SUP

JANUARY 2022

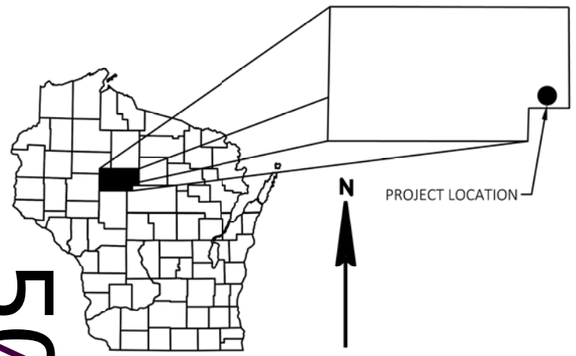
PROJECT ID: 9548-00-70

WITH:

COUNTY: TAYLOR

ORDER OF SHEETS

TOTAL SHEETS = 36



50

DESIGN DESIGNATION

A.A.D.T.	2022	=	58
A.A.D.T.	2042	=	61
D.H.V.		=	12
D.D.		=	62/38
T.		=	7.7%
DESIGN SPEED		=	25 MPH
ESALS		=	N/A

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

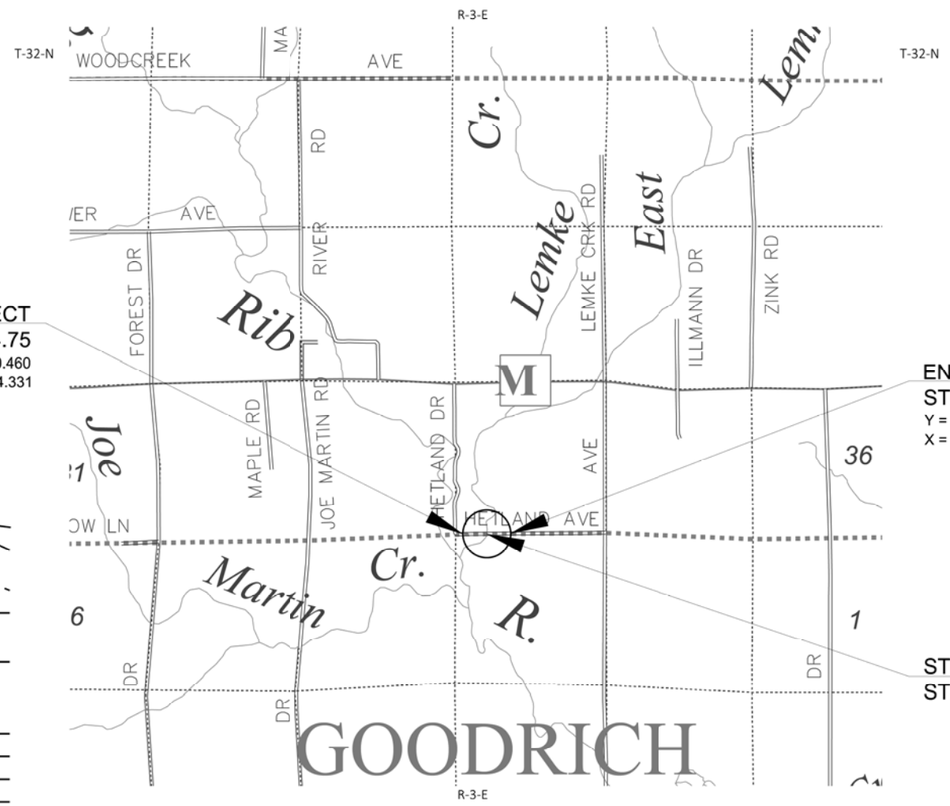
T GOODRICH, HETLAND AVE

LEMKE CREEK BRIDGE B-60-0153

LOCAL STREET
TAYLOR COUNTY

STATE PROJECT NUMBER
9548-00-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9548-00-70	WISC 2022142	1



BEGIN PROJECT
STA 9+74.75
Y = 364 900.460
X = 712 334.331

END PROJECT
STA 11+25.25
Y = 364 904.071
X = 712 484.783

STRUCTURE B-60-0153
STA 10+50

LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.0285 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), TAYLOR COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ACCEPTED FOR

TAYLOR COUNTY

7/21/2021 (Date) *Benjamin Stanfley* (Signature and Title of Official)
Highway Commissioner

ORIGINAL PLANS PREPARED BY

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

WISCONSIN
AARON B. PALMER
E-35695
RICHLAND CENTER, WI
PROFESSIONAL ENGINEER

DATE: 7/22/2021 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WESTBROOK ASSOCIATED ENGINEERS, INC.
Designer	WESTBROOK ASSOCIATED ENGINEERS, INC.
Project Manager	MATTHEW VAN NATTA, PE
Regional Examiner	TOU YANG, PE
Regional Supervisor	TYLER RONGSTAD, PE

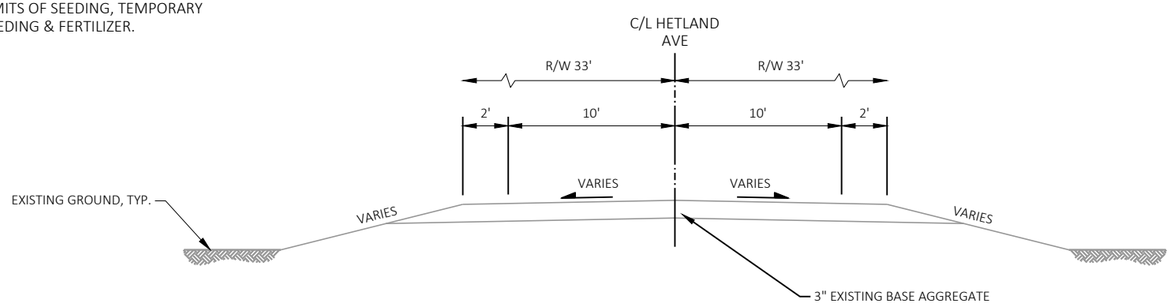
APPROVED FOR THE DEPARTMENT

DATE: 7/22/2021 Digitally signed by Matthew Van Natta Location: NWR Superior (Signature)

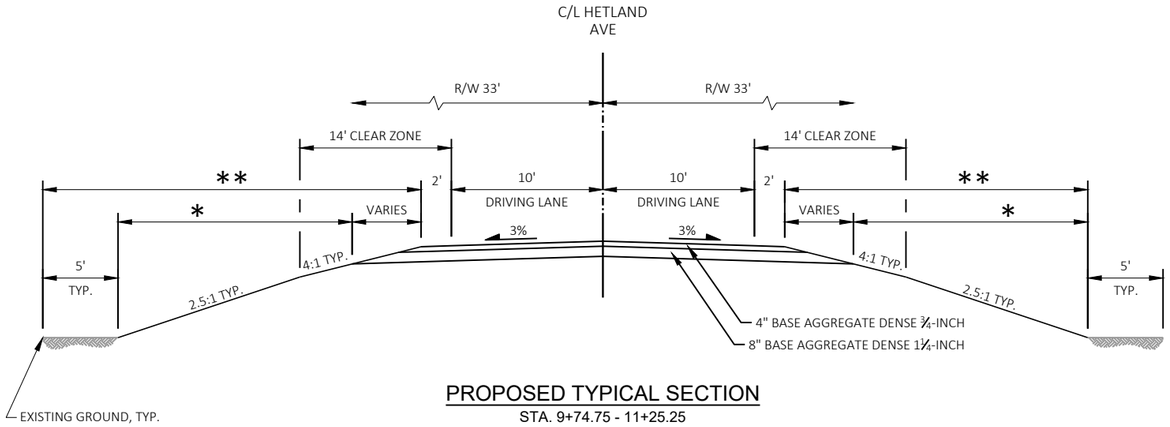
E

FILE NAME : G:\00-PROJECT FILES\2021\21007 T. GOODRICH, HETLAND AVE BRIDGE REPLACEMENT ID 9548-00-00\0-CAD\SHEETSPLAN\010101_TI.DWG PLOT DATE : 7/20/2021 11:26 AM PLOT BY : ERIK MEYER PLOT NAME :

* LIMITS OF SALVAGED TOPSOIL, MULCH, AND E-MAT.
** LIMITS OF SEEDING, TEMPORARY SEEDING & FERTILIZER.



EXISTING TYPICAL SECTION
STA. 9+74.75 - 11+25.25



PROPOSED TYPICAL SECTION
STA. 9+74.75 - 11+25.25

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 = 0.23 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.16 ACRES

GENERAL NOTES

EROSION CONTROL ITEMS TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER. SILT FENCE AND TURBIDITY BARRIER SHALL BE IN PLACE PRIOR TO CONSTRUCTION.

EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TEMPORARY SEEDED, MULCHED, AND E-MATTED AS DIRECTED BY THE ENGINEER.

SLOPES STEEPER THAN 2.5:1 REQUIRE EROSION MAT.

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

WETLANDS ARE PRESENT AT THE LOCATIONS SHOWN IN THE PLANS. DO NOT OPERATE MACHINERY OUTSIDE OF THE SLOPE INTERCEPTS IN THESE LOCATIONS.

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

D.O.T. MONUMENT IS TO BE FURNISHED BY THE STATE AND PLACED BY THE CONTRACTOR IN THE SAME WING THAT THE PROPOSED NAME PLATE WILL BE PLACED, AS DIRECTED BY THE ENGINEER.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), TAYLOR COUNTY, HORIZONTAL DATUM NAD83 (2011), ELEVATION DATUM NAVD88 (2012).

ALL SIGNS WITHIN THE PROJECT LIMITS SHALL BE REMOVED, SALVAGED, AND REPLACED. STACK SIGNS AND POSTS IN SECURE LOCATION AND NOTIFY AND COORDINATE WITH THE TAYLOR COUNTY HIGHWAY DEPARTMENT FOR PICKUP.

EXISTING BRIDGE GIRDERS SHALL BE REMOVED AND SALVAGED BY THE CONTRACTOR. NOTIFY AND COORDINATE WITH THE TAYLOR COUNTY HIGHWAY DEPARTMENT FOR PICKUP.

COMMUNICATIONS

TDS TELECOM
JEFF OLSON
171 PAOLI RD
VERONA, WI 53593
(608) 845-2219
jeffrey.olson@tdstelecom.com

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

ORDER OF SECTION 2 SHEETS
GENERAL NOTES & TYPICAL SECTIONS

CONTACTS

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

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

WDNR LIAISON
DNR NORTHERN REGION HEADQUARTERS
107 SUTLIFF
RHINELANDER, WI 54501

ATTN: WENDY HENNIGES
PH: (715) 365-8916
Wendy.Henniges@wisconsin.gov

COUNTY LIAISON
TAYLOR COUNTY HIGHWAY DEPARTMENT
208 N 8TH STREET
MEDFORD, WI 54451

ATTN: BEN STANFLEY, EIT
ATTO: (715) 785-8326
ben.stanfley@co.taylor.wi.us

STANDARD ABBREVIATIONS

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

Estimate Of Quantities

9548-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. P-60-0104	EACH	1.000	1.000
0008	205.0100	Excavation Common	CY	91.000	91.000
0010	206.1000	Excavation for Structures Bridges (structure) 01. B-60-0153	LS	1.000	1.000
0012	208.0100	Borrow	CY	99.000	99.000
0014	210.1500	Backfill Structure Type A	TON	314.000	314.000
0016	213.0100	Finishing Roadway (project) 01. 9548-00-70	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	72.000	72.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	148.000	148.000
0022	502.0100	Concrete Masonry Bridges	CY	163.000	163.000
0024	502.3200	Protective Surface Treatment	SY	214.000	214.000
0026	505.0400	Bar Steel Reinforcement HS Structures	LB	3,940.000	3,940.000
0028	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	24,710.000	24,710.000
0030	506.0105	Structural Steel Carbon	LB	500.000	500.000
0032	513.4061	Railing Tubular Type M	LF	105.000	105.000
0034	516.0500	Rubberized Membrane Waterproofing	SY	10.000	10.000
0036	550.0500	Pile Points	EACH	12.000	12.000
0038	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	420.000	420.000
0040	606.0300	Riprap Heavy	CY	93.000	93.000
0042	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	142.000	142.000
0044	618.0100	Maintenance And Repair of Haul Roads (project) 01. 9548-00-70	EACH	1.000	1.000
0046	619.1000	Mobilization	EACH	1.000	1.000
0048	624.0100	Water	MGAL	4.400	4.400
0050	625.0500	Salvaged Topsoil	SY	410.000	410.000
0052	627.0200	Mulching	SY	50.000	50.000
0054	628.1504	Silt Fence	LF	320.000	320.000
0056	628.1520	Silt Fence Maintenance	LF	510.000	510.000
0058	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0060	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0062	628.2008	Erosion Mat Urban Class I Type B	SY	410.000	410.000
0064	628.6005	Turbidity Barriers	SY	140.000	140.000
0066	629.0210	Fertilizer Type B	CWT	0.330	0.330
0068	630.0130	Seeding Mixture No. 30	LB	10.000	10.000
0070	630.0200	Seeding Temporary	LB	15.000	15.000
0072	630.0500	Seed Water	MGAL	11.100	11.100
0074	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0076	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0078	638.2602	Removing Signs Type II	EACH	6.000	6.000
0080	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0082	642.5001	Field Office Type B	EACH	1.000	1.000
0084	643.0420	Traffic Control Barricades Type III	DAY	1,872.000	1,872.000
0086	643.0705	Traffic Control Warning Lights Type A	DAY	3,744.000	3,744.000
0088	643.0900	Traffic Control Signs	DAY	1,872.000	1,872.000
0090	643.5000	Traffic Control	EACH	1.000	1.000
0092	645.0111	Geotextile Type DF Schedule A	SY	58.000	58.000
0094	645.0120	Geotextile Type HR	SY	170.000	170.000
0096	650.4500	Construction Staking Subgrade	LF	100.000	100.000
0098	650.5000	Construction Staking Base	LF	100.000	100.000

Estimate Of Quantities

9548-00-70

Line	Item	Item Description	Unit	Total	Qty
0100	650.6500	Construction Staking Structure Layout (structure) 01. B-60-0153	LS	1.000	1.000
0102	650.9910	Construction Staking Supplemental Control (project) 01. 9548-00-70	LS	1.000	1.000
0104	650.9920	Construction Staking Slope Stakes	LF	100.000	100.000
0106	715.0502	Incentive Strength Concrete Structures	DOL	972.000	972.000
0108	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 10+50	EACH	1.000	1.000
0110	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	300.000	300.000
0112	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	300.000	300.000

NOTE:
ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED.

3

CLEARING AND GRUBBING

STATION	-	STATION	LOCATION	201.0105 CLEARING (STA)	201.0205 GRUBBING (STA)
9+75	-	10+25	MAINLINE	1	1
10+75	-	11+25	MAINLINE	1	1
			TOTALS	2	2

EARTHWORK SUMMARY

STATION	-	STATION	LOCATION	COMMON EXCAVATION (1) (ITEM # 205.0100) CUT (2)	SALVGED / UNUSABLE PAVEMENT MATERIAL (3)	AVAILABLE MATERIAL (4)	UNEXPANDED FILL	EXPANDED FILL (5) FACTOR 1.25	MASS ORDINATE +/- (6)	BORROW (7) (ITEM # 208.0100)	COMMENT:
9+75	-	10+25	WEST APPROACH	47	0	47	89	111	-64	64	
10+75	-	11+25	EAST APPROACH	44	0	44	63	79	-35	35	
			TOTALS	91	0	91	152	190	-99	99	

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

3

BASE AGGREGATE DENSE

STATION	-	STATION	LOCATION	305.0110 3/4-INCH BASE (TON)	305.0120 1 1/4-INCH BASE (TON)	624.0100 WATER (MGAL)
9+75	-	10+25	MAINLINE	36	74	2.2
10+75	-	11+25	MAINLINE	36	74	2.2
			TOTALS	72	148	4.4

FINISHING ITEMS

STATION	-	STATION	LOCATION	625.0500 SALVAGED TOPSOIL (SY)	627.0200 MULCHING (SY)	628.2008 EROSION MAT URBAN CLASS I TYPE B (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0130 SEEDING MIX NO. 30 (LB)	630.0200 SEEDING TEMPORARY (LB)	630.0500 SEED WATER (MGAL)
9+75	-	10+25	MAINLINE, LT	78	---	78	0.06	2	3	2.1
9+75	-	10+25	MAINLINE, RT	83	---	83	0.07	2	3	2.3
10+75		11+25	MAINLINE, LT	85	---	85	0.06	2	3	2.2
10+75		11+25	MAINLINE, RT	83	---	83	0.07	2	3	2.3
			UNDISTRIBUTED	81	50	81	0.07	2	3	2.2
			TOTALS	410	50	410	0.33	10	15	11.1

SILT FENCE

STATION	-	STATION	LOCATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)
9+75	-	10+25	MAINLINE, LT	60	120
9+75	-	10+25	MAINLINE, RT	70	140
10+75	-	11+25	MAINLINE, LT	60	120
10+75	-	11+25	MAINLINE, RT	65	130
			UNDISTRIBUTED	65	---
			TOTALS	320	510

TURBIDITY BARRIER

LOCATION	628.6005 (SY)
WEST APPROACH	65
EAST APPROACH	75
TOTALS	140

PROJECT NO: 9548-00-70	HWY: HETLAND AVE	COUNTY: TAYLOR	MISCELLANEOUS QUANTITIES	SHEET 5	E

NOTE:
ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED.

3

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)
ID 7363-00-70	3	2
TOTALS	3	2

SIGNING

STATION	LOCATION	SIGN CODE	634.0612 POSTS WOOD 4X6-INCH X 12-FT (EACH)	637.2230 SIGNS TYPE II REFLECTIVE TYPE F (SF)	638.2602 REMOVING SIGN TYPE II (EACH)	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH)	NOTES
10+25	LT	W5-52L	1	3	1	1	BRIDGE HASH MARKS
10+25	RT	W5-52R	1	3	1	1	BRIDGE HASH MARKS
10+25	RT	---	---	---	1	---	LOAD POSTING
10+75	LT	W5-52R	1	3	1	1	BRIDGE HASH MARKS
10+75	LT	---	---	---	1	1	LOAD POSTING
10+75	RT	W5-52L	1	3	1	---	BRIDGE HASH MARKS
		TOTAL	4	12	6	4	-

3

TRAFFIC CONTROL

LOCATION	DURATION	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (NO.)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (DAY)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (NO.)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (DAY)	643.0900 TRAFFIC CONTROL SIGNS (NO.)	643.0900 TRAFFIC CONTROL SIGNS (DAY)	643.5000 TRAFFIC CONTROL (EACH)
PROJECT	---	---	---	---	---	---	---	1
WEST APPROACH	104	8	832	16	1664	8	832	---
EAST APPROACH	104	8	832	16	1664	8	832	---
UNDISTRIBUTED	104	2	208	4	416	2	208	---
	TOTAL	18	1872	36	3744	18	1872	1

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

CONSTRUCTION STAKING

STATION	-	STATION	LOCATION	650.4500 SUBGRADE (LF)	650.5000 BASE (LF)	650.6500 STRUCTURE LAYOUT 01. B-60-0153 (LS)	650.9910 SUPPLEMENTAL CONTROL (LS)	650.992 SLOPE STAKES (LF)
9+75	-	10+25	MAINLINE	50	50	---	---	50
10+75	-	11+25	MAINLINE	50	50	---	---	50
---	-	---	PROJECT	---	---	1	1	---
			TOTALS	100	100	1*	1	100

* CATEGORY 0020

PROJECT NO: 9548-00-70	HWY: HETLAND AVE	COUNTY: TAYLOR	MISCELLANEOUS QUANTITIES	SHEET 6	E

LEGEND
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- SILT FENCE
- TURBIDITY BARRIER
- STREAM EDGE
- EXISTING FENCE
- PROPOSED SIGN
- EXISTING SIGN

ROLAND JEPPESEN | ROLAND JEPPESEN | ROLAND JEPPESEN

STREAM EDGE
EXISTING STRUCTURE P-60-0104
DELINEATED WETLANDS, TYP.
LEMKE CREEK
PROPERTY LINE
TDS TELECOM
EXISTING R/W
CP 2
CP 4
BM 1
8+00 | 9+00 | HETLAND AVE (B.A.D.) | 10+00 | 11+00 | N88°37'30"E | 12+00
CP 1
BP: 7+50.00
N = 364885.067
E = 712109.646
F.E. (B.A.D.)
CP 3
EP: 13+00.00
N = 364908.264
E = 712659.487
EXISTING R/W
SLOPE INTERCEPT, TYP.
PROPOSED STRUCTURE B-60-0153
BEGIN CONSTRUCTION
STA 9+74.75
Y = 364 900.460
X = 712 334.331
MATCH EXISTING
END CONSTRUCTION
STA 11+25.25
Y = 364 904.071
X = 712 484.788
MATCH EXISTING
BRIAN STEEN | BRIAN STEEN | BOBS HUNTING CREW LLC | DEBBIE BYRD

