STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP-5500W	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
50070.1.1		P.E.
50070.3.FS23	NHPP-040-2(168)150	CONST.

PROJECT: BP-5500W

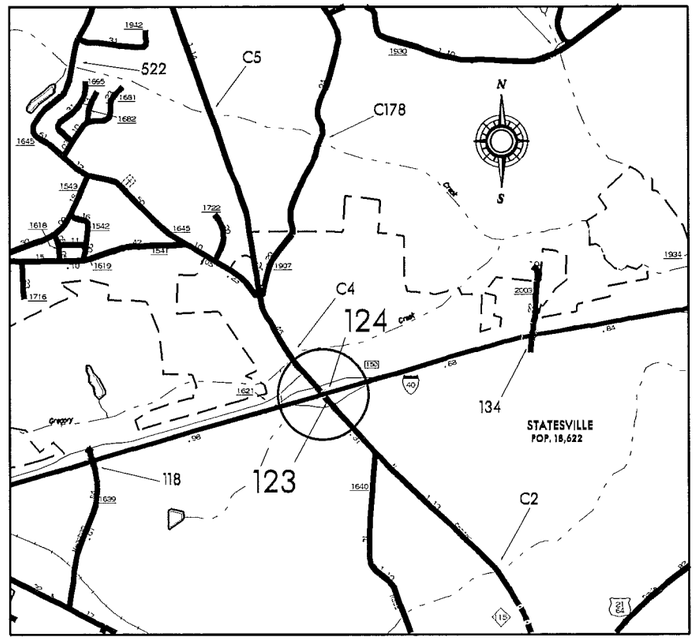
CONTRACT: DL00066

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

IREDELL COUNTY

LOCATION: IREDELL COUNTY:
BRIDGE #123 ON INTERSTATE 40 EAST OVER N.C. HWY 115
BRIDGE #124 ON INTERSTATE 40 WEST OVER N.C. HWY 115

TYPE OF WORK: BRIDGE PRESERVATION – BRIDGE PRESERVATION WITH LATEX MODIFIED CONCRETE, JOINT REPLACEMENT, SUBSTRUCTURE REPAIRS, AND PAINTING OF STRUCTURAL STEEL.



DESIGN DATA

IREDELL
#123 ADT 2010 = 24,250
#124 ADT 2010 = 24,250

PROJECT LENGTH

BRIDGE #123 = .0254 MILE
BRIDGE #124 = .0251 MILE

Prepared In the Office of:
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURES MANAGEMENT UNIT - PRESERVATION & REPAIR GROUP
1000 BIRCH RIDGE DR. RALEIGH, N.C. 27610

RICK NELSON, P.E.
PROJECT ENGINEER

2012 STANDARD SPECIFICATIONS

LETTING DATE:
SEPTEMBER 23, 2014

NORTH CAROLINA PROFESSIONAL SEAL 18665 ENGINEER TIMOTHY M. SHERRILL

08/20/14
TIMOTHY M. SHERRILL, P.E.
PROJECT DESIGN ENGINEER

PROJECT: BP-5500W

CONTRACT: DL00066

STATE OF NORTH CAROLINA

DIVISION OF HIGHWAYS

IREDELL COUNTY

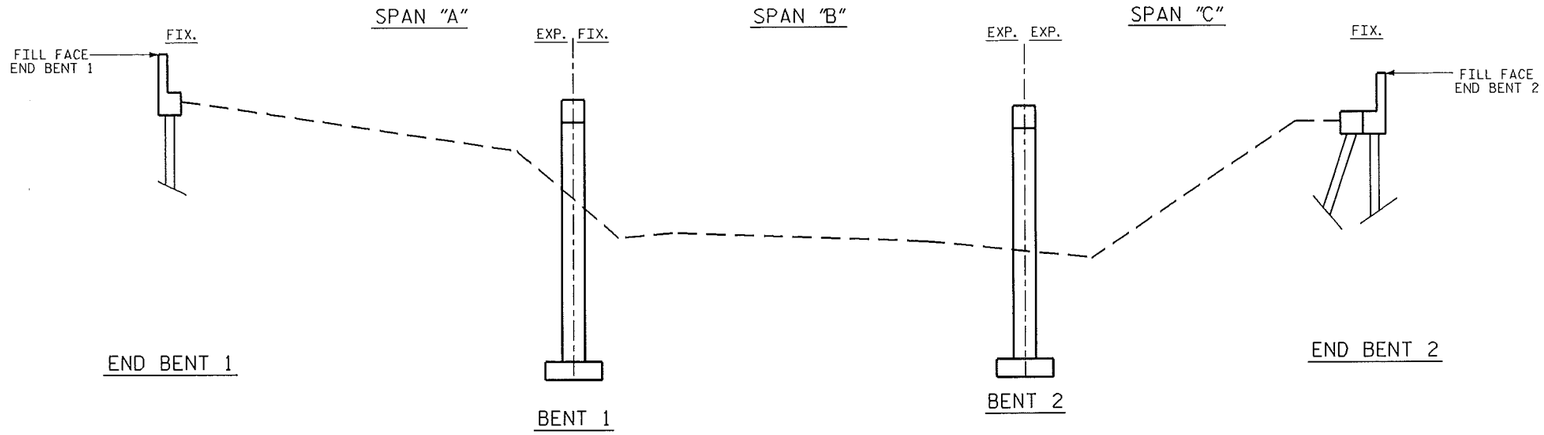
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP-5500W	1A	

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
50070.1.1		P.E.
50070.3.FS23	NHPP-040-2(168)150	CONST.

LOCATION: IREDELL COUNTY:
BRIDGE #123 ON INTERSTATE 40 EAST OVER N.C. HWY 115
BRIDGE #124 ON INTERSTATE 40 WEST OVER N.C. HWY 115

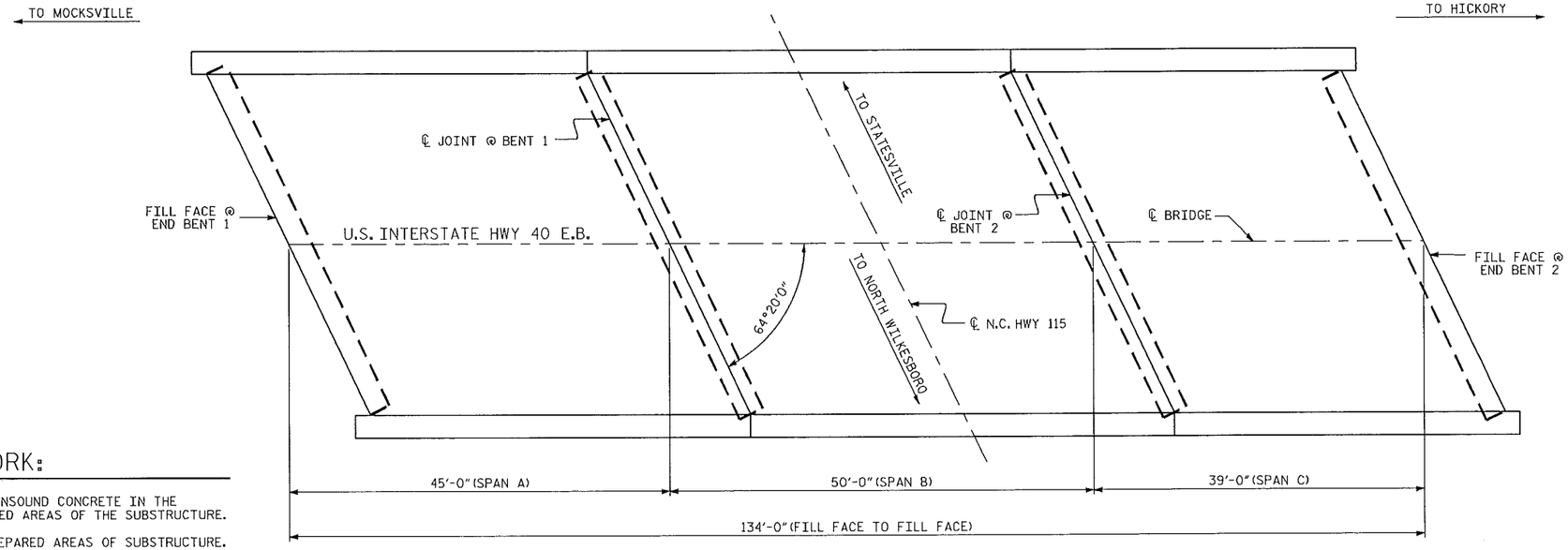
TYPE OF WORK: BRIDGE PRESERVATION – BRIDGE PRESERVATION WITH LATEX MODIFIED CONCRETE, JOINT REPLACEMENT, SUBSTRUCTURE REPAIRS, AND PAINTING OF STRUCTURAL STEEL.

INDEX OF SHEETS



NOTE:
THE PROFILE INFORMATION IS TAKEN FROM THE ORIGINAL PLANS, AND THE ROUTINE INSPECTION REPORT DATED: 04/12/2012

SECTION ALONG ℄ ROADWAY



PLAN

SCOPE OF WORK:

SAWCUT AND CHIP OUT UNSOUND CONCRETE IN THE SPALLED AND DELAMINATED AREAS OF THE SUBSTRUCTURE.

APPLY SHOTCRETE IN PREPARED AREAS OF SUBSTRUCTURE.

EPOXY INJECT CRACKS IN SUBSTRUCTURE.

PREPARE AND PAINT STRUCTURAL STEEL.

PARTIALLY REMOVE BRIDGE DECK CONCRETE USING SCARIFICATION AND HYDRO-DEMOLITION METHODS.

OVERLAY PREPARED BRIDGE DECK SURFACE WITH LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH.

DEMOLISH EXISTING BRIDGE DECK JOINTS.

RECONSTRUCT BRIDGE DECK JOINTS AND INSTALL NEW SYNTHETIC RUBBER EXPANSION JOINT SEALS.

GROOVE CONCRETE BRIDGE DECK.

DRAWN BY : R.PUTEK DATE : 02/14
CHECKED BY : T.SHERRILL DATE : 02/14
DESIGN ENGINEER OF RECORD: _____ DATE : _____

20-AUG-2014 09:21
S:\PRS\POC\Squad C\Preservation_Projects\BP-5500W\IREDELL 123\BP5500W_SD_iredell_123_final.dgn
rputek

PROJECT NO. BP-5500W
IREDELL COUNTY
BRIDGE NO. 123

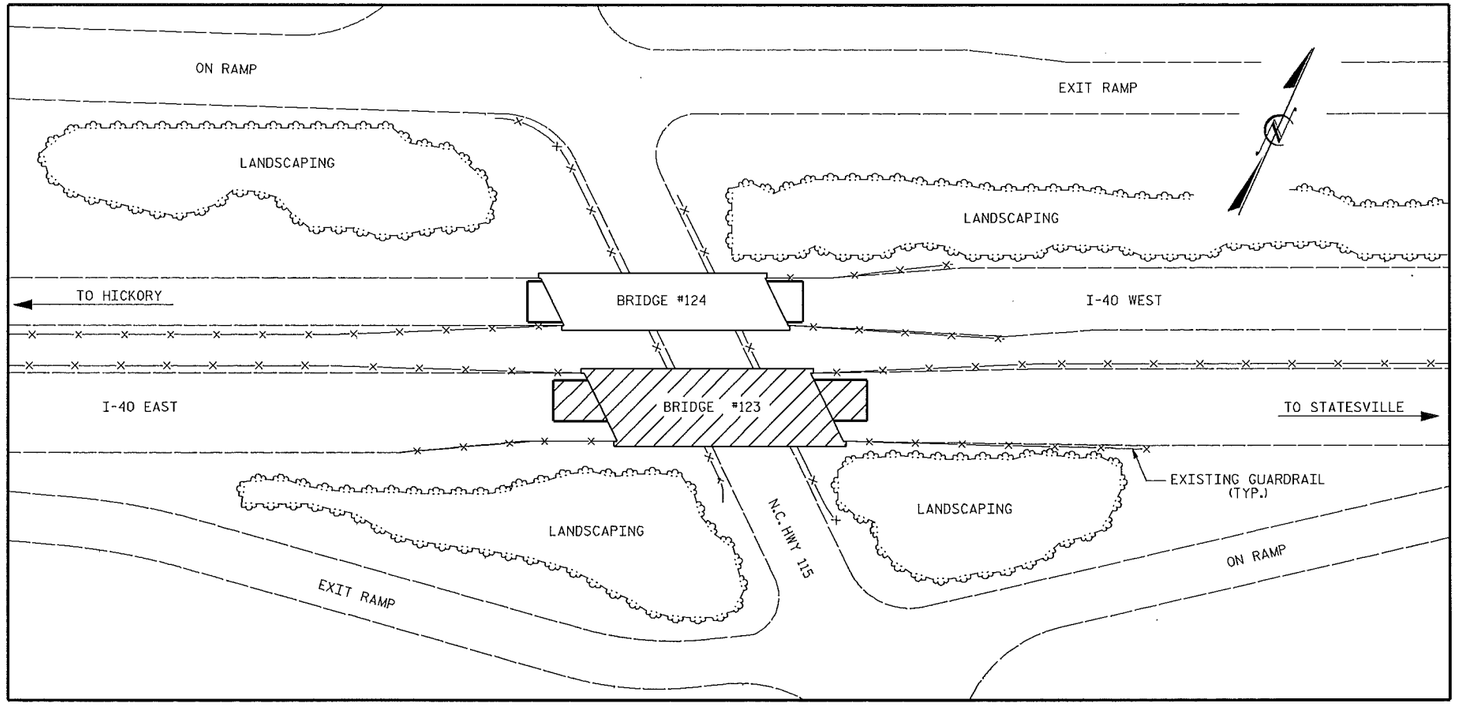
SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
BRIDGE 123 ON I-40 EB
OVER N.C. HWY 115

NORTH CAROLINA PROFESSIONAL SEAL 18865 ENGINEER TIMOTHY M. SHERRILL
08/20/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-1
1			3			TOTAL SHEETS
2			4			28



LOCATION SKETCH

INFORMATION INDICATED ON THE LOCATION SKETCH SHALL BE CONSIDERED GENERAL INFORMATION, ONLY. THE CONTRACTOR SHALL CONFIRM, THROUGH OTHER SOURCES, SPECIFIC INFORMATION REGARDING THE BRIDGES, ROADWAYS, UTILITIES, THE SURROUNDING AREA, AND ANY OTHER ASPECTS THAT MAY BE NECESSARY TO PERFORM AND COMPLETE THE PROJECT.

NOTES

EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.

FOR OVERLAY OF BRIDGE WITH LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF THE DECK.

FOR SCARIFYING BRIDGE DECK, HYDRO-DEMOLITION OF BRIDGE DECK, AND CLASS II SURFACE PREPARATION, SEE OVERLAY SURFACE PREPARATION SPECIAL PROVISION.

EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECKS.

FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION MANAGEMENT PLANS.

LONGITUDINAL CONSTRUCTION JOINTS OF OVERLAYS SHALL BE LOCATED ALONG THE CENTERLINE OR EDGE OF TRAVEL LANES.

DURING CONSTRUCTION, BERMS OR APPROPRIATE MEASURES SHALL BE USED TO ENSURE HYDRO-DEMOLITION WATER DOES NOT FLOW OR MIGRATE INTO ACTIVE TRAVEL LANES.

FOR UNDER STRUCTURE WORK PLATFORM, SEE SPECIAL PROVISIONS.

FOR FOAM JOINT SEALS, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

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

FOR ELASTOMERIC CONCRETE, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR PAINTING EXISTING STRUCTURE, SEE SPECIAL PROVISIONS.

TOTAL BILL OF MATERIAL

GROOVING BRIDGE FLOOR	POLLUTION CONTROL	SHOTCRETE REPAIRS	EPOXY RESIN INJECTION	FOAM JOINT SEALS	PAINTING EXISTING STRUCTURE	UNDER STRUCTURE WORK PLATFORM	LATEX MODIFIED CONCRETE OVERLAY -VERY EARLY STRENGTH	BRIDGE JOINT DEMOLITION	HYDRO-DEMOLITION OF BRIDGE DECK	PLACING & FINISHING LATEX MODIFIED CONCRETE OVERLAY- VERY EARLY STRENGTH	SCARIFYING BRIDGE DECK
SQ. FT.	LUMP SUM	CU. FT.	LIN. FT.	LUMP SUM	LUMP SUM	LUMP SUM	CU. YDS.	SQ. FT.	SQ. YDS.	SQ. YDS.	SQ. YDS.
5900	LUMP SUM	23.3	68.2	LUMP SUM	LUMP SUM	LUMP SUM	37	89	733	733	733

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO. 123

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

BRIDGE #123 ON I-40E
OVER NC 115

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL

08/26/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			28

DRAWN BY : R.PUTEK DATE : 06/14
CHECKED BY : T.SHERRILL DATE : 07/14
DESIGN ENGINEER OF RECORD: - DATE : -

26-AUG-2014 14:45
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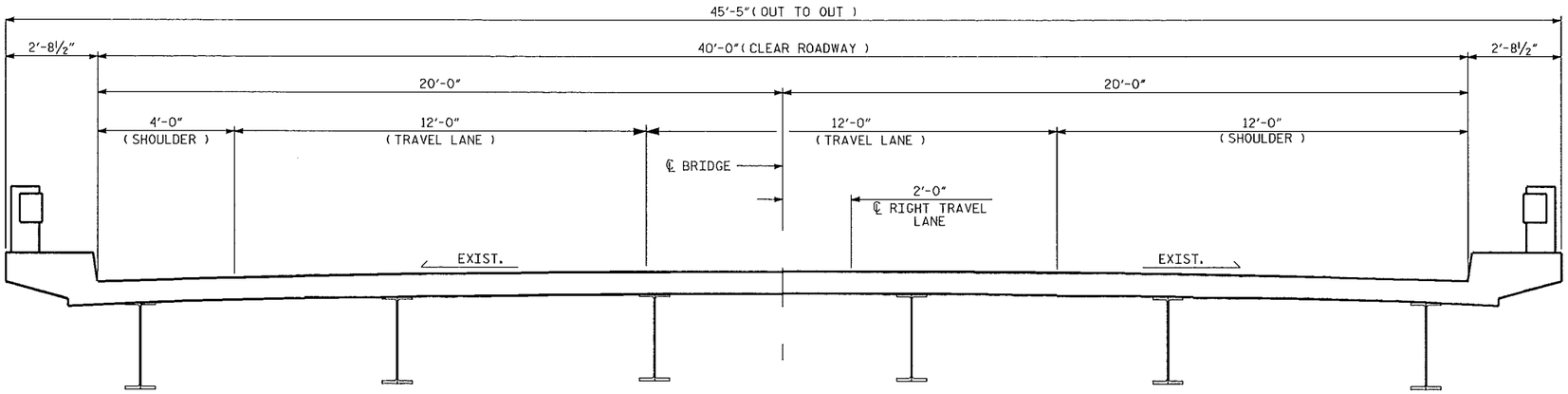
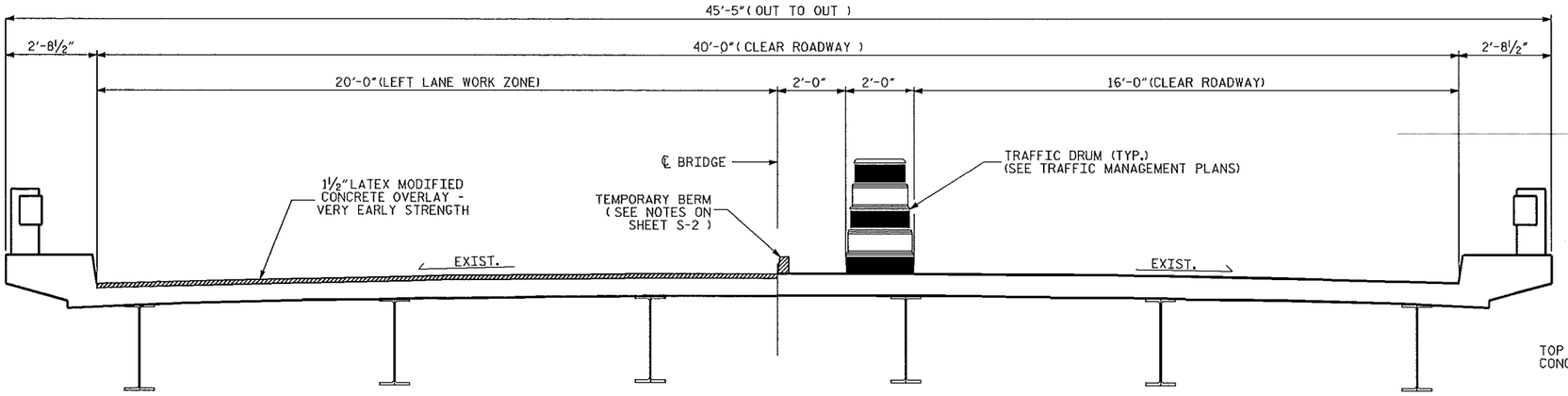
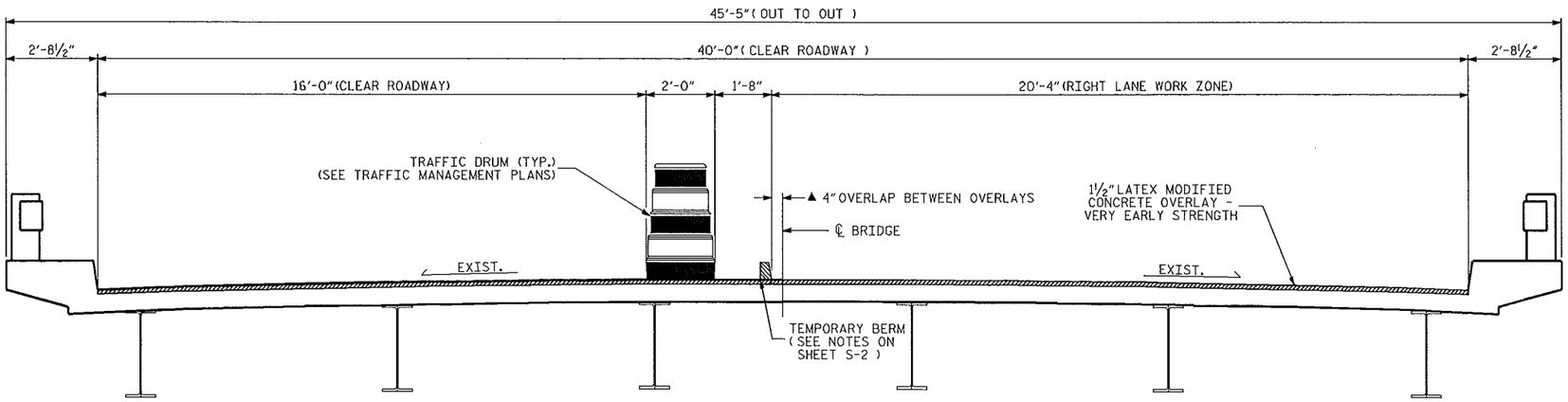
rputek



TYPICAL SECTION
(EXISTING - LOOKING EAST)



TYPICAL SECTION
(LEFT LANE WORK ZONE - LOOKING EAST)



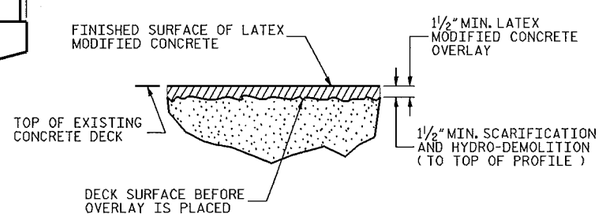
TYPICAL SECTION
(RIGHT LANE WORK ZONE - LOOKING EAST)

▲ 4" OVERLAP BETWEEN OVERLAYS

PREVIOUSLY POURED LMC TO BE HYDRO-DEMOLITIONED AND RECAST WITH LMC

NOTES:

THE WORK STAGING ON THIS PLAN SHEET INDICATES THAT THE LEFT LANE LMC - VES WORK IS PERFORMED FIRST, FOLLOWED BY THE RIGHT LANE LMC - VES WORK. THE CONTRACTOR MAY ELECT TO SEQUENCE THE WORK DIFFERENTLY. BUT THE DIMENSIONS OF THE WORK ZONE, CLEAR ROADWAY AREAS, AND THE LOCATIONS OF THE DRUM SHALL MATCH THAT INDICATED ON THIS PLAN SHEET. RESPECTIVE TO THE LANE WHERE THE LMC WORK IS BEING PERFORMED.



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO.: 123

SHEET 1 OF 1

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

TYPICAL SECTION

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
08/26/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS
2			4			28

DRAWN BY : R.PUTEK DATE : 06/14
CHECKED BY : T.SHERRILL DATE : 07/14
DESIGN ENGINEER OF RECORD: - DATE : -

26-AUG-2014 14:45
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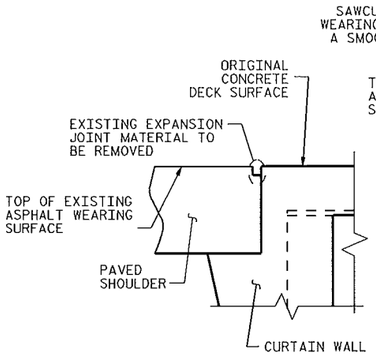
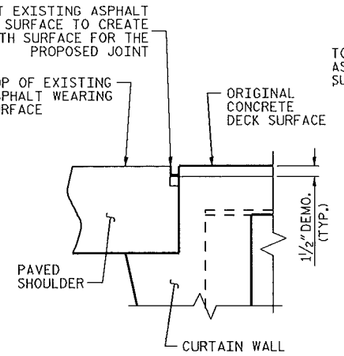
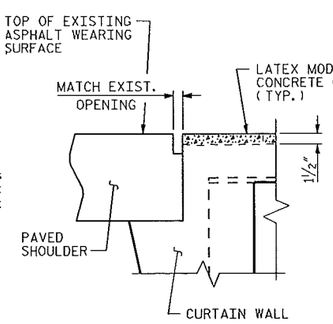


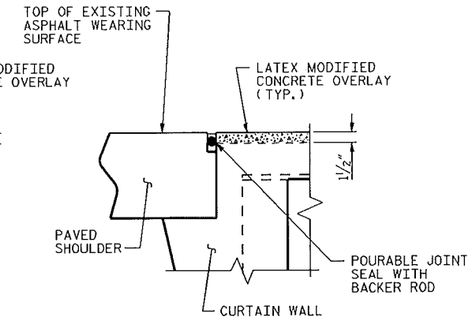
SECTION C-C
(EXISTING JOINT)



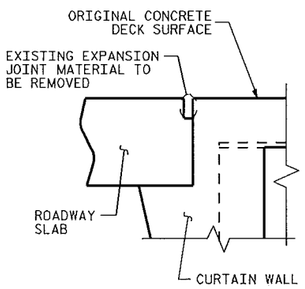
SECTION C-C
(MINIMUM EXISTING JOINT DEMOLITION)



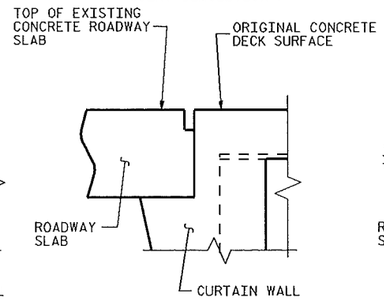
SECTION C-C
(PROPOSED JOINT DIMENSIONS)



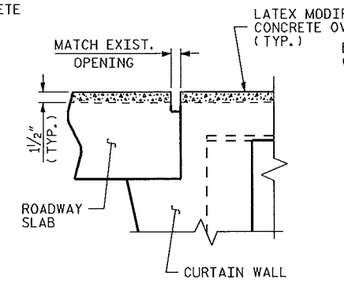
SECTION C-C
(PROPOSED POURABLE JOINT SEAL)



SECTION B-B
(EXISTING JOINT)



SECTION B-B
(MINIMUM EXISTING JOINT DEMOLITION)



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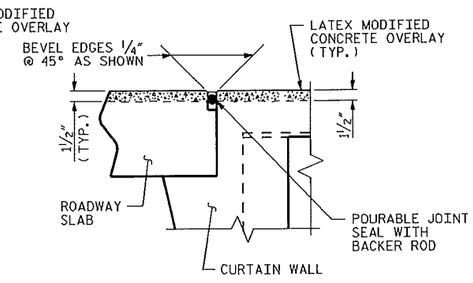
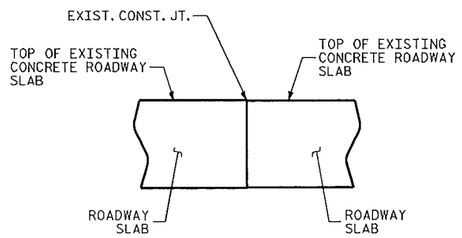
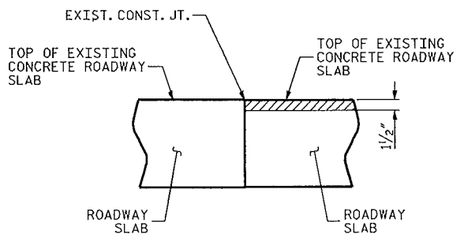
(PROPOSED JOINT DIMENSIONS)



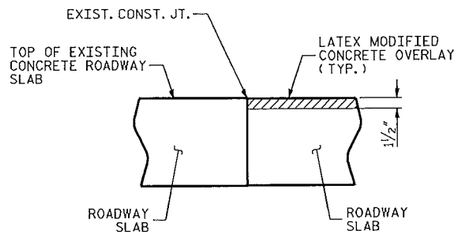
SECTION B-B
(PROPOSED POURABLE JOINT SEAL)



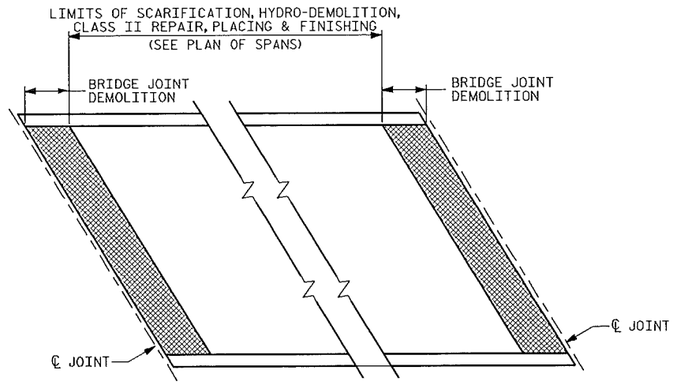
SECTION A-A
(EXISTING)



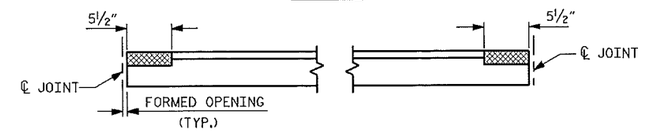
SECTION A-A
(MINIMUM EXISTING DEMOLITION & ROADWAY SLAB MILLING)



SECTION A-A
(PROPOSED)



PLAN



ELEVATION

LIMITS OF BRIDGE JOINT DEMOLITION AND OVERLAY PREPARATION AND PLACEMENT

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO. 123

SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-4
1			3			TOTAL SHEETS
2			4			28

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
08/20/14

DRAWN BY : R.PUTEK DATE : 06/14
CHECKED BY : T.SHERRILL DATE : 07/14
DESIGN ENGINEER OF RECORD: - DATE : -

20-AUG-2014 09:44
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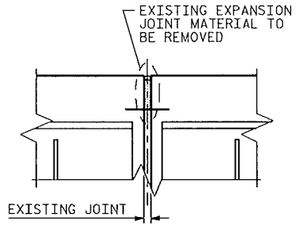
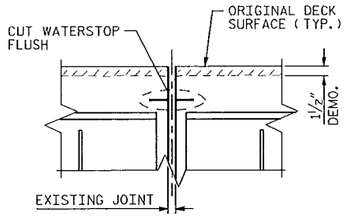
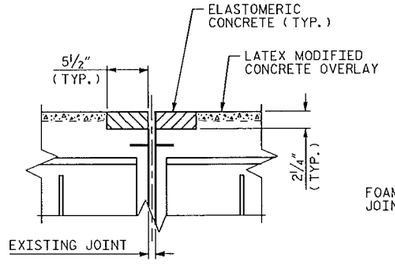
IF THE EMBEDDED PORTION OF THE EXISITNG PLASTIC WATERSTOP IS EXPOSED DURING REMOVAL OF UNSOUND CONCRETE OR IF UNSOUND CONCRETE IS REMOVED WITHIN 2" OF THE WATERSTOP, THE ENTIRE WATERSTOP SHALL BE REMOVED



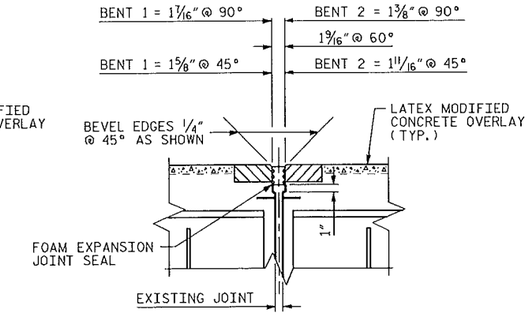
SECTION D-D
(EXISTING)



SECTION D-D
(MINIMUM EXISTING JOINT DEMOLITION)



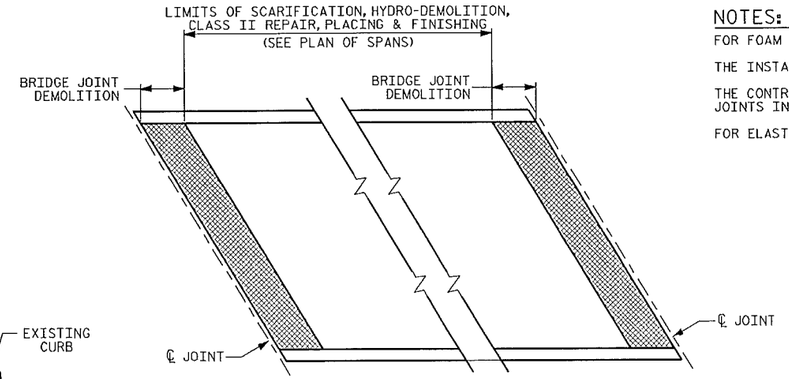
SECTION D-D
(PROPOSED JOINT PRE-SAWED DIMENSIONS)



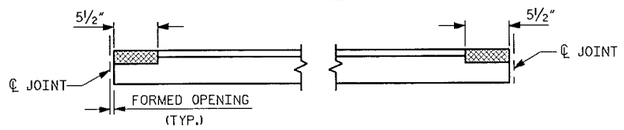
SECTION D-D
(PROPOSED FOAM EXPANSION JOINT SEAL)

HYDRO-DEMOLITION OR EXCAVATION OF CONCRETE AT THE EXISTING JOINT SHALL RESULT IN THE BOTTOM OF THE EXCAVATION BEING REASONABLY FLAT. TO PROVIDE SUFFICENT SUBSTRATE FOR PLACEMENT AND SUPPORT OF ELASTOMERIC OR REPAIR CONCRETE. DEMOLISH BRIDGE JOINT TO THE NECESSARY DEPTH, SUCH THAT ELASTOMERIC CONCRETE SHALL BE FOUNDED ON CONCRETE OR REPAIR CONCRETE SUBSTRATE, NOT LATEX MODIFIED CONCRETE.

ELASTOMERIC CONCRETE	
	CU. FT.
BENT 1	7.63
BENT 2	7.63
TOTAL	15.26



PLAN



ELEVATION

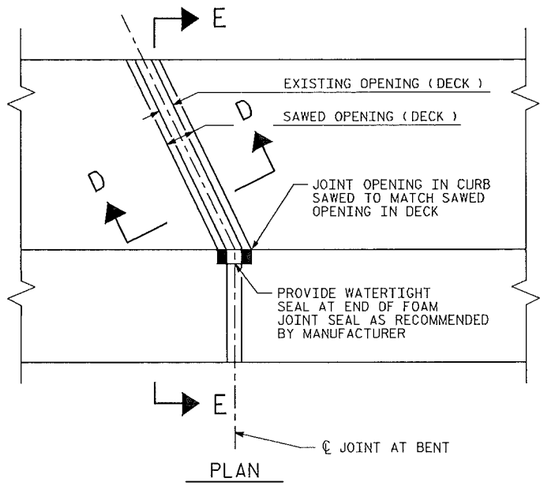
NOTES:

FOR FOAM JOINT SEAL SEE SPECIAL PROVISIONS.

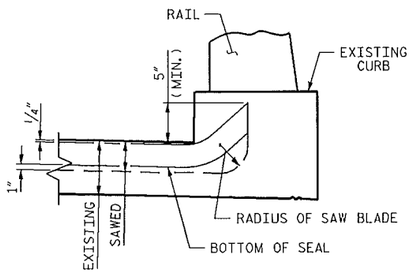
THE INSTALLED FOAM JOINT SEAL SHALL BE WATER TIGHT.

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT.

FOR ELASTOMERIC CONCRETE, SEE SPECIAL PROVISIONS.



PLAN



SECTION E-E

LIMITS OF BRIDGE JOINT DEMOLITION AND OVERLAY PREPARATION AND PLACEMENT

PROJECT NO. BP-5500W
IREDELL COUNTY
BRIDGE NO. 123

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT DETAILS AT BENTS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-5
1			3			TOTAL SHEETS
2			4			28

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
06/20/14

DRAWN BY :	R.PUTEK	DATE : 06/14
CHECKED BY :	T.SHERRILL	DATE : 07/14
DESIGN ENGINEER OF RECORD:	-	DATE : -

20-AUG-2014 09:22
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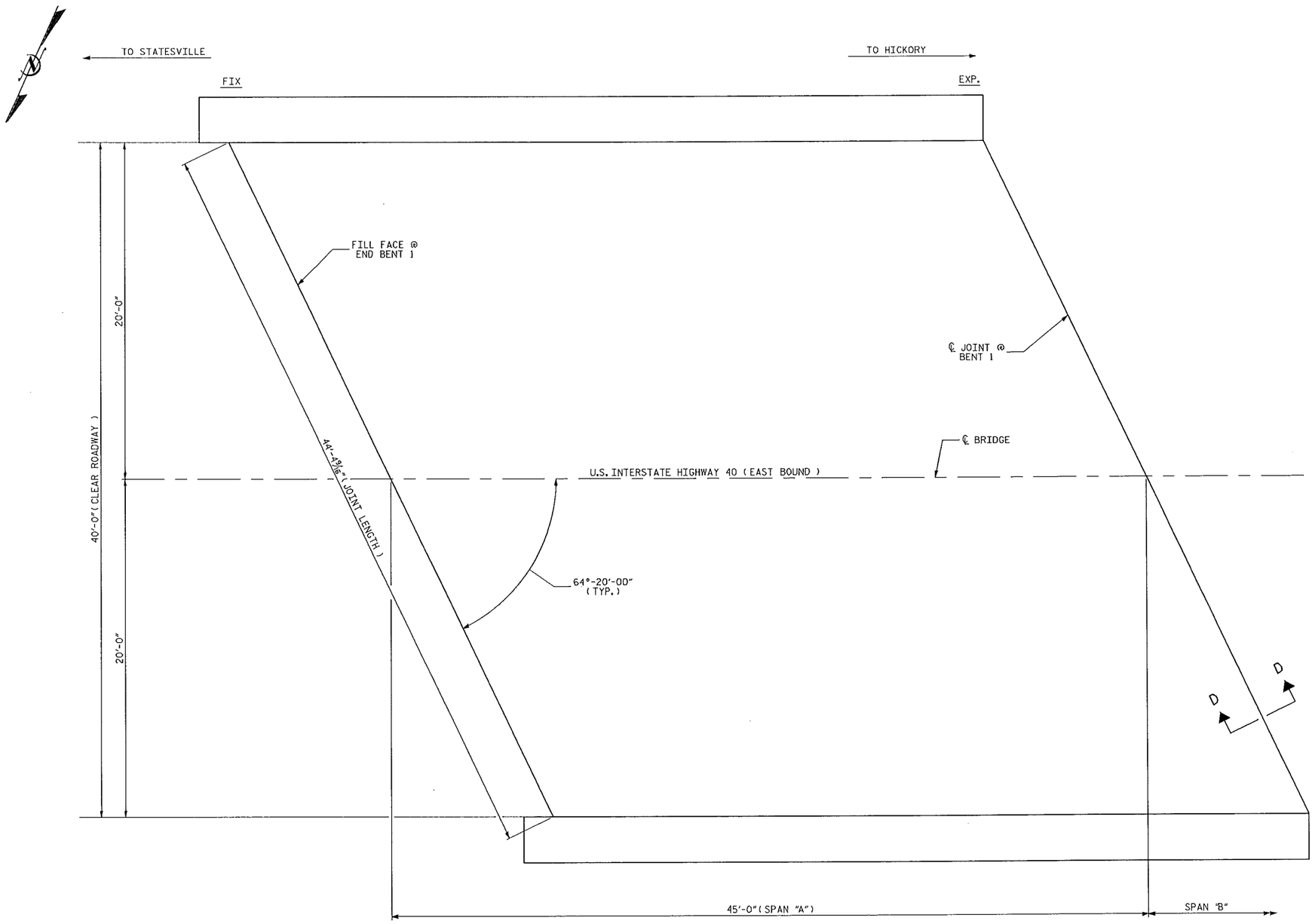
rputek



PLAN OF SPAN "A"
(FOR SECTION VIEWS, SEE "JOINT DETAIL SHEET")

SPAN "A" QUANTITIES

	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	0 SQ. YDS.	
CLASS III SURFACE PREPARATION	0 SQ. YDS.	
SCARIFYING BRIDGE DECK	200 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	200 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE SPECIAL PROVISIONS.

CLASS II SURFACE PREPARATION

SCARIFICATION & HYDRO-DEMOLITION

PROJECT NO. BP-5500W
IREDELL COUNTY
BRIDGE NO.: 123
SHEET 1 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SURFACE PREPARATION SPAN "A"

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
08/20/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-6
1			3			TOTAL SHEETS
2			4			28

DRAWN BY : R.PUTEK DATE : 05/14
CHECKED BY : T.SHERRILL DATE : 07/14
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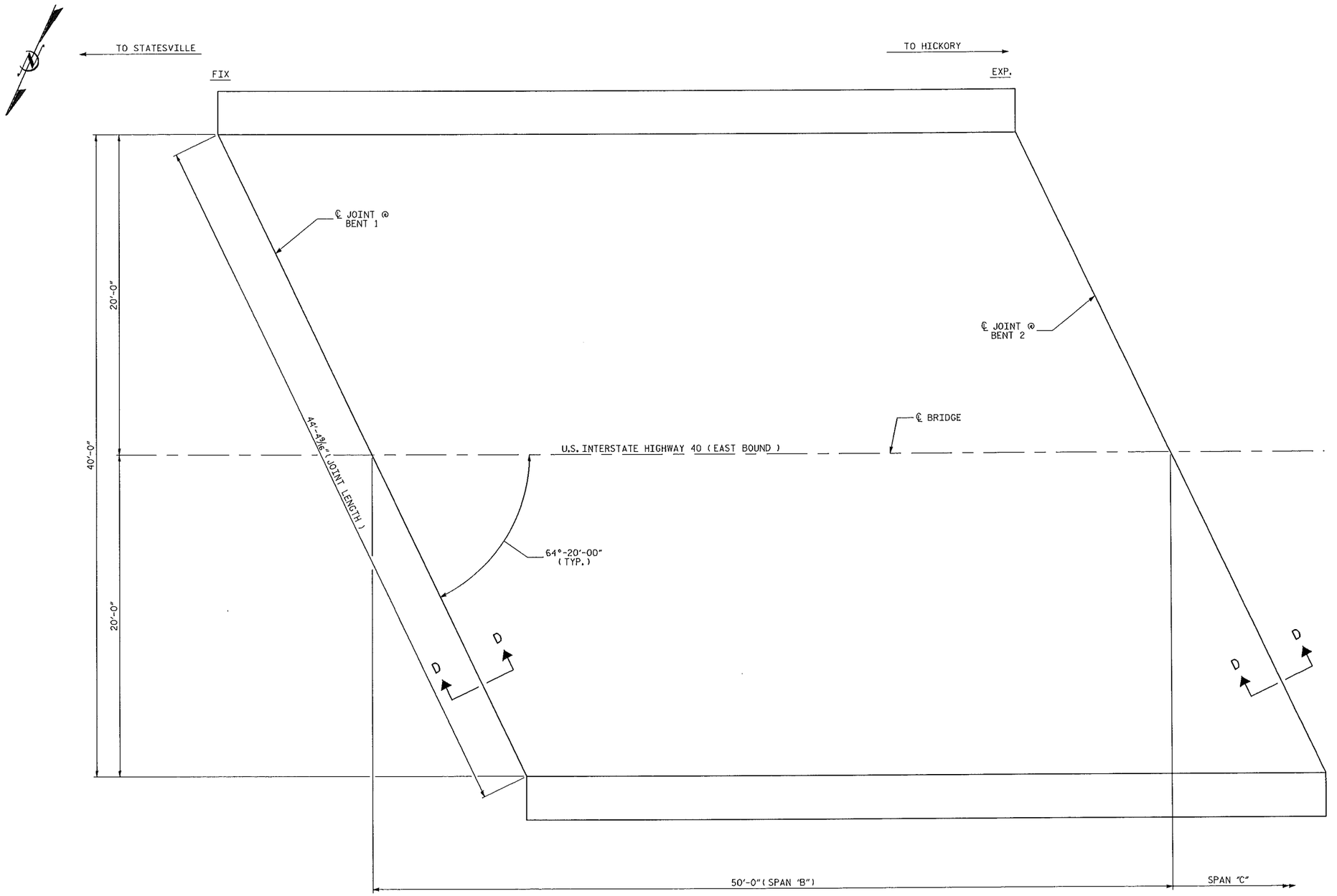
SPAN "B" QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	0 SQ. YDS.	
CLASS III SURFACE PREPARATION	0 SQ. YDS.	
SCARIFYING BRIDGE DECK	222 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	222 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE SPECIAL PROVISIONS.



PLAN OF SPAN "B"
(FOR SECTION VIEWS, SEE "JOINT DETAIL SHEET")

CLASS II SURFACE PREPARATION

SCARIFICATION & HYDRO-DEMOLITION

PROJECT NO. BP-5500W
IREDELL COUNTY
BRIDGE NO.: 123

SHEET 2 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SURFACE PREPARATION
SPAN "B"

NORTH CAROLINA PROFESSIONAL SEAL 19565 ENGINEER TIMOTHY M. SHERRILL
06/20/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-7
1			3			TOTAL SHEETS
2			4			28

DRAWN BY : R.PUTEK DATE : 05/14
CHECKED BY : T.SHERRILL DATE : 07/14
DESIGN ENGINEER OF RECORD: - DATE : -

20-AUG-2014 09:22
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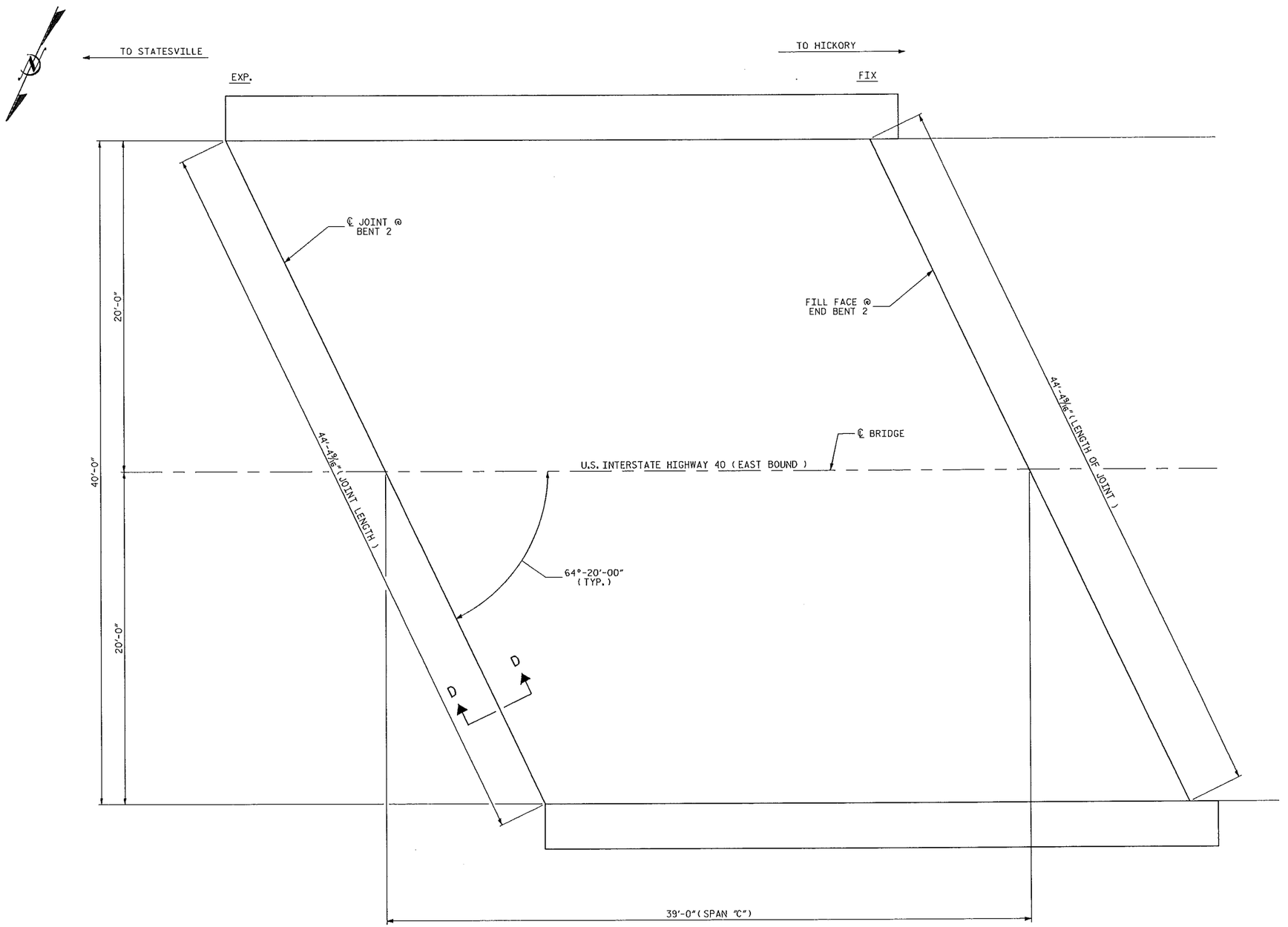

PLAN OF SPAN "C"
(FOR SECTION VIEWS, SEE "JOINT DETAIL SHEET")

SPAN "C" QUANTITIES

	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	0 SQ. YDS.	
CLASS III SURFACE PREPARATION	0 SQ. YDS.	
SCARIFYING BRIDGE DECK	173 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	173 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE SPECIAL PROVISIONS.

CLASS II SURFACE PREPARATION

SCARIFICATION & HYDRO-DEMOLITION

PROJECT NO. BP-5500W
IREDELL COUNTY
BRIDGE NO.: 123
SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SURFACE PREPARATION SPAN "C"

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-8
1			3			TOTAL SHEETS
2			4			28

NORTH CAROLINA PROFESSIONAL SEAL 18585 ENGINEER TIMOTHY M. SHERRILL
08/20/14

DRAWN BY : R.PUTEK DATE : 05/14
CHECKED BY : T.SHERRILL DATE : 07/14
DESIGN ENGINEER OF RECORD: - DATE : -

20-AUG-2014 09:22
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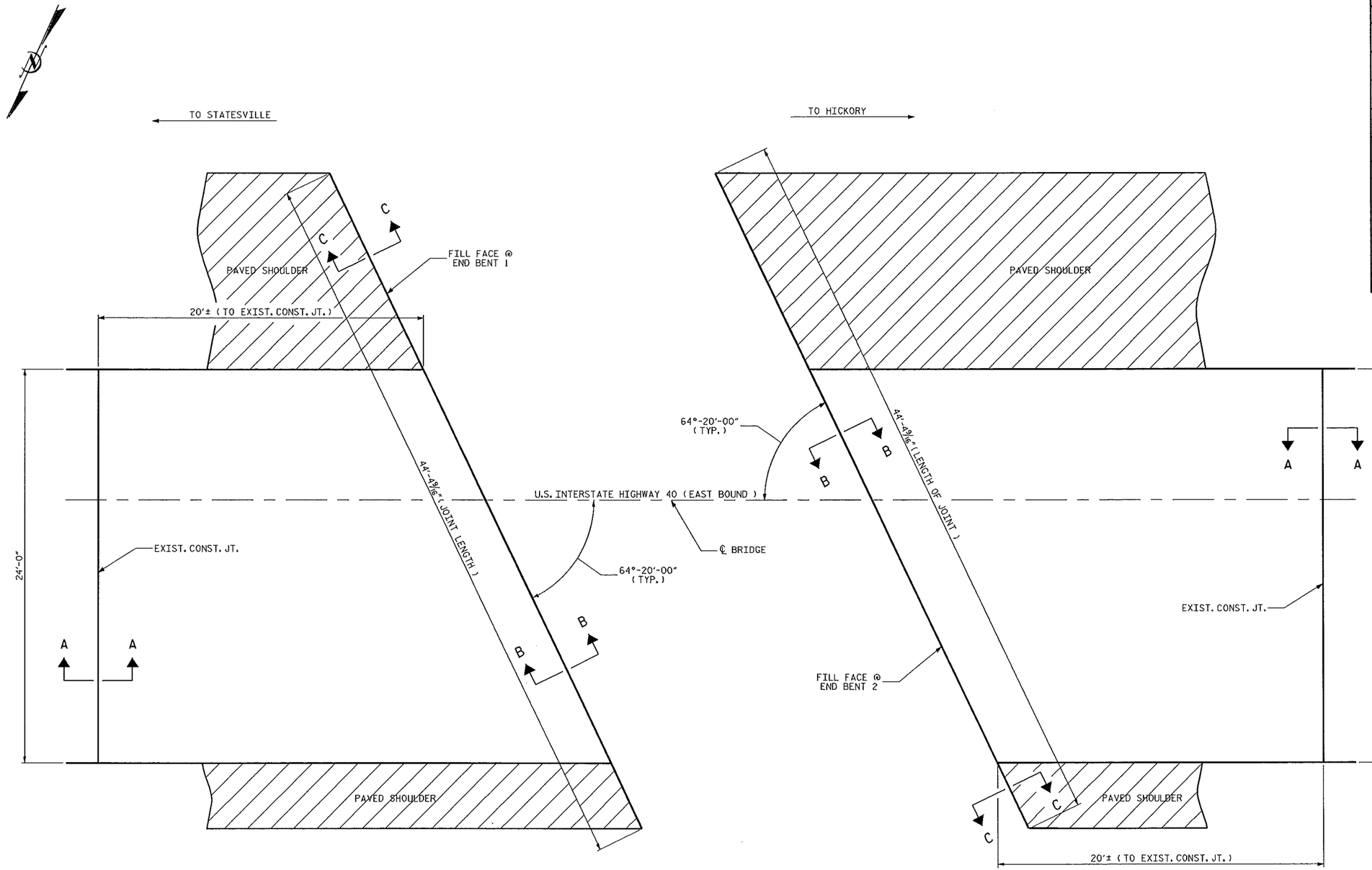
rputek



ROADWAY SLAB @ END BENT 1
(FOR SECTION VIEWS, SEE "JOINT DETAILS" SHEET.)

ROADWAY SLAB @ END BENT 2
(FOR SECTION VIEWS, SEE "JOINT DETAILS" SHEET.)

ROADWAY SLAB @ END BENT 1		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	0 SQ. YDS.	
CLASS III SURFACE PREPARATION	0 SQ. YDS.	
SCARIFYING BRIDGE DECK	69 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	69 SQ. YDS.	

ROADWAY SLAB @ END BENT 2		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	0 SQ. YDS.	
CLASS III SURFACE PREPARATION	0 SQ. YDS.	
SCARIFYING BRIDGE DECK	69 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	69 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE SPECIAL PROVISIONS.

CLASS II SURFACE PREPARATION

SCARIFICATION & HYDRO-DEMOLITION

EXISTING TO REMAIN

PROJECT NO. BP-5500W
IREDELL COUNTY
BRIDGE NO.: 123

SHEET 1 OF 1

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SURFACE PREPARATION ROADWAY SLABS

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
08/26/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-9
1			3			TOTAL SHEETS
2			4			28

DRAWN BY : R.PUTEK DATE : 05/14
CHECKED BY : T.SHERRILL DATE : 07/14
DESIGN ENGINEER OF RECORD: - DATE : -

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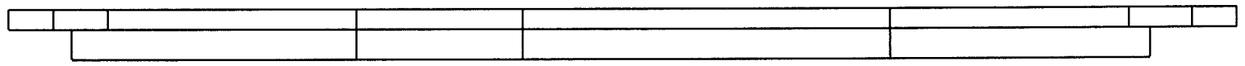
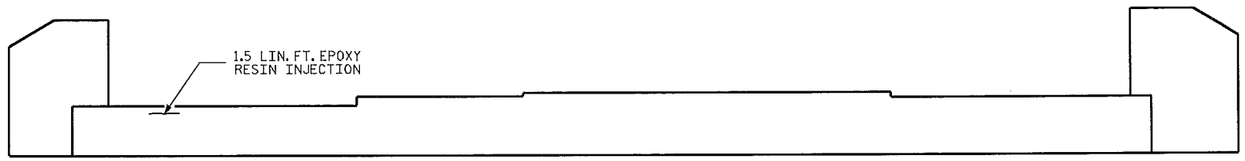
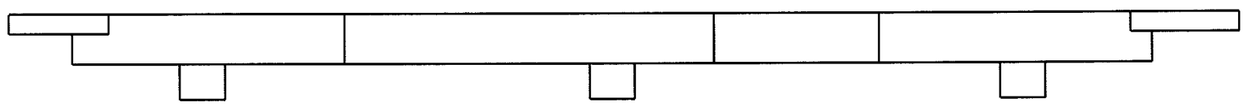


END BENT 1 - TOP



END BENT 1 - SPAN "A" FACE



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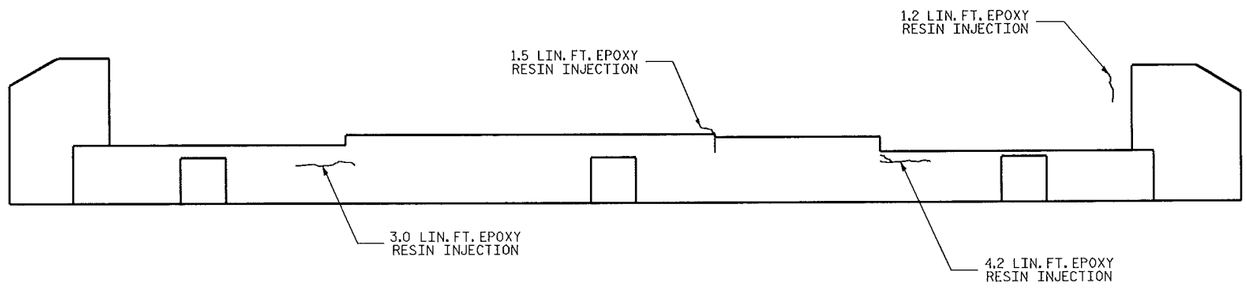

END BENT 2 - SPAN "C" FACE

REPAIR QUANTITY TABLE

REPAIRS END BENT 1	QUANTITIES				
	ESTIMATE		ACTUAL		
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	DEPTH FT	VOLUME CF
CAP (VERTICAL FACE)	0	0			
CAP (HORIZONTAL, CORNER)	0	0			
EPOXY RESIN INJECTION		LN. FT			LN. FT
CAP		1.5			

REPAIRS END BENT 2	QUANTITIES				
	ESTIMATE		ACTUAL		
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	DEPTH FT	VOLUME CF
CAP (VERTICAL FACE)	0	0			
CAP (HORIZONTAL, CORNER)	0	0			
EPOXY RESIN INJECTION		LN. FT			LN. FT
CAP		9.9			

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1" BEHIND REBAR AND MIN. 1" CL TO SAWCUT. SEE REPAIR DETAILS.

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE: 123

SHEET 1 OF 1

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

END BENT 1 & 2 REPAIRS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-10
1			3			TOTAL SHEETS
2			4			28

NORTH CAROLINA PROFESSIONAL SEAL 18568 ENGINEER TIMOTHY M. SHERRILL

08/28/14

DRAWN BY : R.PUTEK DATE : 04/14
CHECKED BY : T.SHERRILL DATE : 07/14
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NOTES

REPAIR LOCATIONS AND ESTIMATES OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE.

IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER, THE CONTRACTOR SHALL NOTE ON THE DRAWINGS, THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS, AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

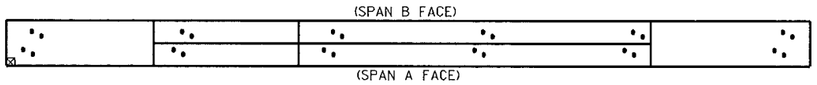
ALL EXISTING REPAIR PATCHES ARE TO BE INSPECTED, AND REPAIRED, AS DEEMED NECESSARY BY THE INSPECTOR, OR ENGINEER.

FOR ADDITIONAL NOTES AND TYPICAL SUBSTRUCTURE REPAIR DETAILS, SEE "DETAILS" SHEET.

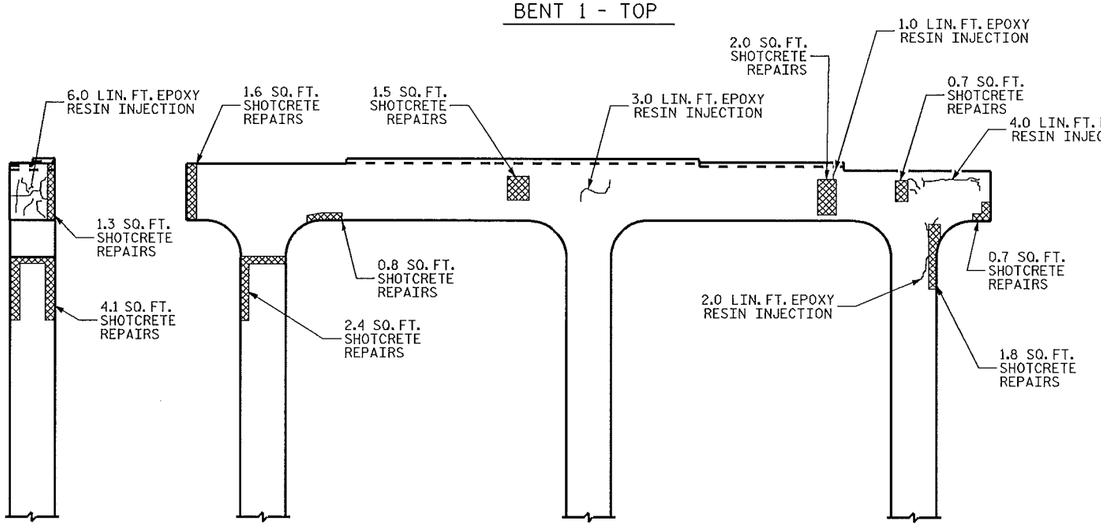
REPAIR QUANTITY TABLE

REPAIRS BENT 1	QUANTITIES				
	ESTIMATE		ACTUAL		
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	DEPTH FT	VOLUME CF
CAP (VERTICAL FACE)	7.1	3.0			
CAP (HORIZONTAL, CORNER)	7.2	3.0			
COLUMN	15.0	6.3			
EPOXY RESIN INJECTION		LN. FT			LN. FT
CAP		32.5			
COLUMN		2.0			

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1" BEHIND REBAR AND MIN. 1" CL TO SAWCUT. SEE REPAIR DETAILS.



BENT 1 - TOP

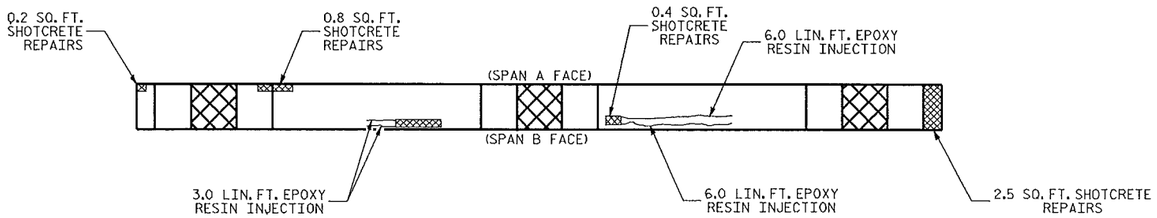


BENT 1 - SOUTH END

BENT 1 - NORTH END

BENT 1 - SPAN "A" FACE

BENT 1 - SPAN "B" FACE



BENT 1 - UNDERSIDE

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO.: 123

SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BENT 1 REPAIRS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-11
1			3			TOTAL SHEETS
2			4			28

NORTH CAROLINA PROFESSIONAL SEAL 16565 ENGINEER TIMOTHY M. SHERRILL

08/26/14

DRAWN BY : R.PUTEK DATE : 06/14
CHECKED BY : T.SHERRILL DATE : 07/14
DESIGN ENGINEER OF RECORD: - DATE : -

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NOTES

REPAIR LOCATIONS AND ESTIMATES OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE.

IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER, THE CONTRACTOR SHALL NOTE ON THE DRAWINGS, THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS, AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

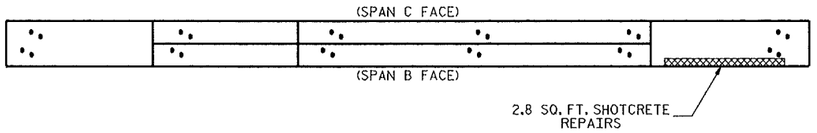
ALL EXISTING REPAIR PATCHES ARE TO BE INSPECTED, AND REPAIRED, AS DEEMED NECESSARY BY THE INSPECTOR, OR ENGINEER.

FOR ADDITIONAL NOTES AND TYPICAL SUBSTRUCTURE REPAIR DETAILS, SEE "DETAILS" SHEET.

REPAIR QUANTITY TABLE

REPAIRS BENT 2	QUANTITIES				
	ESTIMATE		ACTUAL		
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	DEPTH FT	VOLUME CF
CAP (VERTICAL FACE)	3.0	1.3			
CAP (HORIZONTAL, CORNER)	18.9	7.9			
COLUMN	4.4	1.8			
EPOXY RESIN INJECTION	LN. FT				LN. FT
CAP	21.5				
COLUMN	0.8				

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1" BEHIND REBAR AND MIN. 1" CL TO SAWCUT. SEE REPAIR DETAILS.



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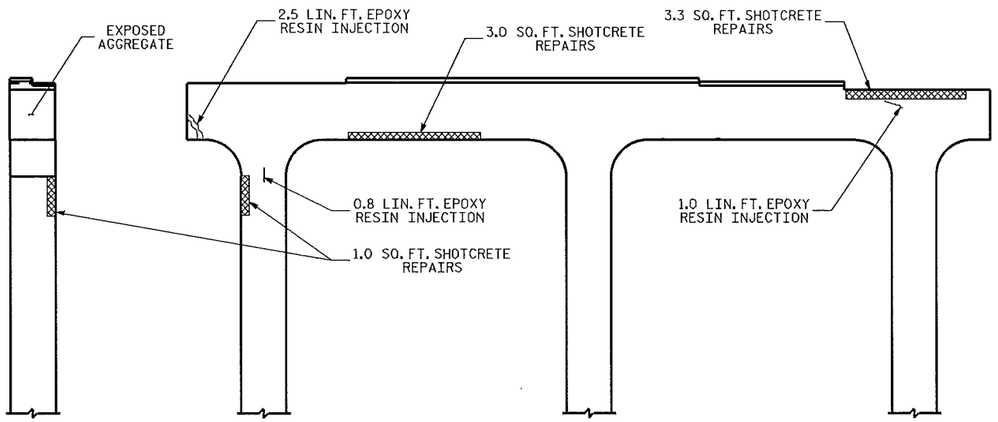
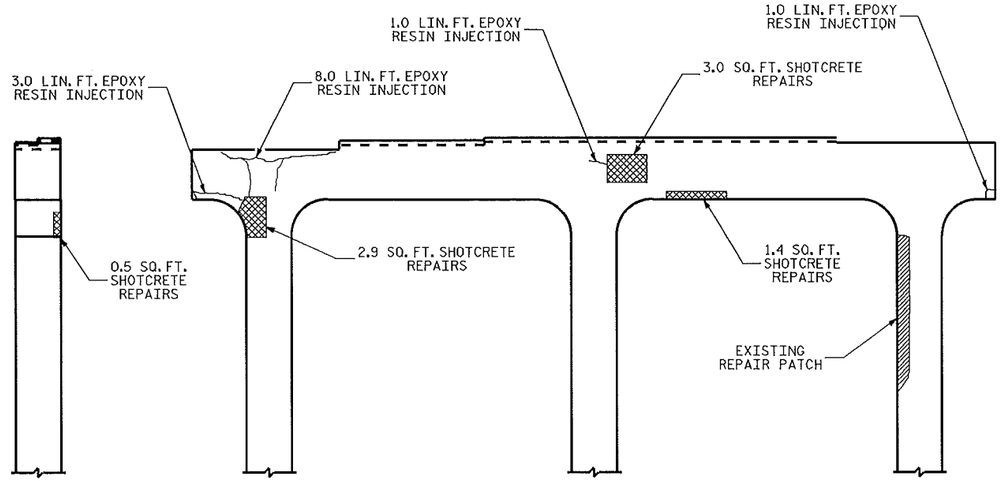
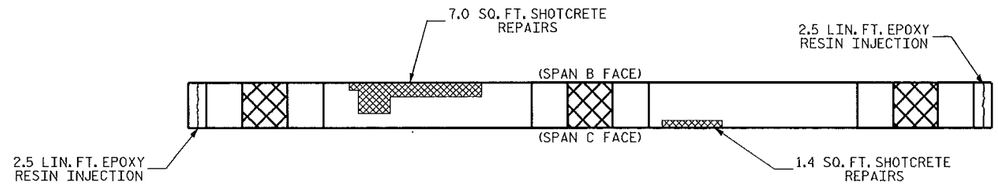


BENT 2 - SOUTH END



BENT 2 - NORTH END

BENT 2 - SPAN "B" FACE



BENT 2 - UNDERSIDE

BENT 2 - SPAN "C" FACE

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO.: 123

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BENT 2 REPAIRS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-12
1			3			TOTAL SHEETS
2			4			28

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
08/26/14

DRAWN BY :	R.PUTEK	DATE : 06/14
CHECKED BY :	T.SHERRILL	DATE : 07/14
DESIGN ENGINEER OF RECORD:	-	DATE : -

26-AUG-2014 14:46
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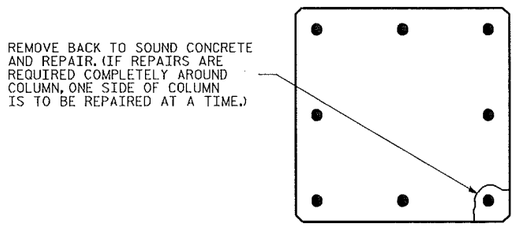
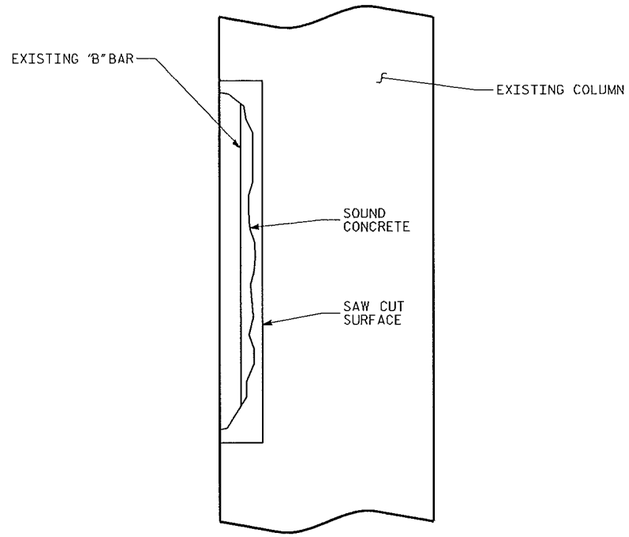


SECTION



ELEVATION

COLUMN CORNER REPAIR

NOTES:

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER, THE CONTRACTOR SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

CONTRACTOR SHALL SAW CUT TO A NOMINAL DEPTH OF ½" BUT REINFORCING STEEL SHALL NOT BE DAMAGED.

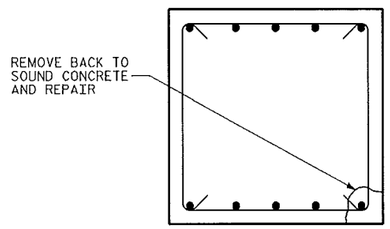
CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL.

SHOTCRETE REPAIRS MAY BE REPLACED WITH CONCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

* THESE DOWELS AND BARS WILL BE REQUIRED AT THE LOCATIONS DESIGNATED BY THE ENGINEER.



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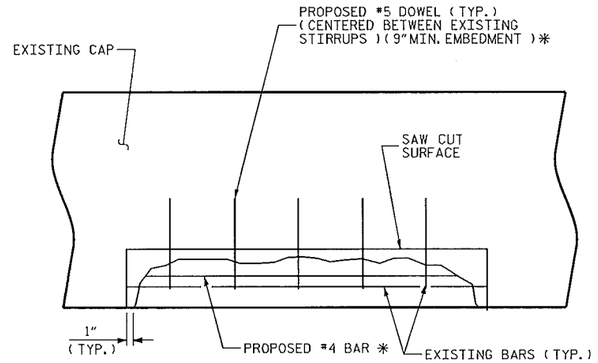
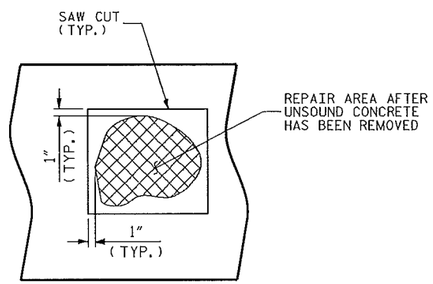


ELEVATION

CAP CORNER REPAIR



FACE REPAIR

TYPICAL SUBSTRUCTURE REPAIR DETAIL

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO.: 123

SHEET 1 OF 1

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-13
1			3			TOTAL SHEETS
2			4			28

NORTH CAROLINA PROFESSIONAL SEAL 8505 ENGINEER TIMOTHY M. SHERRILL

08/20/14

DRAWN BY : R.PUTEK DATE : 04/14
CHECKED BY : T.SHERRILL DATE : 07/14
DESIGN ENGINEER OF RECORD: - DATE : -

20-AUG-2014 09:23
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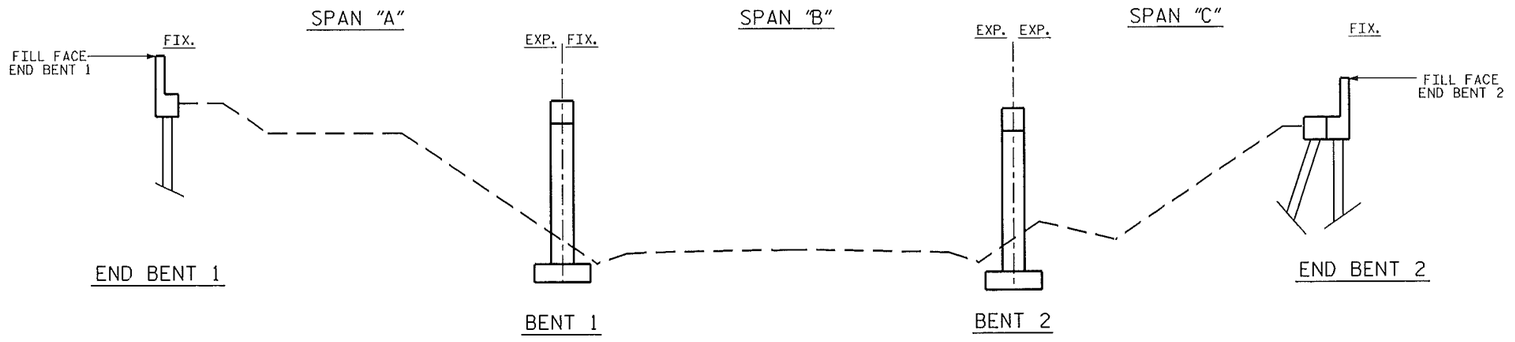
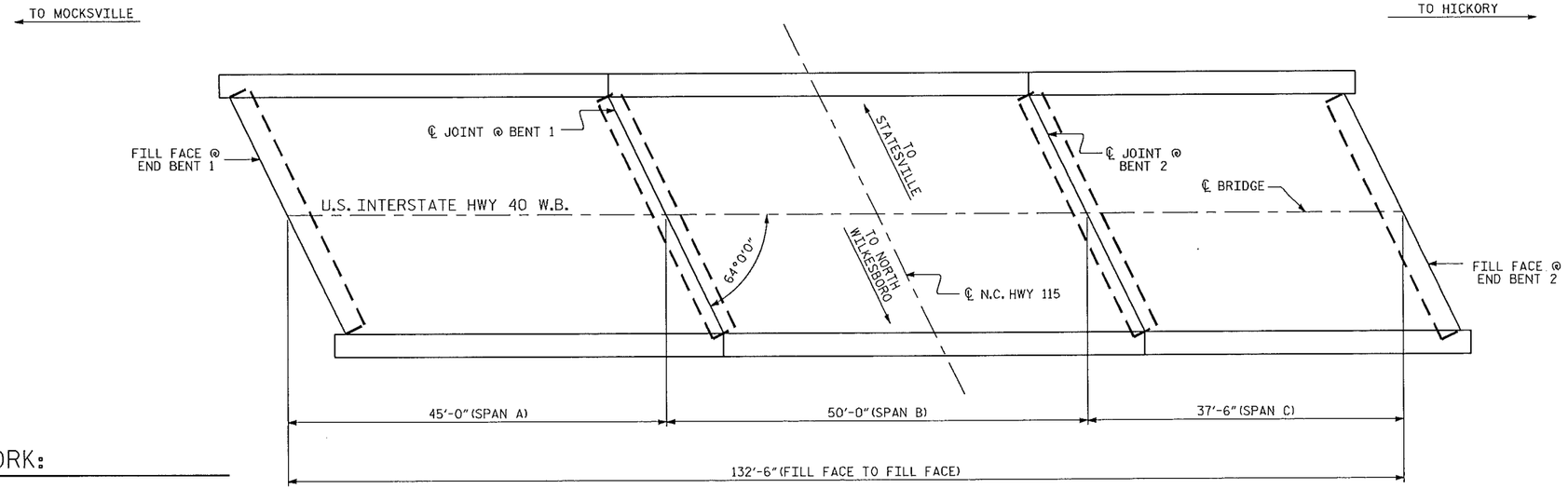
NOTE:
THE PROFILE INFORMATION IS TAKEN FROM THE ORIGINAL PLANS, AND THE ROUTINE INSPECTION REPORT DATED: 04/12/2012



SECTION ALONG ℄ ROADWAY



PLAN

SCOPE OF WORK:

SAWCUT AND CHIP OUT UNSOUND CONCRETE IN THE SPALLED AND DELAMINATED AREAS OF THE SUBSTRUCTURE.

APPLY SHOTCRETE IN PREPARED AREAS OF SUBSTRUCTURE.

EPOXY INJECT CRACKS IN SUBSTRUCTURE.

PREPARE AND PAINT STRUCTURAL STEEL.

PARTIALLY REMOVE BRIDGE DECK CONCRETE USING SCARIFICATION AND HYDRO-DEMOLITION METHODS.

OVERLAY PREPARED BRIDGE DECK SURFACE WITH LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH.

DEMOLISH EXISTING BRIDGE DECK JOINTS.

RECONSTRUCT BRIDGE DECK JOINTS AND INSTALL NEW SYNTHETIC RUBBER EXPANSION JOINT SEALS.

GROOVE CONCRETE BRIDGE DECK.

DRAWN BY : R.PUTEK DATE : 02/14
CHECKED BY : T.SHERRILL DATE : 02/14
DESIGN ENGINEER OF RECORD: _____ DATE : _____

20-AUG-2014 09:26
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NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
08/20/14

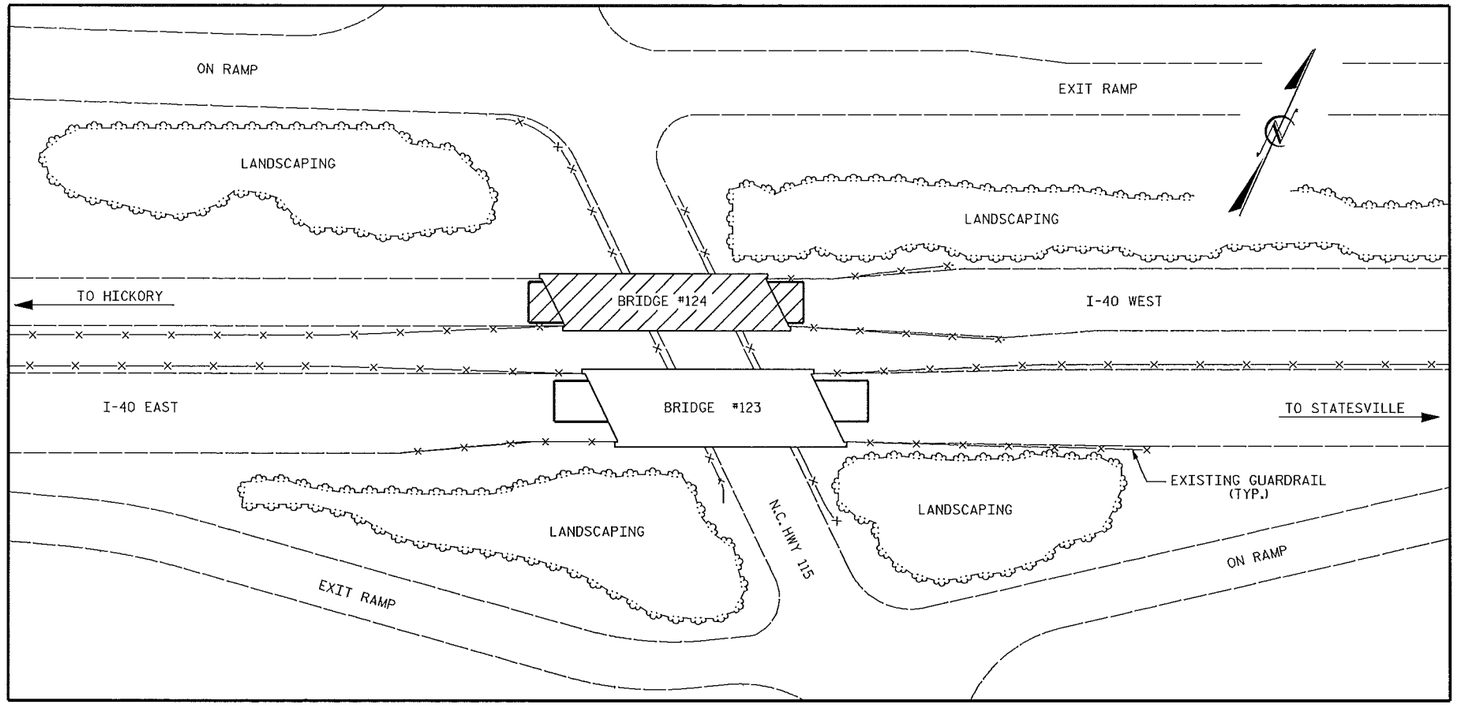
PROJECT NO. BP-5500W
IREDELL COUNTY
BRIDGE NO. 124

SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
BRIDGE 124 ON I-40 WB
OVER N.C. HWY 115

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-14
1			3			TOTAL SHEETS
2			4			28



LOCATION SKETCH

INFORMATION INDICATED ON THE LOCATION SKETCH SHALL BE CONSIDERED GENERAL INFORMATION, ONLY. THE CONTRACTOR SHALL CONFIRM, THROUGH OTHER SOURCES, SPECIFIC INFORMATION REGARDING THE BRIDGES, ROADWAYS, UTILITIES, THE SURROUNDING AREA, AND ANY OTHER ASPECTS THAT MAY BE NECESSARY TO PERFORM AND COMPLETE THE PROJECT.

NOTES

EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.

FOR OVERLAY OF BRIDGE WITH LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF THE DECK.

FOR SCARIFYING BRIDGE DECK, HYDRO-DEMOLITION OF BRIDGE DECK, AND CLASS II SURFACE PREPARATION, SEE OVERLAY SURFACE PREPARATION SPECIAL PROVISION.

EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECKS.

FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION MANAGEMENT PLANS.

LONGITUDINAL CONSTRUCTION JOINTS OF OVERLAYS SHALL BE LOCATED ALONG THE CENTERLINE OR EDGE OF TRAVEL LANES.

DURING CONSTRUCTION, BERMS OR APPROPRIATE MEASURES SHALL BE USED TO ENSURE HYDRO-DEMOLITION WATER DOES NOT FLOW OR MIGRATE INTO ACTIVE TRAVEL LANES.

FOR UNDER STRUCTURE WORK PLATFORM, SEE SPECIAL PROVISIONS.

FOR FOAM JOINT SEALS, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

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

FOR ELASTOMERIC CONCRETE, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR PAINTING EXISTING STRUCTURE, SEE SPECIAL PROVISIONS.

TOTAL BILL OF MATERIAL

GROOVING BRIDGE FLOOR	POLLUTION CONTROL	SHOTCRETE REPAIRS	FOAM JOINT SEALS	UNDER STRUCTURE WORK PLATFORM	LATEX MODIFIED CONCRETE OVERLAY -VERY EARLY STRENGTH	BRIDGE JOINT DEMOLITION	HYDRO-DEMOLITION OF BRIDGE DECK	PLACING & FINISHING LATEX MODIFIED CONCRETE OVERLAY- VERY EARLY STRENGTH	SCARIFYING BRIDGE DECK
SQ. FT.	LUMP SUM	CU. FT.	LUMP SUM	LUMP SUM	CU. YDS.	SQ. FT.	SQ. YDS.	SQ. YDS.	SQ. YDS.
3830	LUMP SUM	31.4	LUMP SUM	LUMP SUM	20	68	493	493	493

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO. 124

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

BRIDGE #124 ON I-40W OVER NC 115

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
08/26/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-15
1			3			TOTAL SHEETS
2			4			28

DRAWN BY : R.PUTEK DATE : 06/14
CHECKED BY : T.SHERILL DATE : 06/14
DESIGN ENGINEER OF RECORD: - DATE : -

26-AUG-2014 14:46
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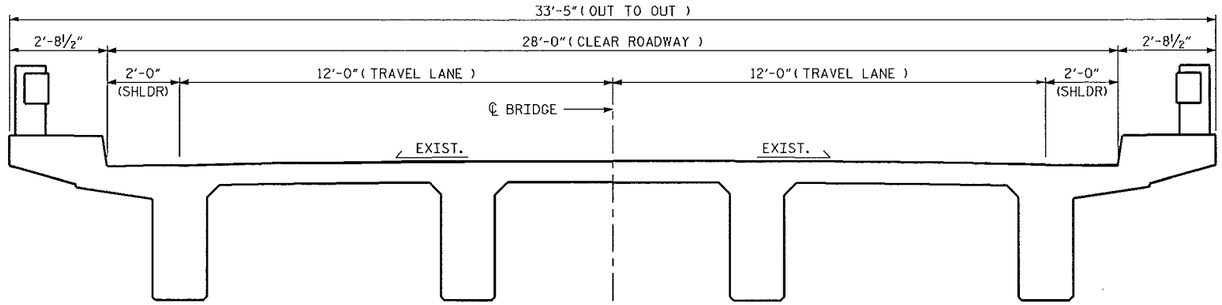
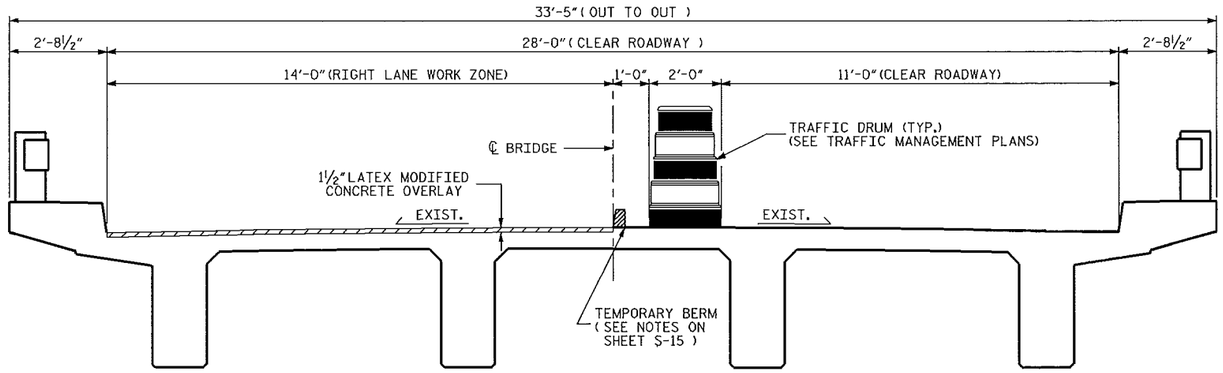
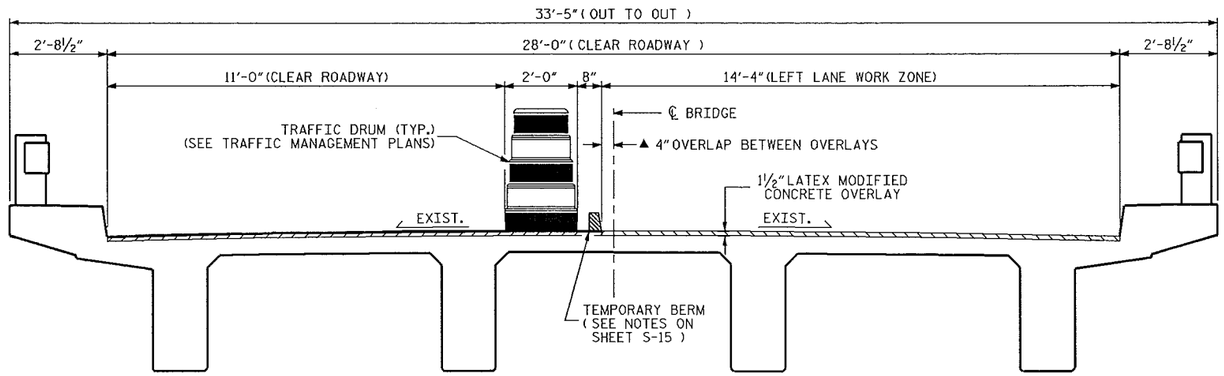


TYPICAL SECTION
(EXISTING - LOOKING EAST)



TYPICAL SECTION
(RIGHT LANE WORK ZONE - LOOKING EAST)



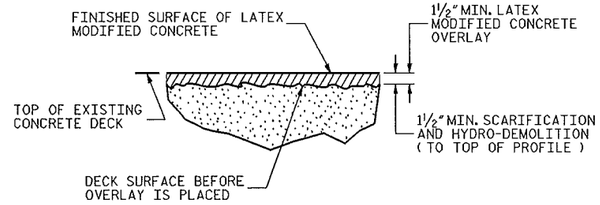
TYPICAL SECTION
(LEFT LANE WORK ZONE - LOOKING EAST)

▲ 4" OVERLAP BETWEEN OVERLAYS

PREVIOUSLY POURED LMC TO BE HYDRO-DEMOLITIONED AND RECAST WITH LMC

NOTES:

THE WORK STAGING ON THIS PLAN SHEET INDICATES THAT THE RIGHT LANE LMC - VES WORK IS PERFORMED FIRST, FOLLOWED BY THE LEFT LANE LMC - VES WORK. THE CONTRACTOR MAY ELECT TO SEQUENCE THE WORK DIFFERENTLY. BUT THE DIMENSIONS OF THE WORK ZONE, CLEAR ROADWAY AREAS, AND THE LOCATIONS OF THE DRUM SHALL MATCH THAT INDICATED ON THIS PLAN SHEET. RESPECTIVE TO THE LANE WHERE THE LMC WORK IS BEING PERFORMED.



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO.: 124

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

TYPICAL SECTION

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-16
1			3			TOTAL SHEETS
2			4			28

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL

08/26/14

DRAWN BY : R.PUTEK DATE : 07/14
CHECKED BY : T.SHERRILL DATE : 07/14
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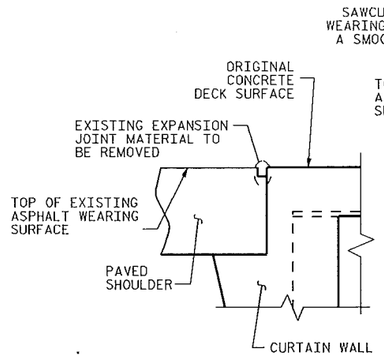
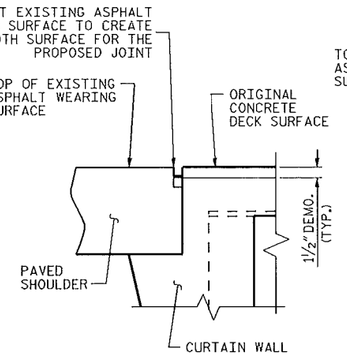
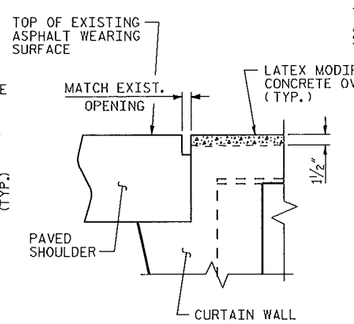


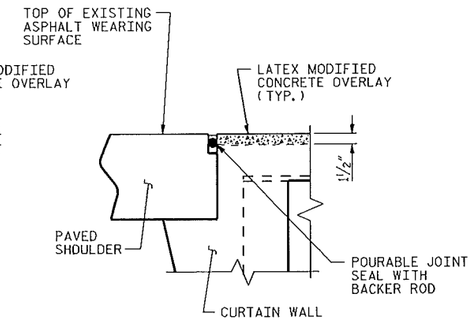
SECTION C-C
(EXISTING JOINT)



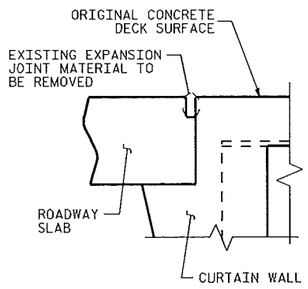
SECTION C-C
(MINIMUM EXISTING JOINT DEMOLITION)



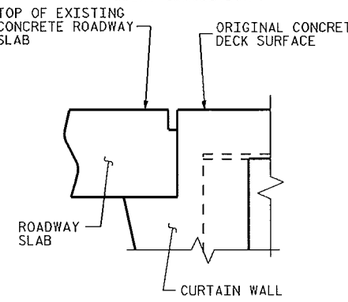
SECTION C-C
(PROPOSED JOINT DIMENSIONS)



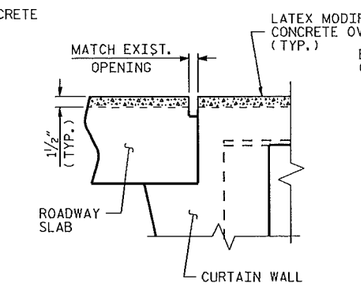
SECTION C-C
(PROPOSED POURABLE JOINT SEAL)



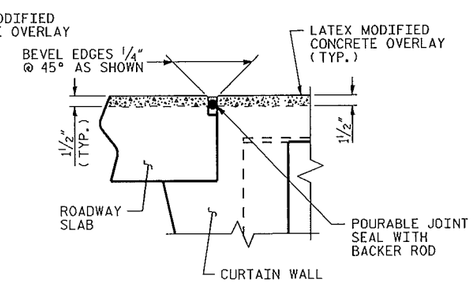
SECTION B-B
(EXISTING JOINT)



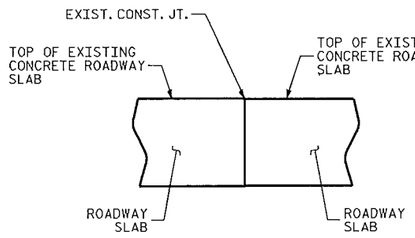
SECTION B-B
(MINIMUM EXISTING JOINT DEMOLITION)



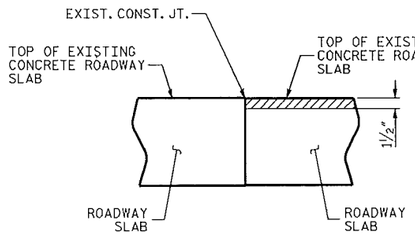
SECTION B-B
(PROPOSED JOINT DIMENSIONS)



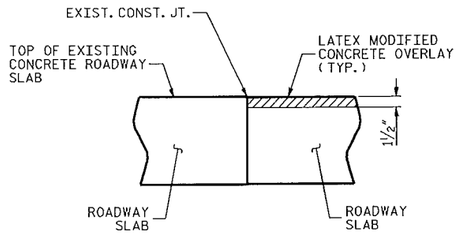
SECTION B-B
(PROPOSED POURABLE JOINT SEAL)



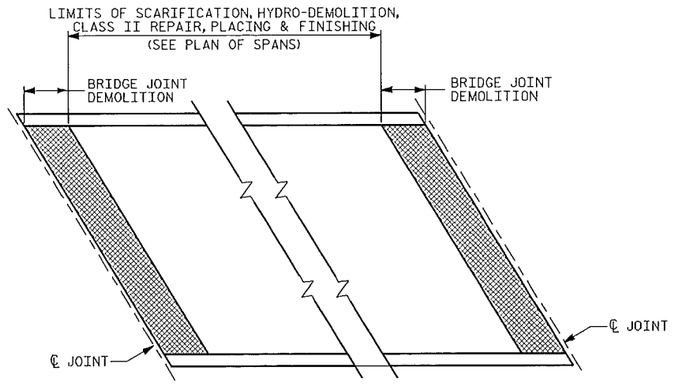
SECTION A-A
(EXISTING)



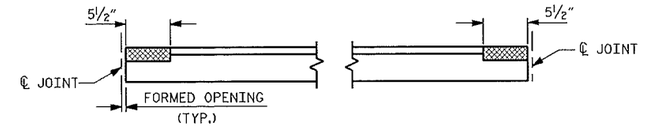
SECTION A-A
(MINIMUM EXISTING DEMOLITION & ROADWAY SLAB MILLING)



SECTION A-A
(PROPOSED)



PLAN



ELEVATION

LIMITS OF BRIDGE JOINT DEMOLITION AND OVERLAY PREPARATION AND PLACEMENT

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO. 124

SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 10565 ENGINEER TIMOTHY M. SHERRILL
06/20/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-17
1			3			TOTAL SHEETS
2			4			28

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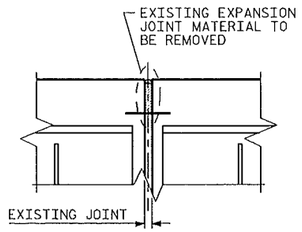
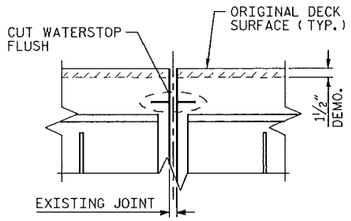
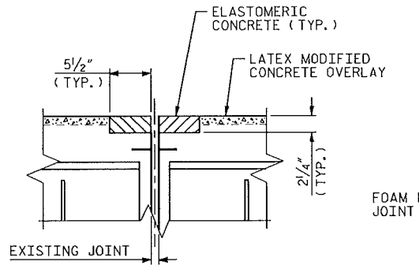
IF THE EMBEDDED PORTION OF THE EXISITNG PLASTIC WATERSTOP IS EXPOSED DURING REMOVAL OF UNSOUND CONCRETE OR IF UNSOUND CONCRETE IS REMOVED WITHIN 2" OF THE WATERSTOP, THE ENTIRE WATERSTOP SHALL BE REMOVED



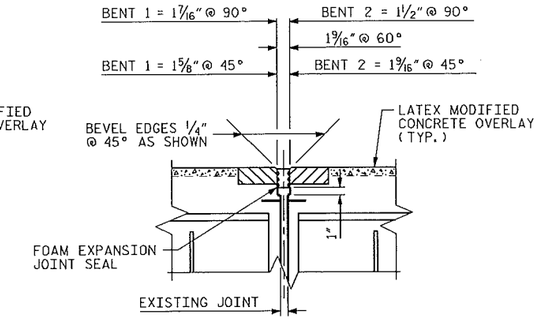
SECTION D-D
(EXISTING)



SECTION D-D
(MINIMUM EXISTING JOINT DEMOLITION)



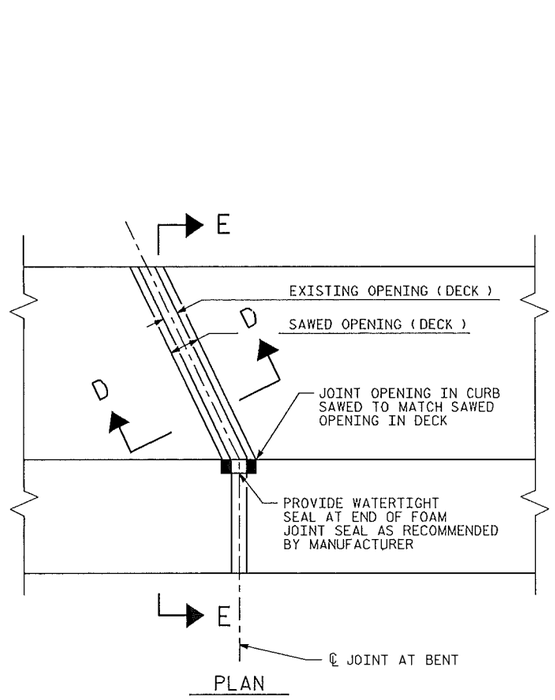
SECTION D-D
(PROPOSED JOINT PRE-SAWED DIMENSIONS)



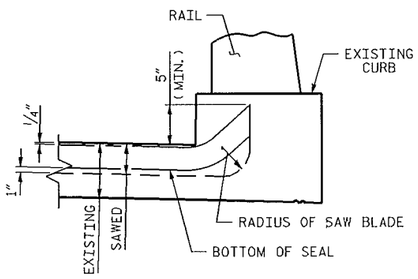
SECTION D-D
(PROPOSED FOAM EXPANSION JOINT SEAL)

HYDRO-DEMOLITION OR EXCAVATION OF CONCRETE AT THE EXISTING JOINT SHALL RESULT IN THE BOTTOM OF THE EXCAVATION BEING REASONABLY FLAT. TO PROVIDE SUFFICENT SUBSTRATE FOR PLACEMENT AND SUPPORT OF ELASTOMERIC OR REPAIR CONCRETE. DEMOLISH BRIDGE JOINT TO THE NECESSARY DEPTH, SUCH THAT ELASTOMERIC CONCRETE SHALL BE FOUNDED ON CONCRETE OR REPAIR CONCRETE SUBSTRATE, NOT LATEX MODIFIED CONCRETE.

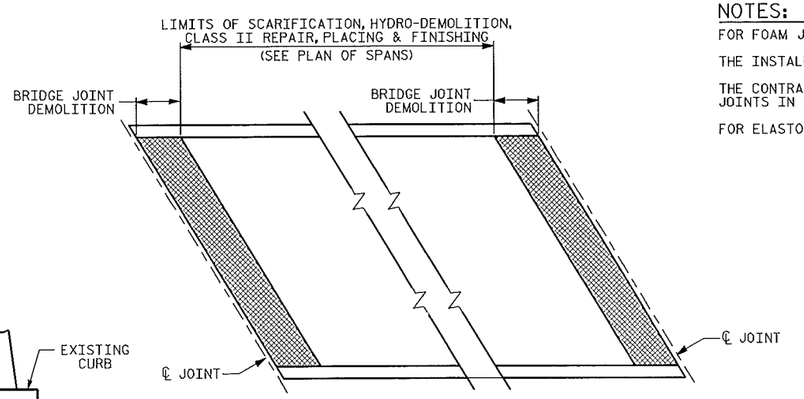
ELASTOMERIC CONCRETE	
	CU. FT.
BENT 1	5.35
BENT 2	5.35
TOTAL	10.70



PLAN



SECTION E-E



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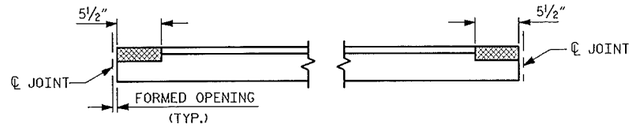

ELEVATION

LIMITS OF BRIDGE JOINT DEMOLITION AND OVERLAY PREPARATION AND PLACEMENT

NOTES:

FOR FOAM JOINT SEAL SEE SPECIAL PROVISIONS.

THE INSTALLED FOAM JOINT SEAL SHALL BE WATER TIGHT.

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT.

FOR ELASTOMERIC CONCRETE, SEE SPECIAL PROVISIONS.

PROJECT NO. BP-5500W
IREDELL COUNTY
BRIDGE NO. 124
SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT DETAILS AT BENTS

NORTH CAROLINA PROFESSIONAL SEAL 10565 ENGINEER TIMOTHY M. SHERRILL
06/20/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-18
1			3			TOTAL SHEETS
2			4			28

DRAWN BY : R.PUTEK DATE : 06/14
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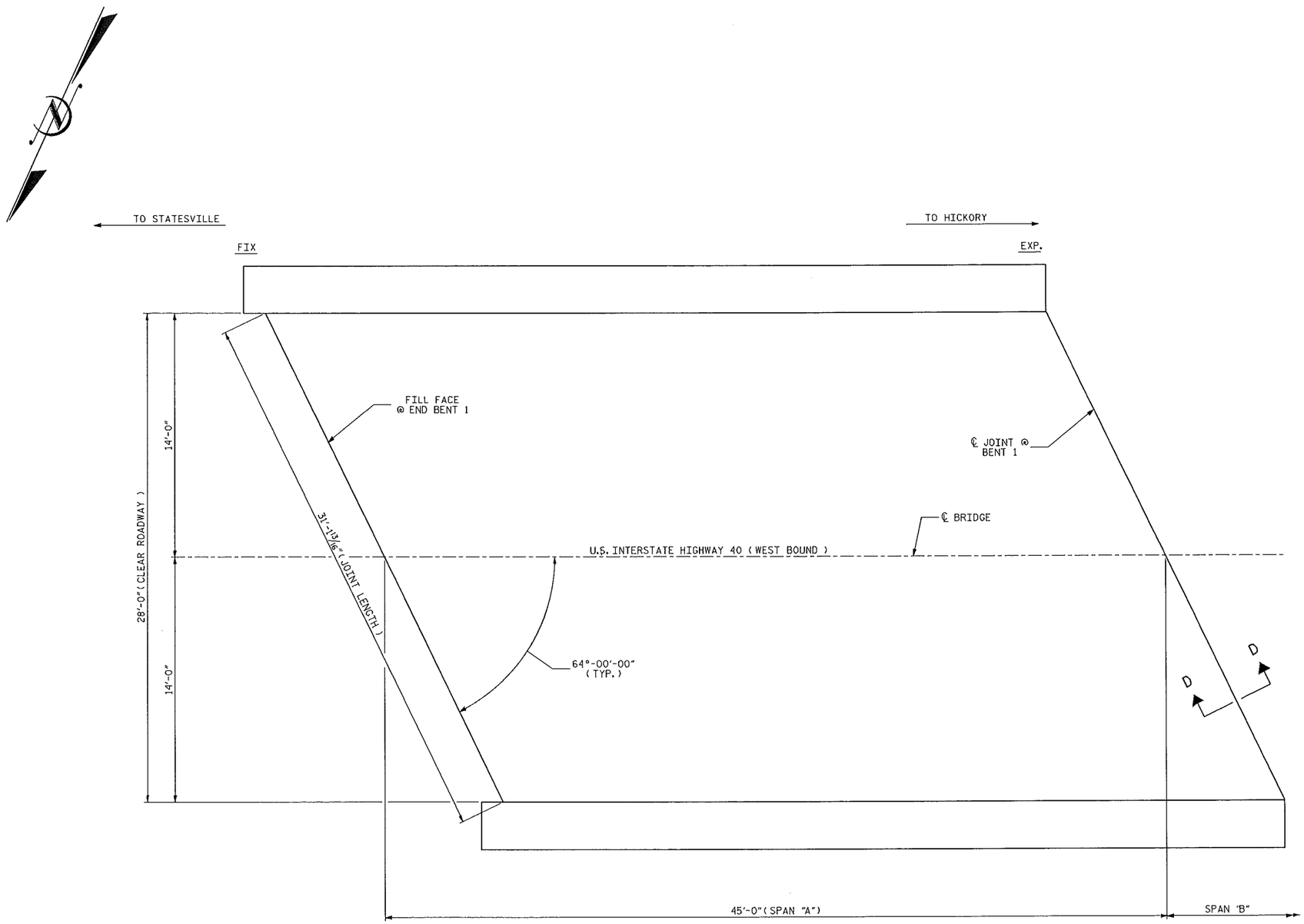
SPAN "A" QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	0 SQ. YDS.	
CLASS III SURFACE PREPARATION	0 SQ. YDS.	
SCARIFYING BRIDGE DECK	140 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	140 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE SPECIAL PROVISIONS.



PLAN OF SPAN "A"
(FOR SECTION VIEWS, SEE "JOINT DETAIL SHEET")

CLASS II SURFACE PREPARATION

SCARIFICATION & HYDRO-DEMOLITION

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO.: 124

SHEET 1 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SURFACE PREPARATION SPAN "A"

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-19
1			3			TOTAL SHEETS
2			4			28

NORTH CAROLINA PROFESSIONAL SEAL 18566 ENGINEER TIMOTHY N. SHERRILL
08/20/14

DRAWN BY : R.PUTEK DATE : 05/14
CHECKED BY : T.SHERRILL DATE : 06/14
DESIGN ENGINEER OF RECORD: - DATE : -

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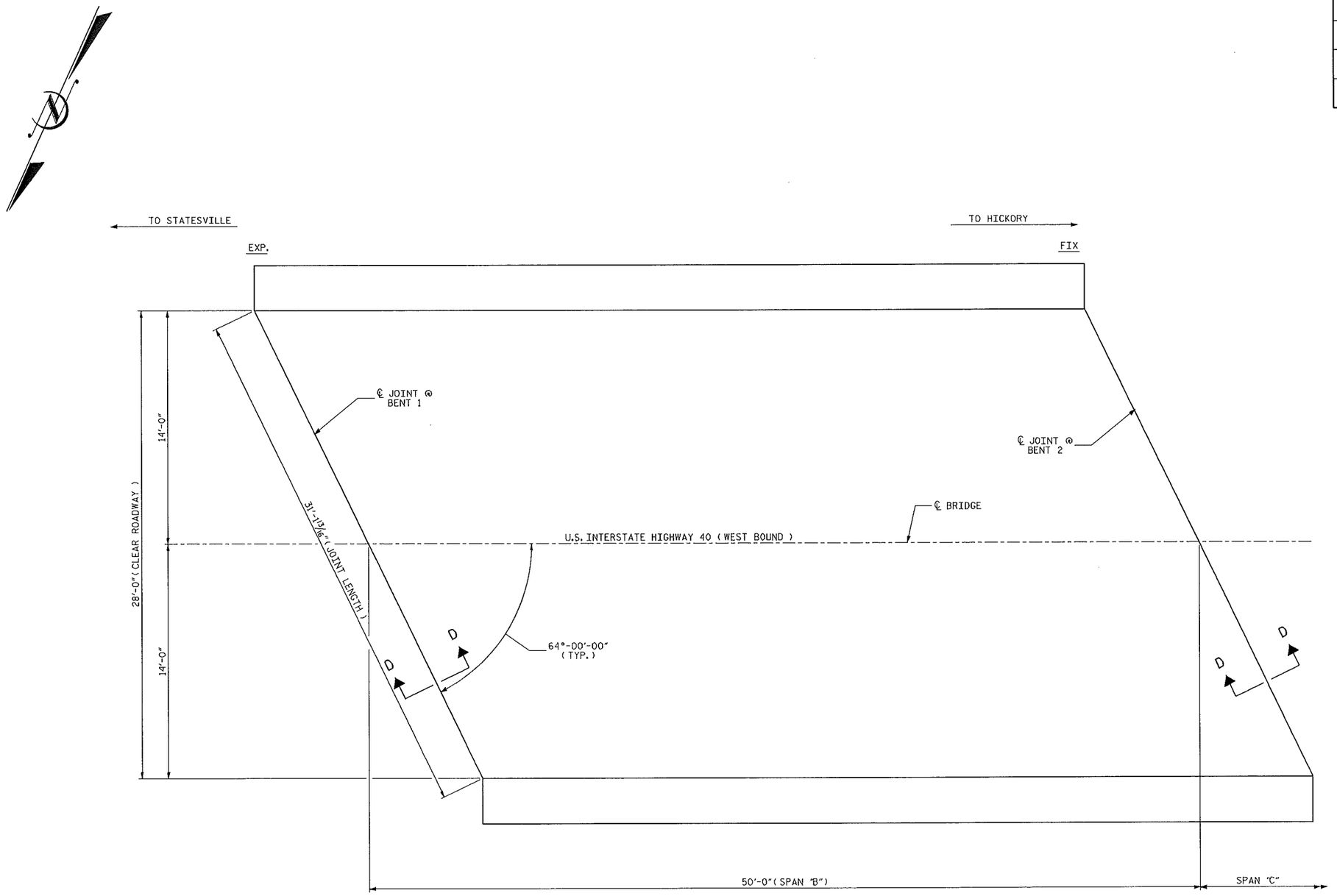
SPAN "B" QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	0 SQ. YDS.	
CLASS III SURFACE PREPARATION	0 SQ. YDS.	
SCARIFYING BRIDGE DECK	156 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	156 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE SPECIAL PROVISIONS.



PLAN OF SPAN "B"
(FOR SECTION VIEWS, SEE "JOINT DETAIL SHEET")

CLASS II SURFACE PREPARATION

SCARIFICATION & HYDRO-DEMOLITION

PROJECT NO. BP-5500W
IREDELL COUNTY
BRIDGE NO.: 124
SHEET 2 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SURFACE PREPARATION
SPAN "B"

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
08/20/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-20
1			3			TOTAL SHEETS
2			4			28

DRAWN BY : R.PUTEK DATE : 05/14
CHECKED BY : T.SHERRILL DATE : 06/14
DESIGN ENGINEER OF RECORD: - DATE : -

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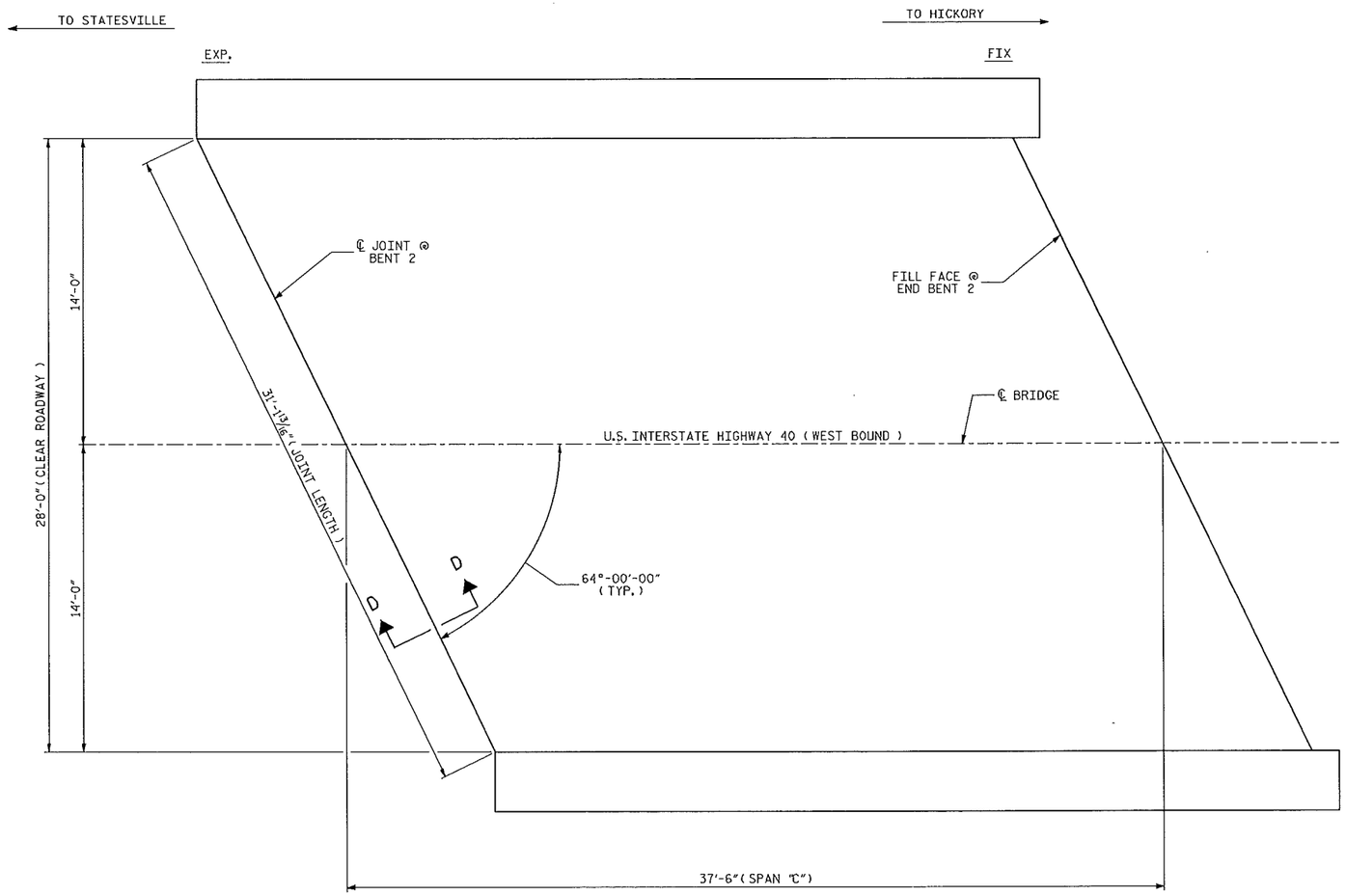
SPAN "C" QUANTITIES		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	0 SQ. YDS.	
CLASS III SURFACE PREPARATION	0 SQ. YDS.	
SCARIFYING BRIDGE DECK	117 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	117 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE SPECIAL PROVISIONS.



PLAN OF SPAN "C"
(FOR SECTION VIEWS, SEE "JOINT DETAIL SHEET")

CLASS II SURFACE PREPARATION

SCARIFICATION & HYDRO-DEMOLITION

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO.: 124

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SURFACE PREPARATION SPAN "C"

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-21
1			3			TOTAL SHEETS
2			4			28

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL

T. Sherrill 08/20/14

DRAWN BY :	R.PUTEK	DATE : 05/14
CHECKED BY :	T.SHERRILL	DATE : 06/14
DESIGN ENGINEER OF RECORD:	-	DATE : -

20-AUG-2014 09:27
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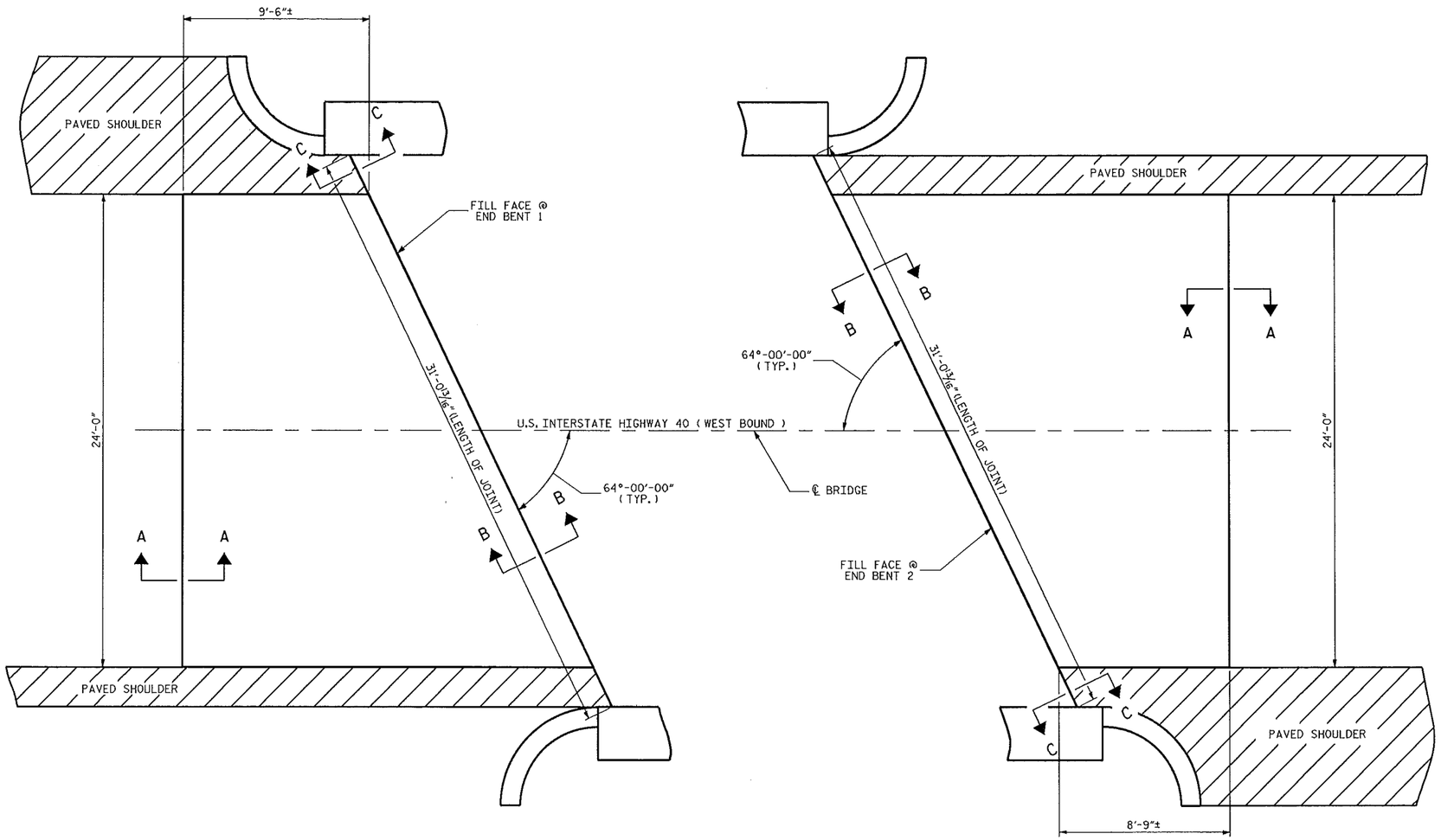

ROADWAY SLAB @ END BENT 1
(FOR SECTION VIEWS, SEE "JOINT DETAILS" SHEET.)

ROADWAY SLAB @ END BENT 2
(FOR SECTION VIEWS, SEE "JOINT DETAILS" SHEET.)

ROADWAY SLAB @ END BENT 1		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	0 SQ. YDS.	
CLASS III SURFACE PREPARATION	0 SQ. YDS.	
SCARIFYING BRIDGE DECK	41 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	41 SQ. YDS.	

ROADWAY SLAB @ END BENT 2		
	ESTIMATE	ACTUAL
CLASS II SURFACE PREPARATION	0 SQ. YDS.	
CLASS III SURFACE PREPARATION	0 SQ. YDS.	
SCARIFYING BRIDGE DECK	39 SQ. YDS.	
HYDRO-DEMOLITION OF BRIDGE DECK	39 SQ. YDS.	

PAYMENT FOR CLASS II & CLASS III SURFACE PREPARATION IS BASED ON THE SQUARE FEET OF ADDITIONAL DEMOLITION REQUIRED FOLLOWING HYDRO-DEMOLITION OF THE BRIDGE DECK. SEE SPECIAL PROVISIONS.

CLASS II SURFACE PREPARATION

SCARIFICATION & HYDRO-DEMOLITION

EXISTING TO REMAIN

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO.: 124

SHEET 1 OF 1

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SURFACE PREPARATION ROADWAY SLABS

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
08/26/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-22
1			3			TOTAL SHEETS
2			4			28

DRAWN BY : R.PUTEK DATE : 05/14
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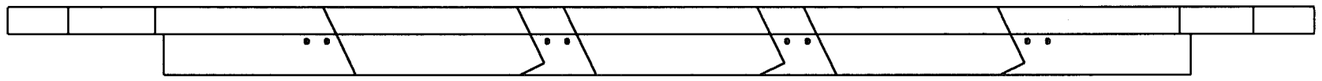
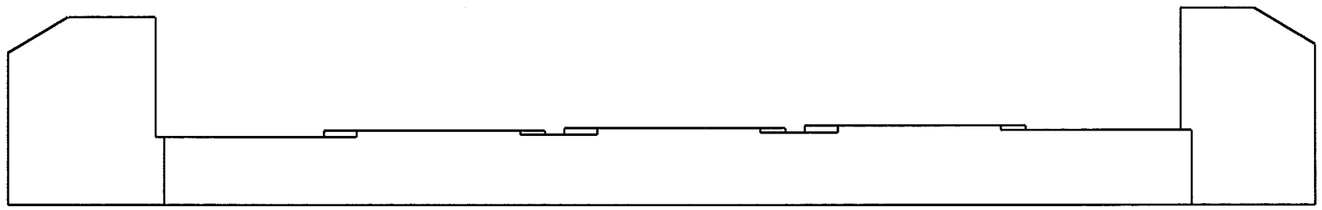
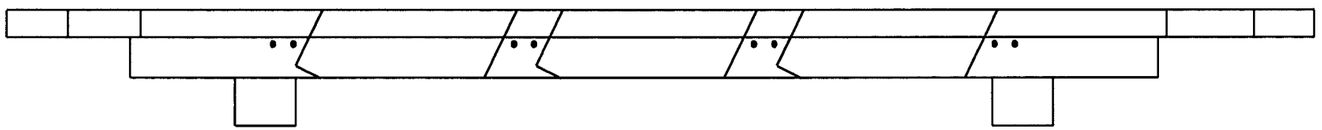


END BENT 1 - TOP



END BENT 1 - SPAN "A" FACE



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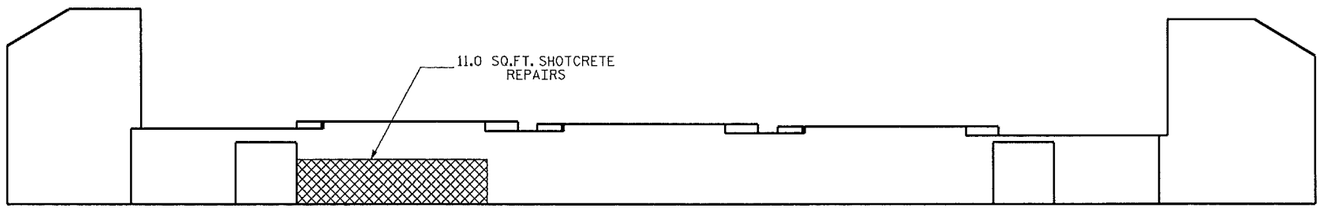

END BENT 2 - SPAN "C" FACE

REPAIR QUANTITY TABLE

REPAIRS END BENT 1	QUANTITIES				
	ESTIMATE		ACTUAL		
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	DEPTH FT	VOLUME CF
CAP (VERTICAL FACE)	0	0			
CAP (HORIZONTAL, CORNER)	0	0			
EPOXY RESIN INJECTION		LN. FT			LN. FT
CAP		0			

REPAIRS END BENT 2	QUANTITIES				
	ESTIMATE		ACTUAL		
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	DEPTH FT	VOLUME CF
CAP (VERTICAL FACE)	11	4.6			
CAP (HORIZONTAL, CORNER)	0	0			
EPOXY RESIN INJECTION		LN. FT			LN. FT
CAP		0			

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1" BEHIND REBAR AND MIN. 1" CL TO SAWCUT. SEE REPAIR DETAILS.

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE: 124

SHEET 1 OF 1

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

END BENT 1 & 2 REPAIRS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-23
1			3			TOTAL SHEETS
2			4			28

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
08/20/14

DRAWN BY : R.PUTEK DATE : 04/14
CHECKED BY : T.SHERRILL DATE : 06/14
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NOTES

REPAIR LOCATIONS AND ESTIMATES OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE.

IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER, THE CONTRACTOR SHALL NOTE ON THE DRAWINGS, THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS, AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

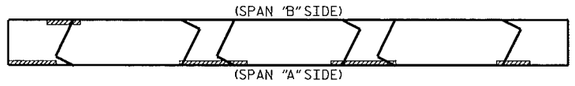
ALL EXISTING REPAIR PATCHES ARE TO BE INSPECTED AND REPAIRED, AS DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER.

FOR ADDITIONAL NOTES AND TYPICAL SUBSTRUCTURE REPAIR DETAILS, SEE "DETAILS" SHEET.

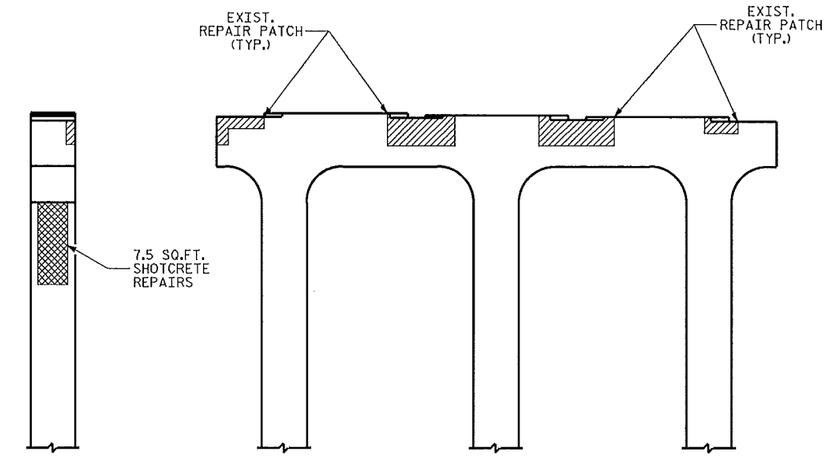
REPAIR QUANTITY TABLE

REPAIRS BENT 1	QUANTITIES				
	ESTIMATE		ACTUAL		
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	DEPTH FT	VOLUME CF
CAP (VERTICAL FACE)	0.0	0.0			
CAP (HORIZONTAL, CORNER)	0.0	0.0			
COLUMN	7.5	3.2			
EPOXY RESIN INJECTION		LN. FT			LN. FT
CAP		0.0			
COLUMN		0.0			

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1" BEHIND REBAR AND MIN. 1" CL TO SAWCUT. SEE REPAIR DETAILS.

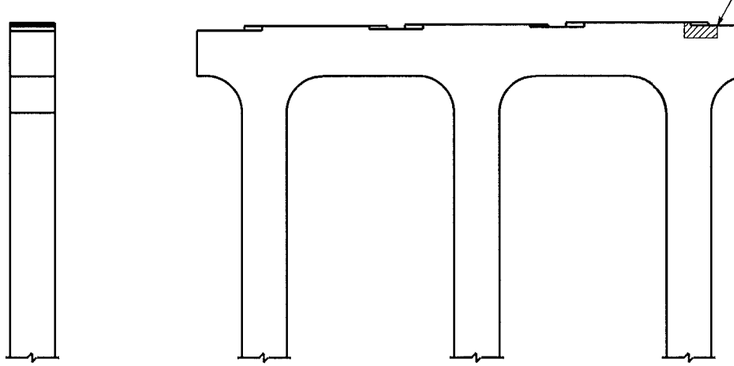


BENT 1 - TOP



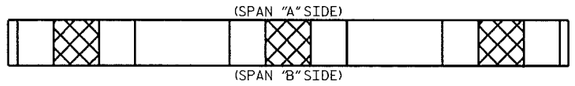
BENT 1 - SOUTH END

BENT 1 - SPAN "A" SIDE



BENT 1 - NORTH END

BENT 1 - SPAN "B" SIDE



BENT 1 - UNDERSIDE

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO.: 124

SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BENT 1 REPAIRS

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
08/20/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-24
1			3			TOTAL SHEETS
2			4			28

DRAWN BY : R.PUTEK DATE : 06/14
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NOTES

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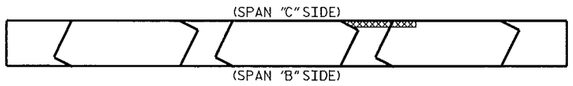
FOR ADDITIONAL NOTES AND TYPICAL SUBSTRUCTURE REPAIR DETAILS, SEE "DETAILS" SHEET.

REPAIR QUANTITY TABLE

REPAIRS BENT 2	QUANTITIES				
	ESTIMATE		ACTUAL		
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	DEPTH FT	VOLUME CF
CAP (VERTICAL FACE)	8.0	3.4			
CAP (HORIZONTAL, CORNER)	0.0	0.0			
COLUMN	0.0	0.0			
EPOXY RESIN INJECTION		LN. FT			LN. FT
CAP		0.0			
COLUMN		0.0			

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1" BEHIND REBAR AND MIN. 1" CL TO SAWCUT. SEE REPAIR DETAILS.



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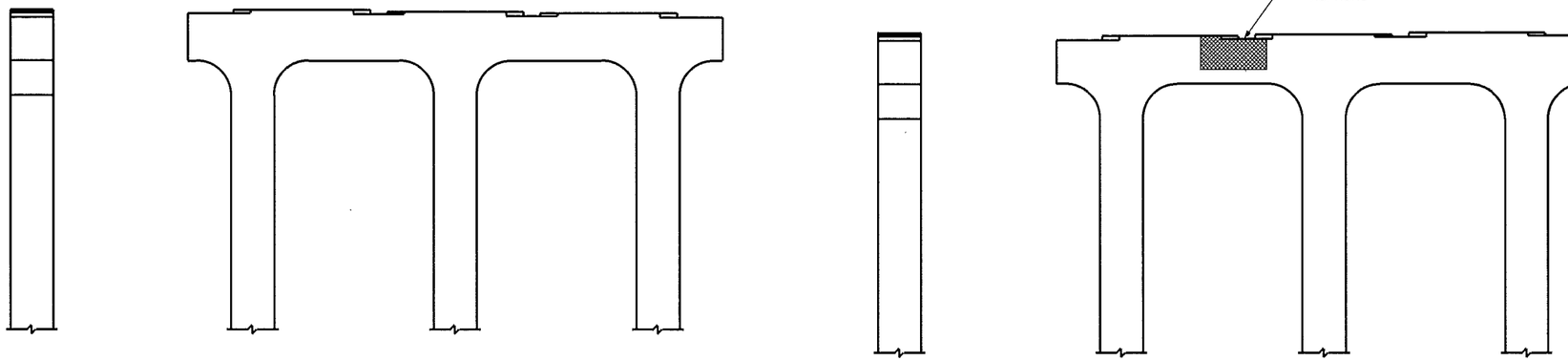
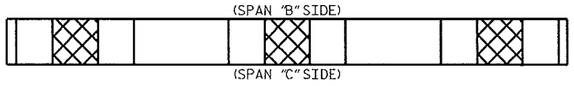


BENT 2 - SOUTH END

BENT 2 - SPAN "B" SIDE

BENT 2 - NORTH END

BENT 2 - SPAN "C" SIDE



BENT 2 - UNDERSIDE

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO.: 124

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BENT 2 REPAIRS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-25
1			3			TOTAL SHEETS
2			4			28

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL

08/26/14

DRAWN BY : R.PUTEK DATE : 06/14
CHECKED BY : T.SHERRILL DATE : 06/14
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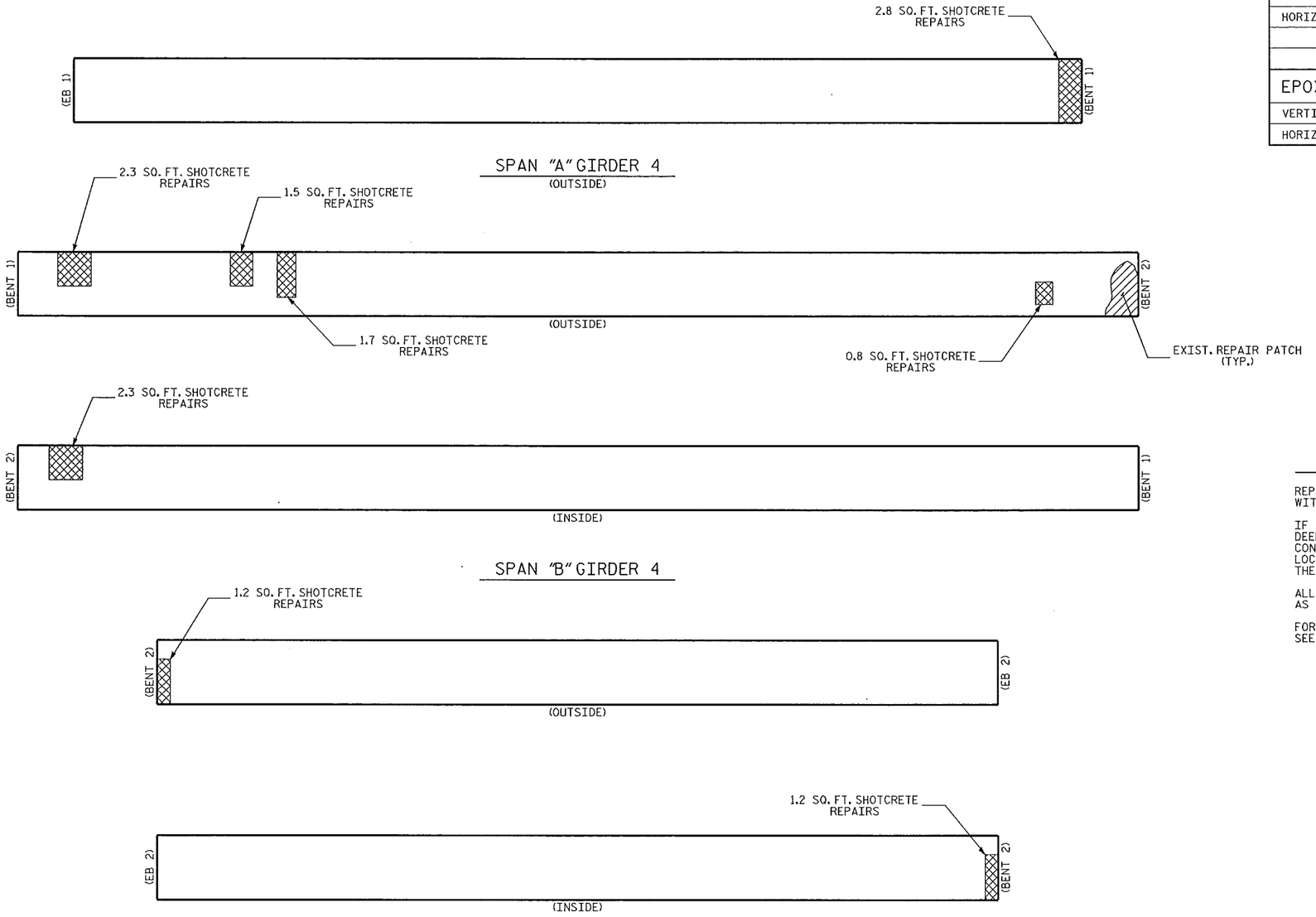

REPAIR QUANTITY TABLE

CONCRETE GIRDER REPAIRS	QUANTITIES				
	ESTIMATE		ACTUAL		
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	DEPTH FT	VOLUME CF
VERTICAL FACE	13.8	5.8			
HORIZONTAL, CORNER	0.0	0.0			
EPOXY RESIN INJECTION		LN. FT			LN. FT
VERTICAL FACE		0			
HORIZONTAL, CORNER		0			

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1" BEHIND REBAR AND MIN. 1" CL TO SAWCUT. SEE REPAIR DETAILS.

NOTES

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FOR ADDITIONAL NOTES AND TYPICAL CONCRETE GIRDER REPAIR DETAILS, SEE "DETAILS" SHEET.

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO.: 124

SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

CONCRETE GIRDER REPAIRS

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY N. SHERRILL
08/26/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-26
1			3			TOTAL SHEETS
2			4			28

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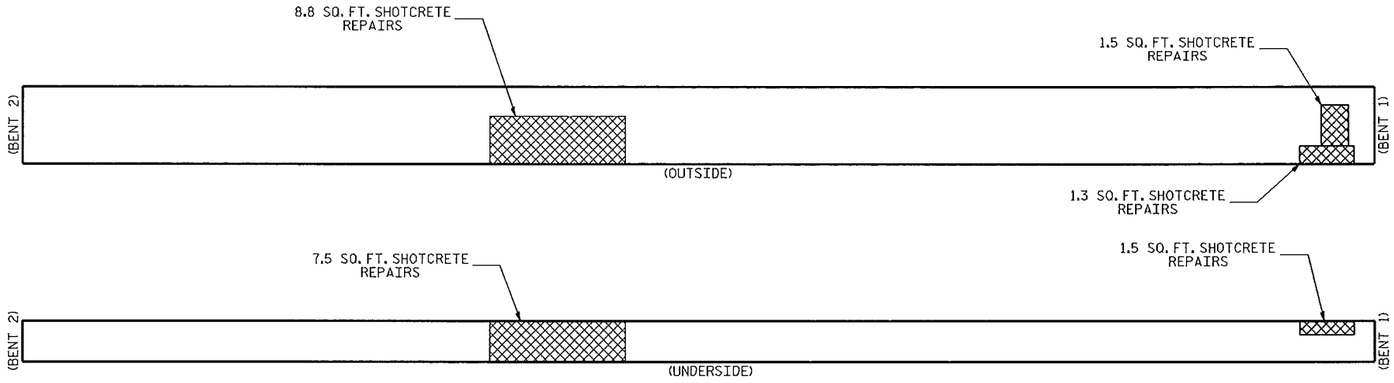
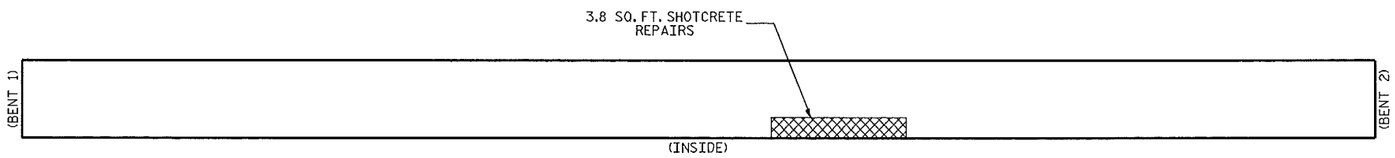
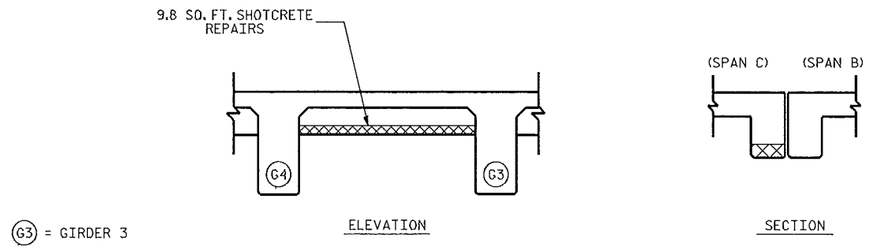




SPAN "B" GIRDER 1



SPAN "C" DIAPHRAGM
(BAY 3)

REPAIR QUANTITY TABLE

CONCRETE GIRDER REPAIRS	QUANTITIES				
	ESTIMATE		ACTUAL		
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	DEPTH FT	VOLUME CF
VERTICAL FACE	15.4	6.5			
HORIZONTAL, CORNER	18.8	7.9			

EPOXY RESIN INJECTION	LN. FT		LN. FT
VERTICAL FACE	0		
HORIZONTAL, CORNER	0		

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1" BEHIND REBAR AND MIN. 1" CL TO SAWCUT. SEE REPAIR DETAILS.

NOTES

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FOR ADDITIONAL NOTES AND TYPICAL CONCRETE GIRDER REPAIR DETAILS, SEE "DETAILS" SHEET.

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO.: 124

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

CONCRETE GIRDER REPAIRS

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
08/26/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-27
1			3			TOTAL SHEETS
2			4			28

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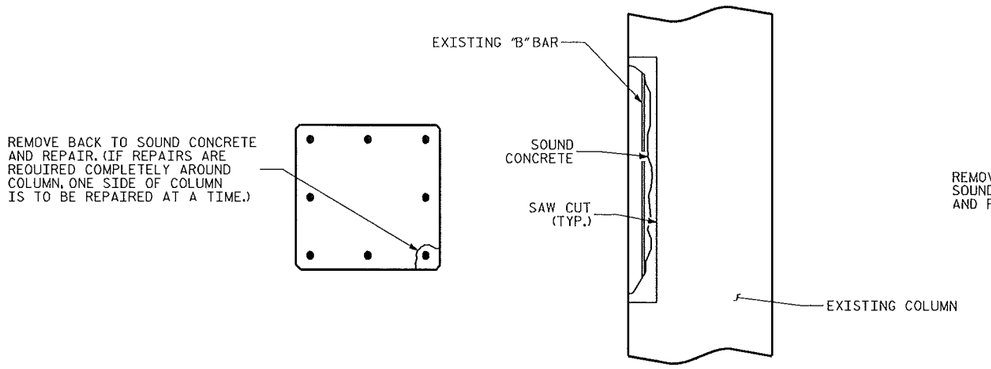
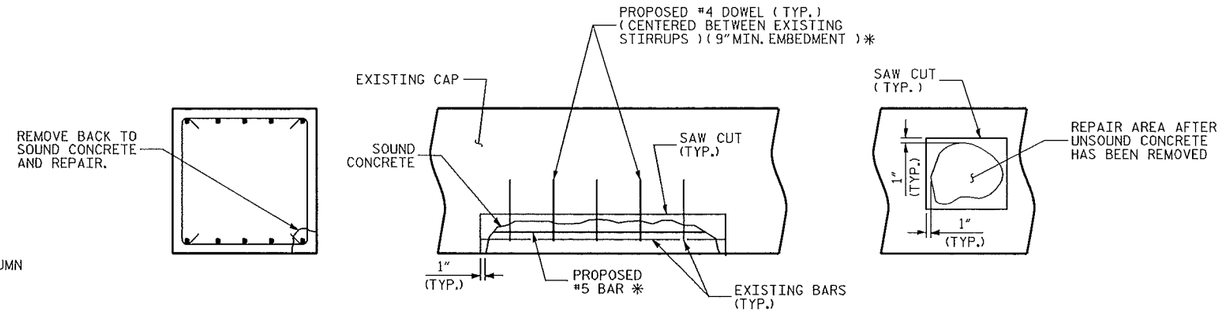


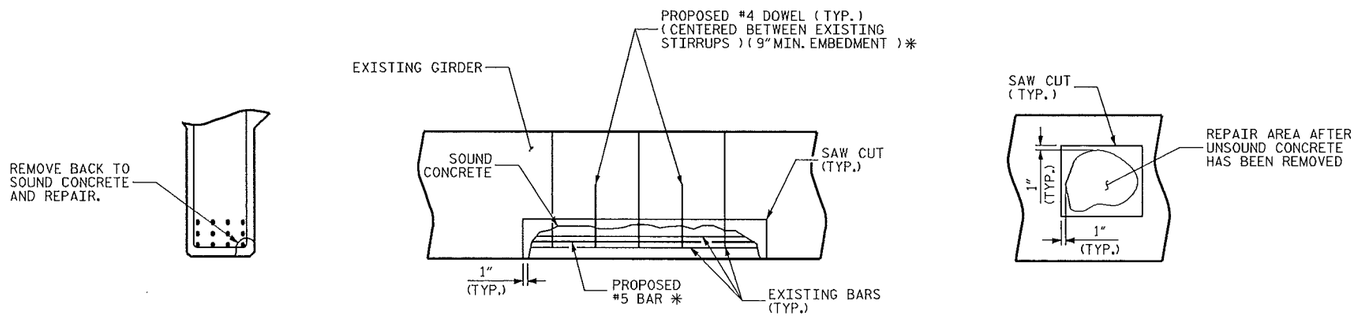
COLUMN CORNER REPAIR



CAP CORNER REPAIR

FACE REPAIR

TYPICAL SUBSTRUCTURE REPAIR DETAIL



GIRDER CORNER REPAIR

FACE REPAIR

TYPICAL CONCRETE GIRDER REPAIR DETAIL

NOTES:

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER THE CONTRACTOR SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

CONTRACTOR SHALL SAW CUT TO A NOMINAL DEPTH OF ½" BUT REINFORCING STEEL SHALL NOT BE DAMAGED.

CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL.

SHOTCRETE REPAIRS MAY BE REPLACED WITH CONCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

* THESE DOWELS AND BARS WILL BE REQUIRED AT THE LOCATIONS DESIGNATED BY THE ENGINEER.

PROJECT NO. BP-5500W

IREDELL COUNTY

BRIDGE NO.: 124

SHEET 1 OF 1

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 18565 ENGINEER TIMOTHY M. SHERRILL
06/20/14

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-28
1			3			TOTAL SHEETS
2			4			28

DRAWN BY : R.PUTEK DATE : 06/14
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20-AUG-2014 09:28
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STANDARD NOTES

DESIGN DATA:

SPECIFICATIONS	A.A.S.H.T.O. (CURRENT)
LIVE LOAD	SEE PLANS
IMPACT ALLOWANCE	SEE A.A.S.H.T.O.
STRESS IN EXTREME FIBER OF	
STRUCTURAL STEEL - AASHTO M270 GRADE 36	20,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50W	27,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50	27,000 LBS. PER SQ. IN.
REINFORCING STEEL IN TENSION	
GRADE 60	24,000 LBS. PER SQ. IN.
CONCRETE IN COMPRESSION	1,200 LBS. PER SQ. IN.
CONCRETE IN SHEAR	SEE A.A.S.H.T.O.
STRUCTURAL TIMBER - TREATED OR	
UNTREATED - EXTREME FIBER STRESS	1,800 LBS. PER SQ. IN.
COMPRESSION PERPENDICULAR TO GRAIN OF TIMBER	375 LBS. PER SQ. IN.
EQUIVALENT FLUID PRESSURE OF EARTH	30 LBS. PER CU. FT. (MINIMUM)

MATERIAL AND WORKMANSHIP:

EXCEPT AS MAY OTHERWISE BE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2012 "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" OF THE N. C. DEPARTMENT OF TRANSPORTATION.

STEEL SHEET PILING FOR PERMANENT OR TEMPORARY APPLICATIONS SHALL BE HOT ROLLED.

CONCRETE:

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS A CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT: CLASS AA CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES, ABUTMENT BACKWALLS, AND APPROACH SLABS; AND CLASS B CONCRETE SHALL BE USED FOR SLOPE PROTECTION AND RIP RAP.

CONCRETE CHAMFERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED 3/4" WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO 1-1/2" RADIUS WHICH IS BUILT INTO CURB FORMS; CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A 1/4" FINISHING TOOL UNLESS OTHERWISE REQUIRED ON PLANS; AND CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A 1/4" RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REQUIRED ON PLANS.

DOWELS:

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12" INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

ALLOWANCE FOR DEAD LOAD DEFLECTION, SETTLEMENT, ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS. SLABS, CURBS AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE.

ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF BEARING UNLESS OTHERWISE NOTED ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESTRESSED CONCRETE GIRDER BRIDGES, ADJUSTMENTS SHALL BE MADE DUE TO THE DEAD LOAD DEFLECTIONS FOR THE ELEVATIONS SHOWN. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER. WHERE BOTTOM OF SLAB IS IN LINE WITH BOTTOM OF TOP FLANGES, DEPTH OF SLAB BETWEEN BEARINGS SHALL BE ADJUSTED TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER.

IN SETTING FALSEWORK AND FORMS FOR REINFORCED CONCRETE SPANS, AN ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF FALSEWORK, AND PERMANENT CAMBER WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE ELEVATIONS SHOWN. AFTER REMOVAL OF THE FALSEWORK, THE FINISHED STRUCTURES SHALL CONFORM TO THE PROFILE AND ELEVATIONS SHOWN ON THE PLANS AND CONSTRUCTION ELEVATIONS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR FALSEWORK OR FORMS FOR BRIDGE SUPERSTRUCTURE AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE FALSEWORK OR FORMS IS STARTED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED IN THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS.

WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES.

STRUCTURAL STEEL:

AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE 7/8"Ø SHEAR STUDS FOR THE 3/4"Ø STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - 7/8"Ø STUDS FOR 4 - 3/4"Ø STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF 7/8"Ø STUDS ALONG THE BEAM AS SHOWN FOR 3/4"Ø STUDS BASED ON THE RATIO OF 3 - 7/8"Ø STUDS FOR 4 - 3/4"Ø STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED. THE MAXIMUM SPACING SHALL BE 2'-0".

EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAMS WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE, THE CONTRACTOR MAY, AT HIS OPTION, SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THESE PLATES ARE AT LEAST 5/16" IN THICKNESS AND DO NOT EXCEED A WIDTH EQUAL TO THE FLANGE WIDTH LESS 2" OR A THICKNESS EQUAL TO 2 TIMES THE FLANGE THICKNESS. THE SIZE OF FILLET WELDS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ANSI/AASHTO/AWS "BRIDGE WELDING CODE". ELECTROSLAG WELDING WILL NOT BE PERMITTED.

WITH THE SOLE EXCEPTION OF EDGES AT SURFACES WHICH BEAR ON OTHER SURFACES, ALL SHARP EDGES AND ENDS OF SHAPES AND PLATES SHALL BE SLIGHTLY ROUNDED BY SUITABLE MEANS TO A RADIUS OF APPROXIMATELY 1/16 INCH OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE PRIOR TO PAINTING, GALVANIZING, OR METALLIZING.

HANDRAILS AND POSTS:

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB, UNLESS OTHERWISE SHOWN ON PLANS. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB.

METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING. CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINS AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED. CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED. CERTIFIED MILL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS.

SPECIAL NOTES:

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THE SPECIFICATIONS, BUT THE REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE SPECIFICATIONS ARTICLE 105-4.

ENGLISH

JANUARY, 1990

STD. NO. SN

REV. 6-16-95 EEM @ RGW REV. 5-7-03 RWW @ JTE REV. 10-1-11 MAA @ GM
REV. 8-16-99 RWW @ LES REV. 5-1-06 TLA @ GM

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