

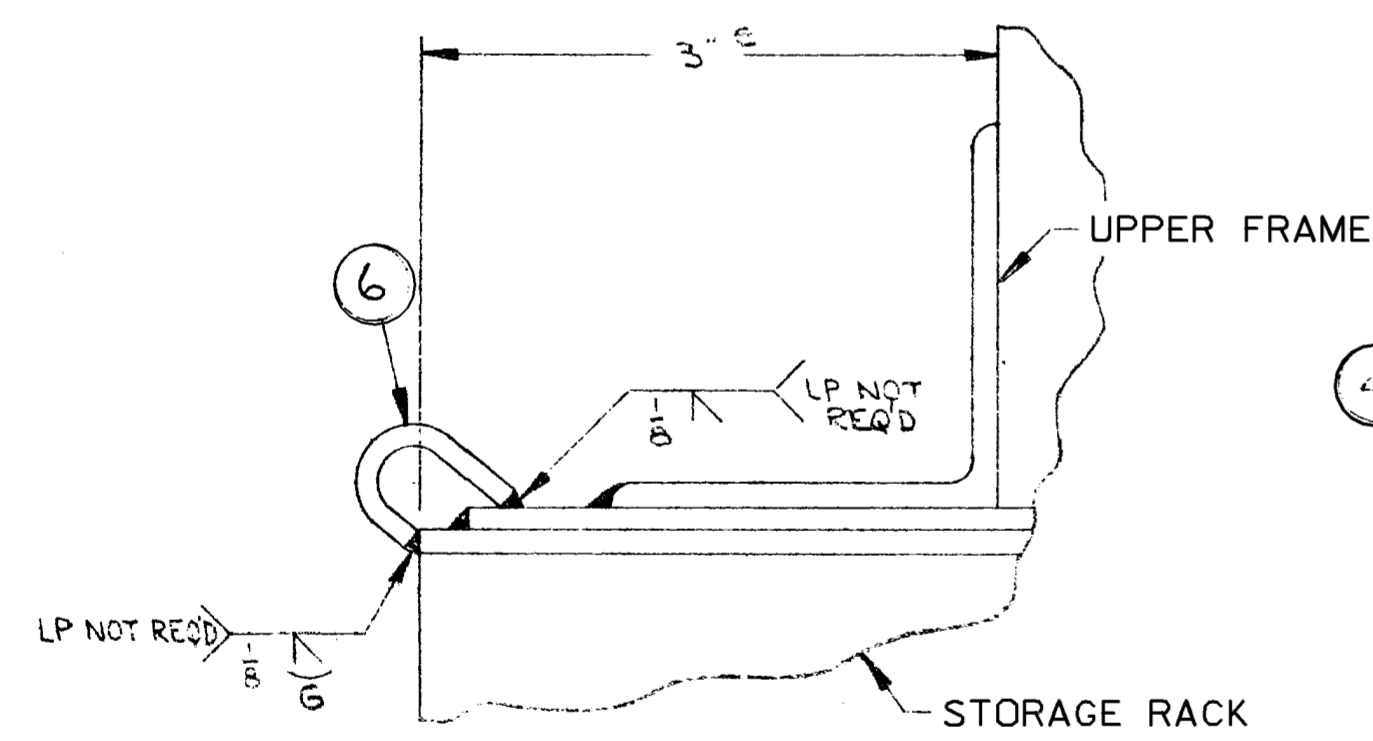
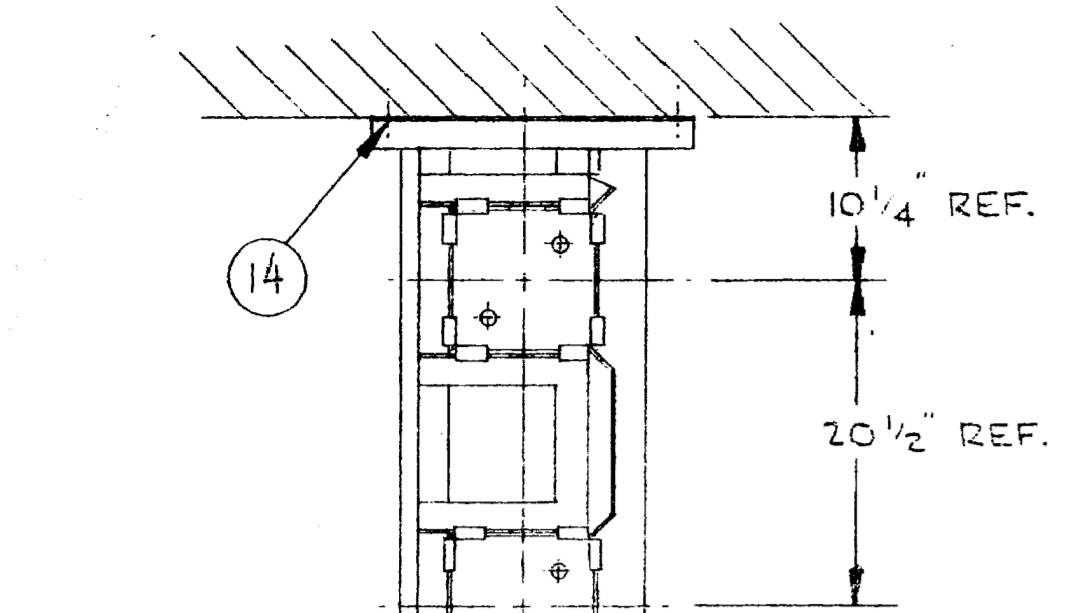
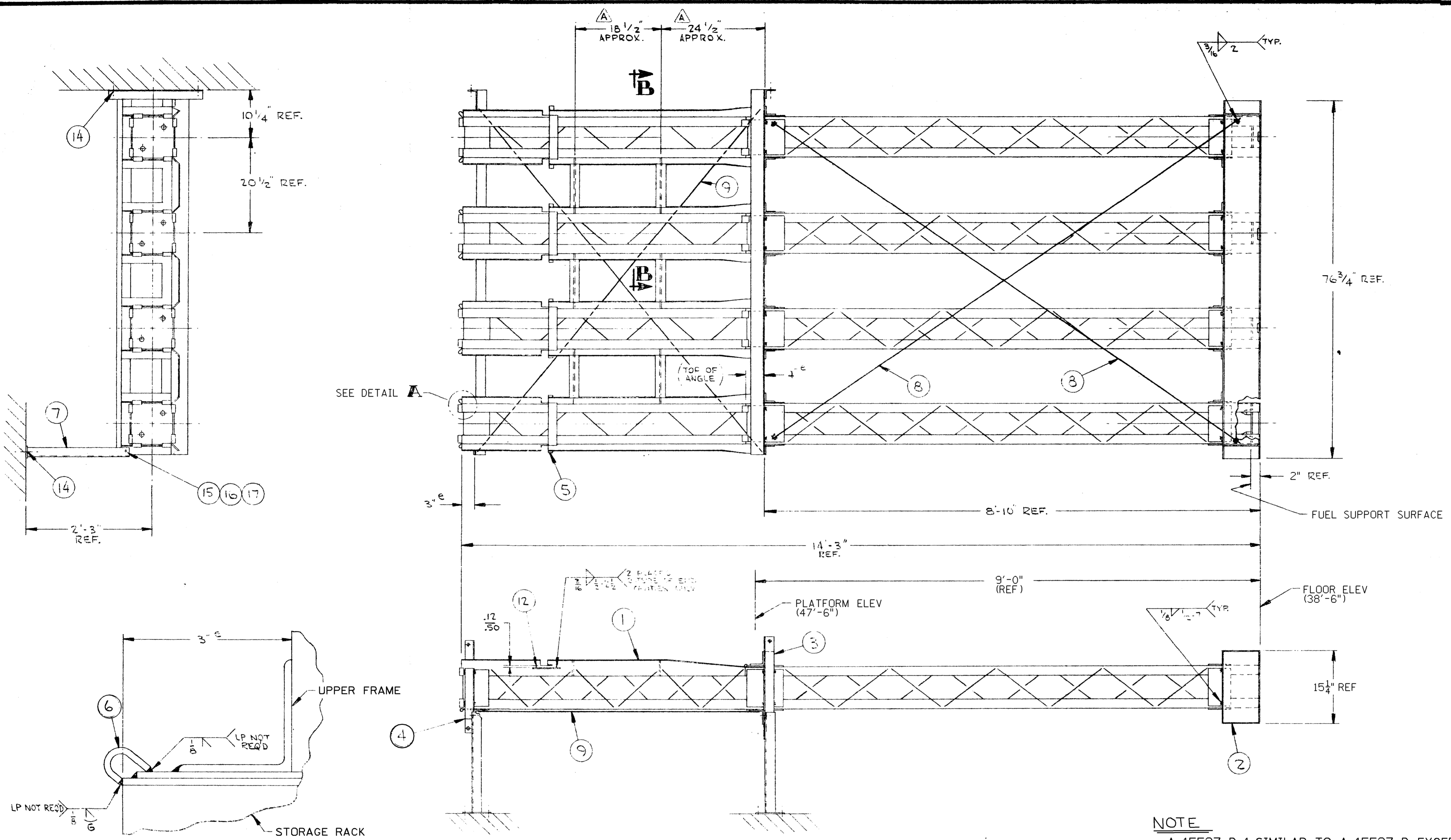
**Millstone Power Station Unit 2  
Drawings Incorporated by Reference**







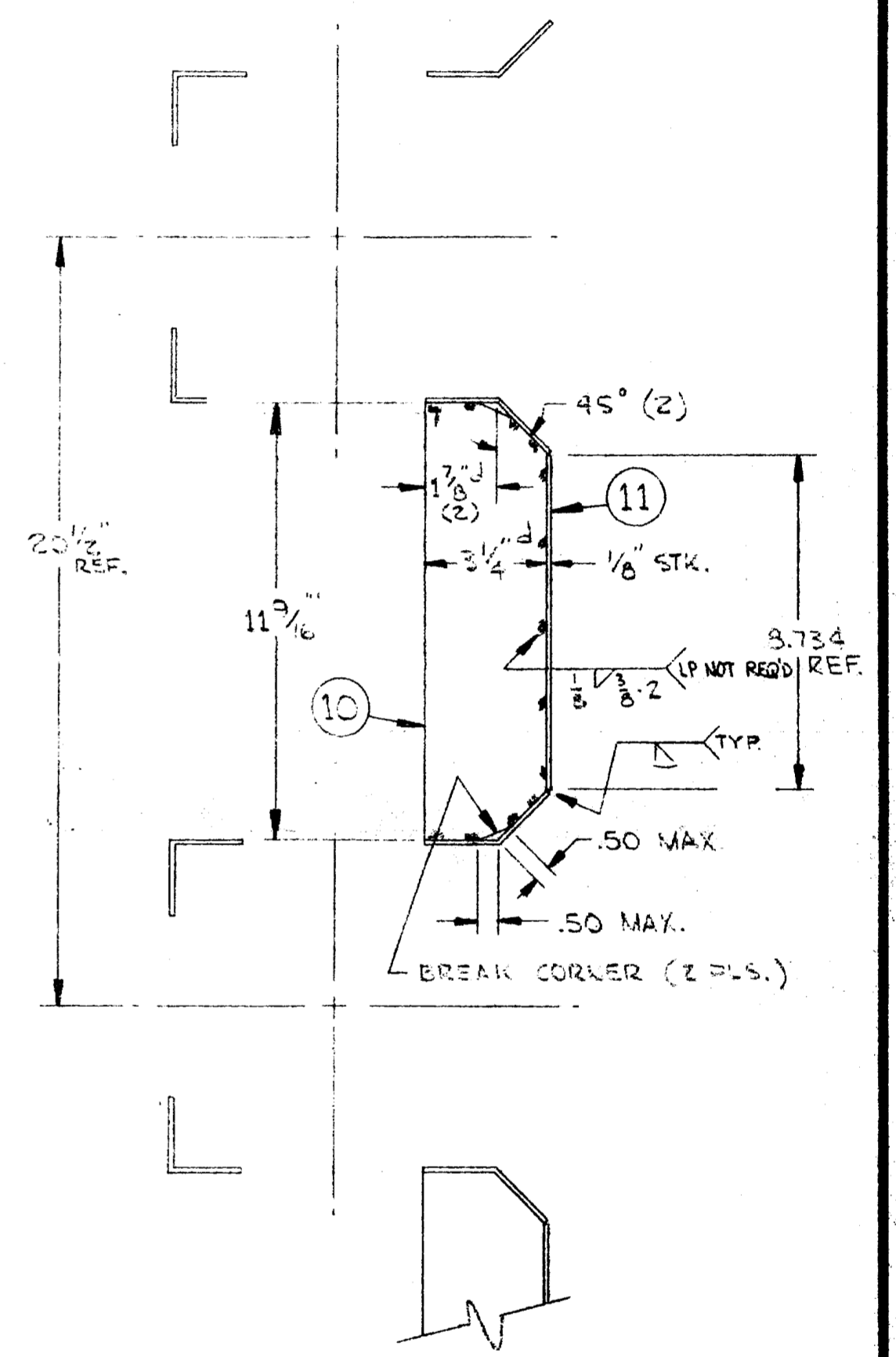
REVISIONS				
ECO NO	REV.	DESCRIPTION	DATE	APPROVAL
	A	24 1/2" WAS 19 5/16" TO TOP OF ANGLE, 18 1/2" WAS 18 5/16"	6-29-73	✓
	B	ADDED ITEM # 12; .50 MAX. ON ITEM # 10 WAS .50; #12 WAS .50	7-7-73	✓



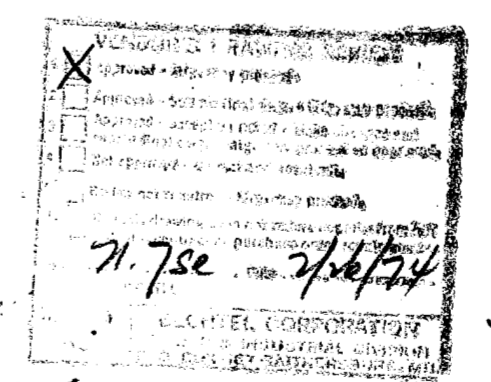
DETAIL A SCALE: FULL  
TYP. 24 PLACES

- NOTES:
1. ALL WELDS PER PaR QCP-1
  2. MECHANICAL CLEANING OF ALL WELDS PER PaR QCP-17
  3. LIQUID PENETRANT INSPECT ALL WELDS PER PaR QCP-16 EXCEPT AS NOTED.
  4. SOLVENT CLEAN PER PaR QCP-17, CLASS A

NOTE  
A-15527-D-1 SIMILAR TO A-15527-D EXCEPT OPPOSITE HANG POSITIONING OF ITEMS #3 & #4



SECTION B-B SCALE: 1/4  
FSAR FIGURE  
SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES



JAN 21 1974

CAD  
NOTE: MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

7604-C84B-20-3

A-15527-D

PG# 0203	1	09/25/01	INCORPORATE DCN DM2-00-0025-00	RJH GHI TP CAM
REV. PA. NO.	NO.	DATE	REVISIONS	BY CHK, APP, APP.

<b>THE MILLSTONE POINT COMPANY</b> MILLSTONE NUCLEAR POWER STATION UNIT NO. 2 BECHTEL-C-84B		<b>PROGRAMMED AND REMOTE SYSTEMS CORP.</b> 87 WEST HIGHWAY 96 ST. PAUL, MINNESOTA 55112 Amplifying the reach and strength of man	
MATERIAL	UNLESS OTHERWISE SPECIFIED TOLERANCES IN INCHES ARE: a = ±.005 d = ±.060 b = ±.010 e = ±.120 c = ±.030	ORIG. DATE: 1-22-73	NAME: NEW FUEL STORAGE RACK ASS'Y (4 RACK MODULE)
HEAT TREATMENT	FINISH	DR: E	NEXT ASSY: 15528
		CHK: DLN	PROJECT NO: 72414
		ENG: [Signature]	SHEET 1 OF 1
		APP: [Signature]	DWG. NO: 25203-13013 SH. 19
SCALE: 1"=1'-0" WT 750			

NON Q.A.



















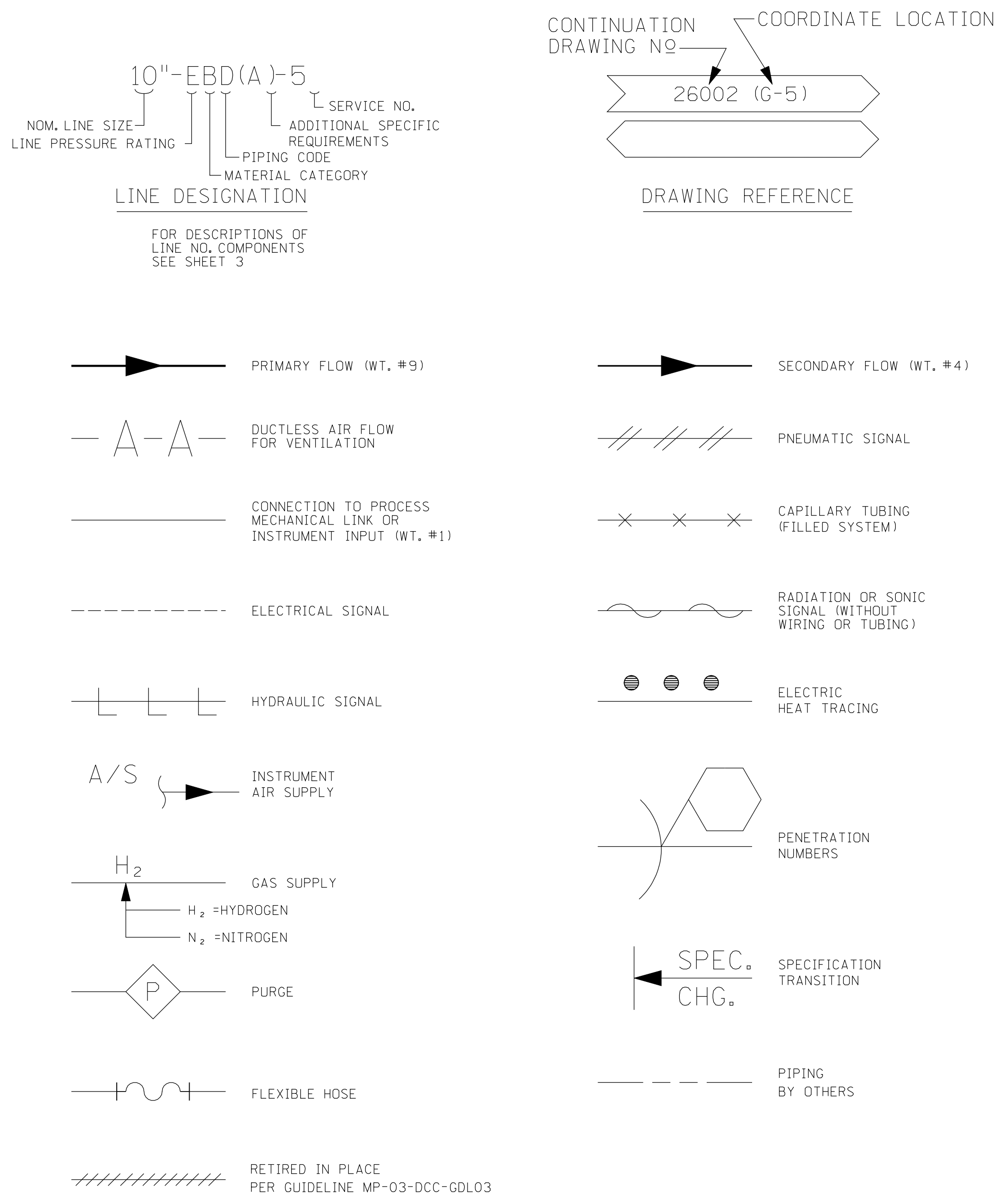




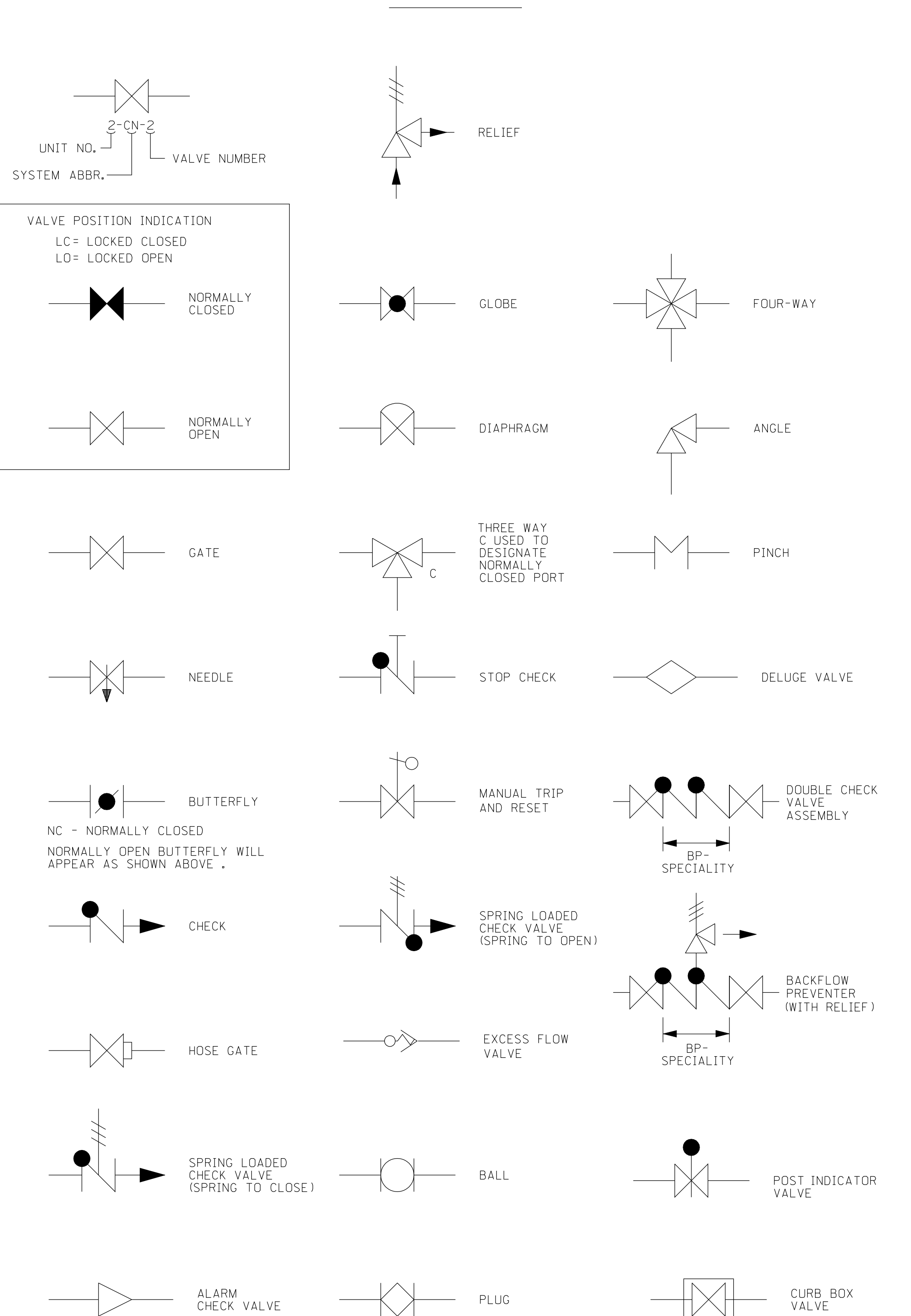




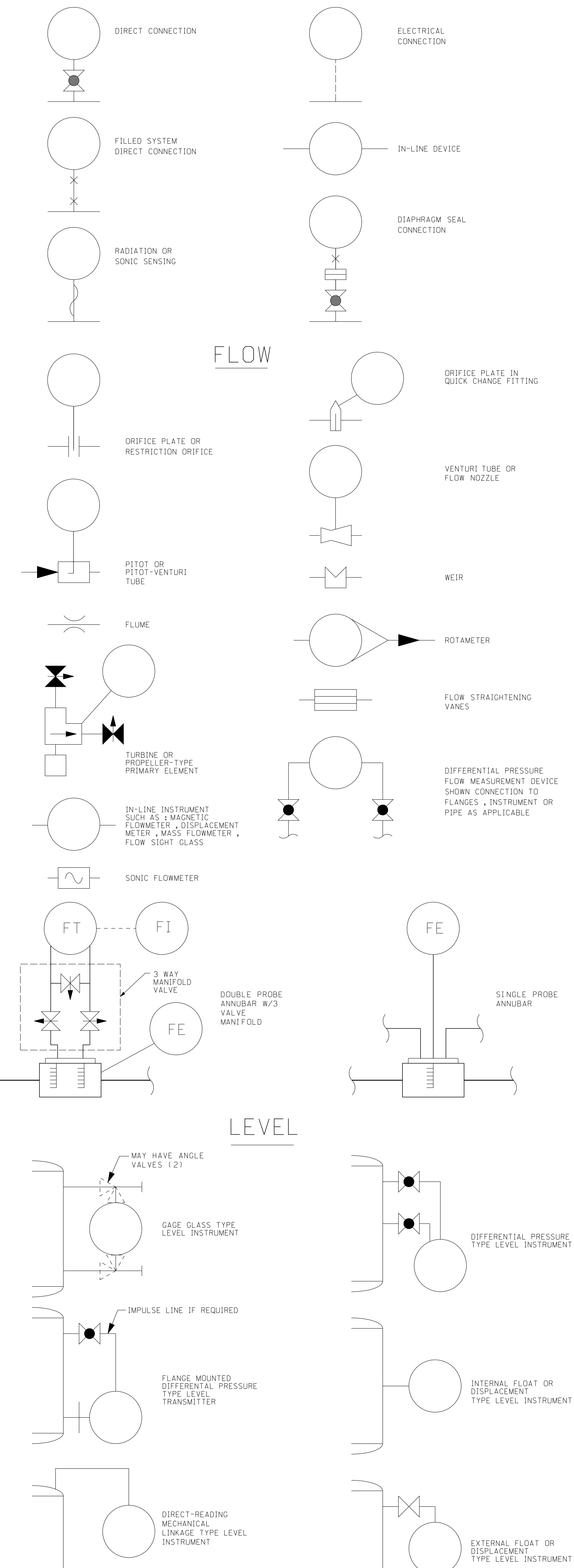
LINES



VALVES



TYPICAL CONNECTION - ANY VARIABLE



FLOW

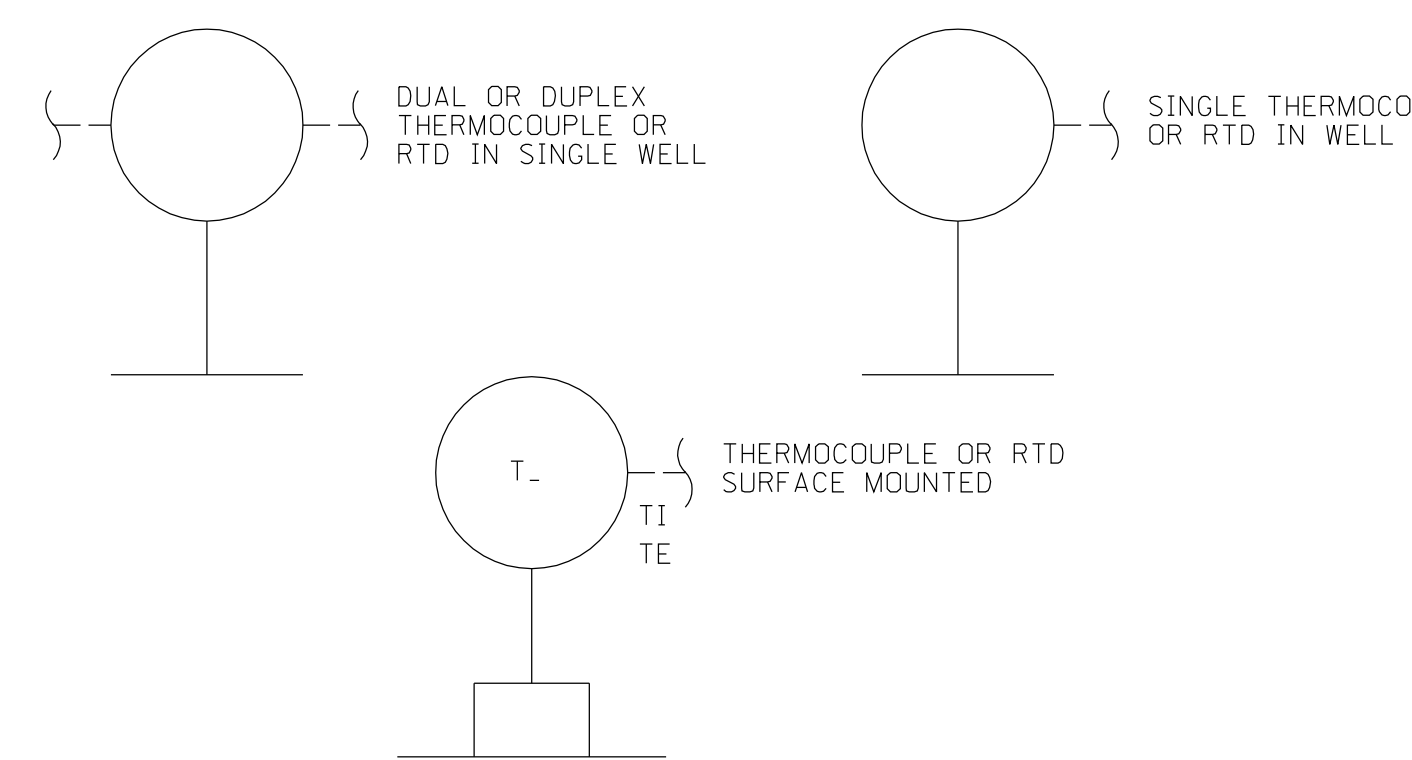
**ABBREVIATIONS** (NOTE 9)

ABSOLUTE	ABS.	HYDROGEN	H2
ALTERNATING CURRENT	A.C.	INCORPORATED	INC.
ACCUMULATOR	ACCUM.	INJECTION	INJ.
ADDITION	ADD.	INSTRUMENTATION	INST.
AUX. EXH. ACTUATION SIGNAL	A.E.A.	INSULATING FLANGE	I.F.
AIR COMPRESSOR	AIR COMP.	LENGTH	L.G.
AIR CONDITIONING	A/C	LOCAL SUMP	L.S.
ALTERNATE	ALT.	LOCATION	LOC.
APPROXIMATE	APPROX.	LOCKED CLOSED	L.C.C.
ARRANGEMENT	ARRGT.	LOCKED OPEN	L.C.O.
ASSEMBLY	ASSY.	LOW PRESSURE	L.P.
ATMOSPHERE	ATMOS.	LUBRICATION OIL	LUBE OIL
AUTOMATIC	AUTO.	MACHINE	MACH.
AUXILIARY	AUX.	MECHANICAL	MECH.
AVERAGE	AVG.	MANHOLE	M.H.
BEYOND DESIGN BASIS	B.D.B.	MANUFACTURER	MFR.
BLIND	BLD.	MAXIMUM	MAX.
BEARING	BRG.	MAIN CONTROL CENTER	M.C.C.
BREAKER	BKR.	MECHANICAL	MECH.
BUILDING	BLDG.	MINIMUM	MIN.
CONTROL ELEMENT DRIVE MECHANISM	CEDM	MISCELLANEOUS	MISC.
CONTROL ELEMENT DRIVE ASSY.	CEDA.	MOISTURE	MOIST.
CHANGE	CHG.	NORMAL	NOM.
CONTAINMENT ISOLATION	C.I.	NORMALLY CLOSED	N.C.C.
ACTUATION SIGNAL	C.I.A.S.	NORMALLY OPEN	N.O.
CHEMICAL	CHEM.	NUMBER	NO.
CHLORINATION	CHLOR.	OPERATING	OP.
CIRCULATING	CIRC.	OUTSIDE AIR	O.A.
COLUMN	COLM.	OUTSIDE DIAMETER	O.D.
COMPRESSOR	COMPR.	PANEL	PNL.
CONCRETE	CONC.	PENETRATION	PENT.
CONDENSATE	COND.S.	PRIMARY DRAIN TANK	P & ID
CONDENSER	COND.	PLATFORM	PLAT.
CONNECTION	CONN.	PRIMARY WATER	P.W.
CONTAINMENT	CONTAM.	POWER	PWR.
CONTAMINATED	CONTAM.	PRESSURE(IZED)	PRESS.
CONTINUATION	CONT.	PRIMARY	PR1.
CONTROL VALVE	C.V.	PUMP	PNP.
COORDINATE	COORD.	PURIFICATION	PURIF.
CHEMICAL & VOLUME CONTROL SYS.	CVCS	QUENCH TANK	QT.
DAMPER	DMPR.	RADIATION	RAD.
DEAERATOR	DEAER.	REACTOR COOLANT SYSTEM	RCS.
DEBRATING	DEBR.	REACTOR	REAC.
DIRECT CURRENT	D.C.	RECEIVER	RCVR.
DEMINERALIZER	DEMIN.	REDUCER	RED.
DETAIL	DET.	REINFORCE	REINF.
DIAMETER	DIA.	REFERENCE	REF.
DIESEL GENERATOR	D.G.	REHEAT	RHT.
DISCHARGE	DISCH.	RELIEF VALVE	R.V.
DISTRIBUTION	DISTR.	REQUIRED	REQD.
DOWN	DN.	RETURN	RET.
DRAIN	DR./D.	REVISION (REVISE)	REV.
DRAWING	DWG.	REACTOR BUILDING CLOSED COOLING WATER	RECBW.
EACH	EAC.	RECIRCULATION	RECIRC.
ENCLOSURE BUILDING FILTRATION	EBFAS.	RETURN AIR	R.A.
ACTUATION SIGNAL	EBFAS.	RADWASTE SYSTEM	RWS.
ELECTRO HYDRAULIC CONTROL	EHC.	SAFETY VALVE	S.V.
EJECTOR	EJECT.	SAFETY INJECTION ACTUATION SYSTEM	SIAS.
ELEVATION	EL.	SEALED CLOSED	S.C.
EMERGENCY	EMER.	SEALED OPEN	S.O.
ENGINE	ENG.	SEPARATOR	SEP.
EQUIPMENT	EQUIP.	SERVICE	SERV.
EVAPORATOR	EVAP.	SUMP RECIRCULATOR ACTUATION SIGNAL	SRAS.
EXCHANGER	EXCH.	SHEET	SH.
ENCLOSURE	ENCL.	SHIELDING	SHLD.
ELECTRIC WATER COOLER	EW.C.	STEAM GENERATOR FEED PUMP	SGFP.
ETHANOLAMINE	ETA	SOCKET WELD	S.W.
EXCITER	EXC.	SPECIFICATION	SPEC.
EXHAUST	EXH.	STAINLESS STEEL	SST.
EXPANSION JOINT	EXP. JT.	STANDARD	STD.
EXTRACTION	EXTR.	STATION	STA.
FAIL CLOSED	F.C.	STEAM	STM.
FAIL LOCKED/FAIL AS-IS	F.L.	STEEL	STL.
FAIL OPEN	F.O.	STRAINER	STRN.
FILTER	FILT.	STRUCTURE	STRUCT.
FLANGE	FLG.	SUCTION	SUCT.
FLOOR	FL.	SYSTEM	SYS.
FOOT, FEET	FT.	SAMPLING	SAMP.
FOUNDATION	FNDN.	TANK	TK.
FUTURE	FUT.	TEMPERATURE	TEMP.
GALLON	GAL.	TEST CONNECTION	TC
GENERATOR	GEN.	THERMAL MARGIN/LOW PRESSURE TRIP	TM/LPT.
GROUND	GRD.	THREADED	THRD.
HEADER	HDR.	TRANSFER, TRANSFORMER	TRANS.
HEAT	HT.	TURBINE	TURB.
HEATER	HTR.	TURBINE GENERATOR	TURB. GEN.
HEATING & VENTILATING	H & V	TYPICAL	TYP.
HEATING VENTILATION AND A/C	HVAC.	TYPICAL	TYP.
HIGH LEVEL	H.L. LEV.	TURBINE BUILDING CLOSED COOLING WATER	TBCCW.
HIGH PRESSURE	H.P.	VOLUME CONTROL TANK	VCT.
HIGH TEMPERATURE	H.T. TEMP.	VENTILATION	VENT.
HORIZONTAL	HOR.	WATER	WTR.
HOT WATER	H.W.	VENT	V.
HOSE STATION	HS.		
HYDRAULIC	HYD.		

NOTES

- DELETED
- FOR PIPING & MATERIAL SPEC. SHEET SEE MS-1 AND ID-3.
- FOR PROJECT MASTER VALUE IDENTIFICATION SEE MS-7.
- FOR EQUIPMENT NUMBER SEE EQUIPMENT LIST MS-50.
- FOR INSTRUMENT INDEX SEE MS-60.
- DELETED
- FOR ALL DRAIN LINE GLOBE VALVES SHOWN, GATE VALVES MAY BE USED REGARDLESS OF VALVE SYMBOL ON THE P & ID.
- FOR LINE VENT AND DRAIN DETAILS SEE 7604-MS-6. P&ID DWG'S ONLY. REFLECT PIPE CAPS THAT WERE INSTALLED AT THE TIME OF SYSTEM WALKDOWN. DUE TO SYSTEM MAINTENANCE AND OPERATION THESE CAPS MAY NO LONGER BE INSTALLED. OPERATIONS DEPARTMENT MAY REPLACE MISSING PIPE CAPS USING THE GUIDANCE PROVIDED PER ENGINEERING RECORD CORRESPONDENCE EP-97-011 & EP-97-011 REV.1. DESIGN ENGINEERING WILL UPDATE P & ID DWG'S TO REFLECT PIPE CAPS INSTALLED PER EP-97-011 & EP-97-011 REV.1 UPON NOTIFICATION BY OPERATIONS.
- FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
- P & ID DWG'S REFLECT LOCKED VALVES IN ACCORDANCE WITH OPERATIONS DEPARTMENT INSTRUCTIONS 2-OPS-132. LOCKED VALVES P & ID DWG'S REFLECT VALVES IN THE POSITION REQUIRED FOR 100% SYSTEM OPERATION. DETERMINED BY VALVE LINE-UPS, SYSTEM OPERATING PROCEDURES, TECH. SPEC. AND DESIGN BASIS. P & ID DWG'S ARE NOT TO BE USED TO MAINTAIN OPERATIONAL CONFIGURATION CONTROL OF VALVES. SYSTEM OPERATING PROCEDURES SHALL BE USED WHEN DETERMINING PROPER VALVE POSITIONS. P & ID DWG'S WILL BE UPDATED TO REFLECT CHANGES IN VALVE POSITIONS AS REQUIRED BY CHANGES TO SYSTEM OPERATING PROCEDURES, VALVE LINE-UPS, TECH. SPECS, DESIGN BASIS AND DOT 2-OPS-132.
- IT SHALL BE NOTED THAT NOT ALL VALVES DOWNSTREAM OF ROOT STOP VALVES HAVE VALVE ID NO'S. VALVES DOWNSTREAM OF ROOT STOP VALVES THAT HAVE BEEN ASSIGNED VALVE ID NO'S HAVE BEEN DONE SO AT THE REQUEST OF THE OPERATIONS DEPT. PER OPERATIONS DEPARTMENT. DESIGN ENGINEERING WILL IDENTIFY VALVES DOWNSTREAM OF ROOT STOP VALVES ON A CASE BASIS WHERE THERE IS A NEED/JUSTIFICATION OR AS REQUESTED BY OPERATIONS.
- NOT ALL TAKE-OFF LINES ON P&ID'S ARE SHOWN IN THE SEQUENCE OF FLOW, AS THEY APPEAR IN THE FIELD. TAKE-OFFS ARE SHOWN DIAGRAMMATICALLY, WHEN SHOWING THEM IN SEQUENCE OF FLOW WILL RESULT IN A CONFUSING REPRESENTATION. TAKE-OFF LINES ARE NOT SHOWN DIAGRAMMATICALLY WHEN THERE IS EQUIPMENT BETWEEN THE TAKE-OFF LINE AND THE MAIN LINE, WHICH COULD LEAD TO IMPROPER ISOLATION OF EQUIPMENT. CHANGING P&ID'S TO SHOW TAKE-OFF LINES IN SEQUENCE OF FLOW WILL BE DONE AT THE DISCRETION OF THE DESIGN SUPERVISOR, ON A CASE BY CASE BASIS WITH REGARD TO THE IMPACT OF THE ASSOCIATED PIPING REPRESENTED ON THE P&ID.

TEMPERATURE

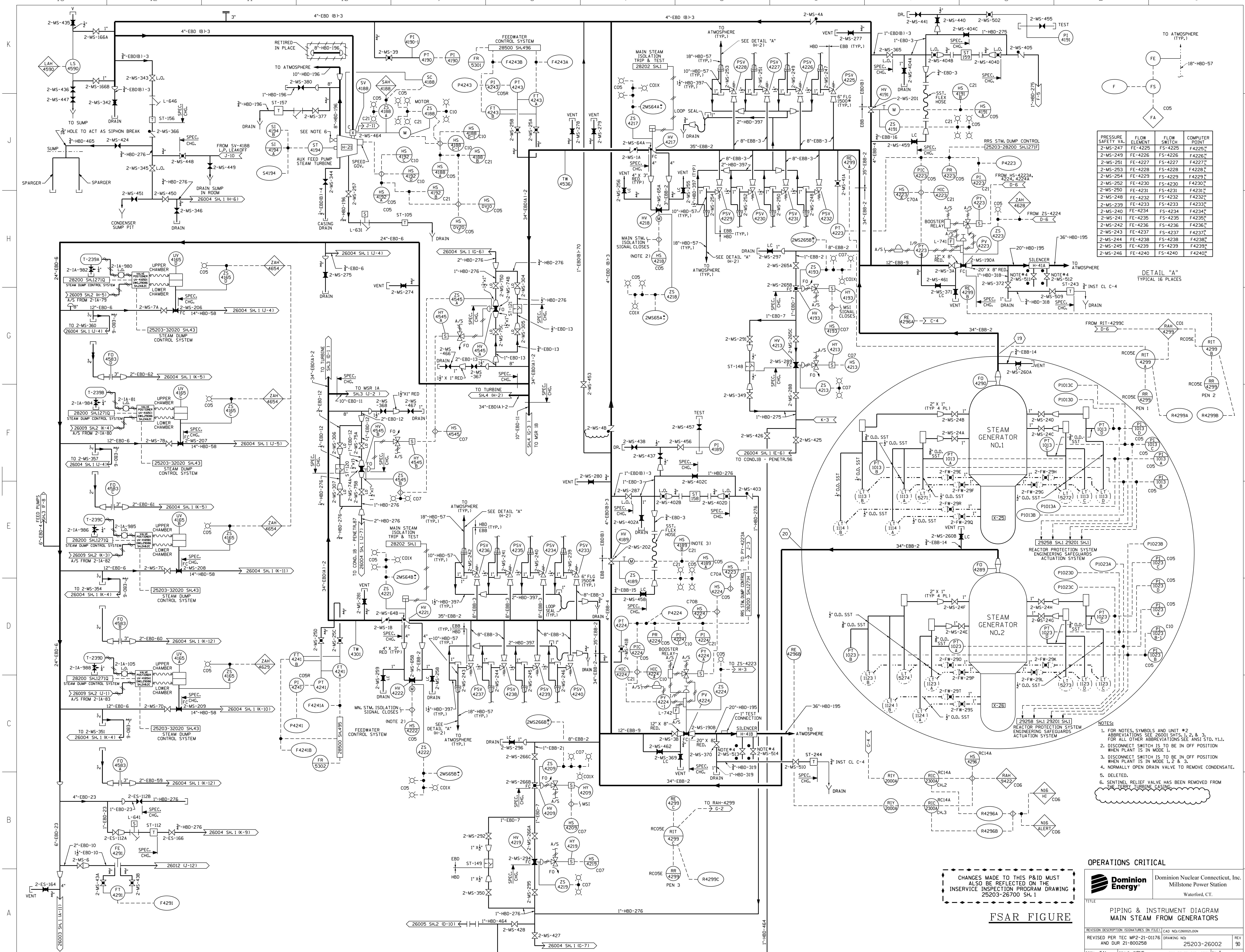


FSAR FIGURE

**REFERENCE DRAWINGS**

25203-26001	SH.1	LEGEND
25203-26001	SH.2	LEGEND
25203-26001	SH.3	LEGEND
25203-26002	SH.1	MAIN STEAM FROM GENERATORS
25203-26002	SH.2	MAIN STEAM GENERATOR BLOWDOWN SYSTEM
25203-26002	SH.3	MAIN STEAM TURBINE & REHEATER NO. 1A
25203-26002	SH.4	MAIN STEAM TURBINE & REHEATER NO. 1B
25203-26002	SH.5	STEAM GENERATOR WET LAYOUT RECIRCULATION SYSTEM
25203-26003	SH.1	L.P. TURBINE 1A & MOISTURE SEP. 1A REHEATER DRAINS & VENTS
25203-26003	SH.2	L.P. TURBINE 1B & MOISTURE SEP. 1B REHEATER DRAINS & VENTS
25203-26004	SH.1	HEATER DRAINS & VENTS SYSTEM
25203-26004	SH.2	HEATER DRAINS & VENTS SYSTEM
25203-26004	SH.3	HEATER DRAINS & VENTS SYSTEM
25203-26005	SH.1	CONDENSATE SYSTEM
25203-26005	SH.2	FEED SYSTEM
25203-26005	SH.3	CONDENSATE STORAGE & AUX. FEED
25203-26005	SH.4	CONDENSATE SYSTEM
25203-26006	---	TURBINE GLAND SEAL & DRAIN SYSTEM
25203-26007	SH.1	TBCCW SYSTEM
25203-26007	SH.2	TBCCW SYSTEM
25203-26007	SH.3	TBCCW SYSTEM
25203-26008	SH.1	CIRCULATING WATER
25203-26008	SH.2	SERVICE WATER
25203-26008	SH.3	SERVICE WATER TO VITAL AC SWITCHGEAR COOLING COIL & AC CHILLER
25203-26008	SH.4	SCREENWASH AND SODIUM HYPOCHLORITE
25203-26009	SH.1	INSTRUMENT AIR SYSTEM COMPRESSORS F-3E & F-3F
25203-26009	SH.2	INSTRUMENT AIR SYSTEM
25203-26009	SH.3	INSTRUMENT AIR SYSTEM
25203-26009	SH.4	INSTRUMENT AIR SYSTEM
25203-26009	SH.5	INSTRUMENT AIR SYSTEM
25203-26009	SH.6	INSTRUMENT AIR SYSTEM
25203-26009	SH.7	INSTRUMENT AIR SYSTEM
25203-26009	SH.8	INSTRUMENT & STATION AIR SYSTEM
25203-26009	SH.9	INSTRUMENT AIR COMPRESSOR F-3D
25203-26009	SH.10	STATION AIR - INTAKE STRUCTURE & CONTAINMENT
25203-26010	SH.1	STATION AIR - TURBINE BLDG.
25203-26010	SH.1	FUEL OIL SYSTEM
25203-26011	SH.1	FIRE PROTECTION
25203-26011	SH.2	DOMESTIC WATER
25203-26011	SH.3	HOSE STATION DETAILS & LEGEND
25203-26011	SH.4	HALON AND EXCITER CO2 FIRE PROTECTION
25203-26011	SH.5	FIRE PROTECTION SYSTEM PIPING DETAILS
25203-26011	SH.6	DOMESTIC WATER SYSTEM
25203-26011	SH.7	FIRE PROTECTION AUTO SPRINKLER VALVE DETS.
25203-26012	---	COND. AIR REMOVAL WATER BOX PRIMING & TURBINE BLDG. SUMPS
25203-26012	---	TURBINE BLDG. WATER SYSTEM
25203-26012	---	REACTOR COOLANT SYSTEM
25203-26012	SH.2	REACTOR COOLANT SYSTEM
25203-26012	SH.3	REACTOR COOLANT PUMP
25203-26012	SH.1	L.P. SAFETY INJECTION SYSTEM
25203-26012	SH.2	HIGH PRESSURE SAFETY INJECTION PUMPS
25203-26012	SH.3	SAFETY INJECTION TANKS
25203-26012	SH.1	CHARGING SYSTEM
25203-26012	SH.2	DEBRATING & PURIFICATION SYSTEM
25203-26012	SH.3	BORIC ACID SYSTEM
25203-26012	SH.2	EMERGENCY DIESEL GENERATOR H-7A LUBE OIL, AIR & JACKET WATER COOLING
25203-26012	SH.3	EMERGENCY DIESEL GENERATOR H-7B LUBE OIL, AIR & JACKET WATER COOLING
25203-26012	SH.4	DIESEL GENERATOR H-7A & H-7B STARTING AIR
25203-26012	SH.5	DIESEL GENERATOR STARTING AIR
25203-26020	SH.1	CLEAN LIQUID RADWASTE SYSTEM
25203-26020	SH.2	CLEAN LIQUID RADWASTE SYSTEM
25203-26020	SH.3	CLEAN LIQUID RADWASTE SYSTEM
25203-26020	SH.4	CLEAN LIQUID RADWASTE SYSTEM
25203-26020	SH.5	CLEAN LIQUID RADWASTE SYSTEM
25203-26021	SH.1	AGERATED LIQUID RADWASTE SYSTEM
25203-26021	SH.2	GASEOUS RADWASTE SYSTEM
25203-26021	SH.3	SPENT RESIN RADWASTE SYSTEM
25203-26022	SH.1	R.B.C.C.W. SYSTEM R.B.C.C.W. PUMPS & HEAT EXCHANGERS
25203-26022	SH.2	R.B.C.C.W. SYSTEM SPENT FUEL POOL AND SHUT-DOWN HEAT EXCHANGERS
25203-26022	SH.3	R.B.C.C.W. SYSTEM CNMT, SPRAY PUMP AND S.I. PUMP SEAL COOLERS
25203-26022	SH.4	R.B.C.C.W. SYSTEM RCP THERMAL BARRIERS AND LO COOLERS
25203-26022	SH.5	R.B.C.C.W. SYSTEM CNMT, AIR RECIRC. AND COOLANT UNIT
25203-26022	SH.6	R.B.C.C.W. SYSTEM REACTOR VESSEL SUPPORT CONCRETE COOLING COILS
25203-26023	SH.1	SPENT FUEL POOL COOLING & CLEANUP SYSTEM
25203-26023	SH.2	CONTAINMENT BLDG. DRAINS
25203-26023	SH.3	AUXILIARY BUILDING DRAINS
25203-26023	SH.4	AUXILIARY YARD SUMP DRAIN
25203-26023	SH.1	SAMPLING SYSTEM
25203-26023	SH.2	SAMPLING SYSTEM
25203-26023	SH.3	SAMPLING SYSTEM
25203-26023	SH.4	SAMPLING SYSTEM
25203-26023	SH.1	AUX. STEAM & CONDENSATE
25203-26023	SH.2	AUX. STEAM & CONDENSATE
25203-26023	SH.3	AUX. STEAM & CONDENSATE
25203-26023	SH.4	AUX. STEAM HEATER INDEX
25203-26023	SH.5	AUX. STEAM & CONDENSATE
25203-26027	SH.1	HVAC SYSTEM TURB. BLDG. INTAKE STR. WHSE. & DIESEL GEN. ROOMS
25203-26027	SH.2	TURB. BLDG. INTAKE STR. WHSE. & D.G. RMS. CHILLED WATER SYSTEM
25203-26027	SH.3	CONTROL ROOM AIR CONDITIONING SYSTEM
25203-26027	SH.4	HEALTH PHYSICS FACILITY HEATING & VENTILATION SYSTEM
25203-26028	SH.1	CONTAINMENT AND ENCLOSURE BUILDING VENTILATION
25203-26028	SH.2	CONTAINMENT AND ENCLOSURE BUILDING VENTILATION
25203-26028	SH.3	CONTAINMENT AND ENCLOSURE BUILDING VENTILATION
25203-26028	SH.4	ENGINEERED SAFETY FEATURE ROOM AIR RECIRCULATION UNIT
25203-26028	SH.5	CONTAINMENT AND ENCLOSURE BUILDING VENTILATION
25203-26028	SH.6	STACK HOUSE VENTILATION WIDE RANGE GAS MONITORING
25203-26029	SH.1	DIAGRAM AUX.BLDG. VENTILATION SYSTEM
25203-26029	SH.2	DIAGRAM AUX.BLDG. VENTILATION SYSTEM
25203-26029	SH.3	DIAGRAM AUX.BLDG. VENTILATION SYSTEM
25203-26029	SH.4	BLDG 110 & 105 HVAC SH.1
25203-26029	SH.5	BLDG 110 & 105 HVAC SH. 2
25203-26029	SH.6	BLDG 110 & 105 HVAC SH. 3
25203-26029	SH.7	CHEMISTRY LABORATORY HVAC
25203-26030	SH.1	WATER TREATMENT SYSTEM
25203-26031	SH.1	MISC. CHEMICAL FEED SYSTEM
25203-26031	SH.2	MISC. CHEMICAL FEED SYSTEM
25203-26031	SH.3	MISC. CHEMICAL FEED SYSTEM
25203-26033	---	N2 SYSTEM
25203-26035	---	H2 & CO2 SYSTEMS
25203-26074	SH.1	POST ACCIDENT SAMPLING SYSTEM (P.A.S.S.)
25203-26074	SH.2	POST ACCIDENT SAMPLING SYSTEM (MODULES)
25203-26075	---	MISC. SYSTEM CNMT, TENDON GREASING SYSTEM
25203-26076	---	IFSI HELIUM, NITROGEN & ARGON GAS SYSTEM AND VACUUM DRYING SYSTEM
25203-26201	SH.1	ELECTRO HYDRAULIC TURBINE CONTROL SYSTEM
25203-26201	SH.2	ELECTRO HYDRAULIC TURBINE CONTROL SYSTEM
25203-26202	---	SHAFT HYDROGEN SEAL OIL SYSTEM





PRESSURE SAFETY VALVE ELEMENT	FLOW ELEMENT	FLOW SWITCH	COMPUTER POINT
2-MS-247	FE-4225	FS-4225	F4225 <sup>H</sup>
2-MS-249	FE-4226	FS-4226	F4226 <sup>H</sup>
2-MS-251	FE-4227	FS-4227	F4227 <sup>H</sup>
2-MS-253	FE-4228	FS-4228	F4228 <sup>H</sup>
2-MS-254	FE-4229	FS-4229	F4229 <sup>H</sup>
2-MS-252	FE-4230	FS-4230	F4230 <sup>H</sup>
2-MS-248	FE-4232	FS-4232	F4232 <sup>H</sup>
2-MS-240	FE-4234	FS-4234	F4234 <sup>H</sup>
2-MS-241	FE-4235	FS-4235	F4235 <sup>H</sup>
2-MS-242	FE-4236	FS-4236	F4236 <sup>H</sup>
2-MS-243	FE-4237	FS-4237	F4237 <sup>H</sup>
2-MS-244	FE-4238	FS-4238	F4238 <sup>H</sup>
2-MS-245	FE-4239	FS-4239	F4239 <sup>H</sup>
2-MS-246	FE-4240	FS-4240	F4240 <sup>H</sup>

DETAIL "A"  
TYPICAL 16 PLACES

- NOTES:
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STD. Y11.
  - DISCONNECT SWITCH IS TO BE IN OFF POSITION WHEN PLANT IS IN MODE 1, 2 & 3.
  - DISCONNECT SWITCH IS TO BE IN OFF POSITION WHEN PLANT IS IN MODE 1, 2 & 3.
  - NORMALLY OPEN DRAIN VALVE TO REMOVE CONDENSATE.
  - DELETED.
  - SENTINEL RELIEF VALVE HAS BEEN REMOVED FROM THE TURBINE CASING.

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH.1

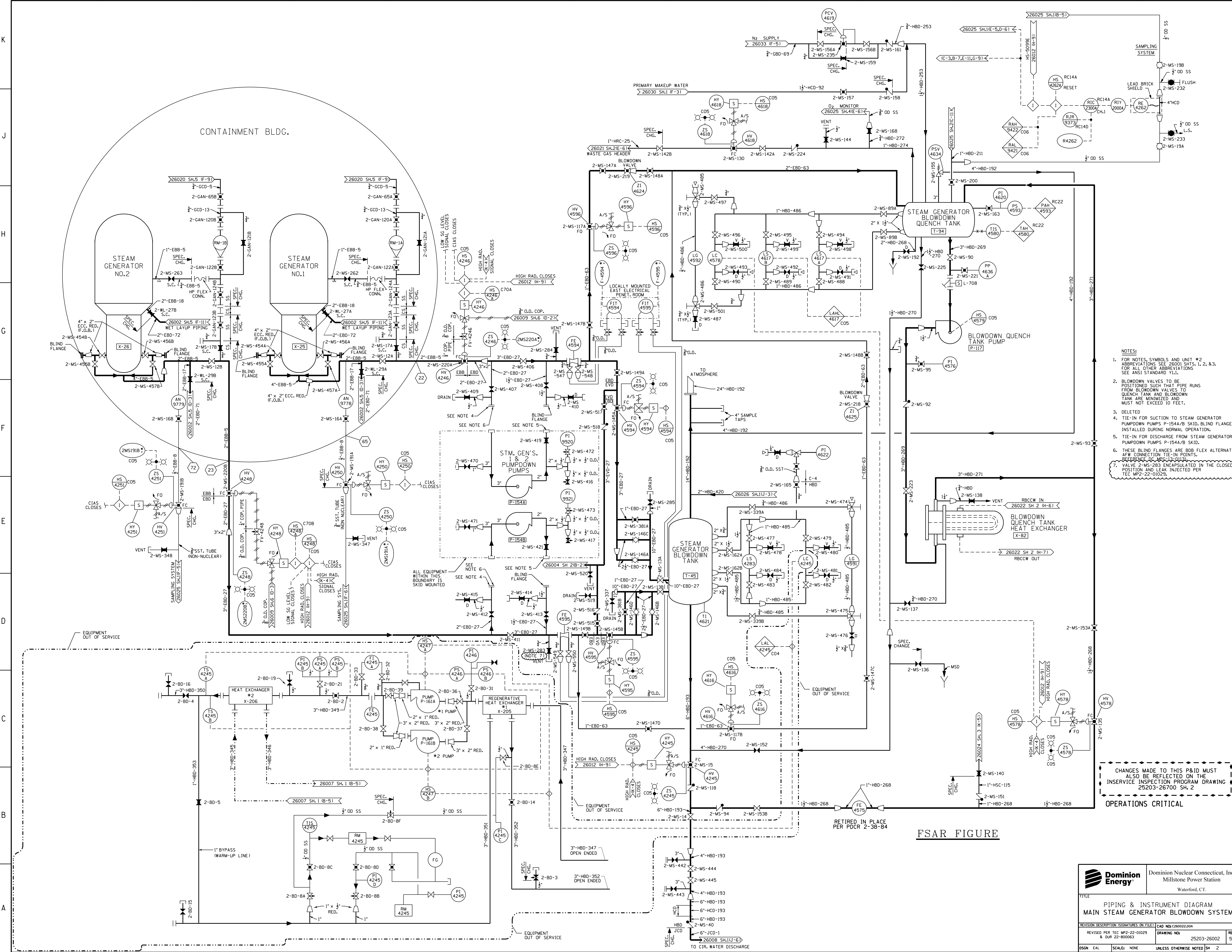
**OPERATIONS CRITICAL**

**Dominion Energy** Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.

TITLE: **PIPING & INSTRUMENT DIAGRAM MAIN STEAM FROM GENERATORS**

REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: 026002J00N  
 REVISED PER TEC MP2-21-01176 DRAWING NO: 25203-26002 REV 90  
 DSN EAL SCALE: NONE UNLESS OTHERWISE NOTED SH.1

FSAR FIGURE



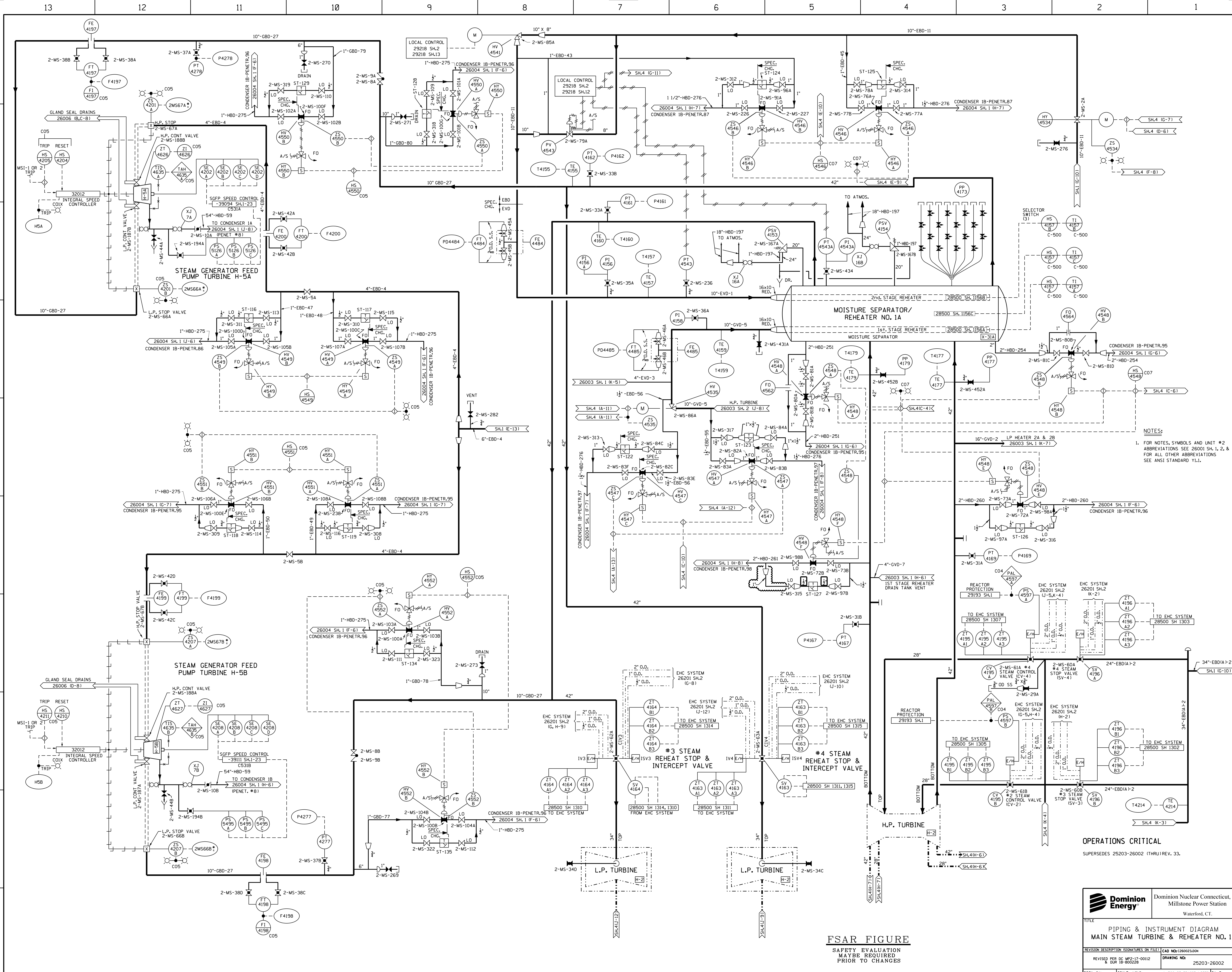
- NOTES:
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SHTS. 1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.1.
  - BLOWDOWN VALVES TO BE POSITIONED SUCH THAT PIPE RUNS FROM BLOWDOWN VALVES TO QUENCH TANK AND BLOWDOWN TANK ARE MINIMIZED AND MUST NOT EXCEED 10 FEET.
  - DELETED
  - TIE-IN FOR SUCTION TO STEAM GENERATOR PUMPDOWN PUMPS P-154A/B SKID, BLIND FLANGE INSTALLED DURING NORMAL OPERATION.
  - TIE-IN FOR DISCHARGE FROM STEAM GENERATOR PUMPDOWN PUMPS P-154A/B SKID.
  - THESE BLIND FLANGES ARE BDD FLEX ALTERNATE A/FW CONNECTION TIE-IN POINTS. REFERENCE TO MFG. 13-01131.
  - VALVE 2-MS-283 ENCAPSULATED IN THE CLOSED POSITION AND LEAK INJECTED PER TEC MS-2-2-01028.

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 2

**OPERATIONS CRITICAL**

FSAR FIGURE

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>PIPING &amp; INSTRUMENT DIAGRAM</b> <b>MAIN STEAM GENERATOR BLOWDOWN SYSTEM</b>			
REVISION DESCRIPTION REVISED PER TEC MP-22-01029 & DCP 22-00063	SIGNATURES ON FILE CAD NO: C26002.004	DRAWING NO: 25203-26002	REV 51
DSGN: EAL	SCALE: NONE	UNLESS OTHERWISE NOTED SH 2	



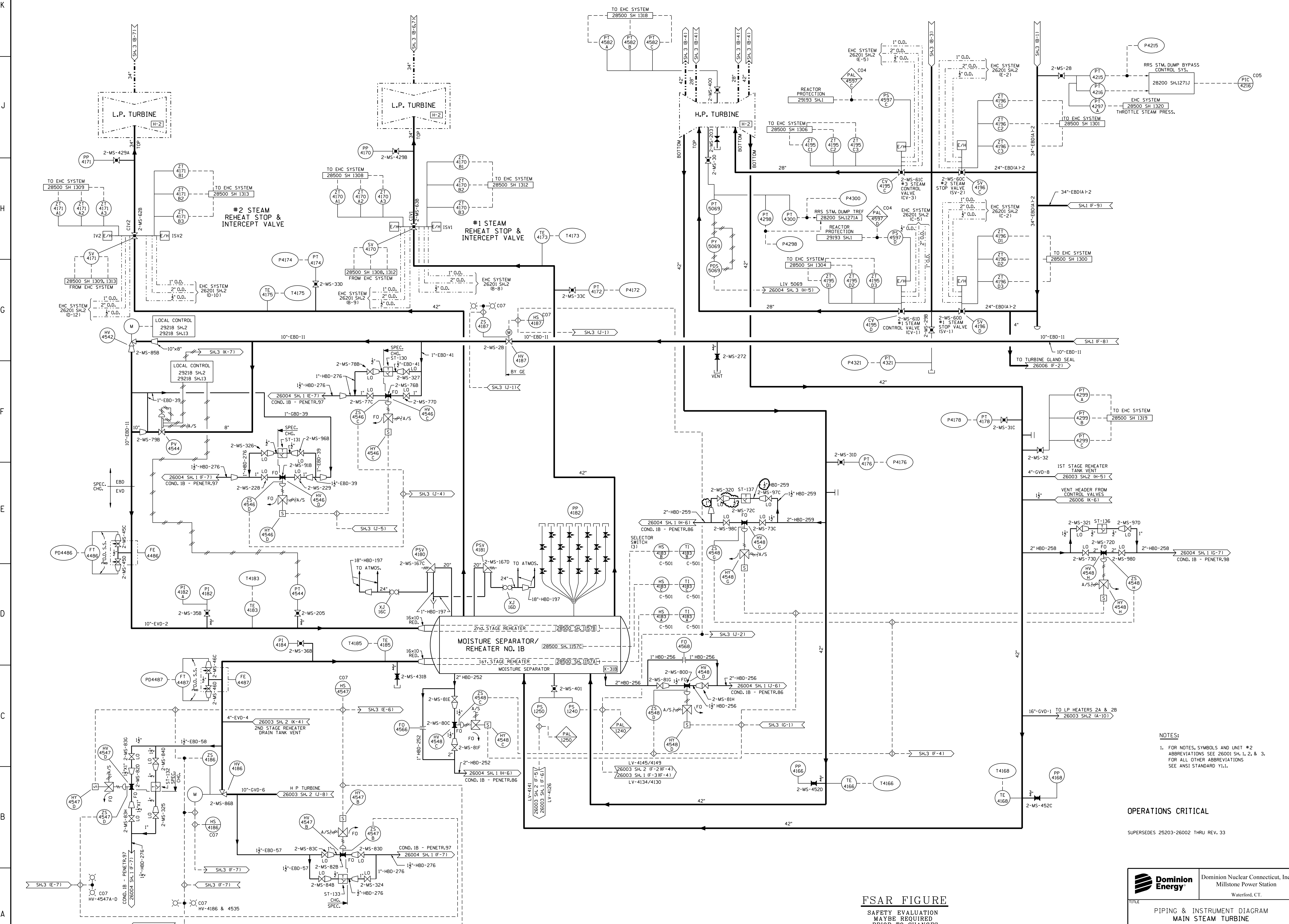
NOTES:  
 1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.

**OPERATIONS CRITICAL**  
 SUPERSEDES 25203-26002 (THRU) REV. 33.

**FSAR FIGURE**

SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>PIPING &amp; INSTRUMENT DIAGRAM          MAIN STEAM TURBINE &amp; REHEATER NO. 1A</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISION PER DC MP2-17-0012 DUR 18-090228	CAD NO: 260023.DGN DRAWING NO: 25203-26002	REV 42	DSGN EAL SCALE: NONE UNLESS OTHERWISE NOTED SH. 3



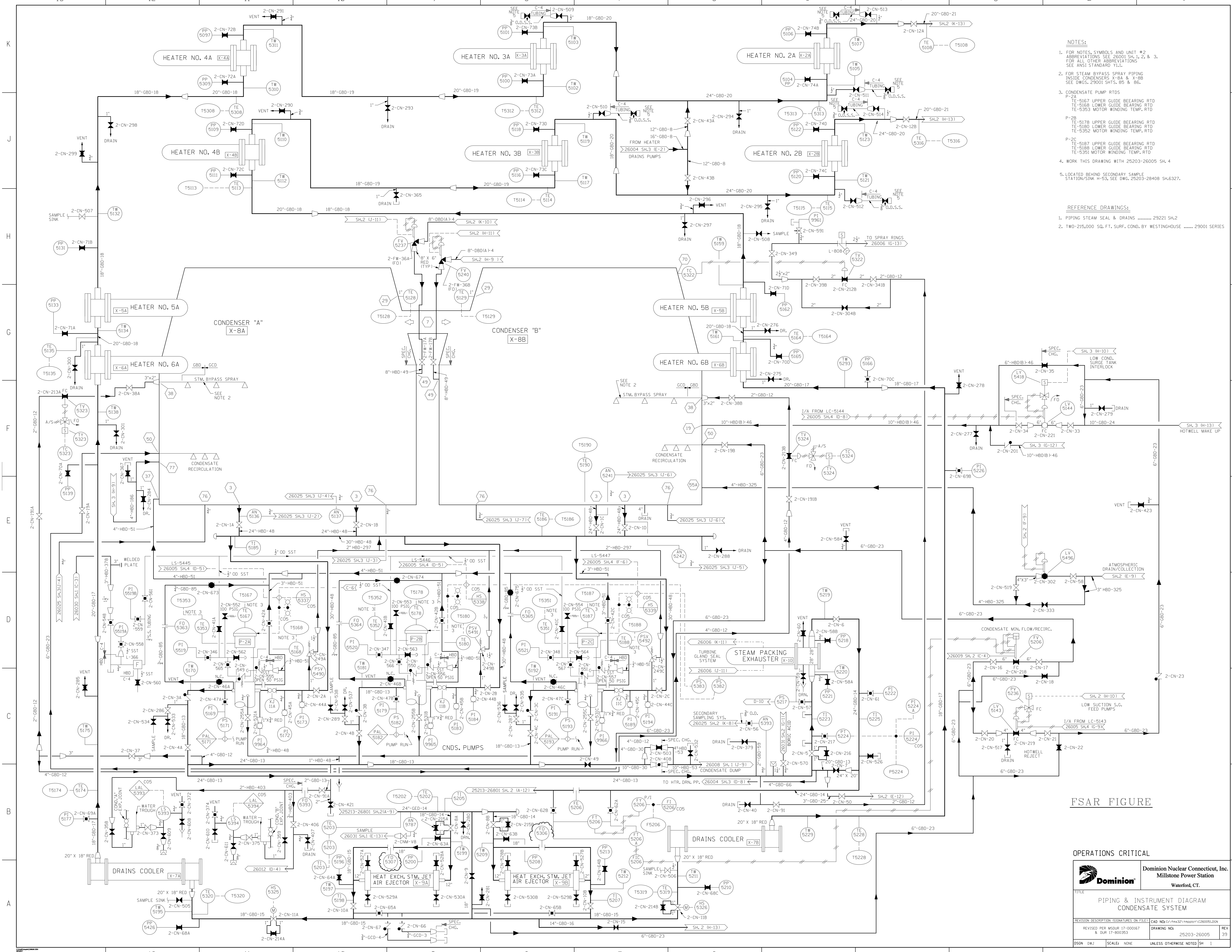
NOTES:  
 1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.1.

OPERATIONS CRITICAL

SUPERSEDES 25203-26002 THRU REV. 33

FSAR FIGURE  
 SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE <b>PIPING &amp; INSTRUMENT DIAGRAM          MAIN STEAM TURBINE</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C260024.DGN	DRAWING NO: 25203-26002	REV 32	DSNM EAL SCALE: NONE UNLESS OTHERWISE NOTED SH 4



- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
  - FOR STEAM BYPASS SPRAY PIPING INSIDE CONDENSERS X-8A & X-8B SEE DWGS. 25001 SHTS. 85 & 86.
  - CONDENSATE PUMP RTDS
    - P-2A TE-5167 UPPER GUIDE BEARING RTD
    - TE-5168 LOWER GUIDE BEARING RTD
    - TE-5353 MOTOR WINDING TEMP. RTD
  - P-2B
    - TE-5178 UPPER GUIDE BEARING RTD
    - TE-5180 LOWER GUIDE BEARING RTD
    - TE-5352 MOTOR WINDING TEMP. RTD
  - P-2C
    - TE-5187 UPPER GUIDE BEARING RTD
    - TE-5188 LOWER GUIDE BEARING RTD
    - TE-5351 MOTOR WINDING TEMP. RTD
  - WORK THIS DRAWING WITH 25203-26005 SH. 4

- REFERENCE DRAWINGS:**
- PIPING STEAM SEAL & DRAINS ..... 29221 SH.2
  - TWO-215,000 SQ. FT. SURF. COND. BY WESTINGHOUSE ..... 29001 SERIES

FSAR FIGURE

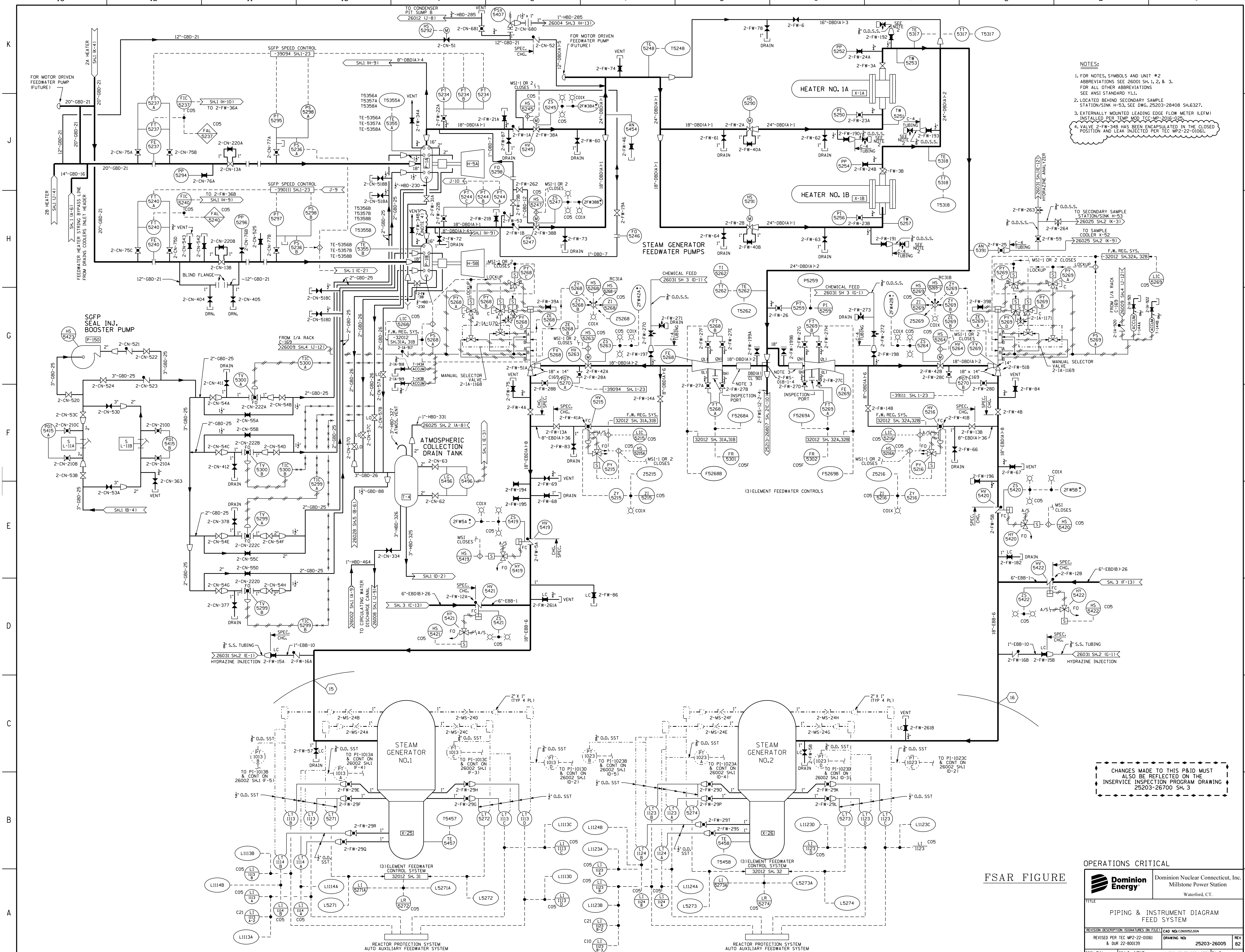
**OPERATIONS CRITICAL**

**Dominion Nuclear Contracting, Inc.**  
 Millstone Power Station  
 Waterford, CT.

TITLE: PIPING & INSTRUMENT DIAGRAM  
 CONDENSATE SYSTEM

REVISION DESCRIPTION SIGNATURES ON FILE CAD NO: 17-000167  
 REVISED PER MSUR 17-000167 & CUR 17-000353 DRAWING NO: 25203-26005 REV 39

DSGN DWJ SCALE: NONE UNLESS OTHERWISE NOTED SH 1

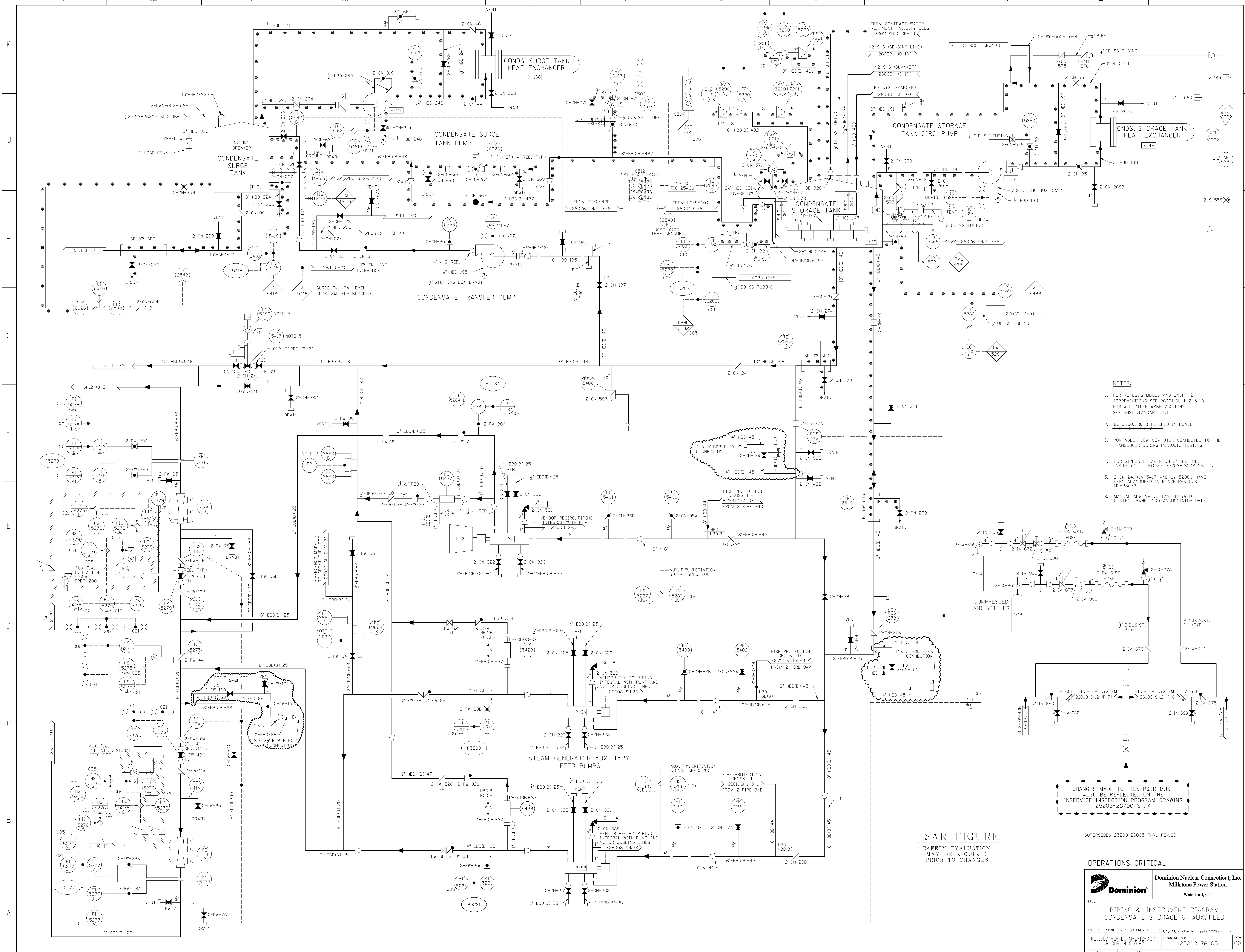


- NOTES:**
1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  2. LOCATED BEHIND SECONDARY SAMPLE STATION/SINK H-53, SEE DWG. 25203-26408 SH.6,327.
  3. EXTERNALLY MOUNTED LEADING EDGE FLOW METER (LEFM) INSTALLED PER TEMP. MOD. ICC-MP-2006-025.
  4. VALVE 2-FW-34B HAS BEEN ENCAPSULATED IN THE CLOSED POSITION AND LEAK INJECTED PER TEC MP2-22-0161.

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 3

<b>OPERATIONS CRITICAL</b>	
<b>FSAR FIGURE</b>	
<b>PIPING &amp; INSTRUMENT DIAGRAM FEED SYSTEM</b>	
REVISION DESCRIPTION	SIGNATURES ON FILE
REVISED PER TEC MP2-22-0161 & DUR 22-800139	DRAWING NO. 25203-26005
DSGN EAL	SCALE: NONE
UNLESS OTHERWISE NOTED SH. 2	





- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  - LC-5280A & B REQUIRED IN PLACE PER P&ID 26023-93.
  - PORTABLE FLOW COMPUTER CONNECTED TO THE TRANSDUCER DURING TESTING.
  - FOR SIPHON BREAKER ON 3"-HBD-188, INSIDE CST (I40) SEE 25003-1300B SH. 44.
  - 2-CN-241 (LV-5417) AND LV-5280C HAVE BEEN ABANDONED IN PLACE PER DCR M2-98073.
  - MANUAL AFW VALVE TAMPER SWITCH CONTROL PANEL CO5 ANNUNCIATOR D-15.

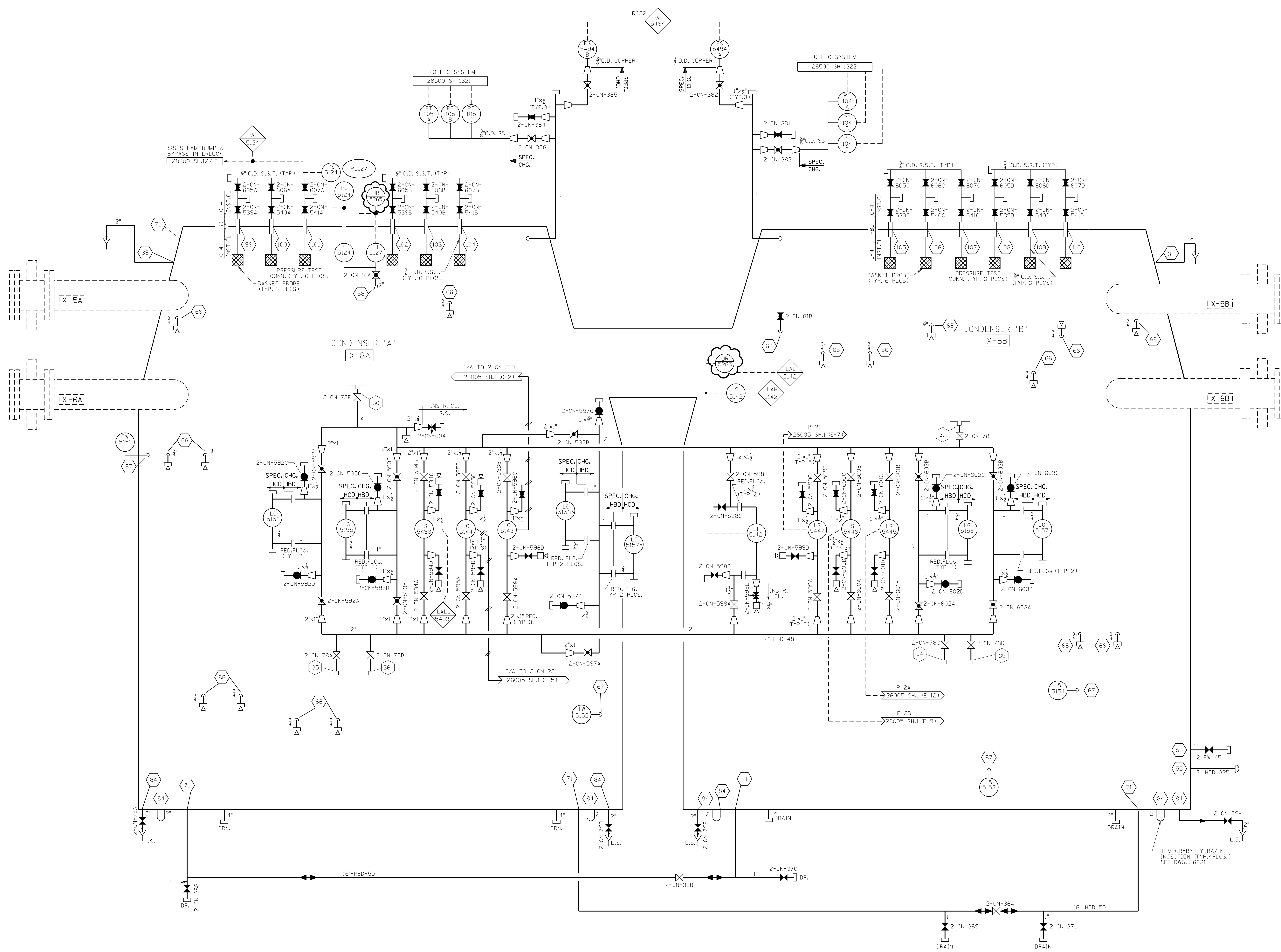
CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 4

**FSAR FIGURE**  
SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

SUPERSEDES 25203-26005 THRU REV.36

**OPERATIONS CRITICAL**

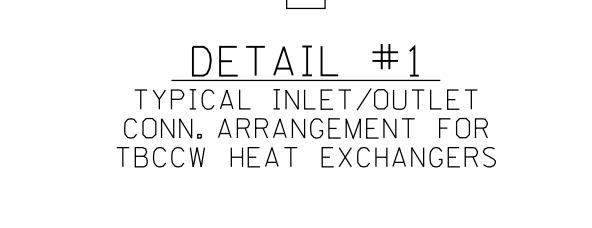
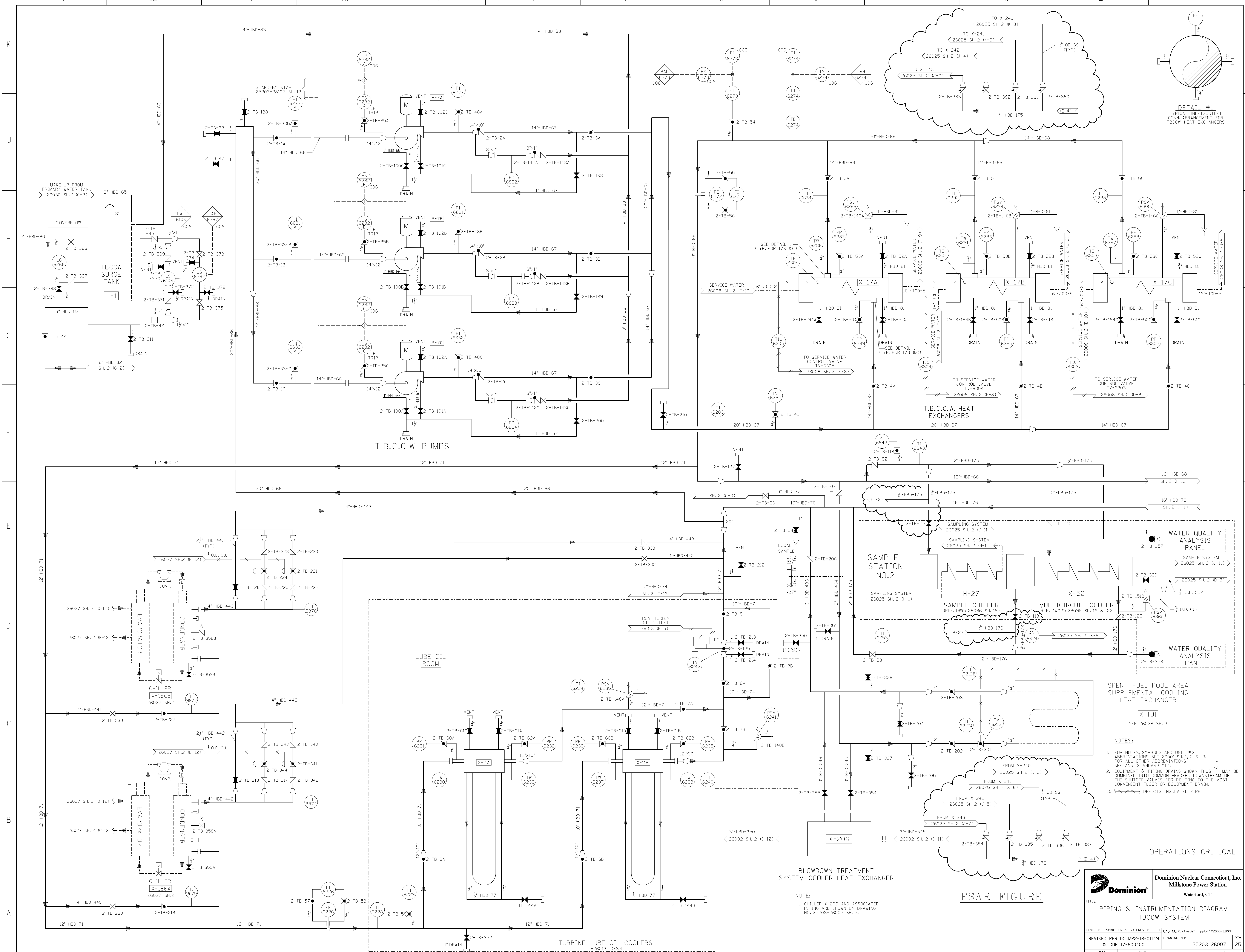
		<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station Waterford, CT.		
		TITLE <b>PIPING &amp; INSTRUMENT DIAGRAM</b> <b>CONDENSATE STORAGE &amp; AUX. FEED</b>		
REVISION DESCRIPTION SIGNATURES ON FILE	CAD NO: E:\ms32\mnp001\c260053.DGN	REVISED PER DC MP2-12-01174 & DUR 14-800162	DRAWING NO: 25203-26005	REV 60
DSNM EAL	SCALE: NONE	UNLESS OTHERWISE NOTED SH. 3		



NOTE:  
WORK THIS DRAWING WITH  
25203-26005 SH.1

OPERATIONS CRITICAL

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>PIPING &amp; INSTRUMENT DIAGRAM CONDENSATE SYSTEM</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE)		CAD NO: C26004.DGN	
REVISED PER DC MP2-17-00171 AND DUR 18-600210		DRAWING NO: 25203-26005	
DSGN DLW		SCALE: NONE	
UNLESS OTHERWISE NOTED SH		4	



