RHI AUGUST 2013

PROJECT ID: 9240-10-61

COUNTY: PRICE

ORDER OF SHEETS

TOTAL SHEETS = 54

25

N

DESIGN DESIGNATION

A.A.D.T.	2010	= 540
A.A.D.T.	2037	= 770
D.H.V.		= 96
D.D.		= 58/42
T.		= 15.6
DESIGN SPEED		= 60 MPH
ESALS		= 200,000

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
- 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

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9240-10-61	———	—

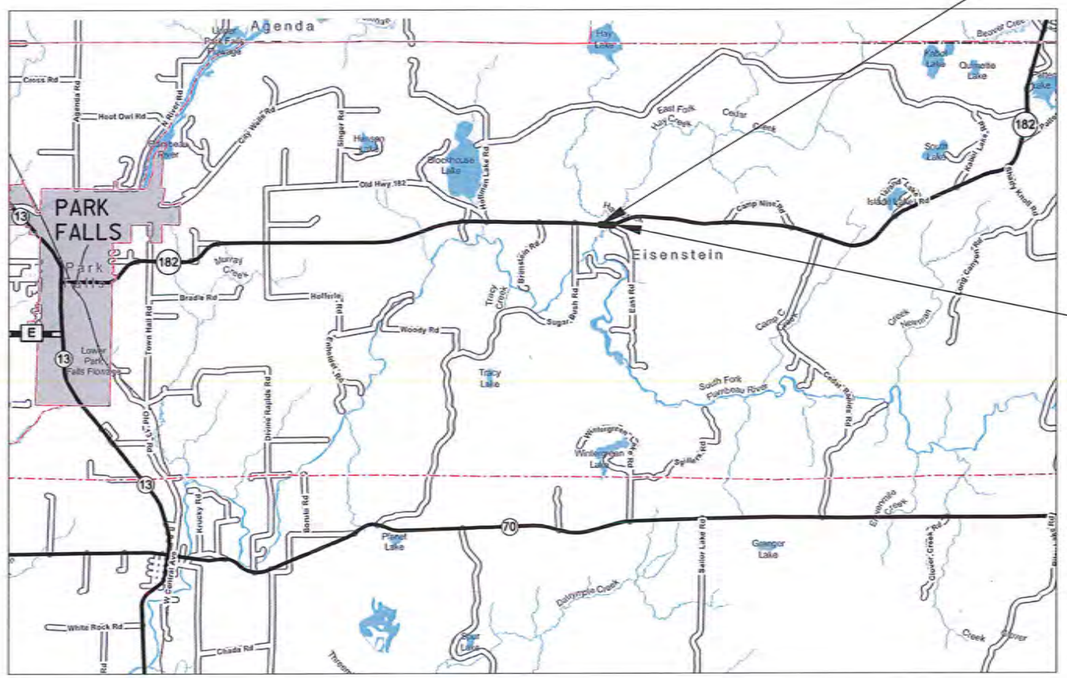
PARK FALLS - SPRINGSTEAD

HAY CREEK CULVERT C-50-18

STH 182

PRICE

STATE PROJECT NUMBER
9240-10-61



BEGIN PROJECT
STA 389+00
Y=507011.09
X=796575.44

END PROJECT
STA 393+50
Y=507005.24
X=797024.89

LAYOUT
SCALE 0 1 mi

TOTAL NET LENGTH OF CENTERLINE = 0.085

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, PRICE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF NAVD 88 (2012)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SURVEYOR
Designer	DAVE KIRCHER
Project Manager	MIKE GRAGE
Regional Examiner	CHERYL SIMON
Regional Supervisor	ROBIN STAFFORD

APPROVED FOR THE DEPARTMENT
DATE: 5/1/13 (Signature)

E

GENERAL NOTES

THE EXISTING CURVE SUPER ELEVATION SHALL BE UPGRADED WITHIN PROJECT LIMITS AND PAVED TO MATCH EXISTING SUPER-ELEVATION IN THE LAST 50 FT

THERE MAY BE UTILITY FACILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN ON THE PLAN

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS BETWEEN THE SUBGRADE SHOULDER POINTS AND THE PROPOSED RIPRAP LOCATIONS, SHALL BE FERTILIZED, SEEDED, AND COVERED WITH EROSION MAT

A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK ZONES" IF WARRANTED BY CONDITIONS

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

CONTACTS

CENTURYLINK
BRIAN HUHN
400 W. 9TH ST. N, SUITE 5
LADYSMITH, WI 54848
715-532-0023
CELL: 715-563-8294

WISCONSIN DNR
JON SIMONSEN
107 SUTLIFF AVENUE
RHINELANDER, WI 54501
JONATHON.SIMONSEN@WISCONSIN.GOV
715-365-8916

PRICE ELECTRIC COOPERATIVE INC
ELECTRICITY
JASON WEIK
PO BOX 110
PHILLIPS, WI 54555
715-339-2155

AS-BUILTS USED

†0701(1)

9240-04-70

SIGNAL TIMING

Note: Stop Bar placement at 500 FT spacing

EB STA 388+75 WB STA 393+75

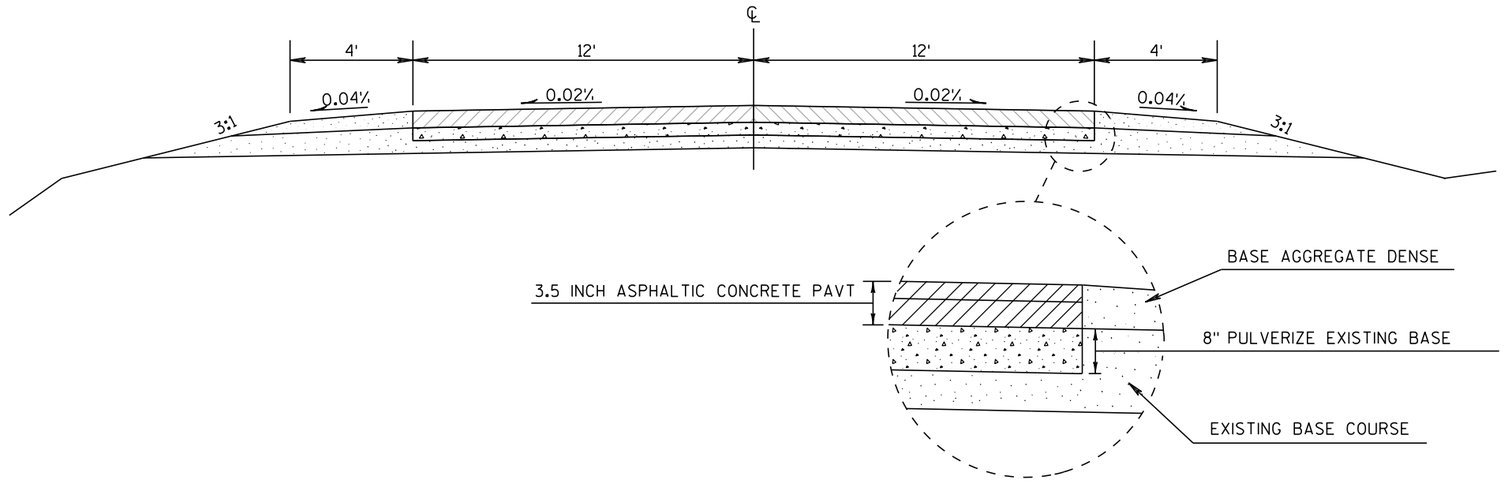
Temporary Signal Timing * 1 6:00am to 8:00pm

EB	WB	Yellow	All Red	Green	
red	red		20.0 sec		
green	red			12.0 sec	
yellow	red	4.0 sec			
red	red		20.0 sec		
red	green			~~12.0 sec~~	
red	yellow	4.0 sec			
Total cycle length		8.0 sec	40.0 sec	24.0 sec =	72.0 sec

Temporary Signal Timing * 2 8:00pm to 6:00am

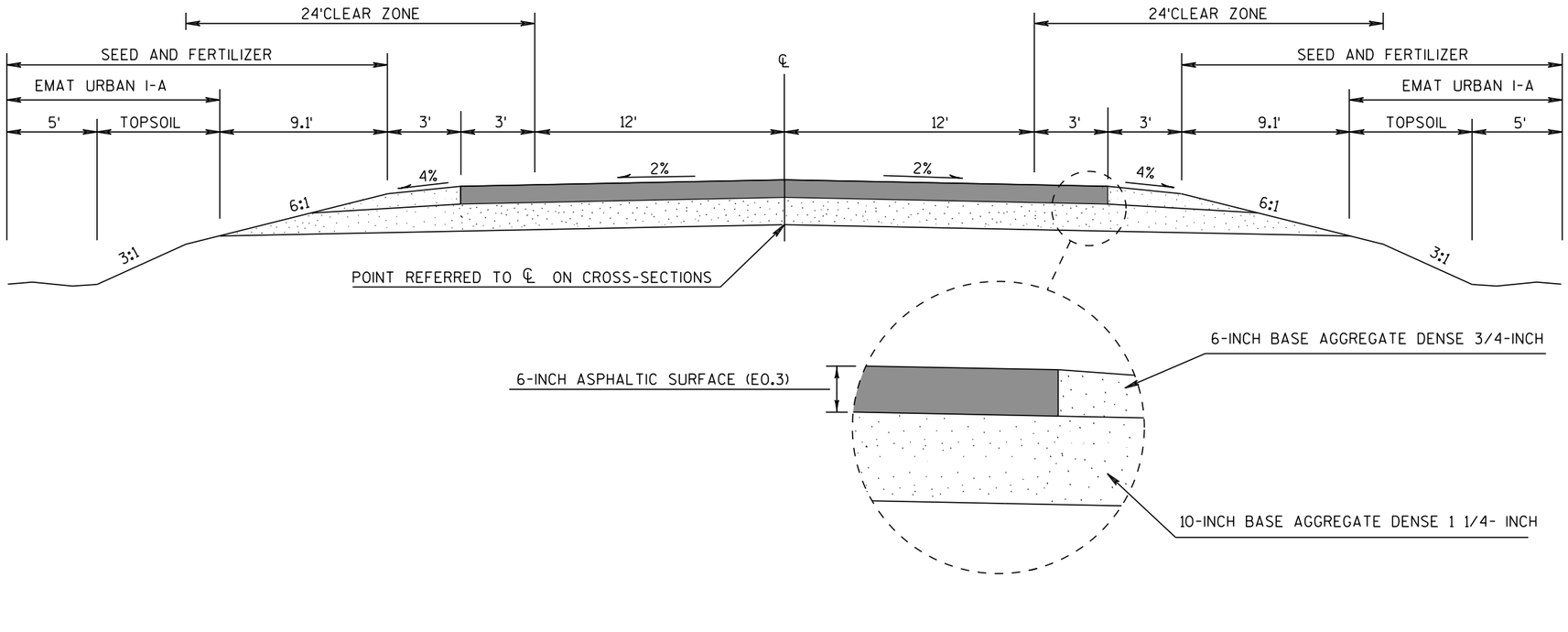
EB	WB	Yellow	All Red	Green	
red	red		20.0 sec		
green	red			12.0 sec	
yellow	red	4.0 sec			
red	red		20.0 sec		
red	green			~~12.0 sec~~	
red	yellow	4.0 sec			
Total cycle length		8.0 sec	40.0 sec	24.0 sec =	72.0 sec

2



EXISTING TYPICAL SECTION

STA 389+00 - STA 393+50

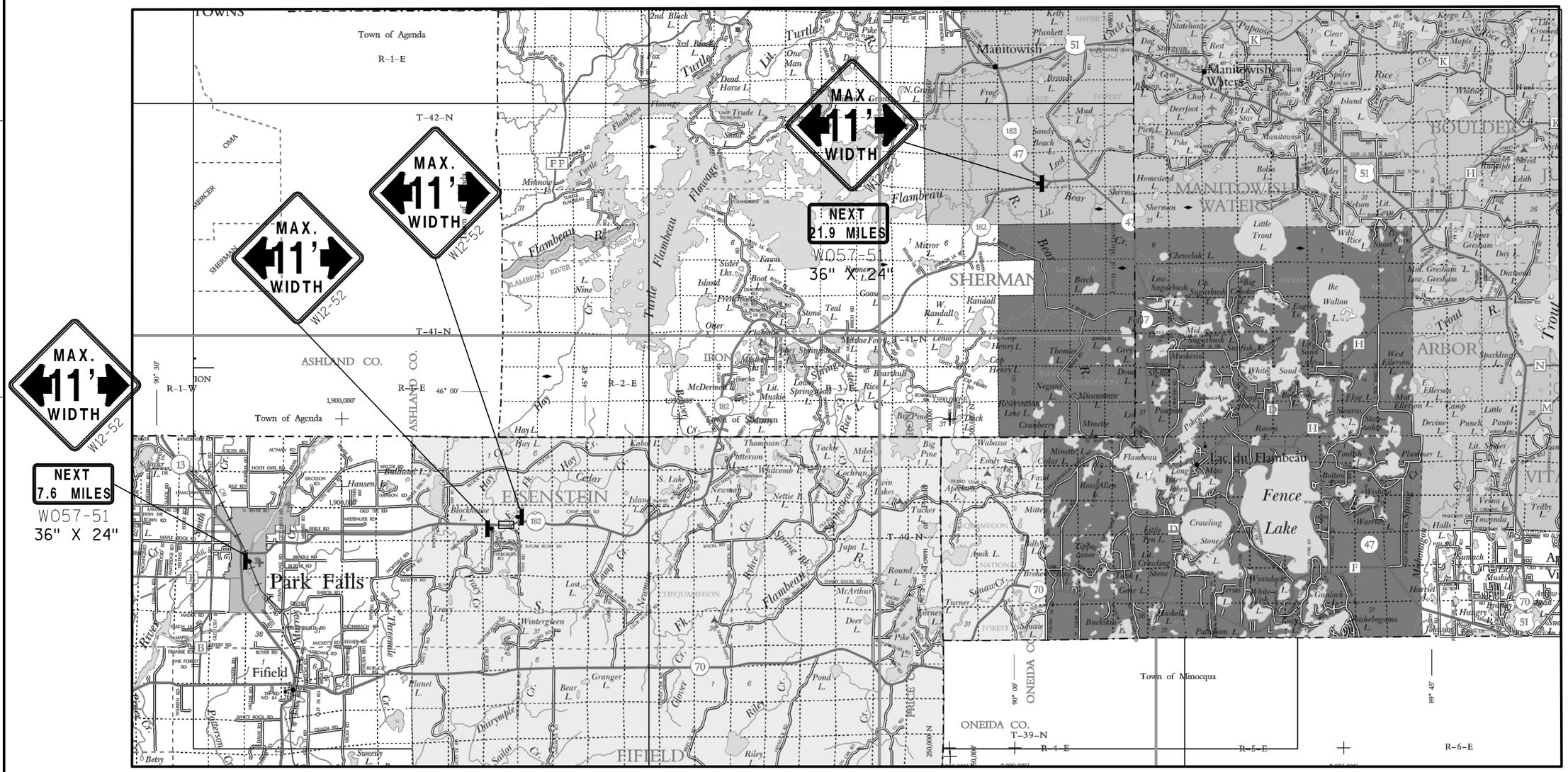


PROPOSED TYPICAL SECTION

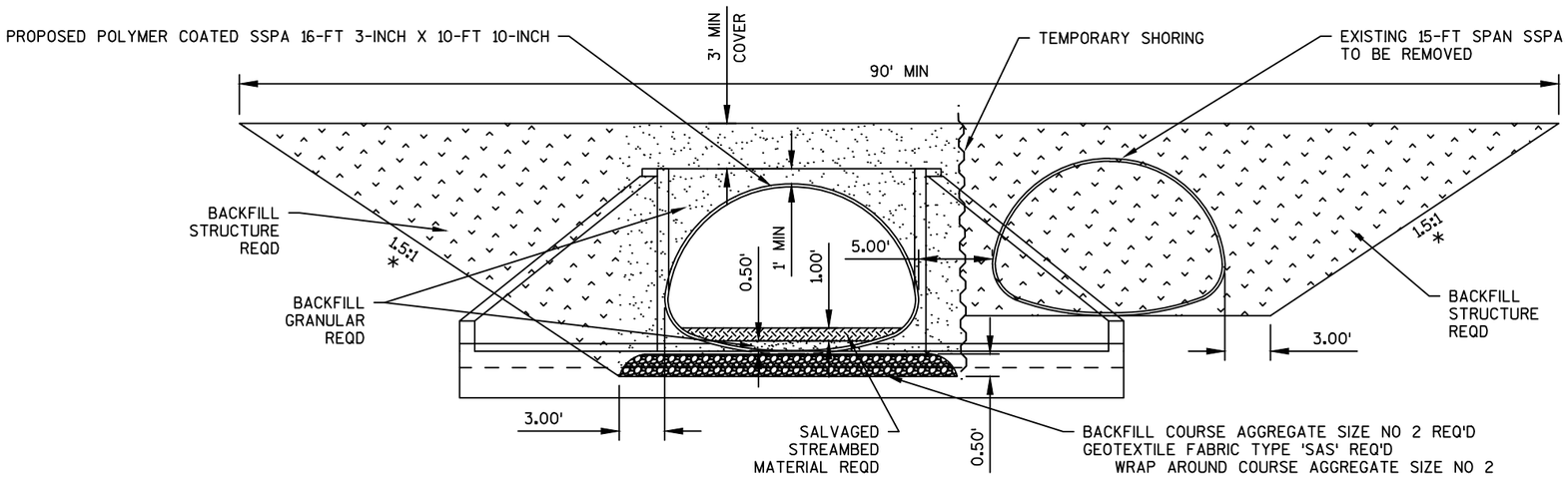
STH 389+00 - STA 393+50

PROJECT NO: 9240-09-70	HWY: STH 182	COUNTY: PRICE	TYPICAL SECTION	SHEET	E

2



PROJECT NO: 9240-10-61	HWY: STH 182	COUNTY: PRICE	PLAN: HAY CREEK STRUCTURE C-50-18	SHEET 4 E



TRENCH EXCAVATION AND STRUCTURE BACKFILL DETAIL

* OSHA MINIMUM SLOPE OF 1.5:1 USED FOR STRUCTURE BACKFILL CALCULATIONS

PROJECT NO: 9240-10-61	HWY: STH 182	COUNTY: PRICE	PLAN: HAY CREEK STRUCTURE C-50-18	SHEET 5	E

2

N

GUARDRAIL REMOVED IN
PREVIOUS STAGE

PC: 390+83.52

390+00

391+00

392+00

SEE SDD CONCRETE BARRIER
TEMPORARY PRECAST

REMOVE STRUCTURE OVER WATERWAY
SOUTH PORTION
STA 391+44

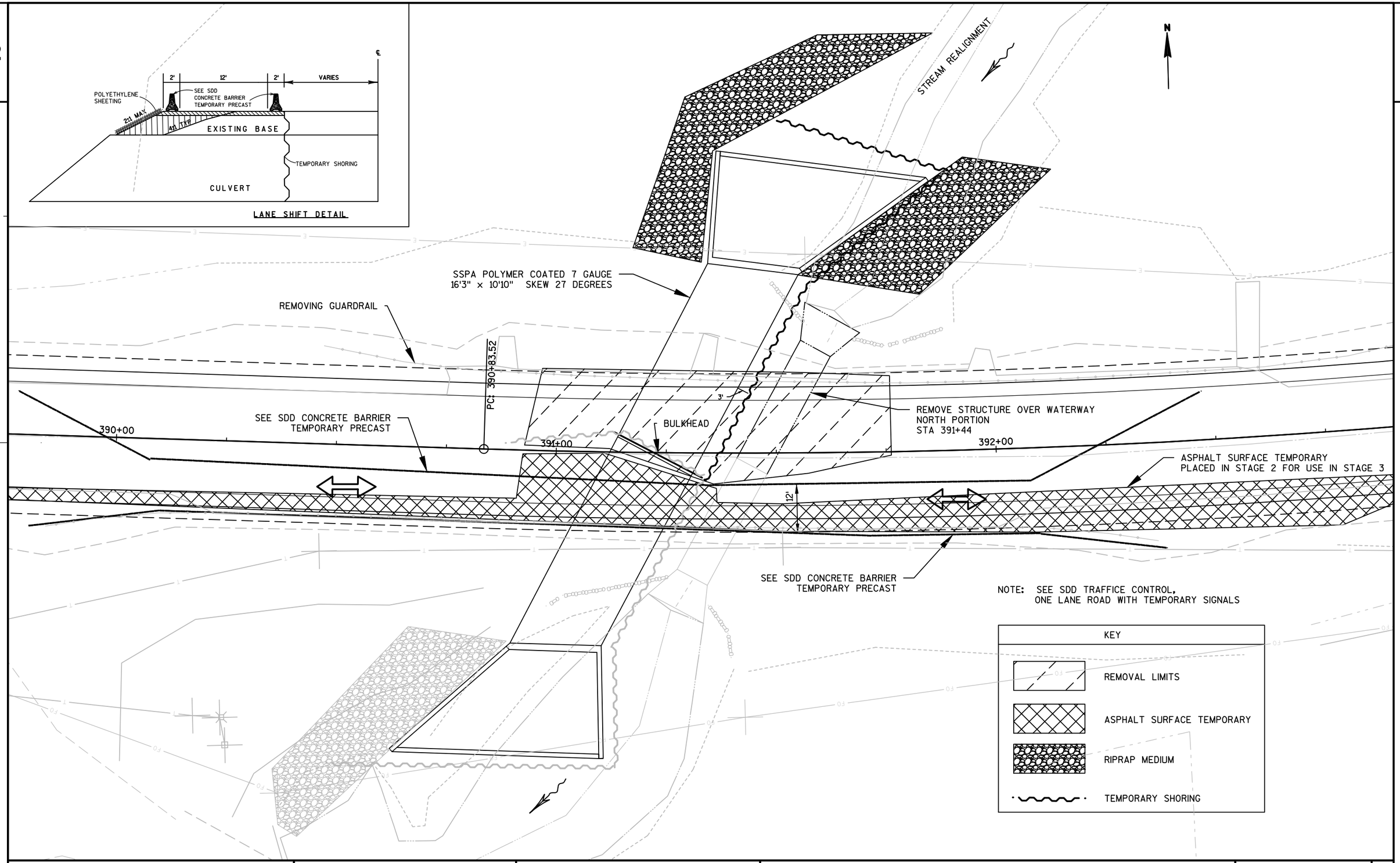
NOTE: SEE SDD TRAFFICE CONTROL,
ONE LANE ROAD WITH TEMPORARY SIGNALS

KEY

- REMOVAL LIMITS
- ASPHALT SURFACE TEMPORARY
- RIPRAP MEDIUM
- TEMPORARY SHORING

PROJECT NO: 9240-10-61	HWY: STH 182	COUNTY: PRICE	PLAN: CULVERT PIPE REMOVAL AND CONSTRUCTION - STAGE 4	SHEET 6	E

LANE SHIFT DETAIL



PROJECT NO: 9240-10-61	HWY: STH 182	COUNTY: PRICE	PLAN: CULVERT PIPE REMOVAL AND CONSTRUCTION - STAGE 3	SHEET 7	E

2

2

N

EXISTING GUARDRAIL TO REMAIN
DURING STAGE 2

PC: 390+83.52

100'

12'

390+00

SEE SDD CONCRETE BARRIER
TEMPORARY PRECAST

391+00

BULKHEAD

392+00

REMOVING GUARDRAIL

SSPA POLYMER COATED 7 GAUGE
16'3" x 10'10" SKEW 27 DEGREES

3'

NOTE: SEE SDD TRAFFICE CONTROL,
ONE LANE ROAD WITH TEMPORARY SIGNALS

KEY

- REMOVAL LIMITS
- ASPHALT SURFACE TEMPORARY
- RIPRAP MEDIUM
- TEMPORARY SHORING

PROJECT NO: 9240-10-61	HWY: STH 182	COUNTY: PRICE	PLAN: CULVERT PIPE REMOVAL AND CONSTRUCTION - STAGE 2	SHEET 8	E

2

N

PERMITTED WETLAND DISTURBANCE

R/W 100 FT

TURBIDITY BARRIER
INSTALLED BEGINNING STAGE 2

TURBIDITY BARRIER INSTALLED AFTER
HAY CREEK FLOWS IN NEW SSPA

DITCH CHECKS

ABANDON EXISTING
STREAMBED

WETLAND
BOUNDARY

TEMPORARY SMALL ANIMAL
TURN AROUND (TYPICAL)

389+00

BEGIN PROJECT 389+00

390+00

TEMPORARY SHORING

391+00

392+00

393+00

394+00

END PROJECT 393+50

PROPOSED SSPA

REMOVE EXISTING SSPA

DITCH TO DRAIN

42' - CPCM 24-INCH REQUIRED
RESTORE PE BAD

R/W 100 FT

WETLAND
BOUNDARY

TURBIDITY BARRIER
INSTALLED END OF STAGE 2

TURBIDITY BARRIER
INSTALLED DURING STAGE 1

PERMITTED WETLAND DISTURBANCE

MULCH

SILT FENCE

EROSION MAT
URBAN CLASS 1 TYPE A

RIP RAP

PERMITTED WETLAND
DISTURBANCE

PIPE DITCH CHECK

ROCK BAGS FOR
SILT FENCE RELIEF

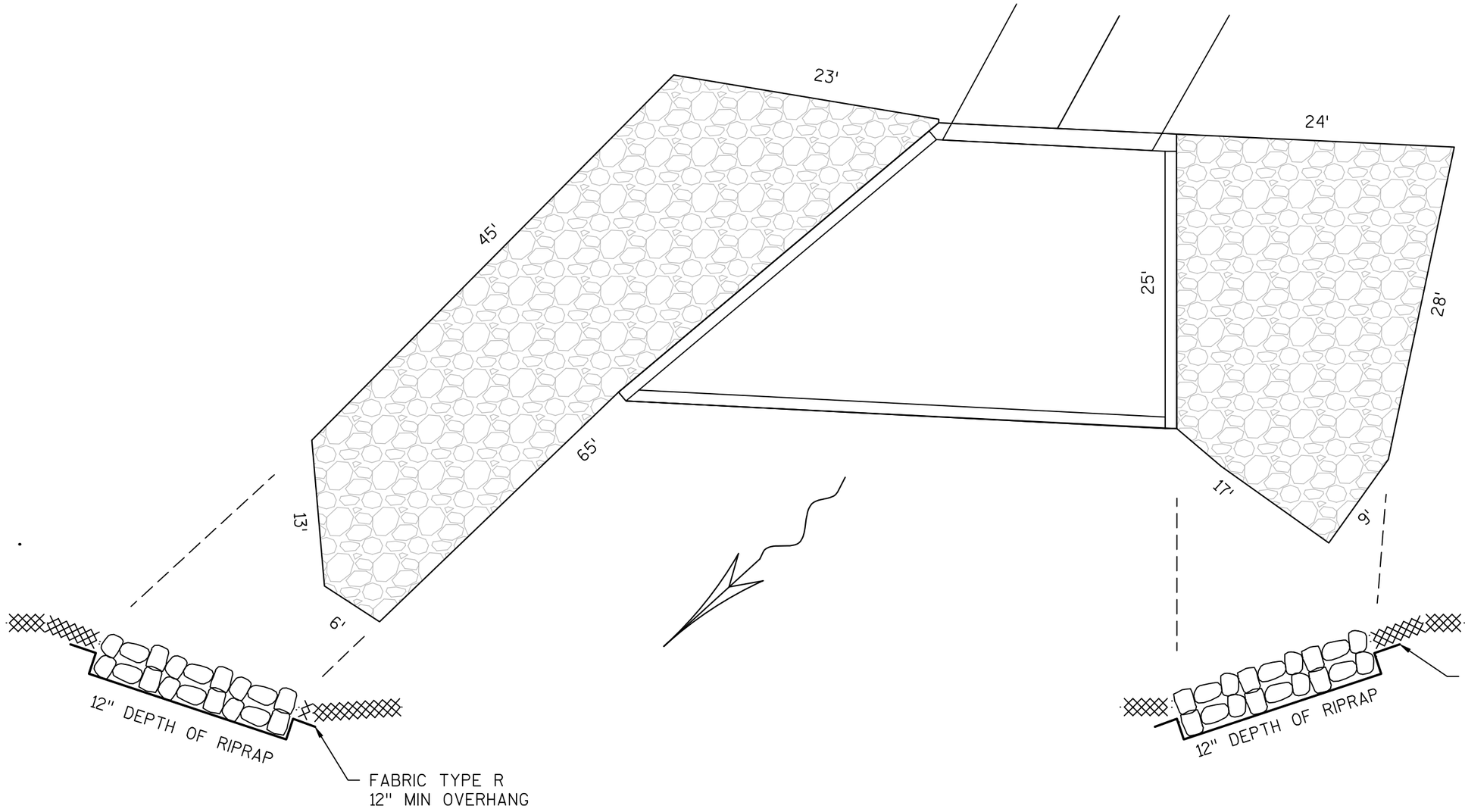
NOTE: CLEARING AND GRUBBING REQUIRED 45' EACH SIDE OF CENTERLINE
AND AREAS OF RIP RAP PLACEMENT

