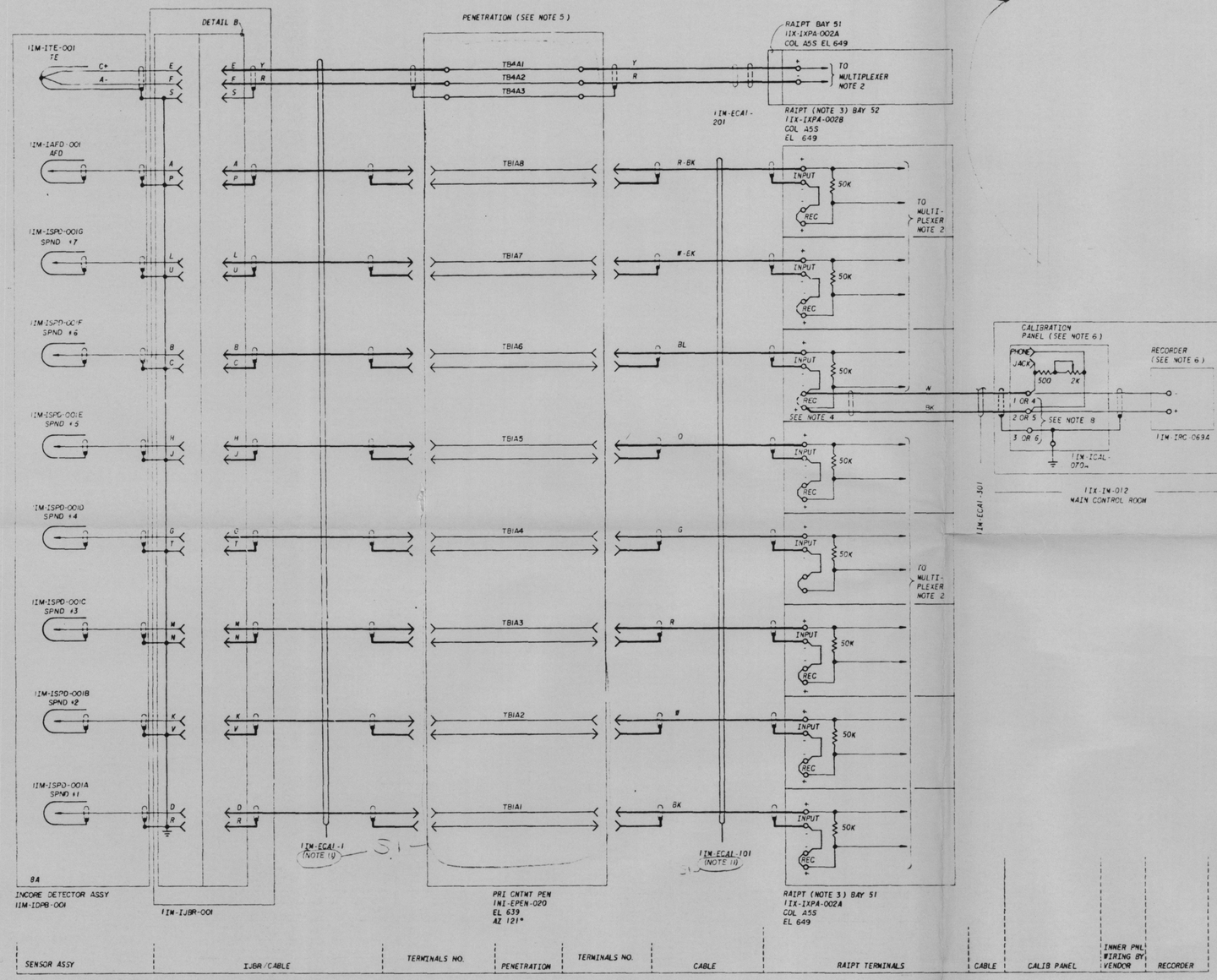
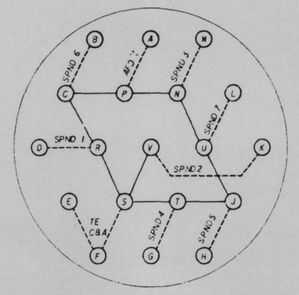
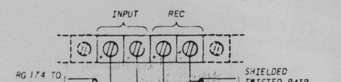


INCORE MONITORING SYSTEM
SCHEMATIC DIAGRAM
(SEE NOTE 1)



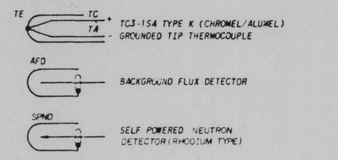
INSERT FOR SENSOR ASSY PLUG
SEE NOTE 7, 9

DETAIL B



RAIPT TERMINAL LAYOUT
TYPICAL FOR EACH TERMINAL
BLOCK SEE NOTE 2 ON SHEET 2

SYMBOLS:



NOTES:

1. THIS DIAGRAM IS A TYPICAL SCHEMATIC FOR THE TABLES SHOWN ON COMPANION DRAWINGS
2. CABLES TO MULTIPLEXER ARE SHOWN AND GIVEN UNID NO 'S ON COMPUTER SCHEMATIC DIAGRAMS, 5GW1640-IC-SERIES
3. RAIPT IS NOT PART OF IMS, BUT SHOWN FOR TERMINAL CONNECTION ONLY
4. JUMPER REMOVED FROM RECORDER TERMINALS WHERE RECORDER IS USED
5. THIS SYSTEM UTILIZES 6 PENETRATIONS WITH A MAXIMUM CAPACITY OF 128 RG 174 AND 16 TWISTED SHIELDED PAIRS EACH (1 SENSOR ASSEMBLIES PER PENETRATION ARE ROUTED THROUGH 2 PENETRATIONS AND 10 SENSOR ASSEMBLIES THROUGH EACH OF THE OTHER 4 PENETRATIONS.
6. TYPICAL WIRING FOR 48 SPND ELEMENTS REFER TO SHEETS -02 THRU -06 FOR PARTICULAR ELEMENTS TO BE WIRED AS SHOWN.
7. CONNECTORS SHOULD MAINTAIN A MINIMUM INSULATION RESISTANCE OF 10^{9} OHMS FROM PIN TO SHELL AND PIN TO PIN. THE OVERALL SYSTEM FROM DETECTOR CONNECTOR TO RAIPT TERMINAL SHOULD MAINTAIN A MINIMUM OF 10^{14} OHMS.
8. CONNECTIONS TO TERMINALS 1, 2, AND 3 OR 4, 5, AND 6
9. PLUG-LJT07RE-21-24P(SR/101)
   SOCKET-LJT07RE-21-24S(SR/101)
   (BENDIX PART #'S)
10. SEE CONAX CORP DWG 7981-0004 FOR PENETRATION DETAILS
    CONNECTORS AT THE PENETRATION END OF CABLES ARE FURNISHED WITH THE PENETRATION. TERMINATION OF THE CABLES IN THE CONNECTORS TO BE PER CONAX MANUAL IPS-509

Docket # 8-438
Control # 8304050356
Date 3-25-83 of Document:
REGULATORY DOCKET FILE

PRC APERTURE CARD

COMPANION DWGS:
5GW1640-IM-02 THRU 06

REFERENCE DWGS:
TVA:
5GW1640-IC-01 THRU 10 COMPUTER SCHEMATICS

BBW (CONTRACT 71C62-54114-2):
02-23752NE....WIRING LAYOUT PANEL 1-IM-12, 2-IM-12
115764D.....IMS ASSY CONN WIRING DETAILS
0912068.....TYP ELECTRICAL LAYOUT
02-22525WC...WIRING DIAGRAM FOR INCORE MONITORING SYSTEM
15-4024000001...INCORE MONITORING SYSTEM DESCRIPTION
12-205300001...INCORE INSTRUMENTATION SPECIFICATION
CONAX CORP (CONTRACT 80-827080)
7981-0004.....INCORE MONITORING ELEC PENETRATION ASSY.
IPS-509.....PENETRATION INSTALLATION & TERMINATION MANUAL.

REV NO.	ECN NO.	DATE	DRWN	CHKD	SUPV	ENGR	NSP	SUBMITTED	APPRD
1	S1	7-7-80							

REVISED PENT TERM, NOTE 0, & REF DWG. ADDED NOTE 11 REMOVED DETAIL A

DRAWN G. R. BELL/T. J. HOWARD
CHKD R. E. PACKETT
SUPV
NSP
ENGINEER M. W. Thomson

SCALE EXCEPT AS NOTED

GENERAL
UNIT 1

SCHEMATIC DIAGRAM
INCORE MONITORING SYSTEM

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

N

SUBMITTED M. W. Thomson
RECOMMENDED
APPROVED R. M. Dodge
KNOXVILLE 11-1-78

88 E 5GW1640-IM-01 R1

RECORD DRAWING AS CONSTRUCTED

INSPECTED AND APPROVED FOR ISSUE

PRINT
SIZE