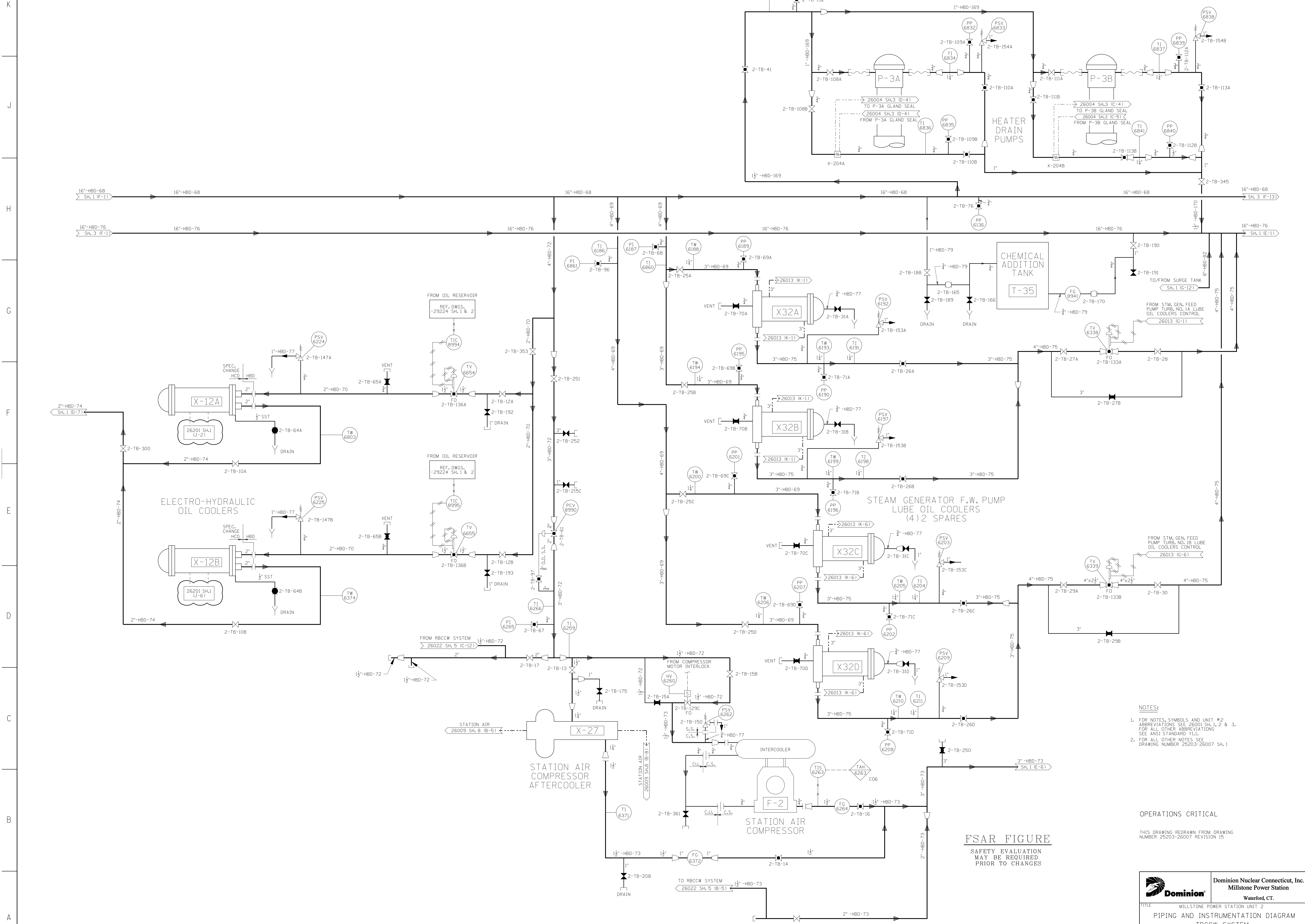
- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  - EQUIPMENT & PIPING DRAINS SHOWN THIS COMBINED INTO COMMON HEADERS. DOWNSHOTS OF THE SHUTOFF VALVES FOR ROUTING TO THE MOST CONVENIENT FLOOR OR EQUIPMENT DRAIN.
  - ~~~~~ DEFICITS INSULATED PIPE

**OPERATIONS CRITICAL**

		<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station Waterford, CT.	
<b>PIPING &amp; INSTRUMENTATION DIAGRAM</b> <b>TBCCW SYSTEM</b>			
REVISION DESCRIPTION & DUR 17-800400	SIGNATURES ON FILE DRAWING NO. 25203-26007	CAD NO. E:\ms32\mnp001\260071.dwg 25203-26007	REV 25
DSGN EAL	SCALE: NONE	UNLESS OTHERWISE NOTED SH 1	

**FSAR FIGURE**

**NOTE:**  
 1. CHILLER X-206 AND ASSOCIATED PIPING ARE SHOWN ON DRAWING NO. 25203-26002 SH. 2.



- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.1.
  - FOR ALL OTHER NOTES SEE DRAWING NUMBER 25203-26007 SH. 1

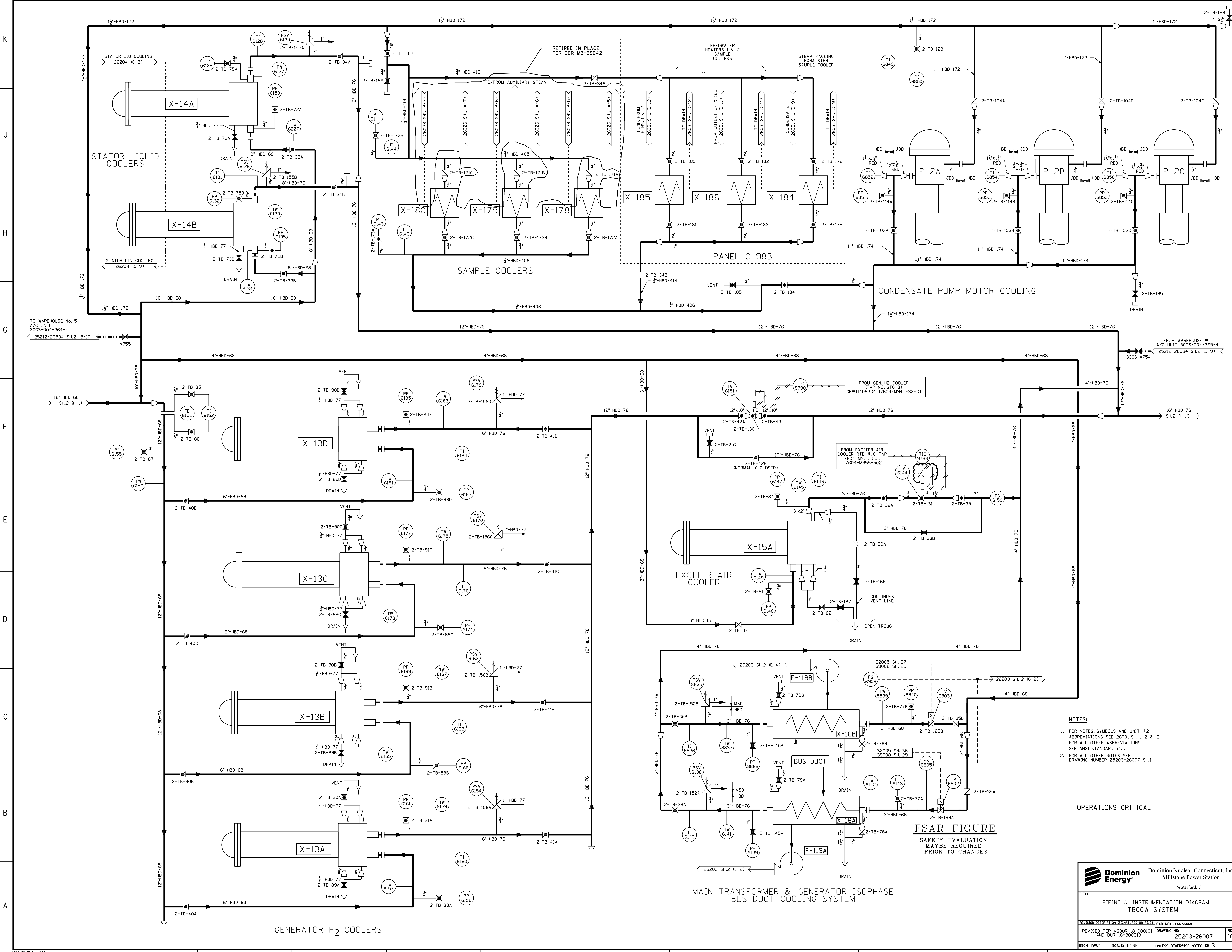
**OPERATIONS CRITICAL**

THIS DRAWING REDRAWN FROM DRAWING NUMBER 25203-26007 REVISION 15

**FSAR FIGURE**

SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE: MILLSTONE POWER STATION UNIT 2 PIPING AND INSTRUMENTATION DIAGRAM TBCCW SYSTEM			
REVISION DESCRIPTION	DATE	CAD NO. PROJECT 200001P260072.004	
REVISED PER MSDUR 14-000004 AND DUR 14-800004		DRAWING NO. 25203-26007	REV 19
DESIGN DWJ	SCALE: NONE	UNLESS OTHERWISE NOTED SH. 2	



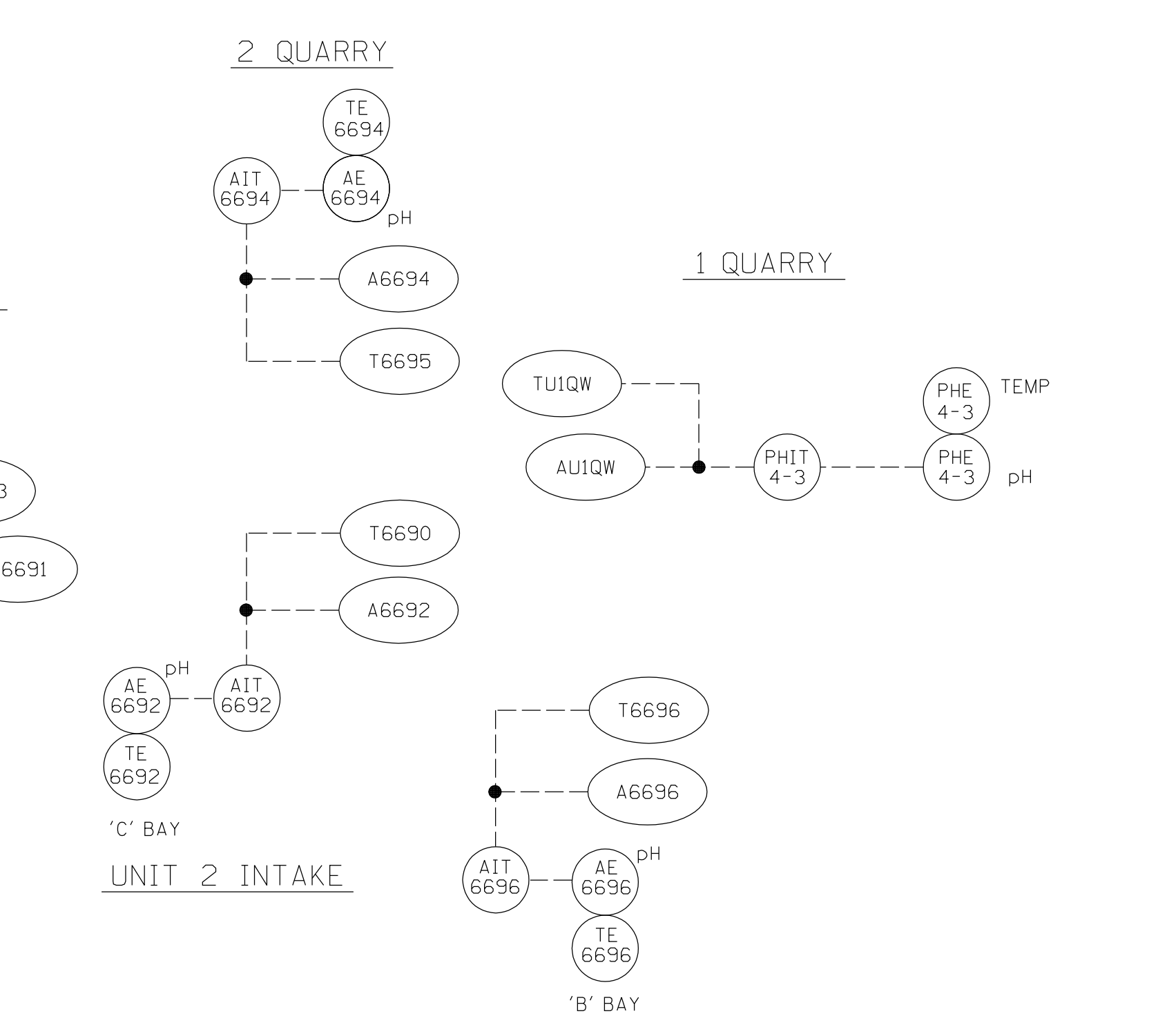
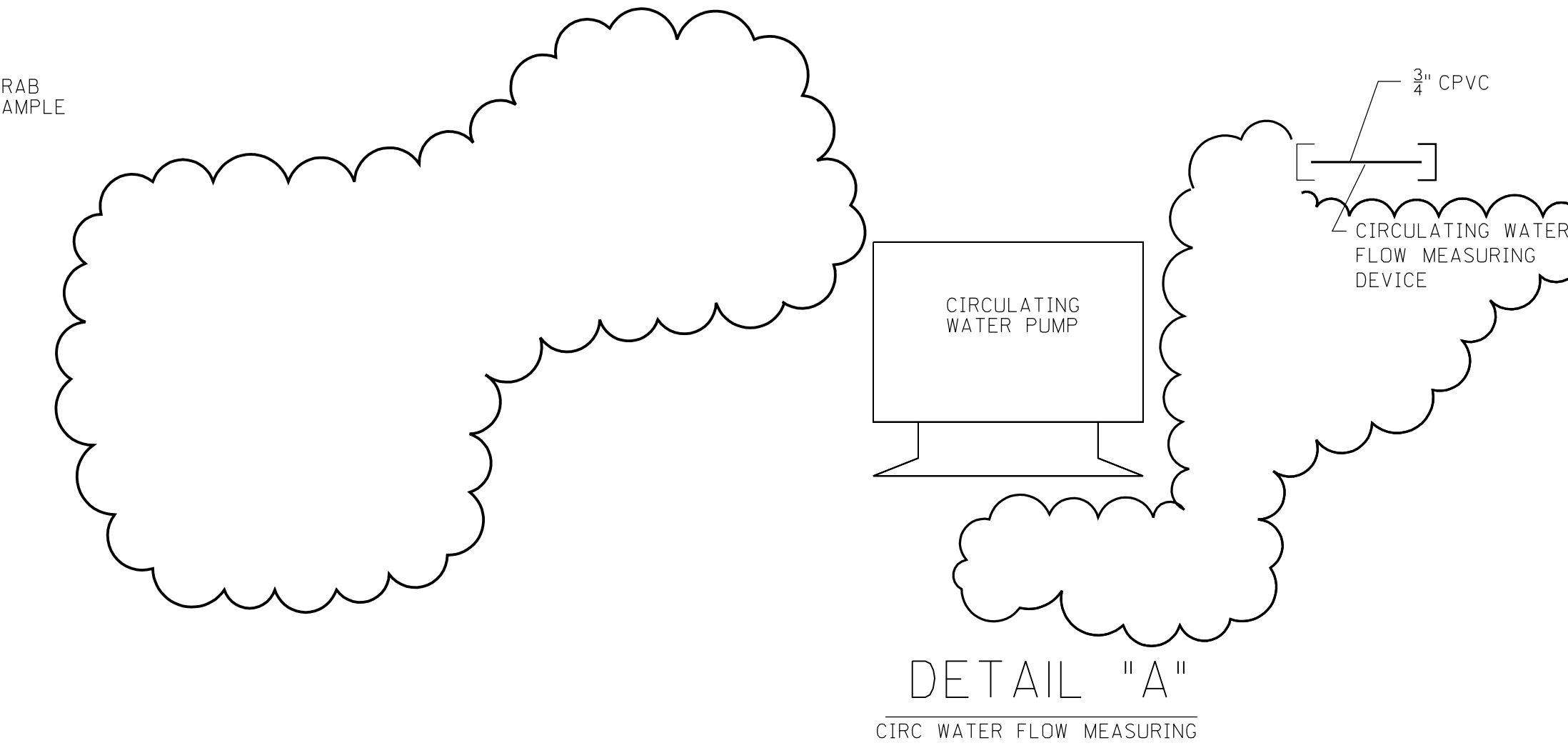
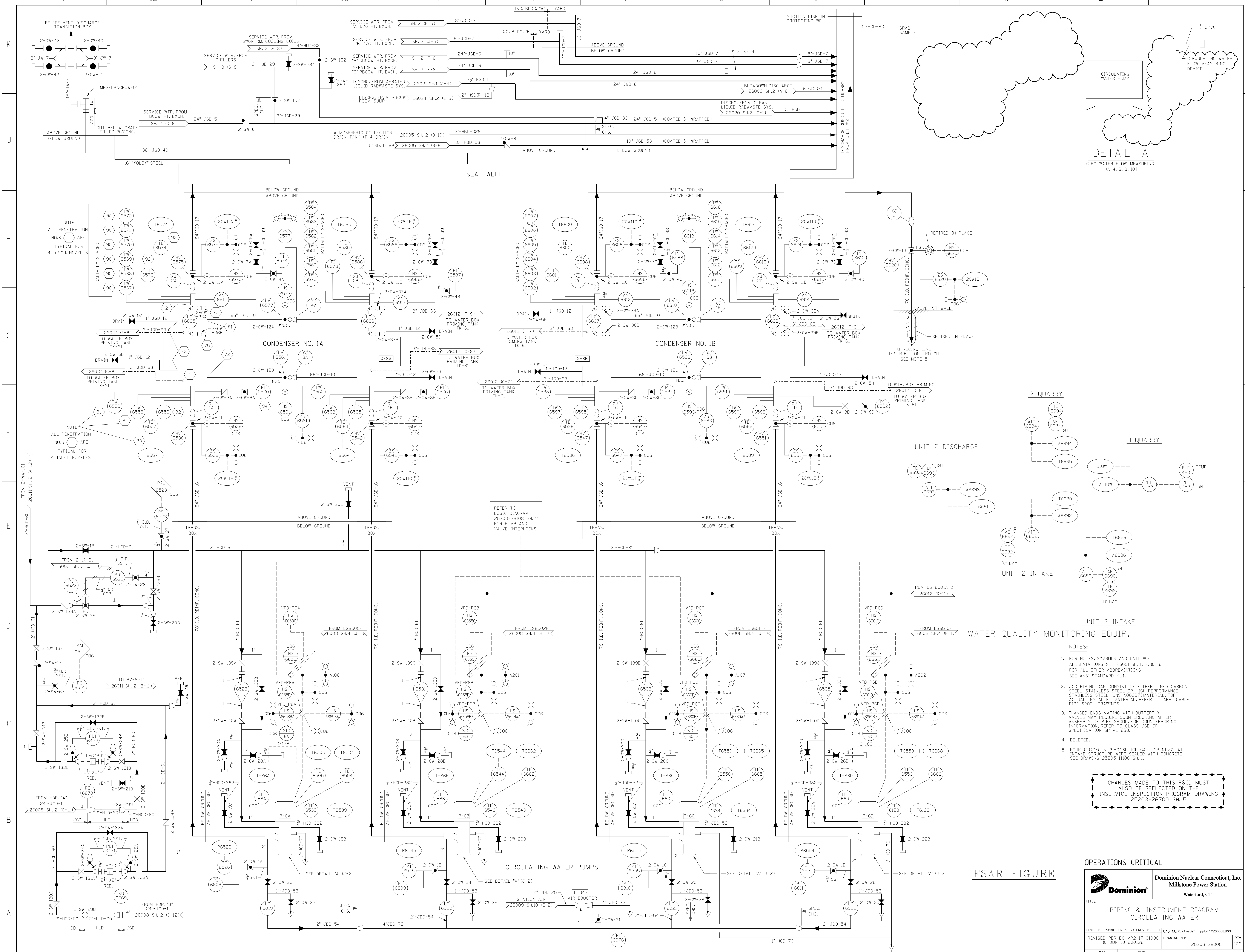
NOTES:  
 1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.1.  
 2. FOR ALL OTHER NOTES SEE DRAWING NUMBER 25203-26007 SH.1

OPERATIONS CRITICAL

**FSAR FIGURE**  
 SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

MAIN TRANSFORMER & GENERATOR ISOPHASE BUS DUCT COOLING SYSTEM

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE PIPING & INSTRUMENTATION DIAGRAM TBCCW SYSTEM			
REVISION DESCRIPTION SIGNATURES ON FILE FILED CAD NO. 25203-26007			
REVISED PER MSOUR 18-000101 AND DUR 18-800313	DRAWING NO. 25203-26007	REV 10	DATE 11/13/18
DESGN DWJ	SCALE: NONE	UNLESS OTHERWISE NOTED SH. 3	



- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  - JGD PIPING CAN CONSIST OF EITHER LINED CARBON STEEL, STAINLESS STEEL OR HIGH PERFORMANCE STAINLESS STEEL (UNS N08367) MATERIAL. FOR ACTUAL INSTALLED MATERIAL, REFER TO APPLICABLE PIPE SPOOL DRAWINGS.
  - FLANGED ENDS MATING WITH BUTTERFLY VALVES MAY REQUIRE COUNTERBORING AFTER ASSEMBLY OF PIPE SPOOL. FOR COUNTERBORING INFORMATION, REFER TO CLASS JGD OF SPECIFICATION SP-ME-668.
  - DELETED.
  - FOUR (4) 2'-0" x 3'-0" SLUICE GATE OPENINGS AT THE INTAKE STRUCTURE WERE SEALED WITH CONCRETE. SEE DRAWING 25205-11100 SH. 1.

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 5

FSAR FIGURE

**OPERATIONS CRITICAL**

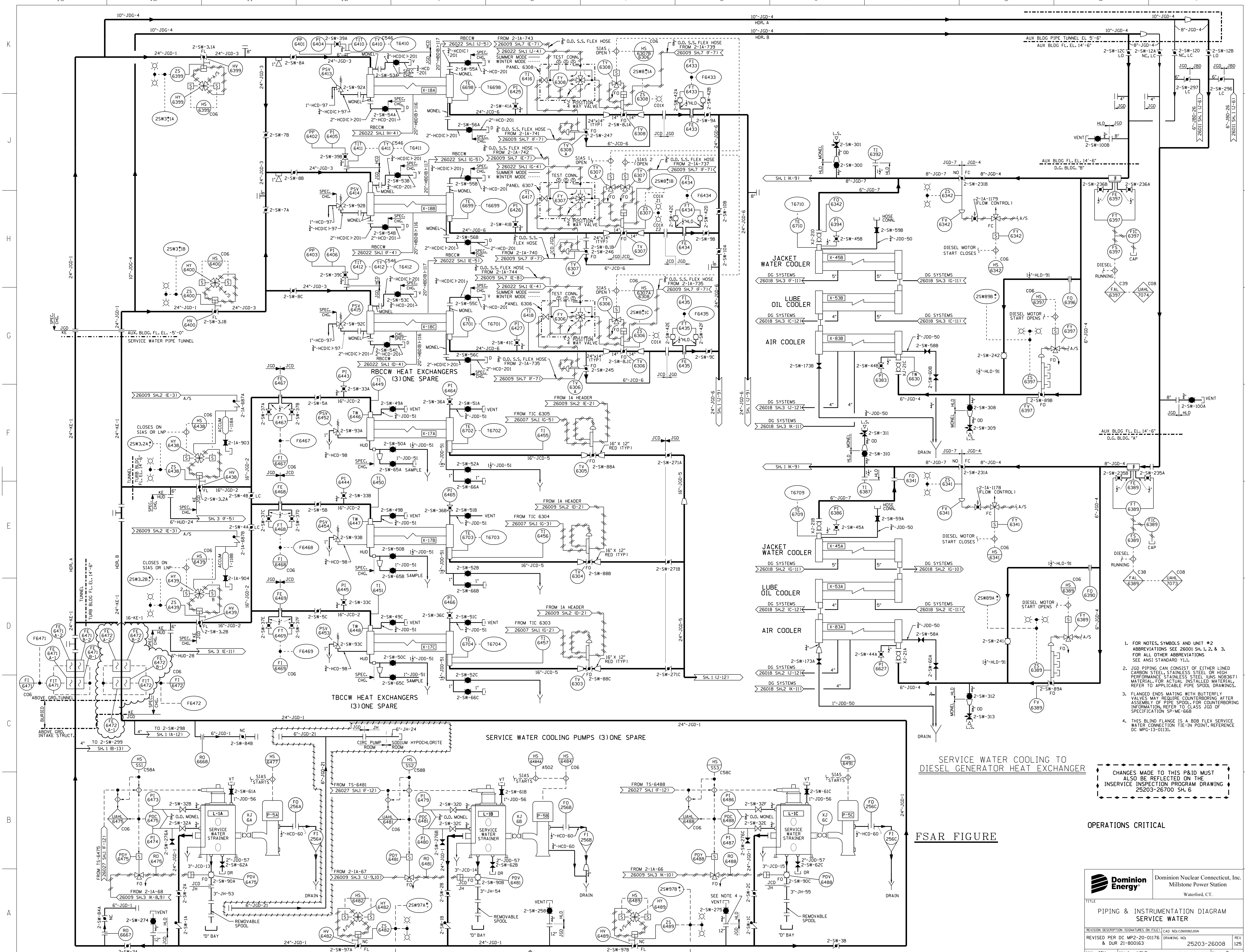
Dominion Nuclear Connecticut, Inc.  
Millstone Power Station  
Waterford, CT.

TITLE: PIPING & INSTRUMENTATION DIAGRAM  
CIRCULATING WATER

REVISION DESCRIPTION (SIGNATURES ON FILE) | CAD NO: E:\1\ms32\mproj\1\26001.dgn | REV 106

REVISED PER DC MP2-17-01030 | DRAWING NO: 25203-26008 | DCN 18-00126

DSGN: EAL | SCALE: NONE | UNLESS OTHERWISE NOTED SH. 1



1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.1.
2. JGD PIPING CAN CONSIST OF EITHER LINED CARBON STEEL, STAINLESS STEEL OR HIGH PERFORMANCE STAINLESS STEEL (UNS N08367) MATERIAL. FOR ACTUAL INSTALLED MATERIAL REFER TO APPLICABLE PIPE SPOOL DRAWINGS.
3. FLANGED ENDS MATING WITH BUTTERFLY VALVES MAY REQUIRE COUNTERBORING AFTER ASSEMBLY OF PIPE SPOOL. FOR COUNTERBORING INFORMATION, REFER TO CLASS JGD OF SPECIFICATION SP-ME-668.
4. THIS BLIND FLANGE IS A BOB FLEX SERVICE WATER CONNECTION 11E-IN POINT. REFERENCE DC MPG-13-01131.

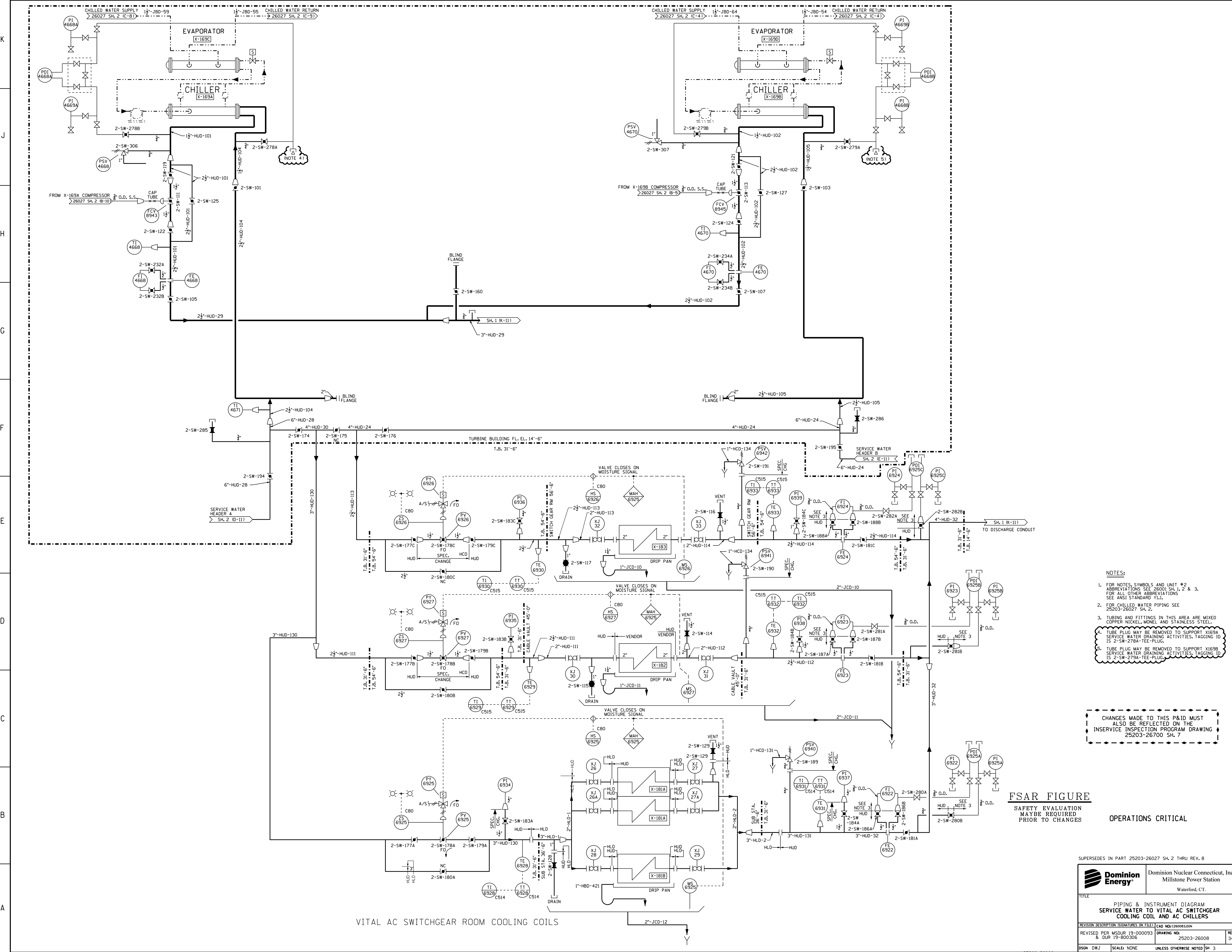
CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 6

SERVICE WATER COOLING TO DIESEL GENERATOR HEAT EXCHANGER

FSAR FIGURE

OPERATIONS CRITICAL

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>PIPING &amp; INSTRUMENTATION DIAGRAM</b> <b>SERVICE WATER</b>			
TITLE PIPING & INSTRUMENTATION DIAGRAM SERVICE WATER	REVISION DESCRIPTION REVISOR DATE	DRAWING NO. 25203-26008	REV 125
DSGN JCV SCALE: NONE UNLESS OTHERWISE NOTED SH	FILED 25203-26008	DRAWING NO. 25203-26008	REV 125



- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  - FOR CHILLED WATER PIPING SEE 25203-26027 SH. 2.
  - TUBING AND FITTINGS IN THIS AREA ARE MIXED COPPER NICKEL, MONEL AND STAINLESS STEEL.
  - TUBE PLUG MAY BE REMOVED TO SUPPORT X169A SERVICE WATER DRAINING ACTIVITIES. TAGGING ID IS 2-SW-278A-TEE-PLUG.
  - TUBE PLUG MAY BE REMOVED TO SUPPORT X169B SERVICE WATER DRAINING ACTIVITIES. TAGGING ID IS 2-SW-279A-TEE-PLUG.

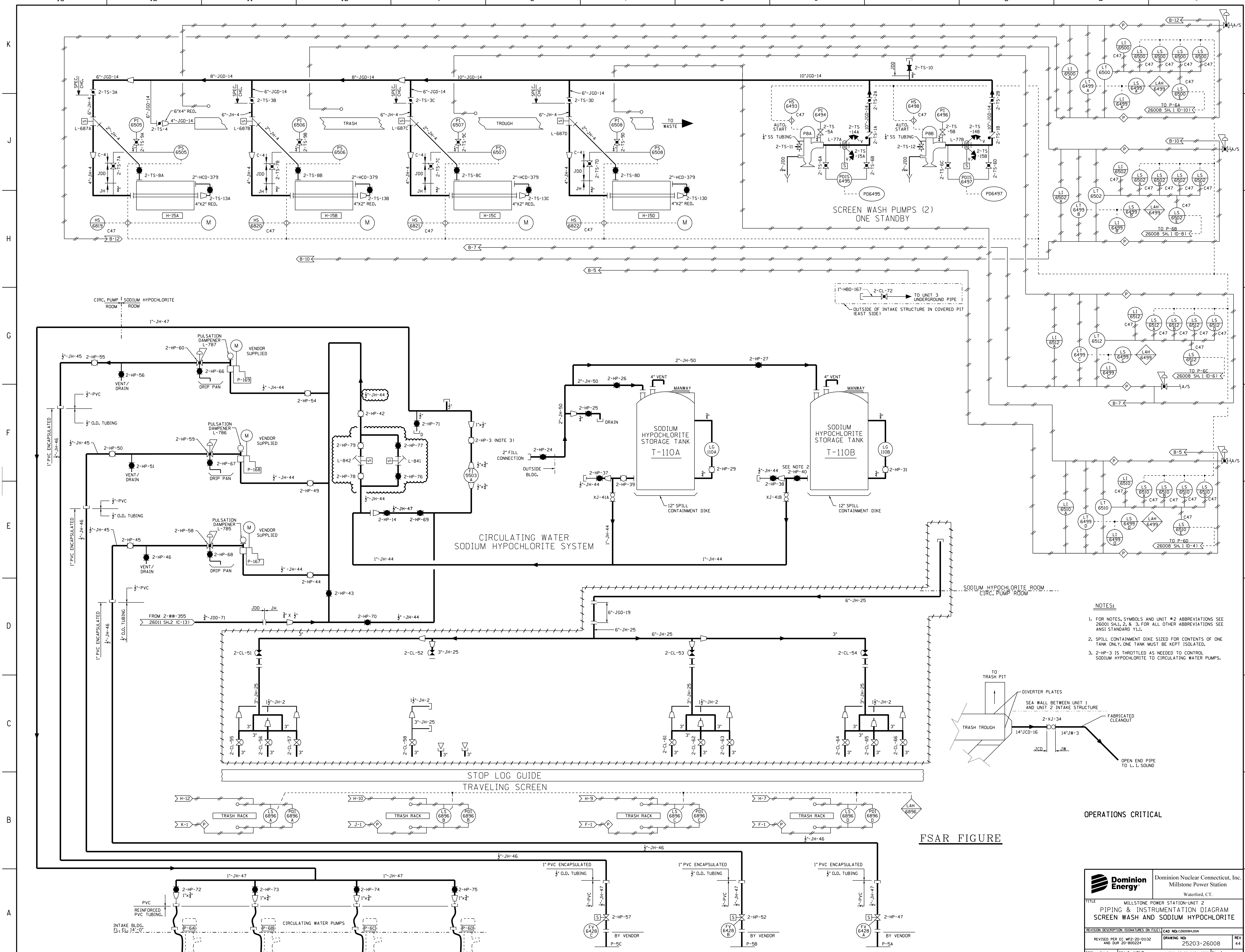
CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 7

**FSAR FIGURE**  
SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES  
**OPERATIONS CRITICAL**

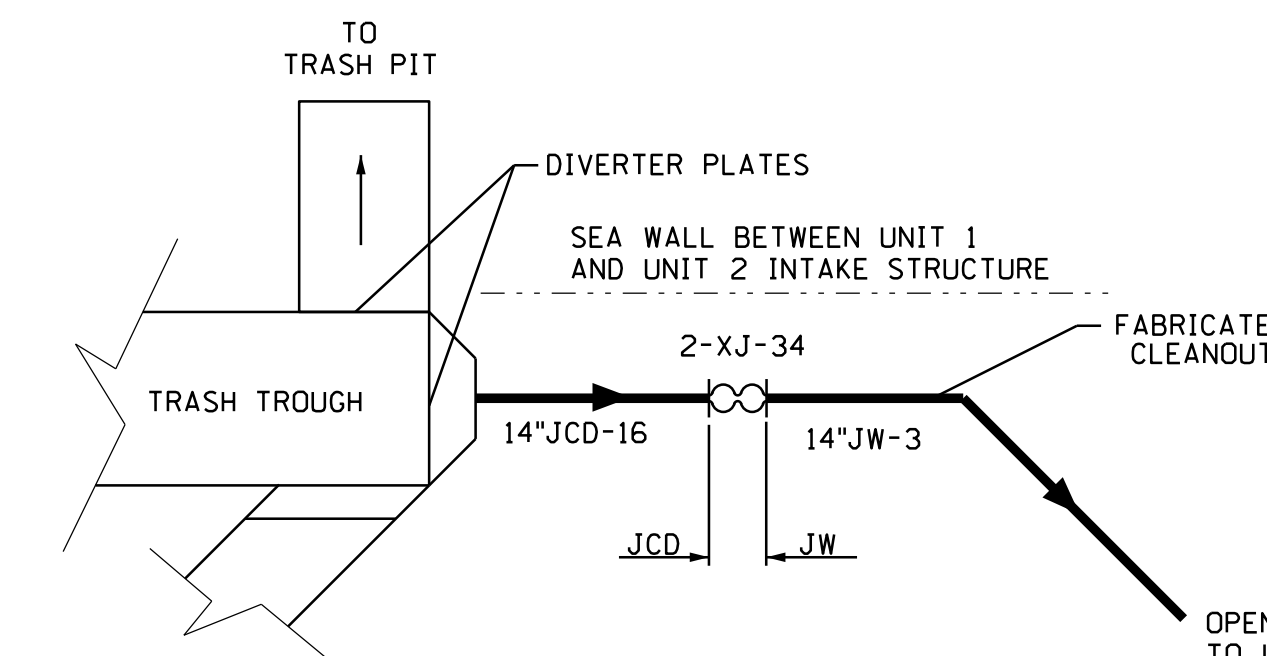
SUPERSEDES IN PART 25203-26027 SH. 2 THRU REV. 8

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE <b>PIPING &amp; INSTRUMENT DIAGRAM          SERVICE WATER TO VITAL AC SWITCHGEAR          COOLING COIL AND AC CHILLERS</b>			
REVISION DESCRIPTION REVISED PER MSDUR 19-000093 & DUR 19-000306	SIGNATURES ON FILE CAD NO: C26008.DGN	DRAWING NO: 25203-26008	REV 34
DSGN DWJ	SCALE: NONE	UNLESS OTHERWISE NOTED SM 3	





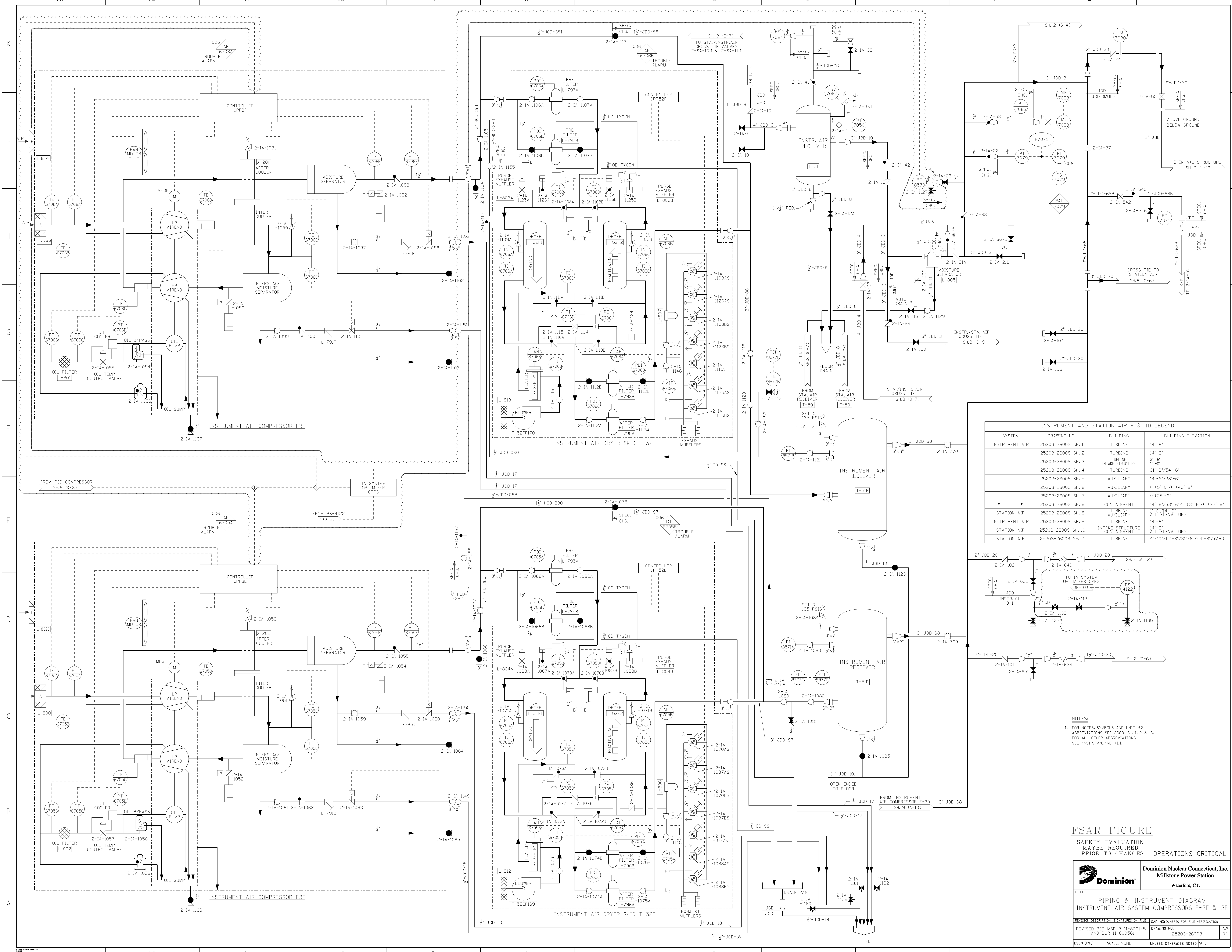
- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
  - SPILL CONTAINMENT DIKE IS OTHER FOR CONTENTS OF ONE TANK ONLY. ONE TANK MUST BE KEPT ISOLATED.
  - 2-HP-3 IS THROTTLED AS NEEDED TO CONTROL SODIUM HYPOCHLORITE TO CIRCULATING WATER PUMPS.



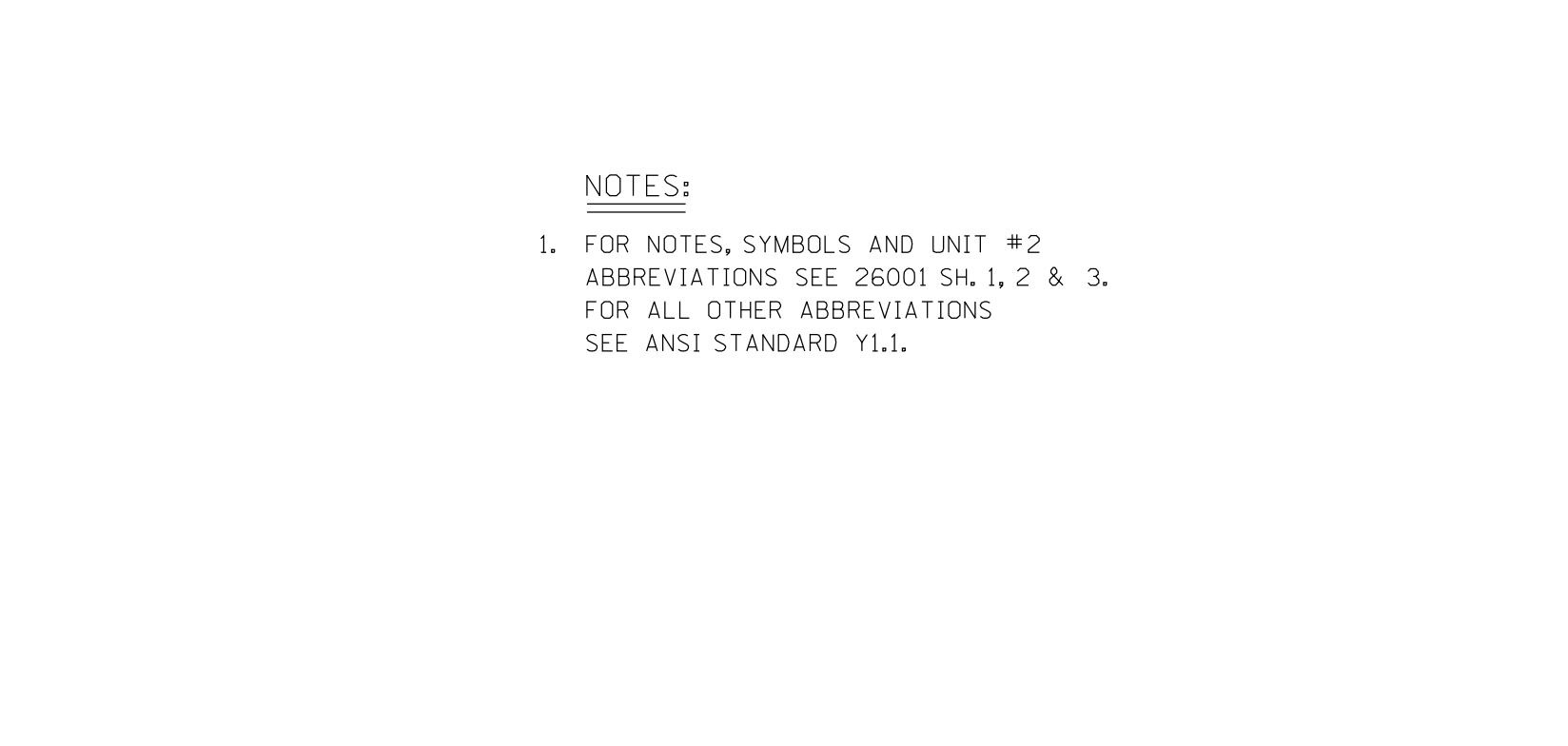
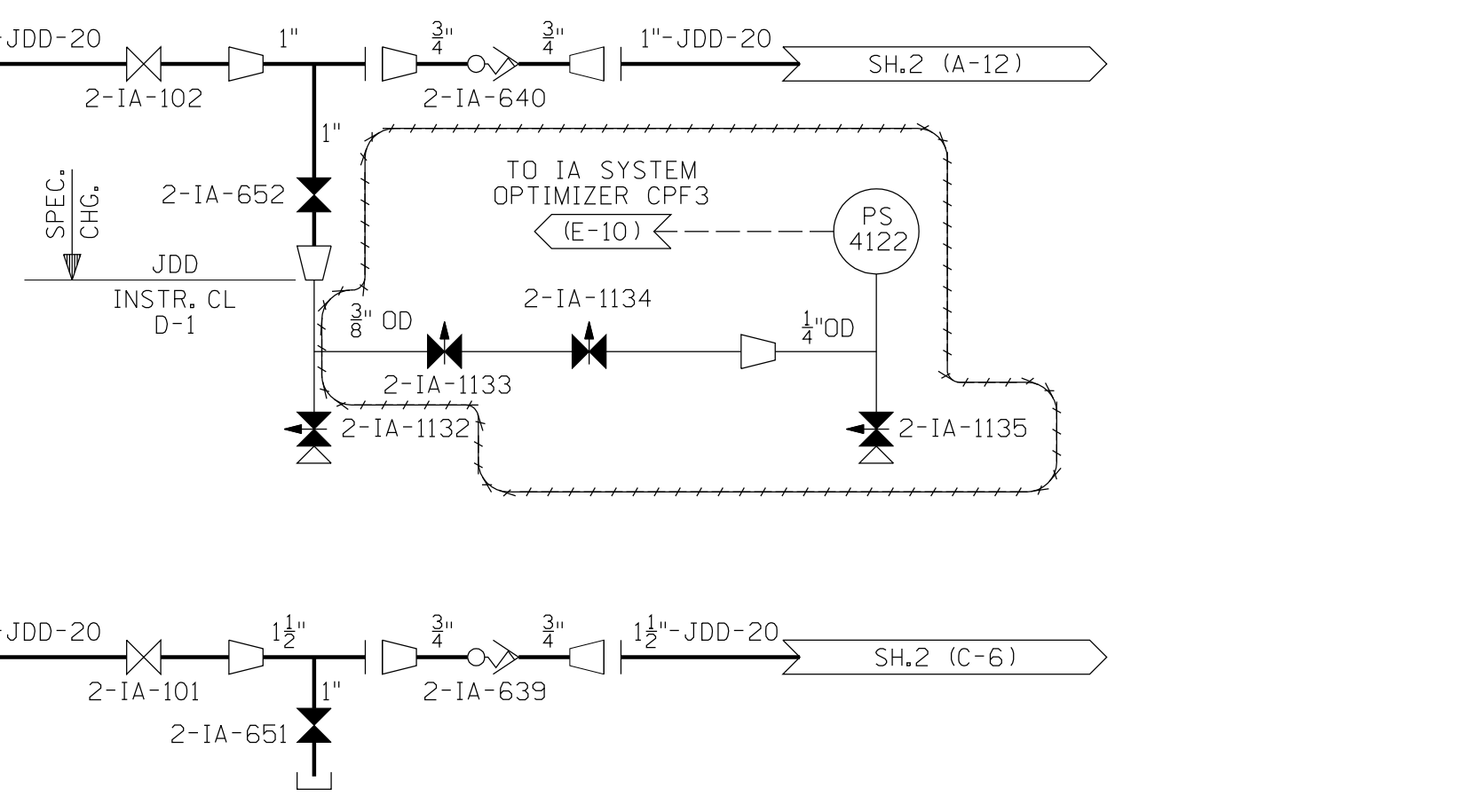
OPERATIONS CRITICAL

FSAR FIGURE

	Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.		
	TITLE: MILLSTONE POWER STATION-UNIT 2 PIPING & INSTRUMENTATION DIAGRAM SCREEN WASH AND SODIUM HYPOCHLORITE		
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: E26008-00N	DRAWING NO: 25203-26008	REV 44	DSGN DWJ SCALE: NONE UNLESS OTHERWISE NOTED SH. 4



INSTRUMENT AND STATION AIR P & ID LEGEND			
SYSTEM	DRAWING NO.	BUILDING	BUILDING ELEVATION
INSTRUMENT AIR	25203-26009 SH. 1	TURBINE	14'-6"
	25203-26009 SH. 2	TURBINE	14'-6"
	25203-26009 SH. 3	TURBINE INTAKE STRUCTURE	31'-6" 14'-0"
	25203-26009 SH. 4	TURBINE	31'-6"/54'-6"
	25203-26009 SH. 5	AUXILIARY	14'-6"/38'-6"
	25203-26009 SH. 6	AUXILIARY	(-1)-5'-0"/(-1)-45'-6"
STATION AIR	25203-26009 SH. 7	AUXILIARY	(-1)-25'-6"
	25203-26009 SH. 8	CONTAINMENT	14'-6"/38'-6"/(-1)-13'-6"/(-1)-22'-6"
	25203-26009 SH. 8	TURBINE	14'-6"
	25203-26009 SH. 9	AUXILIARY	ALL ELEVATIONS
	25203-26009 SH. 10	INTAKE STRUCTURE CONTAINMENT	ALL ELEVATIONS
STATION AIR	25203-26009 SH. 11	TURBINE	4'-0"/14'-6"/31'-6"/54'-6"/YARD



NOTES:  
 1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26000 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.

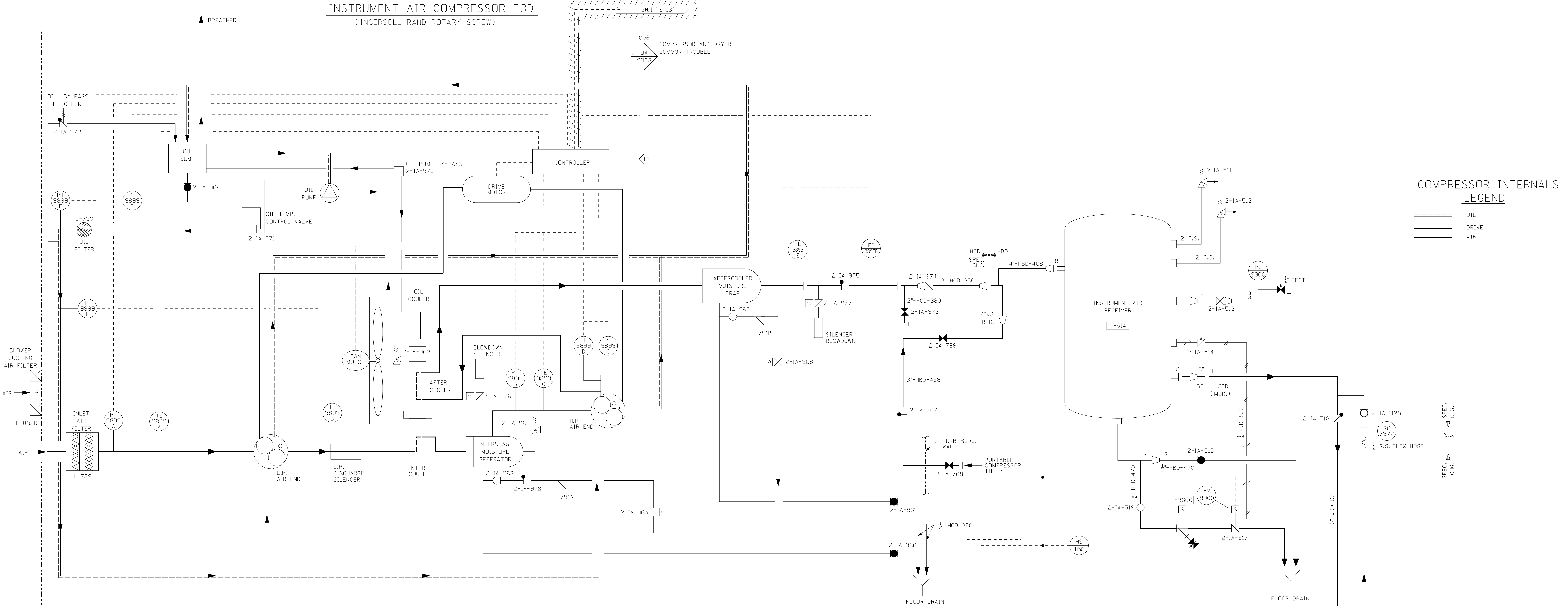
**FSAR FIGURE**  
 SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES OPERATIONS CRITICAL

**Dominion** Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.

TITLE: PIPING & INSTRUMENT DIAGRAM  
 INSTRUMENT AIR SYSTEM COMPRESSORS F-3E & 3F

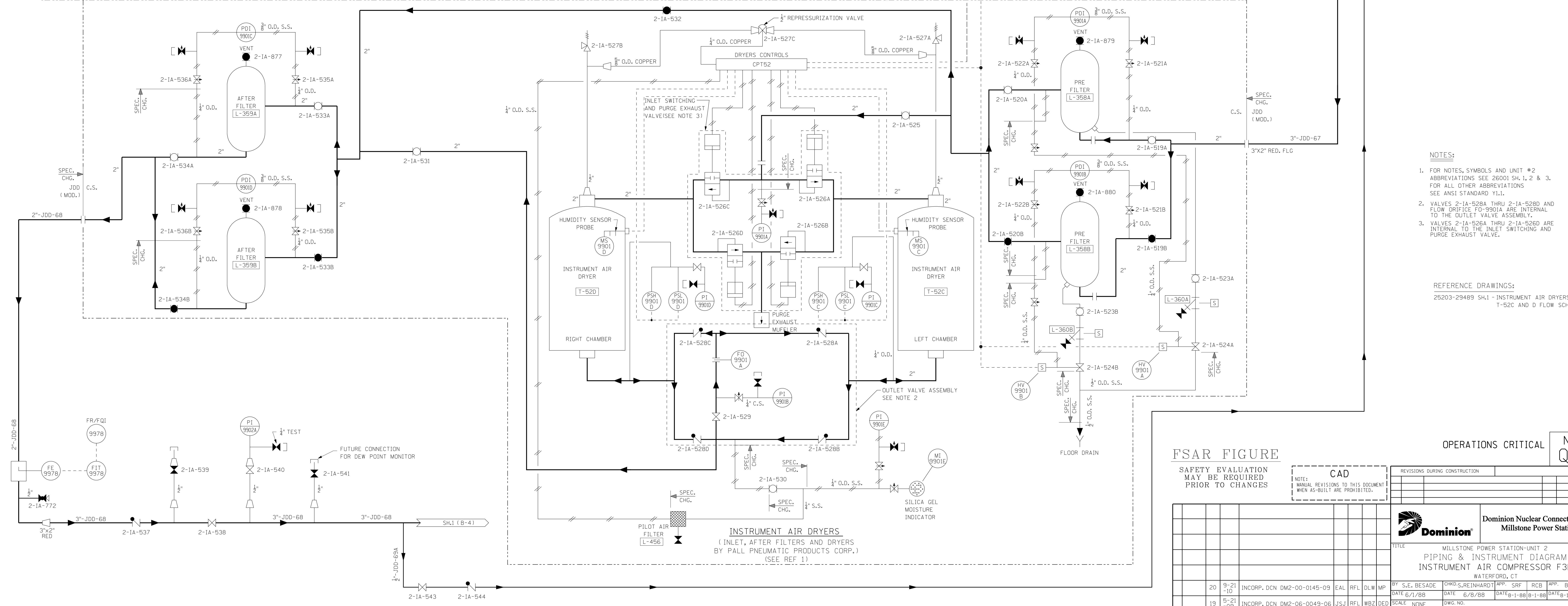
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: BONSPEC FOR FILE VERIFICATION  
 REVISED PER MSDUR 11-800145 AND DUR 11-800561 DRAWING NO: 25203-26009 REV 34  
 DSGN DWJ SCALE: NONE UNLESS OTHERWISE NOTED SH 1

**INSTRUMENT AIR COMPRESSOR F3D**  
(INGERSOLL RAND-ROTARY SCREW)



**COMPRESSOR INTERNALS LEGEND**

--- OIL  
 — DRIVE  
 — AIR



**NOTES:**

- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
- VALVES 2-1A-528A THRU 2-1A-528D AND FLOW ORIFICE FG-9901A ARE INTERNAL TO THE OUTLET VALVE ASSEMBLY.
- VALVES 2-1A-526A THRU 2-1A-526F ARE INTERNAL TO THE INLET SWITCHING AND PURGE EXHAUST VALVE.

**REFERENCE DRAWINGS:**  
 25203-29489 SH.1 - INSTRUMENT AIR DRYERS  
 1-52C AND D FLOW SCHEMATIC

**FSAR FIGURE**

SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

**CAD**  
 NOTES:  
 1. MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

**OPERATIONS CRITICAL** **NON Q.A.**

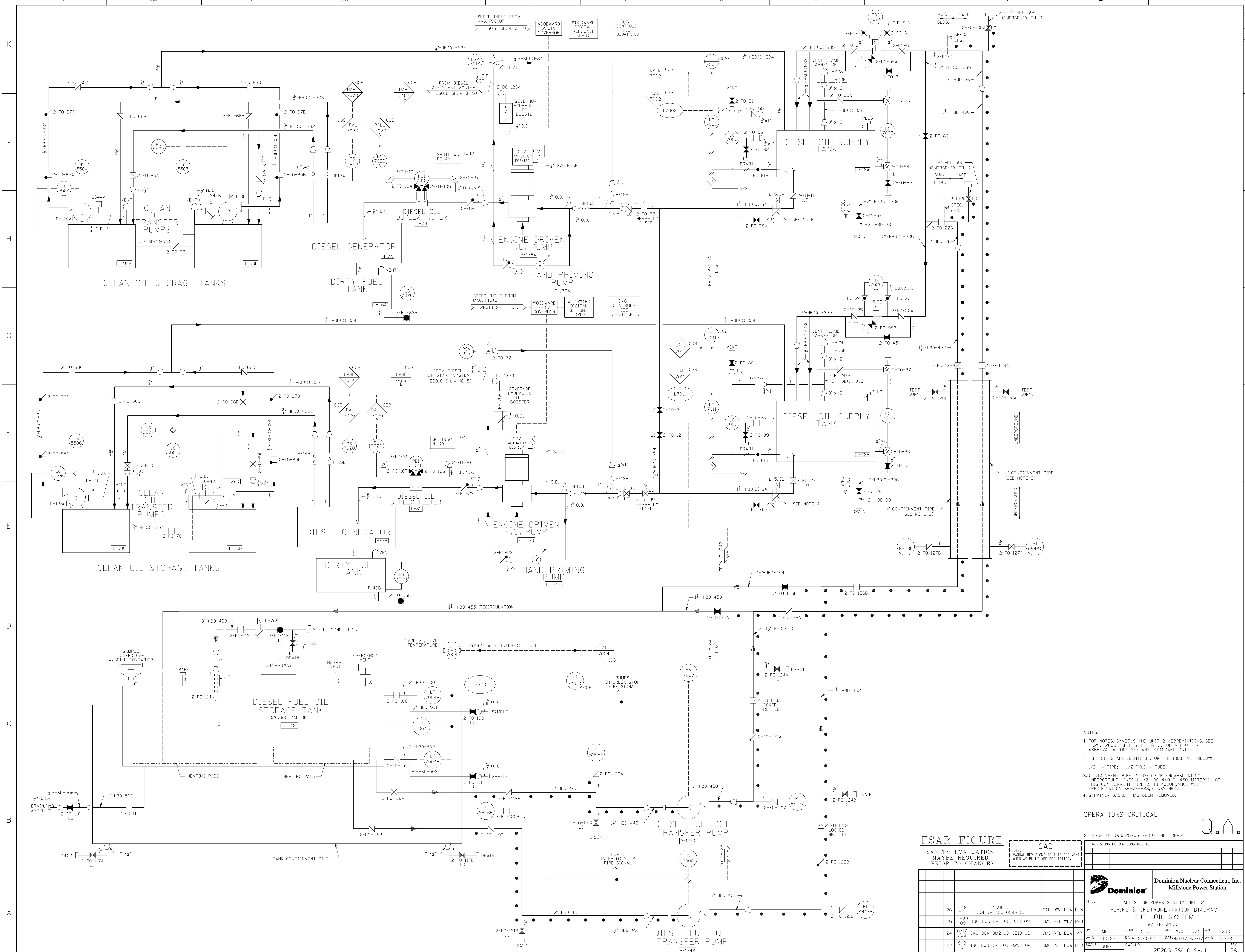
REVISIONS DURING CONSTRUCTION		DATE		BY		APP.		REASON	

BY: S.E. BESADE		CHKD: S. REINHARDT		APP: SRF		RCB		APP: BJO	
DATE: 6/1/88		DATE: 6/8/88		DATE: 8-1-88		DATE: 8-1-88		DATE: 8-1-88	
SCALE: NONE		DWG. NO.:		BY: CHK.		APP.:		84-024	
NO.:		DATE:		REVISIONS:		BY:		APP.:	

**Dominion Nuclear Connecticut, Inc.**  
**Millstone Power Station**

TITLE: MILLSTONE POWER STATION-UNIT 2  
 PIPING & INSTRUMENT DIAGRAM  
 INSTRUMENT AIR COMPRESSOR F3D  
 WATERFORD, CT



- NOTES:
- FOR NOTES, SYMBOLS AND UNIT 2 ABBREVIATIONS, SEE 25203-26001, SHEETS, 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  - PIPE SIZES ARE IDENTIFIED ON THE P&ID AS FOLLOWS:  
1/2" = PIPE; 1/2" O.D. = TUBE
  - CONTAINMENT PIPE IS USED FOR ENCAPSULATING UNDERGROUND LINES 1-1/2" HBD-449 & 450. MATERIAL OF THIS CONTAINMENT PIPE IS IN ACCORDANCE WITH SPECIFICATION SP-ME-688, CLASS HDB.
  - STRAINER BASKET HAS BEEN REMOVED.

OPERATIONS CRITICAL

**FSAR FIGURE**

SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

CAD  
NOTE: MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

SUPERSEDES DWG. 25203-26010 THRU REV.4

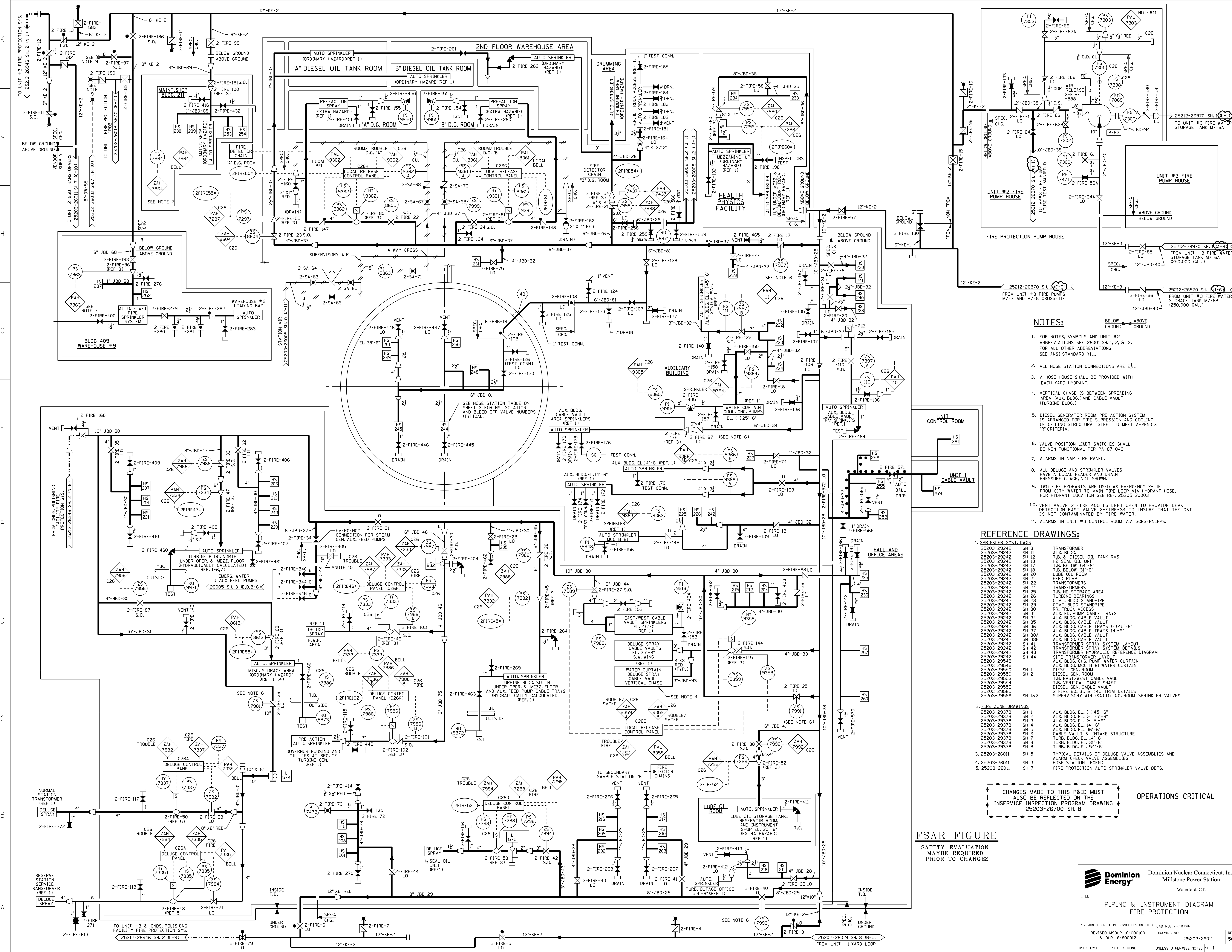
REVISIONS DURING CONSTRUCTION		DATE		BY		APP.		DATE		BY		APP.	

**Dominion Nuclear Connecticut, Inc.**  
Millstone Power Station

TITLE: MILLSTONE POWER STATION UNIT-2  
PIPING & INSTRUMENTATION DIAGRAM  
FUEL OIL SYSTEM  
WATERFORD, CT

NO.	DATE	REVISIONS	BY	CHKD.	APP.	DATE	NO.	DATE	REVISIONS	BY	CHKD.	APP.	DATE
26	2-18-11	INCCORP. DCN DM2-00-0046-09	EAL	DWJ	DLW	DLW	25	12-29-09	INC. DCN DM2-00-0311-09	JMS	RFL	DLW	MP
24	6/17/08	INC. DCN DM2-00-0213-08	JMS	RFL	DLW	MP	23	9/10/04	INC. DCN DM2-00-0207-04	SMP	MP	DLW	DED
23	9/10/04	INC. DCN DM2-00-0207-04	SMP	MP	DLW	DED							

SCALE: NONE  
DWG. NO.: 25203-26010 SH. 1  
REV: 26



- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.1.
  - ALL HOSE STATION CONNECTIONS ARE 2 1/2".
  - A HOSE HOUSE SHALL BE PROVIDED WITH EACH YARD HYDRANT.
  - VERTICAL CHASE IS BETWEEN SPREADING AREA (AUX. BLDG.) AND CABLE VAULT (TURBINE BLDG.).
  - DIESEL GENERATOR ROOM PRE-ACTION SYSTEM IS ARRANGED FOR FIRE SUPPRESSION AND COOLING OF CEILING STRUCTURAL STEEL TO MEET APPENDIX "R" CRITERIA.
  - VALVE POSITION LIMIT SWITCHES SHALL BE NON-FUNCTIONAL PER PA 87-043.
  - ALARMS IN NAP FIRE PANEL.
  - ALL DELUGE AND SPRINKLER VALVES HAVE A LOCAL HEADER AND DRAIN PRESSURE GAUGE, NOT SHOWN.
  - TWO FIRE HYDRANTS ARE USED AS EMERGENCY X-TIE FROM CITY WATER TO MAIN FIRE LOOP VIA HYDRANT HOSE. FOR HYDRANT LOCATION SEE REF. 25205-20003.
  - VENT VALVE 2-FIRE-405 IS LEFT OPEN TO PROVIDE LEAK DETECTION PAST VALVE 2-FIRE-34 TO INSURE THAT THE CST IS NOT CONTAMINATED BY FIRE WATER.
  - ALARMS IN UNIT #3 CONTROL ROOM VIA 3CES-PNLFFPS.

- REFERENCE DRAWINGS:**
- SPRINKLER SYST. DWGS
    - 25203-29242 SH 8 TRANSFORMER
    - 25203-29242 SH 11 AUX. BLDG.
    - 25203-29242 SH 12 T.B. & DIESEL OIL TANK RMS
    - 25203-29242 SH 13 H2 SEAL OIL UNIT
    - 25203-29242 SH 17 T.B. BELOW 54'-6"
    - 25203-29242 SH 18 T.B. BELOW 31'-6"
    - 25203-29242 SH 20 LUBE OIL ROOM
    - 25203-29242 SH 21 FEED PUMP
    - 25203-29242 SH 22 TRANSFORMERS
    - 25203-29242 SH 24 T.B. NE STORAGE AREA
    - 25203-29242 SH 26 TURBINE BEARINGS
    - 25203-29242 SH 28 CTMT. BLDG. STANDPIPE
    - 25203-29242 SH 29 RR. TRUCK ACCESS
    - 25203-29242 SH 31 AUX. P.D. PUMP CABLE TRAYS
    - 25203-29242 SH 34 AUX. BLDG. CABLE VAULT
    - 25203-29242 SH 35 AUX. BLDG. CABLE VAULT
    - 25203-29242 SH 36 AUX. BLDG. CABLE TRAYS (1-145'-6"
    - 25203-29242 SH 37 AUX. BLDG. CABLE TRAYS 14'-6"
    - 25203-29242 SH 38A AUX. BLDG. CABLE VAULT
    - 25203-29242 SH 38B AUX. BLDG. CABLE VAULT
    - 25203-29242 SH 41 TRANSFORMER SPRAY SYSTEM LAYOUT
    - 25203-29242 SH 42 SITE TRANSFORMER LAYOUT
    - 25203-29242 SH 43 TRANSFORMER HYDRAULIC REFERENCE DIAGRAM
    - 25203-29242 SH 44 AUX. BLDG. CNG. PUMP WATER CURTAIN
  - SH 1 DIESEL GEN. ROOM
  - SH 2 DIESEL GEN. ROOM
  - SH 2 T.B. EAST/WEST CABLE VAULT
  - SH 2 T.B. VERTICAL CABLE SHAFT
  - SH 2 DIESEL GEN. CABLE VAULT
  - SH 2 DIESEL GEN. CABLE VAULT
  - SH 2 SUPERVISORY AIR (SA) TO D.G. ROOM SPRINKLER VALVES
- 25203-29378 SH 1 AUX. BLDG. EL. (-) 145'-6"
  - 25203-29378 SH 2 AUX. BLDG. EL. (-) 125'-6"
  - 25203-29378 SH 3 AUX. BLDG. EL. (-) 15'-6"
  - 25203-29378 SH 4 AUX. BLDG. EL. 14'-6"
  - 25203-29378 SH 5 CABLE VAULT & INTAKE STRUCTURE
  - 25203-29378 SH 6 TURB. BLDG. EL. 14'-6"
  - 25203-29378 SH 7 TURB. BLDG. EL. 31'-6"
  - 25203-29378 SH 8 TURB. BLDG. EL. 54'-6"
- 25203-26011 SH 5 TYPICAL DETAILS OF DELUGE VALVE ASSEMBLIES AND ALARM CHECK VALVE ASSEMBLIES
  - 25203-26011 SH 3 HOSE STATION LEGEND
  - 25203-26011 SH 7 FIRE PROTECTION AUTO SPRINKLER VALVE DETS.

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 8

**OPERATIONS CRITICAL**

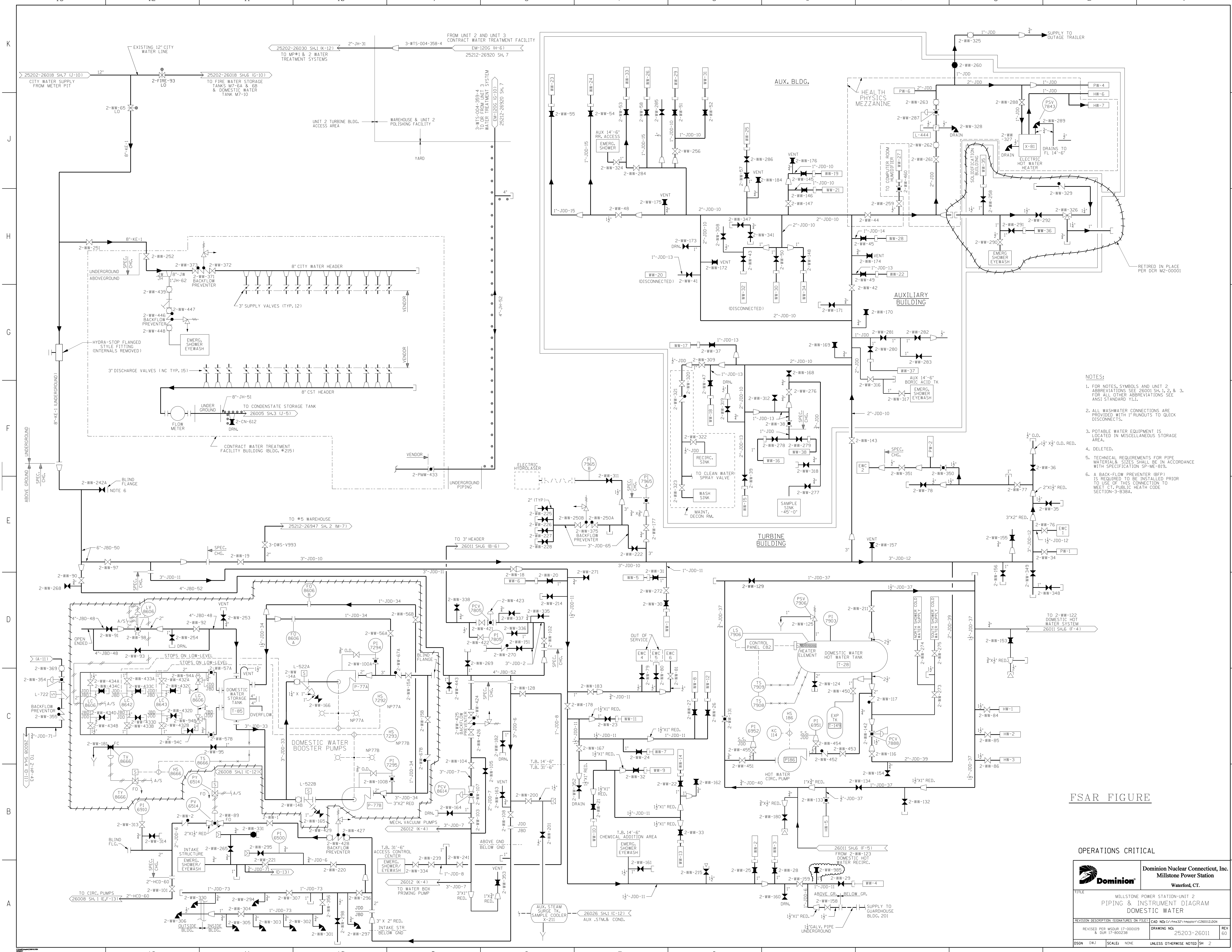
**FSAR FIGURE**

SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

**Dominion Energy** Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.

TITLE: PIPING & INSTRUMENTATION DIAGRAM FIRE PROTECTION

REVISION DESCRIPTION	SIGNATURES ON FILE	CAD NO.	C26011.DGN
REVISED MSOUR 18-000100 & DUR 18-800132	DRAWING NO.	25203-26011	REV 58
DSGN DWJ	SCALE: NONE	UNLESS OTHERWISE NOTED	SH 1

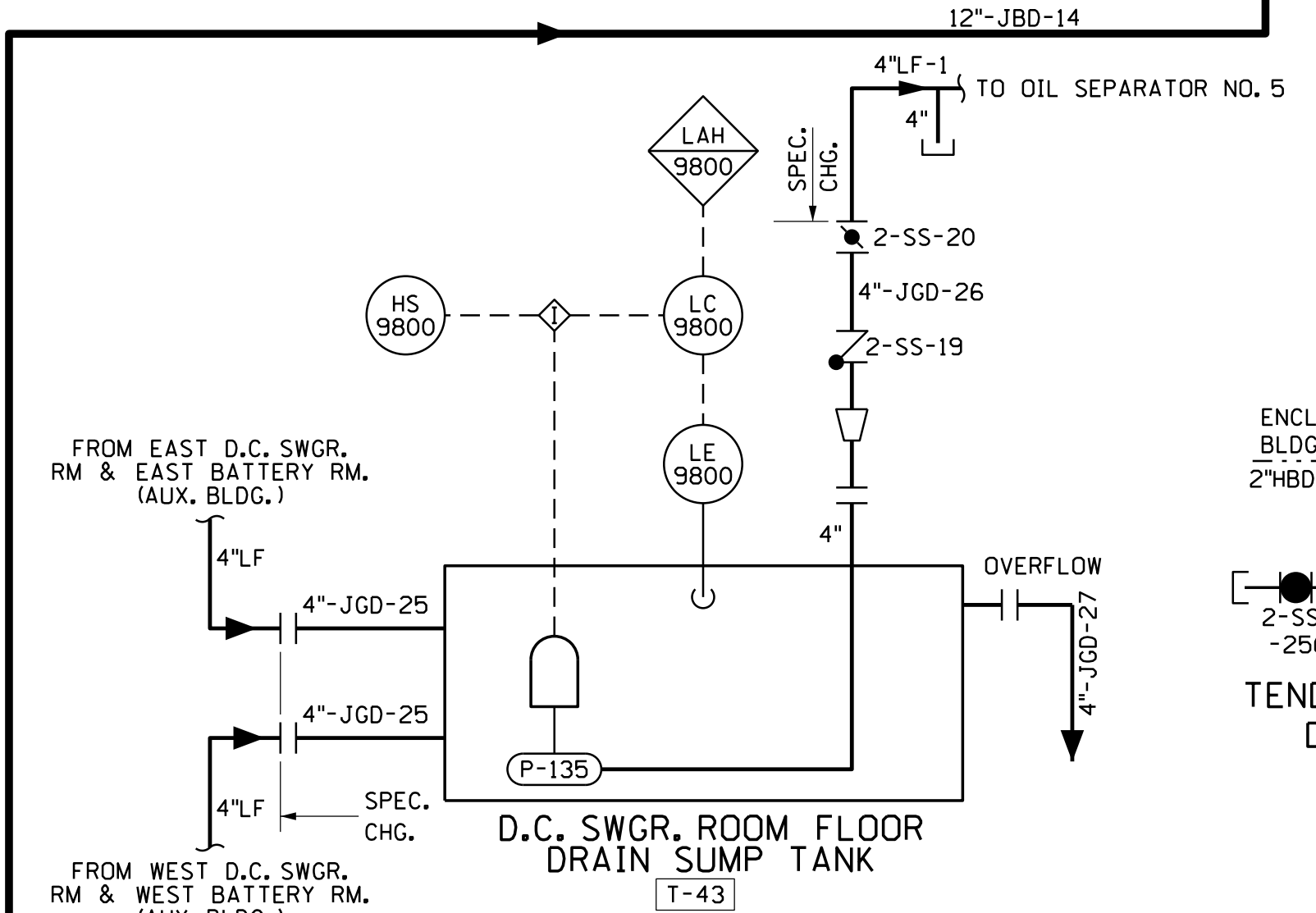
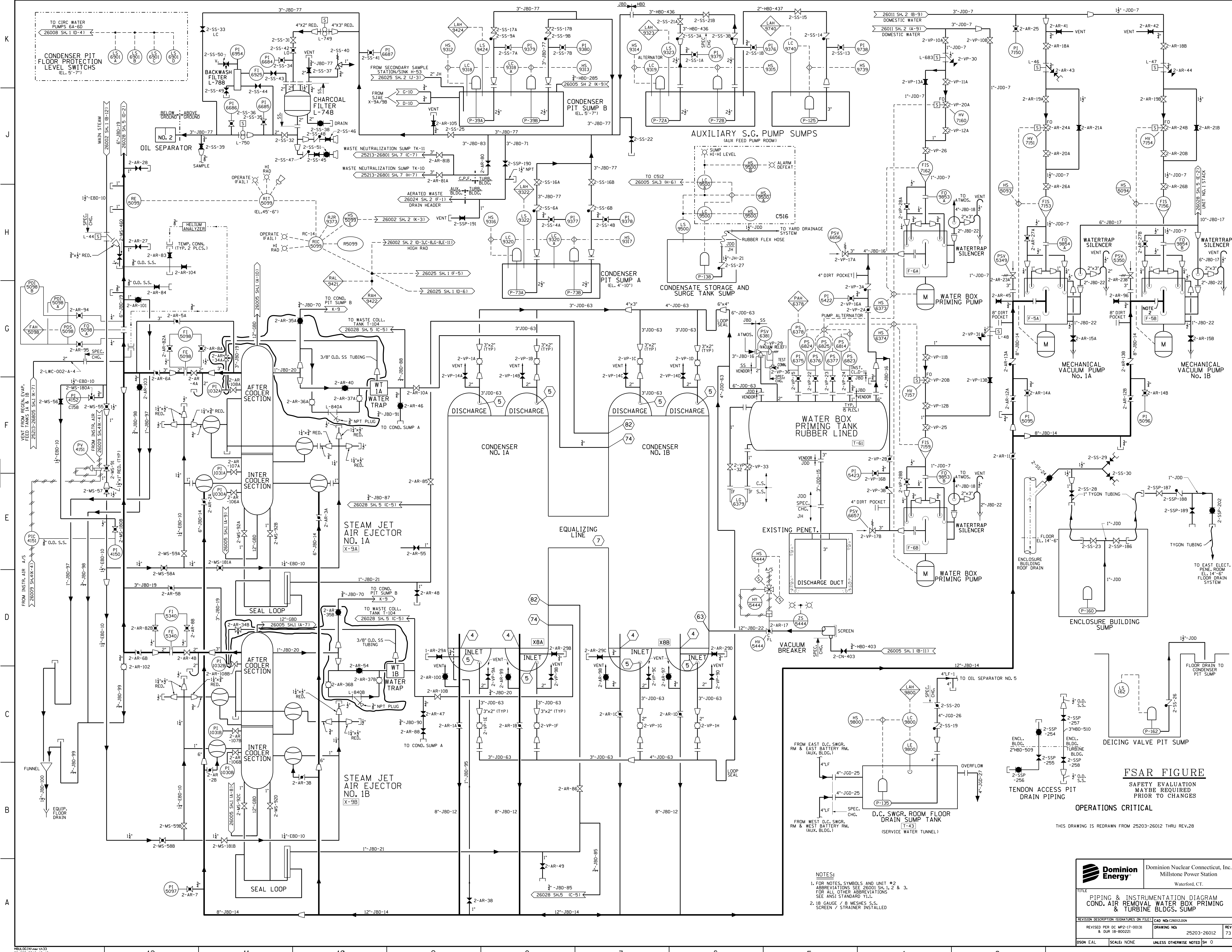


- NOTES:
- FOR NOTES, SYMBOLS AND UNIT 2 ABBREVIATIONS SEE 26001 SH. 1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  - ALL WASHWATER CONNECTIONS ARE PROVIDED WITH 1" RUNOUTS TO QUICK DISCONNECTS.
  - POTABLE WATER EQUIPMENT IS LOCATED IN MISCELLANEOUS STORAGE AREA.
  - DELETED.
  - TECHNICAL REQUIREMENTS FOR PIPE MATERIAL & SIZES SHALL BE IN ACCORDANCE WITH SPECIFICATION SP-ME-819.
  - A BACK-FLOW PREVENTER (BFP) IS REQUIRED TO BE INSTALLED PRIOR TO USE OF THIS CONNECTION TO MEET CT, PUBLIC HEALTH CODE SECTION-3-938A.

FSAR FIGURE

OPERATIONS CRITICAL

		<b>Dominion Nuclear Contract, Inc.</b> Millstone Power Station Waterford, CT.	
TITLE: MILLSTONE POWER STATION-UNIT 2 PIPING & INSTRUMENT DIAGRAM DOMESTIC WATER			
REVISION DESCRIPTION 17-00019 DUR 17-80028	SIGNATURES ON FILE 25203-26011	CAD NO: 17-00019-1 25203-26011	DRAWING NO: 25203-26011 REV 60
DSGN DWG SCALE: NONE	UNLESS OTHERWISE NOTED SH 2		

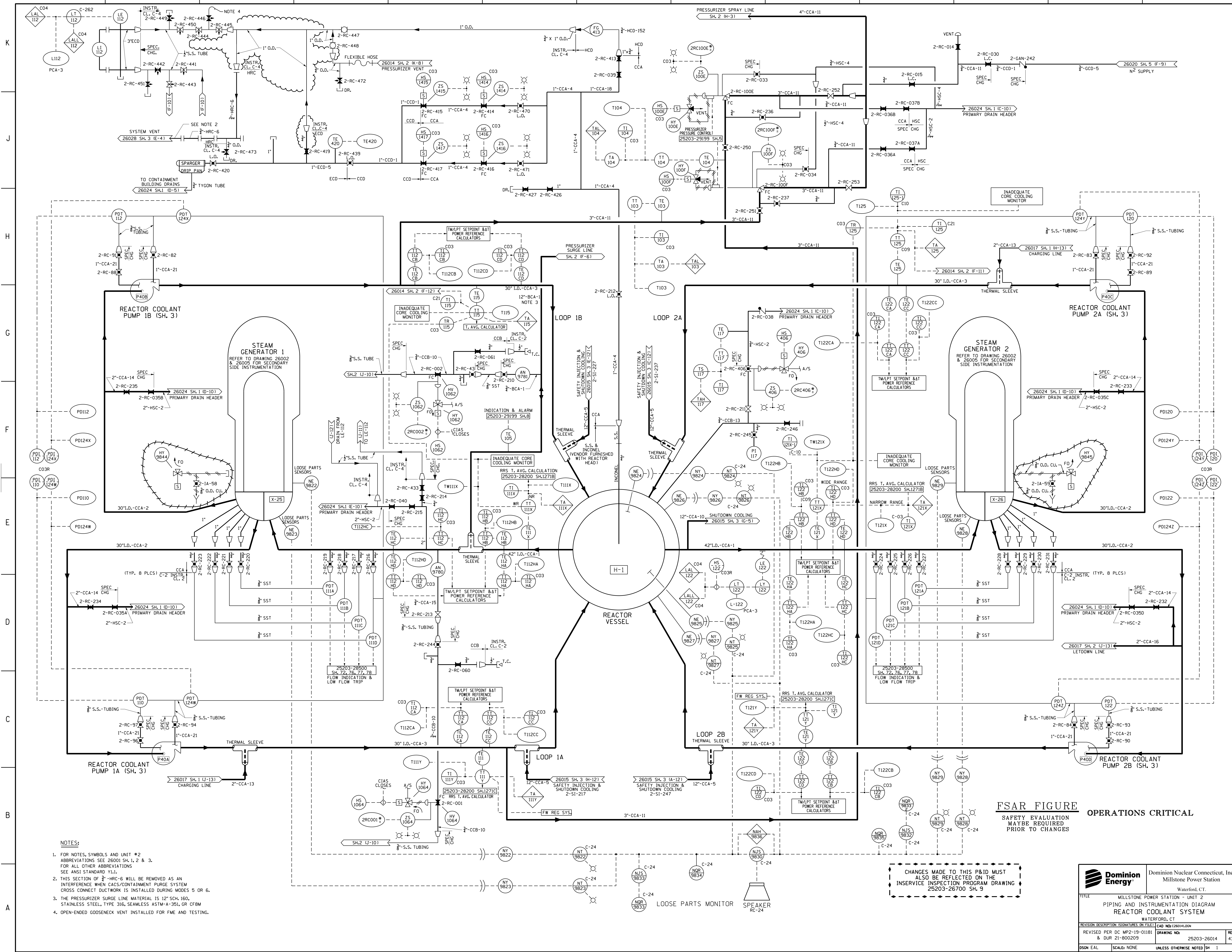


NOTES:  
 1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.  
 2. 18 GAUGE / 8 MESHES S.S. SCREEN / STRAINER INSTALLED

**FSAR FIGURE**  
 SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES  
 OPERATIONS CRITICAL

THIS DRAWING IS REDRAWN FROM 25203-26012 THRU REV.28

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>PIPING &amp; INSTRUMENTATION DIAGRAM          COND. AIR REMOVAL WATER BOX PRIMING          &amp; TURBINE BLDGS. SUMP</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C26012.DGN	DRAWING NO: 25203-26012	REV 73	SCALE: NONE UNLESS OTHERWISE NOTED SH 0



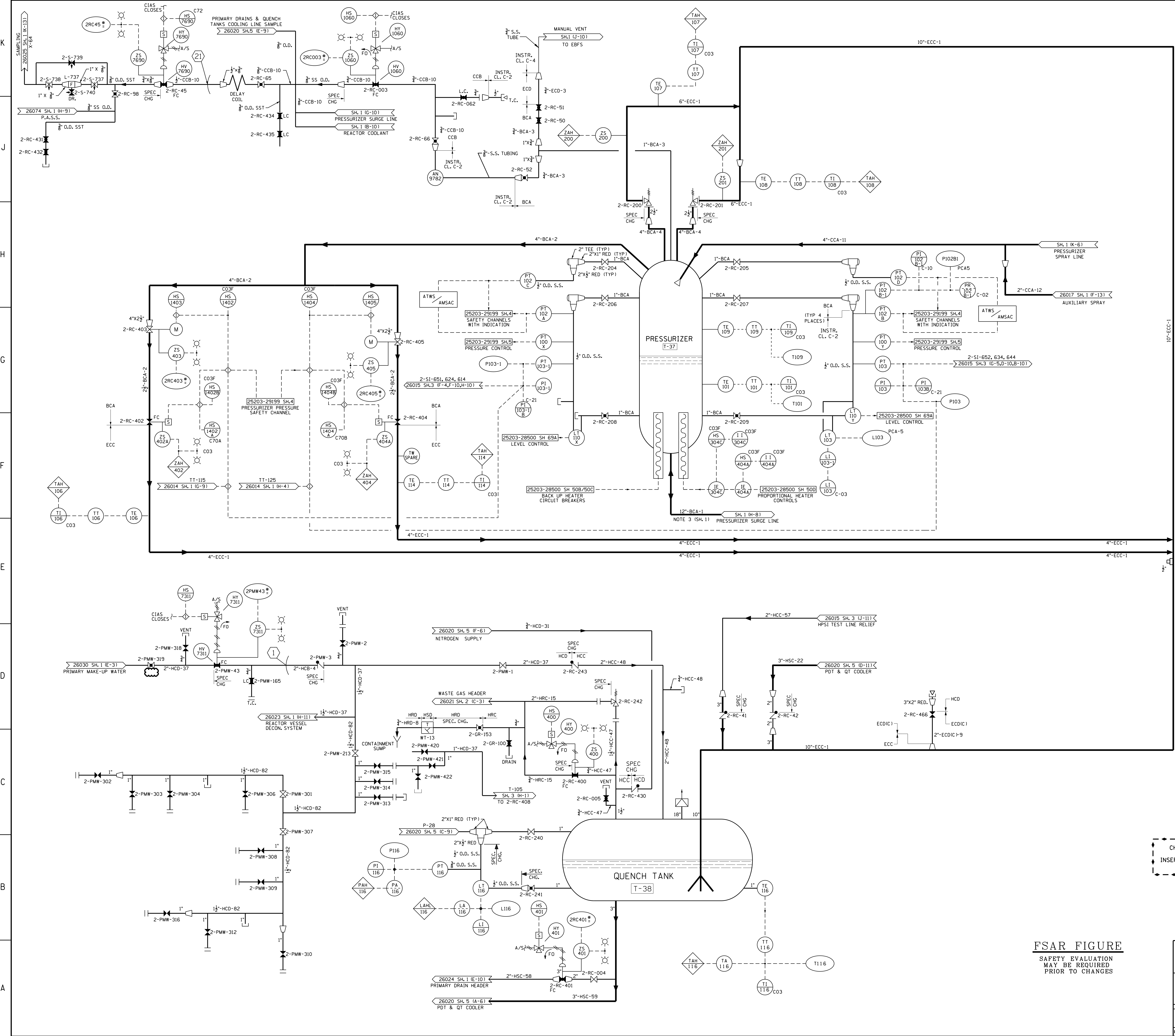
- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  - THIS SECTION OF 3" HRC-6 WILL BE REMOVED AS AN INTERFERENCE WHEN CACS/CONTAINMENT PURGE SYSTEM CROSS CONNECT DUCTWORK IS INSTALLED DURING MODES 5 OR 6.
  - THE PRESSURIZER SURGE LINE MATERIAL IS 12" SCH. 160, STAINLESS STEEL, TYPE 316, SEAMLESS ASTM-A-351, GR CF8M
  - OPEN-ENDED GOOSENECK VENT INSTALLED FOR FME AND TESTING.

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 9

**FSAR FIGURE OPERATIONS CRITICAL**  
SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE: MILLSTONE POWER STATION - UNIT 2 PIPING AND INSTRUMENTATION DIAGRAM REACTOR COOLANT SYSTEM WATERFORD, CT			
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER DC MP2-19-01181 & DUR 21-800209	CAD NO: C260141.DGN DRAWING NO: 25203-26014	REV 43	DSN EAL SCALE: NONE UNLESS OTHERWISE NOTED SH 1





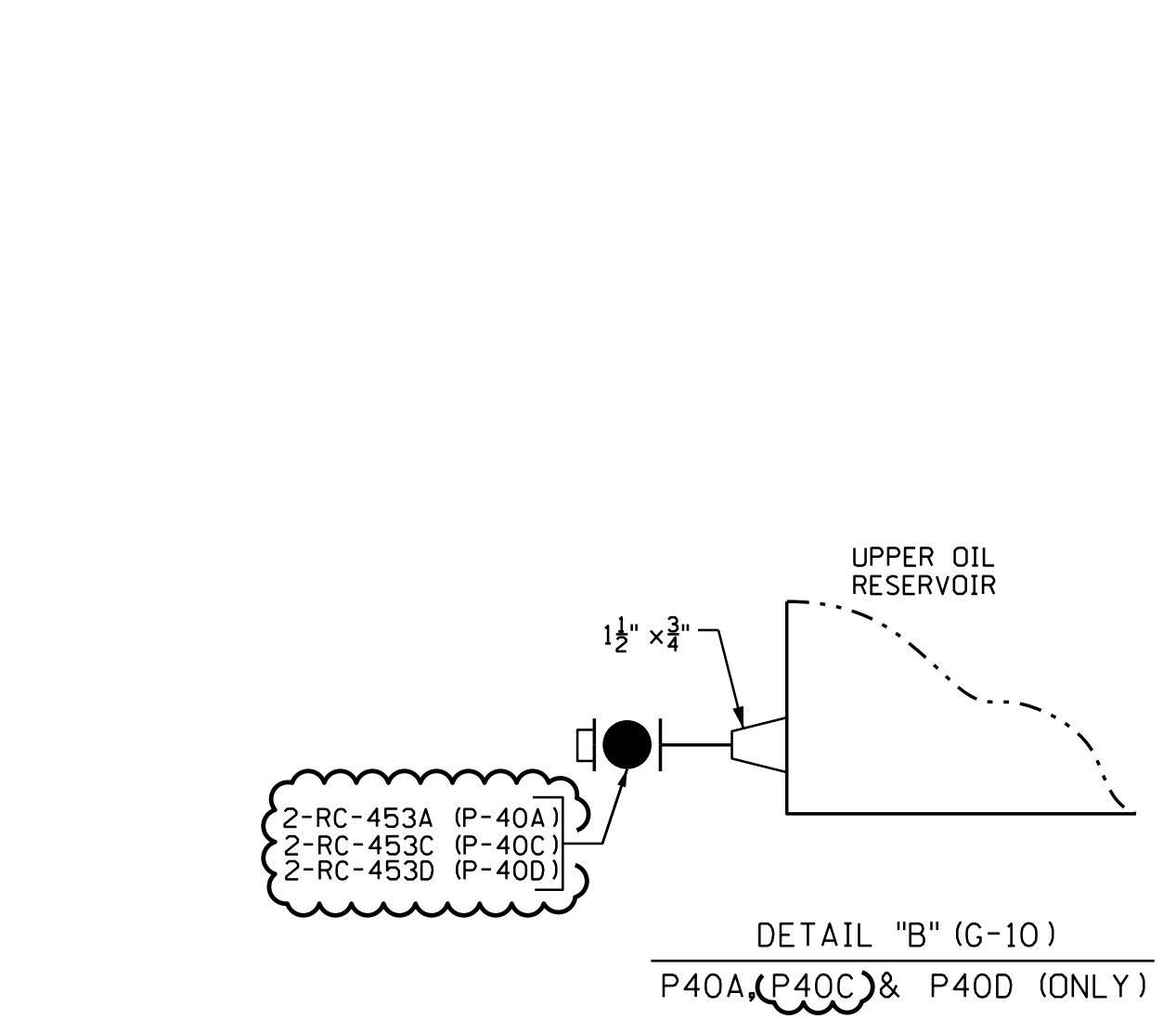
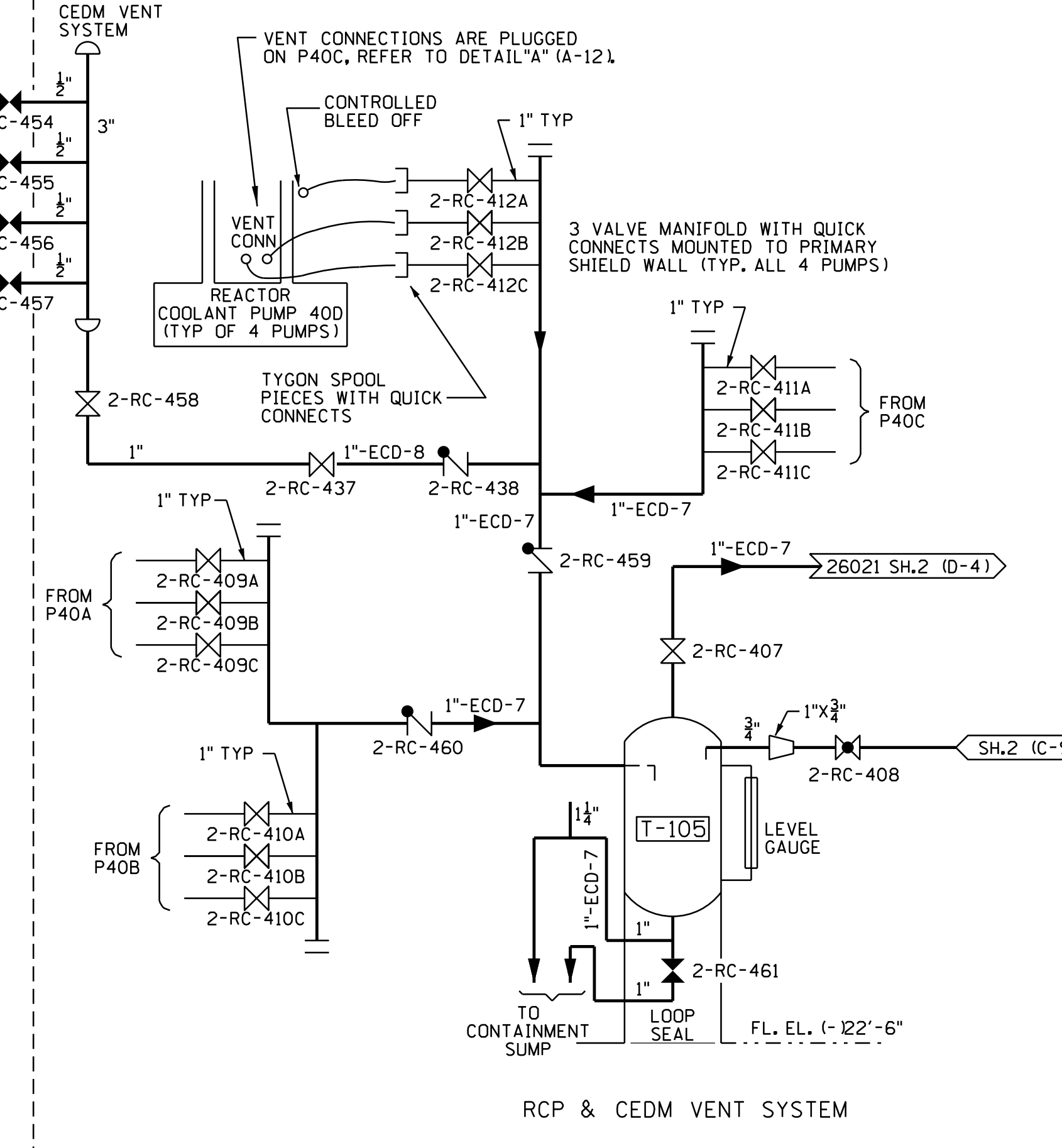
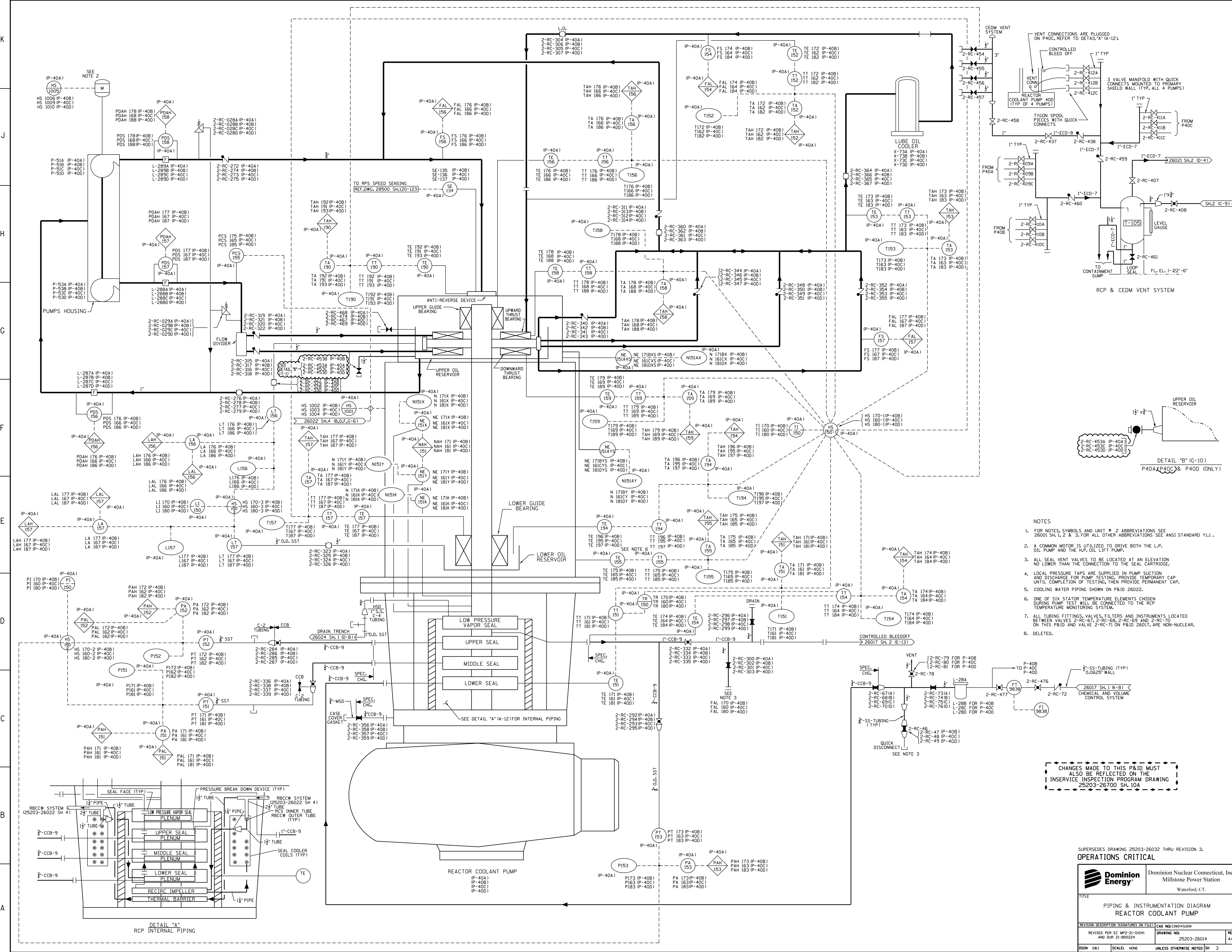
NOTES:  
 1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.1.

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH.10

OPERATIONS CRITICAL

FSAR FIGURE  
 SAFETY EVALUATION  
 MAY BE REQUIRED  
 PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE <b>PIPING AND INSTRUMENTATION DIAGRAM          REACTOR COOLANT SYSTEM</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: E260142.00N	REVISED PER MSDUR 22-000005 & DUR 22-800007	DRAWING NO: <b>25203-26014</b>	REV <b>50</b>
DSGM DWJ	SCALE: NONE	UNLESS OTHERWISE NOTED SH	<b>2</b>

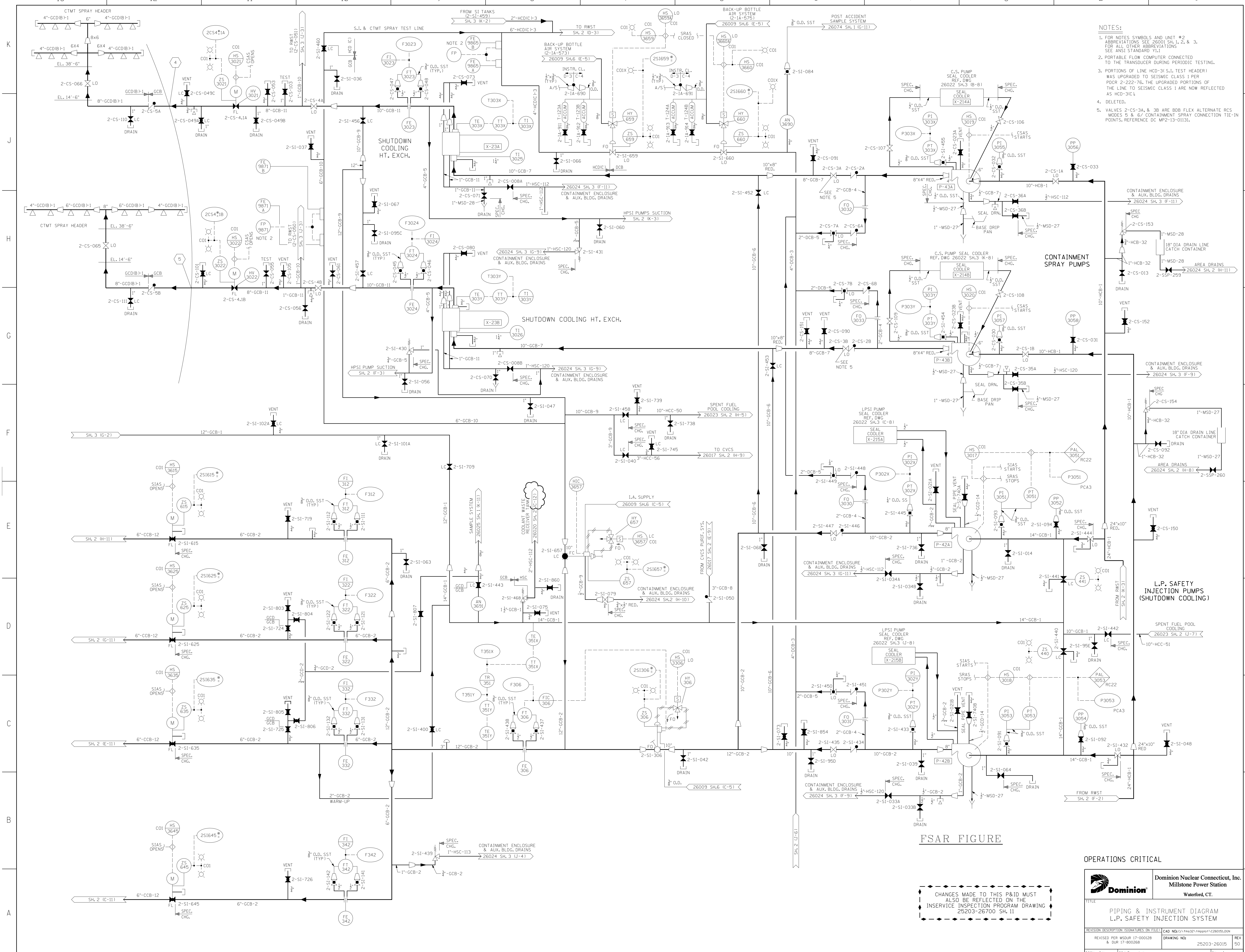


- NOTES**
- FOR NOTES, SYMBOLS AND UNIT # 2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
  - A COMMON MOTOR IS UTILIZED TO DRIVE BOTH THE L.P. OIL PUMP AND THE H.P. OIL LIFT PUMP.
  - ALL SEAL VENT VALVES TO BE LOCATED AT AN ELEVATION NO LOWER THAN THE CONNECTION TO THE SEAL CARTRIDGE.
  - LOCAL PRESSURE TAPS ARE SUPPLIED IN PUMP SUCTION AND DISCHARGE FOR PUMP TESTING. PROVIDE TEMPORARY CAP UNTIL COMPLETION OF TESTING, THEN PROVIDE PERMANENT CAP.
  - COOLING WATER PIPING SHOWN ON P&ID 26022.
  - ONE OF SIX STATOR TEMPERATURE ELEMENTS CHOSEN DURING PUMP TEST WILL BE CONNECTED TO THE RCP TEMPERATURE MONITORING SYSTEM.
  - ALL TUBING FITTINGS, VALVES, FILTERS AND INSTRUMENTS LOCATED BETWEEN VALVES 2-RC-57, 2-RC-58, 2-RC-59 AND 2-RC-70 ON THIS P&ID AND VALVE 2-RC-71 ON P&ID 26017, ARE NON-NUCLEAR.
  - DELETED.

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 10A

SUPERSEDES DRAWING 25203-26032 THRU REVISION 3.  
**OPERATIONS CRITICAL**

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>PIPING &amp; INSTRUMENTATION DIAGRAM</b> <b>REACTOR COOLANT PUMP</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C26014.00N		DRAWING NO: 25203-26014	
REVISED FOR EC MP-21-01041 AND DUR 21-00024		REV 44	
DSGN DWJ	SCALE: NONE	UNLESS OTHERWISE NOTED SH 3	



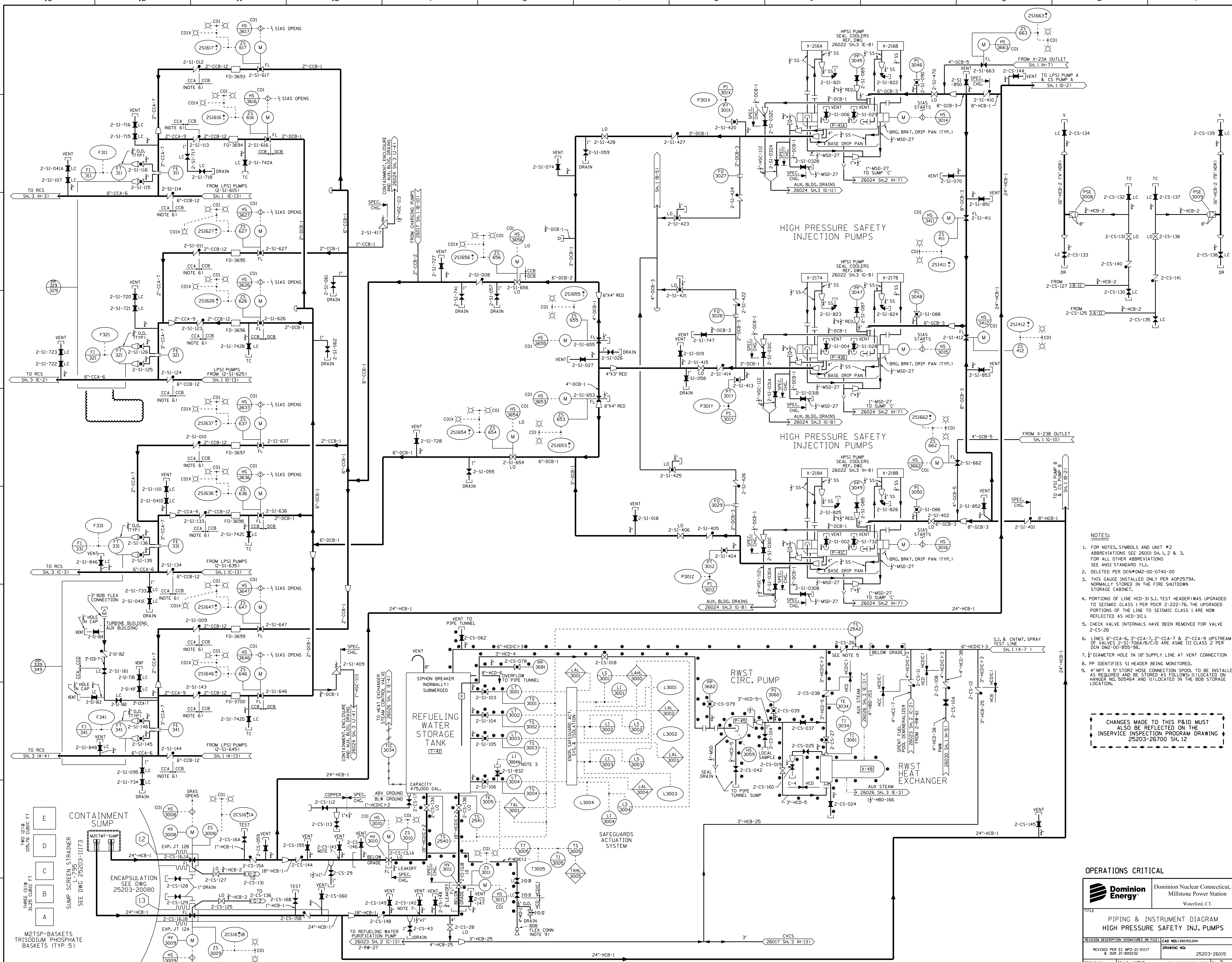
- NOTES:**
- FOR NOTES SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2, & 3. FOR ALL OTHER ABBREVIATIONS, SEE ANSI STANDARD Y1.1.
  - PORTABLE FLOW COMPUTER CONNECTED TO THE TRANSDUCER DURING PERIODIC TESTING.
  - PORTIONS OF LINE HCD-3(S.I. TEST HEADER) WAS UPGRADED TO SEISMIC CLASS 1 PER PDCR 2-222-76. THE UPGRADED PORTIONS OF THE LINE TO SEISMIC CLASS 1 ARE NOW REFLECTED AS HCD-3IC1.
  - DELETED.
  - VALVES 2-CS-3A, & 3B ARE BDB FLEX ALTERNATE RCS MODES 5 & 6/ CONTAINMENT SPRAY CONNECTION TIE-IN POINTS. REFERENCE DC MP2-113131.

**FSAR FIGURE**

**OPERATIONS CRITICAL**

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26105 SH. 11

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.
TITLE <b>PIPING &amp; INSTRUMENT DIAGRAM</b> <b>L.P. SAFETY INJECTION SYSTEM</b>		
REVISION DESCRIPTION 17-000128 17-000208	SIGNATURES ON FILE DRAWING NO. 25203-26105	CAD NO. 17-000128 17-000208 REV 50
DSN EAL	SCALE NONE	UNLESS OTHERWISE NOTED SH 1



- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  - DELETED PER DCM#DM2-00-0740-00
  - THIS GAUGE INSTALLED ONLY PER AOP2579A. NORMALLY STORED IN THE FIRE SHUTDOWN STORAGE CABINET.
  - PORTIONS OF LINE HCD-3(S.I. TEST HEADER) WAS UPGRADED TO SEISMIC CLASS 1 PER PDGR 2-222-76. THE UPGRADED PORTIONS OF THE LINE TO SEISMIC CLASS 1 ARE NOW REFLECTED AS HCD-3ICL
  - CHECK VALVE INTERNALS HAVE BEEN REMOVED FOR VALVE 2-CS-26
  - LINES 6"-CCA-6, 3"-CCA-7, 2"-CCA-7 & 2"-CCA-9 UPSTREAM OF VALVES 2-SI-706A/B/C/D ARE ASME III CLASS 2 PER DCM 02-00-895-98.
  - 1/2" DIAMETER HOLE IN 18" SUPPLY LINE AT VENT CONNECTION
  - PP IDENTIFIES SI HEADER BEING MONITORED.
  - 4" NPT X 6" STORZ HOSE CONNECTION SPOOL TO BE INSTALLED AS REQUIRED AND BE STORED AS FOLLOWS: (1) LOCATED ON HANGER NO. 505464 AND (2) LOCATED IN THE BDB STORAGE LOCATION.

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH.12

**OPERATIONS CRITICAL**

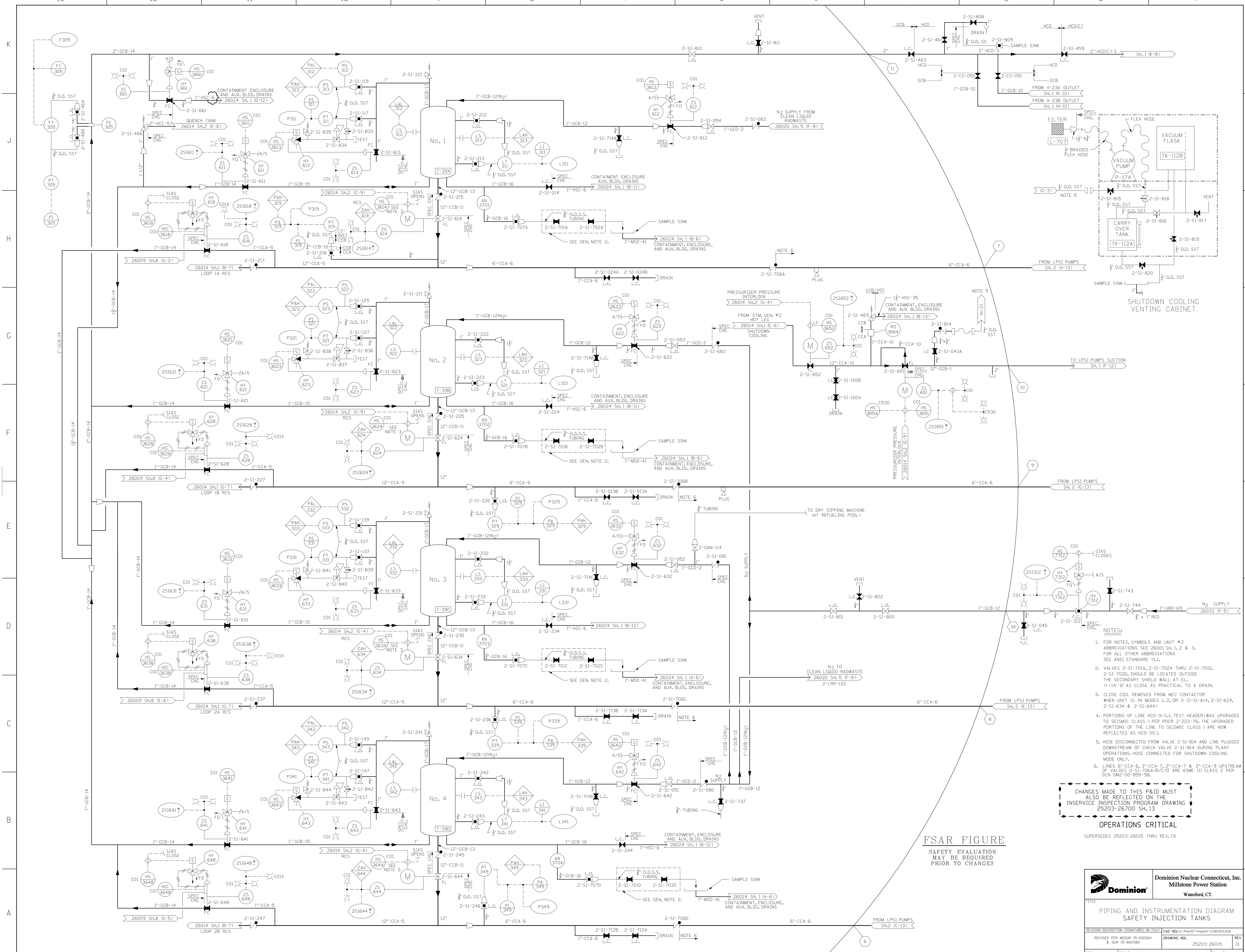
**Dominion Energy** Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.

TITLE: PIPING & INSTRUMENT DIAGRAM HIGH PRESSURE SAFETY INJ. PUMPS

REVISION DESCRIPTION: (SIGNATURES ON FILE) CAD NO: 1260152.DWG

REVISED PER EC MP2-21-0117 & DUR 21-800232 DRAWING NO: 25203-26015 REV 51

DSGN DWJ SCALE: NONE UNLESS OTHERWISE NOTED SH. 2



- NOTES:
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
  - VALVES 2-SI-7014, 2-SI-7024 THRU 2-SI-7010, 2-SI-7020, SHOULD BE LOCATED OUTSIDE THE SECONDARY SHIELD WALL AT EL. (+)14'-6" AS CLOSE AS PRACTICAL TO A DRAIN.
  - CLOSE COIL REMOVED FROM MCC CONTACTOR WHEN UNIT IS IN MODES 1, 2, OR 3 (2-SI-614, 2-SI-624, 2-SI-634 & 2-SI-644)
