

INDEX OF SHEETS:	
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5	PLAN OF END BENT 2 REPAIRS
6	GIRDER DETAILS AND DIAPHRAGM MODIFICATION
7	GIRDER REPAIR
8	EVAZOTE JOINT SEAL DETAIL AND GENERAL NOTES
9	BENT 3 SUBSTRUCTURE REPAIR
10	BENT 6 SUBSTRUCTURE REPAIR

GENERAL NOTES

ALL EXISTING AND PROPOSED STEEL SHALL BE CLEANED AND PAINTED FOR A DISTANCE OF 1/2 TIMES THE GIRDER DEPTH AT ALL EXPANSION JOINTS. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 442 OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS.

WORK ON THIS BRIDGE SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL INTO THE WATER. THE CONTRACTOR SHALL SUBMIT PLANS FOR EROSION CONTROL AND CONSTRUCTION ACCESS IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS AND THE PROJECT SPECIAL PROVISIONS.

ALL STRUCTURAL STEEL FOR SUPERSTRUCTURE REPAIRS SHALL BE AASHTO M270 GRADE 50W, OR APPROVED EQUIVALENT.

TO FACILITATE BRIDGE JACKING, GIRDER REPAIR, JOINT SEAL REPAIR AND PEDESTAL REPAIR THE BRIDGE WILL BE CLOSED TO TRAFFIC FOR A PERIOD UP TO 6 WEEKS. SEE TRAFFIC CONTROL PLANS. SEE SPECIAL PROVISIONS FOR DETAILS.

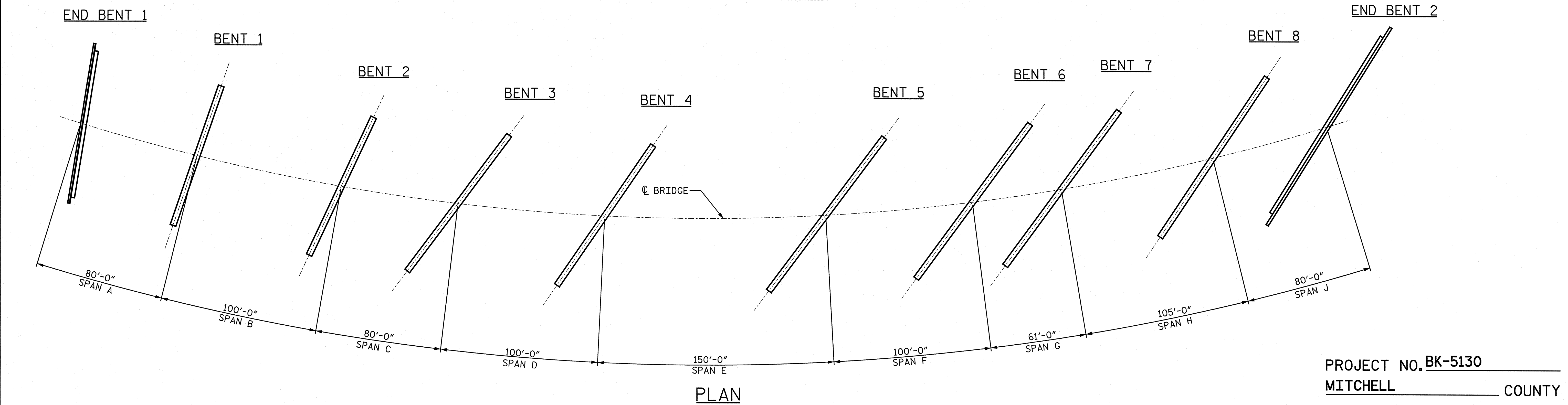
IT IS THE CONTRACTORS RESPONSIBILITY TO FOLLOW ALL OSHA AND STATE SAFETY REQUIREMENTS.

DIMENSIONS AND ELEVATIONS IN THESE PLANS ARE BASED ON ORIGINAL PLANS AND FIELD SURVEY INFORMATION. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.

FOR ADDITIONAL NOTES, SEE EVAZOTE JOINT SEAL DETAIL AND GENERAL NOTES SHEET.

ALL VISUAL AND NON-DESTRUCTIVE WELD TESTING WILL BE PERFORMED BY NCDOT.

FOR UNDER STRUCTURE WORK PLATFORM SEE SPECIAL PROVISIONS.

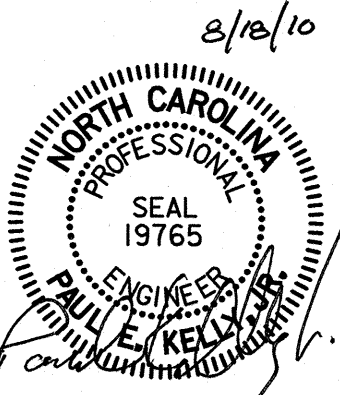


PAY ITEMS												
	BRIDGE JACKING	DIAPHRAGM MODIFICATION	GIRDER REPAIR	EPOXY RESIN INJECTION	CONCRETE REPAIRS TO SUBSTRUCTURE	CLASS A CONCRETE	* REINFORCING STEEL	EVAZOTE JOINT SEALS @ END BENTS 1 & 2	EVAZOTE JOINT SEALS @ BENTS 3 & 6	CLEANING & PAINTING STRUCTURAL STEEL	TRAFFIC CONTROL	UNDER STRUCTURE WORK PLATFORM
	LUMP SUM	LBS	LBS	LINEAR FT.	CU. FT.	CU. FT.	LBS.	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM
END BENT 1		3,315	1,460									
BENT 3		1,687	651	13	42		100					
BENT 6		2,352		20	73	13	100					
END BENT 2		6,078	1,983									
TOTAL	LUMP SUM	13,432	4,094	33	115	13	200	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM

* REINFORCING STEEL FOR REPLACEMENT OF DAMAGED REBAR

DRAWN BY : RDM & CLG DATE : 6-10
CHECKED BY : PEK DATE : 6-10

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Charlotte, NC 28208
NC License No. F-0991



PROJECT NO. BK-5130
MITCHELL COUNTY
STATION: 105+99.50

REHABILITATION OF BRIDGE #16

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
BRIDGE ON US 19E
OVER NORTH TOE RIVER
GENERAL PLAN

REVISIONS						SHEET NO. 1
NO.	BY:	DATE:	NO.	BY:	DATE:	
1	STV	8/18/10	3			TOTAL SHEETS 10
2			4			

NOTES:

THE CONTRACTOR TO PROVIDE BLOCKING FOR ALL JACKS AS NECESSARY. A BLOCKING PLAN SHALL BE SUBMITTED FOR ALL SPANS LIFTED FOR APPROVAL BY THE ENGINEER.

THE CONTRACTOR SHALL JACK ALL GIRDERS IN A SPAN ON AN INDIVIDUAL BENT SIMULTANEOUSLY BY MEANS OF A DUAL-FLOW PRESSURIZED PUMP CONTROLLING THE JACKS.

THE CONTRACTOR SHALL MONITOR THE PLAN LOCATION OF THE GIRDERS FROM INITIAL JACKING UNTIL GIRDERS ARE SECURED ON THEIR PERMANENT BEARINGS. IF THE PLAN LOCATION OF THESE GIRDERS SHIFT FROM ITS ORIGINAL POSITION, ALL WORK SHALL CEASE AND THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

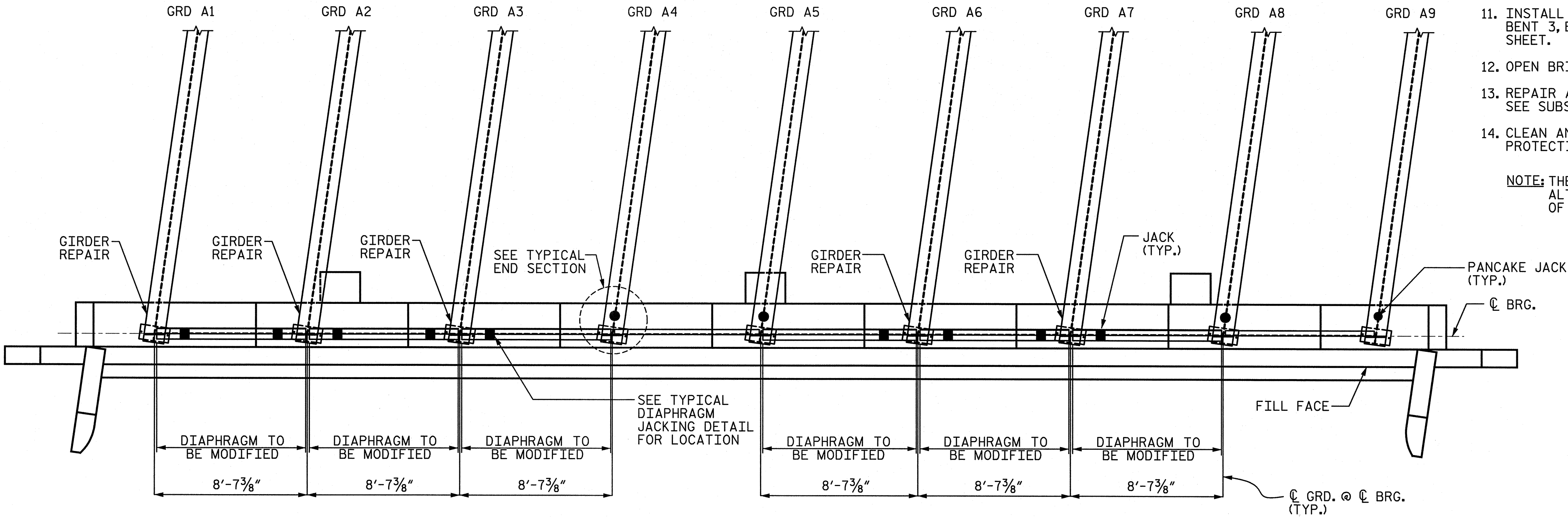
EACH JACK SHALL HAVE A MINIMUM SAFE WORKING CAPACITY OF 60 TONS.

PRIOR TO JACKING THE CONTRACTOR SHALL ENSURE THERE ARE NO OBSTACLES PREVENTING THE SPAN FROM BEING LIFTED.

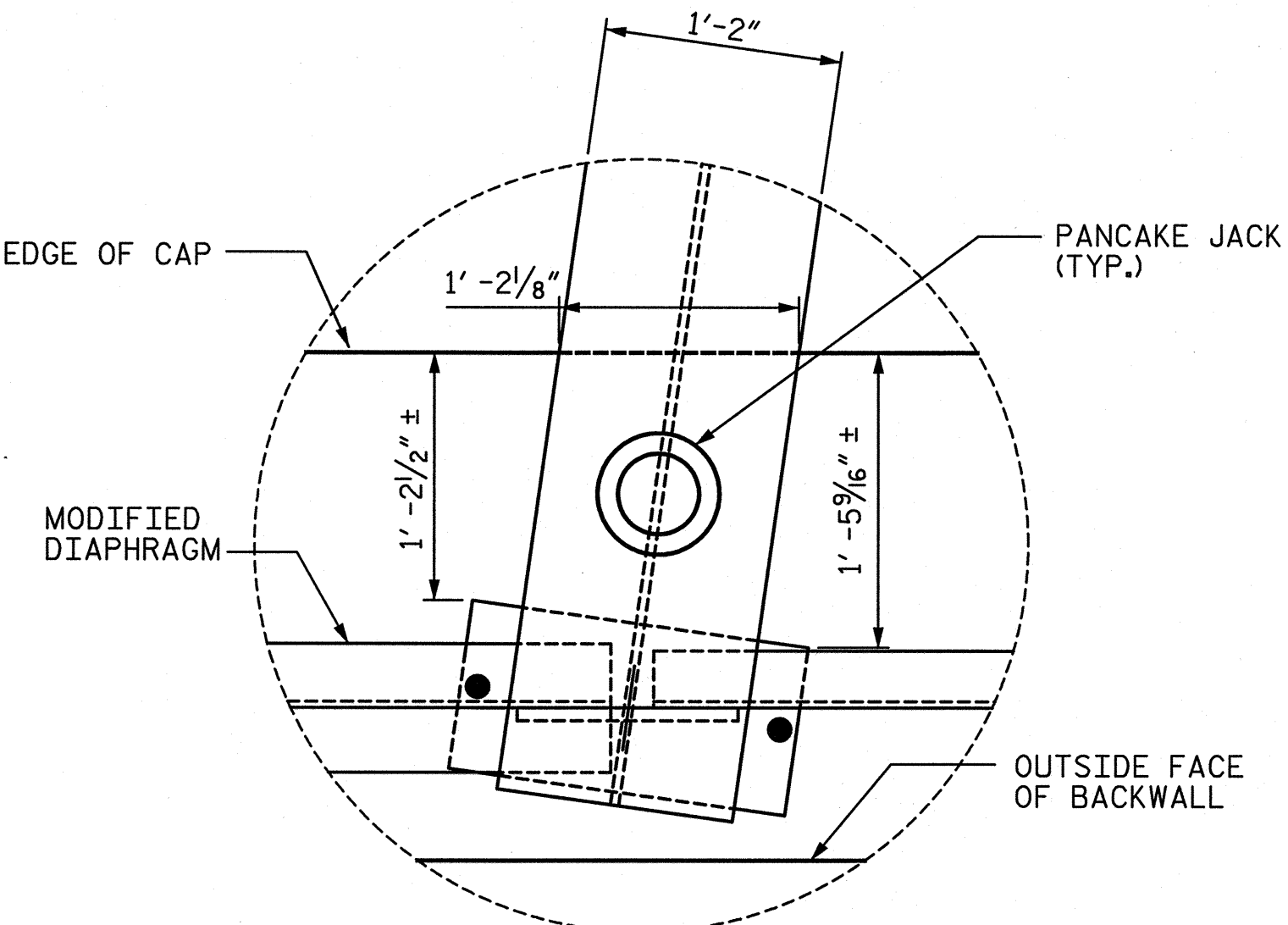
CONSTRUCTION SEQUENCE

1. CLOSE BRIDGE TO TRAFFIC
2. REMOVE EXISTING EXPANSION JOINT SEALS AT END BENT 1, BENT 3, BENT 6, AND END BENT 2
3. PERFORM DIAPHRAGM MODIFICATIONS AT SPECIFIED LOCATIONS. SEE GIRDER DETAILS AND DIAPHRAGM MODIFICATIONS SHEET.
4. INSTALL JACKS AND BLOCKING AT LOCATIONS SHOWN ON PLAN
5. JACK ALL GIRDERS A MAXIMUM OF 1" AT END BENT 1
6. MECHANICALLY LOCK ALL JACKS AT BENT
7. PERFORM GIRDER REPAIRS AT SPECIFIED LOCATIONS. SEE GIRDER REPAIR SHEET. CLEAN AND PAINT ALL BEARINGS.
8. REMOVE AND REPLACE EXISTING PEDESTALS (BENT 6 ONLY) AT SPECIFIED LOCATIONS. SEE BENT 6 REPAIR SHEET.
9. ONCE ALL GIRDER, BEARING STIFFENER AND PEDESTAL REPAIRS ARE COMPLETE, LOWER BRIDGE.
10. REPEAT STEPS 3 THRU 9 FOR BENT 3, BENT 6, AND END BENT 2
11. INSTALL NEW EVAZOTE EXPANSION JOINT SEALS AT END BENT 1, BENT 3, BENT 6, AND END BENT 2. SEE EVAZOTE JOINT DETAIL SHEET.
12. OPEN BRIDGE TO TRAFFIC
13. REPAIR ALL CRACKS AND SPALLING ON BRIDGE SUBSTRUCTURE. SEE SUBSTRUCTURE REPAIR SHEET.
14. CLEAN AND PAINT ALL STRUCTURAL STEEL. APPLY EPOXY PROTECTIVE COATING TO BENT CAPS. SEE GENERAL NOTES.

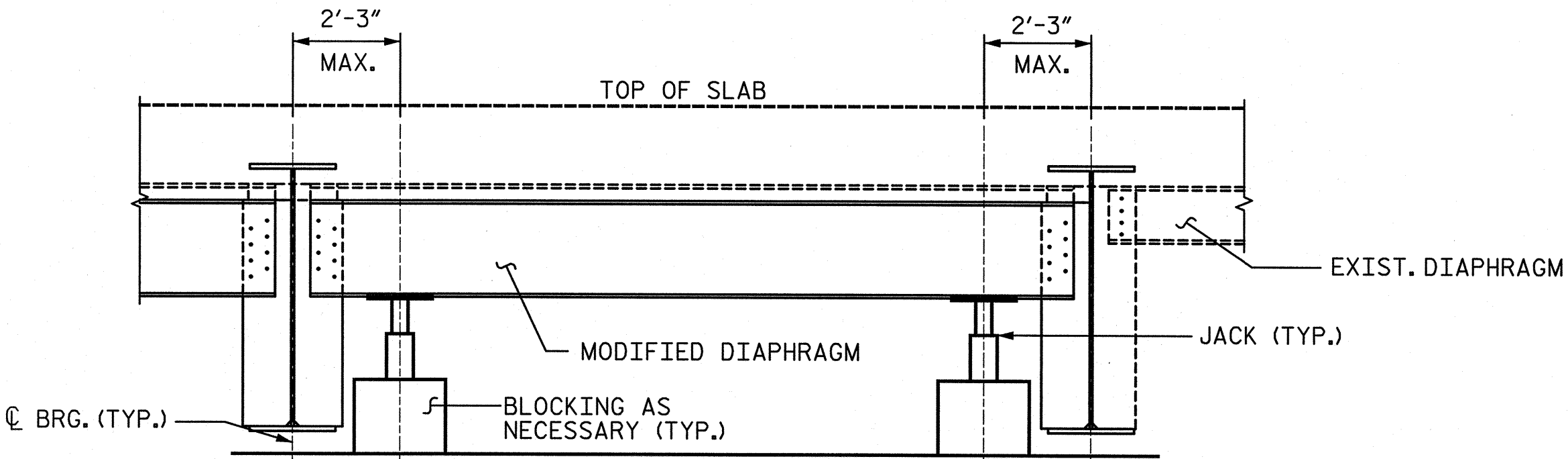
NOTE: THE CONTRACTOR HAS THE OPTION TO PROPOSE AN ALTERNATE CONSTRUCTION SEQUENCE PER THE APPROVAL OF THE ENGINEER.



END BENT 1



TYPICAL END SECTION



TYPICAL DIAPHRAGM JACKING DETAIL

(BEARING NOT SHOWN FOR CLARITY)

PROJECT NO. **BK-5130**
MITCHELL COUNTY
STATION: **105+99.50**

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BRIDGE ON US 19E
OVER NORTH TOE RIVER

PLAN OF END BENT 1
REPAIRS

DRAWN BY : CLG DATE : 6-10
CHECKED BY : PEK DATE : 6-10

8/9/2010
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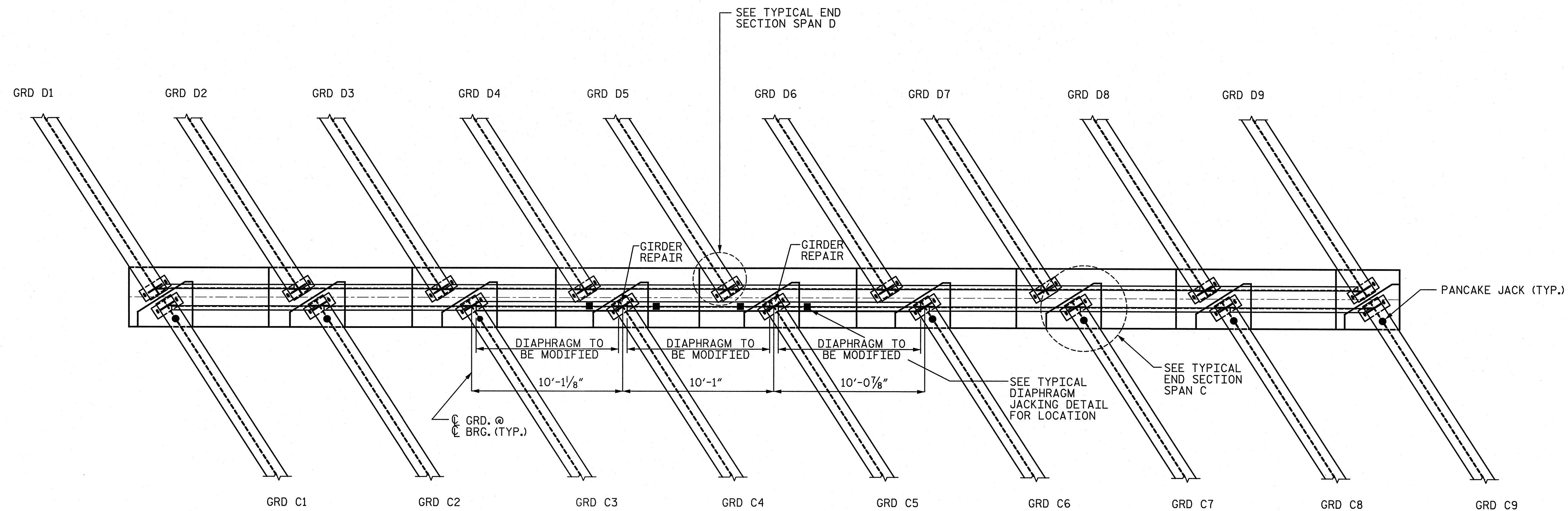
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NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 10
2			4			

NOTES:

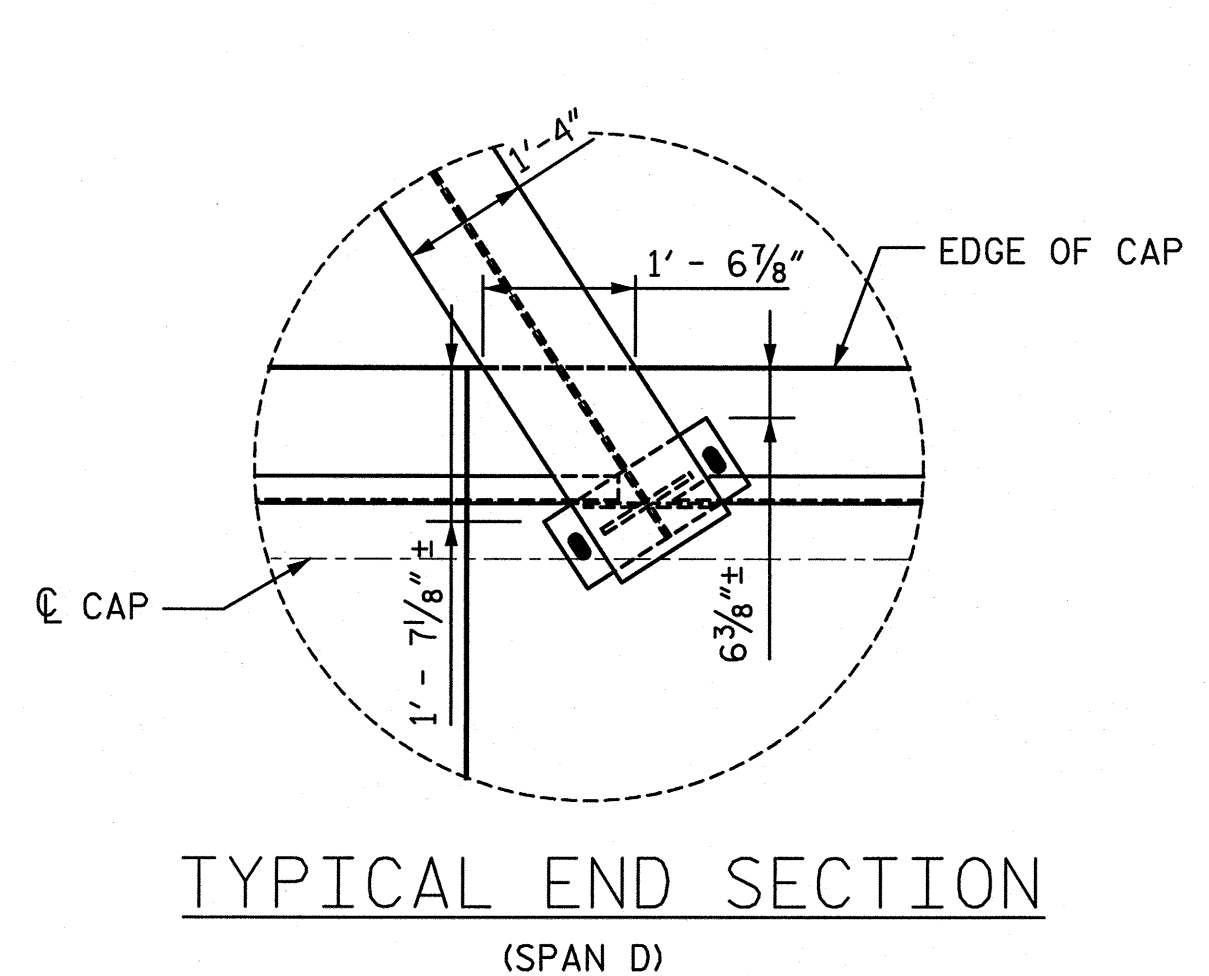
SEE GIRDER REPAIR DETAIL AT BENT 3 ON GIRDER REPAIR SHEET FOR GIRDER REPAIR DETAILS.

SEE GIRDER DETAILS AND DIAPHRAGM MODIFICATION SHEET FOR DIAPHRAGM MODIFICATION DETAILS.

SEE PLAN OF END BENT 1 REPAIRS FOR TYPICAL DIAPHRAGM JACKING DETAIL, CONSTRUCTION SEQUENCE AND NOTES.

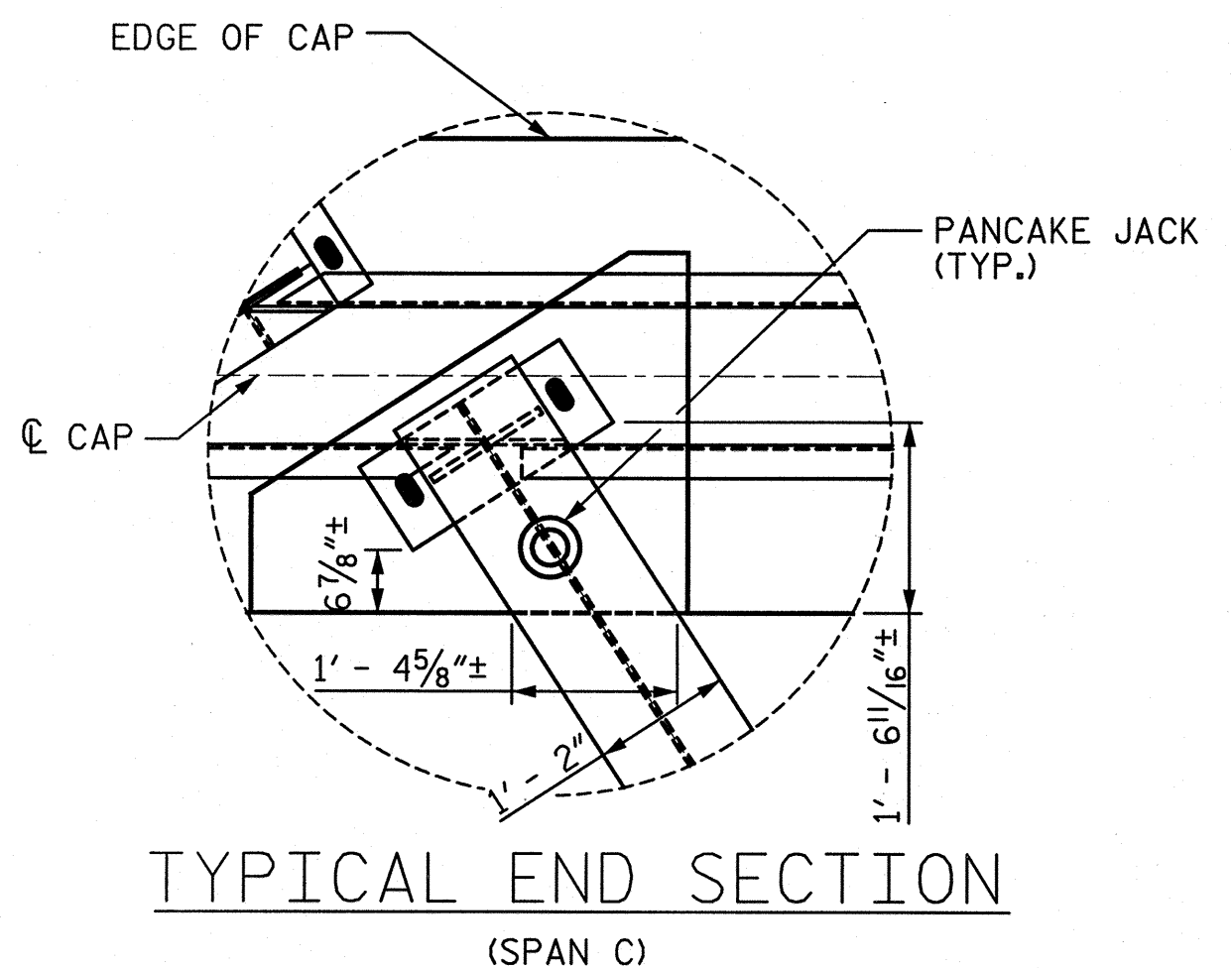


BENT 3



TYPICAL END SECTION

(SPAN D)



TYPICAL END SECTION

(SPAN C)

PROJECT NO. **BK-5130**
MITCHELL COUNTY
STATION: **105+99.50**

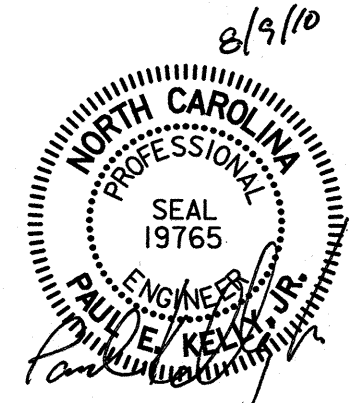
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

**BRIDGE ON US 19E
OVER NORTH TOE RIVER**

**PLAN OF BENT 3
REPAIRS**

REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. **3**
TOTAL SHEETS **10**



DRAWN BY : CLG DATE : 6-10
CHECKED BY : PEK DATE : 6-10

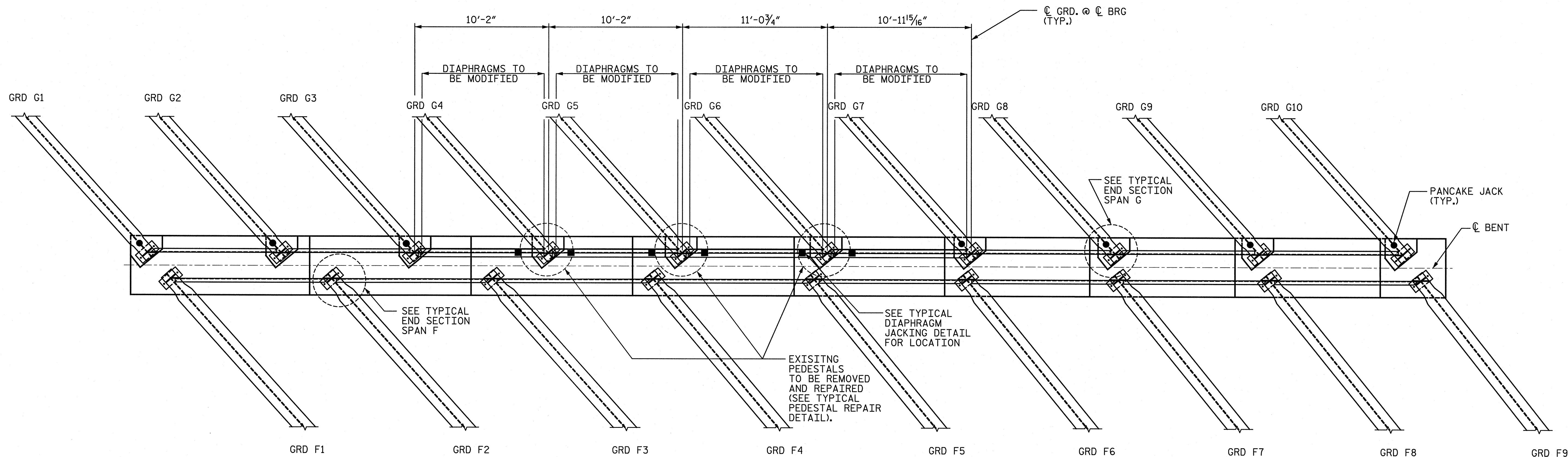
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NOTES:

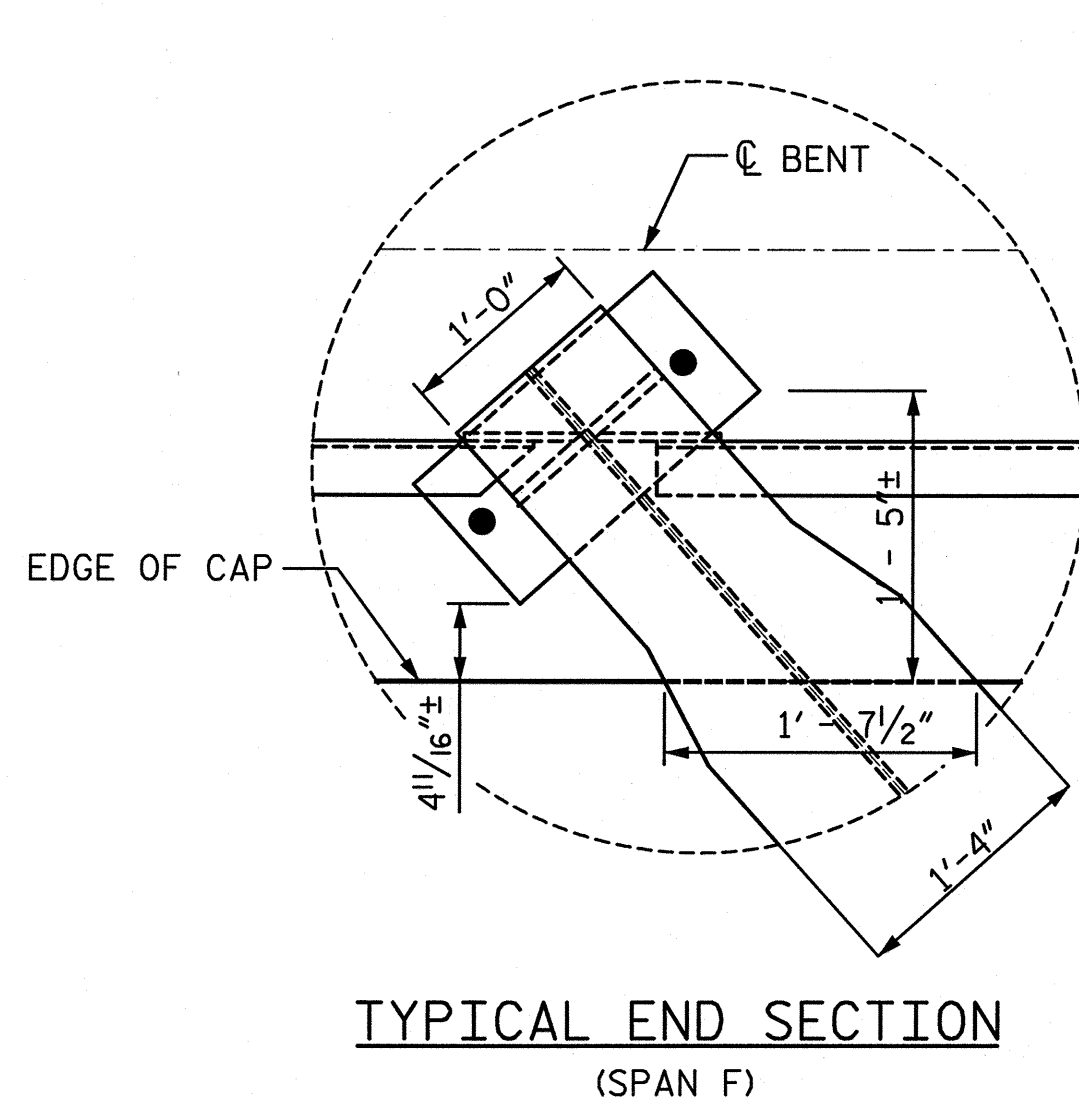
SEE TYPICAL PEDESTAL REPAIR DETAIL ON BENT 6
SUBSTRUCTURE REPAIR SHEET.

SEE GIRDER DETAILS AND DIAPHRAGM MODIFICATION
SHEET FOR DIAPHRAGM MODIFICATION DETAILS.

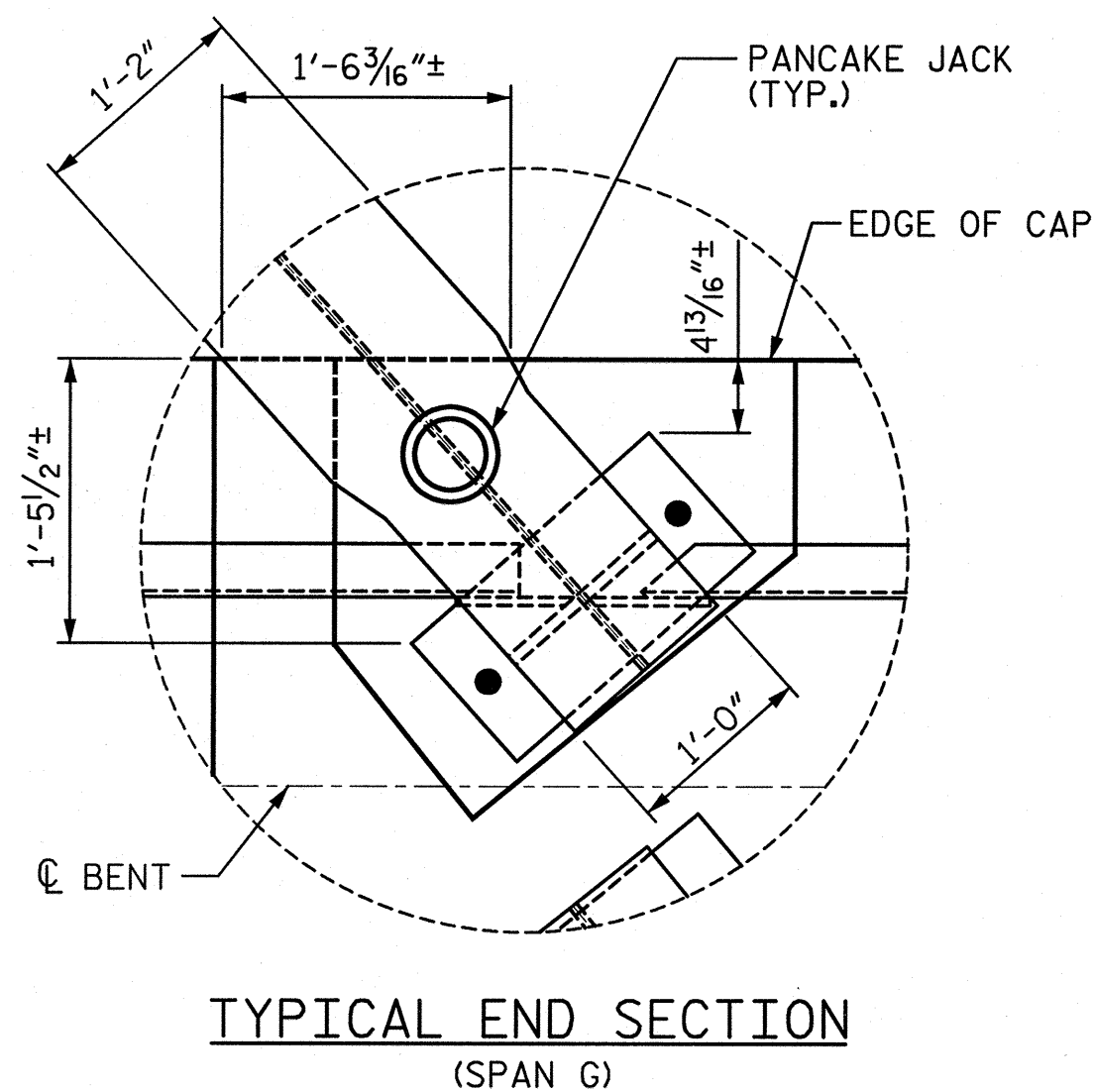
SEE PLAN OF END BENT 1 REPAIRS FOR TYPICAL DIAPHRAGM
JACKING DETAIL, CONSTRUCTION SEQUENCE AND NOTES.



BENT 6



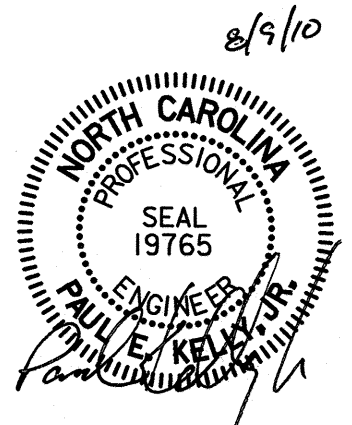
TYPICAL END SECTION
(SPAN F)



TYPICAL END SECTION
(SPAN G)

PROJECT NO. **BK-5130**
MITCHELL COUNTY
STATION: **105+99.50**

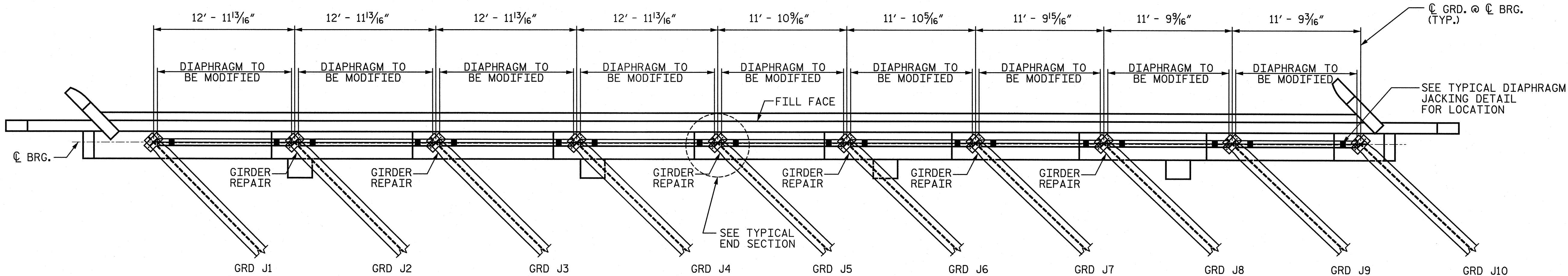
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
BRIDGE ON US 19E OVER NORTH TOE RIVER					
PLAN OF BENT 6 REPAIRS					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
SHEET NO. 4					TOTAL SHEETS 10



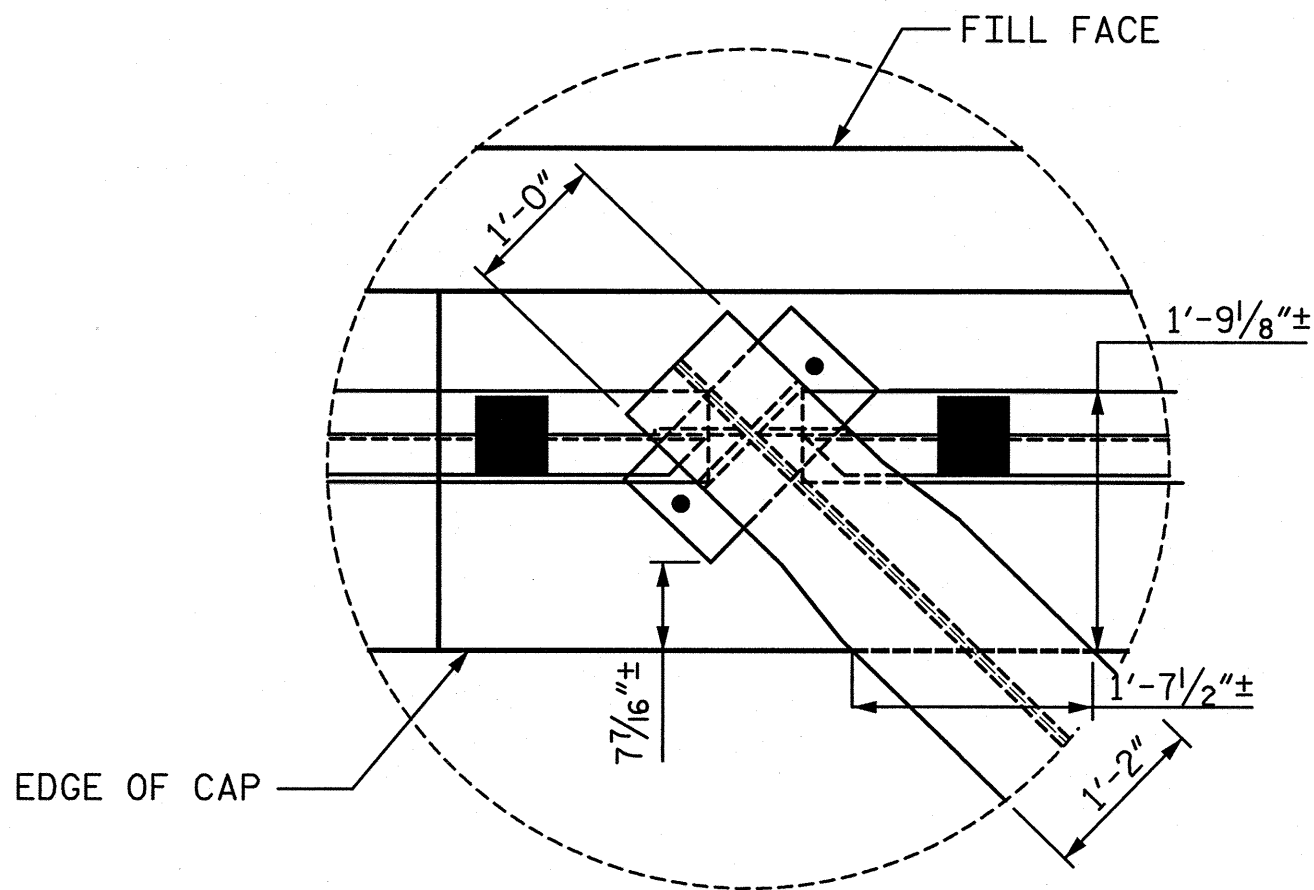
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NOTES:
SEE GIRDER REPAIR DETAIL AT END BENT 2 ON GIRDER REPAIR SHEET FOR GIRDER REPAIR DETAILS.
SEE GIRDER DETAILS AND DIAPHRAGM MODIFICATION SHEET FOR DIAPHRAGM MODIFICATIONS.
SEE PLAN OF END BENT 2 REPAIRS FOR TYPICAL DIAPHRAGM JACKING DETAIL, CONSTRUCTION SEQUENCE AND NOTES.

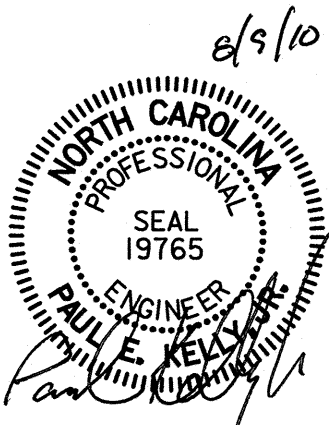


END BENT 2



TYPICAL END SECTION

PROJECT NO. **BK-5130**
MITCHELL COUNTY
STATION: **105+99.50**



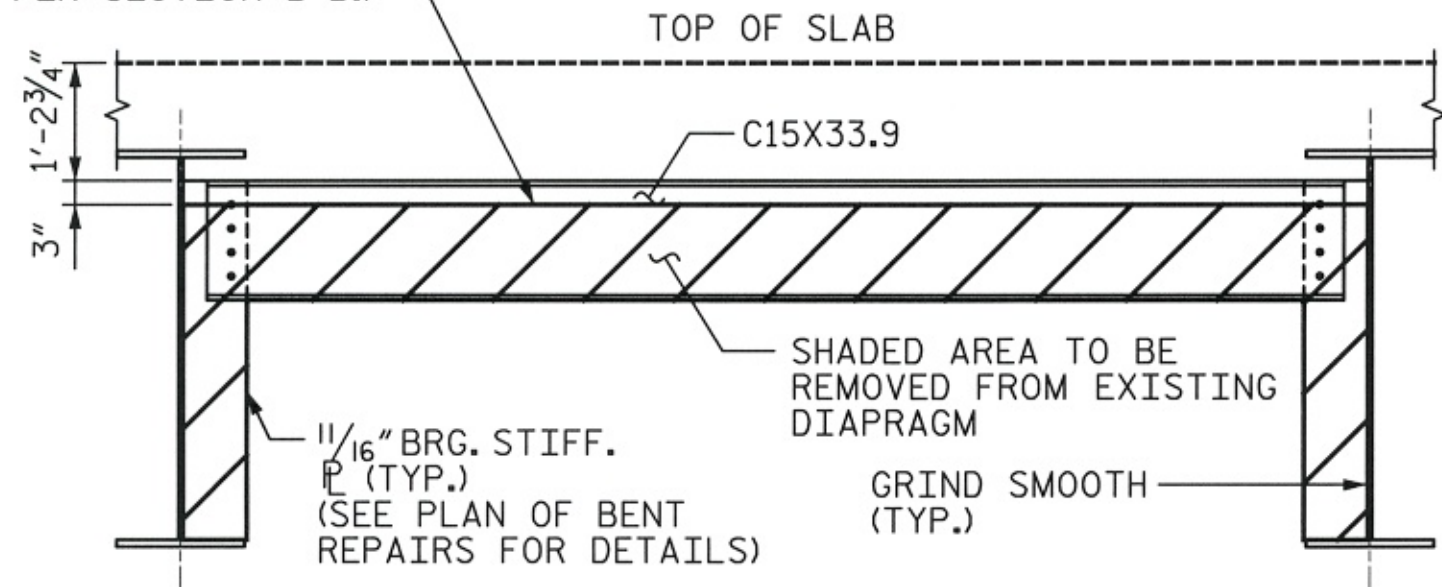
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
BRIDGE ON US 19E
OVER NORTH TOE RIVER
PLAN OF END BENT 2 REPAIRS

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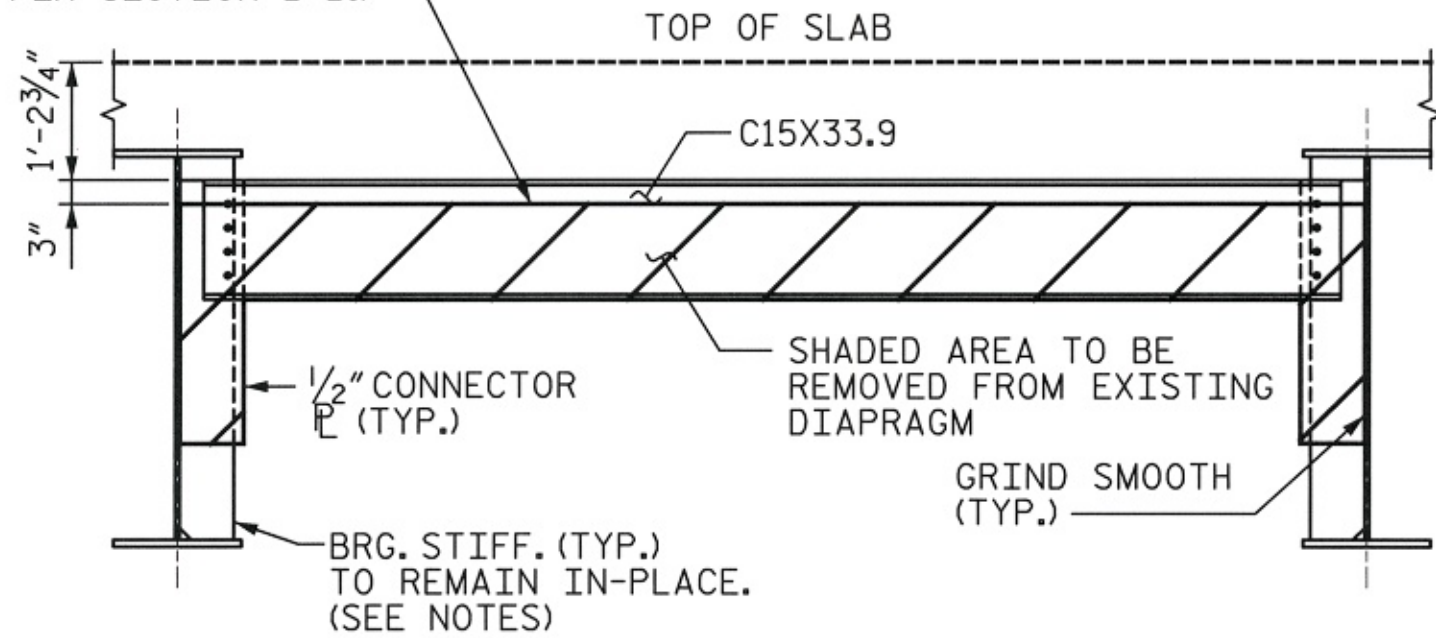
REVISIONS						SHEET NO. 5
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 10
2			4			

CUT LINE (GRIND OR SANDBLAST OFF ALL LOOSE FLAKING MATERIAL ON RETAINING PORTION OF EXISTING DIAPHRAGM. BEVEL EDGE PER SECTION B-B.)



EXISTING DIAPHRAGM
(TYP. ALL BAYS @ END BENT 1 ONLY)

CUT LINE (GRIND OR SANDBLAST OFF ALL LOOSE FLAKING MATERIAL ON RETAINING PORTION OF EXISTING DIAPHRAGM. BEVEL EDGE PER SECTION B-B.)



EXISTING DIAPHRAGM
(TYP. ALL BAYS @ BENT 3, 6 AND END BENT 2)

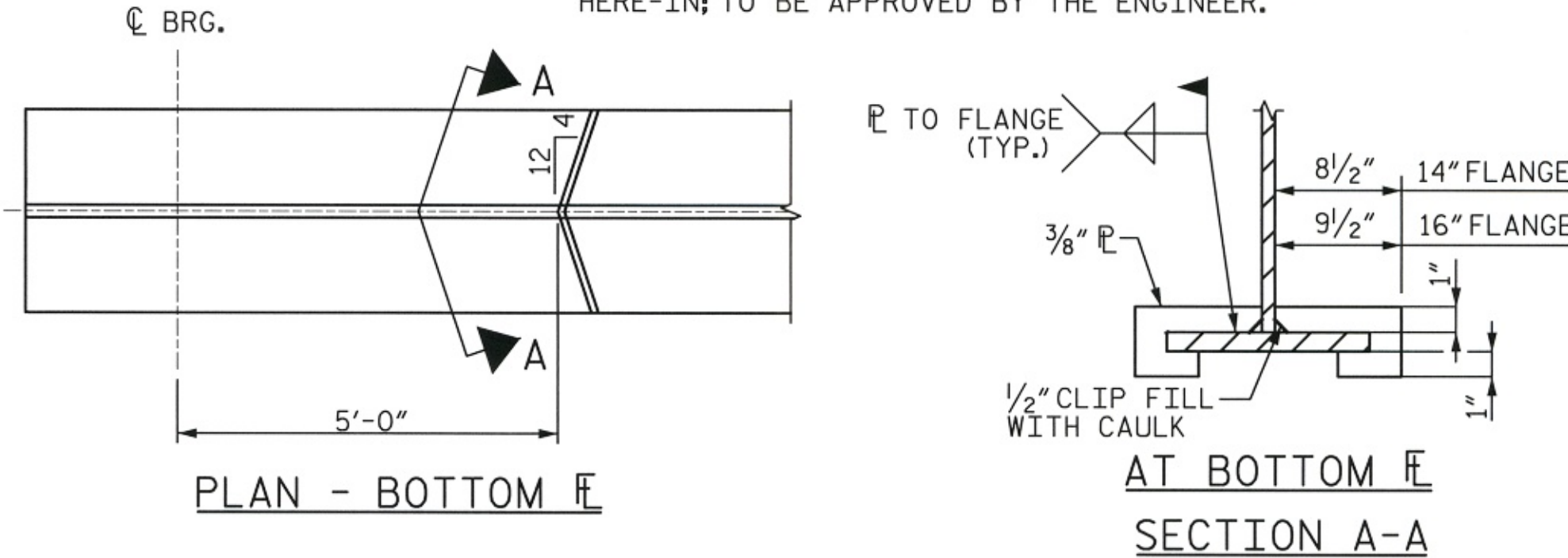
NOTES:

DIAPHRAGM MODIFICATION TO BE COMPLETED ONE BAY AT A TIME.

ALL WELDING SHALL BE IN ACCORDANCE WITH CURRENT AWS SPECIFICATIONS.

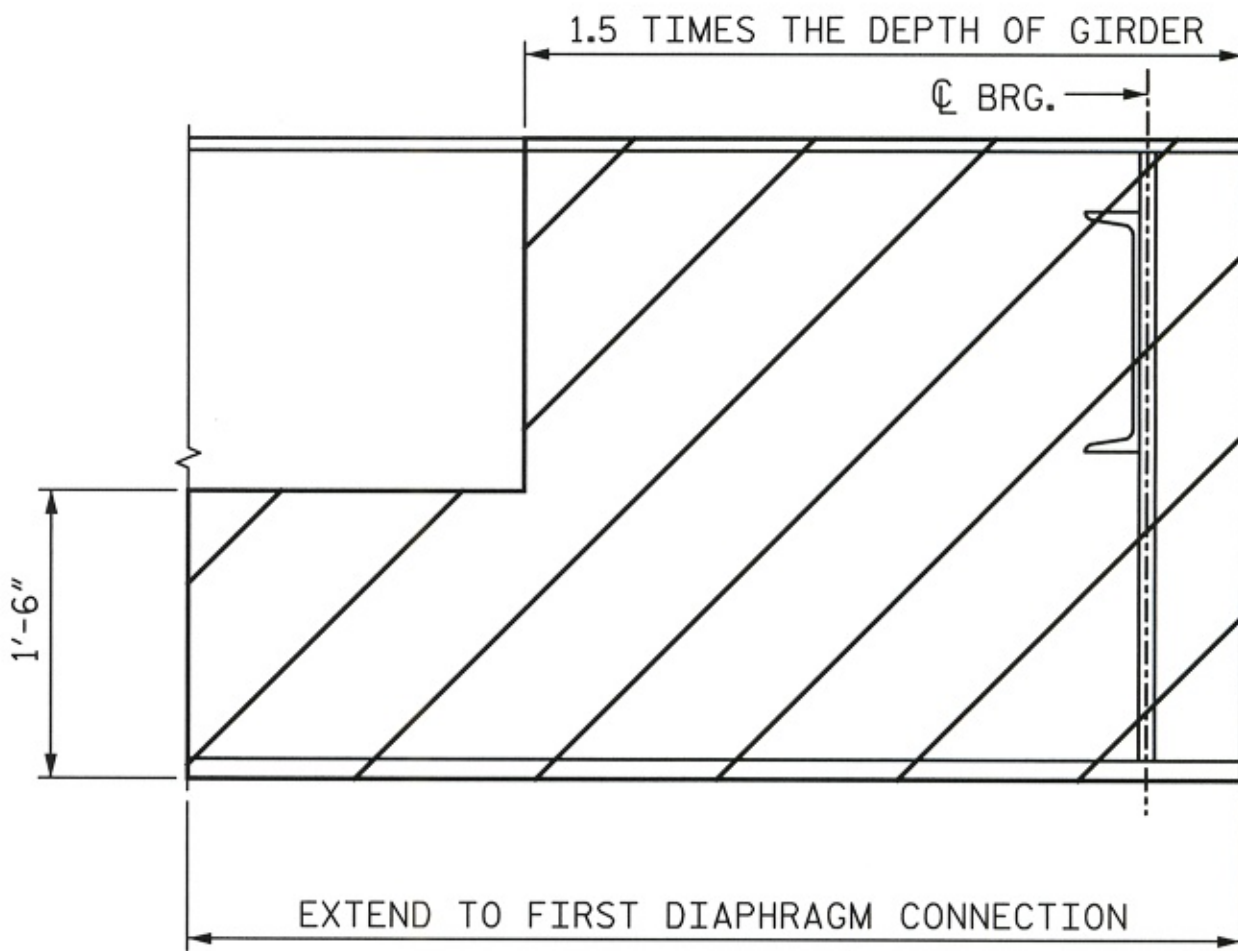
BEARING STIFFENERS AT BENTS 3, 6 @ END BENT 2 MAY REMAIN IN PLACE PROVIDED, REMOVAL OF CONNECTOR PLATE DOES NOT DAMAGE BEARING STIFFENER OR BEARING STIFFENER WELDS. DAMAGED BEARING STIFFENERS SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER.

CONTRACTOR MAY ELECT TO REPLACE BEARING STIFFENERS WITH SAME SIZE MATERIAL AND SIMILAR DETAILS AS SHOWN HERE-IN; TO BE APPROVED BY THE ENGINEER.



WATER DIVERSION PLATE DETAIL

NOTE: WATER DIVERSION PLATES TO BE LOCATED AT SPAN A END BENT 1, SPAN D BENT 3, AND SPAN G BENT 6 EXTERIOR GIRDERS ONLY. ALL HOIRZONTAL DIMENSIONS ARE ALONG C/L OF PLATE.



TYPICAL PAINT DETAIL

(FOR ALL GIRDERS)
(SEE NOTES ON GIRDER REPAIR SHEET)

PROJECT NO. **BK-5130**
MITCHELL COUNTY
STATION: **105+99.50**

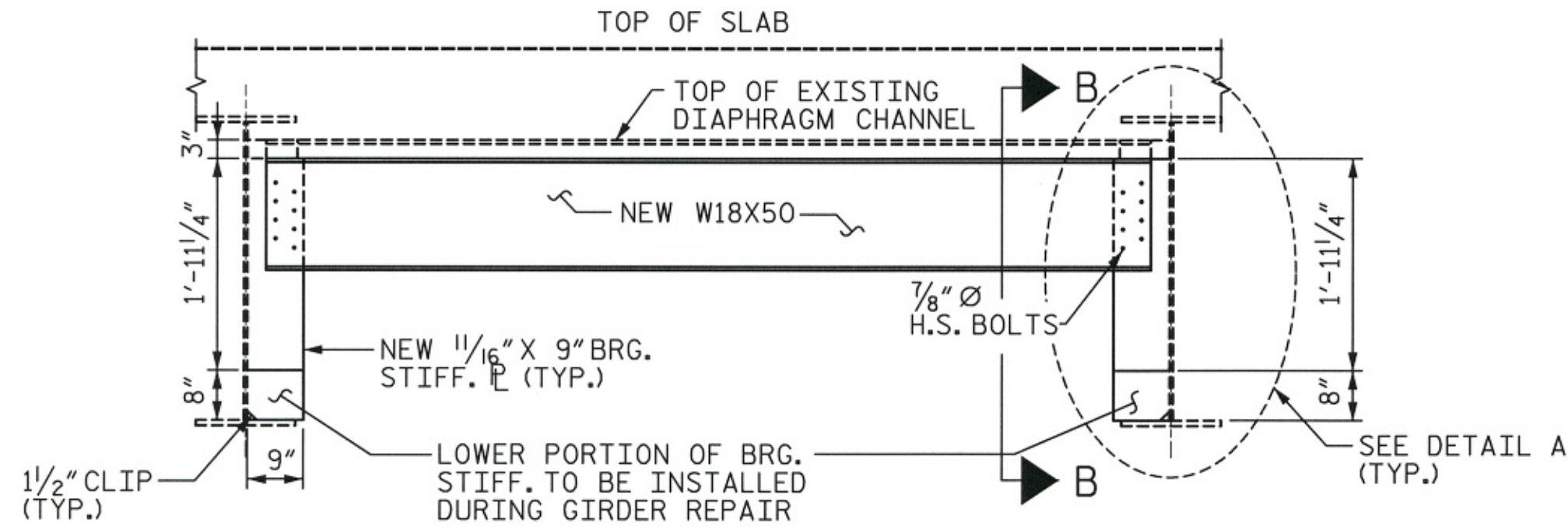
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
**BRIDGE ON US 19E
OVER NORTH TOE RIVER**
GIRDER DETAILS AND
DIAPHRAGM MODIFICATION



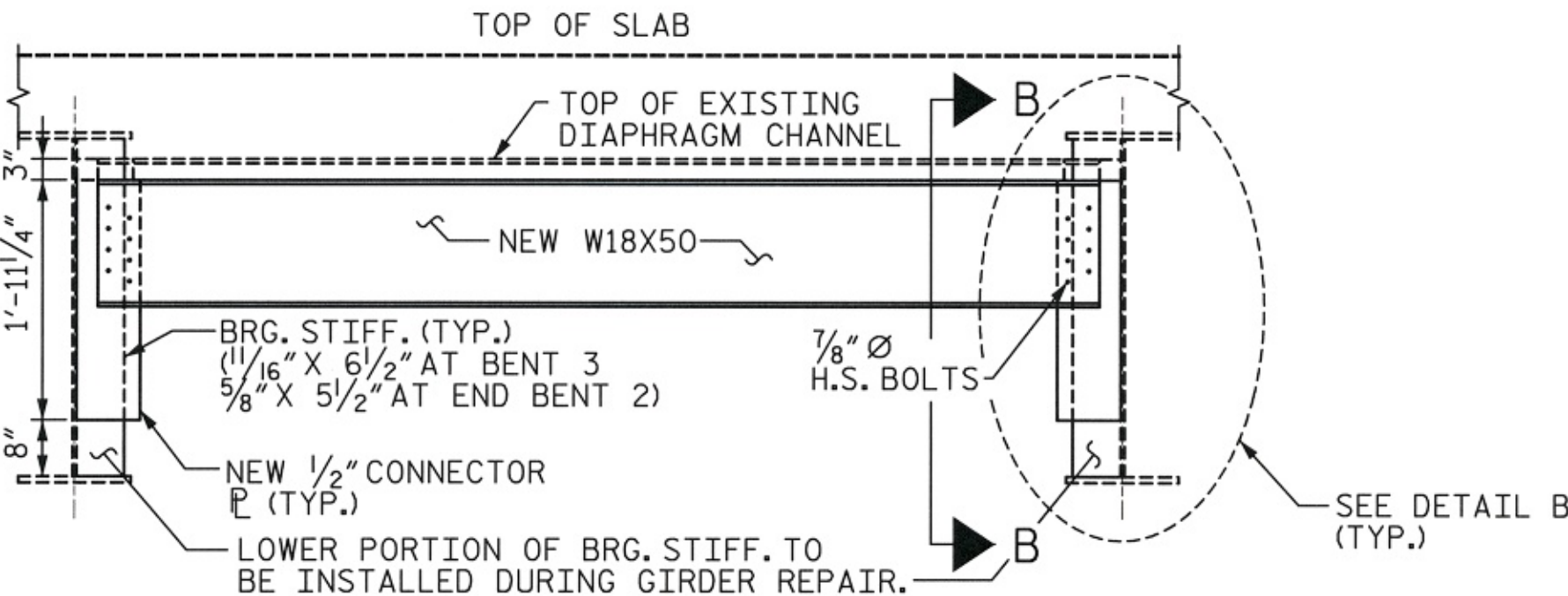
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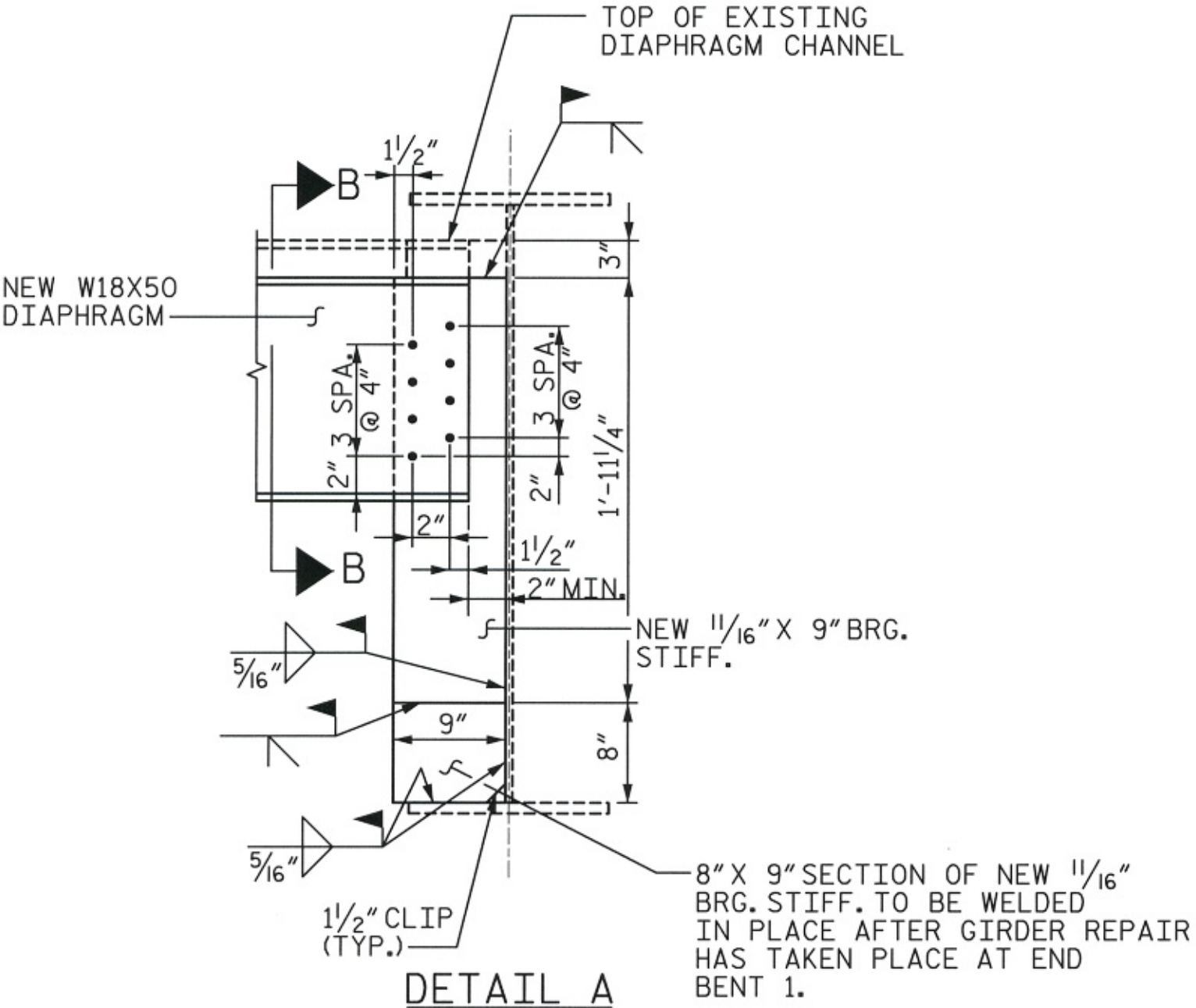
REVISIONS						SHEET NO. 6 TOTAL SHEETS 10
NO.	BY:	DATE:	NO.	BY:	DATE:	
1	STV	9-16-10	3			
2			4			



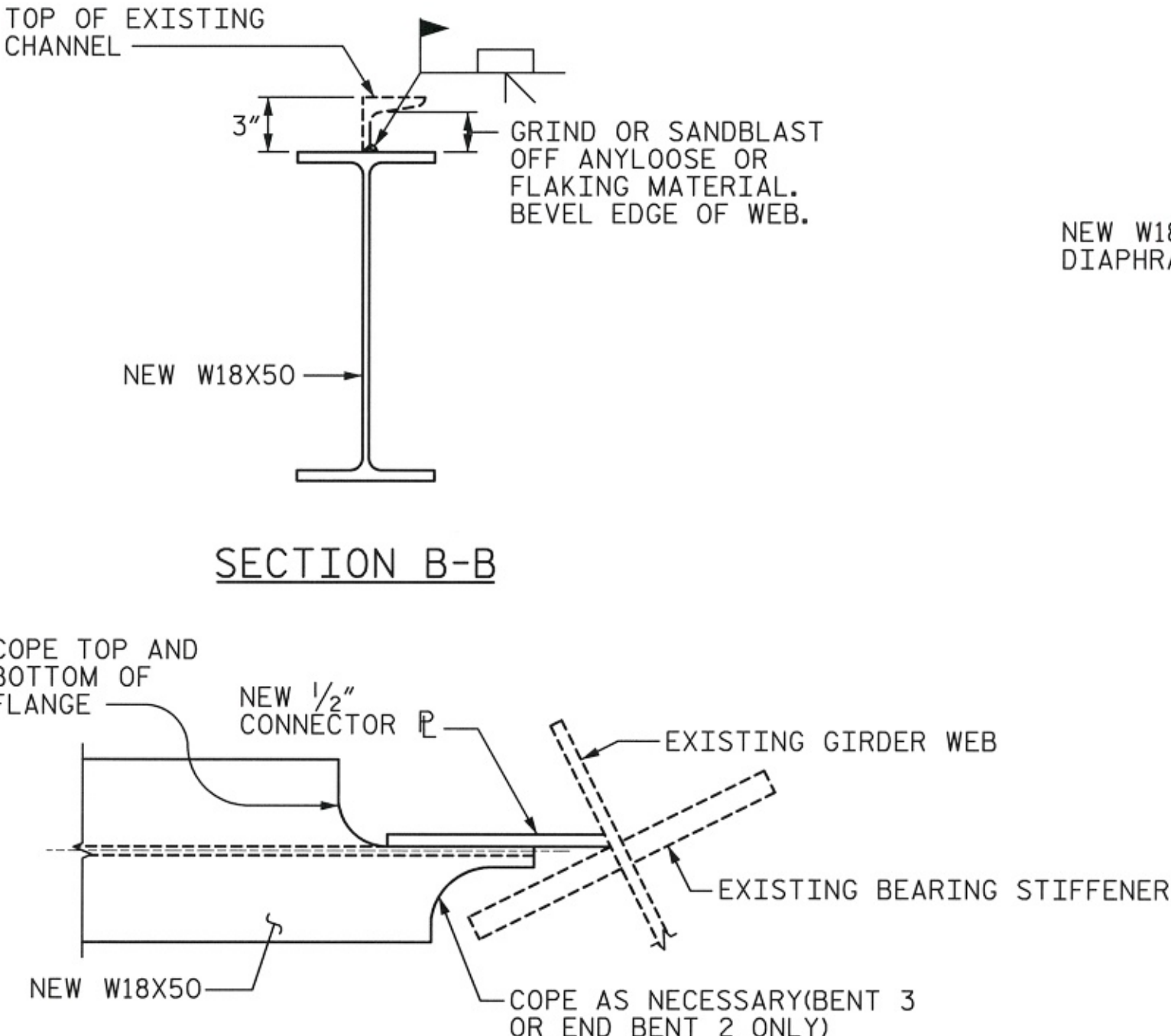
PROPOSED DIAPHRAGM REPLACEMENT
INTERIOR BAY
(TYP. ALL BAYS @ END BENT 1 ONLY)



PROPOSED DIAPHRAGM REPLACEMENT
EXTERIOR BAY
(TYP. ALL BAYS @ BENT 3, BENT 6, & END BENT 2)



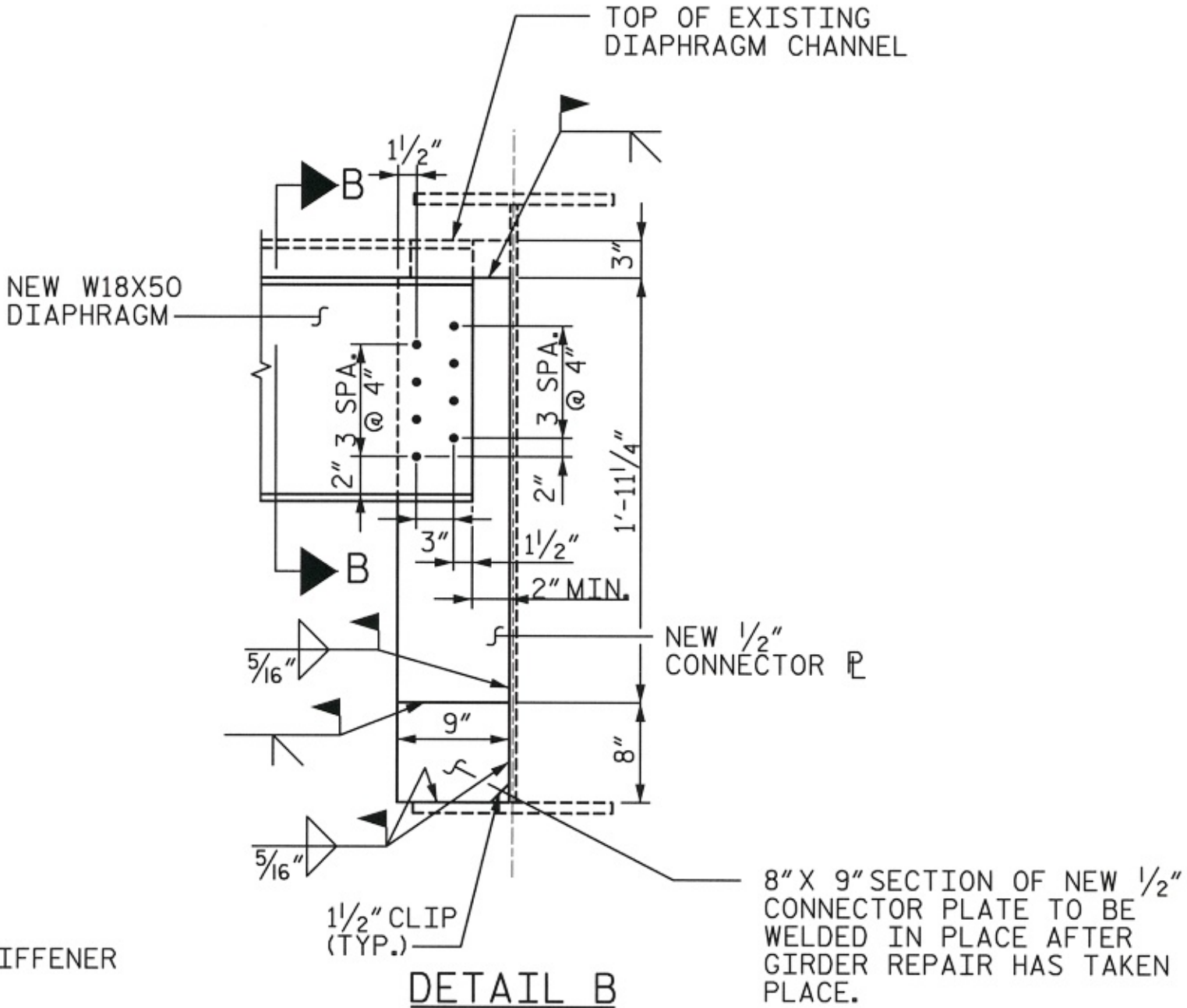
DETAIL A



SECTION B-B

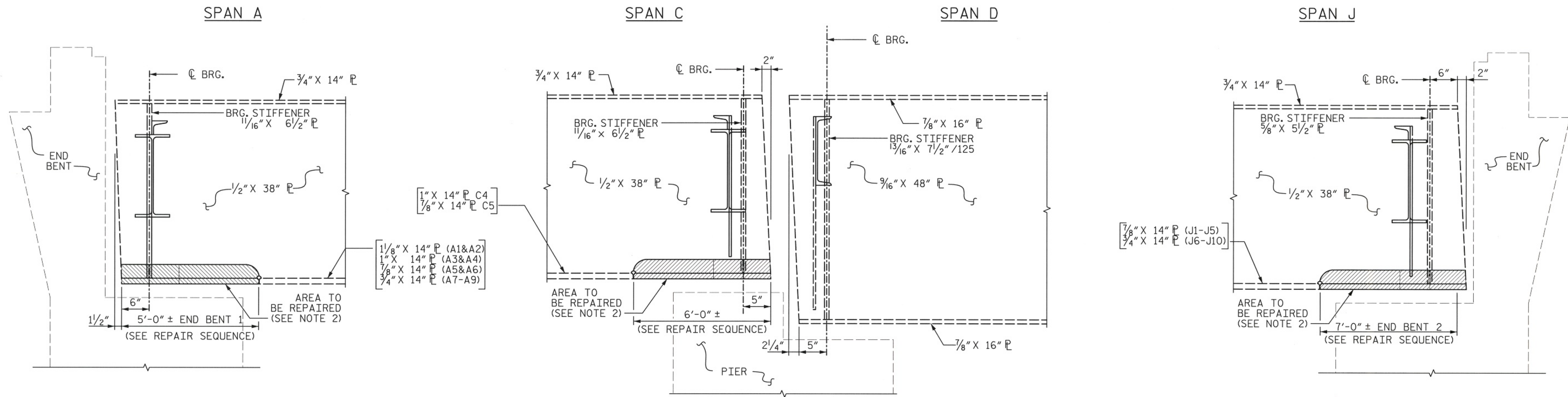
COPING DETAIL

(FOR NEW W18X50 DIAPHRAGM)



DETAIL B

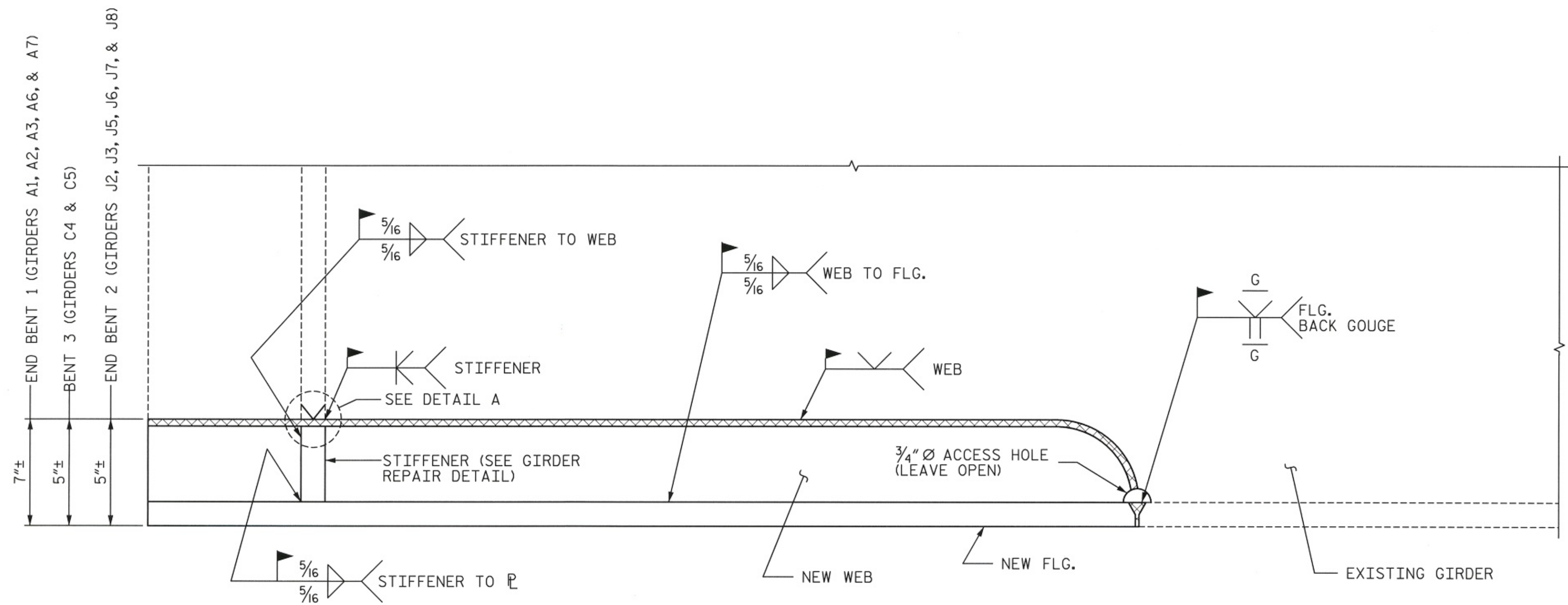
DRAWN BY : **CLG** DATE : **6-10**
CHECKED BY : **PEK** DATE : **6-10**



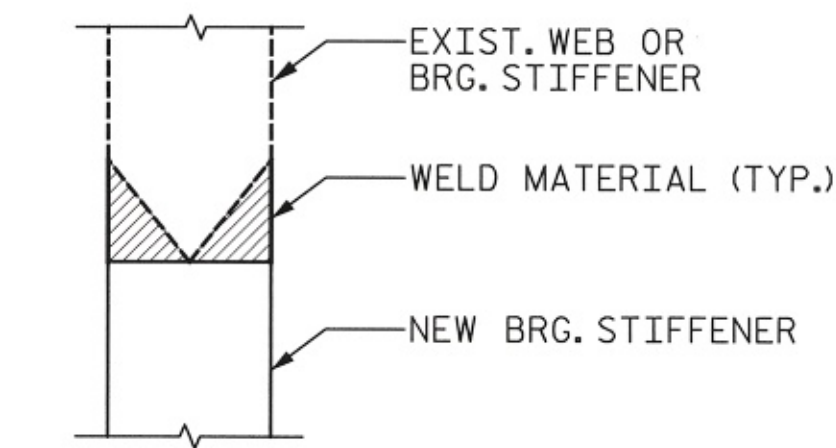
GIRDER REPAIR DETAIL FOR END BENT 1
(FOR GIRDERS A1, A2, A3, A6 & A7 @ END BENT 1)
(BEARINGS NOT SHOWN FOR CLARITY)

GIRDER REPAIR DETAIL AT BENT 3
(FOR GIRDER C4 & GIRDER C5 AT BENT 3)
(BEARINGS NOT SHOWN FOR CLARITY)

GIRDER REPAIR DETAIL FOR END BENT 2
(FOR GIRDERS J2, J3, J5, J6, J7 & J8 @ END BENT 2)
(BEARINGS NOT SHOWN FOR CLARITY)



TYPICAL REPAIR WELD DETAIL



DETAIL A

NOTES:

- REPLACEMENT STEEL SHALL BE A588 STEEL OR APPROVED EQUAL AND PAINTED IN ACCORDANCE WITH SYSTEM 4 OF ARTICLE 442-7 OF THE STANDARD SPECIFICATIONS.
- THE ENGINEER SHALL DETERMINE THE EXTENT OF GIRDER REPAIR.
- REPLACEMENT PLATES SHALL BE MANUFACTURED USING MATERIAL OF CORRESPONDING THICKNESS AND WIDTH TO MATERIAL BEING REPLACED.

- REPAIR SEQUENCE:**
1. AREA AROUND GIRDER DAMAGE SHALL BE MECHANICALLY CLEANED SUCH THAT NO CORROSION IS REMAINING.
 2. DAMAGED AREA SHALL BE REMOVED AND REMAINING SURFACES SHALL BE PREPARED FOR WELDING.
 3. REPLACEMENT PLATES SHALL BE WELDED TO GIRDER AS SHOWN.
 4. GIRDER ENDS, AND ANY DAMAGED AREAS, SHALL BE PAINTED PER NOTE 1 ABOVE.

PROJECT NO. **BK-5130**
MITCHELL COUNTY
STATION: **105+99.50**

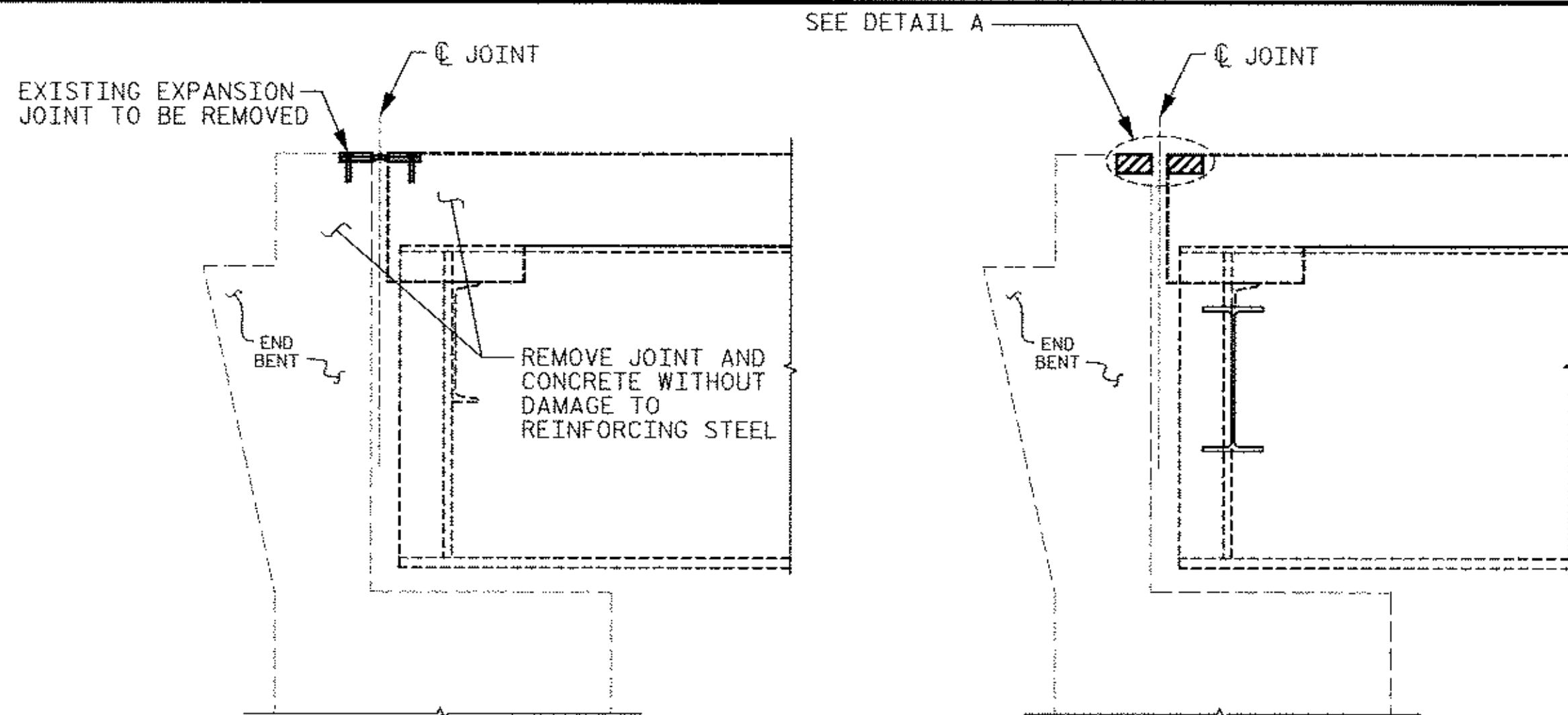
DRAWN BY : **CLG** DATE : **6-10**
CHECKED BY : **PEK** DATE : **6-10**

9/17/2010
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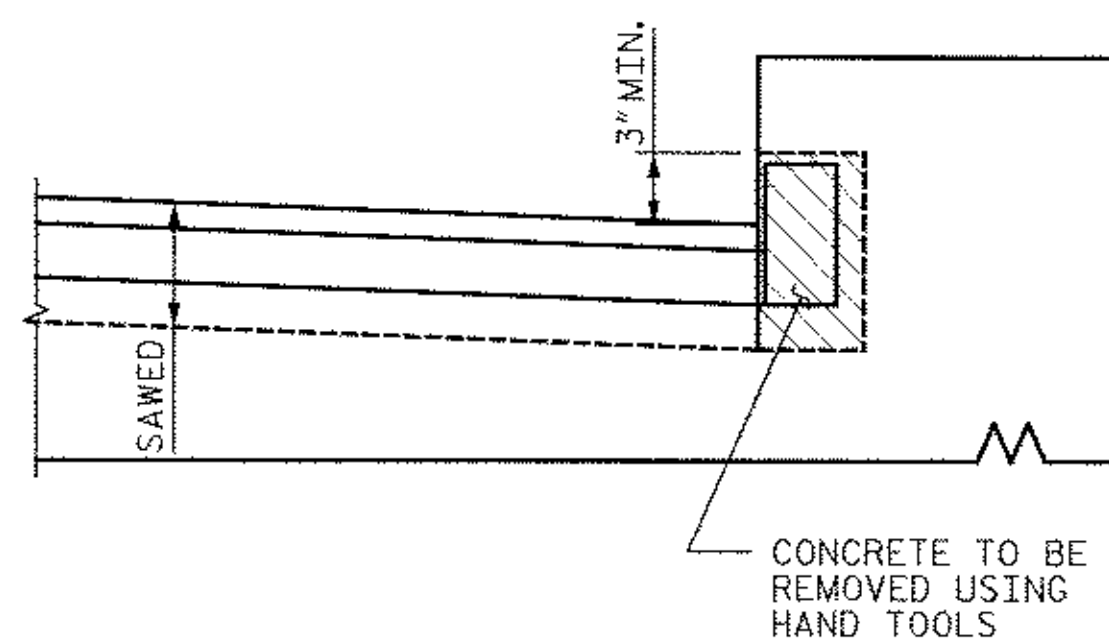


STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
BRIDGE ON US 19E OVER NORTH TOE RIVER					
GIRDER REPAIR					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1	STV	9-16-10	3		
2			4		
SHEET NO. 7					TOTAL SHEETS 10



EXISTING SECTION AT
END BENT 1 & 2

PROPOSED SECTION AT
END BENT 1 & 2



SECTION AT CURB

GENERAL NOTES: ⚠

EXISTING BRIDGE AND REPAIR DETAILS INDICATED ON THE PLANS ARE FROM THE BEST INFORMATION AVAILABLE. SINCE THIS INFORMATION IS SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR, THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THE EXISTING BRIDGE AND REPAIR DETAILS SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

THE COST ASSOCIATED WITH WELDING THE STRUCTURAL STEEL REPAIR PLATES TO THE EXISTING GIRDERS SHALL BE INCLUDED IN THE BID PRICE PER POUND FOR GIRDER REPAIR.

BLOCKING SHALL BE PROVIDED TO INSURE THE SAFETY OF THE STRUCTURE AND ITS OCCUPANTS DURING THE JACKING PROCESS. AT NO TIME SHALL JACKS BE IN OPERATION IN THE ABSENCE OF BLOCKING. FOR BRIDGE JACKING, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS TO SUBSTRUCTURES, SEE SPECIAL PROVISIONS.

FOR CLEANING AND PAINTING STRUCTURAL STEEL, SEE SPECIAL PROVISIONS.

AFTER ALL REPAIRS AT EACH BENT HAVE BEEN COMPLETED AN EPOXY PROTECTIVE COATING SHALL BE APPLIED TO THE TOP SURFACE OF BENT CAPS, INCLUDING PEDESTALS, AT END BENT 1, BENT 3, BENT 6 AND END BENT 2. CAP SURFACES SHALL BE GRIT BLASTED PRIOR TO EPOXY COATING. SEE STANDARD SPECIFICATIONS. FOR EPOXY COATING. ALL COSTS ASSOCIATED WITH APPLYING EPOXY PROTECTIVE COATING SHALL BE INCLUDED IN THE SEVERAL PAY ITEMS FOR THE PROJECT. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.

ALL FIELD CONNECTIONS TO BE $\frac{7}{8}$ " \varnothing HIGH STRENGTH BOLTS UNLESS OTHERWISE NOTED.

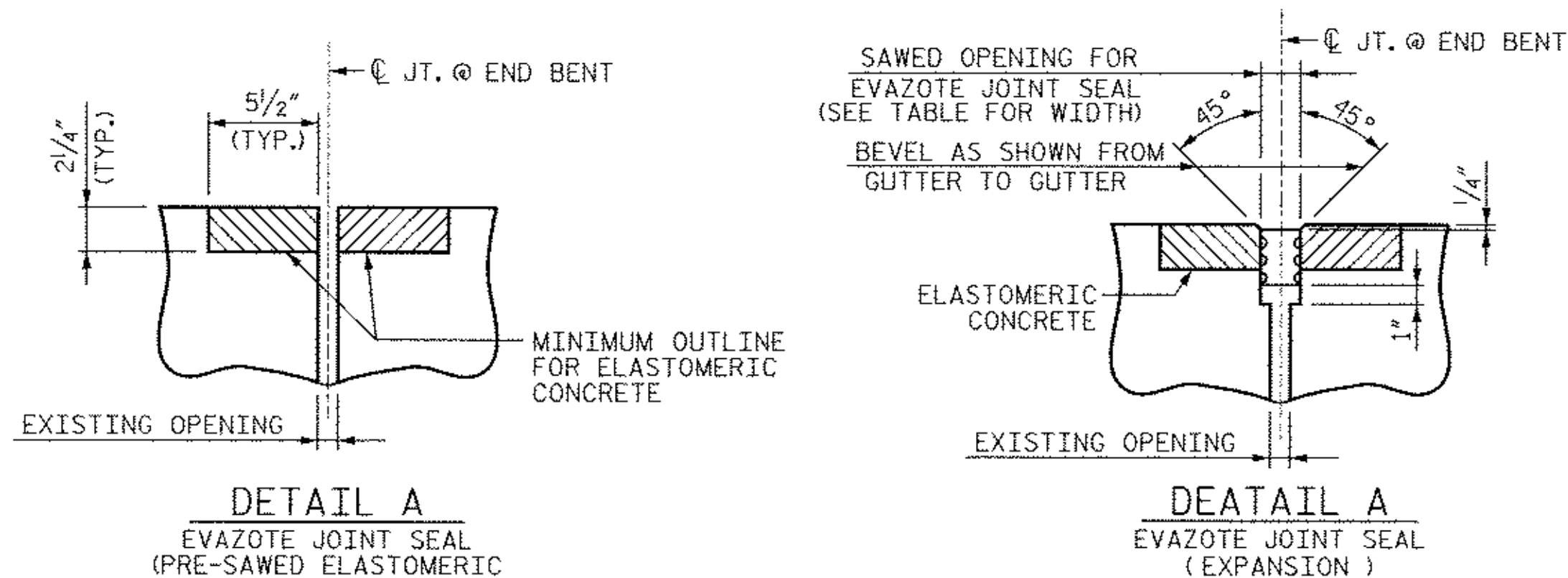
FOR HIGH STRENGTH BOLTS, SEE SPECIAL PROVISIONS.

FOR TRAFFIC CONTROL, SEE TRAFFIC CONTROL PLANS.

FOR GIRDER REPAIR, SEE SPECIAL PROVISIONS.

FOR BRIDGE JACKING, SEE SPECIAL PROVISIONS.

FOR CLEANING AND PAINTING EXISTING BEARINGS, SEE SPECIAL PROVISIONS.



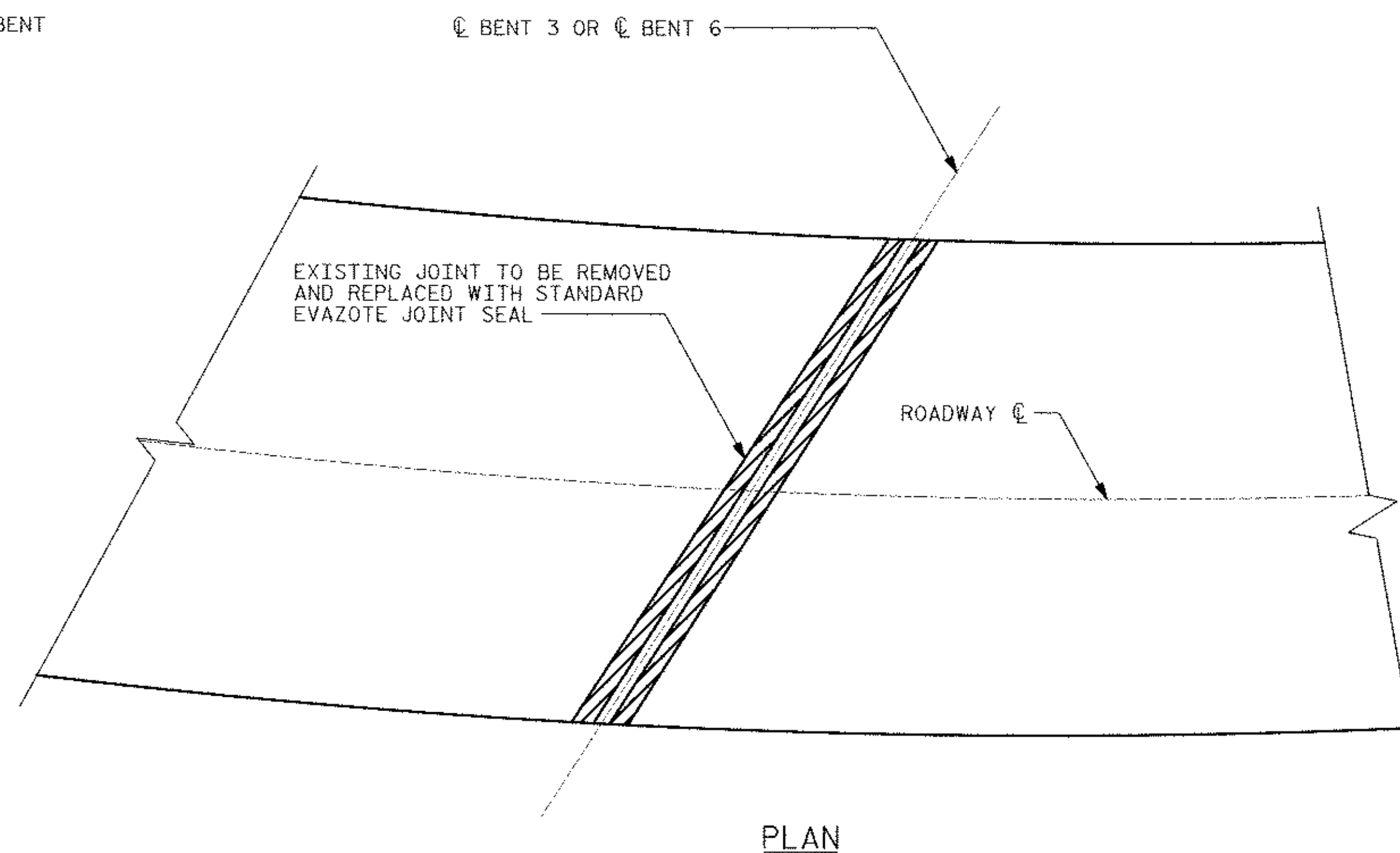
DETAIL A
EVAZOTE JOINT SEAL
(PRE-SAWED ELASTOMERIC
CONCRETE DIMENSIONS)

DEATAIL A
EVAZOTE JOINT SEAL
(EXPANSION)

ELASTOMERIC CONCRETE	
END BENT NO.	ELASTOMERIC CONCRETE * (CU. FT.)
1	12.5
2	20.0
TOTAL	32.5

* BASED ON THE MINIMUM OUTLINE SHOWN.

EVAZOTE JOINT SEAL REPAIR AT END BENTS



PLAN

MOVEMENT AND SETTING AT EVAZOTE JOINT						
BENT NO.	SKIEW ANGLE	NOMINAL UNCOMPRESSED SEAL WIDTH	TOTAL MOVEMENT (ALONG \varnothing RDWY)	PERPENDICULAR JOINT OPENING AT 45° F	PERPENDICULAR JOINT OPENING AT 60° F	PERPENDICULAR JOINT OPENING AT 90° F
E.B. 1	82°00'00"	2 1/2"	1 5/8"	2 1/8"	1 3/8"	1 1/2"
3	122°09'38"	5 3/8"	2 5/8"	■	■	■
6	129°09'38"	5 3/8"	2 5/8"	■	■	■
E.B. 2	134°04'50"	2 1/2"	1 3/8"	2 1/8"	1 3/8"	1 5/8"

TOTAL MOVEMENT IS CALCULATED ALONG THE CENTERLINE OF ROADWAY. JOINT OPENINGS ARE MEASURED PERPENDICULAR TO THE JOINT.

■ JOINT SEALS AT BENTS 3 & 6 WILL BE REPLACED WITH THE JOINT OPENING IN ITS CURRENT STATE. NO SAW CUTTING OR REFORMING OF JOINT IS REQUIRED.

EVAZOTE JOINT REPAIR

DRAWN BY : CLG DATE : 6-10
CHECKED BY : PEK DATE : 6-10

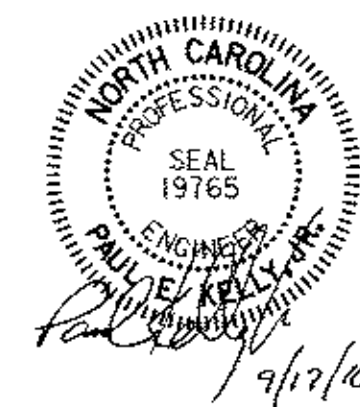
9/17/2010
I:\Projects\2514736\2514736-0001\50.Deliverables & Submittals\08 Evazote Joint Seal and General Notes.dgn

STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208

PROJECT NO. BK-5130
MITCHELL COUNTY
STATION: 105+99.50

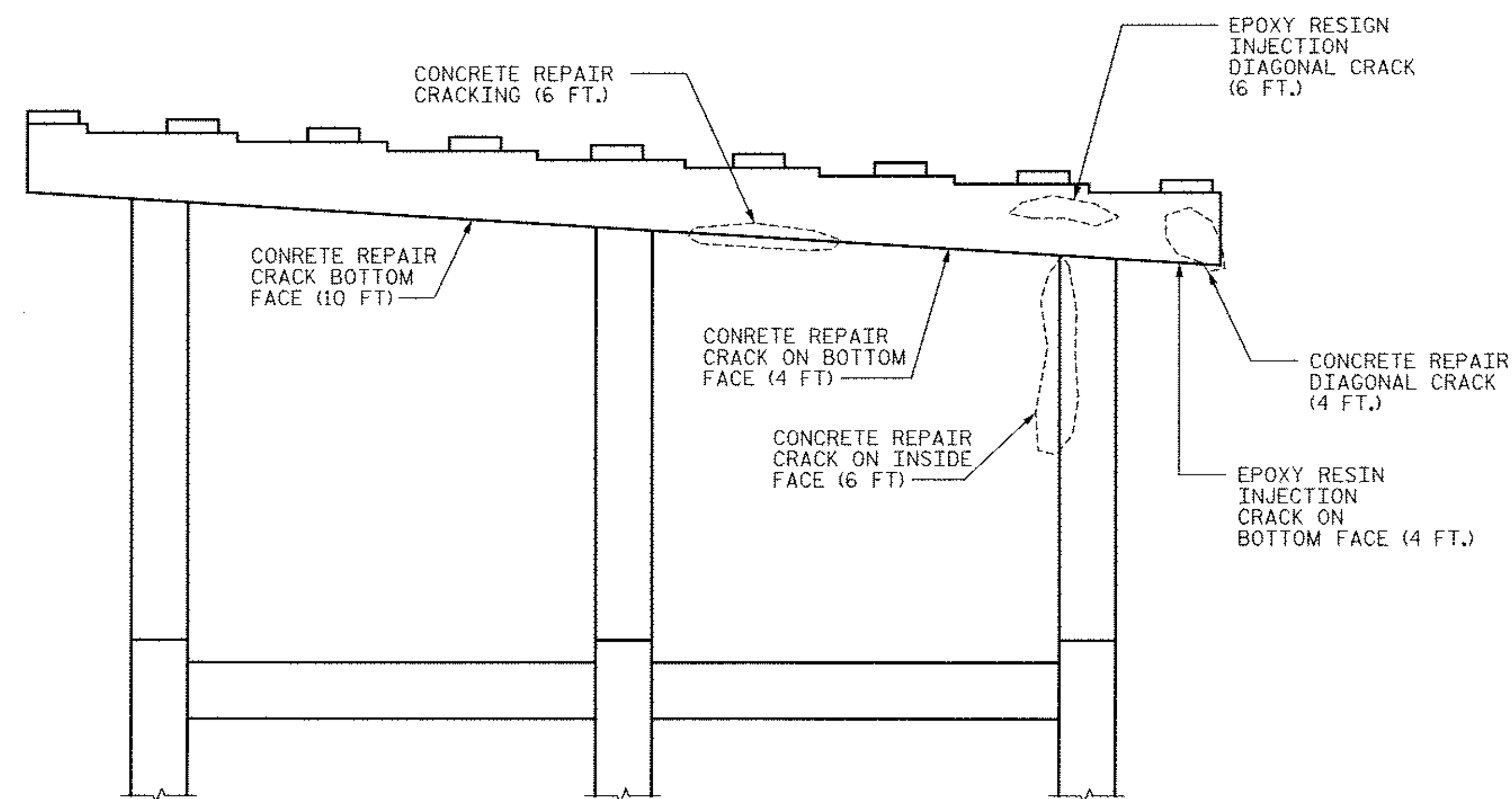
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
BRIDGE ON US 19E
OVER NORTH TOE RIVER
EVAZOTE JOINT SEAL DETAIL
AND GENERAL NOTES

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1	STV	8/18/10	3			8
2	STV	9-16-10	4			
						TOTAL SHEETS
						10

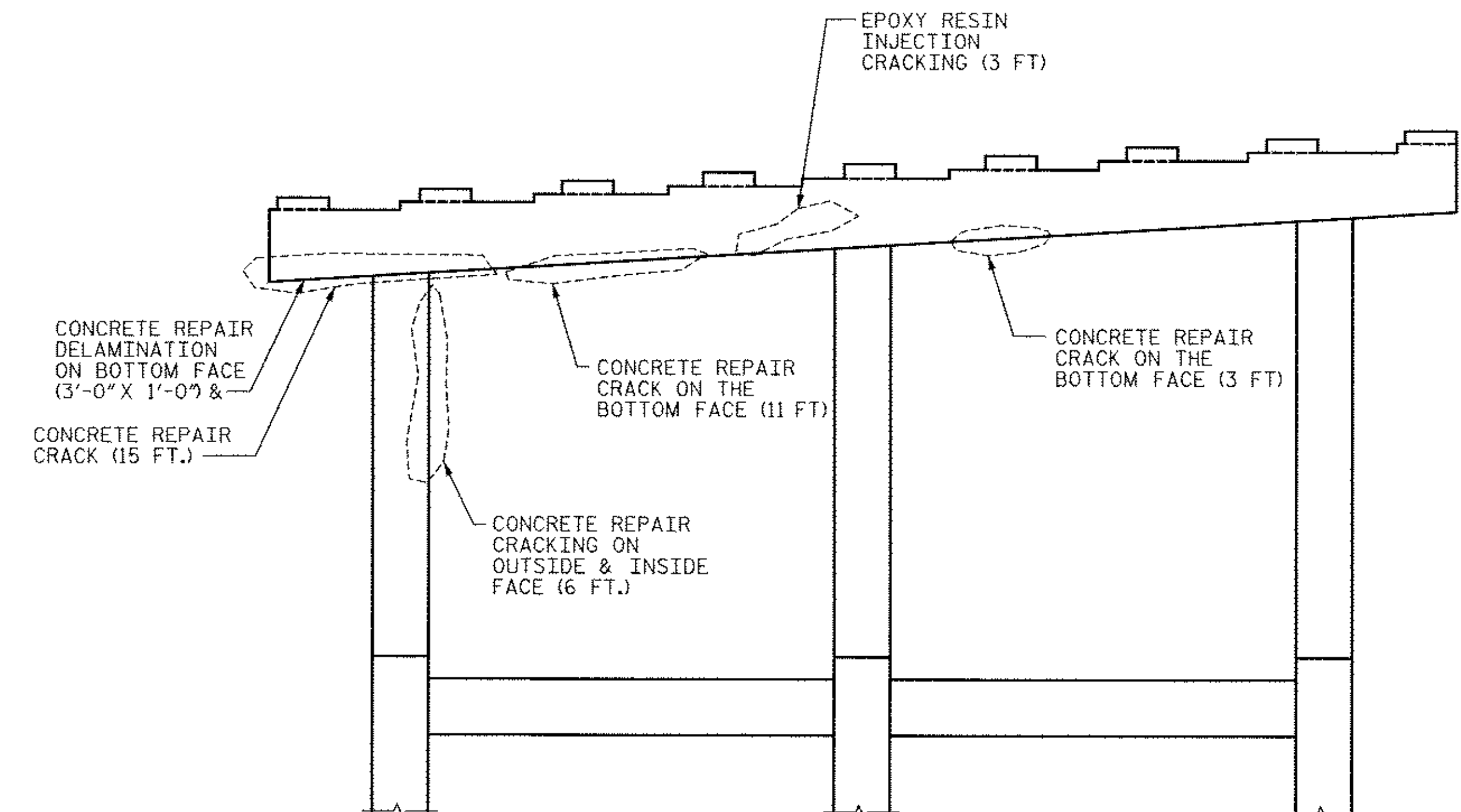


△ NOTES:

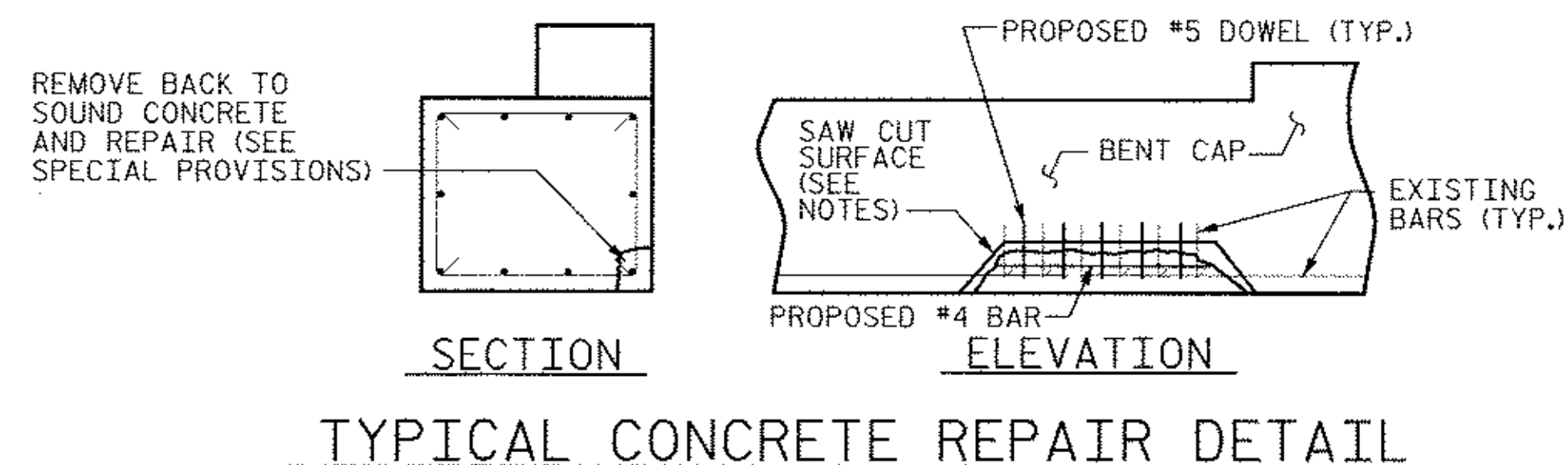
1. SAWCUT 1/4" - 1/2" DEEP AROUND ALL SPALLS.
2. FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.
3. FOR CONCRETE REPAIR SEE SPECIAL PROVISION CONCRETE REPAIR TO SUBSTRUCTURE.
4. SPALL AND CRACK DIMENSIONS SHOWN ARE APPROXIMATE.
5. CONCRETE SHOULD BE SOUNDED TO DETERMINE IF SPALL REPAIR IS NECESSARY. CRACK HAS BEEN QUANTIFIED AS EPOXY RESIN INJECTION, BUT IF SOUNDING SHOULD PROVE OTHERWISE, USE TYPICAL CONCRETE REPAIR DETAIL.



△ BENT 3 ELEVATION
(LOOKING WEST)

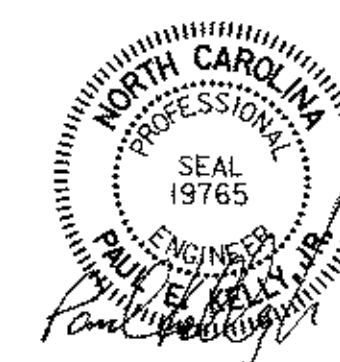


△ BENT 3 ELEVATION
(LOOKING EAST)



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STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**BRIDGE ON US 19E
 OVER NORTH TOE RIVER**
 BENT 3
 SUBSTRUCTURE REPIAR

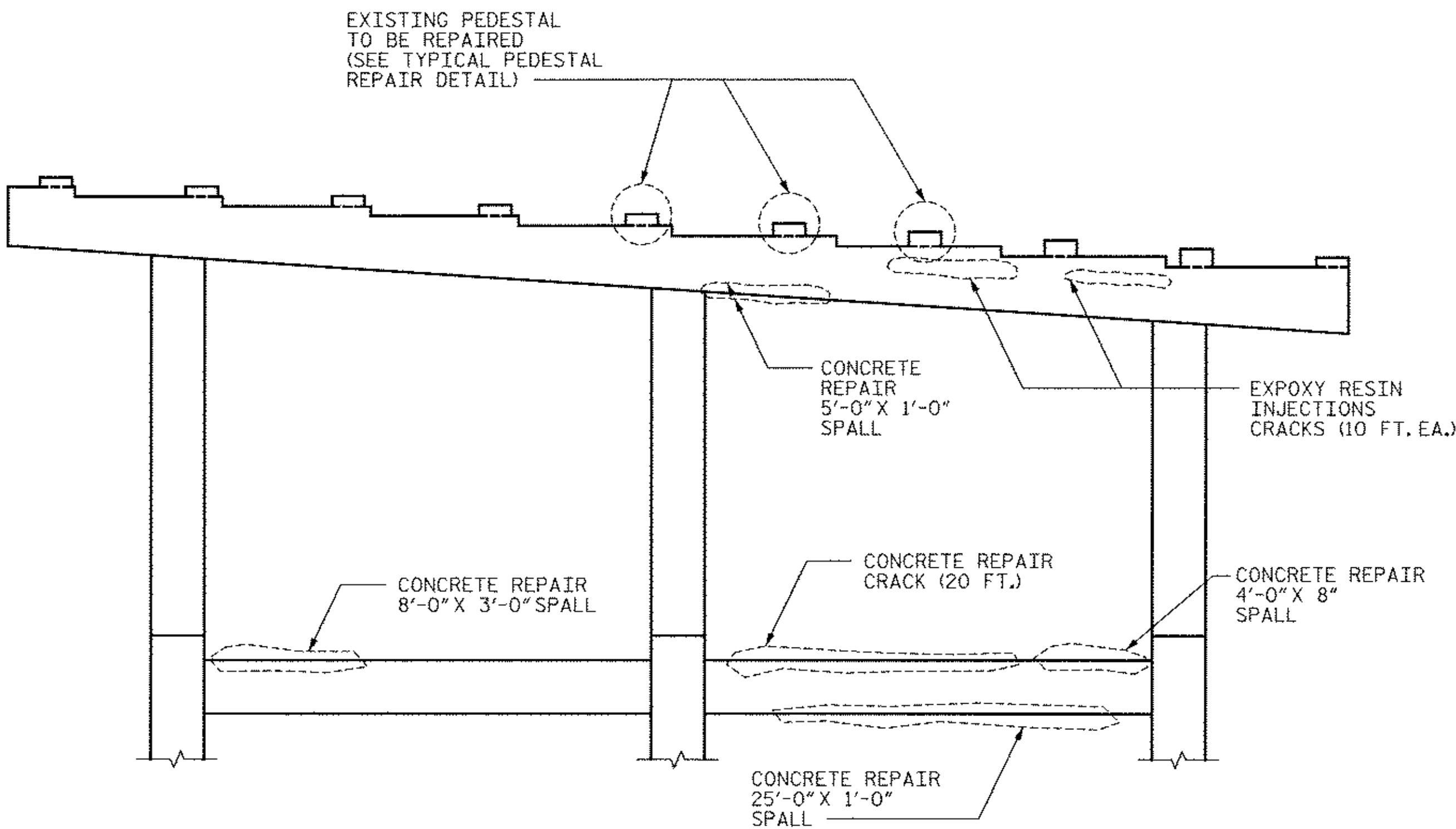


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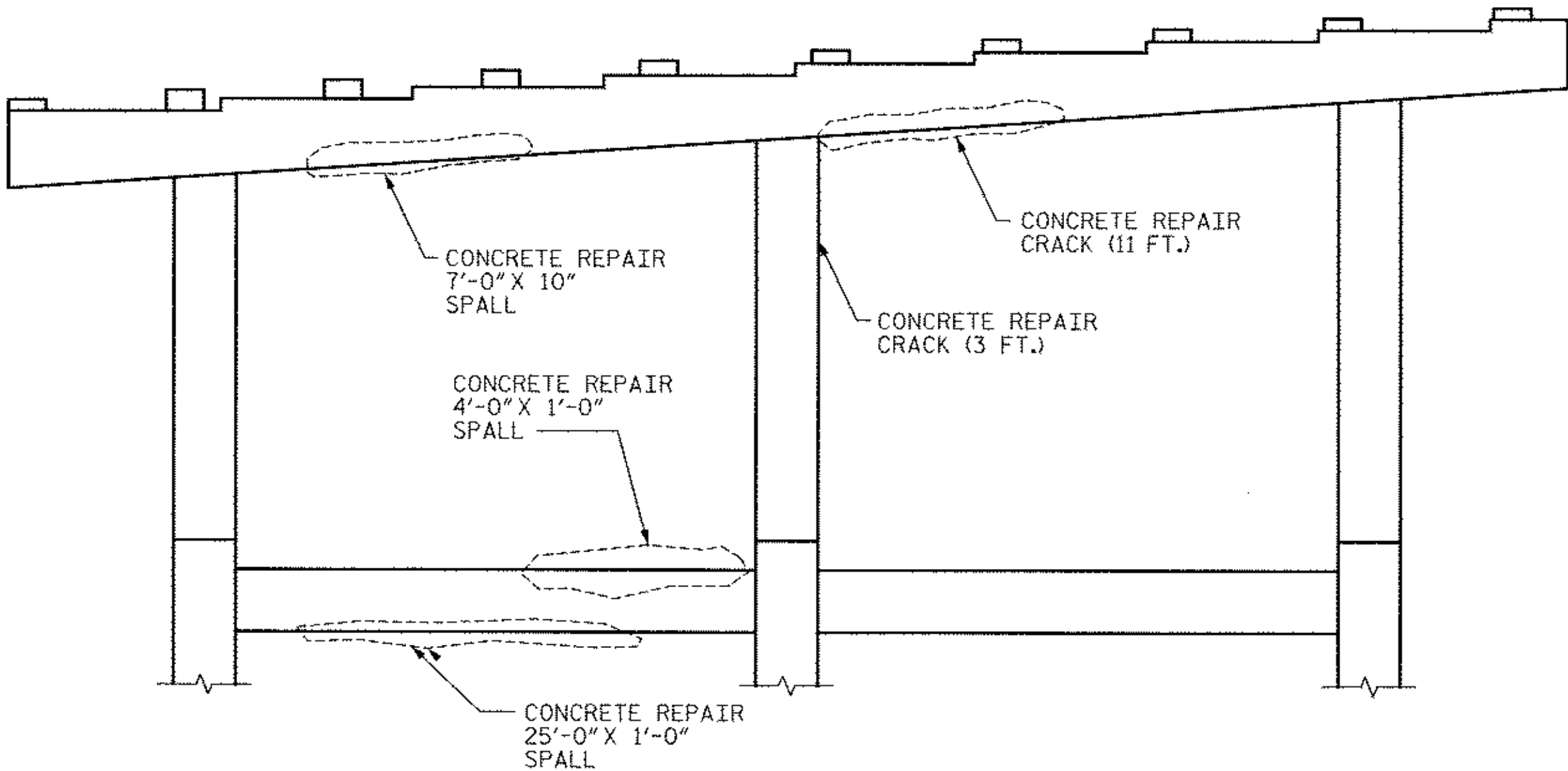
REVISIONS						SHEET NO. 9
NO.	BY:	DATE:	NO.	BY:	DATE:	
1	STV	9-16-10	3			TOTAL SHEETS 10
2			4			

DRAWN BY : **CLG** DATE : **6-10**
 CHECKED BY : **PEK** DATE : **6-10**

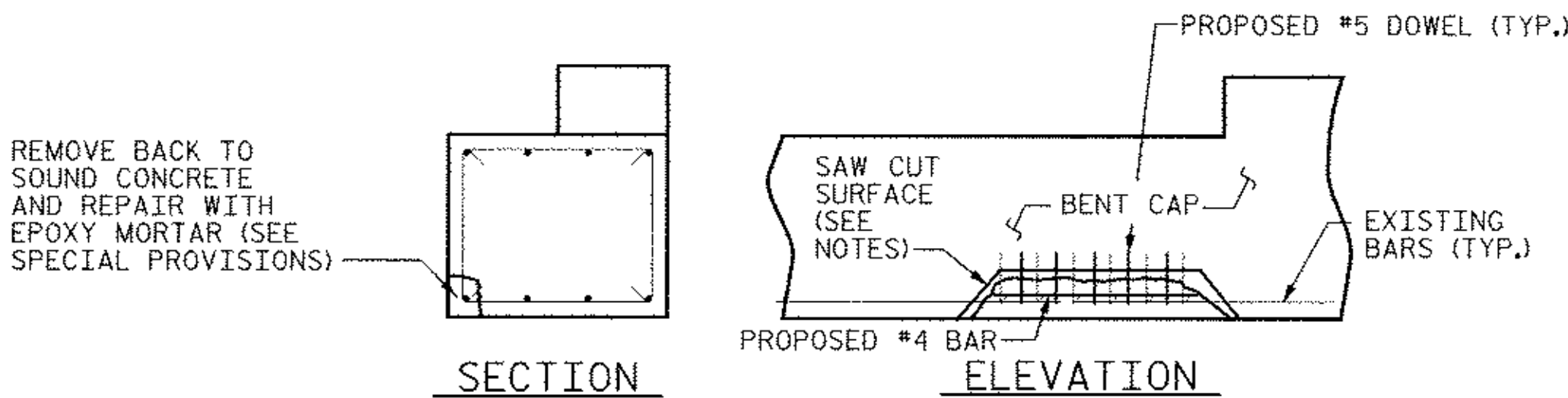
- NOTES:
1. FOR ADDITIONAL NOTES SEE SHEET 9 OF 10.
 2. PEDESTAL HEIGHT BASED UPON EXISTING PLANS. CONTRACTOR SHALL VERIFY EXISTING BEARING HEIGHTS AND ADJUST PEDESTAL AS NEEDED TO MAINTAIN GRADE ON BRIDGE.
 3. CONTRACTOR TO REMOVE CONCRETE PEDESTAL WITH CARE AS NOT TO DAMAGE THE EXISTING REBAR, ANCHOR BOLTS, BEARING ASSEMBLY OR GIRDER.
 4. CONTRACTOR SHALL REPLACE ALL DAMAGED REBAR WHILE REMOVING PEDESTAL.
 5. PEDESTAL CONCRETE SHALL BE CLASS A WITH A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI. MINIMUM COMPRESSIVE STRENGTH SHALL BE ACHIEVED PRIOR TO PLACING LOAD. SEE STANDARD SPECIFICATION FOR DETAILS.



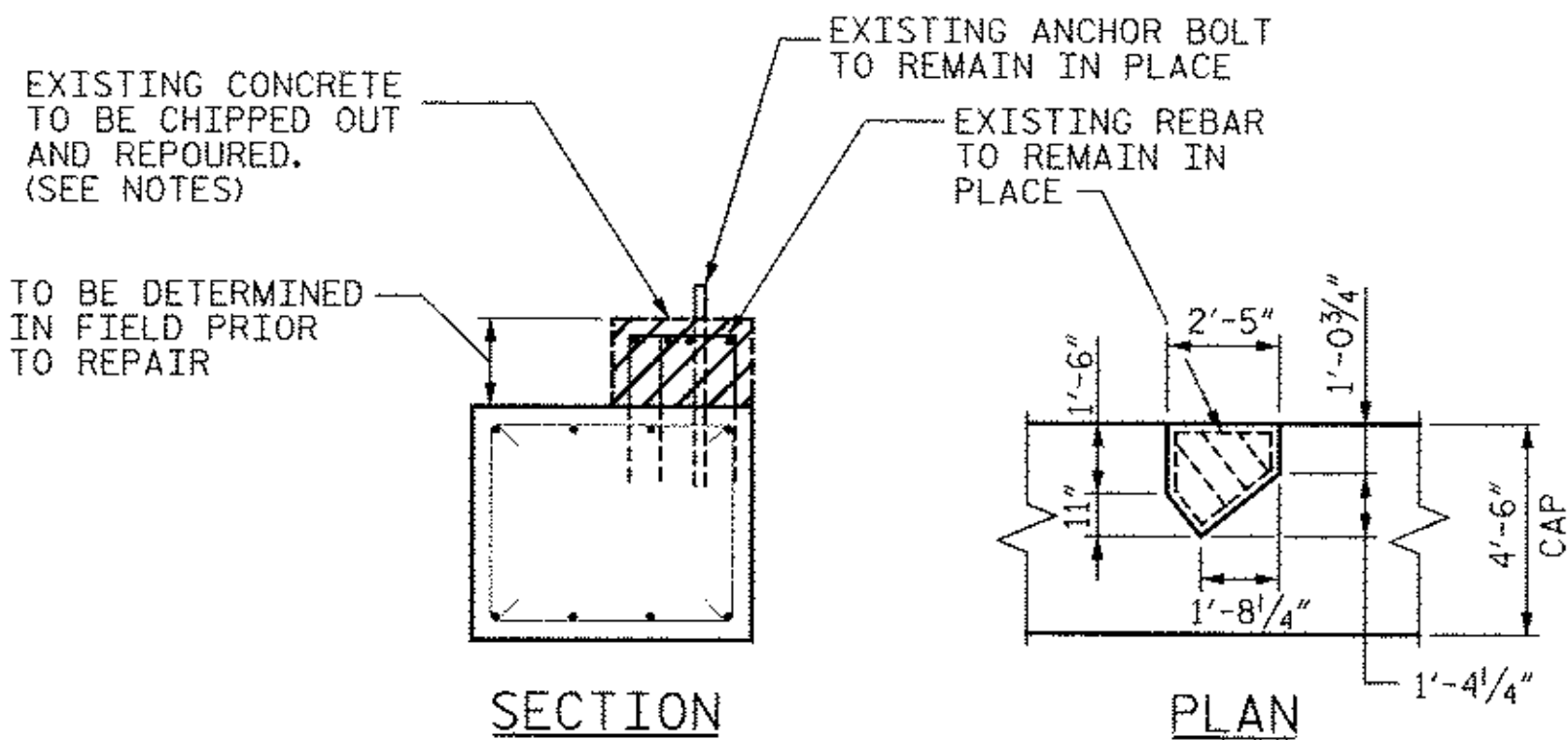
△ BENT 6 ELEVATION
(LOOKING WEST)



△ BENT 6 ELEVATION
(LOOKING EAST)



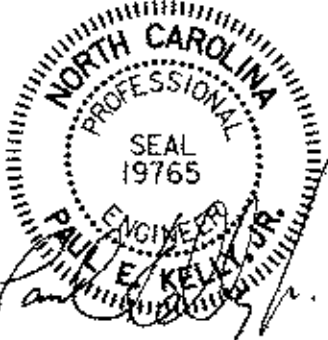
TYPICAL CONCRETE REPAIR DETAIL



TYPICAL PEDESTAL
REPAIR DETAIL

PROJECT NO. **BK-5130**
MITCHELL COUNTY
STATION: **105+99.50**

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
BRIDGE ON US 19E OVER NORTH TOE RIVER					
BENT 6 SUBSTRUCTURE REPAIR					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1	STV	9-16-10	3		
2			4		
SHEET NO. 10					TOTAL SHEETS 10



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