTROL LS	(650.9920) SLOPE STAKES LF
0010	9+00	11+00	200	200	-	-	200
	B-64-0200		-	-	2	-	-
	PROJECT 3849-00-73		-	-	-	1	-
	PROJECT TOTALS		**200**	**200**	**2**	**1**	**200**

TRAFFIC CONTROL

CATEGORY	LOCATION	DAYS	(643.5000) EACH	TRAFFIC CONTROL BARRICADES TYPE III EACH	(643.0420) TRAFFIC CONTROL BARRICADES TYPE III DAYS	TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	(643.0705) TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	TRAFFIC CONTROL SIGNS EACH	(643.0900) TRAFFIC CONTROL SIGNS DAYS
0010	PROJECT 3849-00-73	-	1	-	-	-	-	-	-
	STH 120 INTERSECTION	21	-	2	42	4	84	2	42
	BROOK ROAD INTERSECTION	21	-	2	42	4	84	2	42
	BEGINNING OF PROJECT	21	-	7	147	10	210	5	105
	END OF PROJECT	21	-	7	147	10	210	5	105
	CLAUSEN ROAD INTERSECTION	21	-	2	42	4	84	2	42
	STH 36 INTERSECTION	21	-	2	42	4	84	2	42
	UNDISTRUBUTED	21	-	2	42	4	84	2	42
	PROJECT TOTALS		1		504		840		420

SAWING ASPHALT

CATEGORY	STATION	(690.0150) LF
0010	9+42	20
	10+71	20
	PROJECT TOTALS	**40**

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE, AND OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMP. LIMITED EASEMENT AREA
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
BUILDING (TO BE REMOVED)
BRIDGE

PARCEL NUMBER 25
UTILITY NUMBER 40
SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
R/W MONUMENT
NON-MONUMENTED R/W POINT
FOUND IRON PIN
VALVE (GAS, WATER, ETC.)
SIGN
OFF-PREMISE SIGN

ACCESS CONTROLLED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
NATIONAL GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
PARALLEL OFFSETS

CONVENTIONAL UTILITY SYMBOLS

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

	NON-COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		

CURVE DATA ABBREVIATIONS

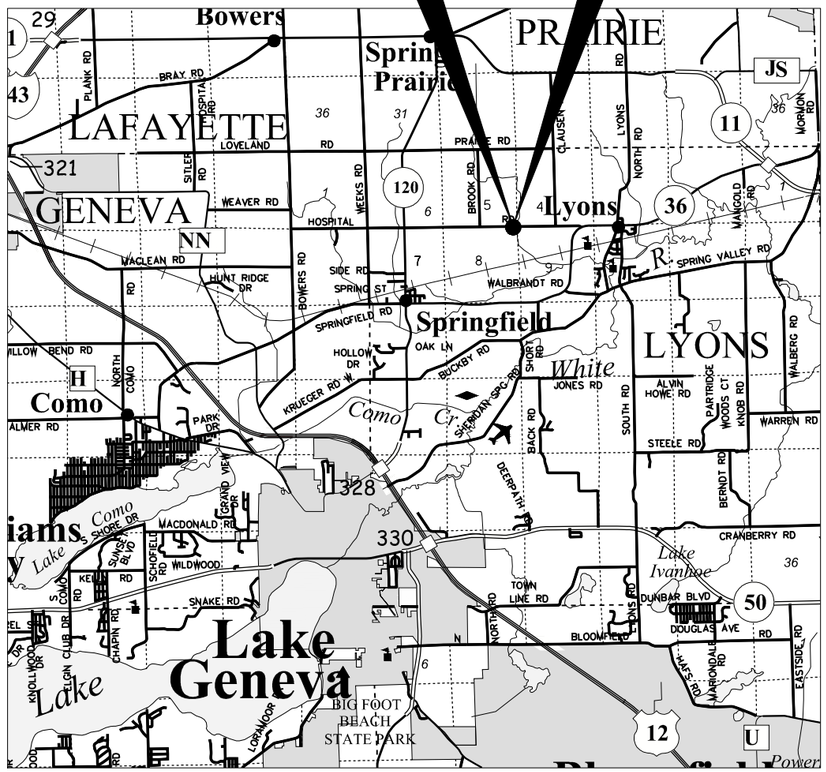
LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	OUTLOT	OL
ACRES	AC	PAGE	P
AHEAD	AH	POINT OF TANGENCY	PT
ALUMINUM	ALUM	PROPERTY LINE	PL
AND OTHERS	ET AL	RECORDED AS	(100')
BACK	BK	REEL / IMAGE	R/I
BLOCK	BLK	REFERENCE LINE	R/L
CENTERLINE	C/L	PERMANENT LIMITED EASEMENT	PLE
CERTIFIED SURVEY MAP	CSM	POINT OF BEGINNING	POB
CONCRETE	CONC	POINT OF CURVATURE	PC
COUNTY	CO	POINT OF COMPOUND CURVE	PCC
COUNTY TRUNK HIGHWAY	CTH	POINT OF INTERSECTION	PI
DISTANCE	DIST	REMAINING	REM
CORNER	COR	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
DOCUMENT NUMBER	DOC	RIGHT	RT
EASEMENT	EASE	RIGHT OF WAY	R/W
EXISTING	EX	SECTION	SEC
GAS VALVE	GV	SEPTIC VENT	SEPV
GRID NORTH	GN	SQUARE FEET	SF
HIGHWAY EASEMENT	HE	STATE TRUNK HIGHWAY	STH
IDENTIFICATION	ID	STATION	STA
LAND CONTRACT	LC	TELEPHONE PEDESTAL	TP
LEFT	LT	TEMPORARY LIMITED EASEMENT	TLE
MONUMENT	MON	TRANSPORTATION PROJECT PLAT	TPP
NATIONAL GEODETIC SURVEY	NGS	UNITED STATES HIGHWAY	USH
NUMBER	NO	VOLUME	V

BEGIN RELOCATION ORDER STA.9+00.00
Y = 359,062.812
X = 805,108.914
APPROXIMATELY 242 FEET WEST OF AND 3 FEET NORTH OF THE NORTHEAST CORNER OF SECTION 8, T-2-N, R-18-E, TOWN OF LYONS, WALWORTH COUNTY, WI.

END RELOCATION ORDER STA.11+00.00
Y = 359,061.571
X = 805,308.910
APPROXIMATELY 42 FEET WEST OF AND 1 FOOT NORTH OF THE NORTHEAST CORNER OF SECTION 8, T-2-N, R-18-E, TOWN OF LYONS, WALWORTH COUNTY, WI.



LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.038

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
3849-00-03	4.01	2

PLAT OF RIGHT OF WAY REQUIRED FOR

TOWN OF LYONS, HOSPITAL ROAD ORE CREEK BRIDGE (P-64-0907)

LOCAL STREET — WALWORTH COUNTY

CONSTRUCTION NUMBER: 3849-00-73

CAUTION:
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES.

NOTES:

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

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

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING RIGHT-OF-WAY FOR HOSPITAL ROAD IS ESTABLISHED BY DEGEN PLAT OF SURVEY AND KROTT PLAT OF SURVEY.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

ORIGINAL PLAT PREPARED BY
MSA PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL • IMMIGRATION DEVELOPMENT • ENVIRONMENTAL
2901 International Lane, Suite 300 Madison, WI 53704-3133
608-242-7779 1-800-446-0679 Fax: 608-242-5664

WISCONSIN
BRADLEY L. TISDALE S-2824 WAUNAKEE WI
LAND SURVEYOR

06/29/2018 (DATE)
(BRADLEY L. TISDALE, PLS S-2824)

REVISION DATE

TOWN OF LYONS

APPROVED FOR THE TOWN

DATE: _____ _____ (Signatur

FILE NAME : P:\9200S\9290S\9294\09294003\C3D\RW\9294003_HOSPITAL RD_PLAT.DWG
PLOT DATE : 7/1/2018 4:01 PM
PLOT BY : BRAD TISDALE
PLOT NAME :

RW POINT	STATION	OFFSET	Y	X
1	9+00.00	32.03 L	359,094.847	805,109.113
2	9+65.00	32.02 L	359,094.428	805,174.112
3	9+65.00	60.00 L	359,122.408	805,174.285
4	10+30.00	60.00 L	359,122.004	805,239.284
5	10+30.00	32.00 L	359,094.009	805,239.110
6	11+00.00	31.99 L	359,093.558	805,309.109
7	11+00.00	34.01 R	359,027.560	805,308.699
8	10+40.00	34.00 R	359,027.946	805,248.700
9	10+40.00	60.00 R	359,001.944	805,248.539
10	9+75.00	60.00 R	359,002.348	805,183.540
11	9+75.00	33.98 R	359,028.365	805,183.702
12	9+00.00	33.97 R	359,028.848	805,108.703

TLE POINT	STATION	OFFSET
T1	9+90.00	90.00 L
T2	10+10.00	90.00 L
T3	11+00.00	50.00 R
T4	10+50.00	70.00 R
T5	9+75.00	70.00 R
T6	9+55.00	50.00 R

TOWN

SE-SE

DON R. AND PATRICIA A. SPIEGELHOFF

(1)

GN

S89°38'39"E 20.00'

SLOPE INTERCEPT (TYP)

N57°34'20"E 107.05'

S56°50'22"E 107.08'

S89°38'39"E 65.00'

S89°37'51"E 65.00'

S89°37'51"E 70.00'

N00°21'21"E 27.98'

S00°21'21"W 28.00'

30' PRIVATE DRAINAGE EASEMENT FOR BENEFIT OF PROPERTY TO THE WEST OWNED BY WILLIAM AND SANDRA PETERSON VOL. 416, PG. 184 DOCUMENT #155165

WOOD FENCE

EXISTING R/W

WE ENERGIES

TDS

RL TO #1 N00°21'21"E 32.03'

PI: 9+00.00

RL TO RL S00°21'21"W 31.99'

PI: 11+00.00

33'

FOUND BRASS DISK
Y = 359,077.225
X = 802,722.949

FOUND BRASS DISK
Y = 359,060.289
X = 805,350.755
11+41.85, 1.02'R

P.L.

9+00

REFERENCE LINE = S89°38'39"E

SECTION LINE = S89°37'51"E

10+00

HOSPITAL ROAD

11+00

SECTION CORNER TO 11+00, 1.01'R N89°37'51"W 41.85'

SEC LINE TO RL N00°21'21"E 0.97'

PROPOSED STRUCTURE B-64-0200

RL TO SEC LINE S00°21'21"W 1.01'

#12 TO SEC LINE N00°21'21"E 33.00'

SEC LINE TO #7 S00°21'21"W 33.00'

BEGIN RELOCATION
ORDER STA.9+00.00
Y = 359,062.812
X = 805,108.914

END RELOCATION
ORDER STA.11+00.00
Y = 359,061.571
X = 805,308.910

AT&T 80

OH EXISTING R/W OH

AT&T (WISCONSIN TELEPHONE CO.)
16.5' TELEPHONE EASEMENT
VOL. 640, PG. 161
DOCUMENT #585315

N89°37'51"W 75.00'

N89°37'51"W 60.00'

AT&T

N73°23'25"W 27.29'

N00°21'21"E 26.02'

S00°21'21"W 26.00'

S00°21'21"W 15.99'

CHARTER

EXISTING R/W

T6

N44°38'39"W 28.28'

AT&T (WISCONSIN TELEPHONE CO.)
UNDEFINED WIDTH TELEPHONE EASEMENT
VOL. 105, PG. 441
DOCUMENT #190073

SLOPE INTERCEPT (TYP)

S68°33'15"W 53.85'

N89°38'39"W 65.00'

N89°38'39"W 75.00'

T5

T4

T3

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
80	AT&T	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE TOWN OF LYONS.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	FEE ACRES REQUIRED			TLE ACRES REQUIRED
			NEW	EXISTING	TOTAL	
1	DON R. AND PATRICIA A. SPIEGELHOFF	FEE/TLE	0.04	0.15	0.19	0.10
2	JAMES P. VOUTIRITSAS AND LAURIE A. STEVENS, AS JOINT TENANTS	FEE/TLE	0.04	0.15	0.19	0.08