  - PORTIONS OF LINE HCD-31 (S.I. TEST HEADER) WAS UPGRADED TO SEISMIC CLASS 1 PER PDCR 2-222-76. THE UPGRADED PORTIONS OF THE LINE TO SEISMIC CLASS 1 ARE NOW REFLECTED AS HCD-31C1.
  - HOSE DISCONNECTED FROM VALVE 2-SI-814 AND LINE PLUGGED DOWNSTREAM OF CHECK VALVE 2-SI-814 DURING PLANT OPERATIONS, HOSE CONNECTED FOR SHUTDOWN COOLING MODE ONLY.
  - LINE 6"-CCA-6, 3"-CCA-7, 2"-CCA-7 & 2"-CCA-9 UPSTREAM OF VALVES 2-SI-706A/B/C/D ARE ASME III CLASS 2 PER DCN DWG-00-B55-98.

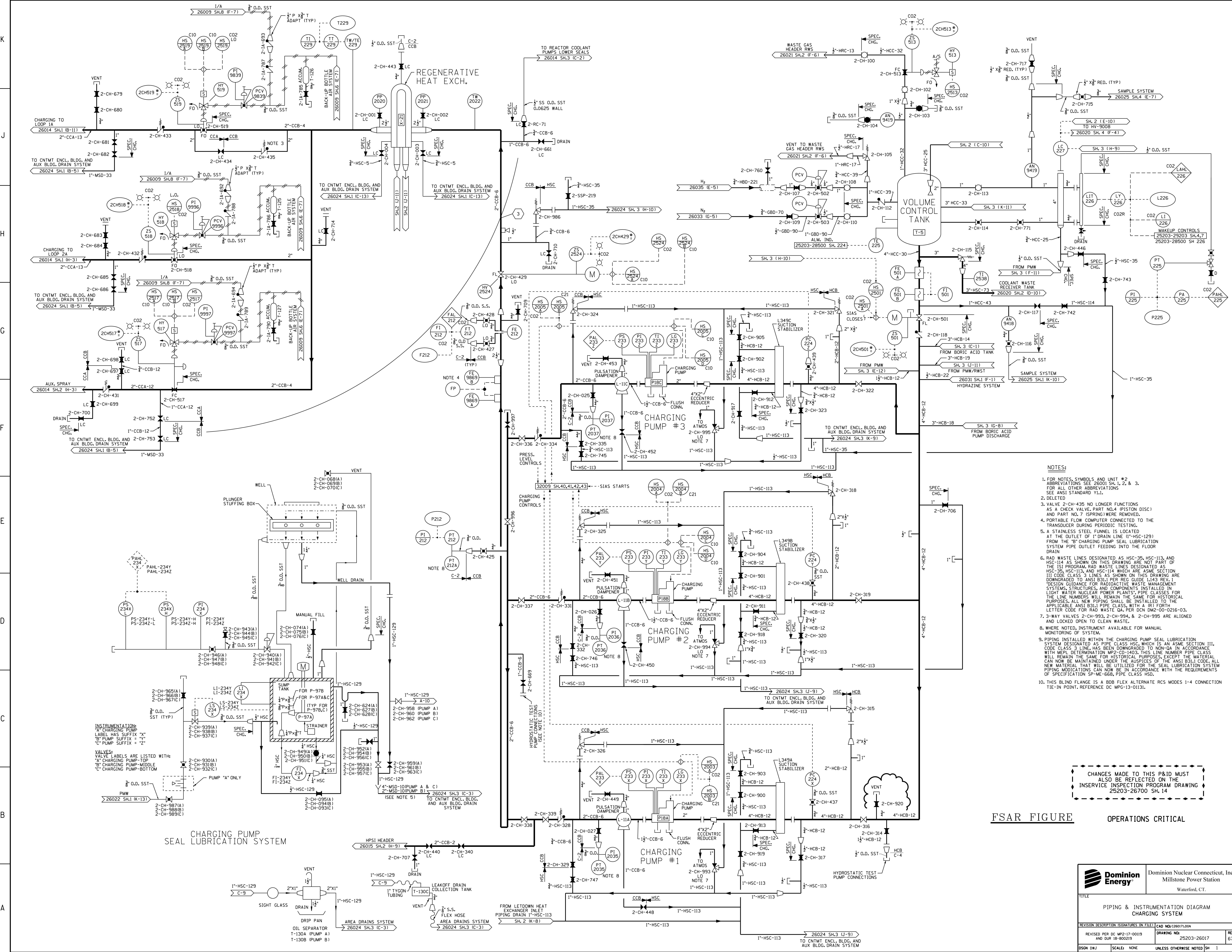
CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 13

OPERATIONS CRITICAL

SUPERSEDES 25203-26015 THRU REV. 19

FSAR FIGURE  
SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

		<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station Waterford, CT.	
TITLE <b>PIPING AND INSTRUMENTATION DIAGRAM</b> <b>SAFETY INJECTION TANKS</b>			
PREVISION DESCRIPTION REVISION PER MSUR 15-000164 & OUR 15-000380	SIGNATURES ON FILE CAD NO: E11-FMS321-mp0011-C260153.DGN	DRAWING NO: 25203-26015	REV 31
DSNM EAL	SCALE: NONE	UNLESS OTHERWISE NOTED SH 3	

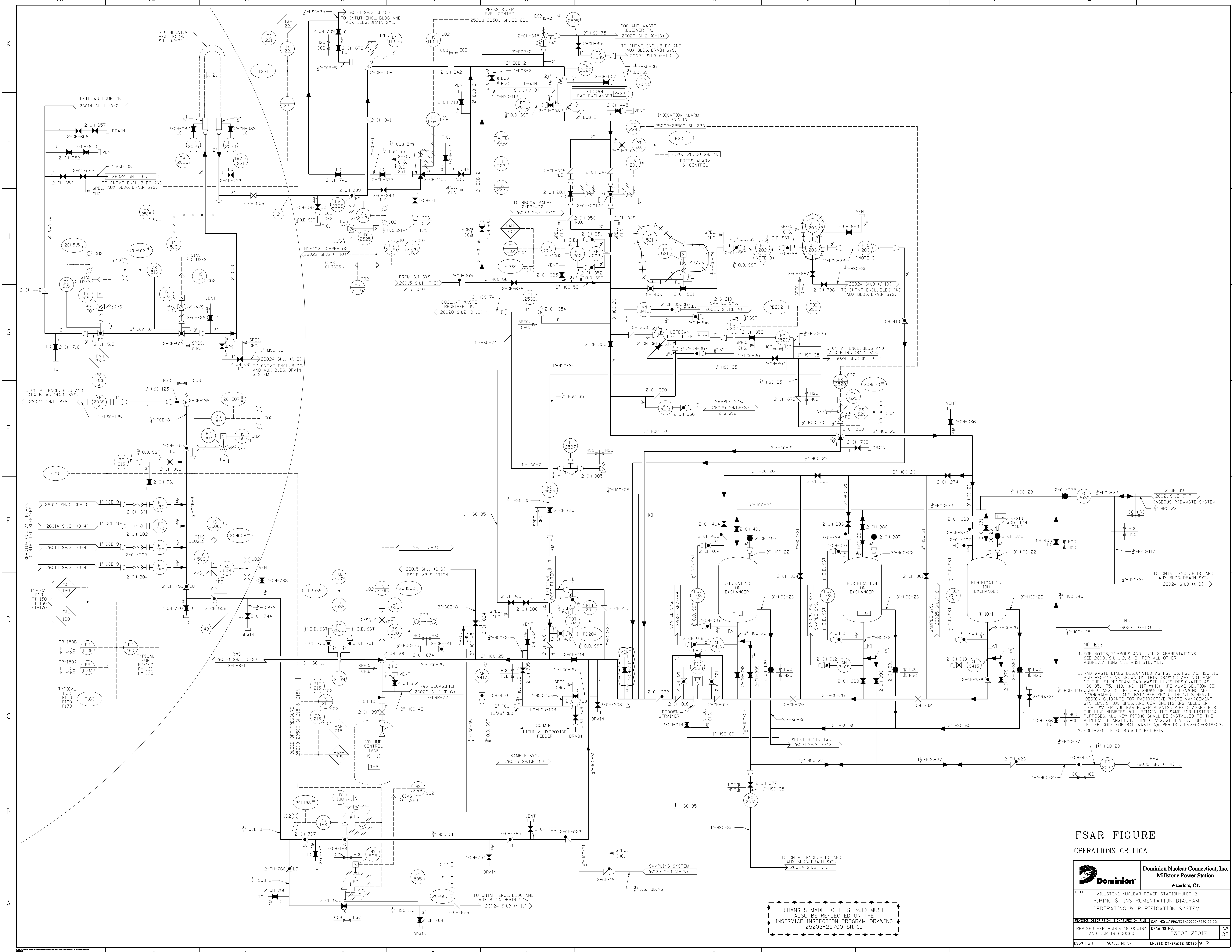


- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS, SEE ANSI STANDARD Y11.
  - DELETED
  - VALVE 2-CH-435 NO LONGER FUNCTIONS AS A CHECK VALVE. PART NO.4 (PISTON DISC) AND PART NO. 7 (SPRING) WERE REMOVED.
  - PORTABLE FLOW COMPUTER CONNECTED TO THE TRANSDUCER DURING PERIODIC TESTING.
  - A STAINLESS STEEL FUNNEL IS LOCATED AT THE OUTLET OF 1" DRAIN LINE (1"-HSC-129) FROM THE "B" CHARGING PUMP SEAL LUBRICATION SYSTEM PIPE OUTLET FEEDING INTO THE FLOOR DRAIN
  - RAD WASTE LINES DESIGNATED AS HSC-35, HSC-113, AND HSC-114 AS SHOWN ON THIS DRAWING ARE NOT PART OF THE IS1 PROGRAM. RAD WASTE LINES DESIGNATED AS HSC-35, HSC-113, AND HSC-114 WHICH ARE ASME SECTION III, CODE CLASS 3 LINES AS SHOWN ON THIS DRAWING ARE DOWNGRADED TO ANSI B31.1 PER REG GUIDE 1.143 REV. 1. DESIGN GUIDANCE FOR RADIOACTIVE WASTE MANAGEMENT SYSTEMS, STRUCTURES, AND COMPONENTS INSTALLED IN LIGHT WATER NUCLEAR POWER PLANTS, PIPE CLASSES FOR THE LINE NUMBERS WILL REMAIN THE SAME FOR HISTORICAL PURPOSES. ALL NEW PIPING SHALL BE INSTALLED TO THE APPLICABLE ANSI B31.1 PIPE CLASS, WITH A (R) FORTH LETTER CODE FOR RAD WASTE QA, PER DCN DM2-00-0216-03.
  - 3-WAY VALVES 2-CH-993, 2-CH-994, & 2-CH-995 ARE ALIGNED AND LOCKED OPEN TO CLEAN WASTE.
  - WHERE NOTED, INSTRUMENT AVAILABLE FOR MANUAL MONITORING OF SYSTEM.
  - PIPING INSTALLED WITHIN THE CHARGING PUMP SEAL LUBRICATION SYSTEM DESIGNATED AS PIPE CLASS HSC, WHICH IS AN ASME SECTION III, CODE CLASS 3 LINE, HAS BEEN DOWNGRADED TO NON-QA IN ACCORDANCE WITH MEPL DETERMINATION MP2-CD-1403. THIS LINE NUMBER PIPE CLASS WILL REMAIN THE SAME FOR HISTORICAL PURPOSES, EXCEPT THE MATERIAL CAN NOW BE MAINTAINED UNDER THE AUSPICES OF THE ANSI B31.1 CODE. ALL NEW MATERIAL THAT WILL BE UTILIZED FOR THE SEAL LUBRICATION SYSTEM PIPING MODIFICATIONS CAN NOW BE IN ACCORDANCE WITH THE REQUIREMENTS OF SPECIFICATION SP-ME-668, PIPE CLASS HSD.
  - THIS BLIND FLANGE IS A BOB FLG ALTERNATE RCS MODES 1-4 CONNECTION TIE-IN POINT. REFERENCE DC MFG-13-0113.

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 14

FSAR FIGURE OPERATIONS CRITICAL

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>PIPING &amp; INSTRUMENTATION DIAGRAM</b> <b>CHARGING SYSTEM</b>			
REVISION DESCRIPTION DSGN DWJ	SIGNATURES ON FILE SCALE: NONE	CAD NO: C26017.DGN DRAWING NO: 25203-26017	REV 67



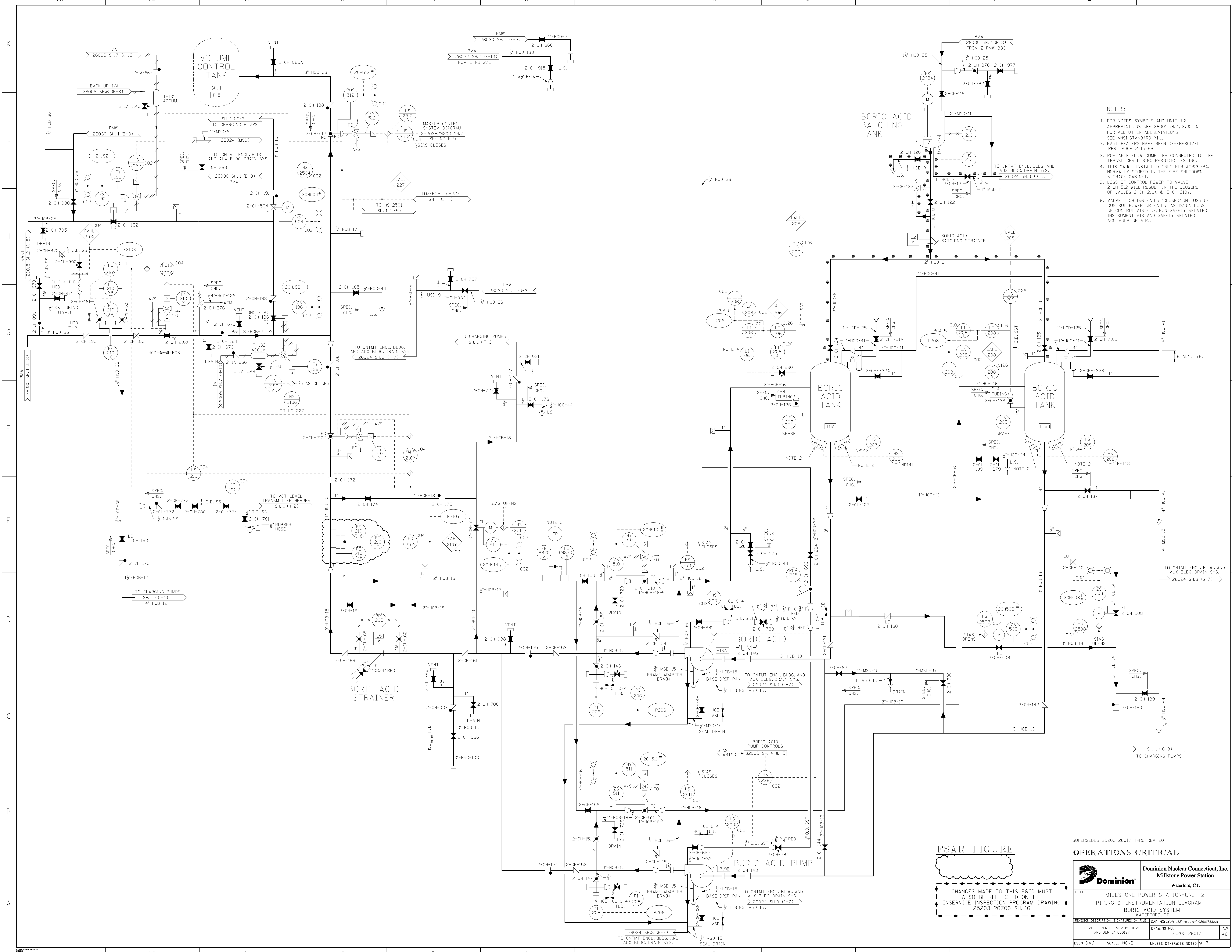
**NOTES:**

- FOR NOTES, SYMBOLS AND UNIT 2 ABBREVIATIONS SEE 26001 SH. 1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STD. T1.1.
- RAD WASTE LINES DESIGNATED AS HSC-35, HSC-75, HSC-113 AND HSC-117 AS SHOWN ON THIS DRAWING ARE NOT PART OF THE ISI PROGRAM. RAD WASTE LINES DESIGNATED AS HSC-35, -75, -113, AND -117 WHICH ARE ASME SECTION III CODE CLASS 3 LINES AS SHOWN ON THIS DRAWING ARE DOWNGRADED TO ANSI B31.1 PER REG GUIDE 1.143 REV. 1 DESIGN GUIDANCE FOR RADIOACTIVE WASTE MANAGEMENT SYSTEMS, STRUCTURES, AND COMPONENTS INSTALLED IN LIGHT WATER NUCLEAR POWER PLANTS. PIPE CLASSES FOR THE LINE NUMBERS WILL REMAIN THE SAME FOR HISTORICAL PURPOSES. ALL NEW PIPING SHALL BE INSTALLED TO THE APPLICABLE ANSI B31.1 PIPE CLASS, WITH A (R) FORTH LETTER CODE FOR RAD WASTE QA PER DCM DW-02-00-0216-03.
- EQUIPMENT ELECTRICALLY RETIRED.

**FSAR FIGURE**  
**OPERATIONS CRITICAL**

		<b>Dominion Nuclear Connecticut, Inc.</b> <b>Millstone Power Station</b> Waterford, CT.	
TITLE MILLSTONE NUCLEAR POWER STATION-UNIT 2 PIPING & INSTRUMENTATION DIAGRAM DEBORATING & PURIFICATION SYSTEM			
REVISION DESCRIPTION 15/04/2000 15/04/2000	SIGNATURES ON FILE 15/04/2000 15/04/2000	CAD NO. PROJECT/2000/P260172.DGN	DRAWING NO. 25203-26017
REVISION 15/04/2000 15/04/2000	DRAWING NO. 25203-26017	SCALE NONE	REV 3/8
DSGN DWJ	SCALE NONE	UNLESS OTHERWISE NOTED SH 2	REV 3/8

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 15



- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
  - BAST HEATERS HAVE BEEN DE-ENERGIZED PER PROC 2-15-88
  - PORTABLE FLOW COMPUTER CONNECTED TO THE TRANSDUCER DURING PERIODIC TESTING.
  - THIS GAUGE INSTALLED ONLY PER AOP2579A. NORMALLY STORED IN THE FIRE SHUTDOWN STORAGE CABINET.
  - LOSS OF CONTROL POWER TO VALVE 2-CH-512 WILL RESULT IN THE CLOSURE OF VALVES 2-CH-210X & 2-CH-210Y.
  - VALVE 2-CH-196 FAILS "CLOSED" ON LOSS OF CONTROL POWER OR FAILS "AS-IS" ON LOSS OF CONTROL AIR (I.E. NON-SAFETY RELATED INSTRUMENT AIR AND SAFETY RELATED ACCUMULATOR AIR.)

**FSAR FIGURE**

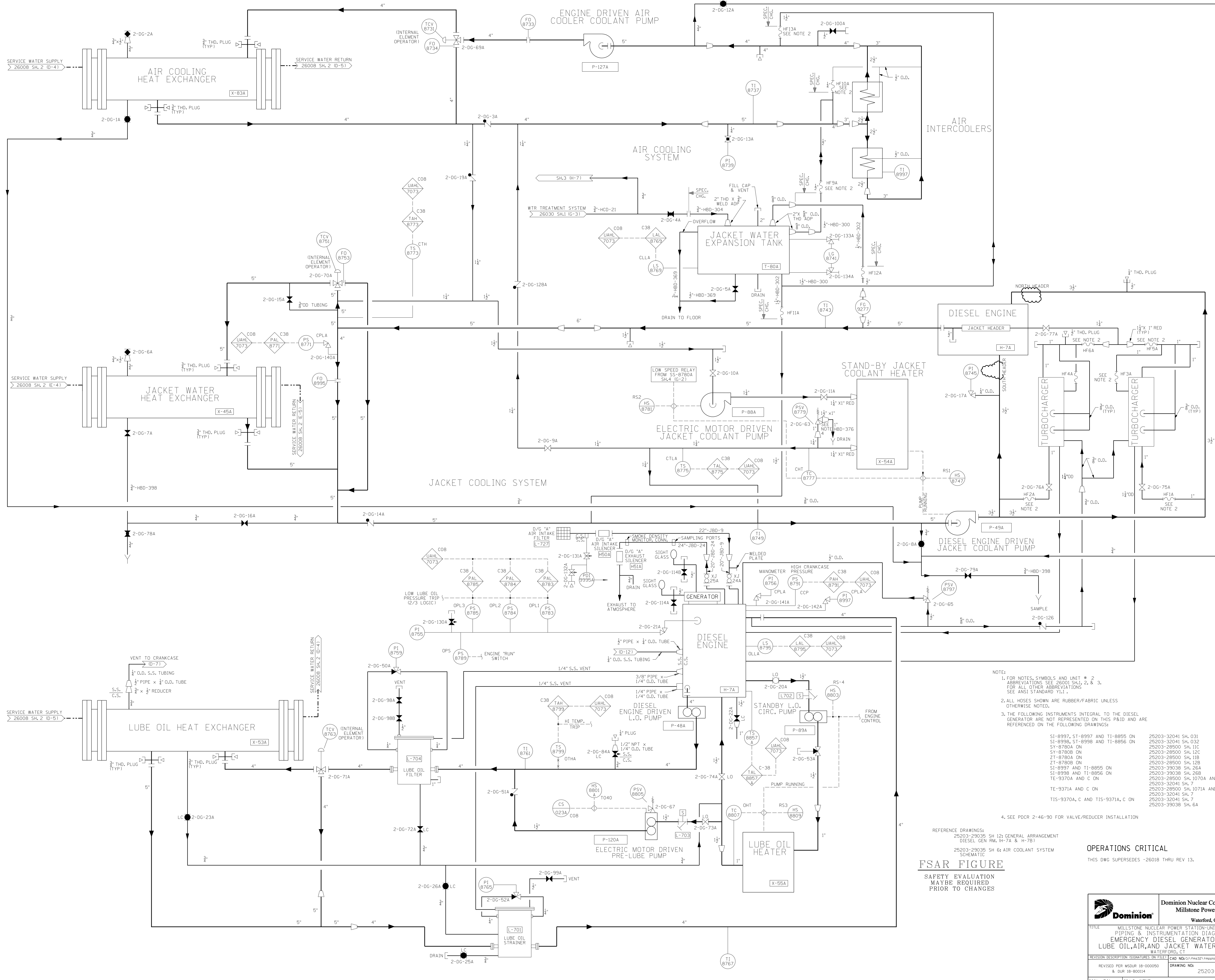
CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH.16

SUPERSEDES 25203-26017 THRU REV. 20

**OPERATIONS CRITICAL**

		<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station Waterford, CT.	
TITLE MILLSTONE POWER STATION-UNIT 2 PIPING & INSTRUMENTATION DIAGRAM BORIC ACID SYSTEM WATERFORD, CT			
REVISION DESCRIPTION REVISION PER DC MP-15-0121 AND DUR 17-000167	SIGNATURES ON FILE DRAWING NO. 25203-26017	CAD NO. E:\ms32\mmp001\c260173.dgn REV 45	SCALE: NONE UNLESS OTHERWISE NOTED SH.3





NOTE:

1. FOR NOTES, SYMBOLS AND UNIT # 2 ABBREVIATIONS SEE 26001 SH.1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
2. ALL HOSES SHOWN ARE RUBBER/FABRIC UNLESS OTHERWISE NOTED.
3. THE FOLLOWING INSTRUMENTS INTEGRAL TO THE DIESEL GENERATOR ARE NOT REPRESENTED ON THIS P&ID AND ARE REFERENCED ON THE FOLLOWING DRAWINGS:
 

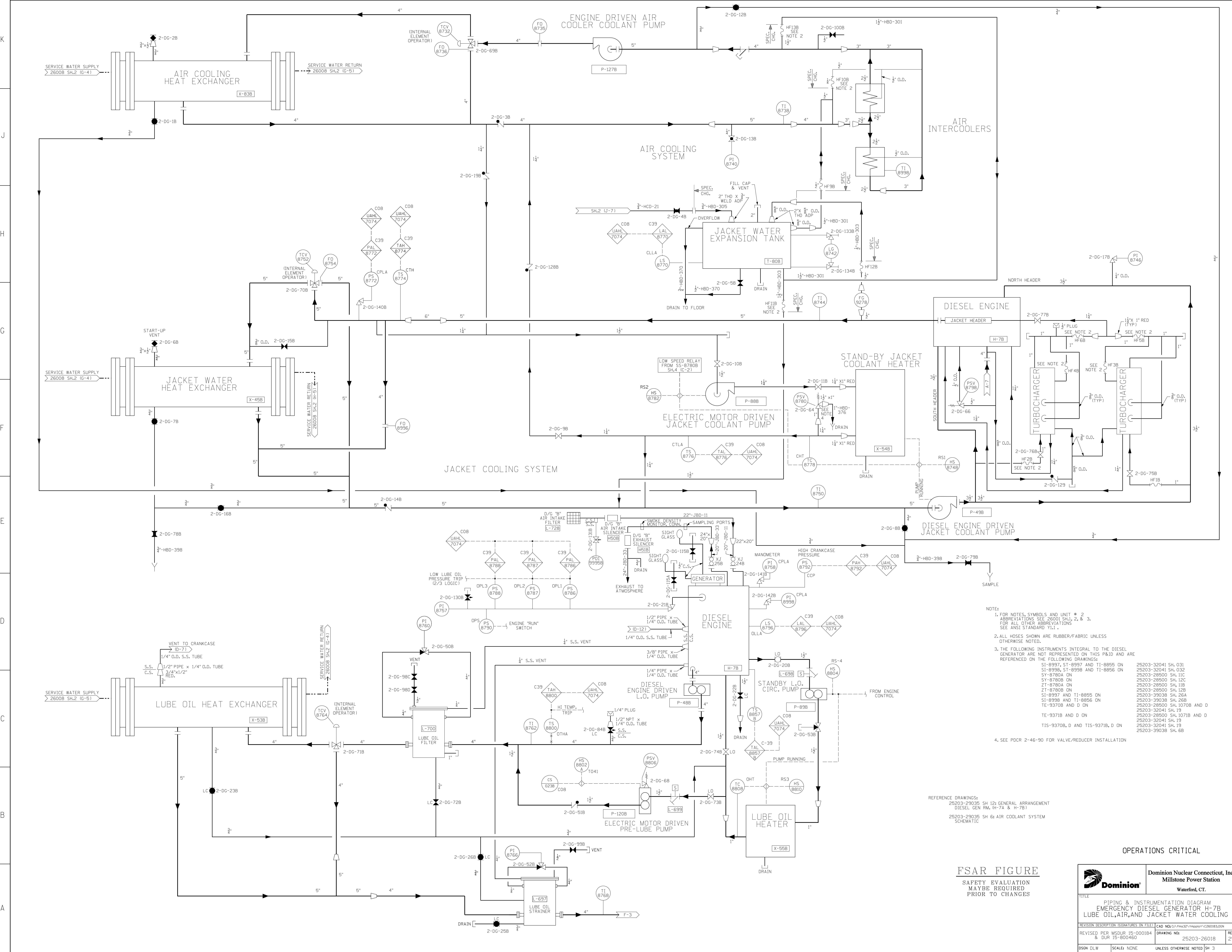
SI-8997, SI-8997 AND TI-8855 ON	25203-32041 SH. 031
SI-8998, SI-8998 AND TI-8856 ON	25203-32041 SH. 032
SI-8780A ON	25203-28500 SH. 11C
SI-8780B ON	25203-28500 SH. 12C
ZI-8780A ON	25203-28500 SH. 11B
ZI-8780B ON	25203-28500 SH. 12B
SI-8997 AND TI-8855 ON	25203-39038 SH. 25A
SI-8998 AND TI-8856 ON	25203-39038 SH. 26B
TE-9370A AND C ON	25203-26500 SH. 1070A AND C
TE-9371A AND C ON	25203-32041 SH. 7
TIS-9370A, C AND TIS-9371A, C ON	25203-32041 SH. 7
	25203-32041 SH. 7
	25203-39038 SH. 6A
4. SEE PDCR 2-46-90 FOR VALVE/REDUCER INSTALLATION

REFERENCE DRAWINGS:  
 25203-29035 SH. 12; GENERAL ARRANGEMENT  
 DIESEL GEN RM. H-7A & H-7B  
 25203-29035 SH. 6; AIR COOLANT SYSTEM  
 SCHEMATIC

**FSAR FIGURE**  
 SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES

**OPERATIONS CRITICAL**  
 THIS DWG SUPERSEDES 26018 THRU REV. 13.

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE MILLSTONE NUCLEAR POWER STATION-UNIT 2 PIPING & INSTRUMENTATION DIAGRAM EMERGENCY DIESEL GENERATOR H-7A LUBE OIL, AIR, AND JACKET WATER COOLING WATERFORD, CT			
REVISION DESCRIPTION	ISSUANCES ON FILE	CAD NO: 1511ms321mpg001\260182.dgn	
REVISED PER MSDR 18-000050 & DUR 18-800114		DRAWING NO: 25203-26018	REV 2/6
DSGN EAL	SCALE: NONE	UNLESS OTHERWISE NOTED SH. 2	



- NOTE:
1. FOR NOTES, SYMBOLS AND UNIT # 2 ABBREVIATIONS SEE 2600 SH.1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.1.
  2. ALL HOSES SHOWN ARE RUBBER/FABRIC UNLESS OTHERWISE NOTED.
  3. THE FOLLOWING INSTRUMENTS INTEGRAL TO THE DIESEL GENERATOR ARE NOT REPRESENTED ON THIS P&ID AND ARE REFERENCED ON THE FOLLOWING DRAWINGS:  
 SI-8997, SI-8997 AND T1-8855 ON SI-8998, SI-8998 AND T1-8856 ON SY-8780A ON SY-8780B ON ZI-8780A ON ZI-8780B ON SI-8997 AND T1-8855 ON SI-8998 AND T1-8856 ON TE-9370B AND D ON TE-9371B AND D ON T15-9370B, D AND T15-9371B, D ON
  4. SEE PDCR 2-46-90 FOR VALVE/REDUCER INSTALLATION

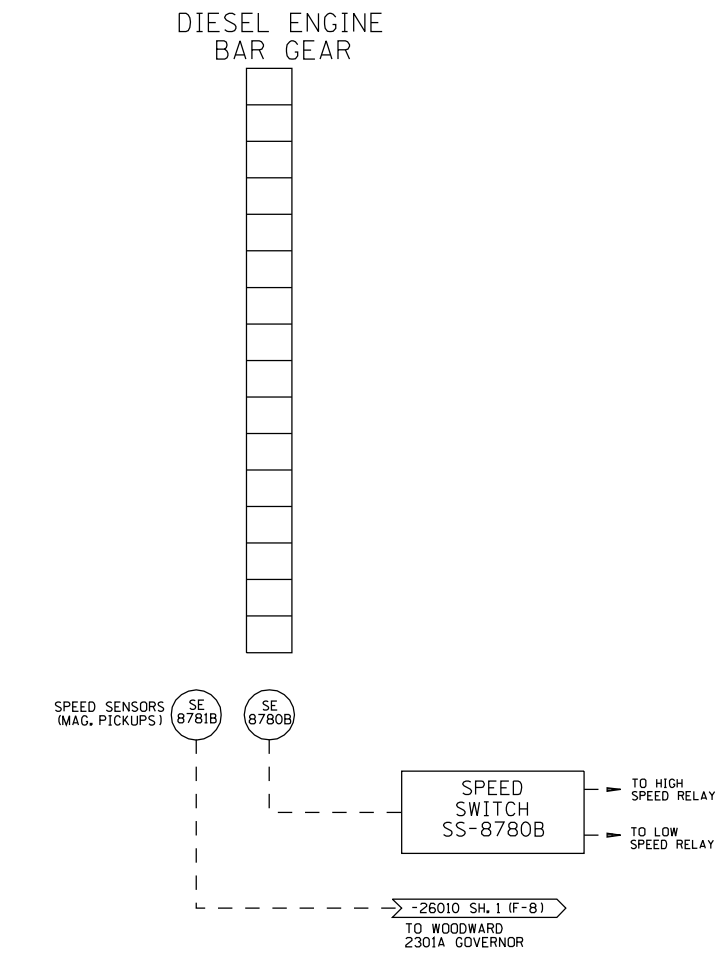
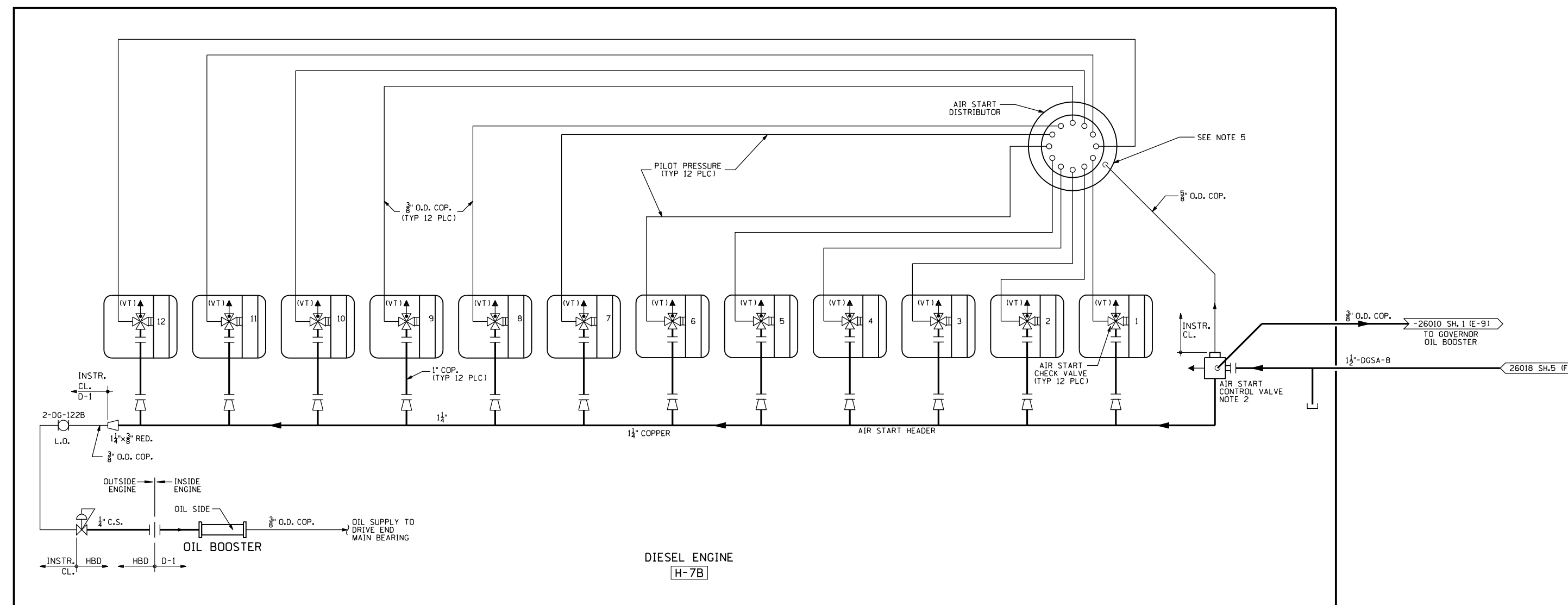
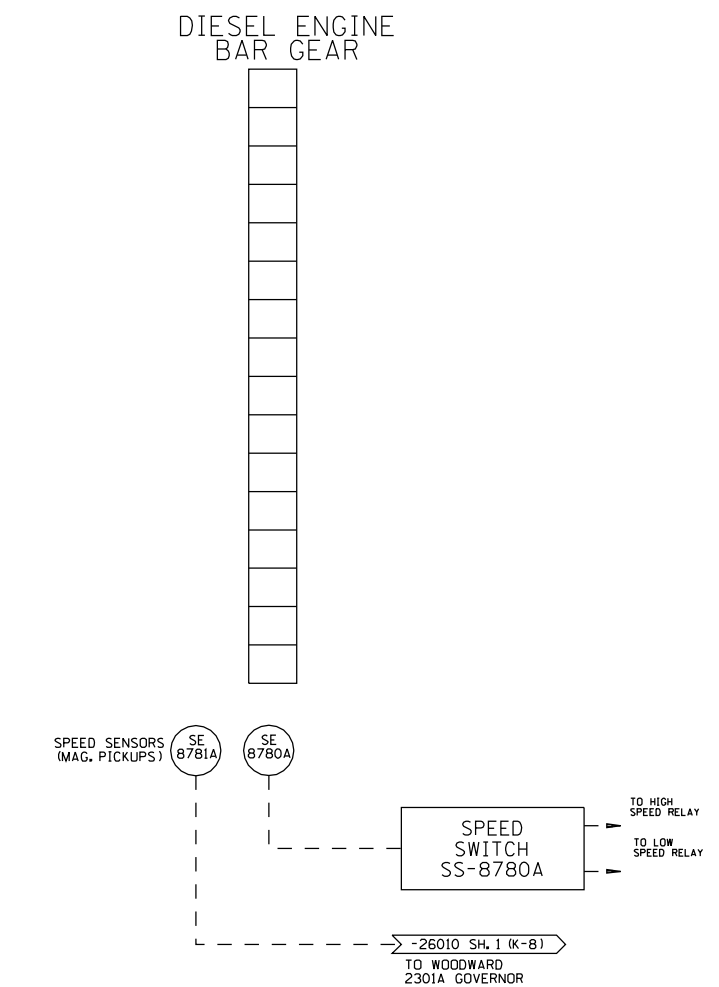
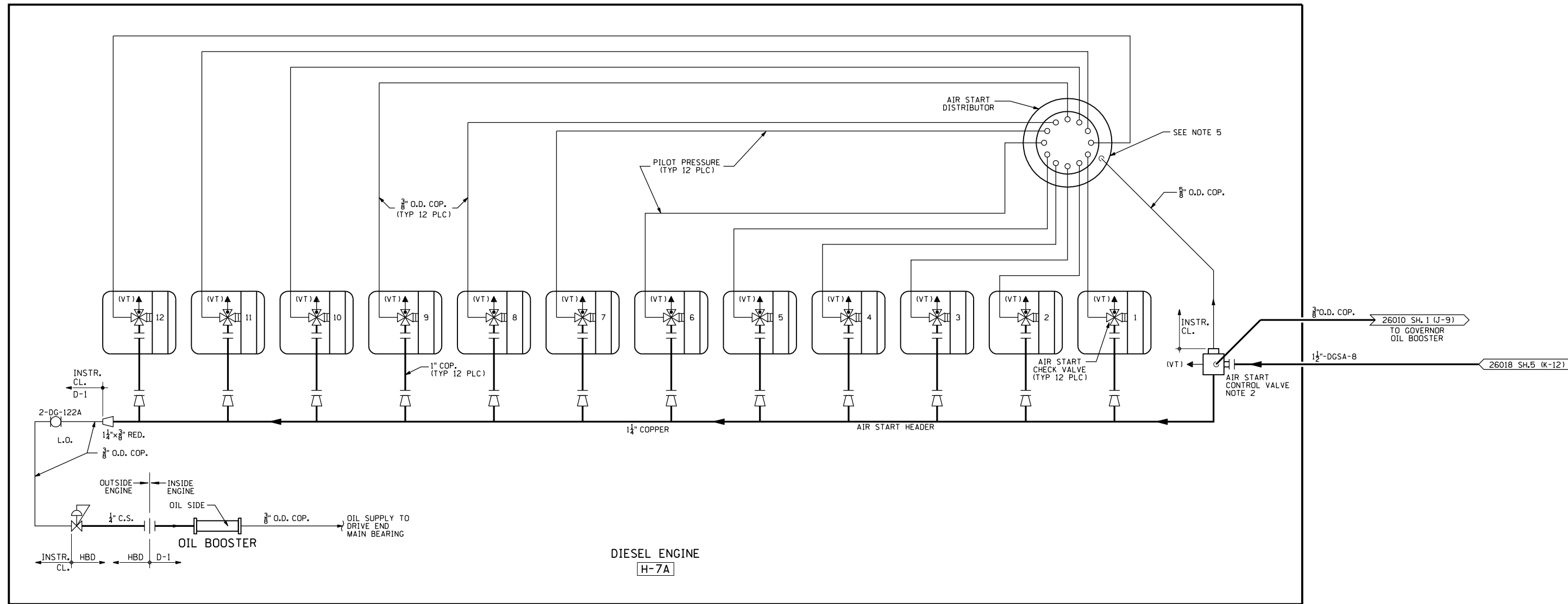
REFERENCE DRAWINGS:  
 25203-29035 SH 12: GENERAL ARRANGEMENT DIESEL GEN RM. H-7A & H-7B  
 25203-29035 SH 6: AIR COOLANT SYSTEM SCHEMATIC

OPERATIONS CRITICAL

**FSAR FIGURE**

SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
		TITLE PIPING & INSTRUMENTATION DIAGRAM EMERGENCY DIESEL GENERATOR H-7B LUBE OIL, AIR, AND JACKET WATER COOLING	
REVISION DESCRIPTION 15-000184	SIGNATURES ON FILE 15-000460	CAD NO. 25203-26018	REV 29
DSN DLW	SCALE: NONE	UNLESS OTHERWISE NOTED SH 3	



- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2, & 3. FOR ALL OTHER ABBREVIATIONS, SEE ANSI STANDARD Y1.1.
  - THESE VALVES HAVE THE INTERNALS REMOVED.
  - SUPPLY WITH EQUIPMENT
  - FOR APPLICABLE SYSTEM NOTES SEE DRAWING 25203-26108 SH.2.
  - ARRANGEMENT OF AIR START TUBING IS DIAGRAMMATIC AND DOES NOT REFLECT THE FIRING ORDER. FOR FIRING ORDER, SEE VENDOR MANUAL 25203-138-002A.

**FSAR FIGURE**

SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

CAD		REVISIONS DURING CONSTRUCTION	
NO.	DATE	NO.	DATE

**OPERATIONS CRITICAL**  
THIS DRAWING PARTIALLY SUPERSEDES DWG NO. 25203-26018 SH.1A REV 1 & DWG NO. 25203-26018 SH.1B REV 1.

NO.	DATE	REVISIONS	BY	CHK.	APP.	NO.	DATE	REVISIONS	BY	CHK.	APP.
N/A	7-10-01	INC. DCN DM2-00-0025-00	NJB	JSJ	REB	GMD					
N/A	5-26-98	INC. DCN DM2-S-0401-96, ADDED TITLE TO DIESEL "B" (B-9)	GZ	REB	REB						
N/A	9-18-96	INC. DCN DM2-S-394-96, ADDED NOTE 5.	MCD	DAD	DAD						
B4-024	4-10-94	INC. DCN DM2-S-0208-94 PER DCR M2-S-0136-94, (C4-6) (REV. 0) VALVES 2-06-122A & 2-06-122B	LLJ	KSS	WAP	WAP					
91-056	3-11-94	AS BUILT PER DCR M2-S-0355-94 (Incorp. DCN DM2-S-0848-94)	KSS	WAP	WAP						
N/A	2-17-94	AS BUILT PER DCR M2-S-077-94 (EDITORIAL)	MCD	DAD	WAP	WAP					
N/A	3-31-93	AS BUILT PER DCR M2-S-469-93 (Incorp. DCN DM2-S-159-93)	JW	TQJ	WAP						

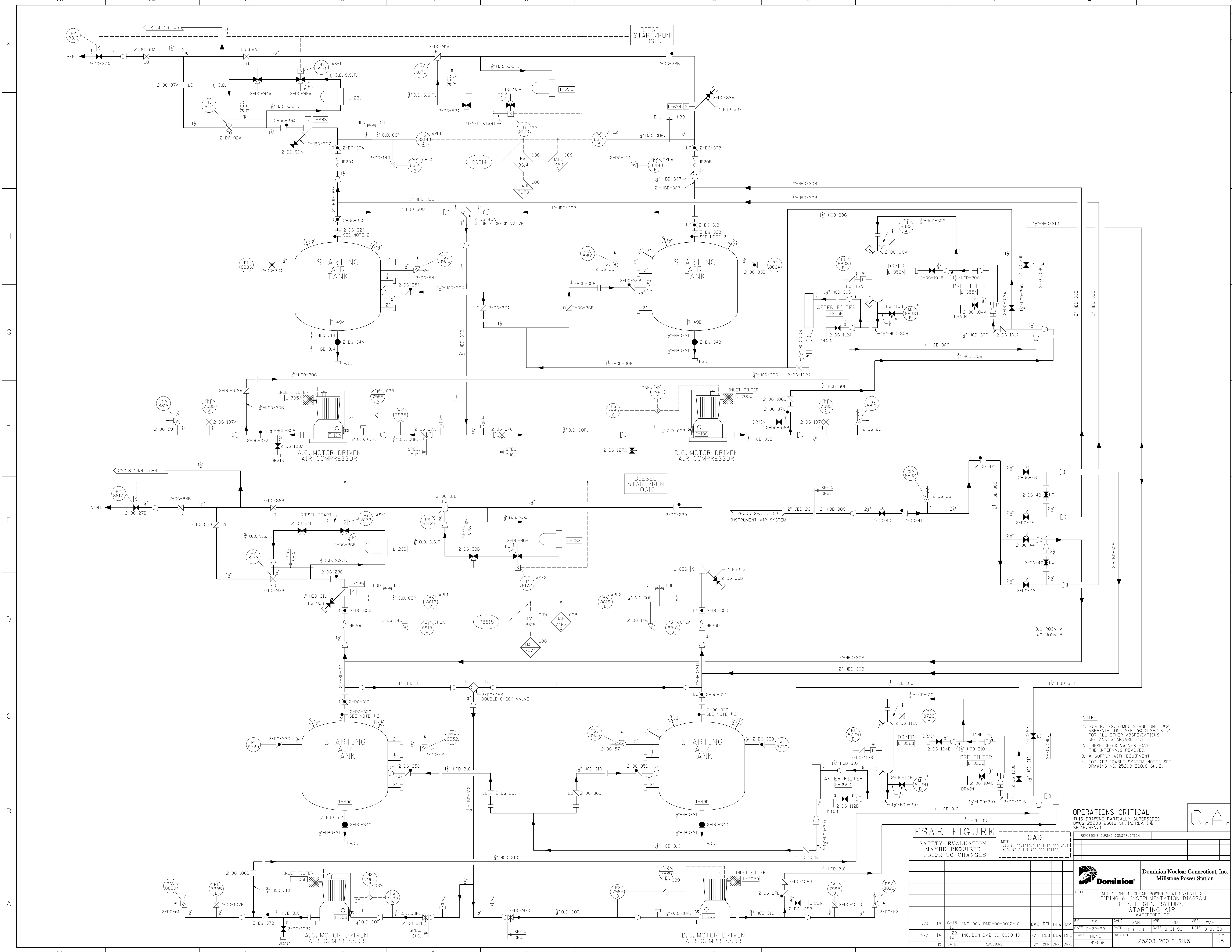
**Dominion Nuclear Connecticut, Inc.**  
Millstone Power Station

TITLE: MILLSTONE NUCLEAR POWER STATION-UNIT 2 PIPING & INSTRUMENTATION DIAGRAM DIESEL GENERATOR H-7A & H-7B STARTING AIR WATERFORD, CT

DATE: 3-15-93  
SCALE: NONE  
DWG. NO.: 25203-26018 SH.4 OF 5

DATE: 3-31-93  
DATE: 3-31-93  
DATE: 3-31-93

APP. WAP  
APP. WAP  
APP. WAP



- NOTES:
1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1 & 2 FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  2. THESE CHECK VALVES HAVE THE INTERNALS REMOVED.
  3. \* SUPPLY WITH EQUIPMENT
  4. FOR APPLICABLE SYSTEM NOTES SEE DRAWING NO. 25203-26018 SH. 2.

OPERATIONS CRITICAL  
 THIS DRAWING PARTIALLY SUPERSEDES  
 DWGS. 25203-26018 SH. 1A, REV. 1 &  
 SH 1B, REV. 1

**FSAR FIGURE**  
 SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES

**CAD**  
 NOTES:  
 1. MANUAL REVISIONS TO THIS DOCUMENT  
 WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION	
NO.	DATE

NO.	DATE	REVISIONS	BY	CHK.	APP.
N/A	15	6-15-10	INC. DCN DM2-00-0012-10	DWJ	RFL
N/A	14	1-28-10	INC. DCN DM2-00-0008-10	EAL	REB

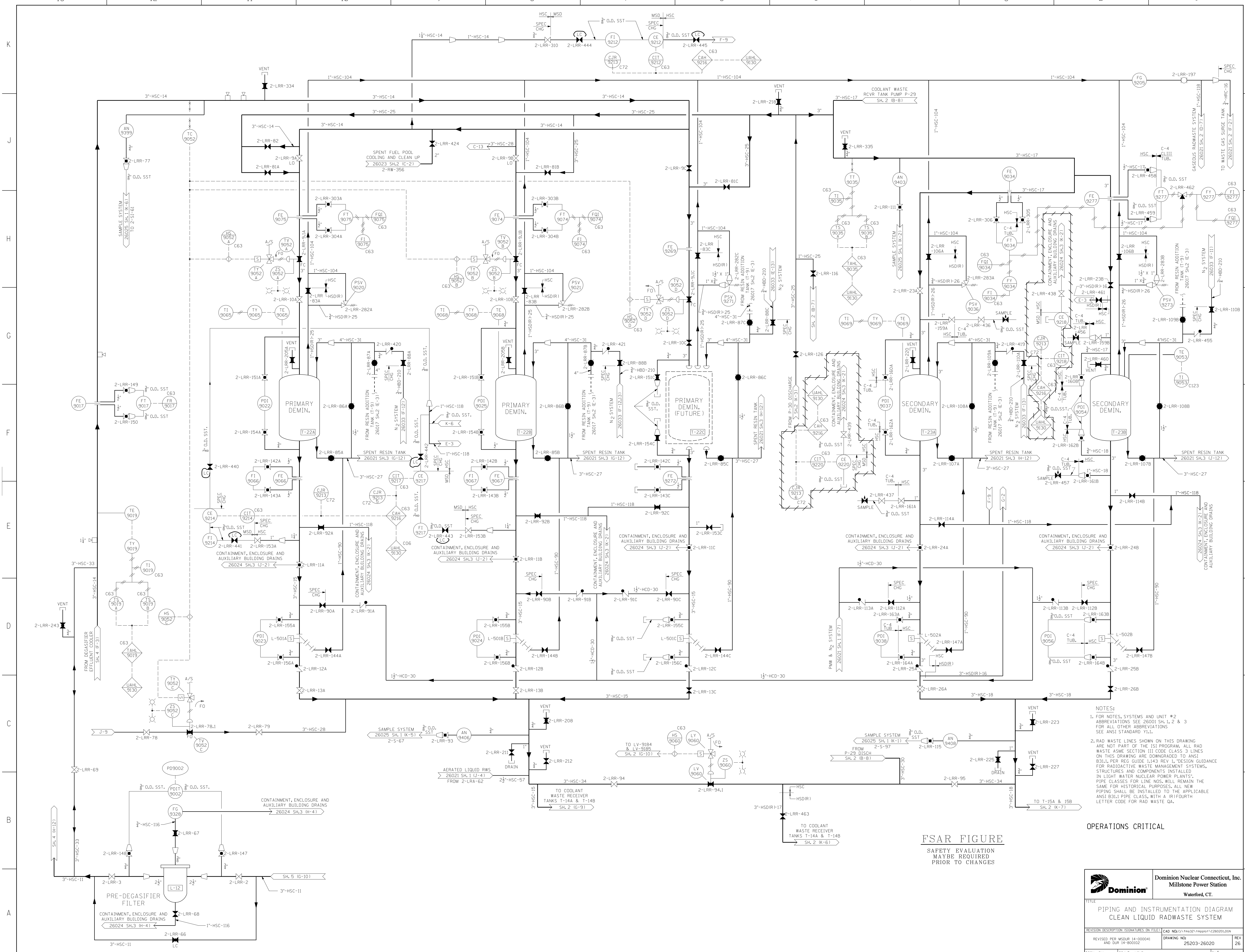
**Dominion Nuclear Connecticut, Inc.**  
**Millstone Power Station**

TITLE: MILLSTONE NUCLEAR POWER STATION-UNIT 2  
 PIPING & INSTRUMENTATION DIAGRAM  
 DIESEL GENERATORS  
 STARTING AIR  
 WATERFORD, CT

BY	CHKD.	APP.	TGQ	APP.	WAP
KSS	SAH	SAH	TGQ	TGQ	WAP

DATE: 2-22-93  
 DATE: 3-31-93  
 DATE: 3-31-93

SCALE: NONE  
 DWG. NO.: 25203-26018 SH.5  
 REV: 15



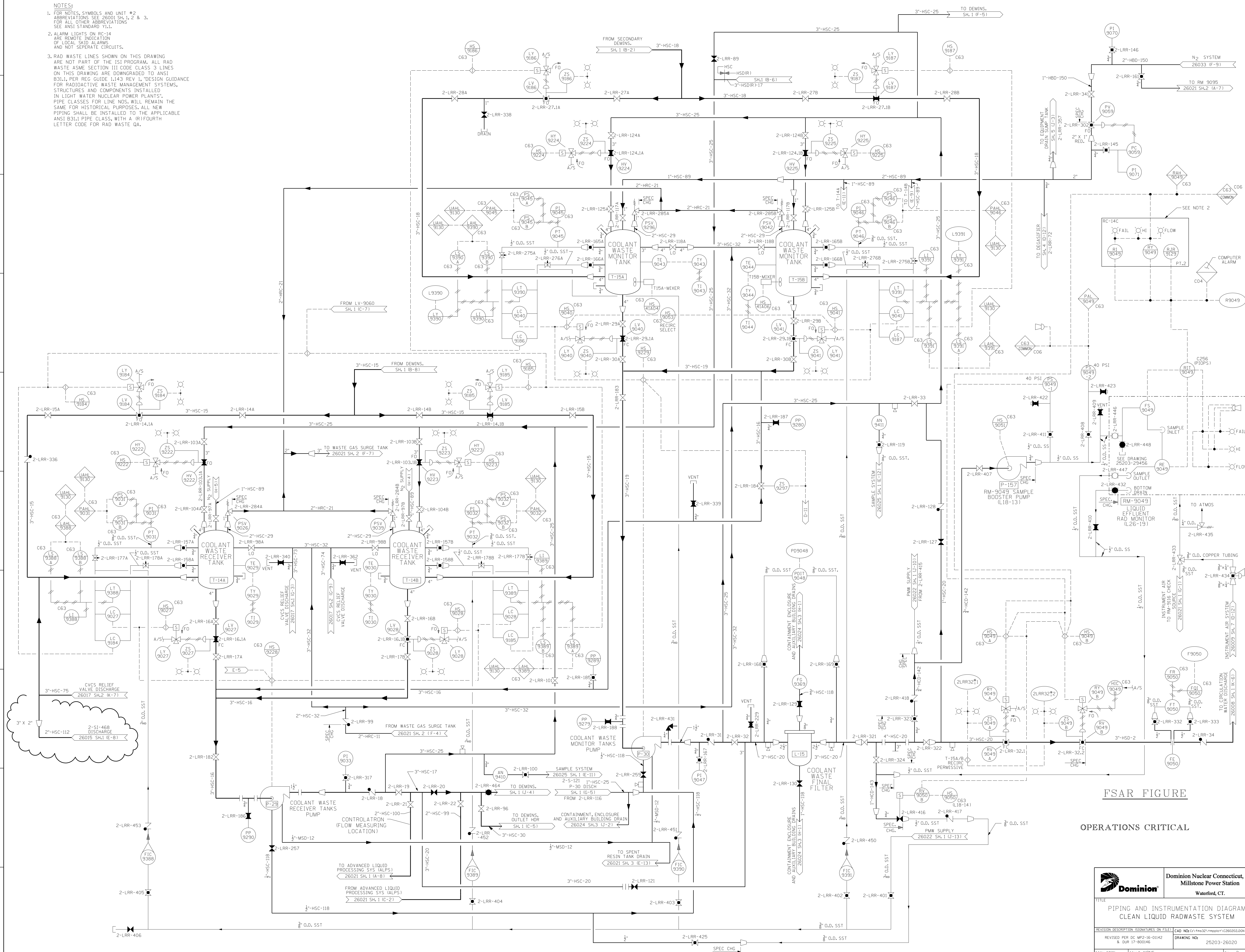
NOTES:  
 1. FOR NOTES, SYSTEMS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3 FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.  
 2. RAD WASTE LINES SHOWN ON THIS DRAWING ARE NOT PART OF THE ISI PROGRAM. ALL RAD WASTE ASME SECTION III CODE CLASS 3 LINES ON THIS DRAWING ARE DOWNGRADED TO ANSI B31.1 PER REG. GUIDE 1.4.3 REV. 1. DESIGN GUIDANCE FOR RADIOACTIVE WASTE MANAGEMENT SYSTEMS, STRUCTURES AND COMPONENTS INSTALLED IN LIGHT WATER NUCLEAR POWER PLANTS PIPE CLASSES FOR LINE NOS. WILL REMAIN THE SAME FOR HISTORICAL PURPOSES. ALL NEW PIPING SHALL BE INSTALLED TO THE APPLICABLE ANSI B31.1 PIPE CLASS, WITH A (R)FOURTH LETTER CODE FOR RAD WASTE QA.

OPERATIONS CRITICAL

FSAR FIGURE  
 SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES

		<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station Waterford, CT.	
TITLE <b>PIPING AND INSTRUMENTATION DIAGRAM          CLEAN LIQUID RADWASTE SYSTEM</b>			
REVISION DESCRIPTION AND DUR.	SIGNATURES ON FILE AND DUR.	DRAWING NO. 25203-26020	REV. 2/6
DSGN. EAL.	SCALE: NONE	UNLESS OTHERWISE NOTED SH.1	

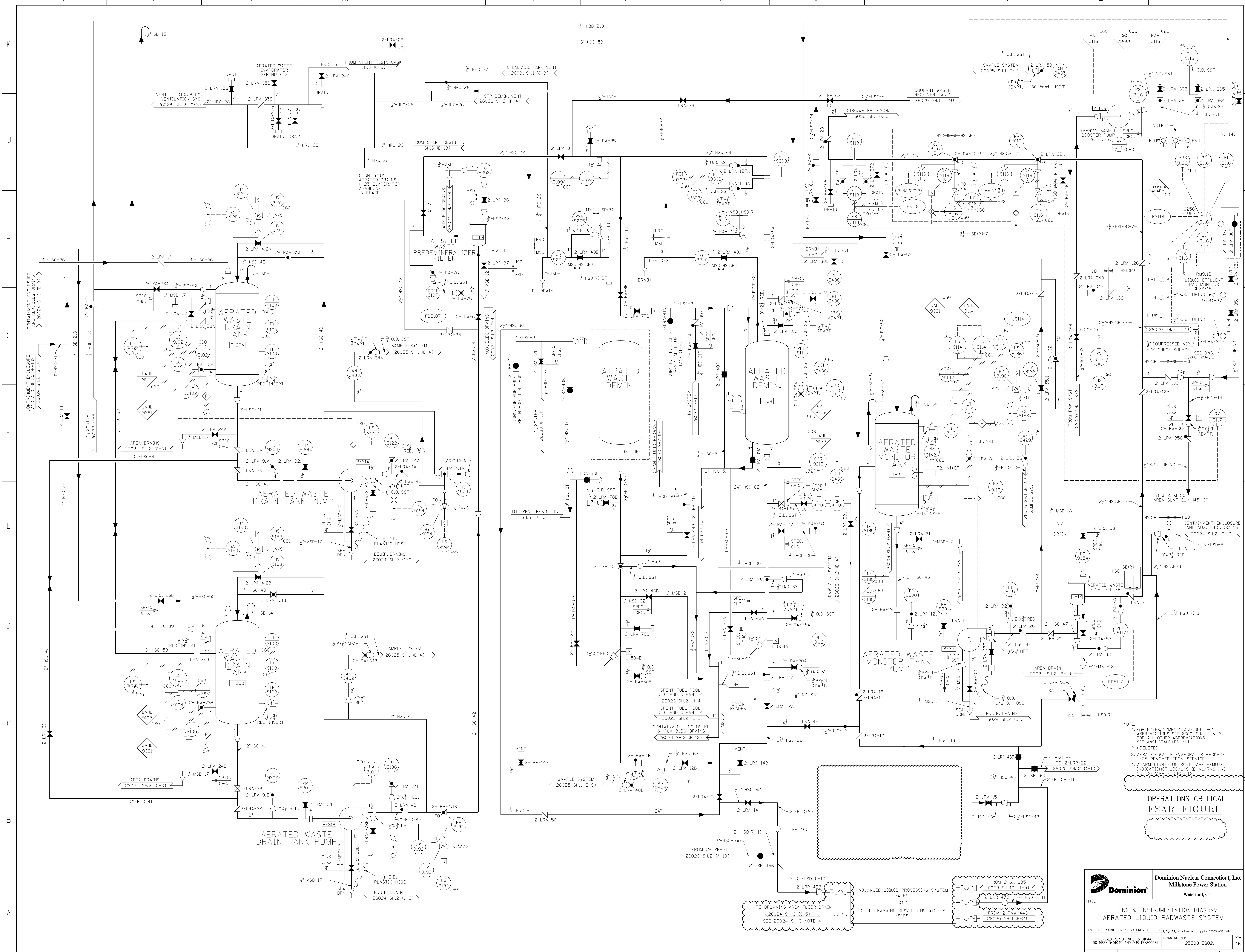
- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
  - ALARM LIGHTS ON RC-14 ARE REMOTE INDICATION OF LOCAL SKID ALARMS AND NOT SEPARATE CIRCUITS.
  - RAD WASTE LINES SHOWN ON THIS DRAWING ARE NOT PART OF THE ISI PROGRAM. ALL RAD WASTE ASME SECTION III CODE CLASS 3 LINES ON THIS DRAWING ARE DOWNGRADED TO ANSI B31.1, PER REG GUIDE L143 REV 1, "DESIGN GUIDANCE FOR RADIOACTIVE WASTE MANAGEMENT SYSTEMS, STRUCTURES AND COMPONENTS INSTALLED IN LIGHT WATER NUCLEAR POWER PLANTS". PIPE CLASSES FOR LINE NOS. WILL REMAIN THE SAME FOR HISTORICAL PURPOSES. ALL NEW PIPING SHALL BE INSTALLED TO THE APPLICABLE ANSI B31.1 PIPE CLASS, WITH A (R)FOURTH LETTER CODE FOR RAD WASTE QA.



FSAR FIGURE

OPERATIONS CRITICAL

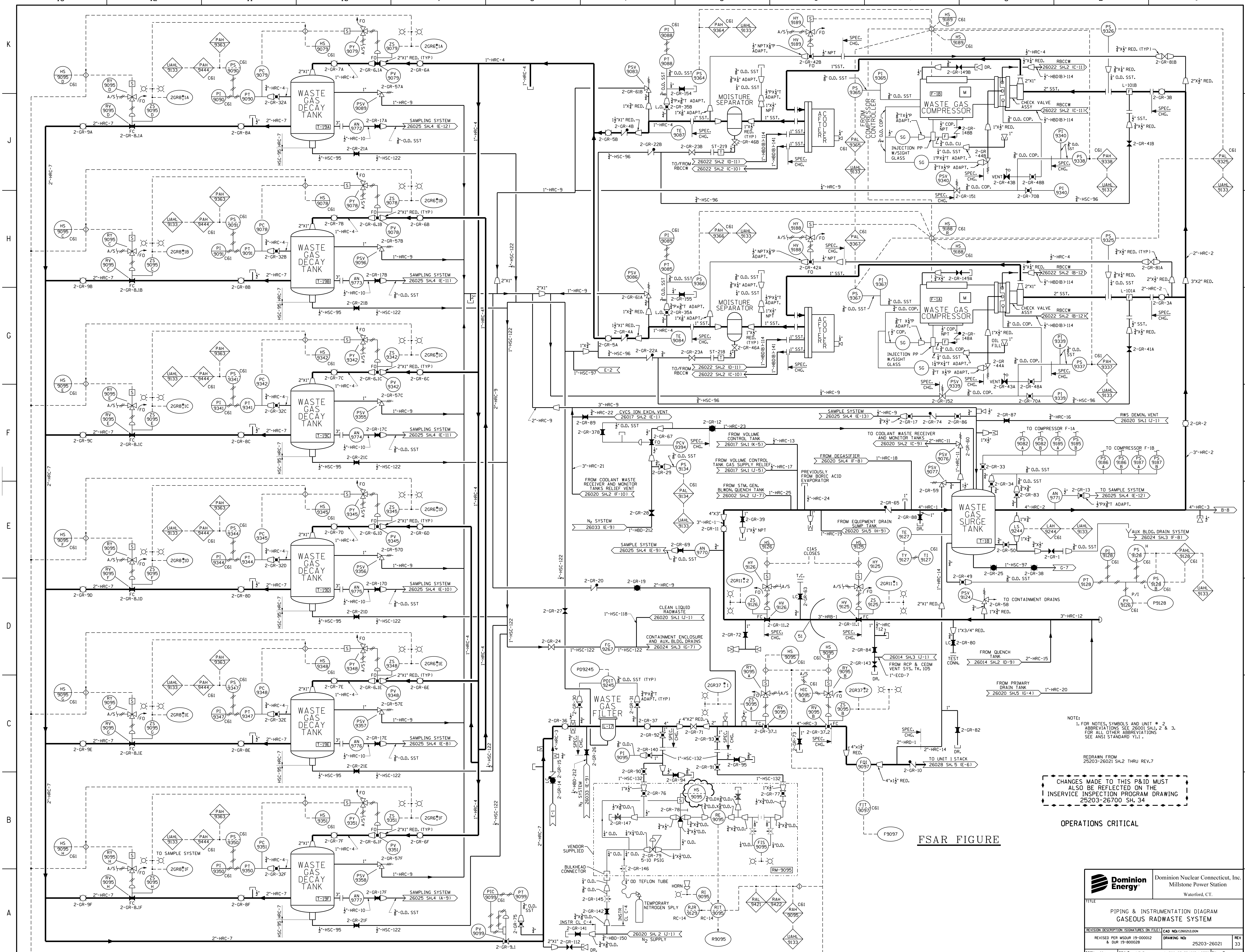
		<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station Waterford, CT.	
<b>PIPING AND INSTRUMENTATION DIAGRAM</b> <b>CLEAN LIQUID RADWASTE SYSTEM</b>			
REVISION DESCRIPTION 1. REVISED PER DC MP-2-16-01142 & DUR 17-00046	SIGNATURES ON FILE 25203-26020	CAD NO: E:\ms32\mp0017\26020.dwg DRAWING NO: 25203-26020	REV 34
DGM MKN	SCALE: NONE	UNLESS OTHERWISE NOTED SH 2	



- NOTE:
1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.1.
  2. (DELETED)
  3. AERATED WASTE EVAPORATOR PACKAGE H-25 REMOVED FROM SERVICE.
  4. ALARM LIGHTS ON RC-14 ARE REMOTE INDICATORS. LOCAL SMOKE ALARMS AND INDICATORS SEPARATE CIRCUITS.

**OPERATIONS CRITICAL  
FSAR FIGURE**

		<b>Dominion Nuclear Connecticut, Inc.</b> <b>Millstone Power Station</b> <b>Waterford, CT.</b>	
<b>PIPING &amp; INSTRUMENTATION DIAGRAM</b> <b>AERATED LIQUID RADWASTE SYSTEM</b>			
REVISION DESCRIPTION	ISSUANCES ON FILE	CAD NO. (1) 11/13/2011	REV 46
DC MP2-15-01044	DC MP2-15-01045 AND DUR 17-00009	NO. 25203-26021	
DSGN DWJ	SCALE: NONE	UNLESS OTHERWISE NOTED SH. 1	



NOTES:  
 1. FOR NOTES, SYMBOLS AND UNIT # 2.  
 2. ABBREVIATIONS SEE 26001 SH.1, 2 & 3.  
 3. FOR ALL OTHER ABBREVIATIONS  
 SEE ANSI STANDARD Y1.1.

REDRAWN FROM  
 25203-26021 SH.2 THRU REV.7

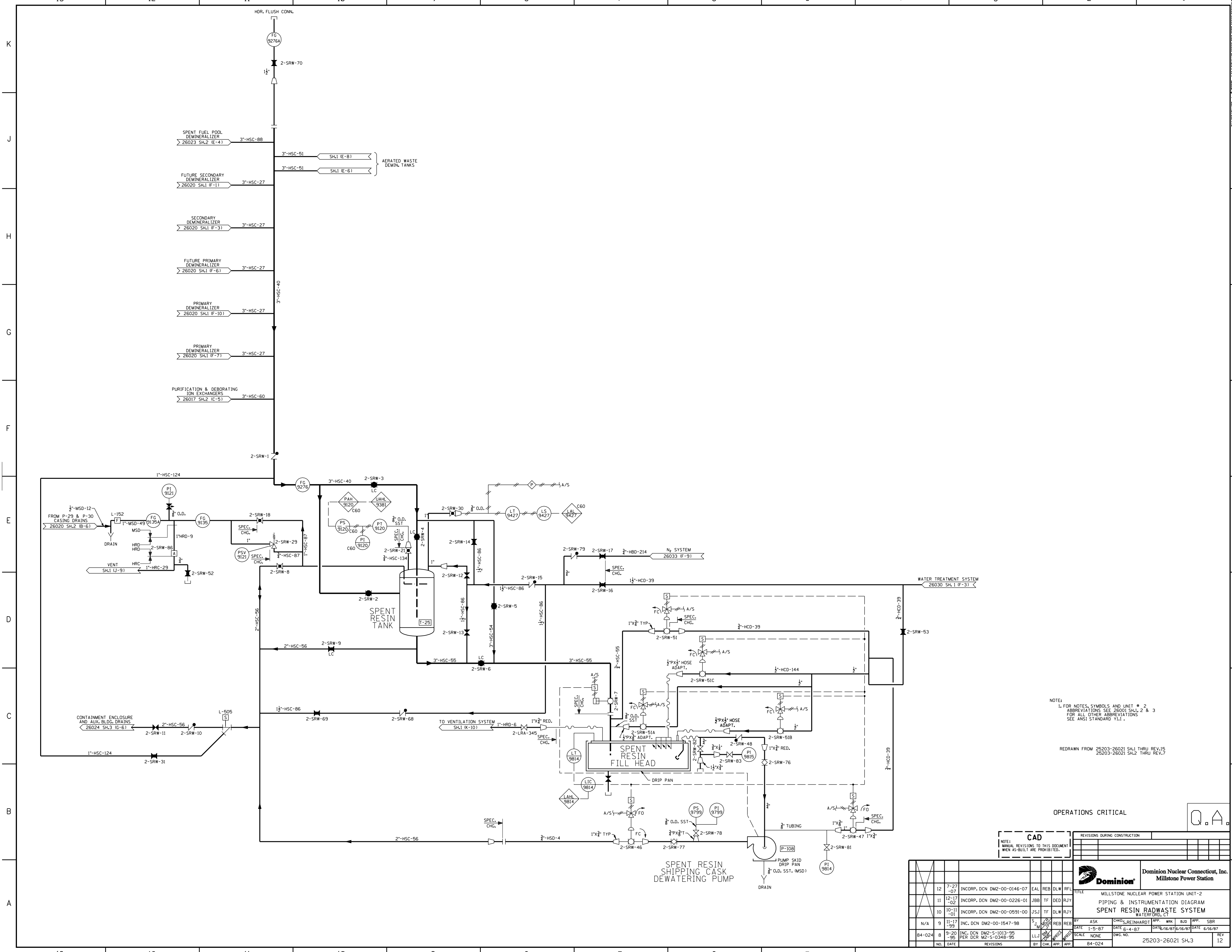
CHANGES MADE TO THIS P&ID MUST  
 ALSO BE REFLECTED ON THE  
 INSERVICE INSPECTION PROGRAM DRAWING  
 25203-26700 SH.34

OPERATIONS CRITICAL

FSAR FIGURE

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>PIPING &amp; INSTRUMENTATION DIAGRAM          GASEOUS RADWASTE SYSTEM</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE) 1. REVISED PER MSUR 19-000012 2. DUR 19-000028	CAD NO: C26021.020N DRAWING NO: 25203-26021	REV 33	DATE 10/1/03
DSGM JCV	SCALE: NONE	UNLESS OTHERWISE NOTED SH 2	





NOTE:  
1. FOR NOTES, SYMBOLS AND UNIT # 2  
ABBREVIATIONS SEE 26001 SH.1, 2 & 3  
FOR ALL OTHER ABBREVIATIONS  
SEE ANSI STANDARD Y1.1.

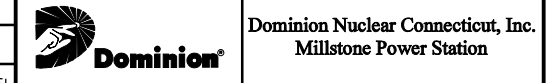
REDRAWN FROM 26203-26021 SH.1 THRU REV.15  
26203-26021 SH.2 THRU REV.17

OPERATIONS CRITICAL

CAD  
NOTE: MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

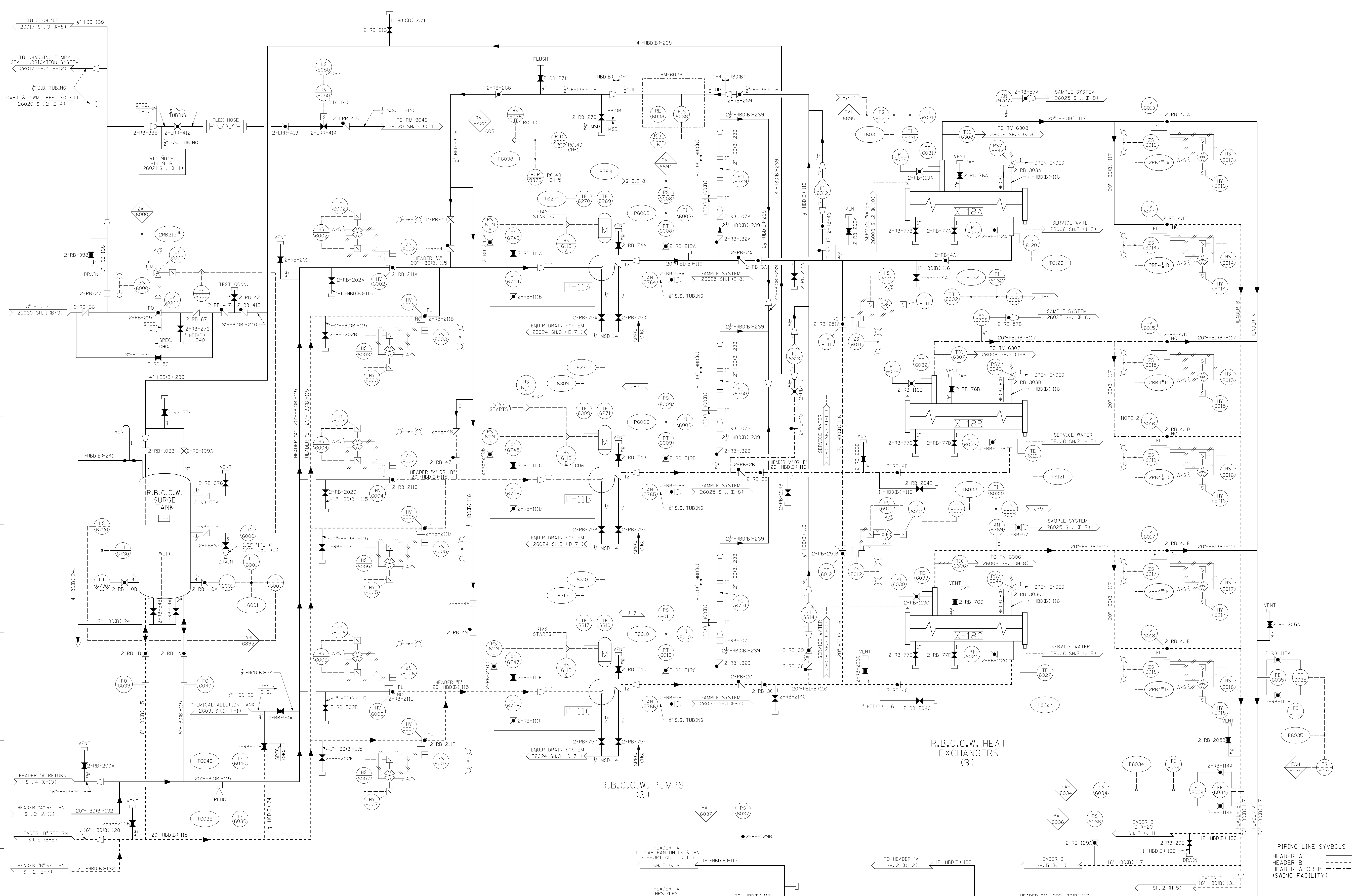
REVISIONS DURING CONSTRUCTION	
NO.	DATE

NO.		DATE		REVISIONS		BY		CHK.		APP.	



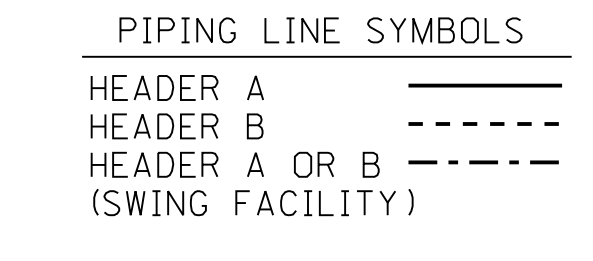
Dominion Nuclear Connecticut, Inc.  
Millstone Power Station  
TITLE: MILLSTONE NUCLEAR POWER STATION UNIT-2  
PIPING & INSTRUMENTATION DIAGRAM  
SPENT RESIN RADWASTE SYSTEM  
WATERFORD, CT

NO.	DATE	REVISIONS	BY	CHK.	APP.	SCALE	DWG. NO.	REV
84-024	8-9-95	INC. DCN DM2-S-1013-95 PER DCR M2-S-0348-95	LLJ			NONE	25203-26021 SH.3	12



R.B.C.C.W. PUMPS (3)

R.B.C.C.W. HEAT EXCHANGERS (3)



OPERATIONS CRITICAL  
 REDRAWN IN PART FROM 25203-26022 SH.1 REV.15.

**FSAR FIGURE**  
 SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

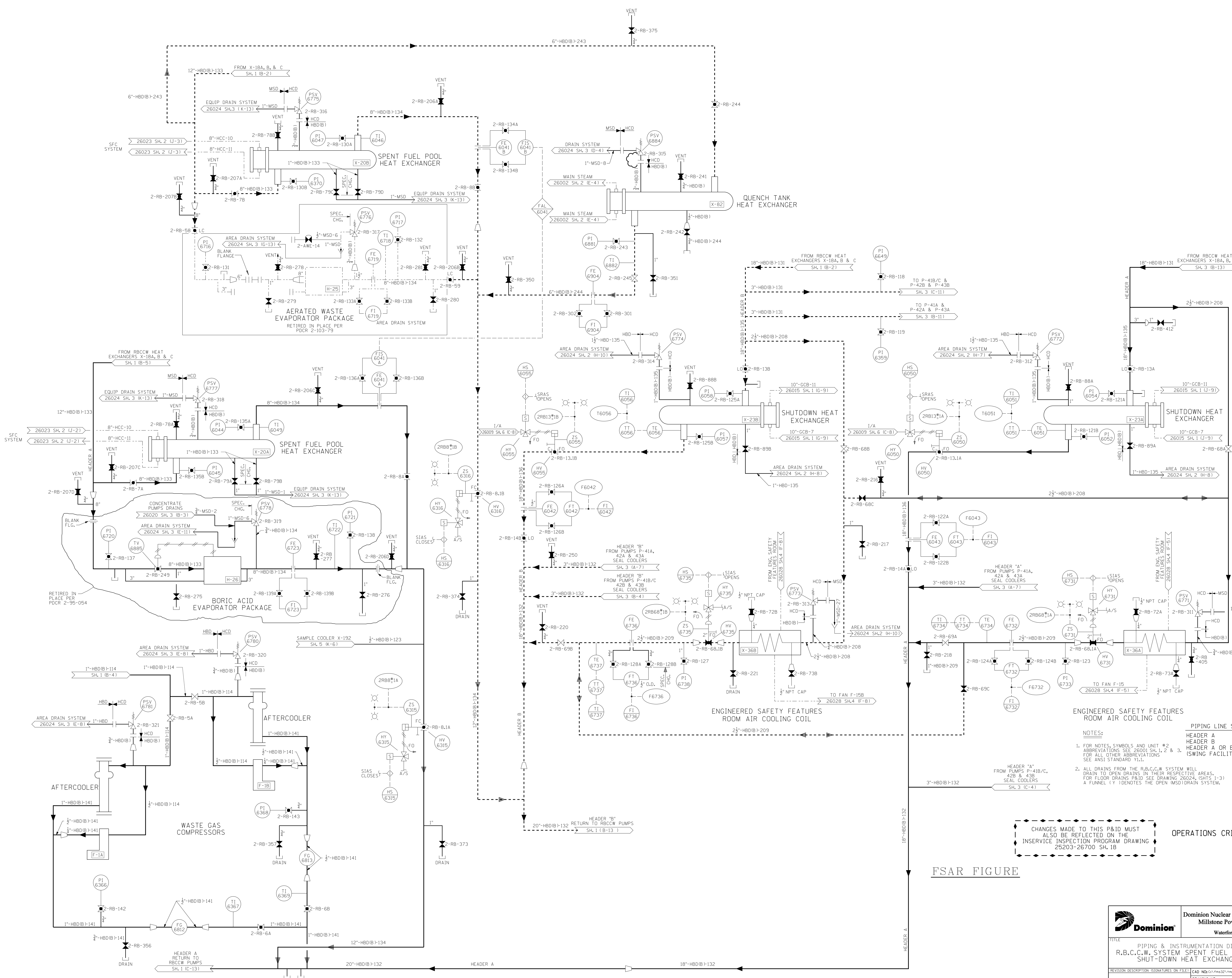
**CAD**  
 MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
  - ALL DRAINS FROM THE R.B.C.C.W. SYSTEM WILL DRAIN TO OPEN DRAINS IN THEIR RESPECTIVE AREAS. FOR FLOOR DRAINS P&ID SEE DRAWING 26024, (SH.1-3) A FUNNEL (Y) DENOTES THE OPEN MSD/DRAIN SYSTEM.

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH.17

REVISIONS DURING CONSTRUCTION		BY		CHKD.	APP.	DATE	REV.
N/A	45	5-8-09	INCORP. DCN DM2-00-0108-09	EAL	MP	DLW	ASK
N/A	44	11-23-05	INCORP. DCN DM2-00-0052-05	JSJ	LEJ	JCV	DED

		<b>Dominion Nuclear Connecticut, Inc.</b> <b>Millstone Power Station</b>	
TITLE: MILLSTONE NUCLEAR POWER STATION-UNIT 2 PIPING & INSTRUMENTATION DIAGRAM R.B.C.C.W. PUMPS & HEAT EXCHANGERS WATERFORD, CT			
BY	DATE	CHKD.	APP.
M.R. BIBISI	10-19-07	SBR	SRF
DATE	DATE	DATE	DATE
10-19-07	11-08-07	11-08-07	11-08-07
SCALE	SCALE	SCALE	SCALE
NONE	NONE	NONE	NONE
BWG. NO.	BWG. NO.	BWG. NO.	BWG. NO.
25203-26022 SH.1	25203-26022 SH.1	25203-26022 SH.1	25203-26022 SH.1
REV	REV	REV	REV
4/5	4/5	4/5	4/5



**NOTES:**

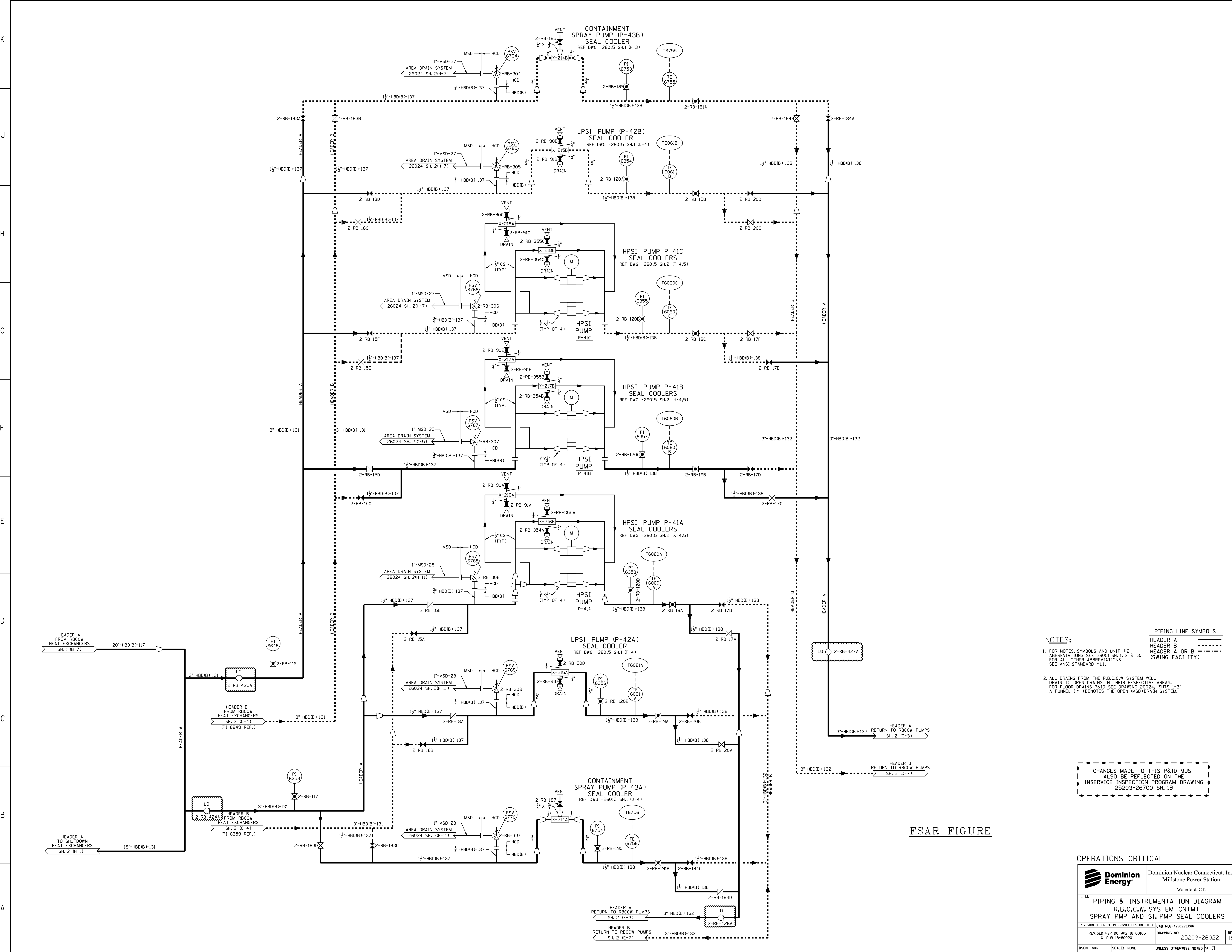
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y14.1.
- ALL DRAINS FROM THE R.B.C.C.W. SYSTEM WILL DRAIN TO OPEN DRAINS IN THEIR RESPECTIVE AREAS. FOR FLOOR DRAINS P&ID SEE DRAWING 26024, SHEETS 1-31. A FUNNEL Y 128 INDICATES THE OPEN MSD/DRAIN SYSTEM.

**CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH.18**

**OPERATIONS CRITICAL**

**FSAR FIGURE**

		<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station Waterford, CT.	
TITLE: PIPING & INSTRUMENTATION DIAGRAM R.B.C.C.W. SYSTEM SPENT FUEL POOL AND SHUT-DOWN HEAT EXCHANGERS			
REVISION DESCRIPTION 17-000255 17-000563	SIGNATURES ON FILE DRAWING NO: 25203-26022	CAD NO: 17-000327 17-000327	REV 28
DESIGNED BY EAL	SCALE: NONE	UNLESS OTHERWISE NOTED SH. 2	



- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  - ALL DRAINS FROM THE R.B.C.C.W. SYSTEM WILL DRAIN TO OPEN DRAINS IN THEIR RESPECTIVE AREAS. FOR FLOOR DRAINS P&ID SEE DRAWING 26024, (SHTS 1-3) A FUNNEL (V) DENOTES THE OPEN (MSD) DRAIN SYSTEM.

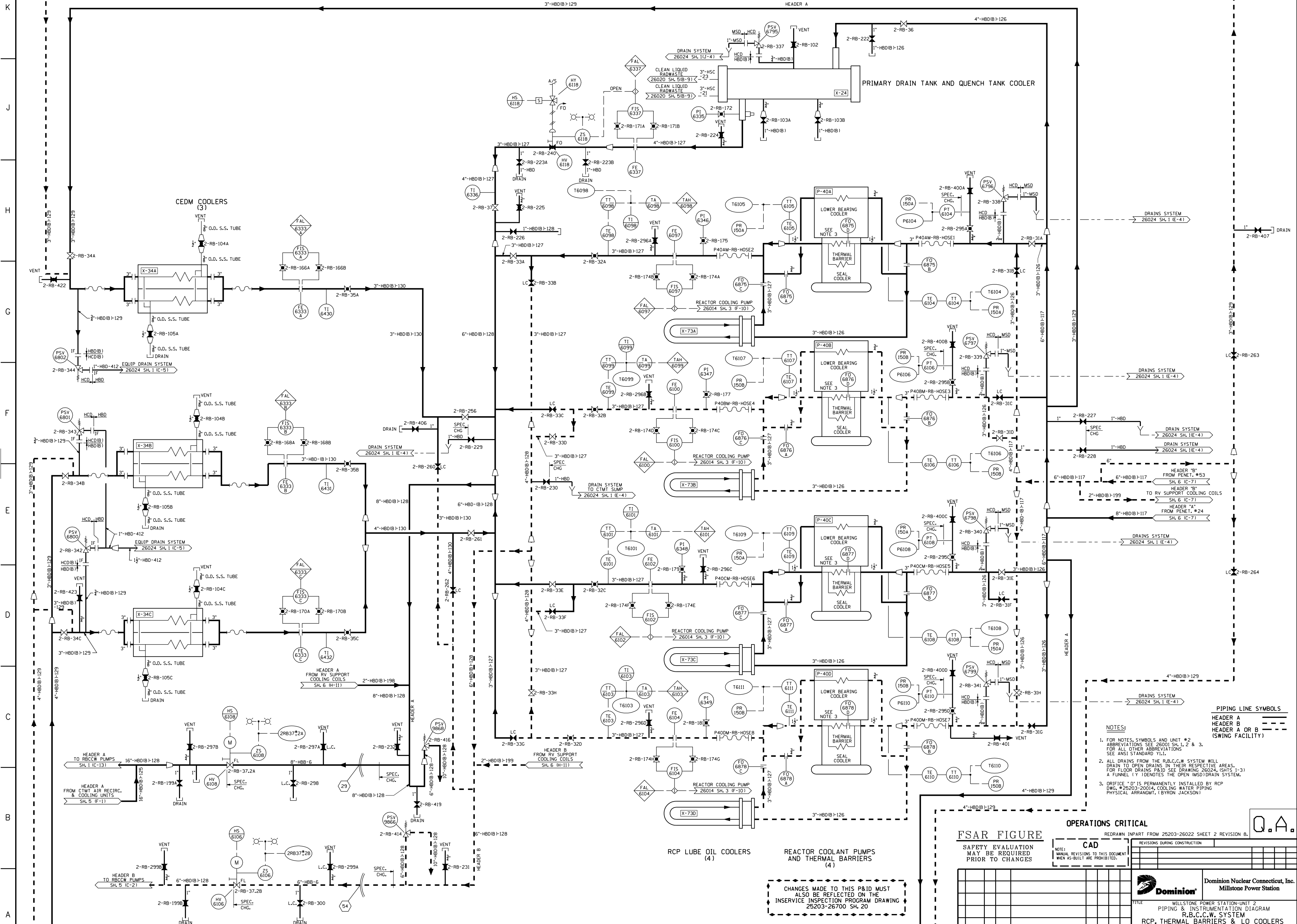
**PIPING LINE SYMBOLS**  
 HEADER A  
 HEADER B  
 HEADER A OR B  
 (SWING FACILITY)

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH.19

FSAR FIGURE

**OPERATIONS CRITICAL**

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>TITLE</b> PIPING & INSTRUMENTATION DIAGRAM R.B.C.C.W. SYSTEM CNTMT SPRAY PMP AND SI. PMP SEAL COOLERS			
<b>REVISION DESCRIPTION</b> (SIGNATURES ON FILE)		<b>CAD NO:</b> P26023.00A	
REVISED PER DC MP2-18-00105 & DUR 18-000201		<b>DRAWING NO:</b> 25203-26022	
<b>DSGN MKN</b>		<b>SCALE:</b> NONE	
<b>UNLESS OTHERWISE NOTED SH. 3</b>		<b>REV 15</b>	



**NOTES:**

- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
- ALL DRAINS FROM THE R.B.C.C.W. SYSTEM WILL DRAIN TO OPEN DRAINS IN THEIR RESPECTIVE AREAS. FOR FLOOR DRAINS P&ID SEE DRAWING 26024 (SHTS 1-3) A FUNNEL (Y) DENOTES THE OPEN MSD/DRAIN SYSTEM.
- ORIFICE "D" IS PERMANENTLY INSTALLED BY RCP DRWG. #2503-20014. COOLING WATER PIPING PHYSICAL ARRANG. (BYRON JACKSON)

**PIPING LINE SYMBOLS**

HEADER A  
HEADER B  
HEADER A OR B  
(SWING FACILITY)

**FSAR FIGURE**

SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

**OPERATIONS CRITICAL**

REDRAWN IN PART FROM 25203-26022 SHEET 2 REVISION B.

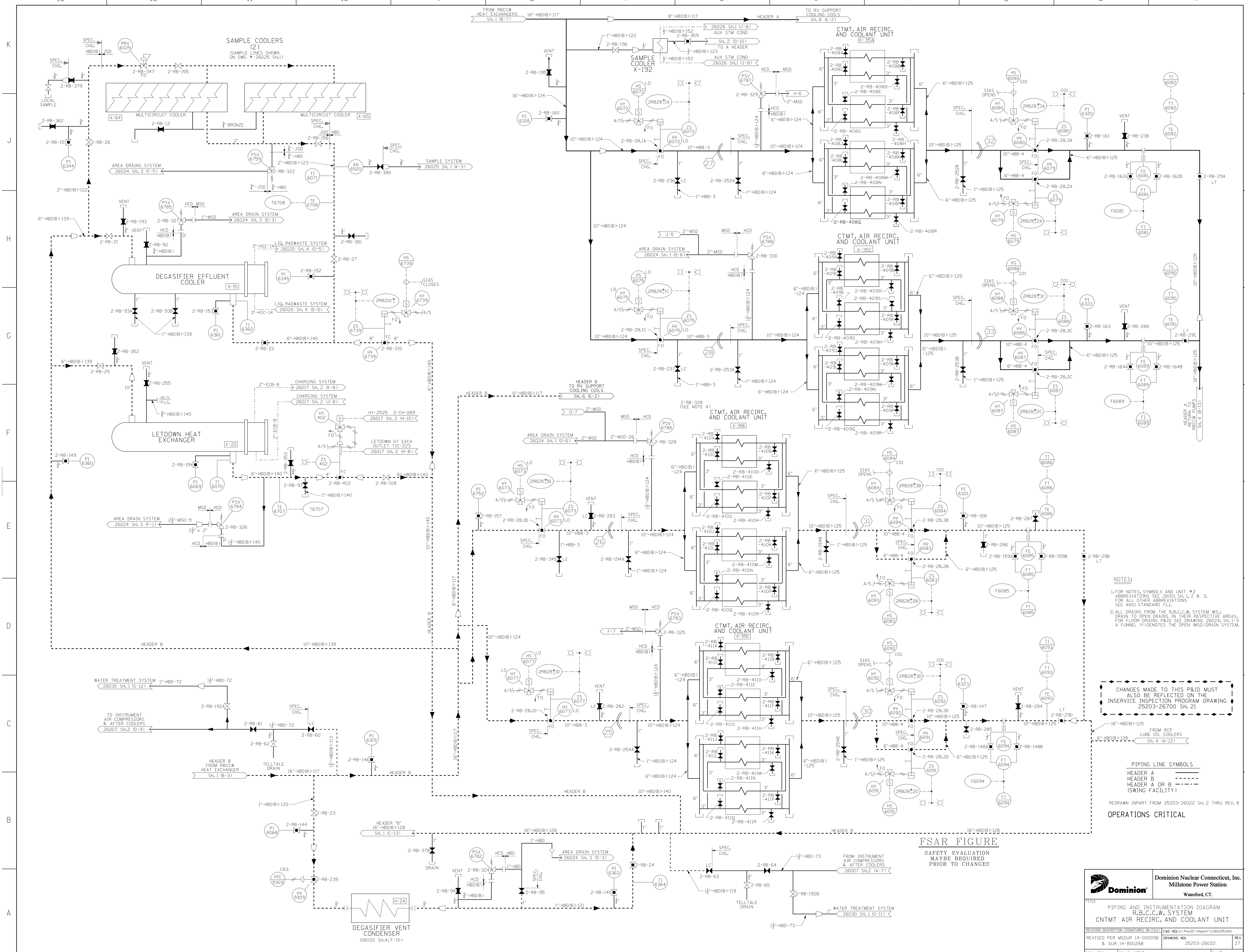
REVISIONS DURING CONSTRUCTION		DATE		BY		APP.		REV.	
N/A	24	5-30-08	INC. DCN DM2-00-0160-08	DWJ	REB	DLW	DED	BY	M.R. BIRSH
N/A	23	5-18-05	INC. DCN DM2-00-0127-05	SMC	ASK	WBZ	MP	SCALE	NONE
NO.	DATE	REVISIONS	BY	CHK.	APP.	APP.	APP.	SCALE	84-024

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 20

**Dominion Nuclear Connecticut, Inc.**  
**Millstone Power Station**

TITLE: MILLSTONE POWER STATION-UNIT 2  
PIPING & INSTRUMENTATION DIAGRAM  
R.B.C.C.W. SYSTEM  
RCP, THERMAL BARRIERS & LO COOLERS

DATE: 4-27-07  
SCALE: NONE  
DWG. NO.: 25203-26022 SH. 4



- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  - ALL DRAINS FROM THE R.B.C.C.W. SYSTEM WILL DRAIN TO OPEN DRAINS IN THEIR RESPECTIVE AREAS. FOR FLOOR DRAINS PAID SEE DRAWING 26024, SH. 1-3. A FUNNEL (Y) DENOTES THE OPEN MSD/DRAIN SYSTEM.

