GRE | DECEMBER 2026

PROJECT ID: 4810-02-71
WITH: NA

COUNTY: FOND DU LAC

ORDER OF SHEETS

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

TOTAL SHEETS = 88



31

DESIGN DESIGNATION 4810-02-00

A.A.D.T.	2027	=	500
A.A.D.T.	2047	=	560
D.H.V.		=	100
D.D.		=	50/50
T.		=	5.4%
DESIGN SPEED		=	35 MPH
ESALS		=	52000

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'E)
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

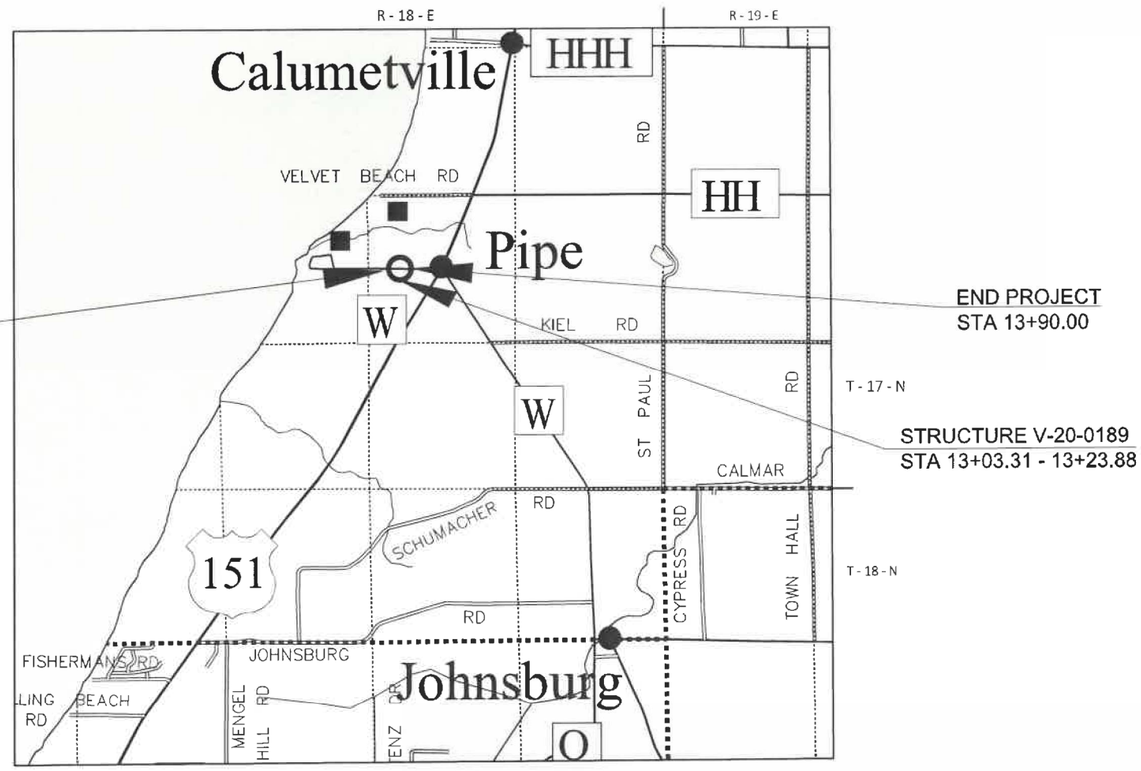
T CALUMET, CTH W

TRIBUTE - PIPE CREEK BRIDGE P-20-0925

CTH W
FOND DU LAC COUNTY

STATE PROJECT NUMBER
4810-02-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4810-02-71	WISC 2027099	1



BEGIN PROJECT
STA 12+35.00
Y= 435550.51
X= 849202.84

END PROJECT
STA 13+90.00

STRUCTURE V-20-0189
STA 13+03.31 - 13+23.88

LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.029 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), FOND DU LAC NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

ACCEPTED FOR
FOND DU LAC COUNTY

DATE: 7/24/2026 (Signature and Title of Official)

ORIGINAL PLANS PREPARED BY

JT ENGINEERING

07/24/26

WISCONSIN
DYLAN A DOUGLAS
E-44729
MADISON
WI
PROFESSIONAL ENGINEER

DATE: _____ (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	JT ENGINEERING, INC.
Designer	JT ENGINEERING, INC.
Project Manager	KATIE SCHWARTZ
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	KIMBERLY SLEZAK

APPROVED FOR THE DEPARTMENT
Katie Schwartz Digitally signed by Katie Schwartz Date: 2026.10.21 11:04:49 -05'00'
DATE: _____ (Signature)

E

FILE NAME : X:\PROJECTS\FOND DU LAC\230053 4810-02-00 CTH W\DESIGN\C3D\SHEETSPLAN\010101_TI.DWG

PLOT DATE : 7/24/2026 6:15 AM PLOT BY : MAX KOLB PLOT NAME :

GENERAL NOTES

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

ANY UTILITY WHICH IS NOT A MEMBER OF DIGGER'S HOTLINE MUST BE CONTACTED SEPARATELY.

SAW CUTS LOCATIONS SHOWN ON THE PLANS ARE SUBJECT TO ADJUSTMENT BY THE ENGINEER IN THE FIELD.

DO NOT PLACE FERTILIZER WITHIN 20 FEET OF A WETLAND OR WATER BODY.

ASPHALTIC PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN.

TACK COAT HAS BEEN ESTIMATED AT AN APPLICATION OF 0.05 GAL/SY AND SHALL BE PLACED BETWEEN THE LAYERS OF ASPHALTIC PAVEMENT.

UTILITY CONTACTS

ALLIANT ENERGY
JOSH COLLIEN
883 W SCOTT STREET
FOND DU LAC, WI 54937
PHONE: (920) 322-6646
EMAIL: JOSHUACOLLIEN@ALLIANTENERGY.COM

WISCONSIN PUBLIC SERVICE - GAS
MATT GABODA
933 S WILDWOOD AVE
SHEBOYGAN, WI 53081
PHONE: (920)-451-3743
EMAIL:MATT.GABODA@WISCONSINPUBLICSERVICE.COM

CHARTER COMMUNICATIONS
NICK FRASE
1515 W WASHINGTON ST,
WEST BEND, WI 53095
PHONE:(920)304-6797
EMAIL:NICK.FRASE@SPECTRUM.COM

TOWN OF CALUMET SANITARY DISTRICT
FRED HAAS
W2104 COUNTY RD HH
MALONE, WI 53049
PHONE: (414) 659-2879
EMAIL: FHAAS@ATT.NET

FRONTIER
THOMAS REKOWSKI
118 DIVISION ST
PLYMOUTH, WI 53073
PHONE:(608)844-0980
EMAIL:THOMAS.REKOWSKI@FTR.COM

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

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
TYPICAL SECTIONS
CONSTRUCTION DETAILS
EROSION CONTROL
TRAFFIC CONTROL

STANDARD ABBREVIATIONS

ADT	AVERAGE DAILY TRAFFIC
AC	ASPHALT CEMENT
AGG	AGGREGATE
ASPH	ASPHALT
BM	BENCHMARK
C/L	CENTERLINE
CONC	CONCRETE
CMP	CORRUGATED METAL PIPE
CR	CREEK
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
ESALS	EQUIVALENT SINGLE AXIS LOADS
EXIST	EXISTING
FE	FIELD ENTRANCE
HYD	HYDRANT
IP	IRON PIPE
L	LENGTH OF CURVE
LC	LONG CHORD OF CURVE
LR	LENGTH OF RUN OFF
MH	MANHOLE
NC	NORMAL CROWN
PT	POINT OF TANGENT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PE	PRIVATE ENTRANCE
R	RADIUS
REM	REMOVE
R/L OR RL	REFERENCE LINE
RCCP	REINFORCED CONCRETE CULVERT PIPE
RCPSS	REINFORCED CONCRETE STORM SEWER
RO	RUNOUT
R/W	RIGHT OF WAY
STA	STATION
SE	SUPER ELEVATION
SS	STORM SEWER
T	TANGENT
TEL	TELEPHONE
TLE	TEMPORARY LIMITED EASEMENT
T	TRUCKS
VC	VERTICAL CURVE
W	WELL

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP- TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE: TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 0.51 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.37 ACRES

AGENCY/ PROJECTS CONTACTS

WISDOT - NE REGION
KATIE SCHWARTZ
944 VANDERPERREN WAY
GREEN BAY, WI 54304
PHONE: 920-492-5652
EMAIL: KATIEA.SCHWARTZ@DOT.WI.GOV

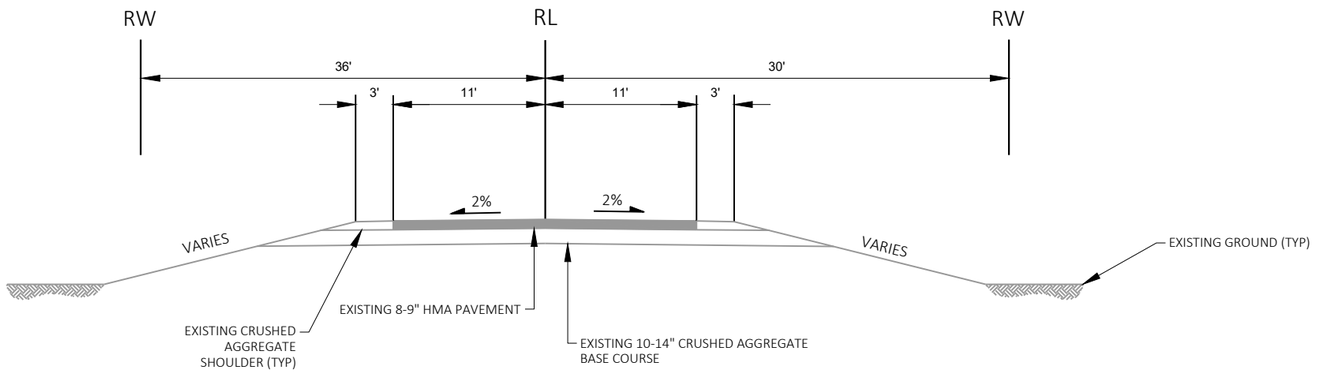
WISCONSIN DNR - NE REGION
MARTY DILLENBURG
625 E COUNTY ROAD Y STE 700
OSHKOSH, WI 54901
PHONE: 920-410-7428
EMAIL: MARTY.DILLENBURG@WISCONSIN.GOV

FOND DU LAC COUNTY
THOMAS JANKE
1820 S HICKORY STREET
FOND DU LAC, WI 54931
PHONE: 920-929-3488
EMAIL: TOM.JANKE@FDLCO.WI.GOV

DESIGN CONTACTS

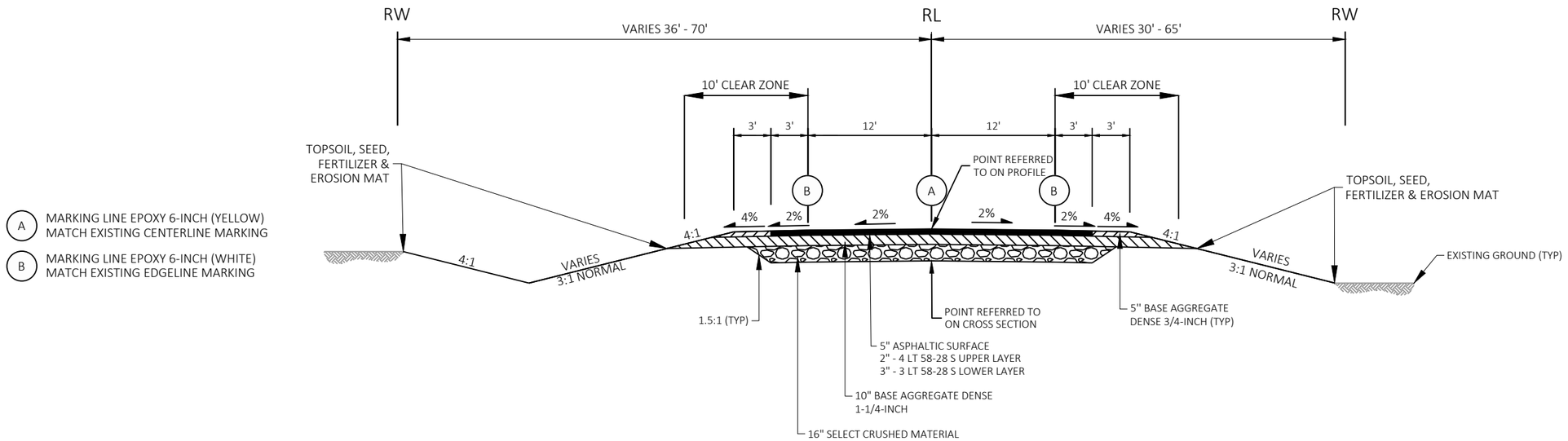
JT ENGINEERING, INC.
MAX KOLB, PE
10001 W INNOVATION DR, STE 104
WAUWATOSA, WI 53226
PHONE: (262)-320-8528
EMAIL:MAXK@JT-ENGINEERING.COM

2



EXISTING TYPICAL SECTION

STA 12+35 - 13+90



FINISHED TYPICAL SECTION

STA 12+35 - 13+90

PROJECT NO: 4810-02-71	HWY: CTH W	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 3	E

2

NOTES

TEMPORARY DIVERSION CHANNEL SHOULD BE CAPABLE OF CARRYING THE Q2 FLOW. FISH THAT BECOME STRANDED IN DEWATERED AREAS OR TEMPORARY CHANNEL SHOULD BE CAPTURED AND RETURNED TO THE ACTIVE CHANNEL.

IF PERMANENT RIPRAP CONFLICTS WITH TEMPORARY CHANNEL, PLACE RIPRAP AFTER FLOW HAS BEEN DIVERTED TO NEW BOX CULVERT AND TEMPORARY DIVERSION CHANNEL HAS BEEN BACKFILLED. TEMPORARY SANDBAGS AND STAGING OF RIPRAP PLACEMENT MAY BE REQUIRED.

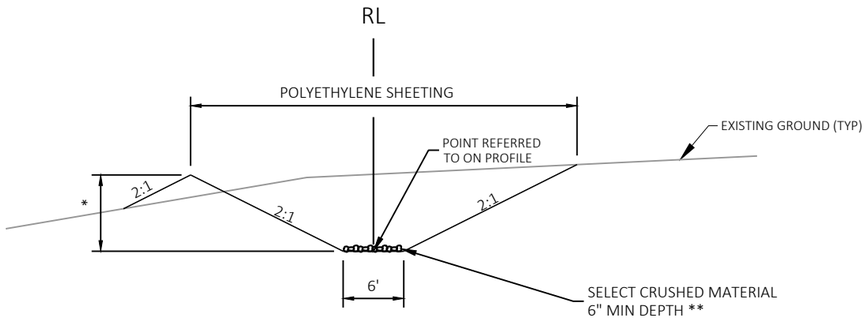
TEMPORARY CHANNEL TO BE RESTORED TO MATCH PROPOSED CTH W CROSS SECTIONS OR EXISTING CONDITION. PLACEMENT OF FILL MATERIAL TO MEET STANDARD SPECIFICATION 207. DISTURBED AREAS TO BE RESTORED WITH TOPSOIL, SEED, AND EROSION MAT.

PIPE CREEK
Q2 = 160 CFS
2 VELOCITY = 7.77 FT/S

USE AVAILABLE EROSION CONTROL ITEMS IN THE CONTRACT TO IMPLEMENT ANY ADDITIONAL EROSION CONTROL NEEDED TO STABILIZE THE SITE AS IDENTIFIED IN THE CONTRACTOR EROSION CONTROL IMPLEMENTATION PLAN AND AS DIRECTED BY THE ENGINEER.

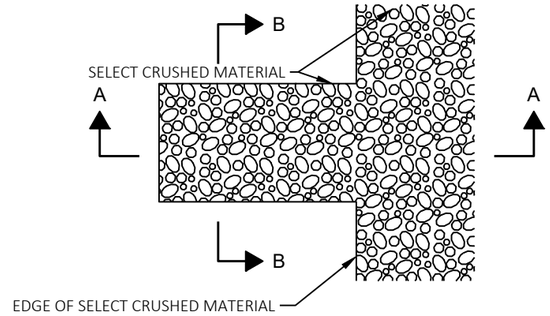
* HEIGHT VARIES - 3' TO 4'

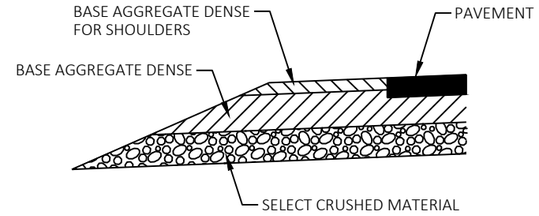
** INCREASE HEIGHT OF SELECT CRUSHED MATERIAL ON SIDES OF CHANNEL ON CORNERS, AS REQUIRED, TO MINIMIZE EROSION AND STABILIZE POLYETHYLENE SHEETING.



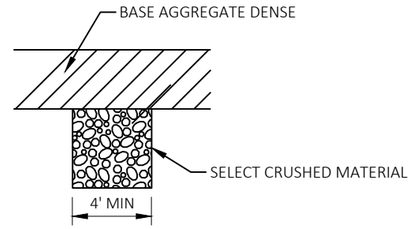
TYPICAL SECTION - TEMPORARY CHANNEL

STA 1+01.59 - STA 2+83.56





SECTION A-A



SECTION B-B

DETAIL FOR FRENCH DRAINS

STA 12+60 LT/RT

FINAL LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

EXCAVATION REQUIRED TO CONSTRUCT FRENCH DRAINS SHALL BE CONSIDERED INCIDENTAL TO THE ITEM SELECT CRUSHED MATERIAL.

2

LEGEND

- EROSION MAT URBAN, CLASS I, TYPE B
- SILT FENCE
- RIP RAP
- (R) SILT FENCE RELIEF
- SLOPE INTERCEPT
- SURFACE WATER FLOW

N

2

SLOPE INTERCEPT (TYP)

PIPE CREEK

PROPOSED R/W (TYP)

TEMPORARY CHANNEL REQ'D

EXISTING R/W

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

BEGIN PROJECT STA 12+35

END PROJECT STA 13+90

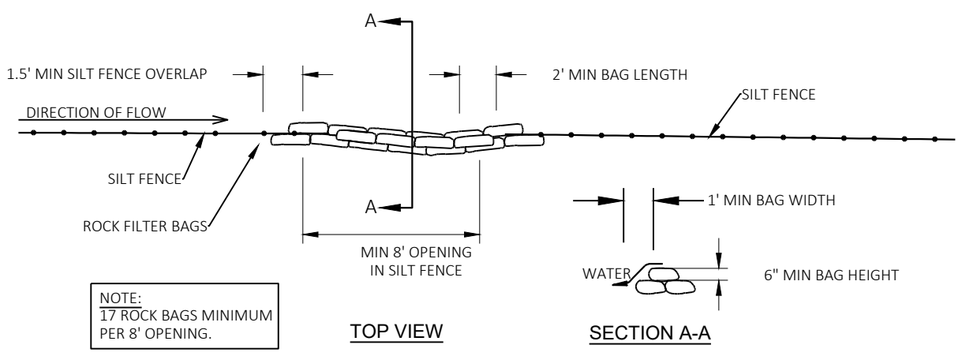
EXISTING R/W

TEMPORARY CHANNEL REQ'D

TLE (TYP)

PIPE CREEK

SEPTIC



NOTE:
17 ROCK BAGS MINIMUM PER 8' OPENING.

TOP VIEW

SECTION A-A

ROCK BAGS USED FOR SILT FENCE RELIEF

PROJECT NO: 4810-02-71	HWY: CTH W	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 5	E

FILE NAME : X:\PROJECTS\FOND DU LAC\230053 4810-02-00 CTH W\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-ec

PLOT DATE : 7/24/2026 11:23 AM PLOT BY : MAX KOLB PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

TRAFFIC CONTROL GENERAL NOTES:

ALL TRAFFIC CONTROL SIGNS, DEVICES, AND THEIR LOCATIONS SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD), THE PLANS, SPECIFICATIONS, CONTRACT AND APPLICABLE STANDARD DETAIL DRAWINGS.

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

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

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

GENERAL TRAFFIC CONTROL REQUIREMENTS:

ACCESS TO PROPERTIES WITHIN THE WORKZONE SHALL BE MAINTAINED AT ALL TIMES UNLESS COORDINATED DIRECTLY WITH THE PROPERTY OWNER AND ENGINEER.

WHERE TWO DRIVEWAYS SERVE THE PROPERTY, WORK SHALL BE STAGED TO REQUIRE ONE DRIVEWAY TO REMAIN OPEN.

STAGE 1 CONSTRUCTION

MAINTAIN THROUGH TRAFFIC AND PEDESTRIAN TRAFFIC ON CTH W THROUGH THE USE OF FLAGPERSONS IN ACCORDANCE WITH SDD 'TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION'. CTH W SHALL BE OPEN TO TWO LANES OF TRAFFIC DURING NON-WORKING HOURS.

STAGE 1A

TRAFFIC SHALL UTILIZE THE EXISTING EASTBOUND LANE OF CTH W.

COMPLETE ALL TEMPORARY WIDENING FROM STA 12+00 TO STA 14+33 LT.

STAGE 1B

TRAFFIC SHALL UTILIZE THE EXISTING WESTBOUND LANE OF CTH W AND TEMPORARY WIDENING CONSTRUCTED IN STAGE 1A.

COMPLETE THE FOLLOWING ITEMS OF WORK:

- INSTALL CULVERT PIPE TEMPORARY 54-INCH FROM 2.5' LEFT OF REFERENCE LINE TO SOUTH.
- CONSTRUCT TEMPORARY CHANNEL SOUTH OF CTH W.
- CONSTRUCT TEMPORARY WIDENING FROM STA 12+02 TO STA 14+25 RT.

STAGE 2 CONSTRUCTION

MAINTAIN THROUGH TRAFFIC AND PEDESTRIAN TRAFFIC ON CTH W ON THE EXISTING EASTBOUND LANE AND TEMPORARY WIDENING IN ACCORDANCE WITH SDD 'TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS'.

COMPLETE THE FOLLOWING ITEMS OF WORK:

- INSTALL CULVERT PIPE TEMPORARY 54-INCH FROM 2.5' LEFT OF REFERENCE LINE TO NORTH.
- CONSTRUCT TEMPORARY CHANNEL NORTH OF CTH W. DIVERT TRIBUTARY FLOW INTO TEMPORARY CHANNEL.
- CONSTRUCT BOX CULVERT FROM 2.5' LEFT OF CENTERLINE TO NORTH. PLACE RIPRAP HEAVY.
- COMPLETE CONSTRUCTION ON CTH W WESTBOUND INCLUDING EXCAVATION COMMON, BORROW, SELECT CRUSHED, BASE AGGREGATE DENSE 1 ¼-INCH, ASPHALTIC SURFACE (LOWER LAYER), BASE AGGREGATE DENSE 3/4-INCH, AND RESTORATION.

STAGE 3 CONSTRUCTION

MAINTAIN THROUGH TRAFFIC AND PEDESTRIAN TRAFFIC ON CTH W ON THE CONSTRUCTED WESTBOUND LANE AND TEMPORARY WIDENING IN ACCORDANCE WITH SDD 'TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS'..

COMPLETE THE FOLLOWING ITEMS OF WORK:

- COMPLETE BOX CULVERT CONSTRUCTION FROM 2.5' LEFT OF CENTERLINE TO SOUTH. PLACE RIPRAP HEAVY.
- REMOVE TRIBUTARY DIVERSION AND ESTABLISH FLOW INTO BOX CULVERT. REMOVE CULVERT PIPE TEMPORARY 54-INCH FROM 2.5' LEFT OF REFERENCE LINE TO SOUTH. REMOVE TEMPORARY CHANNEL SOUTH OF CTH W.
- COMPLETE CONSTRUCTION ON CTH W EASTBOUND INCLUDING EXCAVATION COMMON, BORROW, SELECT CRUSHED, BASE AGGREGATE DENSE 1 ¼-INCH, ASPHALTIC SURFACE (LOWER LAYER), BASE AGGREGATE DENSE 3/4-INCH, AND RESTORATION.

STAGE 4 CONSTRUCTION

MAINTAIN THROUGH TRAFFIC AND PEDESTRIAN TRAFFIC ON CTH W THROUGH THE USE OF FLAGPERSONS IN ACCORDANCE WITH SDD 'TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION'. CTH W SHALL BE OPEN TO TWO LANES OF TRAFFIC DURING NON-WORKING HOURS.

COMPLETE THE FOLLOWING ITEMS OF WORK:

- REMOVE CULVERT PIPE TEMPORARY 54-INCH FROM 2.5' LEFT OF REFERENCE LINE TO NORTH. REMOVE TEMPORARY CHANNEL NORTH OF CTH W.
- REMOVE TEMPORARY WIDENING FROM STA 12+00 TO STA 14+33 LT.
- COMPLETE RIPRAP HEAVY PLACEMENT AT NORTH END OF BOX CULVERT, IF NECESSARY.
- COMPLETE CONSTRUCTION ON CTH W INCLUDING BASE AGGREGATE DENSE 1 ¼-INCH, ASPHALTIC SURFACE (UPPER LAYER), BASE AGGREGATE DENSE 3/4-INCH, PAVEMENT MARKING, AND RESTORATION.

SIGN W12-52 TO BE PLACED 1500' PRIOR TO STOP BAR

MAX. 10' WIDTH
W12-52
48"X48"

LOOSE GRAVEL
W08-7

TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH WHITE (TYP)

BRIDGE OUT
R11-2B
48"X30"

CRASH CUSHION TEMPORARY (TYP)
SEE SDD 14B07 FOR BARRIER END TREATMENT

BRIDGE OUT
R11-2B
48"X30"

WO1-6
48" X 24"
TYPE III BARRICADE

KOENINGS ROAD

SIGN W12-52 TO BE PLACED AT CTH W & USH 151 INTERSECTION

MAX. 10' WIDTH
W12-52
48"X48"

STOP HERE ON RED
R10-6
24"X36"

EXISTING R/W

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

CTH W

STOP HERE ON RED
R10-6
24"X36"

WO1-4R

WO1-4L

STAGE 2

TEMPORARY SIGNAL TIMING STAGE 2		
DIRECTION	EB	WB
MIN GREEN	12 SEC	12 SEC
MAX GREEN	30 SEC	30 SEC
YELLOW	2 SEC	2 SEC
ALL RED	15 SEC	15 SEC
PASSAGE	5 SEC	5 SEC

N

LEGEND

- WORK ZONE
- TEMPORARY WIDENING
- DIRECTION OF VEHICLE TRAFFIC
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- CONCRETE BARRIER TEMPORARY PRECAST
- TEMPORARY SHORING
- TEMPORARY MARKING LINE PAINT OR REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
- TEMPORARY MARKING LINE PAINT OR REMOVABLE TAPE 6-INCH (WHITE)
- × MARKING REMOVAL LINE 4-INCH

SEE SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR SIGNING, NOT ALL SIGNING SHOWN ON THIS DETAIL.

MAX. 10' WIDTH
W12-52
48"X48"

SIGN W12-52 TO BE PLACED 1500' PRIOR TO STOP BAR

WO1-4L

WO1-4R

CRASH CUSHION TEMPORARY (TYP)
SEE SDD 14B07 FOR BARRIER END TREATMENT

KOENINGS ROAD

SIGN W12-52 TO BE PLACED AT CTH W & USH 151 INTERSECTION

MAX. 10' WIDTH
W12-52
48"X48"

STOP HERE ON RED
R10-6
24"X36"

EXISTING R/W

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

CTH W

TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH WHITE (TYP)

STOP HERE ON RED
R10-6
24"X36"

WO1-6
48" X 24"
TYPE III BARRICADE

BRIDGE OUT
R11-2B
48"X30"

BRIDGE OUT
R11-2B
48"X30"

WO1-6
48" X 24"
TYPE III BARRICADE

STAGE 3

TEMPORARY SIGNAL TIMING STAGE 3		
DIRECTION	EB	WB
MIN GREEN	12 SEC	12 SEC
MAX GREEN	30 SEC	30 SEC
YELLOW	2 SEC	2 SEC
ALL RED	15 SEC	15 SEC
PASSAGE	5 SEC	5 SEC

N

TEMPORARY SIGNAL NOTES:
1. GREEN TIMES MAY BE ADJUSTED TO FIT TRAFFIC CONDITIONS.
2. DO NOT REDUCE ALL RED TIME.
3. 35 MPH POSTED SPEED LIMIT

PROJECT NO: 4810-02-71	HWY: CTH W	COUNTY: FOND DU LAC	TRAFFIC CONTROL	SHEET 7	E

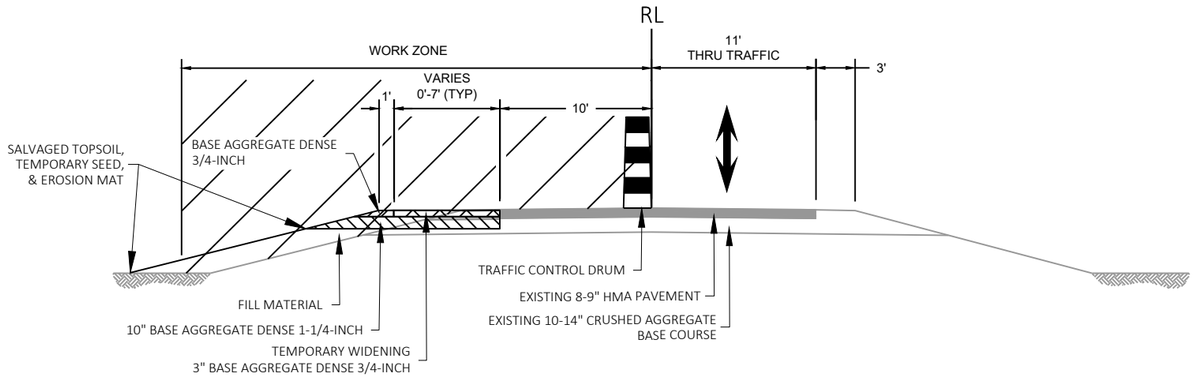
FILE NAME : X:\PROJECTS\FOND DU LAC\230053 4810-02-00 CTH W\DESIGN\C3D\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - 01-Stage2 & 3
PLOT DATE : 7/24/2026 11:22 AM
PLOT BY : MAX KOLB
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND:

TRAFFIC FLOW

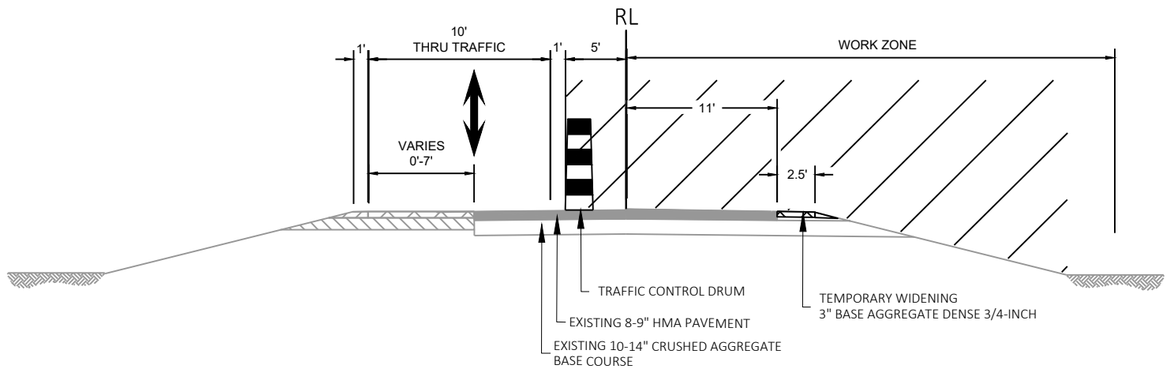
WORK ZONE

DRAWING IS NOT TO SCALE



STAGE 1A

STA 12+00 - STA 14+33



STAGE 1B

STA 12+25 - STA 14+25

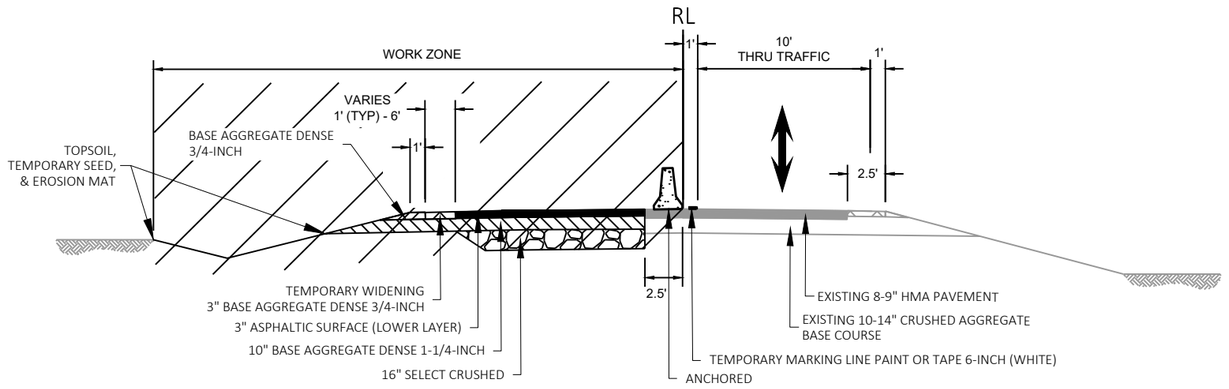
LEGEND:

TRAFFIC FLOW

WORK ZONE

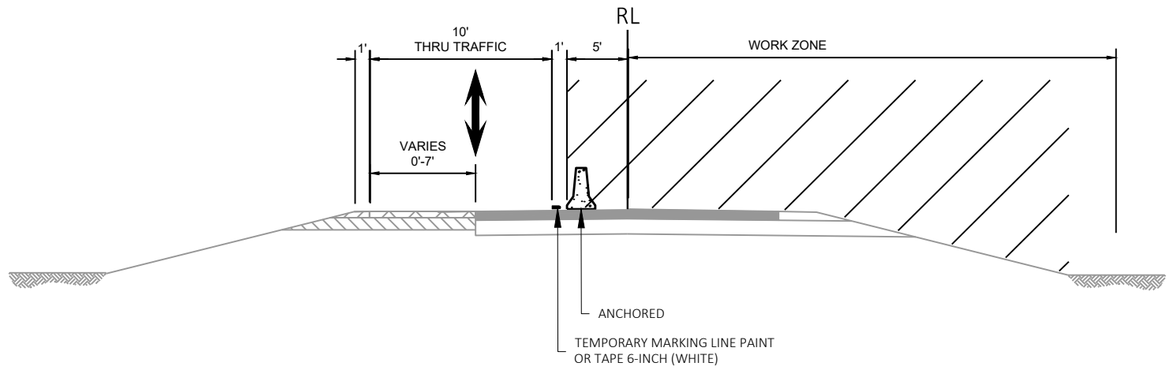
CONCRETE BARRIER TEMPORARY PRECAST (ANCHORED)

DRAWING IS NOT TO SCALE



STAGE 2

STA 12+02 - STA 12+35



STAGE 3

STA 11+98 - STA 12+35
STA 13+90 - STA 14+33

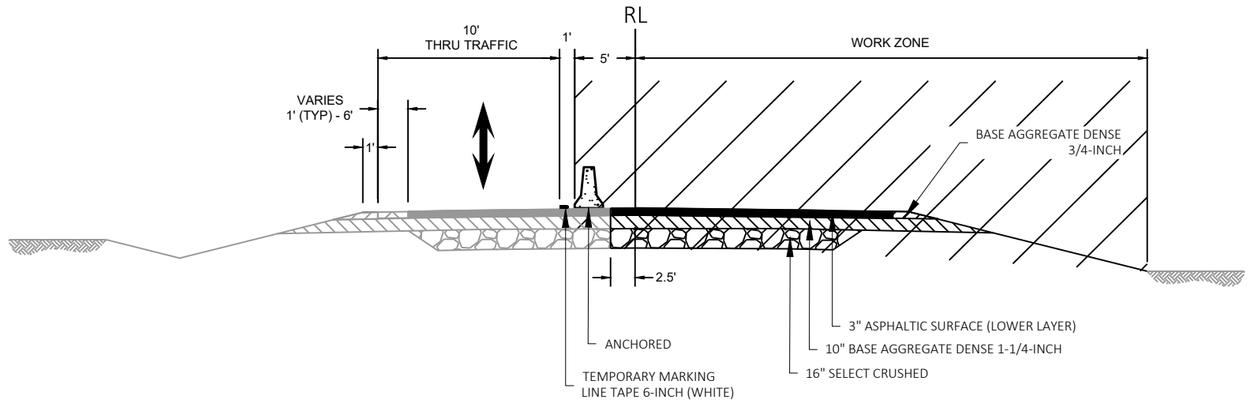
LEGEND:

TRAFFIC FLOW

WORK ZONE

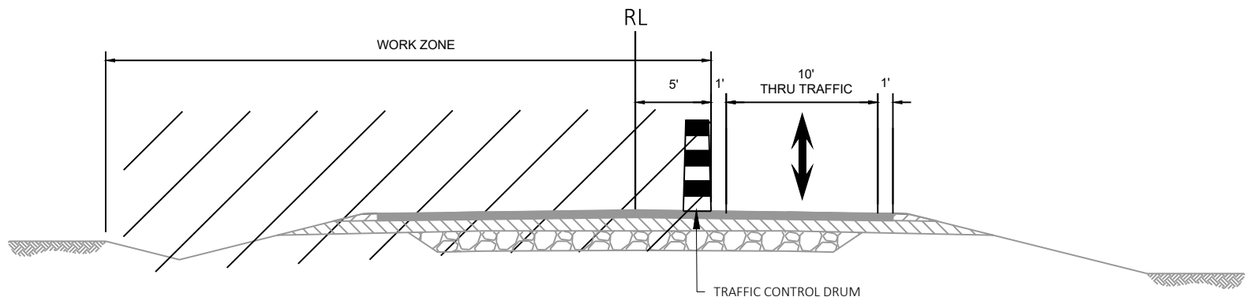
CONCRETE BARRIER TEMPORARY PRECAST (ANCHORED)

DRAWING IS NOT TO SCALE



STAGE 3

STA 12+35 - STA 13+90



STAGE 4

NOTE: STAGING AS SHOWN IS FOR WORK TAKING PLACE ON THE NORTH SIDE OF CTH W. FOR WORK ON THE SOUTH SIDE, STAGING WOULD BE MIRRORED.

Estimate Of Quantities

4810-02-71

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	2.000	2.000
0004	203.0220	Removing Structure (structure) 01. P-20-0925	EACH	1.000	1.000
0006	204.9060.S	Removing (item description) 01. Debris from Streambed	EACH	1.000	1.000
0008	205.0100	Excavation Common	CY	609.000	609.000
0010	206.2001	Excavation for Structures Culverts (structure) 01. V-20-0189	EACH	1.000	1.000
0012	208.0100	Borrow	CY	75.000	75.000
0014	210.2500	Backfill Structure Type B	TON	1,105.000	1,105.000
0016	213.0100	Finishing Roadway (project) 01. 4812-02-71	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	131.000	131.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	550.000	550.000
0022	311.0110	Breaker Run	TON	170.000	170.000
0024	312.0110	Select Crushed Material	TON	454.000	454.000
0026	450.4000	HMA Cold Weather Paving	TON	137.000	137.000
0028	455.0605	Tack Coat	GAL	24.000	24.000
0030	465.0105	Asphaltic Surface	TON	137.000	137.000
0032	504.0100	Concrete Masonry Culverts	CY	185.000	185.000
0034	505.0400	Bar Steel Reinforcement HS Structures	LB	18,450.000	18,450.000
0036	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	1,660.000	1,660.000
0038	511.1200	Temporary Shoring (structure) 01. V-20-0189	SF	1,585.000	1,585.000
0040	516.0500	Rubberized Membrane Waterproofing	SY	23.000	23.000
0042	520.2054	Culvert Pipe Temporary 54-Inch	LF	168.000	168.000
0044	603.8000	Concrete Barrier Temporary Precast Delivered	LF	187.500	187.500
0046	603.8125	Concrete Barrier Temporary Precast Installed	LF	375.000	375.000
0048	603.8500	Anchoring Concrete Barrier Temporary Precast	LF	250.000	250.000
0050	606.0400	Riprap Extra-Heavy	CY	175.000	175.000
0052	614.0905	Crash Cushions Temporary	EACH	2.000	2.000
0054	618.0100	Maintenance and Repair of Haul Roads (project) 01. 4810-02-71	EACH	1.000	1.000
0056	619.1000	Mobilization	EACH	1.000	1.000
0058	624.0100	Water	MGAL	17.000	17.000
0060	625.0100	Topsoil	SY	1,147.000	1,147.000
0062	628.1504	Silt Fence	LF	469.000	469.000
0064	628.1520	Silt Fence Maintenance	LF	469.000	469.000
0066	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0068	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0070	628.2008	Erosion Mat Urban Class I Type B	SY	1,147.000	1,147.000
0072	628.5505	Polyethylene Sheeting	SY	295.000	295.000
0074	628.7570	Rock Bags	EACH	75.000	75.000
0076	629.0210	Fertilizer Type B	CWT	3.000	3.000
0078	630.0130	Seeding Mixture No. 30	LB	54.000	54.000
0080	630.0200	Seeding Temporary	LB	33.000	33.000
0082	630.0500	Seed Water	MGAL	28.000	28.000
0084	638.2602	Removing Signs Type II	EACH	4.000	4.000
0086	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0088	642.5001	Field Office Type B	EACH	1.000	1.000
0090	643.0300	Traffic Control Drums	DAY	1,160.000	1,160.000
0092	643.0420	Traffic Control Barricades Type III	DAY	70.000	70.000
0094	643.0705	Traffic Control Warning Lights Type A	DAY	140.000	140.000
0096	643.0715	Traffic Control Warning Lights Type C	DAY	200.000	200.000
0098	643.0900	Traffic Control Signs	DAY	810.000	810.000

4810-02-71

Line	Item	Item Description	Unit	Total	Qty
0100	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000
0102	643.3165	Temporary Marking Line Paint 6-Inch	LF	300.000	300.000
0104	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	3,405.000	3,405.000
0106	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	22.000	22.000
0108	643.5000	Traffic Control	EACH	1.000	1.000
0110	645.0105	Geotextile Type C	SY	330.000	330.000
0112	645.0120	Geotextile Type HR	SY	335.000	335.000
0114	646.2020	Marking Line Epoxy 6-Inch	LF	1,544.000	1,544.000
0116	646.6466	Cold Weather Marking Epoxy 6-Inch	LF	1,544.000	1,544.000
0118	646.9000	Marking Removal Line 4-Inch	LF	800.000	800.000
0120	650.4500	Construction Staking Subgrade	LF	155.000	155.000
0122	650.5000	Construction Staking Base	LF	155.000	155.000
0124	650.6501	Construction Staking Structure Layout (structure) 01. V-20-0189	EACH	1.000	1.000
0126	650.9911	Construction Staking Supplemental Control (project) 01. 4810-02-71	EACH	1.000	1.000
0128	650.9920	Construction Staking Slope Stakes	LF	155.000	155.000
0130	661.0101	Temporary Traffic Signals for Bridges (structure) 01. V-20-0189	EACH	1.000	1.000
0132	690.0150	Sawing Asphalt	LF	44.000	44.000
0134	715.0502	Incentive Strength Concrete Structures	DOL	1,110.000	1,110.000
0136	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	300.000	300.000
0138	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000	600.000
0140	SPV.0060	Special 01. Temporary Water Diversion	EACH	1.000	1.000

3

REMOVALS SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	201.0205 GRUBBING STA	204.9060.S.01 REMOVING (ITEM DESCRIPTION) (01. DEBRIS FROM STREAMBED) EACH	REMARKS
0010	12+50	-	13+50	CTH W LT & RT	2	-	
0010	13+00	-	13+25	PIPE CREEK	-	1	
				TOTAL 0010	2	1	

AGGREGATE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	* 312.0110 SELECT CRUSHED MATERIAL TON	624.0100 WATER MGAL	REMARKS
0010	12+35	-	13+90	CTH W	31	290	410	11	
0010	12+35	-	13+90	TEMP WIDENING	100	260	-	6	
				TOTAL 0010	131	550	410	17	

*ITEM FOUND ELSEWHERE IN PLAN

3

ASPHALT SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON	REMARKS
0010	12+35	-	13+90	CTH W	137	24	137	
				TOTAL 0010	137	24	137	

TEMPORARY CONCRETE BARRIER SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	603.8500 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST LF	REMARKS
0010	12+35	-	13+90	CTH W	187.5	187.5	125	TRAFFIC CONTROL STAGE 2
0010	12+35	-	13+90	CTH W	-	187.5	125	TRAFFIC CONTROL STAGE 3
				TOTAL 0010	187.5	375	250	

TEMPORARY DRAINAGE SUMMARY

CATEGORY	STATION	LOCATION	520.2054 CULVERT PIPE TEMPORARY 54-INCH LF	SPV.0060.01 SPECIAL (01. TEMPORARY WATER DIVERSION) EACH	REMARKS
0010	13+47	CTH W	168	1	
		TOTAL 0010	168	1	

CRASH CUSHIONS TEMPORARY SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	614.0905 CRASH CUSHIONS TEMPORARY EACH	BACK WIDTH LF	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS	REMARKS
0010	12+35	-	13+90	CTH W - STAGE 2	1	4	OM3-R (WO5-58R)	TL-3	UNIDIRECTIONAL	LT	CBTP	TRAFFIC CONTROL STAGE 2
0010	12+35	-	13+90	CTH W - STAGE 3	1	4	OM3-L (WO5-58L)	TL-3	UNIDIRECTIONAL	RT	CBTP	TRAFFIC CONTROL STAGE 3
				TOTAL 0010	2							

DIVISION	FROM/TO STATION	LOCATION	205.0100 EXCAVATION COMMON (1) CUT (2)	205.0100 EXCAVATION COMMON (1) EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (6) FACTOR 1.35	MASS ORDINATE +/- (7)	WASTE	208.0100 BORROW	COMMENT
DIVISION 1												
TEMPORARY CHANNEL	1+10.00/2+74.35		152	0	0	152	12	16	136		0	
DIVISION 1 SUBTOTAL			152	0	0	152	12	16	136	136	0	
DIVISION 2												
STAGES 1A AND 2	12+35.00/13+90.00		187	0	0	187	194	262	-75		75	
STAGES 1B AND 3	12+35.00/13+90.00		270	0	0	270	78	105	165		0	
DIVISION 2 SUBTOTAL			457	0	0	457	272	367	90	90	75	
GRAND TOTAL			609	0	0	609	284	383	226	226	75	
TOTAL COMMON EXC			609									

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) EBS EXCAVATION TO BE BACKFILLED WITH BORROW MATERIAL.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(6) EXPANDED FILL FACTOR = 1.35
DEPENDING ON SELECTIONS: **EXPANDED FILL = (UNEXPANDED FILL) * FILL FACTOR**
(7) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

3

EROSION CONTROL SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	* 312.0110 SELECT CRUSHED MATERIAL TON	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.5505 POLYETHYLENE SHEETING SY	628.7570 ROCK BAGS EACH	REMARKS
0010	12+35	-	13+90	CTH W LT	-	185	185	-	-	-	20	
0010	12+35	-	13+90	CTH W RT	-	190	190	-	-	-	20	
0010	1+10	-	2+75	TEMPORARY CHANNEL	36	-	-	-	-	236	20	
0010	9+64	-	14+21	UNDISTRIBUTED	8	94	94	5	4	59	15	
				TOTAL 0010	44	469	469	5	4	295	75	

*ITEM FOUND ELSEWHERE IN PLAN

RESTORATION SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	REMARKS
0010	12+35	-	13+90	CTH W LT	447	447	1	21	13	11	
0010	12+35	-	13+90	CTH W RT	470	470	1	22	13	11	
0010	9+64	-	14+21	UNDISTRIBUTED	230	230	1	11	7	6	
				TOTAL 0010	1,147	1,147	3	54	33	28	

SIGNING SUMMARY

CATEGORY	STATION	LOCATION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	12+98	LT	1	1	BRIDGE HAZARD MARKER
0010	12+99	RT	1	1	BRIDGE HAZARD MARKER
0010	13+37	LT	1	1	BRIDGE HAZARD MARKER
0010	13+40	RT	1	1	BRIDGE HAZARD MARKER
		TOTAL 0010	4	4	

3

TRAFFIC CONTROL SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	DURATION** DAYS	643.0300 TRAFFIC CONTROL DRUMS EACH**	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH**	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH**	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH**	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0900 TRAFFIC CONTROL SIGNS EACH**	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS EACH**	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.5000 TRAFFIC CONTROL EACH	661.0101.01 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) (01. V-20-0189) EACH	REMARKS
0010	12+35	-	13+90	CTH W - STAGE 1	10	32	320	-	-	-	-	-	-	12	120	2	14	-	-	SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"
0010	12+35	-	13+90	CTH W - STAGE 2	35	26	260	3	30	6	60	10	100	28	280	1	7	-	-	SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS"
0010	12+35	-	13+90	CTH W - STAGE 3	40	26	260	4	40	8	80	10	100	29	290	1	7	-	-	SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS"
0010	12+35	-	13+90	CTH W - STAGE 4	32	32	320	-	-	-	-	-	-	12	120	-	-	-	-	SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"
0010	12+35	-	13+90	PROJECT		-	-	-	-	-	-	-	-	-	-	-	-	1	1	
				TOTAL 0010			1,160		70		140		200		810		28	1	1	

PAVEMENT MARKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH LF	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH LF	643.3850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF	646.2020 MARKING LINE EPOXY 6-INCH LF	646.6466 COLD WEATHER MARKING EPOXY 6-INCH LF	646.9000 MARKING REMOVAL LINE 4-INCH LF	REMARKS
0010	11+45	-	15+30	CTH W	-	-	-	772	772	-	YELLOW CENTERLINE
0010	11+45	-	15+30	CTH W	-	-	-	772	772	-	WHITE EDGELINE
0010	11+45	-	15+30	TRAFFIC CONTROL STAGE 2	150	3,100	22	-	-	800	DOUBLE YELLOW CENTERLINE, STOP LINE, AND WHITE EDGELINE PER SDD
0010	11+45	-	15+30	TRAFFIC CONTROL STAGE 3	150	305	-	-	-	-	WHITE EDGELINE
				TOTAL 0010	300	3,405	22	1,544	1,544	800	

3

CONSTRUCTION STAKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.6501.01 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) (01. V-20-0189) EACH	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 4810-02-71) EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	REMARKS
0010	12+35	-	13+90		155	155	-	1	155	
				TOTAL 0010	155	155	0	1	155	
0020	12+35	-	13+90		-	-	1	-	-	
				TOTAL 0020	0	0	1	0	0	
				PROJECT TOTAL	155	155	1	1	155	

SAWING SUMMARY

CATEGORY	STATION	LOCATION	690.0150 SAWING ASPHALT LF	REMARKS
0010	12+35	CTH W	22	BEGIN PROJECT
0010	13+90	CTH W	22	END PROJECT
		TOTAL 0010	44	

CONVENTIONAL SYMBOLS

- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- NEW REFERENCE LINE
- NEW R/W LINE
- EXISTING R/W OR HE LINE
- PROPERTY LINE
- LOT, TIE & OTHER MINOR LINES
- SLOPE INTERCEPT
- CORPORATE LIMITS
- UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W (TYPE)
- NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
- TEMPORARY LIMITED EASEMENT AREA
- EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
- TRANSMISSION STRUCTURES
- BUILDING TO BE REMOVED
- BRIDGE CULVERT

- SECTION CORNER SYMBOL
- SECTION CORNER MONUMENT
- R/W MONUMENT (TO BE SET)
- NON-MONUMENTED R/W POINT
- FOUND SURVEY MONUMENT (SEE FOUND MONUMENT TABLE) IP
- GEODETIC SURVEY MONUMENT
- SIXTEENTH CORNER MONUMENT
- SIGN — SIGN
- OFF-PREMISE SIGN — #1-25 SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

- ACCESS RESTRICTED BY ACQUISITION
- NO ACCESS (BY STATUTORY AUTHORITY)
- ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
- NO ACCESS (NEW HIGHWAY)
- PARCEL NUMBER 25 UTILITY NUMBER 40
- PARALLEL OFFSETS

CONVENTIONAL UTILITY SYMBOLS

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

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA ABBREVIATIONS

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

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), FOND DU LAC COUNTY, NAD83(YEAR), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, CENTERLINE OF EXISTING PAVEMENTS AND/OR EXISTING OCCUPATIONAL LINES.

