₽ 5200-03-61 ROS

FEDERAL PROJECT **NOVEMBER 2017** STATE PROJECT STATE OF WISCONSIN ORDER OF SHEETS PROJECT CONTRACT 5200-03-61 Title **DEPARTMENT OF TRANSPORTATION** Typical Sections and Details Section No. Estimate of Quantities Section No. Miscellaneous Quantities STATE HIGHWAY REHABILITATION-MAINTENANCE PROJECT Section No. C LACROSSE, CAMERON AVE & CASS ST Structure Plans Section No. MISSISSIPPI RVR B-32-202 & B-32-300 **USH 14** TOTAL SHEETS = 46 LA CROSSE COUNTY STATE PROJECT NUMBER 5200-03-61 R8W R7W **BEGIN CONSTRUCTION** STATION 38+09.25 B B-32-300 (Westbound) LA CROSSE MISSISSIPPI RIVER **END CONSTRUCTION** STATION 63+42.92 B B-32-300 (Westbound) DESIGN DESIGNATION A.A.D.T = 16,527 A.A.D.T **BEGIN PROJECT** D.H.V. STATION 43+20.07 EB D.D. B-32-202 (Eastbound) DESIGN SPEED X = 1,635,063.42 ESALS Y = 662,326.57 T16N T15N **END PROJECT CONVENTIONAL SYMBOLS** STATION 68+93.07 EB PROFILE B-32-202 (Eastbound) CORPORATE LIMITS GRADE LINE B-32-300 ORIGINAL GROUND PROPERTY LINE MARSH OR ROCK PROFILE LOT LINE (To be noted as such) B-32-202 LIMITED HIGHWAY EASEMENT SPECIAL DITCH STATE OF WISCONSIN EXISTING RIGHT OF WAY GRADE ELEVATION PROPOSED OR NEW R/W LINE DEPARTMENT OF TRANSPORTATION CULVERT (Profile View) SLOPE INTERCEPT PREPARED BY UTILITIES REFERENCE LINE ELECTRIC DENNIS PARSLEY/ALEIGHA BURG EXISTING CULVERT FIBER OPTIC PROPOSED CULVERT (Box or Pipe) SANITARY SEWER Regional Supervisor COMBUSTIBLE FLUIDS STORM SEWER 1000 FEET TELEPHONE SCALE APPROVED FOR THE DEPARTMENT MARSH AREA HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY UTILITY PEDESTAL COORDINATES, LA CROSSE COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. TOTAL NET LENGTH OF CENTERLINE = 0.000 MI VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. POWER POLE ₫ GRID DISTANCES MAY BE USED AS GROUND DISTANCES. TELEPHONE POLE Ø WOODED OR SHRUB AREA

N:\PDS\C3D\52000331\SHEETSPLAN\010101 TI.DWG

LAYOUT NAME - 010101\_ti

3/28/2017 2:21 PM

BURG, ALEIGHA J

PLOT NAME

2

**GENERAL NOTES** 

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES, THE CONTRACTOR SHALL CAREFULY MAKE A SEARCH FOR EVIDENCE OF A LANDMARK IN ALL AREAS WHERE SUCH A LANDMARK MAY EXIST

WORK WITH THE UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKERS IS TO BE WITH THE APPROVAL OF THE ENGINEER

UTILITY CONTACTS

CENTURY LINK, COMMUNICATION LINE

THOMAS MURRAY 333 N FRONT STREET LA CROSSE, WI 54601 PHONE: 608-796-7869 MOBILE: 608-780-0895

CITY OF LA CROSSE, WATER

MARK GRAFF 800 EAST AVE N LA CROSSE, WI 54601 PHONE: 608-789-7384 MOBILE: 608-797-2335

XCEL ENERGY, GAS/PETROLEUM JAYMIE HOLTE 3215 COMMERCE STREET LA CROSSE, WI 54603 PHONE: 608-789-3698 MOBILE: 608-780-9881 CITY OF LA CROSSE, SEWER

STEVE ASP

905 JOSEPH HOUSKA PARK DRIVE

LA CROSSE, WI 54601 PHONE: 608-789-7322 MOBILE: 608-780-3554

XCEL ENERGY, ELECTRICITY-

TRANSMISSION BRUCE ZEMKE

414 NICOLLET MALL, 5TH FLOOR MINNEAPOLIS, MN 55401

PHONE: 612-330-7815 MOBILE: 651-214-2620

#### DESIGN CONTACTS

TODD WALDO
PROJECT MANAGER
WISDOT SW REGION
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
PHONE: 608-785-9462
EMAIL: Todd.Waldo@dot.wi.gov

ALEIGHA BURG
PROJECT DESIGNER
WISDOT SW REGION
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
PHONE:608-317-9083
EMAIL: Aleigha.Burg@dot.wigov

#### STANDARD ABBREVIATIONS

A.A.D.T. ANNUAL AVERAGE DAILY TRAFFIC Δ CENTRAL ANGLE OR DELTA D DEGREE OF CURVE D.H.V. DESIGN HOURLY VOLUME D.D. DIRECTIONAL DISTRIBUTION **ESALS EQUIVALENT SINGLE AXLE LOADS** CWT **HUNDRED WEIGHT** L LENGTH OF CURVE LT LEFT MGAL 1000 GALLONS

PC POINT OF CURVATURE
PI POINT OF INTERSECTION
PT POINT OF TANGENCY
R RADIUS OR RANGE
REQ'D REQUIRED

S.D.D. STANDARD DETAIL DRAWING(S)

T TANGENT
T. PERCENT TRUCKS
TYP TYPICAL
VAR VARIABLE

**ENVIRONMENTAL CONTACT** 

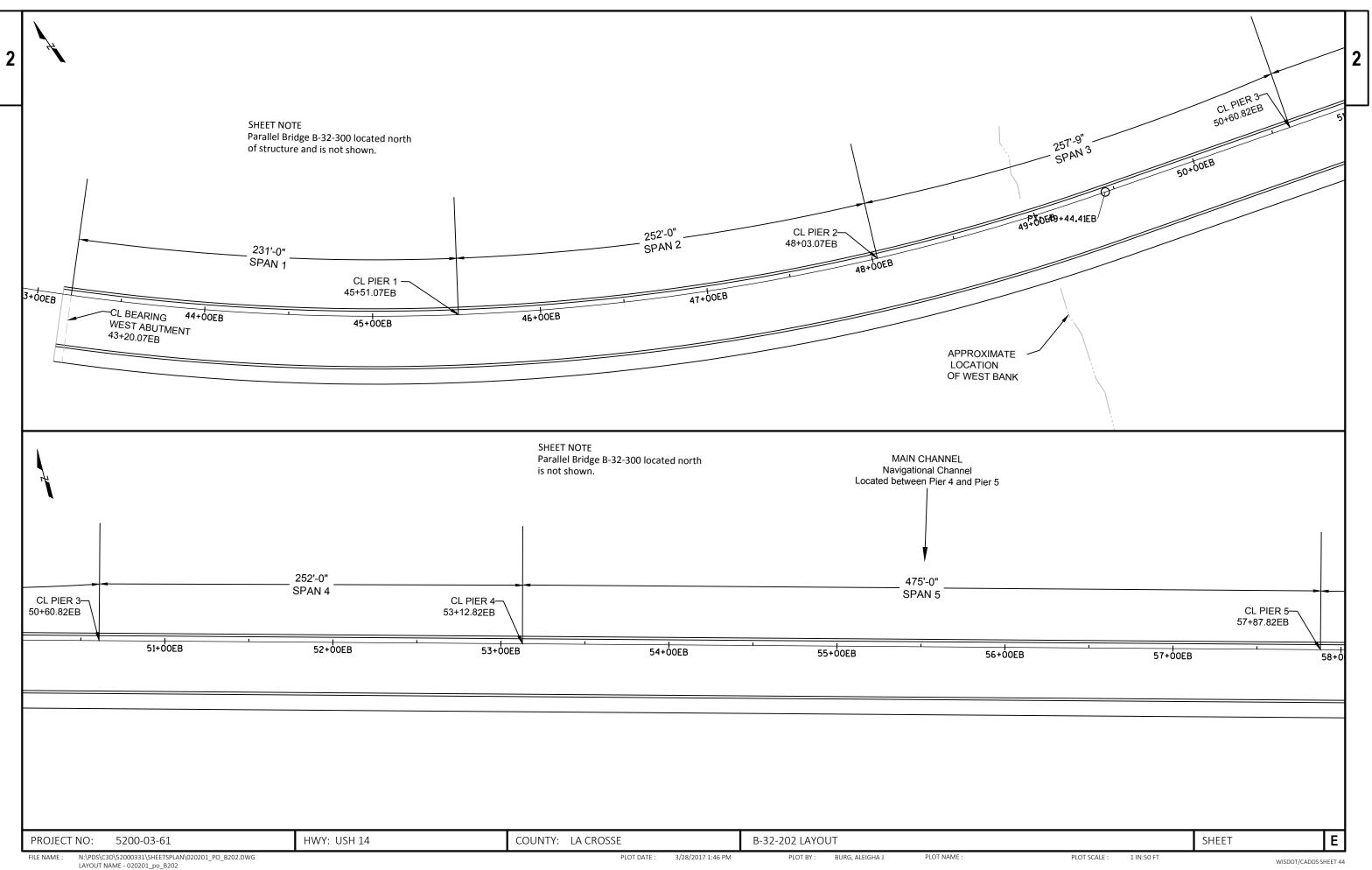
KAREN KALVELAGE
ENVIRONMENTAL ANALYSIS & REVIEW SPECIALIST
WISCONSIN DEPT. OF NATURAL RESOURCES
SOUTH CENTRAL REGION
3550 MORMON COULEE RD
LA CROSSE, WI 54601
PHONE: 608-785-9115

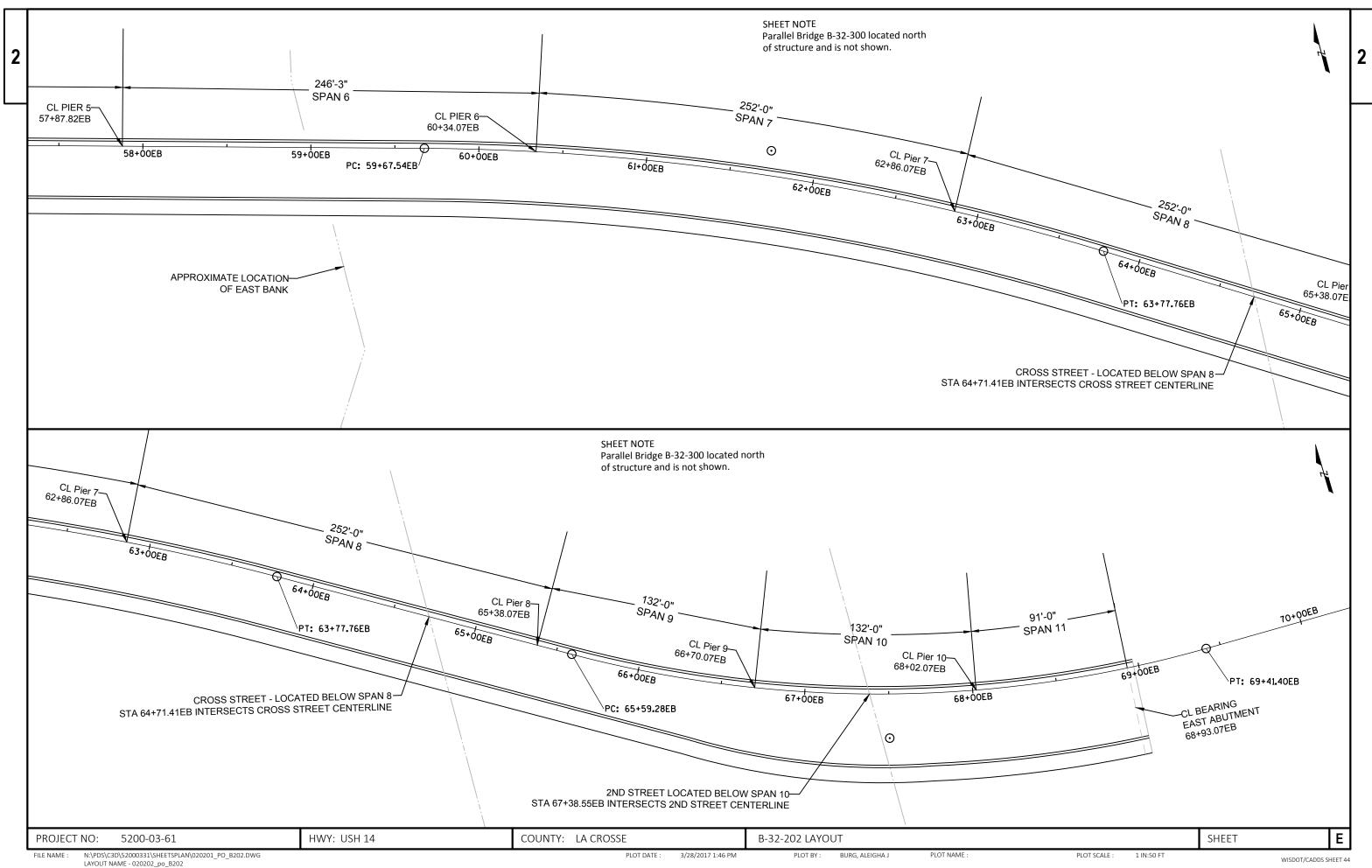
Email: karen.Kalvelage@wisconsin.gov

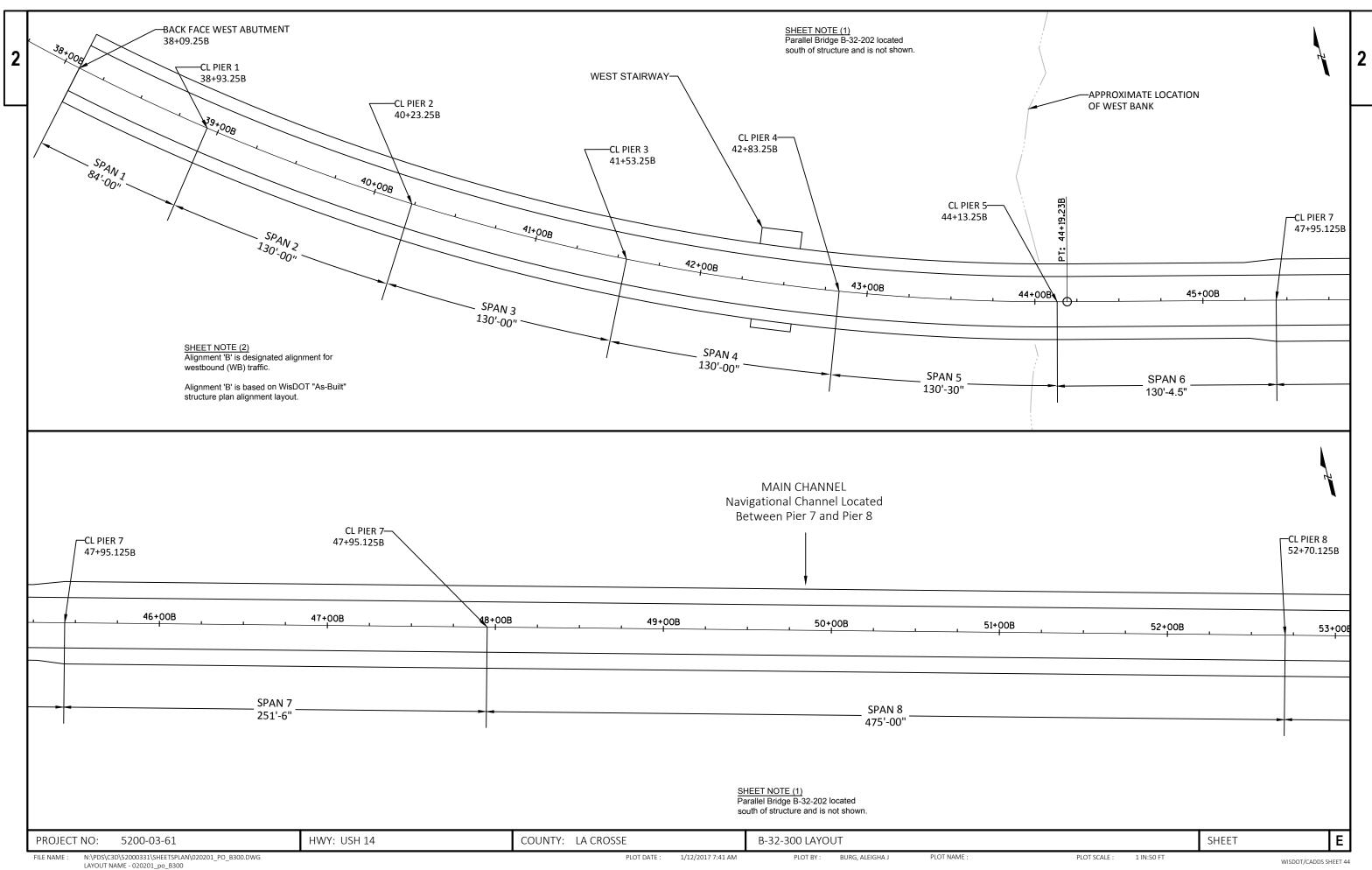


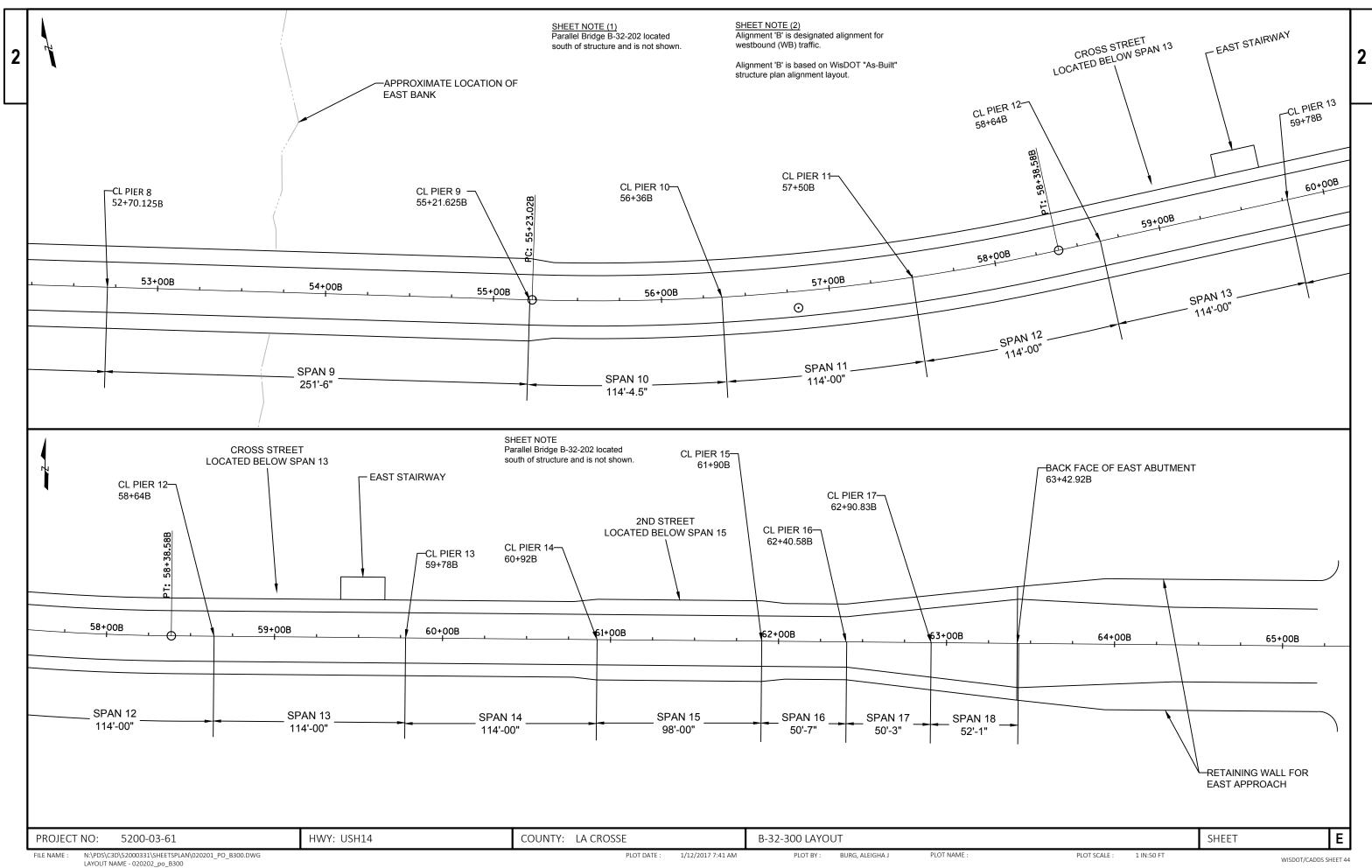
PROJECT NO: 5200-03-61 HWY: USH 14 COUNTY: LA CROSSE GENERAL NOTES SHEET: E

FILE NAME : PLOT DATE : 3/28/2017 1:29 PM PLOT BY : PLOT NAME : PLOT SCALE : N/A









TRAFFIC CONTROL DRUM

SIGN ON TEMPORARY SUPPORT

**DIRECTION OF TRAFFIC** 

**WORK ZONE** 

**EXISTING LIGHT POLE** 

SIGN ON PERMANENT SUPPORT

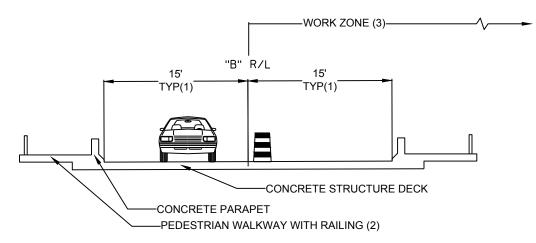
PORTABLE CHANGEABLE MESSAGE SIGN

#### TRAFFIC CONTROL NOTES FOR ALL TRAFFIC CONTROL SHEETS

- 1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
- 2. ALL TYPE III BARRICADES ARE 8' IN LENGTH UNLESS SPECIFIED OR NOTED.
- 3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE SIGN BACKGROUND IS ORANGE.
- 4. ALL TRAFFIC CONTROL DEVICE LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

HWY: USH 14

5. HOURS OF LANE CLOSURE RESTRICTIONS: CAMERON (B-32-202), EASTBOUND (INBOUND) 6:00AM TO 9:00AM. CASS (B-32-300), WESTBOUND (OUTBOUND) - 3:00PM TO 6:00PM.

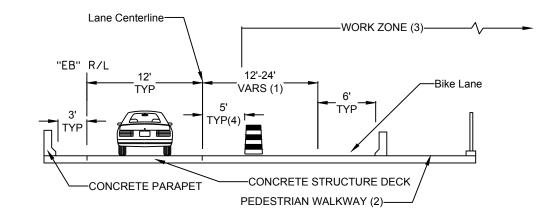


B-32-300 WORK ZONE STRUCTURE ROADWAY AREA 38+09.3B TO 63+42.9B (Looking West)

#### Notes:

(1) Width increases to 26'-3" from 62+90.8B to 63+41.3B

(2) Full bridge pedestrian cross access only on north side of structure (3) Left traffic lane closed as shown. Change lane closure signing according to work plan. Maintain one open lane for traffic during work operations.



B-32-202 WORK ZONE STRUCTURE ROADWAY AREA 43+15EB TO 68+97EB (Lookina East)

(1) Variable width from 66+34EB to 67+74EB to accommodate right turn

(2) Full bridge pedestrian cross access only on south side of structure.

(3) Right traffic lane closed as shown. Change lane closure signing according to work plan. Maintain one open lane for traffic during work operations.

(4) Barrel shifted 5' right from lane line to accommodate bicycle traffic. For Left lane closure, barrel to be placed left of lane centerline and maintain bike lane.

PLOT SCALE .

N:\PDS\C3D\52000331\SHEETSPLAN\025001 TC.DWG

COUNTY: LA CROSSE

LAYOUT NAME - 025001\_tc

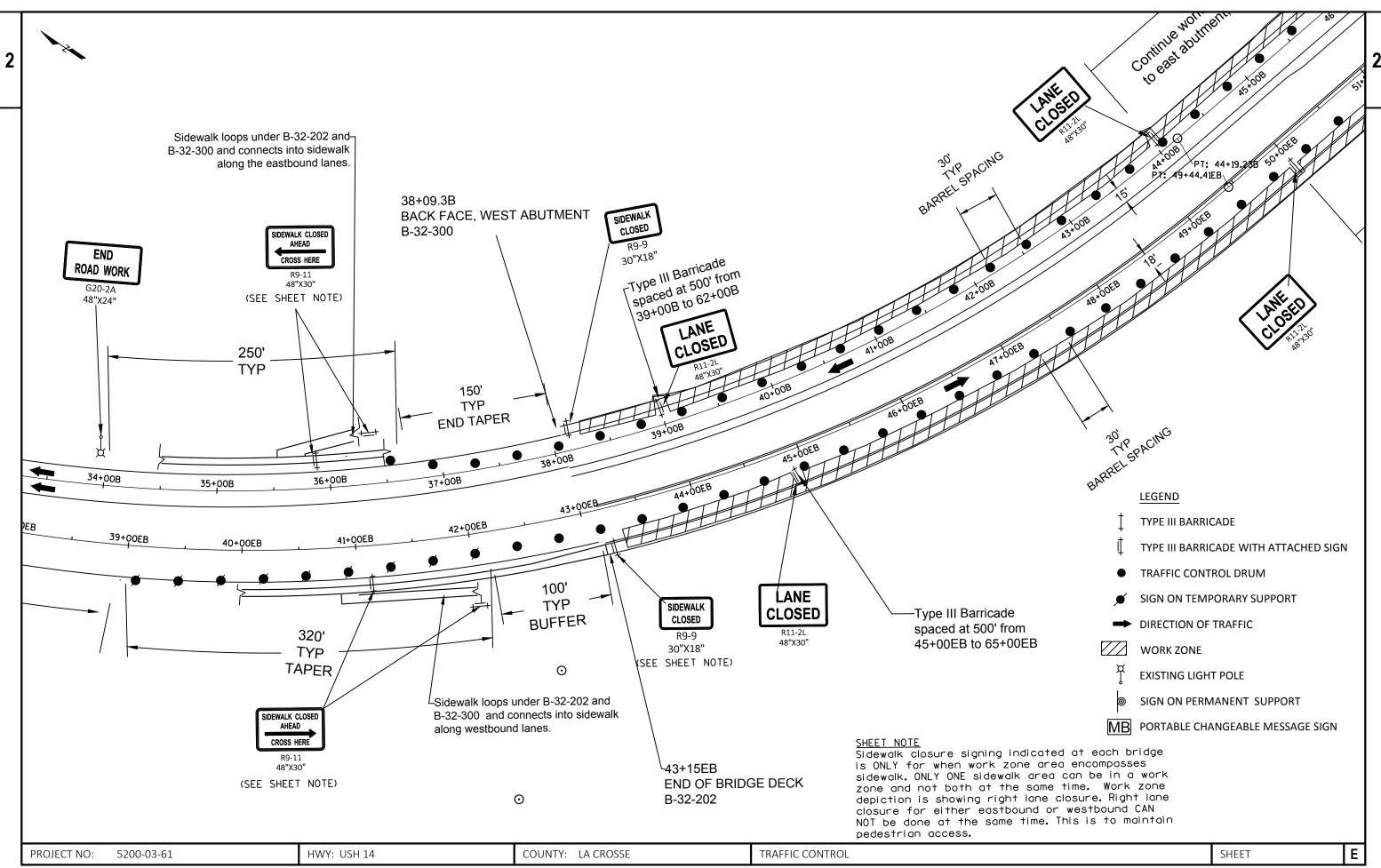
5200-03-61

PLOT DATE · 3/30/2017 6:56 AM PLOT BY: BURG, ALEIGHA J

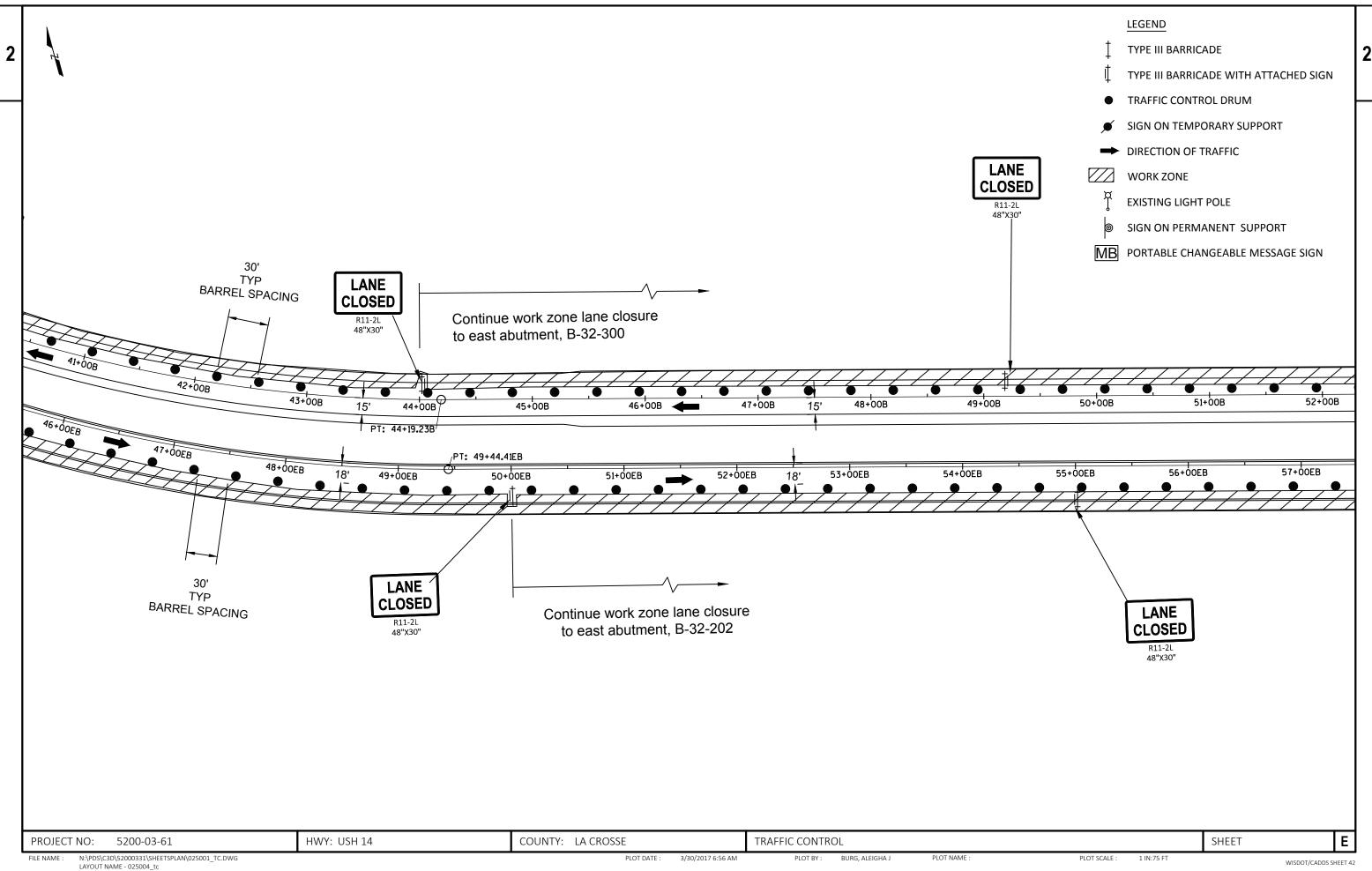
PLOT NAME

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PROJECT NO:



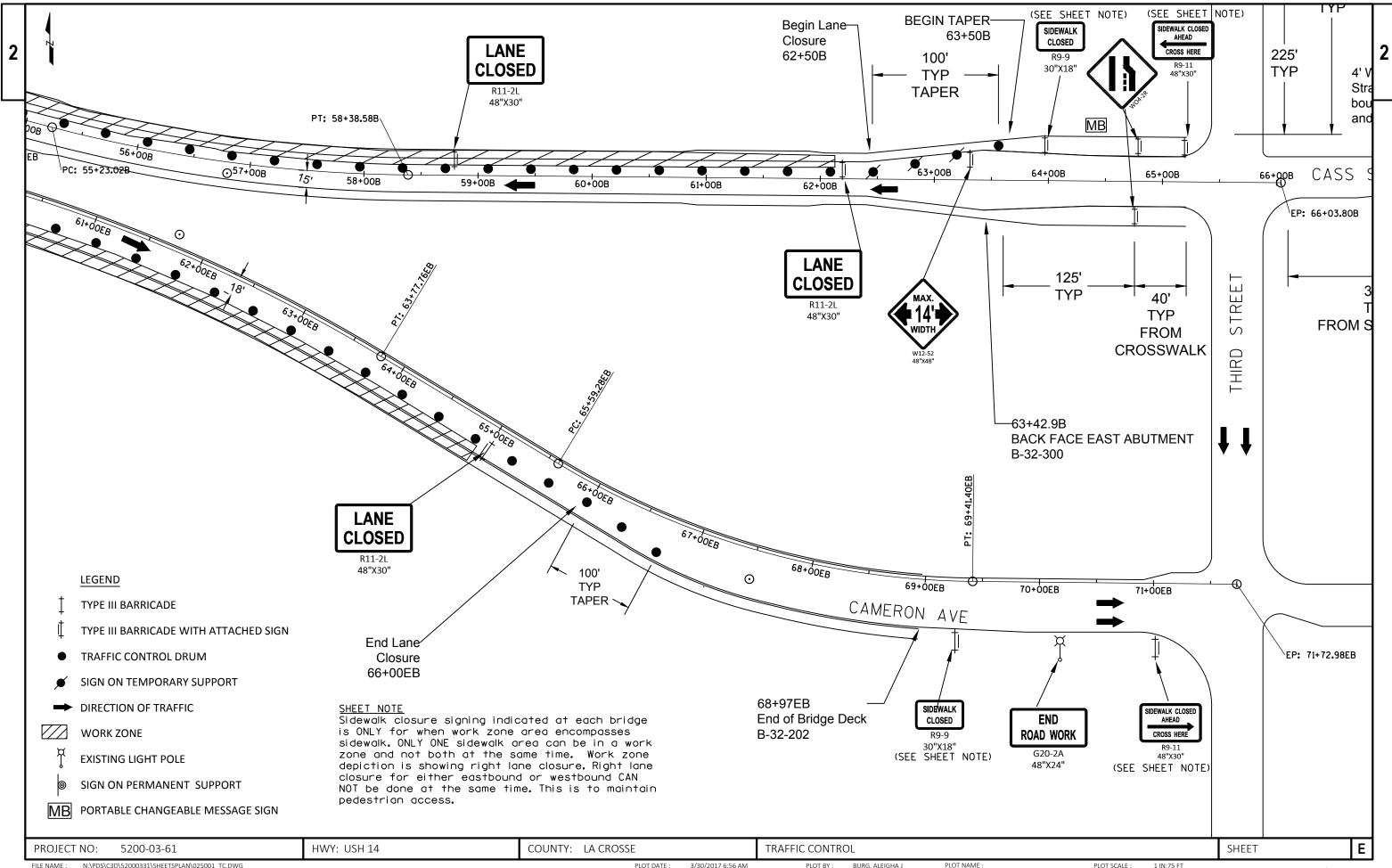
N:\PDS\C3D\52000331\SHEETSPLAN\025001\_TC.DWG LAYOUT NAME - 025003\_tc PLOT NAME : BURG, ALEIGHA J PLOT DATE : 3/30/2017 6:56 AM PLOT SCALE : 1 IN:75 FT



PLOT DATE : 3/30/2017 6:56 AM BURG, ALEIGHA J

PLOT NAME :

PLOT SCALE :



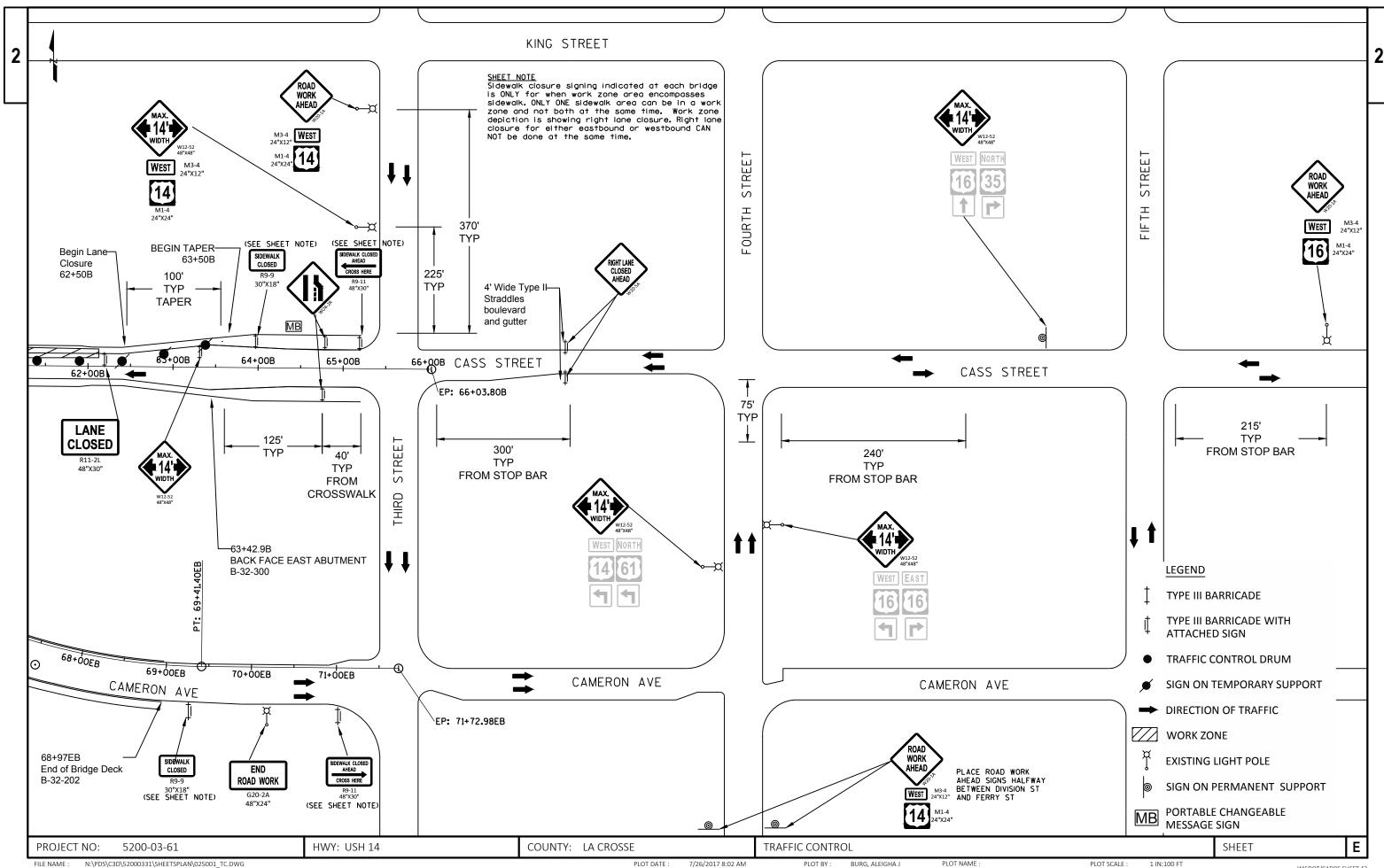
N:\PD\$\C3D\52000331\SHEETSPLAN\025001\_TC.DWG FILE NAME : LAYOUT NAME - 025005\_tc

PLOT DATE : 3/30/2017 6:56 AM

BURG, ALEIGHA J PLOT BY:

PLOT NAME

PLOT SCALE :



FILE NAME : N:\PDS\C3D\52000331\SHEETSPLAN\025001\_TC.DWG LAYOUT NAME - 025006\_tc

PLOT DATE :

BURG, ALEIGHA J

PLOT NAME

PLOT SCALE :

1 IN:100 FT

					5200-03-61	
Line	Item	Item Description	Unit	Total	Qty	
0002	213.0100	Finishing Roadway (project) 01. 5200-03-61	EACH	1.000	1.000	
0004	305.0115	Base Aggregate Dense 3/4-Inch	CY	1.000	1.000	
0006	502.0100	Concrete Masonry Bridges	CY	5.000	5.000	
8000	502.4205	Adhesive Anchors No. 5 Bar	EACH	74.000	74.000	
0010	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	550.000	550.000	
0012	506.0105	Structural Steel Carbon	LB	630.000	630.000	
0014	509.1500	Concrete Surface Repair	SF	266.000	266.000	
0016	514.2625	Downspout 6-Inch	LF	10.000	10.000	
0018	517.1010.S	Concrete Staining (structure) 01. B-32-202	SF	234.000	234.000	
0020	606.0500	Grouted Riprap Light	CY	3.000	3.000	
0022	616.0405	Fence Chain Link Salvaged 5-FT	LF	50.000	50.000	
0024	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5200-03-61	EACH	1.000	1.000	
0026	619.1000	Mobilization	EACH	1.000	1.000	
0028	642.5001	Field Office Type B	EACH	1.000	1.000	
0030	643.0100	Traffic Control (project) 01. 5200-03-61	EACH	1.000	1.000	
0032	643.0300	Traffic Control Drums	DAY	15,640.000	15,640.000	
0034	643.0410	Traffic Control Barricades Type II	DAY	170.000	170.000	
0036	643.0420	Traffic Control Barricades Type III	DAY	2,040.000	2,040.000	
0038	643.0705	Traffic Control Warning Lights Type A	DAY	2,380.000	2,380.000	
0040	643.0715	Traffic Control Warning Lights Type C	DAY	1,020.000	1,020.000	
0042	643.0900	Traffic Control Signs	DAY	4,420.000	4,420.000	
0044	643.0920	Traffic Control Covering Signs Type II	EACH	520.000	520.000	
0046	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000	
0048	SPV.0060	Special 01. Removing Rivets	EACH	96.000	96.000	
0050	SPV.0060	Special 02. Removing Corroded Shims	EACH	3.000	3.000	
0052	SPV.0060	Special 03. Batten Plate Access Holes	EACH	32.000	32.000	
0054	SPV.0060	Special 04. Waterline Tube Brace Repair	EACH	5.000	5.000	
0056	SPV.0105	Special 01. Bridge Cleaning Structure B-32-202	LS	1.000	1.000	
0058	SPV.0105	Special 02. Bridge Cleaning Structure B-32-300	LS	1.000	1.000	
0060	SPV.0105	Special 03. Structure Spot Cleaning and Painting Structure B-32-202	LS	1.000	1.000	
0062	SPV.0105	Special 04. Structure Spot Cleaning and Painting Structure B-32-300	LS	1.000	1.000	
0064	SPV.0105	Special 05. Strip Seal Gland Replacement B-32-300	LS	1.000	1.000	
0066	SPV.0105	Special 06. Wind Anchor Repair	LS	1.000	1.000	
0068	SPV.0105	Special 07. Historical Railing Repairs	LS	1.000	1.000	
0070	SPV.0105	Special 08. Compression Seal Expansion Device B-32-300	LS	1.000	1.000	
0072	SPV.0165	Special 01. Mortar Surface Repair	SF	111.000	111.000	

# TRAFFIC CONTROL

				SERVI CE	TRA	. 0300 IFFI C ITROL	TRA CON	0410 FFI C TROL CADES	TRA CON	0420 FFI C TROL CADES	TRA CON WAR	0705 FFI C TROL NI NG GHTS	TRA CON WAR	0715 FFI C TROL NI NG GHTS	TRA	0900 FFIC TROL	
				PERI OD	DR	RUMS	TYP	E II	TYPI	<u> </u>	TYF	PE A	TYF	PE C	SG	INS	
CATEGORY	LOCATI ON	SIGN CODE	MESSAGE	DAYS	NO	DAY	NO	DAY	NO	DAY	NO	DAY	NO	DAY	NO	DAY	REMARKS
0010	WEST OF WORK JONE	000.01	END DOAD WORK	0.5	00	75/5	•			•	•			7.5		0.5	WEST SUBSTITUTE OF SOUR
0010	WEST OF WORK ZONE	G20-2A	END ROAD WORK	85	89	7565	0	0	0	0	0	0	9	765	1	85	WESTBOUND LANE CLOSURE
0010	WEST OF WORK ZONE	R9-11	SW CLOSED AHEAD W/ARROW	85	0	0	0	0	2	170	0	0	0	0	2	170	WESTBOUND LANE CLOSURE
0010	WEST OF WORK ZONE	R9-9	SI DEWALK CLOSED	85	0	0	0	0	1 -	85	0	0	0	0	1 -	85	WESTBOUND LANE CLOSURE
0010	39+00B - 62+00B	R11-2L	LANE CLOSED	85	0	0	0	0	5	425	10	850	0	0	5	425	WESTBOUND LANE CLOSURE
0010	EAST OF WORK ZONE	W12-52	MAX 14' WIDTH	85	0	0	0	0	1	85	2	170	0	0	5	425	WESTBOUND LANE CLOSURE
0010	EAST OF WORK ZONE	R9-9	SI DEWALK CLOSED	85	0	0	0	0	1	85	0	0	0	0	1	85	WESTBOUND LANE CLOSURE
0010	EAST OF WORK ZONE	W04-2R	WORK ZONE LANE ENDS	85	0	0	0	0	2	170	4	340	0	0	2	170	WESTBOUND LANE CLOSURE
0010	EAST OF WORK ZONE	R9-11	SW CLOSED AHEAD W/ARROW	85	0	0	0	0	1	85	0	0	0	0	1	85	WESTBOUND LANE CLOSURE
0010	EAST OF WORK ZONE	W20-5A	RT/LT LANE CLOSED AHEAD	85	0	0	0	0	0	0	0	0	0	0	2	170	WESTBOUND LANE CLOSURE
0010	EAST OF WORK ZONE	M3-4	WEST	85	0	0	0	0	0	0	0	0	0	0	5	425	WESTBOUND LANE CLOSURE
					_	-		-	_	-		-		_			
0010	EAST OF WORK ZONE	M1-4	USH 14 OR 16	85	0	0	0	0	0	0	0	0	0	0	5	425	WESTBOUND LANE CLOSURE
0010	EAST OF WORK ZONE	W20-1A	ROAD WORK AHEAD	85	0	0	0	0	0	0	0	0	0	0	4	340	WESTBOUND LANE CLOSURE
0010	WEST OF WORK ZONE	W20-1A	ROAD WORK AHEAD	85	95	8075	0	0	0	0	0	0	3	255	2	170	EASTBOUND LANE CLOSURE
0010	WEST OF WORK ZONE	W20-5A	RT/LT LANE CLOSED AHEAD	85	0	0	0	0	0	0	0	0	0	0	2	170	EASTBOUND LANE CLOSURE
0010	WEST OF WORK ZONE	WO4-2R	WORK ZONE LANE ENDS	85	0	0	0	0	0	0	0	0	0	0	2	170	EASTBOUND LANE CLOSURE
0010	WEST OF WORK ZONE	R9-11	SW CLOSED AHEAD W/ARROW	85	0	0	0	0	2	170	0	0	0	0	2	170	EASTBOUND LANE CLOSURE
0010	WEST OF WORK ZONE	R9-9	SI DEWALK CLOSED	85	0	0	0	0	1	85	0	0	0	0	1	85	EASTBOUND LANE CLOSURE
0010	45+00EB - 65+00EB	R11-2L	LANE CLOSED	85	0	0	0	0	4	340	8	680	0	0	4	340	EASTBOUND LANE CLOSURE
0010	EAST OF WORK ZONE	R9-9	SI DEWALK CLOSED	85	0	0	0	0	1	85	0	0	0	0	1	85	EASTBOUND LANE CLOSURE
0010	EAST OF WORK ZONE	G20-2A	END ROAD WORK	85	0	0	0	0	0	0	0	0	0	0	1	85	EASTBOUND LANE CLOSURE
0010	EAST OF WORK ZONE	R9-11	SW CLOSED AHEAD W/ARROW	85	0	0	0	0	1	85	0	0	0	0	1	85	EASTBOUND LANE CLOSURE
0010	BELOW STRUCTURE	W20-1A	ROAD WORK AHEAD		0	0	0	0	2	170	4	340	0	0	2	170	2ND STREET
0010	EAST OF WORK ZOME	W20-TA W20-5A	RUAD WURK AHEAD RT/LT LANE CLOSED AHEAD	85 85	0	0	2	170	0	0	0	0	0	0	0	0	ZIND SIREE!
0010	EMST OF WORK ZUME	WZU-SA	KI/LI LANE CLUSED AMEAD	ဝ၁	U	U	2	170	U	U	U	U	U	U	U	U	
				TOTAL 0010		15640		170		2040		2380		1020		4420	

# TRAFFIC CONTROL SIGNS PCMS

# TRAFFIC CONTROL COVERING SIGNS TYPE II

CATEGORY	STATI ON	LOCATI ON	643. 1050 DAY	CATEGORY	SIGN CODE	MESSAGE	# OF CYCLES	# OF SI GNS	643. 0920 EACH
0010	32+00EB	RT	7	0010	W12-52	MAX 14' WIDTH	80	4	320
0010	64+00B	LT	7	0010	W04-2R	WORK ZONE LANE ENDS	80	2	160
		TOTAL 0010	14	0010	W20-5A	RT/LT LANE CLOSED AHEAD	80	2	160
						TOTAL 0010			640

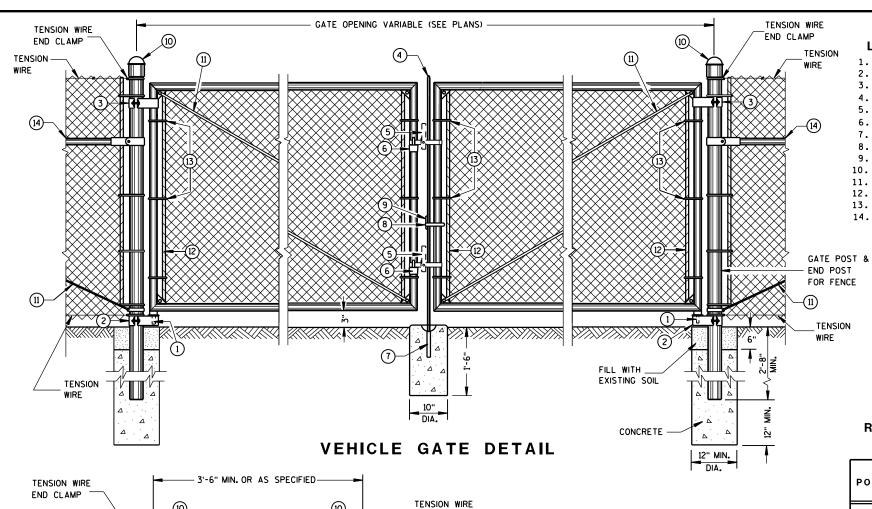
PROJECT NO: 5200-03-61 HWY: USH 14 COUNTY: LA CROSSE MISCELLANEOUS QUANTITIES SHEET: E

# Standard Detail Drawing List

15B03-15A	FENCE CHAIN LINK	
15B03-15B	FENCE CHAIN LINK	
15C05-03	TRAFFIC CONTROL,	ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15D20-04	TRAFFIC CONTROL,	SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D30-03A	TRAFFIC CONTROL,	PEDESTRI AN ACCOMMODATI ON
15D30-03B	TRAFFIC CONTROL,	TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL.	PEDESTRI AN ACCOMMODATION

6

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END CLAMP

EXISTING SOIL

PEDESTRIAN GATE DETAIL

CONCRETE

12" MIN.

CONCRETE

12" MIN.

**TENSION** 

GATE POST &

END POST

FOR FENCE

TENSION -

GATE POST &

TENSION

END POST

FOR FENCE

6

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 $\Box$ 

# REQUIRED FENCE POST SIZES

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

#### **BRACE RAIL TYPES**

USE	TYPE
BRACE RAIL	SP1 OR FS1

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

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

\*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

## **GENERAL NOTES**

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

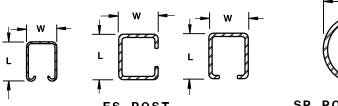
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

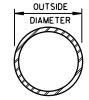
FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

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

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

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





SP POST & RAIL

# CROSS SECTIONS OF POSTS AND RAILS

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

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

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

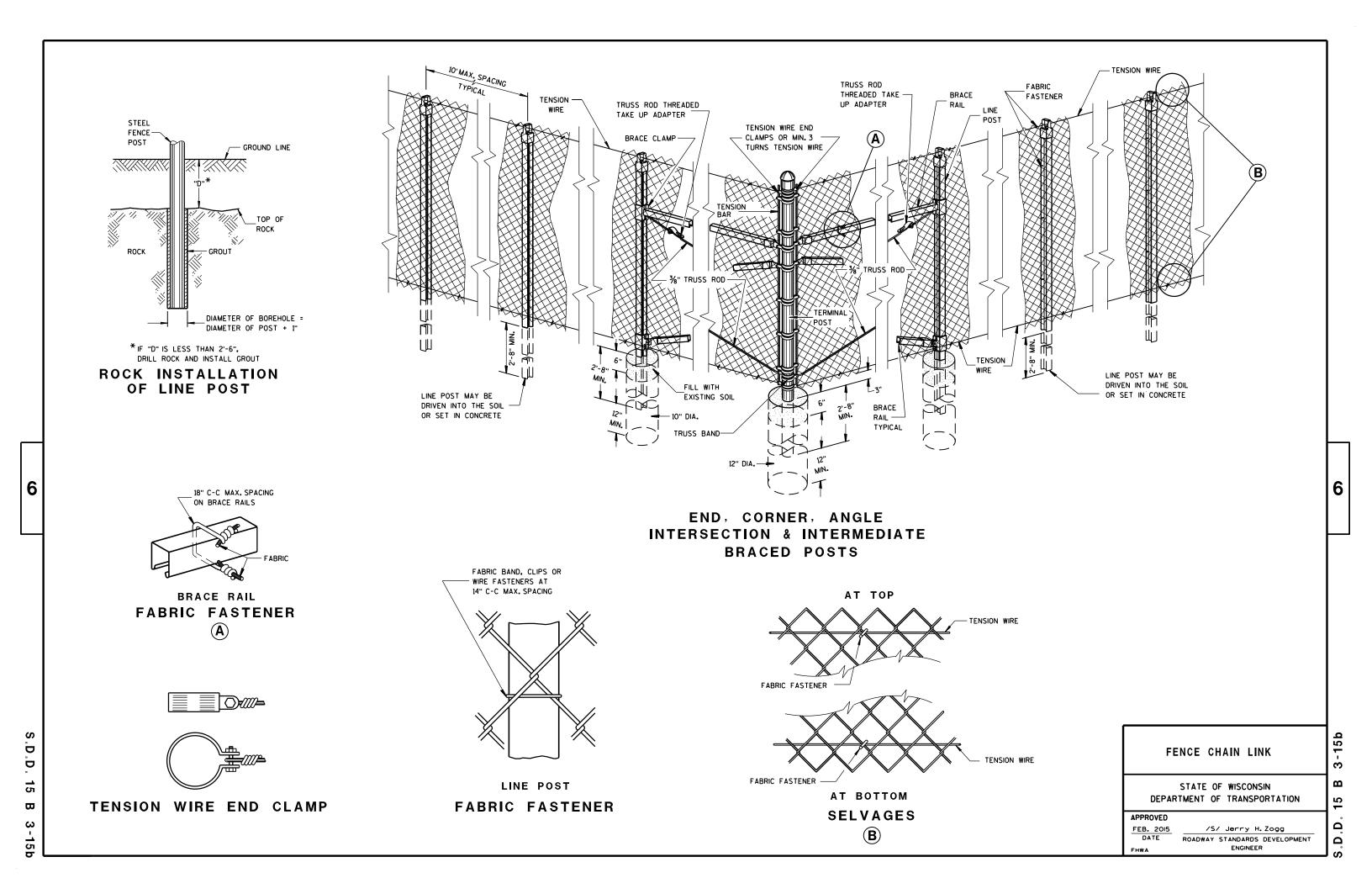
POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT		
SP1	1.660	0.140	2.270		
SP2	1.900	0.145	2.720		
SP3	2.375	0.154	3.650		
SP4	2.875	0.203	5.800		
SP5	4.000	0.226	9.120		
SP6	6.625	0.280	18.990		
SP7	8.625	0.322	28.580		

#### REQUIRED POST SIZE FOR GATES

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

FENCE CHAIN LINK

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION က



# **GENERAL NOTES**

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

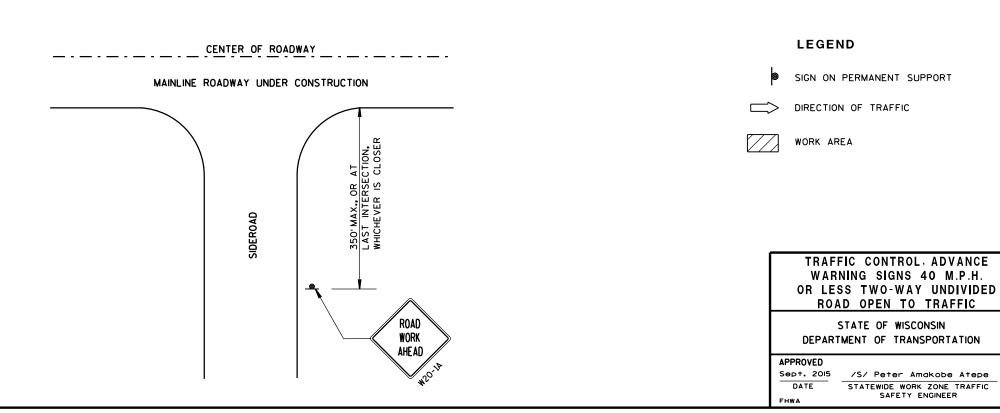
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"×36" SIGNS MAY BE USED INSTEAD OF 48"×48" SIGNS.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

★ THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

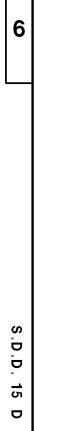


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FOR LANE WIDTH OTHER THAN 12':

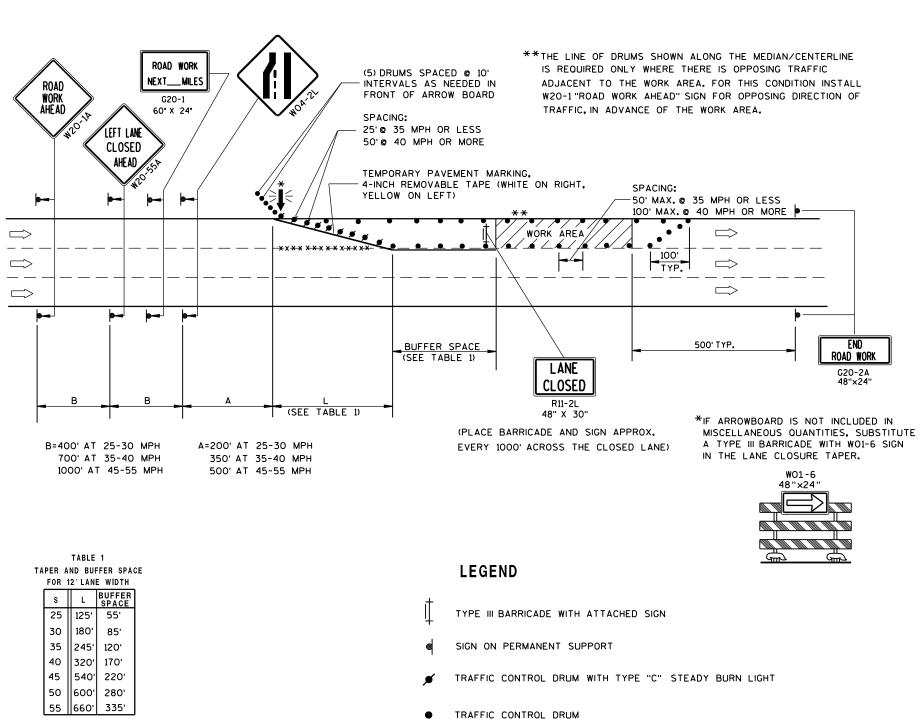
L = WS AT 45 MPH OR GREATER

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

 $L = \frac{WS^2}{60}$  AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

W = WIDTH OF LANE CLOSURE



FLASHING ARROW BOARD

DIRECTION OF TRAFFIC

WORK AREA

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

# **GENERAL NOTES**

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE, FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

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

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

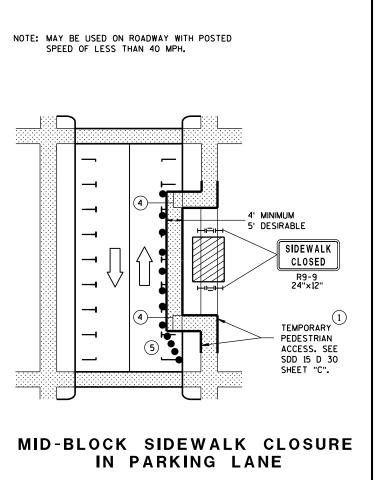
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

June 2016 /S/ Peter Amak

ZOIG /S/ Peter Amakobe Atepe

STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

D.D. 15 D



NOTE: LAYOUT SAME AS ABOVE. 4' MINIMUM 5' DESIRABLE SIDEWALK CLOSED RQ-Q TEMPORARY PEDESTRIAN ACCESS. SEE SDD 15 D 30 SHEET "C". SIDEWALK DIVERSION

6

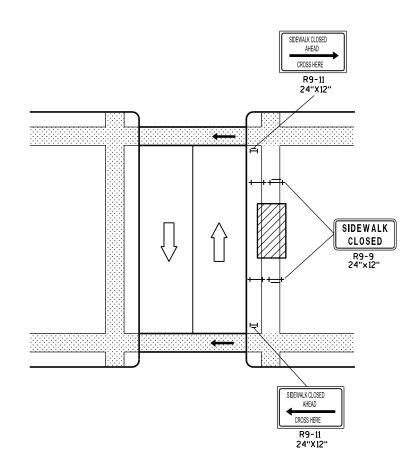
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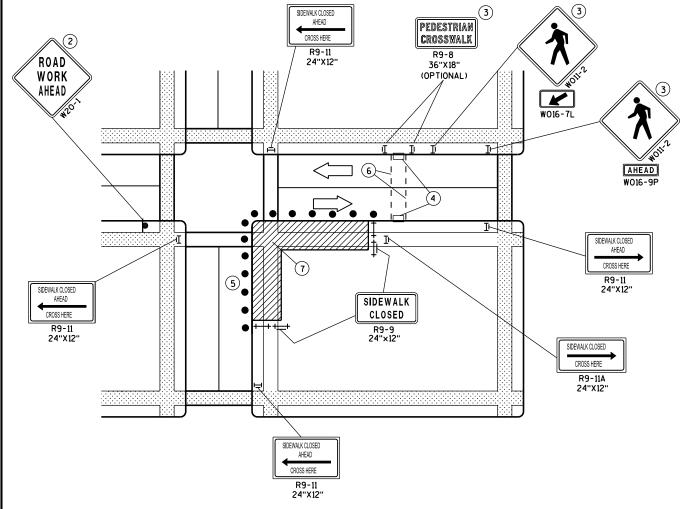
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MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

#### **GENERAL NOTES**

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

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

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

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

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

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

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

- 1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.
- 2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
- (3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND WO11-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
- (4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".
- (5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
- (6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
- (7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN

#### **LEGEND**

SIGN ON PERMANENT SUPPORT

UNDER PEDESTRIAN TRAFFIC

TRAFFIC TRAFFIC CONTOL DRUM

DIRECTION OF

WORK AREA PEDESTRIAN

CHANNELIZATION DEVICE

TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A. LOW-INTENSITY FLASHING)

TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)

# TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION က 0 က Ω Ω

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PARALLEL TO CURB

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#### **GENERAL NOTES**

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION. ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

- (1) CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".
- (2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- 3 DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- (4) CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
- (5) CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- (6) THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
- 7 DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- (8) LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
- (9) CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".
- (10) 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.

DEPARTMENT OF TRANSPORTATION

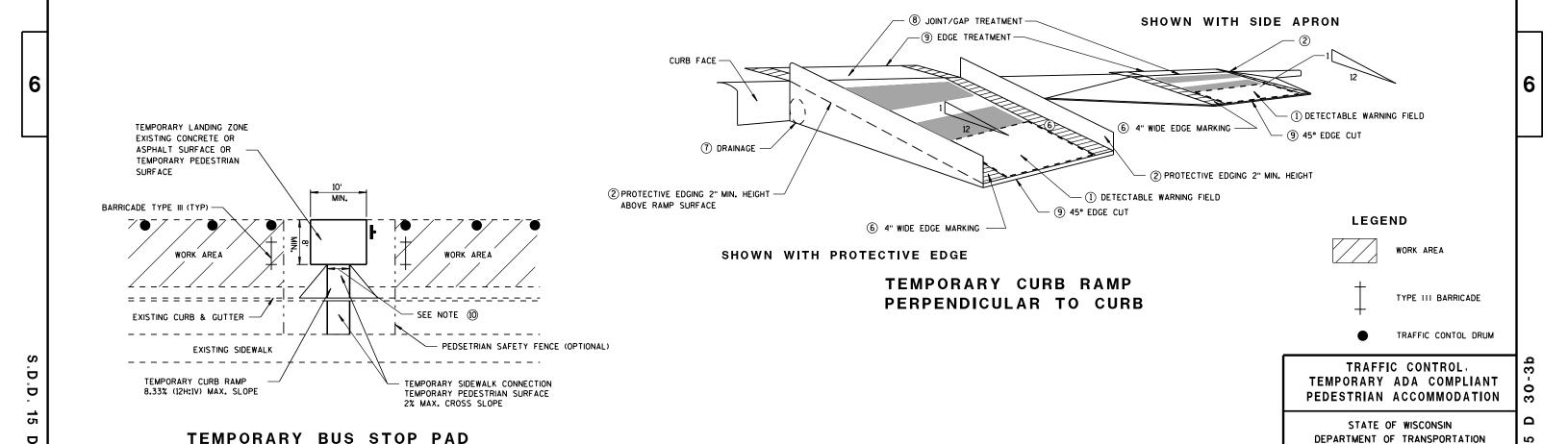
/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC

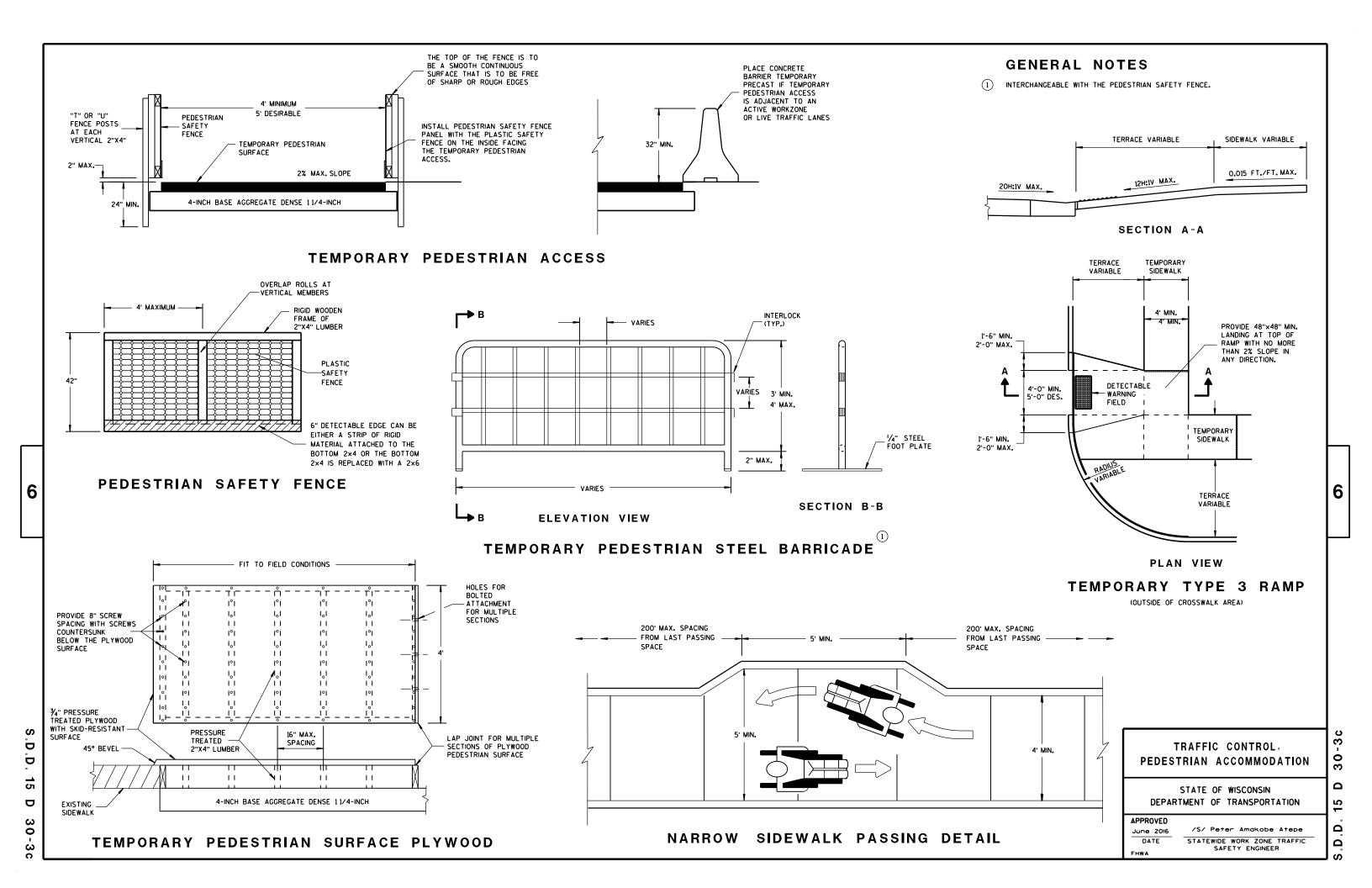
SAFETY ENGINEER

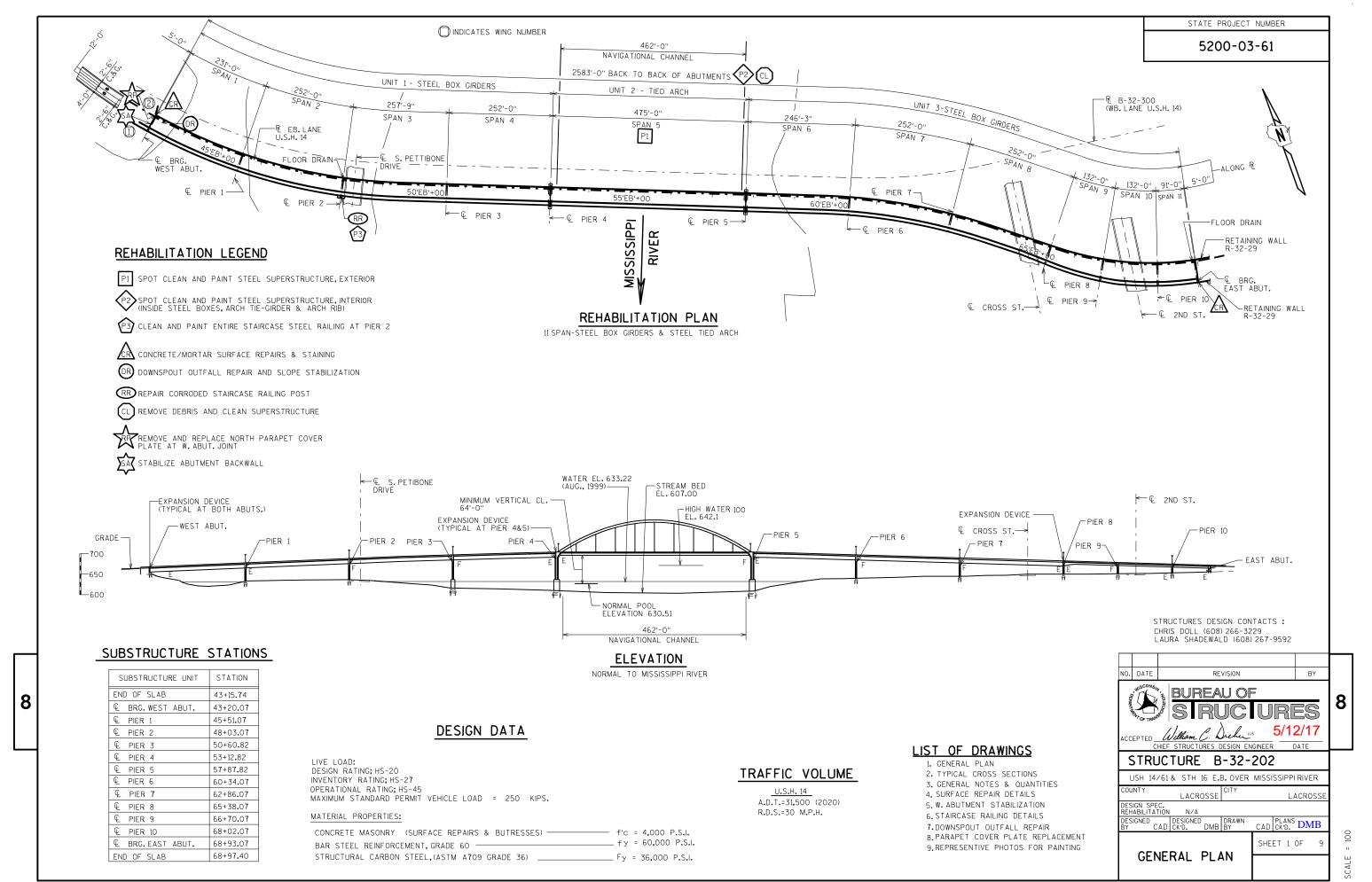
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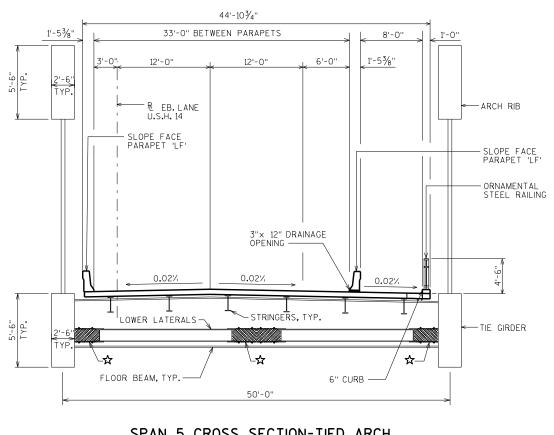
APPROVED

June 2016



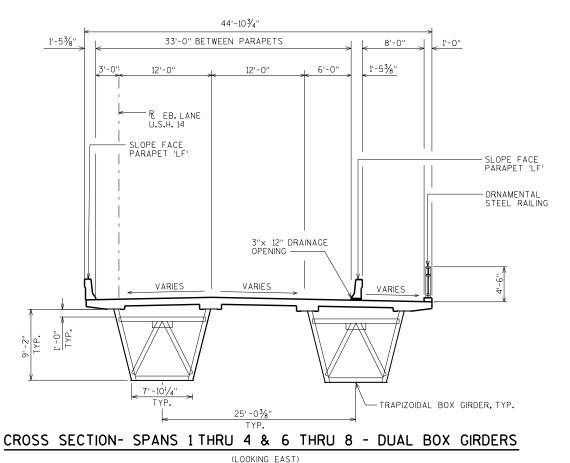


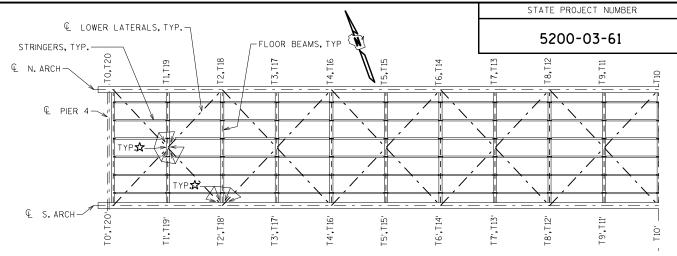




# SPAN 5 CROSS SECTION-TIED ARCH

(LOOKING EAST)

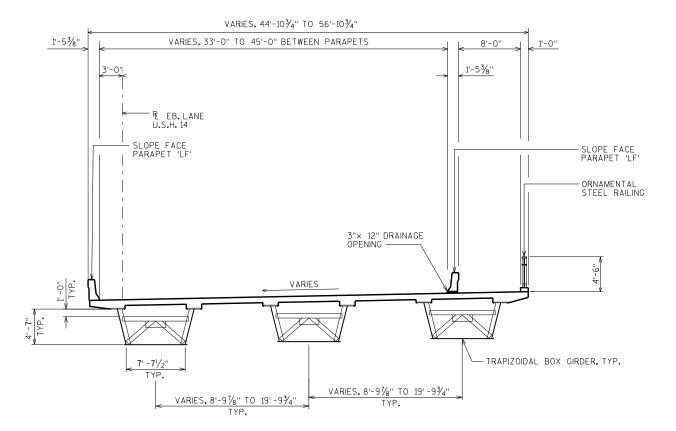




SPAN 5 - HALF FRAMING PLAN

SYM. ABOUT MIDSPAN->

★ EXISTING WIRE MESH BIRD SCREENING AT LOWER LATERAL CONNECTION PLATES TO BE REMOVED, SALVAGED, AND REINSTALLED AFTER CLEANING AND PAINTING HAS BEEN COMPLETED. SALVAGE AND REUSE EXISTING 1/2" DIA.BOLTS, SQUARE WASHERS, AND LOCK WASHERS CONNECTING MESH TO CONNECTION PLATES (CONNECTION PLATES ARE TAPPED FOR THE BOLTS). REMOVAL AND REINSTALLATION OF WIRE MESH BIRD SCREENING SHALL BE CONSIDERED INCIDENTAL TO BID ITEM "STRUCTURE SPOT CLEANING AND PAINTING B-32-202".



# CROSS SECTION- SPANS 9 THRU 11 - 3 BOX GIRDERS

(LOOKING EAST)

NO.	NO. DATE REVISION BY						
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION							
STRUCTURE B-32-202							
			DRAWN BY	CAD	PLANS CK'D.	DMB	
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CF	ROSS	S SECTI					

# GENERAL NOTES

5200-03-61

STATE PROJECT NUMBER

# TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER UNIT 1	SUPER UNIT 2	SUPER UNIT 3	WEST ABUT.	EAST ABUT.	PIER 2	TOTALS
305.0115	BASE AGGREGATE DENSE 3/4-INCH	CY				1			 1
502.0100	CONCRETE MASONRY BRIDGES	CY				5			 5
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH				74			 74
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB				550			 550
506.0105	STRUCTURAL STEEL CARBON	LB				200		5	 205
509.1500	CONCRETE SURFACE REPAIR	SF				14			 14
514.2625	DOWNSPOUT 6-INCH	LF				10			 10
51 <b>7.</b> 1010.S	CONCRETE STAINING B-32-202	SF				232	2		 234
606.0500	GROUTED RIPRAP LIGHT	CY				3			 3
616.0405	FENCE CHAIN LINK SALVAGED 5-FT.	LF				50			 50
SPV.0105	BRIDGE CLEANING B-32-202	LS							 1
SPV.0105	STRUCTURE SPOT CLEANING AND PAINTING B-32-202	LS	400 SF <b>*</b>	3000 SF*	700 SF*			26 SF*	 1
SPV.0165	MORTAR SURFACE REPAIR	SF				2	2		 4

\*ESTIMATED SQUARE FOOT QUANTITES SHOWN FOR INFORMATION ONLY. ITEM TO BE BID AS A SINGLE LUMP SUM AMOUNT FOR ALL PAINTING ON THE STRUCTURE.

QUANTITIES SHOWN ARE APPROXIMATE AND ADDITIONAL CLEANING/PAINTING MAY BE REQUIRED DURING CONSTRUCTION AND SHOULD BE PERFORMED AS DIRECTED BY THE FIELD ENGINEER.

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

THE COLOR OF THE FINISH EXTERIOR EPOXY TOP COAT OF THE TIED ARCH AND PIER 2 STAIR CASE RAILING SHALL BE BLUE, (FEDERAL STANDARD COLOR NO. 25240) OR SIMILAR COLOR APPROVED BY THE ENGINEER.

THE COLOR OF THE FINISH INTERIOR EPOXY TOP COAT OF THE BOX GIRDERS AND TIED ARCH SHALL BE WHITE, (FEDERAL STANDARD COLOR NO. 20152) OR SIMILAR COLOR APPROVED BY THE ENGINEER.

ANY EXCAVATION AND SUBSEQUENT BACKFILL NECESSARY TO COMPLETE THE CONCRETE SURFACE REPAIRS AT WING 2 IS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE SURFACE REPAIR".

ACCESS TO THE INTERIOR OF BOX GIRDERS IS AVAILABLE AT THE WEST ABUTMENT AND AT PIER 4 FOR SPANS 1 THRU 4, AND AT PIERS 5 & 8 FOR SPANS 6 THRU 11.

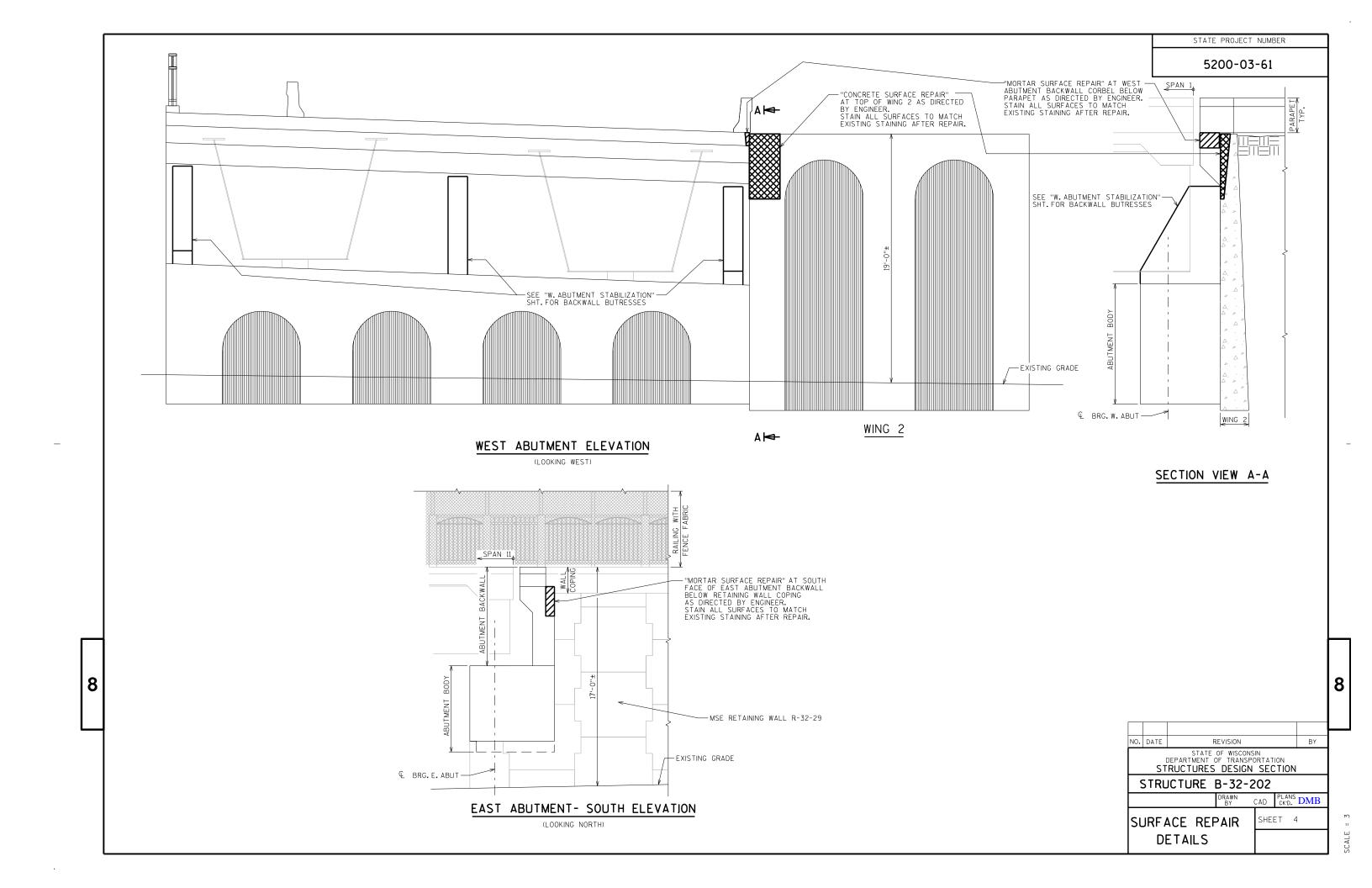
ACCESS TO THE INTERIOR OF THE TIED ARCH RIB AND TIE-GIRDER IS AVAILABLE AT PIERS 4 & 5. ACCESS HATCHES ARE LOCATED IN THE SIDEWALK/MULTI-USE PATH ON THE SOUTH SIDE OF THE BRIDGE AT THESE PIER LOCATIONS.

SEE ROADWAY PLANS FOR TRAFFIC CONTROL REQUIREMENTS.

NO. DATE BY REVISION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-32-202 DRAWN BY CAD PLANS DMB SHEET 3 GENERAL NOTES & QUANTITES



STATE PROJECT NUMBER

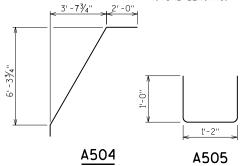
5200-03-61



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

BAR MARK	780s	NO. REQ'D.	LENGTH	NA NA	BAR SERIES	LOCATION
A501	Х	28	5'-4"		lack	N. & S. BUTRESS HORIZ.
A502	Х	20	8'-3"			BUTRESS VERT.
A503	Х	12	5'-1"		lacktriangle	N. & S. BUTRESS VERT.
A504	Χ	4	10'-0"	Х		N. & S. BUTRESS- TOP
A505	Х	21	2'-11''	Х		BUTRESS F.F. U-BARS
A506	Χ	14	3'-8"		lacktriangle	MIDDLE BUTRESS HORIZ.

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



# BAR SERIES TABLE

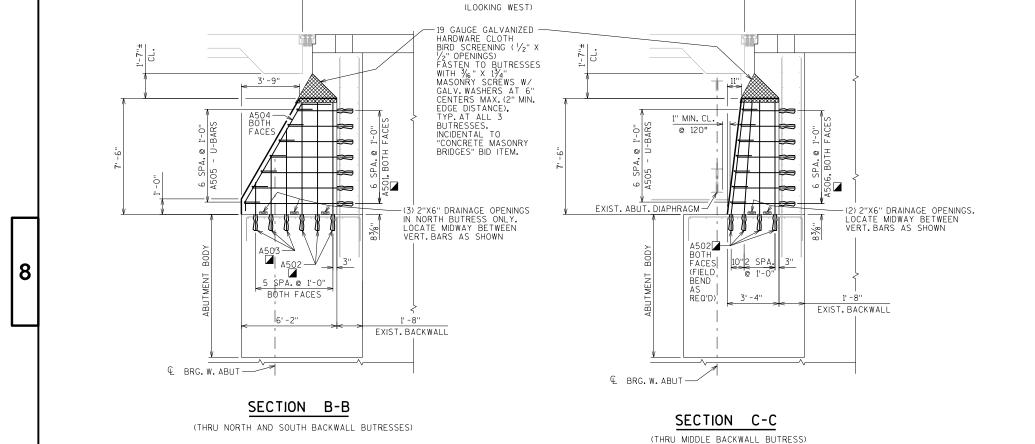
BAR MARK	NO. REQ'D.	LENGTH
A501	4 SERIES OF 7	3'-7" TO 7'-0"
A503	4 SERIES OF 3	6'-9" TO 3'-4"
A506	2 SERIES OF 7	3'-3" TO 4'-0"

BUNDLE AND TAG EACH SERIES SEPARATELY.

# NOTES

STAIN ALL EXPOSED VERTICAL SURFACES OF BUTRESSES TO MATCH EXISTING ABUTMENT STAINING.

ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0" IN CONCRETE.



C₩

1' -6" CONC. BUTRESS

(MIDDLE)

C₩

WEST ABUTMENT ELEVATION

EXIST. ABUT. DIAPHRAGM-

19' -8"

SPAN 1

B₩

CONC. BUTRESS (SOUTH)

В₩

-A502,A503 VERT.
BOTH FACES

A504-

6 SPA. @ 1'-0" A505 U-BARS

- 19 GAUGE GALVANIZED HARDWARE CLOTH BIRD SCREENING ( ½" X ½" OPENINGS) FASTEN TO BUTRESSES WITH 1½" X 1½", MASONRY SCREWS W/ GALV, WASHERS AT 6" CENTERS MAX. (2" MIN. EDGE DISTANCE), TYP. AT ALL 3 BUTRESSES. INCIDENTAL TO "CONCRETE MASONRY BRIDGES" BID ITEM.

19' -8"

B₩

1'-6" CONC. BUTRESS (NORTH)

B₩

SPAN 1

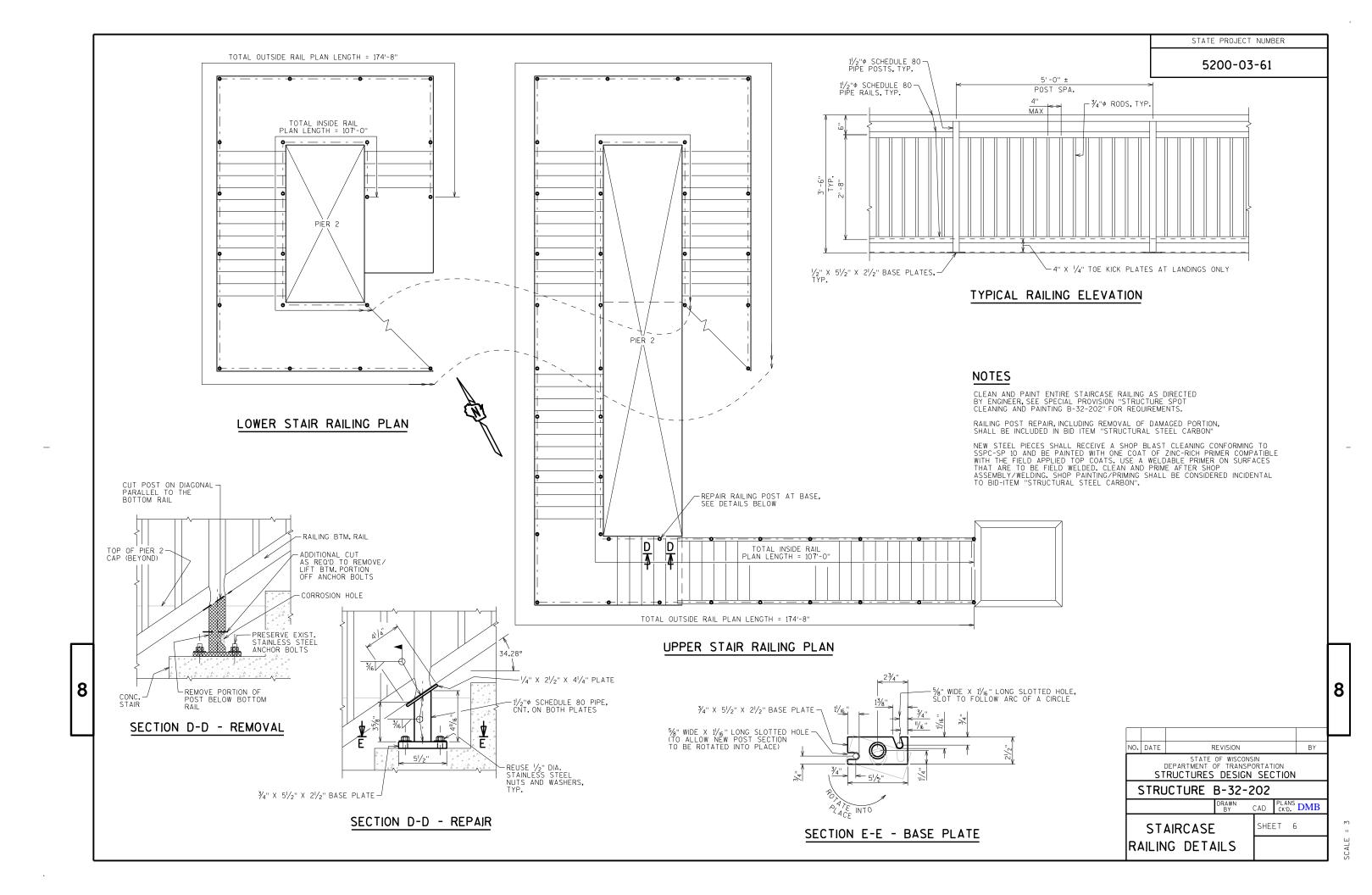
- A502,A503 ✓ VERT. BOTH FACES

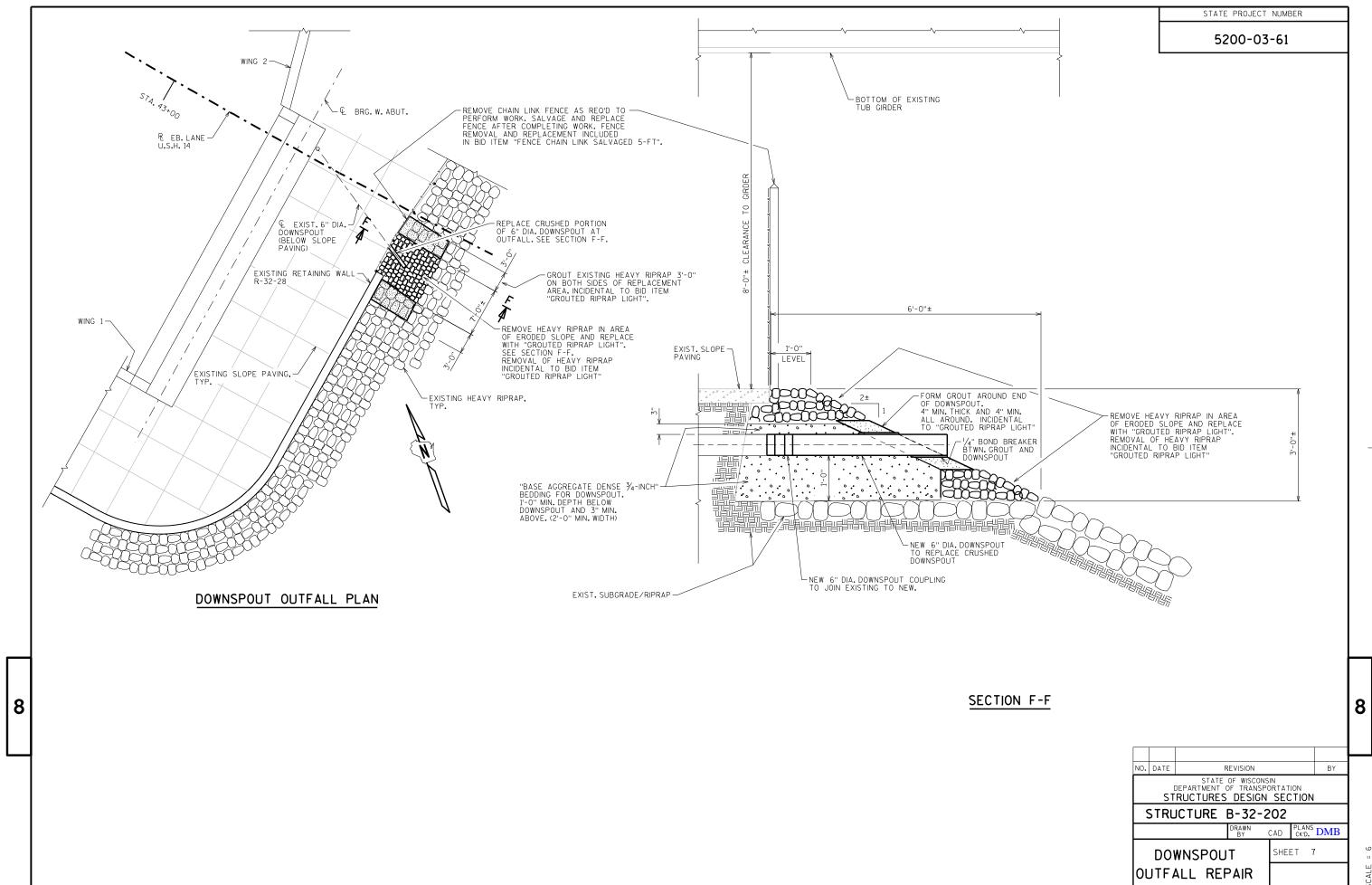
-EXISTING GRADE

A504-

6 SPA.@ 1'-0" A505 U-BARS

NO. DATE BY REVISION STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION STRUCTURE B-32-202 CAD PLANS DMB SHEET 5 W. ABUTMENT STABILIZATION





STATE PROJECT NUMBER

5200-03-61

# <u>NOTES</u>

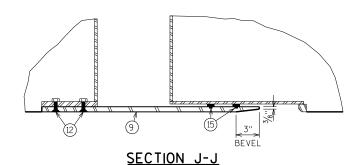
SANDBLAST PLATE AFTER FABRICATION IN ACCORDANCE WITH SSPC SP-6 "COMMERICAL BLAST CLEANING". AFTER BLAST CLEANING, PLATE SHALL BE HOT DIPPED GALVANIZED.

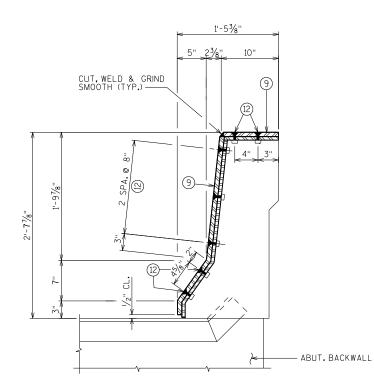
COST OF REMOVING OLD PLATE, AND FURNISHING & INSTALLING NEW PARAPET COVER PLATE SHALL BE PAID FOR UNDER BID ITEM "STRUCTURAL STEEL CARBON"

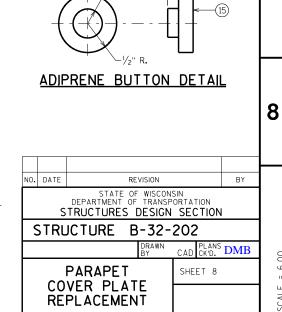
ONLY REPLACE PLATE AFTER ABUTMENT BACKWALL HAS BEEN STABILIZED, SEE "W. ABUTMENT STABILIZATION" SHT.

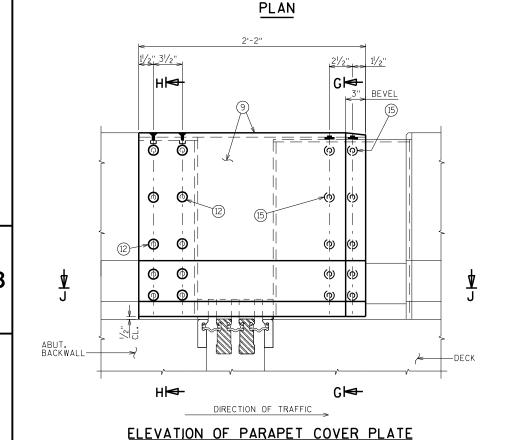
# LEGEND

- 9 OUTSIDE PLATE. FABRICATE FROM 5%" PLATE.
- 2  $\cancel{3}\!\!/_4$  "  $\phi$  X 2" STAINLESS STEEL FLAT CTSK. SLOTTED HEAD CAP SCREWS WITH ANTI-SEIZE LUBRICANT. RECESS  $/\!\!/_{16}$  " BELOW PLATE SURFACE.
- (15) ADIPRENE BUTTON. SEE DETAIL. SET IN OUTSIDE PLATE.







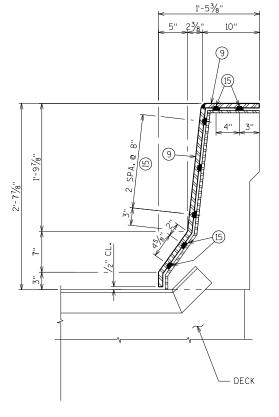


WING 2

R EB. LANE U.S.H. 14

- & BRG. W. ABUT.

REMOVE EXISTING NORTH PARAPET COVER PLATE AT WEST ABUTMENT EXPANSION JOINT AND REPLACE WITH NEW SHORTER PLATE, SEE DETAILS



SECTION G-G

SECTION H-H



TYPICAL CORROSION ON STAIRCASE RAILING AT PIER 2



TYPICAL ISOLATED CORROSION ON BEARING AT PIER 5

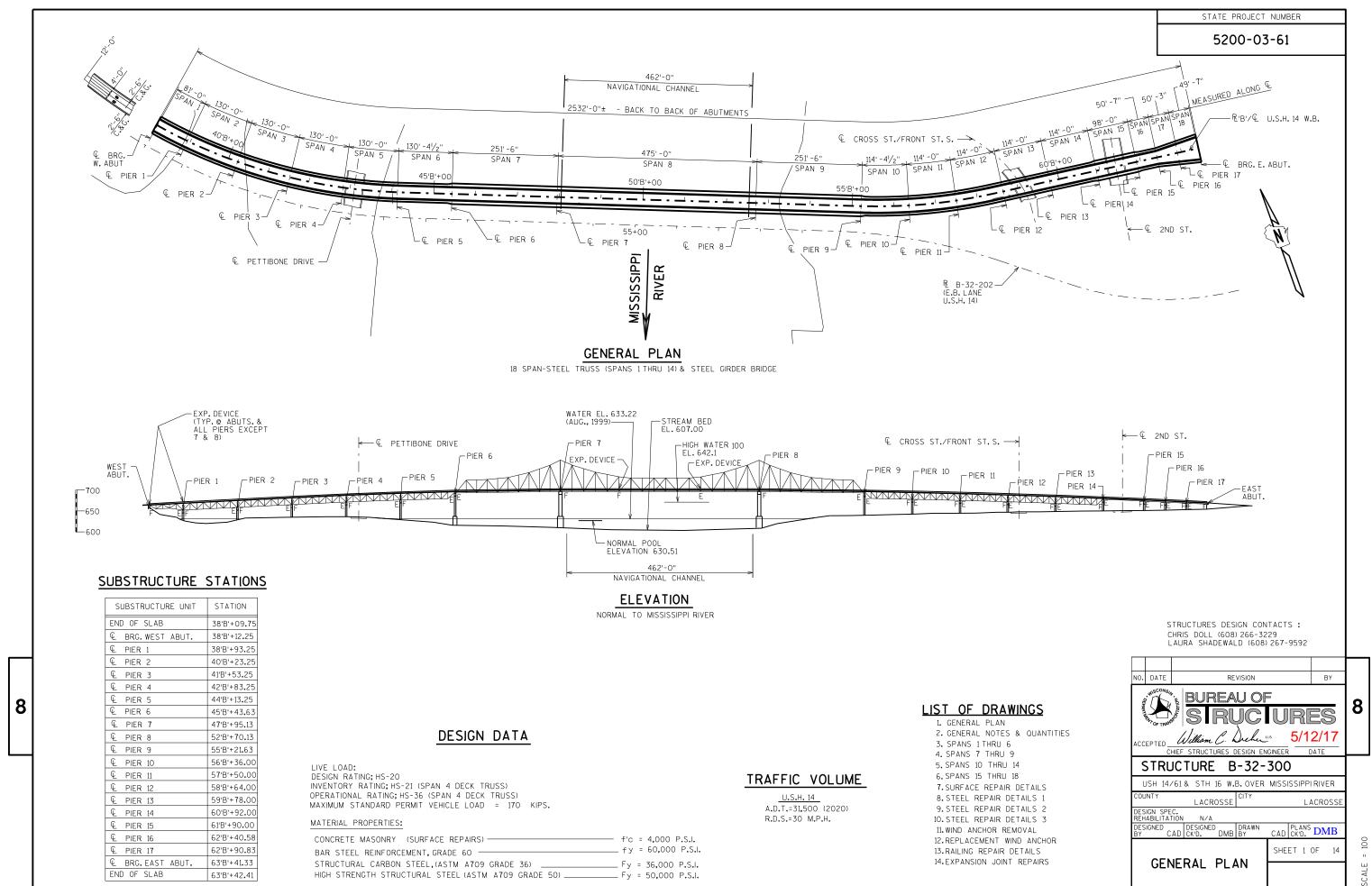


TYPICAL ISOLATED CORROSION ON ARCH TIE GIRDER IN SPAN 5



TYPICAL ISOLATED CORROSION ON FLOOR OF ARCH INSIDE TIE GIRDER IN SPAN 5

NO.	DATE		BY				
	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION						
5	STRUCTURE B-32-202						
			DRAWN BY	CAD CK'D.	DMB		
	REPRESENTATIVE		SHEET 9				
PHOTOS FO PAINTING		_					



# TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER SPANS 1-6	SUPER SPANS 7-9	SUPER SPANS 10-14	SUPER SPANS 15-18	WEST ABUT.	PIER 5	PIER 6	PIER 9	PIER 10	TOTALS
506.0105	STRUCTURAL STEEL CARBON	LB	5	420								425
509.1500	CONCRETE SURFACE REPAIR	SF	25		25	25	35	10	118	14		252
SPV.0060	REMOVING RIVETS	EACH	10	86								96
SPV.0060	REMOVING CORRODED SHIMS	EACH	3									3
SPV.0060	BATTEN PLATE ACCESS HOLES	EACH		32								32
SPV.0060	WATERLINE TUBE BRACE REPAIR	EACH	1	2	2							5
SPV.0105	BRIDGE CLEANING B-32-300	LS										1
SPV.0105	STRUCTURE SPOT CLEANING AND PAINTING B-32-300	LS	700 SF*	7000 SF*	600 SF*	800 SF*						1
SPV.0105	STRIP SEAL GLAND REPLACEMENT B-32-300	LS										1
SPV.0105	WIND ANCHOR REPAIR	LS										1
SPV.0105	HISTORIC RAILING REPAIRS	LS										1
SPV.0105	COMPRESSION SEAL EXPANSION DEVICE B-32-300	LS										1
SPV.0165	MORTAR SURFACE REPAIR	SF	25		25	25			24		8	107
							<u>-</u>					

\*ESTIMATED SQUARE FOOT QUANTITES SHOWN FOR INFORMATION ONLY, ITEM TO BE BID AS A SINGLE LUMP SUM AMOUNT FOR ALL PAINTING ON THE STRUCTURE.

QUANTITIES SHOWN ARE APPROXIMATE AND ADDITIONAL CLEANING/PAINTING MAY BE REQUIRED DURING CONSTRUCTION AND SHOULD BE PERFORMED AS DIRECTED BY THE FIELD ENGINEER.

# GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL FIELD CONNECTIONS SHALL BE MADE WITH A325 HIGH-TENSILE STRENGTH BOLTS.

THE COLOR OF THE FINISH EXTERIOR EPOXY TOP COAT SHALL BE BLUE, (FEDERAL STANDARD COLOR NO. 25240) OR SIMILAR COLOR APPROVED BY THE ENGINEER.

ACCESS HATCHES TO THE TOPS OF PIERS 7 & 9 ARE LOCATED IN THE SIDEWALK ON THE SOUTH SIDE OF THE BRIDGE AT THESE PIER LOCATIONS.

SEE ROADWAY PLANS FOR TRAFFIC CONTROL REQUIREMENTS.

8

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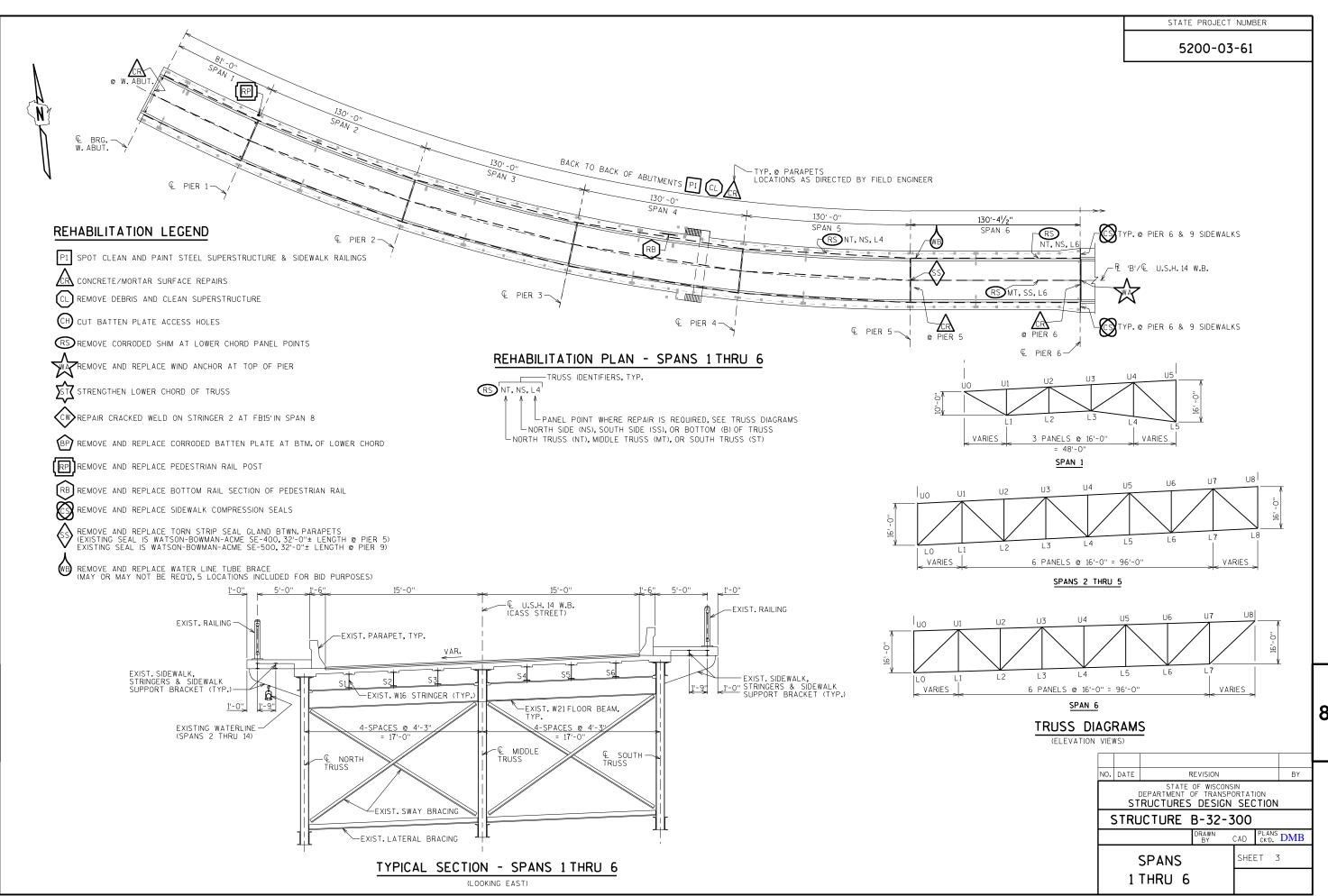
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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-32-300

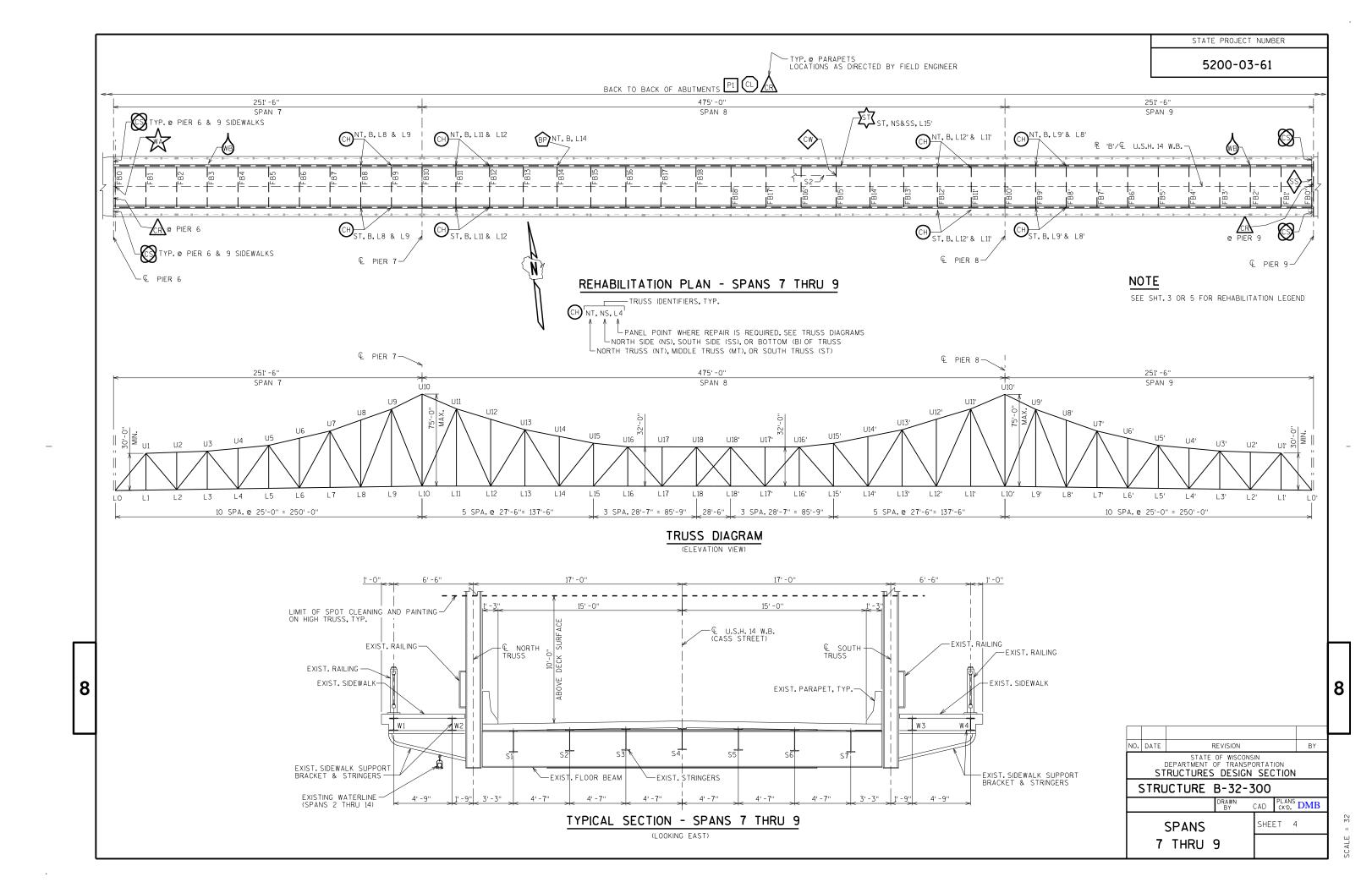
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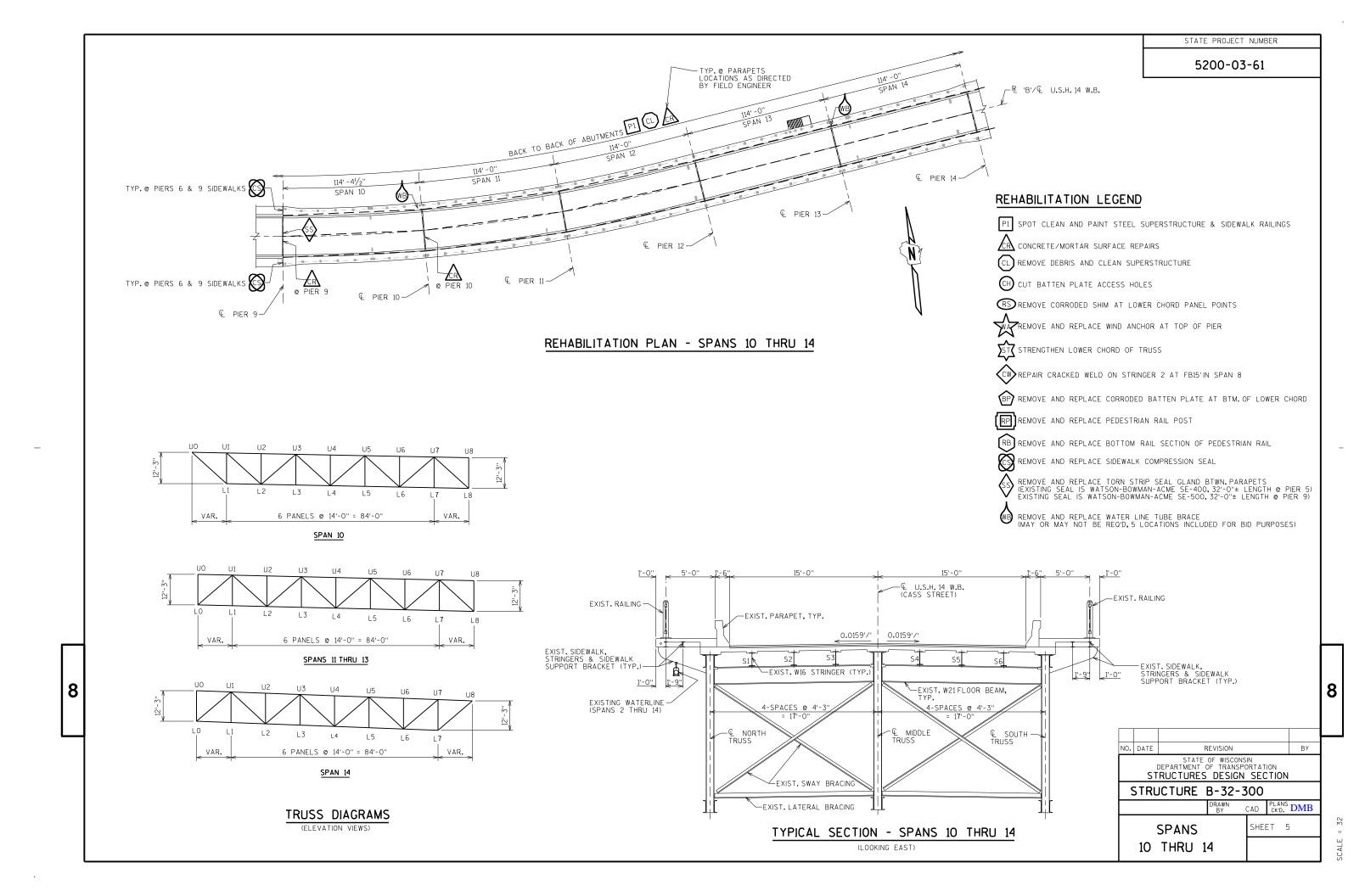
GENERAL NOTES
& QUANTITES

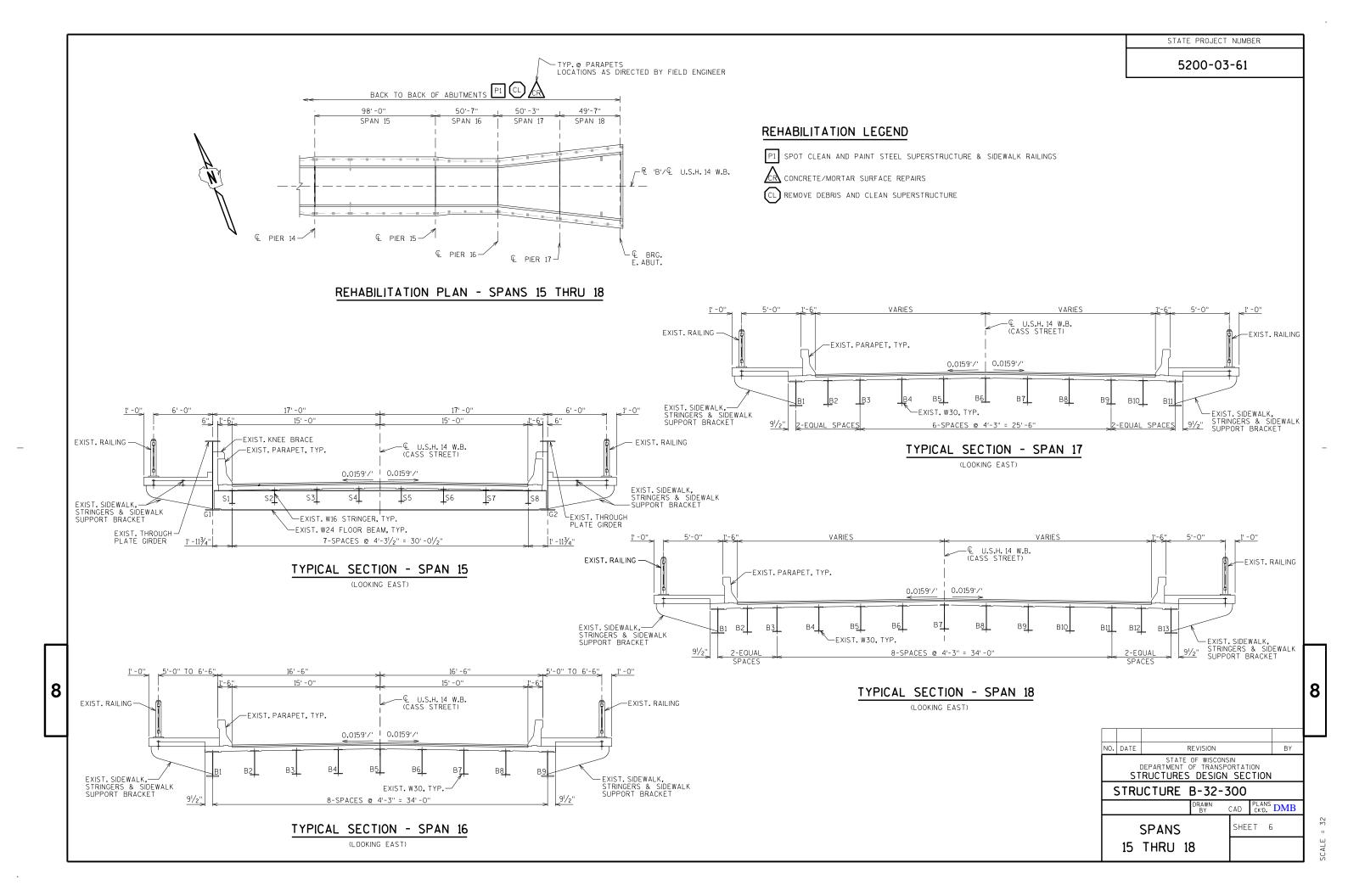
SHEET 2

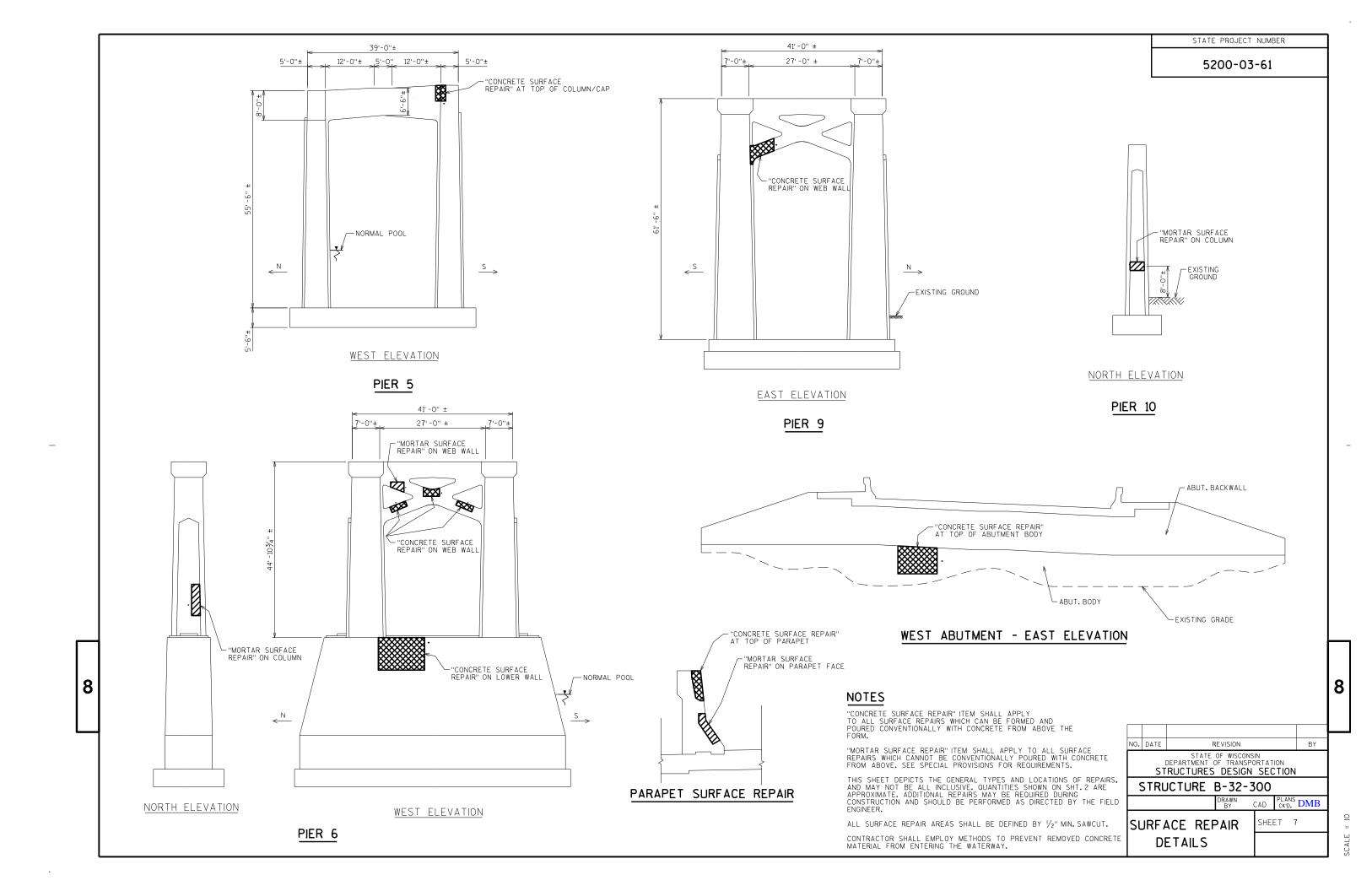


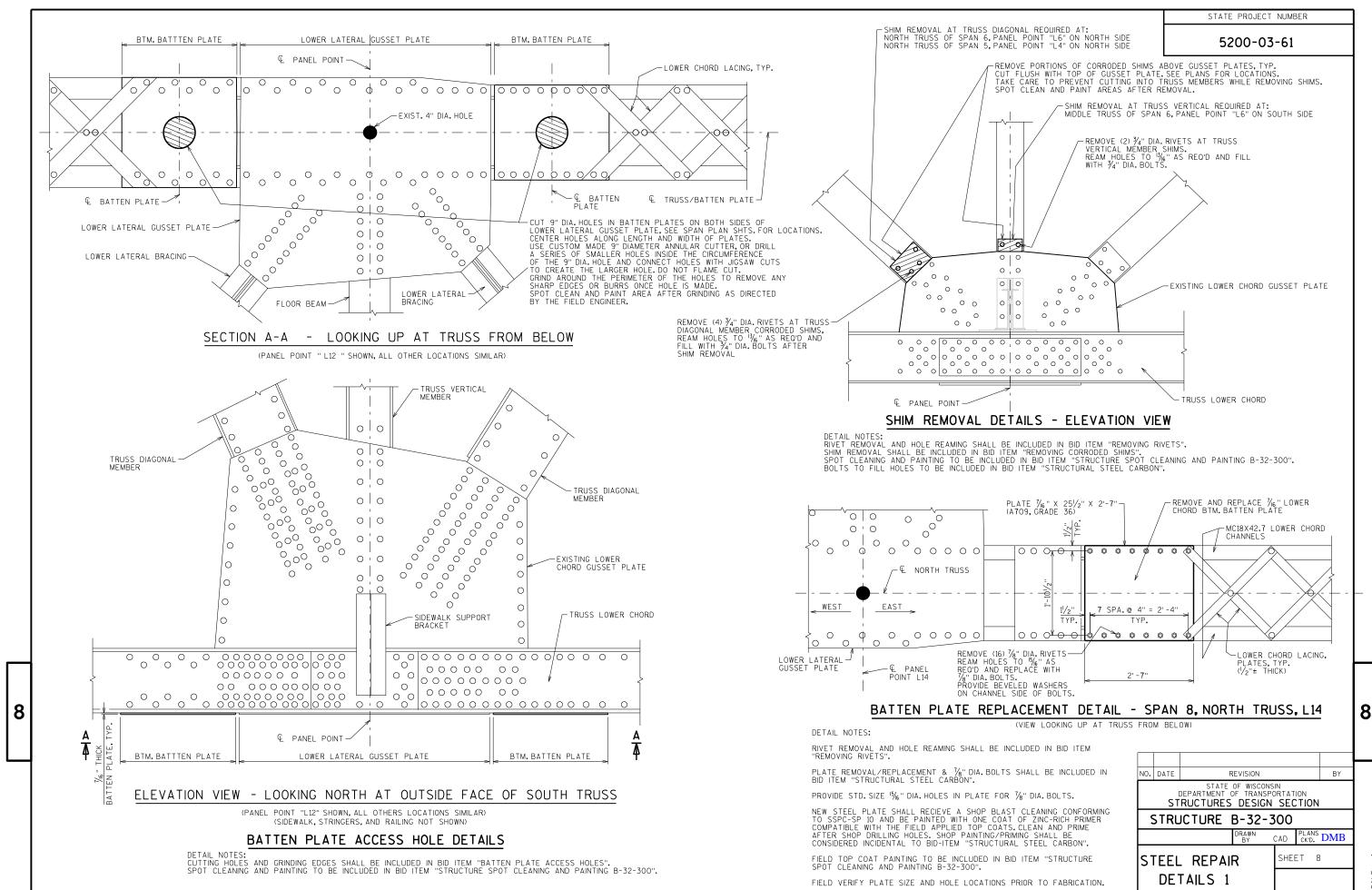
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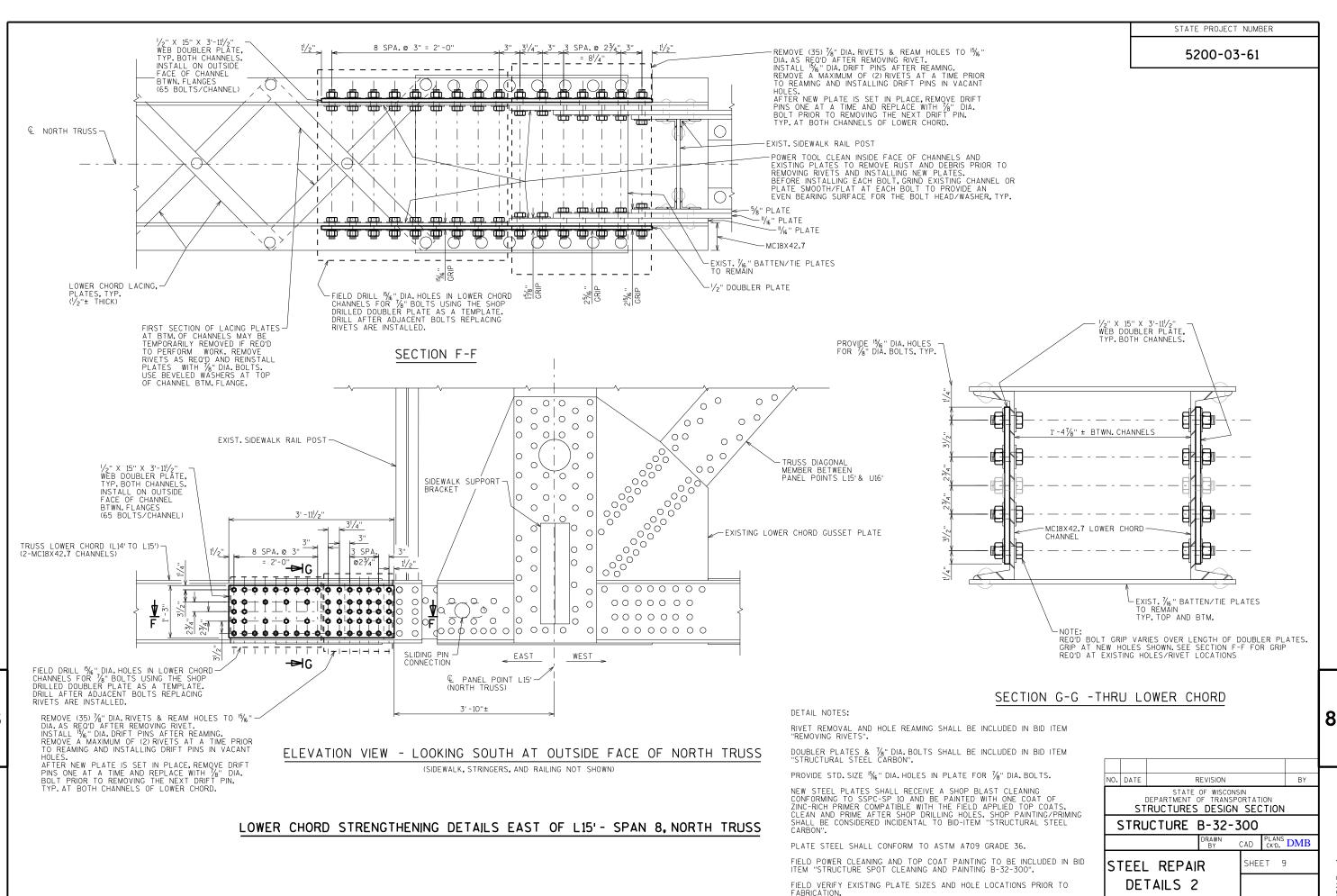






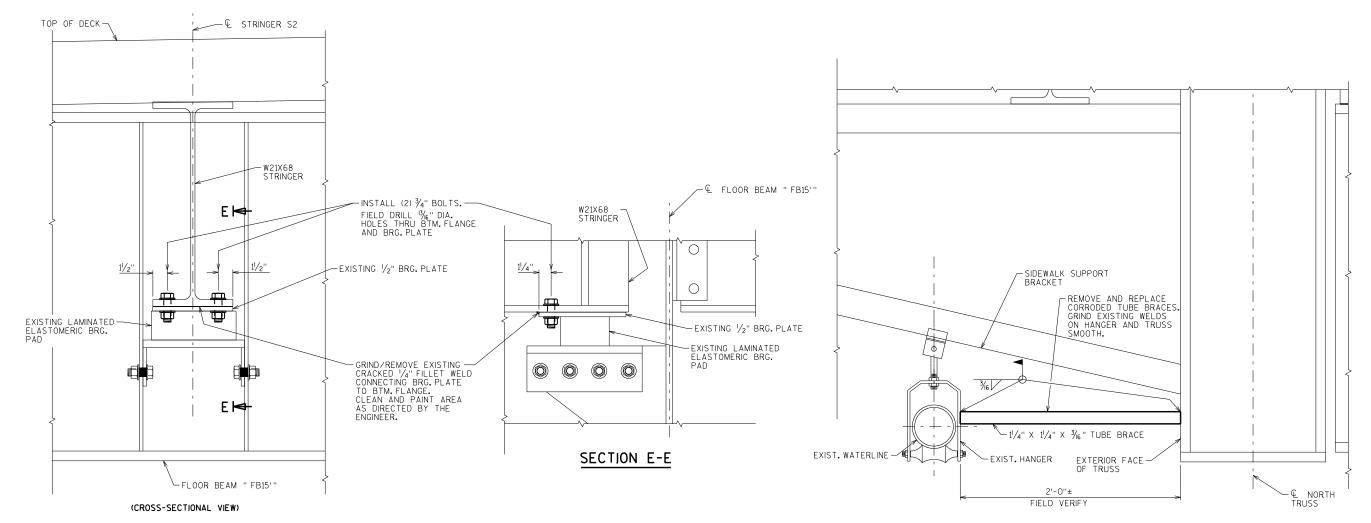


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# WELD CRACK REPAIR AT STRINGER S2 AT FB15'-SPAN 8

DETAIL NOTES:
WELD GRINDING/REMOVAL SHALL BE CONSIDERED INCIDENTAL TO BID ITEM "STRUCTURAL STEEL CARBON".
DRILLING HOLES AND INSTALLING BOLTS SHALL BE INCLUDED IN BID ITEM "STRUCTURAL STEEL CARBON".
SPOT CLEANING AND PAINTING TO BE INCLUDED IN BID ITEM "STRUCTURE SPOT CLEANING AND PAINTING B-32-300".

## WATERLINE TUBE BRACE REPAIR DETAIL

DETAIL NOTES: ALL MATERIAL AND WORK SHOWN OR NOTED SHALL BE INCLUDED IN BID ITEM "WATERLINE TUBE BRACE REPAIR".

NEW STEEL TUBE SHALL RECEIVE A SHOP BLAST CLEANING CONFORMING TO SSPC-SP 10 AND BE PAINTED WITH ONE COAT OF WELDABLE, ZINC-RICH PRIMER COMPATIBLE WITH THE FIELD APPLIED TOP COATS.

FIELD TOUCH-UP PRIMING AND TOP COAT PAINTING TO BE INCLUDED IN BID ITEM "STRUCTURE SPOT CLEANING AND PAINTING B-32-300".

REPAIR LOCATIONS TO BE IDENTIFIED BY THE FIELD ENGINEER. (5) LOCATIONS TOTAL HAVE BEEN INCLUDED FOR BID PURPOSES. ACTUAL NUMBER OF LOCATIONS REQUIRING REPAIR SHALL BE AS DIRECTED BY THE ENGINEER.

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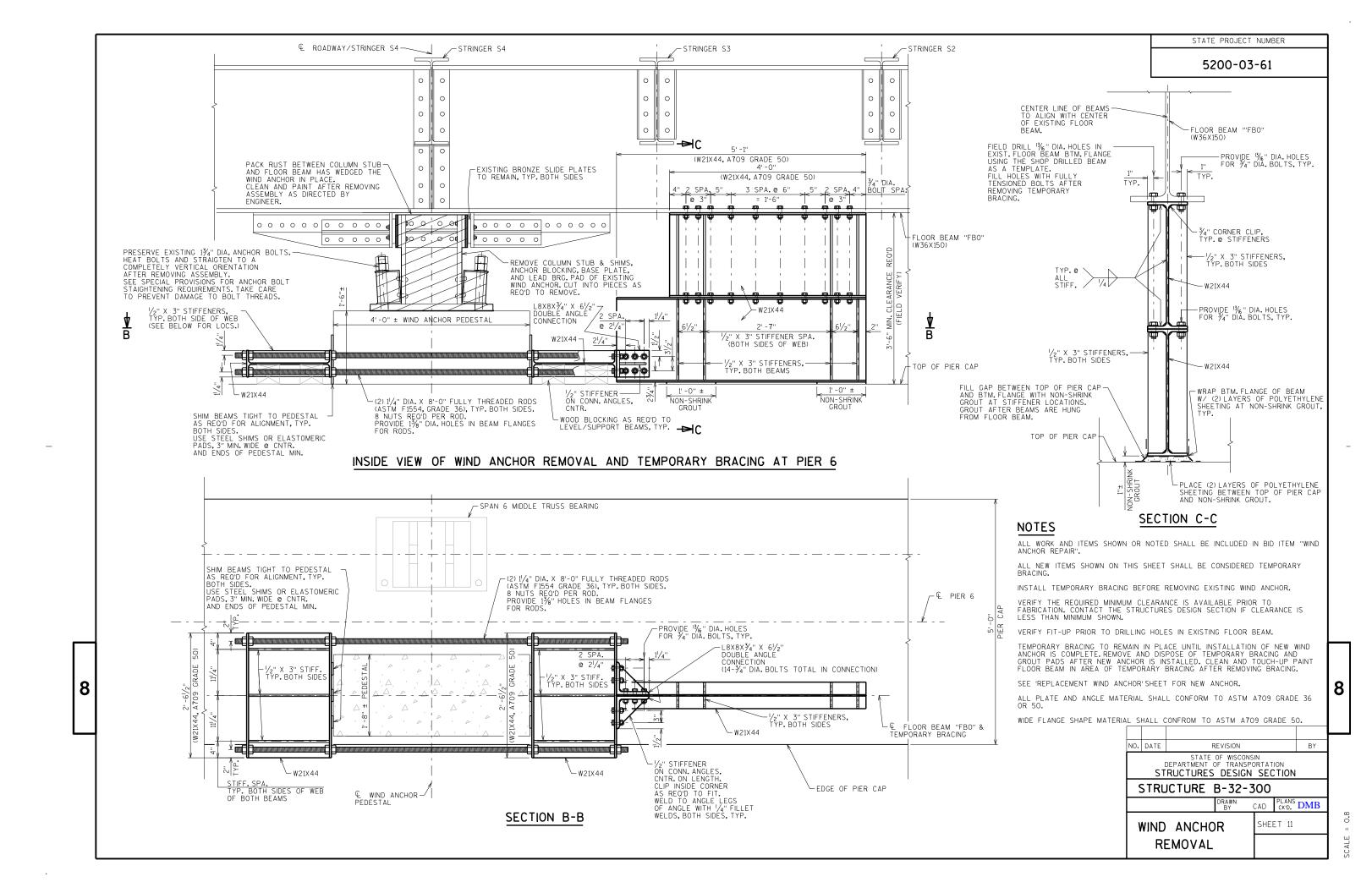
STATE OF WISCONSIN STRUCTURES DESIGN SECTION

STRUCTURE B-32-300

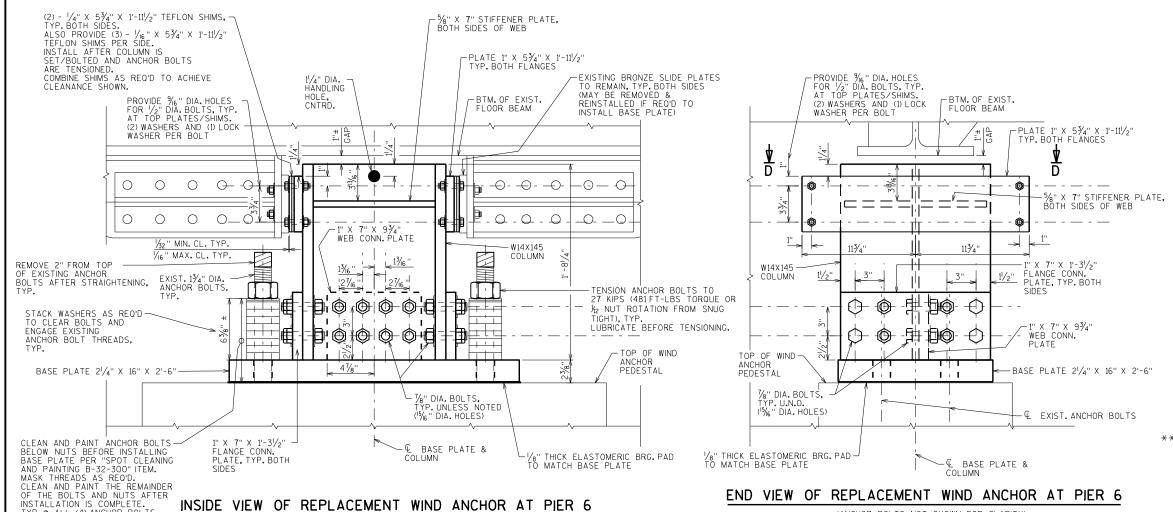
DRAWN CAD PLANS DMB

STEEL REPAIR DETAILS 3

8



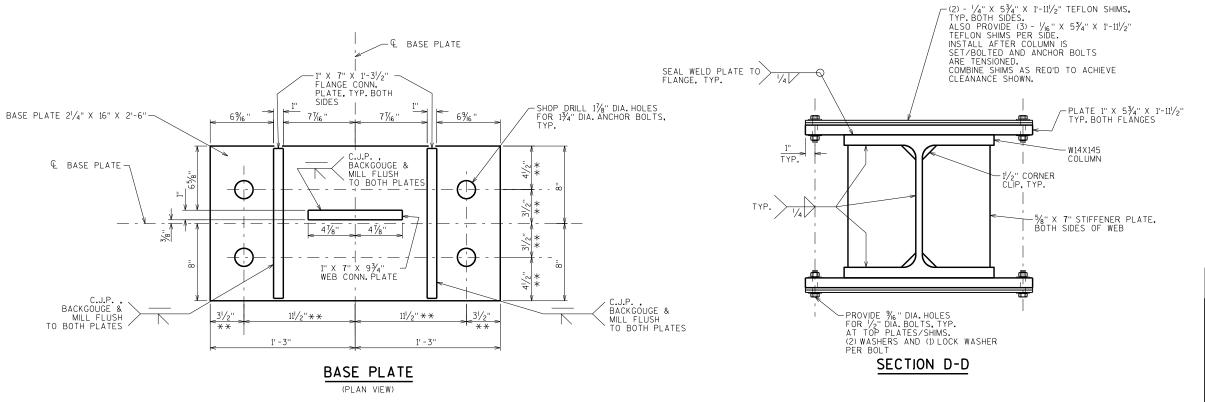
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TYP. @ ALL (4) ANCHOR BOLTS.

# END VIEW OF REPLACEMENT WIND ANCHOR AT PIER 6

(ANCHOR BOLTS NOT SHOWN FOR CLARITY)



# **NOTES**

ALL WORK AND MATERIAL SHOWN OR NOTED SHALL BE INCLUDED IN BID ITEM "WIND ANCHOR REPAIR".

ALL MATERIAL SHOWN SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, FABRICTED PIECES SHALL BE GIVEN A NO. 6 BLAST CLEANING PER

ALL BOLTS, NUTS, AND WASHERS (EXCEPT ANCHOR BOLT NUTS) SHALL BE GALVANIZED.

FABRICATOR TO ENSURE FIT-UP AND BOLT HOLE ALIGNMENT BEFORE AND AFTER GALVANIZING. VERIFY THAT COLUMN STUB FITS BETWEEN FLANGE CONNECTION PLATES ON BASE PLATE AND SLIDES IN HORIZONTALLY (RATHER THAN DROPPING IN VERTICALLY FROM OVERHEAD).

TEMPORARY BRACING TO REMAIN IN PLACE UNTIL INSTALLATION OF NEW WIND ANCHOR IS COMPLETE. SEE 'WIND ANCHOR REMOVAL'SHT.FOR TEMPORARY BRACING.

ALL PLATE MATERIAL SHALL CONFORM TO ASTM A709 GRADE 36 OR 50.

WIDE FLANGE SHAPE MATERIAL SHALL CONFROM TO ASTM A709 GRADE 50.

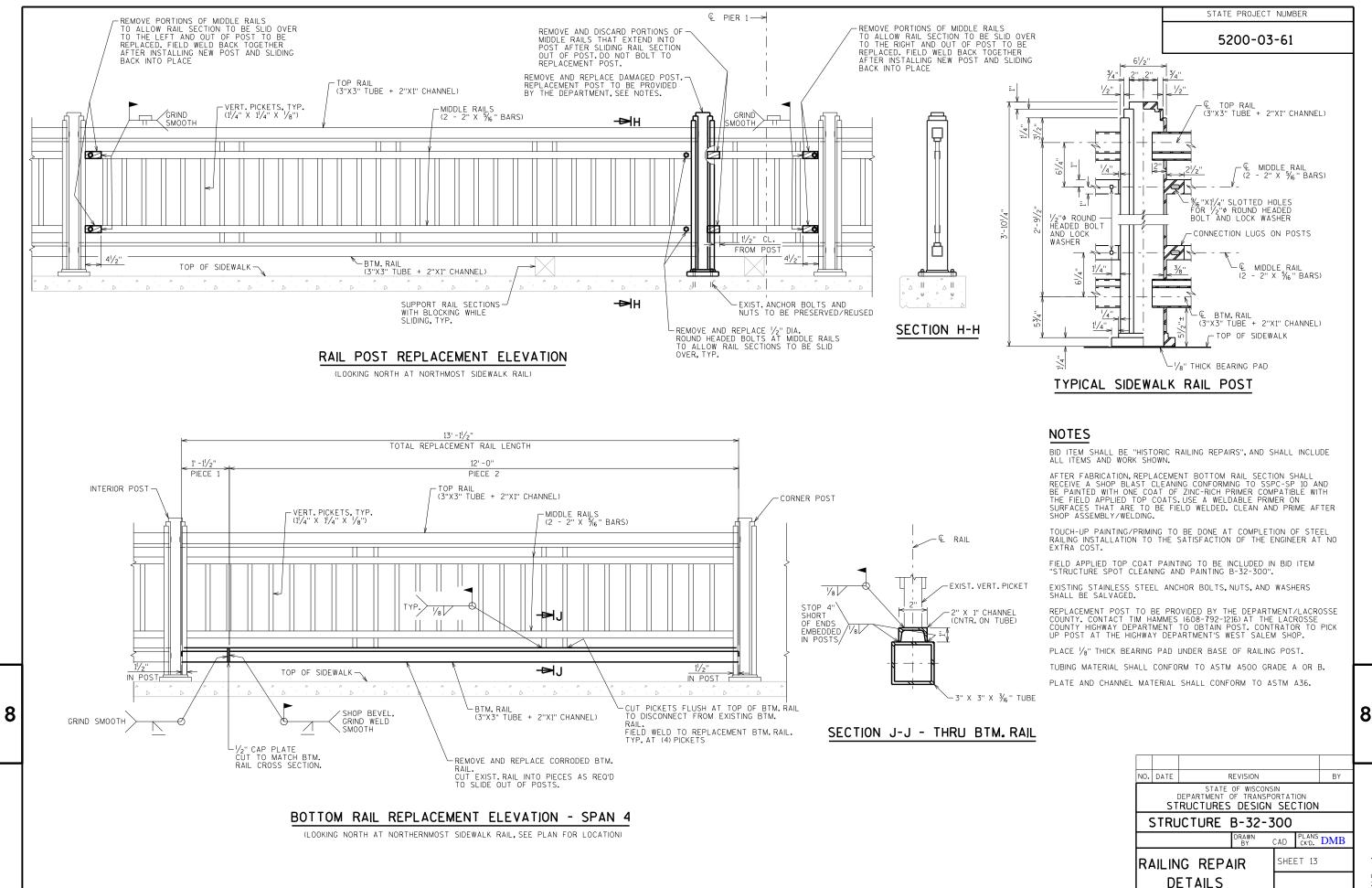
ALL STRUCTURAL STEEL PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME

PROVIDE  $\frac{1}{8}$ " THICK BEARING PAD THE SAME SIZE AS BASE

\*\* PRIOR TO FABRICATION, FIELD VERIFY ANCHOR BOLT LOCATIONS/SPACING AFTER STRAIGHTENING EXISTING ANCHOR BOLTS. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS DATED 1940.

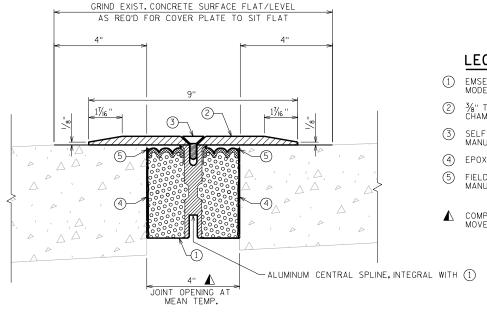
NO. DATE REVISION BY STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION STRUCTURE B-32-300 CAD PLANS DMB SHEET 12 REPLACEMENT WIND ANCHOR



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STATE PROJECT NUMBER

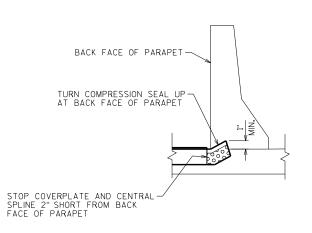
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# **LEGEND**

- ① EMSEAL SJS-SYSTEM COMPRESSION SEAL EXPANSION DEVICE, MODEL SJS-100-400-100 OR APPROVED EQUAL
- $3_{
  m W}$ " THICK, SHOT-BLASTED, ALUMINUM COVERPLATE WITH EDGE CHAMFERS
- 3 SELF-TAPPING STAINLESS STEEL FLAT CAP SCREWS PER MANUFACTURER'S SPECIFICATIONS (SPACED 12" O.C.)
- 4 EPOXY ADHESIVE PER MANUFACTURER'S SPECIFICATIONS
- (5) FIELD APPLIED SILICONE CORNER BEAD SEALANT PER MANUFACTURER'S SPECIFICATIONS
- ⚠ COMPRESSION SEAL SHALL BE ABLE TO ACCOMODATE (+/-) 2" OF MOVEMENT FROM MEAN TEMPERATURE.

# SECTION K-K - THRU JOINT



## SECTION L-L

## NOTES

ALL COMPRESSION SEAL EXPANSION JOINT ASSEMBLIES, INCLUDING COVERPLATES AND ASSOCIATED HARDWARE, WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "COMPRESSION SEAL EXPANSION DEVICE B-32-300".

PREPARE EXISTING CONCRETE SURFACES AS DIRECTED BY MANUFACTURER'S WRITTEN INSTRUCTIONS TO ENSURE BOND BETWEEN EPOXY ADHESIVE AND CONCRETE.

GRIND EXISTING SIDEWALK SURFACE TO EXTENTS SHOWN OVER THE LENGTH OF THE COVER PLATES TO ALLOW COVER PLATES TO REMAIN FLAT DURING STRUCTURE EXPANSION/CONTRACTION

COORDINATE WITH SEAL MANUFACTURER TO ENSURE COMPRESSION SEALS ARRIVE PRECOMPRESSED TO THE CORRECT WIDTH TO ALLOW THEIR INSTALLATION INTO JOINT OPENING/S AT THE TIME OF INSTALLATION.

# PLAN - SIDEWALK COMPRESSION SEAL REPLACEMENT AT PIER 6 & 9 EXPANSION JOINTS

(PIER 6 SHOWN, PIER 9 MIRRORED)

NO. DATE BY REVISION STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION STRUCTURE B-32-300 CAD PLANS DMB SHEET 14 **EXPANSION** JOINT REPAIRS

-BACK FACE OF PARAPET **→** -FRONT FACE OF PARAPET -FRONT FACE OF PARAPET -BACK FACE OF PARAPET REMOVE EXIST. ELASTOMERIC COMPRESSION SEAL AND REPLACE WITH (1)

€ PIER 6-

-EDGE OF SIDEWALK

-EXIST. RAILING, TYP.

-REMOVE EXIST.ELASTOMERIC COMPRESSION SEAL AND REPLACE WITH (1)

- EXIST, PIER ACCESS HATCH IN SIDEWALK

EXIST. RAILING, TYP.

-EDGE OF SIDEWALK



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