

NOTES:
EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM THE BEST INFORMATION AVAILABLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS. THE CONTRACTOR SHALL FIELD VERIFY THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.

ROADWAY SCARIFICATION IS INCLUDED TO ENSURE A SMOOTH TRANSITION ONTO THE BRIDGE FLOOR. DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL SCARIFY AS REQUIRED TO PROVIDE A SMOOTH TRANSITION TO THE ROADWAY AT BOTH ENDS OF THE BRIDGE.

FOR FOAM JOINT SEALS, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

BRIDGE 82 ON I-85 SOUTH BOUND

LOCATION: BRIDGE 670082, I-85 SOUTH OVER SR 1006
3.5 MILES NORTH OF JCT. SR 1239

BRIDGE 82 ON I-85 SOUTH BOUND OVER SR 1006

TOTAL BILL OF MATERIAL

SHOULDER RECONSTRUCTION	MILLING ASPHALT PAVEMENT, 3" DEPTH	INCIDENTAL MILLING	ASPHALT CONC. SURFACE COURSE TYPE S9.5C	REMOVE & RESET EXISTING GUARDRAIL	SCARIFYING BRIDGE DECK	PLACING & FINISHING LATEX MODIFIED CONCRETE OVERLAY-VERY EARLY STRENGTH	LATEX MODIFIED CONCRETE OVERLAY-VERY EARLY STRENGTH	CLASS AA CONCRETE	CLASS III * SURFACE PREPARATION	CLASS II * SURFACE PREPARATION	CLASS I * SURFACE PREPARATION	HYDRO-DEMOLITION OF BRIDGE DECK	FOAM JOINT SEALS	GROOVING BRIDGE FLOORS	CONCRETE REPAIRS	SHOTCRETE REPAIRS	SPAN JACKING ORANGE CO. BRIDGE 82
SHLDR.MI.	SO.YDS.	SO.YDS.	TONS	LIN. FT.	SO.YDS.	SO.YDS.	CU.YDS.	CU.YDS.	SO.YDS.	SO.YDS.	SO.YDS.	SO.YDS.	LUMP SUM	SO.FT.	CU.FT.	CU.FT.	EA.
0.038	645.6	351	30	200	645.6	645.6	39.6	0	0	3.2	0	645.6	LUMP SUM	4,976	7.5	30	1

*QUANTITIES ARE ESTIMATES FROM BEST AVAILABLE DATA, AND SHOULD BE CONSIDERED FOR INFORMATION PURPOSES ONLY. IF ANY CLASS III LOCATIONS ARE ENCOUNTERED PRIOR TO OR DURING HYDRO-DEMOLITION, SEE "TYP. BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL. NO SEPARATE MEASUREMENT OR PAYMENT FOR THIS ITEM SHALL BE MADE. ALL COSTS FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR HYDRO-DEMOLITION.

PROJECT NO. WBS 17BP.7.P.2
ORANGE COUNTY
STATION: _____



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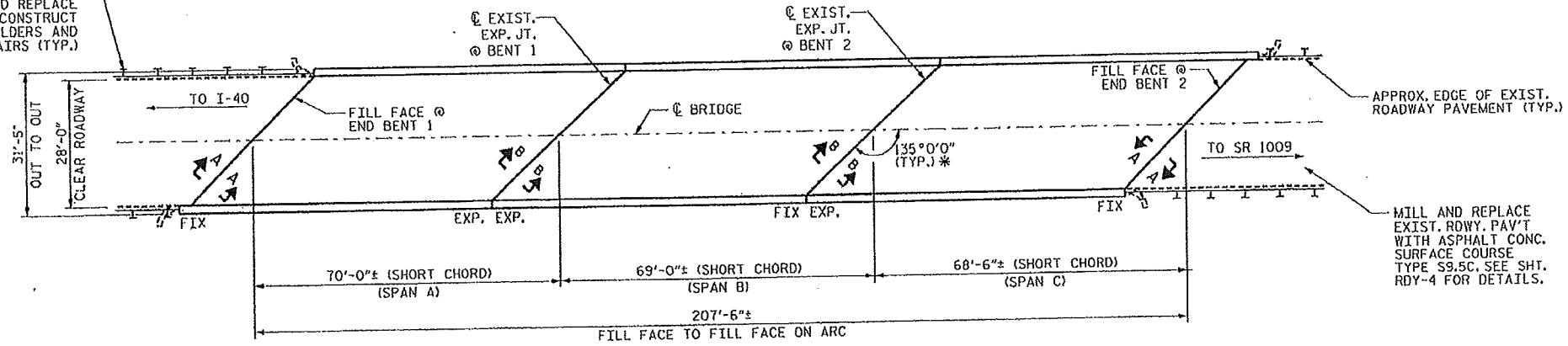
DRAWN BY: K R TYLER DATE: 01/12
CHECKED BY: J T KELVINGTON DATE: 01/12



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
LOCATION SKETCH AND TOTAL BILL OF MATERIAL					
DECK REHAB. FOR BRIDGE NO. 82					
REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
TOTAL SHEETS					83

EXISTING STEEL
"W" BEAM GUARDRAIL.
DISMANTLE AND REPLACE
AS REQ'D TO CONSTRUCT
SHOULDERS AND
JOINT REPAIRS (TYP.)

NOTE: ALL DIMENSIONS SHOWN ARE FROM BEST AVAILABLE SOURCES AND ARE
APPROXIMATE. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD.



PLAN VIEW

* APPROXIMATE CHORD TO BENT ANGLE. ACTUAL ANGLES WILL VARY DUE TO CURVATURE OF ROADWAY.

NOTE: ALL HORIZONTAL DIMENSIONS SHOWN ARE ARC OR RADIAL DIMENSION WITH RESPECT TO CL BRIDGE.

RAIL POSTS AND BARRIER RAILS ARE NOT SHOWN FOR CLARITY.

NOTES:

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

FOR HYDRO-DEMOLITION, SEE SPECIAL PROVISIONS.

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

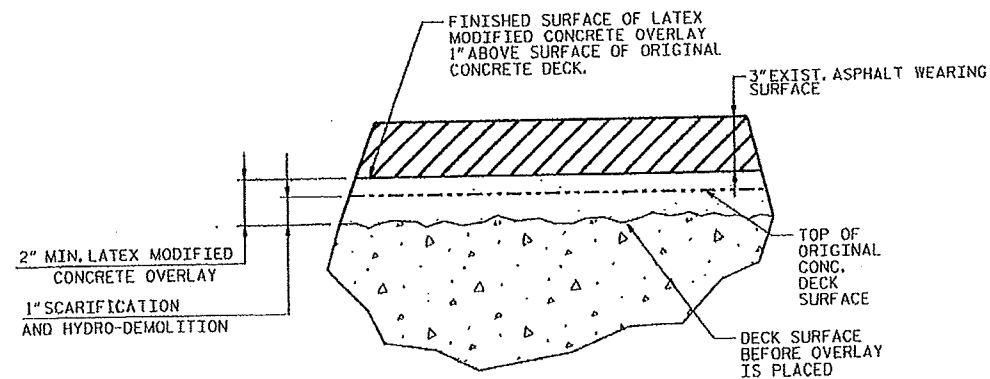
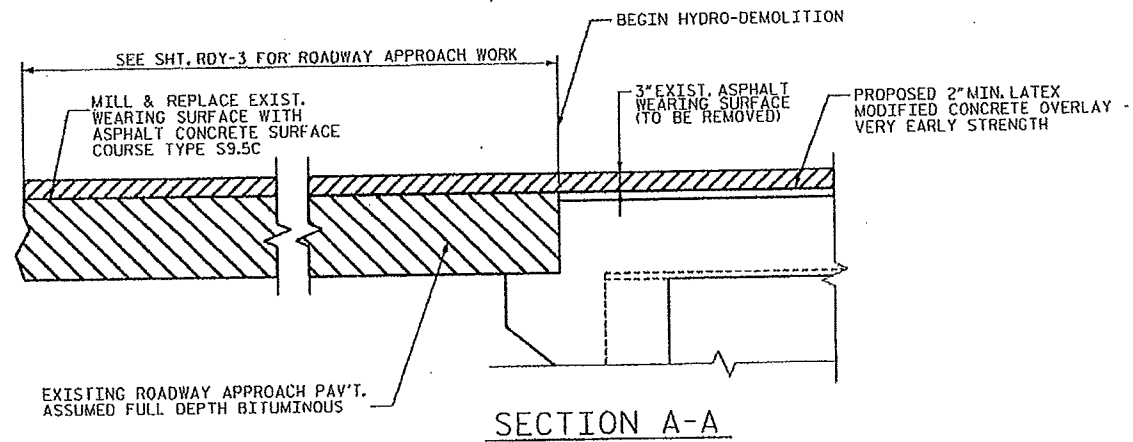
THE BOUNDARIES OF AREAS IDENTIFIED FOR CLASS III SURFACE PREPARATION ARE APPROXIMATE. THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF THE DECK. SEE DETAIL, SHT. NO. S-77.