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

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

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

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

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT COUNTY HIGHWAY DEPARTMENT.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE DETAIL PAGES.

R/W PROJECT NUMBER 4810-02-00	SHEET NUMBER	TOTAL SHEETS
FEDERAL PROJECT NUMBER	4.00	2

PLAT OF RIGHT OF WAY REQUIRED FOR

T CALUMET, CTH W
TRIBUTE - PIPE CREEK BRIDGE P-20-0925

CTH W	FOND DU LAC COUNTY

CONSTRUCTION PROJECT NUMBER 4810-02-71

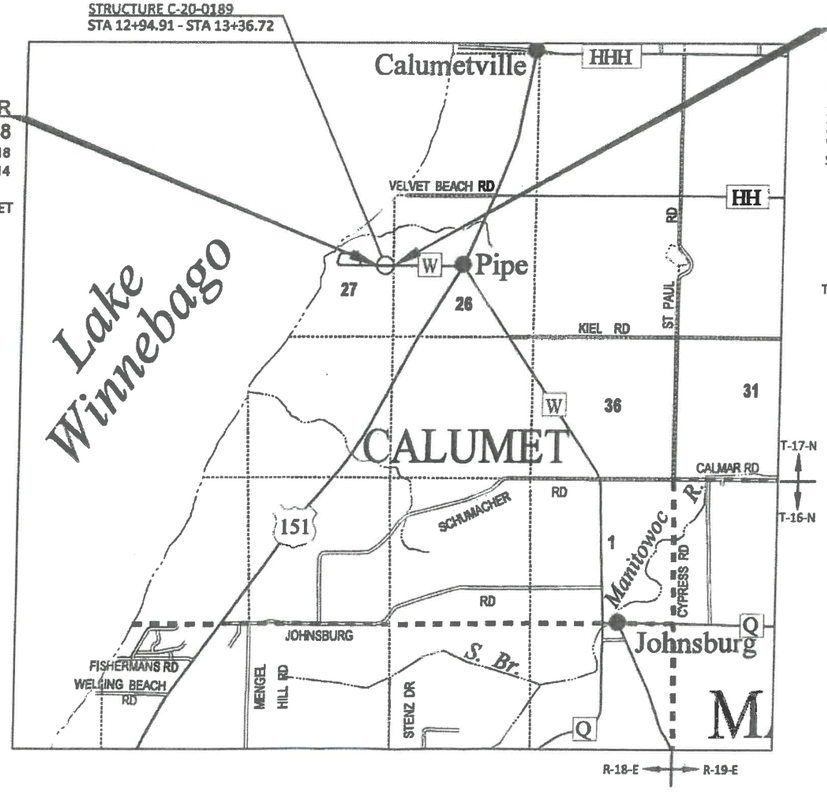
STRUCTURE C-20-0189
STA 12+94.91 - STA 13+36.72

BEGIN RELOCATION ORDER
STA 12+34.88
Y = 435,550.518
X = 849,202.714

12.49 FEET NORTH AND 841.14 FEET EAST OF MEANDER CORNER OF SECTION 27, T17N, R18 E

END RELOCATION ORDER
STA 14+00.08
Y = 435,549.684
X = 849,367.913

17.46 FEET NORTH AND 285.34 FEET WEST OF WEST QUARTER CORNER OF SECTION 27, T17N, R18 E



LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.031 MILES

RECEIVED
APR 2 1 2025
FOND DU LAC COUNTY CLERK

REVISION DATE

APPROVED
FOR
FOND DU LAC COUNTY
4-17-2025 [SIGNATURE]
DATE

ENGINEERING
REAL.TRUSTED.PROVEN.

THE SURVEY IS PREPARED AT THE REQUEST OF THE COUNTY. THE TOPOGRAPHY AND UTILITY SURVEY WAS PERFORMED IN 2024. THIS THIS SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

WISCONSIN
James R. Cappeart
S-3044
Green Bay
Wis.
LAND SURVEYOR

[SIGNATURE] 4/9/2025
JAMES CAPPEART DATE
REGISTRATION NUMBER S-3044

FILE NAME : X:\PROJECTS\FOND DU LAC\230053 4810-02-00 CTH W\DESIGN\C3D\RW\DWG\040101-TI.DWG
PLOT DATE : 4/9/2025 2:09 PM
PLOT BY : RYAN MALUEG
PLOT NAME :

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), FOND DU LAC COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT OF WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOUND MONUMENT INFORMATION SHOWN REPRESENTS TYPE AND LOCATION OF EXISTING MONUMENTS WITHOUT OPINION AS TO THEIR VALIDITY AND USE AS A PROPERTY CORNER.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT COUNTY HIGHWAY DEPARTMENT.

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

EXISTING HIGHWAY RIGHT OF WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE.

EXISTING RIGHT OF WAY FOR CTH W ESTABLISHED FROM CSM 4434, CSM 1000, CSM 18, AND CSM 7370.

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

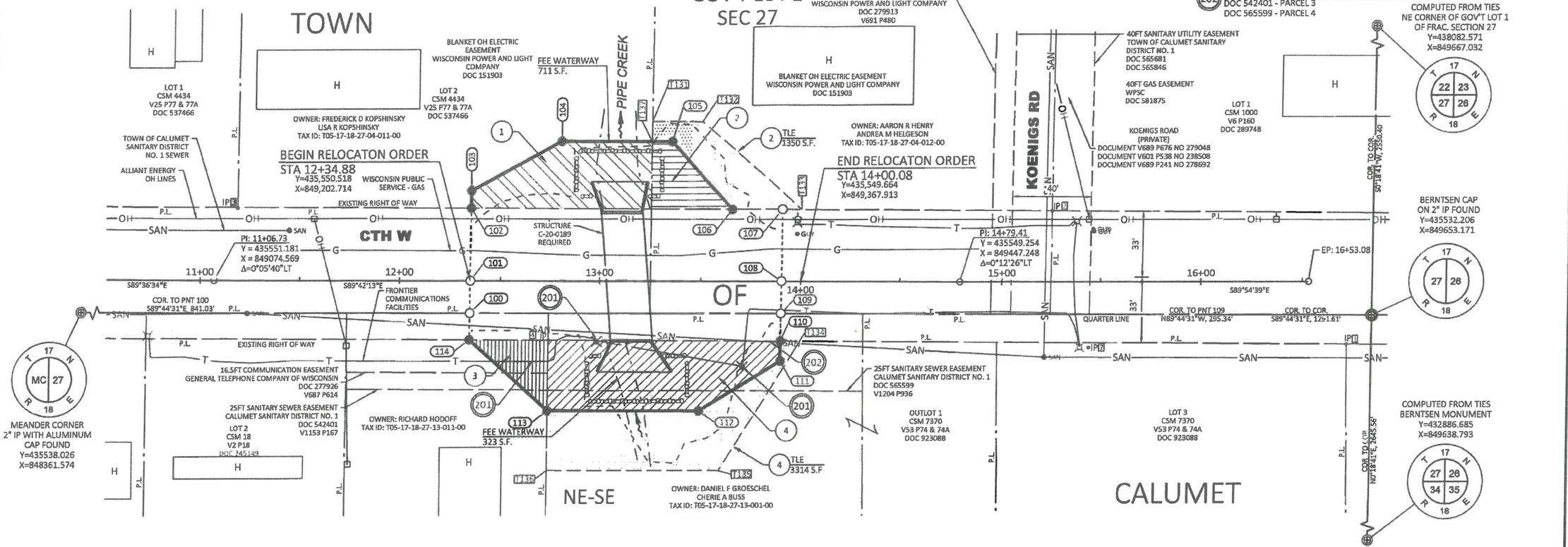
PARCEL NUMBER	OWNER (S)	INTEREST(S) REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
1	FREDERICK D KOPSHINSKY LISA R KOPSHINSKY	FEE	2474	---	2474	---
2	AARON R HENRY ANDREA M HELGESON	FEE, TLE	848	3406	4254	1350
3	RICHARD HODOFF	FEE	698	530	1228	---
4	DANIEL F GROESCHEL CHERIE A BUSS	FEE, TLE	3564	1578	5142	3314

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTERESTS REQUIRED
201	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
202	TOWN OF CALUMET-SANITARY DISTRICT NO. 1	RELEASE OF RIGHTS

201 FRONTIER COMMUNICATIONS
DOC 277926 - PARCEL 3
NO RECORDED EASEMENT - PARCEL 4

202 TOWN OF CALUMET - SANITARY DISTRICT NO. 1
DOC 542401 - PARCEL 3
DOC 565599 - PARCEL 4



R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
100	12+34.84	16.28' RT
101	12+34.88	0.00' RT
102	12+34.95	36.35' LT
103	12+34.95	45.00' LT
104	12+80.00	70.00' LT
105	13+35.00	70.00' LT
106	13+65.00	36.07' LT
107	13+90.19	36.02' LT

R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
108	13+90.12	0.00' RT
109	13+90.08	16.18' RT
110	13+90.05	29.98' RT
111	13+90.05	40.00' RT
112	13+50.00	65.00' RT
113	12+74.40	65.00' RT
114	12+34.81	29.65' RT

TLE STATION & OFFSET TABLE

POINT	STATION	OFFSET
T131	13+24.94	80.00' LT
T132	13+50.00	80.00' LT
T133	14+00.08	36.00' LT
T134	13+99.94	30.00' RT
T135	13+60.00	95.00' RT
T136	12+74.42	95.00' RT
T137	13+24.95	70.00' LT

FOUND MONUMENT TABLE

IP POINT	Y COORDS	X COORDS	IP TYPE
1	435517.689	849640.482	IP/1" IRON PIPE
2	435584.663	849492.719	IP/IRON ROD 0.5"
3	435587.198	849086.075	IP/IRON ROD 0.5"
4	435520.460	849242.222	IP/IRON ROD 0.5"
7	435516.039	849511.993	IP/1" IRON PIPE

COURSE TABLE

COURSE	BEARING	DISTANCE
100-101	N00° 25' 11"E	16.28'
101-102	N00° 25' 11"E	36.35'
102-103	N00° 17' 47"E	8.65'
103-104	N61° 15' 58"E	51.52'
104-105	S89° 42' 13"E	55.00'
105-106	S41° 11' 21"E	45.29'
106-107	S89° 34' 50"E	25.20'
107-108	S00° 25' 11"W	36.02'

COURSE TABLE

COURSE	BEARING	DISTANCE
108-109	S00° 25' 11"W	16.18'
109-110	S00° 25' 11"W	13.80'
110-111	S00° 17' 47"W	10.02'
111-112	S58° 19' 29"W	47.21'
112-113	N89° 42' 13"W	75.60'
113-114	N47° 56' 24"W	53.08'
114-100	N00° 25' 11"E	13.36'

RECEIVED
APR 21 2025

REVISION DATE	DATE 4/9/2025	SCALE, FEET 0 25 50	HWY: CTH W	R/W PROJECT NUMBER 4810-02-00	PLAT SHEET 4.01	
	GRID FACTOR N/A		COUNTY: FOND DU LAC	CONSTRUCTION PROJECT NUMBER 4810-02-71	PS&E SHEET ____	E

FILE NAME : 040101-RP.DWG
LAYOUT NAME - 4.01
PLOT DATE : 4/9/2025 2:11 PM
PLOT BY : RYAN MALUEG
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 75

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM1	11+74, 32' RT	761.96	RR SPIKE IN PPOL
BM2	15+44, 31' LT	765.61	RR SPIKE IN PPOL

CONTROL POINTS				
NO.	STATION	Y COORDS	X COORDS	DESCRIPTION
CP900	15+63.7, 15.7' RT	435,533.443	849,531.469	3/4" REBAR
CP901	11+47.7, 16.3' RT	435,534.686	849,115.419	3/4" REBAR
CP903	13+09.2, 13.9' RT	435,536.276	849,276.975	3/4" REBAR

(A) REMOVING SIGNS TYPE II & REMOVING SMALL SIGN SUPPORTS OR

HENRY A. DUQUAINE

PI: 11+06.73
Y=435551.181
X=849074.569

FREDERICK D KOPSHINSKY
USA R KOPSHINSKY

ALLIANT ENERGY

SLOPE INTERCEPT (TYP)

PIPE CREEK

TREE REMOVAL BY OTHERS (TYP)

AARON R. HENRY &
ANDREA M. HELGESON

TLE (TYP)

WISCONSIN PUBLIC SERVICE

KOENINGS RD

PI: 14+79.41
Y=435549.254
X=849447.248

JASON L. & KRISTIE L.
SCHILLING

EXISTING R/W

BM2

CHARTER

CAUTION

CTH W

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

S89°42'13"E

CP901 CP903 CP900

EXISTING R/W

BM1

MARY MEKA

BEGIN PROJECT
STA 12+35
Y=435550.518
X=849202.841
MATCH EXISTING
SAW CUT REQ'D

SEPTIC

FRONTIER

RICHARD HODOFF

PROPOSED R/W (TYP)

PIPE CREEK

STA 13+44
2 - CULVERT PIPE TEMPORARY 54-INCH REQ'D
5° SKEW RHF

DANIEL F. GROESCHEL & CHERIE A.
BUSS

TOWN OF CALUMET

GLEN GROESCHEL

END PROJECT
STA 13+90
MATCH EXISTING
SAW CUT REQ'D

N

STA 12+35.00
EL 760.64

STA 13+90.00
EL 762.03

EXISTING PROFILE

0.90%

PROPOSED PROFILE

HW_{100}
ELEV = 755.64

HW_2
ELEV = 753.92

OBSERVED
ELEV = 750.73
9/18/2023

V-20-189
INLET EL: 750.20
OUTLET EL: 748.75

PROPOSED PROFILE ELEVATIONS
EXISTING PROFILE ELEVATIONS

APPROXIMATE TOP OF EXISTING 20"
STEEL CASING AND 8" SANITARY MAIN
PIPE PER TOWN OF CALUMET ASBUILTS

770 765 760 755 750 745 741

760.57 760.53 760.55 760.74 760.77 761.24 761.22 761.72 761.67 762.18 763.21 764.67 765.97

11+00 11+50 12+00 12+50 13+00 13+50 14+00 14+50 15+00 15+50

STA 13+12.10
REMOVE STRUCTURE P-20-0925
TWIN 8'-0" DIA. METAL PIPE CULVERT
22' OVERALL LENGTH

STA 13+13.60
STRUCTURE V-20-189
TWO CELL CONCRETE BOX CULVERT 9' x 6'
65'6" OVERALL LENGTH
5° SKEW RHF

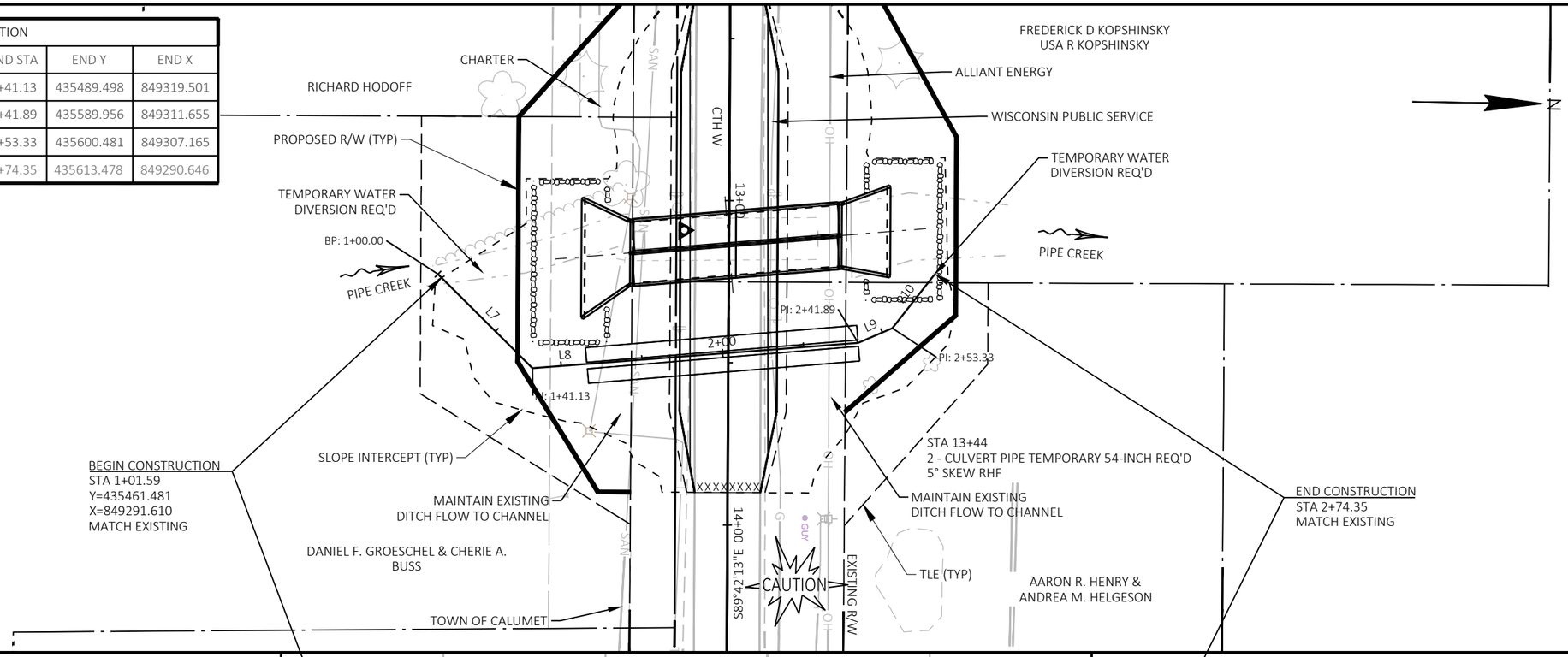
PROJECT NO: 4810-02-71	HWY: CTH W	COUNTY: FOND DU LAC	PLAN AND PROFILE: CTH W	SHEET 20	E

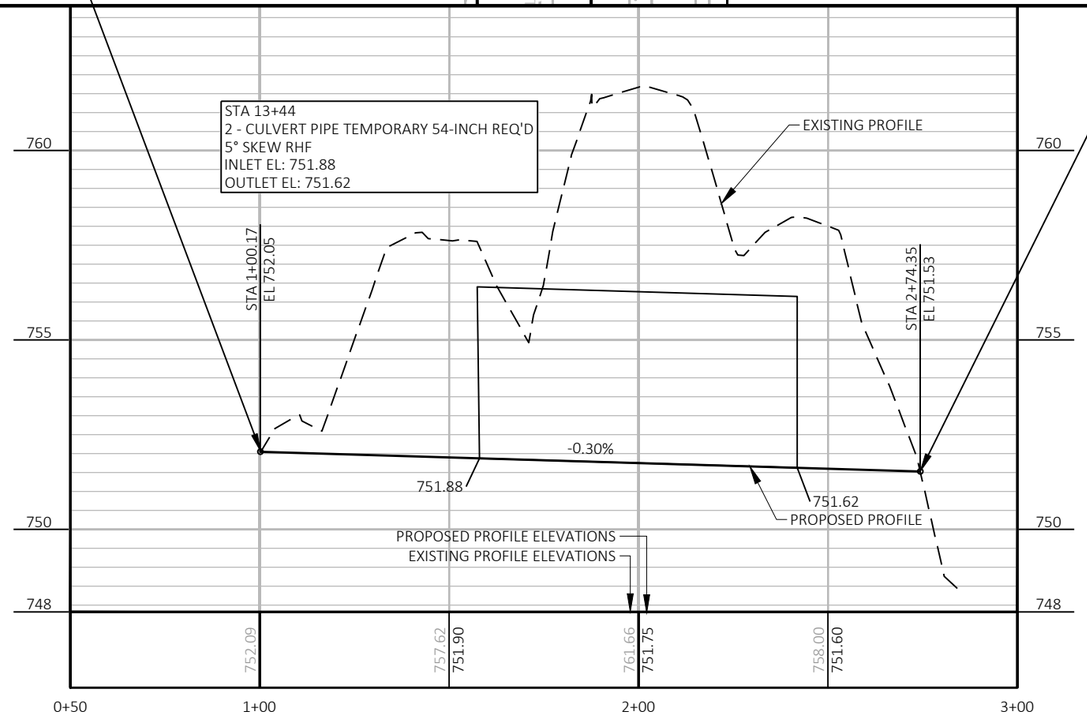
FILE NAME : X:\PROJECTS\FOND DU LAC\230053 4810-02-00 CTH W\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp

PLOT DATE : 7/27/2026 2:16 PM PLOT BY : MAX KOLB PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

ALIGNMENT DESCRIPTION						
LINE #	LENGTH	DIRECTION	START STA	END STA	END Y	END X
L7	41.13'	N44° 52' 13"E	1+00.00	1+41.13	435489.498	849319.501
L8	100.76'	N04° 27' 57"W	1+41.13	2+41.89	435589.956	849311.655
L9	11.44'	N23° 05' 58"W	2+41.89	2+53.33	435600.481	849307.165
L10	30.79'	N51° 48' 14"W	2+53.33	2+74.35	435613.478	849290.646



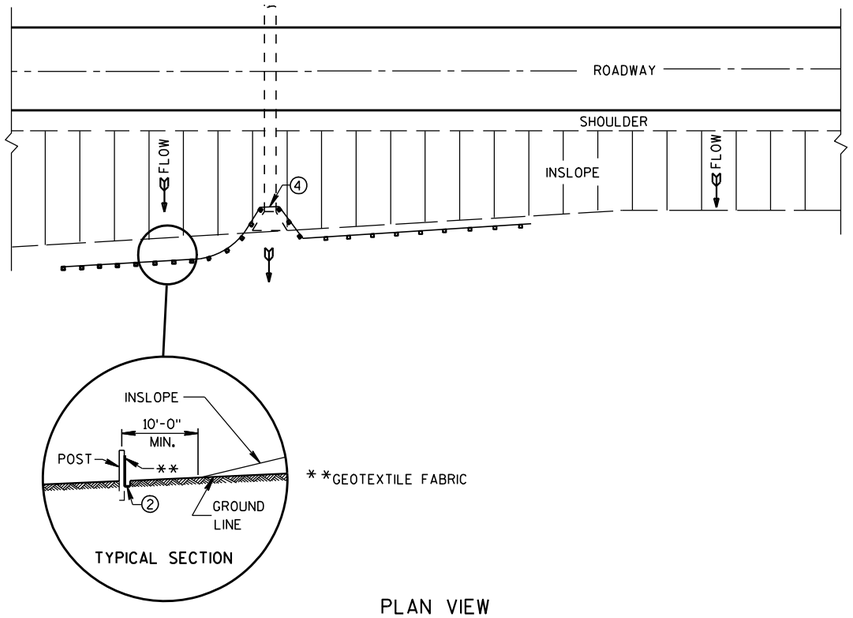


PROJECT NO: 4810-02-71	HWY: CTH W	COUNTY: FOND DU LAC	PLAN AND PROFILE: TEMPORARY CHANNEL	SHEET 21	E

FILE NAME : X:\PROJECTS\FOND DU LAC\230053 4810-02-00 CTH W\DESIGN\C3D\SHEETSPLAN\050102-PP-TEMPCHANNEL.DWG
LAYOUT NAME - 050102-pp
PLOT DATE : 7/24/2026 11:23 AM PLOT BY : MAX KOLB PLOT NAME : PLOT SCALE : 1 IN:40 FT

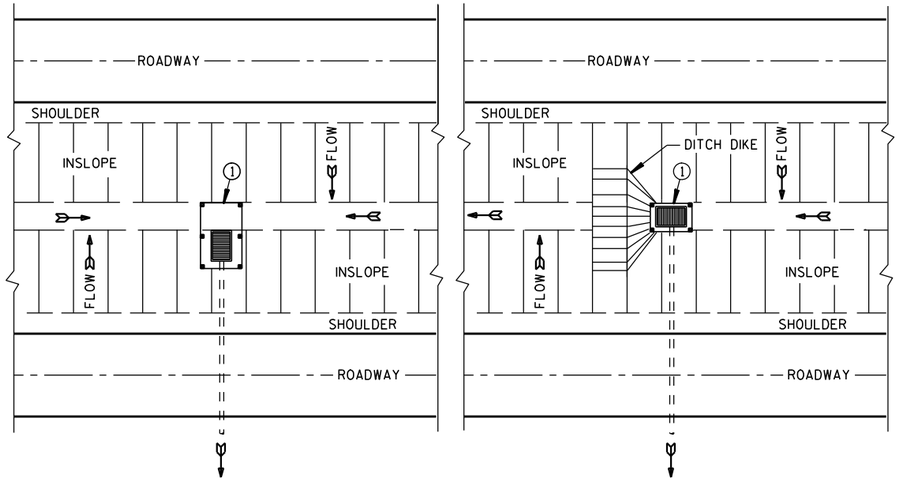
Standard Detail Drawing List

08E09-06	SILT FENCE
09G02-05A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
14B07-16A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16J	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16K	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16L	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16M	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16N	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-24B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C11-11B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C12-09B	TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE
15C19-11A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D33-10A	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS



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.

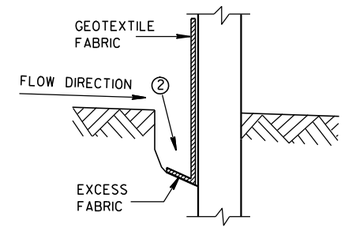
(1) HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

(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.

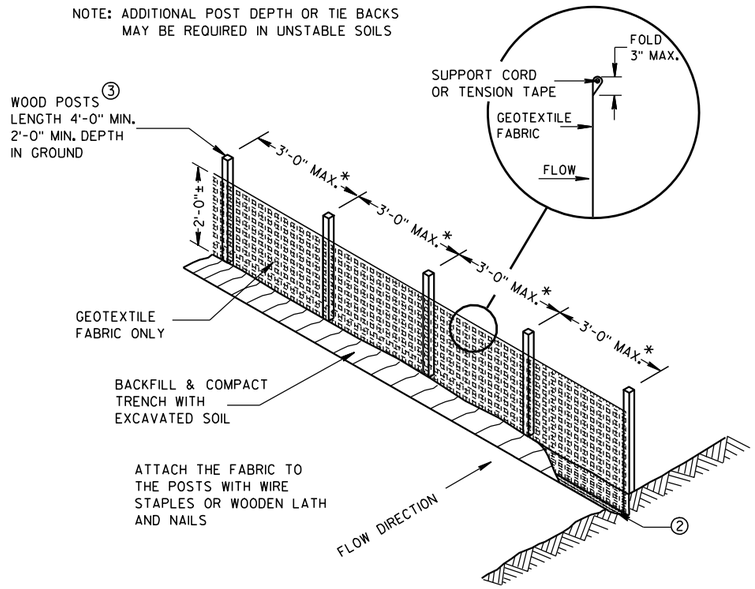
(3) WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

(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.

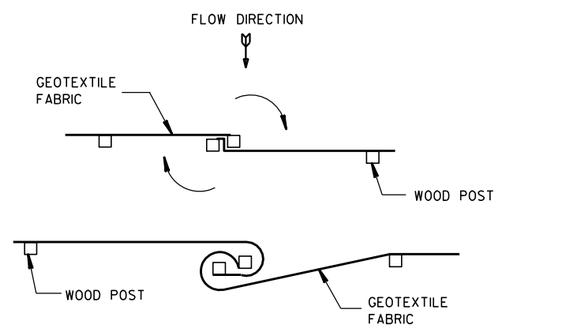


TRENCH DETAIL

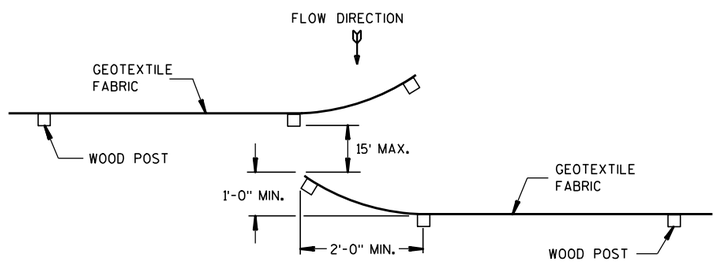


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

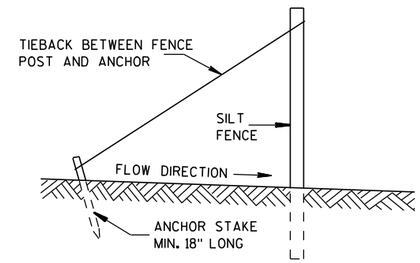


TWIST METHOD



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

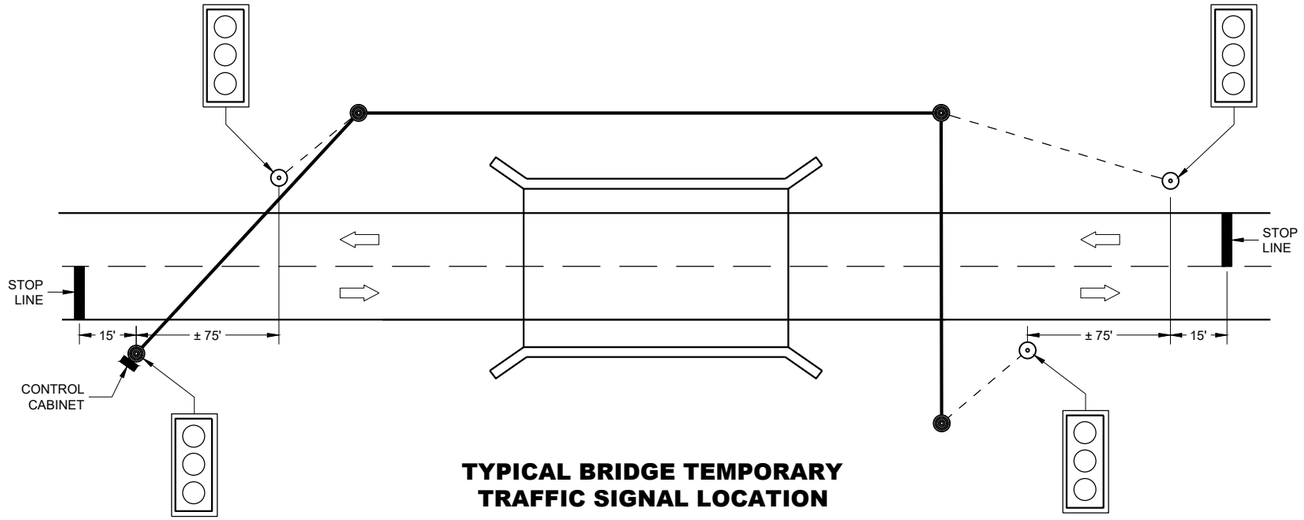
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6



TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION

LEGEND

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

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 MAY BE MOUNTED ON THE SERVICE POLE IF THE ELECTRICAL UTILITY ALLOWS THE INSTALLATION.

WHEN UTILITY POLES 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 (NON-BREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAM GUARD, ETC.).

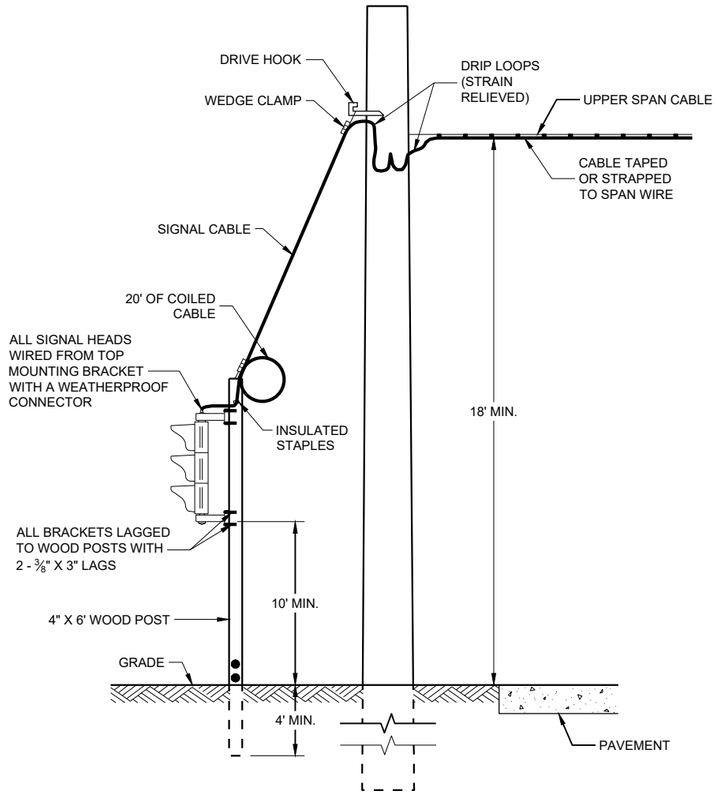
WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

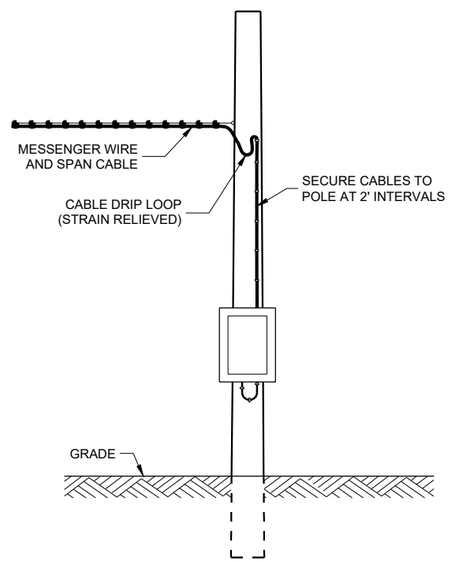
TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

EACH TRAFFIC SIGNAL SHALL HAVE A BACKPLATE.

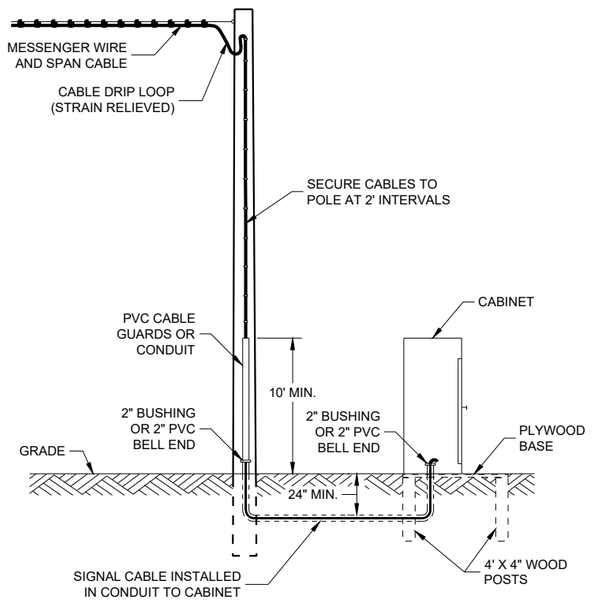
SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL DROP TO TRAFFIC SIGNAL FACE



POLE MOUNT CABINET INSTALLATION



GROUND MOUNT CABINET INSTALLATION

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

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.

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Ahmet Demirbilek — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

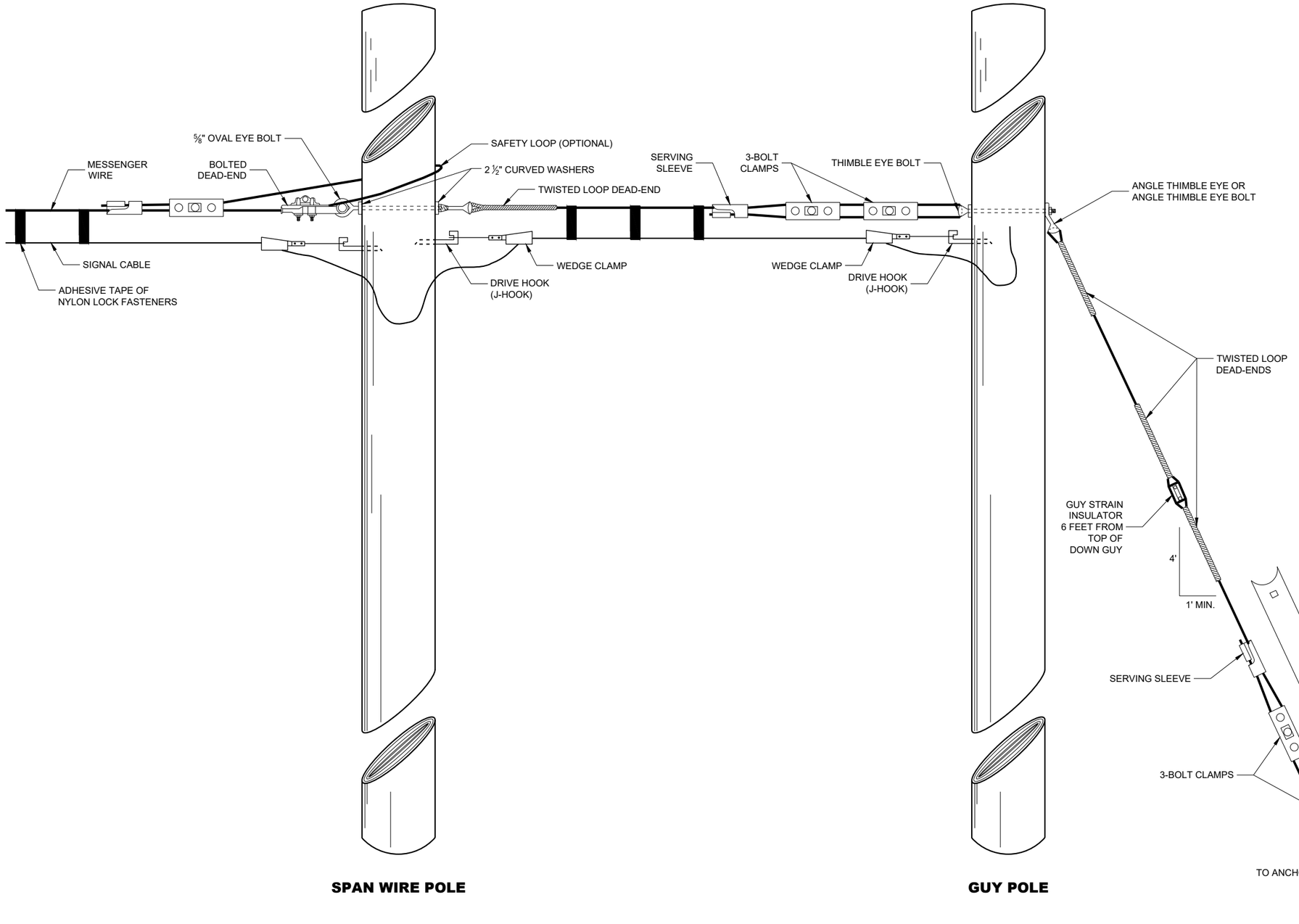
SDD09G02 - 05a

6

SDD09G02 - 05a

GENERAL NOTES

USE ¾" DRILL IN WOOD POLE TO PROVIDE FOR ⅝" BOLTS.