CP 1
STA. 7+64.00, 29.11' RT
N - 364 866.300
E - 712 124.336
ELEV. - 1424.041
3/4" REBAR

CP 2
STA. 8+07.63, 30.35' LT
N - 364 926.788
E - 712 166.533
ELEV. - 1424.117
3/4" REBAR

CP 3
STA. 12+19.68, 25.25' RT
N - 364 881.096
E - 712 579.799
ELEV. - 1429.331
3/4" REBAR

CP 4
STA. 12+33.54, 27.29' LT
N - 364 933.955
E - 712 592.390
ELEV. - 1429.237
3/4" REBAR

BENCHMARKS			
NO.	STATION/OFFSET	ELEV.	DESCRIPTION
BM 1	10+45.02, 9.80' LT	1428.092	CHISELED X IN NORTH CURB

7+50.00 | 8+00.00 | 9+00.00 | 10+00.00 | 11+00.00 | 12+00.00 | 13+00.00 | 13+50.00

1430 | 1425 | 1420 | 1416

VCL = 39.10
K = 12.00

STA 9+74.75 EL 1426.27
VPC STA 10+20.24 VPC EL 1427.11
VPI STA 10+51.09 VPI EL 1427.68
VPT STA 10+81.93 VPT EL 1427.25
LP STA 11+01.44 LP EL 1427.09
STA 11+25.25 EL 1427.33

1.85% | -1.40% | 1.86%

EXISTING ℄ PROFILE
PROPOSED ℄ PROFILE
HIGH WATER (100) EL. = 1426.14
HP STA 10+55.33 HP EL 1427.44
VPC STA 10+84.64 VPC EL 1427.21
VPI STA 11+04.19 VPI EL 1426.94
VPT STA 11+23.74 VPT EL 1427.30
VCL = 61.69
K = 19.00
OBSERVED WATER EL. = 1419.41 (12/08/2020)
PROPOSED ℄ ELEVATION
EXISTING ℄ ELEVATION
APPROX. STREAMBED EL. = 1418.19

1425.31 | 1425.94 | 1426.63 | 1426.74 | 1418.54 | 1427.43 | 1427.06 | 1427.09 | 1427.82 | 1429.06

STA. 10+50
REMOVE EXISTING STRUCTURE P-60-0104
41.8-FT OVERALL LENGTH AND
19-FT CLEAR ROADWAY WIDTH
SINGLE SPAN STEEL DECK GIRDER BRIDGE

STA. 10+50
STRUCTURE B-60-0153 REQUIRED
50.5-FT OVERALL LENGTH AND
24-FT CLEAR ROADWAY WIDTH
SINGLE SPAN CONCRETE FLAT SLAB BRIDGE

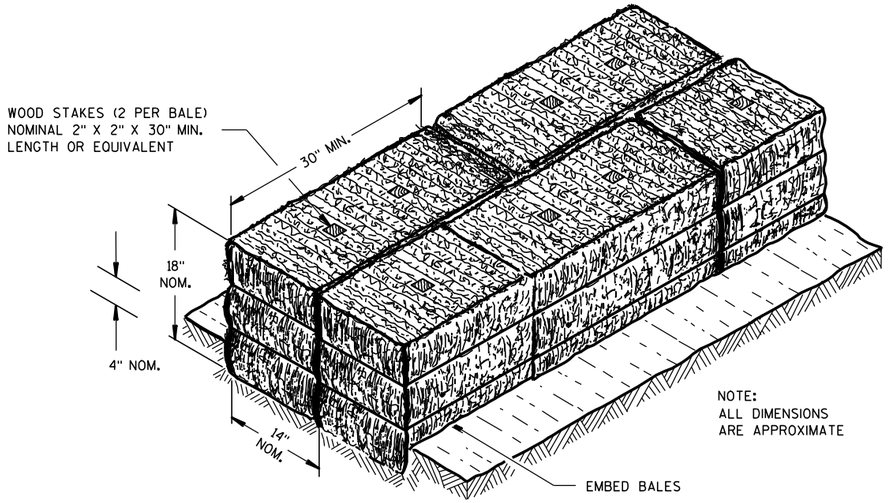
PROJECT NO: 9548-00-70	HWY: HETLAND AVE	COUNTY: TAYLOR	PLAN & PROFILE	SHEET 7	E

FILE NAME : G:\00-PROJECT FILES\2021\21007 T. GOODRICH, HETLAND AVE BRIDGE REPLACEMENT ID 9548-00-00\0-CAD\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 050101_pp
PLOT DATE : 7/21/2021 2:12 PM | PLOT BY : ERIK MEYER | PLOT NAME : | PLOT SCALE : 1 IN:40 FT

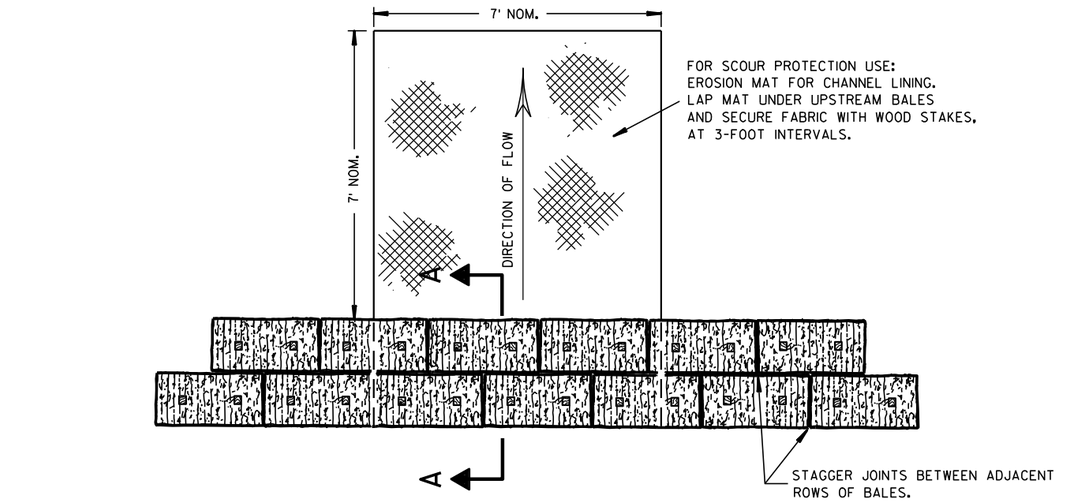
Standard Detail Drawing List

08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

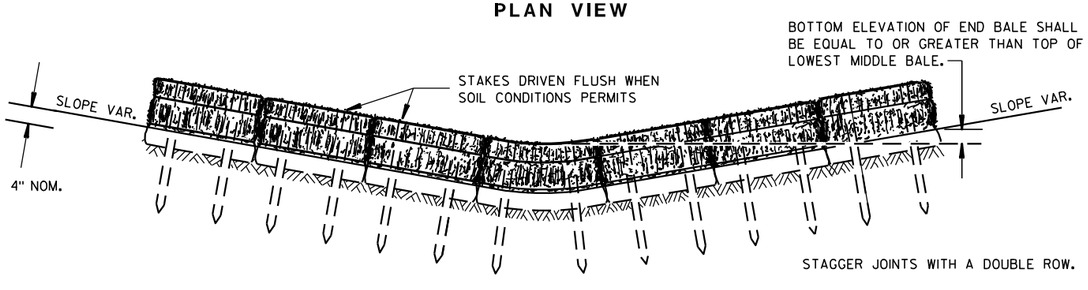
6



SECTION A-A



PLAN VIEW



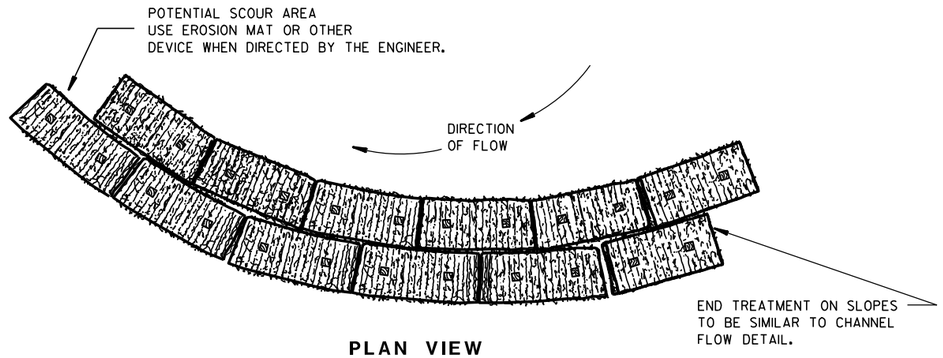
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

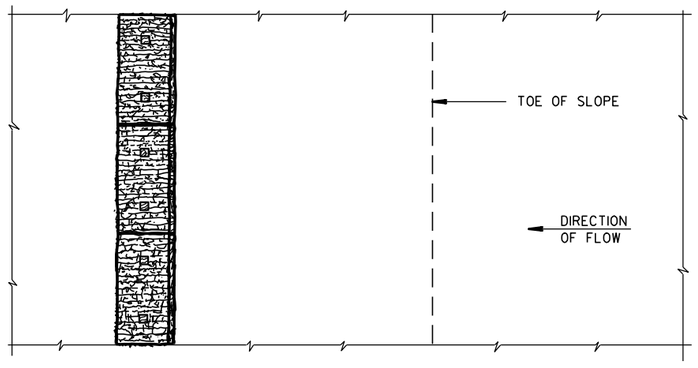
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

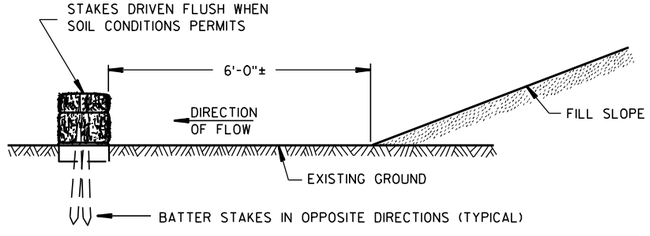


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

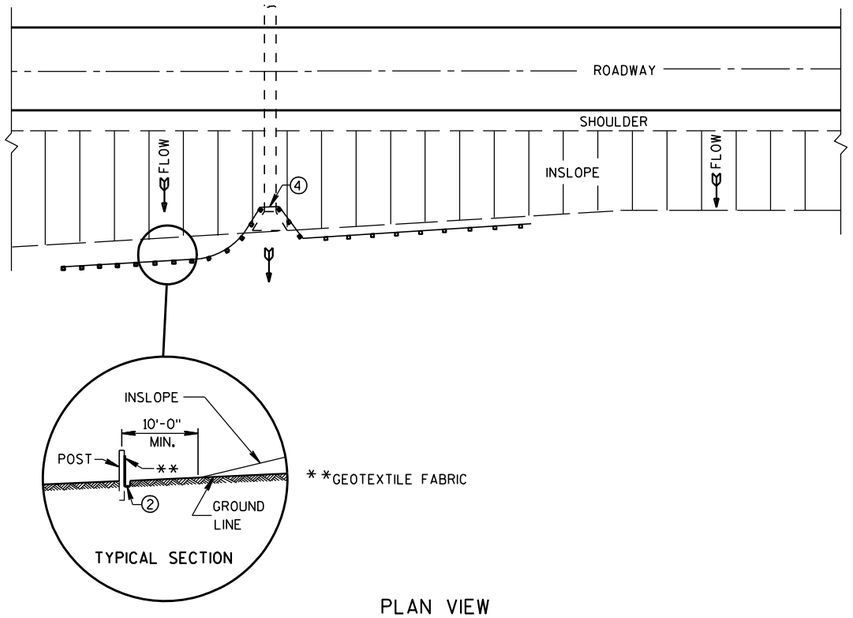
EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

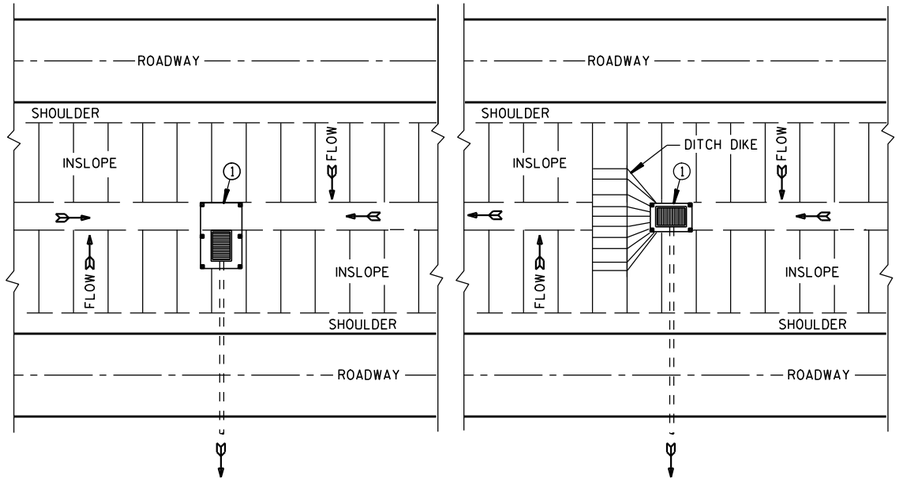
APPROVED
6/04/02 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



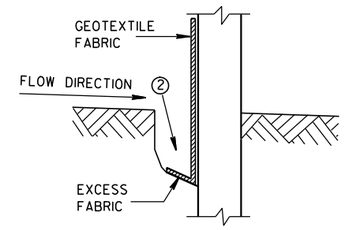
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

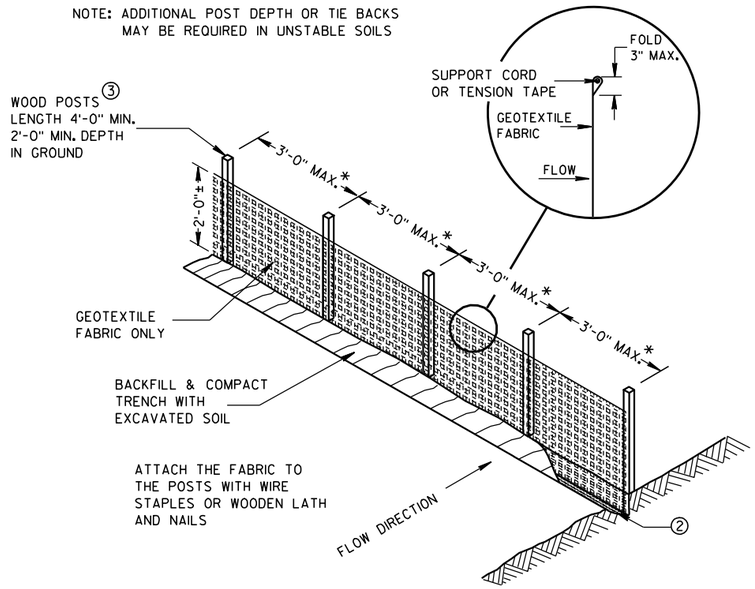
GENERAL NOTES

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

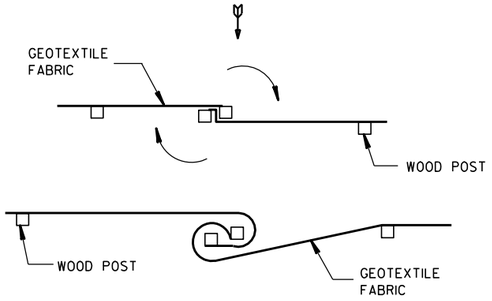
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



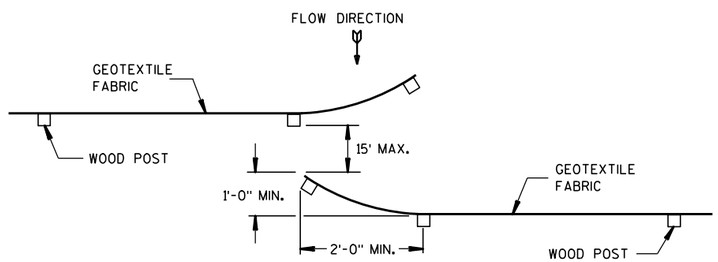
TRENCH DETAIL



SILT FENCE

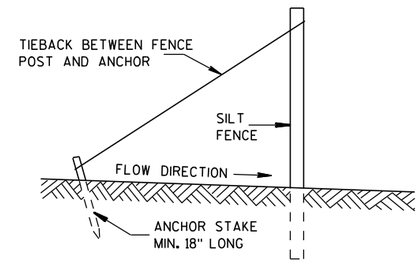


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

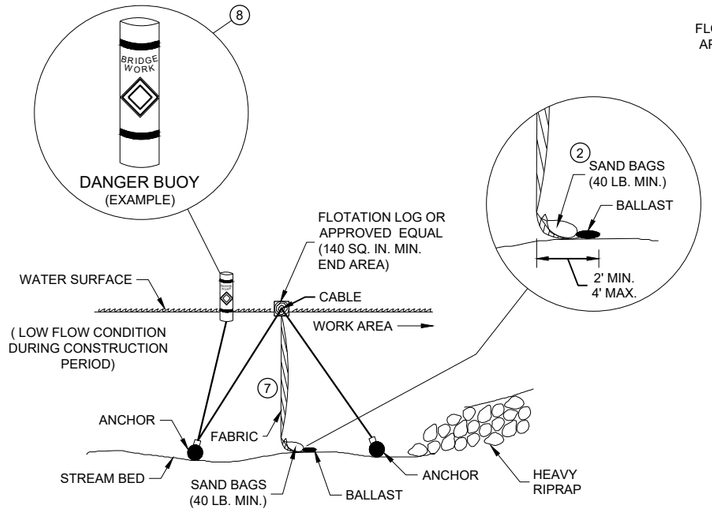
SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

6

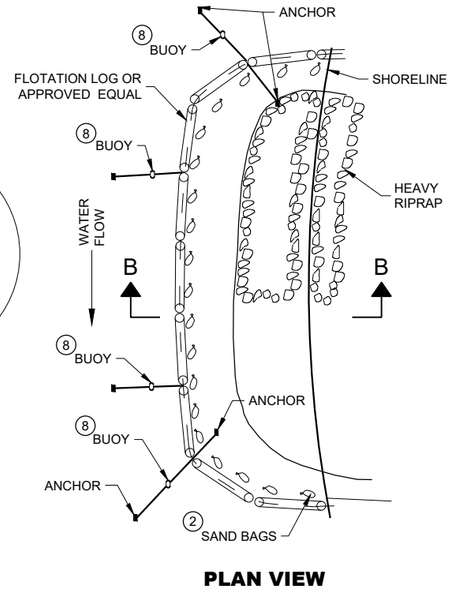
S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6

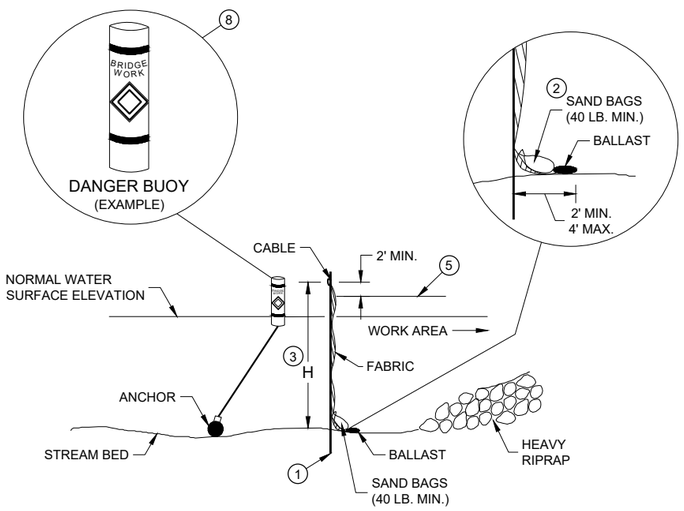


SECTION B - B

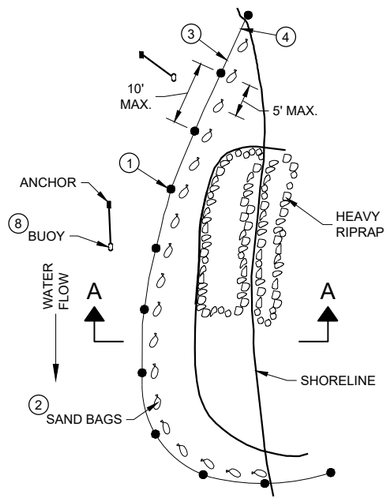


PLAN VIEW

TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A - A



PLAN VIEW

TURBIDITY BARRIER - STANDARD POST INSTALLATION

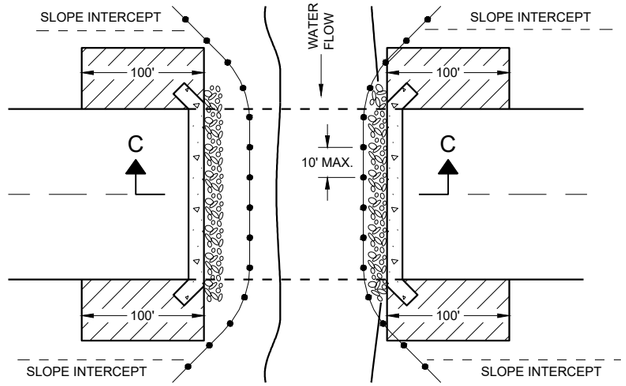
TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

