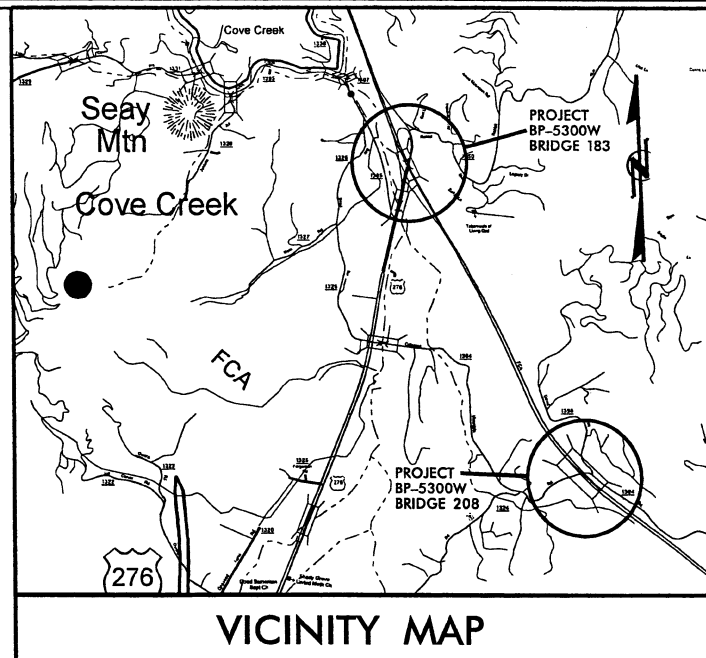


TIP PROJECT: BP-5300W

CONTRACT: D000115



STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

HAYWOOD COUNTY

**LOCATION: BRIDGE 183, I-40 EBL AND WBL OVER US 276,
3.0 MILES WEST OF JUNCTION I40 AND NC 209**

**LOCATION: BRIDGE 208, I-40 WBL OVER SR 1364,
1.5 MILES EAST OF JUNCTION 140 AND US 276**

**TYPE OF WORK: BRIDGE DECK PRESERVATION AND
SUBSTRUCTURE REPAIR**

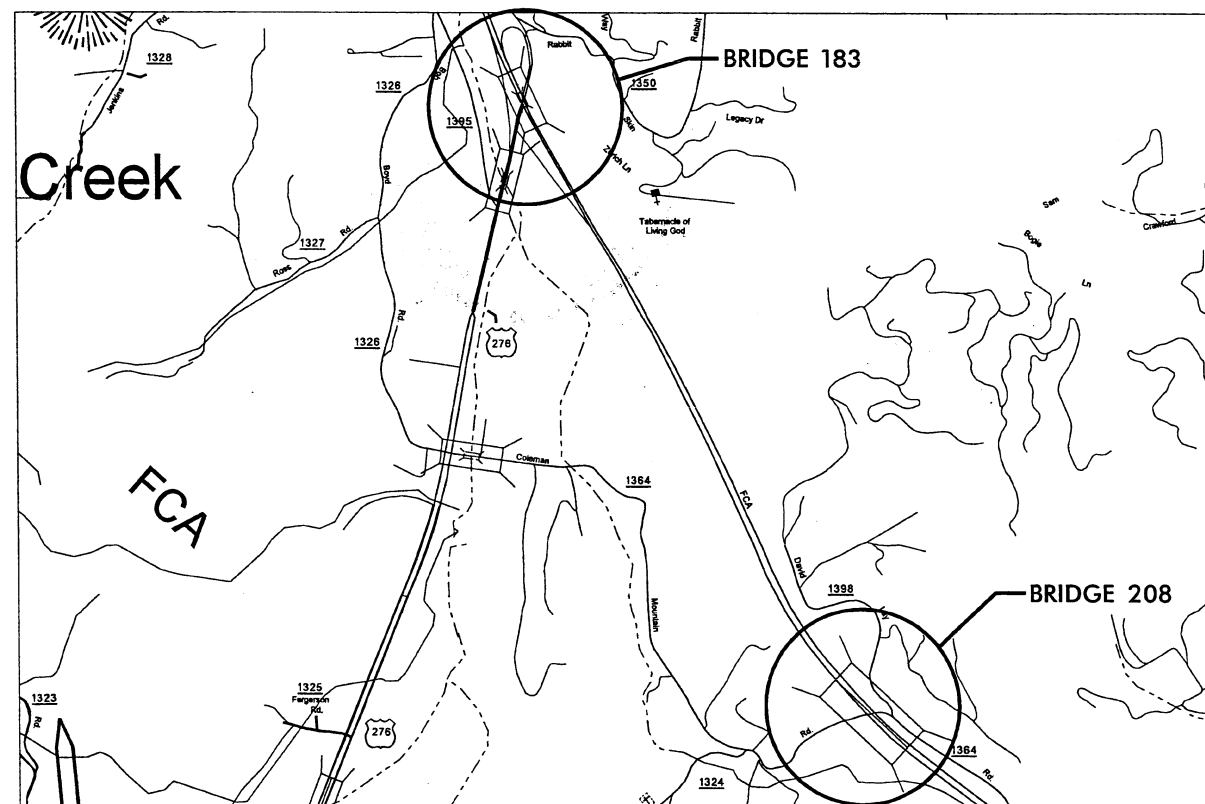
[illegible]

TABLE OF CONTENTS

DWG.	DESCRIPTION
S183-1	PLAN OF BRIDGE
S183-2	BRIDGE TYPICAL SECTION
S183-3	DECK REPAIR DETAILS
S183-4	DECK REPAIR DETAILS
S183-5	DECK REPAIR DETAILS
S183-6	DECK REPAIR DETAILS
S183-7	EXPANSION JOINT REPAIR DETAILS
S183-8	END BENT JOINT SEAL DETAILS
S208-1	PLAN OF BRIDGE
S208-2	BRIDGE TYPICAL SECTION
S208-3	DECK REPAIR DETAILS
S208-4	DECK REPAIR DETAILS
S208-5	DECK REPAIR DETAILS
S208-6	EXPANSION JOINT REPAIR DETAILS
S208-7	END BENT JOINT SEAL DETAILS
S208-8	SUBSTRUCTURE REPAIRS - BENT 1
S208-9	SUBSTRUCTURE REPAIRS - BENT 2
S208-10	SUBSTRUCTURE REPAIRS - END BENT 2
TCP1-5	TRAFFIC CONTROL PLANS

PROJECT LENGTH



PREPARED IN THE OFFICE OF:

Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
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Fax. (919) 851-7024
www.stantec.com
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Startec
FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2006 STANDARD SPECIFICATIONS

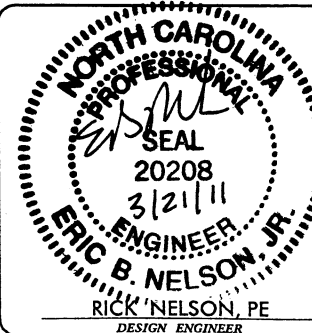
RIGHT OF WAY DATE:
N.A.

LETTING DATE:
APRIL 13, 2011

NCDOT CONTACT:

JOE KELVINGTON, PE
PROJECT ENGINEER

MIKE SUMMERS
BRIDGE MANAGEMENT PROJECT MANAGER



DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA



NOTES:

DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECKS WITH LATEX MODIFIED CONCRETE. SEE SPECIAL PROVISIONS.

FOR HYDRO-DEMOLITION, SEE SPECIAL PROVISIONS.

THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS. SEE SPECIAL PROVISIONS.

THE BOUNDARIES OF AREAS IDENTIFIED FOR CLASS III SURFACE PREPARATION ARE APPROXIMATE. THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF THE DECK. SEE DETAIL.

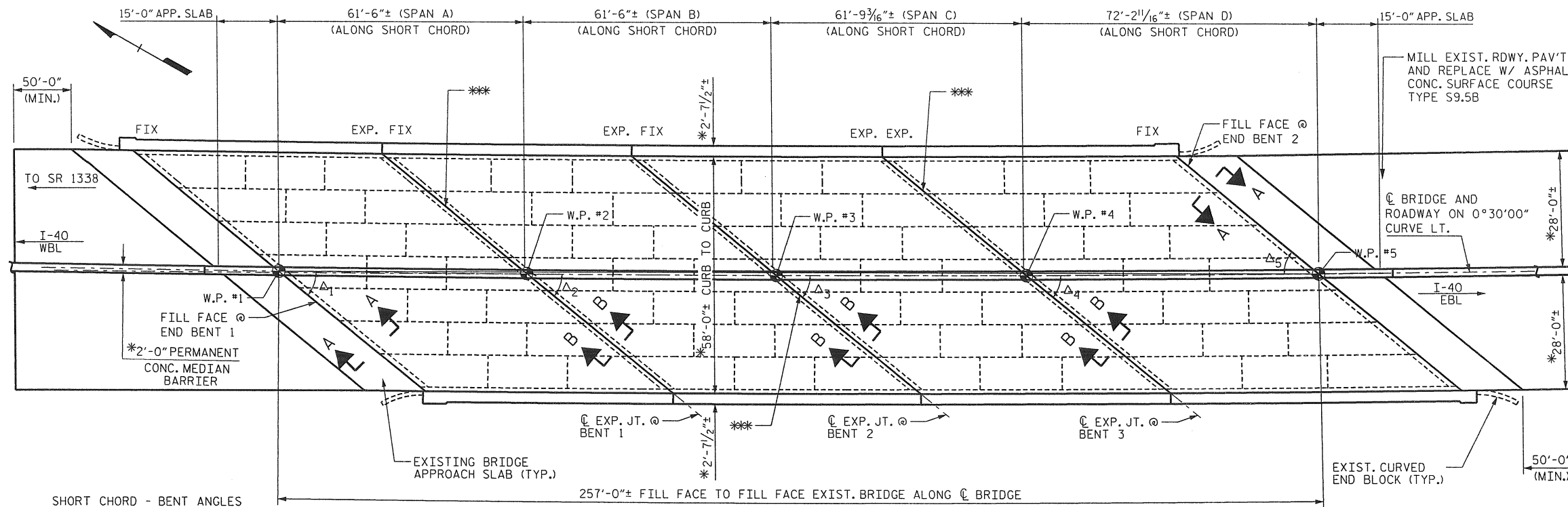
LATEX MODIFIED CONCRETE SHALL BE LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH.

FOR LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.

FOR SECTION B-B, SEE SHEET NO. S183-4.

* DENOTES RADIAL DIMENSION.

FOR EVAZOTE JOINT SEAL, SEE SPECIAL PROVISIONS.

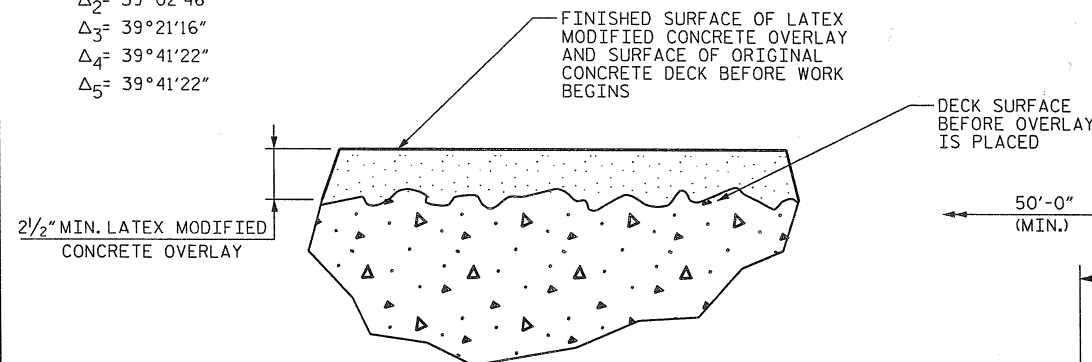


SHORT CHORD - BENT ANGLES

$\Delta_1 = 38^\circ 44' 19''$
 $\Delta_2 = 39^\circ 02' 46''$
 $\Delta_3 = 39^\circ 21' 16''$
 $\Delta_4 = 39^\circ 41' 22''$
 $\Delta_5 = 39^\circ 41' 22''$

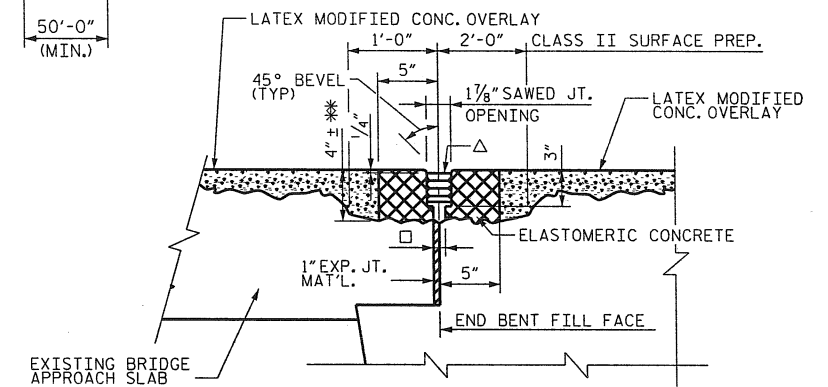
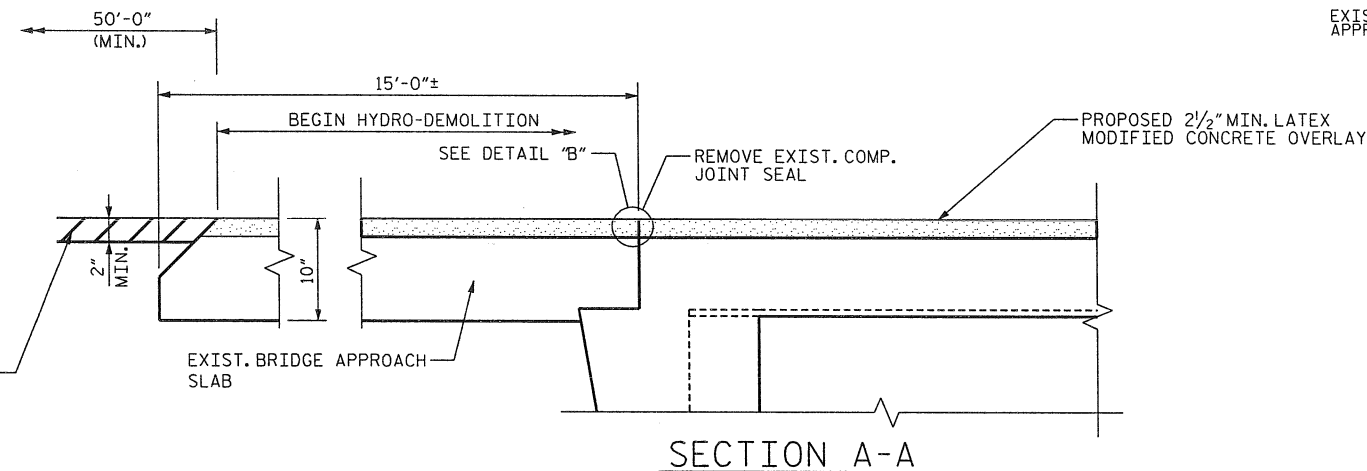
PLAN OF SPANS

*** EXISTING ARMORED EXPANSION JOINT SEAL TO BE REMOVED. (TYP. EA. INT. BENT ON EA. SIDE OF THE MEDIAN)



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY

MILL EXIST. ROADWAY PAVEMENT AND REPLACE W/ ASPHALT CONC. SURFACE COURSE TYPE S9.5B



DETAIL "B"

Δ USE 2.50" X 2.00" UNCOMPRESSED SEAL MATERIAL

\square 1" FORMED OPENING CENTERED ABOUT FILL FACE

* NOMINAL DIMENSION. REMOVE ALL LOOSE, DETERIORATED MATERIAL, INCLUDING EXISTING SEAL DEVICES AND HARDWARE TO SOUND CONCRETE. PRESERVE AND RETAIN ALL EXPOSED REINFORCING STEEL. ADJUST SAW CUT DEPTH AS REQUIRED TO PREVENT CUTS INTO EXISTING REINFORCING STEEL.

PROJECT NO. BP-5300W

HAYWOOD COUNTY

STATION: _____

TOTAL BILL OF MATERIAL

DECK** SCARIFICATION	CLASS I* SURFACE PREPARATION	CLASS II* SURFACE PREPARATION	CLASS III* SURFACE PREPARATION	HYDRO-DEMOLITION	CLASS AA* CONCRETE	LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH	PLACE & FINISH LMC-VERY EARLY STRENGTH	EVAZOTE JOINT SEAL	GROOVING BRIDGE FLOORS	ASPHALT CONC. SURFACE COURSE TYPE S9.5B
SQ.YDS.	SQ.YDS.	SQ.YDS.	SQ.YDS.	SQ.YDS.	CU.YDS.	CU.YDS.	SQ.YDS.	LUMP SUM	SQ.FT.	TON
2,787	1322	273	128	1722	10	147	1723	LUMP SUM	13,719	112

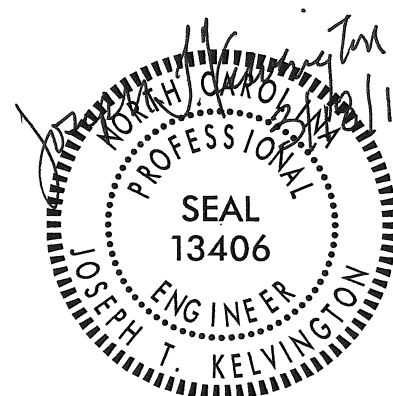
* QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. IF ANY CLASS III LOCATIONS ARE ENCOUNTERED PRIOR TO OR DURING HYDRO-DEMOLITION, SEE "TYP. 'BLOW THRU' CONTAINMENT AND FORMWORK" DETAIL.

** INCLUDES MILLING OF ROADWAY PAVEMENT.



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DRAWN BY: R.A. WILLIAMS DATE: 3/11
 CHECKED BY: J.T. KELVINGTON DATE: 3/11



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN OF SPANS FOR DECK REPAIR

DECK REHAB. FOR BRIDGE NO. 183

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S183-1
2			4			
TOTAL SHEETS						8

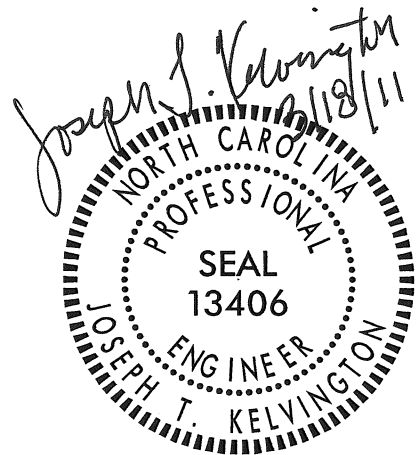
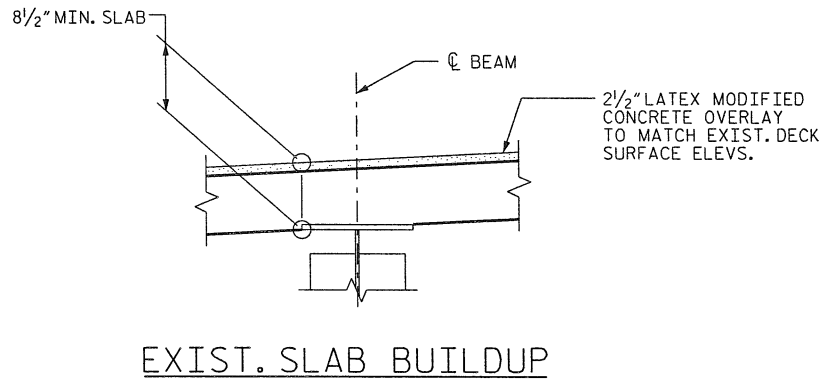
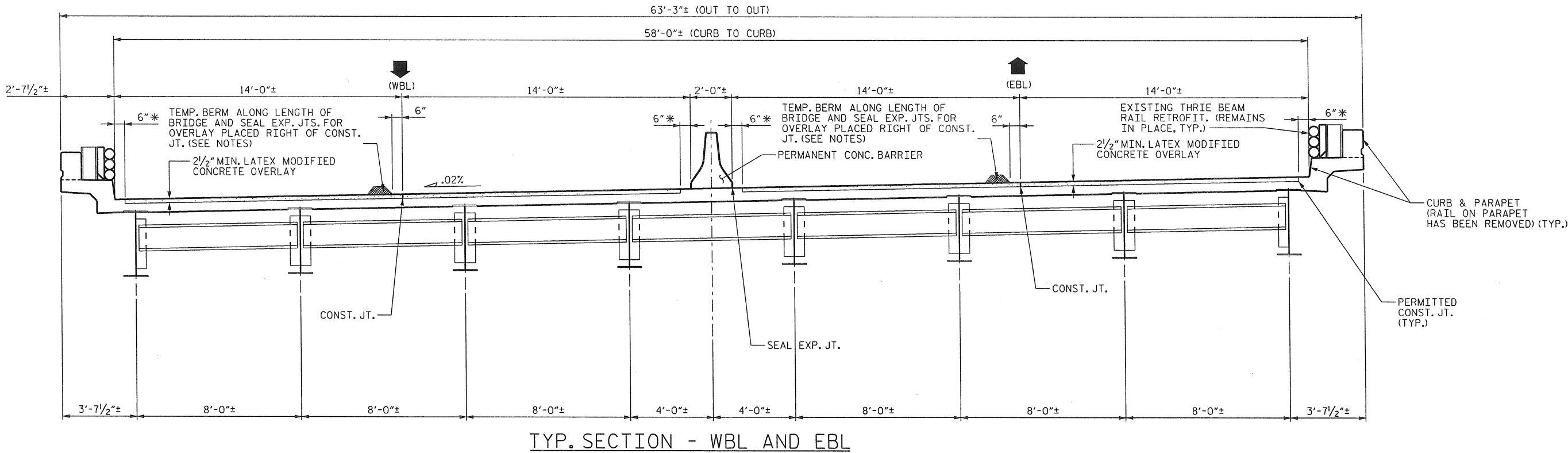
NOTES:

WATER & CONCRETE SLURRY FROM HYDRO-DEMOLITION SHALL NOT BE ALLOWED TO DRAIN ACROSS TRAVEL LANES. CONTRACTOR SHALL PROVIDE A METHOD TO CONTROL THE WATER.

ALL HORIZONTAL DIMENSIONS SHOWN ARE RADIAL.

FOR TRAFFIC CONTROL AND CONSTRUCTION STAGING DETAILS, SEE TRAFFIC CONTROL DRAWINGS TCP1-5.

*PERMITTED WIDTH OF EXISTING CONCRETE DECK SURFACE OVER FULL LENGTH OF BRIDGE AND APPROACH SLAB THAT MAY BE LEFT INTACT FOR SCREED SUPPORT, OTHERWISE, REPAIR DECK SURFACE FROM CURB TO CURB.



PROJECT NO. BP-5300W
HAYWOOD COUNTY
STATION: _____

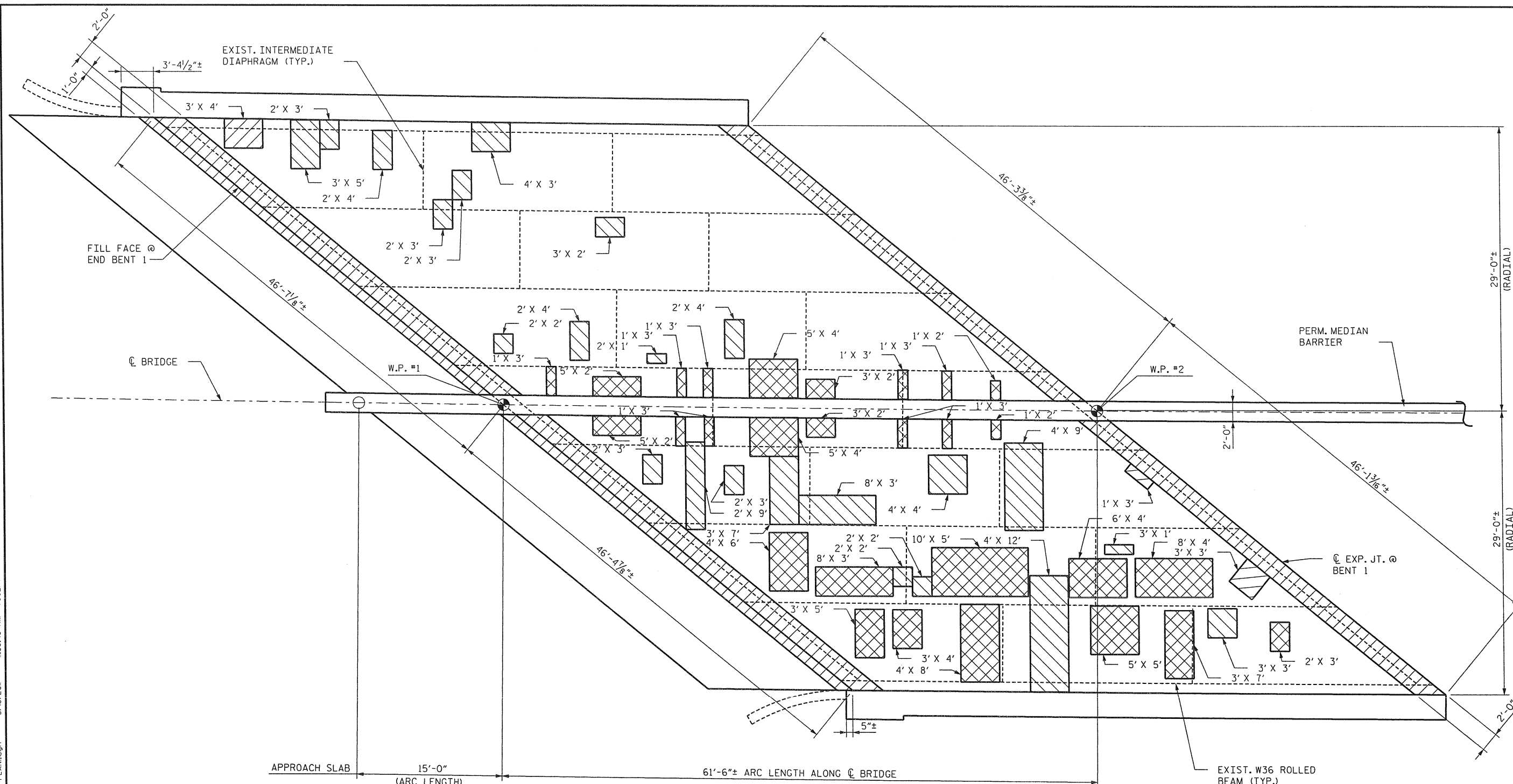
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
TYPICAL SECTION					
DECK REHAB. FOR BRIDGE NO. 183					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
SHEET NO. S183-2					TOTAL SHEETS 8



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DRAWN BY: R A WILLIAMS DATE: 3/11
CHECKED BY: J T KELVINGTON DATE: 3/11

\\turbo\bridge\group\2011\BP5300W\bridge\183\drawing\BP-5300WB3_Repair\PLAN.dgn 3/18/2011 11:38:48 AM \$USER\$



PLAN OF SPAN A - DECK REPAIRS
PARAPET AND RAIL NOT SHOWN FOR CLARITY

NOTES:

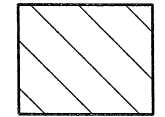
CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

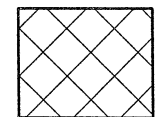
COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SQ. YD. OF CLASS III SURFACE PREPARATION.

SEE HYDRO DEMOLITION SPECIAL PROVISIONS.

FOR "BLOW THROUGH" CONTAINMENT AND FORMWORK DETAIL, SEE SHEET S183-4.

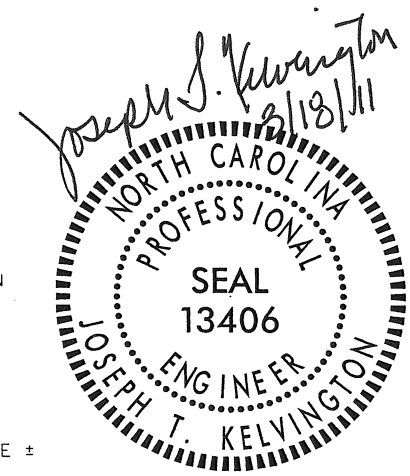


CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

L' X W' = LENGTH OF AREA ALONG CL BRIDGE X
WIDTH OF AREA NORMAL TO CL BRIDGE ±



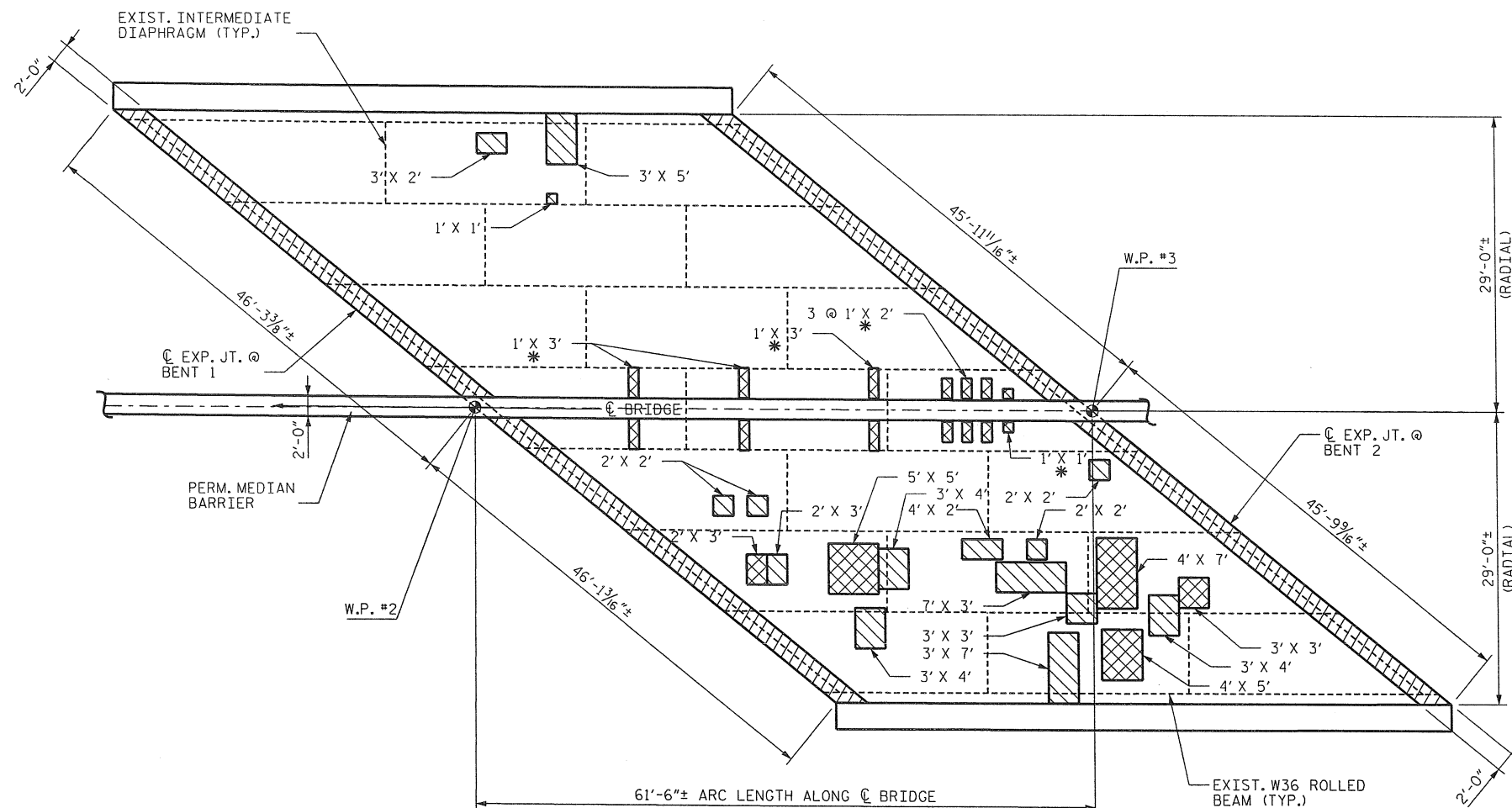
PROJECT NO. BP-5300W
HAYWOOD COUNTY
STATION: _____

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
DECK REPAIR DETAILS SPAN A					
DECK REHAB. FOR BRIDGE NO. 183					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
SHEET NO. S183-3					TOTAL SHEETS 8

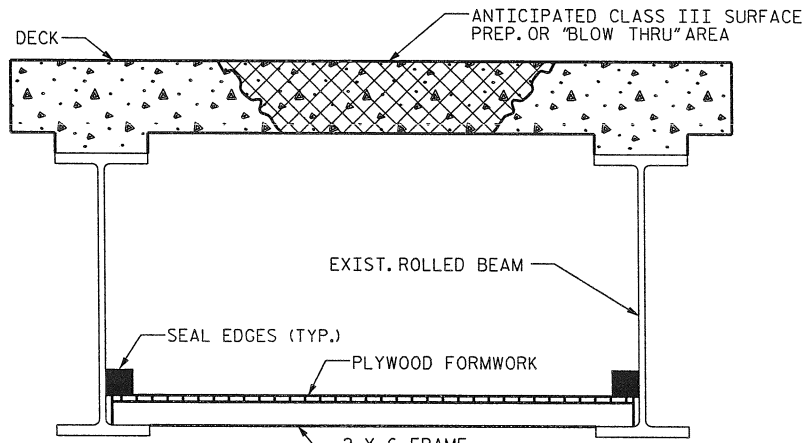


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DRAWN BY: R A WILLIAMS DATE: 3/11
CHECKED BY: J T KELVINGTON DATE: 3/11



PLAN OF SPAN B - DECK REPAIRS
PARAPET AND RAIL NOT SHOWN FOR CLARITY



TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

A METHOD TO CAPTURE WATER AND DEBRIS FROM BLOW THRU DURING HYDRO-DEMOLITION SHALL BE INSTALL IN AREAS INDICATED AS CLASS III SURFACE PREPARATION.

SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE PER SQ. YARD OF HYDRO-DEMOLITION.

CONTRACTOR, AT HIS OPTION, MAY CHOOSE TO MONITOR HYDRO-DEMOLITION WORK AND CONTROL TRAFFIC UNDER THE BRIDGE IN LIEU OF BLOW THRU CONTAINMENT. SEE TRAFFIC CONTROL PLANS.

NOTES:

CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SQ. YD. OF CLASS III SURFACE PREPARATION.

SEE HYDRO DEMOLITION SPECIAL PROVISIONS.

*TYP. EA. SIDE OF BARRIER

CLASS II SURFACE PREPARATION

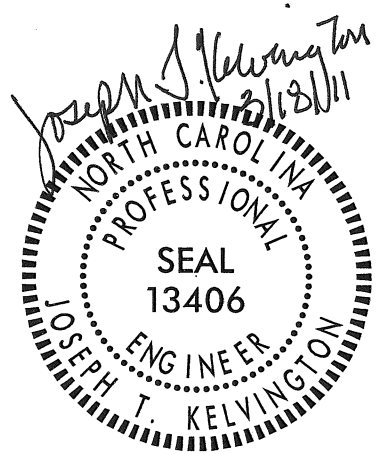
CLASS III SURFACE PREPARATION

L' X W' = LENGTH OF AREA ALONG CL BRIDGE X
WIDTH OF AREA NORMAL TO CL BRIDGE ±



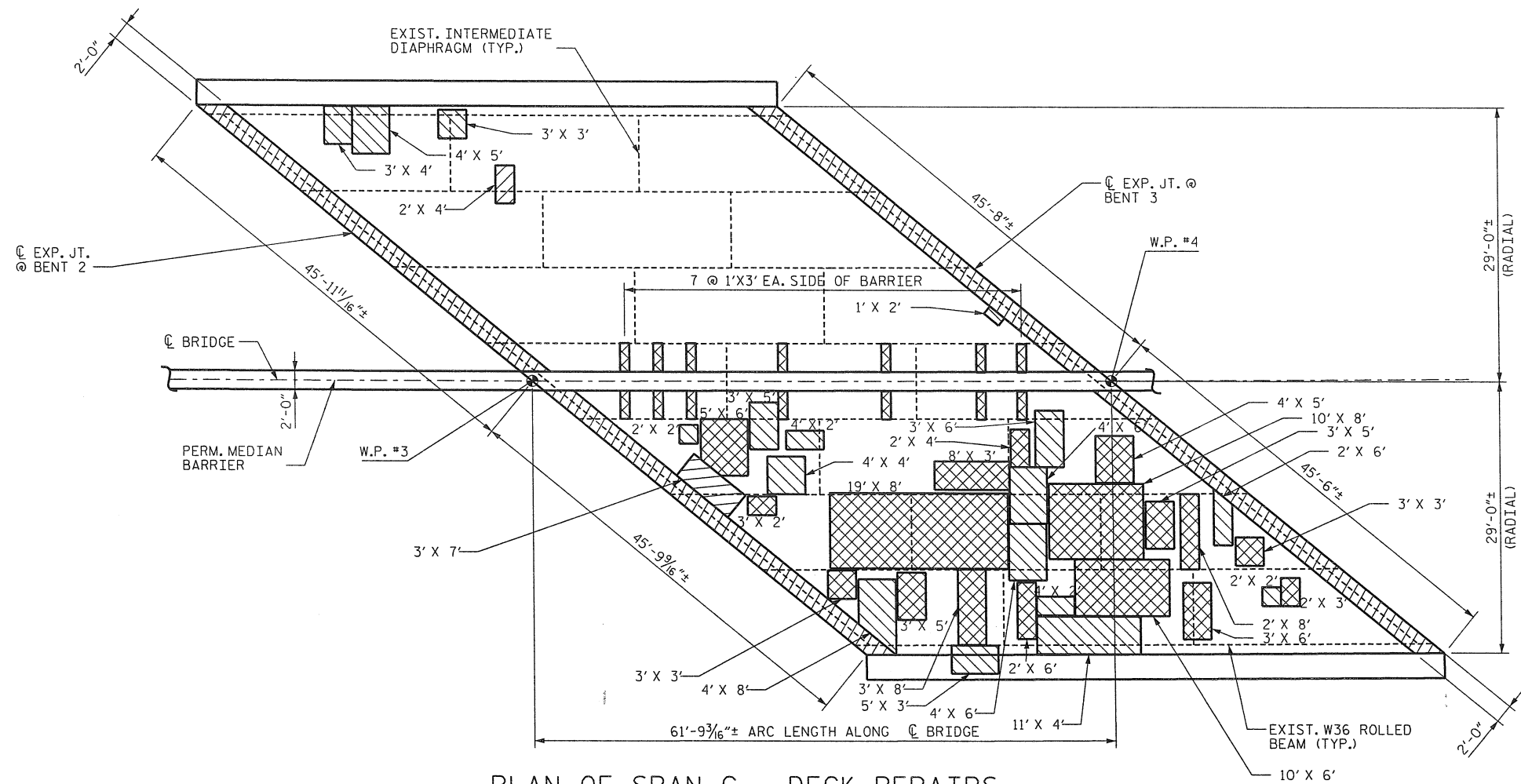
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www.stantec.com
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DRAWN BY : R A WILLIAMS DATE : 3/11
CHECKED BY : J T KELVINGTON DATE : 3/11

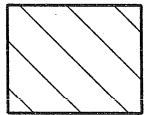


PROJECT NO. BP-5300W
HAYWOOD COUNTY
STATION: _____

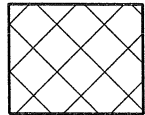
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
DECK REPAIR DETAILS SPAN B					
DECK REHAB. FOR BRIDGE NO. 183					
REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
TOTAL SHEETS					8



PLAN OF SPAN C - DECK REPAIRS
PARAPET AND RAIL NOT SHOWN FOR CLARITY



CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

L' X W' = LENGTH OF AREA ALONG CL BRIDGE X
WIDTH OF AREA NORMAL TO CL BRIDGE \pm

NOTES:

CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SQ. YD. OF CLASS III SURFACE PREPARATION.

SEE HYDRO DEMOLITION SPECIAL PROVISIONS.

FOR "BLOW THROUGH" CONTAINMENT AND FORMWORK DETAIL, SEE SHEET S183-4.

PROJECT NO. BP-5300W
HAYWOOD COUNTY
STATION: _____

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK REPAIR DETAILS
SPAN C

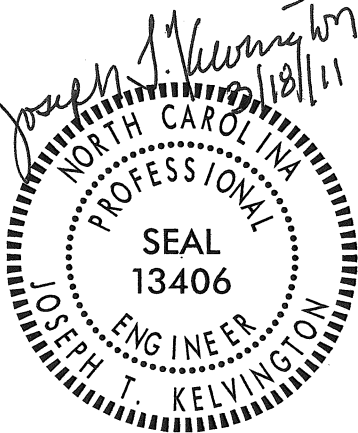
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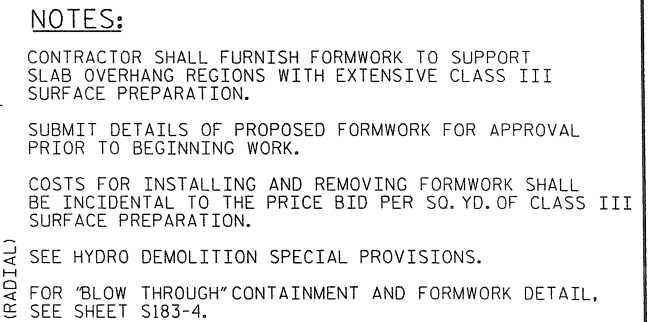
REVISIONS						SHEET NO. S183-5
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 8
2			4			




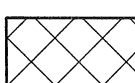
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CHECKED BY: J T KELVINGTON DATE: 3/11





 CLASS II SURFACE PREPARATION

 CLASS III SURFACE PREPARATION

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

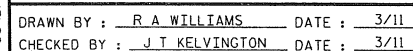
RALEIGH

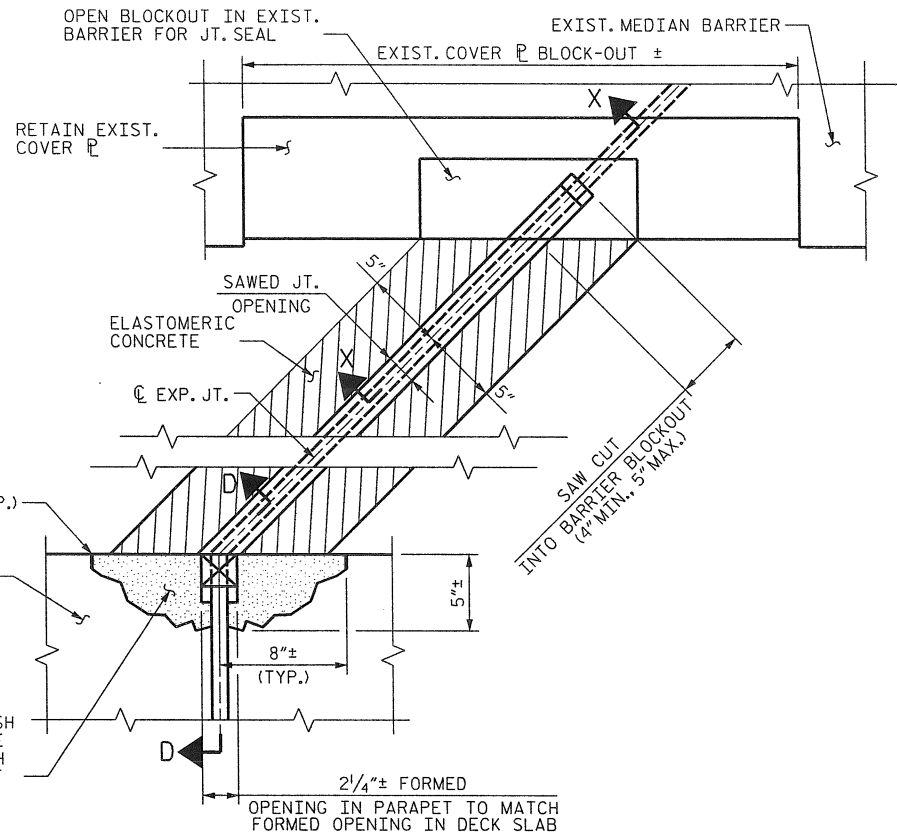
DECK REPAIR DETAILS

SPAN D

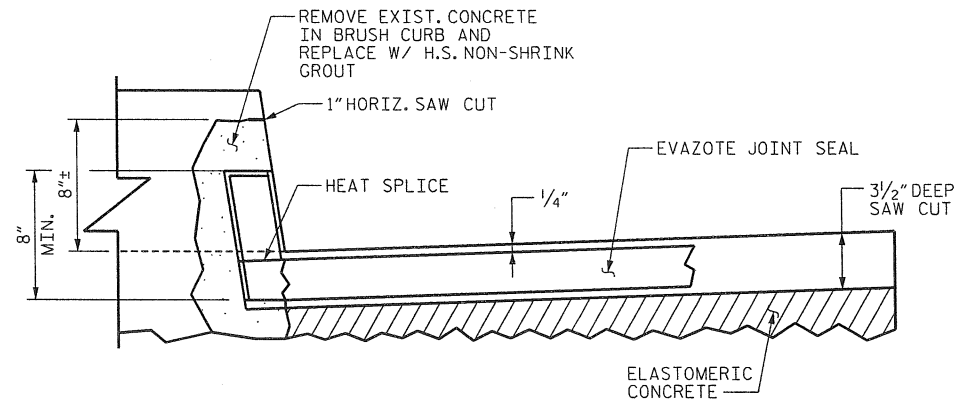
DECK REHAB. FOR BRIDGE NO. 183

REVISIONS						SHEET NO. S183-6
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS 8
1			3			
2			4			





PARTIAL PLAN @ JOINT

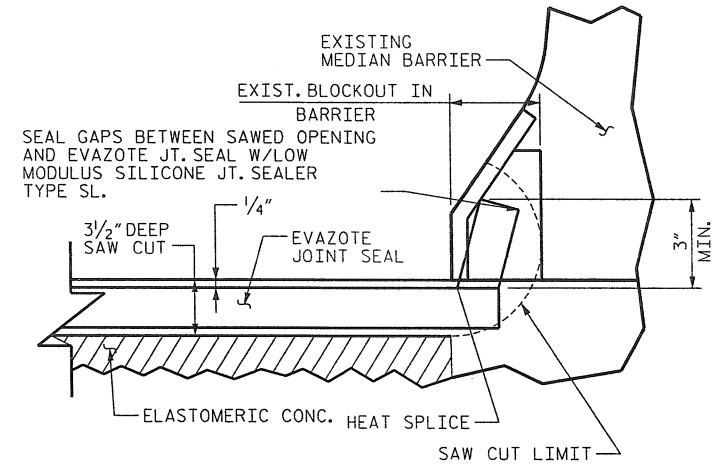


SECTION D-D

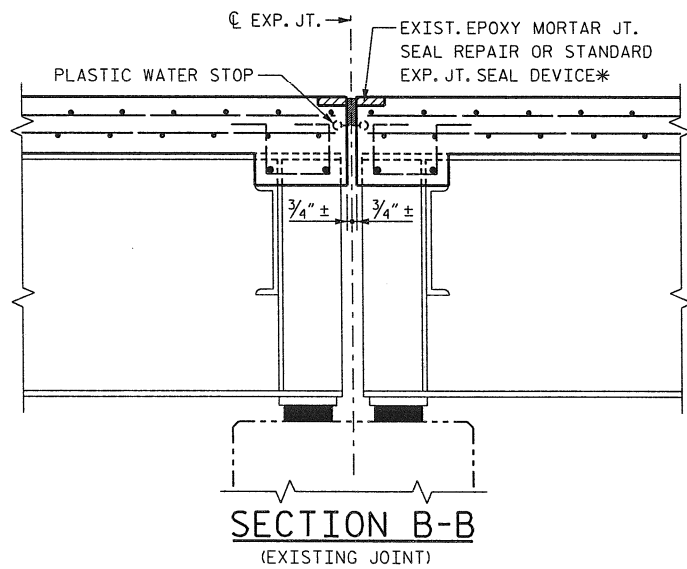
CONTRACTOR SHALL EXERCISE CARE TO AVOID CUTTING OR DAMAGING EXISTING REINF. STEEL.
FOR HIGH STRENGTH GROUT, SEE SPECIAL PROVISIONS.
HIGH STRENGTH GROUT SHALL BE APPROVED BY THE ENGINEER.

ELASTOMERIC CONCRETE	
LOCATION	QTY
END BENT 1	25.3 C.F.
BENT 1	29.8 C.F.
BENT 2	29.6 C.F.
BENT 3	29.4 C.F.
END BENT 2	24.6 C.F.

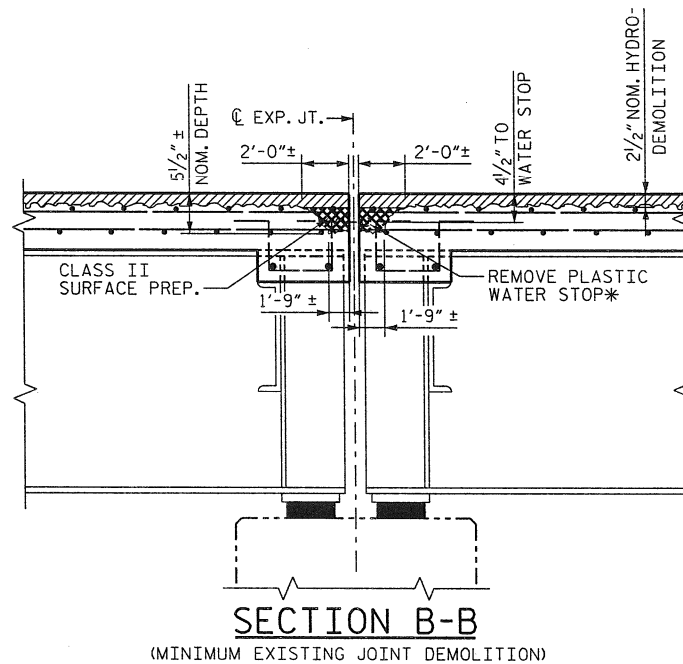
TOTAL ELASTOMERIC CONC. = 138.7 C.F.
TOTAL ELASTOMERIC CONC. = 5.1 C.Y.



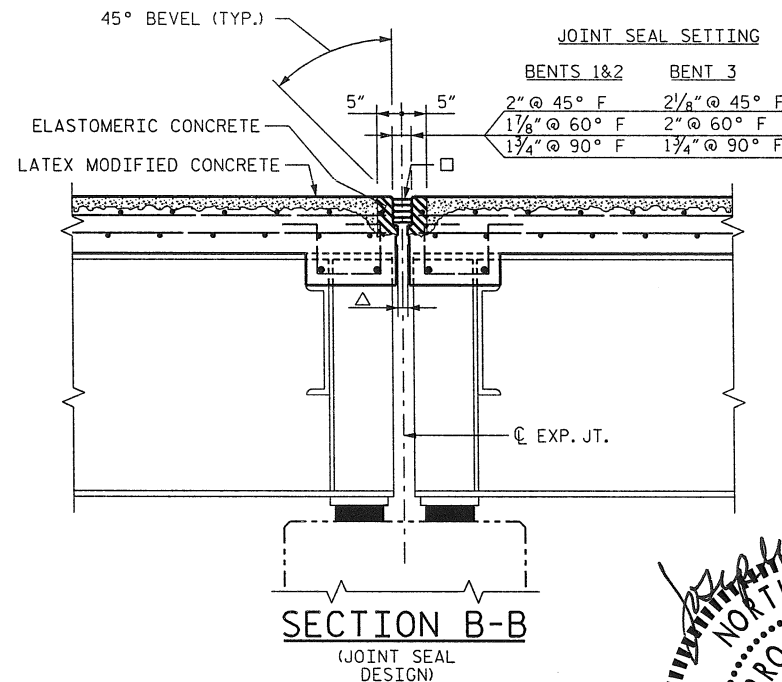
SECTION X-X



SECTION B-B
(EXISTING JOINT)



NOTE: RETAIN ALL EXIST. REINF. STEEL. CLEAN AND REPAIR AS REQ'D
* ALL EXISTING JOINT SEAL DEVICES AND EPOXY JT. SEAL REPAIR COMPONENTS ARE TO BE COMPLETELY REMOVED



SECTION B-B
(JOINT SEAL DESIGN)

□ USE 2.8125" X 2.50" UNCOMPRESSED EVAZOTE JT. SEAL MATERIAL @ BENT 3
△ 1 1/4" FORMED OPENING
□ USE 2.50" X 2.0" UNCOMPRESSED EVAZOTE JT. SEAL MATERIAL @ BENTS 1 & 2

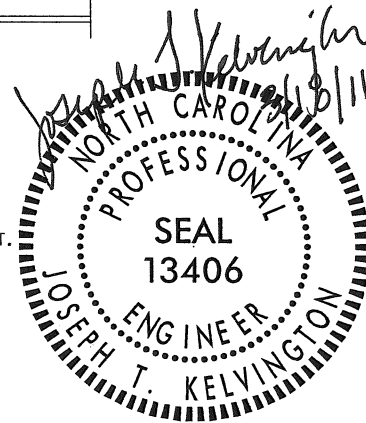
PROJECT NO. BP-5300W
HAYWOOD COUNTY
STATION: _____

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
EXPANSION JOINT DETAILS					
DECK REHAB. FOR BRIDGE NO. 183					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
SHEET NO. S183-7					TOTAL SHEETS 8

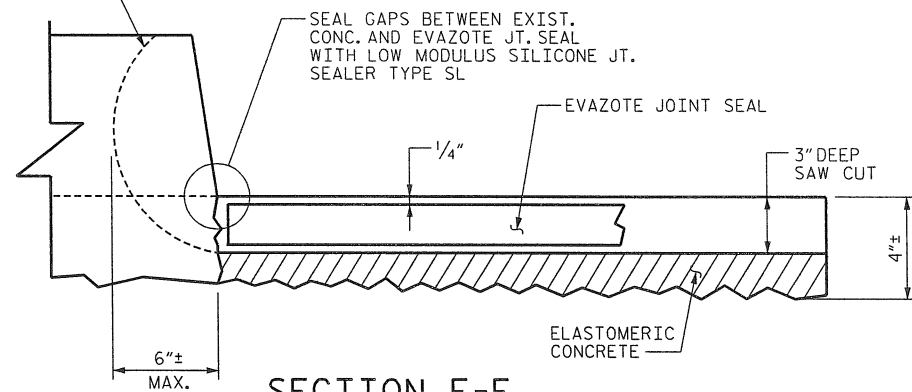


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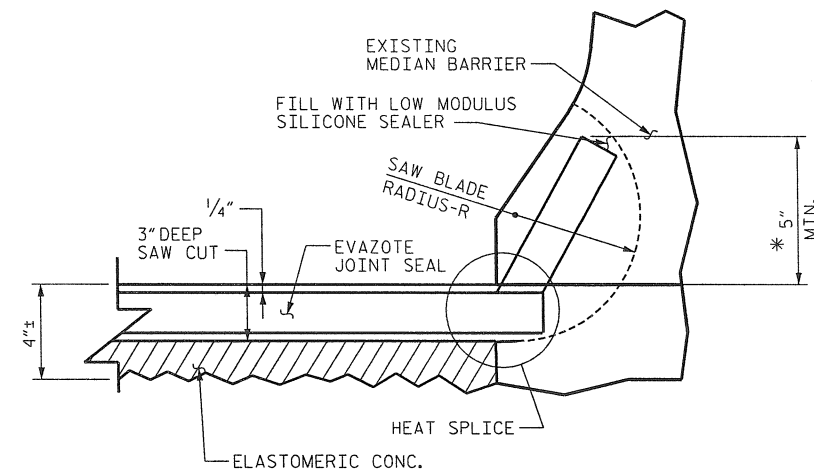
DRAWN BY: R.A. WILLIAMS DATE: 3/11
CHECKED BY: J.T. KELVINGTON DATE: 3/11



SAW CUT ONLY AS DEEP
AS NECESSARY TO PREPARE
SURFACES FOR JOINT MAT'L

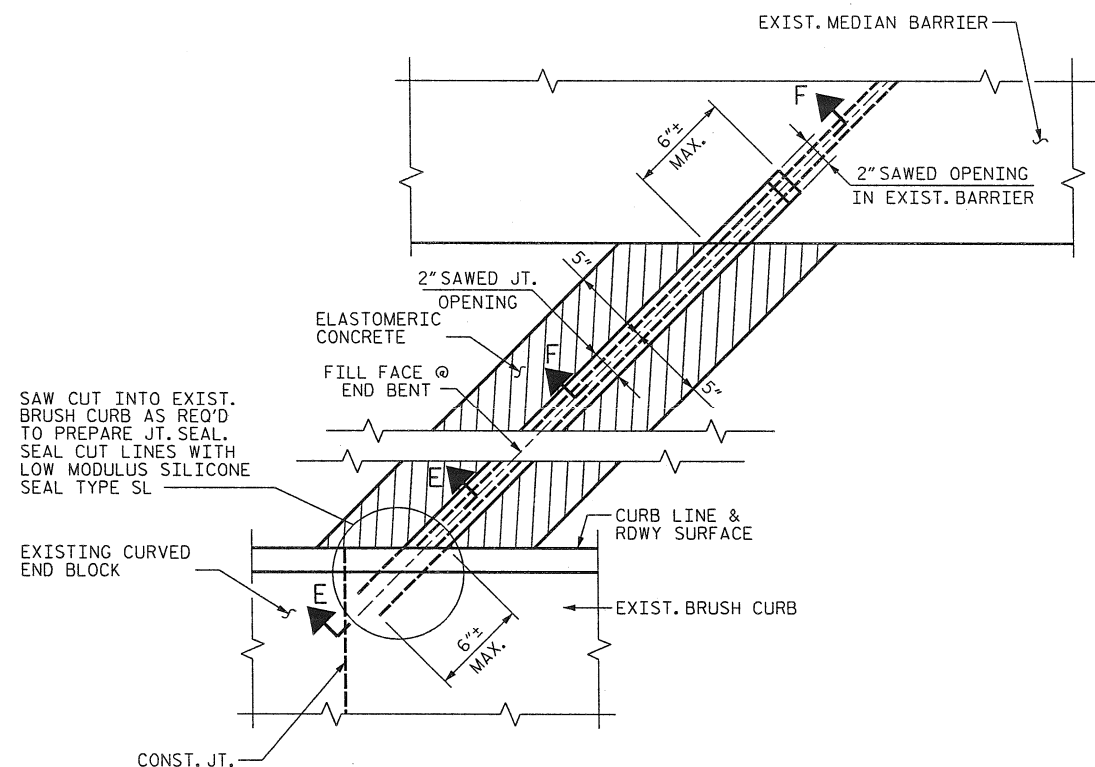


SECTION E-E



* PROVIDE LENGTH OF SEAL MAT'L SUFFICIENT
TO FILL SAWED OPENING IN RAIL

SECTION F-F



PARTIAL PLAN @ END BENT #1

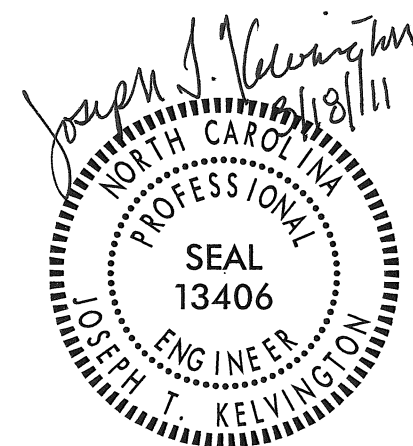
(END BENT #2 SIMILAR)

SEE SHT. NO. S183-1, DETAIL B, FOR CROSS SECTION THRU JOINT AREA



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DRAWN BY : R A WILLIAMS DATE : 3/11
CHECKED BY : J T KELVINGTON DATE : 3/11



PROJECT NO. BP-5300W

HAYWOOD COUNTY

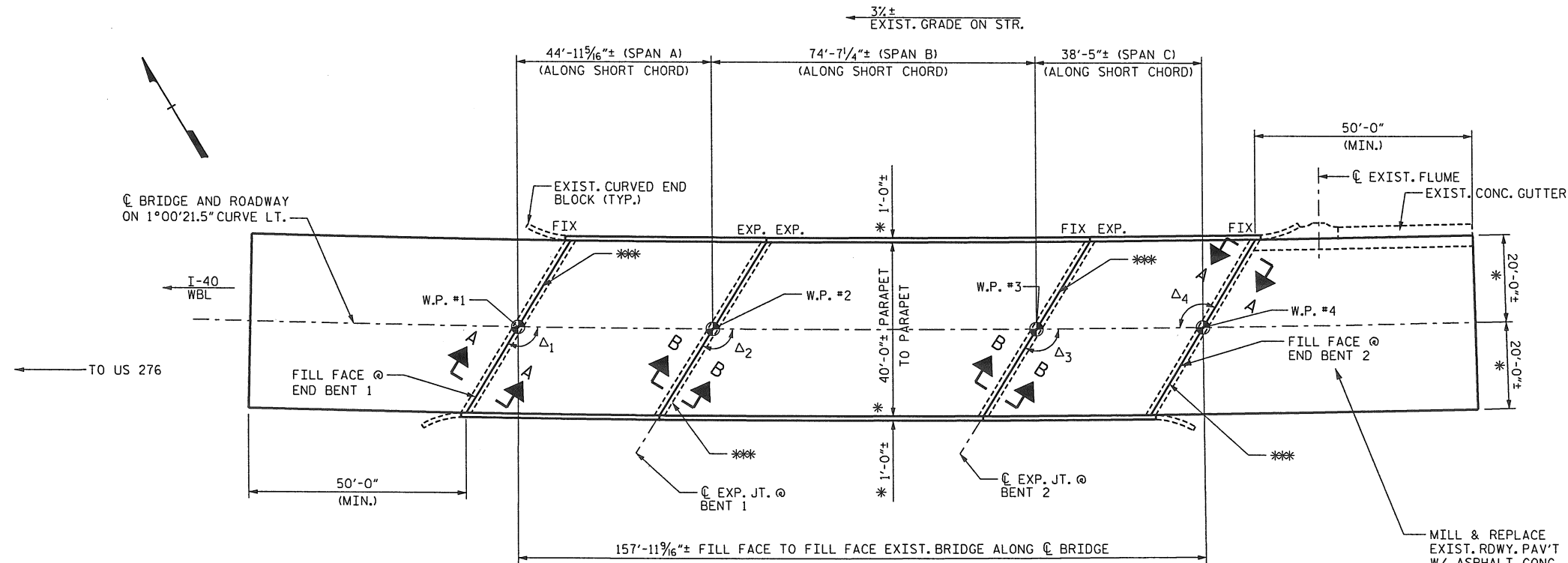
STATION: _____

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

END BENT JOINT SEAL
DETAILS

DECK REHAB. FOR BRIDGE NO. 183

REVISIONS						SHEET NO. S183-8
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 8
2			4			

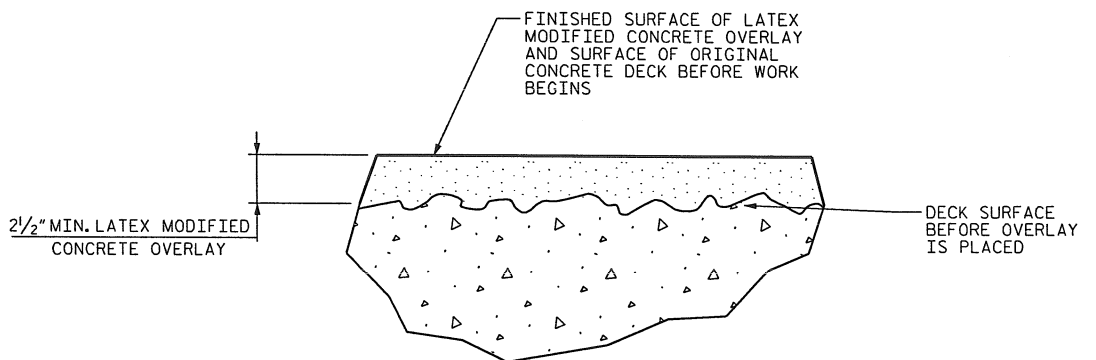


SHORT CHORD TO BENT ANGLES (APPROX.)

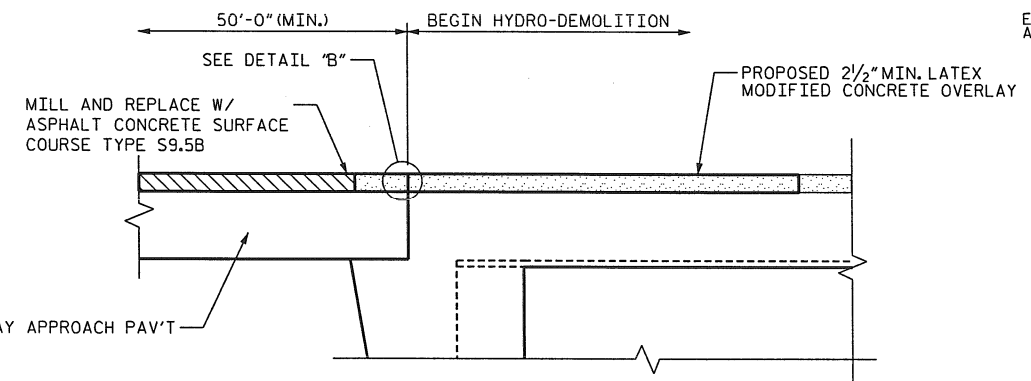
- Δ₁ = 121°03'29"
- Δ₂ = 121°39'34"
- Δ₃ = 122°13'41"
- Δ₄ = 122°13'41"

*** EXIST. EXPANSION JT. SEAL DEVICE TO BE REMOVED

PLAN OF SPANS

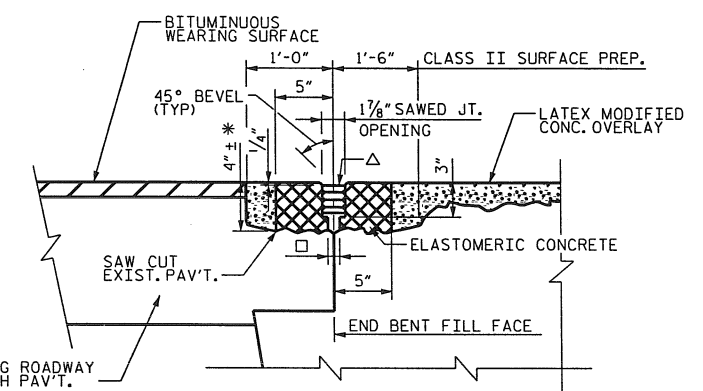


DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY



SECTION A-A

- NOTES:**
- DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECKS WITH LATEX MODIFIED CONCRETE. SEE SPECIAL PROVISIONS.
 - FOR HYDRO-DEMOLITION, SEE SPECIAL PROVISIONS.
 - THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS. SEE SPECIAL PROVISIONS.
 - THE BOUNDARIES OF AREAS IDENTIFIED FOR CLASS III SURFACE PREPARATION ARE APPROXIMATE. THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF THE DECK. SEE DETAIL.
 - LATEX MODIFIED CONCRETE SHALL BE LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH.
 - FOR LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.
 - FOR SECTION B-B, SEE SHEET NO. S208-4.
 - * DENOTES RADIAL DIMENSION.
 - FOR EVAZOTE JOINT SEAL, SEE SPECIAL PROVISIONS.



DETAIL "B"

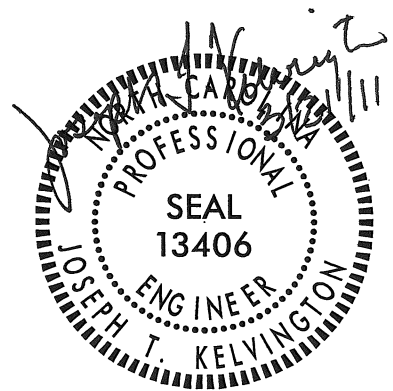
- Δ USE 2.50" X 2.00" UNCOMPRESSED SEAL MATERIAL
- 1" FORMED OPENING CENTERED ABOUT FILL FACE
- * NOMINAL DIMENSION. REMOVE ALL LOOSE, DETERIORATED MATERIAL, INCLUDING EXISTING SEAL DEVICES AND HARDWARE TO SOUND CONCRETE. PRESERVE AND RETAIN ALL EXPOSED REINFORCING STEEL. ADJUST SAW CUT DEPTH AS REQUIRED TO PREVENT CUTS INTO EXISTING REINFORCING STEEL.

TOTAL BILL OF MATERIAL

DECK** SCARIFICATION	CLASS I* SURFACE PREPARATION	CLASS II* SURFACE PREPARATION	CLASS III* SURFACE PREPARATION	HYDRO-DEMOLITION	CLASS AA CONCRETE	LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH	PLACE & FINISH LMC-VERY EARLY STRENGTH	EVAZOTE JOINT SEAL	GROOVING BRIDGE FLOORS	ASPHALT CONC. SURFACE COURSE TYPE S9.5B	UNDER DECK BENT & DIAPH. REPAIR
SQ.YDS.	SQ.YDS.	SQ.YDS.	SQ.YDS.	SQ.YDS.	CU.YDS.	CU.YDS.	SQ.YDS.	LUMP SUM	SQ.FT.	TON	CF
1,239	614	65	17	685	1	51	685	LUMP SUM	5584	59	152

* QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. IF ANY CLASS III LOCATIONS ARE ENCOUNTERED PRIOR TO OR DURING HYDRO-DEMOLITION, SEE "TYP. 'BLOW THRU' CONTAINMENT AND FORMWORK" DETAIL.

** INCLUDES MILLING OF ROADWAY PAVEMENT.



PROJECT NO. BP-5300W
HAYWOOD COUNTY
 STATION: _____

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN OF SPANS
 FOR DECK REPAIR

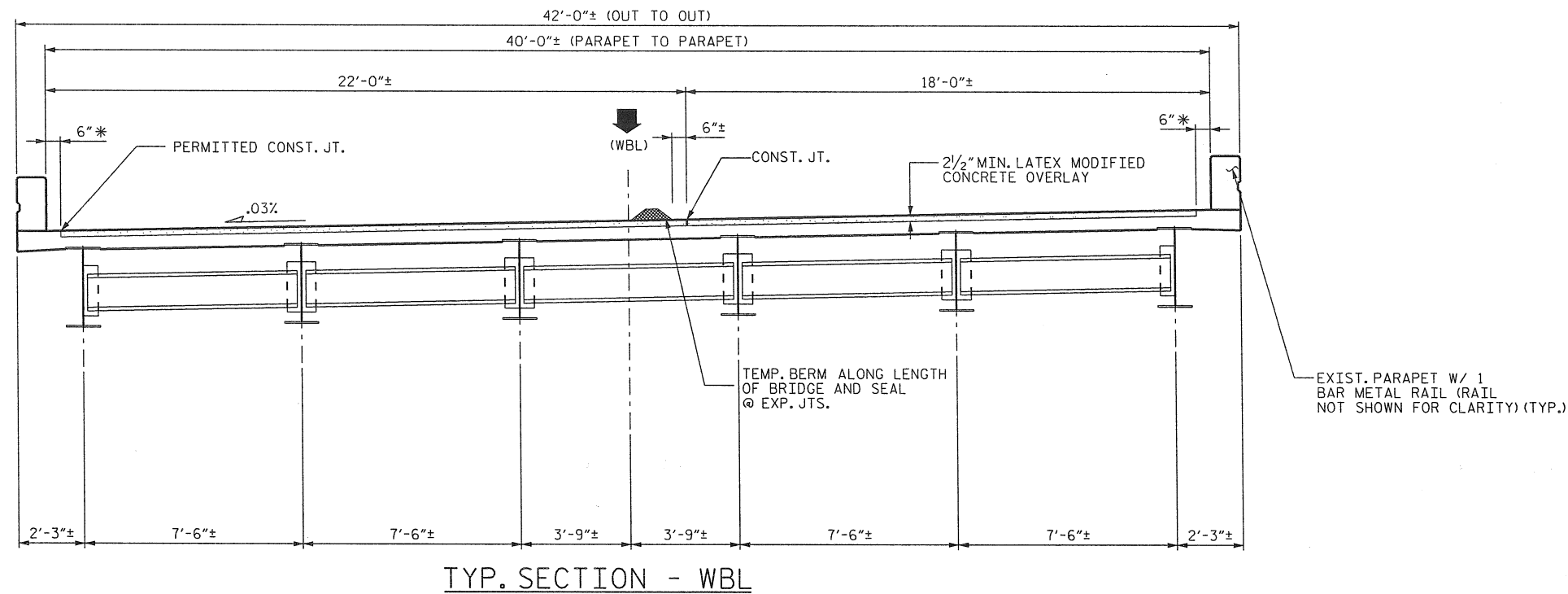
DECK REHAB. FOR BRIDGE NO. 208

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S208-1	
1			3			TOTAL SHEETS	
2			4			10	

5: Structures\Bridges Group 2011\BP5300W\Bridges 208\Drawing\BP-5300W208_DeckPlan.dgn 3/21/2011 9:46:26 AM \$USER\$

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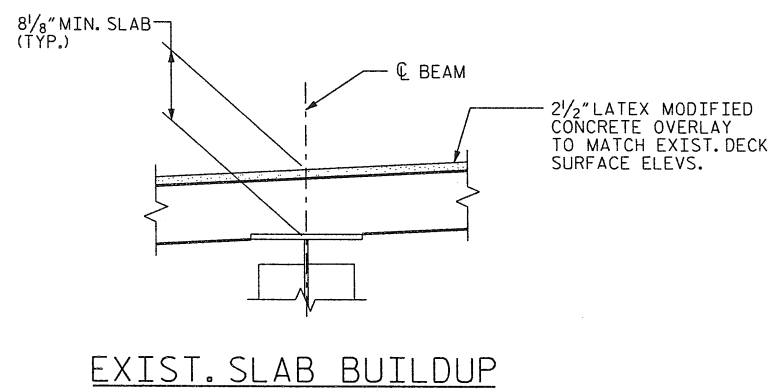
NOTES:

WATER & CONCRETE SLURRY FROM HYDRO-DEMOLITION SHALL NOT BE ALLOWED TO DRAIN ACROSS TRAVEL LANES. CONTRACTOR SHALL PROVIDE A METHOD TO CONTROL THE WATER.

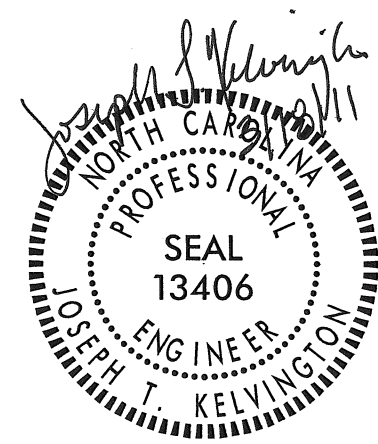
ALL HORIZONTAL DIMENSIONS SHOWN ARE RADIAL.

FOR TRAFFIC CONTROL AND PHASING DETAILS, SEE SHTS. TCP1-5.

*PERMITTED WIDTH OF EXISTING CONCRETE DECK SURFACE THAT MAY BE LEFT INTACT FOR SCREED SUPPORT. OTHERWISE REPAIR DECK SURFACE FROM PARAPET TO PARAPET.



PROJECT NO. BP-5300W
HAYWOOD COUNTY
 STATION: _____



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
TYPICAL SECTION					
DECK REHAB. FOR BRIDGE NO. 208					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
SHEET NO. S208-2					TOTAL SHEETS 10

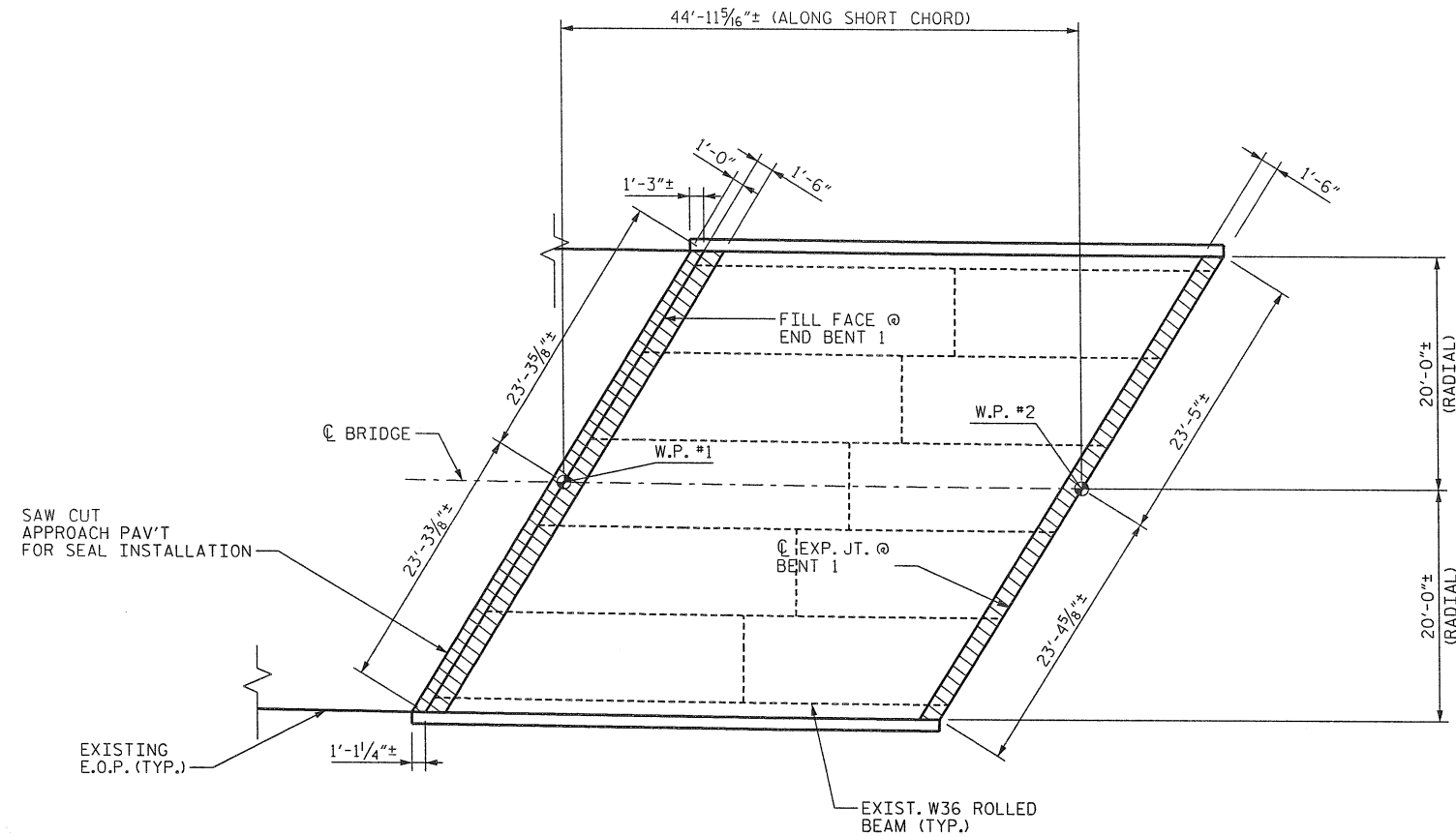


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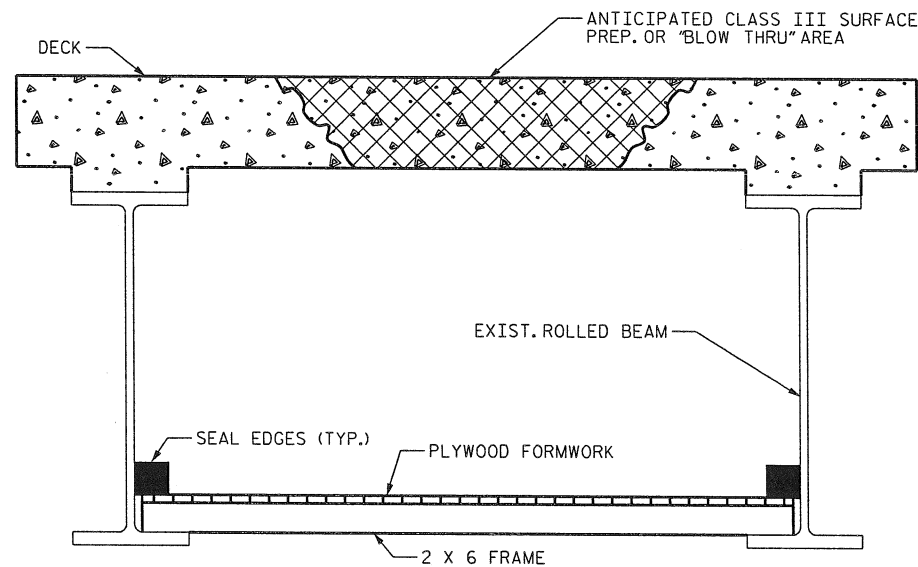
DRAWN BY : R A WILLIAMS DATE : 3/11
 CHECKED BY : J T KELVINGTON DATE : 3/11

3/18/2011 11:46:07 AM \$USER\$

ures: Bridge Group 2011BP5300W\Bridg 208-Dr-awing\BP-5300W208_Repair\PLAN.dgn 3/18/2011 11:46:29 AM \$USERS\$



PLAN OF SPAN A - DECK REPAIRS
PARAPET AND METAL RAILING NOT SHOWN FOR CLARITY



TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

A METHOD TO CAPTURE WATER AND DEBRIS FROM BLOW THRU DURING HYDRO-DEMOLITION SHALL BE INSTALL IN AREAS INDICATED AS CLASS III SURFACE PREPARATION.

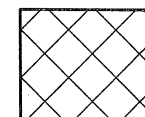
SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE PER SQ. YARD OF HYDRO-DEMOLITION.

CONTRACTOR, AT HIS OPTION, MAY CHOOSE TO MONITOR HYDRO-DEMOLITION WORK AND CONTROL TRAFFIC UNDER THE BRIDGE IN LIEU OF BLOW THRU CONTAINMENT. SEE TRAFFIC CONTROL PLANS.



CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

L' X W' = LENGTH OF AREA ALONG CL BRIDGE X
WIDTH OF AREA NORMAL TO CL BRIDGE ±

NOTES:

CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SQ. YD. OF CLASS III SURFACE PREPARATION.

SEE HYDRO DEMOLITION SPECIAL PROVISIONS.

PROJECT NO. BP-5300W
HAYWOOD COUNTY
STATION: _____



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK REPAIR DETAILS
SPAN A

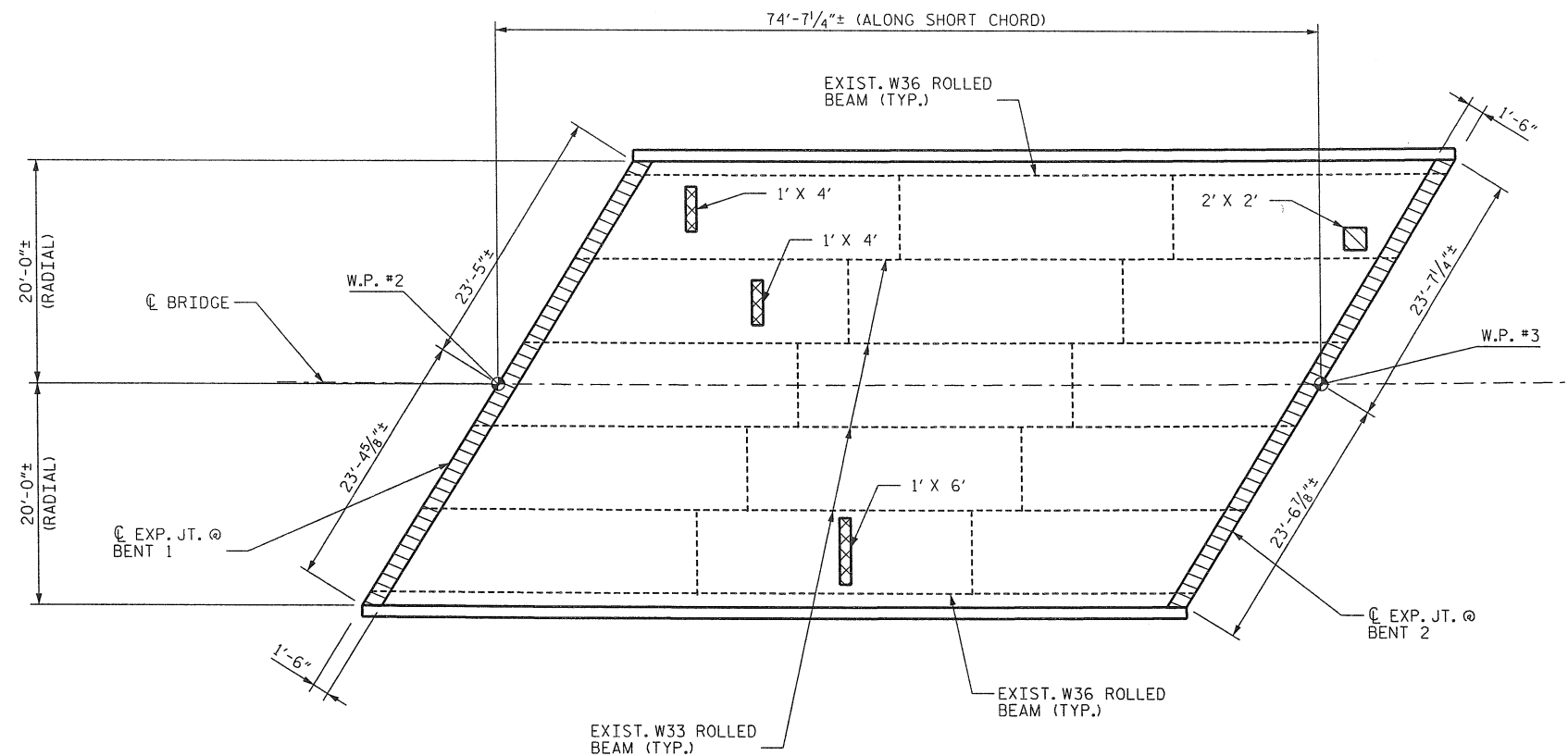
DECK REHAB. FOR BRIDGE NO. 208

REVISIONS						SHEET NO. S208-3
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 10
2			4			

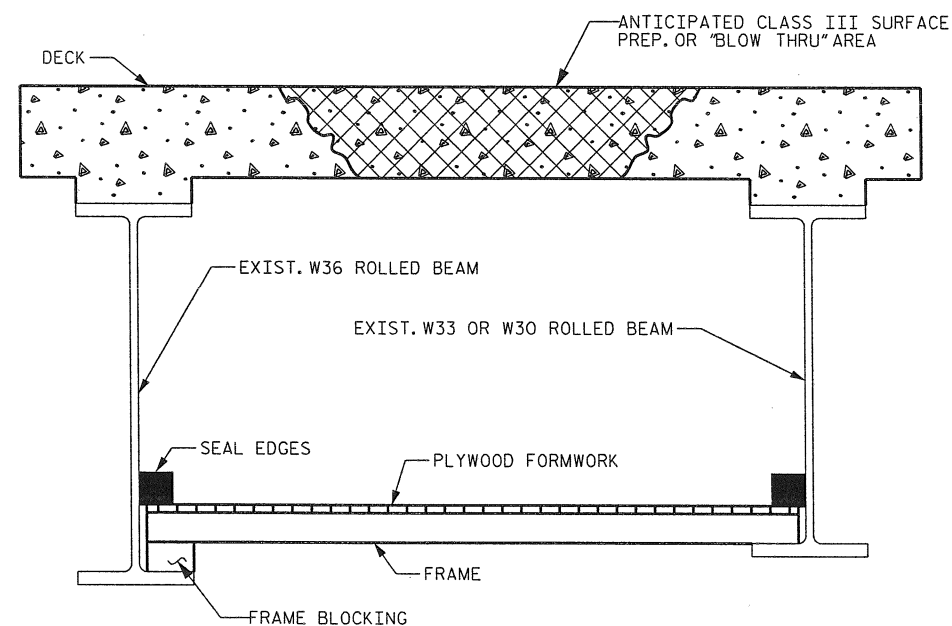


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PLAN OF SPAN B - DECK REPAIRS
PARAPET AND METAL RAILING NOT SHOWN FOR CLARITY



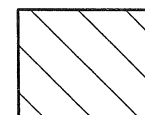
TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

A METHOD TO CAPTURE WATER AND DEBRIS FROM BLOW THRU DURING HYDRO-DEMOLITION SHALL BE INSTALL IN AREAS INDICATED AS CLASS III SURFACE PREPARATION.

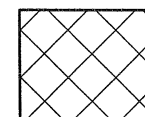
SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE PER SQ. YARD OF HYDRO-DEMOLITION.

CONTRACTOR, AT HIS OPTION, MAY CHOOSE TO MONITOR HYDRO-DEMOLITION WORK AND CONTROL TRAFFIC UNDER THE BRIDGE IN LIEU OF BLOW THRU CONTAINMENT. SEE TRAFFIC CONTROL PLANS.



CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

L' X W' = LENGTH OF AREA ALONG C BRIDGE X
WIDTH OF AREA NORMAL TO C BRIDGE

NOTES:

CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SQ. YD. OF CLASS III SURFACE PREPARATION.

SEE HYDRO DEMOLITION SPECIAL PROVISIONS.

PROJECT NO. BP-5300W

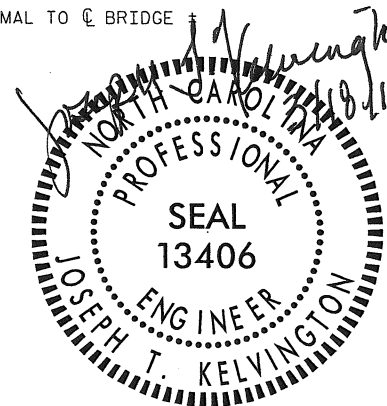
HAYWOOD COUNTY

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CHECKED BY : J T KELVINGTON DATE : 3/11

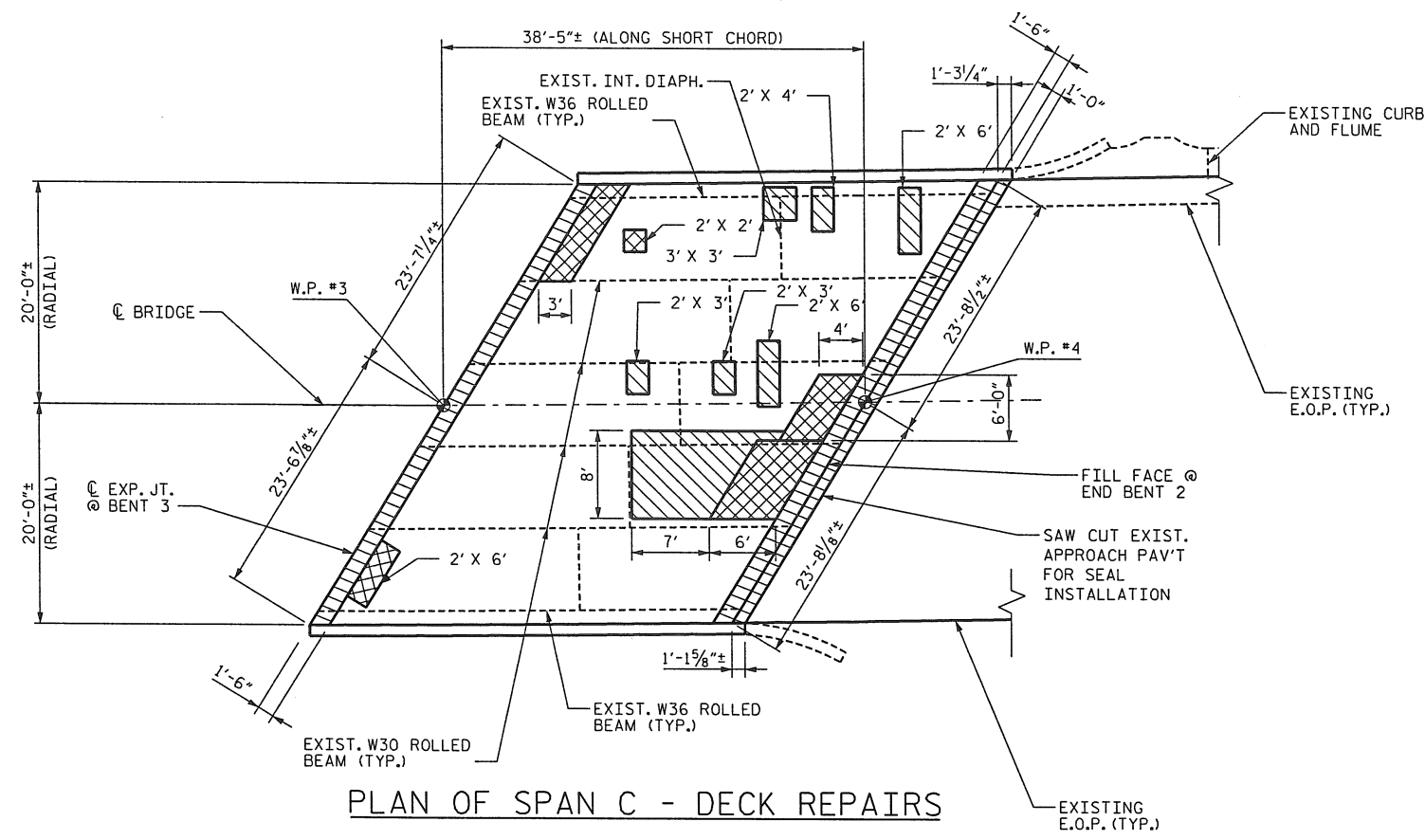


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK REPAIR DETAILS
SPAN B

DECK REHAB. FOR BRIDGE NO. 208

REVISIONS						SHEET NO. S208-4
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 10
2			4			



NOTES:

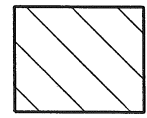
CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

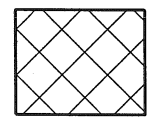
COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SQ. YD. OF CLASS III SURFACE PREPARATION.

SEE HYDRO DEMOLITION SPECIAL PROVISIONS.

FOR "BLOW THROUGH" CONTAINMENT DETAIL, SEE SHT. S208-4.



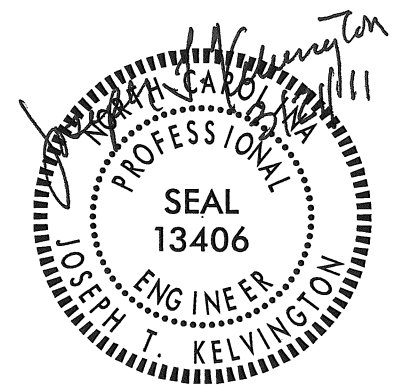
CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

L' X W' = LENGTH OF AREA ALONG C BRIDGE X
WIDTH OF AREA NORMAL TO C BRIDGE ±

PROJECT NO. BP-5300W
HAYWOOD COUNTY
STATION: _____



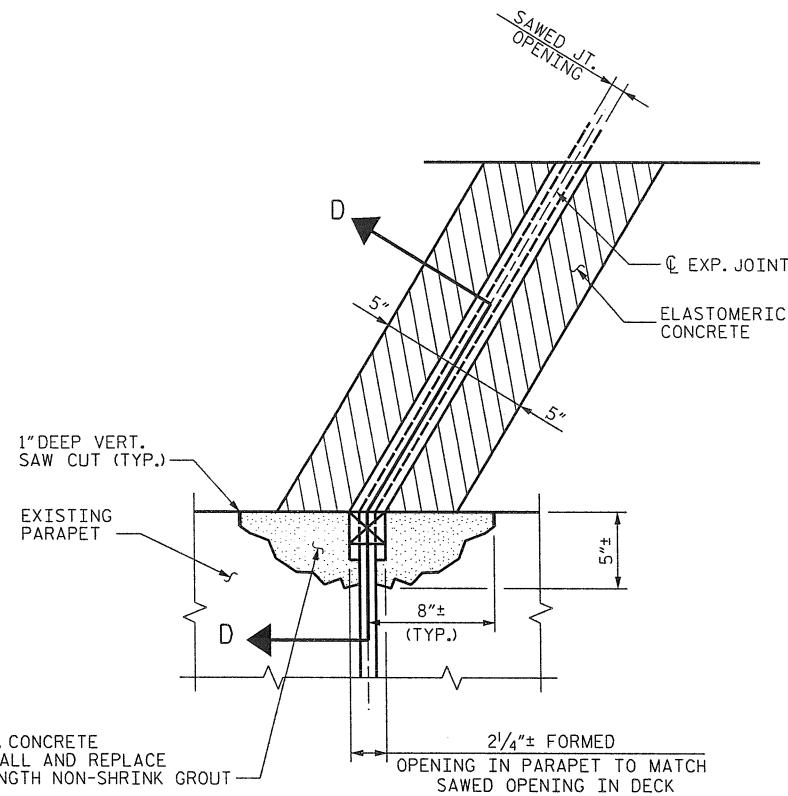
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
DECK REPAIR DETAILS SPAN C					
DECK REHAB. FOR BRIDGE NO. 208					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
SHEET NO. S208-5					TOTAL SHEETS 10



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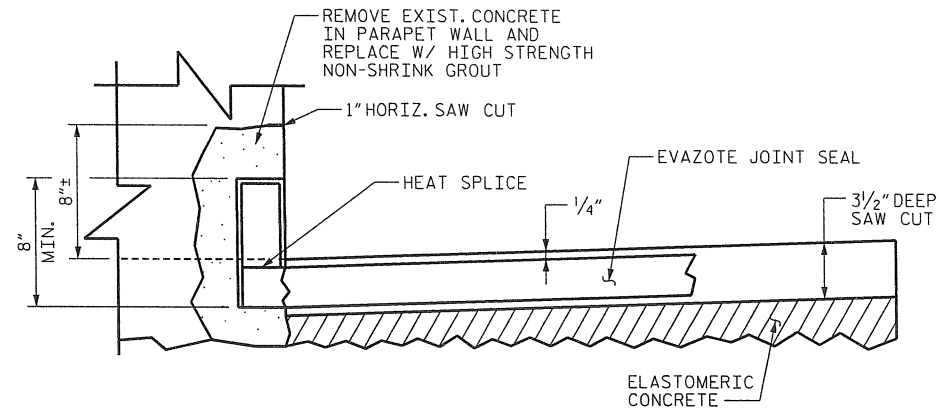
DRAWN BY : R A WILLIAMS DATE : 3/11
CHECKED BY : J T KELVINGTON DATE : 3/11

3/21/2011 9:26:52 AM \$USER\$ 208\BP5300W\Bridge 208\Drawing\BP-5300W208_Repair\PLAN3.dgn



PARTIAL PLAN @ JOINT

PARAPET @ O.S. SHLDR. SHOWN. PARAPET @ MEDIAN SHLDR. SIMILAR



SECTION D-D

CONTRACTOR SHALL EXERCISE CARE TO AVOID CUTTING OR DAMAGING EXISTING REINF. STEEL.

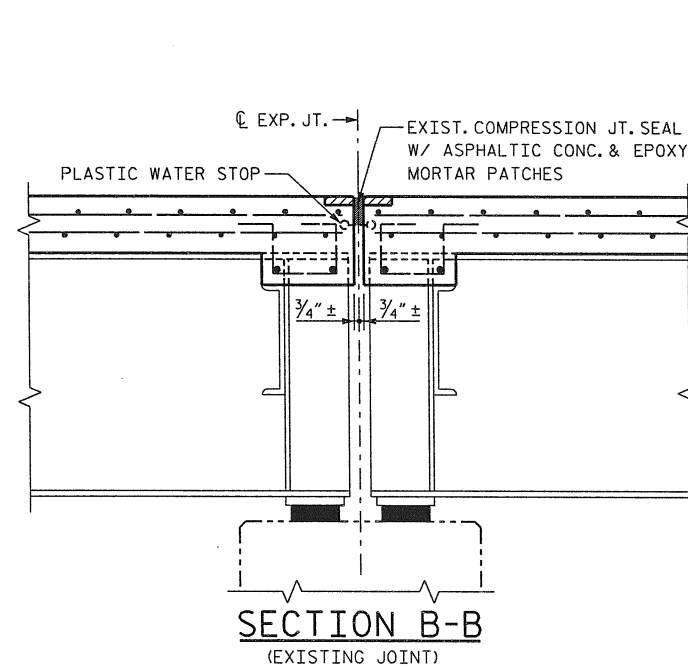
FOR HIGH STRENGTH GROUT, SEE SPECIAL PROVISIONS.

HIGHT STRENGTH GROUT SHALL BE APPROVED BY THE ENGINEER.

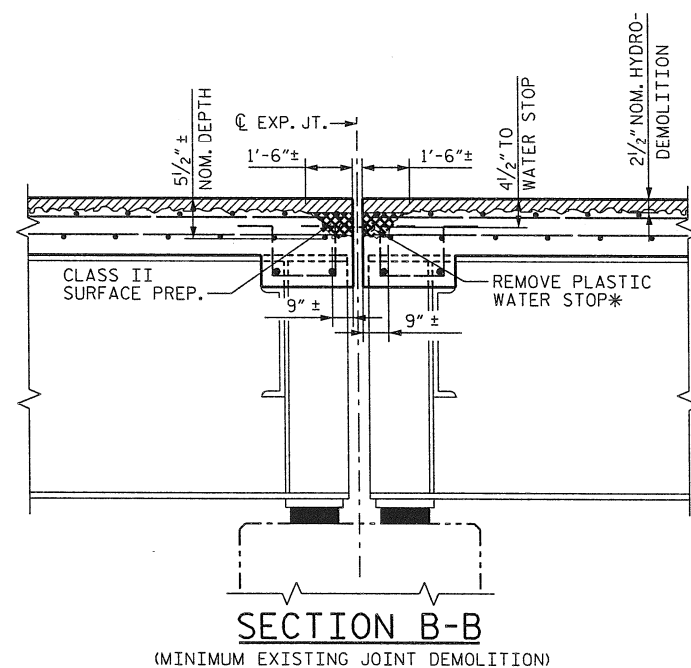
ELASTOMERIC CONCRETE	
LOCATION	QTY
END BENT 1	13.1 C.F.
BENT 1	15.7 C.F.
BENT 2	15.8 C.F.
END BENT 2	13.3 C.F.

TOTAL ELASTOMERIC CONC. = 57.9 C.F.

TOTAL ELASTOMERIC CONC. = 2.1 C.Y.



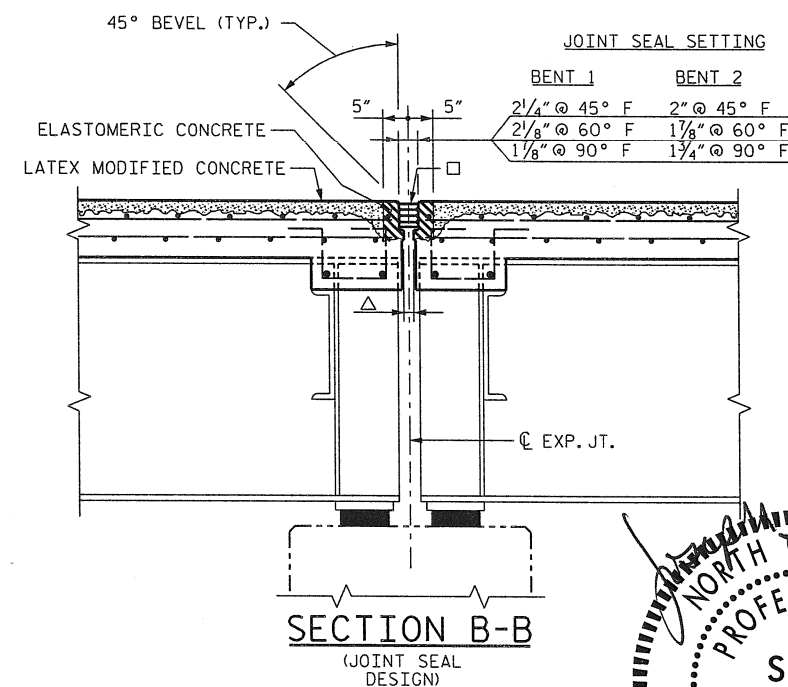
SECTION B-B
(EXISTING JOINT)



SECTION B-B
(MINIMUM EXISTING JOINT DEMOLITION)

NOTE: RETAIN ALL EXIST. REINF. STEEL. CLEAN AND REPAIR AS REQ'D

* REMOVE EXIST. COMP. JT. SEAL MAT'L. IN ADDITION TO ALL EPOXY MORTAR AND ASPHALT CONCRETE PATCH MATERIALS



SECTION B-B
(JOINT SEAL DESIGN)

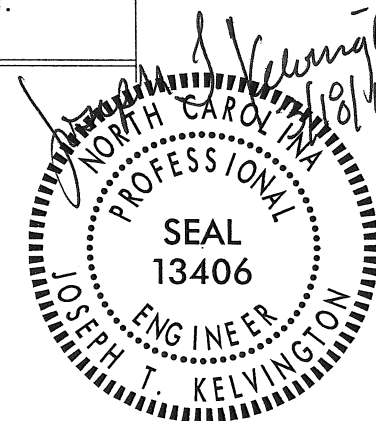
□ USE 2.8125" X 2.50" UNCOMPRESSED EVAZOTE JT. SEAL MATERIAL
△ 1" FORMED OPENING

PROJECT NO. BP-5300W
HAYWOOD COUNTY
STATION: _____



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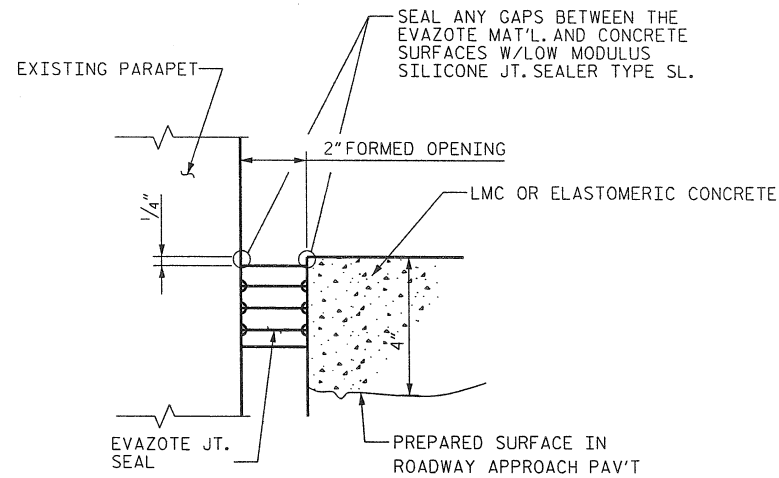


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

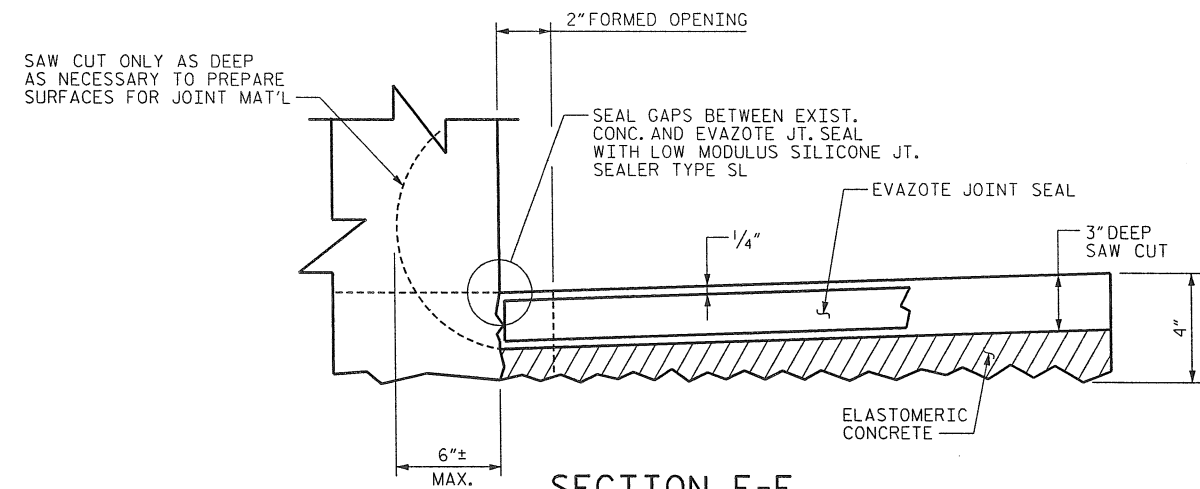
EXPANSION JOINT DETAILS

DECK REHAB. FOR BRIDGE NO. 208

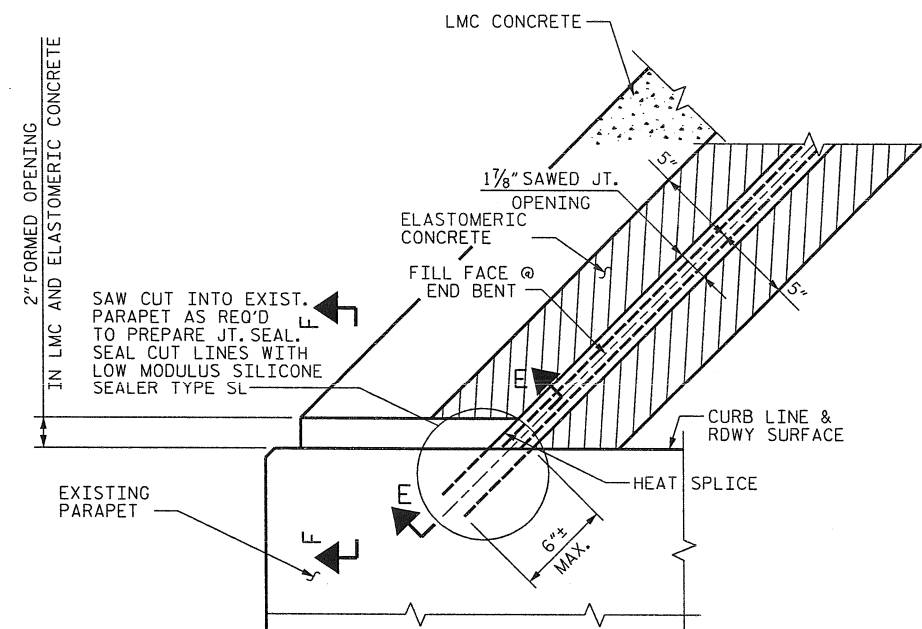
REVISIONS						SHEET NO. S208-6
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 10
2			4			



SECTION F-F



SECTION E-E



PARTIAL PLAN @ END BENT #1

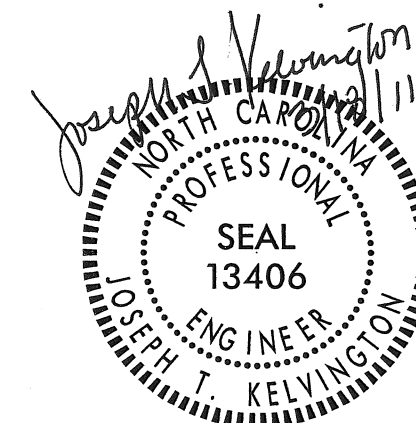
(END BENT #2 SIMILAR)

SEE SHT. NO. S208-1, DETAIL B, FOR CROSS SECTION THRU JOINT AREA



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PROJECT NO. BP-5300W
HAYWOOD COUNTY
STATION: _____

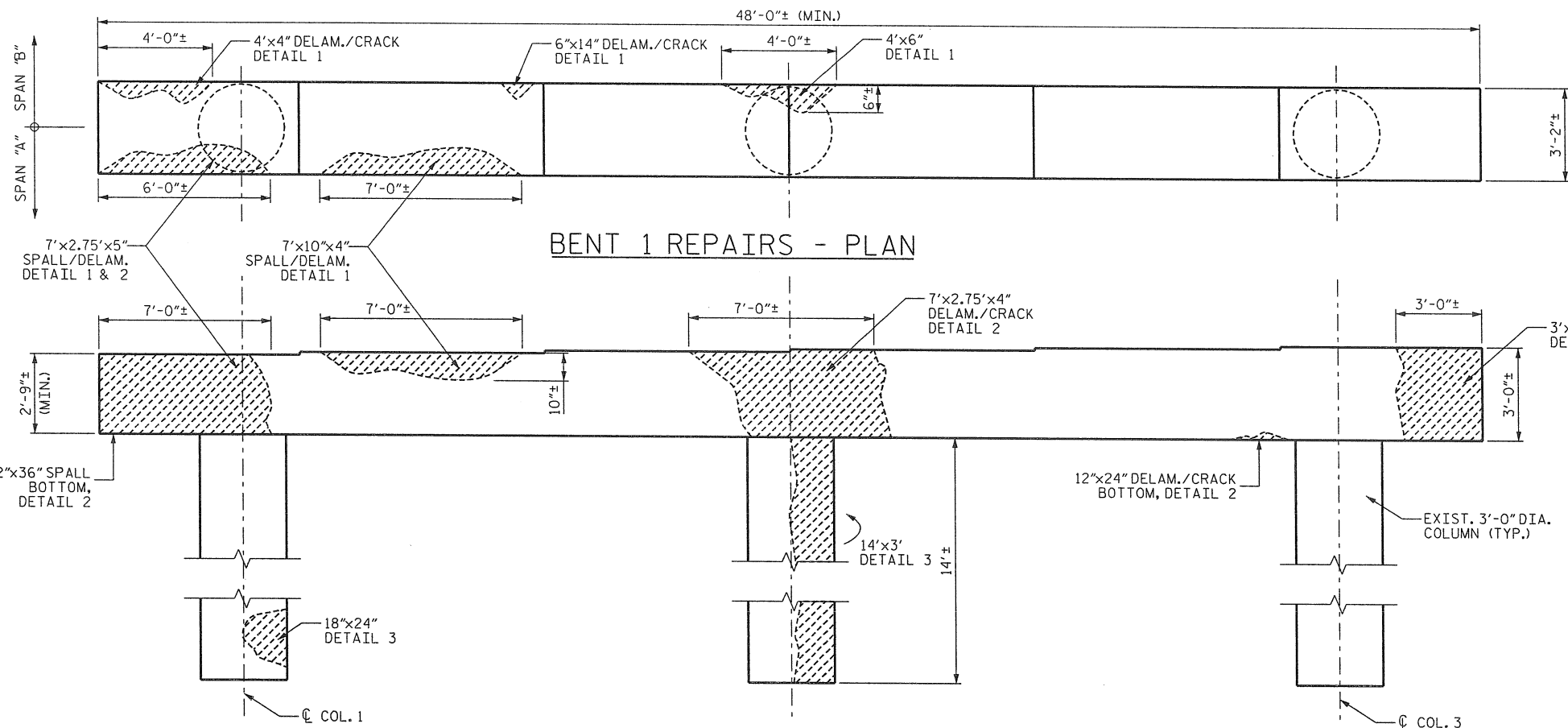
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

END BENT JOINT SEAL
DETAILS

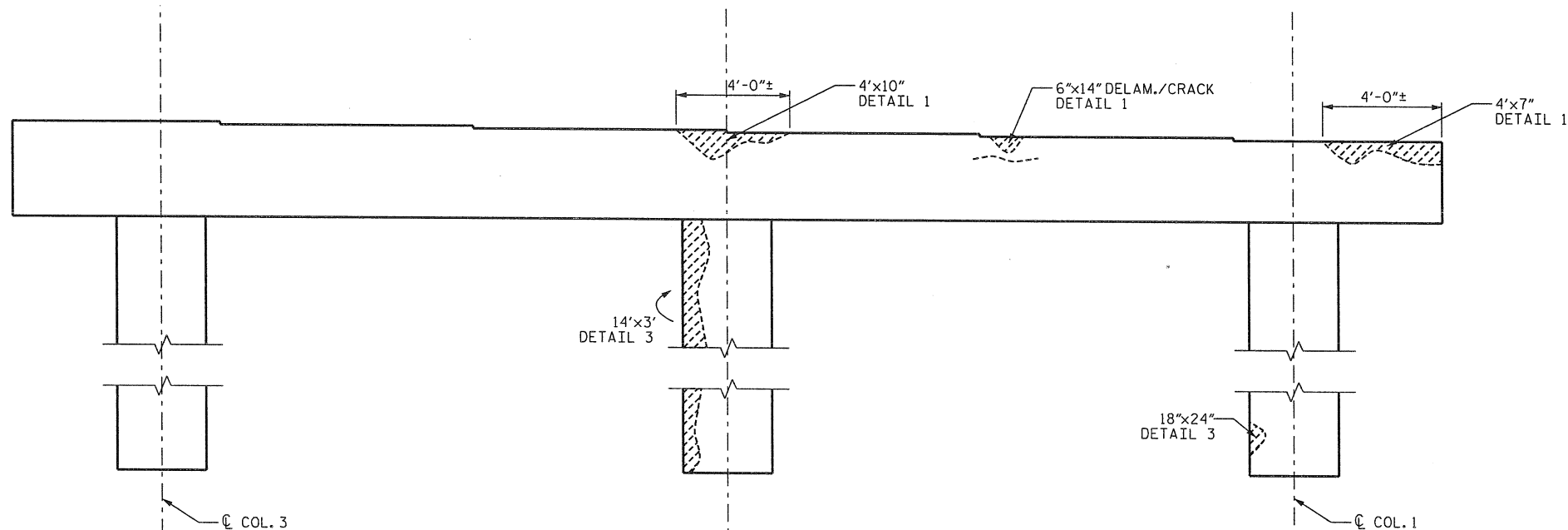
DECK REHAB. FOR BRIDGE NO. 208

REVISIONS						SHEET NO. S208-7
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 10
2			4			

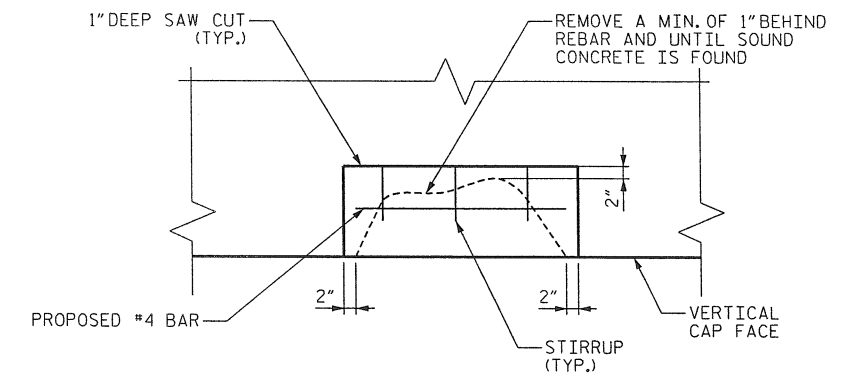
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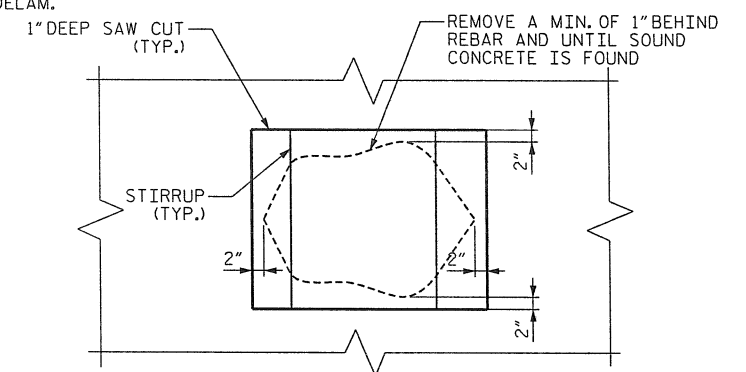
BENT 1 REPAIRS - ELEVATION (SPAN A SIDE)



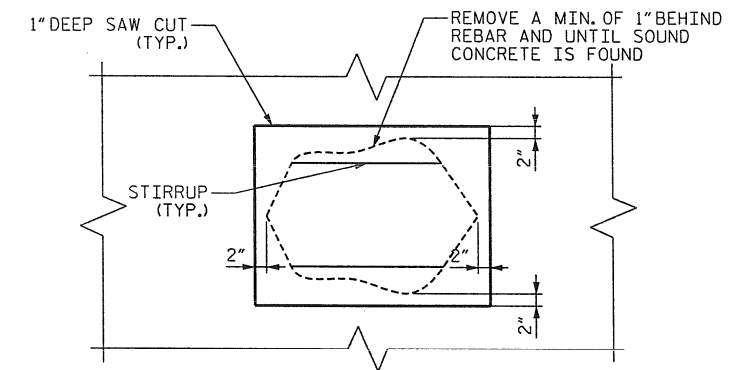
BENT 1 REPAIRS - ELEVATION (SPAN B SIDE)



TYPICAL REPAIR DETAIL 1

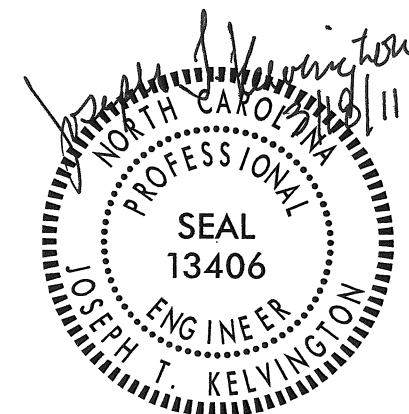


TYPICAL REPAIR DETAIL 2



TYPICAL REPAIR DETAIL 3

PROJECT NO. BP-5300W
HAYWOOD COUNTY
STATION: 1215+88.69 - "L"



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BENT 1 RIGHT LANE

DECK REHAB. FOR BRIDGE NO. 208

REVISIONS						SHEET NO. S208-8
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 10
2			4			



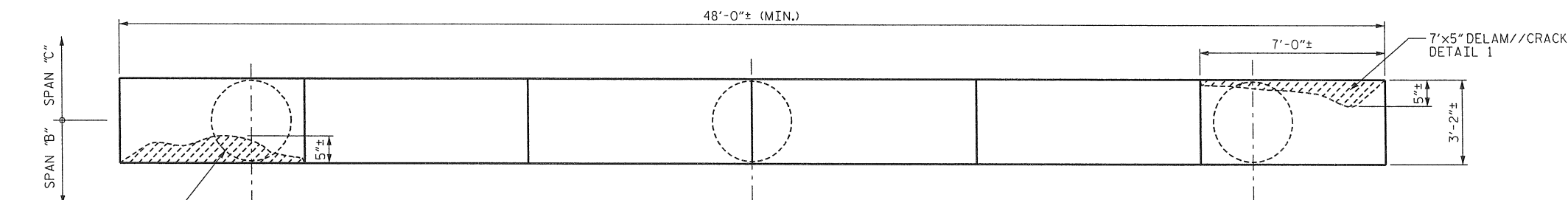
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NOTES:

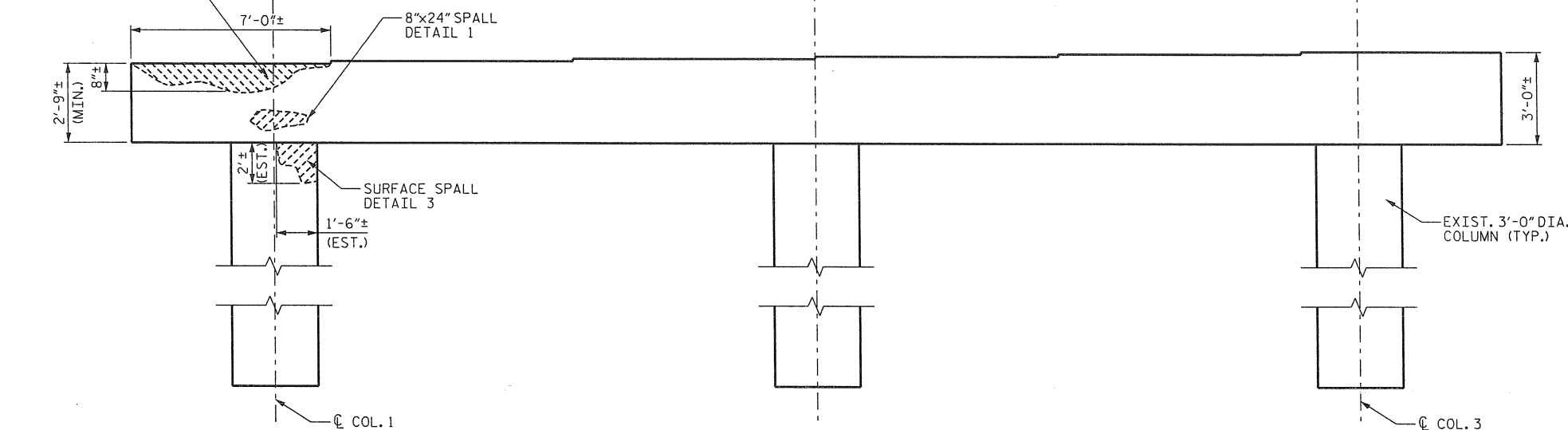
1. SPALL, DELAMINATED AND CRACK AREA DIMENSIONS SHOWN ARE APPROXIMATE.
2. ALL REINFORCEMENT TO BE PROVIDED IS INCIDENTAL TO SUBSTR. REPAIR AND SHALL BE GRADE 60.
3. REPAIR MATERIAL SHALL BE SHOTCRETE OR POLYMER MODIFIED CONCRETE.

SHOTCRETE OR POLYMER MODIFIED CONCRETE:
EST. CONCRETE VOL. = 108 CF

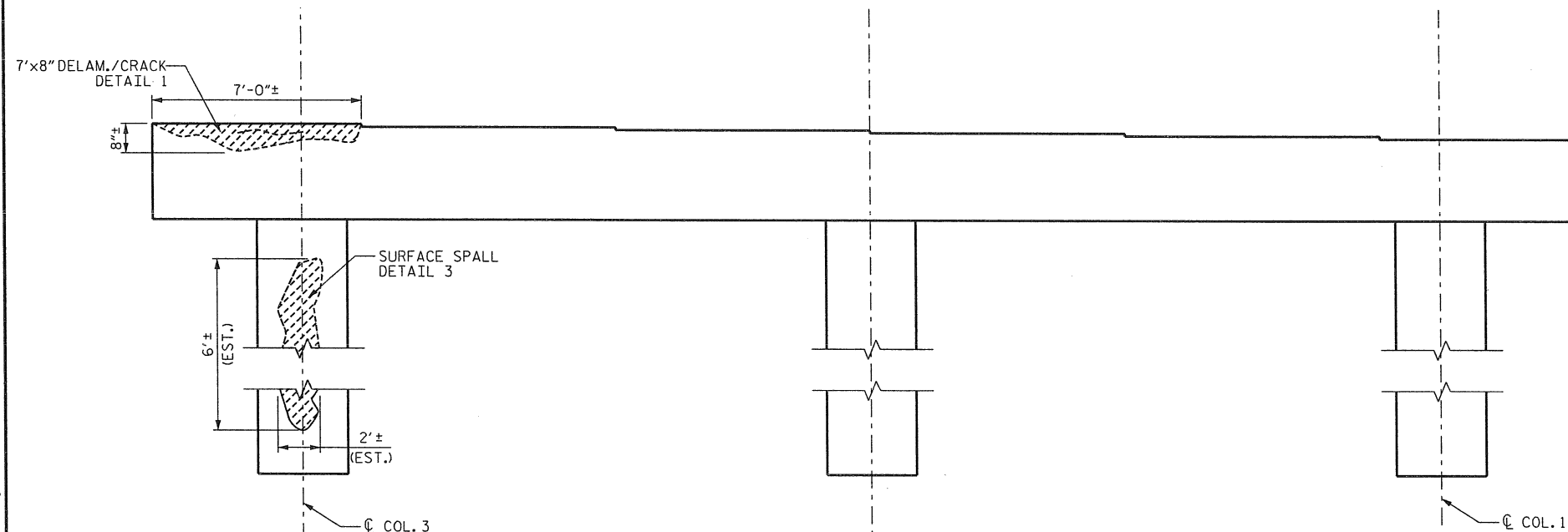
DRAWN BY: R A WILLIAMS DATE: 3/11
CHECKED BY: J T KELVINGTON DATE: 3/11



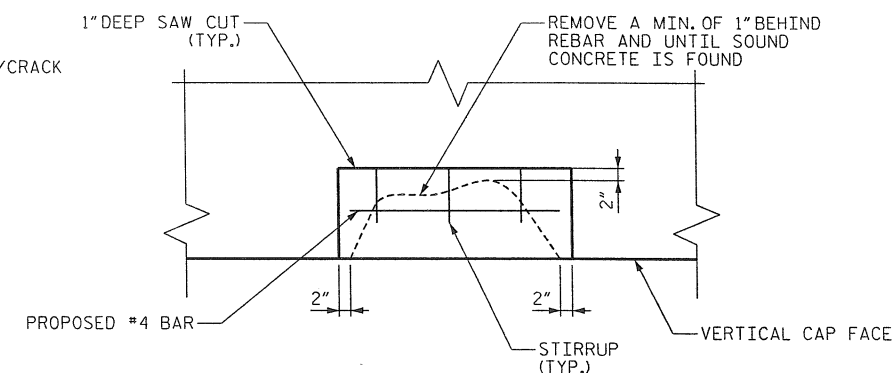
BENT 2 REPAIRS - PLAN



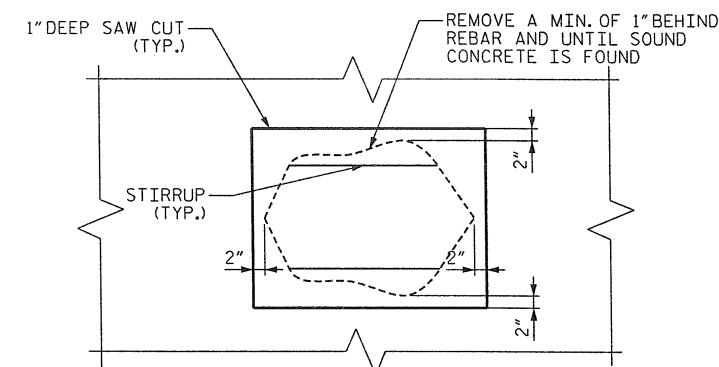
BENT 2 REPAIRS - ELEVATION (SPAN B SIDE)



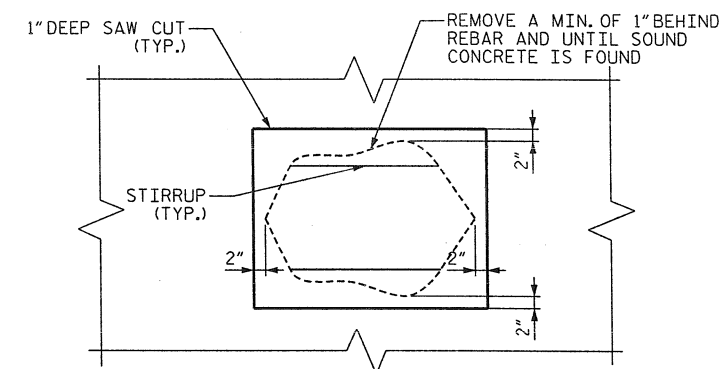
BENT 2 REPAIRS - ELEVATION (SPAN C SIDE)



TYPICAL REPAIR DETAIL 1

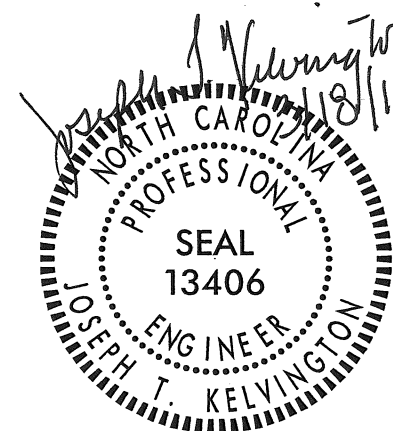


TYPICAL REPAIR DETAIL 2



TYPICAL REPAIR DETAIL 3

PROJECT NO. BP-5300W
HAYWOOD COUNTY
STATION: 1215+88.69 - "L"



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BENT 2 RIGHT LANE

DECK REHAB. FOR BRIDGE NO. 208

REVISIONS						SHEET NO. S208-9
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 10
2			4			

NOTES:

1. SPALL, DELAMINATED AND CRACK AREA DIMENSIONS SHOWN ARE APPROXIMATE.
2. ALL REINFORCEMENT TO BE PROVIDED IS INCIDENTAL TO SUBSTR. REPAIR AND SHALL BE GRADE 60.
3. REPAIR MATERIAL SHALL BE SHOTCRETE OR POLYMER MODIFIED CONCRETE.

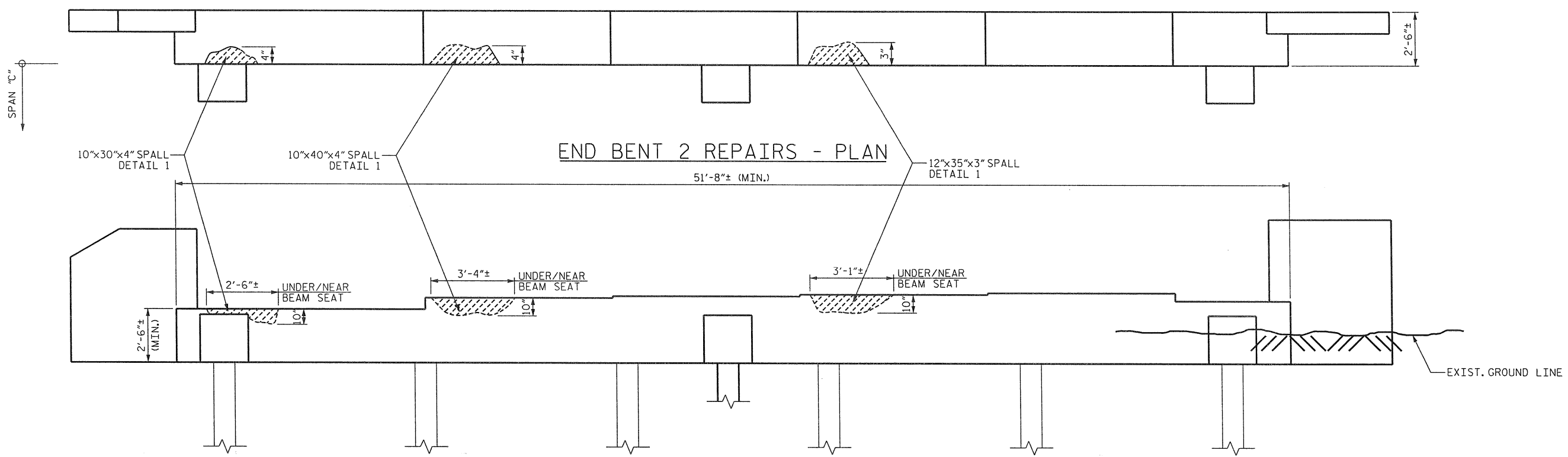
SHOTCRETE OR POLYMER MODIFIED CONCRETE:
EST. CONCRETE VOL. = 32 CF



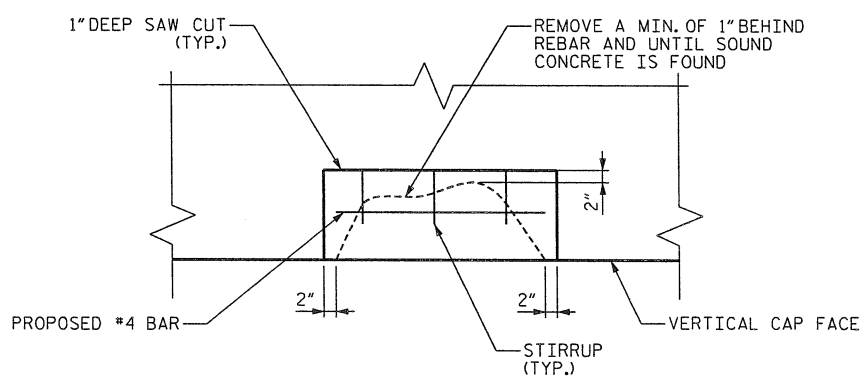
Stantec Consulting Services Inc.
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Fax. (919) 851-7024
www.stantec.com
License No. F-0672

DRAWN BY: R A WILLIAMS DATE: 3/11
CHECKED BY: J T KELVINGTON DATE: 3/11

Bridge Group 2011\BP5300W\Bridg 208\Drawings\BP-5300W208_Repair-END BENT2.dgn 3/18/2011 11:51:02 AM \$USER\$



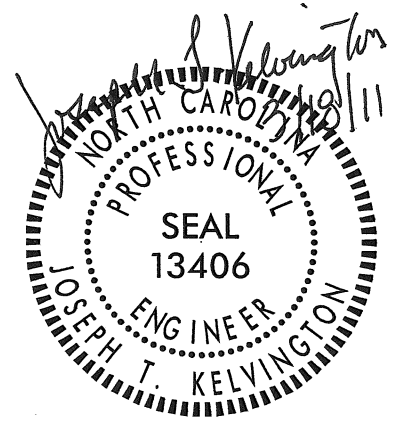
END BENT 2 REPAIRS - ELEVATION



TYPICAL REPAIR DETAIL 1

- NOTES:
1. SPALL AND DELAMINATED AREA DIMENSIONS SHOWN ARE APPROXIMATE.
 2. ALL REINFORCEMENT TO BE PROVIDED IS INCIDENTAL TO SUBSTR. REPAIR AND SHALL BE GRADE 60.
 3. REPAIR MATERIAL SHALL BE SHOTCRETE OR POLYMER MODIFIED CONCRETE.
- SHOTCRETE OR POLYMER MODIFIED CONCRETE:
EST. CONCRETE VOL. = 12 CF

PROJECT NO. BP-5300W
HAYWOOD COUNTY
STATION: 1215+88.69 - "L"



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DRAWN BY : R A WILLIAMS DATE : 3/11
CHECKED BY : J T KELVINGTON DATE : 3/11

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
END BENT 2 RIGHT LANE					
DECK REHAB. FOR BRIDGE NO. 208					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
SHEET NO. S208-10					TOTAL SHEETS 10

3/18/2011
U:\Traffic\TrafficControl\TCP\BP-5300W Haywood 183 159 208\Plan Sheets\BP-5300W_tcp.sho1.dgn
gkarageorge

PROJECT: BP-5300W

WBS 45438.1.1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
TRAFFIC CONTROL

HAYWOOD COUNTY

TYPE OF WORK: TRAFFIC CONTROL FOR BRIDGE REHABILITATION

LOCATION: I-40 BRIDGE NO.S 183 AND 208.

STATE PROJECT REFERENCE NO.

BP-5300W

SHEET NO.

TCP-1

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARD DRAWINGS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" -
PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C.,
DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE
CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW PANELS
1130.01	DRUMS
1135.01	CONES
1150.01	FLAGGING DEVICES
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS

INDEX OF SHEETS

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, & INDEX OF SHEETS
TCP-2	GENERAL NOTES
TCP-3	TRAFFIC CONTROL PHASING & BRIDGE TYPICAL SECTIONS
TCP-4	RIGHT LANE CLOSURES WITH LANE SHIFTS
TCP-5	RIGHT LANE CLOSURES WITH LANE SHIFTS THRU EXIT RAMP AREAS

LEGEND

GENERAL

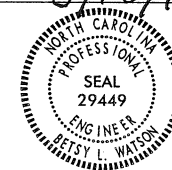
- ← DIRECTION OF TRAFFIC FLOW
→ NORTH ARROW
■ WORK AREA

TRAFFIC CONTROL DEVICES

- ▨ TYPE III BARRICADE
▲ CONE
● DRUM ◎ SKINNY DRUM
⇒ FLASHING ARROW PANEL (TYPE C)
└ STATIONARY SIGN
└ PORTABLE SIGN
└ STATIONARY OR PORTABLE SIGN
▬ PORTABLE CONCRETE BARRIER (PCB)
~ TEMPORARY CRASH CUSHION
◀ CHANGEABLE MESSAGE SIGN (CMS)
▨ TRUCK MOUNTED
IMPACT ATTENUATOR (TMIA)
▨ LAW ENFORCEMENT (LAW)
■ FLAGGER

APPROVED: *Betsy L. Watson*
DATE: 3/18/11

PLAN PREPARED BY:



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27608
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www.stantec.com

BETSY L. WATSON, PE

TRAFFIC CONTROL ENGINEER

GEORGE KARAGEORGE

TRAFFIC CONTROL DESIGNER

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

LANE CLOSURE DAY AND TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES ON ANY ROADWAY AS FOLLOWS:

BEFORE MAY 26, 2011:
6:00 A.M.-7:00 P.M. MONDAY-SUNDAY (EVERY DAY).

BEGINNING ON MAY 26, 2011 AND FOR THE REMAINING DURATION OF THE CONTRACT TIME:

6:00 A.M.- 7:00 P.M. MONDAY THRU THURSDAY AND
6:00 A.M. FRIDAY THRU 7:00 P.M. SUNDAY (NO WEEKEND CLOSURES)

B) DO NOT CLOSE OR NARROW TRAVEL LANES ON ANY ROADWAY DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

- 1) FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- 2) FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31st TO 7:00 P.M. JANUARY 2nd. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
- 3) FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
- 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY; THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- 6) FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
- 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- C) LANE CLOSURES ARE REQUIRED WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN ANY PORTION OF A TRAVEL LANE. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- D) INSTALL ALL LANE CLOSURES ACCORDING TO THE TRAFFIC CONTROL PLAN, ROADWAY STANDARD DRAWINGS (1101.02), OR AS DIRECTED BY THE ENGINEER.
- E) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- F) INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC. REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
- G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- I) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- J) UNLESS OTHERWISE SHOWN IN THE PLANS, PLACE ARROW PANELS ON THE ROADWAY SHOULDER. IF SHOULDERS DO NOT EXIST, PLACE ARROW PANELS WITHIN THE MERGE TAPER BEHIND THE CHANNELIZING DEVICES OF THE LANE CLOSURE. IF NEEDED, EXTEND LANE CLOSURES TO PROVIDE STOPPING SIGHT DISTANCE TO THE ARROW PANEL (REFER TO ROADWAY STANDARD DRAWING 1101.11 SHEET 2).
- K) PLACE LANE CLOSURE DRUMS IN TAPERS AT A MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT (MPH). ALONG BUFFER SPACES AND WORK AREAS SPACE DRUMS AT A MAXIMUM SPACING EQUAL IN FEET TO TWICE THE POSTED SPEED LIMIT (MPH). IN ALL CASES, CHANNELIZING DEVICES ARE TO BE SPACED IN SUCH A MANNER AS TO POSITIVELY ACHIEVE THE INTENDED VISUAL CHANNELIZATION. CHANNELIZING DEVICES SHOULD BE Laterally OFFSET 3 FT INSIDE THE CLOSED LANE AS ROOM PERMITS.
- L) DO NOT EXCEED LANE CLOSURE LENGTHS LONGER THAN 2 MILES MEASURED FROM THE ARROW PANEL TO WHERE THE LANE CLOSURE ENDS, UNLESS OTHERWISE ALLOWED BY THE ENGINEER.


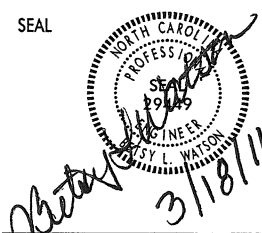

PAVEMENT MARKING

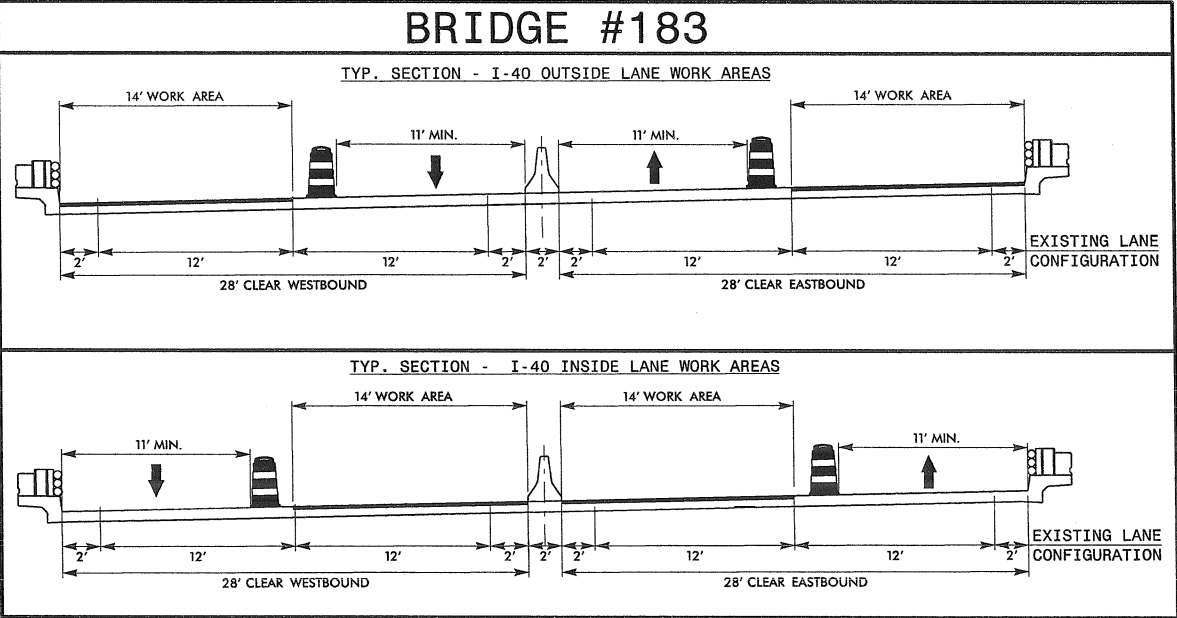
- M) REPLACE PAVEMENT MARKINGS OBLITERATED FROM CONSTRUCTION OPERATIONS WITH 2 APPLICATIONS OF PAINT.

MISCELLANEOUS

- N) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.
 - O) ALL DIMENSIONS AND STATIONS IN THE TRAFFIC CONTROL PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
 - P) MAINTAIN DRIVEWAY ACCESS AT ALL TIMES, UNLESS OTHERWISE DIRECTED BY ENGINEER.
 - Q) COMPLETE ONLY THE AMOUNT OF HYDRO-DEMOLITION THAT CAN BE OVERLAYED TO FINAL ELEVATION BEFORE LANES ARE RE-OPENED TO TRAFFIC.
- WIDE LOAD VEHICLE DETOURS
- R) PROVIDE OFF SITE DETOUR ROUTE SIGNS AND CHANGEABLE MESSAGE SIGNS FOR RE-ROUTING WIDE LOAD VEHICLES. COVER OR REMOVE SIGNING WHEN THE DETOUR IS NOT IN OPERATION.
 - S) DURING BRIDGE REHABILITATION OPERATIONS WHEN A 14' CLEAR LANE CANNOT BE PROVIDED AND WHEN DIRECTED BY THE ENGINEER, RE-ROUTE WIDE LOAD VEHICLES 10' WIDTH AND WIDER. DETOUR VIA I-26, I-81 (JOHNSON CITY, TENNESSEE) AND BACK TO I-40 EAST OF KNOXVILLE, TN. POSITION SIGNS AND CHANGEABLE MESSAGE SIGNS AT THESE LOCATIONS AS DIRECTED BY THE ENGINEER.
 - T) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.

3/18/2011
Control\TCP\BP-5300W\Haywood 183 159 208\Plan Sheets\BP-5300W.tc-psht02.dgn
GK:george

 Stantec Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672	SEAL  3/18/11	GENERAL NOTES									
	SCALE: NONE DATE: JAN. 2011 DWG. BY: GK DESIGN BY: GK REVIEWED BY: BLW		REVISIONS <table><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>								



TRAFFIC CONTROL PHASING

SIMULTANEOUS WORK ON BRIDGES IN BOTH DIRECTIONS OF I-40 WILL BE ALLOWED. INSTALL ONLY ONE LANE CLOSURE PER DIRECTION OF I-40 AT A MAXIMUM LENGTH OF 2 MILES, UNLESS OTHERWISE ALLOWED BY THE ENGINEER.

INCORPORATE WIDE LOAD DETOUR IN ACCORDANCE WITH THE GENERAL NOTES.

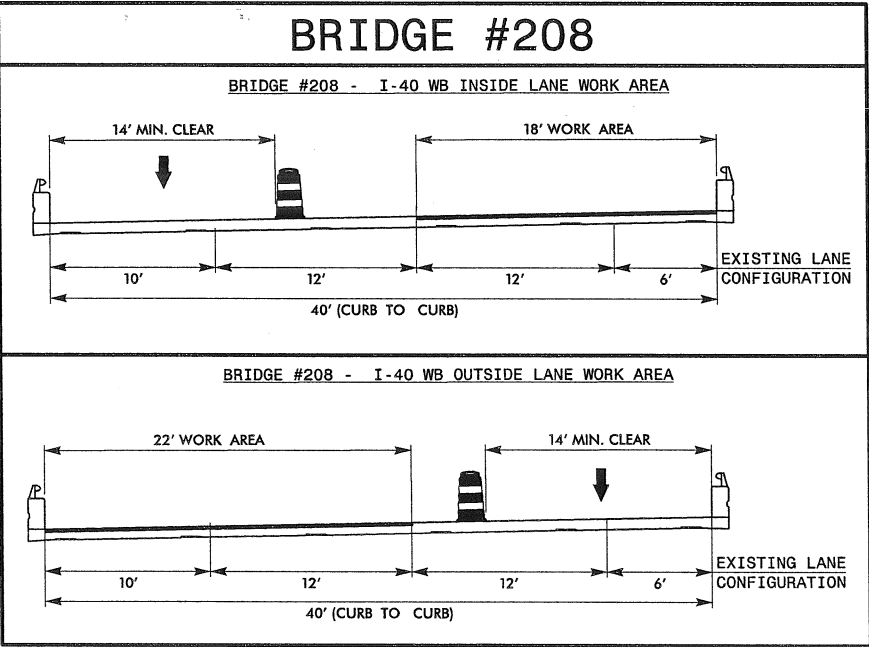
DURING BRIDGE REHABILITATION WORK ON I-40, USE RIGHT LANE CLOSURES WITH LANE SHIFTS AS FOLLOWS:

BRIDGE # 183

REFER TO SHEET TCP-4 & 5. USE FLAGGER CONTROLLED LANE CLOSURES ON US 276 UNDER THE BRIDGE DURING PERIODS WHEN DEBRIS FROM HYDRO-DEMOLITION OR OTHER OPERATIONS CAN AFFECT TRAFFIC. REFER TO RDWY. STD. DWG. 1101.02, SHEET 1.

BRIDGE # 208

REFER TO SHEET TCP-4. USE FLAGGER CONTROLLED LANE CLOSURES ON COLEMAN MTN. RD. UNDER THE BRIDGE DURING PERIODS WHEN DEBRIS FROM HYDRO-DEMOLITION OR OTHER OPERATIONS CAN AFFECT TRAFFIC. REFER TO RDWY. STD. DWG. 1101.02, SHEET 1.

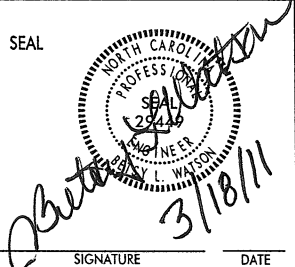


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3/18/2011
gk:george



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SEAL



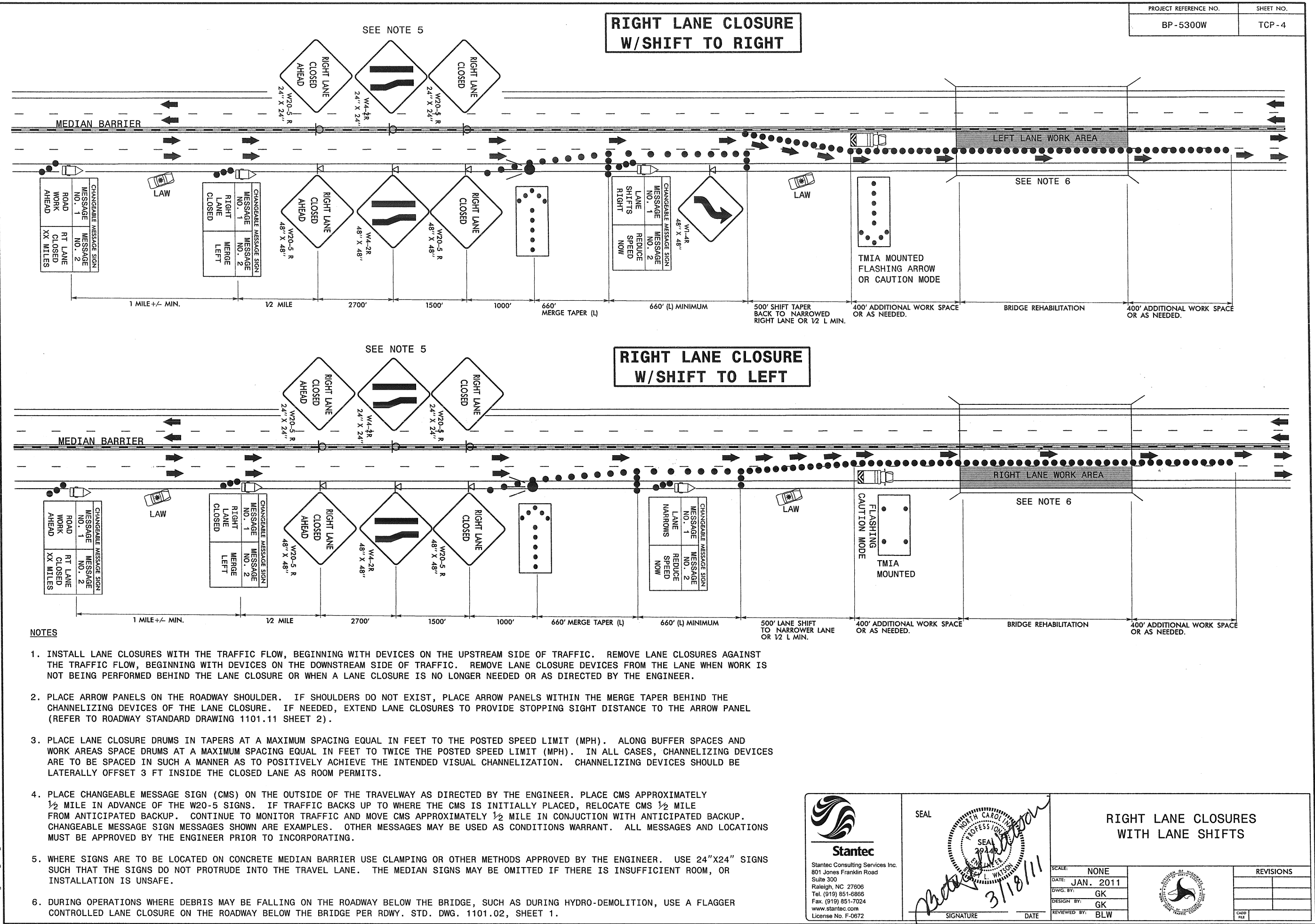
**TRAFFIC CONTROL PHASING
&
BRIDGE TYPICAL SECTIONS**

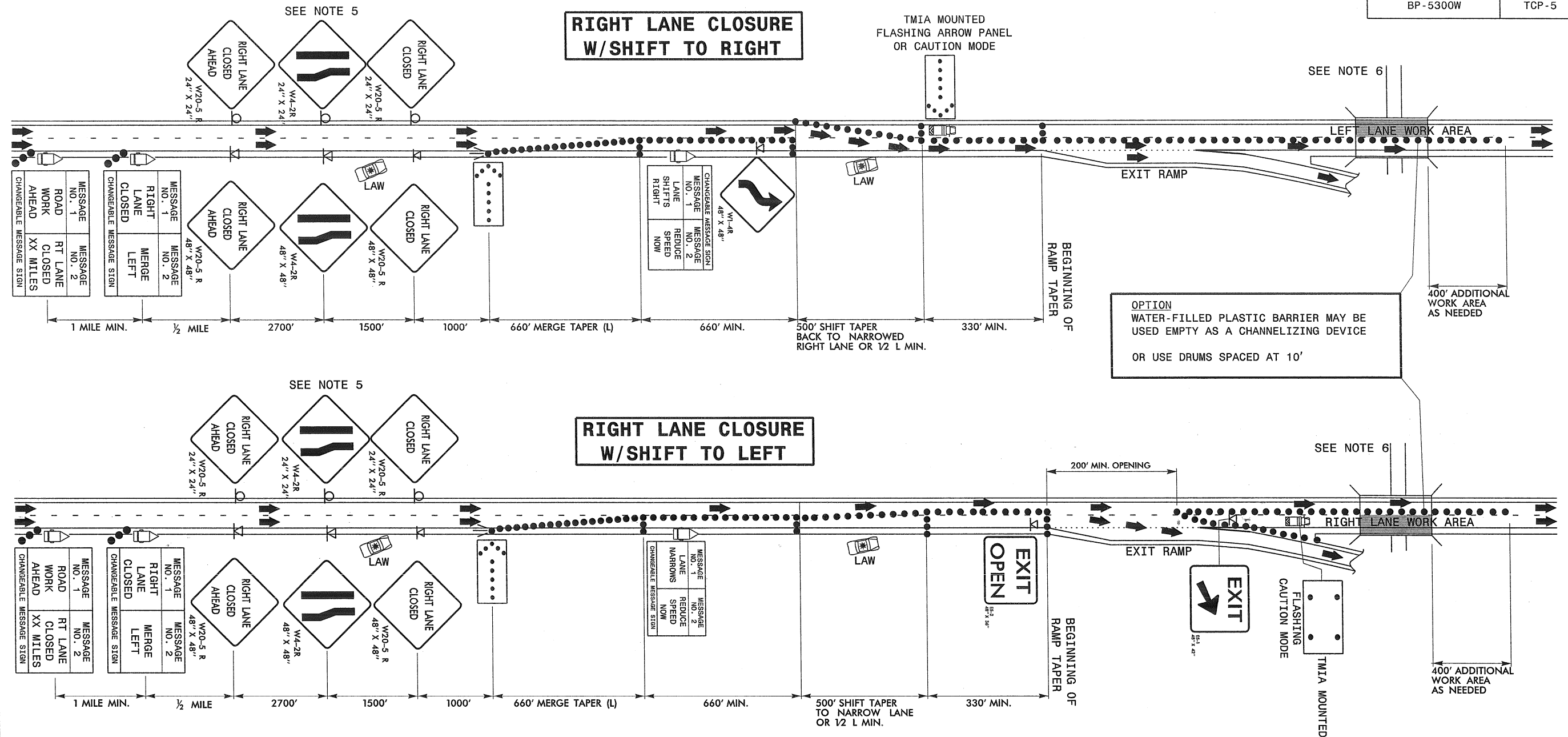
SCALE: NONE
DATE: JAN. 2011
DWG. BY: GK
DESIGN BY: GK
REVIEWED BY: BLW



REVISIONS	

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NOTES

1. INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC. REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC. REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
2. PLACE ARROW PANELS ON THE ROADWAY SHOULDER. IF SHOULDERS DO NOT EXIST, PLACE ARROW PANELS WITHIN THE MERGE TAPER BEHIND THE CHANNELIZING DEVICES OF THE LANE CLOSURE. IF NEEDED, EXTEND LANE CLOSURES TO PROVIDE STOPPING SIGHT DISTANCE TO THE ARROW PANEL (REFER TO ROADWAY STANDARD DRAWING 1101.11 SHEET 2).
3. PLACE LANE CLOSURE DRUMS IN TAPERS AT A MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT (MPH). ALONG BUFFER SPACES AND WORK AREAS SPACE DRUMS AT A MAXIMUM SPACING EQUAL IN FEET TO TWICE THE POSTED SPEED LIMIT (MPH). IN ALL CASES, CHANNELIZING DEVICES ARE TO BE SPACED IN SUCH A MANNER AS TO POSITIVELY ACHIEVE THE INTENDED VISUAL CHANNELIZATION. CHANNELIZING DEVICES SHOULD BE LATERALLY OFFSET 3 FT INSIDE THE CLOSED LANE AS ROOM PERMITS.
4. PLACE CHANGEABLE MESSAGE SIGN (CMS) ON THE OUTSIDE OF THE TRAVELWAY AS DIRECTED BY THE ENGINEER. PLACE CMS APPROXIMATELY 1/2 MILE IN ADVANCE OF THE W20-5 SIGNS. IF TRAFFIC BACKS UP TO WHERE THE CMS IS INITIALLY PLACED, RELOCATE CMS 1/2 MILE FROM ANTICIPATED BACKUP. CONTINUE TO MONITOR TRAFFIC AND MOVE CMS APPROXIMATELY 1/2 MILE IN CONJUNCTION WITH ANTICIPATED BACKUP.
5. WHERE SIGNS ARE TO BE LOCATED ON CONCRETE MEDIAN BARRIER USE CLAMPING OR OTHER METHODS APPROVED BY THE ENGINEER. USE 24"X24" SIGNS SUCH THAT THE SIGNS DO NOT PROTRUDE INTO THE TRAVEL LANE. THE MEDIAN SIGNS MAY BE OMITTED IF THERE IS INSUFFICIENT ROOM, OR INSTALLATION IS UNSAFE.
6. DURING OPERATIONS WHERE DEBRIS MAY BE FALLING ON THE ROADWAY BELOW THE BRIDGE, SUCH AS DURING HYDRO-DEMOLITION, USE A FLAGGER CONTROLLED LANE CLOSURE ON THE ROADWAY BELOW THE BRIDGE PER RDWY. STD. DWG. 1101.02, SHEET 1.

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SEAL

Professional Engineer
3/18/11

SIGNATURE DATE

RIGHT LANE CLOSURES WITH LANE SHIFTS THRU EXIT RAMP AREAS

SCALE: NONE		REVISIONS
DATE: JAN. 2011		
DWG. BY: GK		
DESIGN BY: GK		
REVIEWED BY: BLW		CADD FILE