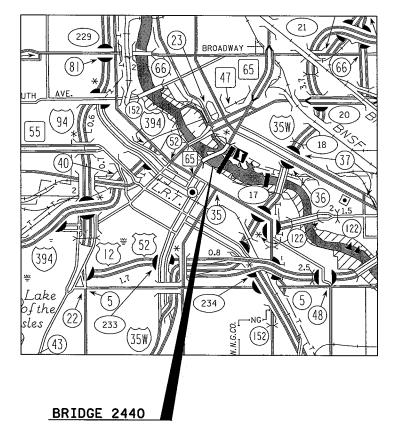
MINNESOTA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN FOR BRIDGE REPAIR NO. 2440 BRIDGE 2440 LOCATED AT T.H. 65 OVER MISSISSIPPI RIVER AND CITY STREETS 6.0 MILES SOUTH OF JUNCTION OF I-35W AND T.H. 65

	SCHEDULE OF QUANTITIES										
ITEM NO.	ITEM	UNIT	PIER 1	PIER 2	PIER 5	QUANTITY TOTAL					
2021.501	MOBILIZATION	LUMP SUM		Ì		1					
2031.501	FIELD OFFICE TYPE D	EACH		Ì		1					
2104.601	REMOVE MISCELLANEOUS DEBRIS	LUMP SUM	0.5		0.5	1					
2401.541	REINFORCEMENT BARS (STAINLESS STEEL)	POUND	3030	2410	1230	6670					
2433.601	RECONSTRUCT FOUNDATION TYPE 1	LUMP SUM	1			1					
2433.601	RECONSTRUCTION FOUNDATION TYPE 2	LUMP SUM			1	1					
2433.602	GROUTED REINF BARS (STAINLESS STEEL)	EACH	332	220	102	654					
2433.607	CEMENT GROUT	CU. YD.			3	3					
2433.618	CONCRETE SURFACE REPAIR	SQ. FT.	200			200					
2433.618	CONCRETE SURFACE REPAIR TYPE 1	SQ. FT.	2032	1600	15	3647					
2433.618	CONCRETE SURFACE REPAIR TYPE 2	SQ. FT.	203	160	2	365					
2563.601	TRAFFIC CONTROL	LUMP SUM				1					





# CONSTRUCTION NOTES:

THE 2014 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

NO CUTTING WILL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER, REMOVAL AND RECONSTRUCTION SHALL CONFORM TO SPEC. 2433.

ALL EXPOSED CUT LINES SHALL BE SAW CUT TO A MINIMUM

APPROVED BONDING GROUT TO BE APPLIED TO ALL ABOVE WATER CONTACT SURFACES BETWEEN NEW AND INPLACE CONCRETE AT AREAS OF RECONSTRUCTION.

THE BAR SIZES SHOWN IN THIS PLAN ARE IN U.S. CUSTOMARY DESIGNATIONS.

BARS MARKED WITH SUFFIX "S" SHALL BE STAINLESS STEEL IN ACCCORDANCE WITH SPECIAL PROVISIONS.

PLANS OF INPLACE BRIDGE NO. 2440 ARE AVAILABLE AT THE MINNESOTA DEPARTMENT OF TRANSPORTATION.

DIRECTIONS GIVEN IN PLANS (WEST FACE, EAST FACE, ETC.)
ARE GIVEN BASED ON T.H. 65 RUNNING A NORTH/SOUTH ROUTE.

STATE FUNDS

BRIDGE NO.	STATE PROJECT NO.	JOB NO.
2440	2710-2440B	T9R548
		•••

	LIST OF SHEETS
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	GENERAL PLAN AND ELEVATION
3	PIER 1 & 2 GEOMETRY
4	PIER 1 REMOVALS
5 .	PIER 1 REPAIR DETAILS
6	PIER 2 REMOVALS
7	PIER 2 REPAIR DETAILS
8	PIER 5 INPLACE CONDITIONS (1 OF 3)
9	PIER 5 INPLACE CONDITIONS (2 OF 3)
10	PIER 5 INPLACE CONDITIONS (3 OF 3)
11	PIER 5 FOOTING REPAIR (1 OF 2)
12	PIER 5 FOOTING REPAIR (2 OF 2)
13	BORING LOGS 1
14	BORING LOGS 2
15	BORING LOGS 3
16	AS-BUILT BRIDGE DATA
17	SWPPP AND WATER RESOURCES
18	SWPPP AND WATER RESOURCES
19	SWPPP AND WATER RESOURCES

FOR APPROVAL

APPROVED

STATE BRIDGE ENGINEER

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

JACQB\_Z, BRONDER DATE: 5/23/14 SIGNATURE:

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS, IF ANY, WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT YAM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: \_ \_ \_ LICENSE \*\_ \_ \_ \_ DATE:

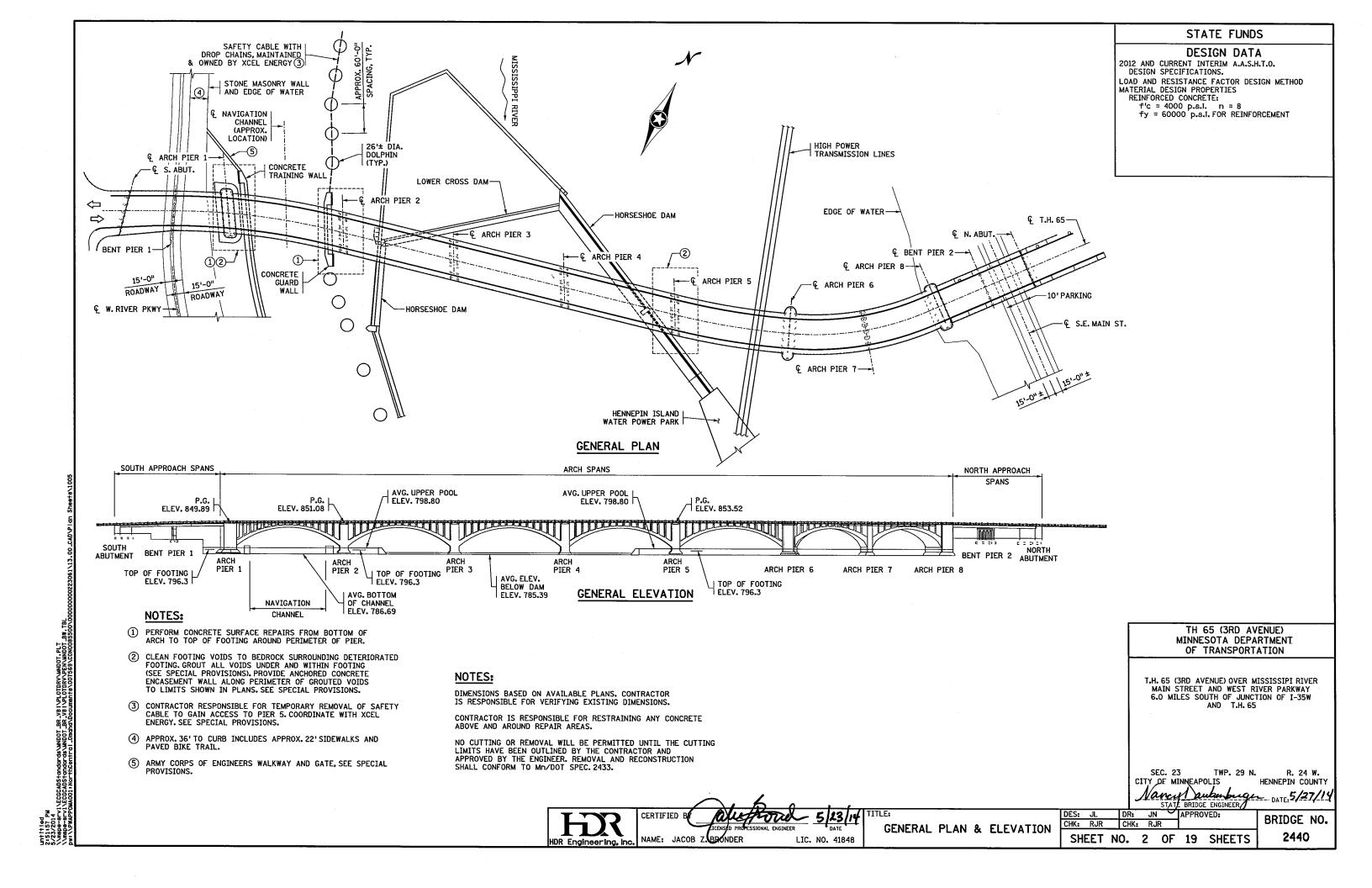
STATE PROJ. NO.

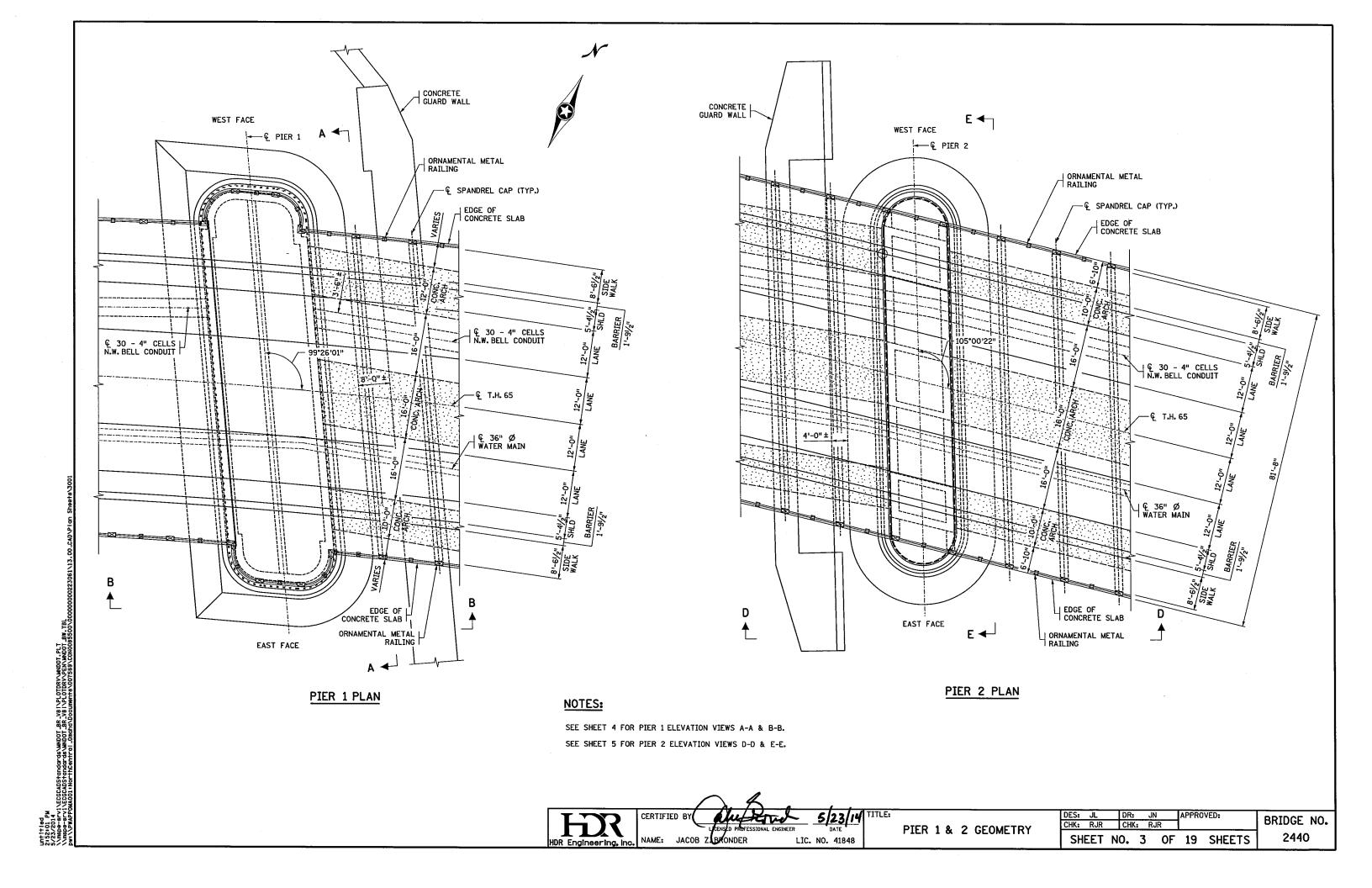
2710-2440B (T.H. 65)

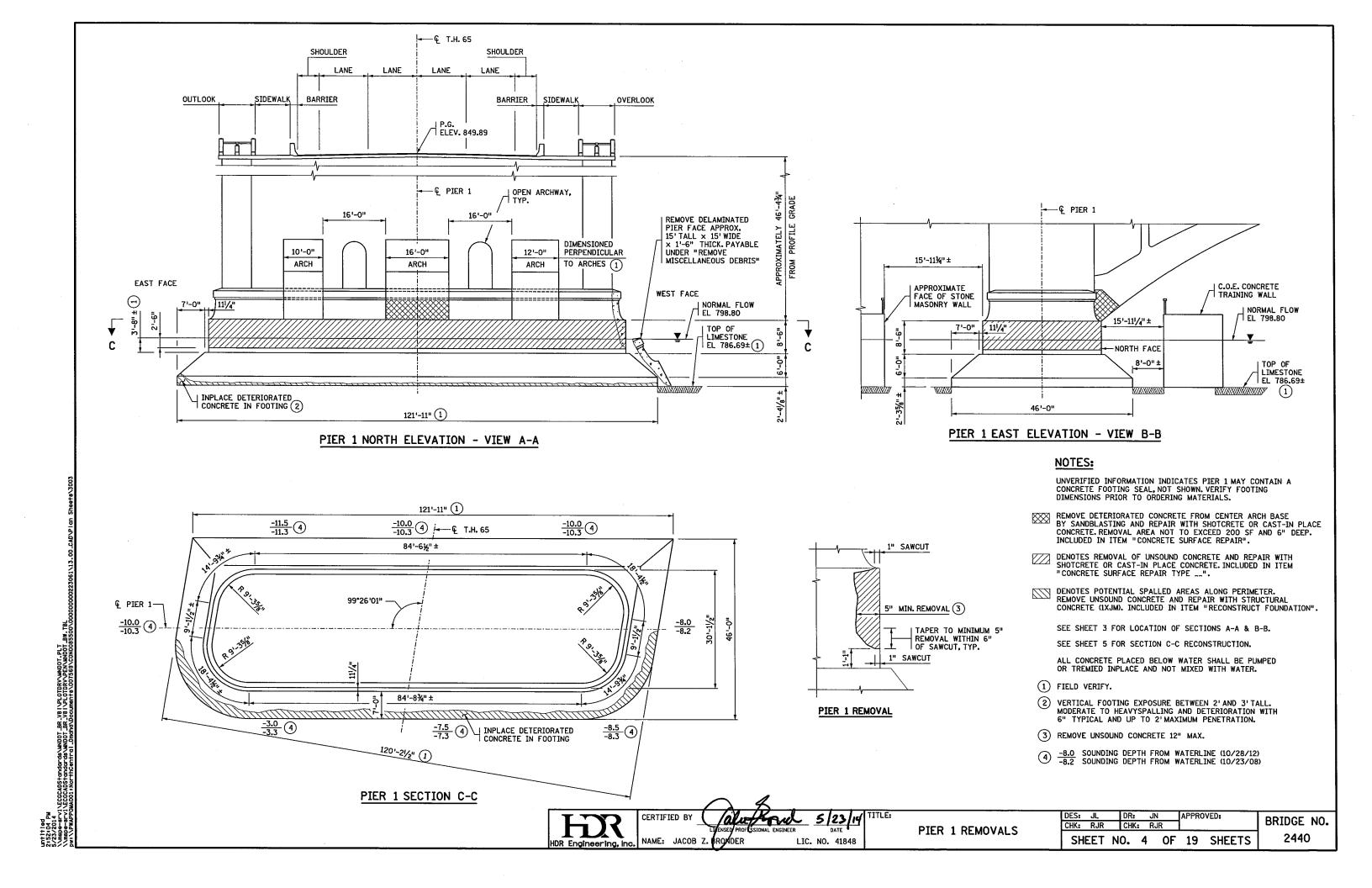
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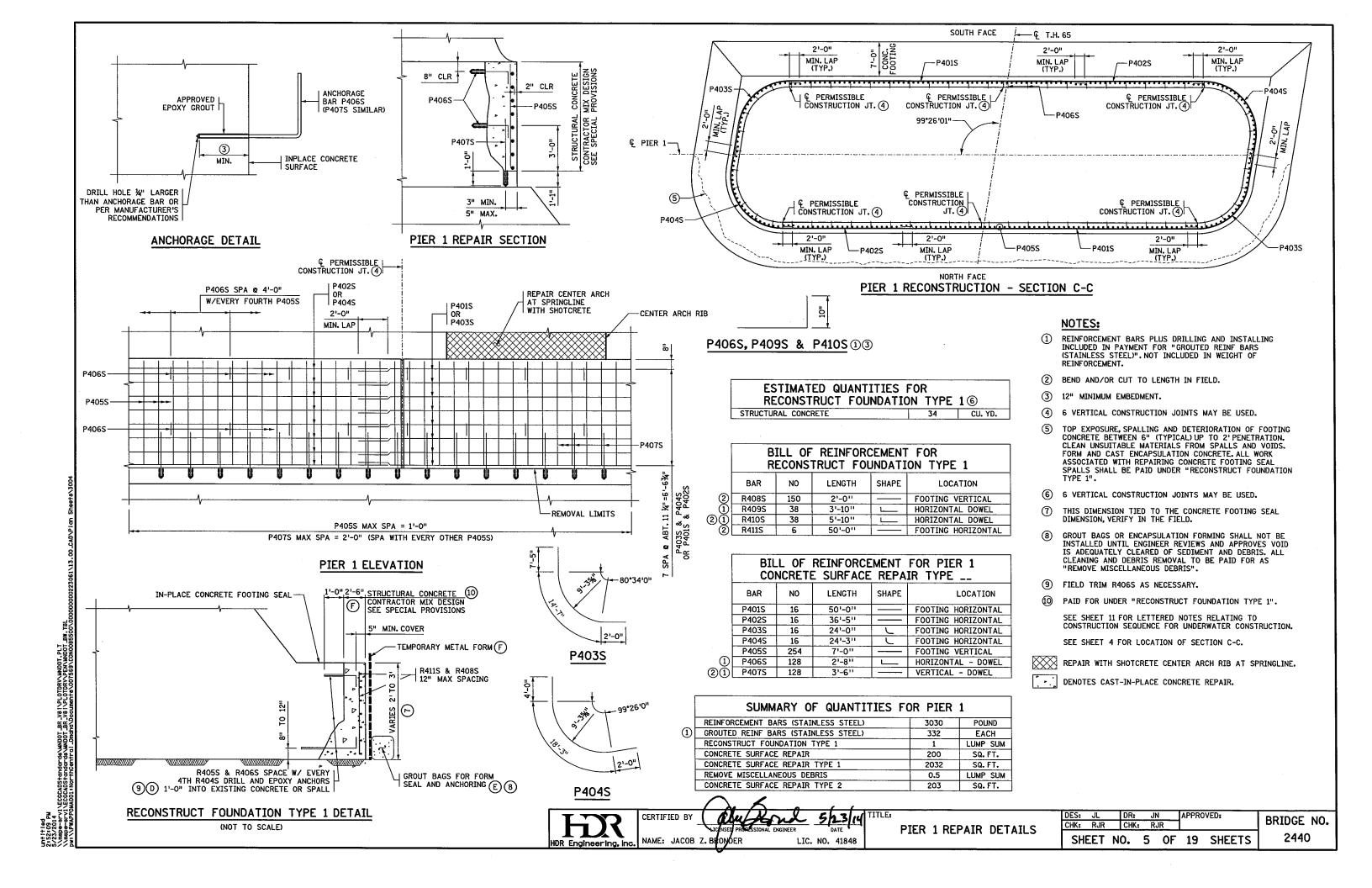
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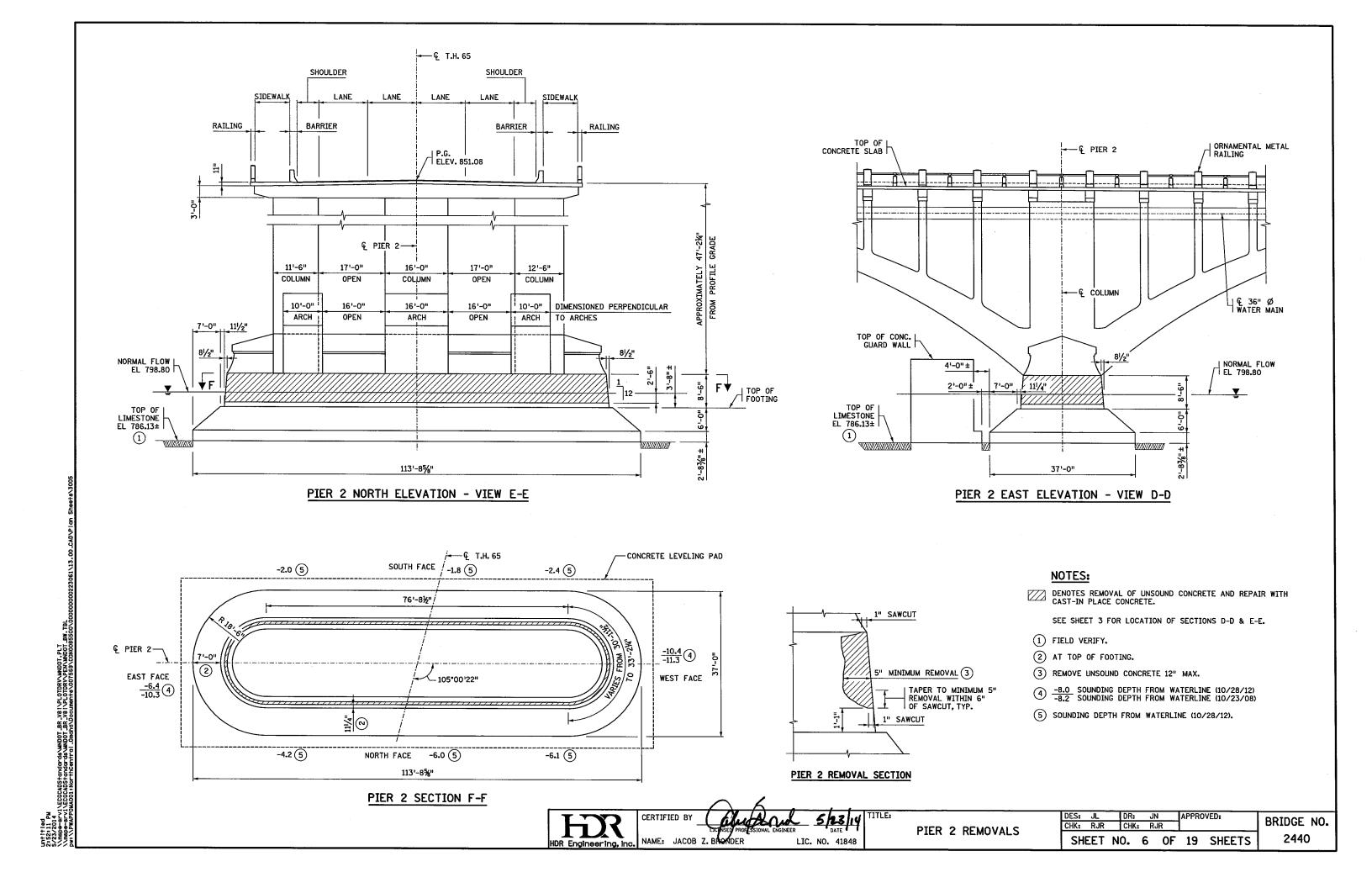
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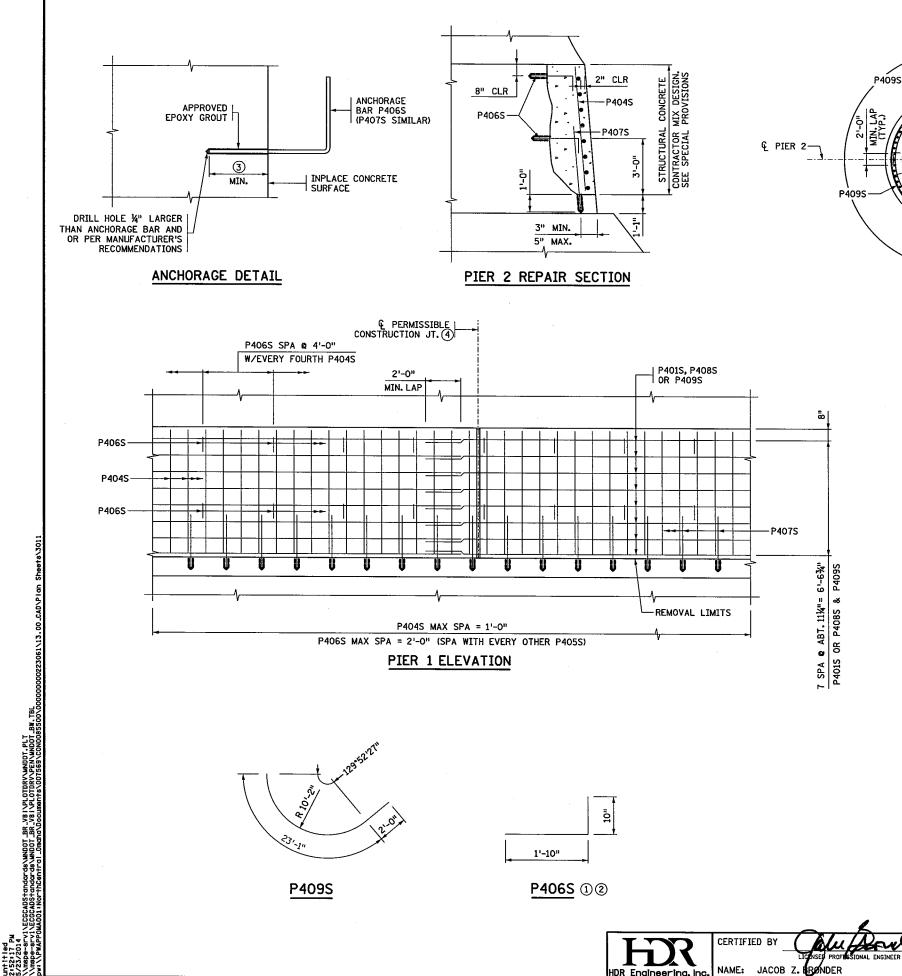












SOUTH FACE 2'-0" -P408S 2'-0" 2'-0" MIN. LAP MIN. LAP MIN. LAP (TYP.) -P401S P409S . PERMISSIBLE CONSTRUCTION JT. 4 PERMISSIBLE CONSTRUCTION JT. 4 € PERMISSIBLE CONSTRUCTION JT. 4 -P406S PERMISSIBLE | CONSTRUCTION JT. 4 -105°00'22" | & PERMISSIBLE | CONSTRUCTION JT. 4 © PERMISSIBLE CONSTRUCTION JT. (4) 2'-0" 2'-0" MIN. LAP (TYP.) MIN. LAP -P404S MIN. LAP (TYP.) -P408S NORTH FACE

## PIER 2 RECONSTRUCTION - VIEW F-F

	SUMMARY OF QUANTITIES FOR F	PIER 2	
j	REINFORCEMENT BARS (STAINLESS STEEL)	2410	POUND
1	GROUTED REINF BARS (STAINLESS STEEL)	220	EACH
	CONCRETE SURFACE REPAIR TYPE 1	1600	SQ. FT.
	CONCRETE SURFACE REPAIR TYPE 2	160	SQ.FT.

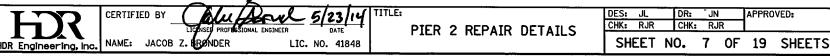
- REINFORCEMENT BARS PLUS DRILLING AND INSTALLING INCLUDED IN PAYMENT FOR "GROUTED REINF BARS (STAINLESS STEEL)".
- BEND AND/OR CUT TO LENGTH IN FIELD.
- 12" MINIMUM EMBEDMENT.
- (4) 6 VERTICAL CONSTRUCTION JOINTS MAY BE USED. SEE SHEET 6 FOR LOCATION OF SECTION F-F.

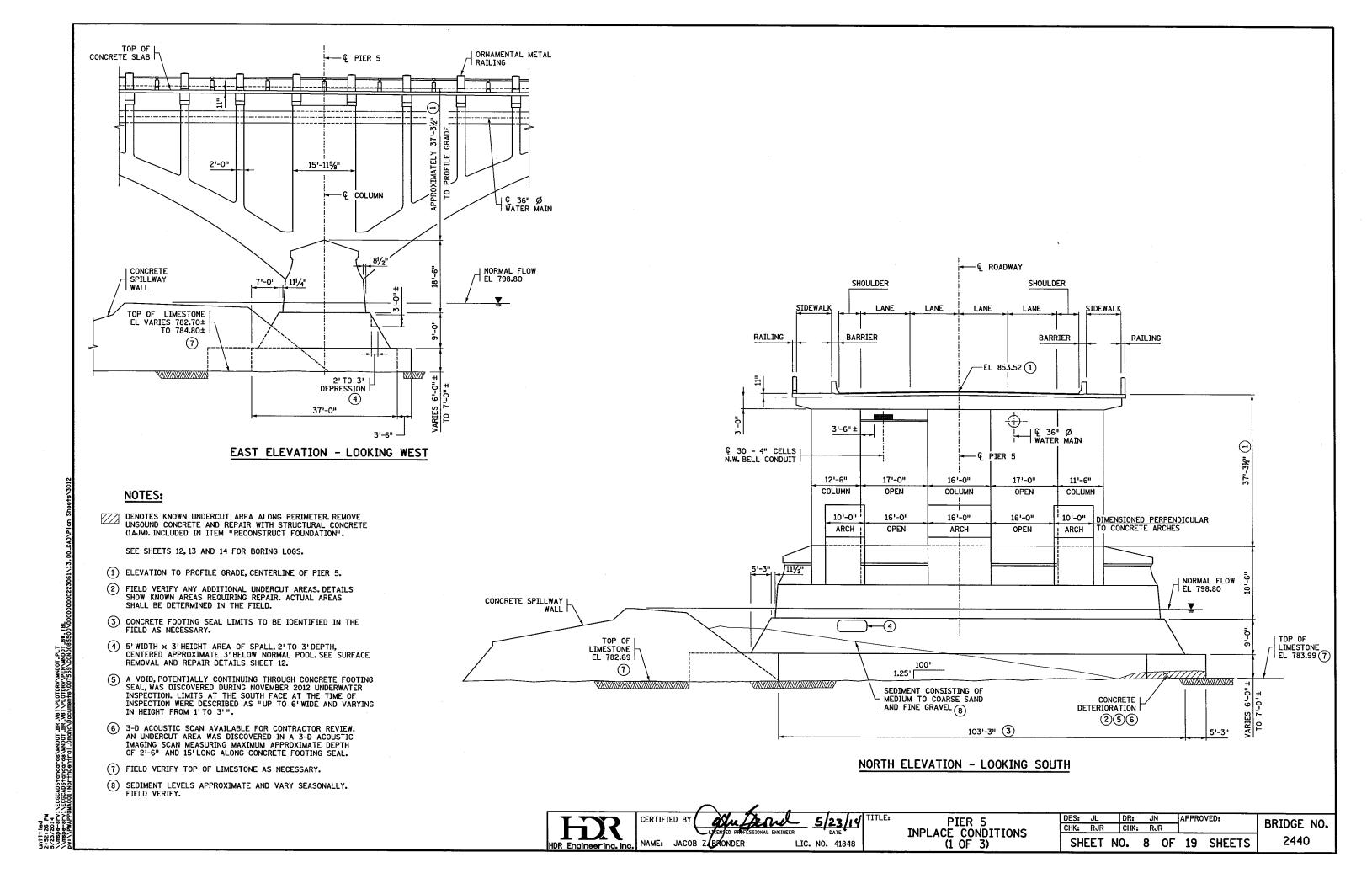
DENOTES CONCRETE REPAIR.

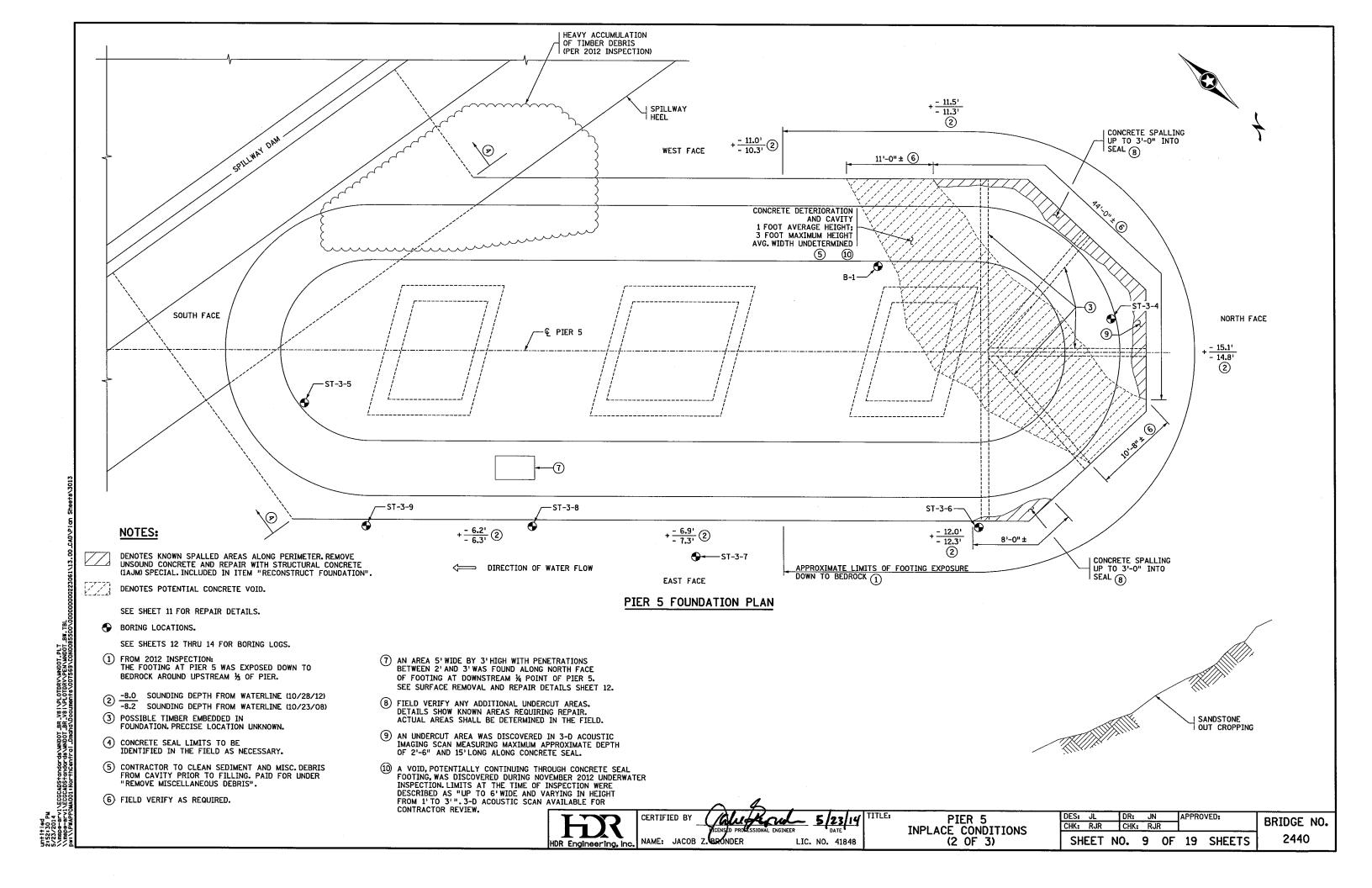
					EMENT FOR PIER 2 E REPAIR TYPE
	BAR	NO	LENGTH	SHAPE	LOCATION
	P401S	16	50'-0''	†===	FOOTING HORIZONTAL
l	P404S	220	7'-0"		FOOTING VERTICAL
(D)	P406S	110	2'-8''		HORIZONTAL DOWEL
(Ī)	P407S	110	3'-6''	T	VERTICAL DOWEL
	P408S	16	28'-9"	<b> </b>	FOOTING HORIZONTAL
	P409S	32	25'-1"		FOOTING HORIZONTAL

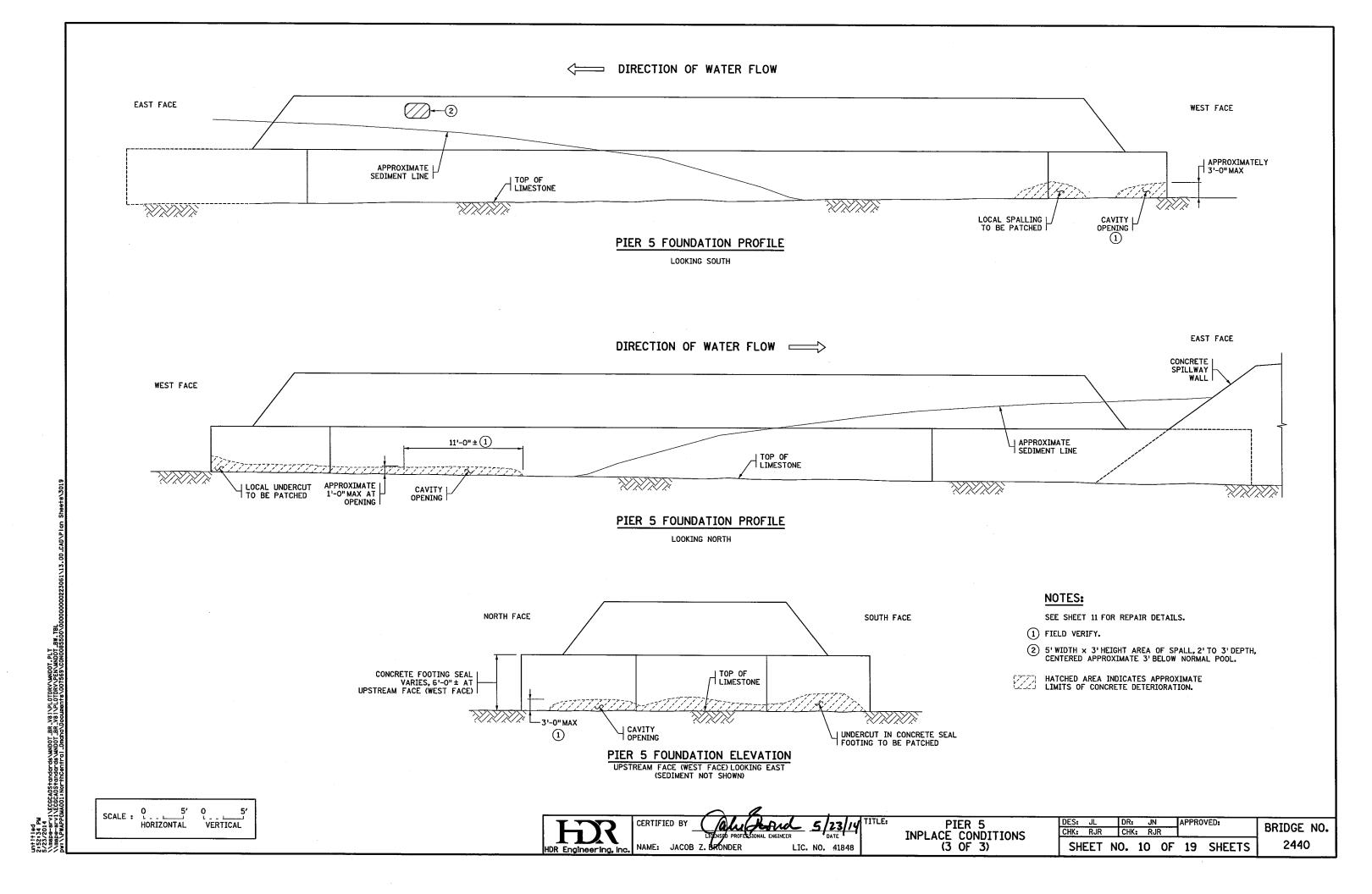
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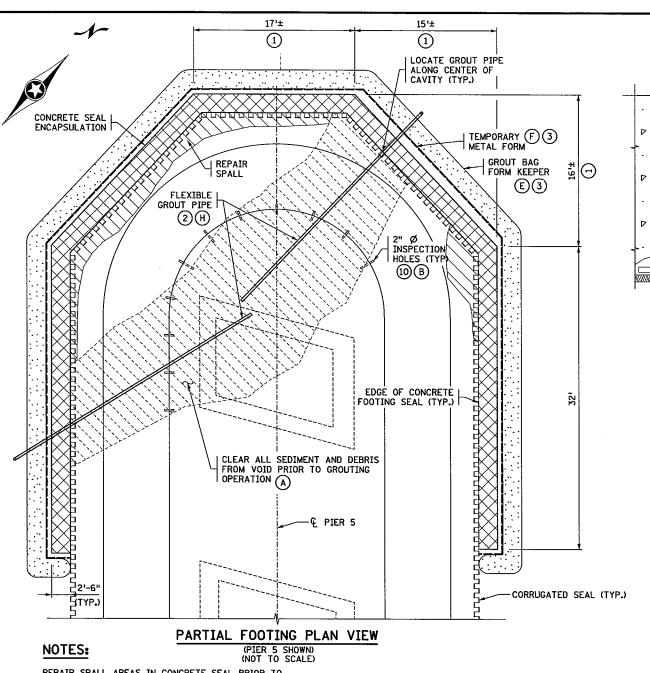
BRIDGE NO.











1'-0"2'-6",STRUCTURAL CONCRETE (6) IN-PLACE CONCRETE FOOTING SEAL CONTRACTOR MIX DESIGN SEE SPECIAL PROVISIONS 5" MIN. COVER TEMPORARY METAL FORM (F) R401S, R402S, R403S & R404S 12" MAX SPACING 2"Ø GROUT PIPE EXTEND TO CENTER OR BACK OF VOID W/CLOSURE VALVE AND QUICK CONNECTION <u>(4)</u> GROUT BAGS FOR FORM SEAL AND ANCHORING (E) (3) 8" TO 12" R405S & R406S SPACE W/ EVERY 4TH R404S DRILL AND EPOXY ANCHORS
1'-0" INTO EXISTING CONCRETE OR VOID (D) (5)

### RECONSTRUCT FOUNDATION TYPE 2 DETAIL

(NOT TO SCALE)

	SUMMARY OF QUANTITIES FOR F	PIER 5	
(9)	REMOVE MISCELLANEOUS DEBRIS	0.5	LUMP SUM
(E)	REINFORCEMENT BARS (STAINLESS STEEL)	1230	POUND
(B)	RECONSTRUCT FOUNDATION TYPE 2	1	LUMP SUM
$\sim$ [	GROUTED REINF BARS (STAINLESS STEEL)	102	EACH
Ī	CONCRETE SURFACE REPAIR TYPE 1	15	SQ. FT.
	CONCRETE SURFACE REPAIR TYPE 2	2	SQ. FT.

REPAIR SPALL AREAS IN CONCRETE SEAL PRIOR TO CASTING ENCAPSULATION.

- (1) THIS DIMENSION TIED TO THE CONCRETE FOOTING SEAL DIMENSION, VERIFY IN THE FIELD.
- (2) GROUT TO BE PUMPED FROM CENTER OF VOID OUTWARDS
- GROUT BAGS OR ENCAPSULATION FORMING SHALL NOT BE INSTALLED UNTIL ENGINEER REVIEWS AND APPROVES VOID IS ADEQUATELY CLEARED OF SEDIMENT AND DEBRIS. ALL CLEANING AND DEBRIS REMOVAL TO BE PAID FOR AS 'REMOVE MISCELLANEOUS DEBRIS".
- (4) EXTEND LESSER OF 3'OR VOID PENETRATION. MINIMUM ANCHORAGE EMBEDMENT IS 12".
- (5) FIELD TRIM R406S AS NECESSARY.
- (6) PAID FOR UNDER "RECONSTRUCT FOUNDATION TYPE 2".
- REINFORCEMENT BARS PLUS DRILLING AND INSTALLING INCLUDED IN PAYMENT FOR "GROUTED REINF BARS (STAINLESS STEEL)".
- (8) BEND AND/OR CUT TO LENGTH IN FIELD.
- (9) SEE SPECIAL PROVISIONS FOR ESTIMATED QUANTITY INCLUDED IN LUMP SUM.
- DRILL A MINIMUM OF 11 HOLES SPACED AT ABOUT 4'.
  APPROXIMATE LENGTH = 17' EACH. PAYMENT FOR DRILLING IS INCIDENTAL TO "RECONSTRUCT FOUNDATION TYPE 2".



R405S, R406S, R409S & R410S (7)

R402S

1		OF REINF DATION T		MENT FOR RECONSTRUCT
BAR	NO	LENGTH	SHAPE	LOCATION
R401S	14	32'-1"		PIER 5 - FOOTING HORIZONTAL
R402S	14	26'-2''		PIER 5 - FOOTING HORIZONTAL
R403S	7	17'-2''	T	PIER 5 - FOOTING HORIZONTAL
R404S	128	6'-10''		PIER 5 - FOOTING VERTICAL
R405S	64	3'-10''		PIER 5 - HORIZONTAL DOWEL
R406S	32	5'-10''		PIER 5 - HORIZONTAL DOWEL

## CONSTRUCTION SEQUENCE FOR UNDERWATER CONSTRUCTION:

- (A) CLEAN VOID AND REMOVE ALL SEDIMENT TO SOLID LIMESTONE AROUND FOOTING.
- (B) CORE DRILL NOMINAL 2" DIAMETER HOLES ON ANGLE ON THE PIER AND VERTICALLY ON THE FOOTING AS SHOWN ON DRAWINGS AND DIRECTED IN THE FIELD, AND EXTEND CASING 2' MINIMUM ABOVE THE WATER SURFACE. IF HOLE DOES NOT HIT VOID DRILLING TO STOP AT BEDROCK.
- C INSPECT VOID AND REMOVE ORGANIC MATERIAL, SAND, DRILL CUTTINGS, AND LOOSE/UNSOUND CONCRETE, REPORT CONDITION TO MNDOT FOR VERIFICATION DIVE PRIOR TO PROCEEDING.
- D INSTALL REINFORCEMENT AND DOWELS FOR CONCRETE ENCASEMENT. INSTALL HORIZONTAL GROUT TUBES AND VENT TUBES AT VOID ONLY.
- INSTALL GROUT BAGS OR OTHER APPROVED MATERIAL FOR CONCRETE ENCASEMENT WHILE LEAVING SPACE FOR ACCESS TO GROUT AND VENT TUBES IN VOID. GROUT BAGS SHALL BE A MINIMUM OF 3' HIGH WHEN FILLED WITH GROUT.
- (F) PLACE METAL OR OTHER FORM MATERIAL FOR CONCRETE ENCAPSULATION TO TOP OF FOOTING, CREATE FORMED BLOCK-OUT AND TUNNEL AT THE LARGEST VOID OPENING TO THE VOID IN ORDER TO ADEQUATELY VENT SUBSEQUENT INTERIOR
- G TREMIE OR PUMP CONCRETE INPLACE KEEPING THE DISCHARGE OF THE CONCRETE WITHIN THE CONCRETE MASS BEING PLACED. WORK FROM SHALLOW UNDERCUT AREAS TOWARD LARGER UNDERCUT AREAS. CONCRETE SHALL NOT BE MIXED WITH THE SURROUNDING WATER.

REMOVE VENT BLOCK-OUT AND TUNNEL FORMS.

- (H) AFTER THE CONCRETE HAS SET AND GAINED STRENGTH, PRESSURE GROUT VOID FROM HORIZONTAL GROUT PIPES AT A MINIMUM OF TWO SIDES OF FOOTING, BEGIN AT THE INTERIOR CENTER OF FOOTING AND EXTEND TOWARD THE PERIMETER. CARE SHALL BE TAKEN TO FILL THE ENTIRE VOID. CONTINUE PUMPING FROM THE HORIZONTAL GROUT PIPES UNTIL GROUT CAN BE OBSERVED EXCEEDING THE TOP OF VOID FROM THE CORED HOLES. GROUTING SHALL CONTINUE FROM THE HORIZONTAL GROUT TUBES AS LONG AS THE GROUTING OPERATION CONTINUES TO PROGRESS AND FILL THE VOIDS. RETRACT HORIZONTAL GROUT PIPES WHILE GROUTING, MAINTAINING VISUAL CONFIRMATION FROM THE VERTICAL CORE HOLES THAT GROUT ELEVATION EXCEEDS TOP OF VOID ELEVATION. GROUTING FROM VERTICAL CORED HOLES IS PERMITTED WHEN GROUT IS OBSERVED AT THE TOP OF THE VOID FOR THE RESPECTIVE VERTICAL CORE HOLE. WHEN GROUT IS WITHIN THICKNESS OF CONCRETE SEAL PERIMETER, PLACE GROUT BAGS AROUND VENT BLOCKOUT AND REDUCE VENTING TO TWO 2" DIAMETER VENT TUBES WITH SHUTOFF VALVES. CONTINUE GROUTING UNTIL GROUT COMES FROM VENT PIPE AT THE EDGE OF THE VOID. A DIVER SHALL BE PROVIDED TO OBSERVE THE VENT HOLES AND GROUT SHALL BE WASTED UNTIL NO WATER FLOWS FROM THE VENTS. AT THAT TIME ALL VENTS AND GROUT PIPES SHALL BE CLOSED. ALL OPEN CORE HOLES SHALL BE FILLED WITH
- (I) CORE DRILL A MINIMUM OF FOUR 2" Ø VERIFICATION CORES AT LOCATION APPROVED BY MNDOT. ALL CORE HOLES SHALL BE FILLED WITH GROUT. IN THE EVENT SIGNIFICANT VOIDS ARE ESTABLISHED A SUPPLEMENTAL GROUTING OPERATION WILL BE REQUIRED. PAYMENT FOR CORING MADE INCIDENTAL TO "RECONSTRUCT FOUNDATION TYPE 2".
- REMOVE TEMPORARY WORKS EXCLUDING GROUT BAGS. CUT OFF ANY VENT PIPING AND REMOVE ANY METAL FORMS, PLACE ADDITIONAL GROUT BAGS COVERING FULL AREA OF VENTING BLOCK-OUT OR VENT TUBES.



DENOTES ENCAPSULATION CONCRETE



DENOTES CONCRETE SPALL AREAS

DENOTES POTENTIAL CONCRETE VOID

HDR Engineering, Inc.

NAME: JACOB Z. BROWDER

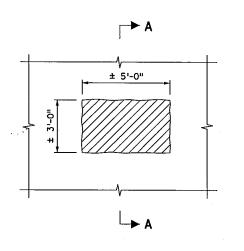
LIC. NO. 41848

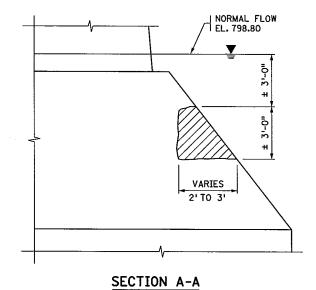
PIER 5 FOOTING REPAIR (1 OF 2)

DR: JN APPROVED: CHK: RJR CHK: RJR SHEET NO. 11 OF 19 SHEETS

BRIDGE NO. 2440

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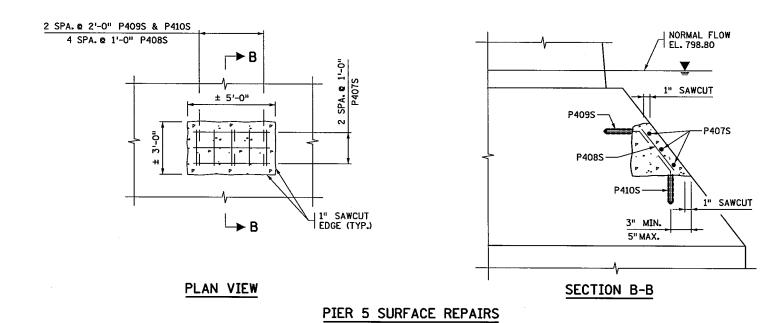


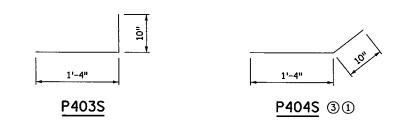


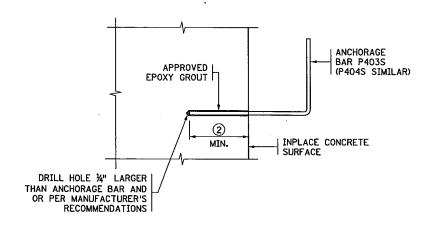
PLAN VIEW

PIER 5 SURFACE REMOVALS

(FIELD VERIFY DIMENSIONS)







### ANCHORAGE DETAIL

	ESTIMATED QUANTITIES FOR FOUNDATION TYPE 2 ④	RECONSTRU	СТ
	STRUCTURAL CONCRETE	86	CU. YD.
(5)	HIGH MOBILITY GROUT	36	CU. YD.
6	CEMENT GROUT	1.8	CU. YD.

### NOTES:

- (1) REINFORCEMEMT BARS PLUS DRILLING AND INSTALLING INCLUDED IN PAYMENT FOR "GROUTED REINF BARS (STAINLESS STEEL)".
- (2) 12" MINIMUM EMBEDMENT.
- (3) FIELD BEND TO MATCH FACE SLOPE.
- NO COMPENSATION WILL BE PAID ABOVE LUMP SUM PRICE FOR CHANGE IN QUANTITIES EXCEPT AS NOTED IN(5). ESTIMATED QUANTITIES ARE BASED ON BEST AVAILABLE INFORMATION. ACTUAL QUANTITIES ARE TO BE DETERMINED BY CONTRACTOR IN FIELD AS NECESSARY TO EXECUTE REPAIRS SHOWN.
- PRIMARY GROUTING OF VOID ESTIMATED.
- QUANTITY OF SECONDARY GROUTING IS INCIDENTAL. SEE SPECIAL PROVISIONS FOR ADDITIONAL VOLUME PAYMENT TERMS.
- DENOTES REMOVAL OF UNSOUND CONCRETE INCLUDED IN ITEM "CONCRETE SURFACE REPAIR TYPE \_\_\_".
- DENOTES CAST-IN-PLACE CONCRETE REPAIR. INCLUDED IN ITEM "CONCRETE SURFACE REPAIR TYPE \_\_\_".

					MENT FOR PIER 5 REPAIR TYPE
	BAR	NO	LENGTH	SHAPE	LOCATION
	P407S	3	4'-8''	<b> </b>	FOOTING HORIZONTAL
	P408S	5	2'-8''		FOOTING VERTICAL
1	P409S	3	2'-8''		HORIZONTAL - DOWEL
31	P410S	3	2'-8''		VERTICAL - DOWEL

CERTIFIED BY NAME: JACOB Z. BRONDER

5/23/14 LIC. NO. 41848

PIER 5 FOOTING REPAIR (2 OF 2)

APPROVED: CHK: RJR CHK: RJR

BRIDGE NO.

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SHEET NO. 12 OF 19 SHEETS

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\$. 7. 0.								thosse, brown, Meddum to Scarse Sand and Fine Gravel, Wet	2
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BORING LOGS 1

DES: JL DR: JN APPROVED: CHK: RJR CHK: RJR SHEET NO. 13 OF 19 SHEETS

BRIDGE NO.

TITLE:

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ACRING NO. ST-3-7.

SHEET. 1 OF 1

EGCATION

STATION GROUND WATER HOURS AFTER DRIVING .
HOURS AFTER BRILING .
HOURS AFTER BRITTING orphie i SAMPLER TYPE AND DATA SOIL DESCRIPTION
CLASSIFICATION SYSTEM [0] UNDISTURBED SAMPLE. NX Diamond Bit SOIL DESCRIPTION AND REMARKS Water 775 775 3071 1575 finat core Sand -- not sampled Light grey motiled with dark grey Playtowiffe Limestume Formation (upper 1' fregmented) 1003 1003 seeted by In casing 16 16 Bluish gray Glenwood Forms: 198.5, 978.6

Boring By: Solt Engineering SERVICES, INC. Logged By: P.H. Anderson Minnespolis, Minnesplos OF BORING Inspector: J. Murphy

68-80 3rd Avenus Bridge Minneapolis, Minnesols

Poring Sy: SOIL ENGINEERING SERVICES, INC. Manageofie, Minnesolus TOS OF BORING PROJECT: CS-93 God Avenue Bridge Minneapolis, Minneapole GROUND WATER ...... HOURS AFTER DRILLINGS ... OFFSET: BORING TYPE HOURS AFTER BEILING rue Beterr \_\_\_HOVRS AFTER BRILLING: \_\_\_\_ SAMPLER TYPE AND DATA (3) SENT PAPER THE PART OF THE PA [9] UNCHSTURARD SAMPLE \_ E KOCK CORE NX Diamond lit SOIL DESCRIPTION AND REMARKS LASSIFICATION SYSTEM first core 8.51791.5 13.77 G Sand -- not sampled rotation Light grey sorkled with cars grey Fiatterilla Formation Section Oy 69° 19**91** \* 26\5º 778.4 \*Bluish gray Glaumand Rosmation HOWARD, NEEDLES, TAMMEN & BERGENDON

hering by: Soil Engineering Services, Inc. Leggel By: P. H. Anderson Minneapoils, Minneapolog of Boring Paster: F. Burghy

PROJECTI OB	destruction of a		ie bri Us, M	imiesota (ese 1. or	8			
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Account of April 1997	TRESPONDE IN	Action Control of Cont	CCONFORMAL INFORMAL AND	SAMPLER TYPE AND DATA  SPEIT ENERGY. 1 3/6" f.D. 2" D.D.  Undertured Sample  Sock core NX Diamond fir  Ayour  Other  Soil Description and Remarks  Coassucation system.	[ 150 2259			
7		Nator used to driving thing	N. cachill southed by notation to the 31 — first cours and degree in cashing	Sand not sampled  Light gray motiled with tark gray Platteville Formation (upper 1-fort fragmonted)  Platen gray to yellowish those Slobwacer farmation  Pary delay, light gray motiled with brown, in Peter Sanostone  Thornes up NX Diamond hit ha three Fourness up NX Diamond hit has three				

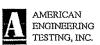
TITLE:

BORING LOGS 2

DES: JL DR: JN
CHK: RJR CHK: RJR SHEET NO. 14 OF 19 SHEETS BRIDGE NO.

## SUBSURFACE BORING LOG

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### SUBSURFACE BORING LOG

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### SUBSURFACE BORING LOG

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PROIE	cr. 3rd Avenue Bridge; Minneapolis, N	LIN											
DEPTH IN PEET	MATERIAL DESCRIPTION		GEOLOGY	N	мс	s/	MPLE YPE	REC IN.	WC	REC %	RQD IN.		
71 72 73 74 75 76 77	LIMESTONE, light gray and gray, crinkley bedded Weathering: Slightly weathered to fresh Fracturing: Slightly fractured Stratification: Very thinly bedded Hardness: Hard		PLATTEVIIL FORMATION MIFFILIN MEMBER	(4)			HQ	60		100	50 43.5	83	
78 79 80 81 82 83 84	Weathering: Fresh Fracturing: Slightly fractured Stratification: Thinly bedded Hardness: Hard STIALE, gray SANDSTONE, light gray, fine grained		PLATIEVILL FORMATION PECATONICA MEMBER GLENWOOD FORMATION ST. PETER FORMATION		***************************************	X	SS	12	***************************************				
85	END OF BORING  Set VW piezometer at 84.5 feet (elevation 768.5 feet)	A STATE OF THE PROPERTY OF THE									And the second s	· ·	

BORING LOGS 3

DES: JL DR: JN APPROVED: CHK: RJR CHK: RJR SHEET NO. 15 OF 19 SHEETS

BRIDGE NO. 2440

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CONCRETE WEARING COURSE	PAINT SYSTEM	OTHER ITEMS ①
LOW SLUMP	Mn/DOT SPECIFICATION NUMBER	① UTILITIES ADDED DURING CONSTRUCTION AND SPECIALTY ITEMS.
OTHERTYPE OR MANUFACTURER	MANUFACTURERNAME AND ADDRESS (CITY, STATE)	FINAL QUANTITIES ENTERED ON SCHEDULE OF QUANTITIES: YES \( \subseteq \) NO \( \subseteq \)
EXPANSION JOINTS	PRIME COATMn/DOT MATERIAL SPECIFICATION NUMBER	
JOINT MANUFACTURER	INTERMEDIATE COATMn/DOT MATERIAL SPECIFICATION NUMBER	
MANUFACTURER'S IDENTIFICATION  MFR'S No. AND/OR LETTER DESIGNATION FOR JOINT USED	FINISH COAT Mn/DOT MATERIAL SPECIFICATION NUMBER COLOR	
GLAND MANUFACTURERNAME AND ADDRESS (CITY, STATE)	PLAN QUALITY	
SIZE OF GLAND	RATE 1 (AGREE), 2 (NEUTRAL), OR 3 (DISAGREE, PLEASE COMMENT BELOW)	
MANUFACTURER'S IDENTIFICATION MFR'S No. AND/OR LETTER DESIGNATION FOR GLAND USED	DIMENSIONING AND DETAILING ADEQUATELY DESCRIBED REQUIRED CONSTRUCTION.	
MFR'S NO. AND/OR LETTER DESIGNATION FOR GLAND USED	BAR LISTS AND QUANTITIES WERE TYPICALLY COMPLETE AND FREE OF ERRORS.  SCALE OF DRAWINGS AND OVERALL LEGIBILITY OF LINES AND TEXT WAS GOOD.	SUMMARY OF SIGNIFICANT
ELASTOMERIC BEARING PADS	(SB) SPECIAL PROVISIONS ADEQUATELY DESCRIBED SPECIAL WORK AND PAYMENT.	AS-BUILT CHANGES
PAD MANUFACTURERNAME AND ADDRESS (CITY, STATE)	COMMENTS:	
SPECIAL SURFACE FINISH		
SYSTEM: COLOR:		
FINISHING ROADWAY FACES OF BARRIER RAILING	NUMBER OF BRIDGE SUPPLEMENTAL AGREEMENTS: COST: \$	
TYPE: COLOR:	LIST SIGNIFICANT ERRORS OR OMISSIONS IN PLAN DETAILS OR PAY QUANTITIES IN THE SPACE PROVIDED AT RIGHT.	
ANTI-GRAFFITI COATING	BRIDGE REMOVAL / BRIDGE OPENING	
MANUFACTURER	NUMBER OF AND DATE OLD BRIDGE WAS REMOVED (IF APPLICABLE):	
NAME AND ADDRESS (CITY, STATE)  PRODUCT NAME: LOCATION:	BRIDGE NUMBER DATE REMOVED	
THOUSE LOCATIONS		
	DATE NEW BRIDGE WAS OPENED TO TRAFFIC  NOTIFY THE BRIDGE OFFICE BRIDGE MANAGEMENT UNIT WITH THIS INFORMATION AS SOON	
	AS POSSIBLE. (651) 366-4557	
		THE AS-BUILT INFORMATION WAS ADDED TO THE PLAN BY:
		INSPECTOR(S) SIGNATURE DATE
		CHECKED BY:
		AT THE TIME OF THE FINAL, THIS COMPLETED AS-BUILT BRIDGE DATA SHEET MUST BE SUBMITTED TO THE BRIDGE OFFICE - ATTN: REGIONAL CONSTRUCTION ENGINEER (MS610).
ISION: 10-28-2008 AS-BUILT DETAILS		FIG. 5-397.900

REVISION: 10-28-2008 APPROVED: SEPTEMBER 26, 2003

Warned & Mongan

STATE BRIDGE ENVANCER

AS-BUILT DETAILS (AS NEEDED)



AS-BUILT BRIDGE DATA

FIG. 5-397.900 BRIDGE NO.

DR: CHK: SHEET NO. 16 OF 19 SHEETS 2440

#### PROJECT DESCRIPTION/LOCATION

SP 2710-2440B IS LOCATED ON T.H. 65 (3RD AVENUE) IN THE CITY OF MINNEAPOLIS IN HENNEPIN COUNTY.

THE SCOPE OF THE 3RD AVENUE BRIDGE REPAIR PROJECT INCLUDES THE FOLLOWING: THE THIRD AVENUE BRIDGE REPAIR WORK INCLUDE REPAIR OF DETERIORATED SURFACE CONCRETE NEAR THE WATER LINE OF THE PIERS AND FOUNDATION WORK TO REPAIR OF VOIDS NEAR BASE OF THE PIERS. THE CONCRETE SURFACE REPAIR IS AT PIERS 1, 2, AND 5. THIS WORK INVOLVES REMOVING DETERIORATED AND POOR QUALITY CONCRETE FROM THE VERTICAL FACE OF EACH PIER, DRILLING INTO THE PIER CONCRETE AND INSTALLING ANCHORAGES, PLACEMENT OF A MATT OF REINFORCEMENT, AND PLACING NEW CONCRETE TO FORM A NEW REPAIRED SURFACE.

THE FOUNDATION WORK AT PIERS 1 AND 5 WILL INVOLVE ENCAPSULATING THE DAMAGED AREA AND FOR PIER 5 GROUTING THE VOID. THE ENCAPSULATING EFFORT INCLUDES REMOVING POOR QUALITY CONCRETE AND SEDIMENT FROM THE VOID AND SPALLS, INSTALL ANCHORAGES INTO THE EXISTING CONCRETE, INSTALLING GROUT BAGS TO FACILITATE ENCAPSULATION, TYING A VERTICAL MAT OF REINFORCEMENT TO THE ANCHORAGES, AND CASTING CONCRETE (DESIGNED TO NOT DISPERSE IN WATER) INTO THE FORMED ENCAPSULATION.

FOR REPAIRING THE VOID BELOW PIER 5 AN ADDITIONAL STEP WILL TAKE PLACE AFTER THE ENCAPSULATION CONCRETE HAS CURED. THIS WILL INVOLVE DRILLING HOLES 2" OR 3" DIAMETER HOLES FROM THE TOP OF THE FOOTING INTO THE VOID AREA. THESE HOLES WILL FACILITATE PRESSURE GROUTING VOIDS AND OTHER CONCRETE FRACTURES AT THE CONCRETE FOOTING-BEDROCK INTERFACE. THE INSTALLATION OF THE CONCRETE ENCAPSULATION STRUCTURE IS DESIGNED TO CREATE A SEAL AROUND THE FOOTING THAT RESTRICTS GROUT FROM EXITING THE FOUNDATION INTO THE RIVER DURING THIS OPERATION.

THE WORK DESCRIBED IS PLANNED TO BE STAGED BY BARGE WITH INTERMITTENT USE OF THE BRIDGE DECK ABOVE TO CONVEY SOME MATERIALS. THE CONTRACTOR
MAY INSTALL A TEMPORARY SCAFFOLD AROUND THE PIERS WHILE WORKING ON THE SURFACE REPAIRS WHICH WILL AID IN MATERIAL RECOVERY AND REDUCE FIELD PERSONNELS RELIANCE ON UNDERWATER DIVING EQUIPMENT.

SEDIMENT AND DEBRIS REMOVAL WILL INVOLVE JETTING AND VACUUM EQUIPMENT AND SEDIMENT BAGS. ALL SEDIMENT REMOVED SHALL BE CONTAINED WITHIN A COFFERDAM OR OTHER APPROVED CONTAINMENT METHOD AND FOLLOWING REMOVAL, BE TREATED THROUGH THE SETTLEMENT SYSTEM LOCATED ON THE BARGE. WORK SHALL NOT NEGATIVELY IMPACT THE VISUAL QUALITY OF THE WATER AT THE MILL RUINS PARK TAILRACE. HYDROPOWER GENERATORS DOWNSTREAM SHOULD NOT EXPERIENCE ANY REDUCTION IN POWER GENERATION OR DAMAGE FROM THE PROJECT.

### PROJECT SCHEDULE (ANTICIPATED)

ESTIMATED CONSTRUCTION START DATE: AUGUST 2014 ESTIMATED CONSTRUCTION END DATE: DECEMBER 2014

### SWPPP TRAINING REQUIREMENTS

THIS SWPPP WAS PREPARED BY HDR ENGINEERING PERSONNEL THAT ARE CERTIFIED IN THE DESIGN OF CONSTRUCTION SWPPPS. COPIES OF THE CERTIFICATIONS ARE ON FILE WITH HDR ENGINEERING AND ARE AVAILABLE UPON REQUEST. THE CONTRACTOR SHALL ENSURE THAT THE TRAINING REQUIREMENTS IN PART III.A.2 OF THE GENERAL STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES ARE MET, AND TRAINING RECEIVED WILL BE RECORDED IN THE SWPPP BEFORE THE START OF CONSTRUCTION OR AS SOON AS PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. THE INDIVIDUALS WHO MUST BE TRAINED INCLUDE:

- INDIVIDUAL(S) OVERSEEING THE IMPLEMENTATION OF, REVISING, AND AMENDING THE SWPPP AND INDIVIDUAL(S) PERFORMING INSPECTIONS. ONE OF THESE INDIVIDUAL(S) WILL BE AVAILABLE FOR AN ONSITE INSPECTION WITH 72 HOURS UPON REQUEST BY THE MPCA.
- INDIVIDUAL(S) PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF BMPS. AT LEAST ONE INDIVIDUAL ON A PROJECT MUST BE TRAINED IN THESE JOB DUTIES.

### ENVIRONMENTALLY SENSITIVE AREAS

THE MISSISSIPPI RIVER IS A MINNESOTA DNR PUBLIC WATER.

THIS PROJECT IS NOT LOCATED IN A WELLHEAD PROTECTION AREA.

THE PROJECT AREA INCLUDES WETLAND AREAS WITHIN CONSTRUCTION LIMITS AND ADJACENT AREAS. CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT WETLANDS AND AVOID ANY IMPACTS TO WETLAND AREAS, INCLUDING AREAS WITHIN CONSTRUCTION LIMITS AND ADJACENT AREAS.

#### SOIL TYPES

SEE THE PROJECT PLAN AND RID FOR SOIL AND SOIL BORING INFORMATION.

#### LAND FEATURE CHANGES

TOTAL DISTURBED AREA 0.00 ACRES

#### LONG TERM OPERATION AND MAINTENANCE

MNDOT IS RESPONSIBLE FOR THE LONG TERM OPERATION AND MAINTENANCE OF THE PERMANENT DRAINAGE SYSTEM WITHIN MNDOT ROW.

THE CITY OF MINNEAPOLIS SEWER DEPARTMENT WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF ALL OTHER DISTURBED STORM DRAINAGE SYSTEMS NOT OPERATED BY MNDOT. THE CITY AND MNDOT HAVE DEVELOPED A MAINTENANCE AGREEMENT THAT IDENTIFIES WHICH AGENCY IS RESPONSIBLE FOR MAINTENANCE.

#### ENVIRONMENTAL CONTACTS AND RESPONSIBILITIES

THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP, WHICH INCLUDES THE INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE AND DURING CONSTRUCTION. THE CONTRACTOR SHALL PREVENT AND AVOID POLLUTION OF NATURAL RESOURCES OF AIR, LAND AND WATER IN ACCORDANCE WITH THE RULES, REGULATIONS, AND STANDARDS ADOPTED AND ESTABLISHED BY THE MINNESOTA POLLUTION CONTROL AGENCY (MPCA), IN ACCORDANCE WITH THE SPECIAL PROVISIONS TO MNDOT STANDARD CONSTRUCTION SPECIFICATION SECTION 1717. THE CONTRACTOR SHALL REDUCE THE AREA OF DISTURBANCE TO A MINIMUM AT ALL TIMES TO REDUCE THE POTENTIAL FOR A PERMIT VIOLATION. THE CONTRACTOR IS ENCOURAGED TO MINIMIZE WORK DURATIONS OF TEMPORARY ACTIVITIES SO PERMANENT TURF ESTABLISHMENTS MAY BE PLACED AS SOON AS PRACTICABLE.

THE CONTRACTOR IS A CO-PERMITEE WITH MNDOT TO ENSURE COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE GENERAL STORMWATER PERMIT (MN R100001), AND IS RESPONSIBLE FOR THOSE PORTIONS OF THE PERMIT WHERE THE OPERATOR IS REFERENCED.

THE CONTRACTOR SHALL DESIGNATE A CERTIFIED EROSION CONTROL SUPERVISOR WHO IS EITHER A RESPONSIBLE EMPLOYEE OF THE CONTRACTOR AND/OR DULY AUTHORIZED BY THE CONTRACTOR TO REPRESENT THE CONTRACTOR ON ALL MATTERS PERTAINING TO THE NPDES CONSTRUCTION STORMWATER PERMIT COMPLIANCE. THE EROSION CONTROL SUPERVISOR IS

THE EROSION CONTROL SUPERVISOR SHALL HAVE AUTHORITY OVER ALL CONTRACTOR OPERATIONS WHICH INFLUENCE NPDES PERMIT COMPLIANCE INCLUDING GRADING, EXCAVATION, REMOVALS, TEMPORARY CONNECTIONS, UTILITY WORK, STAGING, TRAFFIC CONTROL, BACKFILLING AND COMPACTION, TEMPORARY PAVING, AND ANY OTHER OPERATIONS THAT INCREASE THE EROSION POTENTIAL ON THE PROJECT. THE EROSION CONTROL SUPERVISOR IS RESPONSIBLE FOR COORDINATING THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS AND NOTIFYING THE NECESSARY PERSONNEL FOR REPAIRS AND MAINTENANCE. MEMBERS OF MNDOT'S OFFICE OF ENVIRONMENTAL SERVICES ARE ALSO AVAILABLE FOR ASSISTANCE.

THE CONTRACTOR SHALL NOT START ANY WORK UNTIL THE UPDATED SWPPP HAS BEEN APPROVED AND ACCEPTED BY THE PROJECT OVERSIGHT TEAM. THE CONTRACTOR SHALL INSTALL REQUIRED BMPS PRIOR TO BEGINNING ANY WORK.

IN THE EVENT OF AN ACCIDENTAL SEDIMENT DISCHARGE TO WATERS OF THE STATE, OR ANY DISCHARGE OF HAZARDOUS MATERIAL OF REPORTABLE QUANTITY, CONTACT THE MPCA STATE DUTY OFFICER AT 1-800-422-0798 FOR 24-HOUR EMERGENCY NOTIFICATION.

#### ENVIRONMENTAL CONTACT LIST

NAME	AGENCY	PERMIT	POSITION	CONTACT
JIM BRIST	MPCA	401 WATER QUALITY CERT	WATER QUALITY	651-757-2245
STATE DUTY OFFICER	MPCA			651-649-5451 800-422-0798
TIM NELSON	MNDOT		CONSTRUCTION ENGINEER	651-366-5136
CAROL YN ADAMSON	MNDOT		WATER RESOURCE ENGINEER	651-234-7526
JACK YUZNA	CITY OF MINNEAPOLIS	<del></del>	BRIDGE ENGINEER	612-673-2415
PETER LEETE	MN DNR	DNR PUBLIC WATERS	MNDNR/MNDOT LIAISON	651-366-3634
MELISSA JENNY	ARMY CORPS OF ENGINEERS	404/10	REGULATORY PROJECT MANAGER	651-290-5363
ERIC WASHBURN	UNITED STATES COAST GUARD	SECTION 9		314-269-2378

#### AMENDMENT PROCEDURES

THE EROSION AND SEDIMENT CONTROL SUPERVISOR AND SWPPP DESIGNER SHALL AMEND THE SWPPP WHENEVER THE FOLLOWING OCCUR:

- THERE IS A CHANGE IN CONSTRUCTION ACTIVITIES OR OPERATIONS THAT MAY AFFECT POLLUTANTS IN STORMWATER RUNOFF WITHIN AND DISCHARGING FROM A CONSTRUCTION SITE.
- THERE IS A VIOLATION OF THE GENERAL STORMWATER PERMIT FOR CONSTRUCTION

  - WHEN DEEMED NECESSARY BY MNDOT.
    WHEN DEEMED NECESSARY BY THE CITY OF MINNEAPOLIS
- WHEN DEEMED NECESSARY BY THE MPCA, CORPS OF ENGINEERS, OR

THE AMENDMENTS SHALL BE STAND-ALONE DOCUMENTS THAT SHALL BE KEPT WITH THE SWPPP. THE FOLLOWING ITEMS SHALL BE INCLUDED IN EACH AMENDMENT:

- PERSON REQUESTING AMENDMENT.

PERSON REQUESTING AMENDMENT.
PERSON PREPARING AMENDMENT.
REASON FOR PREPARATION OF AMENDMENT.
SITE MAP SHOWING THE RELEVANT SITE FEATURES AND BMP LOCATIONS.
DESCRIPTION OF THE EXISTING AND PROPOSED BMPS.

THE FOLLOWING TABLE STRUCTURE SHALL BE UTILIZED TO TRACK SWPPP AMENDMENTS PREPARED, AND WILL INCLUDE THE AMENDMENT NUMBER, DATE, BRIEF DESCRIPTION OF THE AMENDMENT, AND WHO PREPARED THE AMENDMENT. THE TABLE SHALL BE UPDATED AS AMENDMENTS ARE ADDED TO THE SWPPP, ALL SWPPP AMENDMENTS SHALL BE APPROVED BY MNDOT PRIOR TO STARTING CONSTRUCTION ACTIVITIES.

THE EROSION AND SEDIMENT CONTROL SUPERVISOR OR HIS/HER DESIGNEE SHALL DISTRIBUTE ALL SWPPP AMENDMENTS, VIA A DISTRIBUTION LIST, TO THE RELEVANT ONSITE SUPERINTENDENTS. THE EROSION AND SEDIMENT CONTROL SUPERVISOR OR THEIR DESIGNEE SHALL EDUCATE THE ONSITE SUPERINTENDENTS ABOUT THE CONTENT OF THE AMENDMENTS AND HOW IT MAY AFFECT THEIR WORK ZONE BEFORE CONSTRUCTION ACTIVITIES ARE PERFORMED.

AMENDMENT NO.	DATE	BRIEF DESCRIPTION OF AMENDMENT	PREPARED BY	APPROVED BY
				-

### LOCATION OF SWPPP REQUIREMENTS

THE REQUIRED SWPPP ELEMENTS MAY BE LOCATED IN MANY PLACES WITHIN THE PLAN AS WELL AS IN THE SPECIAL PROVISIONS, MN/DOT SPEC BOOK (2014 EDITION), OR ON FILE

#### LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN

DESCRIPTION	LOCATION
SITE MAP	SHEETS NO. 2
DIRECTION OF FLOW	SHEETS NO. 10

#### TIMING OF BMP INSTALLATION

THE EROSION PREVENTION, SEDIMENT CONTROL AND POLLUTION MANAGEMENT BMPS SHALL BE INSTALLED AS NECESSARY TO MINIMIZE AIR, LAND AND WATER POLLUTION FROM DISTURBED SURFACES AND CAPTURE SEDIMENTS AND OTHER POLLUTION ONSITE, AND SHALL MEET THE NPDES PERMIT PART IV CONSTRUCTION ACTIVITY REQUIREMENTS. THE FOLLOWING LIST WAS TAKEN FROM THE MNDOT SPECIFICATIONS, AND MODIFIED, AND ALSO DEFINES THE TIMING OF EROSION CONTROL MEASURES IN SPECIFIC AREAS.

1. SUFFICIENT PERSONNEL, EQUIPMENT, MATERIALS AND INCIDENTALS SHALL BE MOBILIZED WITHIN 24 HOURS OF A WRITTEN ORDER BY A MNDOT REPRESENTATIVE TO CONDUCT CORRECTIVE WORK AND INSTALL TEMPORARY EROSION CONTROL WORK IN THE CASE OF AN EMERGENCY AS DEFINED BY THE MNDOT SPECIFICATIONS.

HDR Engineering, Inc. DESIGNER: BRETT A. VOTH

HEREBY CERTIFY THAT SHEETS 17 THROUGH 19 OF THIS PLAN WERE PREPARED BY M R UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL GINEER LINDER THE LAWS OF THE STATE OF MINNESOT

PRINT NAME: BRETT A. VOTH DATE: 5-16-14 SIGNATURE: Bran Unt

LICENSE \* 49045

STORM WATER POLLUTION PREVENTION PLAN

DES: BAV DR: BAV APPROVED: CHK: JZB CHK: JZB SHEET NO. 17 OF 19 SHEETS

BRIDGE NO. 2440

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- 2. THE CONTRACTOR WILL PREPARE A WRITTEN, NOT ORAL, WEEKLY SCHEDULE OF PROPOSED EROSION AND SEDIMENT CONTROL ACTIVITIES FOR THE PROJECT ENGINEER'S APPROVAL AS PER MN/DOT SPEC. 1717.2C.
- THE CONTRACTOR WILL PREPARE AND SUBMIT A SITE PLAN FOR THE PROJECT ENGINEER'S APPROVAL AS PER MN/DOT SPEC. 1717.2D FOR CONCRETE MANAGEMENT, WORK IN ENVIRONMENTALLY SENSITIVE AREAS, AND ANY WORK THAT WILL REQUIRE DEWATERING. ALL SITE PLANS MUST BE SUBMITTED TO THE PROJECT ENGINEER IN WRITING. THE CONTRACTOR SHALL ALLOW A MINIMUM OF 7 DAYS FOR MN/DOT TO REVIEW AND APPROVE SITE PLAN SUBMITTALS. THE CONTRACTOR WILL NOT BE ALLOWED TO COMMENCE WORK FOR WHICH A SITE PLAN IS REQUIRED UNTIL APPROVAL HAS BEEN GRANTED BY THE PROJECT ENGINEER. THE CONTRACTOR WILL NOT BE GIVEN ANY EXTRA TIME IN THE CONTRACT DUE TO THE UNTIMELY SUBMITTAL OF A SITE PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR CREATING AND FOLLOWING A WRITTEN DISPOSAL PLAN FOR ALL WASTE MATERIALS. THE PLAN WILL INCLUDE HOW THE MATERIAL WILL BE DISPOSED OF AND THE LOCATION OF THE DISPOSAL SITE. SUBMIT TO THE
- 5. THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS SHALL BE PLACED AS NECESSARY TO MINIMIZE EROSION FROM DISTURBED SURFACES AND TO CAPTURE SEDIMENT ONSITE. ALL EROSION CONTROL MEASURE SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF ANY REMOVAL WORK AND/OR GROUND DISTURBING ACTIVITES AND SHALL BE MAINTAINED UNTIL THE POTENTIAL FOR EROSION HAS BEEN ELIMINATED.
- 6. SEDIMENT DEPOSITS IN A WATER OF THE STATE MUST BE REMOVED WITHIN 7 DAYS.
- 7. SITE DRAINING ACTIVITIES OF TURBID OR SEDIMENT LADEN WATER WILL BE DISCHARGED TO SETTLEMENT TANKS OR SEDIMENT BAGS. WATER MUST BE TREATED BEFORE BEING DISCHARGED BACK INTO THE RECEIVING WATERS.
- 8. THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING MAINTENANCE REQUIREMENTS:
  A. TEMPORARY SEDIMENT BASINS MUST HAVE THE SEDIMENT REMOVED ONCE THE SEDIMENT HAS REACHED 1/2 THE STORAGE VOLUME WITHIN 72 HOURS OF

  - DISCOVERY.
    TRACKED SEDIMENT MUST BE REMOVED WITHIN 24 HOURS OF DISCOVERY OF
    TRACKING ONTO PAVED SURFACES.
    ALL OTHER NON-FUNCTIONAL BMPS MUST BE REPAIRED, REPLACED, OR
    SUPPLEMENTED WIHIN 24 HOURS OF DISCOVERY.
    THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL BMPS UNTIL WORK
    HAS BEEN COMPLETED AND THE SITE HAS GONE UNDER FINAL STABILIZATION.
- PROVIDE PERIMETER CONTROLS AROUND ALL STOCKPILES.
- 10. WATER CONTAINMENT BOOM INSTALL FLOATING WATER CONTAINMENT BOOM AROUND ALL AREAS WHERE WORK IS BEING DONE IN THE WATER. INSTALLATION SHALL BE COMPLETED PRIOR TO DISTURBANCE.
- 11. THE CONTRACTOR SHALL SUBMIT A BARGE LAYOUT PLAN THAT PROVIDES TOTAL CONTAINMENT OF THE WORK SURFACE FROM THE RIVER, A BARGE PERIMETER CONTAINMENT SYSTEM AND FILTER TREATMENT PORTALS TO TREAT STORM WATER DISCHARGE FROM THE SURFACE, SECONDARY CONTAINMENT OF ALL EQUIPMENT THAT COULD LEAK, SURFACE COVERS OF EXPOSED MATERIALS DURING PERIODS OF WORK SUSPENSION, INCLUDING OVERNIGHT, TURN RADIUS CAPTURE OF CLAMOR EXCAVATED MATERIALS TO TRANSPORT BARGES, ETC. AND A RAPID RESPONSE PROGRAM FOR LEAKS AND LOSS OF CHEMICALS, FLUIDS, AND SEDIMENTS.
- THE CONTRACTOR MUST USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT CONCRETE DUST, PARTICLES, SAW CUT SLURRY, PLANING WASTE AND OTHER CONCRETE WASTES FROM LEAVING THE PROJECT SITE AND DEPOSITING IN SURFACE WATERS.
- ALL SEDIMENT DISTURBED BY THE PROJECT SHALL BE REMOVED FROM THE SITE AND DISPOSED OF ACCORDING TO APPLICABLE CODES AND PERMITS. ALL WATERS DISCHARGED BACK INTO SURFACE WATERS MUST MEET WATER QUALITY SPECIFICATIONS DETAILED IN THE PROJECT DIVISION SB SPECIAL PROVISIONS.

#### BRIDGE PIER REPAIR WORK

ACCESS TO THE PIER LOCATIONS ANTICIPATED BY BARGE.

- ANY COFFERDAMS USED ON THE PROJECT SHALL BE DEWATERED INTO IN-BARGE SETTLING TANKS OR DUMPSTERS.
- IN-BARGE SETTLING TANKS SHALL BE PLACED OR CONSTRUCTED ON A BARGE. WATER FROM THE DEWATERING OF THE COFFERDAMS SHALL BE PUMPED INTO SETTLING TANKS. 2 OR MORE TANKS SHALL BE USED IN SERIES. FLOCCULANTS SHALL BE USED IN THE SECOND TANK TO INCREASE THE FFFECTIVENESS OF THE SETTLING. ONCE TREATED TO NO MORE THAN 25 NTU ABOVE RIVER BASELINE NTU'S AND 7.0 PH +/- PH (MEASURED HOURLY UNTIL DATA INDICATES NO CHANGE), WATER WILL BE DISCHARGED BACK TO RIVER. TANKS SHALL BE CLEANED OUT WHEN MORE THAN 1/3 FILLED WITH SILT. RELEASE RATE WILL BE CONTROLLED SUCH THAT SEDIMENT IS ACHIEVED. THE RELEASE RATE WILL DEPEND UPON THE TANK SIZE USED BY THE CONTRACTOR.

THIS WORK SHALL CONSIST OF PROVIDING, USING, AND MAINTAINING TEMPORARY DEWATERING DUMPSTERS DESIGNED FOR TREATING STORMWATER FROM CONSTRUCTION ACTIVITIES, AS PART OF MECHANICAL DEWATERING OPERATIONS, AND BASED ON SITE CONDITION CONSTRAINTS. THE CONTRACTOR WILL FURNISH COMMERCIALLY ENGINEERED DEWATERING DUMPSTERS TO BE KEPT OF PROJECT SITE AT ALL TIMES, FOR THE LIFE OF THE CONTRACT. THIS WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE MN/DOT STANDARD SPECIFICATIONS, THE PLAN, AND THE FOLLOWING:

THE PORTABLE SEDIMENT CONTAINMENT SYSTEM IS COMMERCIALLY AVAILABLE FROM WIMCO. 199 THEIS DRIVE, SHAKOPEE, MN 55379 952-222-3055

THIS DEVICE WILL MEASURE 8 FOOT BY 20 FOOT, SIMILAR IN FORM TO A TRASH DUMPSTER, WITH ORIFICE ATTACHMENT PORTALS FOR DEWATERING HOSES, AND SEDIMENT CLEANOUT ACCESS. THE DEVICE WILL INCLUDE A GEOTEXTILE FILTER WALL FOLLOWED BY A REPLACEABLE FILTER MEDIA IN THE FORM OF SLASH MULCH, EXCELSIOR FIBERS, OR OTHER FILTER MEDIA, DEPENDING ON POLLUTANT LOAD. THE PORTABLE SEDIMENT CONTAINMENT SYSTEM WILL BE INSTALLED IN THE FIELD FOLLOWING MANUFACTURER'S RECOMMENDATIONS AND APPROVED SITE PLANS. THE PORTABLE SEDIMENT CONTAINMENT SYSTEM WILL BE SLIGHTLY TILTED SUCH THAT THE WATER WILL FLOW OVER THE INTERNAL WEIR, AND WILL BE PLACED ON A SLASH MULCH OR FILTER AGGREGATE OVER A SUITABLE GEOTEXTILE.

#### FAILURE TO PERFORM

IF THE CONTRACTOR FAILS TO PROVIDE OR USE THE DEWATERING DUMPSTERS TO TREAT SEDIMENT OR OTHER POLLUTANT CONTAINING GROUND OR STORMWATER, THE CONTRACTOR SHALL SUSPEND OPERATIONS, AND RELATED OPERATIONS, IF ORDERED BY THE PROJECT ENGINEER UNTIL THE ISSUE IS RESOLVED.

#### EROSION AND SEDIMENT CONTROL BMPS

THE NECESSARY EROSION AND SEDIMENT CONTROL CONSTRUCTION BMPS INCLUDE, BUT ARE

- 1. STOCKPILE MANAGEMENT -THE CONTRACTOR SHALL DEVELOP A WRITTEN STOCKPILE MANAGEMENT PROGRAM THAT ADDRESSES THE FOLLOWING ITEMS RELATED TO STOCKPILES PLACED ON LAND OR ON A BARGE:
  - A. ALL ACTIVE OR IN-ACTIVE PORTLAND CEMENT, CONCRETE RUBBLE, ASPHALT CONCRETE, ASPHALT RUBBLE, AGGREGATE BASE, ROADWAY SUBBASE, PRE-MIXED AGGREGATE, AND ASPHALT BINDER SHALL BE COVERED WITH PLASTIC OR COMPARABLE MATERIAL TO PREVENT WIND EROSION AND AIR POLLUTION. PERIMETER SUPER DUTY SILT FENCE WILL ALSO BE ESTABLISHED AS AN EROSION CONTROL MEASURE.

    B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STOCKPILE LOCATIONS, STOCKPILES WILL BE SHAPED TO FACILITATE STABLIZATION AND MINMIZE EROSION. PLACE STOCKPILES NO CLOSER THAN 25 FEET FROM ANY DRIVEWAY OR CATCH BASIN, SUPER DUTY SILT FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF ALL STOCKPILE ARFAS.

  - C. ALL SOIL STOCKPILES THAT REMAIN IN PLACE FOR 7 DAYS OR MORE WILL BE STABILIZED PER MNDOT SPECIFICATION 2575.3 RAPID STABILIZATION METHOD 3.

    D. AGGREGATE STOCKPILES WILL BE STABILIZED.

    E. IF RAPID STABILIZATION METHOD 3 CANNOT BE USED, THEN THE STOCKPILE SHALL BE COVERED WITH TARPS OR PLASTIC SHEETING AND WEIGHTED TO PREVENT
  - F. IF TEMPORARY STOCKPILES ARE NECESSARY, CONTRACTOR SHALL ESTABLISH EROSION CONTROL MEASURES IN COMPLIANCE WITH MNDOT SPECS AND SWPPP REQUIREMENTS. THE COST ASSOCIATED WITH POTENTIAL TEMPORARY STOCKPILE EROSION PREVENTION MEASURES, INCLUDING MATERIAL, LABOR, AND EQUIPMENT, SHALL BE CONSIDERED
  - PROTECTION OF STOCKPILES IS REQUIRED THROUGHOUT CONSTRUCTION. REPAIR AND/OR REPLACE PERIMETER CONTROLS AND COVERS AS NEEDED TO KEEP THEM FUNCTIONING PROPERLY.
  - H. STOCKPILES PLACED ON BARGES SHALL HAVE ALL NECESSARY PERIMETER CONTROLS TO REMAIN CONTAINED ON THE BARGE AND PREVENT SPILLING INTO SURFACE WATERS.

- 2. CONCRETE SLURRY, TRUCK AND MIXER WASHOUT

  A. A DESIGNATED WASHOUT AREA SHALL BE PROVIDED AT THE CONSTRUCTION SITE AND SHALL BE CLEARLY MARKED.

  B. THE WASHOUT SHALL BE CONSTRUCTED AND MAINTAINED TO PROVIDE SUFFICIENT IMPERVIOUS CONTAINMENT FOR ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.

  C. FOR EQUIPMENT THAT DOES NOT HAVE SELF-CONTAINED WASHOUT WATER STORAGE, CONCRETE WASHOUTS OF CONCRETE TRUCKS, CHUTES, PUMPS, MIXING PLANTS AND OTHER CONCRETE HANDLING EQUIPMENT SHALL BE WASHED OUT INTO A LEAK-PROOF CONTAINMENT FACILITY OF IMPERMEABLE LINER.

  D. THE WASHOUT AREAS MUST BE IDENTIFIED BY SIGNAGE AND MUST BE AT LEAST 200' FROM SITE PLAN REQUIREMENT AREAS OR ENVIRONMENTALLY SENSITIVE AREAS. AN ENGINEERED COLLECTION SYSTEM CAN ALSO BE USED IF IT IS APPROVED BY THE PROJECT ENGINEER.
  - F. PROCESS WASTEWATER FROM GRINDING OR GROOVING OF CONCRETE SHALL BE COLLECTED AND TREATED AS CONCRETE WASH WATER AND PROPERLY DISPOSED. REFER TO THE PROJECT SWPPP DOCUMENT FOR MNDOT'S ACCEPTABLE DISPOSAL PROCEDURES OF CONCRETE WASHOUT.
  - G. CONCRETE WASHOUT FACILITIES WILL BE PERIODICALLY INSPECTED AND EMPTIED/REMOVED FROM THE SITE WHEN NEARING CAPACITY TO PREVENT OVERFLOWS.
  - H. THE SWPPP WILL BE AMENDED AS NEEDED FOR CONCRETE OPERATIONS AS THEY OCCUR.

- 3. VEHICLE MAINTENANCE
  - A. ROUTINE MAINTENANCE OF VEHICLES SHALL OCCUR IN OFFSITE STAGING AREAS ONLY. NO ON-SITE VEHICLE MAINTENANCE IS ALLOWED, UNLESS IN AN ENGINEER-APPROVED SYSTEM.
  - ENGINEER-APPROVED SYSTEM.
    VEHICLE WASHING SHALL BE AVOIDED. IF WASHING IS NECESSARY, RUNOFF FROM THE
    WASHING SHALL BE CONTAINED IN A LINED SEDIMENT TRAP AND THE WASH WATER
    SHALL BE PROPERLY DISPOSED OF AT A TREATMENT FACILITY.
    ENGINE DEGREASING SHALL ALSO BE CONTAINED IN A LINED SEDIMENT TRAP AND
    PROPERLY DISPOSED OF AT A TREATMENT FACILITY.

- - B. ABSORBENT MATERIALS SHALL BE AVAILABLE IN THE FUEL TRUCK FOR USE IN CLEANING UP SMALL SPILLS.
    C. EDUCATION ON SPILL RESPONSE PROCEDURES SHALL BE PROVIDED BY THE

### 5. HAZARDOUS MATERIALS

- A. CONTRACTOR SHALL FOLLOW ALL RECOMMENDED DIRECTIONS AND PRECAUTIONS ACCORDING TO MANUFACTURER/SUPPLIER OF HAZARDOUS MATERIALS. STORAGE OF HAZARDOUS MATERIALS SHALL NOT OCCUR IN THE CONSTRUCTION AREA.
- A. STORAGE OF HAZARDOUS MATERIAL SHALL NOT OCCUR ON BARGES.

- 6. CHEMICAL CONTAINMENT
  A. CHEMICALS NOT BEING USED SHALL BE STORED AT STAGING AREAS.
  B. GASOLINE, OIL, PAINT, SOLVENTS, AND OTHER CHEMICALS NECESSARY FOR CONSTRUCTION ARE NOT ALLOWED TO CONTACT THE SURFACE WATER.
  C. HAZARDOUS MATERIAL SHALL BE RETURNED TO THE HAZARDOUS MATERIAL STORAGE AREA AND LOCKED AT THE END OF EACH DAY.
  D. TEMPORARY SANITARY FACILITIES SHALL BE LOCATED AT LEAST 25 FEET FROM DRAINAGE INLETS AND 200 FEET UPGRADE FROM STREAMS AND WETLANDS. FACILITIES SHALL BE LOCATED ON STABLE, LEVEL SURFACES AND ANCHORED TO AVOID TIPPING.

  - E. THE CONTRACTOR SHALL PROVIDE TANKS OR BARRELS TO COLLECT LIQUID
    BYPRODUCTS THAT POSE A POLLUTION HAZARD.

    F. THE POLLUTANTS SHALL BE REMOVED FROM THE SITE ON, AT MOST, A WEEKLY BASIS
    AND DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.

    G. ALL STATIONARY EQUIPMENT (NON-VEHICLE) WITH THE POTENTIAL TO LEAK FLUIDS
    OR DUE TO REFUELING OPERATIONS SHALL HAVE SECONDARY CONTAINMENT THAT
    PREVENTS THE DISCHARGE OF FLUIDS TO GROUND OR SURFACE WATERS.

    H. CHEMICAL SPILLS OF ANY KIND (OIL, FUEL, FERTILIZER, ETC.) MUST BE CLEANED
    UP AND REMOVED FROM THE SITE IMMEDIATELY. IF DRIPS AND LEAKS ARE
    DISCOVERED, THE SOILS MUST BE MANAGED BY THE CONTRACTOR ACCORDING TO MPCA
    RULES. SPILLS EQUAL TO OR GREATER THAN 5 GALLONS MUST BE REPORTED TO THE
    STATE DUTY OFFICER.

- 7. SOLID WASTE (INCLUDES TRASH)
  A. SOLID WASTE SHALL BE COLLECTED AND STORED IN APPROPRIATE CONTAINERS AND PROPERLY DISPOSED OF ON A REGULAR BASIS.

  - CONTAINERS SHALL BE COVERED TO PREVENT WIND FROM BLOWING THE WASTE AROUND OR OFF THE SITE.

    NO MATERIALS SHALL BE BURIED OR BURNED ON SITE.

    MPCA DISPOSAL REQUIREMENTS WILL BE FOLLOWED FOR ALL SOLID WASTE.

#### 8. DUST CONTROL

- USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT CONCRETE DUST AND OTHER DUST PARTICLES FROM LEAVING THE PROJECT SITE, THE CONTRACTOR SHALL USE A VARIETY OF DUST CONTROL METHODS, INCLUDING BUT NOT LIMITED TO THE
  - FOLLOWING:

    1. RAPID STABILIZATION METHOD 3 (MNDOT SPECIFICATION 2575.3) ON IN-ACTIVE SOIL STOCKPILES.
  - THE CONTRACTOR SHALL PRE-WATER AND SWEEP HAUL ROADS TO MINIMIZE
  - III. PAVEMENT SURFACES SHALL BE SWEPT WITHIN 24 HOURS OF DISCOVERY OF SEDIMENT OR TRACKING ONTO PAVEMENT. PAVEMENT SHALL BE LIGHTLY WETTED PRIOR TO SWEEPING. THIS WORK IS INCIDENTAL.
  - DUST PLUMES RESULTING FROM ANY SANDBLASTING AND SHOTCRETE WORK ON THE PROJECT ARE NOT ALLOWED TO BE RELEASED INTO THE AIR. DUST PLUMES ARE REQUIRED TO BE CONTAINED ON-SITE BY APPROVED METHODS.

SHEET 2 OF 3

HDR Engineering, inc.

CERTIFIED BY

But Wat 5-16-14 LICENSED PROFESSIONAL ENGINEER

STORM WATER POLLUTION PREVENTION PLAN

DES: BAV DR: BAV APPROVED: CHK: JZB CHK: JZB SHEET NO. 18 OF 19 SHEETS

BRIDGE NO. 2440

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NAME: BRETT A. VOTH

LIC. NO. 49045

#### 1. SPILL PREVENTION, CONTAINMENT, AND CLEANUP

A. FOR THIS SECTION "EQUIPMENT SHALL REFER TO BOTH VEHICLES AND EQUIPMENT, PLACE DRIP PANS AND ABSORBANT PADS UNDER EQUIPMENT USED OVER WATER. KEEP AN ADEQUATE SUPPLY OF SPILL CLEANUP MATERIALS WITH THE EQUIPMENT ON BARGES AT ALL TIMES. IF THE EQUIPMENT WILL BE IDLE FOR MORE THAN ONE HOUR, PLACE DRIP PANS OR PLASTIC SHEETING UNDER THE EQUIPMENT ON DOCKS, BARGES, OR OTHER SURFACES OVER WATER. INSPECT EQUIPMENT FOR LEAKS AND SPILLS ON A DAILY BASIS. MAINTAIN ALL EQUIPMENT BEING USED OVER WATER. IF LEAKING LINES ON EQUIPMENT CANNOT BE REPAIRED, REMOVE EQUIPMENT FROM OVER THE WATER.

FURNISH WATERTIGHT CURBS OR TOE BOARDS ON BARGES OR OTHER SURFACES OVER WATER TO CONTAIN MATERIAL, DEBRIS, AND TOOLS. SECURE MATERIALS TO PREVENT SPILLS OR DISCHARGE INTO WATER DUE TO WIND. ALL CHEMICALS STORED AND USED ON BARGE SHALL HAVE SECONDARY CONTAINMENT, NOT INCLUDING THE BARGE TOE BOARDS. ACCUMULATED WASTE MUST BE REMOVED PROPERLY AND IN A TIMELY MANNER.

- B. PROCEDURES FOR A MINOR SPILL INCLUDE, BUT ARE NOT LIMITED TO, ELIMINATING POTENTIAL SPARK SOURCES, NOTIFYING THE CONTRACTOR EM, CONTAINING THE SPILL WITH RESPONSE MATERIALS AND EQUIPMENT, AND CONTAINERIZING SOIL IN CONTACT WITH THE SPILLED MATERIAL OR STOCKPILING SOIL ON AND COVERING WITH 10-MIL PLASTIC. PROCEDURES FOR A MAJOR SPILL INCLUDE, BUT ARE NOT LIMITED TO, ELIMINATING POTENTIAL SPARK SOURCES, STOPPING WORK IN THE IMMEDIATE AREA AND PREPARING WORKERS TO EVACUATE THE SPILL SITE VIA DESIGNATED EXIT ROUTES AT THE DIRECTION OF THE CONTRACTOR EM. THE CONTRACTOR EM WILL NOTIFY AGENCIES LISTED ON THE EMERGENCY CONTACT LIST, THE MNDOT ECM, AND THE STATE DUTY OFFICER. THE EMERGENCY RESPONSE CONTRACTOR WILL APPROPRIATELY CONTAINERIZE FREE LIQUIDS FOR DISPOSAL, AND CONTAINATED SOIL WILL BE STORED IN LINED ROLL-OFF CONTAINERS OR STOCKPILED ON AND COVERED WITH 10-MIL PLASTIC. AFTER THE INCIDENT, THE CONTRACTOR EM AND MNDOT ECM WILL REVIEW THE RESPONSE AND AMEND THE PROJECT SPILL CONTAINMENT PLAN IF NEEDED. A RECORD INCLUDING A DESCRIPTION OF THE SPILL, CAUSE, AND CLEANUP MEASURES TAKEN WILL BE SUBMITTED TO MNDOT. WILL BE SUBMITTED TO MNDOT.
- C. IN THE EVENT OF AN ACCIDENTAL SPILL OR RELEASE OF HAZARDOUS MATERIALS, ON-SITE PERSONNEL SHALL CONTAIN THE MATERIAL TO THE GREATEST EXTENT POSSIBLE. THESE PERSONNEL SHALL BE EQUIPPED WITH THE APPROPRIATE LEVELS OF PROTECTIVE CLOTHING AS DESCRIBED IN THE CONTRACTOR'S SITE HEALTH AND SAFETY PLAN. MNDOT AND THE EM SHALL BE NOTIFIED IMMEDIATELY WHEN ANY SPILL OCCURS.
- D. CONTAINMENT SHALL INCLUDE THE USE OF SORBENT PADS AND/OR BOOMS, DIKING WITH SOIL, COVERING AND/OR DIVERTING SPILLS FROM SEWERS, DRAINS, SURFACE WATER BODIES, ETC. FOR SPILLS THAT CANNOT BE CONTAINED BY ON-SITE PERSONNEL THE CONTRACTOR EM SHALL SECURE THE AREA AND NOTIFY THE FIRE DEPARTMENT, STATE DUTY OFFICER, AND MNDOT PM AND ECM IMMEDIATELY.
- 2. OIL/PETROLEUM LEAKS
  A. AN EMERGENCY SPILL KIT MUST BE AT EACH WORKSITE AT ALL TIMES AND BE READILY ACCESSIBLE. ALL WORK MUST BE STOPPED AT ANY TIME IN THE VICINITY OF A LARGE SPILL OR LEAK SO AS TO CONTAIN ANY LEAKS OR SHEENS.

### INSPECTIONS AND MAINTENANCE

PERIODIC INSPECTIONS OF THE TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS OF RAINFALL EVENTS THAT PRODUCE MORE THAN 1/2 INCH OF RAIN IN A 24-HOUR PERIOD. RECORDS SHALL BE KEPT IN THE PROJECT OFFICE FOR EACH INSPECTION AND MAINTENANCE ACTIVITY AND WILL CONTAIN THE FOLLOWING INFORMATION:

- DATE AND TIME OF INSPECTION
  NAME OF PERSON(S) CONDUCTING INSPECTION
  FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTION
  CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIME, AND PERSON(S) COMPLETING
  MAINTENANCE ACTIVITIES)
- DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 1/2-INCH IN A 24-HOUR PERIOD
- DOCUMENT CHANGES TO SWPPP
- TRACKED SEDIMENTS SHALL BE REMOVED FROM PAVED SURFACES AT THE END OF EACH DAY, OR AS OFTEN AS NECESSARY TO MAINTAIN SAFE AND EFFECTIVE ROAD SURFACES, USING A PICK-UP TYPE SWEEPER. NO CONCRETE SLURRY WILL BE ALLOWED TO ENTER
- USING A PICK-UP TYPE SWEEPER. NO CONCRETE SLURRY WILL BE ALLOWED TO ENTER OPEN PUBLIC ROADWAYS.

  CONSTRUCTION ENTRANCES SHALL BE MAINTAINED DAILY.

  REPLACEMENT OF BMPS THAT ARE NOT FUNCTIONING.

  EXPOSED SOIL COVERS SHALL BE MAINTAINED OR SUPPLEMENTED TO REMAIN EFFECTIVE UNTIL THE TURF OVER THE EXPOSED SOIL IS FULLY ESTABLISHED

ALL REMAINING TEMPORARY BMPS AND ACCUMULATED SEDIMENTS WILL BE CLEANED OUT AND REMOVED UPON COMPLETION OF THE PROJECT.

IF SEDIMENT OR A CHEMICAL DEPOSITS IN A WATER OF THE STATE, THE SWPPP MUST BE IMMEDIATELY AMENDED TO ADDRESS THE PROCESS OF RECOVERY AND RESTORATION. THE MATERIAL MUST BE SCHEDULED FOR REMOVAL WITHIN 7 DAYS OF DISCOVERY AS PER NPDES PERMIT FOR ACCESS ISSUES, WITH CONTINUOUS PROGRESS UNTIL COMPLETION, THE SWPPP MUST BE AMENDED TO PREVENT ANY FURTHER LOSS OF SEDIMENT OR CHEMICAL.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL BMPS UNTIL THE WORK HAS BEEN COMPLETED AND THE SITE HAS UNDERGONE FINAL STABILIZATION.

#### RECORDS RETENTION

THE SWPPP AND ALL AMENDMENTS SHALL BE KEPT ON THE CONSTRUCTION SITE DURING CONSTRUCTION ACTIVITIES. THE SWPPP SHALL BE LOCATED IN THE FIELD OFFICE AND ALL RELEVANT CONTRACTOR SUPERINTENDENTS SHALL HAVE A COPY OF THE SWPPP DOCUMENTS THAT ARE RELATED TO THEIR AREAS OF RESPONSIBILITIES.

ALL TRAINING DOCUMENTATION OF PROJECT SWPPP TEAM MEMBERS SHALL BE RETAINED WITH THE SWPPP DURING THE PROJECT.

ALL SWPPP INSPECTIONS AND SWPPP MAINTENANCE ACTIVITIES CONDUCTED DURING CONSTRUCTION ACTIVITIES SHALL BE RECORDED IN WRITING AND THESE RECORDS SHALL BE RETAINED WITH THE SWPPP DURING THE PROJECT.

ALL PERMANENT OPERATION AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING RIGHT-OF-WAY AGREEMENTS, CONTRACTS, COVENANTS, AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE, SHALL BE AVAILABLE FROM MNDOT.

ALL CALCULATIONS FOR THE DESIGN OF TEMPORARY AND PERMANENT STORMWATER MEASURES SHALL BE AVAILABLE IN THE PROJECT OFFICE.

SHEET 3 OF 3

HDR Engineering, Inc.

CERTIFIED BY

5-16-14

STORM WATER POLLUTION

DES: BAV DR: BAV APPROVED: CHK: JZB CHK: JZB

BRIDGE NO. 2440

Kul NAME: BRETT A. VOTH LIC. NO. 49045

PREVENTION PLAN