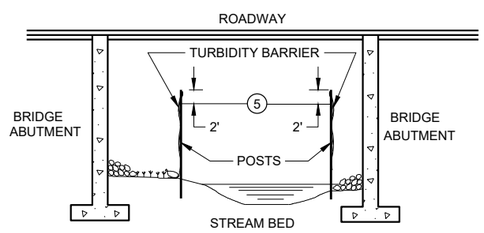
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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. SAND BAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
3. WHEN BARRIER HEIGHT "H" EXCEEDS 8 FEET, POST SPACING MAY NEED TO BE DECREASED.
4. IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
5. ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
6. FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.
7. ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
8. USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

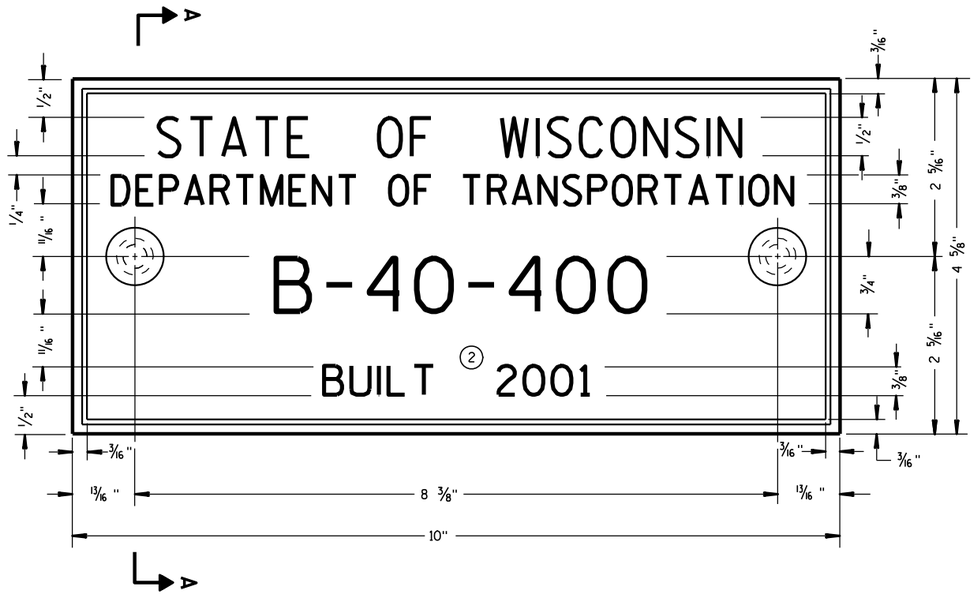
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6
SDD 08E11 - 02



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

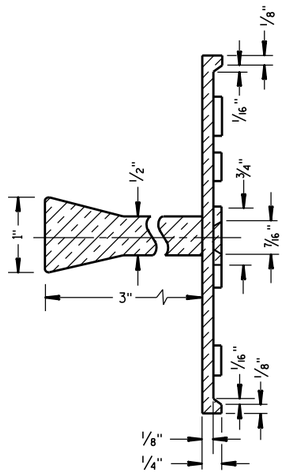
GENERAL NOTES

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

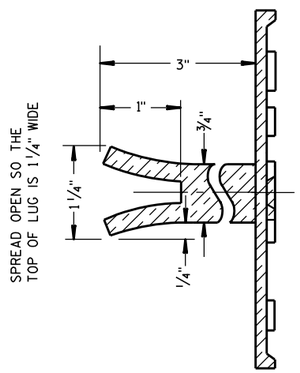
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

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



SECTION A-A



ALTERNATE LUG

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

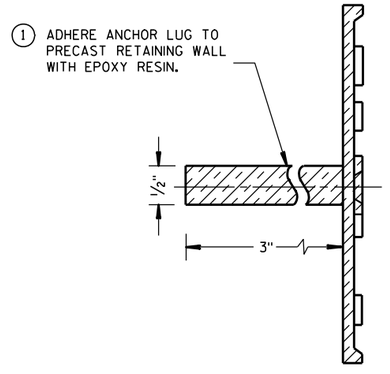
COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

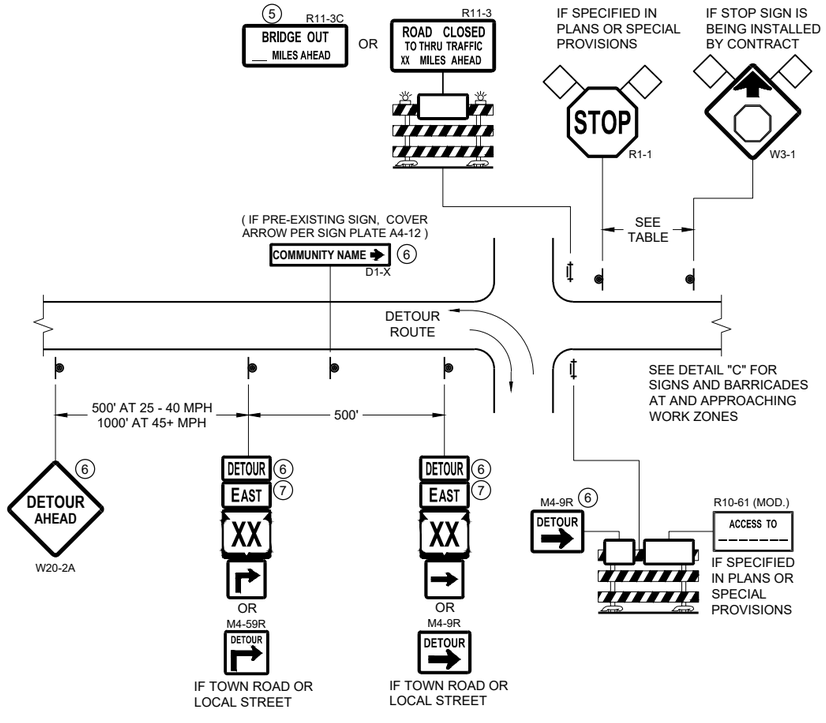
3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOPMENT ENGINEER

FHWA

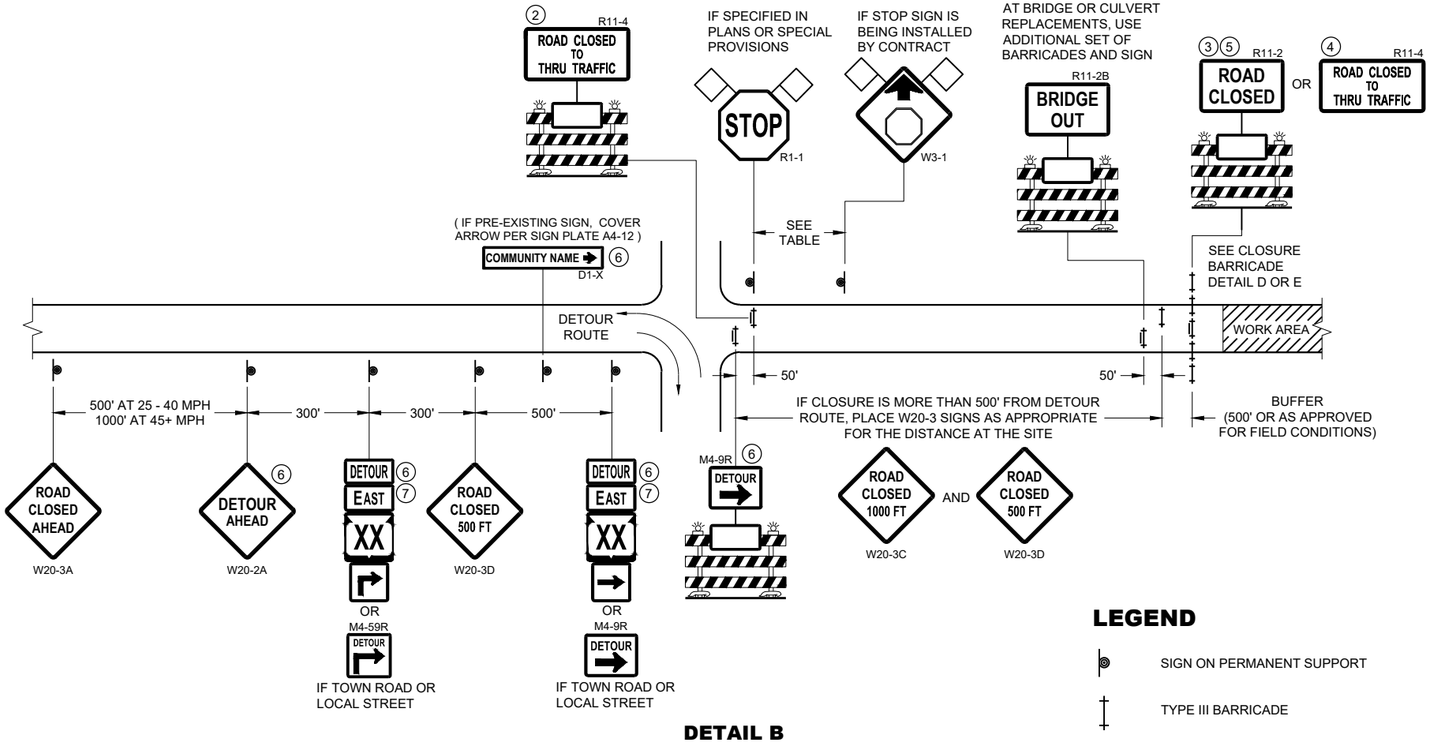
6

S.D.D. 12 A 3-10



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



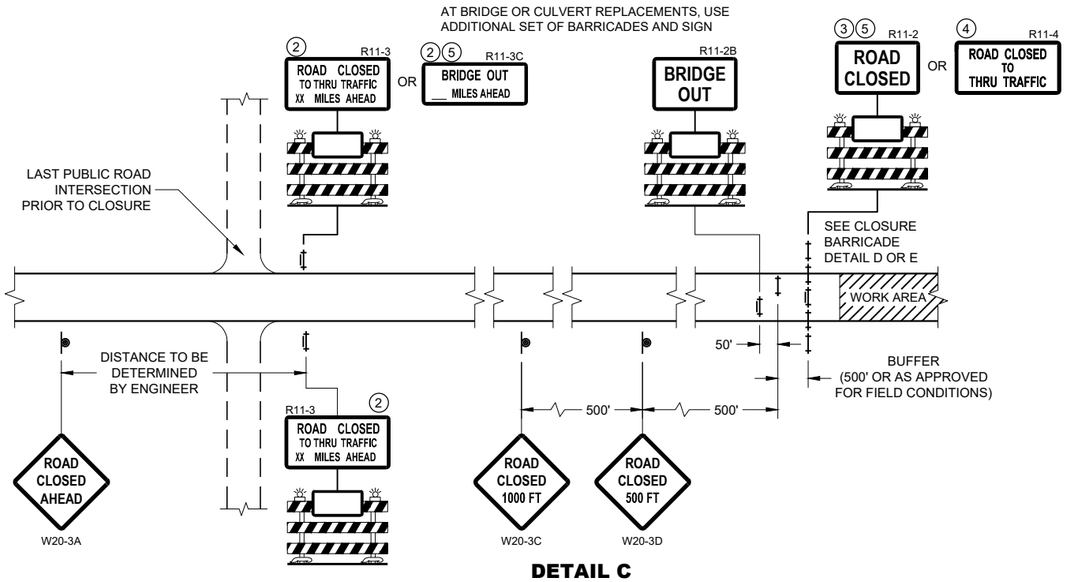
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

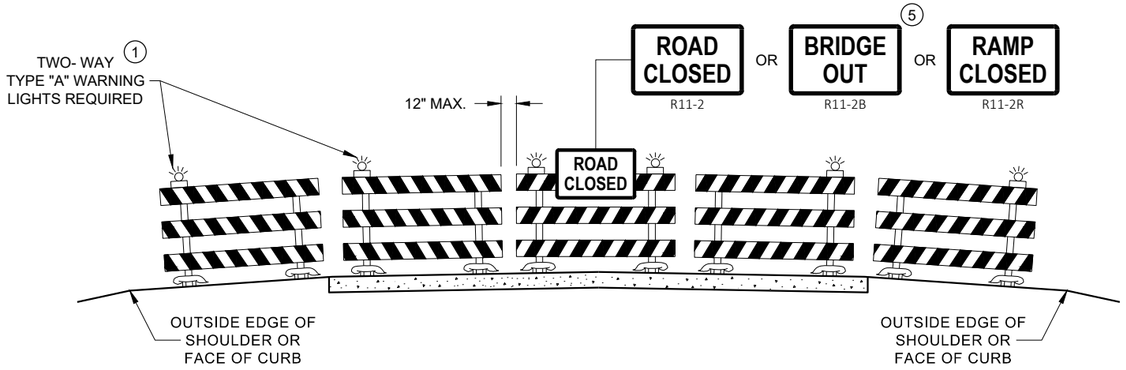
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

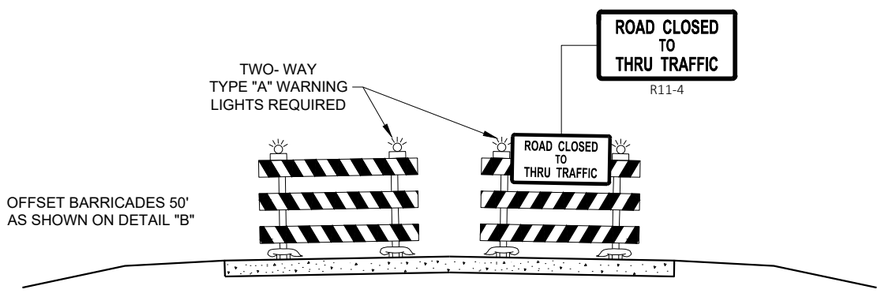
FHWA

SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

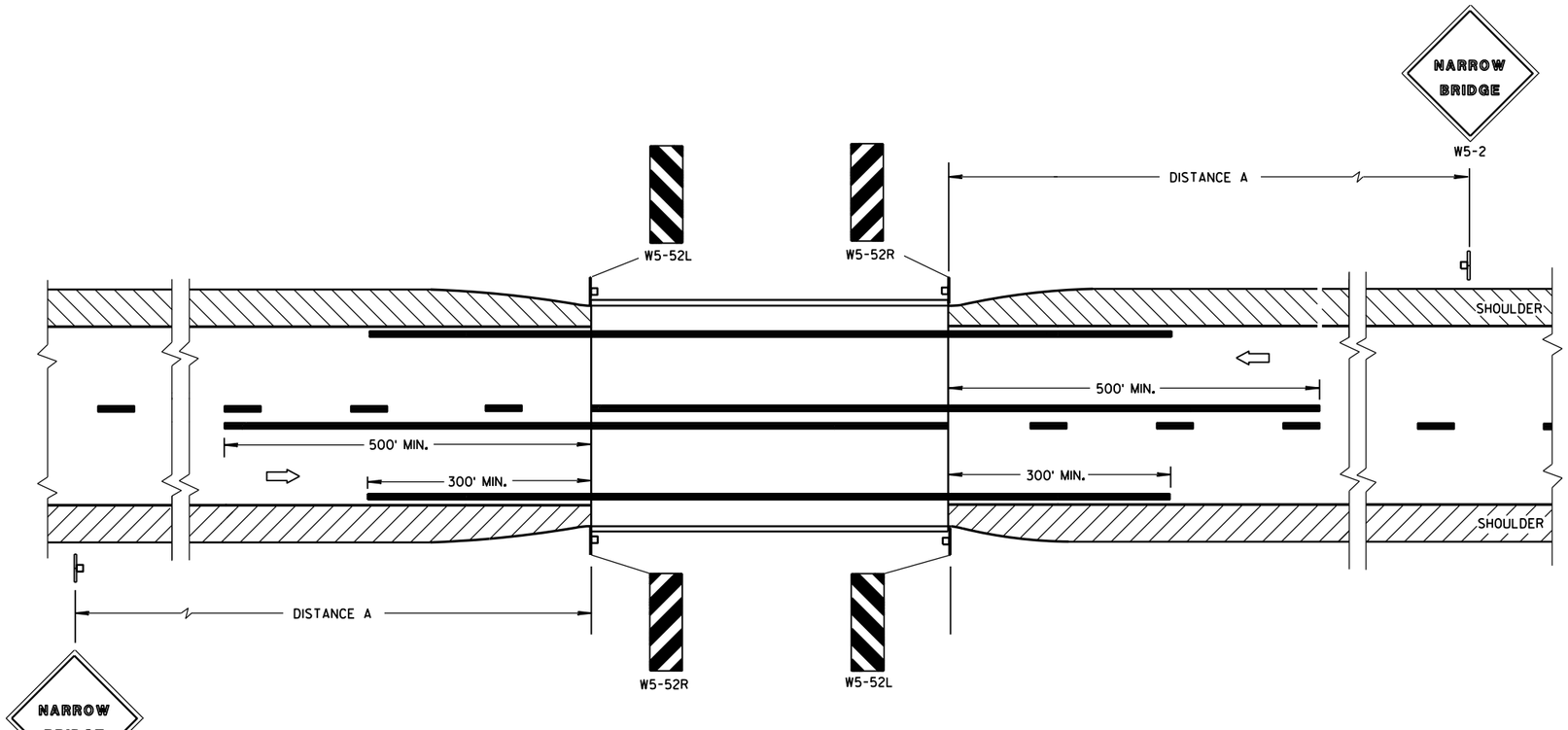
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 08b

6

SDD 15C02 - 08b



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

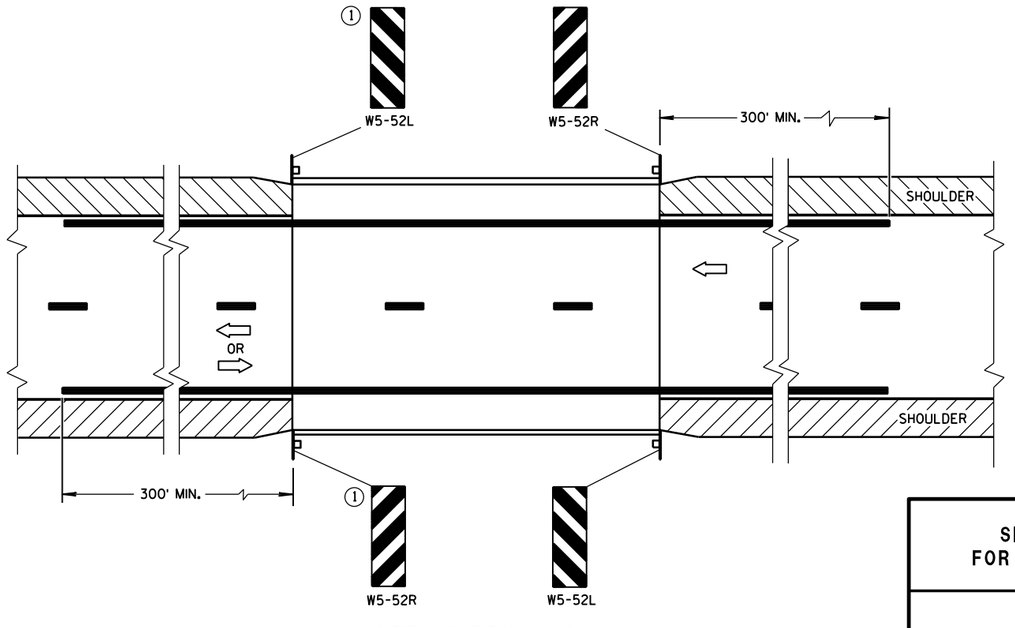
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

6

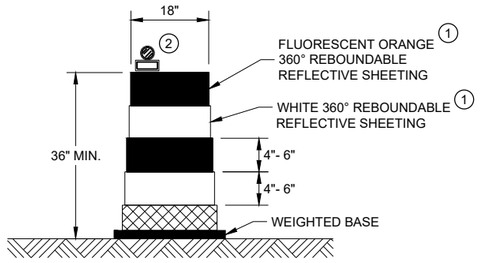
S.D.D. 15 C 6-9

6

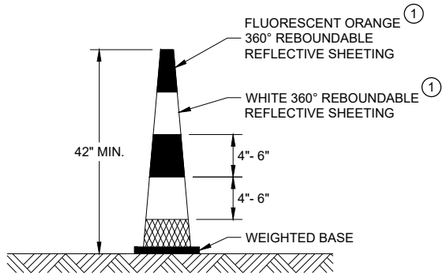
S.D.D. 15 C 6-9

GENERAL NOTES

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

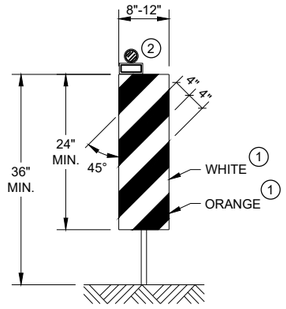


DRUM



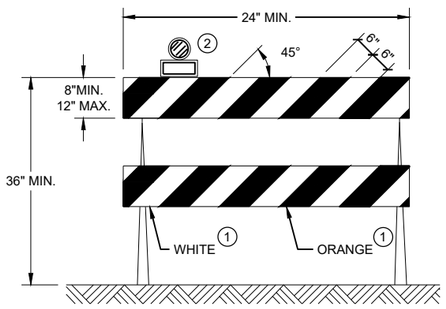
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