GEOTEXTILE FABRIC REQUIRED UNDER ALL RIP RAP

TURBIDITY BARRIERS TO BE PLACED PRIOR TO EXISTING SSPA
TRENCH BACKFILL AND RIP RAP FILLS CONSTRUCTED

PROJECT NO: 9240-10-61	HWY: STH 182	COUNTY: PRICE	PLAN: EROSION CONTROL DETAIL C-50-18	SHEET 9	E

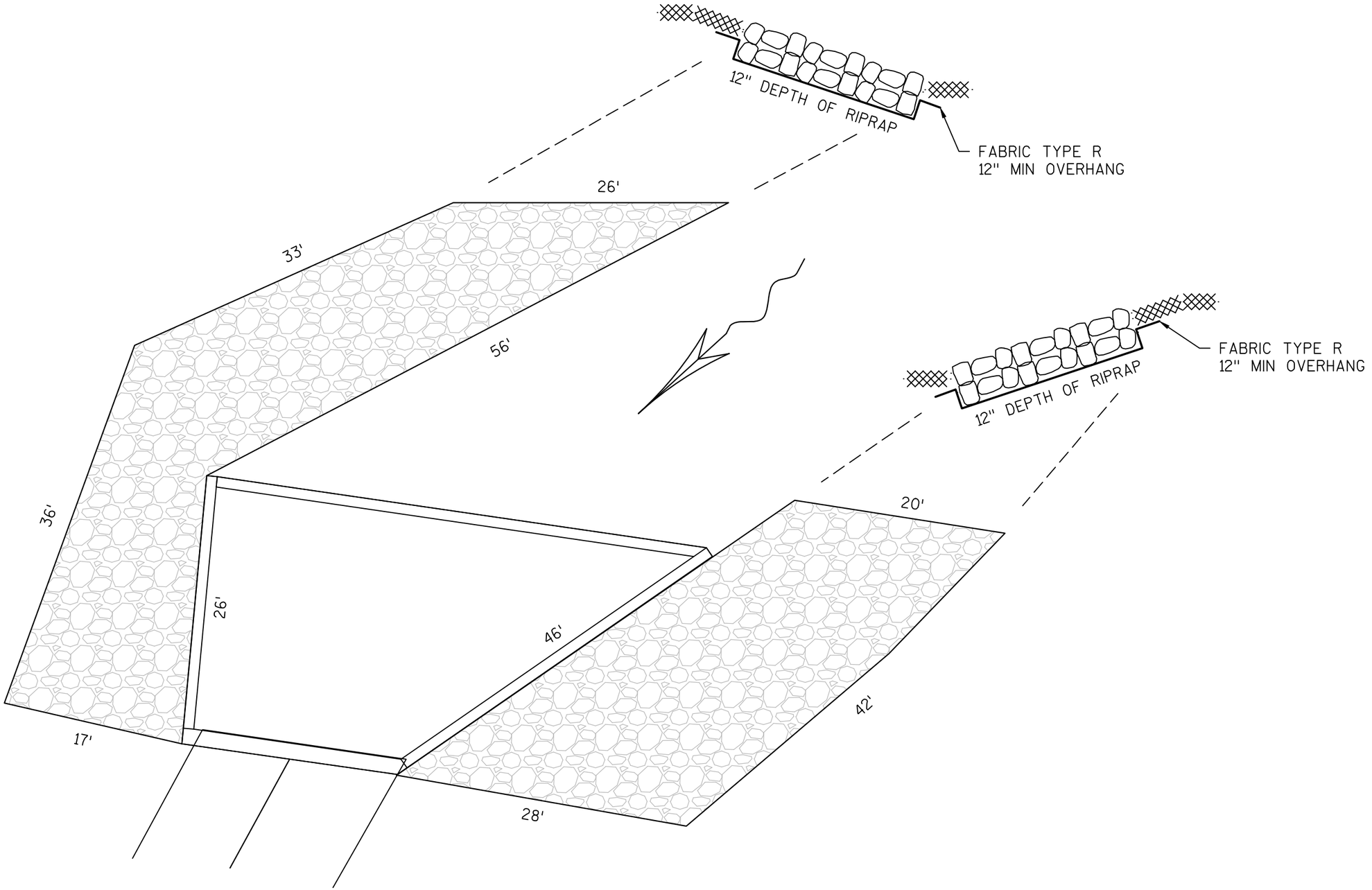
2



SOUTH END RIPRAP DIMENSIONS

PROJECT NO: 9240-10-61	HWY: STH 182	COUNTY: PRICE	PLAN: HAY CREEK STRUCTURE C-50-18	SHEET 10	E

2

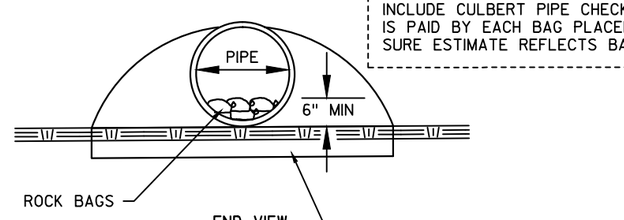


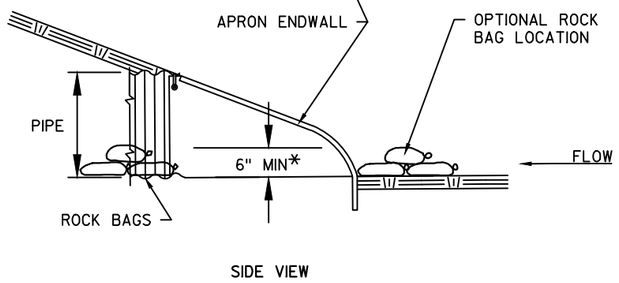
NORTH END RIPRAP DIMENSIONS

PROJECT NO: 9240-10-61	HWY: STH 182	COUNTY: PRICE	PLAN: HAY CREEK STRUCTURE C-50-18	SHEET	E

FILE NAME : N:\PDS\C3D\92401000\SHEETSPLAN\61\021001_CD.DWG PLOT DATE : 5/21/2013 2:26 PM PLOT BY : BAIER, GERARD M PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

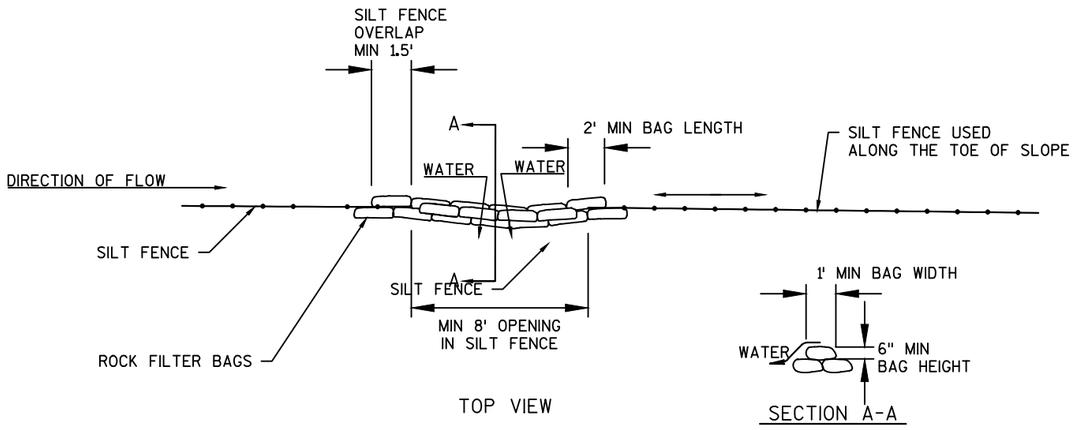
DESIGN NOTE:
INCLUDE CULBERT PIPE CHECK ITEM IN MISC QTY/ESTIMATE. ITEM IS PAID BY EACH BAG PLACED AS PART OF THE PIPE CHECK-MAKE SURE ESTIMATE REFLECTS BAGS.



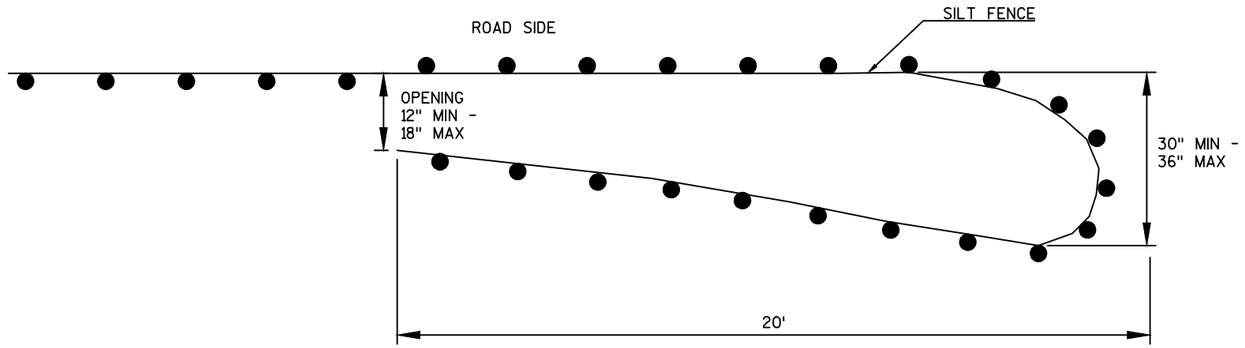


CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)



ROCK BAGS USED FOR SILT FENCE RELIEF



PLAN VIEW

GENERAL NOTES:

SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS

TEMPORARY SMALL ANIMAL TURN-AROUND

DATE 23MAY13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	9240-10-61 QUANTITY
0010	201.0105	CLEARING	STA	4.000	4.000
0020	201.0205	GRUBBING	STA	4.000	4.000
0030	203.0500.S	REMOVING OLD STRUCTURE OVER WATERWAY (STATION) 01. STA 391+44	LS	1.000	1.000
0040	204.0165	REMOVING GUARDRAIL	LF	502.000	502.000
0050	205.0100	EXCAVATION COMMON	CY	1,300.000	1,300.000
0060	206.4000	EXCAVATION FOR STRUCTURES STRUCTURAL PLATE PIPE OR PIPE ARCHES (STATION) 01. STA 391+23	LS	1.000	1.000
0070	206.6000.S	TEMPORARY SHORING	SF	3,500.000	3,500.000
0080	208.0100	BORROW	CY	1,300.000	1,300.000
0090	209.0100	BACKFILL GRANULAR **P**	CY	750.000	750.000
0100	209.0300.S	BACKFILL COARSE AGGREGATE (SIZE) 01. NO. 2	CY	75.000	75.000
0110	210.0100	BACKFILL STRUCTURE	CY	1,090.000	1,090.000
0120	213.0100	FINISHING ROADWAY (PROJECT) 01. 9240-10-61	EACH	1.000	1.000
0130	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	130.000	130.000
0140	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	1,000.000	1,000.000
0150	455.0605	TACK COAT	GAL	70.000	70.000
0160	465.0105	ASPHALTIC SURFACE	TON	450.000	450.000
0170	465.0125	ASPHALTIC SURFACE TEMPORARY	TON	175.000	175.000
0180	504.0100	CONCRETE MASONRY CULVERTS	CY	124.000	124.000
0190	505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	LB	8,110.000	8,110.000
0200	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	14.000	14.000
0210	520.0124	CULVERT PIPE CLASS III 24-INCH	LF	42.000	42.000
0220	520.1024	APRON ENDWALLS FOR CULVERT PIPE 24-INCH	EACH	2.000	2.000
0230	603.8000	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	LF	600.000	600.000
0240	603.8125	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	LF	1,000.000	1,000.000
0250	606.0200	RIPRAP MEDIUM	CY	125.000	125.000
0260	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 9240-10-61	EACH	1.000	1.000
0270	619.1000	MOBILIZATION	EACH	1.000	1.000
0280	624.0100	WATER	MGAL	3.000	3.000
0290	625.0100	TOPSOIL	SY	3,000.000	3,000.000
0300	627.0200	MULCHING	SY	3,500.000	3,500.000
0310	628.1504	SILT FENCE	LF	755.000	755.000
0320	628.1520	SILT FENCE MAINTENANCE	LF	755.000	755.000
0330	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	1.000	1.000
0340	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	2.000	2.000
0350	628.2006	EROSION MAT URBAN CLASS I TYPE A	SY	1,500.000	1,500.000
0360	628.5505	POLYETHYLENE SHEETING	SY	225.000	225.000
0370	628.6005	TURBIDITY BARRIERS	SY	180.000	180.000
0380	628.7504	TEMPORARY DITCH CHECKS	LF	48.000	48.000
0390	628.7555	CULVERT PIPE CHECKS	EACH	6.000	6.000
0400	628.7570	ROCK BAGS	EACH	84.000	84.000
0410	629.0210	FERTILIZER TYPE B	CWT	2.000	2.000
0420	630.0120	SEEDING MIXTURE NO. 20	LB	55.000	55.000
0430	630.0200	SEEDING TEMPORARY	LB	40.000	40.000
0440	633.1100	DELINEATORS TEMPORARY	EACH	50.000	50.000
0450	633.5200	MARKERS CULVERT END	EACH	4.000	4.000
0460	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0470	643.0100	TRAFFIC CONTROL (PROJECT) 01. 9240-10-61	EACH	1.000	1.000

3

DATE 23MAY13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	9240-10-61 QUANTITY
0480	643.0300	TRAFFIC CONTROL DRUMS	DAY	2,250.000	2,250.000
0490	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	55.000	55.000
0500	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	1,200.000	1,200.000
0510	643.0900	TRAFFIC CONTROL SIGNS	DAY	1,440.000	1,440.000
0520	645.0130	GEOTEXTILE FABRIC TYPE R	SY	380.000	380.000
0530	645.0140	GEOTEXTILE FABRIC TYPE SAS	SY	690.000	690.000
0540	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	1,300.000	1,300.000
0550	646.0600	REMOVING PAVEMENT MARKINGS	LF	400.000	400.000
0560	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	2,300.000	2,300.000
0570	649.1400	TEMPORARY PAVEMENT MARKING STOP LINE REMOVABLE TAPE 24-INCH	LF	24.000	24.000
0580	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	400.000	400.000
0590	650.5000	CONSTRUCTION STAKING BASE	LF	400.000	400.000
0600	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	1.000	1.000
0610	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. C-50-18	LS	1.000	1.000
0620	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01.9240-10-61	LS	1.000	1.000
0630	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	400.000	400.000
0640	661.0100	TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) 01. HAY CREEK CULVERT	LS	1.000	1.000
0650	690.0150	SAWING ASPHALT	LF	230.000	230.000
0660	715.0502	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	750.000	750.000
0670	SPV.0090	SPECIAL 01. POLYMER COATED SSPA 16'3"X10'10"	LF	100.000	100.000
0680	SPV.0180	SPECIAL 01. SALVAGED STREAMBED MATERIAL	SY	360.000	360.000

3

REMOVALS AND SAWING

STATION			LOCATION	201.0115 CLEARING (STA)	201.0215 GRUBBING (STA)	203.0500.S REMOVING OLD STRUCTURE OVER WATERWAY (LS)	204.0165 REMOVING GUARDRAIL (LF)	690.0150 SAWING ASPHALT (LF)
STA 389+00	-	STA 393+50	HAY CREEK	4	4	1	502	230
			TOTAL	**4**	**4**	**1**	**502**	**230**

EARTHWORK

STATION			LOCATION	205.0100 EXCAVATION COMMON (CY)	206.4000 EXCAVATION FOR STRUCTURE PIPE ARCH (LS)	208.0100 BORROW (CY)
STA 389+00	-	STA 393+50	HAY CREEK	1,300	1	1,300
			TOTAL	**1,300**	**1**	**1,300**

ROADWAY

STATION			LENGTH (FT)	LOCATION	213.0100 FINISHING ROADWAY (EACH)	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)	455.0605 TACK COAT (GAL)	465.0125 ASPHALTIC SURFACE (TON)	465.0125 ASPHALTIC SURFACE TEMPORARY (TON)	618.01 MAINTENANCE AND REPAIR OF HAUL ROADS (EACH)
STA 389+00	-	STA 393+50	450	HAY CREEK	1	150	1,040	75	510	175	1
				TOTAL	**1**	**150**	**1,040**	**75**	**510**	**175**	**1**

EROSION CONTROL

STATION			LOCATION	624.0100 WATER (MGAL)	625.0100 TOPSOIL (SY)	627.0200 MULCHING (SY)	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)	628.2002 EROSION MAT URBAN CLASS I TYPE A (SY)	628.5505 POLYETHYLENE SHEETING (SY)	628.6005 TURBIDITY BARRIER (SY)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.7555 CULVERT PIPE CHECKS (EACH)	628.7570 ROCK BAGS (EACH)	629.0210 FERTILIZER TYPE B (CWT)
STA 389+00	-	STA 393+50	HAY CREEK	3	3,000	3,500	755	755	1	2	1,500	225	180	48	6	84	2
			TOTAL	**3**	**3,000**	**3,500**	**755**	**755**	**1**	**2**	**1,500**	**225**	**180**	**48**	**6**	**84**	**2**

PAVEMENT MARKING

STATION			LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH (LF)	646.0600 REMOVING PAVEMENT MARKINGS (LF)	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (LF)	649.1400 TEMPORARY PAVEMENT MARKING STOP LINE REMOVABLE TAPE 24-INCH (LF)
STA 388+00	-	STA 394+00	CENTERLINE	500	200	800	
STA 388+00	-	STA 394+00	EDGE LINES	800	200	1,500	
STA 388+75	-	STA 393+75	STOP BAR				24
			TOTAL	**1,300**	**400**	**2,300**	**24**

TRAFFIC CONTROL

LOCATION	STAGE	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED (LF)	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED (LF)	643.0100 TRAFFIC CONTROL (EACH)	643.0300 TRAFFIC CONTROL DRUMS (DAY)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (DAY)	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C (DAY)	643.0900 TRAFFIC CONTROL SIGNS (DAY)	661.0100 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (LS)
HAY CREEK		600		1	150	55	150	300	1
	1		300		600		300	300	
	2		600		600		300	300	
	3		100		600		300	300	
					300		150	240	
	TOTAL	**600**	**1,000**	**1**	**2,250**	**55**	**1,200**	**1,440**	**1**

STRUCTURE AND CULVERT

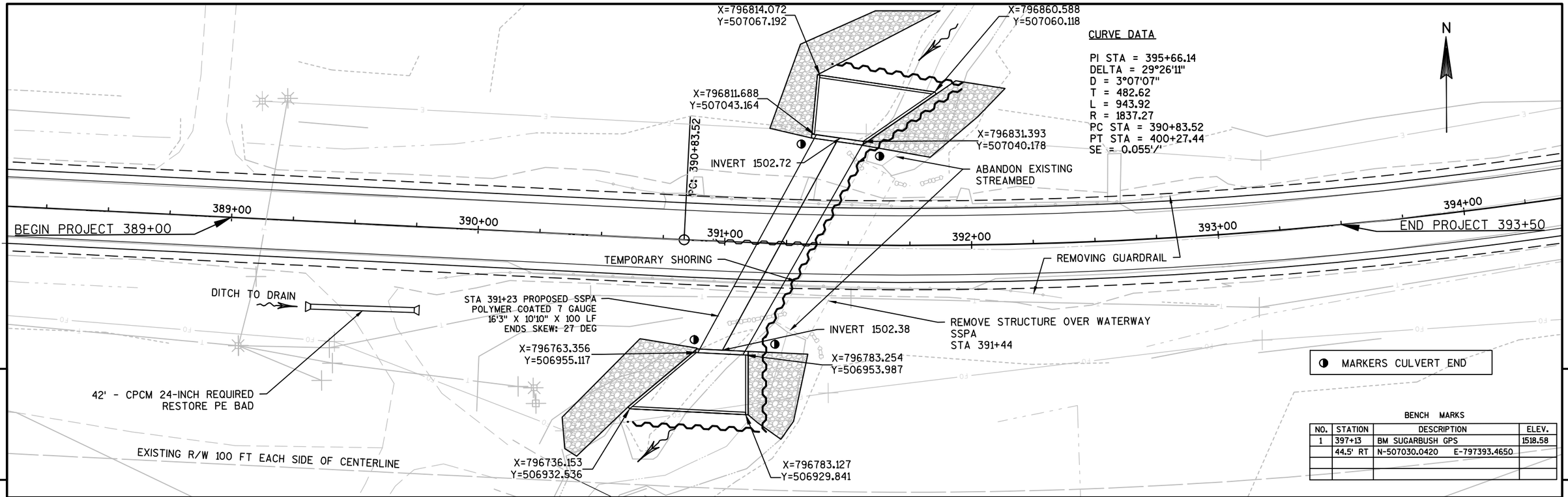
STATION	STRUCTURE ID	520.0124 CULVERT PIPE CLASS III 24" (LF)	520.1024 APRON ENDWALLS 24" (EACH)	SPV0090.01 SSPA 16'3"X10'10" 7 GAUGE (LF)	206.6000.S TEMPORARY SHORING (SF)	209.0100 BACKFILL GRANULAR (CY)	209.0300.S BACKFILL COURSE AGGREGATE NO 2 (CY)	*210.0100 BACKFILL STRUCTURE (CY)	606.0200 RIPRAP MEDIUM (CY)	633.5200 MARKERS CULVERT END (EACH)	645.0130 GEOTEXTILE FABRIC TYPE R (SY)	645.0140 GEOTEXTILE FABRIC TYPE SAS (SY)	SPV.0180 SALVAGED STREAMBED MATERIAL (SY)
STA 391+50	C-50-18			100	3,500	750	75	626	125	4	380	690	360
STA 389+50	PE	42	2										
	TOTAL	**42**	**2**	**100**	**3,500**	**750**	**75**	**626**	**125**	**4**	**380**	**690**	**360**

*464 see structure plans

MIN. THICKNESS FOR 24 - INCH 0.064" STEEL

CONSTRUCTION STAKING

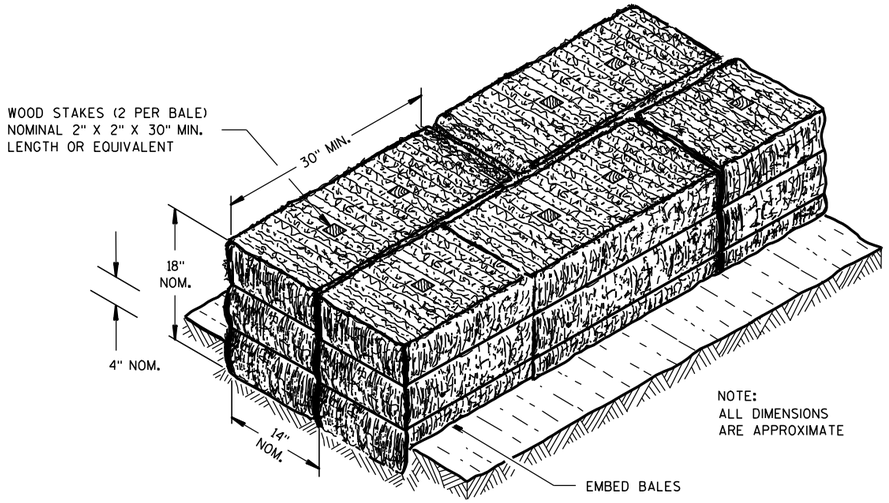
STATION		STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE (LF)	650.5000 CONSTRUCTION STAKING BASE (LF)	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (LS)	650.9920 CONSTUCTION STAKING SLOPE STAKES (LF)	650.6000 CONSTUCTION STAKING PIPE CULVERTS (EACH)
STA 389+00	-	STA 393+00	STH 182	400	400	1	400	
STA 389+50		PE	35' RT					1
			TOTAL	**400**	**400**	**1**	**400**	**1**



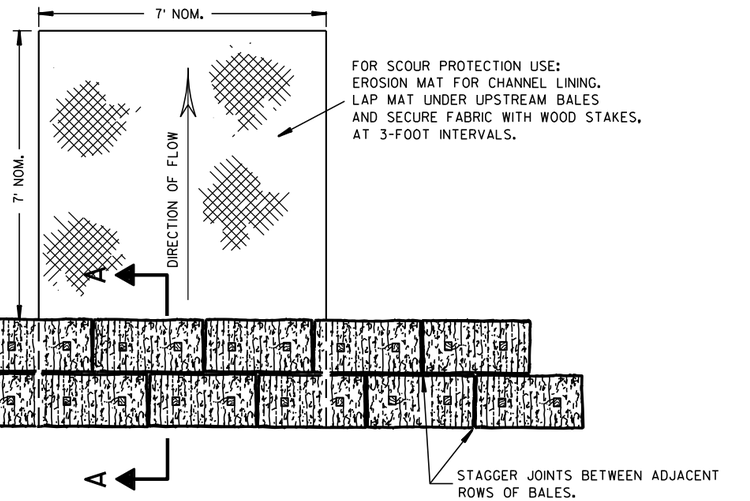
PROJECT NO: 9240-10-61	HWY: STH 182	COUNTY: PRICE	PLAN AND PROFILE: HAY CREEK STRUCTURE C-50-18	SHEET 18	E

Standard Detail Drawing List

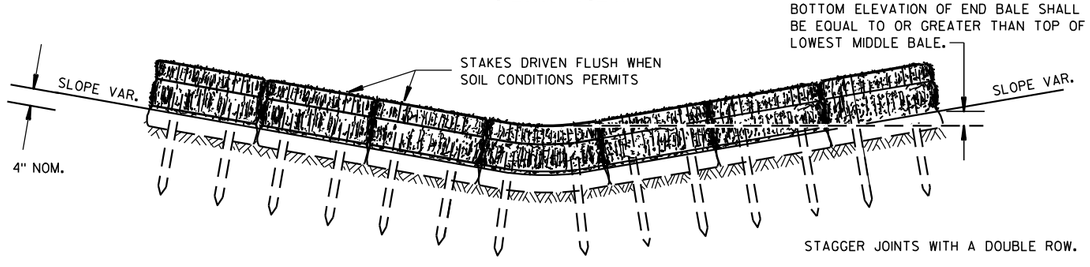
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
09G02-03A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-03B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-03C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
12A03-10	NAME PLATE (STRUCTURES)
14B07-13A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B29-01	SAFETY EDGE
15A02-07	DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15D33-02	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS



SECTION A-A



PLAN VIEW



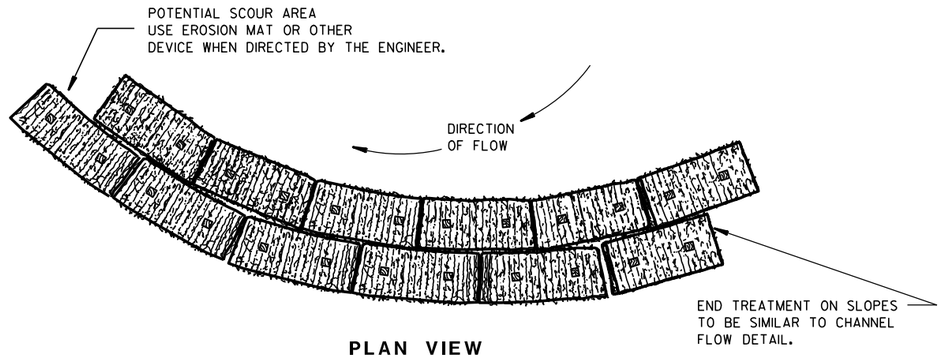
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

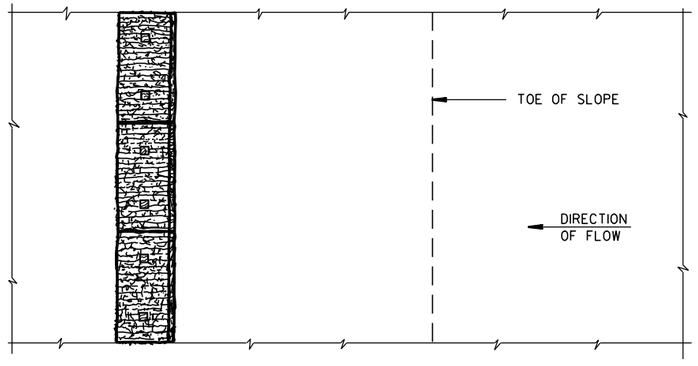
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

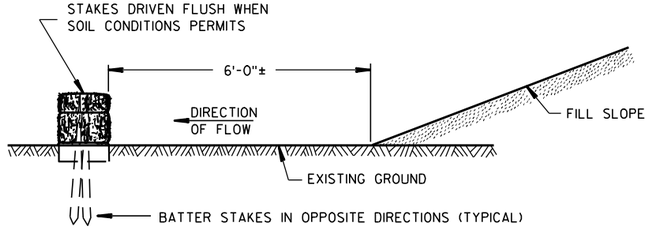


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

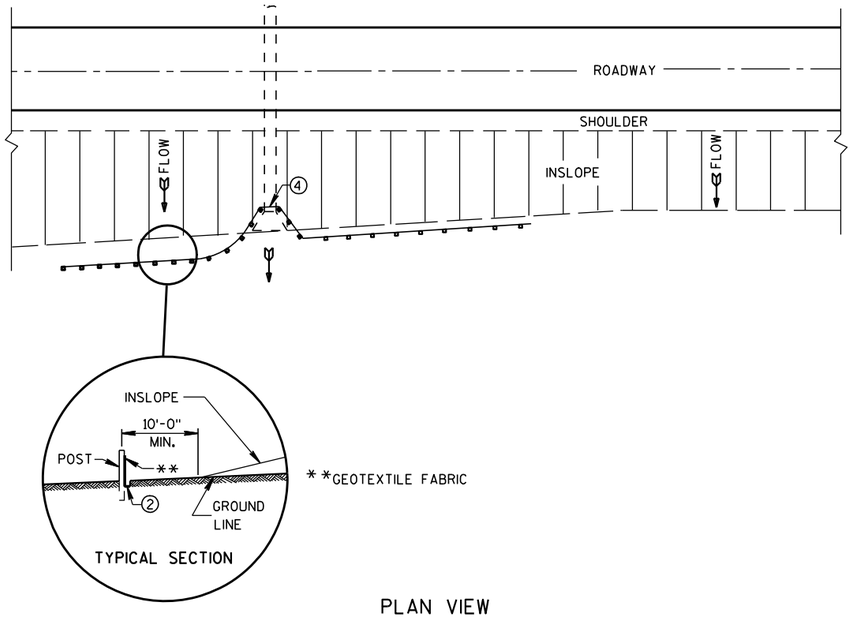
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

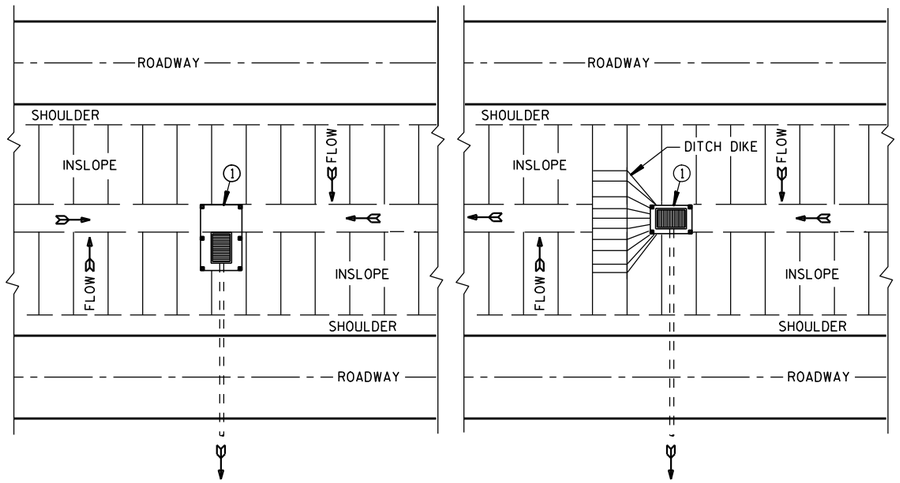
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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.

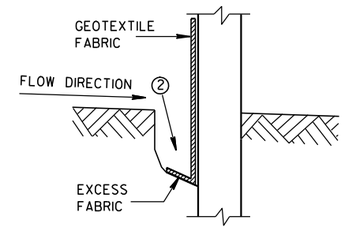
(1) HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

(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.

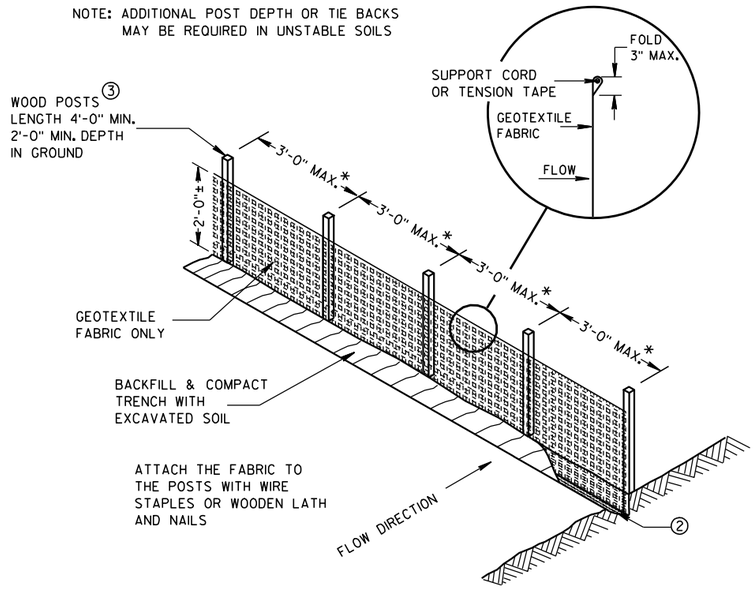
(3) WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

(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.

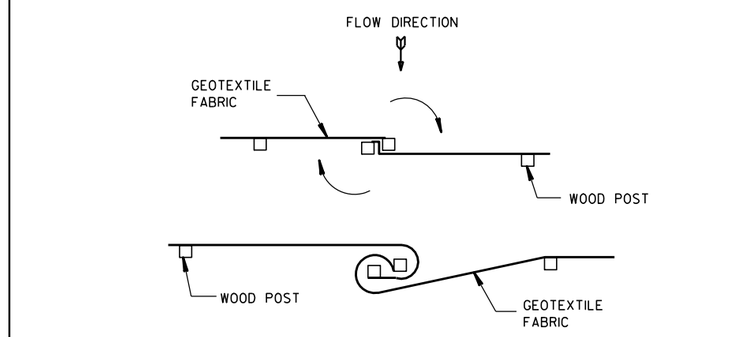


TRENCH DETAIL

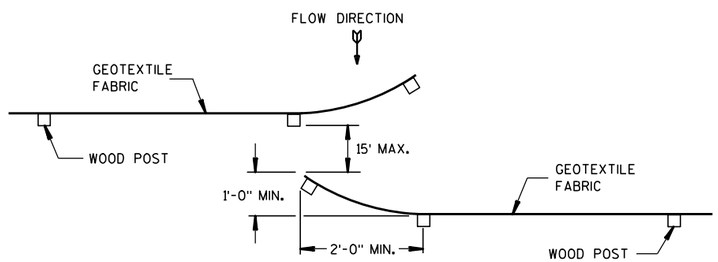


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

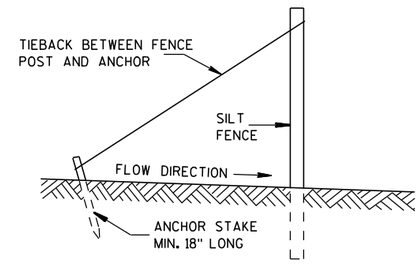


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

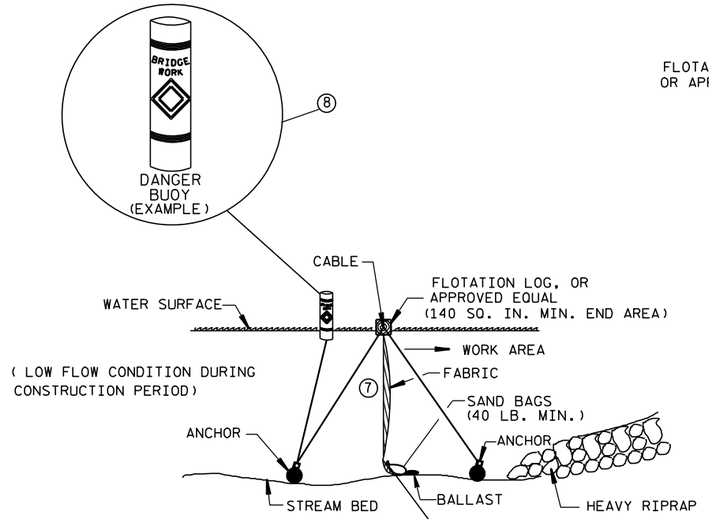
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

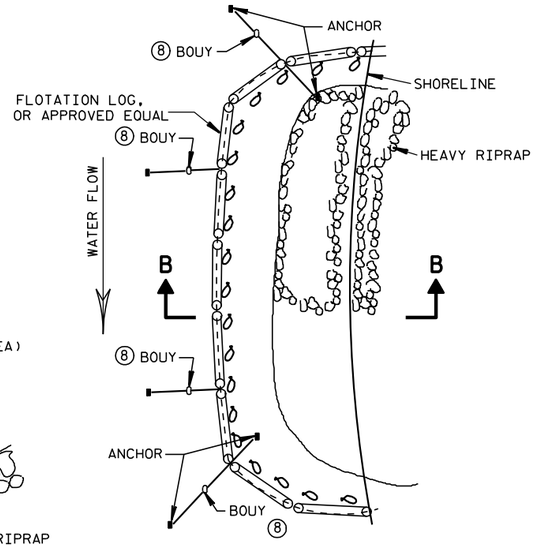
S.D.D. 8 E 9-6

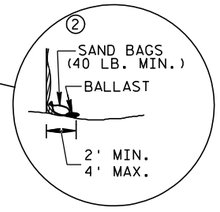
6

S.D.D. 8 E 9-6

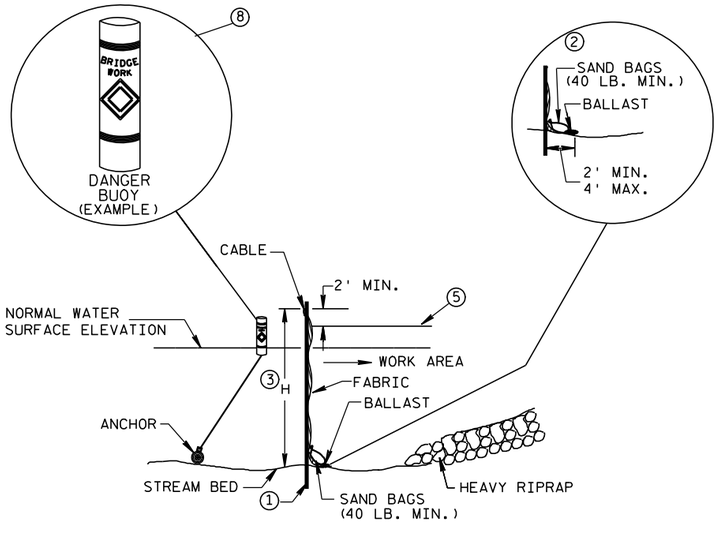


SECTION B-B

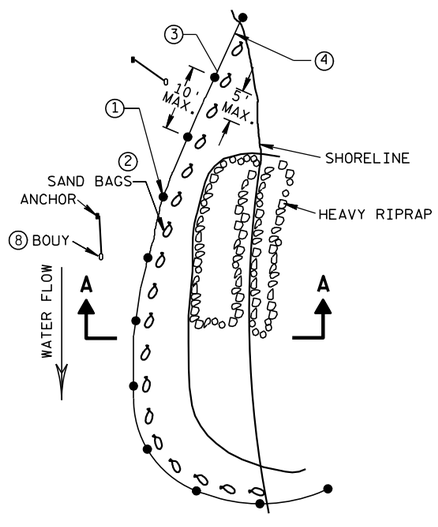




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

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

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.

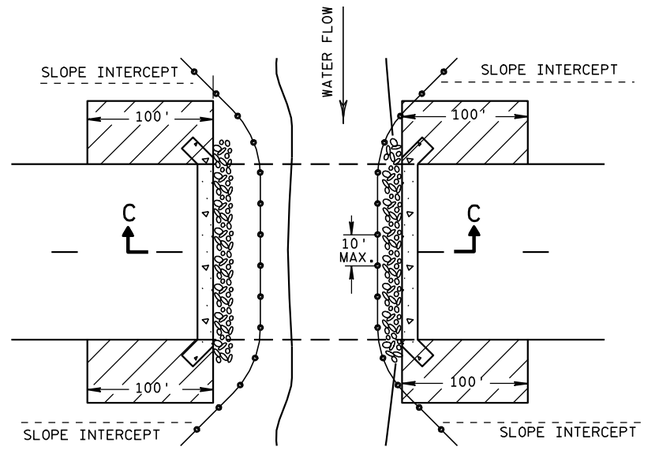
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

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

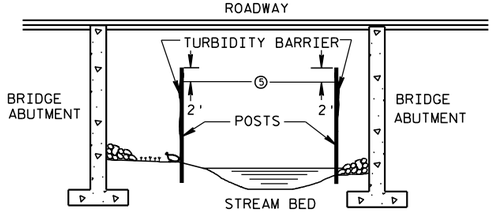
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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

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



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
6/04/02 DATE	/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

6

S.D.D. 8 E 11-2

6

S.D.D. 8 E 11-2

METAL APRON ENDWALLS

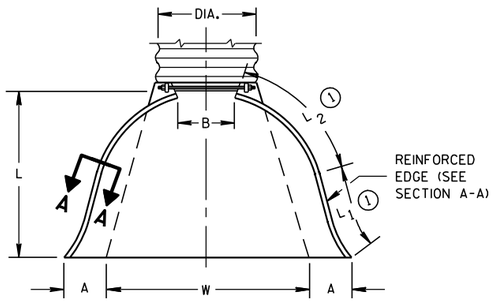
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

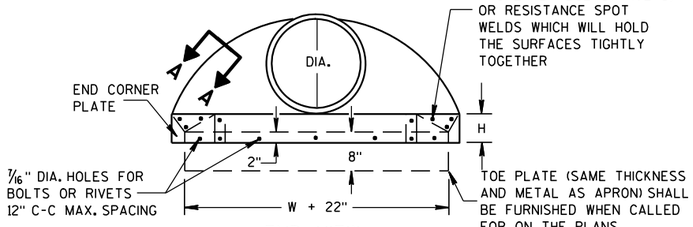
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
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

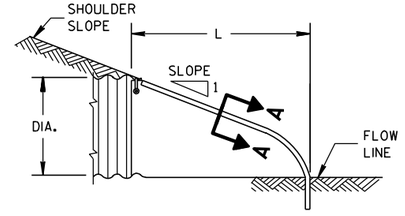
*MINIMUM
**MAXIMUM



PLAN VIEW

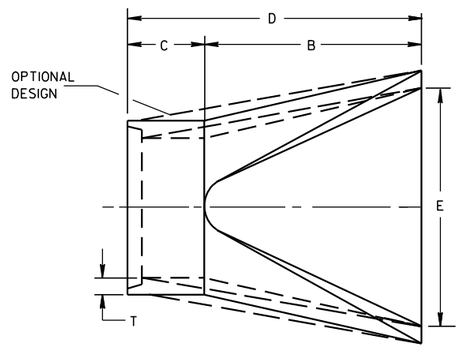


END VIEW

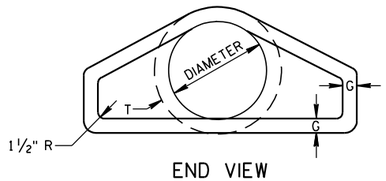


SIDE ELEVATION

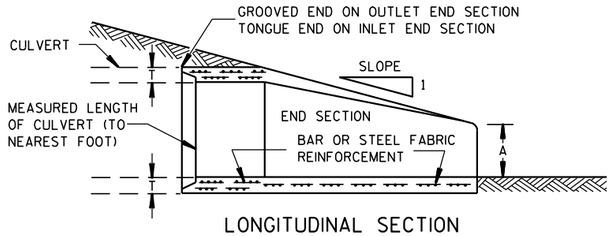
METAL ENDWALLS



PLAN

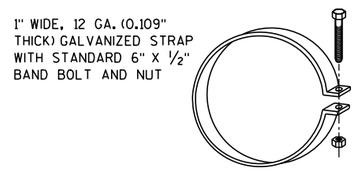


END VIEW



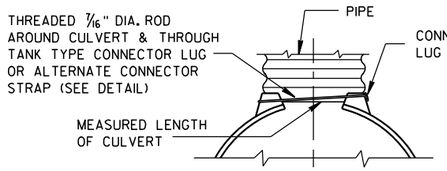
LONGITUDINAL SECTION

CONCRETE ENDWALLS

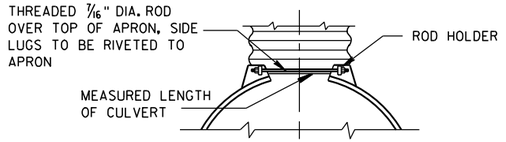


ALTERNATE FOR TYPE 1 CONNECTION

END SECTION CONNECTOR STRAP

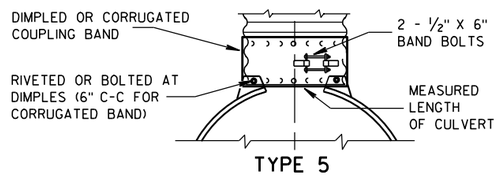


TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

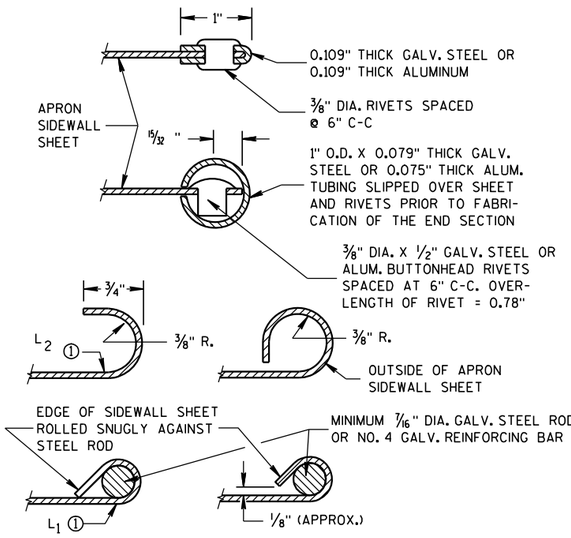
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

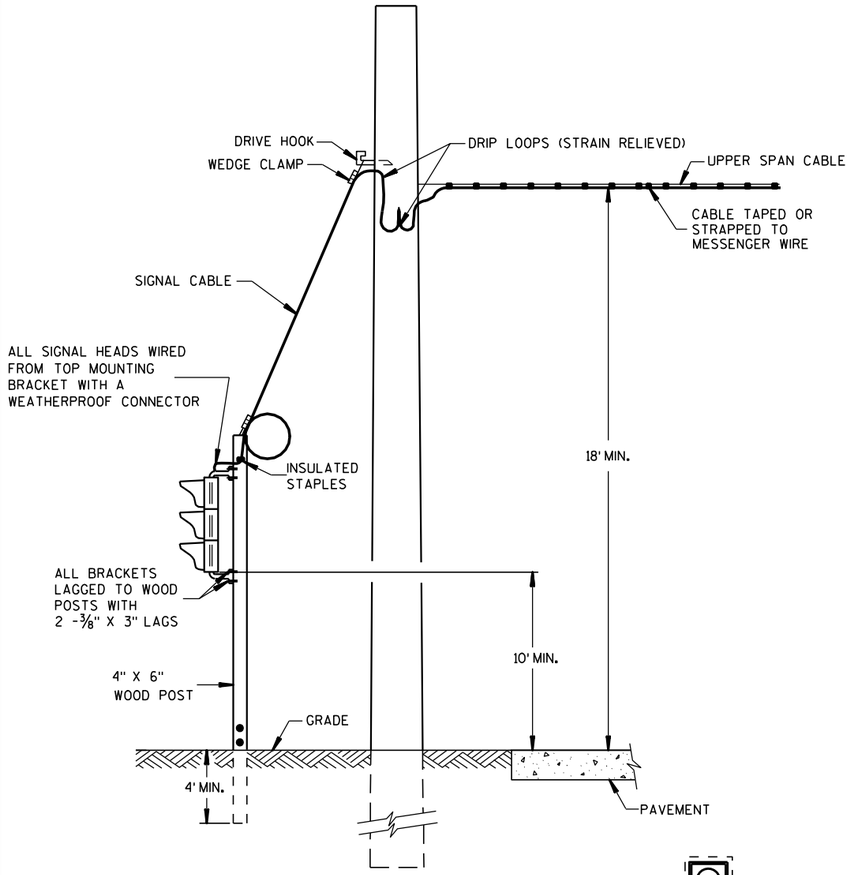
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

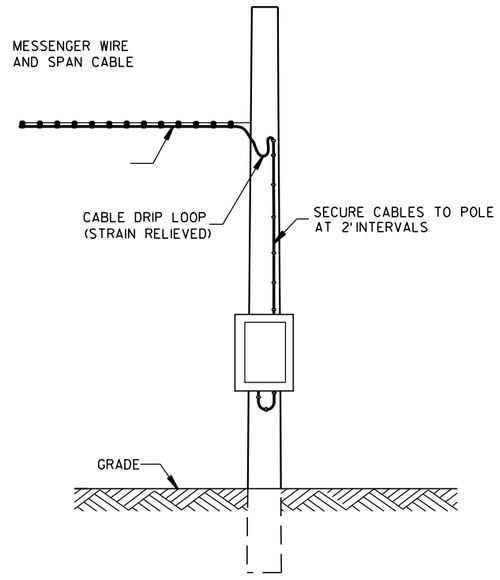
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



TYPICAL DROP TO TRAFFIC SIGNAL FACE



POLE MOUNT CABINET INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLE MOUNTED TRAFFIC SIGNAL CONTROL CABINET MAYBE MOUNTED ON THE SERVICE POLE IF THE ELECTRICAL UTILITY ALLOWS THE INSTALLATION.

WHEN UTILITY PLOLES ARE USED TO SPAN THE TEMPORARY OVERHEAD CABLE, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER OF THE POLES AND GIVEN TO THE PROJECT MANAGER. ALL PERTINENT UTILITY AND CODE CLEARANCES SHALL BE MAINTAINED.

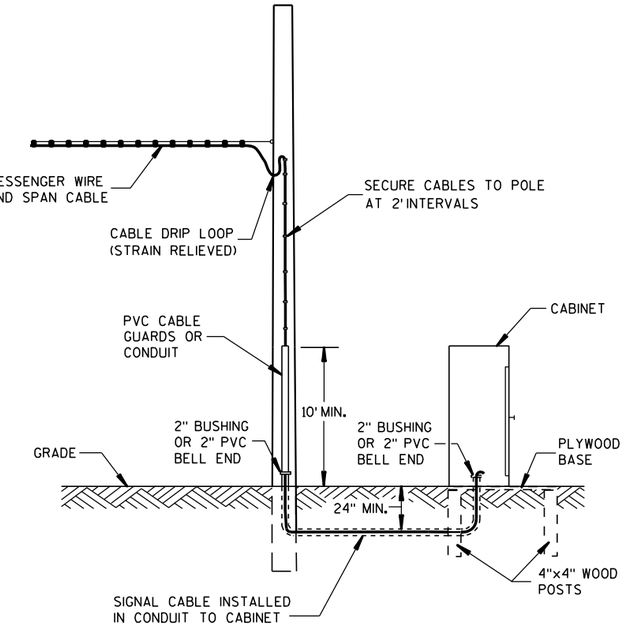
WOOD POLES (NONBREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAMGUARD, ETC.).

WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

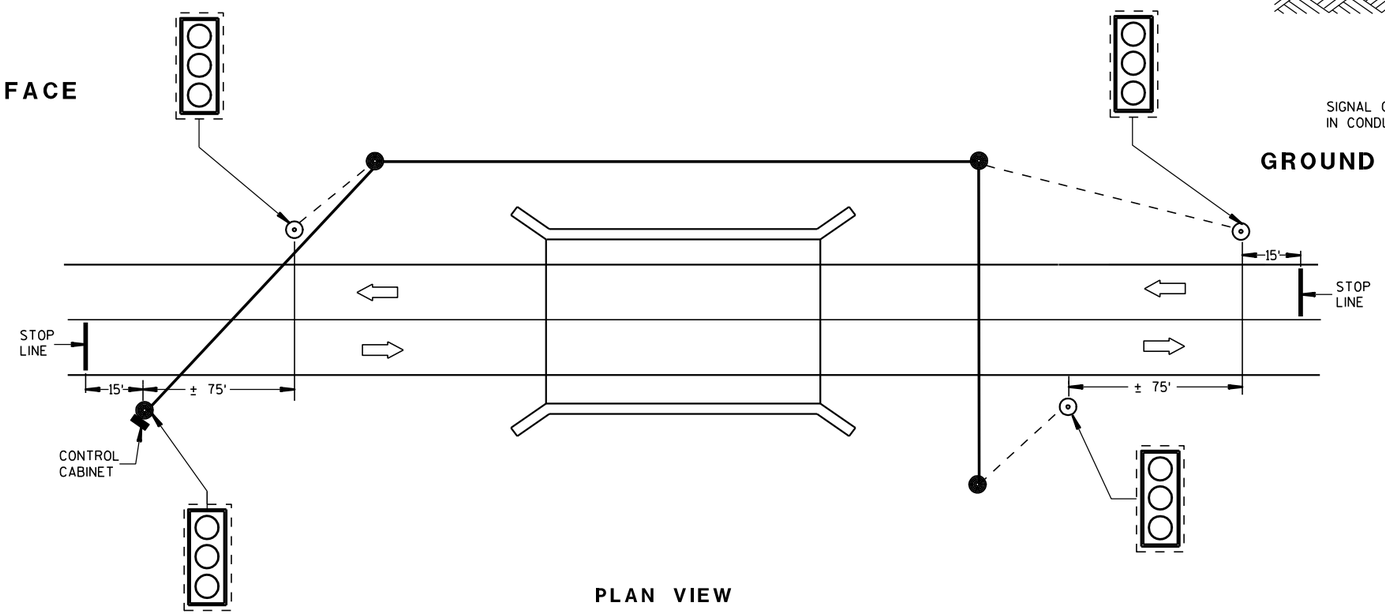
EACH TRAFFIC SIGNAL FACE SHALL HAVE A BACKPLATE.