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 21

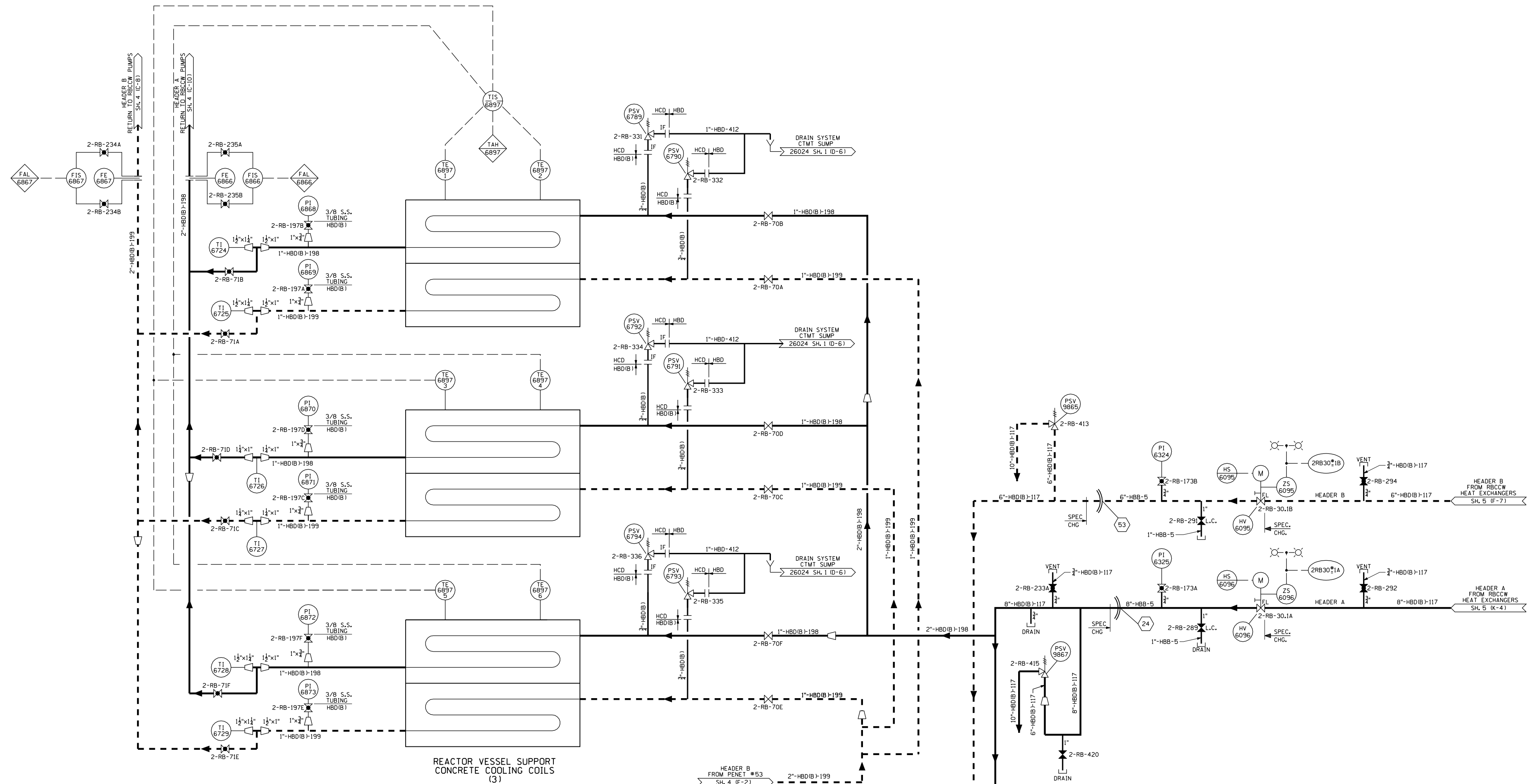
**PIPING LINE SYMBOLS**  
 HEADER A  
 HEADER B  
 HEADER A OR B (SWING FACILITY)

REDRAWN IN PART FROM 25203-26022 SH. 2 THRU REV. B

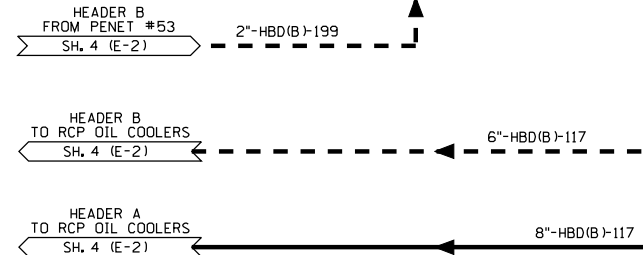
**OPERATIONS CRITICAL**

**FSAR FIGURE**  
 SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

		<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station Waterford, CT.	
TITLE PIPING AND INSTRUMENTATION DIAGRAM R.B.C.C.W. SYSTEM CNTMT AIR RECIRC. AND COOLANT UNIT			
REVISION DESCRIPTION & DUR	SIGNATURES ON FILE 14-000096 14-800288	CAD NO. 14-000096 25203-26022	REV 27
DSNM EAL	SCALE: NONE	UNLESS OTHERWISE NOTED SH. 5	



REACTOR VESSEL SUPPORT  
CONCRETE COOLING COILS  
(3)



- NOTES:
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. J, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARDS 11.1.
  - ALL DRAINS FROM THE R.B.C.C.W. SYSTEM WILL DRAIN TO OPEN DRAINS IN THEIR RESPECTIVE AREAS. FOR FLOOR DRAINS P&ID, SEE DRAWING 26024, SHTS. 1-3. A FUNNEL (Y) DENOTES THE OPEN MSD/DRAIN SYSTEM.

PIPING LINE SYMBOLS

---	HEADER A
---	HEADER B
---	HEADER A OR B (SWING FACILITY)

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 22

OPERATIONS CRITICAL

FSAR FIGURE

SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

CAD NOTE: MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

NO.	DATE	REVISIONS	BY	CHK.	APP.

N/A	15	5-18-05	INC. DCN DM2-00-0127-05	SMC	ASK	NBZ	MP
N/A	14	5-10-02	INC. DCN DM2-00-0547-01	BLM	TP	SBB	CAM
N/A	13	3-7-02	INC. DCN DM2-00-0156-01	JCV	TF	DLW	RJY
N/A	12	3-3-02	INC. DCN DM2-00-0157-01	JCV	TF	NMN	PFL
N/A	11	5-29-00	INC. DCN'S DM2-00-0345-97, DM2-00-0025-00 & DM2-00-0395-00	ASK	FM	REB	REB
N/A	10	8-18-98	INC. DCN DM2-00-0298-97	MCR	REB	REB	REB
N/A	9	3-12-98	INC. DCN DM2-00-0438-98	GZ	REB	REB	REB
N/A	8	3-12-98					

REVISIONS DURING CONSTRUCTION

--	--	--	--	--	--

**DOMINION** Nuclear Connecticut, Inc.  
 Millstone Power Station

TITLE: MILLSTONE NUCLEAR POWER STATION-UNIT 2  
 PIPING AND INSTRUMENTATION DIAGRAM  
 R.B.C.C.W. SYSTEM REACTOR  
 VESSEL SUPPORT CONCRETE COOLING COILS  
 WATERFORD, CT

BY: M.R. BIBISI  
 DATE: 7-24-87  
 SCALE: NONE

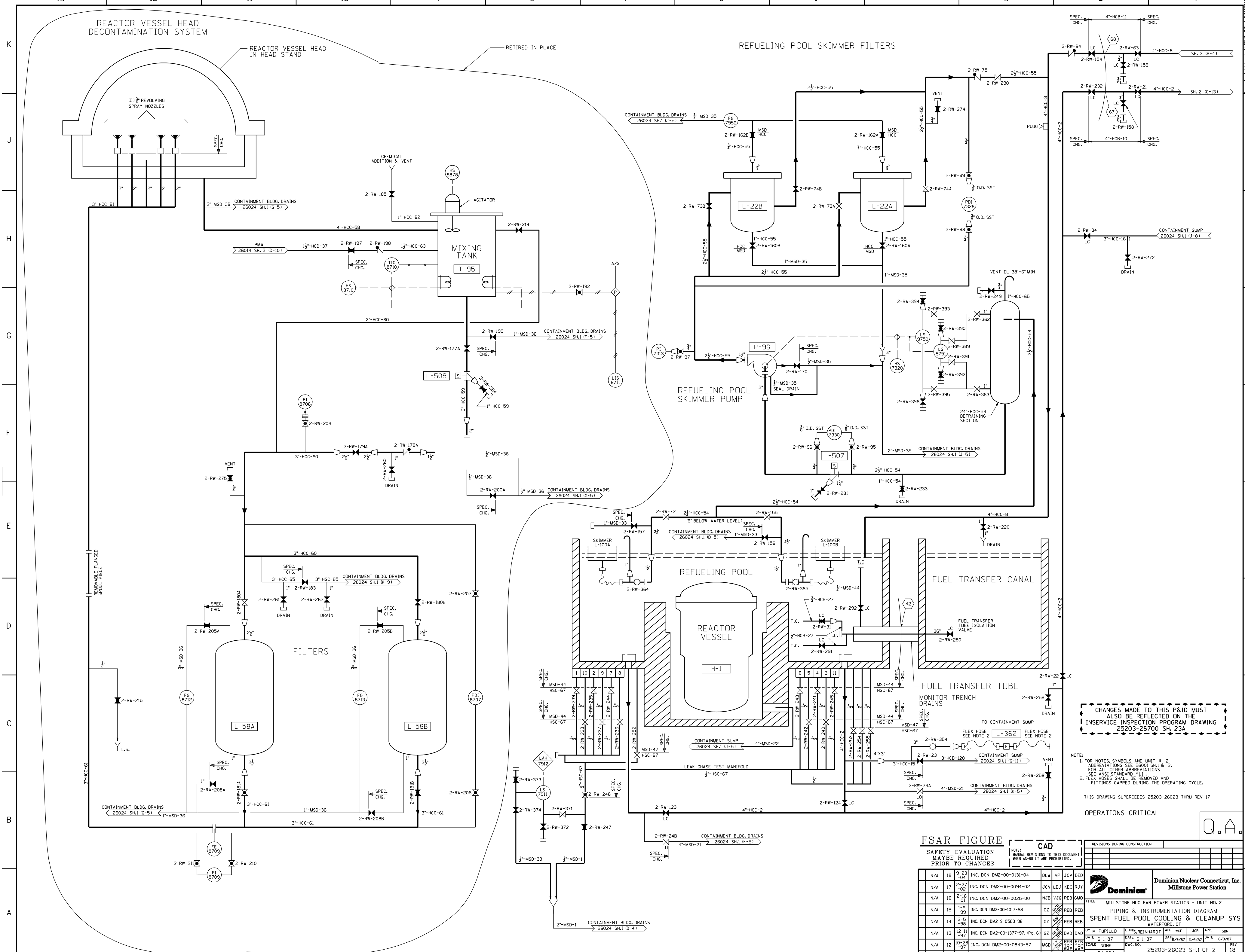
APP. SRF  
 DATE: 10-28-87  
 DWG. NO.: 25203-26022 SH. 6 OF 6

APP. GEC  
 DATE: 8-1-88

APP. RCB  
 DATE: 8-1-88

APP. SBR  
 DATE: 8-1-88

REV 15



CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 23A

- NOTE:
1. FOR NOTES, SYMBOLS AND UNIT # 2. ABBREVIATIONS SEE 26001 SH.1 & 2. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.1.
  2. FLEX HOSES SHALL BE REMOVED AND FITTINGS CAPPED DURING THE OPERATING CYCLE.

THIS DRAWING SUPERCEDES 25203-26023 THRU REV 17  
OPERATIONS CRITICAL

**FSAR FIGURE**

SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

**CAD**  
NOTE: MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

NO.	DATE	REVISIONS	BY	CHK.	APP.
N/A	18	9-23-04	INC. DCN DM2-00-0131-04	DLW	MP JCV DED
N/A	17	2-27-02	INC. DCN DM2-00-0094-02	JCV	LEJ KEC R/J
N/A	16	2-18-01	INC. DCN DM2-00-0025-00	NJB	V/JG REB G/MO
N/A	15	1-5-99	INC. DCN DM2-00-1017-98	GZ	X/RB REB
N/A	14	2-5-98	INC. DCN DM2-5-0583-96	GZ	X/RB REB
N/A	13	12-11-97	INC. DCN DM2-00-1377-97, Pg. 6	GZ	DAD/DAD
N/A	12	10-28-97	INC. DCN DM2-00-0843-97	MCD	Y/C/F/W

REVISIONS DURING CONSTRUCTION		DATE		DATE	

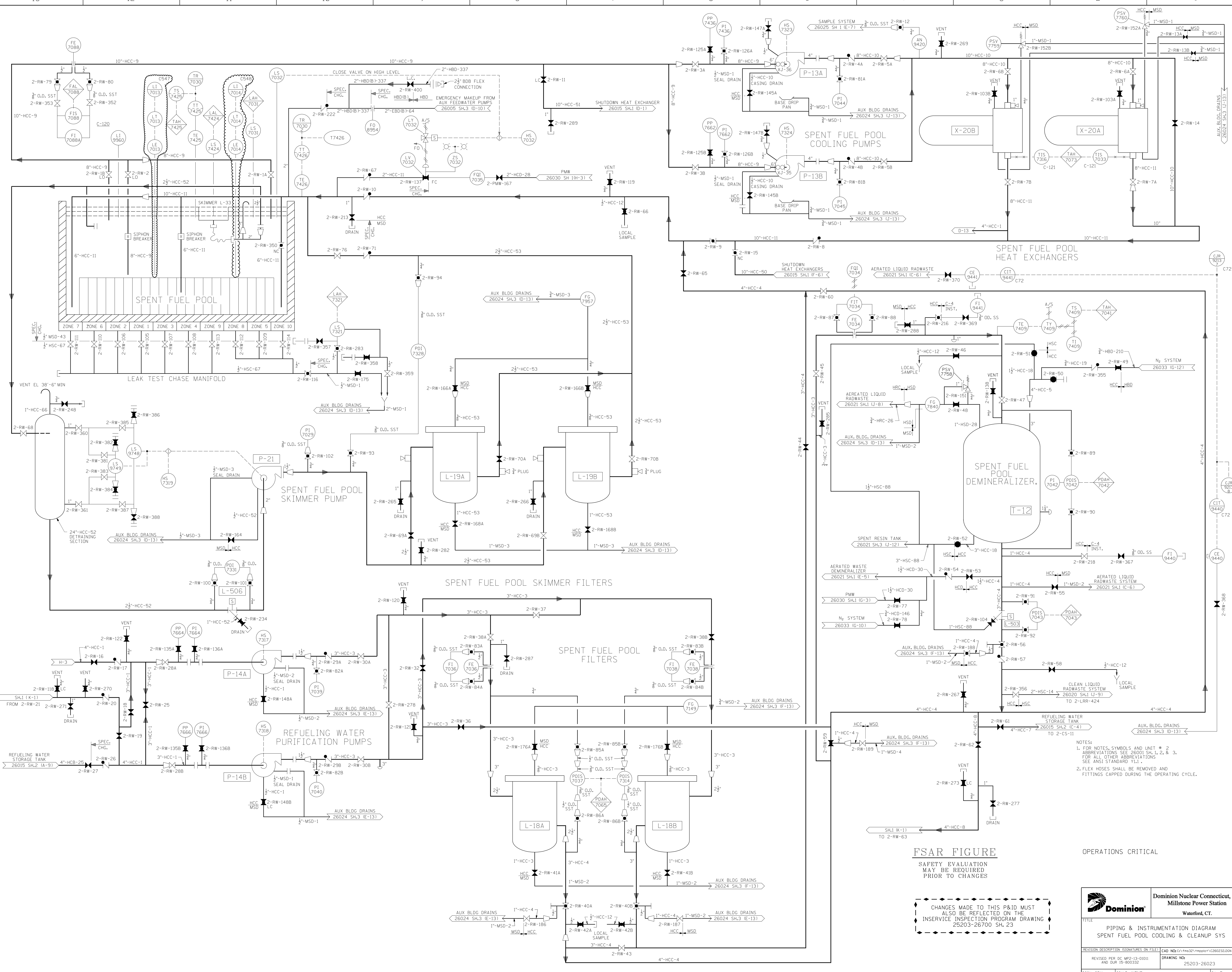
**Dominion Nuclear Connecticut, Inc.**  
Millstone Power Station

TITLE: MILLSTONE NUCLEAR POWER STATION - UNIT NO. 2  
PIPING & INSTRUMENTATION DIAGRAM  
SPENT FUEL POOL COOLING & CLEANUP SYS  
WATERFORD, CT

BY: M PUPILLO  
DATE: 6-1-87  
SCALE: NONE  
DWG. NO.: 25203-26023 SH.1 OF 2

APP: SBR  
DATE: 6-1-87  
DATE: 6/9/87  
REV: 18





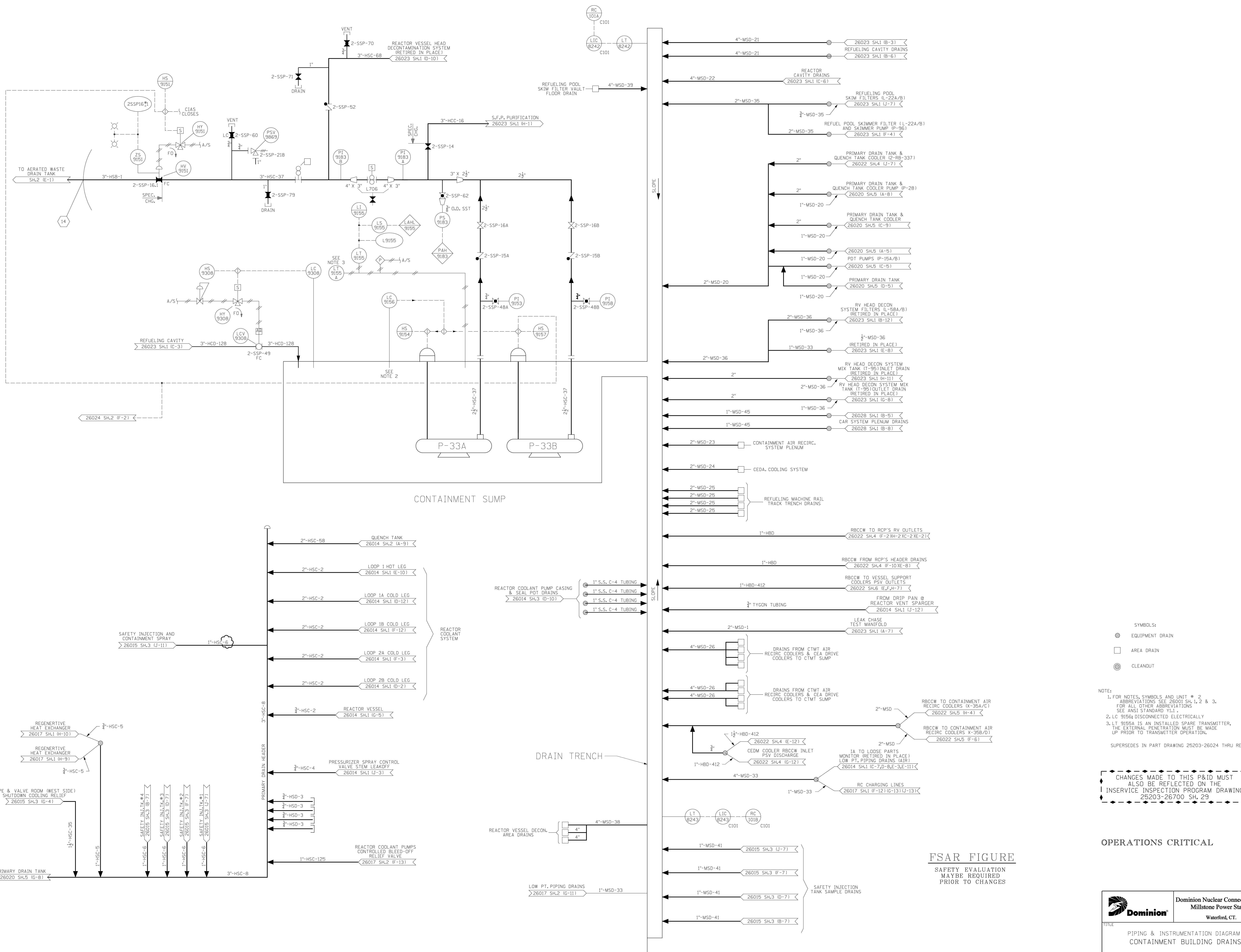
**FSAR FIGURE**  
SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

OPERATIONS CRITICAL

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH.23

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.
TITLE <b>PIPING &amp; INSTRUMENTATION DIAGRAM</b> <b>SPENT FUEL POOL COOLING &amp; CLEANUP SYS</b>		
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER DC WP2-13-01011 AND DUR 15-000332	DRAWING NO. 25203-26023	REV 33
DSN JCV	SCALE: NONE	UNLESS OTHERWISE NOTED SH. 2

- NOTES:
- FOR NOTES, SYMBOLS AND UNIT # 2 ABBREVIATIONS SEE 26001 SH.1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.1.
  - FLEX HOSES SHALL BE REMOVED AND FITTINGS CAPPED DURING THE OPERATING CYCLE.



SYMBOLS:  
 ● EQUIPMENT DRAIN  
 □ AREA DRAIN  
 ⊙ CLEANOUT

NOTE:  
 1. FOR NOTES, SYMBOLS AND UNIT # 2 ABBREVIATIONS SEE 26003 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.1.  
 2. LC 9156 DISCONNECTED ELECTRICALLY  
 3. LT 9155A IS AN INSTALLED SPARE TRANSMITTER. THE EXTERNAL PENETRATION MUST BE MADE UP PRIOR TO TRANSMITTER OPERATION.

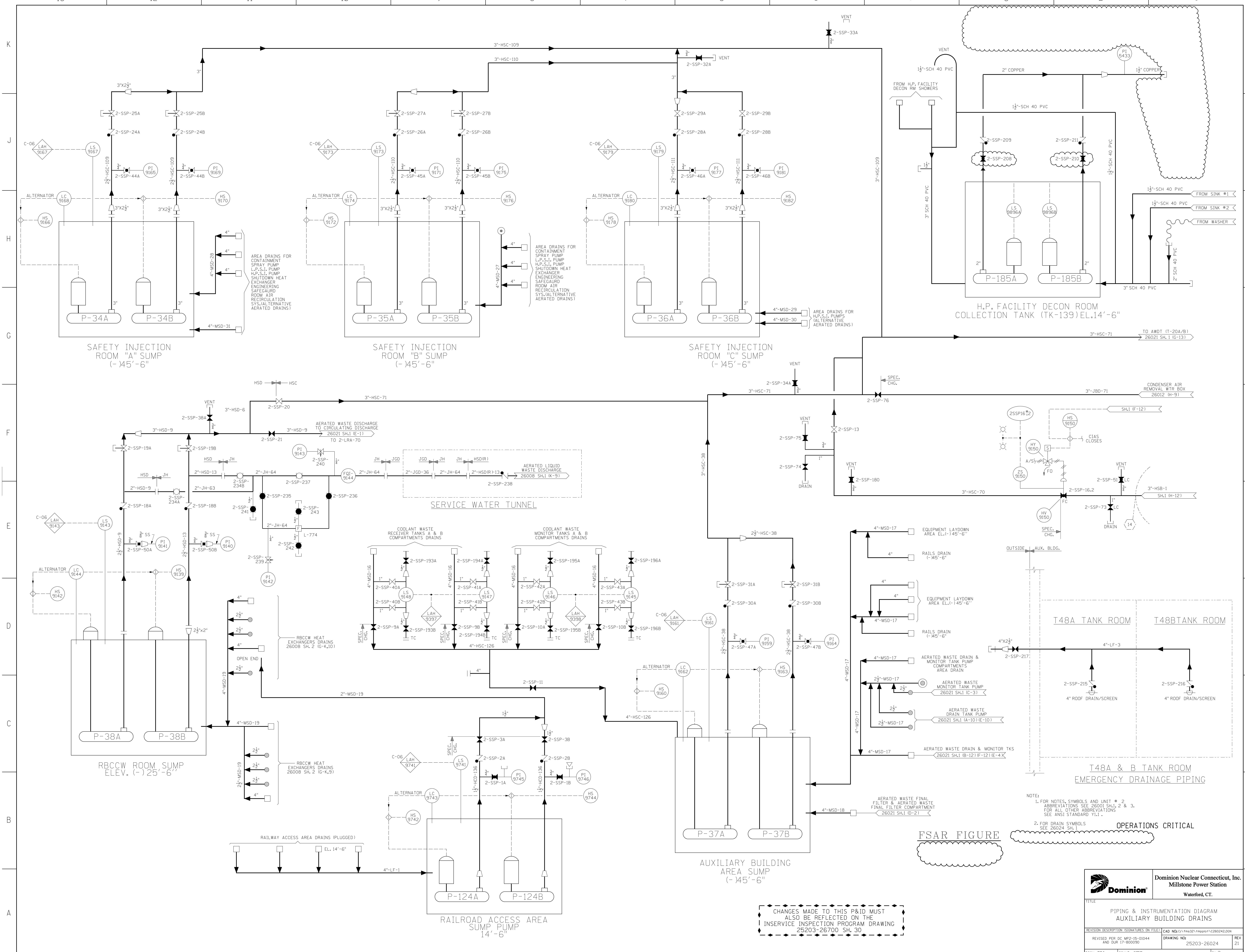
SUPERSEDES IN PART DRAWING 25203-26024 THRU REV.11

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 29

**FSAR FIGURE**  
 SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES

**OPERATIONS CRITICAL**

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE PIPING & INSTRUMENTATION DIAGRAM CONTAINMENT BUILDING DRAINS			
REVISION DESCRIPTION REVISION PER MS&R 15-000164 & QUR 15-000360	SIGNATURES ON FILE CAD NO: 1517ms327mp01015260241.DGN	DRAWING NO: 25203-26024	REV 21
DSGN EAL	SCALE: NONE	UNLESS OTHERWISE NOTED SH 1	



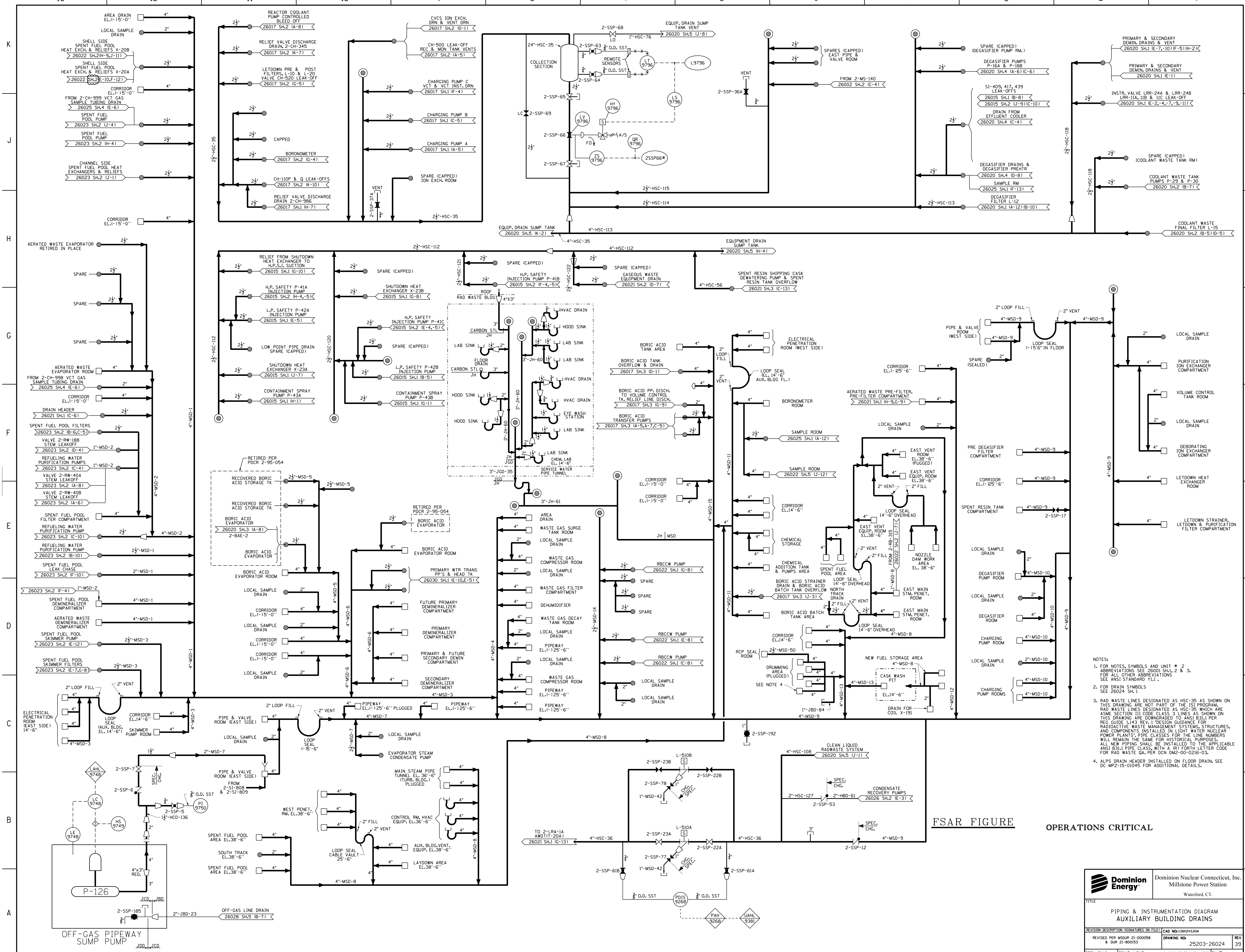
CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 30

NOTE:  
 1. FOR NOTES, SYMBOLS AND UNIT # 2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.  
 2. FOR DRAIN SYMBOLS SEE 26024 SH.1

OPERATIONS CRITICAL

FSAR FIGURE

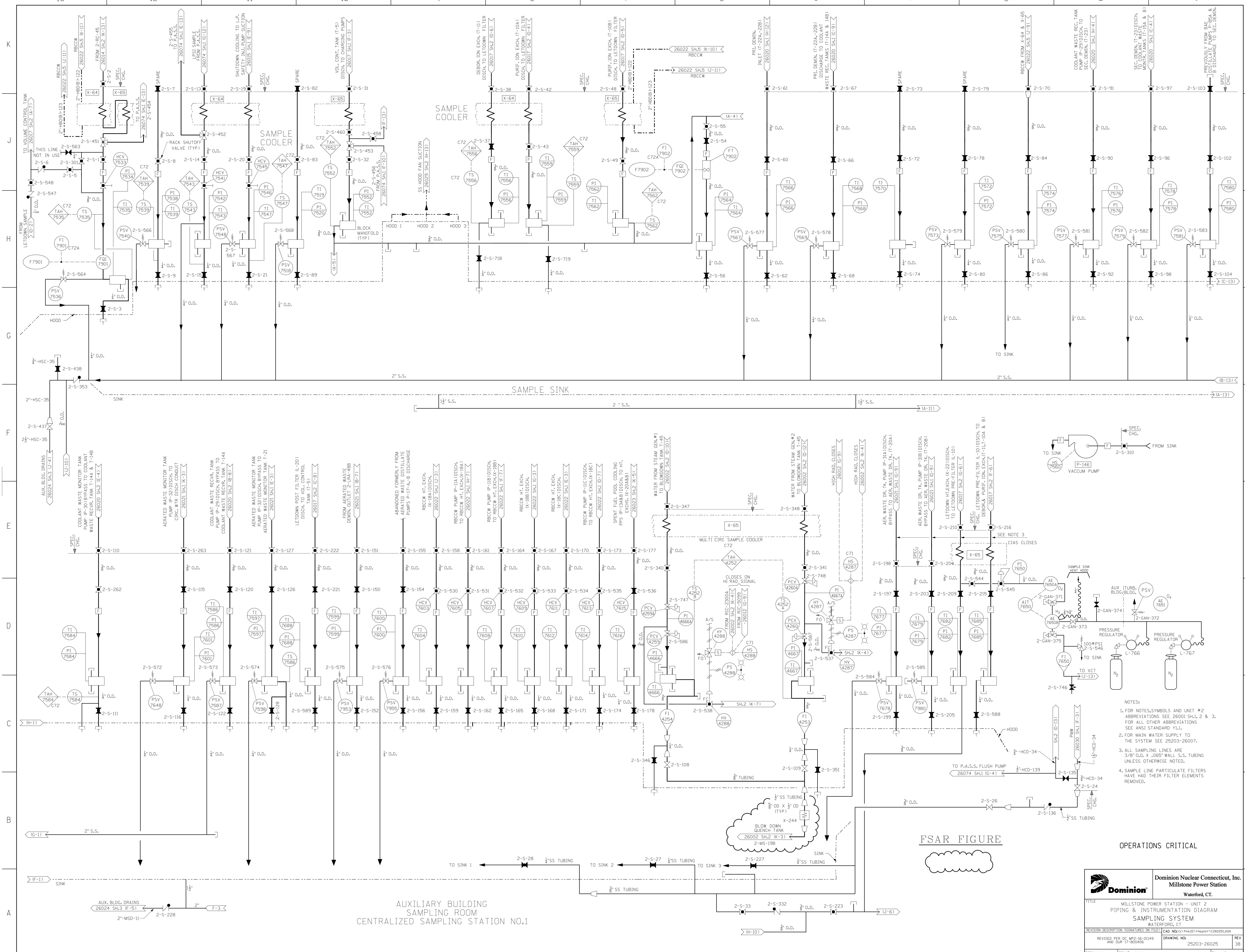
		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE PIPING & INSTRUMENTATION DIAGRAM AUXILIARY BUILDING DRAINS			
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER DC MP2-15-01044 AND DUR 17-800090	CAD NO: 0111ms321mp0011260242.dgn DRAWING NO: 25203-26024	REV 21	
DSGN DWJ	SCALE: NONE	UNLESS OTHERWISE NOTED SH. 2	



- NOTES:
- FOR NOTES, SYMBOLS AND UNIT # 2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
  - FOR DRAIN SYMBOLS SEE 26024 SH.1
  - RAD WASTE LINES DESIGNATED AS HSC-35 AS SHOWN ON THIS DRAWING ARE NOT PART OF THE IS1 PROGRAM. RAD WASTE LINES DESIGNATED AS HSC-35 WHICH ARE ASME SECTION III CODE CLASS 3 LINES AS SHOWN ON THIS DRAWING ARE DOWNGRADED TO ANSI B31.1 PER REG GUIDE 1-143 REV. 1 "DESIGN GUIDANCE FOR RADIOACTIVE WASTE MANAGEMENT SYSTEMS, STRUCTURES, AND COMPONENTS INSTALLED IN LIGHT WATER NUCLEAR POWER PLANTS". PIPE CLASSES FOR THE LINE NUMBERS WILL REMAIN THE SAME FOR HISTORICAL PURPOSES. ALL NEW PIPING SHALL BE INSTALLED TO THE APPLICABLE ANSI B31.1 PIPE CLASS WITH A (R) FORTH LETTER CODE FOR RAD WASTE QA. PER DCN DM2-00-0216-03.
  - ALPS DRAIN HEADER INSTALLED ON FLOOR DRAIN. SEE DC MP2-15-01045 FOR ADDITIONAL DETAILS.

FSAR FIGURE OPERATIONS CRITICAL

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>PIPING &amp; INSTRUMENTATION DIAGRAM</b> <b>AUXILIARY BUILDING DRAINS</b>			
REVISION DESCRIPTION DWJ	SIGNATURES ON FILE SCALE: NONE	CAD NO: 260243.D04 DRAWING NO: 25203-26024	REV 39



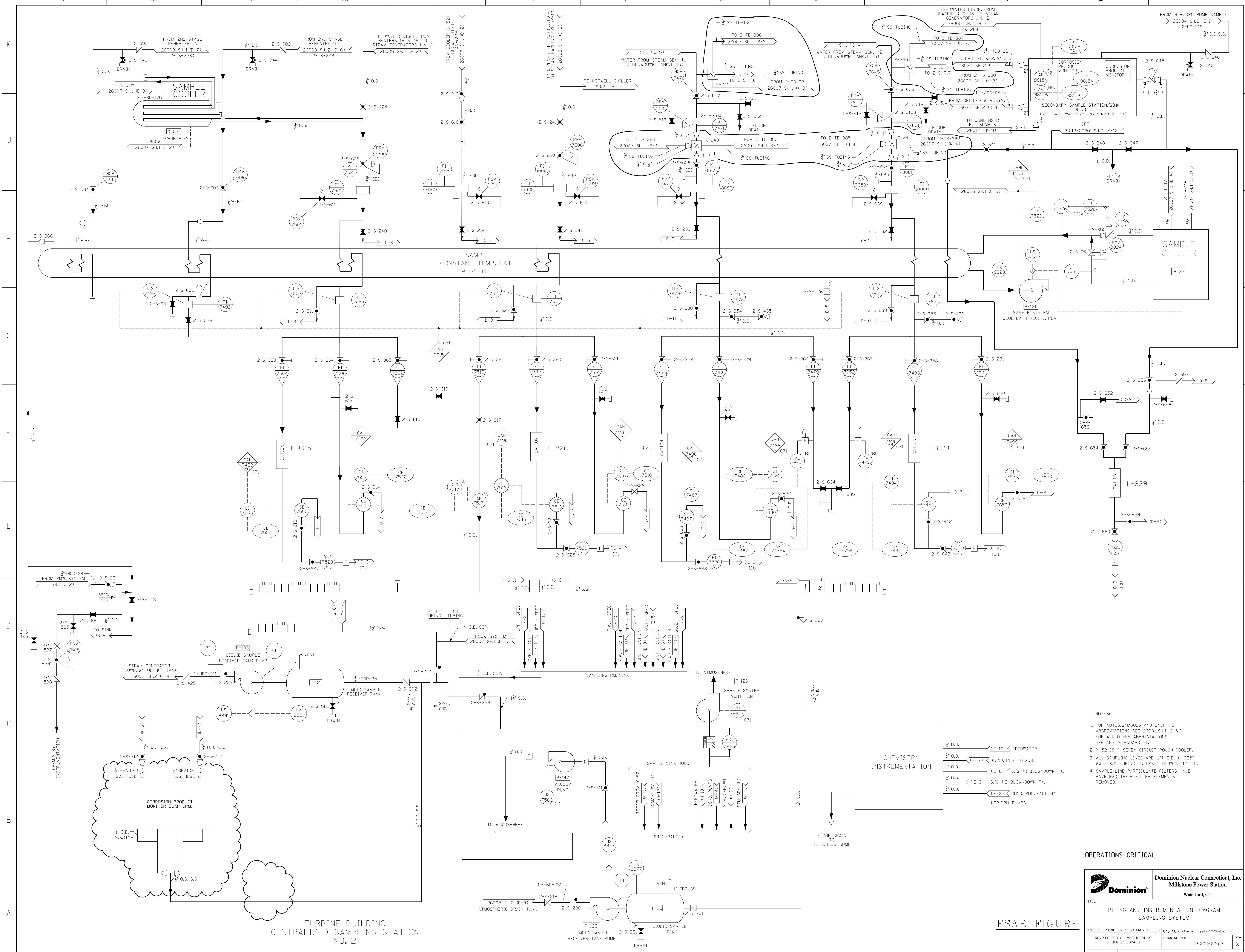
AUXILIARY BUILDING  
SAMPLING ROOM  
CENTRALIZED SAMPLING STATION NO.1

FSAR FIGURE

OPERATIONS CRITICAL

- NOTES:
1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
  2. FOR MAIN WATER SUPPLY TO THE SYSTEM SEE 25203-26007.
  3. ALL SAMPLING LINES ARE 3/8" O.D. X .065" WALL S.S. TUBING UNLESS OTHERWISE NOTED.
  4. SAMPLE LINE PARTICULATE FILTERS HAVE HAD THEIR FILTER ELEMENTS REMOVED.

		Dominion Nuclear Power Station Millstone Power Station Waterford, CT.
TITLE MILLSTONE POWER STATION - UNIT 2 PIPING & INSTRUMENTATION DIAGRAM SAMPLING SYSTEM WATERFORD, CT		
REVISION DESCRIPTION REVISION NO. DATE	SIGNATURES ON FILE DRAWING NO. SCALE: NONE	CAD NO. 25203-26025 UNLESS OTHERWISE NOTED SHEET NO. 1



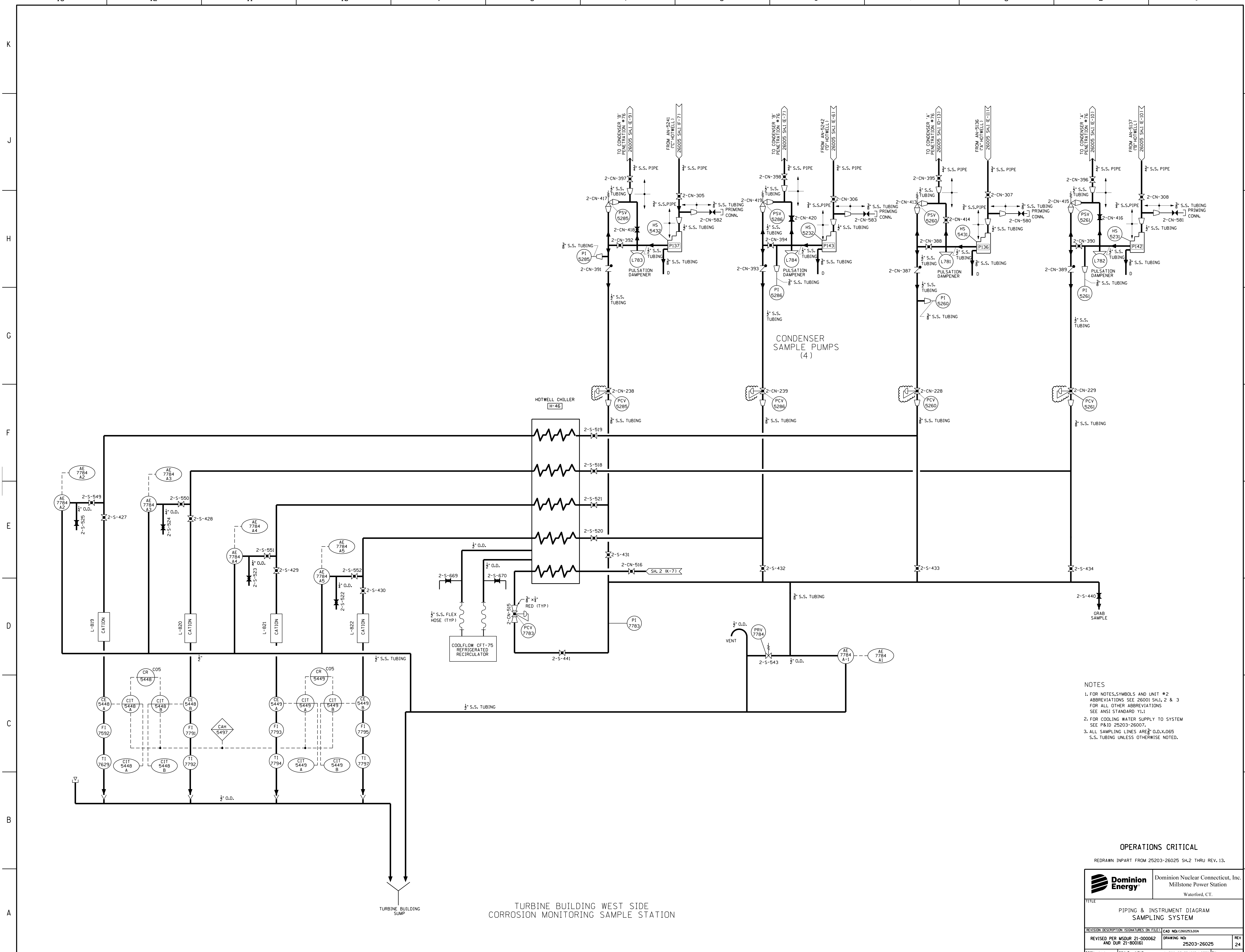
- NOTES:
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3 FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  - X-52 IS A SEVEN CIRCUIT ROUGH COOLER.
  - ALL SAMPLING LINES ARE 1/4" O.D. X .035" WALL S.S. TUBING UNLESS OTHERWISE NOTED.
  - SAMPLE LINE PARTICULATE FILTERS HAVE HAD THEIR FILTER ELEMENTS REMOVED.

OPERATIONS CRITICAL

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE <b>PIPING AND INSTRUMENTATION DIAGRAM</b> <b>SAMPLING SYSTEM</b>			
REVISION DESCRIPTION REVISED PER DC MP-2-16-01149 & CUR 17-000400	SIGNATURES ON FILE DRAWING NO: 25203-26025	CAD NO: C:\ms32\mnp001\c260252.dgn	REV 31
DSGN EAL	SCALE: NONE	UNLESS OTHERWISE NOTED SH 2	

FSAR FIGURE

TURBINE BUILDING  
CENTRALIZED SAMPLING STATION  
NO. 2



CONDENSER SAMPLE PUMPS (4)

HOTWELL CHILLER H-46

COOLFLOW CFT-75 REFRIGERATED RECIRCULATOR

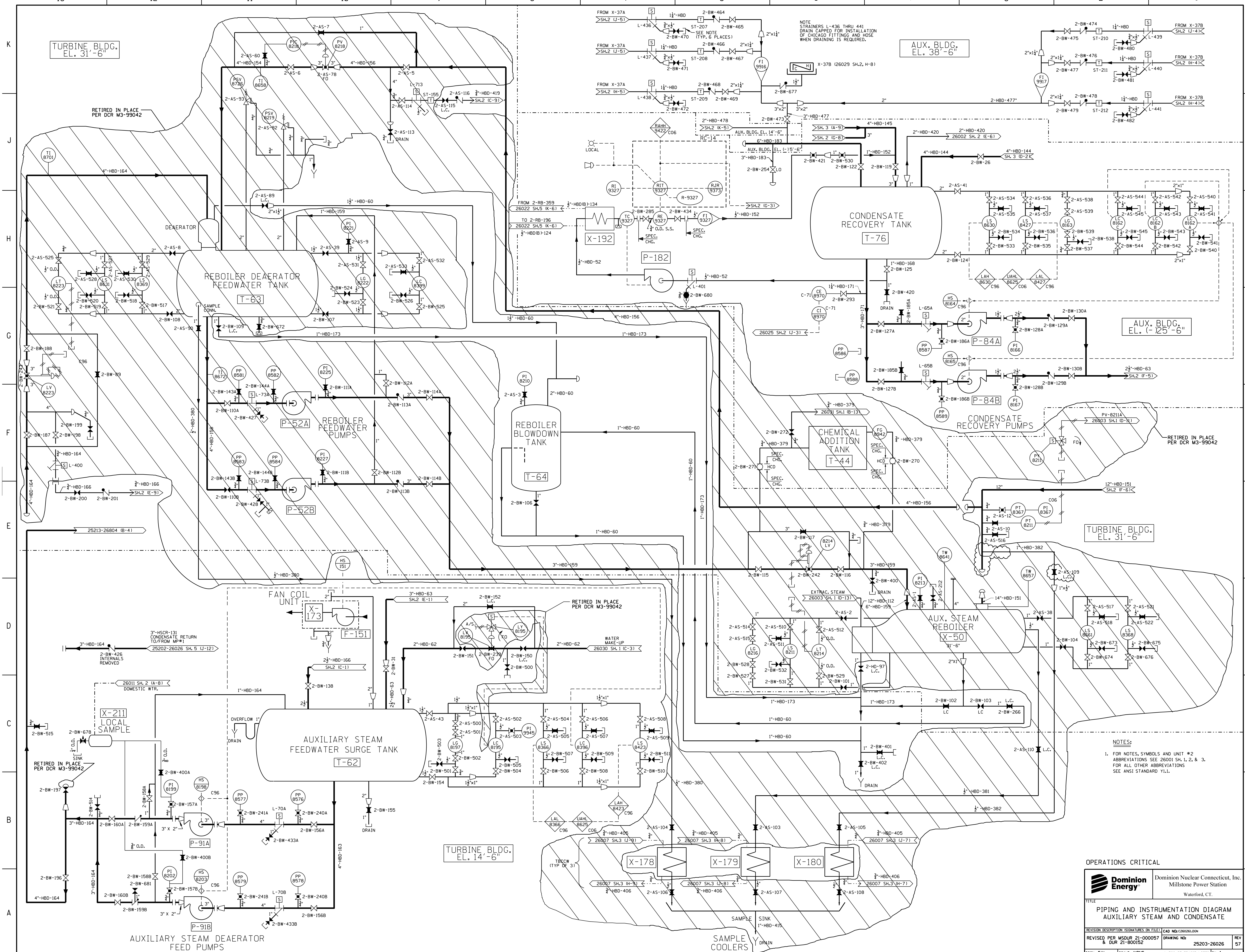
TURBINE BUILDING WEST SIDE CORROSION MONITORING SAMPLE STATION

- NOTES
1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3 FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  2. FOR COOLING WATER SUPPLY TO SYSTEM SEE P&ID 25203-26007.
  3. ALL SAMPLING LINES ARE 1/2" O.D. X .065 S.S. TUBING UNLESS OTHERWISE NOTED.

OPERATIONS CRITICAL

REDRAWN IN PART FROM 25203-26025 SH.2 THRU REV. 13.

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE <b>PIPING &amp; INSTRUMENT DIAGRAM SAMPLING SYSTEM</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISION PER MSDR 21-00062 AND DUR 21-800161	CAD NO: C26025.DGN DRAWING NO: 25203-26025	REV 24	DSGN DWJ SCALE: NONE UNLESS OTHERWISE NOTED SH 3



TURBINE BLDG.  
EL. 31'-6"

AUX. BLDG.  
EL. 38'-6"

AUX. BLDG.  
EL. (-)25'-6"

TURBINE BLDG.  
EL. 31'-6"

TURBINE BLDG.  
EL. 14'-6"

NOTES:  
1. FOR NOTES, SYMBOLS AND UNIT #2  
ABBREVIATIONS SEE 26001 SH. 1, 2, & 3.  
FOR ALL OTHER ABBREVIATIONS  
SEE ANSI STANDARD Y11.1.

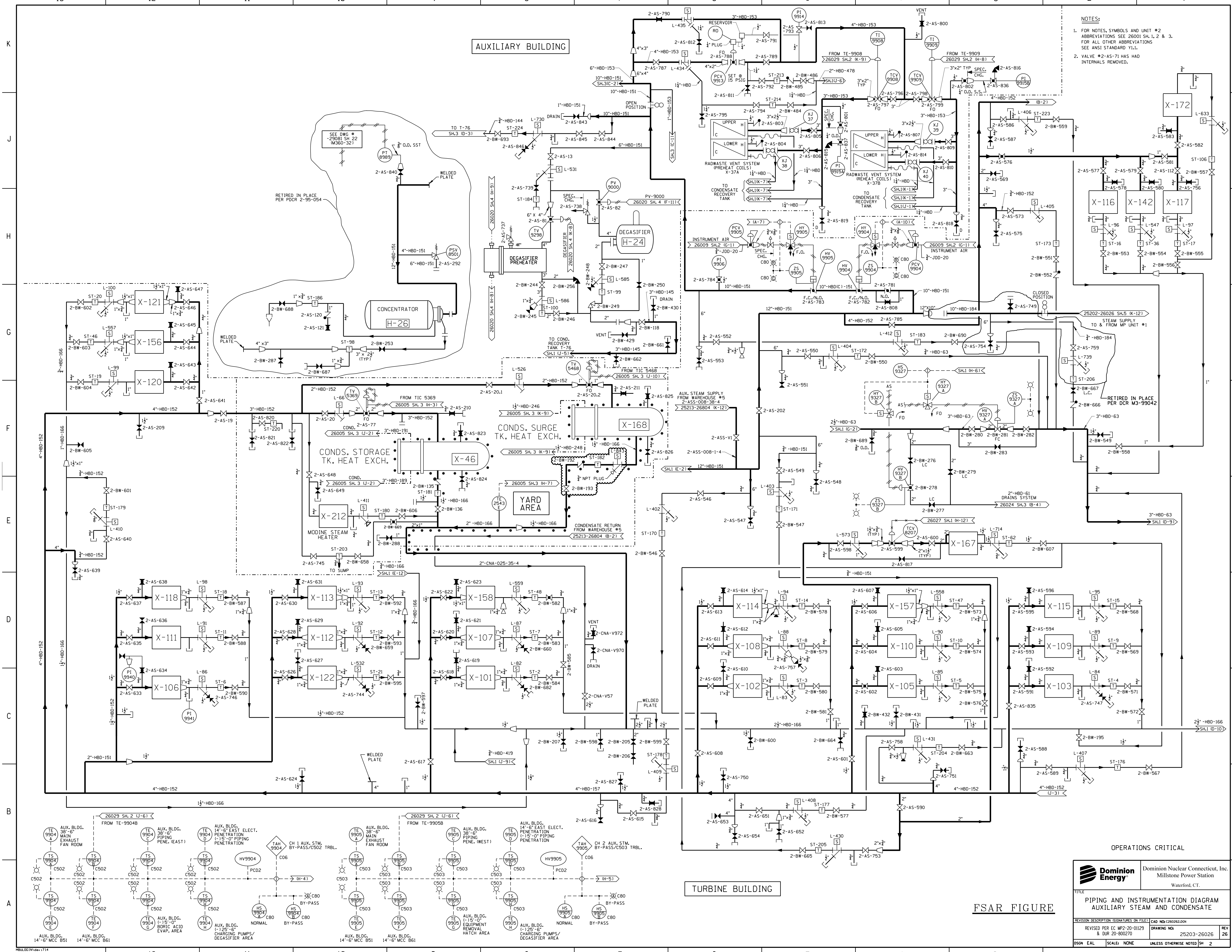
OPERATIONS CRITICAL

Dominion Nuclear Connecticut, Inc.  
Millstone Power Station  
Waterford, CT.

TITLE  
PIPING AND INSTRUMENTATION DIAGRAM  
AUXILIARY STEAM AND CONDENSATE

REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C260261.DGN  
REVISED PER MSDUR 21-000057 DRAWING NO: 25203-26026 REV 57  
& DUR 21-000152 UNLESS OTHERWISE NOTED SH 1



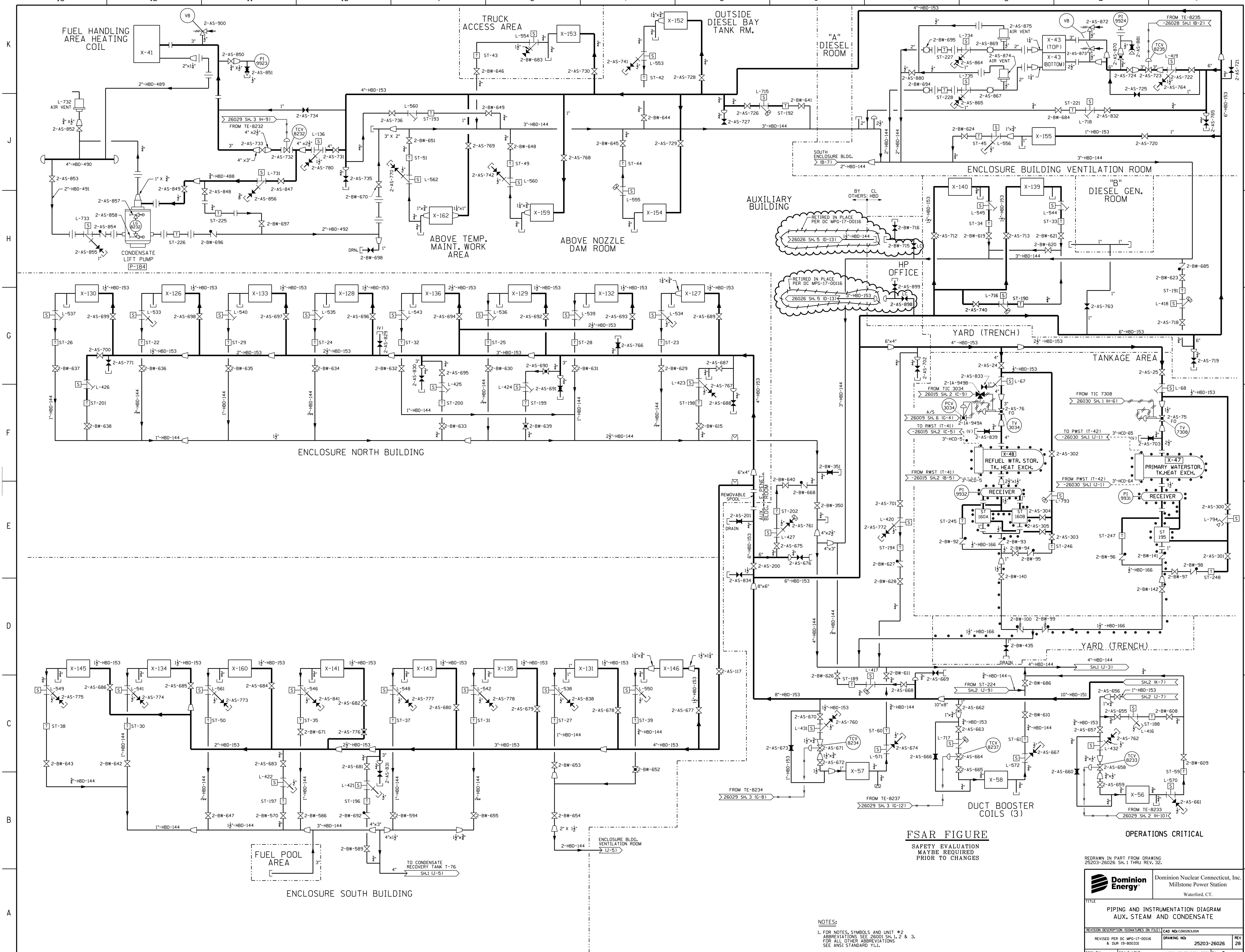


**NOTES:**  
 1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.  
 2. VALVE #2-AS-71 HAS HAD INTERNALS REMOVED.

OPERATIONS CRITICAL

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>TITLE</b> PIPING AND INSTRUMENTATION DIAGRAM AUXILIARY STEAM AND CONDENSATE			
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C260262.DGN		REV 26	
REVISED PER EC MP2-20-0125 & DUR 20-800270		25203-26026	
DSGN EAL		SCALE: NONE	
UNLESS OTHERWISE NOTED SH 2		26	

FSAR FIGURE



**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

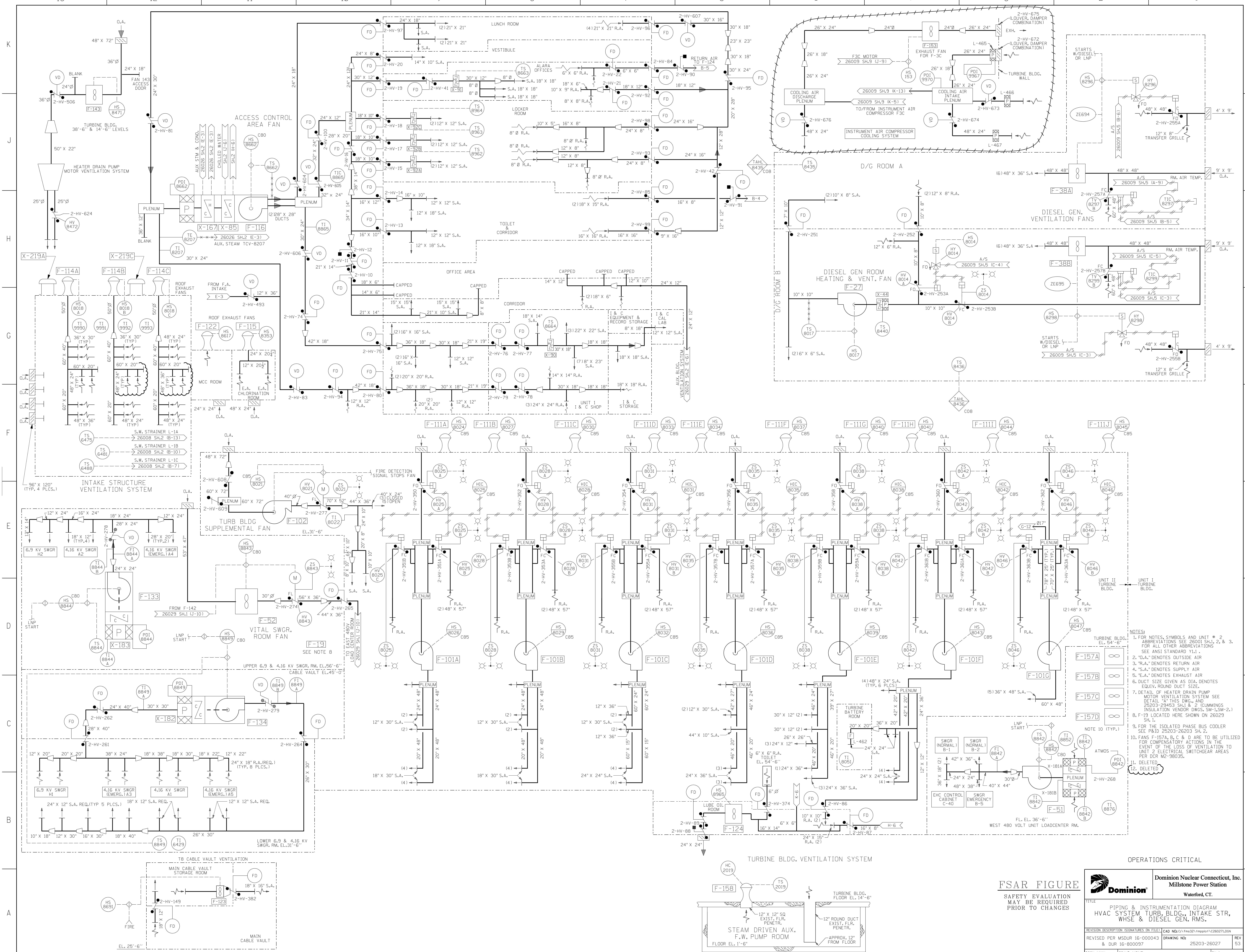
OPERATIONS CRITICAL

REDRAWN IN PART FROM DRAWING  
25203-26026 SH.1 THRU REV. 32.

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>PIPING AND INSTRUMENTATION DIAGRAM AUX. STEAM AND CONDENSATE</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C26026.DGN	DRAWING NO: 25203-26026	REV 28	DATE 11/19/03
DSGN EAL	SCALE: NONE	UNLESS OTHERWISE NOTED SH. 3	

**NOTES:**  
1. FOR NOTES, SYMBOLS AND UNIT #2  
ABBREVIATIONS SEE 26001 SH. 1, 2 & 3.  
FOR ALL OTHER ABBREVIATIONS  
SEE ANSI STANDARD Y1.1.





- NOTES:
- FOR NOTES, SYMBOLS AND UNIT # 2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
  - "O.A." DENOTES OUTSIDE AIR
  - "R.A." DENOTES RETURN AIR
  - "S.A." DENOTES SUPPLY AIR
  - "E.A." DENOTES EXHAUST AIR
  - DUCT SIZE GIVEN AS DIA. DENOTES EQUIV. ROUND DUCT SIZE.
  - DETAIL OF HEATER DRAIN PUMP MOTOR VENTILATION SYSTEM SEE DETAIL "A" THIS DWG. AND 26003-25453 SH.1 & 2 (CUMMINGS INSULATION VENDOR DWGS. SM-LSM-2.)
  - F-19 LOCATED HERE SHOWN ON 26029 SH.1.
  - FOR THE ISOLATED PHASE BUS COOLER SEE P&ID 25203-26203 SH.2.
  - FANS F-157A, B, C & D ARE TO BE UTILIZED FOR COMPENSATORY ACTIONS IN THE EVENT OF THE LOSS OF VENTILATION TO UNIT 2 ELECTRICAL SWITCHGEAR AREAS PER DCR M2-98035.
  - DELETED
  - DELETED

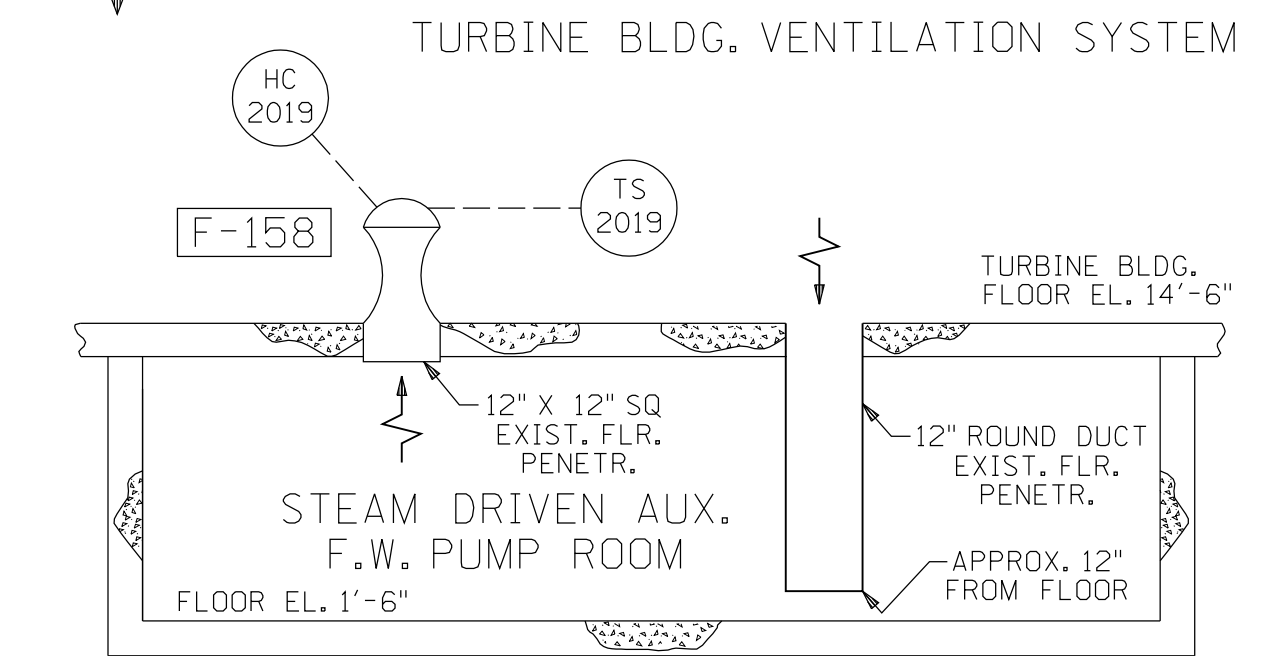
**FSAR FIGURE**  
SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

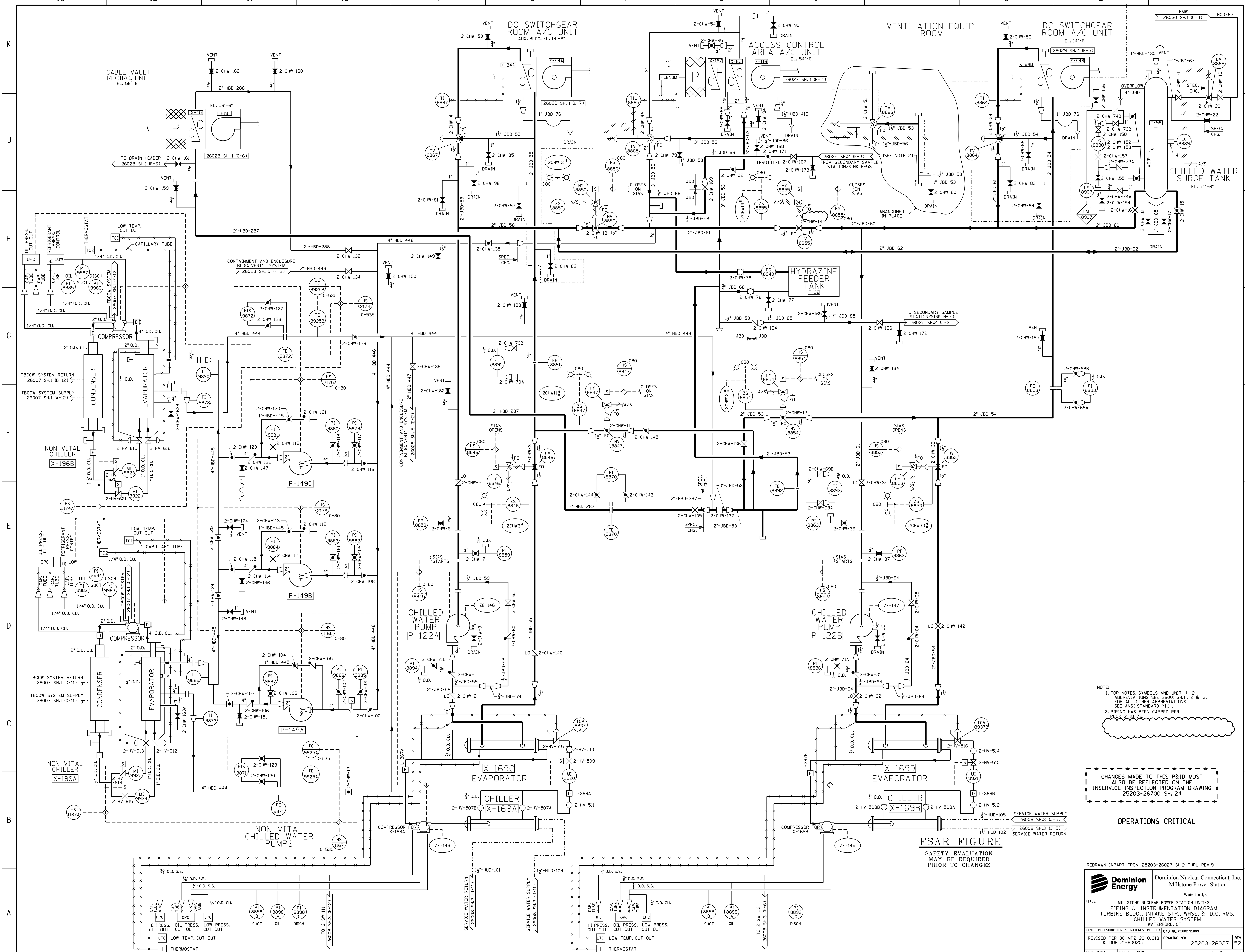
**OPERATIONS CRITICAL**

**Dominion**  
Dominion Nuclear Connecticut, Inc.  
Millstone Power Station  
Waterford, CT.

TITLE: PIPING & INSTRUMENTATION DIAGRAM  
HVAC SYSTEM TURB. BLDG., INTAKE STR.,  
WHSE & DIESEL GEN. RMS.

REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: 15113321.mpp01.c260271.DGN  
REVISED PER MSDR 16-00043 DRAWING NO: 25203-26207 REV 53  
& DUR 16-800097 UNLESS OTHERWISE NOTED SH 1





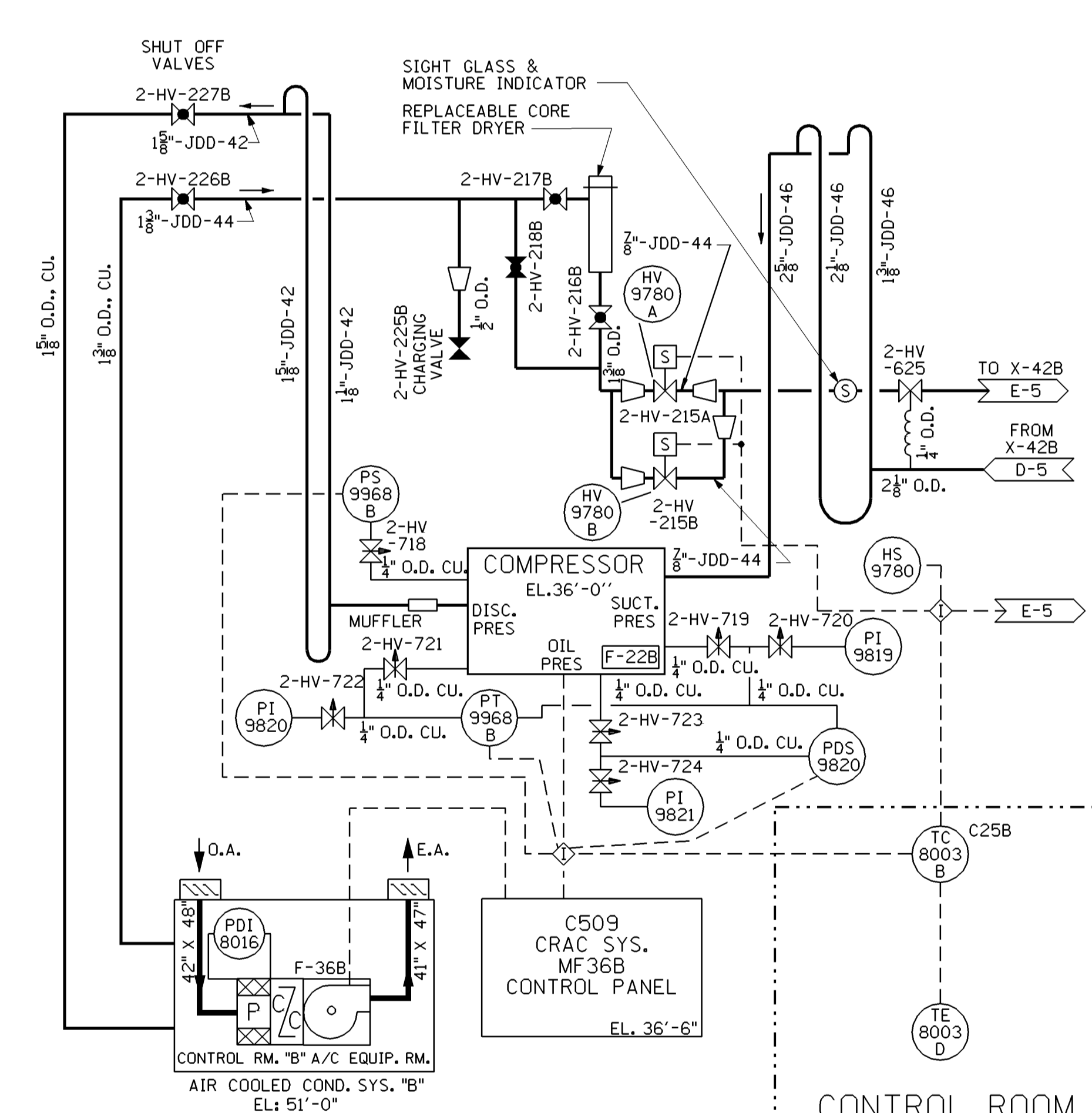
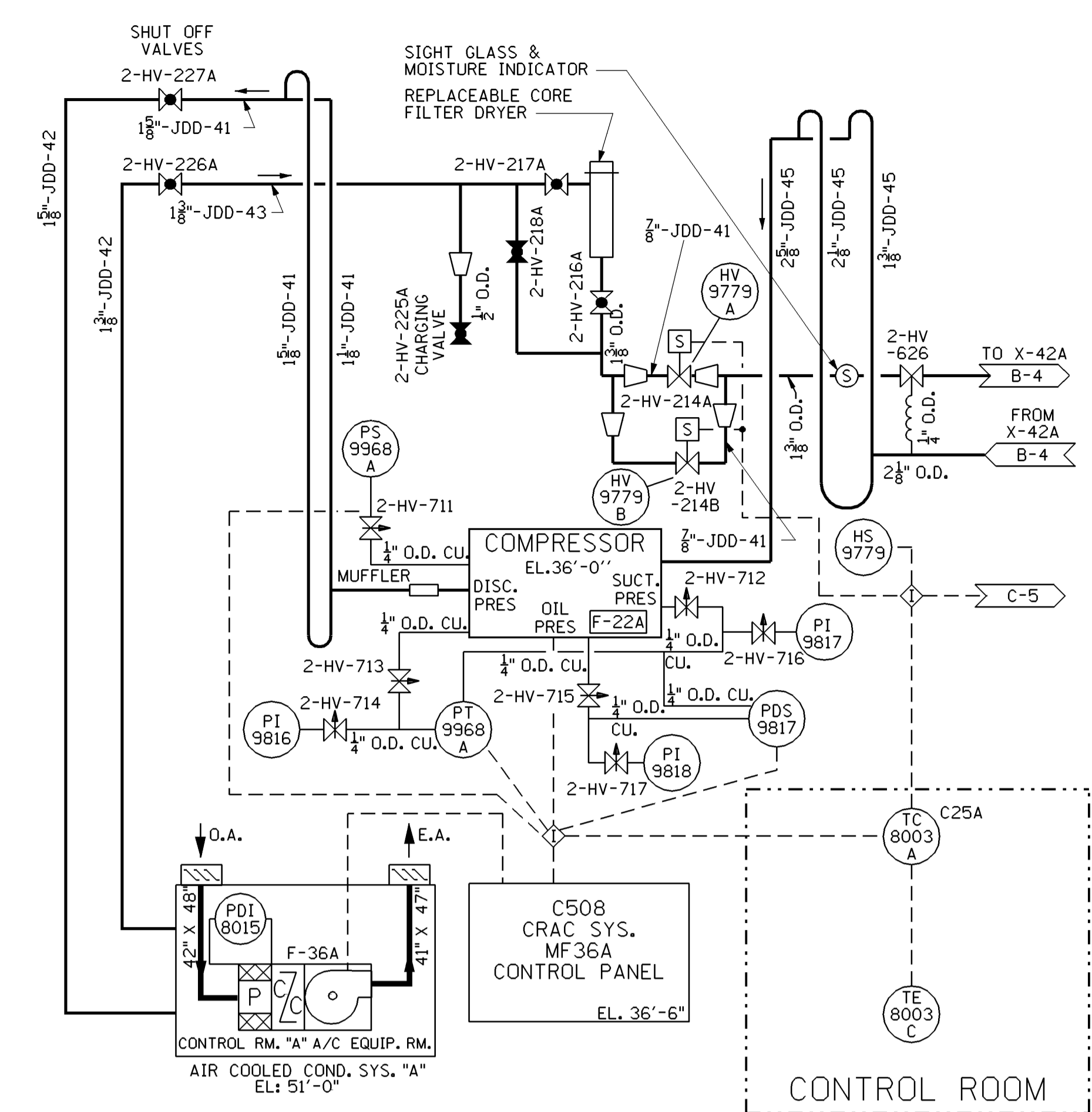
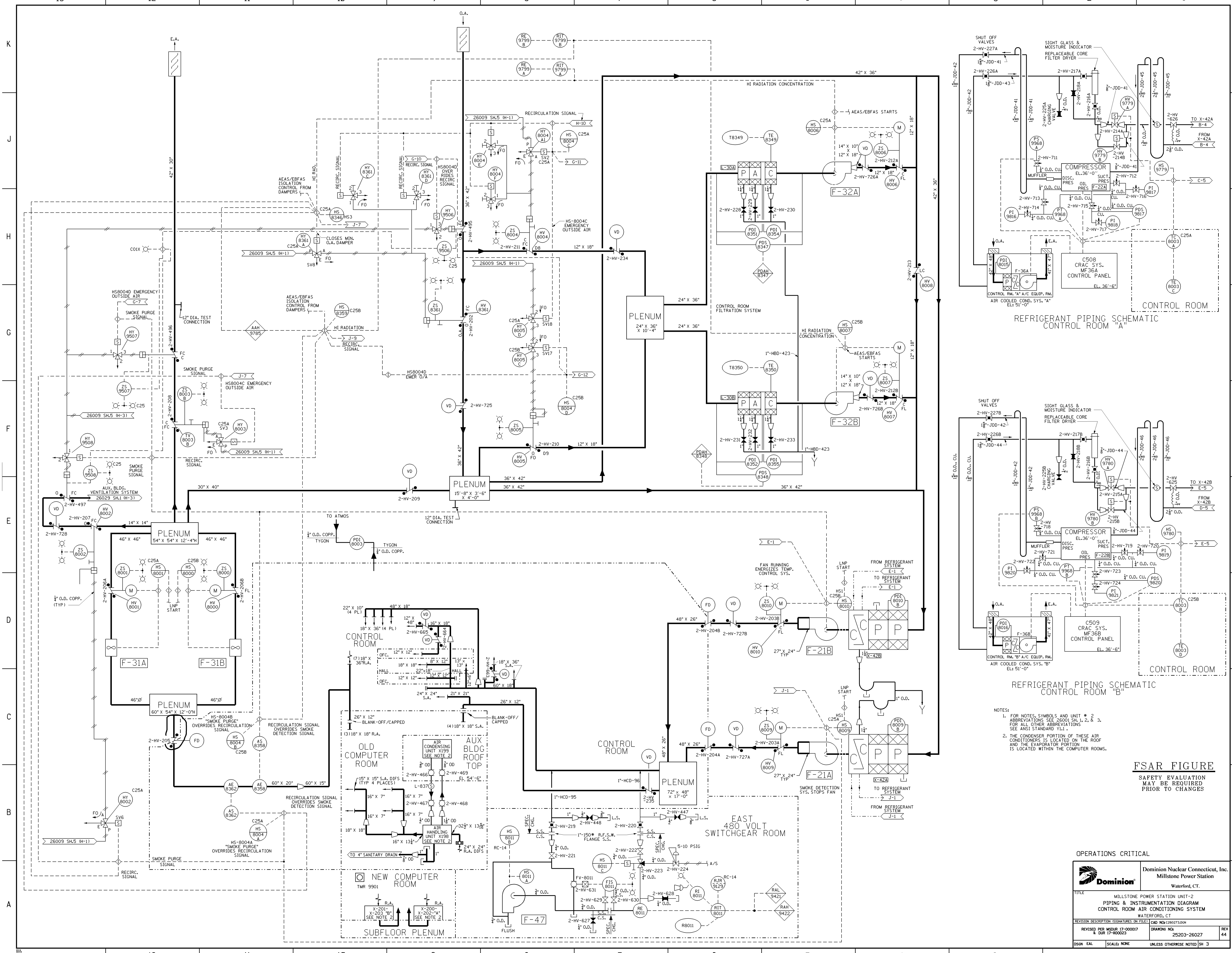
NOTE:  
 1. FOR NOTES, SYMBOLS AND UNIT # 2 & 3, SEE 26007 SH.1 (I-11), 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.  
 2. PIPING HAS BEEN CARRIED PER P&ID 2-18-79.

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 24

OPERATIONS CRITICAL

**FSAR FIGURE**  
 SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

REDRAWN IN PART FROM 25203-26027 SH.2 THRU REV.9 <b>DOMINION ENERGY</b> Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE MILLSTONE NUCLEAR POWER STATION UNIT-2 PIPING & INSTRUMENTATION DIAGRAM TURBINE BLDG., INTAKE STR., WHSE. & D.G. RMS. CHILLED WATER SYSTEM WATERFORD, CT.	
REVISION DESCRIPTION SIGNATURES ON FILE 26008 SH.3 (U-51)	CAD NO: 260272.D04
REVISION PER DC MP-20-01013 & DUR 21-000205	DRAWING NO: 25203-26027
DSGN DWJ	SCALE: NONE UNLESS OTHERWISE NOTED SH. 2



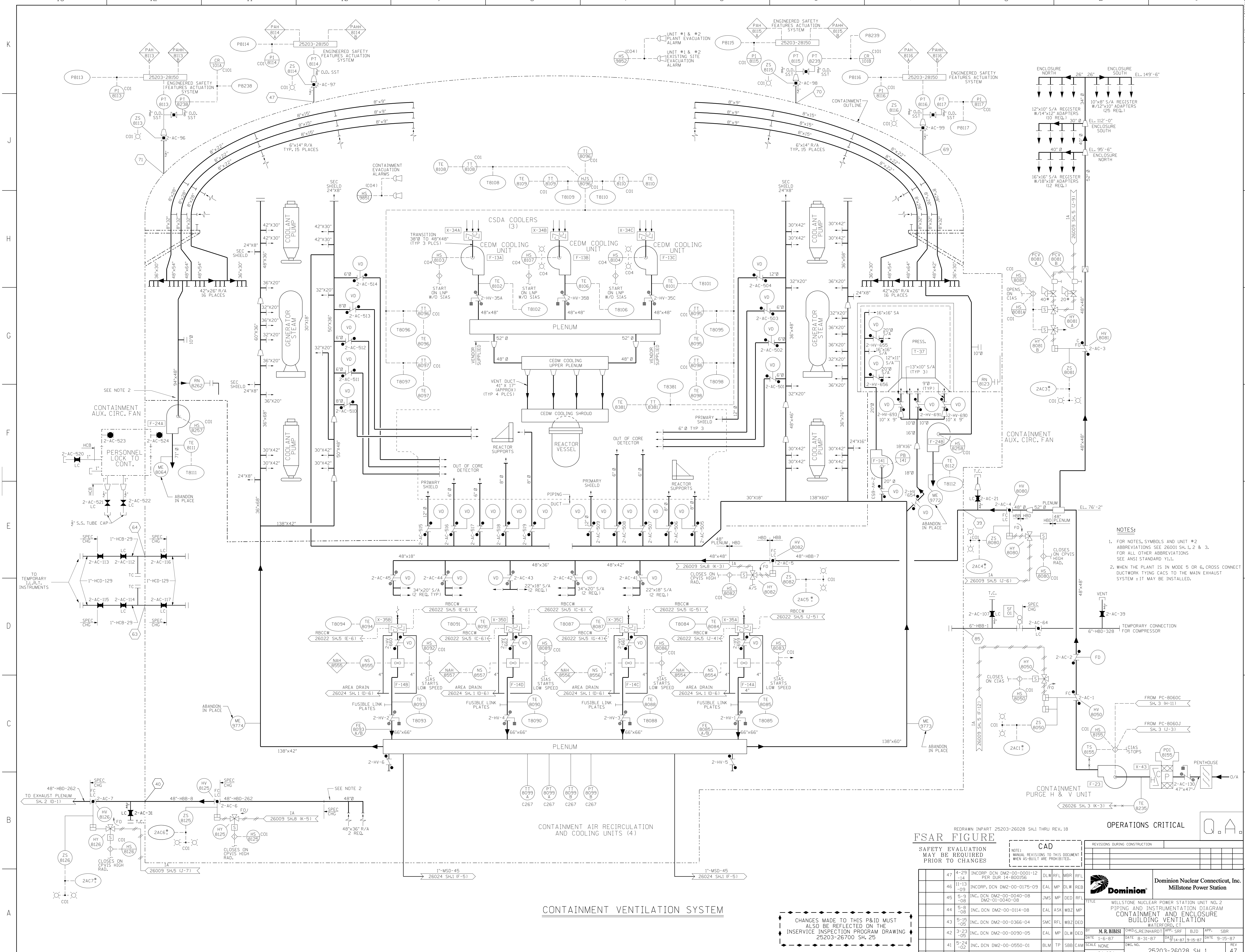
NOTES:

- FOR NOTES, SYMBOLS AND UNIT # 2 ABBREVIATIONS SEE 26009 SH.1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
- THE CONDENSER PORTION OF THESE AIR CONDITIONERS IS LOCATED ON THE ROOF AND THE EVAPORATOR PORTION IS LOCATED WITHIN THE COMPUTER ROOMS.

**FSAR FIGURE**  
SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

OPERATIONS CRITICAL

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE MILLSTONE POWER STATION UNIT-2 PIPING & INSTRUMENTATION DIAGRAM CONTROL ROOM AIR CONDITIONING SYSTEM WATERFORD, CT			
REVISION DESCRIPTION SIGNATURES ON FILE		CAD NO: C260273.DGN	
REVISED PER MSOUR 17-000017 & DUR 17-000023		DRAWING NO: 25203-26027	
DSN EAL		UNLESS OTHERWISE NOTED SH 3	



- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y14.1.
  - WHEN THE PLANT IS IN MODE 5 OR 6, CROSS CONNECT DUCTWORK TYING CACS TO THE MAIN EXHAUST SYSTEM; IT MAY BE INSTALLED.

**OPERATIONS CRITICAL**

**FSAR FIGURE**

REDRAWN IN PART 25203-26028 SH.1 THRU REV. 18

SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

NO.		DATE		REVISIONS	BY	CHKD.	APP.	DATE	REV
47	4-29-14	INCORP. DCN DM2-00-0001-12 PER BUR 14-600156	DLW	RFL	MBR	RFL			
46	11-13-09	INCORP. DCN DM2-00-0175-09	EAL	MP	DLW	RFL			
45	5-9-08	INC. DCN DM2-00-0040-08 DM2-01-0040-08	JMS	MP	DED	RFL			
44	5-8-08	INC. DCN DM2-00-0114-08	EAL	ASX	WBZ	MP			
43	5-15-05	INC. DCN DM2-00-0366-04	SFC	RFL	WBZ	DED			
42	3-23-05	INC. DCN DM2-00-0090-05	EAL	MP	DLW	DED			
41	5-24-02	INC. DCN DM2-00-0550-01	BLM	TP	SBB	CAM			

CAD REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION

NO.	DATE	REVISIONS	BY	CHK.	APP.

**Dominion Nuclear Connecticut, Inc.**  
**Milstone Power Station**

TITLE: MILLSTONE NUCLEAR POWER STATION UNIT NO. 2  
 CONTAINMENT AND ENCLOSURE DIAGRAM  
 BUILDING VENTILATION

WATERFORD, CT

BY: M.R. BIBISI  
 DATE: 1-6-07  
 SCALE: NONE

CHKD.: G. REINHARDT  
 DATE: 8-31-07  
 DWG. NO.: 84-024

APP.: BJD  
 DATE: 9-15-07

SBR  
 DATE: 9-15-07

REV: 47

CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 25

**CONTAINMENT VENTILATION SYSTEM**

**CONTAINMENT AIR RECIRCULATION AND COOLING UNITS (4)**

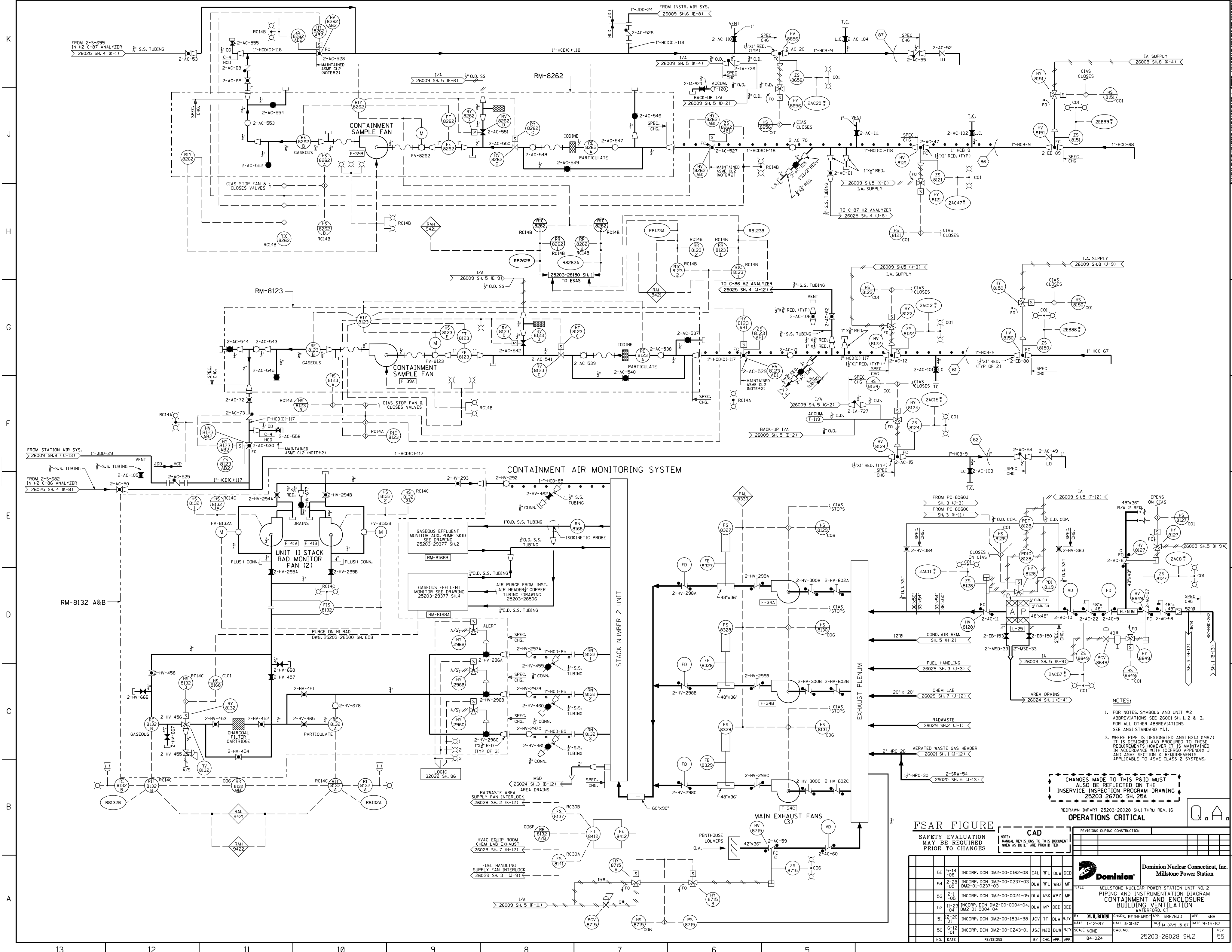
SEE NOTE 2

TO EXHAUST PLENUM SH. 2 (D-1)

TO EXHAUST PLENUM SH. 2 (D-1)

SEE NOTE 2

TO EXHAUST PLENUM SH. 2 (D-1)



**OPERATIONS CRITICAL**

REDRAWN IN PART 25203-26028 SH.1 THRU REV. 16

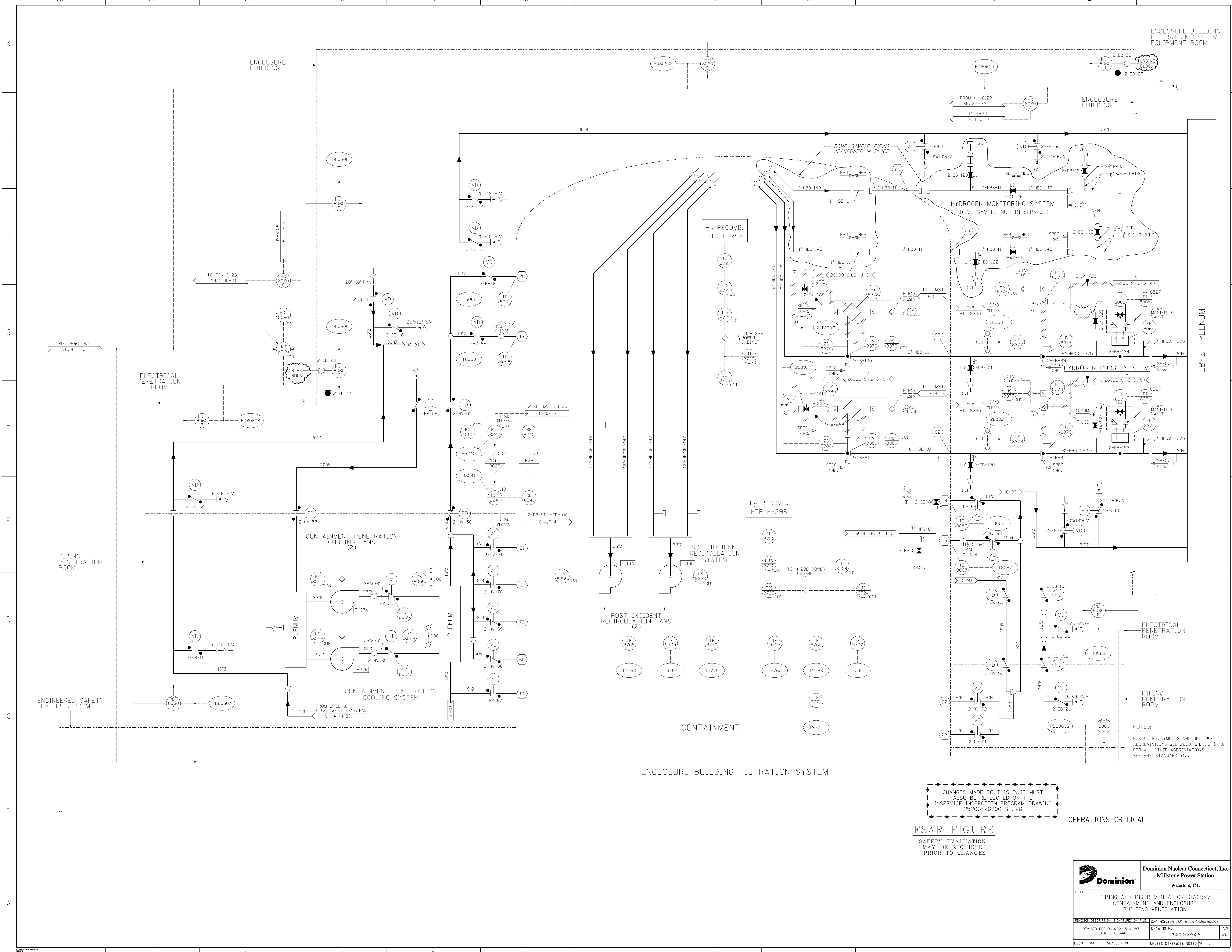
CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 25A

NOTES:  
 1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.  
 2. WHERE PIPE IS DESIGNATED ANSI B31.1 (1967) IT IS DESIGNED AND PROCURED TO THESE REQUIREMENTS HOWEVER IT IS MAINTAINED IN ACCORDANCE WITH 10CFR50 APPENDIX J AND ASME SECTION XI REQUIREMENTS APPLICABLE TO ASME CLASS 2 SYSTEMS.

FSAR FIGURE		CAD		REVISIONS DURING CONSTRUCTION	
SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES		NOTE: MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.			
55	5-14-08	INCRP. DCM DM2-00-0162-08	EAL	RFL	DLW
54	2-28-06	INCRP. DCM DM2-00-0237-03	DLW	RFL	WBZ
53	2-1-05	INCRP. DCM DM2-00-0024-05	DLW	ASK	WBZ
52	11-23-04	INCRP. DCM DM2-00-0004-04	DLW	MP	DED
51	12-20-01	INCRP. DCM DM2-00-1834-98	JCV	TF	DLW
50	6-12-01	INCRP. DCM DM2-00-0243-01	JSD	NJB	DLW
NO.	DATE	REVISIONS	BY	CHK.	APP.
					84-024

<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station	
TITLE: MILLSTONE NUCLEAR POWER STATION UNIT NO. 2 PIPING AND INSTRUMENTATION DIAGRAM CONTAINMENT AND ENCLOSURE BUILDING VENTILATION WATERFORD, CT	
DATE: 1-12-87 SCALE: NONE	DATE: 8-31-87 DATE: 14-87/9-15-87 DATE: 9-15-87
DWG. NO.: 25203-26028 SH.2	REV: 55





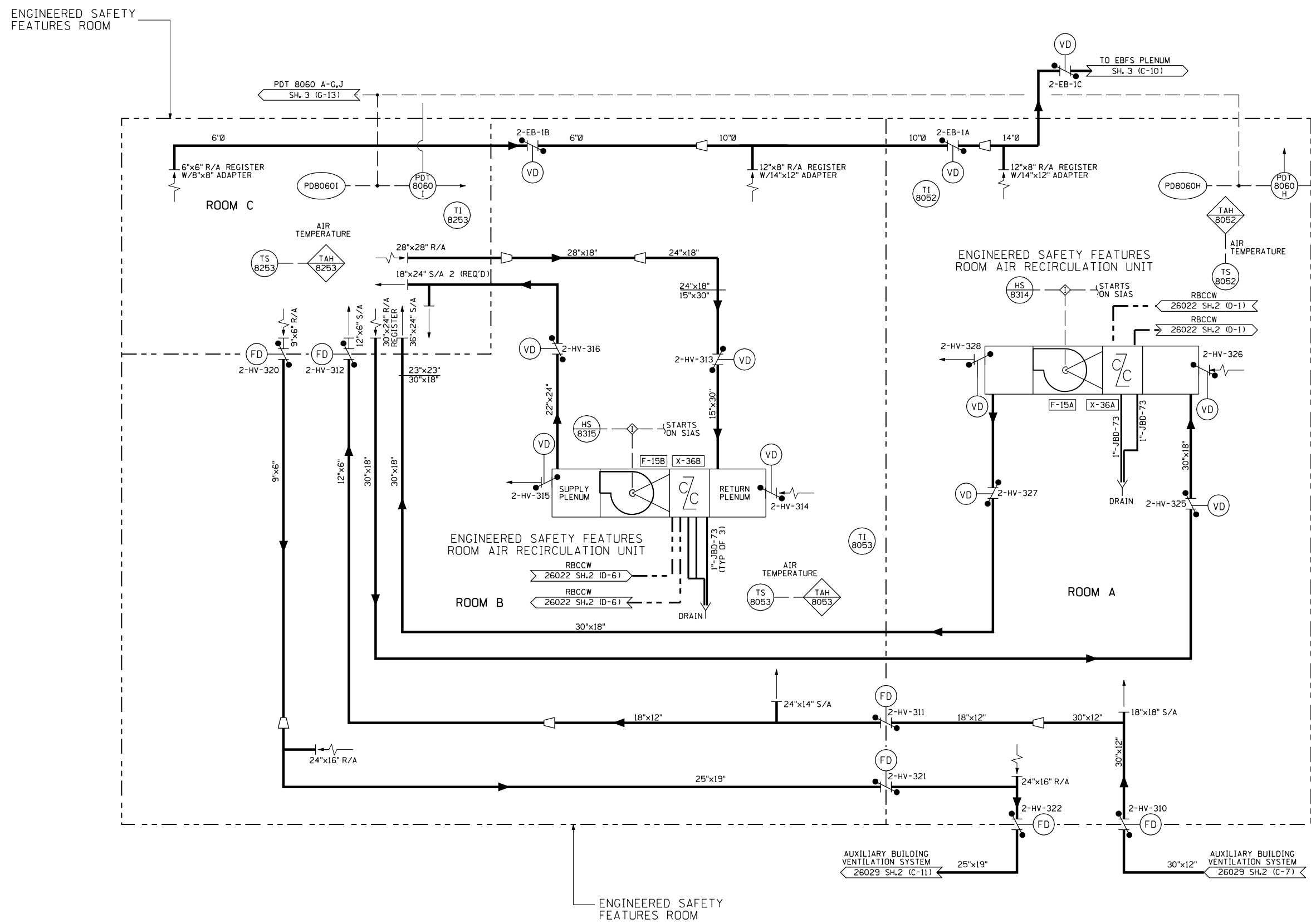
CHANGES MADE TO THIS P&ID MUST ALSO BE REFLECTED ON THE INSERVICE INSPECTION PROGRAM DRAWING 25203-26700 SH. 26

**FSAR FIGURE**  
SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

OPERATIONS CRITICAL

- NOTES:
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3.
  - FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.
TITLE PIPING AND INSTRUMENTATION DIAGRAM CONTAINMENT AND ENCLASURE BUILDING VENTILATION		
REVISION DESCRIPTION REVISED PER DC MR-2-15-01087 & DUR 15-800446	SIGNATURES ON FILE DRAWING NO. 25203-26028	CAD NO. 15-800446
DSGN DWJ	SCALE: NONE	UNLESS OTHERWISE NOTED SH 3



NOTES:  
 1. FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.

REDRAWN IN PART 25203-26028 SH.2 THRU REV. 16

**FSAR FIGURE**  
 SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

**OPERATIONS CRITICAL**

NO.	DATE	REVISIONS	BY	CHK.	APP.
N/A	10	3-23-01	INCORP. DCN#DM2-00-0593-00 & DM2-00-0025-00	NJB	JTD
N/A	9	12-4-98	INC. DCN DM2-00-0213-97, REVERSED REDUCER (ZONE G-B)	GZ	DLW
N/A	8	8-18-97	INC. DCN DM2-00-0636-97	MGD	DLW
N/A	7	12-27-95	INCORP. DCN DM2-S-1288-95 PER DCR M2-S-0403-95	KSS	JPP
84-024	6	11-8-95	INC. DCN DM2-S-0448-95 PER DCR M2-S-392-95	LLJ	DLW
N/A	5	10-12-95	INCORP. DCN DM2-S-808-95 PER DCR M2-S-392-95	RJC	DLW

NOTE: MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION

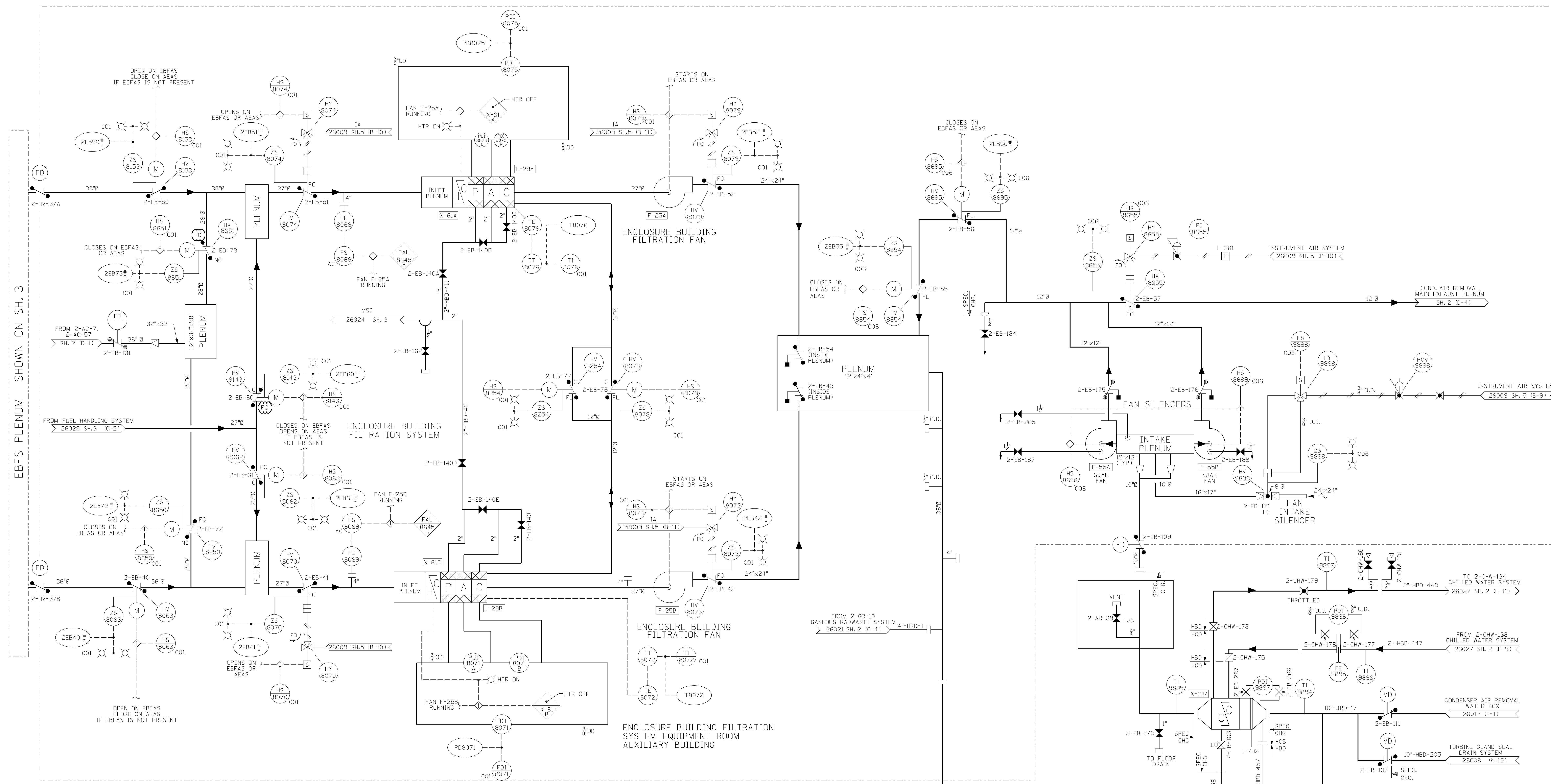
NO.	DATE	REVISIONS	BY	CHK.	APP.

BY: M.R. BIBISI  
 DATE: 1-21-87  
 SCALE: NONE  
 DWG. NO.: 25203-26028 SH. 4 OF 6

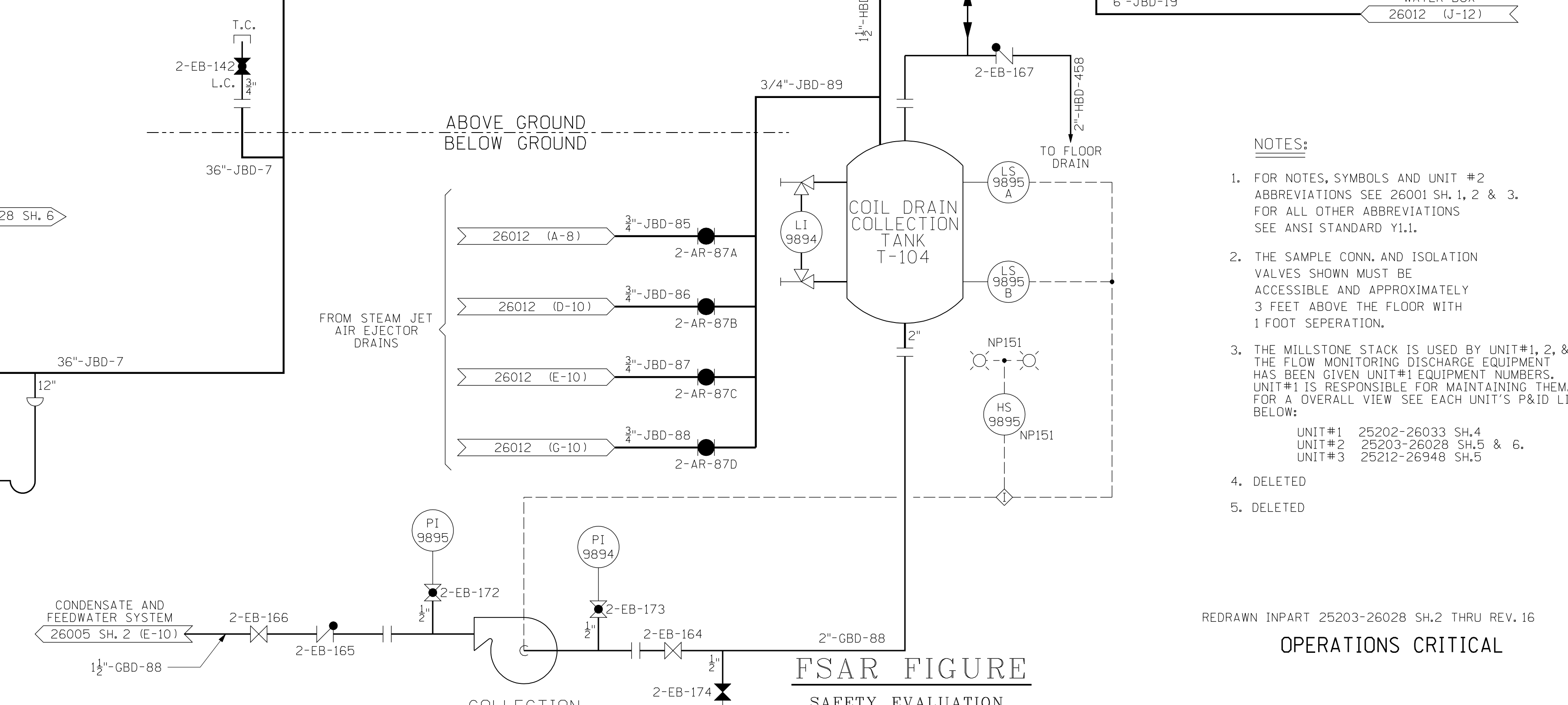
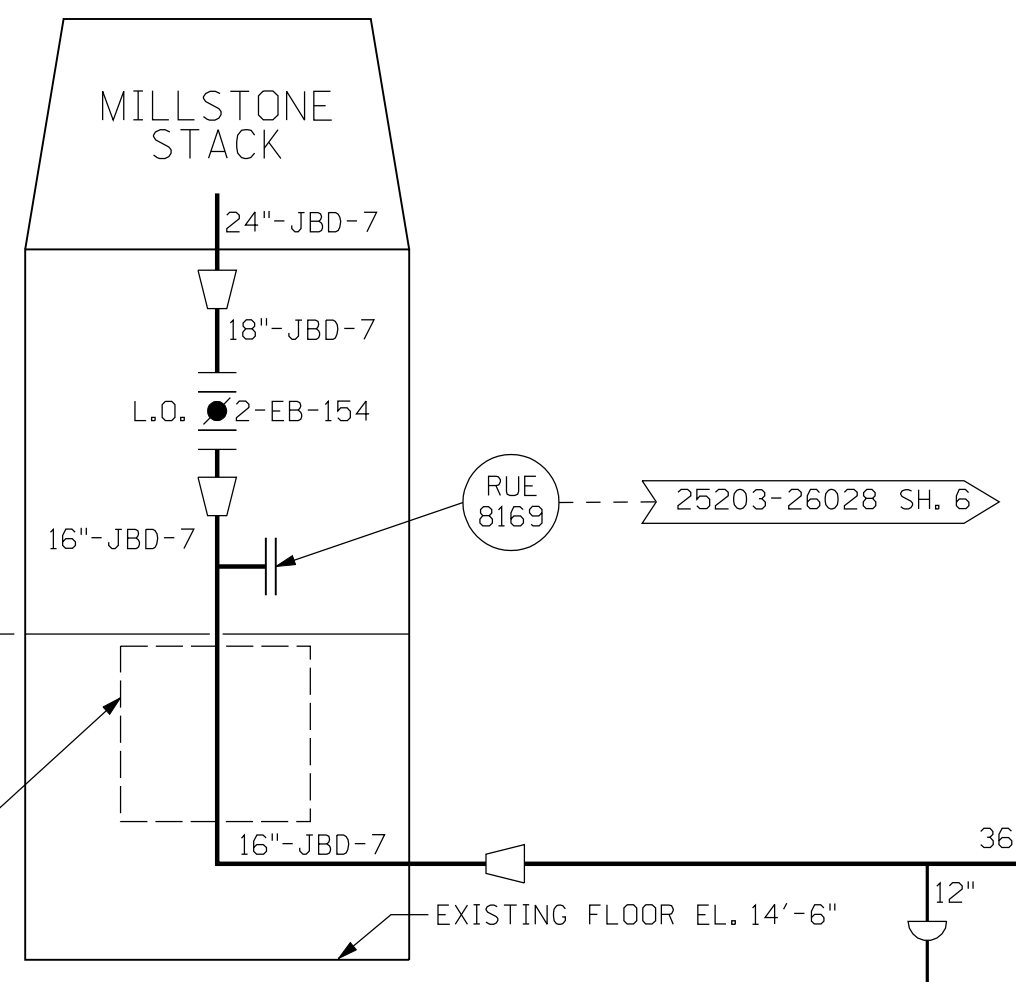
APP. DATE: 8-31-87  
 DATE: 9-15-87  
 DATE: 9-15-87  
 REV: 10

Dominion Nuclear Connecticut, Inc.  
 Millstone Power Station

TITLE: MILLSTONE NUCLEAR POWER STATION UNIT NO. 2  
 PIPING AND INSTRUMENTATION DIAGRAM  
 ENGINEERED SAFETY FEATURES ROOM  
 AIR RECIRCULATION UNIT  
 WATERFORD, CT



EBFS PLENUM SHOWN ON SH. 3



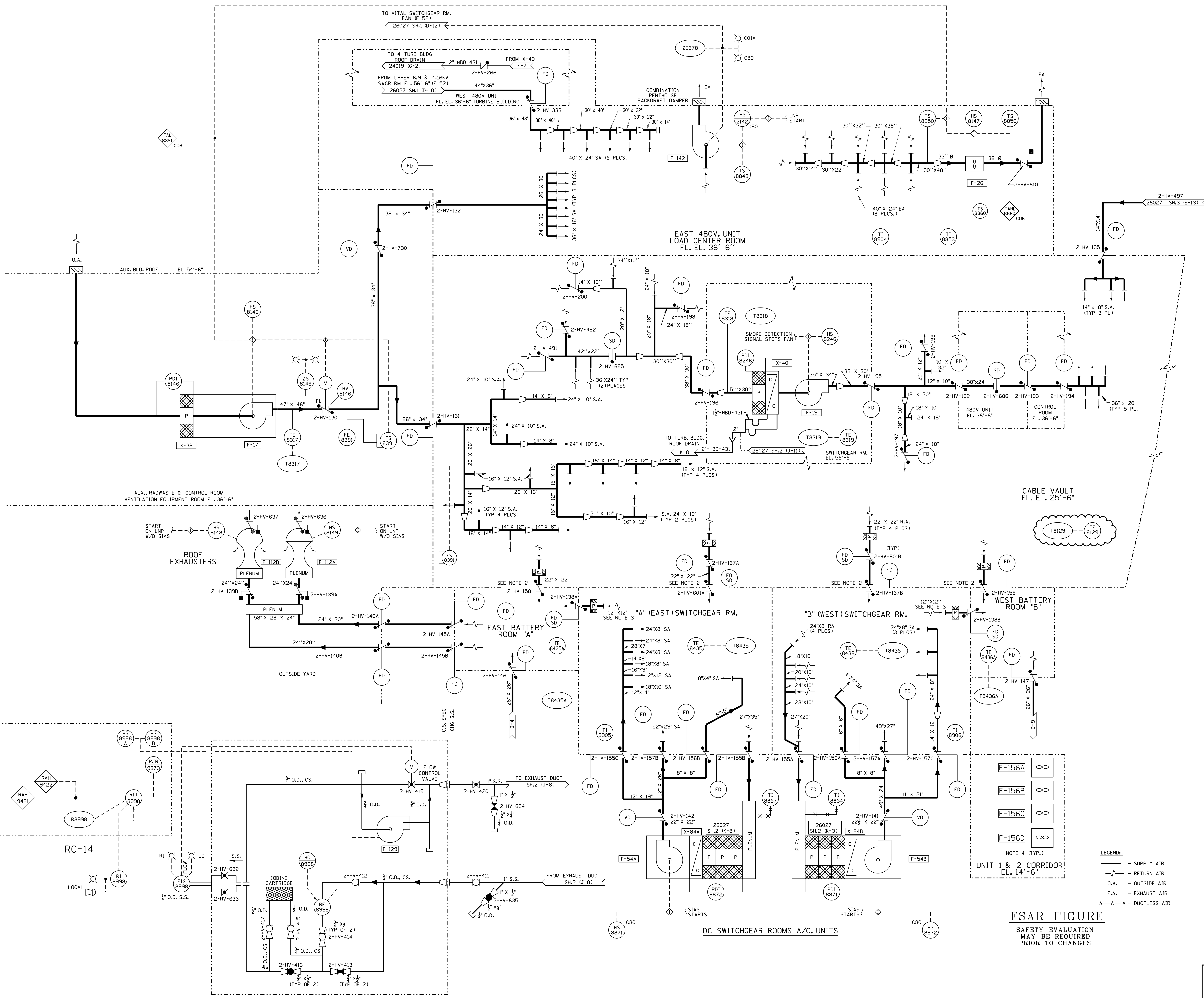
- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.
  - THE SAMPLE CONN. AND ISOLATION VALVES SHOWN MUST BE ACCESSIBLE AND APPROXIMATELY 3 FEET ABOVE THE FLOOR WITH 1 FOOT SEPARATION.
  - THE MILLSTONE STACK IS USED BY UNIT #1, 2 & 3. THE FLOW MONITORING DISCHARGE EQUIPMENT HAS BEEN GIVEN UNIT #1 EQUIPMENT NUMBERS. UNIT #1 IS RESPONSIBLE FOR MAINTAINING THEM. FOR AN OVERALL VIEW SEE EACH UNIT'S P&ID LISTED BELOW:  
 UNIT #1 25202-26033 SH.4  
 UNIT #2 25203-26028 SH.5 & 6.  
 UNIT #3 25212-26948 SH.5
  - DELETED
  - DELETED

REDRAWN IN PART 25203-26028 SH.2 THRU REV. 16  
**OPERATIONS CRITICAL**

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE PIPING AND INSTRUMENTATION DIAGRAM CONTAINMENT AND ENCLOSURE BUILDING VENTILATION			
REVISION DESCRIPTION 25203-26028 SH.2 AND DUR 14-000413	SIGNATURES ON FILE (Blank space for signatures)	CAD NO. 14-000413	DRAWING NO. 25203-26028 REV 37
DSGN DWJ	SCALE: NONE	UNLESS OTHERWISE NOTED SH. 5	

TURBINE BUILDING

**FSAR FIGURE**  
 SAFETY EVALUATION  
 MAY BE REQUIRED  
 PRIOR TO CHANGES

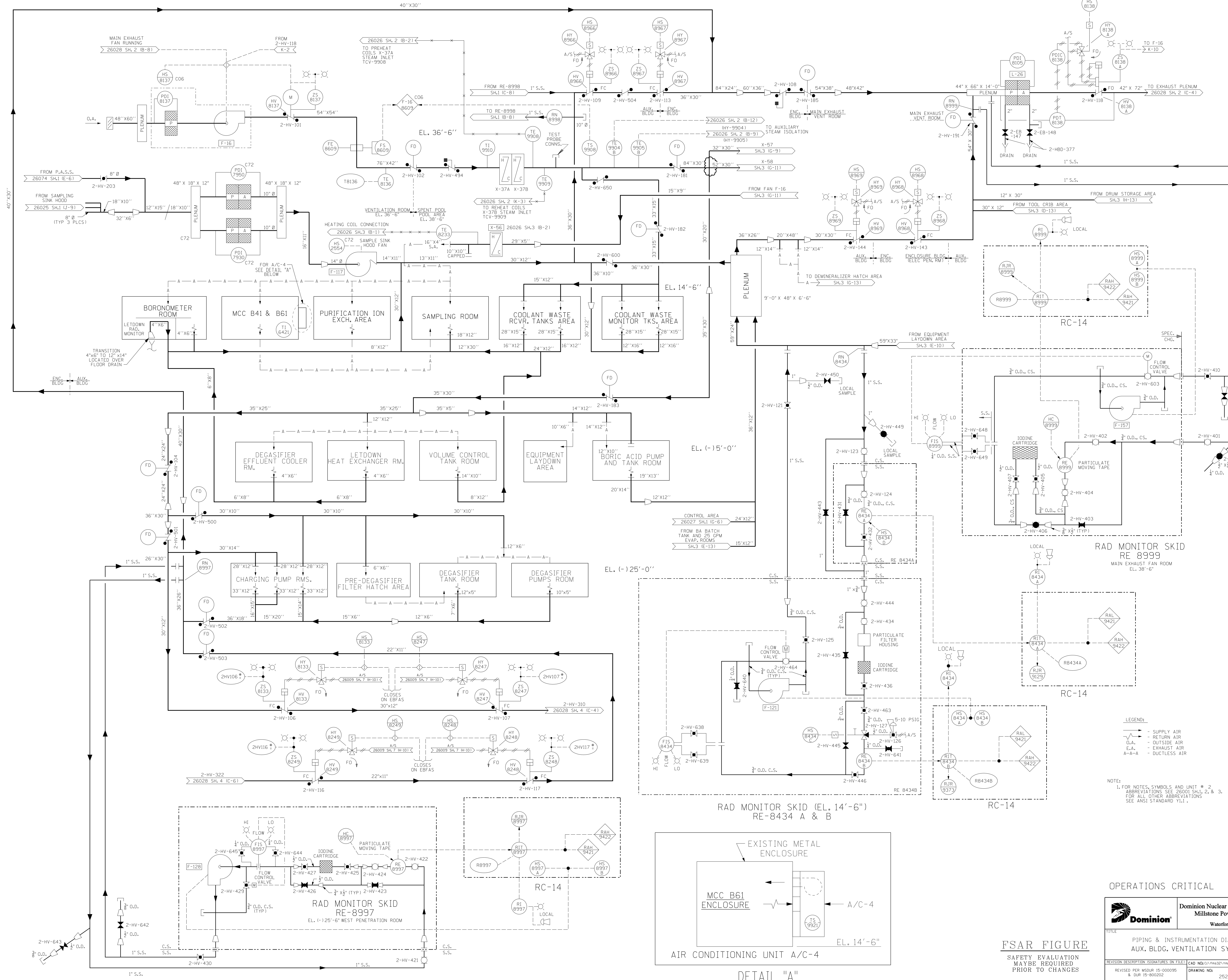


- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT # 2 ABBREVIATIONS SEE 26001 SH.1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y1.1.
  - DAMPERS HAVE 18 GAGE GALVANIZED STEEL SHIELDS INSTALLED OVER THE DAMPER TO PRECLUDE WATER FROM SPRAYING INTO THE D.C. SWITCHGEAR ROOM AND BATTERY ROOMS. DAMPERS ALSO HAVE WATER DAMS 2" HIGH INSTALLED TO PRECLUDE WATER FROM POURING INTO D.C. SWITCHGEAR ROOMS AND BATTERY ROOMS.