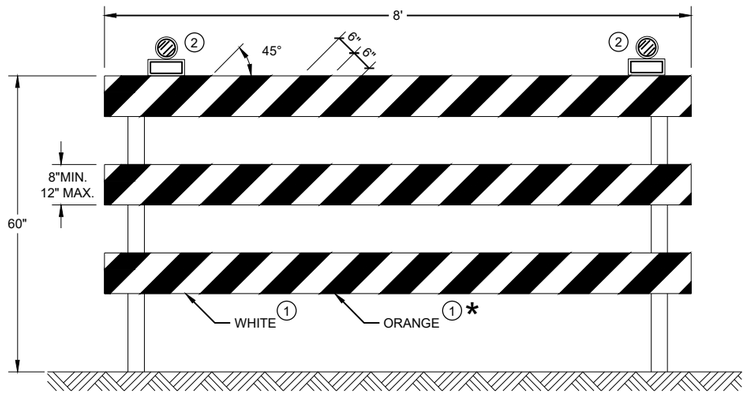
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

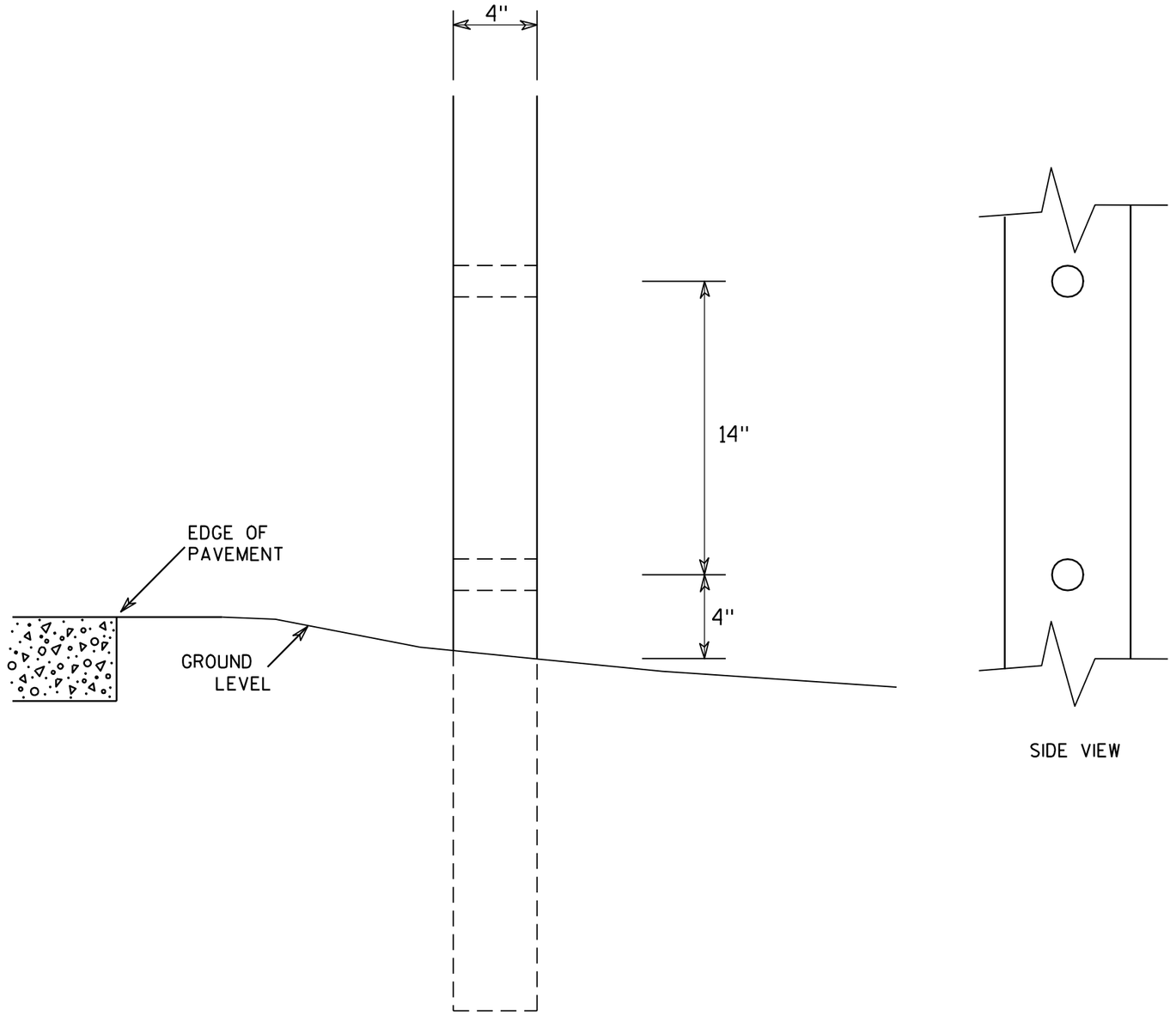
APPROVED
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15C11 - 09b

6

SDD 15C11 - 09b



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

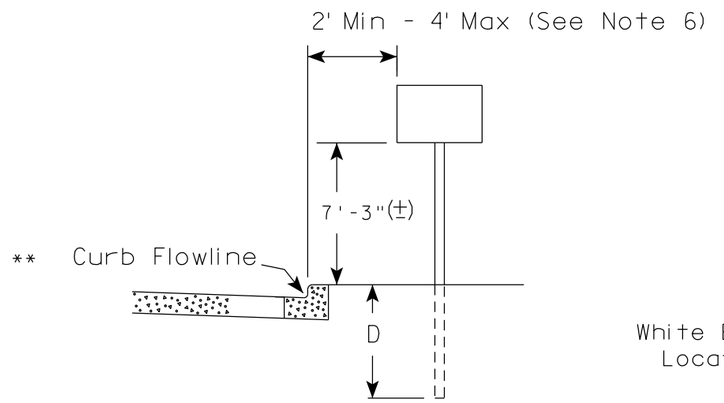
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

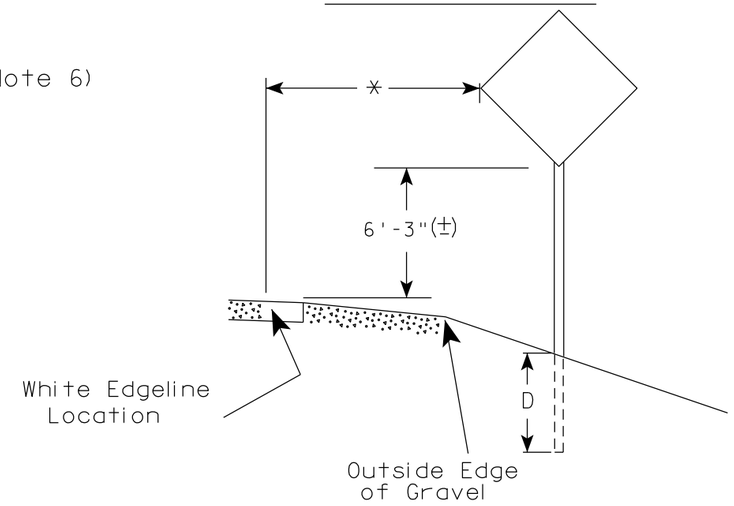
DATE 3/27/97 PLATE NO. A4-11.2

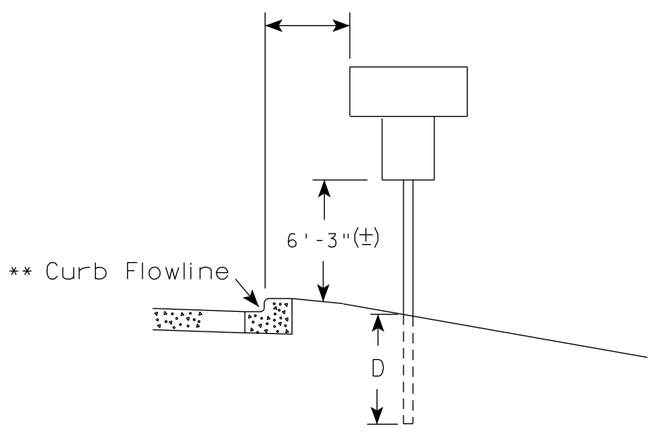
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 17	E

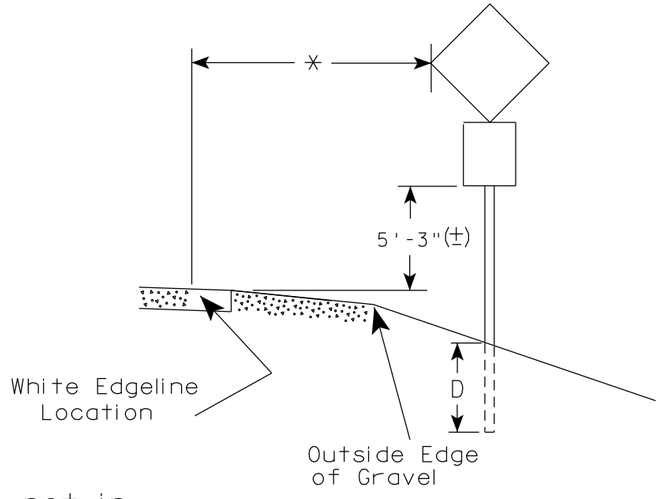
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

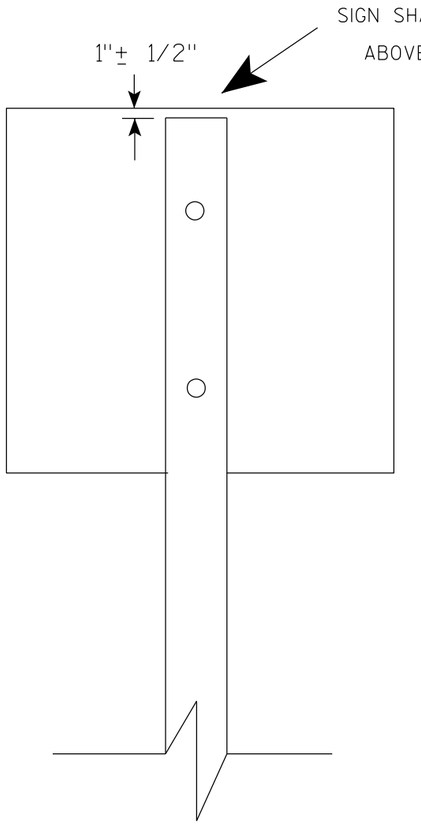
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

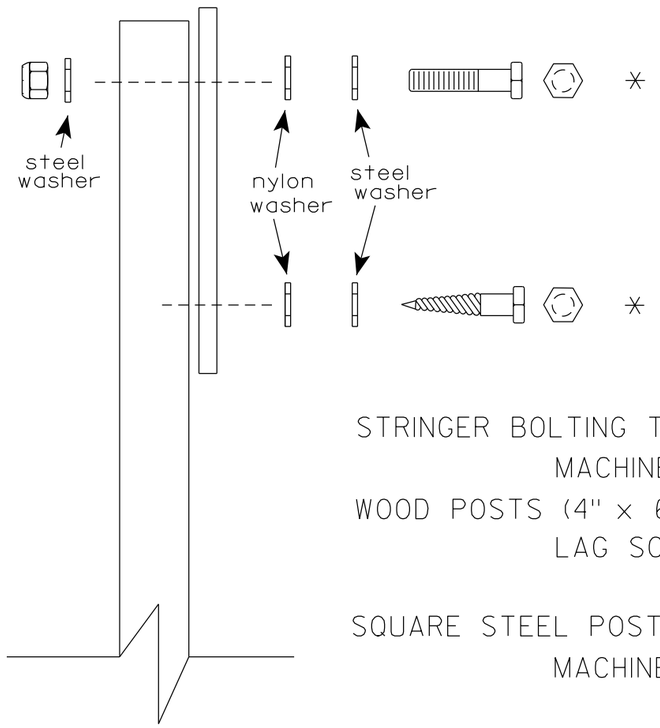
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 18	E





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

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

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

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

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

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

WOOD POSTS (4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

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

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

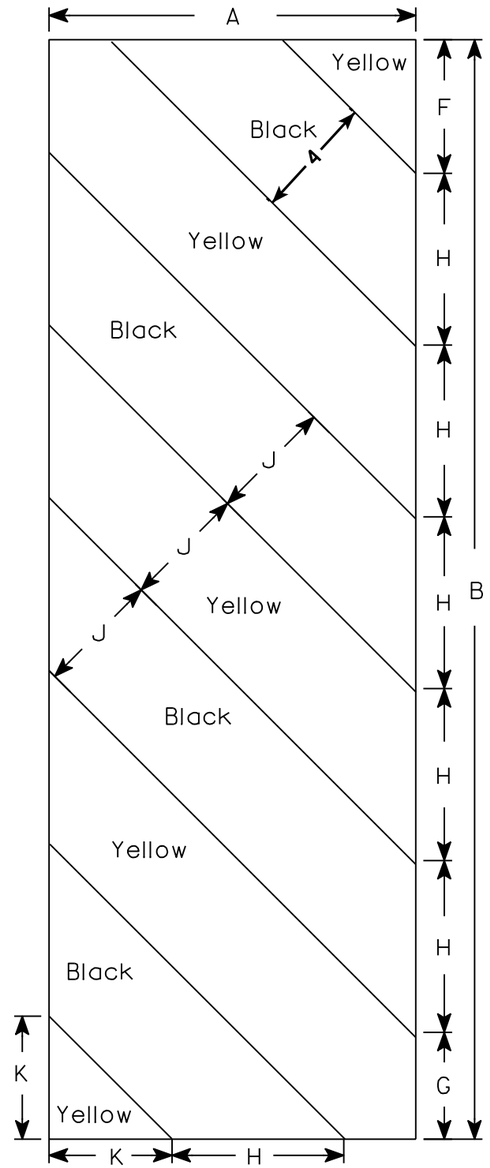
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

ATTACHMENT OF SIGNS TO POSTS

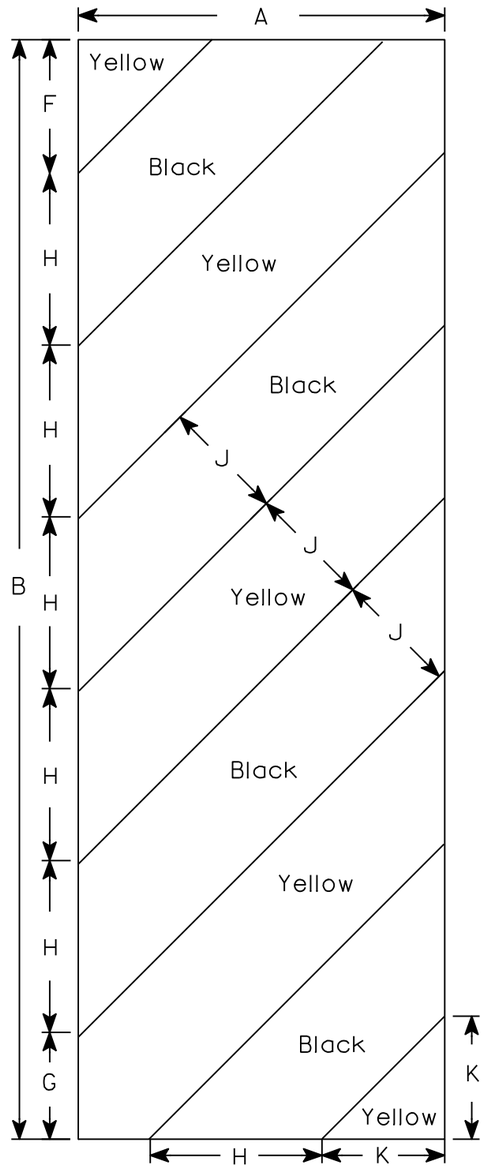
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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



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

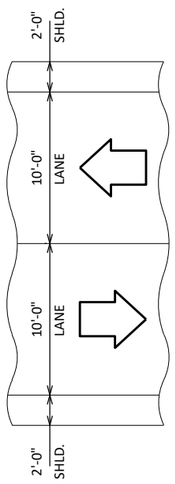
DATE 5/29/12 PLATE NO. W5-52.9

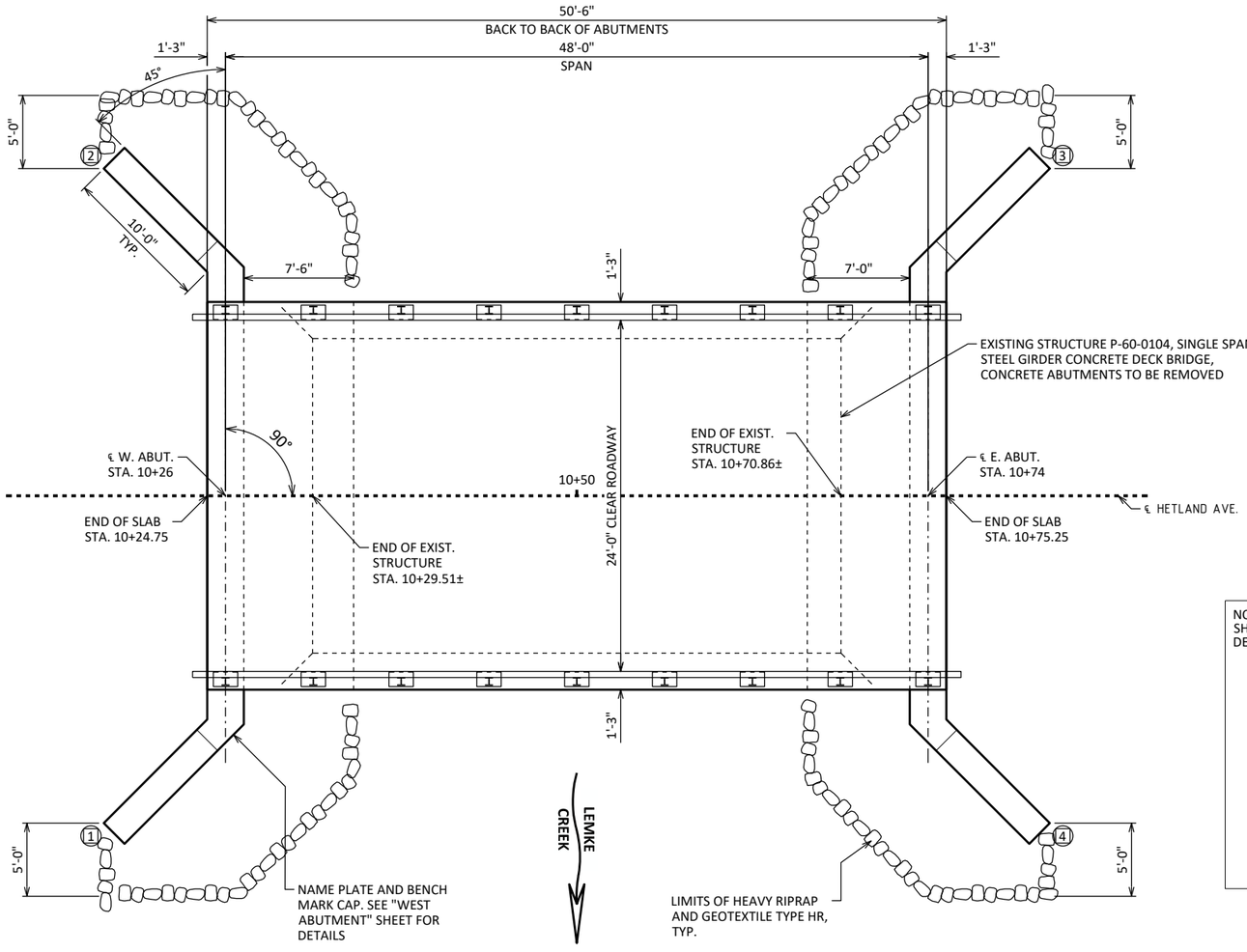
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 20 | E

STATE PROJECT NUMBER

9548-00-70

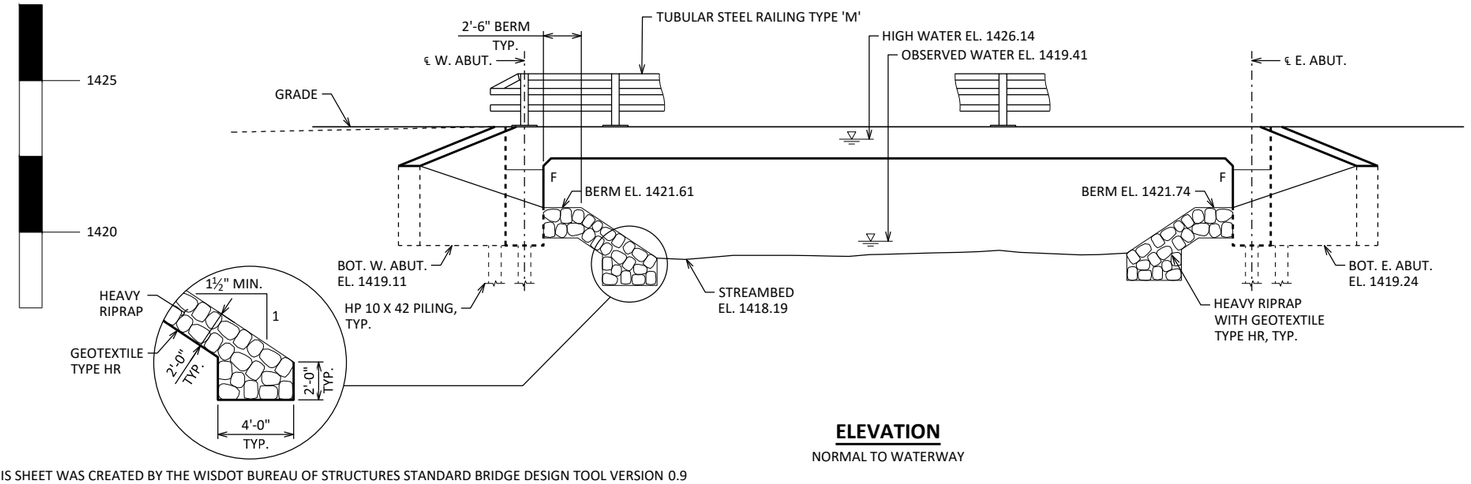
INDICATES WING NUMBER





PLAN

SINGLE SPAN FLAT SLAB

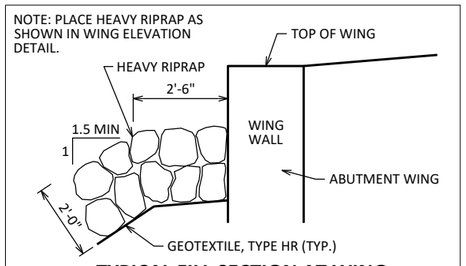


ELEVATION

NORMAL TO WATERWAY

THIS SHEET WAS CREATED BY THE WISDOT BUREAU OF STRUCTURES STANDARD BRIDGE DESIGN TOOL VERSION 0.9

NOTE: PLACE HEAVY RIPRAP AS SHOWN IN WING ELEVATION DETAIL.