JAMES P. VOUTIRITSAS AND LAURIE A. STEVENS

(2)

NE-NE

ORE CREEK

WISCONSIN
BRADLEY L. TISDALE
S-2824
WAUNAKEE
WI
LAND SURVEYOR

LYONS

REVISION DATE	DATE 06/29/2018	SCALE, FEET 0 10 20	HWY: HOSPITAL ROAD	R/W PROJECT NUMBER 3849-00-03
	GRID FACTOR		COUNTY: WALWORTH	CONSTRUCTION PROJECT NUMBER 3849-00-73

PLAT SHEET 4.02

PS&E SHEET 11 E

FILE NAME : 9294003_HOSPITAL RD_PLAT.DWG
LAYOUT NAME - Plat

PLOT DATE : 7/1/2018 4:01 PM PLOT BY : BRAD TISDALE PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 75

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE B (NON-NETTED)
- SILT FENCE
- TEMPORARY DITCH CHECKS
- RIPRAP HEAVY OVER GEOTEXTILE TYPE HR

TLE
STREAM BANK EXCAVATION AND SHAPING (TYP.)
(TO BE DETERMINED BY PROJECT ENGINEER)
CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH (TYP.)
PATRICIA A. SPIEGELHOFF
TALL GRASS
PASTURE
JAMES R HOUCK
WOODS
NEW R/W
DRAINAGE EASEMENT
4' PICKET WOOD FENCE
GAS (WE ENERGIES)
ABANDONED GAS (WE ENERGIES)
WETLAND BOUNDARY (TYP.)
3' SPACING (TYP.)
GAS METER
30'
EXISTING R/W
CAUTION
LAWN
FIBER (TDS)
GRVL
BM11
CP1
CP3
33'
SAWING ASPHALT REQ'D STA. 9+42
SAWING ASPHALT REQ'D STA. 10+71
EXISTING STRUCTURE P-64-0907
PROPOSED ℄
8+00
9+00
10+00
11+00
12+00
13+00
CP7
CP6
HOSPITAL ROAD (ASPHALT)
EXISTING ℄
PROPOSED STRUCTURE B-64-0200
BM10
BM12
OH
EXISTING R/W
16.5'
SLOPE INTERCEPT (TYP.)
OVERHEAD ELECTRIC (WE ENERGIES)
OVERHEAD TELEPHONE (CHARTER)
WISCONSIN STATE TELEPHONE EASEMENT
JAMES P VOUTIRITSAS AND LAURIE A. STEVENS
TELEPHONE (AT&T)
CULVITATED FIELD
EXISTING DITCH
BEGIN PROJECT STA. 9+42.00 Y=359,062.55 X=805,150.92
BEGIN CONSTRUCTION STA. 9+00.00
REMOVE EXISTING BRIDGE P-64-907
STA. 10+00 CL
STEEL DECK GIRDER BRIDGE
23.5' CLEAR ROADWAY WIDTH
24.5' OVERALL LENGTH
ORE CREEK
PROPOSED DITCH CL (TYP.)
END PROJECT STA. 10+71.00 Y=359,061.75 X=805,279.91
END CONSTRUCTION STA. 11+00.00
COMSTOCK FAMILY TRUST
N

STA 9+42.00 EL 841.67
VPI STA 10+00.00 VPI EL 841.84
VPT STA 10+55.26 VPT EL 841.38
STA 10+71.00 EL 841.25
EXISTING ℄ PROFILE
0.29%
-0.83%
VPC STA 9+44.74 VPC EL 841.68
VCL = 110.52
K = 98.00
PROPOSED ℄ PROFILE
TWIN PIPE ARCH CORRUGATED STEEL (128"X83")
INLET EL: 831.50, TYP.
OUTLET EL: 831.30, TYP.

840
832
845.47 844.09 842.77 841.93 841.68 841.69 841.68 841.69 841.38 841.42 841.42 842.28 843.96 845.64 847.18
7+00 8+00 9+00 10+00 11+00 12+00 13+00

SURVEY CONTROL POINTS

CONTROL POINT	X	Y	DESCRIPTION	STA.	OFFSET	ELEV.
CP1	805258.06	359078.70	REBAR SET EAST OF ORE CREEK BRIDGE	10+49.04	16.81 LT	840.26
CP3	805048.57	359079.51	REBAR SET WEST OF ORE CREEK BRIDGE	8+39.59	16.48 LT	842.81
CP6	805309.00	359061.28	PK NAIL	11+00.00	0.02 LT	841.37
CP7	805047.31	359062.84	PK NAIL	8+38.41	0.46 RT	843.05

BENCH MARKS

NO.	STA.	DESCRIPTION	OFFSET	ELEV.
10	8+33.18	SPIKE IN NORTH FACE POWER POLE	31.59' RT	842.74
11	9+82.64	CHISEL X AT NW CORNER WINGWALL	19.92' LT	838.10
12	10+98.01	SPIKE IN NORTH FACE OF POWER POLE	30.41' RT	840.18

EARTHWORK SUMMARY
STA. 9+00 - STA. 11+00

COMMON EXC.	238 CY
FILL	178 CY
FILL EXPANSION	30 %
WASTE	20 CY

HW 100 EL. 838.69
OBSERVED WATER EL. 834.52
(5-11-2017)
STREAMBED EL. 832.14

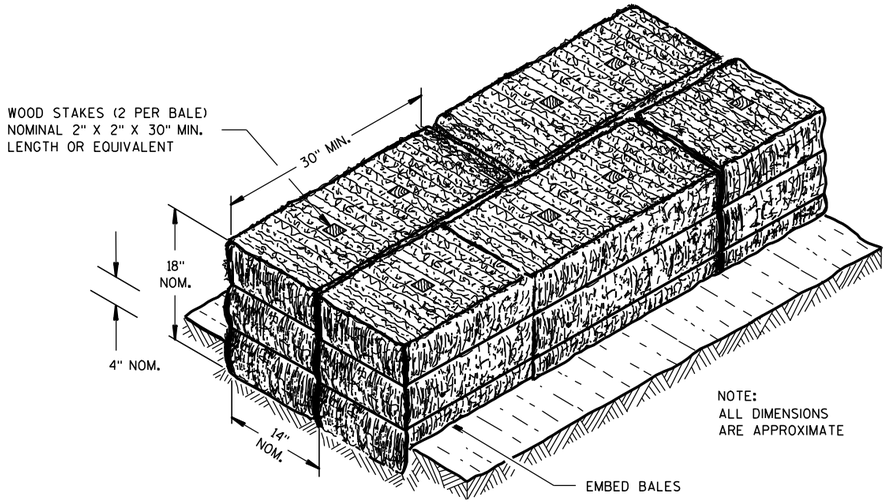
STA. 10+02 STRUCTURE B-64-0200
TWIN PIPE ARCH CORRUGATED STEEL (128"X83")
WITH CONCRETE APRONS PER SDD 8F10
(MODIFIED WING TIPS HEIGHT TO 2' 8")
71.0' LENGTH (EACH)
36' CLEAR ROADWAY WIDTH
5°RHF SKEW

PROJECT NO: 3849-00-73	HWY: HOSPITAL ROAD	COUNTY: WALWORTH	PLAN AND PROFILE: HOSPITAL ROAD	SHEET 12	E

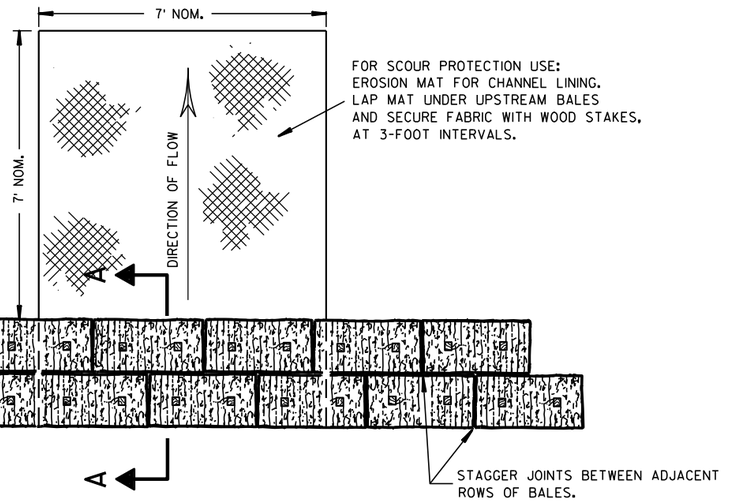
FILE NAME : P:\9200S\9290S\9294\09294003\C3D\DESIGN\ALIPROFS\ALIPROF-HOSPITAL ROAD.DWG
LAYOUT NAME - Plan & Profile
PLOT DATE : 10/30/2018 12:11 PM PLOT BY : ERIN JORDAN PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

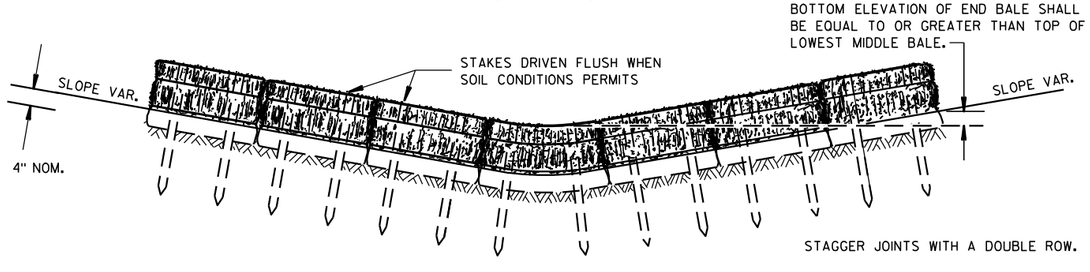
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F10-01	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
12A03-10	NAME PLATE (STRUCTURES)
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



SECTION A-A



PLAN VIEW



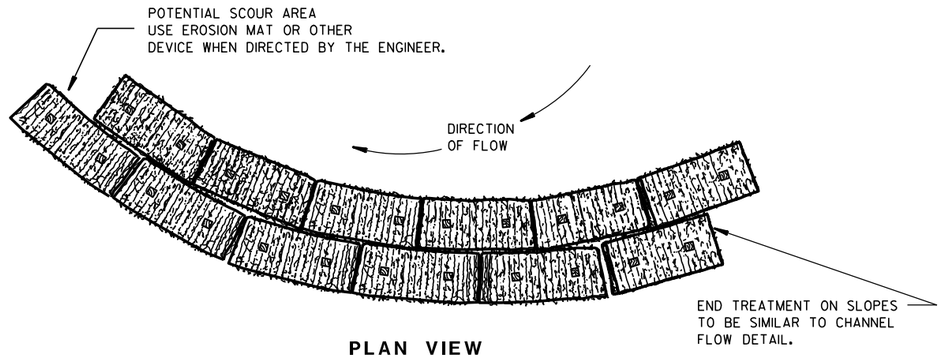
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

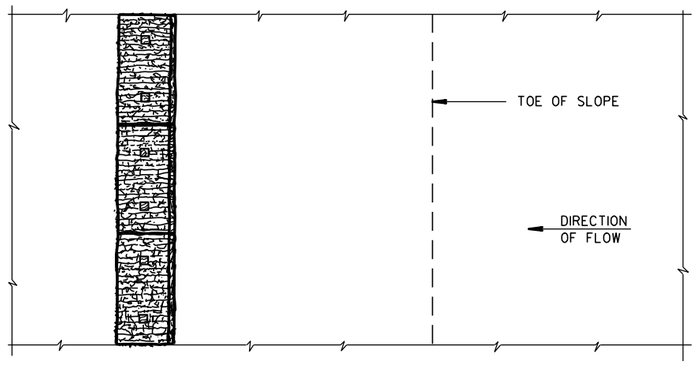
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

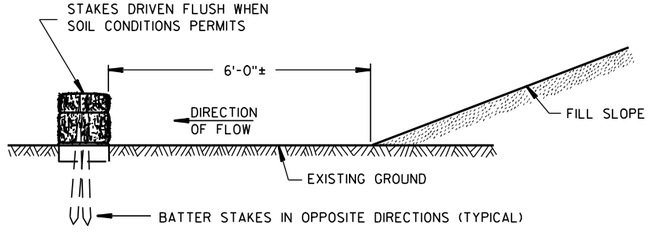


PLAN VIEW

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

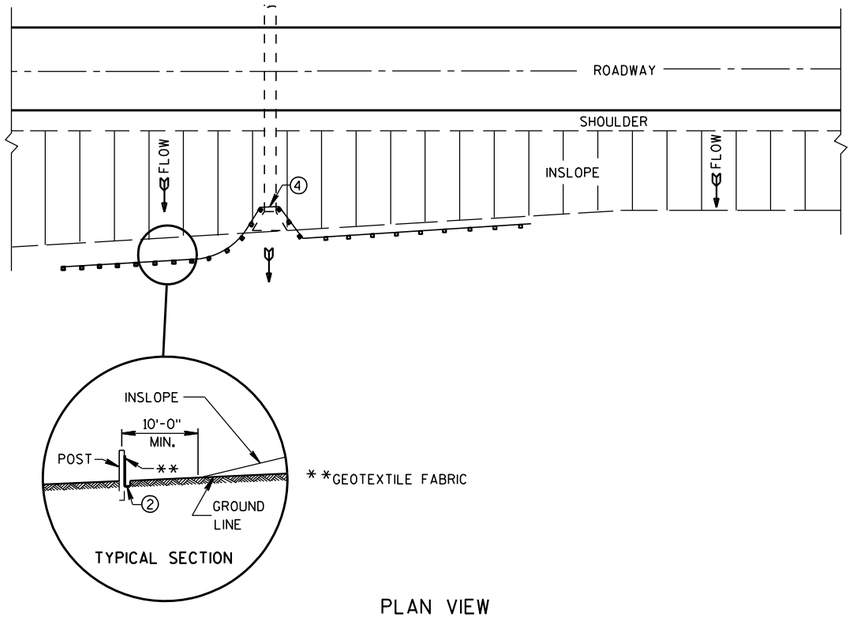
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

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

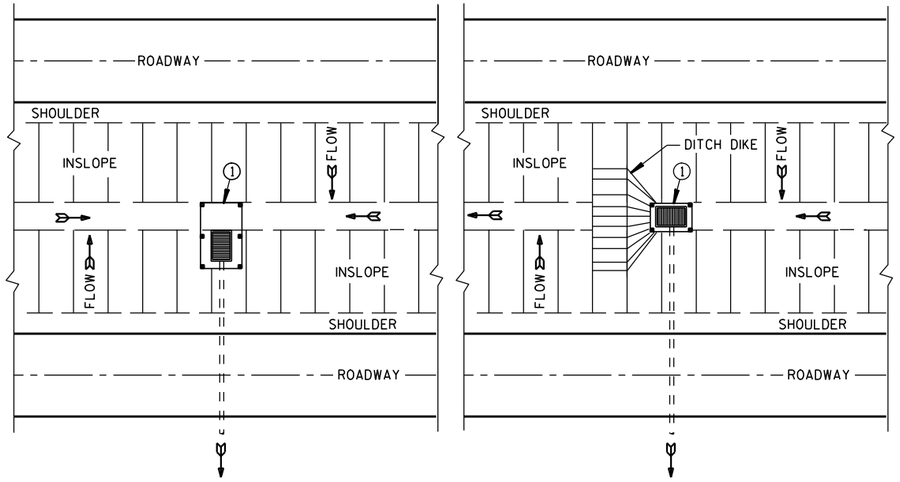
FHWA

6
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



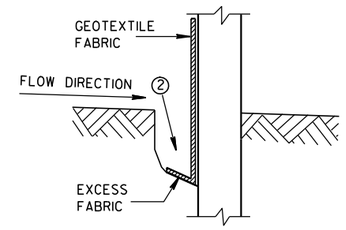
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

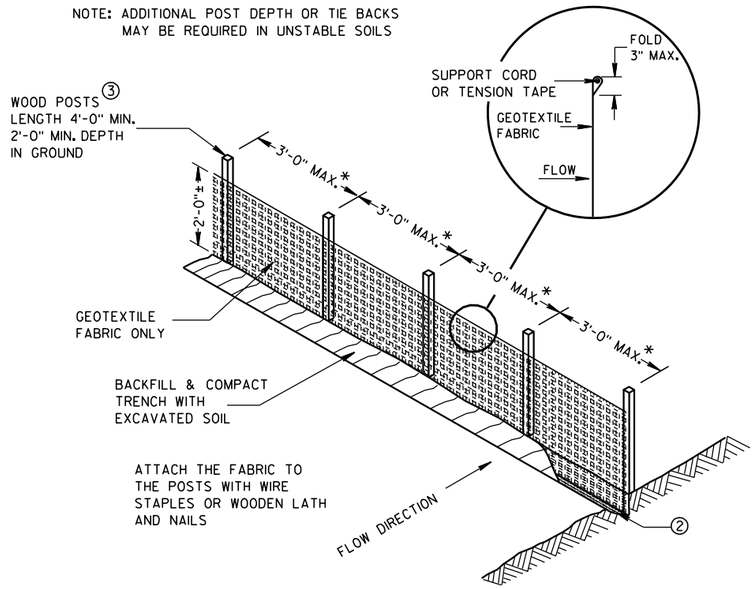
GENERAL NOTES

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

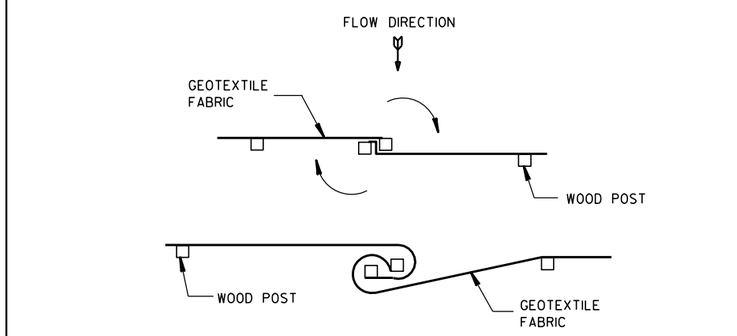
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



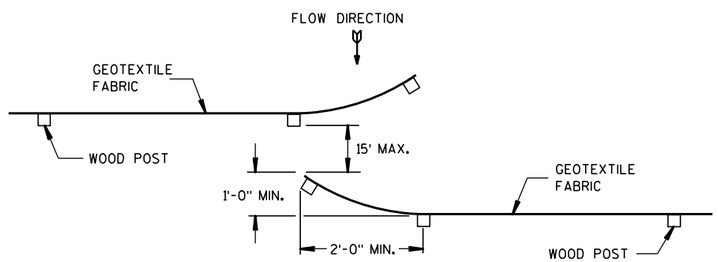
TRENCH DETAIL



SILT FENCE

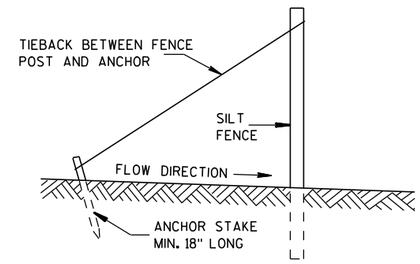


TWIST METHOD



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	

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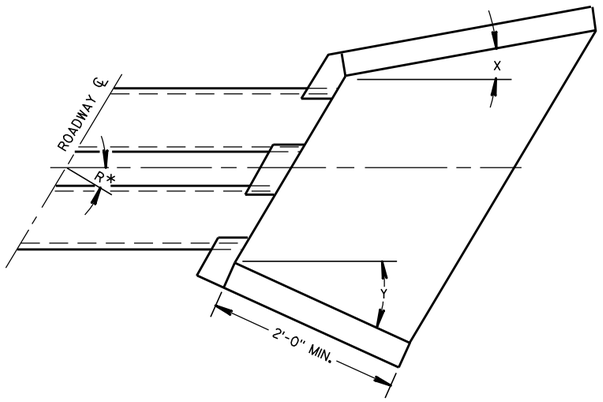


WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

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.

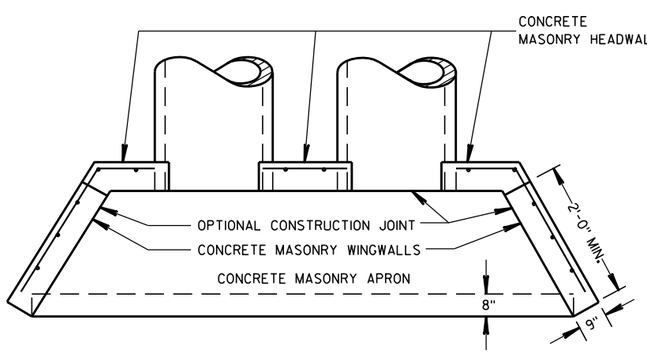
FILL SLOPES FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

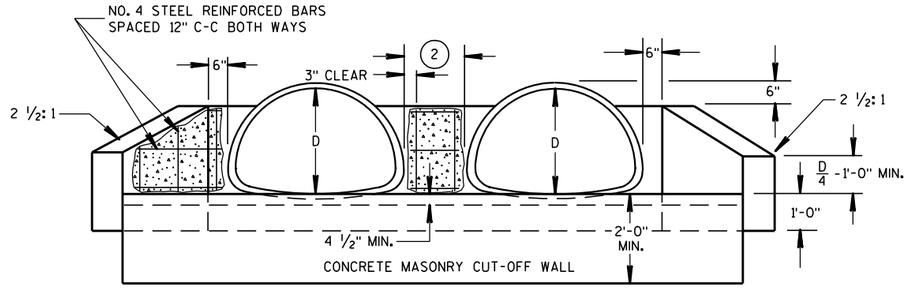
(2) THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	½ DIA. OR SPAN
OVER 72"	3'-0"



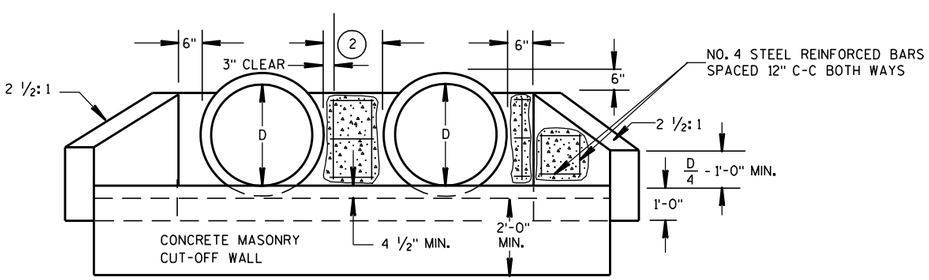
PLAN VIEW

CULVERT PIPE AND PIPE ARCH



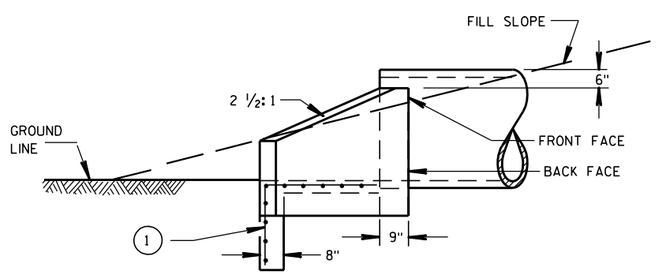
END ELEVATION

PIPE ARCH



END ELEVATION

CULVERT PIPE



SIDE ELEVATION

CULVERT PIPE AND PIPE ARCH

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/14/98 — DATE
/S/ Rory L. Rhinehart — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 F 10-1

