U.S.A. No.: TN10561F

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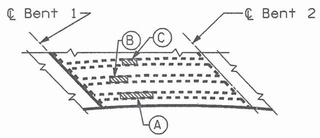
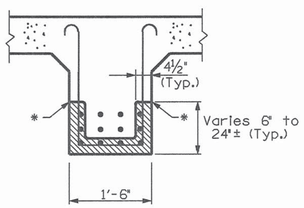
STR



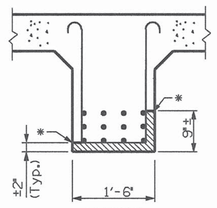
PART PLAN

(A) 20'-0"± Beam Repair, see Repair Detail A
(B) 3'-0"± Beam Repair, see Repair Detail B
(C) 2'-0"± Beam Repair, see Repair Detail C



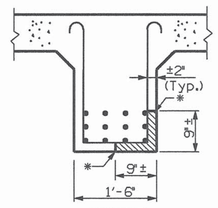
SECTION

CONCRETE BEAM REPAIR-DETAIL A



SECTION

CONCRETE BEAM REPAIR-DETAIL B



SECTION

CONCRETE BEAM REPAIR-DETAIL C

* Saw Cut 1" (Typ.)

▨ - Denotes limits of concrete removal and areas to be repoured.

CONSTRUCTION PROCEDURE FOR REPAIRING DETERIORATED AREAS ON CONCRETE BEAMS

1. Saw cut existing concrete surfaces so as to obtain a square area and remove portions of concrete beams as shown in these plans to insure that sound concrete is reached in all areas.

2. Clean all exposed reinforcing steel.

3. Patching material for Repair Detail A shall be 18 hour high early strength concrete. Patching material for Repair Details B & C shall be a polymer modified cementitious patching material. See General Notes on Dwg. No. BR-27-75.

4. Beam repairs can only be made between 9:00 p.m. Friday night and 6:00 a.m. Monday morning. 24 hr. shifts may be required to complete this work in a weekend. Two weekends may be required to complete Beam Repair (A).

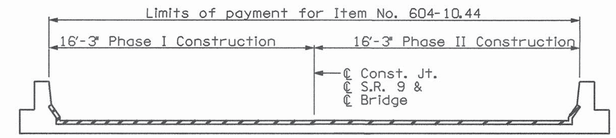
5. Beam Repair (A) shall be done during Phase I lane closure on S.R. 9 to remove live loading from repair area.

NOTE: Contractor shall take extreme care when removing existing concrete so as not to damage the existing reinforcing. Any damage shall be repaired, at the Contractor's expense, to the full approval of the Engineer.

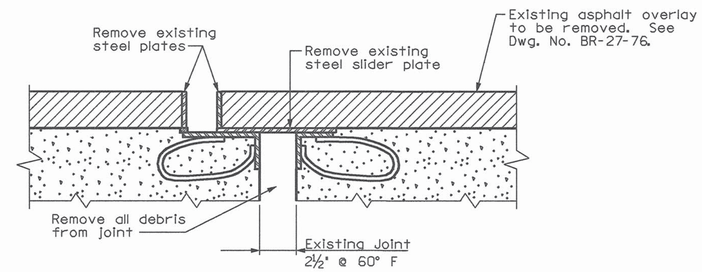
NOTE: Cost of saw cutting, removing damaged concrete, cleaning, forming, patching material, labor and any miscellaneous materials necessary for completing repairs to the damaged concrete beams, as directed by the Engineer, shall be paid for under Item No. 604-10.42, Concrete, C.F.

SPECIAL NOTE TO CONTRACTOR: Concrete beam repairs shown on this sheet are approximate areas and lengths only, and may be increased or decreased as directed by the Engineer from Headquarters, Bridge Inspection and Repair Office. Additional locations within the bridge may be designated to receive similar type repairs. All areas of beam repair shall be designated by the Engineer. Any additional areas shall be paid for at the unit price bid for Item No. 604-10.42, Concrete, C.F.

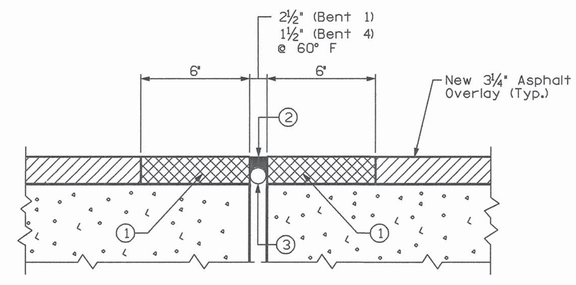
DESIGNED BY	BLS	DATE	7-94
DRAWN BY	PGR	DATE	7-94
SUPERVISED BY	WSH	DATE	7-94
CHECKED BY	BLS	DATE	12-97



TYPICAL CROSS SECTION
(Shown looking in direction of traffic)
No Scale



EXISTING JOINT @ BENT 1



NEW XJS JOINT DETAIL

(1) SILSPEC 900 Polymer Nosing System (PNS)

(2) Two-component, self-leveling silicone sealant (minimum 1¼" thickness above backer rod)

(3) Backer rod shall be a closed cell non-gassing foam material capable of withstanding elevated temperatures resulting from the reaction of the two-component joint seal system.

Joint Seal System: Dow Corning X.J.S. Expansion Joint System or equal.

Cost for removing existing debris, joint material, steel plates and slider plate, labor, forming and any miscellaneous incidentals necessary for the complete installation of X.J.S. Joint System to be paid for under Item No. 604-10.44.

DETAILS FOR NEW XJS JOINT SYSTEM
(Total of one (1) location)

PROJECT NO.	YEAR	SHEET NO.
98012-4109-04	1998	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

12-08-97

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGE REPAIR DETAILS (2)
STATE ROUTE 9 OVER
INTERSTATE I-275
BRIDGE NO. 47-SR9-7.18
KNOX COUNTY
1998

BR-27-77