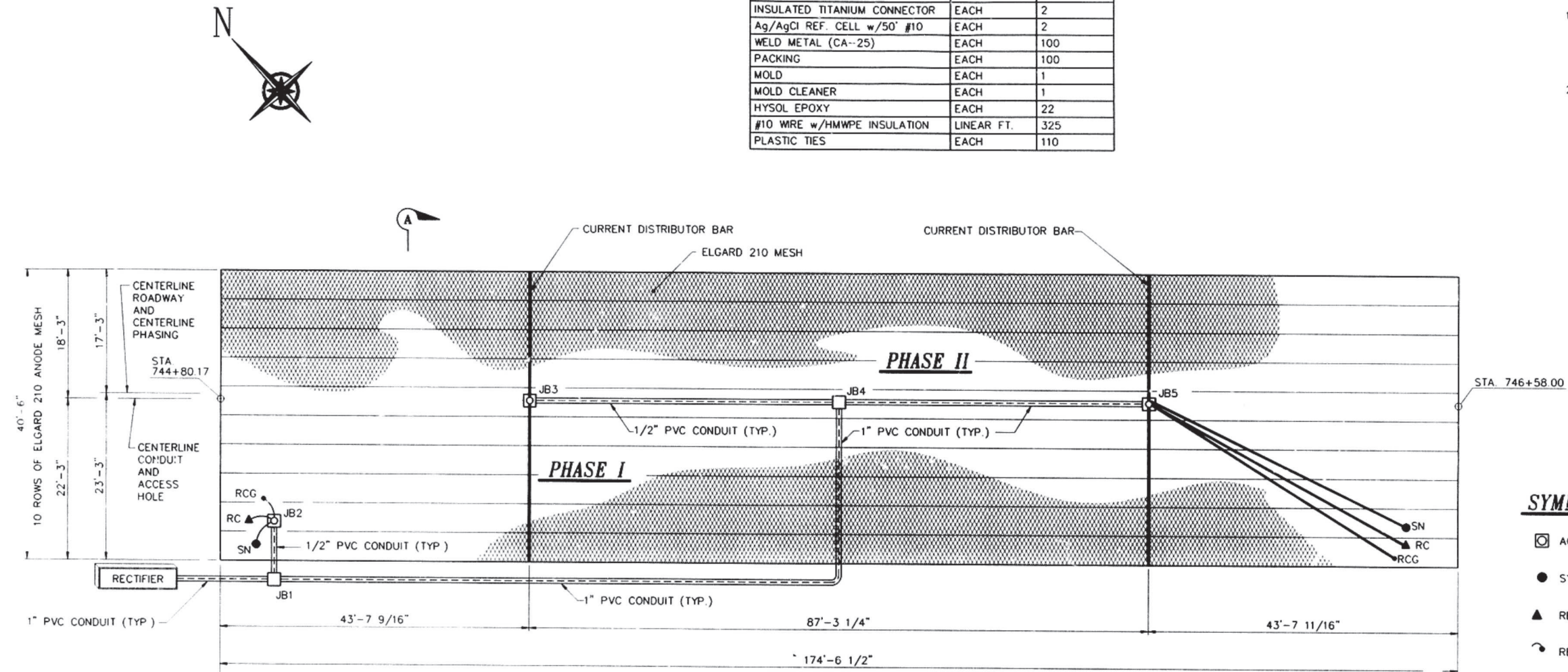


FILE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	*	TAZEWELL	68	56
STA.	TO STA.			
FED. ROAD DIST. NO.	ALLOTT	FED. AID PROJECT		
90-(108)RS-2, (126)RS-2, (108B-1)I-1, (108B-2)I, (108B-2)I-1, (108B)II, (108B-1)I-2, (108B-1)I (RRPM)				

*Estimated Quantities of "Cathodic Protection".
The Pay Item shall be Cathodic Protection Complete L.S. .3

* QUANTITIES		
ITEM	UNIT	QUANTITY
ELGARD 210 ANODE MESH	sf	7,000
CURRENT DISTRIBUTOR	LINEAR FT.	125
FASTENERS, PLASTIC, STANDARD	EACH	1,600
INSULATED TITANIUM CONNECTOR	EACH	2
Ag/AgCl REF. CELL w/50' #10	EACH	2
WELD METAL (CA-25)	EACH	100
PACKING	EACH	100
MOLD	EACH	1
MOLD CLEANER	EACH	1
HYSOL EPOXY	EACH	22
#10 WIRE w/HMWPE INSULATION	LINEAR FT.	325
PLASTIC TIES	EACH	110

1. TERMINATE ANODE MESH 3" FROM EXPOSED METAL, SUCH AS, EXPANSION DAMS, PIPES, AND DRAINS
2. LOCATE REFERENCE CELLS IN DELAMINATED AREA



- SYMBOL LEGEND**
- ☐ ACCESS HOLE w/JUNCTION BOX
 - SYSTEM NEGATIVE (SN)
 - ▲ REFERENCE CELL (RC)
 - ⊕ REFERENCE CELL GROUND (RCG)
 - ☐ JUNCTION BOX (JB)
 - CURRENT DISTRIBUTOR
 - ≡ PVC CONDUIT

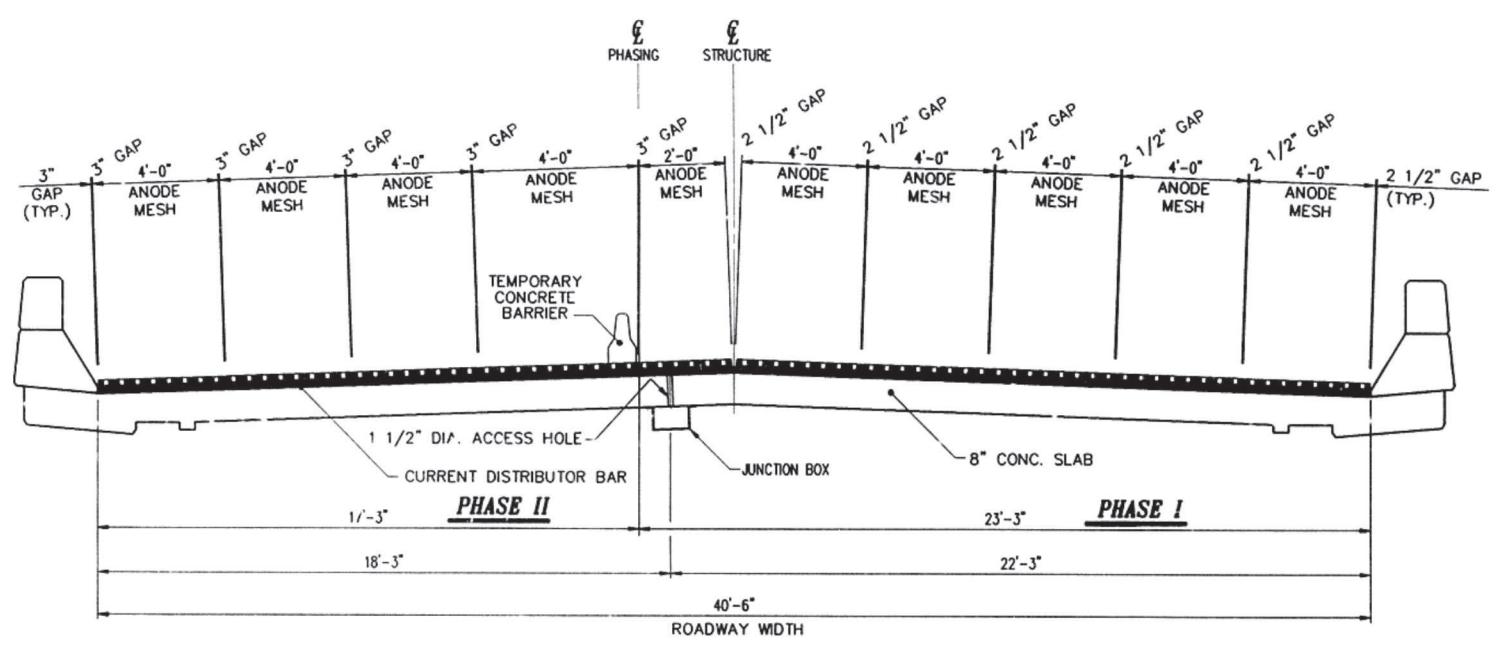
PLAN VIEW
BRIDGE SN 090-0093
OVER INDIAN CREEK
ZONE 1
(N.T.S.)

INDIAN CREEK
CATHODIC PROTECTION



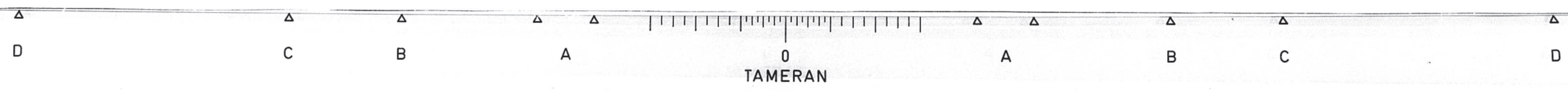
F. & E. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	*	TAZEWELL	68	57
STA.	TO STA.			
FED. AID DIST. NO.	ALLOYS	FED. AID PROJECT		

* 90-(108)RS-2,(126)RS-2,(108B-1)I-1,(108B-2)I-1,(108B-2)I-1,(108B-1)I-1,(108B-1)I-1,(108B-1)I-1 (IRPM)



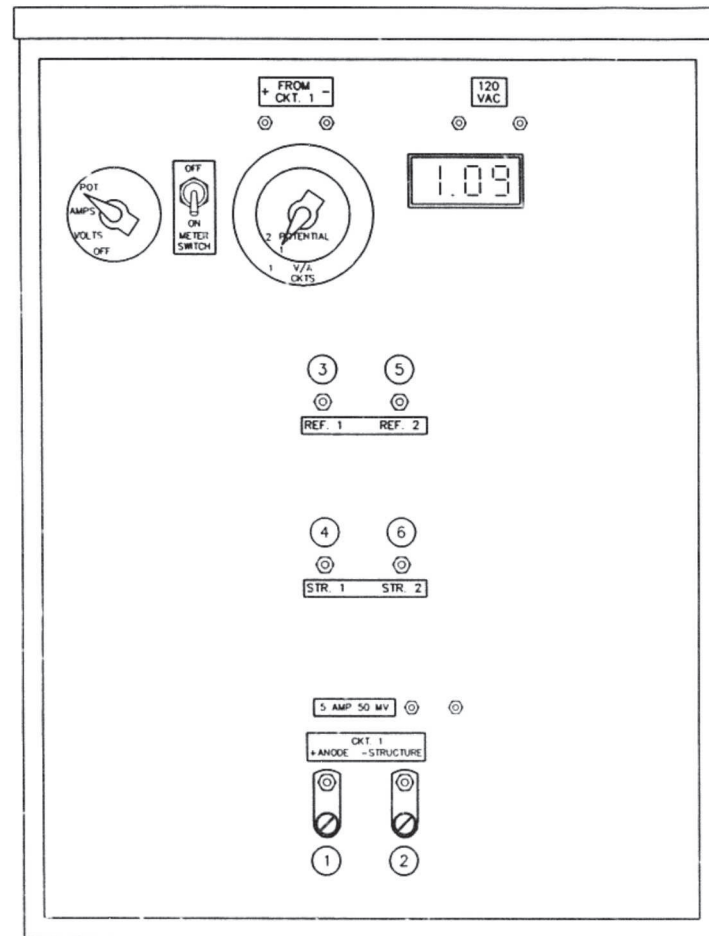
CROSS SECTION A-A
 BRIDGE SN 090-0093
 OVER INDIAN CREEK

INDIAN CREEK
CATHODIC PROTECTION



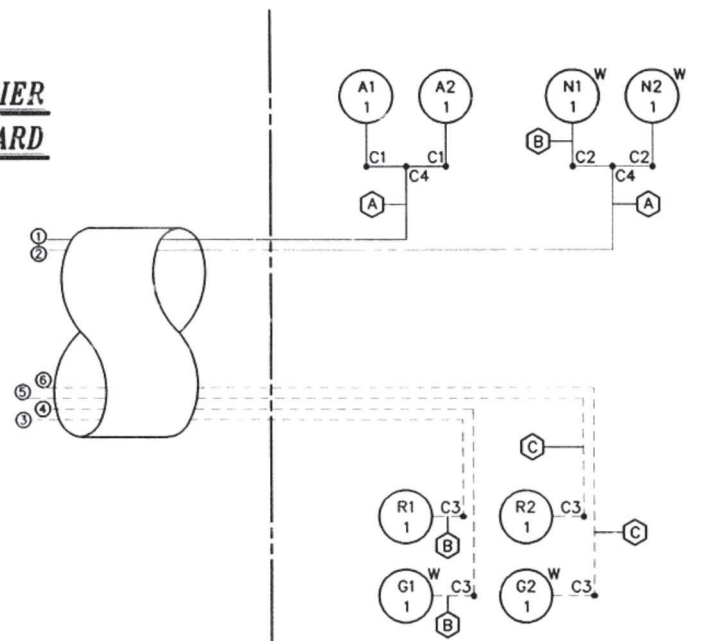
P.A. FILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	*	TAZEWELL	68	58
STA.	TO STA.			
FED. HIGH DIST. NO.	ILLUMIN.	FED. AID PROJECT		

* 90-(108)RS-2, (126)RS-2, (106B-1)I-1, (108B-2)I, (108B-2)I-1, (108B)I, (108B-1)I-2, (108B)I (RRP/M)



RECTIFIER PANEL BOARD

**TO RECTIFIER
PANEL BOARD**



ZONE 1

- 1) THE PURPOSE OF THIS DRAWING IS TO SHOW THE RECTIFIER TO INDIVIDUAL ZONE WIRING RELATIONSHIP. ACTUAL ORIENTATION OF THE RECTIFIER AND CONDUIT RUNS IS THE RESPONSIBILITY OF THE ELECTRICAL SUB-CONTRACTOR.
- 2) WIRES SHALL BE IDENTIFIED WITH CLOTH MARKERS AT SPLICE CONNECTIONS AND RECTIFIER.
- 3) PANEL BOARD IS SHOWN FOR ILLUSTRATION PURPOSES ONLY AND MAY NOT REPRESENT ACTUAL CONFIGURATION.

SYMBOL LEGEND

- ANODE ANODE NO. ZONE NO.
- SYSTEM NEGATIVE
- W THERMITE WELD SYSTEM NEGATIVE NO. ZONE NO.
- R1 REFERENCE CELL REFERENCE CELL NO. ZONE NO.
- W REFERENCE CELL GROUND THERMITE WELD REFERENCE CELL GROUND NO. ZONE NO.

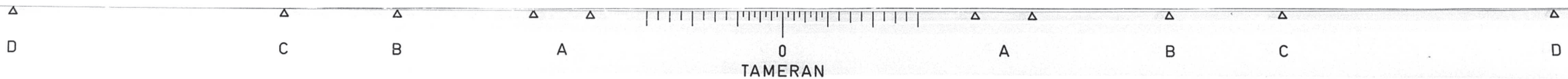
SPLICE CONNECTIONS

- C1: 1/8" DIA. TI ROD TO NO. 10 AWG
- C2: NO. 10 AWG TO NO. 10 AWG
- C3: NO. 10 AWG TO NO. 18 AWG
- C4: 2 NO. 10 AWG TO 1 NO. 10 AWG

*BRIDGE SN 090-0093 OVER INDIAN CREEK

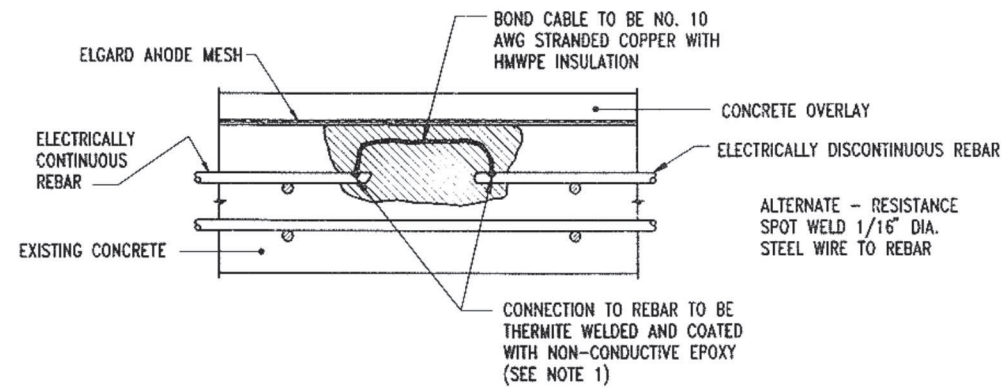
- ANODE LEAD AND SYSTEM NEGATIVE LEAD WIRE TO BE NO. 10 AWG STRANDED COPPER WIRE WITH THHN INSULATION IN CONDUIT.
- SYSTEM NEGATIVE, REFERENCE CELL, AND REFERENCE CELL GROUND LEAD WIRES TO BE NO. 10 AWG STRANDED COPPER WIRE w/HMWPE INSULATION TO JUNCTION BOX.
- REFERENCE CELL LEAD AND GROUND WIRE TO BE NO. 18 AWG STRANDED COPPER SHIELDED TWISTED PAIR WITH DRAIN AND PVC INSULATION.

**INDIAN CREEK
CATHODIC PROTECTION**

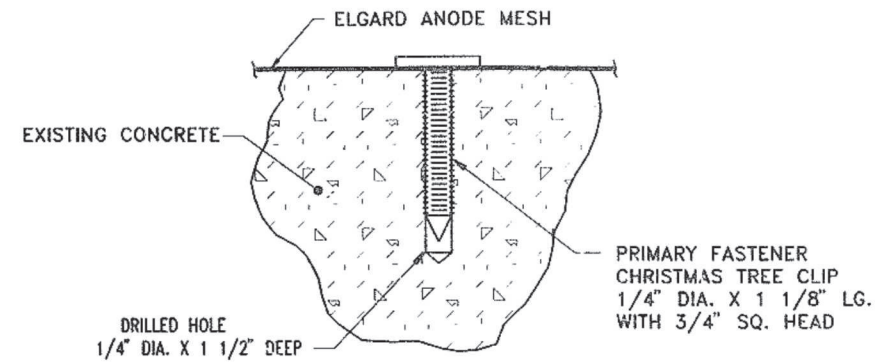


F. A. SHE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320		TAZEWELL	68	59
STA.	TO STA.			
FED. ROAD DIST. NO.	BLANDY	FED. AID PROJECT		

90-(108)RS-2,(126)RS-2,(108B-1)I-1,(108B-2)I,(108B-2)I-1,(108B)I,(108B-1)I-2, (108B-1)I (RRPM)

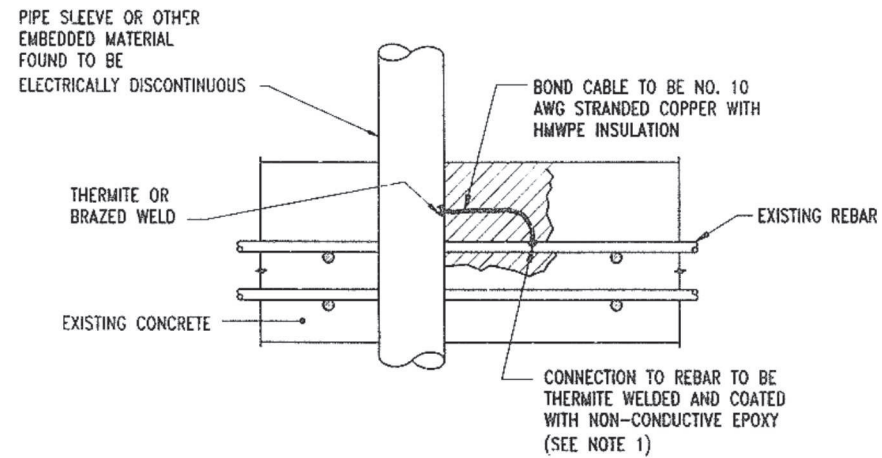


REBAR CONTINUITY DETAIL

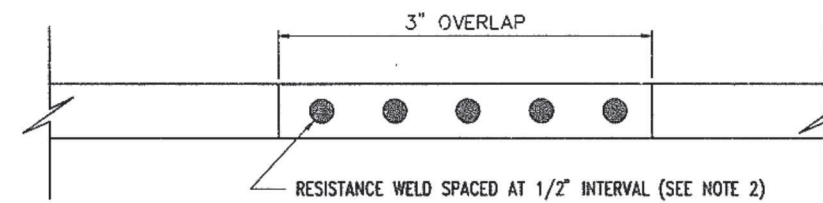


ANODE FASTENER DETAIL
CHRISTMAS TREE CLIP

1. AFTER THERMITE WELDED CONNECTION IS MADE GENTLY TAP AND REMOVE SLAG FROM WELD.
2. USE SPECIAL ELGARD WELDER. CONDUCT WELDER QUALITY ASSURANCE TEST PRIOR TO EACH USE.



EMBEDDED STEEL
BONDING DETAIL

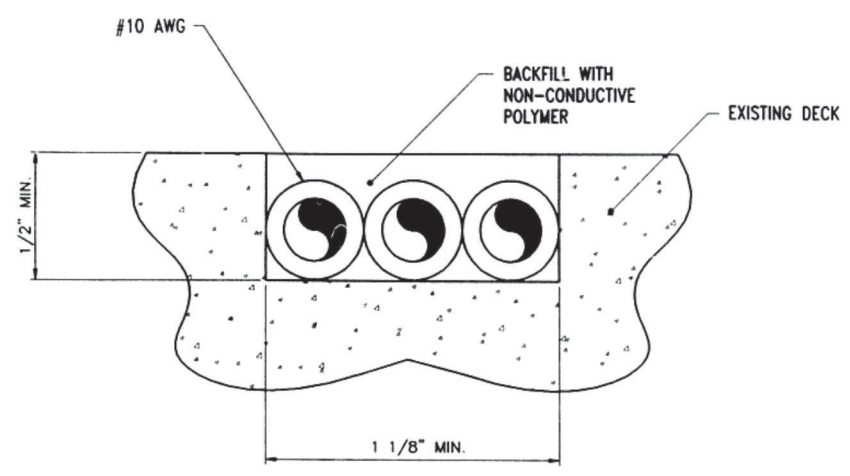


CURRENT DISTRIBUTOR SPLICING DETAIL

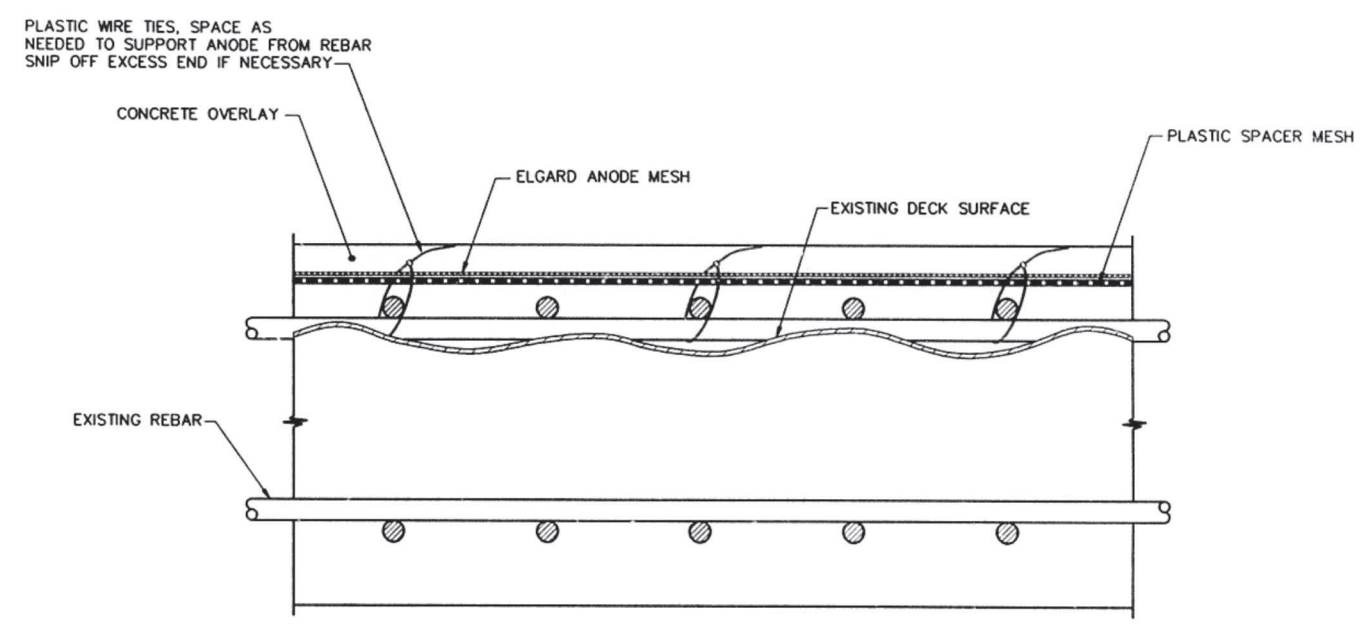
CATHODIC PROTECTION
DETAILS

P.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320		TAEWELL	68	61
STA.	TO STA.		FED. AID PROJECT	
FED. ROAD DIST. NO.	SUBDIV.	FED. AID PROJECT		

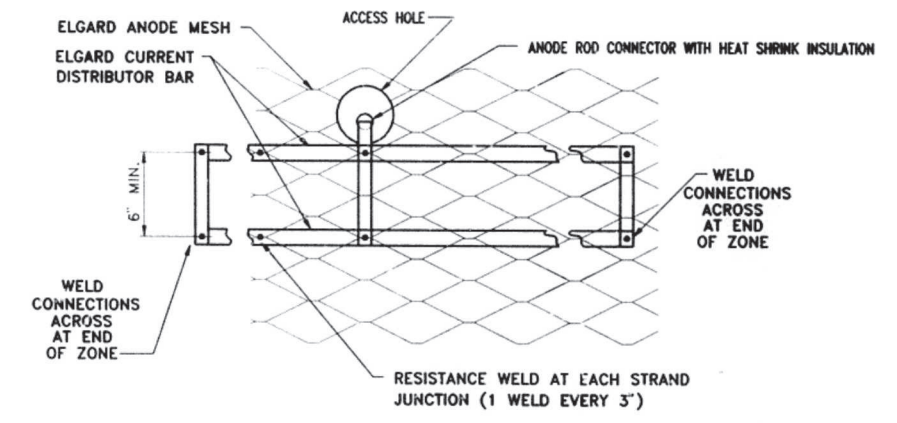
90-(108)PS-2, (126)PS-2, (108E-1)I-1, (108B-2)I, (108B-2)I-1, (108HB)I, (108B-1)I-2, (108HB-1)I (RRPM)



**SYSTEM NEGATIVE
REFERENCE CELL AND GROUND
WIRE PLACEMENT IN SLOT ON DECK DETAIL**



**PLASTIC SPACER MESH DETAIL
(FOR AREAS WITH EXPOSED REBAR)**



**DOUBLE CURRENT
DISTRIBUTOR WELDING DETAIL**

**CATHODIC PROTECTION
DETAILS**