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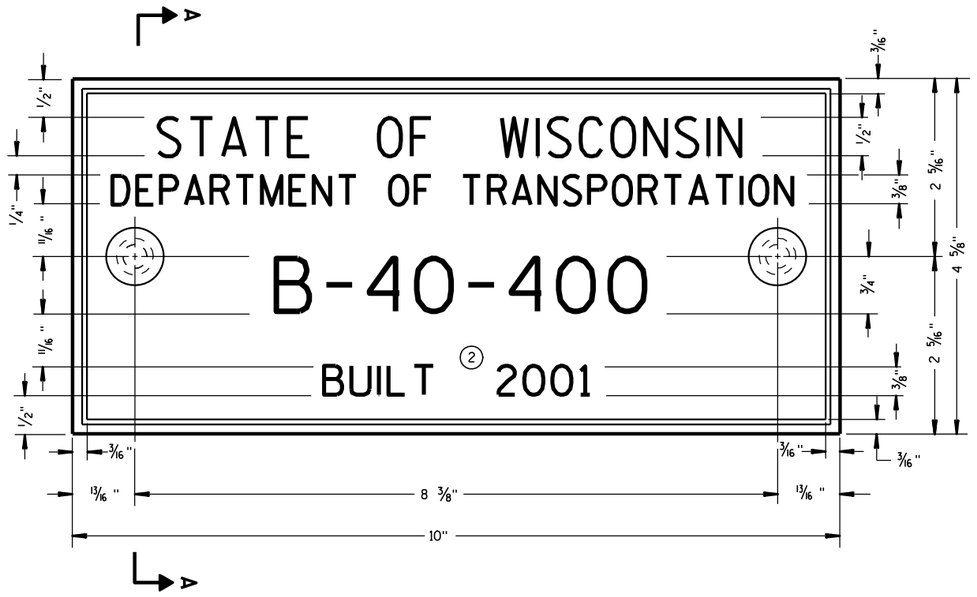
S.D.D. 8 F 10-1



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

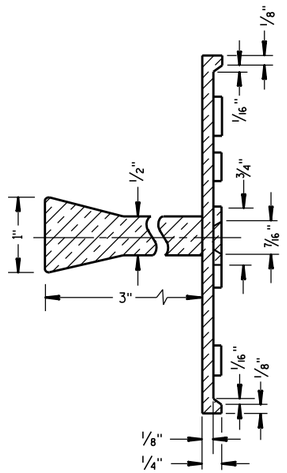
GENERAL NOTES

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.

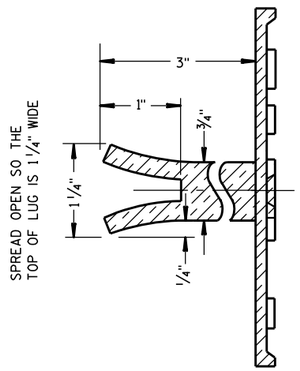
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

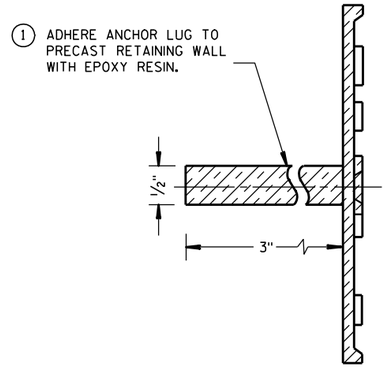
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



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 DEVELOPMENT ENGINEER

FHWA

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S.D.D. 12 A 3-10

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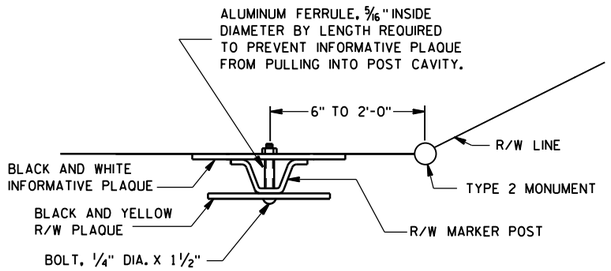
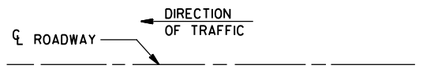
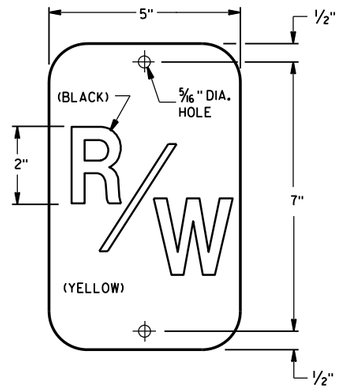
S.D.D. 12 A 3-10



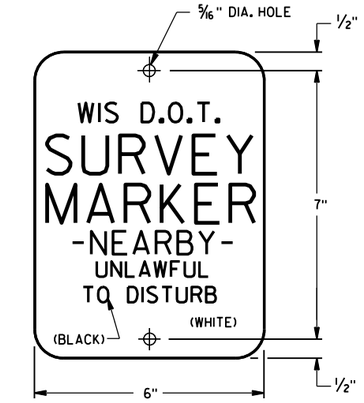


PLAN VIEW



R/W PLAQUE

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



INFORMATIVE PLAQUE

GENERAL NOTES

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

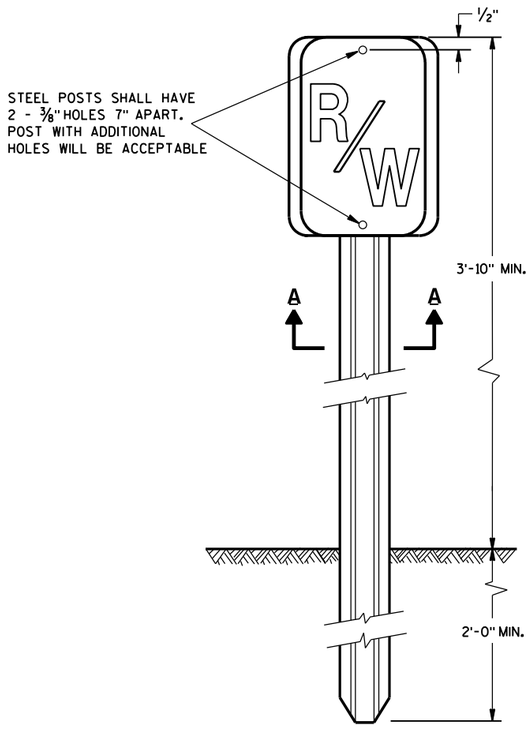
A STEEL MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFORMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. R/W AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE DEPARTMENT OF TRANSPORTATION.

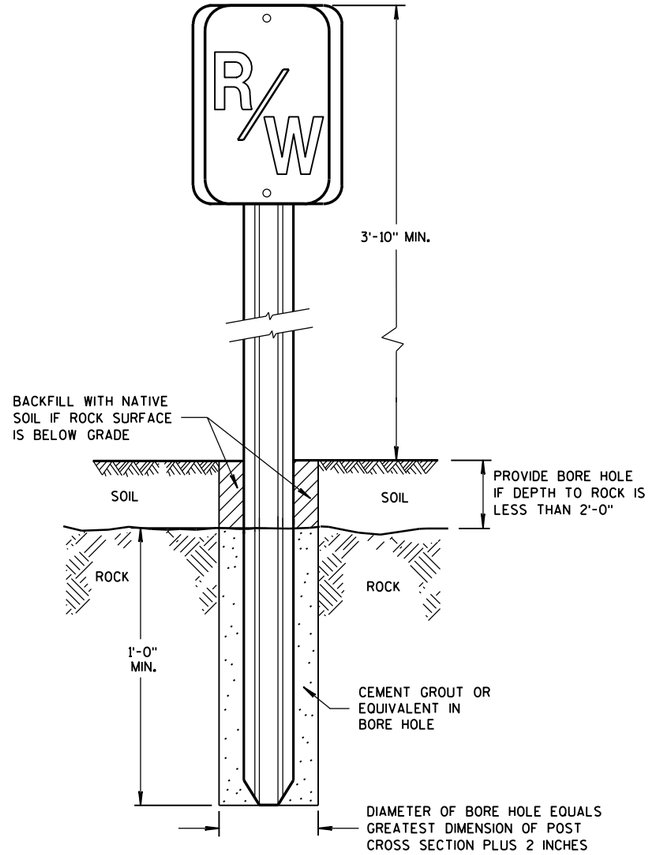
STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

(1) IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK TO A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3'10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR.

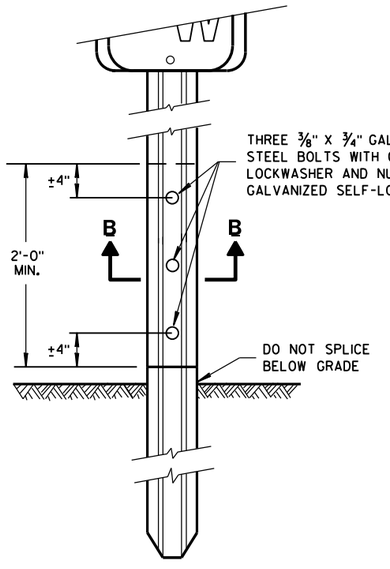
FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT. DEPENDING ON THE STABILITY OF THE ROCK.



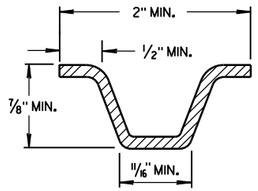
FRONT VIEW
STEEL MARKER POST



FRONT VIEW
ROCK INSTALLATION (1)

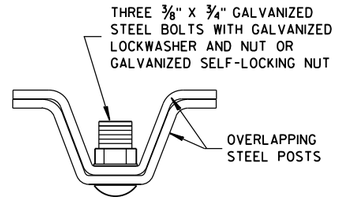


FRONT VIEW
SPLICE DETAIL



MIN. WEIGHT 1.12 LB./FT.

SECTION A-A



SECTION B-B

MARKER POST FOR RIGHT-OF-WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/18/2016 — DATE
/S/ Ray Kumapayi — CHIEF SURVEYING AND MA[illegible]INEER
FHWA

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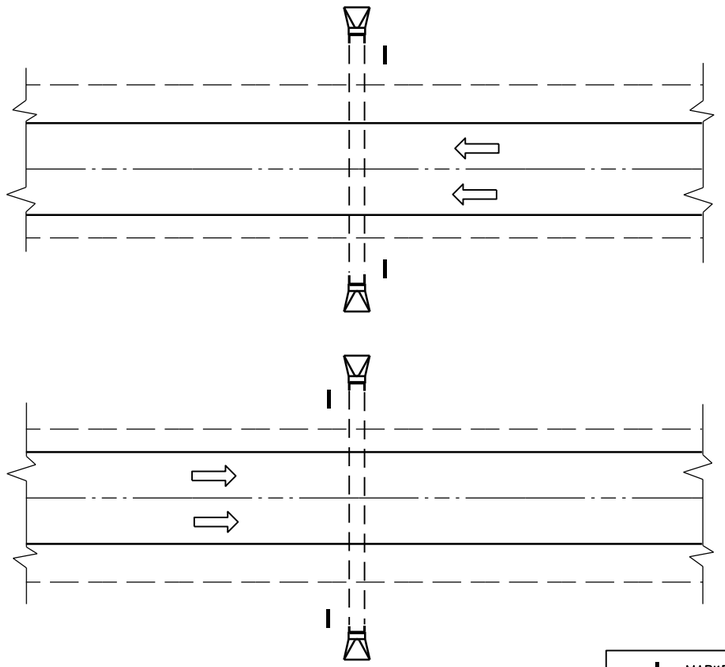
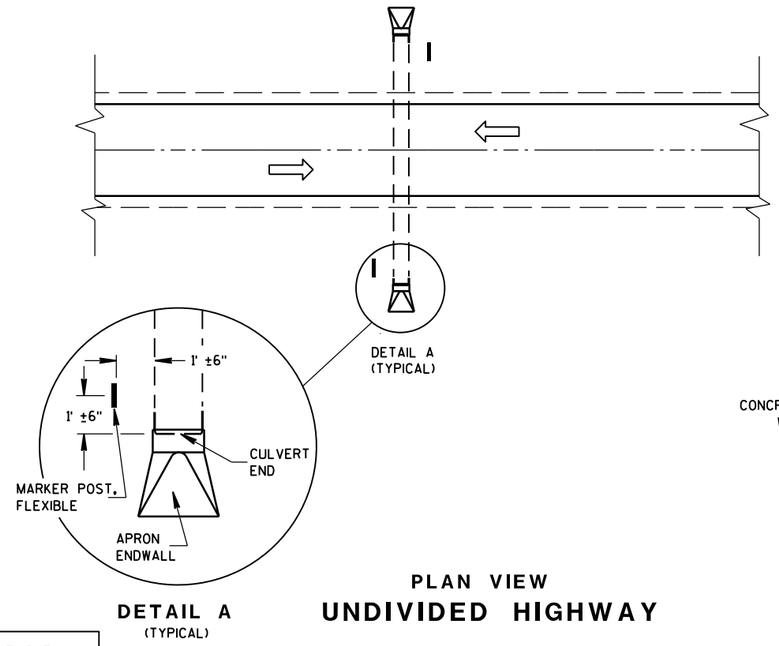
S.D.D. 15 A 1-13a



