

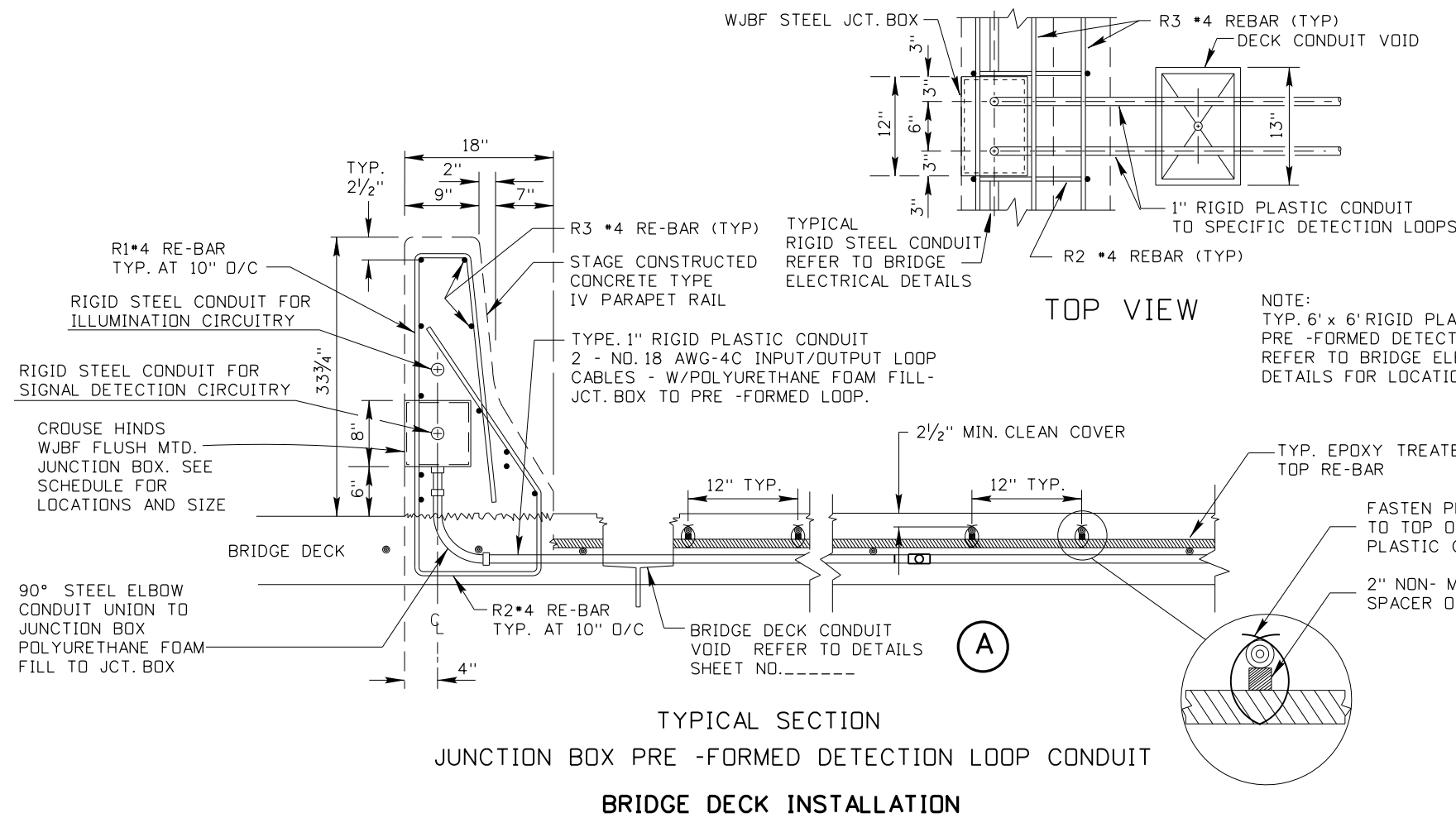
**PRE-FORMED DETECTION LOOPS  
BRIDGE DECK INSTALLATION PROCEDURES**

A. FOR INSTALLATION OF THE PRE-FORMED DETECTION LOOPS AND JUNCTION BOXES WITHIN THE BRIDGE DECK AND TYPE IV PARAPETS, CLOSE COORDINATION SHALL BE REQUIRED BETWEEN THE ELECTRICAL AND THE REINFORCING STEEL CONTRACTOR SPECIALIST.

WITH REFERENCE TO DETECTION LOOP NO.'S JCT. BOX SCHEDULE AND SPECIFIC DETAILS DEPICTED IN PLAN SHEETS \_\_ AND \_\_ PLUS STANDARD SPECIFICATION 656. - LOCATE AND FASTEN THE WBJF JCT. BOXES TO R2\*4 AND R3\*4 TYPE IV PARAPET REINFORCING STEEL, FOR SUPPORT.

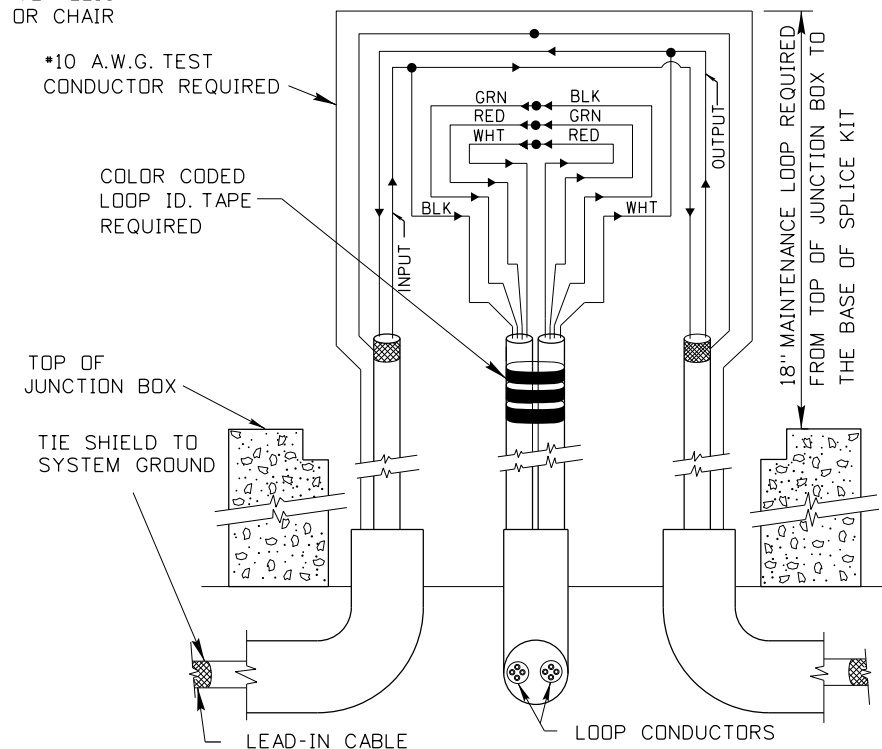
AFTER THE WBJF JCT. BOXES ARE SECURE, THE PRE-FORMED LOOP, PRE-DRILLED CONDUIT SECTIONS ARE LAYED OUT - CABLE PULLED AND COUPLERS, UNIONS, ELBOWS, ETC. FASTENED TO THE JCT. BOX. THE SYSTEM UNIT SHALL THEN BE TIED, AS NOTED, TO THE TOP OF THE UPPERMOST EPOXY COATED REINFORCING MATERIAL. (REFER TO B)

B. AFTER TESTING REQUIREMENTS OF LOOP CONTINUITY, (REF. STANDARD SPECIFICATION 656.03) THE CONDUIT SECTIONS FROM THE 6' X 6' LOOP TO JCT. BOXES SHALL BE INJECTED WITH POLYURETHANE FOAM, AS NOTED. EXCESS LOOP CABLE SHALL BE COILED NEATLY WITH THE CABLE END SEALED AND PLACE IN THE COVERED JUNCTION BOXES UNTIL THE REMAINDER OF THE SYSTEM IS INSTALLED AND SPLICES ARE MADE, AS NOTED.



NOTE:  
TYP. 6' x 6' RIGID PLASTIC PRE-FORMED DETECTION LOOP REFER TO BRIDGE ELECTRICAL DETAILS FOR LOCATION

NOTES:  
ALL CONDUCTOR SPLICES SHALL BE SOLDERED AND WATERPROOFED WITH AN APPROVED SPLICE KIT.  
THE LEAD-IN SHIELD SPLICE SHALL BE SOLDERED AND INSULATED TO PREVENT GROUNDING AT THE JCT. BOX.



TYPICAL SECTION  
JUNCTION BOX PRE-FORMED DETECTION LOOP CONDUIT  
BRIDGE DECK INSTALLATION

LOOP SPLICE DETAIL AT JUNCTION BOX

GENERAL NOTES CONTINUED

5. THE BASIC CONCEPT OF THE PRE-FORMED DETECTION LOOP OFFERS THERMAL CHARACTERISTICS FOR PHYSICAL AND ELECTRICAL REASONS. ENCAPSULATED ENCASMENT SEALS LOOP CABLES FROM WATER AND MOISTURE ENTRENCHMENT. DUE TO THIS CONCEPT, CLIMATIC RESTRAINTS SHALL BE REQUIRED DURING FIELD INSTALLATION OF THE PRE-FORMED DETECTION LOOP SYSTEM.

FABRICATED DETECTION LOOPS, CONDUIT, LOOP CABLE AND FOAM MAY BE STORED AT THE JOB SITE. THESE ITEMS SHALL BE PROTECTED FROM ELEMENTS SUCH AS RAIN, FRDST, MORNING DEW, HEAVY FOG AND EXCESSIVE SUNLIGHT.

INSTALLATIONS SHALL NOT BE ALLOWED DURING INCLEMENT WEATHER. POLYURETHANE FOAM WILL NOT ADHERE TO WET OR FROSTY SURFACES. THE TEMPERATURES OF THE ATMOSPHERE, CONDUIT CAVITY AND THE POLYURETHANE COMPONENTS A AND B ALL HAVE AN EFFECT ON CURING TIME, FOAM DENSITY, AND RATE OF REACTION. THE BEST RESULTS ARE OBTAINED WHEN ALL TEMPERATURES ARE AT 75°F (24°C).

TO ACHIEVE PROPER USE AND PROPORTIONING OF A AND B URETHANE CHEMICALS, PROPER REACTION, CURE AND OPTIMUM YIELDS, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONSISTENTLY USE APPLICATION PROCEDURES AS SPECIFIED BY THE POLYURETHANE FOAM MANUFACTURER.

6. WHEN THE INSTALLATION OF ANY PARTICULAR LOOP SYSTEM RUN BEGINS, THE ENTIRE UNIT FROM THE 6' X 6' PRE-FORMED LOOP TO THE JUNCTION BOX ASSEMBLY SHALL BE FORMED AND COMPLETED (AS PER NOTED INSTALLATION PROCEDURE) BEFORE THE CONTRACTOR/INSTALLER LEAVES THE JOB SITE FOR THE DAY.

N.T.S.

REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	08-08	NQB	MODIFIED LOOPS AND BORDER SHEET

DESIGNED	
DESIGN CHECKED	
DETAILED	CADD FILE NAME td36C_0808.dgn
DRAWING CHECKED	DRAWING DATE: MARCH,1992

**IDAHO  
TRANSPORTATION  
DEPARTMENT**

PROJECT NO.	td-36C
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	td-36C
	PRE-FORMED DETECTION LOOP DETAILS BRIDGE DECK INSTALLATION

<b>English</b>
COUNTY
KEY NUMBER
SHEET OF

NOT APPROVED  
PRELIMINARY  
FOR CONSTRUCTION