GROUND MOUNT CABINET INSTALLATION

OFFSET DISTANCES FOR TEMPORARY NON-BREAKAWAY POLES	
SPEED LIMIT	OFFSET DISTANCE**
GREATER THAN 45 MPH	18 FT
45 MPH OR LESS	12 FT
45 MPH OR LESS W/ CURBS	2 FT

**NOTE: OFFSET MEASURED FROM OUTER EDGE OF OUTSIDE THRU LANE.



PLAN VIEW

TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION

LEGEND

- WOOD POLE (NONBREAKAWAY)
- WOOD POST (BREAKAWAY)
- SIGNAL CABLE
- SIGNAL CABLE W/MESSENGER
- LED TRAFFIC SIGNAL FACE WITH BACKPLATE (3-12")
- DIRECTION OF TRAFFIC

MINIMUM POLE LENGHTS	CLASS	MINIMUM BURIAL DEPTHS
25 FEET	V	5 FEET
30 FEET	V	6 FEET
35 FEET	IV	7 FEET
40 FEET	IV	8 FEET
45 FEET	IV	9 FEET

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/2/2011 DATE
/S/ Thomas J. Gosling STATE ELECTRICAL ENGI
24 HWYS
FHWA

6

S.D.D. 9 G 2-3a

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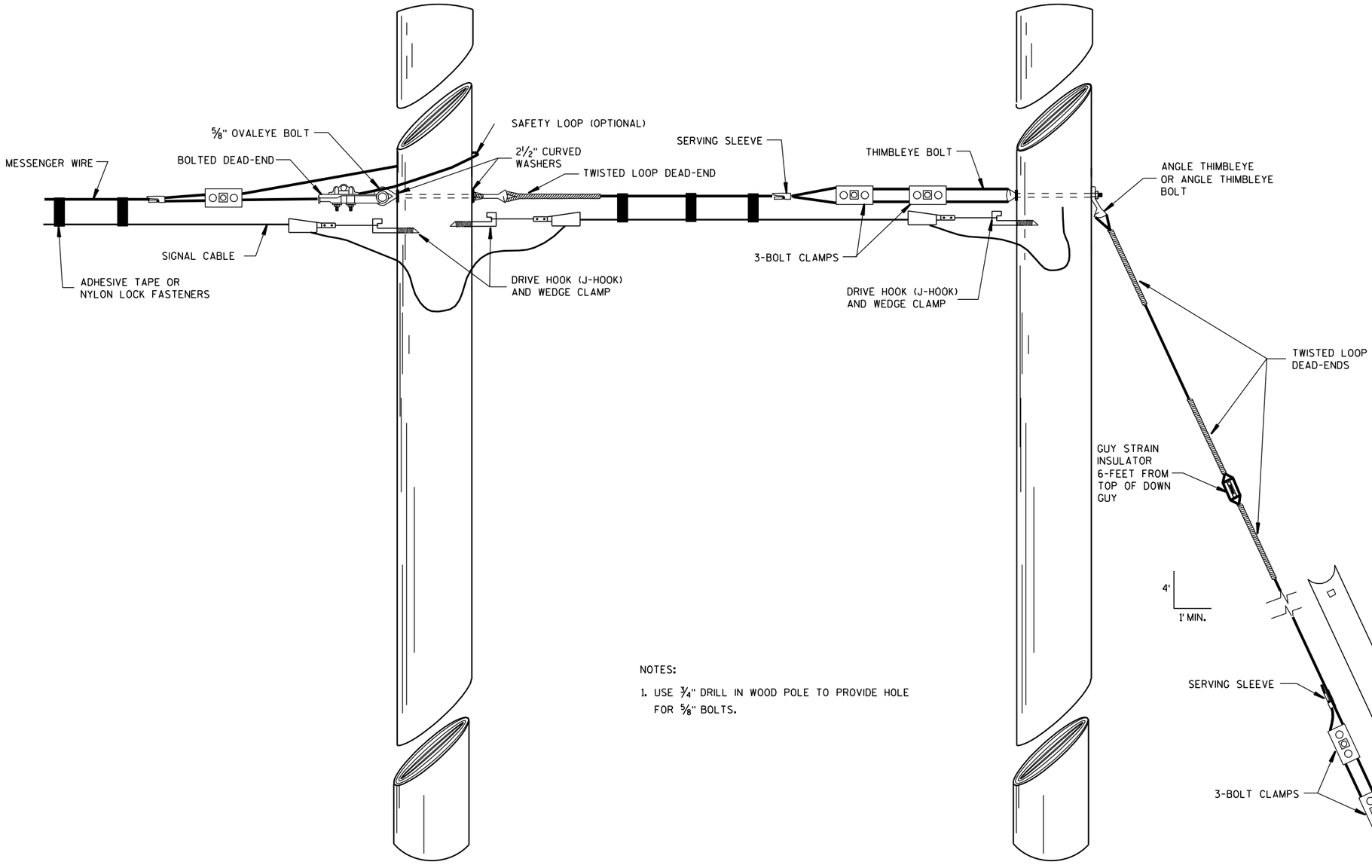
S.D.D. 9 G 2-3a



SPAN WIRE POLE

GUY POLE

NOTES:

1. USE 3/4" DRILL IN WOOD POLE TO PROVIDE HOLE FOR 5/8" BOLTS.

TYPICAL DEAD-ENDINGS OR GUYING

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011 DATE

/S/ Thomas J. G[illegible] STATE ELECTRICAL ENGI

25

HWYS

FHWA

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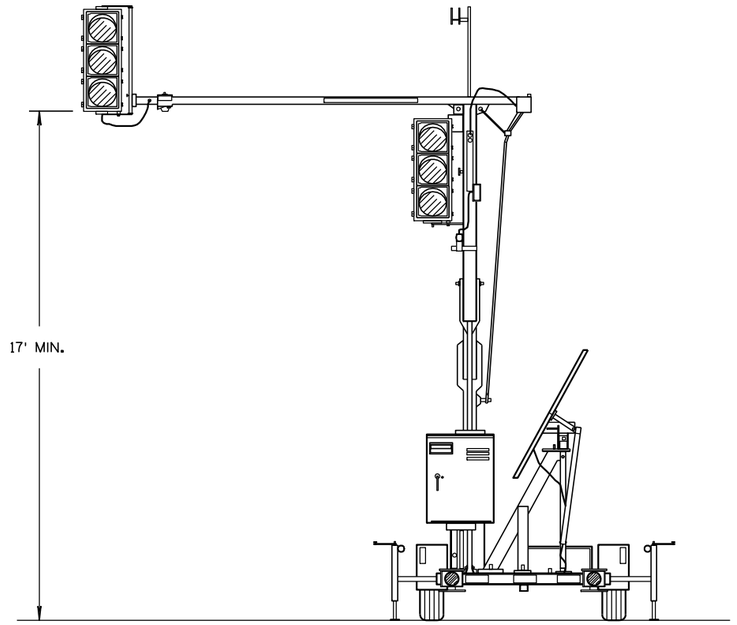
S.D.D. 9 G 2-3b

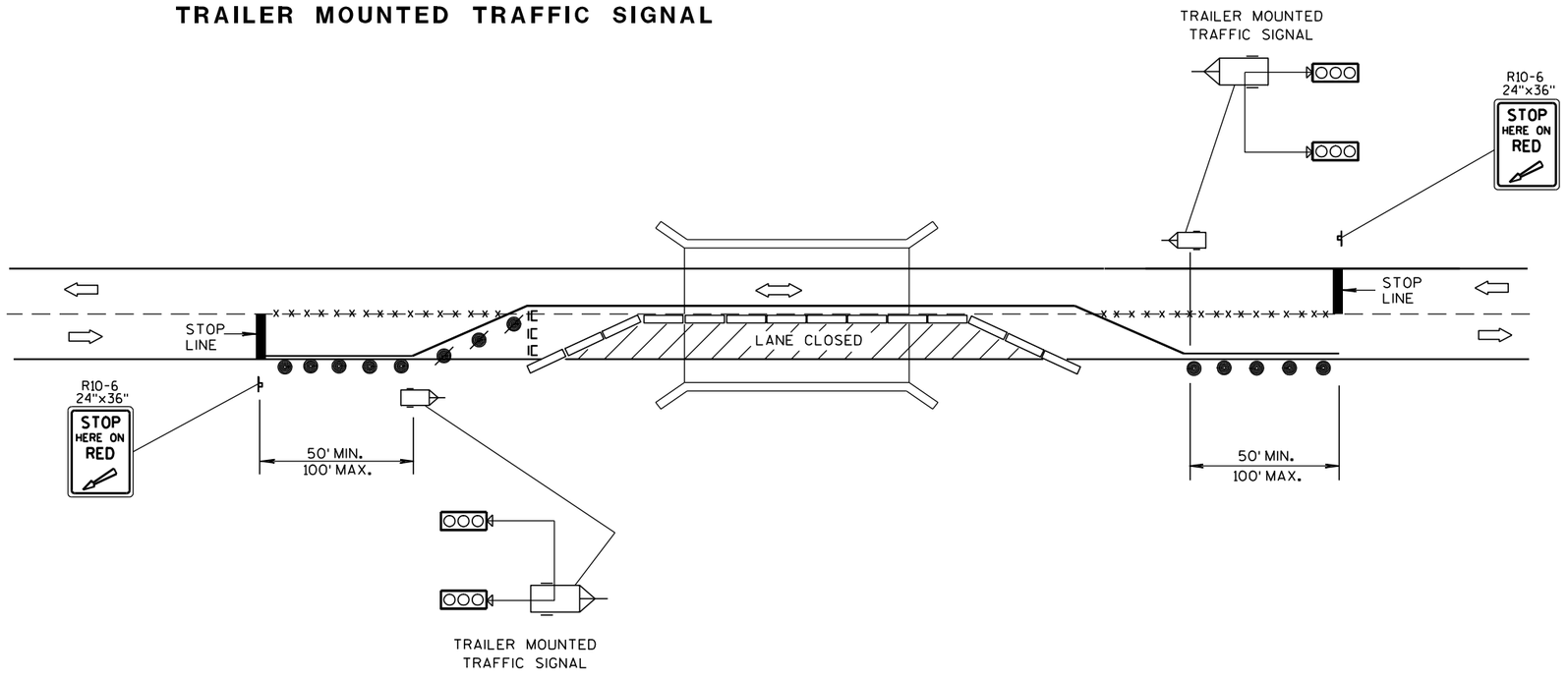


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15 D 33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

LEGEND

- POST MOUNTED SIGN
- REMOVING PAVEMENT MARKING
- TYPE III BARRICADE WITH SIGN
- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- TEMPORARY PRECAST CONCRETE BARRIER
- TRAILER MOUNTED TRAFFIC SIGNAL
- DIRECTION OF TRAFFIC FLOW

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011 — DATE

/S/ Thomas J. Gosling — STATE ELECTRICAL ENGI

FHWA

HWYS

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S.D.D. 9 G 2-3c

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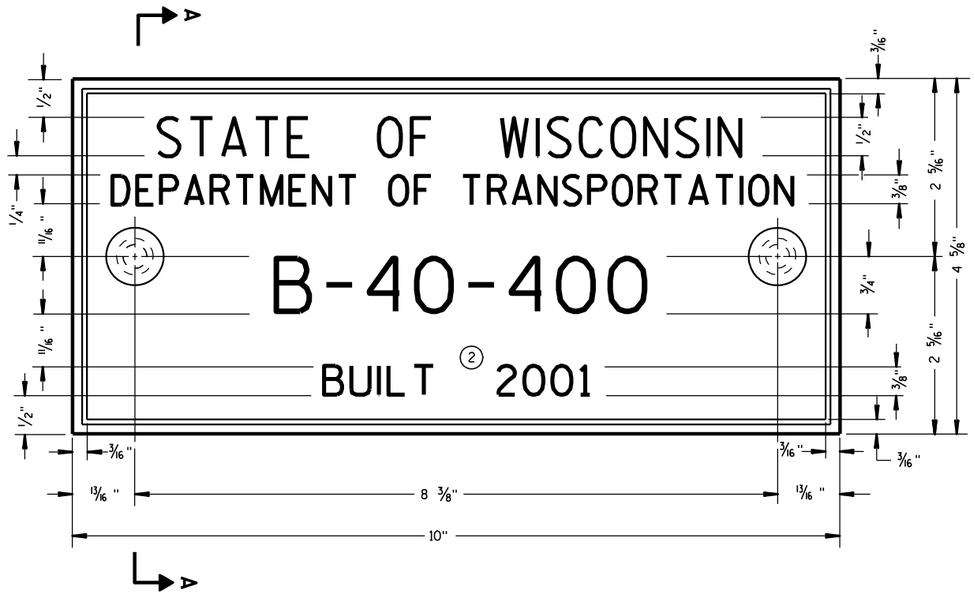
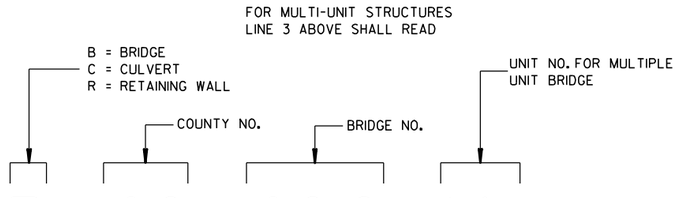
S.D.D. 9 G 2-3c



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

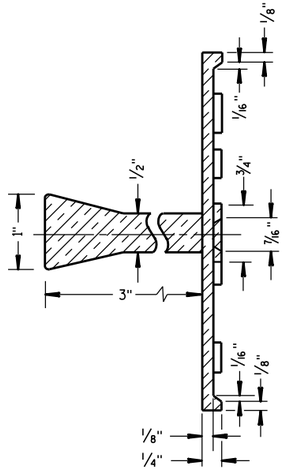
GENERAL NOTES

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.

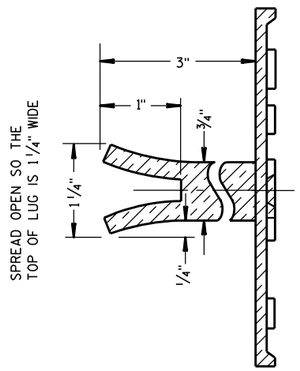
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

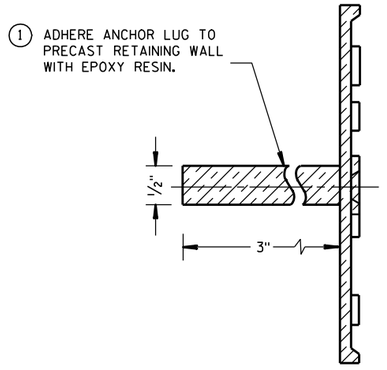
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



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

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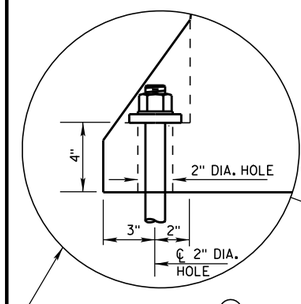
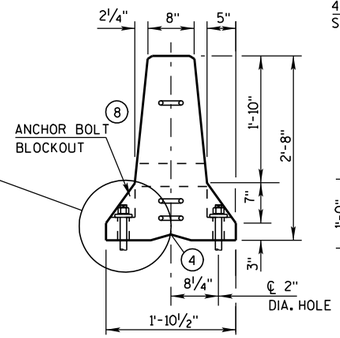
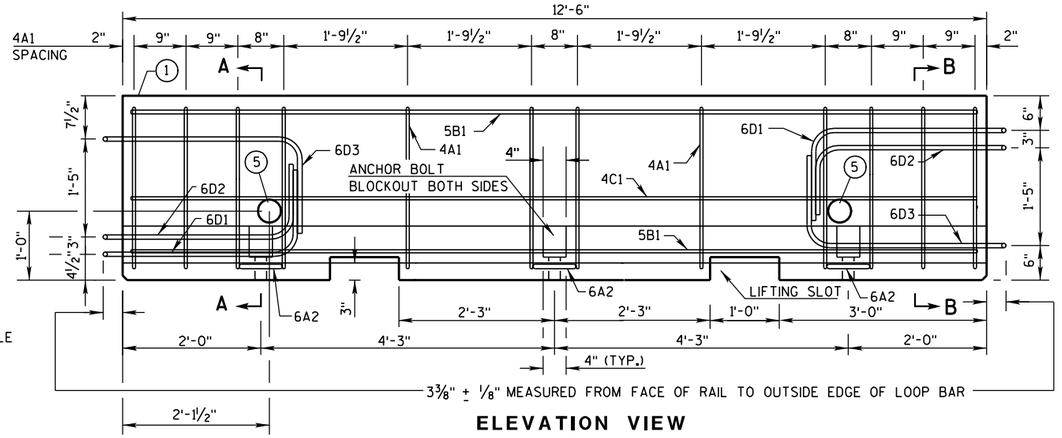
S.D.D. 12 A 3-10



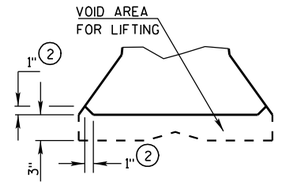
ANCHOR ON TRAFFIC SIDE (8) ONLY WHEN REQUIRED (SEE SHEET D FOR ADDITIONAL ANCHOR DETAIL)



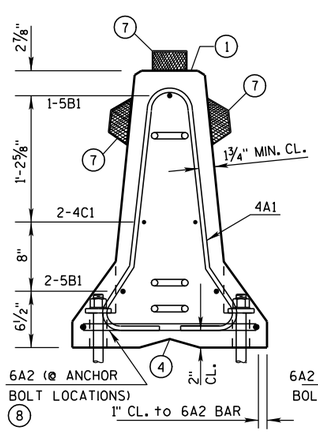
END VIEW



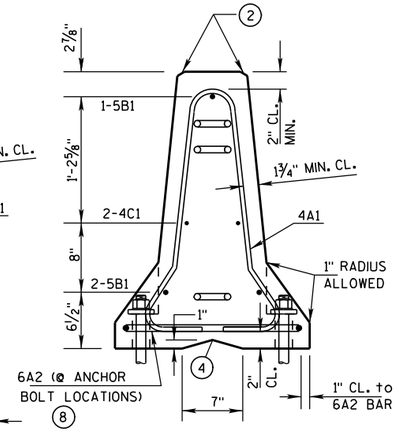
ELEVATION VIEW



DETAIL "B"
LIFTING SLOT DETAIL



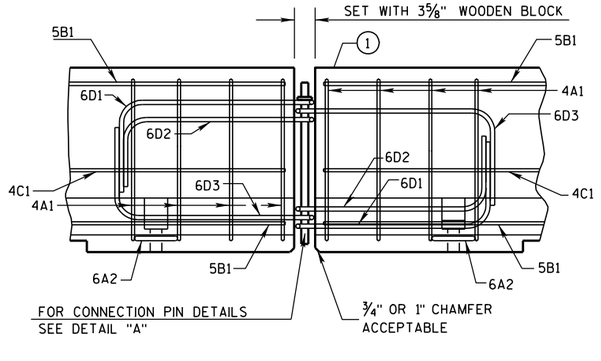
SECTION A-A
(STIRRUP PLACEMENT)



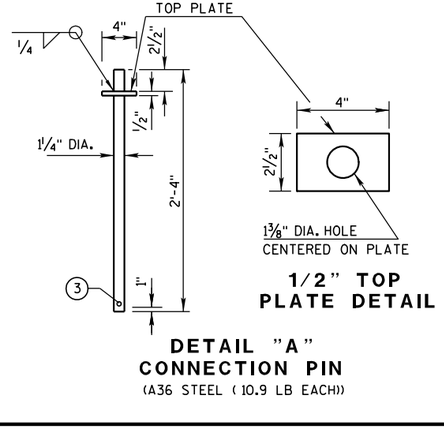
SECTION B-B
(STIRRUP PLACEMENT)

PLAN VIEW

DETAILS OF BARRIER SECTION

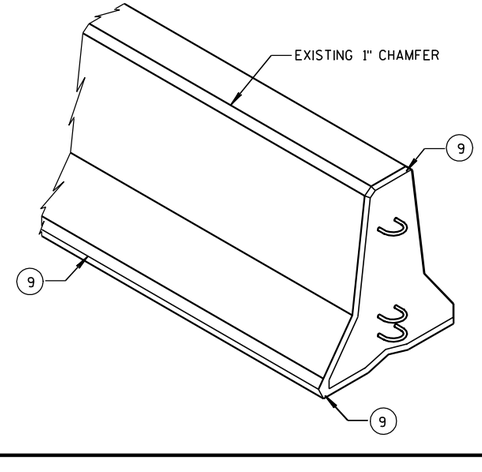


DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

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



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-13(a) THRU 14B7-13(h).

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 EPOXY 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: WICBTP
- 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 ANCHORING CRITERIA.

(9) 1" CHAMFER OPTIONAL.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....

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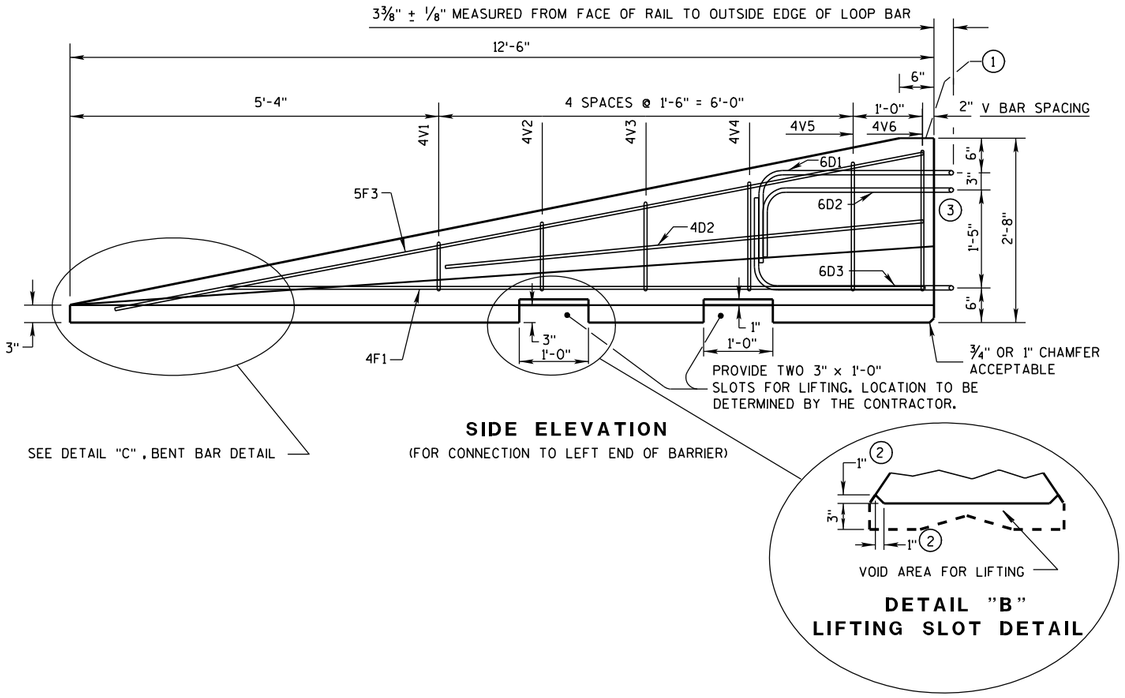
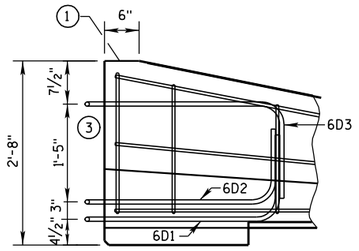
S.D.D. 14 B 7-13a



SIDE ELEVATION

(FOR CONNECTION TO LEFT END OF BARRIER)

DETAIL "B"
LIFTING SLOT DETAIL

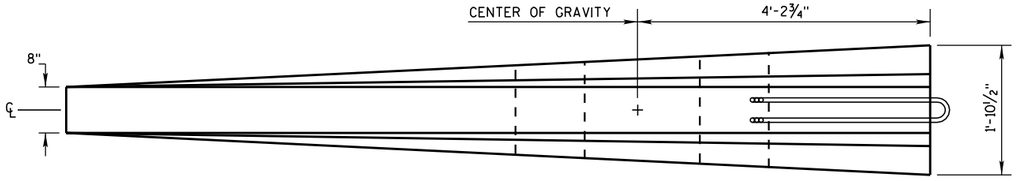


SIDE ELEVATION

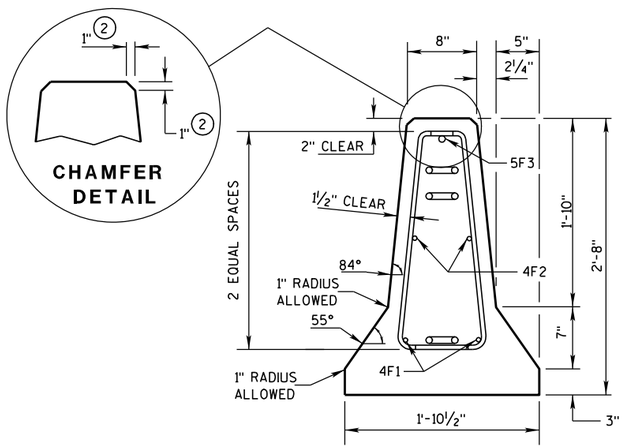
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

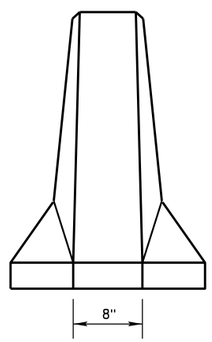
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



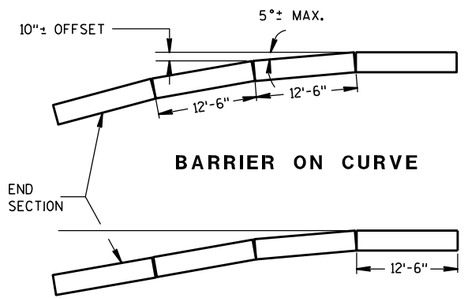
PLAN VIEW



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 TRANSPORTATION

6

S.D.D. 14 B 7-13b

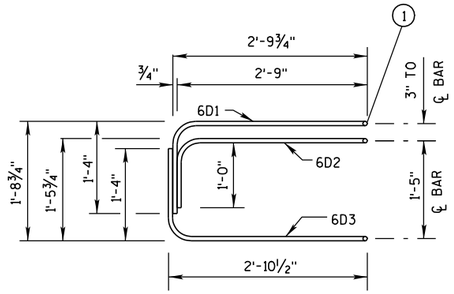
6

S.D.D. 14 B 7-13b

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

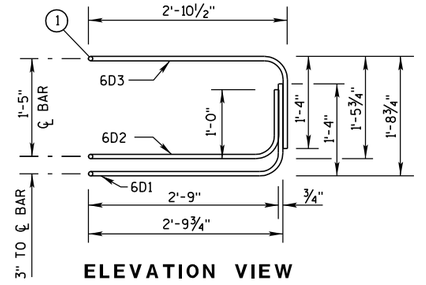
GENERAL NOTES

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

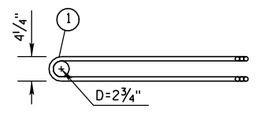
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

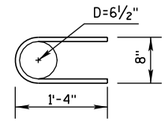
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