  - CABLE VAULT AND BATTERY ROOM FIRE/SMOKE DAMPER CLOSE ON FIRE SIGNAL FROM PANELS FLP 546 & 7.
  - FANS F-156A, B, C & D ARE TO BE UTILIZED FOR COMPENSATORY ACTIONS IN THE EVENT OF THE LOSS OF VENTILATION TO UNIT 2 ELECTRICAL SWITCHGEAR AREAS PER DCR M2-98035.
- LEGEND:**
- SUPPLY AIR
  - - - RETURN AIR
  - O.A. — OUTSIDE AIR
  - E.A. — EXHAUST AIR
  - A—A—A — DUCTLESS AIR

**FSAR FIGURE**  
SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

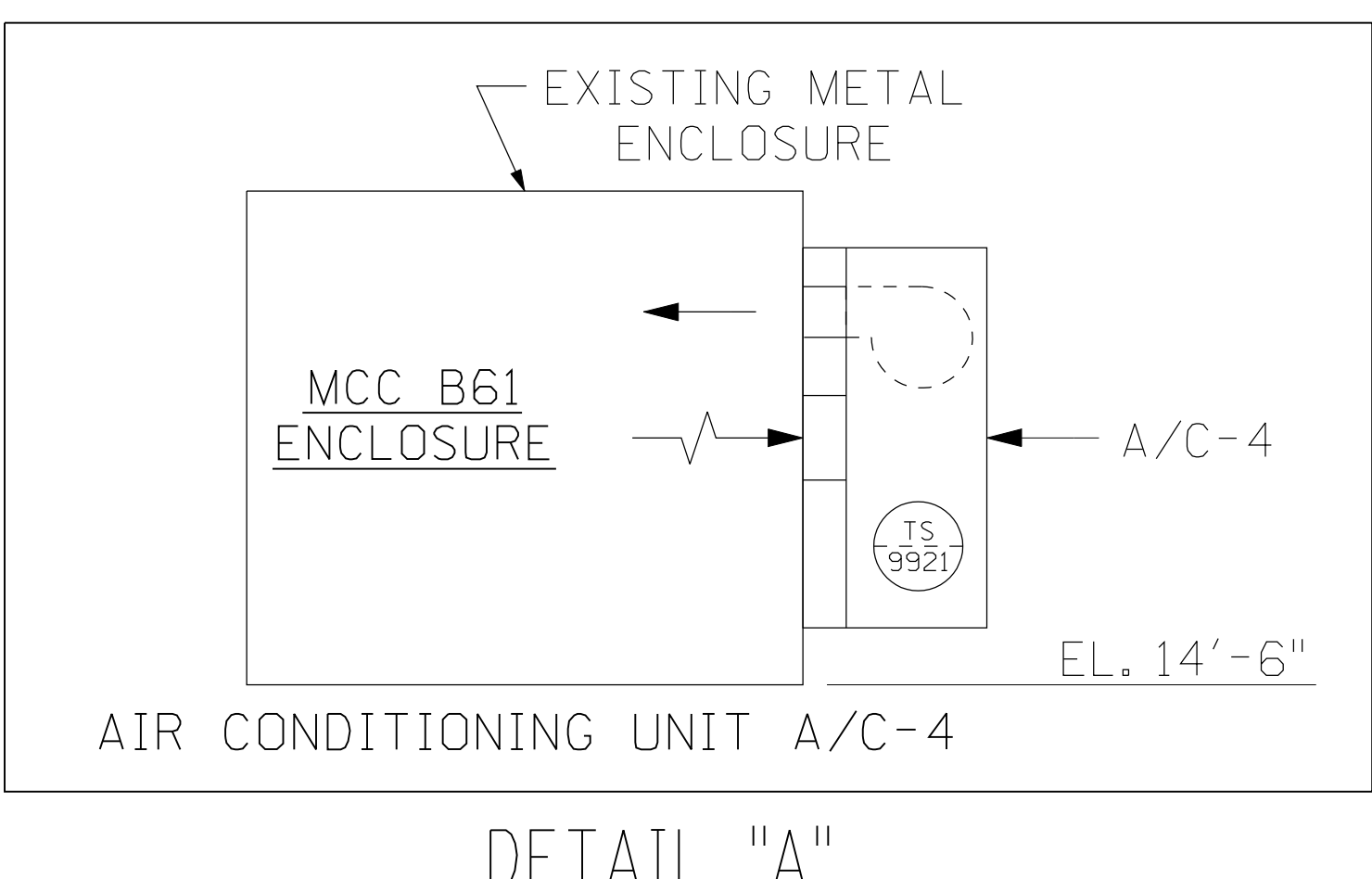
**OPERATIONS CRITICAL**  
SUPERSEDES 25203-26029 THRU REV. 15

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE: MILLSTONE POWER STATION - UNIT 2 PIPING & INSTRUMENTATION DIAGRAM AUX. BLDG. VENTILATION SYSTEM			
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C26029I.DGN	DRAWING NO: 25203-26029	REV 29	DSGN JCV SCALE: NONE UNLESS OTHERWISE NOTED SH 1



LEGEND:  
 - - - SUPPLY AIR  
 - - - RETURN AIR  
 O.A. - OUTSIDE AIR  
 E.A. - EXHAUST AIR  
 A-A-A - DUCTLESS AIR

NOTE:  
 1. FOR NOTES, SYMBOLS AND UNIT # 2  
 ABBREVIATIONS SEE 26001 SH.1, 2 & 3.  
 FOR ALL OTHER ABBREVIATIONS  
 SEE ANSI STANDARD Y1.1.

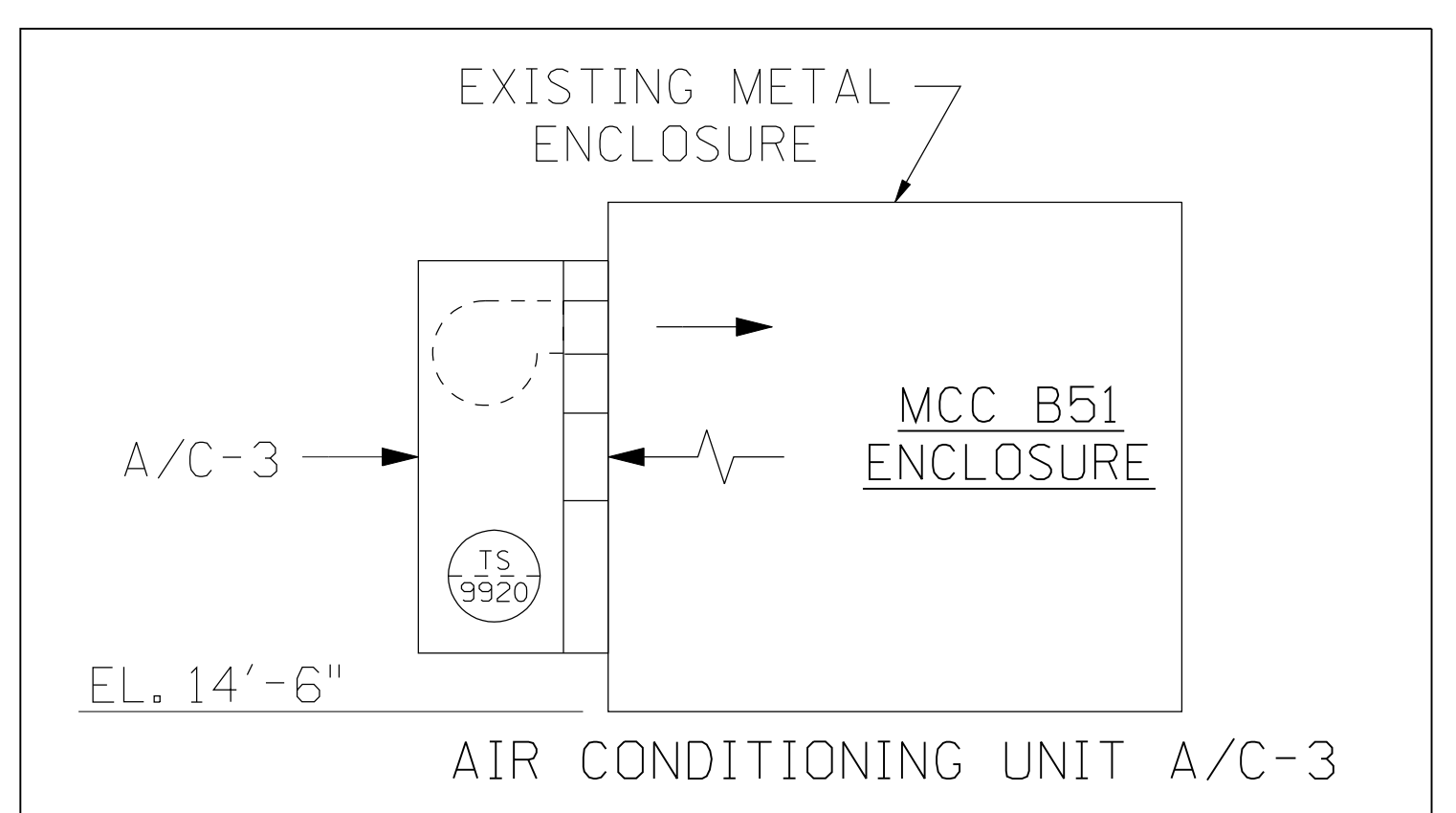
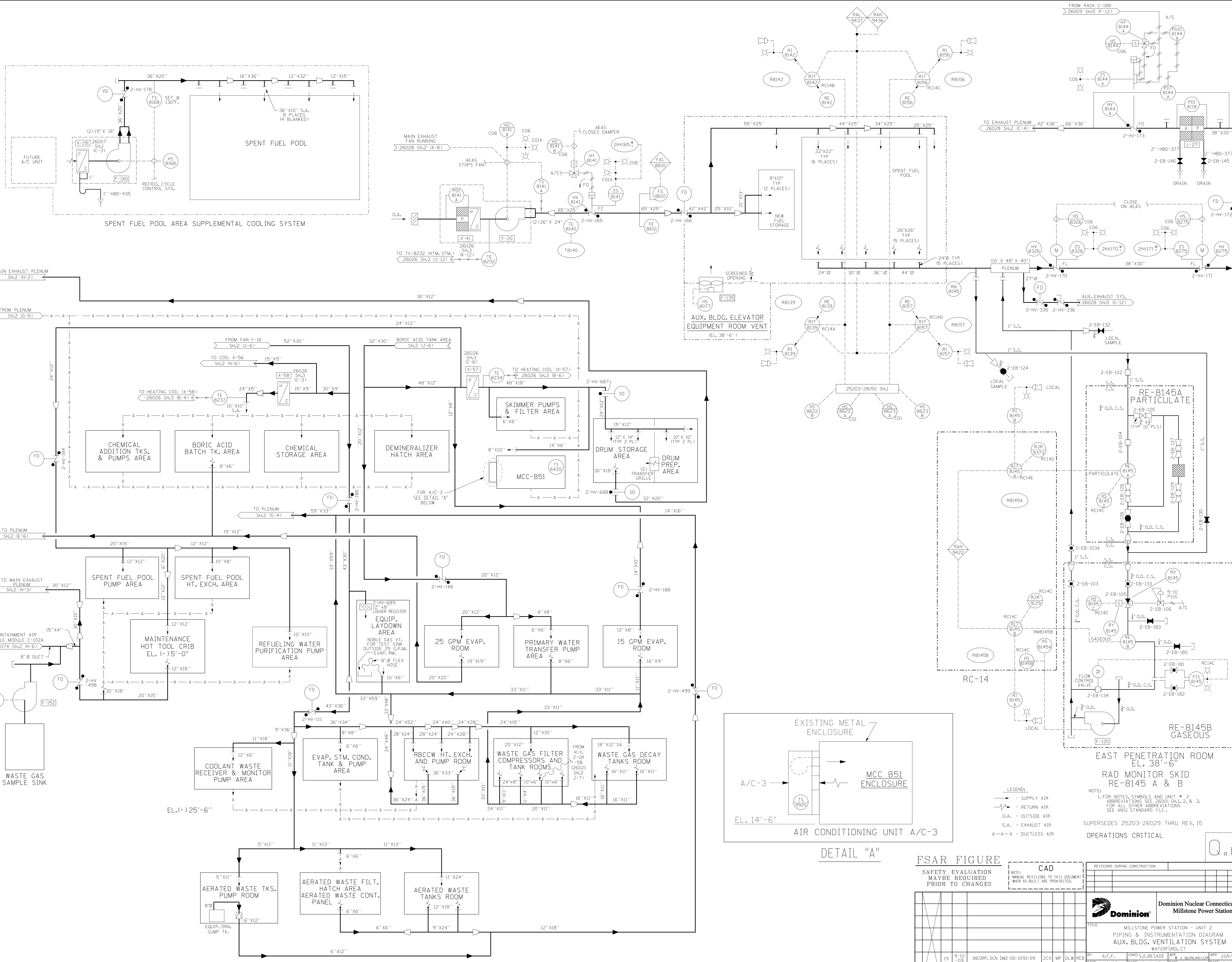


DETAIL "A"

OPERATIONS CRITICAL

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE PIPING & INSTRUMENTATION DIAGRAM AUX. BLDG. VENTILATION SYSTEM			
REVISION DESCRIPTION 15-000095 15-000202	SIGNATURES ON FILE 25203-26029 25203-26029	CAD NO. 15-000202	REV 26
DSNM EAL	SCALE NONE	UNLESS OTHERWISE NOTED SH 2	

FSAR FIGURE  
 SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES



DETAIL "A"

FSAR FIGURE

SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

**CAD**  
 NOTES:  
 1. MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION	
NO.	DATE

NO.	DATE	REVISIONS	BY	CHKD.	APP.	DATE	SCALE	DWG. NO.
19	9-10-09	INCORP. DCN DM2-00-0193-09	JCV	MP	DLW	REB	BY A.F.F.	25203-26029 SH.3
18	3-6-02	INCORP. DCN DM2-00-0697-99	JSS	MGR	DVC	DCZ	DATE 12-13-87	19

**Dominion Nuclear Connecticut, Inc.**  
**Millstone Power Station**

TITLE: MILLSTONE POWER STATION - UNIT 2  
 PIPING & INSTRUMENTATION DIAGRAM  
 AUX. BLDG. VENTILATION SYSTEM  
 WATERFORD, CT

DATE 12-13-87  
 DATE 12-13-88

SCALE: NONE  
 DWG. NO.: 25203-26029 SH.3

REV. 19

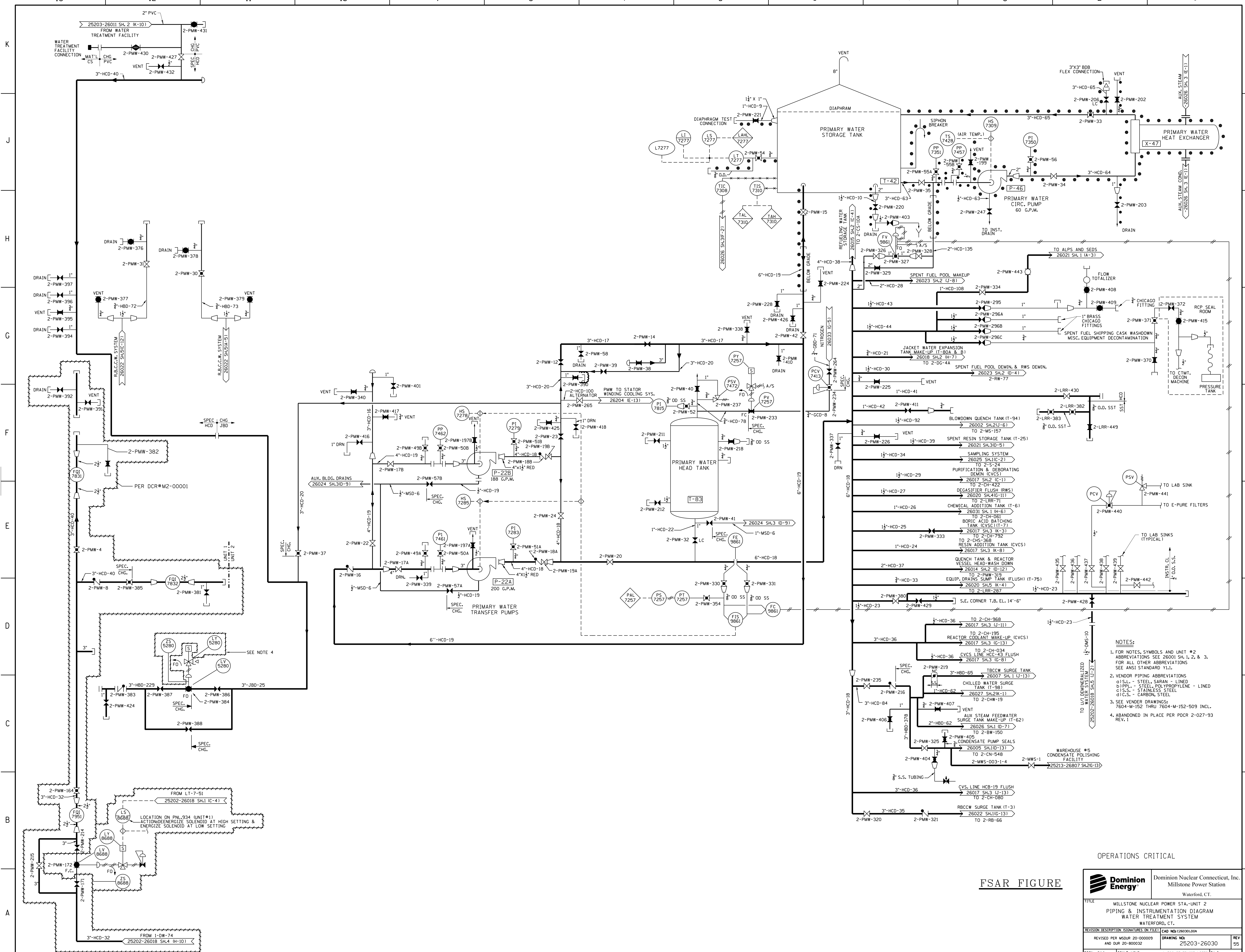
**EAST PENETRATION ROOM**  
 EL. 38'-6"

**RAD MONITOR SKID**  
 RE-8145 A & B

NOTE:  
 1. FOR NOTES, SYMBOLS AND UNIT # 2  
 ABBREVIATIONS SEE 26001 SH.1, 2 & 3.  
 FOR ALL OTHER ABBREVIATIONS  
 SEE ANSI STANDARD "T1".

SUPERSEDES 25203-26029 THRU REV. 15  
 OPERATIONS CRITICAL

**LEGEND:**  
 - - - SUPPLY AIR  
 - - - RETURN AIR  
 O.A. - OUTSIDE AIR  
 E.A. - EXHAUST AIR  
 A-A-A - DUCTLESS AIR

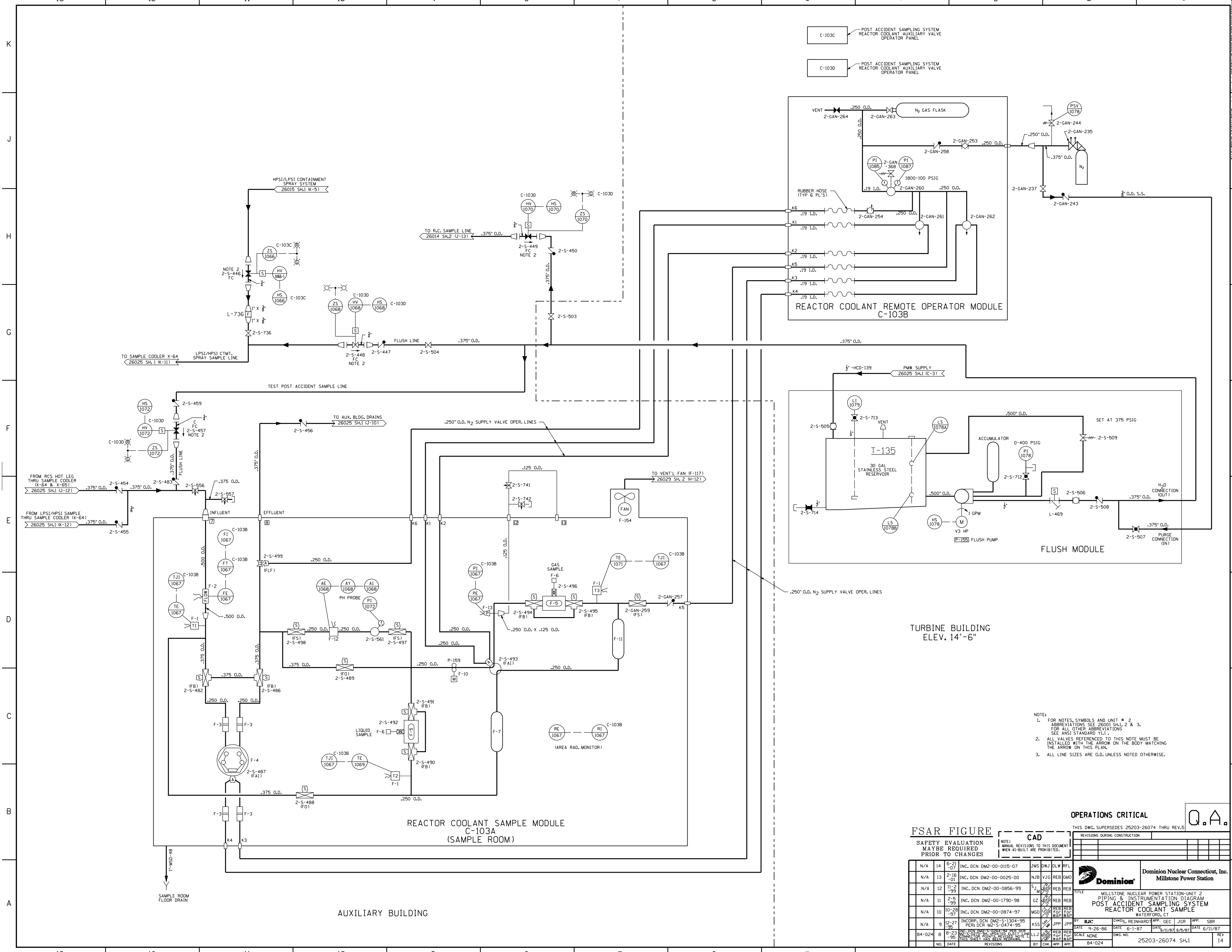


- NOTES:**
- FOR NOTES, SYMBOLS AND UNIT #2 ABBREVIATIONS SEE 26001 SH. 1, 2, & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD 11.1.
  - VENDOR PIPING ABBREVIATIONS:  
 ○ S.S.L. - STEEL, SARAN - LINED  
 ○ P.P.L. - STEEL, POLYPROPYLENE - LINED  
 ○ S.S. - STAINLESS STEEL  
 ○ C.S. - CARBON, STEEL
  - SEE VENDOR DRAWINGS:  
 7604-M-152 THRU 7604-M-152-509 INCL.
  - ABANDONED IN PLACE PER PDCR 2-027-93 REV. 1

OPERATIONS CRITICAL

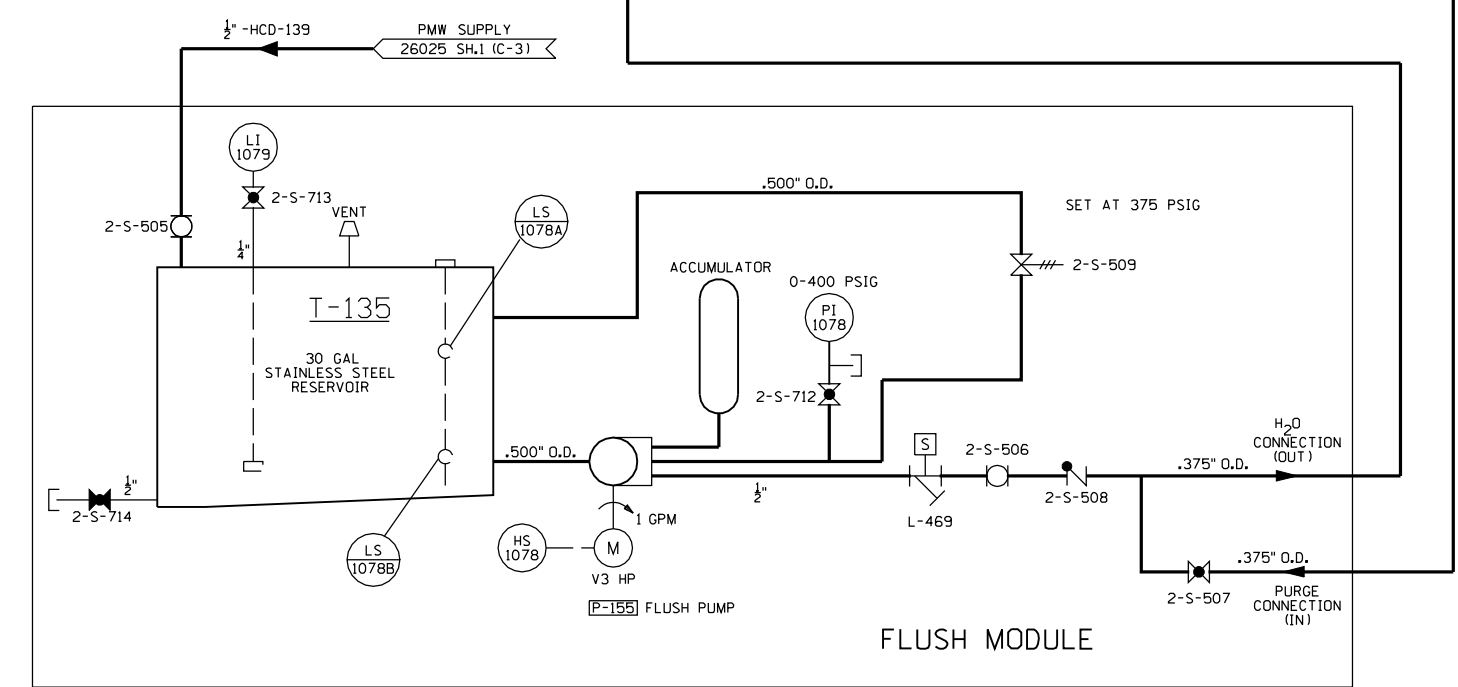
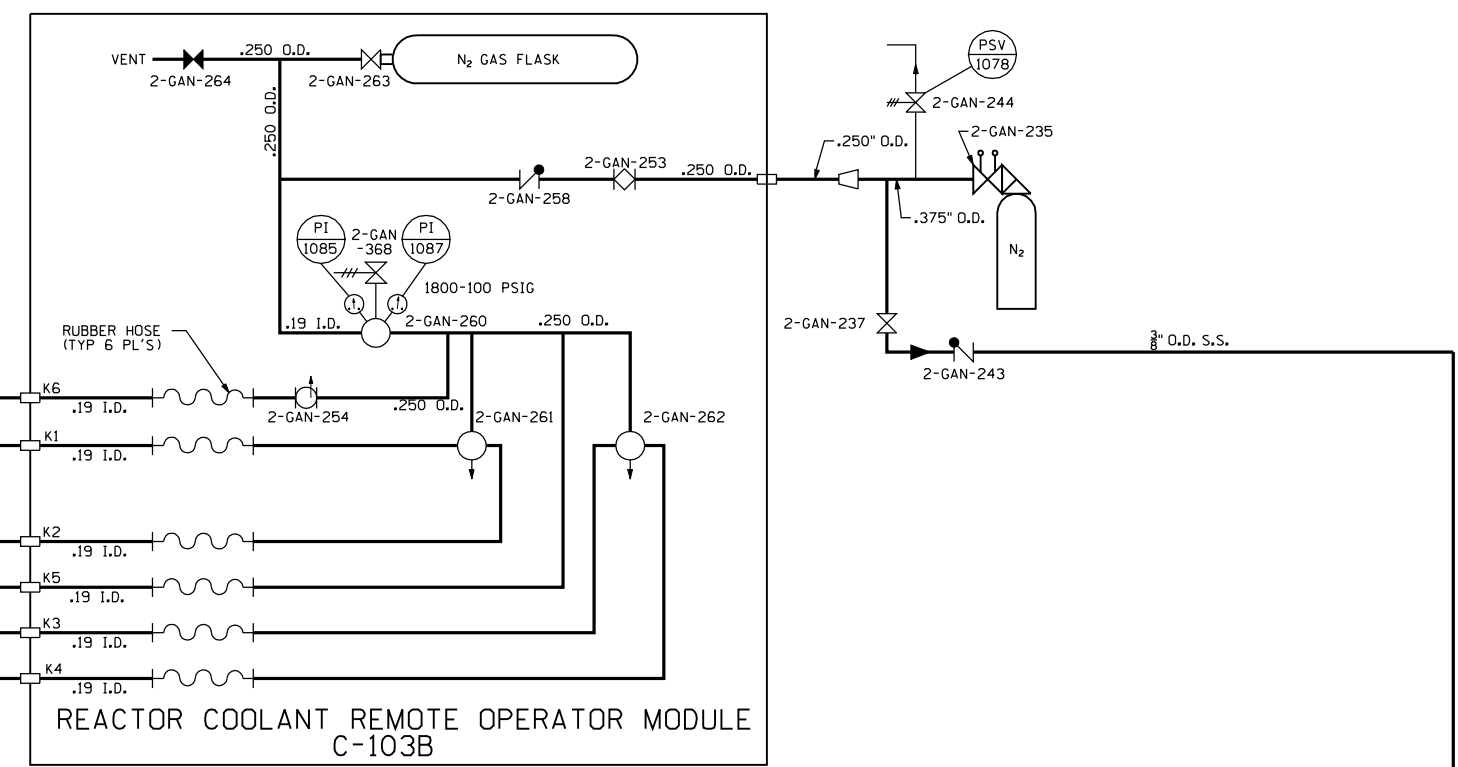
FSAR FIGURE

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>TITLE</b> MILLSTONE NUCLEAR POWER STA.-UNIT 2 PIPING & INSTRUMENTATION DIAGRAM WATER TREATMENT SYSTEM WATERFORD, CT.			
<b>REVISION DESCRIPTION (SIGNATURES ON FILE)</b>		<b>CAD NO.</b> C260301.DGN	<b>REV</b> 55
REVISED PER MSDR 20-000009 AND DUR 20-800032		<b>DRAWING NO.</b> 25203-26030	<b>REV</b> 55
<b>DSGN</b> DWJ	<b>SCALE</b> NONE	UNLESS OTHERWISE NOTED SH. 1	



C-103C POST ACCIDENT SAMPLING SYSTEM REACTOR COOLANT AUXILIARY VALVE OPERATOR PANEL

C-103D POST ACCIDENT SAMPLING SYSTEM REACTOR COOLANT AUXILIARY VALVE OPERATOR PANEL



TURBINE BUILDING  
ELEV. 14'-6"

- NOTE:
- FOR NOTES, SYMBOLS AND UNIT # 2, ABBREVIATIONS SEE 26001 SH.1, 2 & 3. FOR ALL OTHER ABBREVIATIONS SEE ANSI STANDARD Y11.1.
  - ALL VALVES REFERENCED TO THIS NOTE MUST BE INSTALLED WITH THE ARROW ON THE BODY MATCHING THE ARROW ON THIS PLAN.
  - ALL LINE SIZES ARE O.D. UNLESS NOTED OTHERWISE.

OPERATIONS CRITICAL

FSAR FIGURE

SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

CAD		REVISIONS DURING CONSTRUCTION	
NO.	DATE	BY	CHKD.
N/A	14	6-21-07	JMS/DWJ/DLW/RFL
N/A	13	2-18-07	INC. DCN DM2-00-0115-07
N/A	12	11-2-95	INC. DCN DM2-00-0025-00
N/A	11	2-5-95	INC. DCN DM2-00-0856-99
N/A	10	10-28-97	INC. DCN DM2-00-1790-98
N/A	9	12-27-95	INC. DCN DM2-00-0874-97
N/A	8	8-23-95	INCORP. DCN DM2-S-1304-95 PER: DCR M2-S-0474-95
84-024	8	8-23-95	INCORP. DCN DM2-S-1304-95 PER: DCR M2-S-0474-95

**Dominion Nuclear Connecticut, Inc.**  
Millstone Power Station

TITLE: MILLSTONE NUCLEAR POWER STATION-UNIT 2 PIPING & INSTRUMENTATION DIAGRAM POST ACCIDENT SAMPLING SYSTEM REACTOR COOLANT SAMPLE WATERFORD, CT

DATE: 9-26-86  
DATE: 6-1-87  
DATE: 6/11/87  
DATE: 6/11/87

BY: RJC  
CHKD.: REINHARDT  
APP.: GEC  
JGR  
APP.: SBR

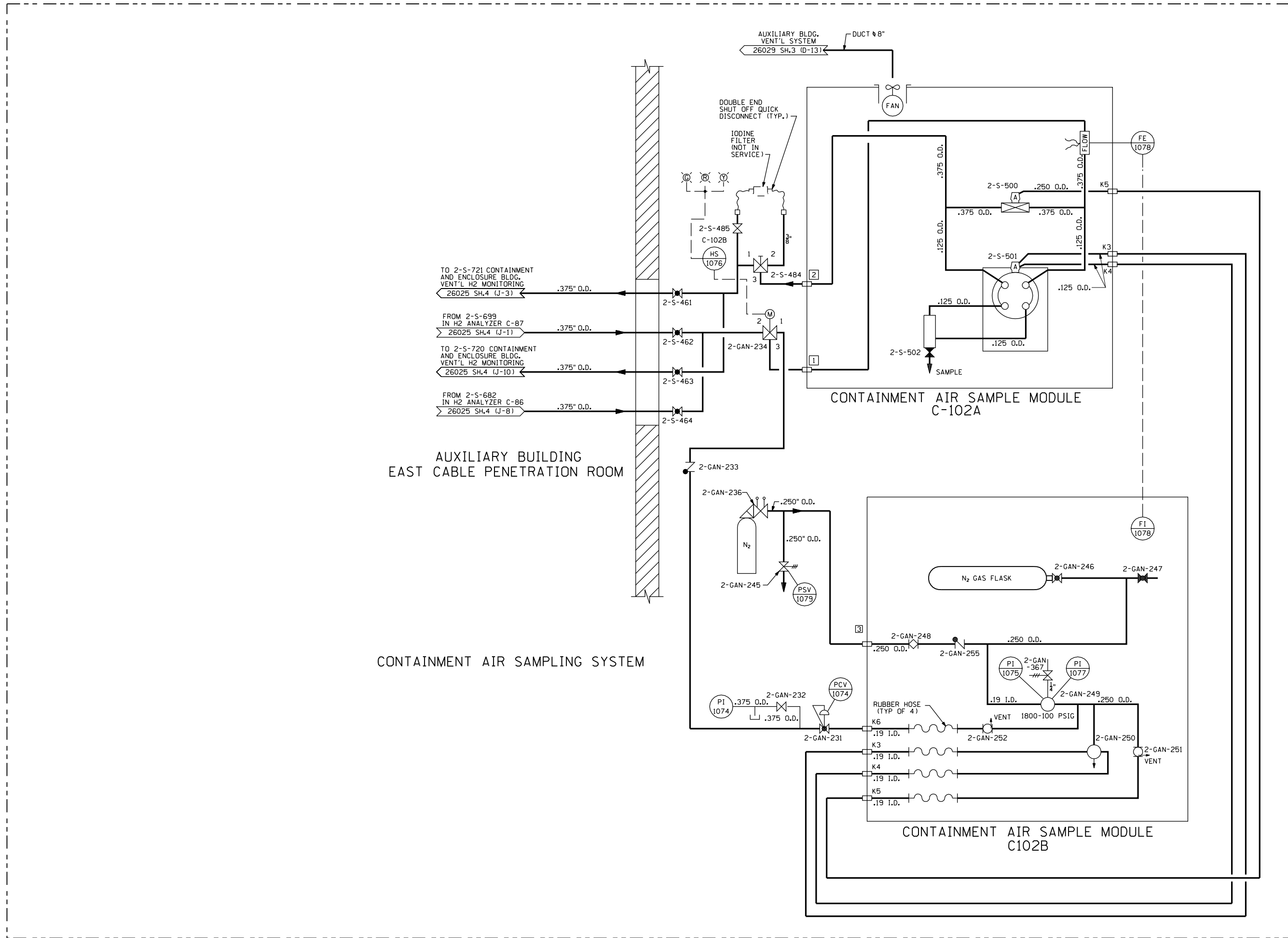
SCALE: NONE  
DWG. NO.: 25203-26074 SH.1  
REV: 14

REACTOR COOLANT SAMPLE MODULE  
C-103A  
(SAMPLE ROOM)

AUXILIARY BUILDING

SAMPLE ROOM FLOOR DRAIN





AUXILIARY BUILDING  
EAST CABLE PENETRATION ROOM

CONTAINMENT AIR SAMPLING SYSTEM

CONTAINMENT AIR SAMPLE MODULE  
C-102A

CONTAINMENT AIR SAMPLE MODULE  
C102B

LEGEND  
FO - FAIL OPEN  
FS - FAIL SHUT  
FI - FAIL INLINE  
FB - FAIL BYPASS  
FLF - FAIL LOW FLOW  
FAI - FAIL AS IS

NOTES:  
1. FOR NOTES, SYMBOLS AND UNIT # 2.  
ABBREVIATIONS SEE 26001 SH.1, 2 & 3.  
FOR ALL OTHER ABBREVIATIONS  
SEE ANSI STANDARD Y11.1.  
2. THE SYMBOLS FOR VENDOR EQUIPMENT  
ON THIS DRAWING, SEE DRAWINGS  
25203-29429 SH.4 & 25203-29431 SH.3.  
THIS DRAWING REFLECTS MODULES  
SHOWN ON VENDOR DRAWINGS  
25203-29429 SH.2  
25203-29429 SH.3  
25203-29431 SH.2

OPERATIONS CRITICAL



FSAR FIGURE

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION					
NO.	DATE	REVISIONS	BY	CHK.	APP.

N/A	7	6-21-07	INC. DCN DM2-00-0115-07	JMS	DWJ	DLW	RFL
N/A	6	2-18-01	INC. DCN DM2-00-0025-00	NJB	VJG	REB	GMO
N/A	5	1-18-99	INC. DCN DM2-00-0474-97	GZ			
N/A	4	10-28-97	INC. DCN DM2-00-0874-97	MCD			
B4-024	3	8-23-95	RE-DESIGN OF THE SYSTEM TO REMOVE THE RUBBER HOSE FROM THE LINE TO THE POINT WHERE IT TURNS TO THE RIGHT AND BEGINS TO GO DOWN.	LLJ			
NA	2	9-9-91	AS BUILT PER: DCR-M2-P-75-91	TG	RWB		
B4-024	1	6/8/87	AS BUILT PER: DSR-M2-S-529-87.	SEB	SBR		

	Dominion Nuclear Connecticut, Inc. Millstone Power Station	
	TITLE: MILLSTONE NUCLEAR POWER STATION-UNIT 2 PIPING & INSTRUMENTATION DIAGRAM POST ACCIDENT SAMPLING SYSTEM CONTAINMENT AIR SAMPLE WATERFORD, CT	
DATE: 1-19-87 SCALE: NONE	DATE: 6/1/87 DWG. NO.: 25203-26074 SH.2	DATE: 6/11/87 REV: 7



























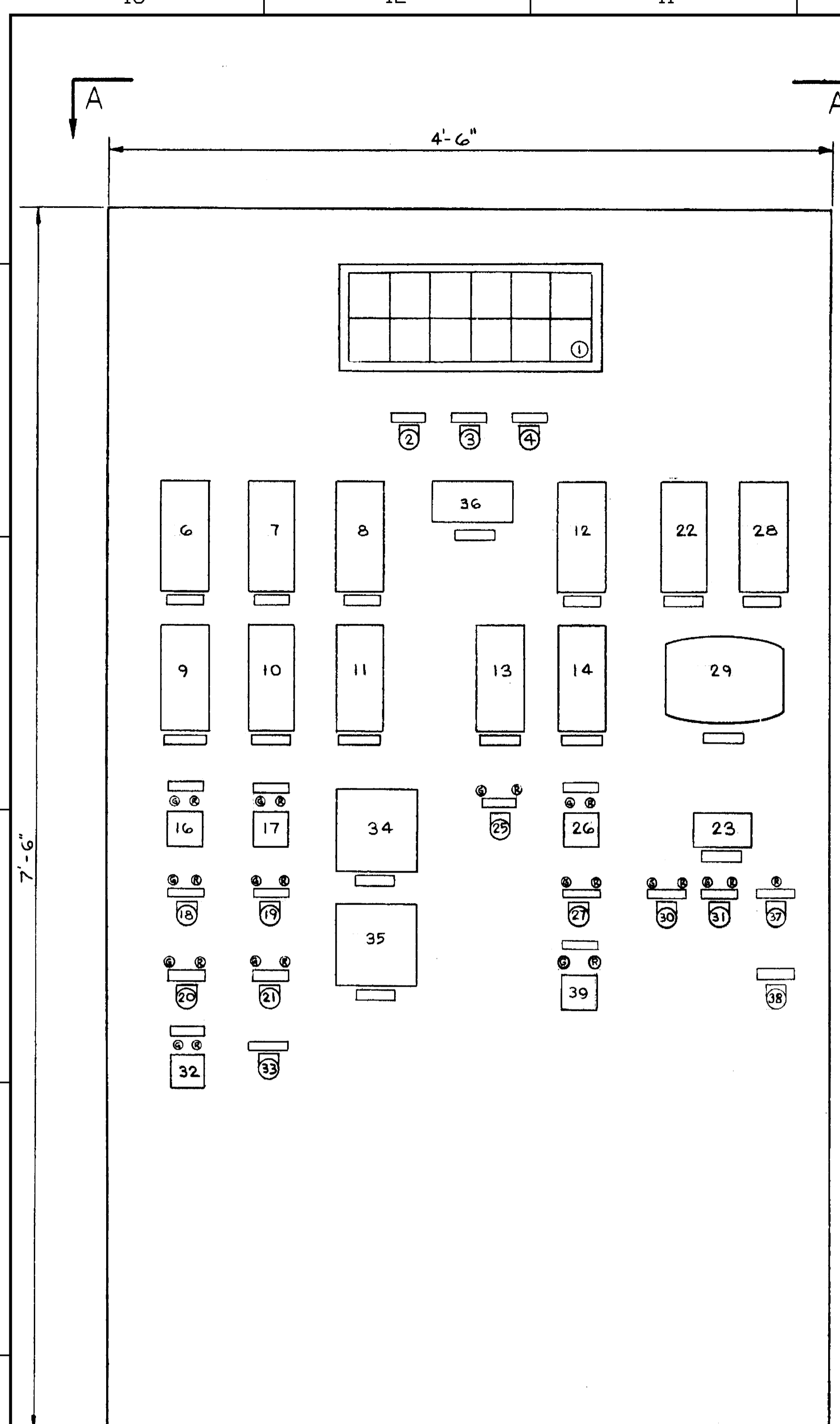




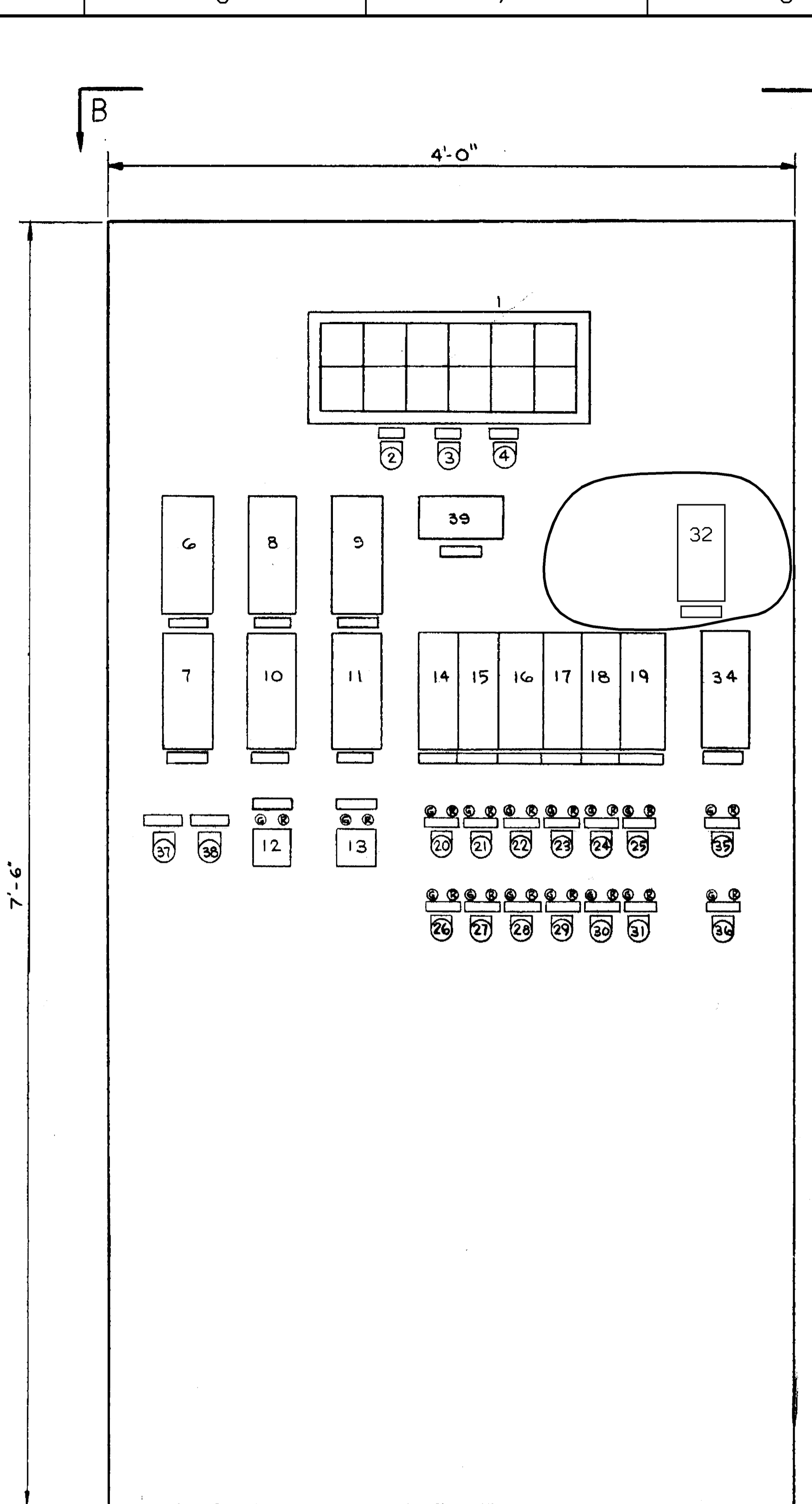




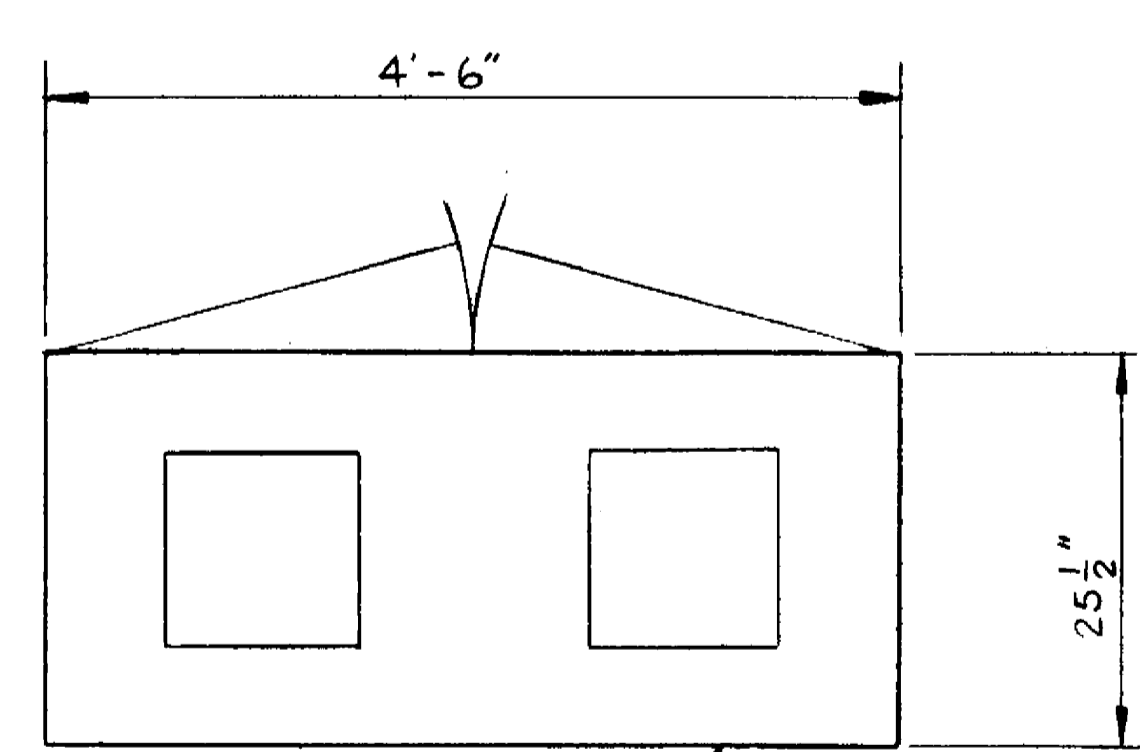




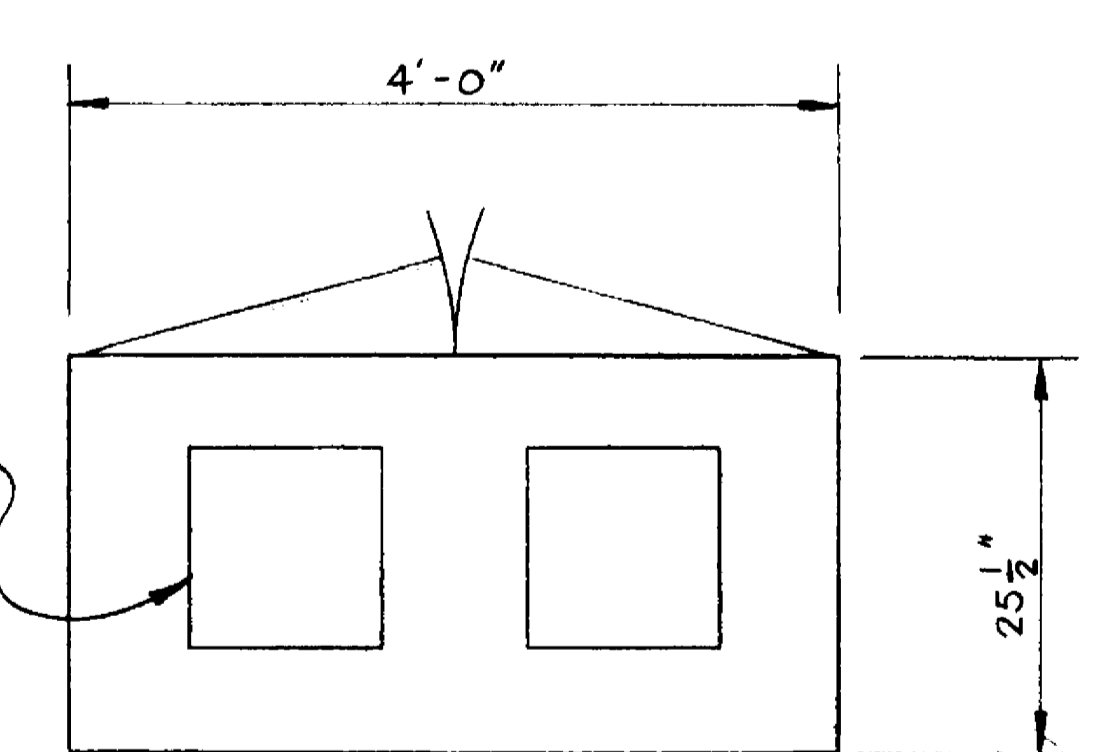
AERATED LIQUID RADWASTE CONTROL PANEL (C60)



WASTE GAS CONTROL PANEL (C61)



VIEW "A-A" NTS



VIEW "B-B" NTS

INSTRUMENT IMPULSE LINES & CABLE ENTRY AREA (TYP.)

ITEM	INSTR NO.	DESCRIPTION
1	PA-180	ALARM ANNUNCIATOR "ACKNOWLEDGE"
2	PA-180	ALARM ANNUNCIATOR "RESET" PUSHBUTTON
3	PA-180	ALARM ANNUNCIATOR "TEST" PUSHBUTTON
4	PA-180	ALARM ANNUNCIATOR "TEST" PUSHBUTTON
5		SPARE
6	TI-9100	AERATED WASTE DRAIN TANK (T-204) TEMP. INDICATOR
7	TI-9100	AERATED WASTE DRAIN TANK (T-204) TEMP. INDICATOR
8	TI-9100	AERATED WASTE FILTER (L-15) DISCH. TEMPERATURE INDICATOR
9	LI-9102	AERATED WASTE DRAIN TANK (T-204) LEVEL INDICATOR
10	LI-9102	AERATED WASTE DRAIN TANK (T-204) LEVEL INDICATOR
11	PI-9100	SPENT RESIN TANK (T-205) PRESSURE INDICATOR
12	TI-9105	AERATED WASTE MONITOR TANK (T-21) TEMP. INDICATOR
13	LI-9101	AERATED WASTE EXHAUSTOR PACKAGE LEVEL INDICATOR
14	LI-9114	AERATED WASTE MONITOR TANK (T-21) LEVEL INDICATOR
15		SPARE
16	HS-9101	AERATED WASTE DRAIN TK. PUMP (P-314) CONTROL SWITCH
17	HS-9104	AERATED WASTE DRAIN TK. PUMP (P-318) CONTROL SWITCH
18	HS-9104	AERATED WASTE DRAIN TK. (T-204) RECIRC. VALVE SEL. SWITCH
19	HS-9102	AERATED WASTE DRAIN TK. (T-204) RECIRC. VALVE SEL. SWITCH
20	HS-9101	AERATED WASTE DRAIN TK. (T-204) DISCH. VALVE SEL. SWITCH
21	HS-9104	AERATED WASTE DRAIN TK. (T-204) DISCH. VALVE SEL. SWITCH
22	PI-9108	SYSTEM DISCHARGE VALVE FLOW CONTROLLER (MANUAL)
23	FTI-9108	SYSTEM DISCHARGE VALVE FLOW TOTALIZER
24		SPARE
25	HS-9107	CONCENTRATES TANK HEATER CONTROL SWITCH
26	HS-9112	AERATED WASTE MONITOR TANK PUMP (P-327) CONTROL SWITCH
27	HS-9106	AERATED WASTE MONITOR TANK RECIRC. VALVE SEL. SWITCH
28	FM-9118	AERATED WASTE SYSTEM DISCHARGE FLOW RECORDER
29	HS-9118	AERATED WASTE SYSTEM DISCHARGE FLOW TOTALIZING INTEGRATOR
30	HS-9118A	AERATED WASTE SYSTEM DISCHARGE ISOLATION VALVE SEL. SWITCH
31	HS-9118B	AERATED WASTE SYSTEM DISCHARGE ISOLATION VALVE SEL. SWITCH
32	HS-9104	CONCENTRATES TANK PUMP (P-3) CONTROL SWITCH
33	HS-9101B	AERATED WASTE EVAP. PKG. PUMP LOCAL-REMOTE SWITCH
34	CI-9458	AERATED WASTE MONITOR TK. INLET CONDUCTIVITY
35	CI-9459	AERATED WASTE MONITOR TK. OUTLET CONDUCTIVITY
36	HS-9108	SYSTEM DISCHARGE VALVE FLOW CONTROLLER (MANUAL)
37	HS-9118	AERATED WASTE SYS. SAMPLE PUMP (P-156) FOR RM916
38	HS-9117	AERATED WASTE SYS. FLOW VALVES (V-317A & V-317B) FOR RM916
39	HS-9121	AERATED WASTE MONITOR TANK MIXER MOTOR (M-21) CONTROL SWITCH

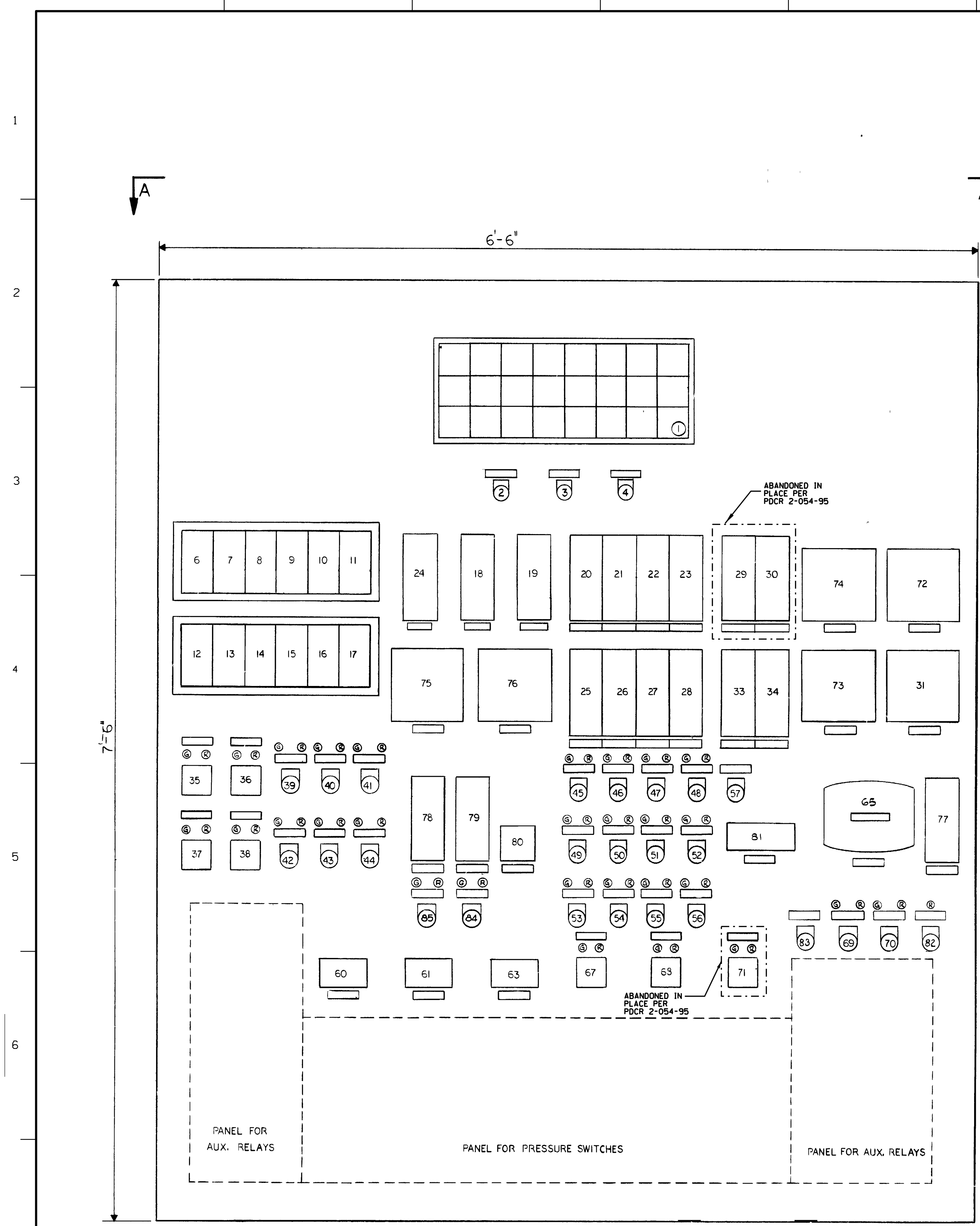
ITEM	INSTR NO.	DESCRIPTION
1	PA-181	ALARM ANNUNCIATOR
2	PA-181	ALARM ANNUNCIATOR "ACKNOWLEDGE" PUSHBUTTON
3	PA-181	ALARM ANNUNCIATOR "RESET" PUSHBUTTON
4	PA-181	ALARM ANNUNCIATOR "TEST" PUSHBUTTON
5		SPARE
6	TI-9127	WASTE GAS DRAIN TANK (T-10) TEMP. INDICATOR
7	PI-9128	WASTE GAS DRAIN TANK (T-10) PRESSURE INDICATOR
8	TI-9084	WASTE GAS COMPRESSOR (F-18) DISCH. TEMP. INDICATOR
9	TI-9087	WASTE GAS COMPRESSOR (F-18) DISCH. TEMP. INDICATOR
10	PI-9085	WASTE GAS COMPRESSOR (F-18) DISCH. PRESSURE INDICATOR
11	PI-9088	WASTE GAS COMPRESSOR (F-18) DISCH. PRESSURE INDICATOR
12	HS-9108	WASTE GAS COMPRESSOR (F-18) CONTROL SWITCH
13	HS-9108	WASTE GAS COMPRESSOR (F-18) CONTROL SWITCH
14	PI-9080	WASTE GAS DECAY TANK (T-10A) PRESSURE INDICATOR
15	PI-9081	WASTE GAS DECAY TANK (T-10B) PRESSURE INDICATOR
16	PI-9241	WASTE GAS DECAY TANK (T-10C) PRESSURE INDICATOR
17	PI-9244	WASTE GAS DECAY TANK (T-10D) PRESSURE INDICATOR
18	PI-9247	WASTE GAS DECAY TANK (T-10E) PRESSURE INDICATOR
19	PI-9250	WASTE GAS DECAY TANK (T-10F) PRESSURE INDICATOR
20	HS-9109	WASTE GAS DECAY TANK (T-10A) INLET VALVE SEL. SWITCH
21	HS-9109	WASTE GAS DECAY TANK (T-10B) INLET VALVE SEL. SWITCH
22	HS-9242	WASTE GAS DECAY TANK (T-10C) INLET VALVE SEL. SWITCH
23	HS-9245	WASTE GAS DECAY TANK (T-10D) INLET VALVE SEL. SWITCH
24	HS-9248	WASTE GAS DECAY TANK (T-10E) INLET VALVE SEL. SWITCH
25	HS-9251	WASTE GAS DECAY TANK (T-10F) INLET VALVE SEL. SWITCH
26	HS-9080	WASTE GAS DECAY TANK (T-10) OUTLET VALVE SEL. SWITCH
27	HS-9080C	WASTE GAS DECAY TANK (T-10B) OUTLET VALVE SEL. SWITCH
28	HS-9080E	WASTE GAS DECAY TANK (T-10D) OUTLET VALVE SEL. SWITCH
29	HS-9080F	WASTE GAS DECAY TANK (T-10E) OUTLET VALVE SEL. SWITCH
30	HS-9080G	WASTE GAS DECAY TANK (T-10F) OUTLET VALVE SEL. SWITCH
31	HS-9080H	WASTE GAS DECAY TANK (T-10) OUTLET VALVE SEL. SWITCH
32	FTI-9097	WASTE GAS DISCHARGE FLOW SOFT
33	PI-9089	WASTE GAS DECAY TANK OUTLET PRESSURE IND. CONTROLLER
34	PI-9089	WASTE GAS DECAY TANK OUTLET PRESSURE IND. CONTROLLER
35	HS-9085A	WASTE GAS SYSTEM DISCH. ISOLATION VALVE SEL. SWITCH
36	HS-9085B	WASTE GAS SYSTEM DISCH. ISOLATION VALVE SEL. SWITCH
37	HS-9108B	WASTE GAS COMPRESSOR (F-18) RESET PUSHBUTTON
38	HS-9108B	WASTE GAS COMPRESSOR (F-18) RESET PUSHBUTTON
39	HS-9095B	SYSTEM DISCHARGE VALVE FLOW CONTROLLER (MANUAL)

NOTES:

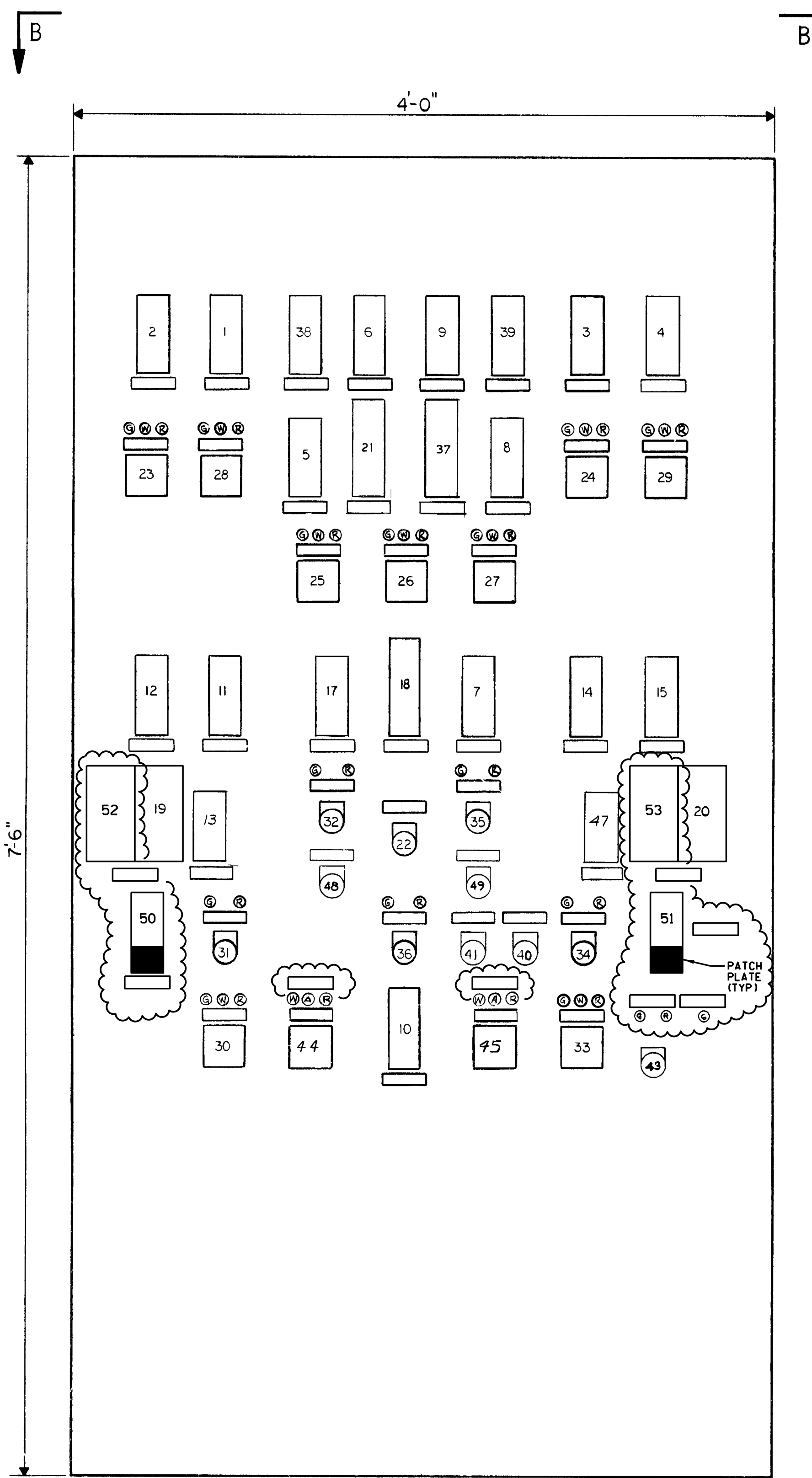
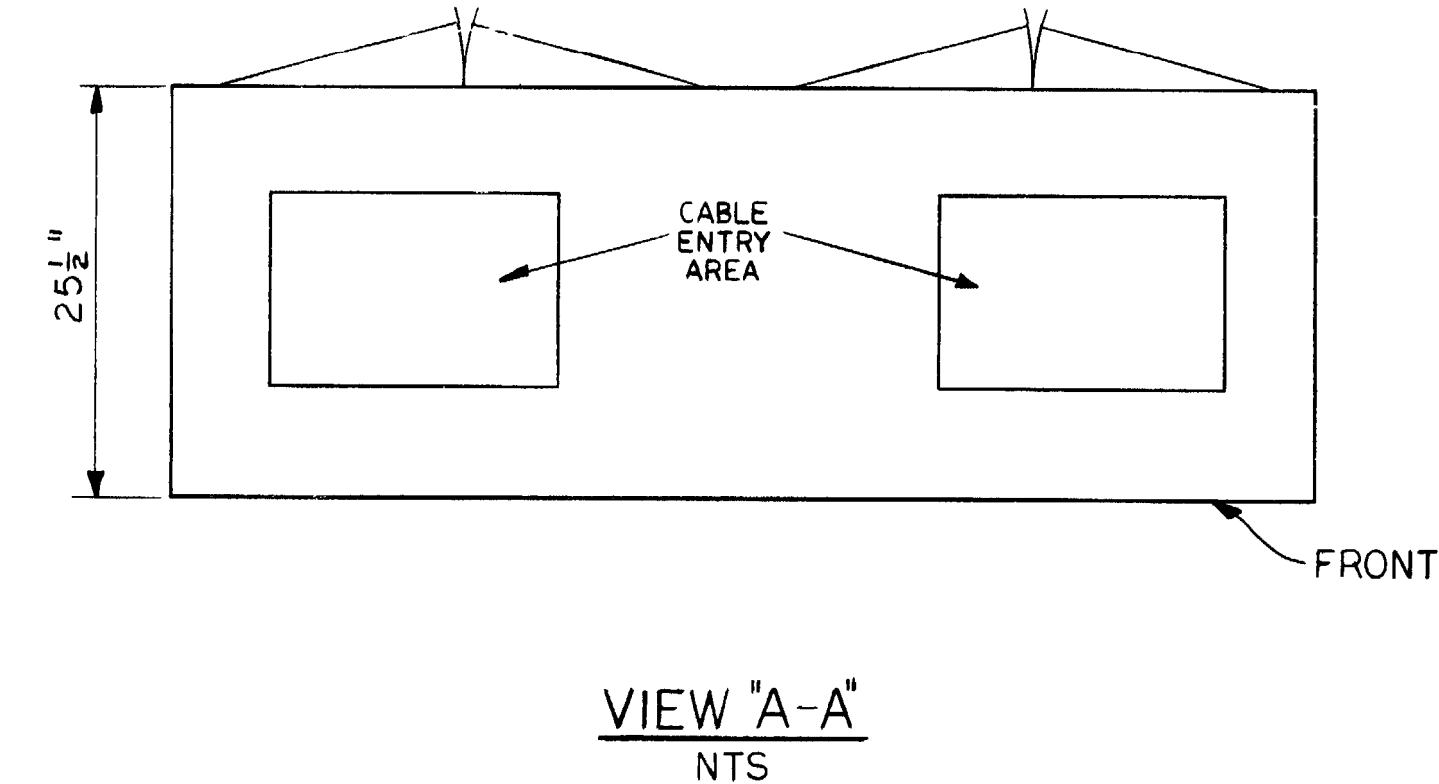
- FOR WOLFE & MANN FRONT VIEW & SECTIONS, SEE 29097, SH. 74 FOR C63 & 29097, SH. 83 FOR C61.
- FOR LAYOUT AND CONSTRUCTION DETAILS, REFER TO BECHTEL DWG. 7604-M420-B3(L) & 7604-M420-B6(C1).
- FOR BILL OF MATERIAL SEE BECHTEL DWG. 7604-M420-BM-C60 OR C61.
- THE ABOVE NUMBERING SEQUENCE APPLIES ONLY TO THE ITEMS ON THIS DWG.
- FOR NAMEPLATE ENGRAVING SCHEDULE SEE BECHTEL DWG. 7604-M-420-B4 (C60) & 7604-M420-B7 (C61), 29097, SH. 81A, 81B, 29097, SH. 84A.

FSAR FIGURE  
SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

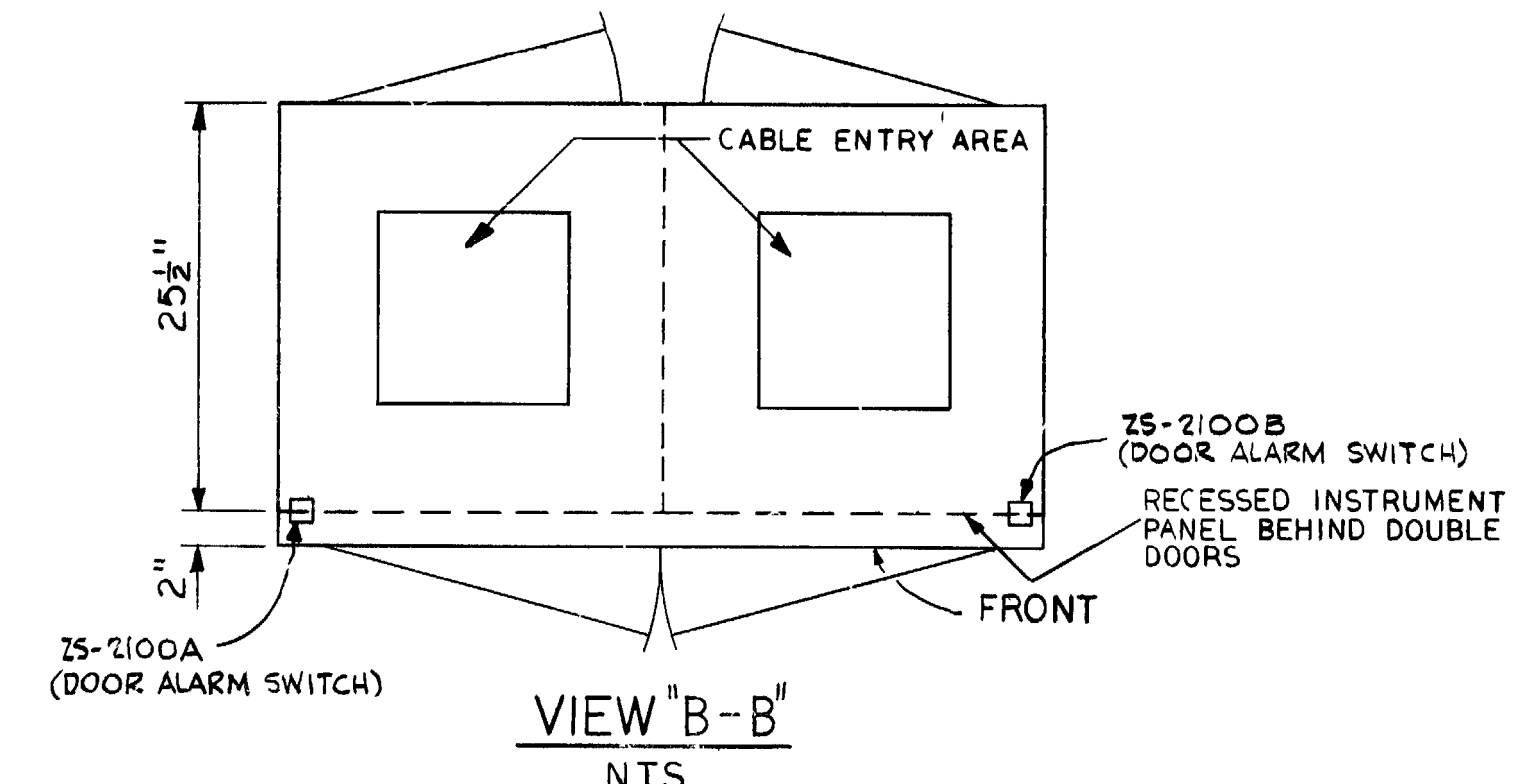
		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE: MILLSTONE UNIT 2 LOCAL CONTROL PANELS (C60) & (C61)			
REVISION DESCRIPTION REVISED PER DC MP2-16-01003 AND DUR 17-800315	SIGNATURES ON FILE CAD NO: C2806LHYB DRAWING NO: 25203-28006	SCALE: UNLESS OTHERWISE NOTED SH	REV 4



CLEAN LIQUID RADWASTE CONTROL PANEL (C63)



HOT SHUTDOWN CONTROL PANEL (C21)



**NOTES**  
 1 FOR LAYOUT AND CONSTRUCTION DETAILS, REFER TO BECHTEL DWG 7604-M420-77 (C63) 29097, SH 74 & 7604-M420-80 (C21) 29097, SH 77.  
 2 FOR BILL OF MATERIAL SEE BECHTEL DWG 7604-M420-BM-C63 OR C21  
 3 THE ABOVE NUMBERING SEQUENCE APPLIES ONLY TO THE ITEMS ON THIS DWG  
 4 FOR NAMEPLATE ENGRAVING SCHEDULE SEE BECHTEL DWG 7604-M420-78 (C63) & 7604-M420-81 (C21) 29097, SH 75A & 29097, SH 78A, 78B, 78C  
 5 FOR WOLFE & MANN FRONT VIEW & SECTIONS SEE 29097, SH 74 FOR C63 & 29097, SH 77 FOR C21

CLEAN LIQUID RADWASTE CONTROL PANEL (C63)		
ITEM	INSTR. NO.	DESCRIPTION
1	AL-001	ALARM ANNUNCIATOR
2	PP-161	ALARM ANNUNCIATOR "ACKNOWLEDGE" PUSHBUTTON
3	PP-162	ALARM ANNUNCIATOR "RESET" PUSHBUTTON
4	PP-163	ALARM ANNUNCIATOR "TEST" PUSHBUTTON
5	SPARE	
6	TIC-9000	DEGASIFIER TANK PRESSURE INDICATOR/CONTROLLER
7	TIC-9008	DEGASIFIER TANK TEMPERATURE INDICATOR/CONTROLLER
8	LIC-9009	DEGASIFIER TANK LEVEL INDICATOR/CONTROLLER
9	TIC-9010	DEGASIFIER TEMPERATURE INDICATOR
10	HIC-9110	DEGASIFIER HYDROGEN INLET MANUAL LOADING STATION
11	SPARE	
12	TIC-9099	DEGASIFIER PREHEATER TEMPERATURE INDICATOR/CONTROLLER
13	FI-9011	DEGASIFIER INLET FLOW INDICATOR
14	TIC-9012	DEGASIFIER INLET TEMPERATURE INDICATOR
15	HIC-9108	RBCOM TO DEGASIFIER VENT COND. W/A STATION
16	HIC-9109	DEGASIFIER INLET MANUAL LOADING STATION
17	SPARE	
18	TI-9018	DEGASIFIER PUMP TO PRIMARY DEMIN. TEMPERATURE INDICATOR
19	TI-9015	SECONDARY DEMIN. INLET TEMPERATURE INDICATOR
20	PI-9001	COOLANT WASTE RECEIVER TK. (T-14A) PRESSURE INDICATOR
21	PI-9002	COOLANT WASTE RECEIVER TK. (T-14B) PRESSURE INDICATOR
22	PI-9045	COOLANT WASTE MONITOR TK. (T-15A) PRESSURE INDICATOR
23	PI-9046	COOLANT WASTE MONITOR TK. (T-15B) PRESSURE INDICATOR
24	PI-9047	EQUIPMENT DRAIN TANK PRESSURE INDICATOR
25	LI-9056	COOLANT WASTE RECEIVER TK. (T-14A) LEVEL INDICATOR
26	LI-9059	COOLANT WASTE MONITOR TK. (T-15A) LEVEL INDICATOR
27	LI-9061	COOLANT WASTE MONITOR TK. (T-15B) LEVEL INDICATOR
28	LI-9241	RECOVERED BORIC ACID TK. (T-81A) LEVEL INDICATOR
29	LI-9243	RECOVERED BORIC ACID TK. (T-81B) LEVEL INDICATOR
30	FR-8017	CLEAN LIQUID RADWASTE SYSTEM INLET FLOW RECORDER
31	SPARE	
32	FI-9034	SECONDARY DEMIN INLET FLOW INDICATOR T23A
33	FI-9277	SECONDARY DEMIN INLET FLOW INDICATOR T23B
34	HS-9001	DEGASIFIER PUMP P-16A CONTROL SWITCH
35	HS-9003	DEGASIFIER PUMP P-16B CONTROL SWITCH
36	HS-9008	EQUIPMENT DRAIN TANK PUMP (P-94A) CONTROL SWITCH
37	HS-9011	EQUIPMENT DRAIN TANK PUMP (P-94B) CONTROL SWITCH
38	HS-9024	PRIMARY DEMIN. (T-22A) INLET VALVE SEL. SWITCH
39	HS-9028	PRIMARY DEMIN. (T-22B) INLET VALVE SEL. SWITCH
40	HS-9008	RADWASTE BYPASS VALVE SEL. SWITCH
41	HS-9051C	DEGASIFIER EFFLUENT BYPASS VALVE SEL. SWITCH
42	HS-9051D	FUTURE PRIMARY DEMIN. INLET VALVE SEL. SWITCH
43	HS-9052	PRIMARY DEMIN. TO COOL WASTE MONITOR TANK, INLET VALVE SEL. SWITCH
44	HS-9144	COOLANT WASTE RECEIVER TK. (T-14A) INLET VALVE SEL. SWITCH
45	HS-9145	COOLANT WASTE RECEIVER TK. (T-14B) INLET VALVE SEL. SWITCH
46	HS-9040	COOLANT WASTE MONITOR TK. (T-15A) INLET VALVE SEL. SWITCH
47	HS-9041	COOLANT WASTE MONITOR TK. (T-15B) INLET VALVE SEL. SWITCH
48	HS-9042	COOLANT WASTE RECEIVER TK. (T-14A) DISCH. VALVE SEL. SWITCH
49	HS-9048	COOLANT WASTE RECEIVER TK. (T-14B) DISCH. VALVE SEL. SWITCH
50	HS-9049	COOLANT WASTE MONITOR TK. (T-15A) DISCH. VALVE SEL. SWITCH
51	HS-9050	COOLANT WASTE MONITOR TK. (T-15B) DISCH. VALVE SEL. SWITCH
52	HS-9232	RADWASTE COOLANT REGULATION VALVE SEL. SWITCH
53	HS-9233	RADWASTE COOLANT REGULATION VALVE SEL. SWITCH
54	HS-9244	RADWASTE COOLANT REGULATION VALVE SEL. SWITCH
55	HS-9245	RADWASTE COOLANT REGULATION VALVE SEL. SWITCH
56	HS-9053	COOLANT WASTE MONITOR TANK MIXER MOTOR MTISA CONTROL SW.
57	HS-9053	COOLANT WASTE MONITOR TANK MIXER PERMISSIVE SEL. SWITCH
58	SPARE	
59	FBI-9015	PRIMARY DEMIN. (T-22A) INLET FLOW TOTALIZING INTEGRATOR
60	FBI-9014	PRIMARY DEMIN. (T-22B) INLET FLOW TOTALIZING INTEGRATOR
61	SPARE	
62	FBI-9034	SECONDARY DEMIN. (T-23) INLET FLOW TOTALIZING INTEGRATOR
63	SPARE	
64	FBI-9050	CLEAN LIQUID RADWASTE SYSTEM DISCH. FLOW TOTALIZING INTEGRATOR
65	SPARE	
66	HS-9228	COOLANT WASTE RECEIVER TANK PUMP (P-90) CONTROL SWITCH
67	HS-9040A	CLEAN LIQUID RADWASTE SYSTEM DISCH. ISOLATION VLV. SEL. SWITCH
68	HS-9040B	CLEAN LIQUID RADWASTE SYSTEM DISCH. ISOLATION VLV. SEL. SWITCH
69	HS-9233	RECOVERED BORIC ACID STORAGE TKS PUMP CONTROL SWITCH
70	CIT-9000	PRIMARY DEMIN T-22A OUTLET CONDUCTIVITY INDICATOR
71	CIT-9001	SECONDARY DEMIN T-23 OUTLET CONDUCTIVITY INDICATOR
72	CIT-9014	PRIMARY DEMIN T-22A INLET CONDUCTIVITY INDICATOR
73	CIT-9018	SECONDARY DEMIN T-23 INLET CONDUCTIVITY INDICATOR
74	FR-9050	SYSTEM DISCH. FLOW RECORDER
75	FI-9075	PRIMARY DEMIN T-22A INLET FLOW INDICATOR
76	FI-9074	PRIMARY DEMIN T-22B INLET FLOW INDICATOR
77	FI-9077	SECONDARY DEMIN T23B INLET FLOW INDICATOR
78	HIC-9049B	SYSTEM DISCHARGE ISOLATION VALVE MANUAL FLOW CONTROLLER
79	HS-9051	CLEAN LIQUID WASTE SW. SAMPLE PUMP P-157 FOR RM3049A/B
80	HS-9050	CLEAN LIQUID WASTE SW. FLUSH VALVES P-1508A & P-1508B FOR RM3049A/B
81	HS-41A04	COOLANT WASTE MONITOR TANK MIXER MOTOR MTISA CONTROL SW.
82	HS-41A04	COOLANT WASTE MONITOR TANK MIXER MOTOR MTISA CONTROL SW.

HOT SHUTDOWN CONTROL PANEL (C21)		
ITEM	INSTR. NO.	DESCRIPTION
1	TI-1115	LOOP #1 COLD LEG TEMPERATURE INDICATOR
2	TI-1011	WIDE RANGE NUCLEAR INSTRUMENT INDICATOR
3	TI-1125	LOOP #2 COLD LEG TEMPERATURE INDICATOR
4	TI-1028	WIDE RANGE NUCLEAR INSTRUMENT INDICATOR
5	LI-1101	PRESSURIZER LEVEL INDICATOR
6	PI-1024B	PRESSURIZER PRESSURE INDICATOR
7	TI-1024B	LETDOWN TEMPERATURE INDICATOR
8	LI-1103	PRESSURIZER LEVEL INDICATOR
9	PI-1024B	PRESSURIZER PRESSURE INDICATOR
10	LI-1101-1	STEAM GEN. #1 LEVEL INDICATOR
11	LI-1111, #2	STEAM GEN. #1 LEVEL INDICATOR
12	PI-4223	STEAM GEN. #1 DUMP TO ATMOS. PRESSURE INDICATOR
13	TI-1122A-2	AUX. FEEDWATER PUMP TO STM. GEN. #1 FLOW INDICATOR
14	LI-1129B	STEAM GEN. #2 LEVEL INDICATOR
15	PI-4224	STEAM GEN. #2 DUMP TO ATMOS. PRESSURE INDICATOR
16	PI-2018	LETDOWN HEX DISCH. PRESSURE INDICATOR
17	HIC-1115 P02	LETDOWN MANUAL CONTROLLER STATION
18	HIC-4213	STEAM GEN. #1 DUMP TO ATMOS. W/A STATION
19	HIC-4224	STEAM GEN. #2 DUMP TO ATMOS. W/A STATION
20	HIC-100-E-2	PRESSURIZER SPRAY W/A STATION
21	HS-4193B	AUX. STEAM FEEDWATER TURBINE SPEED CONTROL SWITCH
22	HS-100-4 B	PRESSURIZER BACK-UP HEATER CONTROL SWITCH
23	HS-100-5 B	PRESSURIZER BACK-UP HEATER CONTROL SWITCH
24	HS-100-6 B	BOILING CHARGING PUMP (P-18A) CONTROL SWITCH
25	HS-100-8 B	BOILING CHARGING PUMP (P-18B) CONTROL SWITCH
26	HS-100-9 B	BOILING CHARGING PUMP (P-18C) CONTROL SWITCH
27	HS-100-10 B	BOILING CHARGING PUMP (P-18D) CONTROL SWITCH
28	HS-100-11 B	PRESSURIZER BACK-UP HEATER CONTROL SWITCH
29	HS-100-12 B	PRESSURIZER BACK-UP HEATER CONTROL SWITCH
30	HS-5278 B	STM. GEN. #1 F.W. PUMP (P-5A) CONTROL SWITCH
31	HS-5278B	AUX. F.W. PUMP TO STM. GEN. #1 EMERG. OVERRIDE/RESET SEL. SW.
32	HS-4181B	STM. GEN. #1 AUX. F.W. TURBINE STOP VALVE SEL. SWITCH
33	HS-5278	STM. GEN. #2 F.W. PUMP (P-5B) CONTROL SWITCH
34	HS-5278B	AUX. F.W. PUMP TO STM. GEN. #2 EMERG. OVERRIDE/RESET SEL. SW.
35	HS-4188B	STM. GEN. #2 AUX. F.W. TURBINE STOP VALVE SEL. SWITCH
36	HS-5278B	STM. GEN. AUX. F.W. TURB. CROSS VALVE SEL. SWITCH
37	HIC-100F-2	PRESSURIZER SPRAY W/A STATION
38	PI-1031B	PRESSURIZER PRESSURE INDICATOR
39	PI-1031B	PRESSURIZER PRESSURE INDICATOR
40	CS-110	LETDOWN FLOW CONTROL COS/C21 SELECTOR SWITCH
41	HS-110-1B	LETDOWN FLOW CONTROL VALVE (C41)Q. BOTH (C41)D.1 SELECTOR SW.
42	HS-4188B	AUX F.W. TURBINE STOP VALVE SELECTOR SWITCH
43	HS-5278C	AUX FEEDWATER PUMP TO STM GEN #1 SELECTOR SW. FACE
44	HS-5278D	AUX FEEDWATER PUMP TO STM GEN #2 SELECTOR SW. FACE
45	HS-5278E	AUX FEEDWATER PUMP TO STM GEN #3 SELECTOR SW. FACE
46	HS-5278F	AUX FEEDWATER PUMP TO STM GEN #4 SELECTOR SW. FACE