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

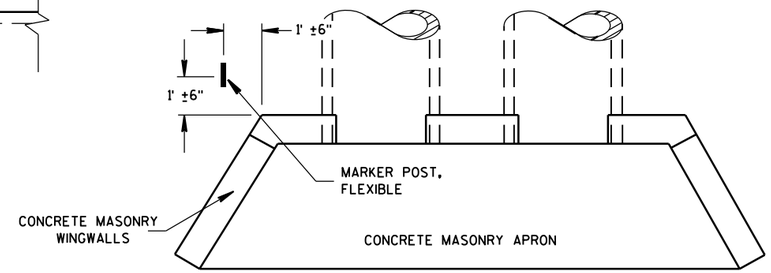
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

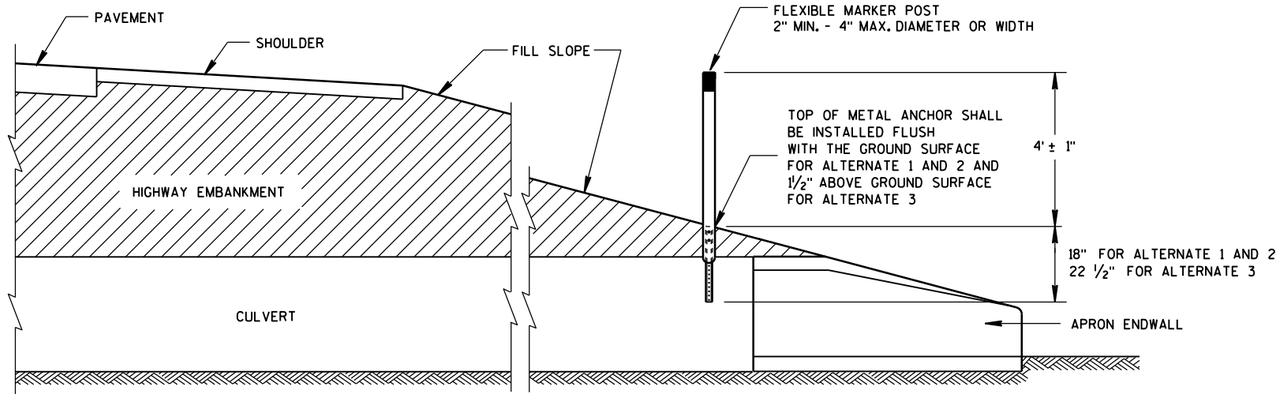
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 15 A 3-2a

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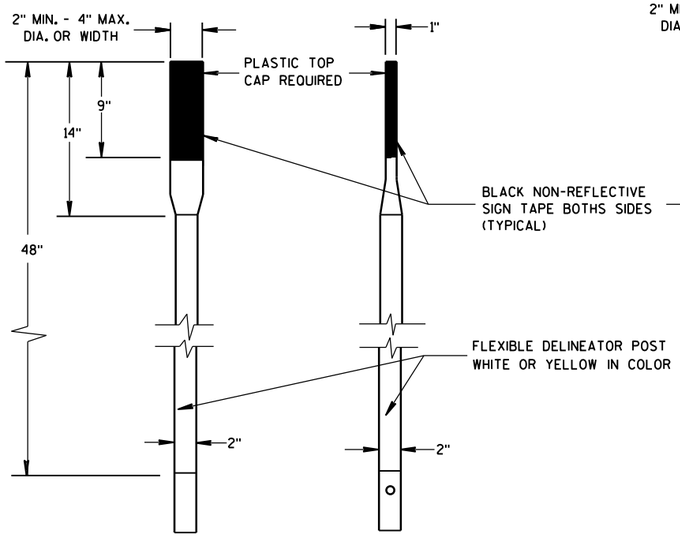
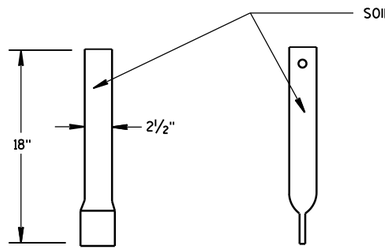
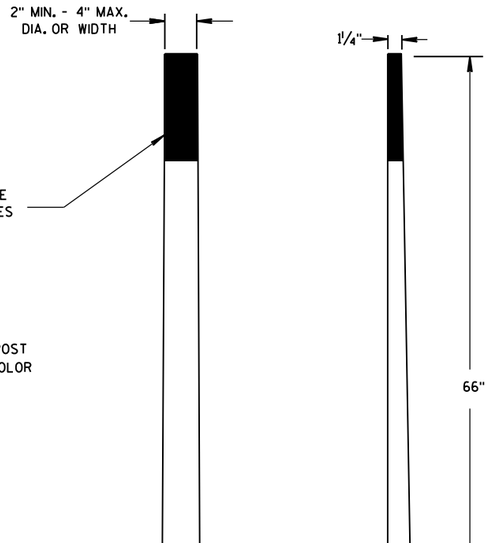
S.D.D. 15 A 3-2a





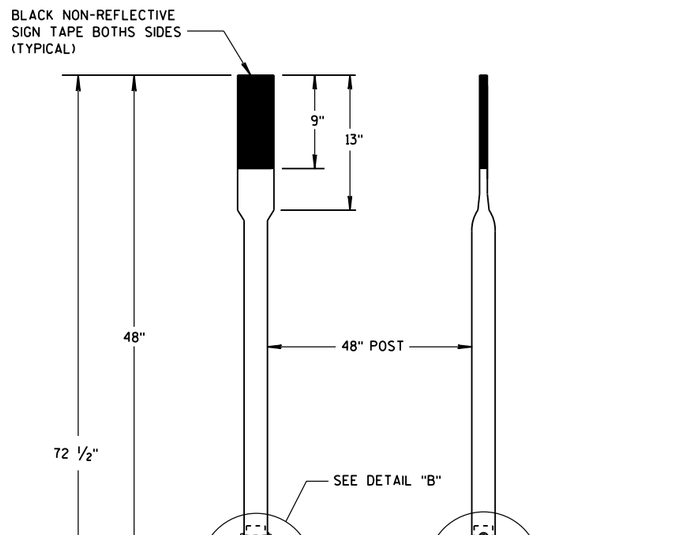
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

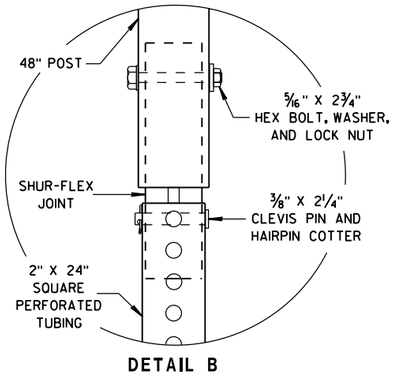
ALTERNATE 2



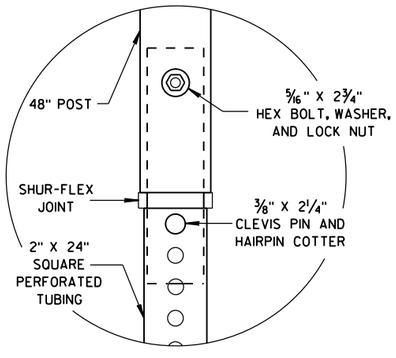
FRONT VIEW SIDE VIEW

ALTERNATE 3

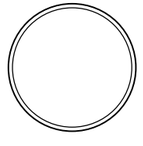
FLEXIBLE MARKER POSTS



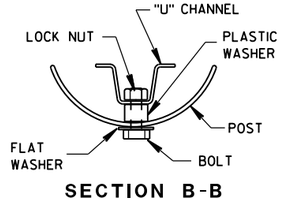
DETAIL B



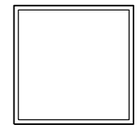
DETAIL C



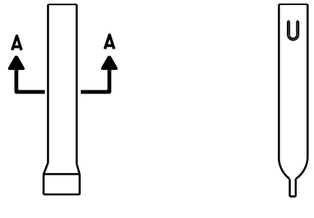
SECTION A-A



SECTION B-B

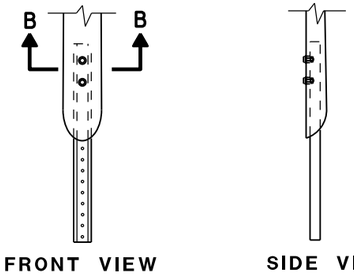


SECTION C-C



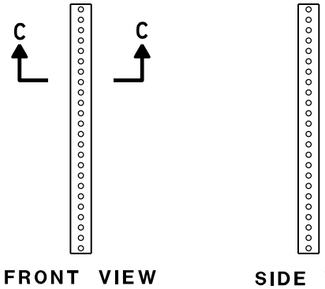
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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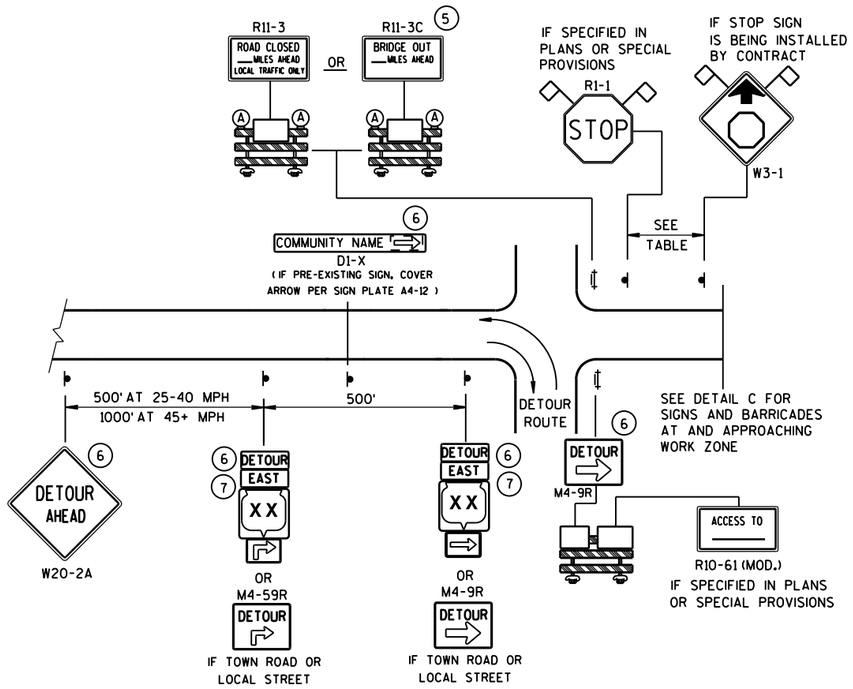
S.D.D. 15 A 3-2b