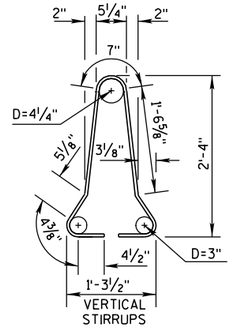
ELEVATION VIEW



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



6A2



4A1

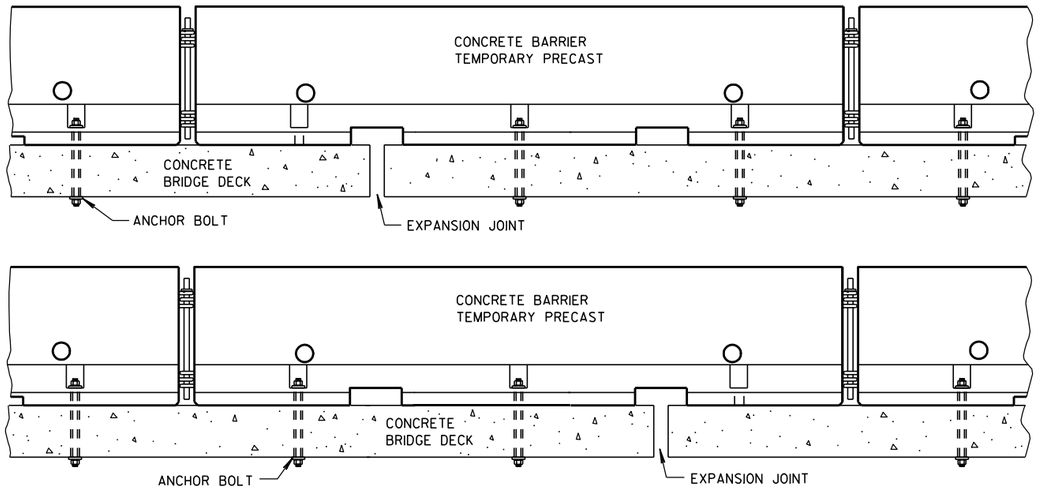
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

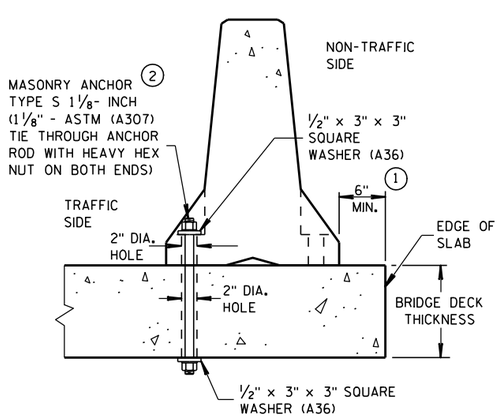
6

S.D.D. 14 B 7-13c



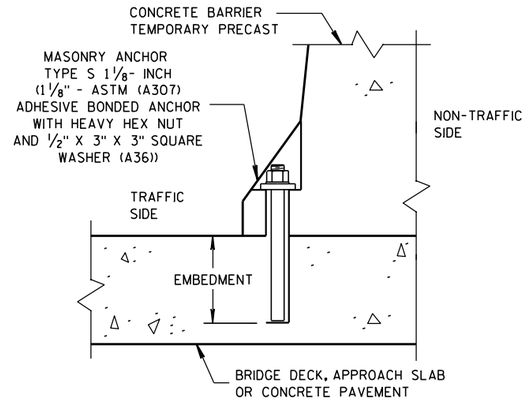
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(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 BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

2

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

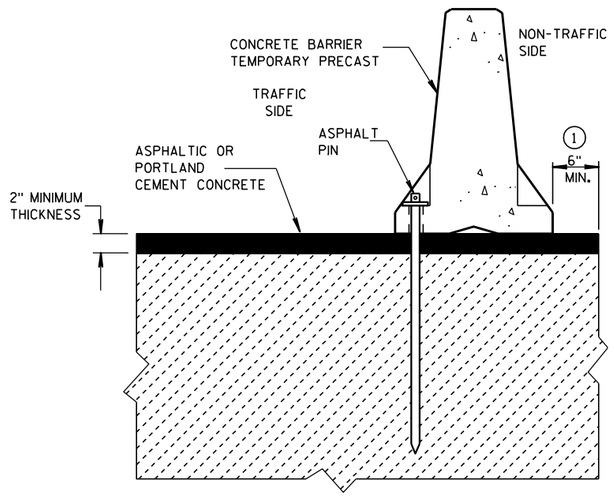
1. CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
   THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

   THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT. IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

2. ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

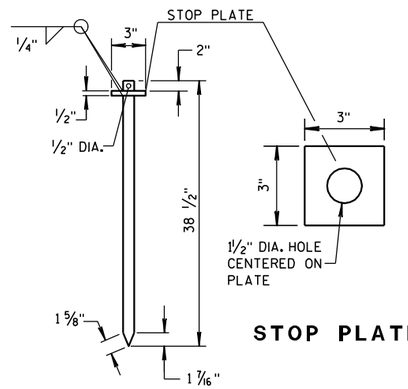
   WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

   UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALLANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR EPOXY MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

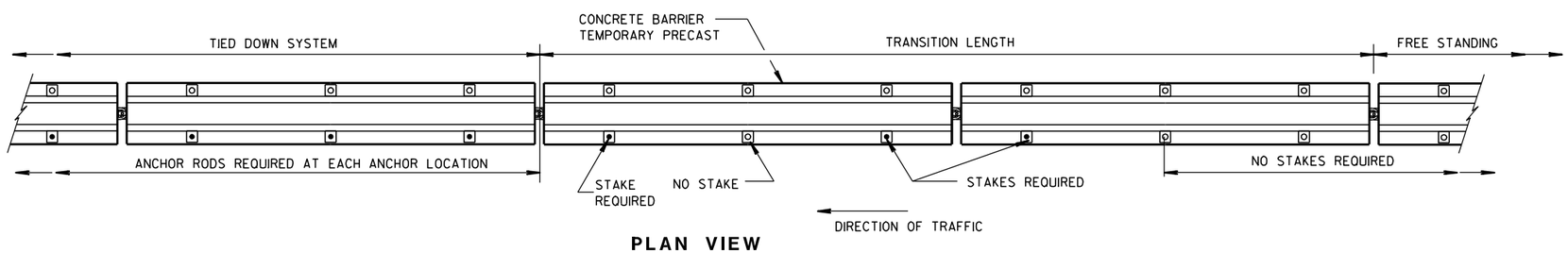
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



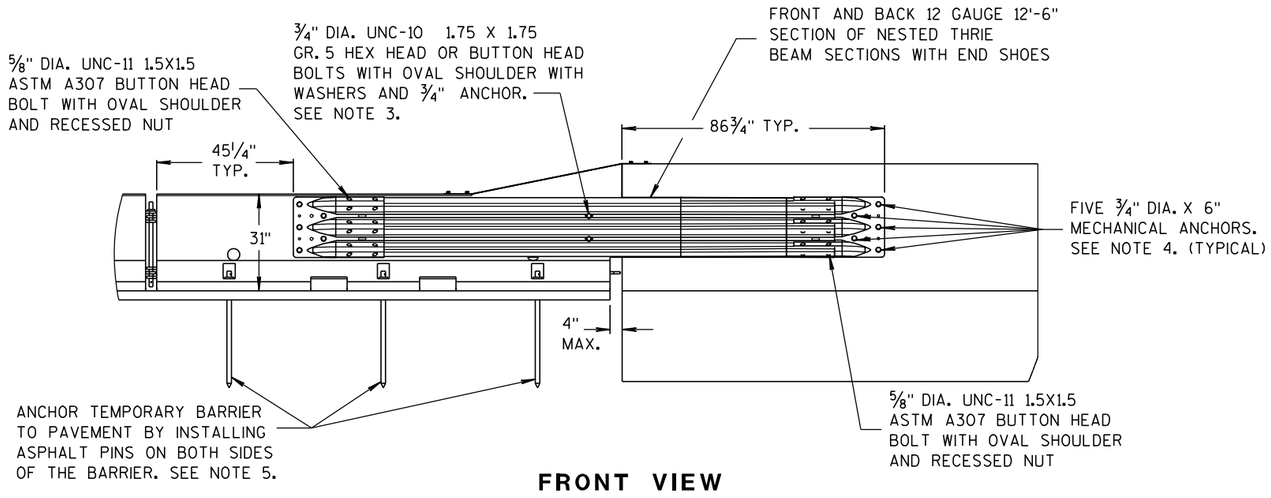
PLAN VIEW

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"

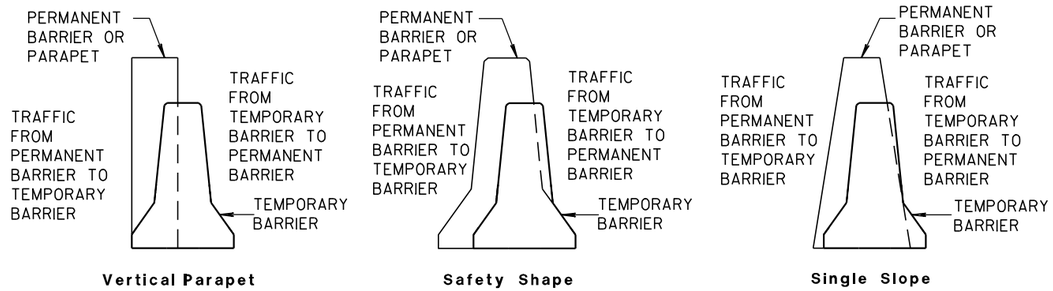
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...



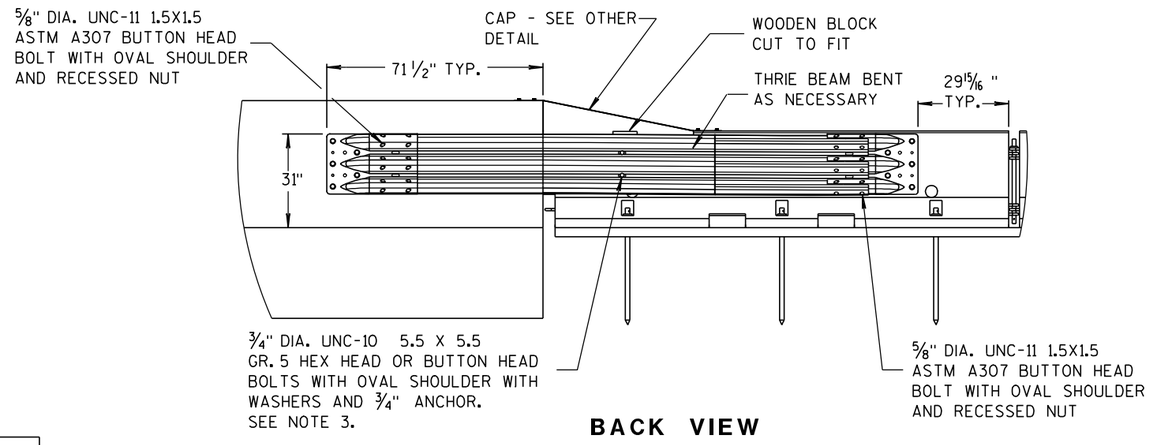
FRONT VIEW

NOTES

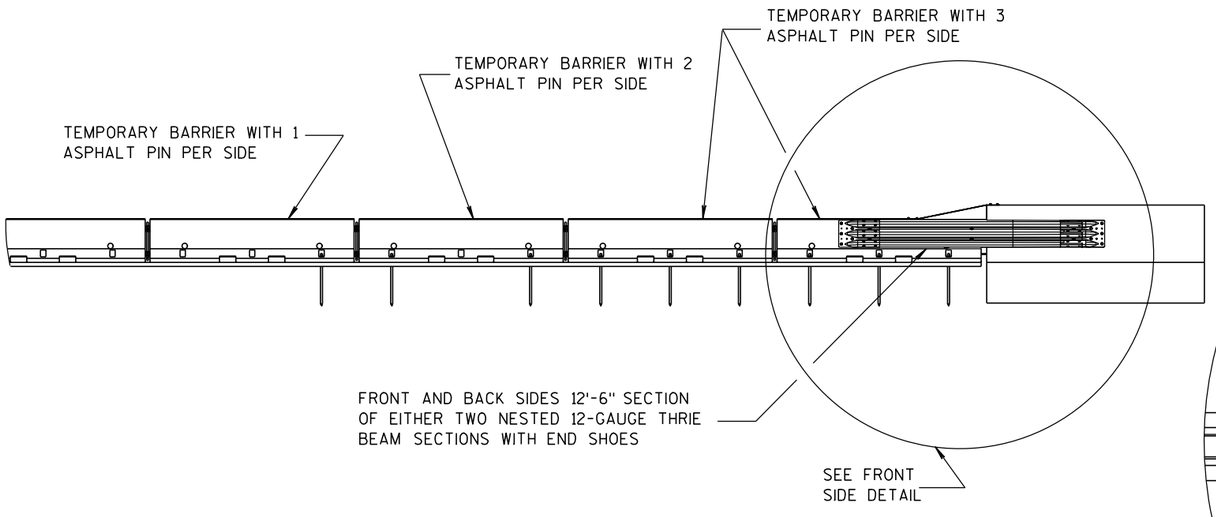
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15¼" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR EPOXY 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 EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



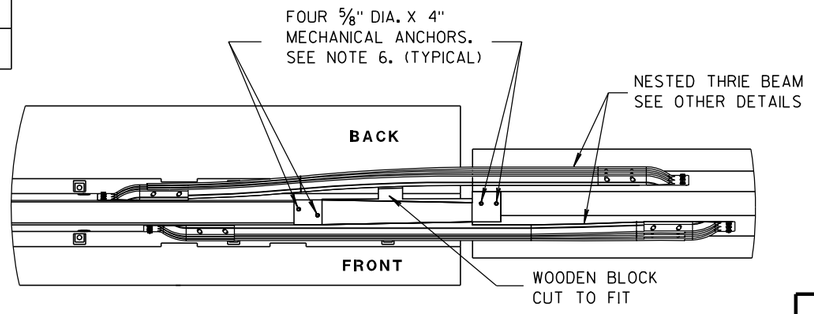
TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



BACK VIEW



FRONT VIEW



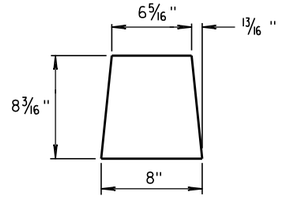
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

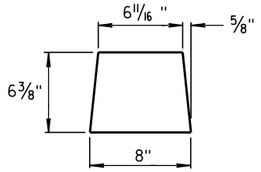
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

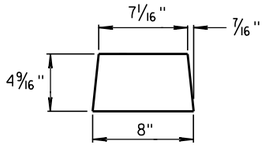
6
S.D.D. 14 B 7-13e



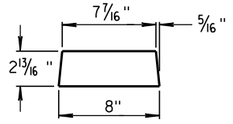
GUSSET 1



GUSSET 2

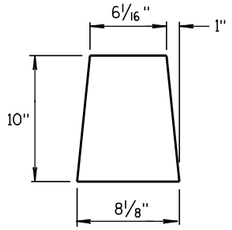


GUSSET 3

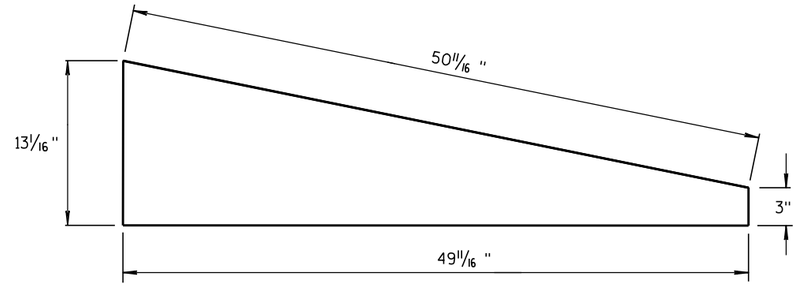


GUSSET 4

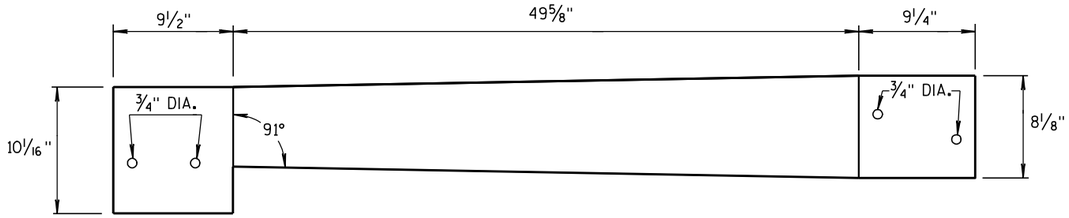
GUSSETS

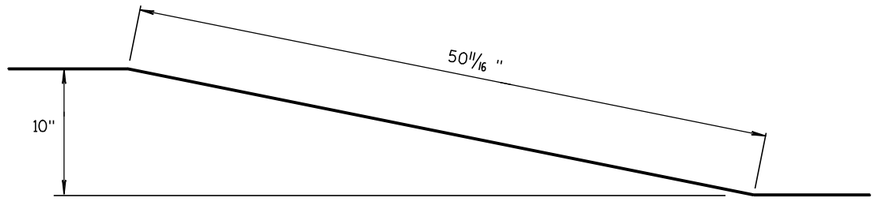


END PLATE

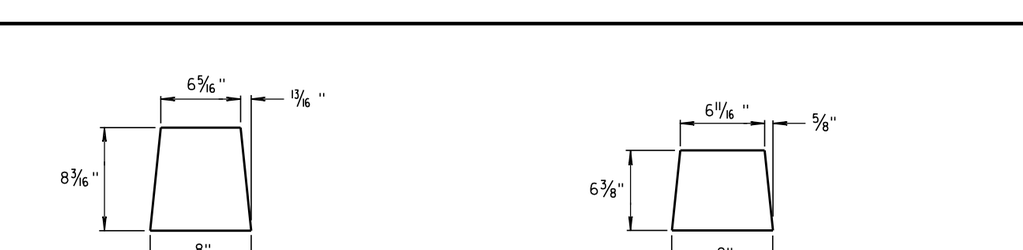


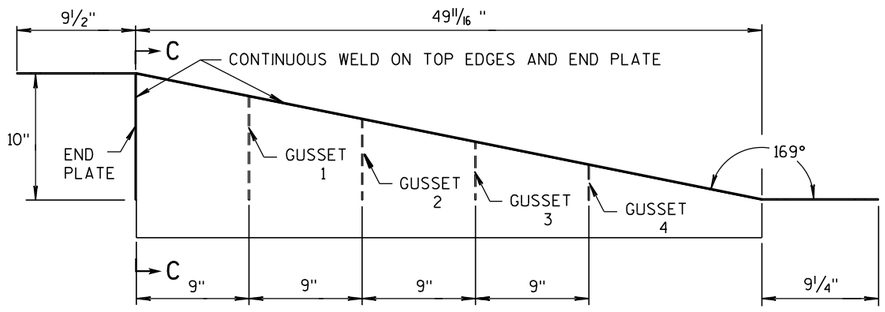
SIDE PLATE

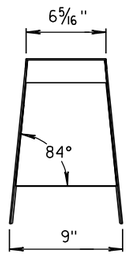




TOP PLATE







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

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

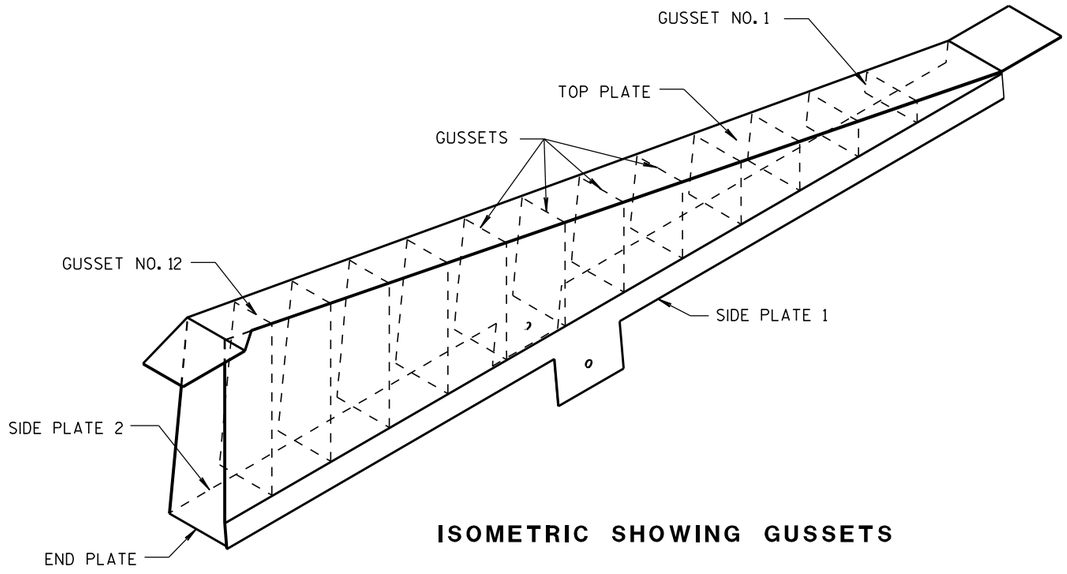
SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

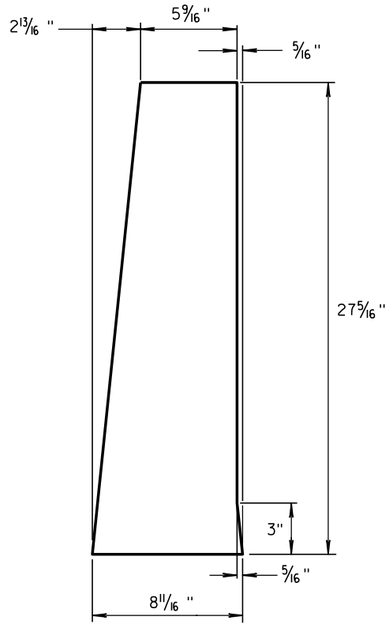
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6

S.D.D. 14 B 7-13f

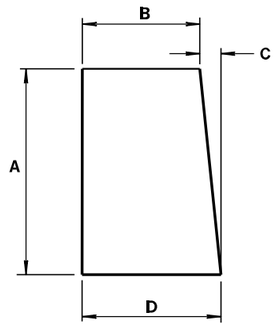


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



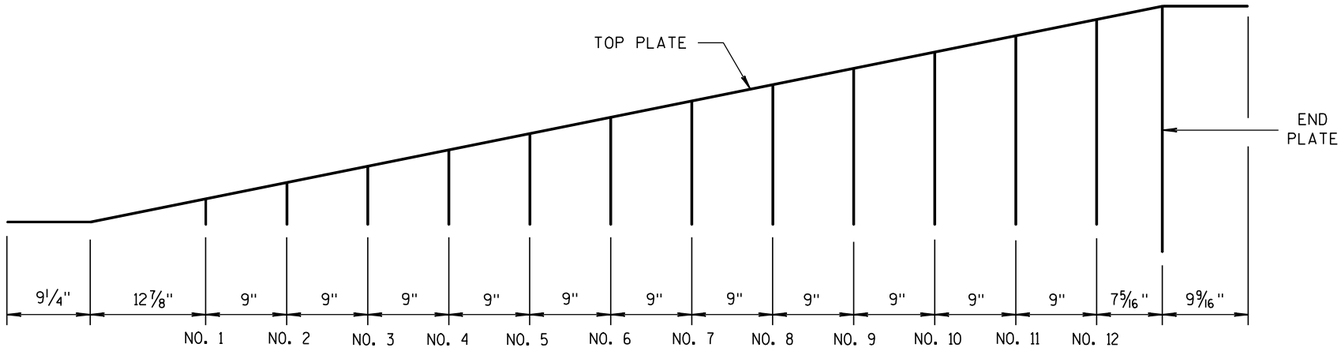
GUSSETS 1 - 12

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"

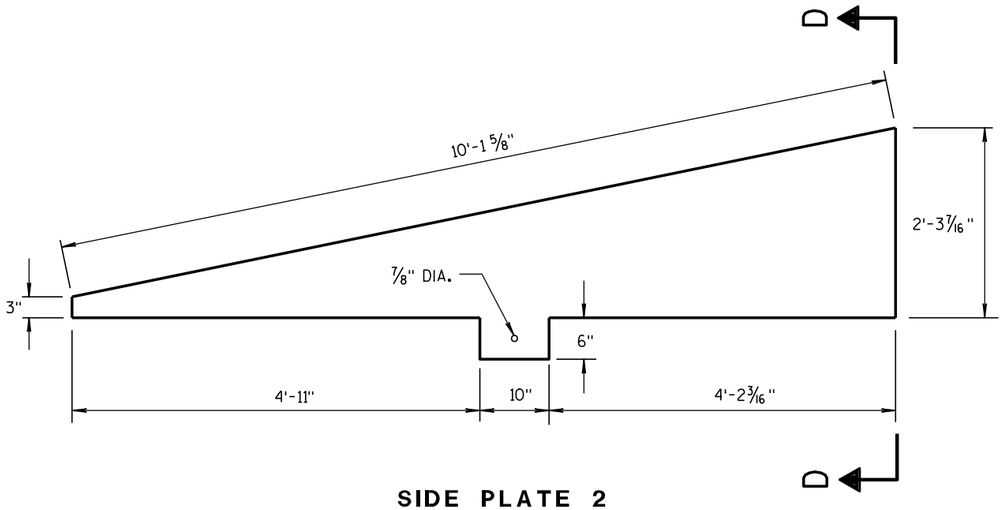
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6

