

Lee

NOTES

SIGNS AND MOUNTING STRUCTURE SHALL BE ORIENTED PARALLEL TO BRIDGE GRADE. PLAN VIEWS ARE TAKEN PARALLEL TO AND DIMENSIONED ALONG BRIDGE GRADE.

ALL FABRICATOR SHALL CONFORM TO THE APPLICABLE SECTION OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, JANUARY 1, 1990. ALL STRUCTURAL STEEL SHALL BE A.S.T.M. A-36 AND SHALL BE GALVANIZED AFTER FABRICATION. SEE STANDARD SPECIFICATIONS.

ALL CONNECTIONS EXCEPT CONCRETE ANCHORS SHALL BE MADE WITH GALVANIZED H.S. BOLTS AND WASHERS CONFORMING TO ASTM A-325.

1 CONCRETE ANCHORS SHALL BE $\frac{3}{4}$ " NORMAL DIAMETER AND SHALL CONSIST OF A STUD BOLT, THREADED ON ONE END WITH AN EXPANDER WEDGE ASSEMBLY POSITIONED AROUND A TAPERED AREA AT THE OTHER END. ANCHORS SHALL BE INSTALLED IN HOLES OF PROPER SIZE AS RECOMMENDED BY THE MANUFACTURER OF THE ANCHOR. ANCHORS SHALL PROVIDE A MINIMUM SAFE HOLDING CAPACITY OF 2000 LBS. FOR $\frac{3}{4}$ " BOLTS BASED UPON $\frac{1}{4}$ THE ACTUAL PULLOUT CAPACITY OF THE ANCHORS IN 3500 P.S.I. CONCRETE AS DETERMINED BY APPROVED COMMERCIAL TESTING LABORATORY SATISFACTORY PROOF SHALL BE FURNISHED TO THE ENGINEER.

2 CONCRETE ANCHORS SHALL BE MADE OF STEEL HAVING A MINIMUM TENSILE STRENGTH OF 120,000 PSI. ANCHORS SHALL BE EITHER GALVANIZED ACCORDING TO A.S.T.M. A-153 OR SHALL BE STAINLESS STEEL OR SHALL BE ZINC PLATED ACCORDING TO FEDERAL SPECIFICATION 00-23256.

HOLES FOR CONCRETE ANCHORS ARE TO BE DRILLED BY MEANS OF A ROTARY DRILL OR A ROTARY IMPACT DRILL A CARBIDE TIPPED BIT IS TO BE USED IN AREAS WITHOUT REINFORCING STEEL ANOTHER TYPE OF BIT MAY BE REQUIRED IF REINFORCING STEEL IS ENCOUNTERED. PROPER HOLE DIAMETER IS CRITICAL TO PROPER ANCHOR PERFORMANCE.

HOLES SHALL BE THOROUGHLY CLEANED OF ALL DEBRIS AND DUST BY BLOWING OUT WITH COMPRESSED AIR PRIOR TO INSTALLING ANCHORS.

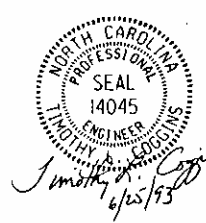
ALL CONCRETE DAMAGED BY THIS WORK SHALL BE REPAIRED IN A SATISFACTORY MANNER.

APPROX. STRUCTURAL STEEL WEIGHT FOR SIGN OUTRIGGERS AND SUPPORTS IS 800 LBS. SIGN SUPPORTS ARE INCLUDED AND ARE TO BE PAID FOR AS STRUCTURAL STEEL.

THE ENTIRE COST OF THE SIGN SUPPORTS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE BID FOR STRUCTURAL STEEL.

THE SIGN AND "Z" BRACKETS ARE PROVIDED BY THE DEPARTMENT OF CORRECTIONS.

1 CONCRETE ANCHORS SHALL BE $\frac{3}{4}$ " NOMINAL DIAMETER STUD WITH A WASHER, LOCK WASHER AND NUT AND SHALL BE ADHESIVELY ANCHORED. SEE SPECIAL PROVISIONS FOR ADHESIVELY ANCHOR BOLTS OR DOWELS. THE YIELD LOAD OF THE $\frac{3}{4}$ " BOLT IS 12 KIPS. THE ANCHOR STUDS SHALL BE ASTM A36 AND GALVANIZED ACCORDING TO ASTM A153 OR SHALL BE STAINLESS STEEL. ANCHORS SHALL BE INSTALLED IN HOLES W/PROPER SIZE AS RECOMMENDED BY MANUFACTURER OF THE ANCHOR STUD. DESIGN LOAD IS 12 KIPS. FIELD TESTING IS REQUIRED. SEE SPECIAL PROVISIONS FOR ADHESIVELY ANCHOR BOLTS OR DOWELS.



PROJECT NO. 8.T500311
ORANGE COUNTY
STATION: 39+93.75 -Y6- REV. A1

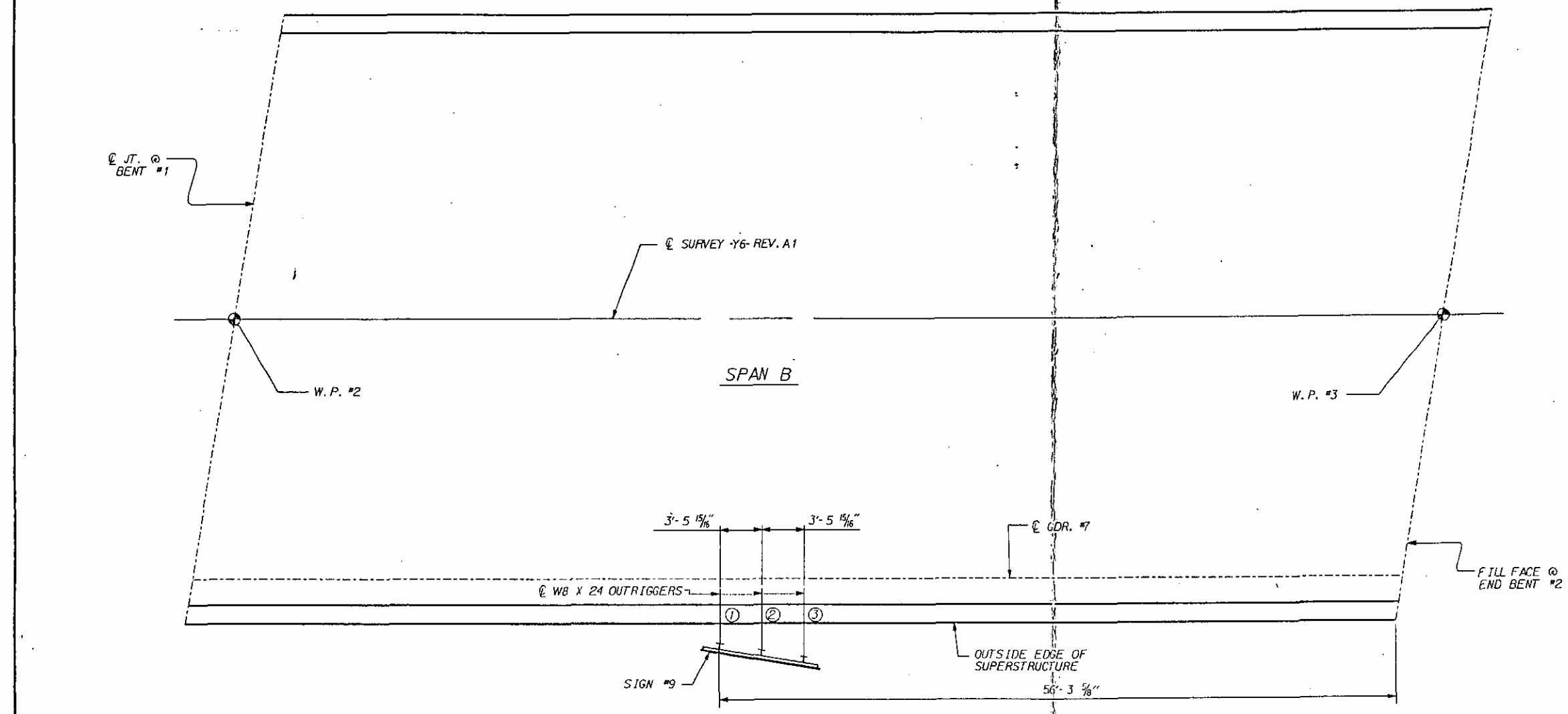
SHEET 1 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

OVERHEAD SIGN
ASSEMBLY
FOR SIGN #9

- 1 REV. #1 - DELETED NOTES #4 & #5 AND ADDED NOTE #12 BY: RST 3/31/94
✓ BY: TLC 3/31/94
- 2 REV. #2 - REVISED NOTE #12 TO ADDED DESIGN LOAD AND FIELD TESTING REQUIRED. BY: RST 3/7/95
✓ BY: TLC 3/7/95
- 3 REV. #3 - CHANGED LOCATION OF OVERHEAD SIGN ATTACHED TO BRIDGE. BY: RST 6/12/95
✓ BY: TLC 6/12/95

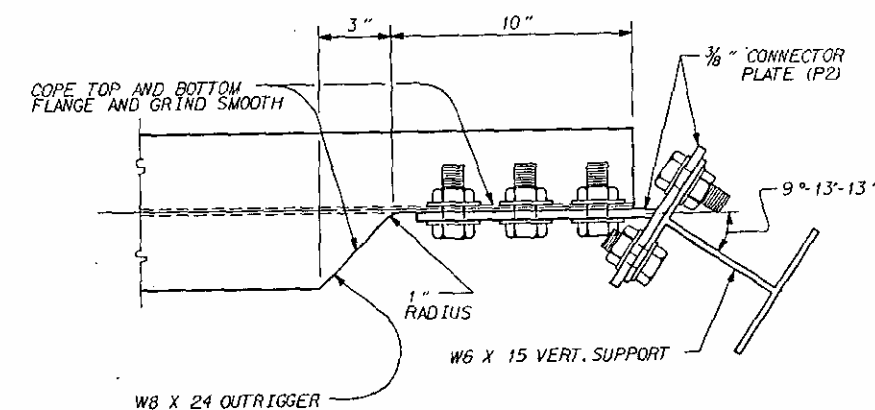
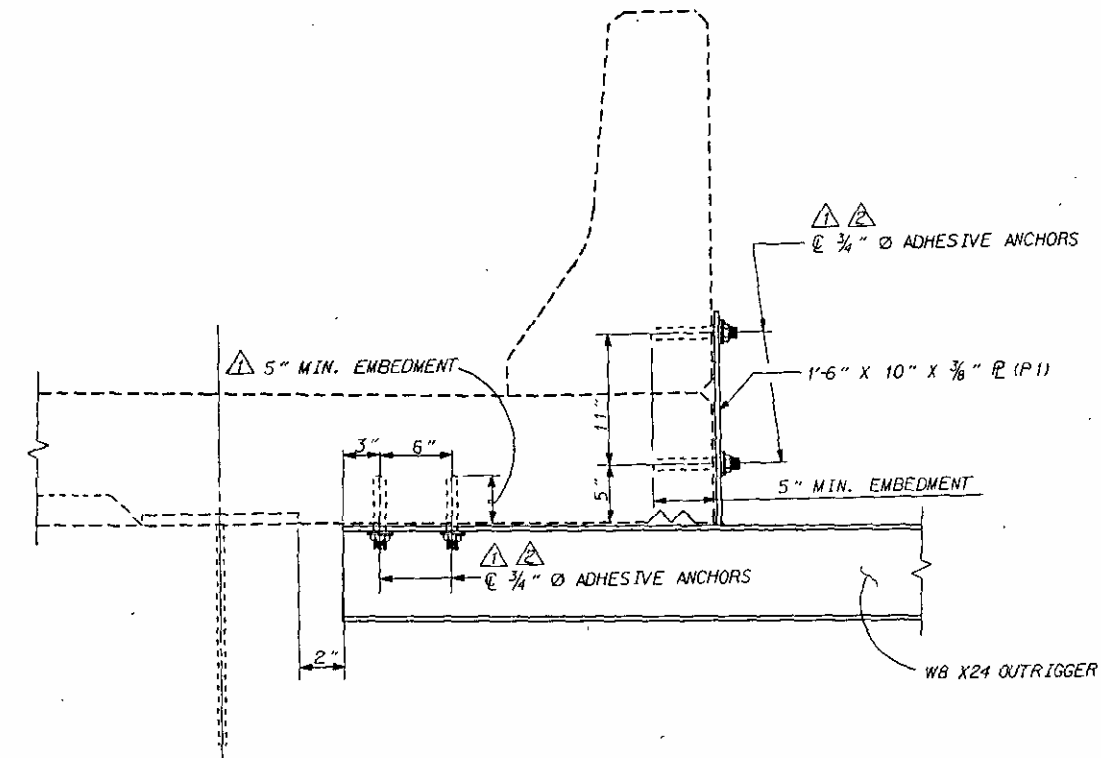
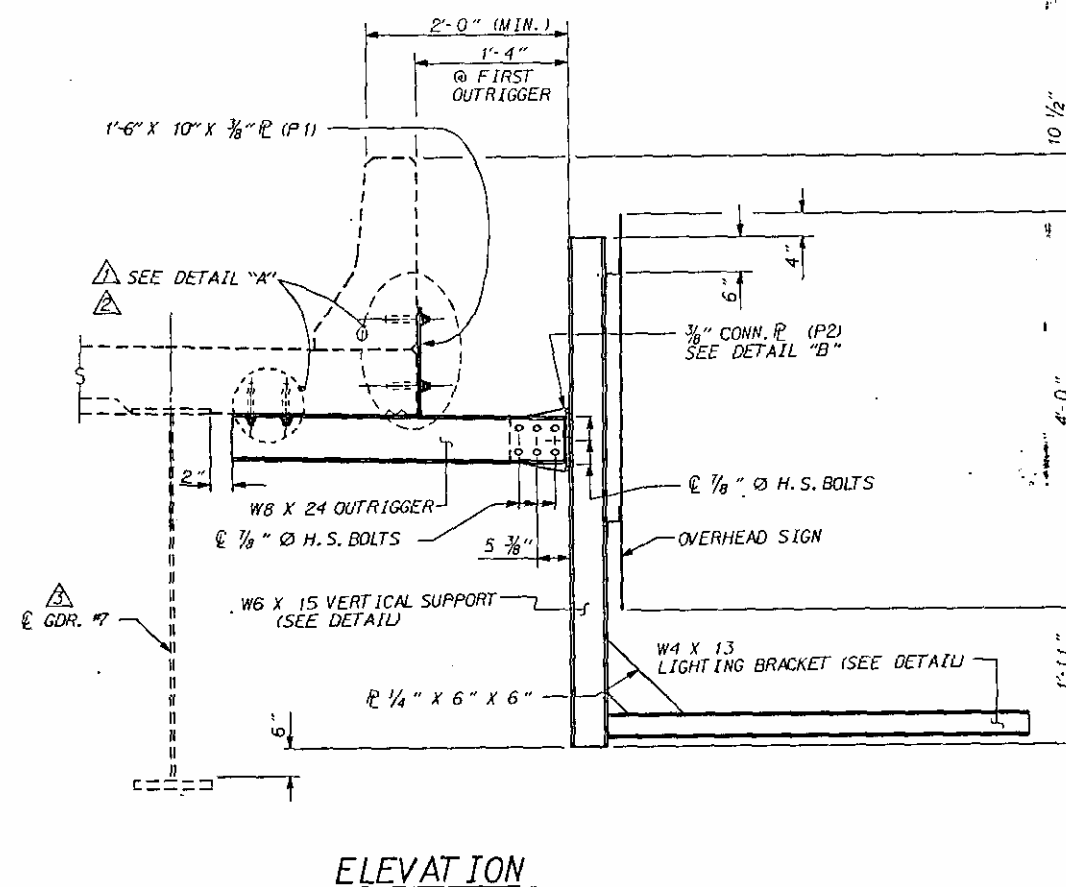
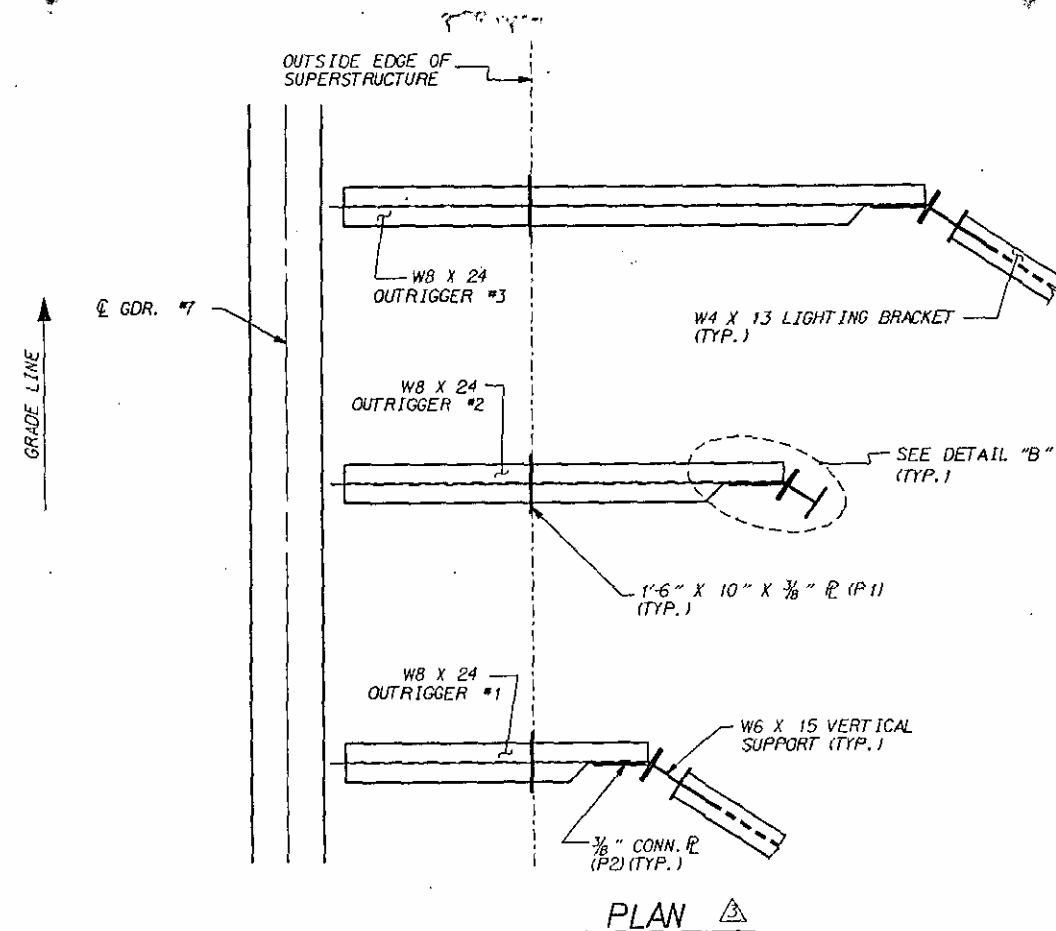
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1	RST	3/31/94	3	RST	6/12/95	S-33
2	RST	3/7/95	4			
TOTAL SHEETS						108



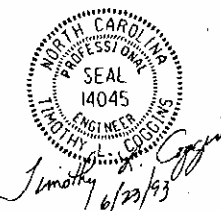
LOCATION SKETCH 3

DRAWN BY: R. TUNG DATE: 4-7-93
CHECKED BY: S. D. RACKLEY DATE: 4-28-93

13-JUN-1995 1:45
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- REV. #1 - CHANGED EMBEDMENT DEPTH FROM 3 1/2" TO 5". IN THE BOTTOM OF OVERHANG, AND CHANGED EXPANSION ANCHOR TO ADHESIVE ANCHOR. BY: RST 3/31/94 ✓ BY: TLC 3/31/94
- REV. #2 - CHANGED ADHESIVE ANCHORS FROM BOLT TO STUD WITH WASHER, LOCK WASHER AND NUT. BY: RST 3/7/95 ✓ BY: TLC 3/7/95
- REV. #3 - CHANGED LOCATION OF OVERHEAD SIGN ATTACHED TO BRIDGE. BY: RST 6/12/95 ✓ BY: TLC 6/12/95



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SHEET 2 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
**OVERHEAD SIGN
ASSEMBLY
FOR SIGN #9**

REVISIONS				SHEET NO.			
NO.	BY	DATE	NO.	BY	DATE	TOTAL SHEETS	
1	RST	3/31/94	3	RST	6/12/95	108	
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STR. #1