TYPICAL FILL SECTION AT WING

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.11
OPERATING RATING FACTOR: RF = 1.44
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

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

MATERIAL PROPERTIES:

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

BAR STEEL REINFORCEMENT:
GRADE 60 — fy = 60,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 x 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS †† PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 35 FT LONG.

†† 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.

TRAFFIC VOLUME

HETLAND AVE
ADT = 61 (2042)
R.D.S. = 25 M.P.H.

HYDRAULIC DATA

100 YEAR FREQUENCY
Q_{100} = 1,880 C.F.S.
$VEL._{100}$ = 6.78 F.P.S.
$HW._{100}$ = EL. 1426.14
WATERWAY AREA = 215 SQ. FT.
DRAINAGE AREA = 20.2 SQ. MI.
ROADWAY OVERTOPPING = 1,180 C.F.S.
SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY
Q_2 = 502 C.F.S.
$VEL._2$ = 4.30 F.P.S.
$HW._2$ = EL. 1423.22

ROAD OVERTOPPING FREQUENCY
FREQUENCY = 14 YEARS
Q_{14} = 1,180 C.F.S.
$HW._{14}$ = EL. 1424.95

LIST OF DRAWINGS

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
(608) 261-0261

CONSULTANT CONTACT
ANDY KNUTSON, P.E., S.E.
(608) 588-7866

THESE PLANS ARE BASED UPON STANDARD BRIDGE PLANS DEVELOPED AND MAINTAINED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION THROUGH THE USE OF THE WISDOT STANDARD BRIDGE DESIGN TOOL. THE UNDERSIGNED DESIGNER CERTIFIES THE ACCURACY OF THE BRIDGE TYPE, SIZE AND LOCATION, HYDRAULICS AND FOUNDATION SUPPORT, AND INFORMATION IN THE PLANS THAT IS NOT PART OF THE STANDARD PLANS SUPPLIED BY THE DEPARTMENT. THE DESIGNER FURTHER CERTIFIES THAT USE OF THE STANDARD BRIDGE DESIGN TOOL FOR DEVELOPMENT OF THIS PLAN IS CONSISTENT WITH THE GUIDANCE PROVIDED IN THE WISDOT BRIDGE MANUAL.

NO.	DATE	REVISION	BY

WESTBROOK
Associated Engineers, Inc.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WI 53588
PHONE (608) 588-7866
FAX (608) 588-7954

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED SDR 09/14/21
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-60-153

HETLAND AVE OVER LEMKE CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
TAYLOR	GOODRICH

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JDO	CDS	JDO	ACK

GENERAL PLAN

SHEET 1 OF **10**
21

SCALE = NA

8

8

STATE PROJECT NUMBER

9548-00-70

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES B-60-0153" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

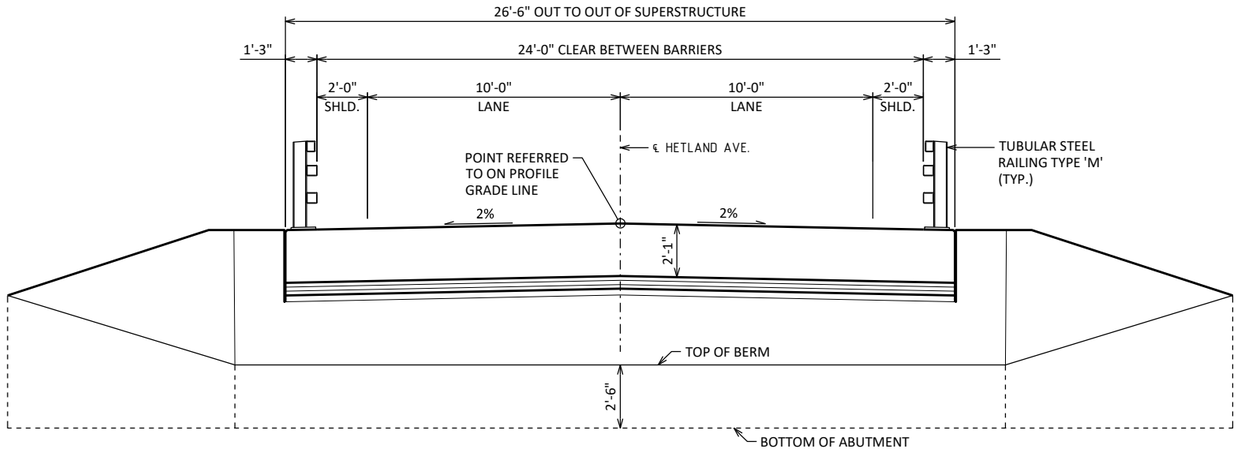
EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

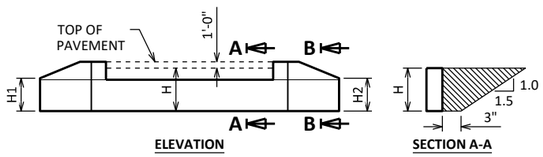
THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

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

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

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO ENTIRE EXPOSED TOP OF SLAB, INCLUDING THE SLAB EDGE AND 1'-0" UNDER THE SLAB, THE TOP AND EXTERIOR EXPOSED FACE OF WINGS AND FRONT FACE OF ABUTMENT TO 1'-0" PAST THE EDGE OF SLAB.



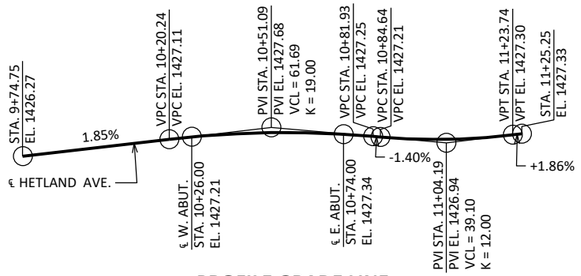


ABUTMENT BACKFILL DIAGRAM

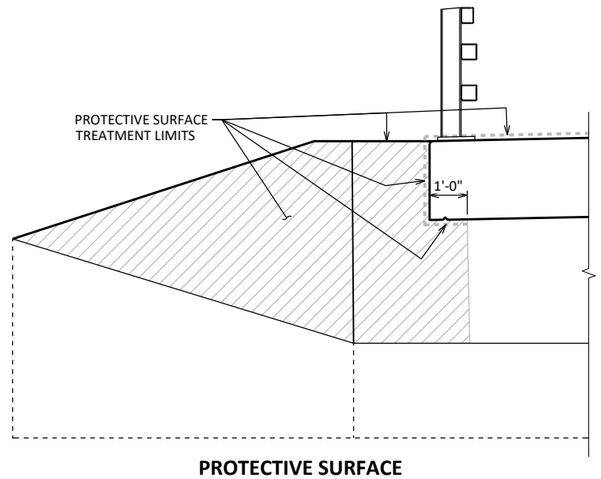
L = ABUTMENT BODY LENGTH AT BACKFACE (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
H1 = WING 1 HEIGHT AT TIP (FT)
H2 = WING 2 HEIGHT AT TIP (FT)
W = WING LENGTH (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H) + (3')(0.5)(H1+H2+H+H)(W)
V_{CY} = V_{CF}(EF)/27
V_{TON} = V_{CY}(2.0)

CROSS SECTION THRU ROADWAY

LOOKING EAST
(PILING NOT SHOWN FOR CLARITY)



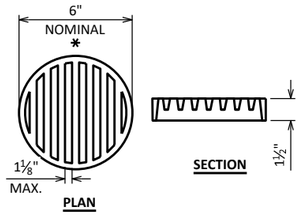
PROFILE GRADE LINE



PROTECTIVE SURFACE TREATMENT DETAILS

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
BM #1	10+45.03	CHISELED "X", 9.80' LT.	1428.09



RODENT SHIELD DETAIL

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

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

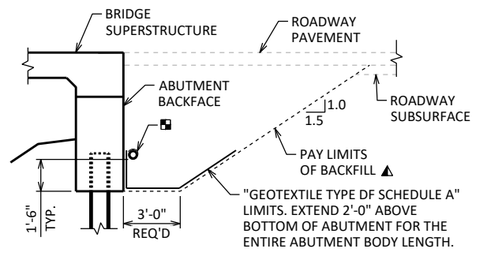
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X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

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM DESCRITION	UNIT	SUPER	W. ABUT.	E. ABUT.	TOTALS
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS P-60-0104	EACH	---	---	---	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-60-0153	LS	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	---	157	157	314
502.0100	CONCRETE MASONRY BRIDGES	CY	107	28	28	163
502.3200	PROTECTIVE SURFACE TREATMENT	SY	180	17	17	214
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	1,970	1,970	3,940
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	21,470	1,620	1,620	24,710
506.0105	STRUCTURAL STEEL CARBON	LB	500	---	---	500*
513.4061	RAILING TUBULAR TYPE M	LF	105	---	---	105
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	5	5	10
550.0500	PILE POINTS	EACH	---	6	6	12
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	---	210	210	420
606.0300	RIPRAP HEAVY	CY	---	48	45	93
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	71	71	142
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	---	29	29	58
645.0120	GEOTEXTILE TYPE HR	SY	---	87	83	170
	NON-BID ITEMS					
	FILLER	SIZE	---	---	---	½", ¾"

*REQUIRED FOR TWO PROTECTION ANGLE RUNNING FULL WIDTH OF BRIDGE DECK.

THIS SHEET WAS CREATED BY THE WISDOT BUREAU OF STRUCTURES STANDARD BRIDGE DESIGN TOOL VERSION 0.9



TYPICAL SECTION THRU ABUTMENT

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

▪ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-60-153

DRAWN BY JDO | PLANS CK'D ACK

CROSS SECTION & QUANTITIES

SHEET 2
22

SCALE = NA

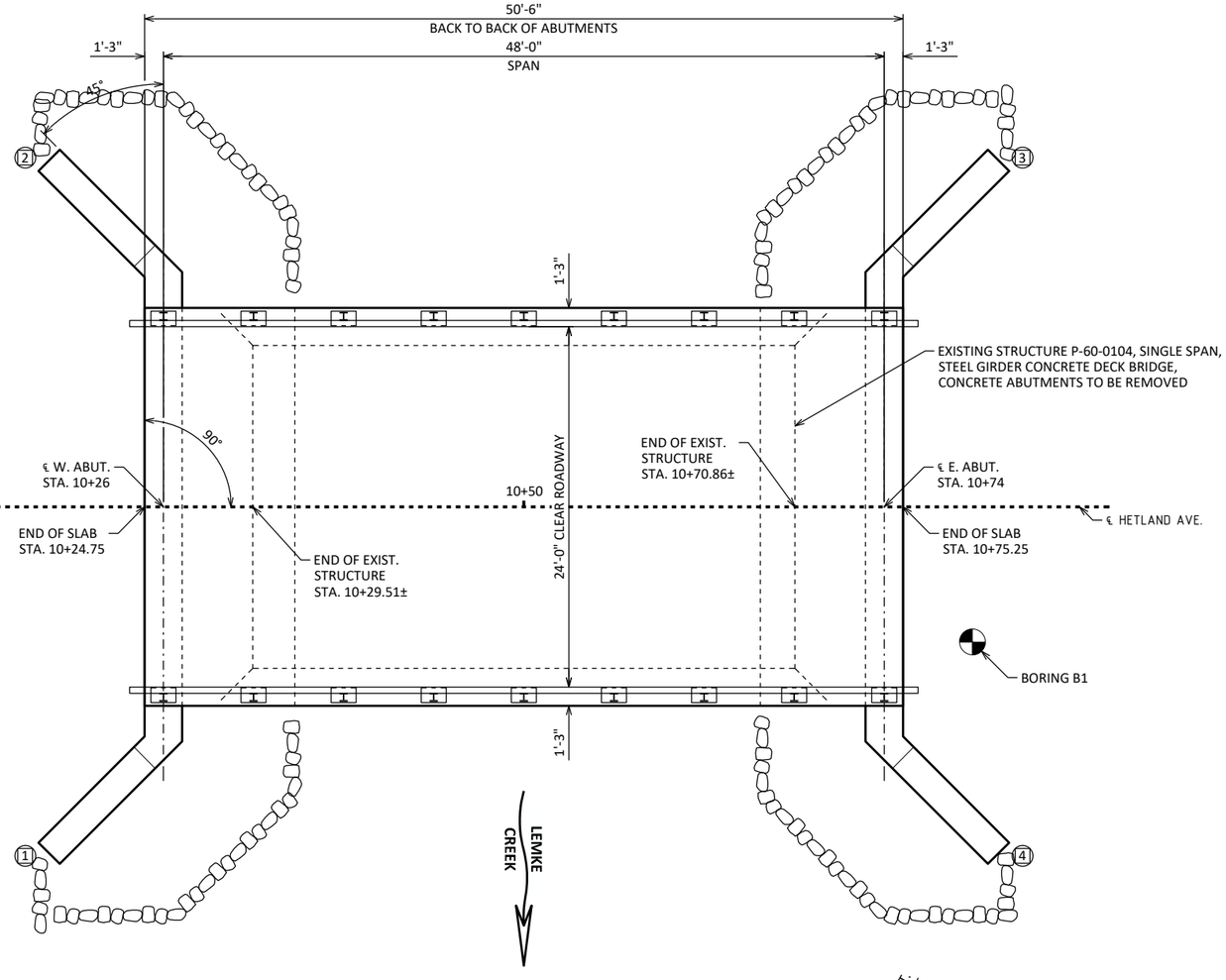
8

8

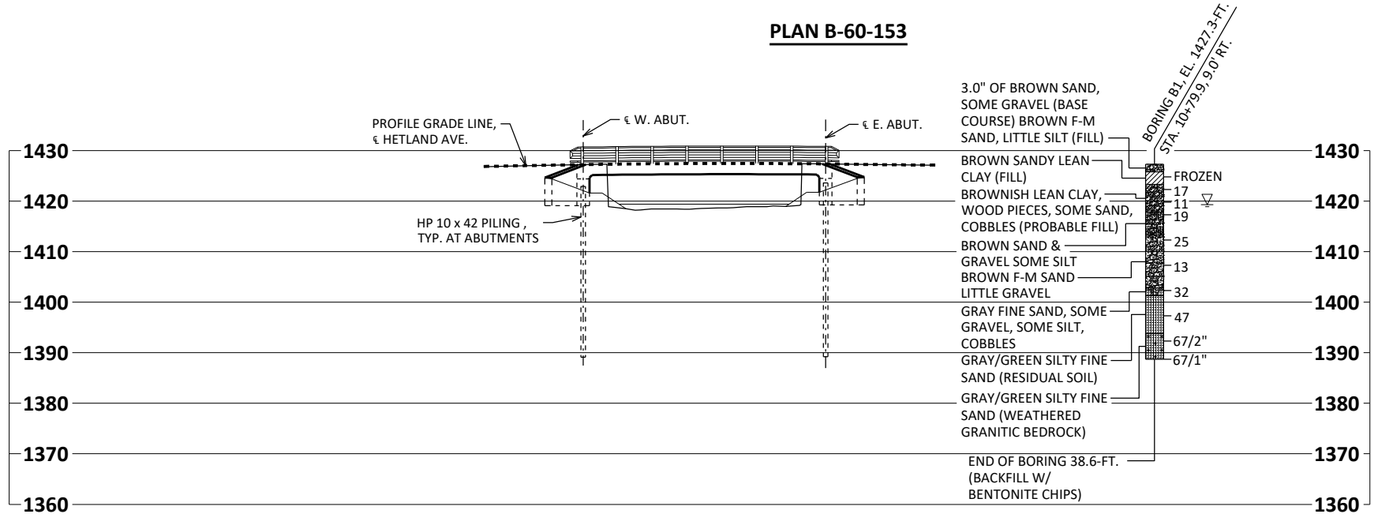
INDICATES WING NUMBER

B-60-153 BORINGS

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
BORING B1	1/12/2021	364894.0	712439.6
BORINGS COMPLETED BY: NUMMELIN TESTING SERVICES, INC.			
SUBSURFACE INVESTIGATION REPORT: NUMMELIN TESTING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WCCS, TAYLOR COUNTY			



