

EQUIPMENT NUMBERING INDEX

KEY NO.	EQUIPMENT NUMBER	DESCRIPTION
01	3V111VX004	MAKE-UP FILTER (TRAIN A) (11A)
02	3V111VX004	UNIT (01) HEATING OIL (11A)
03	3V111VF001	UNIT (01) PREFILTER (11A)
04	3V111VF013	UNIT (01) HEPA FILTER (11A)
05	3V111VF001	UNIT (01) CARBON FILTER (11A)
06	3V111VF022	UNIT (01) HEPA FILTER (11A)
07	3V111VFN04	MAKE-UP FAN (TRAIN A) (11A)
08	3V111VX005	MAKE-UP FILTER (TRAIN B) (11B)
09	3V111VX005	UNIT (02) HEATING COIL (11B)
10	3V111VF002	UNIT (02) PREFILTER (11B)
11	3V111VF014	UNIT (02) HEPA FILTER (11B)
12	3V111VF002	UNIT (02) CARBON FILTER (11B)
13	3V111VF023	UNIT (02) HEPA FILTER (11B)
14	3V111VFN05	MAKE-UP FAN (TRAIN B) (11B)
15	3V111VX006	MAKE-UP FILTER (TRAIN C) (11C)
16	3V111VX006	UNIT (15) HEATING COIL (11C)
17	3V111VF003	UNIT (15) PREFILTER (11C)
18	3V111VF015	UNIT (15) HEPA FILTER (11C)
19	3V111VF003	UNIT (15) CARBON FILTER (11C)
20	3V111VF024	UNIT (15) HEPA FILTER (11C)
21	3V111VFN06	MAKE-UP FAN (TRAIN C) (11C)
22	9V111VX010	OUTSIDE AIR HEATING COIL

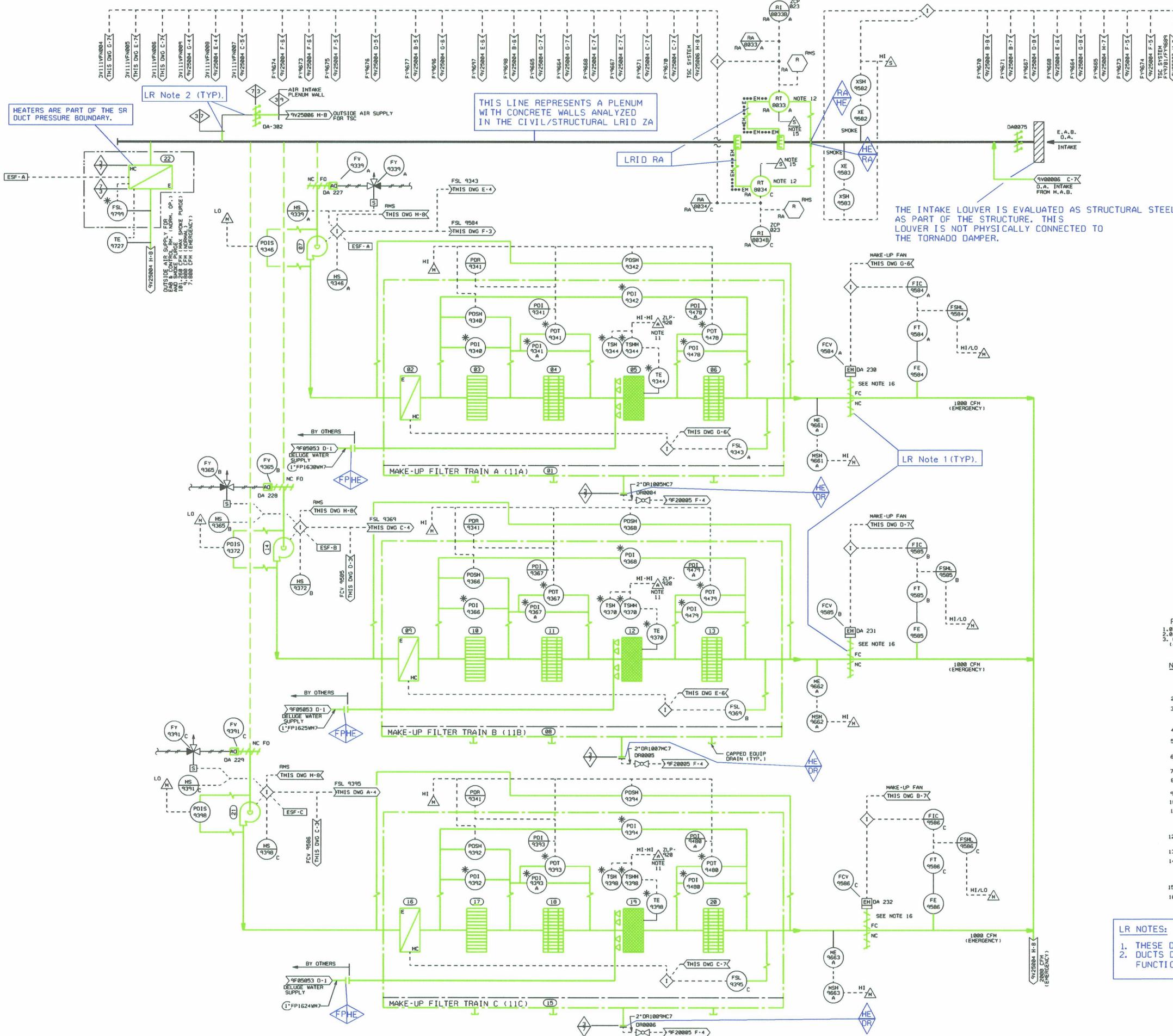
REFERENCE DRAWINGS
 1. 0-F-00001 P&ID STANDARD ABBREVIATIONS & SYMBOLS.
 2. 0-F-00002 P&ID STANDARD ABBREVIATIONS & SYMBOLS.
 3. GENERAL ATOMIC DWG NO. 0392-1001(GAS), SMT 18 (4301-00275-DW, 0301-00267-DW).

- NOTES
- ALL SYSTEMS SHOWN ARE SAFETY CLASS 3 AND SEISMIC CATEGORY 1 EXCEPT THOSE NOTED WHICH ARE NNS. ALL NNS DUCTWORK & HVAC EQUIP. SUPPORTS ARE DESIGNED TO MEET QUALITY CLASS 7 REQUIREMENTS.
 - ALL DAMPER NUMBERS SHOWN HAVE THE PREFIX 3V111V.
 - ALL INSTRUMENTS ON THIS P&ID HAVE SYSTEM DESIGNATOR "HE" EXCEPT RADIATION MONITORING SYSTEM WHICH HAS SYSTEM DESIGNATION "RA". RADIATION MONITORS ARE SUPPLIED BY GENERAL ATOMICS.
 - DELETED.
 - ALL INSTRUMENTS ON THIS P&ID HAVE SEPARATION GROUP "AT" UNLESS OTHERWISE NOTED AT 5 O'CLOCK POSITION.
 - INSTRUMENTS MARKED WITH AN (•) ARE FURNISHED BY THE CORRESPONDING EQUIPMENT VENDOR.
 - DELETED.
 - ALL AIR FLOW CFM'S SHOWN ARE AT STANDARD CONDITIONS (SCFM).
 - ALL EQUIPMENT DRAINS SHOWN ARE 2" SIZE.
 - DAMPERS DA-227, 228 & 229 ARE BUBBLE TIGHT.
 - ALL ANNUNCIATORS WILL BE DISPLAYED ON THE LOCAL FIRE CONTROL PANEL & RE-TRANSMITTED THRU THE FIRE PROTECTION DATA ACQUISITION TO A CRT DISPLAY IN THE CONTROL ROOM.
 - TAG NUMBER OF VALVES FURNISHED BY GA IS SHOWN ON REF DWG 3.
 - ALL FIRE PROTECTION PIPING IS QUALITY CLASS 7.
 - FOR CONTROL ROOM ENVELOPE HVAC SYSTEM(H001) ACTUAL AIR FLOW QUANTITIES, SEE THE AS BUILT CONDITION SHOWN ON THE FINAL AIR BALANCING REPORT 0835-01-00023-3M FOR UNIT 1.
 - MONITOR FAILURE ALARM ON PANEL ZCP-022.
 - THE FLOW CONTROL DAMPERS WILL FAIL CLOSED ON LOSS OF CONTROL SIGNAL, IF NORMAL AC ACTUATOR POWER AVAILABLE, IF NORMAL AC POWER ACTUATOR IS LOST THE DAMPER WILL FAIL AS IS.

LR NOTES:
 1. THESE DAMPERS ARE SR BARRIERS.
 2. DUCTS DO NOT HAVE A STRUCTURAL INTEGRITY FUNCTION ON ATTACHED SR COMPONENTS.

D163

LR BOUNDARY DRAWING NO.	REV.
LR-STP-HE-5V119V25003*1	00



21	REVISED PER CR 02-2066-3.	VJM
0-20	12-16-02 ISSUED FOR CONSTRUCTION.	SIGNATURES ON FILE

NO.	ISSUE DATE	REVISION	ORIG					NO.	ISSUE DATE	REVISION	ORIG					PRIORITY	CADD FILE NO.	FSUG. NO.	STI. NO.	SCALE	DWG. NO.	SMT.	REV.
			ORIG	CKR	RE	DV	SE				ORIG	CKR	RE	DV	SE								
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SOUTH TEXAS PROJECT
NUCLEAR OPERATING COMPANY

PIPING & INSTRUMENTATION DIAGRAM
 HVAC ELECTRICAL AUXILIARY BUILDING &
 CONTROL ROOM OUTSIDE AIR MAKE-UP SYSTEM