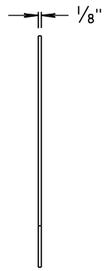
S.D.D. 14 B 7-13g

6

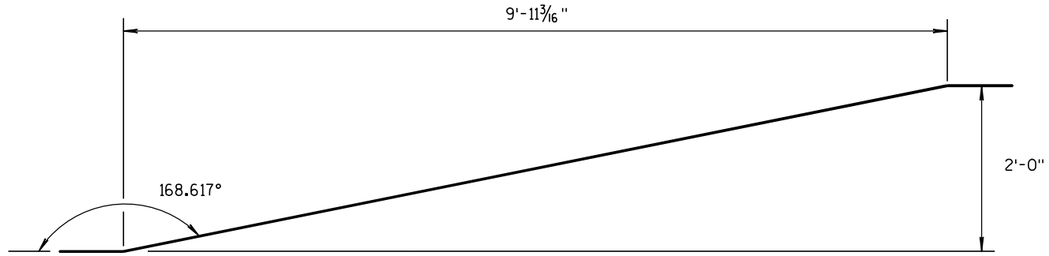
S.D.D. 14 B 7-13g



SIDE PLATE 2

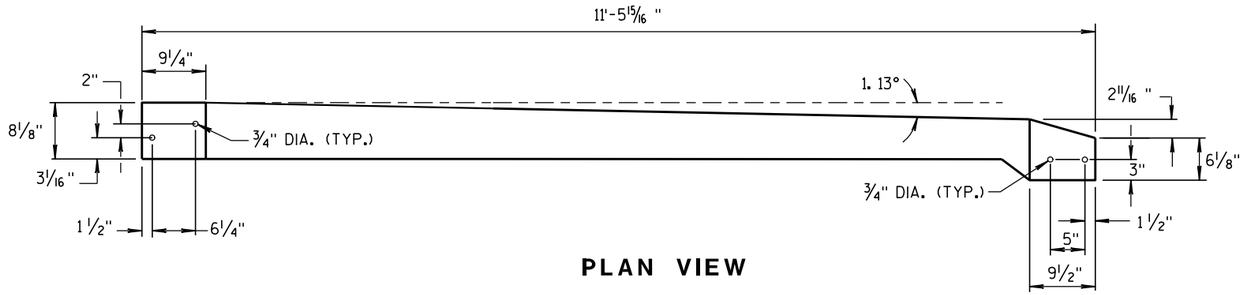


END VIEW



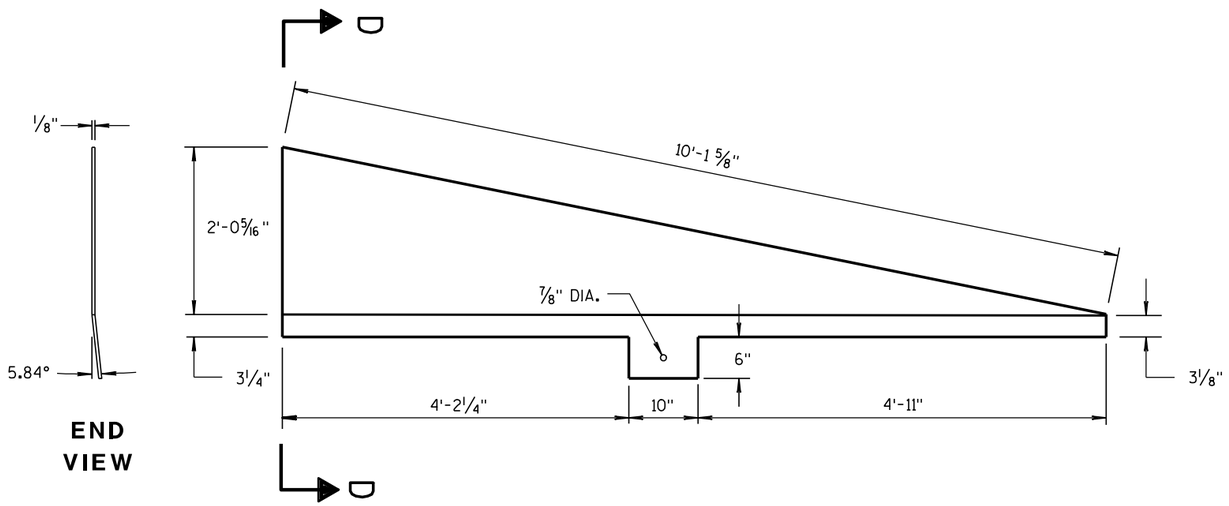
SIDE VIEW

TOP PLATE



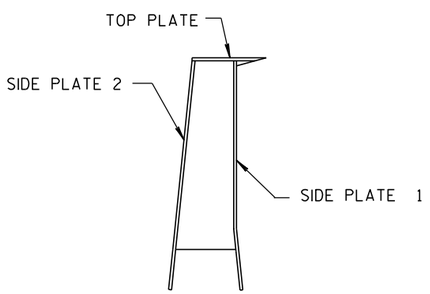
PLAN VIEW

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

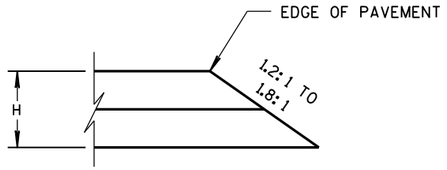
APPROVED
8/31/2012 — DATE
/S/ Jerry H. [illegible] — ROADWAY STANDARDS ENGINEER
ENT
FHWA

6

S.D.D. 14 B 7-13h

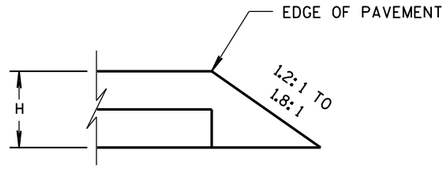
6

S.D.D. 14 B 7-13h



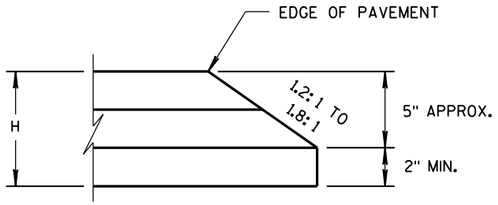
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



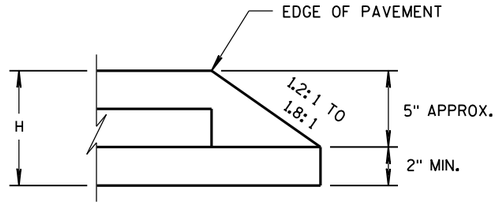
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

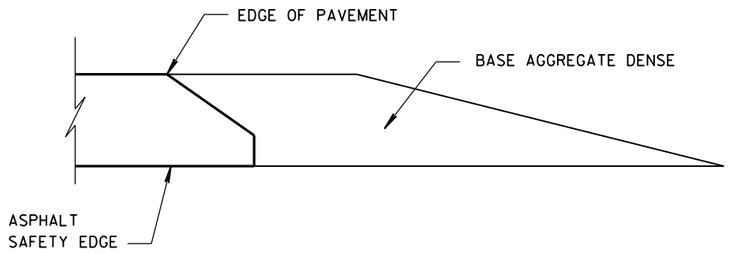
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

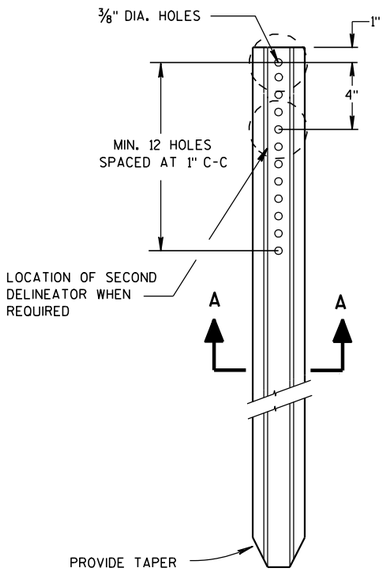
11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

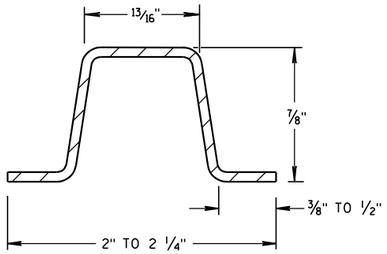
FHWA

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

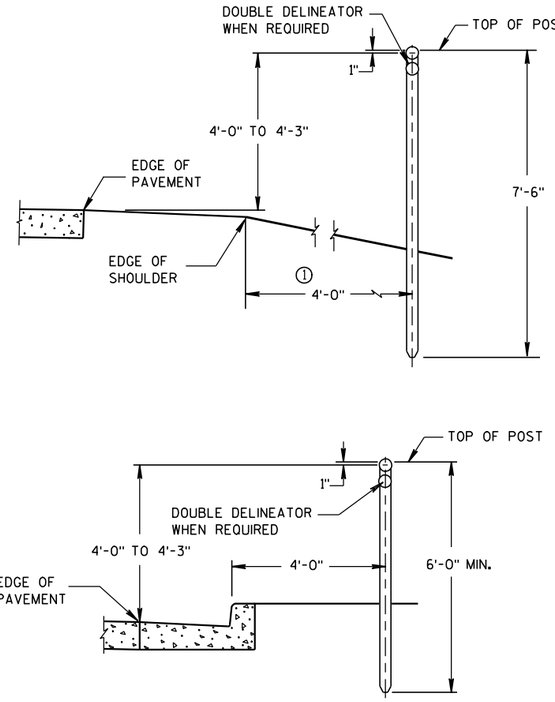


DELINEATOR POST



SECTION A-A

WEIGHT 1.12 LBS PER FT. ± 0.1 LB.



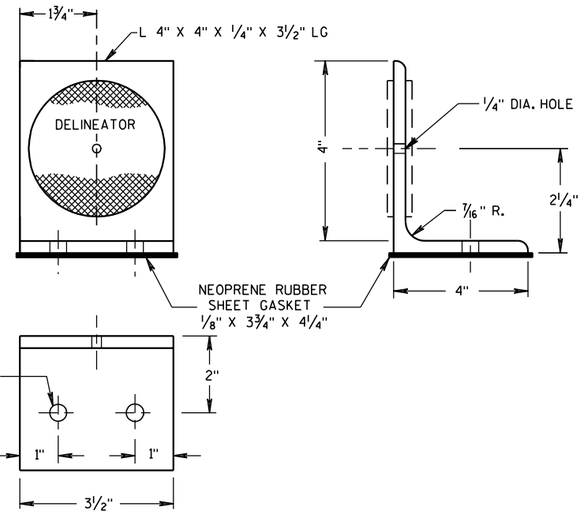
TYPICAL INSTALLATIONS OF DELINEATOR POSTS

GENERAL NOTES

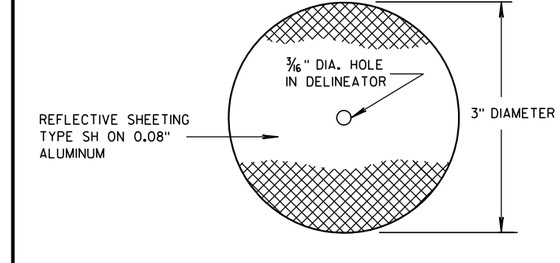
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.

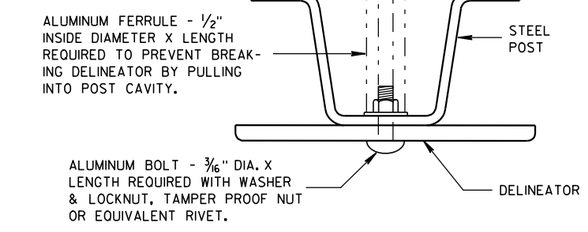
NOTE:
FASTEN DELINEATOR TO BRACKET WITH BOLTS 3/16" DIA. X LENGTH REQ'D. WITH WASHER AND LOCKNUT OR EQUIVALENT RIVETS.



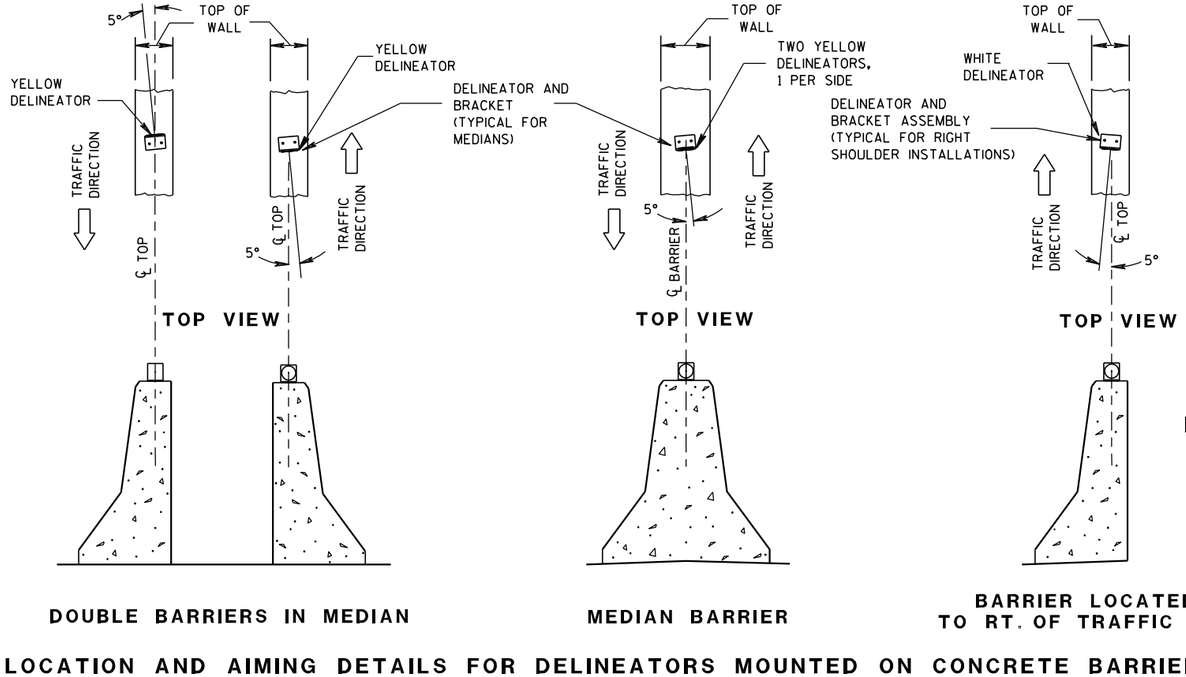
DELINEATOR BRACKET



DELINEATOR



MOUNTING DETAIL FOR DELINEATOR

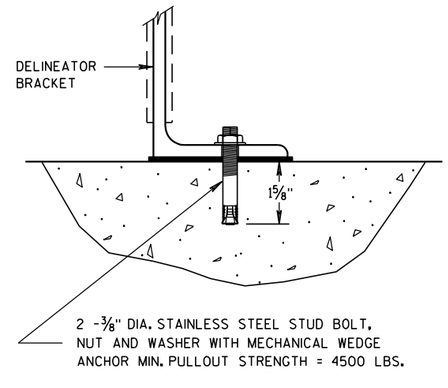


DOUBLE BARRIERS IN MEDIAN

MEDIAN BARRIER

BARRIER LOCATED TO RT. OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR DELINEATORS MOUNTED ON CONCRETE BARRIERS



DELINEATOR BRACKET MOUNTING DETAIL

DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1/25/2011 — DATE
/S/ Thomas N. Notbohm — STATE TRAFFIC ENGINEER

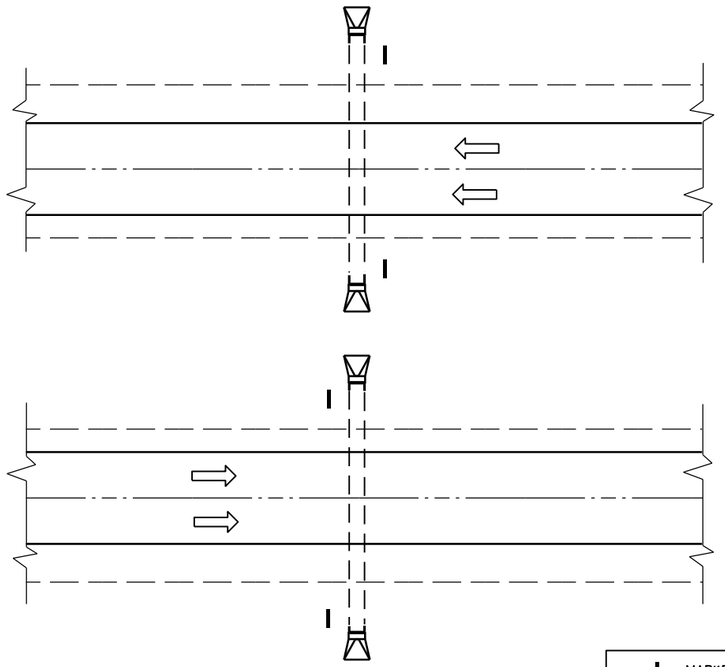
FHWA

6

S.D.D. 15 A 2-7

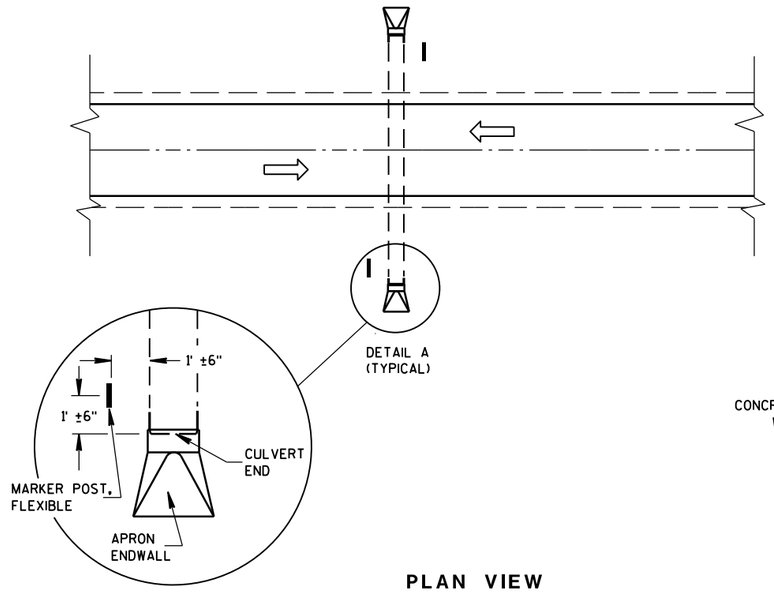
6

S.D.D. 15 A 2-7



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

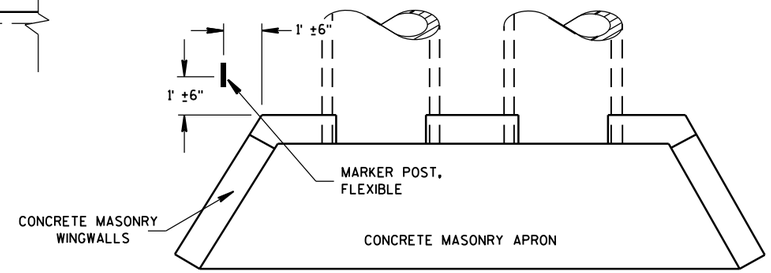
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

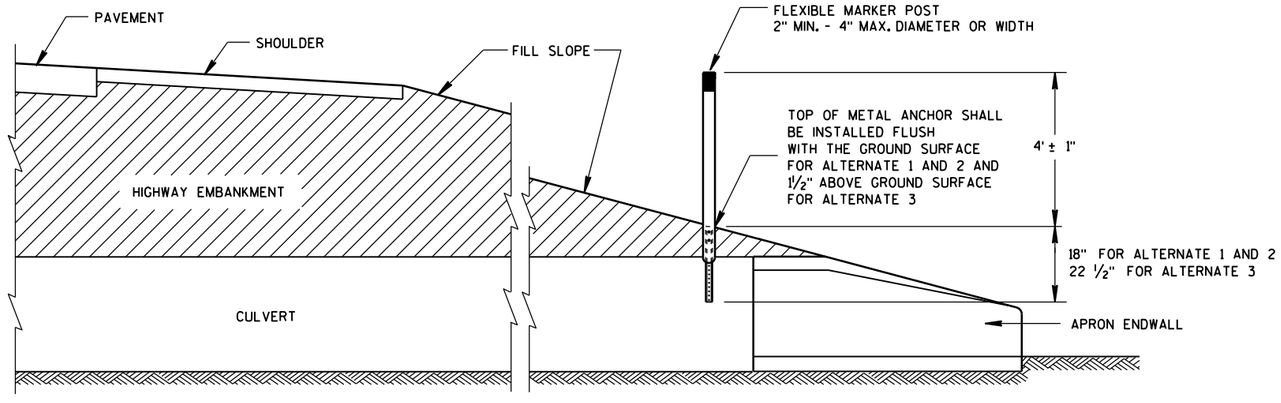
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

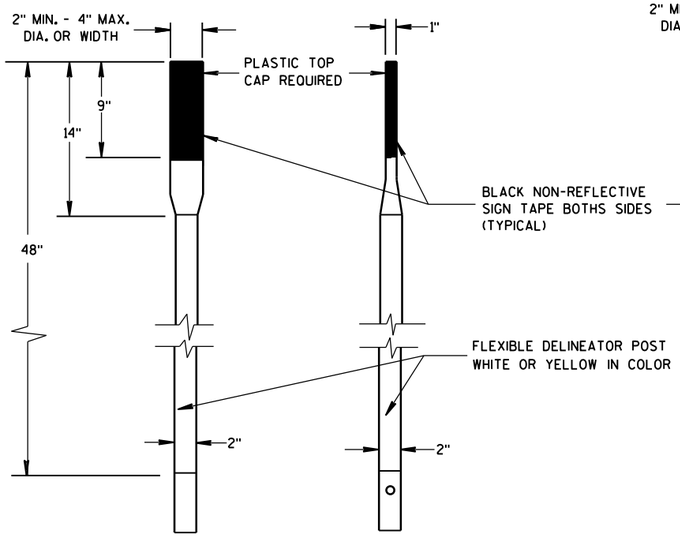
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

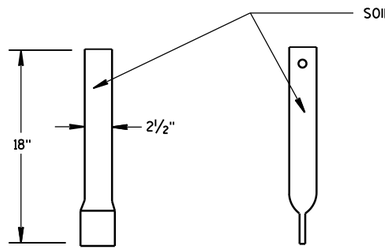
6

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

6

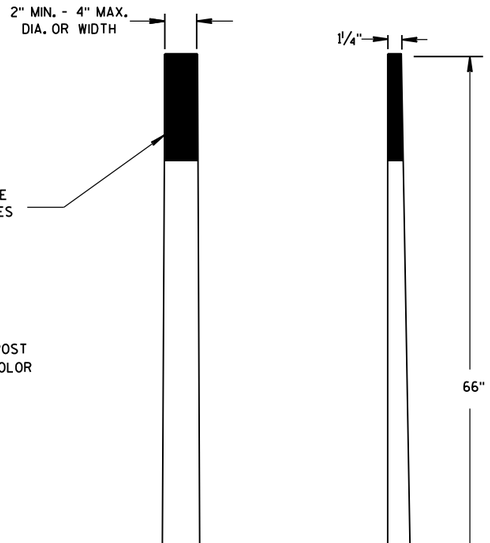
S.D.D. 15 A 3-2a





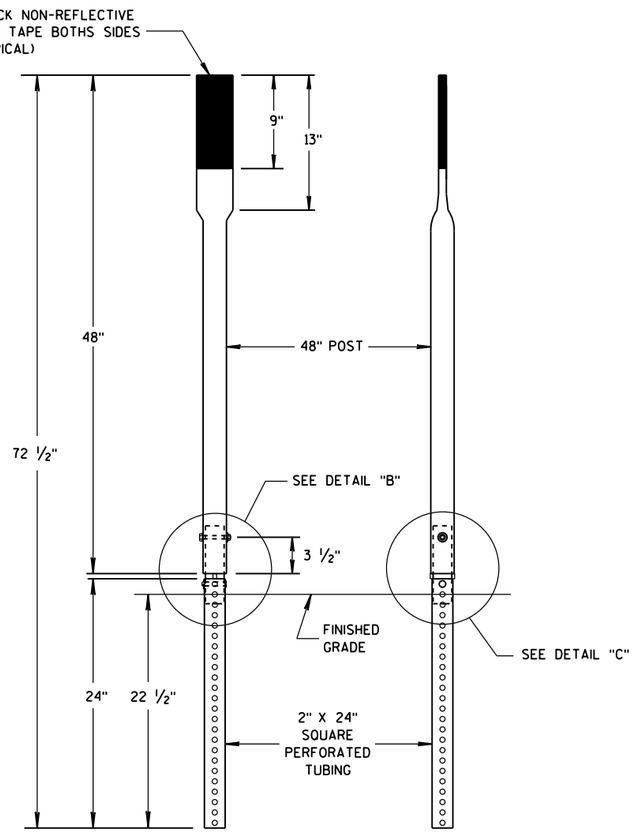
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

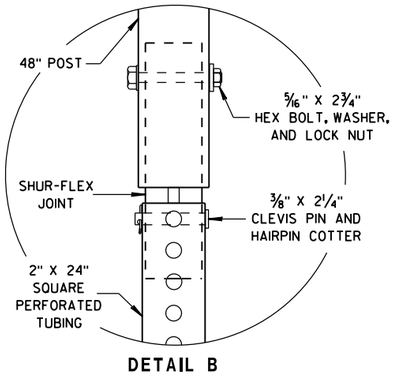
ALTERNATE 2



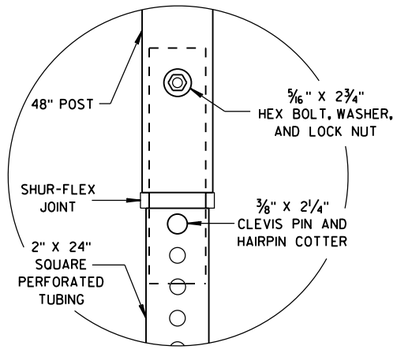
FRONT VIEW SIDE VIEW

ALTERNATE 3

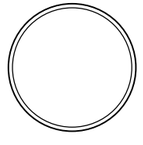
FLEXIBLE MARKER POSTS



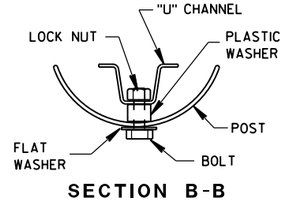
DETAIL B



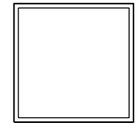
DETAIL C



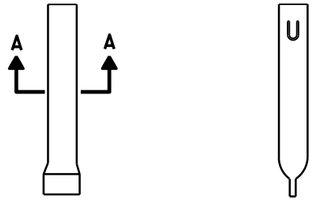
SECTION A-A



SECTION B-B

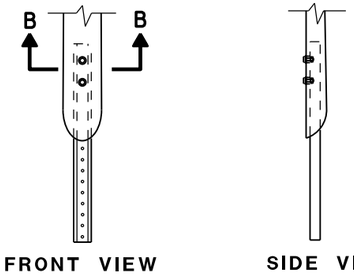


SECTION C-C



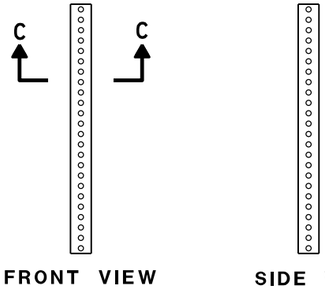
FRONT VIEW SIDE VIEW

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

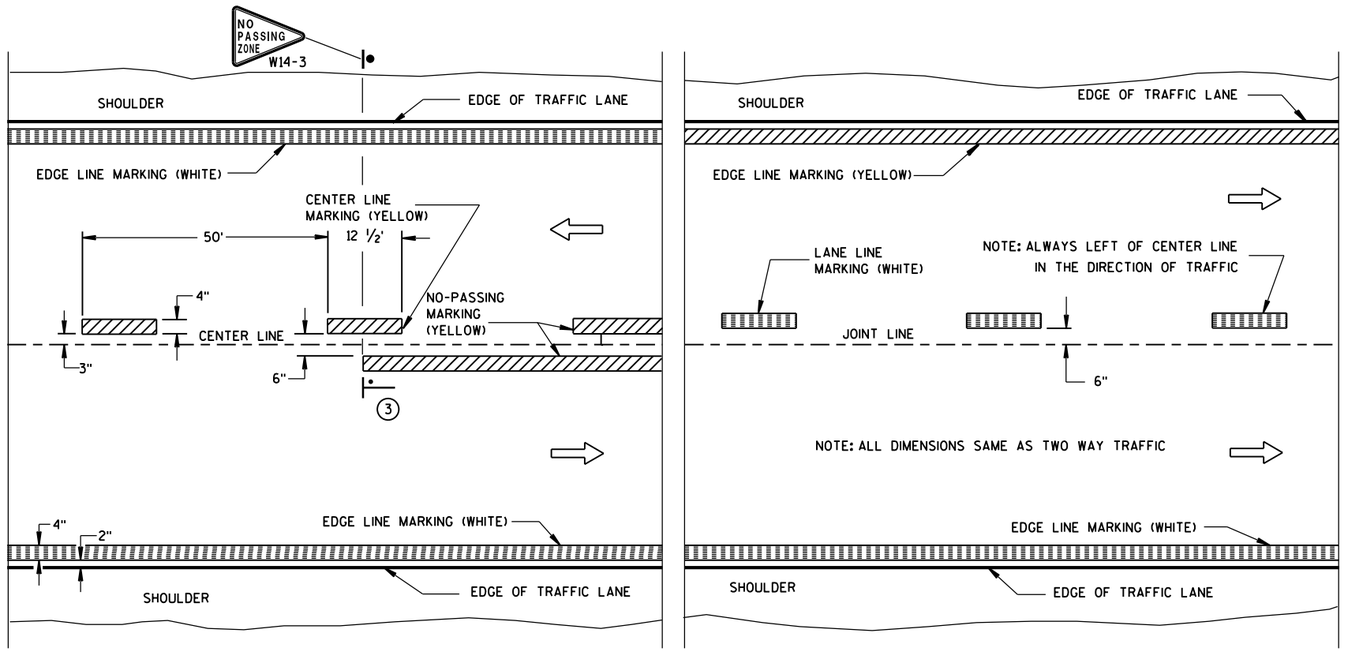
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