47	HS-5278G	AUX FEEDWATER PUMP TO STM GEN #5 SELECTOR SW. FACE
48	HS-5278H	AUX FEEDWATER PUMP TO STM GEN #6 SELECTOR SW. FACE
49	HS-5278I	AUX FEEDWATER PUMP TO STM GEN #7 SELECTOR SW. FACE
50	HS-5278J	AUX FEEDWATER PUMP TO STM GEN #8 SELECTOR SW. FACE
51	HIC-5279B	AUX. FEEDWATER TO STM GEN #8 HAND INDICATING VALVE CONTROLLER
52	SPARE	
53	SPARE	

M/L 79-203 ITEM E54  
 M/L 79-203 ITEM E54

M/L 79-203-221

Dominion Nuclear Connecticut, Inc.  
 Millstone Power Station  
 Waterford, CT.

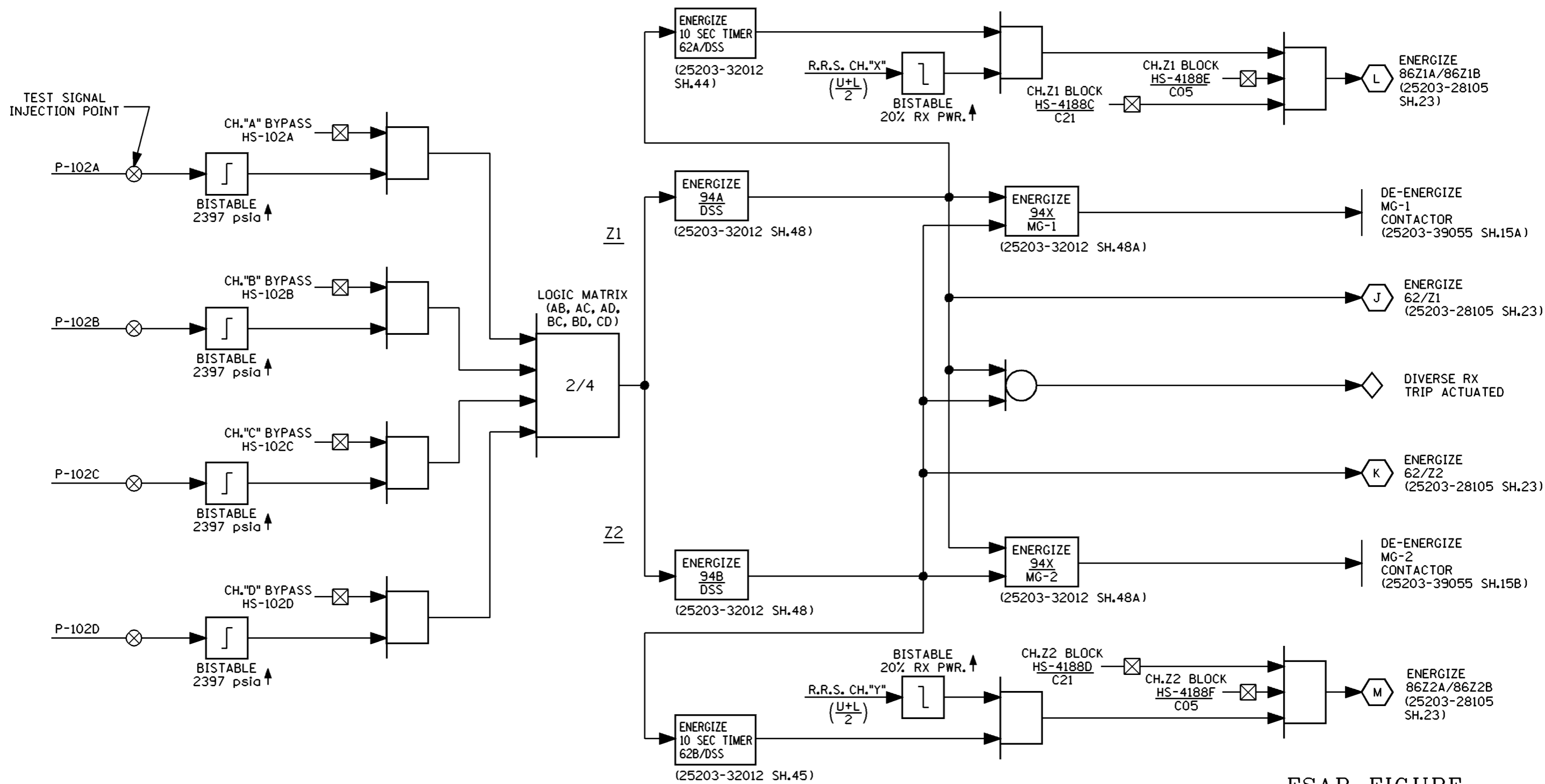
FSAR FIGURE  
 SAFETY EVALUATION  
 MAY BE REQUIRED  
 PRIOR TO CHANGES

TITLE LOCAL CONTROL PANELS (C63) & (C21)

REVISION DESCRIPTION SIGNATURES ON FILE CAD NO: C28002-MFB

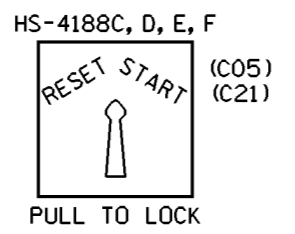
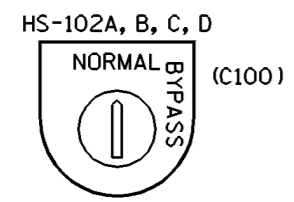
REVISED PER MSDUR 21-000046 DRAWING NO: 25203-28006 REV 11  
 & DUR 21-900122

DSGN J.S.J SCALE: N/A UNLESS OTHERWISE NOTED SH 2



**FSAR FIGURE**

SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES



REVISIONS DURING CONSTRUCTION

NO.	DATE	REVISIONS	BY	CHK	APP	APP
4	11-20-01	INCORPORATE DCN'S DM2-00-1075-97 DM2-00-0025-00	AGC	GHH	TP	CAM
3	9/25/99	INCRP. DCN DM2-00-1025-98	MEL	WBZ	JPP	JPP
2	7/31/98	INCRP. DCN DM2-00-1527-97	WBZ	RTM	JPP	JPP

**Q.A.** CAD  
MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED

TITLE: MILLSTONE UNIT 2  
LOGIC DIAGRAM - ANTICIPATED TRANSIENT WITHOUT SCRAM (A.T.W.S.)  
WATERFORD, CT.

BY WBZ		CHKD. MEL	APP. JTK	APP. DWC
DATE 10-25-88	DATE 11-16-88	DATE 11-17-88	DATE 11-18-88	
SCALE N/A	DWG. NO. 25203-28105 SH.36			

START:

28129 SH 30 VENT VLV 8138A NOT CLOSED  
 6 FS-8137 TWO EXHAUST FANS RUNNING  
 HS8137 "START"  
 MOTGR OVERLOAD TRIP RESET

POWER AVAILABLE

FAN F-16 START

EG90

C06

R

DAMPER HV8137 OPEN

C06

G

ZS8137

STOP:

MOTOR OVERLOAD TRIP  
 ZS8138A DAMPER HV8138A "CLOSED"  
 HS8137 "STOP"  
 6 MAIN EXHAUST FAN LOW FLOW FS-8137

POWER AVAILABLE

FAN F-16 STOP

C06

G

DAMPER HV8137 CLOSE

C06

R

ZS 8137

ALARMS:

6 A FAN OVERLOAD TRIP

ZAH E806

CAD

NOTE: MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

FSAR FIGURE

SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

40 H.P. 480V

Q.A.

	8	11-28-01	INCORPORATE DCN DM2-00-0025-00	GHH	RJH	TP	CAM
	7	1/11/83	AS BUILT PER DCR M2-P-087-82 & PDLR-275-82	WWS	WWS	WWS	WWS
MF	NO.	DATE	REVISIONS	BY	CHK.	CORR	APP.

BECHTEL CORPORATION JOB 7604  
 Gaithersburg, Md.  
 for THE MILLSTONE POINT COMPANY

NORTHEAST UTILITIES SERVICE COMPANY  
 MILLSTONE NUCLEAR POWER STATION  
 UNIT NO. 2

LOGIC DIAGRAM  
 RADWASTE AREA SUPPLY FAN  
 dwg. no. 25203-28129 sh.22









Table with columns: EQUIPMENT NO., DESCRIPTION, ACTUATION MODULE TYPE, ACTUATION MODULE NO., ACTUATION GROUP, RELAY NO., INCIDENT & ACTUATION CHANNEL (SIAS, CSAS, CIAS, SRAS, EBFAS, AEAS, MSI, CPVIS, AFAIS, LOAD SHED), DG SEQUENCE (INCIDENT AND LOSS OF POWER, LOSS OF POWER ONLY), P & ID, SCHEMATIC, NOTES. Rows include equipment like 2-EB-99, 2-FW-5A, 2-GR-11.1, 2-HV-106, 2-LRR-43.1, 2-MS-64A, 2-RB-8.1A, 2-RB-402.

NOTE: FOR NOTES AND LEGEND SEE DWG. 28150 SH.2A.

OPERATIONS CRITICAL

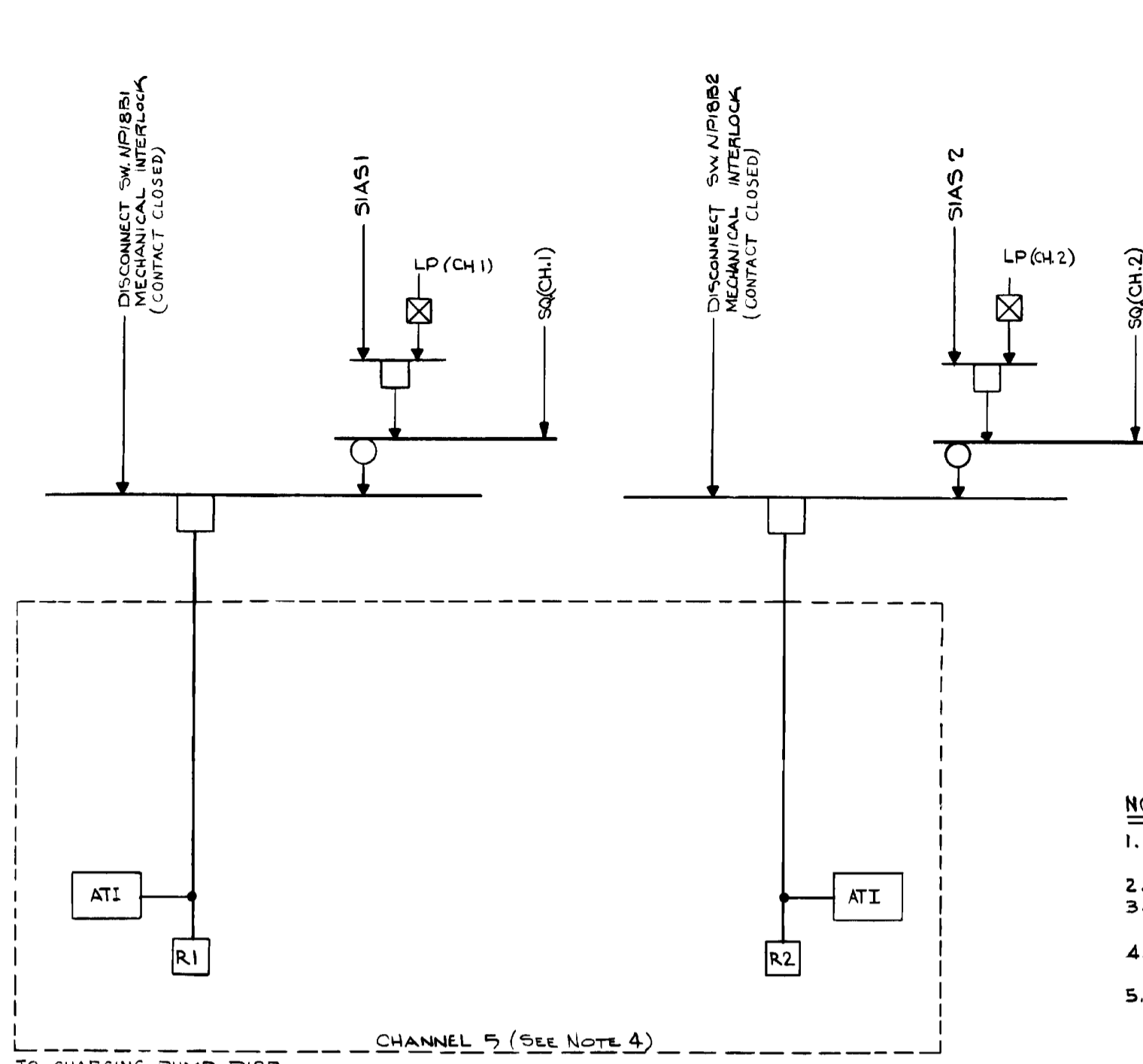
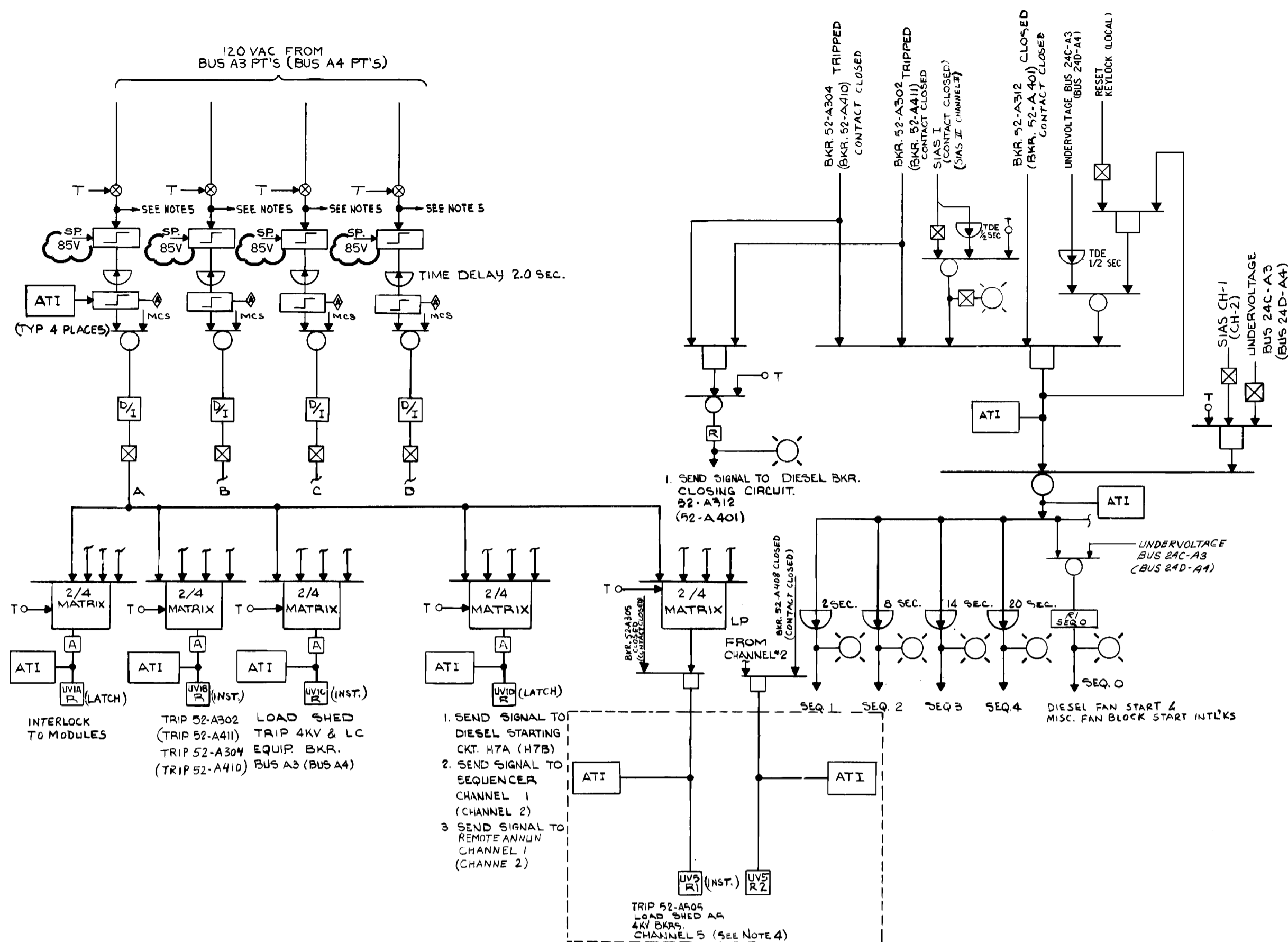
REVISIONS DURING CONSTRUCTION table and Dominon Nuclear Connecticut, Inc. logo and title block.

FSAR FIGURE

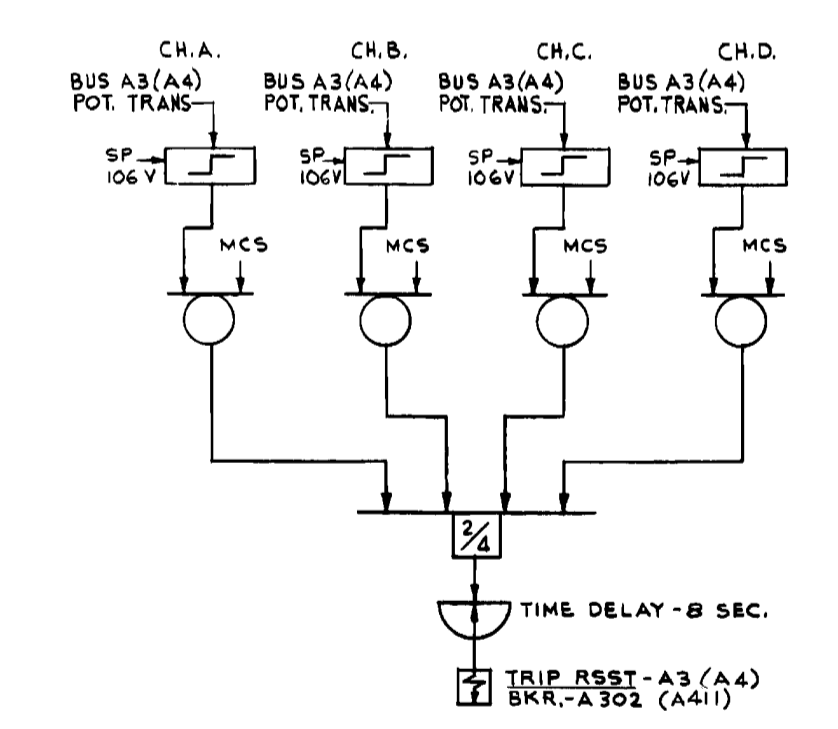
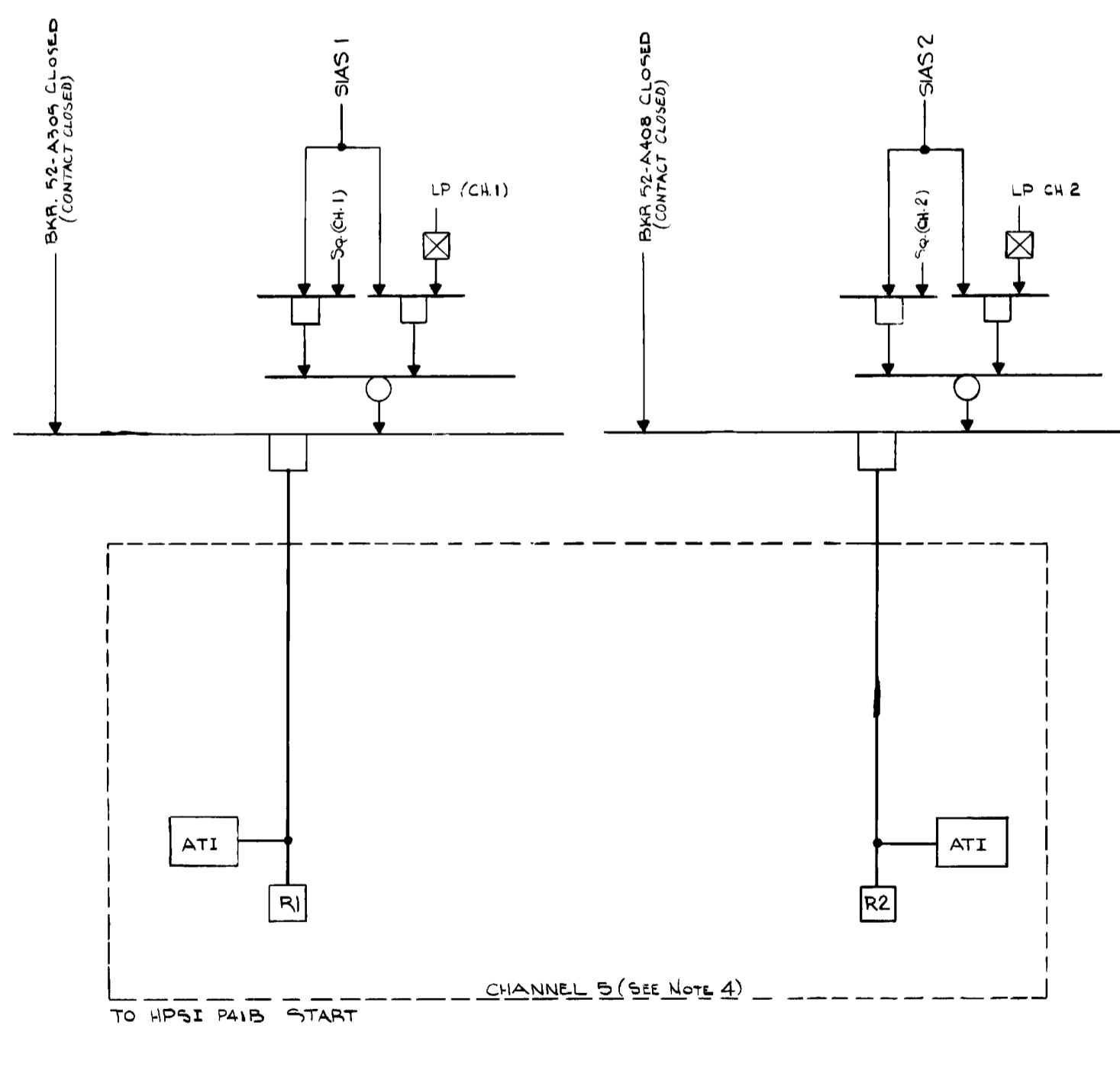
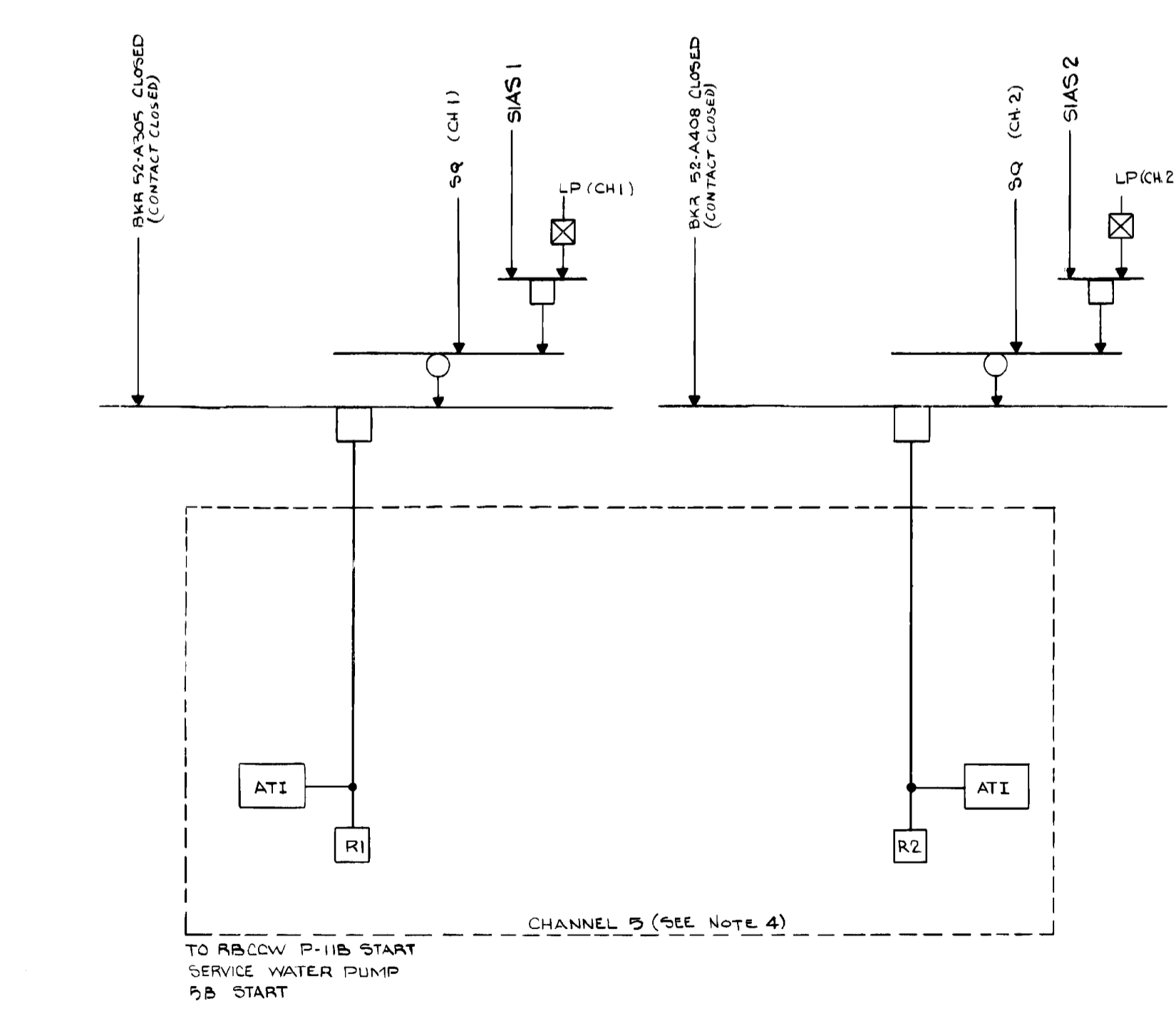
SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

Table with columns: NO., DATE, REVISIONS, BY, CHK., APP., INCORP. DCN, J.S.J., R.E.B., J.P.P., J.P.P., SCALE, DWG. NO., WATERFORD, CT.





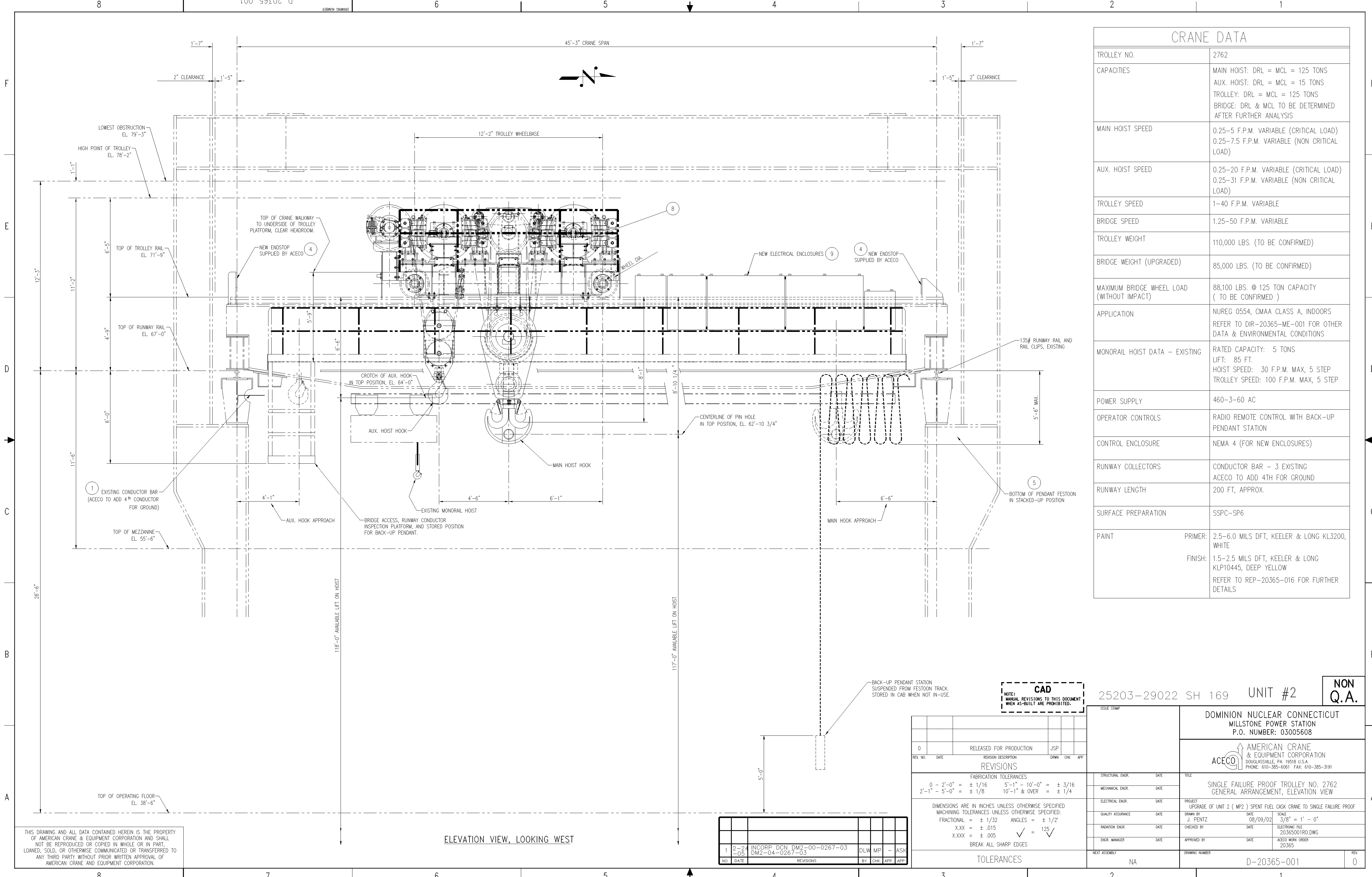
- NOTES:**
1. DESIGNATIONS APPEARING IN PARENTHESIS, ( ), APPLY TO CHANNEL 2.
  2. CHANNEL 2 IS SIMILAR TO CHANNEL 1.
  3. PUSHBUTTON WITH COVER TO BE LOCATED AT MAIN CONTROL BOARD C-8.
  4. R1 & R2 CONTACTS PARALLELED TO ACTUATE THE SAFEGUARD EQUIPMENT.
  5. TO RSST UV LOGIC SENSING CIRCUIT.



**FSAR FIGURE**  
SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>ENGINEERED SAFETY LOGIC SEQUENCER &amp; CHANNEL 5 OUTPUT</b>			
REVISION DESCRIPTION SIGNATURES ON FILE	CAD NO. C8350L3A5	DRAWING NO. 25203-28150	REV 6
DSON DLW	SCALE: NONE	UNLESS OTHERWISE NOTED 5/1 3	





CRANE DATA	
TROLLEY NO.	2762
CAPACITIES	MAIN HOIST: DRL = MCL = 125 TONS AUX. HOIST: DRL = MCL = 15 TONS TROLLEY: DRL = MCL = 125 TONS BRIDGE: DRL & MCL TO BE DETERMINED AFTER FURTHER ANALYSIS
MAIN HOIST SPEED	0.25-5 F.P.M. VARIABLE (CRITICAL LOAD) 0.25-7.5 F.P.M. VARIABLE (NON CRITICAL LOAD)
AUX. HOIST SPEED	0.25-20 F.P.M. VARIABLE (CRITICAL LOAD) 0.25-31 F.P.M. VARIABLE (NON CRITICAL LOAD)
TROLLEY SPEED	1-40 F.P.M. VARIABLE
BRIDGE SPEED	1.25-50 F.P.M. VARIABLE
TROLLEY WEIGHT	110,000 LBS. (TO BE CONFIRMED)
BRIDGE WEIGHT (UPGRADED)	85,000 LBS. (TO BE CONFIRMED)
MAXIMUM BRIDGE WHEEL LOAD (WITHOUT IMPACT)	88,100 LBS. @ 125 TON CAPACITY ( TO BE CONFIRMED )
APPLICATION	NUREG 0554, CMAA CLASS A, INDOORS REFER TO DIR-20365-ME-001 FOR OTHER DATA & ENVIRONMENTAL CONDITIONS
MONORAIL HOIST DATA - EXISTING	RATED CAPACITY: 5 TONS LIFT: 85 FT. HOIST SPEED: 30 F.P.M. MAX, 5 STEP TROLLEY SPEED: 100 F.P.M. MAX, 5 STEP
POWER SUPPLY	460-3-60 AC
OPERATOR CONTROLS	RADIO REMOTE CONTROL WITH BACK-UP PENDANT STATION
CONTROL ENCLOSURE	NEMA 4 (FOR NEW ENCLOSURES)
RUNWAY COLLECTORS	CONDUCTOR BAR - 3 EXISTING ACECO TO ADD 4TH FOR GROUND
RUNWAY LENGTH	200 FT, APPROX.
SURFACE PREPARATION	SSPC-SP6
PAINT	PRIMER: 2.5-6.0 MILS DFT, KEELER & LONG KL3200, WHITE FINISH: 1.5-2.5 MILS DFT, KEELER & LONG KLP10445, DEEP YELLOW REFER TO REP-20365-016 FOR FURTHER DETAILS

25203-29022 SH 169 UNIT #2 **NON Q.A.**

ISSUE STAMP

**DOMINION NUCLEAR CONNECTICUT  
MILLSTONE POWER STATION  
P.O. NUMBER: 03005608**

**ACECO** AMERICAN CRANE & EQUIPMENT CORPORATION  
DOUGLASSVILLE, PA 19518 U.S.A.  
PHONE: 610-385-6061 FAX: 610-385-3191

TITLE: SINGLE FAILURE PROOF TROLLEY NO. 2762  
GENERAL ARRANGEMENT, ELEVATION VIEW

STRUCTURAL ENGR.	DATE	TITLE
MECHANICAL ENGR.	DATE	
ELECTRICAL ENGR.	DATE	PROJECT
QUALITY ASSURANCE	DATE	UPGRADE OF UNIT 2 ( MP2 ) SPENT FUEL CASK CRANE TO SINGLE FAILURE PROOF
RADIATION ENGR.	DATE	DRAWN BY
ENGR. MANAGER	DATE	J. PENTZ
		DATE
		08/09/02
		SCALE
		3/8" = 1' - 0"
		ELECTRONIC FILE
		20365001RO.DWG
		DATE
		20365
		ACECO WORK ORDER
		20365
NEXT ASSEMBLY	DATE	DRAWING NUMBER
NA		D-20365-001
		REV
		0

**CAD**  
NOTE: MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

REV. NO.	DATE	REVISION DESCRIPTION	DRWN	CHK	APP
0		RELEASED FOR PRODUCTION	JSP		

**REVISIONS**

FABRICATION TOLERANCES  
 0 - 2'-0" = ± 1/16    5'-1" - 10'-0" = ± 3/16  
 2'-1" - 5'-0" = ± 1/8    10'-1" & OVER = ± 1/4

MACHINING TOLERANCES UNLESS OTHERWISE SPECIFIED:  
 FRACTIONAL = ± 1/32    ANGLES = ± 1/2"  
 X.XX = ± .015    ✓ = 125  
 X.XXX = ± .005

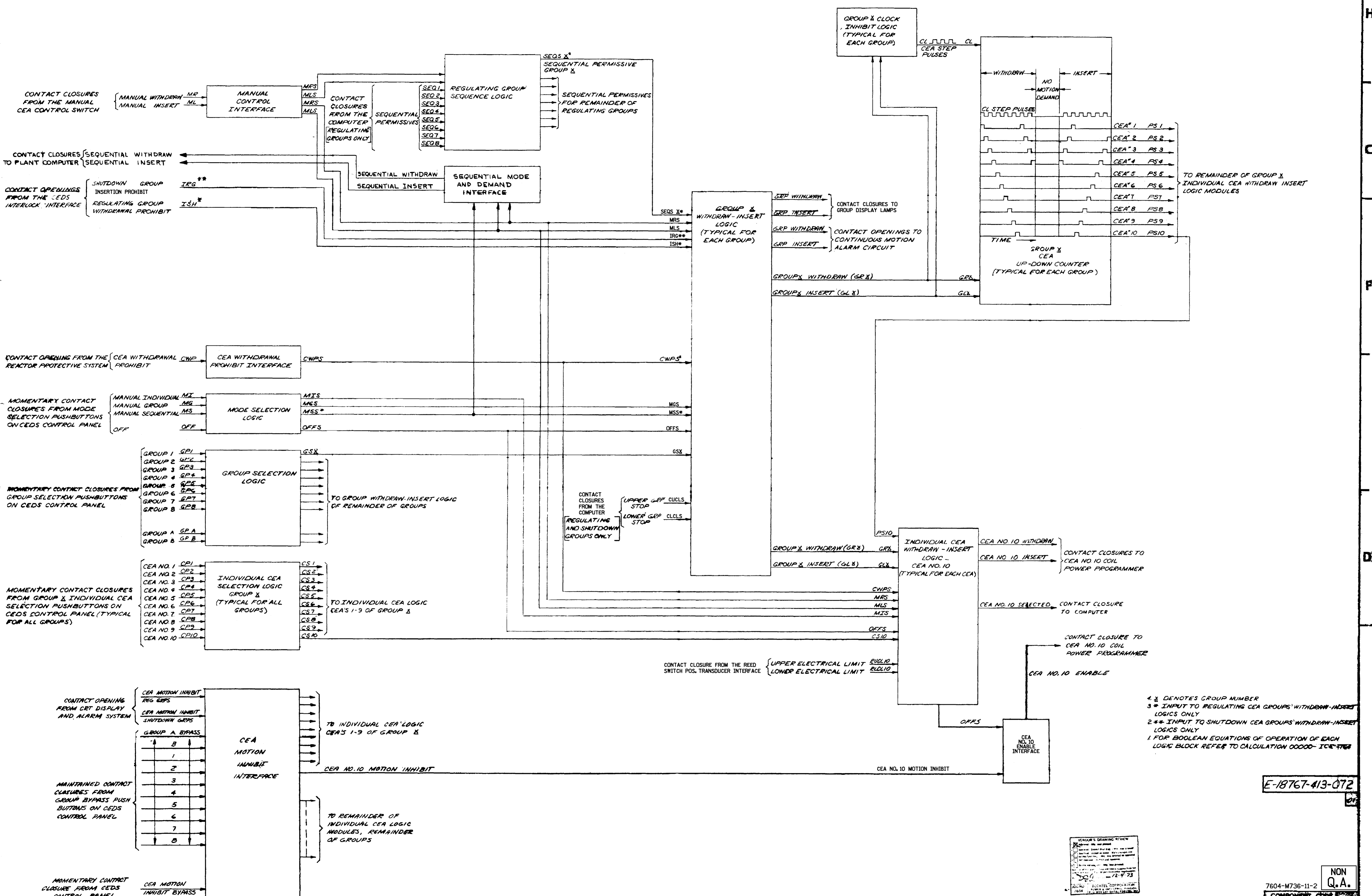
BREAK ALL SHARP EDGES

**TOLERANCES**

NO.	DATE	REVISIONS	BY	CHK	APP	APP.
1	2-24-05	INCORP DCN DM2-00-0267-03 DM2-04-0267-03	DLW	MP	-	ASK

THIS DRAWING AND ALL DATA CONTAINED HEREIN IS THE PROPERTY OF AMERICAN CRANE & EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART, LOANED, SOLD, OR OTHERWISE COMMUNICATED OR TRANSFERRED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN APPROVAL OF AMERICAN CRANE AND EQUIPMENT CORPORATION.

ELEVATION VIEW, LOOKING WEST



E-18767-413-072

VENUE'S DRAWING REVIEW  
 DATE: 2-7-73  
 BY: [Signature]

NON Q.A.

25203-29155 SH 9

FSAR FIGURE  
 SAFETY EVALUATION  
 MAY BE REQUIRED  
 PRIOR TO CHANGES

MILLSTONE NUCLEAR POWER STATION - UNIT NO. 2  
 NORTHEAST UTILITIES

NO.	DATE	DESCRIPTION	BY	CHKD.	APPD.	REV.	DESCRIPTION	DATE	BY	CHKD.	APPD.	REV.	DESCRIPTION	DATE	BY	CHKD.	APPD.
3	11-16-74	INCORP CON DM2-00-0025-00, DM2-00-0399-98	DLW	WBZ	-	DED											

CEA'S FUNCTIONAL BLOCK DIAGRAM  
 E-18767-413-072

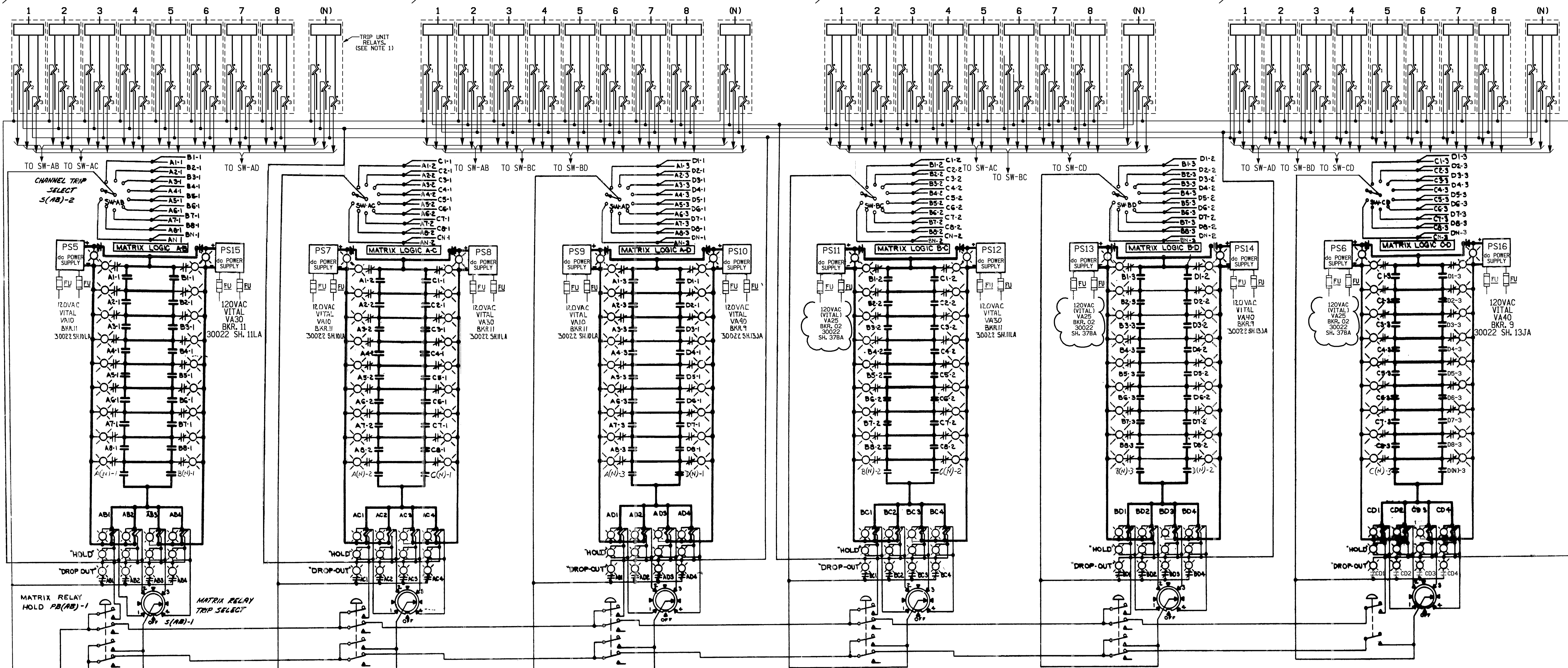
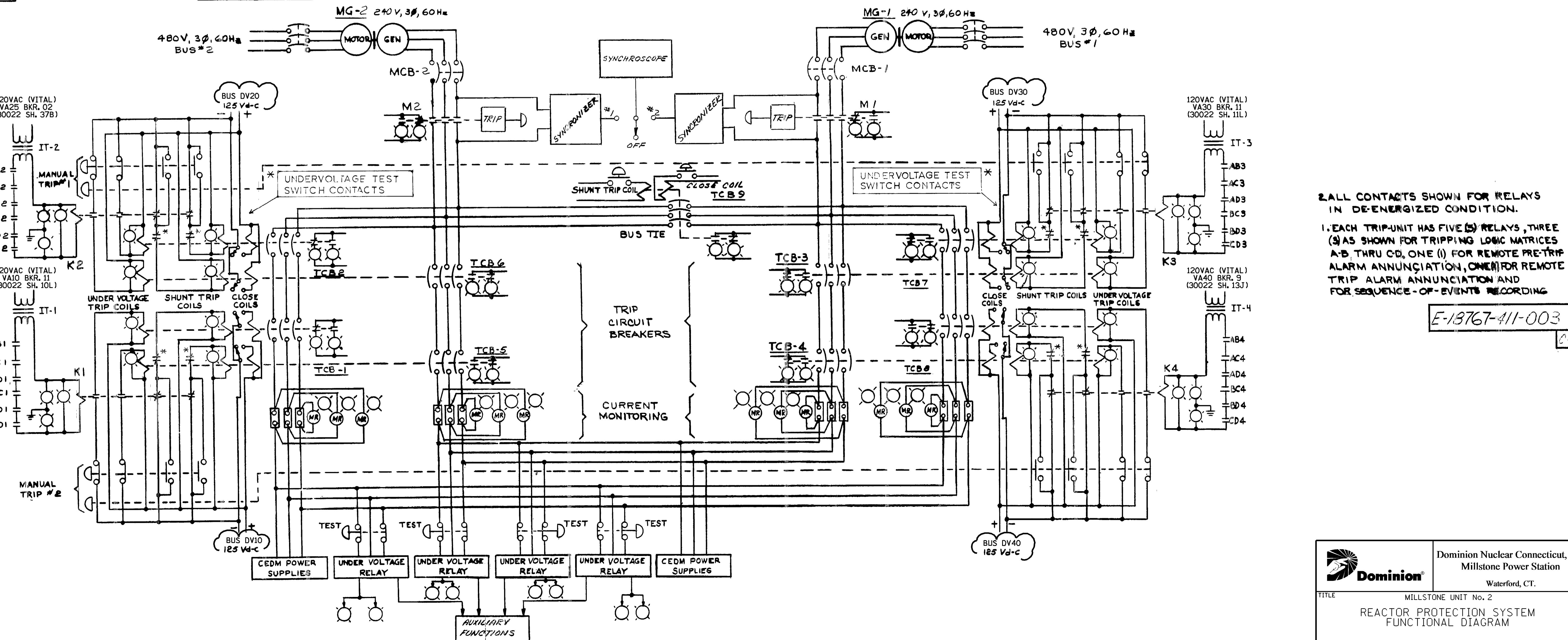


TABLE 1	
TRIP INPUTS	
1	VARIABLE HIGH POWER TRIP
2	LOW REACTOR COOLANT PUMP SPEED
3	LOW FLOW REACTOR COOLANT
4	LOW WATER LEVEL STEAM GENERATORS 1&2
5	LOW PRESSURE STEAM GENERATORS 1&2
6	HIGH PRESSURE PRESSURIZER
7	THERMAL MARGIN/LOW PRESSURE
8	TURBINE TRIP
9	HIGH CONTAINMENT PRESSURE
10	SPACE
11	LOCAL POWER DENSITY
12	SPACE



2. ALL CONTACTS SHOWN FOR RELAYS IN DE-ENERGIZED CONDITION.

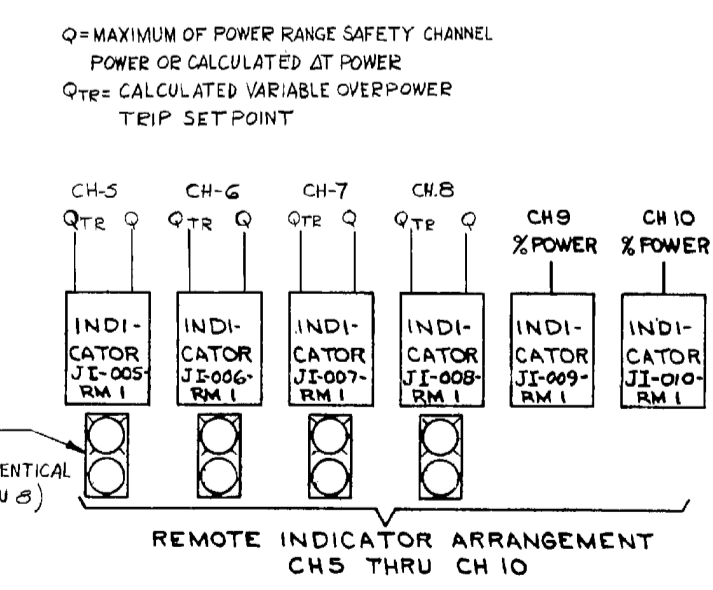
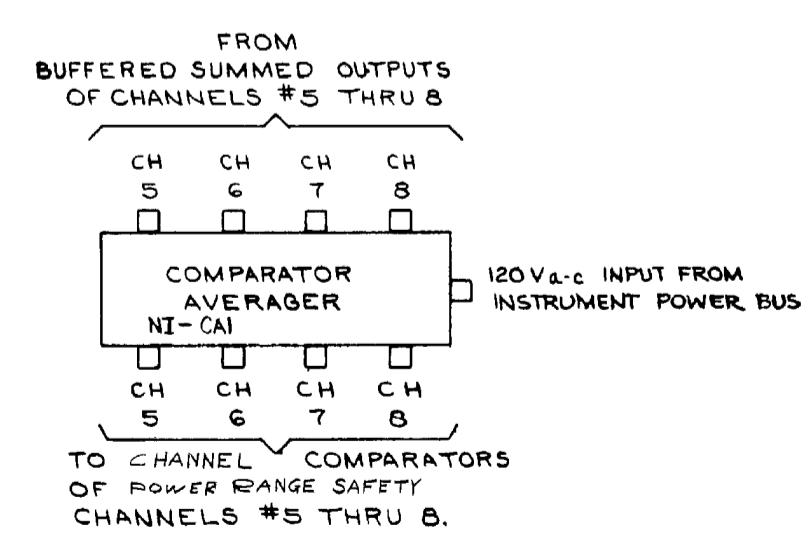
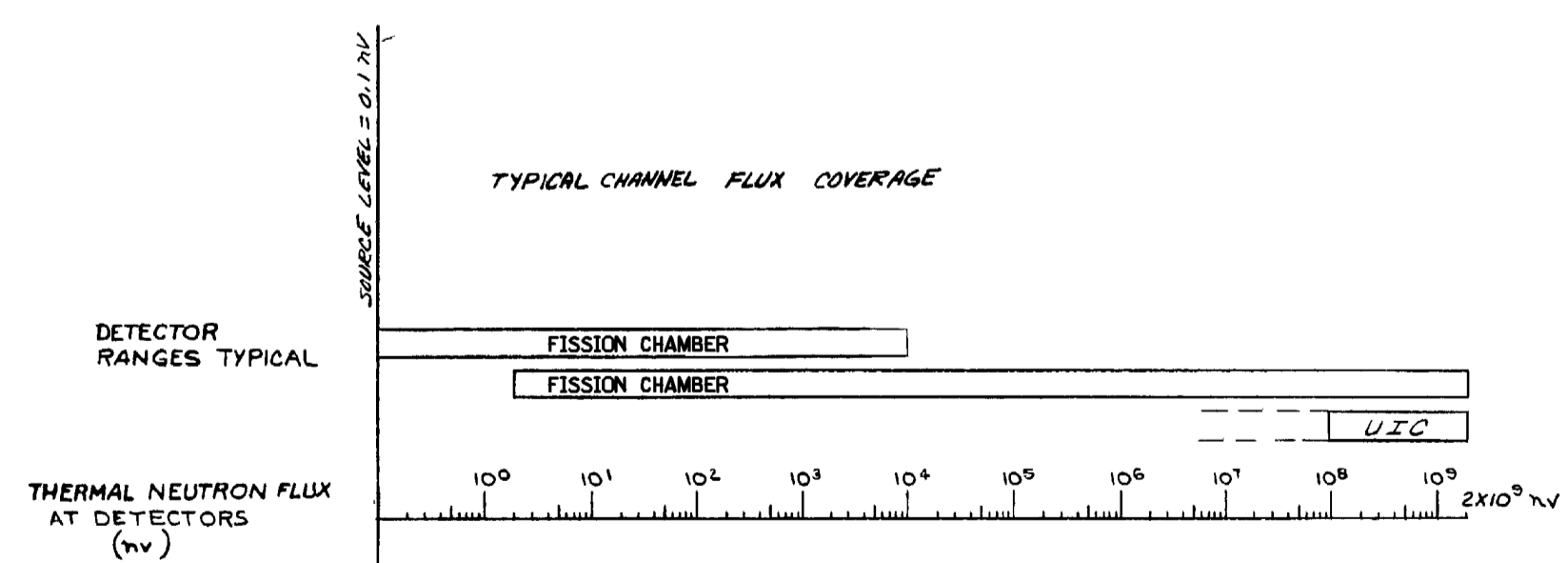
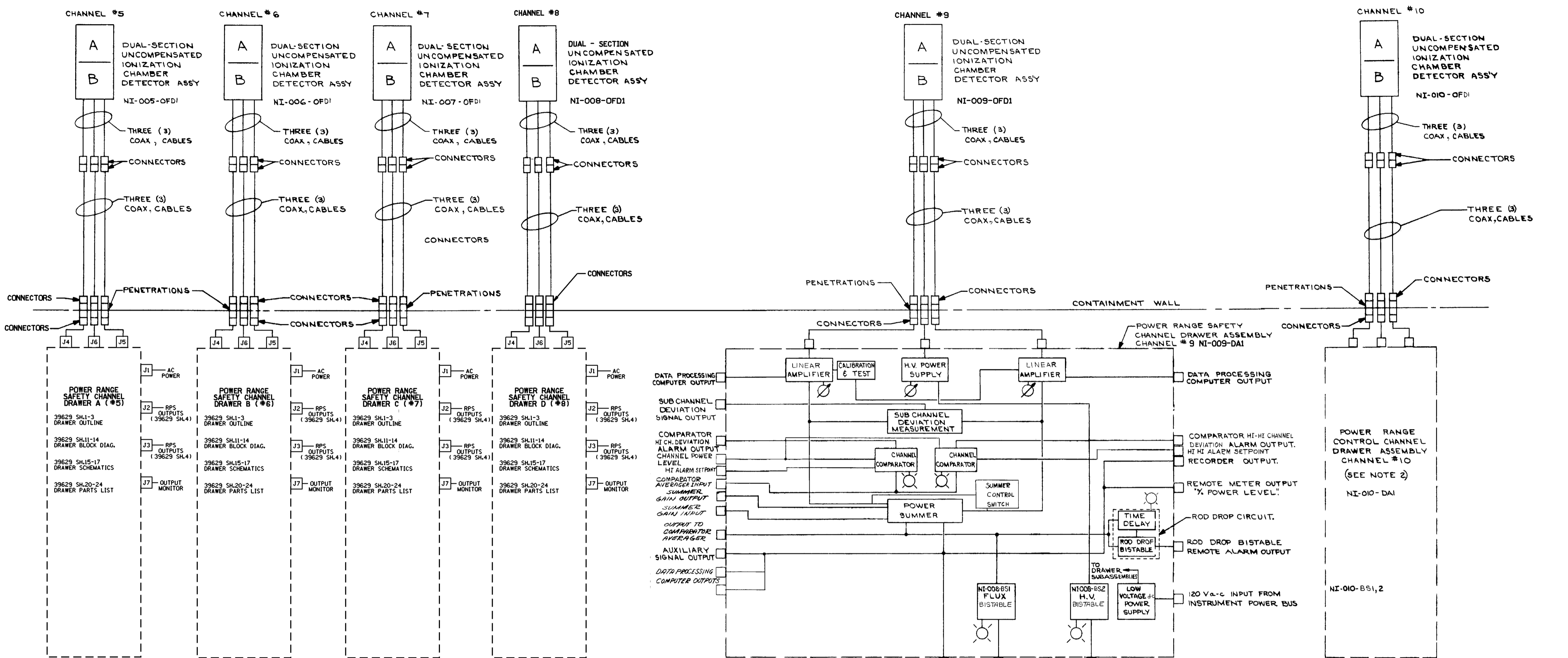
1. EACH TRIP-UNIT HAS FIVE (5) RELAYS, THREE (3) AS SHOWN FOR TRIPPING LOGIC MATRICES A-B THRU CD, ONE (1) FOR REMOTE PRE-TRIP ALARM ANNUNCIATION, ONE (1) FOR REMOTE TRIP ALARM ANNUNCIATION AND FOR SEQUENCE-OF-EVENTS RECORDING

E-13767-411-003

	Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.
	TITLE: MILLSTONE UNIT NO. 2 REACTOR PROTECTION SYSTEM FUNCTIONAL DIAGRAM
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISION NO. 17-000126 & DUR 17-800286	CAD NO. C29193L4Y8 DRAWING NO. 25203-29193 REV 12
DSGN DLW SCALE: NONE	UNLESS OTHERWISE NOTED SH 1

POWER RANGE SAFETY CHANNELS

POWER RANGE CONTROL CHANNELS



- 4. CH = CHANNEL
  - NI = NUCLEAR INSTRUMENTATION
  - BS = BISTABLE
  - DA = DRAWER ASSY
  - OPD = OUT OF CORE FLUX DETECTOR
  - PA = PREAMPLIFIER
  - REC = RECORDER
  - RM = REMOTE METER
  - CA = COMPARATOR AVERAGER
  - HV = HIGH VOLTAGE
  - CPS = COUNTS PER SECOND
3. ALL DRAWING DESIGNATIONS ACCORDING TO C.E. STANDARDS UNLESS OTHERWISE SPECIFIED.
2. DRAWER ASSEMBLIES DESIGNATED BY THIS NOTE IDENTICAL TO DRAWER ASSEMBLY FOR CHANNEL #9.

BECHTEL DWG. No. 7604-M820-17-1  
 C.E. DWG. No. E-18767-41-103

NOTES:  
 1. SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

REVISIONS DURING CONSTRUCTION

NO.	DATE	REVISIONS	BY	CHK.	APP.	APP.
7	12-4-88	INCORP. DCH DM2-00-0243-05	JSJ	MEL	-	DLW
6	3/12/89	INCORP. DCH'S DM2-00-0891-98 DM2-00-0909-00 DM2-00-0910-00	ACC	GM	TP	CM
5	4-7-89	INCORP. DCH DM2-00-0025-00	JMM	JKY	JPP	JPP
4	9/28/89	INCORP. DCH DM2-00-1072-97	WBZ	JSJ	JPP	JPP

SCALE: N/A  
 DWG. NO.: 25203-29198 SH.14

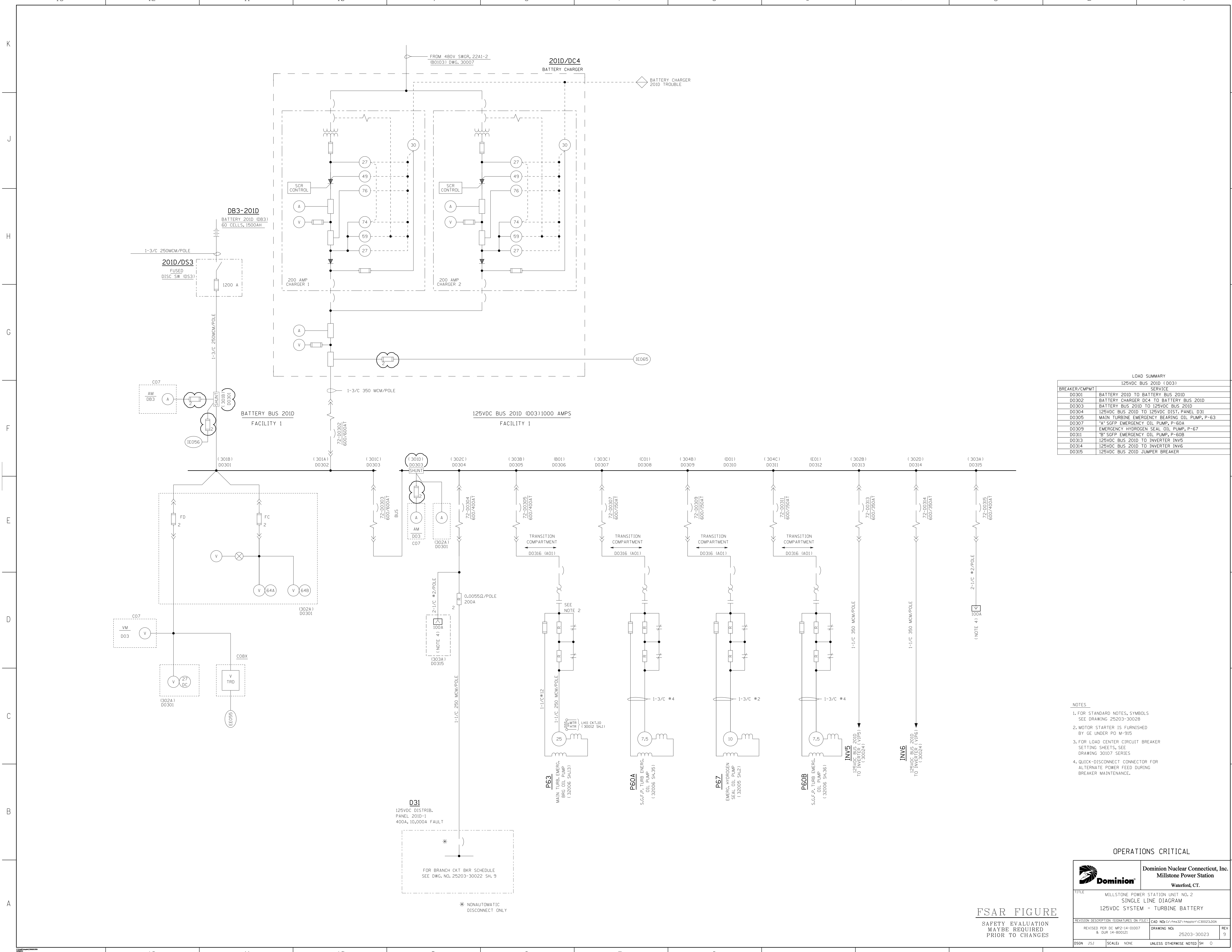
Domination Nuclear Connecticut, Inc. Millstone Power Station

TITLE: NEUTRON FLUX MONITORING SYSTEM POWER RANGE CHANNELS

DATE: 7-21-89  
 DATE: 8/31/89  
 DATE: 9/25/89  
 DATE: 9/25/89







LOAD SUMMARY

BREAKER/CMPMT	125VDC BUS 2010 (D03) SERVICE
D0301	BATTERY 2010 TO BATTERY BUS 2010
D0302	BATTERY CHARGER DC4 TO BATTERY BUS 2010
D0303	BATTERY BUS 2010 TO 125VDC BUS 2010
D0304	125VDC BUS 2010 TO 125VDC DIST. PANEL D31
D0305	MAIN TURBINE EMERGENCY BEARING OIL PUMP, P-63
D0307	"A" SGFP EMERGENCY OIL PUMP, P-60A
D0309	EMERGENCY HYDROGEN SEAL OIL PUMP, P-67
D0311	"B" SGFP EMERGENCY OIL PUMP, P-60B
D0313	125VDC BUS 2010 TO INVERTER INVS
D0314	125VDC BUS 2010 TO INVERTER INV6
D0315	125VDC BUS 2010 JUMPER BREAKER

- NOTES
- FOR STANDARD NOTES, SYMBOLS SEE DRAWING 25203-3002B
  - MOTOR STARTER IS FURNISHED BY GE UNDER PO M-915
  - FOR LOAD CENTER CIRCUIT BREAKER SETTING SHEETS, SEE DRAWING 30107 SERIES
  - QUICK-DISCONNECT CONNECTOR FOR ALTERNATE POWER FEED DURING BREAKER MAINTENANCE.

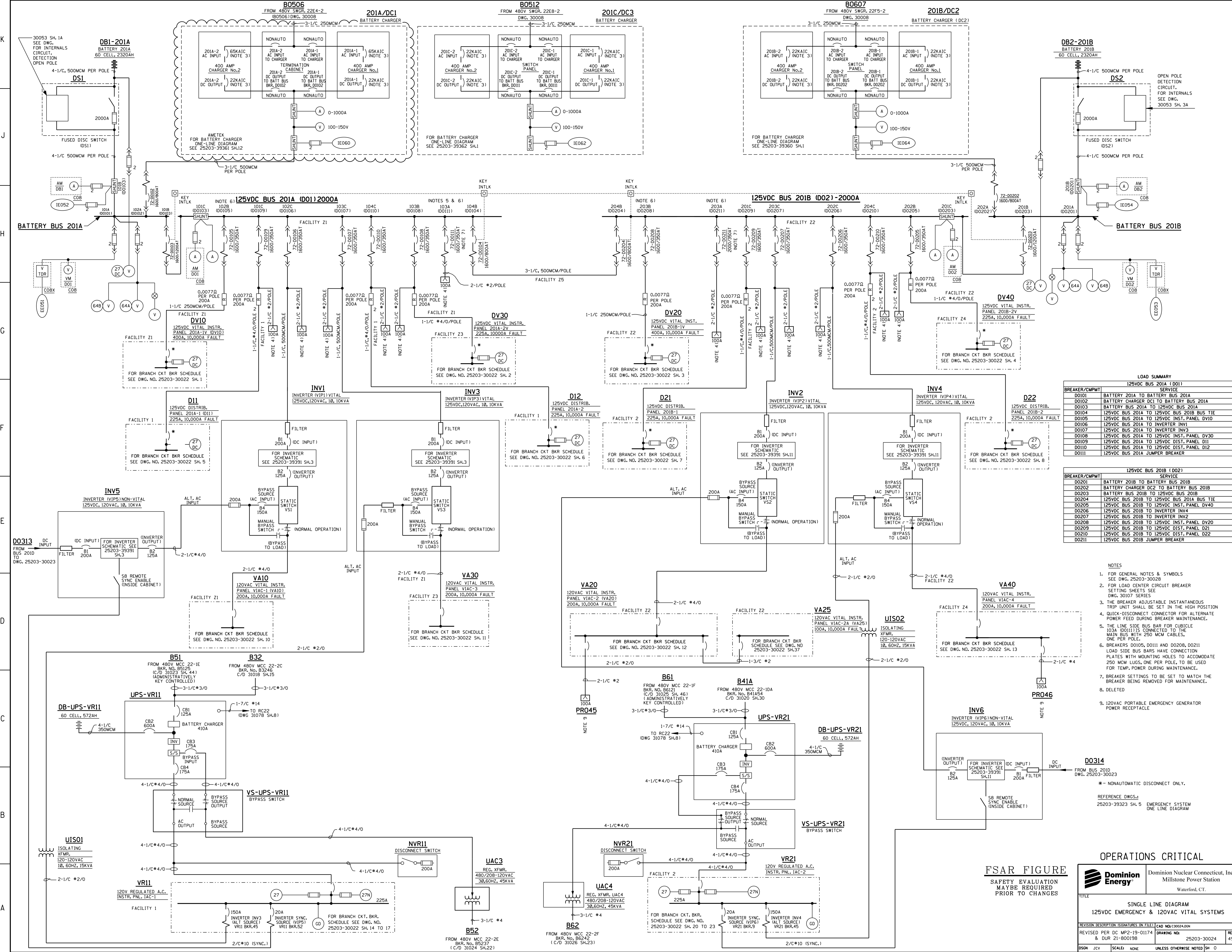
OPERATIONS CRITICAL

		<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station Waterford, CT.	
TITLE: MILLSTONE POWER STATION UNIT NO. 2 SINGLE LINE DIAGRAM 125VDC SYSTEM - TURBINE BATTERY			
REVISION DESCRIPTION: [blank] REVISED PER DC MP2-14-01007 & DUR 14-00101	SIGNATURES ON FILE: [blank]	CAD NO: [blank]	REV 19
DSGM JSJ	SCALE: NONE	UNLESS OTHERWISE NOTED SH 0	25203-30023

FSAR FIGURE  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

FOR BRANCH CKT BKR SCHEDULE  
SEE DWG. NO. 25203-30022 SH, 9

\* NONAUTOMATIC  
DISCONNECT ONLY



**LOAD SUMMARY**

125VDC BUS 201A (001)	
BREAKER/CMPWT	DESCRIPTION
D010	BATTERY 201A TO BATTERY BUS 201A
D012	BATTERY CHARGER DC1 TO BATTERY BUS 201A
D013	BATTERY BUS 201A TO 125VDC BUS 201A
D014	125VDC BUS 201A TO 125VDC BUS 201B TIE
D015	125VDC BUS 201A TO 125VDC INST. PANEL DV10
D016	125VDC BUS 201A TO INVERTER INV1
D017	125VDC BUS 201A TO INVERTER INV3
D018	125VDC BUS 201A TO 125VDC INST. PANEL DV30
D019	125VDC BUS 201A TO 125VDC DIST. PANEL D11
D020	125VDC BUS 201A TO 125VDC DIST. PANEL D12
D021	125VDC BUS 201A JUMPER BREAKER

**LOAD SUMMARY**

125VDC BUS 201B (002)	
BREAKER/CMPWT	DESCRIPTION
D020	BATTERY 201B TO BATTERY BUS 201B
D022	BATTERY CHARGER DC2 TO BATTERY BUS 201B
D023	BATTERY BUS 201B TO 125VDC BUS 201B
D024	125VDC BUS 201B TO 125VDC BUS 201A TIE
D025	125VDC BUS 201B TO 125VDC INST. PANEL DV40
D026	125VDC BUS 201B TO INVERTER INV4
D027	125VDC BUS 201B TO INVERTER INV2
D028	125VDC BUS 201B TO 125VDC INST. PANEL DV20
D029	125VDC BUS 201B TO 125VDC DIST. PANEL D21
D0210	125VDC BUS 201B TO 125VDC DIST. PANEL D22
D0211	125VDC BUS 201B JUMPER BREAKER

- NOTES**
- FOR GENERAL NOTES & SYMBOLS SEE DWG. 25203-30028
  - FOR LOAD CENTER CIRCUIT BREAKER SETTING SHEETS SEE DWG. 30107 SERIES
  - THE BREAKER ADJUSTABLE INSTANTANEOUS TRIP UNIT SHALL BE SET IN THE HIGH POSITION
  - QUICK-DISCONNECT CONNECTOR FOR ALTERNATE POWER FEED DURING BREAKER MAINTENANCE.
  - THE LINE SIDE BUS BAR FOR CUBICLE 103A (D0111) IS CONNECTED TO THE MAIN BUS WITH 250 MCM CABLES, ONE PER POLE.
  - BREAKERS D0105, D0111 AND D0208, D0211 LOAD SIDE BUS BARS HAVE CONNECTION PLATES WITH MOUNTING HOLES TO ACCOMMODATE 250 MCM LUGS, ONE PER POLE, TO BE USED FOR TEMP. POWER DURING MAINTENANCE.
  - BREAKER SETTINGS TO BE SET TO MATCH THE BREAKER BEING REMOVED FOR MAINTENANCE.
  - DELETED
  - 120VAC PORTABLE EMERGENCY GENERATOR POWER RECEPTACLE

**OPERATIONS CRITICAL**

**FSAR FIGURE**  
SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

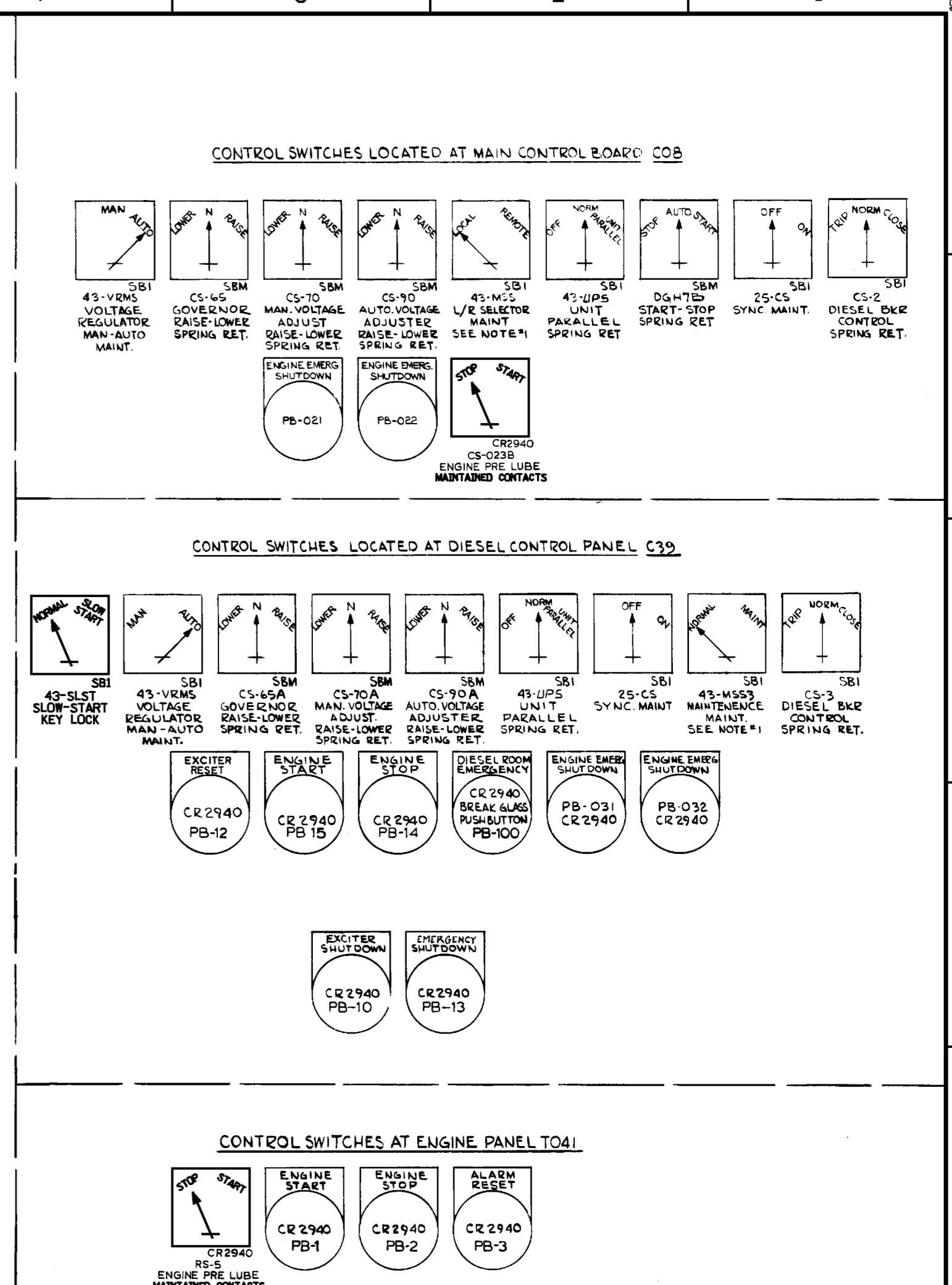
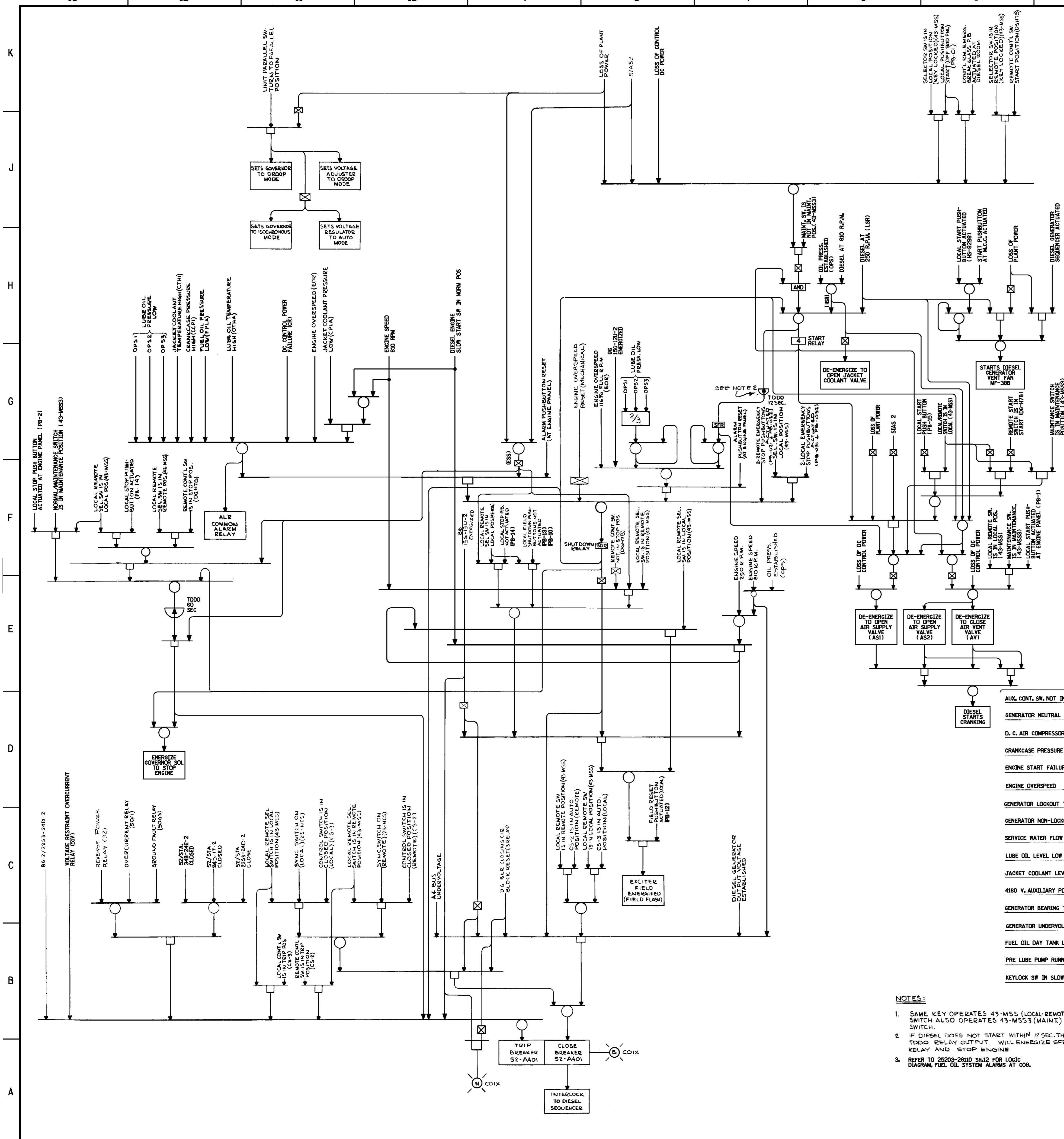
**Dominion Energy**  
Dominion Nuclear Connecticut, Inc.  
Millstone Power Station  
Waterford, CT.

**SINGLE LINE DIAGRAM**  
125VDC EMERGENCY & 120VAC VITAL SYSTEMS

REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C30024-000N  
REVISED PER DC MP2-19-01174  
& DUR 21-800198 DRAWING NO: 25203-30024 REV 49

DSGN JCV SCALE: NONE UNLESS OTHERWISE NOTED SH 0





- NOTES:**
- SAME KEY OPERATES 43-M55 (LOCAL-REMOTE) SWITCH ALSO OPERATES 43-M553 (MAINT.) SWITCH.
  - IF DIESEL DOES NOT START WITHIN 1/2 SEC. THE TOOD RELAY OUTPUT WILL ENERGIZE SFE RELAY AND STOP ENGINE.
  - REFER TO 25203-2810 SH.2 FOR LOGIC DIAGRAM, FUEL OIL SYSTEM ALARMS AT COB.

**FSAR FIGURE**

**SAFETY EVALUATION**  
MAY BE REQUIRED PRIOR TO CHANGES

NO.	DATE	REVISIONS	BY	CHK.	APP.	APP.
13	5-8-96	INCORP DCM DM2-00-0027-06	DLW	WBZ	-	ASK
12	7-21-05	INCORP DCM DM2-00-0287-05	SMC	DLW	-	ASK
11	3-13-03	INCORP DCM DM2-00-0508-02	SMH	DLW	N/A	DED
10	4-8-02	INCORP DCM DM2-00-0480-01	JSJ	DLW	N/A	RJY
9	10-10-01	INCORP'D DCM DM2-00-0885-99	TAM	RAH	MAG	GMO
8	2-7-00	INCORP. DCM DM2-00-0025-00	JSJ	WBZ	JPP	JPP
7	10-12-98	INCORP. DCM DM2-00-0356-97 01-0354-97, 01-0490-97	WBZ	MM	JPP	JPP

**CD**  
MINOR REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

**REVISIONS DURING CONSTRUCTION**

NO.	DATE	REVISIONS	BY	CHK.	APP.	APP.

**Domain Nuclear Connecticut, Inc.**  
Milestone Power Station

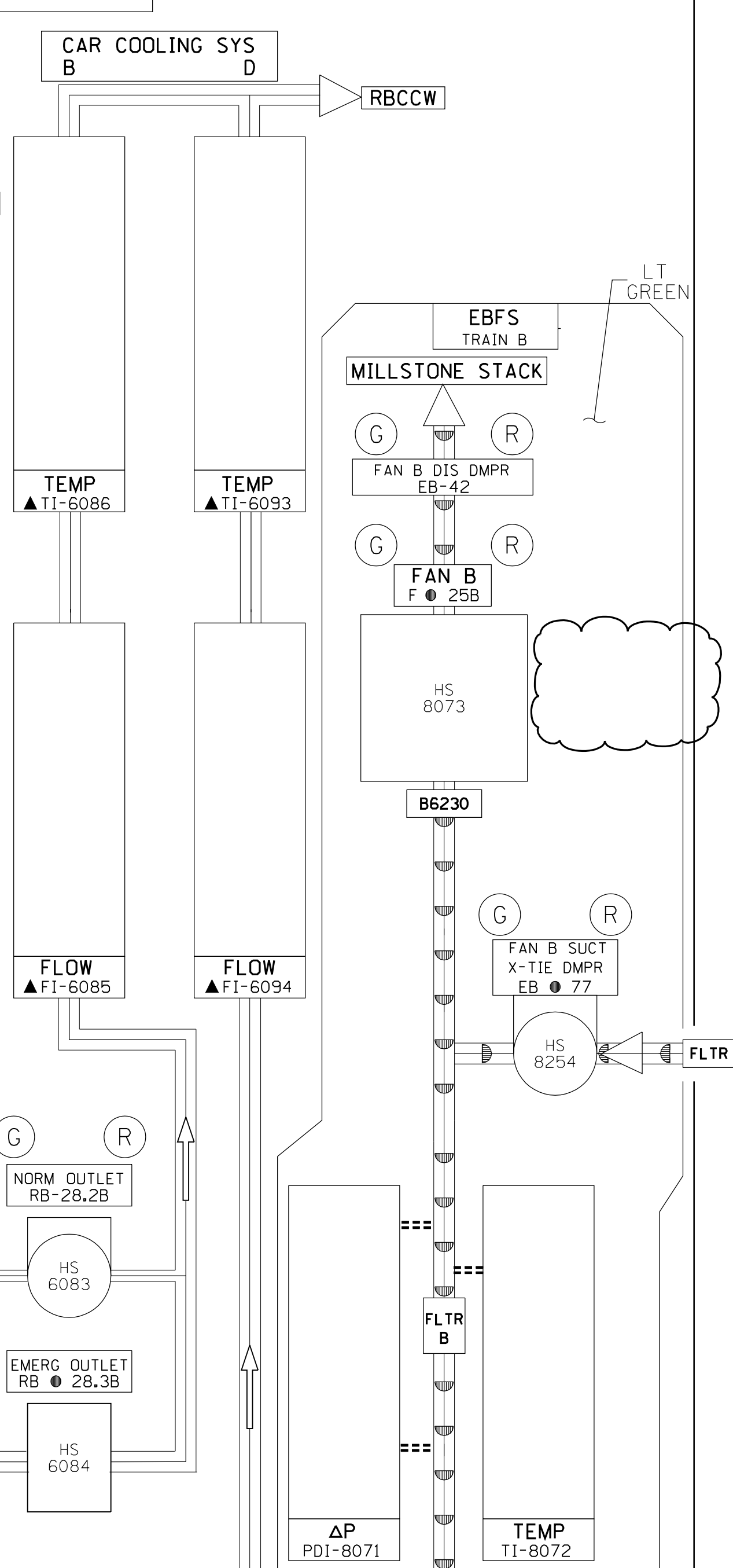
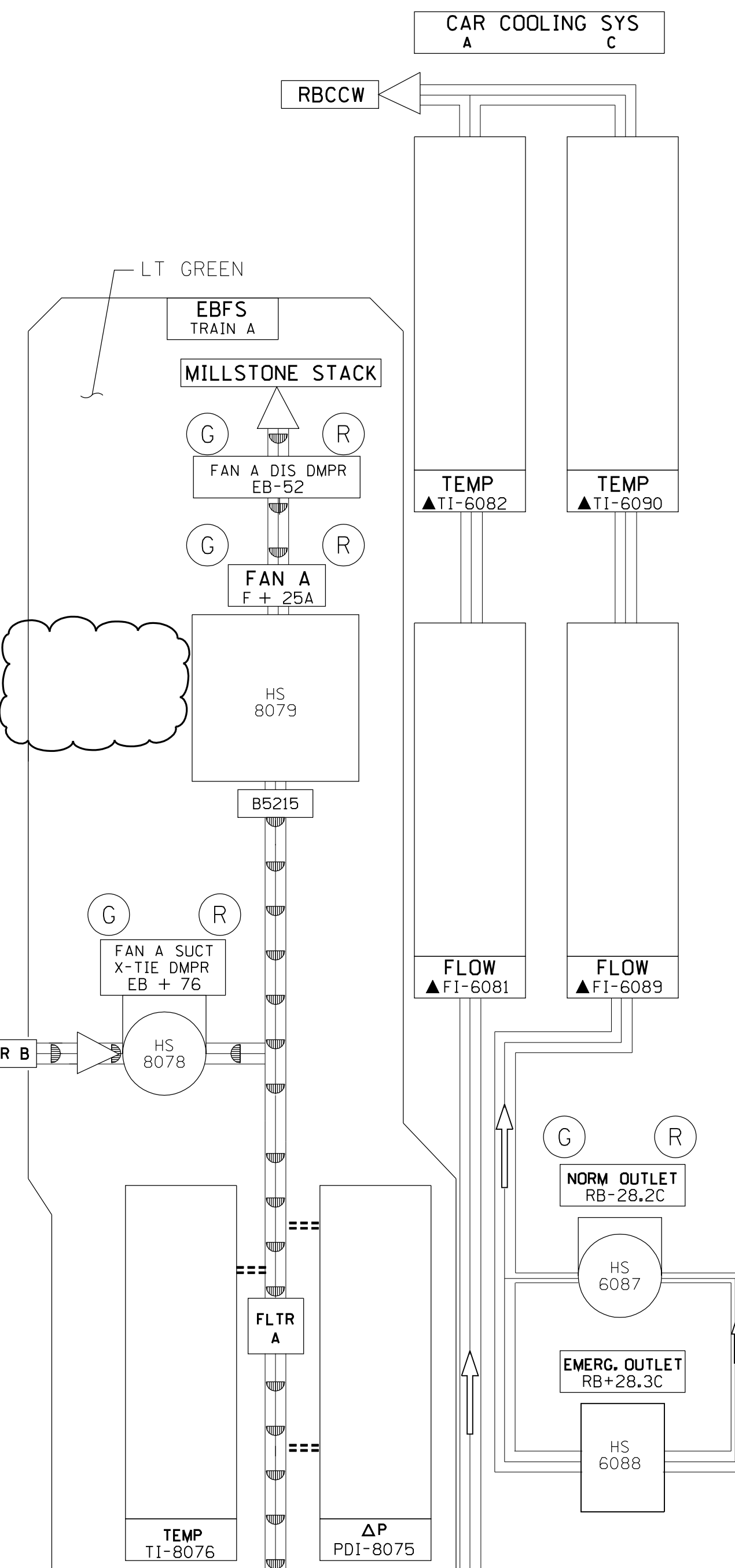
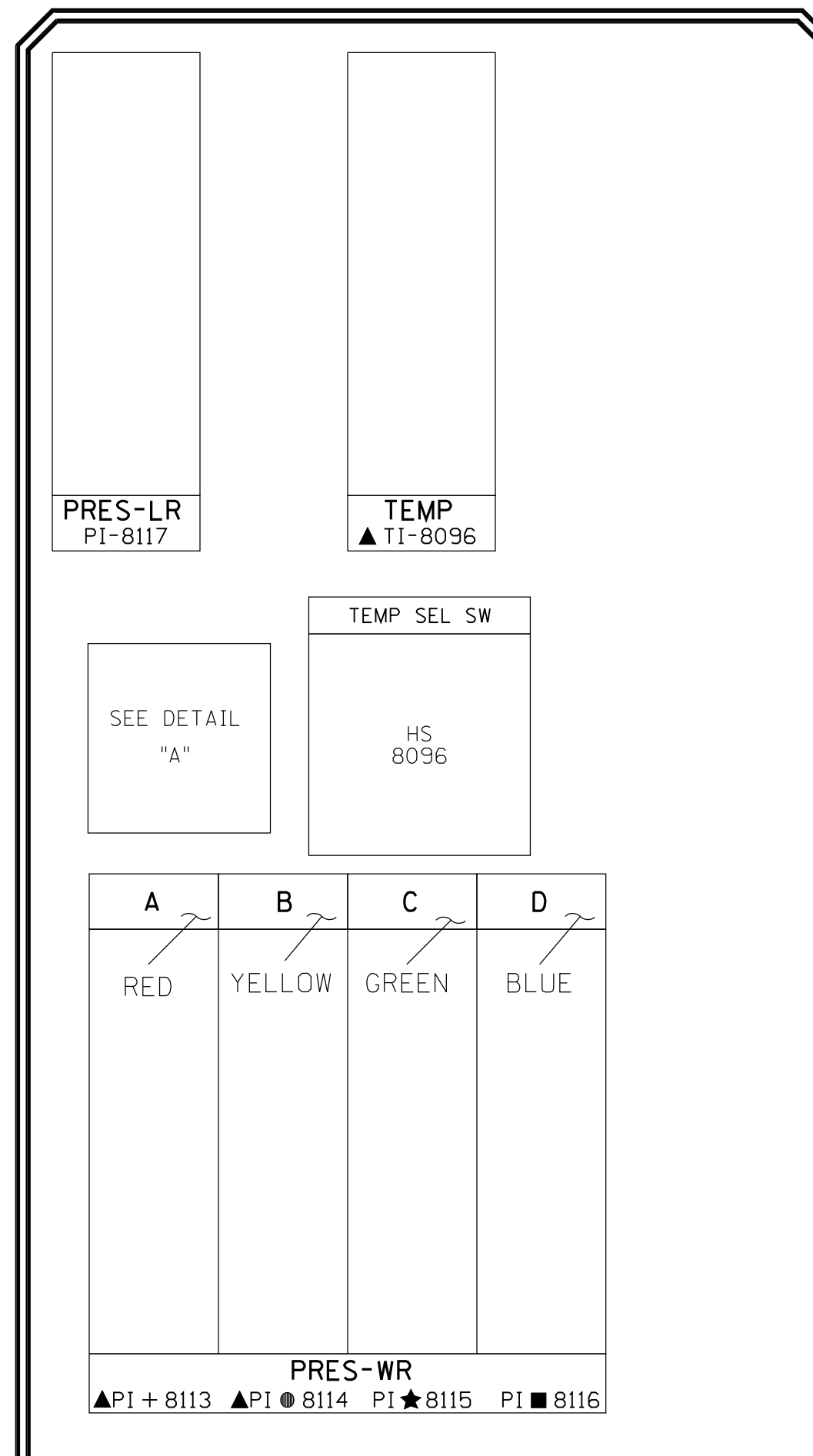
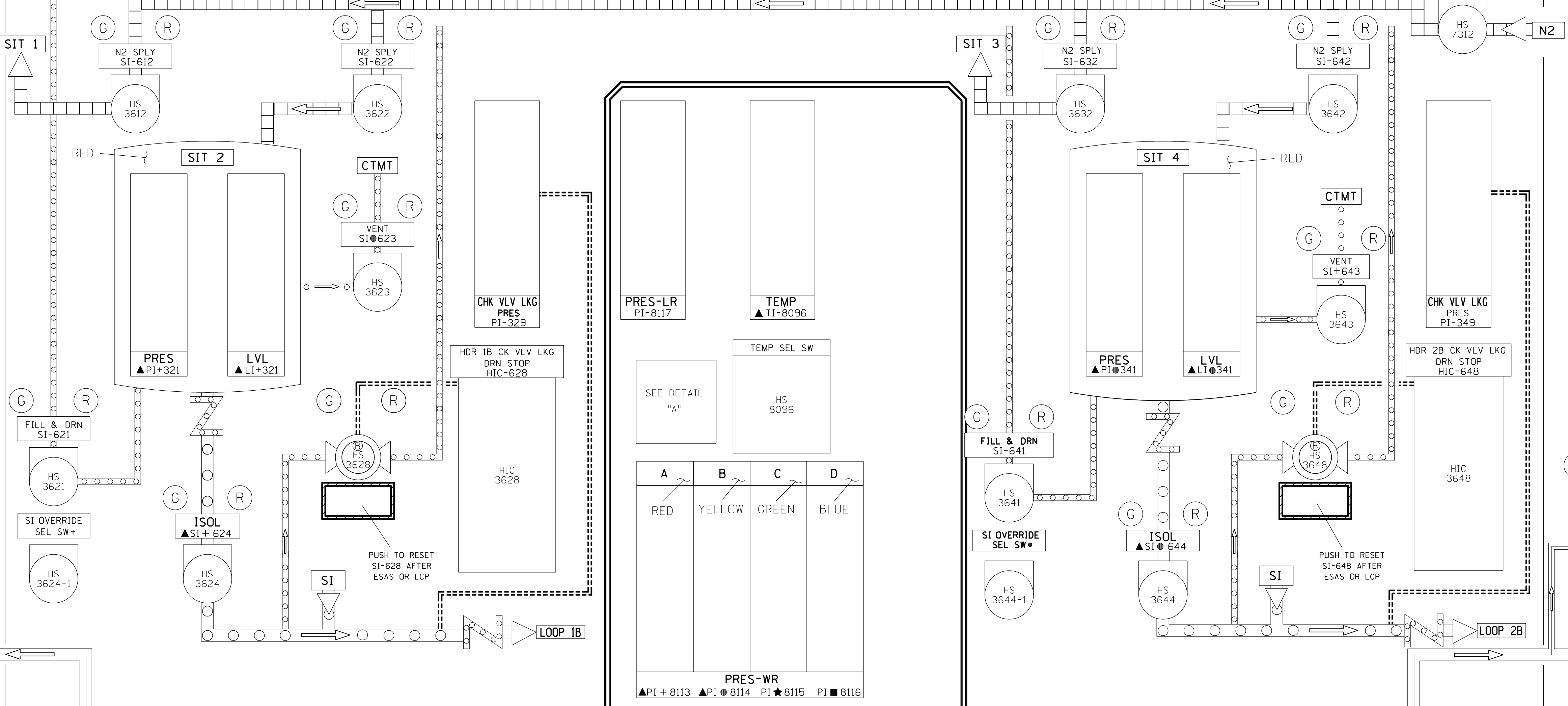
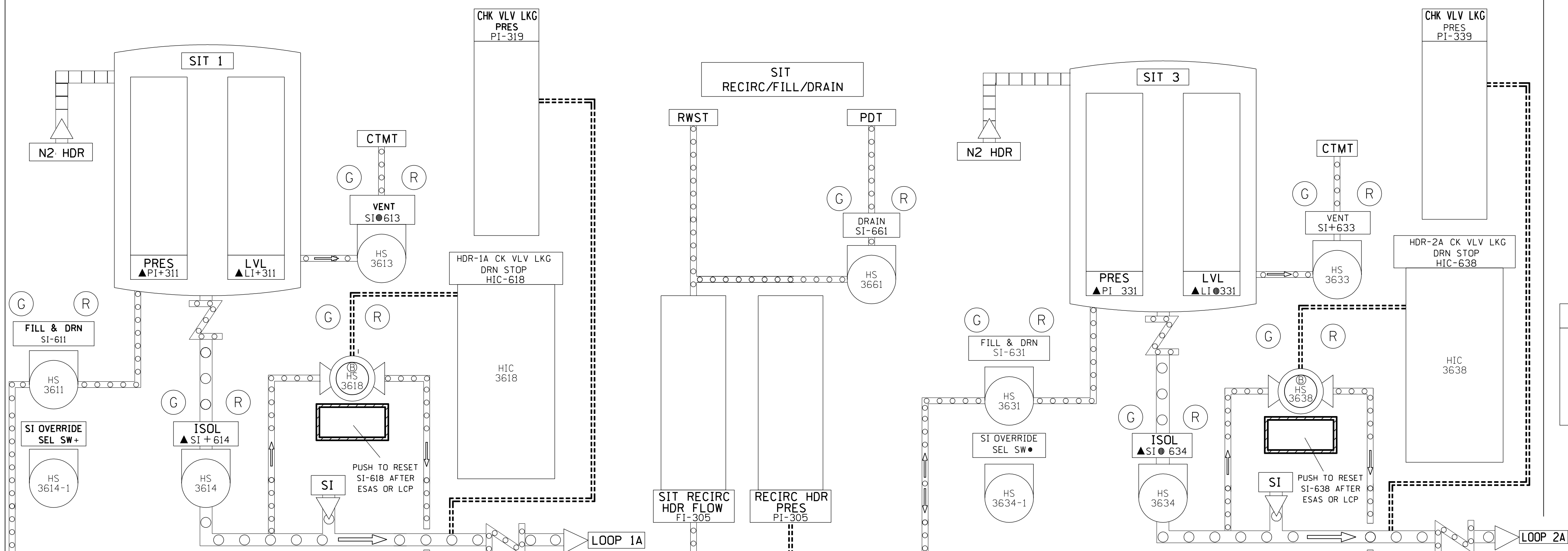
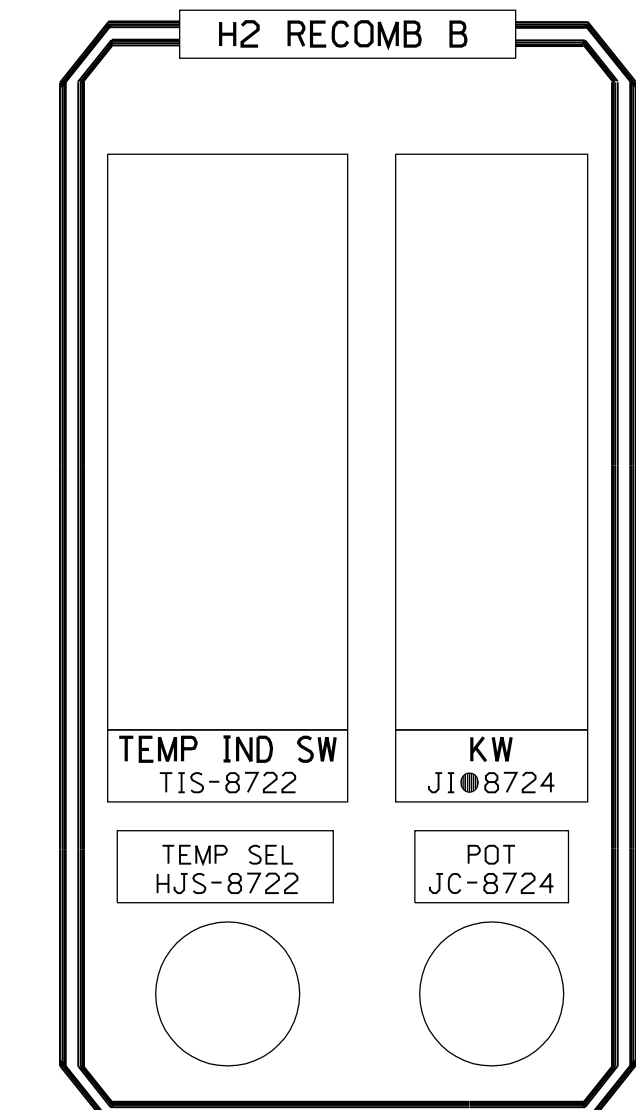
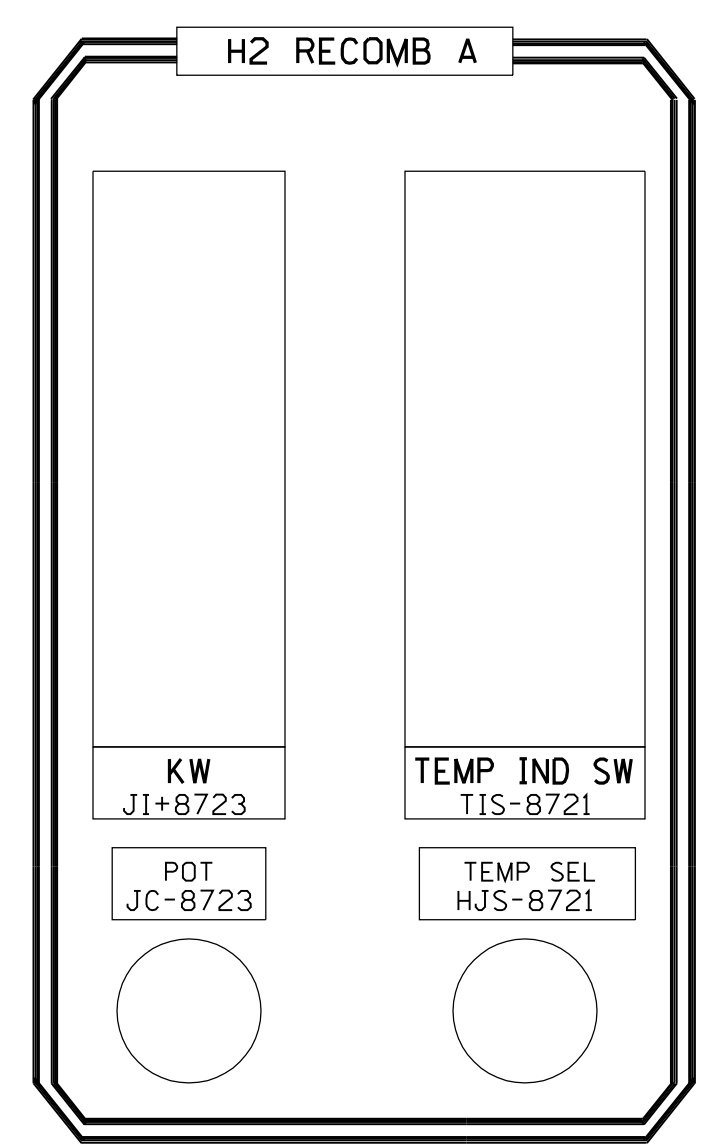
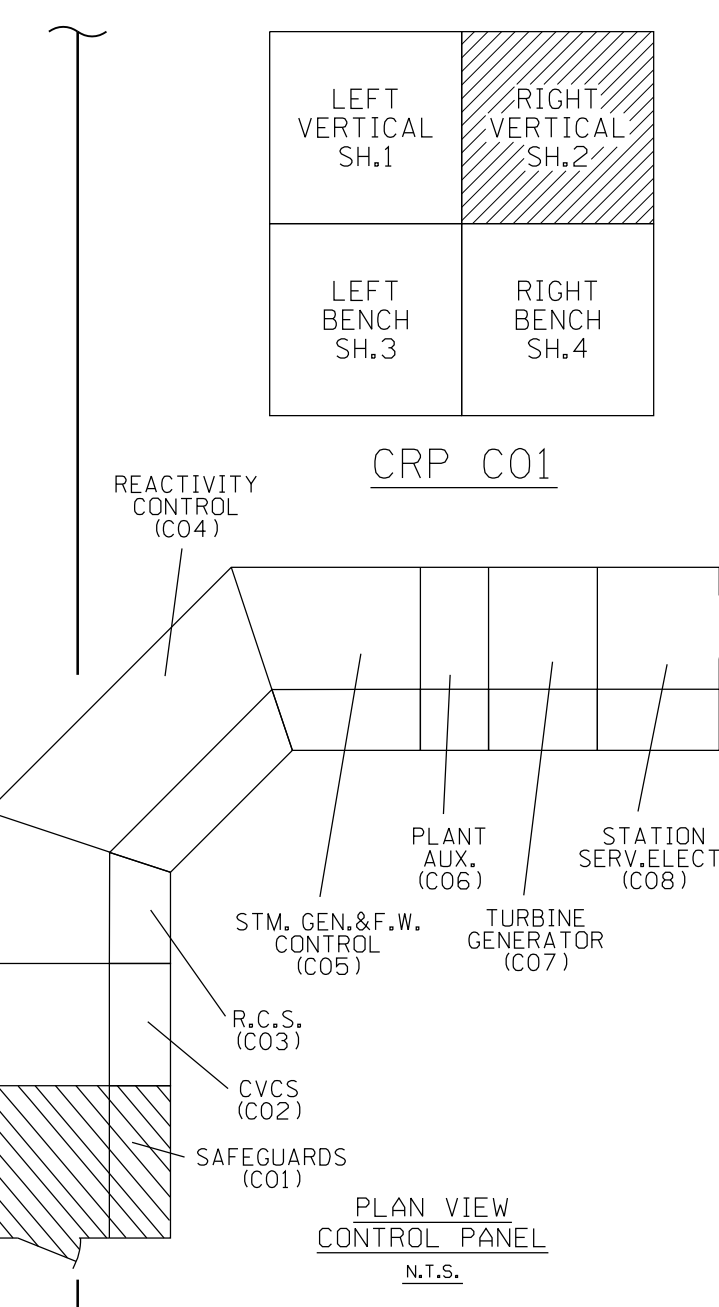
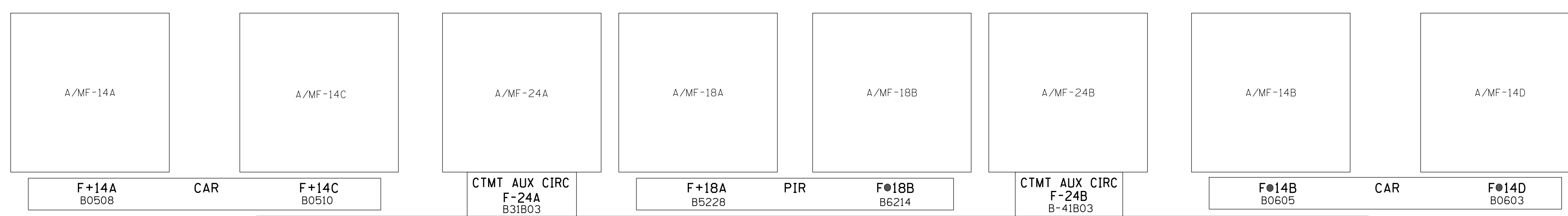
**Millstone Unit 2**  
LOGIC DIAGRAM  
DIESEL GENERATOR (7B) & DIESEL BKR. (A401) CONTROL  
WATERFORD, CT.

BY: JSJ  
DATE: 1-31-96  
SCALE: N/A  
DWG. NO.: 25203-30034 SH. 2





ANNUNCIATOR



MIMIC LEGEND table with line styles for GRAY, BLACK/YELLOW, RED, BLACK/WHITE, LT-BLUE, BLACK, PURPLE, and AQUA.

NOTES: 1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS. 2. LETTER SIZES AND DEVICE NUMBERS ARE NOT SHOWN TO SCALE. NAMEPLATE LEGEND: REFER TO SPECIFICATION SP-EE-261. Legend for symbols: black triangle, red dot, yellow dot, green dot, blue dot.

NAMEPLATE LINE SPACING table showing 1/8 inch spacing for LINE 1, LINE 2, and LINE 3.

TEMP. POSITIONS table listing locations #1 through #8: #1 RX CAVITY N.E., #2 RX CAVITY S.W., #3 S/G NO.1 CAVITY, #4 S/G NO.2 CAVITY, #5 38' ELEV. S.E. WALL, #6 38' ELEV. S.W. WALL, #7 39' ELEV. CTMT, DOME, #8 RX CAVITY N.W.

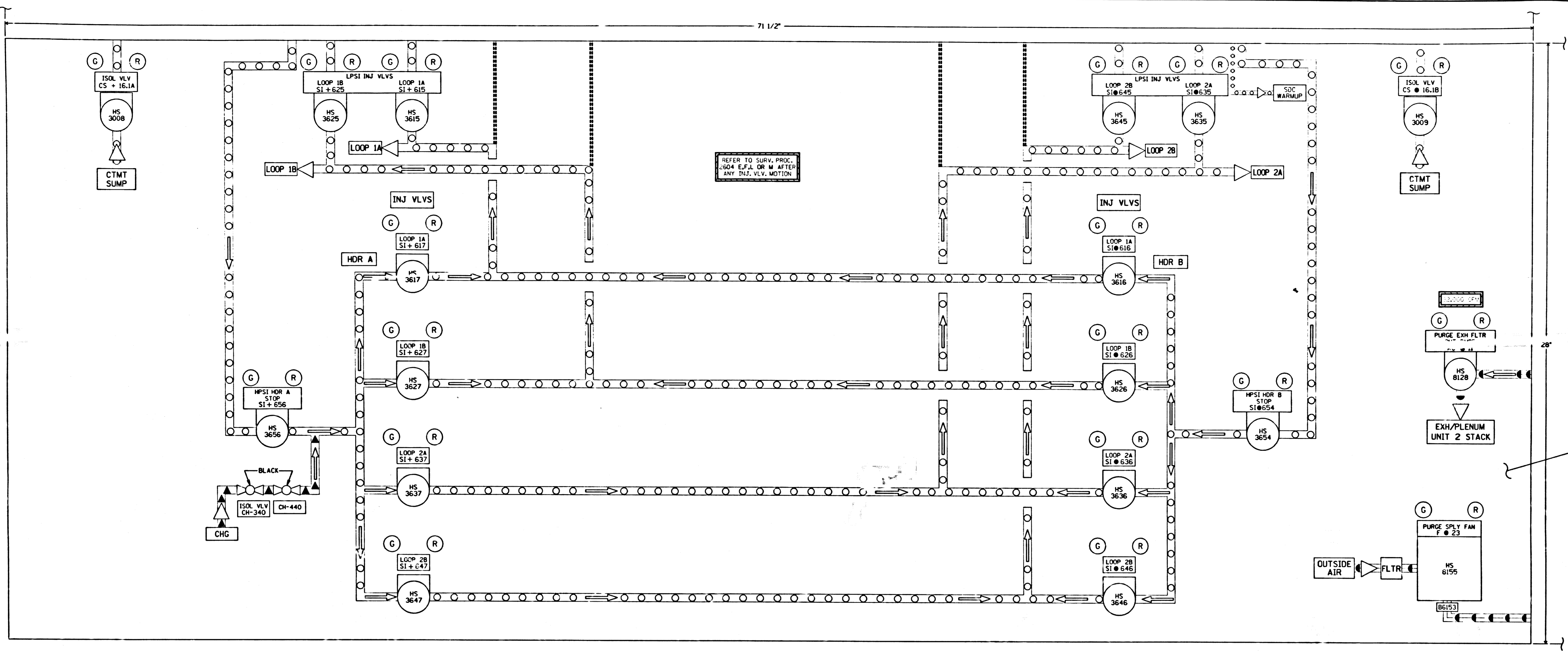
THIS DWG. SUPERCEDES PART OF FOLLOWING DWGS. 25203-29002, 25203-29037, SH.45, 25203-29037, SH.50A TO 50K

FSAR FIGURE SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

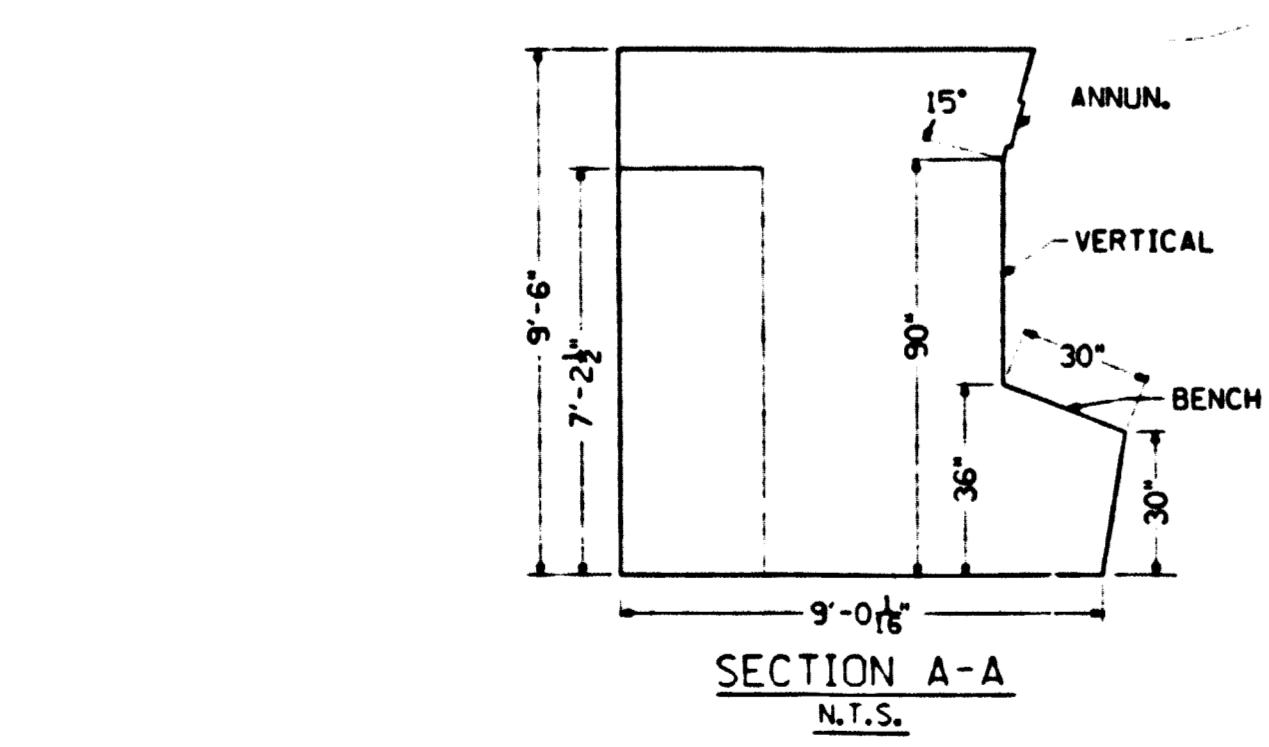
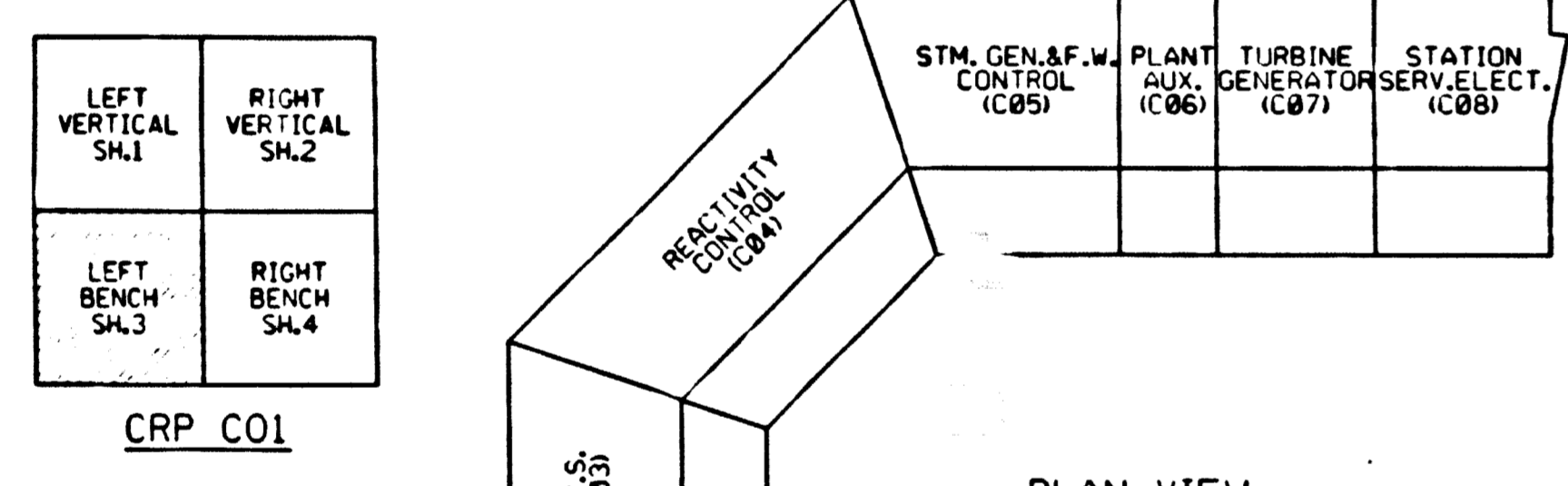
Project information block including Dominion logo, project name (MILLSTONE UNIT 2 COI, CRP, FRONT VIEW ARRANGEMENT SAFEGUARDS SECTION), revision history, and drawing number (25203-30208).



13 12 11 10 9 8 7 6 5 4 3 2 1



CRP. CO1 (LEFT BENCH)



NAMEPLATE LINE SPACING

SEE DWG	AS REQ'D
1/8" SPACE	LINE 1
1/8" SPACE	LINE 2
1/8" SPACE	LINE 3
1/8" SPACE	SPACE

MIMIC LEGEND

RED	=====
BLACK/WHITE	=====
BLACK/YELLOW	=====
LT-BLUE	=====

- NOTES
- NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
  - + - INDICATES AN 1/8" RED DOT (TRAIN-A), EXCEPT FOR CAUTION LABELS  
 • - INDICATES AN 1/8" YELLOW DOT (TRAIN-B)  
 • - INDICATES AN 1/8" BLACK DOT.
  - LETTER SIZES AND DEVICE NUMBERS ARE NOT SHOWN TO SCALE.

FSAR FIGURE

SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

CAD  
 WHEN REVISIONS TO THIS DOCUMENT ARE MADE, REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

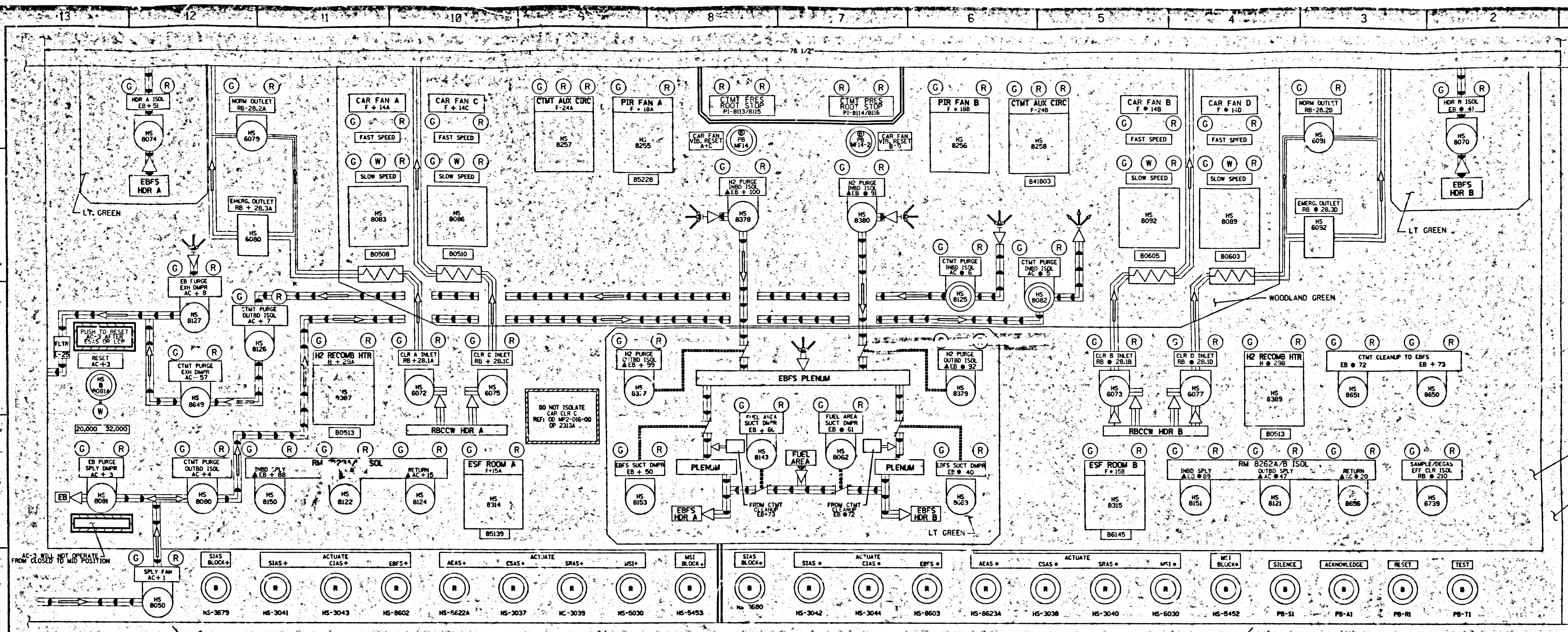
5	12-72	INCORP. DCN DM2-00-0204-03	JCV	PL	PL	PL
4	12-00	INCORP. DCN DM2-00-0025-00	USJ	WBZ	JPP	JPP
3	11-9	INCORP. DCN DM2-S-0403-95	JMM	JMM	JPP	JPP
2	11-1	AS BUILT PER DCR-M2-S-1381-90	WBL	MEL	JTK	LJC
1	11-26	AS BUILT PER DSR-M2-S-302-88	TAS	DJK	LJC	LJC

Dominion Nuclear Connecticut Inc.			
MILLSTONE UNIT 2			
CO1, CRP, FRONT VIEW ARRANGEMENT SAFEGUARDS SECTION WATERFORD, CONNECTICUT			
T.A. SWIFT	MGR	CHK	APP
7/3/97	11-24-87	11-24-87	11-24-87
N.T.S. 25203-30208, SH.3 OF 4			

THIS DWG. SUPERCEDES PART OF FOLLOWING DWGS.  
 25203-28002  
 25203-29097, SH.45  
 25203-29097, SH.50A TO 50K

NON Q.A.

13 12 11 10 9 8 7 6 5 4 3 2 1



HINGED COVERS OVER ALL PB'S  
CRP, CO1 (RIGHT BENCH)

**MIMIC LEGEND**

BLACK	=====
BLACK/YELLOW	=====
LT-BLUE	=====
AQUA	=====
BLACK/WHITE	=====

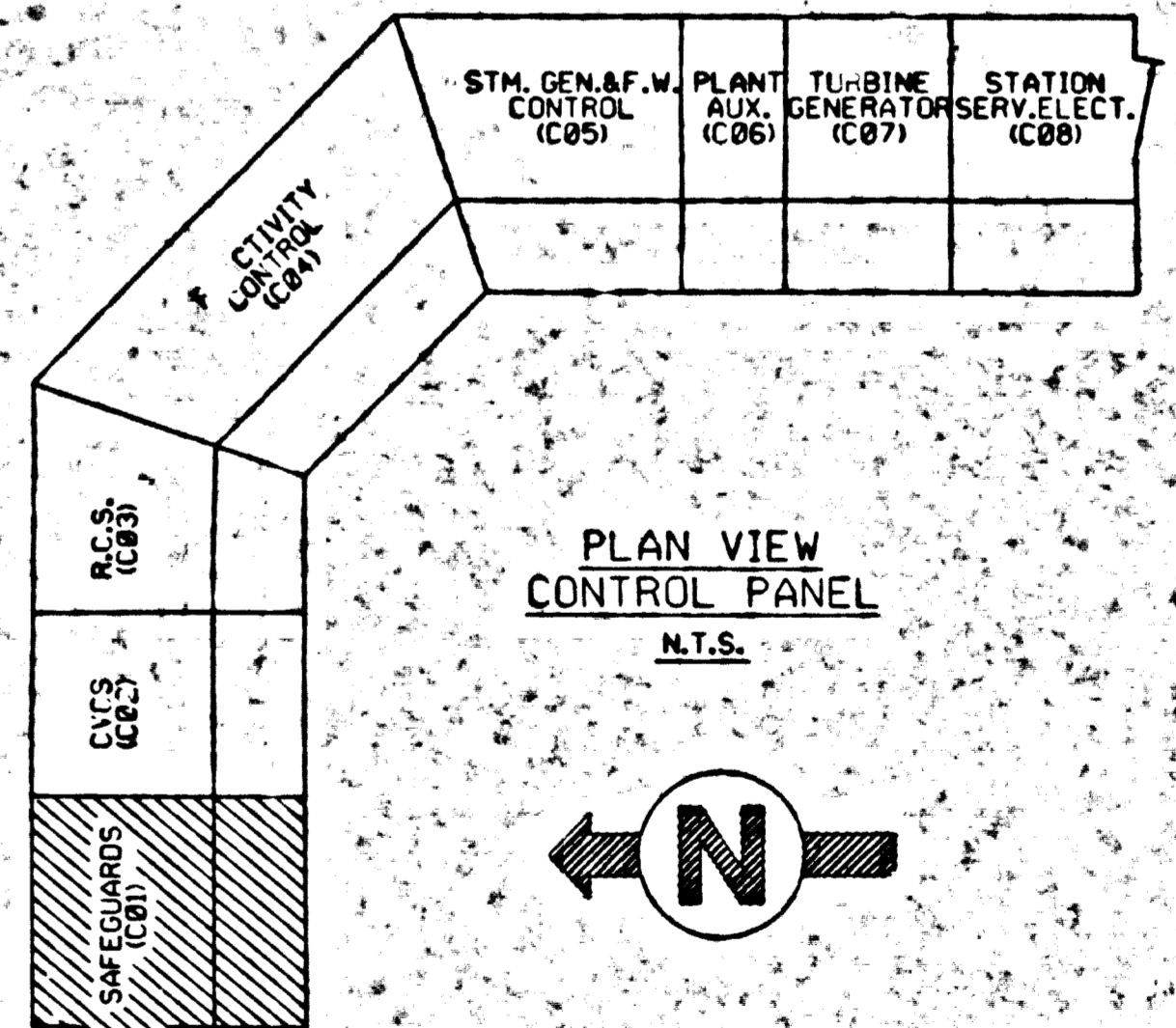
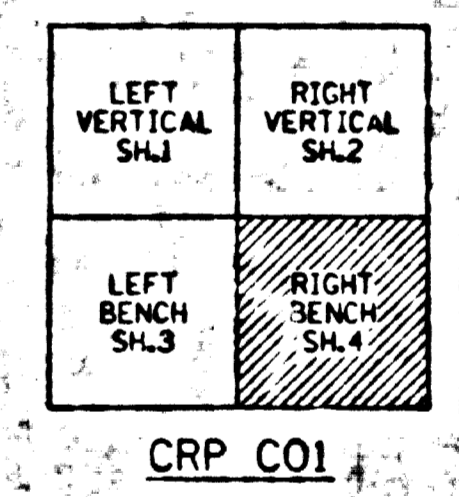
**NAMEPLATE LINE SPACING**

1/8" SPACE	AS REQ'D
LINE 1	
LINE 2	
LINE 3	
1/8" SPACE	

- NOTES**
1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
  2. B - INDICATES BLACK PUSHBUTTON / RING  
R - INDICATES RED PUSHBUTTON / RING
  3. LETTER SIZES AND DEVICE NUMBERS ARE NOT SHOWN TO SCALE.

**NAMEPLATE LEGEND**  
REFER TO SPECIFICATION SP-EE-261

- ▲ INDICATES A BLACK TRIANGLE R.G. L-97 INSTR.
- + INDICATES AN + RED DOT (ZI POWERED EQUIPMENT) EXCEPT FOR CAUTION LABELS
- INDICATES AN ● YELLOW DOT (Z2 POWERED EQUIPMENT)



**FSAR FIGURE**  
SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

**CAD**  
REVISIONS DURING CONSTRUCTION

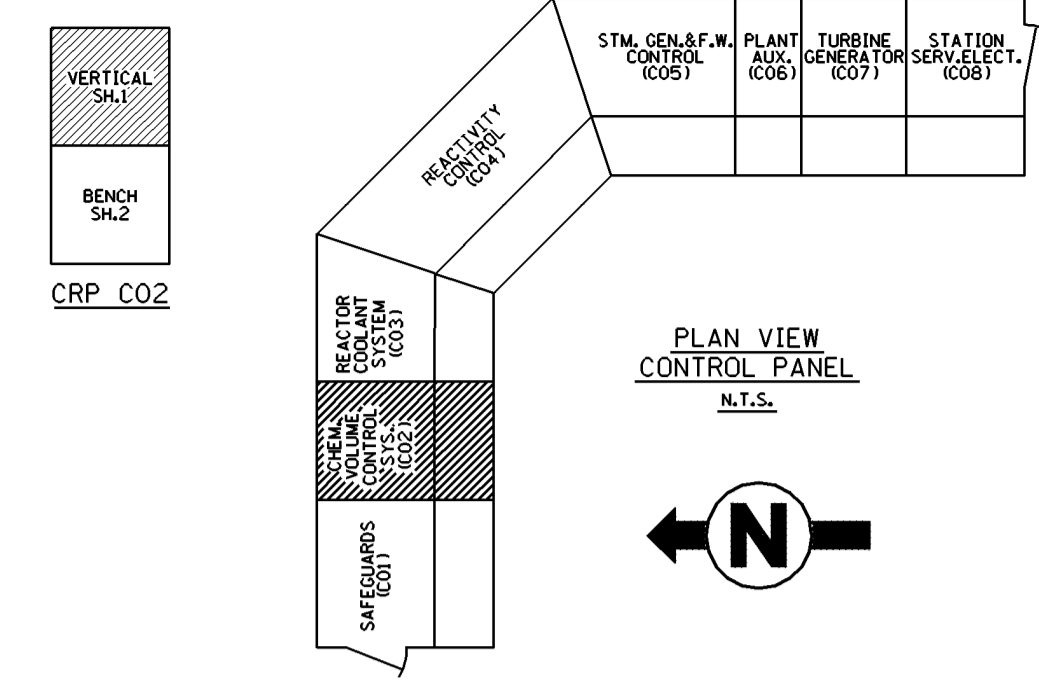
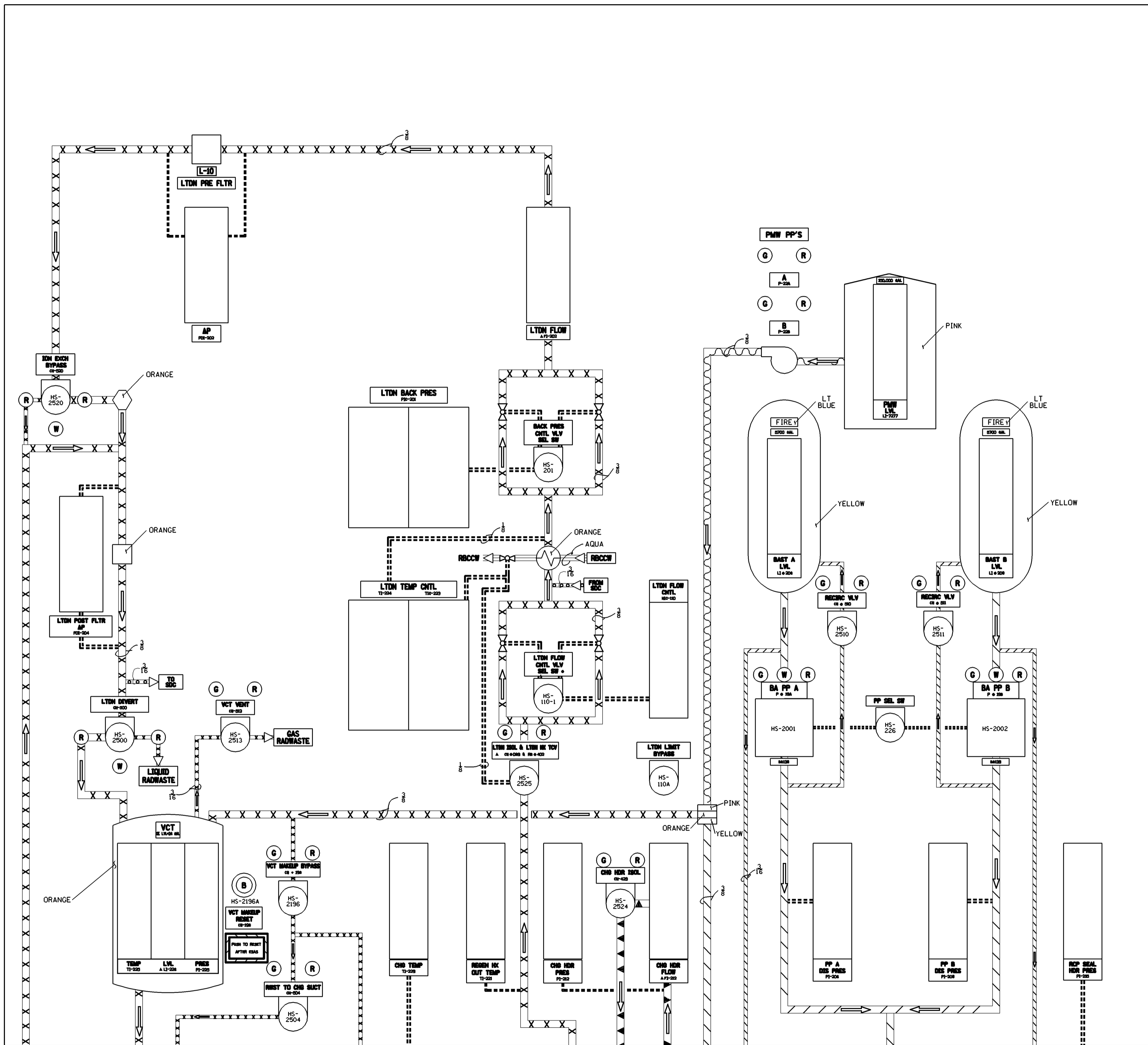
NO.	DATE	REVISIONS
1	11-24-87	INCORP DCM 02-00-0162-01

THIS DWG SUPERSEDES PART OF FOLLOWING D.W.G.'S:  
25203-26002  
25203-29097 SH.45  
25203-29097 SH.50A TO BOR

FOR: **NON O.A.**

**Dominion Nuclear Connecticut Inc.**  
MILLSTONE UNIT 2  
CO1, CRP, FRONT VIEW ARRANGEMENT SAFEGUARDS SECTION  
WATERFORD, CT.

DATE: 11-24-87  
SCALE: N.T.S.  
25203-30208 SH. 4 OF 4



<b>FSAR FIGURE</b>		<b>NON Q.A.</b>	
SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES			
<b>CAD</b>			
REVISIONS DURING CONSTRUCTION			
<small>THIS DWG SUPERCEDES 25203-29005, 29097 SH.36, 25203-29097 SHTS.41A,41B,41C, 41K,41L</small>			
<small>NOTE: MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.</small>			
<small>REVISIONS</small>			
<small>INCORP. DCN DM2-00-0395-04</small>			
<small>BY: T.A. SWIFT</small>			
<small>DATE: 3/25/88</small>			
<small>SCALE: NTS</small>			
<small>DWG. NO. 25203-30209 SH.1 OF 2</small>			
<small>Domination Nuclear Connecticut, Inc. Millstone Power Station</small>			
<small>MILLSTONE UNIT 2</small>			
<small>CO2, CRP, FRONT VIEW ARRANGEMENT CVCS</small>			
<small>WATERFORD, CONNECTICUT</small>			
<small>BY: T.A. SWIFT</small>			
<small>DATE: 3/25/88</small>			
<small>SCALE: NTS</small>			
<small>DWG. NO. 25203-30209 SH.1 OF 2</small>			

**MIMIC LEGEND**

GREEN	=====
AQUA	=====
ORANGE	=====
YELLOW	=====
PINK	=====
BLACK/WHITE	=====
BLACK/YELLOW	=====
RED	=====

**NOTES**

1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.

**NAMEPLATE LEGEND**

REFER TO SPECIFICATION SP-EE-261

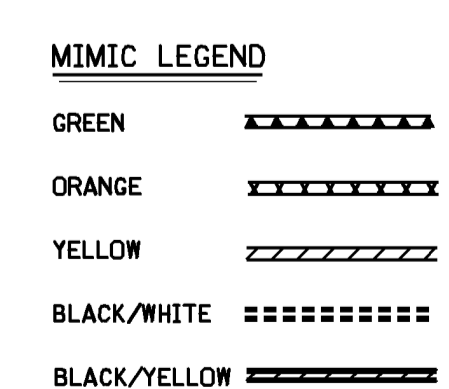