PLAN B-60-153



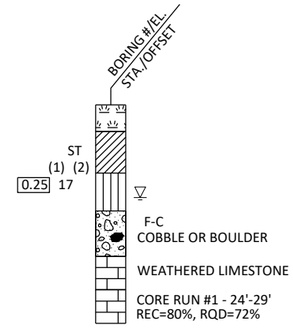
STATE PROJECT NUMBER

9548-00-70

MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

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
STRUCTURES DESIGN SECTION

STRUCTURE B-60-153

DRAWN BY JDO | PLANS CK'D ACK

SUBSURFACE EXPLORATION

SHEET 3
23

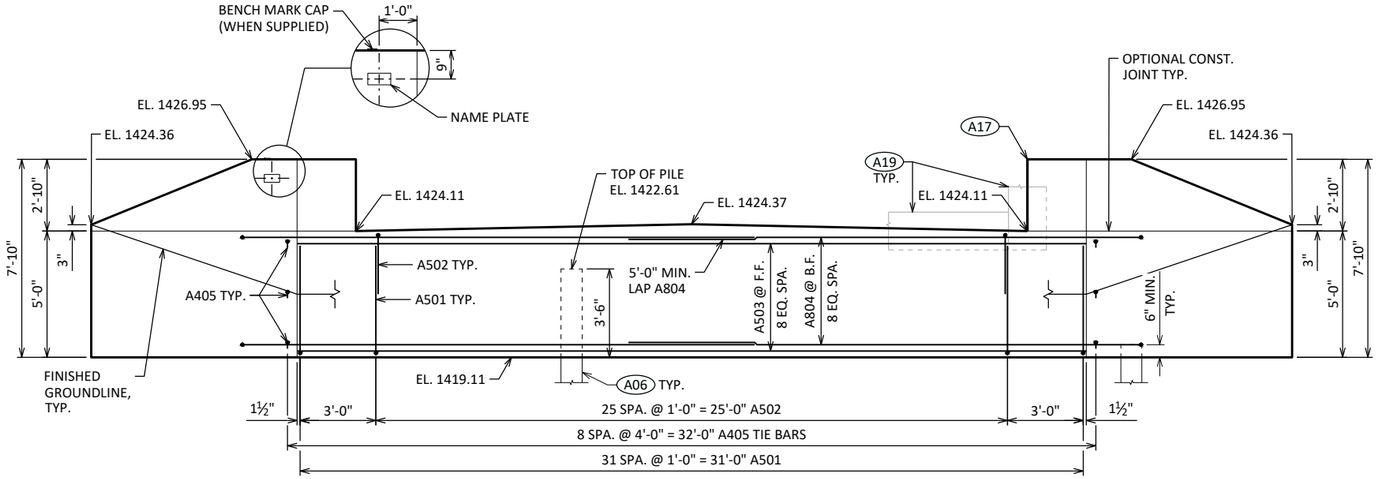
SCALE = NA

8

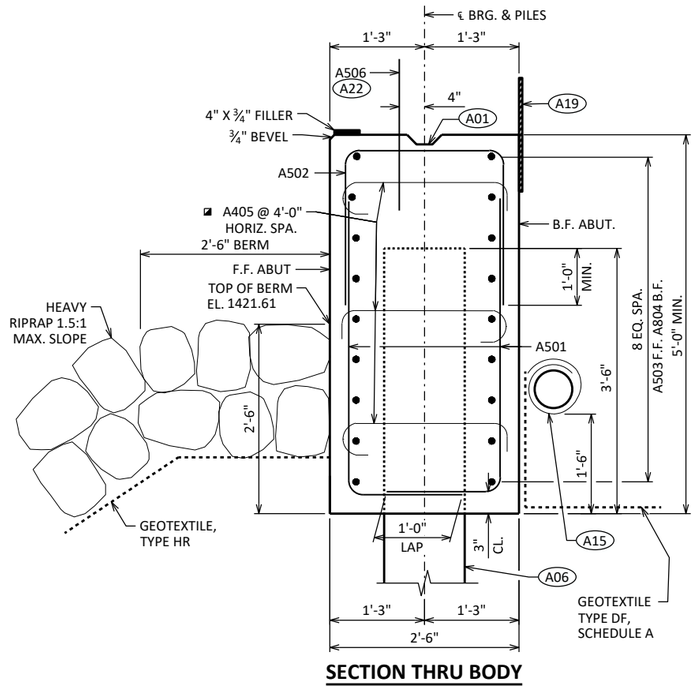
8

STATE PROJECT NUMBER

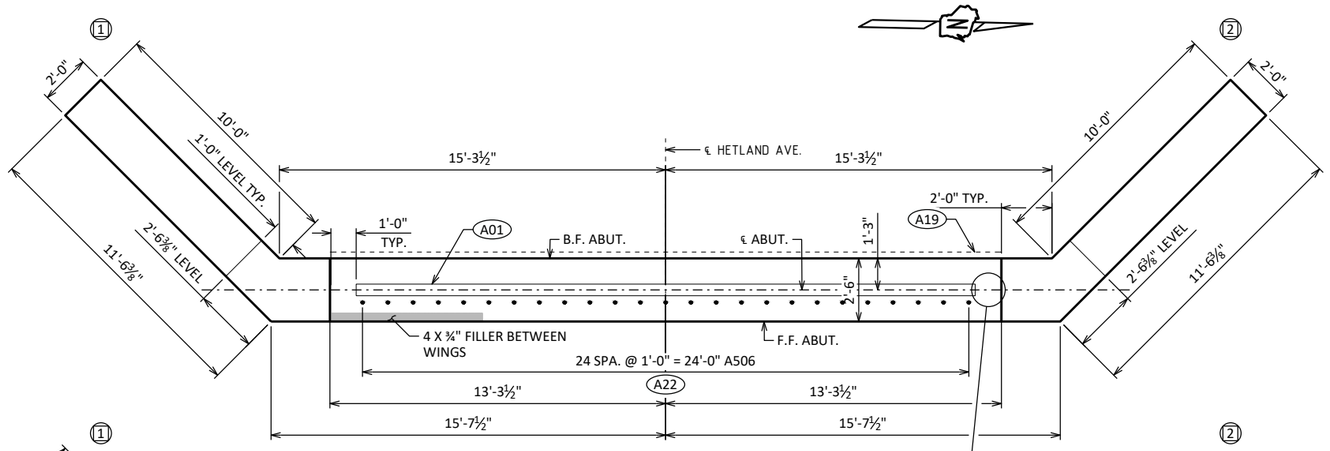
9548-00-70



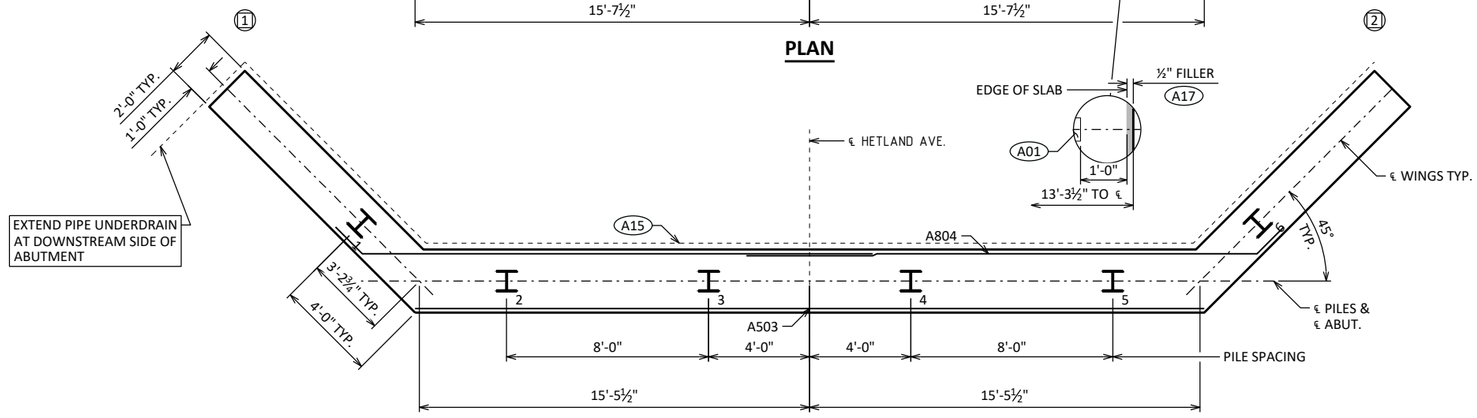
ELEVATION
LOOKING WEST



SECTION THRU BODY



PLAN



PILE PLAN

(A01) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6.

(A06) SUPPORT ABUTMENT ON HP 10 x 42 PILING WITH PILE POINTS, ESTIMATED 35' LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) ½" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A22) A506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

◪ ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.

(1) INDICATES WING NUMBER

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-60-153

DRAWN BY JDO | PLANS CK'D ACK

WEST ABUTMENT

SHEET 4
24

SCALE = NA

THIS SHEET WAS CREATED BY THE WISDOT BUREAU OF STRUCTURES STANDARD BRIDGE DESIGN TOOL VERSION 0.9

8

8

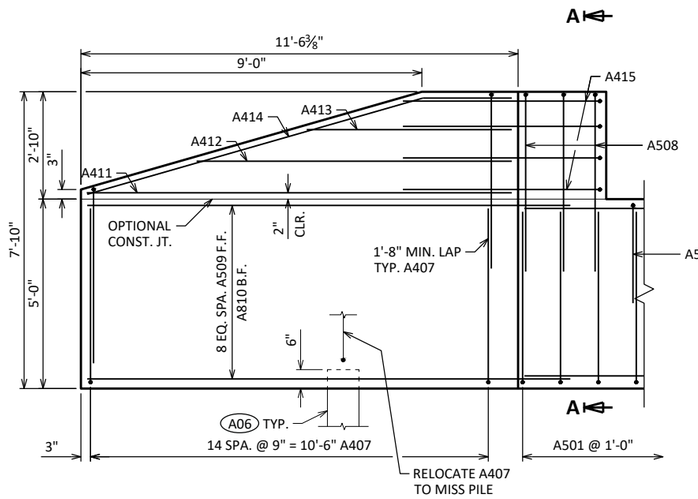
STATE PROJECT NUMBER

9548-00-70

BILL OF BARS

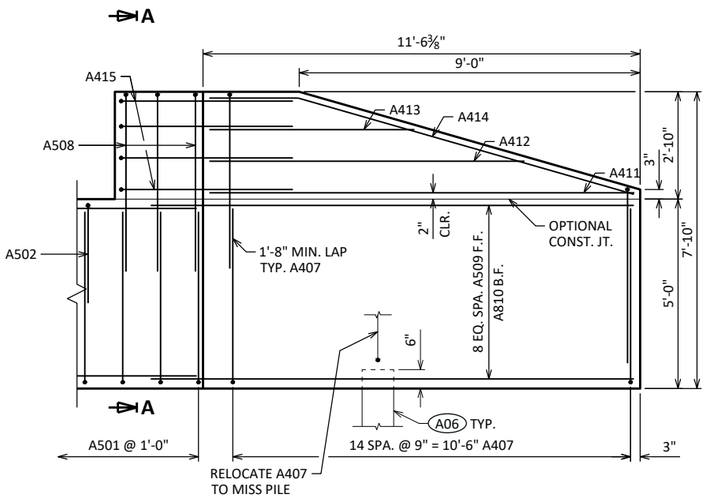
NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
A501		64	6'-0"	X		ABUT BODY STIRRUPS
A502		26	7'-1"	X		ABUT BODY STIRRUPS - TOP U-BAR
A503		9	31'-3"			ABUT BODY HORIZ. - F.F.
A804		18	21'-6"	X		ABUT BODY HORIZ. - B.F.
A405		27	3'-0"	X		ABUT BODY TIE BARS
A506	X	25	2'-0"			ABUT BODY DOWEL BARS
A407	X	60	10'-8"	X		WING STIRRUPS
A508	X	6	11'-3"	X		WING CORNER STIRRUPS
A509	X	18	12'-9"	X		WING LOWER HORIZ. - F.F.
A810	X	18	14'-3"	X		WING LOWER HORIZ. - B.F.
A411	X	4	11'-1"			WING UPPER HORIZ.
A412	X	4	8'-3"			WING UPPER HORIZ.
A413	X	4	5'-4"			WING UPPER HORIZ.
A414	X	4	11'-9"	X		WING TOP HORIZ.
A415	X	4	8'-3"	X		WING 1 UPPER HORIZ. CORNER
A416	X	4	8'-3"	X		WING 2 UPPER HORIZ. CORNER



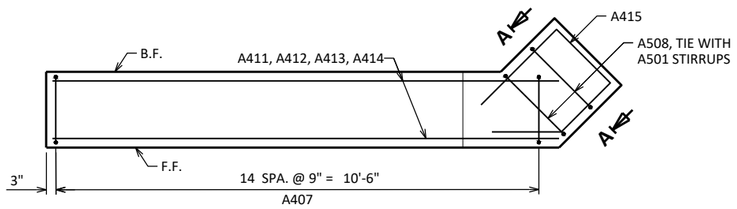
WING 1 ELEVATION

SHOWING F.F. WING



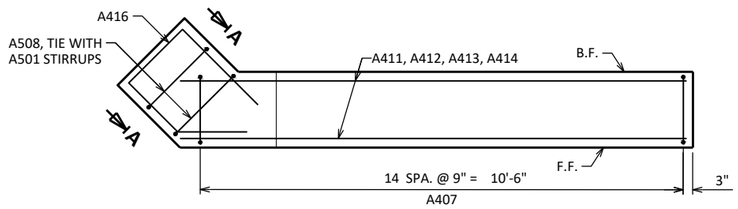
WING 2 ELEVATION

SHOWING F.F. WING



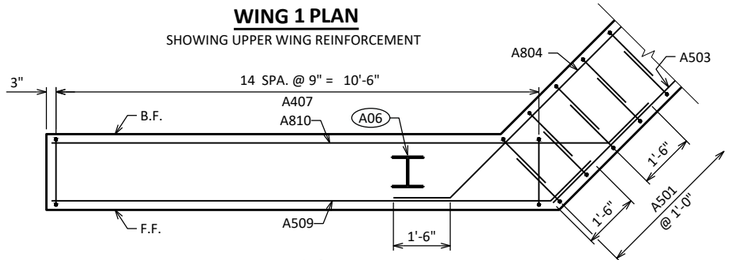
WING 1 PLAN

SHOWING UPPER WING REINFORCEMENT



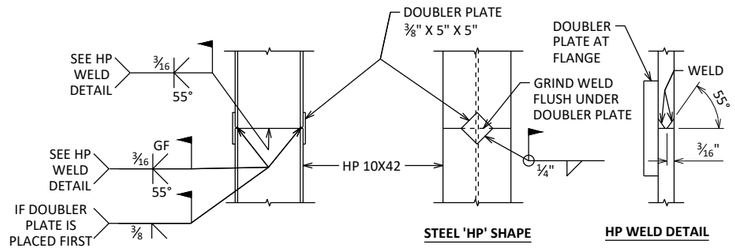
WING 2 PLAN

SHOWING UPPER WING REINFORCEMENT

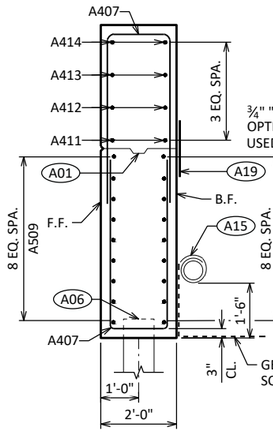


WING 1 PLAN

SHOWING LOWER WING REINFORCEMENT
WING 2 SIMILAR

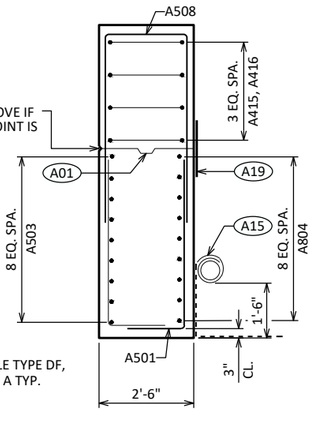


'HP' PILE DETAILS

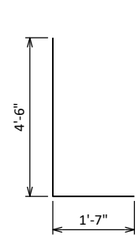


SECTION THRU WING 1

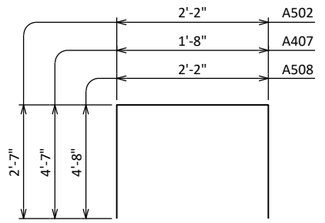
TYPICAL BOTH WINGS



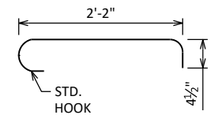
SECTION A-A



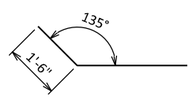
A501



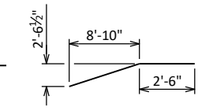
A502, A407, A508



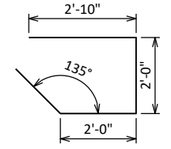
A405



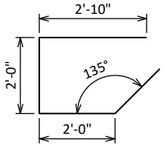
A804, A509, A810



A414



A415



A416

(A01) OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6. PROVIDE ¾" "V" GROOVE ON F.F. OF WINGWALL IF JOINT IS USED.

(A06) SUPPORT ABUTMENT ON HP 10 x 42 PILING WITH PILE POINTS, ESTIMATED 35' LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A19) 18" RUBBERIZED MEMBRANE WATERPROOFING, ONLY IF OPTIONAL CONSTRUCTION JOINT IS USED. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY STRUCTURES".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-60-153

DRAWN BY JDO | PLANS CK'D ACK

WEST ABUTMENT DETAILS

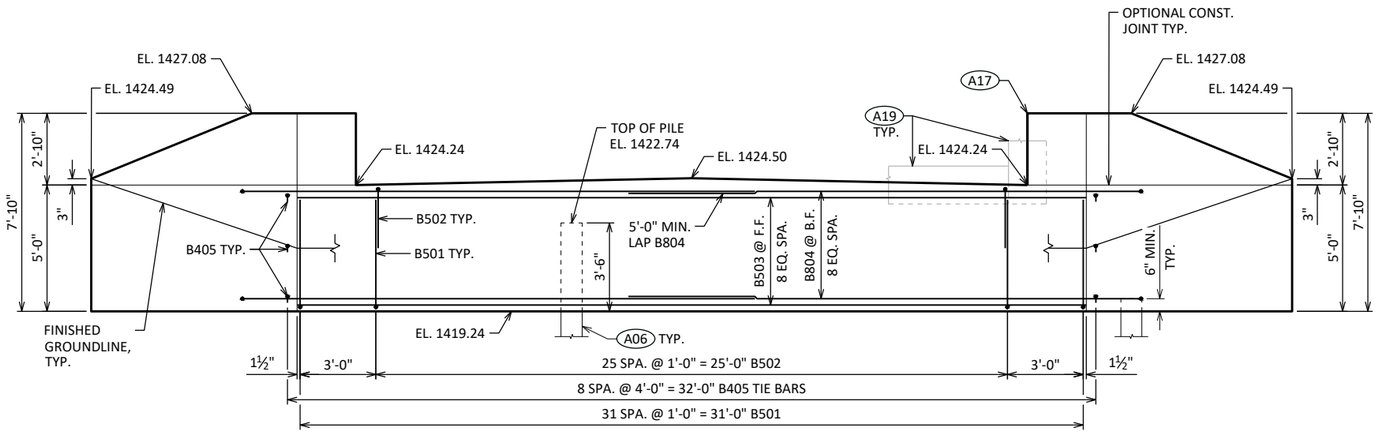
SHEET 5
25

SCALE = NA

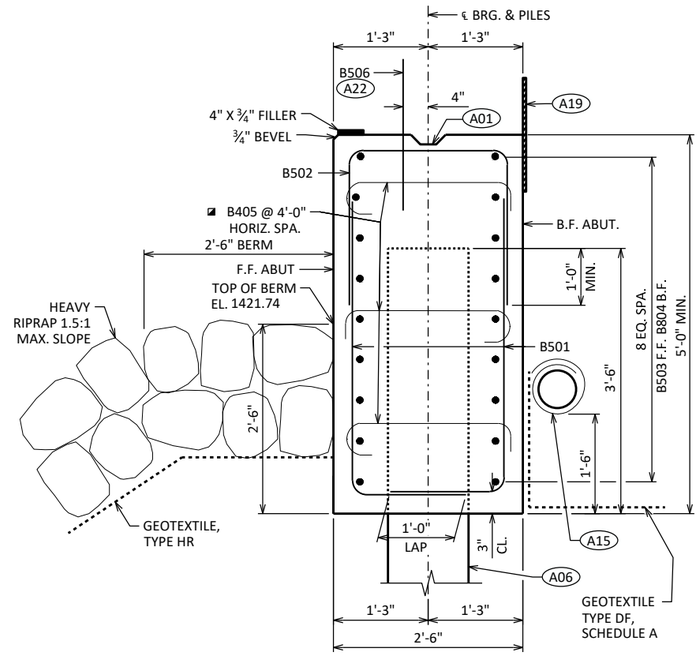
THIS SHEET WAS CREATED BY THE WISDOT BUREAU OF STRUCTURES STANDARD BRIDGE DESIGN TOOL VERSION 0.9

STATE PROJECT NUMBER

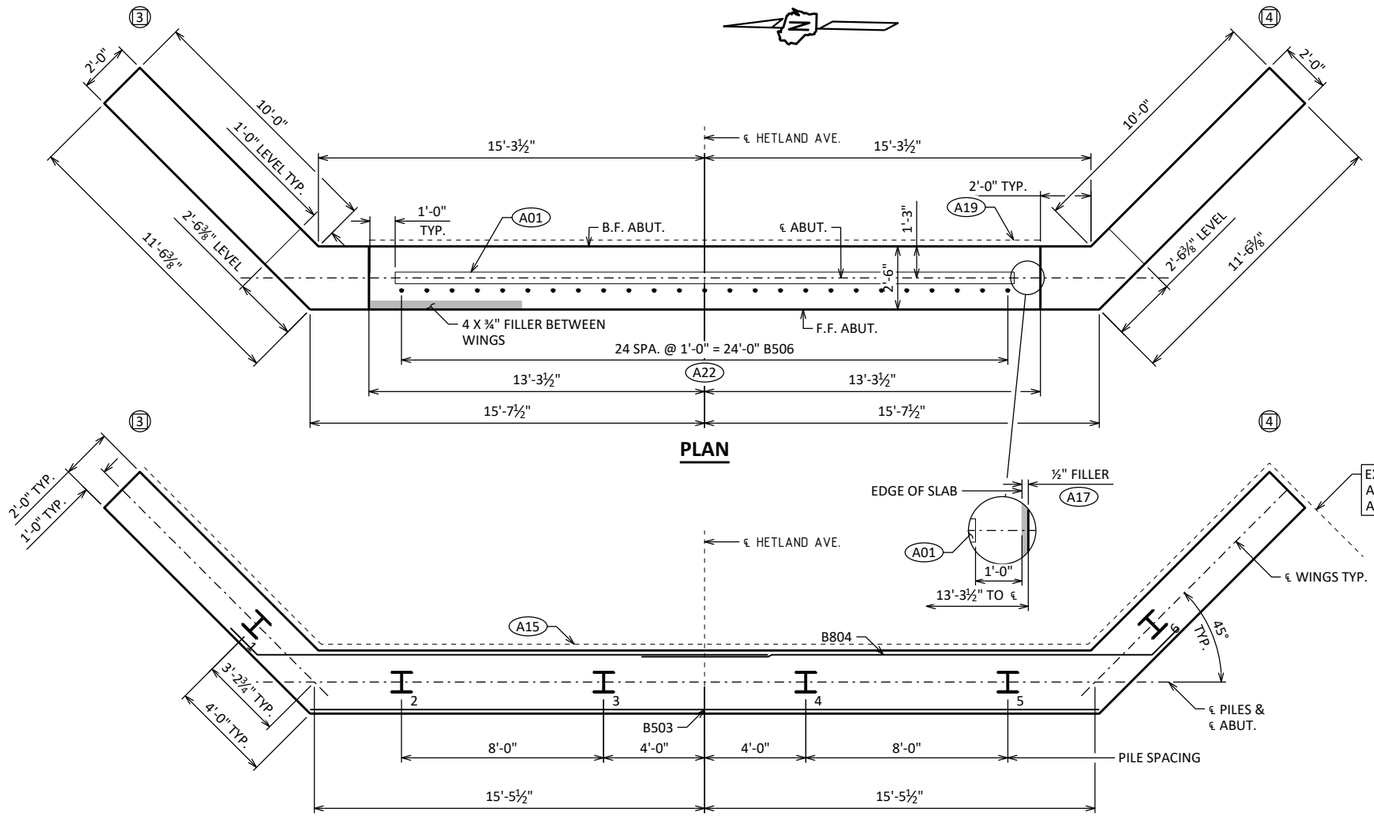
9548-00-70



ELEVATION
LOOKING EAST



SECTION THRU BODY



PLAN

PILE PLAN

INDICATES WING NUMBER

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

A01 CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6.