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

6

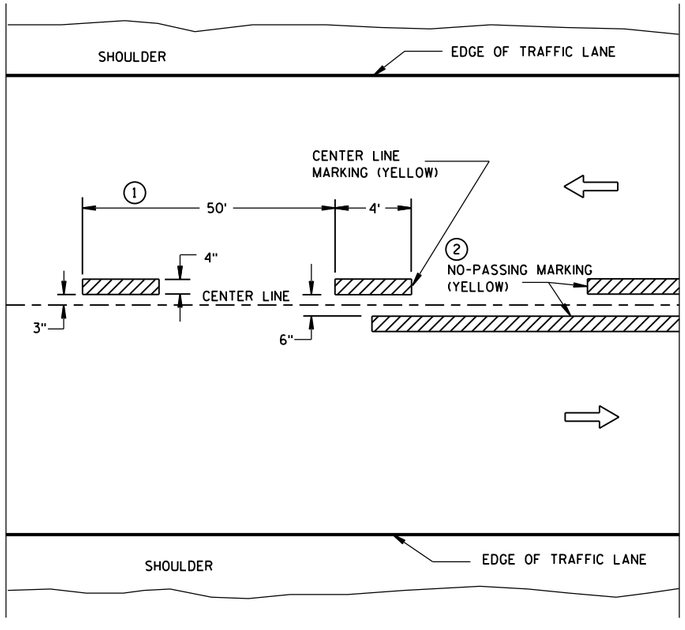
S.D.D. 15 A 3-2b



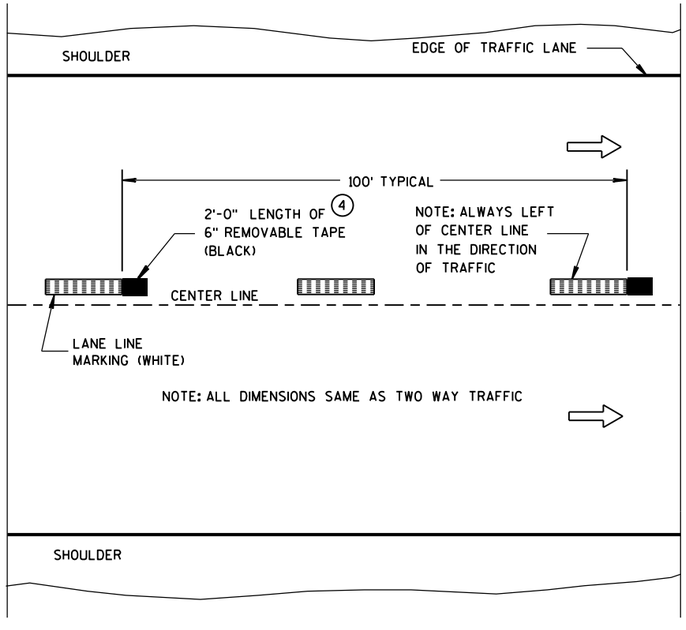
TWO WAY TRAFFIC

ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

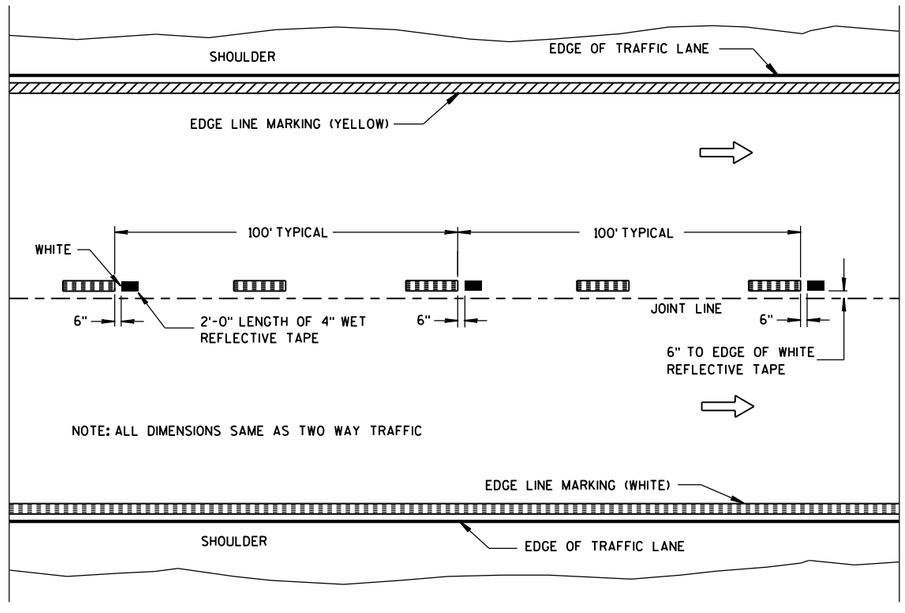
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

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

6

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

TWO-LANE ROADWAY

SYMBOLS

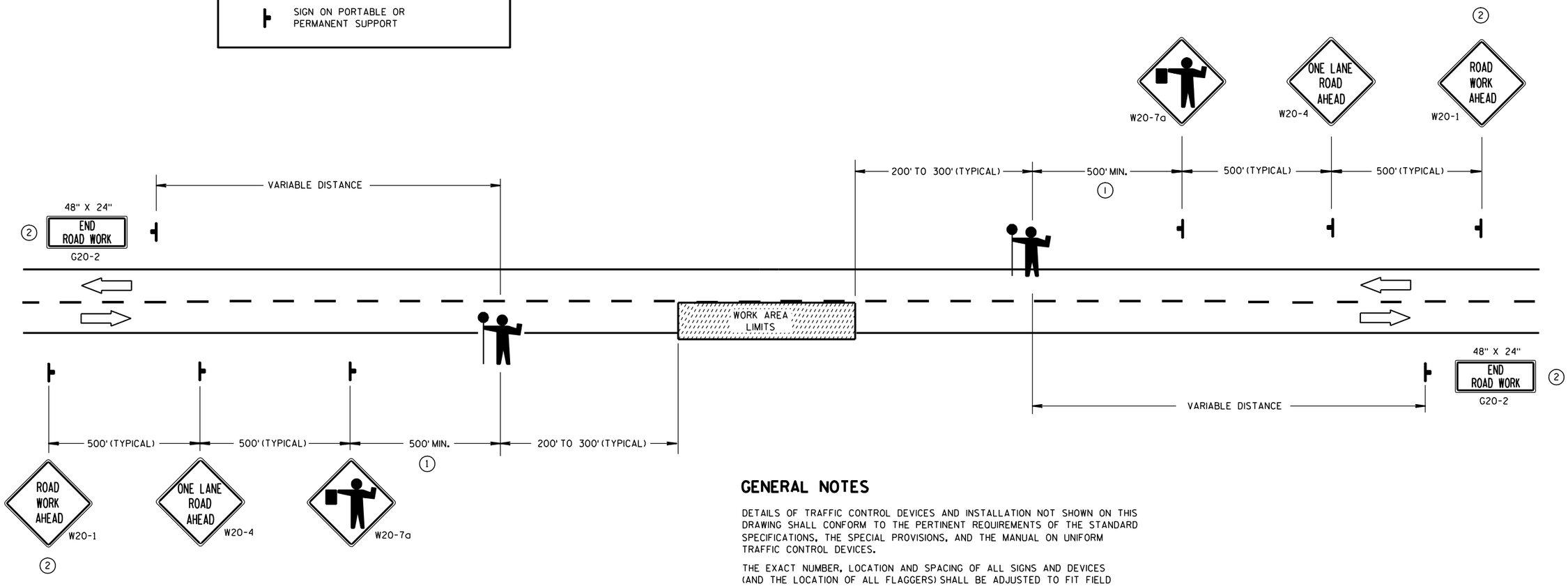
WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN ON PORTABLE OR PERMANENT SUPPORT

W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

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.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/5/06 — DATE

/S/ Thomas N. Nathaam — STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 12-3

6

S.D.D. 15 C 12-3

LEGEND

- POST MOUNTED SIGN
- REMOVING PAVEMENT MARKING
- TYPE III BARRICADE WITH SIGN
- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- TEMPORARY PRECAST CONCRETE BARRIER
- FLAGS, 16"x16" MIN., ORANGE
- TEMPORARY SIGNAL WITH BACKPLATE AND 12-INCH LENSES ON BREAKAWAY POLE
- ASPHALTIC PAVEMENT WIDENING
- DIRECTION OF TRAFFIC FLOW
- 4" X 6" WOOD POST

W057-52
36"x24"

INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1 FOOT LESS THAN AVAILABLE WIDTH. (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET.)

GENERAL NOTES :

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

NON-OPERATIONAL EQUIPMENT OR MATERIAL SHALL BE LOCATED BEHIND THE PRECAST CONCRETE BARRIER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

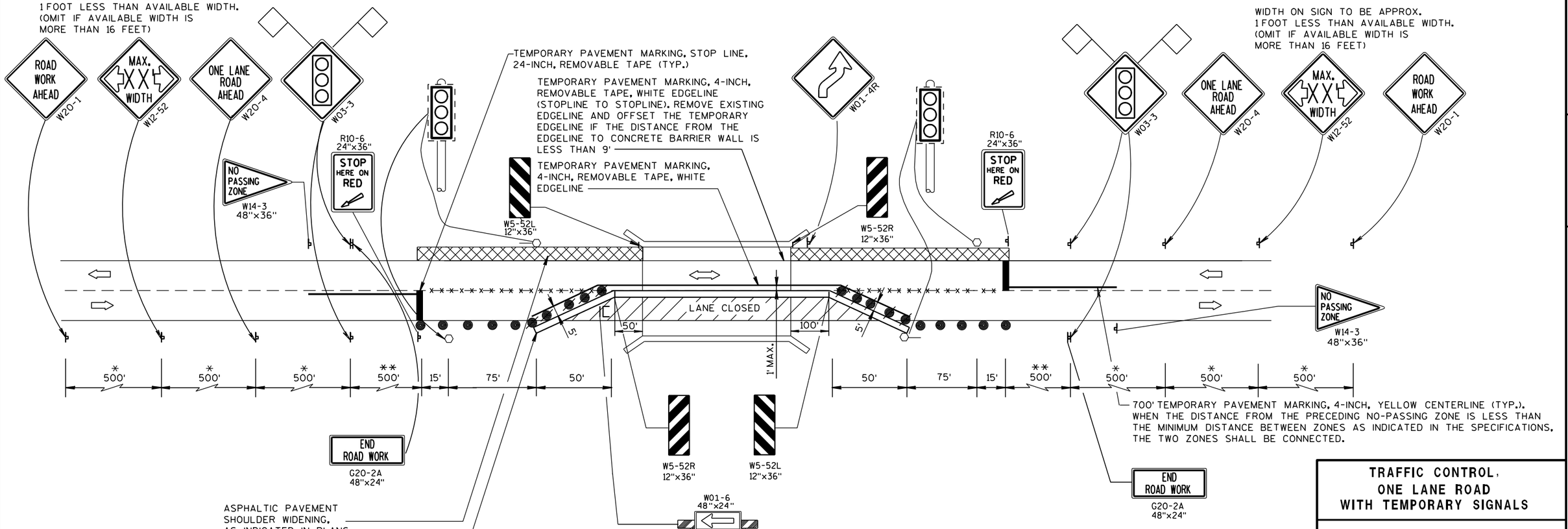
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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.

PLACE TEMPORARY PAVEMENT MARKING EDGELINE AND CENTERLINE, AND REMOVE EXISTING PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.

* 500' SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350' TYPICAL SPACING. FOR 25-30 MPH, USE 200' TYPICAL SPACING.

** USE 300' SPACING IF PRE-CONSTRUCTION REGULATORY SPEED LIMIT IS 35 MPH OR LESS.



TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-8-03 DATE

/S/ Thomas N. Nothohm for
CHIEF SIGNS AND MARI ... IEER

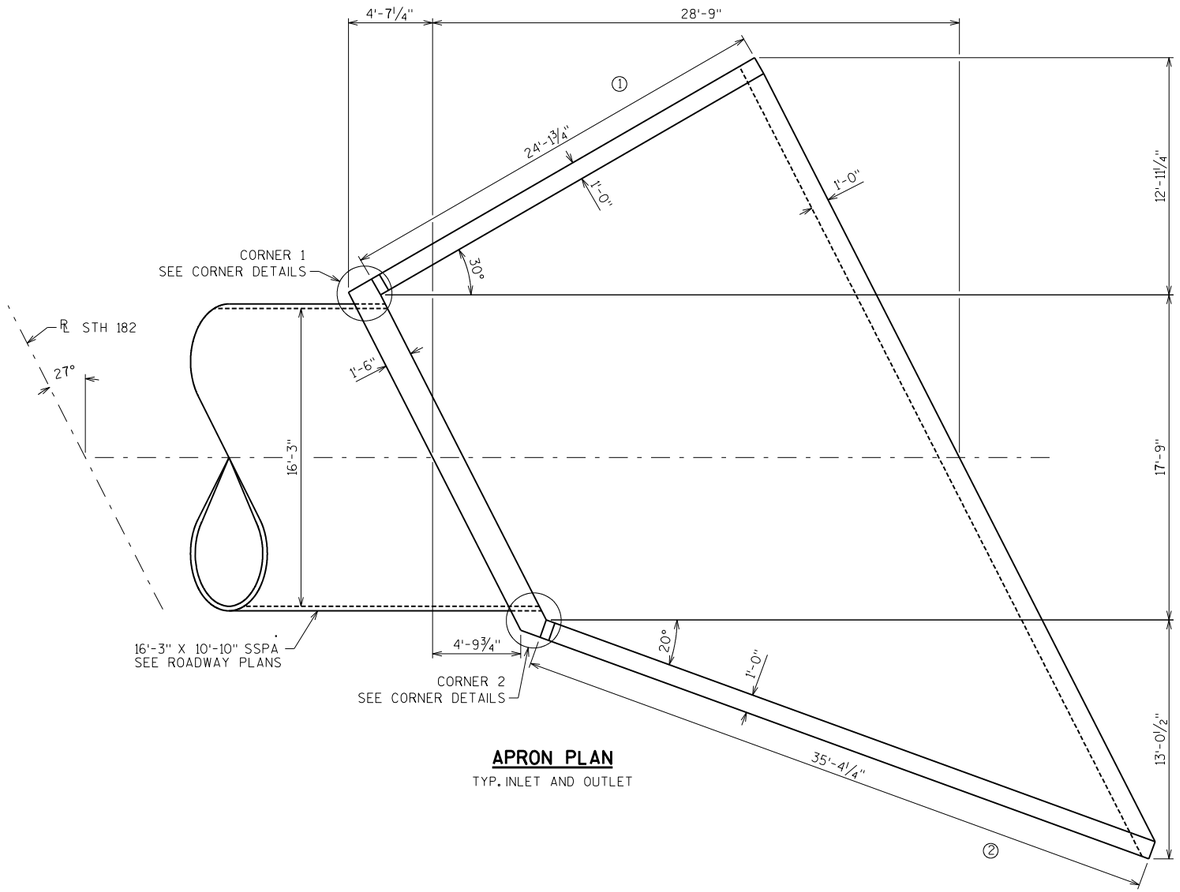
FHWA

6

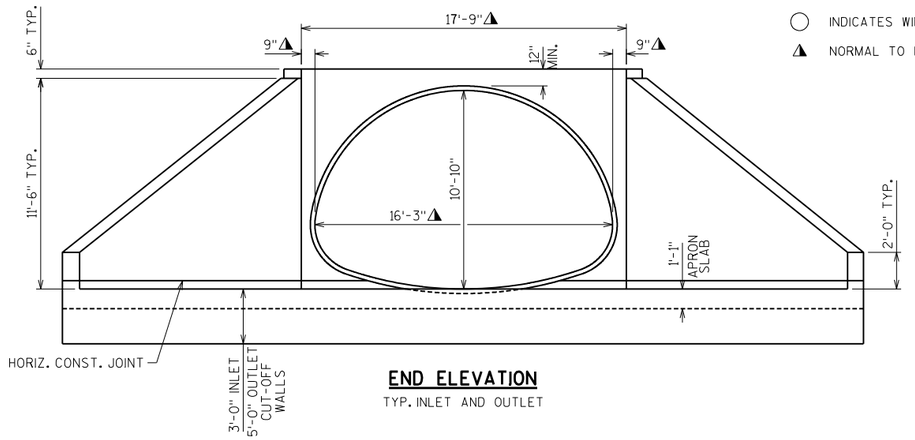
S.D.D. 15 D 33-2

STATE PROJECT NUMBER
9240-10-61

NOTE: STRUCTURE BACKFILL REQUIRED BEHIND ALL WING WALLS.

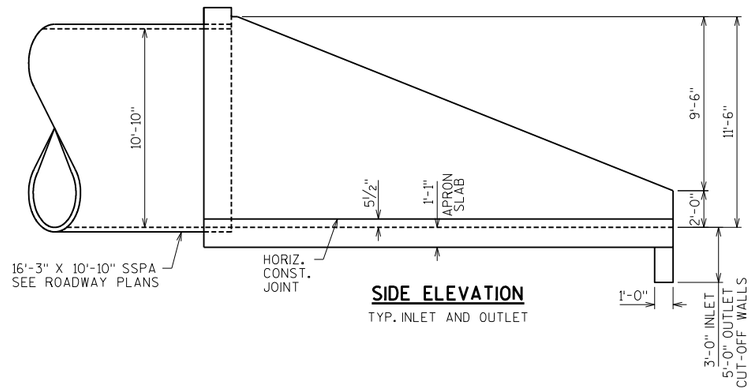


APRON PLAN
TYP. INLET AND OUTLET



END ELEVATION
TYP. INLET AND OUTLET

○ INDICATES WING NUMBER
▲ NORMAL TO PIPE ℄



SIDE ELEVATION
TYP. INLET AND OUTLET

LIST OF DRAWINGS

STRUCTURE DESIGN CONTACT:
DANIELLE DE TENNIS (608) 266-8689
LAURA SHADEWALD (608) 267-9592

DESIGN DATA

ULTIMATE DESIGN STRESSES:
CONCRETE MASONRY, GRADE A-FA ——— f'_c = 3500 P.S.I.
HIGH STRENGTH BAR STEEL REINFORCEMENT — f_y = 60000 P.S.I.

TOTAL ESTIMATED QUANTITIES

BID ITEMS

210.0100	BACKFILL STRUCTURE	464	CY
504.0100	CONCRETE MASONRY CULVERTS	124	CY
505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	8,110	LB
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	14	SY

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE TOP OF THE WING WALLS WITHIN THE LENGTH OF THE CULVERT.

THE CONCRETE IN THE CUTOFF WALLS MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

PLACE A 18" (MIN.) WIDE SHEET OF 'RUBBERIZED MEMBRANE WATERPROOFING' OVER ALL CONSTRUCTION JOINTS

NO.	DATE	REVISION	BY

Plans Prepared By **WISDOT**
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS 5/20/13
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE C-50-18

STH 182 OVER HAY CREEK

COUNTY: PRICE — TOWN/~~CITY/VILLAGE~~: EISENSTEIN

DESIGN SPEC.: AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	DFD	DESIGN CK'D.	NAR	DRAWN BY	DFD	PLANS CK'D.	NAR

LAYOUT

SHEET 1 OF 3

43

I.D. 9240-10-00

DATE: MARCH 2013

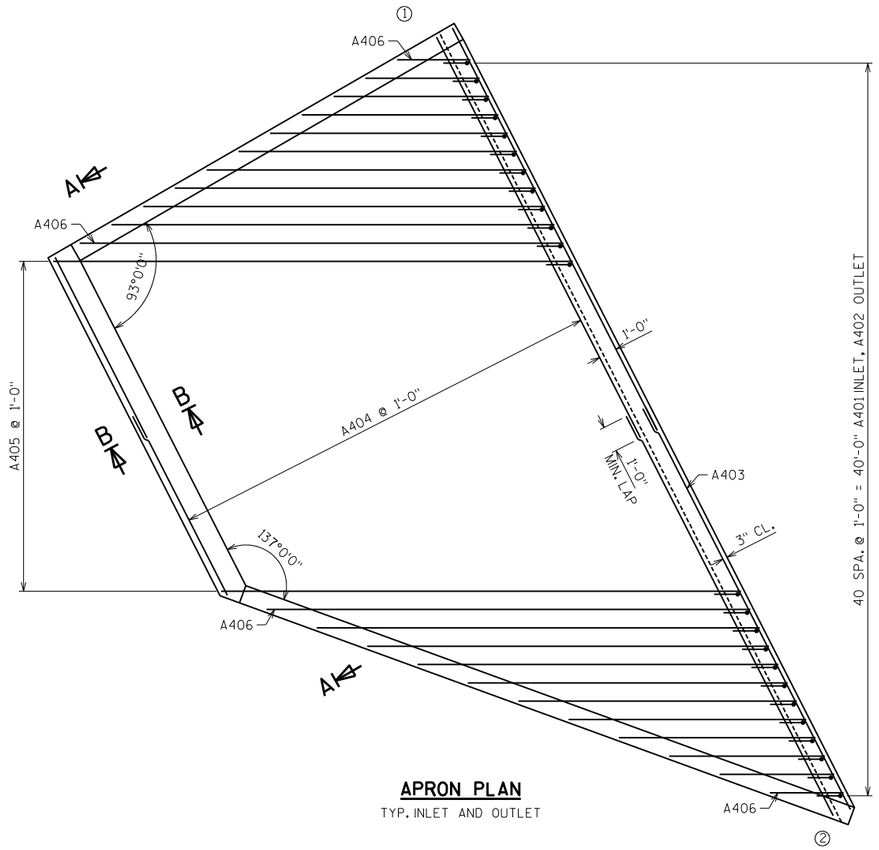
SCALE = 4

8

8

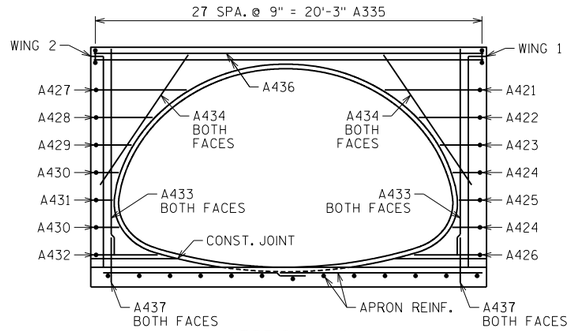
STATE PROJECT NUMBER

9240-10-61



APRON PLAN

TYP. INLET AND OUTLET

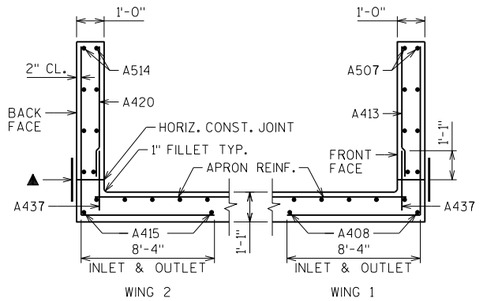


SECTION A-A

HEADER WALL ELEVATION

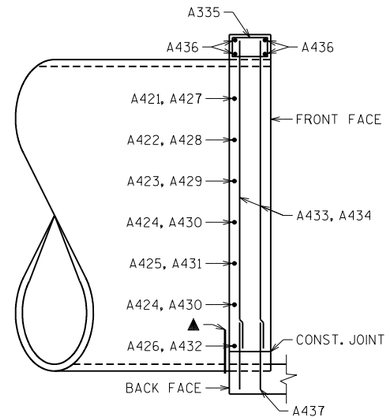
(NOTE: FEILD CUT BARS A421 THRU A432 TO FIT AS NEEDED)

▲ 18" RUBBERIZED MEMBRANE WATER-PROOFING. PLACE ALONG HORIZ. CONST. JT. FOR ENTIRE WING LENGTH (TYP.).

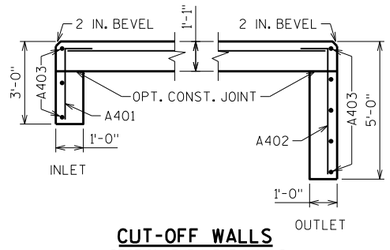


SECTION THRU WINGS

AT RIGHT ANGLES TO WING WALLS

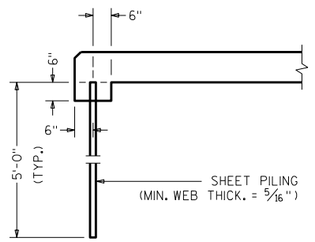


SECTION B-B THRU HEADER WALL



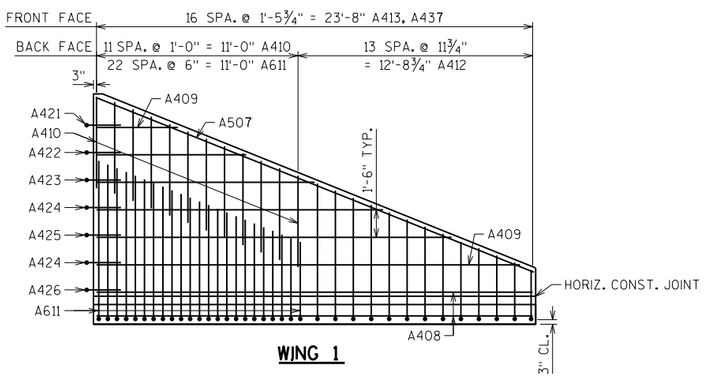
CUT-OFF WALLS

SECTION THRU THE WALLS

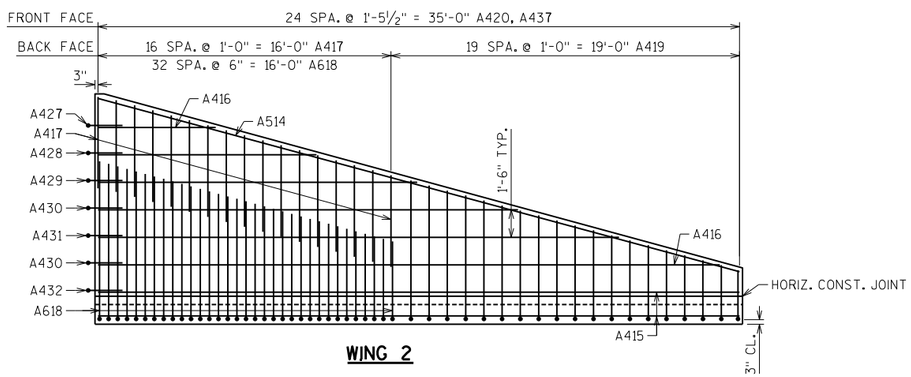


ALTERNATE CUT-OFF WALL

THE ABOVE ALT. MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONC. CUT-OFF WALLS. PAYMENT WILL BE BASED ON THE CONC. CUT-OFF WALL.