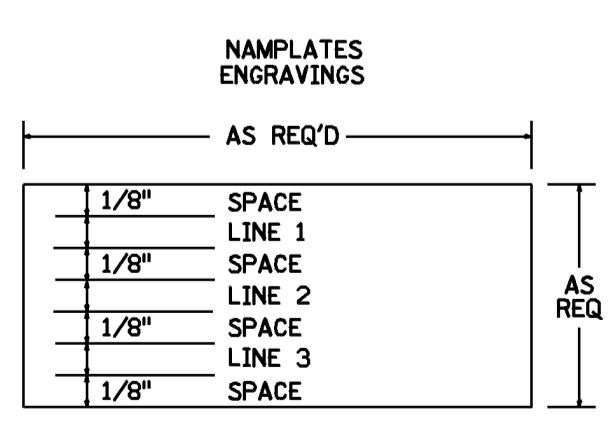
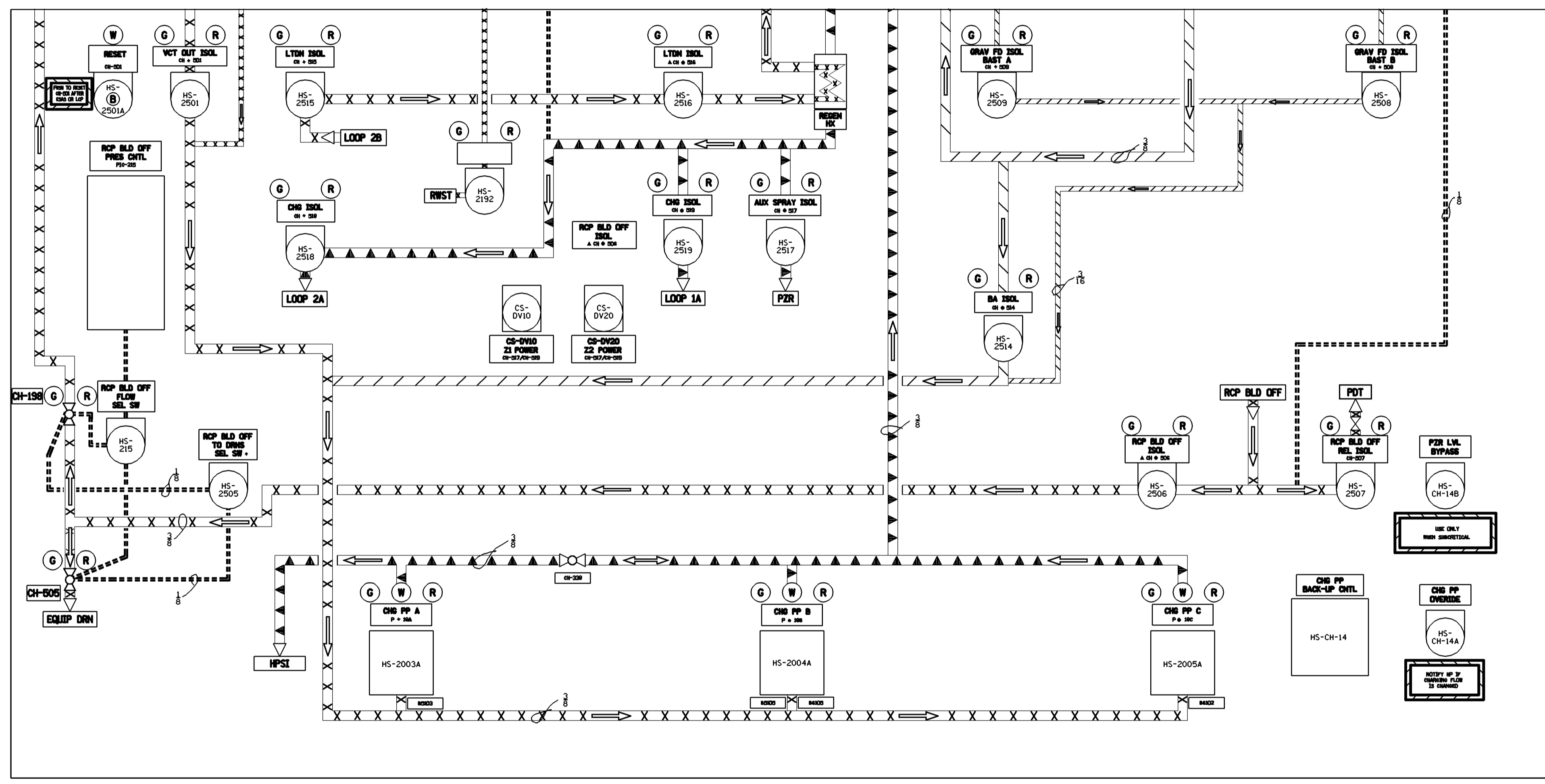
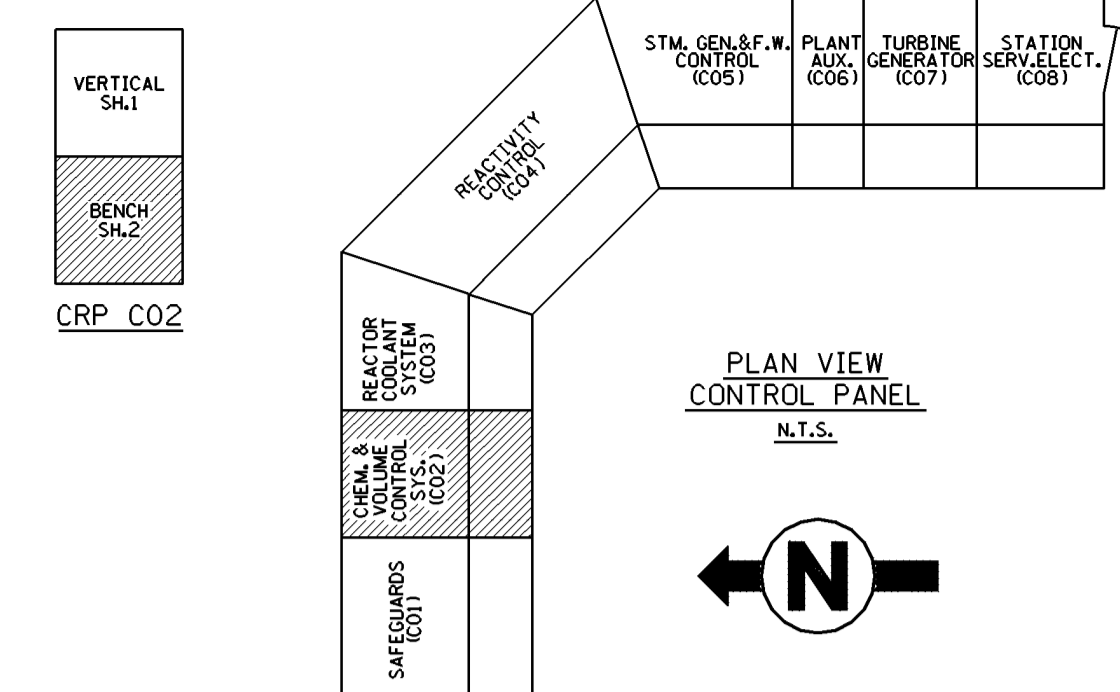
▲ = INDICATES A BLACK TRIANGLE R.G. 1.97 INSTR.

+ = INDICATES AN 1/8" RED DOT (Z1 POWERED EQUIPMENT) EXCEPT FOR CAUTION LABELS

● = INDICATES AN 1/8" YELLOW DOT (Z2 POWERED EQUIPMENT)

**NAMEPLATE ENGRAVING**

AS REQ'D	1/8" SPACE	LINE 1
AS REQ'D	1/8" SPACE	LINE 2
AS REQ'D	1/8" SPACE	LINE 3
AS REQ'D	1/8" SPACE	AS REQ'D



**NOTES**

1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.

**NAMEPLATE LEGEND**  
REFER TO SPECIFICATION SP-EE-261

- ▲ = INDICATES A BLACK TRIANGLE (R.G. 1.97 INSTR.)
- + = INDICATES AN 1/8" RED DOT (Z1 POWERED EQUIPMENT) EXCEPT FOR CAUTION LABELS
- = INDICATES AN 1/8" YELLOW DOT (Z2 POWERED EQUIPMENT)
- \* = INDICATES AN 1/8" BLACK DOT (Z5 POWERED SWING EQUIPMENT)

**FSAR FIGURE**

SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

NO.	DATE	REVISIONS	BY	CHK.	APP.	APP.
5	6-17-05	INCORP. DCN DM2-00-0138-04, DM2-03-0138-04	DLW	WBZ	-	ASK
4	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP
3	7-21-99	INCORP. DCN'S DM2-00-0532-98, DM2-00-1630-98	WBZ	JSJ	JPP	JPP
2	1-11-91	AS BUILT PER DCR-M2-S-1381-90	MEL	MGR	JTK	LJC
1	6/16/89	AS BUILT PER PDCR-2-27-88 & OSR-M2-S-492-89	WBZ	MEL	JTK	LJC

THIS DWG. SUPERCEDES 25203-28005, 29097 SH.36 25203-23097 SHTS. 41A, 41B, 41C, 41X, 41L.

**CAD**  
NOTE: MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION			
NO.	DATE	REVISIONS	BY

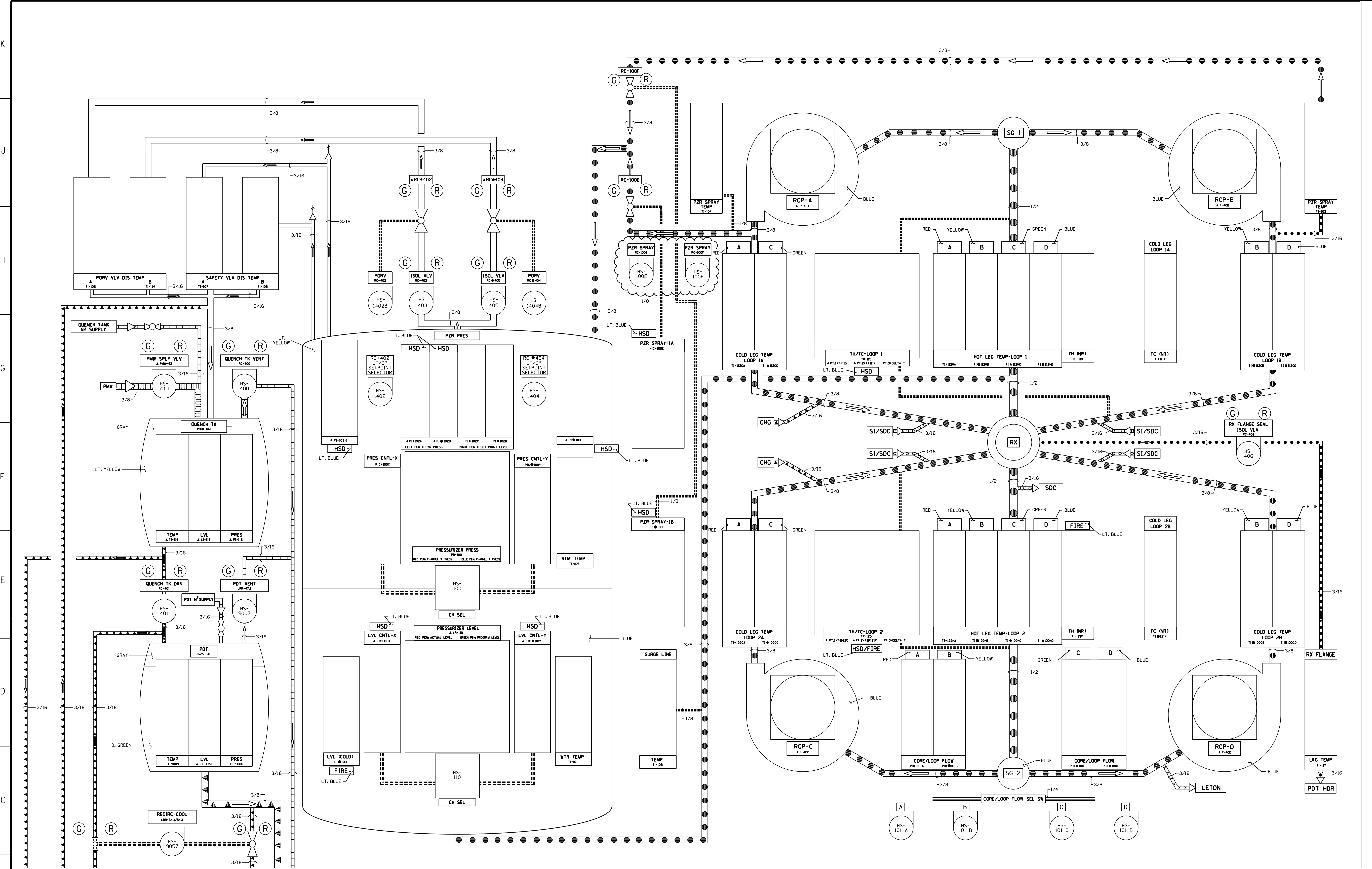
TITLE: MILLSTONE UNIT 2  
 CO2, CRP, FRONT VIEW ARRANGEMENT CVCS  
 WATERFORD, CONNECTICUT

BY: T.A. SWIFT  
 DATE: 3/25/88  
 SCALE: NTS

APP: MBR  
 DATE: 5-12-88  
 DWG. NO.: 25203-30209, SH. 2 OF 2

APP: LJC  
 DATE: 5-19-88

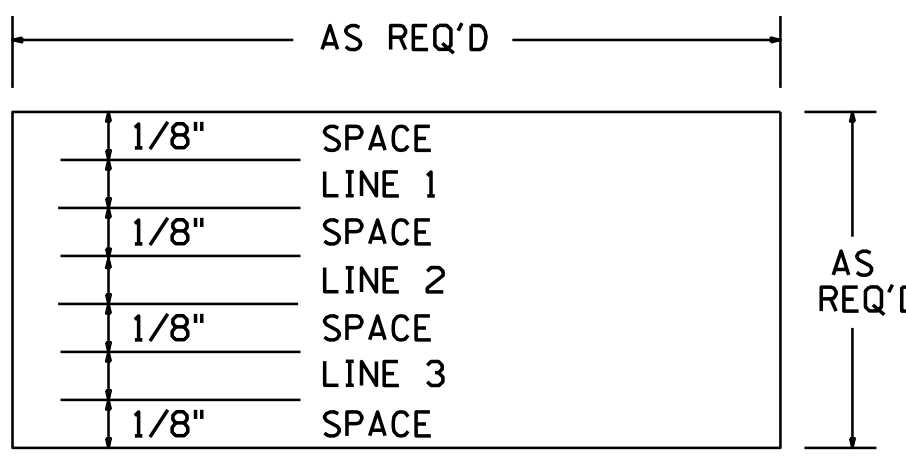
NON Q.A.



**MIMIC LEGEND**

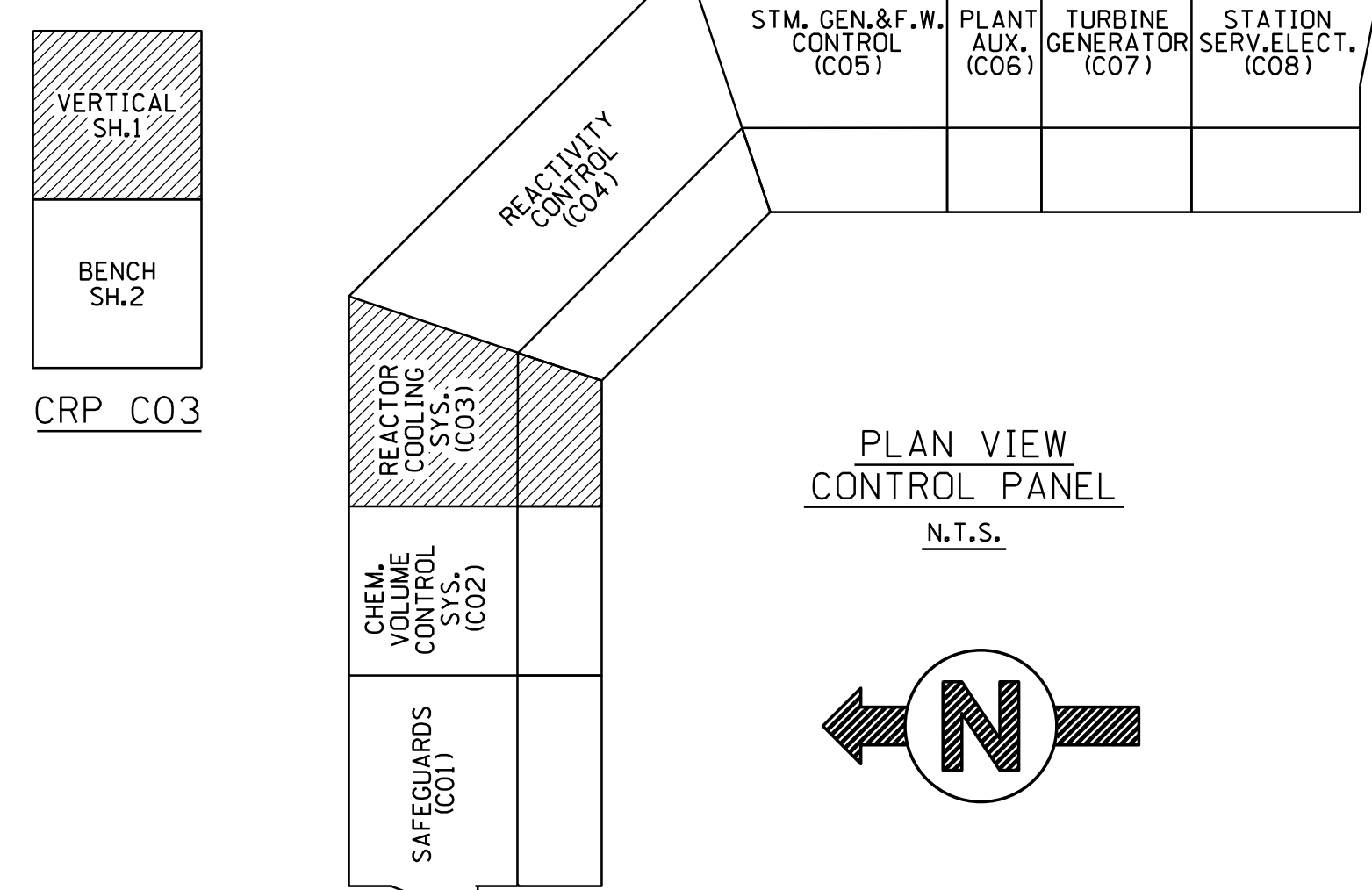
BLUE	██████████
GREEN	▬▬▬▬▬▬▬▬
IVORY	▬▬▬▬▬▬▬▬
GRAY	▬▬▬▬▬▬▬▬
BLACK	▬▬▬▬▬▬▬▬
ORANGE	▬▬▬▬▬▬▬▬
RED	▬▬▬▬▬▬▬▬
BLACK/WHITE	▬▬▬▬▬▬▬▬
PINK	▬▬▬▬▬▬▬▬

**NAMEPLATES ENGRAVING**



**NOTES**

- NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
- NAMEPLATE LEGEND**  
REFER TO SPECIFICATION SP-EE-261
- ▲ = INDICATES A BLACK TRIANGLE (R.G. 1.97 INSTR.)
  - + = INDICATES AN 1/8" RED DOT (ZI POWERED EQUIPMENT) EXCEPT FOR CAUTION LABELS
  - = INDICATES AN 1/8" YELLOW DOT (Z2 POWERED EQUIPMENT)
  - ★ = INDICATES AN 1/8" GREEN DOT (VA30 SUPPLIED)
  - = INDICATES AN 1/8" BLUE DOT (VA40 SUPPLIED)
  - \* = INDICATES AN 1/8" BLACK DOT (Z5 POWERED SWING EQUIPMENT)

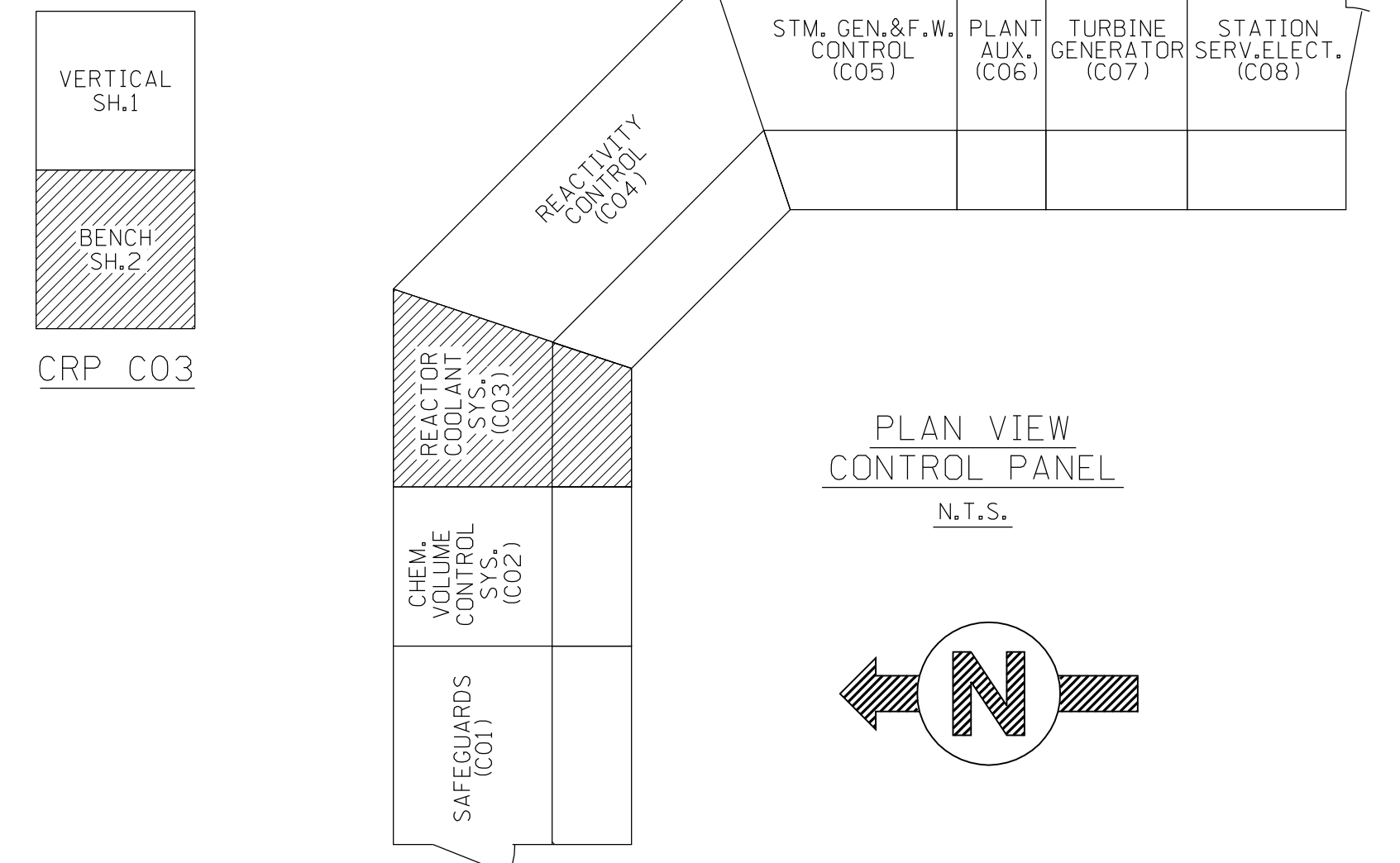
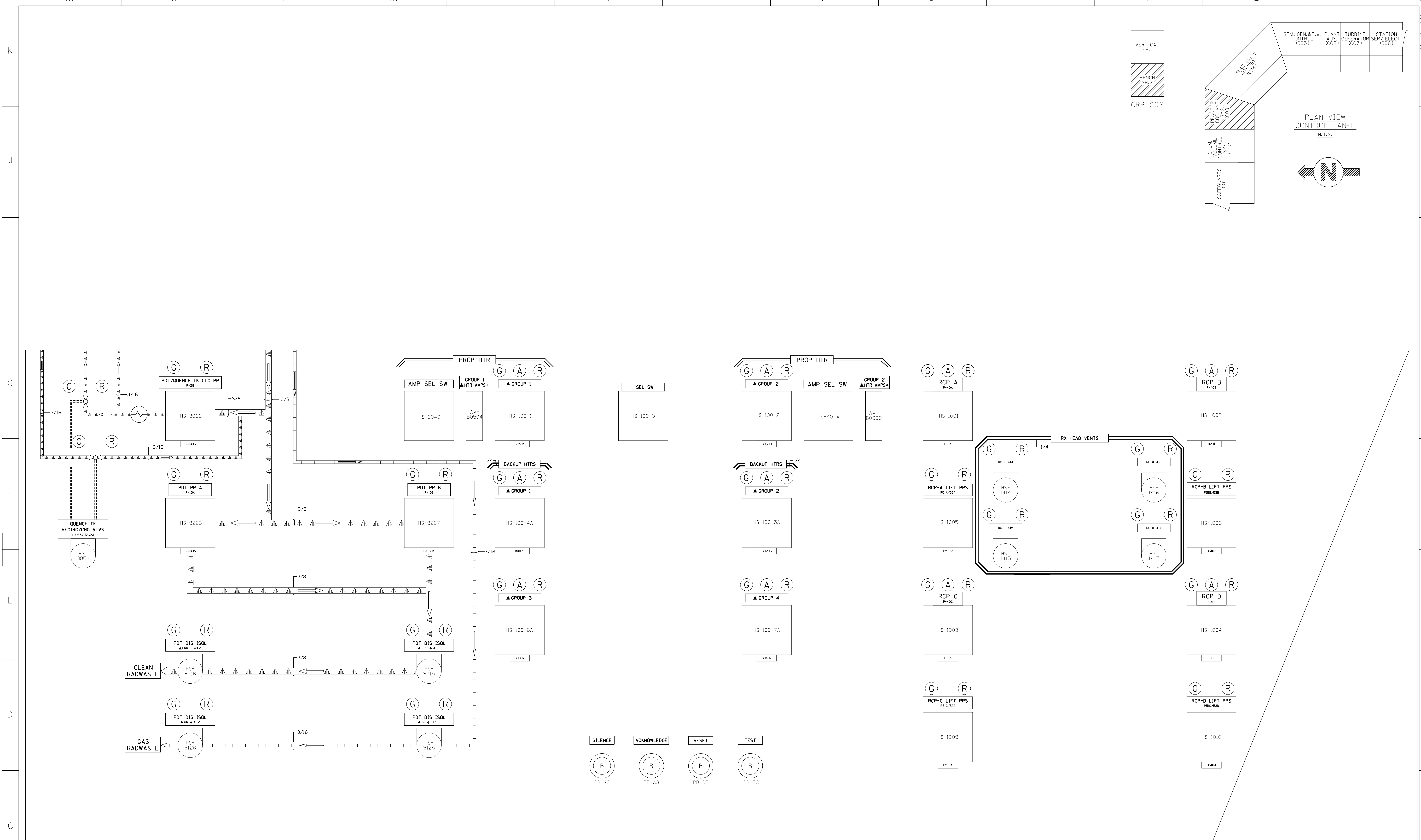


**FSAR FIGURE**

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

	Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
	TITLE: MILLSTONE POWER STATION UNIT 2 CO3, CRP, FRONT VIEW ARRANGEMENT R.C.S.	
REVISION DESCRIPTION: SIGNATURES ON FILE CAD NO: C302101.DGN	DRAWING NO: 25203-30210	REV: 11
DSGN: JSJ	SCALE: N/A	UNLESS OTHERWISE NOTED SH 1

THIS DWG. SUPERCEDES  
25203-30205, 25207, SH. 36  
25203-29097 SHTS. 41C, 41D, 41E, 41F,  
41K, 41L



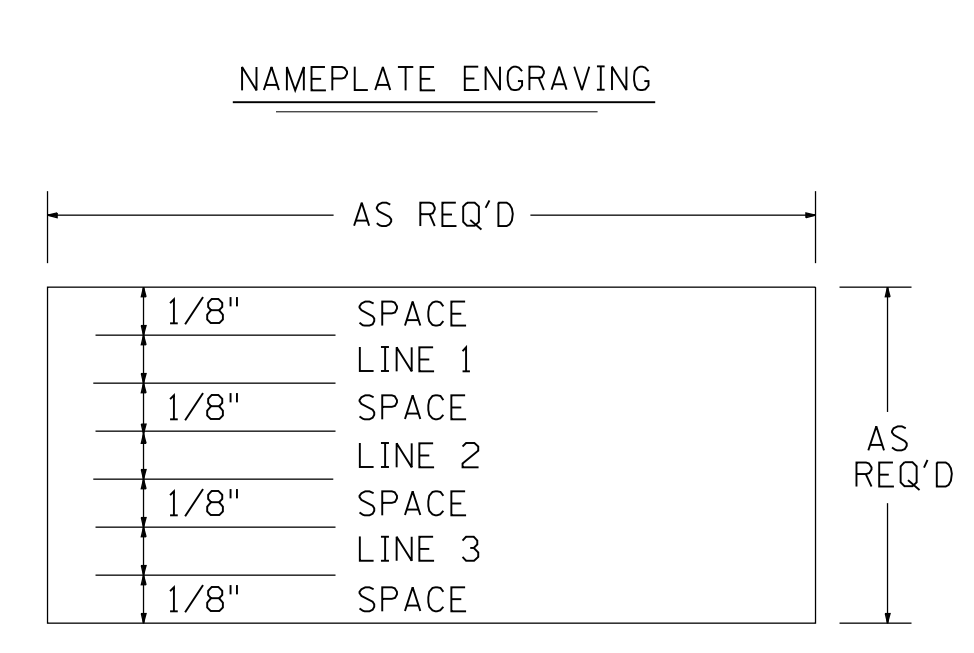
**MIMIC LEGEND**

GREEN ██████████

BLACK/WHITE - - - - -

GRAY ▒▒▒▒▒▒▒▒

BLACK =====



**NOTES**

1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.

**NAMEPLATE LEGEND**

REFER TO SPECIFICATION SP-EE-261

▲ = INDICATES A BLACK TRIANGLE R.G. 1.97 INSTR.

+ = INDICATES AN 1/8" RED DOT (Z1 POWERED EQUIPMENT) EXCEPT FOR CAUTION LABELS

● = INDICATES AN 1/8" YELLOW DOT (Z2 POWERED EQUIPMENT)

**FSAR FIGURE**

SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

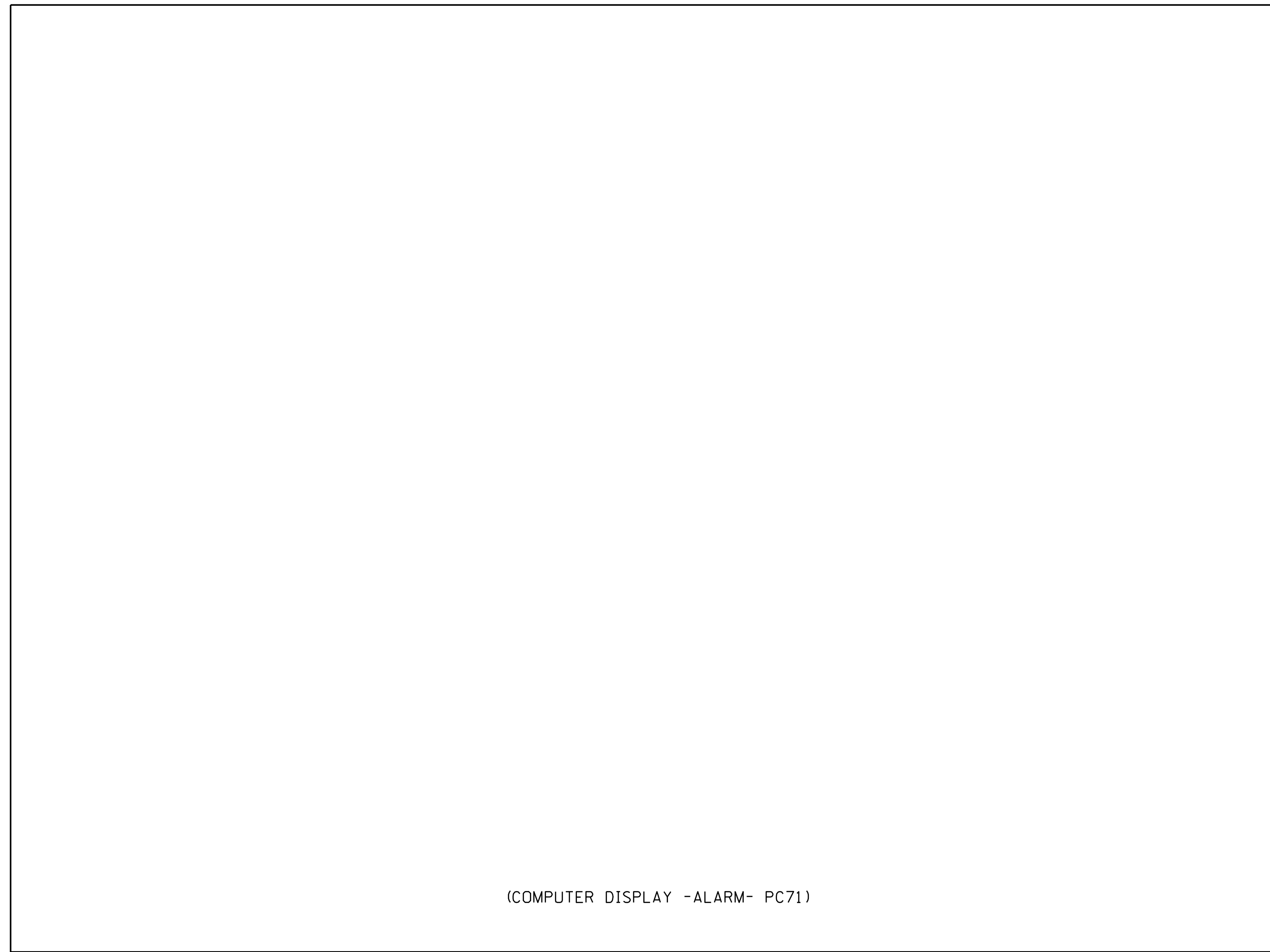
NO.	DATE	REVISIONS	BY	CHK.	APP.
6	4-27-10	INCORP. DCN DM2-00-0019-09	EAL	JCV	- DLW
5	12-19-06	INCORP. DCN DM2-00-0237-05	DLW	MEL	- ASK
4	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP JPP
3	7-21-99	INCORP. DCN DM2-00-0532-98	WBZ	JSJ	JPP JPP
2	1-10-91	AS BUILT PER DCN-M2-S-1381-90	WBZ	MEL	JTK LJC
1	6/16/89	AS BUILT PER PDCR-2-27-88 & DSEP-M2-S-432-89	WBZ	MEL	JTK LJC

THIS DWG. SUPERCEDES 28203-28005, 29097 SH.36, 29203-29097 SH.5, 41C, 41D, 41E, 41F, 41K, 41L		<b>NON Q.A.</b>
CAD REVISIONS DURING CONSTRUCTION		
REVISIONS DURING CONSTRUCTION		
TITLE: MILLSTONE POWER STATION-UNIT 2 C03, CRP. FRONT VIEW ARRANGEMENT R.C.S. WATERFORD, CONNECTICUT		
BY: T.A.SWIFT DATE: 3/29/88	APP: MBR DATE: 5-12-88	APP: LJC DATE: 5-19-88
SCALE: NTS		DWG. NO.: 25203-30210 SH.2

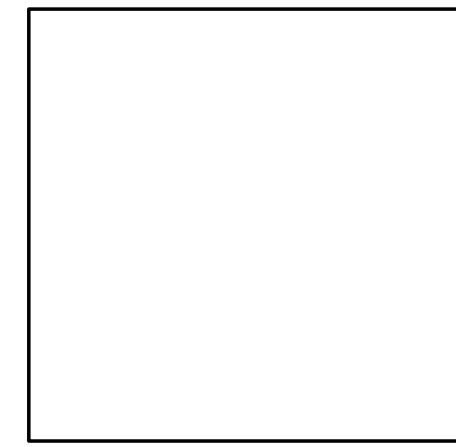


FOR UPPER PANEL SEE DET.1 30211 SH.2



(COMPUTER DISPLAY -ALARM- PC71)

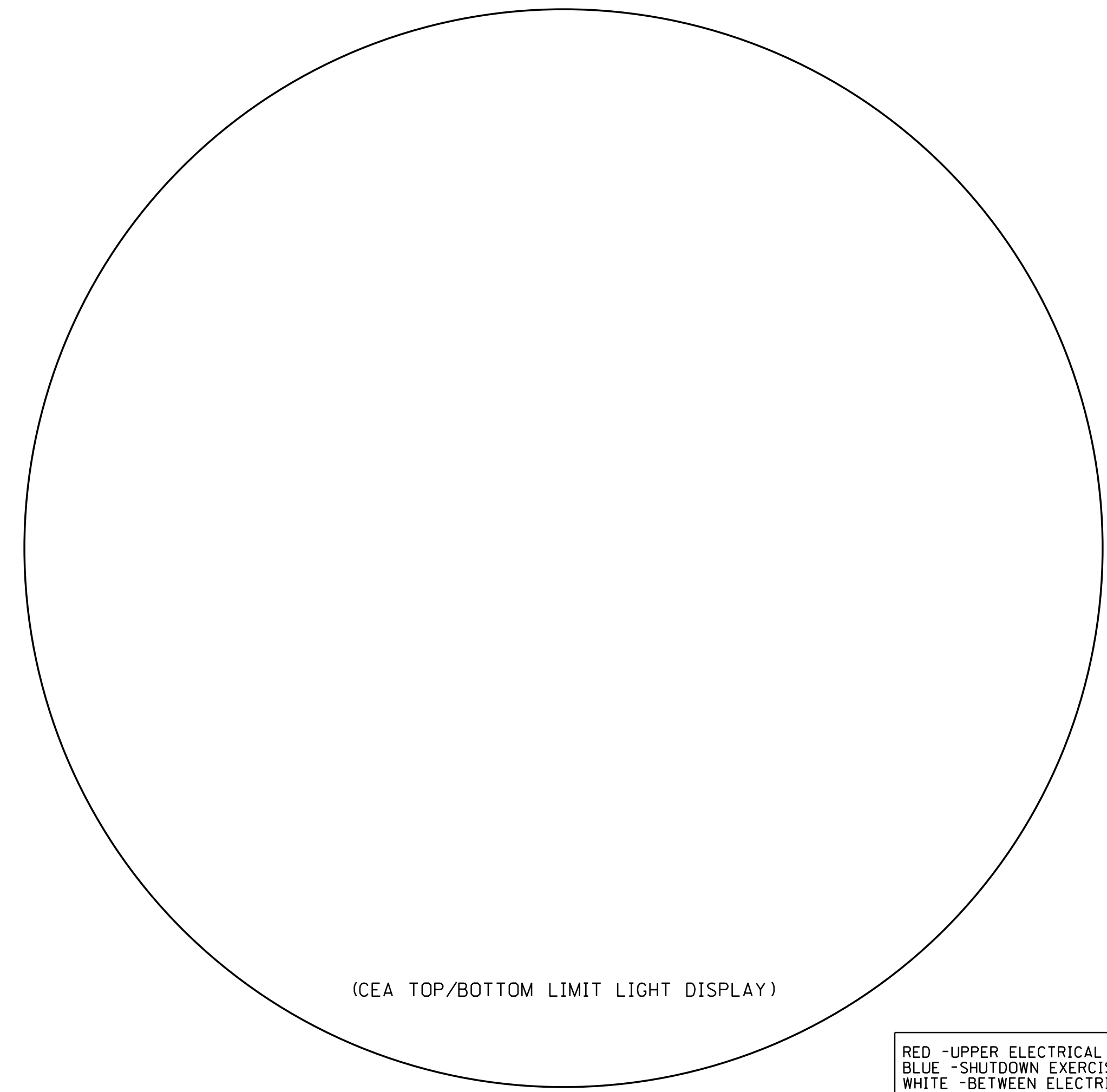
MONITOR 1



MAG/JACK MG A  
2X13 +



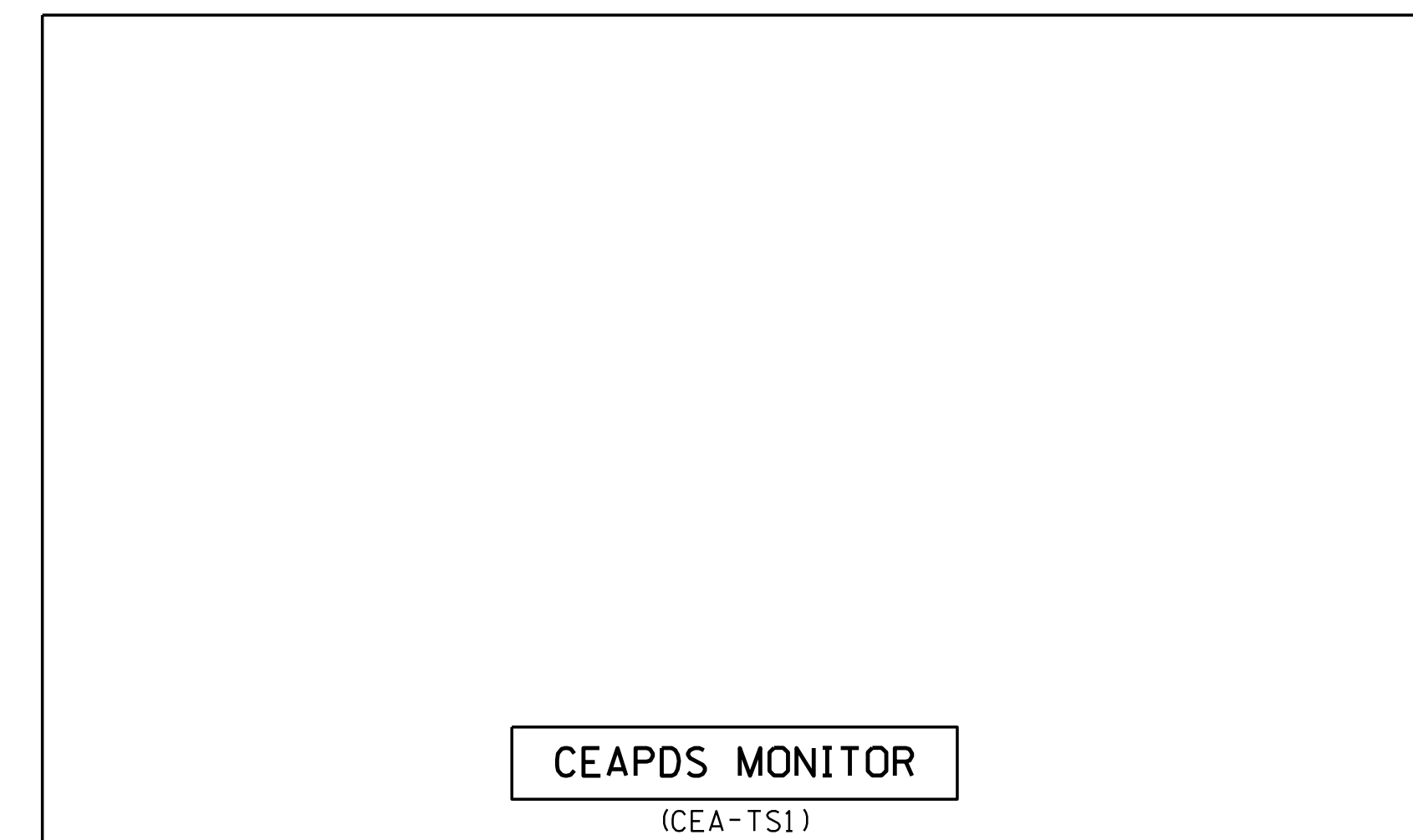
MEGAWATTS ELECTRIC



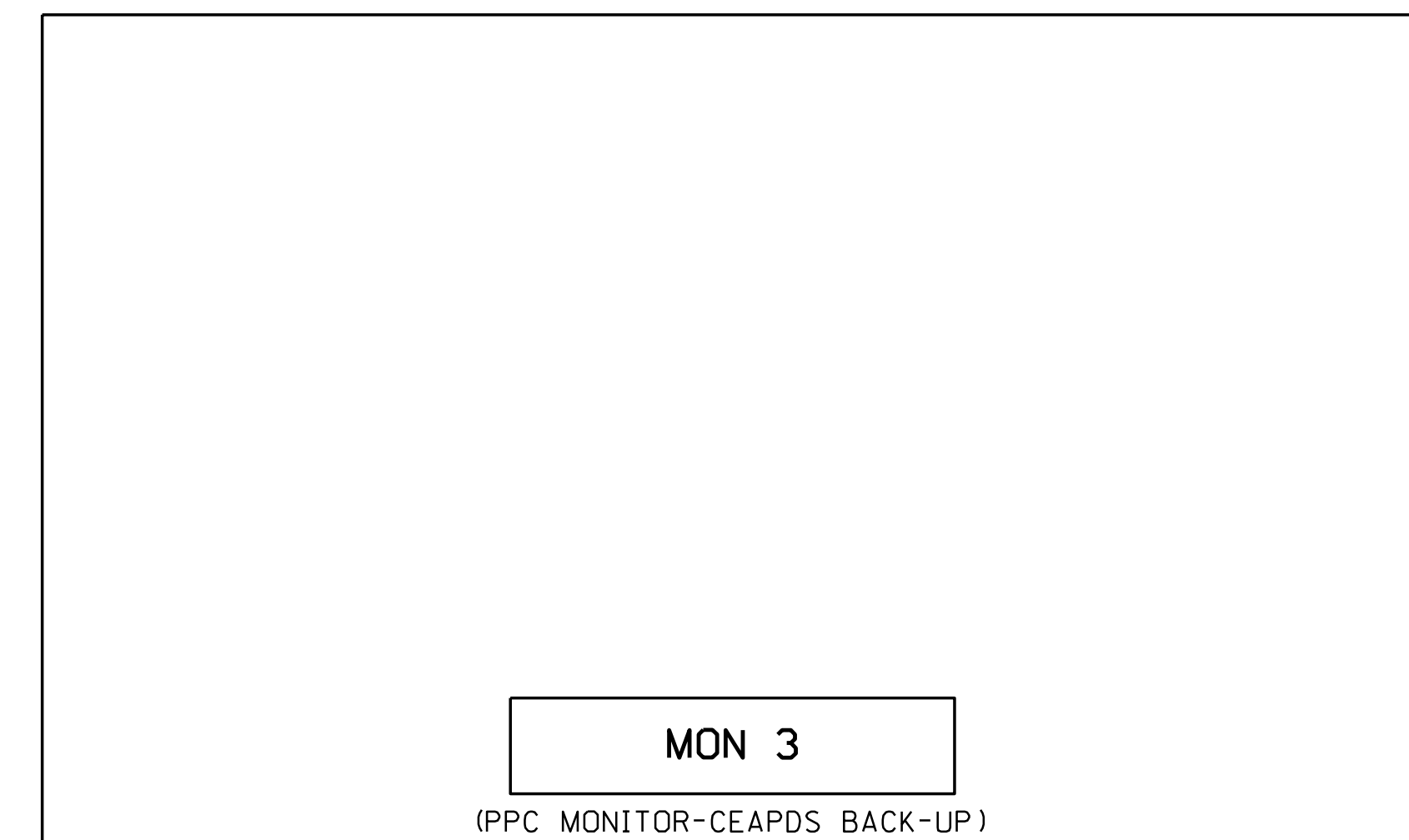
(CEA TOP/BOTTOM LIMIT LIGHT DISPLAY)

RED -UPPER ELECTRICAL LIMIT  
BLUE -SHUTDOWN EXERCISE LIMIT  
WHITE -BETWEEN ELECTRICAL LIMITS  
GREEN -LOWER ELECTRICAL LIMIT  
AMBER -ROD DROP LIGHT

CONT. ON  
30211 SH.2

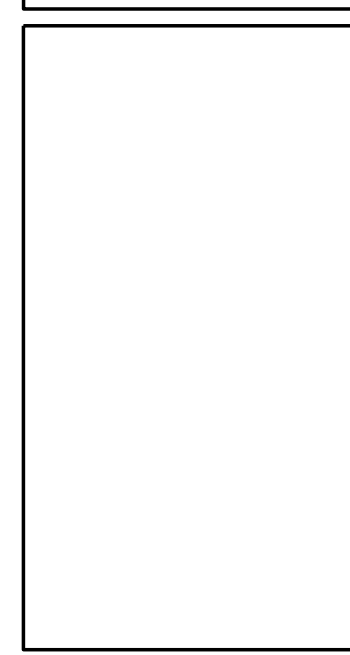


CEAPDS MONITOR  
(CEA-TS1)

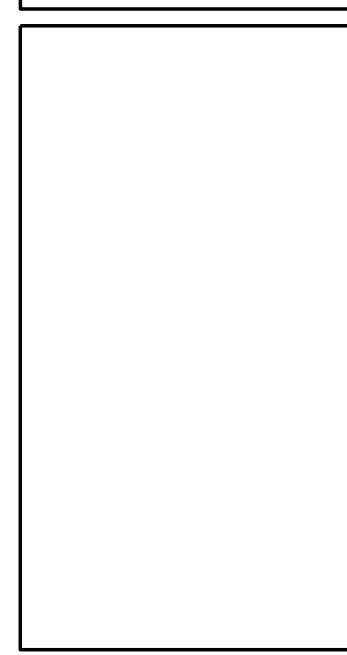


MON 3  
(PPC MONITOR-CEAPDS BACK-UP)

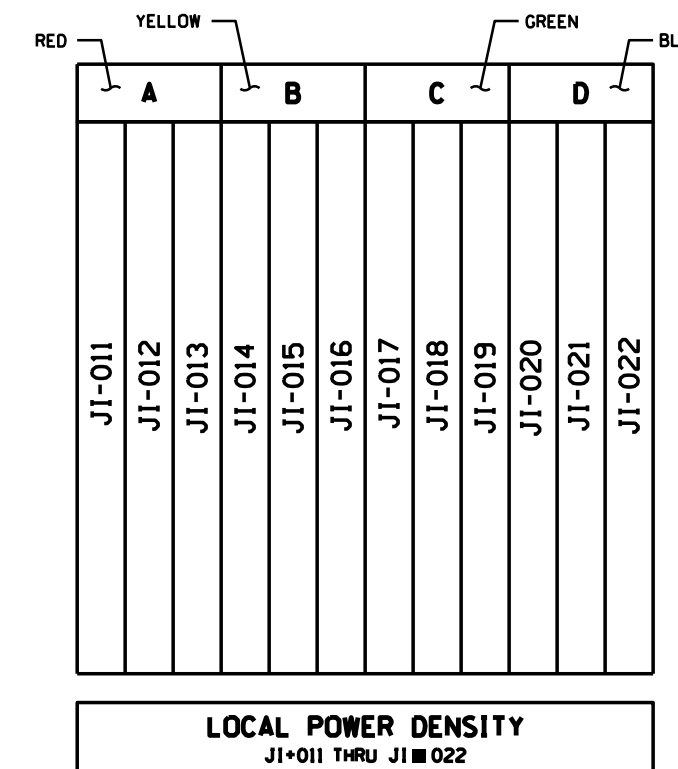
BA MAKEUP FLOW  
CONTROLLER  
FC-2001



PRI MAKEUP WTR FLOW  
CONTROLLER  
FC-2004

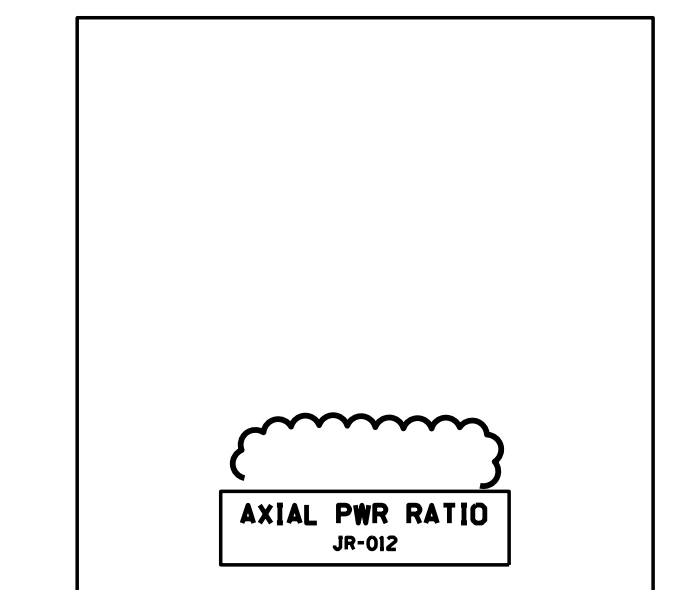


BA FLOW-RED  
MAKEUP WTR FLOW-GREEN  
FR-200



LOCAL POWER DENSITY  
JI-001 THRU JI-022

AXIAL PWR RATIO  
UR-002



NOTES

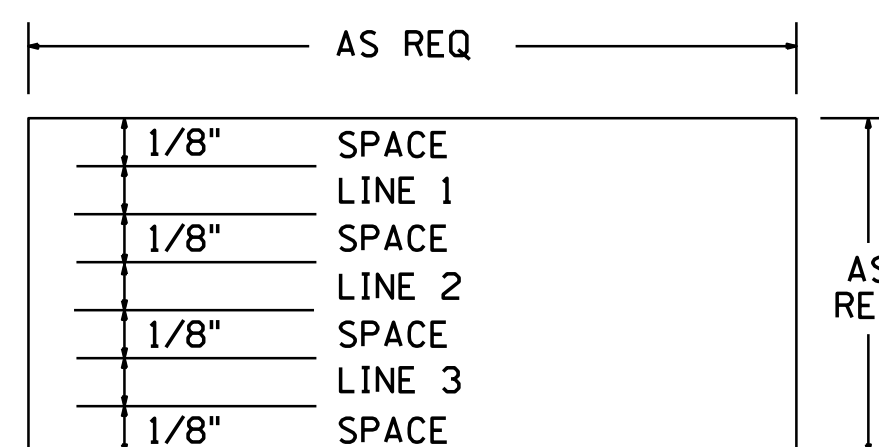
1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE  
WHITE LETTERS.

NAMEPLATE LEGEND

REFER TO SPECIFICATION SP-EE-261

- + = INDICATES AN 1/8" RED DOT (Z1 POWERED EQUIPMENT), EXCEPT FOR CAUTION LABELS
- = INDICATES AN 1/8" YELLOW DOT (Z2 POWERED EQUIPMENT)
- ★ = INDICATES AN 1/8" GREEN DOT (Z3 POWERED EQUIPMENT)
- = INDICATES AN 1/8" BLUE DOT (Z4 POWERED EQUIPMENT)

NAMEPLATE ENGRAVING



COLOR CODE LABEL

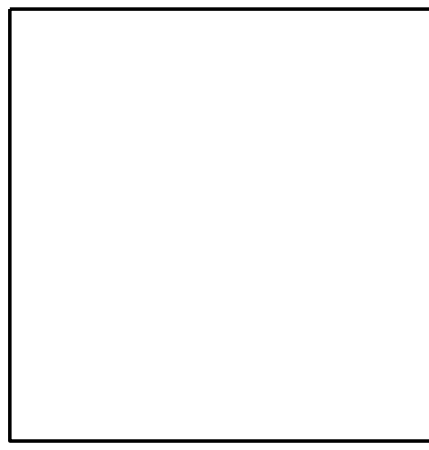
GREEN- LOWER ELECTRICAL LIMIT  
RED- UPPER ELECTRICAL LIMIT  
WHITE- BETWEEN ELECTRICAL LIMITS  
BLUE- BELOW EXERCIZE LIMITS  
AMBER- DROPPED ROD.

THIS DWG SUPERCEDES 25203-28001,  
25203-29097 SH.30A, 30B & 32

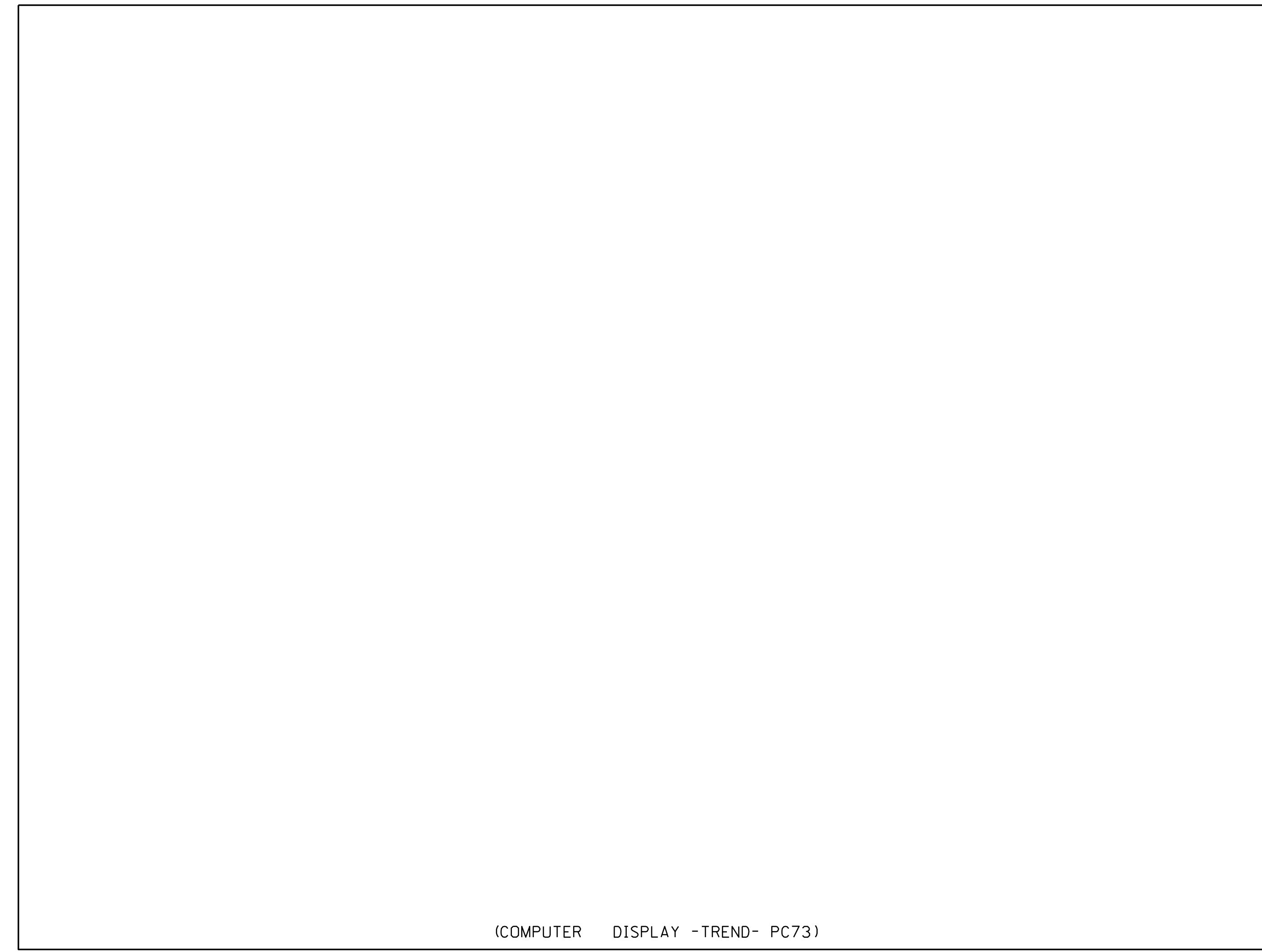
FSAR FIGURE

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE MILLSTONE UNIT 2 C04 CRP, FRONT VIEW ARRANGEMENT REACTIVITY CONTROL SYSTEM			
REVISION DESCRIPTION	SIGNATURES ON FILE	CAD NO: E30211.DGN	
REVISED PER MSDUR 22-000020 AND DUR 22-800052		DRAWING NO: 25203-30211	REV 13
DSGN JCV	SCALE: NONE	UNLESS OTHERWISE NOTED SM 1	

FOR UPPER PANEL SEE DETAIL 1 THIS SH.



MAG/JACK MG B  
Z2F\*



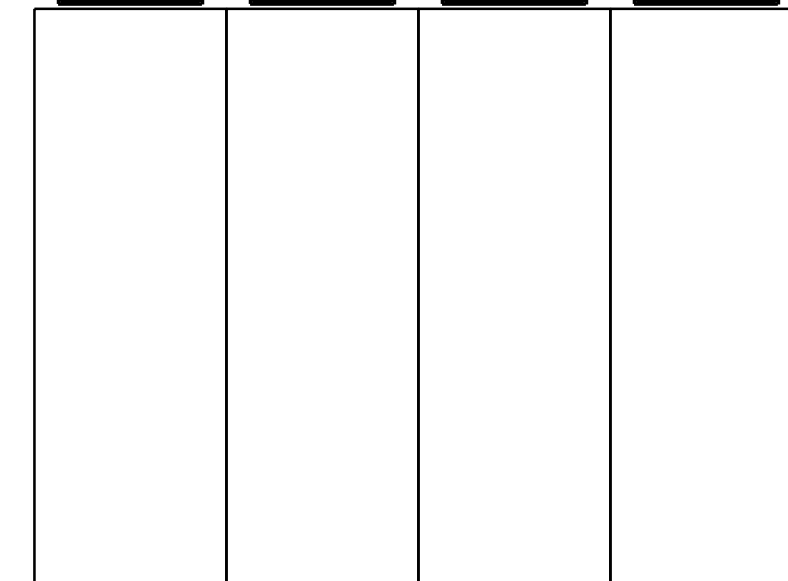
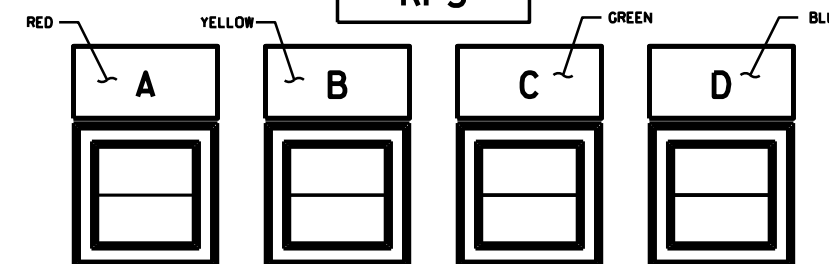
(COMPUTER DISPLAY -TREND- PC73)

MONITOR 2

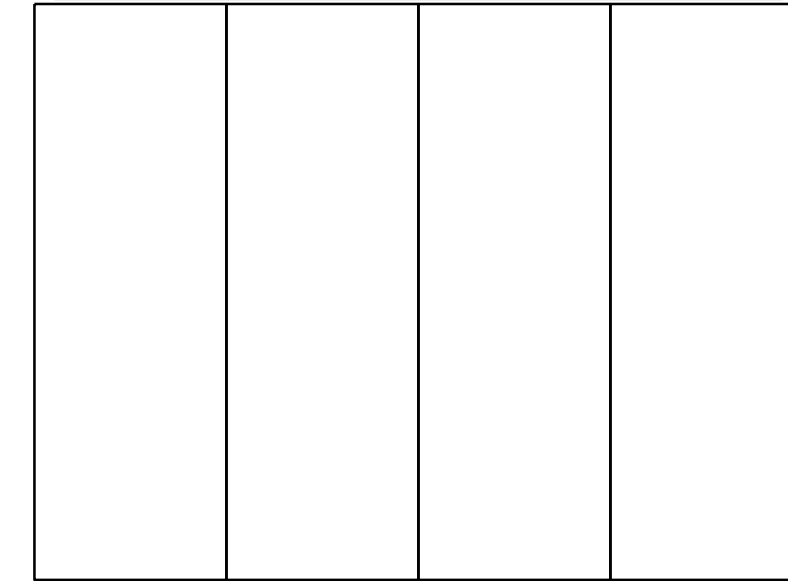


Tavg

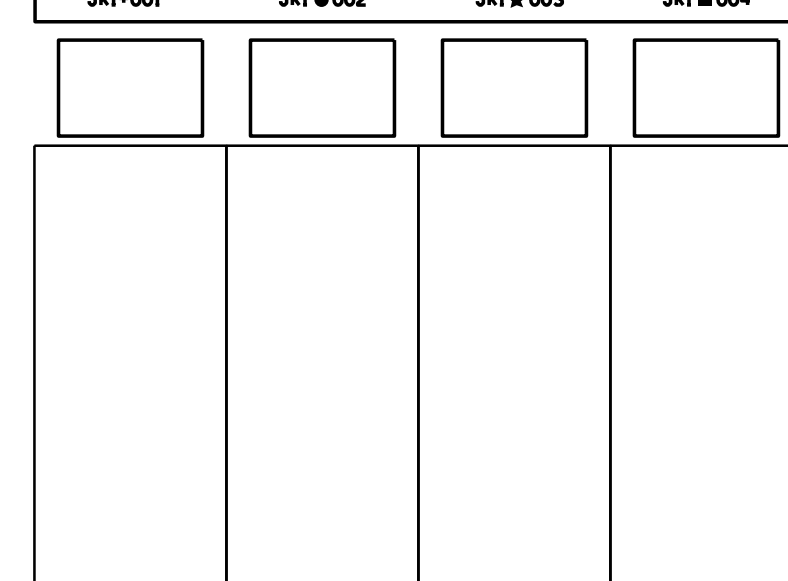
RPS



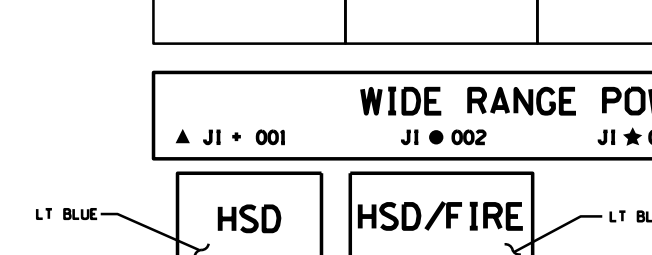
POWER RANGE  
J1#005 J1#006 J1#007 J1#008  
LEFT PEN = PW RANGE RPS DCA-D RIGHT PEN = SET POINT LEVEL



START UP RATE  
J1#001 J1#002 J1#003 J1#004



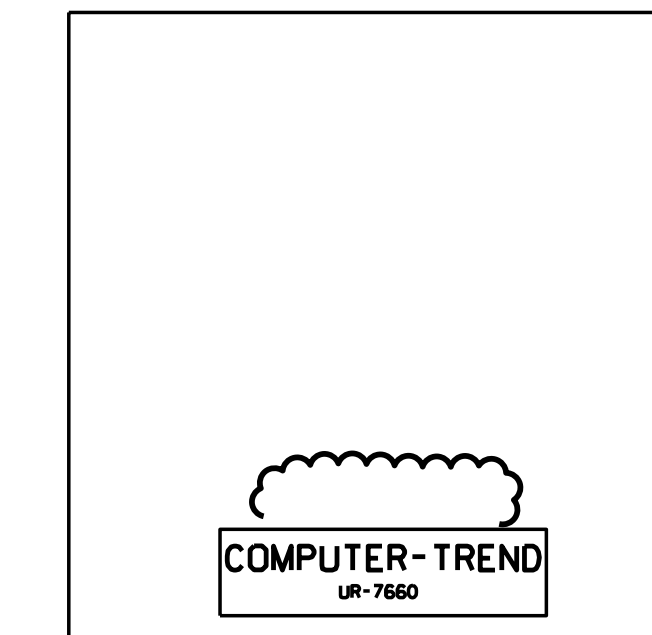
WIDE RANGE POWER  
A J1# 001 J1# 002 J1# 003 A J1# 004



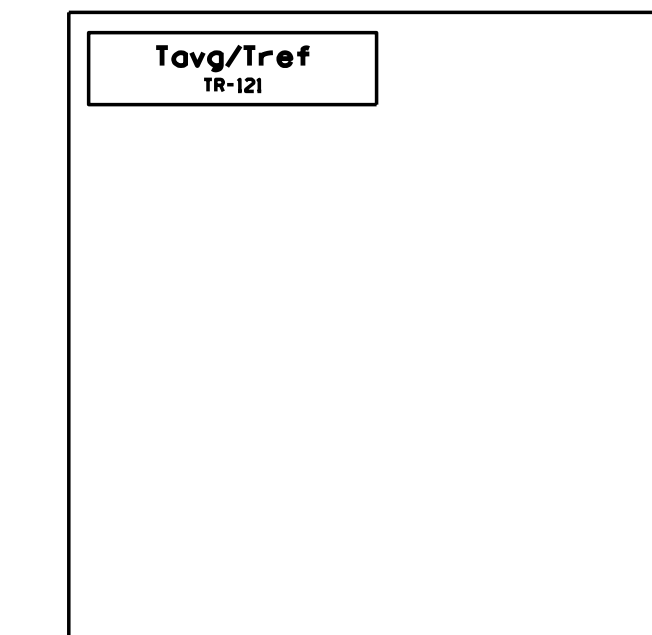
HSD

HSD/FIRE

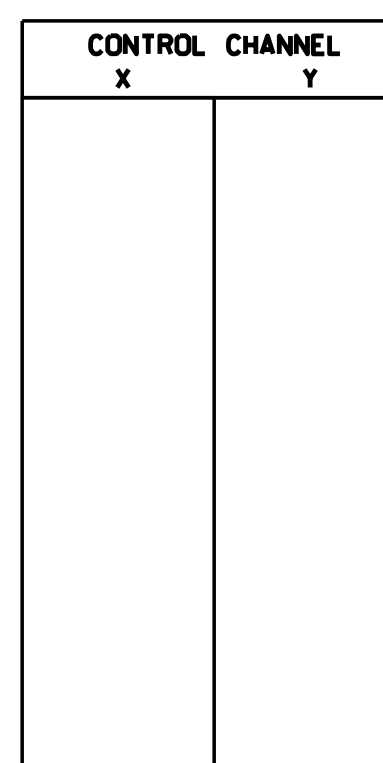
L1 BLUE



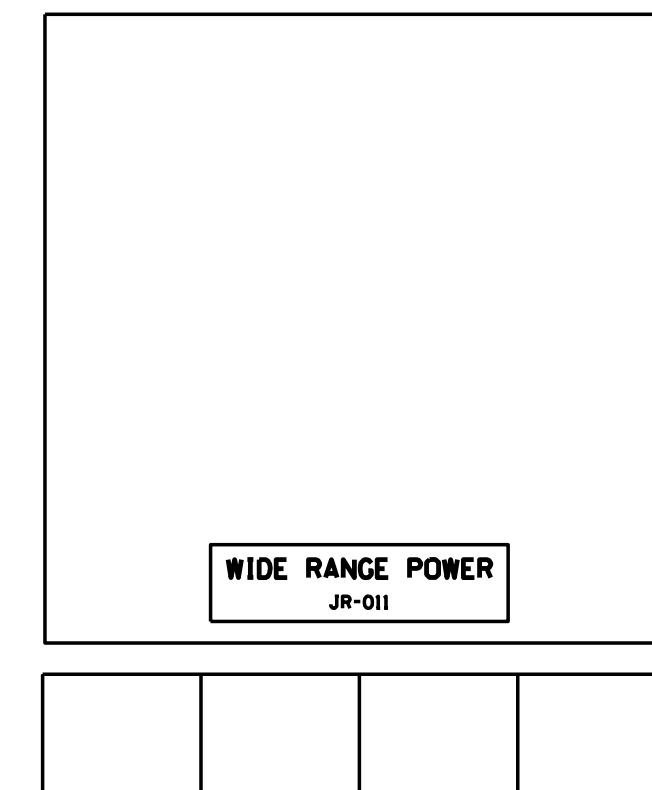
COMPUTER-TREND  
UR-7660



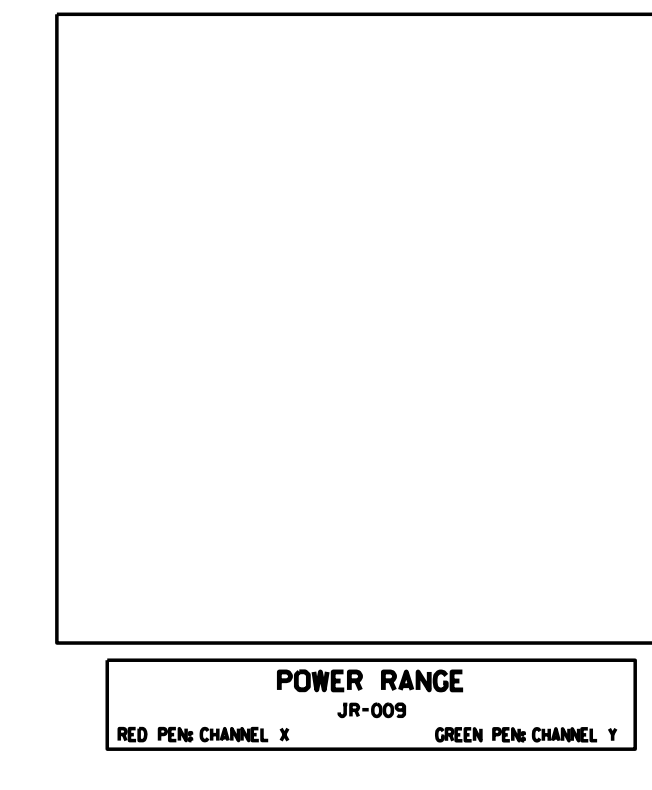
Tavg/Tref  
TR-121



CONTROL CHANNEL  
X Y



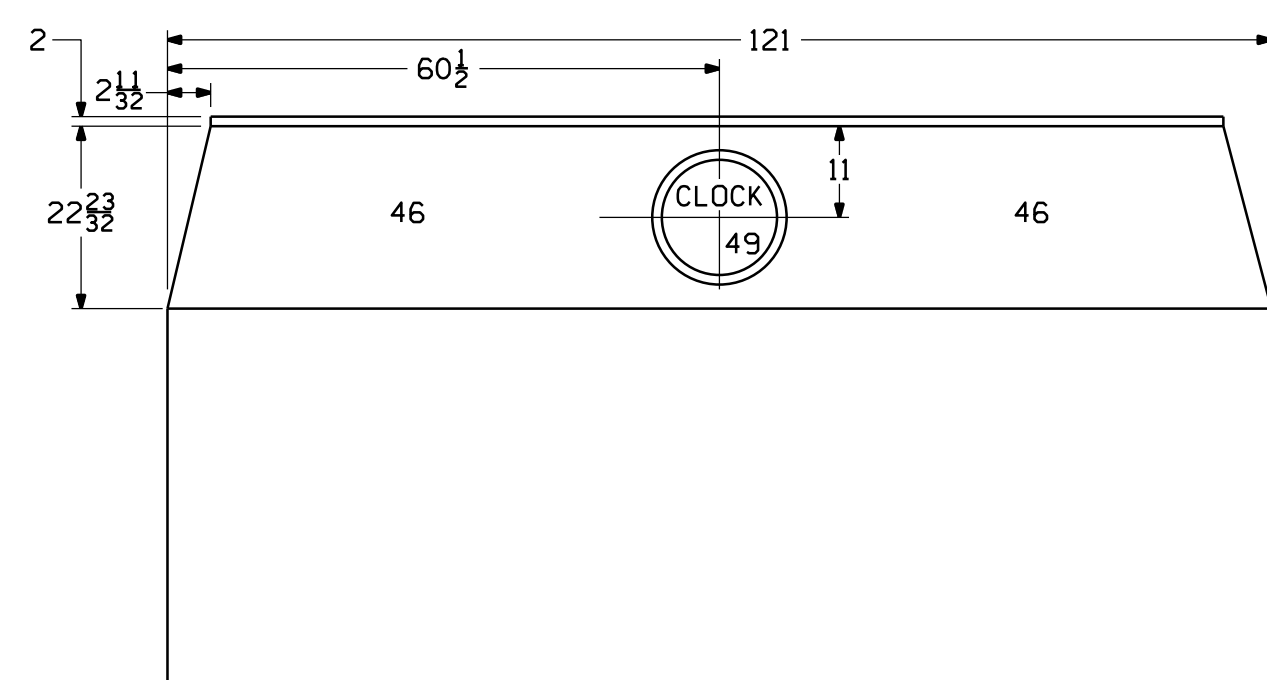
WIDE RANGE POWER  
JR-011



POWER RANGE  
JR-009  
RED PEN CHANNEL X GREEN PEN CHANNEL Y

POWER RANGE  
J1-009

CONT. ON  
30211 SH-1



DETAIL 1

NOTES

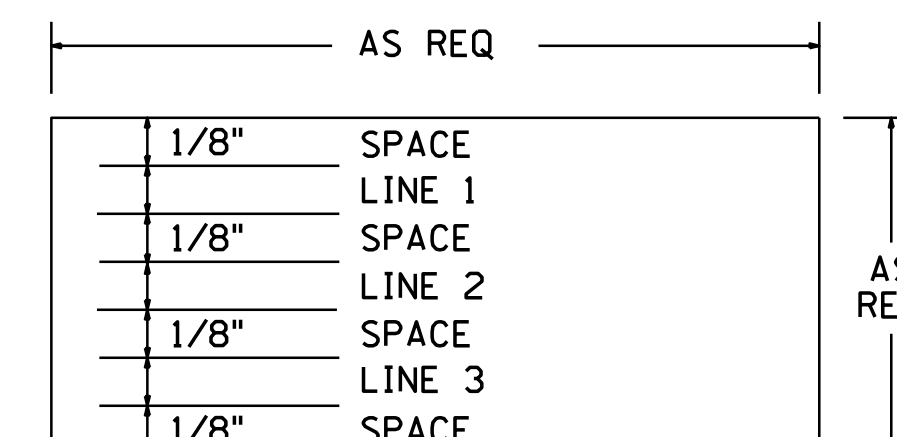
1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.

NAMEPLATE LEGEND

REFER TO SPECIFICATION SP-EE-261

- ▲ = INDICATES A BLACK TRIANGLE R.G. 1.97 INSTR.
- + = INDICATES AN 1/8" RED DOT (Z1 POWERED EQUIPMENT) EXCEPT FOR CAUTION LABELS
- = INDICATES AN 1/8" YELLOW DOT (Z2 POWERED EQUIPMENT)
- ★ = INDICATES AN 1/8" GREEN DOT (Z3 POWERED EQUIPMENT)
- = INDICATES AN 1/8" BLUE DOT (Z4 POWERED EQUIPMENT)

NAMEPLATE ENGRAVING

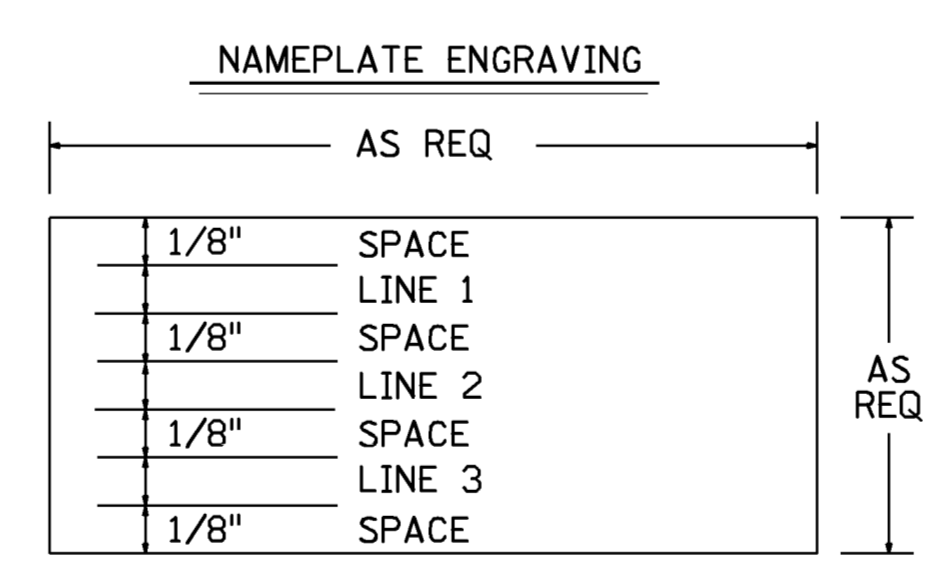
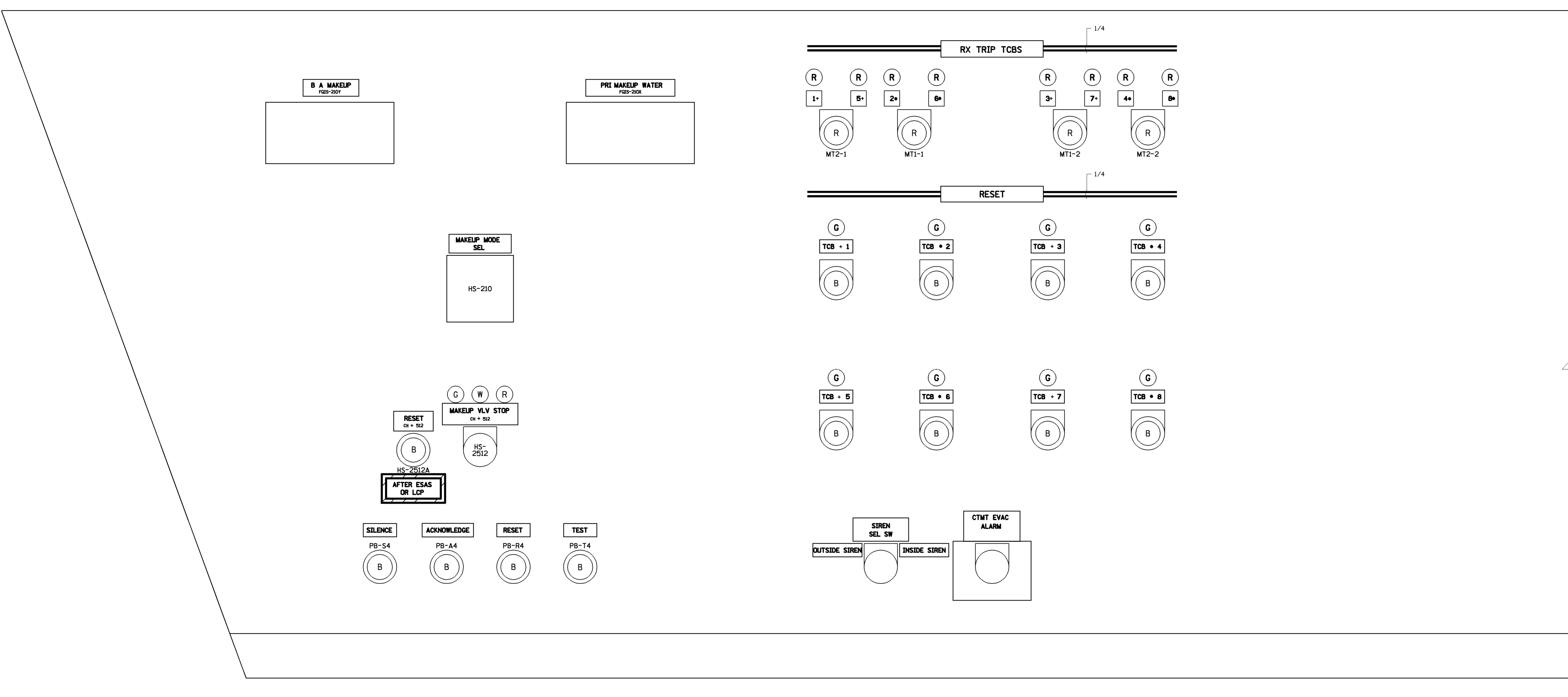


FSAR FIGURE

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE MILLSTONE UNIT 2 CO4 CRP, FRONT VIEW ARRANGEMENT REACTIVITY CONTROL SYSTEM			
REVISION DESCRIPTION	SIGNATURES ON FILE	CAD NO: E302112.DGN	REV
REVISED PER MSDUR 22-000020 AND DUR 22-800052		DRAWING NO: 25203-30211	11
DSGN JCV	SCALE: NONE	UNLESS OTHERWISE NOTED SH 2	

THIS DWG SUPERCEDES 25203-28001,  
25203-29097 SH.30A, 30B & 32





- NOTES**
1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
  2. + - INDICATES AN 1/8" RED DOT., EXCEPT FOR CAUTION LABELS  
    - - INDICATES AN 1/8" YELLOW DOT
    - \* - INDICATES AN 1/8" BLACK DOT.

**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

**CAD**  
NOTES:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION		DATE		BY		APP.	

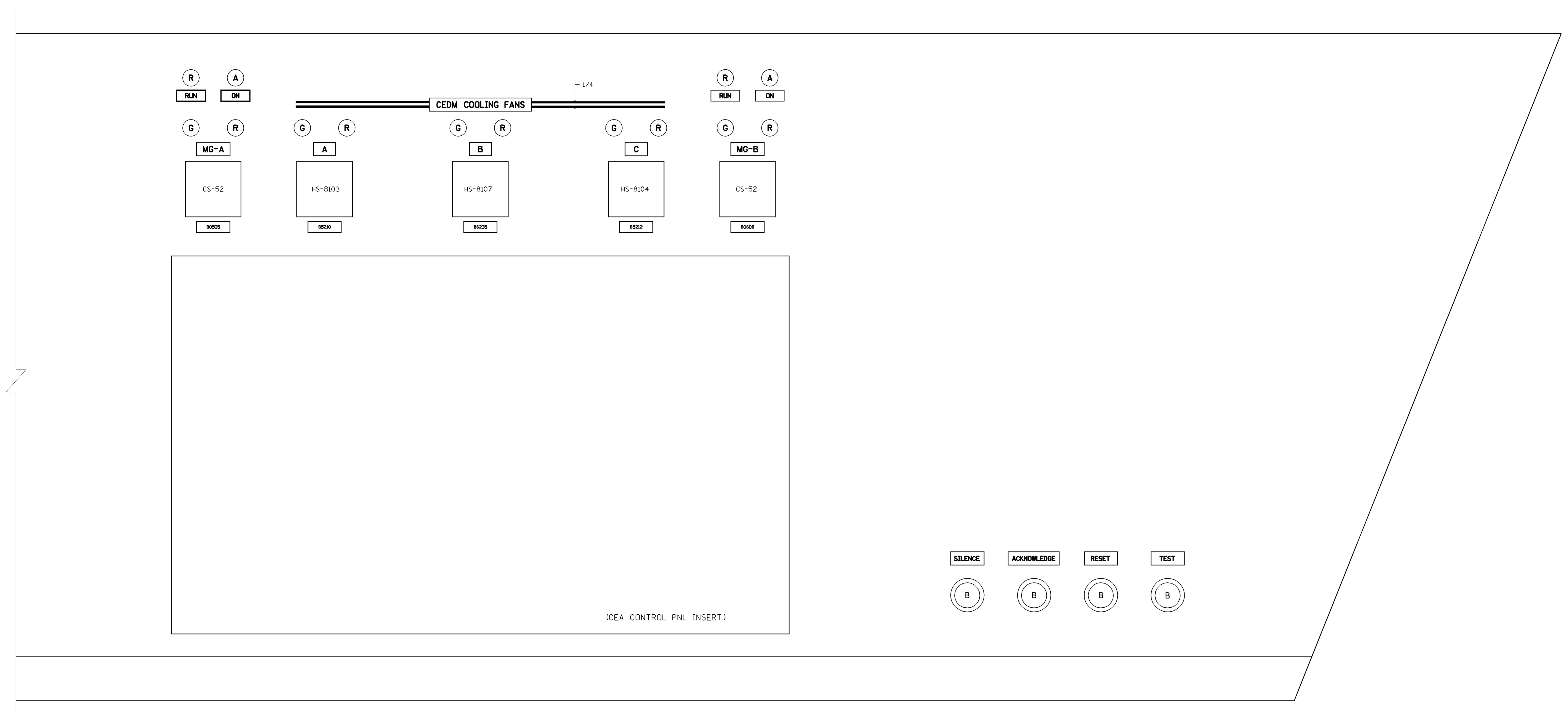
**Dominion Nuclear Connecticut, Inc.**  
Millstone Power Station

TITLE: **MILLSTONE UNIT 2  
C04 CRP, FRONT VIEW ARRANGEMENT  
REACTIVITY CONTROL SYSTEM  
WATERFORD, CONN.**

BY	NAP	CHKD.	MBR	APP.	LJC
DATE	8-18-88	DATE	11-3-88	DATE	11-3-88
SCALE	NTS	DWG. NO.	86-230		

25203-30211 SH.3

THIS DWG SUPERCEDES 25203-28001,  
25203-29097 SH.30A, 30B & 32



NAMEPLATE ENGRAVING

AS REQ		AS REQ
1/8"	SPACE	
1/8"	LINE 1	
1/8"	SPACE	
1/8"	LINE 2	
1/8"	SPACE	
1/8"	LINE 3	
1/8"	SPACE	

- NOTES
- NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
  - + - INDICATES AN 1/8" RED DOT., EXCEPT FOR CAUTION LABELS  
    - INDICATES AN 1/8" YELLOW DOT
    - \* - INDICATES AN 1/8" BLACK DOT.

**FSAR FIGURE**

SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

**CAD**  
NOTES:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION			

NON  
Q.A.

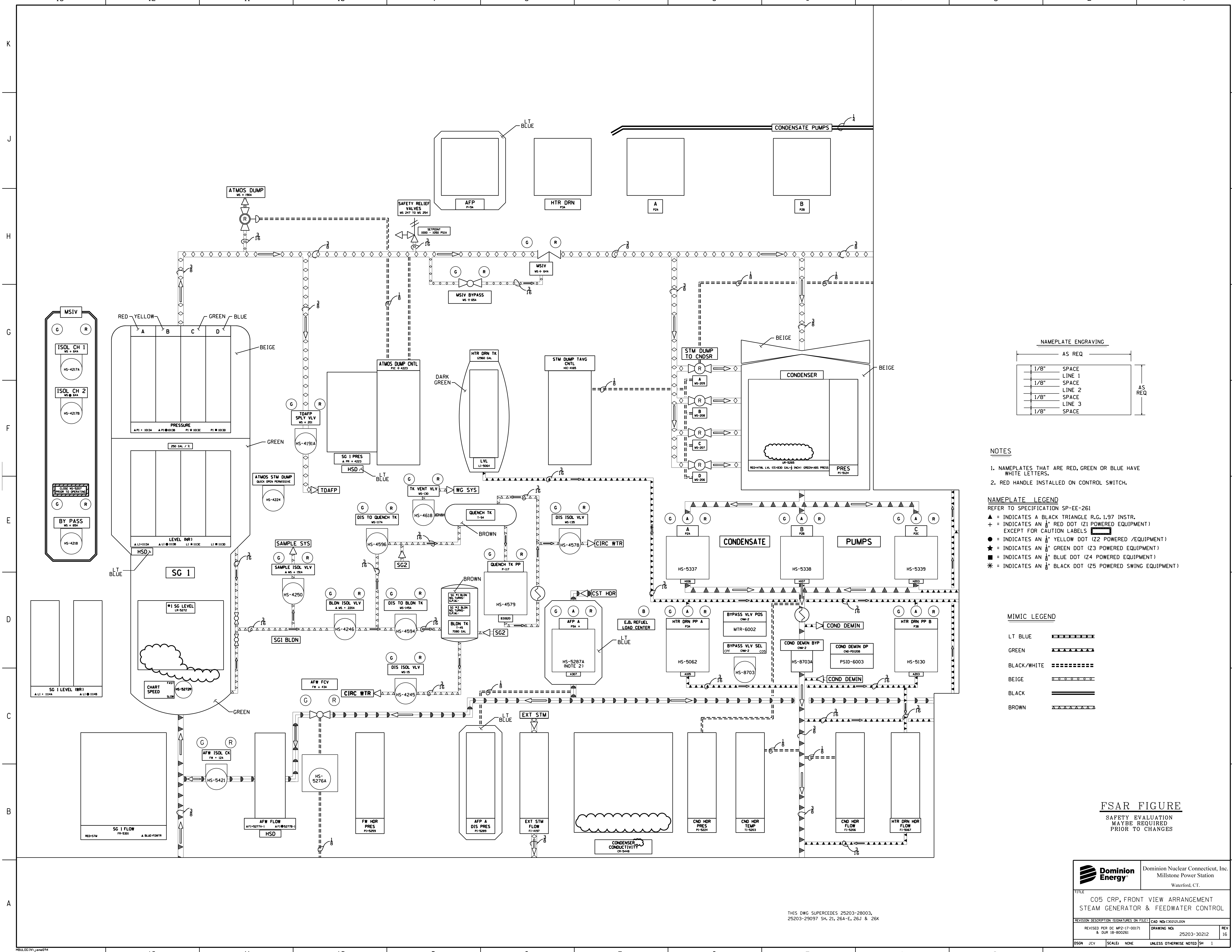
**Dominion**  
Dominion Nuclear Connecticut, Inc.  
Millstone Power Station

MILLSTONE UNIT 2  
C04 CRP, FRONT VIEW ARRANGEMENT  
REACTIVITY CONTROL SYSTEM  
WATERFORD, CONN.

BY	NAP	CHKD.	MBR	APP.	APP.	LJC
DATE	8-18-88	DATE	11-3-8	DATE	11-3-8	
SCALE	NTS	DWG. NO.	25203-30211 SH.4			

THIS DWG SUPERCEDES 25203-28001,  
25203-29097 SH.30A, 30B & 32

NO.	DATE	REVISIONS	BY	CHK.	APP.	APP.
86-230	12-15-08	INCORP. DCN DM2-00-0243-05	JSJ	MEL	---	DLW
86-230	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP
86-230	11-9-96	INCORP. DCN DM2-5-0403-95 & DCR M2-5-0105-96	JMM	MM	JPP	JPP
86-230	12-6-90	AS BUILT PER DCR M2-5-1591-90	WBZ	MEL	JTK	LJC
86-230	6/16/89	AS BUILT PER PDCR-2-27-88 & DCR M2-5-452-89	WBZ	MEL	JTK	LJC



**NAMEPLATE ENGRAVING**

AS REQ
1/8" SPACE
LINE 1
1/8" SPACE
LINE 2
1/8" SPACE
LINE 3
1/8" SPACE
AS REQ

- NOTES**
1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
  2. RED HANDLE INSTALLED ON CONTROL SWITCH.

- NAMEPLATE LEGEND**  
REFER TO SPECIFICATION SP-EE-261
- ▲ = INDICATES A BLACK TRIANGLE (R.G. 1.97 INSTR.)
  - + = INDICATES AN 1/8" RED DOT (Z1 POWERED EQUIPMENT) EXCEPT FOR CAUTION LABELS
  - = INDICATES AN 1/8" YELLOW DOT (Z2 POWERED EQUIPMENT)
  - ★ = INDICATES AN 1/8" GREEN DOT (Z3 POWERED EQUIPMENT)
  - = INDICATES AN 1/8" BLUE DOT (Z4 POWERED EQUIPMENT)
  - \* = INDICATES AN 1/8" BLACK DOT (Z5 POWERED SWING EQUIPMENT)

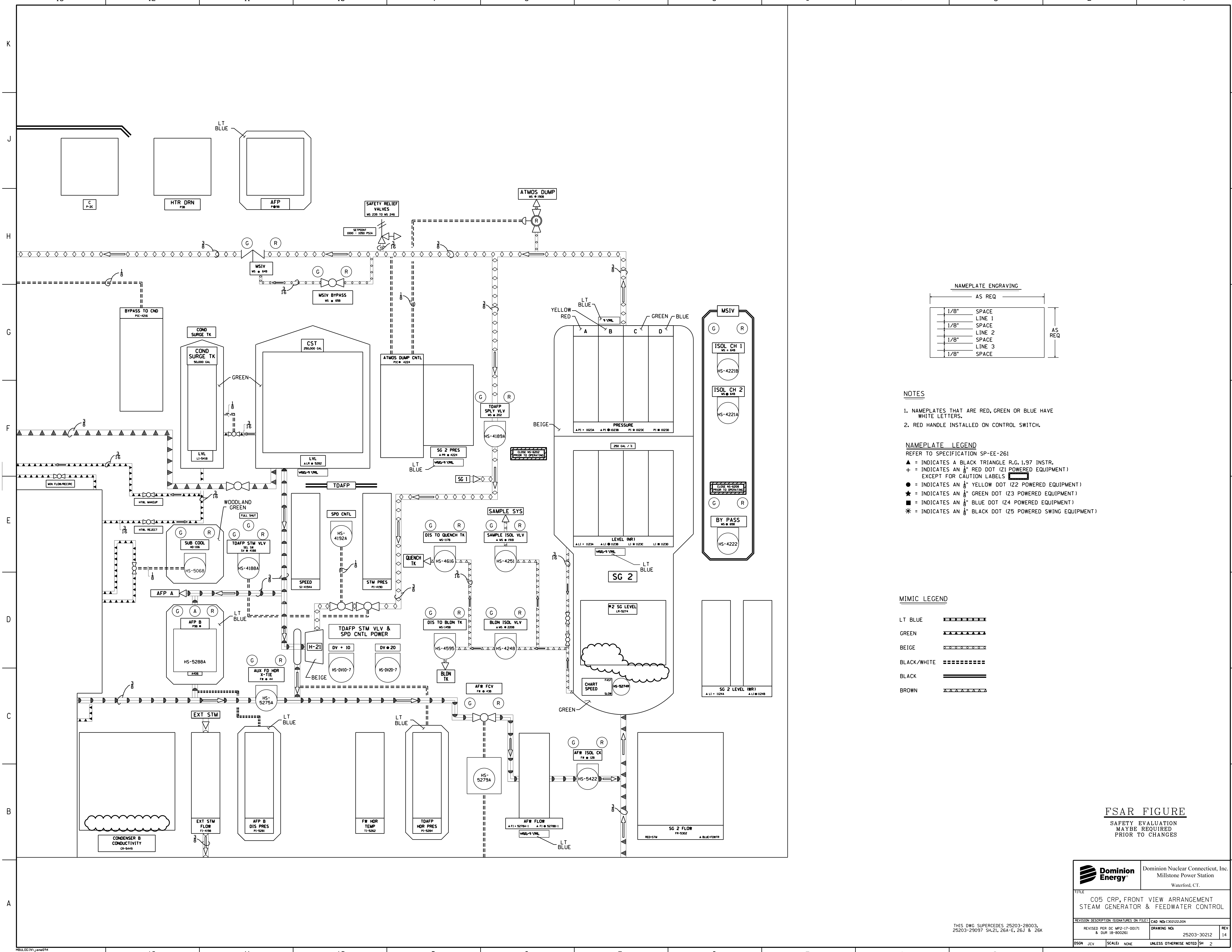
**MIMIC LEGEND**

LT BLUE	=====
GREEN	=====
BLACK/WHITE	=====
BEIGE	=====
BLACK	=====
BROWN	=====

**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

	Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.		
	TITLE <b>CO5 CRP, FRONT VIEW ARRANGEMENT          STEAM GENERATOR &amp; FEEDWATER CONTROL</b>		
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C30212L.DGN	DRAWING NO: 25203-30212	REV 16	DSGM JCV SCALE: NONE UNLESS OTHERWISE NOTED SH 1

THIS DWG SUPERCEDES 25203-28003,  
25203-29097 SH, 21, 26A-E, 26J & 26K



**NAMEPLATE ENGRAVING**

AS REQ	
1/8" SPACE	AS REQ
LINE 1	
1/8" SPACE	
LINE 2	
1/8" SPACE	
LINE 3	
1/8" SPACE	

- NOTES**
1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
  2. RED HANDLE INSTALLED ON CONTROL SWITCH.

- NAMEPLATE LEGEND**  
REFER TO SPECIFICATION SP-EE-261
- ▲ = INDICATES A BLACK TRIANGLE R.G. 1.97 INSTR.
  - + = INDICATES AN 1/8" RED DOT (Z1 POWERED EQUIPMENT) EXCEPT FOR CAUTION LABELS
  - = INDICATES AN 1/8" YELLOW DOT (Z2 POWERED EQUIPMENT)
  - ★ = INDICATES AN 1/8" GREEN DOT (Z3 POWERED EQUIPMENT)
  - = INDICATES AN 1/8" BLUE DOT (Z4 POWERED EQUIPMENT)
  - \* = INDICATES AN 1/8" BLACK DOT (Z5 POWERED SWING EQUIPMENT)

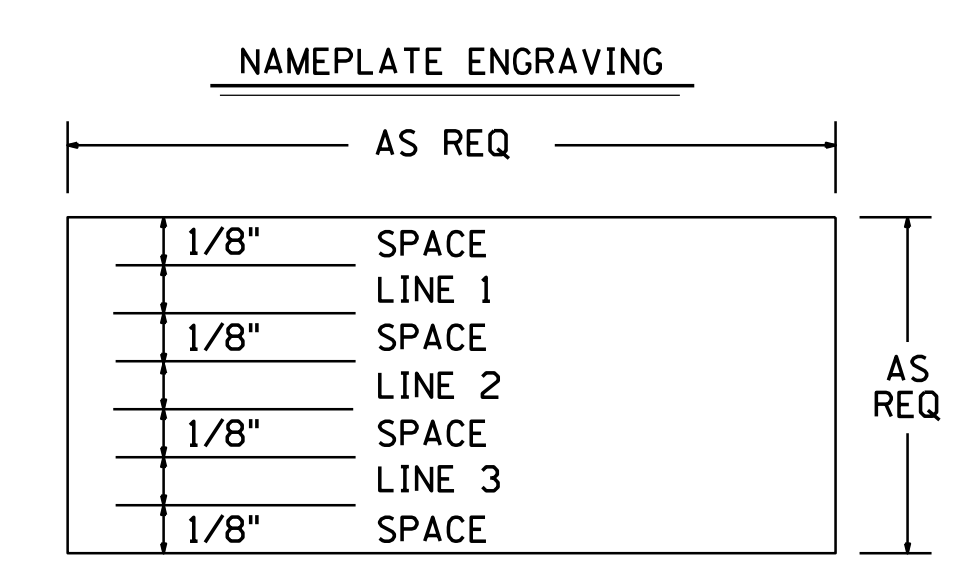
**MIMIC LEGEND**

LT BLUE	=====
GREEN	-----
BEIGE	-.-.-.-.-
BLACK/WHITE	.....
BLACK	=====
BROWN	-----

**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

	Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
	TITLE <b>CO5 CRP, FRONT VIEW ARRANGEMENT          STEAM GENERATOR &amp; FEEDWATER CONTROL</b>	
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: E302122.DGN	DRAWING NO: 25203-30212	REV 14
DSGM JCV	SCALE: NONE	UNLESS OTHERWISE NOTED SM 2

THIS DWG SUPERCEDES 25203-28003,  
25203-29097 SH.21, 26A-E, 26J & 26K



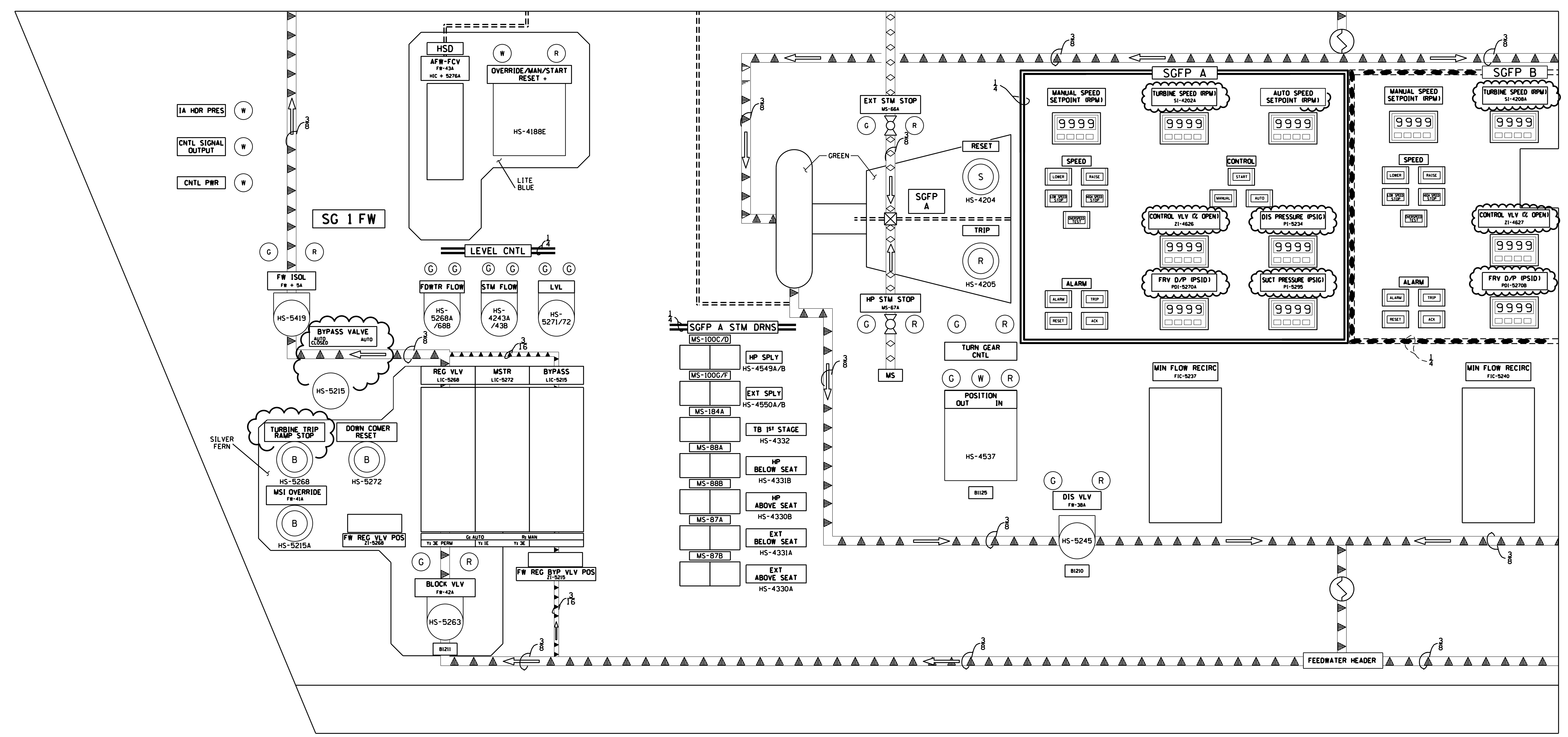
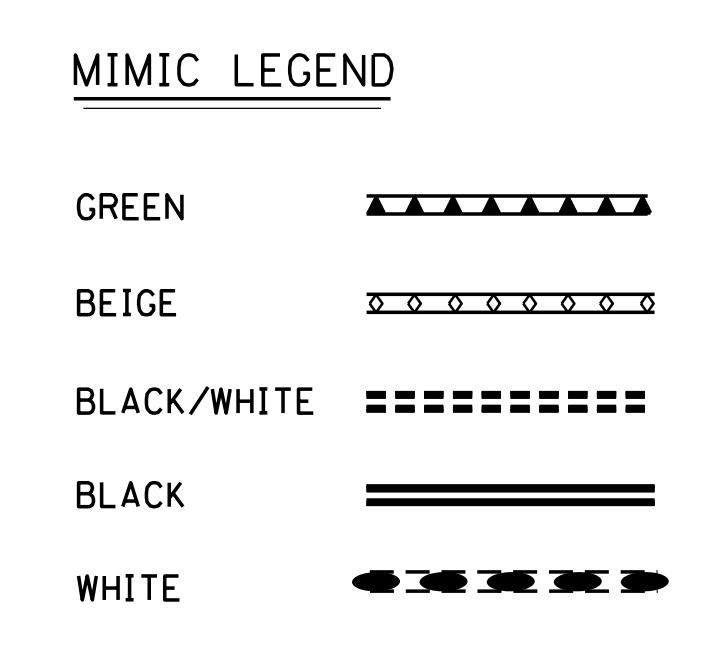
**NOTES**

1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.

**NAMEPLATE LEGEND**  
 REFER TO SPECIFICATION SP-EE-261

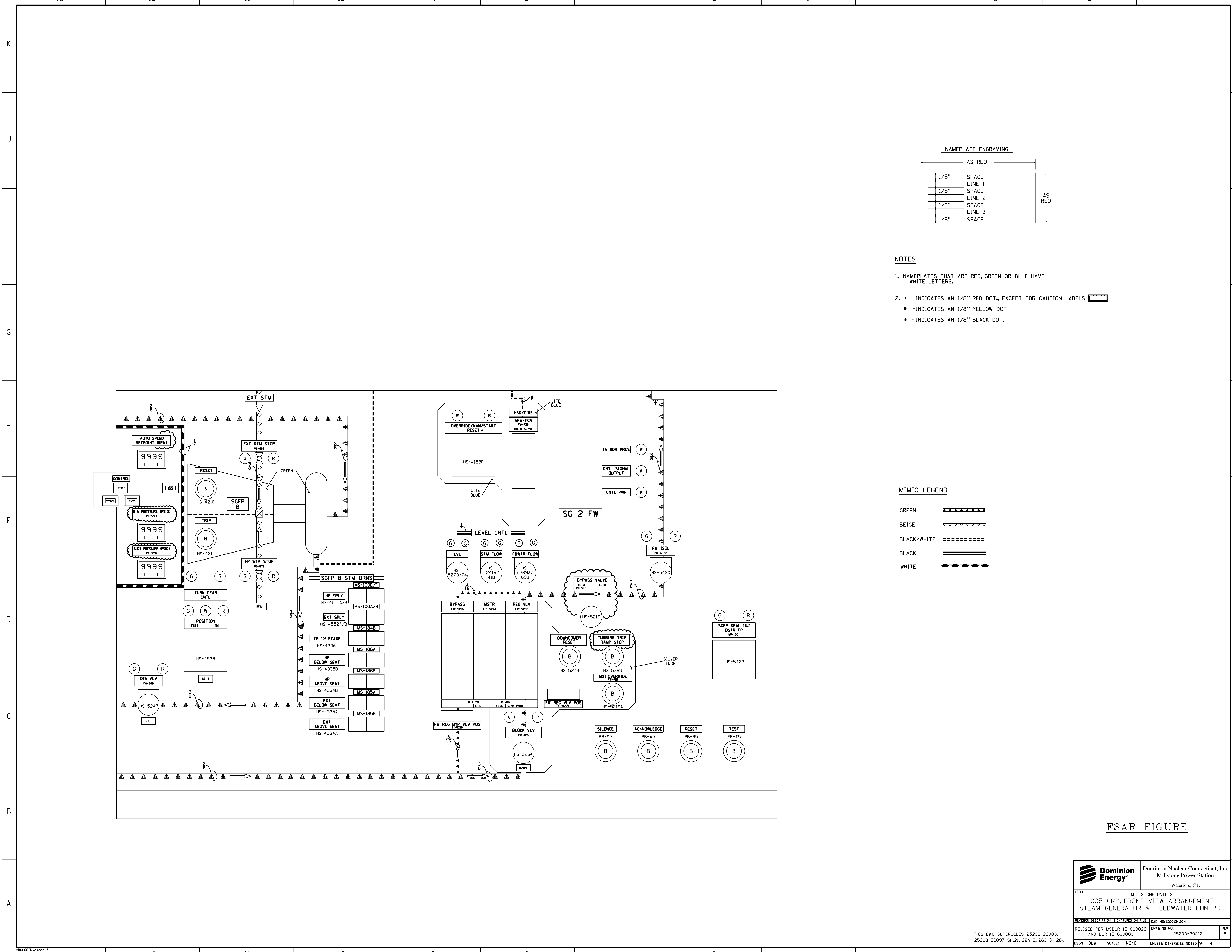
+ = INDICATES AN 1/8" RED DOT (Z1 POWERED EQUIPMENT)

● = INDICATES AN 1/8" YELLOW DOT (Z2 POWERED EQUIPMENT)



**FSAR FIGURE**

	Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.		
	TITLE: MILLSTONE UNIT 2 C05 CRP, FRONT VIEW ARRANGEMENT STEAM GENERATOR & FEEDWATER CONTROL		
REVISION DESCRIPTION SIGNATURES ON FILE AND DUR 13-000000	CAD NO: E302123.DGN DRAWING NO: 25203-30212 SCALE: NONE	REV 10 UNLESS OTHERWISE NOTED	THIS DWG SUPERCEDES 25203-28003, 25203-29097 SH, 21, 26A-E, 26J & 26K



**NAMEPLATE ENGRAVING**

AS REQ		AS REQ
1/8"	SPACE	
	LINE 1	
1/8"	SPACE	
	LINE 2	
1/8"	SPACE	
	LINE 3	
1/8"	SPACE	

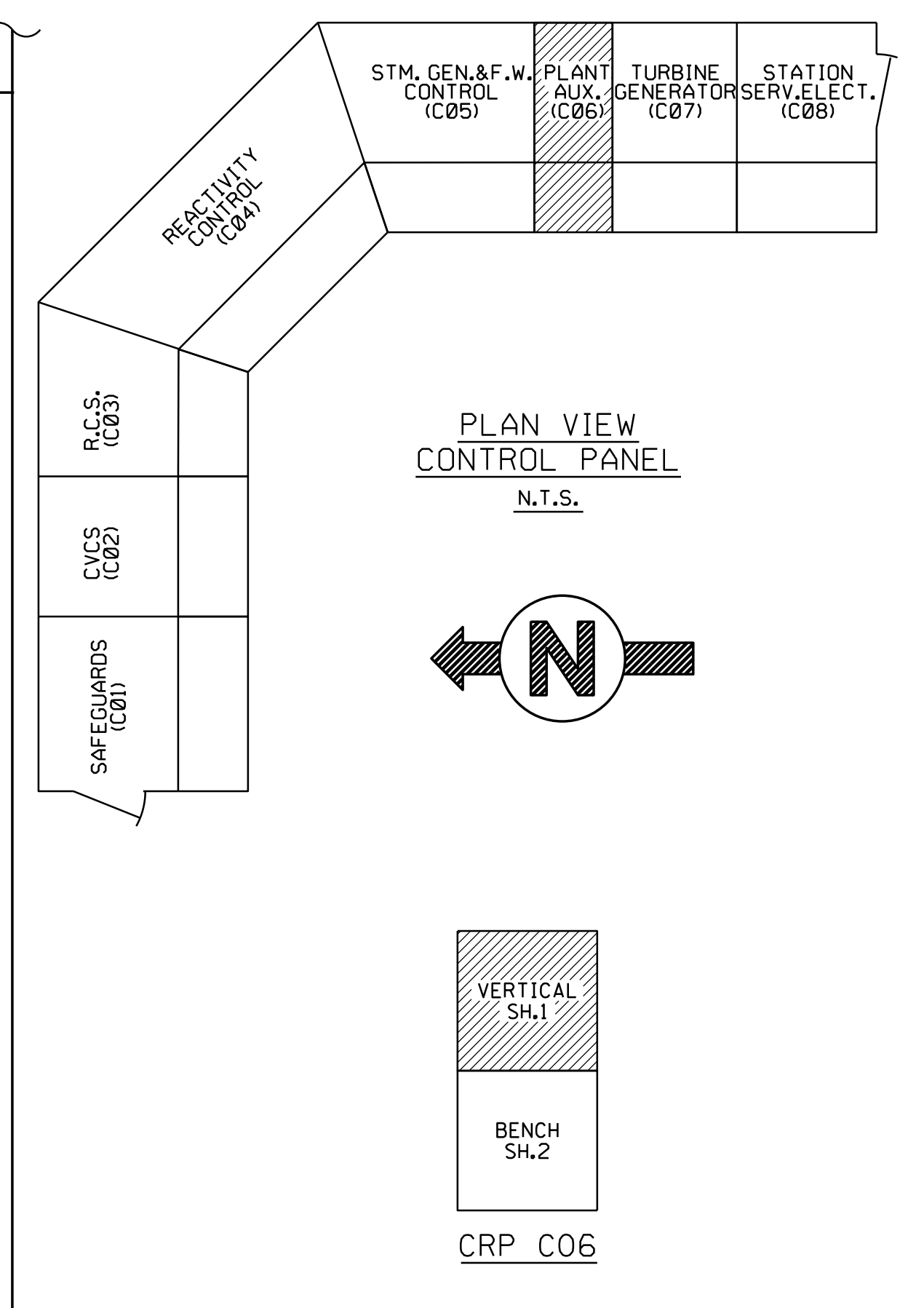
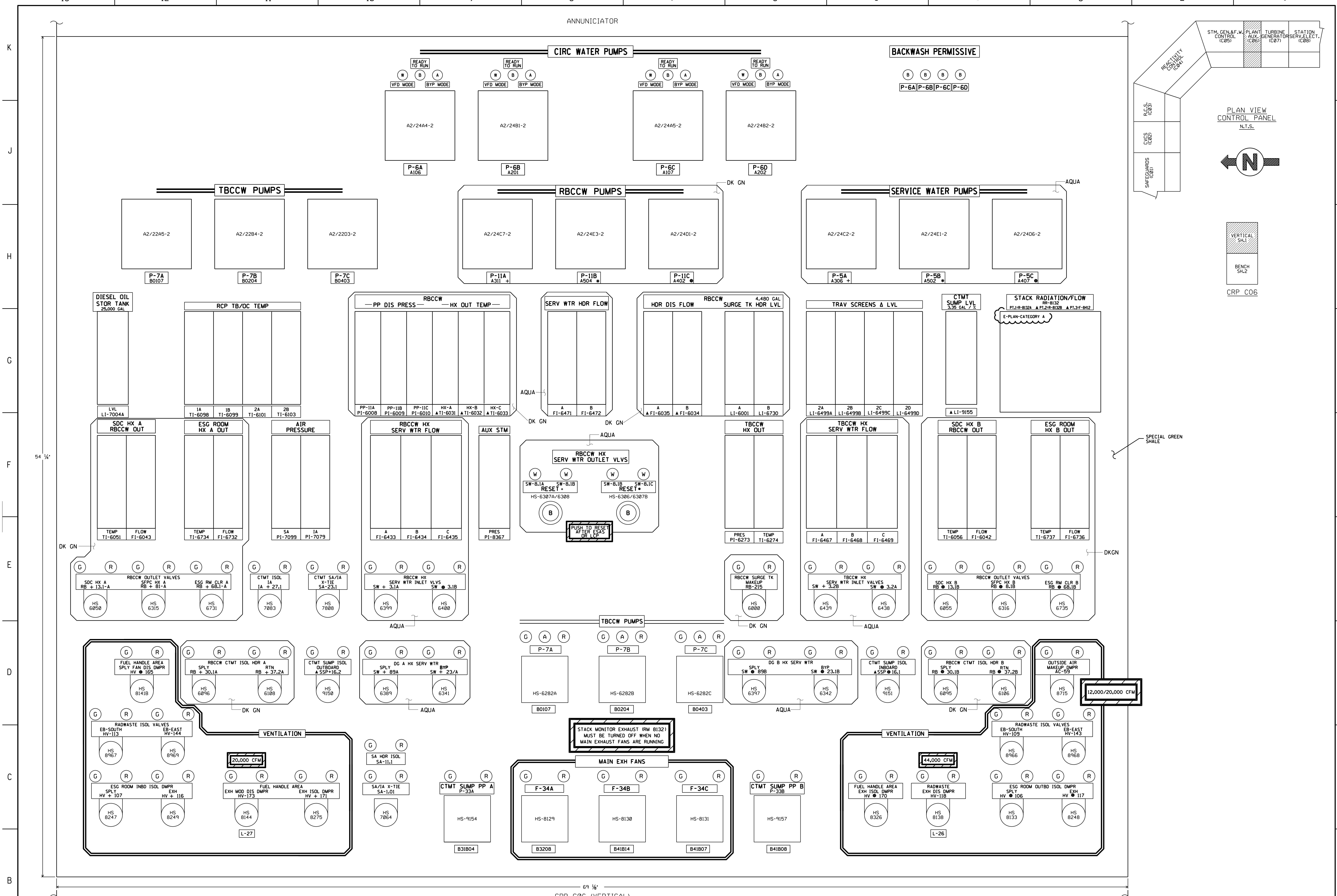
- NOTES**
- NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
  - + INDICATES AN 1/8" RED DOT., EXCEPT FOR CAUTION LABELS  
    - INDICATES AN 1/8" YELLOW DOT
    - INDICATES AN 1/8" BLACK DOT.

**MIMIC LEGEND**

GREEN	▲▲▲▲▲▲▲▲
BEIGE	▬▬▬▬▬▬▬▬
BLACK/WHITE	▬▬▬▬▬▬▬▬
BLACK	▬▬▬▬▬▬▬▬
WHITE	▬▬▬▬▬▬▬▬

**FSAR FIGURE**

	Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
	TITLE: MILLSTONE UNIT 2 C05 CRP, FRONT VIEW ARRANGEMENT STEAM GENERATOR & FEEDWATER CONTROL	
REVISION DESCRIPTION: SIGNATURES ON FILE AND DUR 19-800080	CAD NO: C302124.DGN DRAWING NO: 25203-30212	REV 9
DSGM DLW SCALE: NONE UNLESS OTHERWISE NOTED SH 4	THIS DMC SUPERCEDES 25203-28003, 25203-29097 SH.21, 26A-E, 26J & 26K	

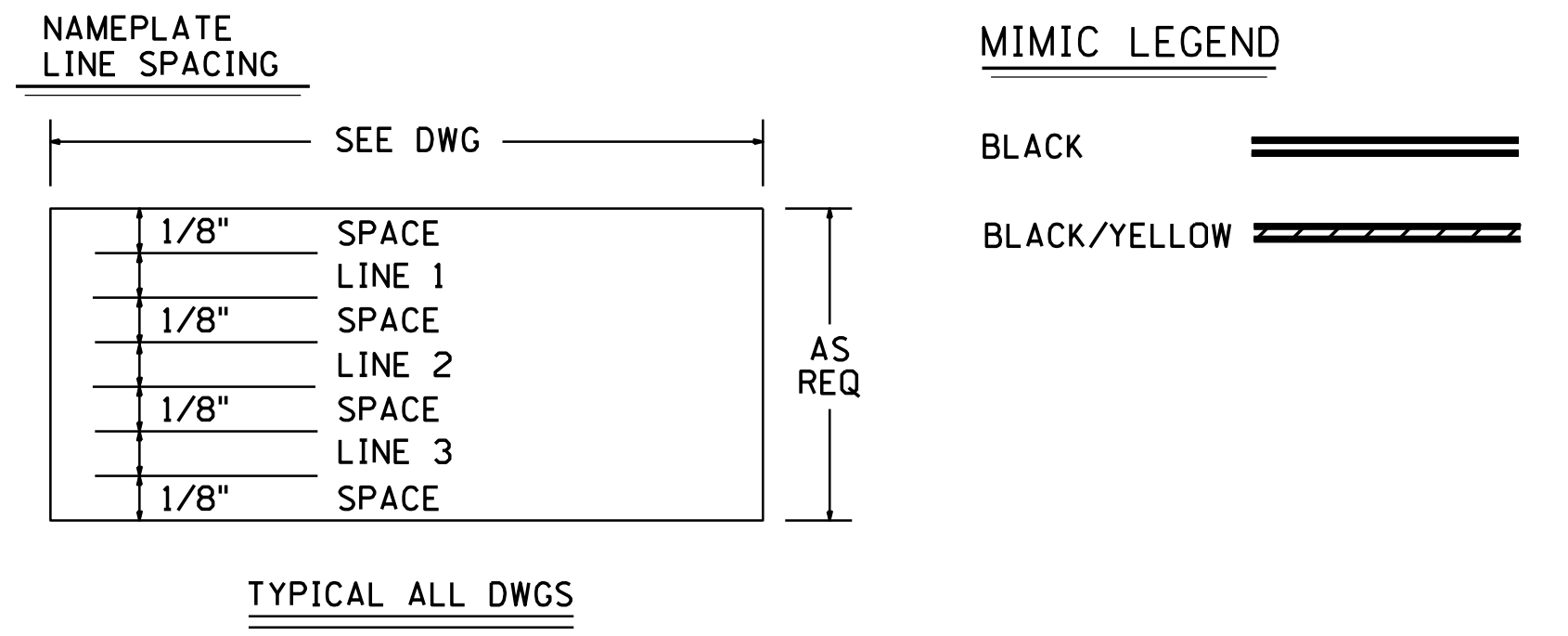


**NOTES**

1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
2. LETTER SIZES AND DEVICE NUMBERS ARE NOT SHOWN TO SCALE.

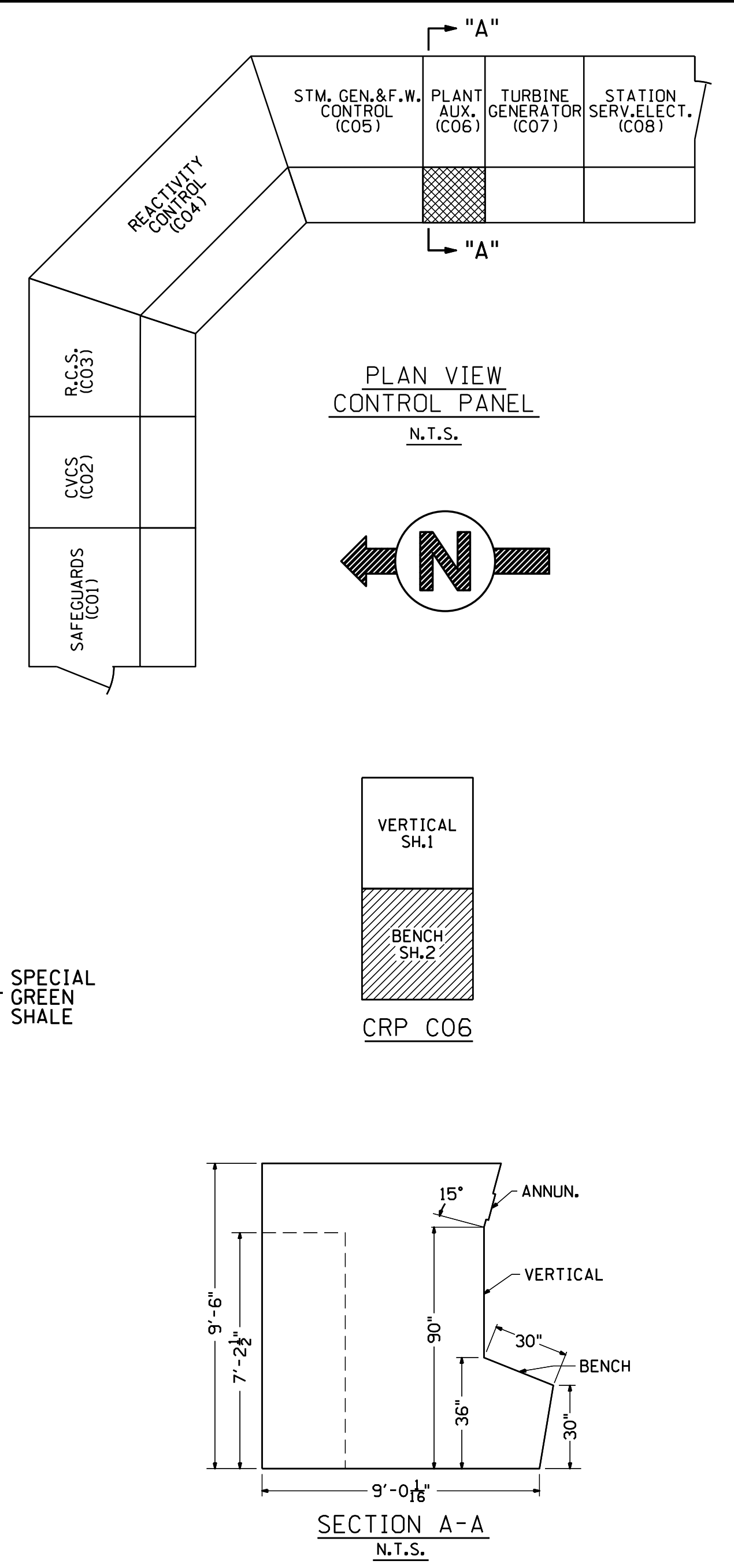
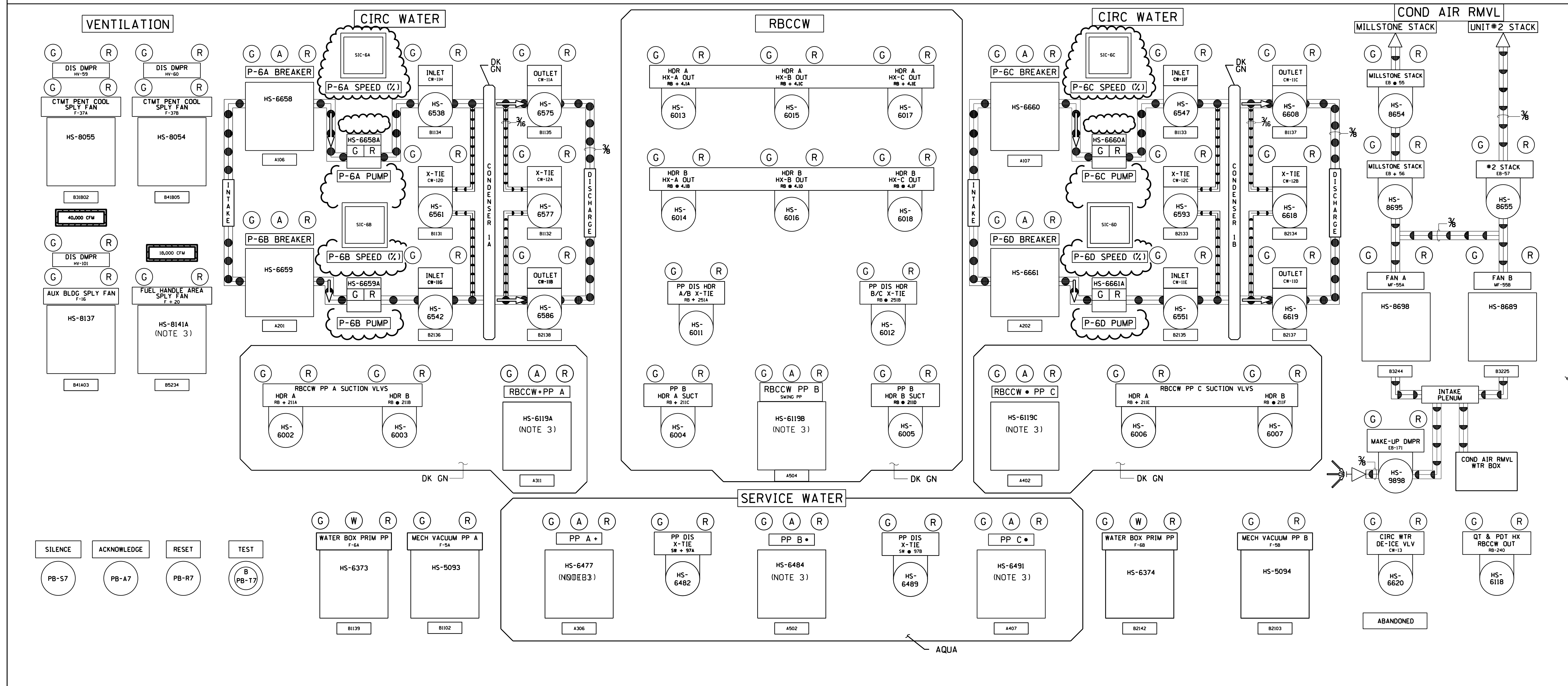
**NAMEPLATE LEGEND**  
REFER TO SPECIFICATION SP-EE-261

- ▲ = INDICATES A BLACK TRIANGLE R.G. 1.97 INSTR.
- + = INDICATES AN 1/8" RED DOT (Z1 POWERED EQUIPMENT) EXCEPT FOR CAUTION LABELS
- = INDICATES AN 1/8" YELLOW DOT (Z2 POWERED EQUIPMENT)
- \* = INDICATES AN 1/8" BLACK DOT (Z5 POWERED SWING EQUIPMENT)



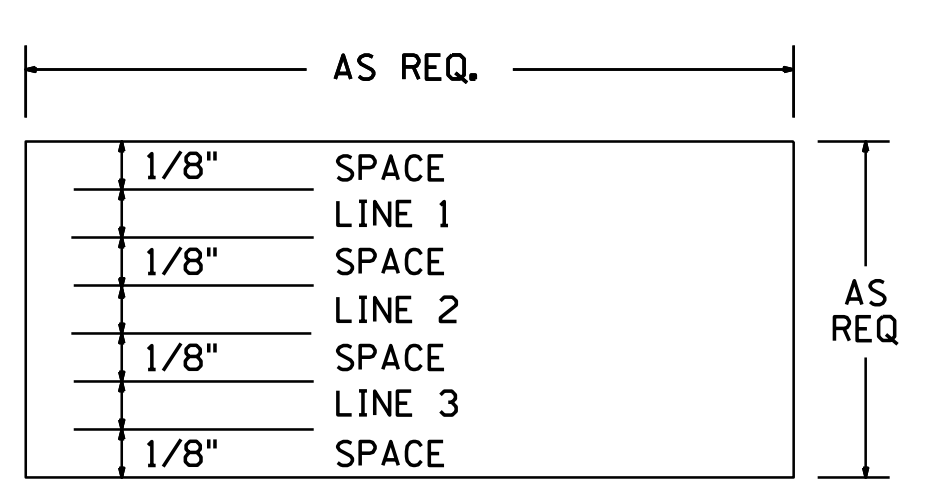
**FSAR FIGURE**

	Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
	TITLE: MILLSTONE UNIT 2 C06, CRP, FRONT VIEW ARRANGEMENT PLANT AUXILIARY	
REVISION DESCRIPTION: SIGNATURES ON FILE REVISED PER MSDUR 19-000029 & DUR 19-800080	DRAWING NO: 25203-30213	CAD NO: E30213.DGN REV 9
DSGN DLW SCALE: NONE UNLESS OTHERWISE NOTED SH 1		



CRP. CO6 (BENCH)

NAMEPLATE ENGRAVING



MIMIC LEGEND

BLUE	
BLACK	
BLACK/YELLOW	
LT BLUE	

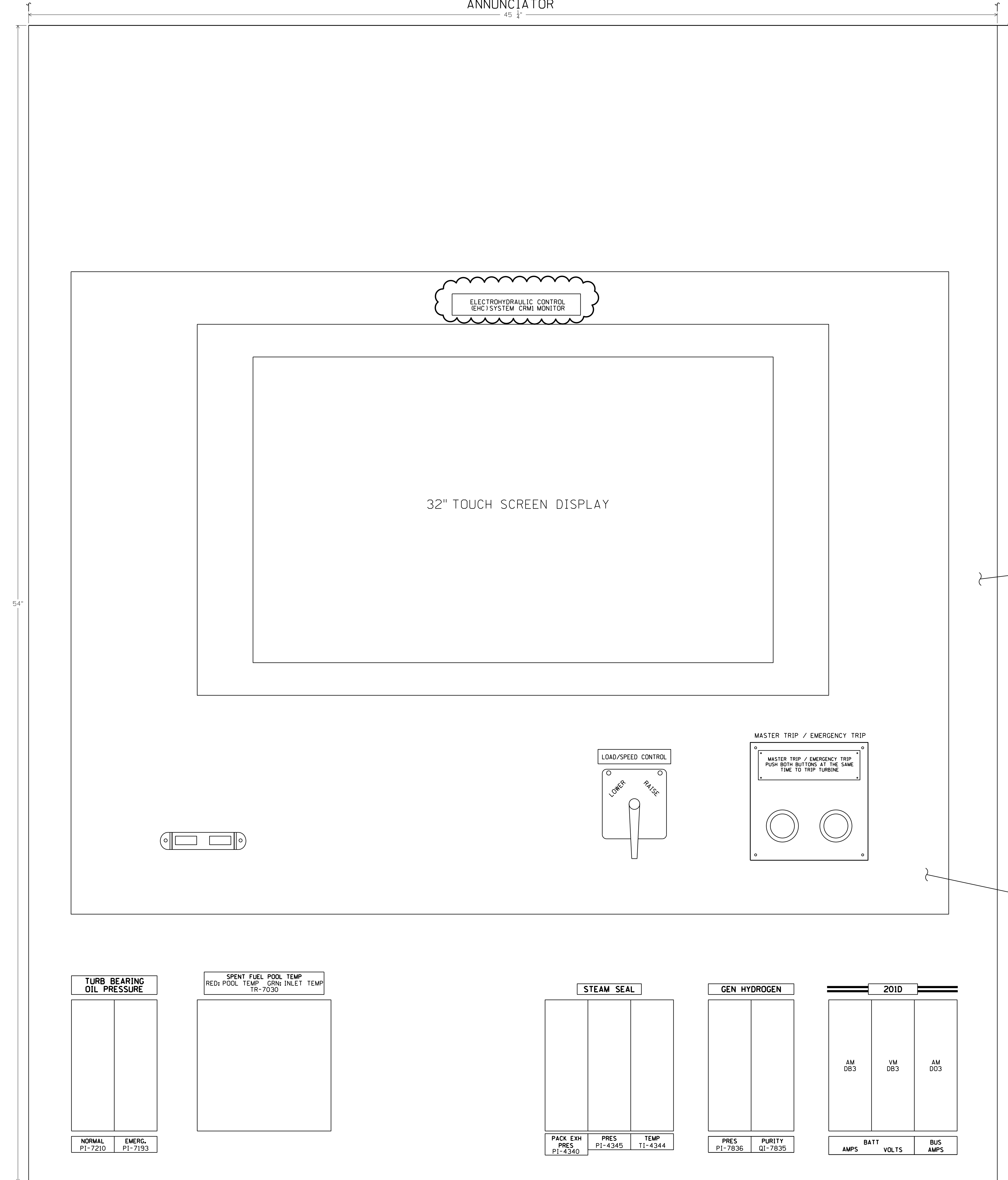
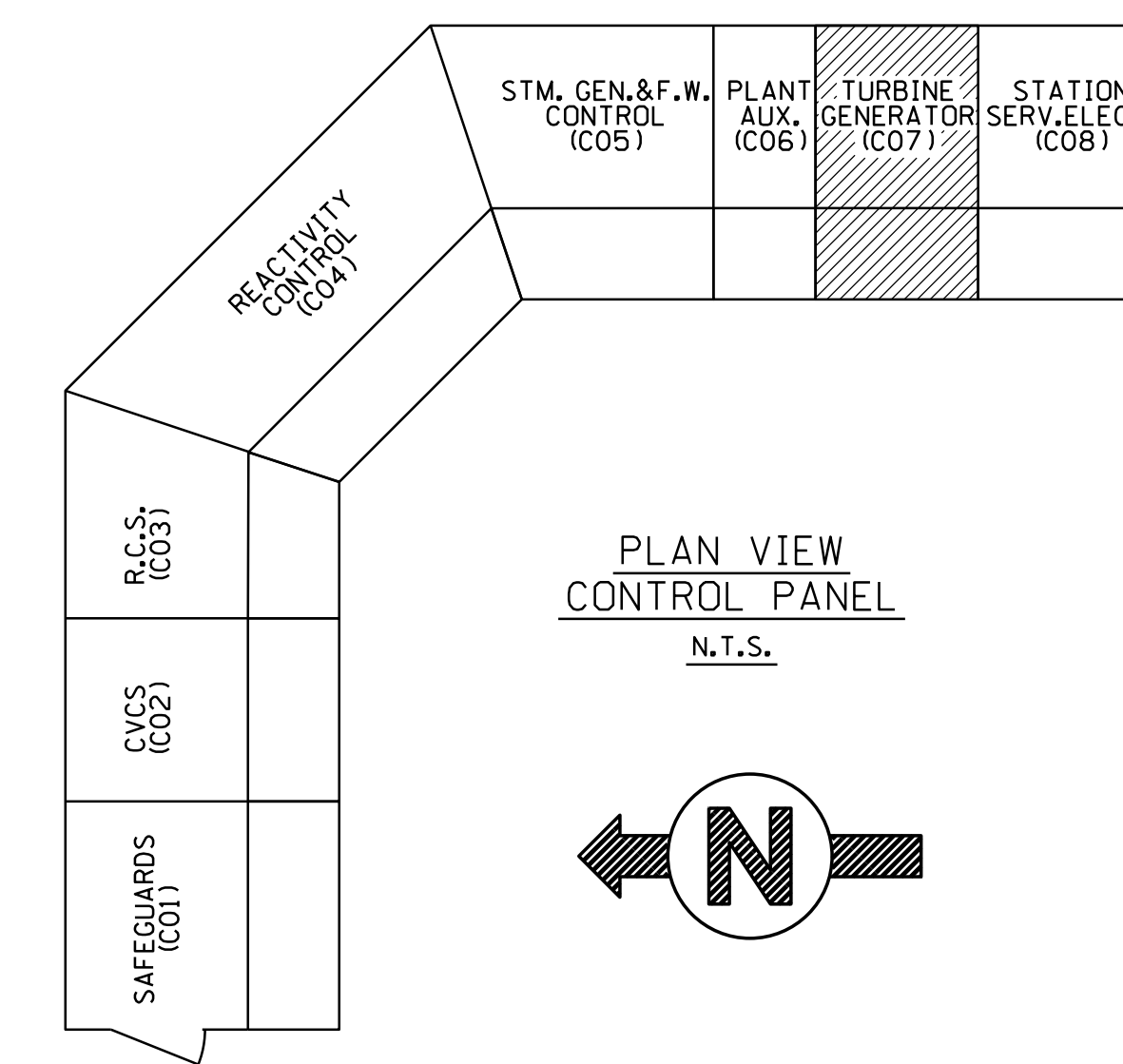
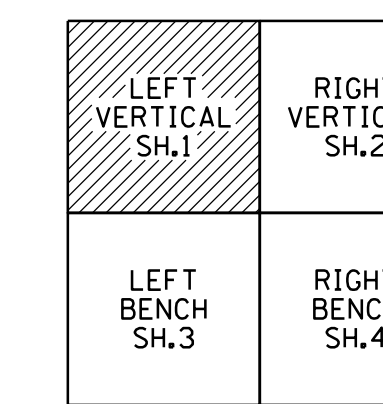
NOTES

1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
2. + - INDICATES AN 1/8" RED DOT., EXCEPT FOR CAUTION LABELS
  - - INDICATES AN 1/8" YELLOW DOT
  - - INDICATES AN 1/8" BLACK DOT.
3. RED HANDLES INSTALLED ON THE CONTROL SWITCHES.

FSAR FIGURE

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE: MILLSTONE POWER STATION UNIT No. 2 CO6, CRP. FRONT VIEW ARRANGEMENT PLANT AUXILIARY			
REVISION DESCRIPTION AND DUR. 19-900080	SIGNATURES ON FILE CAD NO. E302132.DGN	DRAWING NO. 25203-30213	REV 11
THIS DWG. SUPERSEDES THE FOLLOWING DWGS. 25203-28007 25203-29097-SH.8 25203-29097-SH.14D, 14E, 14F, 14H, 14K 14R, 14S, 14T			
DSGN DLW SCALE: NONE UNLESS OTHERWISE NOTED SH 2			

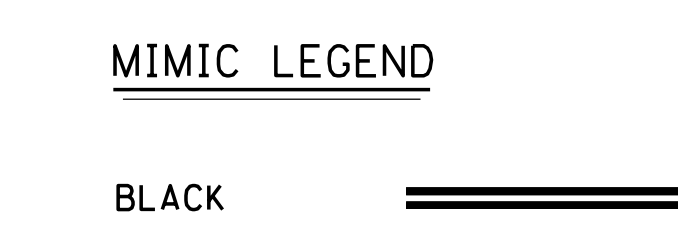
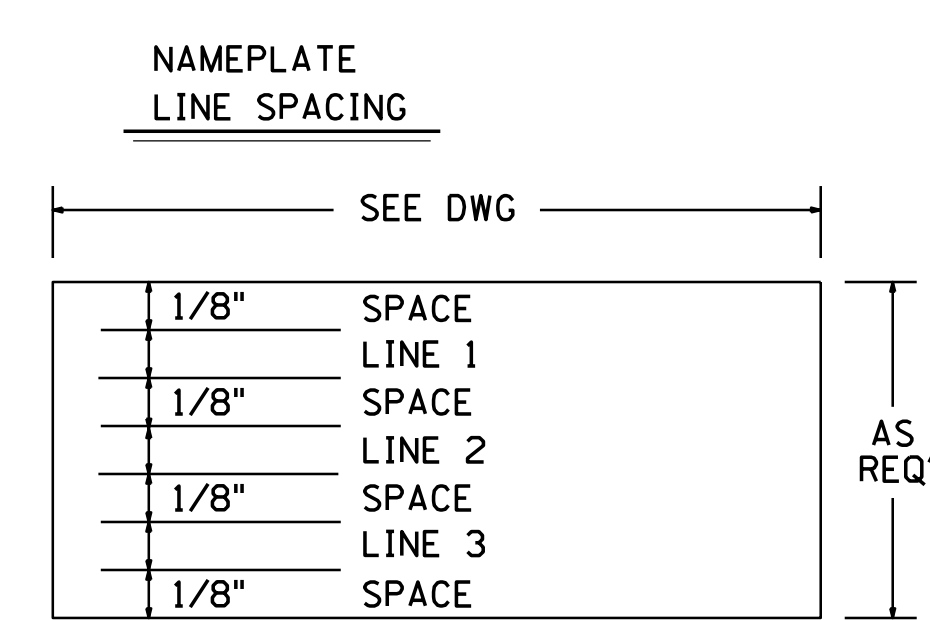




SPECIAL GREEN SHALE

ELECTROHYDRAULIC CONTROL PANEL (EHC)

- NOTES**
1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
  2. + - INDICATES AN 1/8" RED DOT (TRAIN A), EXCEPT FOR CAUTION LABELS  
 • - INDICATES AN 1/8" YELLOW DOT (TRAIN B)  
 \* - INDICATES AN 1/8" BLACK DOT.
  3. LETTER SIZES AND DEVICE NUMBERS ARE NOT SHOWN TO SCALE.



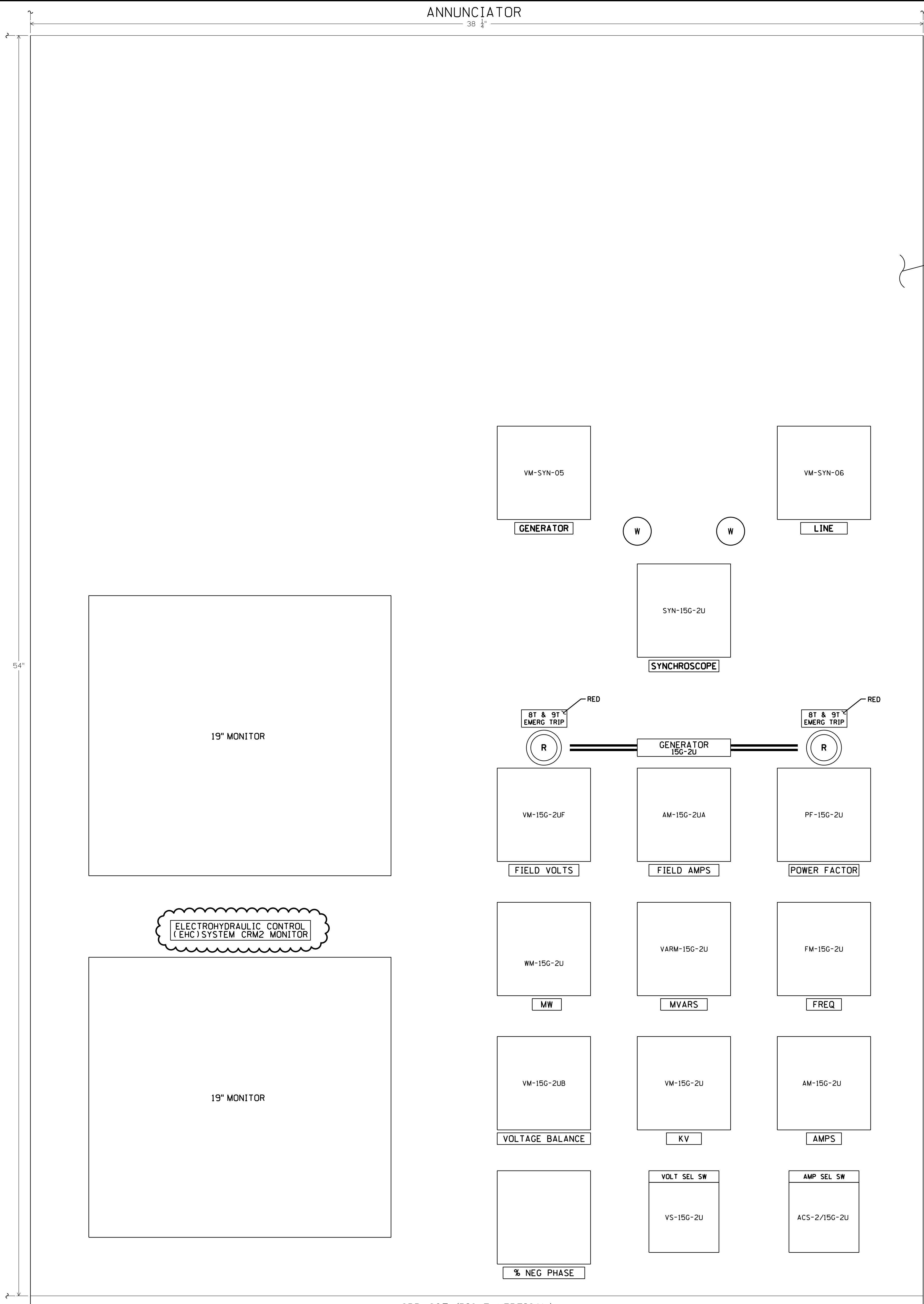
**REFERENCE DWGS**  
 25203-29224 SHEETS 5A AND 5B EHC PANEL INSERT

**FSAR FIGURE**

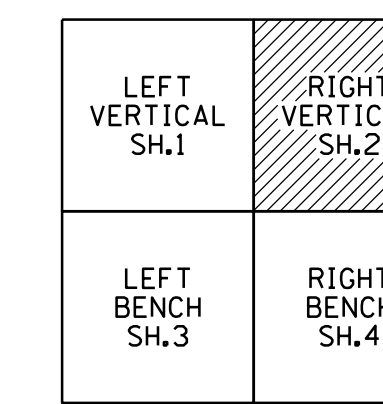
		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE: MILLSTONE UNIT 2 CO7, CRP, FRONT VIEW ARRANGEMENT TURBINE - GENERATOR			
REVISION DESCRIPTION SIGNATURES ON FILE		CAD NO: E30214.DGN	
REVISED PER MSDJR 19-00029 AND BUR 19-80098		DRAWING NO: 25203-30214 REV 8	
DSGN	DLW	SCALE: NONE	UNLESS OTHERWISE NOTED SH 1

THIS DWG. SUPERCEDES THE FOLLOWING DWGS.  
 25203-29097, SH.14F,14G,14H,14J,14K,14L  
 25203-28007  
 25203-29097 SH.8

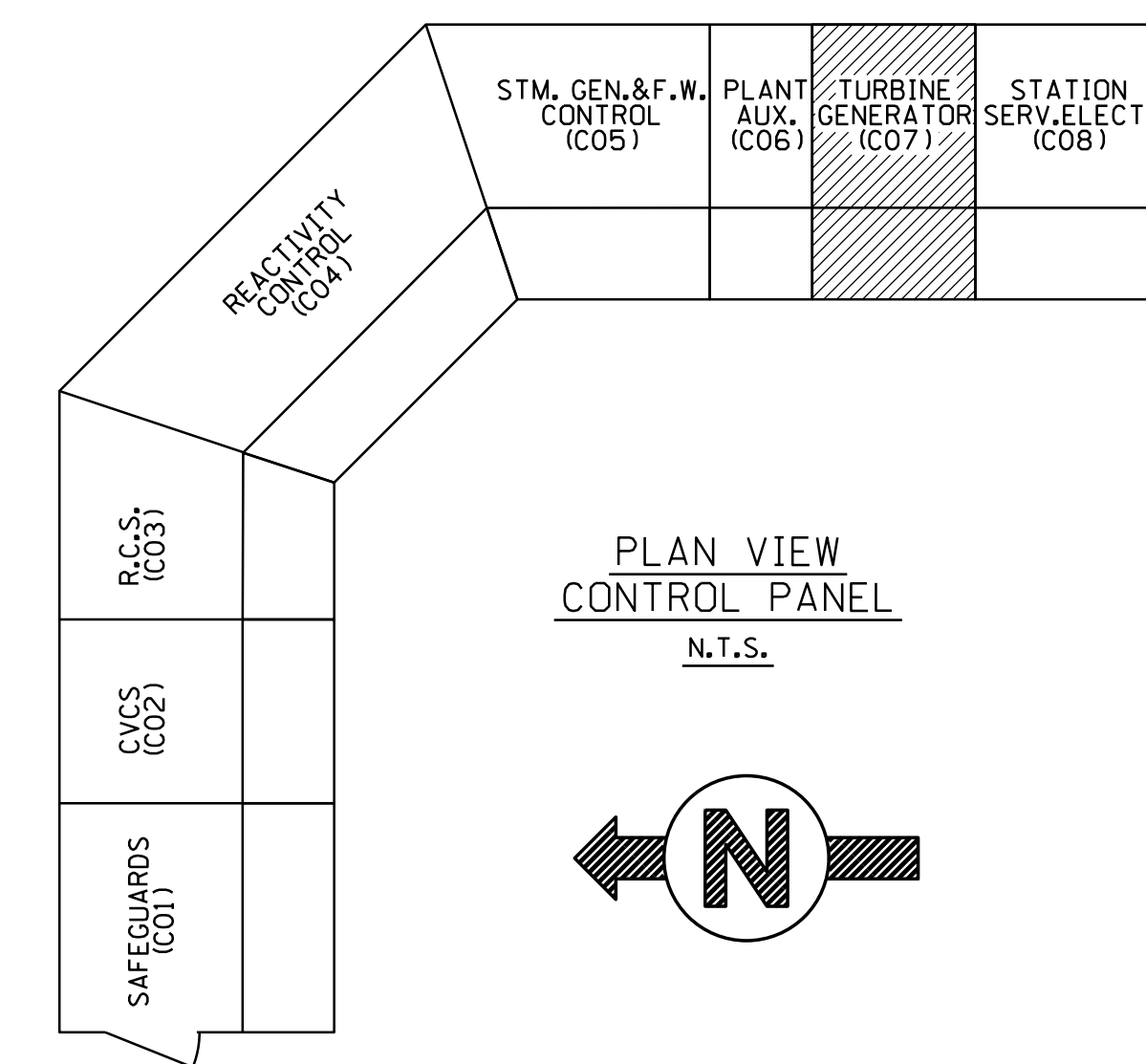
ANNUNCIATOR



SPECIAL GREEN SHALE



CRP CO7



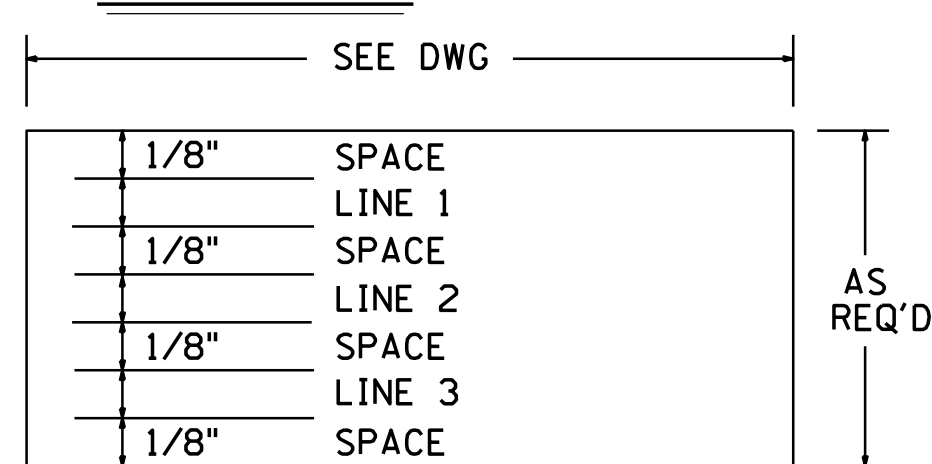
PLAN VIEW CONTROL PANEL  
N.T.S.

NOTES

1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
2. + - INDICATES AN 1/8" RED DOT (TRAIN A), EXCEPT FOR CAUTION LABELS  
 • - INDICATES AN 1/8" YELLOW DOT (TRAIN B)  
 \* - INDICATES AN 1/8" BLACK DOT.
3. LETTER SIZES AND DEVICE NUMBERS ARE NOT SHOWN TO SCALE.

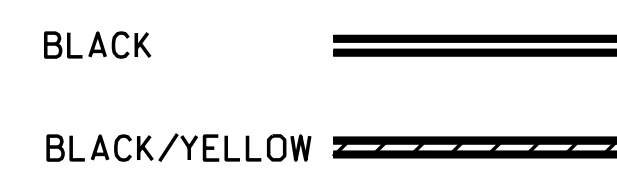
CRP. CO7 (RIGHT VERTICAL)

NAMEPLATE LINE SPACING



TYPICAL ALL DWGS

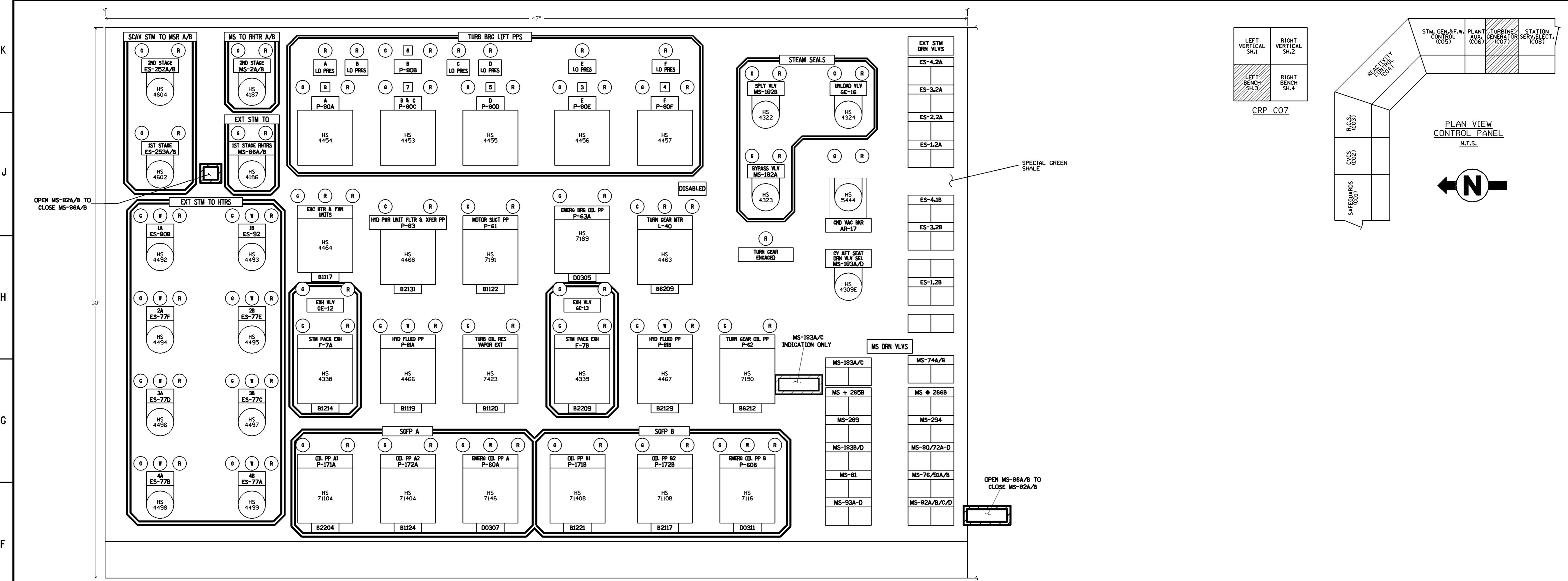
MIMIC LEGEND



FSAR FIGURE

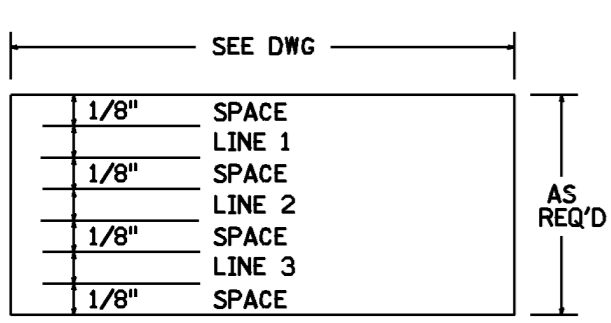
		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE CO7, CRP, FRONT VIEW ARRANGEMENT TURBINE - GENERATOR			
REVISION DESCRIPTION SIGNATURES ON FILE 25203-29097, SH.14F, 14G, 14H, 14J, 14K, 14L 25203-28007 25203-29097 SH.8	CAD NO: C302142.DWG DRAWING NO: 25203-30214 REV 14	REVISION DESCRIPTION SIGNATURES ON FILE 25203-29097, SH.14F, 14G, 14H, 14J, 14K, 14L 25203-28007 25203-29097 SH.8	REV 14
DSON DLW SCALE: NONE UNLESS OTHERWISE NOTED SH 2			

THIS DWG. SUPERCEDES THE FOLLOWING DWGS.  
 25203-29097, SH.14F, 14G, 14H, 14J, 14K, 14L  
 25203-28007  
 25203-29097 SH.8



CRP. C07 (LEFT BENCH)

**NAMEPLATE LINE SPACING**



TYPICAL ALL DWGS

**MIMIC LEGEND**



**NOTES**

1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
2. + - INDICATES AN 1/8" RED DOT (TRAIN A), EXCEPT FOR CAUTION LABELS  
 • - INDICATES AN 1/8" YELLOW DOT (TRAIN B)  
 \* - INDICATES AN 1/8" BLACK DOT.
3. LETTER SIZES AND DEVICE NUMBERS ARE NOT SHOWN TO SCALE .

**FSAR FIGURE**

SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES

**CAD**  
 MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION			
NO.	DATE	BY	APP.

NO.	DATE	REVISIONS	BY	CHK.	APP.	APP.
5	6-10-05	INCCORP. DCN DM2-00-0217-05	DLW	WBZ	-	ASK
4	2-7-00	INCCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP
N/A	10-14-97	INCCORP. DCN DM2-5-0216-95	DSJ	GFD	RWD	RW
86-230	5/10/81	AS BUILT PER DCR-M2-S-1219-89	WBZ	MEL	JTK	LJC
86-230	7/27/88	AS BUILT PER DSR-M2-S-302-88	TAS	MEL	LJC	LJC

**NON Q.A.**

**Dominion** Dominion Nuclear Connecticut, Inc. Millstone Power Station

MILLSTONE UNIT 2  
 CO7, CRP, FRONT VIEW ARRANGEMENT  
 TURBINE - GENERATOR  
 WATERFORD, CT.

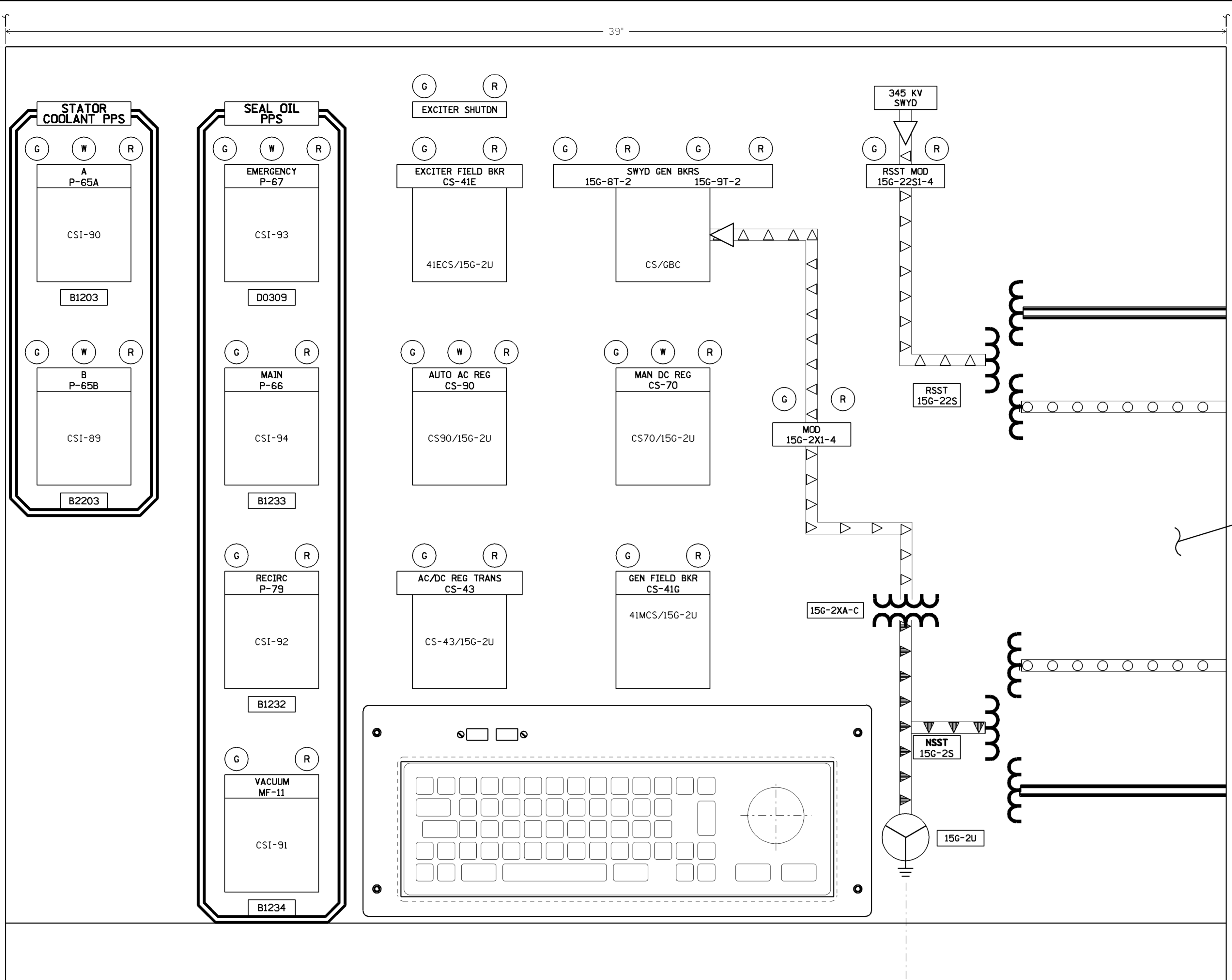
BY: T.A.SWIFT  
 DATE: 7/9/87  
 SCALE: N.T.S.

CHKD: AHS  
 DATE: 8-19-87

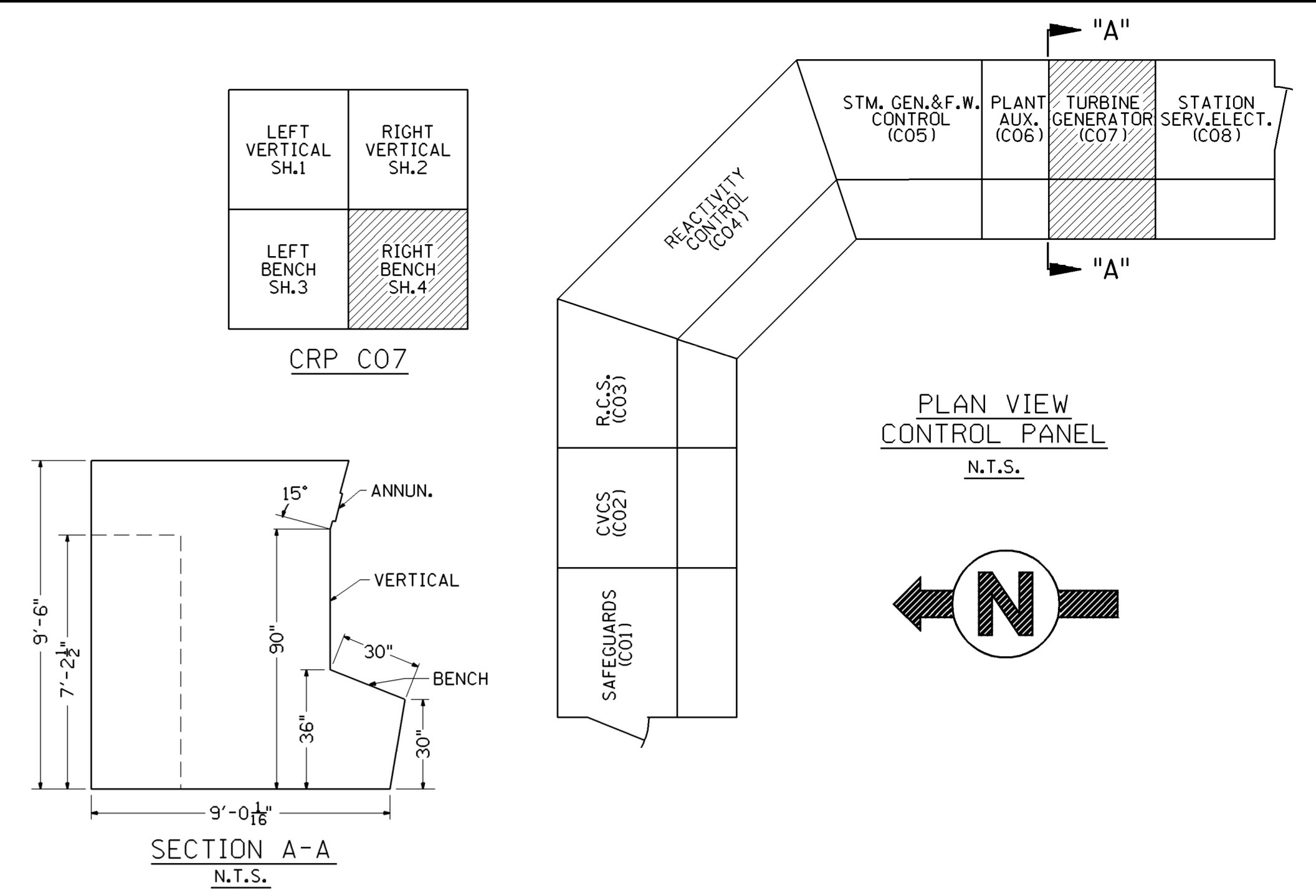
APP: LJC  
 DATE: 8-21-87

DWG. NO. 25203-30214 SH. 3 OF 4

THIS DWG. SUPERSEDES THE FOLLOWING DWGS.  
 25203-29097, SH.14F,14G,14H,14J,14K,14L  
 25203-28007  
 25203-29097 SH.8

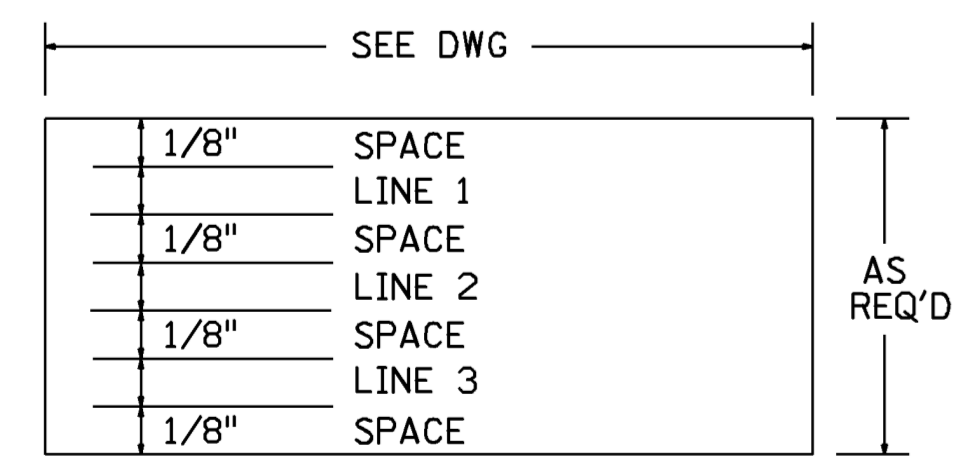


CRP. C07 (RIGHT BENCH)



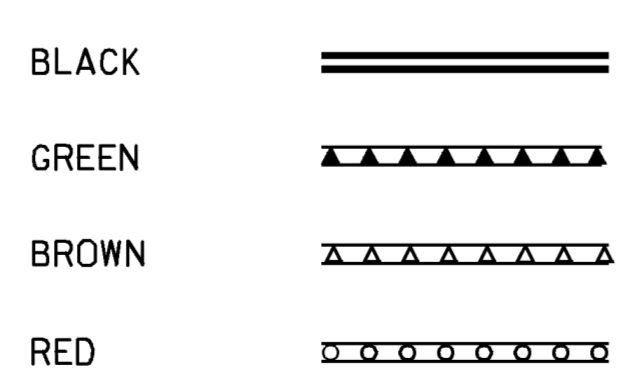
SECTION A-A  
N.T.S.

NAMEPLATE  
LINE SPACING



TYPICAL ALL DWGS

MIMIC LEGEND



NOTES

1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
2. + - INDICATES AN 1/8" RED DOT (TRAIN A), EXCEPT FOR CAUTION LABELS  
 • - INDICATES AN 1/8" YELLOW DOT (TRAIN B)  
 \* - INDICATES AN 1/8" BLACK DOT.
3. LETTER SIZES AND DEVICE NUMBERS ARE NOT SHOWN TO SCALE.

THIS DWG. SUPERCEDES THE FOLLOWING DWGS.  