A06 SUPPORT ABUTMENT ON HP 10 x 42 PILING WITH PILE POINTS, ESTIMATED 35' LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

A17 ½" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

A19 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

A22 B506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

◪ ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-60-153

DRAWN BY JDO | PLANS CK'D ACK

EAST ABUTMENT

SHEET 6
26

SCALE = NA

THIS SHEET WAS CREATED BY THE WISDOT BUREAU OF STRUCTURES STANDARD BRIDGE DESIGN TOOL VERSION 0.9

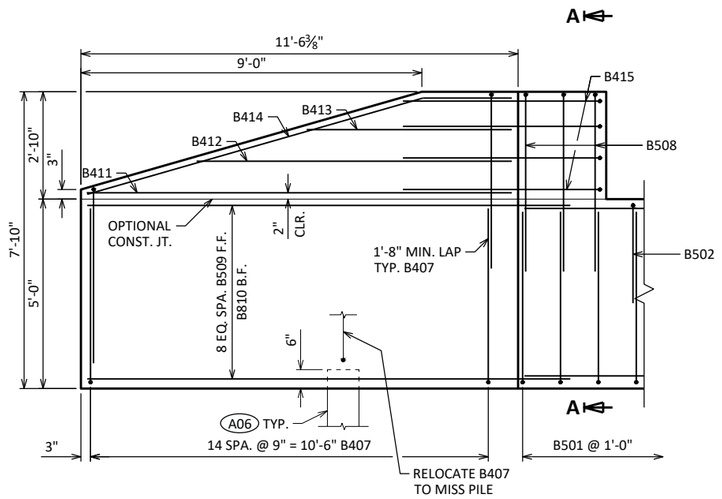
STATE PROJECT NUMBER

9548-00-70

BILL OF BARS

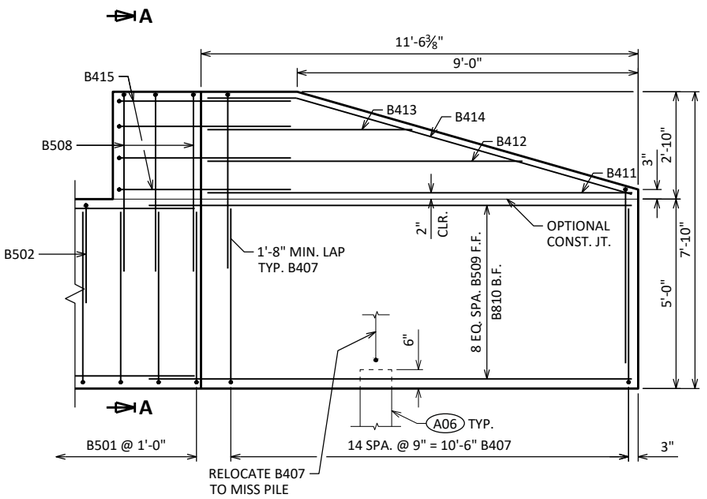
NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
B501		64	6'-0"	X		ABUT BODY STIRRUPS
B502		26	7'-1"	X		ABUT BODY STIRRUPS - TOP U-BAR
B503		9	31'-3"			ABUT BODY HORIZ. - F.F.
B804		18	21'-6"	X		ABUT BODY HORIZ. - B.F.
B405		27	3'-0"	X		ABUT BODY TIE BARS
B506	X	25	2'-0"			ABUT BODY DOWEL BARS
B407	X	60	10'-8"	X		WING STIRRUPS
B508	X	6	11'-3"	X		WING CORNER STIRRUPS
B509	X	18	12'-9"	X		WING LOWER HORIZ. - F.F.
B810	X	18	14'-3"	X		WING LOWER HORIZ. - B.F.
B411	X	4	11'-1"			WING UPPER HORIZ.
B412	X	4	8'-3"			WING UPPER HORIZ.
B413	X	4	5'-4"			WING UPPER HORIZ.
B414	X	4	11'-9"	X		WING TOP HORIZ.
B415	X	4	8'-3"	X		WING 3 UPPER HORIZ. CORNER
B416	X	4	8'-3"	X		WING 4 UPPER HORIZ. CORNER



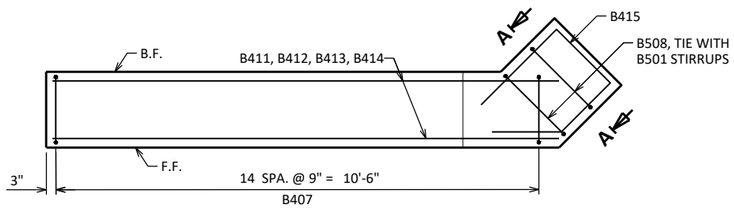
WING 3 ELEVATION

SHOWING F.F. WING



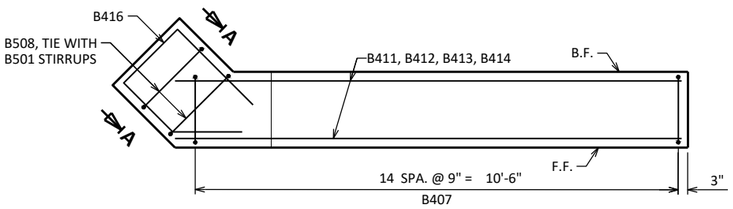
WING 4 ELEVATION

SHOWING F.F. WING



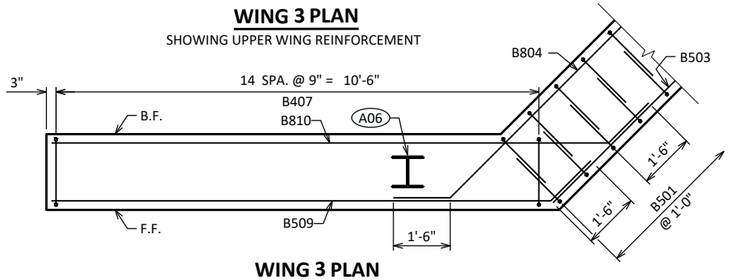
WING 3 PLAN

SHOWING UPPER WING REINFORCEMENT



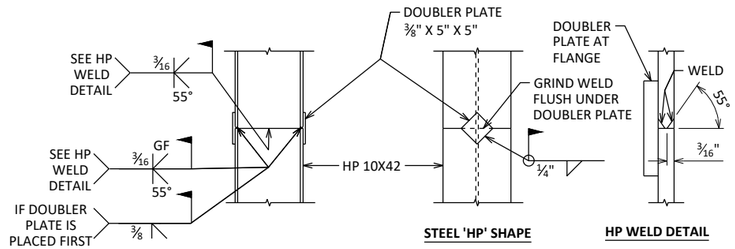
WING 4 PLAN

SHOWING UPPER WING REINFORCEMENT

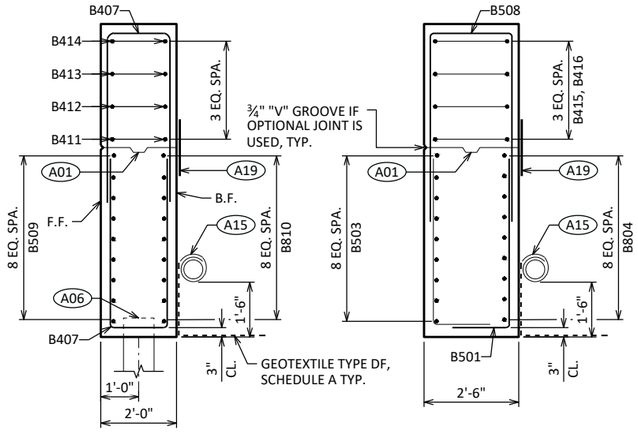


WING 3 PLAN

SHOWING LOWER WING REINFORCEMENT
WING 4 SIMILAR



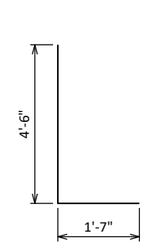
'HP' PILE DETAILS



SECTION THRU WING 3

TYPICAL BOTH WINGS

SECTION A-A



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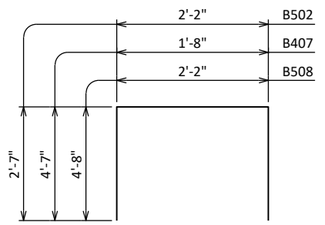
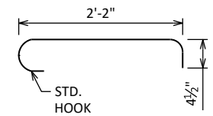


B502, B407, B508



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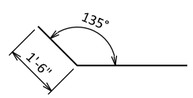
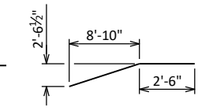


B804, B509, B810



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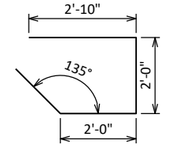

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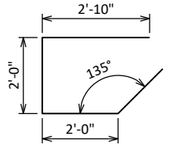


B416

A01 OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6. PROVIDE ¾" "V" GROOVE ON F.F. OF WINGWALL IF JOINT IS USED.

A06 SUPPORT ABUTMENT ON HP 10 x 42 PILING WITH PILE POINTS, ESTIMATED 35' LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

A19 18" RUBBERIZED MEMBRANE WATERPROOFING, ONLY IF OPTIONAL CONSTRUCTION JOINT IS USED. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY STRUCTURES".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-60-153

DRAWN BY JDO | PLANS CK'D ACK

EAST ABUTMENT DETAILS

SHEET 7
27

SCALE = NA

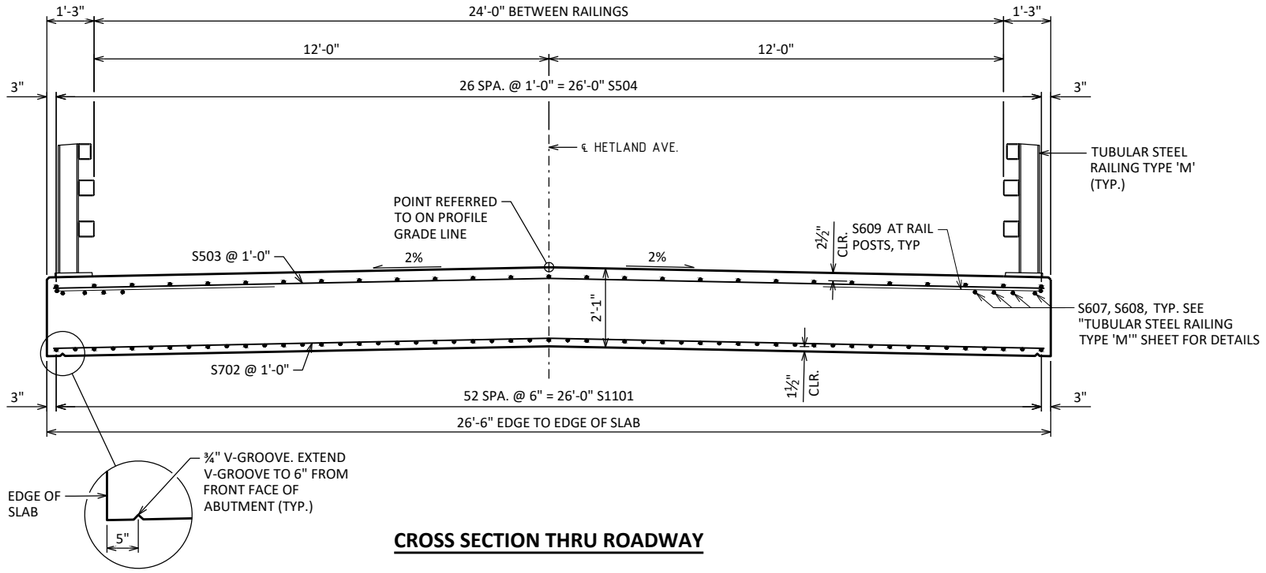
THIS SHEET WAS CREATED BY THE WISDOT BUREAU OF STRUCTURES STANDARD BRIDGE DESIGN TOOL VERSION 0.9

8

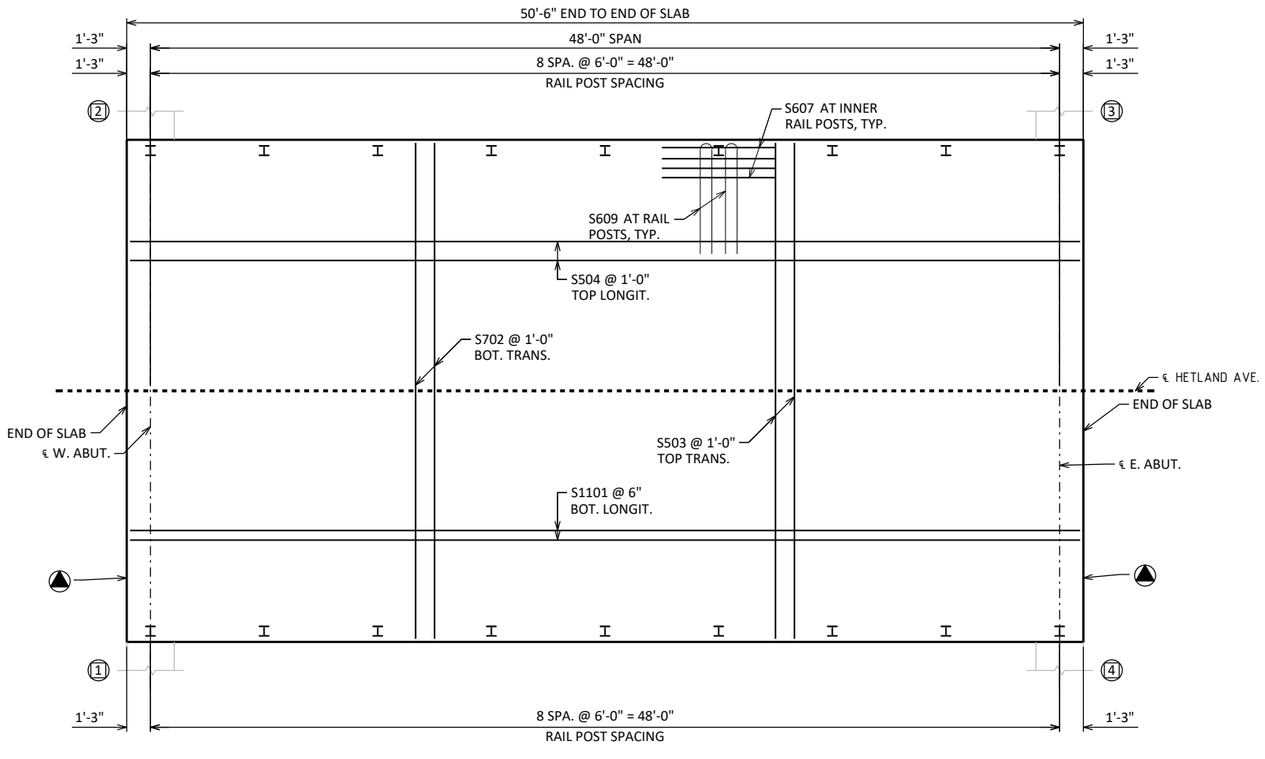
8

STATE PROJECT NUMBER

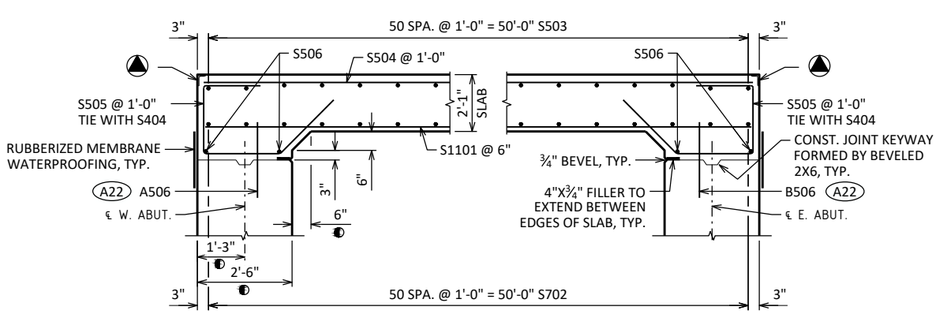
9548-00-70



CROSS SECTION THRU ROADWAY



PLAN



LONGITUDINAL SECTION

DIMENSIONS ARE GIVEN PARALLEL TO ℄ ROADWAY UNLESS OTHERWISE NOTED.

◐ MEASURED NORMAL TO THE ℄ OF ABUTMENT. DIMENSIONS ARE TYPICAL FOR BOTH ABUTMENTS.

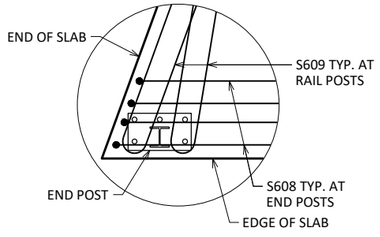
(A22) A506, B506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

△ PROTECTION ANGLE SEE "SUPERSTRUCTURE DETAILS" SHEET FOR DETAILS.

NOTES

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

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



END POST DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-60-153

DRAWN BY JDO | PLANS CK'D ACK

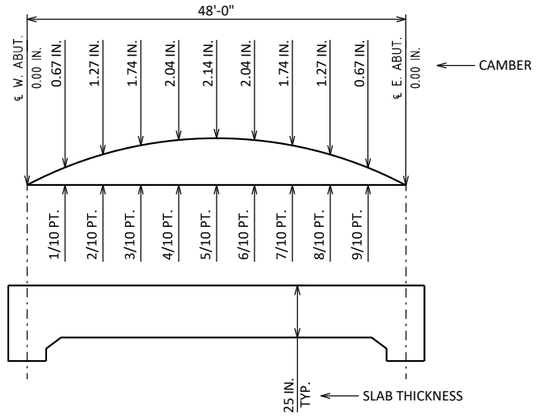
SUPERSTRUCTURE

SHEET 8
28

(2) INDICATES WING NUMBER

THIS SHEET WAS CREATED BY THE WISDOT BUREAU OF STRUCTURES STANDARD BRIDGE DESIGN TOOL VERSION 0.9

SCALE = NA

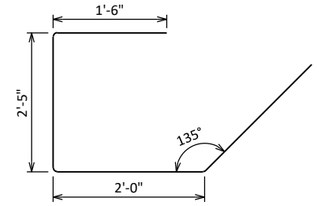


CAMBER AND SLAB THICKNESS DIAGRAM

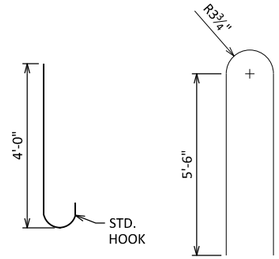
CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT. PARAPETS, SIDEWALKS AND MEDIANS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED, EXCEPT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

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

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



S505



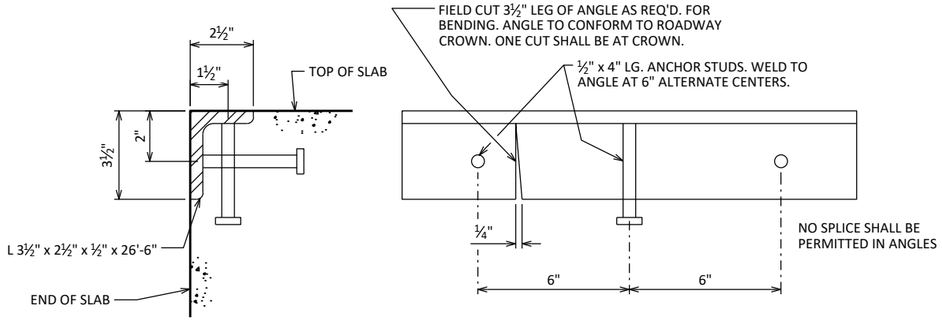
S608

S609

BILL OF BARS

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S1101	X	53	50'-2"			SLAB BOTTOM LONGITUDINAL
S702	X	51	26'-2"			SLAB BOTTOM TRANSVERSE
S503	X	51	26'-2"			SLAB TOP TRANSVERSE
S504	X	27	50'-2"			SLAB TOP LONGITUDINAL
S505	X	54	7'-8"	X		ABUTMENT DIAPHRAGM STIRRUPS
S506	X	4	26'-2"			ABUTMENT DIAPHRAGM LONGITUDINAL
S607	X	56	6'-0"			SLAB TOP LONGIT. UNDER RAIL POSTS
S608	X	16	4'-8"	X		SLAB TOP LONGIT. UNDER RAIL END POSTS
S609	X	36	12'-0"	X		SLAB TOP HOOKS UNDER RAIL POSTS



PROTECTION ANGLE DETAIL

ANGLE AND STUDS TO BE PAID FOR AT THE UNIT PRICE BID FOR "STRUCTURAL STEEL CARBON". (NO PAINT REQ'D.)

SANDBLAST PROTECTION ANGLE AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PROTECTION ANGLE SHALL BE HOT DIPPED GALVANIZED.

PROTECTION ANGLES ARE REQUIRED AT BOTH END OF SLABS AND ARE TO BE EMBEDDED IN THE BRIDGE SLAB CONCRETE. ENSURE PROTECTION ANGLES ARE SECURELY IN PLACE PRIOR TO POURING THE BRIDGE SLAB.

