WKE

AUGUST 2022

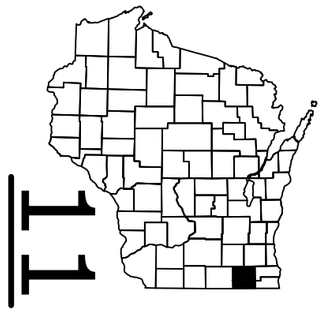
PROJECT ID: 3839-00-70

WITH: N/A

COUNTY: WALWORTH

ORDER OF SHEETS

TOTAL SHEETS = 116



N

DESIGN DESIGNATION

A.A.D.T.	2022	=	140
A.A.D.T.	2042	=	140
D.H.V.		=	20
D.D.		=	50% / 50%
T.		=	5%
DESIGN SPEED		=	25 MPH
ESALS		=	16,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

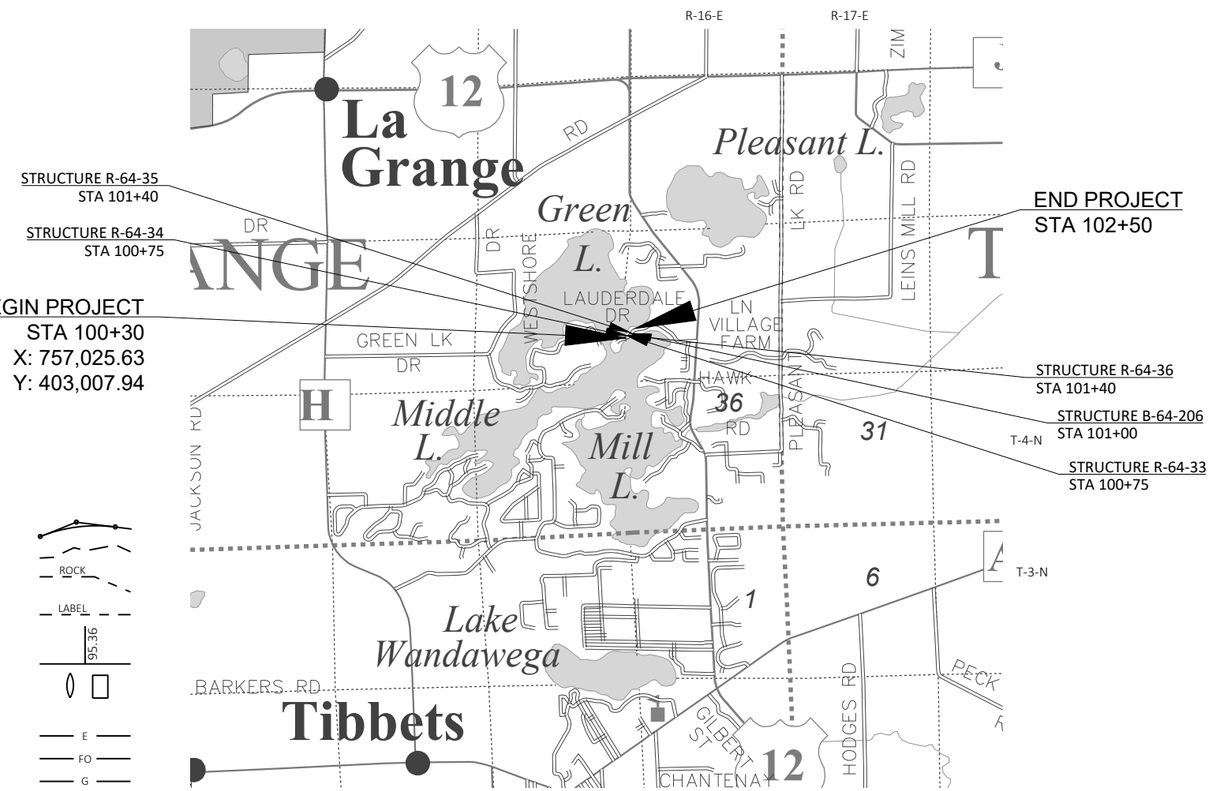
LAUDERDALE DRIVE

BRIDGE OVER GREEN LAKE P-64-0921

LOCAL STREET
WALWORTH COUNTY

STATE PROJECT NUMBER
3839-00-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3839-00-70	WISC2022249	1



LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.042 MI

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

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ACCEPTED FOR

TOWN OF LAGRANGE

Date 04/27/2022 Frank Taylor

(Signature and Title of Official)

TOWN CHAIRMAN

ORIGINAL PLANS PREPARED BY

Michael Baker INTERNATIONAL

WISCONSIN PROFESSIONAL ENGINEER

LINDSAY M. KAUFMANN E-434390 MILWAUKEE, WI

DATE: 04/27/2022 Lindsay M. Kaufmann

(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SEH
Designer	MICHAEL BAKER INTERNATIONAL
Project Manager	MICHAEL BAIRD
Regional Examiner	
Regional Supervisor	JEFFREY BOHEN

APPROVED FOR THE DEPARTMENT

DATE: 4/27/2022 Michael J. Baird

(Signature)

E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\010101-TI.DWG

PLOT DATE : 10/12/2021 6:05 PM

PLOT BY : BRUCKNER, KAITLYN

PLOT NAME :

GENERAL NOTES

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

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO HAVE ALL UTILITIES LOCATED BEFORE EXCAVATIONS.

TACK COAT HAS BEEN ESTIMATED AT AN APPLICATION RATE OF 0.05 GAL/S.Y. AND SHALL BE PLACED BETWEEN ALL LAYERS OF HMA PAVEMENT.

THE EXACT LOCATION OF EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD, AND AS DIRECTED BY THE ENGINEER.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT MATCHES.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

PERMANENTLY RESTORE ALL GRADED AREAS WITHIN 5 DAYS OF DISTURBANCE WITH SEED AND MULCH. IF GRADED AREAS WILL NOT BE PERMANENTLY RESTORED WITHIN 5 DAYS, APPLY TEMPORARY SEED AND MULCH WITHIN 24 HOURS OF DISTURBANCE. THIS INCLUDES ALL EQUIPMENT AND MATERIAL STORAGE AREAS.

ORDER OF SECTION 2 DETAIL SHEETS

UTILITY CONTACTS

EDGE BROADBAND
BRIAN MADL
PHONE: 262-458-4220
EMAIL: BRIAN@EDGEBROADBAND.COM

TDS TELECOM (FORMERLY STATE LONG DISTANCE TELEPHONE CO)
JASON KENNY
311 ELIZABETH STREET
WATERFORD, WI 53185
PHONE: 262-514-2127 (OFFICE)
PHONE: 608-345-7939 (MOBILE)
EMAIL: JASON.KENNY@TDSTELECOM.COM

WE ENERGIES (ELECTRIC)
ERIC KICKHAVER
PHONE: 414-944-5917 (OFFICE)
PHONE: 414-588-7472 (MOBILE)
EMAIL: ERIC.KICKHAVER@WE-ENERGIES.COM

WE ENERGIES (GAS)
SCOTT HOLSTEIN
PHONE: 262-763-1084 (OFFICE)
PHONE: 262-949-0490 (MOBILE)
EMAIL: SCOTT.HOLSTEIN@WE-ENERGIES.COM

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

AGENCIES

TOWN OF LAGRANGE

FRANK TAYLOR
TOWN CHAIR
N7899 COUNTY ROAD H
WHITEWATER, WI 53190
PHONE: (262) 495-8200
EMAIL: CLERK@TOWNOFLAGRANGEWI.COM

DNR CONTACT

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

DESIGN CONTACT

MICHAEL BAKER INTERNATIONAL
JASON SADOWSKI
250 E WISCONSIN AVE, SUITE 1725
MILWAUKEE, WI 53202
PHONE: (414)-751-9986
EMAIL: JASON.SADOWSKI@MBAKERINTL.COM

2

2

N

GREEN LAKE

END PROJECT
STA 102+50

R-64-35
(PROPOSED)

STRUCTURE B-64-206
P-67-0921 EXISTING

R-64-34
(PROPOSED)

BEGIN PROJECT
STA 100+30
X:757,025.63
Y:403,007.94

LAUDERDALE DRIVE

101

102

R-64-36
(PROPOSED)

DEAKIN ISLE

R-64-33
(PROPOSED)

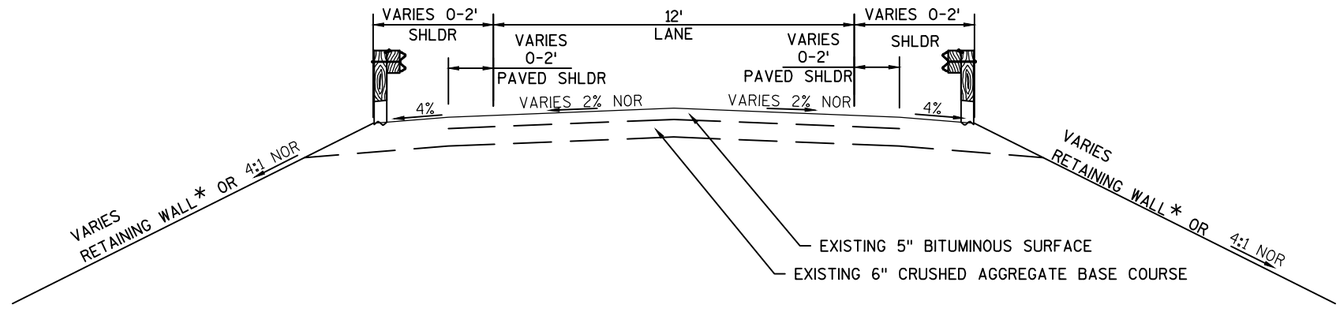
MIDDLE LAKE

PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\020201 - PO.DWG
LAYOUT NAME - 020201 - po

PLOT DATE : 4/26/2022 10:49 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:40 FT

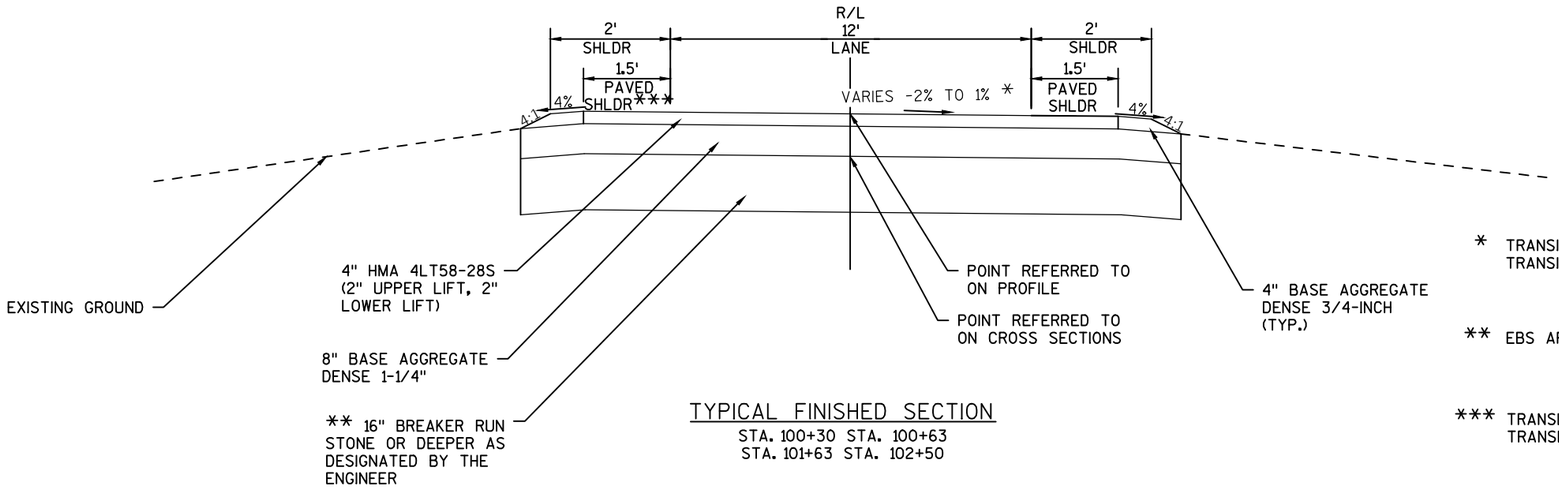
WISDOT/CADDS SHEET 42



BEAM GUARD
STA. 100+46 - 101+59 LT
STA. 100+52 - 101+60 RT

* RETAINING WALL
STA. 100+57 - 100+84 LT
STA. 100+52 - 100+84 RT
STA. 101+24 - 101+60 LT
STA. 101+25 - 101+60 RT

TYPICAL EXISTING SECTION
STA. 100+30 TO STA. 102+50

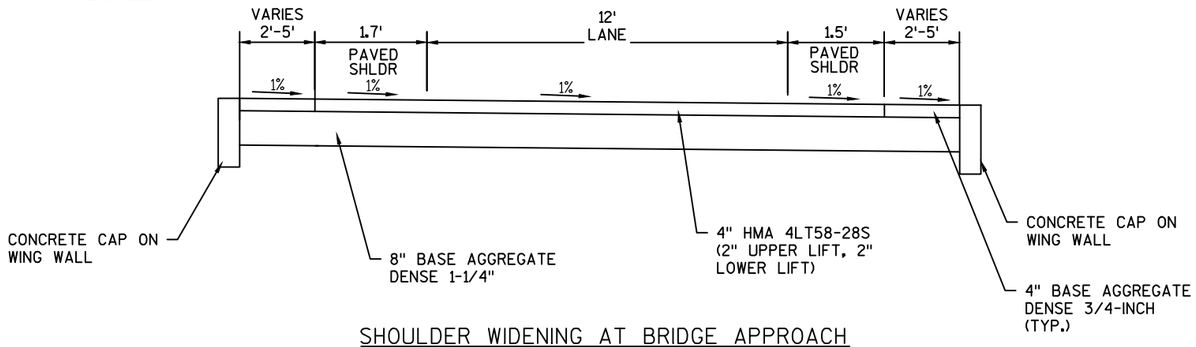


* TRANSITION FROM -2% AT STA. 100+35 TO 1% AT STA. 100+85
TRANSITION FROM 1% AT STA 102+00 TO -2% AT STA. 102+50

** EBS AREA AS DETERMINED BY THE ENGINEER

*** TRANSITION FROM 1.5' TO 1' FROM STA 102+10 TO STA 102+20
TRANSITION FROM 1' TO 0.04' FROM STA 102+40 TO 102+50

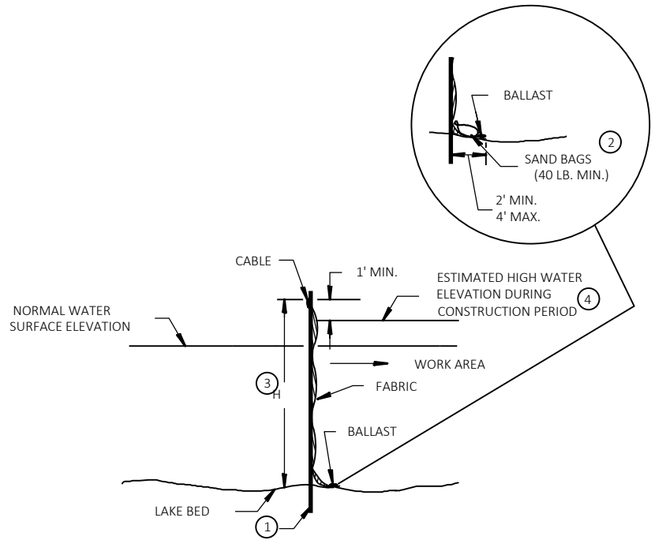
TYPICAL FINISHED SECTION
STA. 100+30 STA. 100+63
STA. 101+63 STA. 102+50



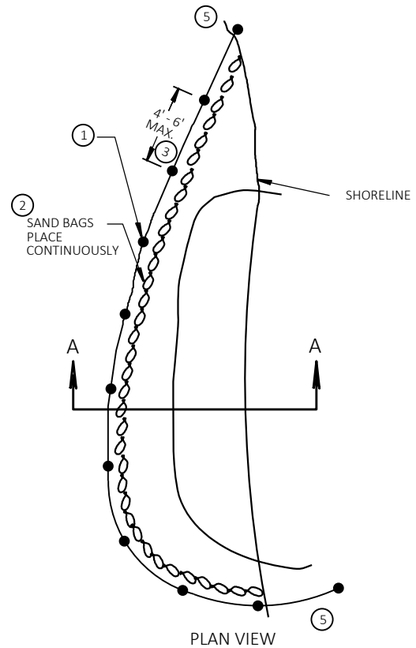
SHOULDER WIDENING AT BRIDGE APPROACH
STA. 100+63 TO STA. 100+87
STA. 101+20 TO STA. 101+63

PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	TYPICAL SECTIONS	SHEET 4	E

2



SECTION A-A



PLAN VIEW

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

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

BUOYS SHALL BE PROVIDED AS SHOWN ON THE TRAFFIC CONTROL PLANS, AND ARE INCIDENTAL TO THE CONTRACT.

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

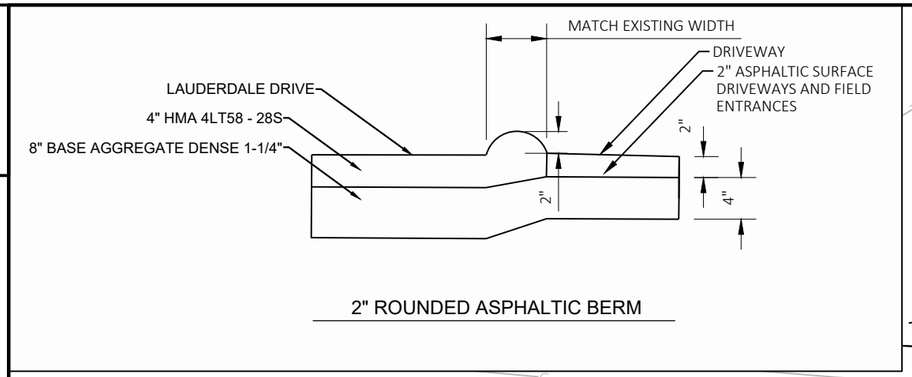
(2) SANDBAGS OR ROCK BAGS SHALL BE USED AS ADDITIONAL BALLAST. PLACE CONTINUOUSLY WITH NO GAPS. SAND OR ROCK BAGS ARE INCIDENTAL TO THE BID ITEM FOR "ENHANCED TURBIDITY BARRIER".

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

(4) ESTIMATED HIGH WATER ELEVATIONS DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 1' GREATER THAN THE OBSERVED WATER ELEVATION AT THE TIME OF CONSTRUCTION.

(5) ENDS OF BARRIER ARE TO BE TRENCHED INTO THE SHORELINE OR CONNECTED CONTINUOUSLY TO THE CONCRETE WALLS TO FULLY ISOLATE THE IN-WATER WORK ZONE.

ENHANCED TURBIDITY BARRIER DETAIL



2" ROUNDED ASPHALTIC BERM

2

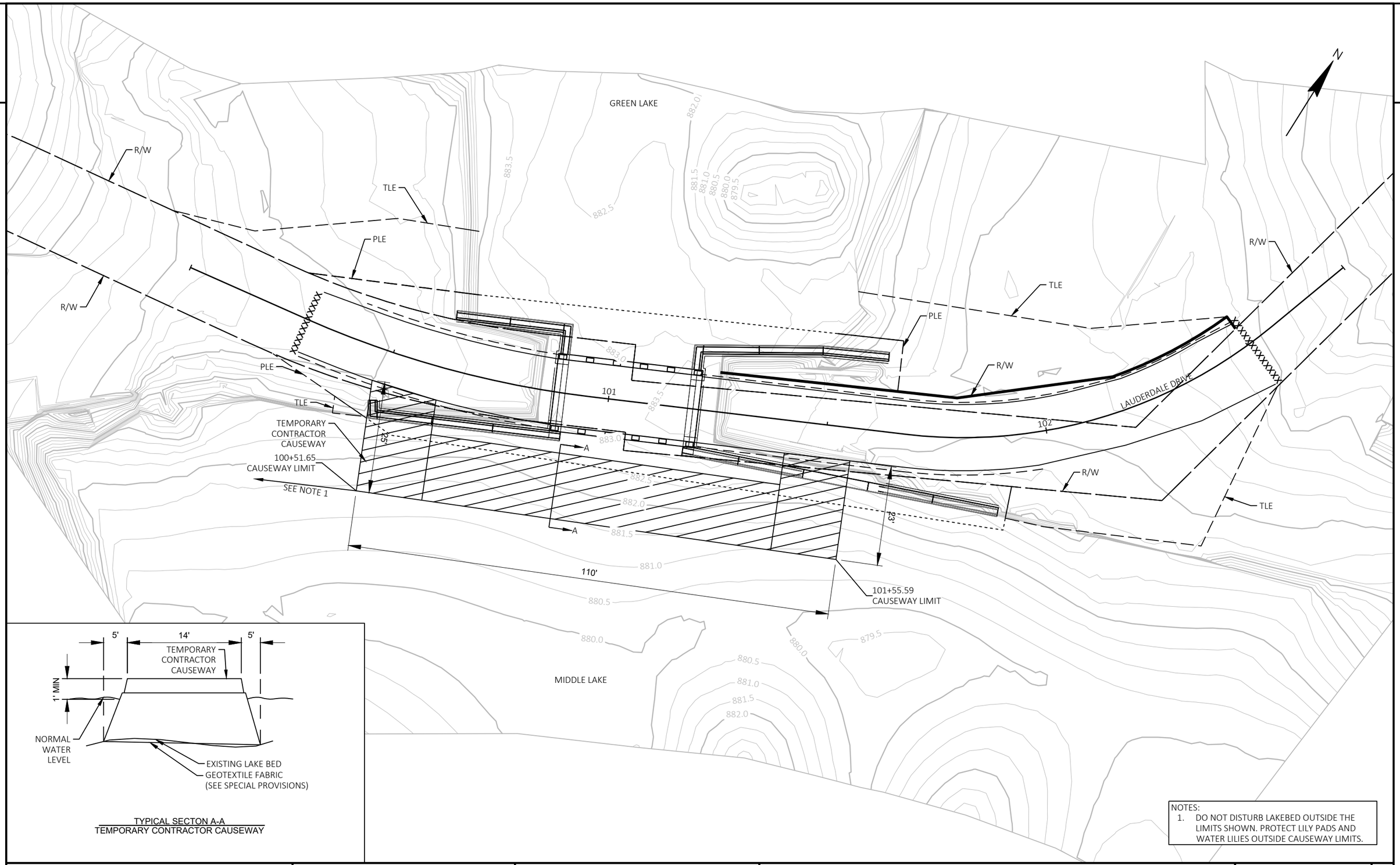
TLE
PLE
100+39.65
12.64' LT
100+34.93
12.48' LT
100+30.00
13.14' LT
100+39.58
11.96' LT
EXISTING SEPTIC HOLDING TANK
R/W
100+30.00
7.14' LT
100+40.64
7.50' LT
2" ROUNDED ASPHALT BERM
100+50
LAUDERDALE DRIVE
2" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCE OVER 4" BASE AGG. DENSE 1 $\frac{1}{4}$" *
* OR MATCH EXISTING ASPH. DEPTH
R/W
ANY ADDITIONAL BASE AGG. DENSE REQ'D. SHALL BE PAID UNDER ITEM - " BASE AGGREGATE DENSE 1 1/4- INCH"
N

TLE
R/W
LAUDERDALE DRIVE
102+47.85
11.95' RT
102+32.92
9.19' RT
2" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OVER 4" BASE AGG. DENSE 1 $\frac{1}{4}$" *
* OR MATCH EXISTING ASPH. DEPTH
PLE
102+00
102+28.27
28.99' RT
101+97.20
7.50' RT
102+21.89
22.65' RT
R/W
101+98.77
9.79' RT
101+99.71
16.17' RT
101+99.46
17.99' RT
102+10.13
23.86' RT
102+04.30
20.82' RT
102+02.09
18.69' RT
TLE
101+50
ANY ADDITIONAL BASE AGG. DENSE REQ'D. SHALL BE PAID UNDER ITEM - " BASE AGGREGATE DENSE 1 1/4- INCH"
N

PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	CONSTRUCTION DETAILS - DRIVEWAY DETAIL	SHEET 6	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\021002-CD.DWG
LAYOUT NAME - 021002-cd
PLOT DATE : 5/26/2022 10:27 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

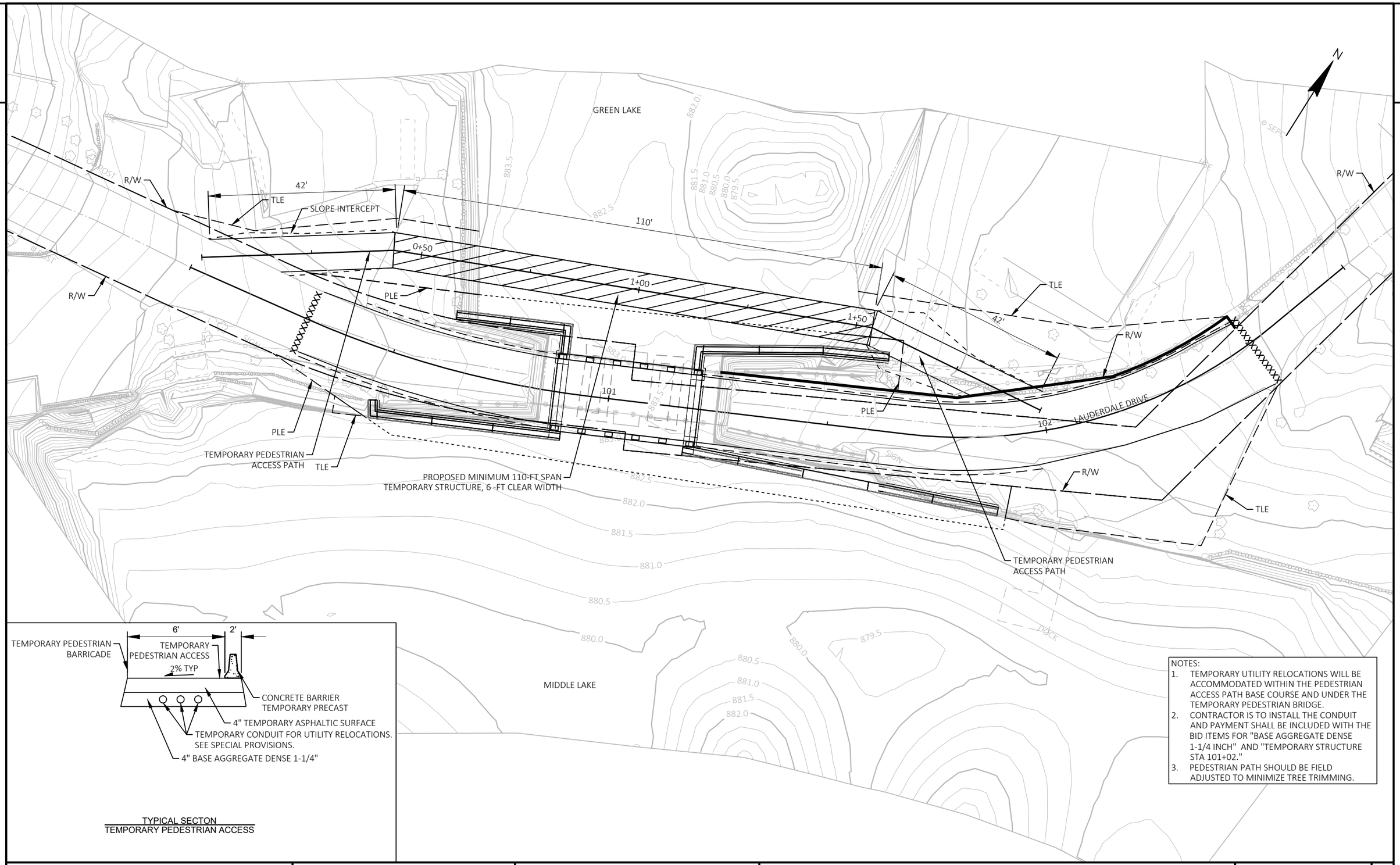


TYPICAL SECTON A-A
TEMPORARY CONTRACTOR CAUSEWAY

NOTES:
1. DO NOT DISTURB LAKEBED OUTSIDE THE LIMITS SHOWN. PROTECT LILY PADS AND WATER LILIES OUTSIDE CAUSEWAY LIMITS.

PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	CONSTRUCTION DETAILS - TEMPORARY CONTRACTOR CAUSEWAY	SHEET 7	E

2

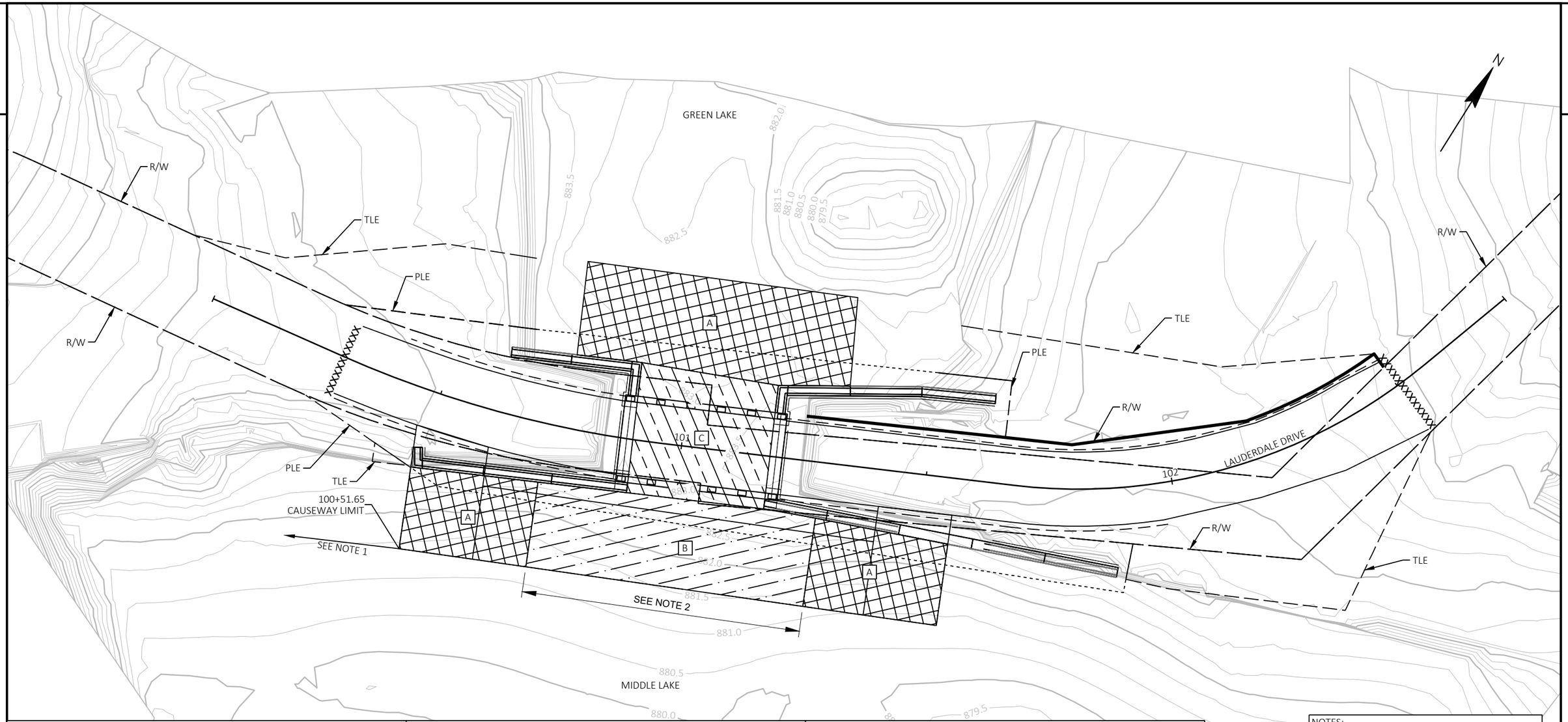


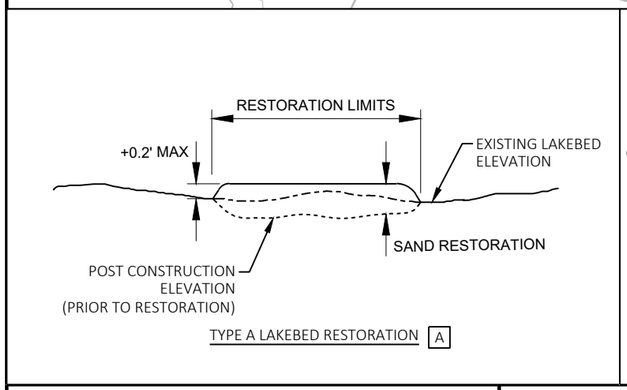
TYPICAL SECTON
TEMPORARY PEDESTRIAN ACCESS

NOTES:
1. TEMPORARY UTILITY RELOCATIONS WILL BE ACCOMMODATED WITHIN THE PEDESTRIAN ACCESS PATH BASE COURSE AND UNDER THE TEMPORARY PEDESTRIAN BRIDGE.
2. CONTRACTOR IS TO INSTALL THE CONDUIT AND PAYMENT SHALL BE INCLUDED WITH THE BID ITEMS FOR "BASE AGGREGATE DENSE 1-1/4 INCH" AND "TEMPORARY STRUCTURE STA 101+02."
3. PEDESTRIAN PATH SHOULD BE FIELD ADJUSTED TO MINIMIZE TREE TRIMMING.

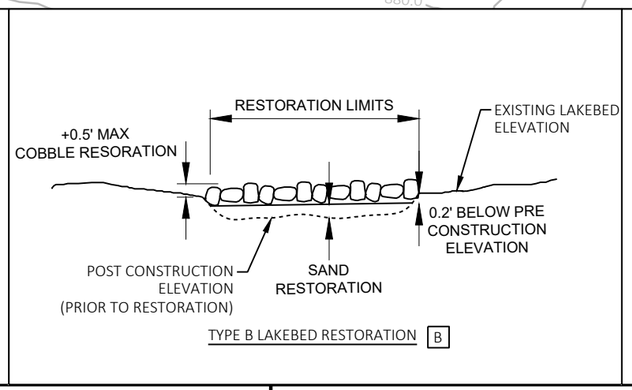
PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	CONSTRUCTION DETAILS - TEMPORARY PEDESTRIAN ACCESS	SHEET 8	E

2

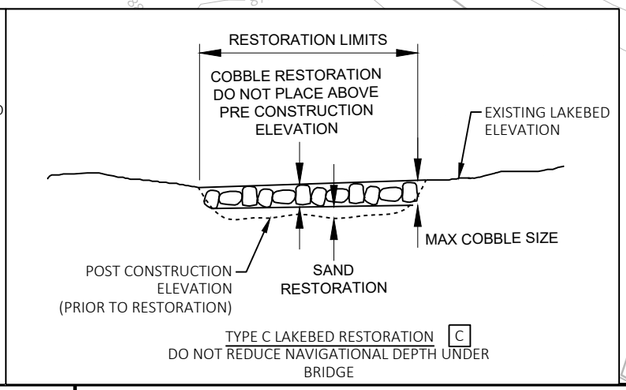




TYPE A LAKEBED RESTORATION [A]



TYPE B LAKEBED RESTORATION [B]

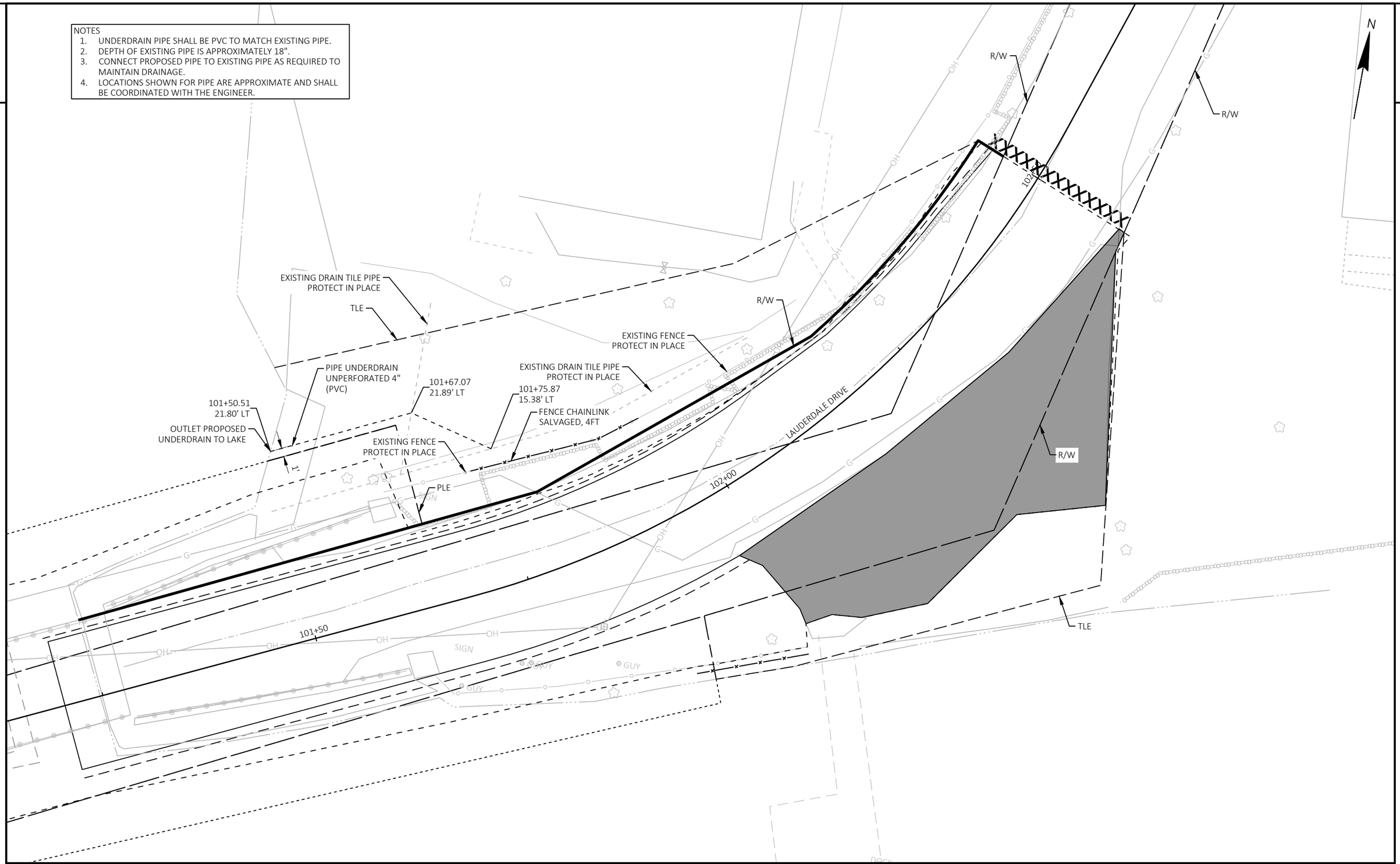


TYPE C LAKEBED RESTORATION [C]
DO NOT REDUCE NAVIGATIONAL DEPTH UNDER BRIDGE

NOTES:
1. DO NOT DISTURB LAKEBED OUTSIDE THE LIMITS SHOWN. PROTECT LILY PADS AND WATER LILIES OUTSIDE CAUSEWAY LIMITS.
2. ZONE B LIMITS ARE 10' FROM THE EXISTING PRIVATE DOCK LOCATIONS TO EITHER SIDE. COORDINATE WITH ENGINEER TO IDENTIFY THE LIMITS OF ZONE B RESTORATION TO AVOID ENCROACHMENT ON PRIVATE DOCKS.
3. RESTORE LAKEBED TO PRE-CONSTRUCTION ELEVATIONS TO THE TOLERANCES NOTED.
4. ALL LAKEBED RESTORATION WORK IS INCLUDED IN THE BID ITEM "LAKEBED RESTORATION."
5. SEE SPECIAL PROVISIONS FOR COBBLE SIZE AND SHAPE REQUIREMENTS.

PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	CONSTRUCTION DETAILS - LAKEBED RESTORATION	SHEET 9	E

NOTES
1. UNDERDRAIN PIPE SHALL BE PVC TO MATCH EXISTING PIPE.
2. DEPTH OF EXISTING PIPE IS APPROXIMATELY 18".
3. CONNECT PROPOSED PIPE TO EXISTING PIPE AS REQUIRED TO MAINTAIN DRAINAGE.
4. LOCATIONS SHOWN FOR PIPE ARE APPROXIMATE AND SHALL BE COORDINATED WITH THE ENGINEER.



PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	CONSTRUCTION DETAILS - DRAIN TILE DETAIL	SHEET 10	E

NOTES:
1. EXISTING WALLS SHALL BE PROTECTED IN PLACE PER THE SPECIAL PROVISIONS. SEE RETAINING WALL PLANS FOR ASSOCIATED BID ITEMS.

GREEN LAKE

EXISTING WALL PROTECT IN PLACE
TLE
CLEARING AND GRUBBING
REMOVING MASONRY (OUTDOOR FIREPLACE)
R/W
REMOVING SIGNS TYPE II, 4 EA.
PLE
REMOVING GUARDRAIL
R/W
REMOVING GUARDRAIL
101
EXISTING WALL PROTECT IN PLACE
PLE
CLEARING AND GRUBBING
TLE
REMOVING FENCE
REMOVING GUARDRAIL
COMMON EXCAVATION

CLEARING AND GRUBBING
PLE
REMOVING EXISTING DRAIN TILE
PROTECT IN PLACE (EXISTING WALL)
REMOVING GUARDRAIL
REMOVING GUARDRAIL
102
REMOVING GUARDRAIL
COMMON EXCAVATION
SALVAGED CONCRETE MONUMENTS
CLEARING AND GRUBBING
EXISTING WALL PROTECT IN PLACE
REMOVING FENCE

SALVAGED CONCRETE MONUMENTS
REMOVING EXISTING DRAIN TILE
EXISTING FENCE PROTECT IN PLACE
TLE
FENCE CHAINLINK SALVAGED FENCE 4-FT
R/W
R/W
LAUDERDALE DRIVE
TLE
EXISTING FENCE PROTECT IN PLACE
R/W

MIDDLE LAKE

N

LEGEND
- COMMON EXCAVATION
- CLEARING AND GRUBBING
- REMOVING GUARDRAIL
- REMOVING FENCE
- FENCE CHAINLINK SALVAGED 4 - FT
- REMOVING SIGNS TYPE II

PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	REMOVAL PLAN	SHEET 11	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\021101-RM.DWG
LAYOUT NAME - 021101-rm
PLOT DATE : 5/26/2022 10:30 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:
1. ADDITIONAL ENHANCED TURBIDITY BARRIER REQUIRED TO ENCLOSE WORK ZONE, IF TEMPORARY SHEET PILES ARE NOT INSTALLED PRIOR TO CAUSEWAY CONSTRUCTION. SEE BRIDGE PLANS FOR ASSUMED SHEET PILE LOCATIONS.

GREEN LAKE

SEE NOTE 1

ADJUST TO ENCOMPASS SUPPORTS FOR TEMPORARY STRUCTURE

TLE

R/W

PLE

R/W

TLE

PLE

R/W

LAUDERDALE DRIVE

R/W

101

102

PLE

TLE

TLE

R/W

MIDDLE LAKE

N

LEGEND

DOUBLE STAKED SILT FENCE

ENHANCED TURBIDITY BARRIER

SEED AND MULCH

PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	EROSION CONTROL	SHEET 12	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 022002-ec

PLOT DATE : 4/26/2022 10:55 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	PERMANENT SIGNING	SHEET 13	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 023201-ps

PLOT DATE : 4/26/2022 10:55 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TYPE A WARNING LIGHT (FLASHING)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL BOUY

GREEN LAKE

BRIDGE OUT
R11-2B
48"X30"

BRIDGE OUT
R11-2B
48"X30"

25' TYP 25' TYP 25' TYP

BRIDGE OUT
R11-2B
48"X30"

BRIDGE OUT
R11-2B
48"X30"

ROAD CLOSED
0.5 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60"X30"

ASTA DR

US 12

ROAD CLOSED AHEAD
W20-3A
48"X48"

BRIDGE OUT
0.5 MILES AHEAD
R11-3C
60"X24"

SEPC

POST

HSE

60'

101

102

LAUDERDALE DRIVE

250'

ROAD CLOSED AHEAD
W20-3A
48"X48"

45' TYP 45' TYP 45' TYP

TRAFFIC CONTROL BUOY

500' 500'

ROAD CLOSED 500 FT
W20-3D
48"X48"

ROAD CLOSED 1000 FT
W20-3C
48"X48"

MIDDLE LAKE

N

NOTE: TRAFFIC CONTROL BUOTS SHALL BE PROVIDED WITH STANDARD MARKINGS FOR BOAT EXCLUSION AREAS, MARKED AS "KEEP OUT". SEE SPECIAL PROVISIONS.

PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	TRAFFIC CONTROL - STAGE 1	SHEET 14	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\025101-TC-S1.DWG
LAYOUT NAME - 025101-tc

PLOT DATE : 4/26/2022 10:55 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TYPE A WARNING LIGHT (FLASHING)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL BOUY
- TEMPORARY PEDESTRIAN BARRICADE

GREEN LAKE

BRIDGE OUT
R11-2B
48"X30"

BRIDGE OUT
R11-2B
48"X30"

TEMPORARY PEDESTRIAN BARRICADE

CONCRETE BARRIER TEMPORARY PRECAST

BRIDGE OUT
R11-2B
48"X30"

TEMPORARY PEDESTRIAN BARRICADE

CONCRETE BARRIER TEMPORARY PRECAST

BRIDGE OUT
R11-2B
48"X30"

W11-2
30"X30"

WO16-7R
24"X12"

101

102

LAUDERDALE DRIVE

W11-2
30"X30"

WO16-7L
24"X12"

ROAD CLOSED
0.5 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60"X30"

ASTA DR

US 12

ROAD CLOSED AHEAD
W20-3A
48"X48"

BRIDGE OUT
0.5 MILES AHEAD
R11-3C
60"X24"

250'

500'

500'

ROAD CLOSED AHEAD
W20-3A
48"X48"

TRAFFIC CONTROL BUOY
(SEE STAGE 1 FOR LAYOUT)

ROAD CLOSED 500 FT
W20-3D
48"X48"

ROAD CLOSED 1000 FT
W20-3E
48"X48"

N

MIDDLE LAKE

PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	TRAFFIC CONTROL - STAGE 2	SHEET 15	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\025201-TC-S2.DWG
LAYOUT NAME - 025201-tc

PLOT DATE : 4/26/2022 10:56 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TYPE A WARNING LIGHT (FLASHING)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL BOUY
- TEMPORARY PEDESTRIAN BARRICADE

NOTE: AT THE END OF STAGE 3 REMOVE ALL TRAFFIC CONTROL SHOWN AND REPLACE WITH SIGNS PER SDD TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL.

GREEN LAKE

TEMPORARY PEDESTRIAN BARRICADE

CONCRETE BARRIER TEMPORARY PRECAST

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

BRIDGE OUT
R11-2B
48"X30"

W11-2
30"X30"

WO16-7L
24"X12"

ROAD CLOSED
0.5 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60"X30"

ASTA DR

US 12

48"X48"

BRIDGE OUT
0.5 MILES AHEAD
R11-3C
60"X24"

W11-2
30"X30"

WO16-7R
24"X12"

BRIDGE OUT
R11-2B
48"X30"

101

102

LAUDERDALE DRIVE

TEMPORARY PEDESTRIAN BARRICADE

CONCRETE BARRIER TEMPORARY PRECAST

250'

500'

500'

ROAD CLOSED AHEAD
W20-3A
48"X48"

TRAFFIC CONTROL BUOY
(SEE STAGE 1 FOR LAYOUT)

ROAD CLOSED 500 FT
W20-3D
48"X48"

ROAD CLOSED 1000 FT
W20-3E
48"X48"

MIDDLE LAKE

PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	TRAFFIC CONTROL - STAGE 3	SHEET 16	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\025301-TC-S3.DWG
LAYOUT NAME - 025301-tc

PLOT DATE : 4/26/2022 10:56 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TYPE A WARNING LIGHT (FLASHING)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GREEN LAKE

101

102

LAUDERDALE DRIVE

75' 75' 75' 75' 75'

ROAD WORK AHEAD W20-1A 48"X48"

RUMBLE STRIPS AHEAD W21-6S 48"X48"

ONE LANE ROAD AHEAD W20-4A 48"X48"

W20-7A 48"X48"

200' 200' 200' 200'

W20-7A 48"X48"

ONE LANE ROAD AHEAD W20-4A 48"X48"

RUMBLE STRIPS AHEAD W21-6S 48"X48"

ROAD WORK AHEAD W20-1A 48"X48"

TRAFFIC CONTROL BUOY
(SEE STAGE 1 FOR LAYOUT)

MIDDLE LAKE

N

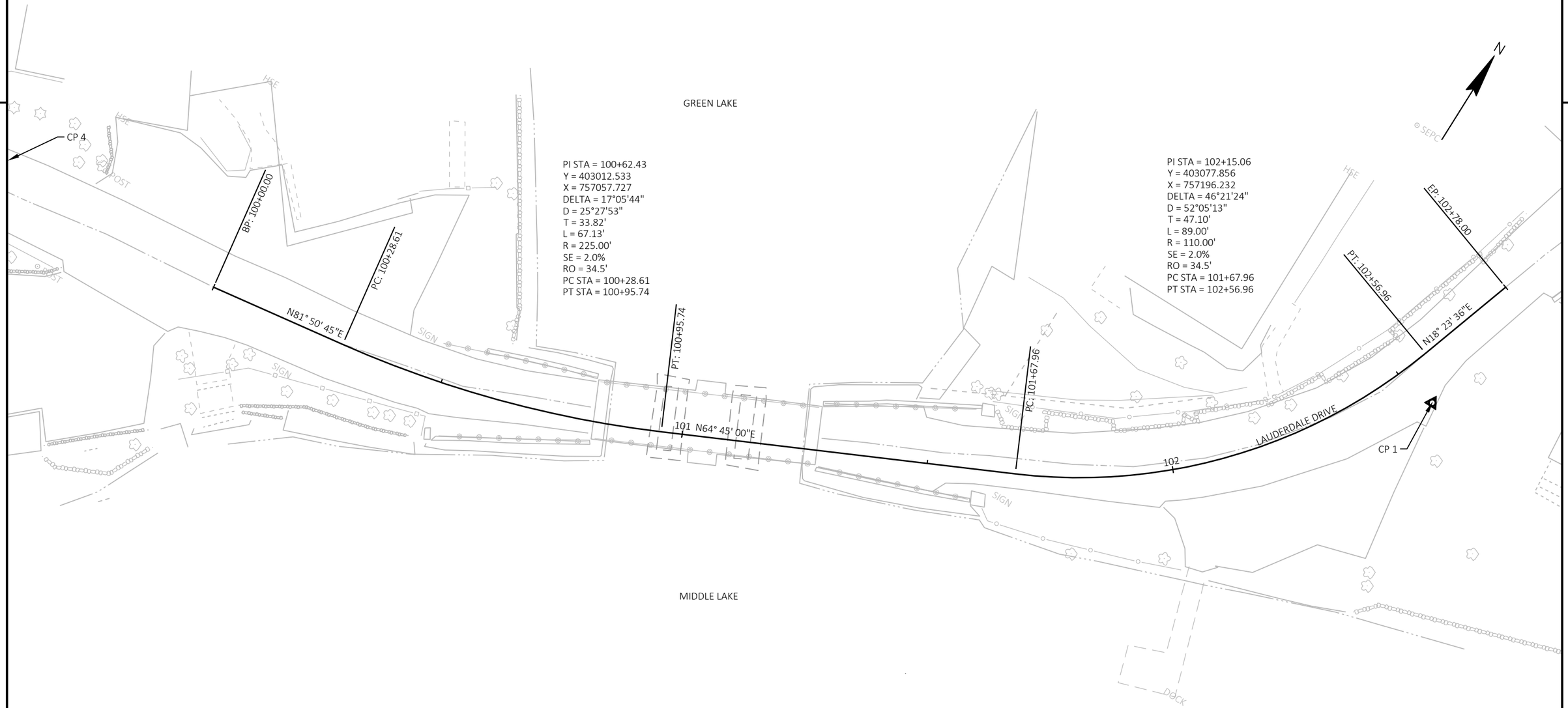
PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	TRAFFIC CONTROL - STAGE 4	SHEET 17	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\025401-TC-S4.DWG
LAYOUT NAME - 025401-tc

PLOT DATE : 4/26/2022 10:57 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



CONTROL POINT TABLE					
CP ID	STA.	ALIGN.	COORDINATES	ELEV.	DESCRIPTION
1	102+52.00 8.724' RT	LAUDERDALE DR	X=757217.568 Y=403114.755	889.984	MAG NAIL IN BIT
4	55' WEST & 1' NORTH FROM STA 100+30	LAUDERDALE DR	X=756941.227 Y=403004.378	897.393	MAG NAIL IN BIT

3839-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	3.000	3.000
0004	201.0205	Grubbing	STA	3.000	3.000
0006	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. B-64-206	EACH	1.000	1.000
0008	204.0165	Removing Guardrail	LF	124.000	124.000
0010	204.0170	Removing Fence	LF	82.000	82.000
0012	204.0185	Removing Masonry	CY	3.000	3.000
0014	204.9090.S	Removing (item description) 01. Drain Tile Pipe	LF	35.000	35.000
0016	205.0100	Excavation Common	CY	177.000	177.000
0018	206.1000	Excavation for Structures Bridges (structure) 01. B-64-206	LS	1.000	1.000
0020	206.3000	Excavation for Structures Retaining Walls (structure) 01. R-64-33	LS	1.000	1.000
0022	206.3000	Excavation for Structures Retaining Walls (structure) 02. R-64-34	LS	1.000	1.000
0024	206.3000	Excavation for Structures Retaining Walls (structure) 03. R-64-35	LS	1.000	1.000
0026	206.3000	Excavation for Structures Retaining Walls (structure) 04. R-64-36	LS	1.000	1.000
0028	206.5000	Cofferdams (structure) 01. B-64-206	LS	1.000	1.000
0030	209.0300.S	Backfill Coarse Aggregate (size) 01. No. 1	CY	22.000	22.000
0032	210.1500	Backfill Structure Type A	TON	413.000	413.000
0034	213.0100	Finishing Roadway (project) 01. 3839-00-70	EACH	1.000	1.000
0036	305.0110	Base Aggregate Dense 3/4-Inch	TON	24.000	24.000
0038	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	233.000	233.000
0040	311.0115	Breaker Run	CY	86.000	86.000
0042	455.0605	Tack Coat	GAL	16.190	16.190
0044	460.2000	Incentive Density HMA Pavement	DOL	60.000	60.000
0046	460.5224	HMA Pavement 4 LT 58-28 S	TON	71.000	71.000
0048	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	10.000	10.000
0050	465.0125	Asphaltic Surface Temporary	TON	12.000	12.000
0052	502.0100	Concrete Masonry Bridges	CY	53.000	53.000
0054	502.3200	Protective Surface Treatment	SY	254.000	254.000
0056	504.0500	Concrete Masonry Retaining Walls	CY	31.000	31.000
0058	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	14,730.000	14,730.000
0060	506.3008	Welded Stud Shear Connectors 5/8x5-Inch	EACH	17.000	17.000
0062	512.0500	Piling Steel Sheet Permanent Delivered	SF	5,524.000	5,524.000
0064	512.0600	Piling Steel Sheet Permanent Driven	SF	5,524.000	5,524.000
0066	513.4061	Railing Tubular Type M	LF	71.000	71.000
0068	516.0500	Rubberized Membrane Waterproofing	SY	18.000	18.000
0070	526.0100	Temporary Structure (station) 01. STA 101+02	LS	1.000	1.000
0072	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	360.000	360.000
0074	603.8000	Concrete Barrier Temporary Precast Delivered	LF	64.000	64.000
0076	603.8125	Concrete Barrier Temporary Precast Installed	LF	64.000	64.000
0078	612.0204	Pipe Underdrain Unperforated 4-Inch	LF	27.000	27.000
0080	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	6.000	6.000
0082	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	242.000	242.000
0084	616.0204	Fence Chain Link 4-FT	LF	256.000	256.000
0086	616.0404	Fence Chain Link Salvaged 4-FT	LF	20.000	20.000
0088	619.1000	Mobilization	EACH	1.000	1.000
0090	624.0100	Water	MGAL	6.000	6.000
0092	625.0100	Topsoil	SY	75.000	75.000
0094	627.0200	Mulching	SY	150.000	150.000
0096	628.1504	Silt Fence	LF	328.000	328.000
0098	628.1520	Silt Fence Maintenance	LF	1,312.000	1,312.000

3839-00-70

Line	Item	Item Description	Unit	Total	Qty
0100	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0102	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0104	629.0210	Fertilizer Type B	CWT	0.100	0.100
0106	630.0130	Seeding Mixture No. 30	LB	1.360	1.360
0108	630.0200	Seeding Temporary	LB	2.020	2.020
0110	630.0500	Seed Water	MGAL	1.680	1.680
0112	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	6.000	6.000
0114	637.2230	Signs Type II Reflective F	SF	30.000	30.000
0116	638.2602	Removing Signs Type II	EACH	4.000	4.000
0118	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0120	642.5201	Field Office Type C	EACH	1.000	1.000
0122	643.0420	Traffic Control Barricades Type III	DAY	976.000	976.000
0124	643.0705	Traffic Control Warning Lights Type A	DAY	732.000	732.000
0126	643.0900	Traffic Control Signs	DAY	1,600.000	1,600.000
0128	643.5000	Traffic Control	EACH	1.000	1.000
0130	644.1810	Temporary Pedestrian Barricade	LF	91.000	91.000
0132	645.0111	Geotextile Type DF Schedule A	SY	159.000	159.000
0134	645.0130	Geotextile Type R	SY	6.000	6.000
0136	650.4500	Construction Staking Subgrade	LF	186.000	186.000
0138	650.5000	Construction Staking Base	LF	186.000	186.000
0140	650.6500	Construction Staking Structure Layout (structure) 01. B-64-206	LS	1.000	1.000
0142	650.6500	Construction Staking Structure Layout (structure) 02. R-64-33	LS	1.000	1.000
0144	650.6500	Construction Staking Structure Layout (structure) 03. R-64-34	LS	1.000	1.000
0146	650.6500	Construction Staking Structure Layout (structure) 04. R-64-35	LS	1.000	1.000
0148	650.6500	Construction Staking Structure Layout (structure) 05. R-64-36	LS	1.000	1.000
0150	650.9910	Construction Staking Supplemental Control (project) 01. 3839-00-70	LS	1.000	1.000
0152	650.9920	Construction Staking Slope Stakes	LF	138.000	138.000
0154	690.0150	Sawing Asphalt	LF	30.000	30.000
0156	715.0502	Incentive Strength Concrete Structures	DOL	504.000	504.000
0158	999.1001.S	Seismograph 01. 3839-00-70	EACH	1.000	1.000
0160	999.1501.S	Crack and Damage Survey	EACH	2.000	2.000
0162	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	200.000	200.000
0164	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	500.000	500.000
0166	SPV.0060	Special 01. Protect Existing Retaining Wall	EACH	4.000	4.000
0168	SPV.0060	Special 02. Temporary Causeway	EACH	1.000	1.000
0170	SPV.0060	Special 03. Salvage Concrete Monuments	EACH	2.000	2.000
0172	SPV.0060	Special 04. Lakebed Restoration	EACH	1.000	1.000
0174	SPV.0090	Special 01. Flashing Stainless Steel	LF	28.000	28.000
0176	SPV.0180	Special 01. Enhanced Turbidity Barrier	SY	171.000	171.000

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)		AVAILABLE MATERIAL (5)	MASS ORDINATE +/- (14)	WASTE	COMMENT
			CUT (2)	EBS EXCAVATION (3)				
DIVISION 1								
QUANTITYREPORTTEMPXML	100+30/102+50	MAINLINE	177	0	177	177	177	
DIVISION 1 SUBTOTAL			177	0	177	177	177	
GRAND TOTAL			177	0	177	177	177	
TOTAL COMMON EXC			177					

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 SELECT BORROW MATERIAL. NOTE: THIS IS DESIGNERS CHOICE, CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL.

(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(14) 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.

(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

PROJECT ID	STAGE	STATION	TO	STATION	201.0105 Clearing STA	201.0205 Grubbing STA
3839-00-70	STAGE 1	100+30	-	100+88	1	1
	STAGE 1	101+21	-	102+50	2	2
Contract Total					**3**	**3**

PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	204.0165 Removing Guardrail LF	204.0170 Removing Fence LF	204.0185 Removing Masonry CY	204.9090.S.01 Removing Drain Tile Pipe LF
3839-00-70	STAGE 1	100+13	-	100+50	'RT'		39		
	STAGE 1	100+48	-	100+81	'LT'	32			
	STAGE 1	100+48	-	100+58	'LT'			3	
	STAGE 1	100+53	-	100+82	'RT'	30			
	STAGE 1	101+28	-	101+59	'RT'	31			
	STAGE 1	101+28	-	101+59	'LT'	31			
	STAGE 1	101+49	-	101+76	'LT'				35
	STAGE 1	101+62	-	101+99	'RT'		43		
Contract Total						**124**	**82**	**3**	**35**

PROJECT ID	STAGE	STATION	TO	STATION	305.0110 Base Aggregate Dense 3/4-Inch TON	305.0120 Base Aggregate Dense 1 1/4-Inch TON	311.0115 Breaker Run CY
3839-00-70	STAGE 1	100+40	-	100+60		5	
	STAGE 1	101+59	-	101+94		7	
	STAGE 2	100+30	-	100+88		64	
	STAGE 2	101+21	-	102+50		138	
	STAGE 2	101+63	-	102+50			86
	STAGE 4	100+30	-	100+41		1	
	STAGE 4	100+30	-	100+86	5		
	STAGE 4	100+40	-	100+86	4		
	STAGE 4	101+21	-	102+50	7		
	STAGE 4	101+21	-	101+98	8		
	STAGE 4	101+97	-	102+49		18	
Contract Total					**24**	**233**	**86**

PROJECT ID	STAGE	STATION	TO	STATION	455.0605 Tack Coat GAL	460.5224 HMA Pavement 4 LT 58-28 S TON	465.0120 Asphaltic Surface Driveways and Field Entrances TON	465.0125 Asphaltic Surface Temporary TON
3839-00-70	STAGE 1	100+40	-	100+60				5
	STAGE 1	101+59	-	101+94				7
	STAGE 4	100+30	-	100+41	0.01		1	
	STAGE 4	100+30		100+88	4.92	22		
	STAGE 4	100+88	-	100+88	0.03			
	STAGE 4	101+21	-	102+50	11.15	49		
	STAGE 4	101+21		101+21	0.03			
	STAGE 4	101+97	-	102+48	0.05			
	STAGE 4	101+97		102+49			9	
Contract Total					**16.19**	**71**	**10**	**12**

FILE NAME : X:\Projects\Dane\3070-00-02 STH 73\Est&Qnty\Miscellaneous Quantities\030200_mq.pptx PLOT DATE : 4/21/2022 4:04 PM PLOT BY : MICHAEL BAKER INTL PLOT NAME : PLOT SCALE : 1:1

3

PROJECT ID	STATION	LOCATION	526.0100.01 Temporary Structure STA 101+02 LS
3839-00-70	101+02	'LT'	1
Contract Total			**1**

3

PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	603.8000 Concrete Barrier Temporary Precast Delivered LF	603.8125 Concrete Barrier Temporary Precast Installed LF
3839-00-70	STAGE 2	100+09	-	100+42	'LT'	34	34
	STAGE 2	101+47	-	101+77	'LT'	30	30
Contract Total						**64**	**64**

PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	612.0204 Pipe Underdrain Unperforated 4-Inch LF
3839-00-70	STAGE 4	101+50	-	101+76	'LT'	27
Contract Total						**27**

PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	616.0204 Fence Chain Link 4-FT LF	616.0404 Fence Chain Link Salvaged 4-FT LF
3839-00-70	STAGE 1	101+72	-	101+95	'LT'		20
	STAGE 4	100+13	-	100+50	'RT'	39	
	STAGE 4	101+88	-	101+98	'RT'	13	
Contract Total						**52**	**20**

PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	624.0100 Water MGAL	625.0100 Topsoil SY	627.0200 Mulching SY	628.1504 Silt Fence LF	628.1520 Silt Fence Maintenance LF
3839-00-70		100+28	-	100+99				75		
		100+30	-	100+88	'RT'	2				
		101+21	-	102+50	'LT'	4				
	STAGE 1	100+28	-	100+67	'RT'				89	89
	STAGE 1	101+48	-	102+50	'LT'				239	239
	STAGE 2	100+28	-	100+67	'RT'					89
	STAGE 2	101+48	-	102+50	'LT'					239
	STAGE 3	100+28	-	100+67	'RT'					89
	STAGE 3	101+48	-	102+50	'LT'					239
	STAGE 4	100+28	-	100+67	'RT'					89
	STAGE 4	100+28	-	100+51	'RT'		13	13		
	STAGE 4	100+40	-	100+60	'LT'		15	15		
	STAGE 4	101+48	-	102+50	'LT'					239
	STAGE 4	101+59	-	101+96	'LT'		19	19		
	STAGE 4	101+63	-	102+00	'RT'		28	28		
Contract Total						**6**	**75**	**150**	**328**	**1,312**

PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	628.1905 Mobilizations Erosion Control EACH	628.1910 Mobilizations Emergency Erosion Control EACH	629.0210 Fertilizer Type B CWT	630.0130 Seeding Mixture No. 30 LB	630.0200 Seeding Temporary LB	630.0500 Seed Water MGAL
3839-00-70		100+28	-	100+99		5	4	0.05		2.02	0.84
	STAGE 4	100+28	-	100+51	'RT'			0.01	0.24		0.15
	STAGE 4	100+40	-	100+60	'LT'			0.01	0.27		0.17
	STAGE 4	101+59	-	101+96	'LT'			0.01	0.34		0.21
	STAGE 4	101+63	-	102+00	'RT'			0.02	0.51		0.31
Contract Total						**5**	**4**	**0.10**	**1.36**	**2.02**	**1.68**

3

PROJECT ID	STAGE	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	634.0612 Posts Wood 4x6-Inch x 12-FT EACH	637.2230 Signs Type II Reflective F SF	638.2602 Removing Signs Type II EACH	638.3000 Removing Small Signs Supports EACH
3839-00-70	STAGE 1	100+15	'RT'						1	1
	STAGE 1	100+40	'LT'						1	1
	STAGE 1	101+62	'RT'						1	1
	STAGE 1	101+63	'LT'						1	1
	STAGE 4			W5-2	36" X 36"	NARROW BRIDGE MESSAGE	1	9		
	STAGE 4	100+81	'LT'	W5-52L	12" X 36"	BRIDGE HASH MARKS	1	3		
	STAGE 4	100+81	'RT'	W5-52R	12" X 36"	BRIDGE HASH MARKS	1	3		
	STAGE 4	101+23	'RT'	W5-52L	12" X 36"	BRIDGE HASH MARKS	1	3		
	STAGE 4	101+23	'LT'	W5-52R	12" X 36"	BRIDGE HASH MARKS	1	3		
	STAGE 4	102+61	'LT'	W5-2	36" X 36"	NARROW BRIDGE MESSAGE	1	9		
Contract Total							**6**	**30**	**4**	**4**

PROJECT ID	STAGE	STATION	LOCATION	DAYS	643.0420 Traffic Control Barricades Type III DAY	643.0705 Traffic Control Warning Lights Type A DAY	643.0900 Traffic Control Signs DAY
3839-00-70	STAGE 1			12	24	48	84
	STAGE 1	100+17	'RT'	12	12	24	12
	STAGE 1	100+20	'LT'	12	12		
	STAGE 1	100+24	'RT'	12	24	24	12
	STAGE 1	100+24	'LT'	12	36		
	STAGE 1	102+53	'RT'	12	24	24	12
	STAGE 1	102+53	'LT'	12	36		
	STAGE 1	102+59	'RT'	12	12		
	STAGE 1	102+63	'LT'	12	12	24	12
	STAGE 2			41	82	164	369
	STAGE 2	100+11	'RT'	41	41	82	41
	STAGE 2	100+15	'LT'	41	41		
	STAGE 2	100+19	'RT'	41	82	82	41
	STAGE 2	100+19	'LT'	41	123		
	STAGE 2	101+62	'LT'	41	41	82	41
	STAGE 2	101+64	'LT'	41	41		
	STAGE 2	101+62	'LT'	41	41	82	41
	STAGE 2	101+64	'LT'	41	41		
	STAGE 2	101+65	'LT'	41	123		
	STAGE 2	101+73	'LT'	41	41	82	41
	STAGE 2	101+76	'LT'	41	41		
	STAGE 2	102+05	'LT'	41			82
	STAGE 3			8	16	32	64
	STAGE 3	100+71	'RT'	8	8	16	8
	STAGE 3	100+74	'LT'	8	8		
	STAGE 3	100+78	'RT'	8	16		
	STAGE 3	100+78	'LT'	8	24	16	8
	STAGE 3	101+36	'RT'	8	8		
	STAGE 3	101+36	'LT'	8	32	16	8
	STAGE 3	101+42	'RT'	8	8		
	STAGE 3	101+46	'LT'	8	8	16	8
	STAGE 3	102+05	'LT'	8			16
	STAGE 3	102+46	'LT'	8			8
	STAGE 3 - WINTER SHUTDOWN						624
	STAGE 4						48
Contract Total					**976**	**732**	**1,600**

PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	644.1810 Temporary Pedestrian Barricade LF
3839-00-70	STAGE 1					49
	STAGE 1	101+58	-	102+00	'LT'	42
Contract Total						**91**

PROJECT ID	STATION	TO	STATION	LOCATION	650.4500 Construction Staking Subgrade LF	650.5000 Construction Staking Base LF	650.9920 Construction Staking Slope Stakes LF
3839-00-70	100+30	-	100+88		57	57	
	100+30	-	100+64	'LT'			20
	100+40	-	100+48	'RT'			19
	101+21	-	102+50		129	129	
	101+63	-	102+50	'LT'			86
	101+88	-	102+00	'RT'			13
Contract Total					**186**	**186**	**138**

FILE NAME : X:\Projects\Dane\3070-00-02 STH 73\Est&Qnty\Miscellaneous Quantities\030200_mq.pptx PLOT DATE : 4/21/2022 4:04 PM PLOT BY : MICHAEL BAKER INTL PLOT NAME : PLOT SCALE : 1:1

3

PROJECT ID	STAGE	STATION	690.0150 Sawing Asphalt LF
3839-00-70	STAGE 1	100+28	15
	STAGE 1	102+50	15
Contract Total			**30**

PROJECT ID	STATION	TO	STATION	LOCATION	SPV.0180.01 Enhanced Turbidity Barrier SY
3839-00-70	100+42	-	101+91	'RT'	139
	100+92	-	100+98	'LT'	16
	101+23	-	101+28	'LT'	16
Contract Total					**171**

3

PROJECT ID	ITEM #	DESCRIPTION	UNIT	Sum of Quantity
3839-00-70	213.0100.01	Finishing Roadway 3839-00-70	EACH	1
	619.1000	Mobilization	EACH	0.167
	642.5201	Field Office Type C	EACH	1
	643.5000	Traffic Control	EACH	1
	650.6500.01	Construction Staking Structure Layout B-64-206	LS	1
	650.6500.02	Construction Staking Structure Layout R-64-33	LS	1
	650.6500.03	Construction Staking Structure Layout R-64-34	LS	1
	650.6500.04	Construction Staking Structure Layout R-64-35	LS	1
	650.6500.05	Construction Staking Structure Layout R-64-36	LS	1
	650.9910.01	Construction Staking Supplemental Control 3839-00-70	LS	1
	SPV.0060.02	Temporary Causeway	EACH	1
	SPV.0060.03	Salvage Concrete Monuments	EACH	2
	SPV.0060.04	Lakebed Restoration	EACH	1

FILE NAME : X:\Projects\Dane\3070-00-02 STH 73\Est&Qnty\Miscellaneous Quantities\030200_mq.pptx PLOT DATE : 4/21/2022 4:04 PM PLOT BY : MICHAEL BAKER INTL PLOT NAME : PLOT SCALE : 1:1

TRANSPORTATION PROJECT PLAT NO: 3839-00-00 - 4.01 AMENDMENT NO.2

AMENDS PARCEL 1 AND 2 OF TRANSPORTATION PROJECT PLAT 3839-00-00-4.01 AMENDMENT NO. 1 RECORDED AS DOCUMENT NO. 1044038.

THAT PART OF LOT 1, PLAT OF LAUDERDALE PARK, LOCATED IN GOVERNMENT LOT 4, SECTION 25 AND PART OF LOT 26, GREEN ISLAND, LOCATED IN GOVERNMENT LOT 7, SECTION 26, ALL IN THE TOWN OF LAGRANGE, TOWNSHIP 4 NORTH, RANGE 16 EAST, WALWORTH COUNTY, WISCONSIN.

RELOCATION ORDER LAUDERDALE DRIVE (BRIDGE OVER GREEN LAKE P-64-0921) WALWORTH COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE TOWN OF LAGRANGE DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

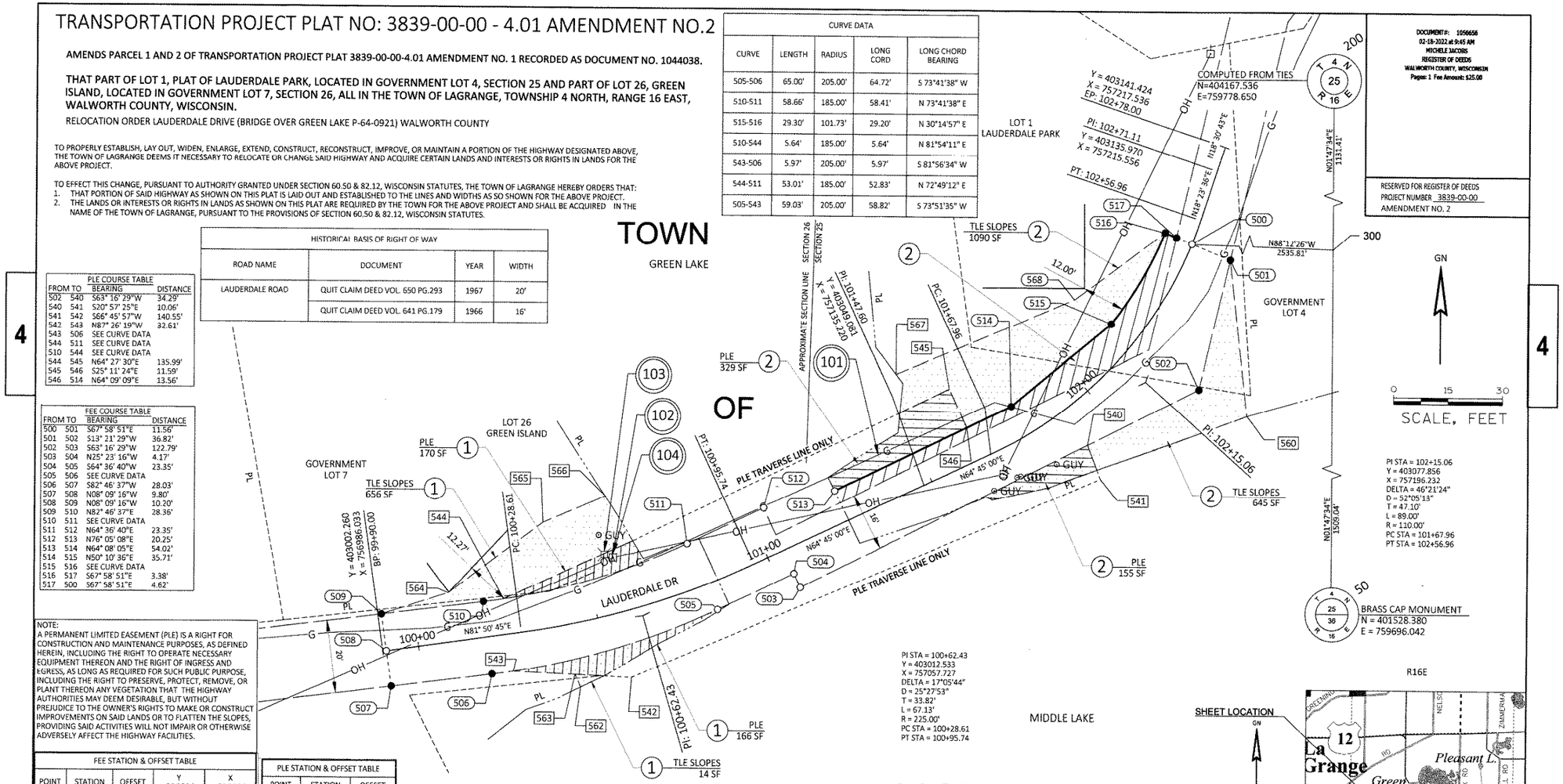
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 60.50 & 82.12, WISCONSIN STATUTES, THE TOWN OF LAGRANGE HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE TOWN FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE TOWN OF LAGRANGE, PURSUANT TO THE PROVISIONS OF SECTION 60.50 & 82.12, WISCONSIN STATUTES.

CURVE DATA				
CURVE	LENGTH	RADIUS	LONG CORD	LONG CHORD BEARING
505-506	65.00'	205.00'	64.72'	S 73°41'38" W
510-511	58.66'	185.00'	58.41'	N 73°41'38" E
515-516	29.30'	101.73'	29.20'	N 30°14'57" E
510-544	5.64'	185.00'	5.64'	N 81°54'11" E
543-506	5.97'	205.00'	5.97'	S 81°56'34" W
544-511	53.01'	185.00'	52.83'	N 72°49'12" E
505-543	59.03'	205.00'	58.82'	S 73°51'35" W

HISTORICAL BASIS OF RIGHT OF WAY			
ROAD NAME	DOCUMENT	YEAR	WIDTH
LAUDERDALE ROAD	QUIT CLAIM DEED VOL. 650 PG.293	1967	20'
	QUIT CLAIM DEED VOL. 641 PG.179	1966	16'

PLE COURSE TABLE			
FROM	TO	BEARING	DISTANCE
502	540	S63° 16' 29"W	34.29'
540	541	S20° 57' 25"E	10.06'
541	542	S66° 45' 57"W	140.55'
542	543	N87° 26' 19"W	32.61'
543	506	SEE CURVE DATA	
544	511	SEE CURVE DATA	
510	544	SEE CURVE DATA	
544	545	N64° 27' 30"E	135.99'
545	546	S25° 11' 24"E	11.59'
546	514	N64° 09' 09"E	13.56'

FEE COURSE TABLE			
FROM	TO	BEARING	DISTANCE
500	501	S67° 58' 51"E	11.56'
501	502	S13° 21' 29"W	36.82'
502	503	S63° 16' 29"W	122.79'
503	504	N25° 23' 16"W	4.17'
504	505	S64° 36' 40"W	23.35'
505	506	SEE CURVE DATA	
506	507	S82° 46' 37"W	28.03'
507	508	N08° 09' 16"W	9.80'
508	509	N08° 09' 16"W	10.20'
509	510	N82° 46' 37"E	28.36'
510	511	SEE CURVE DATA	
511	512	N64° 36' 40"E	23.35'
512	513	N76° 05' 08"E	20.25'
513	514	N64° 08' 05"E	54.02'
514	515	N50° 10' 36"E	35.71'
515	516	SEE CURVE DATA	
516	517	S67° 58' 51"E	3.38'
517	500	S67° 58' 51"E	4.62'



NOTE:
A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND 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, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

FEE STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
500	102+50.00	0.00' RT	403116.015	757208.689
501	102+50.00	11.56' RT	403111.680	757219.406
502	102+19.32	22.21' RT	403075.861	757210.901
503	101+04.73	11.22' RT	403020.642	757101.231
504	101+04.72	7.05' RT	403024.410	757099.443
505	100+81.83	7.55' RT	403014.398	757078.346
506	100+19.03	10.26' RT	402996.226	757016.226
507	99+91.00	9.80' RT	402992.701	756988.413
508	99+91.00	0.00' RT	403002.402	756987.023
509	99+91.00	10.20' LT	403012.501	756985.576
510	100+19.36	9.74' LT	403016.067	757013.711
511	100+80.47	12.40' LT	403032.466	757069.771
512	101+04.67	12.95' LT	403042.479	757090.868
513	101+24.52	8.97' LT	403047.347	757110.519
514	101+79.51	8.99' LT	403070.916	757159.132
515	102+18.40	8.00' LT	403093.788	757186.561
516	102+50.00	8.00' LT	403119.014	757201.272
517	102+50.00	4.62' LT	403117.748	757204.402

PLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
540	101+90.96	11.59' RT
541	101+88.60	21.28' RT
542	100+55.00	18.00' RT
543	100+25.00	10.27' RT
544	100+25.00	9.74' LT
545	101+65.00	21.00' LT
546	101+64.99	9.41' LT

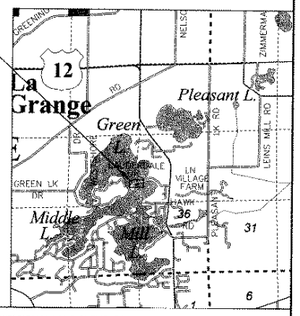
TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
560	102+21.23	37.20' RT
562	100+41.78	17.53' RT
563	100+41.00	13.80' RT
564	100+10.00	13.50' LT
565	100+40.00	29.00' LT
566	100+61.36	32.01' LT
567	101+53.42	30.87' LT
568	102+17.00	20.00' LT

UTILITY EASEMENT TABLE			
UTILITY NUMBER	PARCEL	RECORDING INFORMATION	UTILITY OWNER
101	1	NO EASEMENT OF RECORD	WE ENERGIES (GAS)
	2	NO EASEMENT OF RECORD	
102	1	NO EASEMENT OF RECORD	WE ENERGIES (ELECTRIC)
103	1	NO EASEMENT OF RECORD	TDS TELECOM
104	1	NO EASEMENT OF RECORD	EDGE BROADBAND

UTILITY INTEREST TABLE		
UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
101	WE ENERGIES (GAS)	RELEASE OF RIGHTS
102	WE ENERGIES (ELECTRIC)	RELEASE OF RIGHTS
103	TDS TELECOM	RELEASE OF RIGHTS
104	EDGE BROADBAND	RELEASE OF RIGHTS

NOTE:
REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT NO. 1040670 FOR ADDITIONAL INFORMATION

SCHEDULE OF LANDS & INTERESTS REQUIRED							
PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W NEW SF	R/W EXISTING SF	R/W TOTAL SF	PLE SF	TLE SF
1	GEOFFERY A. BONN & EVA LU-BONN	PLE - TLE	0.00	0.00	0.00	336	670
2	GREGORY S. CSANDA & SUSAN W. CSANDA	FEE - PLE - TLE	669	0.00	669	484	1735
OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE TOWN							



SEH
10 N BRIDGE ST
CHIPPEWA FALLS WI 54729

I, JASON L. CANCE PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF TOWN OF LAGRANGE I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: _____ DATE: 2-3-2022
PRINT NAME: JASON L. CANCE
REGISTRATION NUMBER: S-2688

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE TOWN OF LAGRANGE

SIGNATURE: _____ DATE: 03/9/2022
PRINT NAME: FRANK TAYLOR, TOWN BOARD CHAIRMAN

FILE NAME : \\SEHDF\PROJECTS\KO\M\MBAKE\152052\LAUDERDALE ROAD\4.01 - COPY.DWG
APPRAISAL PLAT DATE : 8/6/2021
PLOT DATE : 2/2/2022 4:25 PM
PLOT BY : NICK ENGH
PLOT NAME :
PLOT SCALE : 1 IN:30 FT

3839-00-00 4.01

SURVEY POINT TABLE					
BM ID	STA.	ALIGN.	COORDINATES	ELEV.	DESCRIPTION
BM 1884	83' WEST & 21' SOUTH FROM STA 100+30	LAUDERDALE DR	X=756942.311 Y=402986.617	898.364	3/8" SPIKE IN 5" WOOD POST
BM 2024	102+02.41 24.025' RT	LAUDERDALE DR	X=757198.459 Y=403059.956	887.211	CORNER OF CONCRETE WALL, 1" EAST OF DOCK, ADDRESS W5308

JAMES G BINDON TRUST

GEOFFREY A BONN

GREEN LAKE

GREGORY S CSANDA

JOHN M CLARKSON TRUST

MARK W ROBIE TRUST

ALL EXISTING WALLS, PROTECT IN PLACE WHERE WALLS ARE TO REMAIN, TYP.

DRIVEWAY SEE CONSTRUCTION DETAILS - DRIVEWAY DETAIL

EXISTING SEPTIC HOLDING TANK

WE-ENERGIES GAS

COFFERDAM (SEE STRUCTURE PLAN)

STRUCTURE B-64-206

STRUCTURE R-64-34

STRUCTURE R-64-35

STRUCTURE R-64-36

STRUCTURE R-64-33

TDS TELECOM & WE-ENERGIES ELECTRIC & EDGE BROADBAND

FENCE CHAINLINK, 4FT

FENCE CHAINLINK SALVAGED, 4FT

EXISTING FENCE PROTECT IN PLACE

ROCK RETAINING WALL TO REMAIN IN PLACE

LAUDERDALE DRIVE

R/W

TLE

PLE

BM 1884

BM 2024

N81° 50' 45"E

N64° 45' 00"E

N18° 23' 36"E

R110'

100+30.00 7.13' LT

100+40.00 7.50' LT

100+25.21 10.26' RT

100+30.00 7.61' RT

100+40.00 7.50' RT

100+49.56 11.54' RT

100+87.55 END OF DECK

101+20.55 END OF DECK

101+72.39 13.70' LT

101+87.77 17.10' RT

101+94.97 11.72' LT

102+10.00 7.50' LT

102+20.00 7.00' LT

102+32.92 9.19' RT

102+40.00 7.00' LT

102+50.00 6.04' LT

101+98.18 21.11' RT

102+50.00 10.89' RT

SLOPE INTERCEPT

BEGIN PROJECT
STA 100+30
X = 757,025.63
Y = 403,007.94

END PROJECT
STA 102+50
X = 757,208.69
Y = 403,116.01

DESIGN NOTE: EXCAVATION BELOW SUBGRADE AREA AS DETERMINED BY THE ENGINEER

STATION 100+87.55 - 101+20.55
STRUCTURE B-64-206
SINGLE SPAN CONCRETE SLAB
15' CLEAR ROADWAY
SKEW 0°

STATION 100+81.85 - 101+27.49
REMOVE STRUCTURE P-64-0921
SINGLE SPAN CONCRETE SLAB
47' OVERALL LENGTH
12' OVERALL WIDTH

VCL = 75.00
K = 11.20

STA 100+30.00 EL 890.48

STA 100+47.54 EL 890.15

STA 101+50.00 EL 888.74

VPI STA 102+06.00 VPI EL 887.67

VPT STA 102+43.50 VPT EL 889.46

STA 102+50.00 EL 889.77

VPC STA 101+68.50 VPC EL 888.39

PROPOSED PROFILE

ORIGINAL GROUND

(-3.64%) -1.90% -1.37% (-2.82%) -1.92% 4.79%

HIGH WATER 100 885.6'

HIGH WATER 2 885.0'

OBSERVED WATER HEIGHT 884.35'

	EXISTING	PROPOSED
STA 100+30.00	891.72	
STA 100+47.54	889.96	890.11
STA 101+50.00	883.15	889.43
STA 101+68.50	888.87	888.74
VPI STA 102+06.00	888.13	888.23
VPT STA 102+43.50	889.77	889.77

890 885 883

99 100 101 102 103

PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	PLAN AND PROFILE: LAUDERDALE DRIVE	SHEET 31	E

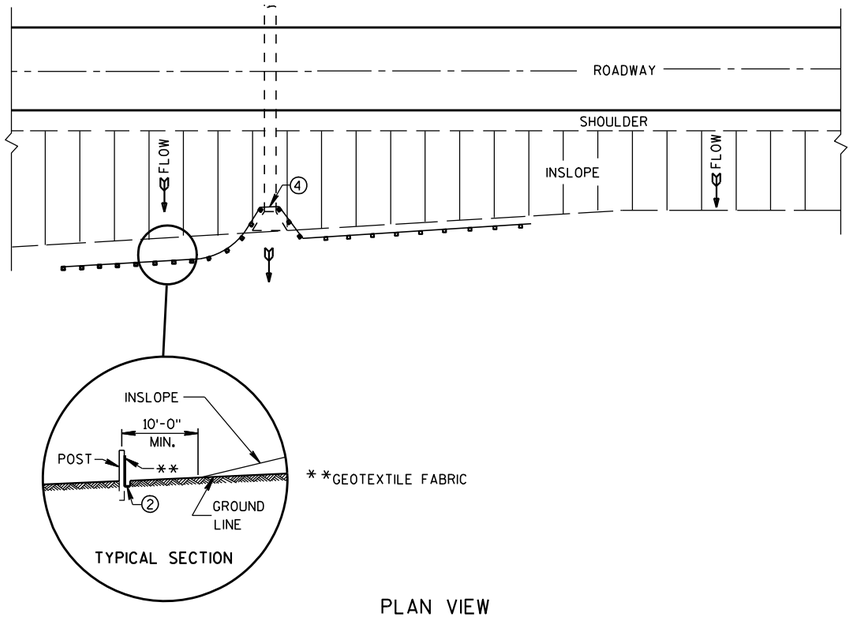
FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp

PLOT DATE : 4/26/2022 10:57 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 44

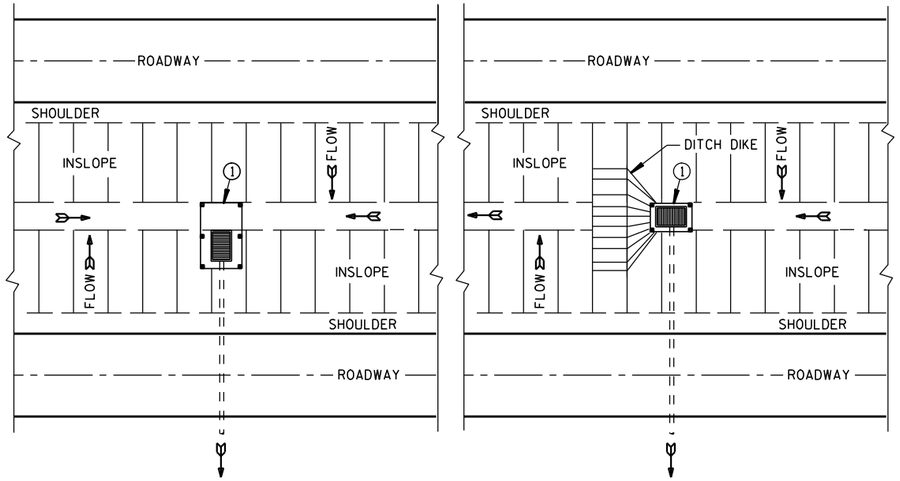
Standard Detail Drawing List

08E09-06	SILT FENCE
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-08	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15D30-06A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-06B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-06C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



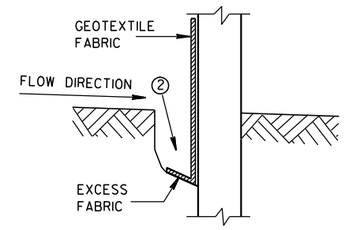
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

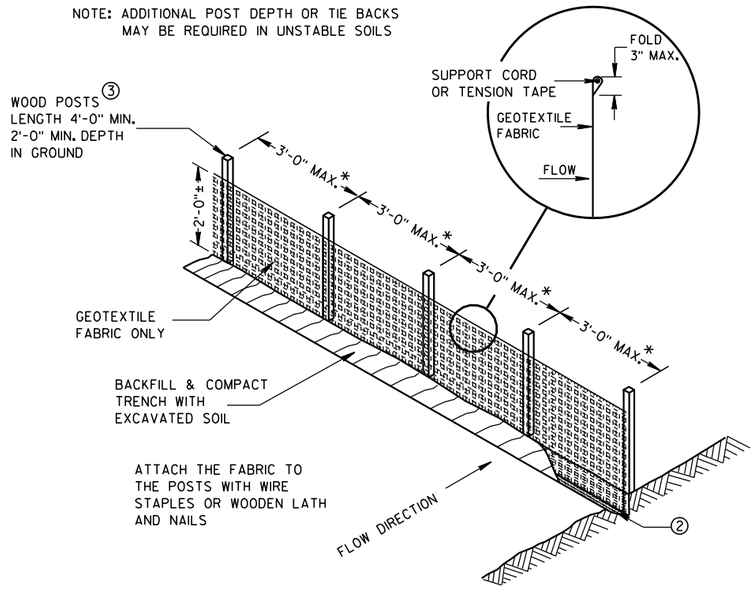
GENERAL NOTES

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

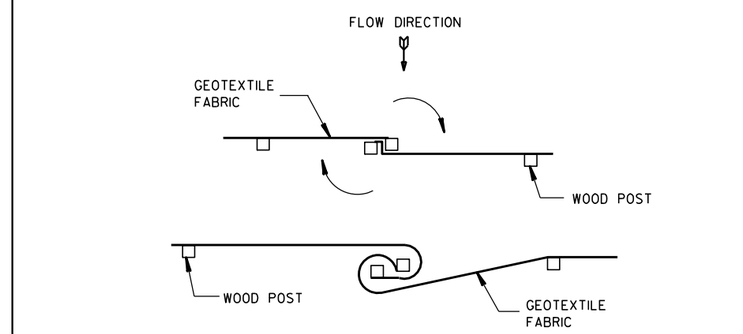
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



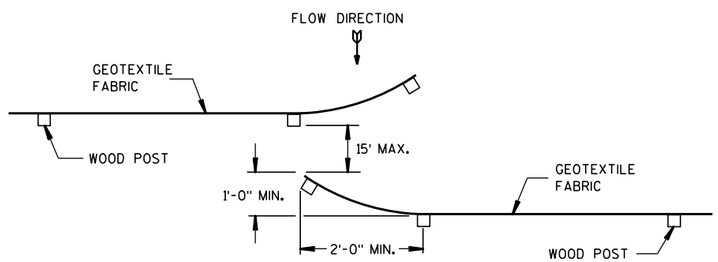
TRENCH DETAIL



SILT FENCE

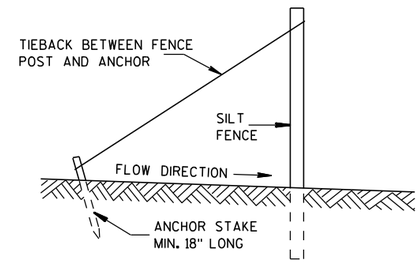


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

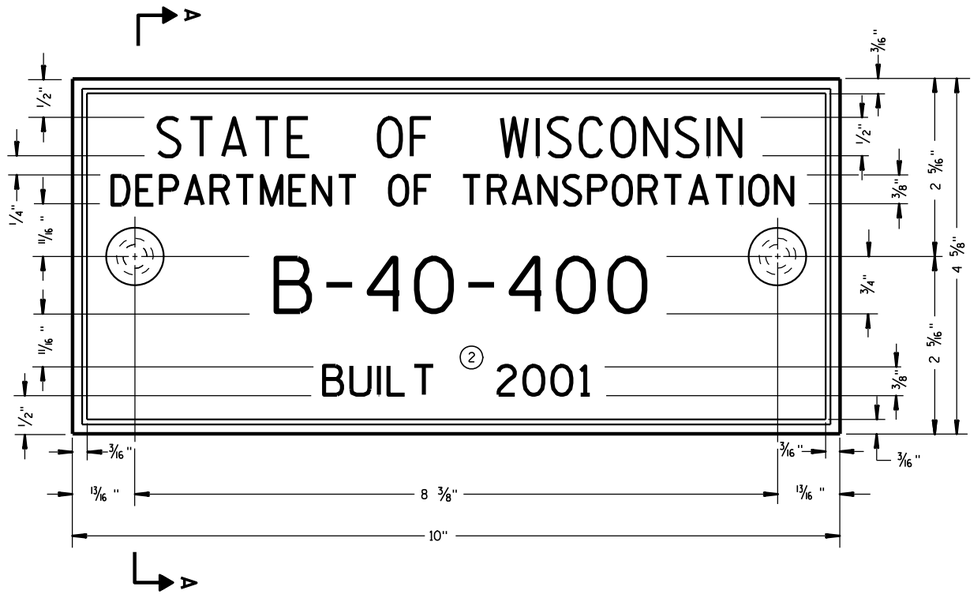
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6



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

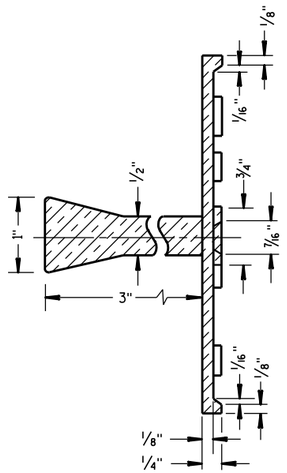
GENERAL NOTES

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

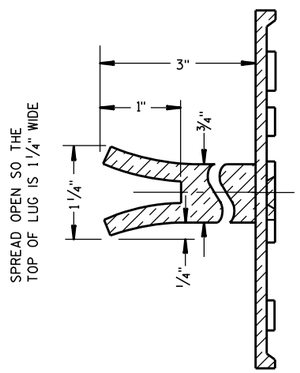
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

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



SECTION A-A



ALTERNATE LUG

FOR MULTI-UNIT STRUCTURES LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

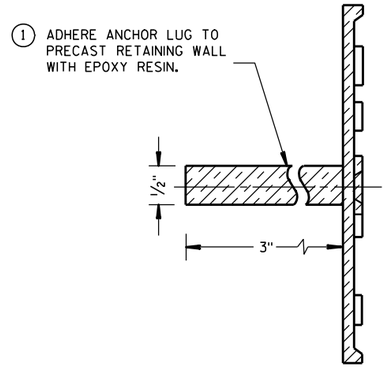
COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

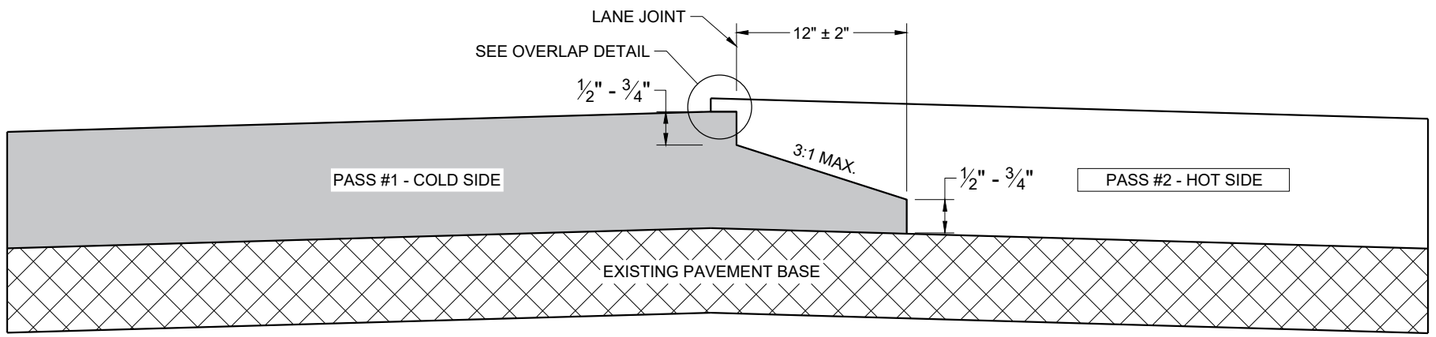
3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER

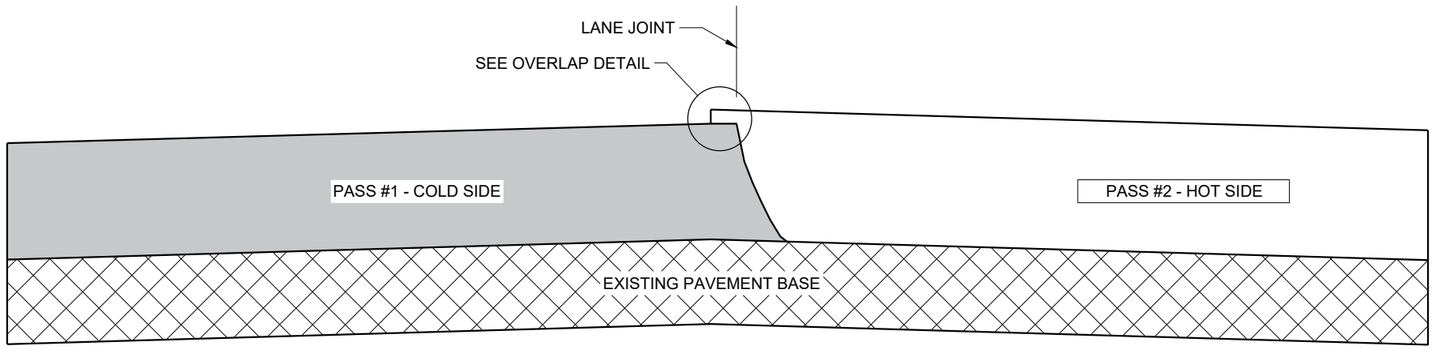
FHWA

6

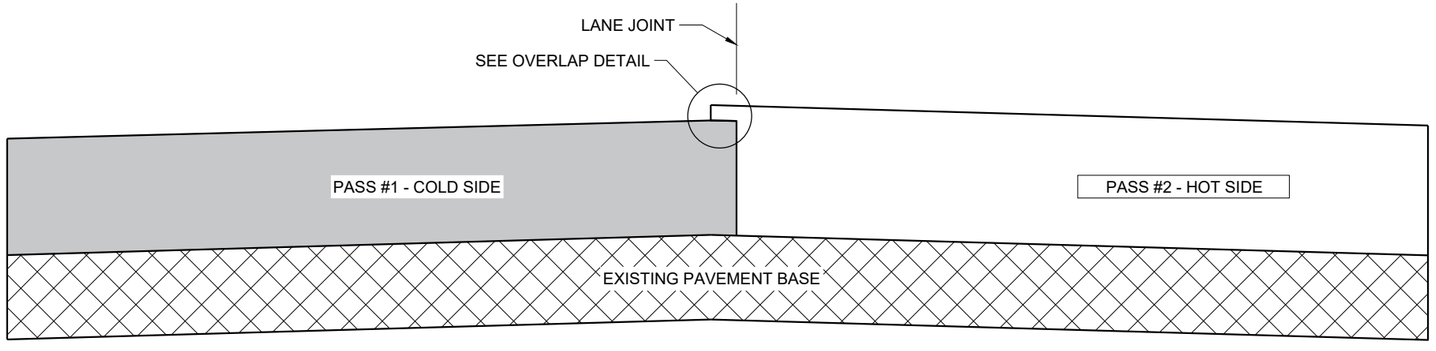
S.D.D. 12 A 3-10



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

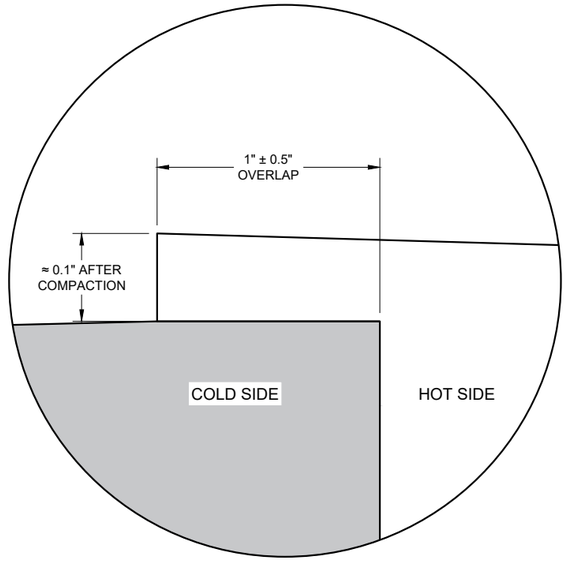
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)

HMA LONGITUDINAL JOINTS

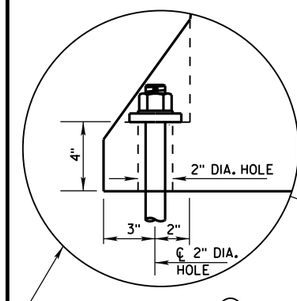
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE
/S/ Steven Hefel
HMA PAVEMENT ENGIN

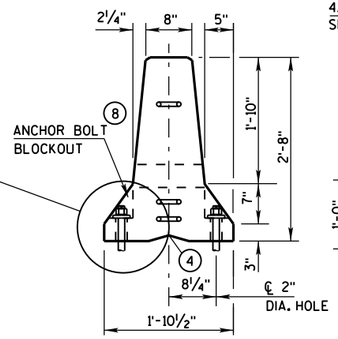
FHWA

6

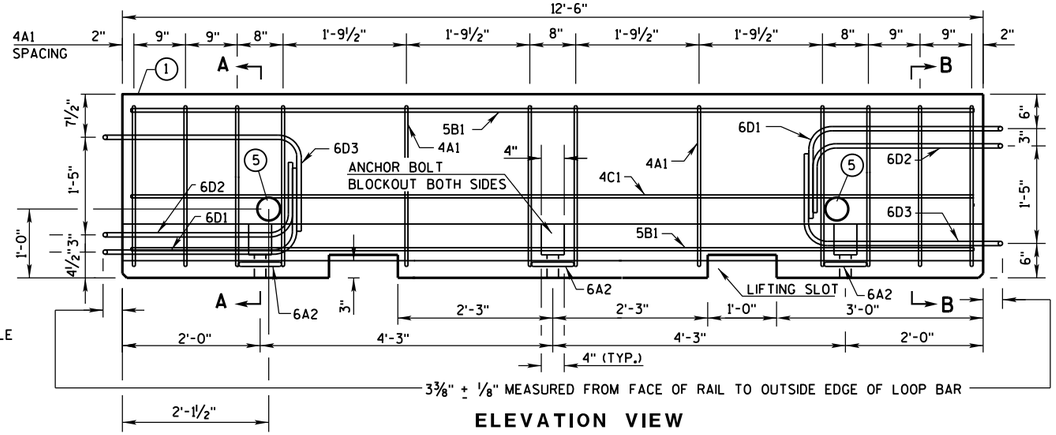
SDD 13C19 - 03



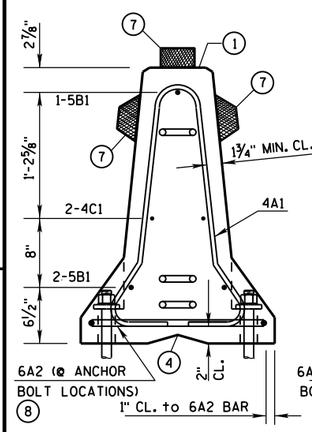
ANCHOR ON TRAFFIC SIDE (8) ONLY WHEN REQUIRED (SEE SHEET D FOR ADDITIONAL ANCHOR DETAIL)



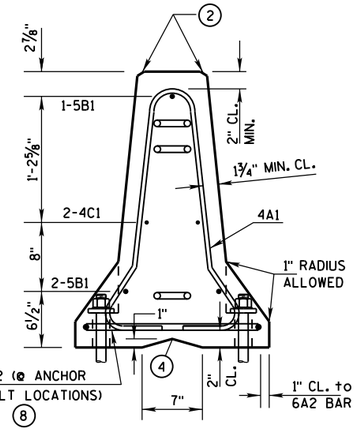
END VIEW



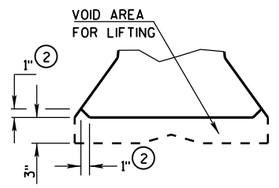
ELEVATION VIEW



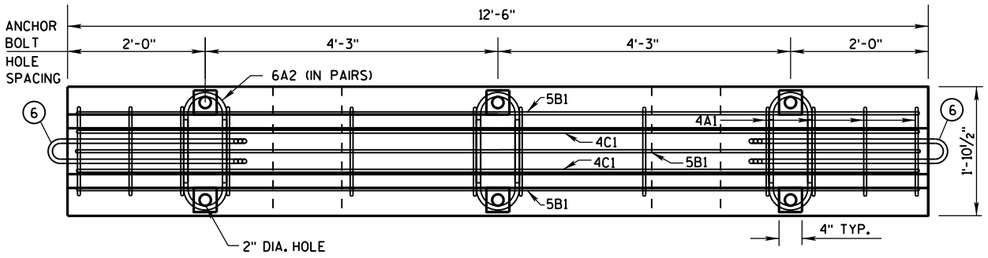
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

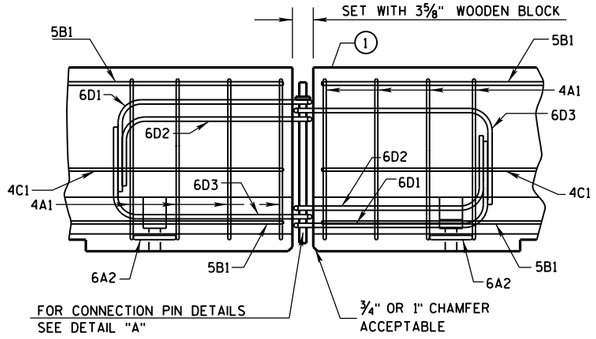


DETAIL "B"
LIFTING SLOT DETAIL

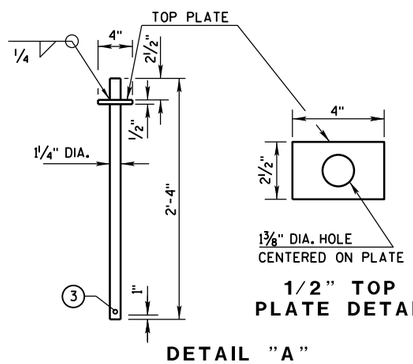


PLAN VIEW

DETAILS OF BARRIER SECTION

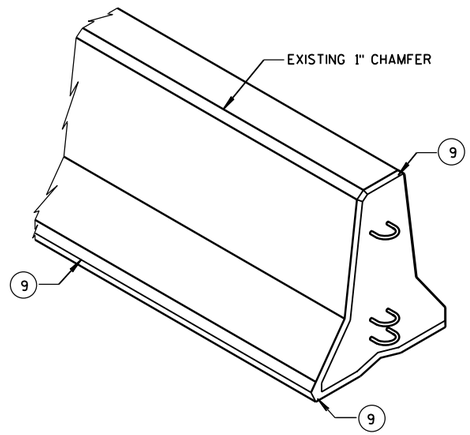


DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

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



GENERAL NOTES

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

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

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

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

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

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

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

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

(2) 1" CHAMFER TO PREVENT SPALLING.

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

(4) "V" NOTCH IS OPTIONAL.

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

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

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

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

(9) 1" CHAMFER OPTIONAL.

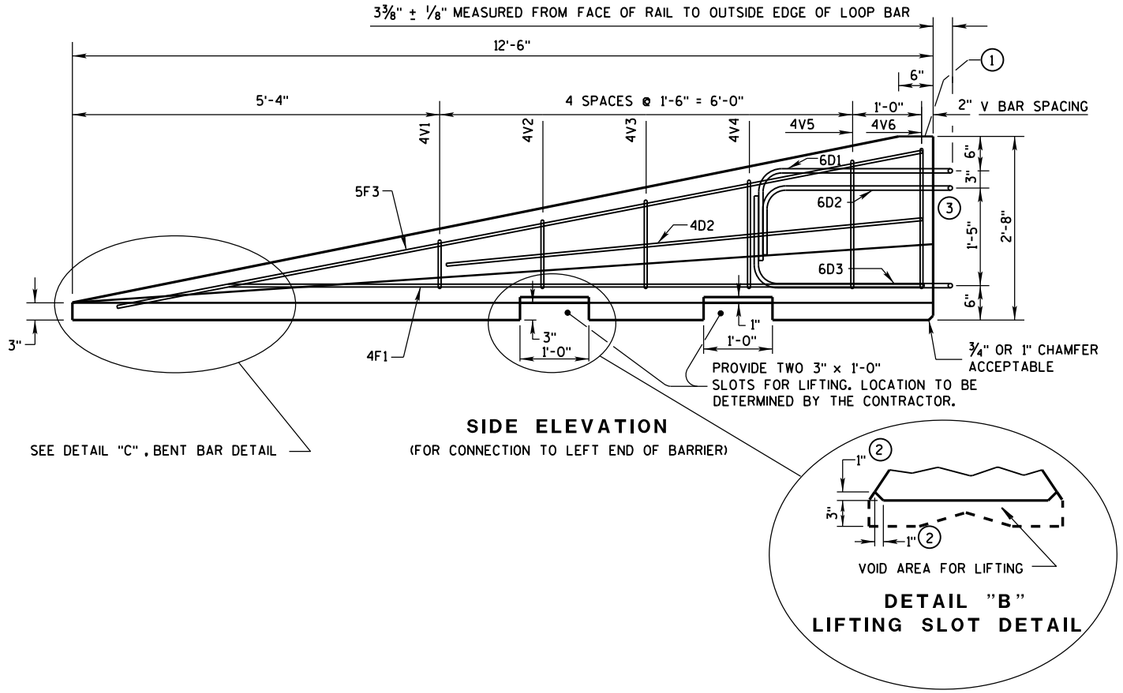
f'c = 4,000 psi

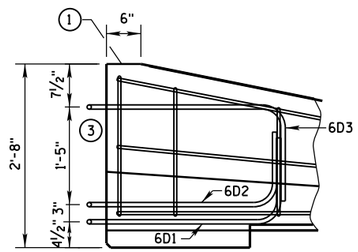
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

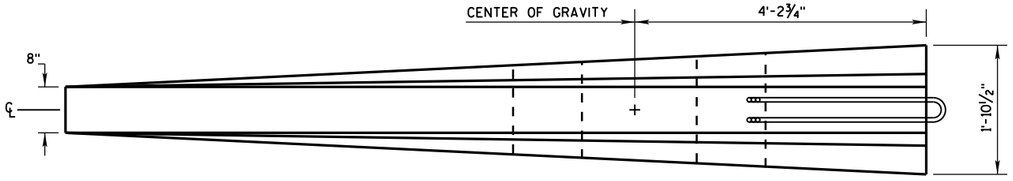
S.D.D. 14 B 7-15a

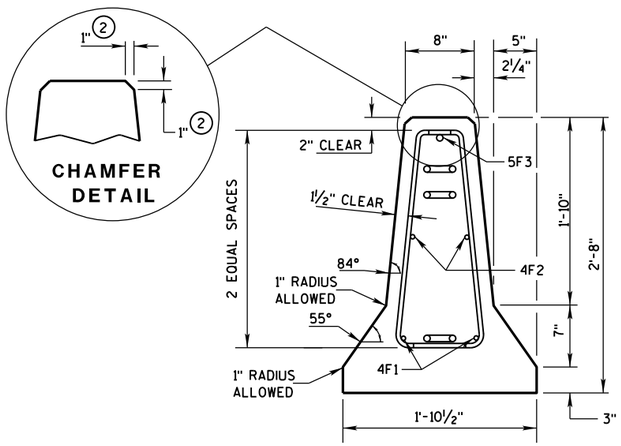


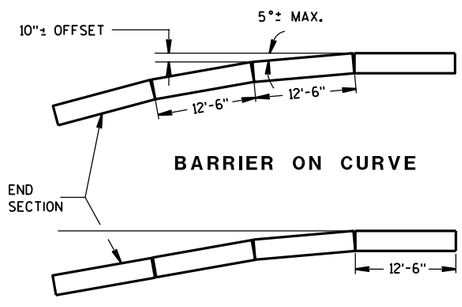


GENERAL NOTES

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







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

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

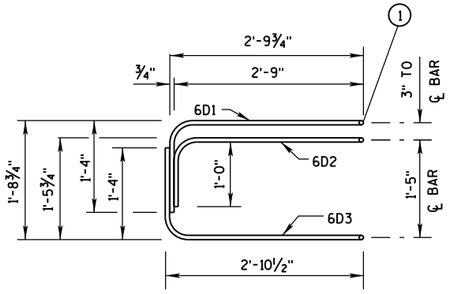
6

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

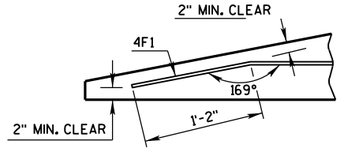
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

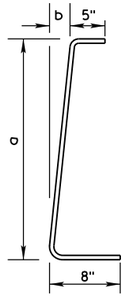
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



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

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

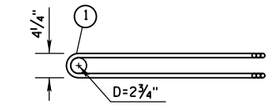
GENERAL NOTES

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

BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

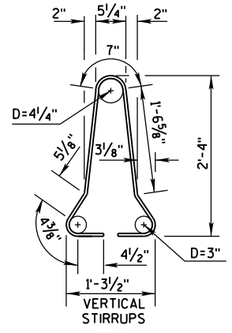
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



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

6A2

ELEVATION VIEW



4A1

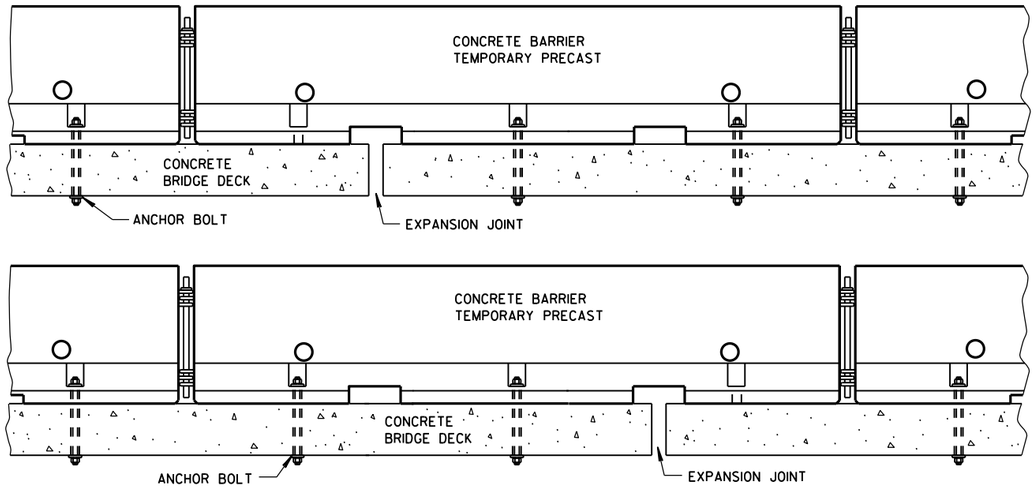
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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



TREATMENT AT BRIDGE DECK EXPANSION JOINTS

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

GENERAL NOTES

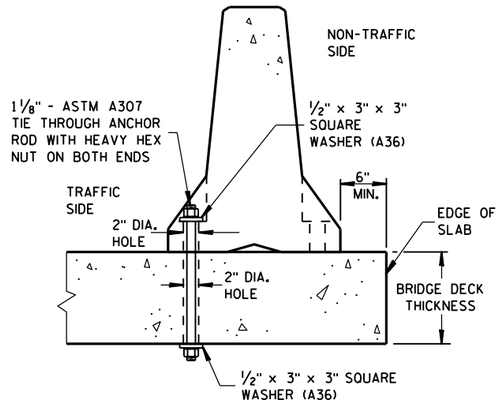
SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

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

(1) 1⅛" DIAMENTER A307 THREADED ROD. ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL. ASTM A563A HEAVY HEX NUT.

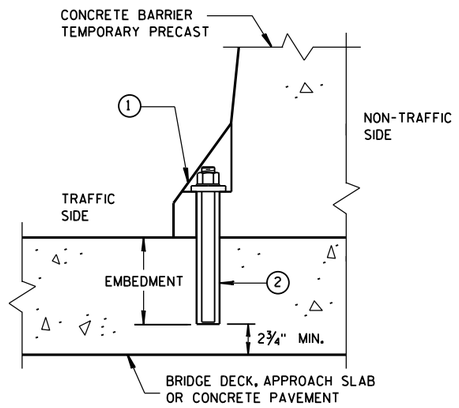
(2) ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

(3) ASPHALT SURFACE SHOWN. CONTRACTOR MAY DRILL THROUGH CONCRETE PAVEMENT AND THAN DRIVE ASPHALT ANCHOR PIN.



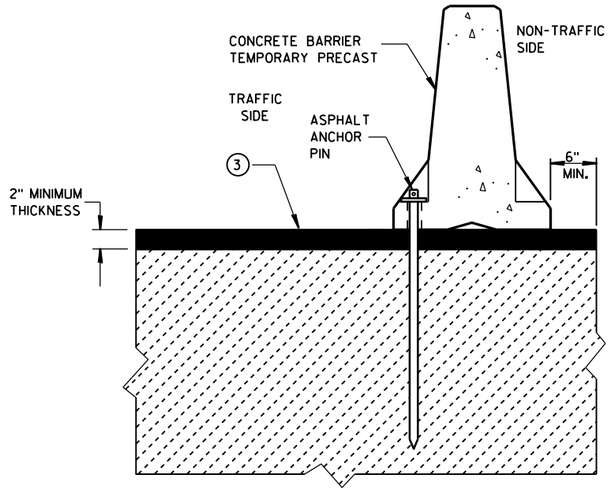
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)

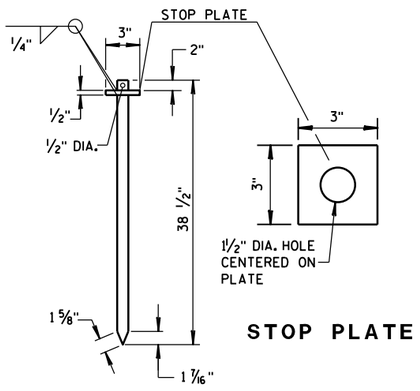


REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



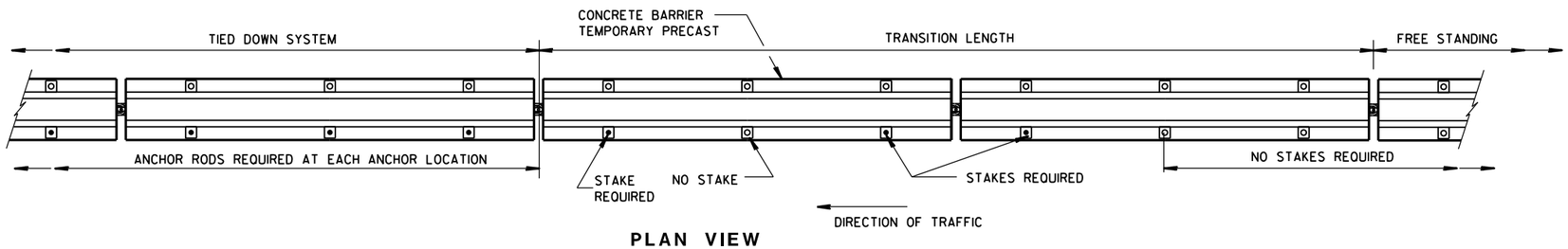
STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE



STOP PLATE

ASPHALT ANCHOR PIN

(ASTM A36 STEEL)



PLAN VIEW

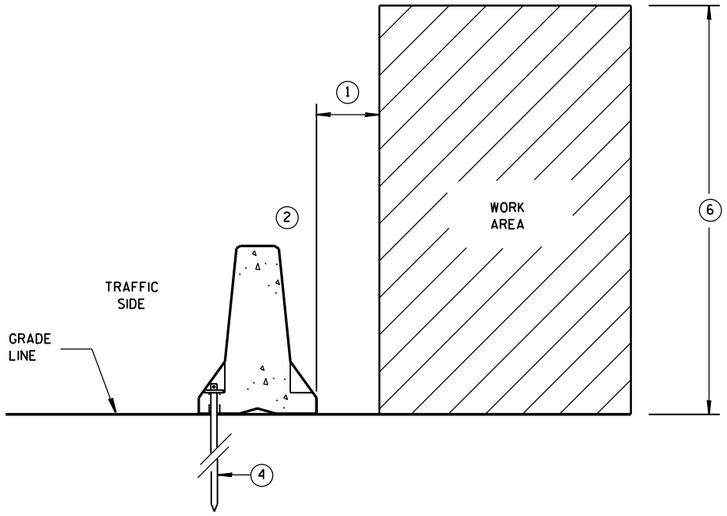
FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

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

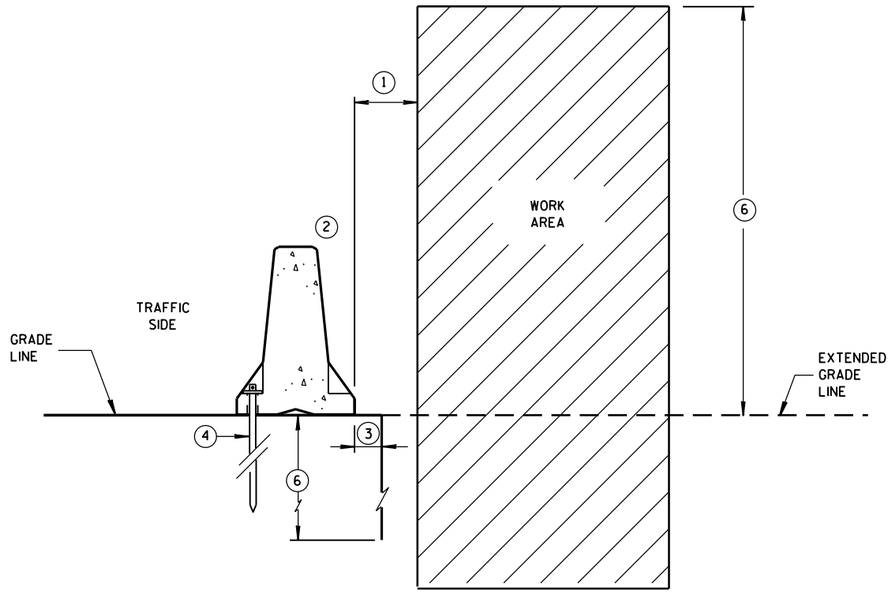
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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



ANCHORED BARRIER SPACE REQUIREMENTS FOR HAZARDS EXTENDED ABOVE THE GRADE LINE

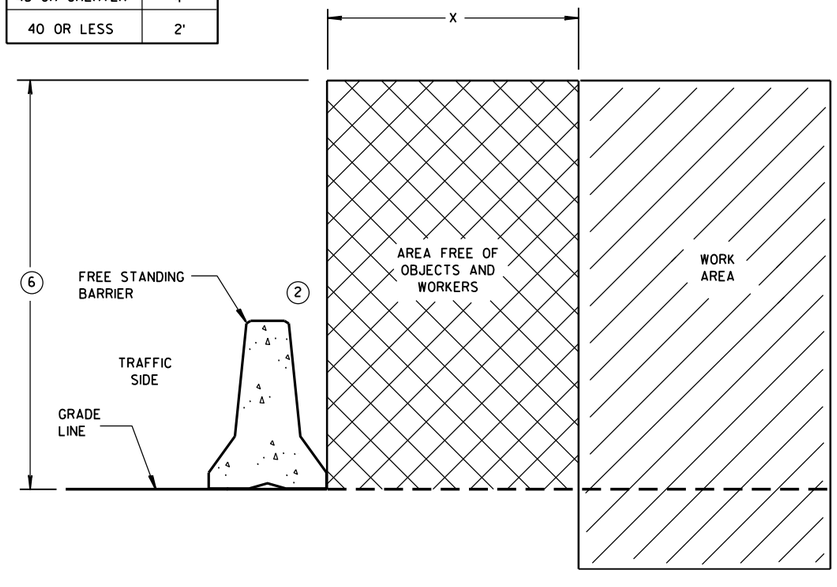


ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS

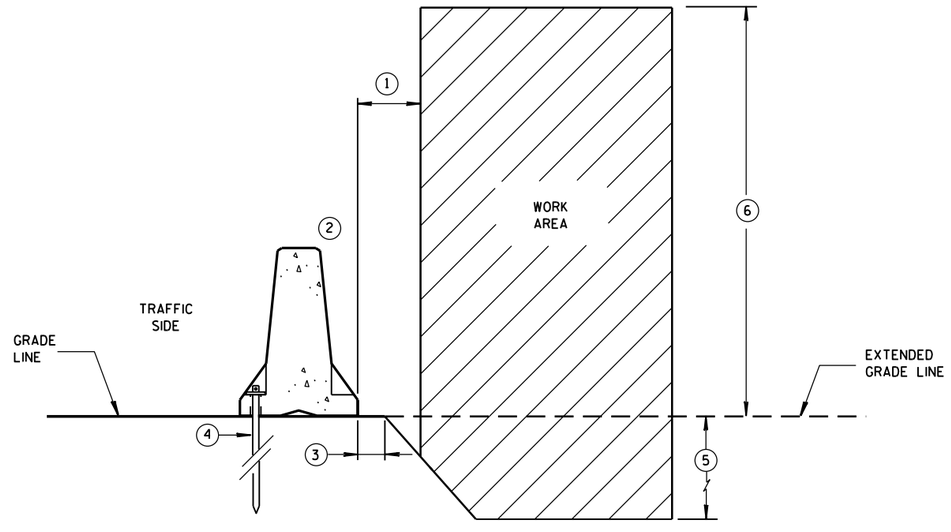
GENERAL NOTES

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

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



FREE STANDING BARRIER SPACE REQUIREMENTS



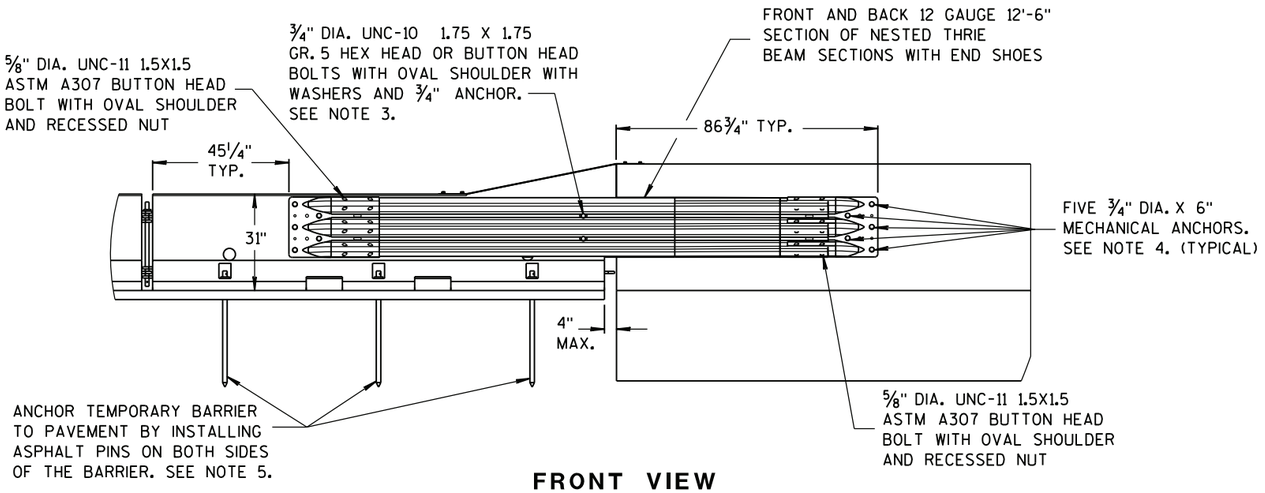
ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

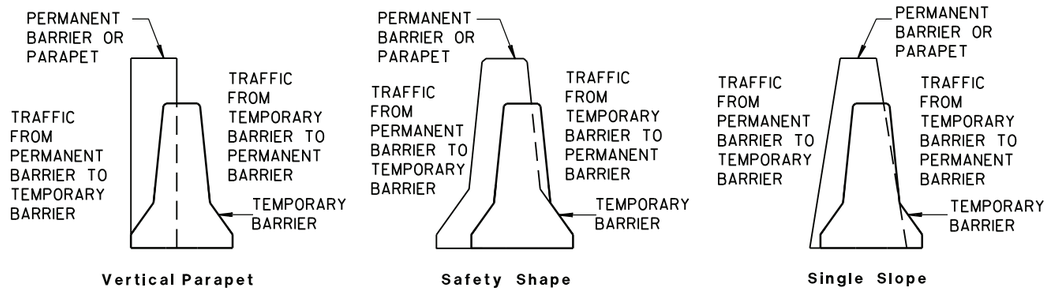
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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



FRONT VIEW

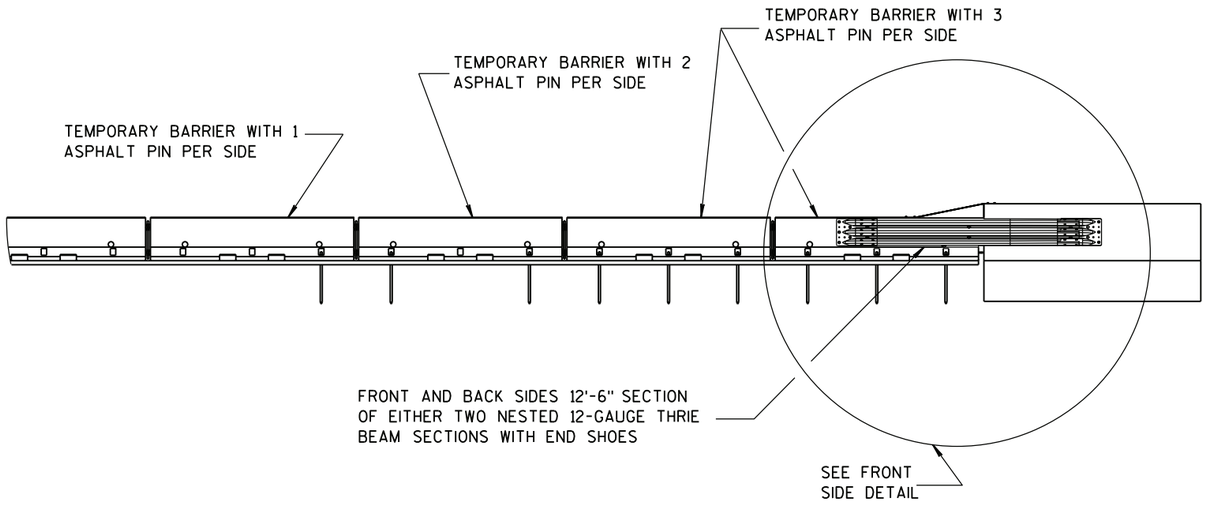


TEMPORARY BARRIER PLACEMENT FOR TRANSITION TO TIED DOWN SYSTEM

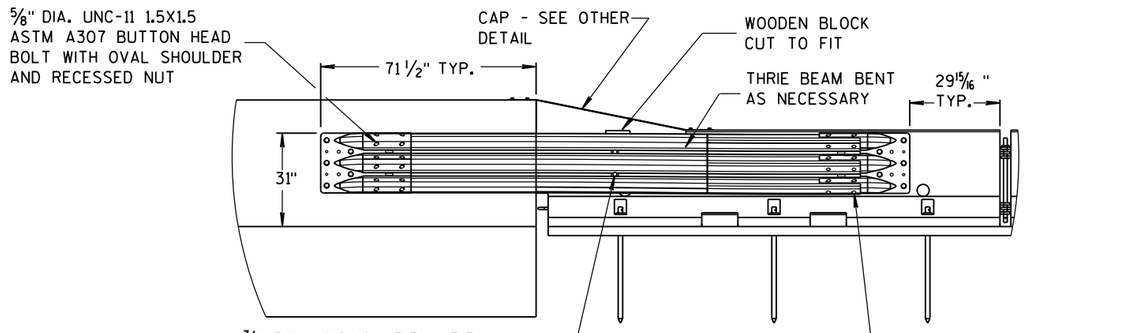
NOTES

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

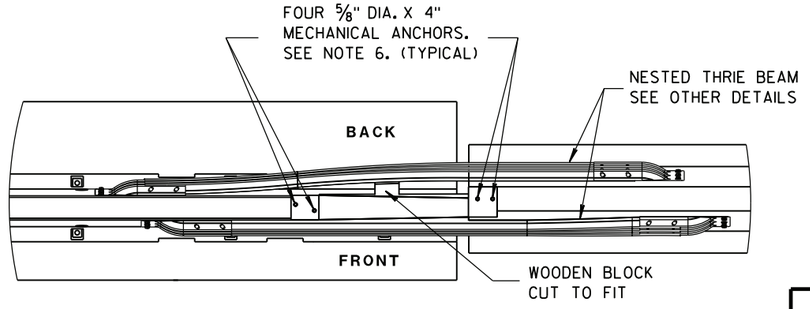
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD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



FRONT VIEW



BACK VIEW



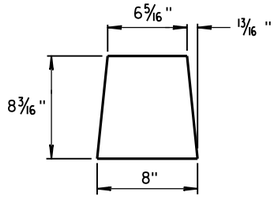
PLAN VIEW

TRANSITION TO TIED DOWN SYSTEM

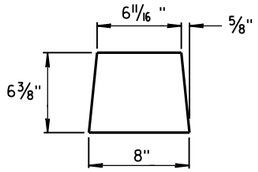
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

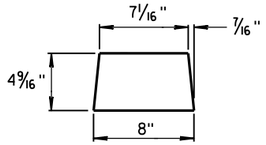
6
S.D.D. 14 B 7-15f



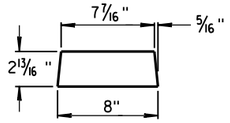
GUSSET 1



GUSSET 2

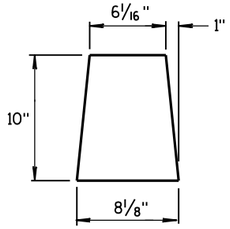


GUSSET 3

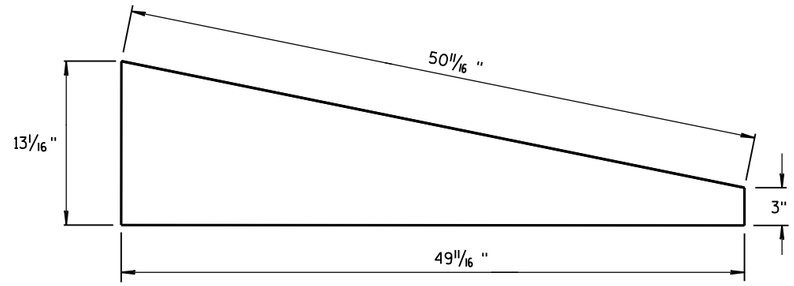


GUSSET 4

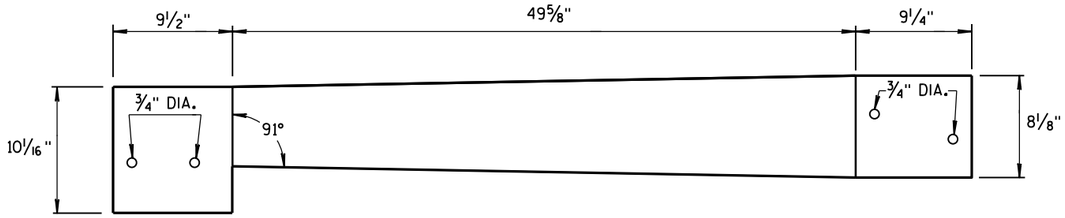
GUSSETS

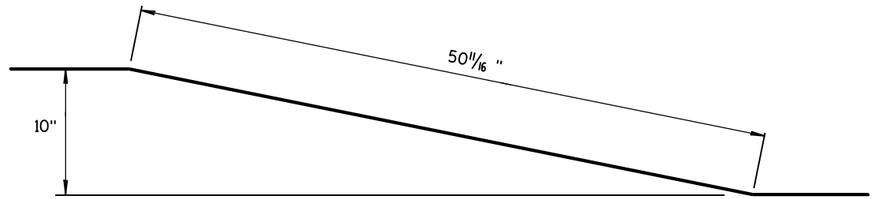


END PLATE



SIDE PLATE

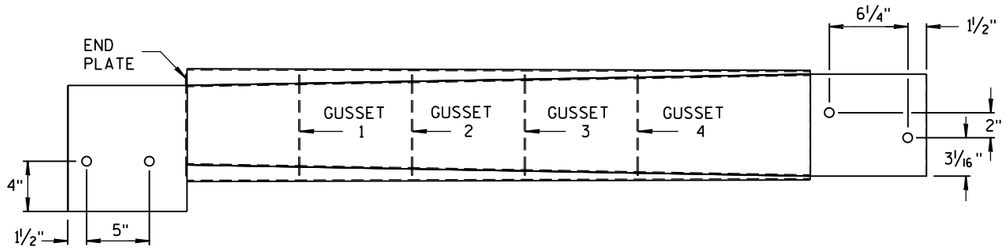


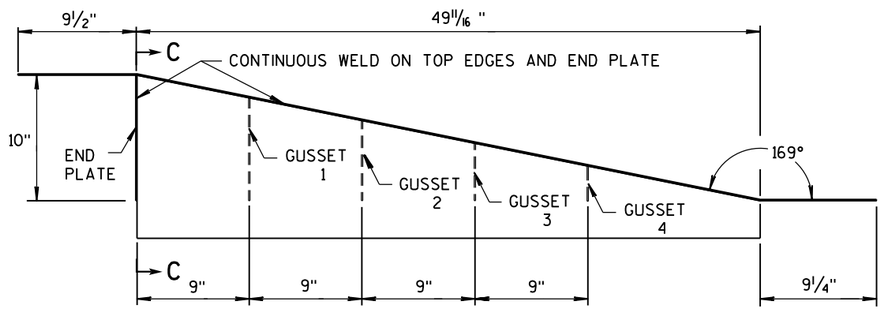


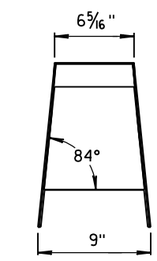
TOP PLATE

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

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







SECTION C-C

NOTES

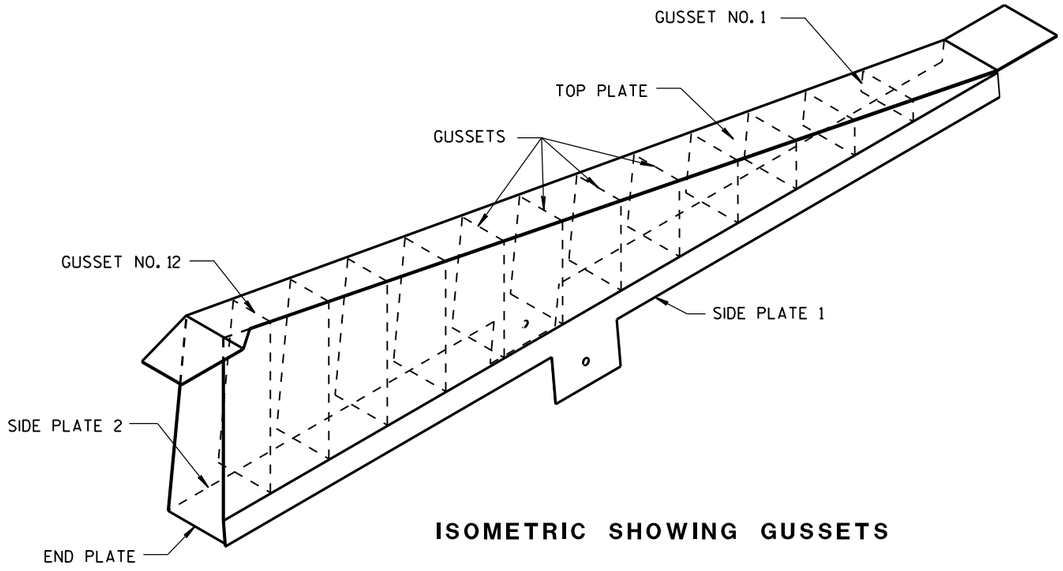
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

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

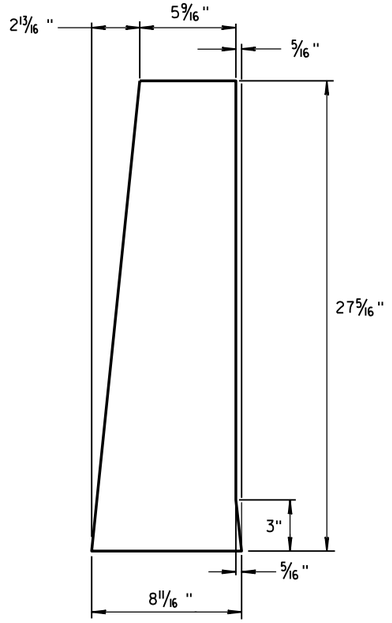
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

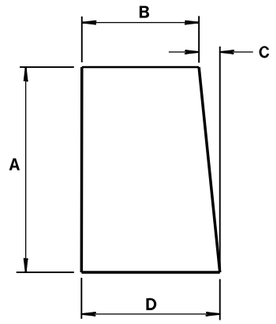


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



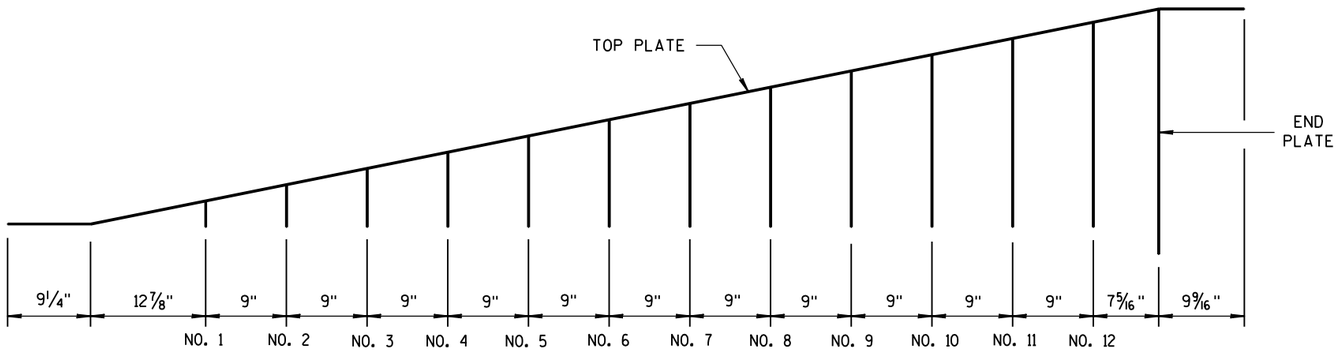
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

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

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

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



GUSSET LOCATION

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

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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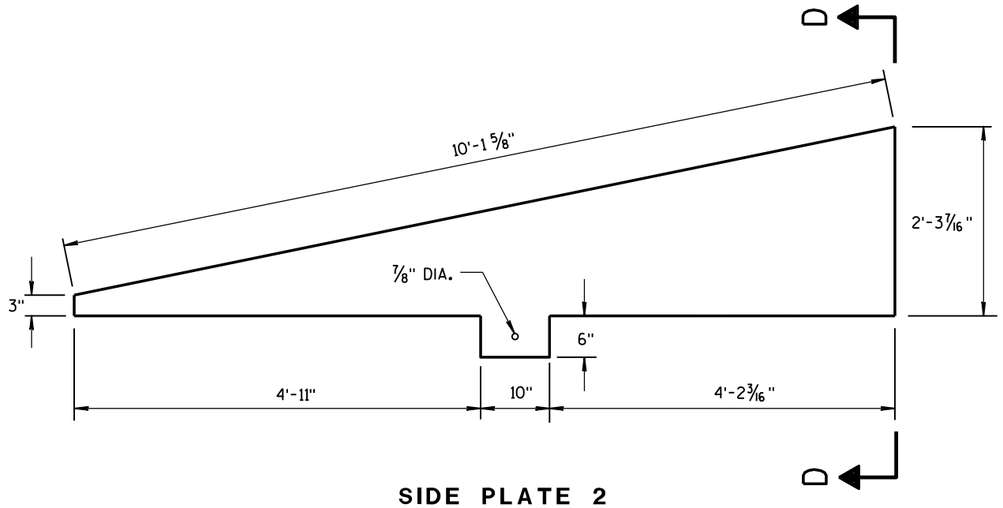
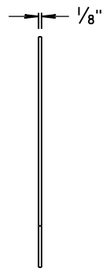
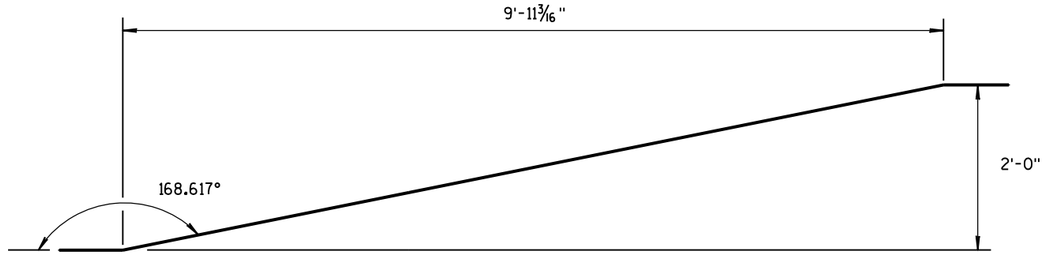
S.D.D. 14 B 7-15h



SIDE PLATE 2

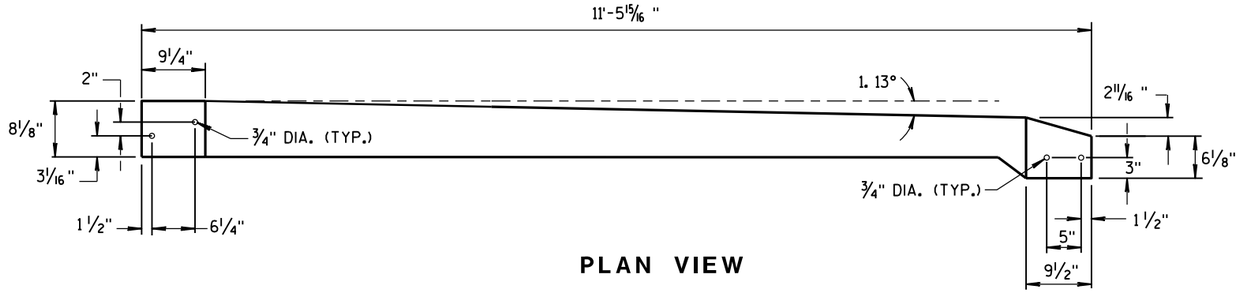


END VIEW



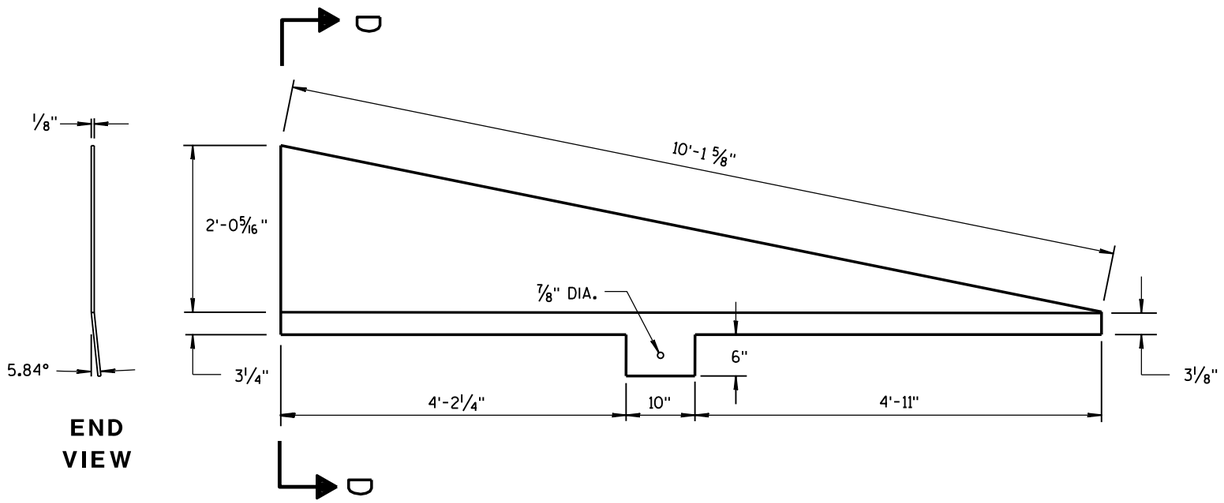
SIDE VIEW

TOP PLATE



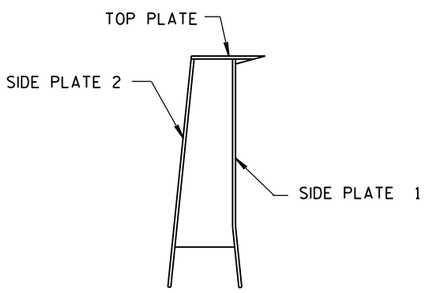
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

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

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

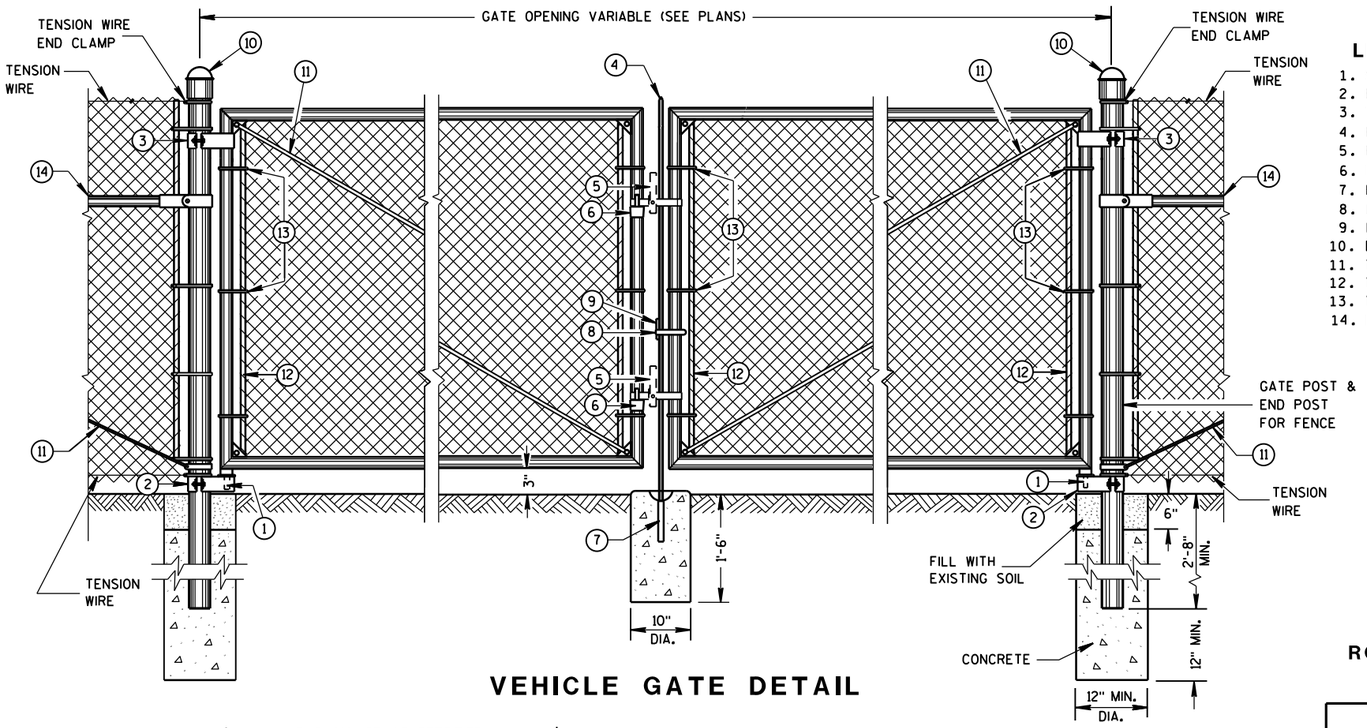
FHWA

6

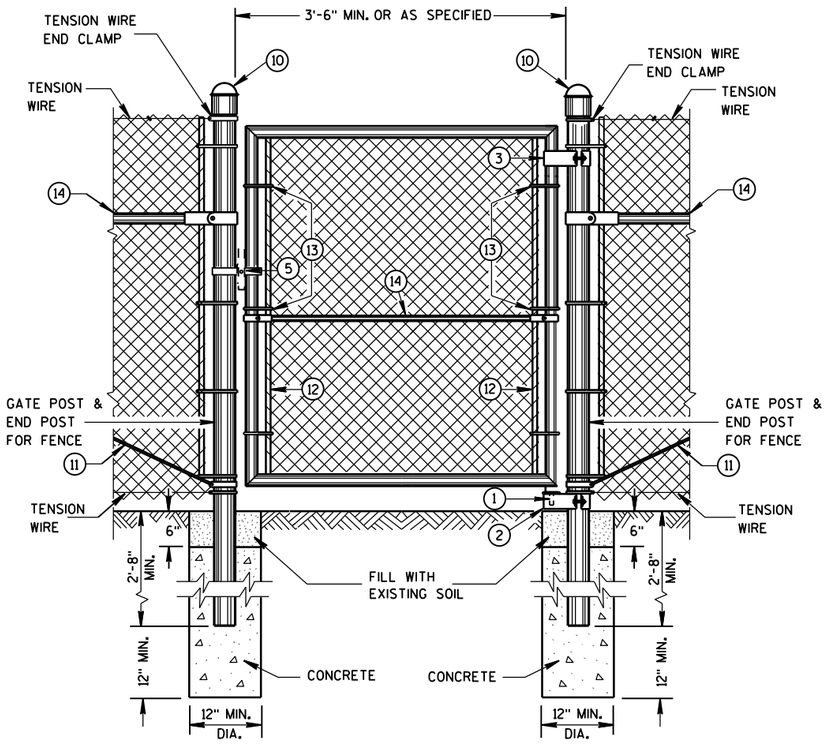
S.D.D. 14 B 7-15i

6

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



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

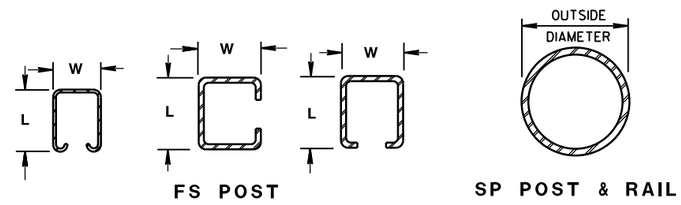
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



FS POST

SP POST & RAIL

CROSS SECTIONS OF POSTS AND RAILS

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

FENCE CHAIN LINK

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DEPARTMENT OF TRANSPOR

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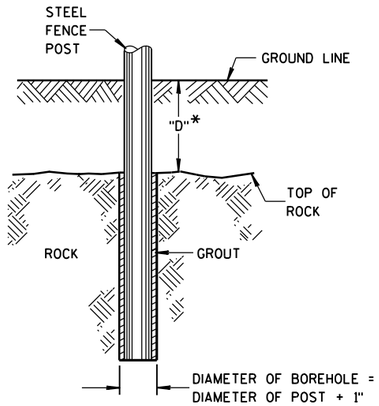
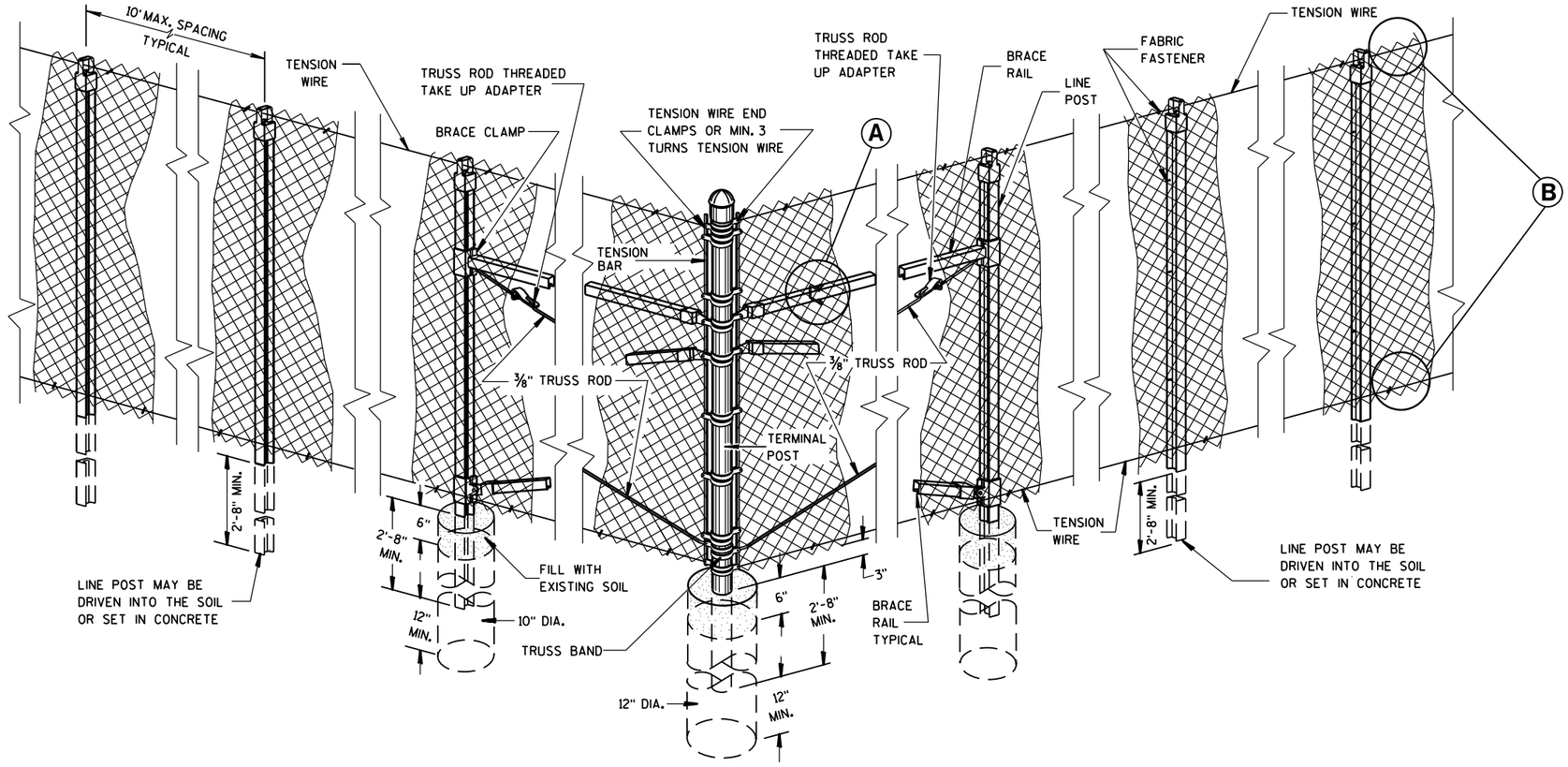
S.D.D. 15 B 3-15a

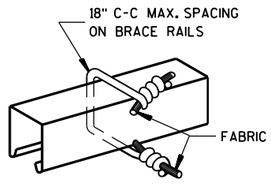


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



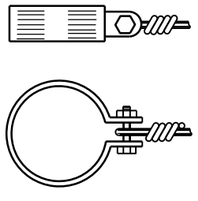
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



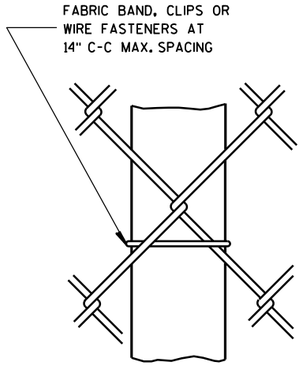
BRACE RAIL

FABRIC FASTENER

Ⓐ



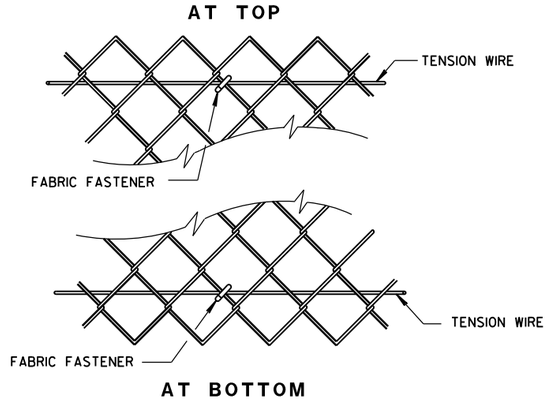
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

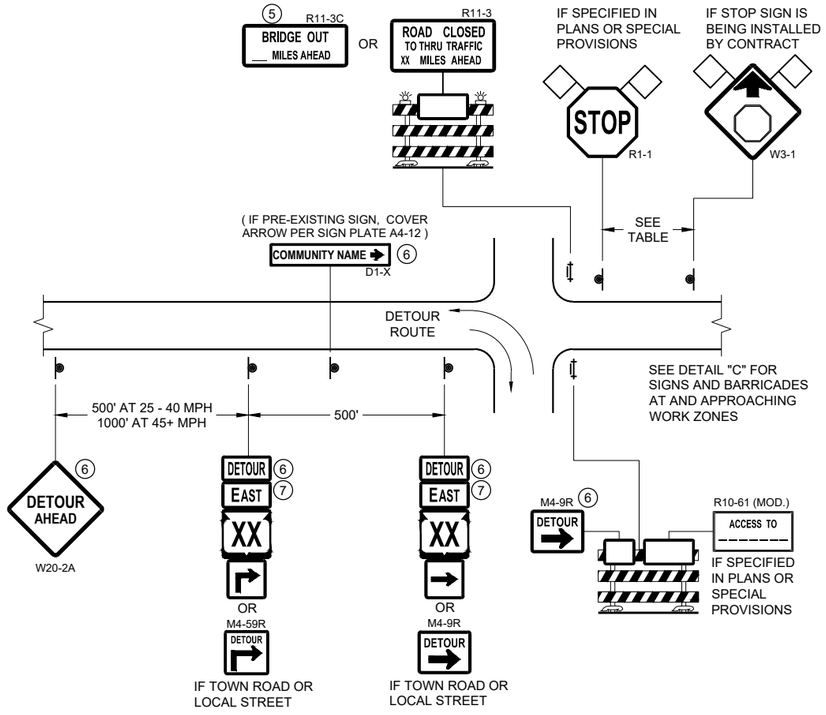
FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

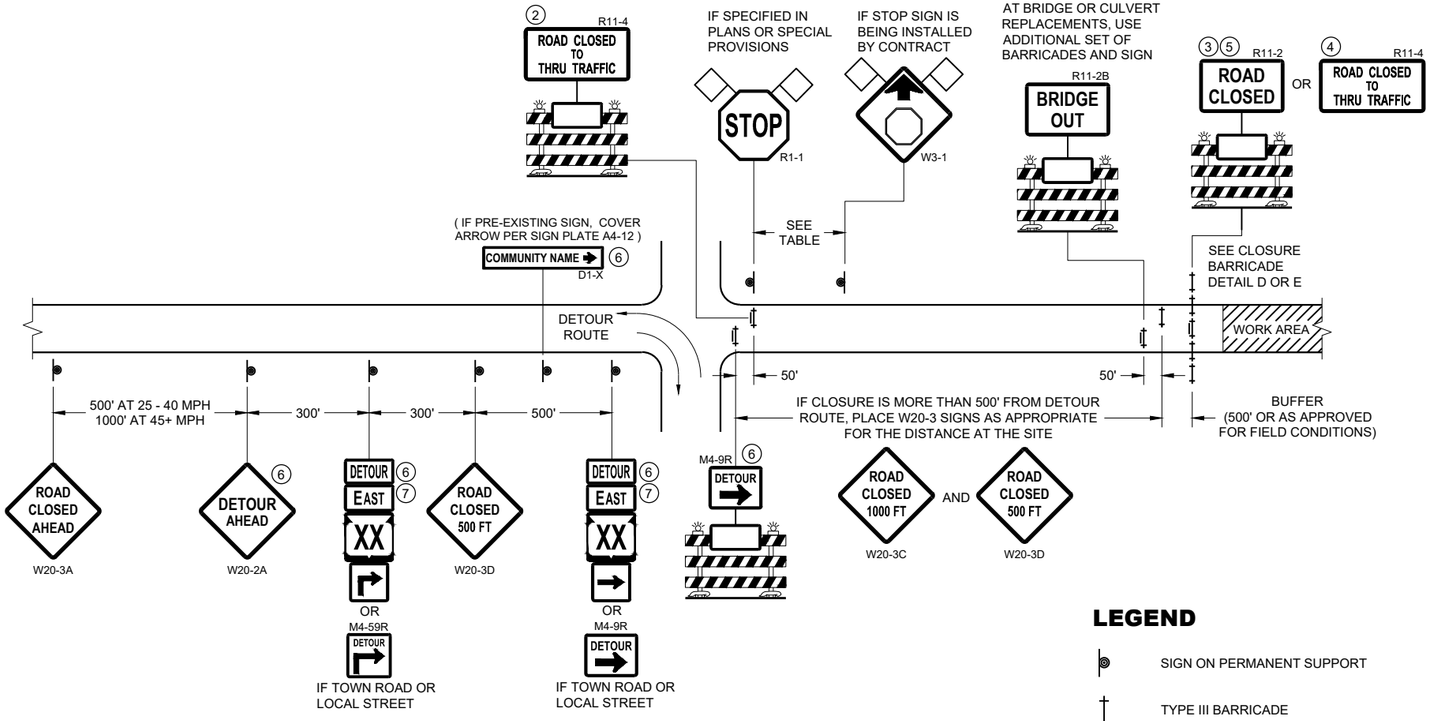
6

S.D.D. 15 B 3-15b



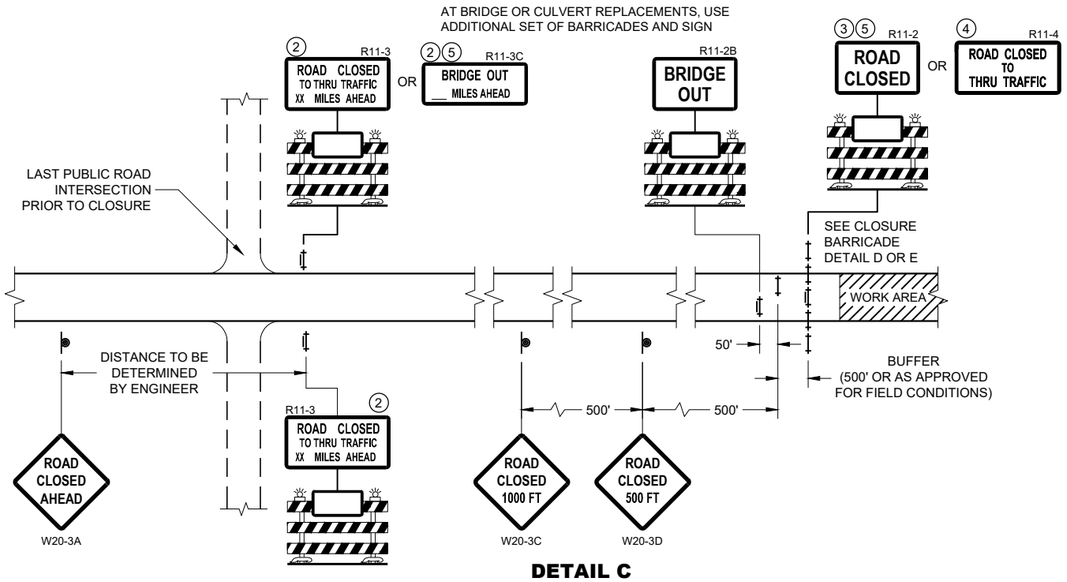
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

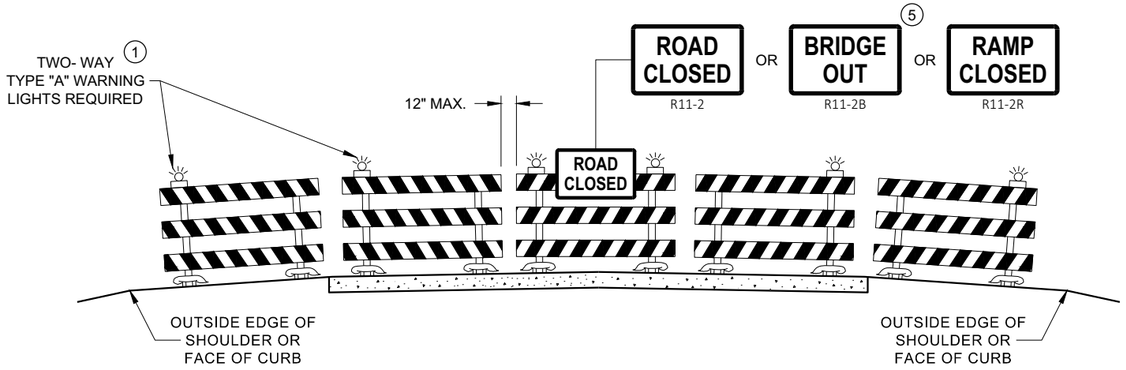
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

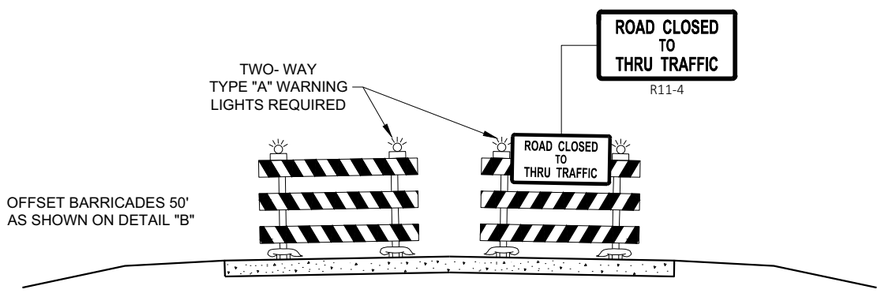
6

SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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SDD 15C02 - 08b

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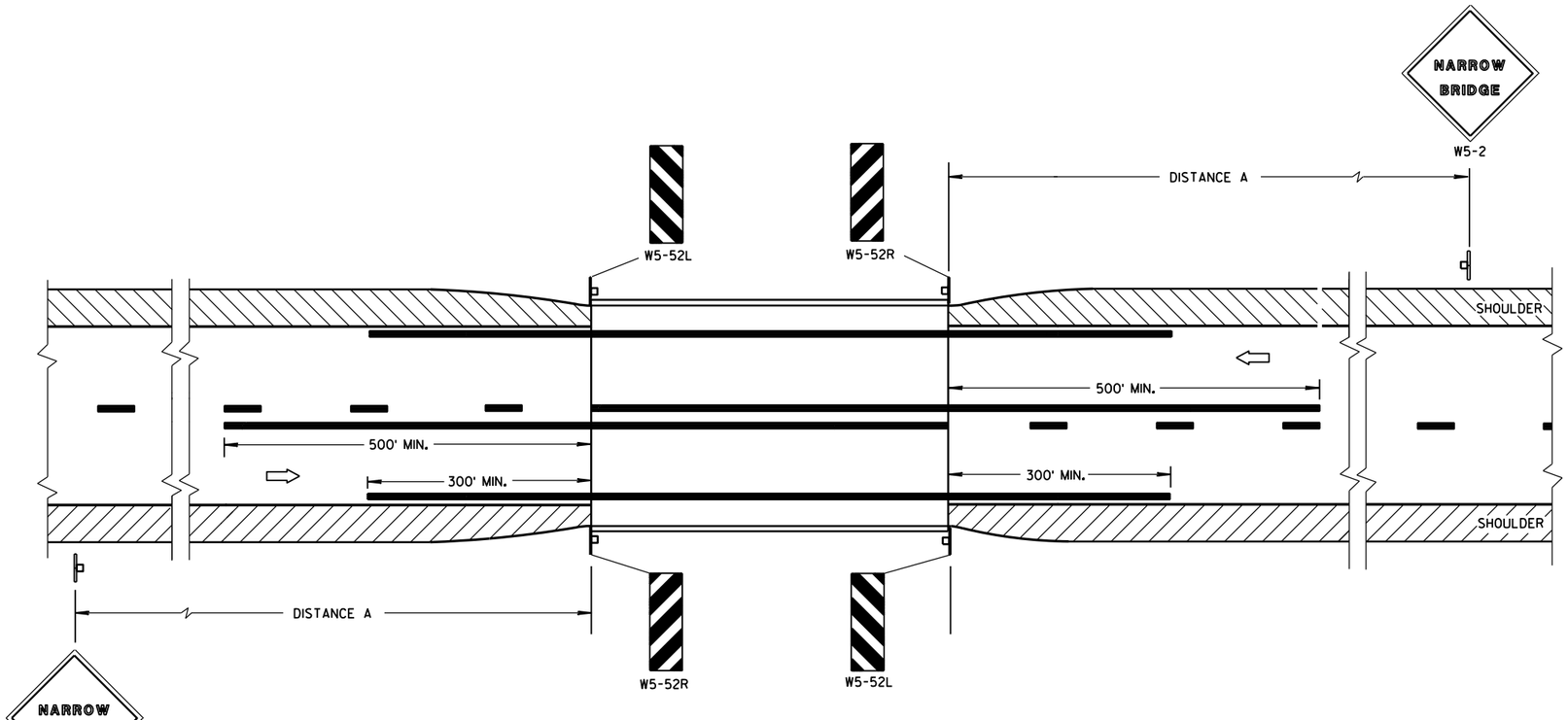
SDD 15C02 - 08b



SITUATION 1

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

DISTANCE TABLE

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

GENERAL NOTES

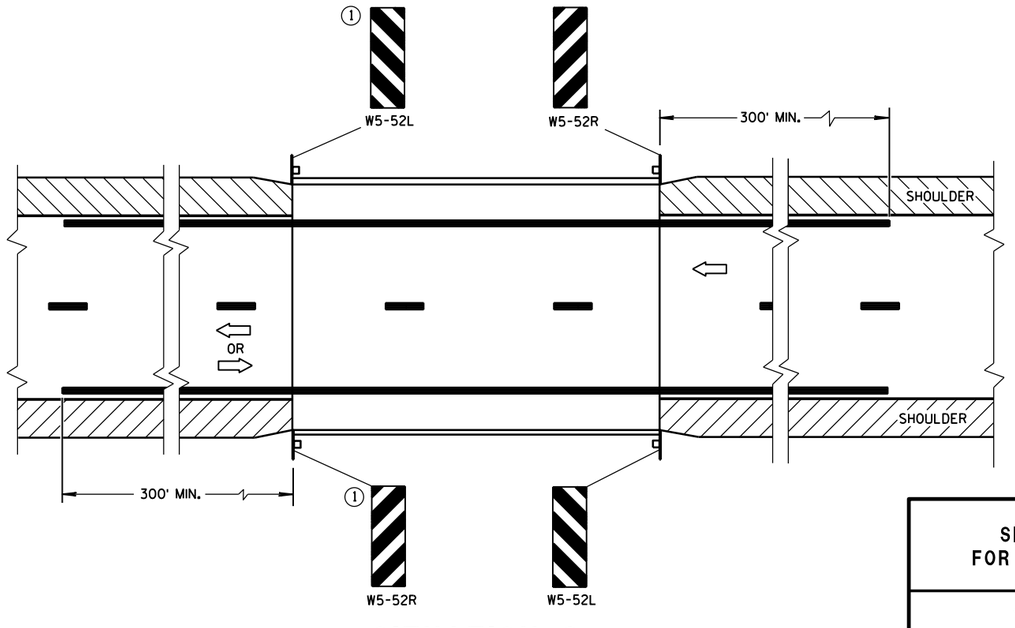
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

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

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6

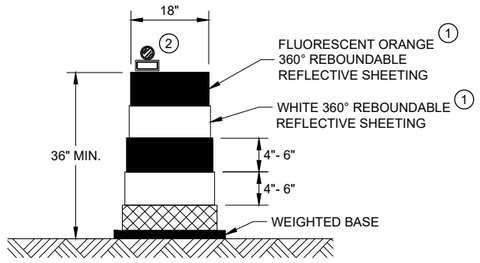
S.D.D. 15 C 6-9

6

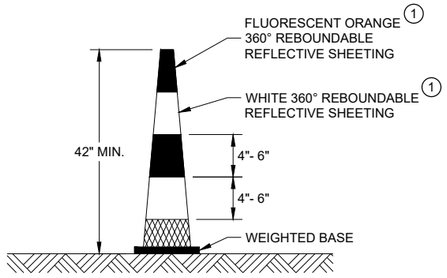
S.D.D. 15 C 6-9

GENERAL NOTES

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

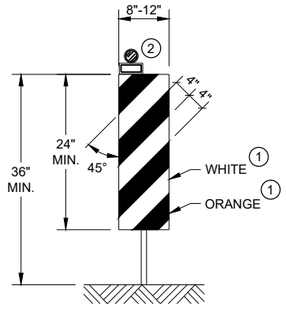


DRUM



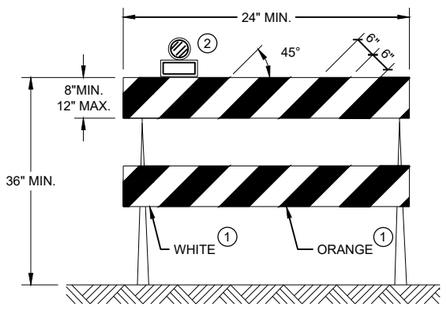
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



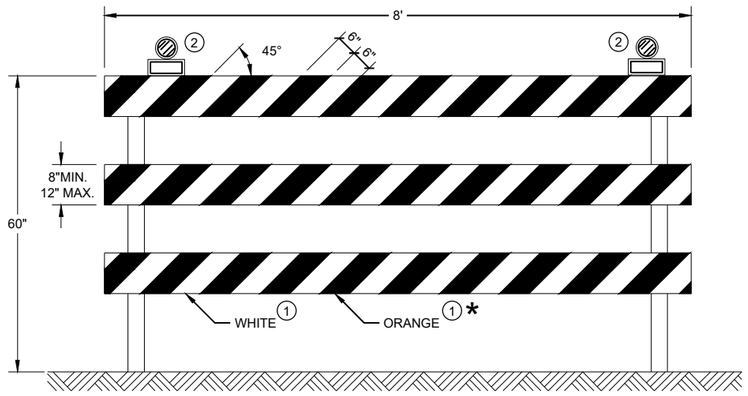
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

SDD15C11 - 09b

6

SDD15C11 - 09b

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.

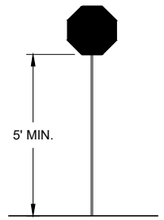
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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.



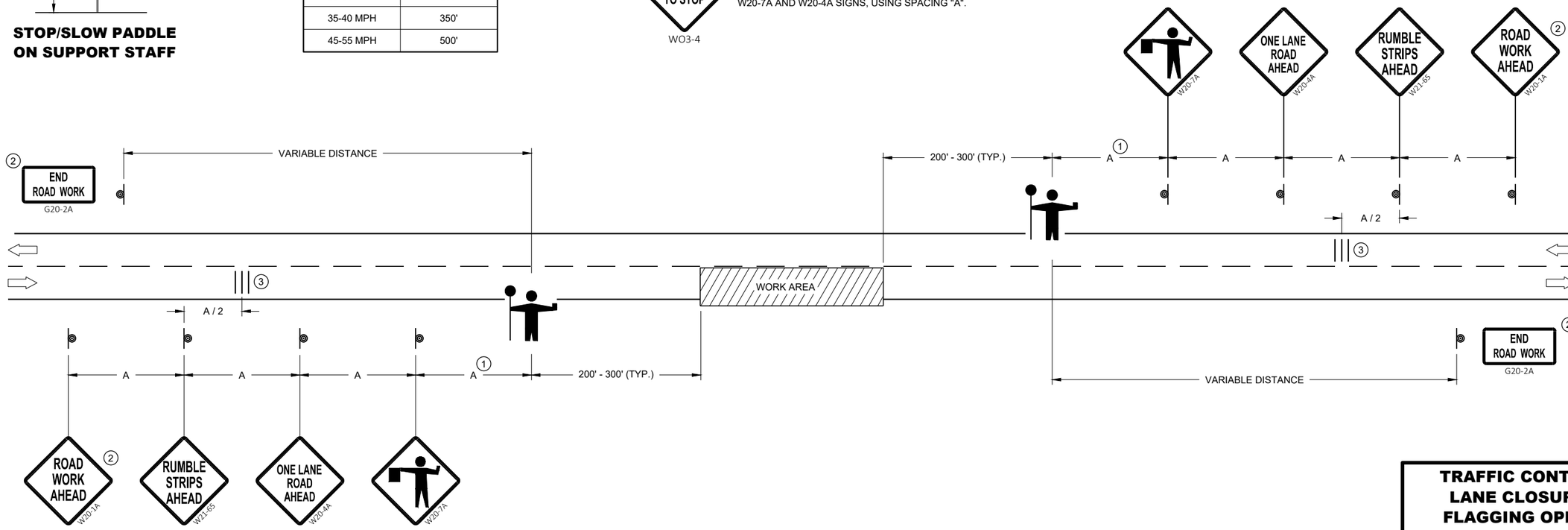
STOP/SLOW PADDLE ON SUPPORT STAFF

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
November 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

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SDD 15C12 - 08

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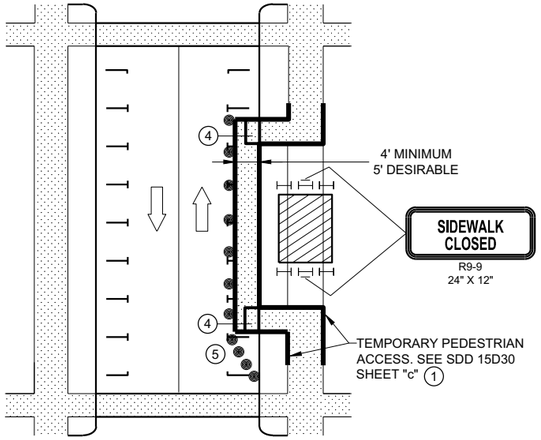
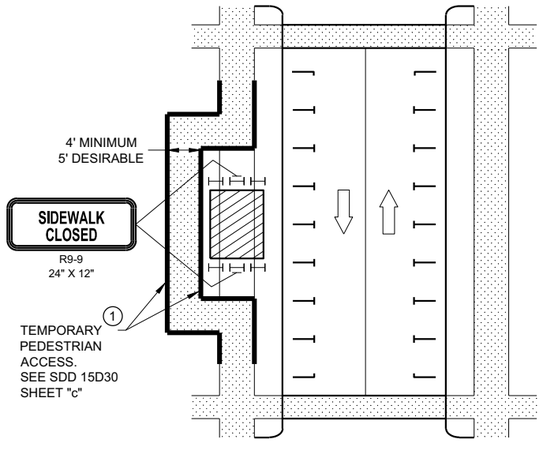
SDD 15C12 - 08

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

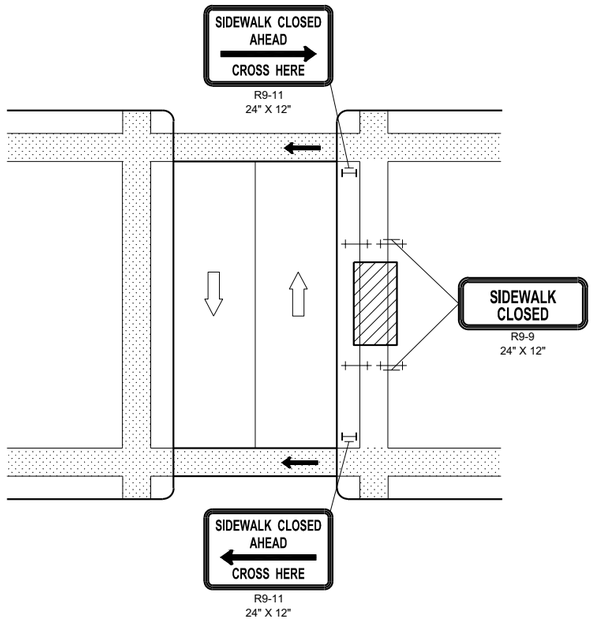


MID-BLOCK SIDEWALK SIDEWALK CLOSURE IN PARKING LANE

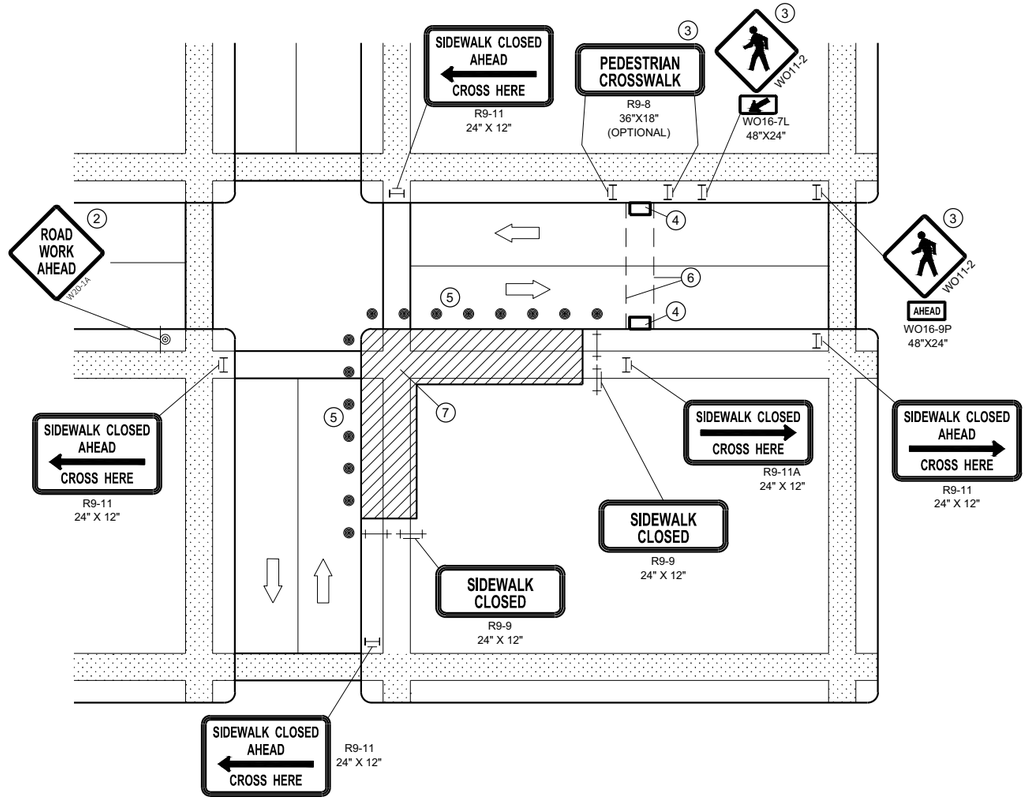
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

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

FOR NIGHTIME CLOSURE, USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEK LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

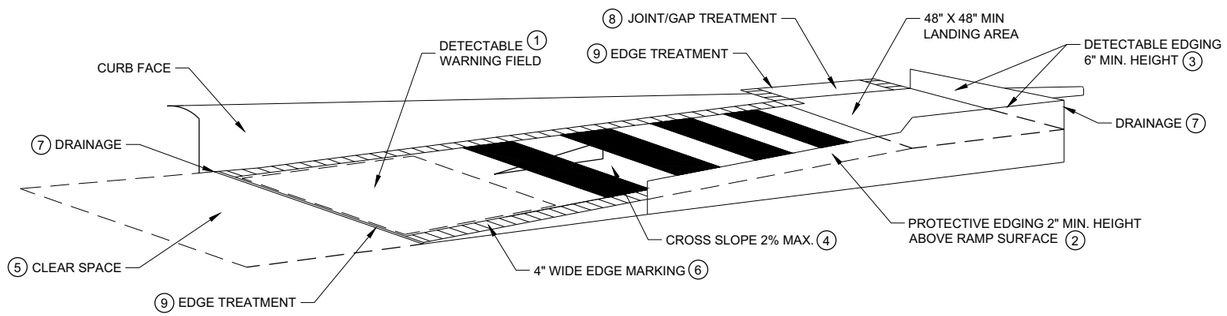
1. IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE
2. "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
3. IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND WO11-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
4. TEMPORARY CURB RAMPS. SEE SDD 15D30 SHEET "b'.
5. DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
6. TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
7. LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

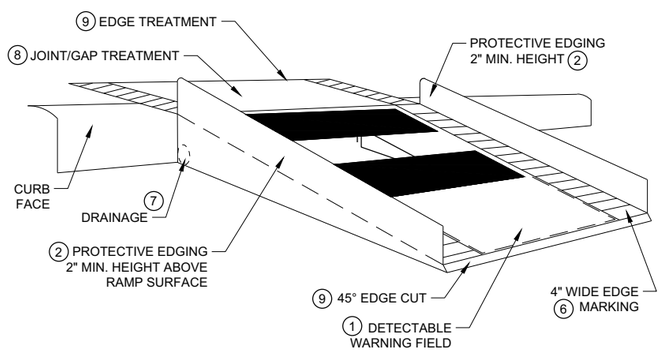
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

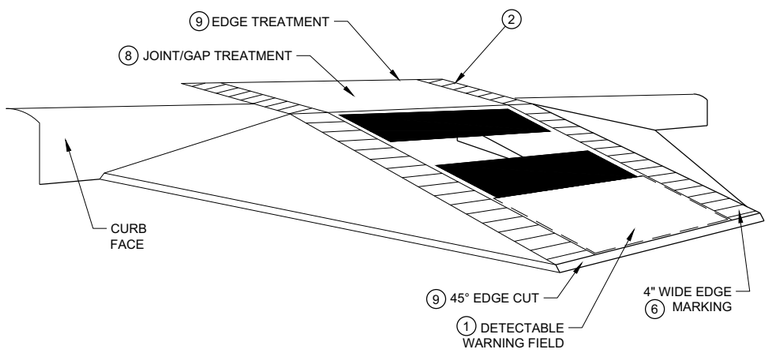
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



TEMPORARY CURB RAMP PARALLEL TO CURB



WITH PROTECTIVE EDGE



WITH SIDE APRON

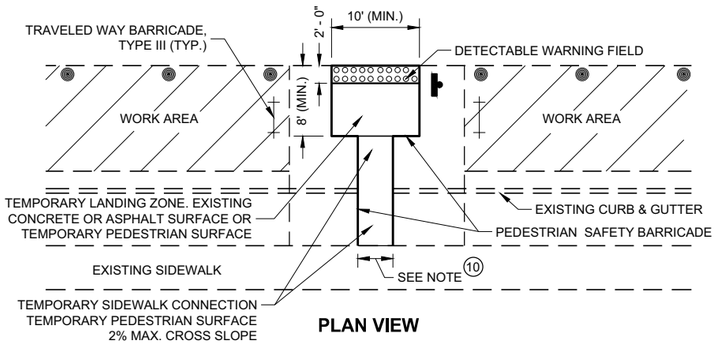
TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

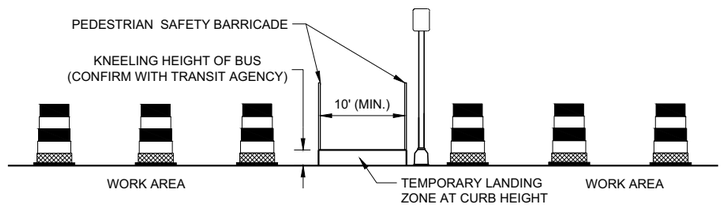
NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

1. CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 08D05, SHEET "e".
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
5. CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
6. THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
7. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.
9. CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES SHALL BE VERTICAL UP TO ¼" HIGH AND BEVELED AT 1:2 BETWEEN ¼" AND ½".
10. 5" WIDE MIN. WITH PEDESTRIAN SAFETY BARRICADE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY BARRICADE.



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

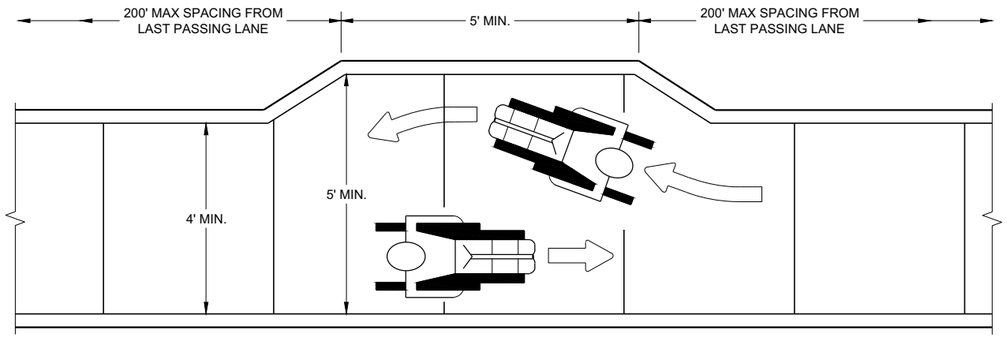
LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- WORK AREA

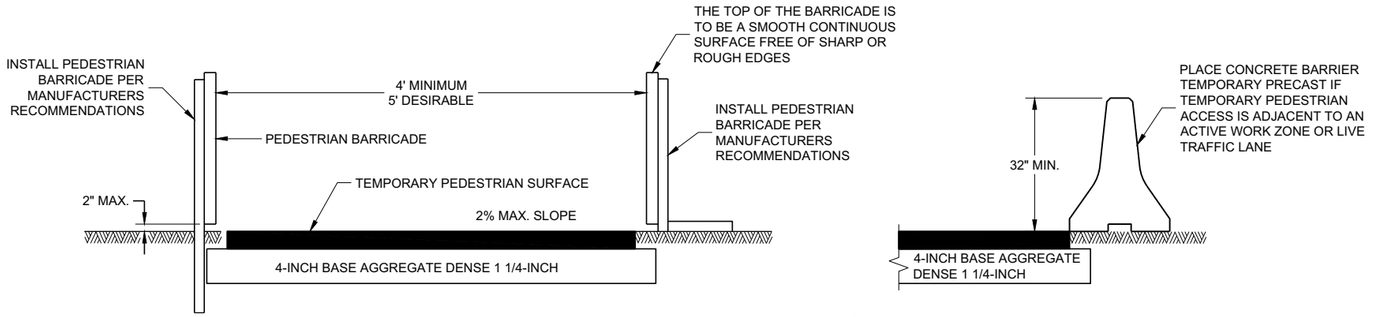
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

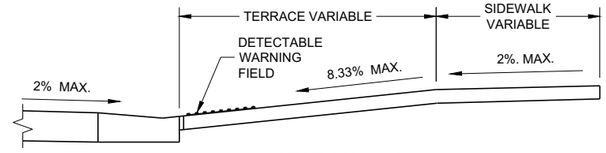
SDD 15D30 - 06b



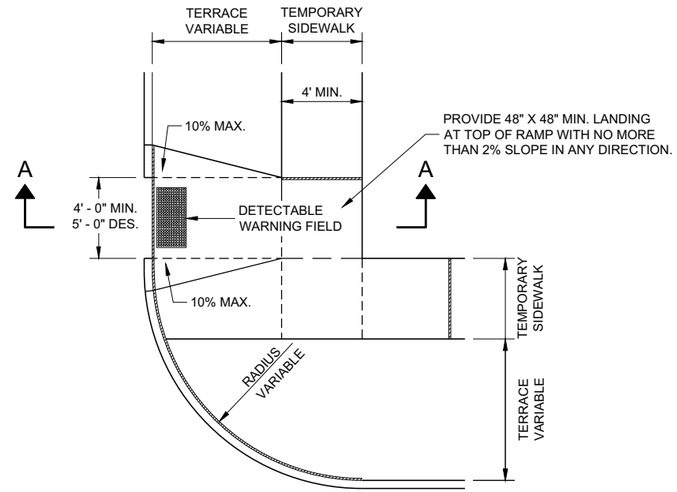
NARROW SIDEWALK PASSING DETAIL



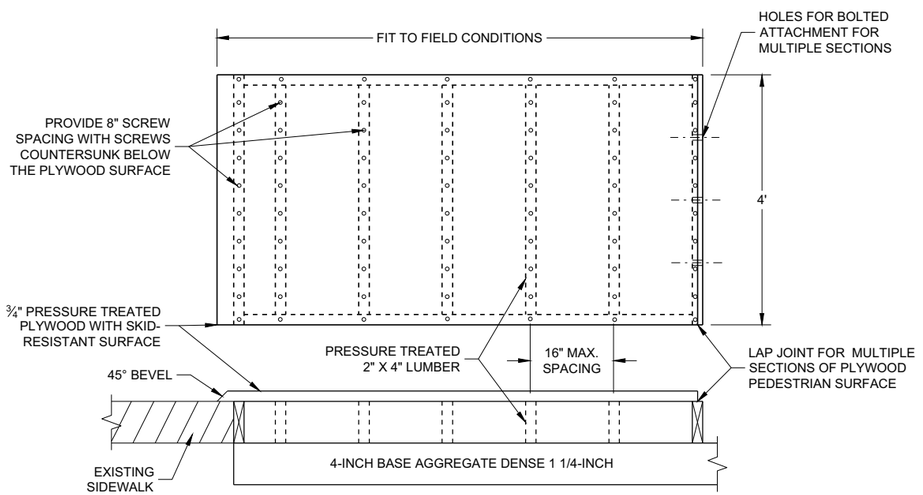
TEMPORARY PEDESTRIAN ACCESS



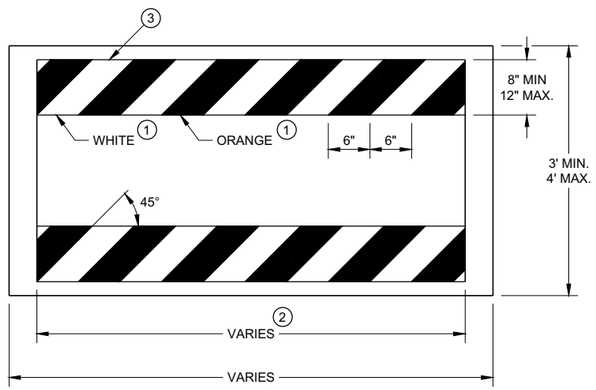
SECTION A - A



PLAN VIEW
TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



TEMPORARY PEDESTRIAN BARRICADE *

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
3. PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D30 - 06c

6

SDD 15D30 - 06c

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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 INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

(1) PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

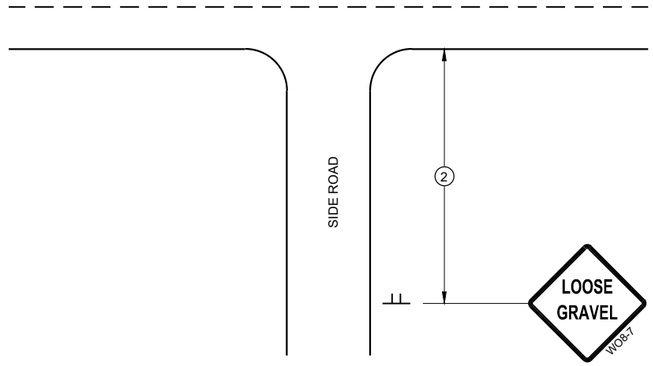
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

(3) ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

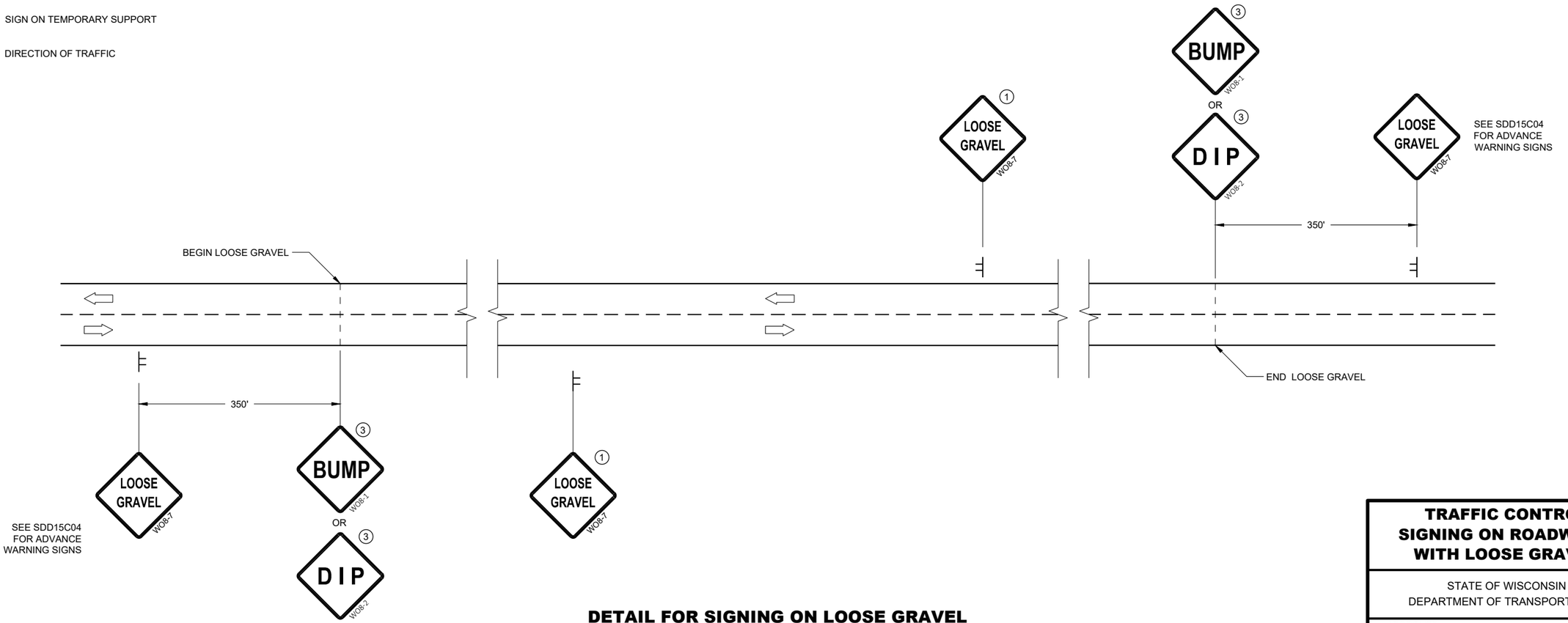
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

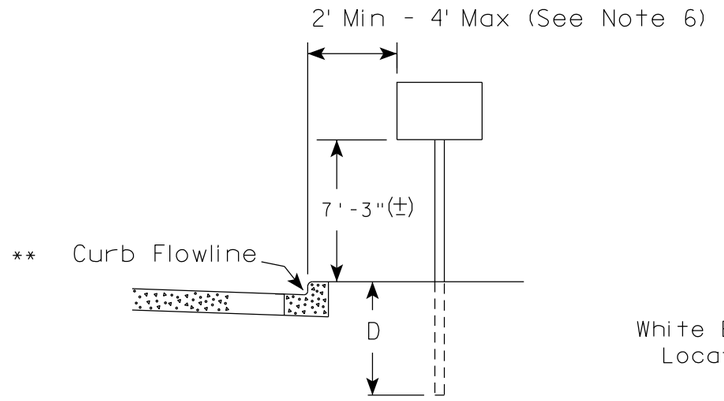
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

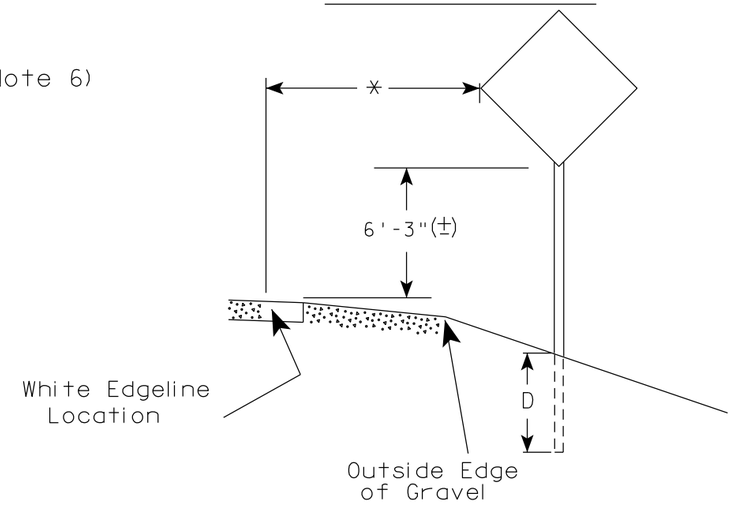
6

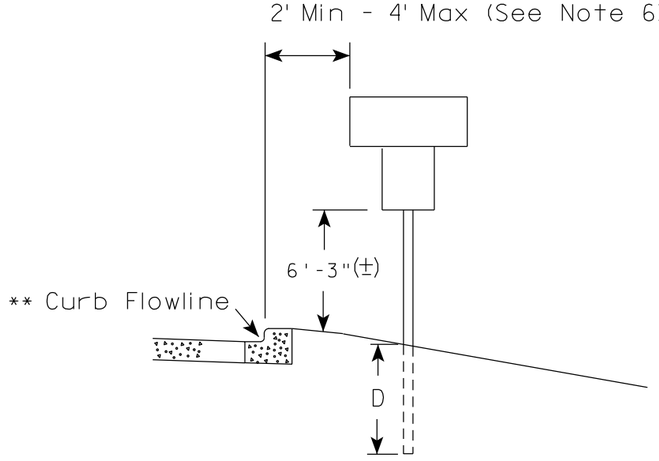
SDD 15D45 - 03

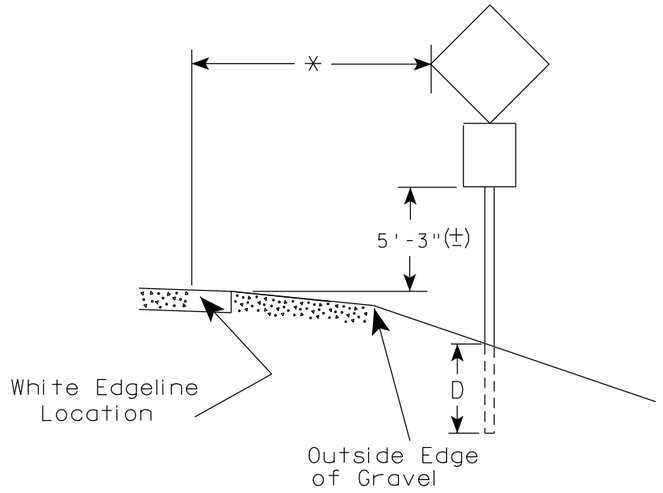
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

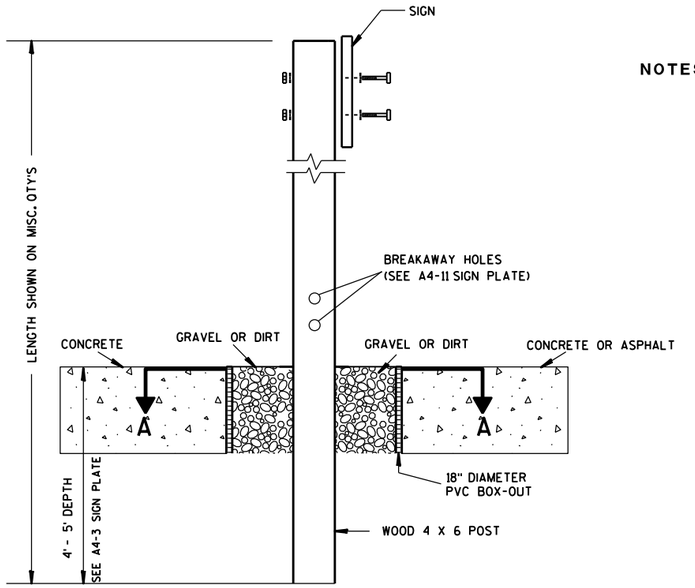
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

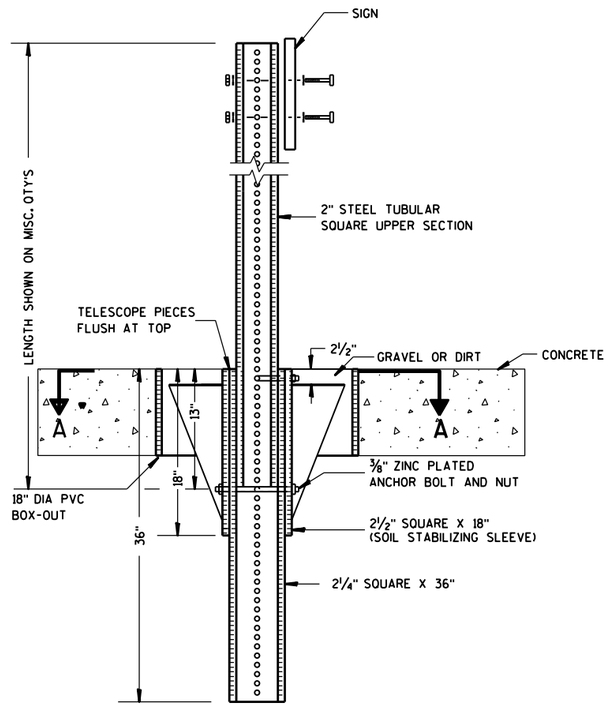
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 56	E



ELEVATION VIEW

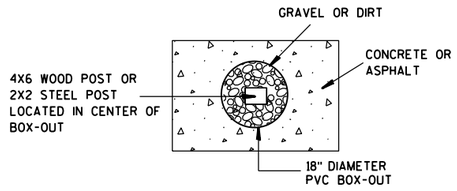
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

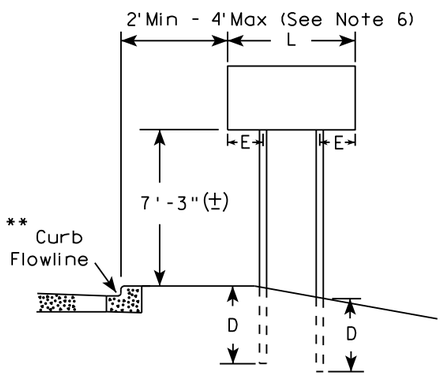
APPROVED Matthew R Rauch
for State Traffic Engineer

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

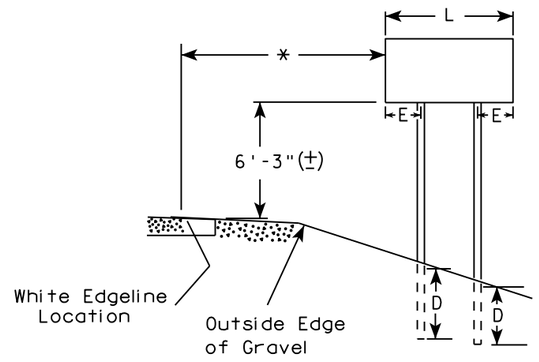
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

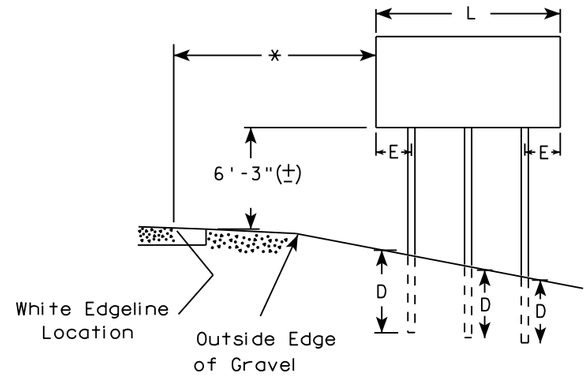
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

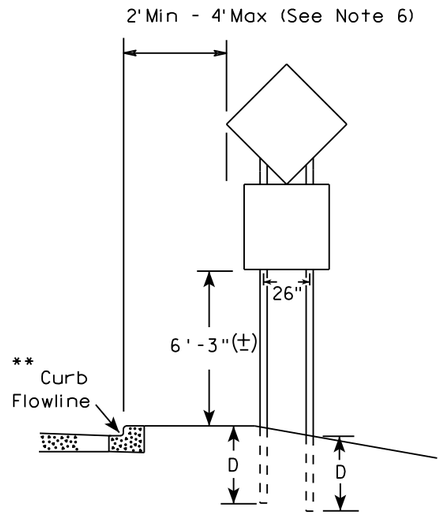
URBAN AREA



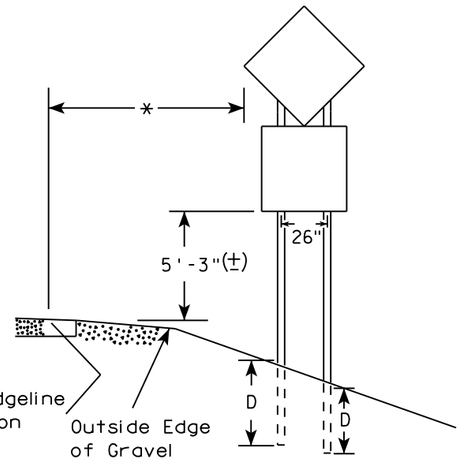
RURAL AREA (See Note 3)







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" (±) or 6'-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" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), 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" (±).

* 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'

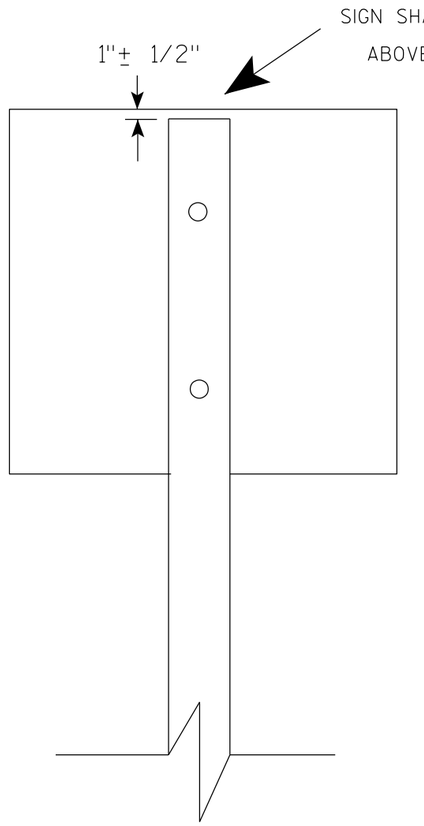
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

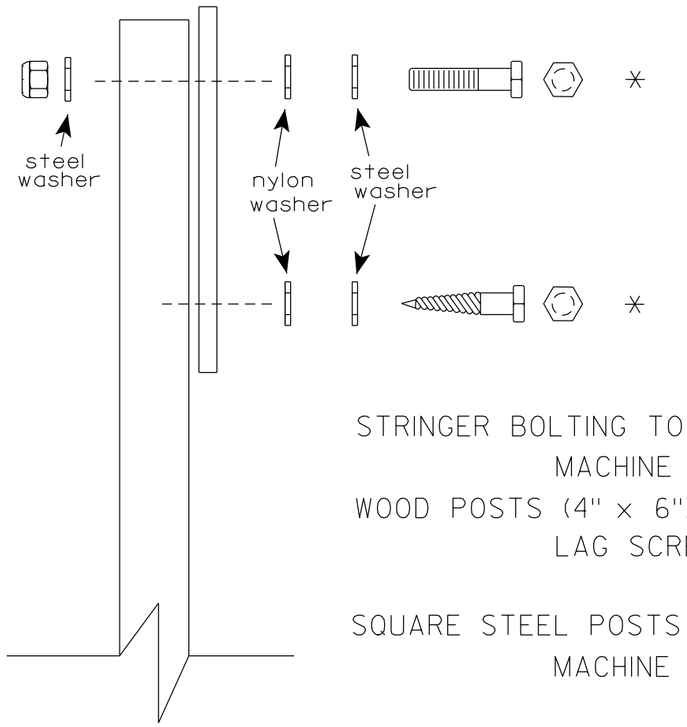
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 58	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

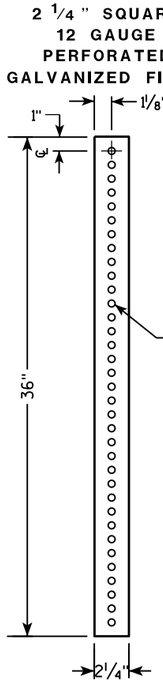
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

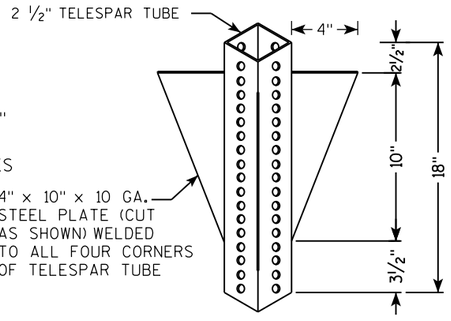
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

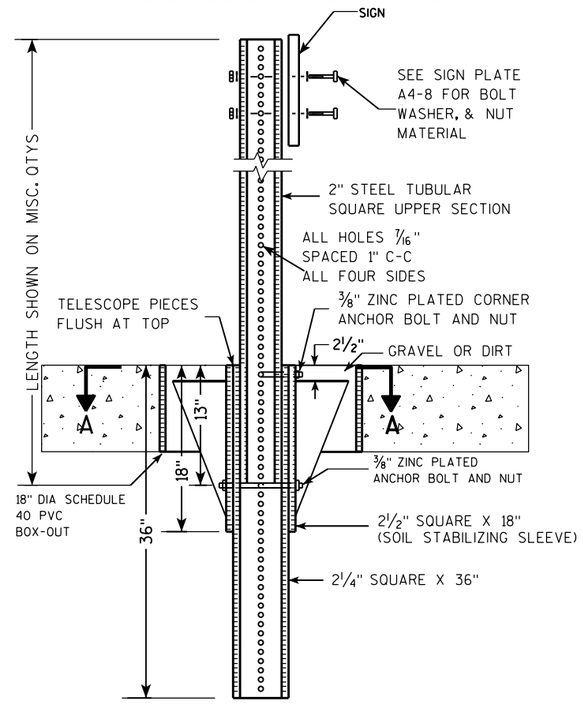
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



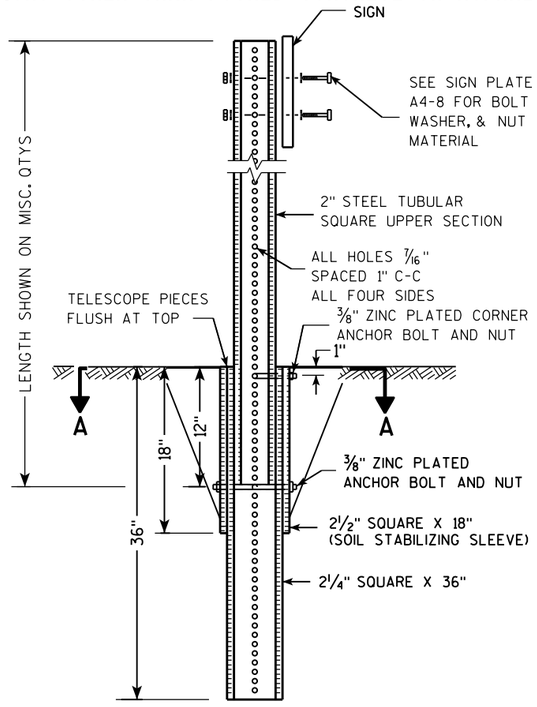
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

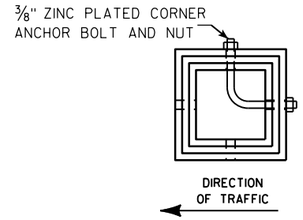


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

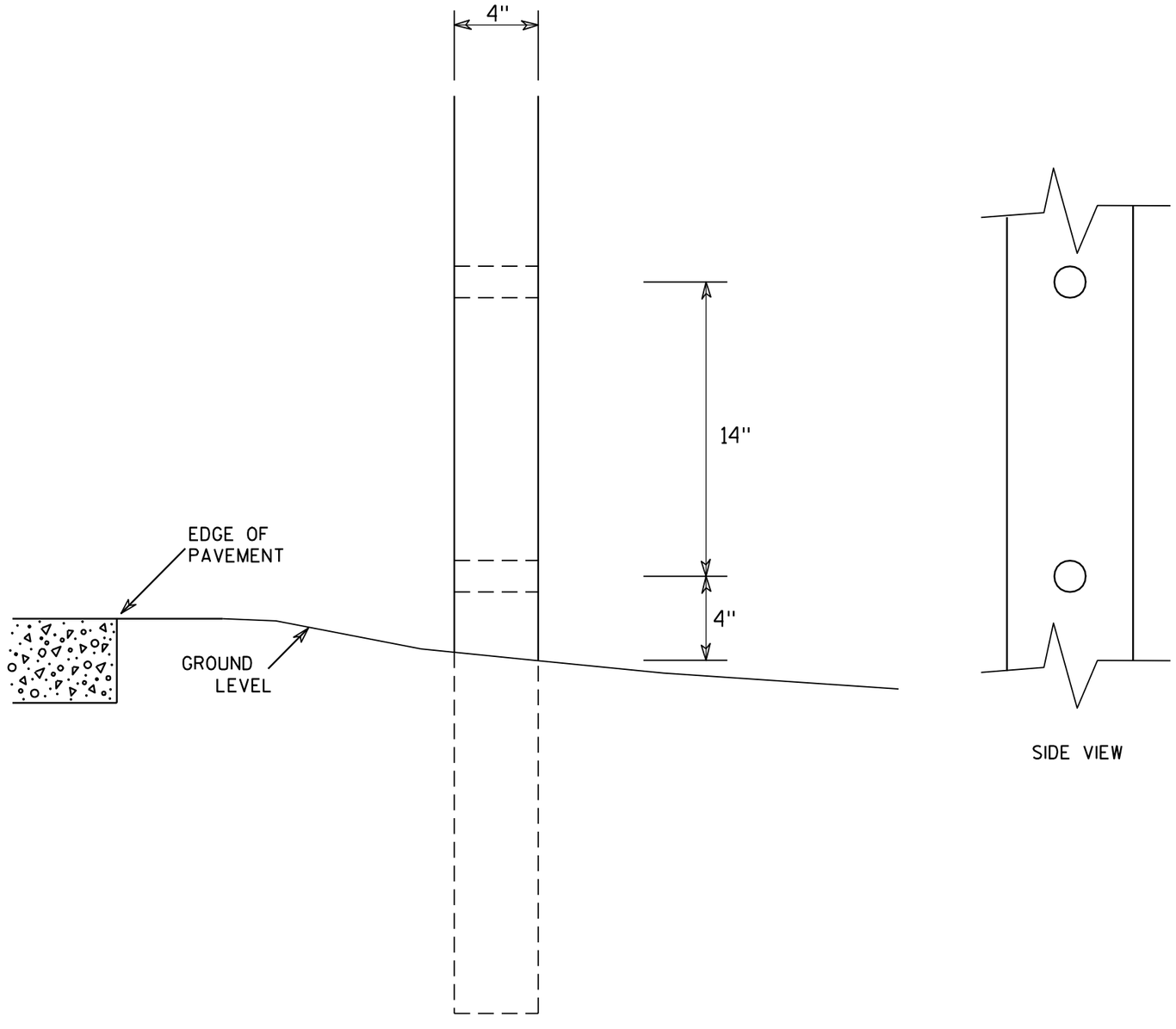
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 60 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.

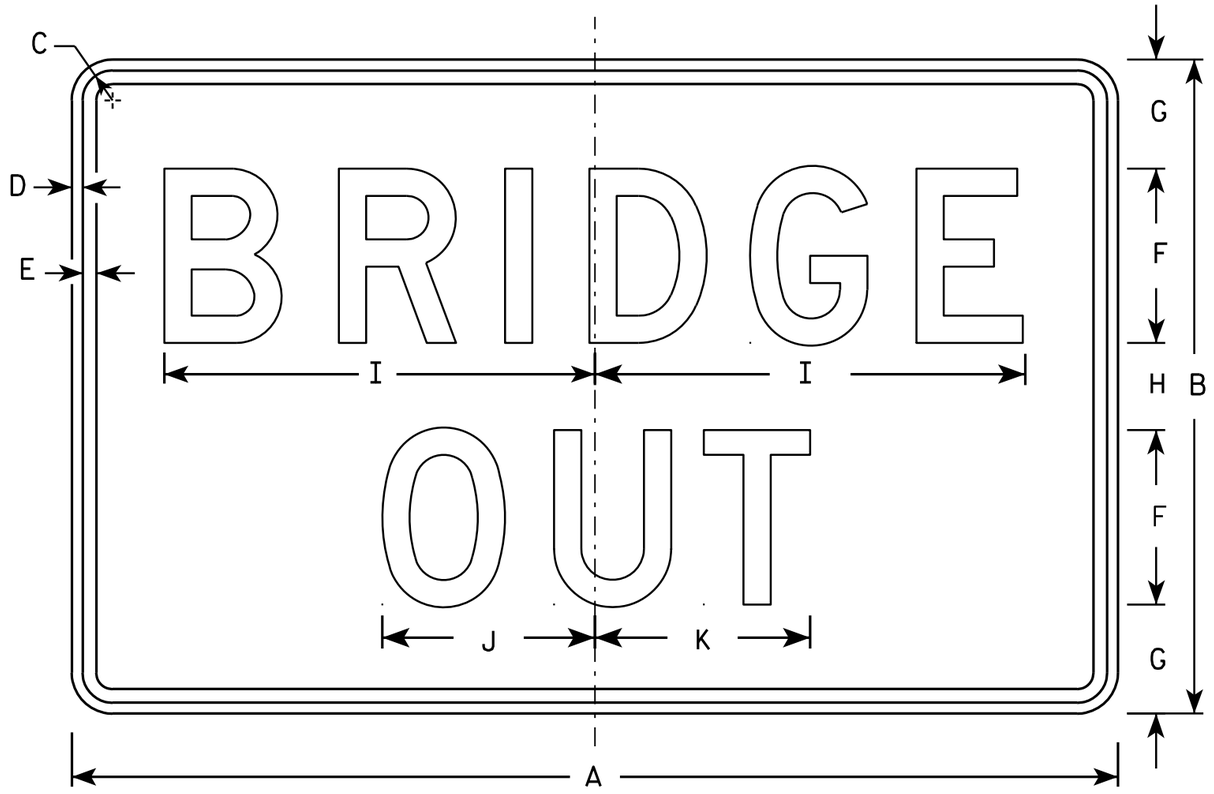
4 X 6 WOOD POST MODIFICATIONS

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: 61	E



R11-2B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 3/8	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

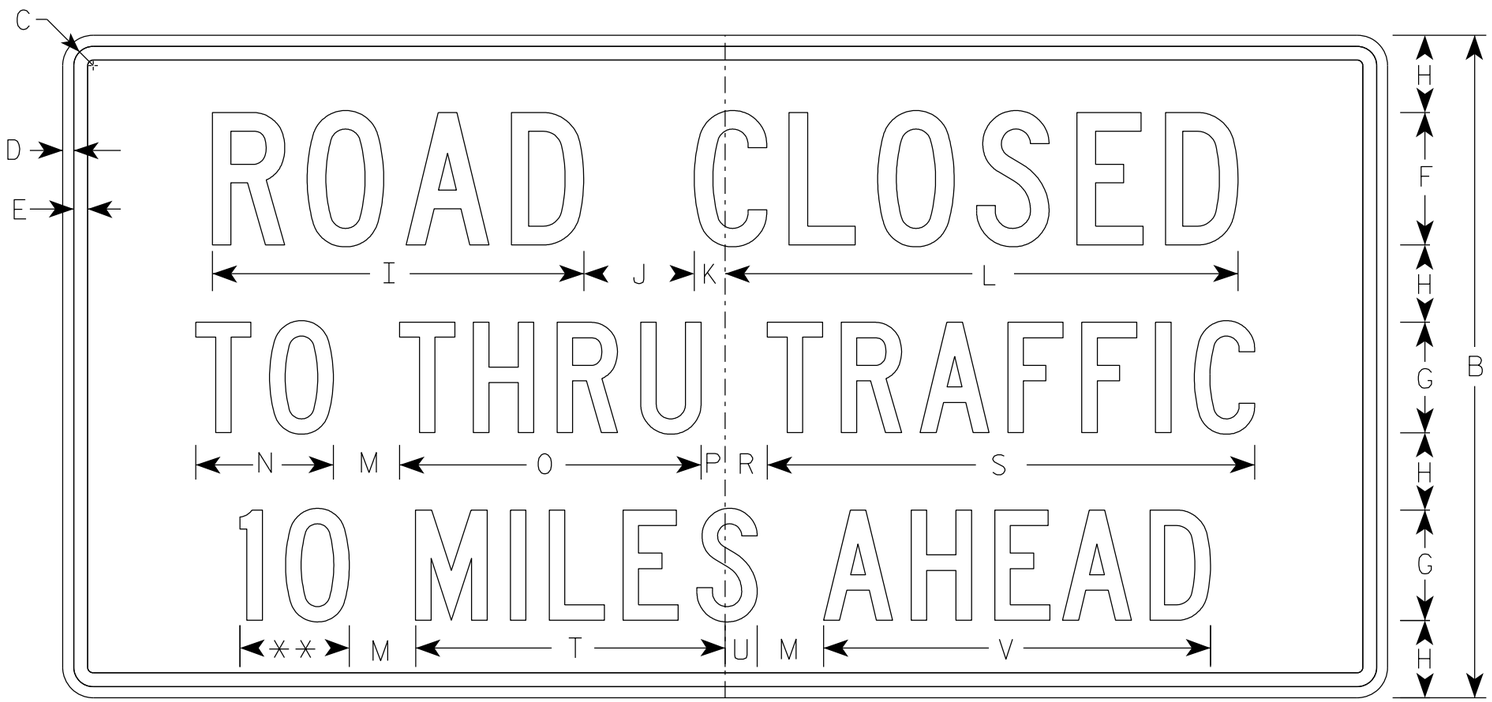
DATE 4/1/11 PLATE NO. R11-2B.2

PROJECT NO:

SHEET NO: 62 E

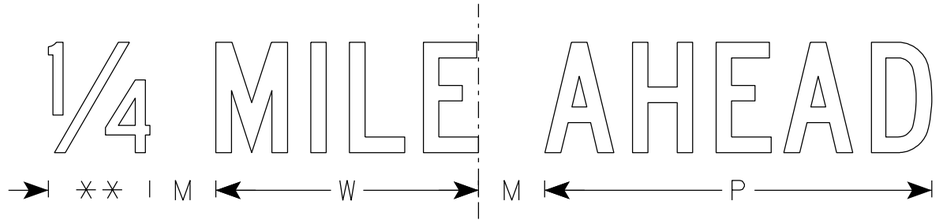
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
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.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



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	18	1 1/4	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

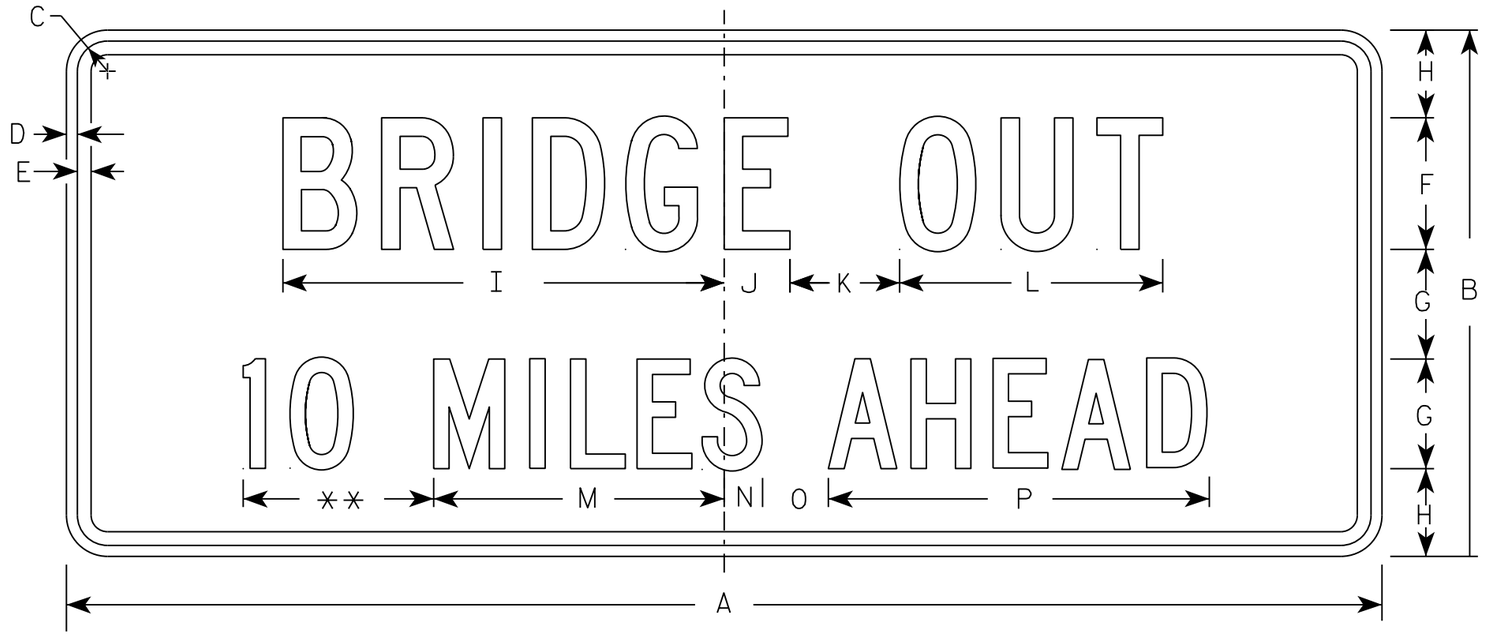
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 6/14/2021 PLATE NO. R11-3.9

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

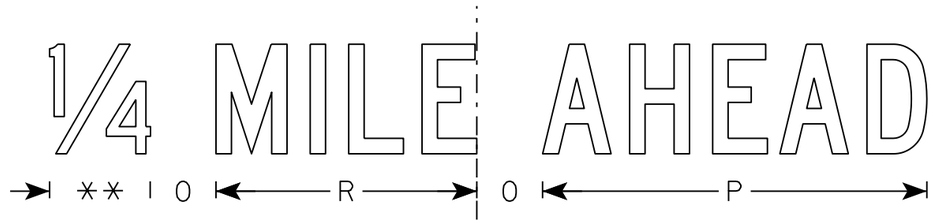
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
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.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3C

** See Note 5



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	15	1 3/8	1/2	5/8	4	3	2 1/2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4		7 1/8									3.75
2S	60	24	1 3/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
2M	60	24	1 3/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
3																											
4																											
5																											

STANDARD SIGN
R11-3C

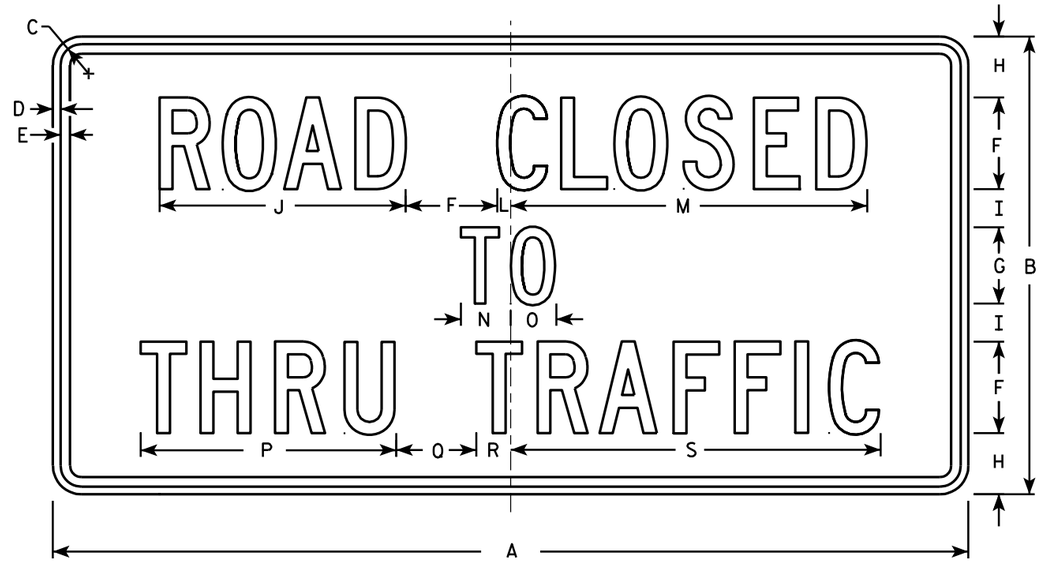
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/28/16 PLATE NO. R11-3C.3

PROJECT NO:

SHEET NO: 64 E



R11-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
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	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

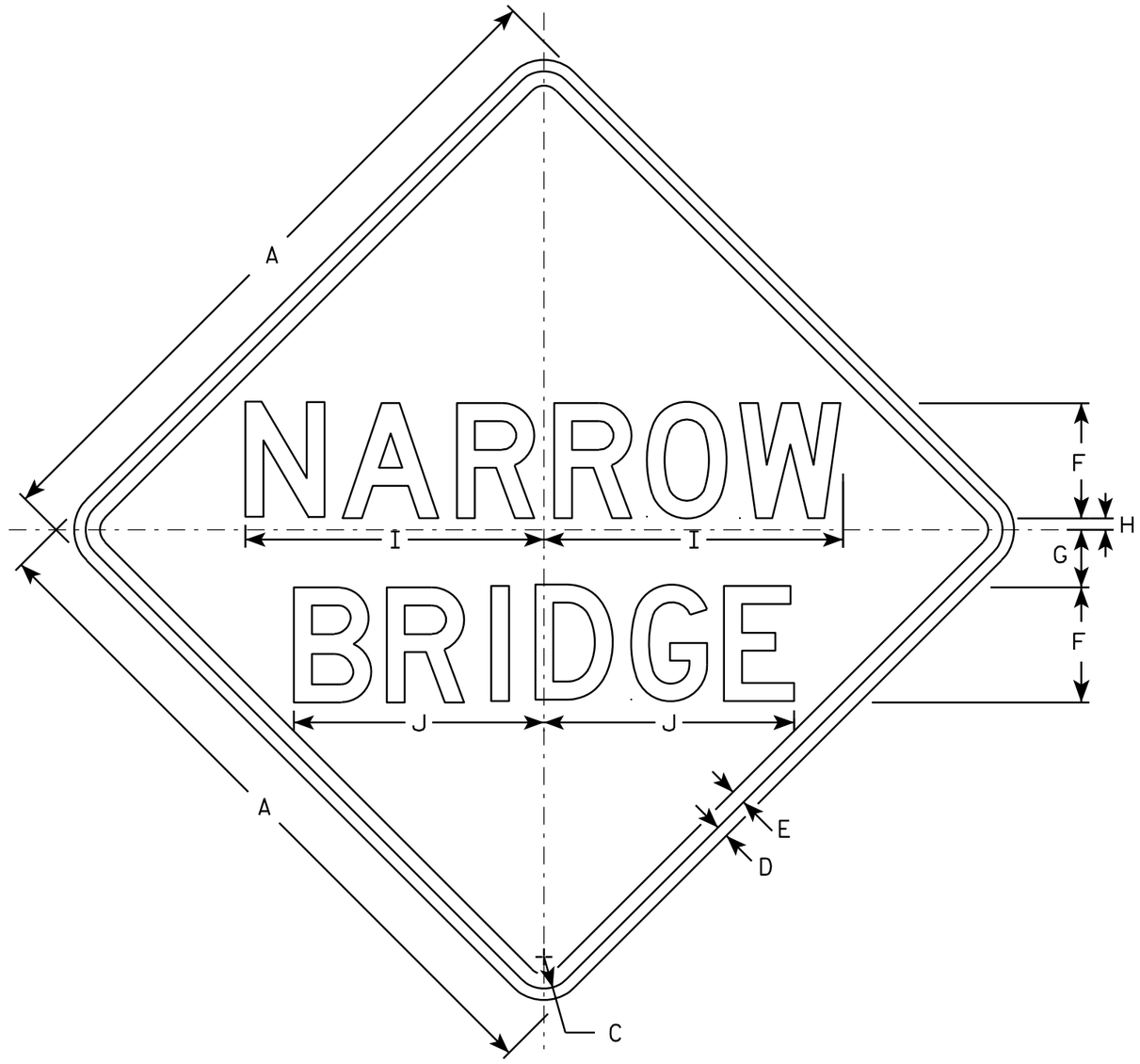
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

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



W5-2

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. 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	30		1 3/8	1/2	5/8	5	2 1/2	1/2	13	10 7/8																	6.25
2S	36		1 5/8	5/8	3/4	6	3	3/4	15 5/8	13 1/8																	9.0
2M	36		1 5/8	5/8	3/4	6	3	3/4	15 5/8	13 1/8																	9.0
3	36		1 5/8	5/8	3/4	6	3	3/4	15 5/8	13 1/8																	9.0
4	48		2 1/4	3/4	1	8	4	3/4	20 3/4	17 3/8																	16.0
5																											

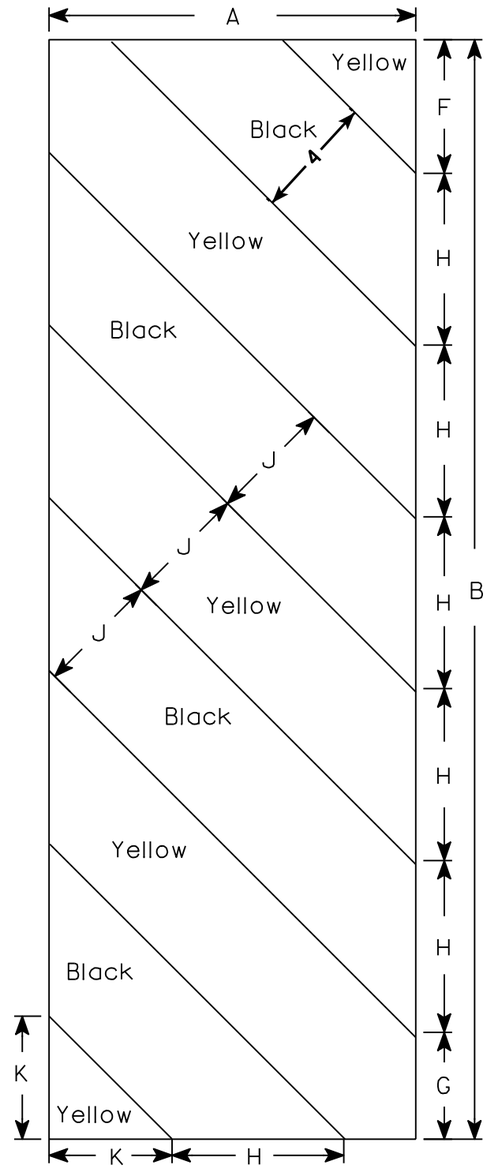
STANDARD SIGN
W5-2

WISCONSIN DEPT OF TRANSPORTATION

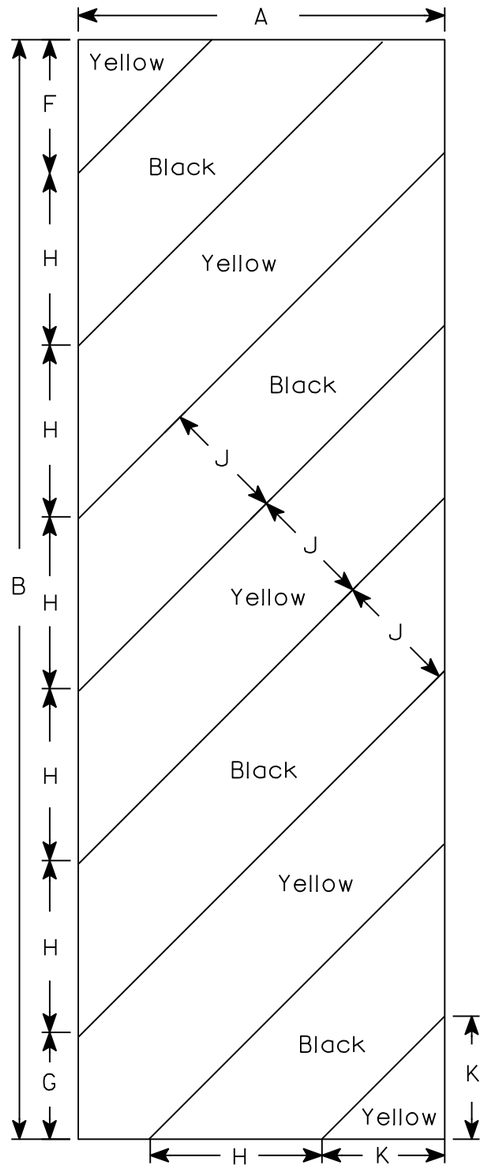
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W5-2.8

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



W5-52L



W5-52R

NOTES

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

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

STANDARD SIGN

W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

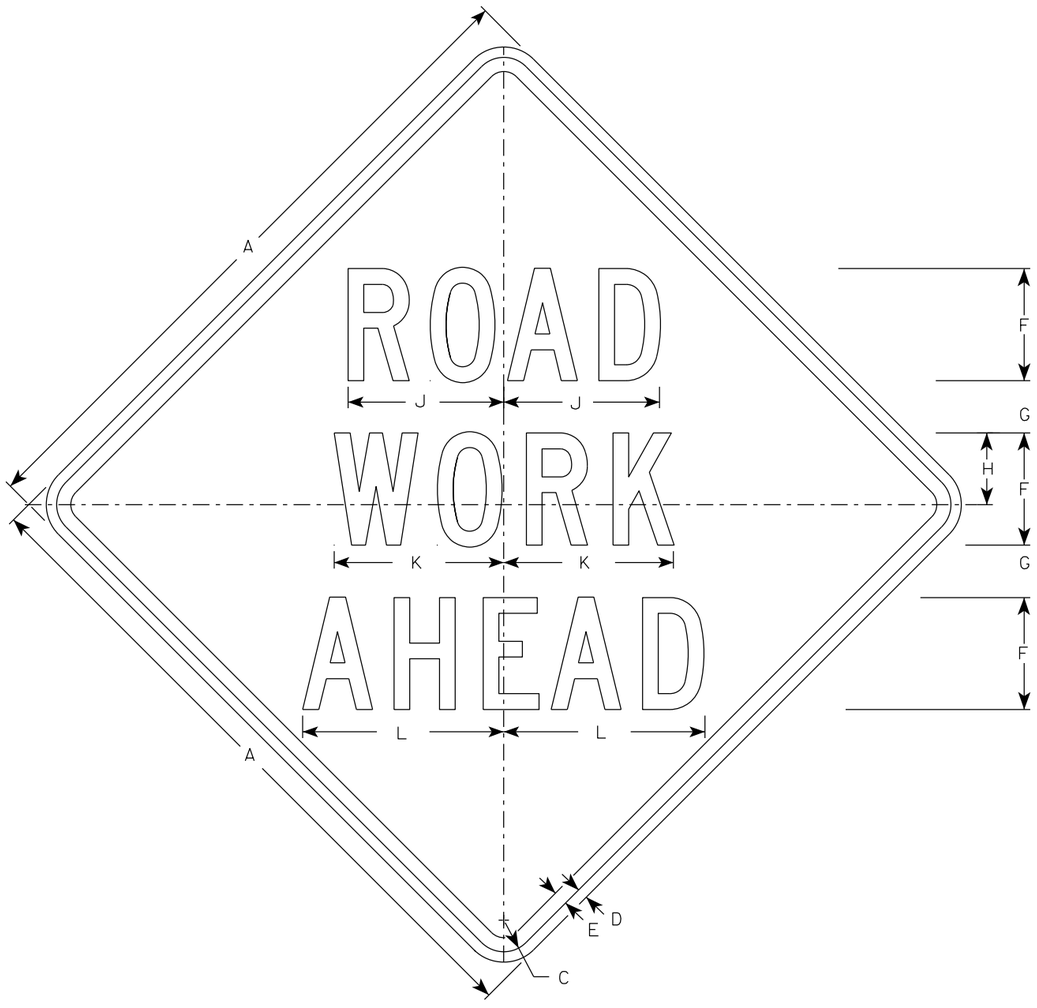
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 67 | E

7

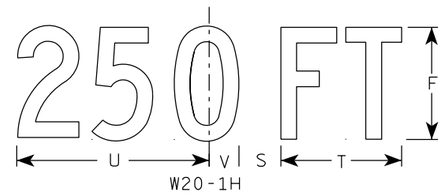
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W552.DGN PLOT DATE : 29-MAY-2012 13:03 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 4.961899:1.000000

NOTES

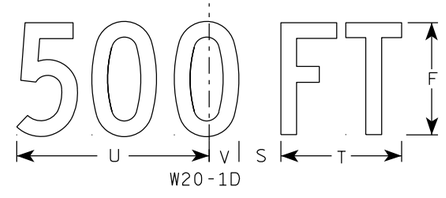
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



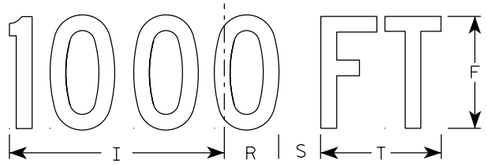
W20-1A



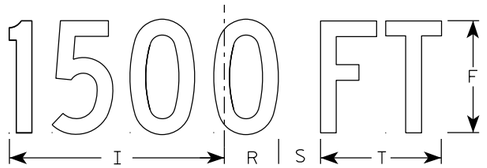
W20-1H



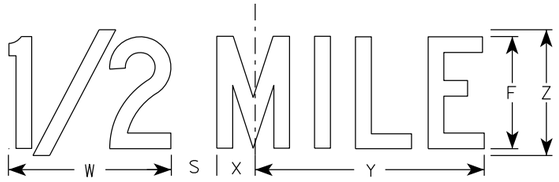
W20-1D



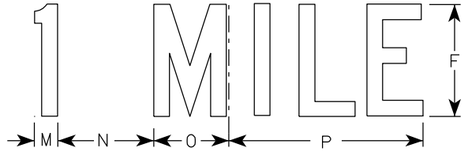
W20-1C



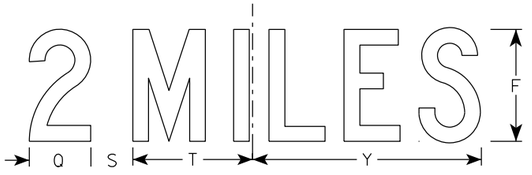
W20-1B



W20-1G



W20-1F



W20-1E

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		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

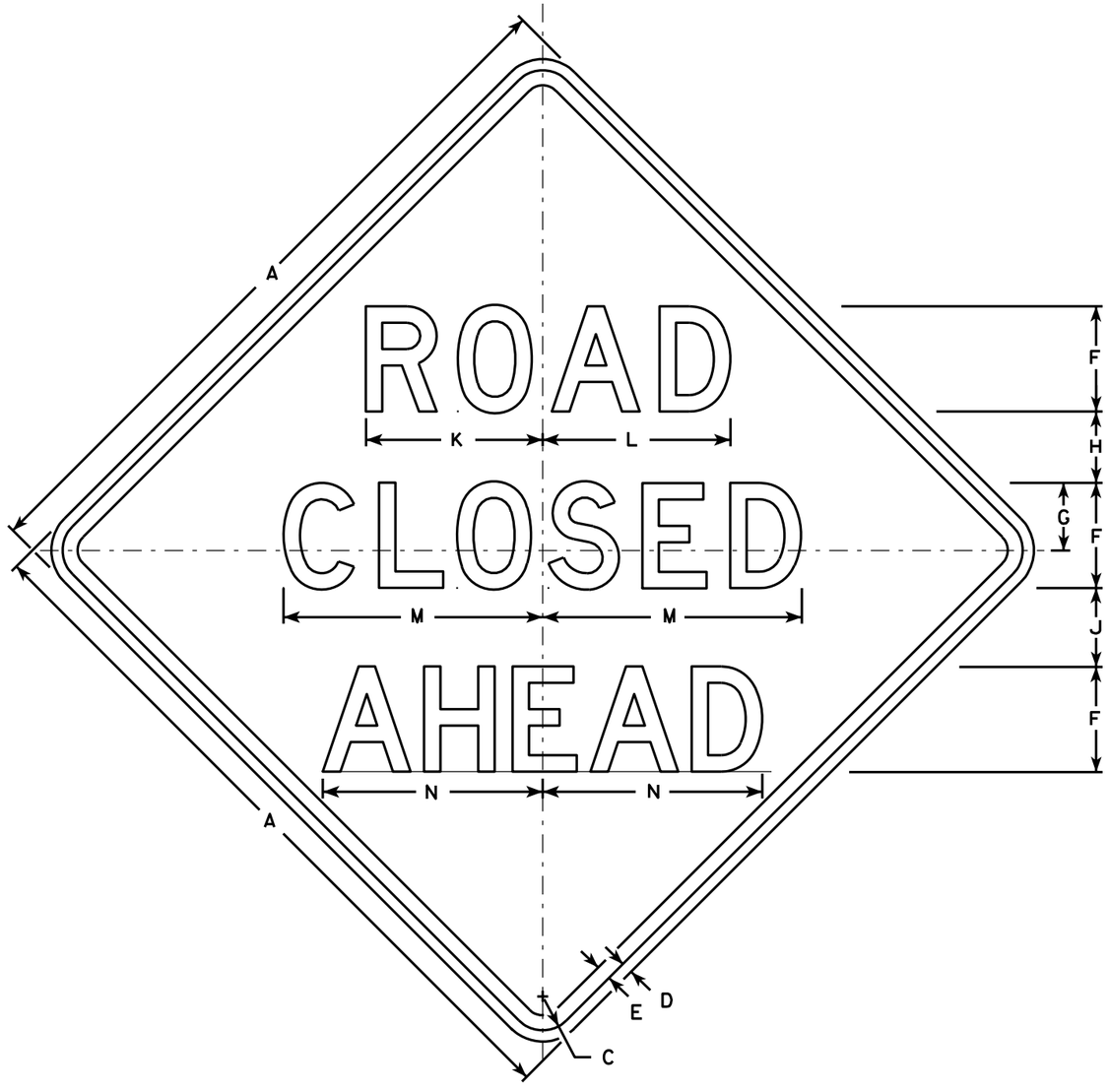
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

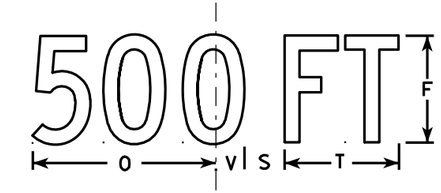
DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

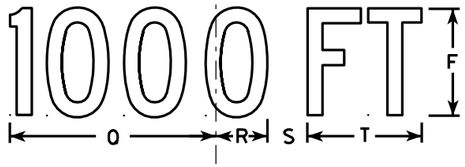
SHEET NO: E



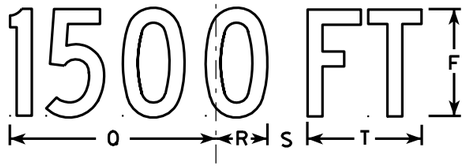
W20-3A



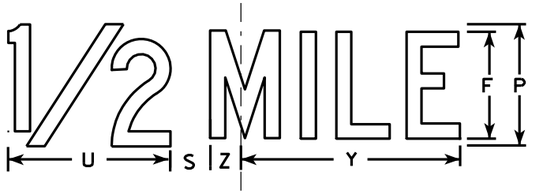
W20-3D



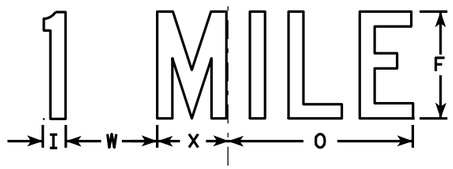
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
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.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

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		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

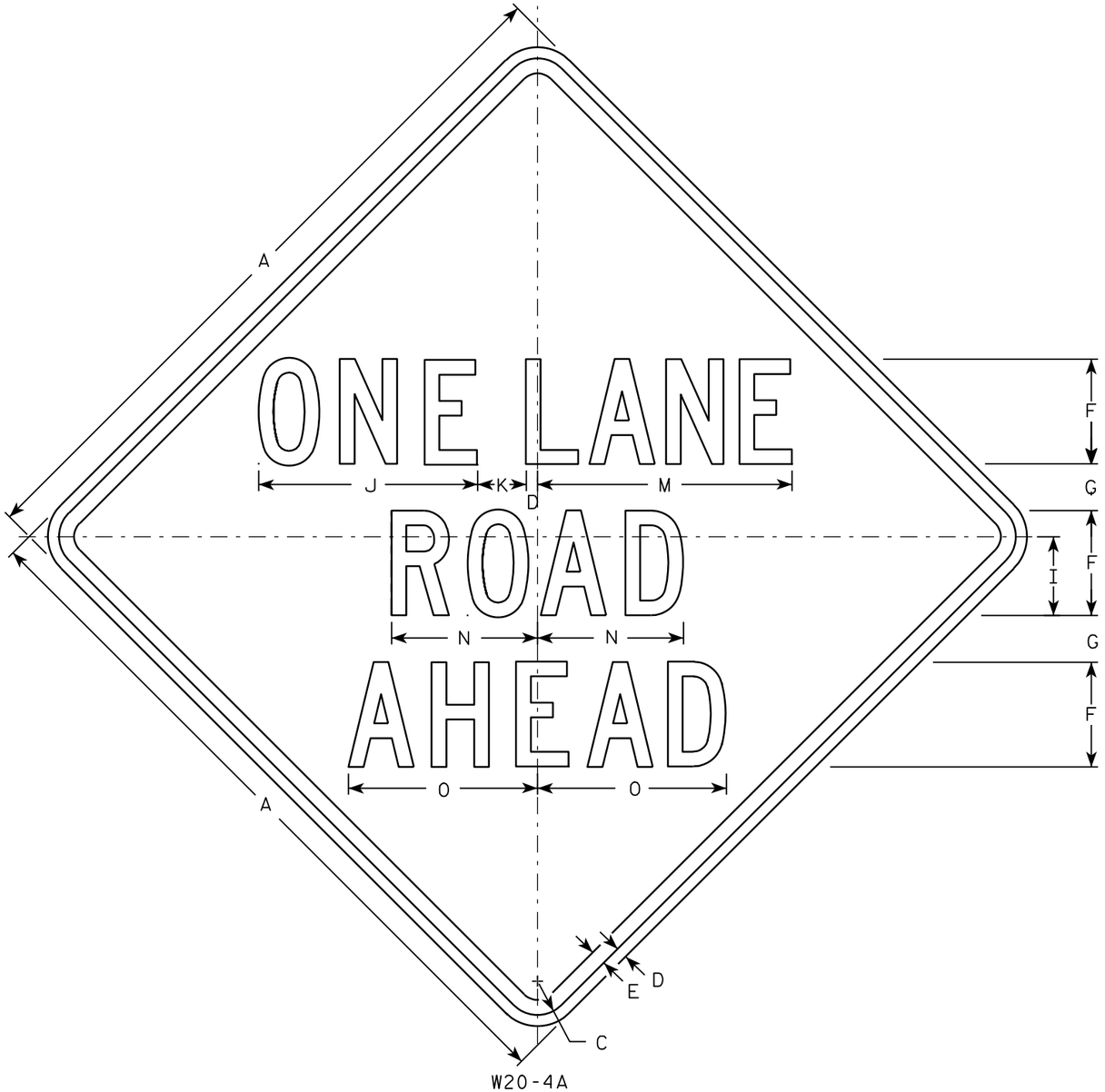
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

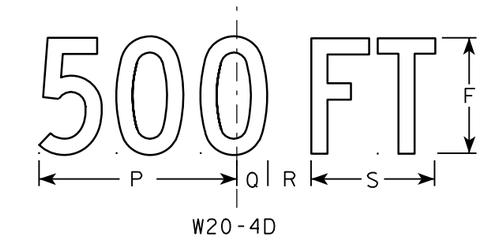
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 69 | E

7

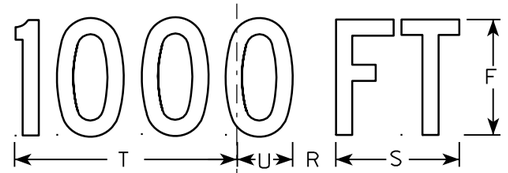
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



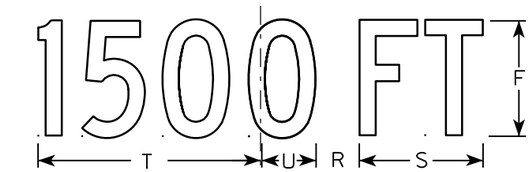
W20-4A



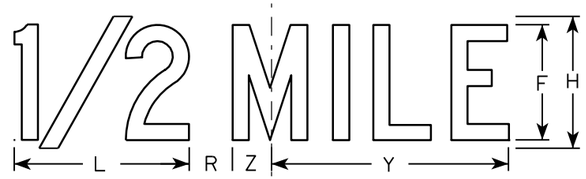
W20-4D



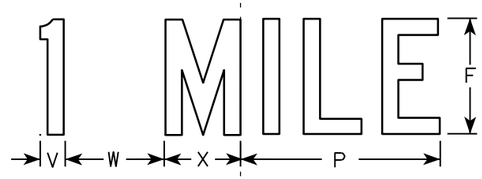
W20-4C



W20-4B



W20-4G



W20-4F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
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		1 5/8	5/8	3/4	5	2 3/8	6	3 3/4	10 3/8	2 3/8	8	13 1/2	7	8 7/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-4A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

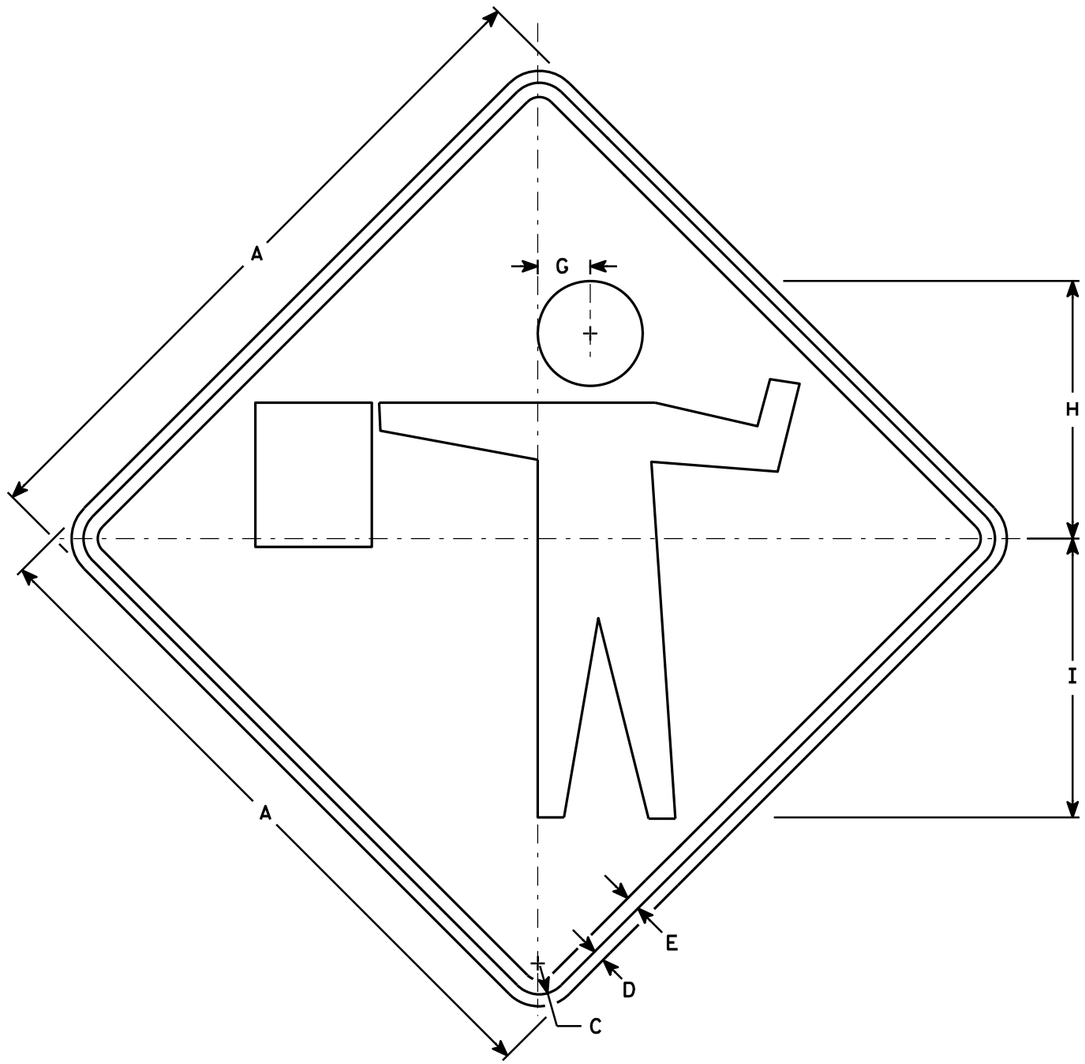
DATE 3/18/11 PLATE NO. W20-4.9

PROJECT NO:

SHEET NO: 70 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W204.DGN PLOT DATE : 18-MAR-2011 12:11 PLOT BY : mscj9h

WISDOT/CADDS SHEET 42



W20-7A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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	36		1 5/8	5/8	3/4		2 3/4	13 1/2	14 5/8																		9.00
2S	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
2M	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
3	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
4	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
5	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00

STANDARD SIGN
W20-7A

WISCONSIN DEPT OF TRANSPORTATION

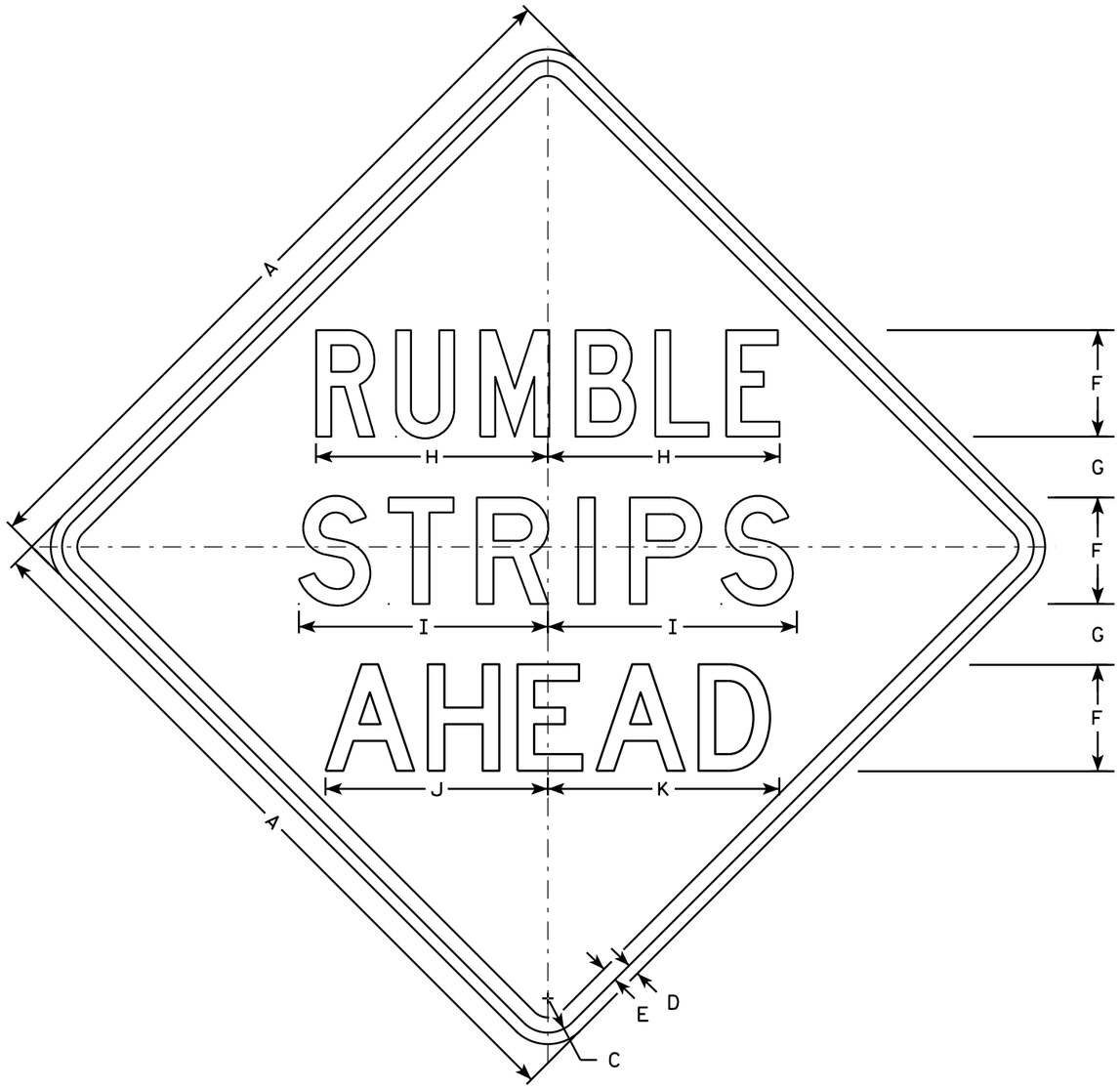
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-7A.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 71 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W207A.DGN PLOT DATE : 18-MAR-2011 13:14 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 7.945391:1.000000 WISDOT/CADDS SHEET 42



W21-65

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
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.
5. Line 1 is Series C
   Lines 2 and 3 are Series D

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		1 5/8	5/8	3/4	5	3 1/4	10 7/8	11 5/8	11	11 5/8																9.0
2S	48		2 1/4	3/4	1	7	4	15 1/4	16 3/8	14 5/8	15 1/4																16.0
2M	48		2 1/4	3/4	1	7	4	15 1/4	16 3/8	14 5/8	15 1/4																16.0
3	48		2 1/4	3/4	1	7	4	15 1/4	16 3/8	14 5/8	15 1/4																16.0
4	48		2 1/4	3/4	1	7	4	15 1/4	16 3/8	14 5/8	15 1/4																16.0
5	48		2 1/4	3/4	1	7	4	15 1/4	16 3/8	14 5/8	15 1/4																16.0

STANDARD SIGN

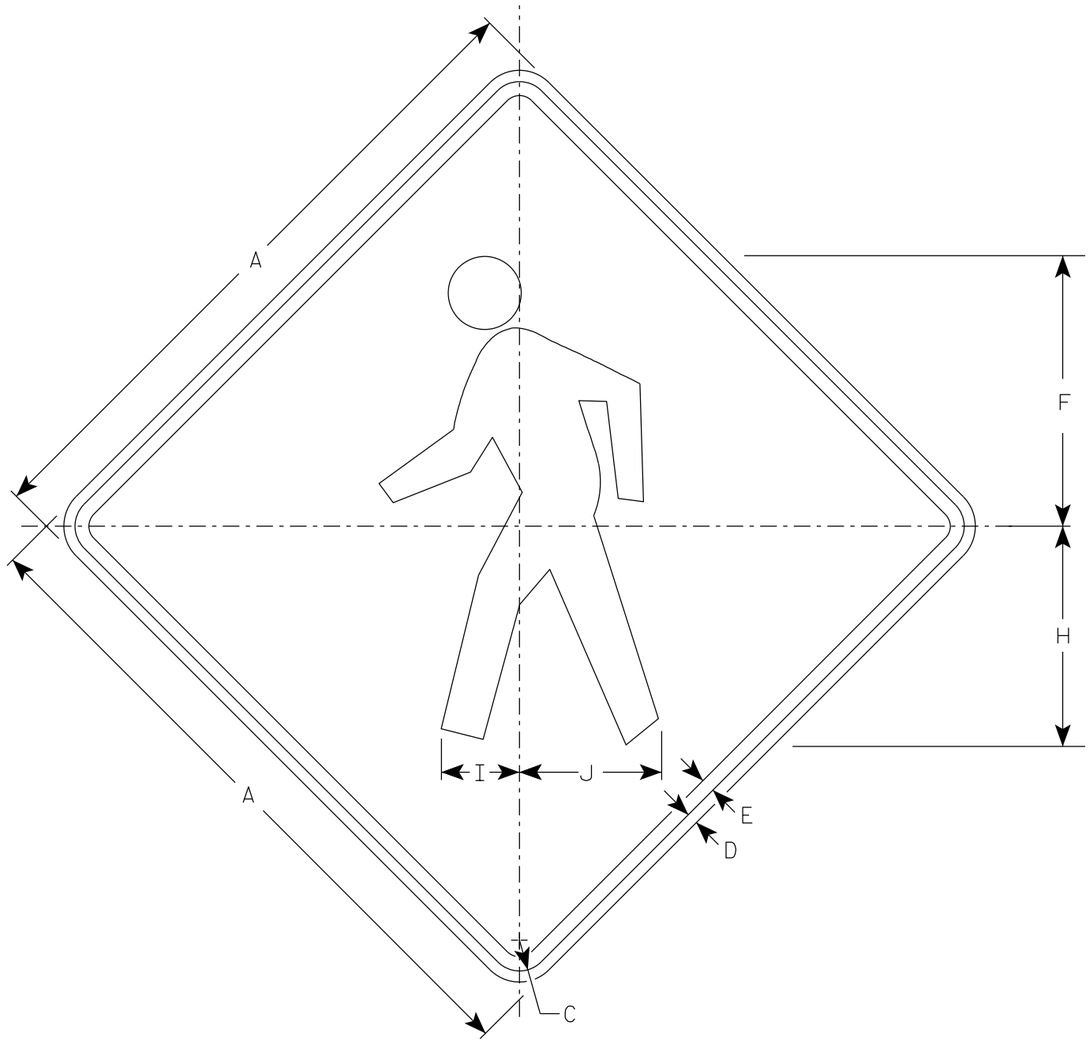
W21-65

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/28/14 PLATE 72 W21-65.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



WO11-2

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	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
2S	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
2M	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
3	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN

WO11-2

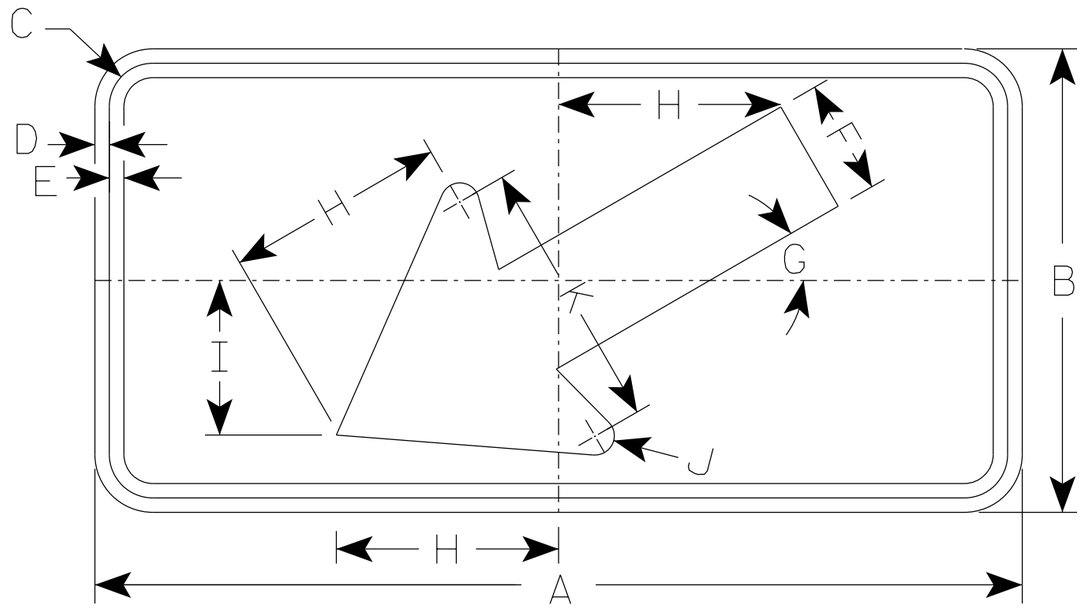
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 4/8/2020 PLATE NO. WO11-2.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 73	E



W016-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded but corners shall be rounded when base material is metal.
4. W016-7R is the same as W016-L 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	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2S	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
2M	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
3	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
4	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0

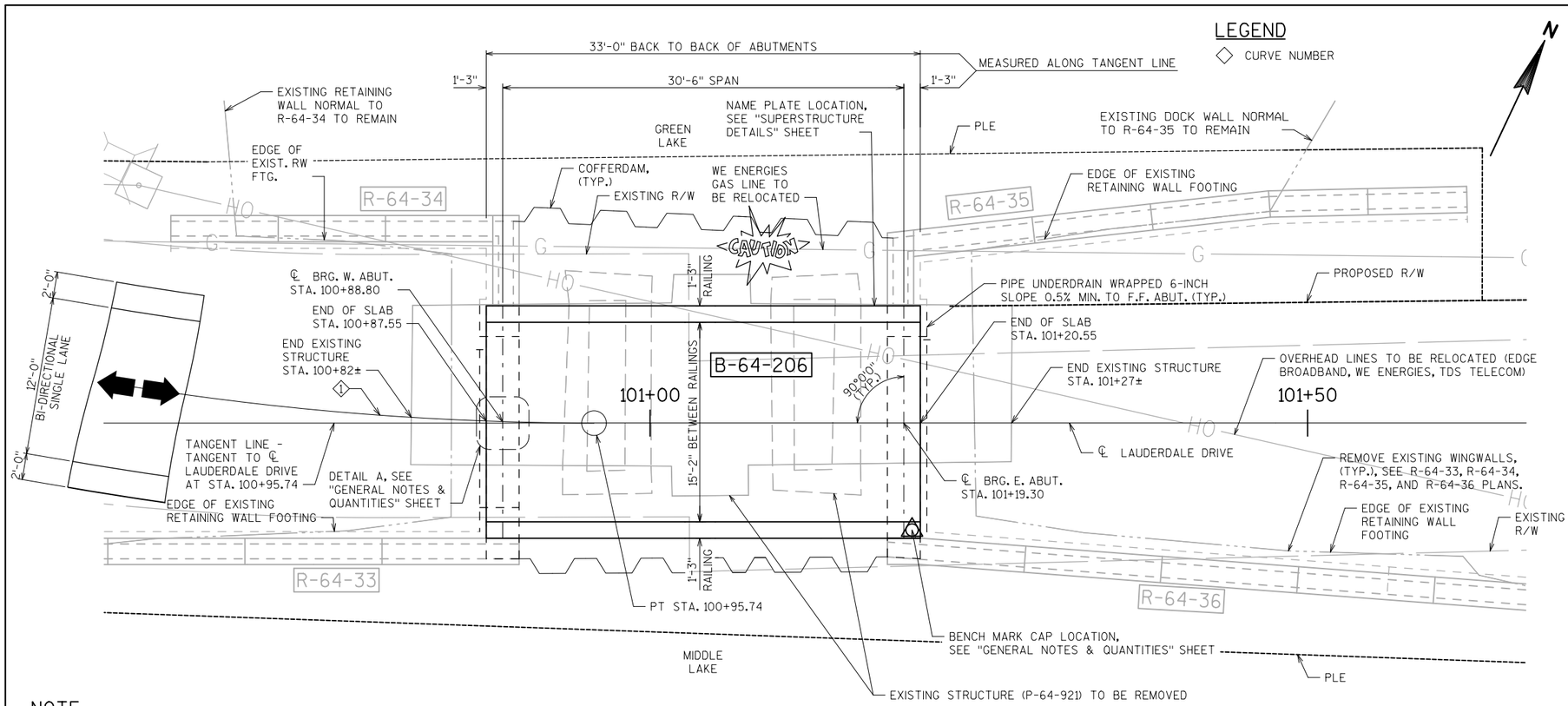
STANDARD SIGN
W016-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/2021 PLATE NO. W016-7.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 74	E

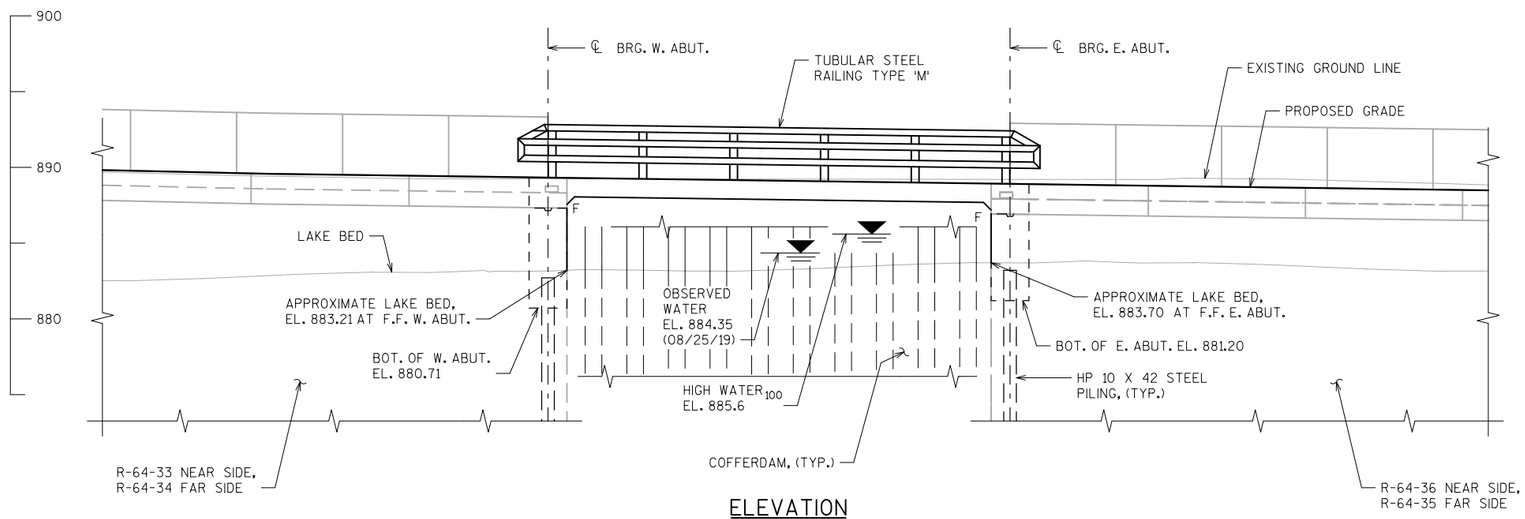


PLAN

SINGLE SPAN-FLAT SLAB

NOTE

1. TEMPORARY PEDESTRIAN BRIDGE AND CONSTRUCTION CAUSEWAYS NOT SHOWN, SEE ROADWAY PLANS.



ELEVATION

LOOKING NORTH

LEGEND

◇ CURVE NUMBER

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF= 1.16
OPERATING RATING FACTOR: RF= 1.51
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

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

MATERIAL PROPERTIES:
CONCRETE MASONRY BRIDGES:
SLAB.....f'c = 4,000 P.S.I.
ALL OTHER.....f'c = 3,500 P.S.I.

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

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10X42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS* PER PILE AS DETERMINED BY THE MODIFED GATES DYNAMIC FORMULA. ESTIMATED 45'LONG AT THE WEST ABUTMENT AND 35'LONG AT THE EAST ABUTMENT.

*THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.50 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA

FLOW NOT APPLICABLE. THIS IS AN EQUALIZED STRUCTURE.

100 YEAR FREQUENCY
$HW._{100}$ = EL. 885.6 (FIS)
WATERWAY AREA = 124 SQ. FT.
DRAINAGE AREA = N/A
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 8
$HW._{100}$ IS BASED ON WALWORTH COUNTY FLOOD INSURANCE STUDY DATED SEPTEMBER 3, 2014

2 YEAR FREQUENCY
$HW._{2}$ = EL. 885.0

CURVE DATA

① P.I. = 100+62.43
Y = 403012.533
X = 757057.727
Δ = 17°05'44"
D = 25°27'53"
T = 33.82'
L = 67.13'
R = 225.00'
P.C. STA. = 100+28.61
P.T. STA. 100+95.74

TRAFFIC DATA

LAUDERDALE DRIVE
A.A.D.T. = 140 (2022)
A.A.D.T. = 140 (2042)
R.D.S. = 25 M.P.H.

LIST OF DRAWINGS

WISCONSIN PROFESSIONAL ENGINEER
JASON R. SADOWSKI
E-38660
BROOKFIELD, WI
4/27/2022

STRUCTURE DESIGN CONTACTS
BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
JASON SADOWSKI (414) 751-9982

NO.	DATE	REVISION	BY

Michael Baker INTERNATIONAL
MICHAEL BAKER INTERNATIONAL
250 E. WISCONSIN STREET
SUITE 1725
MILWAUKEE, WI 53202

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 04/27/22
CHIEF STRUCTURES DESIGN ENGINEER DATE

STATE PROJECT NUMBER
3839-00-70

STRUCTURE B-64-206

LAUDERDALE DRIVE OVER GREEN LAKE

COUNTY	TOWN ~~CITY/VILLAGE~~
WALWORTH	LA GRANGE

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
DRH	JRS	TJN/RBH	JRS

GENERAL PLAN

SHEET 1 OF 10
75

8

8

STATE PROJECT NUMBER
3839-00-70

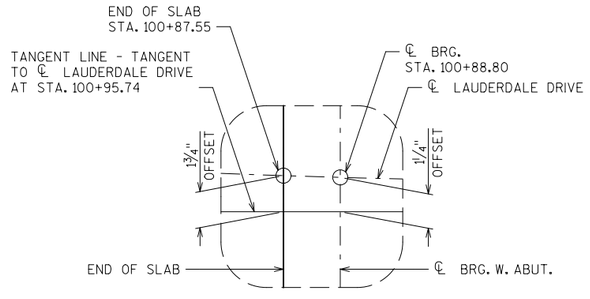
TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	WEST ABUTMENT	EAST ABUTMENT	SUPER.	TOTAL
203.0260.01	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS P-64-921	EACH	---	---	---	1
206.1000.01	EXCAVATION FOR STRUCTURES BRIDGES B-64-206	LS	---	---	---	1
206.5000.01	COFFERDAMS B-64-206	LS	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	134	112	---	246
502.0100	CONCRETE MASONRY BRIDGES	CY	12	11	30	53
502.3200	PROTECTIVE SURFACE TREATMENT	SY	---	---	73	73
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,530	1,440	8,830	11,800
513.4061	RAILING TUBULAR TYPE M	LF	---	---	71	71
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	3	3	---	6
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	200	160	---	360
612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	3	3	---	6
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	19	19	---	38
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	24	24	---	48
SPV.0090.01	FLASHING STAINLESS STEEL	LF	---	---	28	28
	NON-BID ITEMS					
	FILLER	SIZE	---	---	---	½ " & ¾ "
	NAME PLATE	EACH	1	---	---	1

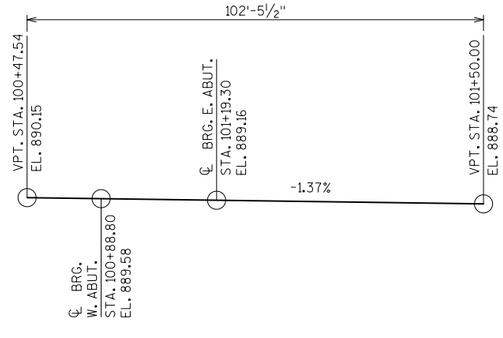
BENCH MARKS

NO.	NORTHING (Y)	EASTING (X)	DESCRIPTION	ELEV.
1884	402986.6170	756942.3110	⅜" SPIKE IN 5" WOOD POST	898.36
2024	403059.9560	757198.4590	CORNER OF CONCRETE WALL, 1' EAST OF DOCK, ADDRESS W5308	887.21

NOTE: FOR BENCHMARK LOCATIONS IN PLAN VIEW, SEE ROADWAY PLANS



DETAIL A



PROFILE GRADE LINE - LAUDERDALE DRIVE

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

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

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

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

EXISTING STRUCTURE (P-64-921) IS A THREE SPAN-STEEL DECK GIRDER BRIDGE WITH AN OVERALL LENGTH OF 47.0' AND AN OVERALL WIDTH OF 12.1'. THE EXISTING STRUCTURE IS SUPPORTED ON CONCRETE ABUTMENTS WITH SPREAD FOOTINGS TO BE REMOVED. CONTRACTOR TO REMOVE CONCRETE OF EXISTING FOOTINGS AND EXISTING WINGWALLS. EXISTING PIERS TO BE REMOVED 2'-0" BELOW EXISTING LAKE BED.

REMOVAL OF EXISTING WINGWALLS FOR CONSTRUCTION OF R-64-33, R-64-34, R-64-35, AND R-64-36 IS INCLUDED IN THE BID ITEM "REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS P-64-921".

CONCRETE POURED UNDER WATER SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 STANDARD SPECIFICATIONS.

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR THE STRUCTURE.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS.

CONSTRUCTION ACCESS WILL BE PROVIDED VIA A CAUSEWAY SOUTH OF THE BRIDGE. FOR DETAILS AND PAY ITEMS, SEE ROADWAY PLANS.

COORDINATE BRIDGE CONSTRUCTION WITH THE CONSTRUCTION OF THE NEW RETAINING WALLS (R-64-33, R-64-34, R-64-35, AND R-64-36).

FOR LAKE BED RESTORATION REQUIREMENTS AND BID ITEMS, SEE THE ROADWAY PLANS AND SPECIAL PROVISIONS.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-206

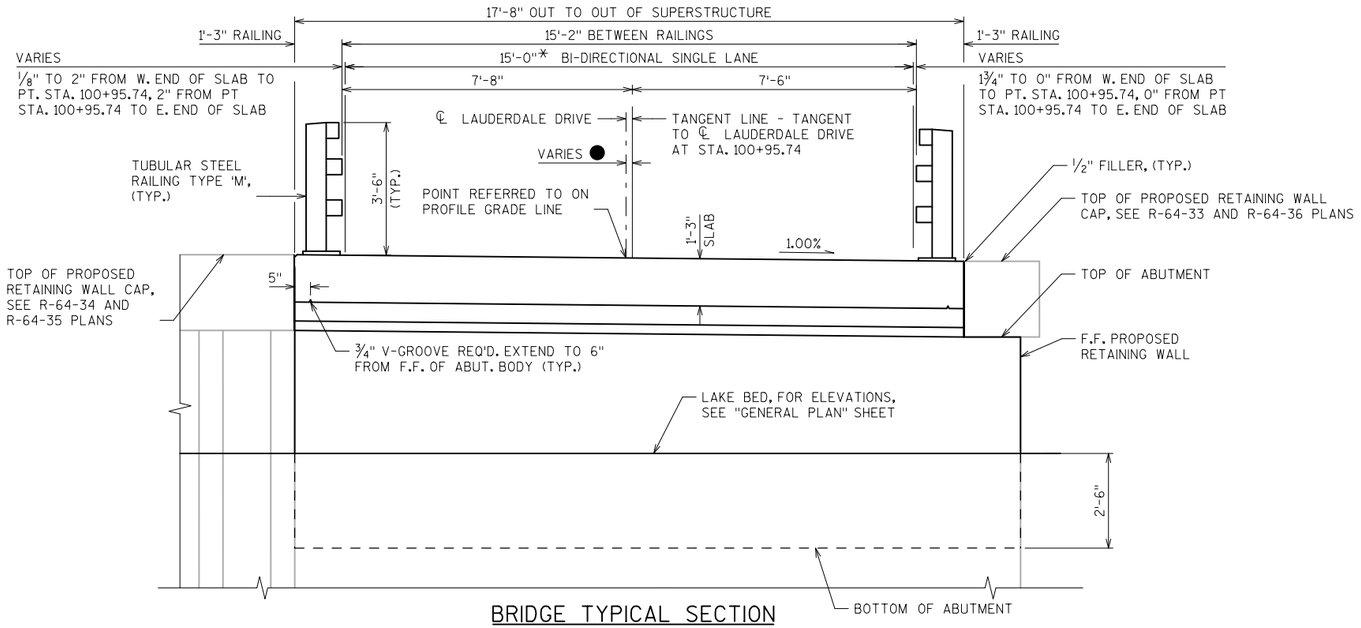
DRAWN BY TJN | PLANS CK'D. JRS

GENERAL NOTES & QUANTITIES

SHEET 2 OF 10
76

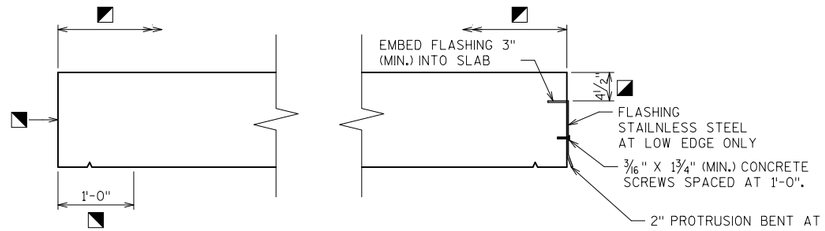
STATE PROJECT NUMBER

3839-00-70



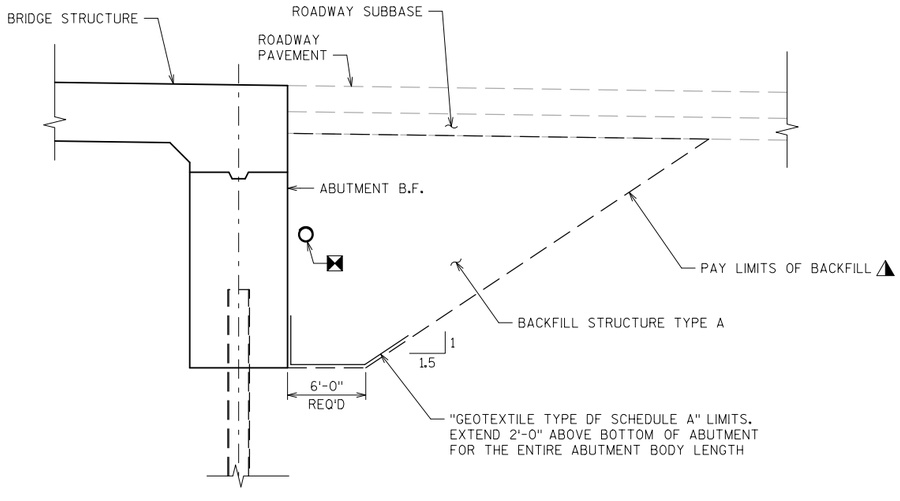
BRIDGE TYPICAL SECTION

MEASURED NORMAL TO TANGENT U.N.O.



FLASHING AND SLAB PROTECTIVE SURFACE TREATMENT DETAIL

RAILING NOT SHOWN FOR CLARITY



ABUTMENT BACKFILL DETAIL

NOTES

1. THE BID ITEM "FLASHING STAINLESS STEEL" SHALL INCLUDE PROVIDING AND INSTALLING THE STAINLESS STEEL FLASHING AND 3/16" CONCRETE SCREWS.
2. EXTEND FLASHING TO F.F. ADJACENT RETAINING WALLS R-64-33, R-64-34, R-64-35, AND R-64-36.
3. FLASHING IS TO BE A CONSTANT HEIGHT.

LEGEND

◭ BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR. FOR BACKFILL LIMITS FOR SHEET PILE RETAINING WALLS, SEE R-64-33, R-64-34, R-64-35, AND R-64-36 PLANS.

⧓ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO LOCATIONS SHOWN ON "WEST ABUTMENT" AND "EAST ABUTMENT" SHEETS. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. FOR RODENT SHIELD DETAIL, SEE "WEST ABUTMENT" SHEET.

◪ PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF SLAB. SEE FLASHING AND SLAB PROTECTIVE SURFACE TREATMENT DETAIL ON THIS SHEET.

* DIMENSION TAKEN NORMAL TO ℄ LAUDERDALE DRIVE. BI-DIRECTIONAL LANE IS CENTERED ON ℄ LAUDERDALE DRIVE.

● 1 3/4" TO 0'-0" FROM W. END OF SLAB TO PT. STA. 100+95.74, 0" FROM PT STA. 100+95.74 TO E. END OF SLAB.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-206

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TYPICAL SECTION

SHEET 3 OF 10

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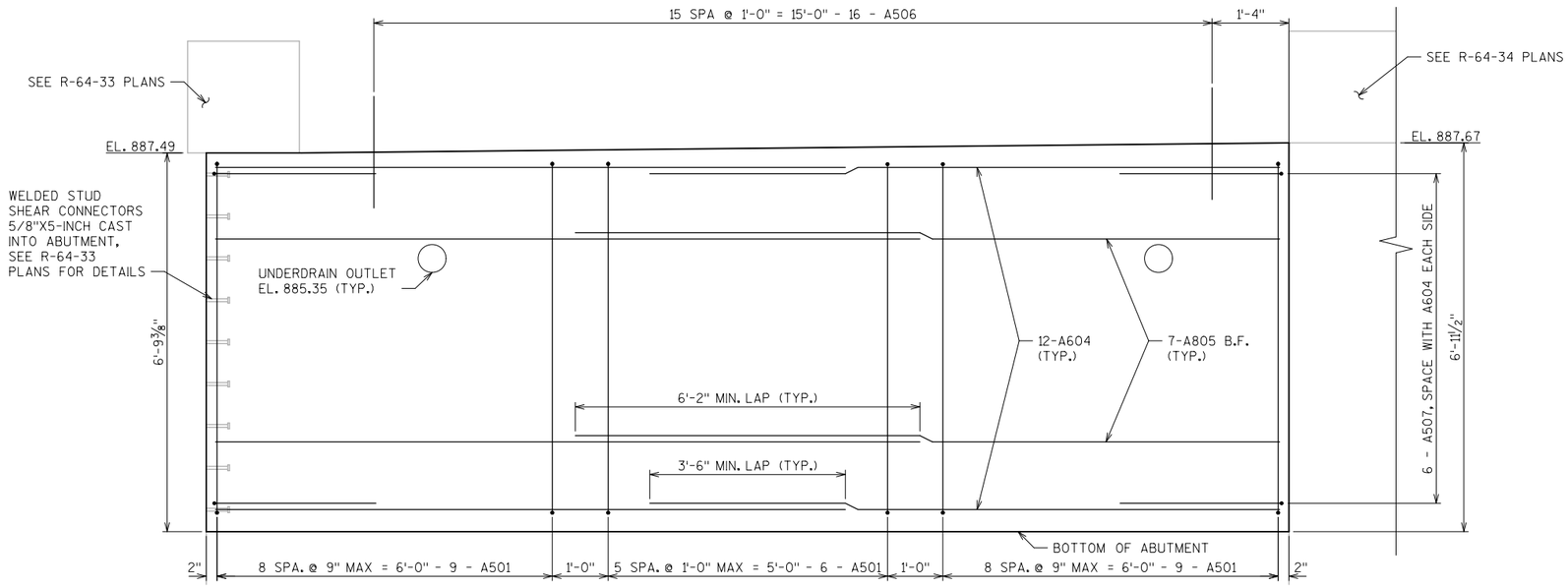
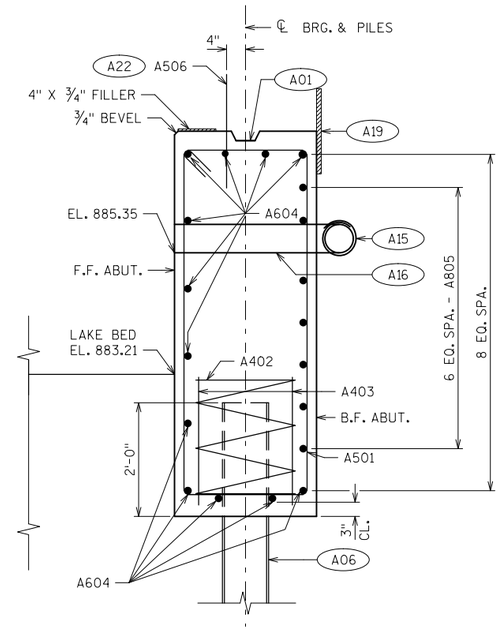
STATE PROJECT NUMBER

3839-00-70



ELEVATION

LOOKING WEST



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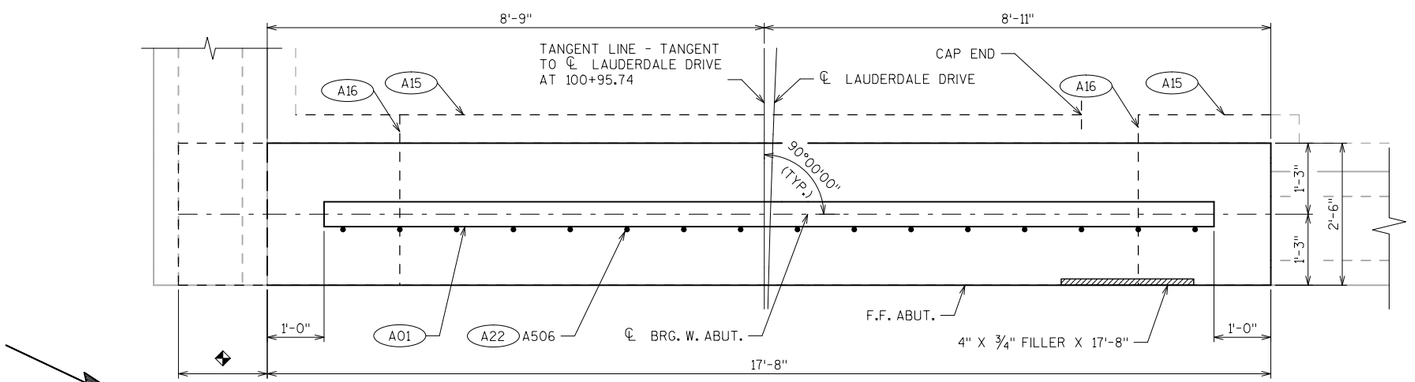
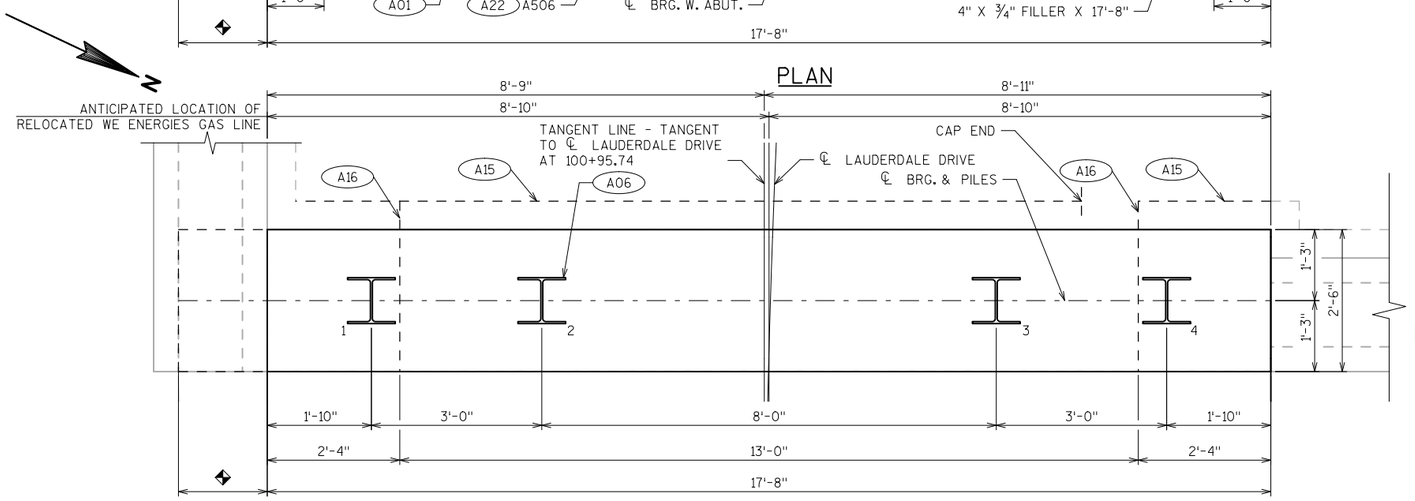


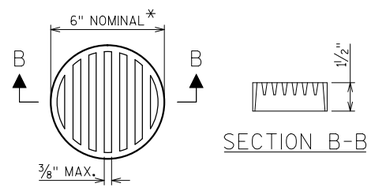
PLAN



PILE PLAN

NOTE

1. COORDINATE THE FINAL LOCATION OF THE RELOCATED GAS LINE WITH WE ENERGIES PRIOR TO PILE DRIVING. PILE LOCATIONS MAY BE ADJUSTED IN THE FIELD UNDER THE FOLLOWING CONDITIONS:
   - MAINTAIN MINIMUM EDGE DISTANCE OF 1'-6" FROM END OF ABUTMENT TO CENTER OF OUTSIDE PILE
   - MAINTAIN MAXIMUM SPACING OF 8'-0" OR LESS BETWEEN CENTERS OF ADJACENT PILES
   - MAINTAIN MINIMUM SPACING OF 2'-6" OR MORE BETWEEN CENTERS OF ADJACENT PILES



SECTION B-B

RODENT SHIELD DETAIL

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

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

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

LEGEND

- (A01) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2" X 6".
- (A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING. ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE.
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. CONNECT TO RETAINING WALL DRAINS, SEE R-64-33 AND R-64-34 PLANS FOR DETAILS.
- (A16) PIPE UNDERDRAIN UNPERFORATED (6-INCH) THROUGH ABUTMENT STEM. CONNECT TO WRAPPED UNDERDRAIN AT BACKFACE. RODENT SHIELD REQUIRED.
- (A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE. SEE R-64-33 AND R-64-34 PLANS FOR RMW AT INTERFACE BETWEEN RETAINING WALLS AND ABUTMENTS.
- (A22) A506 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- ◆ ASSUMED MAXIMUM VALUE OF 1'-8". ABUTMENT TO EXTEND TO FRONT FACE OF RETAINING WALL R-64-33. ACTUAL DIMENSION WILL DEPEND ON SHEET PILE TYPE CHOSEN. BRIDGE PLANS AND QUANTITIES ASSUME A SHEET PILE SECTION HEIGHT OF 16".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-206

DRAWN BY RBH | PLANS CK'D. DRH

WEST ABUTMENT

SHEET 4 OF 10

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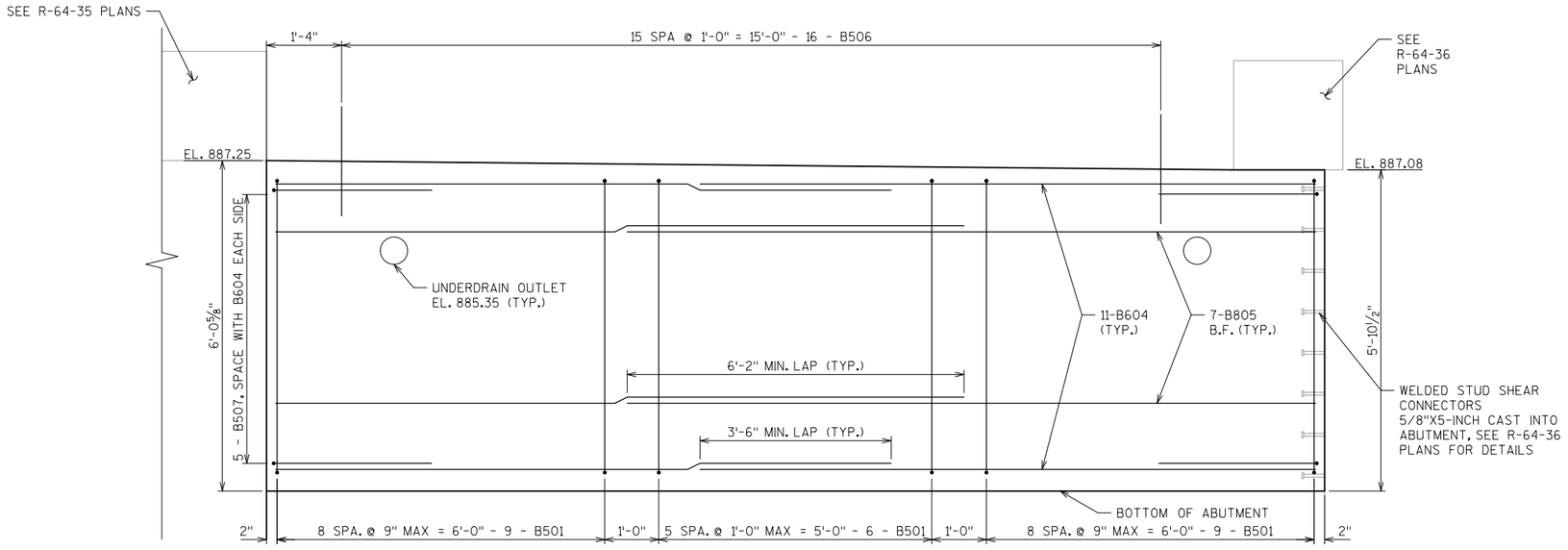
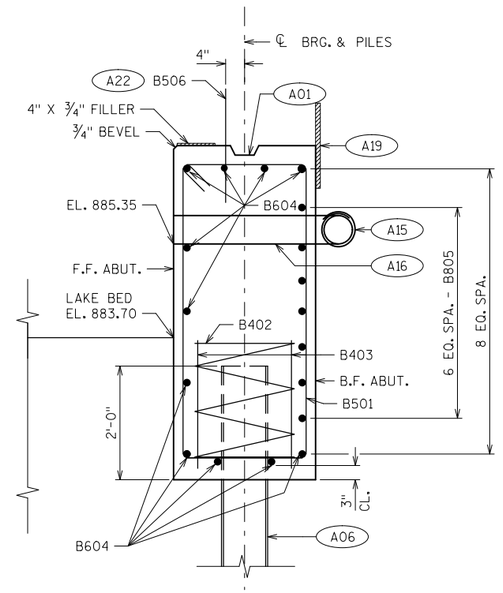
STATE PROJECT NUMBER

3839-00-70

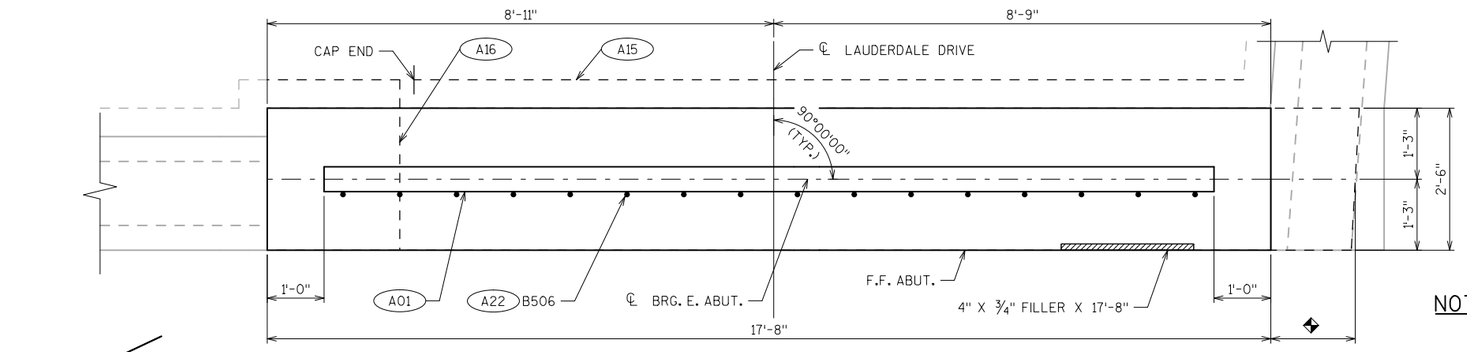


ELEVATION

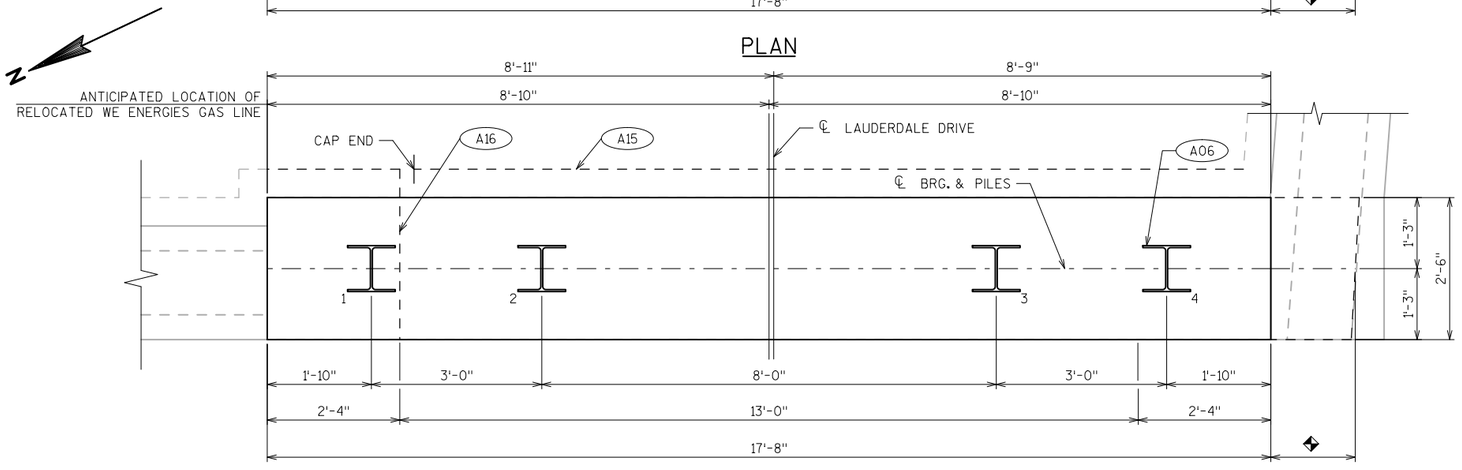
LOOKING EAST



SECTION THRU BODY



PLAN



PILE PLAN

NOTE

LEGEND

- (A01) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2" X 6".
- (A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING. ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE.
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. CONNECT TO RETAINING WALL DRAINS, SEE R-64-35 AND R-64-36 PLANS FOR DETAILS.
- (A16) PIPE UNDERDRAIN UNPERFORATED (6-INCH) THROUGH ABUTMENT STEM. CONNECT TO WRAPPED UNDERDRAIN AT BACKFACE. RODENT SHIELD REQUIRED.
- (A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE. SEE R-64-35 AND R-64-36 PLANS FOR RMW AT INTERFACE BETWEEN RETAINING WALLS AND ABUTMENTS.
- (A22) B506 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- ◆ ASSUMED MAXIMUM VALUE OF 1'-8". ABUTMENT TO EXTEND TO FRONT FACE OF RETAINING WALL R-64-36. ACTUAL DIMENSION WILL DEPEND ON SHEET PILE TYPE CHOSEN. BRIDGE PLANS AND QUANTITIES ASSUME A SHEET PILE SECTION HEIGHT OF 16".

NOTES

1. SEE "WEST ABUTMENT" SHEET FOR RODENT SHIELD DETAIL
2. COORDINATE THE FINAL LOCATION OF THE RELOCATED GAS LINE WITH WE ENERGIES PRIOR TO PILE DRIVING. PILE LOCATIONS MAY BE ADJUSTED IN THE FIELD UNDER THE FOLLOWING CONDITIONS:
   - MAINTAIN MINIMUM EDGE DISTANCE OF 1'-6" FROM END OF ABUTMENT TO CENTER OF OUTSIDE PILE
   - MAINTAIN MAXIMUM SPACING OF 8'-0" OR LESS BETWEEN CENTERS OF ADJACENT PILES
   - MAINTAIN MINIMUM SPACING OF 2'-6" OR MORE BETWEEN CENTERS OF ADJACENT PILES

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-206

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EAST ABUTMENT

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STATE PROJECT NUMBER
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WEST ABUTMENT
BILL OF BARS

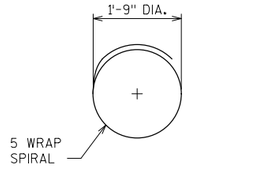
TOTAL COATED = 1,530 LBS

BAR MARK	NO. REQ'D.	LENGTH	COAT	STAINLESS STEEL	BENT	BAR SERIES	LOCATION
A501	24	17'-5"	X		X		STIRRUP
A402	4	28'-0"	X		X		1 PER PILE - VERTICAL
A403	8	2'-3"	X				2 PER PILE - VERTICAL
A604	24	11'-3"	X				HORIZONTAL - F.F., TOP, & BOT.
A805	14	12'-7"	X				HORIZONTAL - B.F.
A506	16	2'-0"	X				VERTICAL - DOWELS
A507	12	7'-7"	X		X		STIRRUP - ENDS

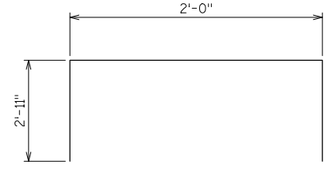
EAST ABUTMENT
BILL OF BARS

TOTAL COATED = 1,440 LBS

BAR MARK	NO. REQ'D.	LENGTH	COAT	STAINLESS STEEL	BENT	BAR SERIES	LOCATION
B501	24	15'-7"	X		X		STIRRUP
B402	4	28'-0"	X		X		1 PER PILE - VERTICAL
B403	8	2'-3"	X				2 PER PILE - VERTICAL
B604	22	11'-3"	X				HORIZONTAL - F.F., TOP, & BOT.
B805	14	12'-7"	X				HORIZONTAL - B.F.
B506	16	2'-0"	X				VERTICAL - DOWELS
B507	10	7'-7"	X		X		STIRRUP - ENDS



A402, B402



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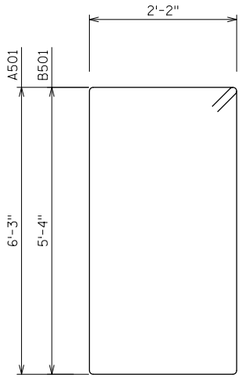
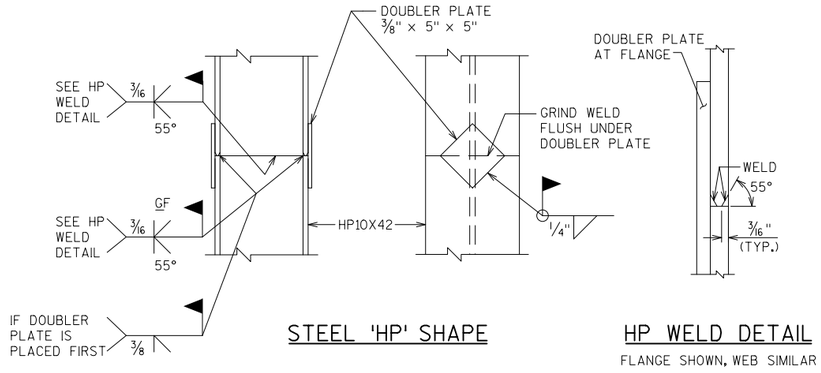


A501, B501



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

HP 10x42 PILE SPLICE DETAILS

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-206

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ABUTMENT DETAILS

SHEET 6 OF 10
80

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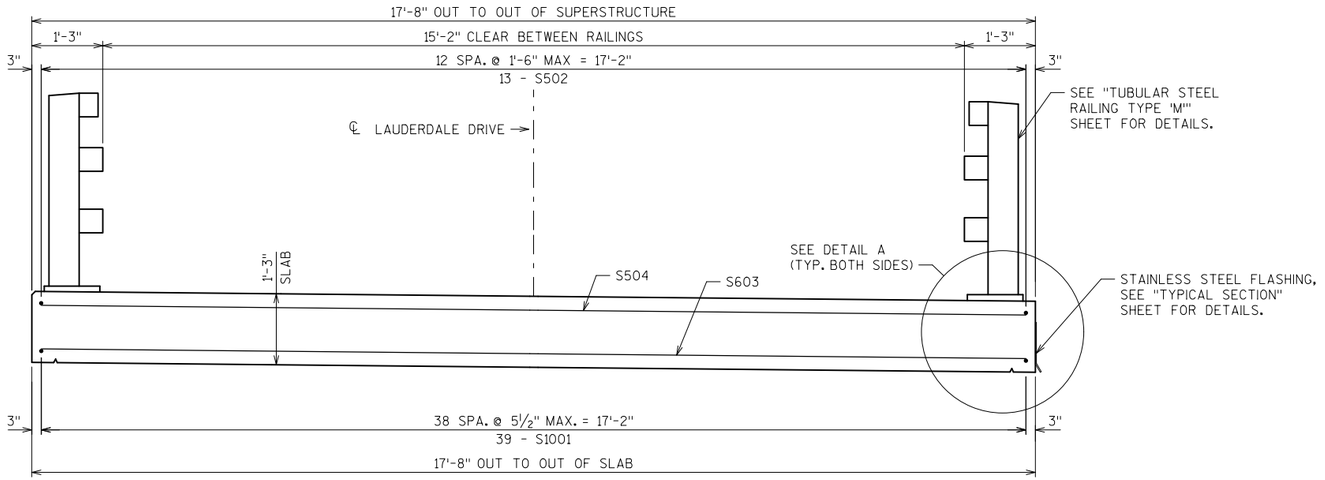
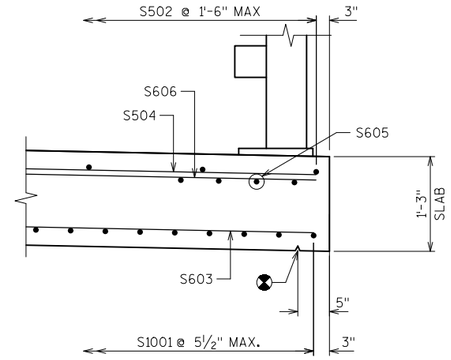
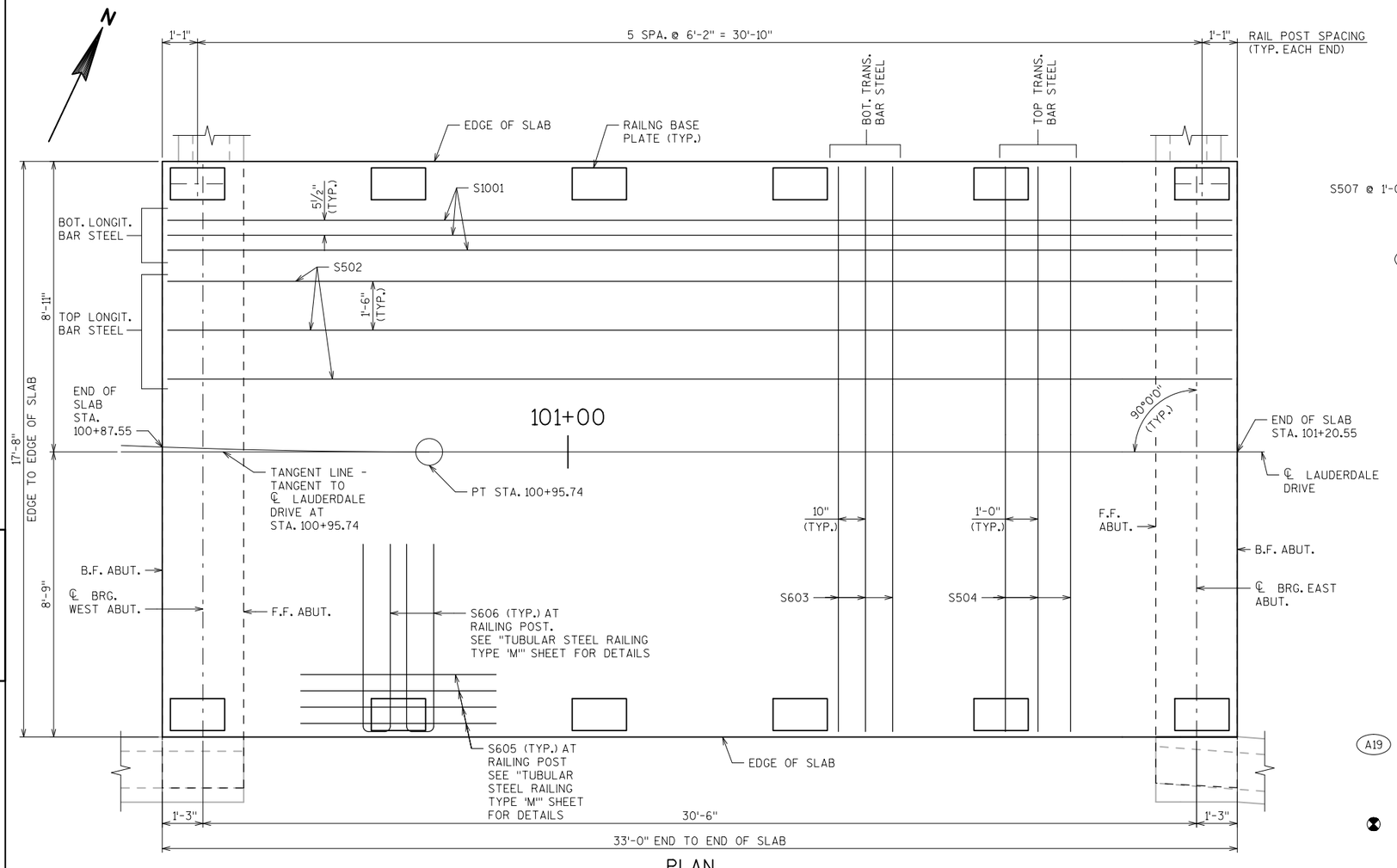


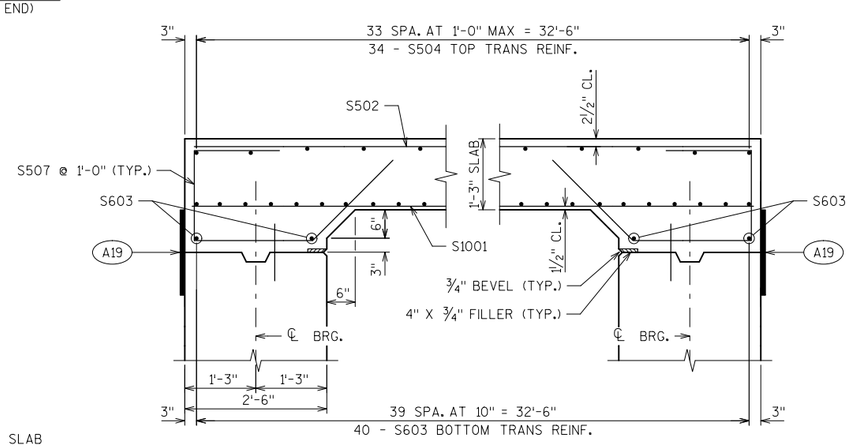
TYPICAL SECTION THRU SLAB



DETAIL A



PLAN



LONGITUDINAL SECTION

NOTES

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

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

LEGEND

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE. SEE R-64-33, R-64-34, R-64-35 AND R-64-36 PLANS FOR RMW AT INTERFACE BETWEEN RETAINING WALLS AND ABUTMENT

⊠ ¾" V-GROOVE. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENT. (TYP) V-GROOVES ARE REQUIRED.

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STRUCTURE B-64-206

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SUPERSTRUCTURE

SHEET 7 OF 10
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STATE PROJECT NUMBER
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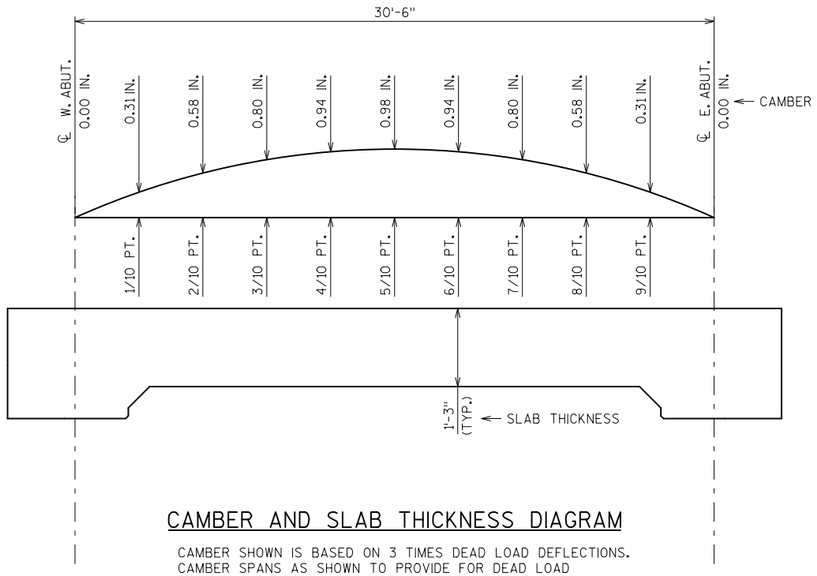


CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

TOP OF SLAB ELEVATIONS

		℄ BRG. W. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. E. ABUT.
NORTH EDGE OF SLAB	STA	100+88.51	100+91.69	100+94.86	100+97.95	101+01.00	101+04.05	101+07.10	101+10.15	101+13.20	101+16.25	101+19.30
	OFFSET	-8.81	-8.88	-8.92	-8.92	-8.92	-8.92	-8.92	-8.92	-8.92	-8.92	-8.92
	T.O.D.	889.67	889.63	889.59	889.55	889.50	889.46	889.42	889.38	889.34	889.29	889.25
℄ LAUDERDALE DRIVE	STA	100+88.80	100+91.85	100+94.90	100+97.95	101+01.00	101+04.05	101+07.10	101+10.15	101+13.20	101+16.25	101+19.30
	T.O.D.	889.58	889.54	889.50	889.46	889.41	889.37	889.33	889.29	889.25	889.20	889.16
SOUTH EDGE OF SLAB	STA	100+89.06	100+91.99	100+94.93	100+97.95	101+01.00	101+04.05	101+07.10	101+10.15	101+13.20	101+16.25	101+19.30
	OFFSET	8.85	8.78	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75
	T.O.D.	889.49	889.45	889.41	889.37	889.33	889.28	889.24	889.20	889.16	889.12	889.07

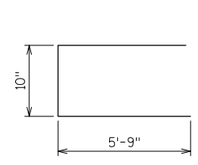
TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN, OR REFERENCE LINE FOLLOW THIS PROCEDURE:

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

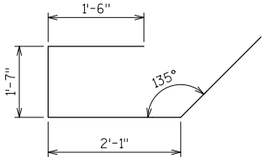
BILL OF BARS

TOTAL COATED = 8,830 LBS

BAR MARK	NO. REQ'D.	LENGTH	COAT	STAINLESS STEEL	BENT	BAR SERIES	LOCATION
S1001	39	32'-8"	X				LONGITUDINAL - BOTTOM
S502	13	32'-8"	X				LONGITUDINAL - TOP
S603	44	17'-4"	X				TRANSVERSE - BOTTOM
S504	34	17'-4"	X				TRANSVERSE - TOP
S605	48	6'-0"	X				LONGITUDINAL - TOP - 4 PER RAIL POST
S606	24	12'-0"	X		X		TRANSVERSE - TOP - 2 PER RAIL POST
S507	38	6'-11"	X		X		AT ABUTMENTS



S606



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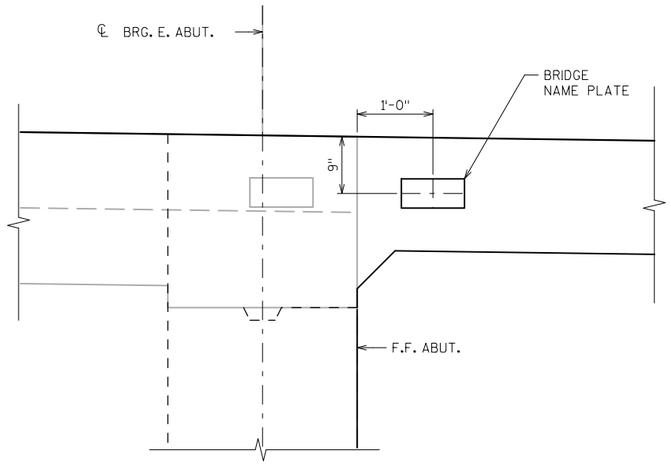

NAME PLATE LOCATION DETAIL

LOOKING SOUTH AT NORTH SLAB EDGE

SURVEY TOP OF SLAB ELEVATIONS

	WEST ABUTMENT	5/10 PT.	EAST ABUTMENT
NORTH EDGE OF SLAB			
℄ LAUDERDALE DRIVE			
SOUTH EDGE OF SLAB			

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE ℄ OF ABUTMENTS, AND AT ½ PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG ℄ LAUDERDALE DRIVE AND EDGES OF SLAB. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-64-206

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SUPERSTRUCTURE DETAILS

SHEET 8 OF 10
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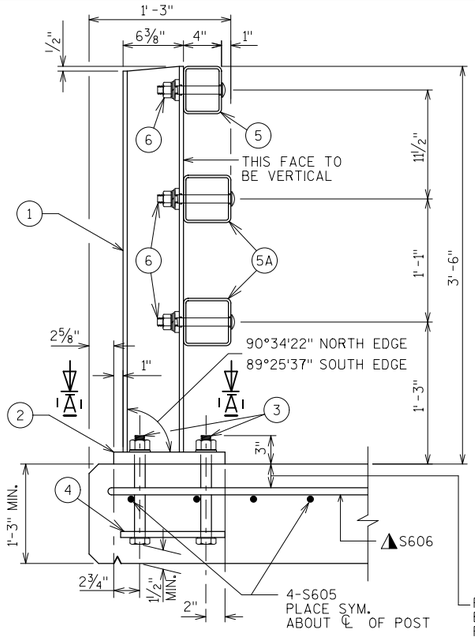
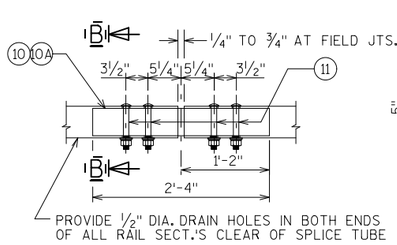
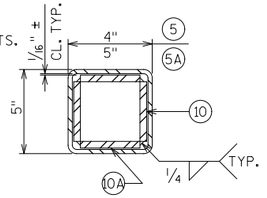


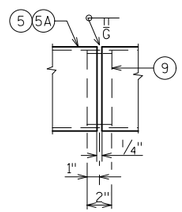
SECTION THRU RAILING ON SLAB



FIELD ERECTION JOINT DETAIL

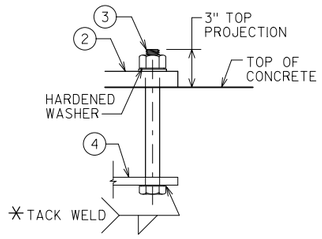


SECTION B-B

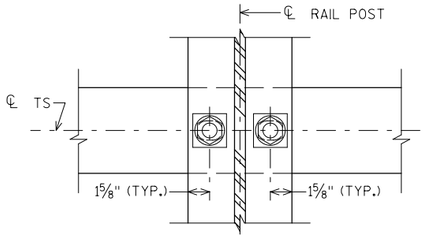


SHOP RAIL SPLICE DETAIL

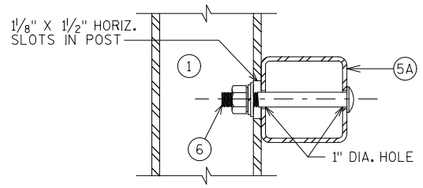
LOCATION MUST BE SHOWN ON SHOP DRAWINGS



ANCHOR BOLTS



SECTION THRU POST WEB



SECTION THRU RAIL

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

TYPICAL RAIL TO POST CONNECTIONS

LEGEND

(1) W6 x 25 WITH 1⅛" X 1½" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.

(2) PLATE 1¼" × 11¾" × 1'-8" WITH 1 7⁄16" DIA. OVERSIZED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN.

(3) ASTM A449 - 1⅛" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED). 5 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 10¾" LONG (AN EQUIVALENT THREADED ROD WITH NUTS AND HARDENED WASHERS MAY BE SUBSTITUTED FOR ANCHOR BOLTS IN WINGS IF REQ'D. FOR CONSTRUCTABILITY.)

(4) ⅝" × 11" × 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1 3⁄16" DIA. HOLES FOR ANCHOR BOLTS NO. 3

(5) TS 5 × 4 × 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.

(5A) TS 5 × 5 × 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.

(6) ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, ⅜" X 1⅝" X 1⅝" MIN. WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION.)

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

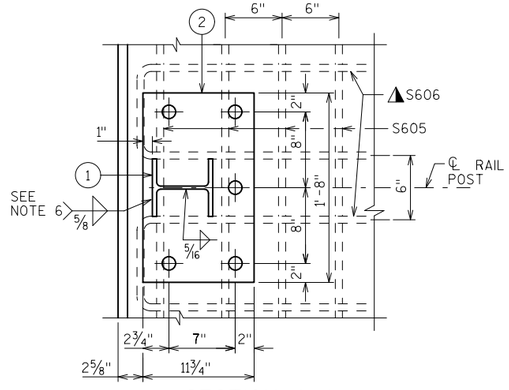
(10) ⅜" X 3⅝" X 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.

(10A) ⅜" X 2⅝" X 2'-4" PLATE USED IN NO. 5, ⅜" X 3⅝" X 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.

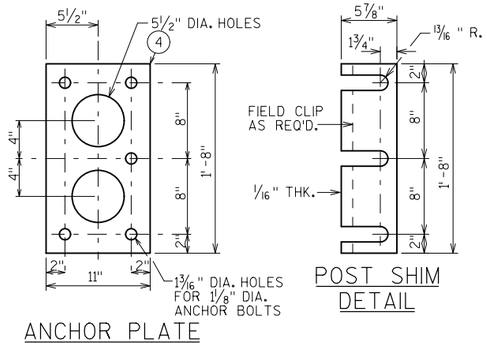
(11) ⅞" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 15⁄16 " X 1¼" LONGIT. SLOTTED HOLES AT FIELD JOINTS AND 15⁄16 " X 2¼" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 10A.

▲ TIE TO TOP MAT OF STEEL.

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



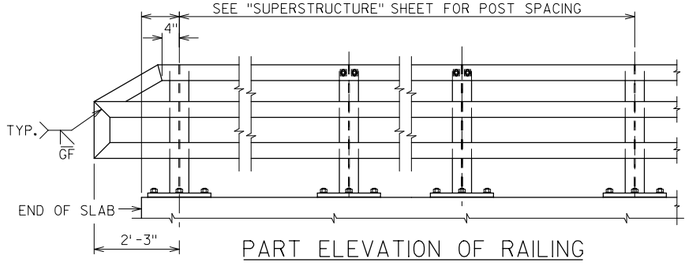
SECTION A-A



ANCHOR PLATE

AT RAIL TO SLAB CONNECTION

POST SHIM DETAIL



PART ELEVATION OF RAILING

GENERAL NOTES

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

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-206

DRAWN BY	PLANS CK'D.
RBH	DRH

TUBULAR STEEL RAILING TYPE 'M'

SHEET 9 OF 10

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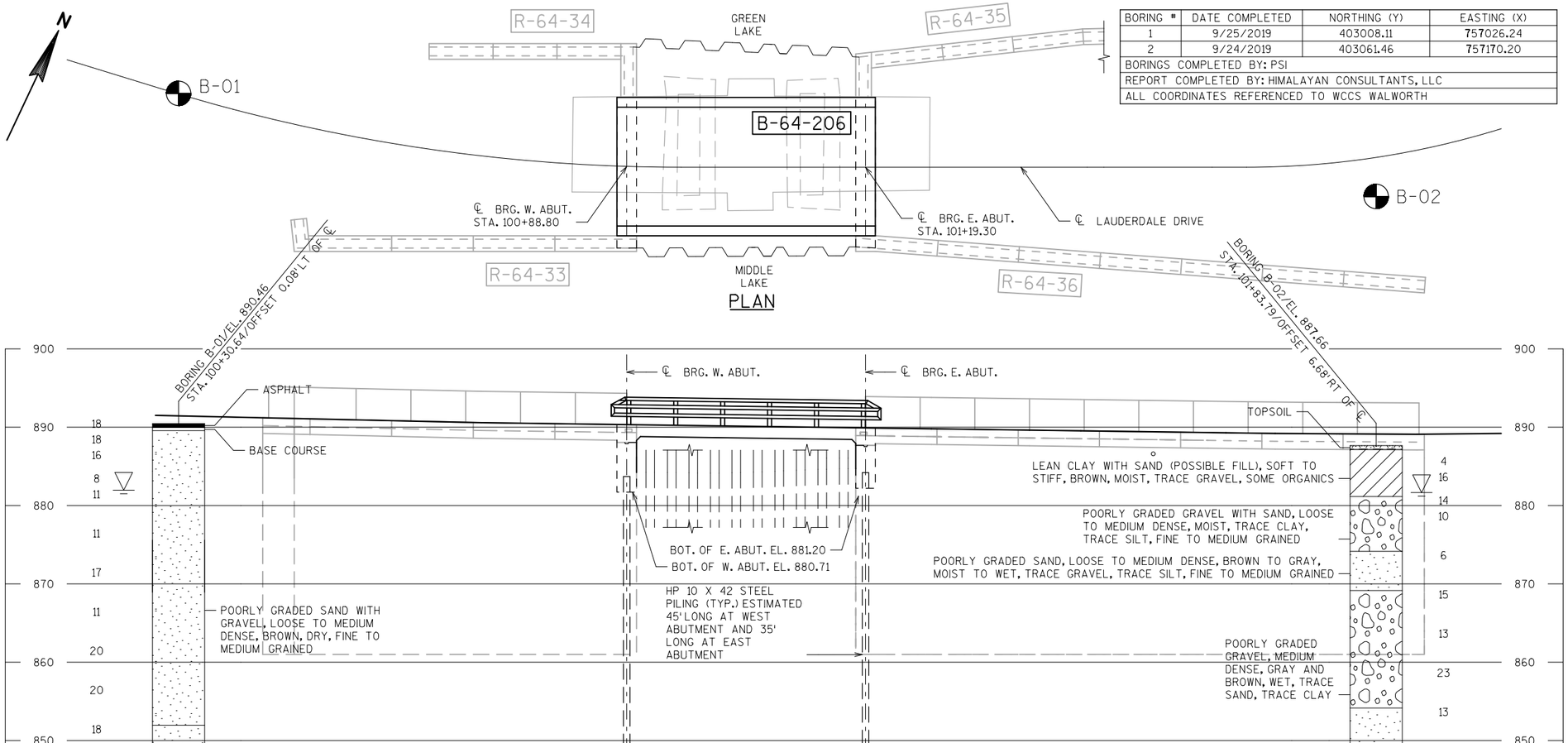
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	9/25/2019	403008.11	757026.24
2	9/24/2019	403061.46	757170.20
BORINGS COMPLETED BY: PSI			
REPORT COMPLETED BY: HIMALAYAN CONSULTANTS, LLC			
ALL COORDINATES REFERENCED TO WCCS WALWORTH			



PLAN

ELEVATION

LOOKING NORTH

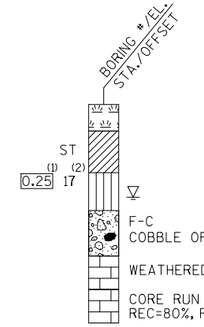
STATE PROJECT NUMBER

3839-00-70

MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

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

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-206

DRAWN BY TJN | PLANS CK'D. JRS

SUBSURFACE EXPLORATION

SHEET 10 OF 10

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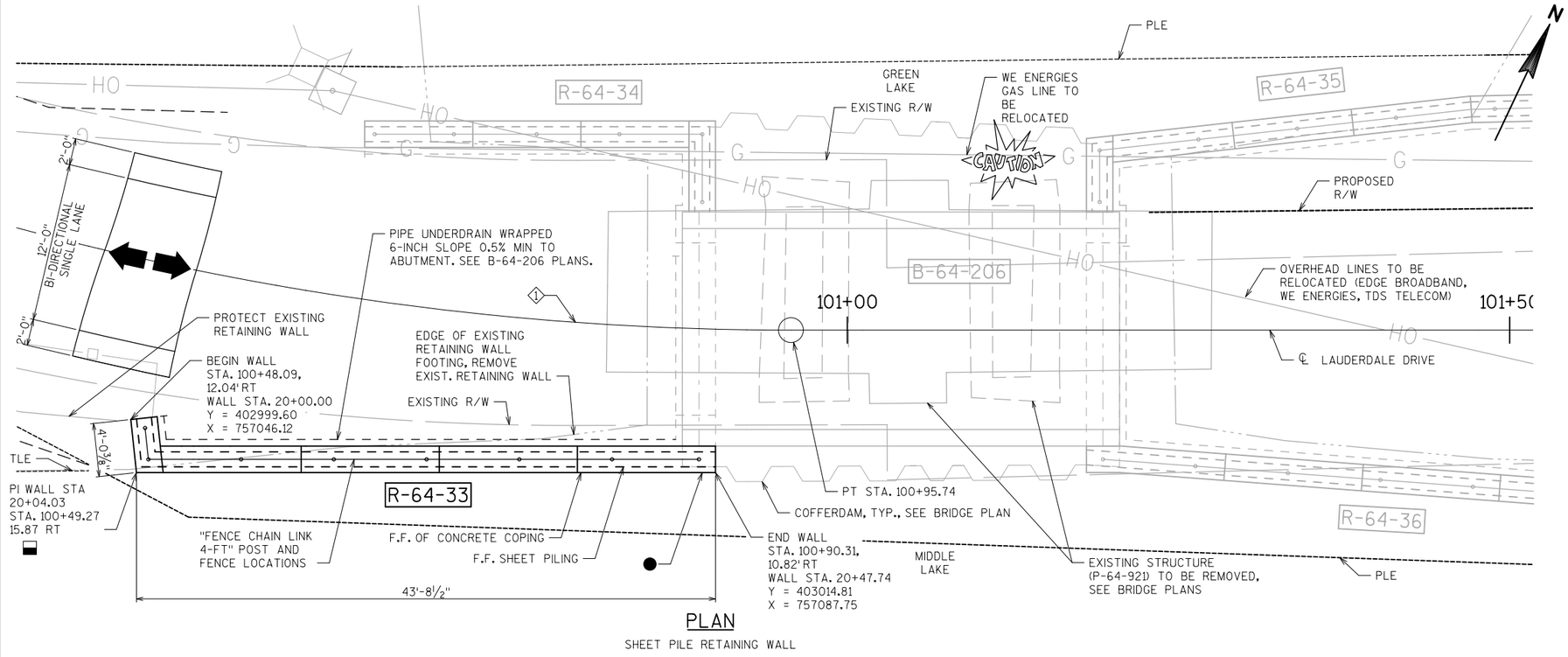
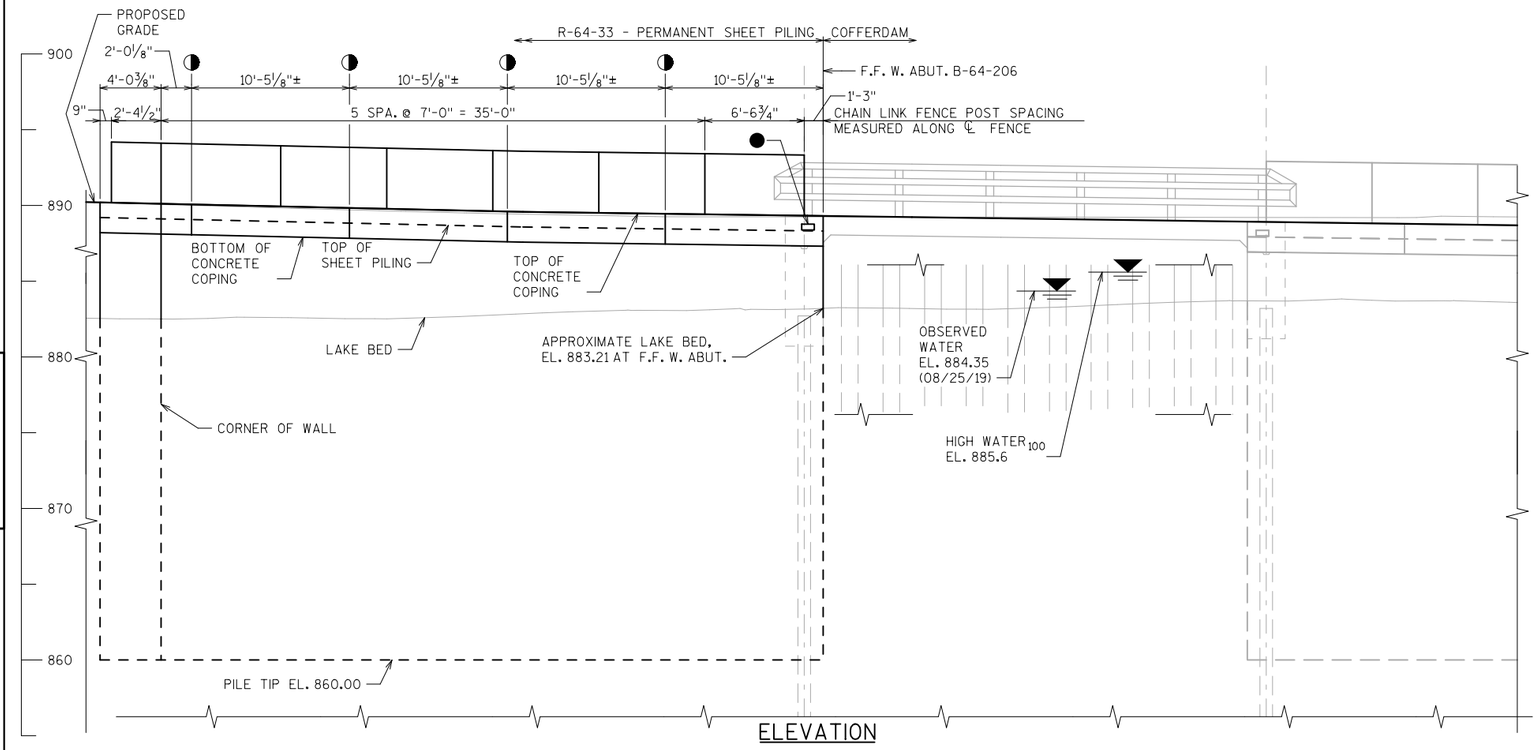


PLAN

SHEET PILE RETAINING WALL



ELEVATION

LOOKING NORTH

DESIGN DATA

LIVE LOAD:
LIVE LOAD SURCHARGE 240 PSF

MATERIAL PROPERTIES:
CONCRETE MASONRY RETAINING WALLS:
COPING.....f'c = 3,500 P.S.I.
SHEET PILE RETAINING WALLS:
PERMANENT STEEL SHEET PILING (ASTM A328).....fy = 39,000 P.S.I.

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

THE MIN. SECTION MODULUS FOR THE STEEL PILING SHALL BE 22.3 IN^3/FT.

HYDRAULIC DATA

FLOW NOT APPLICABLE. THIS IS A EQUALIZED STRUCTURE.

100 YEAR FREQUENCY
$HW._{100}$= EL. 885.6 (FIS)
DRAINAGE AREA = N/A
ROADWAY OVERTOPPING = N/A
$HW._{100}$ IS BASED ON WALWORTH COUNTY FLOOD INSURANCE STUDY DATED SEPTEMBER 3, 2014

2 YEAR FREQUENCY
$HW._2$= EL. 885.0

CURVE DATA

◇1 P.I. = 100+62.43
Y = 403012.533
X = 757057.727
Δ = 17°05'44"
D = 25°27'53"
T = 33.82'
L = 67.13'
R = 225.00'
P.C. STA. = 100+28.61
P.T. STA. 100+95.74

TRAFFIC DATA

LAUDERDALE DRIVE
A.A.D.T. = 140 (2022)
A.A.D.T. = 140 (2042)
R.D.S. = 25 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. GENERAL NOTES & QUANTITIES
3. WALL DETAILS
4. COPING REINFORCEMENT
5. CHAIN LINK FENCE DETAILS
6. SUBSURFACE EXPLORATION

NOTES

1. WALL LENGTH IS MEASURED ALONG THE F.F. OF CONCRETE COPING.
2. TEMPORARY PEDESTRIAN BRIDGE AND CONSTRUCTION CAUSEWAYS NOT SHOWN, SEE ROADWAY PLANS.

LEGEND

- FOR TIE-IN DETAILS WITH EXISTING RETAINING WALL, SEE "WALL DETAILS" SHEET
- NAME PLATE LOCATION, SEE "WALL DETAILS" SHEET
- VERTICAL CONTRACTION JOINT, SEE "WALL DETAILS" SHEET. LOCATIONS ARE APPROXIMATE AND ARE TO BE DETERMINED BY THE CONTRACTOR.
- ◇ CURVE NUMBER

WISCONSIN
JASON R. SADOWSKI
E-38660
BROOKFIELD, WI
PROFESSIONAL ENGINEER

4/27/2022

STRUCTURE DESIGN CONTACTS
BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
JASON SADOWSKI (414) 751-9982

NO.	DATE	REVISION	BY

Michael Baker INTERNATIONAL
MICHAEL BAKER INTERNATIONAL
250 E. WISCONSIN STREET
SUITE 1725
MILWAUKEE, WI 53202

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 04/27/22
CHIEF STRUCTURES DESIGN ENGINEER DATE

STATE PROJECT NUMBER
3839-00-70

STRUCTURE R-64-33

RETAINING WALL AT SW CORNER OF LAUDERDALE DRIVE OVER GREEN LAKE

COUNTY	TOWN ~~CITY/VILLAGE~~
WALWORTH	LA GRANGE

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	CK'D.	DESIGN	DRAWN BY	CK'D.	PLANS
GZ	MJM		TJN/DRH	JRS	

GENERAL PLAN

SHEET 1 OF 6
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STATE PROJECT NUMBER

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TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL
206.3000.01	EXCAVATION FOR STRUCTURES RETAINING WALLS R-64-33	LS	1
209.0300.S.01	BACKFILL COARSE AGGREGATE SIZE NO. 1	CY	8
210.1500	BACKFILL STRUCTURE TYPE A	TON	56
502.3200	PROTECTIVE SURFACE TREATMENT	SY	42
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	7
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	690
506.3008	WELDED STUD SHEAR CONNECTORS 5/8X5-INCH	EACH	9
512.0500	PILING STEEL SHEET PERMANENT DELIVERED	SF	1,344
512.0600	PILING STEEL SHEET PERMANENT DRIVEN	SF	1,344
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	3
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	48
616.0204	FENCE CHAIN LINK 4-FT	LF	48
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	31
645.0130	GEOTEXTILE TYPE R	SY	2
SPV.0060.01	PROTECT EXISTING RETAINING WALL	EACH	1
	NON-BID ITEMS		
	FILLER	SIZE	½ "
	NAME PLATE	EACH	1

GEOMETRY TABLE

WALL STATION	℄ LAUDERDALE DRIVE STATION	OFFSET TO F.F. WALL	TOP OF CONCRETE CAP ELEV.	TOP OF STEEL SHEET PILING ELEV.*	APPROXIMATE EXISTING LAKE BED ELEV.	BOTTOM OF SHEET PILE ELEV.
20+00.00	100+48.09	12.04' RT.	889.29	888.29	882.51	860.00
20+04.03	100+49.27	15.87' RT.	888.73	887.73	882.51	860.00
20+10.00	100+54.75	14.72' RT.	888.92	887.92	882.62	860.00
20+20.00	100+64.05	13.11' RT.	889.16	888.16	882.55	860.00
20+30.00	100+73.45	11.91' RT.	889.28	888.28	882.94	860.00
20+40.00	100+82.94	11.13' RT.	889.31	888.31	883.11	860.00
20+47.74	100+90.31	10.82' RT.	889.49	888.49	883.21	860.00

* TOP OF SHEET PILING ELEV. BASED ON 1' EMBEDMENT INTO CONCRETE CAP

SHEET PILE SOIL PARAMETERS

LAYER DEPTH/LOCATION	SOIL LAYER DESCRIPTION	TOTAL UNIT WEIGHT (PCF)	FRICTION ANGLE (DEGREES)
0.0 TO 5.0 FEET	MEDIUM DENSE GRANULAR	120	32
5.0 TO 8.5 FEET	LOOSE GRANULAR	105	28
8.5 TO 58.5 FEET	MEDIUM DENSE GRANULAR	120	32
58.5 TO 80.0 FEET	DENSE GRANULAR	125	36

SHEET PILE WALL GLOBAL STABILITY EVALUATION

LOCATION	FACTOR OF SAFETY (FOS)		CAPACITY DEMAND RATIO (CDR) [1,2] = Φ * FOS
	BISHOP (CIRCULAR SLIP SURFACE)		
	DRAINED	UNDRAINED	
R-64-33	2.49	2.49	1.87

1. FOS VALUES BASED ON LIMITING EQUILIBRIUM METHODS OF ANALYSIS.
2. Φ = RESISTANCE FACTOR = 0.75 PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 11.6.2.3.
3. BASED ON 12' EMBEDMENT BELOW GROUND AT F.F.

BENCH MARKS

NO.	NORTHING (Y)	EASTING (X)	DESCRIPTION	ELEV.
1984	402986.6170	756942.3110	⅜" SPIKE IN 5" WOOD POST	898.36
2040	403059.9560	757198.4590	CORNER OF CONCRETE WALL, 1' EAST OF DOCK, ADDRESS W5308	887.21

NOTE: FOR BENCHMARK LOCATIONS IN PLAN VIEW, SEE ROADWAY PLANS

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

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

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR THE STRUCTURE.

PROTECT THE EXISTING RETAINING WALLS ADJACENT TO NEW CONSTRUCTION AND REMOVAL WORK IN ACCORDANCE WITH BID ITEM "PROTECT EXISTING RETAINING WALL".

PAINTING OF SHEET PILING AS STATED IN STANDARD SPECIFICATION 5.12.3.3 IS NOT REQUIRED.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS.

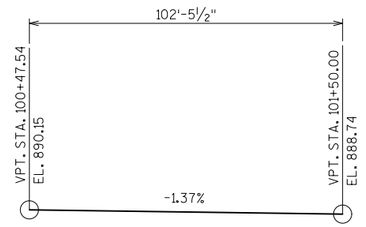
CONSTRUCTION ACCESS WILL BE PROVIDED VIA A CAUSEWAY SOUTH OF THE BRIDGE. FOR DETAILS AND PAY ITEMS, SEE ROADWAY PLANS.

REMOVAL OF THE EXISTING BRIDGE (P-64-921) AND THE ASSOCIATED RETAINING WALLS IS INCLUDED AS PAY ITEM AS PART OF THE B-64-206 QUANTITIES.

COORDINATE RETAINING WALL CONSTRUCTION WITH REMOVAL OF THE EXISTING BRIDGE (P-64-921) AND CONSTRUCTION OF THE NEW BRIDGE (B-64-206).

THE PLAN QUANTITY FOR THE BID ITEM "PILING STEEL SHEET PERMANENT DELIVERED" AND "PILING STEEL SHEET PERMANENT DRIVEN" IS BASED ON THE AREA OF WALL FROM THE TOP OF SHEET PILING WITH AN ASSUMED 1' EMBEDMENT INTO THE CONCRETE CAP TO THE BOTTOM OF SHEET PILE.

ALL HOLES CUT INTO WALL FOR CONCRETE COPING REINFORCEMENT TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL PERMANENT DRIVEN".



PROFILE GRADE LINE - LAUDERDALE DRIVE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-33

DRAWN BY TJN | PLANS CK'D. JRS

GENERAL NOTES & QUANTITIES

SHEET 2 OF 6
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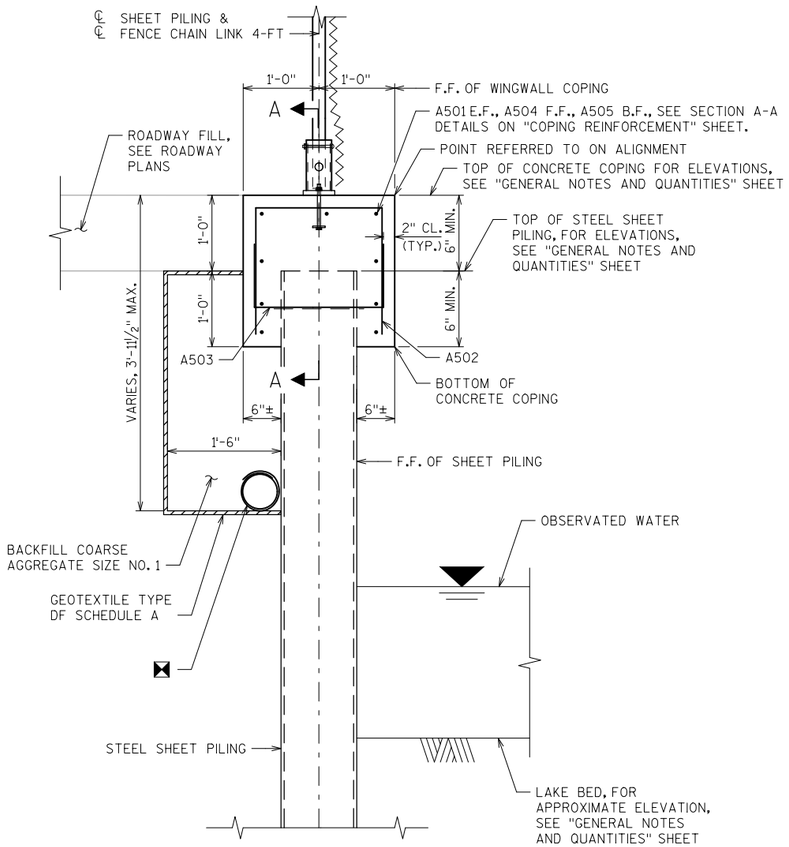
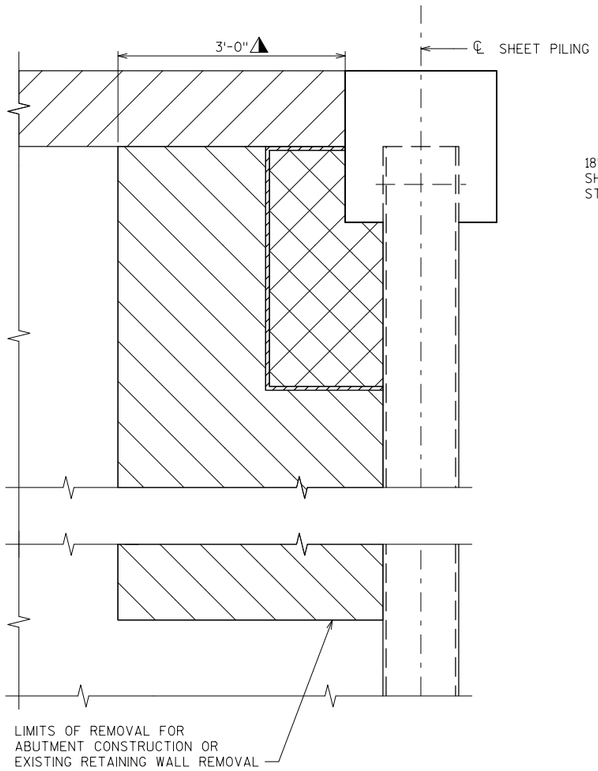
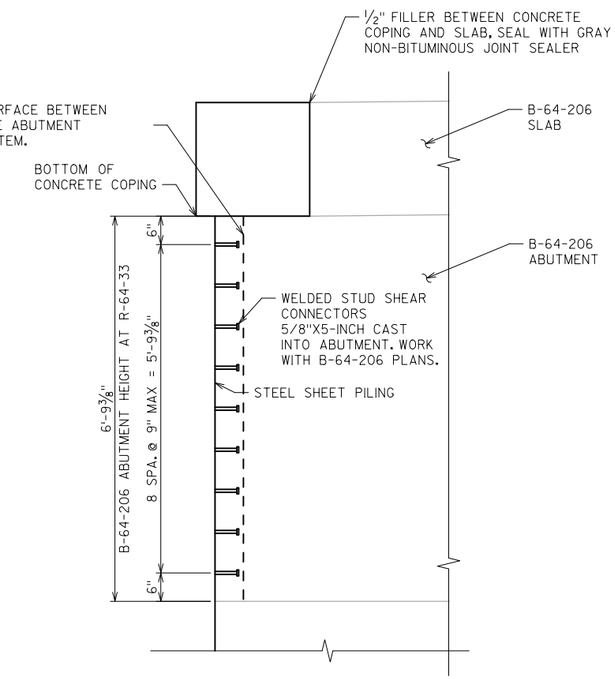


SECTION THRU WALL



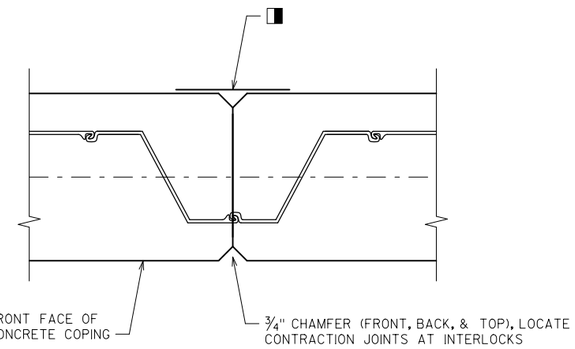
WALL BACKFILL DETAIL

18" RMW AT B.F. OF INTERFACE BETWEEN SHEET PILING AND BRIDGE ABUTMENT STEM, FULL HEIGHT OF STEM.



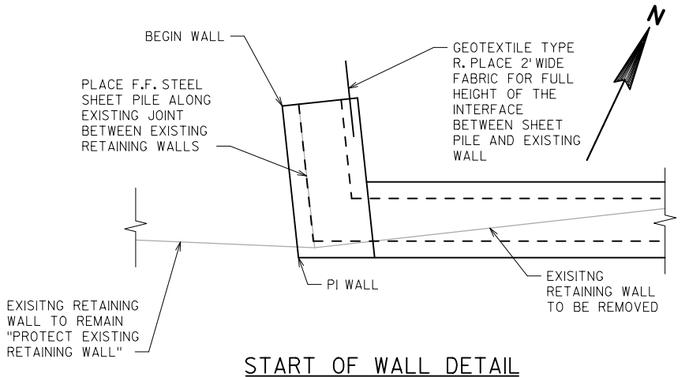
DETAIL AT BRIDGE ABUTMENT

ABUT. REINF. NOT SHOWN FOR CLARITY

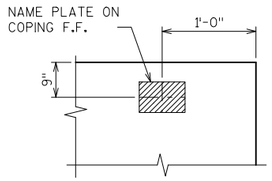


COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT
MAX. SPACING OF JOINT = 12'



START OF WALL DETAIL



NAME PLATE LOCATION

LOOKING NORTH AT END OF WALL

LEGEND

- BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TOWARD ABUTMENT. SEE B-64-206 PLANS FOR LOCATIONS.
- 18" RUBBERIZED MEMBRANE WATERPROOFING TO BE APPLIED TO CONCRETE COPING ALONG BACK FACE. EXTEND FROM TOP OF CONCRETE COPING TO BOTTOM OF CONCRETE COPING ALONG BACK FACE.
- ROADWAY FILL, SEE ROADWAY PLANS
- BACKFILL STRUCTURE TYPE A
- BACKFILL COARSE AGGREGATE SIZE NO. 1

NOTE

1. PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO ALL FACES OF THE CONCRETE COPING, INCLUDING THE TOP, SIDES, AND UNDERSIDES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-33

DRAWN BY TJN | PLANS CK'D. JRS

WALL DETAILS

SHEET 3 OF 6

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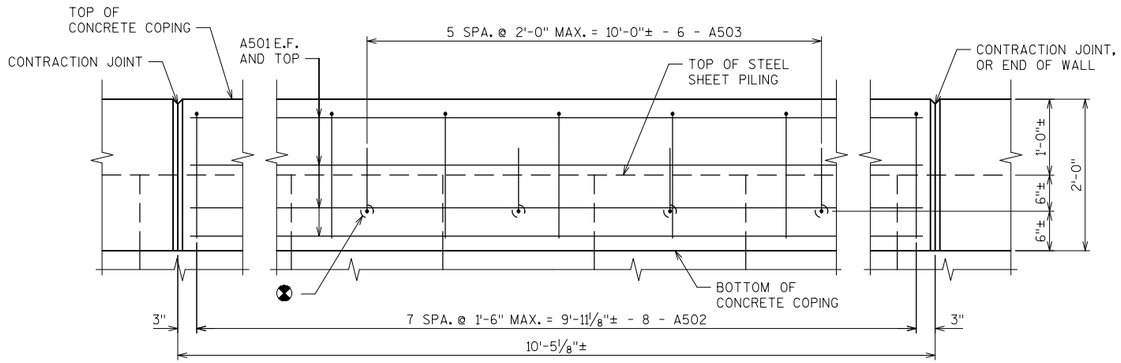
3839-00-70

BILL OF BARS

TOTAL COATED = 690 LBS

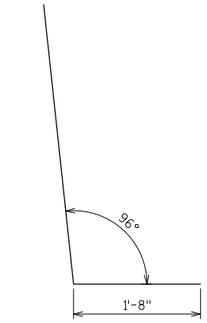
BAR MARK	NO. REQ'D.	LENGTH	COAT	STAINLESS STEEL	BENT	BAR SERIES	LOCATION
A501	36	10'-1"	X				HORIZONTAL
A502	37	4'-9"	X		X		CAP TIES
A503	27	3'-1"	X		X		CAP TIES THROUGH PILING
A504	4	5'-3"	X		X		HORIZONTAL - AT START OF WALL - F.F.
A505	5	2'-6"	X		X		HORIZONTAL - AT START OF WALL - B.F.

BAR QUANTITIES AND LENGTHS ARE BASED ON THE CONTRACTION JOINT LAYOUT PROVIDED ON THE GENERAL PLAN SHEET. IF THE CONTRACTOR MODIFIES THE CONTRACTION JOINT LAYOUT, THE BAR TABLE SHALL BE MODIFIED BY THE CONTRACTOR AS REQUIRED. PAYMENT SHALL BE BASED ON THE WEIGHTS CALCULATED FROM THE ABOVE TABLES.

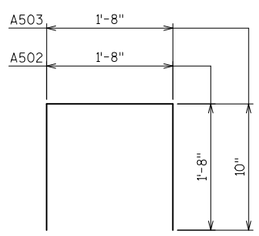


SECTION A-A

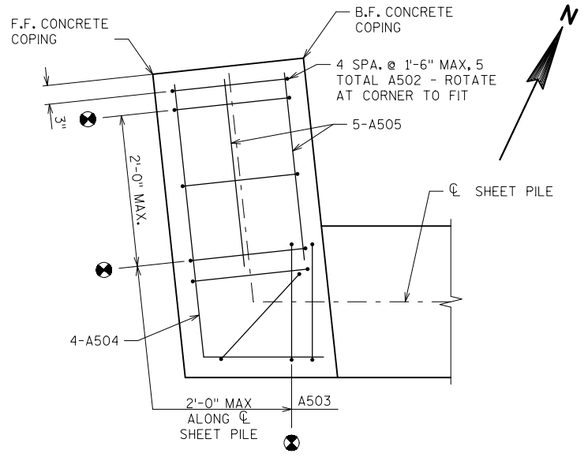
TYPICAL BETWEEN JOINTS, FENCE NOT SHOWN
BASED ON ASSUMED JOINT LOCATIONS.
CONTRACTOR SHALL DETERMINE FINAL JOINT LOCATIONS.



A504



A502, A503



BEGIN WALL PLAN

LEGEND

⊠ ℄ OF 2"± DIA. FIELD CUT HOLE FOR A503 BARS. ONE HOLE PER PILE SECTION AT 2'-0" MAX. SPACING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-33

DRAWN BY DRH | PLANS CK'D. JRS

COPING REINFORCEMENT

SHEET 4 OF 6

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STATE PROJECT NUMBER

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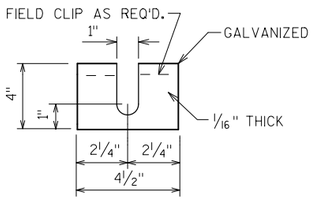
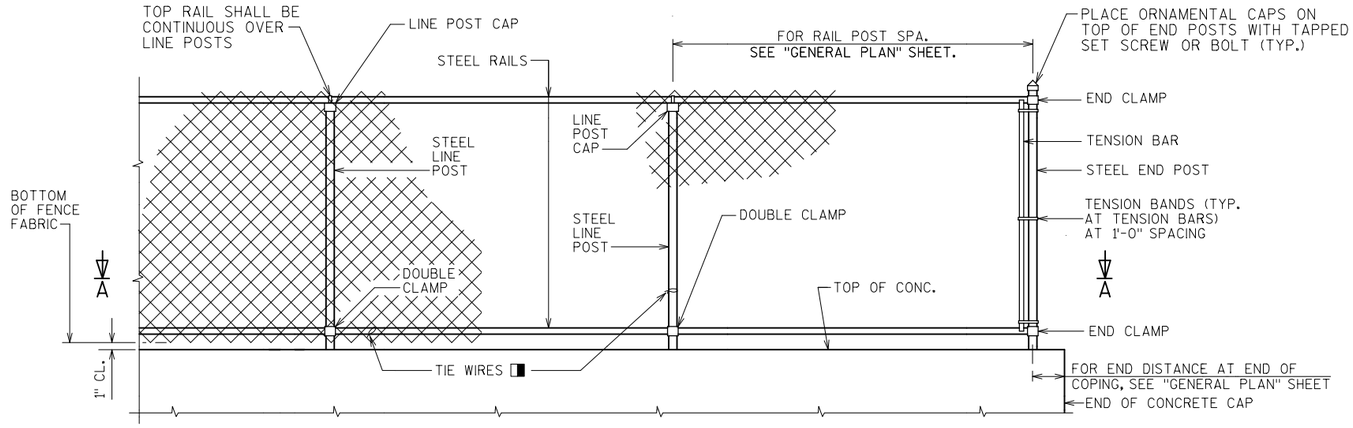
FENCE MEMBER SIZE & WEIGHT

STEEL FENCE MEMBER	OUTSIDE DIAMETER (INCHES)	WEIGHT (LB/FT)
RAILS	1.660	2.27
END POST	2.875	5.80
OVERHANG POST	2.875	5.80
LINE POST	2.375	3.65
POST SLEEVE	4.000	9.12



POST SHIM DETAILS

SHIMS REQUIRED ONLY WHEN END POSTS AND LINE POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST. USE WHERE REQUIRED FOR ALIGNMENT.



FENCE PART ELEVATION

VIEWING FABRIC SIDE

NOTES

POSTS ARE TO BE SET VERTICAL.

ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED STEEL OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 4-FT."

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

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

BASE PLATES, ANCHOR PLATES AND SHIMS SHALL BE ASTM A709, GRADE 36.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

◪ CAULK AROUND PERIMETER OF BASE PLATE AND FILL PORTION OF SLOTTED HOLE AROUND ANCHOR BOLT IN SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

✳ ALTERNATE TO DOUBLE CLAMP: USE LINE RAIL CLAMP (BOULEVARD) OR 180° BRACE BAND, WHICH MAY BE USED WHEN THE POSTS ARE EITHER BOLTED TO THE POST SLEEVES OR DIRECTLY WELDED TO THE BASE PLATE.

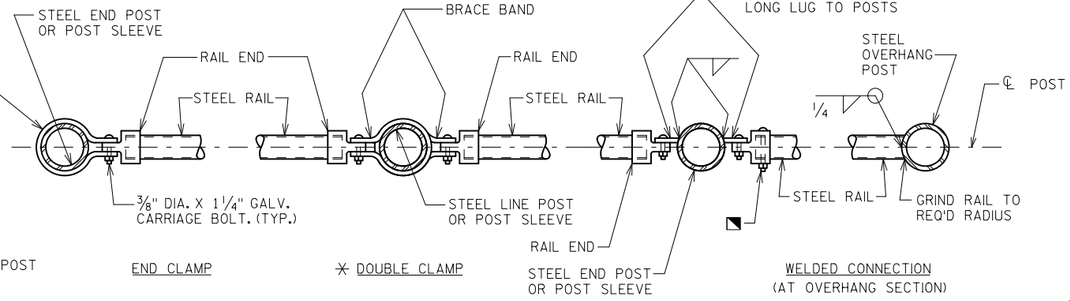
◭ 1/2" DIA. X 6 7/8" LONG GALVANIZED HEX BOLT WITH NUT & WASHER.☆

☆ ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS 1/2-INCH. EMBED 7" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

◨ ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

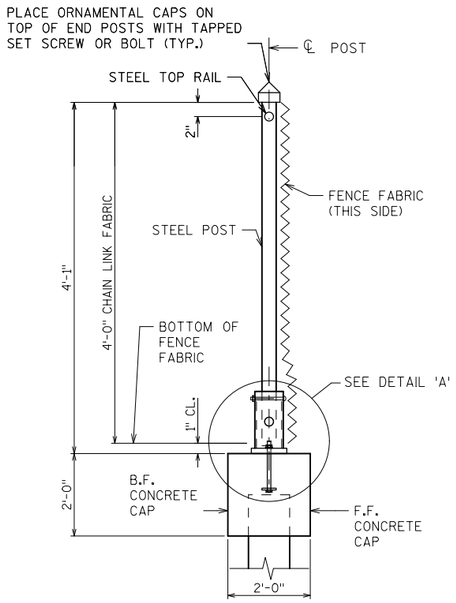
◥ BOLT RAIL TO RAIL END TO SECURE OVERHANG SECTION. ALTERNATE IS TO WELD RAIL DIRECTLY TO END POST.

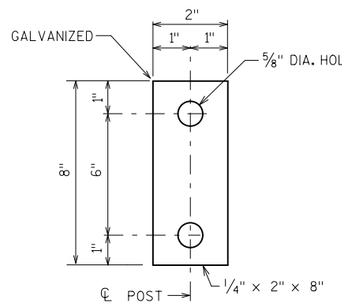
MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". LOCATE SPLICES NEAR 1/4 POINT OF POST SPACING.



SECTION A-A

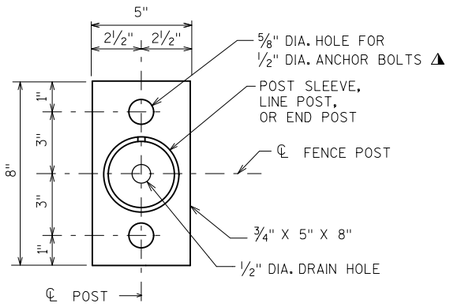
NOTE: PLACE ALL BOLT HEADS ON SIDE OF FENCE ADJACENT TO PEDESTRIANS



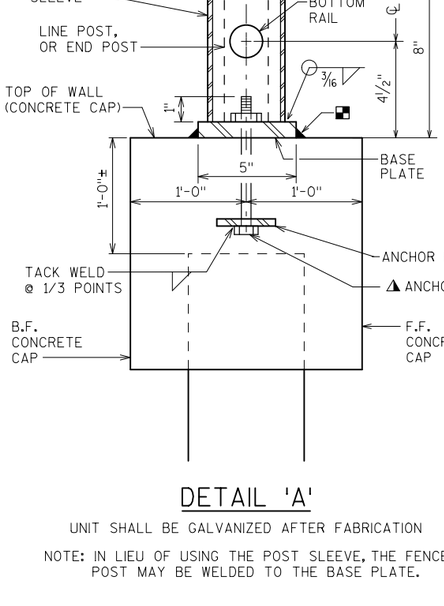


ANCHOR PLATE

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



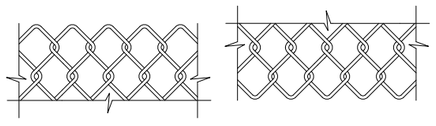
BASE PLATE



DETAIL 'A'

UNIT SHALL BE GALVANIZED AFTER FABRICATION

NOTE: IN LIEU OF USING THE POST SLEEVE, THE FENCE POST MAY BE WELDED TO THE BASE PLATE.



TOP DETAIL

BOTTOM DETAIL

FENCE FABRIC

FENCE FABRIC WOVEN OF 9-GAGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-33

DRAWN BY DRH | PLANS CK'D. JRS

CHAIN LINK FENCE DETAILS

SHEET 5 OF 6

89

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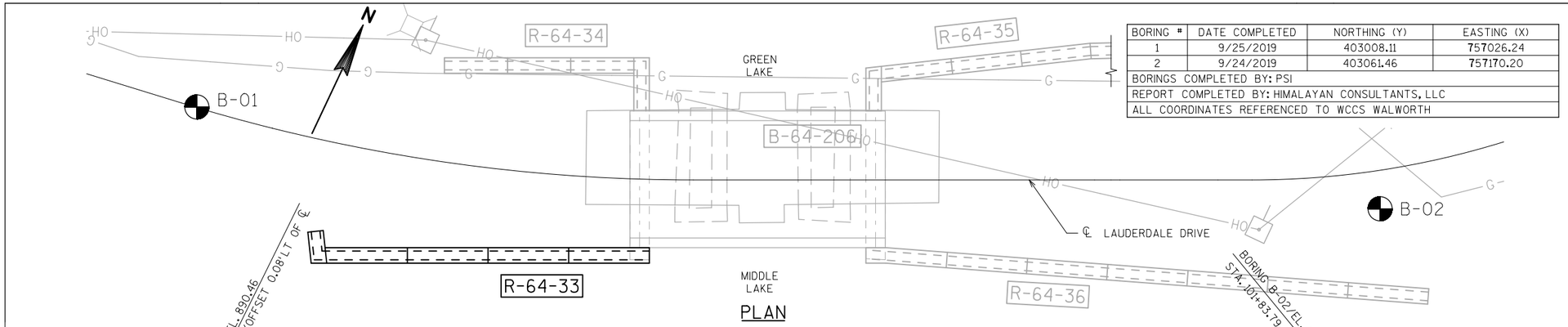
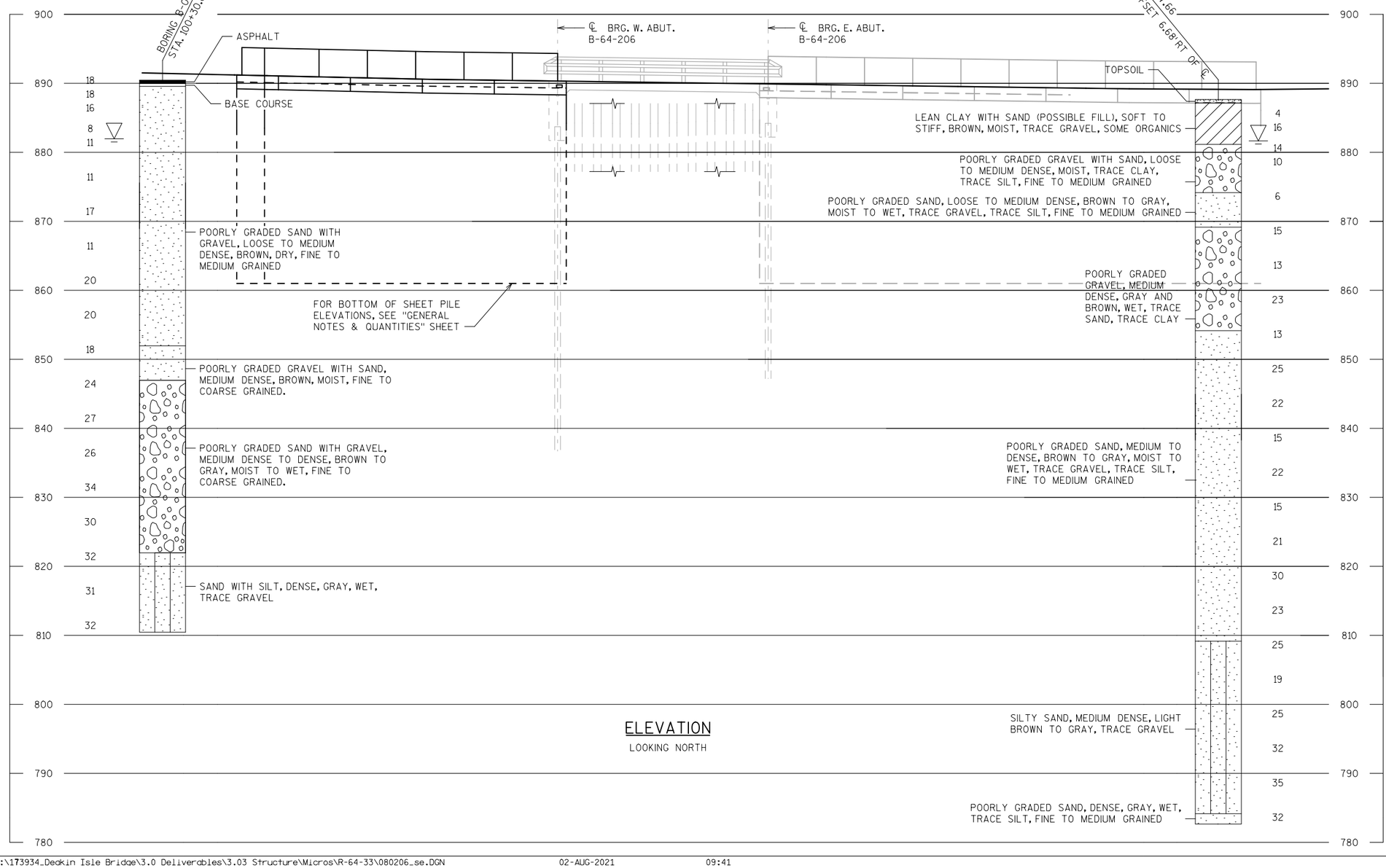


PLAN

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	9/25/2019	403008.11	757026.24
2	9/24/2019	403061.46	757170.20
BORINGS COMPLETED BY: PSI			
REPORT COMPLETED BY: HIMALAYAN CONSULTANTS, LLC			
ALL COORDINATES REFERENCED TO WCCS WALWORTH			



ELEVATION

LOOKING NORTH

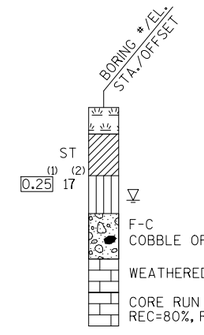
STATE PROJECT NUMBER

3839-00-70

MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

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

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-33

DRAWN BY TJN | PLANS CK'D. JRS

SUBSURFACE EXPLORATION

SHEET 6 OF 6

90

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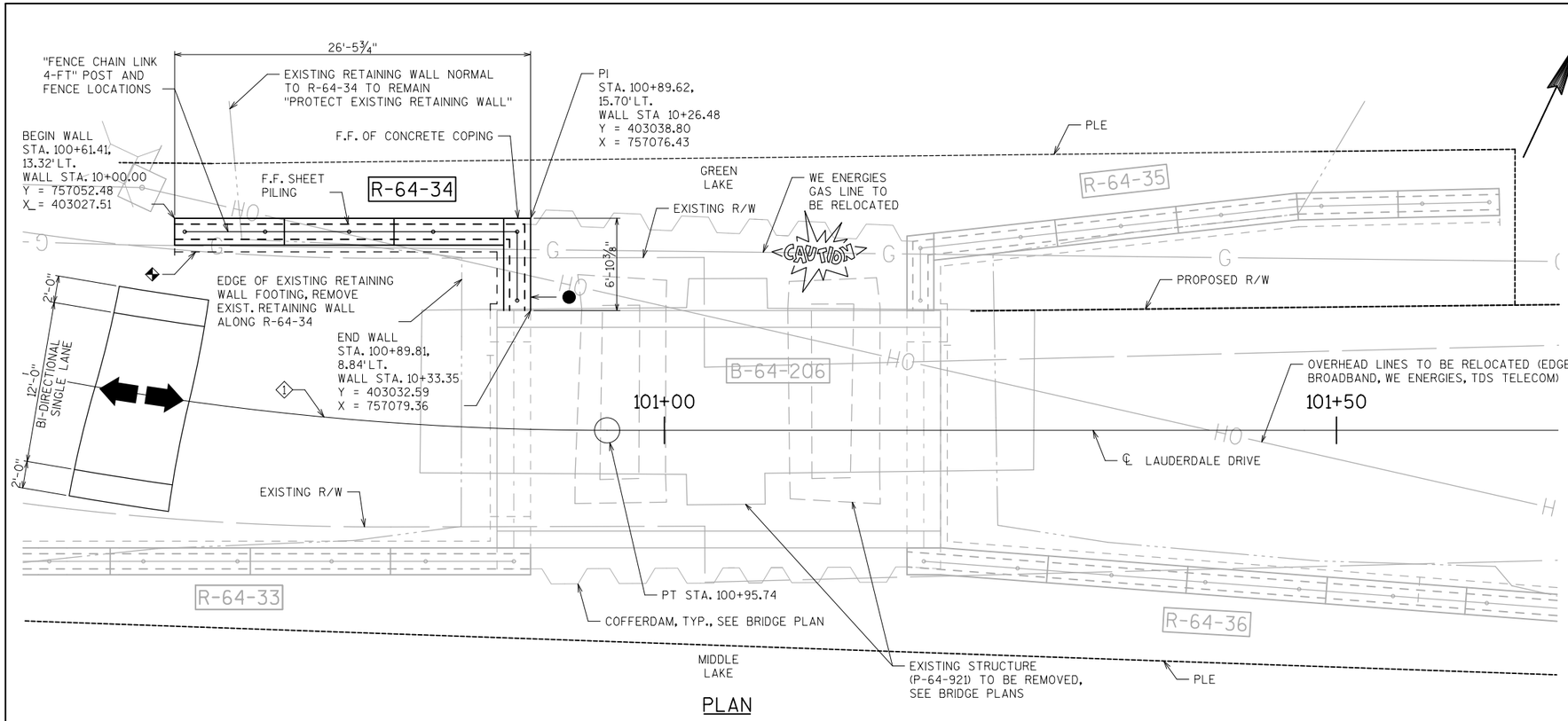
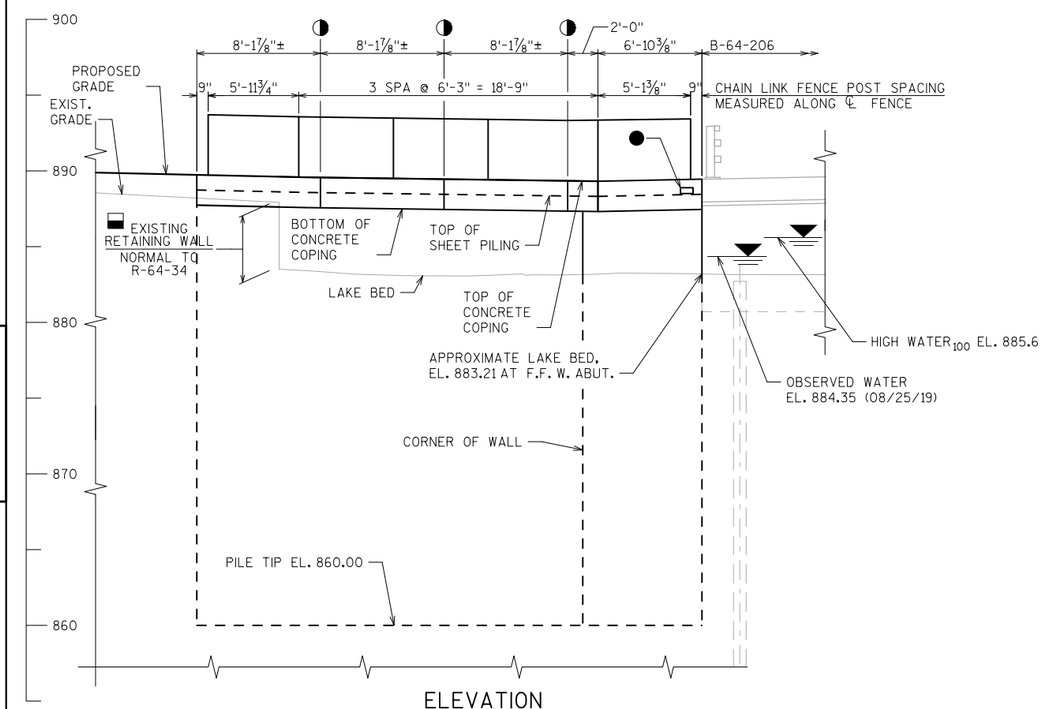


PLAN

SHEET PILE RETAINING WALL



ELEVATION

LOOKING AT B.F. WALL, UNFOLDED ELEVATION

STATE PROJECT NUMBER
3839-00-70

DESIGN DATA

LIVE LOAD:
LIVE LOAD SURCHARGE 240 PSF

MATERIAL PROPERTIES:
CONCRETE MASONRY RETAINING WALLS:
COPING.....f'c = 3,500 P.S.I.
SHEET PILE RETAINING WALLS:
PERMANENT STEEL SHEET PILING (ASTM A328).....fy = 39,000 P.S.I.

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

THE MIN. SECTION MODULUS FOR THE STEEL PILING SHALL BE 22.3 IN^3/FT.

HYDRAULIC DATA

FLOW NOT APPLICABLE. THIS IS A EQUALIZED STRUCTURE.

100 YEAR FREQUENCY
$HW._{100}$ = EL. 885.6 (FIS)
DRAINAGE AREA = N/A
ROADWAY OVERTOPPING = N/A
$HW._{100}$ IS BASED ON WALWORTH COUNTY FLOOD INSURANCE STUDY DATED SEPTEMBER 3, 2014

2 YEAR FREQUENCY
$HW._2$ = EL. 885.0

CURVE DATA

① P.I. = 100+62.43
Y = 403012.533
X = 757057.727
Δ = 17°05'44"
D = 25°27'53"
T = 33.82'
L = 67.13'
R = 225.00'
P.C. STA. = 100+28.61
P.T. STA. 100+95.74

TRAFFIC DATA

LAUDERDALE DRIVE
A.A.D.T. = 140 (2022)
A.A.D.T. = 140 (2042)
R.D.S. = 25 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. GENERAL NOTES & QUANTITIES
3. WALL DETAILS
4. COPING REINFORCEMENT
5. CHAIN LINK FENCE DETAILS
6. SUBSURFACE EXPLORATION

NOTES

1. WALL LENGTH IS MEASURED ALONG THE F.F. OF CONCRETE COPING.
2. TEMPORARY PEDESTRIAN BRIDGE AND CONSTRUCTION CAUSEWAYS NOT SHOWN, SEE ROADWAY PLANS.

LEGEND

- FOR TIE-IN DETAILS WITH EXISTING RETAINING WALL, SEE "WALL DETAILS" SHEET
- NAME PLATE LOCATION, SEE "WALL DETAILS" SHEET
- VERTICAL CONTRACTION JOINT, SEE "WALL DETAILS" SHEET. LOCATIONS ARE APPROXIMATE AND ARE TO BE DETERMINED BY THE CONTRACTOR.
- PIPE UNDERDRAIN WRAPPED 6-INCH SLOPE 0.5% MIN. TO ABUTMENT. SEE B-64-206 PLANS.
- ◇ CURVE NUMBER

WISCONSIN
JASON R. SADOWSKI
E-38660
BROOKFIELD, WI
PROFESSIONAL ENGINEER

4/27/2022

STRUCTURE DESIGN CONTACTS
BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
JASON SADOWSKI (414) 751-9982

NO.	DATE	REVISION	BY

Michael Baker INTERNATIONAL
MICHAEL BAKER INTERNATIONAL
250 E. WISCONSIN STREET
SUITE 1725
MILWAUKEE, WI 53202

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 04/27/22
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-64-34

RETAINING WALL AT NW CORNER OF LAUDERDALE DRIVE OVER GREEN LAKE

COUNTY	TOWN ~~/CITY/VILLAGE~~
WALWORTH	LA GRANGE

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
GZ	MJM	TJN/DRH	JRS

GENERAL PLAN

SHEET 1 OF 6
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STATE PROJECT NUMBER
3839-00-70

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL
206.3000.02	EXCAVATION FOR STRUCTURES RETAINING WALLS R-64-34	LS	1
209.0300.S.01	BACKFILL COARSE AGGREGATE SIZE NO. 1	CY	6
210.1500	BACKFILL STRUCTURE TYPE A	TON	24
502.3200	PROTECTIVE SURFACE TREATMENT	SY	30
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	5
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	480
512.0500	PILING STEEL SHEET PERMANENT DELIVERED	SF	922
512.0600	PILING STEEL SHEET PERMANENT DRIVEN	SF	922
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	3
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	33
616.0204	FENCE CHAIN LINK 4-FT	LF	33
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	21
645.0130	GEOTEXTILE TYPE R	SY	2
SPV.0060.01	PROTECT EXISTING RETAINING WALL	EACH	1
	NON-BID ITEMS		
	FILLER	SIZE	½ "
	NAME PLATE	EACH	1

GEOMETRY TABLE

WALL STATION	℄ LAUDERDALE DRIVE STATION	OFFSET TO F.F. WALL	TOP OF CONCRETE CAP ELEV.	TOP OF STEEL SHEET PILING ELEV.*	APPROXIMATE EXISTING LAKE BED ELEV.	BOTTOM OF SHEET PILE ELEV.
10+00.00	100+61.41	13.32' LT.	889.08	888.08	888.18	860.00
10+10.00	100+71.98	14.61' LT.	888.66	887.66	883.18	860.00
10+20.00	100+82.66	15.43' LT.	888.36	887.36	883.15	860.00
10+26.48	100+89.62	15.70' LT.	888.20	887.20	883.21	860.00
10+33.35	100+89.81	8.84' LT.	889.67	888.67	883.21	860.00

* TOP OF SHEET PILING ELEV. BASED ON 1' EMBEDMENT INTO CONCRETE CAP

SHEET PILE SOIL PARAMETERS

LAYER DEPTH/LOCATION	SOIL LAYER DESCRIPTION	TOTAL UNIT WEIGHT (PCF)	FRICTION ANGLE (DEGREES)
0.0 TO 5.0 FEET	MEDIUM DENSE GRANULAR	120	32
5.0 TO 8.5 FEET	LOOSE GRANULAR	105	28
8.5 TO 58.5 FEET	MEDIUM DENSE GRANULAR	120	32
58.5 TO 80.0 FEET	DENSE GRANULAR	125	36

SHEET PILE WALL GLOBAL STABILITY EVALUATION

LOCATION	FACTOR OF SAFETY (FOS) BISHOP (CIRCULAR SLIP SURFACE)		CAPACITY DEMAND RATIO (CDR) [1,2] = Φ * FOS
	DRAINED	UNDRAINED	
R-64-34	2.49	2.49	1.87

1. FOS VALUES BASED ON LIMITING EQUILIBRIUM METHODS OF ANALYSIS.
2. Φ = RESISTANCE FACTOR = 0.75 PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 11.6.2.3.
3. BASED ON 12' EMBEDMENT BELOW GROUND AT F.F.

BENCH MARKS

NO.	NORTHING (Y)	EASTING (X)	DESCRIPTION	ELEV.
1984	402986.6170	756942.3110	3/8" SPIKE IN 5" WOOD POST	898.36
2040	403059.9560	757198.4590	CORNER OF CONCRETE WALL, 1' EAST OF DOCK, ADDRESS W5308	887.21

NOTE: FOR BENCHMARK LOCATIONS IN PLAN VIEW, SEE ROADWAY PLANS

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

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

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR THE STRUCTURE.

PROTECT THE EXISTING RETAINING WALLS ADJACENT TO NEW CONSTRUCTION AND REMOVAL WORK IN ACCORDANCE WITH BID ITEM "PROTECT EXISTING RETAINING WALL".

PAINTING OF SHEET PILING AS STATED IN STANDARD SPECIFICATION 5.12.3.3 IS NOT REQUIRED.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS.

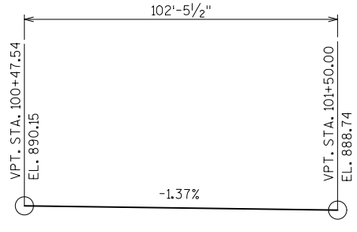
CONSTRUCTION ACCESS WILL BE PROVIDED VIA A CAUSEWAY SOUTH OF THE BRIDGE. FOR DETAILS AND PAY ITEMS, SEE ROADWAY PLANS.

REMOVAL OF THE EXISTING BRIDGE (P-64-921) AND THE ASSOCIATED RETAINING WALLS IS INCLUDED AS PAY ITEM AS PART OF THE B-64-206 QUANTITIES.

COORDINATE RETAINING WALL CONSTRUCTION WITH REMOVAL OF THE EXISTING BRIDGE (P-64-921) AND CONSTRUCTION OF THE NEW BRIDGE (B-64-206).

THE PLAN QUANTITY FOR THE BID ITEM "PILING STEEL SHEET PERMANENT DELIVERED" AND "PILING STEEL SHEET PERMANENT DRIVEN" IS BASED ON THE AREA OF WALL FROM THE TOP OF SHEET PILING WITH AN ASSUMED 1' EMBEDMENT INTO THE CONCRETE CAP TO THE BOTTOM OF SHEET PILE.

ALL HOLES CUT INTO WALL FOR CONCRETE COPING REINFORCEMENT TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL PERMANENT DRIVEN".



PROFILE GRADE LINE - LAUDERDALE DRIVE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-34

DRAWN BY TJN | PLANS CK'D. JRS

GENERAL NOTES & QUANTITIES

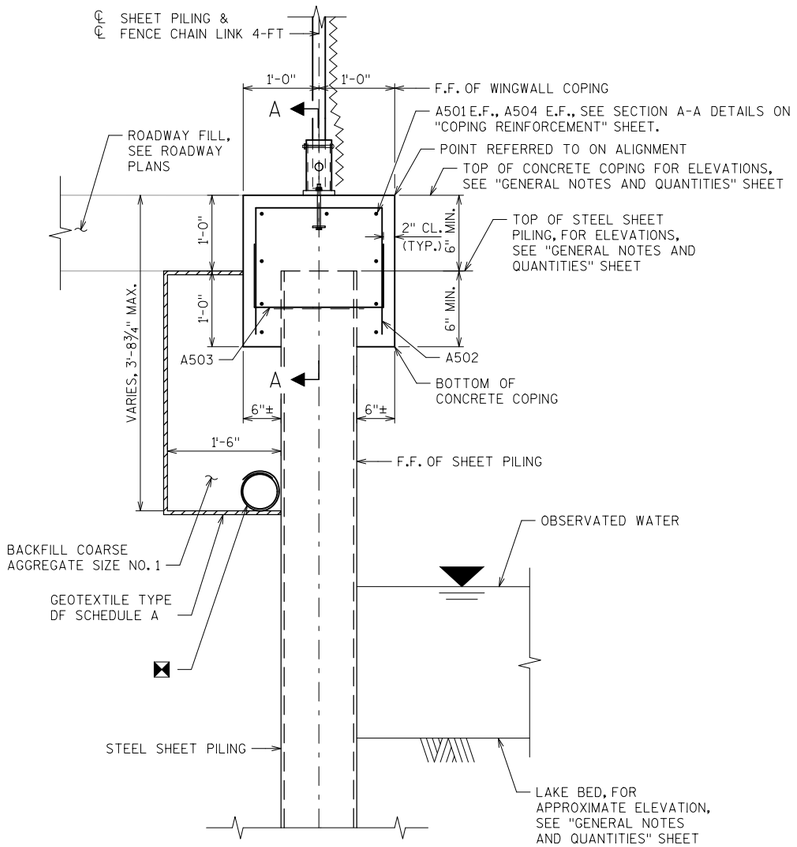
SHEET 2 OF 6

8

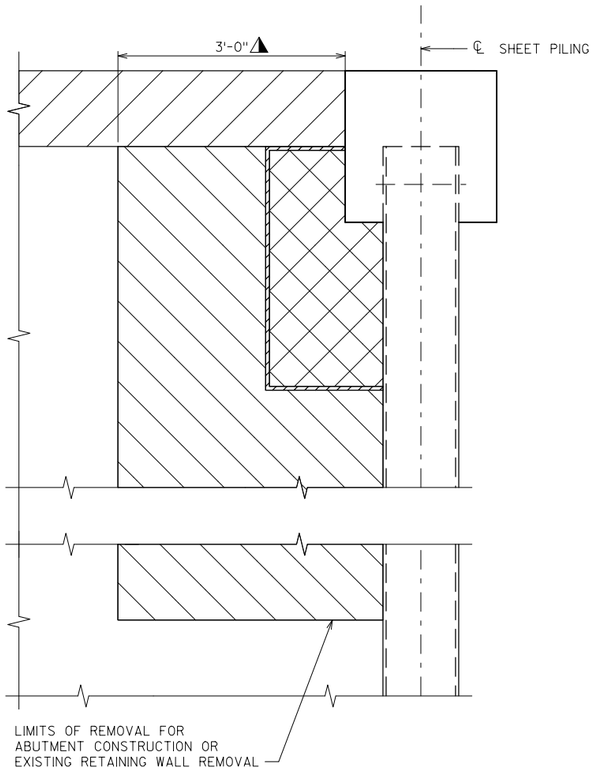
8

STATE PROJECT NUMBER

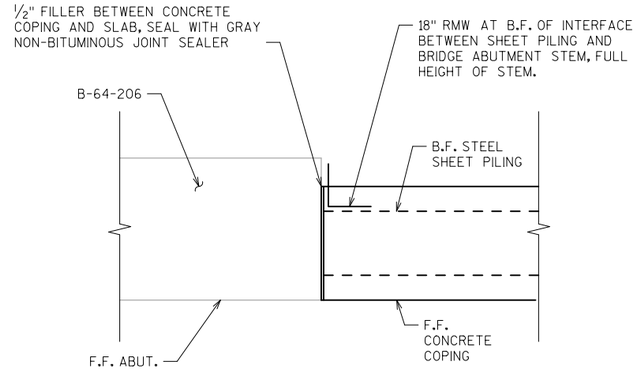
3839-00-70



SECTION THRU WALL

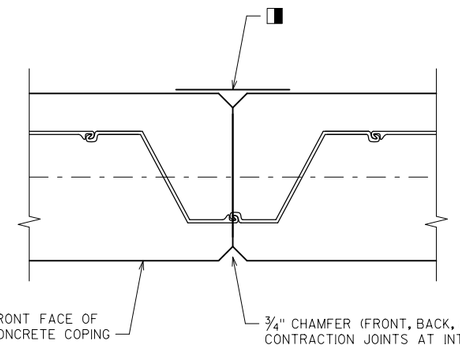


WALL BACKFILL DETAIL



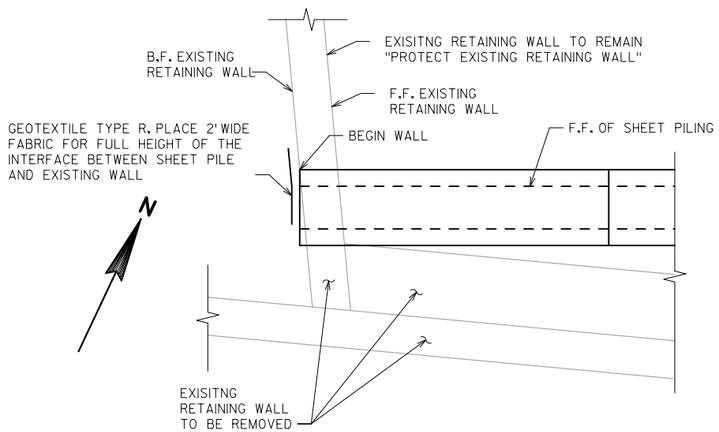
DETAIL AT BRIDGE ABUTMENT

ABUT. REINF. NOT SHOWN FOR CLARITY

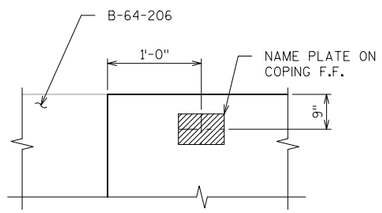


COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT
MAX. SPACING OF JOINT = 12'



EXISTING RETAINING WALL INTERFACE DETAIL



NAME PLATE LOCATION

LOOKING WEST AT END OF WALL

LEGEND

- BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TOWARD ABUTMENT. SEE B-64-206 PLANS FOR LOCATIONS.
- 18" RUBBERIZED MEMBRANE WATERPROOFING TO BE APPLIED TO CONCRETE COPING ALONG BACK FACE. EXTEND FROM TOP OF CONCRETE COPING TO BOTTOM OF CONCRETE COPING ALONG BACK FACE.
- ROADWAY FILL, SEE ROADWAY PLANS
- BACKFILL STRUCTURE TYPE A
- BACKFILL COARSE AGGREGATE SIZE NO. 1

NOTE

1. PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO ALL FACES OF THE CONCRETE COPING, INCLUDING THE TOP, SIDES, AND UNDERSIDES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-34

DRAWN BY TJN | PLANS CK'D. JRS

WALL DETAILS

SHEET 3 OF 6

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STATE PROJECT NUMBER
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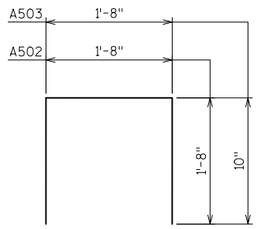
BILL OF BARS

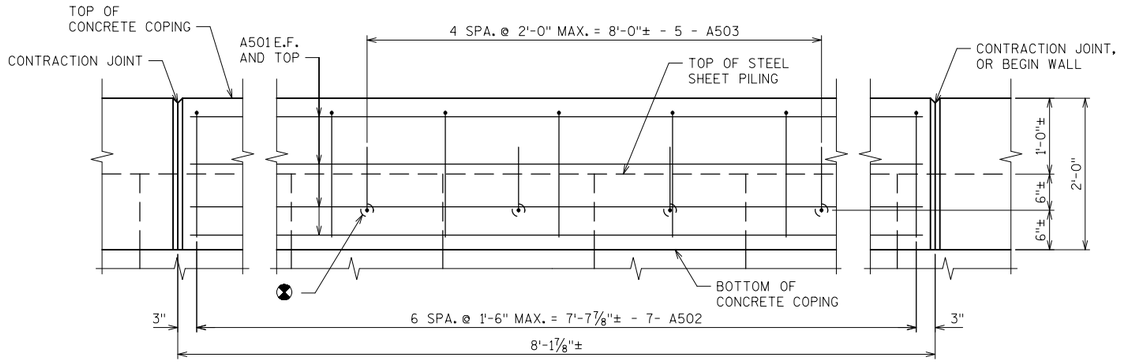
TOTAL COATED = 480 LBS

BAR MARK	NO. REQ'D.	LENGTH	COAT	STAINLESS STEEL	BENT	BAR SERIES	LOCATION
A501	27	7'-9"	X				HORIZONTAL
A502	27	4'-9"	X		X		CAP TIES
A503	18	3'-1"	X		X		CAP TIES THROUGH PILING
A504	9	6'-6"	X				HORIZONTAL - AT END OF WALL

BAR QUANTITIES AND LENGTHS ARE BASED ON THE CONTRACTION JOINT LAYOUT PROVIDED ON THE GENERAL PLAN SHEET. IF THE CONTRACTOR MODIFIES THE CONTRACTION JOINT LAYOUT, THE BAR TABLE SHALL BE MODIFIED BY THE CONTRACTOR AS REQUIRED. PAYMENT SHALL BE BASED ON THE WEIGHTS CALCULATED FROM THE ABOVE TABLES.

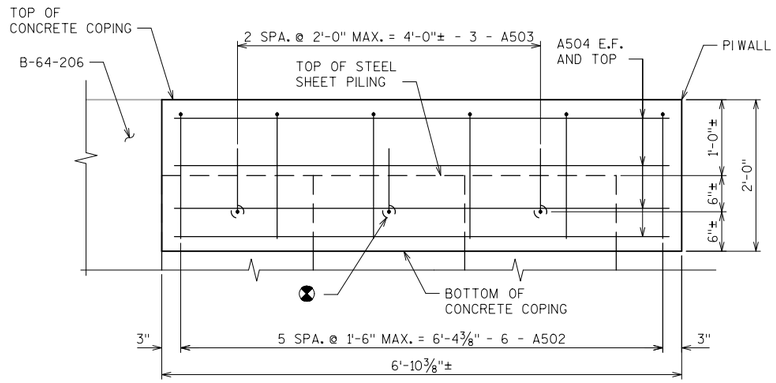


A502, A503



SECTION A-A (TYPICAL)

TYPICAL BETWEEN JOINTS, FENCE NOT SHOWN
BASED ON ASSUMED JOINT LOCATIONS.
CONTRACTOR SHALL DETERMINE FINAL JOINT LOCATIONS.



SECTION A-A (AT END WALL)

FENCE NOT SHOWN

LEGEND

℄ OF 2"± DIA. FIELD CUT HOLE FOR A503 BARS.
ONE HOLE PER PILE SECTION AT 2'-0" MAX. SPACING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-34

DRAWN BY DRH | PLANS CK'D. JRS

COPING REINFORCEMENT

SHEET 4 OF 6

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STATE PROJECT NUMBER

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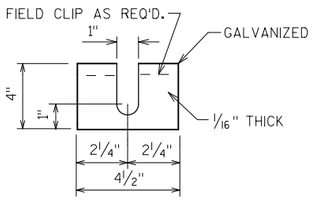
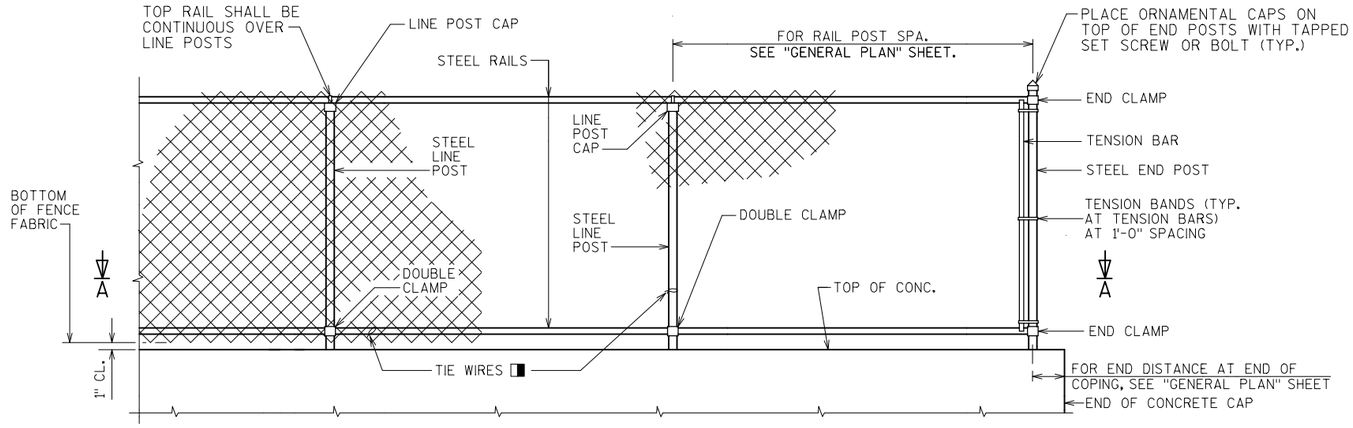
FENCE MEMBER SIZE & WEIGHT

STEEL FENCE MEMBER	OUTSIDE DIAMETER (INCHES)	WEIGHT (LB/FT)
RAILS	1.660	2.27
END POST	2.875	5.80
OVERHANG POST	2.875	5.80
LINE POST	2.375	3.65
POST SLEEVE	4.000	9.12



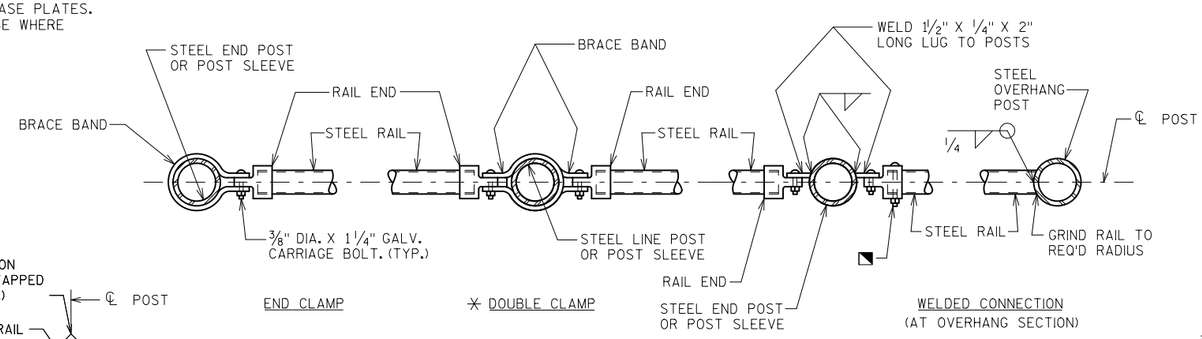
POST SHIM DETAILS

SHIMS REQUIRED ONLY WHEN END POSTS AND LINE POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST. USE WHERE REQUIRED FOR ALIGNMENT.



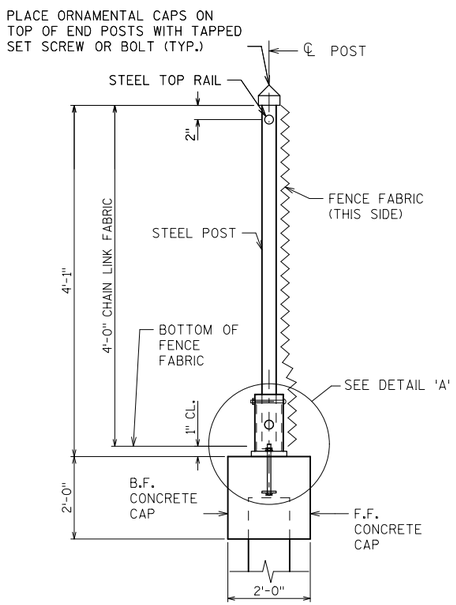
FENCE PART ELEVATION

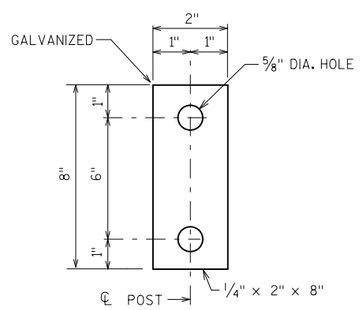
VIEWING FABRIC SIDE



SECTION A-A

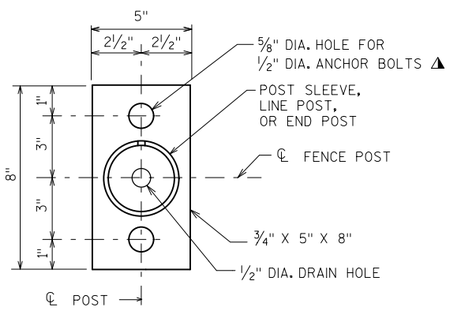
NOTE: PLACE ALL BOLT HEADS ON SIDE OF FENCE ADJACENT TO PEDESTRIANS



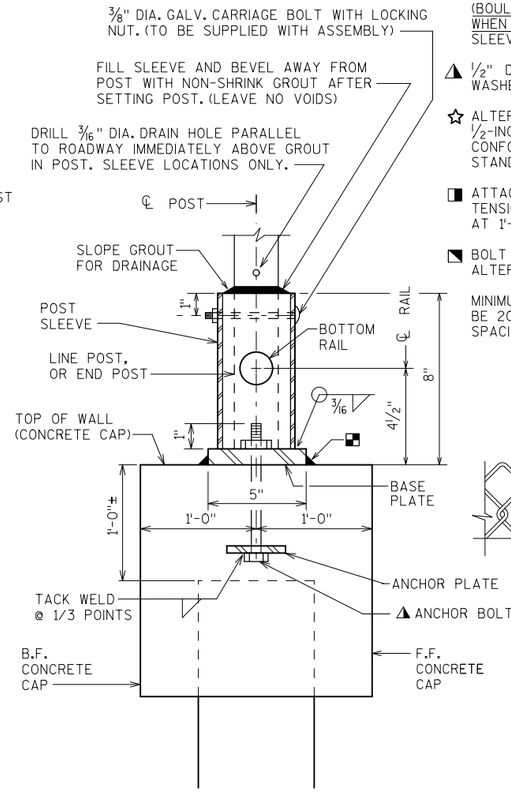


ANCHOR PLATE

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



BASE PLATE



DETAIL 'A'

UNIT SHALL BE GALVANIZED AFTER FABRICATION

NOTE: IN LIEU OF USING THE POST SLEEVE, THE FENCE POST MAY BE WELDED TO THE BASE PLATE.

NOTES

POSTS ARE TO BE SET VERTICAL.

ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED STEEL OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 4-FT."

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

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

BASE PLATES, ANCHOR PLATES AND SHIMS SHALL BE ASTM A709, GRADE 36.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

◪ CAULK AROUND PERIMETER OF BASE PLATE AND FILL PORTION OF SLOTTED HOLE AROUND ANCHOR BOLT IN SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

✳ ALTERNATE TO DOUBLE CLAMP: USE LINE RAIL CLAMP (BOULEVARD) OR 180° BRACE BAND, WHICH MAY BE USED WHEN THE POSTS ARE EITHER BOLTED TO THE POST SLEEVES OR DIRECTLY WELDED TO THE BASE PLATE.

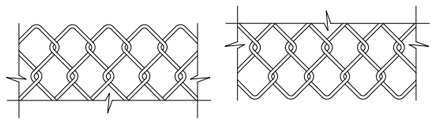
◭ 1/2" DIA. X 6 7/8" LONG GALVANIZED HEX BOLT WITH NUT & WASHER.☆

☆ ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS 1/2-INCH. EMBED 7" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

◨ ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

◥ BOLT RAIL TO RAIL END TO SECURE OVERHANG SECTION. ALTERNATE IS TO WELD RAIL DIRECTLY TO END POST.

MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". LOCATE SPLICES NEAR 1/4 POINT OF POST SPACING.



TOP DETAIL BOTTOM DETAIL

FENCE FABRIC

FENCE FABRIC WOVEN OF 9-GAGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-34

DRAWN BY DRH | PLANS CK'D. JRS

CHAIN LINK FENCE DETAILS

SHEET 5 OF 6

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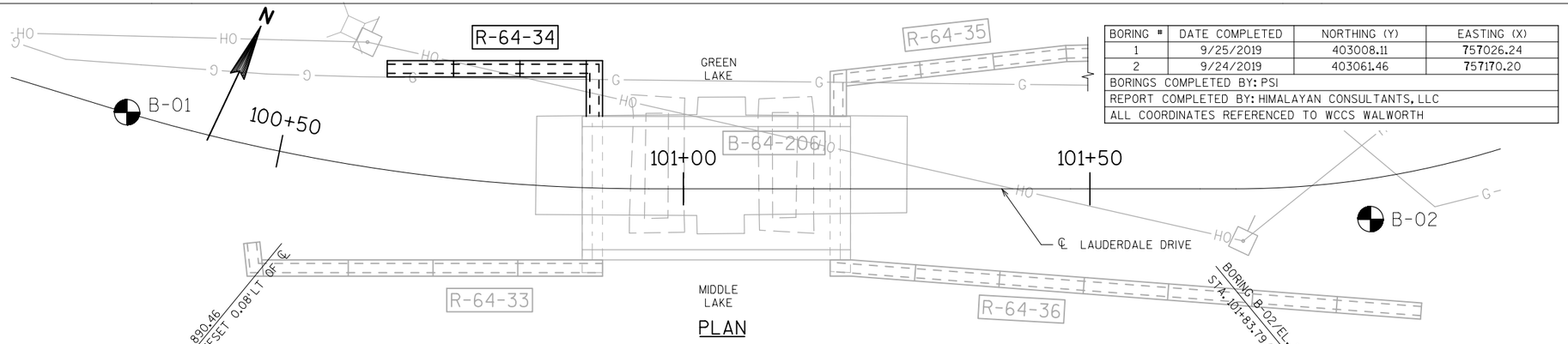
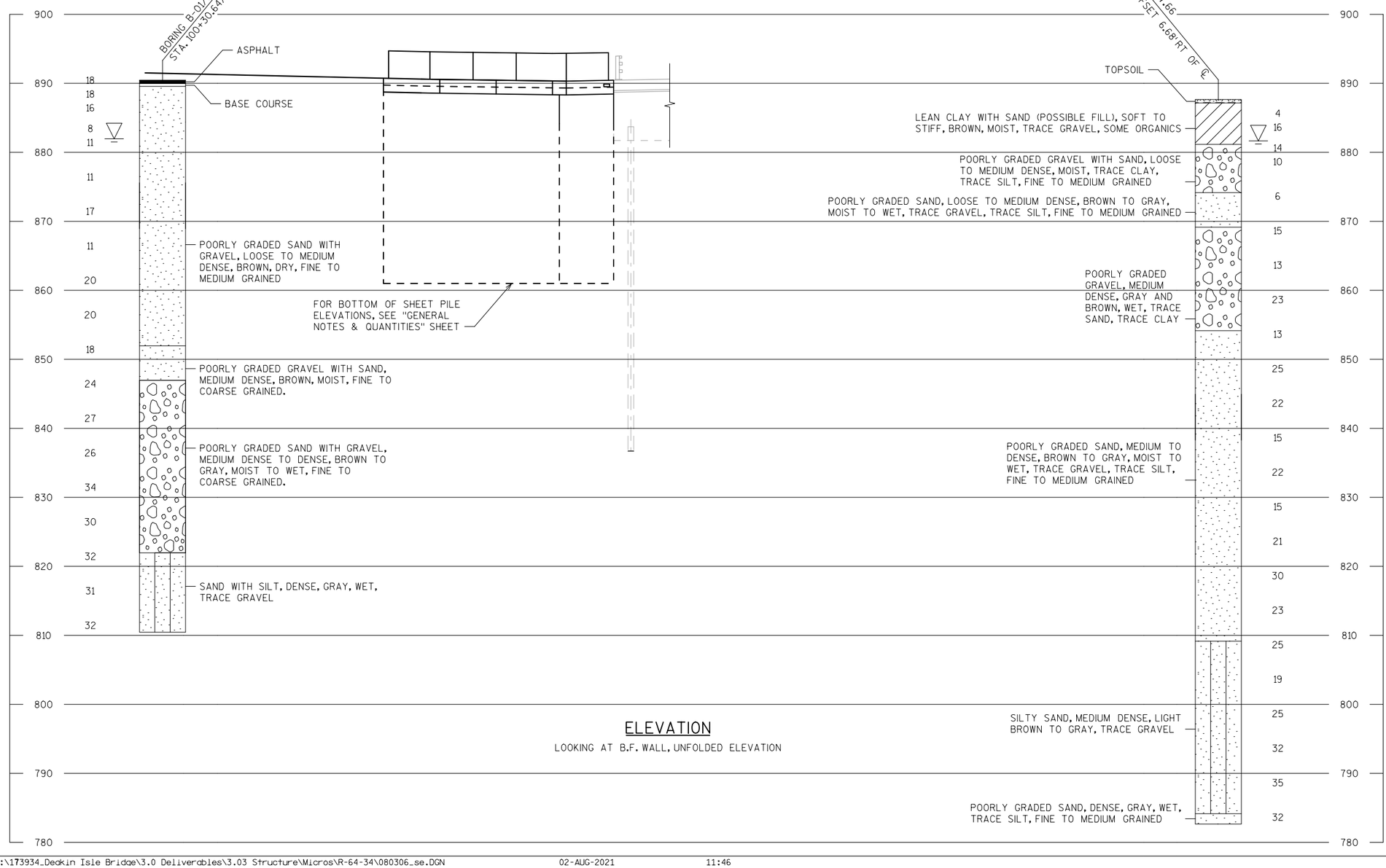


PLAN

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	9/25/2019	403008.11	757026.24
2	9/24/2019	403061.46	757170.20
BORINGS COMPLETED BY: PSI			
REPORT COMPLETED BY: HIMALAYAN CONSULTANTS, LLC			
ALL COORDINATES REFERENCED TO WCCS WALWORTH			



ELEVATION

LOOKING AT B.F. WALL, UNFOLDED ELEVATION

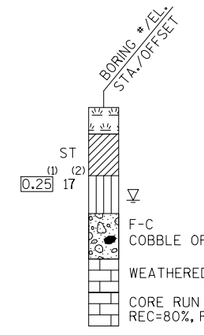
STATE PROJECT NUMBER

3839-00-70

MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

▽ AT TIME OF DRILLING

▼ END OF DRILLING

▼ AFTER DRILLING

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-34

DRAWN BY TJN | PLANS CK'D. JRS

SUBSURFACE EXPLORATION

SHEET 6 OF 6

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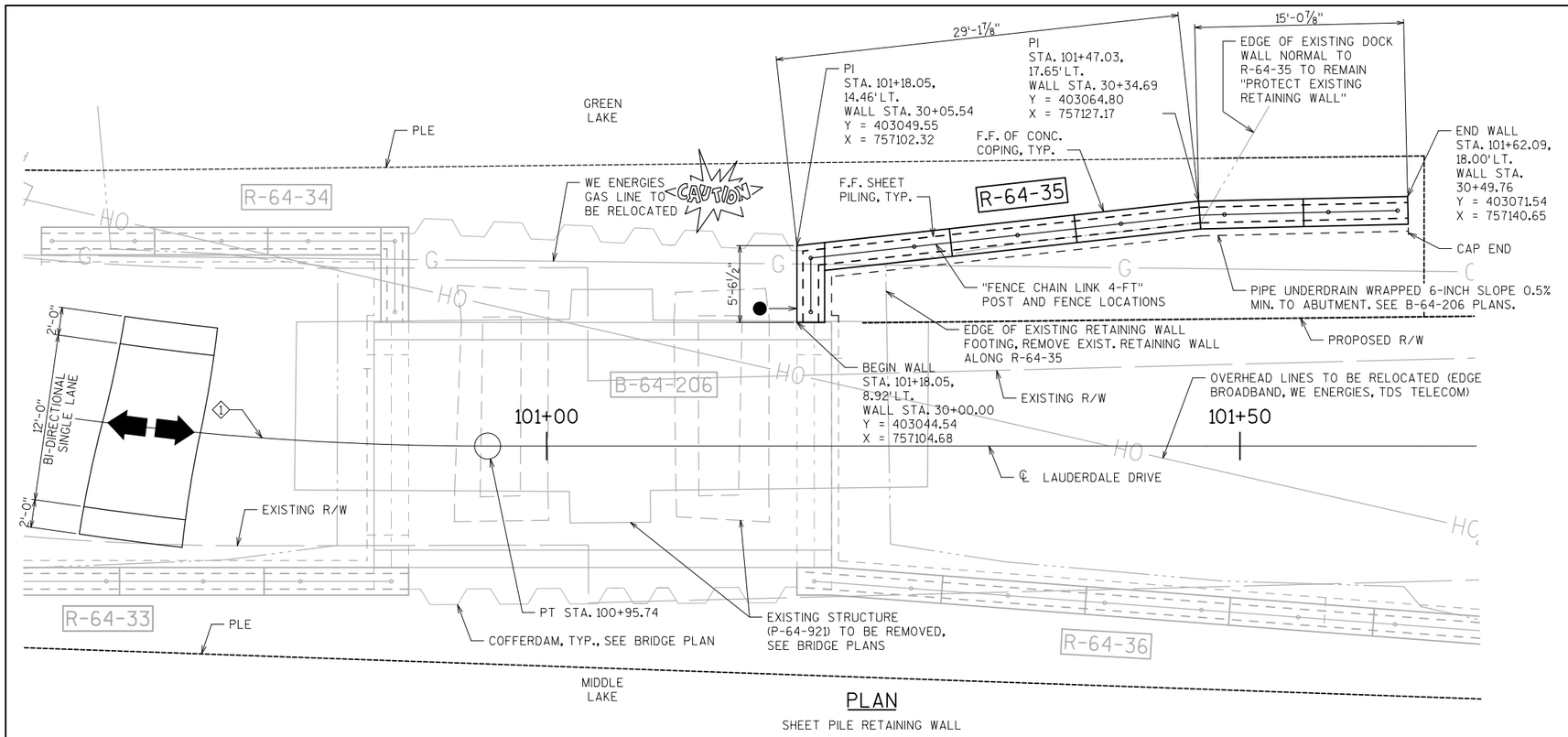
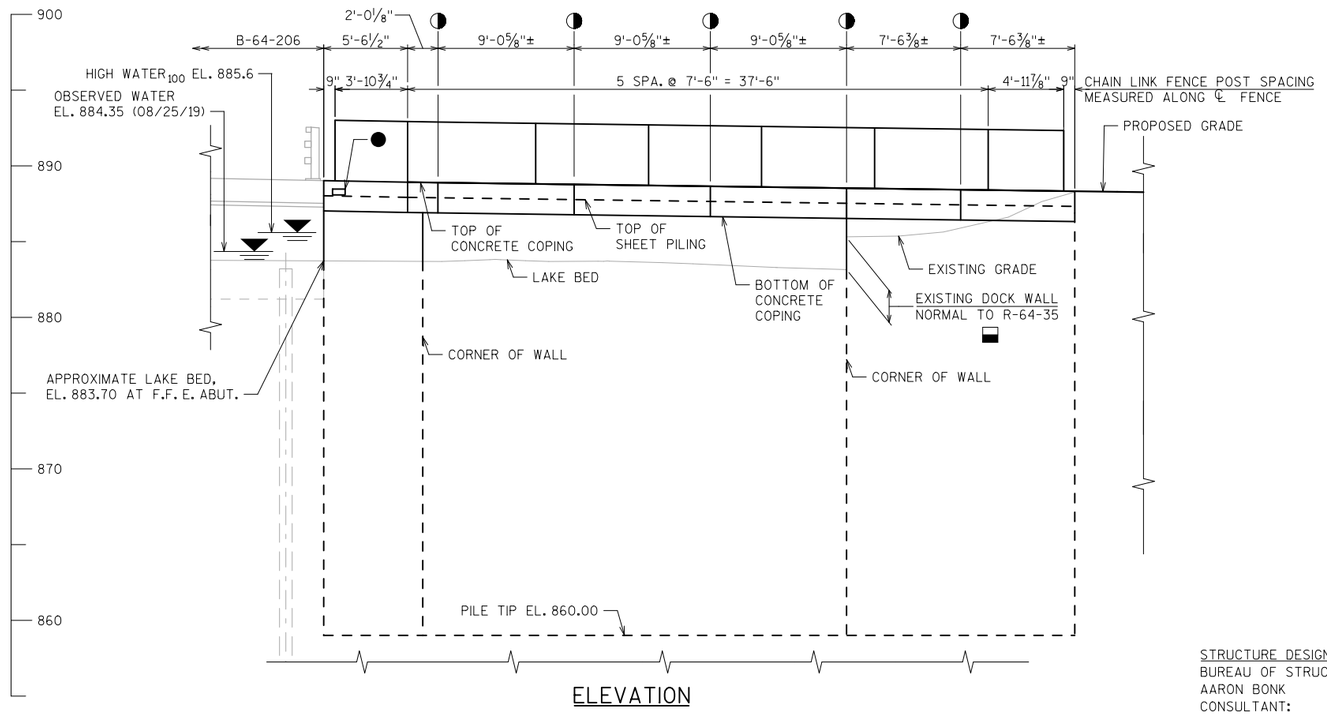


PLAN

SHEET PILE RETAINING WALL



ELEVATION

LOOKING AT B.F. WALL, UNFOLDED ELEVATION

DESIGN DATA

LIVE LOAD:
LIVE LOAD SURCHARGE 240 PSF

MATERIAL PROPERTIES:
CONCRETE MASONRY RETAINING WALLS:
COPING.....f'c = 3,500 P.S.I.
SHEET PILE RETAINING WALLS:
PERMANENT STEEL SHEET PILING (ASTM A328).....fy = 39,000 P.S.I.

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

THE MIN. SECTION MODULUS FOR THE STEEL PILING SHALL BE 22.3 IN^3/FT.

HYDRAULIC DATA

FLOW NOT APPLICABLE. THIS IS A EQUALIZED STRUCTURE.

100 YEAR FREQUENCY
$HW._{100}$= EL. 885.6 (FIS)
DRAINAGE AREA = N/A
ROADWAY OVERTOPPING = N/A
$HW._{100}$ IS BASED ON WALWORTH COUNTY FLOOD INSURANCE STUDY DATED SEPTEMBER 3, 2014

2 YEAR FREQUENCY
$HW._2$= EL. 885.0

CURVE DATA

◇1 P.I. = 100+62.43
Y = 403012.533
X = 757057.727
Δ = 17°05'44"
D = 25°27'53"
T = 33.82'
L = 67.13'
R = 225.00'
P.C. STA. = 100+28.61
P.T. STA. 100+95.74

TRAFFIC DATA

LAUDERDALE DRIVE
A.A.D.T. = 140 (2022)
A.A.D.T. = 140 (2042)
R.D.S. = 25 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. GENERAL NOTES & QUANTITIES
3. WALL DETAILS
4. COPING REINFORCEMENT
5. CHAIN LINK FENCE DETAILS
6. SUBSURFACE EXPLORATION

NOTES

1. WALL LENGTH IS MEASURED ALONG THE F.F. OF CONCRETE COPING.
2. TEMPORARY PEDESTRIAN BRIDGE AND CONSTRUCTION CAUSEWAYS NOT SHOWN, SEE ROADWAY PLANS.

LEGEND

- FOR DETAILS AT EXISTING DOCK WALL, SEE "WALL DETAILS" SHEET
- NAME PLATE LOCATION, SEE "WALL DETAILS" SHEET
- VERTICAL CONTRACTION JOINT, SEE "WALL DETAILS" SHEET. LOCATIONS ARE APPROXIMATE AND ARE TO BE DETERMINED BY THE CONTRACTOR.
- ◇ CURVE NUMBER

WISCONSIN
JASON R. SADOWSKI
E-38660
BROOKFIELD, WI
PROFESSIONAL ENGINEER

4/27/2022

STRUCTURE DESIGN CONTACTS
BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
JASON SADOWSKI (414) 751-9982

NO.	DATE	REVISION	BY

Michael Baker INTERNATIONAL
MICHAEL BAKER INTERNATIONAL
250 E. WISCONSIN STREET
SUITE 1725
MILWAUKEE, WI 53202

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 04/27/22
CHIEF STRUCTURES DESIGN ENGINEER DATE

STATE PROJECT NUMBER
3839-00-70

STRUCTURE R-64-35

RETAINING WALL AT NE CORNER OF LAUDERDALE DRIVE OVER GREEN LAKE

COUNTY	TOWN ~~CITY/VILLAGE~~
WALWORTH	LA GRANGE

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
GZ	MJM	TJN/DRH	JRS

GENERAL PLAN

SHEET 1 OF 6
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STATE PROJECT NUMBER
3839-00-70

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL
206.3000.03	EXCAVATION FOR STRUCTURES RETAINING WALLS R-64-35	LS	1
209.0300.S.01	BACKFILL COARSE AGGREGATE SIZE NO. 1	CY	4
210.1500	BACKFILL STRUCTURE TYPE A	TON	26
502.3200	PROTECTIVE SURFACE TREATMENT	SY	44
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	8
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	690
512.0500	PILING STEEL SHEET PERMANENT DELIVERED	SF	1,315
512.0600	PILING STEEL SHEET PERMANENT DRIVEN	SF	1,315
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	3
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	50
616.0204	FENCE CHAIN LINK 4-FT	LF	50
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	25
645.0130	GEOTEXTILE TYPE R	SY	1
SPV.0060.01	PROTECT EXISTING RETAINING WALL	EACH	1
	NON-BID ITEMS		
	FILLER	SIZE	½ "
	NAME PLATE	EACH	1

GEOMETRY TABLE

WALL STATION	℄ LAUDERDALE DRIVE STATION	OFFSET TO F.F. WALL	TOP OF CONCRETE CAP ELEV.	TOP OF STEEL SHEET PILING ELEV.*	APPROXIMATE EXISTING LAKE BED ELEV.	BOTTOM OF SHEET PILE ELEV.
30+00.00	101+18.05	8.92' LT.	889.25	888.25	883.70	860.00
30+05.54	101+18.05	14.46' LT.	888.13	887.13	883.70	860.00
30+10.00	101+22.48	14.94' LT.	887.94	886.94	883.77	860.00
30+20.00	101+32.42	16.04' LT.	887.53	886.53	883.68	860.00
30+30.00	101+42.36	17.14' LT.	887.12	886.12	883.29	860.00
30+34.69	101+47.03	17.65' LT.	886.93	885.93	883.15	860.00
30+40.00	101+52.33	17.77' LT.	886.82	885.82	885.54	860.00
30+49.76	101+62.09	18.00' LT.	886.57	885.57	888.27	860.00

* TOP OF SHEET PILING ELEV. BASED ON 1' EMBEDMENT INTO CONCRETE CAP

SHEET PILE SOIL PARAMETERS

LAYER DEPTH/LOCATION	SOIL LAYER DESCRIPTION	TOTAL UNIT WEIGHT (PCF)	FRICTION ANGLE (LONG-TERM DRAINED CONDITION) (DEGREES)
0.0 TO 3.0 FEET	SOFT COHESIVE	105	25
3.0 TO 6.0 FEET	STIFF COHESIVE	120	29
6.0 TO 13.5 FEET	MEDIUM DENSE GRANULAR	120	32
13.5 TO 18.5 FEET	LOOSE GRANULAR	105	28
18.5 TO 93.5 FEET	MEDIUM DENSE GRANULAR	120	32
93.5 TO 105.0 FEET	DENSE GRANULAR	125	36

SHEET PILE WALL GLOBAL STABILITY EVALUATION

LOCATION	FACTOR OF SAFETY (FOS)		CAPACITY DEMAND RATIO (CDR)[1,2] = Φ * FOS
	BISHOP (CIRCULAR SLIP SURFACE)		
	DRAINED	UNDRAINED	
R-64-35	2.25	2.13	1.60

1. FOS VALUES BASED ON LIMITING EQUILIBRIUM METHODS OF ANALYSIS.
2. Φ = RESISTANCE FACTOR = 0.75 PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 11.6.2.3.
3. BASED ON 12' EMBEDMENT BELOW GROUND AT F.F.

BENCH MARKS

NO.	NORTHING (Y)	EASTING (X)	DESCRIPTION	ELEV.
1984	402986.6170	756942.3110	3/8" SPIKE IN 5" WOOD POST	898.36
2040	403059.9560	757198.4590	CORNER OF CONCRETE WALL, 1' EAST OF DOCK, ADDRESS W5308	887.21

NOTE: FOR BENCHMARK LOCATIONS IN PLAN VIEW, SEE ROADWAY PLANS

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

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

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR THE STRUCTURE.

PROTECT THE EXISTING RETAINING WALLS ADJACENT TO NEW CONSTRUCTION AND REMOVAL WORK IN ACCORDANCE WITH BID ITEM "PROTECT EXISTING RETAINING WALL".

PAINTING OF SHEET PILING AS STATED IN STANDARD SPECIFICATION 5.12.3.3 IS NOT REQUIRED.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS.

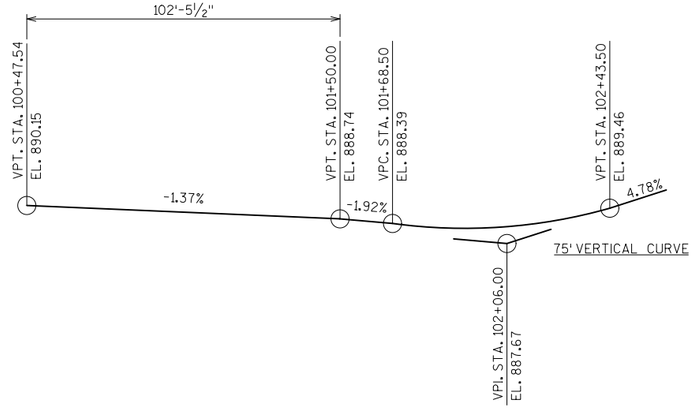
CONSTRUCTION ACCESS WILL BE PROVIDED VIA A CAUSEWAY SOUTH OF THE BRIDGE. FOR DETAILS AND PAY ITEMS, SEE ROADWAY PLANS.

REMOVAL OF THE EXISTING BRIDGE (P-64-921) AND THE ASSOCIATED RETAINING WALLS IS INCLUDED AS PAY ITEM AS PART OF THE B-64-206 QUANTITIES.

COORDINATE RETAINING WALL CONSTRUCTION WITH REMOVAL OF THE EXISTING BRIDGE (P-64-921) AND CONSTRUCTION OF THE NEW BRIDGE (B-64-206).

THE PLAN QUANTITY FOR THE BID ITEM "PILING STEEL SHEET PERMANENT DELIVERED" AND "PILING STEEL SHEET PERMANENT DRIVEN" IS BASED ON THE AREA OF WALL FROM THE TOP OF SHEET PILING WITH AN ASSUMED 1' EMBEDMENT INTO THE CONCRETE CAP TO THE BOTTOM OF SHEET PILE.

ALL HOLES CUT INTO WALL FOR CONCRETE COPING REINFORCEMENT TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL REINFORCEMENT DRIVEN".



PROFILE GRADE LINE - LAUDERDALE DRIVE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-35

DRAWN BY TJN | PLANS CK'D. JRS

GENERAL NOTES & QUANTITIES

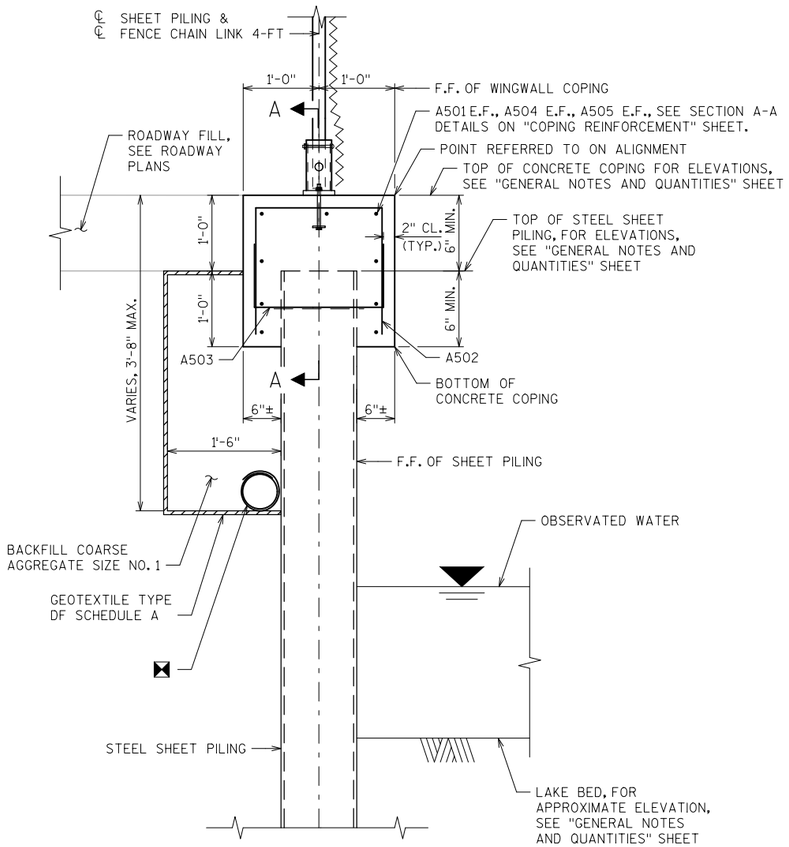
SHEET 2 OF 6
98

8

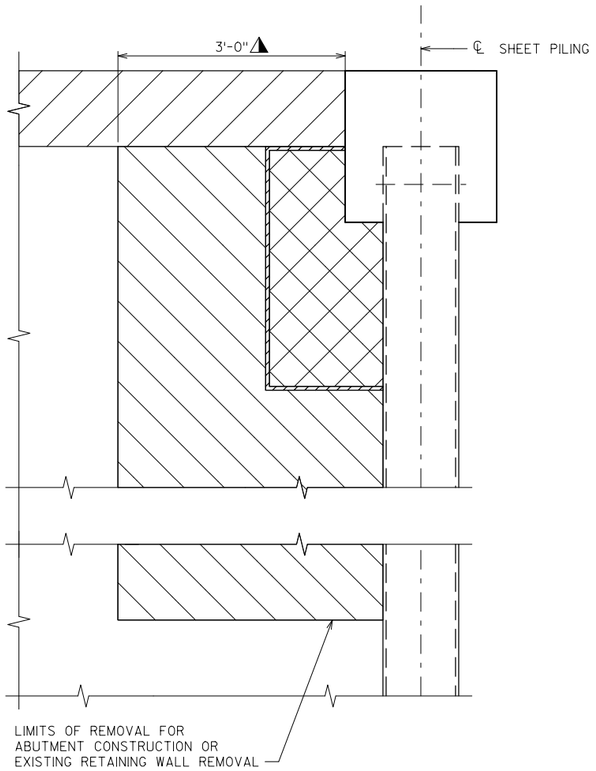
8

STATE PROJECT NUMBER

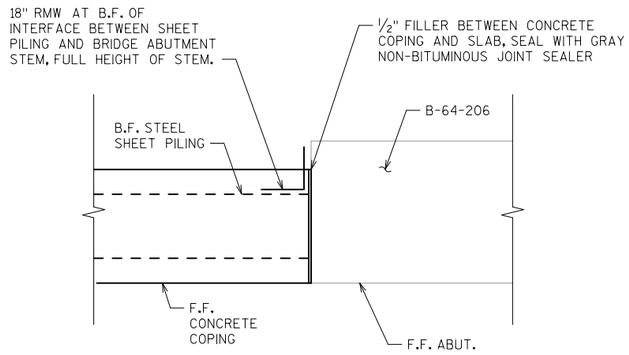
3839-00-70



SECTION THRU WALL



WALL BACKFILL DETAIL



DETAIL AT BRIDGE ABUTMENT

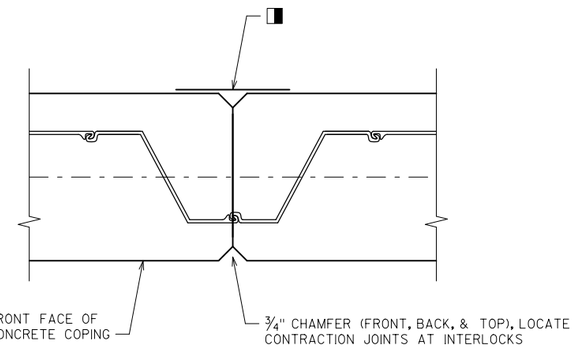
ABUT. REINF. NOT SHOWN FOR CLARITY

LEGEND

- BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TOWARD ABUTMENT. SEE B-64-206 PLANS FOR LOCATIONS.
- 18" RUBBERIZED MEMBRANE WATERPROOFING TO BE APPLIED TO CONCRETE COPING ALONG BACK FACE. EXTEND FROM TOP OF CONCRETE COPING TO BOTTOM OF CONCRETE COPING ALONG BACK FACE.
- ROADWAY FILL, SEE ROADWAY PLANS
- BACKFILL STRUCTURE TYPE A
- BACKFILL COARSE AGGREGATE SIZE NO. 1

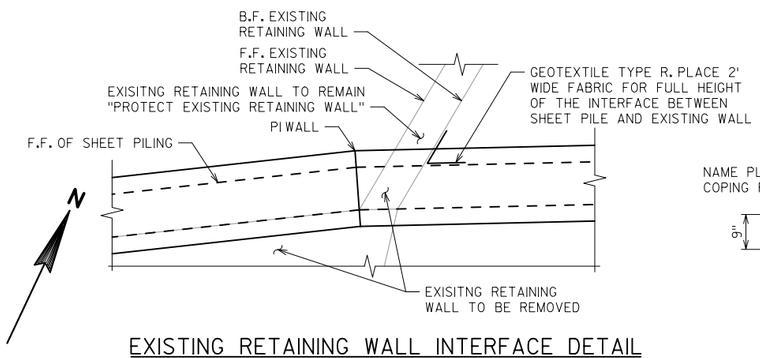
NOTE

1. PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO ALL FACES OF THE CONCRETE COPING, INCLUDING THE TOP, SIDES, AND UNDERSIDES.

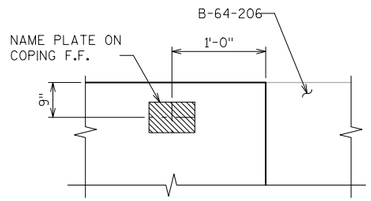


COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT
MAX. SPACING OF JOINT = 12'



EXISTING RETAINING WALL INTERFACE DETAIL



NAME PLATE LOCATION

LOOKING EAST AT START OF WALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-35

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WALL DETAILS

SHEET 3 OF 6

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STATE PROJECT NUMBER

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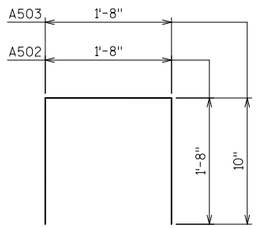
BILL OF BARS

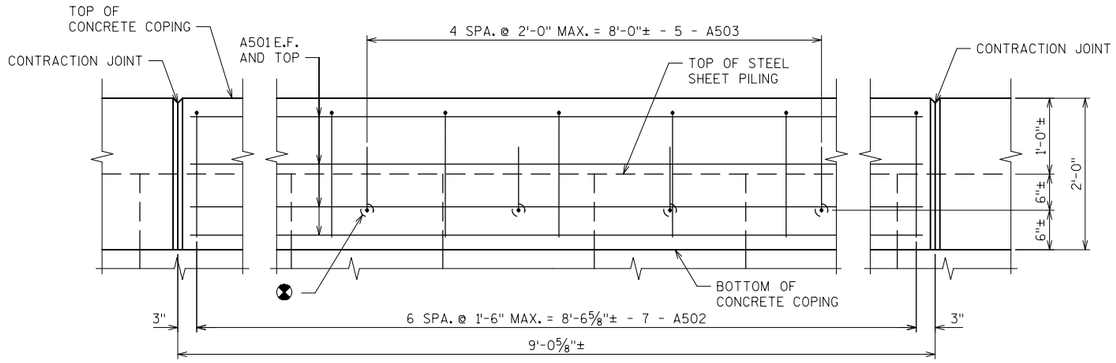
TOTAL COATED = 690 LBS

BAR MARK	NO. REQ'D.	LENGTH	COAT	STAINLESS STEEL	BENT	BAR SERIES	LOCATION
A501	27	8'-8"	X				HORIZONTAL
A502	38	4'-9"	X		X		CAP TIES
A503	26	3'-1"	X		X		CAP TIES THROUGH PILING
A504	9	7'-2"	X				HORIZONTAL - AT START OF WALL
A505	18	5'-2"	X				HORIZONTAL - AT END OF WALL

BAR QUANTITIES AND LENGTHS ARE BASED ON THE CONTRACTION JOINT LAYOUT PROVIDED ON THE GENERAL PLAN SHEET. IF THE CONTRACTOR MODIFIES THE CONTRACTION JOINT LAYOUT, THE BAR TABLE SHALL BE MODIFIED BY THE CONTRACTOR AS REQUIRED. PAYMENT SHALL BE BASED ON THE WEIGHTS CALCULATED FROM THE ABOVE TABLES.

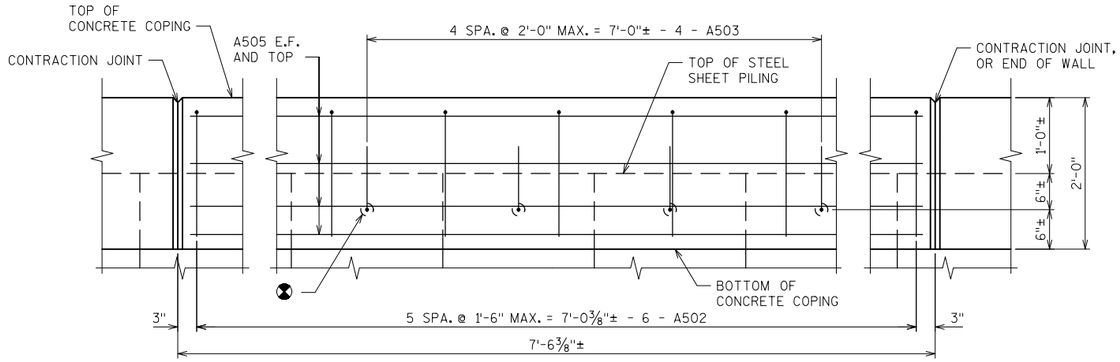


A502, A503



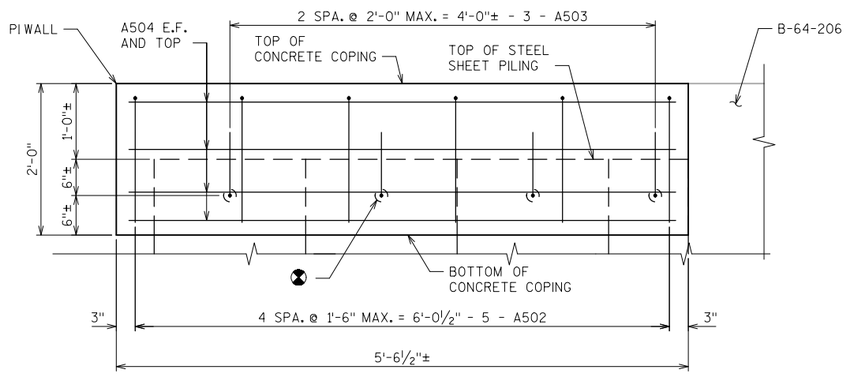
SECTION A-A (PI WALL TO PI WALL)

TYPICAL BETWEEN JOINTS, FENCE NOT SHOWN
BASED ON ASSUMED JOINT LOCATIONS.
CONTRACTOR SHALL DETERMINE FINAL JOINT LOCATIONS.



SECTION A-A (PI WALL TO END WALL)

TYPICAL BETWEEN JOINTS, FENCE NOT SHOWN
BASED ON ASSUMED JOINT LOCATIONS.
CONTRACTOR SHALL DETERMINE FINAL JOINT LOCATIONS.



SECTION A-A (AT BEGIN WALL)

FENCE NOT SHOWN

LEGEND

℄ OF 2"± DIA. FIELD CUT HOLE FOR A503 BARS.
ONE HOLE PER PILE SECTION AT 2'-0" MAX. SPACING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-35

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COPING REINFORCEMENT

SHEET 4 OF 6

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STATE PROJECT NUMBER

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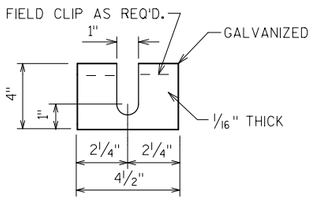
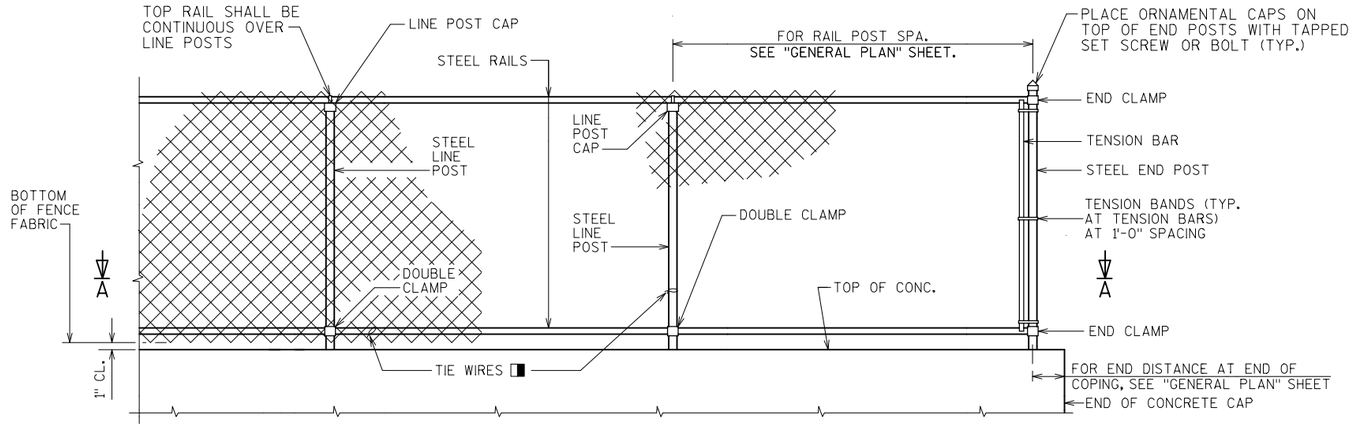
FENCE MEMBER SIZE & WEIGHT

STEEL FENCE MEMBER	OUTSIDE DIAMETER (INCHES)	WEIGHT (LB/FT)
RAILS	1.660	2.27
END POST	2.875	5.80
OVERHANG POST	2.875	5.80
LINE POST	2.375	3.65
POST SLEEVE	4.000	9.12



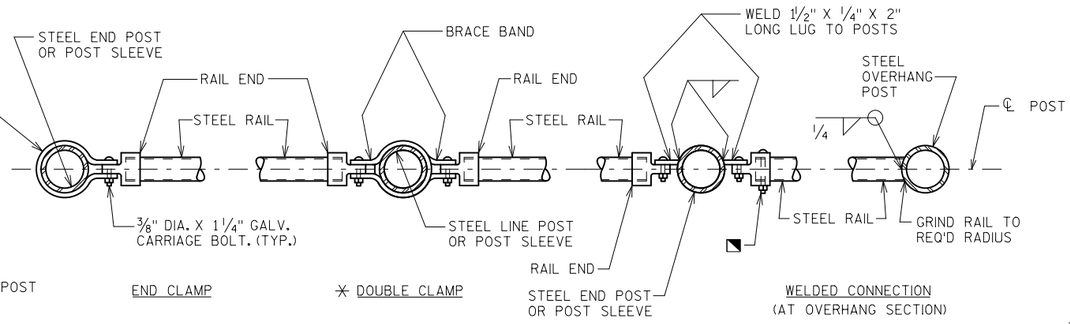
POST SHIM DETAILS

SHIMS REQUIRED ONLY WHEN END POSTS AND LINE POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST. USE WHERE REQUIRED FOR ALIGNMENT.

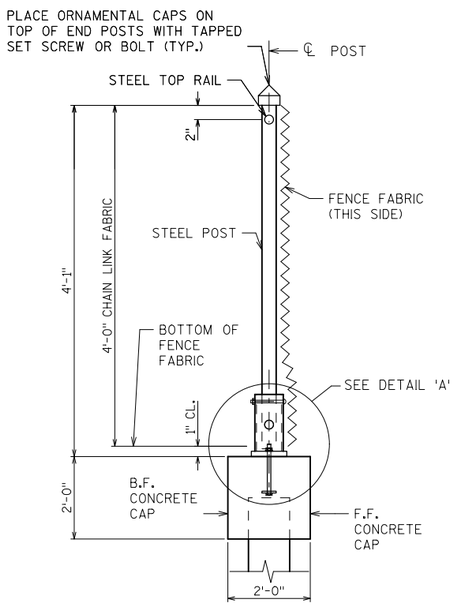


FENCE PART ELEVATION

VIEWING FABRIC SIDE

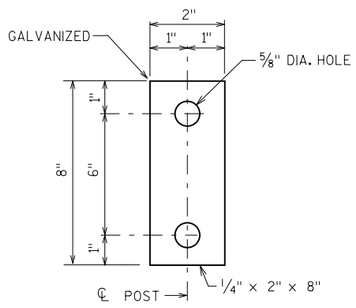


END CLAMP ✳ DOUBLE CLAMP WELDED CONNECTION (AT OVERHANG SECTION)



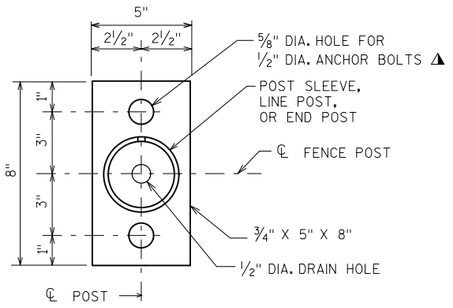
SECTION A-A

NOTE: PLACE ALL BOLT HEADS ON SIDE OF FENCE ADJACENT TO PEDESTRIANS

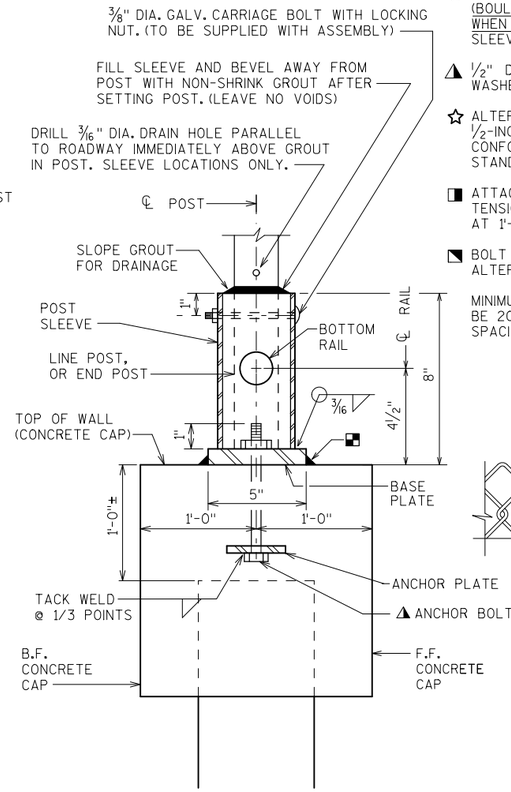


ANCHOR PLATE

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



BASE PLATE



DETAIL 'A'

UNIT SHALL BE GALVANIZED AFTER FABRICATION

NOTE: IN LIEU OF USING THE POST SLEEVE, THE FENCE POST MAY BE WELDED TO THE BASE PLATE.

NOTES

POSTS ARE TO BE SET VERTICAL.

ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED STEEL OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 4-FT."

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

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

BASE PLATES, ANCHOR PLATES AND SHIMS SHALL BE ASTM A709, GRADE 36.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

◪ CAULK AROUND PERIMETER OF BASE PLATE AND FILL PORTION OF SLOTTED HOLE AROUND ANCHOR BOLT IN SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

✳ ALTERNATE TO DOUBLE CLAMP: USE LINE RAIL CLAMP (BOULEVARD) OR 180° BRACE BAND, WHICH MAY BE USED WHEN THE POSTS ARE EITHER BOLTED TO THE POST SLEEVES OR DIRECTLY WELDED TO THE BASE PLATE.

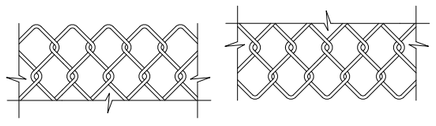
◭ 1/2" DIA. X 6 7/8" LONG GALVANIZED HEX BOLT WITH NUT & WASHER.☆

☆ ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS 1/2-INCH. EMBED 7" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

◨ ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

◥ BOLT RAIL TO RAIL END TO SECURE OVERHANG SECTION. ALTERNATE IS TO WELD RAIL DIRECTLY TO END POST.

MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". LOCATE SPLICES NEAR 1/4 POINT OF POST SPACING.



TOP DETAIL BOTTOM DETAIL

FENCE FABRIC

FENCE FABRIC WOVEN OF 9-GAGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-35

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CHAIN LINK FENCE DETAILS

SHEET 5 OF 6

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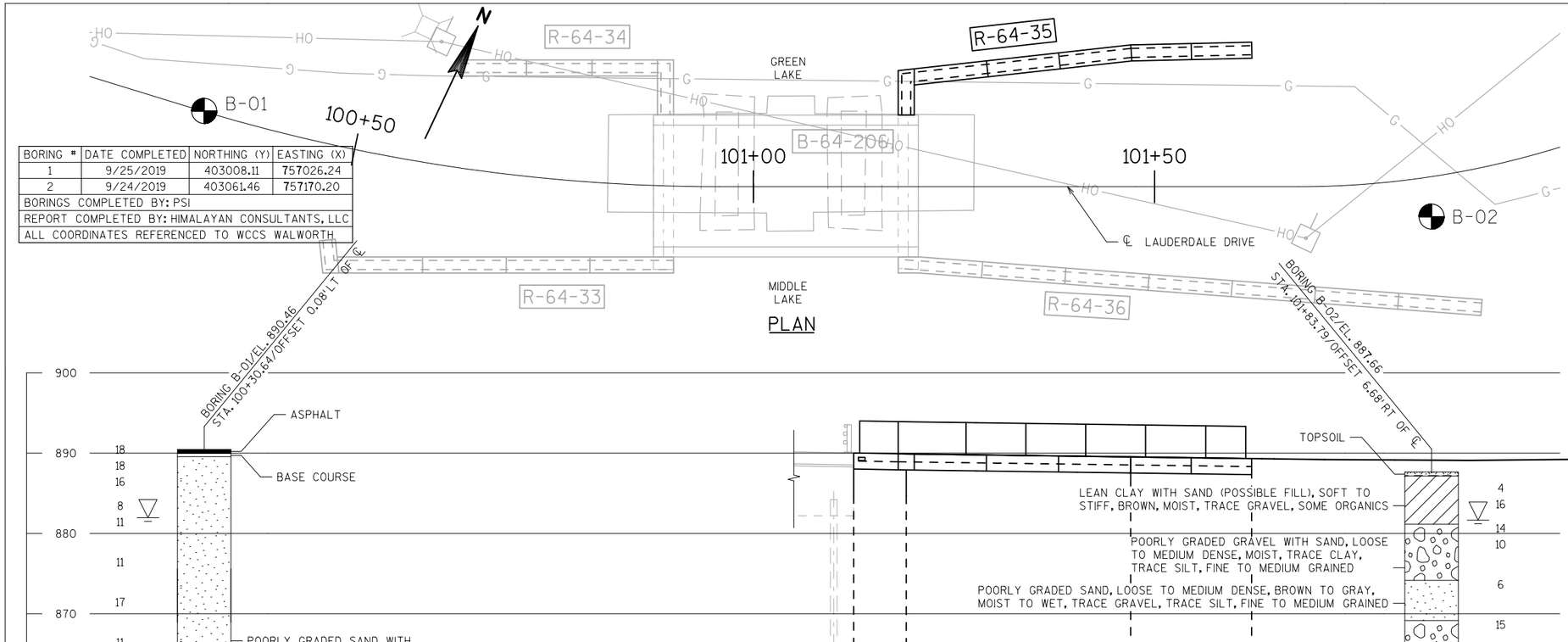
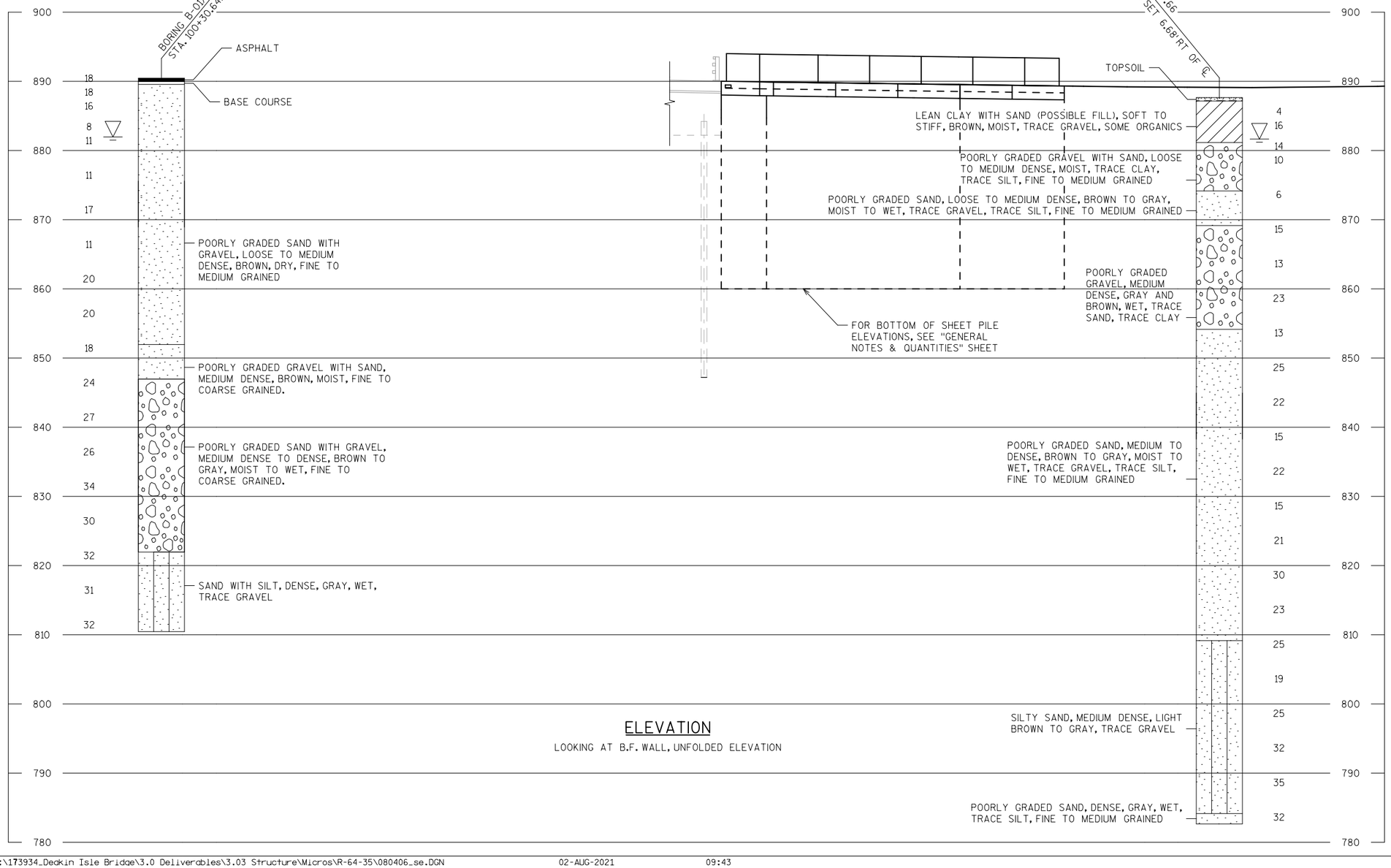
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	9/25/2019	403008.11	757026.24
2	9/24/2019	403061.46	757170.20
BORINGS COMPLETED BY: PSI			
REPORT COMPLETED BY: HIMALAYAN CONSULTANTS, LLC			
ALL COORDINATES REFERENCED TO WCCS WALWORTH			



PLAN



ELEVATION

LOOKING AT B.F. WALL, UNFOLDED ELEVATION

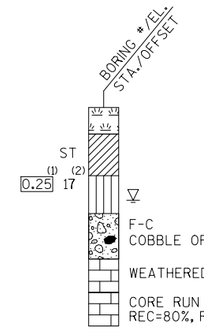
STATE PROJECT NUMBER

3839-00-70

MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

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

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-35

DRAWN BY TJN | PLANS CK'D. JRS

SUBSURFACE EXPLORATION

SHEET 6 OF 6

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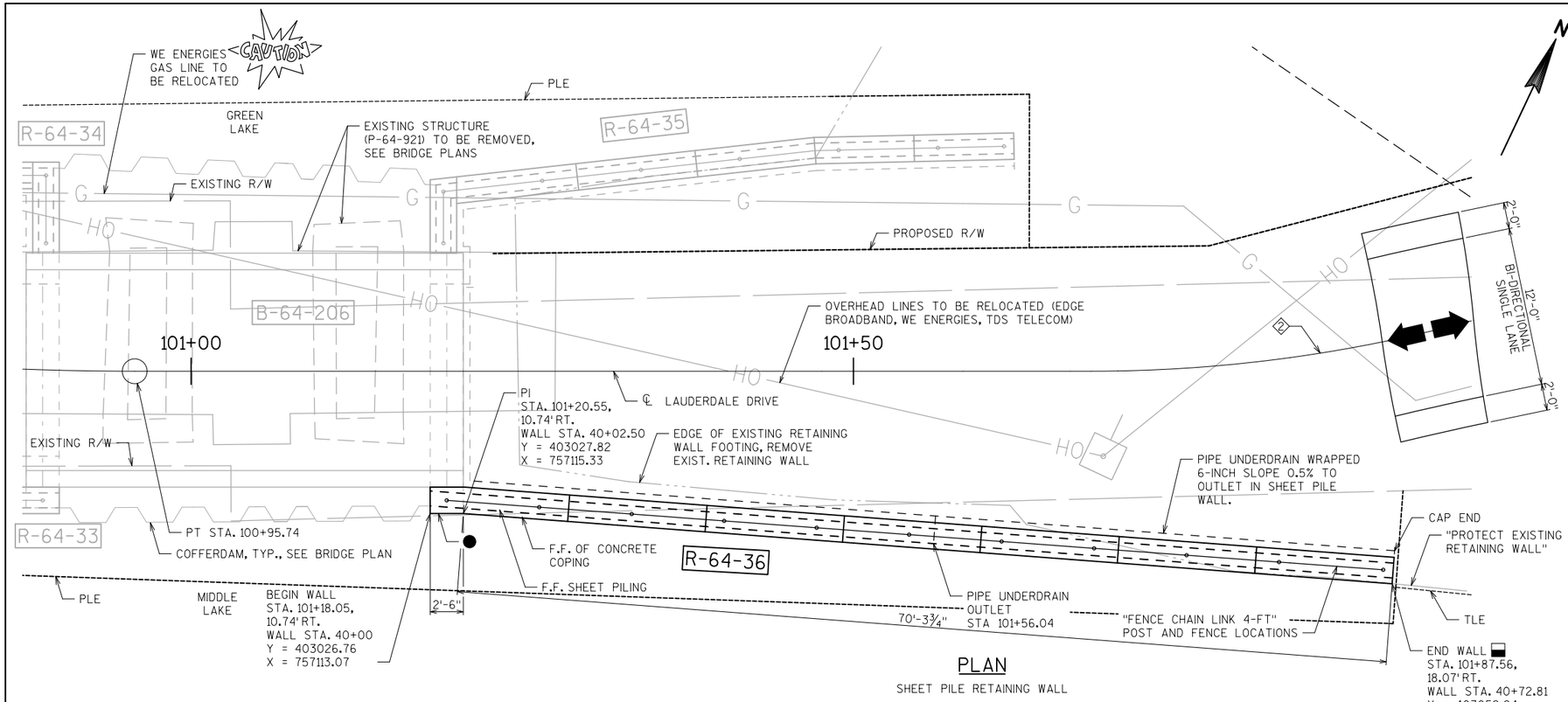
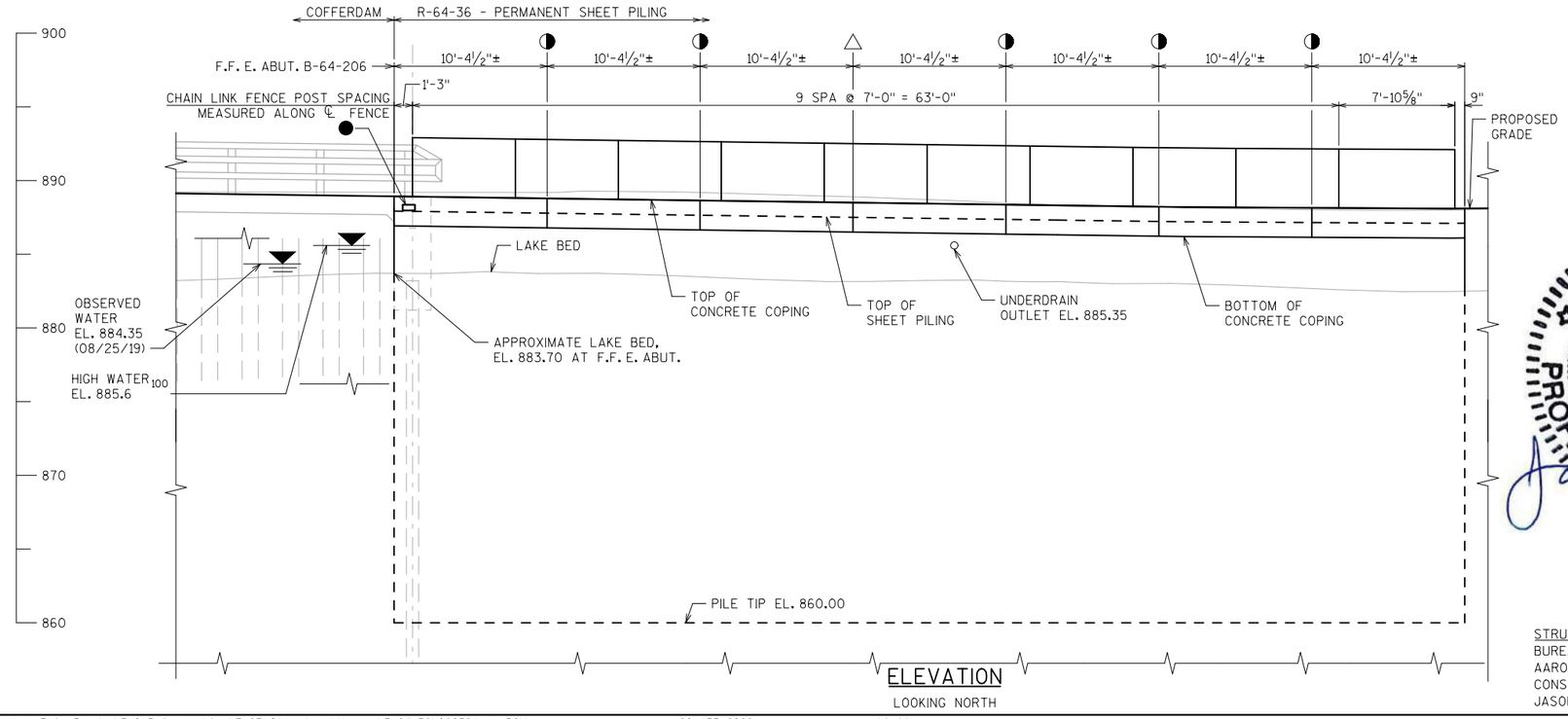


PLAN

SHEET PILE RETAINING WALL



ELEVATION

LOOKING NORTH

DESIGN DATA

LIVE LOAD:
LIVE LOAD SURCHARGE 240 PSF

MATERIAL PROPERTIES:
CONCRETE MASONRY RETAINING WALLS:
COPING.....f'c = 3,500 P.S.I.
SHEET PILE RETAINING WALLS:
PERMANENT STEEL SHEET PILING (ASTM A328).....fy = 39,000 P.S.I.

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

THE MIN. SECTION MODULUS FOR THE STEEL PILING SHALL BE 22.3 IN^3/FT.

HYDRAULIC DATA

FLOW NOT APPLICABLE. THIS IS A EQUALIZED STRUCTURE.

100 YEAR FREQUENCY
$HW._{100}$ = EL. 885.6 (FIS)
DRAINAGE AREA = N/A
ROADWAY OVERTOPPING = N/A
$HW._{100}$ IS BASED ON WALWORTH COUNTY FLOOD INSURANCE STUDY DATED SEPTEMBER 3, 2014

2 YEAR FREQUENCY
$HW._2$ = EL. 885.0

CURVE DATA

◇2 P.I. = 102+15.06
Y = 403077.856
X = 757196.232
Δ = 46°21'24"
D = 52°05'13"
T = 47.10'
L = 89.00'
R = 110.00'
P.C. STA. = 101+67.96
P.T. STA. 102+56.96

TRAFFIC DATA

LAUDERDALE DRIVE
A.A.D.T. = 140 (2022)
A.A.D.T. = 140 (2042)
R.D.S. = 25 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. GENERAL NOTES & QUANTITIES
3. WALL DETAILS
4. COPING REINFORCEMENT
5. CHAIN LINK FENCE DETAILS
6. SUBSURFACE EXPLORATION

NOTES

1. WALL LENGTH IS MEASURED ALONG THE F.F. OF CONCRETE COPING.
2. TEMPORARY PEDESTRIAN BRIDGE AND CONSTRUCTION CAUSEWAYS NOT SHOWN, SEE ROADWAY PLANS.

LEGEND

- FOR TIE-IN DETAILS WITH EXISTING RETAINING WALL, SEE "WALL DETAILS" SHEET
- NAME PLATE LOCATION, SEE "WALL DETAILS" SHEET
- VERTICAL CONTRACTION JOINT, SEE "WALL DETAILS" SHEET. LOCATIONS ARE APPROXIMATE AND ARE TO BE DETERMINED BY THE CONTRACTOR.
- VERTICAL EXPANSION JOINT, SEE "WALL DETAILS" SHEET. LOCATIONS ARE APPROXIMATE AND ARE TO BE DETERMINED BY THE CONTRACTOR.
- ◇ CURVE NUMBER

WISCONSIN
JASON R. SADOWSKI
E-38660
BROOKFIELD, WI
PROFESSIONAL ENGINEER
4/27/2022

STRUCTURE DESIGN CONTACTS
BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
JASON SADOWSKI (414) 751-9982

NO.	DATE	REVISION	BY

Michael Baker INTERNATIONAL
MICHAEL BAKER INTERNATIONAL
250 E. WISCONSIN STREET
SUITE 1725
MILWAUKEE, WI 53202

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 04/27/22
CHIEF STRUCTURES DESIGN ENGINEER DATE

STATE PROJECT NUMBER
3839-00-70

STRUCTURE R-64-36

RETAINING WALL AT SE CORNER OF LAUDERDALE DRIVE OVER GREEN LAKE

COUNTY	TOWN ~~CITY/VILLAGE~~
WALWORTH	LA GRANGE

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
GZ	MJM	TJN/DRH	JRS

GENERAL PLAN

SHEET 1 OF 6
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STATE PROJECT NUMBER

3839-00-70

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL
206.3000.04	EXCAVATION FOR STRUCTURES RETAINING WALLS R-64-36	LS	1
209.0300.S.01	BACKFILL COARSE AGGREGATE SIZE NO. 1	CY	4
210.1500	BACKFILL STRUCTURE TYPE A	TON	61
502.3200	PROTECTIVE SURFACE TREATMENT	SY	65
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	11
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,070
506.3008	WELDED STUD SHEAR CONNECTORS 5/8X5-INCH	EACH	8
512.0500	PILING STEEL SHEET PERMANENT DELIVERED	SF	1,943
512.0600	PILING STEEL SHEET PERMANENT DRIVEN	SF	1,943
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	3
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	73
616.0204	FENCE CHAIN LINK 4-FT	LF	73
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	34
645.0130	GEOTEXTILE TYPE R	SY	1
SPV.0060.01	PROTECT EXISTING RETAINING WALL	EACH	1
	NON-BID ITEMS		
	FILLER	SIZE	½ " & ¾ "
	NAME PLATE	EACH	1

GEOMETRY TABLE

WALL STATION	℄ LAUDERDALE DRIVE STATION	OFFSET TO F.F. WALL	TOP OF CONCRETE CAP ELEV.	TOP OF STEEL SHEET PILING ELEV.*	APPROXIMATE EXISTING LAKE BED ELEV.	BOTTOM OF SHEET PILE ELEV.
40+00.00	101+18.05	10.74' RT.	889.07	888.07	883.70	860.00
40+02.50	101+20.55	10.74' RT.	889.04	888.04	883.69	860.00
40+10.00	101+28.03	11.31' RT.	888.63	887.63	883.69	860.00
40+20.00	101+38.00	12.06' RT.	888.31	887.31	883.51	860.00
40+30.00	101+47.97	12.82' RT.	887.98	886.98	883.15	860.00
40+40.00	101+57.94	13.57' RT.	887.61	886.61	883.23	860.00
40+50.00	101+67.91	14.33' RT.	887.22	886.22	883.01	860.00
40+60.00	101+76.67	15.47' RT.	886.80	885.80	882.78	860.00
40+70.00	101+85.21	17.40' RT.	886.26	885.26	882.47	860.00
40+72.81	101+87.56	18.07' RT.	886.09	885.09	882.49	860.00

* TOP OF SHEET PILING ELEV. BASED ON 1'EMBEDMENT INTO CONCRETE CAP

SHEET PILE SOIL PARAMETERS

LAYER DEPTH/LOCATION	SOIL LAYER DESCRIPTION	TOTAL UNIT WEIGHT (PCF)	FRICTION ANGLE (LONG-TERM DRAINED CONDITION) (DEGREES)
0.0 TO 3.0 FEET	SOFT COHESIVE	105	25
3.0 TO 6.0 FEET	STIFF COHESIVE	120	29
6.0 TO 13.5 FEET	MEDIUM DENSE GRANULAR	120	32
13.5 TO 18.5 FEET	LOOSE GRANULAR	105	28
18.5 TO 93.5 FEET	MEDIUM DENSE GRANULAR	120	32
93.5 TO 105.0 FEET	DENSE GRANULAR	125	36

SHEET PILE WALL GLOBAL STABILITY EVALUATION

LOCATION	FACTOR OF SAFETY (FOS)		CAPACITY DEMAND RATIO (CDR) [1,2] = Φ * FOS
	BISHOP (CIRCULAR SLIP SURFACE)		
	DRAINED	UNDRAINED	
R-64-36	2.25	2.13	1.60

1. FOS VALUES BASED ON LIMITING EQUILIBRIUM METHODS OF ANALYSIS.
2. Φ = RESISTANCE FACTOR = 0.75 PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 11.6.2.3.
3. BASED ON 12'EMBEDMENT BELOW GROUND AT F.F.

BENCH MARKS

NO.	NORTHING (Y)	EASTING (X)	DESCRIPTION	ELEV.
1984	402986.6170	756942.3110	⅜" SPIKE IN 5" WOOD POST	898.36
2040	403059.9560	757198.4590	CORNER OF CONCRETE WALL, 1' EAST OF DOCK, ADDRESS W5308	887.21

NOTE: FOR BENCHMARK LOCATIONS IN PLAN VIEW, SEE ROADWAY PLANS

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

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

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR THE STRUCTURE.

PROTECT THE EXISTING RETAINING WALLS ADJACENT TO NEW CONSTRUCTION AND REMOVAL WORK IN ACCORDANCE WITH BID ITEM "PROTECT EXISTING RETAINING WALL".

PAINTING OF SHEET PILING AS STATED IN STANDARD SPECIFICATION 5.12.3.3 IS NOT REQUIRED.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS.

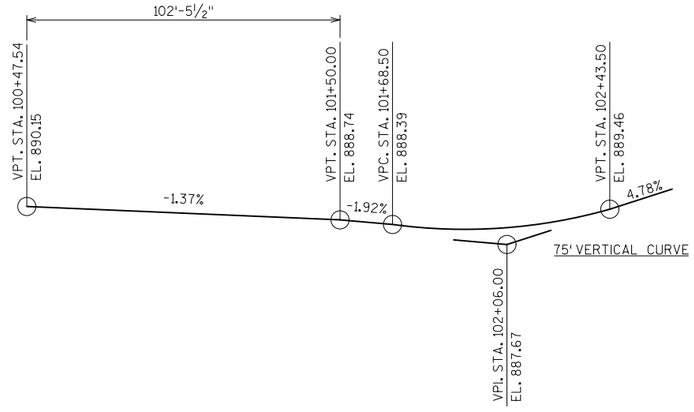
CONSTRUCTION ACCESS WILL BE PROVIDED VIA A CAUSEWAY SOUTH OF THE BRIDGE. FOR DETAILS AND PAY ITEMS, SEE ROADWAY PLANS.

REMOVAL OF THE EXISTING BRIDGE (P-64-921) AND THE ASSOCIATED RETAINING WALLS IS INCLUDED AS PAY ITEM AS PART OF THE B-64-206 QUANTITIES.

COORDINATE RETAINING WALL CONSTRUCTION WITH REMOVAL OF THE EXISTING BRIDGE (P-64-921) AND CONSTRUCTION OF THE NEW BRIDGE (B-64-206).

THE PLAN QUANTITY FOR THE BID ITEM "PILING STEEL SHEET PERMANENT DELIVERED" AND "PILING STEEL SHEET PERMANENT DRIVEN" IS BASED ON THE AREA OF WALL FROM THE TOP OF SHEET PILING WITH AN ASSUMED 1' EMBEDMENT INTO THE CONCRETE CAP TO THE BOTTOM OF SHEET PILE.

ALL HOLES CUT INTO WALL FOR PIPE UNDERDRAIN OUTLET OR CONCRETE COPING REINFORCEMENT TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL PERMANENT DRIVEN".



PROFILE GRADE LINE - LAUDERDALE DRIVE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-36

DRAWN BY TJN | PLANS CK'D. JRS

GENERAL NOTES & QUANTITIES

SHEET 2 OF 6

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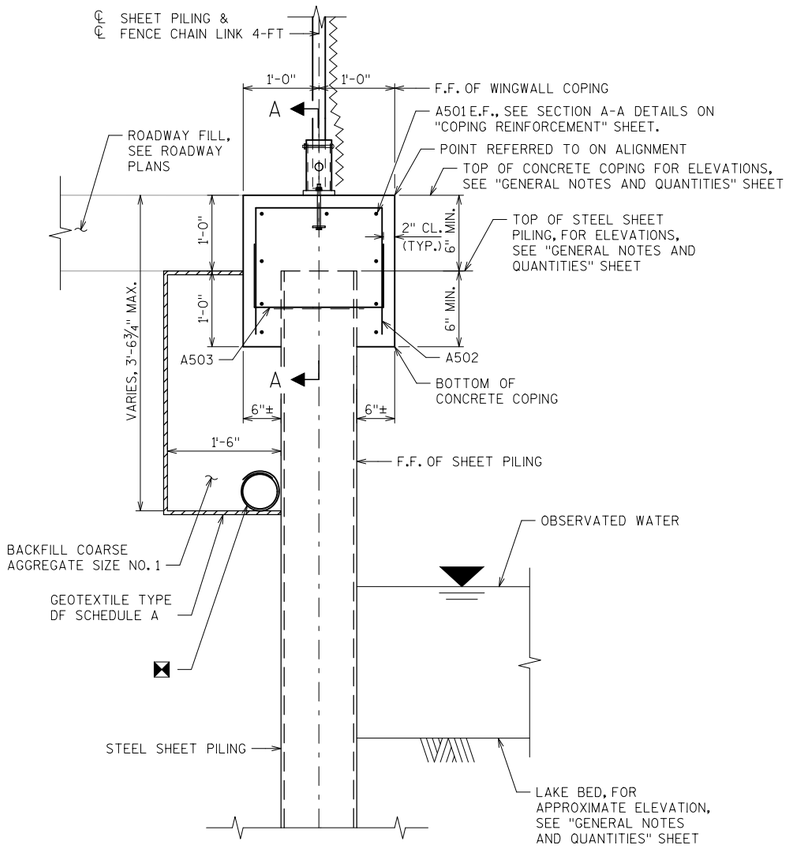
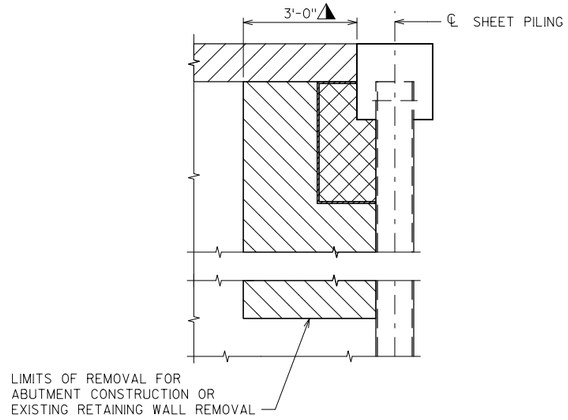
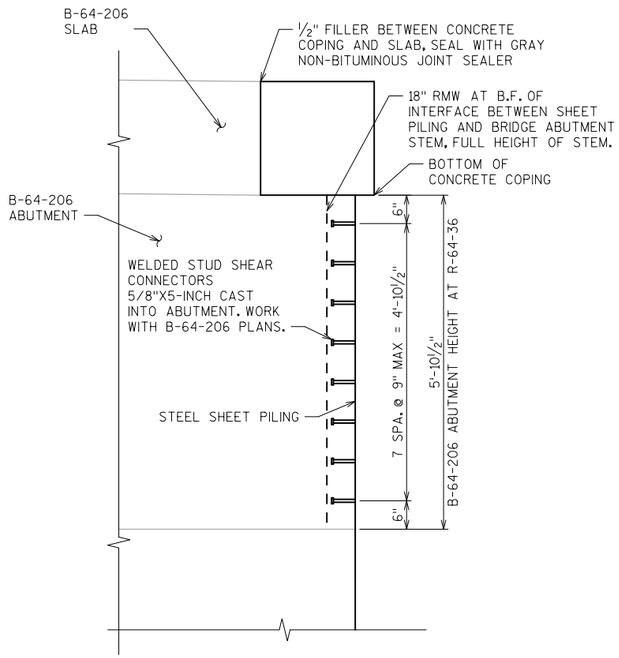


SECTION THRU WALL

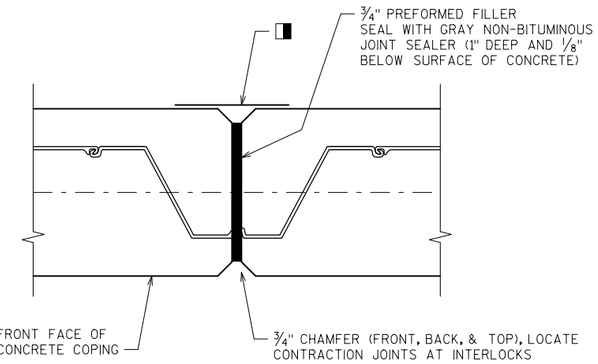


WALL BACKFILL DETAIL



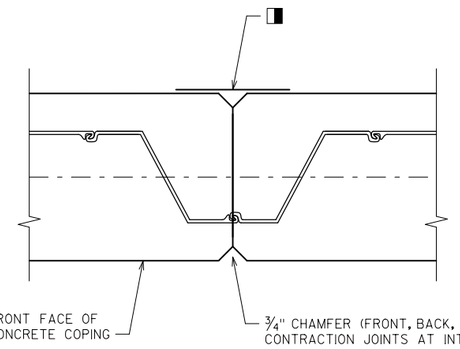
DETAIL AT BRIDGE ABUTMENT

ABUT. REINF. NOT SHOWN FOR CLARITY



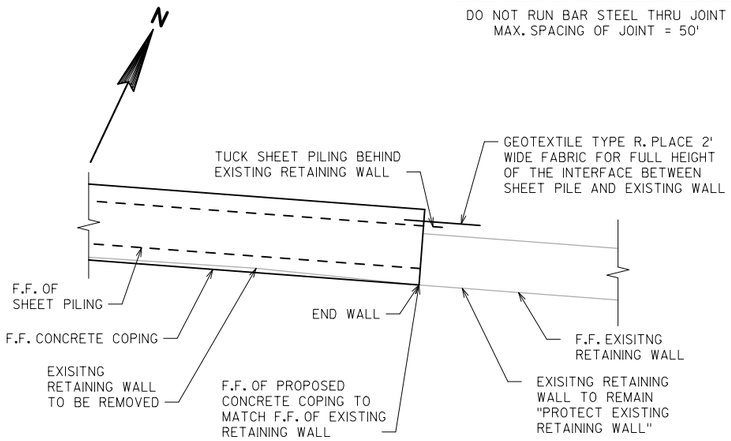
COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT
MAX. SPACING OF JOINT = 50'

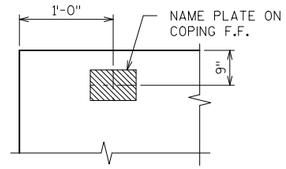


COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT
MAX. SPACING OF JOINT = 12'



END OF WALL DETAIL



NAME PLATE LOCATION

LOOKING NORTH AT START OF WALL

LEGEND

- BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. OUTLET AT 101+56.04.
- 18" RUBBERIZED MEMBRANE WATERPROOFING TO BE APPLIED TO CONCRETE COPING ALONG BACK FACE. EXTEND FROM TOP OF CONCRETE COPING TO BOTTOM OF CONCRETE COPING ALONG BACK FACE.
- ROADWAY FILL, SEE ROADWAY PLANS
- BACKFILL STRUCTURE TYPE A
- BACKFILL COARSE AGGREGATE SIZE NO. 1

NOTE

1. PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO ALL FACES OF THE CONCRETE COPING, INCLUDING THE TOP, SIDES, AND UNDERSIDES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-36

DRAWN BY TJN | PLANS CK'D. JRS

WALL DETAILS

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STATE PROJECT NUMBER
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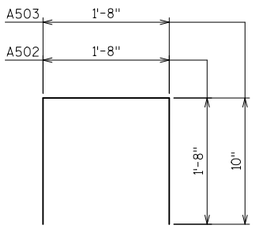
BILL OF BARS

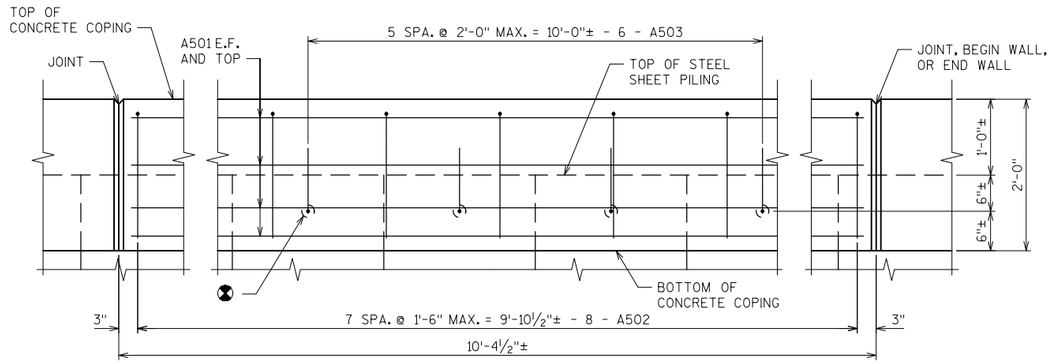
TOTAL COATED = 1,070 LBS

BAR MARK	NO. REQ'D.	LENGTH	COAT	STAINLESS STEEL	BENT	BAR SERIES	LOCATION
A501	63	10'-0"	X				HORIZONTAL (TYPICAL)
A502	56	4'-9"	X		X		CAP TIES
A503	42	3'-1"	X		X		CAP TIES THROUGH PILING

BAR QUANTITIES AND LENGTHS ARE BASED ON THE CONTRACTION JOINT LAYOUT PROVIDED ON THE GENERAL PLAN SHEET. IF THE CONTRACTOR MODIFIES THE CONTRACTION JOINT LAYOUT, THE BAR TABLE SHALL BE MODIFIED BY THE CONTRACTOR AS REQUIRED. PAYMENT SHALL BE BASED ON THE WEIGHTS CALCULATED FROM THE ABOVE TABLES.



A502, A503



SECTION A-A

TYPICAL BETWEEN JOINTS, FENCE NOT SHOWN
BASED ON ASSUMED JOINT LOCATIONS.
CONTRACTOR SHALL DETERMINE FINAL JOINT LOCATIONS.

LEGEND

℄ OF 2"± DIA. FIELD CUT HOLE FOR A503 BARS.
ONE HOLE PER PILE SECTION AT 2'-0" MAX. SPACING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-36

DRAWN BY DRH | PLANS CK'D. JRS

COPING REINFORCEMENT

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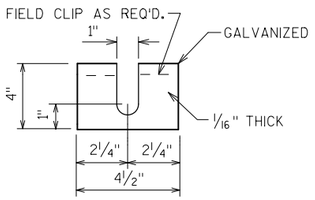
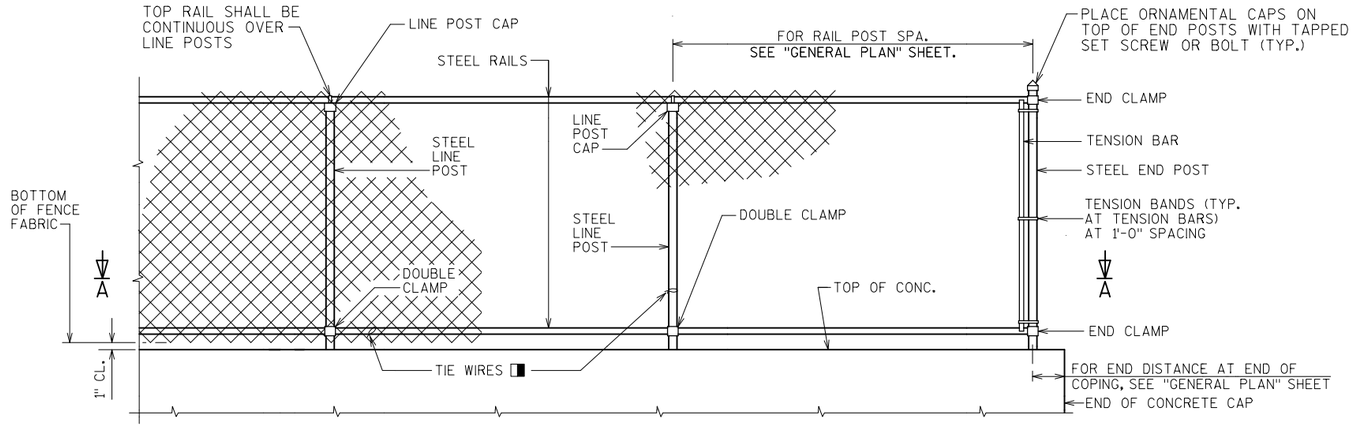
FENCE MEMBER SIZE & WEIGHT

STEEL FENCE MEMBER	OUTSIDE DIAMETER (INCHES)	WEIGHT (LB/FT)
RAILS	1.660	2.27
END POST	2.875	5.80
OVERHANG POST	2.875	5.80
LINE POST	2.375	3.65
POST SLEEVE	4.000	9.12



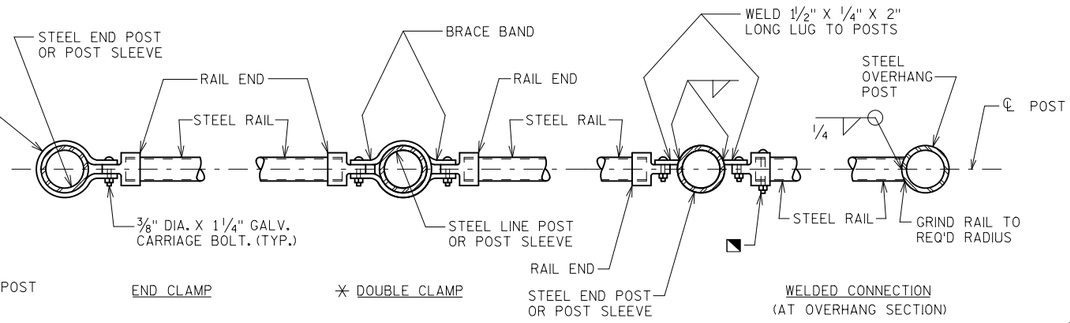
POST SHIM DETAILS

SHIMS REQUIRED ONLY WHEN END POSTS AND LINE POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST. USE WHERE REQUIRED FOR ALIGNMENT.

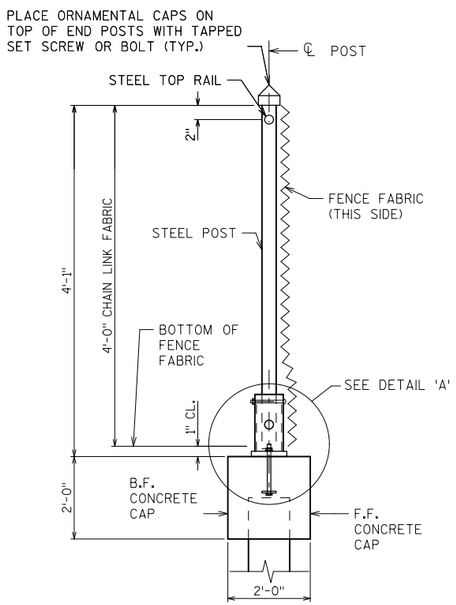


FENCE PART ELEVATION

VIEWING FABRIC SIDE

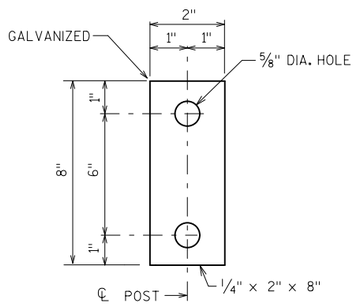


END CLAMP ✳ DOUBLE CLAMP WELDED CONNECTION (AT OVERHANG SECTION)



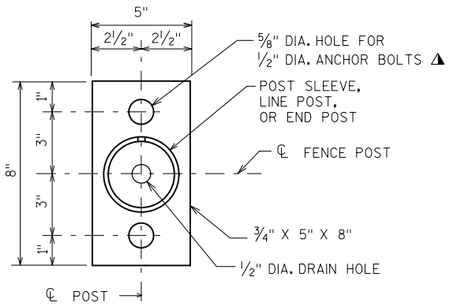
SECTION A-A

NOTE: PLACE ALL BOLT HEADS ON SIDE OF FENCE ADJACENT TO PEDESTRIANS

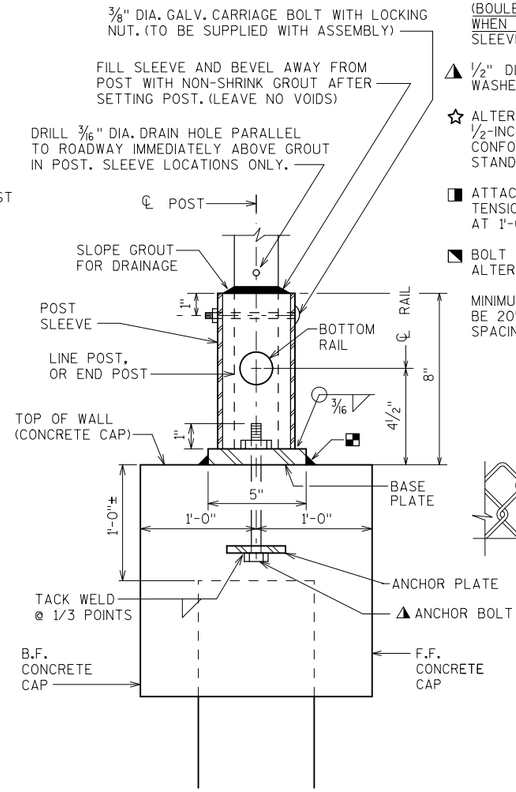


ANCHOR PLATE

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



BASE PLATE



DETAIL 'A'

UNIT SHALL BE GALVANIZED AFTER FABRICATION

NOTE: IN LIEU OF USING THE POST SLEEVE, THE FENCE POST MAY BE WELDED TO THE BASE PLATE.

NOTES

POSTS ARE TO BE SET VERTICAL.

ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED STEEL OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 4-FT."

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

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

BASE PLATES, ANCHOR PLATES AND SHIMS SHALL BE ASTM A709, GRADE 36.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

◪ CAULK AROUND PERIMETER OF BASE PLATE AND FILL PORTION OF SLOTTED HOLE AROUND ANCHOR BOLT IN SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

✳ ALTERNATE TO DOUBLE CLAMP: USE LINE RAIL CLAMP (BOULEVARD) OR 180° BRACE BAND, WHICH MAY BE USED WHEN THE POSTS ARE EITHER BOLTED TO THE POST SLEEVES OR DIRECTLY WELDED TO THE BASE PLATE.

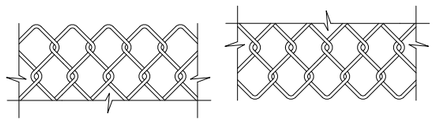
◭ 1/2" DIA. X 6 7/8" LONG GALVANIZED HEX BOLT WITH NUT & WASHER.☆

☆ ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS 1/2-INCH. EMBED 7" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

◨ ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

◥ BOLT RAIL TO RAIL END TO SECURE OVERHANG SECTION. ALTERNATE IS TO WELD RAIL DIRECTLY TO END POST.

MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". LOCATE SPLICES NEAR 1/4 POINT OF POST SPACING.



TOP DETAIL BOTTOM DETAIL

FENCE FABRIC

FENCE FABRIC WOVEN OF 9-GAGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE R-64-36

DRAWN BY	DRH	PLANS CK'D.	JRS

CHAIN LINK FENCE DETAILS

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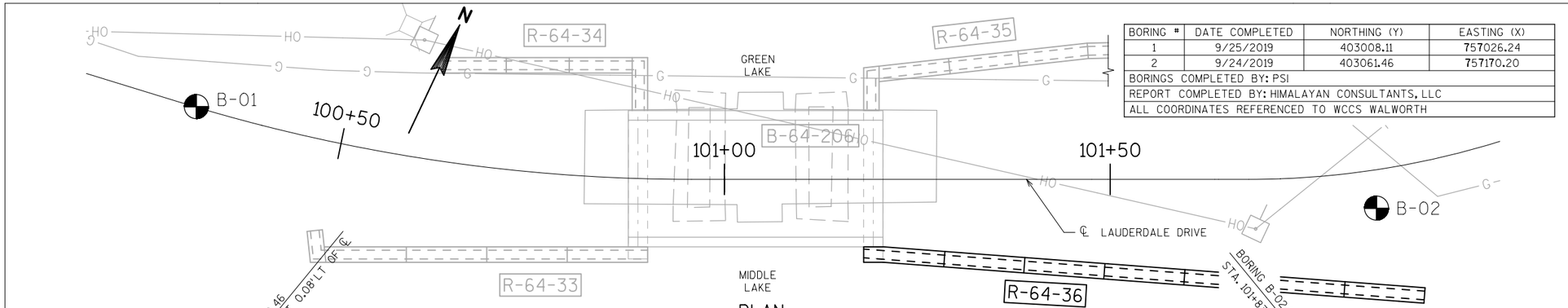
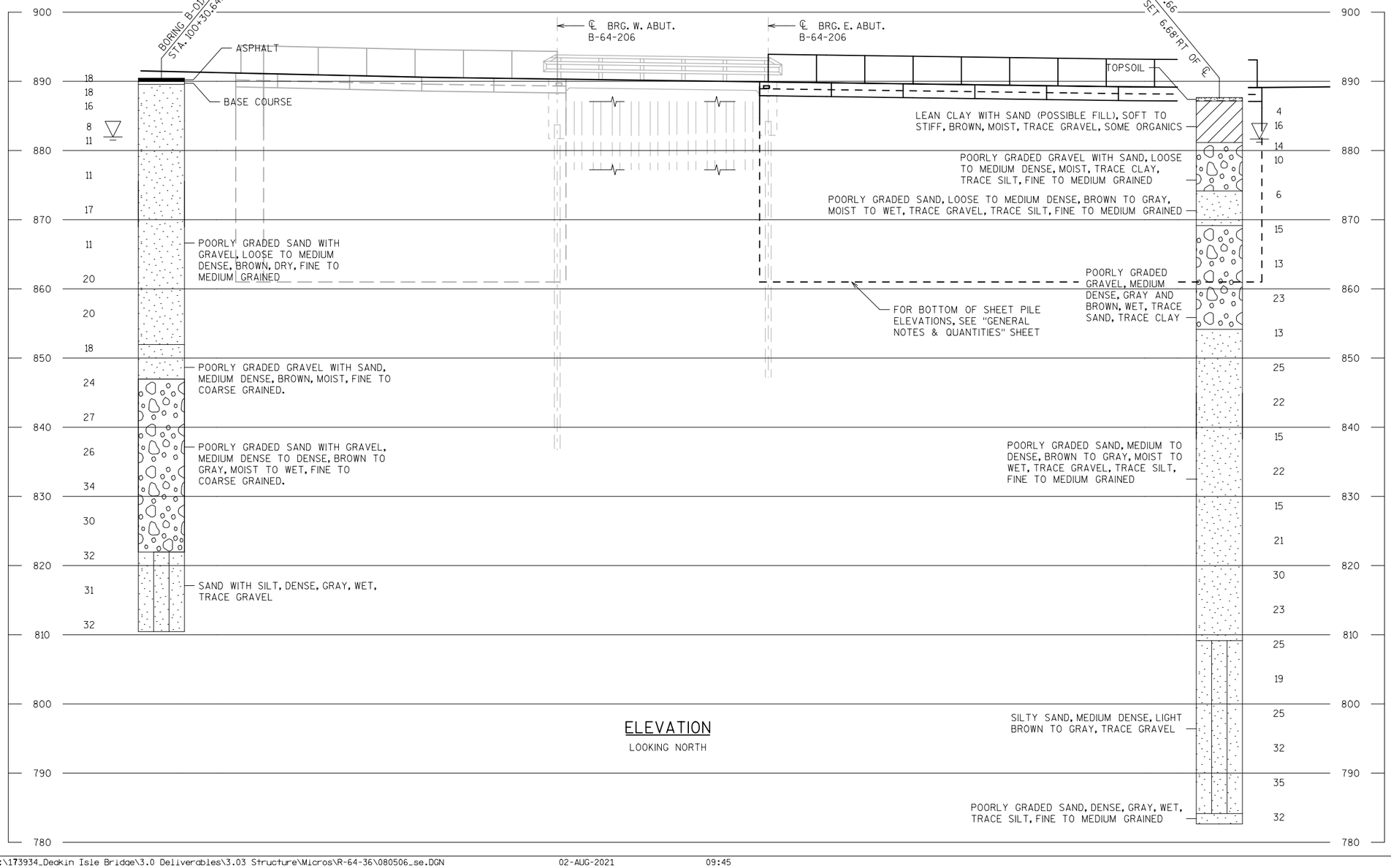
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	9/25/2019	403008.11	757026.24
2	9/24/2019	403061.46	757170.20
BORINGS COMPLETED BY: PSI			
REPORT COMPLETED BY: HIMALAYAN CONSULTANTS, LLC			
ALL COORDINATES REFERENCED TO WCCS WALWORTH			



PLAN



ELEVATION

LOOKING NORTH

STATE PROJECT NUMBER

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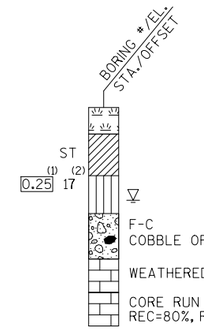
MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

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

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-64-36

DRAWN BY TJN | PLANS CK'D. JRS

SUBSURFACE EXPLORATION

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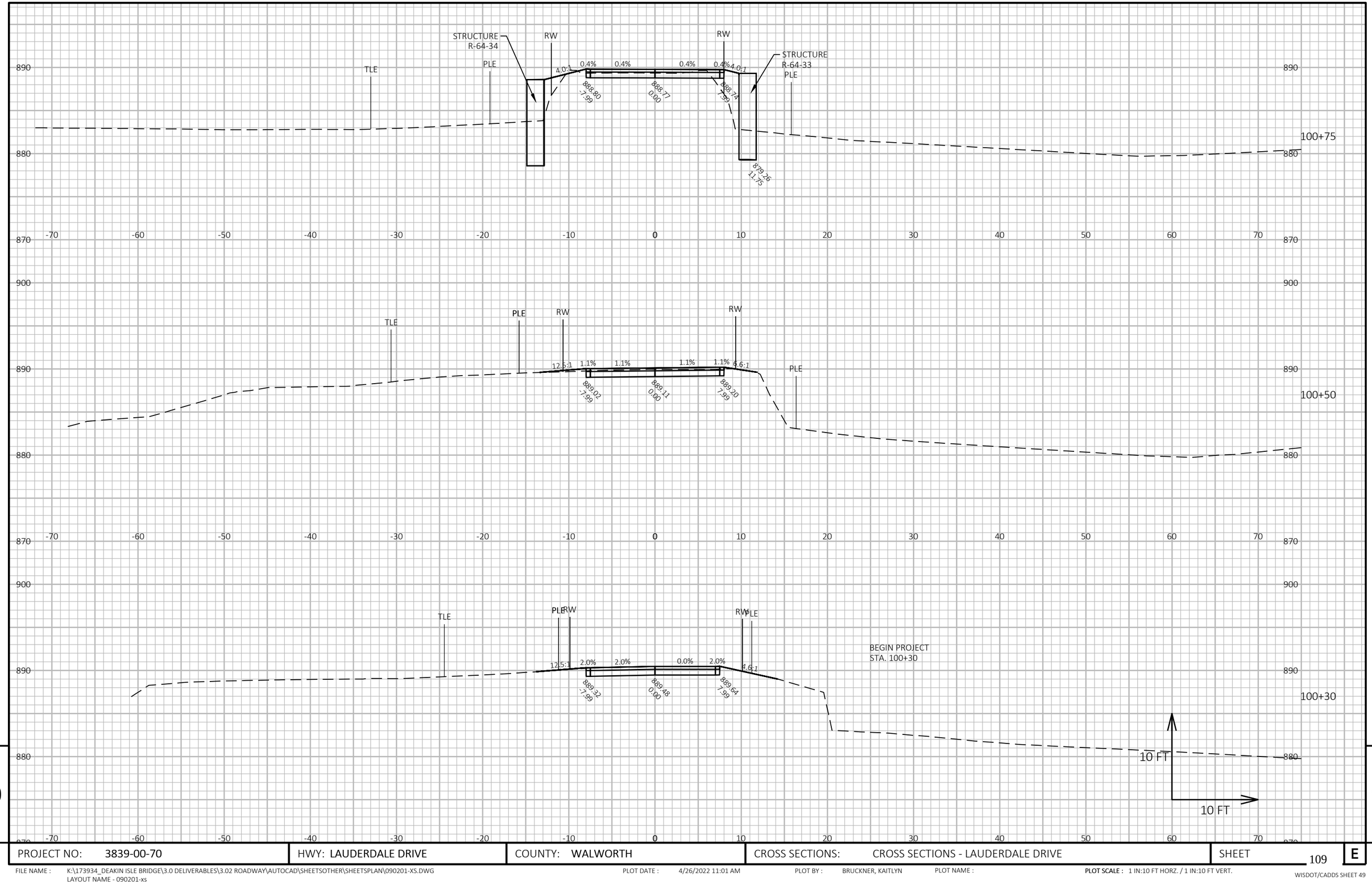
K:\173934_Deakin Isle Bridge\3.0 Deliverables\3.03 Structure\Micros\R-64-36\080506_se.DGN 02-AUG-2021 09:45

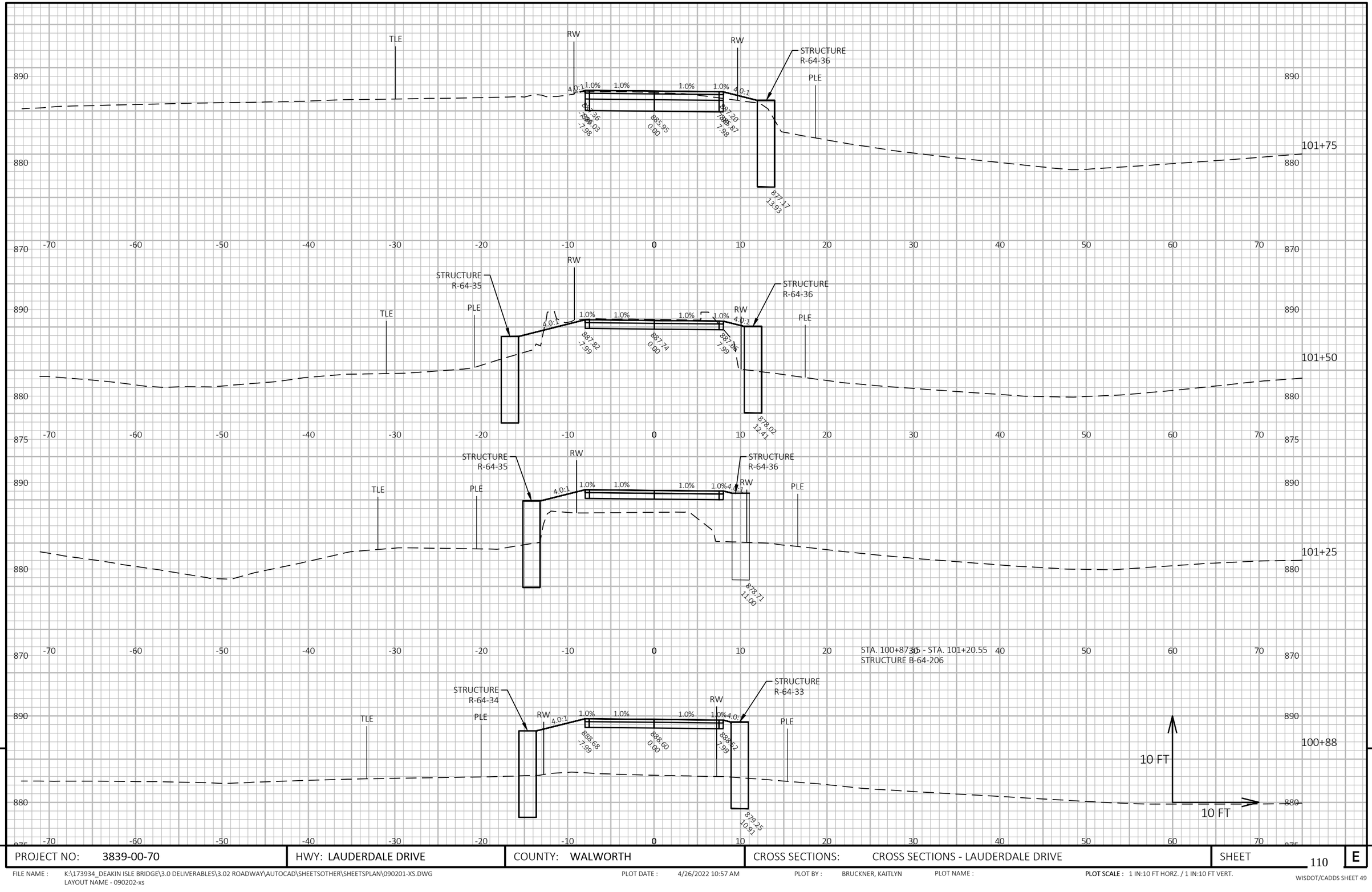


PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	CROSS SECTIONS: CROSS SECTIONS - LAUDERDALE DRIVE	SHEET 109	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090201-xs

PLOT DATE : 4/26/2022 11:01 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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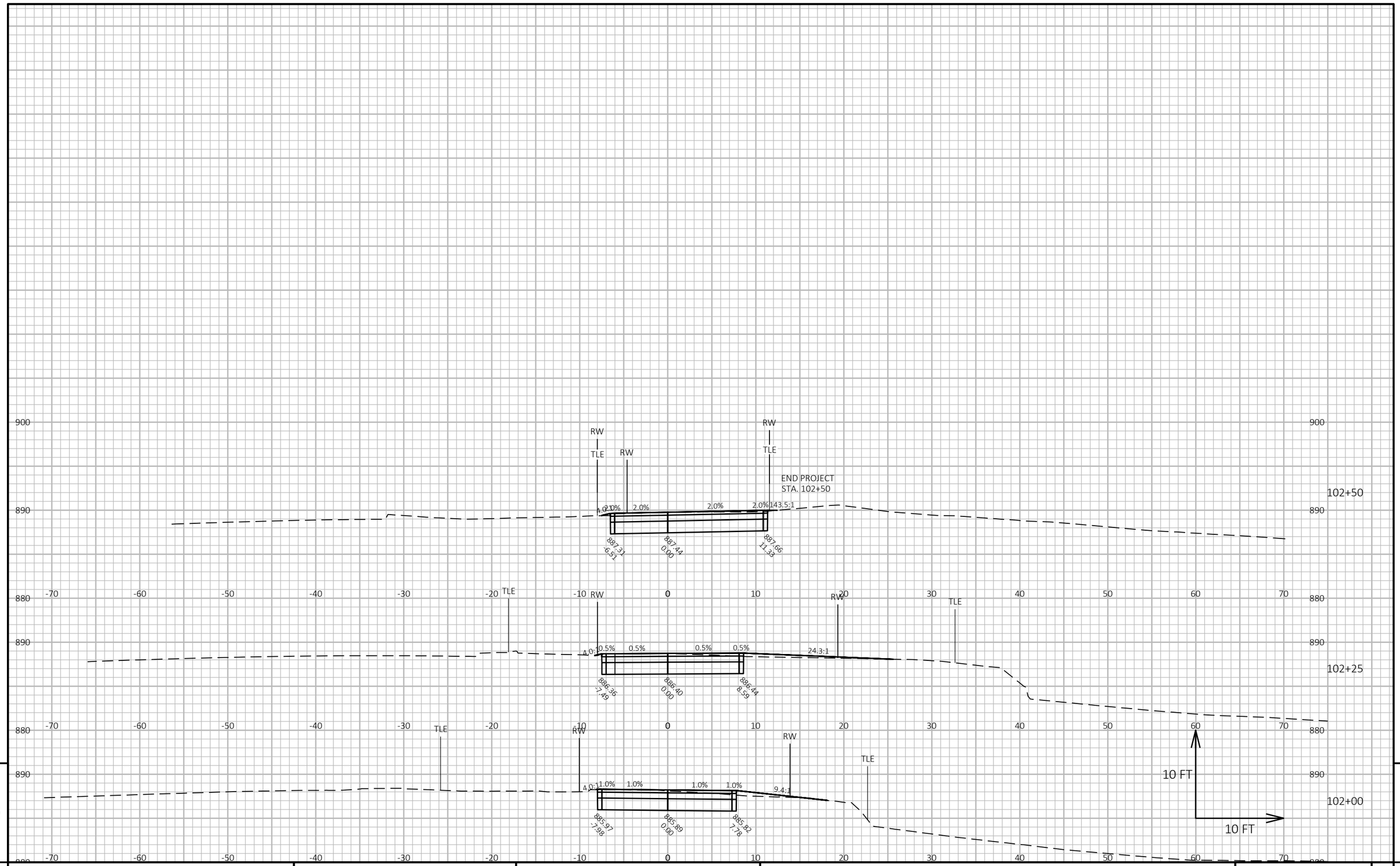
PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	CROSS SECTIONS: CROSS SECTIONS - LAUDERDALE DRIVE	SHEET 110	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090202-xs

PLOT DATE : 4/26/2022 10:57 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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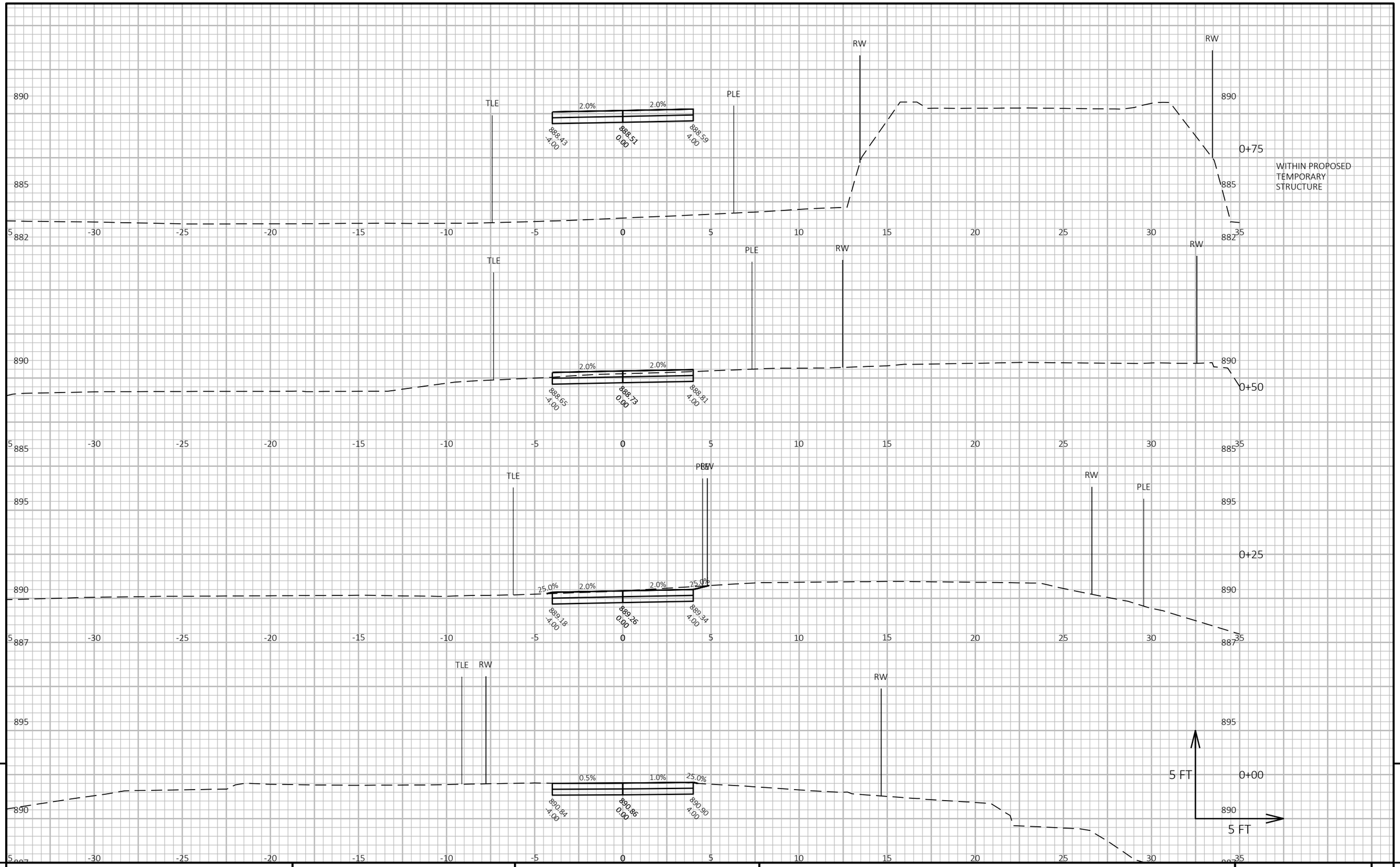
PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	CROSS SECTIONS: CROSS SECTIONS - LAUDERDALE DRIVE	SHEET 111	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090203-xs

PLOT DATE : 4/26/2022 10:57 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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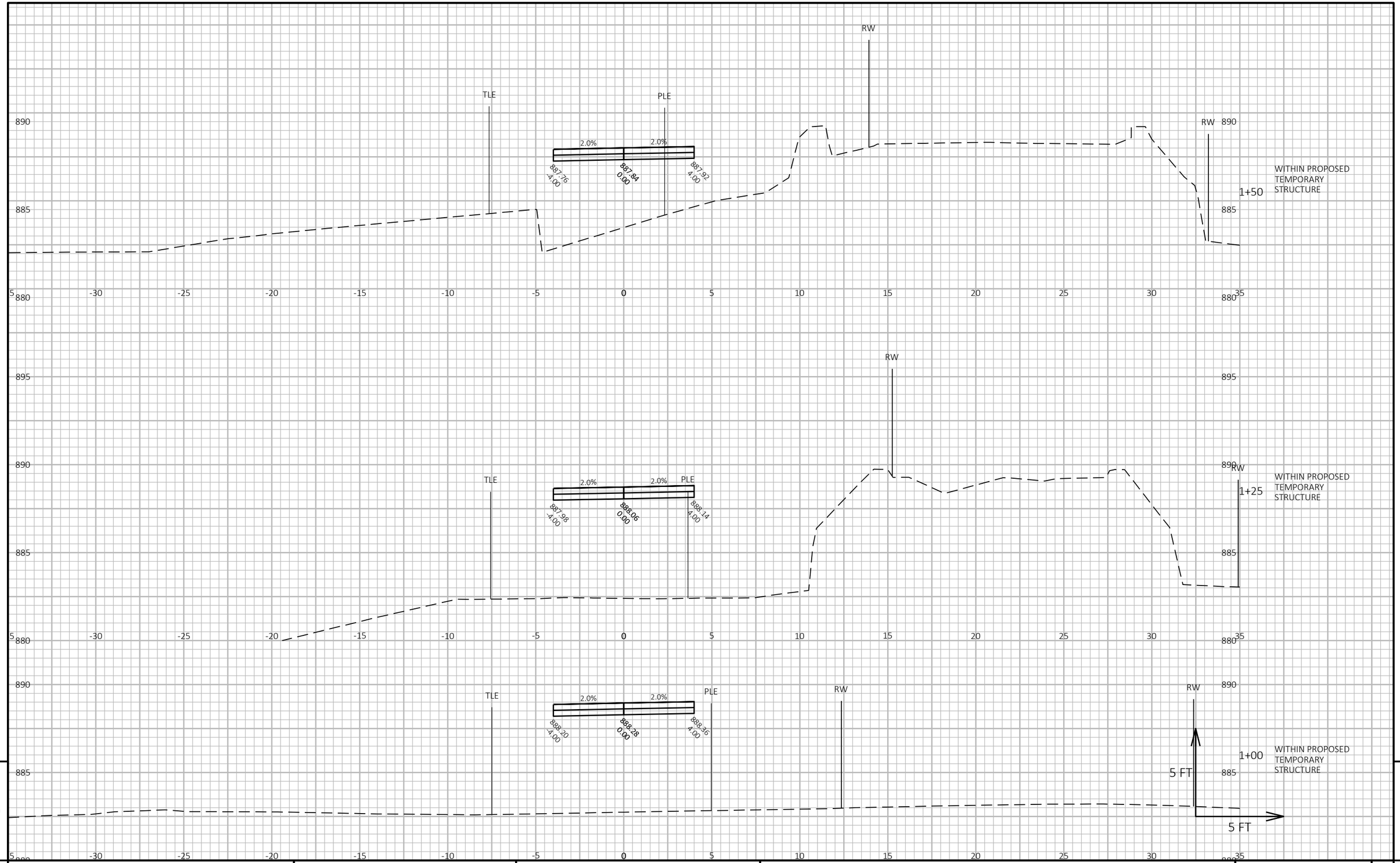
PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	CROSS SECTIONS: CROSS SECTIONS - TEMPORARY PEDESTRIAN SIDEWALK	SHEET 112	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\DESIGN\CORRIDORS\CRDR-CAUSEWAY.DWG
LAYOUT NAME - 090301-xs

PLOT DATE : 4/26/2022 10:58 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:5 FT HORZ. / 1 IN:5 FT VERT.

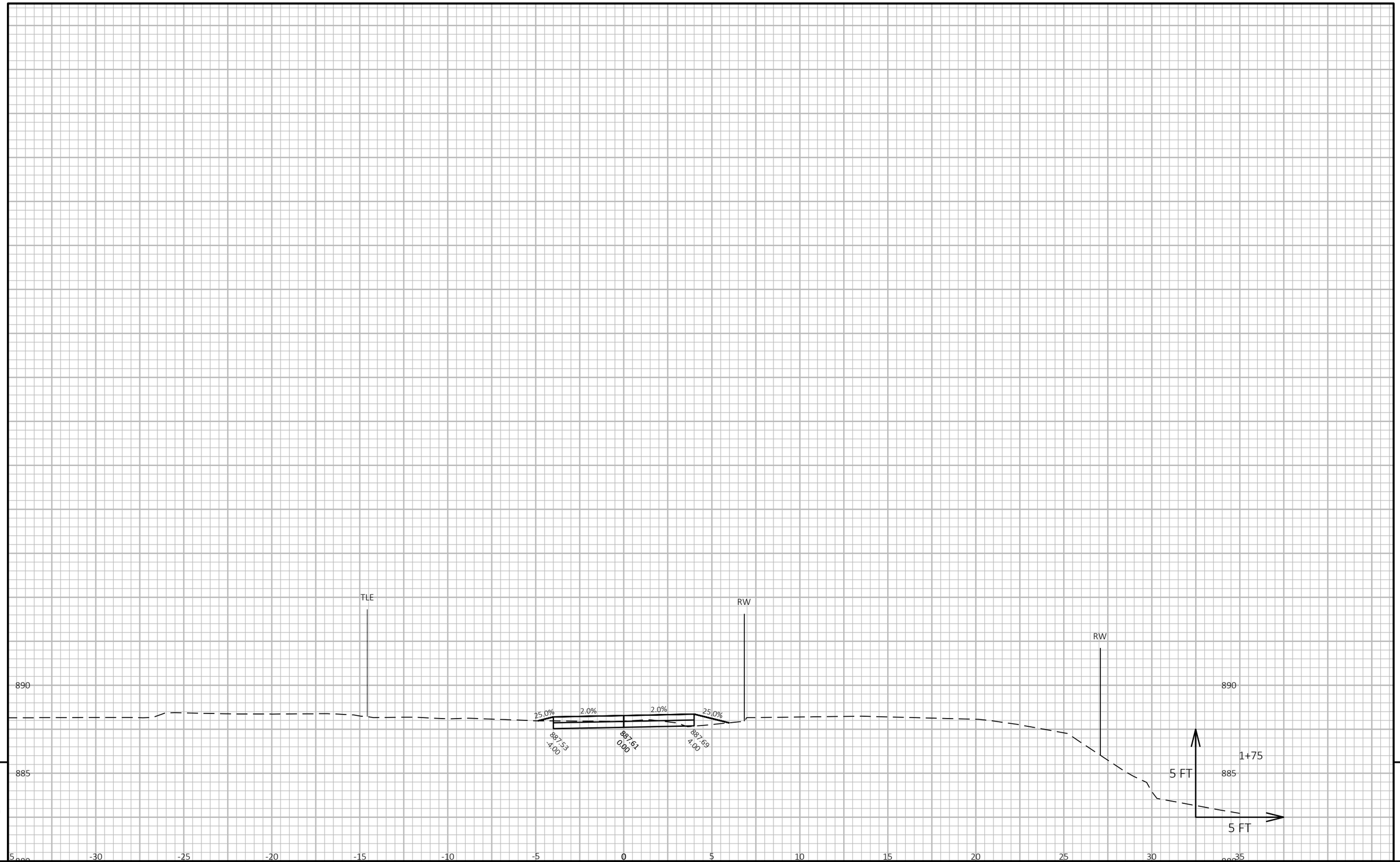
WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	CROSS SECTIONS: CROSS SECTIONS - TEMPORARY PEDESTRIAN SIDEWALK	SHEET 113	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\DESIGN\CORRIDORS\CRDR-CAUSEWAY.DWG
LAYOUT NAME - 090302-xs
PLOT DATE : 4/26/2022 10:58 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:5 FT HORZ. / 1 IN:5 FT VERT.
WISDOT/CADDS SHEET 49



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PROJECT NO: 3839-00-70	HWY: LAUDERDALE DRIVE	COUNTY: WALWORTH	CROSS SECTIONS: CROSS SECTIONS - TEMPORARY PEDESTRIAN SIDEWALK	SHEET 114	E

FILE NAME : K:\173934_DEAKIN ISLE BRIDGE\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\DESIGN\CORRIDORS\CRDR-CAUSEWAY.DWG
LAYOUT NAME - 090303-xs

PLOT DATE : 4/26/2022 10:58 AM PLOT BY : BRUCKNER, KAITLYN PLOT NAME : PLOT SCALE : 1 IN:5 FT HORZ. / 1 IN:5 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

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