SPAN WIRE POLE

GUY POLE

TYPICAL DEAD-ENDINGS OR GUYING

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015 — DATE
/S/ Ahmet Demerbilek — ROADWAY STANDARDS DEVE ENGINEER

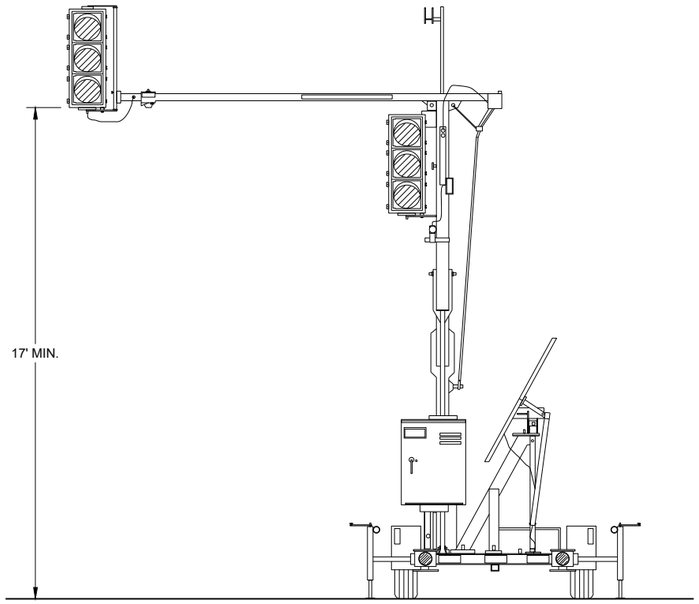
FHWA

6

SDD09G02 - 05b

6

SDD09G02 - 05b

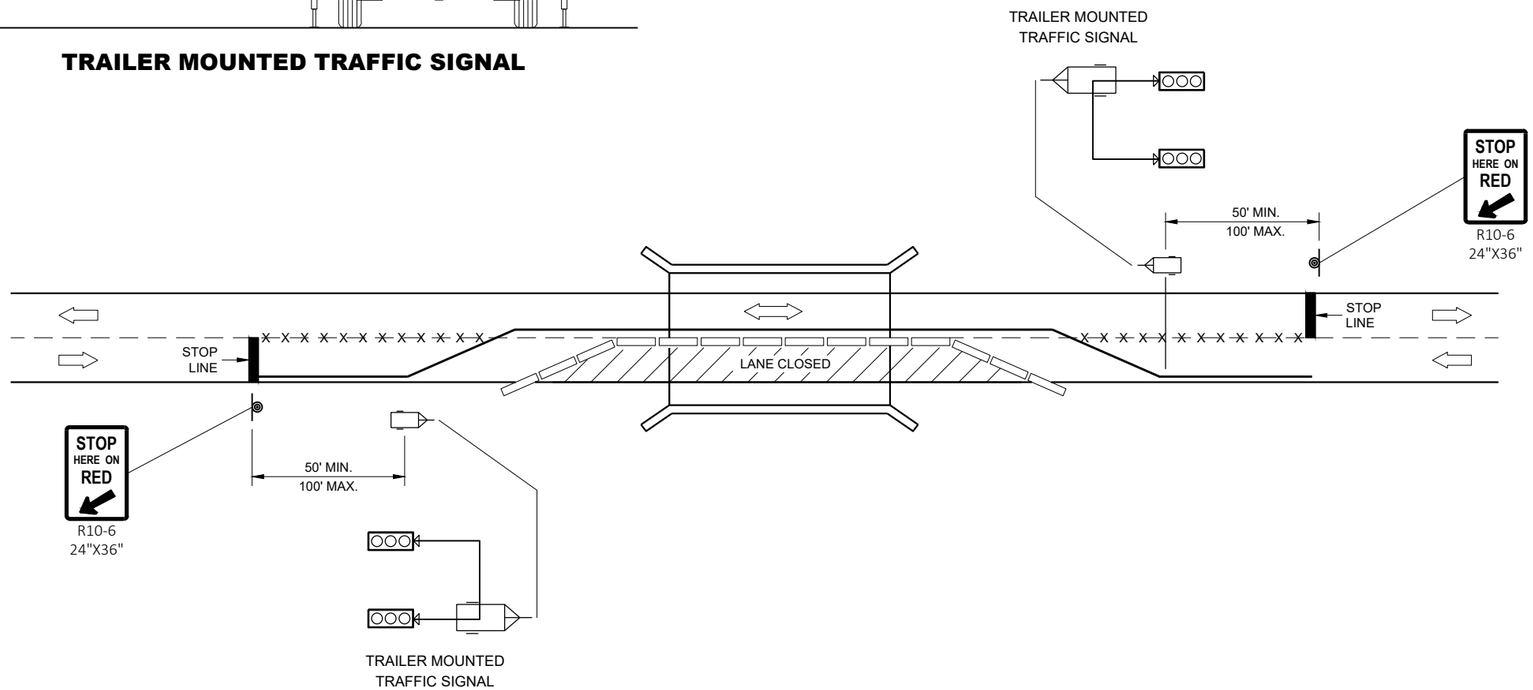


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

DETAIL 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 15D33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

LEGEND

- POST MOUNTED SIGN
- TEMPORARY PRECAST CONCRETE BARRIER
- TRAILER MOUNTED TRAFFIC SIGNAL
- REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

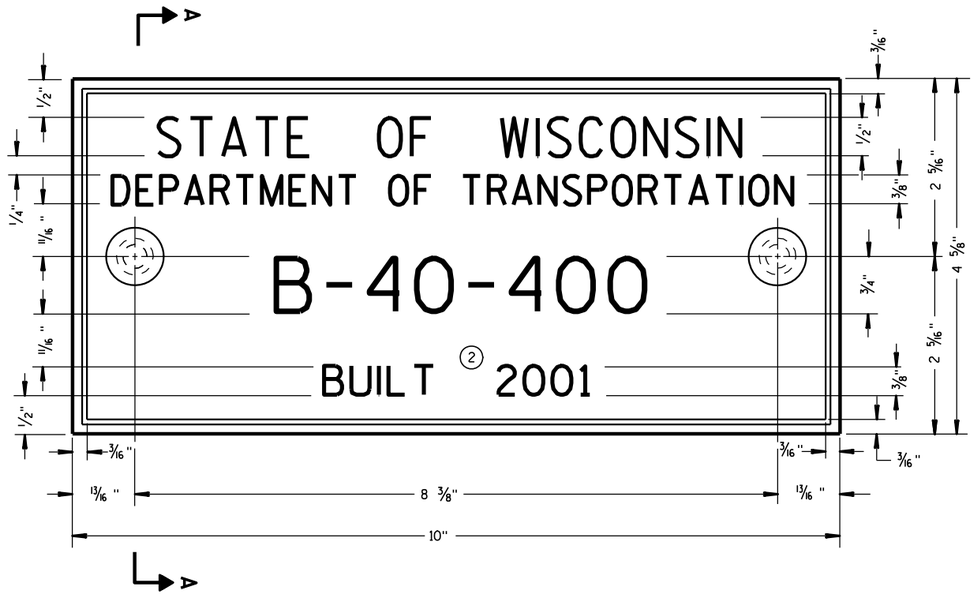
FHWA

6

SDD09G02 - 05c

6

SDD09G02 - 05c



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

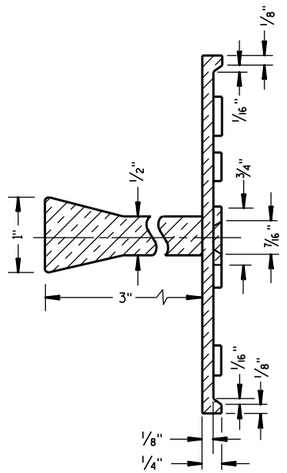
GENERAL NOTES

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

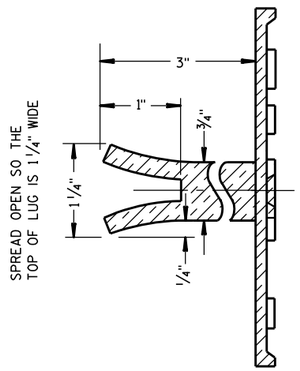
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

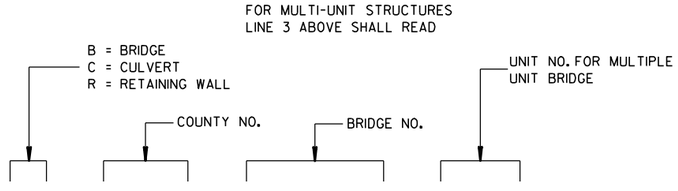
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



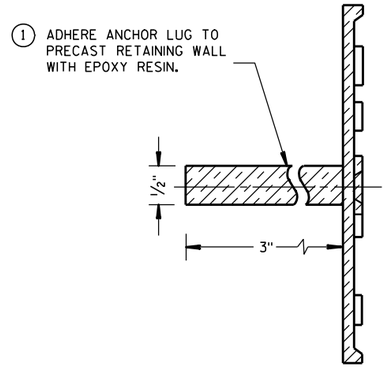
SECTION A-A



ALTERNATE LUG



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE

/S/ Scot Beck-- CHIEF STRUCTURAL DEVELOP ENGINEER

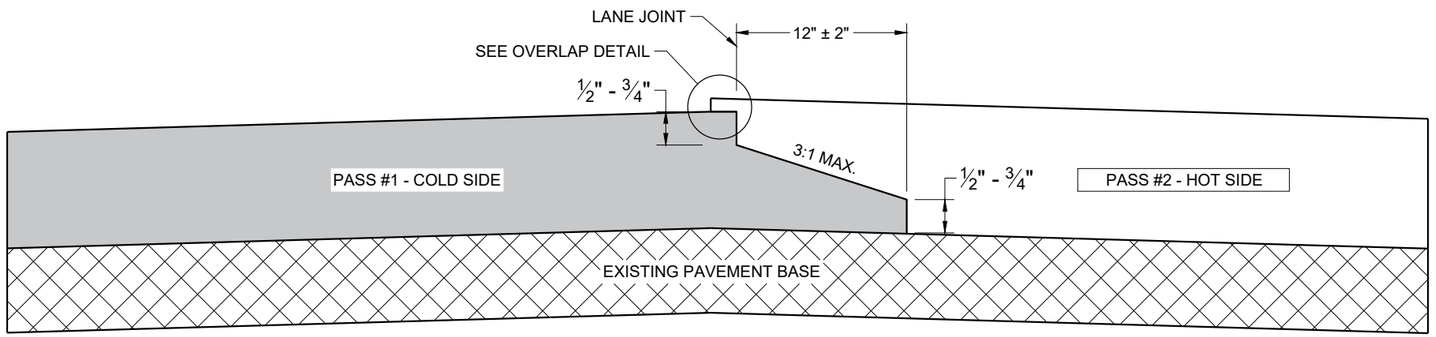
FHWA

6

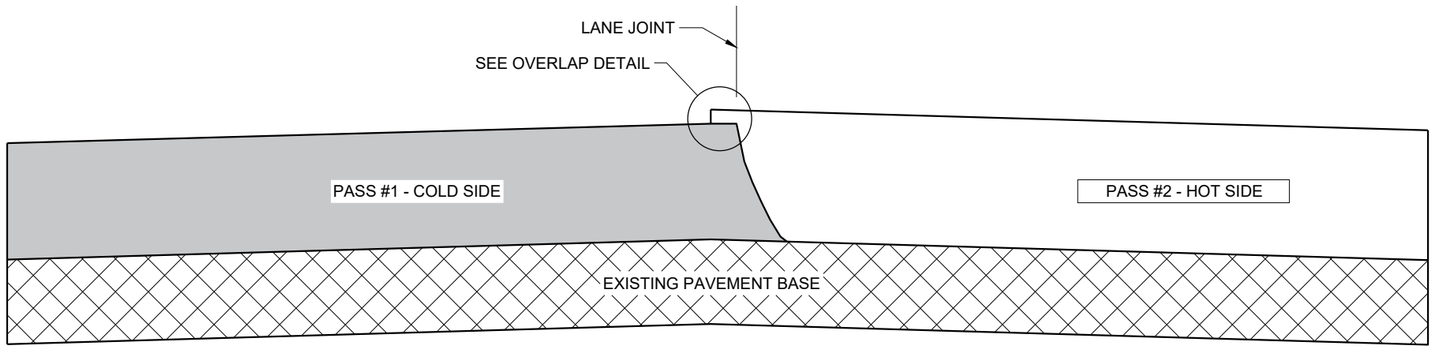
S.D.D. 12 A 3-10

6

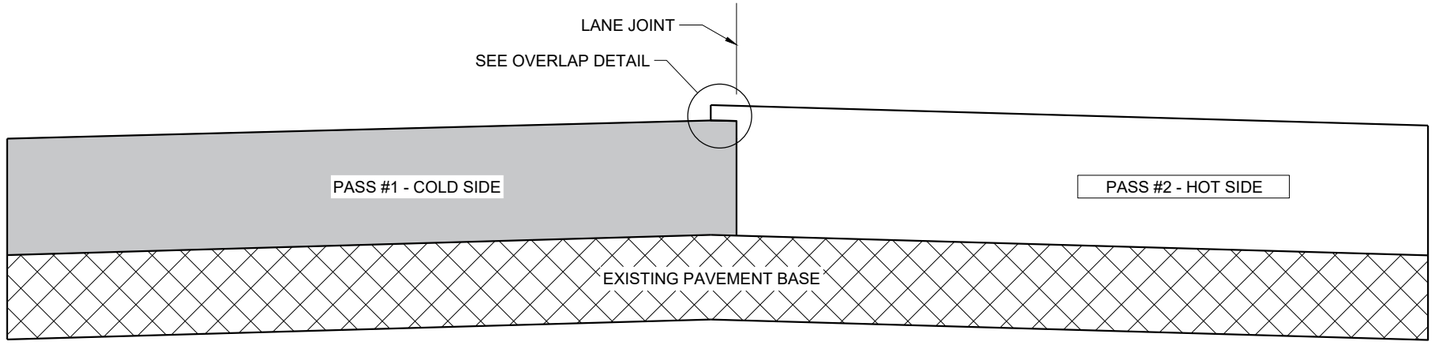
S.D.D. 12 A 3-10



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

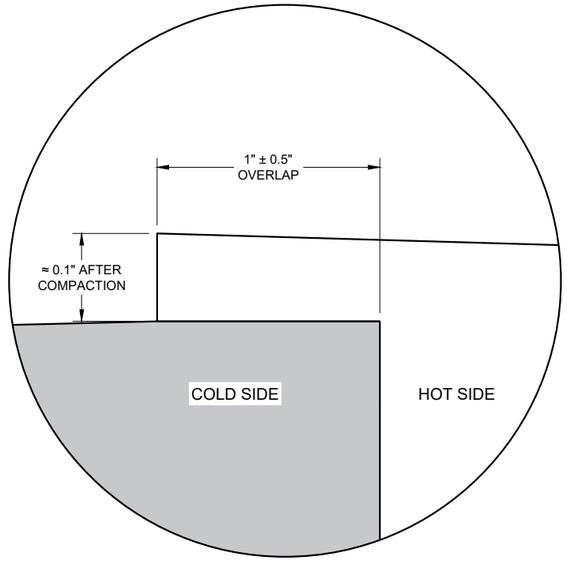
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

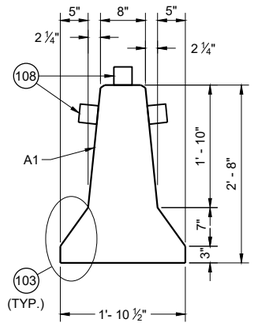
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

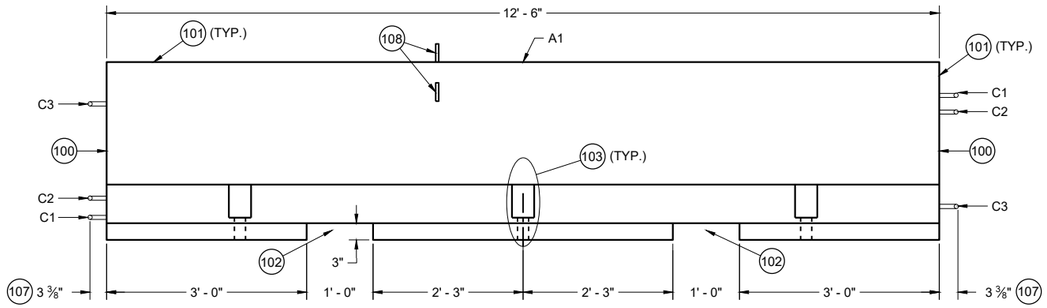
APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



CROSS SECTION



PROFILE VIEW

GENERAL NOTES

PLACE BARRIER ON PAVED SURFACE. BEFORE PLACEMENT OF TEMPORARY BARRIER, REMOVE ALL LOOSE MATERIAL FROM PAVED SURFACE.

LOOP BARS C1, C2 AND C3 ARE NOT FOR PLACEMENT OR MOVEMENT OF BARRIER.

(100) PERMANENTLY FORM INTO ONE END OF BARRIER THE FOLLOWING INFORMATION:
- A. TYPE OF BARRIER: WI-CBTP
- B. MANUFACTURER
- C. DATE OF MANUFACTURE (MONTH AND YEAR)

(101) 1" OPTIONAL CHAMFER

(102) SEE LIFTING SLOT DETAIL

(103) SEE ANCHOR BLOCK DETAIL

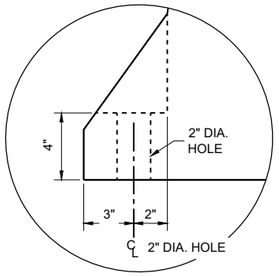
(104) 1 ¾" MIN. CLEAR COVER

(105) 2" MIN. CLEAR COVER

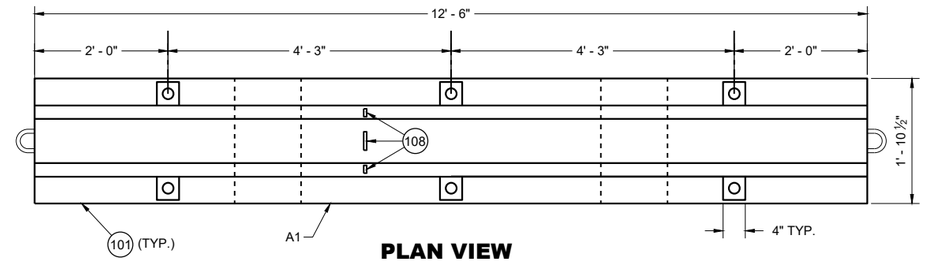
(106) 1" MIN. CLEAR COVER

(107) ± ⅛" MEASURED FROM FACE OF CONCRETE BARRIER TO OUTSIDE OF LOOP BAR (TYP.)

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

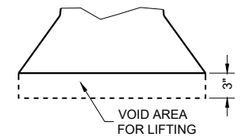


ANCHOR BLOCK DETAIL

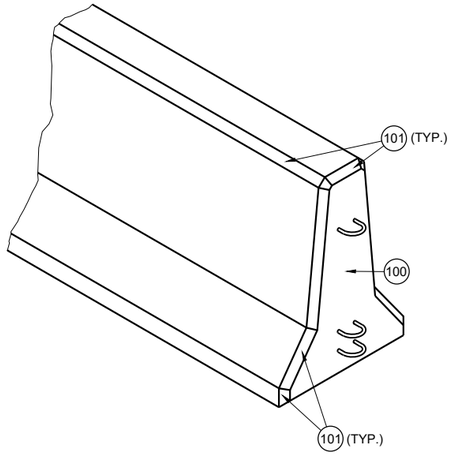


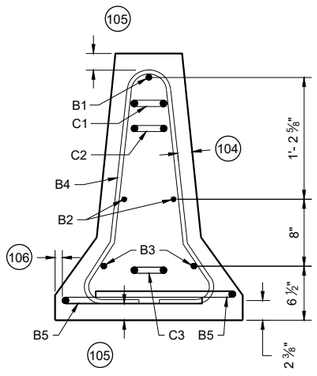
PLAN VIEW

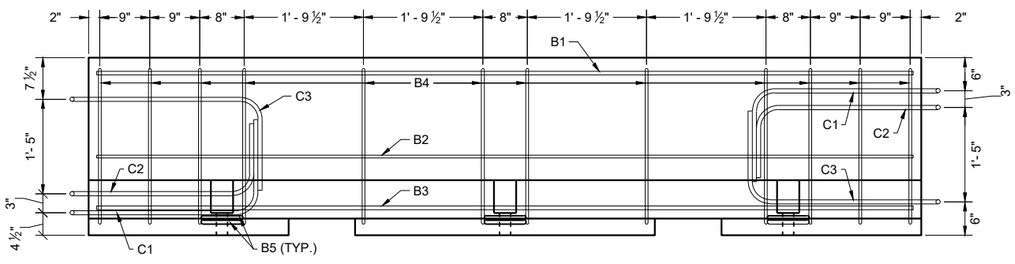
TEMPORARY BARRIER



LIFTING SLOT DETAIL (TYP.)







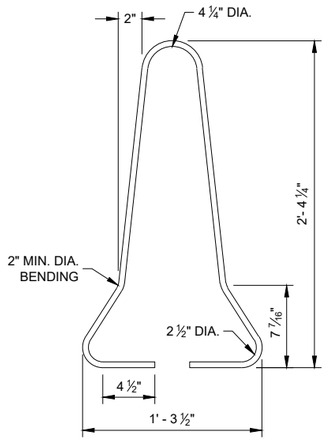
PROFILE VIEW

TEMPORARY BARRIER REINFORCEMENT

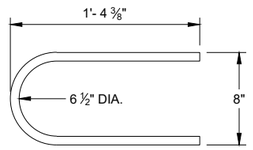
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

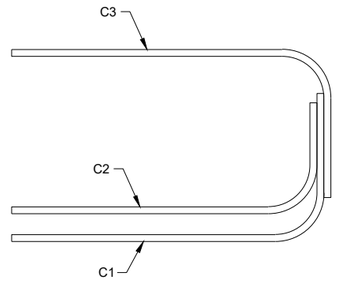
SDD 14B07-16a



B4 BAR DETAIL

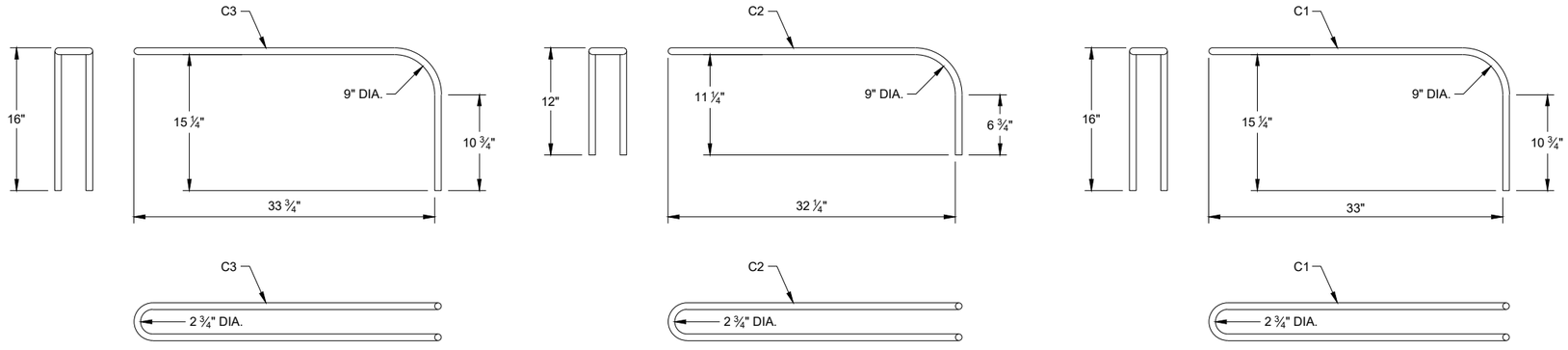


B5 BAR DETAIL



PROFILE VIEW

LOOP BAR ASSEMBLY

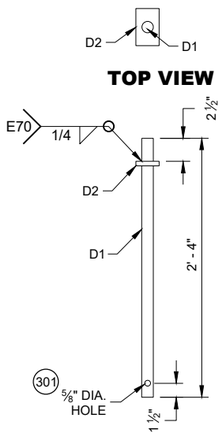


C BAR DETAILS

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

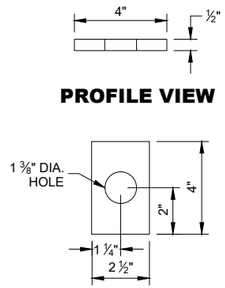
6
SDD 14B07-16b



TOP VIEW

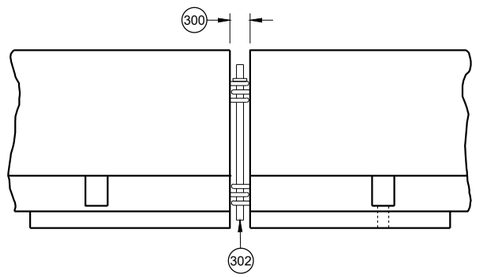
PROFILE VIEW

CONNECTOR PIN ASSEMBLY



PROFILE VIEW

TOP VIEW D2



CONNECTING TEMPORARY BARRIER SECTIONS

GENERAL NOTES

300 SET WITH 3 ⅝" WOOD BLOCK.

301 HOLE IS OPTIONAL.

302 CONNECTOR PIN ASSEMBLY.

303 CONCRETE PAVEMENT, APPROACH SLAB, OR DECK.

304 CONCRETE DECK.

305 DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY OR CONCRETE PAVEMENT WITH ASPHALT OVERLAY.

306 MINIMUM OF 2" OF ASPHALT.

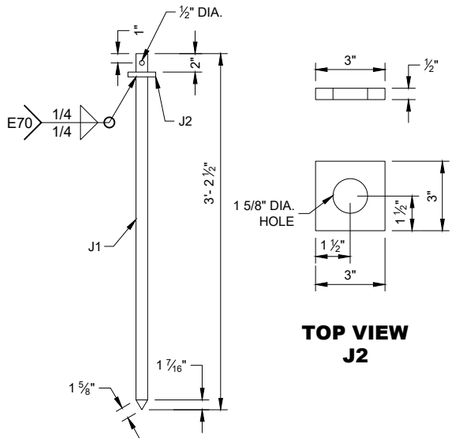
307 ASPHALT ANCHOR PIN ASSEMBLY

308 IF DRILLING A PILOT HOLE, THE MAX, DIA. OF THE HOLE IS 3/4"

309 WHEN THERE IS ASPHALT OVERLAYING CONCRETE PAVEMENT, A 1 5/8" DIA. PILOT HOLE CAN BE DRILLED INTO THE OVERLAY AND CONCRETE. IF NEEDED DRILL A 3/4" PILOT HOLE IN BASE COURSE.



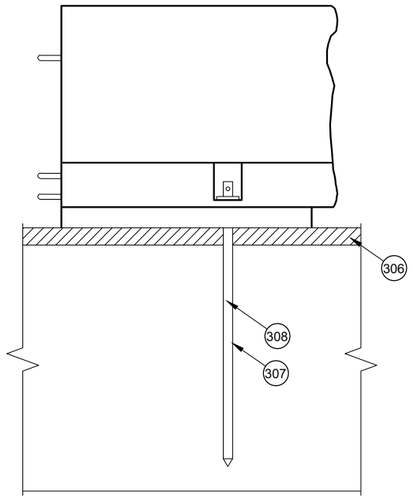
TOP VIEW



TOP VIEW J2

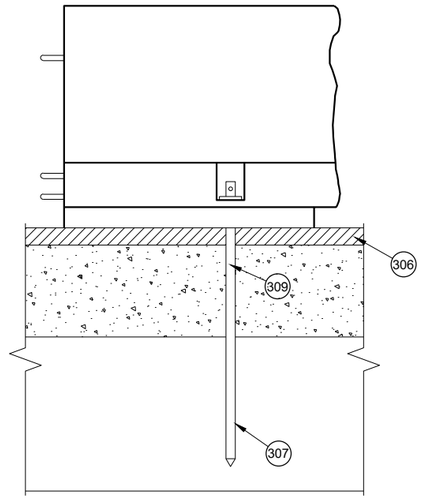
PROFILE VIEW

ASPHALT ANCHOR PIN ASSEMBLY



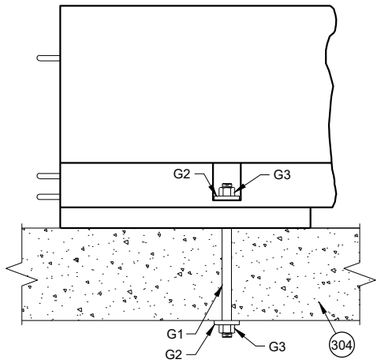
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT PAVEMENT



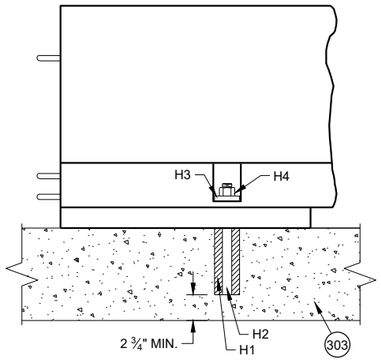
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT OVERLAY ON TOP OF CONCRETE PAVEMENT



SIDE VIEW

THROUGH BOLT ANCHOR INSTALLATION (305)



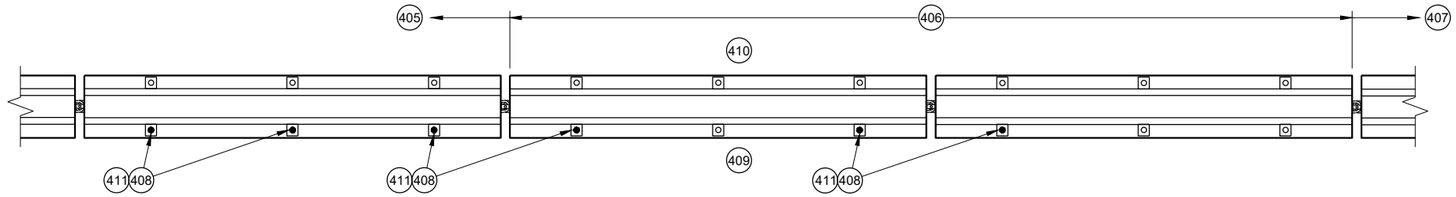
SIDE VIEW

ADHESIVE ANCHOR INSTALLATION (305)

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

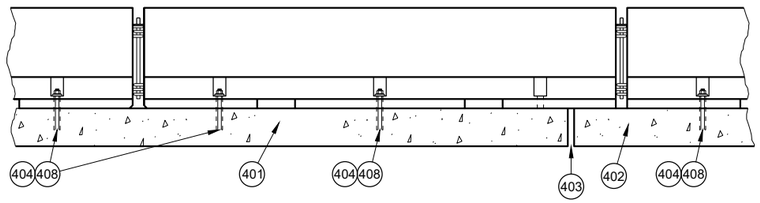
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B07-16c



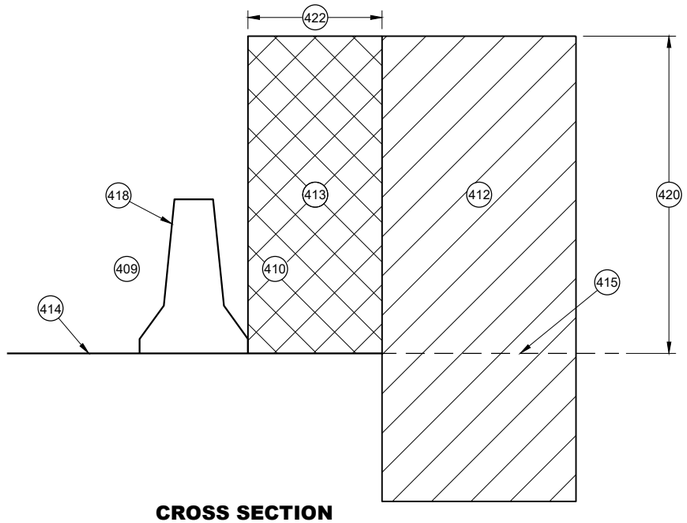
PLAN VIEW

TRANSITION FROM FREE STANDING TO ANCHORED BARRIER



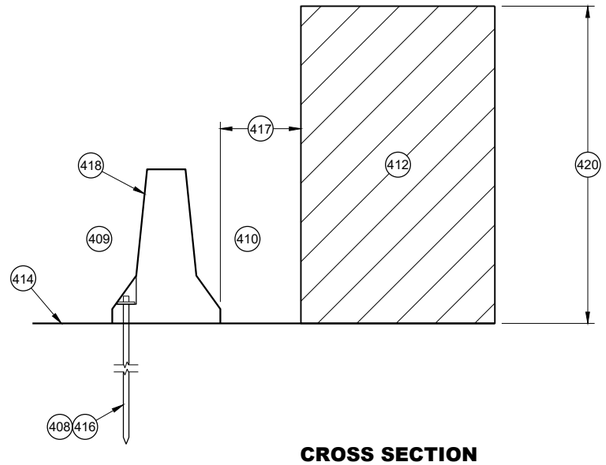
PROFILE VIEW

ANCHORED BARRIER NEAR EXPANSION JOINT (400)



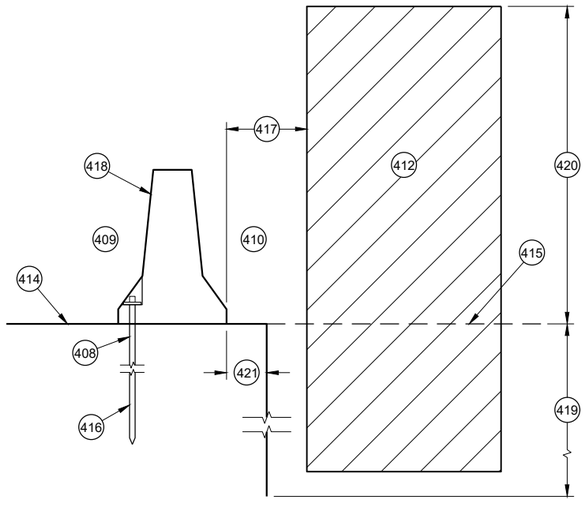
CROSS SECTION

FREE STANDING BARRIER



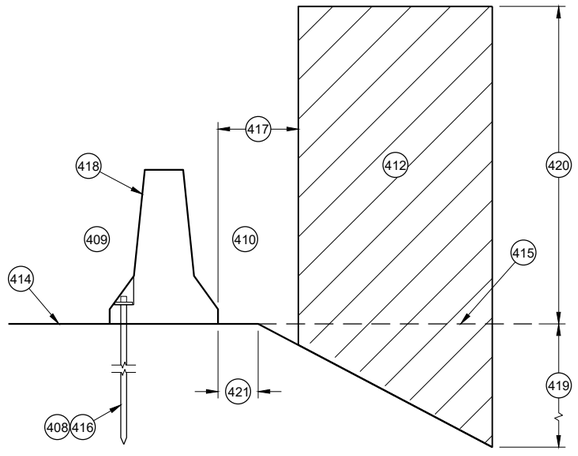
CROSS SECTION

ANCHORED BARRIER FOR OBJECTS ABOVE THE GRADE LINE AND NEAR THE BARRIER



CROSS SECTION

ANCHORED BARRIER NEAR VERTICAL DROP OFF



CROSS SECTION

ANCHORED BARRIER NEAR A SLOPE

GENERAL NOTES

(400) 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.

(401) CONCRETE DECK

(402) CONCRETE DECK OR APPROACH SLAB.

(403) EXPANSION JOINT

(404) ADHESIVE ANCHOR SHOWN. SEE ANCHOR DETAILS.

(405) ANCHORED TEMPORARY BARRIER

(406) TRANSITION FROM ANCHORED TEMPORARY BARRIER TO FREE STANDING

(407) FREE STANDING BARRIER

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

(409) TRAFFIC SIDE

(410) NON-TRAFFIC SIDE

(411) ANCHOR LOCATION. SEE ANCHORING DETAILS.

(412) WORK AREA

(413) AREA FREE OF OBJECTS AND WORKERS

(414) GRADE LINE

(415) EXTENDED GRADE LINE

(416) ANCHORED TEMPORARY BARRIER. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR AN ASPHALT ANCHOR ROD DETAILS FOR MORE INFORMATION. ASPHALT ANCHOR ROD SHOWN.

(417) WHEN OBJECTS EXTEND ABOVE THE GRADE. A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT.

(418) OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR ALLOWED TO LEAN AGAINST THE BARRIER WITHOUT WRITTEN PERMISSION OF THE PROJECT ENGINEER.

(419) DEPTHS OF 3 FEET OR MORE.

(420) Y = 6.5'

(421) OFFSET FROM BACK OF BARRIER EDGE:

CONCRETE PAVEMENT	0.5'
ASPHALT	0.5'

(422) POSTED SPEED (MPH):

45 OR GREATER	4.0'
40 OR LOWER	2.0'

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B07-16d

GENERAL NOTES

(500) EXISTING RIGID BARRIERS (VARIES)

(501) TEMPORARY BARRIER

(502) SEE OTHER DETAIL ON HOW TO ANCHOR TEMPORARY BARRIER (BARRIER ASPHALT ANCHOR SHOWN).

(503) ANCHORS ARE REQUIRED ON BOTH SIDE OF THE TEMPORARY BARRIER.

(504) NESTED RAILS ARE REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

(505) TRAFFIC TRAVELS FROM PERMANENT BARRIER TO TEMPORARY BARRIER.

(506) TRAFFIC TRAVELS FROM TEMPORARY BARRIER TO PERMANENT BARRIER.

(507) VERTICAL BARRIER

(508) SAFETY SHAPE BARRIER

(509) SINGLE SLOPE BARRIER

(510) CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF RIGID BARRIER.

(511) BENT THRIE BEAM TO FIT.

(512) THRIE BEAM PIECES ARE OFFSET 15 ¼" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.

(513) TWO (2) P1, P2 AND P3 ARE REQUIRED

(514) FIVE (5) N1, N2 AND N3 ARE REQUIRED

(515) TWO (2) R1, R2 AND R3 ARE REQUIRED

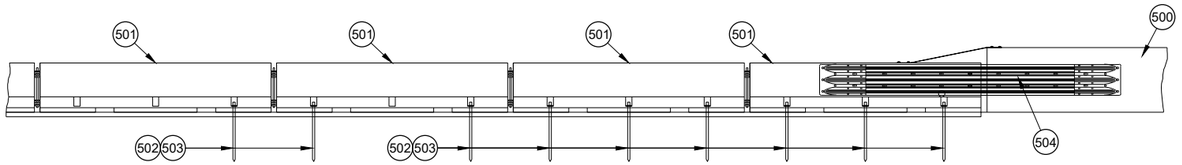
(516) CUT WOOD BLOCK TO FIT.

(517) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL ASSEMBLY.

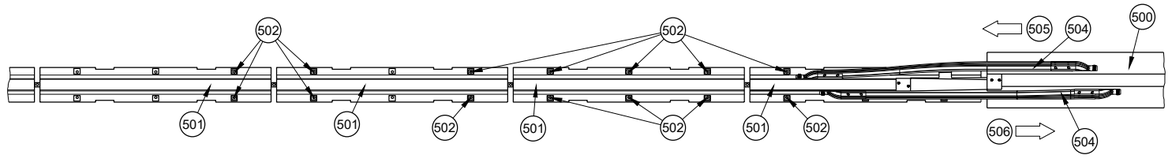
(518) CAP ASSEMBLY

(519) 4" MAX. GAP BETWEEN TEMPORARY BARRIER AND RIGID BARRIER.

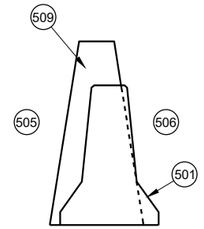
(520) ALL TWELVE SPLICE HOLES REQUIRE M1 AND M2



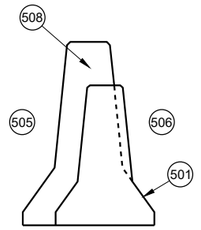
PROFILE VIEW



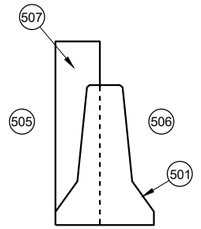
PLAN VIEW



CROSS SECTION TEMPORARY BARRIER PLACEMENT SINGLE SLOPE

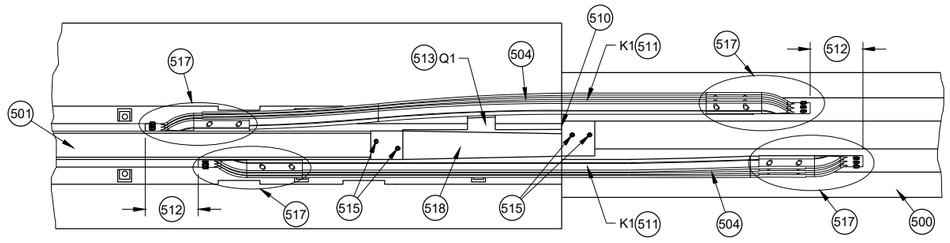


CROSS SECTION TEMPORARY BARRIER PLACEMENT SAFETY SHAPE

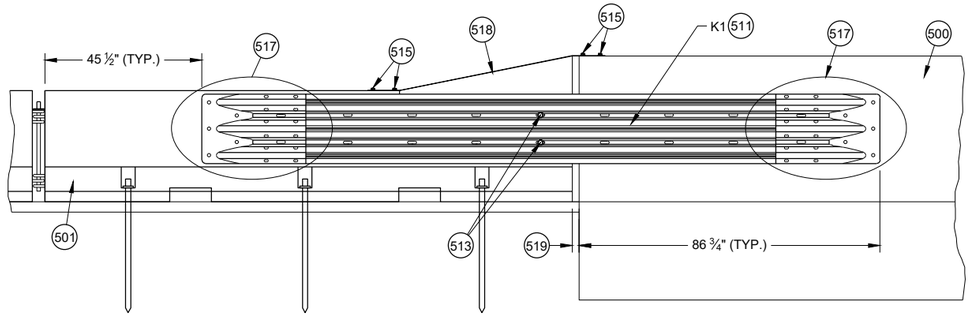


CROSS SECTION TEMPORARY BARRIER PLACEMENT VERTICAL

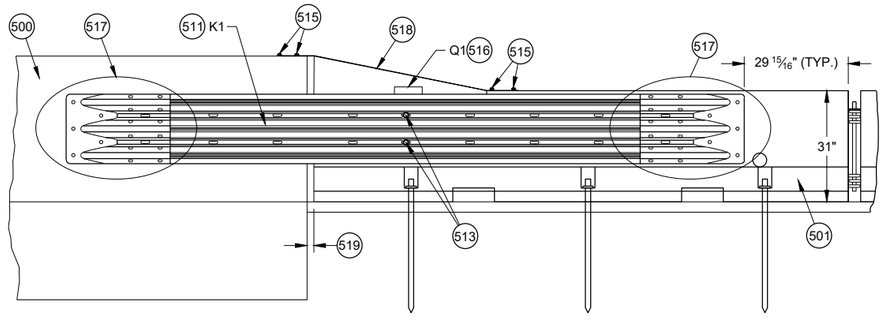
PLAN VIEW TRANSITION TO RIGID BARRIER



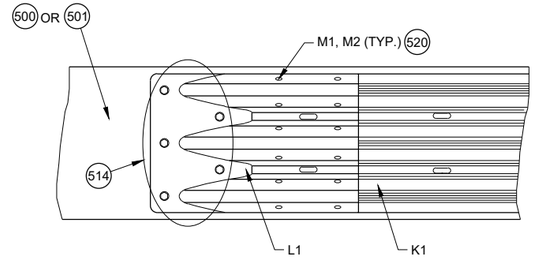
PLAN DETAIL VIEW TRANSITION TO RIGID BARRIER



FRONT DETAIL VIEW TRANSITION TO RIGID BARRIER



BACK DETAIL VIEW TRANSITION TO RIGID BARRIER

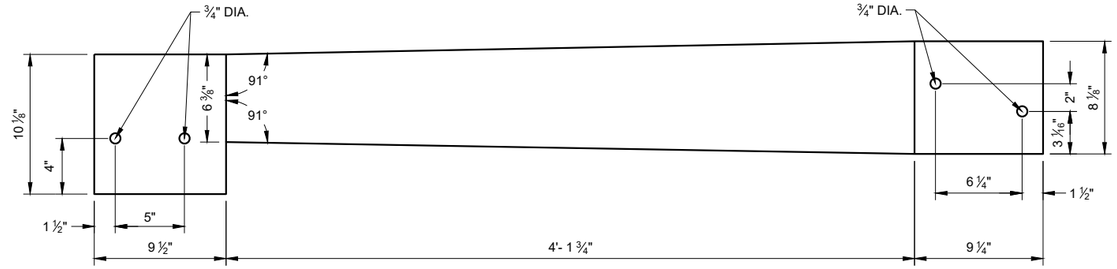


(517) **DETAIL PLAN VIEW THRIE BEAM RAIL TERMINAL CONNECTOR ASSEMBLY**

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

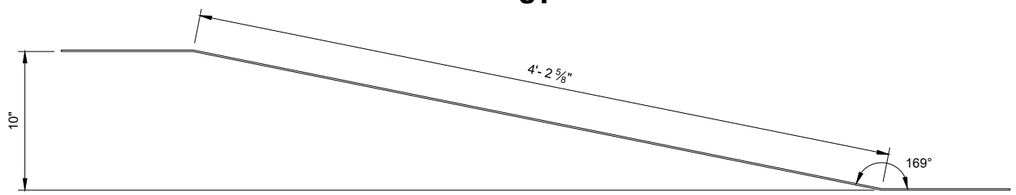
6

SDD 14B07-16e



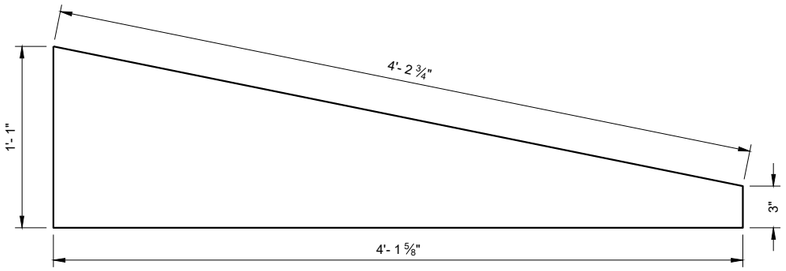
TOP VIEW

S1



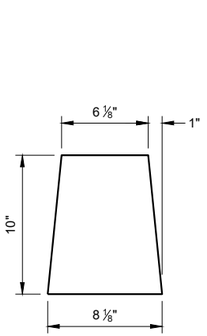
ELEVATION VIEW

S1

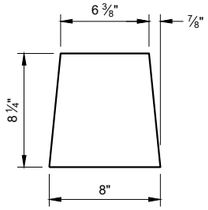


SIDE VIEW

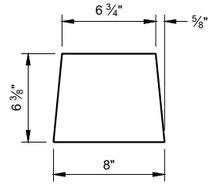
S3



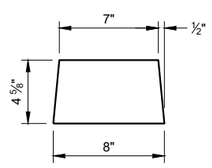
S2



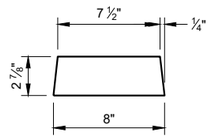
S4



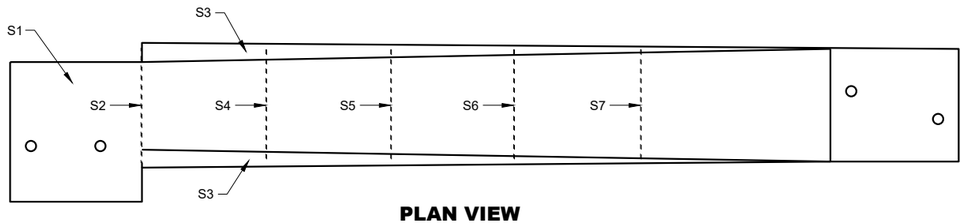
S5



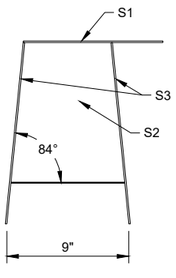
S6



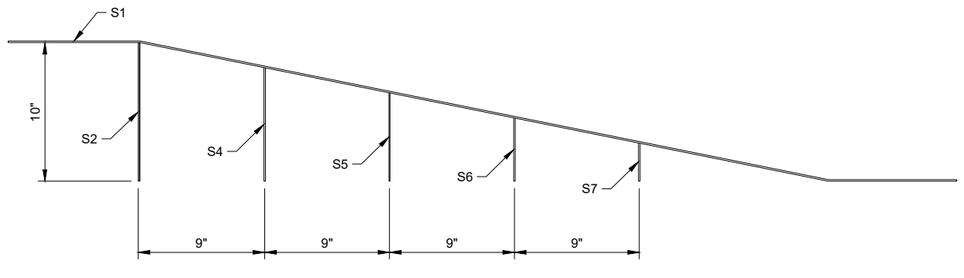
S7



PLAN VIEW



BACK VIEW



SIDE VIEW (600)

42" TOP CAP ASSEMBLY

GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THREE SIDES

STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

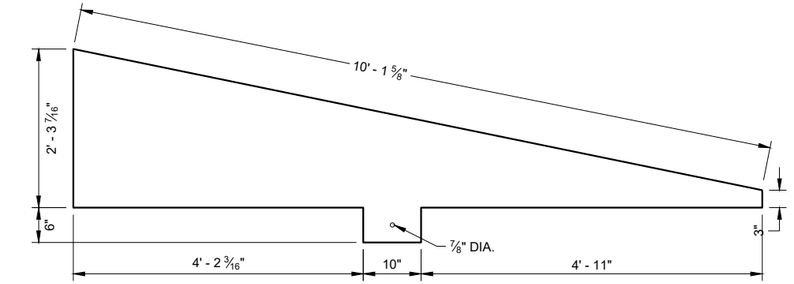
(600) SIDE PLATES (S3) NOT SHOWN FOR CLARITY.

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

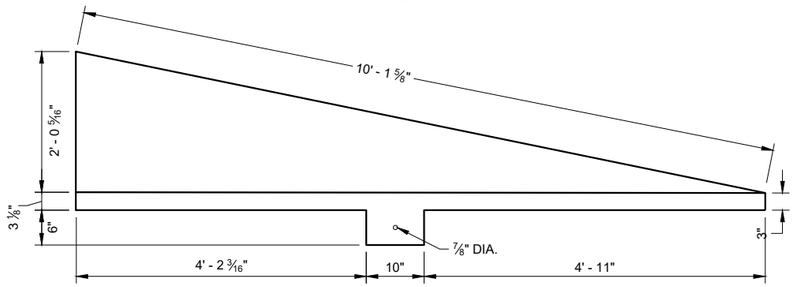
SDD 14B07-16f



SIDE VIEW
T4



END VIEW



SIDE VIEW
T3

END VIEW

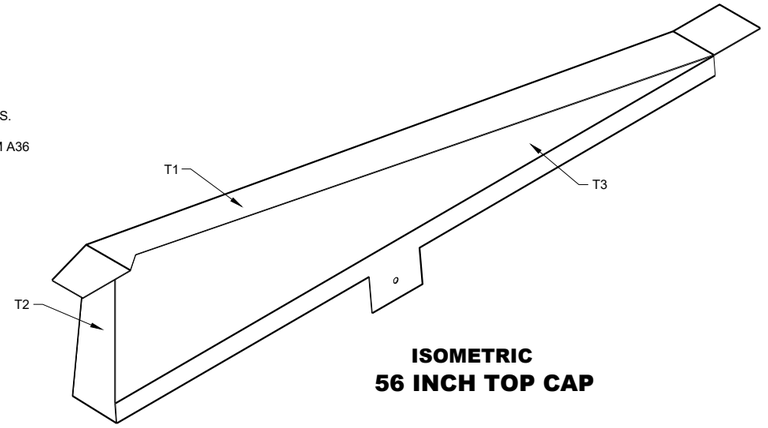
GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THRIE SIDES

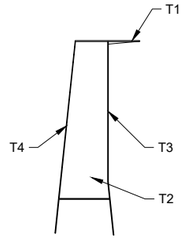
STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

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

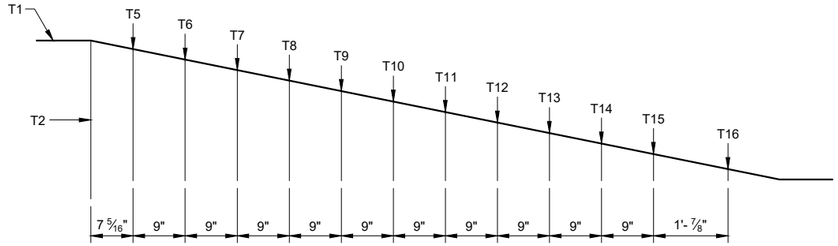
(700) SIDE PLATES (T3 AND T4) NOT SHOWN FOR CLARITY.



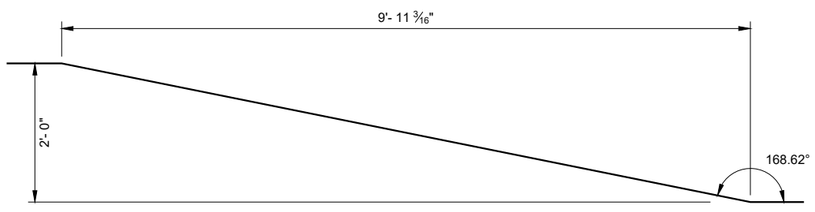
ISOMETRIC
56 INCH TOP CAP



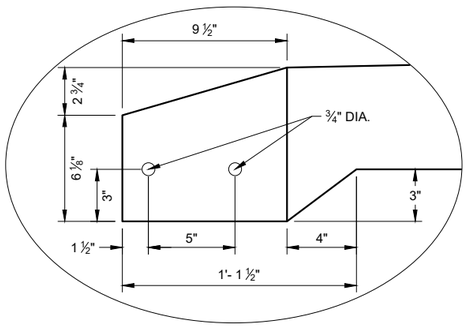
END VIEW
56 INCH TOP CAP



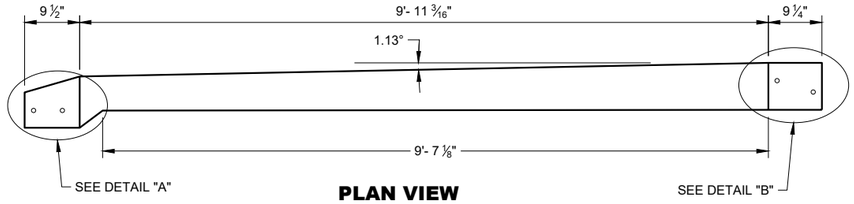
SIDE VIEW (700)
56 INCH TOP CAP



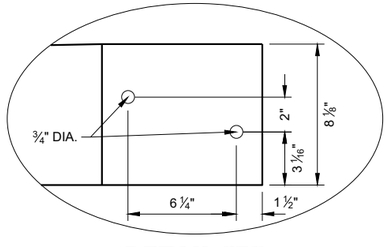
SIDE VIEW
TOP PLATE T1



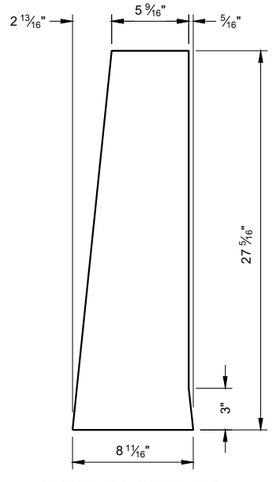
DETAIL "A"



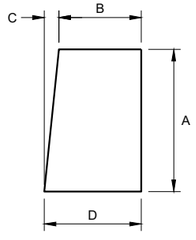
PLAN VIEW
TOP PLATE T1



DETAIL "B"



END PLATE T2



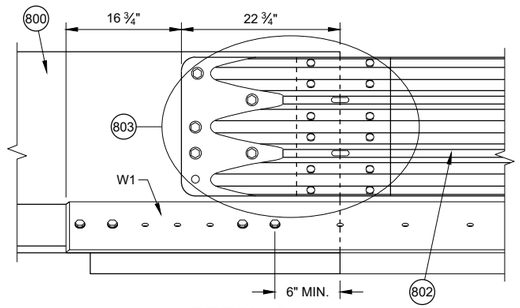
GUSSET PLATES
T5 - T16

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
T5	22 13/16"	5 1/16"	2 5/16"	8 1/16"
T6	21"	5 7/8"	2 3/16"	8 1/16"
T7	19 3/16"	6 1/16"	1 15/16"	8 1/16"
T8	17 3/8"	6 1/4"	1 13/16"	8 1/16"
T9	15 5/16"	6 7/16"	1 9/16"	8 1/16"
T10	13 3/4"	6 5/8"	1 7/16"	8 1/16"
T11	11 15/16"	6 13/16"	1 1/4"	8 1/16"
T12	10 1/8"	7"	1 1/16"	8 1/16"
T13	8 5/16"	7 3/16"	7/8"	8 1/16"
T14	6 1/2"	7 3/8"	1 1/16"	8 1/16"
T15	4 11/16"	7 9/16"	1/2"	8"
T16	2 7/8"	7 3/4"	1/4"	8"

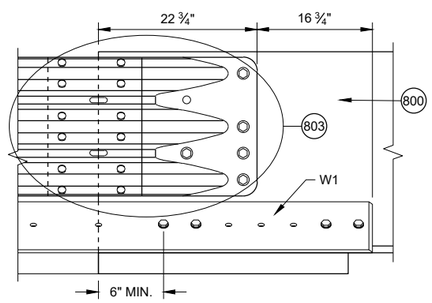
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

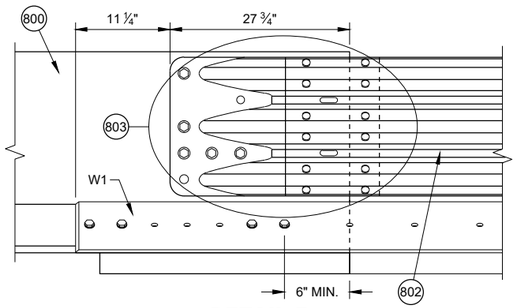
6
SDD 14B07-16g



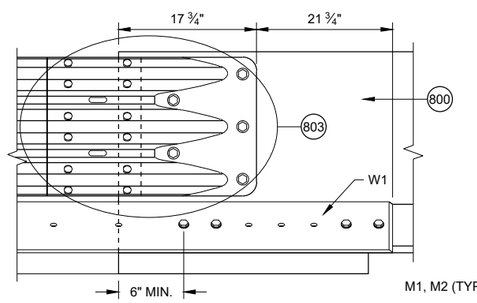
DETAIL D



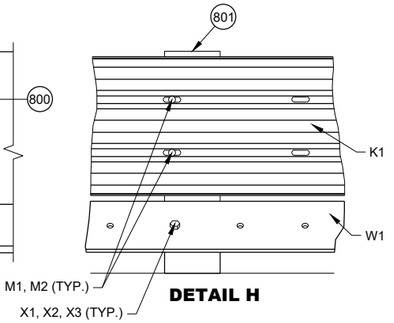
DETAIL E



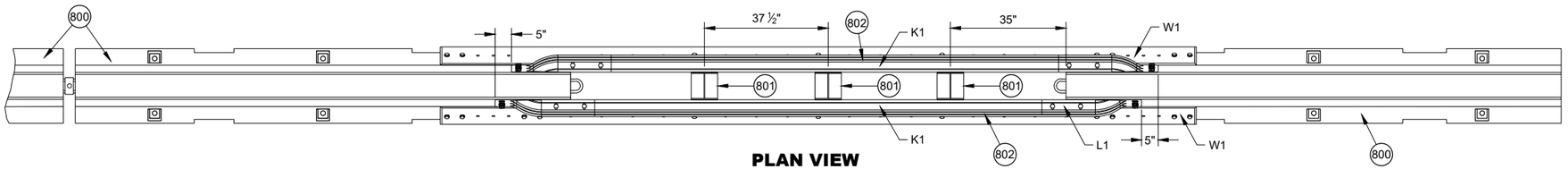
DETAIL F



DETAIL G



DETAIL H



PLAN VIEW

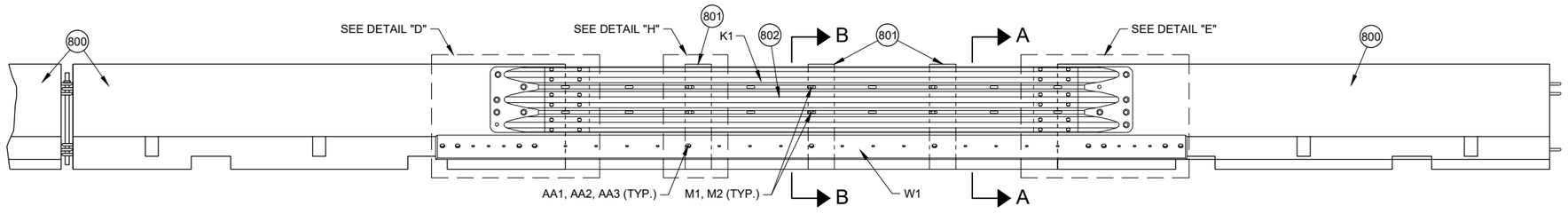
GENERAL NOTES

(800) FREE STANDING TEMPORARY BARRIER

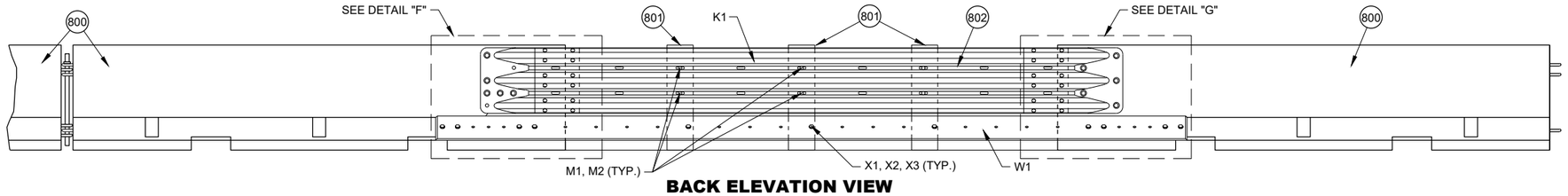
(801) GAP STIFFENER ASSEMBLY

(802) THRIE BEAMS ARE NESTED ON BOTH SIDES OF THE TEMPORARY BARRIER.

(803) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL



FRONT ELEVATION VIEW



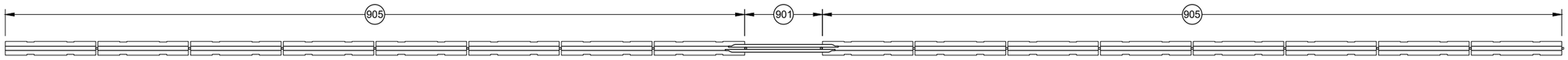
BACK ELEVATION VIEW

PORTABLE CONCRETE BARRIER GAP THRIE BEAM COVER

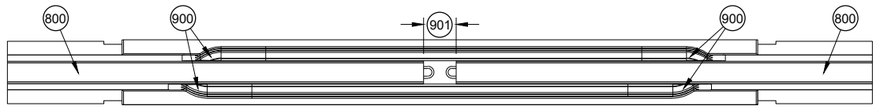
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B07-16h



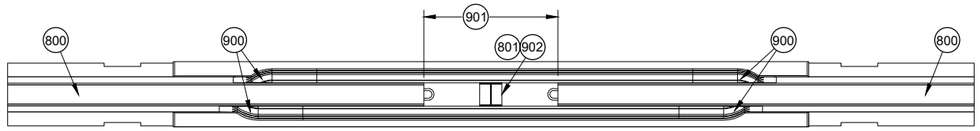
PLAN VIEW
GAP WITHIN SPACING



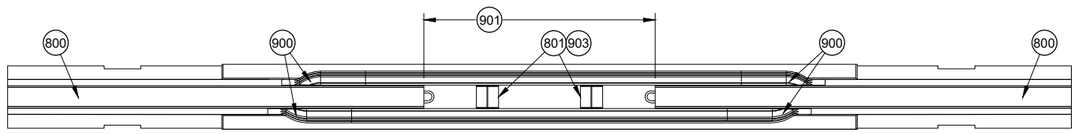
PLAN VIEW
TEMPORARY BARRIER GAP OVER 4" TO 1' MAX. (904)

GENERAL NOTES

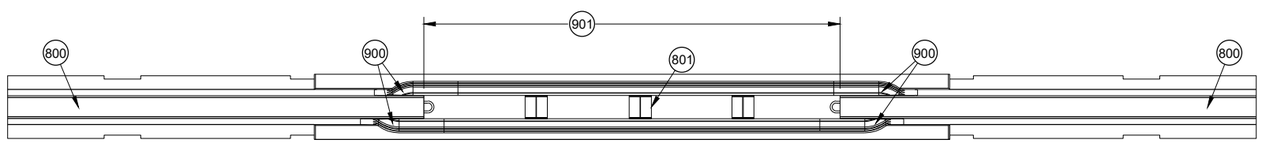
(900) SEE OTHER DETAILS FOR TEMPORARY GAP HARDWARE (TYP.)
(901) TEMPORARY BARRIER GAP
(902) GAP STIFFENER ASSEMBLY CENTERED IN THE GAP.
(903) GAP STIFFENER ASSEMBLY IS OFFSET 18 ¾" FROM CENTER
(904) MINIMUM NUMBER OF GAP STIFFENERS SHOWN FOR THE GAP RANGE SHOWN.
(905) MINIMUM OF 8 CONTINUOUS FREE STANDING TEMPORARY BARRIERS



PLAN VIEW
TEMPORARY BARRIER GAP OVER 1' TO 4' MAX. (904)



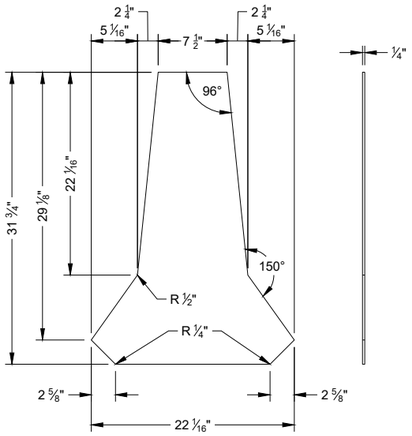
PLAN VIEW
TEMPORARY BARRIER GAP OVER 4' TO 7' MAX. (904)



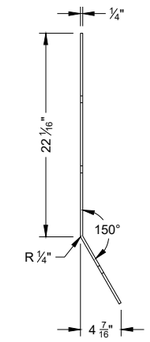
PLAN VIEW
TEMPORARY BARRIER GAP OVER 7' TO 12.5' MAX. (904)

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

6
SDD 14B07-16i

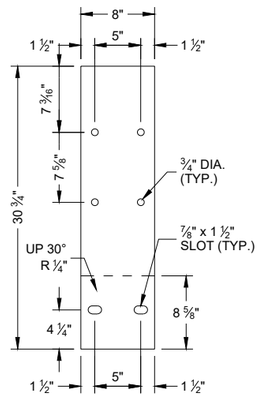


PROFILE VIEW



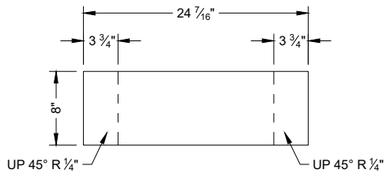
SIDE VIEW

STIFFENER ASSEMBLY
CENTER PANEL U1

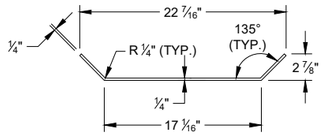


FLAT PATTERN

STIFFENER ASSEMBLY
SIDE PANEL U2

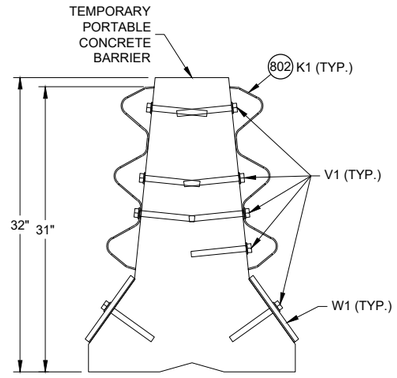


FLAT PATTERN

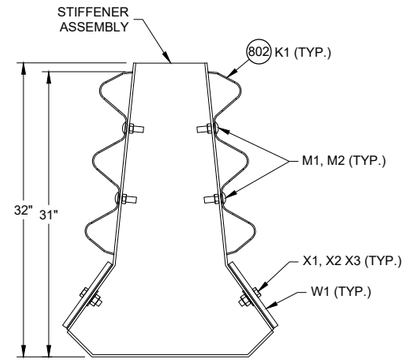


PROFILE VIEW

STIFFENER ASSEMBLY
BOTTOM PANEL U3

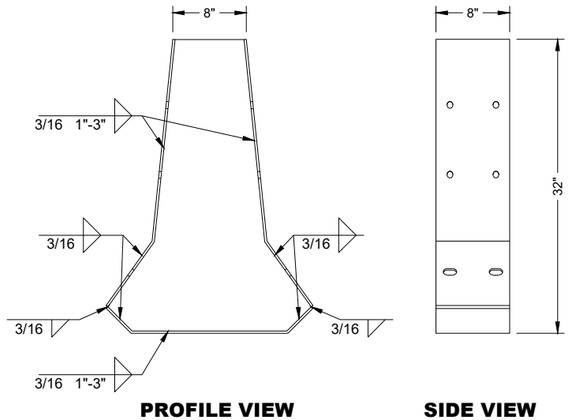


SECTION A - A



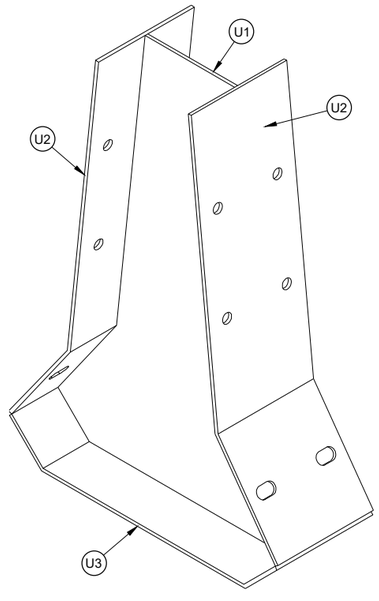
SECTION B - B

PLAN VIEW



PROFILE VIEW

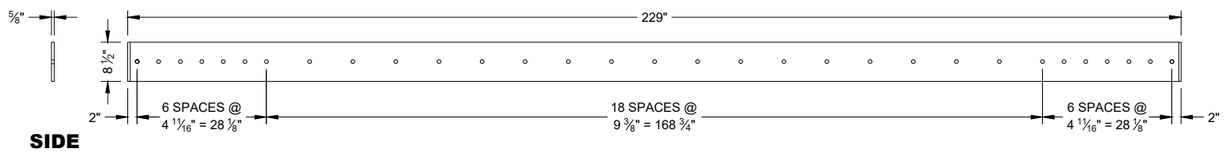
SIDE VIEW



ISOMETRIC

GAP STIFFENER ASSEMBLY

PLAN VIEW

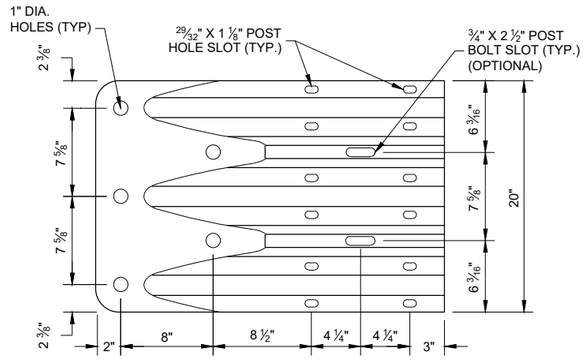


SIDE VIEW

ELEVATION VIEW

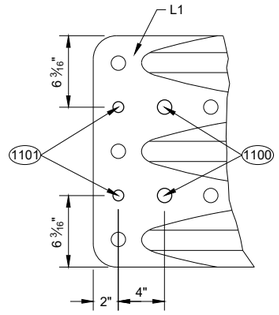
W1 TOE PLATE

CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"



ELEVATION VIEW

THRIE BEAM TERMINAL CONNECTOR



ELEVATION VIEW

ADDITIONAL THRIE BEAM (1102) TERMINAL CONNECTOR HOLE DETAIL

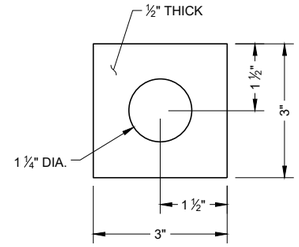


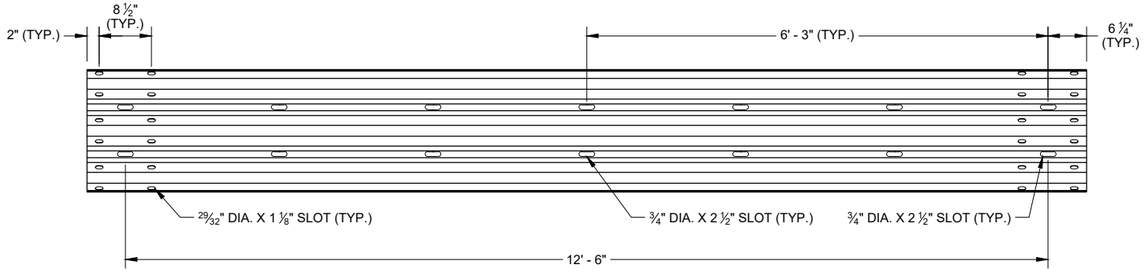
PLATE WASHER DETAIL G2, H3

GENERAL NOTES

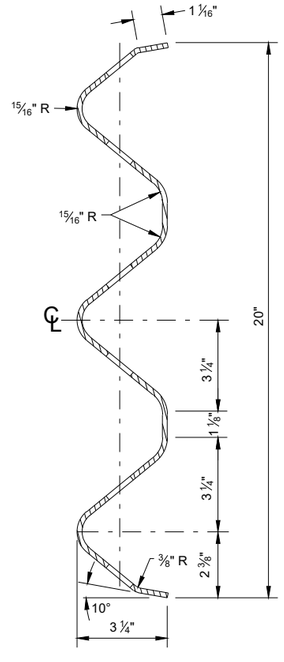
(1100) 1" DIA. HOLE

(1101) 3/4" DIA. HOLE

(1102) PROVIDE HOLES IN THRIE BEAM TERMINAL CONNECTOR TO LIMIT STEEL REINFORCEMENT OR LOOP BAR CONFLICT. CONTRACTOR MAY FIELD DRILL ADDITIONAL HOLE OR PROVIDE THRIE BEAM TERMINAL CONNECTOR WITH ADDITIONAL HOLES FROM SUPPLIER.



SLOTTED THRIE BEAM RAIL K1



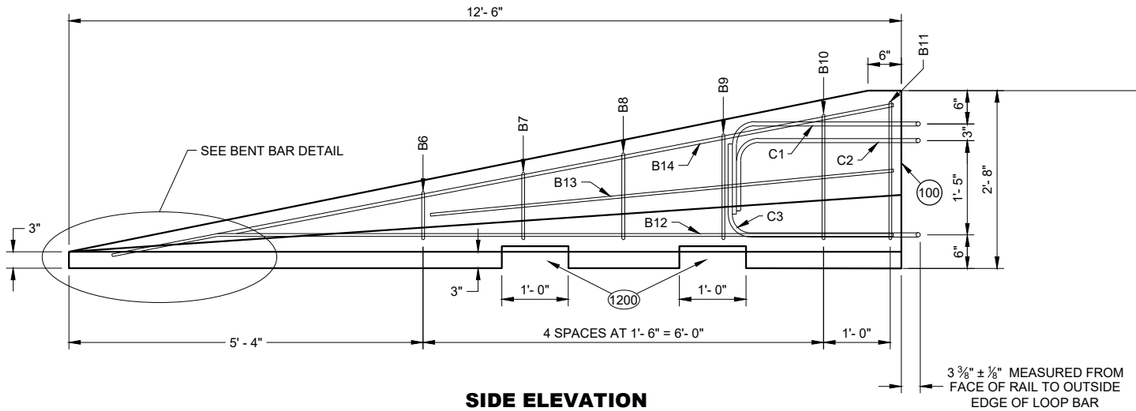
SECTION THROUGH BEAM K1

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

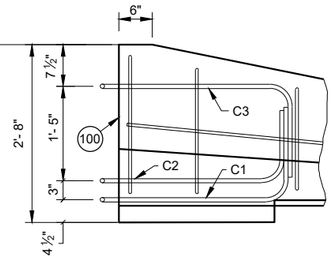
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16k



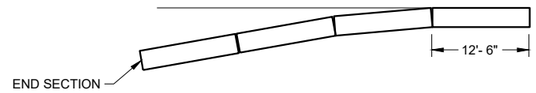
SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



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

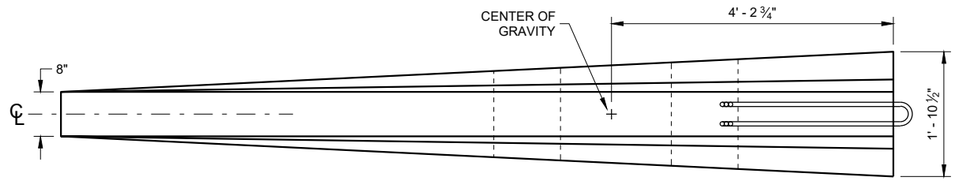
GENERAL NOTES

(1200) SEE LIFTING SLOT DETAIL. LOCATION OF LIFTING SLOTS DETERMINED BY CONTRACTOR.

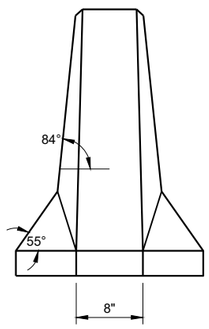


FLARE AT BARRIER END

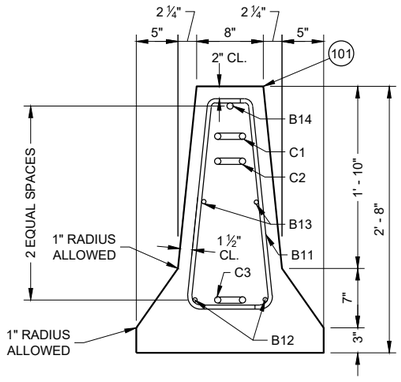
POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1



PLAN VIEW

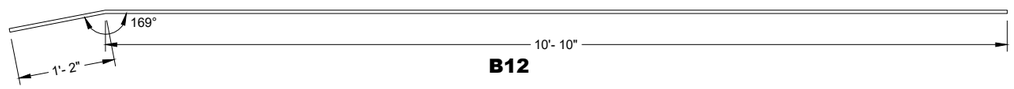


FRONT ELEVATION

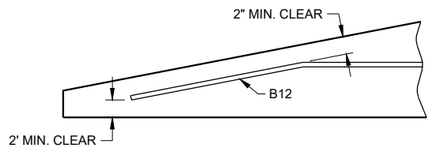


END SECTION

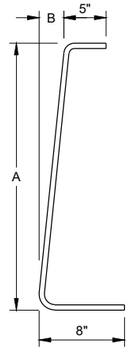
DETAILS OF BARRIER TAPER SECTION



B12



BENT BAR DETAIL



BAR	A	B
B6	10"	1"
B7	1'- 1"	1 ¼"
B8	1'- 5"	1 ⅝"
B9	1'- 8"	1 ⅞"
B10	2'- 0 ½"	2 ⅜"
B11	2'- 3"	2 ¾"

B BARS
2 OF EACH SIZE REQUIRED FOR STIRRUP ASSEMBLY

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

6
SDD 14B07-16I

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	PRECAST TEMPORARY BARRIER - CONCRETE	MIN. = f'c 5000 PSI	
B1	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B2	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-2"
B3	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B4	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 6'-0"
B5	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#6 REBAR, LENGTH 2'-11"
B6	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 1'-11"
B7	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-2"
B8	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-6"
B9	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-9"
B10	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-2"
B11	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-4"
B12	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-0"
B13	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 7'-9"
B14	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 11'-9"
C1	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C2	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C3	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
D1	CONNECTION PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ¼" DIA.
D2	CONNECTION PIN - TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G1	BOLT THROUGH ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A OR SAE J429 GRADE 2 UNC	1 ⅛" DIA.
G2	BOLT THROUGH ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G3	BOLT THROUGH ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
H1	ADHESIVE ANCHOR - ADHESIVE	ICC-ES-AC308 5 ¼" EMBEDMENT WITH A MIN. BOND STRENGTH OF 1,650 PSI. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
H2	ADHESIVE ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A / SAE J429 GRADE 2 UNC	1 ⅛" DIA.
H3	ADHESIVE ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
H4	ADHESIVE ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
J1	ASPHALT ANCHOR PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ½" DIA.
J2	ASPHALT ANCHOR PIN - STOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
K1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE
L1	THRIE BEAM RAIL - TERMINAL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
M1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	⅝" DIA.
M2	SPLICE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
N1	THRIE BEAM RAIL TERMINAL - MECHANICAL ANCHOR	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA. LENGTH 6"
N2	THRIE BEAM RAIL TERMINAL - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
N3	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
P1	THRIE BEAM RAIL CONNECTION 1-BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA.
P2	THRIE BEAM RAIL CONNECTION 1-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
P3	THRIE BEAM RAIL CONNETION 1- MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
Q1	BLOCK WOOD	SEE STANDARD SPEC. 614	
R1	CAP - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	⅝" DIA.
R2	CAP- BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
R3	CAP - BOLT - MECHANICAL ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	12 GAUGE
S1	CAP 42-INCH TOP PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S2	CAP 42-INCH END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S3	CAP 42-INCH SIDE PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S4	CAP 42-INCH GUSSET 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S5	CAP 42-INCH GUSSET 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S6	CAP 42-INCH GUSSET 3	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S7	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE

6

SDD 14B07-16m

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16m

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
T1	CAP 56-INCH TOP PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T2	CAP 56-INCH END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T3	CAP 56-INCH SIDE PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T4	CAP 56-INCH SIDE PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T5	CAP 56-INCH GUSSET 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T6	CAP 56-INCH GUSSET 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T7	CAP 56-INCH GUSSET 3	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T8	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T9	CAP 42-INCH GUSSET 5	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T10	CAP 42-INCH GUSSET 6	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T11	CAP 42-INCH GUSSET 7	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T12	CAP 42-INCH GUSSET 8	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T13	CAP 42-INCH GUSSET 9	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T14	CAP 42-INCH GUSSET 10	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T15	CAP 42-INCH GUSSET 11	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T16	CAP 42-INCH GUSSET 12	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
U1	GAP STIFFENER	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
U2	GAP STIFFENER - CONNECTOR PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
U3	GAP STIFFENER - CONNECTOR PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
V1	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 24.0 KIPS AND ULTIMATE SHEAR LOAD 21.5 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	¾" DIA.
V2	GAP STIFFENER - BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C O R MECHANICAL GALVANIZE TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
W1	TOE PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
X1	TOE PLATE - CONNECTION BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC HEAVY HEX HEAD OR AASTHO M180 HEAD, ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED. PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	¾" DIA.
X2	TOE PLATE - CONNECTION BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1 (HARDEN WASHER ONLY)	
X3	TOE PLATE - CONNECTION BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	

6

SDD 14B07-16n

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

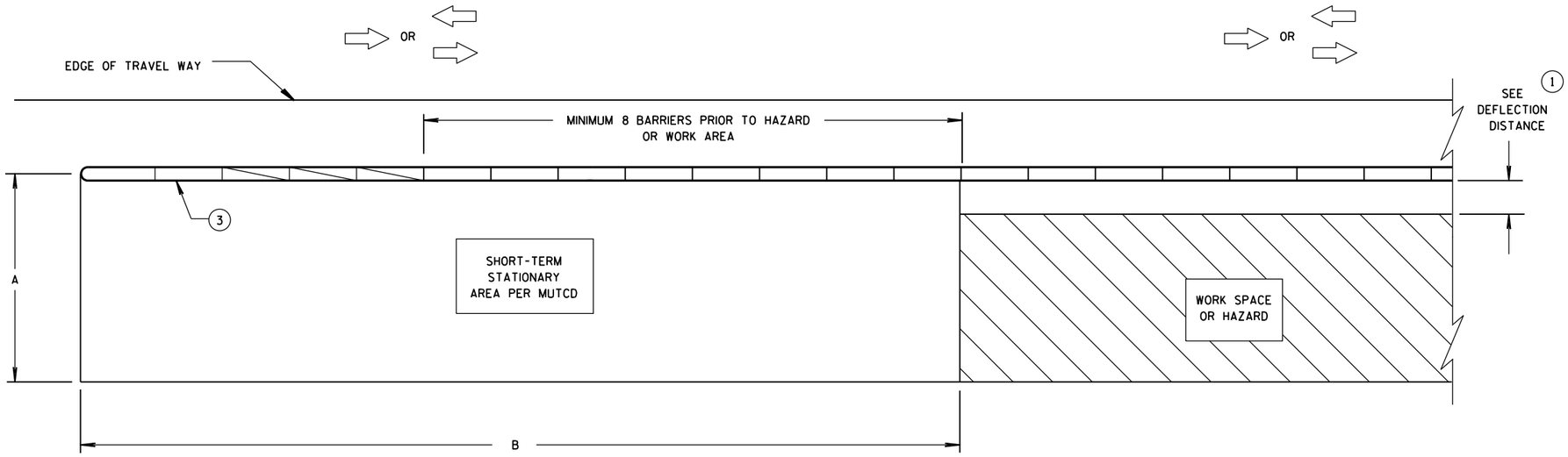
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 14B07-16n



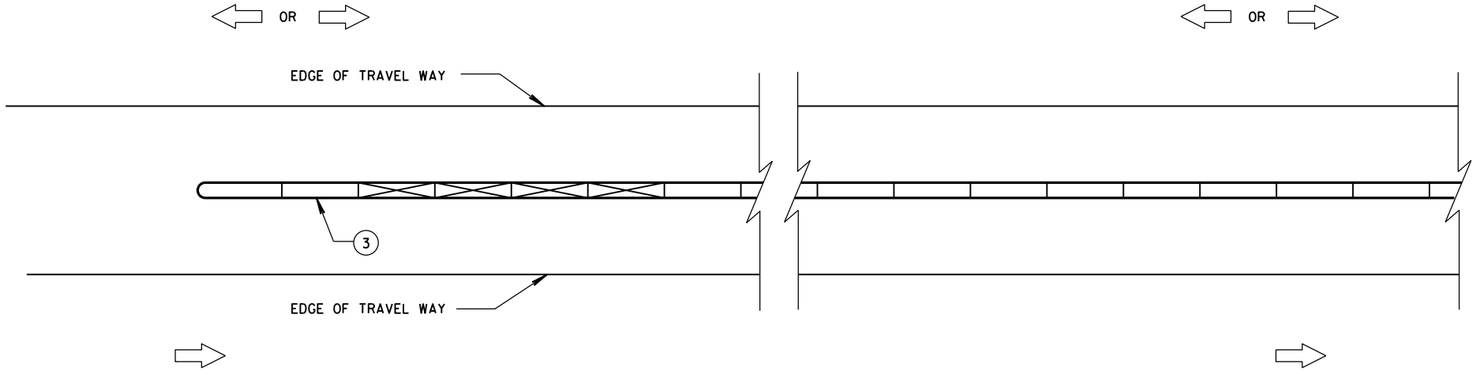
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

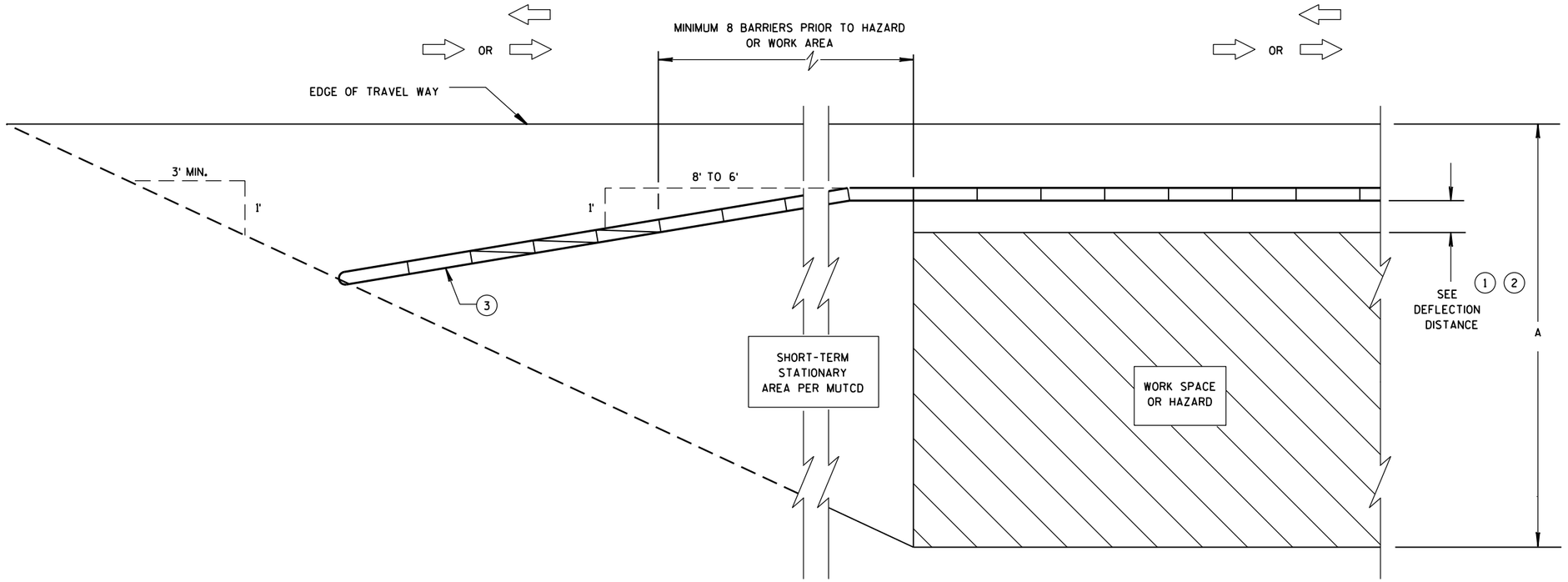
(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

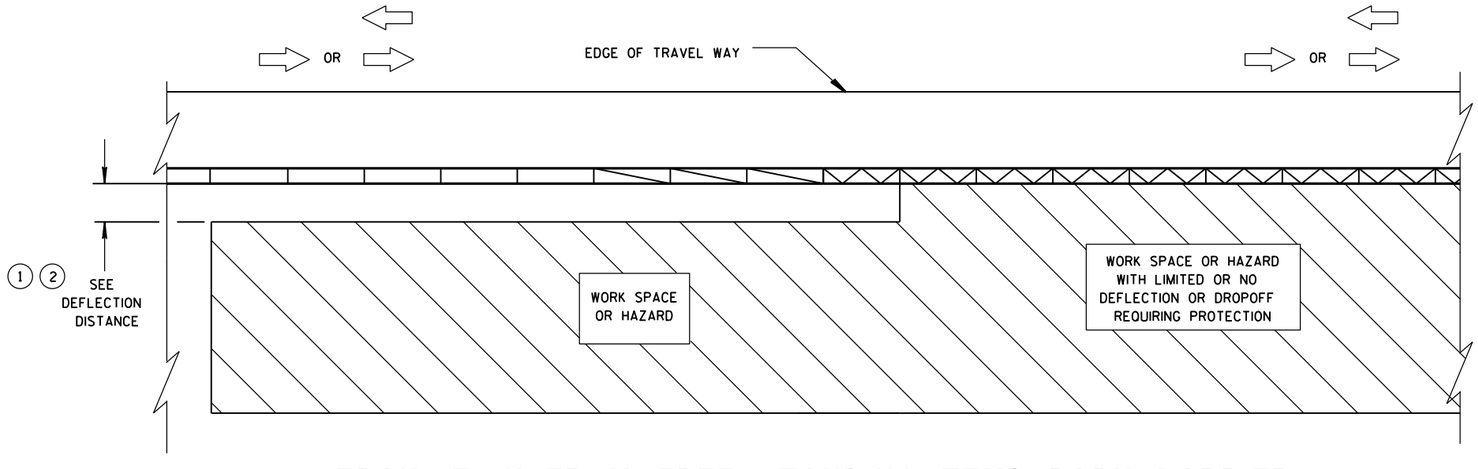
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 8-2a
S.D.D. 14 B 8-2a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

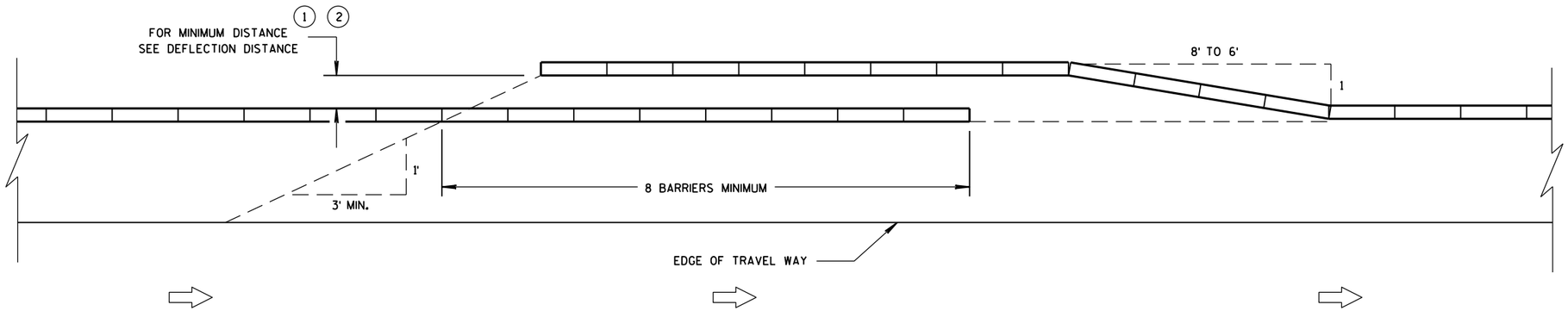
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

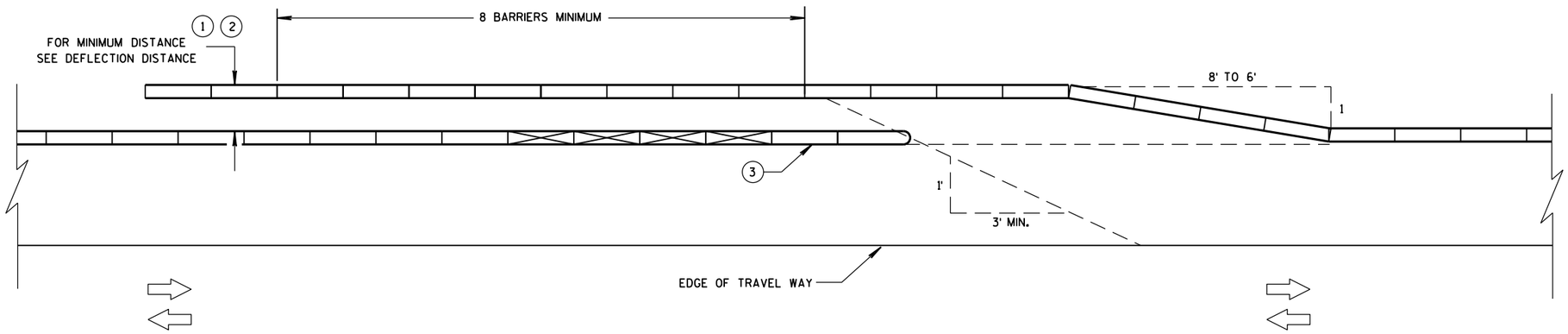
S.D.D. 14 B 8-2b

6

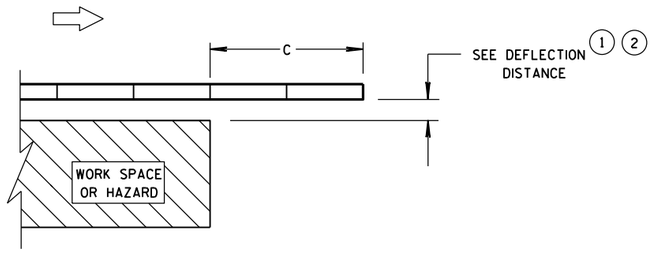
S.D.D. 14 B 8-2b



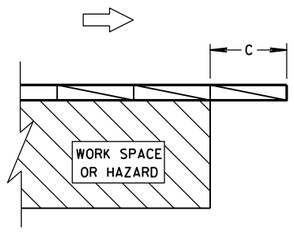
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

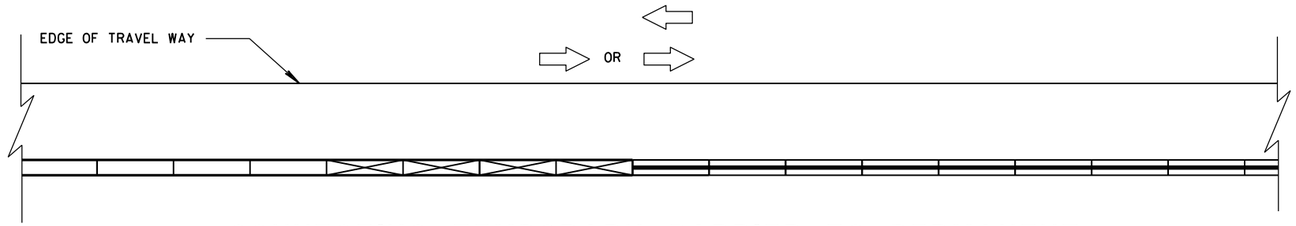
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

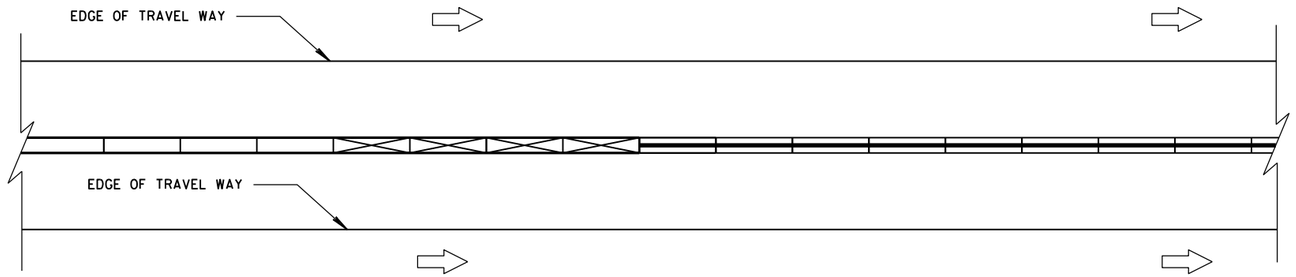
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 8-2c



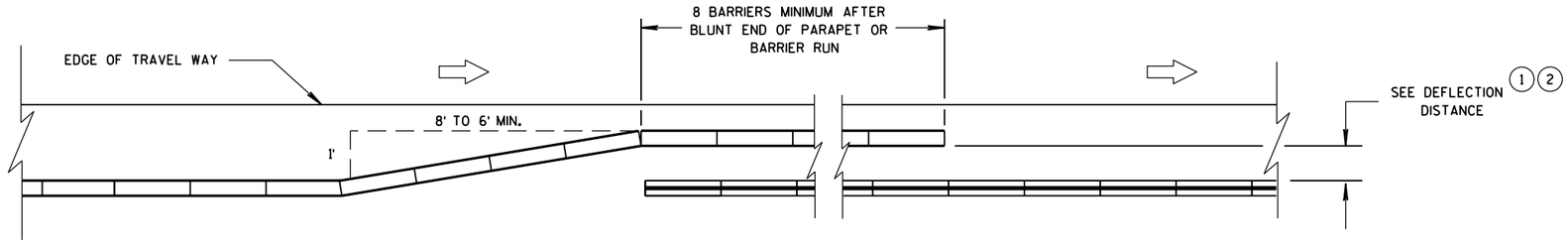
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



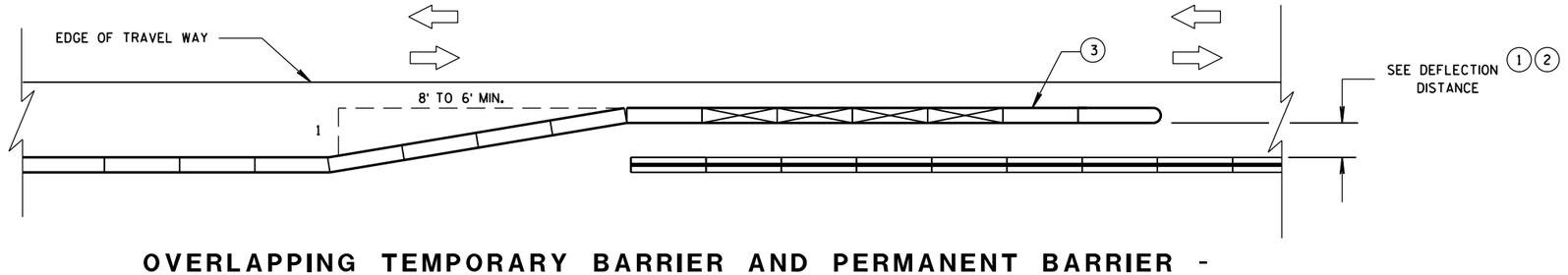
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 8-2d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

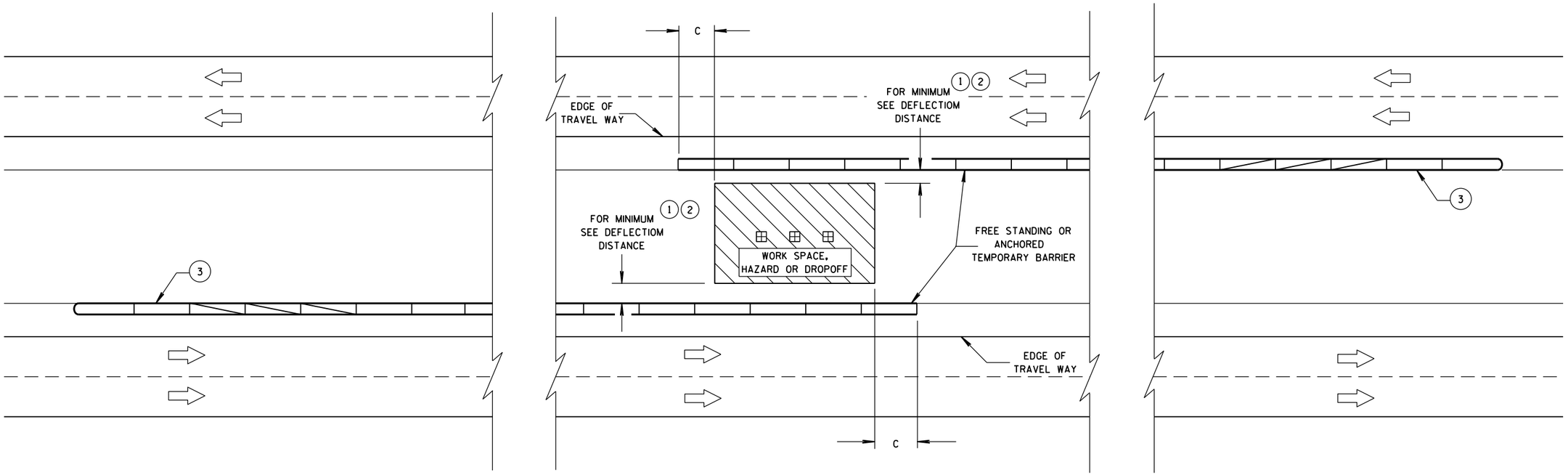
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINNER
FHWA

6

S.D.D. 14 B 8-2e

GENERAL NOTES

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

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

(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

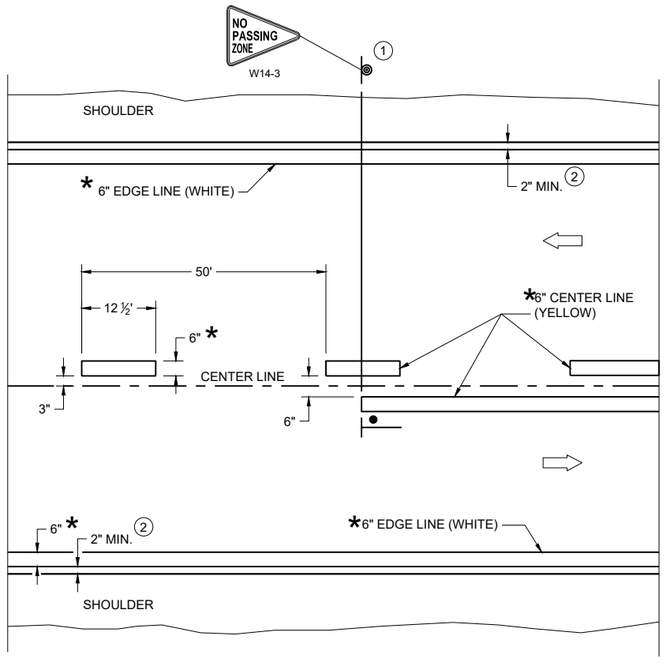
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

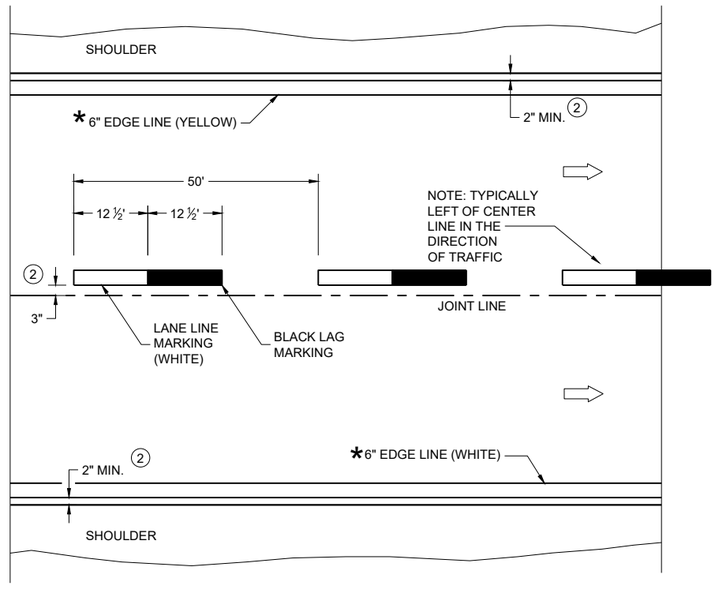
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE

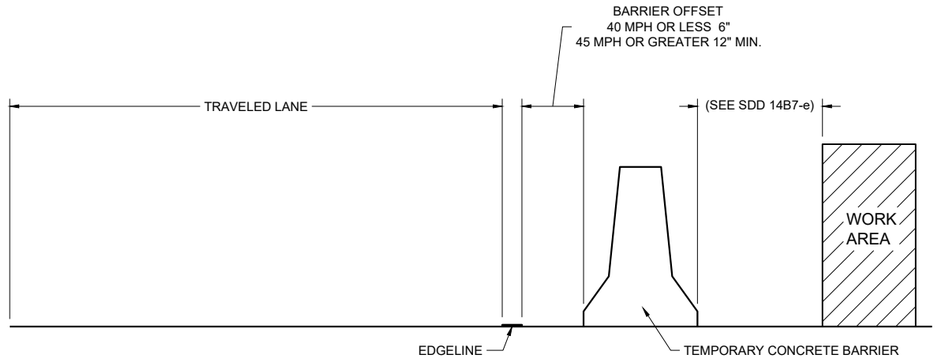
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

SDD 15C08-24a

SDD 15C08-24a



TEMPORARY BARRIER OFFSET FROM EDGELINE

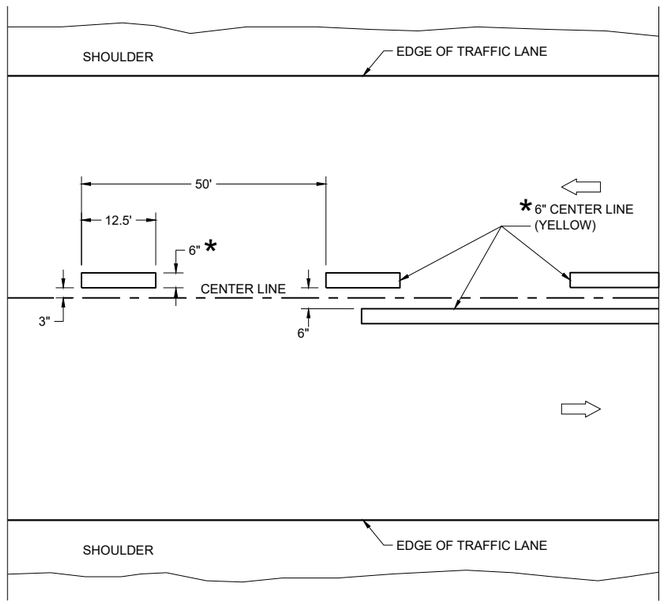
GENERAL NOTES

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

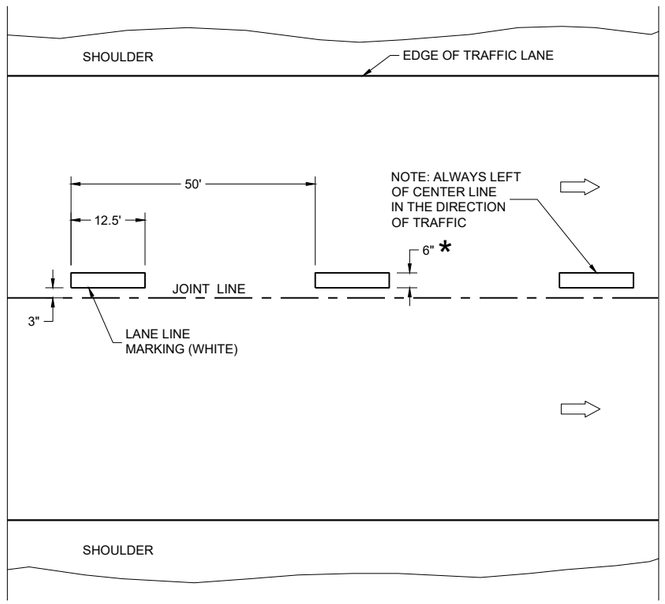
LEGEND

DIRECTION OF TRAFFIC

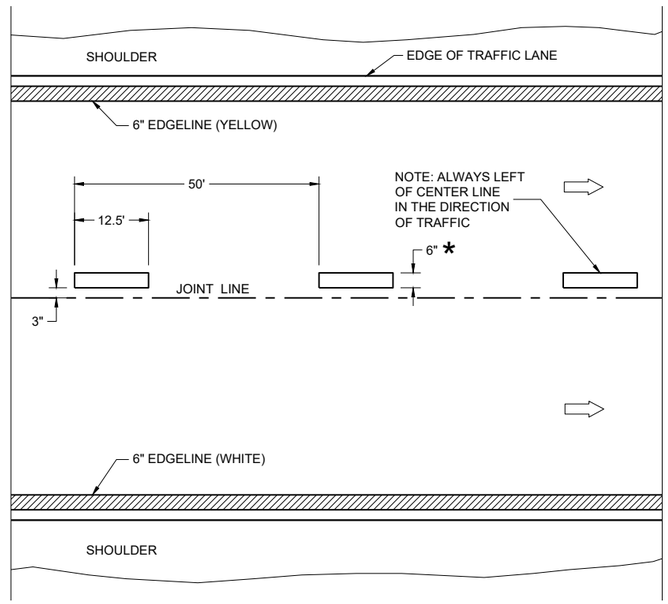
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

SDD 15C08-24b

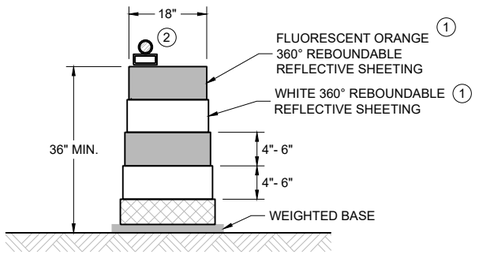
6

SDD 15C08-24b

GENERAL NOTES

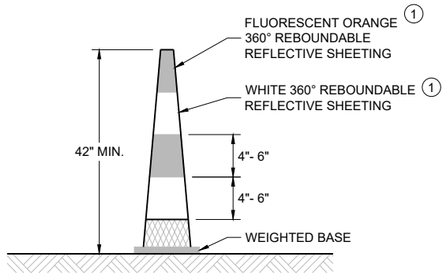
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

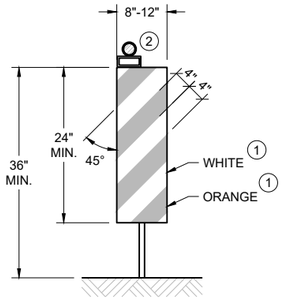
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

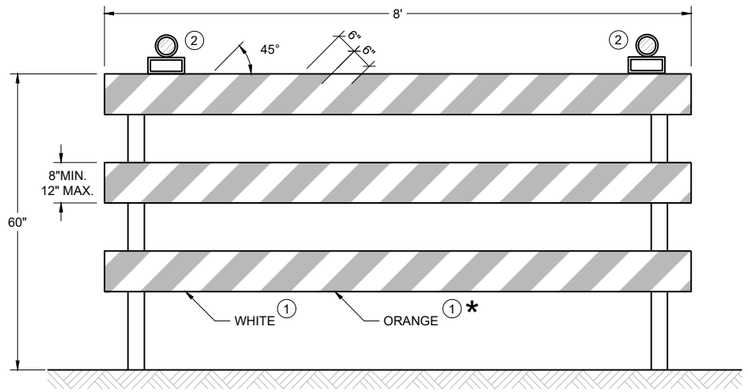
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



VERTICAL PANEL

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2026 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6
SDD 15C11-11b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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

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.

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

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

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND 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.

FLAGGING

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 REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' 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.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

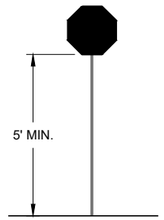
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



STOP/SLOW PADDLE ON SUPPORT STAFF

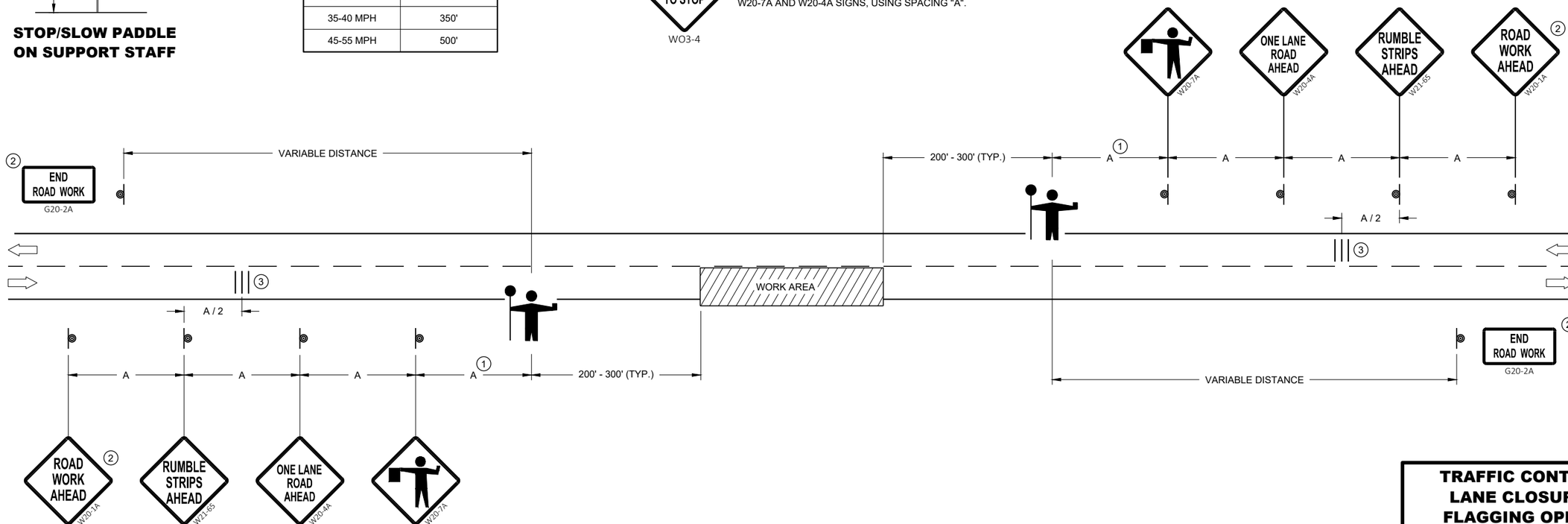
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C12 - 09a

6

SDD 15C12 - 09a

GENERAL NOTES

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL CONE 42-INCH

TRAFFIC CONTROL DRUM

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

AFAD — AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

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.

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

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

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND 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.

FLAGGING

IF THE AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) STOPS WORKING, 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 REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

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

(2) IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.

TEMPORARY PORTABLE RUMBLE STRIPS

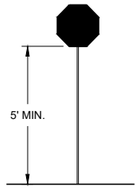
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

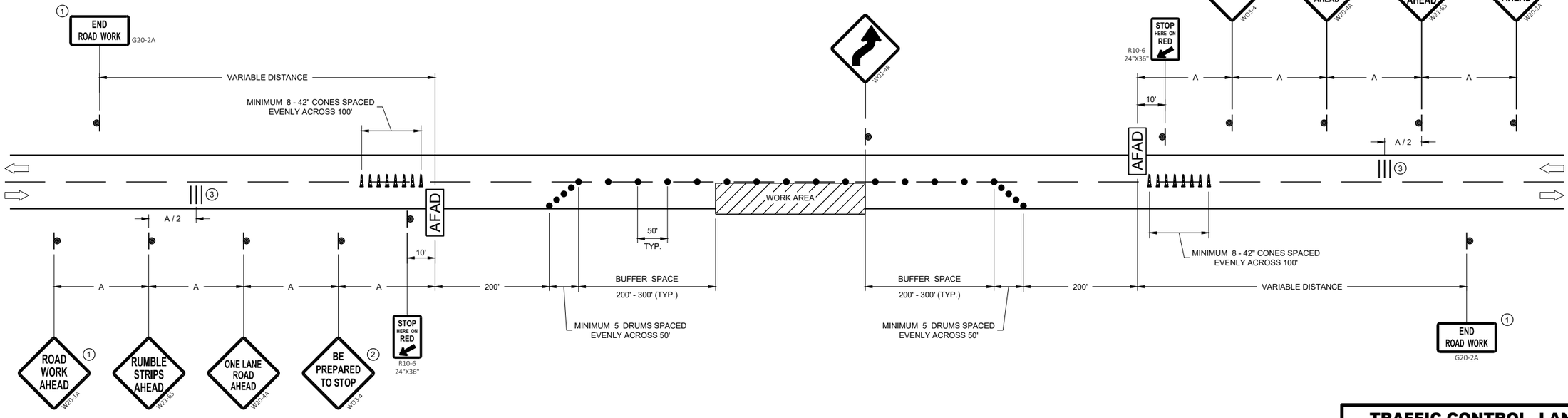
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

SDD 15C12 - 09b

SDD 15C12 - 09b

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH

WORKERS SHALL NOT PERFORM WORK FROM ANY SHADOW OR PROTECTION VEHICLES.

UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

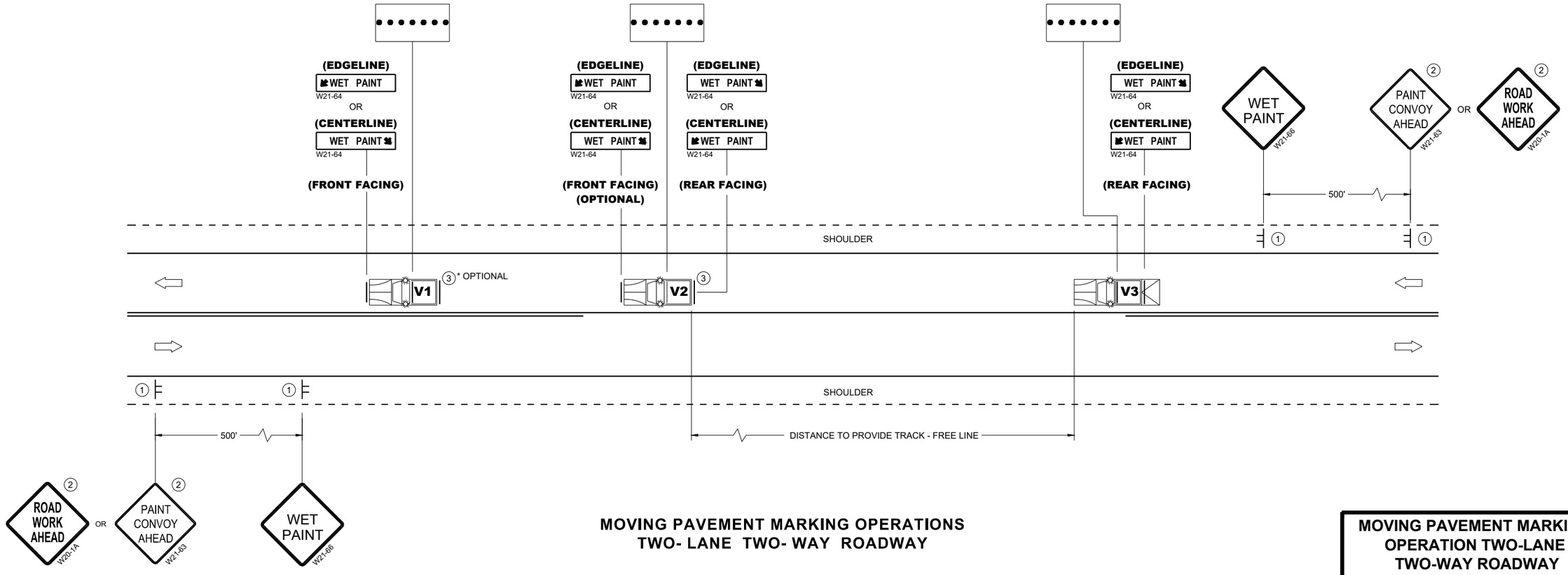
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — STATE ELECTRICAL ENGINEER

FHWA

6

SDD 15C19-11a

SDD 15C19-11a

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TRAFFIC CONTROL DRUM

FLAGS, 16" X 16" MIN. (ORANGE)

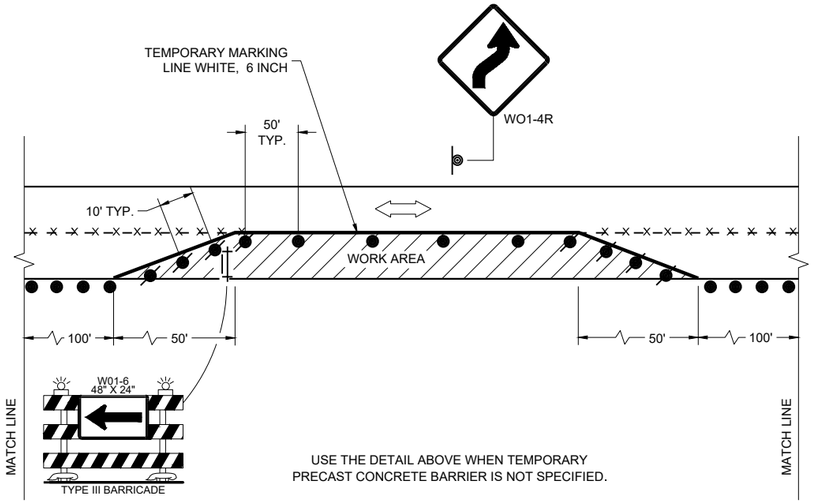
REMOVING PAVEMENT MARKING

DIRECTION OF TRAFFIC

ASPHALTIC PAVEMENT WIDENING

CONCRETE BARRIER TEMPORARY PRECAST

TEMPORARY SIGNAL. SEE SDD 09G02 FOR EXACT PLACEMENT



USE THE DETAIL ABOVE WHEN TEMPORARY PRECAST CONCRETE BARRIER IS NOT SPECIFIED.

GENERAL NOTES

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

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

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

REMOVE PAVEMENT MARKING AND PLACE TEMPORARY PAVEMENT MARKING LINES IF THE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

INSTALL OVERHEAD TEMPORARY SIGNAL HEADS ABOVE THE MIDDLE OF THE TRAVEL LANE THEY ARE CONTROLLING.

(1) 500 FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35 - 40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25 - 30 MPH, USE 200 FOOT TYPICAL SPACING.

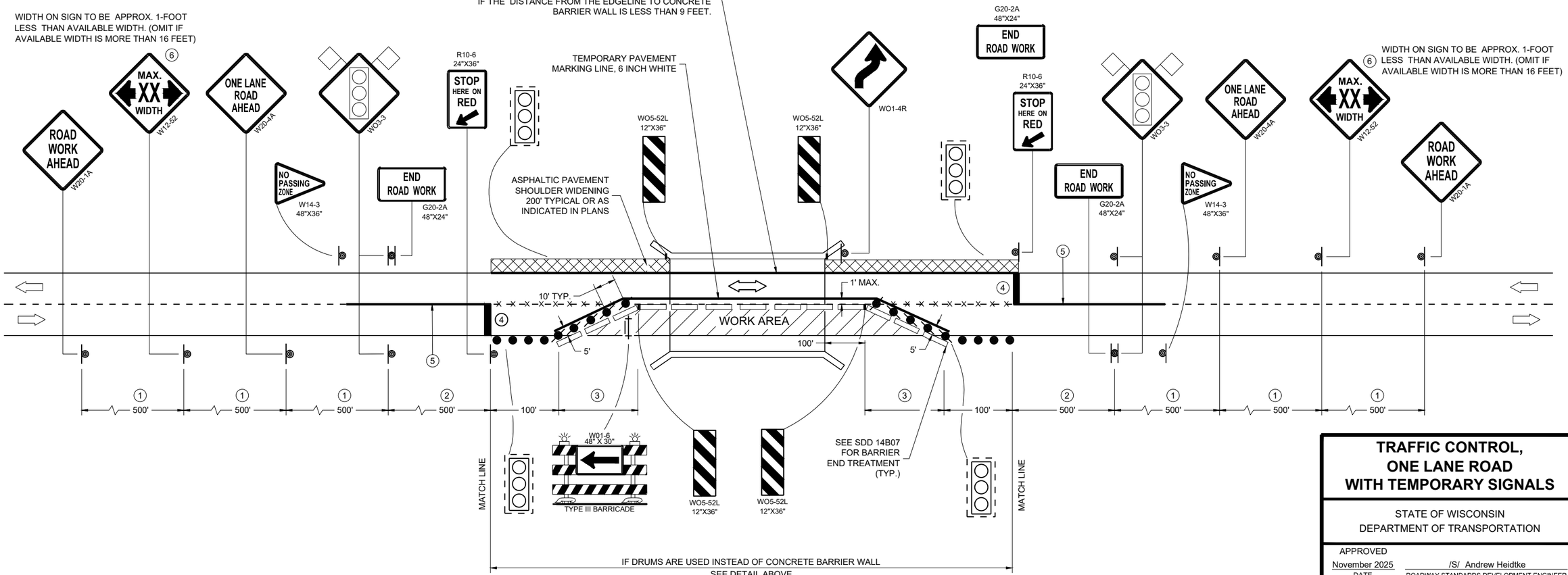
(2) USE 300 FOOT SPACING IF THE PRE - CONSTRUCTION REGULATORY SPEED IS 35 MPH OR LESS.

(3) DIMENSION DETERMINED BY CBTP TAPER FROM EDGE LINE TO TANGENT SECTION OF THE ROAD.

(4) TEMPORARY PAVEMENT MARKING LINE, 18 INCH WHITE STOP LINE.

(5) 700 FOOT TEMPORARY PAVEMENT MARKING LINE, 6 INCH DOUBLE YELLOW . WHEN THE DISTANCE FOR THE PRECEDING NO - PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.

(6) SEE SDD 15C02 - SHEET "F" FOR ADVANCED WIDTH RESTRICTION SIGNING.



TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

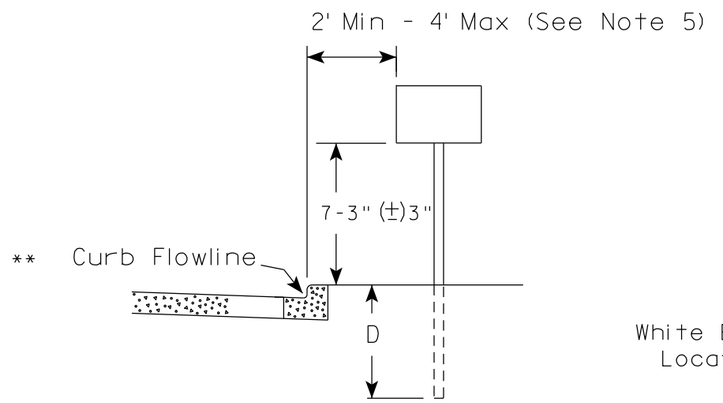
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT ENGINEER

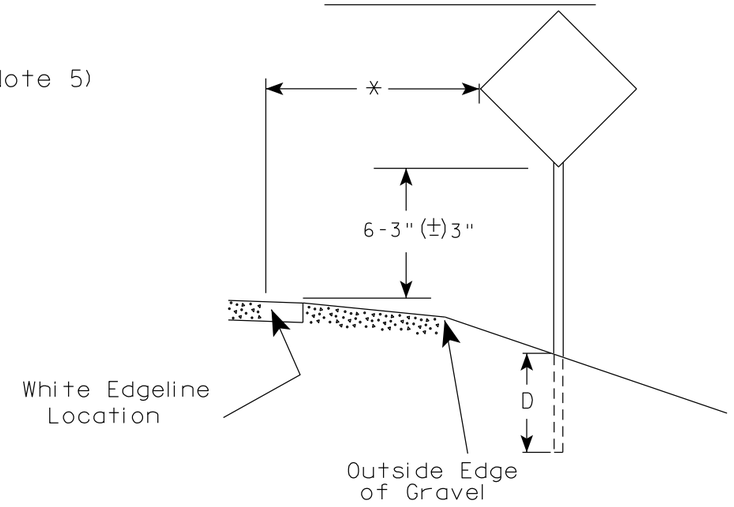
FHWA

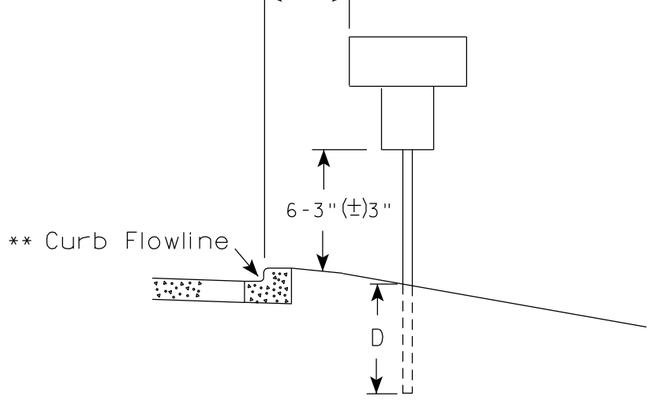
6
SDD 15D33-10a

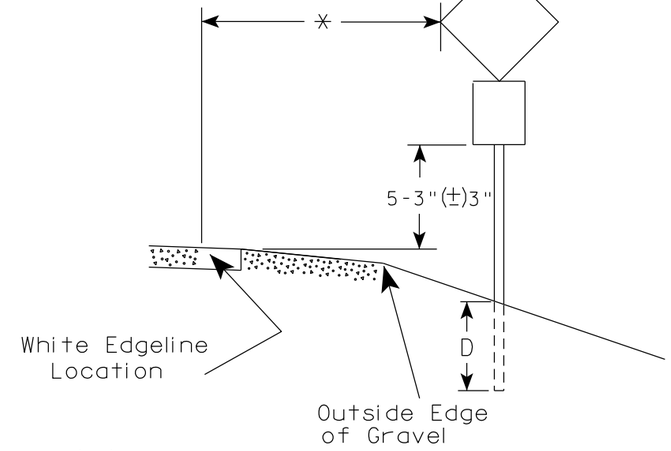
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

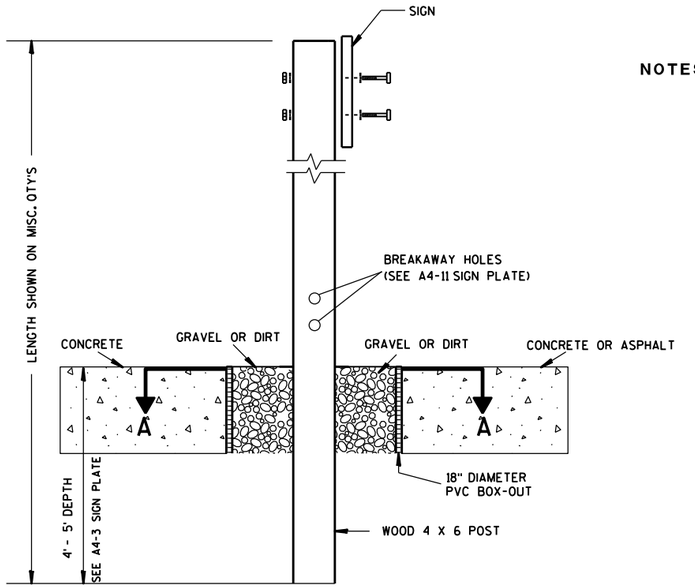
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

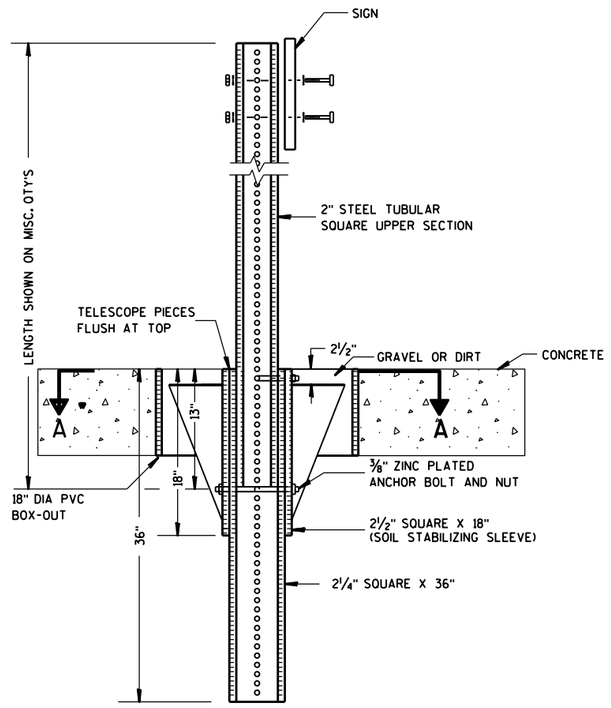
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 55	E



ELEVATION VIEW

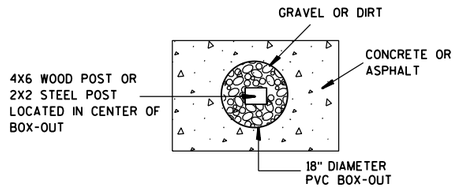
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

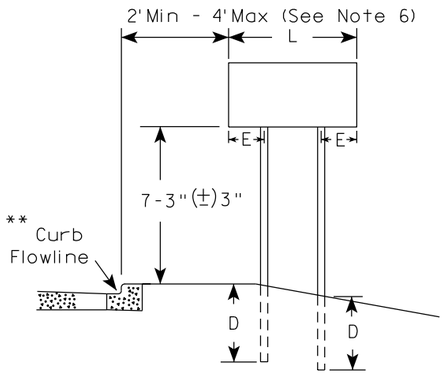
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

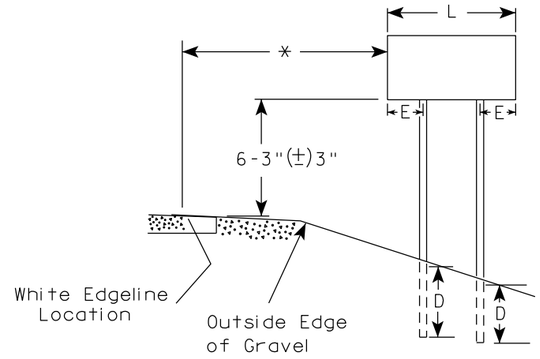
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

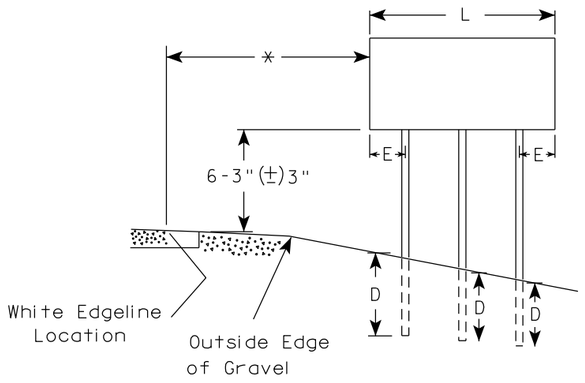
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

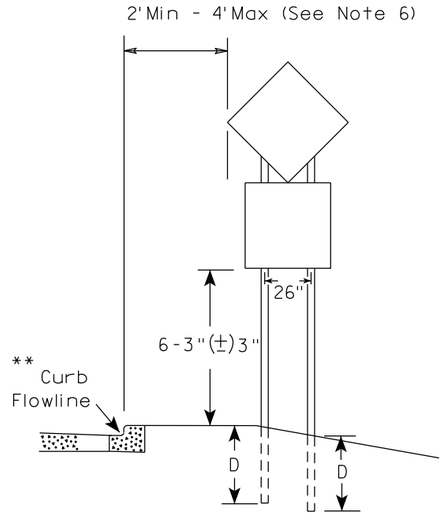
URBAN AREA



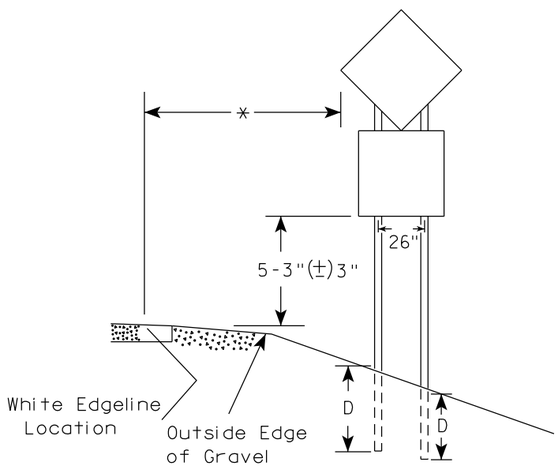
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

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

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

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

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

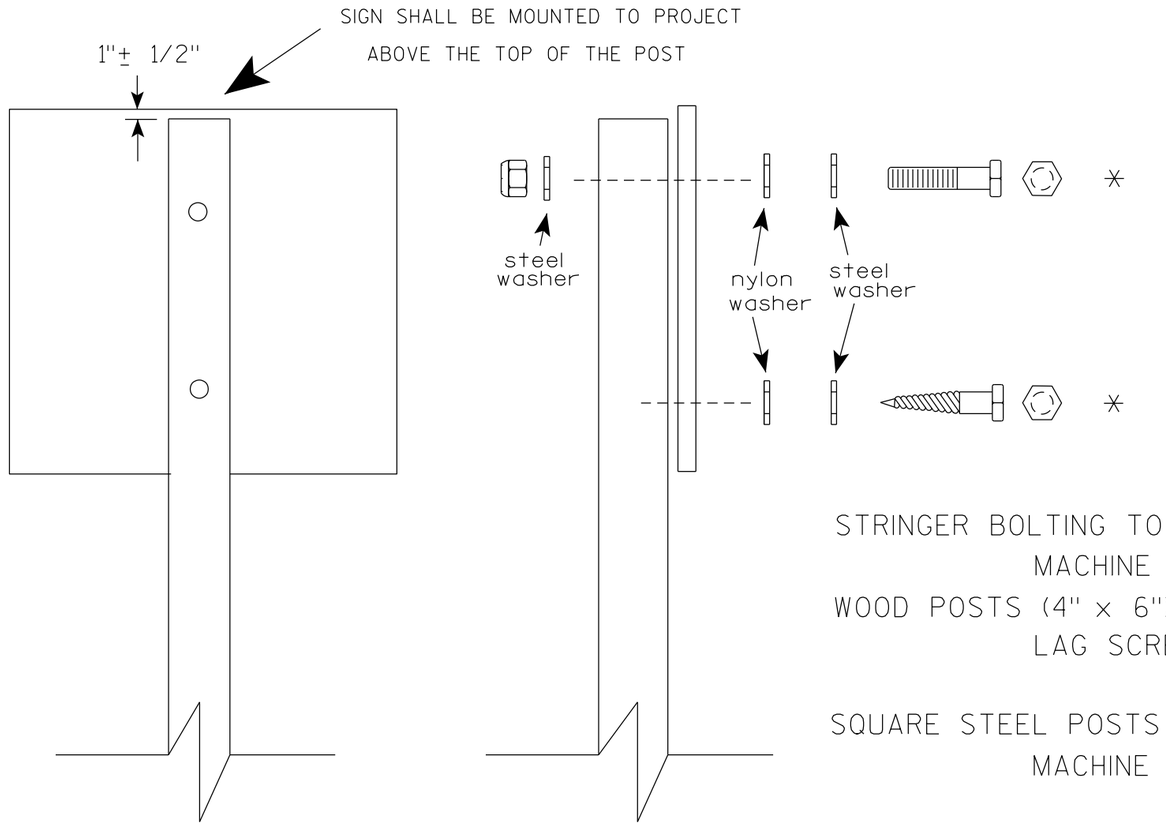
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 57	E



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

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

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

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

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

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

WOOD POSTS (4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

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

WASHERS (ALL POSTS) -

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

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

ATTACHMENT OF SIGNS TO POSTS

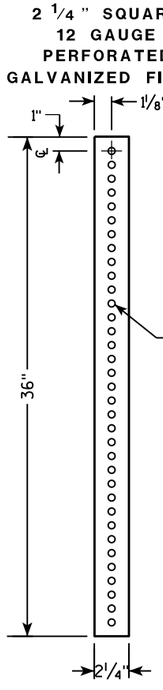
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

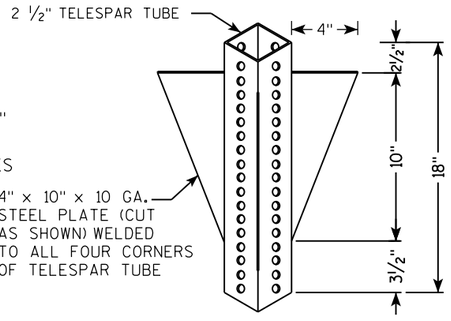
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

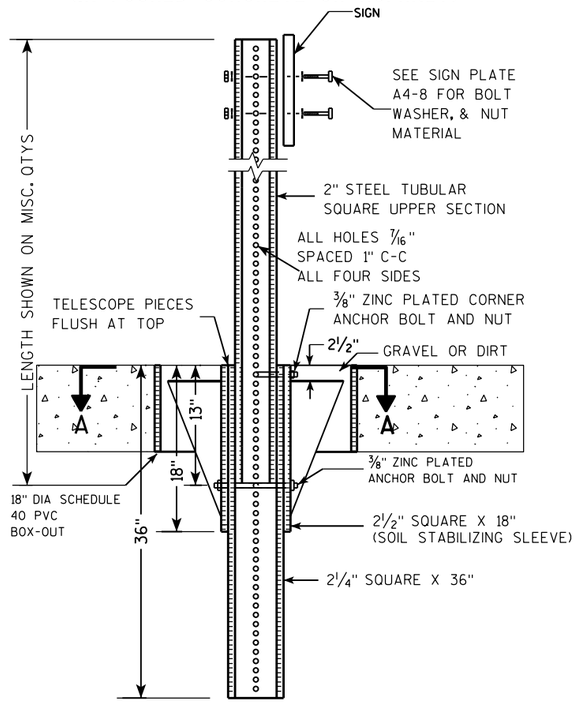
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



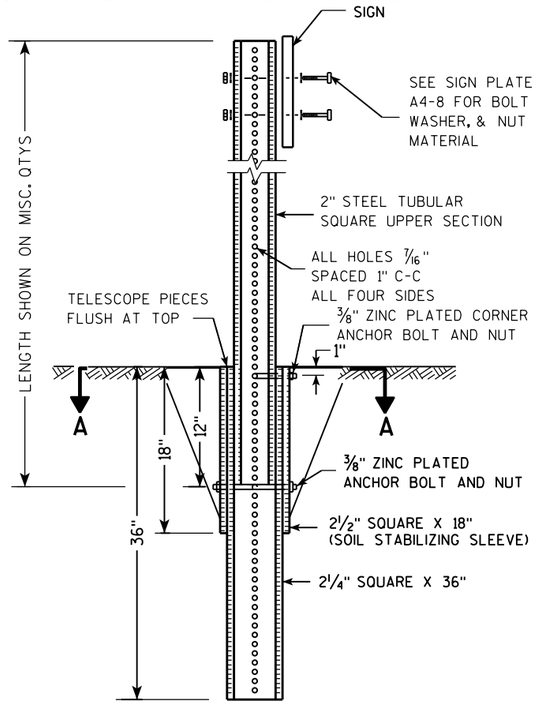
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

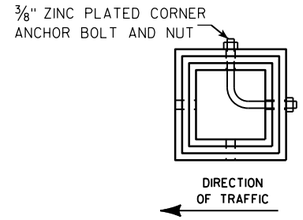


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

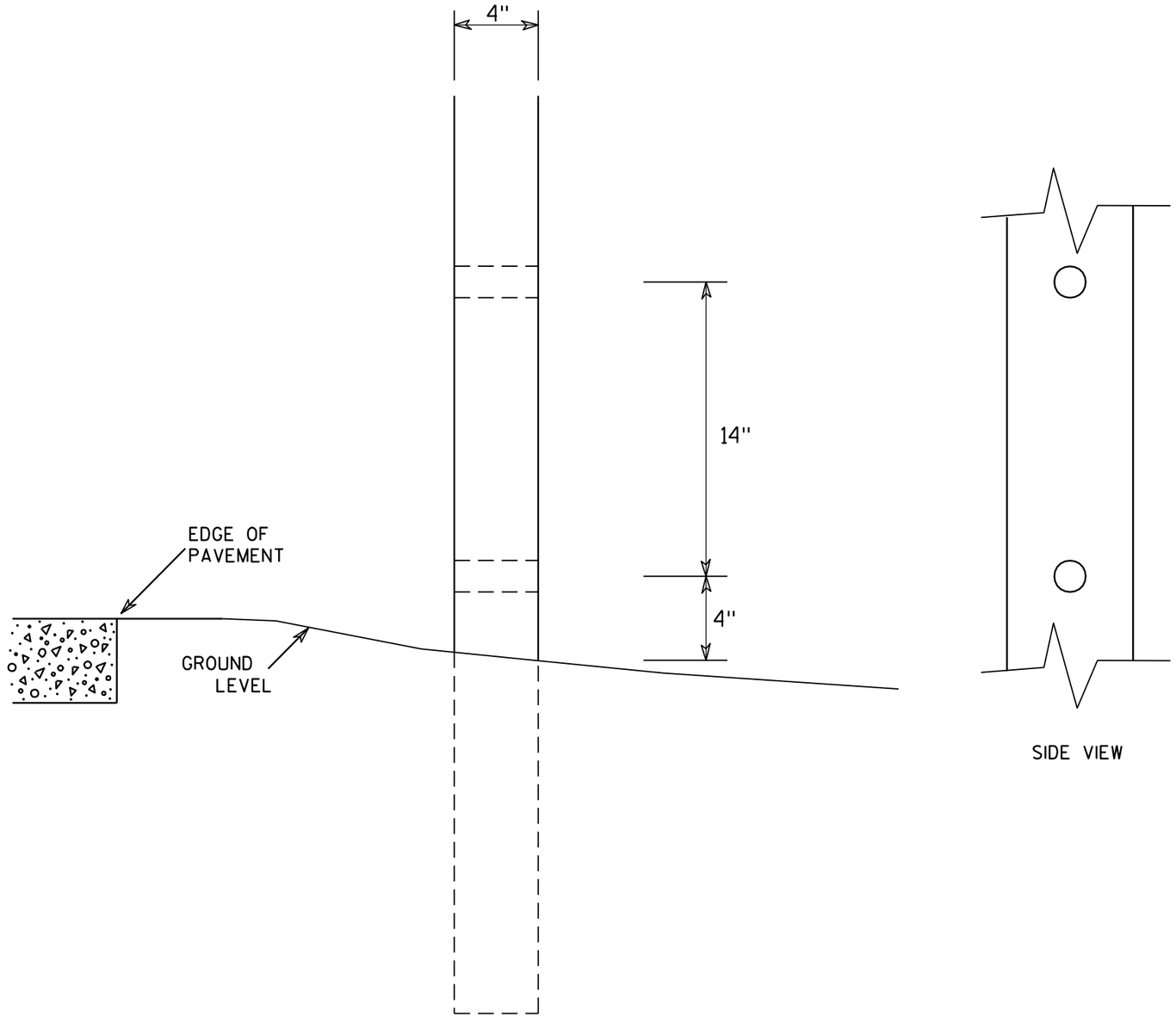
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 59 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

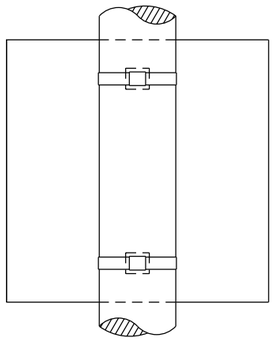
APPROVED Chester J Spang for State Traffic Engineer

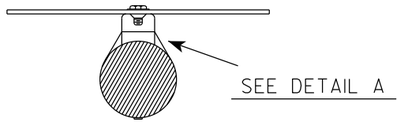
DATE 3/27/97 PLATE NO. A4-11.2

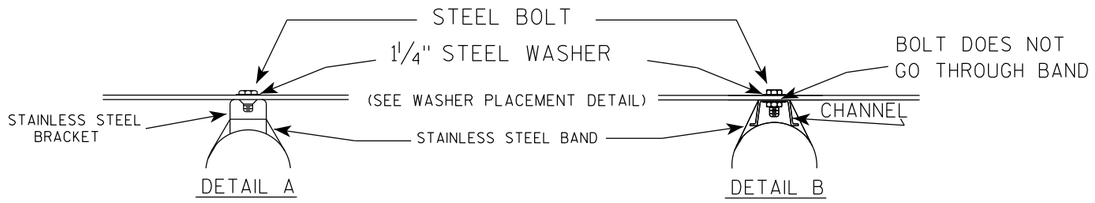
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 60	E

BANDING

SINGLE SIGN



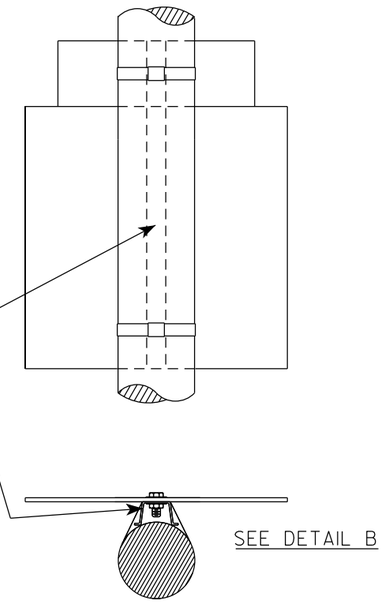




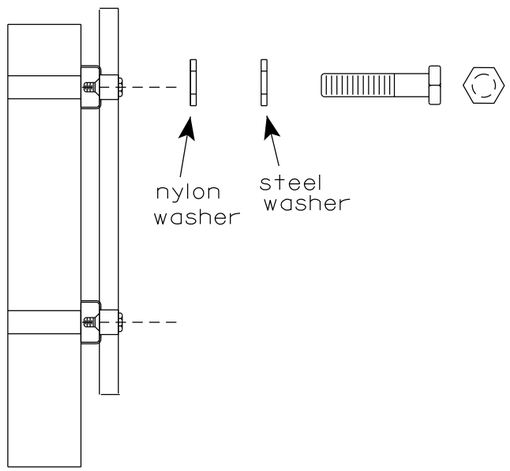
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

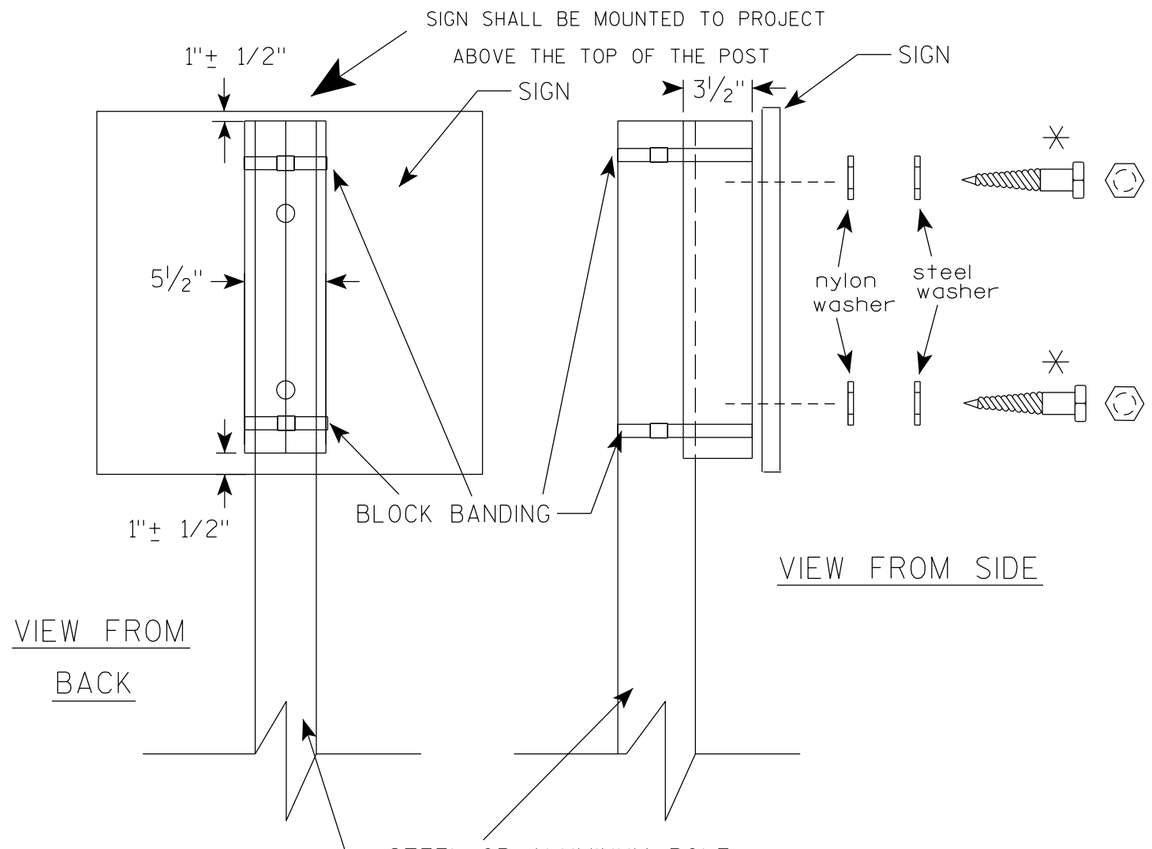
DATE 6/10/19 PLATE NO. A5-9.4

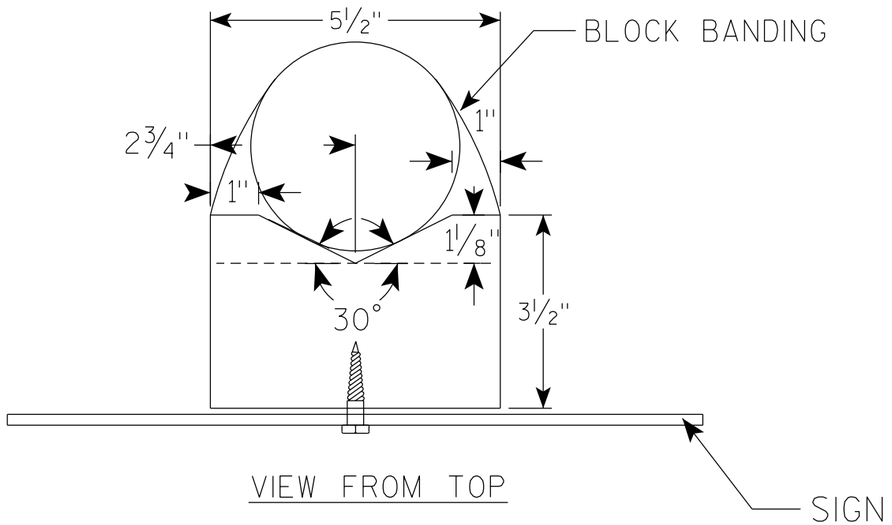
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 61	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

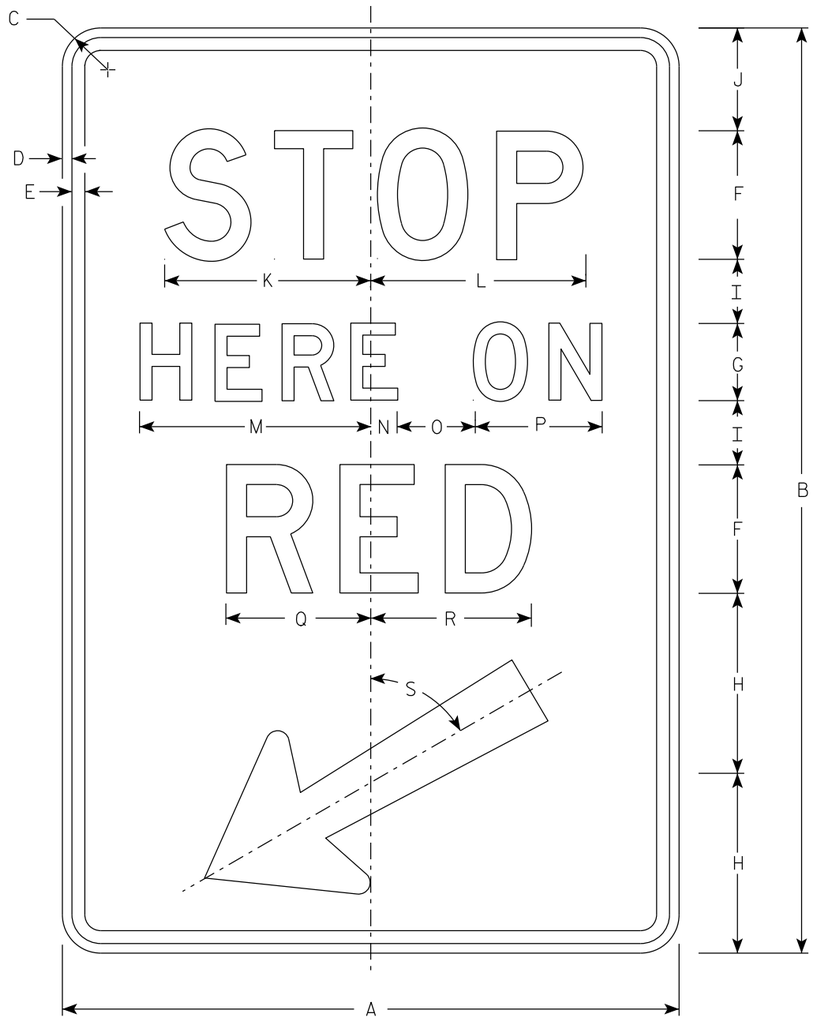
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

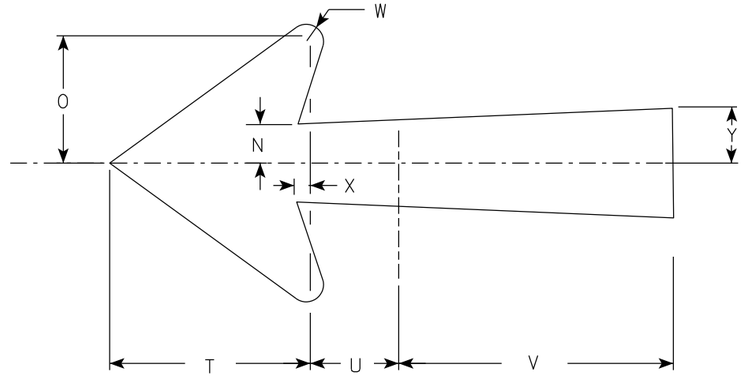
SHEET NO: 62 E



R10-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Areq sq. ft.
1																											
2S	24	36	1 1/2	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
2M	24	36	1 1/2	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
3																											
4																											
5																											

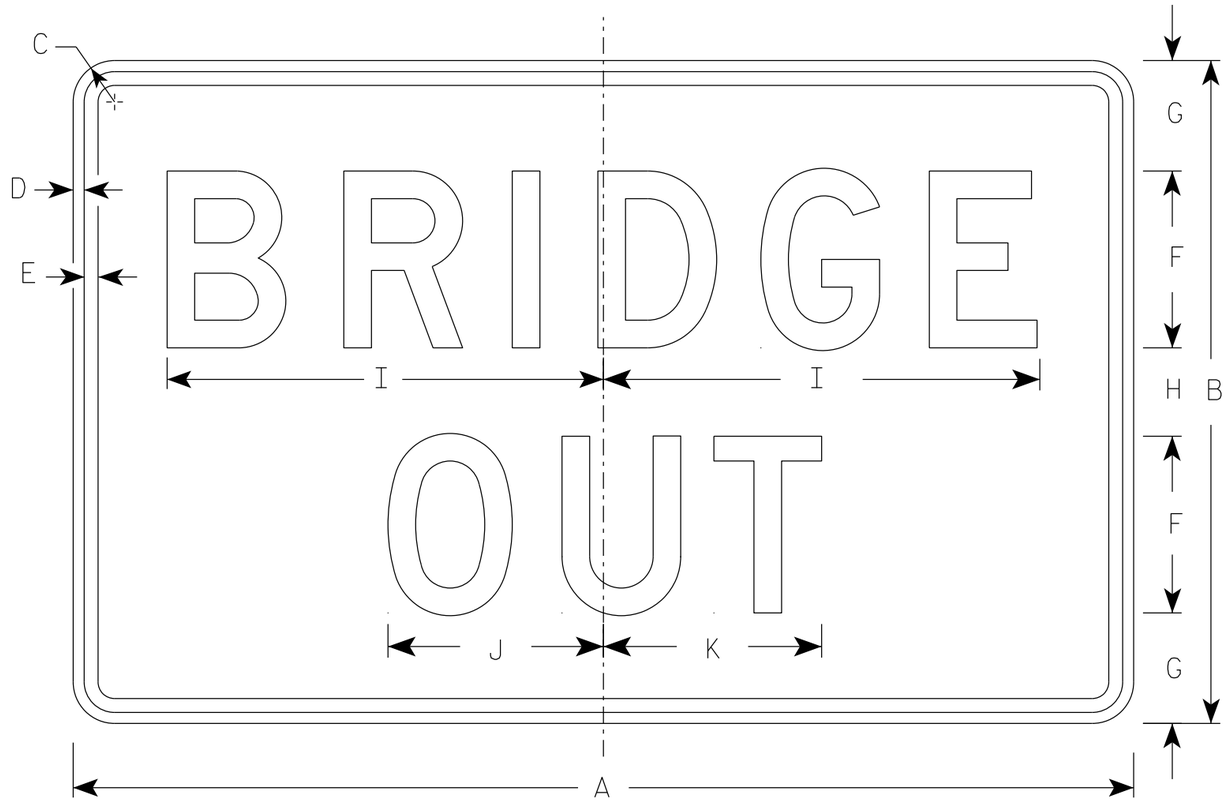
STANDARD SIGN
R10-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/24 PLATE NO. R10-6.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 63	E



R11-2B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

STANDARD SIGN
R11-2B

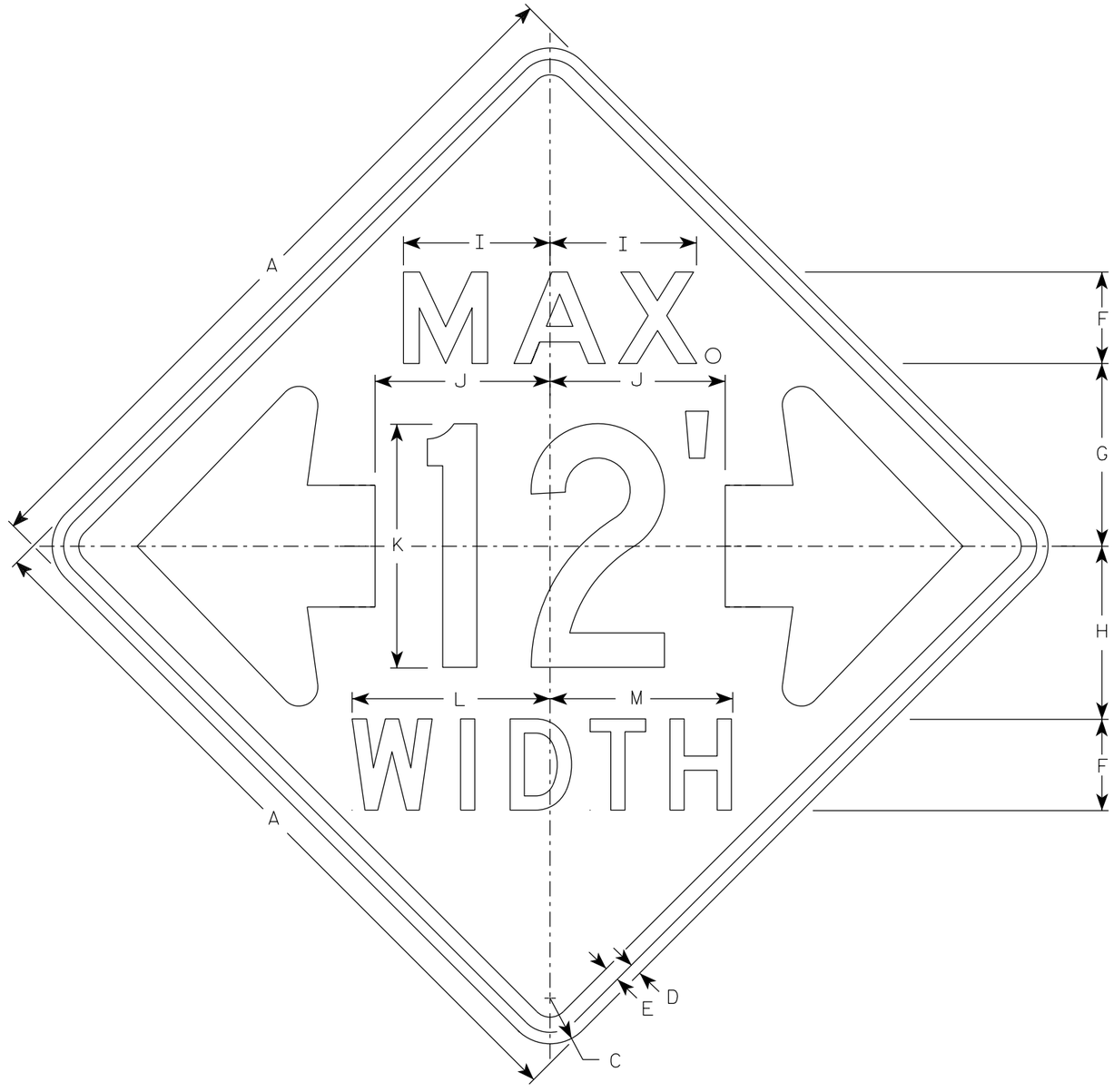
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2B.3

PROJECT NO:

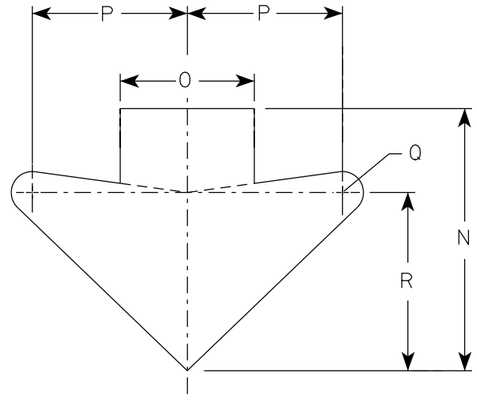
SHEET NO: 64 E



W12-52

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. The top line is series E, the numerals are series C, and the bottom line is series D.
5. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
2M	48		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
3																											
4																											
5																											

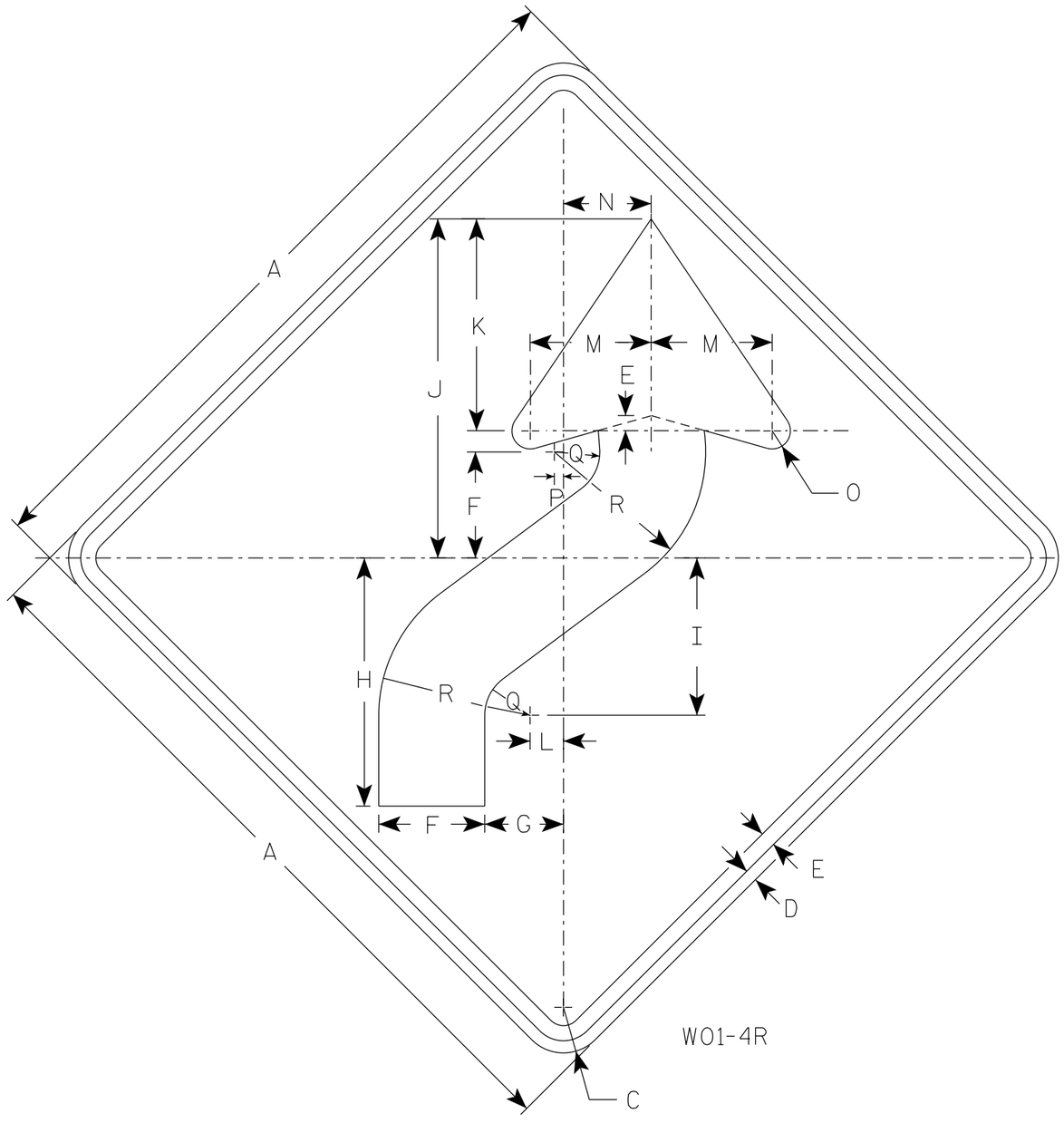
STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/2024 PLATE NO. W12-52.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 65 | E



WO1-4R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. WO1-4L is the same as WO1-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN

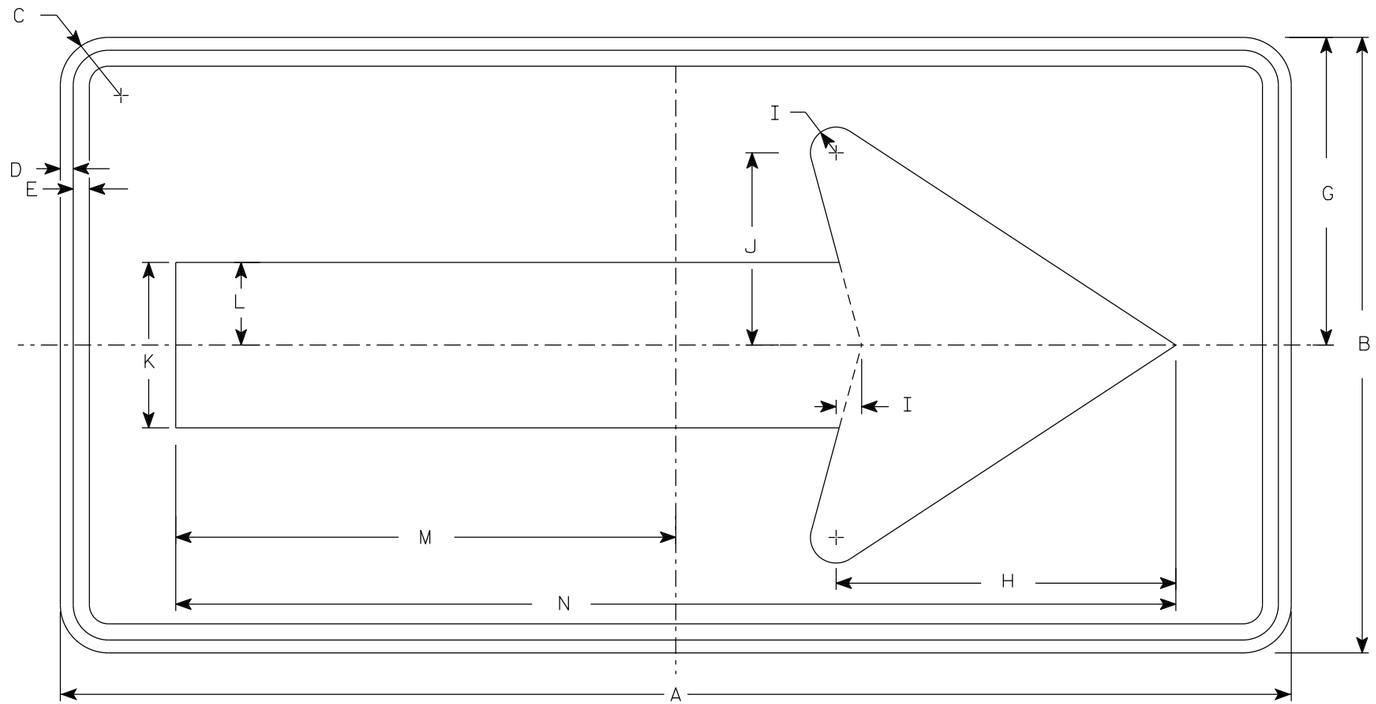
WO1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-4.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 66 E



WO1-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

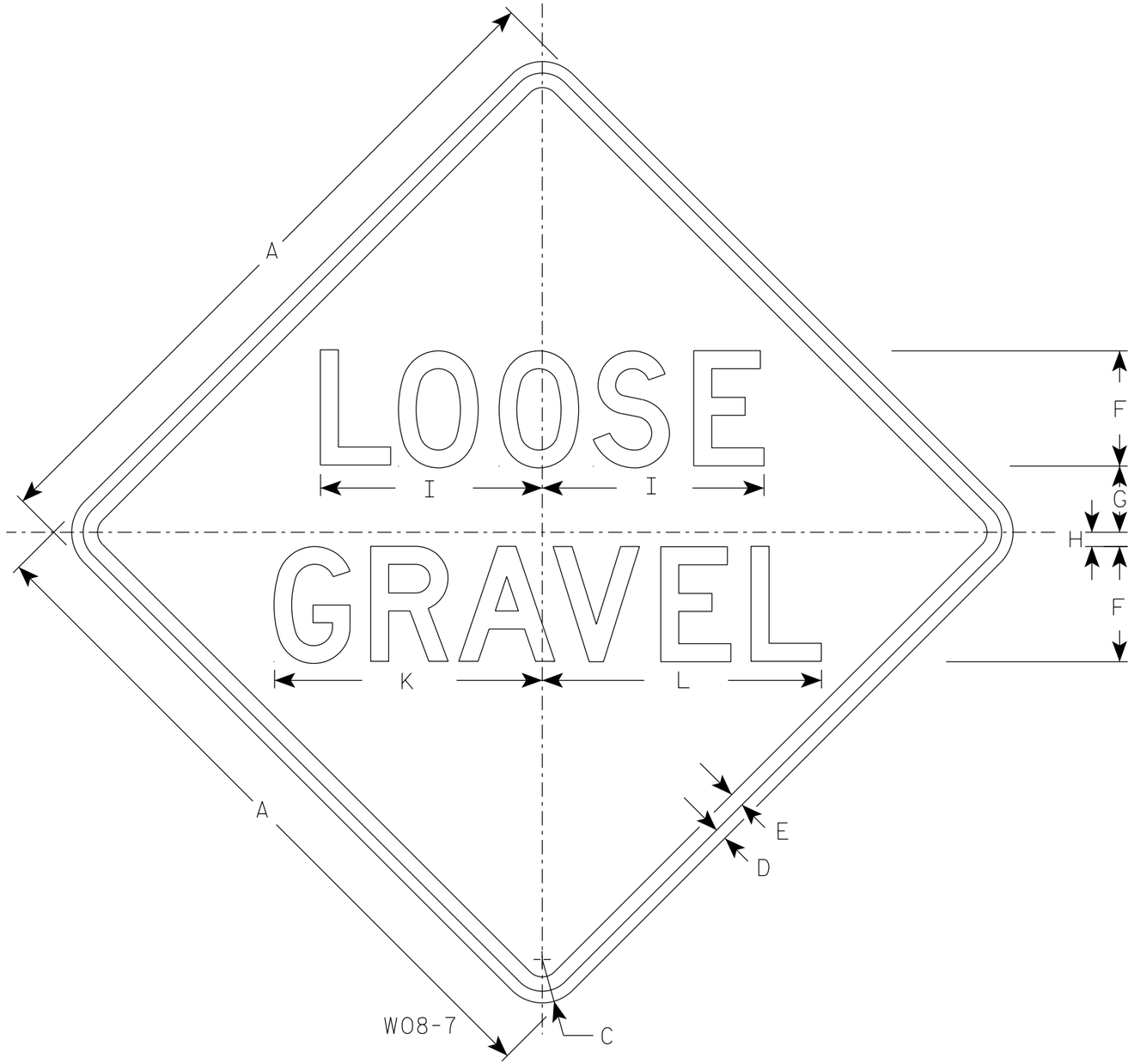
STANDARD SIGN
WO1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-6.2

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



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
2S	48		3	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0
2M	48		3	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0
3	48		3	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0
4	48		3	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0
5	48		3	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0

STANDARD SIGN
W08-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

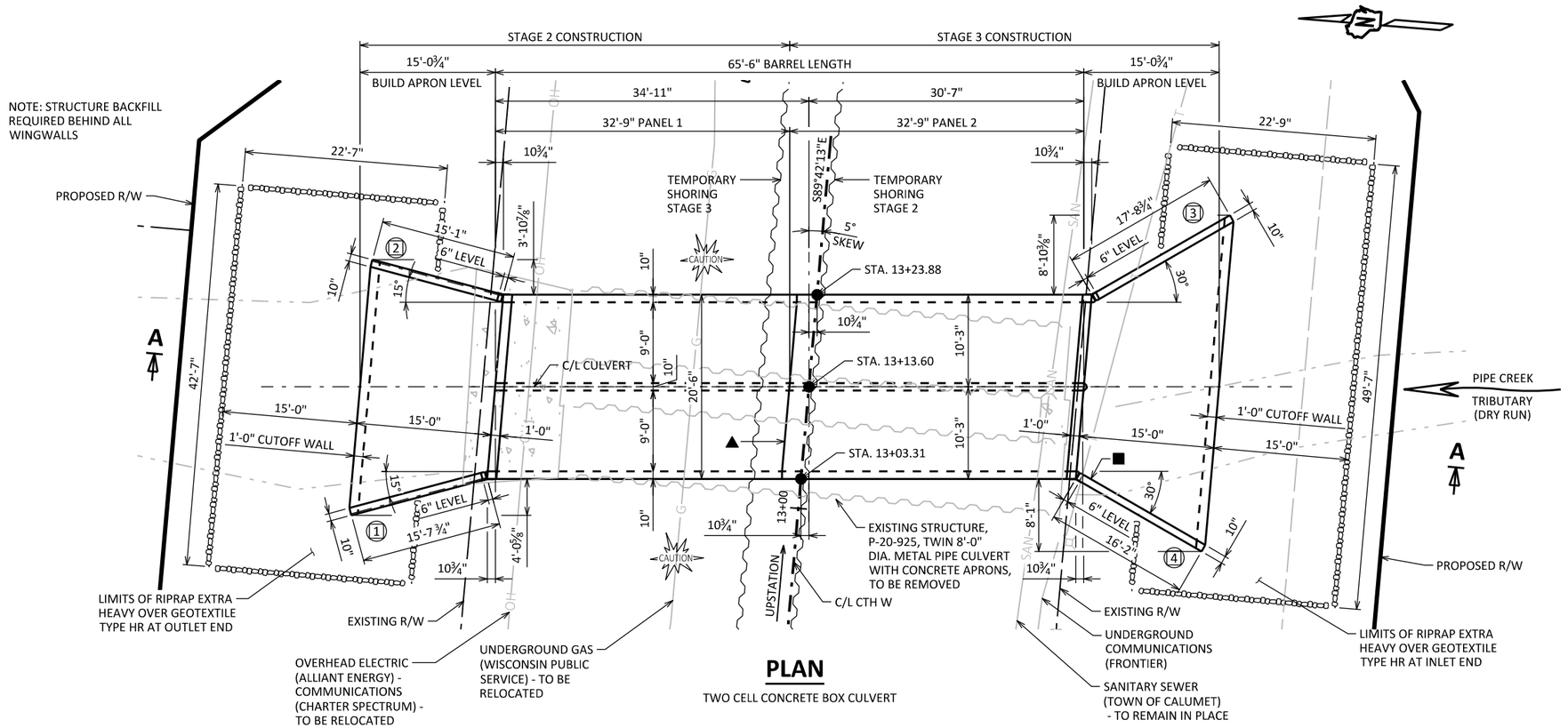
DATE 1/31/2024 PLATE NO. W08-7.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 68 E

7

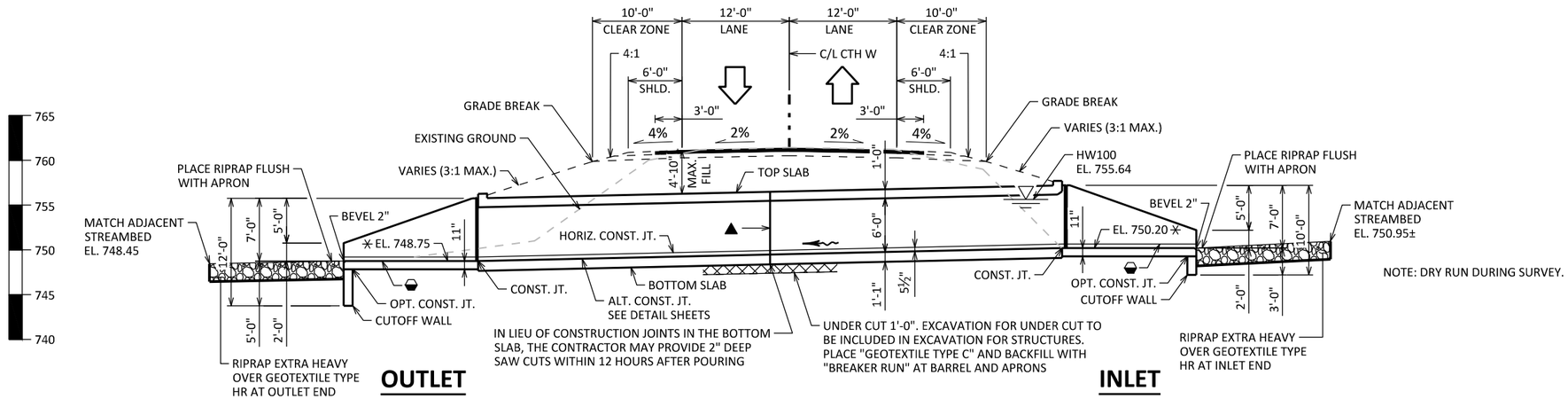
STATE PROJECT NUMBER

4810-02-71



PLAN

TWO CELL CONCRETE BOX CULVERT



OUTLET

INLET

SECTION A-A

NORMAL TO C/L CTH W

NOTE: THE INVERTS ARE SET ABOUT 0.5-FT BELOW EXISTING STREAMBED ELEVATION.

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.	EASTING (X)	NORTHING (Y)
BM 1	11+73.96, 31.91'RT	RR SPIKE IN PPOL	761.96	849141.6350	435518.9270
BM 2	15+44.36, 30.93' LT	RR SPIKE IN PPOL	765.61	849512.2450	435580.0840

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.57
OPERATING RATING: RF = 2.03
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY:
ALL — f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — f_y = 60,000 PSI

EARTH LOAD:

DESIGNED FOR FILL HEIGHT RANGE OF 3.0 TO 5.0 FEET

HYDRAULIC DATA

100-YEAR FREQUENCY:

Q_{100}= 620 C.F.S.
V_{100}= 10.35 F.P.S.
HW_{100}= EL. 755.64
WATERWAY AREA = 60 SQ. FT.
DRAINAGE AREA = 1.6 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 8

2-YEAR FREQUENCY:

Q_2= 160 C.F.S.
V_2= 7.77 F.P.S.
HW_2= EL. 753.92

TRAFFIC DATA

FEATURE ON: CTH W

ADT = 500 (2027)
ADT = 560 (2047)
R.D.S. = 35 MPH

LEGEND

- (X) INDICATES WING WALL NUMBER
- ▲ VERTICAL CONSTRUCTION JOINT
- ■ NAME PLATE LOCATION
- ✳ INVERT ELEVATIONS ARE SET 6" BELOW THE EXISTING STREAMBED ELEVATION.
- BUILD APRON LEVEL

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION, NOTES, AND QUANTITIES
3. SUBSURFACE EXPLORATION
4. BARREL REINFORCEMENT
5. BARREL DETAILS
6. OUTLET APRON DETAILS
7. INLET APRON DETAILS
8. APRON DETAILS
9. APRON BAR STEEL DETAILS



06/17/2026

NO.	DATE	REVISION	BY

JT ENGINEERING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED _____ JLR 08/13/26
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE V-20-189

CTH W OVER PIPE CREEK TRIBUTARY

COUNTY	TOWN
FOND DU LAC	CALUMET

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
ZRT	CJM	ZRT	VJD/CJM

GENERAL PLAN

SHEET 1 OF 9
69

SCALE =

STRUCTURE DESIGN CONTACTS:

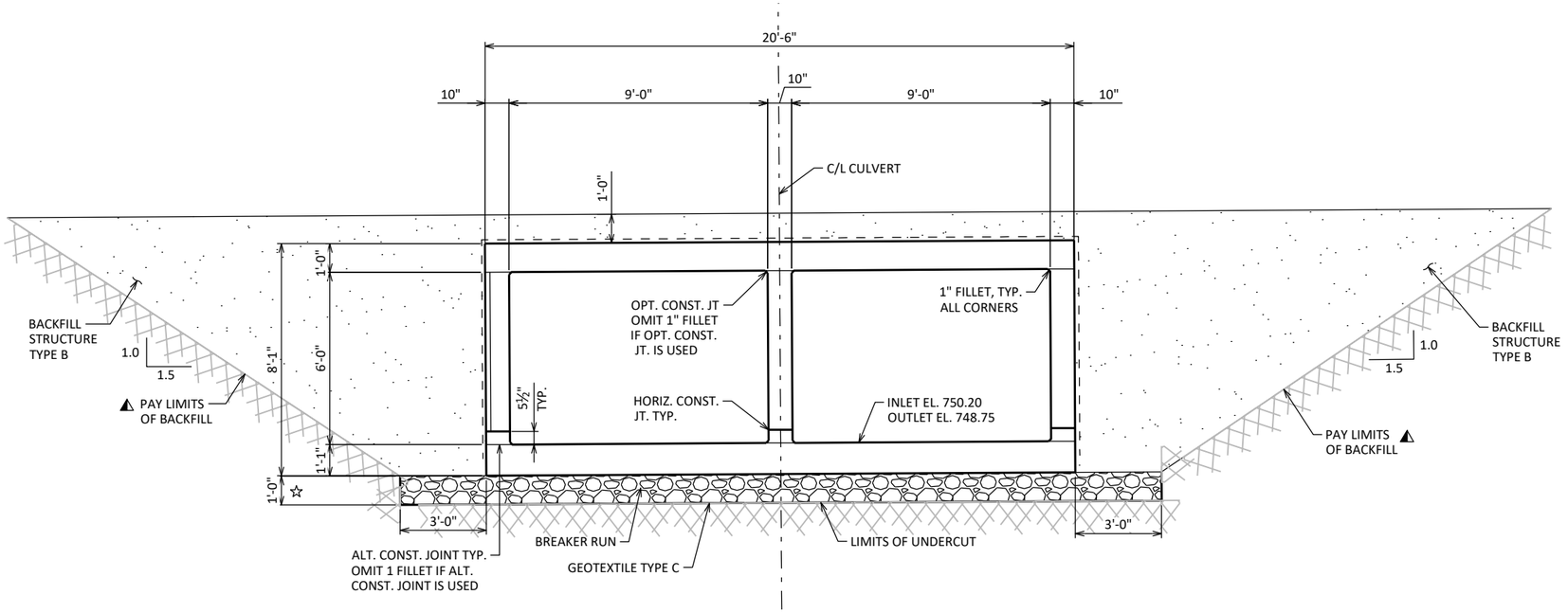
AARON BONK 608-261-0261
CHRISTOPHER MARCUM, PE 715-861-4823

I.D. 4810-02-00

DATE: APRIL 2026

8

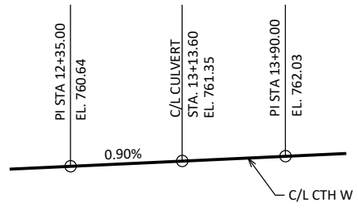
8



SECTION THRU BOX CULVERT

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
203.0220	REMOVING STRUCTURE P-20-925	EACH	1
206.2001	EXCAVATION FOR STRUCTURES CULVERTS V-20-189	EACH	1
210.2500	BACKFILL STRUCTURE TYPE B	TON	1,105
311.0110	BREAKER RUN	TON	170
504.0100	CONCRETE MASONRY CULVERTS	CY	185
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	18,450
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,660
511.1200	TEMPORARY SHORING V-20-189	SF	1,585
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	23
606.0400	RIPRAP EXTRA-HEAVY	CY	175
645.0105	GEOTEXTILE TYPE C	SY	330
645.0120	GEOTEXTILE TYPE HR	SY	335
	NON-BID ITEMS		
	FILLER	SIZE	½", ¾"
	NAME PLATE	EACH	1



PROFILE GRADE LINE

STATE PROJECT NUMBER

4810-02-71

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS V-20-189" SHALL BE THE EXISTING GROUNDLINE.