WING 1



WING 2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-50-18

DRAWN BY DFD | PLANS CK'D. NAR

APRON DETAILS

SHEET 2

44

8

8

SCALE = 4

STATE PROJECT NUMBER

9240-10-61

BILL OF BARS

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

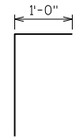
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A401		41	3-6	X		INLET CUT OFF WALL VERT.
A402		41	5-6	X		OUTLET CUT OFF WALL VERT.
A403		16	24-6			CUT OFF WALL HORIZ.
A404		100	17-8		⚠	APRON
A405		38	28-3			APRON
A406		44	15-1		⚠	APRON
A507		4	25-7			WING 1 HORIZ. BOTH FACES
A408		8	23-9			WING 1 HORIZ. APRON BOTTOM
A409		24	13-9		⚠	WING 1 HORIZ. BOTH FACES
A410		24	5-0			WING 1 VERT. BACK FACE
A611		46	14-7	X	⚠	WING 1 VERT. BACK FACE
A412		26	13-4	X	⚠	WING 1 VERT. BACK FACE
A413		34	6-2		⚠	WING 1 VERT. FRONT FACE
A514		4	36-1			WING 2 HORIZ. BOTH FACES
A415		8	35-0			WING 2 HORIZ. APRON BOTTOM
A416		24	20-2		⚠	WING 2 HORIZ. BOTH FACES
A417		34	5-0			WING 2 VERT. BACK FACE
A618		66	14-8	X	⚠	WING 2 VERT. BACK FACE
A419		38	13-4	X	⚠	WING 2 VERT. BACK FACE
A420		50	6-2		⚠	WING 2 VERT. FRONT FACE
A421		2	7-5	X		HEADER WALL HORIZ. BACK FACE
A422		2	5-7	X		HEADER WALL HORIZ. BACK FACE
A423		2	4-5	X		HEADER WALL HORIZ. BACK FACE
A424		4	3-8	X		HEADER WALL HORIZ. BACK FACE
A425		2	3-4	X		HEADER WALL HORIZ. BACK FACE
A426		2	5-10	X		HEADER WALL HORIZ. BACK FACE
A427		2	7-7	X		HEADER WALL HORIZ. BACK FACE
A428		2	5-9	X		HEADER WALL HORIZ. BACK FACE
A429		2	4-7	X		HEADER WALL HORIZ. BACK FACE
A430		4	3-11	X		HEADER WALL HORIZ. BACK FACE
A431		2	3-7	X		HEADER WALL HORIZ. BACK FACE
A432		2	6-0	X		HEADER WALL HORIZ. BACK FACE
A433		8	11-4			HEADER WALL VERT. BOTH FACES
A434		8	8-9			HEADER WALL VERT. BOTH FACES
A335		56	4-1	X		HEADER STIRRUPS
A436		8	20-6			HEADER HORIZ.
A437		92	2-10			DOWELS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

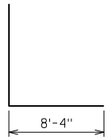
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
A404	4 SERIES OF 25	10-11 TO 24-4
A406	4 SERIES OF 11	3-11 TO 26-3
A409	4 SERIES OF 6	4-5 TO 23-1
A611	2 SERIES OF 23	12-5 TO 16-9
A412	2 SERIES OF 13	10-11 TO 15-8
A413	2 SERIES OF 17	1-5 TO 10-10
A416	4 SERIES OF 6	6-5 TO 33-11
A618	2 SERIES OF 33	12-6 TO 16-10
A419	2 SERIES OF 19	10-10 TO 15-9
A420	2 SERIES OF 25	1-5 TO 10-10

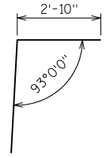
BUNDLE AND TAG EACH SERIES SEPARATELY.



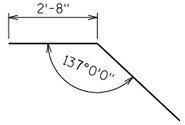
A401, A402



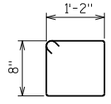
A611, A412
A618, A419



A421, A422, A423,
A424, A425, A426

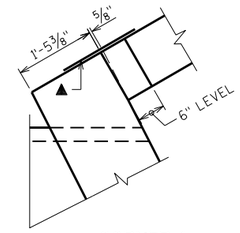


A427, A428, A429,
A430, A431, A432

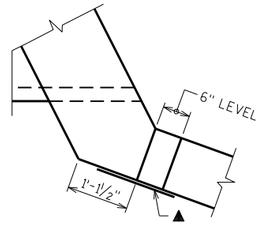


A335

▲ 18" RUBBERIZED MEMBRANE WATER-PROOFING. EXTEND FROM HORIZ. CONST. JT. TO TOP OF WALL.



CORNER 1



CORNER 2

CORNER DETAILS

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-50-18

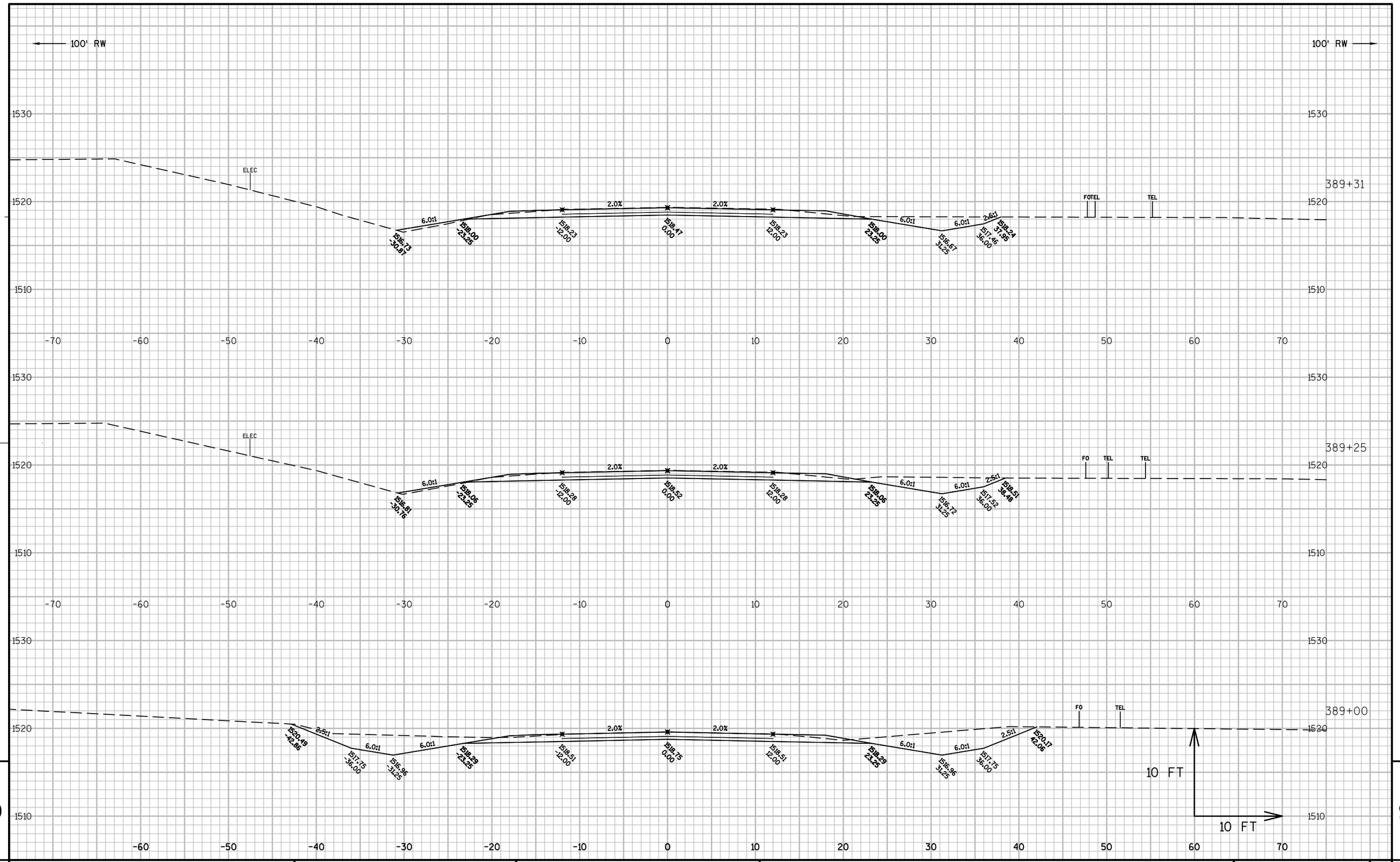
DRAWN BY DFD | PLANS CK'D. NAR

DETAILS

SHEET 3

45

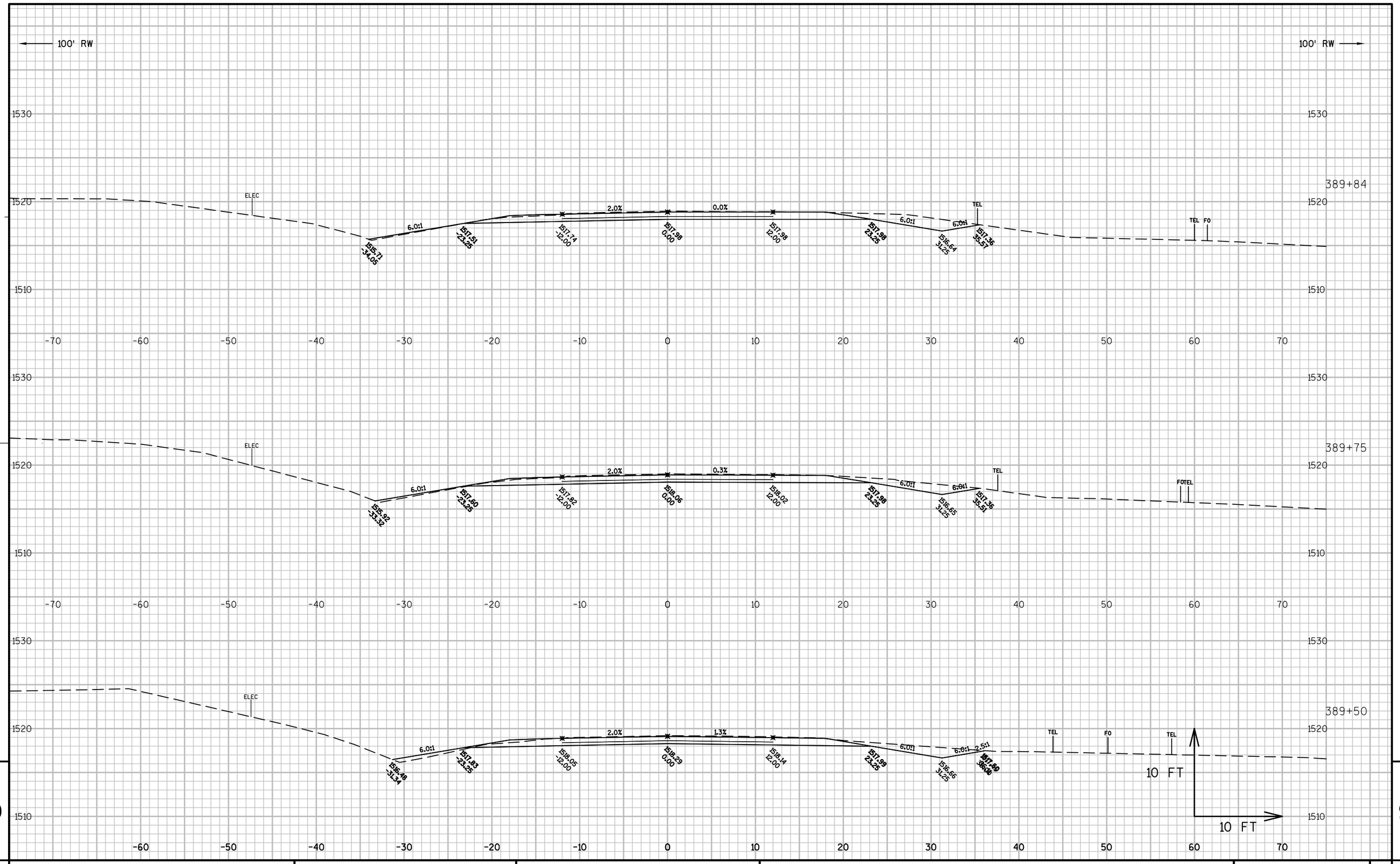
SCALE = 4



PROJECT NO: 9240-10-61	HWY: STH 182	COUNTY: PRICE	CROSS SECTIONS: HAY CREEK STRUCTURE C-50-18	SHEET 46 E

FILE NAME : N:\PDS\C3D\92401000\DESIGN\XSECTIONS\HAY CREEK X-SECTIONS.DWG PLOT DATE : 4/23/2013 2:19 PM PLOT BY : LAVIN, MITCHELL L PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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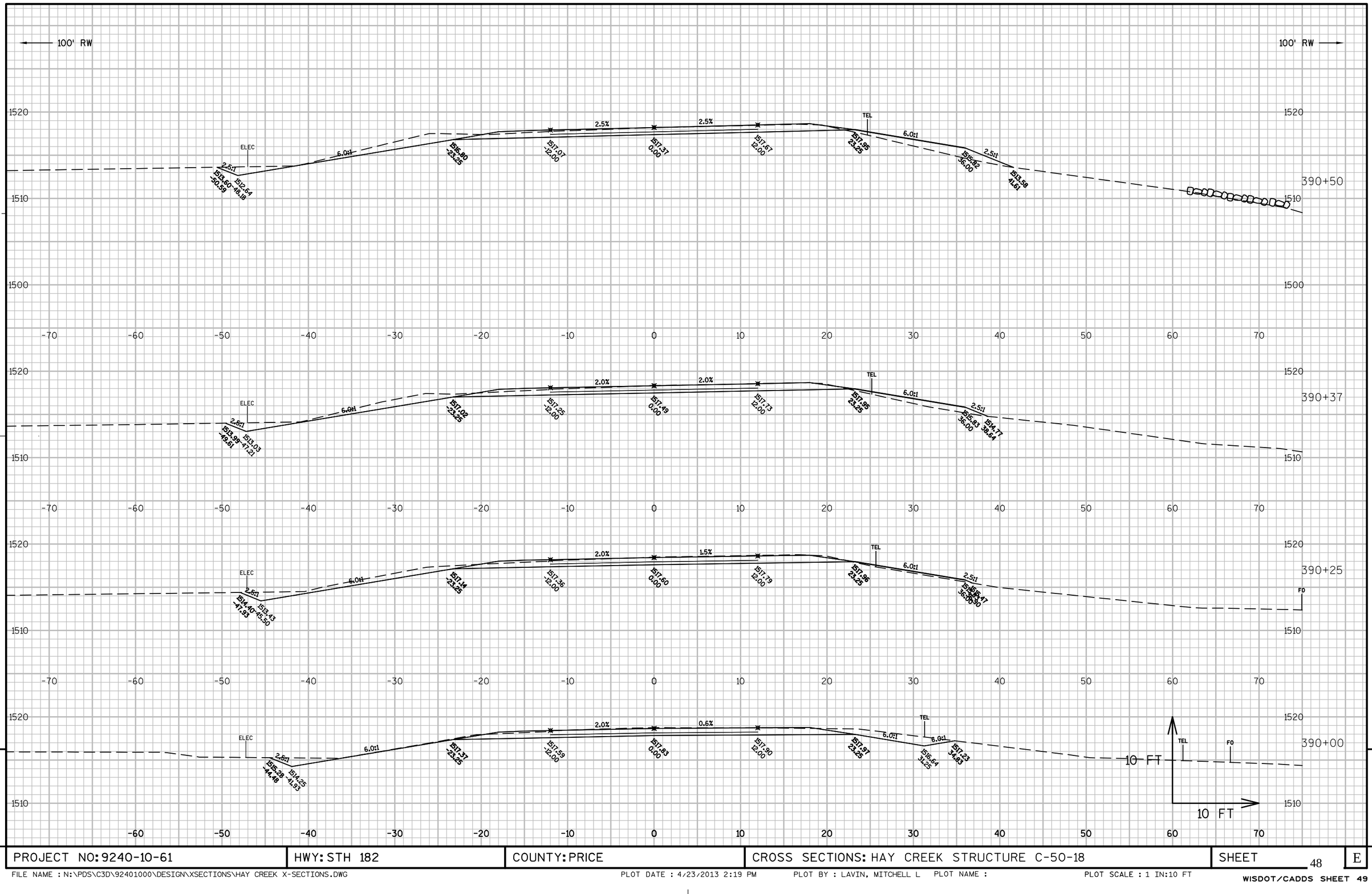
WISDOT/CADDS SHEET 49



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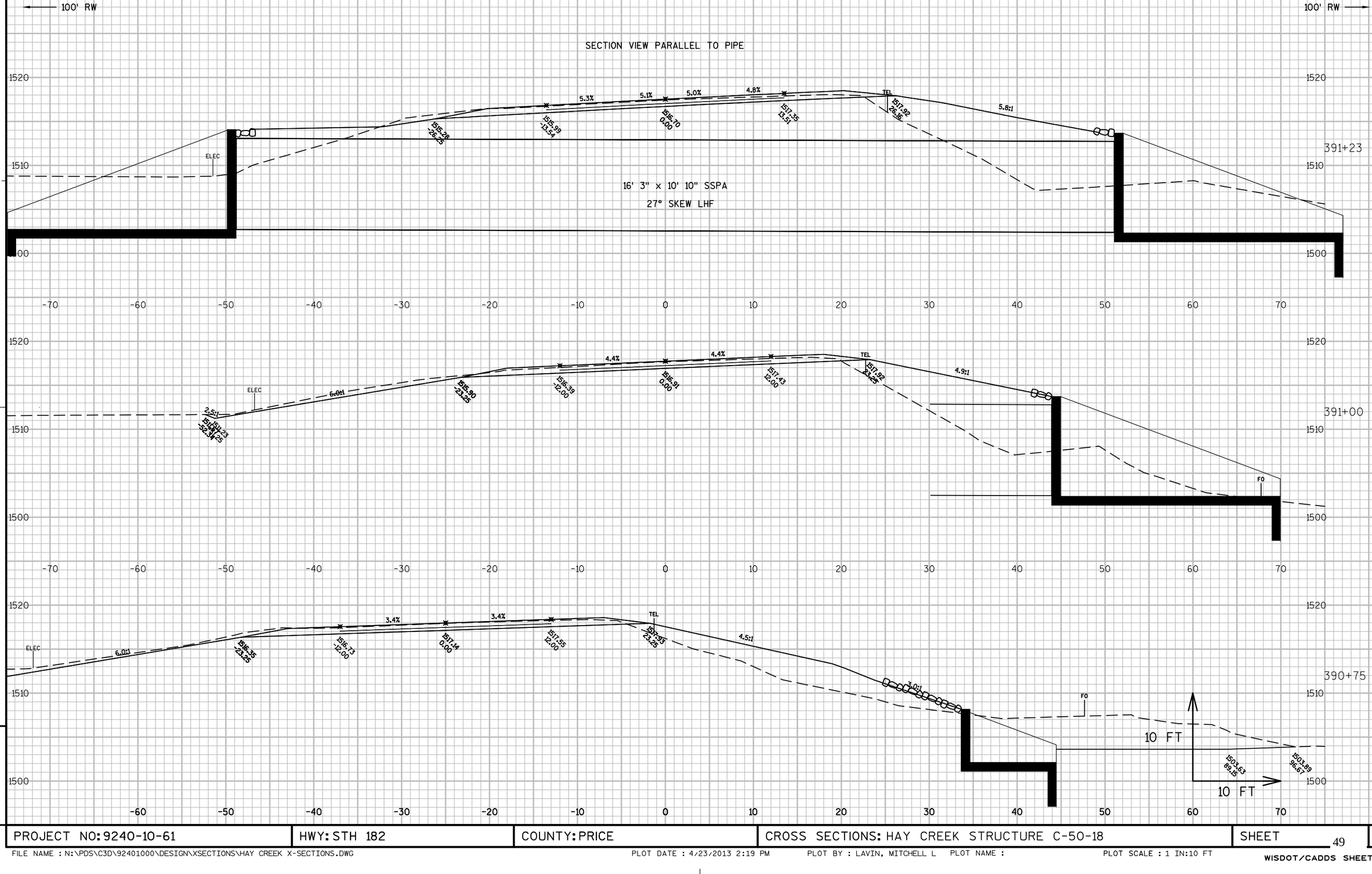
SECTION VIEW PARALLEL TO PIPE



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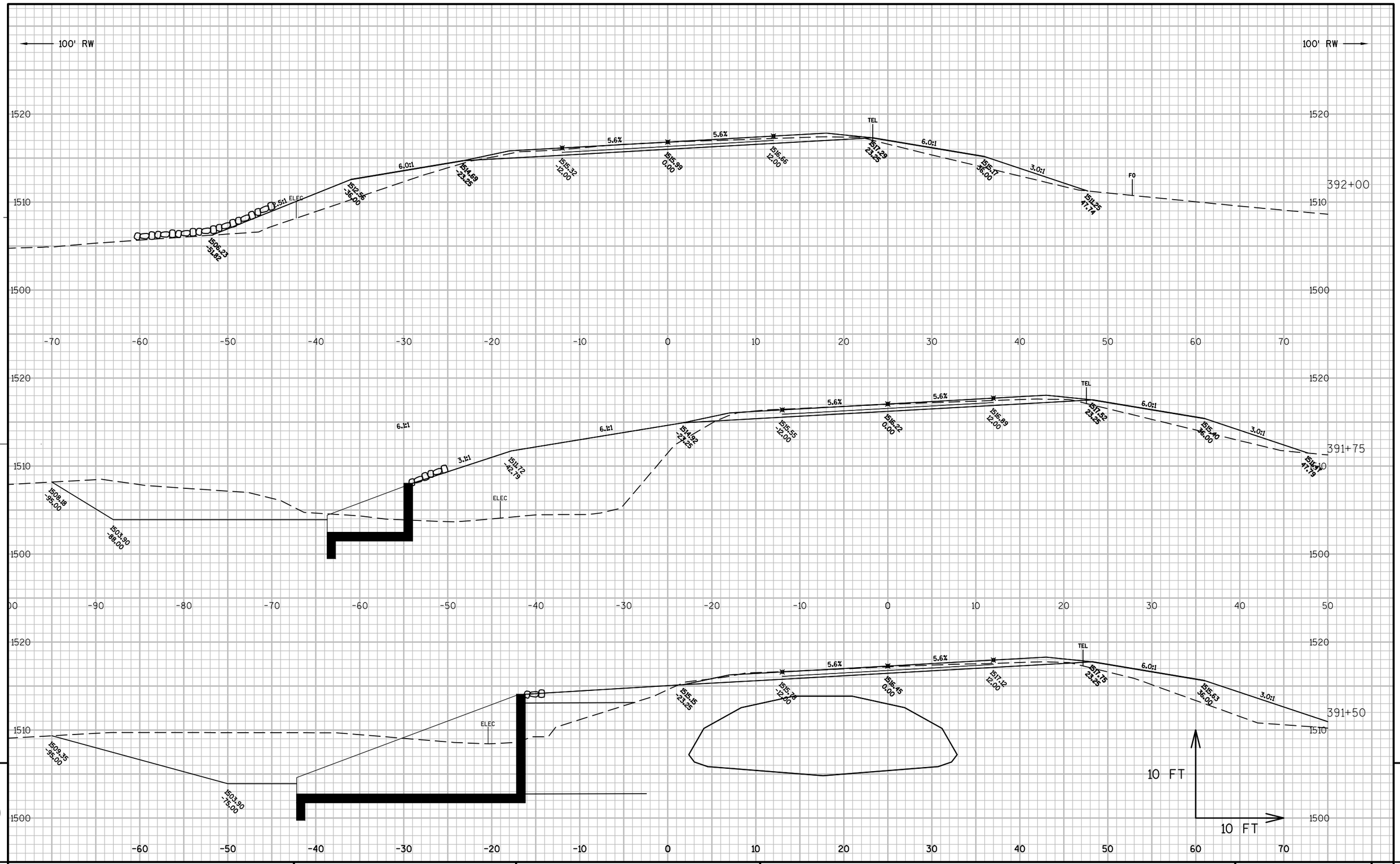
WISDOT/CADDS SHEET 49



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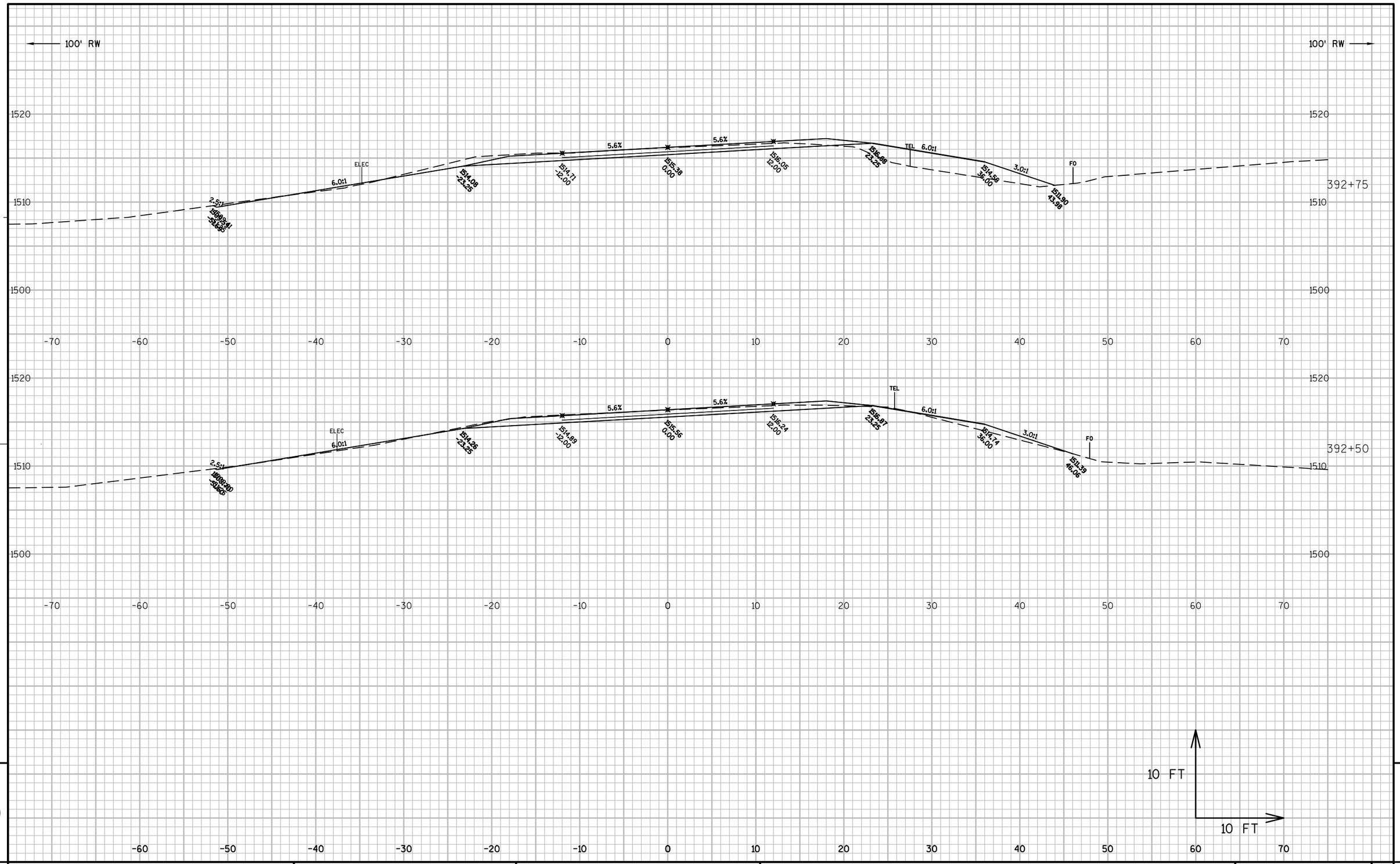

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WISDOT/CADDS SHEET 49

100' RW

100' RW

1530

1520

1510

1500

393+50

393+00

MATCH EXISTING 393+50

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

2.5:1

6.0:1

ELEC

5.6%

5.6%

6.0:1

TEL

3.0:1

FO

1509.95 -25.00

1509.95 -25.00

1513.91 -25.00

1514.54 -12.00

1515.22 0.00

1515.89 12.00

1516.57 24.25

1514.39 36.00

1513.01 40.14

10 FT

10 FT

9

9

PROJECT NO: 9240-10-61	HWY: STH 182	COUNTY: PRICE	CROSS SECTIONS: HAY CREEK STRUCTURE C-50-18	SHEET 52	E

FILE NAME : N:\PDS\C3D\92401000\DESIGN\XSECTIONS\HAY CREEK X-SECTIONS.DWG PLOT DATE : 4/23/2013 2:20 PM PLOT BY : LAVIN, MITCHELL L PLOT NAME : PLOT SCALE : 1 IN:10 FT

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
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