TOP OF SLAB ELEVATIONS

	℄ BRG. W. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. E. ABUT.
N. EDGE OF DECK	1426.95	1427.02	1427.07	1427.12	1427.15	1427.17	1427.17	1427.17	1427.15	1427.12	1427.08
CROWN OR ℄	1427.21	1427.28	1427.33	1427.38	1427.41	1427.43	1427.43	1427.43	1427.41	1427.38	1427.34
S. EDGE OF DECK	1426.95	1427.02	1427.07	1427.12	1427.15	1427.17	1427.17	1427.17	1427.15	1427.12	1427.08

SURVEY TOP OF SLAB ELEVATIONS

	ABUTMENT	5/10 PT.	ABUTMENT
N. GUTTER			
CROWN OR ℄			
S. GUTTER			

PRIOR TO RELEASING SLAB FORMWORK, TAKE TOP OF DECK ELEVATIONS AT THE ℄ OF ABUTMENTS, ℄ OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR ℄. RECORD ELEVATIONS IN THE TABLE ABOVE FOR THE "AS BUILT" PLANS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-60-153

DRAWN BY JDO | PLANS CK'D ACK

SUPERSTRUCTURE DETAILS

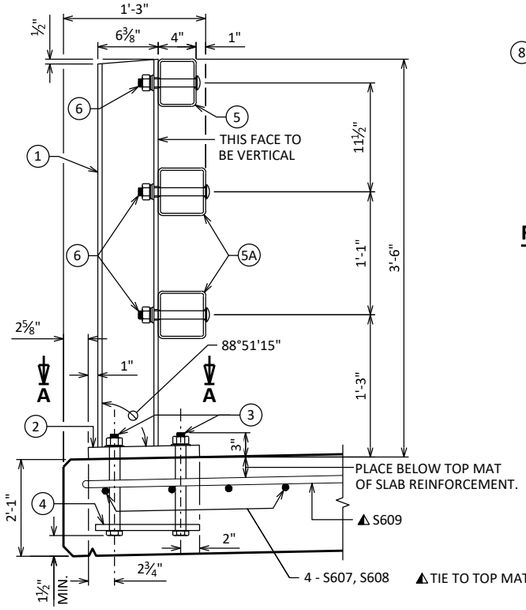
SHEET 9
29

SCALE = NA

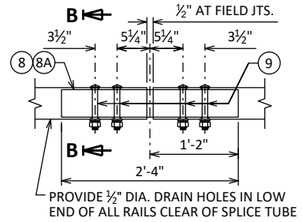
8

STATE PROJECT NUMBER

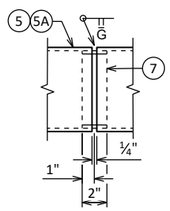
9548-00-70



SECTION THRU RAILING ON DECK

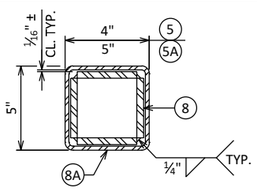


FIELD ERECTION JOINT DETAIL

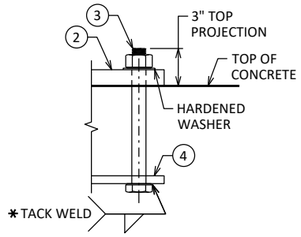


SHOP RAIL SPLICE DETAIL

LOCATION MUST BE SHOWN ON SHOP DRAWINGS

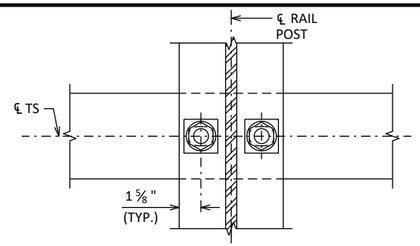


SECTION B-B

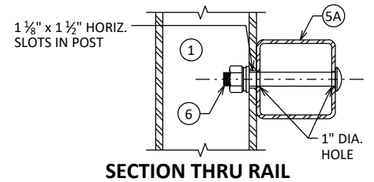


ANCHOR BOLTS

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



SECTION THRU POST WEB



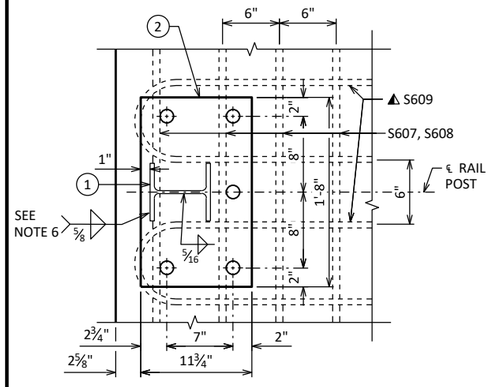
SECTION THRU RAIL

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

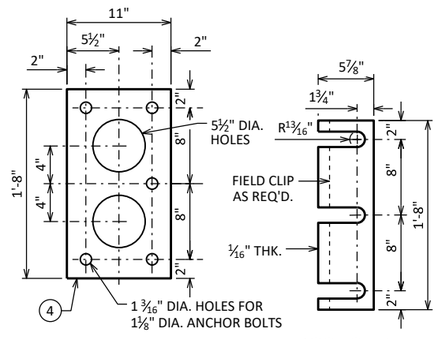
TYPICAL RAIL TO POST CONNECTIONS

LEGEND

1. W6 x 25 WITH 1⅛ " X 1½ " HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.
2. PLATE 1 ¼" x 11 ¾" x 1'-8" WITH 1 7/16" OVERSIZED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN.
3. ASTM A449 - 1⅛" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED). 5 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 1'-9" LONG IN ABUTMENT WINGS. AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 16" USE 1'-3" LONG. USE 10 ¾" LONG AT ALL OTHER LOCATIONS. (AN EQUIVALENT THREADED ROD WITH NUTS AND HARDENED WASHERS MAY BE SUBSTITUTED FOR ANCHOR BOLTS IN WINGS IF REQ'D. FOR CONSTRUCTIBILITY.)
4. ⅝" x 11" x 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1 3/16" DIA. HOLES FOR ANCHOR BOLTS NO. 3
5. TS 5 x 4 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
5A. TS 5 x 5 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
6. ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, 3/16" X 1 5/8" X 1 5/8" MIN. WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION.)
7. SPLICE SLEEVE FABRICATED FROM ¼" PLATE. PROVIDE "SLIDING FIT".
8. ⅜" X 3 5/8" X 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
8A. ⅜" X 2 5/8" X 2'-4" PLATE USED IN NO. 5, ⅜" X 3 5/8" X 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.
9. ⅞" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 15/16" x 1 ¼" LONGIT. SLOTTED HOLES IN PLATE NO. 10A AT FIELD JOINTS AND 15/16" X 2 ¼" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 8A. PROVIDE 15/16" DIA. ROUND HOLES IN TUBES NO. 5 AND NO. 5A.



SECTION A-A



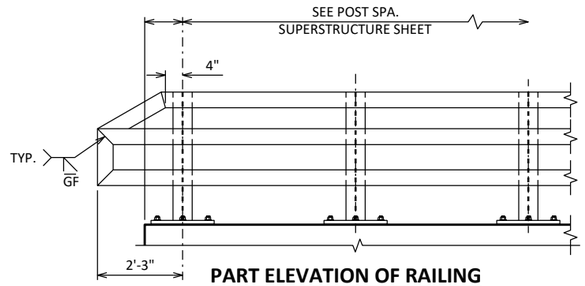
ANCHOR PLATE

AT RAIL TO DECK CONNECTION

POST SHIM DETAIL

GENERAL NOTES

1. BID ITEM SHALL BE "RAILING TUBULAR TYPE M" WHICH INCLUDES ALL ITEMS SHOWN.
2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY = 50 KSI. ANCHOR PLATES, AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.
3. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ⅛ TURN.
4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE. RAILS SHALL BE SPLICED IN A PANEL OVER EXPANSION JOINTS.
5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
6. WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
7. FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 AND CAULK AROUND PERIMETER OF PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
8. POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
9. ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY SSPC SPECIFICATIONS.



PART ELEVATION OF RAILING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-60-153

DRAWN BY JDO | PLANS CK'D ACK

TUBULAR STEEL RAILING TYPE 'M'

SHEET 10
30

SCALE = NA

THIS SHEET WAS CREATED BY THE WISDOT BUREAU OF STRUCTURES STANDARD BRIDGE DESIGN TOOL VERSION 0.9

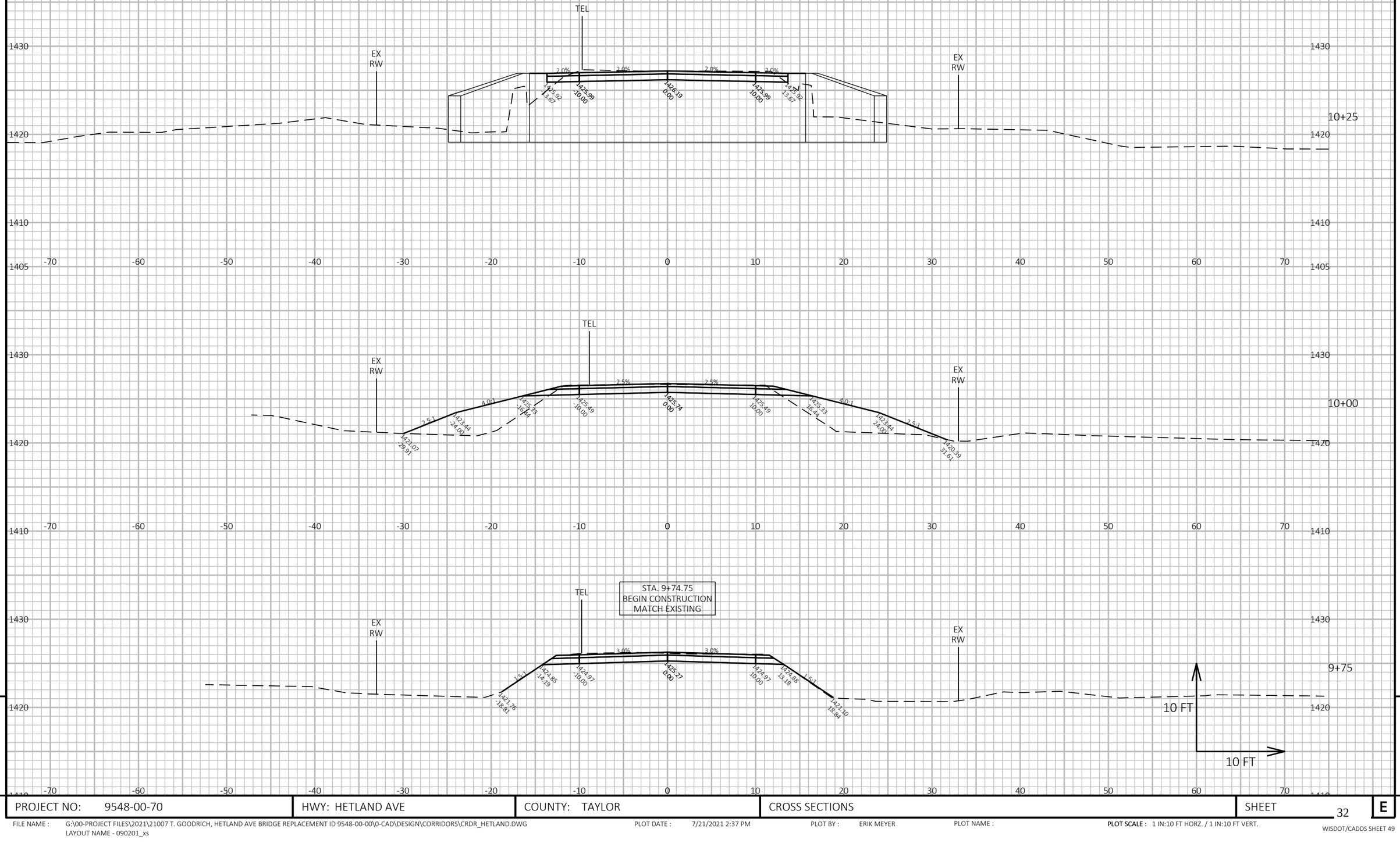
8

8

STATION	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							MASS ORDINATE
	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	
							Note 1	Note 2	Note 3				1.00 Note 1	1.25	1.50 Note 4	1.10	1.30 Note 5	0.60 Note 6	0.80 Note 7	Note 8
09+74.75	26.10	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10+00.00	24.70	0.00	65.32	0	0	0	24	0	31	0	0	0	24	39	0	0	0	0	0	-15
10+18.38	26.00	0.00	77.13	0	0	0	17	0	48	0	0	0	41	99	0	0	0	0	0	-58
10+24.75	26.98	0.00	4.00	0	0	0	6	0	10	0	0	0	47	111	0	0	0	0	0	-64
STRUCTURE B-60-153																				
DIVISION 1 TOTALS							47	0	89	0	0	0								

STATION	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							MASS ORDINATE
	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	
							Note 1	Note 2	Note 3				1.00 Note 1	1.25	1.50 Note 4	1.10	1.30 Note 5	0.60 Note 6	0.80 Note 7	Note 8
STRUCTURE B-60-153																				
10+75.25	23.05	0.00	4.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10+81.62	21.70	0.00	71.59	0	0	0	5	0	9	0	0	0	5	11	0	0	0	0	0	-6
11+00.00	24.65	0.00	37.29	0	0	0	16	0	37	0	0	0	21	58	0	0	0	0	0	-36
11+25.25	25.27	0.00	0.00	0	0	0	23	0	17	0	0	0	44	79	0	0	0	0	0	-34
DIVISION 2 TOTALS							44	0	63	0	0	0								
PROJECT TOTALS							91	0	152	0	0	0								

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

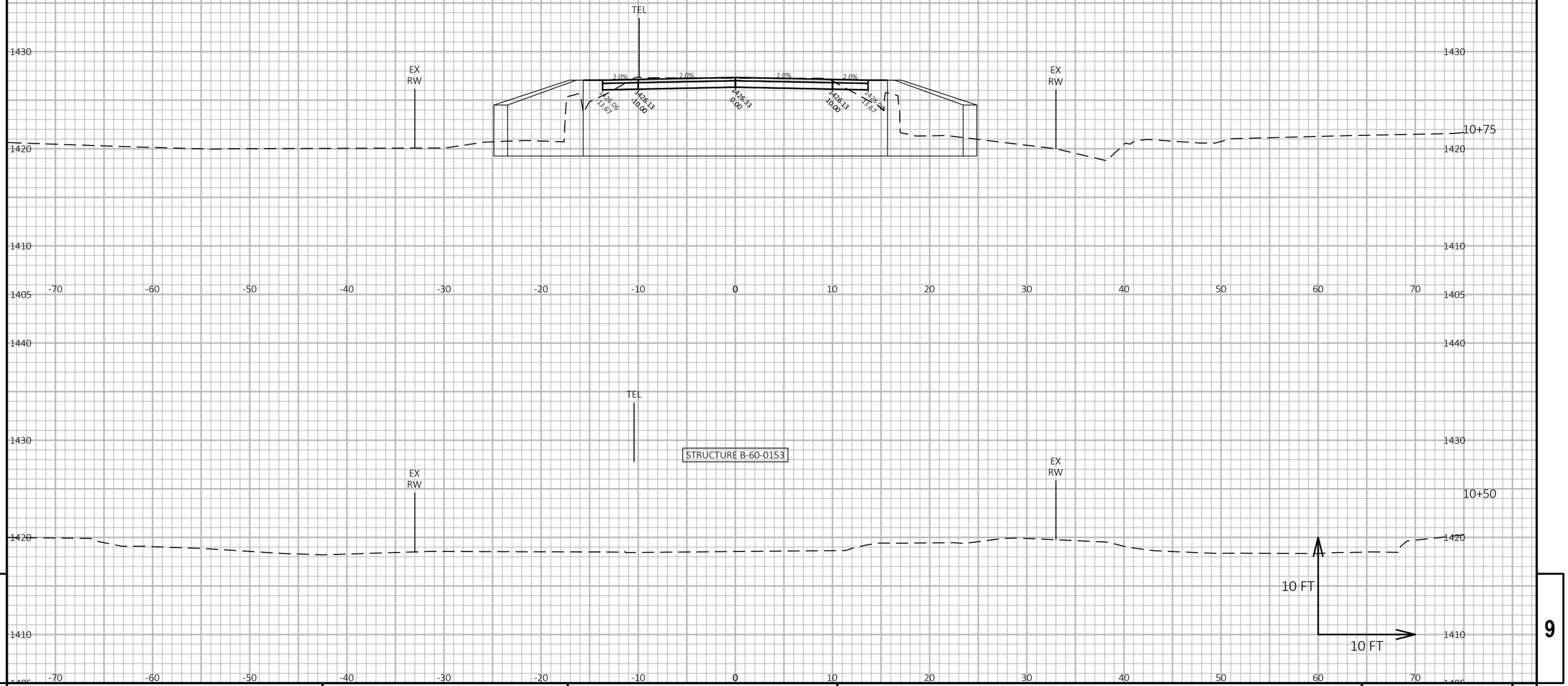


PROJECT NO: 9548-00-70	HWY: HETLAND AVE	COUNTY: TAYLOR	CROSS SECTIONS	SHEET 32	E

FILE NAME : G:\00-PROJECT FILES\2021\21007 T. GOODRICH, HETLAND AVE BRIDGE REPLACEMENT ID 9548-00-00\0-CAD\DESIGN\CORRIDORS\CRDR_HETLAND.DWG
LAYOUT NAME - 090201_xs

PLOT DATE : 7/21/2021 2:37 PM PLOT BY : ERIK MEYER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

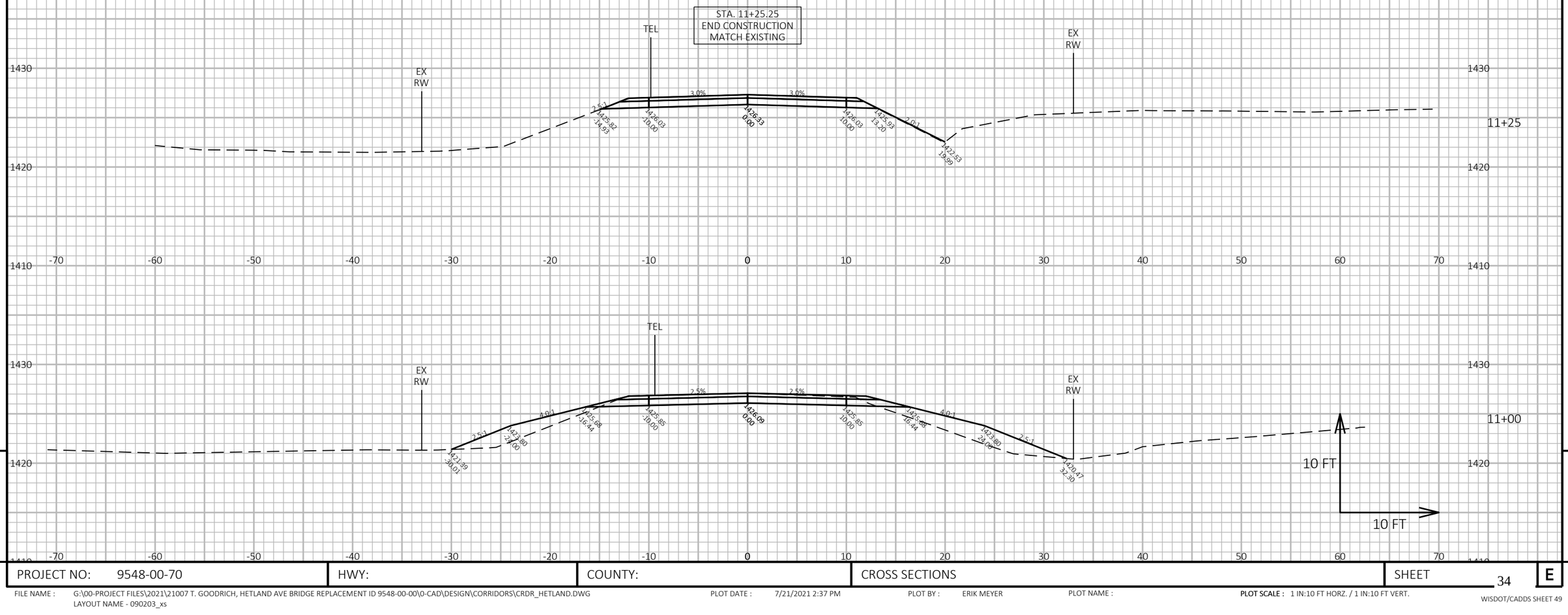


PROJECT NO: 9548-00-70	HWY: HETLAND AVE	COUNTY: TAYLOR	CROSS SECTIONS	SHEET 33	E

FILE NAME : G:\00-PROJECT FILES\2021\21007 T. GOODRICH, HETLAND AVE BRIDGE REPLACEMENT ID 9548-00-00\0-CAD\DESIGN\CORRIDORS\CRDR_HETLAND.DWG
LAYOUT NAME - 090202_xs

PLOT DATE : 7/21/2021 2:37 PM PLOT BY : ERIK MEYER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 9548-00-70	HWY:	COUNTY:	CROSS SECTIONS	SHEET 34 E

FILE NAME : G:\00-PROJECT FILES\2021\21007 T. GOODRICH, HETLAND AVE BRIDGE REPLACEMENT ID 9548-00-00\0-CAD\DESIGN\CORRIDORS\CRDR_HETLAND.DWG
LAYOUT NAME - 090203_xs

PLOT DATE : 7/21/2021 2:37 PM PLOT BY : ERIK MEYER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov