

WKE

MAY 2024

PROJECT ID: 2718-00-73

WITH: 2718-00-78

12

COUNTY: WAUKESHA

WAUKESHA

ORDER OF SHEETS

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

TOTAL SHEETS = 54



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
 PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2718-00-73		
2718-00-78	WISC 2024327	1

C WAUKESHA, E MORELAND BLVD **C WAUKESHA, E MORELAND BLVD**
 BRIDGE OVER FOX RIVER B-67-248 BRIDGE OVER FOX RIVER B-67-205
LOCAL STREET **LOCAL STREET**
WAUKESHA **WAUKESHA**

STATE PROJECT NUMBER
2718-00-73

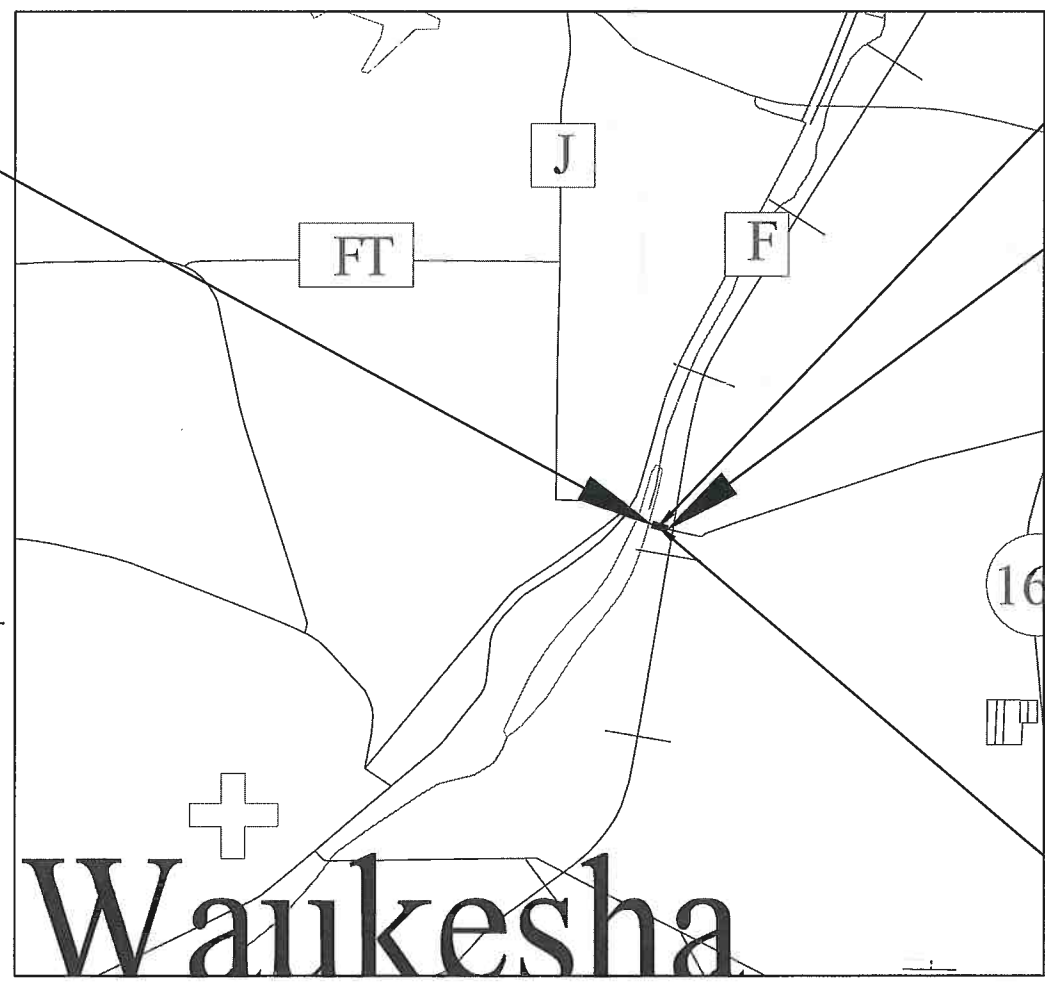
STATE PROJECT NUMBER
2718-00-78

BEGIN PROJECT
 STA 120+94.63'EB'
 Y=165,120.143
 X=685,784.989

STRUCTURE B-67-248
 STA 122+38.30 'WB'

END PROJECT
 STA 123+65.72'EB'

STRUCTURE B-67-205
 STA 122+38.30 'EB'



DESIGN DESIGNATION

A.A.D.T.	=	18,700 (2022)
A.A.D.T.	=	18,700 (2042)
D.H.V.	=	1,900
D.D.	=	51/49
T.	=	7.2%
DESIGN SPEED	=	25 MPH
ESALS	=	3,200,000

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
MARSH AREA	STORM SEWER
WOODED OR SHRUB AREA	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE

LAYOUT
 SCALE 0 0.5 MI
 TOTAL NET LENGTH OF CENTERLINE = 0.052 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), WAUKESHA 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 12B

ACCEPTED FOR
 CITY OF WAUKESHA
 DATE: 1/25/24
Ally Dames
 (Signature and Title of Official)

ORIGINAL PLANS PREPARED BY

ENGINEERING, INC
 Consultant Services

 VINCENT J. DIFRANCES
 E-45790
 MILWAUKEE
 WI
 PROFESSIONAL ENGINEER
Vince J. Difrances
 (Professional Engineer Signature)
 DATE: 2/1/2024

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 PREPARED BY
 Surveyor _____ JT ENGINEERING, INC.
 Designer _____ JT ENGINEERING, INC.
 Project Manager _____ JOSEPH JELACIC, P.E.
 Regional Examiner _____
 Regional Supervisor _____ BRIAN BOOTHBY, P.E.

APPROVED FOR THE DEPARTMENT
 DATE: 2/1/24
Joseph Jelacic
 (Signature)
 APPROVED BY: Joseph Jelacic, P.E.
 (Signature)
 E

UTILITIES CONTACTS

CITY OF WAUKESHA
WATER UTILITY
CHRIS WALTER, P.E.
115 DELAFIELD STREET
WAUKESHA, WI 53188
PHONE: (262) 409-4460 (O) / (262) 901-5886 (M)
EMAIL: CWALTER@WAUKESHA-WATER.COM

WE ENERGIES
ELECTRIC
ERIC KICKHAVER
333 W. EVERETT STREET, A279
MILWAUKEE, WI 53203
PHONE: 414-944-5917 (O); 414-588-7472 (M)
EMAIL: ERIC.KICKHAVER@WE-ENERGIES.COM

CITY OF WAUKESHA
TRAFFIC SIGNALS
DERRIN WOLFORD, P.E.
201 DELAFIELD STREET
WAUKESHA, WI 53188
PHONE: (262) 524-3590 (O) / (262) 349-5629 (M)
EMAIL: DWOLFORD@WAUKESHA-WI.GOV

WE ENERGIES
GAS/PETROLEUM
JOE DABLE
500 S. 116TH STREET
WEST ALLIS, WI 53214
PHONE: 414-944-5543 (O); 414-303-0310 (M)
EMAIL: JOE.DABLE@WE-ENERGIES.COM

CHARTER COMMUNICATIONS
COMMUNICATION LINE
NEAL LONG
1320 N. MARTIN LUTHER KING JR. DR
WAUKESHA, WI 53188
PHONE: (414)-277-4271 (O); (414)-277-7189 (M)
EMAIL: NEAL.LONG@CHARTER.COM OR
WIS.ENGINEERING@CHARTER.COM

CITY OF WAUKESHA
STREET LIGHTS & COMMUNICATION LINE
JEFF HERNKE
500 S. 116TH STREET
WEST ALLIS, WI 53214
PHONE: 262-524-3598 (O); 262-336-5742 (M)
EMAIL: JHERNKE@WAUKESHA-WI.GOV

ORDER OF SECTION 2 DETAIL SHEETS

- GENERAL NOTES
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
EROSION CONTROL
PAVEMENT MARKING
TRAFFIC CONTROL

WISCONSIN DNR LIAISON

CRAIG WEBSTER
SE REGION
141 NW BARSTOW ST
WAUKESHA, WI 53095
PHONE: (262) 574-2141
EMAIL: CRAIG.WEBSTER@WISCONSIN.GOV

CITY OF WAUKESHA CONTACT

CRAIG AUSEN, P.E.
CITY ENGINEER
201 DELAFIELD ST
WAUKESHA, WI 53188
PHONE: (262) 524-3589
EMAIL: CAUSEN@WAUKESHA-WI.GOV

WISCONSIN DEPARTMENT OF TRANSPORTATION
GEODETIC SERVICES

JACOB ROCKWEILER, P.E.
SURVEY & MAPPING
WORK PHONE: 608-243-5992
EMAIL: JACOB.ROCKWEILER@DOT.WI.GOV

GENERAL NOTES

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.
CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY OPERATIONS, OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.
NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.
RIGHT OF WAY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE.
THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER.
TOPSOIL SHALL BE PLACED 1-INCH BELOW THE TOP OF ADJACENT CONCRETE CURBS OR SIDEWALKS.
WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYERS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT APPROXIMATE LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S EROSION CONTROL IMPLEMENTATION PLAN (ECIP) AND APPROVED BY THE ENGINEER. MAINTAIN EROSION CONTROL MEASURES UNTIL SUCH A TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.
RESTRICT REMOVAL OF VEGETATIVE COVER AND EXPOSURE OF BARE GROUND TO THE MINIMUM NECESSARY TO COMPLETE CONSTRUCTION. RESTORATION/STABILIZATION OF DISTURBED AREAS SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS OR PROTECTED AND STABILIZED WITHIN 4 CALENDAR DAYS OF DISTURBANCE. TOPSOIL GRADED AREAS IMMEDIATELY AFTER GRADING IS COMPLETED. SEED, FERTILIZE, AND EROSION MAT TOPSOILED AREAS, AS DESIGNATED IN THE PLANS, WITHIN 4 CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL.
ALL DISTURBED AREAS WITHIN 200 FEET OF THE FOX RIVER SHALL BE TEMPORARY OR PERMANENTLY SEEDED AND COVERED WITH EROSION MAT WITHIN ONE CALENDAR DAY OF THE GROUND DISTURBING ACTIVITY. TEMPORARY SEED SHALL BE PLACED ON ALL SURFACES BEYOND THE SIDEWALK AND PREPARED BASE AGGREGATE.
PLACE EROSION MAT OVER ALL SEEDED AREAS WITHIN THE PROJECT.
PAVEMENT REMOVAL WILL BE TO THE NEAREST JOINT OR A SAWED EDGE WILL BE REQUIRED AS DIRECTED BY THE ENGINEER.
INLET ELEVATIONS MAY BE ADJUSTED BY THE ENGINEER TO FIT EXISTING FIELD CONDITIONS
THE PROPOSED SHOULDER WIDTH SHOWN IN THE TYPICAL SECTIONS ARE MINIMUM WIDTH. PERPETUATE EXISTING SHOULDERS THAT ARE WIDER THAN WHAT IS SHOWN IN THE TYPICAL SECTIONS.
THE CONTRACTOR'S PAVING OPERATION SHALL BE CONSISTENT WITH THE TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING, OR PARKING LANE.
SAWCUTS, AS SHOWN ON THE PLANS, ARE SUGGESTED LOCATIONS AND MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER TO BETTER SUIT FIELD CONDITIONS.
CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PAVING OR PIPE LAYING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAYS SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.
TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
PRIOR TO ORDERING DRAINAGE PIPES, THE CONTRACTOR SHALL FIELD VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN WITH THE ENGINEER.
BEARINGS SHOWN ON THE PLAN ARE TRUE BEARINGS.
BEARINGS SHOWN ON THE PLAN ARE GROUND BEARINGS TO THE NEAREST SECOND.
DO NOT DRIVE OR STORE EQUIPMENT, OR STORE CONSTRUCTION MATERIALS IN ENVIRONMENTALLY SENSITIVE AREAS, WETLANDS OR WATERWAYS.
DO NOT PLACE FERTILIZER 20 FEET NEAR WETLAND OR WATER BODY

RUNOFF COEFFICIENT TABLE

Table with columns for Land Use, Hydrologic Soil Group (A, B, C, D), and Slope Range (Percent). Rows include Row Crops, Median Stripturf, Side Slopeturf, Pavement (Asphalt, Concrete, Brick, Drives/Walks, Roofs, Gravel Roads/Shoulders).

TOTAL PROJECT AREA = 1.21 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.13 ACRES





PROJECT NO: 2718-00-73/78

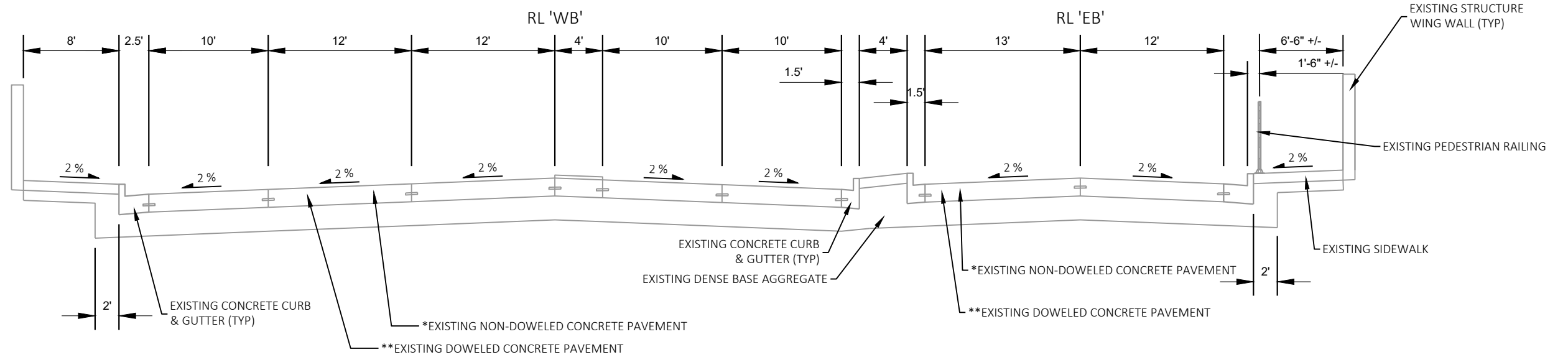
HWY: LOCAL ROAD - E MORELAND BLVD

COUNTY: WAUKESHA

PROJECT OVERVIEW

SHEET

E

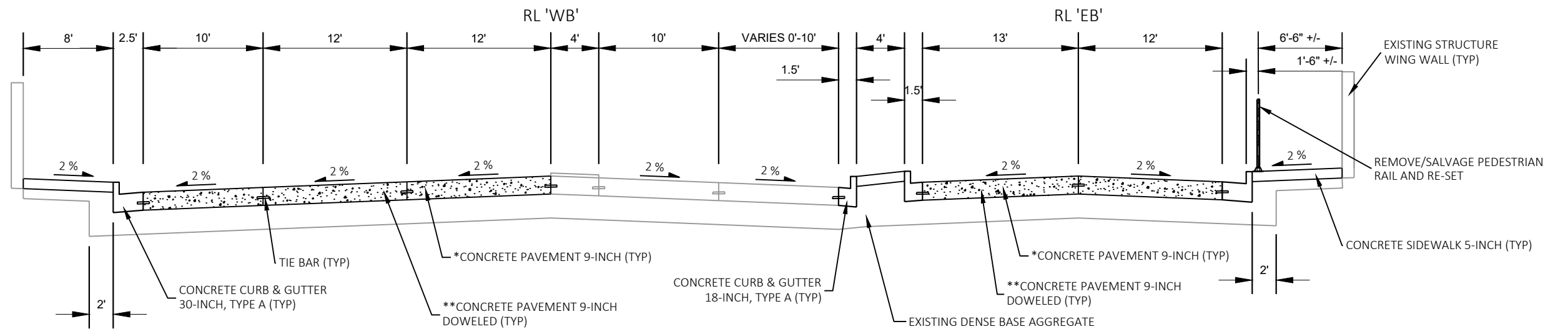


EXISTING TYPICAL SECTION
 *STA 120+94.63 'EB' TO 121+43.98 'EB'
 **STA 123+32.91 'EB' TO 123+65.72 'EB'

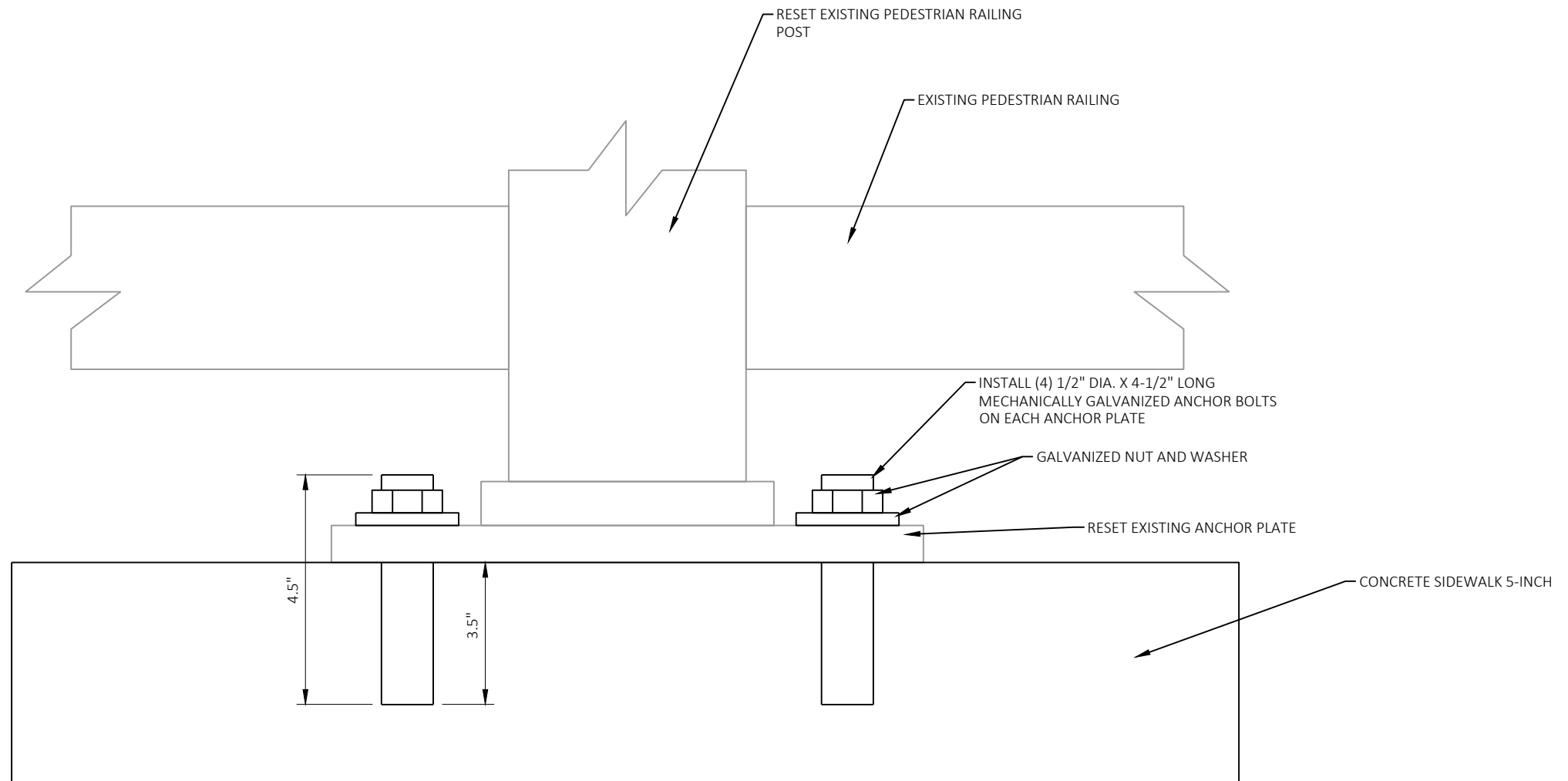
FINISHED TYPICAL SECTION NOTE:

FINISHED CONCRETE PAVEMENT IS SHOWN ACROSS LANES FOR A FINISHED VISUAL REFERENCE ONLY.

REPLACE CONCRETE PANELS AS INDICATED ON THE PLAN DETAIL SHEET ONLY OR AS DIRECTED BY THE ENGINEER.



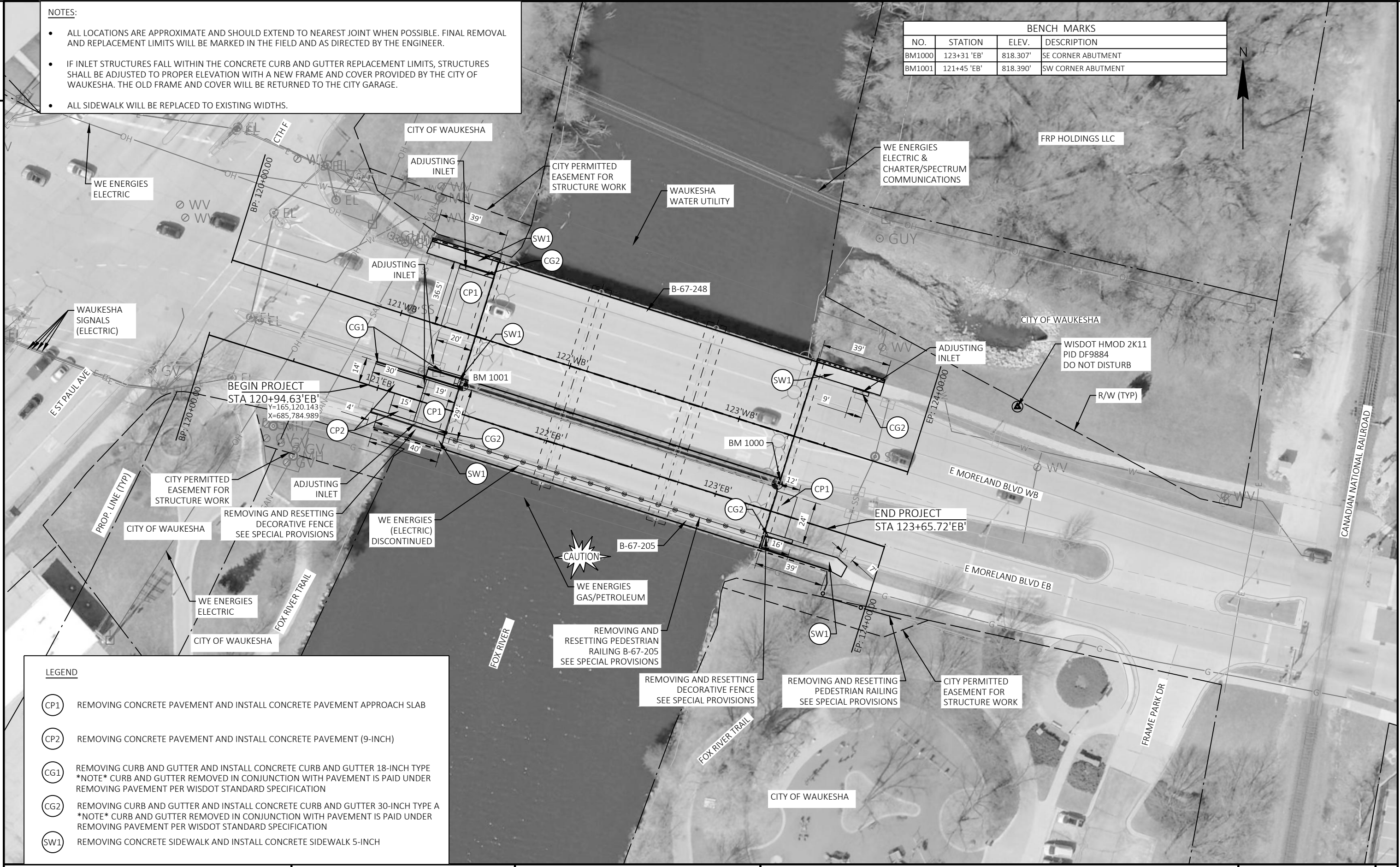
FINISHED TYPICAL SECTION
 *STA 120+94.63 'EB' TO 121+43.98 'EB'
 **STA 123+32.91 'EB' TO 123+65.72 'EB'



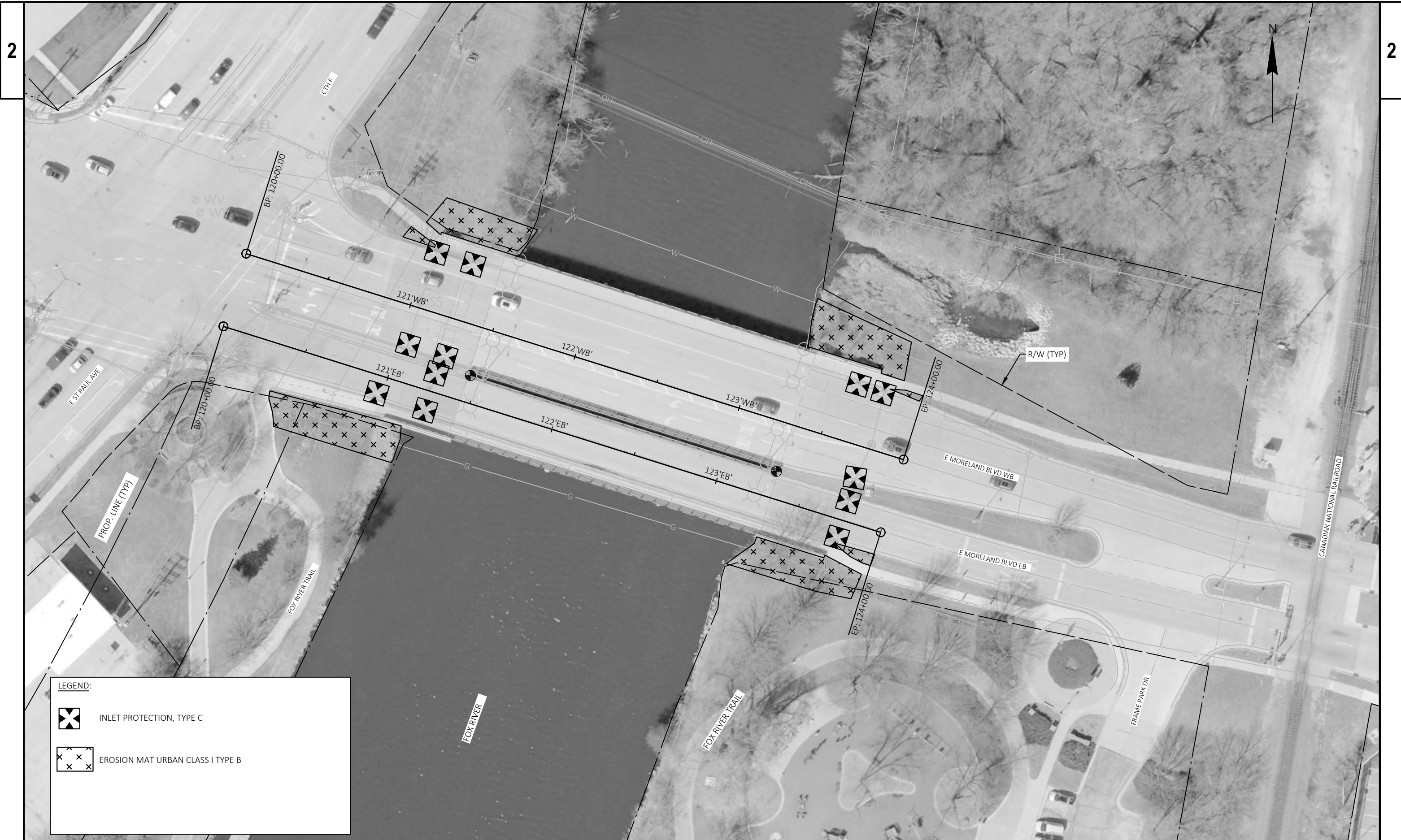
REMOVING AND RESETTING PEDESTRIAN RAILING
ON CONCRETE SIDEWALK 5-INCH

- NOTES:**
- ALL LOCATIONS ARE APPROXIMATE AND SHOULD EXTEND TO NEAREST JOINT WHEN POSSIBLE. FINAL REMOVAL AND REPLACEMENT LIMITS WILL BE MARKED IN THE FIELD AND AS DIRECTED BY THE ENGINEER.
 - IF INLET STRUCTURES FALL WITHIN THE CONCRETE CURB AND GUTTER REPLACEMENT LIMITS, STRUCTURES SHALL BE ADJUSTED TO PROPER ELEVATION WITH A NEW FRAME AND COVER PROVIDED BY THE CITY OF WAUKESHA. THE OLD FRAME AND COVER WILL BE RETURNED TO THE CITY GARAGE.
 - ALL SIDEWALK WILL BE REPLACED TO EXISTING WIDTHS.



BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM1000	123+31 'EB'	818.307'	SE CORNER ABUTMENT
BM1001	121+45 'EB'	818.390'	SW CORNER ABUTMENT

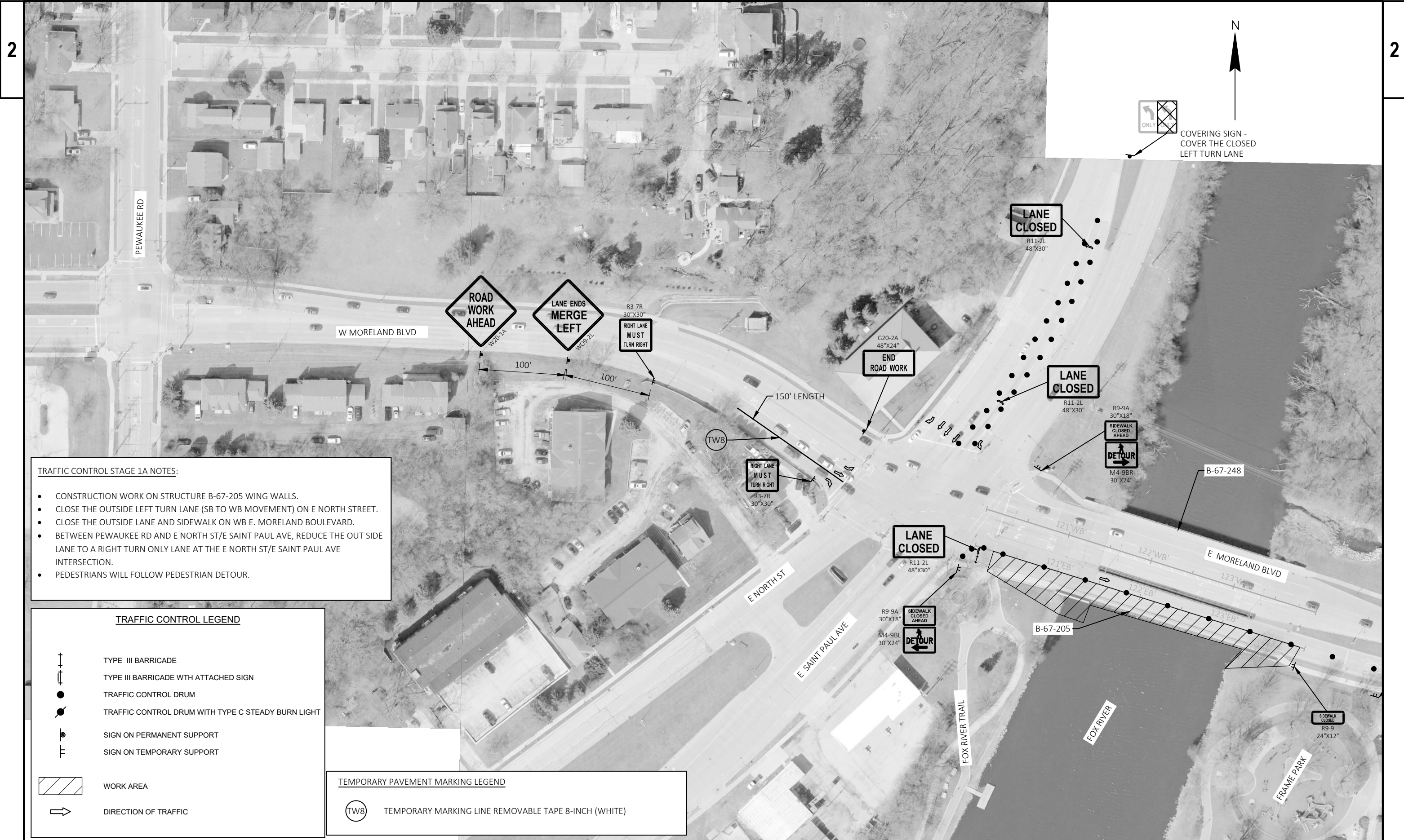


- LEGEND**
- CP1 REMOVING CONCRETE PAVEMENT AND INSTALL CONCRETE PAVEMENT APPROACH SLAB
 - CP2 REMOVING CONCRETE PAVEMENT AND INSTALL CONCRETE PAVEMENT (9-INCH)
 - CG1 REMOVING CURB AND GUTTER AND INSTALL CONCRETE CURB AND GUTTER 18-INCH TYPE
NOTE CURB AND GUTTER REMOVED IN CONJUNCTION WITH PAVEMENT IS PAID UNDER REMOVING PAVEMENT PER WISDOT STANDARD SPECIFICATION
 - CG2 REMOVING CURB AND GUTTER AND INSTALL CONCRETE CURB AND GUTTER 30-INCH TYPE A
NOTE CURB AND GUTTER REMOVED IN CONJUNCTION WITH PAVEMENT IS PAID UNDER REMOVING PAVEMENT PER WISDOT STANDARD SPECIFICATION
 - SW1 REMOVING CONCRETE SIDEWALK AND INSTALL CONCRETE SIDEWALK 5-INCH



LEGEND:

-  INLET PROTECTION, TYPE C
-  EROSION MAT URBAN CLASS I TYPE B



TRAFFIC CONTROL STAGE 1A NOTES:

- CONSTRUCTION WORK ON STRUCTURE B-67-205 WING WALLS.
- CLOSE THE OUTSIDE LEFT TURN LANE (SB TO WB MOVEMENT) ON E NORTH STREET.
- CLOSE THE OUTSIDE LANE AND SIDEWALK ON WB E. MORELAND BOULEVARD.
- BETWEEN PEWAUKEE RD AND E NORTH ST/E SAINT PAUL AVE, REDUCE THE OUT SIDE LANE TO A RIGHT TURN ONLY LANE AT THE E NORTH ST/E SAINT PAUL AVE INTERSECTION.
- PEDESTRIANS WILL FOLLOW PEDESTRIAN DETOUR.

TRAFFIC CONTROL LEGEND

	TYPE III BARRICADE
	TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	WORK AREA
	DIRECTION OF TRAFFIC

TEMPORARY PAVEMENT MARKING LEGEND

	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
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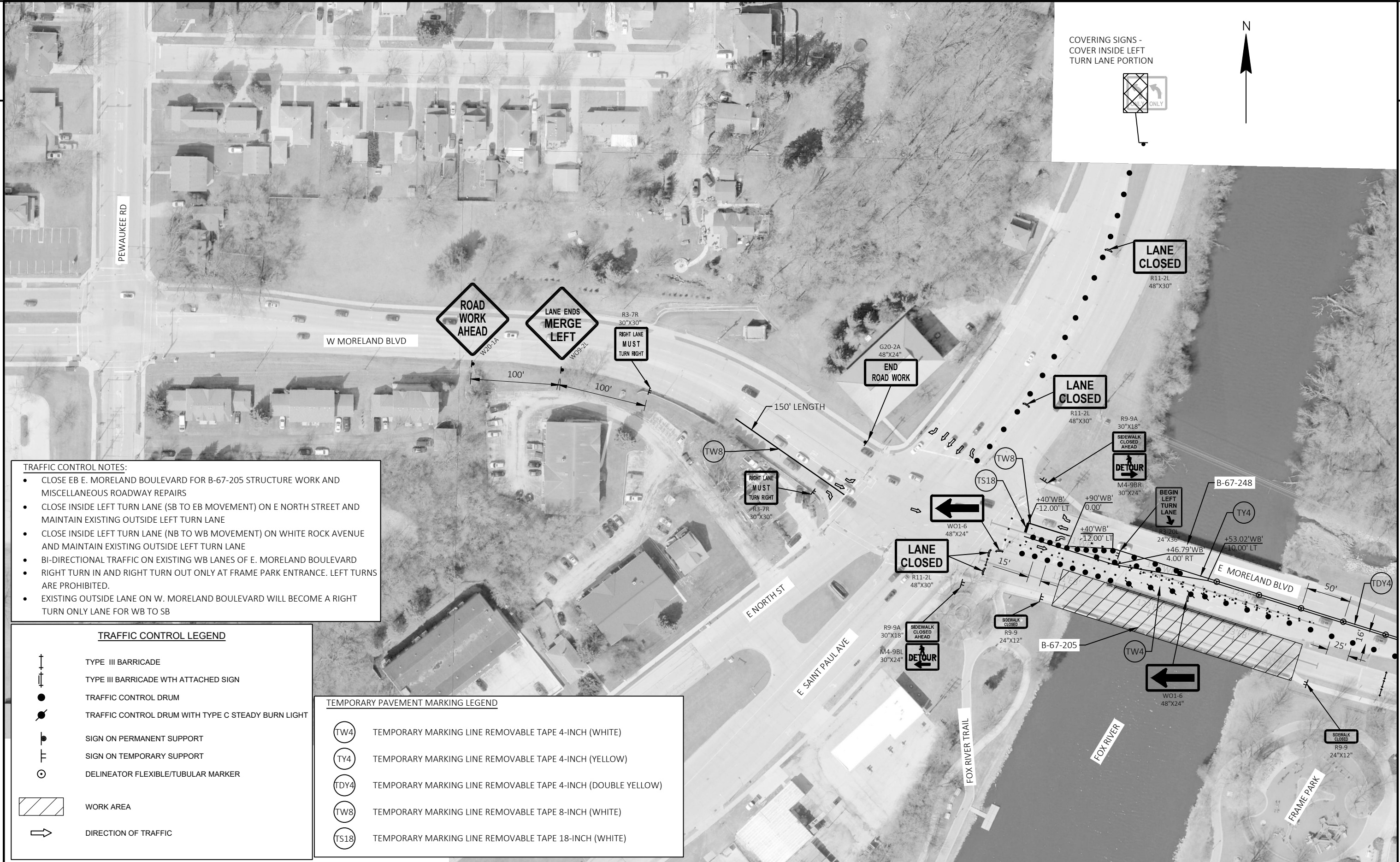
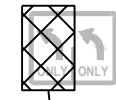
TRAFFIC CONTROL STAGE 1A NOTES:

- CONSTRUCTION WORK ON STRUCTURE B-67-205 WING WALLS.
- CLOSE THE OUTSIDE LEFT TURN LANE (SB TO WB MOVEMENT) ON E NORTH STREET.
- CLOSE THE OUTSIDE LANE AND SIDEWALK ON WB E. MORELAND BOULEVARD.
- BETWEEN PEWAUKEE RD AND E NORTH ST/E SAINT PAUL AVE, REDUCE THE OUT SIDE LANE TO A RIGHT TURN ONLY LANE AT THE E NORTH ST/E SAINT PAUL AVE INTERSECTION.
- PEDESTRIANS WILL FOLLOW PEDESTRIAN DETOUR.

TRAFFIC CONTROL LEGEND

	TYPE III BARRICADE
	TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	WORK AREA
	DIRECTION OF TRAFFIC

COVERING SIGNS - COVER INSIDE LEFT TURN LANE PORTION



TRAFFIC CONTROL NOTES:

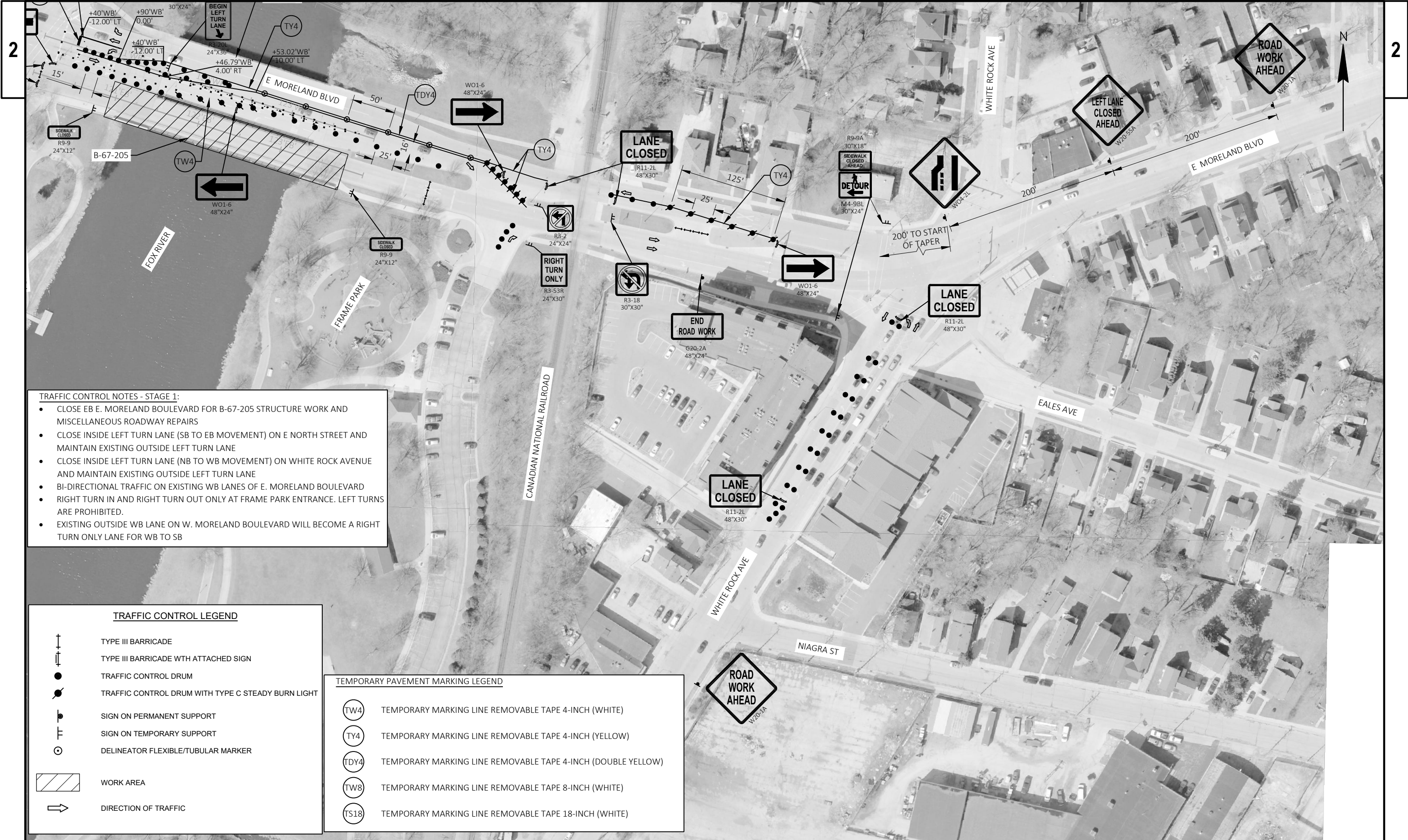
- CLOSE EB E. MORELAND BOULEVARD FOR B-67-205 STRUCTURE WORK AND MISCELLANEOUS ROADWAY REPAIRS
- CLOSE INSIDE LEFT TURN LANE (SB TO EB MOVEMENT) ON E NORTH STREET AND MAINTAIN EXISTING OUTSIDE LEFT TURN LANE
- CLOSE INSIDE LEFT TURN LANE (NB TO WB MOVEMENT) ON WHITE ROCK AVENUE AND MAINTAIN EXISTING OUTSIDE LEFT TURN LANE
- BI-DIRECTIONAL TRAFFIC ON EXISTING WB LANES OF E. MORELAND BOULEVARD
- RIGHT TURN IN AND RIGHT TURN OUT ONLY AT FRAME PARK ENTRANCE. LEFT TURNS ARE PROHIBITED.
- EXISTING OUTSIDE LANE ON W. MORELAND BOULEVARD WILL BECOME A RIGHT TURN ONLY LANE FOR WB TO SB

TRAFFIC CONTROL LEGEND

	TYPE III BARRICADE
	TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA
	DIRECTION OF TRAFFIC

TEMPORARY PAVEMENT MARKING LEGEND

	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
	TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)



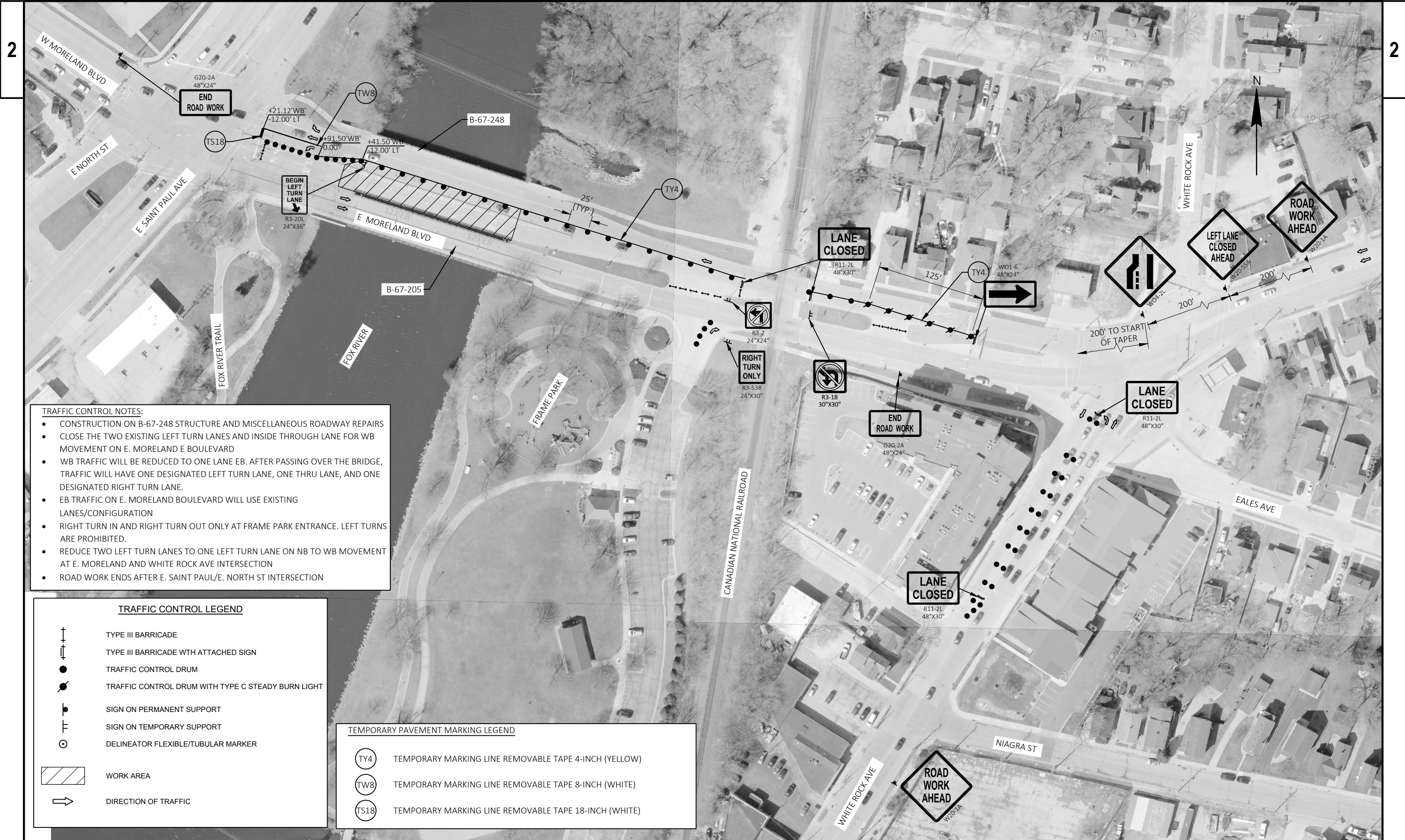
- TRAFFIC CONTROL NOTES - STAGE 1:**
- CLOSE EB E. MORELAND BOULEVARD FOR B-67-205 STRUCTURE WORK AND MISCELLANEOUS ROADWAY REPAIRS
 - CLOSE INSIDE LEFT TURN LANE (SB TO EB MOVEMENT) ON E NORTH STREET AND MAINTAIN EXISTING OUTSIDE LEFT TURN LANE
 - CLOSE INSIDE LEFT TURN LANE (NB TO WB MOVEMENT) ON WHITE ROCK AVENUE AND MAINTAIN EXISTING OUTSIDE LEFT TURN LANE
 - BI-DIRECTIONAL TRAFFIC ON EXISTING WB LANES OF E. MORELAND BOULEVARD
 - RIGHT TURN IN AND RIGHT TURN OUT ONLY AT FRAME PARK ENTRANCE. LEFT TURNS ARE PROHIBITED.
 - EXISTING OUTSIDE WB LANE ON W. MORELAND BOULEVARD WILL BECOME A RIGHT TURN ONLY LANE FOR WB TO SB

TRAFFIC CONTROL LEGEND

	TYPE III BARRICADE
	TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA
	DIRECTION OF TRAFFIC

TEMPORARY PAVEMENT MARKING LEGEND

	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
	TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)



TRAFFIC CONTROL NOTES:

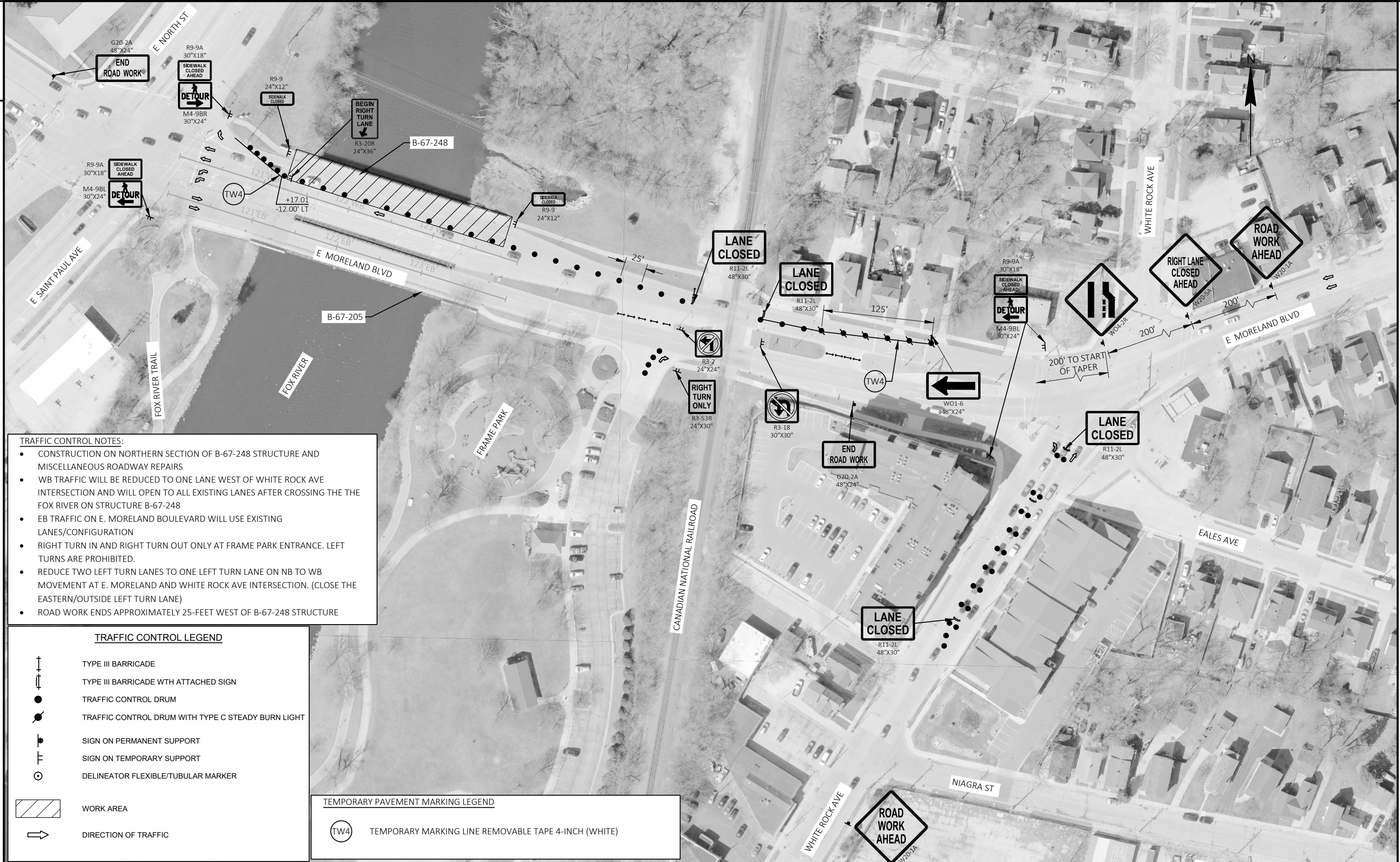
- CONSTRUCTION ON B-67-248 STRUCTURE AND MISCELLANEOUS ROADWAY REPAIRS
- CLOSE THE TWO EXISTING LEFT TURN LANES AND INSIDE THROUGH LANE FOR WB MOVEMENT ON E. MORELAND E BOULEVARD
- WB TRAFFIC WILL BE REDUCED TO ONE LANE EB. AFTER PASSING OVER THE BRIDGE, TRAFFIC WILL HAVE ONE DESIGNATED LEFT TURN LANE, ONE THRU LANE, AND ONE DESIGNATED RIGHT TURN LANE.
- EB TRAFFIC ON E. MORELAND BOULEVARD WILL USE EXISTING LANES/CONFIGURATION
- RIGHT TURN IN AND RIGHT TURN OUT ONLY AT FRAME PARK ENTRANCE. LEFT TURNS ARE PROHIBITED.
- REDUCE TWO LEFT TURN LANES TO ONE LEFT TURN LANE ON NB TO WB MOVEMENT AT E. MORELAND AND WHITE ROCK AVE INTERSECTION
- ROAD WORK ENDS AFTER E. SAINT PAUL/E. NORTH ST INTERSECTION

TRAFFIC CONTROL LEGEND

	TYPE III BARRICADE
	TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	DELINEATOR FLEXIBLE/TUBULAR MARKER
	WORK AREA
	DIRECTION OF TRAFFIC

TEMPORARY PAVEMENT MARKING LEGEND

	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
	TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH (WHITE)



TRAFFIC CONTROL NOTES:

- CONSTRUCTION ON NORTHERN SECTION OF B-67-248 STRUCTURE AND MISCELLANEOUS ROADWAY REPAIRS
- WB TRAFFIC WILL BE REDUCED TO ONE LANE WEST OF WHITE ROCK AVE INTERSECTION AND WILL OPEN TO ALL EXISTING LANES AFTER CROSSING THE THE FOX RIVER ON STRUCTURE B-67-248
- EB TRAFFIC ON E. MORELAND BOULEVARD WILL USE EXISTING LANES/CONFIGURATION
- RIGHT TURN IN AND RIGHT TURN OUT ONLY AT FRAME PARK ENTRANCE. LEFT TURNS ARE PROHIBITED.
- REDUCE TWO LEFT TURN LANES TO ONE LEFT TURN LANE ON NB TO WB MOVEMENT AT E. MORELAND AND WHITE ROCK AVE INTERSECTION. (CLOSE THE EASTERN/OUTSIDE LEFT TURN LANE)
- ROAD WORK ENDS APPROXIMATELY 25-FEET WEST OF B-67-248 STRUCTURE

TRAFFIC CONTROL LEGEND

- ↑ TYPE III BARRICADE
- ↑↑ TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- ⊙ SIGN ON PERMANENT SUPPORT
- ⊙ SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- ▨ WORK AREA
- ➔ DIRECTION OF TRAFFIC

TEMPORARY PAVEMENT MARKING LEGEND

- TW4 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)



PAVEMENT MARKING LEGEND:

ARW2	MARKING ARROW EPOXY, TYPE 2 (WHITE)
MSW4	MARKING LINE EPOXY 4-INCH (WHITE SKIP) (12.5' SKIP, 37.5' GAP)
MSW8	MARKING LINE EPOXY 8-INCH (WHITE SKIP) (2' SKIP, 6' GAP)
MLW8	MARKING LINE EPOXY 8-INCH (WHITE)
SLW18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
WRD	MARKING WORD EPOXY (WHITE)
DLW8	MARKING LINE EPOXY 8-INCH, DIAGONAL (WHITE)

Estimate Of Quantities

2718-00-73 2718-00-78

Line	Item	Item Description	Unit	Total	Qty	Qty
0002	201.0205	Grubbing	STA	2.000	2.000	
0004	203.0250	Removing Structure Over Waterway Remove Debris (structure) 01. B-67-248	EACH	1.000	1.000	
0006	203.0250	Removing Structure Over Waterway Remove Debris (structure) 02. B-67-205	EACH	1.000		1.000
0008	204.0100	Removing Concrete Pavement	SY	198.000	51.000	147.000
0010	204.0150	Removing Curb & Gutter	LF	33.000	9.000	24.000
0012	204.0155	Removing Concrete Sidewalk	SY	140.000	65.000	75.000
0014	206.1001	Excavation for Structures Bridges (structure) 01. B-67-248	EACH	1.000	1.000	
0016	206.1001	Excavation for Structures Bridges (structure) 02. B-67-205	EACH	1.000		1.000
0018	206.5001	Cofferdams (structure) 01. B-67-248	EACH	1.000	1.000	
0020	206.5001	Cofferdams (structure) 02. B-67-205	EACH	1.000		1.000
0022	211.0201	Prepare Foundation for Concrete Pavement (project) 01. 2718-00-73	EACH	1.000	1.000	
0024	211.0201	Prepare Foundation for Concrete Pavement (project) 02. 2718-00-78	EACH	1.000		1.000
0026	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	35.000	10.000	25.000
0028	415.0090	Concrete Pavement 9-Inch	SY	63.000		63.000
0030	415.0410	Concrete Pavement Approach Slab	SY	136.000	52.000	84.000
0032	416.0610	Drilled Tie Bars	EACH	48.000	8.000	40.000
0034	416.0620	Drilled Dowel Bars	EACH	56.000	24.000	32.000
0036	502.0100	Concrete Masonry Bridges	CY	82.000	40.000	42.000
0038	502.3200	Protective Surface Treatment	SY	205.000		205.000
0040	502.4206	Adhesive Anchors No. 6 Bar	EACH	276.000	138.000	138.000
0042	505.0400	Bar Steel Reinforcement HS Structures	LB	12,670.000	6,190.000	6,480.000
0044	509.0301	Preparation Decks Type 1	SY	12.000	6.000	6.000
0046	509.0302	Preparation Decks Type 2	SY	2.000	1.000	1.000
0048	509.0310.S	Sawing Pavement Deck Preparation Areas	LF	70.000	35.000	35.000
0050	509.1200	Curb Repair	LF	30.000	10.000	20.000
0052	509.1500	Concrete Surface Repair	SF	185.000		185.000
0054	517.1015.S	Concrete Staining Multi-Color (structure) 01. B-67-248	SF	1,255.000	1,255.000	
0056	517.1015.S	Concrete Staining Multi-Color (structure) 02. B-67-205	SF	1,370.000		1,370.000
0058	517.1050.S	Architectural Surface Treatment (structure) 01. B-67-248	SF	1,129.000	1,129.000	
0060	517.1050.S	Architectural Surface Treatment (structure) 02. B-67-205	SF	1,181.000		1,181.000
0062	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	70.000	20.000	50.000
0064	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	89.000	29.000	60.000
0066	602.0410	Concrete Sidewalk 5-Inch	SF	1,335.000	580.000	755.000
0068	611.8115	Adjusting Inlet Covers	EACH	5.000	3.000	2.000
0070	619.1000	Mobilization	EACH	1.000	0.500	0.500
0072	624.0100	Water	MGAL	0.700	0.200	0.500
0074	625.0100	Topsoil	SY	619.000	294.000	325.000
0076	628.2008	Erosion Mat Urban Class I Type B	SY	619.000	294.000	325.000
0078	628.7015	Inlet Protection Type C	EACH	12.000	7.000	5.000
0080	629.0210	Fertilizer Type B	CWT	0.400	0.200	0.200
0082	630.0130	Seeding Mixture No. 30	LB	11.500	5.500	6.000
0084	630.0500	Seed Water	MGAL	14.000	7.000	7.000
0086	642.5001	Field Office Type B	EACH	1.000	0.500	0.500
0088	643.0300	Traffic Control Drums	DAY	5,596.000	2,548.000	3,048.000
0090	643.0420	Traffic Control Barricades Type III	DAY	1,068.000	688.000	380.000
0092	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	7.000		7.000
0094	643.0705	Traffic Control Warning Lights Type A	DAY	744.000	336.000	408.000
0096	643.0715	Traffic Control Warning Lights Type C	DAY	756.000	252.000	504.000
0098	643.0800	Traffic Control Arrow Boards	DAY	154.000	42.000	112.000
0100	643.0900	Traffic Control Signs	DAY	2,412.000	796.000	1,616.000

Estimate Of Quantities

2718-00-73 2718-00-78

Line	Item	Item Description	Unit	Total	Qty	Qty
0102	643.0910	Traffic Control Covering Signs Type I	EACH	2.000		2.000
0104	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	1,952.000	782.000	1,170.000
0106	643.3250	Temporary Marking Line Removable Tape 8-Inch	LF	120.000	70.000	50.000
0108	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	24.000	12.000	12.000
0110	643.5000	Traffic Control	EACH	1.000	0.500	0.500
0112	646.1020	Marking Line Epoxy 4-Inch	LF	430.000	330.000	100.000
0114	646.3020	Marking Line Epoxy 8-Inch	LF	1,075.000	1,075.000	
0116	646.5020	Marking Arrow Epoxy	EACH	6.000	6.000	
0118	646.5120	Marking Word Epoxy	EACH	3.000	3.000	
0120	646.6120	Marking Stop Line Epoxy 18-Inch	LF	68.000	68.000	
0122	646.9000	Marking Removal Line 4-Inch	LF	75.000		75.000
0124	646.9100	Marking Removal Line 8-Inch	LF	558.000		558.000
0126	650.8000	Construction Staking Resurfacing Reference	LF	800.000	400.000	400.000
0128	650.9911	Construction Staking Supplemental Control (project) 01. 2718-00-73	EACH	1.000	1.000	
0130	650.9911	Construction Staking Supplemental Control (project) 02. 2718-00-78	EACH	1.000		1.000
0132	690.0250	Sawing Concrete	LF	485.000	240.000	245.000
0134	715.0502	Incentive Strength Concrete Structures	DOL	1,000.000	500.000	500.000
0136	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	1,000.000	500.000	500.000
0138	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	400.000	400.000	
0140	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	900.000	900.000	
0142	SPV.0035	Special 01. Rapid Set Deck Repair	CY	2.000	1.000	1.000
0144	SPV.0090	Special 01. Cleaning and Sealing Joints With Hot-Applied Sealant	LF	122.000	122.000	
0146	SPV.0090	Special 02. Joint Sealant Sidewalk	LF	90.000	54.000	36.000
0148	SPV.0090	Special 03. Removing and Resetting Pedestrian Railing B-67-205	LF	190.000		190.000
0150	SPV.0090	Special 04. Removing and Resetting Pedestrian Railing	LF	82.000		82.000
0152	SPV.0090	Special 05. Removing and Resetting Decorative Fence	LF	62.000		62.000
0154	SPV.0180	Special 01. Methacrylate Flood Seal	SY	2,240.000	1,465.000	775.000

GRUBBING

STA	TO	STA	LOCATION	201.0205 GRUBBING STA
PROJECT ID 2718-00-73				
CAT 0010				
121+00'	WB'	-	122+00'	WB'
			LT	1
123+00'	WB'	-	124+00'	WB'
			LT	1
CAT 0010 TOTALS				2
CONTRACT TOTAL				2

REMOVING CURB & GUTTER

STA	TO	STA	LOCATION	204.0150 REMOVING CURB & GUTTER LF
PROJECT ID 2718-00-78				
CAT 0010				
121+00'	EB'	-	121+24'	EB'
			EB E. MORELAND BLVD	20
123+45'	EB'	-	123+49'	EB'
			EB E. MORELAND BLVD	4
CAT 0010 TOTALS				24
PROJECT ID 2718-00-73				
CAT 0010				
123+56'	WB'	-	123+65'	WB'
			WB E. MORELAND BLVD	9
CAT 0010 TOTALS				9
CONTRACT TOTAL				33

REMOVING CONCRETE PAVEMENT

STA	TO	STA	LOCATION	204.0100 REMOVING CONCRETE PAVEMENT SY
PROJECT ID 2718-00-78				
CAT 0010				
120+94'	EB'	-	121+24'	EB'
			EB E. MORELAND BLVD	63
121+24'	EB'	-	121+44'	EB'
			EB E. MORELAND BLVD	53
123+33'	EB'	-	123+45'	EB'
			EB E. MORELAND BLVD	31
CAT 0010 TOTALS				147
PROJECT ID 2718-00-73				
CAT 0010				
121+23'	WB'	-	121+43'	WB'
			WB E. MORELAND BLVD	51
CAT 0010 TOTALS				51
CONTRACT TOTAL				198

REMOVING SIDEWALK

STA	TO	STA	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK SY
PROJECT ID 2718-00-78				
CAT 0010				
121+04'	EB'	-	121+44'	EB'
			EB E. MORELAND BLVD	34
123+34'	EB'	-	123+83'	EB'
			EB E. MORELAND BLVD	41
CAT 0010 TOTALS				75
PROJECT ID 2718-00-73				
CAT 0010				
121+03'	WB'	-	121+44'	WB'
			WB E. MORELAND BLVD	32
123+33'	WB'	-	123+72'	WB'
			WB E. MORELAND BLVD	33
CAT 0010 TOTALS				65
CONTRACT TOTAL				140

PREPARE FOUNDATION FOR CONCRETE PAVEMENT

LOCATION	211.0201 PREPARE FOUNDATION FOR CONCRETE PAVEMENT (2718-00-78) EACH
PROJECT ID 2718-00-78	
CAT 0010	
EB E. MORELAND BLVD	1
PROJECT ID 2718-00-78 TOTAL	
	1

PREPARE FOUNDATION FOR CONCRETE PAVEMENT

LOCATION	211.0201 PREPARE FOUNDATION FOR CONCRETE PAVEMENT (2718-00-73) EACH
PROJECT ID 2718-00-73	
CAT 0010	
WB E. MORELAND BLVD	1
PROJECT ID 2718-00-73	
	1

BASE AGGREGATE DENSE

LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
PROJECT ID 2718-00-78		
CAT 0010		
EB E. MORELAND BLVD	25	0.5
CAT 0010 TOTALS		
	25	0.5
PROJECT ID 2718-00-73		
CAT 0010		
WB E. MORELAND BLVD	10	0.2
CAT 0010 TOTALS		
	10	0.2
CONTRACT TOTAL		
	35	0.7

CONCRETE PAVEMENT

STA	TO	STA	LOCATION	415.0090 CONCRETE PAVEMENT 9-INCH SY	416.0610 DRILLED TIE BARS EA	416.0620 DRILLED DOWEL BARS EA
PROJECT ID 2718-00-78						
CAT 0010						
120+94'	EB'	121+25'	EB E. MORELAND BLVD	63	25	16
123+33'	EB'	123+48'	EB E. MORELAND BLVD	--	15	16
CAT 0010 TOTALS				63	40	32
PROJECT ID 2718-00-73						
CAT 0010						
121+23'	WB'	121+35'	WB E. MORELAND BLVD	--	8	24
CAT 0010 TOTALS				--	8	24
CONTRACT TOTAL				63	48	56

CONCRETE PAVEMENT APPROACH SLABS

STA	TO	STA	LOCATION	415.0410 CONCRETE PAVEMENT APPROACH SLABS SY
PROJECT ID 2718-00-78				
CAT 0010				
121+24'	EB'	121+44'	EB E. MORELAND BLVD	53
123+33'	EB'	123+45'	EB E. MORELAND BLVD	31
CAT 0010 TOTALS				84
PROJECT ID 2718-00-73				
CAT 0010				
121+23'	WB'	121+43'	WB E. MORELAND BLVD	52
CAT 0010 TOTALS				52
CONTRACT TOTAL				136

CONCRETE ITEMS

STA	TO	STA	LOCATION	601.0405 CONCRETE CURB & GUTTER 18-INCH TYPE A LF	604.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	604.0410 CONCRETE SIDEWALK 5-INCH SY		
PROJECT ID 2718-00-78								
CAT 0010								
120+95'	EB' LT	-	121+44'	EB' LT	EB E. MORELAND BLVD	50	--	--
121+00'	EB' RT	-	121+44'	EB' RT	EB E. MORELAND BLVD	--	44	--
121+25'	EB' LT	-	121+44'	EB' LT	EB E. MORELAND BLVD	--	--	85
121+04'	EB' RT	-	121+44'	EB' RT	EB E. MORELAND BLVD	--	--	305
123+34'	EB' RT	-	123+50'	EB' RT	EB E. MORELAND BLVD	--	16	--
123+34'	EB' RT	-	123+83'	EB' RT	EB E. MORELAND BLVD	--	--	365
CAT 0010 TOTALS				50	60	755		
PROJECT ID 2718-00-73								
CAT 0010								
121+03'	WB' LT	-	121+44'	WB' LT	WB E. MORELAND BLVD	--	--	290
121+24'	WB' LT	-	121+44'	WB' LT	WB E. MORELAND BLVD	--	20	--
121+24'	WB' RT	-	121+44'	WB' RT	WB E. MORELAND BLVD	20	--	--
123+34'	WB' LT	-	123+72'	WB' LT	WB E. MORELAND BLVD	--	9	--
123+56'	WB' LT	-	123+65'	WB' LT	WB E. MORELAND BLVD	--	--	290
CAT 0010 TOTALS				20	29	580		
CONTRACT TOTAL				70	89	1,335		

MOBLIZATION

LOCATION	619.1000 MOBLIZATION EACH
PROJECT ID 2718-00-78	
CAT 0010	
EB E. MORELAND BLVD	0.5
PROJECT ID 2718-00-78 TOTAL	
	0.5
PROJECT ID 2718-00-73	
CAT 0010	
WB E. MORELAND BLVD	0.5
PROJECT ID 2718-00-73	
	0.5

ADJUSTING INLET COVERS

STA	OFFSET	611.8115 ADJUSTING INLET COVERS LF	
PROJECT ID 2718-00-78			
CAT 0010			
121+26'	EB' RT	12' RT	1
121+26'	EB' LT	12' LT	1
CAT 0010 TOTALS		2	
PROJECT ID 2718-00-73			
CAT 0010			
121+26'	WB' LT	24' LT	1
121+26'	WB' RT	12' RT	1
123+61'	WB' LT	24' LT	1
CAT 0010 TOTALS		3	
CONTRACT TOTAL		5	

FIELD OFFICE

LOCATION	FIELD OFFICE TYPE B 642.5001 EACH
PROJECT ID 2718-00-78	
CAT 0010	
EB E. MORELAND BLVD	0.5
PROJECT ID 2718-00-78 TOTAL	
	0.5
PROJECT ID 2718-00-73	
CAT 0010	
WB E. MORELAND BLVD	0.5
PROJECT ID 2718-00-73	
	0.5

3

3

EROSION CONTROL

STA/OFFSET	LOCATION	628.7015 INLET PROTECTION TYPE C EACH
<u>PROJECT ID 2718-00-78</u>		
CAT 0010		
120+96'EB' RT	EB E. MORELAND BLVD	1
121+26'EB' RT	EB E. MORELAND BLVD	1
121+26'EB' LT	EB E. MORELAND BLVD	1
123+76'EB' LT	EB E. MORELAND BLVD	1
123+76'EB' RT	EB E. MORELAND BLVD	1
CAT 0010 TOTALS		5
<u>PROJECT ID 2718-00-73</u>		
CAT 0010		
121+05'WB' RT	WB E. MORELAND BLVD	1
121+05'WB' LT	WB E. MORELAND BLVD	1
121+27'WB' LT	WB E. MORELAND BLVD	1
121+27'WB' RT	WB E. MORELAND BLVD	1
123+60'WB' LT	WB E. MORELAND BLVD	1
123+76'WB' LT	WB E. MORELAND BLVD	1
123+77'WB' RT	WB E. MORELAND BLVD	1
CAT 0010 TOTALS		7
CONTRACT TOTAL		12

TRAFFIC CONTROL

LOCATION	643.5000 TRAFFIC CONTROL EACH
<u>PROJECT ID 2718-00-78</u>	
CAT 0010	
EB E. MORELAND BLVD	0.5
PROJECT ID 2718-00-78 TOTAL	
	0.5
<u>PROJECT ID 2718-00-73</u>	
CAT 0010	
WB E. MORELAND BLVD	0.5
PROJECT ID 2718-00-73	
	0.5

RESTORATION ITEMS

STA	TO	STA	LOCATION	625.0100 TOPSOIL SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0500 SEED WATER MGAL
PROJECT ID 2718-00-78								
CAT 0010								
120+36'EB' RT	-	121+17'EB' RT	EB E. MORELAND BLVD	176	176	0.1	3	4
123+19'EB' RT	-	123+96'EB' RT	EB E. MORELAND BLVD	149	149	0.1	3	3
CAT 0010 TOTALS				325	325	0.2	6	7
PROJECT ID 2718-00-73								
CAT 0010								
121+03'WB' LT	-	121+44'WB' LT	WB E. MORELAND BLVD	130	130	0.1	2.5	3
121+24'WB' LT	-	121+44'WB' LT	WB E. MORELAND BLVD	164	164	0.1	3	4
CAT 0010 TOTALS				294	294	0.2	5.5	7
CONTRACT TOTAL				619	619	0.4	11.5	14

TRAFFIC CONTROL

STAGE	APPROXIMATE SERVICE DAYS	643.0300 TRAFFIC CONTROL DRUMS		643.0420 TRAFFIC CONTROL BARRICADES TYPE III		643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C		643.0800 TRAFFIC CONTROL ARROW BOARDS		643.0900 TRAFFIC CONTROL SIGNS		*643.0910 TRAFFIC CONTROL COVERING SIGNS		
		EACH	DAYS	EACH	DAYS	EACH	EACH	DAYS	EACH	DAYS	EACH	DAYS	EACH	DAYS	EACH	DAYS	NO. OF CYCLES
PROJECT ID 2718-00-78																	
CAT 0010																	
1A	8	38	304	2	16	--	2	16	--	--	--	--	20	160	1	1	1
1	28	98	2,744	13	364	7	14	392	18	504	4	112	52	1,456	1	1	1
CAT 0010 TOTALS		3,048		380		7	408		504		112		1,616		2		
PROJECT ID 2718-00-73																	
CAT 0010																	
1B	8	58	464	16	128	--	8	64	6	48	1	8	22	176	--	--	--
2	16	65	1,040	17	272	--	8	128	6	96	1	16	14	224	--	--	--
3	18	58	1,044	16	288	--	8	144	6	108	1	18	22	396	--	--	--
CAT 0010 TOTALS		2,548		688		--	336		252		42		796		--		
CONTRACT TOTAL		5,596		1,068		7	744		756		154		2,412		2		

* One Cycle as shown: Cover sign at beginning of stage or substage to reflect current traffic control configuration and uncover at end of construction stage or substage to reflect current traffic control configuration.

TRAFFIC CONTROL CONT'D

STAGE	643.3150		643.3250	643.3850		646.9000	646.9100
	TEMPORARY		TEMPORARY	TEMPORARY		MARKING	MARKING
	MARKING LINE		MARKING LINE	MARKING LINE		REMOVAL	REMOVAL
	REMOVABLE TAPE 4-INCH		REMOVABLE TAPE 8-INCH	REMOVABLE TAPE 18-INCH		LINE	LINE
	YELLOW	WHITE	WHITE	WHITE		4-INCH	8-INCH
	LF	LF	LF	LF		LF	LF
PROJECT ID 2718-00-78							
CAT 0010							
1A	--	--	150	--	--	--	--
1	1,170	--	50	12	--	75	558
<hr/>							
CAT 0010 TOTALS	1,170		50	12	--	75	558
PROJECT ID 2718-00-73							
CAT 0010							
1B	--	--	--	--	--	--	--
2	712	--	70	12	--	--	--
3	--	70	--	--	--	--	--
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CAT 0010 TOTALS	782		70	12	--	--	--
<hr/>							
CONTRACT TOTAL	1,952		120	24	--	75	558

PAVEMENT MARKING

STA	TO	STA	LOCATION	646.1020		646.3020		646.5020	646.5120	646.6120	COMMENTS	
				SOLID-WHITE LF	SKIP-WHITE LF	SOLID-WHITE LF	SKIP-WHITE LF	MARKING ARROW EPOXY EACH	MARKING WORD EPOXY EACH	MARKING STOP LINE EPOXY 18-INCH WHITE LF		
PROJECT ID 2718-00-78												
CAT 0010												
			EB E. MORELAND BLVD	--	100	--	--	--	--	--		
CAT 0010 TOTALS				100		--		--	--	--		
PROJECT ID 2718-00-73												
CAT 0010												
			INTERSECTION DUAL LEFT TURN SKIPS	--	--	--	48	--	--	--		
120+21'	WB' LT	-	123+84'	WB' LT	WB E. MORELAND BLVD	130	100	363	--	--	68	2 LEFT TURNS, 2 THRU LANE & RIGHT TURN
121+38'	WB' RT	-	123+82'	WB' RT	WB E. MORELAND BLVD	--	--	664	--	--		INCLUDES DIAGONAL LINES
121+38'	WB' RT	-	123+30'	WB' RT	WB E. MORELAND BLVD	--	100	--	--	6	3	
CAT 0010 TOTALS				330		1,075		6	3	68		
CONTRACT TOTAL				430		1,075		6	3	68		

CONSTRUCTION STAKING

LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9911 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (2718-00-78) EACH	650.9911 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (2718-00-73) EACH
PROJECT ID 2718-00-78			
CAT 0010			
EB E. MORELAND BLVD	400	1	--
CAT 0010 TOTALS	400	1	--
PROJECT ID 2718-00-73			
CAT 0010			
WB E. MORELAND BLVD	400	--	1
CAT 0010 TOTALS	400	--	1
CONTRACT TOTAL	800	1	1

SAWING

STA	TO	STA	LOCATION	690.0250 SAWING CONCRETE LF
PROJECT ID 2718-00-78				
CAT 0010				
120+94'	EB'	-	123+45'	EB'
EB E. MORELAND BLVD				245
CAT 0010 TOTALS				245
PROJECT ID 2718-00-73				
CAT 0010				
121+23'	WB'	-	121+43'	WB'
WB E. MORELAND BLVD				240
CAT 0010 TOTALS				240
CONTRACT TOTAL				485

SALVAGE RAILING AND RESET

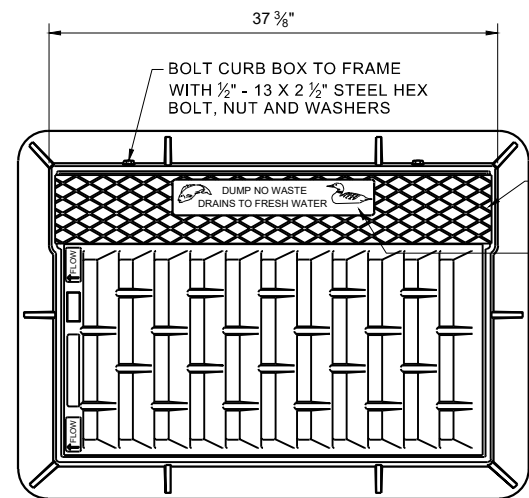
STA	TO	STA	LOCATION	SPV.0090.01 SALVAGE RAILING AND RESET LF
PROJECT ID 2718-00-78				
CAT 0010				
121+00'	EB'	-	123+49'	EB'
EB E. MORELAND BLVD				82
CAT 0010 TOTALS				82
CONTRACT TOTAL				82

REMOVE DECORATIVE RAILING AND RESET

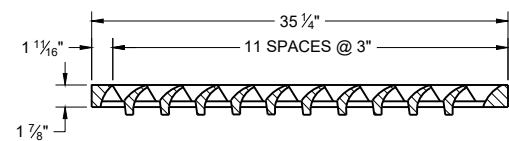
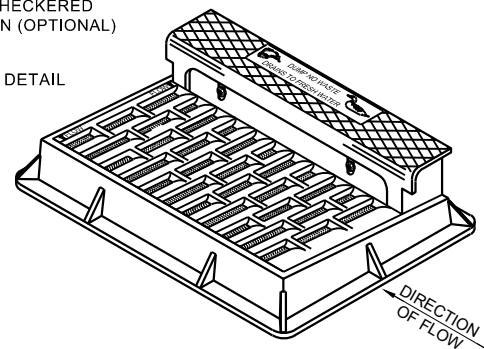
STA	TO	STA	LOCATION	SPV.0090.02 REMOVE DECORATIVE RAILING AND RESET LF
PROJECT ID 2718-00-78				
CAT 0010				
123+50'	EB'	-	124+00'	EB'
EB E. MORELAND BLVD				62
CAT 0010 TOTALS				62
CONTRACT TOTAL				62

Standard Detail Drawing List

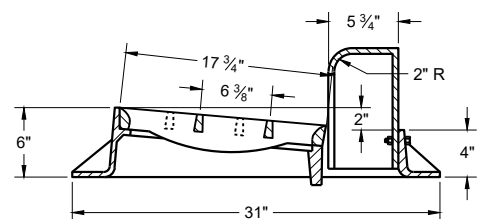
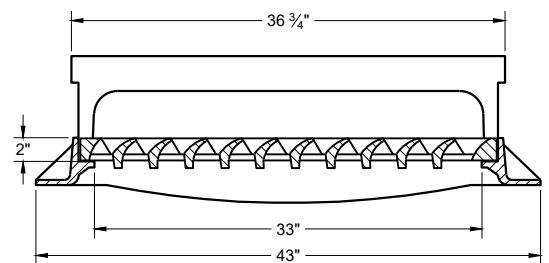
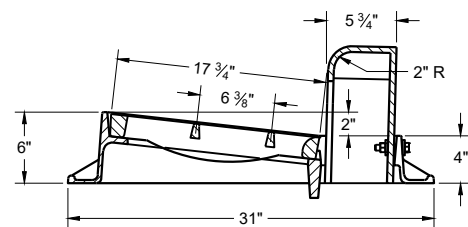
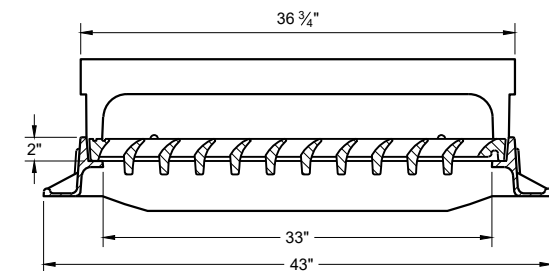
08A05-20A	INLET COVERS TYPE A, H, A-S, H-S & Z
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08E10-02	INLET PROTECTION TYPE A, B, C AND D
12A03-10	NAME PLATE (STRUCTURES)
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-11	URBAN DOWELED CONCRETE PAVEMENT
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)



NOTE: EITHER CASTING IS ACCEPTABLE



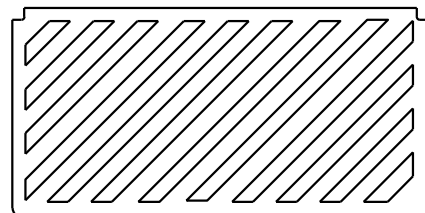
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"



TYPE "H"

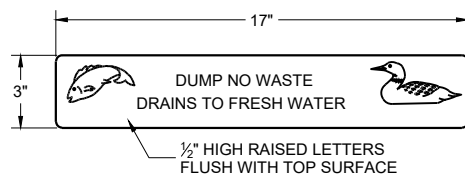
NOTE: EITHER CASTING IS ACCEPTABLE

1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 3/4" X 2")
(NOTED AS TYPE H-S ON DRAINAGE TABLE)



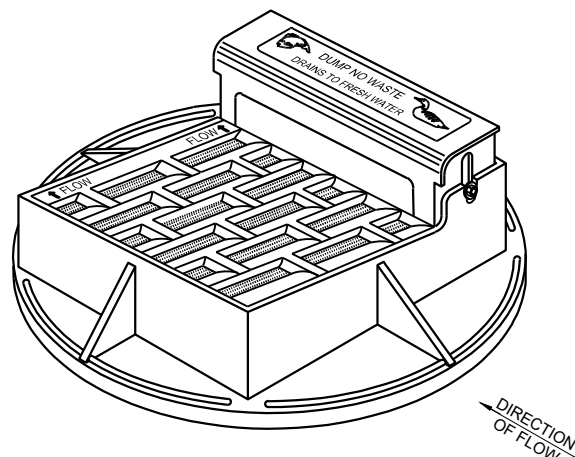
LOGO DETAIL

GENERAL NOTES

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

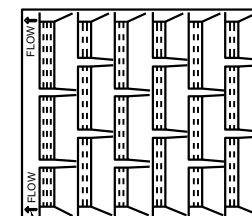
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

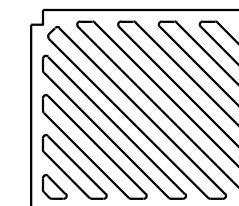


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE

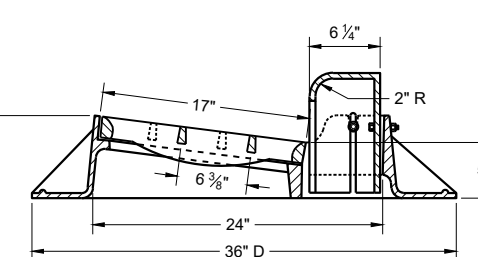
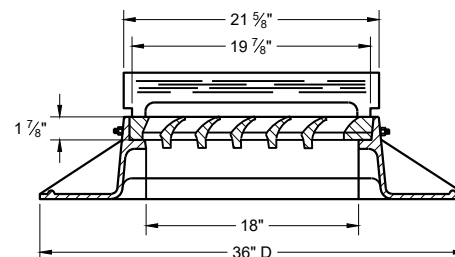
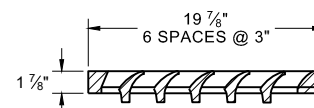


1" DIAGONAL BARS WITH 1 1/2" OPENINGS

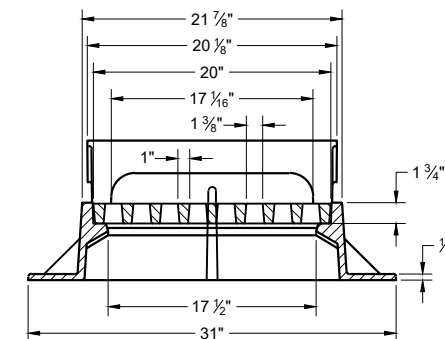
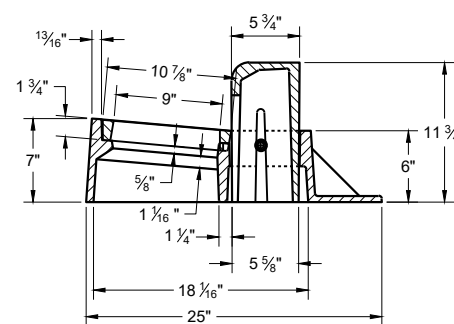


SPECIAL GRATE FOR TYPE "A" COVER

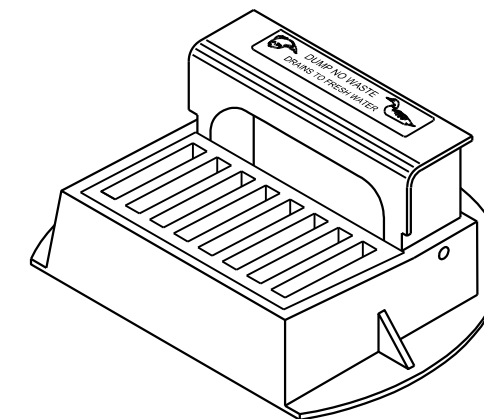
(MEASURES 19 3/4" X 17" X 1 7/8")
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"



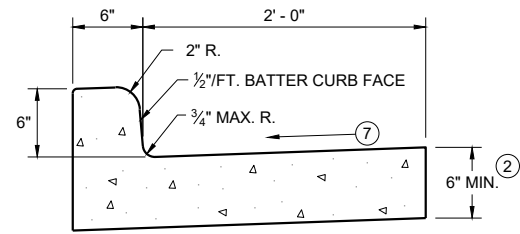
TYPE "Z"



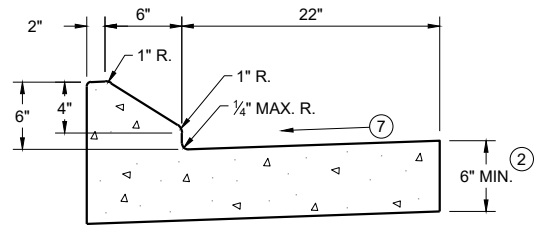
INLET COVERS TYPES A, H, A-S, H-S AND Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

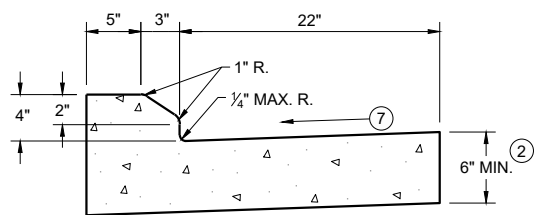
APPROVED
July 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



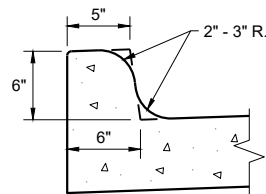
TYPES A^① & D



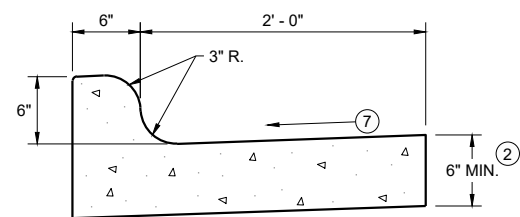
6" SLOPED CURB TYPES G^① & J



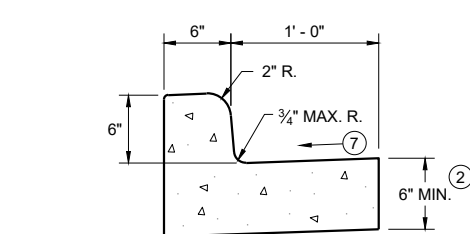
4" SLOPED CURB TYPES G^① & J



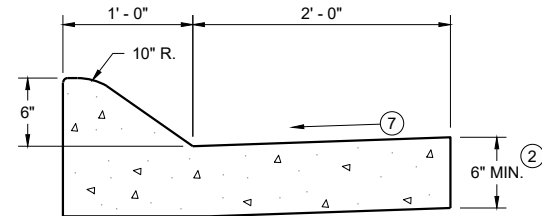
TYPES K^① & L
(OPTIONAL CURB SHAPE)



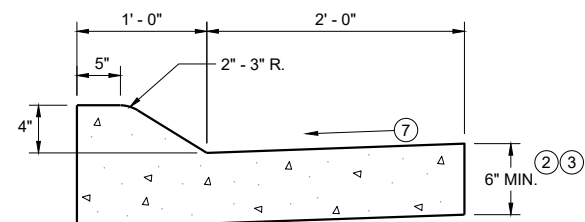
TYPES K^① & L
CONCRETE CURB AND GUTTER 30"



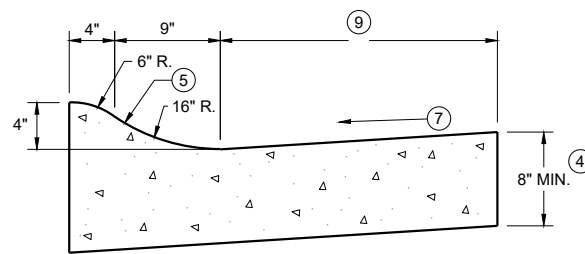
TYPES A^① & D
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A^① & D

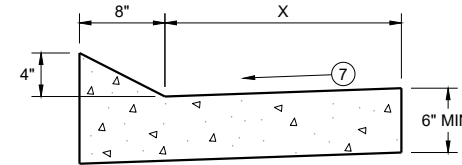


4" SLOPED CURB TYPES A^① & D
CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

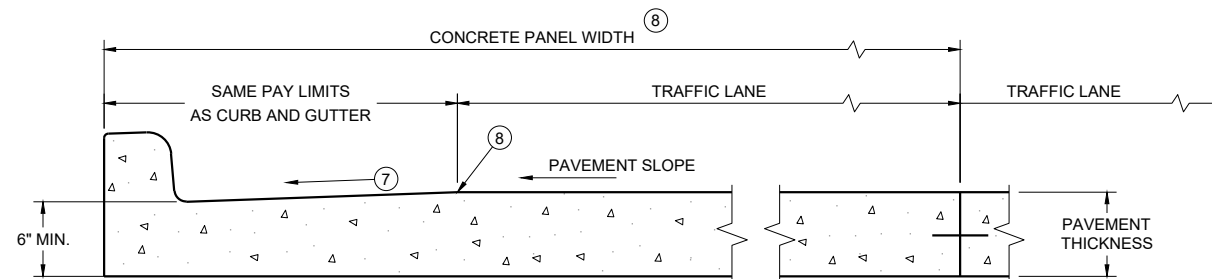
TBT & TBTT	X
30"	22"
36"	28"



TYPES TBT & TBTT^①
CONCRETE CURB AND GUTTER

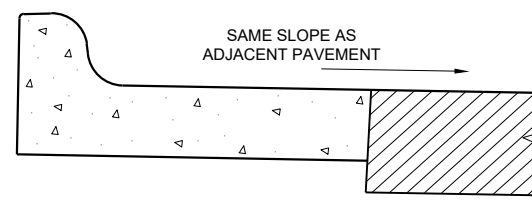
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER^⑥
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

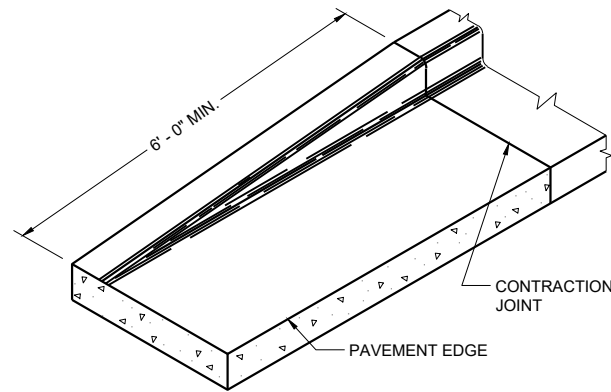
DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

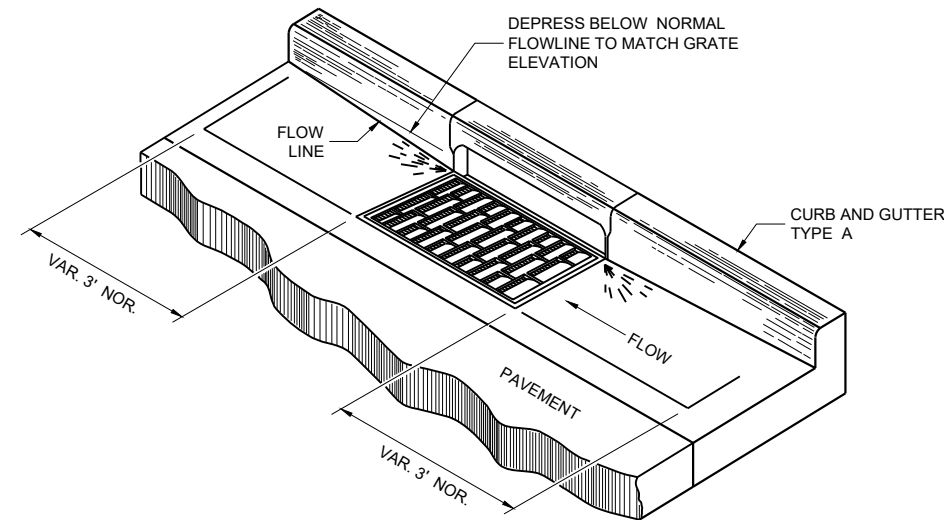
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.
- ⑨ CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

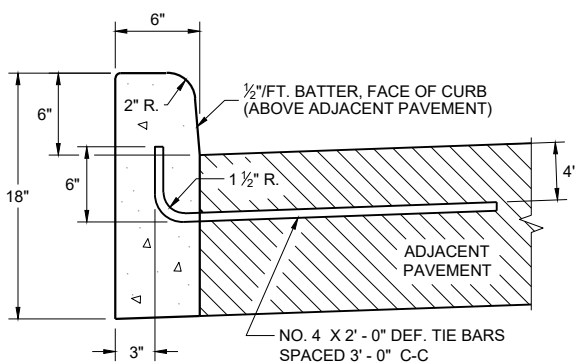


END SECTION CURB AND GUTTER

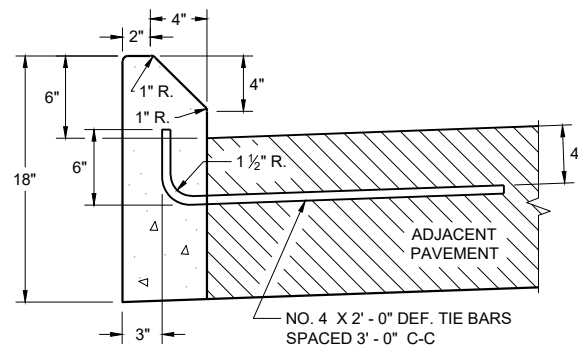


DETAIL OF CURB AND GUTTER AT INLETS

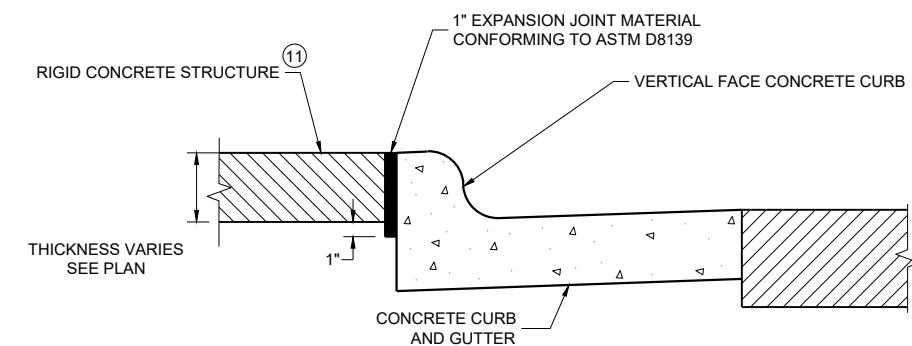
(TYPICAL H INLET COVER SHOWN)



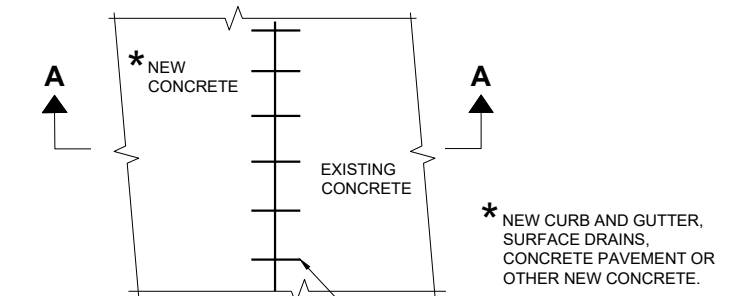
TYPES A^① & D



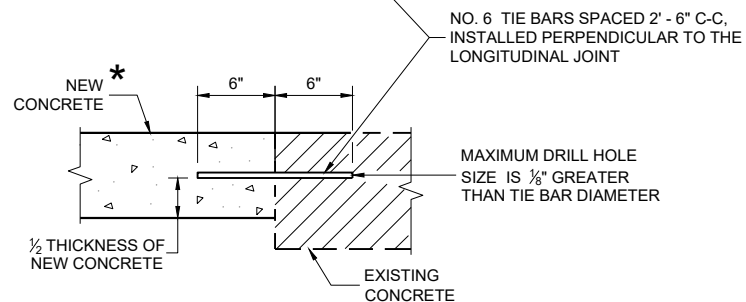
**TYPES G^① & J
CONCRETE CURB**



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE^⑪



PLAN VIEW



**SECTION A - A
TIE BARS DRILLED INTO EXISTING PAVEMENT**

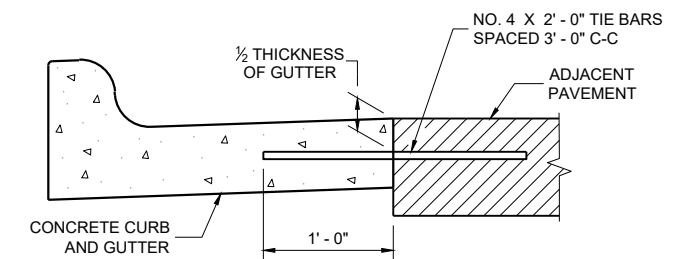
GENERAL NOTES

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

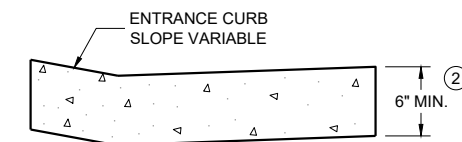
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑩ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.
- ⑪ PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.



TYPICAL TIE BAR LOCATION^①



**DRIVEWAY ENTRANCE CURB^⑩
(WHEN DIRECTED BY THE ENGINEER)**

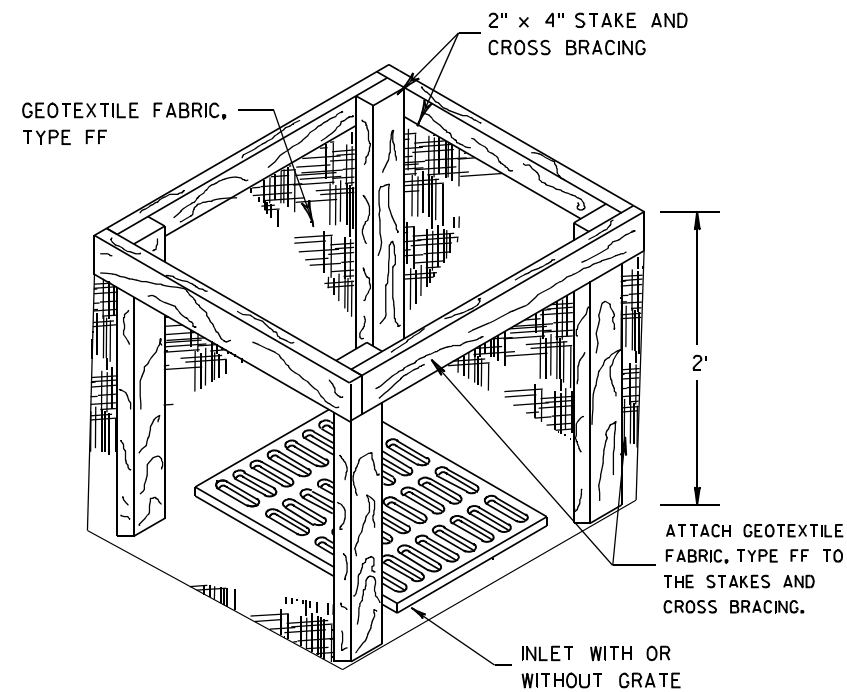
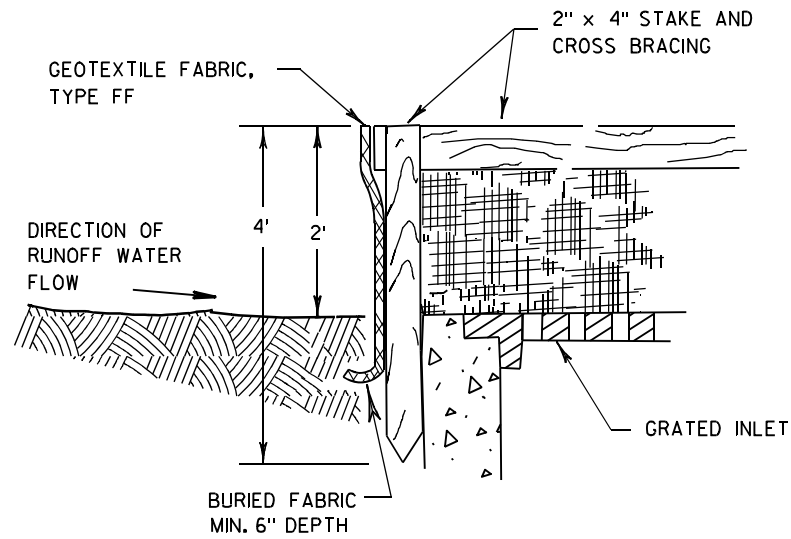
6

6

SDD 08D01-23b

SDD 08D01-23b

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/s/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR



INLET PROTECTION, TYPE A

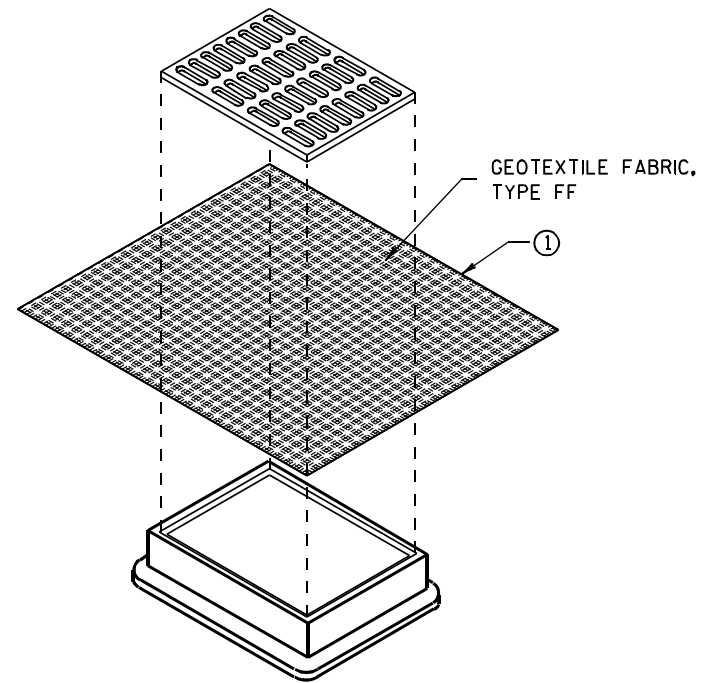
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

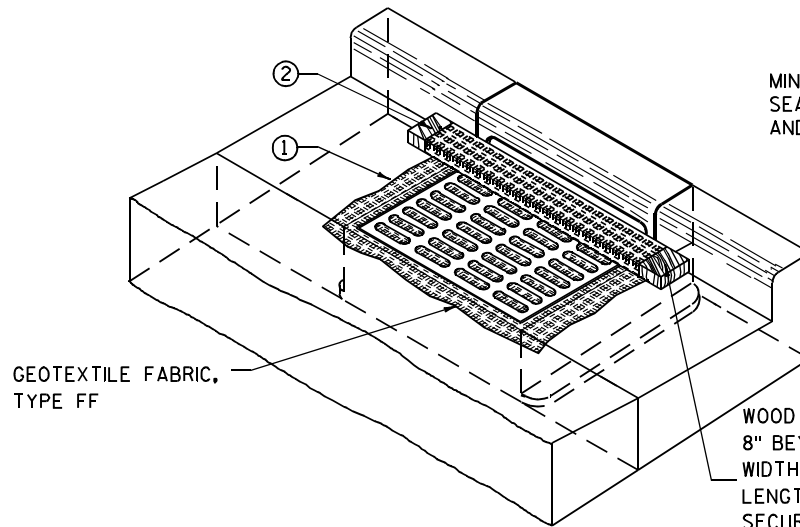
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

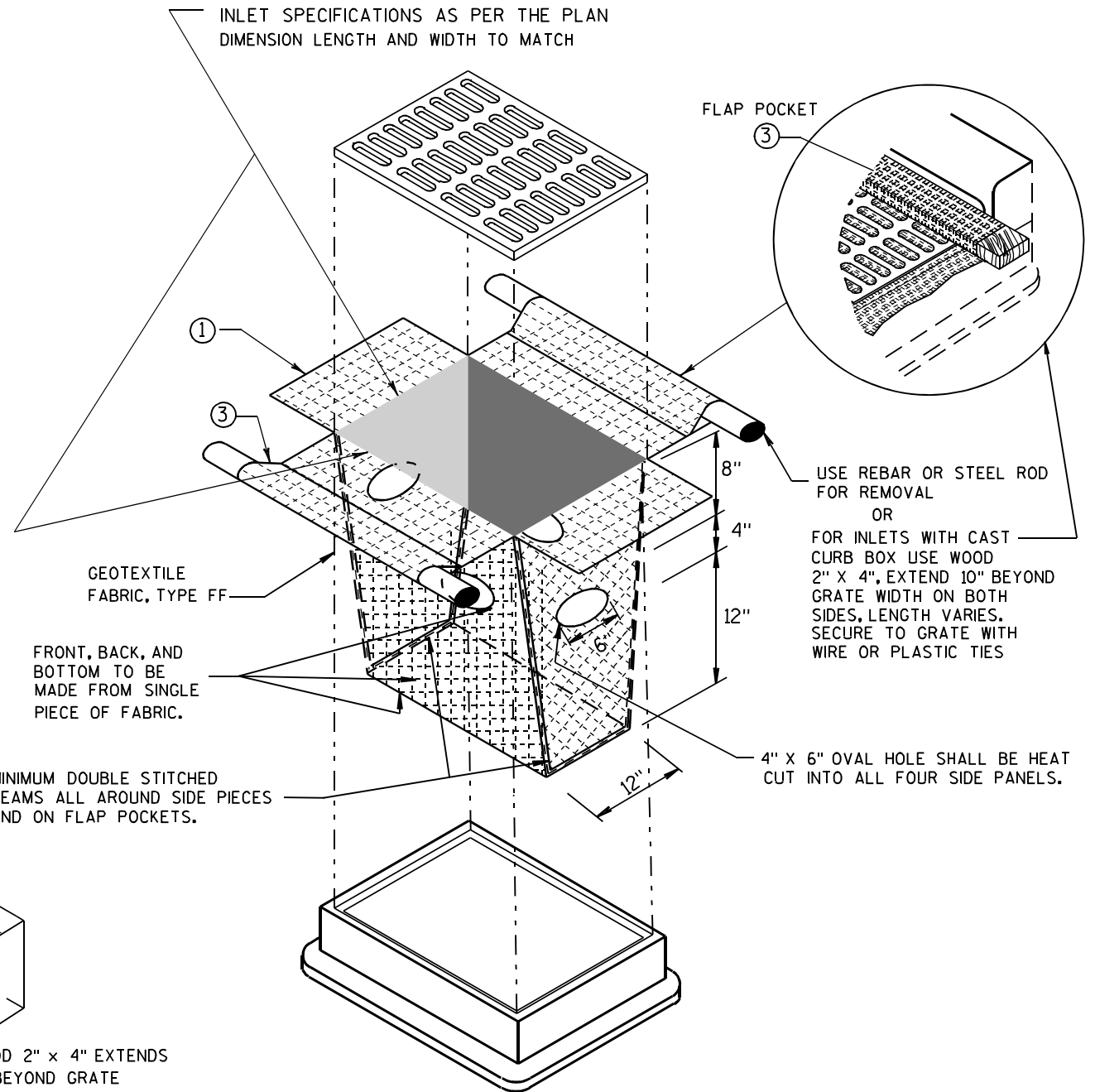
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



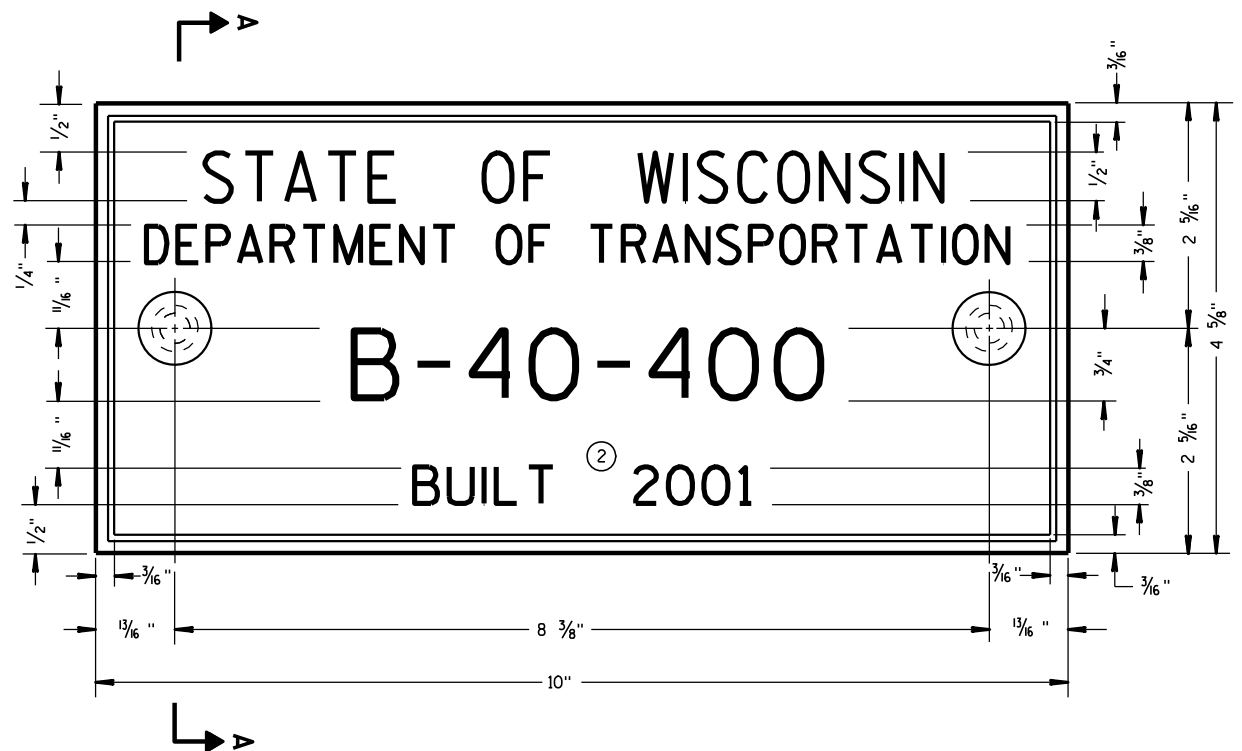
INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Connestra
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



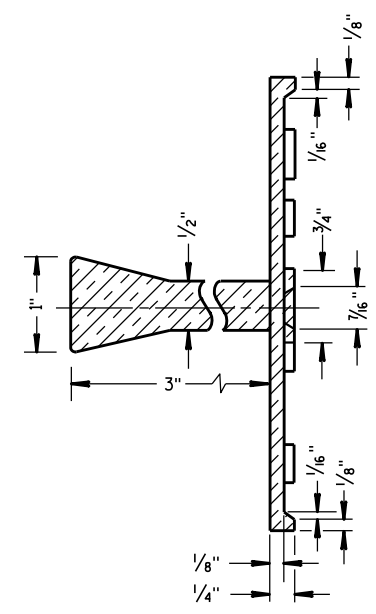
TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

GENERAL NOTES

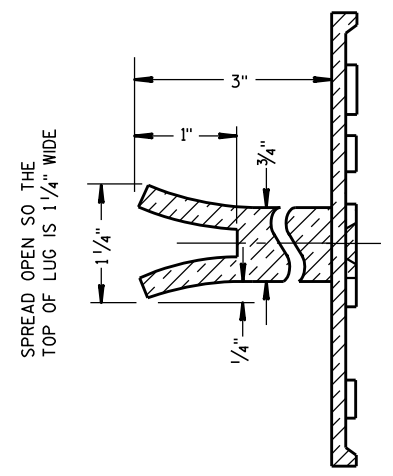
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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



SPREAD OPEN SO THE TOP OF LUG IS 1 1/4" WIDE

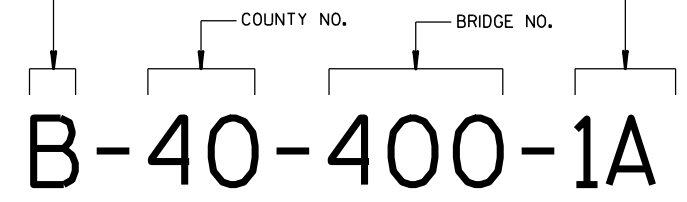
ALTERNATE LUG

6

6

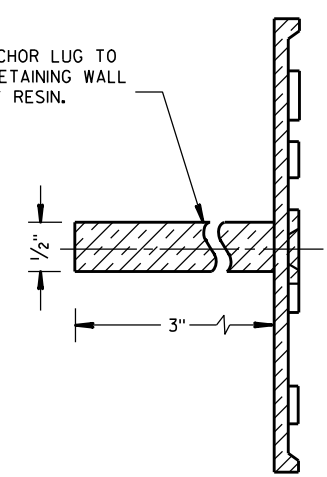
FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

- B = BRIDGE
- C = CULVERT
- R = RETAINING WALL
- UNIT NO. FOR MULTIPLE UNIT BRIDGE



**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

- ① ADHERE ANCHOR LUG TO PRECAST RETAINING WALL WITH EPOXY RESIN.

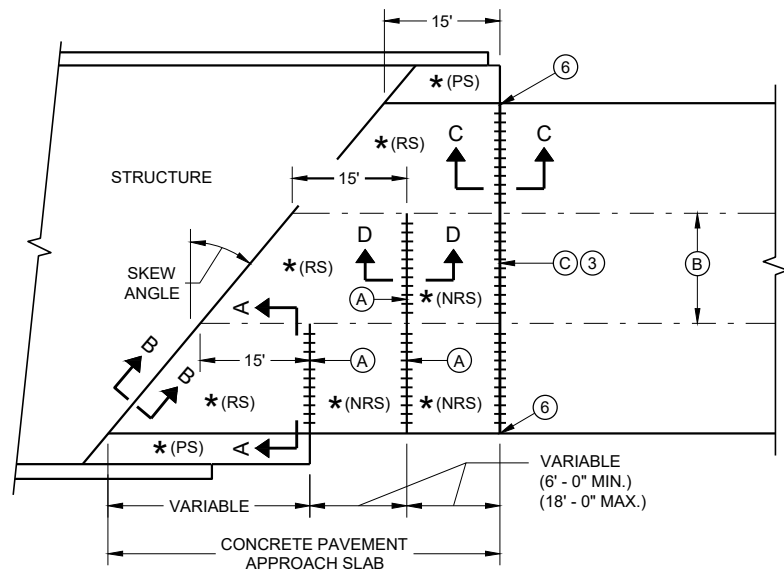


ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

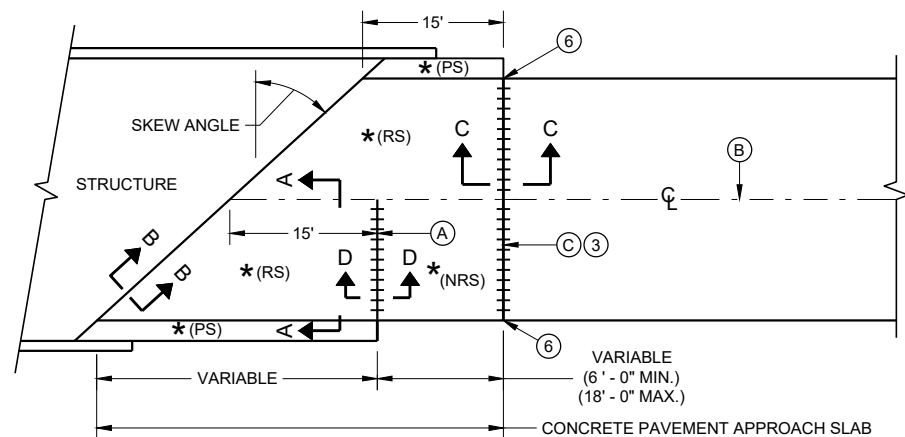
S.D.D. 12 A 3-10

S.D.D. 12 A 3-10

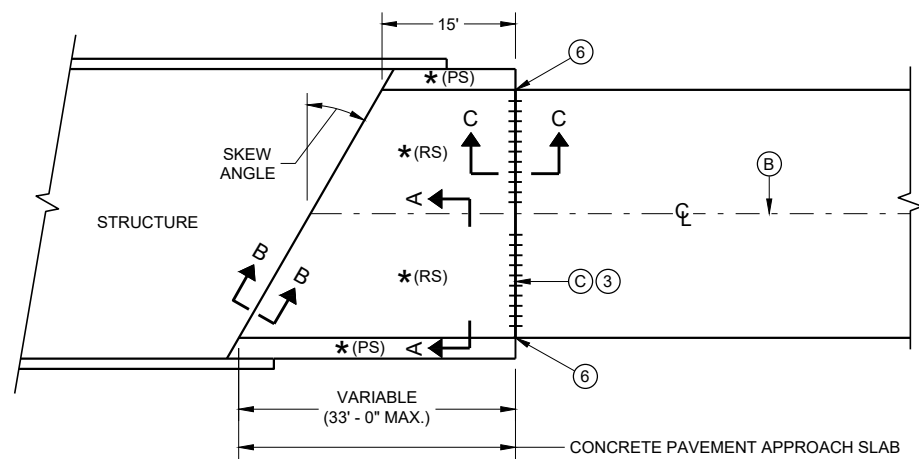
NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 3/26/10	/S/ Scot Becker CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA	



**SKewed APPROACH
(PAVEMENT MORE THAN TWO LANES)**

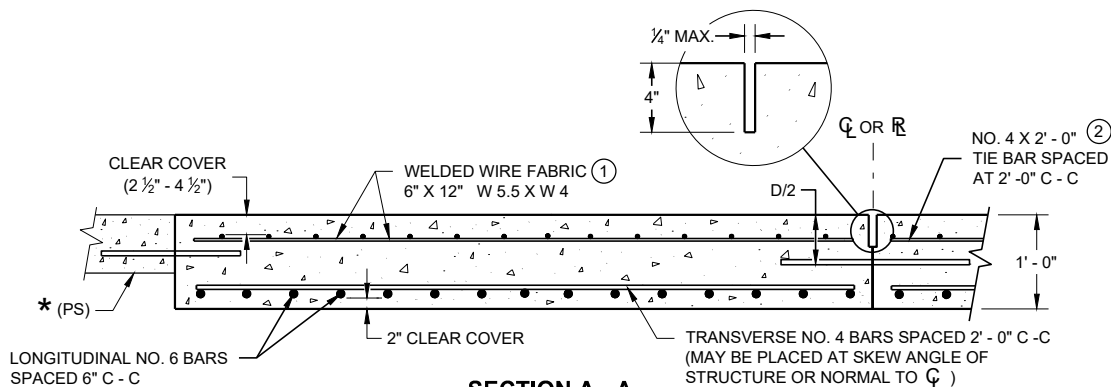


**SKews > 20°
(PAVEMENT WIDTH ≤ 30')**

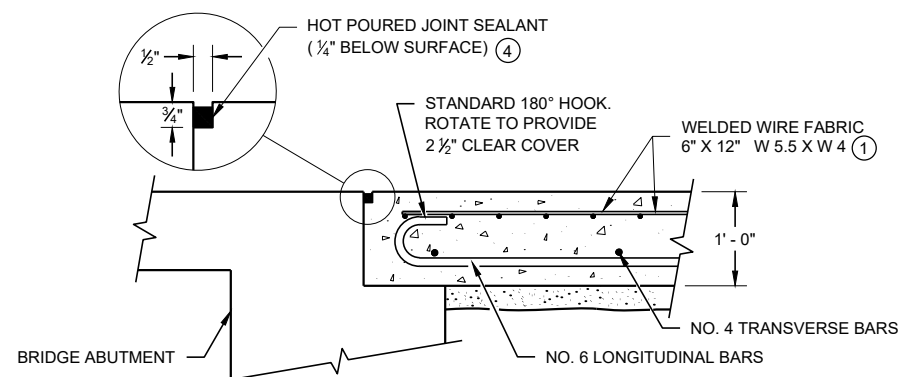


**SKews ≤ 20°
(PAVEMENT WIDTH ≤ 30')**
APPROACH SLAB AND ADJACENT PAVEMENT

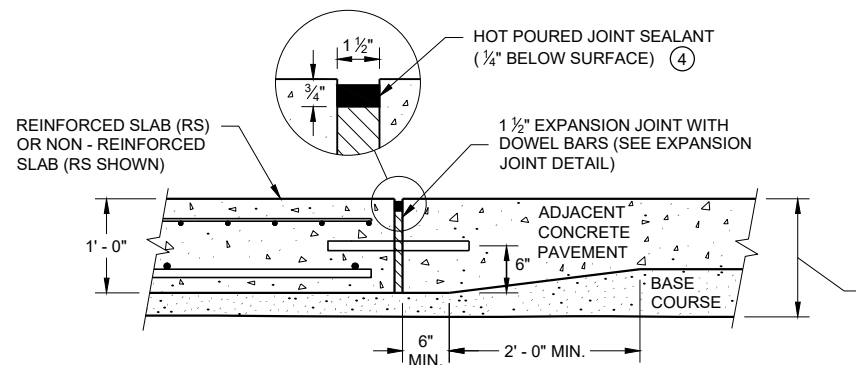
- * (RS) = REINFORCED CONCRETE SLAB
- * (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
- * (NRS) = NON - REINFORCED CONCRETE SLAB
- *** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



**SECTION A - A
REINFORCEMENT POSITIONING DETAIL**



**SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT**



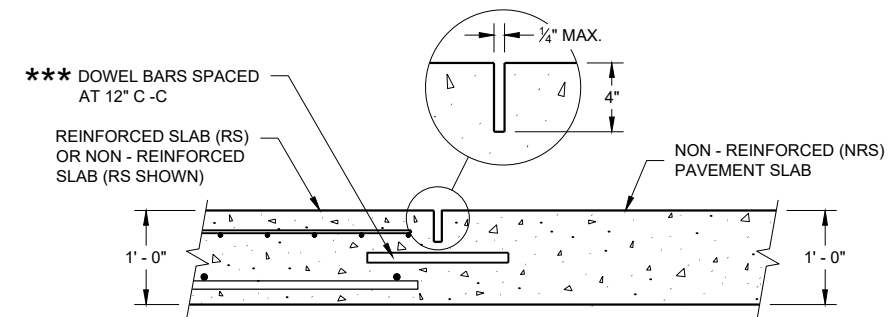
**SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT**

GENERAL NOTES

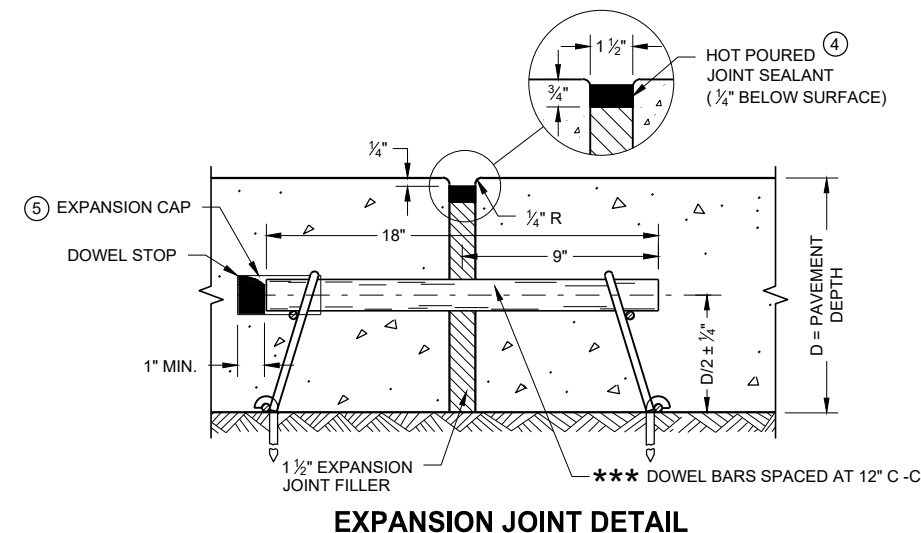
THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

- ① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0" C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.
- ② THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.
- ③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.
- ④ USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
- ⑤ PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.
- ⑥ EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.
- (A) STANDARD CONTRACTION JOINT NORMAL TO \bar{C} OR \bar{R} .
- (B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.
- (C) 1 1/2" EXPANSION JOINT WITH DOWEL BARS NORMAL TO \bar{C} OR \bar{R} .



**SECTION D - D
CONTRACTION JOINT**



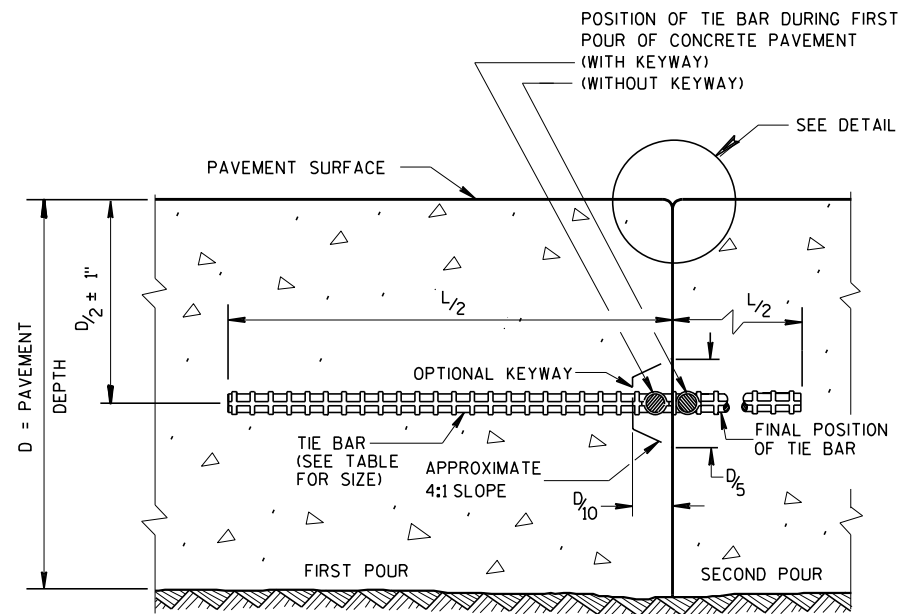
EXPANSION JOINT DETAIL

**CONCRETE PAVEMENT
APPROACH SLAB**

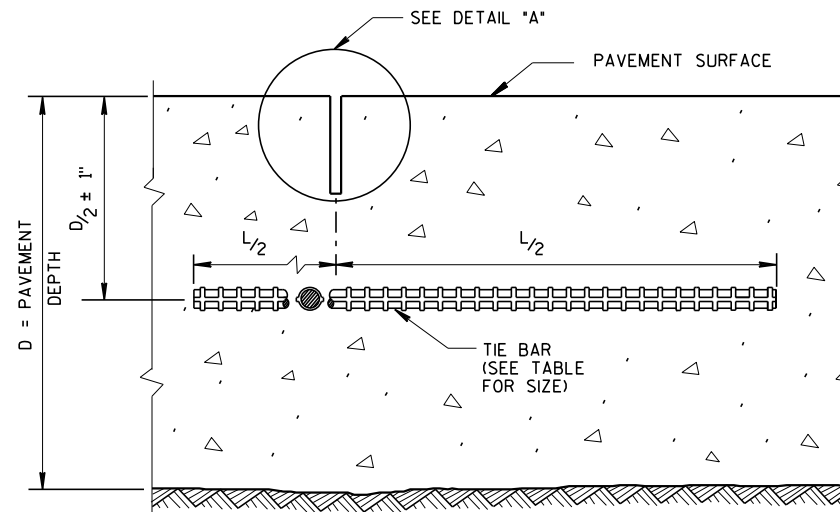
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Peter Kemp, P.E.
DATE DATE PAVEMENT SUPERVISOR

FHWA



CONSTRUCTION JOINT



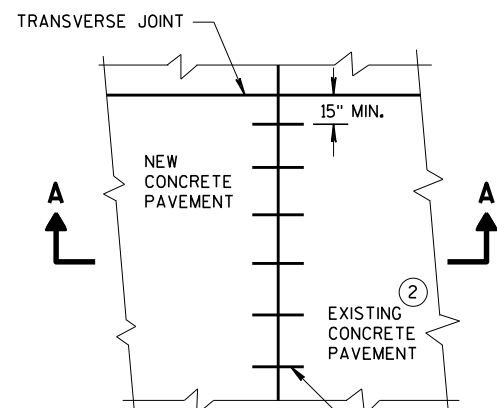
SAWED JOINT

GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

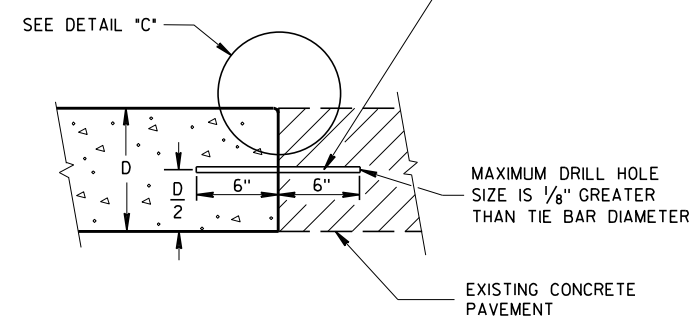
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

- ① ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
- ② PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

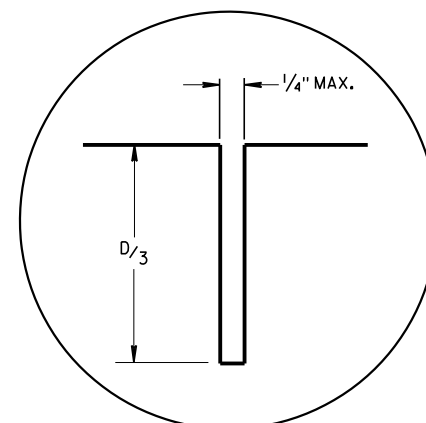


PLAN VIEW

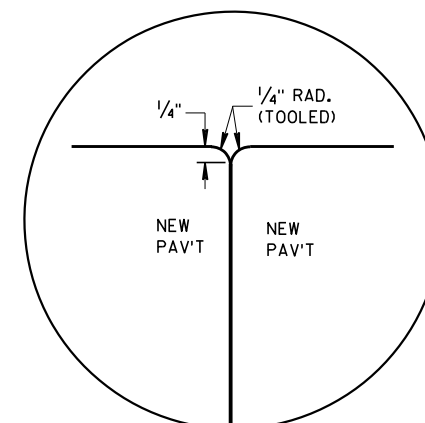
NO. 6 TIE BARS SPACED 30" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT. ①



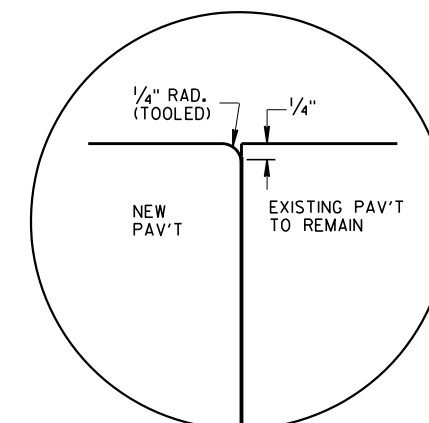
**SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT**



DETAIL "A"



DETAIL "B"



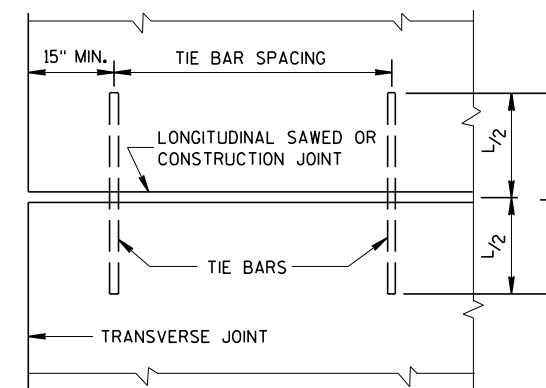
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

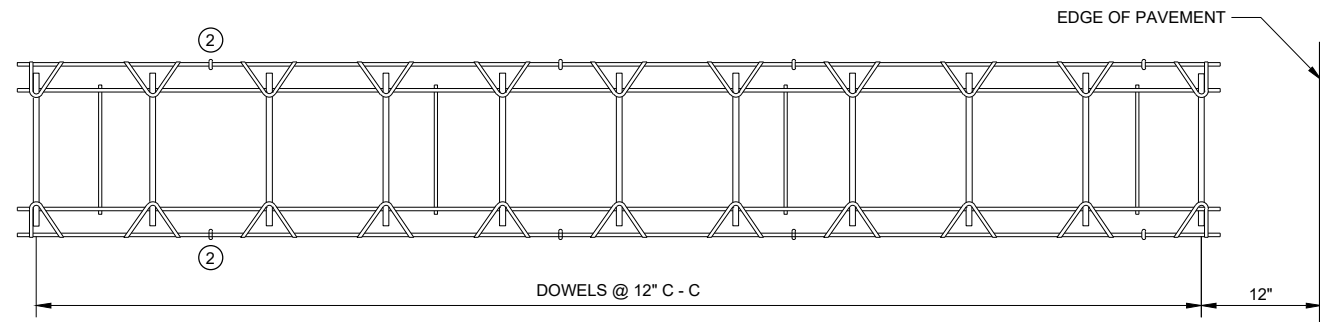


**PLAN VIEW
SHOWING LOCATION OF TIE BARS**

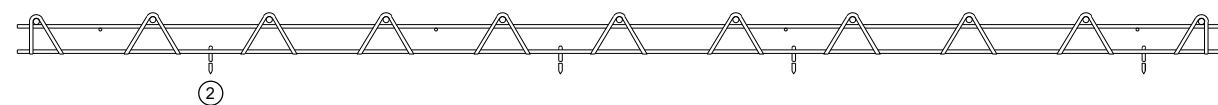
**CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPERVISOR
FHWA

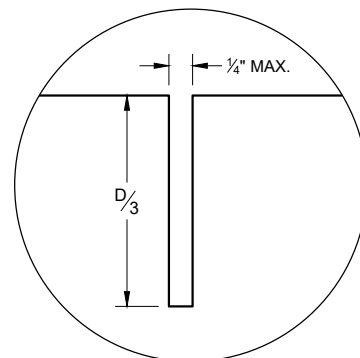


PLAN VIEW



SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

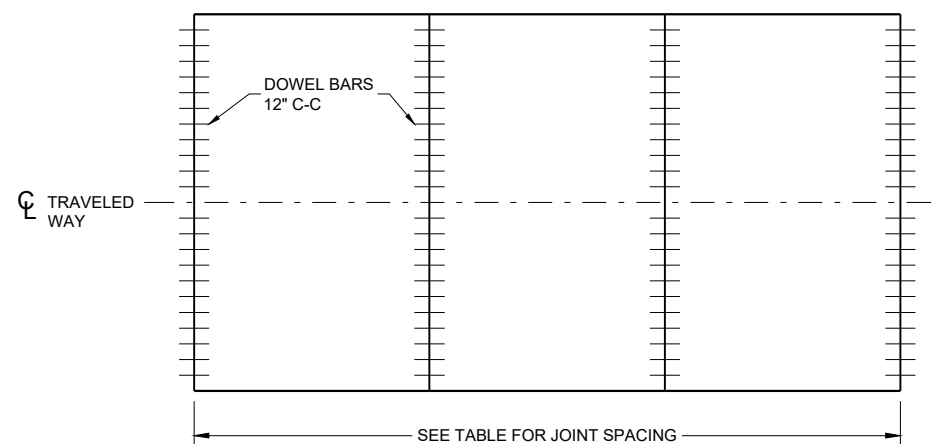
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

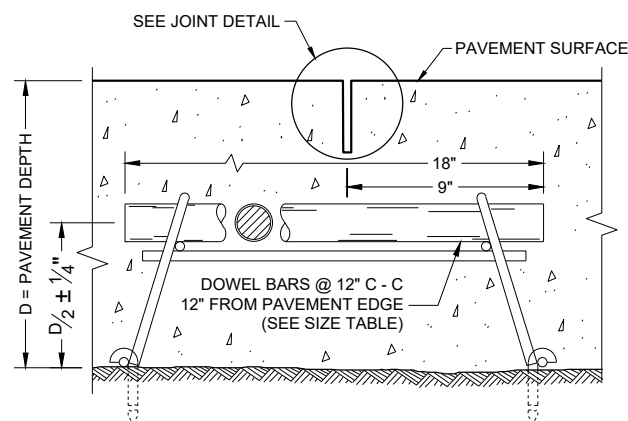
CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

- ① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.
- ② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
- ③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4" RADIUS AT FORMED JOINTS.
- ④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
- ⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.
- ⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- ⑦ ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



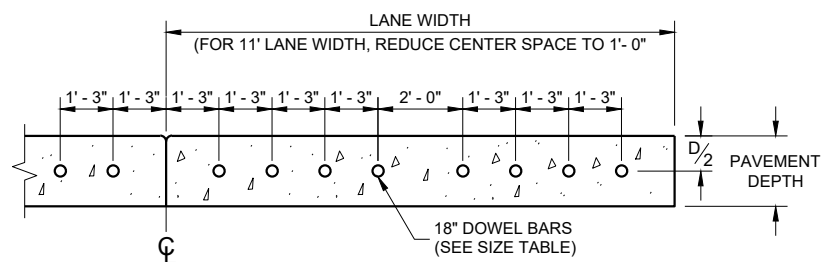
CONTRACTION JOINT LOCATIONS



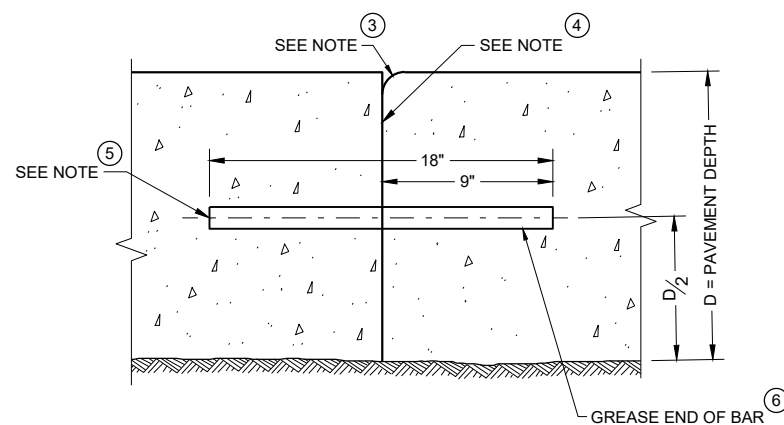
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8" & ABOVE	1 1/4"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



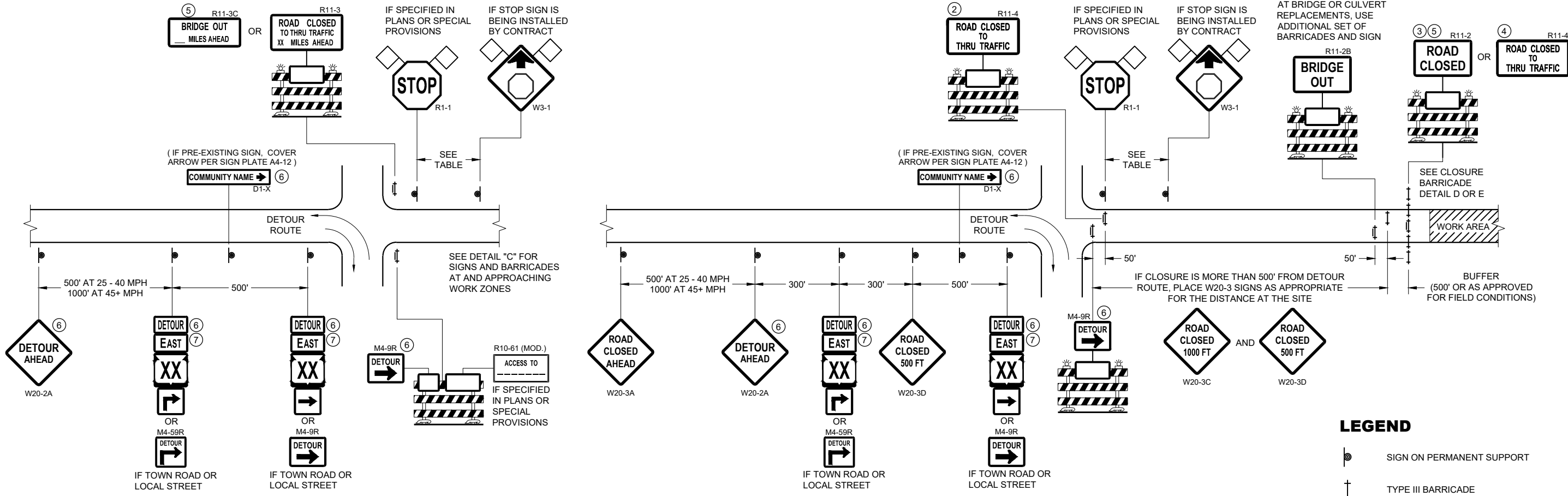
TRANSVERSE CONSTRUCTION JOINT

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 /S/ Peter Kemp P.E.
DATE PAVEMENT SUPERVISOR

FHWA



**DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE GREATER THAN OR EQUAL TO 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

**DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR**

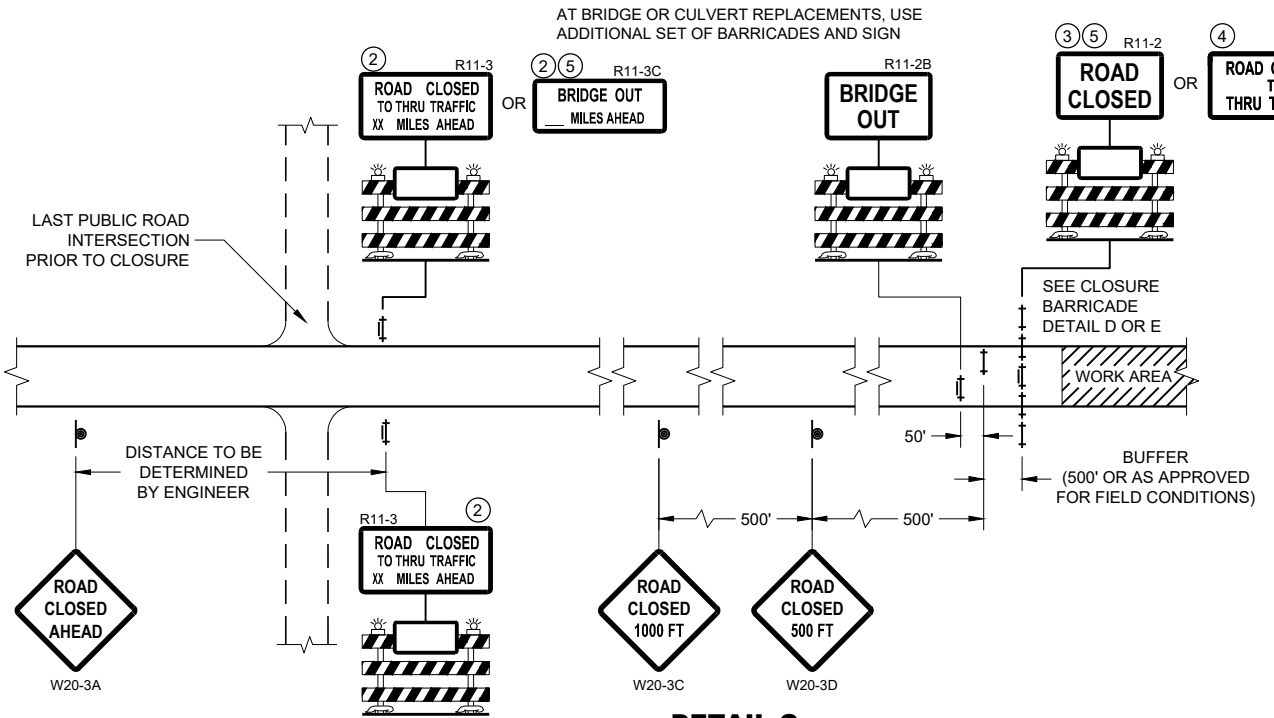
WORK ZONE LESS THAN 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

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

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

- M4 - 8
- M3 - X
- M1 - 4
- M1 - 6
- M1 - 5A
- M05 - 1
- M06 - 1



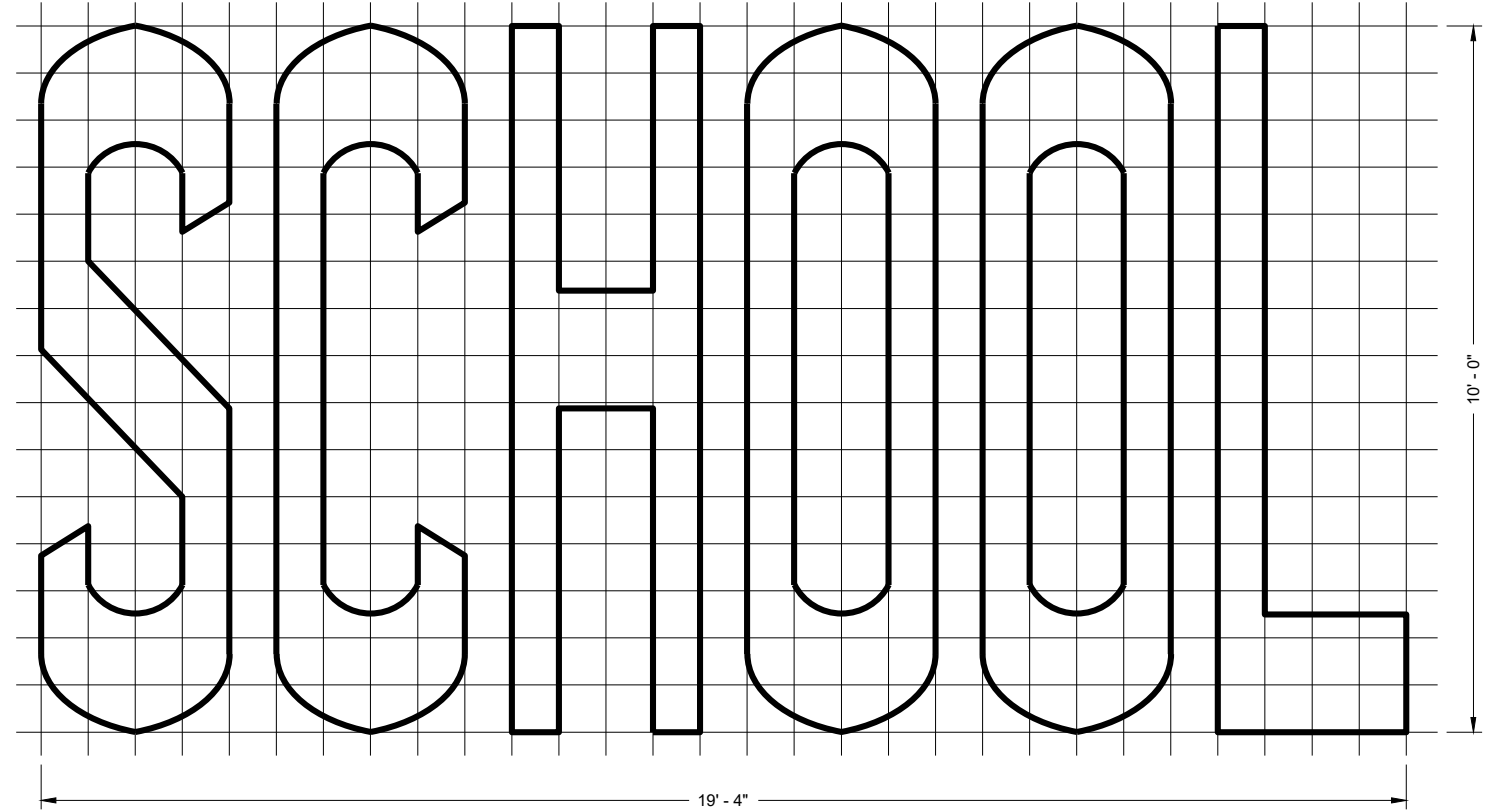
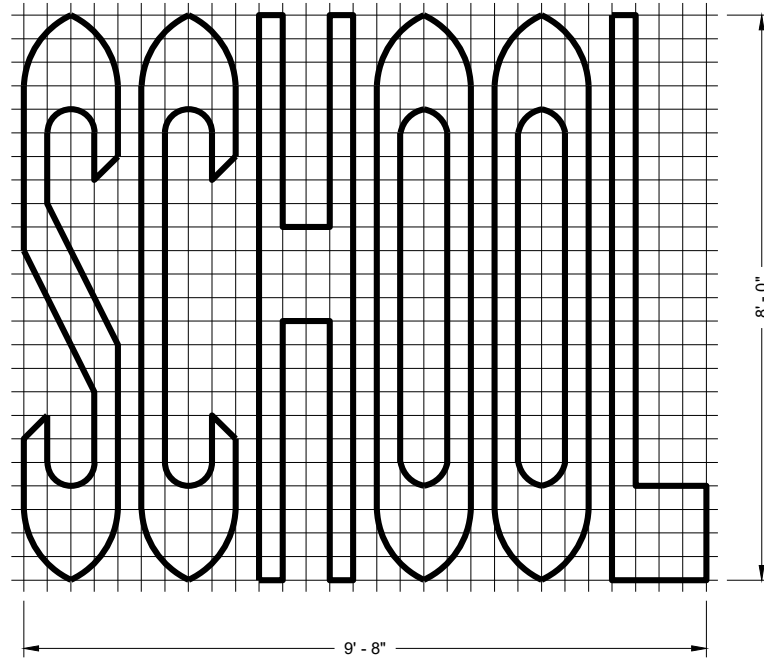
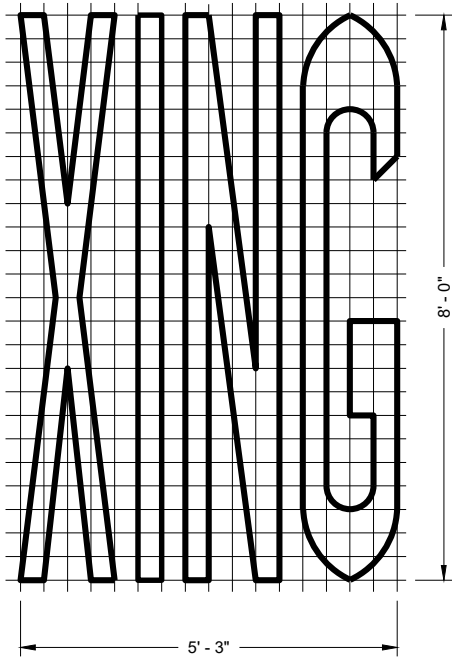
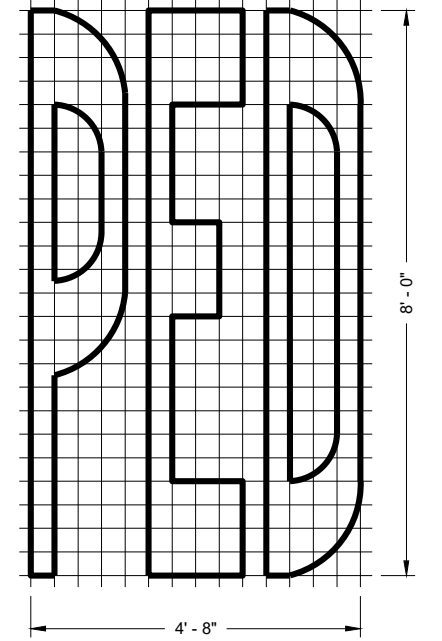
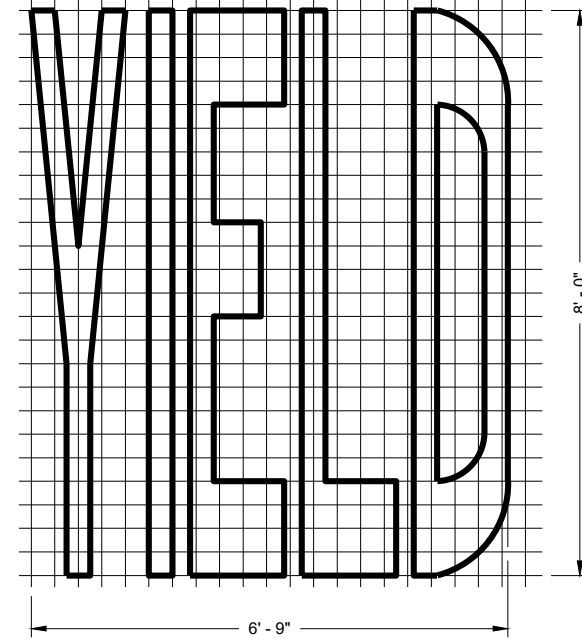
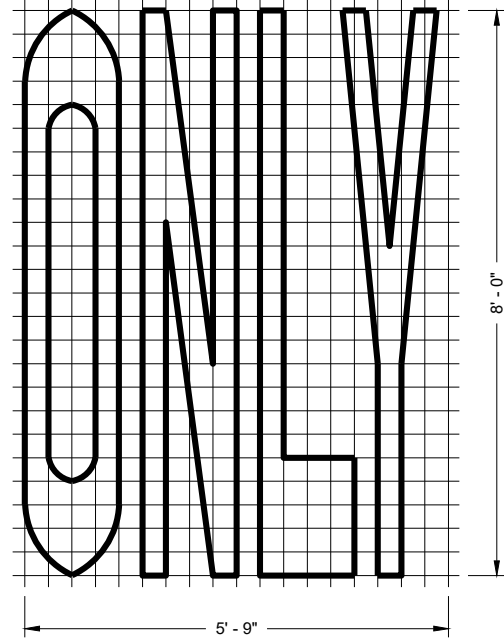
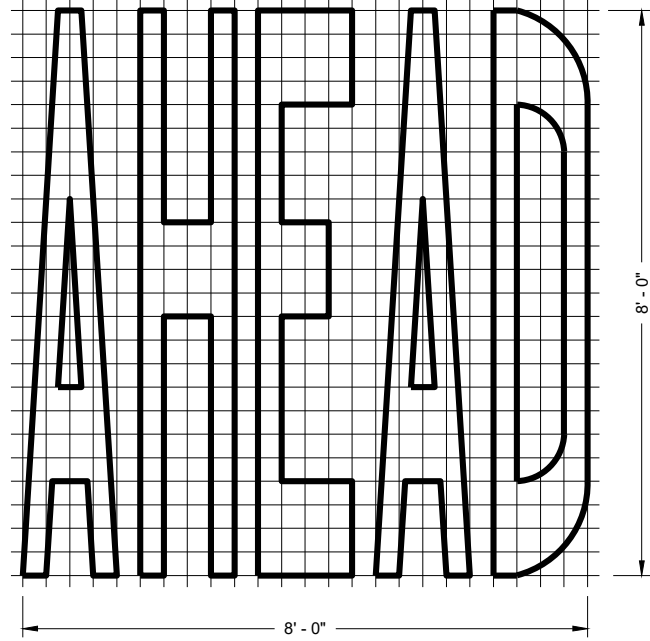
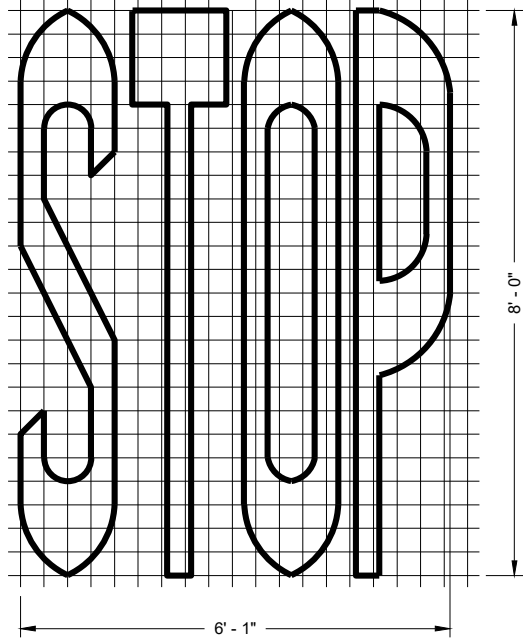
**DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR**

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

**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE DATE WORK ZONE ENGINEER



SINGLE LANE

TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

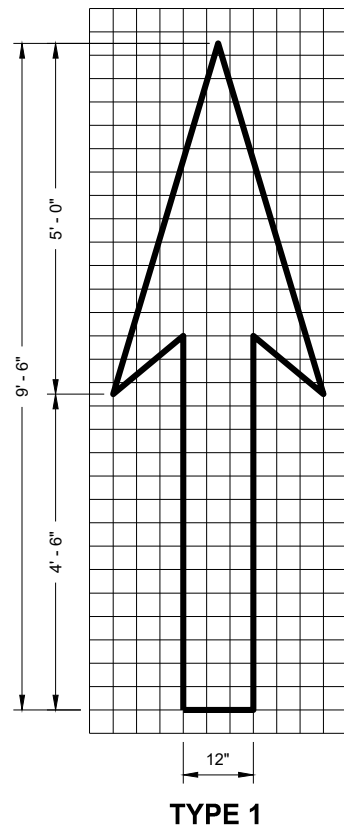
APPROVED

November 2019

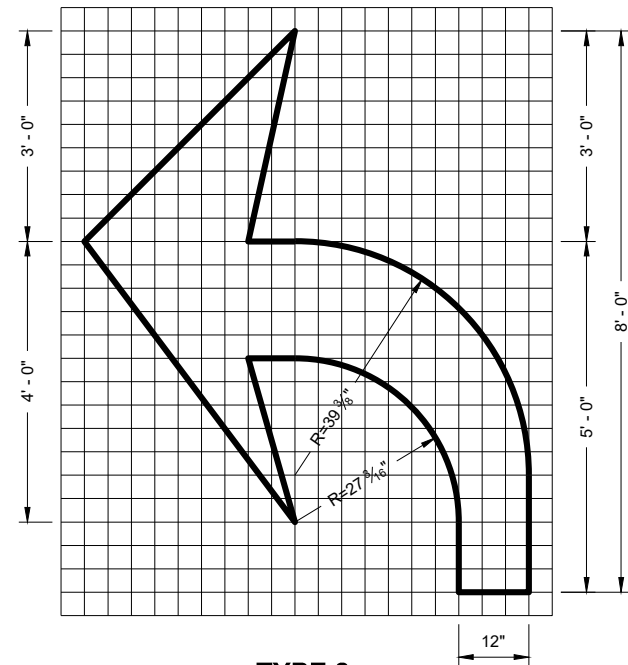
DATE

FHWA

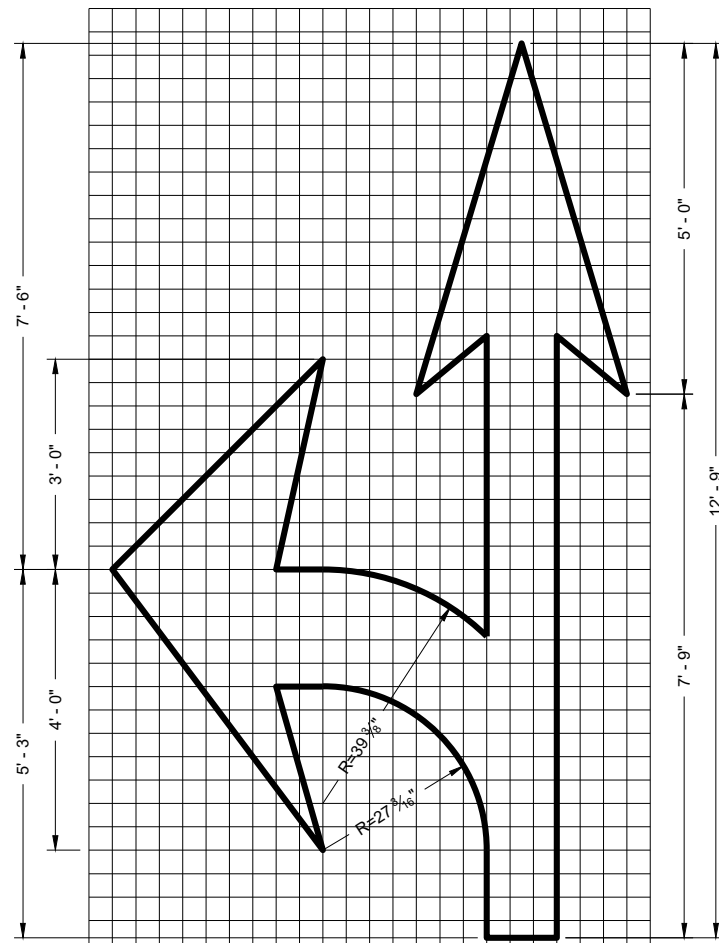
/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER



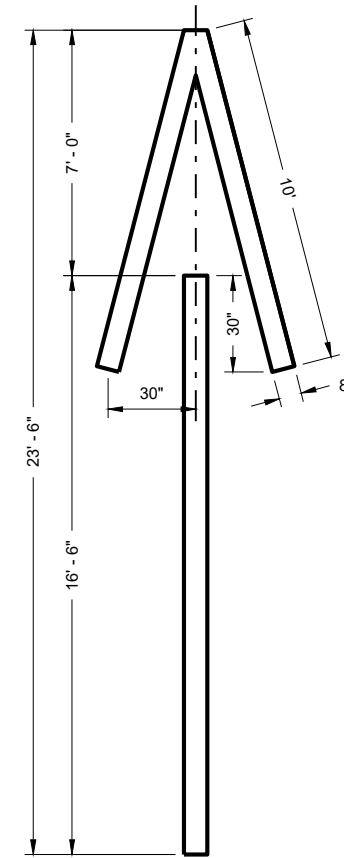
TYPE 1



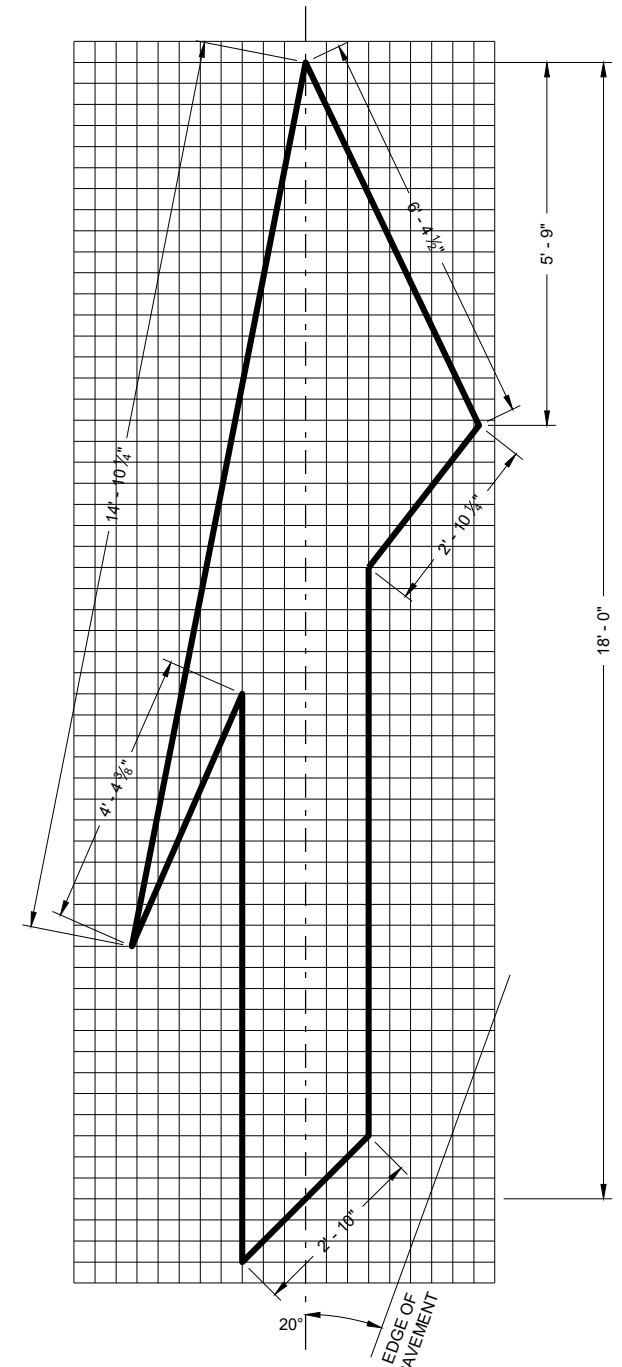
TYPE 2



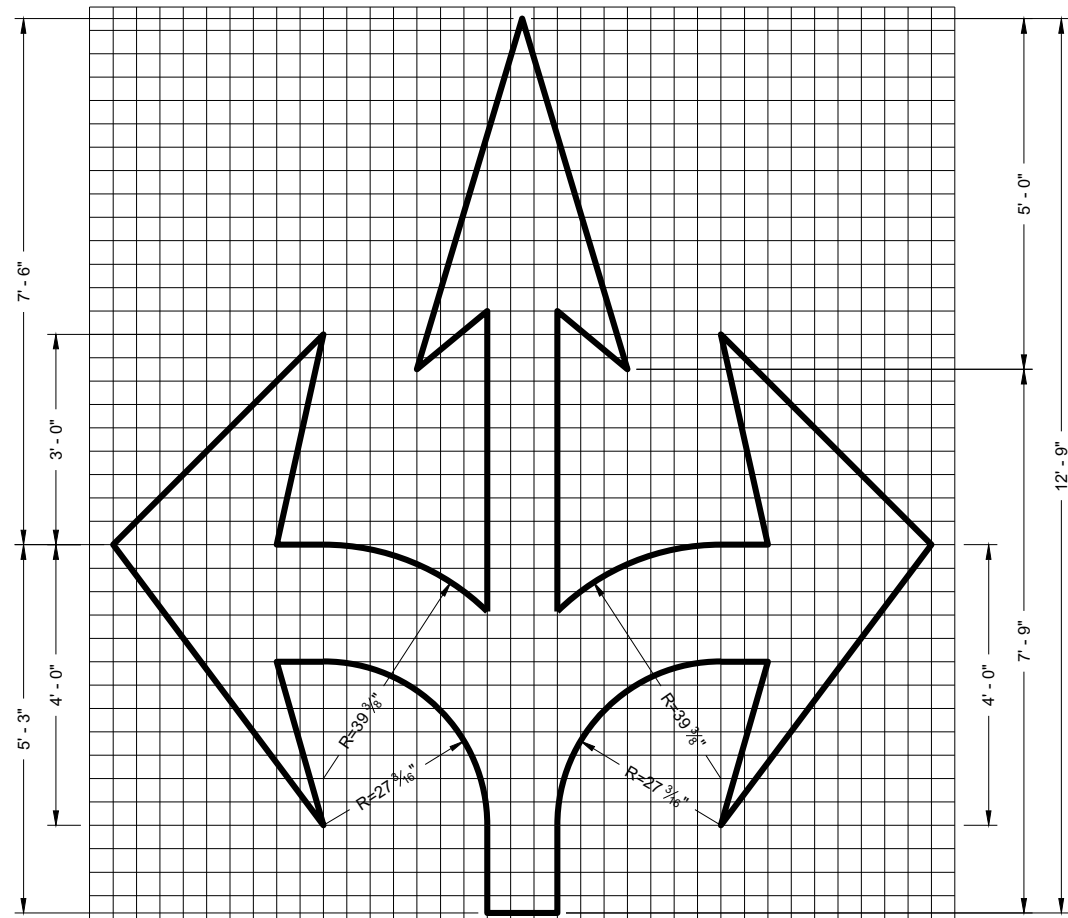
TYPE 3



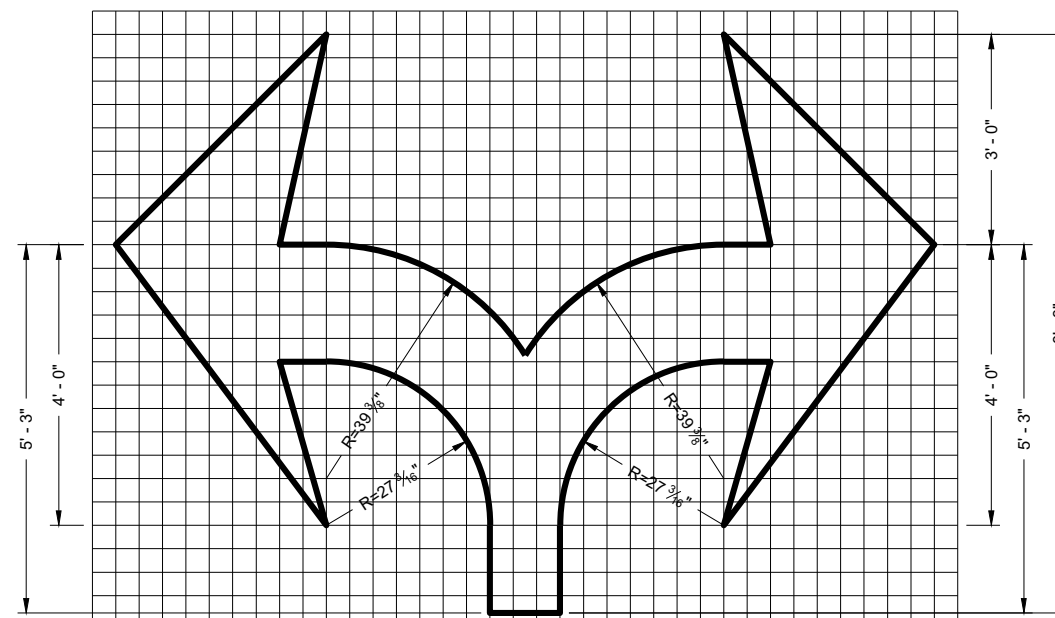
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

GENERAL NOTES

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

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

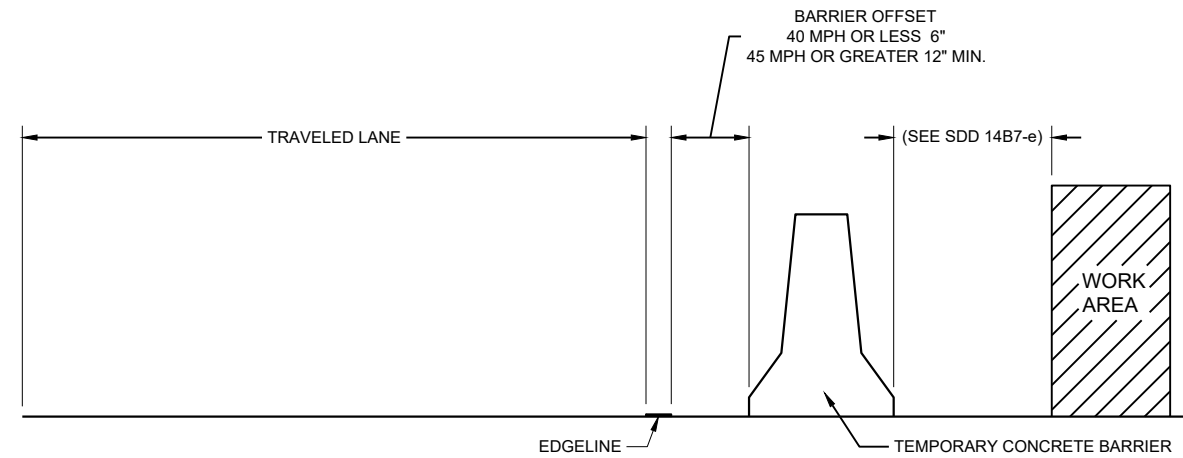
APPROVED

November 2019

DATE

FHWA

/s/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER



TEMPORARY BARRIER OFFSET FROM EDGELINE

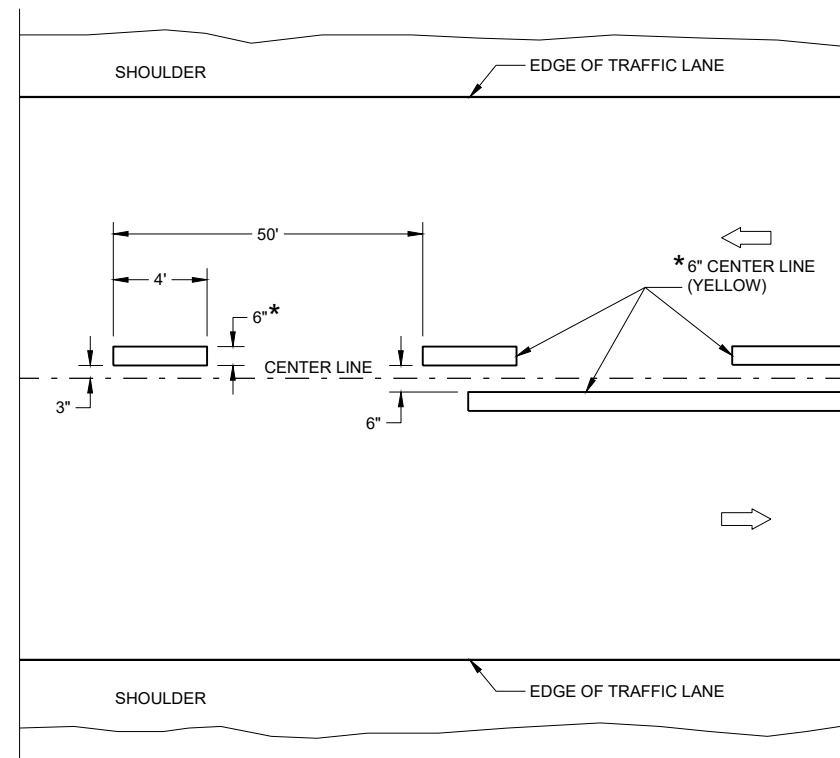
GENERAL NOTES

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

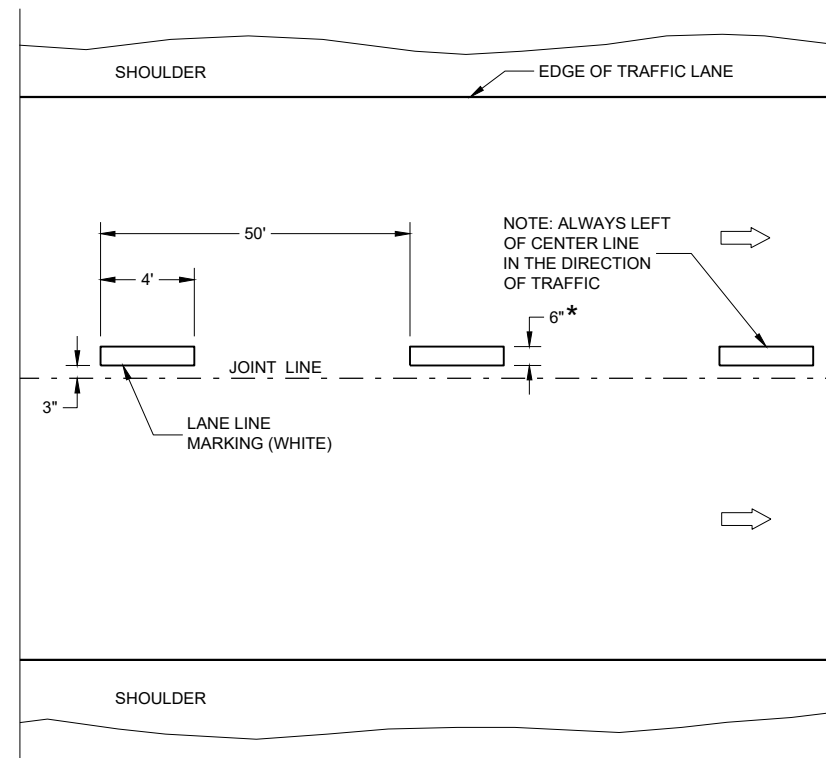
LEGEND

➡ DIRECTION OF TRAFFIC

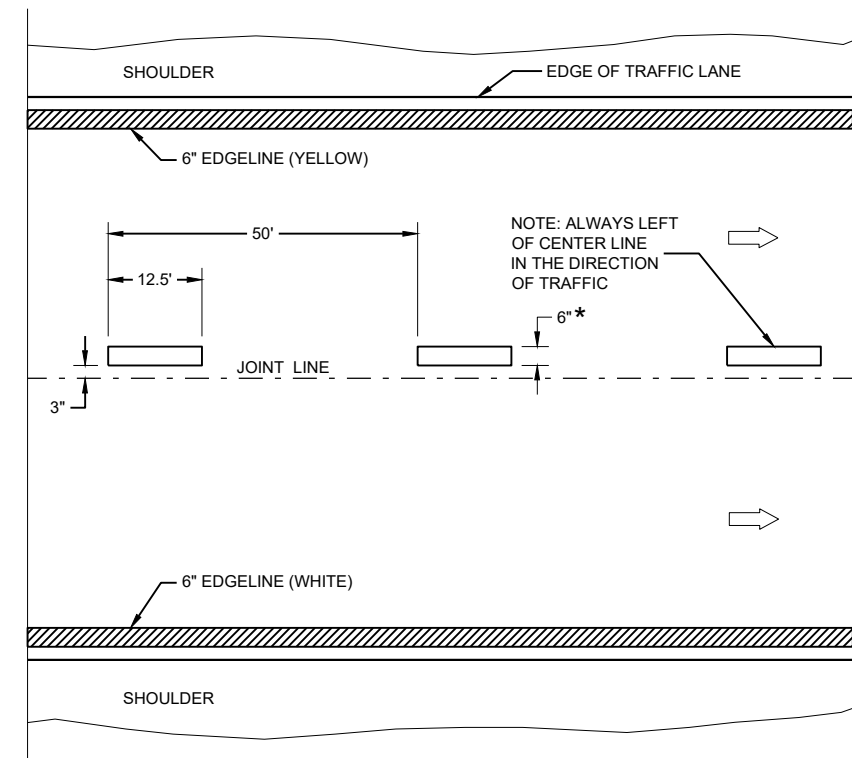
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

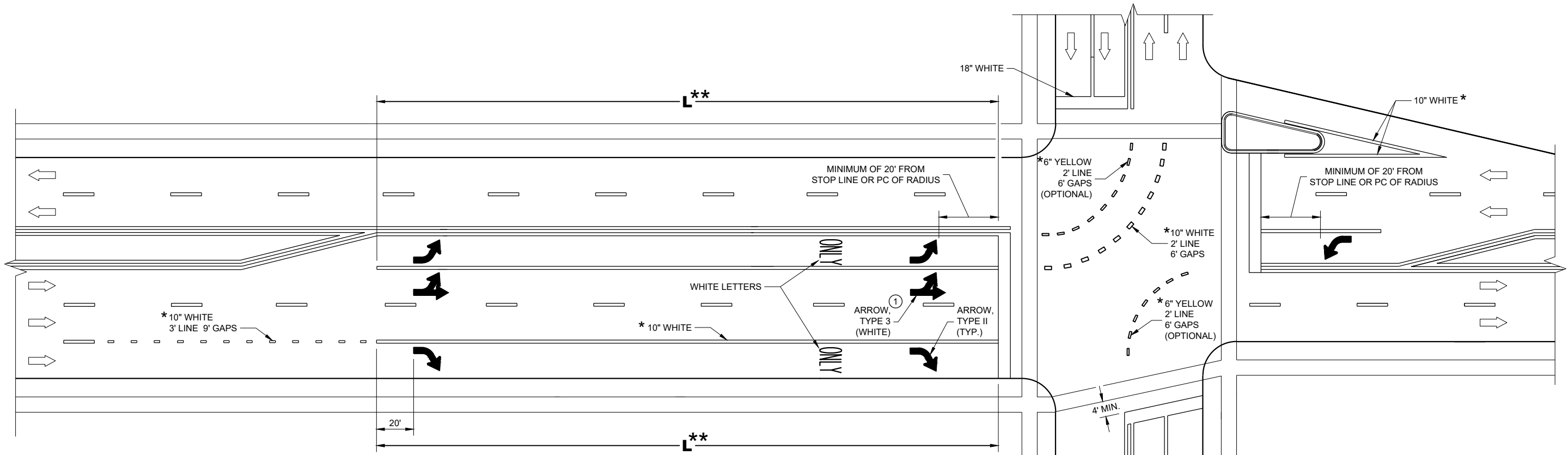
TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

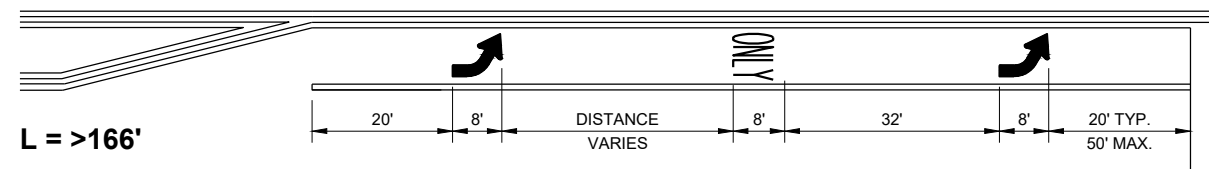
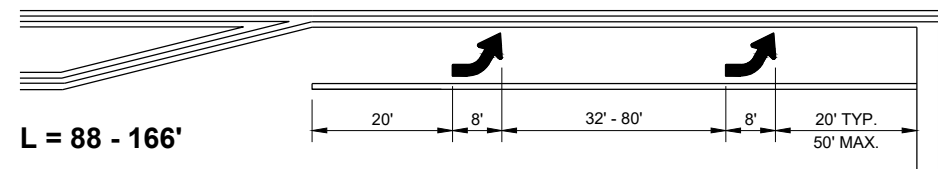
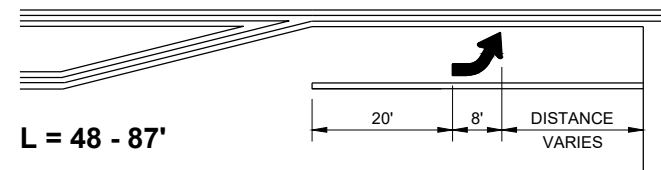
APPROVED
DATE: May 2023 /S/ Jeannie Silver
STATEWIDE SIGNING AND MARKING ENGINEER

FHWA



TURN LANE OPTIONS

LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

GENERAL NOTES

① QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

➡ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1001	121+45.45, 15.60' LT	CHIS 'X' W. ABUT. MEDIAN WALL	818.39
1002	121+31.58, 15.65' LT	CHIS 'X' E. ABUT. MEDIAN WALL	818.31

DESIGN DATA

LIVE LOAD:
 TAKEN FROM HSI, 2/1/2024
 DESIGN LOADING: HS-20
 INVENTORY RATING: HS-23
 OPERATING RATING: HS-39
 WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:
 CONCRETE MASONRY: ALL $f_c = 4,000$ PSI
 BAR STEEL REINFORCEMENT: GRADE 60 $f_y = 60,000$ PSI

TRAFFIC DATA

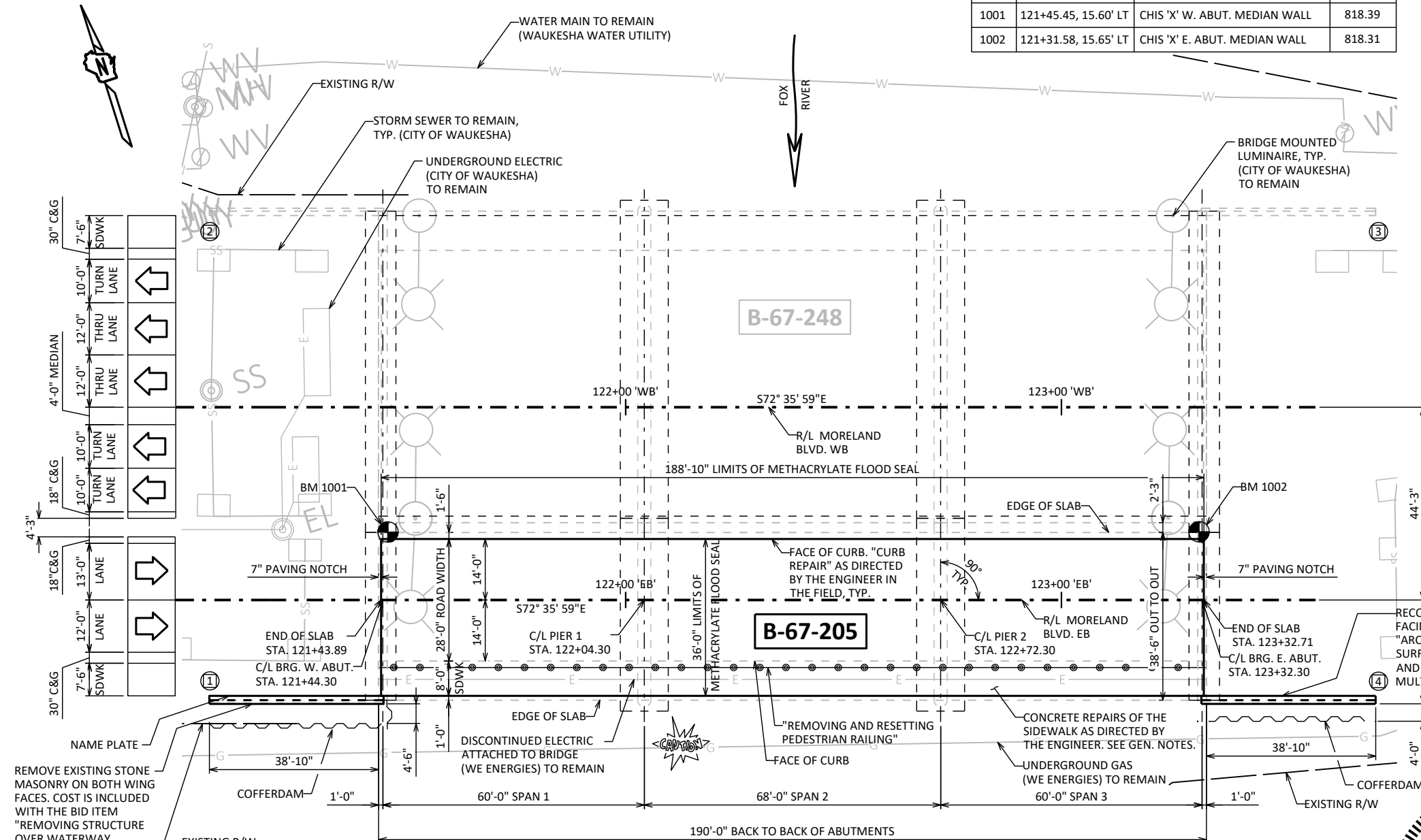
E. MORELAND BLVD
 ADT = 18,700 (2024)
 ADT = 18,700 (2044)
 R.D.S. = 25 MPH

LIST OF DRAWINGS:

1. GENERAL PLAN AND ELEVATION
2. CROSS SECTION, NOTES, AND QUANTITIES
3. WING 1 FACING REPAIR
4. WING 4 FACING REPAIR
5. WING DETAILS

LEGEND

- (X) INDICATES WING WALL NUMBER
- F. FIXED BEARING
- S.E. SEMI-EXPANSION BEARING
- ☆ ELEVATIONS ARE BASED ON ORIGINAL B-67-248 CONSTRUCTION PLANS AND HAVE BEEN CONVERTED FROM CITY OF WAUKESHA DATUM TO NAVD 88 (2012).

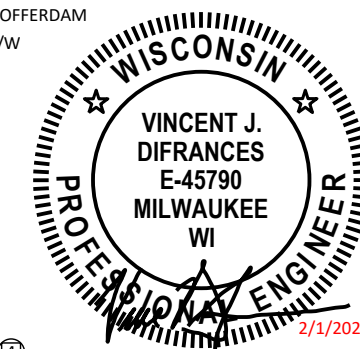


PLAN

REHABILITATION - 3 SPAN CONCRETE HAUNCHED SLAB

REMOVE EXISTING STONE MASONRY ON BOTH WING FACES. COST IS INCLUDED WITH THE BID ITEM "REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS B-67-205", TYP.

REMOVE EXISTING STONE MASONRY ON BOTH WING FACES. COST IS INCLUDED WITH THE BID ITEM "REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS B-67-205", TYP.



STRUCTURE DESIGN CONTACTS:
 AARON BONK, P.E. 608-261-0261
 VINCENT DIFRANCES, P.E. 262-573-3864

NO.	DATE	REVISION	BY



STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 ACCEPTED *[Signature]* SDR 02/21/24
 CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-67-205

EB MORELAND BLVD. OVER FOX RIVER

COUNTY WAUKESHA CITY WAUKESHA

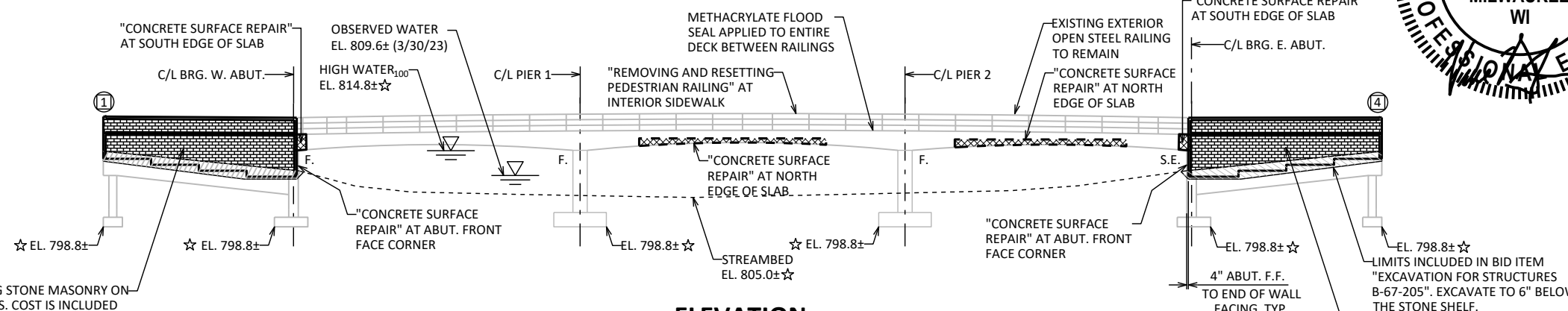
DESIGN SPEC. REHABILITATION N/A

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

GENERAL PLAN AND ELEVATION SHEET 1 OF 5

ELEVATION

LOOKING NORTH
 SHOWING DOWNSTREAM FACE

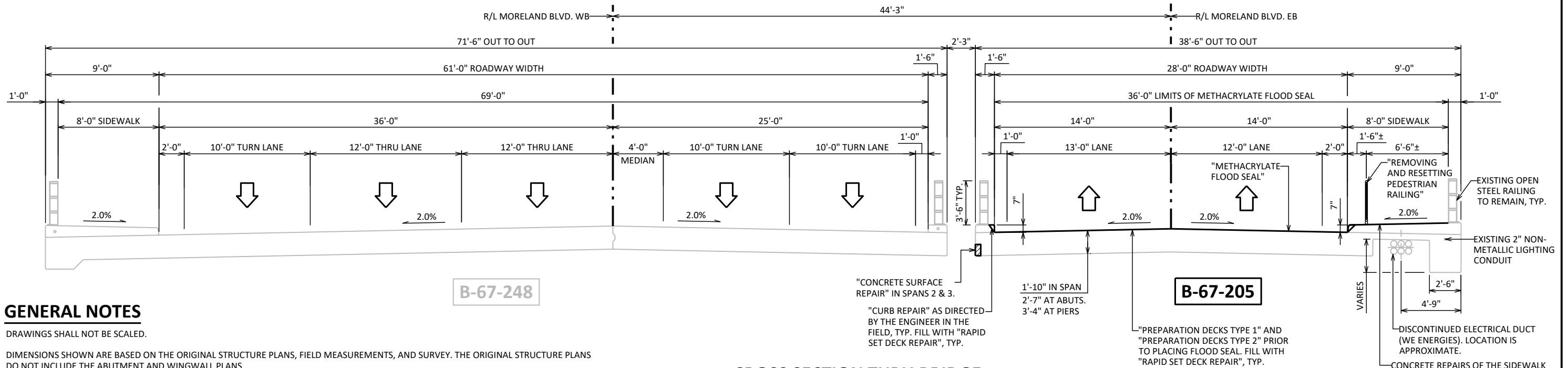


RECONSTRUCT WING FACING AND APPLY "ARCHITECTURAL SURFACE TREATMENT" AND "CONCRETE STAINING MULTI-COLOR", TYP.

FLOOD SEAL NOTES

AT MEDIAN CURBS, EXTEND METHACRYLATE FLOOD SEAL 2" MIN. VERTICALLY ON CURB FACE.

AT SIDEWALK CURBS, APPLY METHACRYLATE FLOOD SEAL ALONG THE FULL CURB HEIGHT. APPLY METHACRYLATE FLOOD SEAL ON SIDEWALK TO FACE OF OPEN STEEL RAILINGS.



CROSS SECTION THRU BRIDGE

LOOKING EAST, NORMAL TO REF. LINE
SHOWING IN SPAN SECTION AND ADJACENT BRIDGE B-67-248

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS, FIELD MEASUREMENTS, AND SURVEY. THE ORIGINAL STRUCTURE PLANS DO NOT INCLUDE THE ABUTMENT AND WINGWALL PLANS.

ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS SHOWN ON SHEET 1 ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND HAVE BEEN CONVERTED FROM CITY OF WAUKESHA DATUM TO NAVD 88 (2012). STATIONS ARE BASED ON THE ORIGINAL B-67-248 STRUCTURE PLANS.

SEE ROADWAY PLANS FOR TRAFFIC CONTROL DETAILS. ALL WORK ON B-67-205 SHALL BE COMPLETED IN THE STAGE 1 TRAFFIC CONFIGURATION.

"REMOVING AND RESETTING PEDESTRIAN RAILING B-67-205" SHALL INCLUDE REMOVAL, SAFE STORAGE, AND REINSTALLATION OF THE RAILING ON EXISTING ANCHORS AFTER FLOOD SEALING. PAYMENT SHALL INCLUDE CAULKING THE BASE PLATES AFTER REINSTALLATION AND ANY TOUCH UP PAINTING REQUIRED. SEE SPECIAL PROVISIONS.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT, UNLESS SPECIFIED OTHERWISE. SAW CUTS FOR "PREPARATION DECKS TYPE 1" SHALL BE PAID UNDER THE BID ITEM "SAWING PAVEMENT DECK PREPARATION AREAS".

AT "CURB REPAIR" REMOVE CONCRETE TO SOUND CONCRETE OR AT LEAST 1 INCH BEHIND EXISTING REINFORCING STEEL. "CURB REPAIR" SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

"CONCRETE SURFACE REPAIR" SHALL BE USED FOR NEEDED REPAIRS AT ABUTMENT CORNERS, ABUTMENT FRONT FACES, AND SLAB EDGES AS SHOWN ON SHEET 1. CONTRACTOR SHALL COORDINATE THE FIELD IDENTIFICATION AND DETERMINATION OF ALL REPAIR LOCATIONS WITH THE ENGINEER.

▲ A LEVEL 1 INFRARED THERMOGRAPHIC SURVEY WAS COMPLETED ON 5/11/2021. ESTIMATED DISTRESS IS 0.3% OF THE TOTAL DECK AREA. "PREPARATION DECKS TYPE 1", "PREPARATION DECKS TYPE 2", AND "SAWING PAVEMENT DECK PREPARATION AREAS" QUANTITIES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE THE FIELD IDENTIFICATION AND DETERMINATION OF ALL REPAIR LOCATIONS WITH THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

ALL PREVIOUS DECK PATCHES SHALL BE REMOVED UNDER THE BID ITEM "PREPARATION DECKS TYPE 1" AND "PREPARATION DECKS TYPE 2".

CONCRETE REPAIRS AT THE SIDEWALKS SHALL BE AS DIRECTED BY THE ENGINEER AND ARE INCLUDED UNDER THE 'DECK PREPARATION' AND "RAPID SET DECK REPAIR" BID ITEMS.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE EXISTING AND REPAIRED EDGES OF THE DECK AND THE BOTTOM 1'-0" OF THE SLAB AT EACH EDGE.

THE BID ITEM "JOINT SEALANT SIDEWALK" SHALL INCLUDE REMOVING EXISTING SEALANT AT ALL SIDEWALK JOINTS PRIOR TO PREPARING THE SURFACE FOR FLOOD SEALING AND RESEALING THE JOINTS WITH NON-STAINING GRAY, NON-BITUMINOUS SEALER PRIOR TO FLOOD SEALING.

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

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

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR OF 1982.

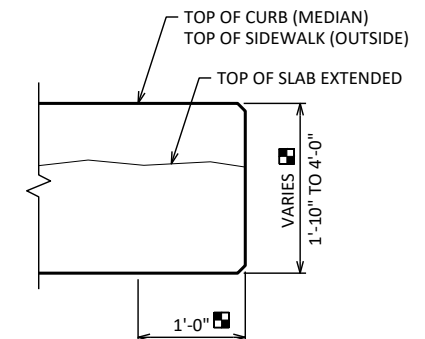
DIRTY OR CONTAMINATED WATER CANNOT LEAVE THE WORK AREAS NOR BE ALLOWED TO ENTER THE FOX RIVER WITHOUT TREATMENT. SEE SPECIAL PROVISIONS FOR DEWATERING REQUIREMENTS.

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

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER	WEST ABUT.	EAST ABUT.	TOTALS
203.0250	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS B-67-205	EACH	-	-	-	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-67-205	EACH	-	-	-	1
206.5001	COFFERDAMS B-67-205	EACH	-	-	-	1
502.0100	CONCRETE MASONRY BRIDGES	CY	-	21	21	42
502.3200	PROTECTIVE SURFACE TREATMENT	SY	205	-	-	205
502.4206	ADHESIVE ANCHORS NO. 6 BAR	EACH	-	69	69	138
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	-	3,260	3,220	6,480
▲ 509.0301	PREPARATION DECKS TYPE 1	SY	6	-	-	6
▲ 509.0302	PREPARATION DECKS TYPE 2	SY	1	-	-	1
▲ 509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	35	-	-	35
509.1200	CURB REPAIR	LF	20	-	-	20
509.1500	CONCRETE SURFACE REPAIR	SF	125	12	48	185
★ 517.1015.S	CONCRETE STAINING MULTI-COLOR B-67-205	SF	-	725	645	1,370
★ 517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-67-205	SF	-	589	592	1,181
SPV.0035.01	RAPID SET DECK REPAIR	CY	1	-	-	1
SPV.0090.02	JOINT SEALANT SIDEWALK	LF	36	-	-	36
SPV.0090.03	REMOVING AND RESETTING PEDESTRIAN RAILING B-67-205	LF	190	-	-	190
SPV.0180.01	METHACRYLATE FLOOD SEAL	SY	775	-	-	775
	NON-BID ITEMS					
	PREFORMED JOINT FILLER	SIZE				½"
	NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER	SIZE				1"
	NAME PLATE	EACH				1

ALL B-67-205 BID ITEMS ARE CATEGORY 0020 EXCEPT AS NOTED.
★ BID ITEMS ARE NON-PARTICIPATING CATEGORY 0030.



EDGE OF SLAB DETAIL

■ LIMITS OF PROTECTIVE SURFACE TREATMENT RAILINGS NOT SHOWN FOR CLARITY EACH EDGE SIMILAR

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-67-205			
DRAWN BY		PLANS CK'D	
VJD		CJM	
CROSS SECTION, NOTES, AND QUANTITIES			SHEET 2 OF 5

SCALE = N.T.S.

BILL OF BARS - WING 1

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

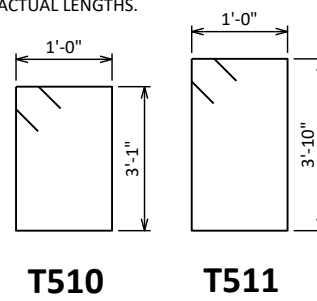
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T601		69	2'-9"			ADHESIVE ANCHORS - VERTICAL
T502		20	10'-2"			FRONT FACE - HORIZONTAL ✖
▲ T503		16	12'-7"		X	FRONT FACE - VERTICAL
T504		1	20'-2"			FRONT FACE - HORIZONTAL
▲ T505		15	11'-3"		X	FRONT FACE - VERTICAL
T506		1	30'-2"			FRONT FACE - HORIZONTAL
▲ T507		15	9'-11"		X	FRONT FACE - VERTICAL
T508		6	40'-2"			FRONT FACE - HORIZONTAL
▲ T509		30	8'-7"		X	FRONT FACE - VERTICAL ✖
T510		58	8'-10"		X	PARAPET - VERTICAL
T511		3	10'-4"		X	PARAPET - VERT. - BLOCK OUT
T812		10	39'-11"			PARAPET - HORIZONTAL
T513		2	1'-4"			PARAPET - HORIZ. - BLOCK OUT

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

BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
T503	1 SERIES OF 16	12'-6" TO 12'-8"
T505	1 SERIES OF 15	11'-2" TO 11'-4"
T507	1 SERIES OF 15	9'-10" TO 10'-0"
* T509	2 SERIES OF 15	8'-6" TO 8'-8"



T510

T511

BILL OF BARS - WING 4

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

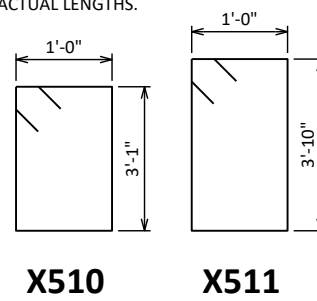
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
X601		69	2'-9"			ADHESIVE ANCHORS - VERTICAL
X502		20	10'-2"			FRONT FACE - HORIZONTAL ✖
▲ X503		16	12'-8"		X	FRONT FACE - VERTICAL
X504		1	20'-2"			FRONT FACE - HORIZONTAL
▲ X505		15	11'-4"		X	FRONT FACE - VERTICAL
X506		1	30'-2"			FRONT FACE - HORIZONTAL
▲ X507		15	9'-11"		X	FRONT FACE - VERTICAL
X508		5	40'-2"			FRONT FACE - HORIZONTAL
▲ X509		30	8'-7"		X	FRONT FACE - VERTICAL ✖
X510		58	8'-10"		X	PARAPET - VERTICAL
X511		3	10'-4"		X	PARAPET - VERT. - BLOCK OUT
X812		10	39'-11"			PARAPET - HORIZONTAL
X513		2	1'-4"			PARAPET - HORIZ. - BLOCK OUT

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

BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

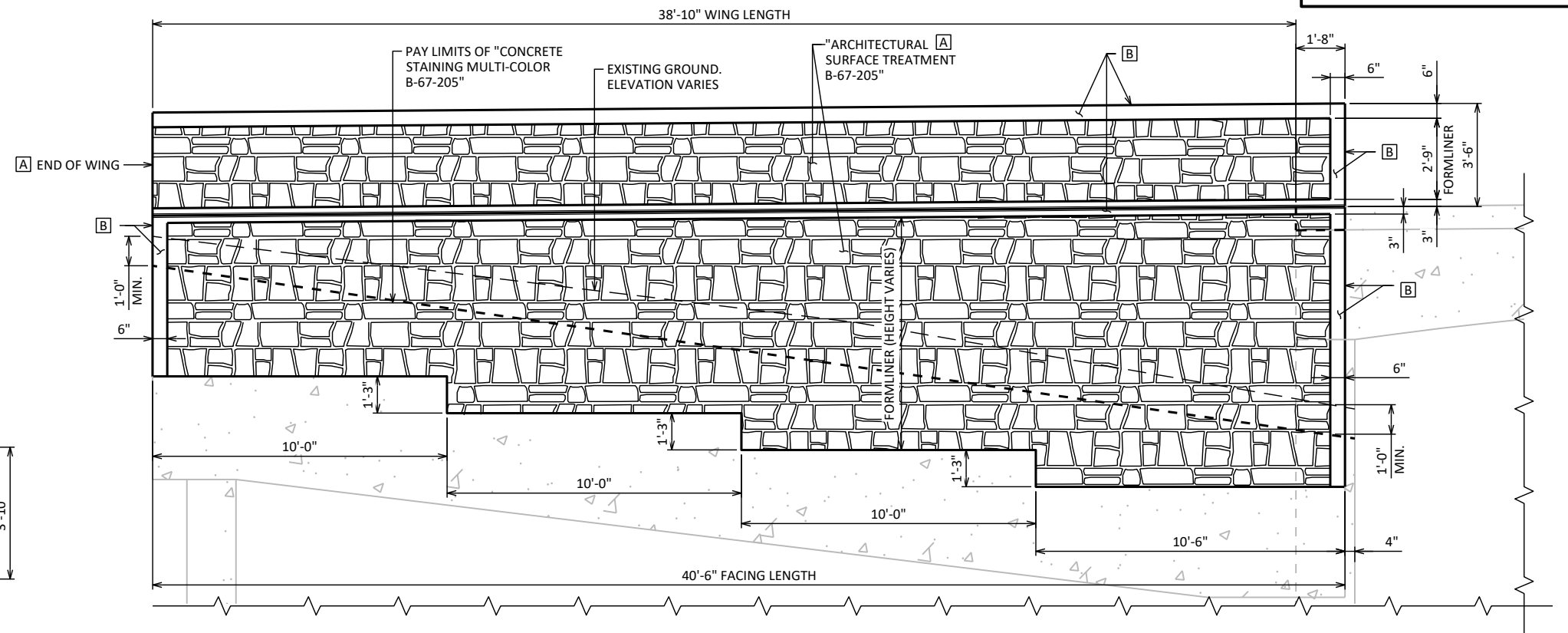
BAR MARK	NO. REQ'D.	LENGTH
X503	1 SERIES OF 16	12'-7" TO 12'-9"
X505	1 SERIES OF 15	11'-3" TO 11'-5"
X507	1 SERIES OF 15	9'-10" TO 10'-0"
* X509	2 SERIES OF 15	8'-6" TO 8'-8"



X510

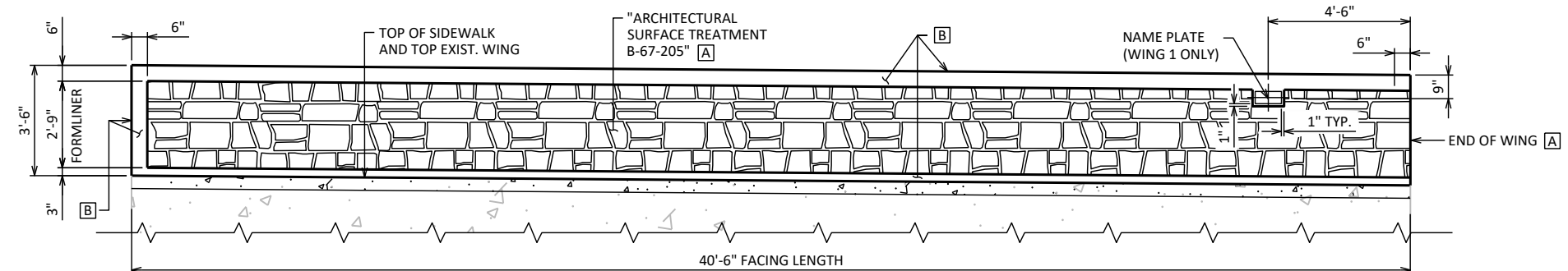
X511

* AN UNDISTRIBUTED QUANTITY OF BARS IS INCLUDED IN THE BILL OF BARS FOR VARIATIONS IN FACING HEIGHT AND STONE SHELF ELEVATION. LAP 1'-9" MIN. AS NEEDED WITH BARS SHOWN.



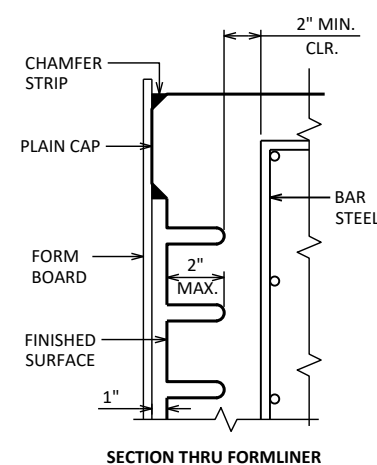
OUTSIDE (FRONT FACE) WING ELEVATION

SHOWING AESTHETIC DETAILS
WING 1 SHOWN, WING 4 SIMILAR

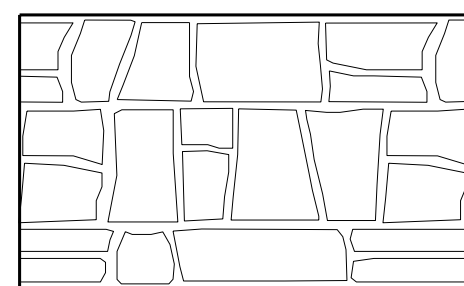


INSIDE (BACK FACE) WING ELEVATION

SHOWING AESTHETIC DETAILS
WING 1 SHOWN, WING 4 SIMILAR



SECTION THRU FORMLINER



RANDOM SPLITEDGE RUSTIC ASHLAR

STONE HEIGHT = 3" TO 10"
MAX. RELIEF = 2"
STONE LENGTH = 8" TO 32"

FORMLINER DETAILS

STAINING NOTES

A ALL ARCHITECTURAL SURFACE TREATMENT FORMLINER AREAS SHALL BE STAINED A RANDOMLY MIXED COLOR ARRANGEMENT TO ACHIEVE A TEXTURED LOOK AS DIRECTED BY THE ENGINEER. APPLY A MULTI-COLOR STAIN USING AMS STANDARD COLOR #36424 AS THE BASE COLOR & AMS STANDARD COLOR #33522 & AMS STANDARD COLOR #33564 AS THE ACCENT COLORS. THE PROTRUDING PORTIONS OF THE FACE (APPROXIMATELY 70%-80%) STAINED TO HIGHLIGHT THE STONE TEXTURE. TO BE PAID FOR UNDER THE BID ITEM "CONCRETE STAINING MULTI-COLOR B-40-205".

B STAIN SURFACE AMS STANDARD COLOR #36424. TO BE PAID FOR UNDER THE BID ITEM "CONCRETE STAINING MULTI-COLOR B-40-205"

IF TOUCH UP STAINING IS REQUIRED, IT SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST.

ARCH. SURF. TREAT. NOTES

FORMLINER COURSING ON THE FRONT FACE OF THE WING SHALL BE LEVEL.

FORMLINER COURSING ON EACH PARAPET FACE ATOP THE WINGS SHALL BE ALIGNED WITH THE TOP OF THE WING. WRAP AROUND/MATCH FORMLINER PATTERN AT CORNERS AT END OF WING.

ALL FORMLINER WORK SHALL BE INCLUDED UNDER THE BID ITEM "ARCHITECTURAL SURFACE TREATMENT B-67-205"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-205

DRAWN BY VJD PLANS CK'D CJM

WING DETAILS SHEET 5 OF 5

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
1001	121+45.45, 28.65' RT	CHIS 'X' W. ABUT. MEDIAN WALL	818.39
1002	123+31.58, 28.60' RT	CHIS 'X' E. ABUT. MEDIAN WALL	818.31

DESIGN DATA

LIVE LOAD:

TAKEN FROM HSI, 2/1/2024
 DESIGN LOADING: HS-20
 INVENTORY RATING: HS-19
 OPERATING RATING: HS-32
 WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
 ALL $f_c = 4,000$ PSI
 BAR STEEL REINFORCEMENT
 GRADE 60 $f_y = 60,000$ PSI

TRAFFIC DATA

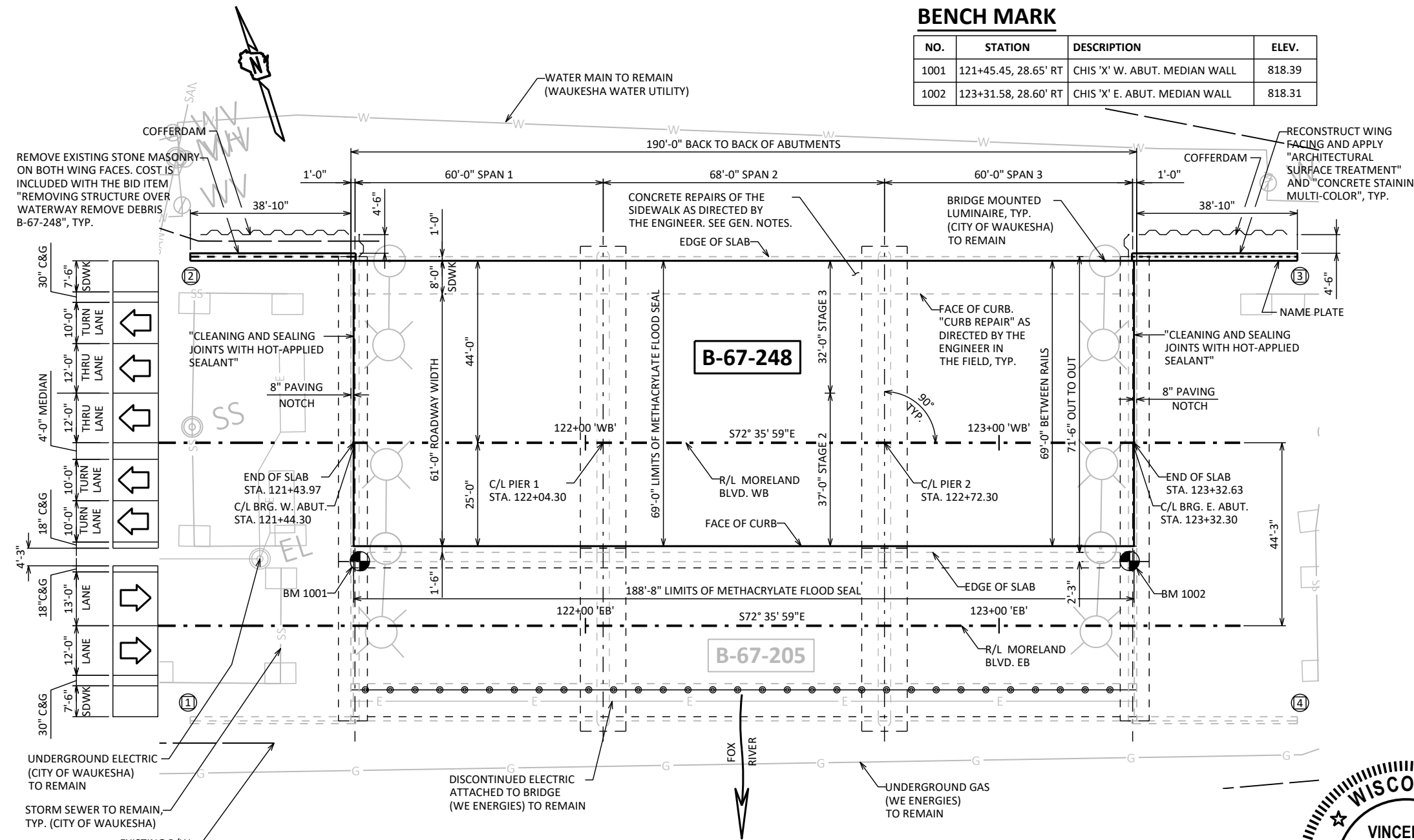
E. MORELAND BLVD
 ADT = 18,700 (2024)
 ADT = 18,700 (2044)
 R.D.S. = 25 MPH

LIST OF DRAWINGS:

1. GENERAL PLAN AND ELEVATION
2. CROSS SECTION, NOTES, AND QUANTITIES
3. WING 2 FACING REPAIR
4. WING 3 FACING REPAIR
5. WING DETAILS

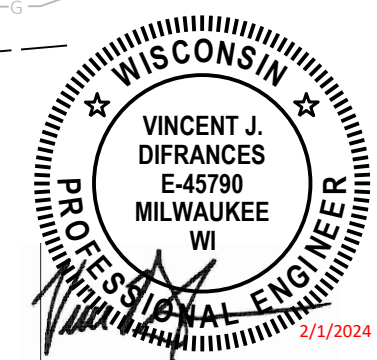
LEGEND

- (X) INDICATES WING WALL NUMBER
- F. FIXED BEARING
- S.E. SEMI-EXPANSION BEARING
- ☆ ELEVATIONS ARE BASED ON ORIGINAL CONSTRUCTION PLANS AND HAVE BEEN CONVERTED FROM CITY OF WAUKESHA DATUM TO NAVD 88 (2012).



PLAN

REHABILITATION - 3 SPAN CONCRETE HAUNCHED SLAB



STRUCTURE DESIGN CONTACTS:
 AARON BONK, P.E. 608-261-0261
 VINCENT DIFRANCES, P.E. 262-573-3864

NO.	DATE	REVISION	BY

ENGINEERING, INC
 Consultant Services

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

ACCEPTED *[Signature]* SDR **02/21/24**
 CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-67-248

WB MORELAND BLVD. OVER FOX RIVER

COUNTY WAUKESHA CITY WAUKESHA

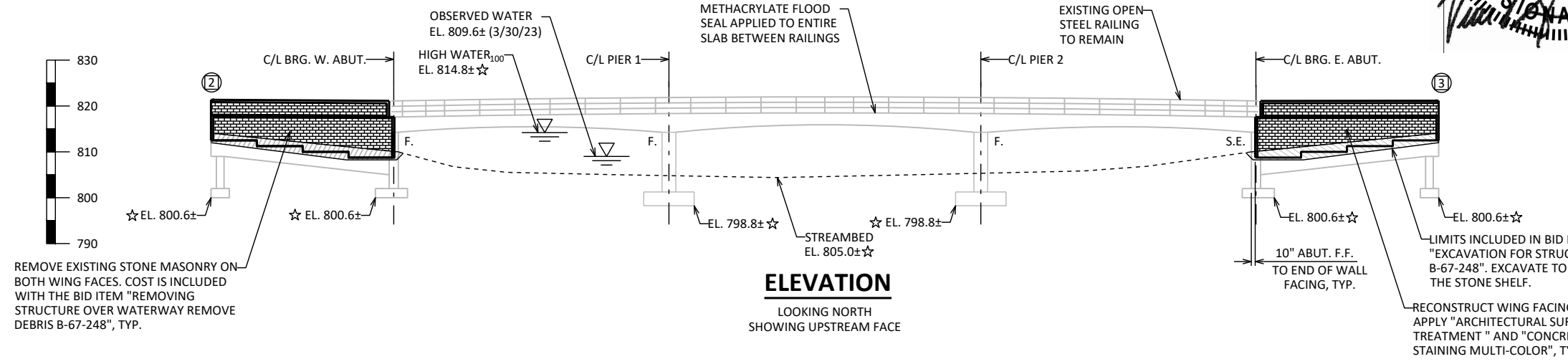
DESIGN SPEC. REHABILITATION N/A

DESIGNED BY VJD	DESIGNED CK'D CJM	DRAWN BY VJD	PLANS CK'D CJM
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GENERAL PLAN AND ELEVATION

SHEET 1 OF 5

SCALE = N.T.S.

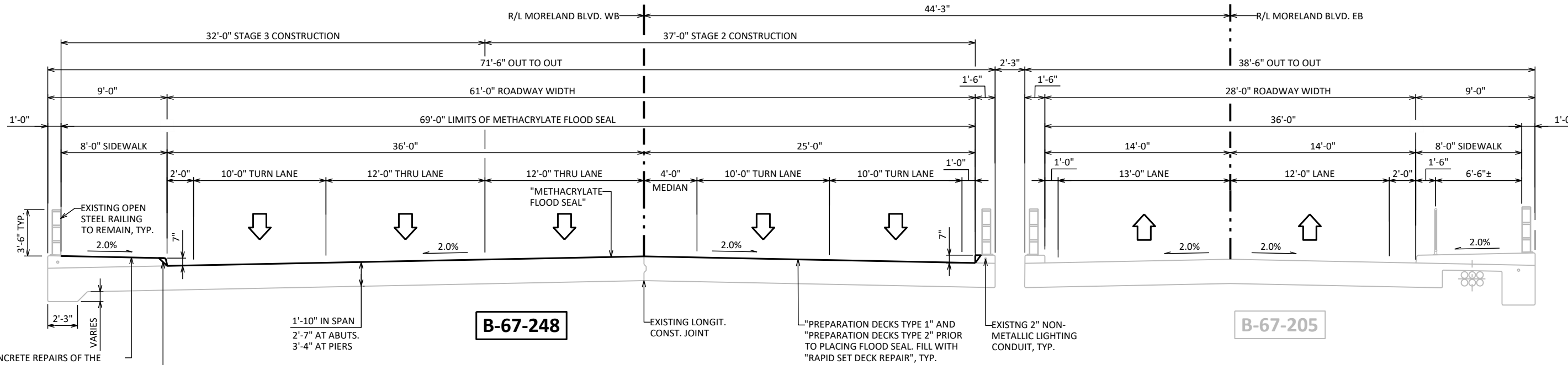


ELEVATION

LOOKING NORTH
 SHOWING UPSTREAM FACE

REMOVE EXISTING STONE MASONRY ON BOTH WING FACES. COST IS INCLUDED WITH THE BID ITEM "REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS B-67-248", TYP.

RECONSTRUCT WING FACING AND APPLY "ARCHITECTURAL SURFACE TREATMENT" AND "CONCRETE STAINING MULTI-COLOR", TYP.



B-67-248

B-67-205

CONCRETE REPAIRS OF THE SIDEWALK AS DIRECTED BY THE ENGINEER. WORK IS INCLUDED WITH 'DECK PREPARATION' AND 'RAPID SET DECK REPAIR' ITEMS.

"CURB REPAIR" AS DIRECTED BY THE ENGINEER IN THE FIELD, TYP. FILL WITH "RAPID SET DECK REPAIR", TYP.

FLOOD SEAL NOTES

AT MEDIAN CURBS, EXTEND METHACRYLATE FLOOD SEAL 2" MIN. VERTICALLY ON CURB FACE.

AT SIDEWALK CURBS, APPLY METHACRYLATE FLOOD SEAL ALONG THE FULL CURB HEIGHT AND. APPLY METHACRYLATE FLOOD SEAL ON SIDEWALK TO FACE OF OPEN STEEL RAILINGS.

CROSS SECTION THRU BRIDGE

LOOKING EAST, NORMAL TO REF. LINE
SHOWING IN SPAN SECTION AND ADJACENT BRIDGE B-67-205

GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
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- ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS SHOWN ON SHEET 1 ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND HAVE BEEN CONVERTED FROM CITY OF WAUKESHA DATUM TO NAVD 88 (2012). STATIONS ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
- SEE ROADWAY PLANS FOR TRAFFIC CONTROL AND STAGING DETAILS.
- ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT, UNLESS SPECIFIED OTHERWISE. SAW CUTS FOR "PREPARATION DECKS TYPE 1" SHALL BE PAID UNDER THE BID ITEM "SAWING PAVEMENT DECK PREPARATION AREAS".
- AT "CURB REPAIR" REMOVE CONCRETE TO SOUND CONCRETE OR AT LEAST 1 INCH BEHIND EXISTING REINFORCING STEEL. "CURB REPAIR" SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER	WEST ABUT.	EAST ABUT.	TOTALS
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206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-67-248	EACH	-	-	-	1
206.5001	COFFERDAMS B-67-248	EACH	-	-	-	1
502.0100	CONCRETE MASONRY BRIDGES	CY	-	20	20	40
502.4206	ADHESIVE ANCHORS NO. 6 BAR	EACH	-	69	69	138
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	-	3,100	3,090	6,190
509.0301	PREPARATION DECKS TYPE 1	SY	6	-	-	6
509.0302	PREPARATION DECKS TYPE 2	SY	1	-	-	1
509.1200	CURB REPAIR	LF	10	-	-	10
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	35	-	-	35
517.1015.S	CONCRETE STAINING MULTI-COLOR B-67-248	SF	-	640	615	1,255
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-67-248	SF	-	566	563	1,129
SPV.0035.01	RAPID SET DECK REPAIR	CY	1	-	-	1
SPV.0090.01	CLEANING AND SEALING JOINTS WITH HOT-APPLIED SEALANT	LF	122	-	-	122
SPV.0090.02	JOINT SEALANT SIDEWALK	LF	54	-	-	54
SPV.0180.01	METHACRYLATE FLOOD SEAL	SY	1,465	-	-	1,465
NON-BID ITEMS						
	PREFORMED JOINT FILLER	SIZE				1/2"
	NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER	SIZE				1"
	NAME PLATE	EACH				1

ALL B-67-248 BID ITEMS ARE CATEGORY 0020

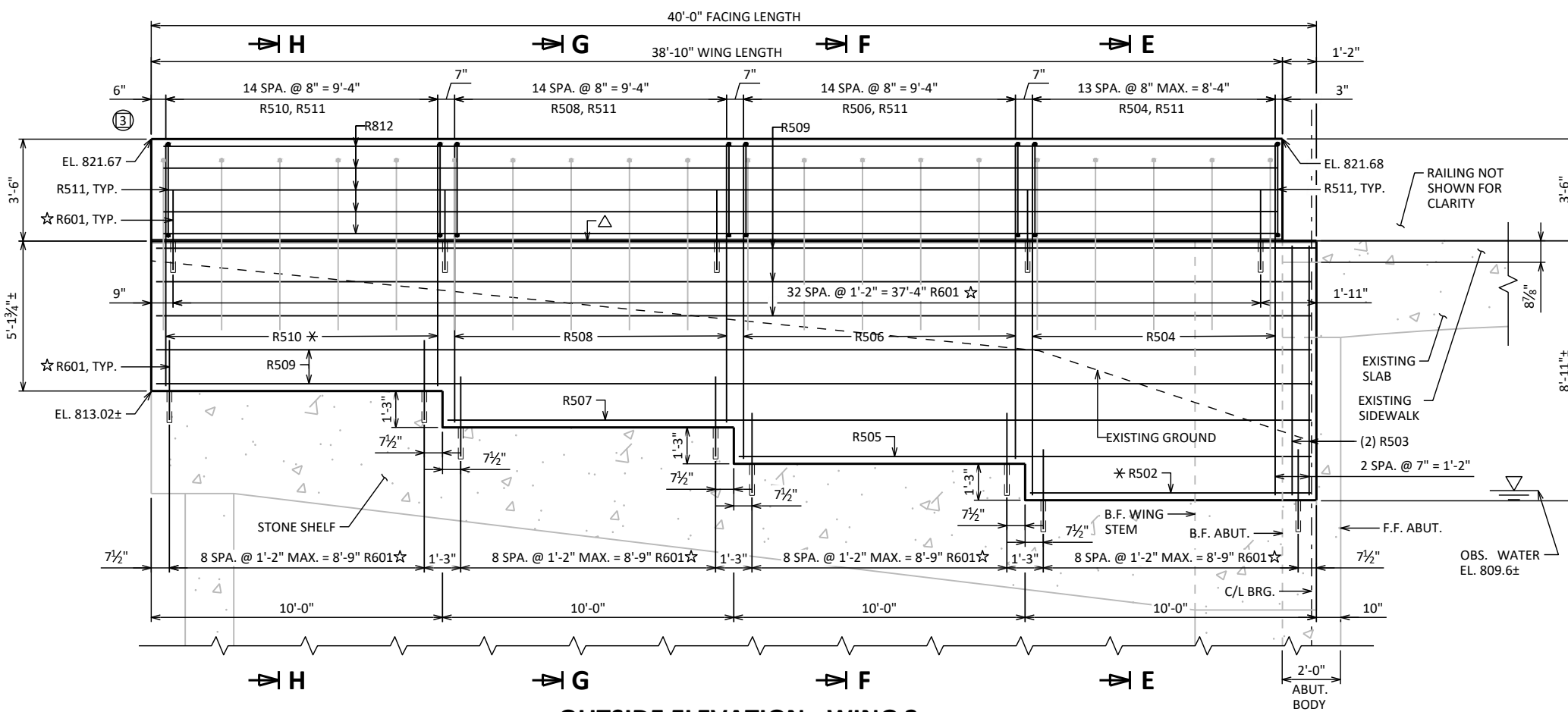
- ▲ A LEVEL 1 INFRARED THERMOGRAPHIC SURVEY WAS COMPLETED ON 5/11/2021. ESTIMATED DISTRESS IS 0.1% OF THE TOTAL DECK AREA. "PREPARATION DECKS TYPE 1", "PREPARATION DECKS TYPE 2", AND "SAWING PAVEMENT DECK PREPARATION AREAS" QUANTITIES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE THE FIELD IDENTIFICATION AND DETERMINATION OF ALL REPAIR LOCATIONS WITH THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".
- ALL PREVIOUS DECK PATCHES SHALL BE REMOVED UNDER THE BID ITEMS FOR "PREPARATION DECKS TYPE 1" AND "PREPARATION DECKS TYPE 2".
- CONCRETE REPAIRS AT THE SIDEWALKS SHALL BE AS DIRECTED BY THE ENGINEER AND ARE INCLUDED UNDER THE 'DECK PREPARATION' AND 'RAPID SET DECK REPAIR' BID ITEMS.
- THE BID ITEM "JOINT SEALANT SIDEWALK" SHALL INCLUDE REMOVING EXISTING SEALANT AT ALL SIDEWALK JOINTS PRIOR TO PREPARING THE SURFACE FOR FLOOD SEALING AND RESEALING THE JOINTS WITH NON-STAINING GRAY, NON-BITUMINOUS SEALER PRIOR TO FLOOD SEALING.
- BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
- THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
- UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.
- THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR OF 1996.
- DIRTY OR CONTAMINATED WATER CANNOT LEAVE THE WORK AREAS NOR BE ALLOWED TO ENTER THE FOX RIVER WITHOUT TREATMENT. SEE SPECIAL PROVISIONS FOR DEWATERING REQUIREMENTS.
- THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-67-248			
DRAWN BY		PLANS CK'D	
VJD		CJM	
CROSS SECTION, NOTES, AND QUANTITIES			SHEET 2 OF 5

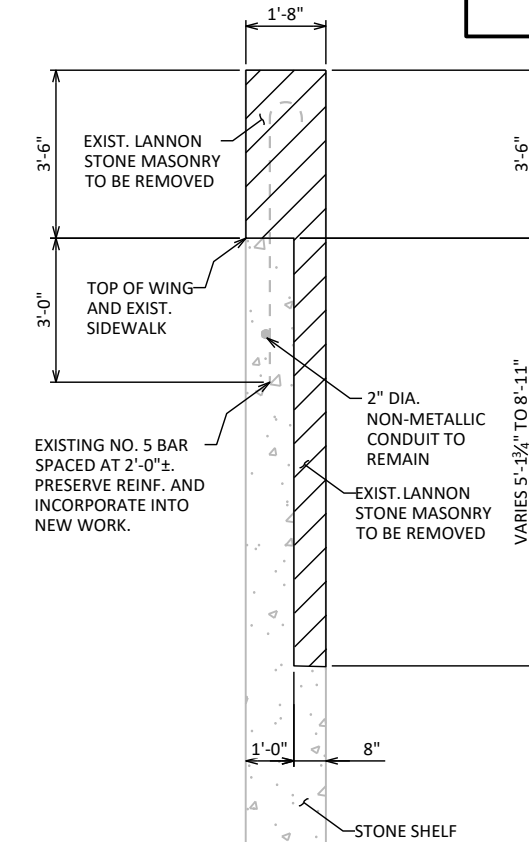
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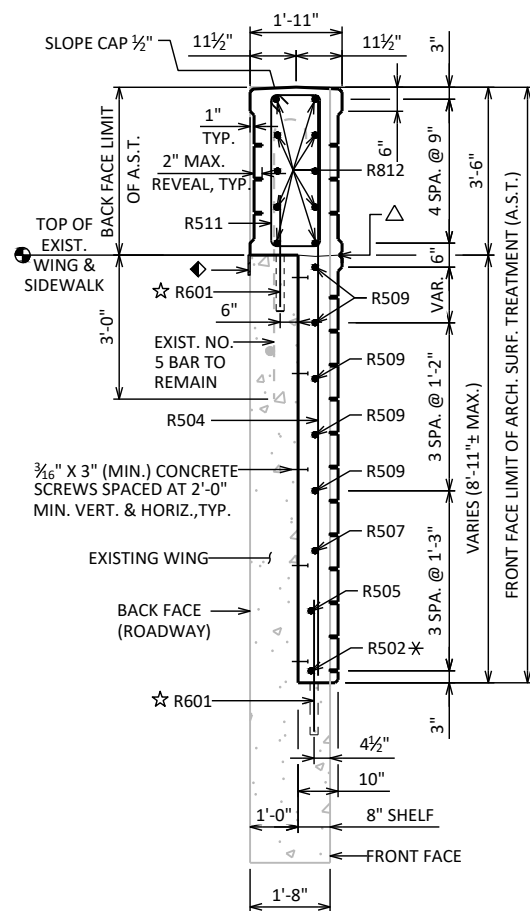
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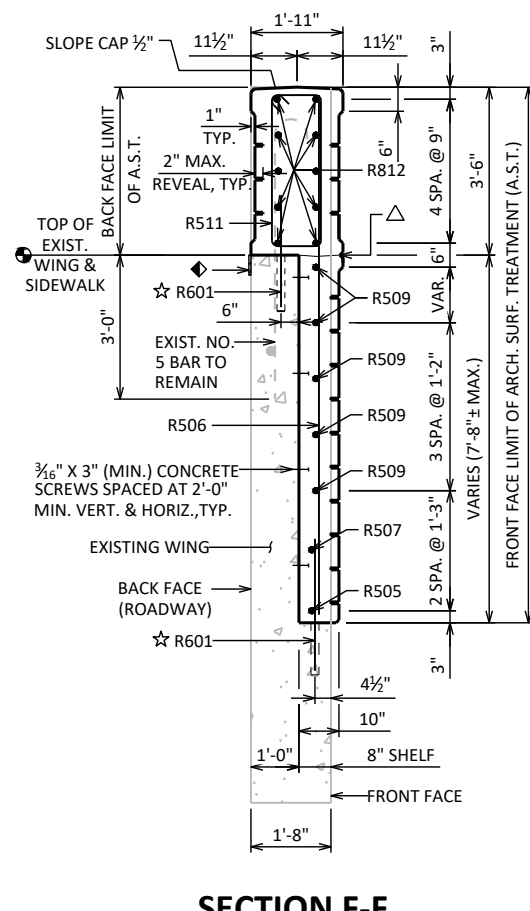
OUTSIDE ELEVATION - WING 3



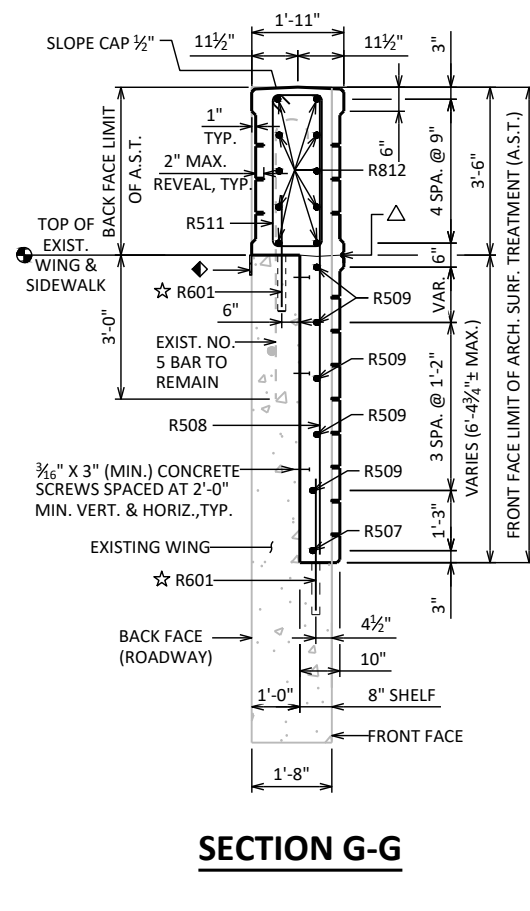
REMOVAL SECTION



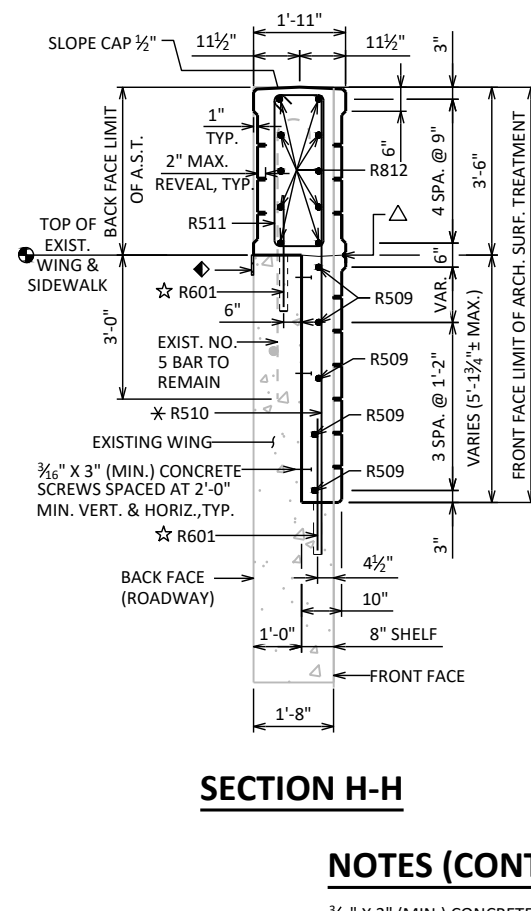
SECTION E-E



SECTION F-F



SECTION G-G



SECTION H-H

NOTES (CONT'D)

- 3/16" X 3" (MIN.) CONCRETE SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY BRIDGES".
- CONCRETE SCREWS SHALL BE 410 STAINLESS STEEL. MINIMUM PROJECTION INTO NEW CONCRETE SHALL BE 2".

LEGEND

- ☆ R601. ADHESIVE ANCHORS NO. 6 BAR. EMBED 6" IN CONCRETE AND SPACE AS SHOWN. SPACE ANCHORS TO MISS EXISTING REINFORCEMENT AT THE TOP OF WING. MAINTAIN A MINIMUM 4 1/2" EDGE DISTANCE.
- * AN UNDISTRIBUTED QUANTITY OF BARS IS INCLUDED IN THE BILL OF BARS FOR VARIATIONS IN FACING HEIGHT AND STONE SHELF ELEVATION. LAP 1'-9" MIN. AS NEEDED WITH BARS SHOWN.
- ◆ 1/2" PREFORMED JOINT FILLER. SEAL WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. MATCH HEIGHT OF PROPOSED 5-INCH SIDEWALK AT WALL F.F.
- △ CONSTRUCTION JOINT. LEAVE ROUGH. PROVIDE A 3/4" "V" GROOVE ON FRONT FACE OF WING WALL.

NOTES

- INSTALL COFFERDAMS AND EXCAVATE TO BELOW THE STONE SHELF ELEVATION PRIOR TO REMOVING EXISTING STONE FACING.
- FOR BILL OF BARS, SEE "WING DETAILS" ON SHEET 5.
- FOR ARCHITECTURAL SURFACE TREATMENT AND CONCRETE STAINING DETAILS, SEE "WING DETAILS" ON SHEET 5.
- UNCOATED REINFORCEMENT MAY BE TRIMMED AS NEEDED TO FIT.
- TOP OF PARAPET ELEVATIONS ARE REFERENCED AT THE CROWN POINT OF THE CAP.

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WING 3 FACING REPAIR		SHEET 4 OF 5	

BILL OF BARS - WING 2

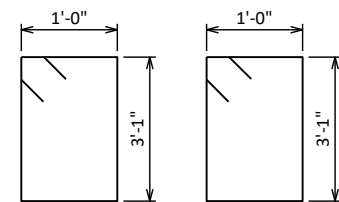
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
W601		69	2'-9"			ADHESIVE ANCHORS - VERTICAL
W502		20	9'-8"			FRONT FACE - HORIZONTAL ✕
W503		2	8'-8"			FRONT FACE - VERTICAL
W504		14	12'-2"			FRONT FACE - VERTICAL
W505		1	19'-8"			FRONT FACE - HORIZONTAL
W506		15	10'-11"			FRONT FACE - VERTICAL
W507		1	29'-8"			FRONT FACE - HORIZONTAL
W508		15	9'-9"			FRONT FACE - VERTICAL
W509		5	39'-8"			FRONT FACE - HORIZONTAL
W510		30	8'-6"			FRONT FACE - VERTICAL ✕
W511		59	8'-10"	X		PARAPET - VERTICAL
W812		10	38'-3"			PARAPET - HORIZONTAL

BILL OF BARS - WING 3

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

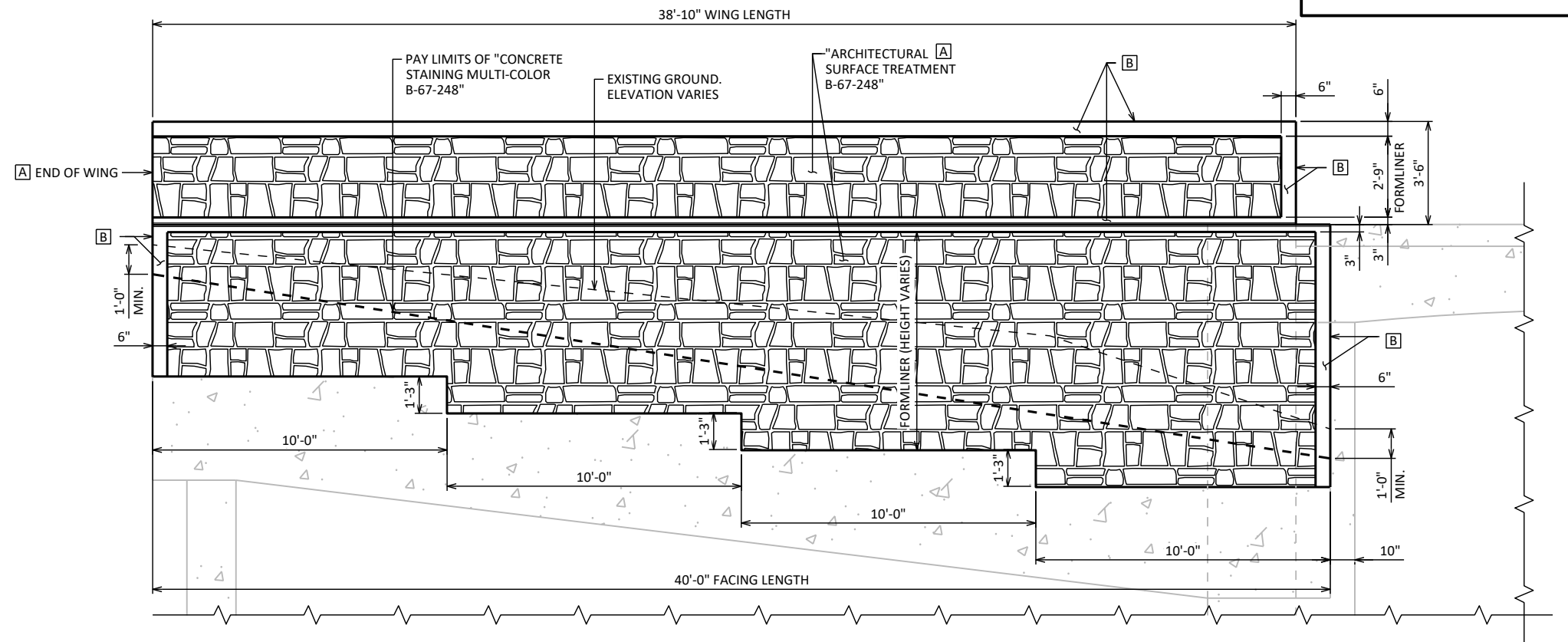
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
R601		69	2'-9"			ADHESIVE ANCHORS - VERTICAL
R502		20	9'-8"			FRONT FACE - HORIZONTAL ✕
R503		2	8'-7"			FRONT FACE - VERTICAL
R504		14	12'-1"			FRONT FACE - VERTICAL
R505		1	19'-8"			FRONT FACE - HORIZONTAL
R506		15	10'-10"			FRONT FACE - VERTICAL
R507		1	29'-8"			FRONT FACE - HORIZONTAL
R508		15	9'-7"			FRONT FACE - VERTICAL
R509		5	39'-8"			FRONT FACE - HORIZONTAL
R510		30	8'-3"			FRONT FACE - VERTICAL ✕
R511		59	8'-10"	X		PARAPET - VERTICAL
R812		10	38'-3"			PARAPET - HORIZONTAL



W511

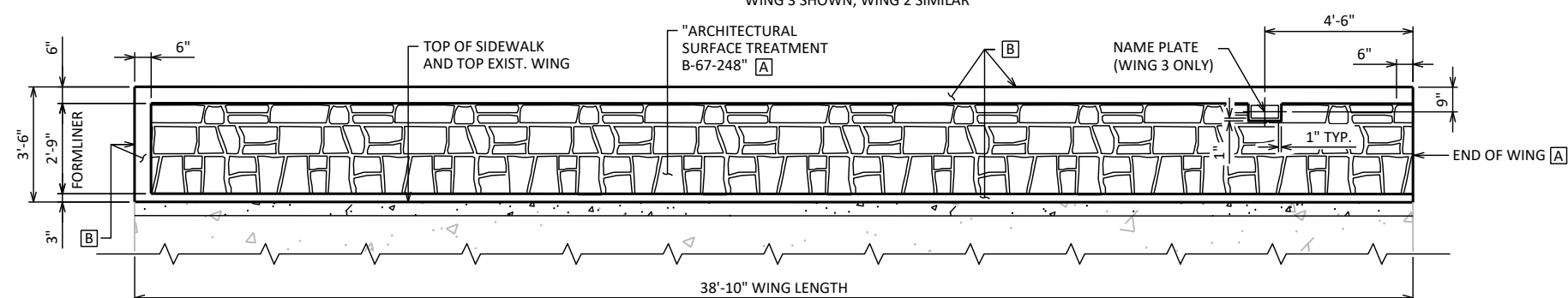
R511

✕ AN UNDISTRIBUTED QUANTITY OF BARS IS INCLUDED IN THE BILL OF BARS FOR VARIATIONS IN FACING HEIGHT AND STONE SHELF ELEVATION. LAP 1'-9" MIN. AS NEEDED WITH BARS SHOWN.



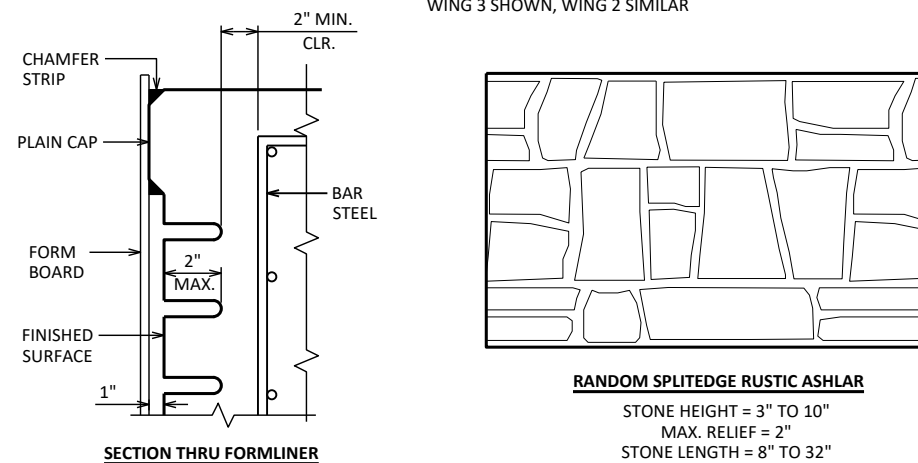
OUTSIDE (FRONT FACE) WING ELEVATION

SHOWING AESTHETIC DETAILS
WING 3 SHOWN, WING 2 SIMILAR



INSIDE (BACK FACE) WING ELEVATION

SHOWING AESTHETIC DETAILS
WING 3 SHOWN, WING 2 SIMILAR



SECTION THRU FORMLINER

FORMLINER DETAILS

STAINING NOTES

- A ALL ARCHITECTURAL SURFACE TREATMENT FORMLINER AREAS SHALL BE STAINED A RANDOMLY MIXED COLOR ARRANGEMENT TO ACHIEVE A TEXTURED LOOK AS DIRECTED BY THE ENGINEER. APPLY A MULTI-COLOR STAIN USING AMS STANDARD COLOR #36424 AS THE BASE COLOR & AMS STANDARD COLOR #33522 & AMS STANDARD COLOR #33564 AS THE ACCENT COLORS. THE PROTRUDING PORTIONS OF THE FACE (APPROXIMATELY 70%-80%) STAINED TO HIGHLIGHT THE STONE TEXTURE. TO BE PAID FOR UNDER THE BID ITEM "CONCRETE STAINING MULTI-COLOR B-40-248".
 - B STAIN SURFACE AMS STANDARD COLOR #36424. TO BE PAID FOR UNDER THE BID ITEM "CONCRETE STAINING MULTI-COLOR B-40-248"
- IF TOUCH UP STAINING IS REQUIRED, IT SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST.

ARCH. SURF. TREAT. NOTES

- FORMLINER COURSING ON THE FRONT FACE OF THE WING SHALL BE LEVEL.
- FORMLINER COURSING ON EACH PARAPET FACE ATOP THE WINGS SHALL BE ALIGNED WITH THE TOP OF THE WING. WRAP AROUND/MATCH FORMLINER PATTERN AT CORNERS AT END OF WING.
- ALL FORMLINER WORK SHALL BE INCLUDED UNDER THE BID ITEM "ARCHITECTURAL SURFACE TREATMENT B-67-248"

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WING DETAILS			SHEET 5 OF 5

Notes



Wisconsin Department of Transportation

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