EXISTING STRUCTURE P-20-925 IS A TWIN 8'-0" DIA. METAL PIPE CULVERT WITH CONCRETE APRONS AND IS TO BE REMOVED. REMOVAL INCLUDING ALL CONCRETE ATTACHED TO THE STRUCTURE SHALL BE INCLUDED IN THE BID ITEM "REMOVING STRUCTURE P-20-925".

ALL VOLUME WHICH CANNOT BE PLACED BEFORE CULVERT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL WITHIN THE LENGTH OF THE CULVERT INCLUDING THE APRON WING WALLS.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE B" IS REQUIRED ON THE BOX CULVERTS SIDES AND BEHIND APRON WING WALLS.

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

THE ALTERNATE CUT OFF WALL ON DETAIL SHOWN ON SHEET 8 MAY BE USED IN LIEU OF THE CAST-ON-PLACE CONCRETE CUT OF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUT OFF WALLS.

PLACE 18" MIN. WIDE RUBBERIZED MEMBRANE WATERPROOFING UP WALLS AND ACROSS TOP SLAB AT VERTICAL CONSTRUCTION JOINTS. EXTEND 6" MIN. BELOW TOP OF BOTTOM SLAB

PREFORMED FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M153 TYPES I, II, OR III OR M213.

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES IS NOT GUARANTEED TO BE ACCURATE OF ALL INCLUSIVE. THE CONTRACTORS IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PLACE RIPRAP EXTRA HEAVY AND GEOTEXTILE TYPE HR TO THE EXTENTS SHOWN ON SHEET 1. ENSURE GEOTEXTILE TYPE HR IS COMPLETELY BURIED BENEATH RIPRAP AND TRIM LOOSE EDGES FLUSH WITH ADJACENT SURFACES.

PRECAST BOX CULVERT AND WING WALL ARE NOT ALLOWED

STREAM DIVERSION DURING CONSTRUCTION TO BE PAID UNDER ROADWAY ITEM "TEMPORARY STREAM DIVERSION CULVERT V-20-189". SEE SPECIAL PROVISIONS AND ROADWAY PLANS FOR DIVERSION DETAILS.

LOCATE NAME PLATE ON WING 4. FACE NAME PLATE UPSTATION.

LEGEND

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

☆ IN LIEU OF USING BREAKER RUN FOR THE BOX CONSTRUCTION PLATFORM, THE CONTRACTOR MAY ELECT TO SUBSTITUTE COARSE AGGREGATE, AASHTO NO. 67 OR AASHTO NO. 4 IN ACCORDANCE WITH STANDARD SPEC 310 AND 604, RESPECTIVELY, SELECT CRUSHED MATERIAL, OR OTHER GRANULAR MATERIAL AS APPROVED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR BASE STABILITY WITH ANY SUBSTITUTED MATERIAL. THE REGION GEOTECHNICAL ENGINEER MAYBE CONTACTED TO DETERMINE IF "OTHER GRANULAR MATERIAL" IS ACCEPTABLE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE V-20-189

DRAWN BY ZRT | PLANS CK'D VJD/CJM

CROSS SECTION, NOTES AND QUANTITIES

SHEET 2 OF 9

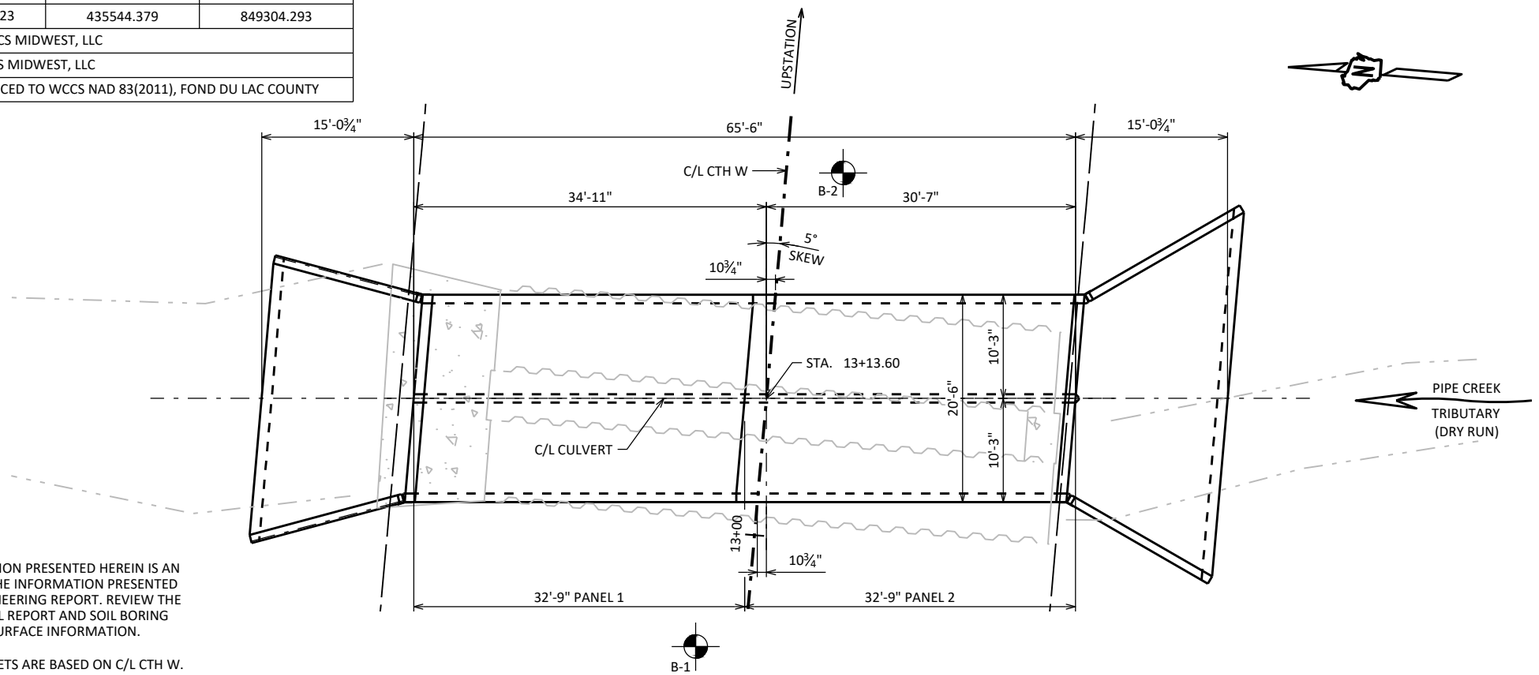
70

SCALE =

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	JULY 11, 2023	435555.086	849256.373
2	JULY 11, 2023	435544.379	849304.293
BORINGS COMPLETED BY: ECS MIDWEST, LLC			
REPORT COMPLETED BY: ECS MIDWEST, LLC			
ALL COORDINATES REFERENCED TO WCCS NAD 83(2011), FOND DU LAC COUNTY			

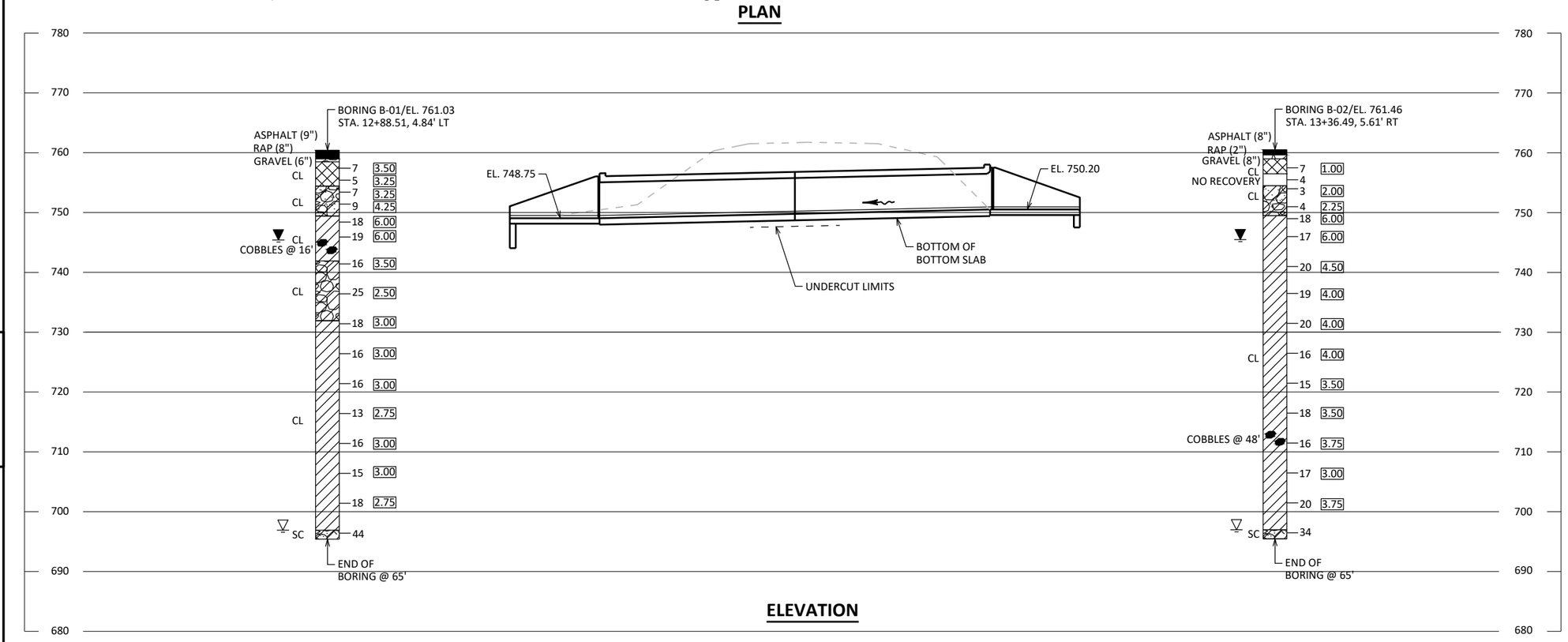


PLAN

NOTE

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

BORING STATIONS AND OFFSETS ARE BASED ON C/L CTH W.

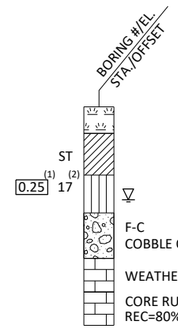


ELEVATION

MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STATE PROJECT NUMBER

4810-02-71

STRUCTURE V-20-189

DRAWN BY ZRT | PLANS CK'D VJD/CJM

SUBSURFACE EXPLORATION

SHEET 3 OF 9

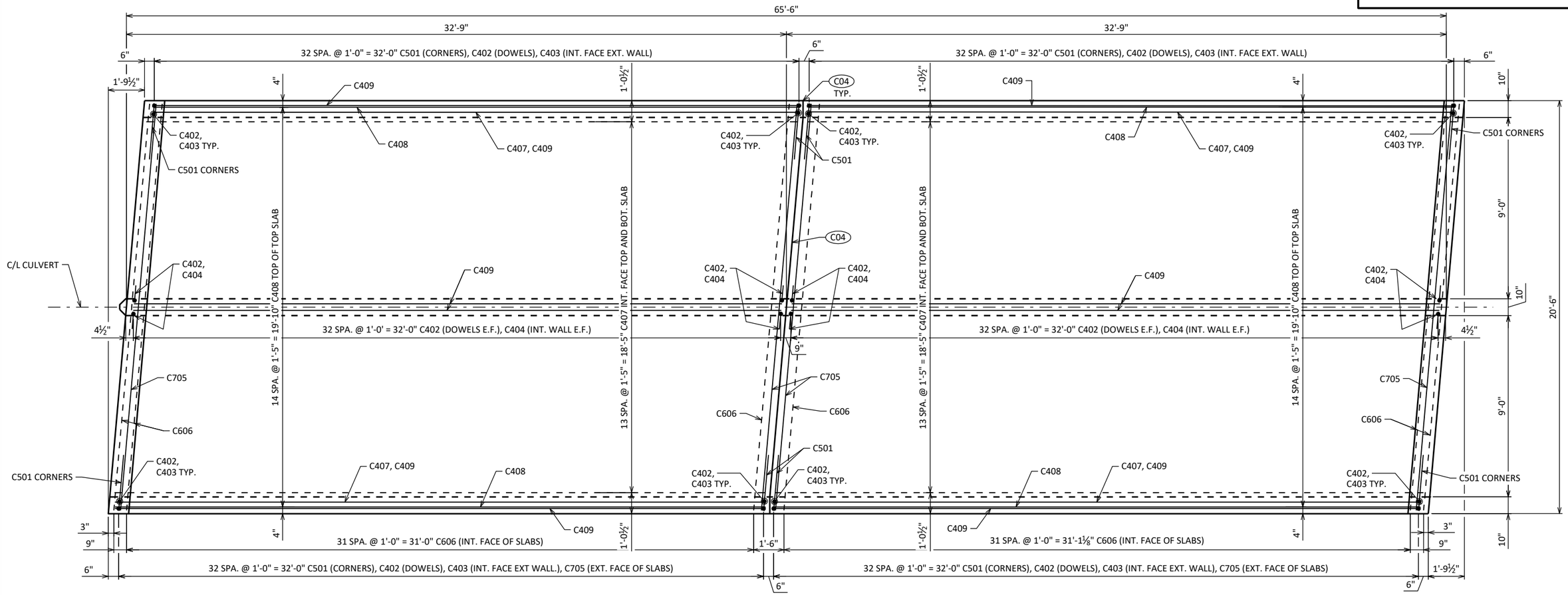
71

SCALE = N.T.S.

8

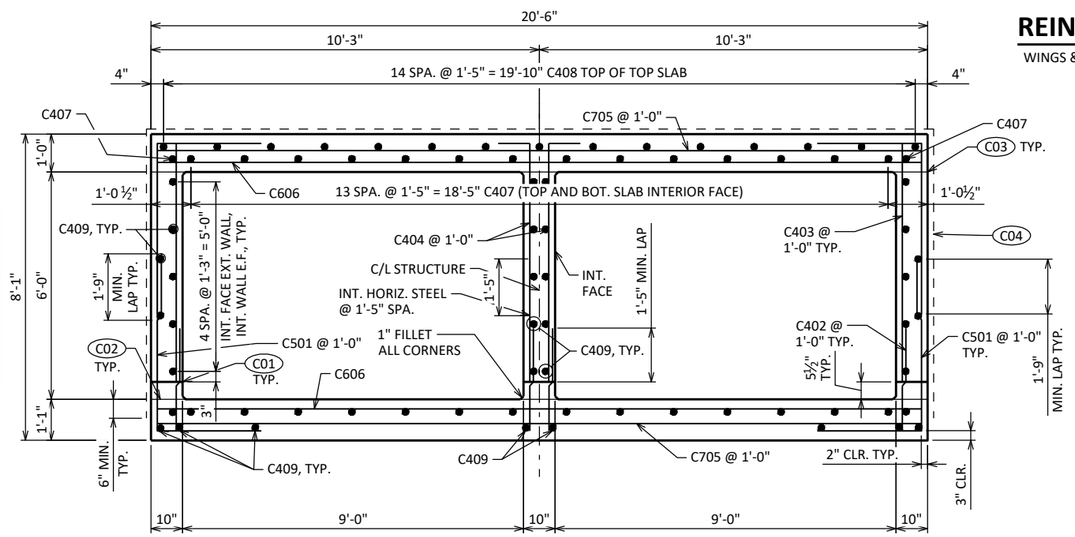
8

STATE PROJECT NUMBER
4810-02-71



REINFORCEMENT PLAN

WINGS & APRONS NOT SHOWN FOR CLARITY



SECTION THRU BARREL

SHOWING BARREL REINFORCEMENT

LEGEND

- C01 HORIZONTAL CONSTRUCTION JOINT
- C02 ALT. CONST. JOINT OMIT 1" FILLET IF ALT. CONST. JOINT IS USED
- C03 OPTIONAL CONST. JOINT OMIT 1" FILLET IF OPTIONAL CONST. JOINT IS USED
- C04 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING (RMW) UP WALLS AND ACROSS TOP OF SLAB AND VERTICAL CONSTRUCTION JOINTS. EXTEND RMW 6" MIN. BELOW THE TOP OF BOT. SLAB.

E.F. - EACH FACE

NOTES

FOR BARREL BILL OF BARS, SEE BARREL DETAIL SHEET 5

FOR CORNER AND INLET NOSE DETAILS, SEE APRON DETAILS ON SHEET 5

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE V-20-189

DRAWN BY ZRT/RAC | PLANS CK'D CJM

BARREL REINFORCEMENT

SHEET 4 of 9
72

SCALE = N.T.S.

8

8

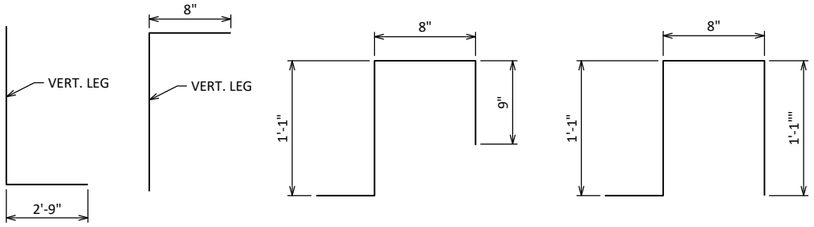
STATE PROJECT NUMBER

4810-02-71

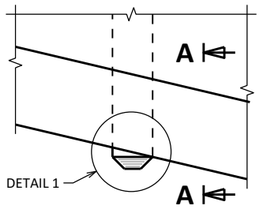
BILL OF BARS - BARREL

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

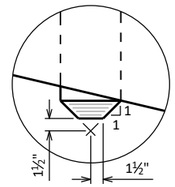
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
C501		264	7'-2"	X		CORNERS - TOP & BOT. SLAB
C402		264	2'-9"			DOWEL - BOT. SLAB
C403		132	6'-3"			WALL - VERT. - EXT.
C404		132	6'-11"	X		WALL - VERT. - INT.
C705		132	20'-2"			TOP & BOT. SLAB - TRANS. - EXT.
C606		132	20'-2"			TOP & BOT. SLAB - TRANS. - INT.
C407		64	32'-4"			TOP & BOT. SLAB - LONGIT. - INT.
C408		30	32'-4"			TOP SLAB - LONGIT. - EXT.
C409		64	32'-4"			WALL - LONGIT.
C510		98	4'-0"			CONST. JT. - LONGIT.
C311		28	3'-0"			INLET - HEADER BAR
C312		28	3'-4"			OUTLET - HEADER BAR
C413		4	20'-3"			INLET & OUTLET - HEADER - TRANS.



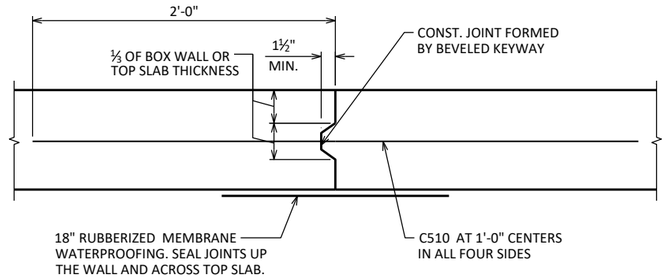
C501 **C404** **C311** **C312**



PLAN

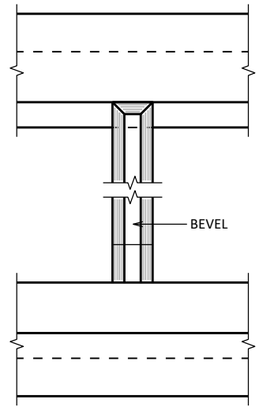


DETAIL 1

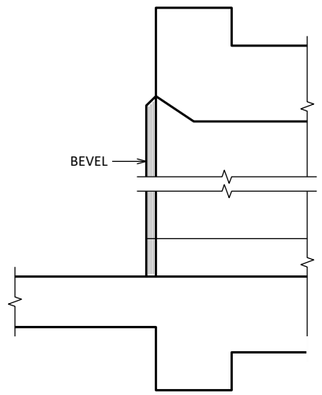


VERTICAL CONSTRUCTION JOINT

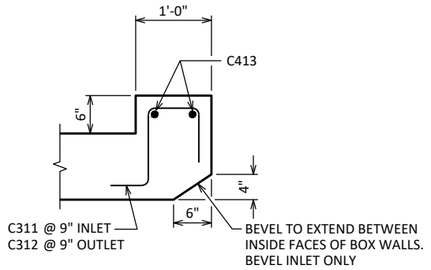
IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING. #5 BARS 4'-0" AT 1'-0" CENTERS REQUIRED.



ELEVATION

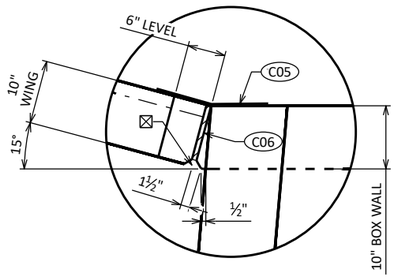


SECTION A-A

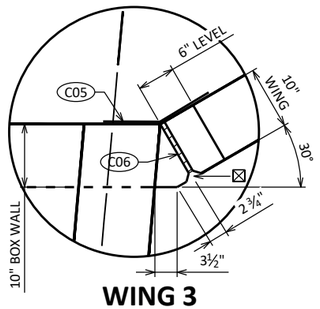


SECTION THRU HEADER

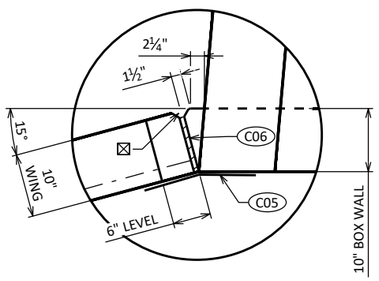
INLET NOSE DETAILS



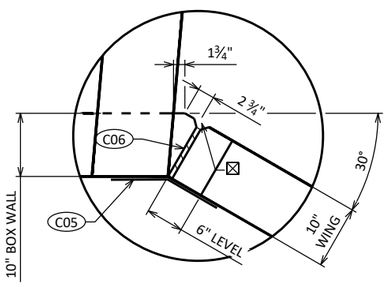
WING 2



WING 3

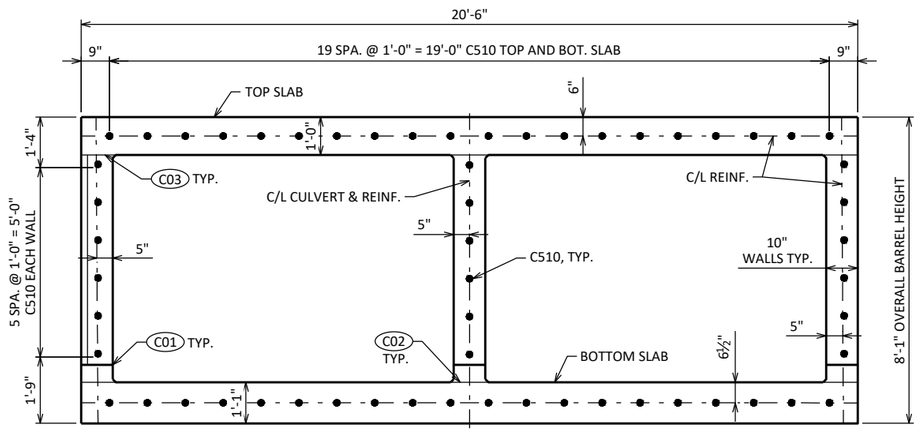


WING 1



WING 4

CORNER DETAILS



SECTION THRU CONSTRUCTION JOINT

SHOWN REINFORCEMENT LAYOUT
RMW NOT SHOWN

LEGEND

- C01 HORIZONTAL CONSTRUCTION JOINT
- C02 ALT. CONST. JOINT OMIT 1" FILLET IF ALT. CONST. IS USED
- C03 OPTIONAL CONST. JOINT OMIT 1" FILLET IF OPTIONAL CONST. JOINT IS USED
- C05 18" RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM HORIZ. CONST. JT. TO TOP OF WALL (FLUSH WITH FACE OF CONCRETE)
- C06 ¾" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.
- ⊠ 1-INCH BEVEL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE V-20-189

DRAWN BY ZRT/RAC | PLANS CK'D CJM

BARREL DETAILS

SHEET 5 OF 9

73

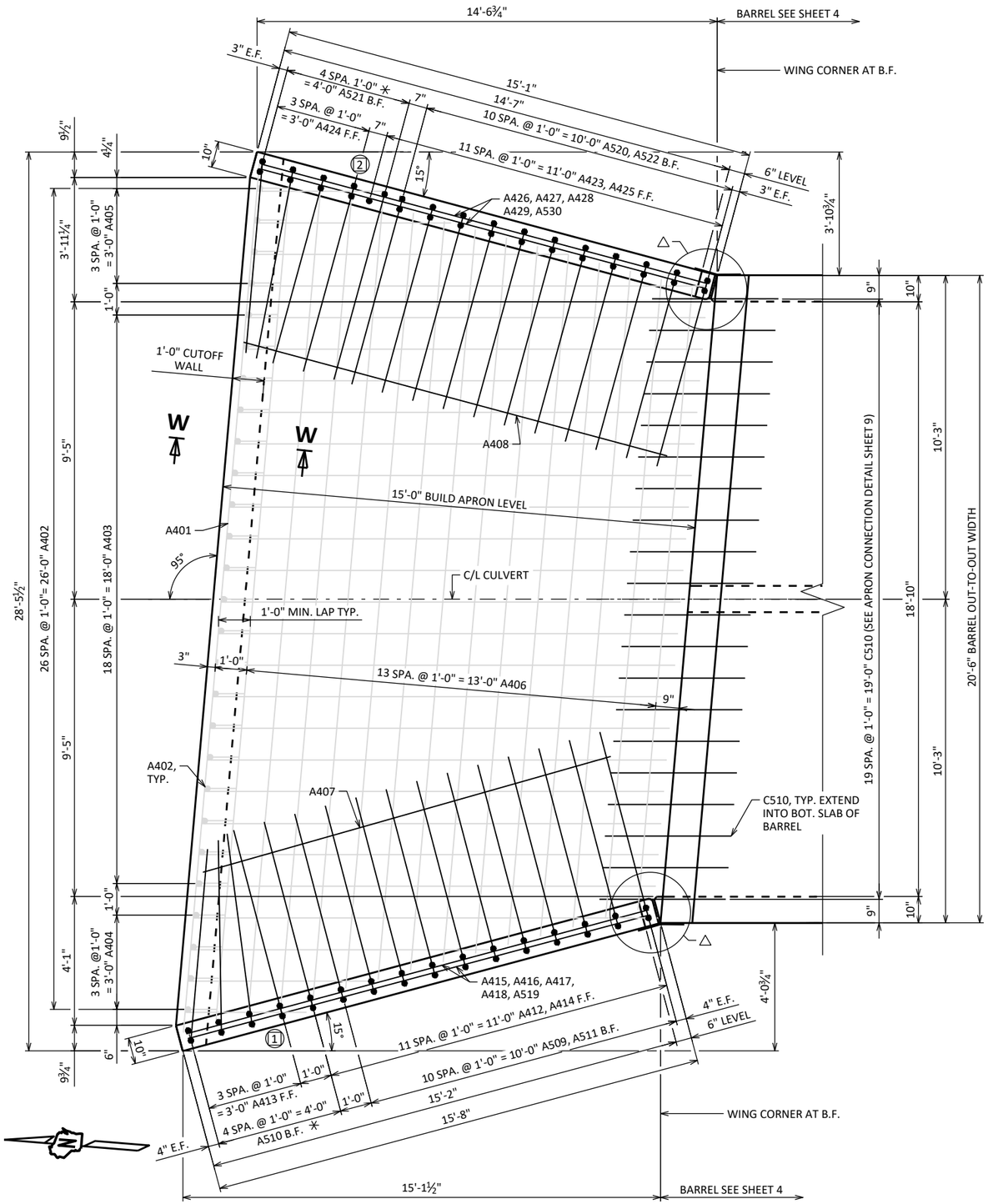
SCALE = N.T.S.

8

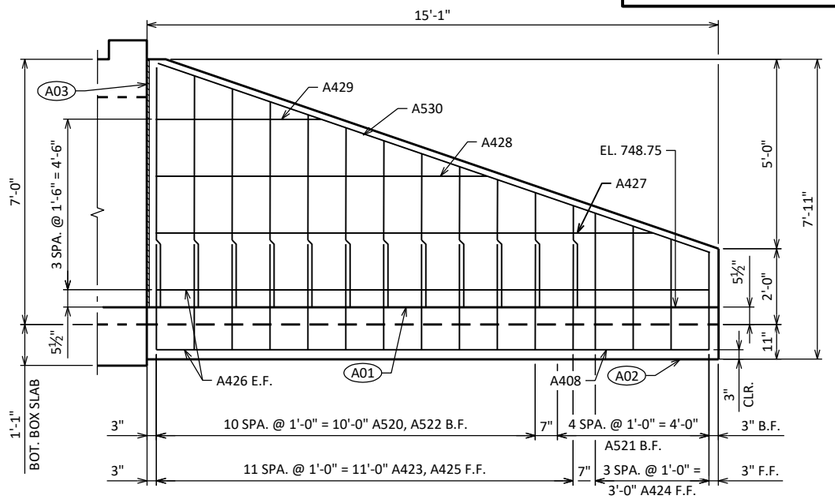
8

STATE PROJECT NUMBER

4810-02-71

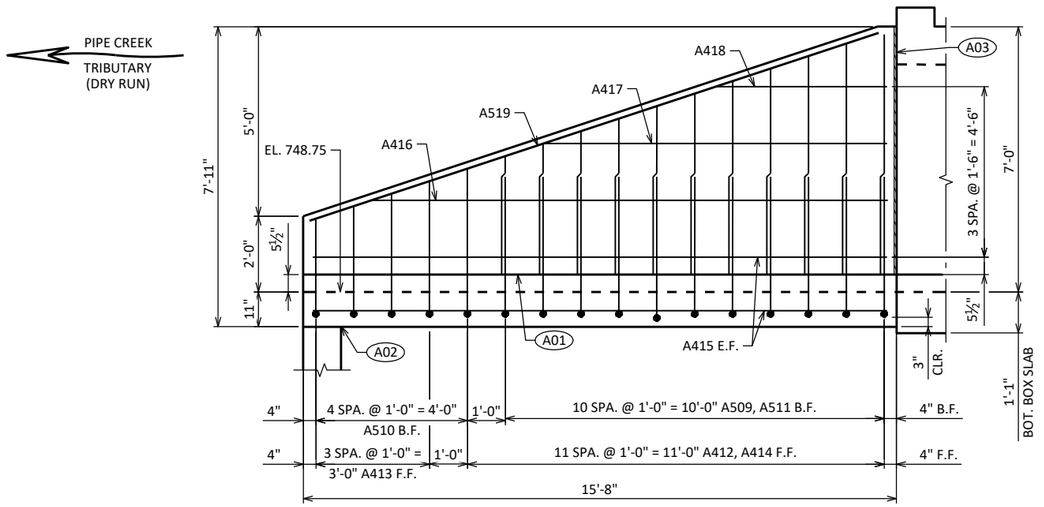


OUTLET APRON PLAN



WING 2

LOOKING AT BACK FACE SHOWING FRONT FACE REINFORCEMENT



WING 1

LOOKING AT BACK FACE SHOWING BACK FACE REINFORCEMENT

LEGEND

- (A01) HORIZONTAL CONSTRUCTION JOINT
- (A02) OPTIONAL CONSTRUCTION JOINT
- (A03) ¾" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING. FILLER IS INCLUDED IN WING LENGTH
- △ SEE CORNER DETAILS ON SHEET 5
- (X) WING NUMBER
- ✳ FAN BARS WHEN NECESSARY

B.F. = BACK FACE
F.F. = FRONT FACE
E.F. = EACH FACE

NOTES

SEE SECTION W-W ON SHEET 8.

FOR BILL OF BARS, SEE APRON DETAILS ON SHEET 9.

FOR SECTION THRU CUTOFF WALLS, SEE APRON DETAILS ON SHEET 8.

DO NOT EXTEND REINFORCEMENT THRU JOINT FILLER.

SEE CORNER DETAILS SHEET 5

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE V-20-189

DRAWN BY ZRT/RAC | PLANS CK'D CJM

OUTLET APRON DETAILS

SHEET 6 OF 9
74

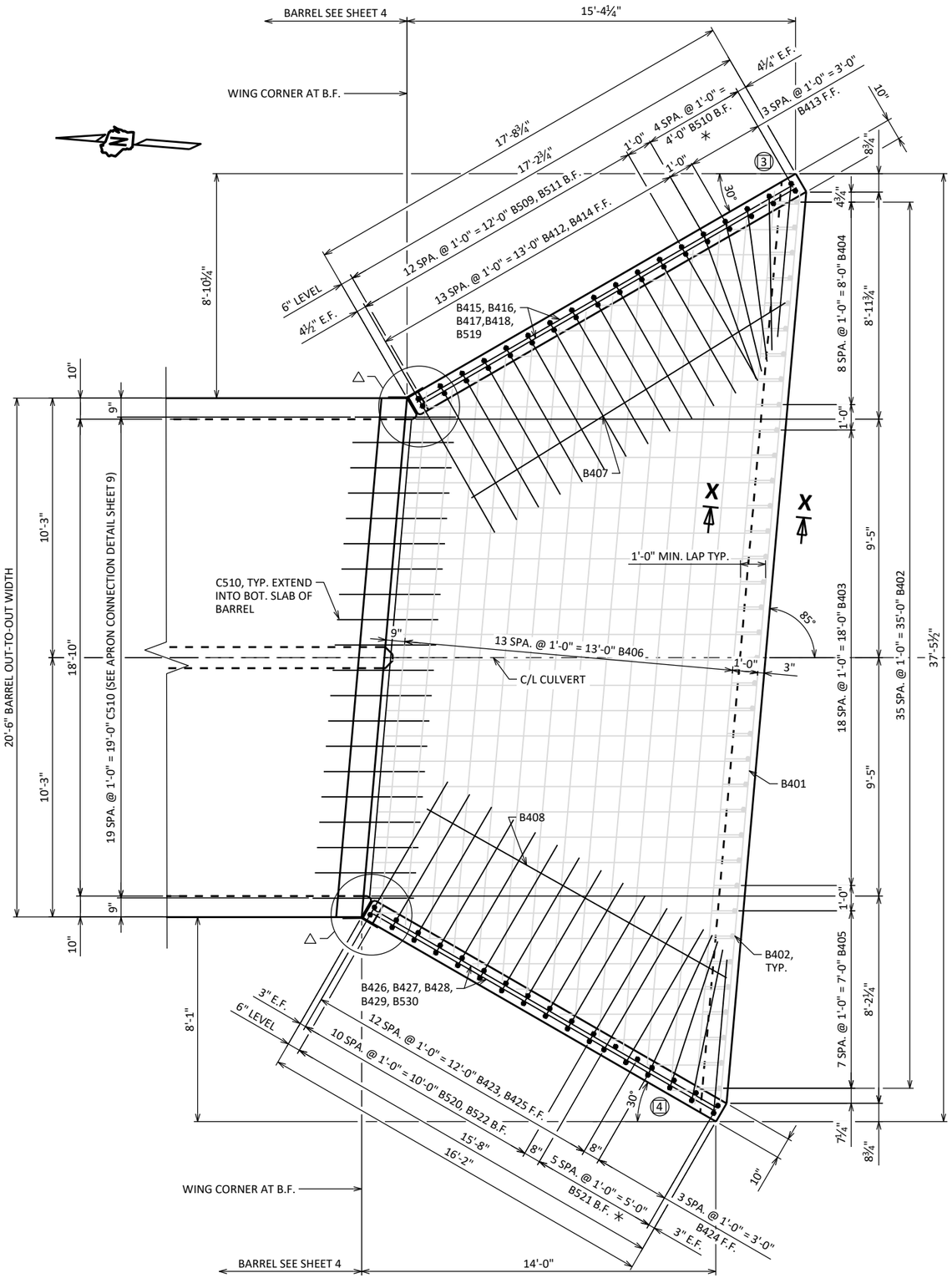
SCALE = N.T.S.

8

8

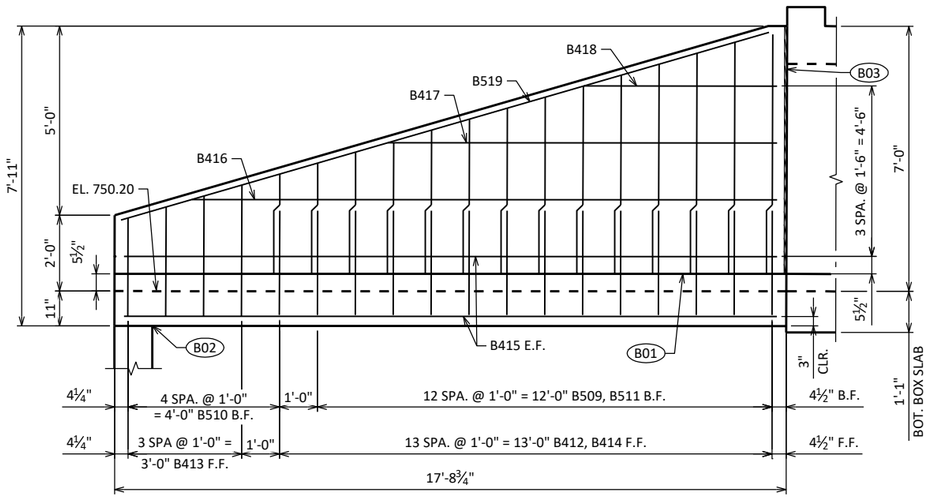
STATE PROJECT NUMBER

4810-02-71



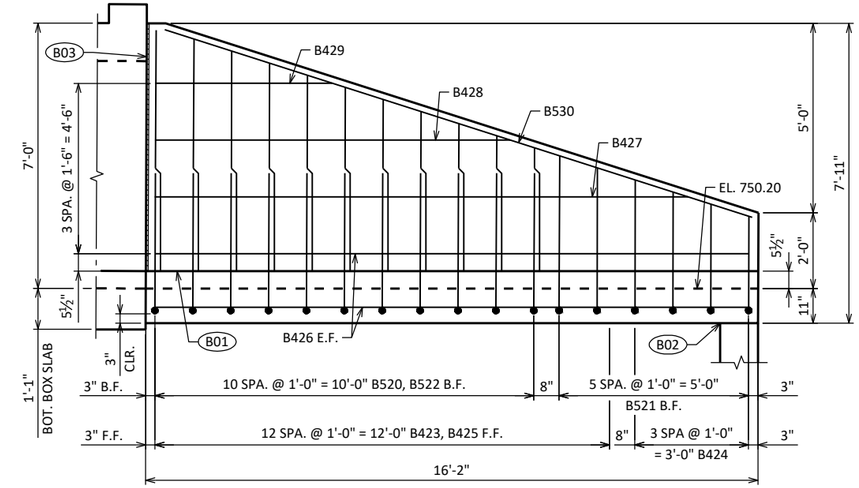
INLET APRON PLAN

PIPE CREEK TRIBUTARY (DRY RUN)



WING 3

LOOKING AT BACK FACE SHOWING FRONT FACE REINFORCEMENT



WING 4

LOOKING AT BACK FACE SHOWING BACK FACE REINFORCEMENT
WING 3 SIMILAR

LEGEND

- (B01) HORIZONTAL CONSTRUCTION JOINT
- (B02) OPTIONAL CONSTRUCTION JOINT
- (B03) ¾" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING. FILLER IS INCLUDED IN WING LENGTH
- △ SEE CORNER DETAILS ON SHEET 5
- (X) WING NUMBER
- ✳ FAN BARS WHEN NECESSARY

B.F. = BACK FACE
F.F. = FRONT FACE
E.F. = EACH FACE

NOTES

SEE SECTION X-X ON SHEET 8.

FOR BILL OF BARS, SEE APRON DETAILS ON SHEET 9.

FOR INLET NOSE DETAILS, SEE SHEET 8.

FOR SECTION THRU CUTOFF WALLS, SEE APRON DETAILS ON SHEET 8.

DO NOT EXTEND REINFORCEMENT THRU JOINT FILLER.

SEE CORNER DETAILS SHEET 5

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE V-20-189

DRAWN BY ZRT/RAC | PLANS CK'D CJM

INLET APRON DETAILS

SHEET 7 OF 9
75

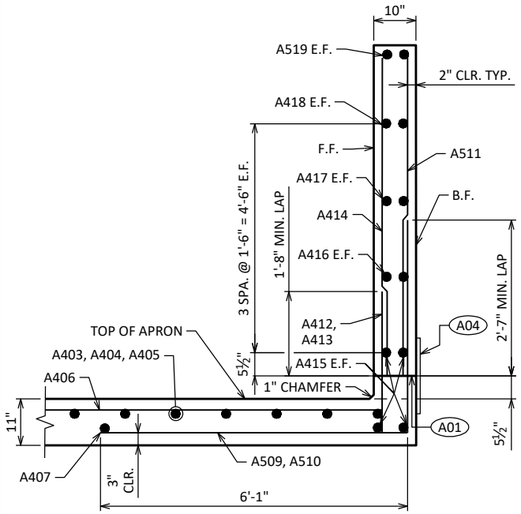
SCALE = N.T.S.

8

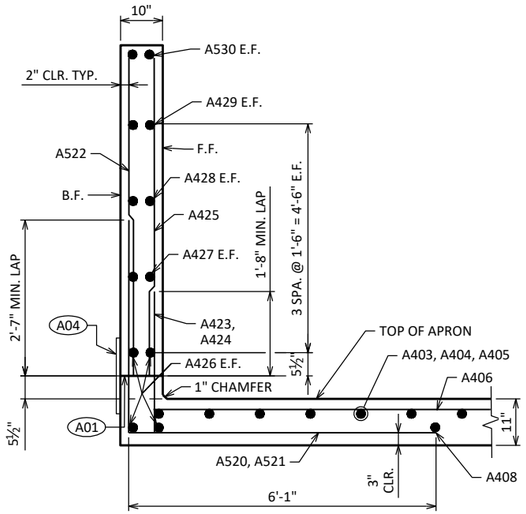
8

STATE PROJECT NUMBER

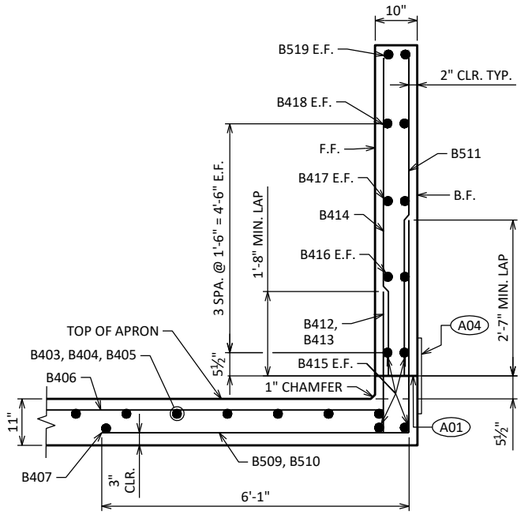
4810-02-71



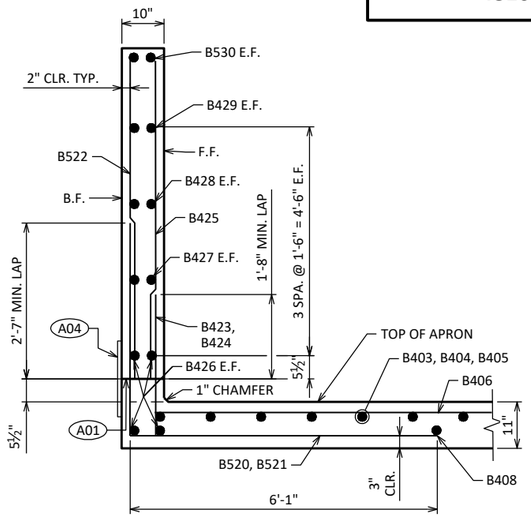
SECTION THRU WING 1



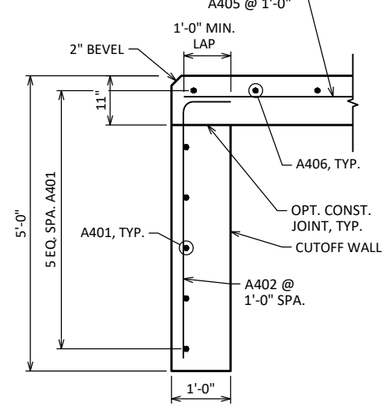
SECTION THRU WING 2



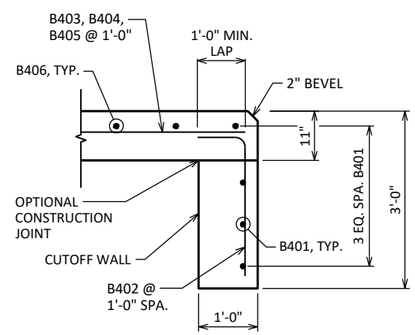
SECTION THRU WING 3



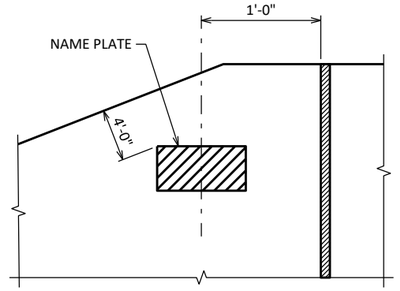
SECTION THRU WING 4



SECTION W-W

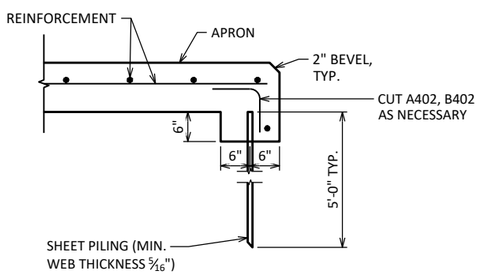


SECTION X-X



NAME PLATE DETAIL

LOOKING AT FRONT FACE OF WING.
LOCATE AT WING 4 ONLY.



ALTERNATE CUTOFF WALL

THE ABOVE ALTERNATIVE MAY BE USED IN LIEU OF CAST-IN-PLACE CONCRETE CUTOFF WALLS. PAYMENT WILL BE BASED ON THE CONCRETE CUTOFF WALLS.

LEGEND

(A01) HORIZONTAL CONSTRUCTION JOINT

(A04) 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZ. CONST. FOR ENTIRE LENGTH OF WING, TYP.

B.F. = BACK FACE
F.F. = FRONT FACE
E.F. = EACH FACE

NOTES

FOR BILL OF BARS, SEE SHEET 9.

FOR SECTION W-W LOCATION, SEE SHEET 6.

FOR SECTION X-X LOCATION, SEE SHEET 7.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE V-20-189

DRAWN BY ZRT/RAC | PLANS CK'D CJM

APRON DETAILS

SHEET 8 OF 9

76

SCALE = N.T.S.

8

8

STATE PROJECT NUMBER

4810-02-71

BILL OF BARS - OUTLET APRON

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		6	26'-7"			CUTOFF WALL HORIZ.
A402		27	5'-6"	X		CUTOFF WALL VERT.
A403		19	14'-8"			APRON LONG.
A404		4	9'-1"		◭	APRON LONG. WING 1
A405		4	9'-2"		◭	APRON LONG WING 2
A406		14	23'-9"		◭	APRON TRANS.
A407		1	12'-9"			APRON WING 1 SPACER
A408		1	13'-6"			APRON WING 2 SPACER
A509	X	11	9'-9"	X		WING 1 VERT. B.F.
A510	X	5	9'-2"	X	◭	WING 1 VERT. B.F.
A511	X	11	4'-8"		◭	WING 1 VERT. B.F.
A412	X	12	2'-10"			WING 1 VERT. F.F.
A413	X	4	3'-1"		◭	WING 1 VERT. F.F.
A414	X	12	4'-6"		◭	WING 1 VERT. F.F.
A415	X	4	15'-2"			WING 1 HORIZ. E.F.
A416	X	2	13'-7"			WING 1 HORIZ. E.F.
A417	X	2	9'-0"			WING 1 HORIZ. E.F.
A418	X	2	4'-6"			WING 1 HORIZ. E.F.
A519	X	2	15'-7"			WING 1 DIAG. E.F.
A520	X	11	9'-9"	X		WING 2 VERT. B.F.
A521	X	5	9'-2"	X	◭	WING 2 VERT. B.F.
A522	X	11	4'-8"		◭	WING 2 VERT. B.F.
A423	X	12	2'-10"			WING 2 VERT. F.F.
A424	X	4	3'-0"		◭	WING 2 VERT. F.F.
A425	X	12	4'-6"		◭	WING 2 VERT. F.F.
A426	X	4	14'-7"			WING 2 HORIZ. E.F.
A427	X	2	13'-1"			WING 2 HORIZ. E.F.
A428	X	2	8'-9"			WING 2 HORIZ. E.F.
A429	X	2	4'-4"			WING 2 HORIZ. E.F.
A530	X	2	15'-1"			WING 2 DIAG. E.F.

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

BILL OF BARS - INLET APRON

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
B401		4	36'-1"			CUTOFF WALL HORIZ.
B402		36	3'-6"	X		CUTOFF WALL VERT.
B403		19	14'-8"			APRON LONG.
B404		9	7'-10"		◭	APRON LONG. WING 3
B405		8	8'-2"		◭	APRON LONG WING 4
B406		14	28'-7"		◭	APRON TRANS.
B407		1	12'-9"			APRON WING 3 SPACER
B408		1	12'-10"			APRON WING 4 SPACER
B509	X	13	9'-9"	X		WING 3 VERT. B.F.
B510	X	5	9'-1"	X	◭	WING 3 VERT. B.F.
B511	X	13	4'-7"		◭	WING 3 VERT. B.F.
B412	X	14	2'-10"			WING 3 VERT. F.F.
B413	X	4	3'-0"		◭	WING 3 VERT. F.F.
B414	X	14	4'-5"		◭	WING 3 VERT. F.F.
B415	X	4	17'-3"			WING 3 HORIZ. E.F.
B416	X	2	15'-5"			WING 3 HORIZ. E.F.
B417	X	2	10'-3"			WING 3 HORIZ. E.F.
B418	X	2	5'-1"			WING 3 HORIZ. E.F.
B519	X	2	17'-5"			WING 3 DIAG. E.F.
B520	X	11	9'-9"	X		WING 4 VERT. B.F.
B521	X	6	9'-3"	X	◭	WING 4 VERT. B.F.
B522	X	11	4'-9"		◭	WING 4 VERT. B.F.
B423	X	13	2'-10"			WING 4 VERT. F.F.
B424	X	4	3'-0"		◭	WING 4 VERT. F.F.
B425	X	13	4'-5"		◭	WING 4 VERT. F.F.
B426	X	4	15'-8"			WING 4 HORIZ. E.F.
B427	X	2	14'-0"			WING 4 HORIZ. E.F.
B428	X	2	9'-4"			WING 4 HORIZ. E.F.
B429	X	2	4'-8"			WING HORIZ. E.F.
B530	X	2	16'-2"			WING 4 DIAG. E.F.

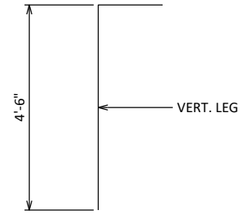
◭ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE - OUTLET APRON

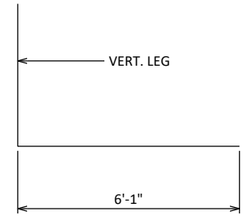
BAR MARK	NO. REQ'D.	LENGTH
A404	1 SERIES OF 4	3'-10" TO 14'-4"
A405	1 SERIES OF 4	3'-11" TO 14'-5"
A406	1 SERIES OF 14	20'-3" TO 27'-3"
A510	1 SERIES OF 5	8'-6" TO 9'-10"
A511	1 SERIES OF 11	3'-1" TO 6'-3"
A413	1 SERIES OF 4	2'-7" TO 3'-7"
A414	1 SERIES OF 12	2'-8" TO 6'-4"
A521	1 SERIES OF 5	8'-6" TO 9'-10"
A522	1 SERIES OF 11	3'-0" TO 6'-4"
A424	1 SERIES OF 4	2'-6" TO 3'-6"
A425	1 SERIES OF 12	2'-8" TO 6'-4"

BAR SERIES TABLE - INLET APRON

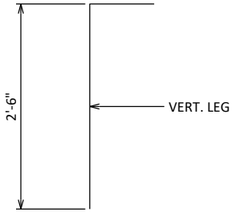
BAR MARK	NO. REQ'D.	LENGTH
B404	1 SERIES OF 9	1'-5" TO 14'-3"
B405	1 SERIES OF 8	2'-0" TO 14'-4"
B406	1 SERIES OF 14	21'-0" TO 36'-2"
B510	1 SERIES OF 5	8'-6" TO 9'-8"
B511	1 SERIES OF 13	2'-10" TO 6'-4"
B413	1 SERIES OF 4	2'-7" TO 3'-5"
B414	1 SERIES OF 14	2'-7" TO 6'-3"
B521	1 SERIES OF 6	8'-5" TO 10'-1"
B522	1 SERIES OF 11	3'-2" TO 6'-4"
B424	1 SERIES OF 4	2'-6" TO 3'-6"
B425	1 SERIES OF 13	2'-6" TO 6'-4"



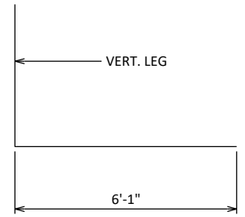
A402



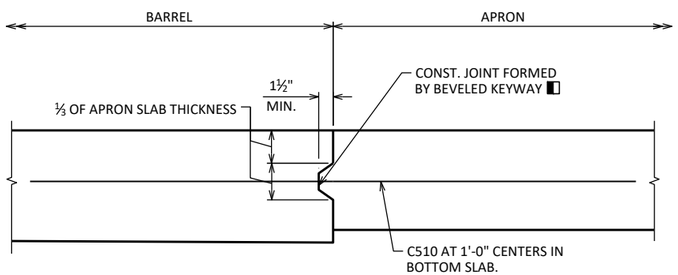
A509, A510, A520, A521



B402



B509, B510, B520, B521



APRON CONNECTION DETAIL

◧ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING. #5 BARS 4'-0" AT 1'-0" CENTERS REQUIRED.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE V-20-189

DRAWN BY ZRT/RAC | PLANS CK'D CJM

APRON BAR STEEL DETAILS

SHEET 9 OF 9

77

SCALE = N.T.S.

DIVISION 1 -TEMPORARY CHANNEL

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.35	
1+10.00	110.00	0.00	7.31	0.00	44.52	0	0	0	0	0	0
1+20.00	120.00	10.00	0.00	0.00	0.00	1	0	8	1	11	-10
1+30.00	130.00	10.00	0.00	0.00	0.00	0	0	0	1	11	-10
1+47.00	147.00	17.00	100.96	0.00	0.00	32	0	0	33	11	22
1+55.12	155.12	8.12	116.00	0.00	0.00	33	0	0	66	11	55
1+56.00	156.00	0.88	0.00	0.00	0.00	2	0	0	68	11	57
2+41.00	241.00	85.00	0.00	0.00	0.00	0	0	0	68	11	57
2+41.89	241.89	0.89	118.34	0.00	0.00	2	0	0	70	11	59
2+50.00	250.00	8.11	105.84	0.00	0.59	34	0	0	104	11	93
2+60.00	260.00	10.00	62.14	0.00	12.08	31	0	2	135	14	122
2+70.00	270.00	10.00	16.66	0.00	0.00	15	0	2	150	16	134
2+74.35	274.35	4.35	2.57	0.00	2.55	2	0	0	152	16	136

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

9

9

PROJECT NO: 4810-02-71	HWY: CTH W	COUNTY: FOND DU LAC	EARTHWORK DATA	SHEET: 78	E

FILE NAME : X:\DesignFiles\QMP\090101_eq.pptx PLOT DATE : July 20, 2026 PLOT BY : JT Engineering PLOT NAME : PLOT SCALE : 1:1

DIVISION 2 -CTH W STAGES 1A AND 2

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.35	
12+35.00	1235.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
12+40.00	1240.00	5.00	25.31	0.00	12.94	2	0	1	2	1	1
12+45.00	1245.00	5.00	28.33	0.00	16.24	5	0	3	7	5	2
12+50.00	1250.00	5.00	32.46	0.00	18.85	6	0	3	13	9	4
12+55.00	1255.00	5.00	36.51	0.00	21.10	6	0	4	19	15	4
12+60.00	1260.00	5.00	40.50	0.00	23.67	7	0	4	26	20	6
12+65.00	1265.00	5.00	42.01	0.00	23.55	8	0	4	34	26	8
12+70.00	1270.00	5.00	43.44	0.00	23.39	8	0	4	42	31	11
12+75.00	1275.00	5.00	44.79	0.00	23.21	8	0	4	50	36	14
12+80.00	1280.00	5.00	44.73	0.00	23.02	8	0	4	58	42	16
12+85.00	1285.00	5.00	39.21	0.00	30.48	8	0	5	66	49	17
12+90.00	1290.00	5.00	34.58	0.00	45.35	7	0	7	73	58	15
12+95.00	1295.00	5.00	30.21	0.00	79.21	6	0	12	79	74	5
13+00.00	1300.00	5.00	31.17	0.00	83.94	6	0	15	85	95	-10
13+05.00	1305.00	5.00	32.03	0.00	81.39	6	0	15	91	115	-24
13+10.00	1310.00	5.00	32.66	0.00	81.16	6	0	15	97	135	-38
13+15.00	1315.00	5.00	33.24	0.00	77.70	6	0	15	103	155	-52
13+20.00	1320.00	5.00	33.49	0.00	75.03	6	0	14	109	174	-65
13+25.00	1325.00	5.00	33.48	0.00	91.78	6	0	15	115	194	-79
13+30.00	1330.00	5.00	33.24	0.00	50.23	6	0	13	121	212	-91
13+35.00	1335.00	5.00	32.94	0.00	26.72	6	0	7	127	221	-94
13+40.00	1340.00	5.00	32.20	0.00	21.07	6	0	4	133	227	-94
13+45.00	1345.00	5.00	33.05	0.00	17.91	6	0	4	139	232	-93
13+50.00	1350.00	5.00	33.53	0.00	15.23	6	0	3	145	236	-91
13+55.00	1355.00	5.00	34.01	0.00	14.71	6	0	3	151	240	-89
13+60.00	1360.00	5.00	33.57	0.00	14.65	6	0	3	157	244	-87
13+65.00	1365.00	5.00	32.90	0.00	14.65	6	0	3	163	248	-85
13+70.00	1370.00	5.00	30.73	0.00	12.93	6	0	3	169	252	-83
13+75.00	1375.00	5.00	28.74	0.00	11.53	6	0	2	175	255	-80
13+80.00	1380.00	5.00	27.16	0.00	10.83	5	0	2	180	258	-78
13+85.00	1385.00	5.00	25.15	0.00	8.67	5	0	2	185	261	-76
13+90.00	1390.00	5.00	0.00	0.00	0.00	2	0	1	187	262	-75

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

9

9

PROJECT NO: 4810-02-71 | HWY: CTH W | COUNTY: FOND DU LAC | EARTHWORK DATA | SHEET: 79 | E

FILE NAME : X:\DesignFiles\QMP\090101_eq.pptx PLOT DATE : July 20, 2026 PLOT BY : JT Engineering PLOT NAME : PLOT SCALE : 1:1

DIVISION 2 -CTH W STAGES 1B AND 3

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.35	
12+35.00	1235.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
12+40.00	1240.00	5.00	42.32	0.00	0.00	4	0	0	4	0	4
12+45.00	1245.00	5.00	44.70	0.00	0.00	8	0	0	12	0	12
12+50.00	1250.00	5.00	47.28	0.00	0.01	9	0	0	21	0	21
12+55.00	1255.00	5.00	49.44	0.00	0.32	9	0	0	30	0	30
12+60.00	1260.00	5.00	51.44	0.00	0.70	9	0	0	39	0	39
12+65.00	1265.00	5.00	52.20	0.00	1.28	10	0	0	49	0	49
12+70.00	1270.00	5.00	51.77	0.00	2.34	10	0	0	59	0	59
12+75.00	1275.00	5.00	49.53	0.00	2.38	9	0	0	68	0	68
12+80.00	1280.00	5.00	48.07	0.00	2.09	9	0	0	77	0	77
12+85.00	1285.00	5.00	47.96	0.00	2.16	9	0	0	86	0	86
12+90.00	1290.00	5.00	48.74	0.00	3.16	9	0	0	95	0	95
12+95.00	1295.00	5.00	54.76	0.00	4.74	10	0	1	105	1	104
13+00.00	1300.00	5.00	48.24	0.00	10.75	10	0	1	115	3	112
13+05.00	1305.00	5.00	48.18	0.00	36.79	9	0	4	124	8	116
13+10.00	1310.00	5.00	48.97	0.00	32.70	9	0	6	133	16	117
13+15.00	1315.00	5.00	49.21	0.00	32.05	9	0	6	142	24	118
13+20.00	1320.00	5.00	49.02	0.00	24.02	9	0	5	151	31	120
13+25.00	1325.00	5.00	48.80	0.00	18.72	9	0	4	160	36	124
13+30.00	1330.00	5.00	48.62	0.00	41.38	9	0	6	169	45	124
13+35.00	1335.00	5.00	48.46	0.00	40.64	9	0	8	178	55	123
13+40.00	1340.00	5.00	48.34	0.00	33.29	9	0	7	187	65	122
13+45.00	1345.00	5.00	48.31	0.00	27.97	9	0	6	196	73	123
13+50.00	1350.00	5.00	48.32	0.00	25.47	9	0	5	205	80	125
13+55.00	1355.00	5.00	48.34	0.00	23.67	9	0	5	214	86	128
13+60.00	1360.00	5.00	48.33	0.00	22.25	9	0	4	223	92	131
13+65.00	1365.00	5.00	48.28	0.00	20.29	9	0	4	232	97	135
13+70.00	1370.00	5.00	46.93	0.00	14.60	9	0	3	241	101	140
13+75.00	1375.00	5.00	45.56	0.00	8.68	9	0	2	250	104	146
13+80.00	1380.00	5.00	44.18	0.00	3.26	8	0	1	258	105	153
13+85.00	1385.00	5.00	43.34	0.00	0.13	8	0	0	266	105	161
13+90.00	1390.00	5.00	0.00	0.00	0.00	4	0	0	270	105	165

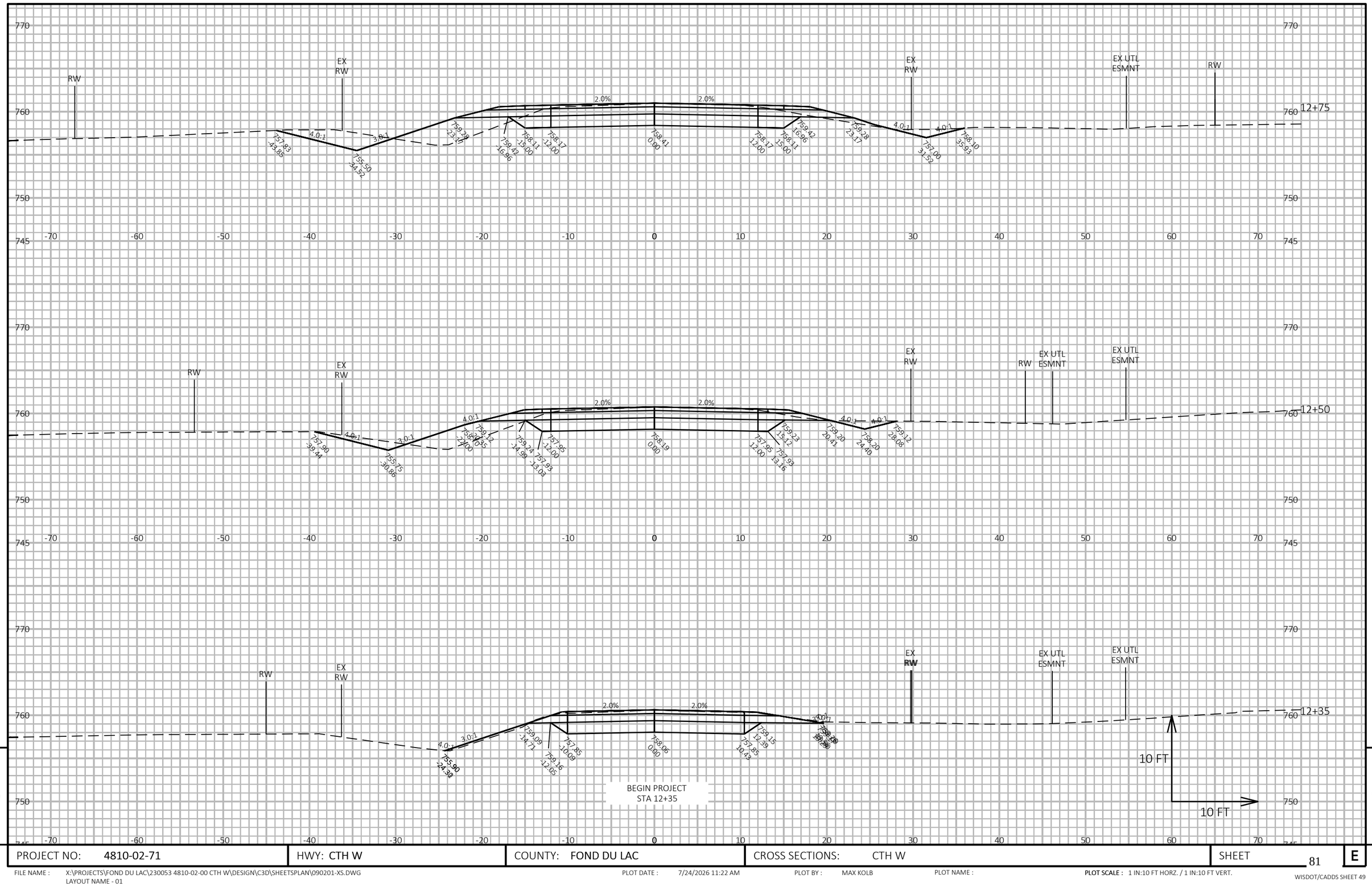
NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

9

9

PROJECT NO: 4810-02-71 | HWY: CTH W | COUNTY: FOND DU LAC | EARTHWORK DATA | SHEET: 80 | E

FILE NAME : X:\DesignFiles\QMP\090101_eq.pptx PLOT DATE : July 20, 2026 PLOT BY : JT Engineering PLOT NAME : PLOT SCALE : 1:1

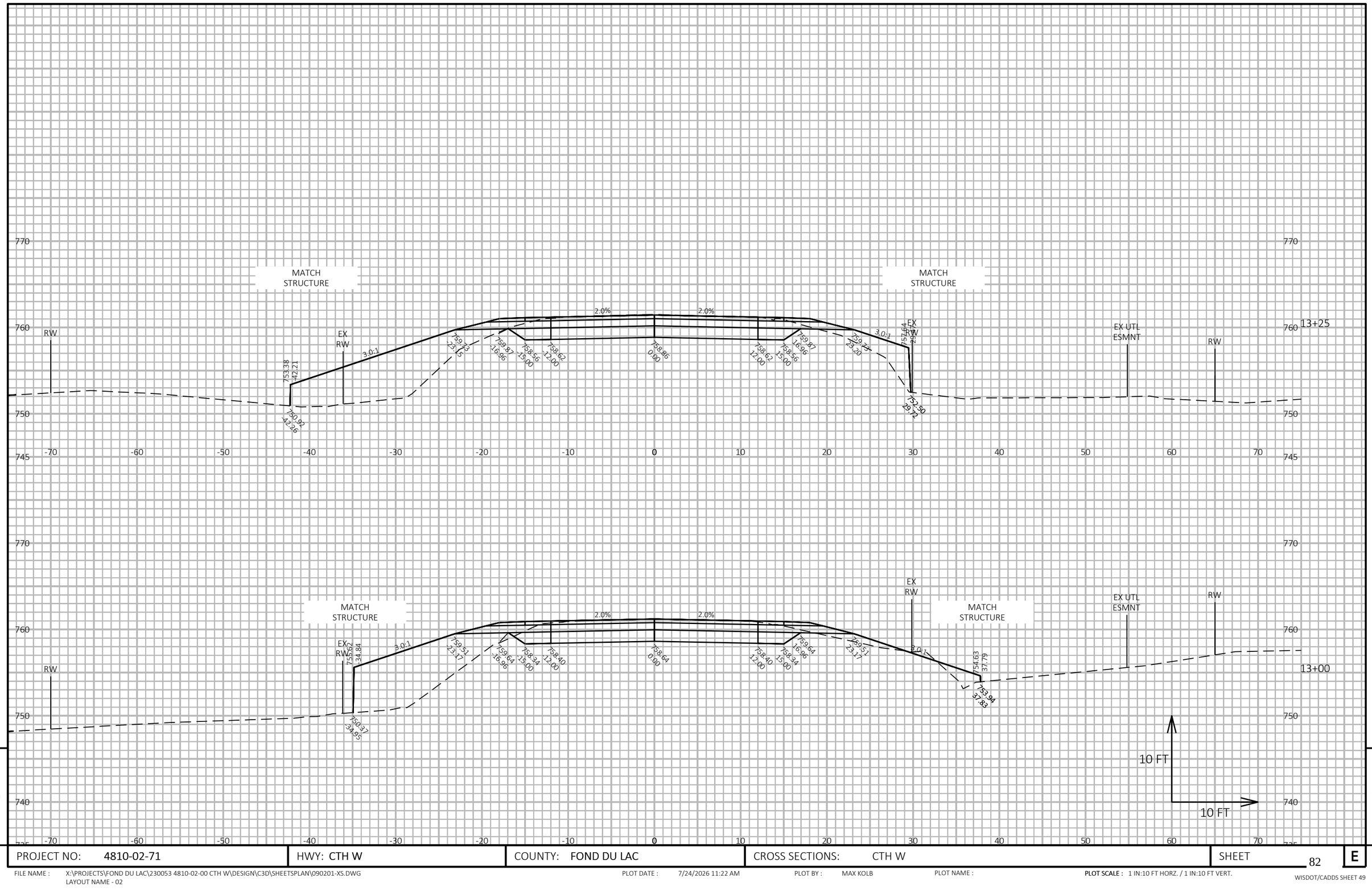


PROJECT NO: 4810-02-71	HWY: CTH W	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH W	SHEET 81	E

FILE NAME : X:\PROJECTS\FOND DU LAC\230053 4810-02-00 CTH W\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 7/24/2026 11:22 AM PLOT BY : MAX KOLB PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

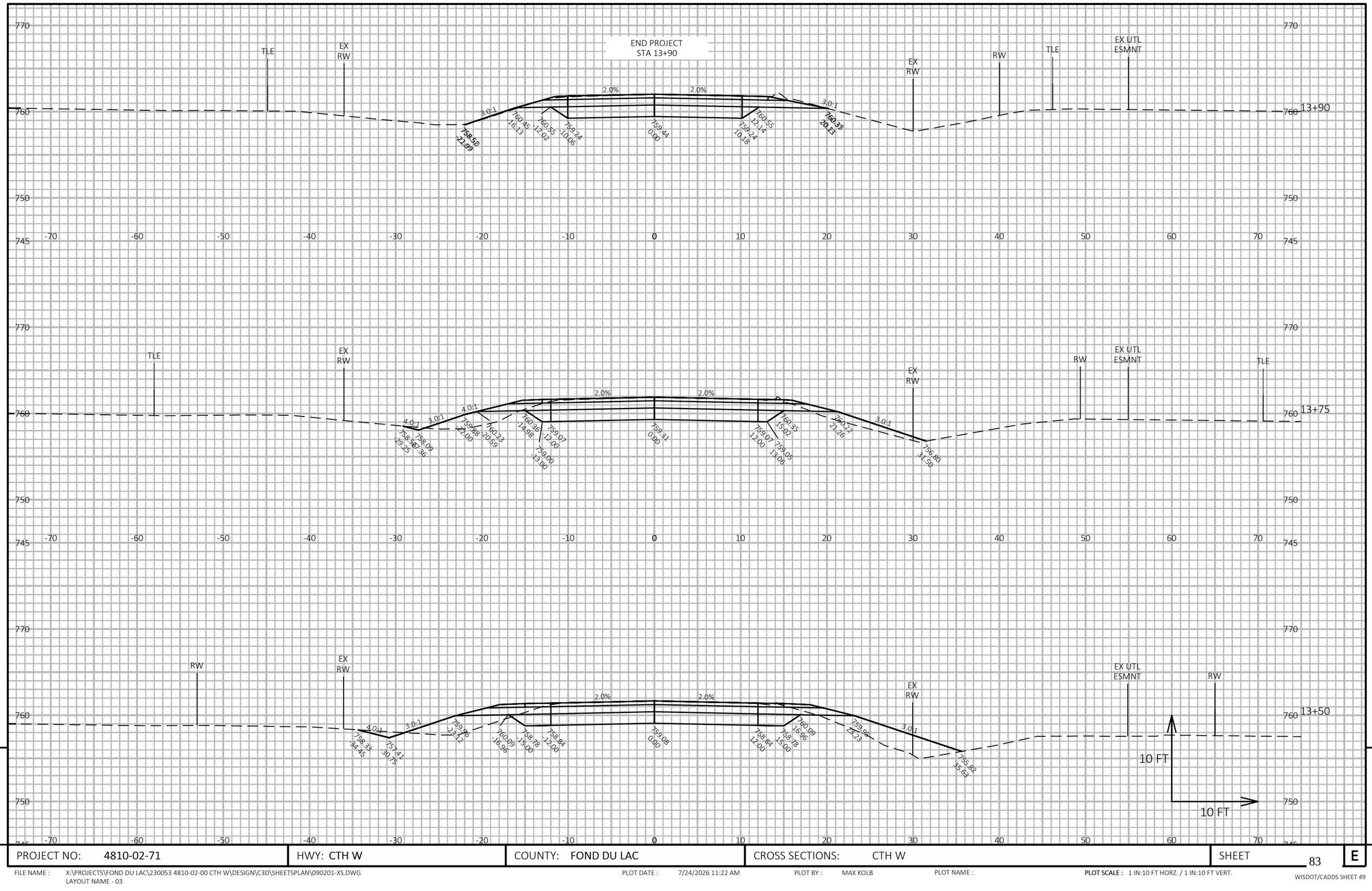
9

PROJECT NO: 4810-02-71	HWY: CTH W	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH W	SHEET 82	E

FILE NAME : X:\PROJECTS\FOND DU LAC\230053 4810-02-00 CTH W\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/24/2026 11:22 AM PLOT BY : MAX KOLB PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

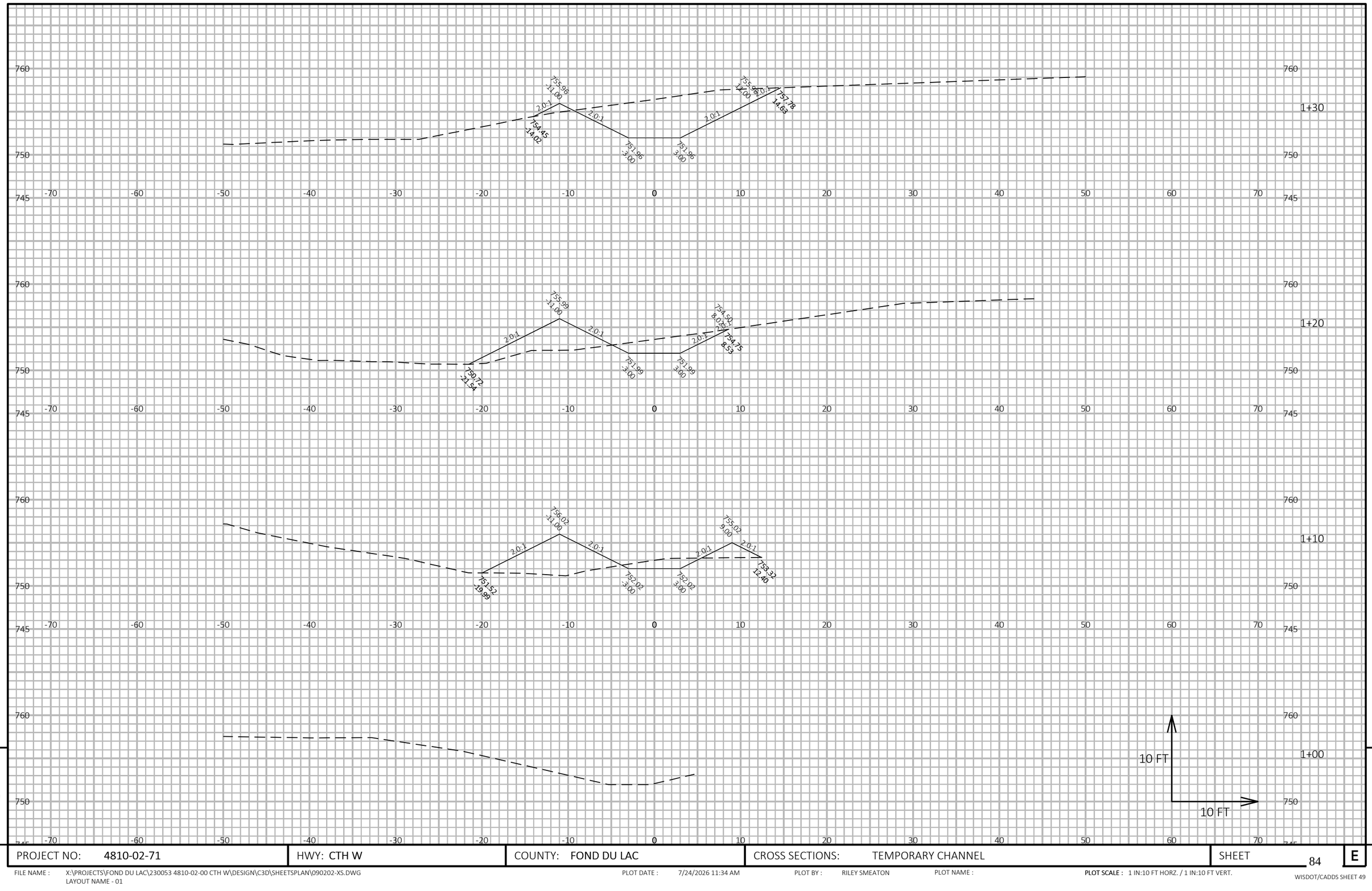
9

PROJECT NO: 4810-02-71	HWY: CTH W	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH W	SHEET 83	E

FILE NAME : X:\PROJECTS\FOND DU LAC\230053 4810-02-00 CTH W\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 7/24/2026 11:22 AM PLOT BY : MAX KOLB PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

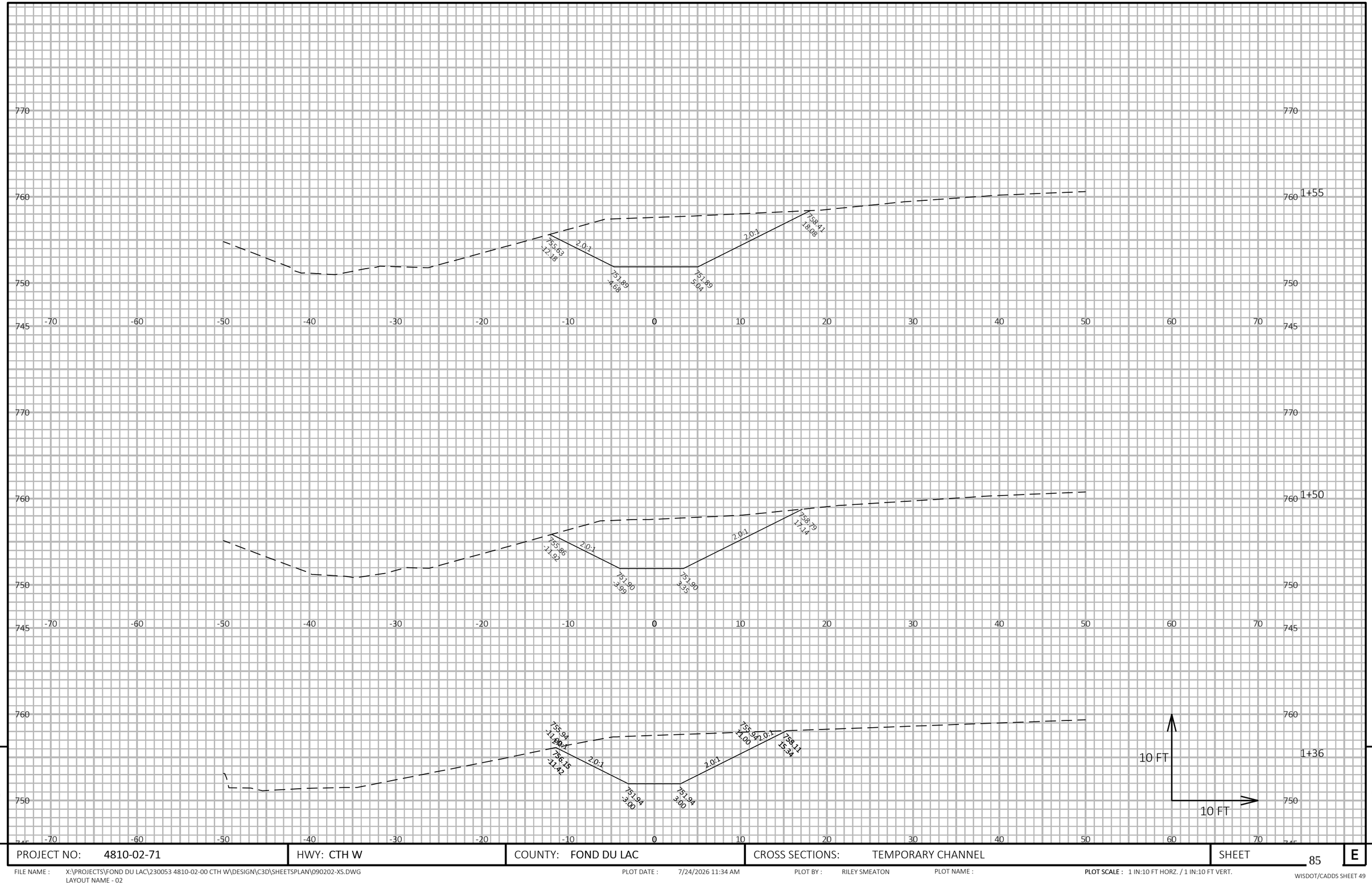
9

PROJECT NO: 4810-02-71	HWY: CTH W	COUNTY: FOND DU LAC	CROSS SECTIONS: TEMPORARY CHANNEL	SHEET 84	E

FILE NAME : X:\PROJECTS\FOND DU LAC\230053 4810-02-00 CTH W\DESIGN\C3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 7/24/2026 11:34 AM PLOT BY : RILEY SMEATON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

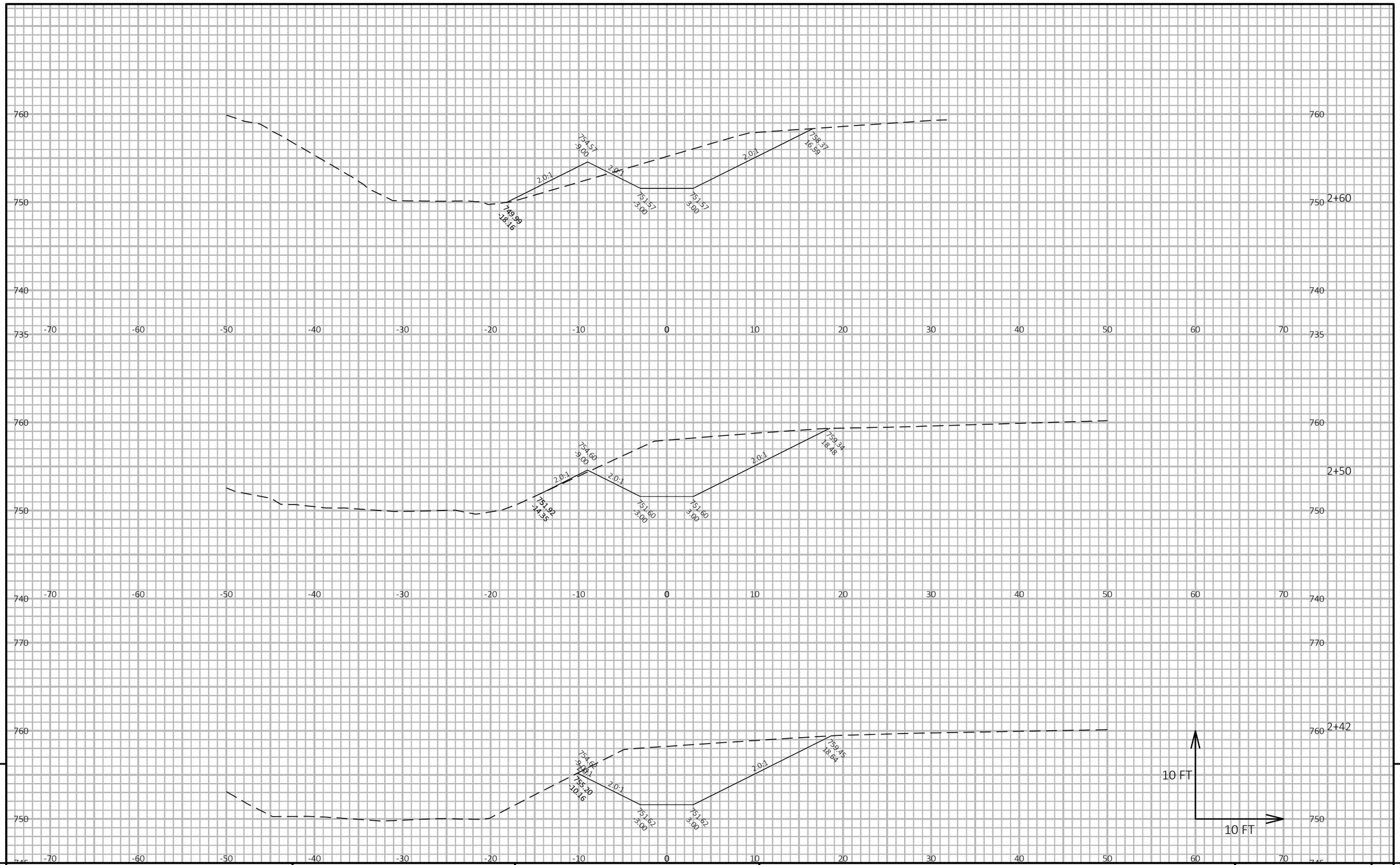
9

PROJECT NO: 4810-02-71	HWY: CTH W	COUNTY: FOND DU LAC	CROSS SECTIONS: TEMPORARY CHANNEL	SHEET 85	E

FILE NAME : X:\PROJECTS\FOND DU LAC\230053 4810-02-00 CTH W\DESIGN\C3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/24/2026 11:34 AM PLOT BY : RILEY SMEATON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



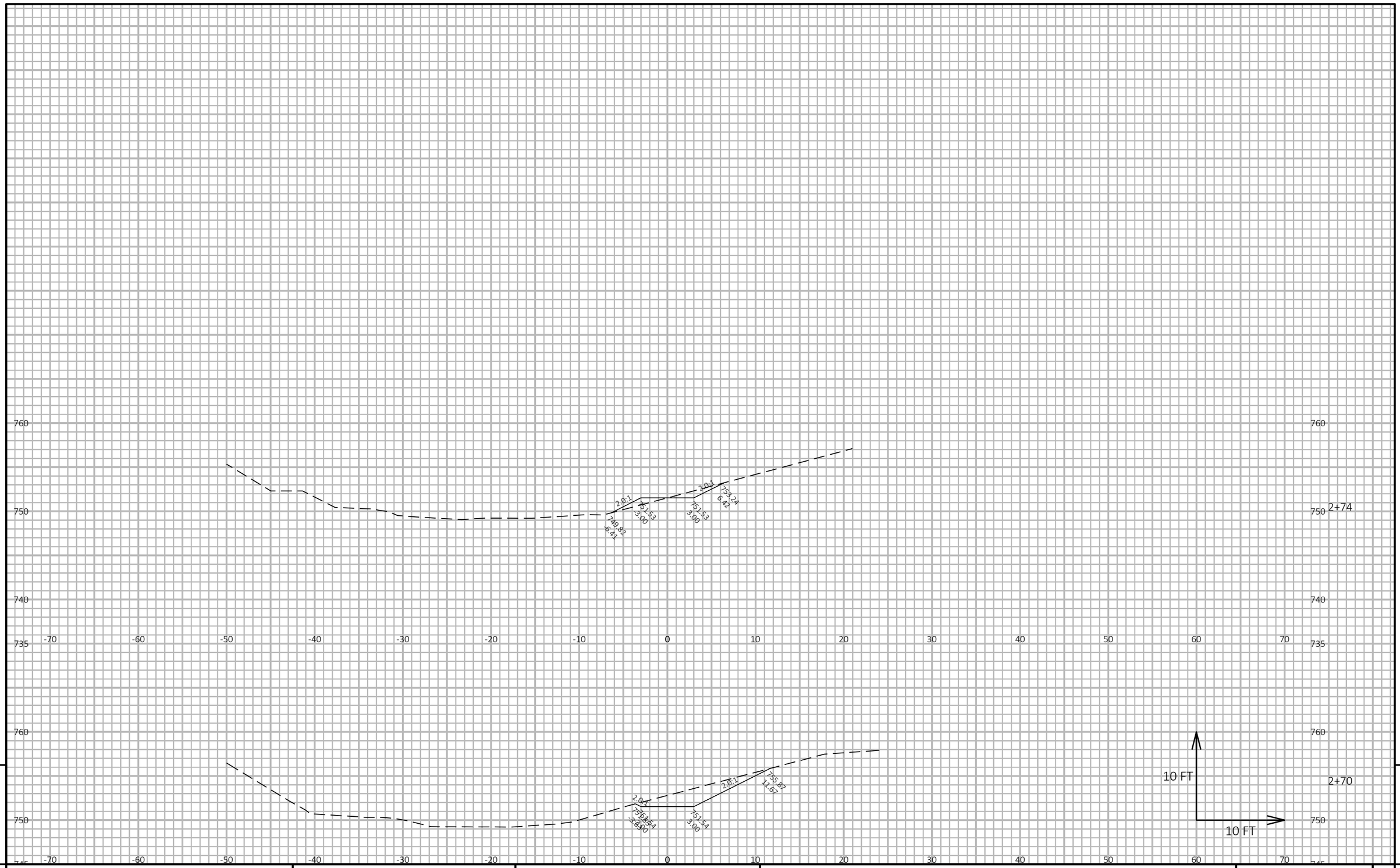
9

9

PROJECT NO: 4810-02-71	HWY: CTH W	COUNTY: FOND DU LAC	CROSS SECTIONS: TEMPORARY CHANNEL	SHEET 86	E

FILE NAME : X:\PROJECTS\FOND DU LAC\230053 4810-02-00 CTH W\DESIGN\C3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 7/24/2026 11:34 AM PLOT BY : RILEY SMEATON PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 4810-02-71	HWY: CTH W	COUNTY: FOND DU LAC	CROSS SECTIONS: TEMPORARY CHANNEL	SHEET 87	E

FILE NAME : X:\PROJECTS\FOND DU LAC\230053 4810-02-00 CTH W\DESIGN\C3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 7/24/2026 11:35 AM PLOT BY : RILEY SMEATON PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov