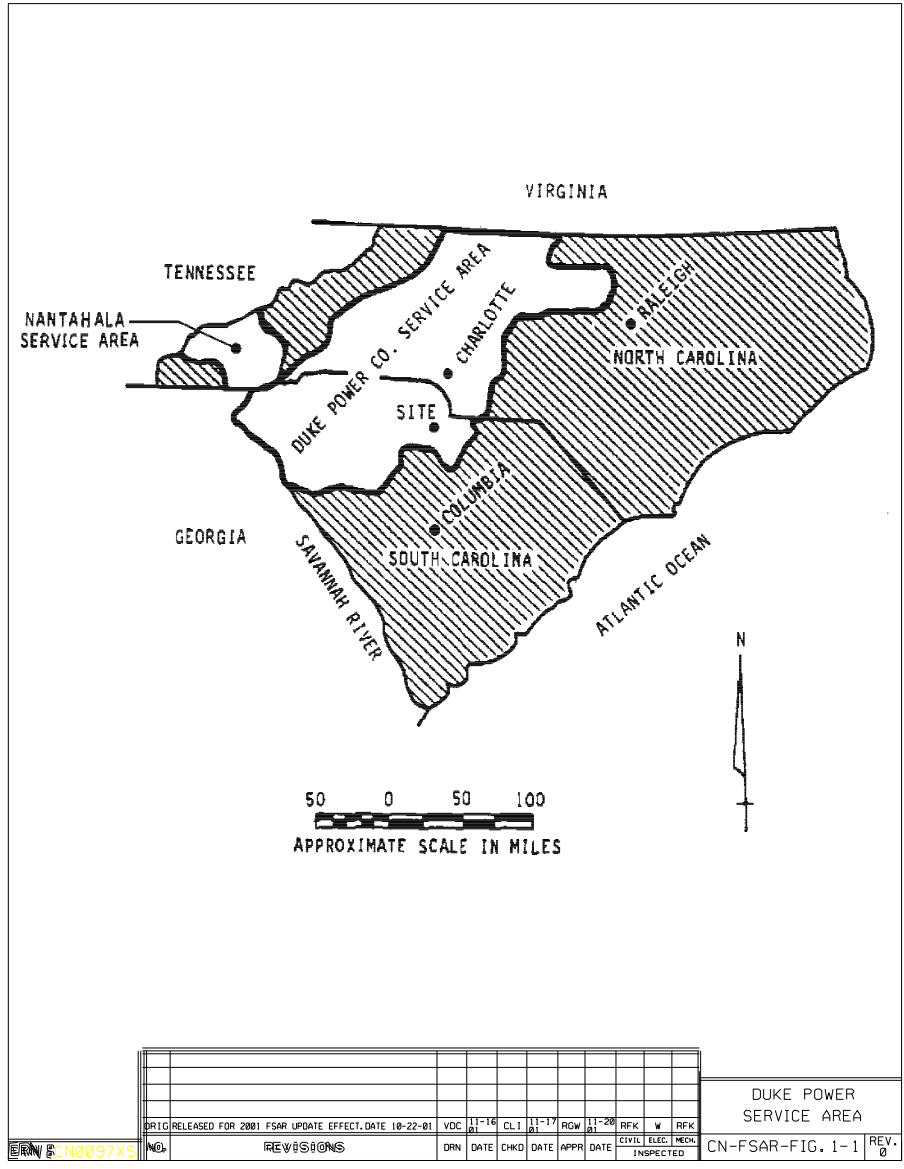


## Appendix 1B. Figures

Figure 1-1. Duke Power Company Service Area



**Figure 1-2. General Arrangement Plan @ EL. 522 +0**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



Figure 1-3. General Arrangement Plan @ EL. 543 +0

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



**Figure 1-4. General Arrangement Plan @ EL. 560 +0**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



**Figure 1-5. General Arrangement Plan @ EL. 577 +0**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



**Figure 1-6. General Arrangement Plan @ EL. 594 +0**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



**Figure 1-7. General Arrangement Plan @ EL. 619 +0**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390





**Figure 1-8. General Arrangement Roof Plan**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



**Figure 1-9. General Arrangement Longitudinal Section**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



**Figure 1-10. General Arrangement Containment and Reactor Building Plan @ EL. 523 +11**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



**Figure 1-11. General Arrangement Containment and Reactor Building Plan @ EL. 552 +0**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



**Figure 1-12. General Arrangement Containment and Reactor Building Plan @ EL. 565 +3**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



**Figure 1-13. General Arrangement Containment and Reactor Building Plan @ EL. 594 +10 3/4**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



**Figure 1-14. General Arrangement Containment and Reactor Building Plan @ EL. 605 +10**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



**Figure 1-15. General Arrangement Containment and Reactor Building Plan @ EL. 652 +7 1/2**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390





**Figure 1-16. General Arrangement Containment and Reactor Building Section (Laydown Space)**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



**Figure 1-17. General Arrangement Containment and Reactor Building Section**

SECURITY-RELATED INFORMATION WITHHOLD UNDER 10 CFR 2.390



Figure 1-18. General Arrangement Containment and Reactor Building Refueling Canal Layout Longitudinal Section

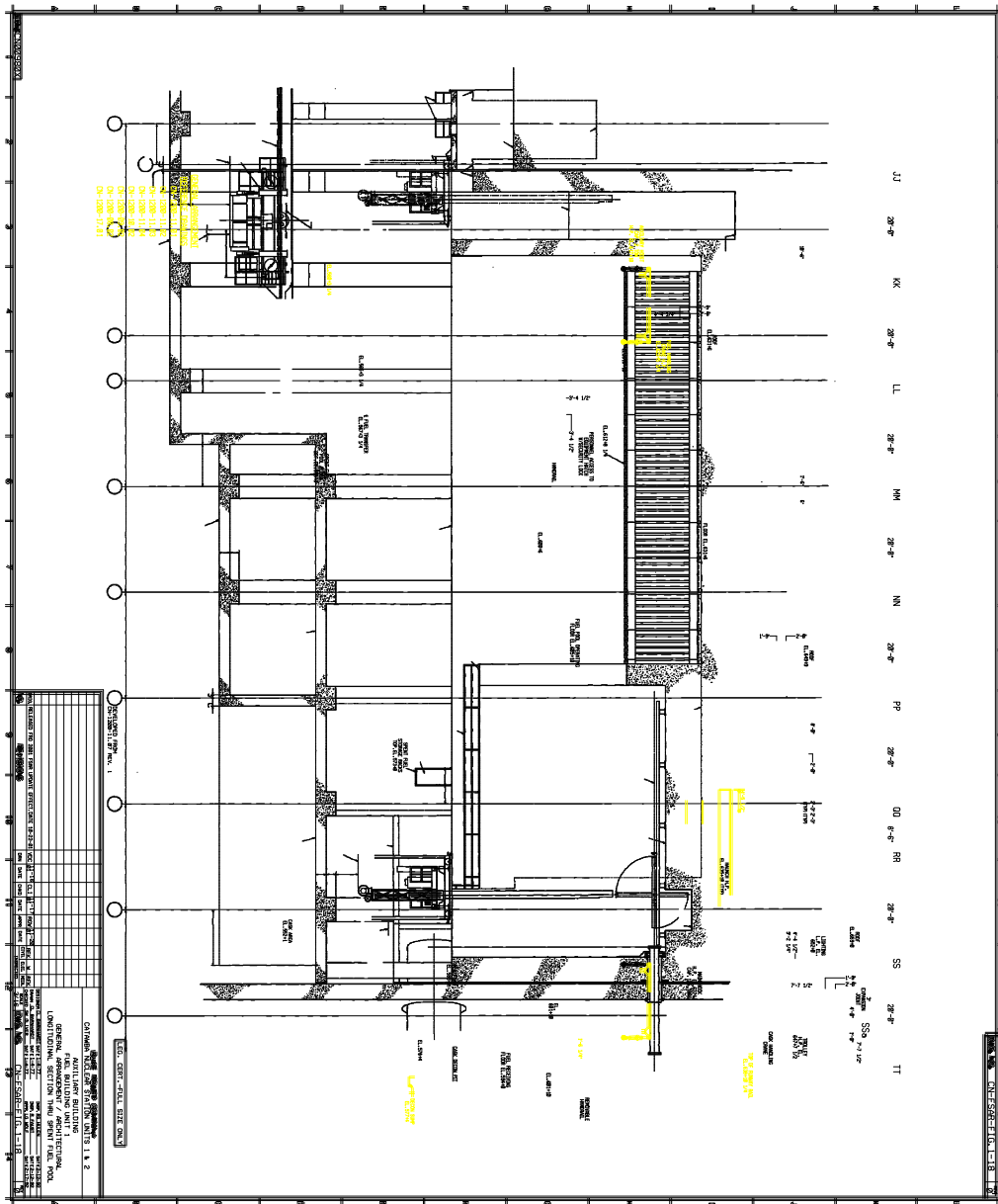
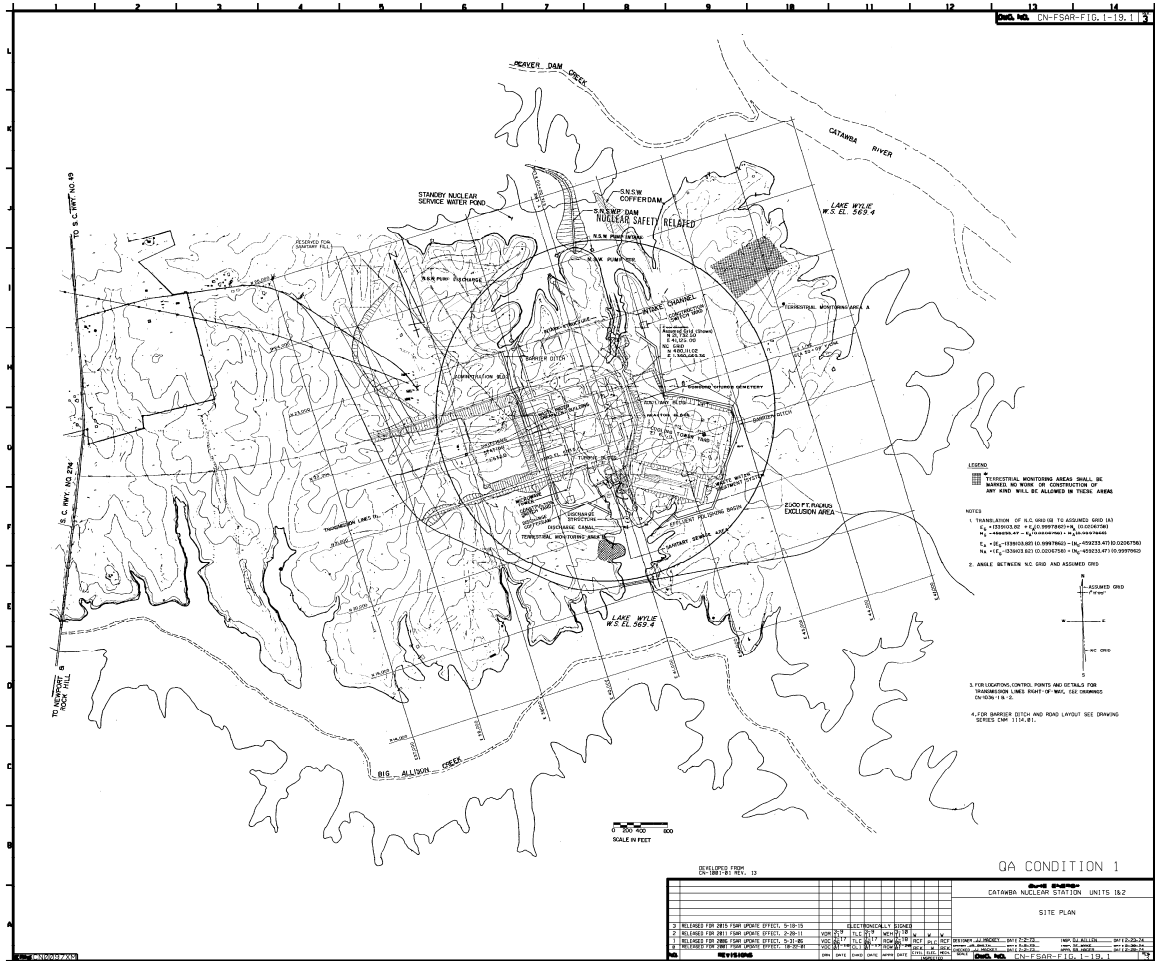
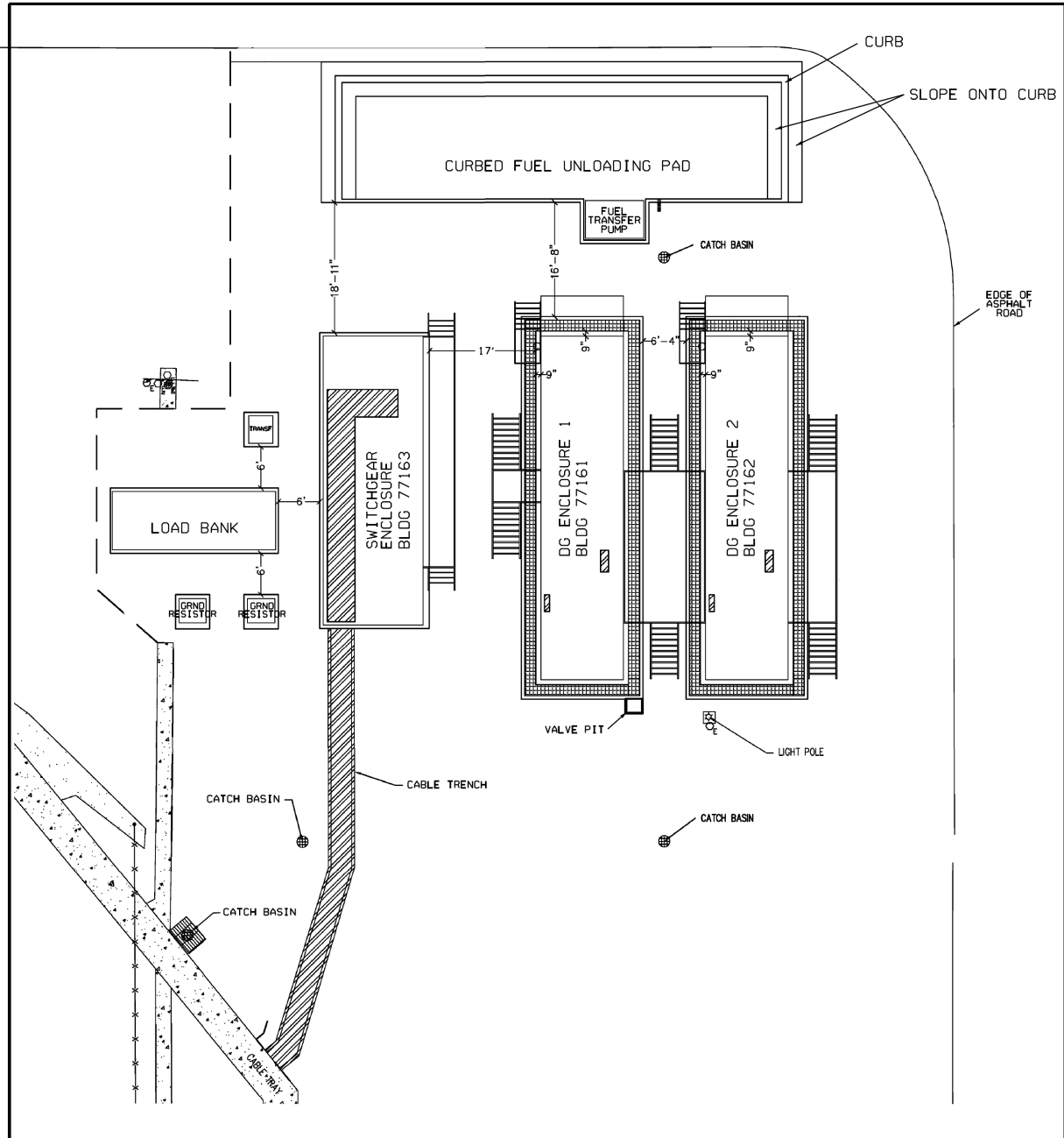


Figure 1-19. Site Plan

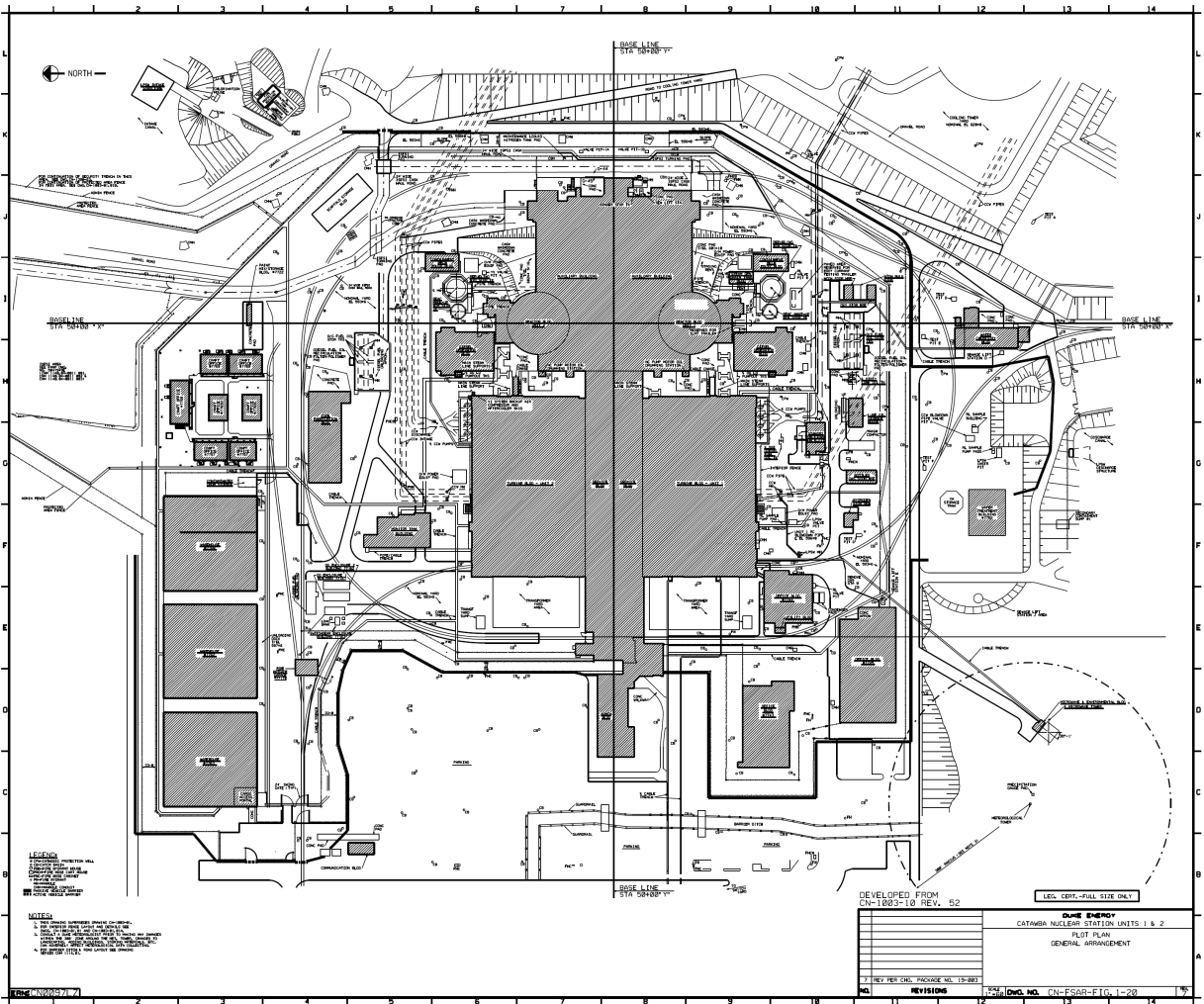






DWG. NO. CN-FSAR-FIG. 01-19. 03		DUKE ENERGY CATAWBA NUCLEAR STATION
		CHAPTER 1 FIGURE ESPS ENCLOSURES SITE PLAN
Ø RELEASED PER CHG. PACKAGE NO. 19-003		
NO.	REVISIONS	

Figure 1-20. Plot Plan



**Figure 1-21. Electrical Symbol Identification**

*HISTORICAL INFORMATION NOT REQUIRED TO BE REVISED*

**DUKE POWER COMPANY  
DESIGN ENGINEERING DEPARTMENT  
ELECTRICAL DESIGN STANDARD**

ALL WORK MUST CONFORM TO THE FOLLOWING: SYMBOLS - ELEMENTARY DRAWINGS

**1. SIZE**

The sizes shown on the standard drawings are the standard sizes. No symbol should be larger or smaller than the standard except where extreme crowding necessitates the symbol being drawn smaller. The symbol should then appear no smaller than 3/4 the standard size.

EXAMPLE:



**2. CONNECTION POINTS**

The dashed lines on the standard drawings show all possible connections to a symbol. No connection point should have more than one wire connected to it.

EXAMPLE:

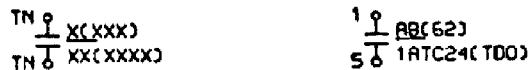


**3. SYMBOL TEXT LAYOUT**

- X - Device name (I.e. panel layout location, etc.)
- XX - Device location (I.e. panel number, valve number, etc.)
- XXX - Device function
- XXXX - Comments
- TN - Terminal Number

Where the symbol configuration allows it, the terminal numbers should appear to the left of a symbol and other text to the right of the symbol.

EXAMPLE:



If crowding necessitates it, the terminal numbers may appear to the right of the symbol and other text may appear to the left of the symbol.



DUKE POWER COMPANY  
 DESIGN ENGINEERING DEPARTMENT  
 ELECTRICAL DESIGN STANDARD

ALL WORK MUST CONFORM TO THE FOLLOWING:

EXAMPLE:

$\begin{array}{c} X(XXX) \frac{0}{\delta} TN \\ XX(XXXX) \end{array}$	$\begin{array}{c} AB(62) \frac{1}{\delta} \\ 1ATC24(TDO) \end{array}$
---	---

The device name should be the first text entry above the line. Text that appears above the line and is not part of the device name should be enclosed in parenthesis. The device location should be the first text entry below the line. Text that appears below the line and is not part of the device location should be enclosed in parenthesis. If no device name or device location is given, the function name or comments should be the first text entry and be in parenthesis.

EXAMPLE:

$\begin{array}{c} TN \frac{0}{\delta} (XXX) \\ TN \delta (XXXX) \end{array}$	$\begin{array}{c} 1 \frac{0}{\delta} (62) \\ 5 \delta (TDO) \end{array}$
--	--

If a comment is too large to fit below the line, the comment should be written close enough to the symbol so as to be associated with it. The comment should be in parenthesis.

EXAMPLE:

$\begin{array}{c} TN \frac{0}{\delta} X(XXX) \\ TN \delta XX \\ (XXXX) \\ (XXXX) \end{array}$	$\begin{array}{c} 1 \frac{0}{\delta} AB(62) \\ 5 \delta 1ATC24 \\ (TDO-15 SEC) \\ (ON ENERGIZE) \end{array}$
---	--

If a number of symbols appear on a drawing with the same device location, a number preceded by an asterisk (\*) may appear in place of the device location.

EXAMPLE:

$\begin{array}{c} TN \frac{0}{\delta} X(XXX) \\ TN \delta *1(XXXX) \end{array}$	$\begin{array}{c} 1 \frac{0}{\delta} AB(62) \\ 5 \delta *1(TDO) \end{array}$
---	--

DUKE POWER COMPANY  
DESIGN ENGINEERING DEPARTMENT  
ELECTRICAL DESIGN STANDARD

ALL WORK MUST CONFORM TO THE FOLLOWING:

A note must then appear on the drawing in the following manner:

NOTES:

- \*1 - Device Location #1
- \*2 - Device Location #2

If no device location is shown the symbol must be defined by \*0 in the notes.

NOTES:

- \*1 - IATC24

EXAMPLE:

$\frac{TN}{\frac{1}{0}} \frac{XCXXX}{XXCXXXX}$

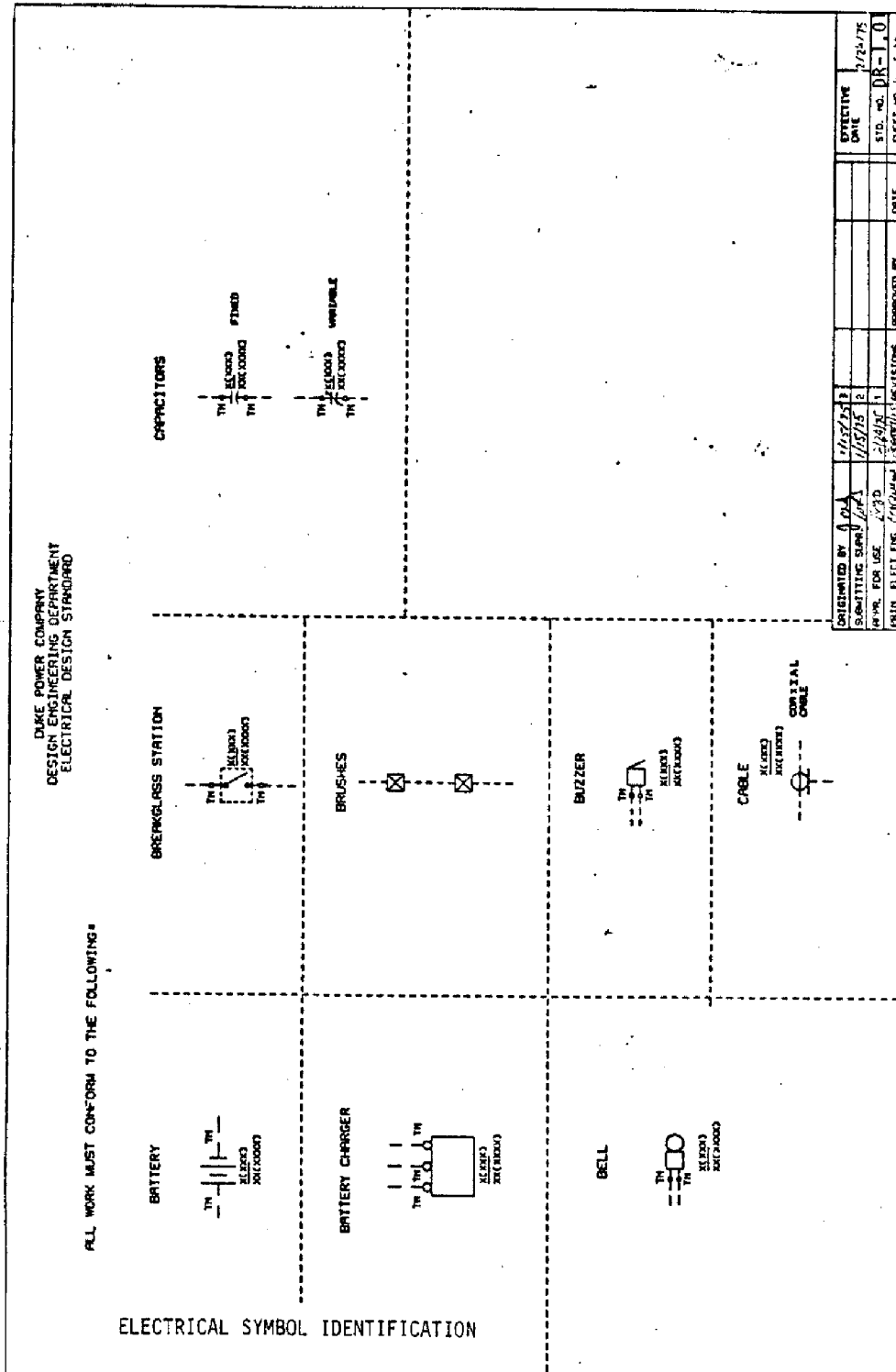
$\frac{1}{\frac{1}{0}} \frac{AB(62)}{S \frac{1}{0}} (TDO)$

NOTES:

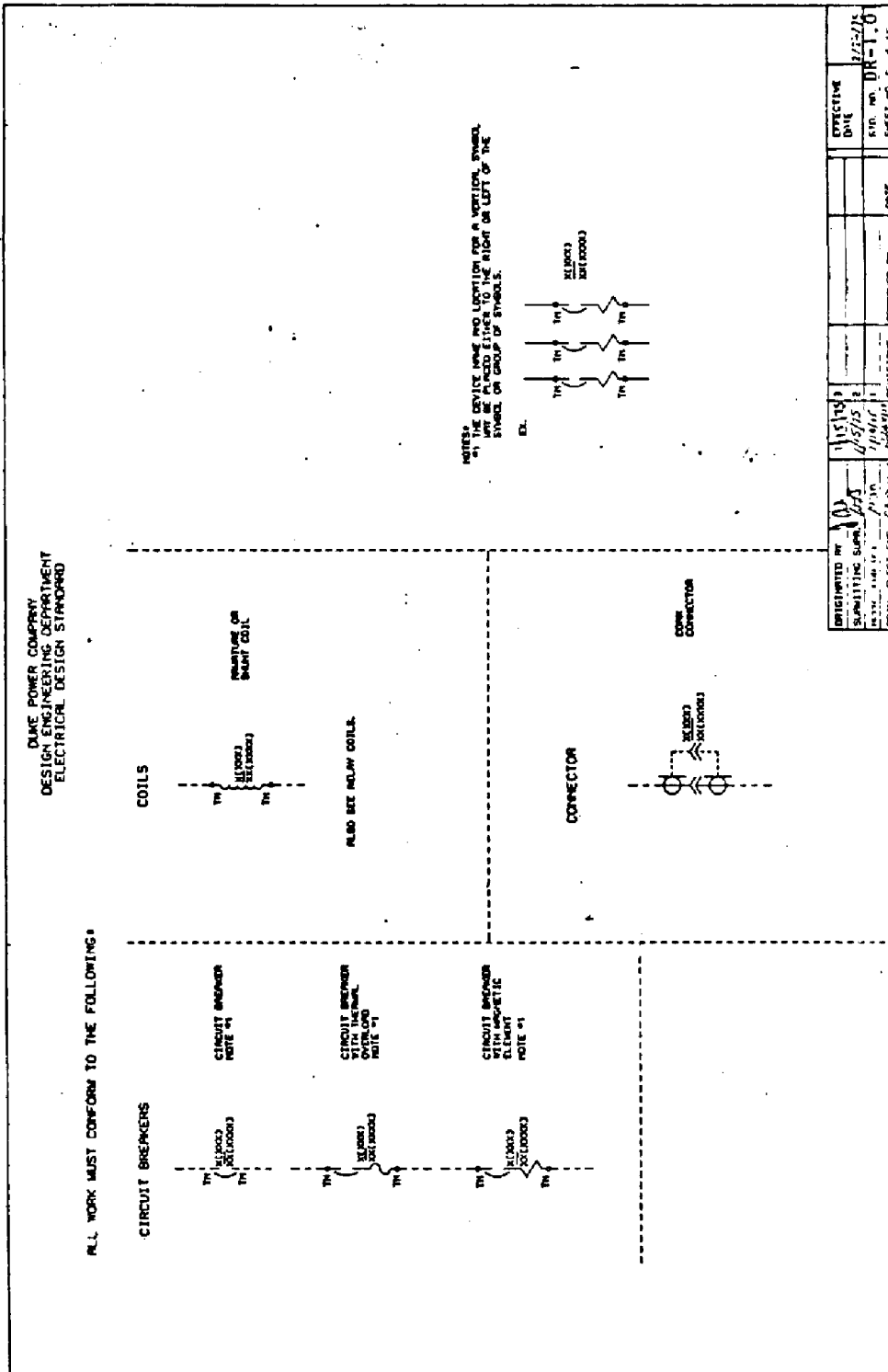
- \*0 - Device Location

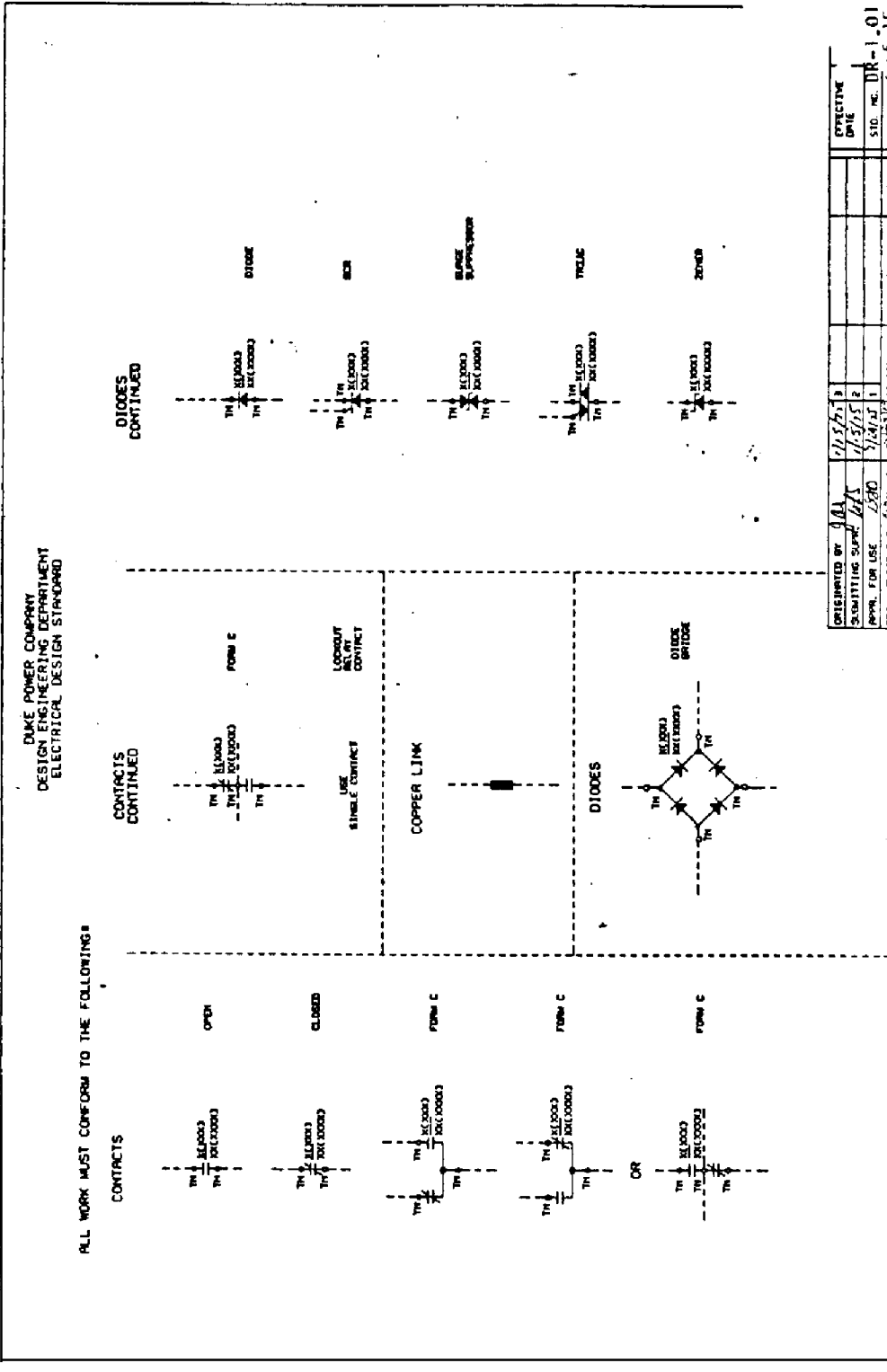
NOTES:

- \*0 - IATC24



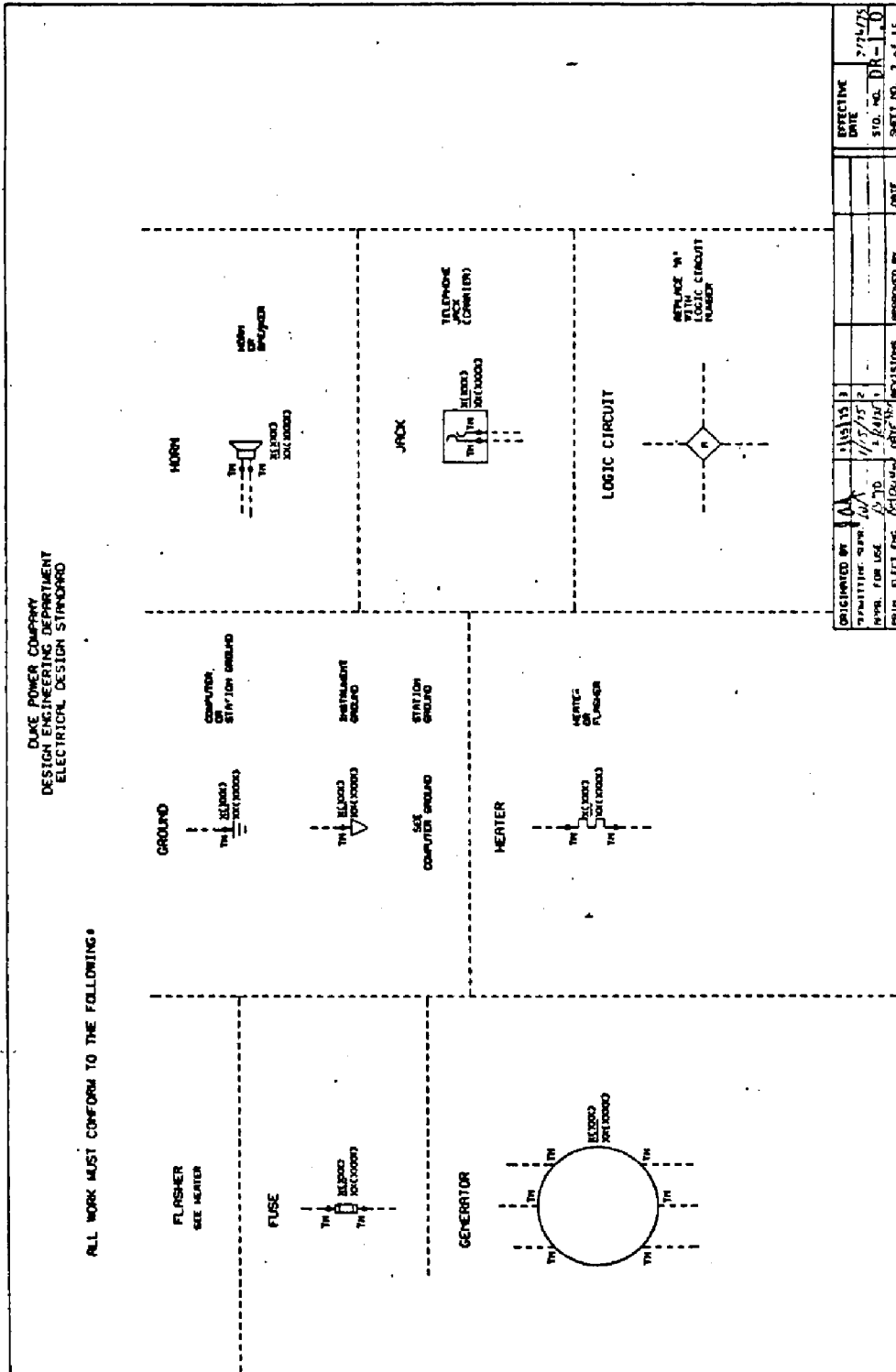
ORIGINATED BY	DATE	APPROVED BY	DATE
W. J. ...	1/15/75		
SUBMITTING ENGINEER	1/15/75		
APPROVED FOR USE	2/24/75		
DATE	2/24/75		
REVISIONS			
NO.	1		
DESCRIPTION			
STANDARD NO.	DR-1.0		
SHEET NO.	4		
TOTAL SHEETS	15		

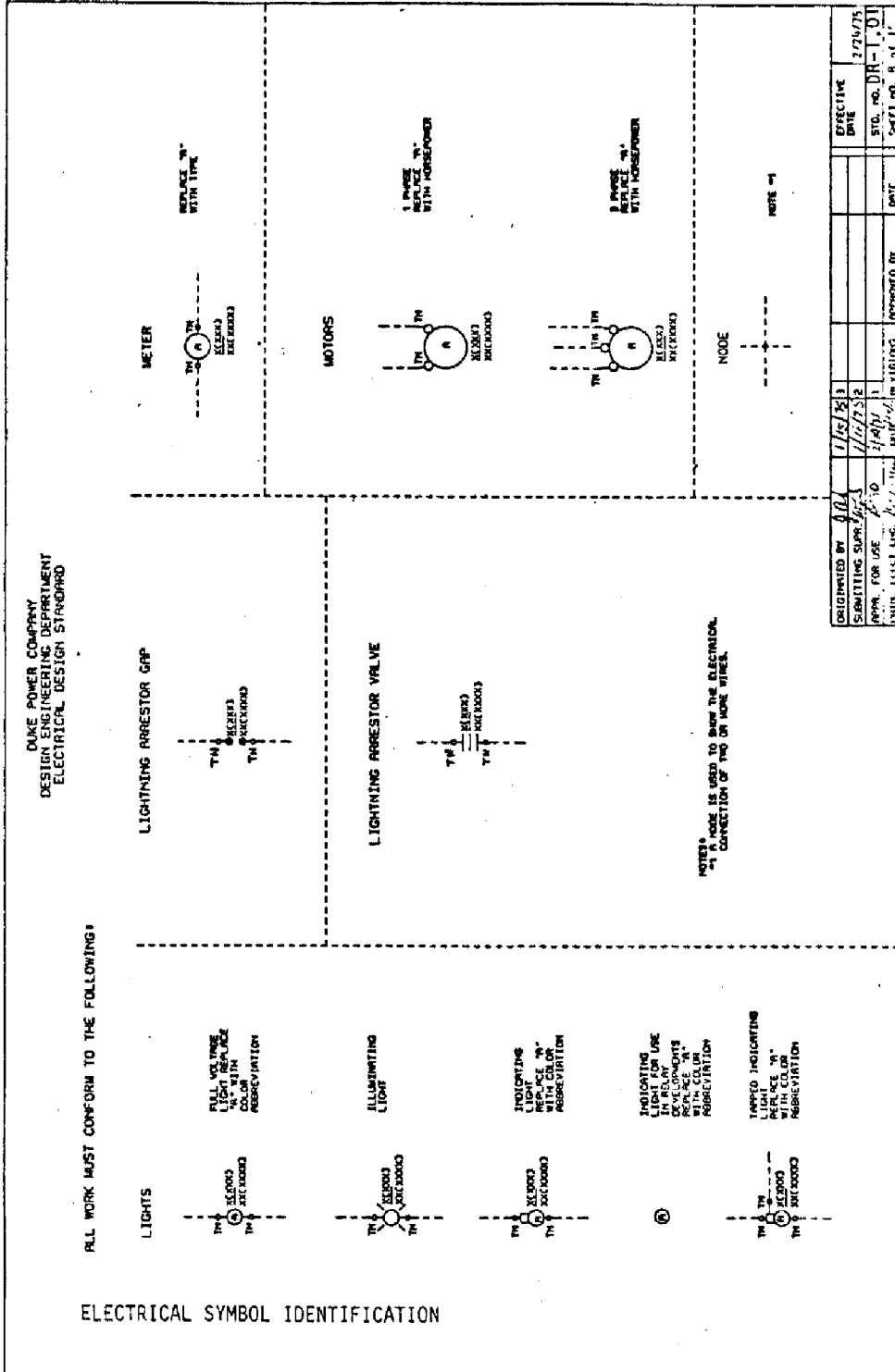




DATE	BY	REVISIONS	APPROVED BY
11/27/53	JJA	1	
11/27/53	JJA	2	
7/24/53	JJA	1	

PREPARED BY: JJA  
 CHECKED BY: JJA  
 DATE: 11/27/53  
 PROJECT: DR-1.01  
 SHEET NO. 6 OF 15

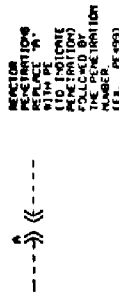




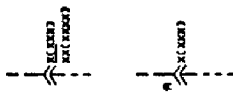
DUKE POWER COMPANY  
DESIGN ENGINEERING DEPARTMENT  
ELECTRICAL DESIGN STANDARD

ALL WORK MUST CONFORM TO THE FOLLOWING:

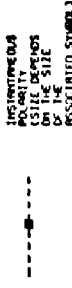
PENETRATIONS



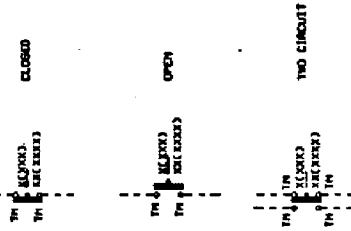
PLUGS



POLARITY



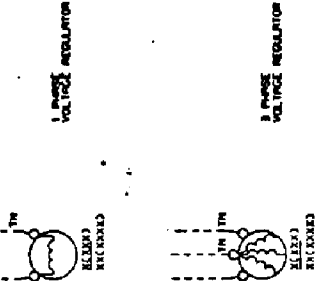
PUSHBUTTONS



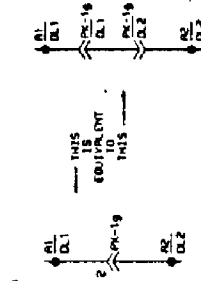
RAT HOLE



REGULATORS



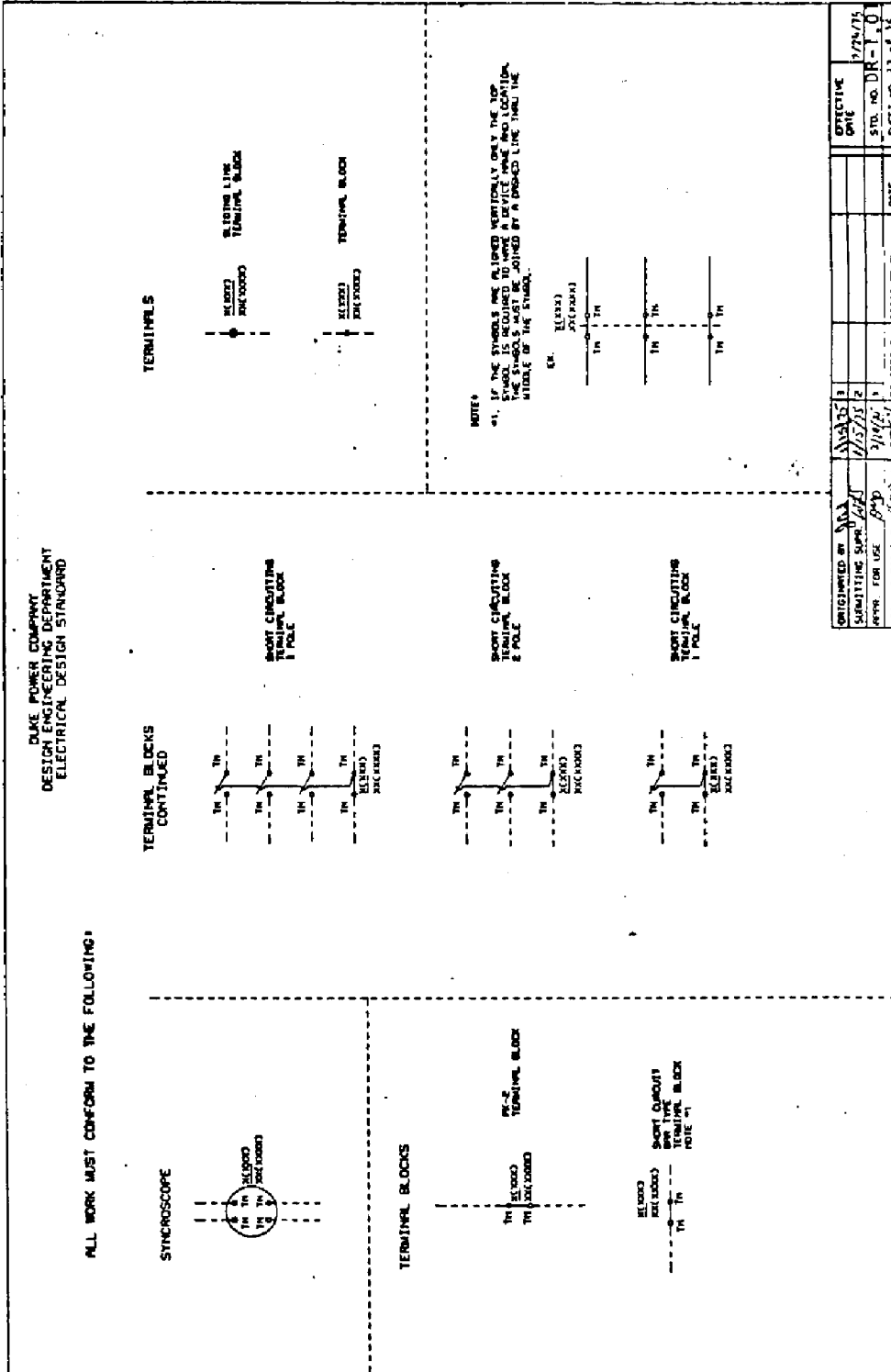
NOTE: THIS SYMBOL IS USED TO SHOW 3 PLUGS. THE LOCATION OF ONE PLUG WILL BE THE SAME AS THE LOCATION OF THE NEXT DEVICE IN THE DIRECTION OF THE ARROW. THE LOCATION OF THE OTHER TWO PLUGS WILL BE THE OPPOSITE DIRECTION OF THE ARROW. THE DEVICE NAMES OF THE PLUGS ARE THE SAME.



ORIGINATED BY	JAS	1/15/75	3	EFFECTIVE DATE	2/24/75
SUBMITTING SUPR.	WLS	1/15/75	2	STD. NO.	DR-10
APPV. FOR USE	DCI	2/24/75	1	DATE	2/24/75
TRAIN. ELECT. ENG.	DCI	2/24/75	1	APPROVED BY	[Signature]
REVISIONS			DATE		

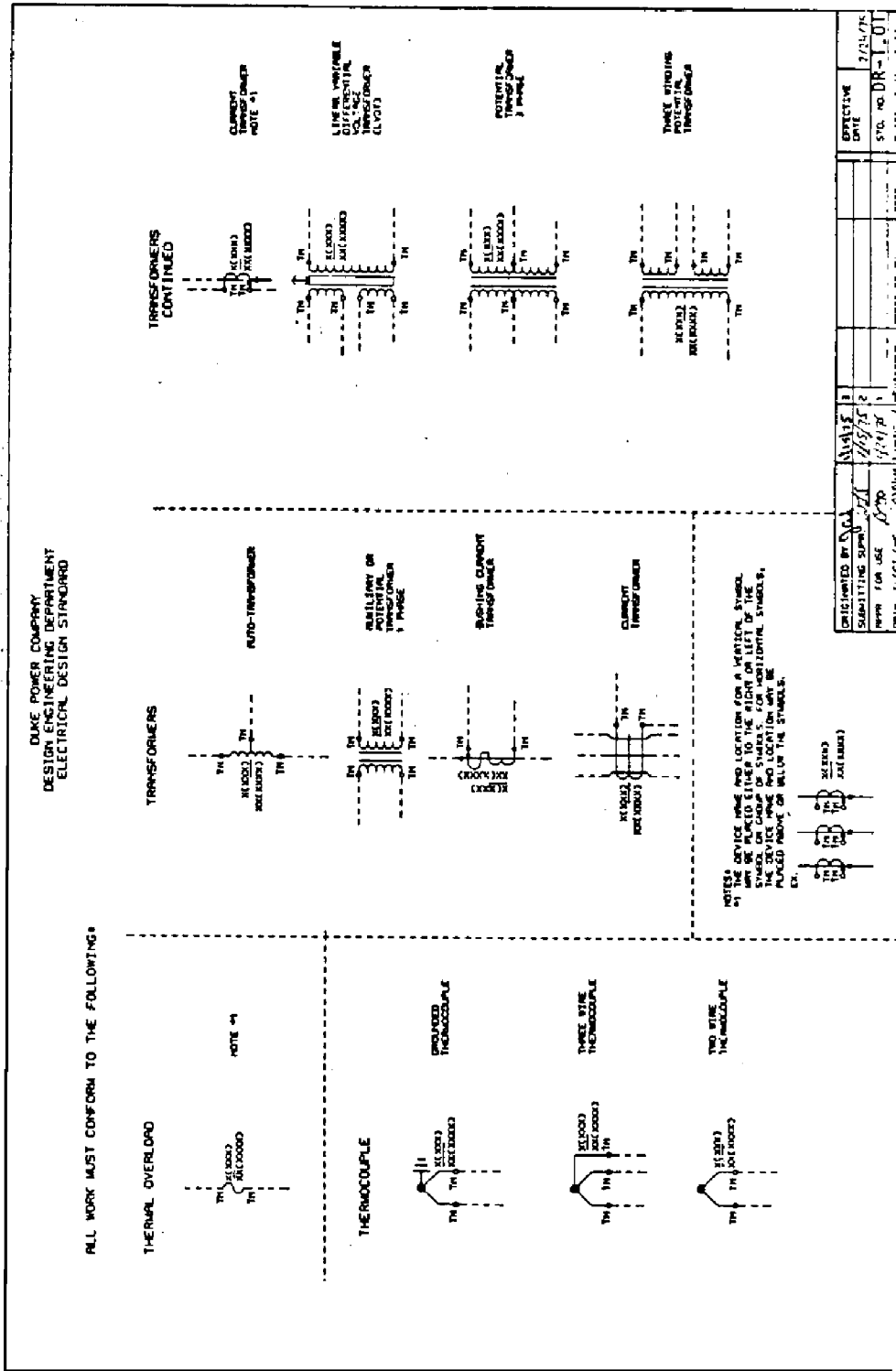






DESIGNED BY	DATE	REVISED	DATE	CORRECTIVE	DATE
APPROVED FOR USE	DATE	DATE	DATE	DATE	DATE

PROJECT NO.	DATE
DR-101	11/24/76





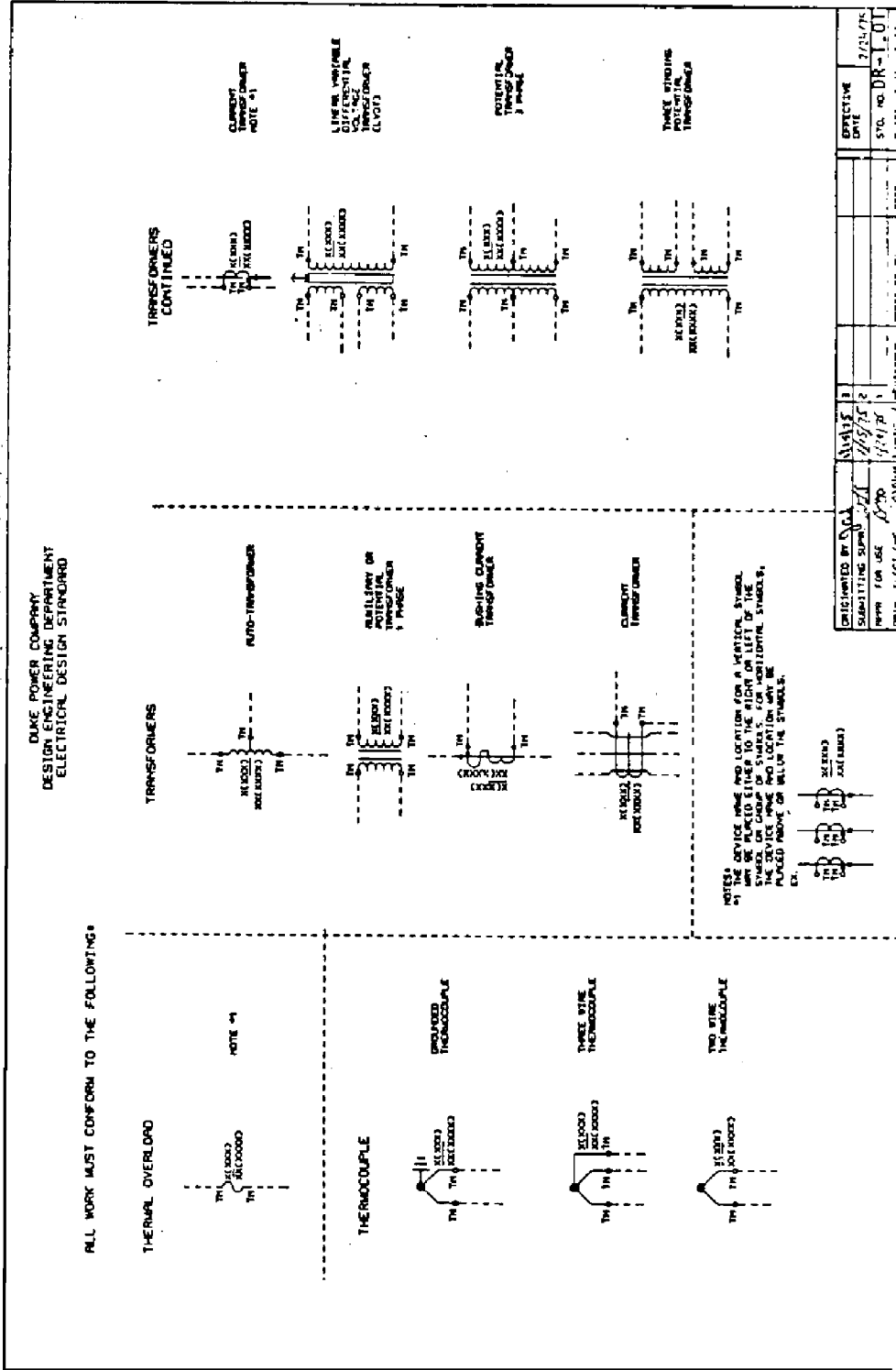












Figure 1-25. Post-accident Radiation Zones @ EL. 522+0

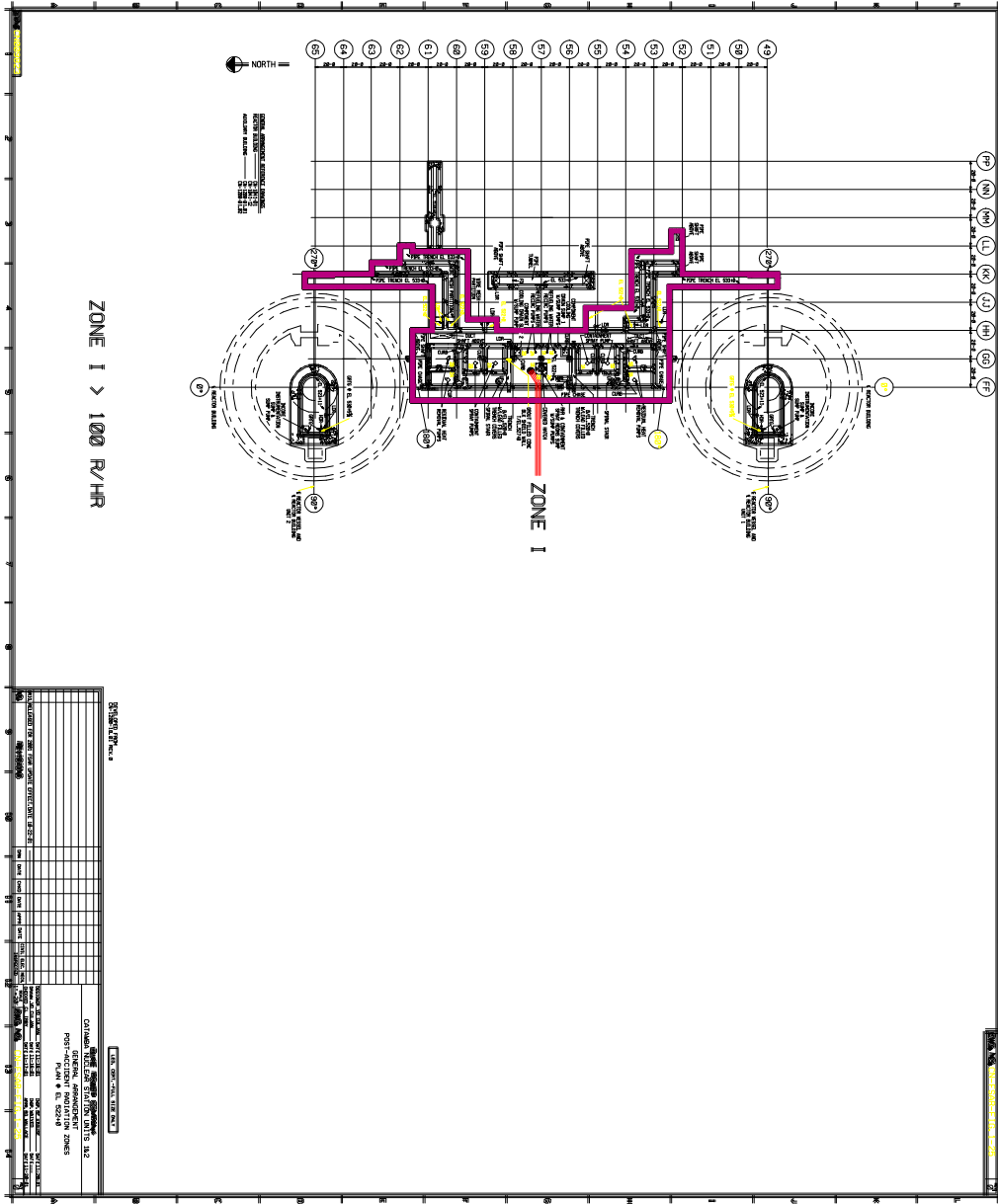




Figure 1-27. Post-accident Radiation Zones @ EL. 560+0

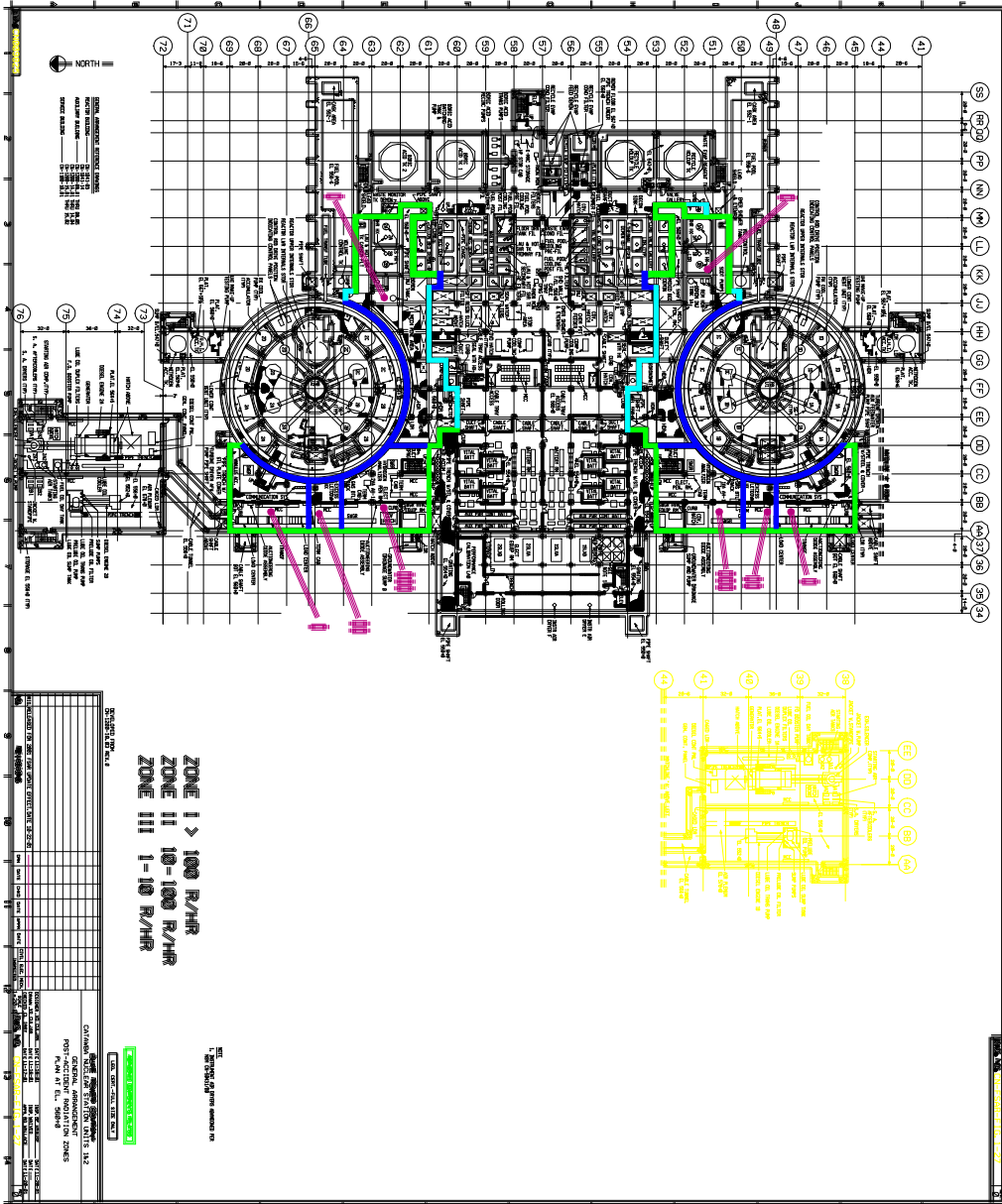


Figure 1-28. Post-accident Radiation Zones @ EL. 577+0

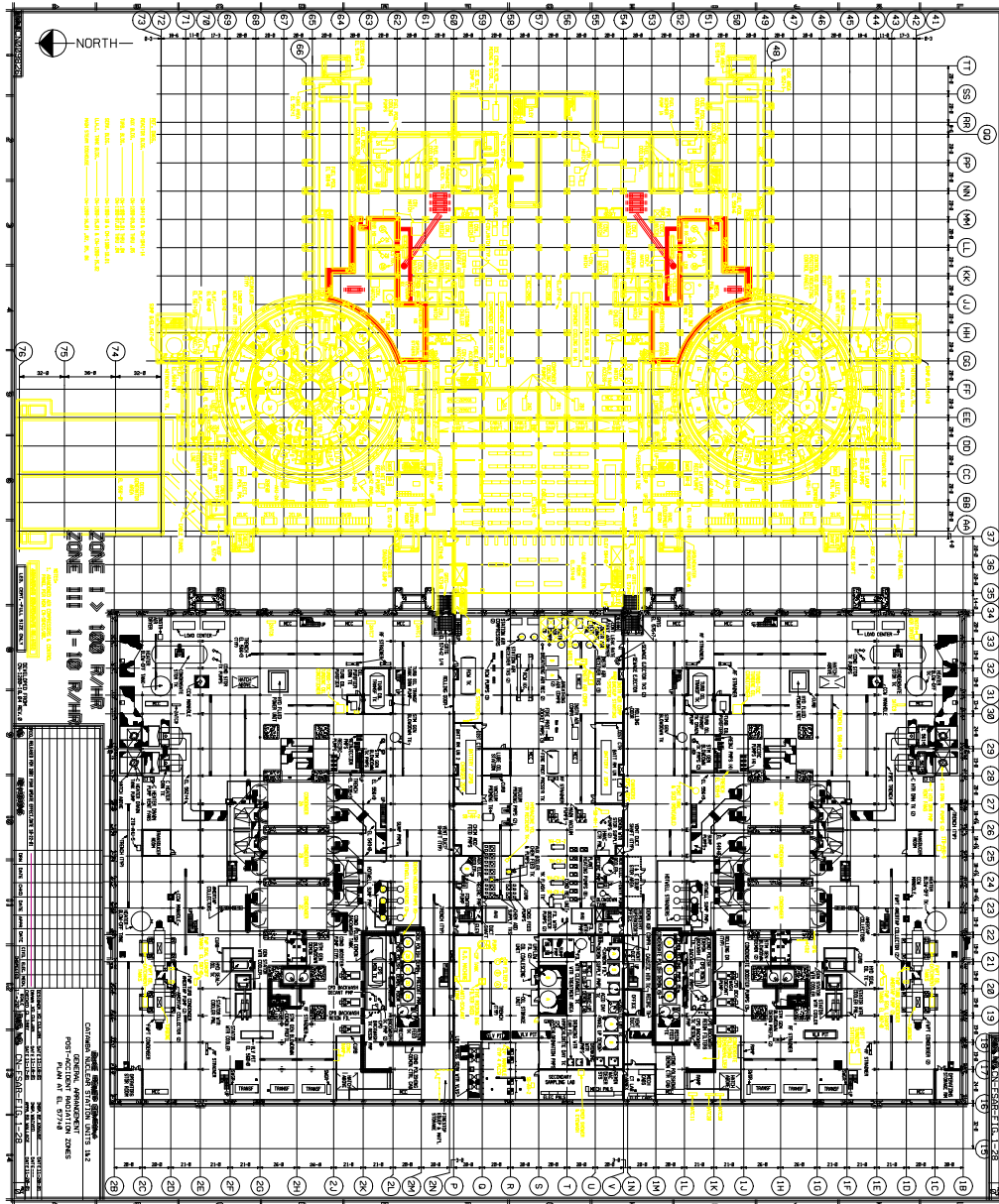


Figure 1-29. Post-accident Radiation Zones @ EL. 594+0

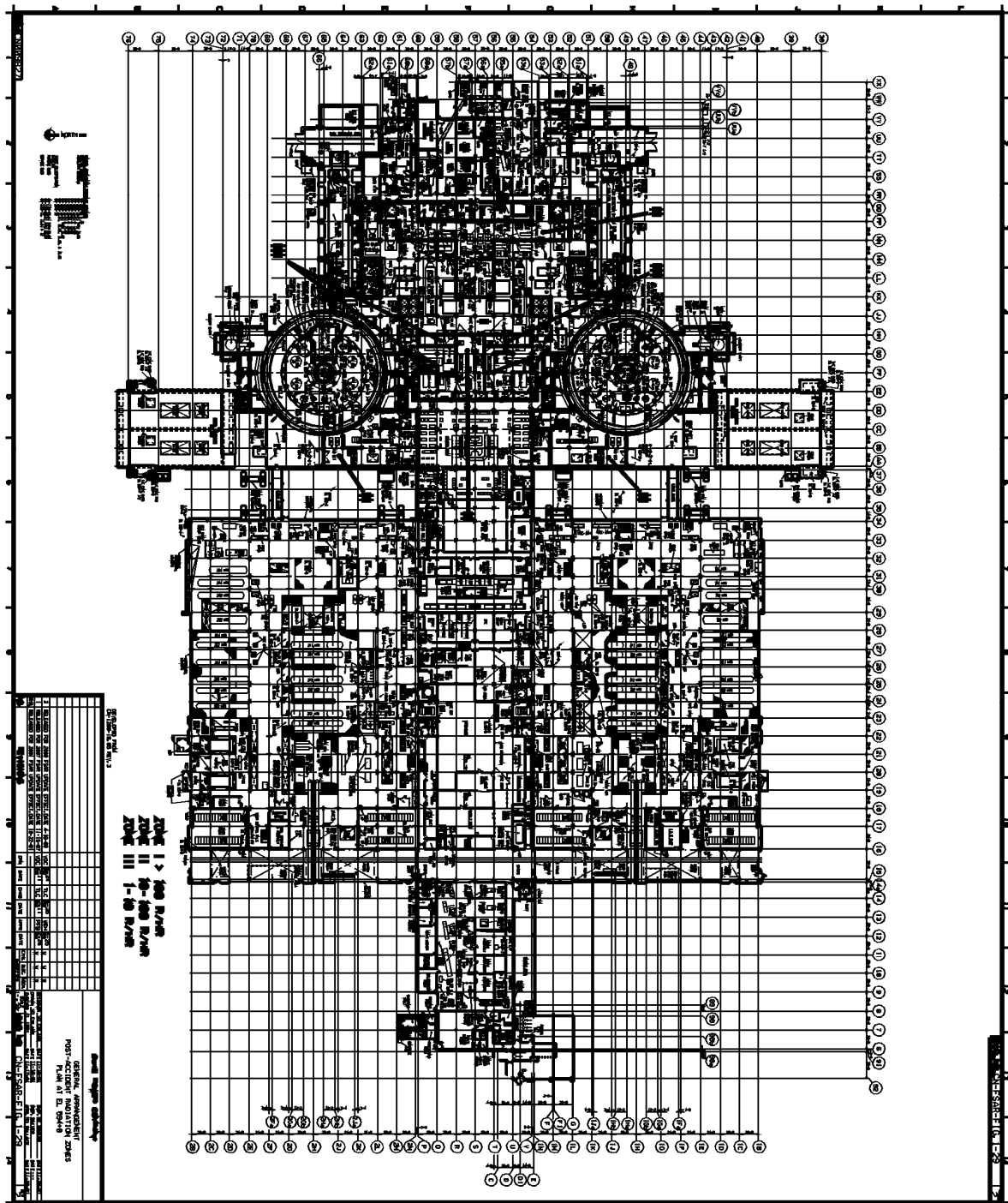


Figure 1-30. Post-accident Radiation Zones @ EL. 605+10 & 619+0

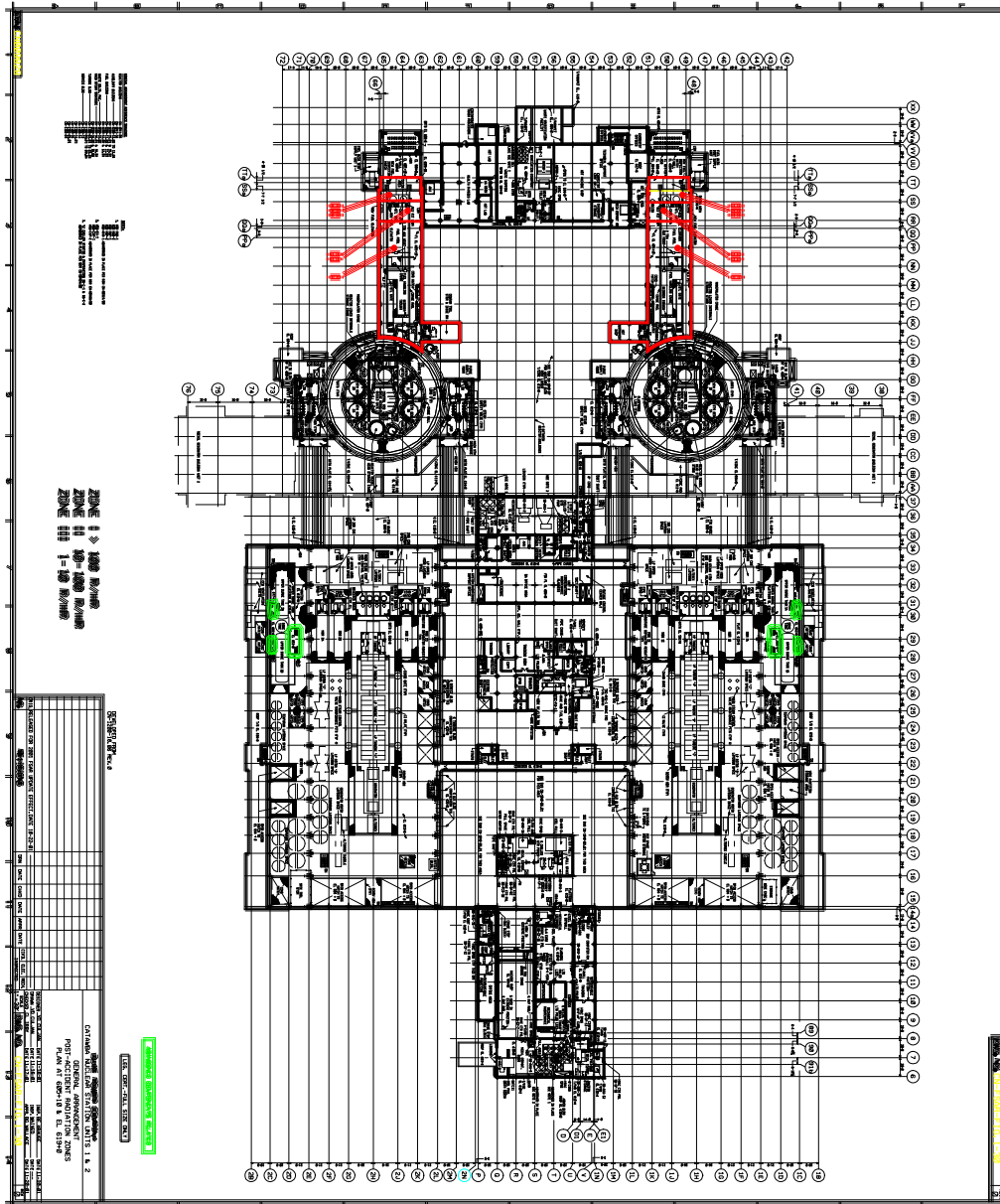
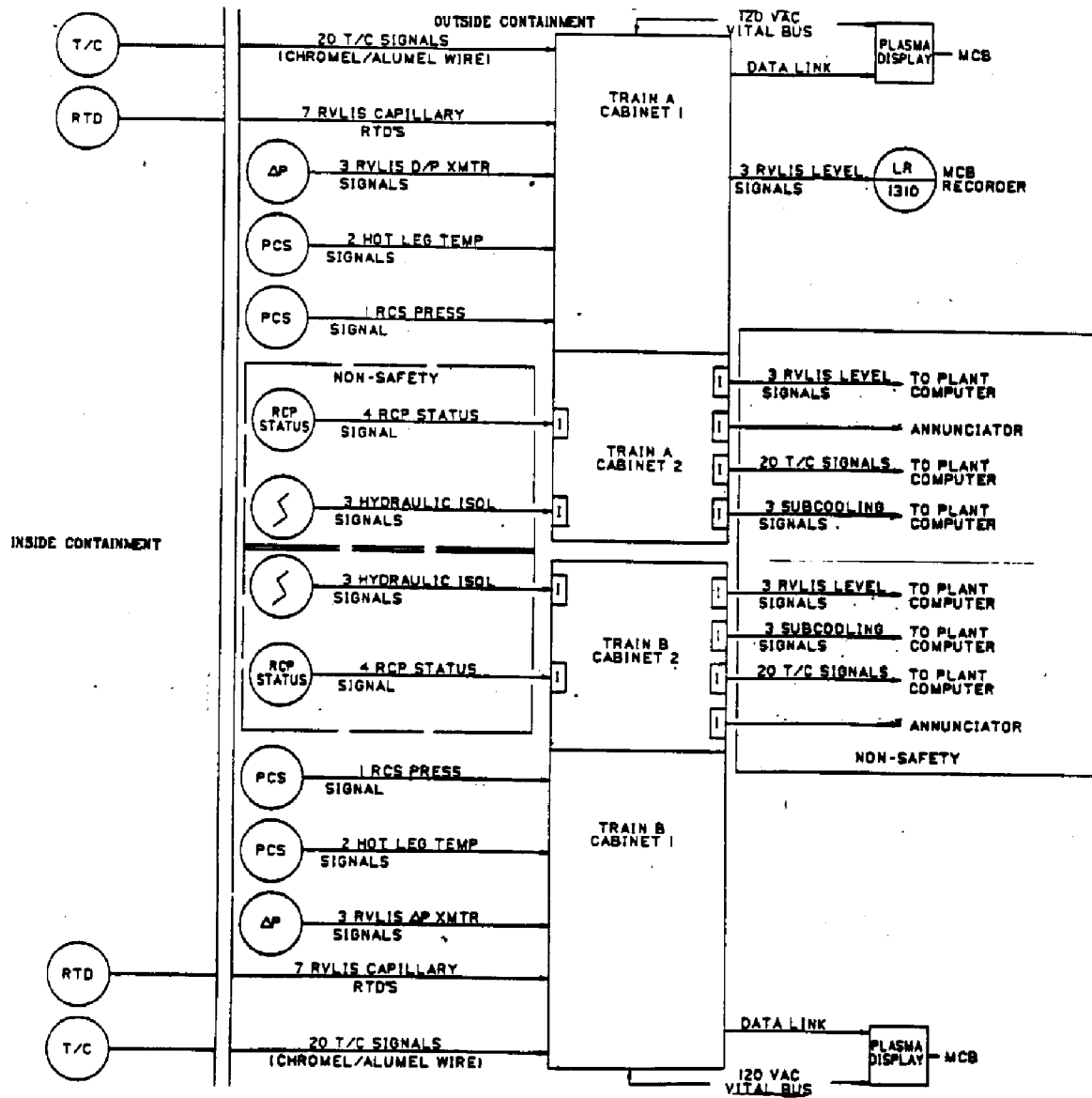


Figure 1-31. Inadequate Core Cooling Instrumentation Configuration

*HISTORICAL INFORMATION NOT REQUIRED TO BE REVISED*





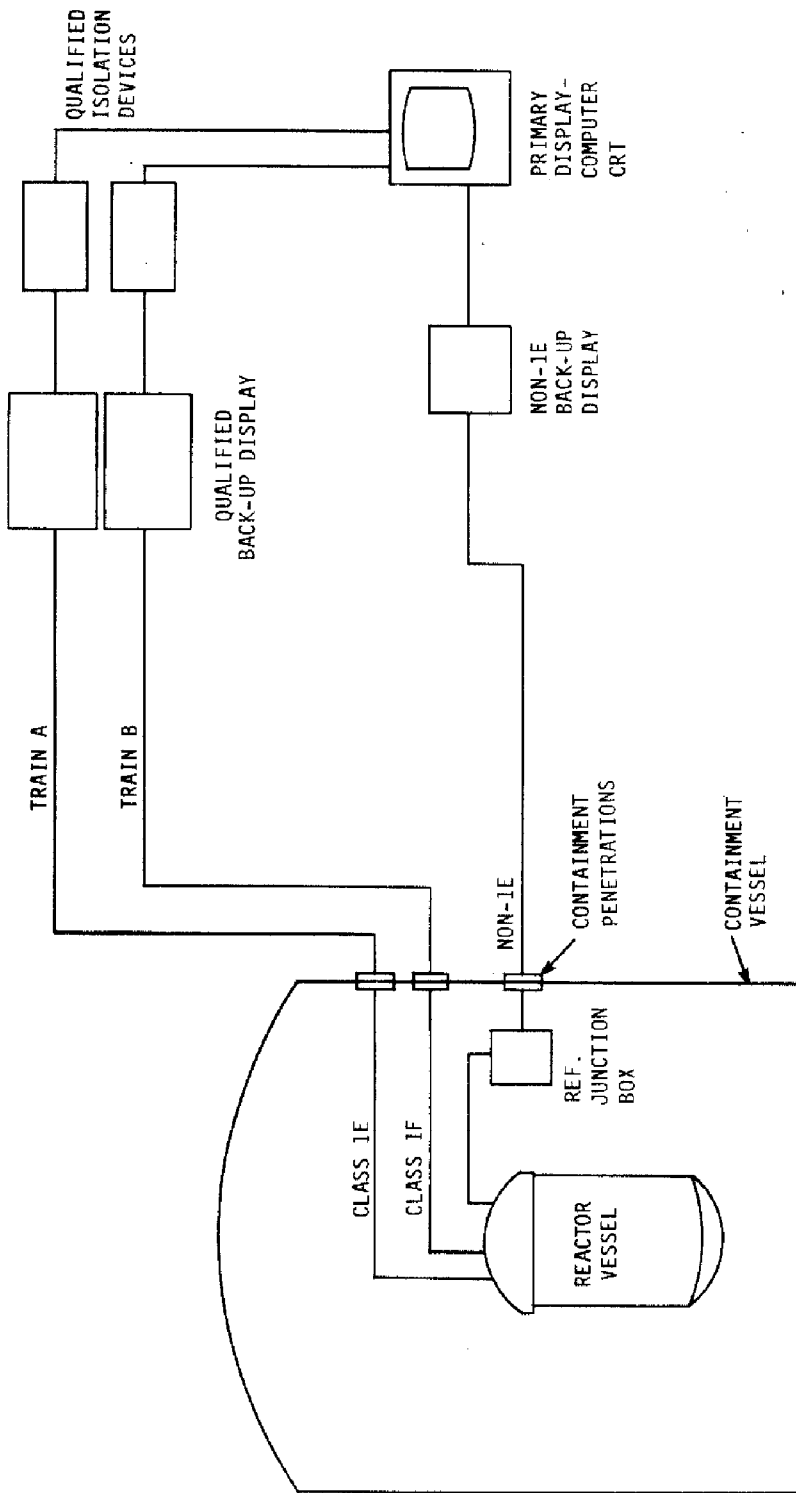
**Figure 1-32. Deleted per 2001 Update**

**Figure 1-33. Deleted per 2001 Update**

**Figure 1-34. Deleted per 2001 Update**

Figure 1-35. Incore Thermocouple System Configuration

*HISTORICAL INFORMATION NOT REQUIRED TO BE REVISED*



INCORE THERMOCOUPLE  
SYSTEM CONFIGURATION