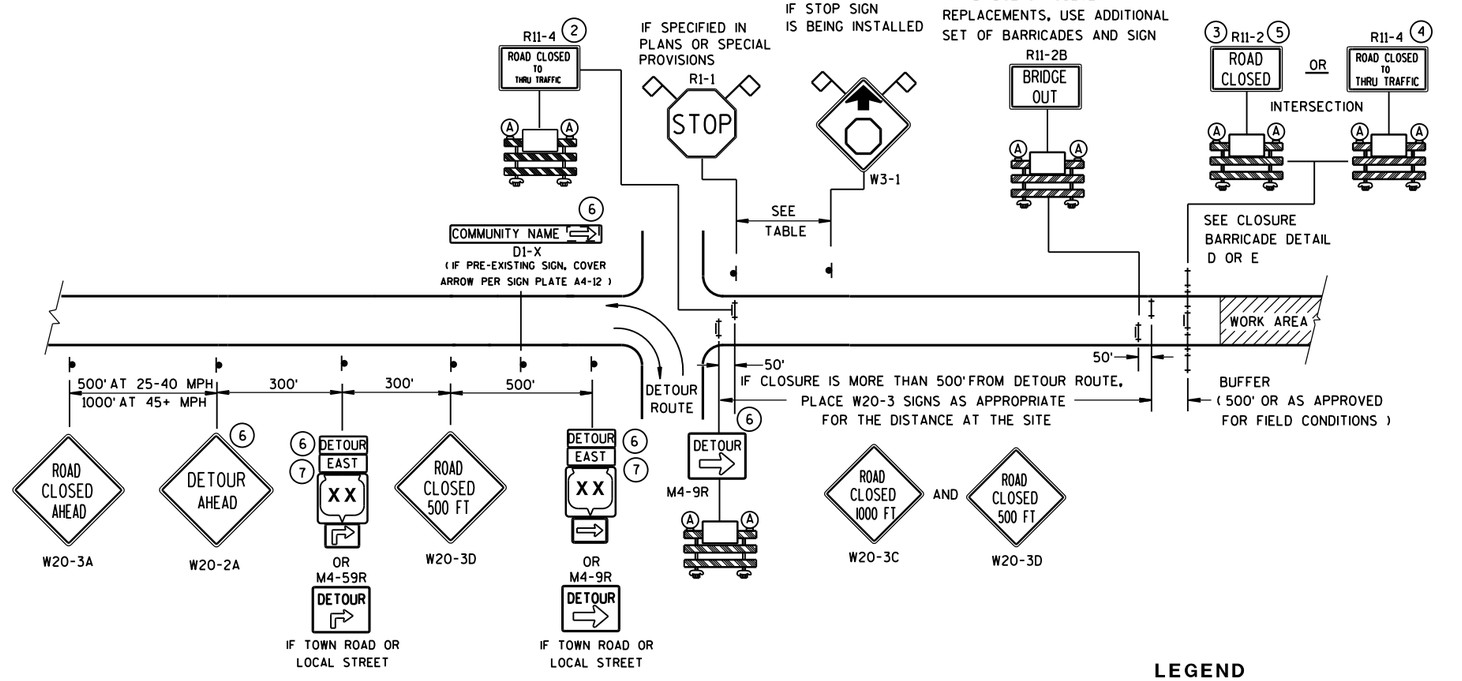
6

S.D.D. 15 A 3-2b



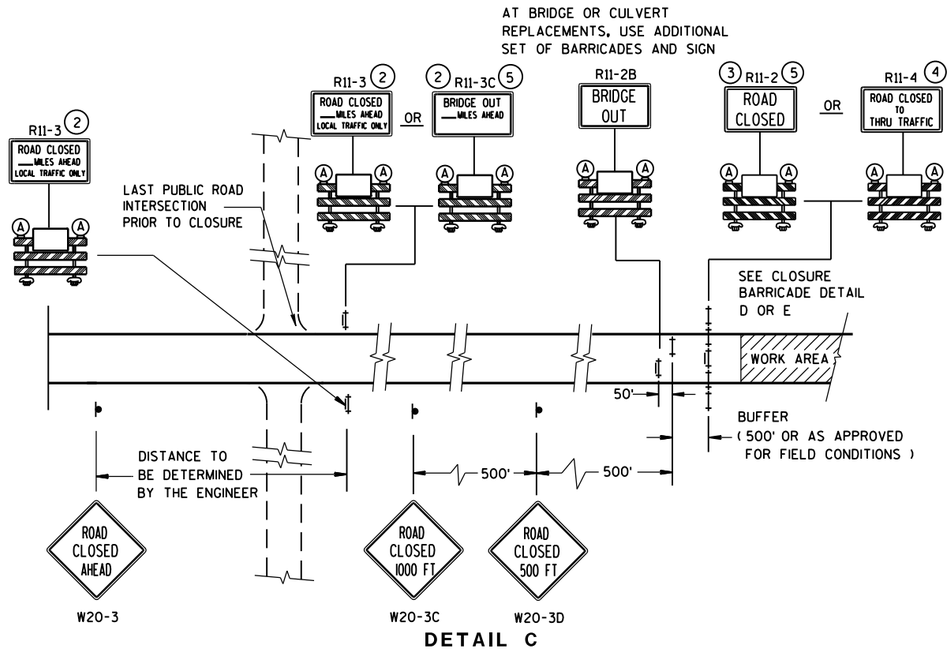
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

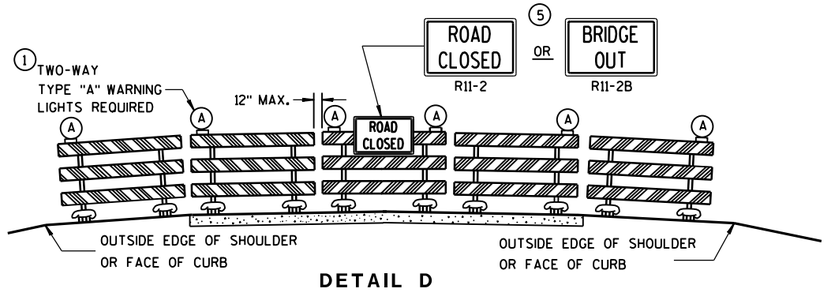
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

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

6

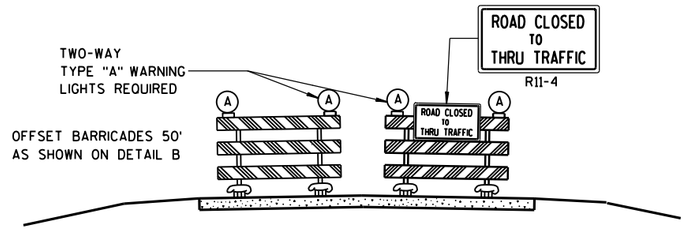
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

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

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

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

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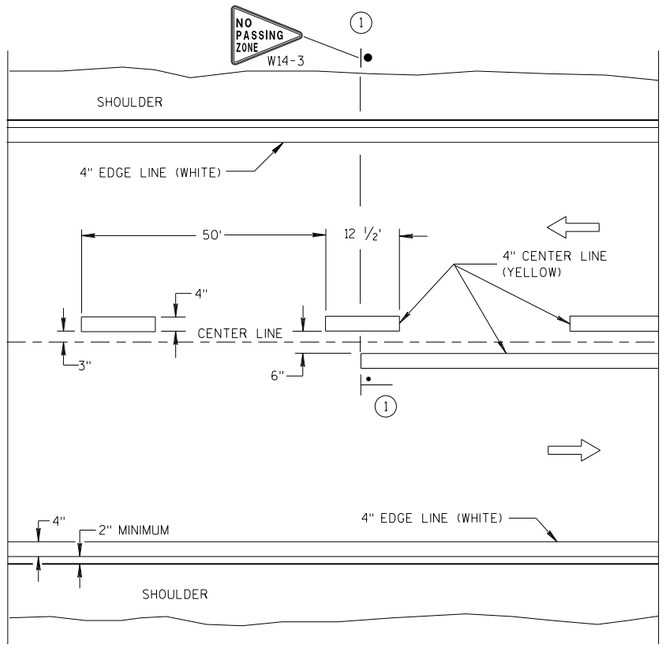
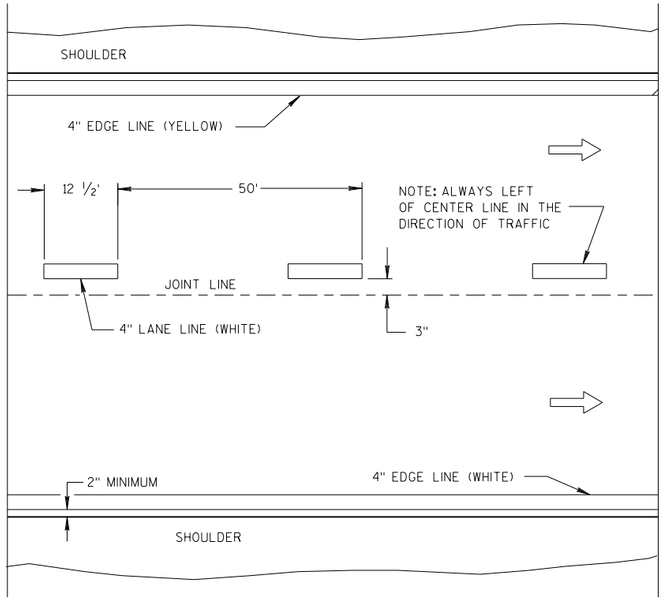
S.D.D. 15 C 2-6b



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

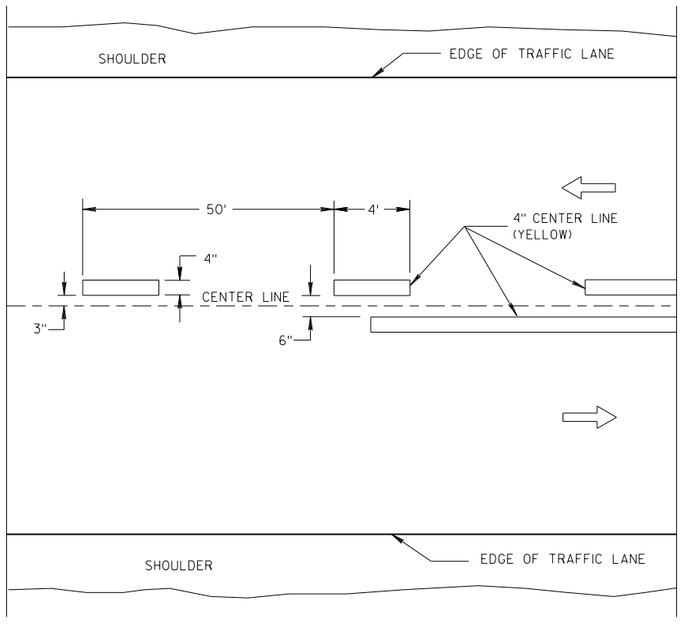
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

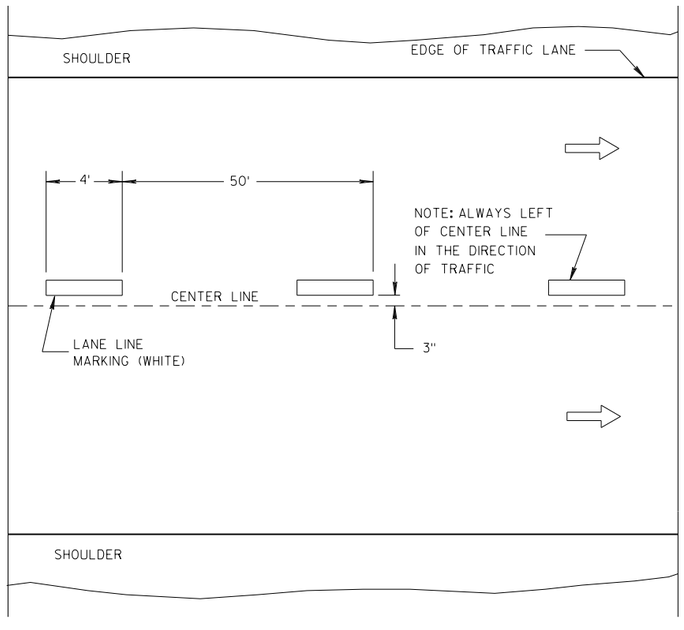
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

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S.D.D. 15 C 8-19a

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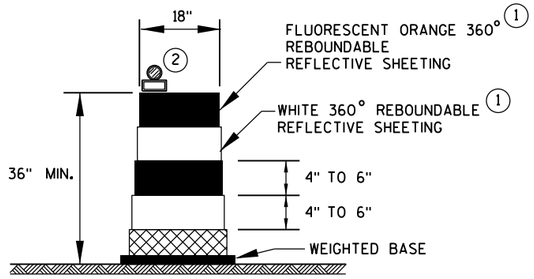
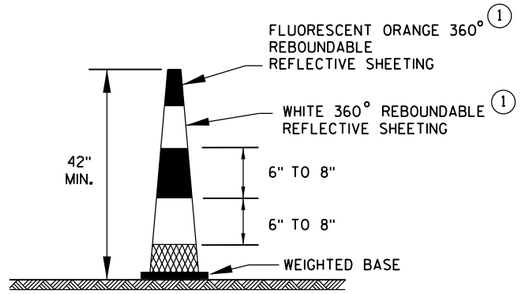
S.D.D. 15 C 8-19a



DRUM

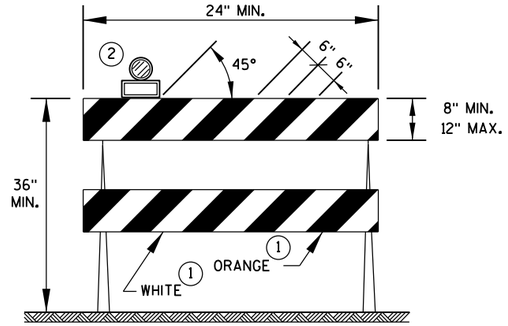


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

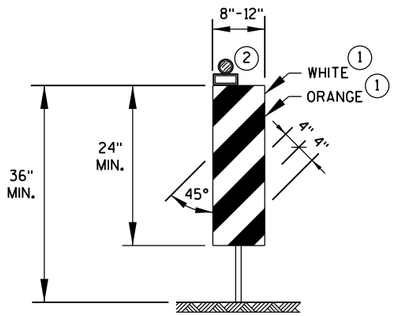
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



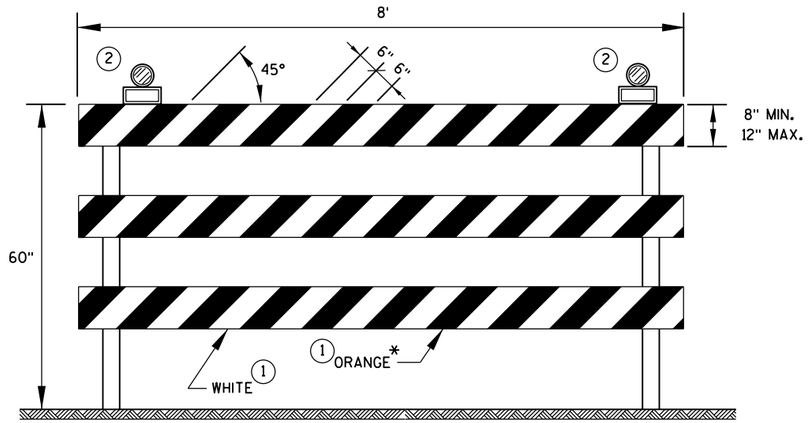
TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE 3 BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017 — DATE

/S/ Andrew Heidtke — WORK ZONE ENG

FHWA

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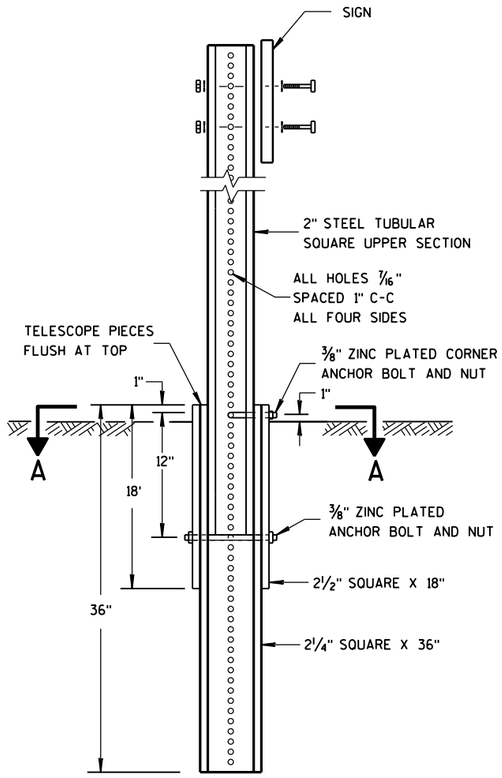
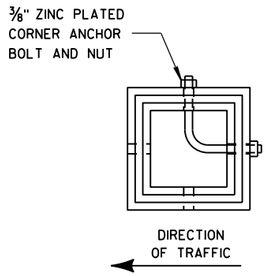
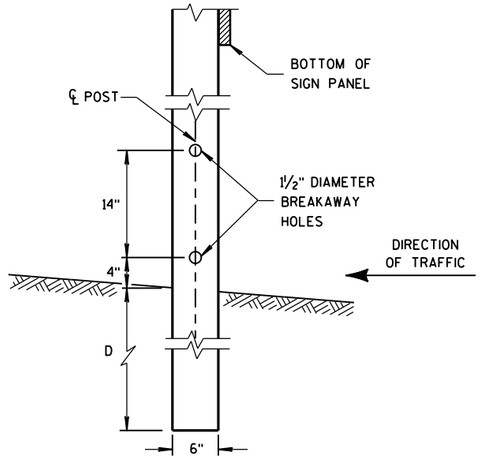
S.D.D. 15 C 11-7b



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



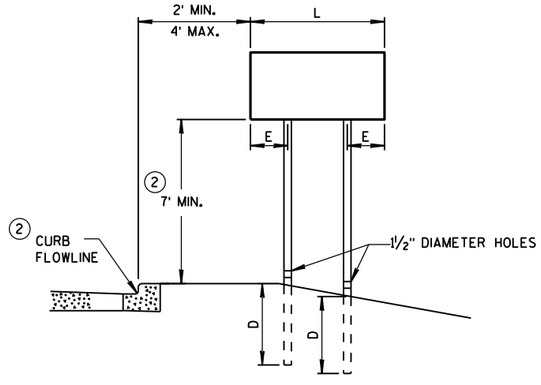
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

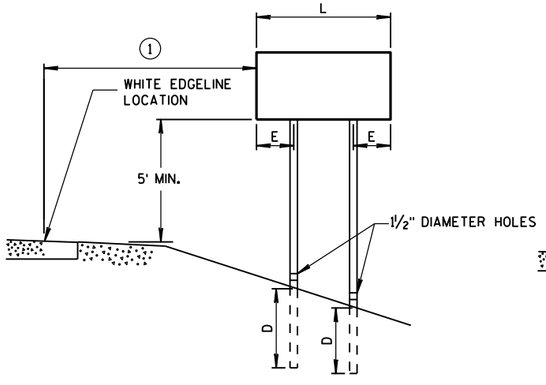
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

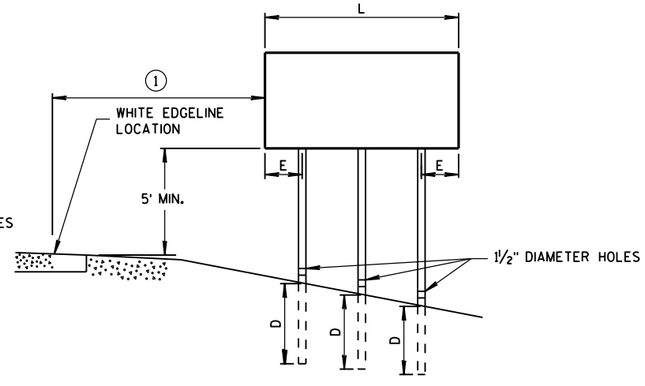
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK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

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



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

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

WOOD POST EMBEDMENT DEPTH

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

4" X 6" WOOD POST

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

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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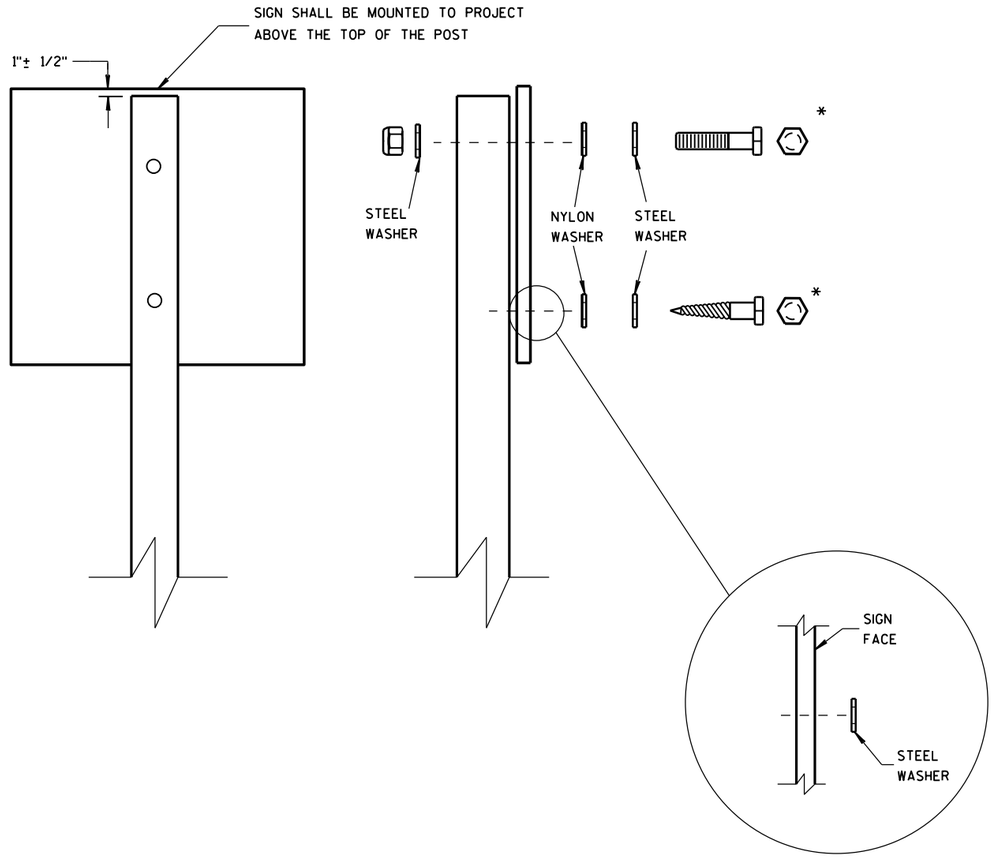
S.D.D. 15 D 38-2a



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

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

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

LAG SCREWS - 3/8" X 3"

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

SQUARE STEEL POSTS (2" x 2")

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

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

EARTHWORK PROJECT I.D. 3849-00-73 DIVISION 1

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.30	Mass Ordinate Note 8
9+00		15	0	0	0	0	0	0	0	0
9+42	42	11	0	25	17	0	39	17	51	-33
9+42	0	35	0	25	0	0	0	0	0	0
9+50	8	33	0	28	10	0	8	10	11	-1
9+90	40	33	0	28	49	0	41	59	65	-6
B-64-0200										
					76	0	89			

EARTHWORK PROJECT I.D. 3849-00-73 DIVISION 2

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.30	Mass Ordinate Note 8
B-64-0200										
10+12		51	0	28	0	0	0	0	0	0
10+50	38	51	0	28	72	0	39	72	51	21
10+71	21	51	0	18	40	0	14	111	69	42
10+71	0	27	0	18	0	0	0	111	69	42
11+00	29	10	0	0	11	0	0	122	69	53
					122	0	53			

9

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PROJECT NO: 3849-00-73 | HWY: HOSPITAL ROAD | COUNTY: WALWORTH | EARTHWORK | SHEET 27 E

FILE NAME : P:\9200S\9290S\9294\09294003\C3D\SHEETSPLAN\090101-EW BORDER.DWG
LAYOUT NAME - 090101-ew

PLOT DATE : 8/27/2018 3:59 PM PLOT BY : JASON DOLENS PLOT NAME :

840

830

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

8+50

840

830

10 FT

10 FT

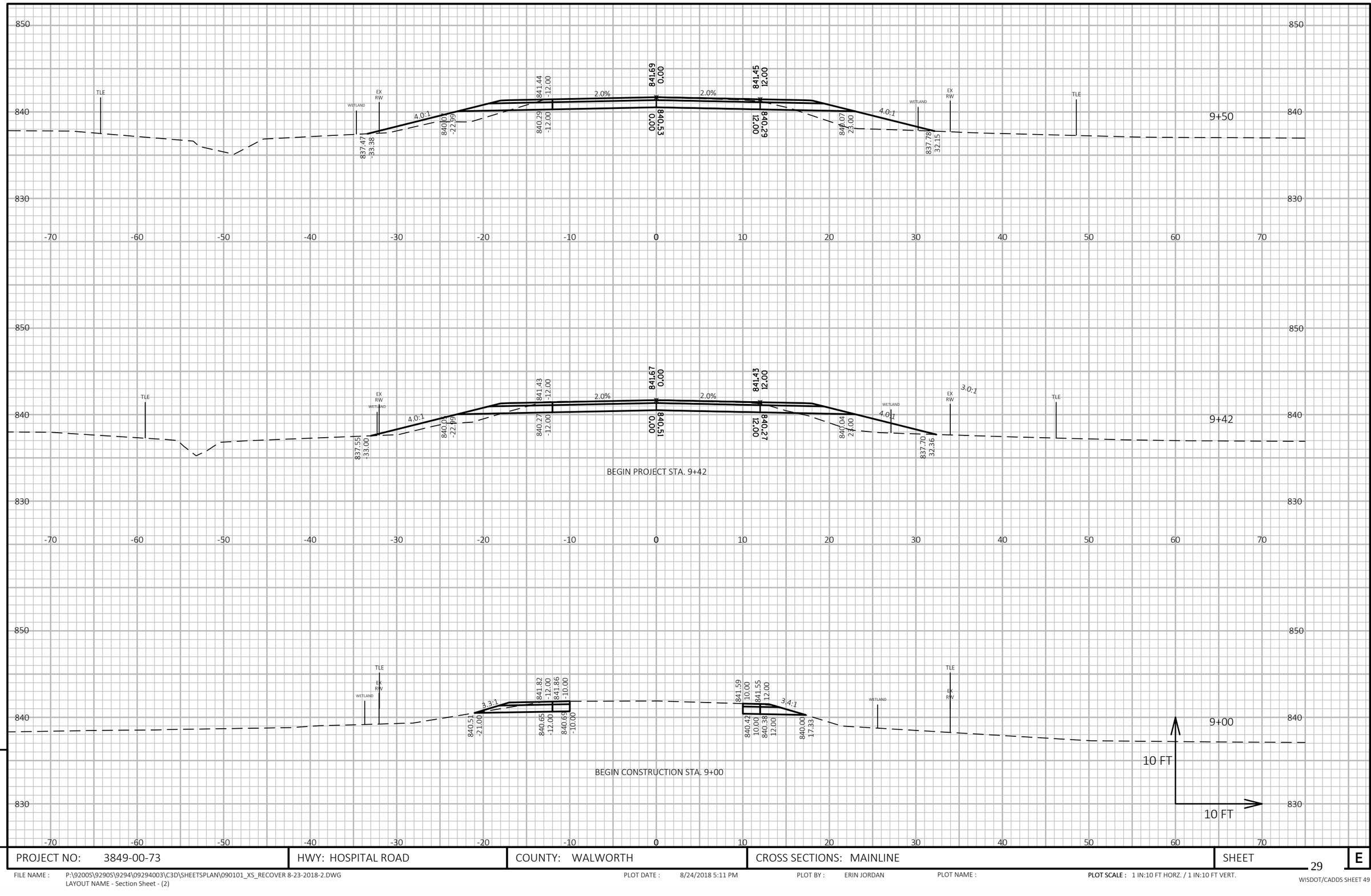
9

9

PROJECT NO: 3849-00-73	HWY: HOSPITAL ROAD	COUNTY: WALWORTH	CROSS SECTIONS: MAINLINE	SHEET 28	E

FILE NAME : P:\9200S\9290S\9294\09294003\C3D\SHEETSPLAN\090101_XS_RECOVER 8-23-2018-2.DWG
LAYOUT NAME - Section Sheet - (1)

PLOT DATE : 8/24/2018 5:11 PM PLOT BY : ERIN JORDAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

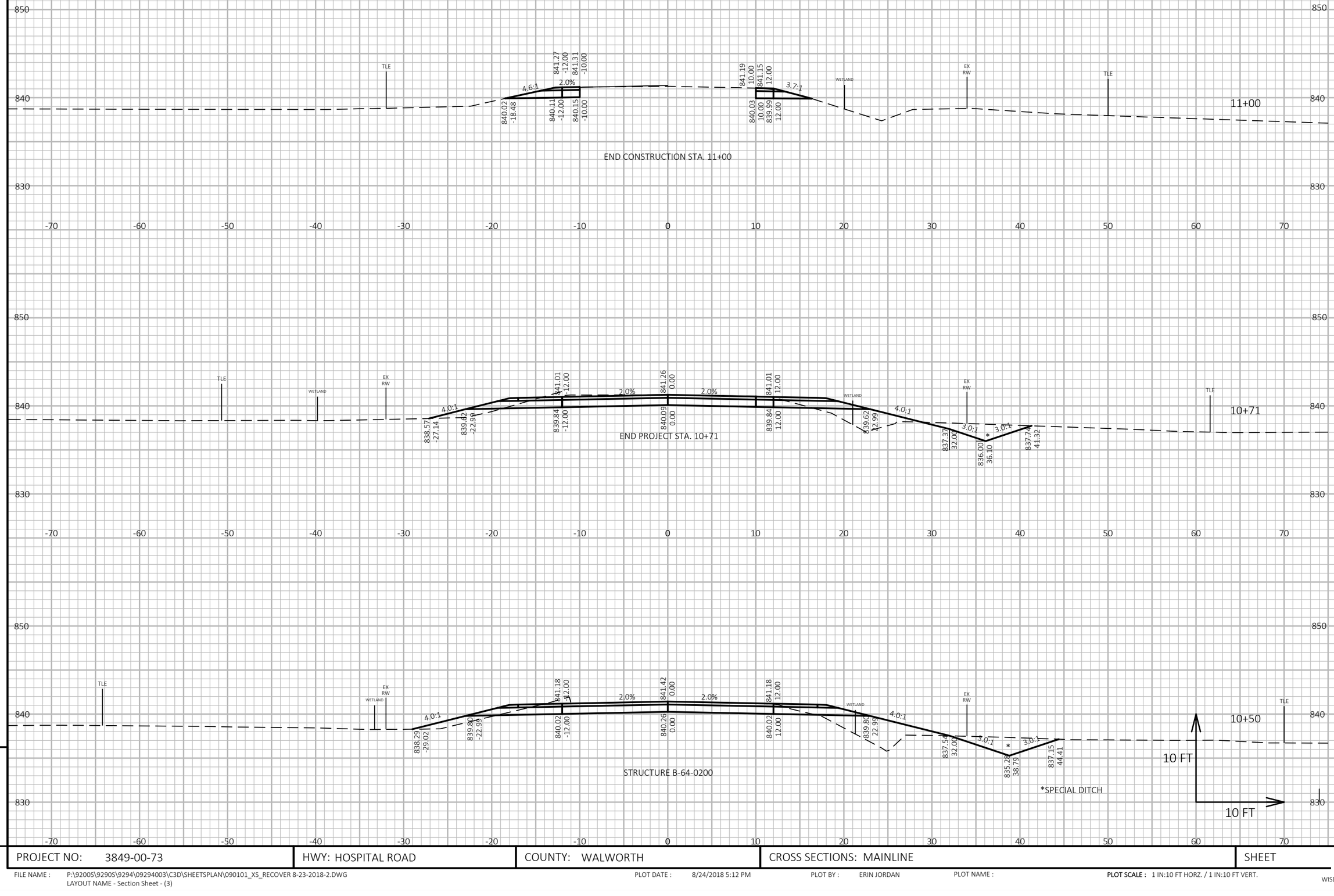


PROJECT NO: 3849-00-73	HWY: HOSPITAL ROAD	COUNTY: WALWORTH	CROSS SECTIONS: MAINLINE	SHEET 29	E

FILE NAME : P:\9200S\9290S\9294\09294003\C3D\SHEETSPLAN\090101_XS_RECOVER 8-23-2018-2.DWG
LAYOUT NAME - Section Sheet - (2)

PLOT DATE : 8/24/2018 5:11 PM PLOT BY : ERIN JORDAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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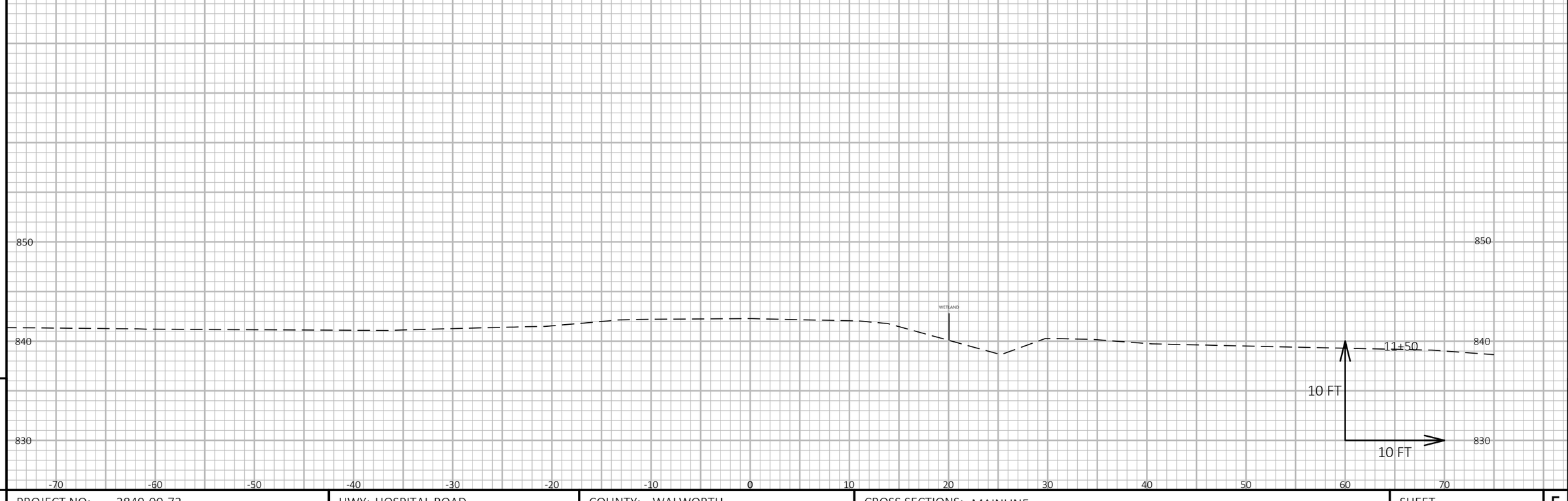
PROJECT NO: 3849-00-73	HWY: HOSPITAL ROAD	COUNTY: WALWORTH	CROSS SECTIONS: MAINLINE	SHEET 30	E

FILE NAME : P:\9200S\9290S\9294\09294003\C3D\SHEETSPLAN\090101_XS_RECOVER 8-23-2018-2.DWG
LAYOUT NAME - Section Sheet - (3)

PLOT DATE : 8/24/2018 5:12 PM PLOT BY : ERIN JORDAN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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9

PROJECT NO: 3849-00-73	HWY: HOSPITAL ROAD	COUNTY: WALWORTH	CROSS SECTIONS: MAINLINE	SHEET 31	E

FILE NAME : P:\9200S\9290S\9294\09294003\C3D\SHEETSPLAN\090101_XS_RECOVER 8-23-2018-2.DWG
LAYOUT NAME - Section Sheet - (4)

PLOT DATE : 8/24/2018 5:12 PM PLOT BY : ERIN JORDAN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

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