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

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

FOR SECTION B-B, SEE SHT. NO. S-80.

EXISTING BRIDGE HAS A 3" THICK ASPHALT WEARING SURFACE. THIS WEARING SURFACE SHALL BE REMOVED BY MILLING IN ITS ENTIRETY BEFORE DECK REHABILITATION BEGINS. COST FOR THIS WORK SHALL BE PAID FOR AS "MILLING ASPHALT PAVEMENT, 3" DEPTH." FOR ROADWAY DETAILS @ BRIDGE APPROACHES, SEE SHT. RDY-4.



PROJECT NO. WBS 17BP.7.P.2
ORANGE COUNTY
STATION: _____

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PLAN OF BRIDGE

DECK REHAB. FOR BRIDGE NO. 82

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S-75
2			4			TOTAL SECT: 83



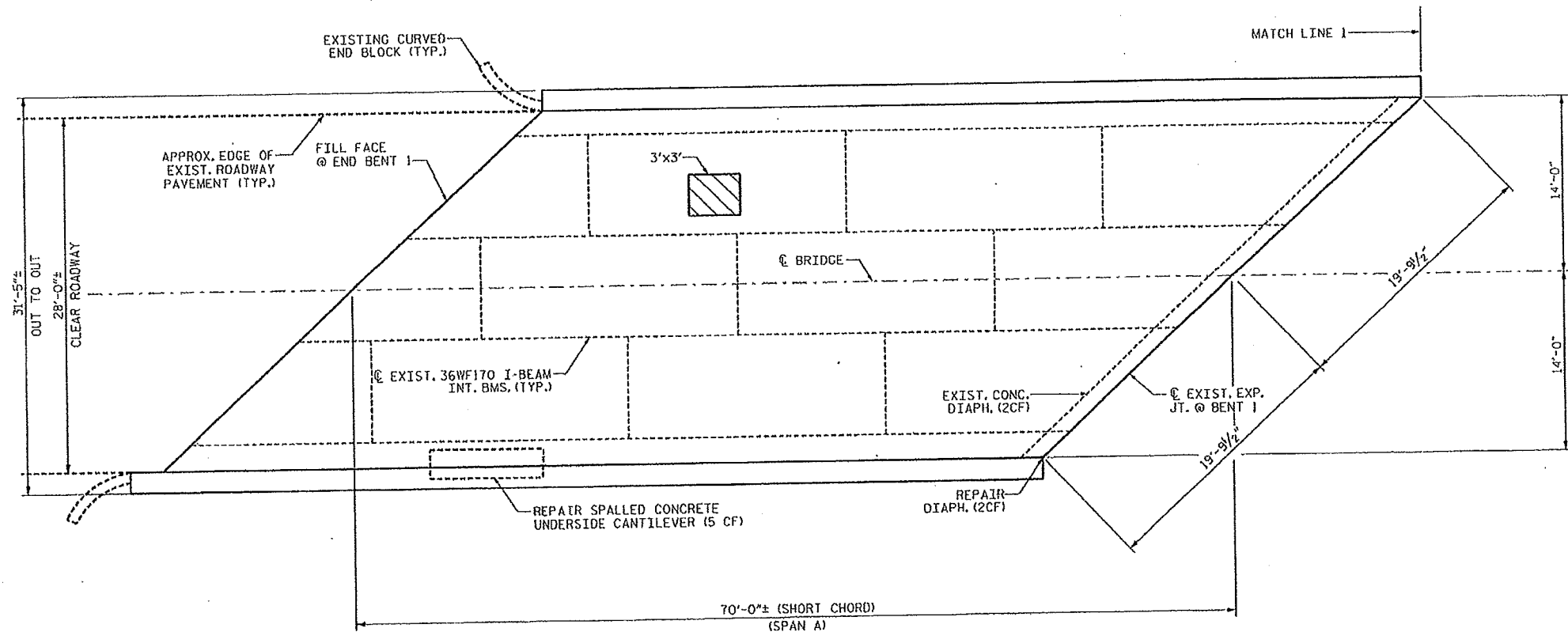
Stantec Consulting Services Inc.
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DRAWN BY: K R TYLER DATE: 01/12
CHECKED BY: J T KELVINGTON DATE: 01/12

Joseph L. Hwang
1/25/2012
13406
ENGINEER

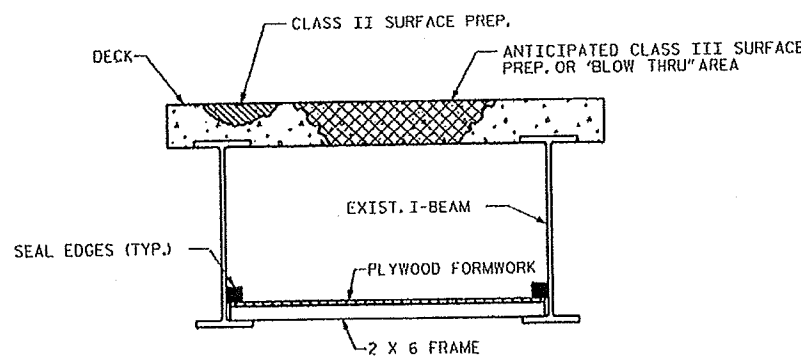
05 17BP.7.P.2 Alameda-Orange Co. Orange Bridge 0820 Drawing: BPO082 Deck and gtr 2/23/2012 1220-29 rev. bictor

17BP.7.P.2 Monmouth-Orange Bridge 08/27/2012 12:20:31 PM 2/23/2012



PLAN OF SPAN A - DECK REPAIRS

NOTE: EXIST. CONC. BARRIER AND POSTS ARE NOT SHOWN FOR CLARITY. ALL DIMENSIONS SHOWN ARE FROM BEST AVAILABLE SOURCES. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD.



TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

NOTES:
CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.
COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SQ. YD. OF HYDRO-DEMOLITION.
CLASS II AND CLASS III SURFACE PREPARATION SHOWN IS REPRESENTATIVE AND DOES NOT REFLECT ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED @ THE PROJECT SITE.
A METHOD TO CAPTURE WATER AND DEBRIS FROM BLOW THRU DURING HYDRO-DEMOLITION SHALL BE INSTALLED IN AREAS INDICATED AS CLASS III SURFACE PREPARATION.
SUBMIT DETAILS OF ALL PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

- CLASS II SURFACE PREPARATION
- CLASS III SURFACE PREPARATION

L X W = LENGTH OF AREA PARALLEL TO CENT. BRIDGE X WIDTH OF AREA PERPENDICULAR TO CENT. BRIDGE.

ESTIMATED CONCRETE REPAIR
CONCRETE REPAIR= 7 CF
SHOTCRETE REPAIR= 7 CF

PROJECT NO. WBS 17BP.7.P.2
ORANGE COUNTY
STATION: _____

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
HALEIGH

DECK REPAIR DETAILS
SPAN A

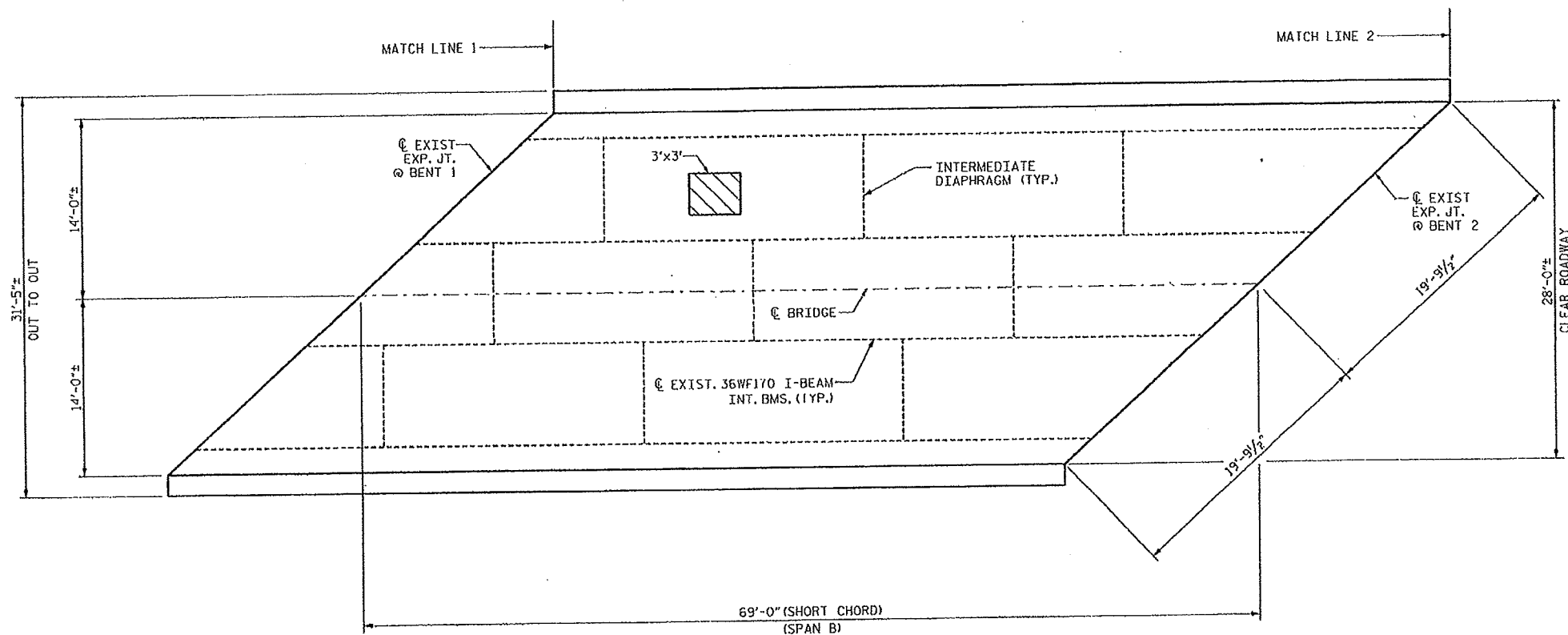
DECK REHAB. FOR BRIDGE NO. 82

REVISIONS						SHEET NO. S-77
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			

TOTAL SHEETS
83

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DRAWN BY: K.R. TYLER DATE: 01/12
CHECKED BY: J.T. KELVINGTON DATE: 01/12



PLAN OF SPAN B - DECK REPAIRS

NOTE: EXIST. CONC. BARRIER AND POSTS ARE NOT SHOWN FOR CLARITY.
ALL DIMENSIONS SHOWN ARE FROM BEST AVAILABLE SOURCES
CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD

NOTES:

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

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

CLASS II AND CLASS III SURFACE PREPARATION SHOWN IS REPRESENTATIVE AND DOES NOT REFLECT ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED @ THE PROJECT SITE.

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

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

-  CLASS II SURFACE PREPARATION
-  CLASS III SURFACE PREPARATION

L X W = LENGTH OF AREA PARALLEL TO ϕ BRIDGE X
WIDTH OF AREA PERPENDICULAR TO ϕ BRIDGE.

PROJECT NO. WBS 17BP.7.P.2
ORANGE COUNTY
STATION: _____



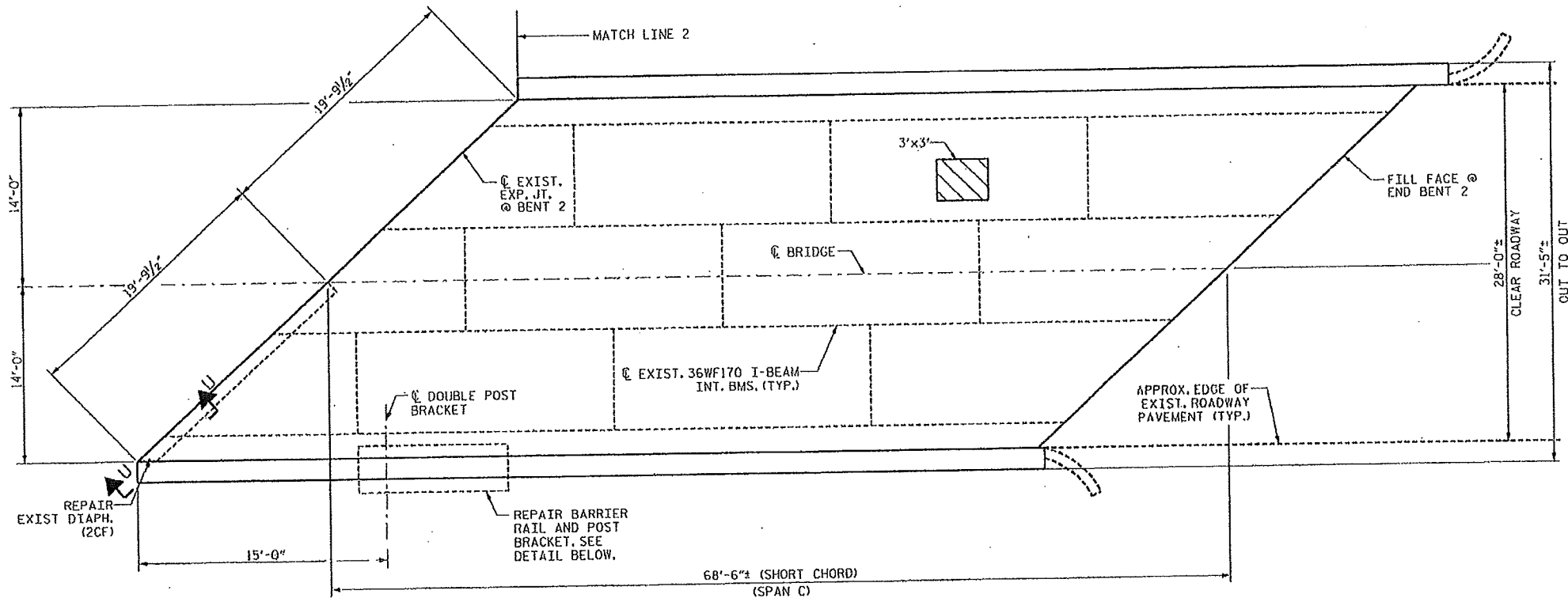
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DRAWN BY: K R TYLER DATE: 01/12
CHECKED BY: J T KELVINGTON DATE: 01/12

Joseph J. Kelvington
Professional Engineer
No. 17823
State of North Carolina

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
DECK REPAIR DETAILS SPAN B					
DECK REHAB. FOR BRIDGE NO. 82					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
					SHEET NO. S-78 TOTAL SHEETS 83

17BP.7.P.2 Alignment-Orange Co\Orange Bridge 082\Drawings\BPO82_Repair-Plan.dgn 2/23/2012 2:20:32 PM b10707



PLAN OF SPAN C - DECK REPAIRS

NOTE: EXIST. CONC. BARRIER AND POSTS ARE NOT SHOWN FOR CLARITY.
ALL DIMENSIONS SHOWN ARE FROM BEST AVAILABLE SOURCES.
CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD.

NOTES:

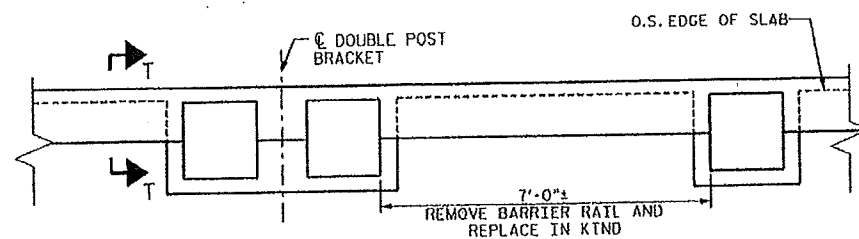
CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

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

CLASS II AND CLASS III SURFACE PREPARATION SHOWN IS REPRESENTATIVE AND DOES NOT REFLECT ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED @ THE PROJECT SITE.

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

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



BARRIER RAIL AND BRACKET REPAIR PLAN



CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

L X W = LENGTH OF AREA PARALLEL TO ϕ BRIDGE X
WIDTH OF AREA PERPENDICULAR TO ϕ BRIDGE.

ESTIMATED CONCRETE REPAIR
CONCRETE REPAIR= 7 CF

PROJECT NO. WBS 17BP.7.P.2

ORANGE COUNTY

STATION: _____

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK REPAIR DETAILS
SPAN C

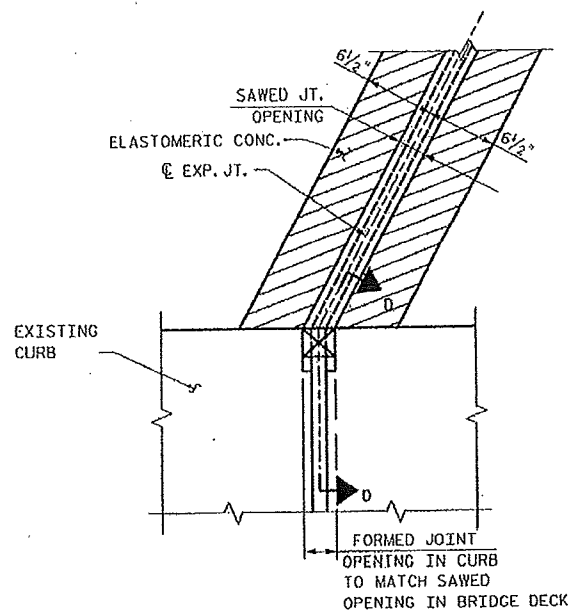
DECK REHAB. FOR BRIDGE NO. 82

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			5-79
2			4			TOTAL SHEETS 83

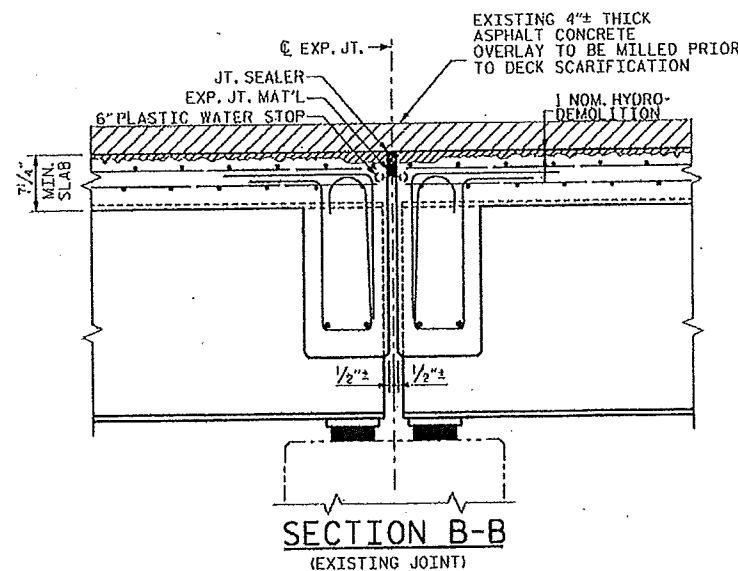


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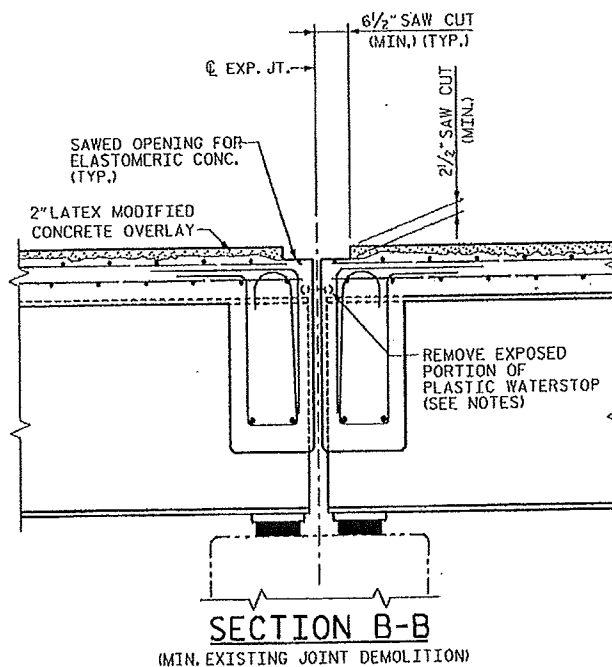
DRAWN BY: K.R. TYLER DATE: 01/12
CHECKED BY: J.T. KELVINGTON DATE: 01/12



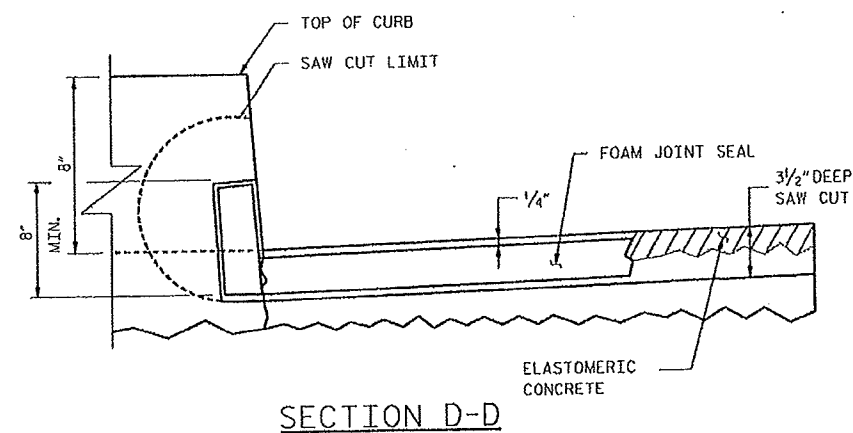
PARTIAL PLAN @ JOINT
(TYP. @ BENTS 1 AND 2)



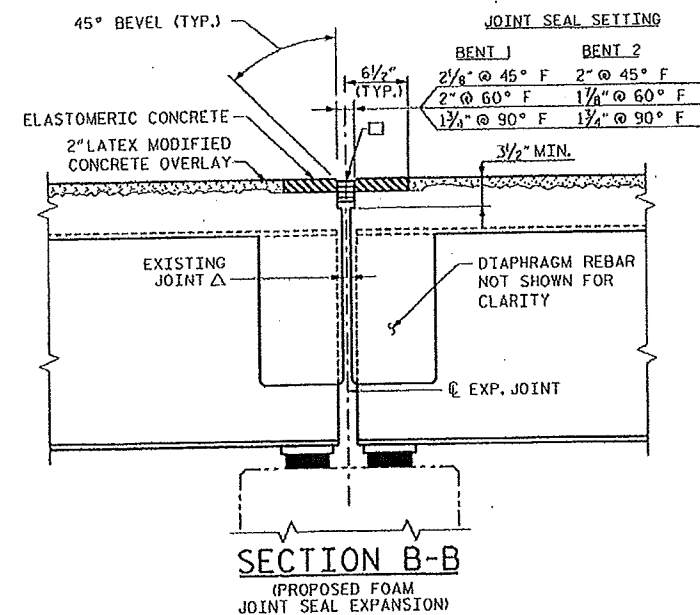
FOR MILLING EXISTING OVERLAY, SEE SHT. RDY-4.



- NOTES:
1. ALL LOOSE AND UNSOUND CONCRETE SHALL BE REMOVED. IF THE EMBEDDED PORTION OF THE EXISTING PLASTIC WATERSTOP IS EXPOSED DURING REMOVAL OF UNSOUND CONCRETE, THE ENTIRE WATERSTOP SHALL BE REMOVED.
 2. RETAIN ALL EXIST. REINF. STEEL CLEAN AND REPAIR AS REQUIRED.



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



- USE 2.8125" X 2.5" UNCOMPRESSED FOAM JT. SEAL MATERIAL FOR BENTS 1 AND 2.
△ EXISTING 1" FORMED OPENING

ELASTOMERIC CONCRETE	
LOCATION	QTY
BENT 1	8.3 C.F.
BENT 2	8.3 C.F.

TOTAL ELASTOMERIC CONC. = 16.6 C.F.
TOTAL ELASTOMERIC CONC. = 0.61 C.Y.

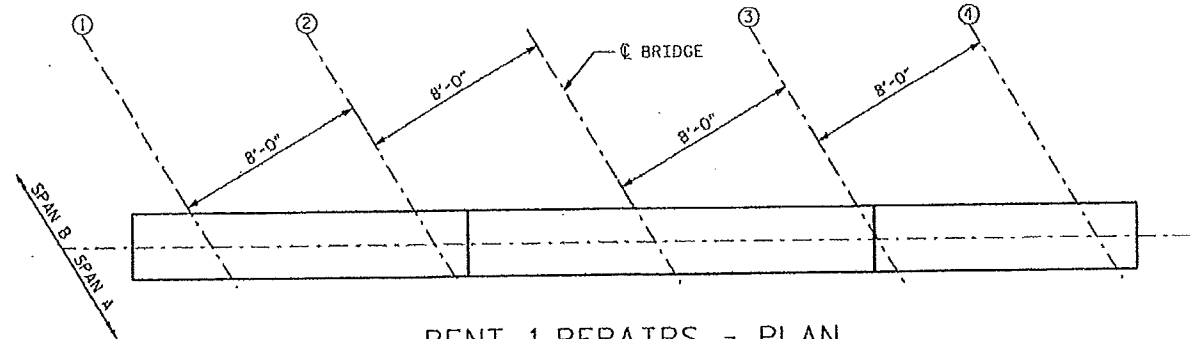
PROJECT NO. WBS 17BP.7.P.2
ORANGE COUNTY
STATION: _____



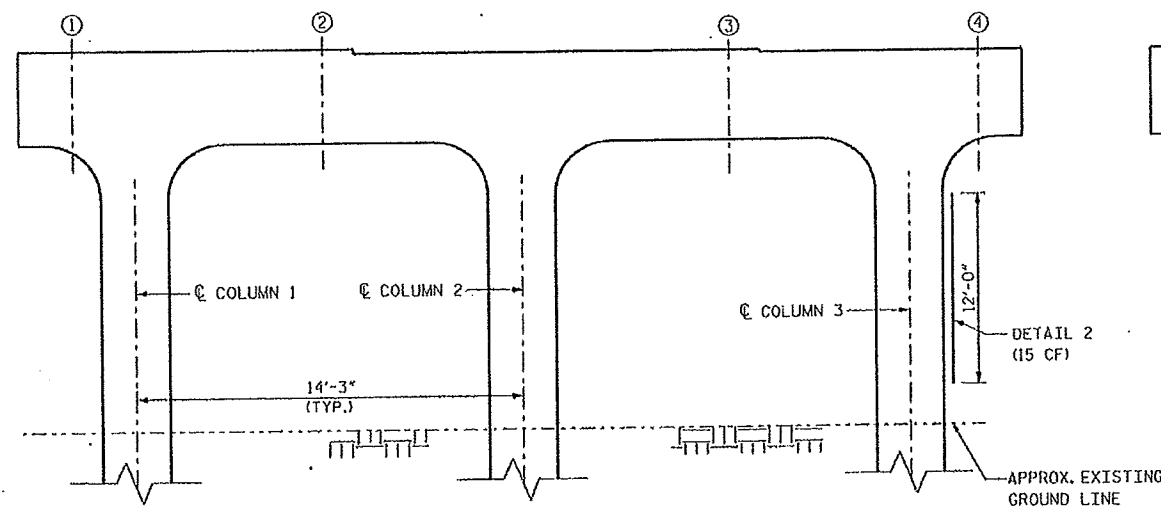
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CHECKED BY: J.T. KELVINGTON DATE: 01/12

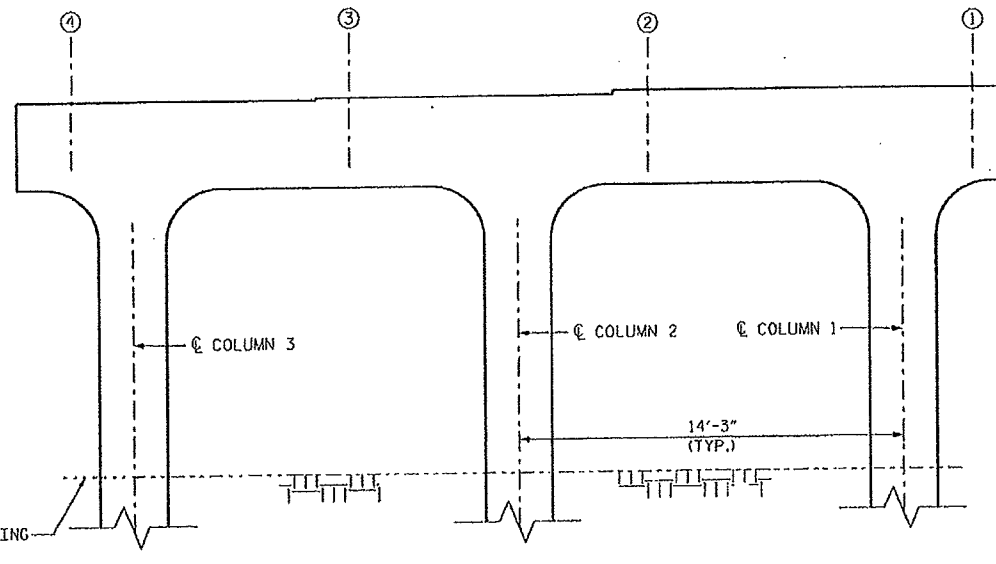
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
INTERIOR BENT JOINT SEAL DETAILS					
DECK REHAB. FOR BRIDGE NO. 82					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
					SHEET NO. S-80
					TOTAL SHEETS 83



BENT 1 REPAIRS - PLAN



SOUTH FACE (WEST)
BENT 1 REPAIRS (SPAN B SIDE)



NORTH FACE (EAST)
BENT 1 REPAIRS (SPAN C SIDE)

TOTAL ESTIMATED QUANTITIES:
SHOTCRETE REPAIR = 15 CF

NOTES:

REPAIR AREA DIMENSIONS SHOWN ARE APPROXIMATE BASED ON BEST AVAILABLE INFORMATION.

ALL REINFORCEMENT TO BE PROVIDED IS INCIDENTAL TO THE SUBSTR. REPAIR AND SHALL BE GRADE 60.

AREAS NOT OTHERWISE SPECIFIED FOR CONCRETE REPAIR MAY BE REPAIRED WITH SHOTCRETE, CLASS A CONC. OR POLYMER CONC. AT THE CONTRACTORS' OPTION.

JACKING SHALL BE CONDUCTED IN A MANNER SUCH THAT THE SUPERSTRUCTURE WILL NOT BE DAMAGED AND THERE ARE NO OBSTACLES PREVENTING THE SPAN FROM BEING LIFTED.

THE MAXIMUM ALLOWABLE VERTICAL JACKING DISPLACEMENT SHALL BE 1/2 INCH WITH RESPECT TO THE BEARINGS OF ADJACENT PIERS.

BEARING NUTS SHALL BE LOOSENEED TO PROVIDE A MINIMUM OF 5/8 INCH GAP TO ALLOW FOR JACKING.

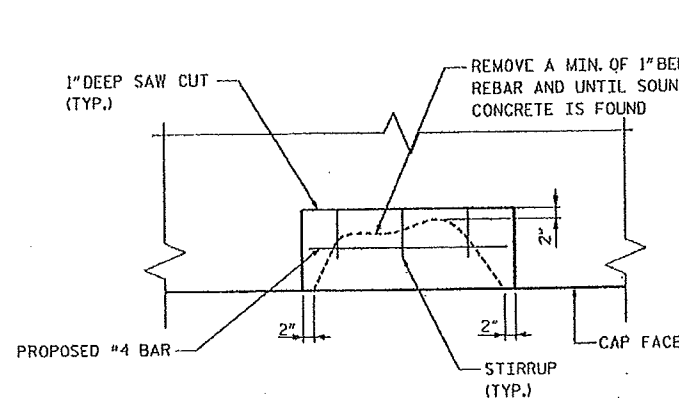
JACK ALL GIRDERS SIMULTANEOUSLY, THE SAME AMOUNT, AND AT THE SAME RATE. AFTER JACKING MAKE SURE ALL JACKS ARE LOCKED.

IF DURING THE JACKING PROCESS OR WHILE THE SPAN IS BEING SUPPORTED THE BEAMS SHIFT FROM THEIR ORIGINAL POSITION, ALL WORK WILL CEASE AND THE ENGINEER SHALL BE NOTIFIED.

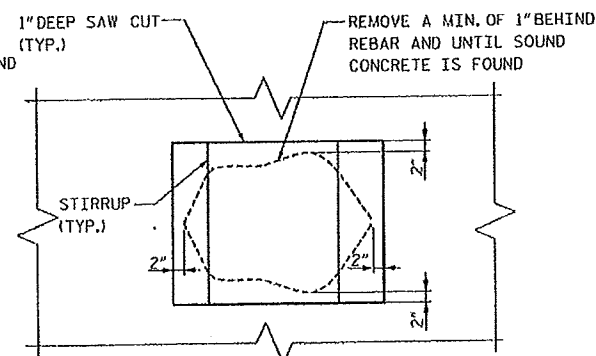
EFFECT OF VIBRATIONS FROM TRAFFIC SHOULD BE CONSIDERED DURING JACKING AND WHEN JACKS ARE LOCKED.

PROVISIONS SHALL BE MADE TO ACCOUNT FOR THERMAL MOVEMENTS DURING THE PERIOD THAT THE STRUCTURE IS RESTING ON TEMPORARY SUPPORTS.

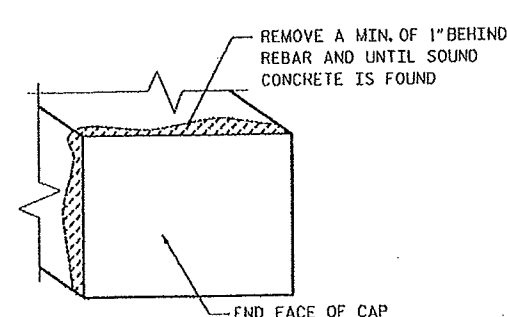
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING THE JACKING TO DETERMINE A JACKING LOCATION AT EACH BEARING AND PROVIDE A DESIGN FOR THE JACKING LOADS. JACKS SHALL HAVE A MINIMUM SAFE LOAD CAPACITY OF 125% OF THE CALCULATED LOADING PER AASHTO SPECIFICATIONS.



TYPICAL REPAIR DETAIL 1



TYPICAL REPAIR DETAIL 2



TYPICAL REPAIR DETAIL 3

PROJECT NO. WBS 17BP.7.P.2
ORANGE COUNTY
STATION: _____

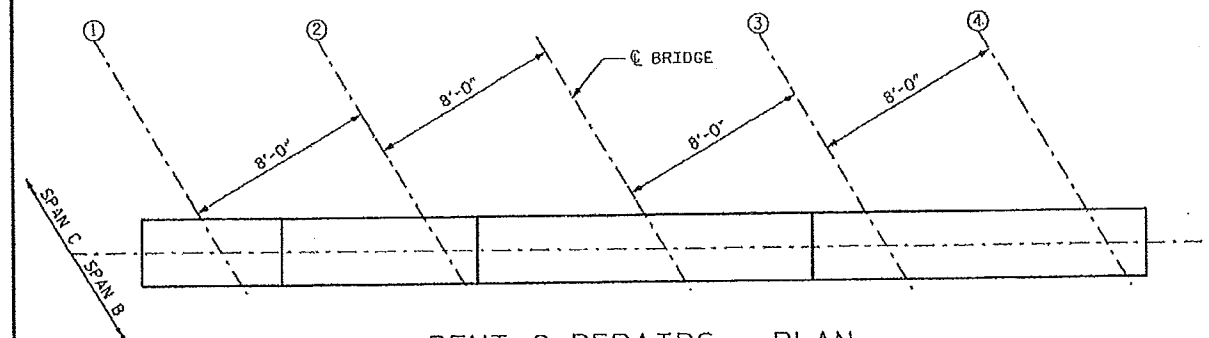
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
SUBSTRUCTURE REPAIRS BENT 1					
DECK REHAB. FOR BRIDGE NO. 82					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
					SHEET NO. S-81
					TOTAL SHEETS 83



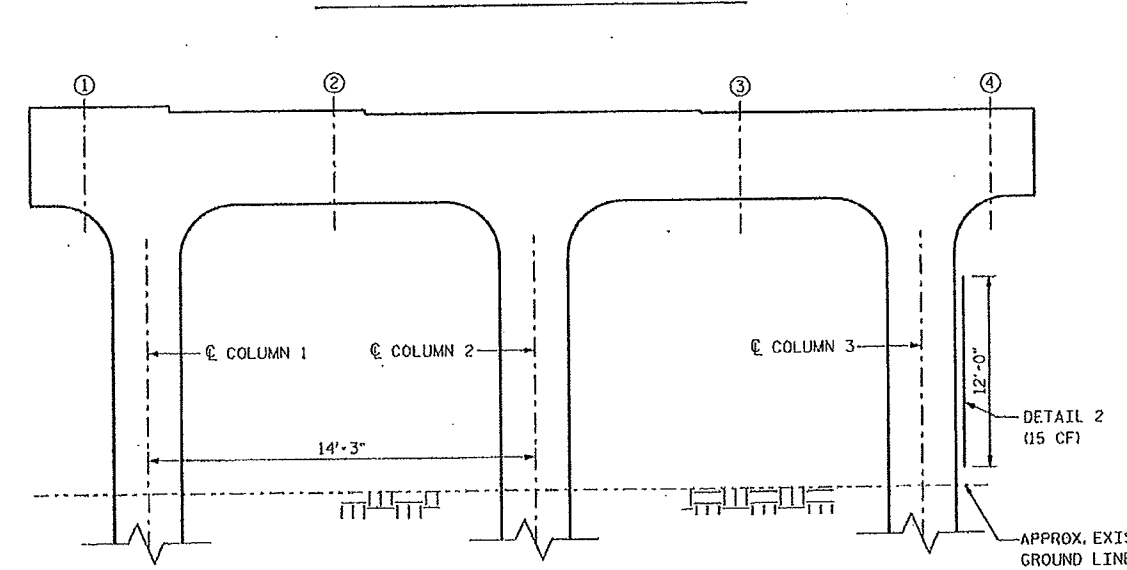
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DRAWN BY : C. B. BAKER DATE : 01/12
CHECKED BY : J. T. KELVINGTON DATE : 01/12

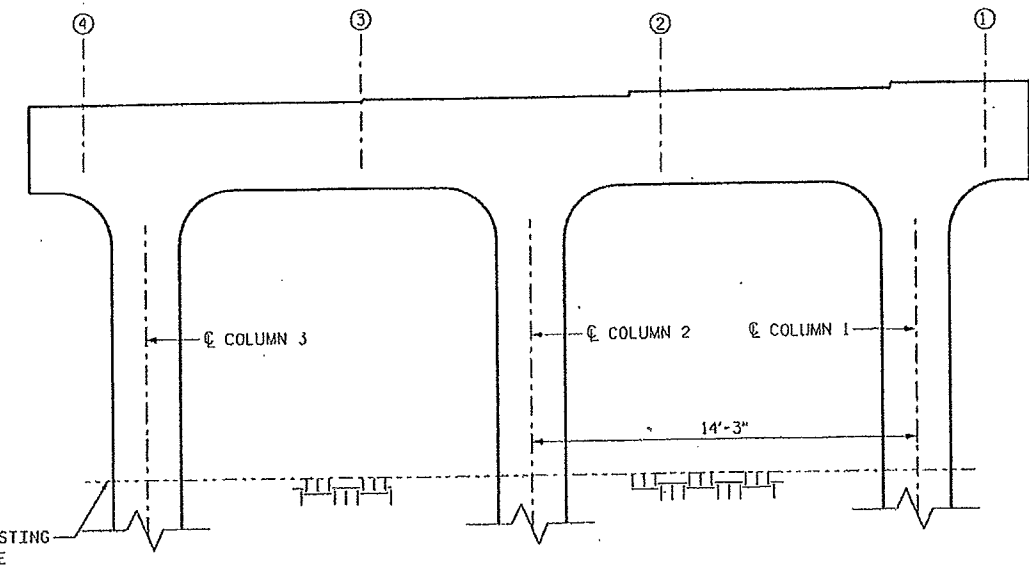
John T. Kelvington
1/23/2012



BENT 2 REPAIRS - PLAN



SOUTH FACE (WEST)
BENT 2 REPAIRS (SPAN A SIDE)



NORTH FACE (EAST)
BENT 2 REPAIRS (SPAN B SIDE)

TOTAL ESTIMATED QUANTITIES:
SHOTCRETE REPAIR = 15 CF

NOTES:

REPAIR AREA DIMENSIONS SHOWN ARE APPROXIMATE BASED ON BEST AVAILABLE INFORMATION.

ALL REINFORCEMENT TO BE PROVIDED IS INCIDENTAL TO THE SUBSTR. REPAIR AND SHALL BE GRADE 60.

AREAS NOT OTHERWISE SPECIFIED FOR CONCRETE REPAIR MAY BE REPAIRED WITH SHOTCRETE, CLASS A CONC. OR POLYMER CONC. AT THE CONTRACTORS' OPTION.

JACKING SHALL BE CONDUCTED IN A MANNER SUCH THAT THE SUPERSTRUCTURE WILL NOT BE DAMAGED AND THERE ARE NO OBSTACLES PREVENTING THE SPAN FROM BEING LIFTED.

THE MAXIMUM ALLOWABLE VERTICAL JACKING DISPLACEMENT SHALL BE 1/2 INCH WITH RESPECT TO THE BEARINGS OF ADJACENT PIERS.

BEARING NUTS SHALL BE LOOSENEED TO PROVIDE A MINIMUM OF 59/64 INCH GAP TO ALLOW FOR JACKING.

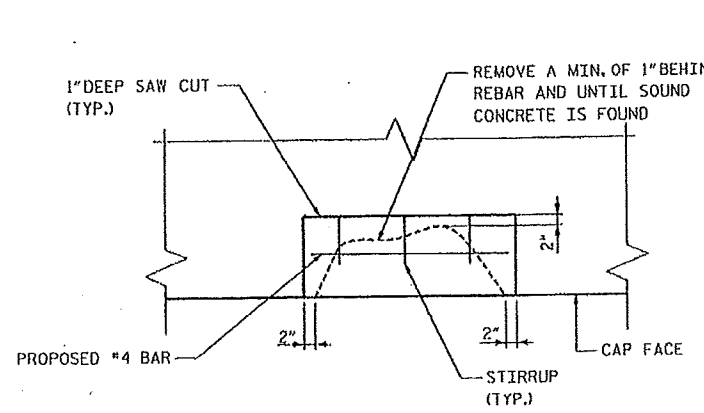
JACK ALL GIRDERS SIMULTANEOUSLY, THE SAME AMOUNT, AND AT THE SAME RATE. AFTER JACKING MAKE SURE ALL JACKS ARE LOCKED.

IF DURING THE JACKING PROCESS OR WHILE THE SPAN IS BEING SUPPORTED THE BEAMS SHIFT FROM THEIR ORIGINAL POSITION, ALL WORK WILL CEASE AND THE ENGINEER SHALL BE NOTIFIED.

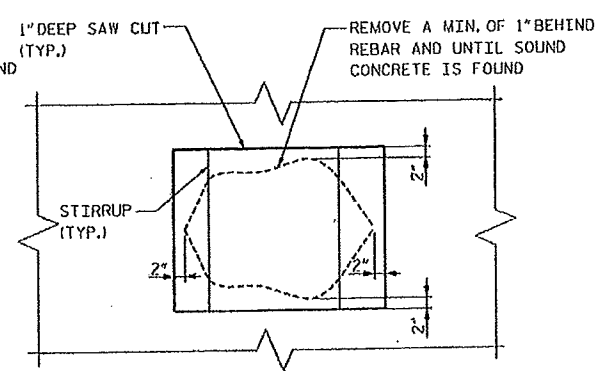
EFFECT OF VIBRATIONS FROM TRAFFIC SHOULD BE CONSIDERED DURING JACKING AND WHEN JACKS ARE LOCKED.

PROVISIONS SHALL BE MADE TO ACCOUNT FOR THERMAL MOVEMENTS DURING THE PERIOD THAT THE STRUCTURE IS RESTING ON TEMPORARY SUPPORTS.

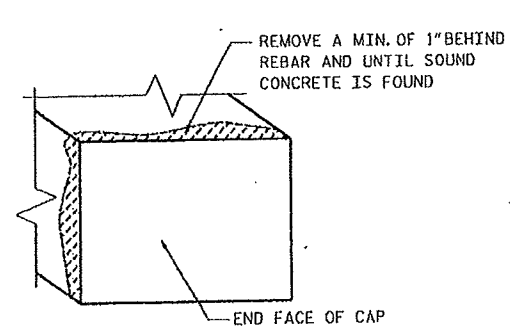
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING THE JACKING TO DETERMINE A JACKING LOCATION AT EACH BEARING AND PROVIDE A DESIGN FOR THE JACKING LOADS. JACKS SHALL HAVE A MINIMUM SAFE LOAD CAPACITY OF 125% OF THE CALCULATED LOADING PER AASHTO SPECIFICATIONS.



TYPICAL REPAIR DETAIL 1



TYPICAL REPAIR DETAIL 2



TYPICAL REPAIR DETAIL 3

Joseph J. Kelvington
2/23/2012

PROJECT NO. WBS 17BP.7.P.2
ORANGE COUNTY
STATION: _____

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
SUBSTRUCTURE REPAIRS BENT 2					
DECK REHAB. FOR BRIDGE NO. 82					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
SHEET NO. S-82					TOTAL SHEETS 83



2/23/2012 12:20:35 PM b1010n
 2/23/2012 12:20:35 PM b1010n
 2/23/2012 12:20:35 PM b1010n

DRAWN BY : C.B. BAKER DATE : 01/12
 CHECKED BY : J.T. KELVINGTON DATE : 01/12

NOTES:

REPAIR AREA DIMENSIONS SHOWN ARE APPROXIMATE BASED ON BEST AVAILABLE INFORMATION.

ALL REINFORCEMENT TO BE PROVIDED IS INCIDENTAL TO THE SUBSTR. REPAIR AND SHALL BE GRADE 60.

AREAS NOT OTHERWISE SPECIFIED FOR CONCRETE REPAIR MAY BE REPAIRED WITH SHOTCRETE, CLASS A CONC. OR POLYMER CONC. AT THE CONTRACTORS' OPTION.

JACKING SHALL BE CONDUCTED IN A MANNER SUCH THAT THE SUPERSTRUCTURE WILL NOT BE DAMAGED AND THERE ARE NO OBSTACLES PREVENTING THE SPAN FROM BEING LIFTED.

THE MAXIMUM ALLOWABLE VERTICAL JACKING DISPLACEMENT SHALL BE 1/2 INCH WITH RESPECT TO THE BEARINGS OF ADJACENT PIERS.

BEARING NUTS SHALL BE LOOSENEED TO PROVIDE A MINIMUM OF 5/16 INCH GAP TO ALLOW FOR JACKING.

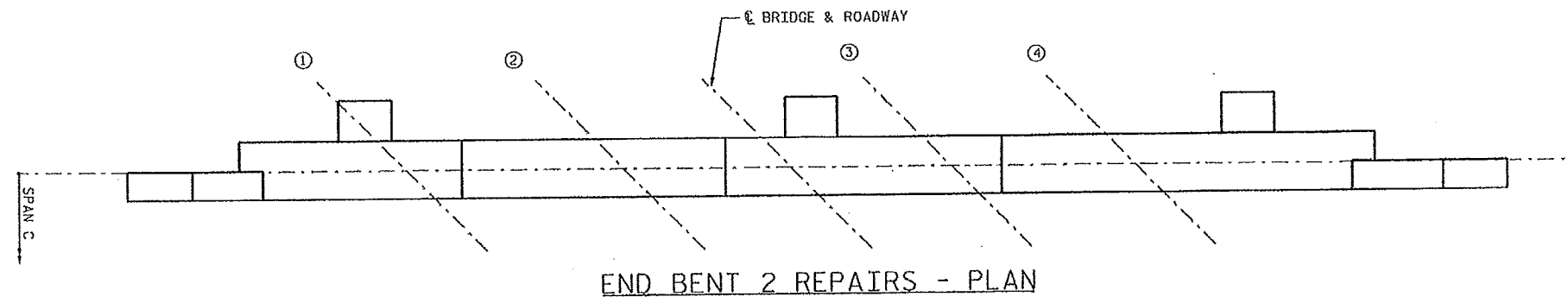
JACK ALL GIRDERS SIMULTANEOUSLY, THE SAME AMOUNT, AND AT THE SAME RATE. AFTER JACKING MAKE SURE ALL JACKS ARE LOCKED.

IF DURING THE JACKING PROCESS OR WHILE THE SPAN IS BEING SUPPORTED THE BEAMS SHIFT FROM THEIR ORIGINAL POSITION, ALL WORK WILL CEASE AND THE ENGINEER SHALL BE NOTIFIED.

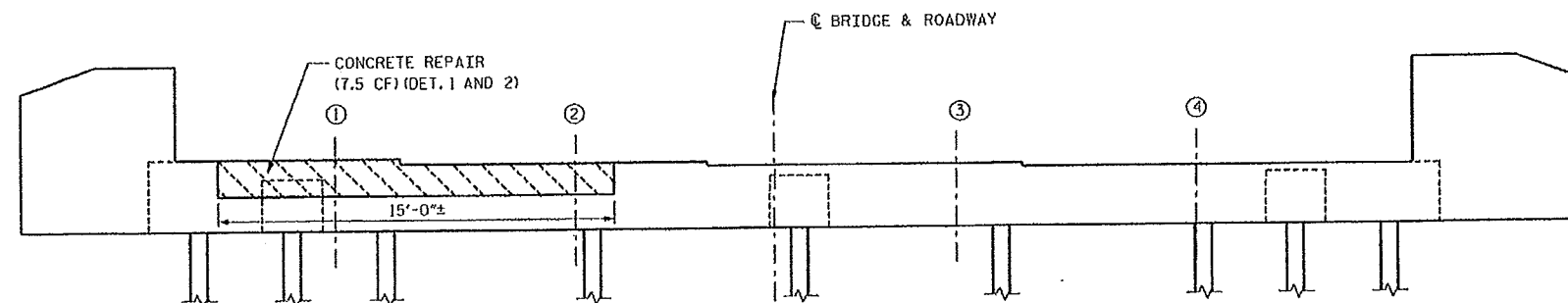
EFFECT OF VIBRATIONS FROM TRAFFIC SHOULD BE CONSIDERED DURING JACKING AND WHEN JACKS ARE LOCKED.

PROVISIONS SHALL BE MADE TO ACCOUNT FOR THERMAL MOVEMENTS DURING THE PERIOD THAT THE STRUCTURE IS RESTING ON TEMPORARY SUPPORTS.

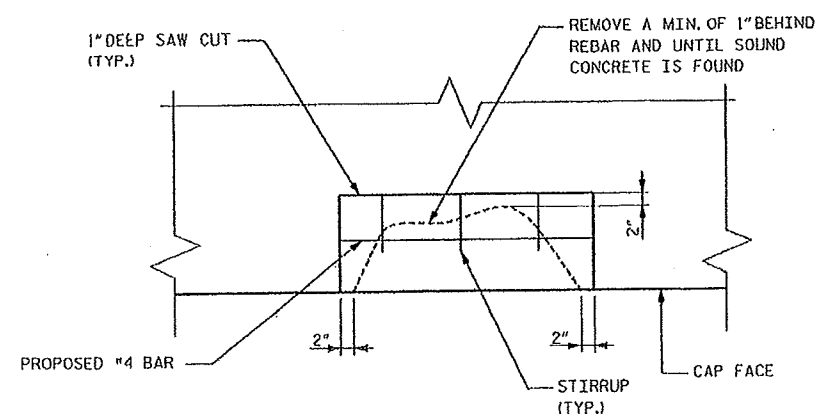
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING THE JACKING TO DETERMINE A JACKING LOCATION AT EACH BEARING AND PROVIDE A DESIGN FOR THE JACKING LOADS. JACKS SHALL HAVE A MINIMUM SAFE LOAD CAPACITY OF 125% OF THE CALCULATED LOADING PER AASHTO SPECIFICATIONS.



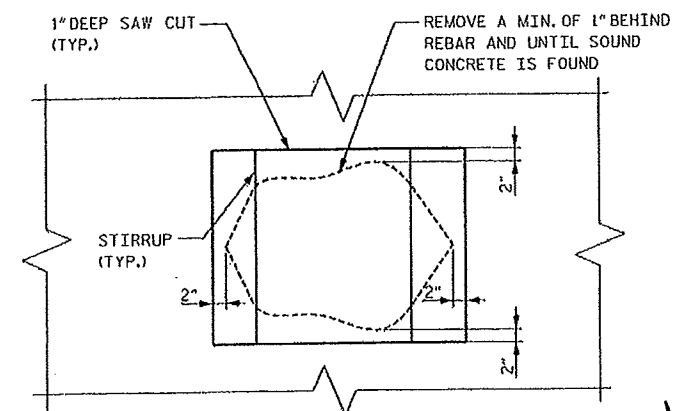
END BENT 2 REPAIRS - PLAN



SOUTH FACE
END BENT 2 REPAIRS (SPAN C SIDE)



TYPICAL REPAIR DETAIL 1



TYPICAL REPAIR DETAIL 2

PROJECT NO. WBS 17BP.7.P.2

ORANGE COUNTY

STATION: _____

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE REPAIRS
END BENT 2

DECK REHAB. FOR BRIDGE NO. 82

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S-83
2			4			
						TOTAL SHEETS
						83



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