 25203-29097, SH, 14F, 14G, 14H, 14J, 14K, 14L  
 25203-28007  
 25203-29097 SH, 8

FSAR FIGURE

SAFETY EVALUATION  
 MAY BE REQUIRED  
 PRIOR TO CHANGES

REVISIONS DURING CONSTRUCTION		CAD		REVISIONS DURING CONSTRUCTION	
NO.	DATE	BY	APP.	NO.	DATE
6	1-14-13	INCORP. DCN DM2-00-0308-08 PER DUR 13-800039	JCV DLW	-	DLW
5	11-16-12	INCORP. DCN DM2-00-0559-10 PER DUR 12-800536	JCV MEL	-	MEL
4	9-11-08	INCORP. DCN DM2-05-0209-06	JCV MEL	-	DLW
3	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ WBZ	JPP	JPP
86-230	5/10/91	AS BUILT PER DCR-M2-S-1218-89	WBZ	MEL	JTK LJC
86-230	5/7/88	AS BUILT PER DSR-M2-S-302-88	TAS	MEL	LJC

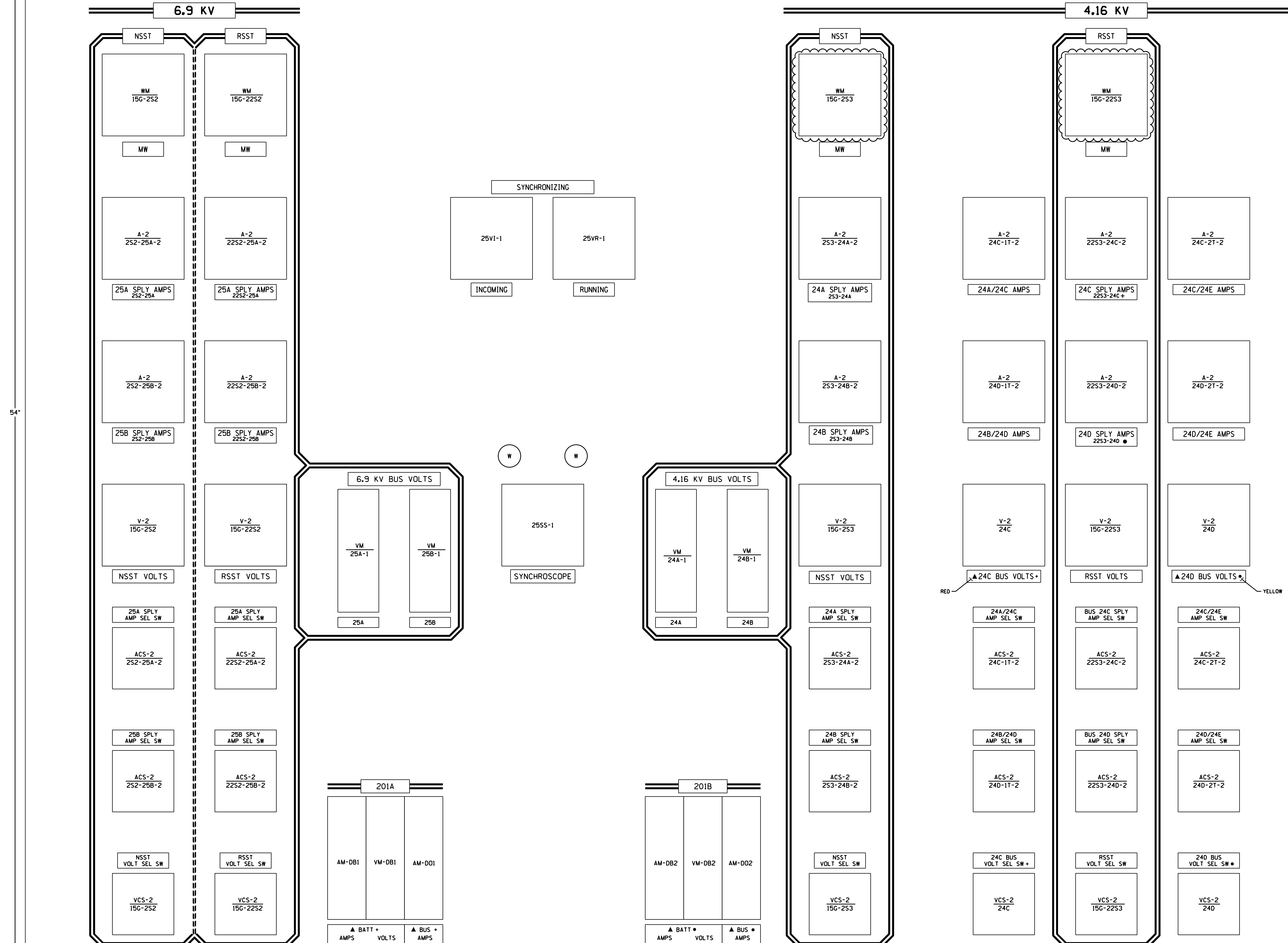
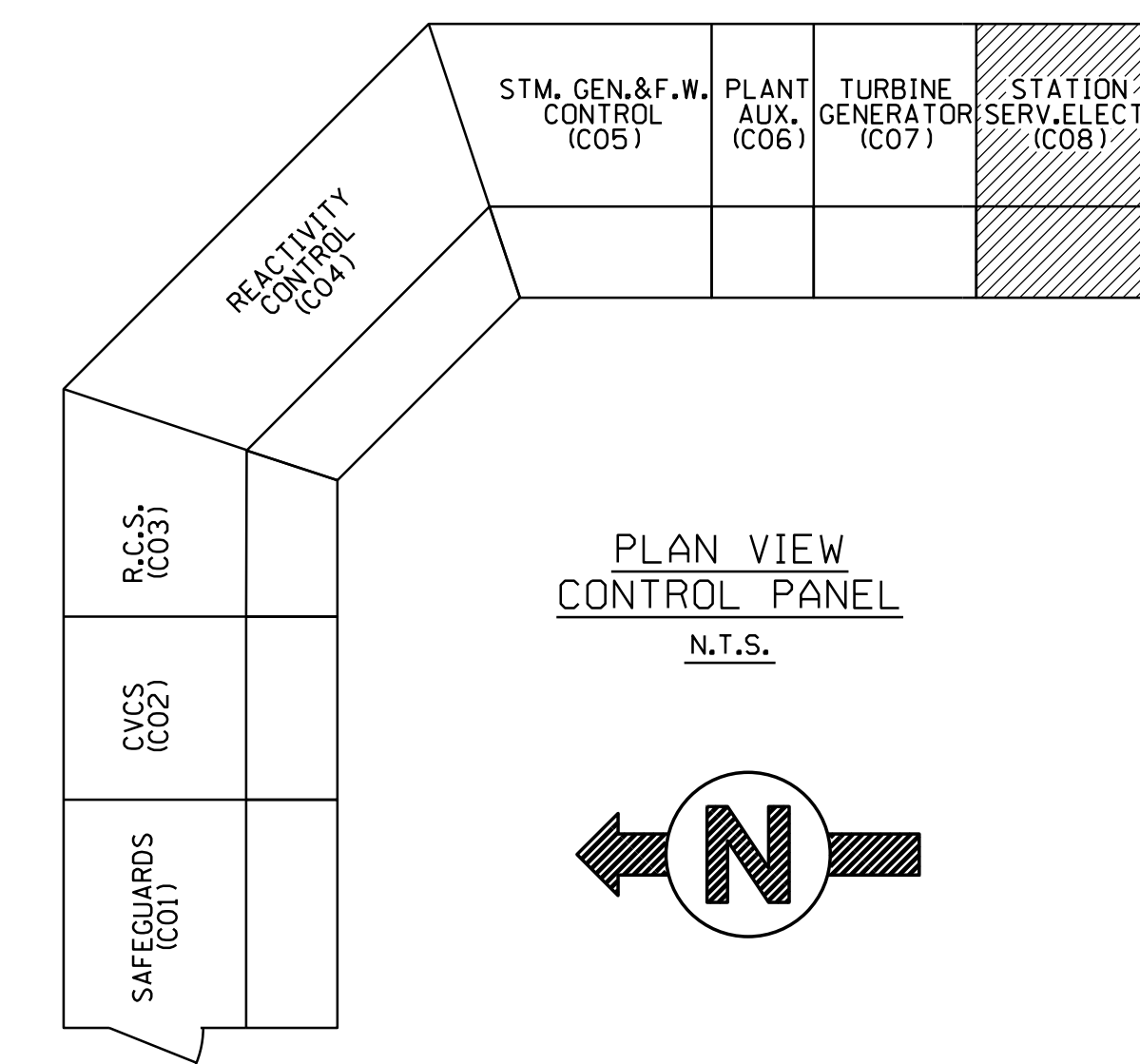
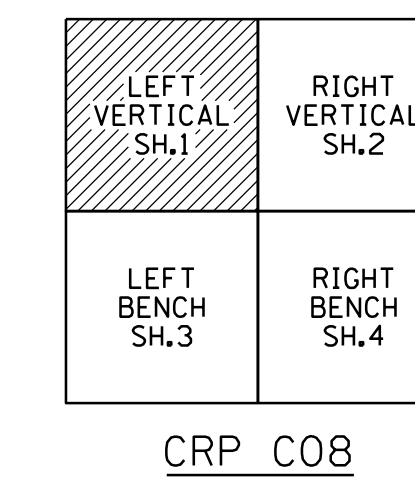
  

BY: T.A. SWIFT		CHKD: AHS	APP: LJC
DATE: 7/9/87	DATE: 8-19-87	DATE: 8-21-87	
SCALE: N.T.S.		DWG. NO.:	25203-30214 SH 4

NON Q.A.

Dominion Nuclear Connecticut, Inc.  
 Millstone Power Station

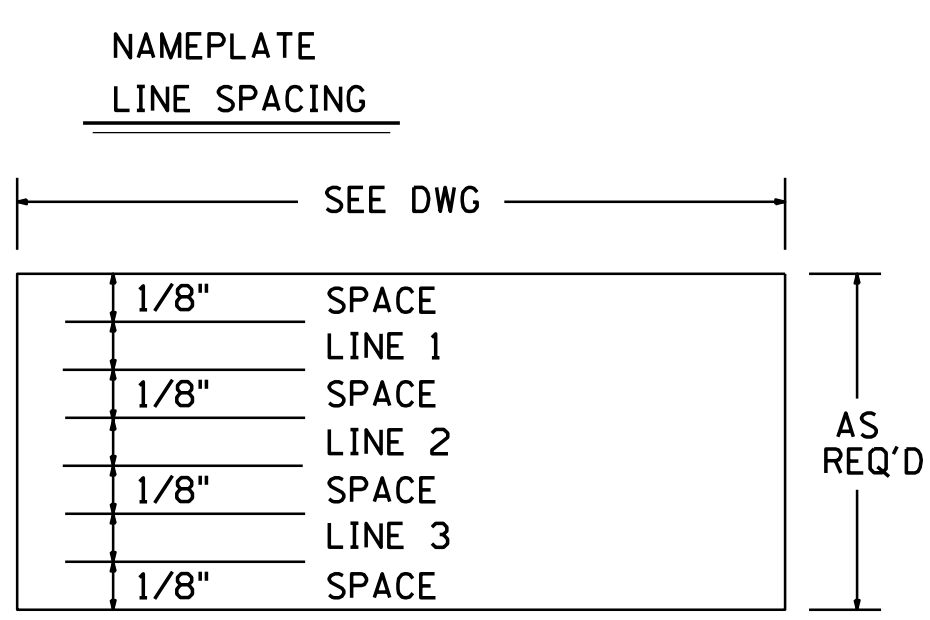
MILLSTONE UNIT 2  
 C07, CRP, FRONT VIEW ARRANGEMENT  
 TURBINE - GENERATOR  
 WATERFORD, CONNECTICUT



- NOTES**
1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
  2. LETTER SIZES AND DEVICE NUMBERS ARE NOT SHOWN TO SCALE

**NAMEPLATE LEGEND**  
REFER TO SPECIFICATION SP-EE-261

- ▲ = INDICATES A BLACK TRIANGLE R.G. 1.97 INSTR.
- + = INDICATES AN 1/8" RED DOT (Z1 POWERED EQUIPMENT), EXCEPT FOR CAUTION LABELS
- = INDICATES AN 1/8" YELLOW DOT (Z2 POWERED EQUIPMENT)



**MIMIC LEGEND**

- BLACK = [Solid line]
- BLACK/WHITE = [Dashed line]
- BLACK/YELLOW = [Dotted line]

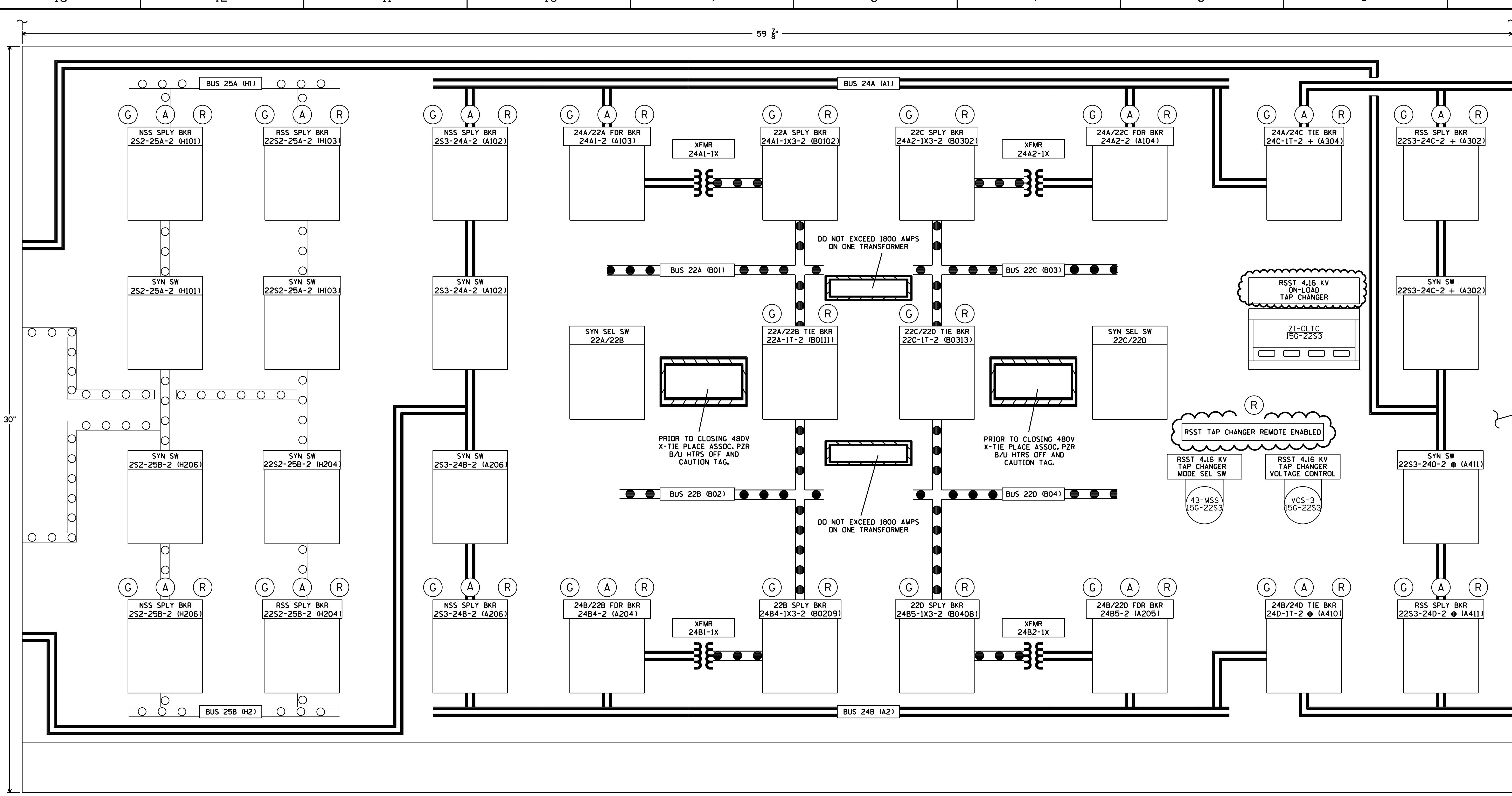
CRP - CO8 (LEFT VERTICAL)

THIS DWG. SUPERCEDES PART OF FOLLOWING DWGS.  
25203-28008  
25203-29097,SH.1  
25203-29097,SH.16A TO 16G

**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

	Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.		
	TITLE: MILLSTONE UNIT 2 CO8 CRP. FRONT VIEW ARRANGEMENT STATION SERVICE ELECTRIC WATERFORD, CONNECTICUT		
REVISION DESCRIPTION SIGNATURES ON FILE	CAD NO: E30215.DWG	DRAWING NO: 25203-30215	REV 7
DSGN JCV	SCALE: NONE	UNLESS OTHERWISE NOTED SH 1	

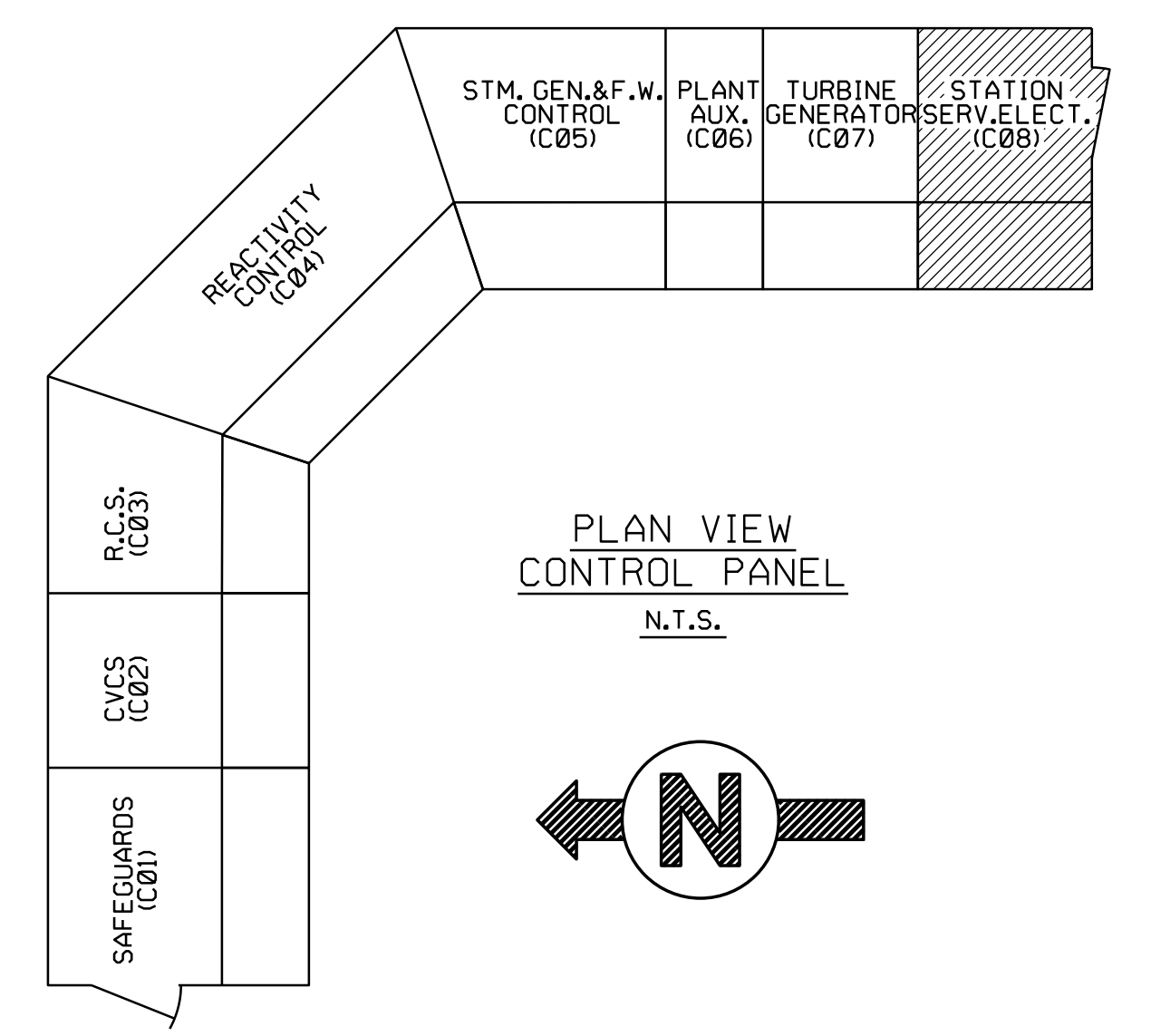




CRP - COB (LEFT BENCH)

LEFT VERTICAL SH.1	RIGHT VERTICAL SH.2
LEFT BENCH SH.3	RIGHT BENCH SH.4

CRP COB



SPECIAL GREEN SHALE

NAMEPLATE LINE SPACING

1/8"	SPACE	AS REQ'D
1/8"	LINE 1	
1/8"	SPACE	
1/8"	LINE 2	
1/8"	SPACE	
1/8"	LINE 3	

TYPICAL ALL DWGS

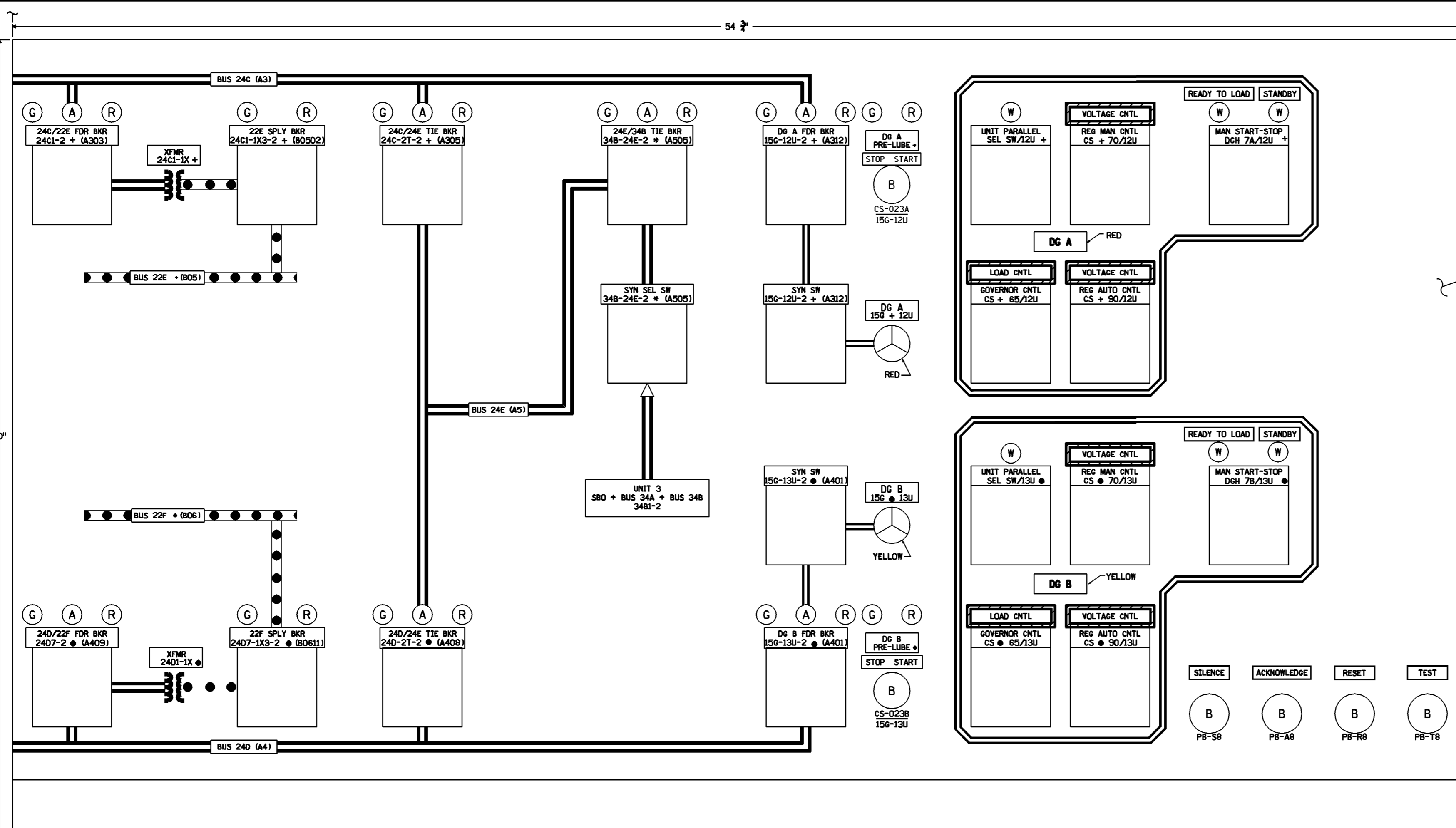
MIMIC LEGEND

BLUE	██████████
BLACK	=====
RED	○○○○○○○○
BLACK/YELLOW	▨▨▨▨▨▨

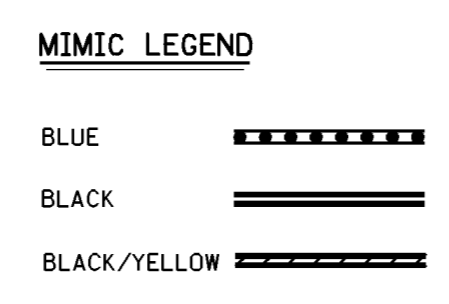
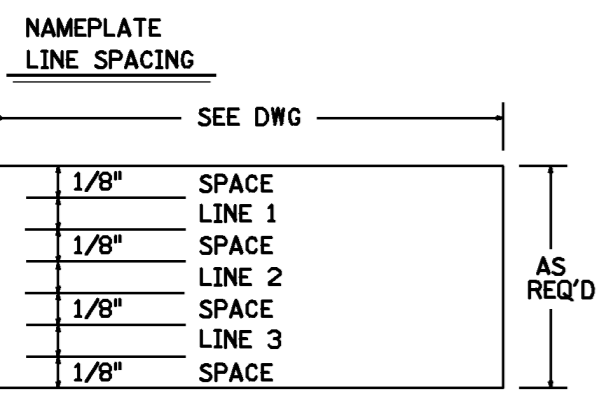
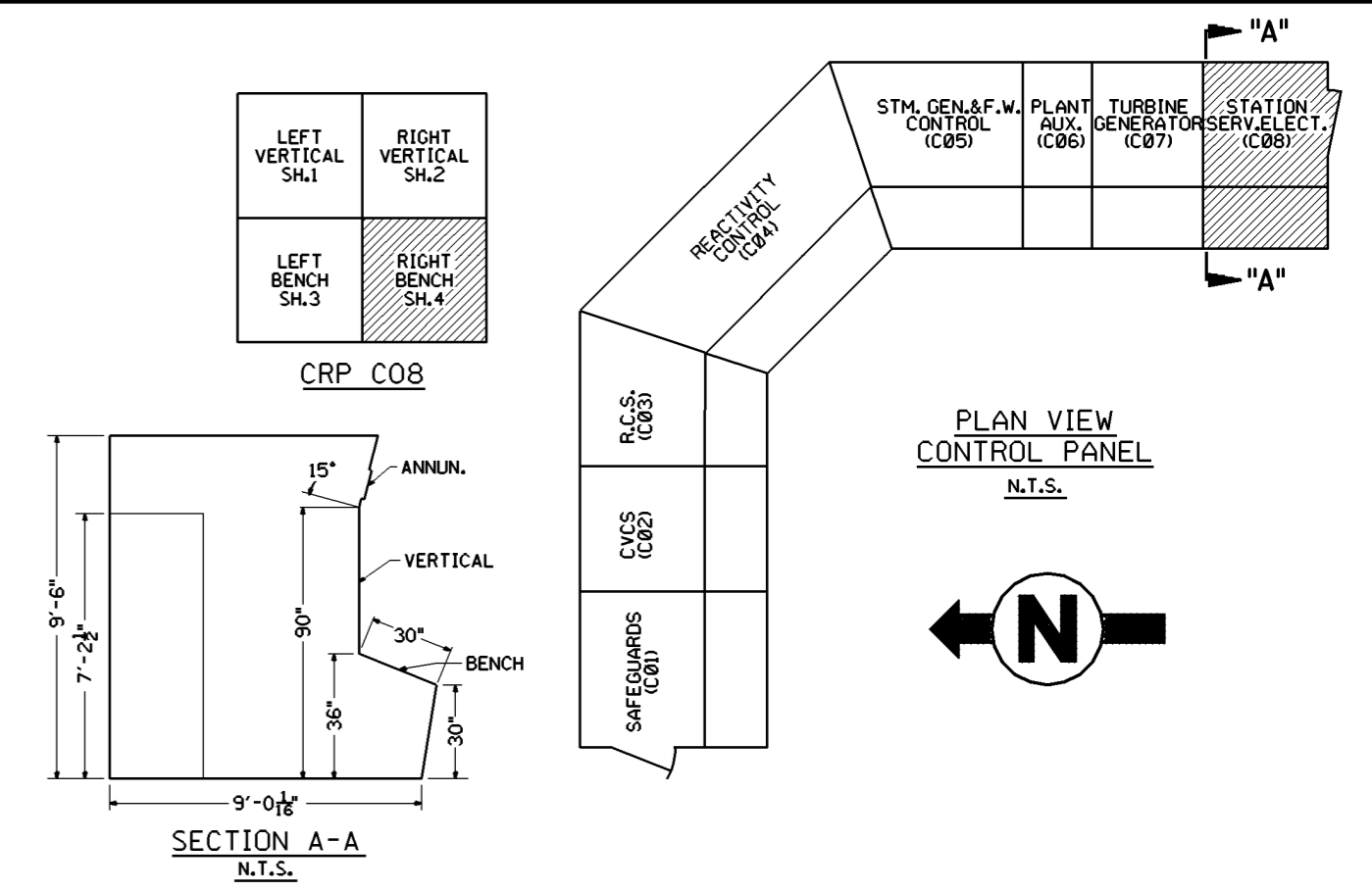
- NOTES
1. NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
  2. + - INDICATES AN 1/8" RED DOT (TRAIN A), EXCEPT FOR CAUTION LABELS
    - - INDICATES AN 1/8" YELLOW DOT (TRAIN B)
    - \* - INDICATES AN 1/8" BLACK DOT.
  3. LETTER SIZES AND DEVICE NUMBERS ARE NOT SHOWN TO SCALE.

FSAR FIGURE

	Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.		
	TITLE: MILLSTONE UNIT 2 COB, CRP, FRONT VIEW ARRANGEMENT STATION SERVICE ELECTRIC		
REVISION DESCRIPTION (SIGNATURES ON FILE) 25203-2900B 25203-29037, SH.1 25203-29037, SH.16A TO 16G	CAD NO: E302153.DGN DRAWING NO: 25203-30215 REV 5	THIS DWG. SUPERCEDES PART OF FOLLOWING DWGS. 25203-2900B 25203-29037, SH.1 25203-29037, SH.16A TO 16G	DSGM DLW SCALE: NONE UNLESS OTHERWISE NOTED SM 3



CRP - COB (RIGHT BENCH)



- NOTES**
- NAMEPLATES THAT ARE RED, GREEN OR BLUE HAVE WHITE LETTERS.
  - + - INDICATES AN 1/8" RED DOT (TRAIN A), EXCEPT FOR CAUTION LABELS
    - INDICATES AN 1/8" YELLOW DOT (TRAIN B)
    - \* INDICATES AN 1/8" BLACK DOT. (Z5 POWERED SWING EQUIPMENT)
  - LETTER SIZES AND DEVICE NUMBERS ARE NOT SHOWN TO SCALE.

**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

NO.		DATE	REVISIONS	BY	CHK.	APP.	APP.
8	9-17-01	INCORP'D DCNS DM1-00-0118-99, DM2-00,03-0865-99	VP	DVP	MAG	GMO	
7	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP	
6	9/23/98	INCORP. DCN DM2-04-0356-97	WBZ	JSJ	JPP	JPP	
N/A	4-7-98	INCORP. DCN DM2-03-0256-97	AP	GFD	RWD	RW	
N/A	11-9-96	INCORP. DCN DM2-5-0403-95 PER DCR M2-S-0105-96	JMM	MM	JPP	JPP	
91-056	3-5-13	AS BUILT PER DM2-S-1377-92, DM2-S-1993-96, DCR M2-S-1286-92	JSJ	MER	DNE	RCD	
86-230	2-12-79	AS BUILT PER DCR-M2-S-1381-90	WBZ	MEL	JTK	LJC	

BY	T.A.SWIFT	CHKD.	AHS	APP.		APP.	LJC
DATE	7/9/87	DATE	8-19-87	DATE		DATE	8-21-87
SCALE	N.T.S.	DWG. NO.					
							25203-30215 SH. 4 of 4

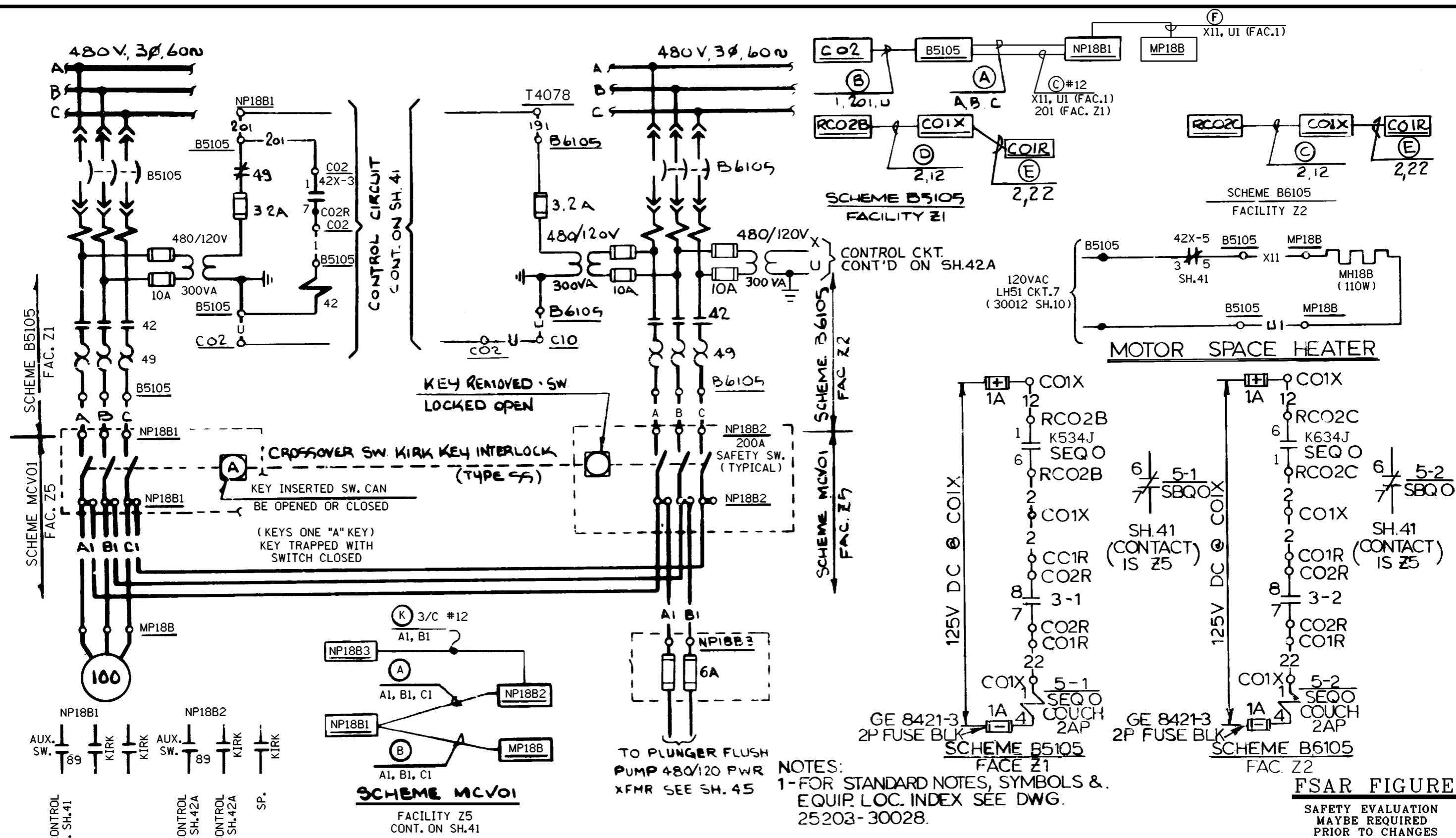
THIS DWG. SUPERCEDES PART OF FOLLOWING DWGS.  
25203-28008  
25203-29497, SH.1  
25203-25097, SH.16A TO 16G

NON  
Q.A.

Dominion Nuclear Connecticut, Inc.  
Millstone Power Station

MILLSTONE UNIT 2  
COB, CRP, FRONT VIEW ARRANGEMENT  
STATION SERVICE ELECTRIC  
WATERFORD, CT.





NOTES:  
1-FOR STANDARD NOTES, SYMBOLS &  
EQUIP. LOC. INDEX SEE DWG.  
25203-30028.

FSAR FIGURE  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

REVISIONS DURING CONSTRUCTION

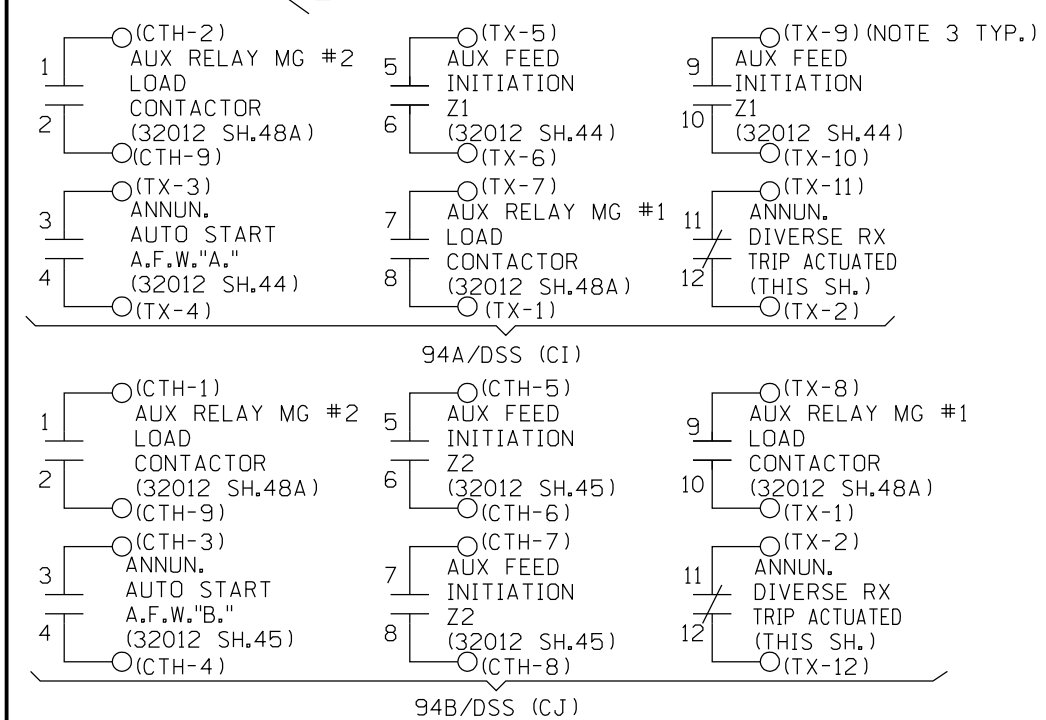
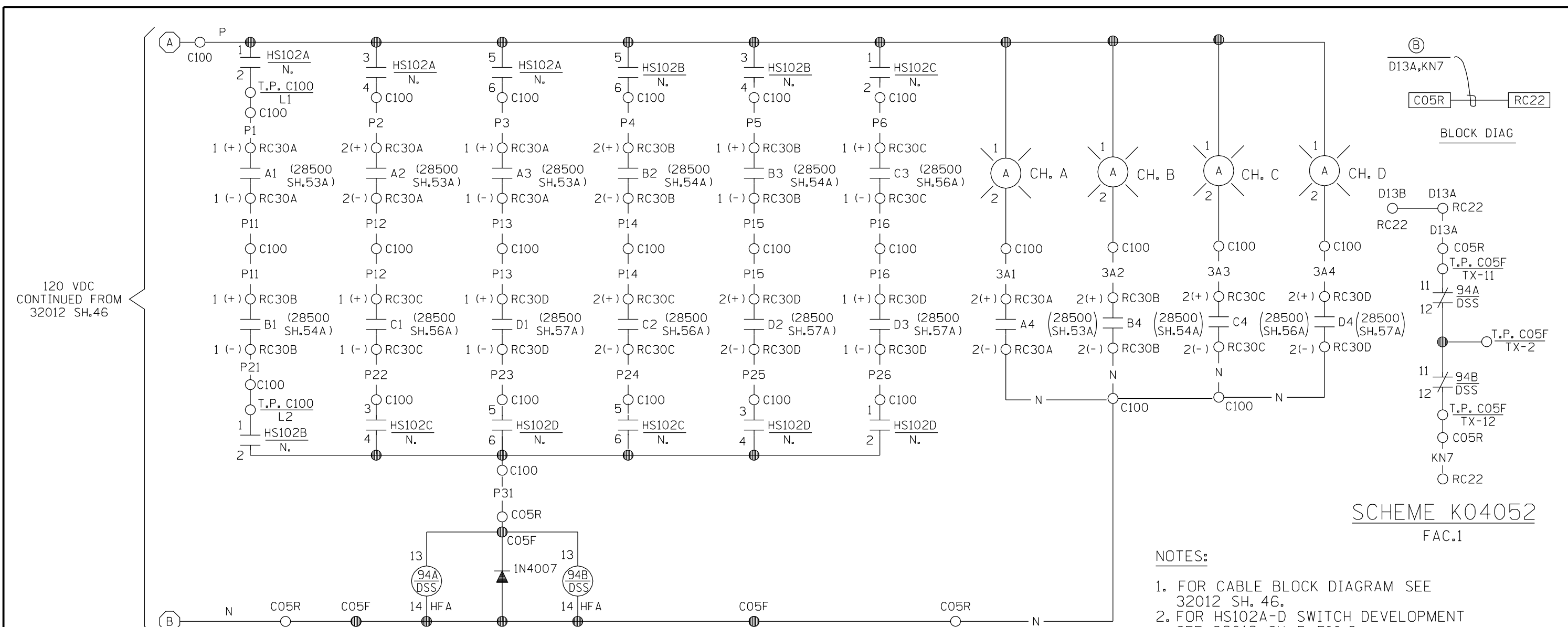
NO.	DATE	REVISIONS	BY	CHK	APP	APP
13	3-29-00	INCORP. DCN DM2-00-0823-98	DM	WBZ	JPP	JPP
12	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP
11	9/9/99	INCORP. DCN's DM2-00-1989-98, DM2-00-0375-99	WBZ	JSJ	JPP	JPP

Q A CAD  
MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED

TITLE: MILLSTONE UNIT 2  
CHARGING PUMP  
PWR. SUPPLY CROSSOVER P18B  
WATERFORD, CT.

Dominion  
Dominion Nuclear Connecticut, Inc.  
Millstone Power Station

BY JSJ	CHKD.	APP.	APP.
DATE 2-13-97	DATE	DATE	DATE
SCALE N/A	DWG. NO.	25203-32009 SH. 42	
N/A			



**SCHEME NMO1 (NOTE 1) FAC. Z5**

- REFERENCES:**
- 25203-31192 SH.4
  - 25203-31078 SH.5
  - 25203-37006 SH.45A
  - 25203-39045 SH.1
  - 25203-31189 SH.2
  - 25203-31189 SH.3
  - 25203-31189 SH.4
  - 25203-37005 SH.105
  - 25203-39045 SH.42
- C100
  - RC22
  - RC22
  - C05R
  - RC30A
  - RC30B
  - RC30C
  - RC30D
  - BLOCK DIAG.
  - C05F

**FSAR FIGURE**

**SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES**

**CAD**

NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION					

NO.		DATE	REVISIONS	BY	CHK	APP	APP



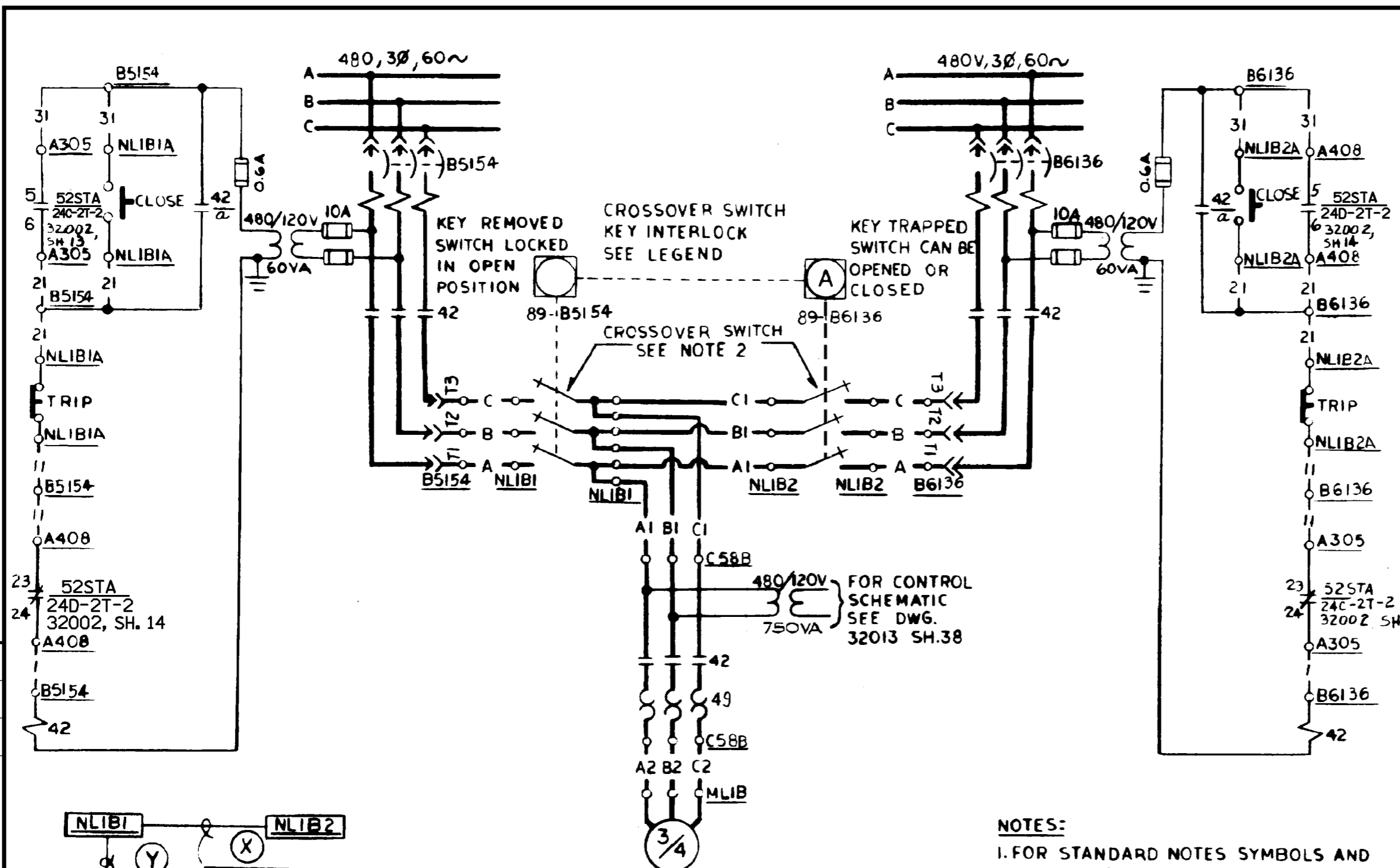
**Dominion Nuclear Connecticut, Inc.  
Millstone Power Station**

**TITLE**  
MILLSTONE UNIT 2  
SCHEMATIC DIAGRAM  
DIVERSE SCRAM SYSTEM A.T.W.S.  
WATERFORD, CT.

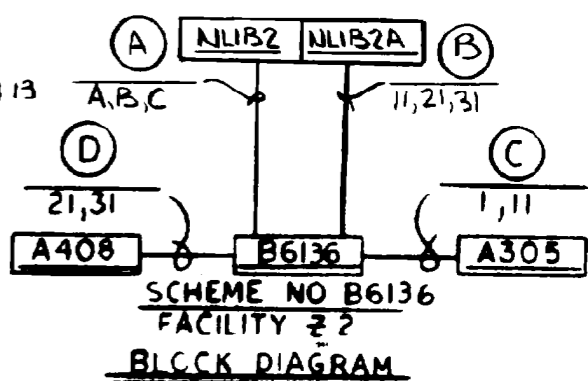
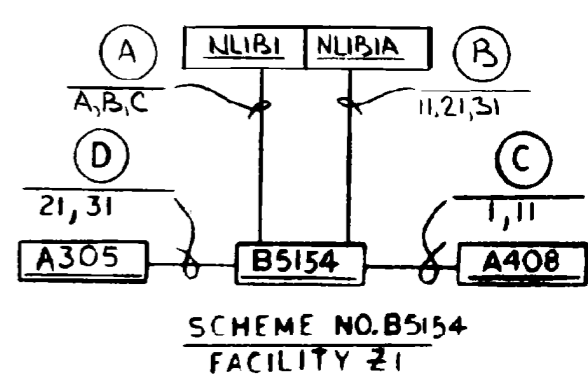
BY WBZ    CHKD. MEL    APP. MCH    APP.

DATE 7-15-87    DATE 7-17-87    DATE 11-13-87    DATE

SCALE N/A    DWG. NO. 25203-32012 SH.48



**LEGEND:**  
 KEY INTERLOCKS  
 ○ KEY REMOVED  
 ⊙ KEY TRAPPED  
 KEY'S ONE A KEY

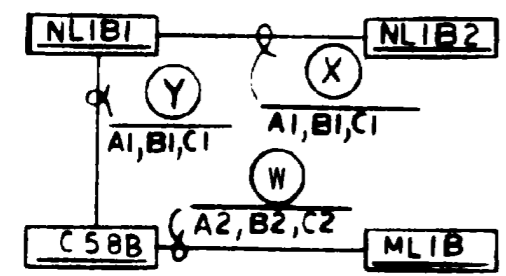


**FSAR FIGURE**

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

Q.A.

- NOTES:**
- FOR STANDARD NOTES SYMBOLS AND EQUIP. LOC. INDEX SEE DWG. 25203-30028.
  - CROSSOVER SW. 89, 30A, 600 VOLT, 3 POLE S.T. NEMA 1 NON-FUSIBLE DISCONNECT SW. SEE DWG. 7604-E-39-ML, ITEM 6.



REVISIONS DURING CONSTRUCTION

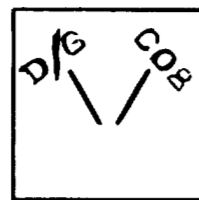
NO.	DATE	REVISIONS	BY	CHK	APP	APP
5	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP
4	9/25/99	INCORP. DCN DM2-01-0153-97	MEL	JSJ	JPP	JPP

TITLE		MILLSTONE UNIT 2 SERVICE WATER STRAINER ML1B POWER SUPPLY CROSSOVER SCHEME WATERFORD, CT.	
CAD		MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED	

Dominion Nuclear Connecticut, Inc. Millstone Power Station			
BY JMM/JSJ	CHKD.	APP.	APP.
DATE 10/22/97	DATE	DATE	DATE
SCALE N/A	DWG. NO.	25203-32013 SH. 39	
N/A			

43-M55 43-M55  
15G-12U 15G-13U

CONTACT HANDLE END	CONT. N <sup>o</sup>	POSITION	
		COB	D/G
1 1c 2c 2 0- --- 0 0- --- 0	1	X	
	2		X
3 3c 4c 4 0- --- 0 0- --- 0	3	X	
	4		X
5 5c 6c 6 0- --- 0 0- --- 0	5	X	
	6		X
7 7c 8c 8 0- --- 0 0- --- 0	7	X	
	8		X



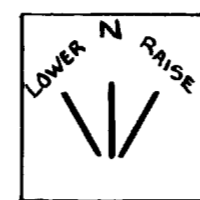
MAINTAINED CONTACTS SBI SEL. SW. KEY OPERATED, KEY REMOVABLE IN LOCAL POSITION ONLY (TWO DIFFERENT KEYS ARE REQ'D FOR DIESELS H7A & H7B)

FIGURE 1

CS-65 CS-65  
15G-12U 15G-13U

CS-70 CS-70 CS-90 CS-90  
15G-12U 15G-13U 15G-12U 15G-13U

CONTACT HANDLE END	CONT. N <sup>o</sup>	POSITION		
		LOWER	N	RAISE
1 1c 2c 2 0- --- 0 0- --- 0	1			X
	2		X	
3 3c 4c 4 0- --- 0 0- --- 0	3	X		
	4			X
5 5c 6c 6 0- --- 0 0- --- 0	5		X	
	6	X		
7 7c 8c 8 0- --- 0 0- --- 0	7			X
	8		X	
9 9c 10c 10 0- --- 0 0- --- 0	9	X		
	10			X
11 11c 12c 12 0- --- 0 0- --- 0	11		X	
	12	X		



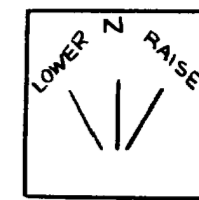
SBM. SPRING RETURN TO NORMAL CONTR. SW.

FIGURE 2

CS-65A CS-65A  
15G-12U 15G-13U

CS-70A CS-70A CS-90A CS-90A  
15G-12U 15G-13U 15G-12U 15G-13U

CONTACT HANDLE END	CONT. N <sup>o</sup>	POSITION		
		LOWER	N	RAISE
1 1c 2c 2 0- --- 0 0- --- 0	1	X		
	2		X	
3 3c 4c 4 0- --- 0 0- --- 0	3			X
	4	X		
5 5c 6c 6 0- --- 0 0- --- 0	5		X	
	6			X
7 7c 8c 8 0- --- 0 0- --- 0	7	X		
	8		X	
9 9c 10c 10 0- --- 0 0- --- 0	9			X
	10	X		
11 11c 12c 12 0- --- 0 0- --- 0	11		X	
	12			X

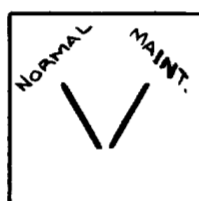


SBM. SPRING RETURN TO NORMAL CONTR. SW.

FIGURE 2A

43-M553 43-M553  
15G-12U 15G-13U (G.E. 16SB1B8226SAM2Y)

CONTACT HANDLE END	CONT. N <sup>o</sup>	POSITION	
		MAINT.	NORMAL
1 1c 2c 2 0- --- 0 0- --- 0	1	X	
	2		X
3 3c 4c 4 0- --- 0 0- --- 0	3	X	
	4		X

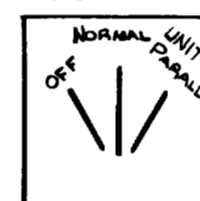


MAINTAINED CONTACTS SBI SEL. SW. KEY OPERATED (SAME KEY FOR FIG. 1) KEY REMOVABLE IN NORMAL POSITION ONLY. - SEE NOTE # 2

FIGURE 5

43-UPS 43-UPS  
15G-12U 15G-13U (UPS = UNIT PARALLEL SW.)

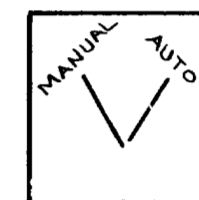
CONTACT HANDLE END	CONT. N <sup>o</sup>	POSITION		
		OFF	NORMAL	UNIT PARALLEL
1 1c 2c 2 0- --- 0 0- --- 0	1			X
	2		X	X
3 3c 4c 4 0- --- 0 0- --- 0	3			X
	4		X	X



SBI SPRING RETURN TO NORMAL CONTROL SW.

FIGURE 4

CONTACT HANDLE END	CONT. N <sup>o</sup>	POSITION	
		AUTO	MANUAL
1 1c 2c 2 0- --- 0 0- --- 0	1	X	
	2		X
3 3c 4c 4 0- --- 0 0- --- 0	3	X	
	4		X
5 5c 6c 6 0- --- 0 0- --- 0	5	X	
	6		X
7 7c 8c 8 0- --- 0 0- --- 0	7	X	
	8		X

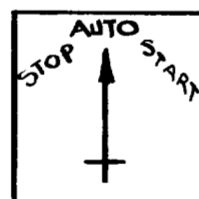


G.E. 16SB1DB203SSM3 MAINTAINED CONTACT SELECTOR SWITCH

FIGURE 3

DGH7A DGH7B  
15G-12U 15G-13U

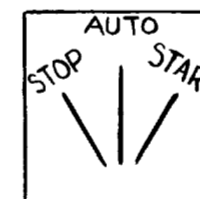
CONTACT HANDLE END	CONT. N <sup>o</sup>	POSITION		
		START	AUTO	STOP
1 1b 2b 2 0- --- 0 0- --- 0	1			X
	2		X	X
3 3b 4b 4 0- --- 0 0- --- 0	3			X
	4		X	X



16SBMB3D41S1S2 SPRING RETURN TO AUTO CONTROL SWITCH

FIGURE 6

CONTACT HANDLE END	CONT. N <sup>o</sup>	POSITION		
		START	AUTO	STOP
1 1c 2c 2 0- --- 0 0- --- 0	1	X		
	2	X	X	
3 3c 4c 4 0- --- 0 0- --- 0	3	X		
	4	X	X	

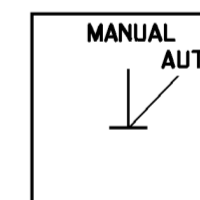


SBI SPRING RETURN TO AUTO CONTROL SW.

FIGURE 7

CONTACT HANDLE END	CONT. NO	POSITION	
		AUTO	MANUAL
1 1c 2c 2 0- --- 0 0- --- 0	1		X
	2		X
3 3c 4c 4 0- --- 0 0- --- 0	3		X
	4		X
5 5c 6c 6 0- --- 0 0- --- 0	5	X	
	6	X	
7 7c 8c 8 0- --- 0 0- --- 0	7	X	
	8	X	

43-VRMS 43-VRMS  
15G-12U 15G-13U

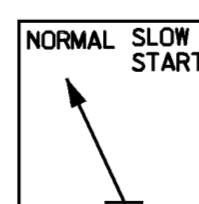


G.E. 16SB1DB204SSM2P MAINTAINED CONTACT SELECTOR SWITCH

FIGURE 3A

43-SLST 43-SLST  
15G-12U 15G-13U

CONTACT HANDLE END	CONT. NO	POSITION	
		SLOW START	NORMAL
1 1c 2c 2 0- --- 0 0- --- 0	1	X	
	2		X
3 3c 4c 4 0- --- 0 0- --- 0	3	X	
	4		X
5 5c 6c 6 0- --- 0 0- --- 0	5	X	
	6		X



MAINTAINED CONTACT SBI SEL. SW. KEY OPERATED KEY REMOVABLE IN NORMAL POSITION

FIGURE 8

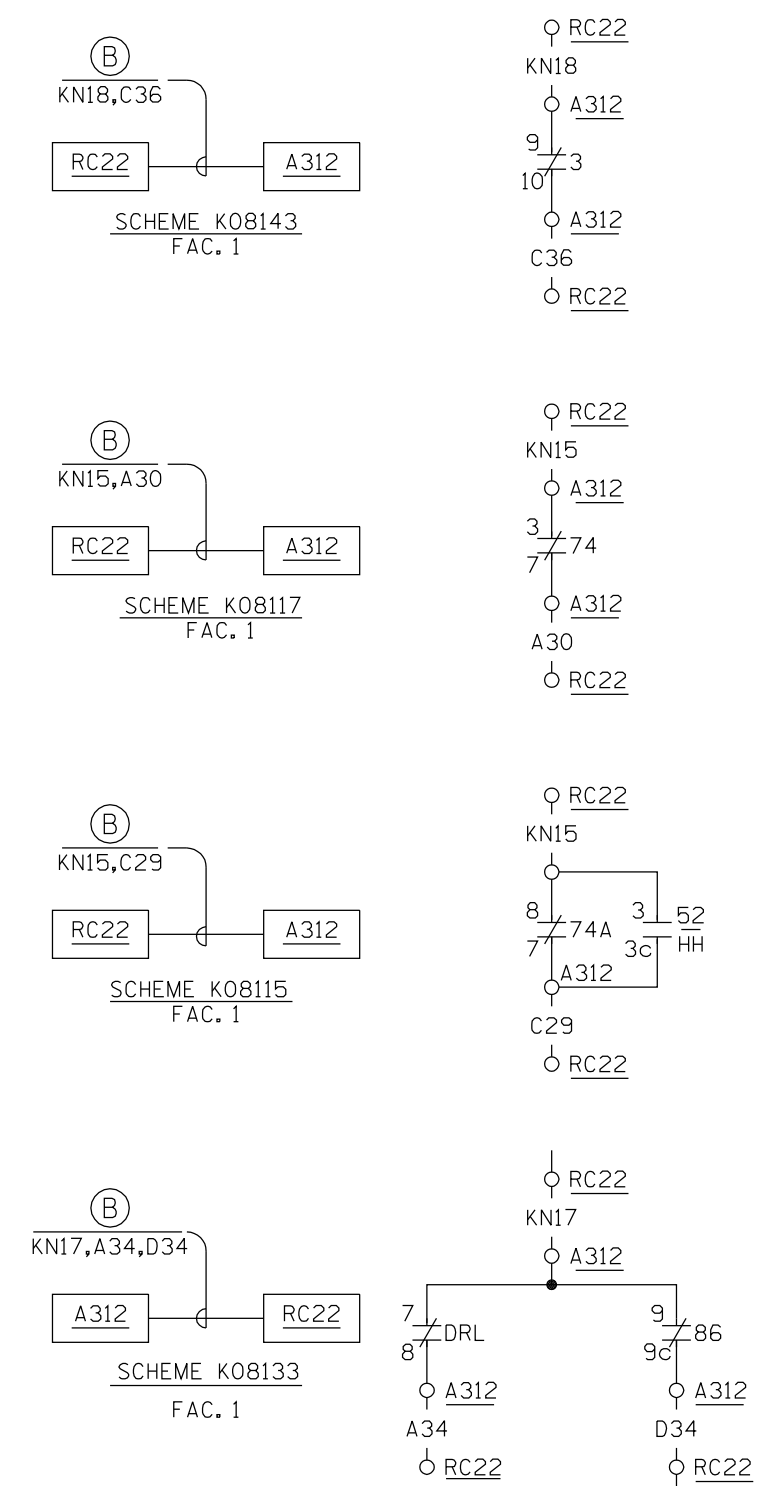
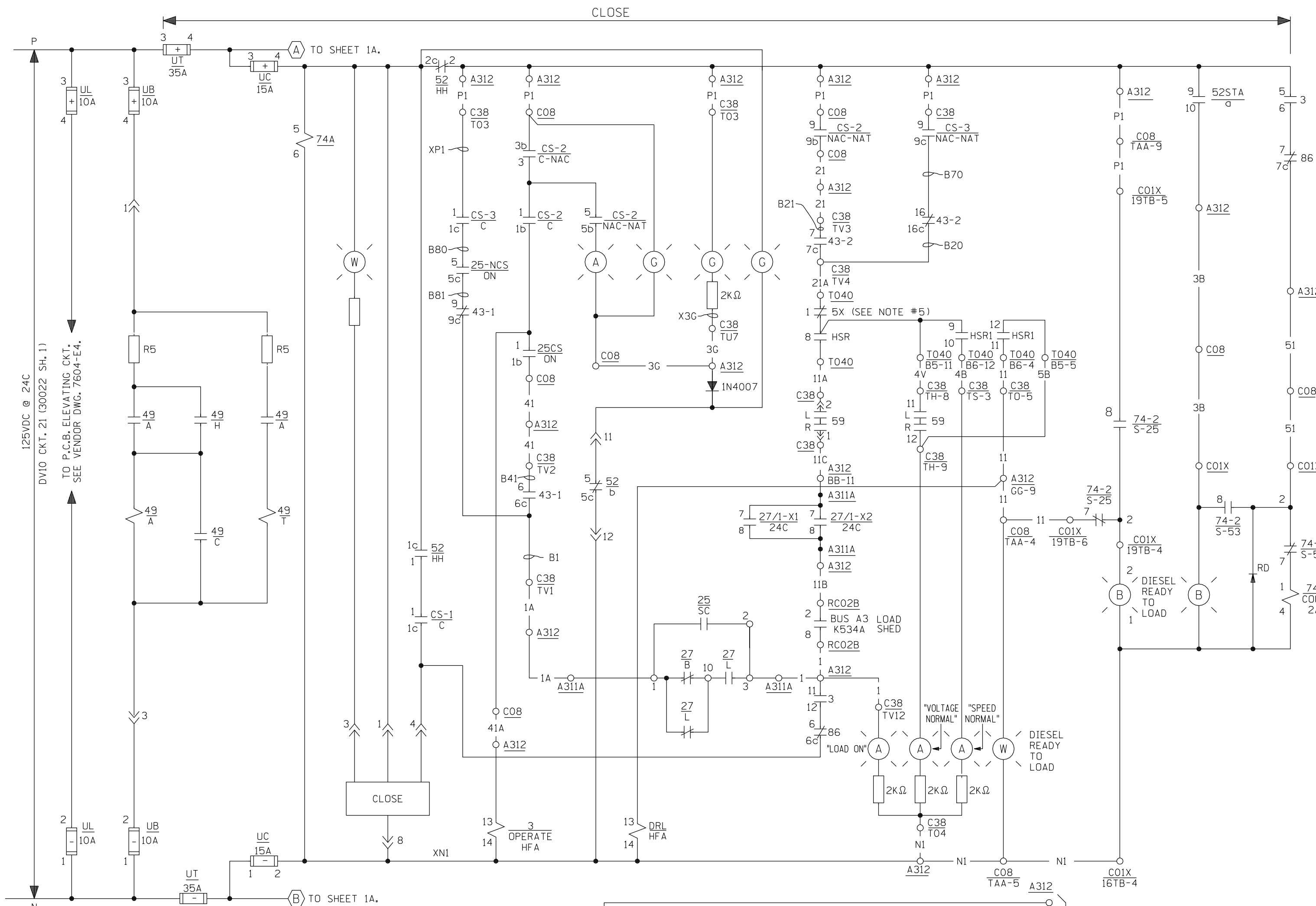
NOTES:

- FOR STANDARD NOTES SYMBOLS & EQUIP LOCATION; INDEX SEE DWG # 25203-30028.
- SWITCHES DESIGNATED 15G-12U ARE FACILITY Z1 & 15G-13U ARE FACILITY Z2.

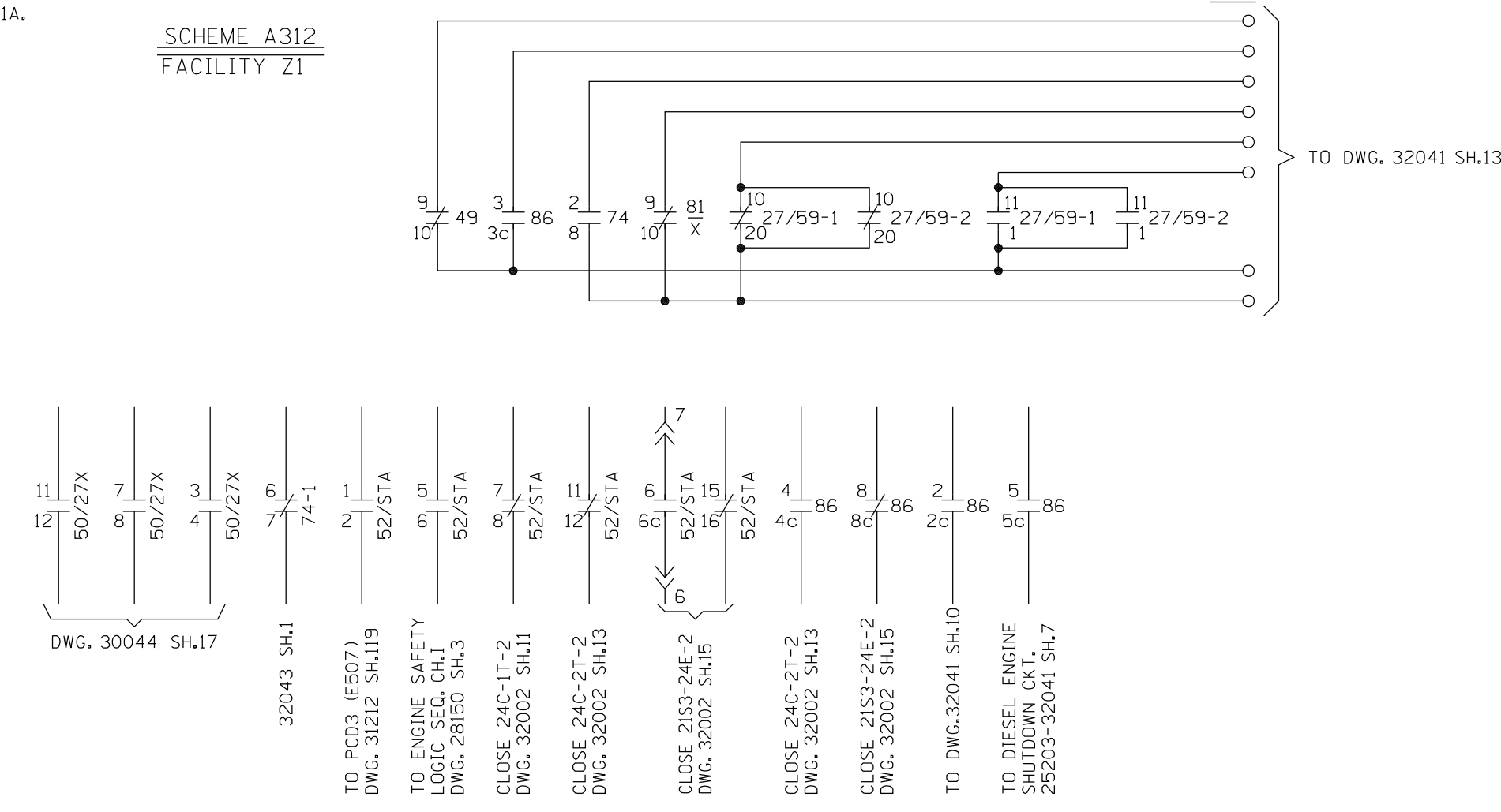
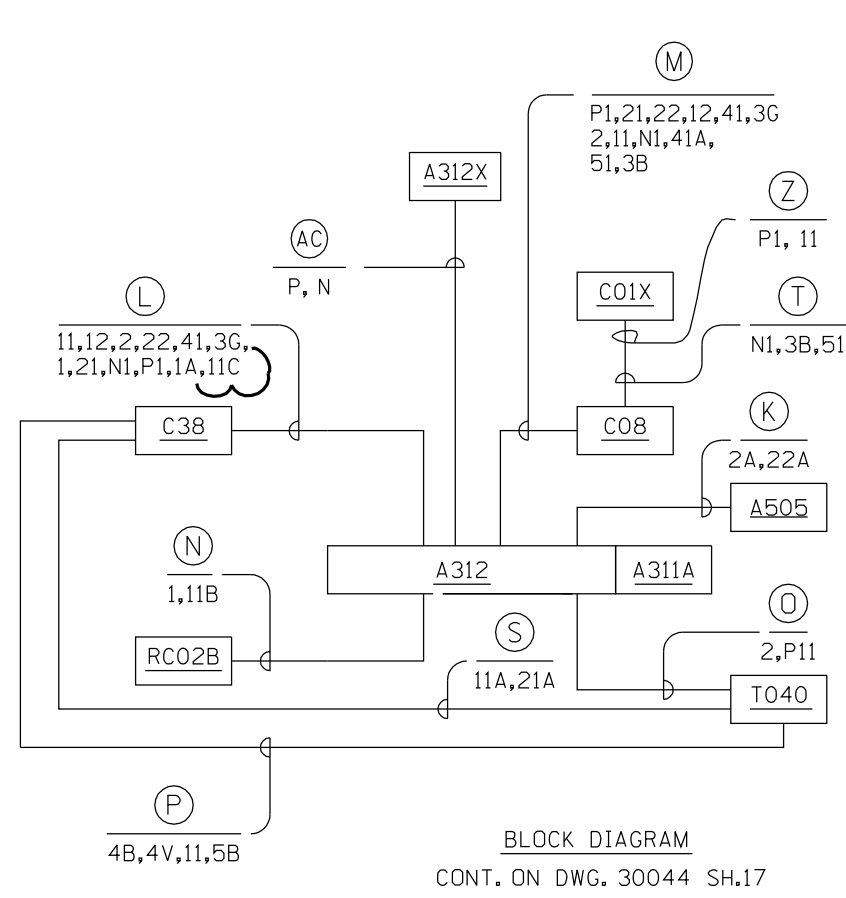
FSAR FIGURE

SAFETY EVALUATION MAYBE REQUIRED PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE DIESEL GENERATOR (H7A) & (H7B) SWITCH DEVELOPMENT			
REVISION DESCRIPTION (SIGNATURES ON FILE)		CAD NO: C32041A.HYB	REV
REVISED PER MSDUR 13-000091 & DUR 13-800496	DRAWING NO: 25203-32041		8
DSGN DLW	SCALE: NONE	UNLESS OTHERWISE NOTED SH A	

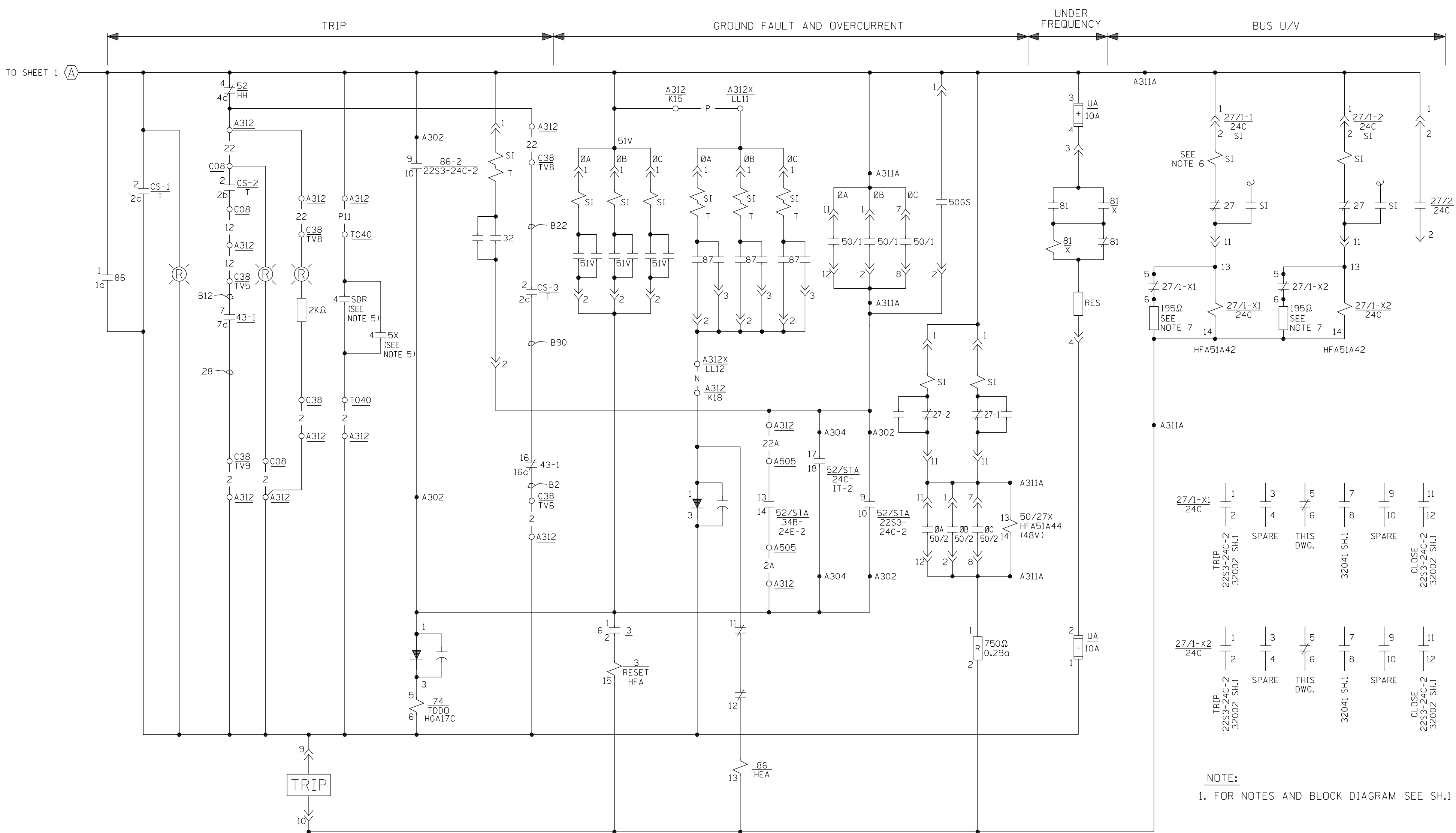


- NOTES:
1. ALL DEVICES 15G-12U-2 EXCEPT WHERE OTHERWISE SHOWN.
  2. FOR STANDARD NOTES SYMBOLS AND EQUIP. LOC. INDEX SEE DWG. 25203-30028.
  3. FOR AVAILABLE BKR. CONTACTS 52/HH AND CS-1 SEE DWG. 7604-E-4.
  4. FOR SWITCH DEVELOPMENTS SEE DWG. 30042 SH.A (CS-2) (CS-3).
  5. FOR COIL 5X AND SDR, SEE SHEETS 4 & 7 RESPECTIVELY.
  6. SEAL-IN DISCONNECTED FOR 27/1-1 THRU 27/1-2
  7. G.E. CAT. No. 1C9006C102C195.



**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

		<b>Dominion Nuclear Connecticut, Inc.</b> <b>Millstone Power Station</b> Waterford, CT.	
TITLE <b>4.16 KV DIESEL GENERATOR FEEDER BREAKER          15G-12U-2 (H7A) (A312)</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE)		CAD NO: DGN SPEC FOR FILE VERIFICATION	
REVISED PER MSDUR 12-800048 & DUR 12-800222		DRAWING NO: 25203-32041	
		REV 15	
DSGN	DLW	SCALE: NONE	UNLESS OTHERWISE NOTED SH 1



SCHEME A312  
FACILITY Z1

**FSAR FIGURE**

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION	

REFERENCE	
25203-30034 SH.1	LOGIC DIAGRAM
25203-30071	ARRGT. CO1X
25203-31063 SH. 1	CONN. DIAG. CO8
25203-31073 SH. 1	CONN. DIAG. CO1X
25203-32043 SH. 2	SCHEM. DIAG. CO1X
25203-39030 SHTS. 7A, 7B	WIRING DIAG. CO1X
25203-39045 SH. 8	WIRING DIAG. CO8

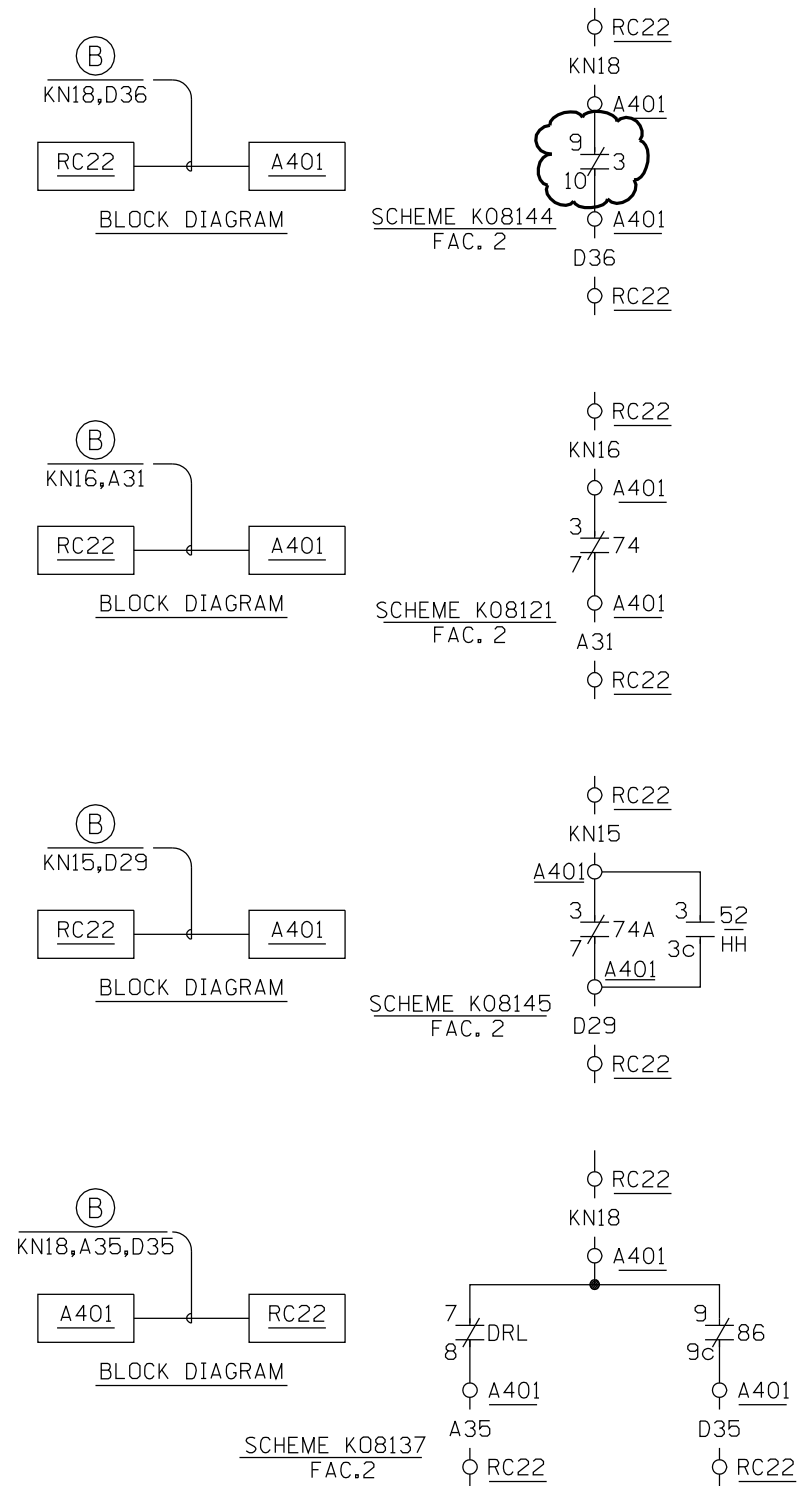
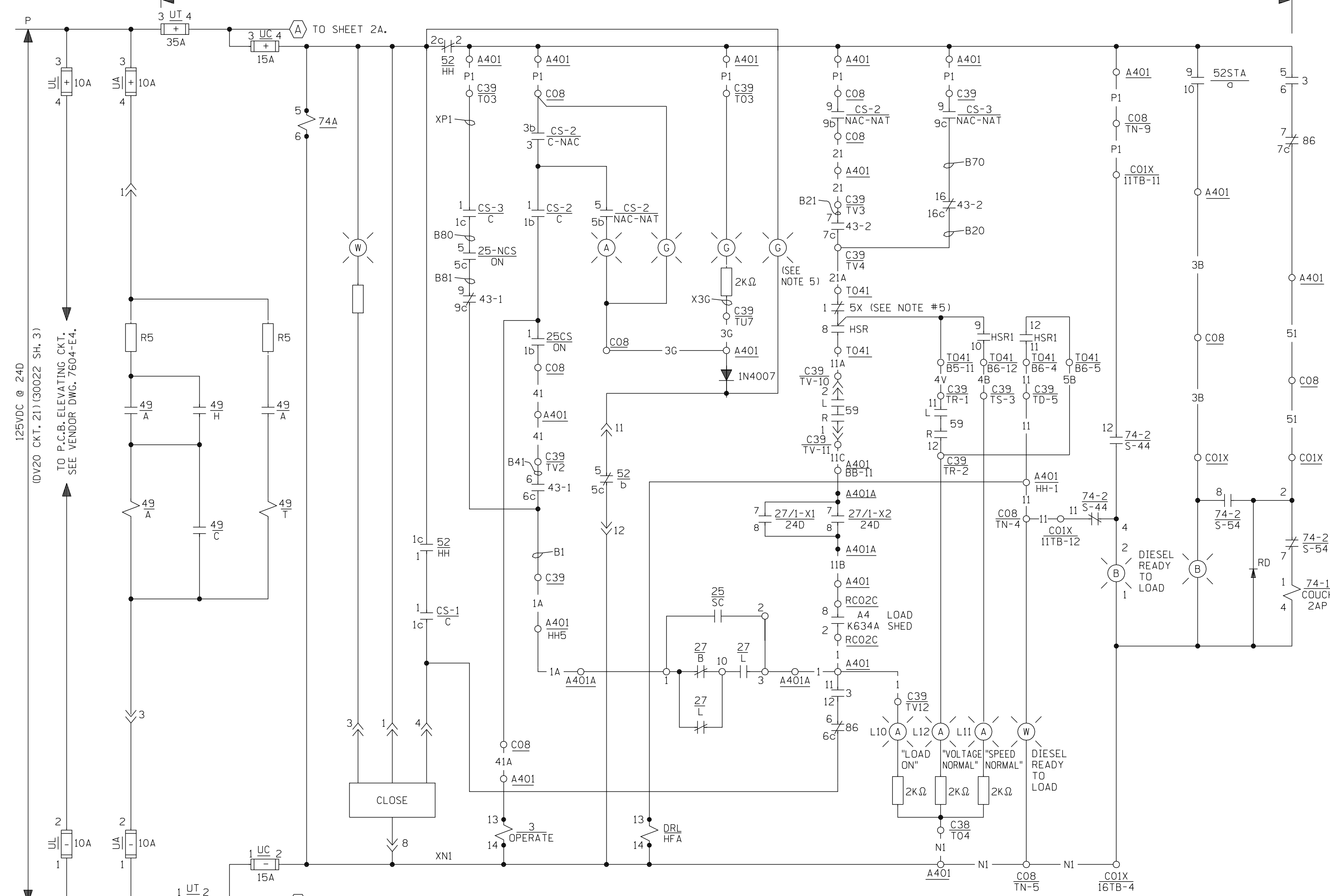
8	9-29-08	INCRP. DCN DM2-00-0235-08	JCV	MEL	-	DLW
7	10-22-01	INCRP'D DCN DM2-00-0865-99	TAM	RNB	MAG	GMO
6	2-7-00	INCRP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP
NO.	DATE	REVISIONS	BY	CHK	APP	APP

	<b>Dominion Nuclear Connecticut, Inc.</b> <b>Millstone Power Station</b>		
	TITLE MILLSTONE UNIT 2 4.16 KV DIESEL GEN. FEEDER BKR. 15G-12U-2 (H7A) (A312) WATERFORD, CT.		
BY	CHKD.	APP.	APP.
DATE 4/9/92	DATE 10/8/92	DATE 10/8/92	DATE 10/8/92
SCALE N/A	DWG. NO. 25203-32041 SH. 1A		91-073

Q.A.

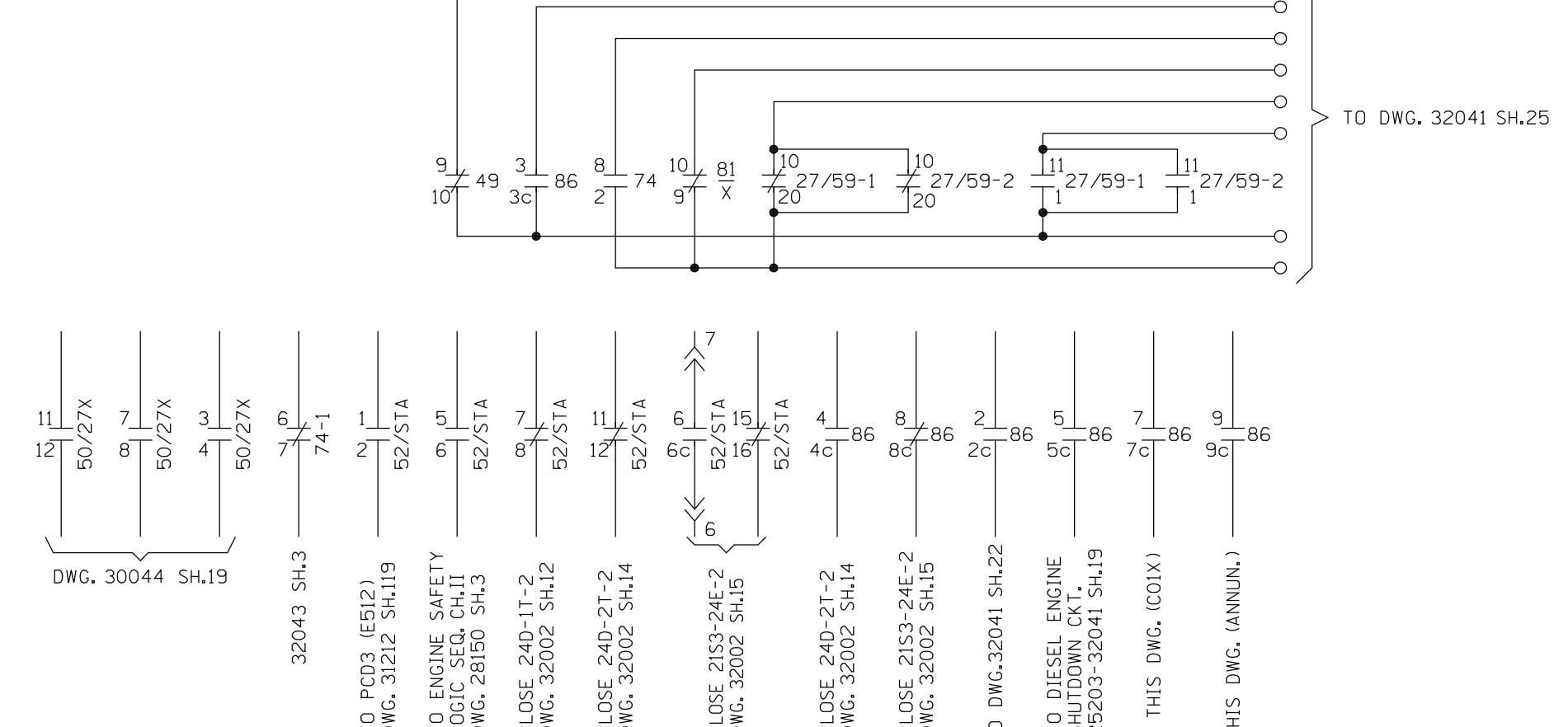
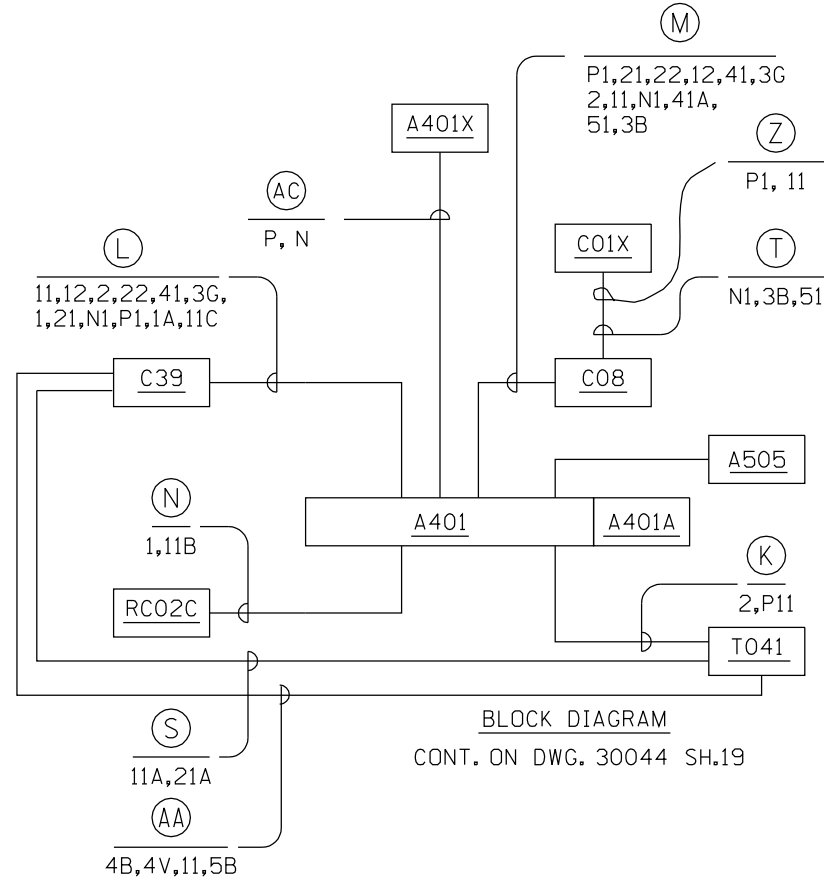
NOTE:  
1. FOR NOTES AND BLOCK DIAGRAM SEE SH.1

CLOSE



- NOTES**
1. ALL DEVICES 15G-13U-2 EXCEPT WHERE OTHERWISE SHOWN.
  2. FOR STANDARD NOTES SYMBOLS AND EQUIP. LOC. INDEX SEE DWG. 25203-30028.
  3. FOR AVAILABLE BKR. CONTACTS 52/HH AND CS-1 SEE DWG. 7604-E-4.
  4. FOR SWITCH DEVELOPMENTS SEE DWG. 30042 SH.A (CS-2)(CS-3).
  5. FOR COIL 5X AND SDR, SEE SHEETS 16 & 19 RESPECTIVELY.
  6. SEAL-IN DISCONNECTED FOR 27/1-1 THRU 27/1-2
  7. G.E. CAT. No. 1C9006C102C195.

**SCHEME A401 FACILITY Z2**



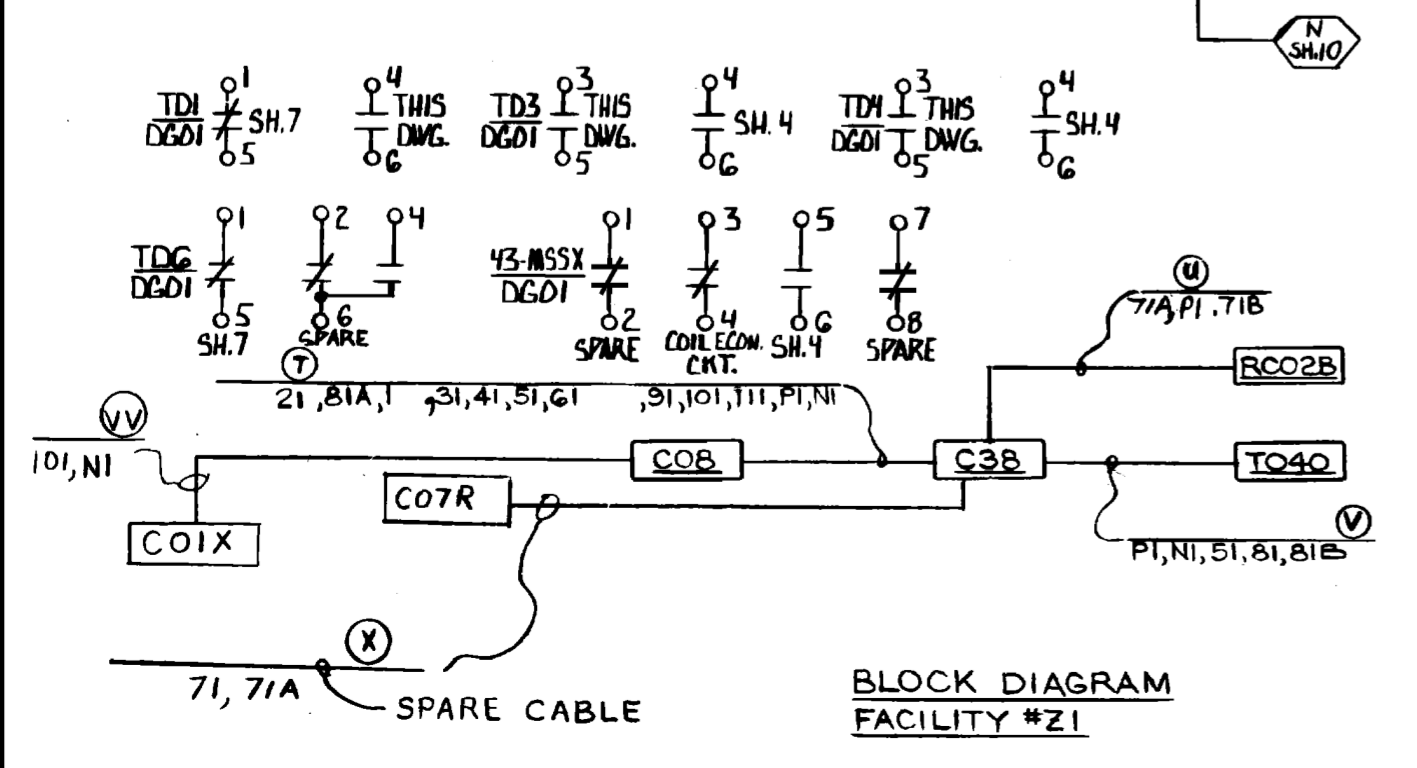
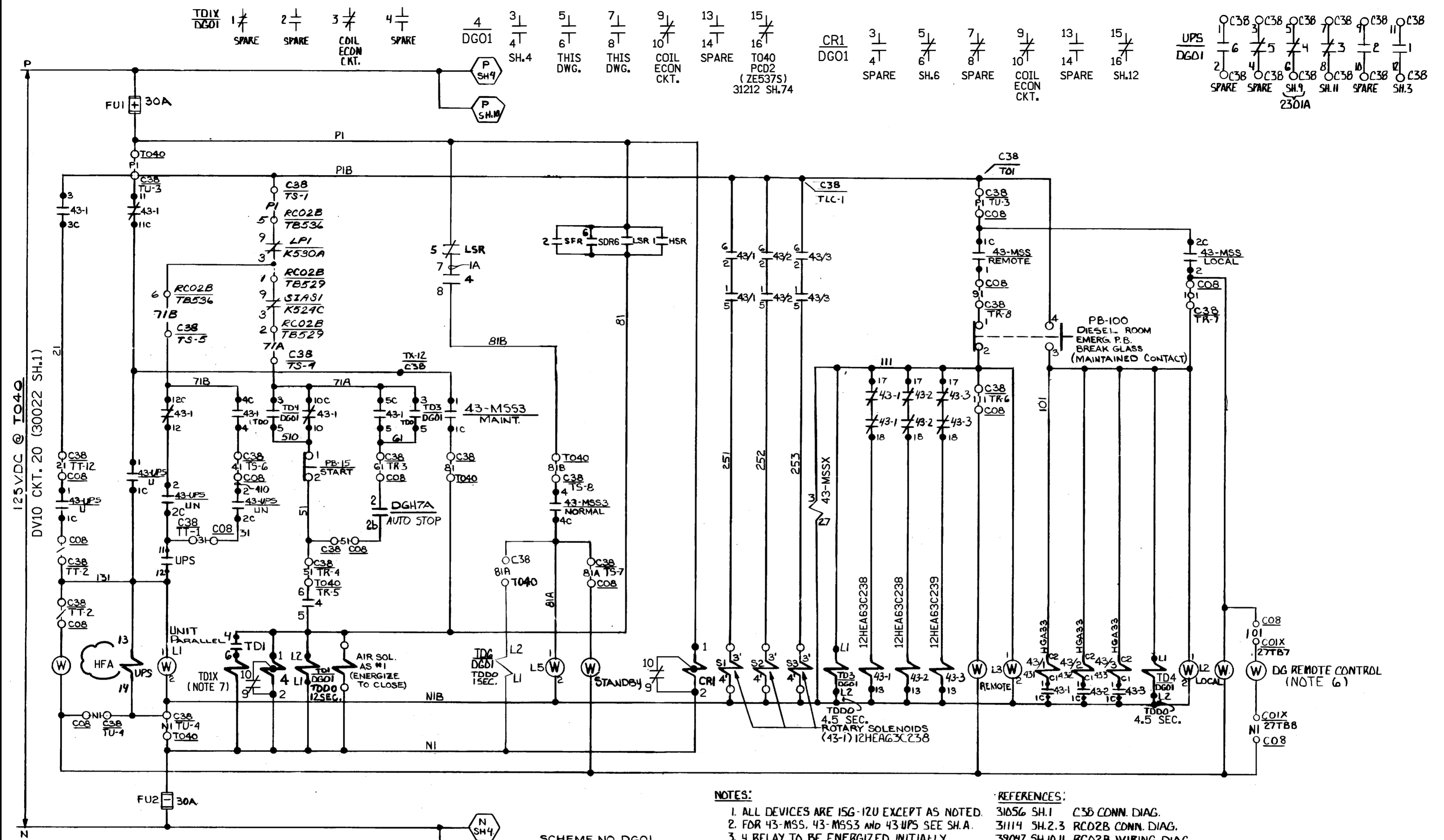
### FSAR FIGURE

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station Waterford, CT.		
TITLE <b>4.16 KV DIESEL GENERATOR FEEDER BREAKER 15G-13U-2 (H7B) (A401)</b>		
REVISION DESCRIPTION (SIGNATURES ON FILE)		CAD NO; DGN SPEC FOR FILE VERIFICATION
REVISED PER MSUR 11-800048 & DUR 11-800160	DRAWING NO: 25203-32041	REV 15
DSON	DLW	SCALE: NONE
UNLESS OTHERWISE NOTED		SH 2







SCHEME NO. DGO1  
FACILITY #Z1

NOTES:

1. ALL DEVICES ARE 15G-12U EXCEPT AS NOTED.
2. FOR 43-MSS, 43-MSS3 AND 43-UPS SEE SH. A.
3. 4 RELAY TO BE ENERGIZED INITIALLY.
4. FOR DGH7A/15G-12U SEE SH. A.
5. FOR 43-MSS3X COIL SEE SH. 4.
6. COIX LIGHT ON WHEN IN "LOCAL".
7. TDIX (NOT USED) ALL CONTACTS SPARE.

REFERENCES:

- 31056 SH.1 C38 CONN. DIAG.
- 31114 SH.2.3 RCO2B CONN. DIAG.
- 39047 SH.10.11 RCO2B WIRING DIAG.
- 31190 C101
- 39038 SH. 24A, 25A
- 39038 SH. 38A

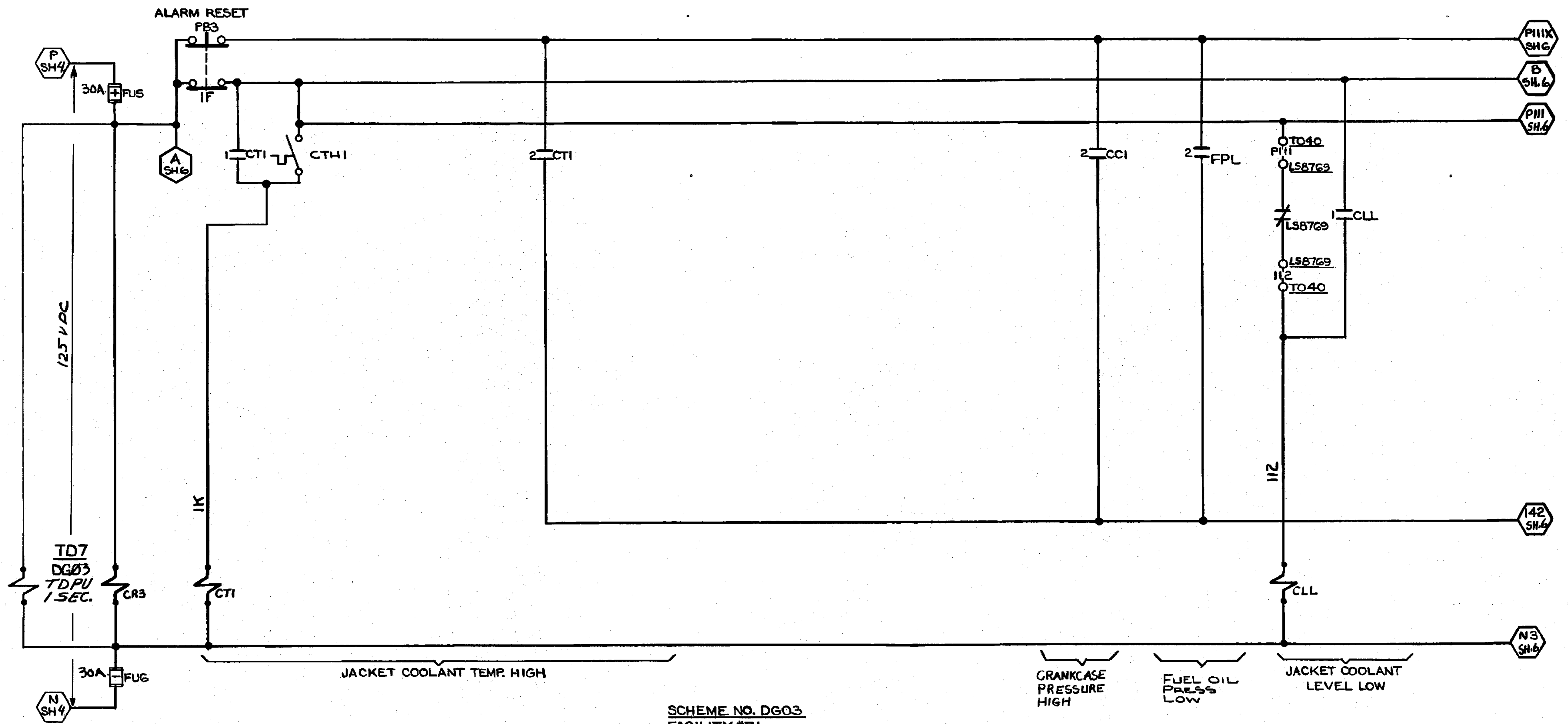
- NOMENCLATURE
- TDIX - AUX TDI RELAY
  - 4 - START RELAY
  - TDI - CRANKING TIME TD00
  - AS#1 - AIR START SOL ENERGIZE TO CLOSE
  - CRI - CONTROL PWR. CIRCUIT CIRCUIT #1
  - L2 - DIESEL GEN MODE LOCAL.
  - L5 - DIESEL ENG. ON STANDBY
  - 43-1 - (SEE 32041 SH.8)
  - 43-2 - (SEE 32041 SH.8)
  - 43-3 - (SEE 32041 SH.8)

FSAR FIGURE

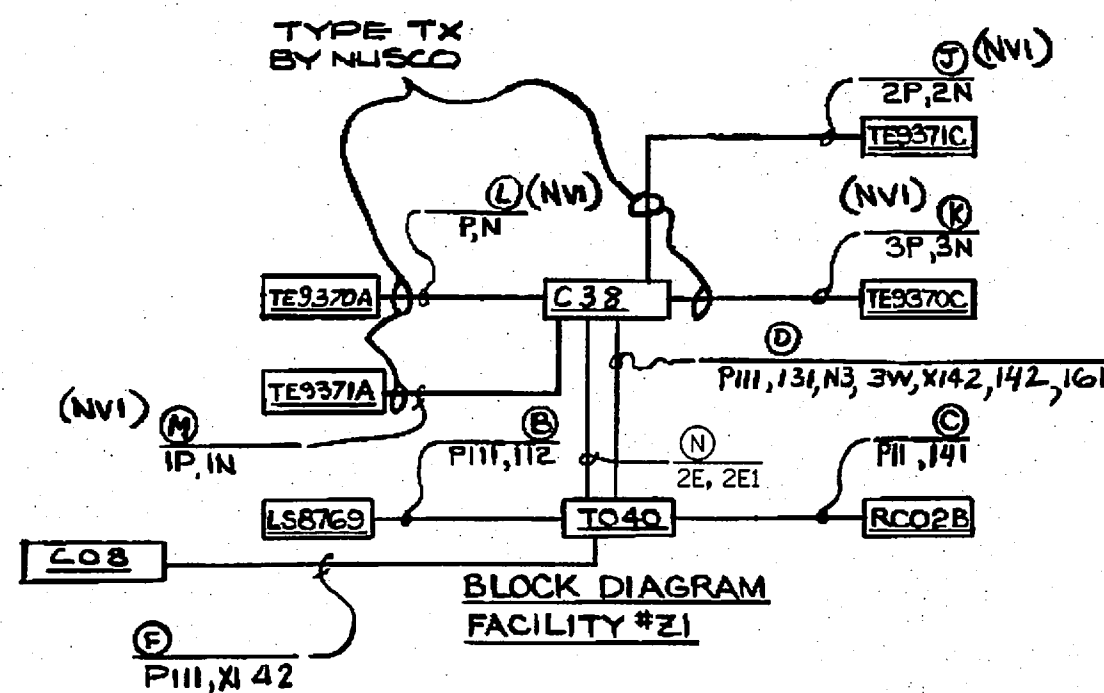
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE MILLSTONE UNIT 2 DIESEL GENERATOR 15G-12U (H7A) ENGINE CONTROL			
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C320413.HYB		DRAWING NO: 25203-32041	
REVISED PER MSDUR 17-000175 & DUR 17-800361		REV 15	
DSON DLW		SCALE: NONE UNLESS OTHERWISE NOTED SH 3	





SCHEME NO. DG03  
FACILITY #Z1



**NOMENCLATURE**  
 CR3 - CONTROL POWER CIRCUIT N°3  
 CTI - JACKET COOLANT TEMP HIGH  
 CLL - JACKET COOLANT LEVEL LOW  
 TD7 - TDP1 1 SEC. LUBE OIL PRES. LOW  
 COMMON ALARM

REF DWGS.  
25203-39038 SH.24A, 25A

**FSAR FIGURE**

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

Q.A.

TD7 1/2 2/2  
DG03 5/8 6/8  
SH.7 SH.7

CR3 1/2 2/2 3/2 4/2 6/2  
SP SP COIL ECON. CKT. SP SH.12

CLL 1/2 2/2 3/2 4/2  
THIS DWG. SP COIL ECON. CKT. SH.12

CTI 1/2 2/2 3/2 4/2 6/2 7/2  
THIS DWG. THIS DWG. COIL ECON. CKT. SP SP SH.12

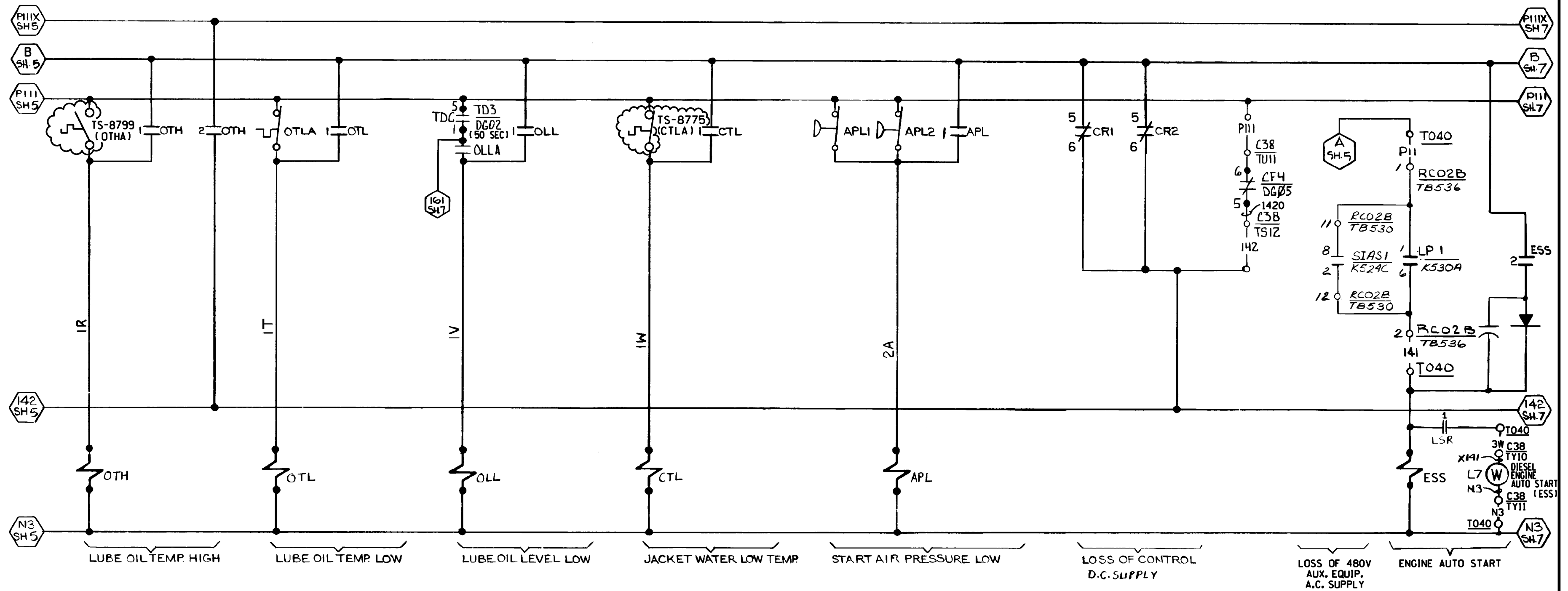
SUPERCEDES  
25203-39038 SH.2  
REDRAWN FROM SAME  
NNECO DWG. NO. REV.4

CAD

NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

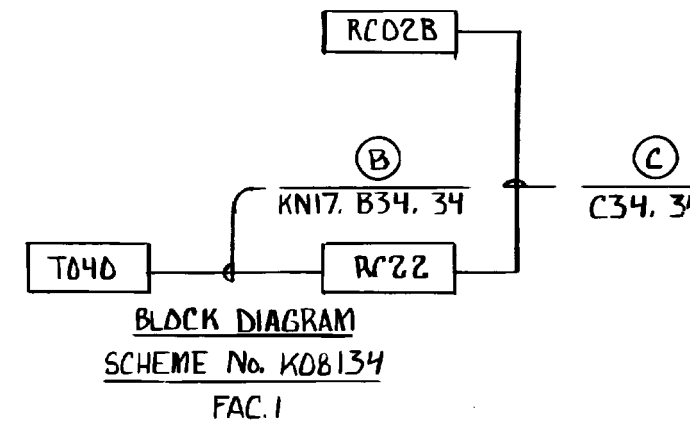
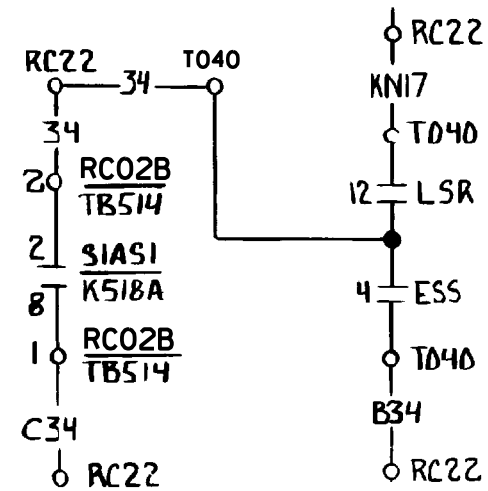
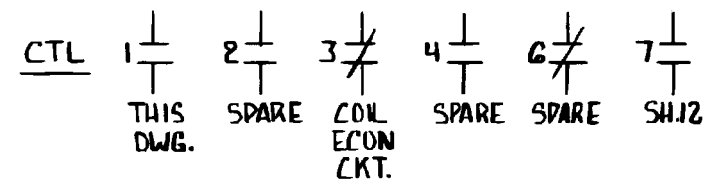
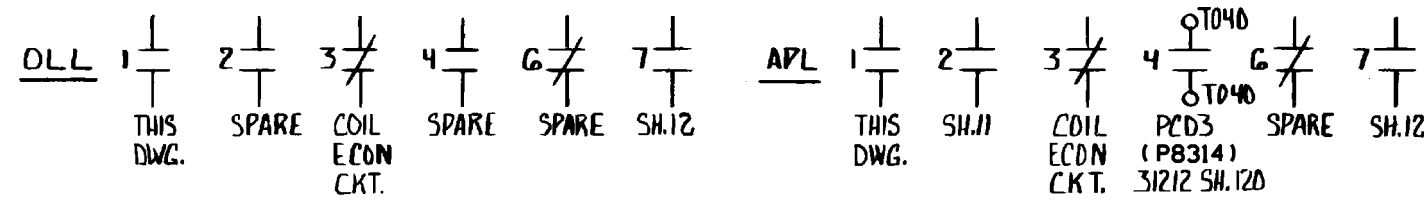
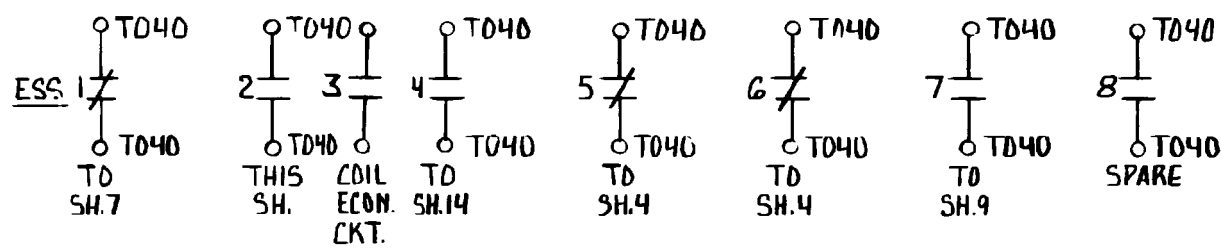
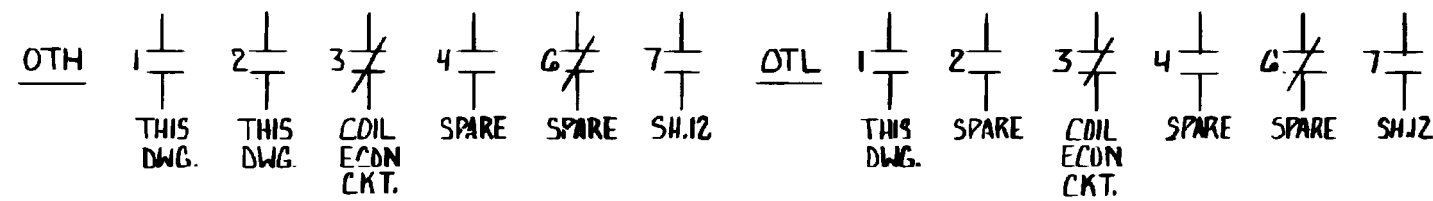
REVISIONS DURING CONSTRUCTION		P.A.*

Northeast Utilities System			
FOR NORTHEAST NUCLEAR ENERGY CO.			
TITLE			
MILLSTONE UNIT 2			
DIESEL GENERATOR 15G-12U (H7A)			
ENGINE CONTROL			
WATERFORD, CT.			
BY	WBZ/JSJ	CHKD.	APP.
DATE	7/6/98	DATE	DATE
SCALE	N/A	DWG. NO.	25203-32041 SH.5
MF/P.A.*	NO. DATE	REVISIONS	BY CHK/APP/APP



SCHEME NO. DGO3  
FACILITY #Z1

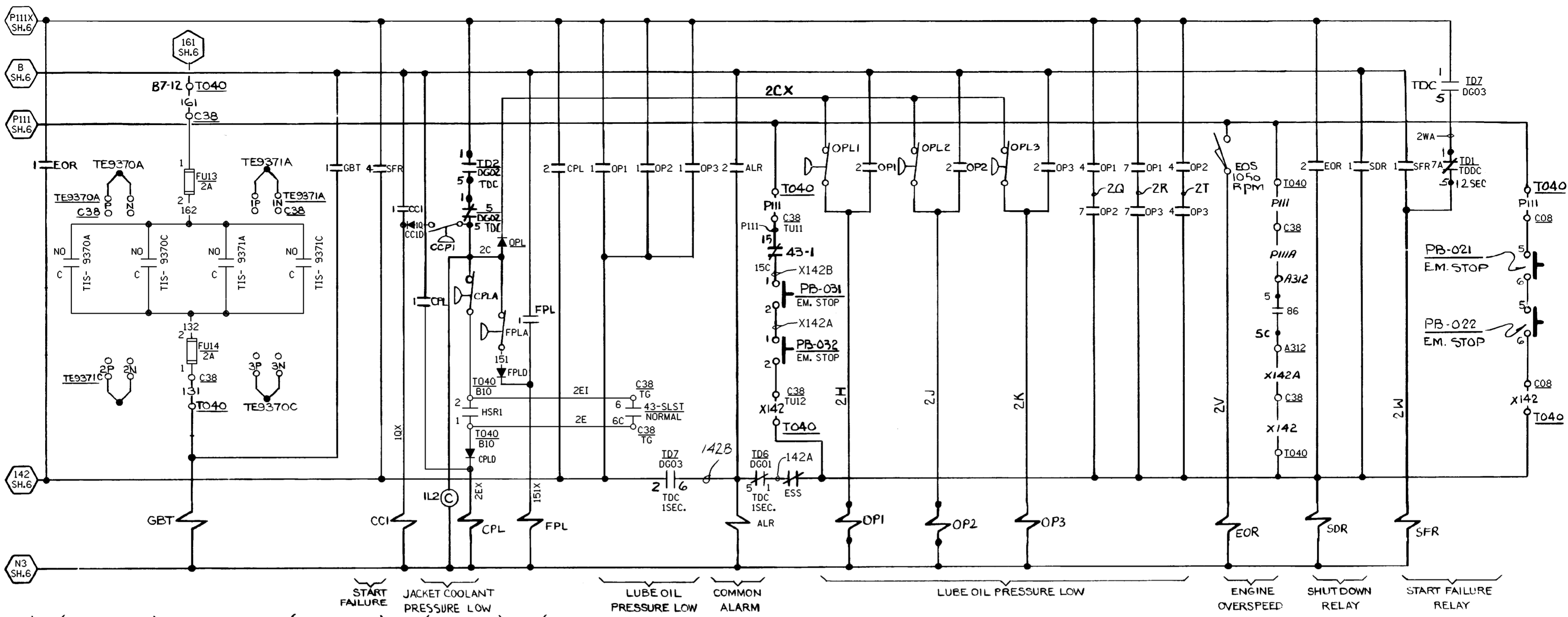
REF. DWGS.  
25203-39038 SH.24A, 25A



REFERENCES  
3114 SH.2, 3 RC02B CONN. DIAG.  
39047 SH.10 RC02B WIRING DIAG.

SUPERCEDES PART OF  
25203-39038 SH.2, 3

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE <b>MILLSTONE UNIT No.2          DIESEL GENERATOR 15G-12U (H7A)          ENGINE CONTROLS</b>		CAD NO: C320416-HYB	
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER DC MP2-19-01207 & DUR 21-800167		DRAWING NO: 25203-32041	
DSON JCV		SCALE: NONE	
UNLESS OTHERWISE NOTED		SH 6	



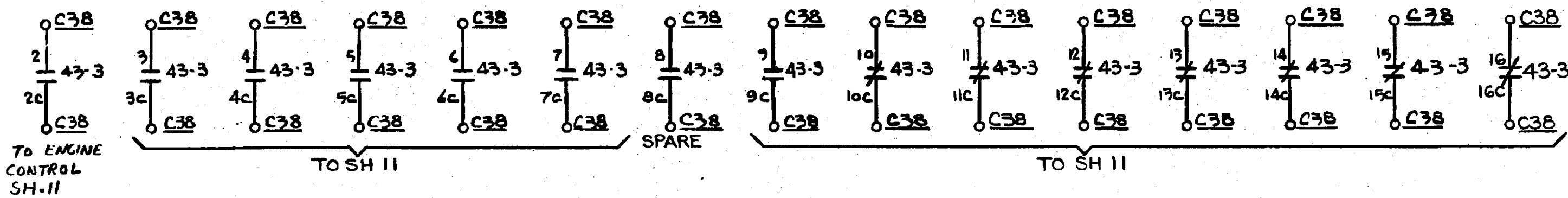
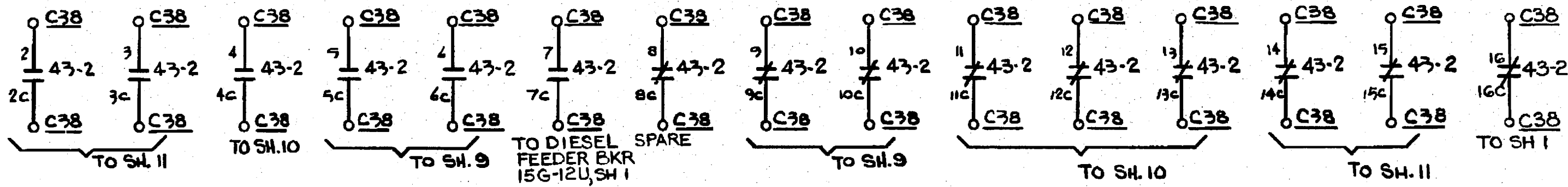
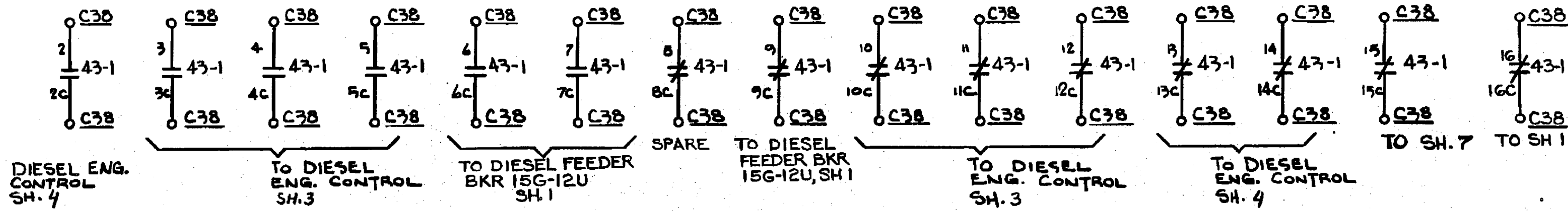
SCHEME NO. DG03  
FACILITY #Z1

<u>GBT</u> 1 THIS DWG	2 SP.	3 COIL ECON. CKT.	4 SP.	6 SP.	7 SH. 12	<u>OPI</u> 1 THIS DWG	2 THIS DWG	3 COIL ECON. CKT.	4 THIS DWG	5 SP.	6 SP.	7 THIS DWG	8 SH. 12	<u>SDR</u> 1 THIS DWG	2 SH. 10	3 COIL ECON. CKT.	4 SH. 1A	5 SH. 11	6 SH. 3	7 SH. 4	8 SH. 4	10 SP.	11 SH. 4
<u>CCI</u> 1 THIS DWG	2 SH. 5	3 COIL ECON. CKT.	4 SP.	6 SP.	7 SH. 12	<u>OP2</u> 1 THIS DWG	2 THIS DWG	3 COIL ECON. CKT.	4 THIS DWG	5 SP.	6 SP.	7 THIS DWG	8 SH. 12										
<u>CPL</u> 1 THIS DWG	2 THIS DWG	3 COIL ECON. CKT.	4 SP.	6 SP.	7 SH. 12	<u>OP3</u> 1 THIS DWG	2 THIS DWG	3 COIL ECON. CKT.	4 THIS DWG	5 SP.	6 SP.	7 THIS DWG	8 SH. 12										
<u>FPL</u> 1 THIS DWG	2 SH. 5	3 COIL ECON. CKT.	4 SH. 13	6 SP.	7 SP.	<u>EOR</u> 1 THIS DWG	2 THIS DWG	3 COIL ECON. CKT.	4 SP.	6 SP.	7 SH. 12												
<u>ALR</u> 1 SP.	2 THIS DWG	3 COIL ECON. CKT.	4 SP.																				
				<u>SFR</u> 1 THIS DWG	2 SH. 3	3 COIL ECON. CKT.	4 THIS DWG	5 SP.	6 SH. 12	7 SP.													

SUPERSEDES  
25203-39038 SH. 3,9,13  
REF. DWGS.  
25203-39038 SH. 24A, 25A  
NOTES:  
1. FOR BLOCK DIAGRAM SEE SH 5.

FSAR FIGURE  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE MILLSTONE UNIT 2 DIESEL GENERATOR 15G-12U (H7A) ENGINE CONTROLS			
REVISION DESCRIPTION (SIGNATURES ON FILE)		CAD NO: C320417.HYB	
REVISED PER MSDUR 13-000114 & DUR 13-800524		DRAWING NO: 25203-32041	
DSON DLW		SCALE: NONE	
UNLESS OTHERWISE NOTED		SH 7	



**NOTES:**

- 1 FOR STANDARD NOTES, SYMBOLS & EQUIP. LOC. INDEX SEE DWG. 25203-30028.
- 2 ALL RELAY CONTACTS SHOWN IN RESET POSITION (LOCAL)

**FSAR FIGURE**

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

REDRAWN FROM SAME  
NNECO DWG. No. REV.1

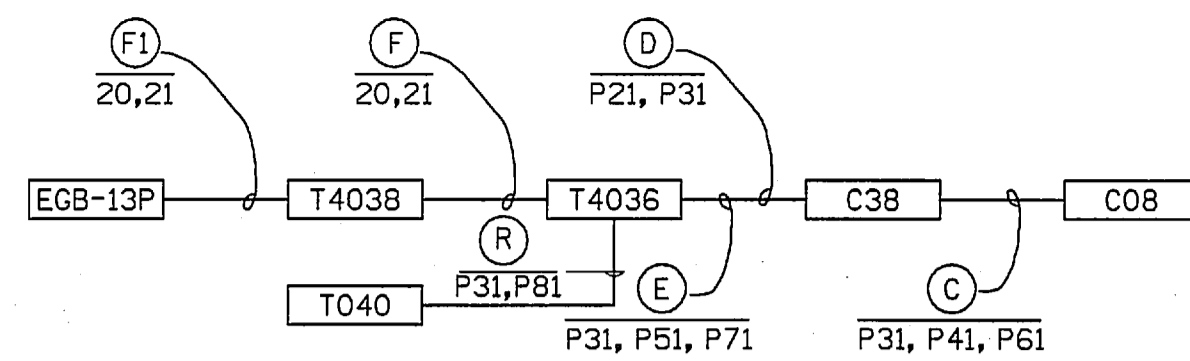
**CAD**

NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

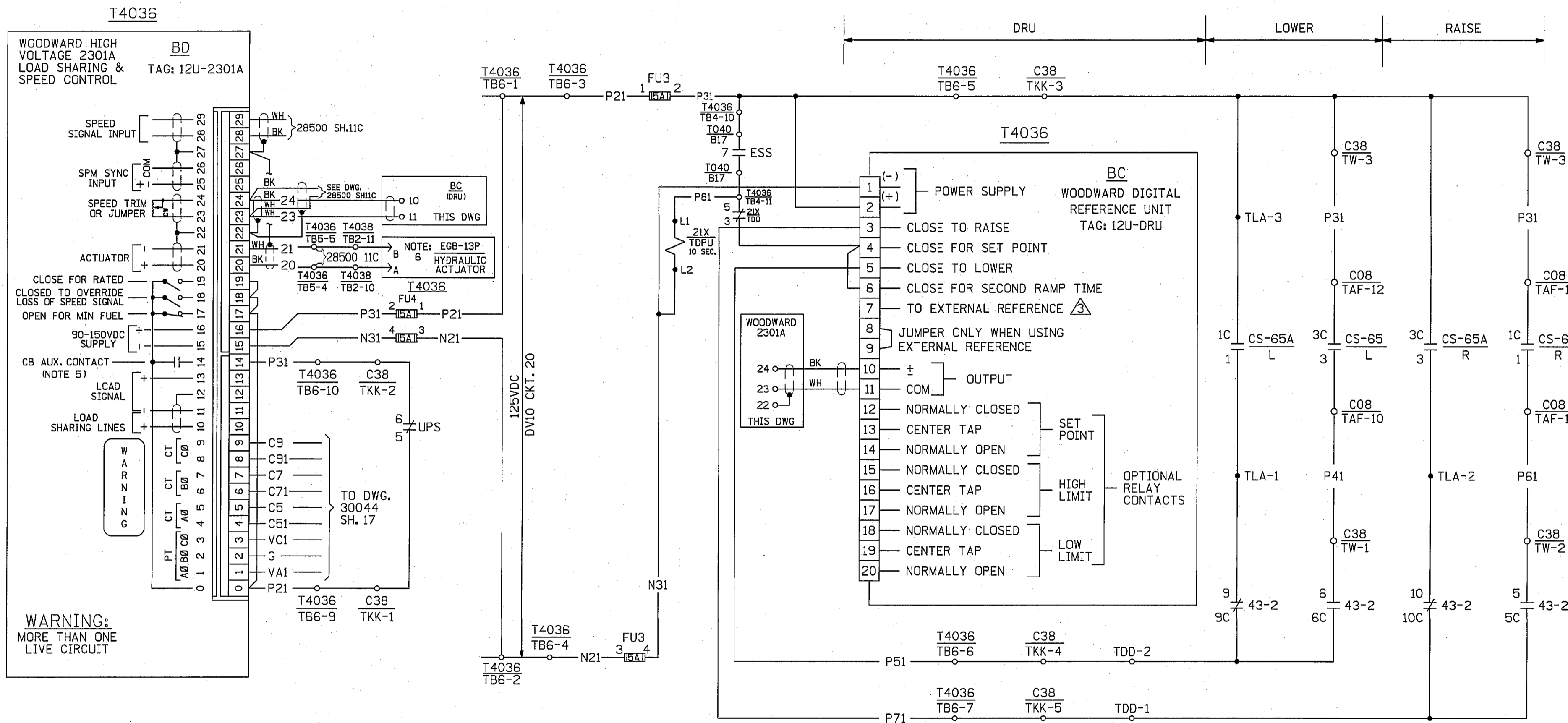
REVISIONS DURING CONSTRUCTION P.A.\*

Q.A.

		<b>Northeast Utilities System</b> FOR NORTHEAST NUCLEAR ENERGY CO.		
		TITLE MILLSTONE UNIT No.2 DIESEL GENERATOR 15G-12U (H7A) ENGINE CONTROL RELAYS WATERFORD, CT.		
BY JSJ/wjs	CHKD.	APP. JPP	APP. JPP	
DATE 1-27-99	DATE	DATE 2-7-00	DATE 2-7-00	
SCALE N/A	DWG. NO.	25203-32041 SH.8		
MF P.A.*	NO. DATE	REVISIONS	BY	CHK APP APP



**BLOCK DIAGRAM**  
SCHEME: DG04  
FAC: Z1



SCHEME. NO. DG04  
FACILITY #Z1

THIS DWG. SUPERCEDES PART  
OF 25203-39038 SH. 13

**FSAR FIGURE**

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

**C.A.D.**

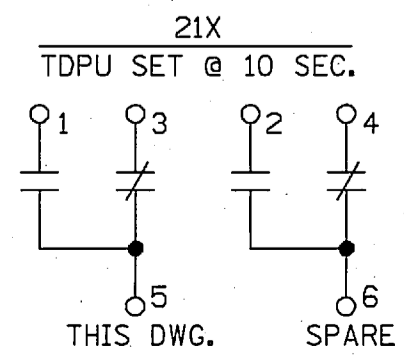
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.  
REFER TO GED 3.01 FOR MANUAL  
REVISIONS DURING CONSTRUCTION.

REVISIONS DURING CONSTRUCTION		P.A.*

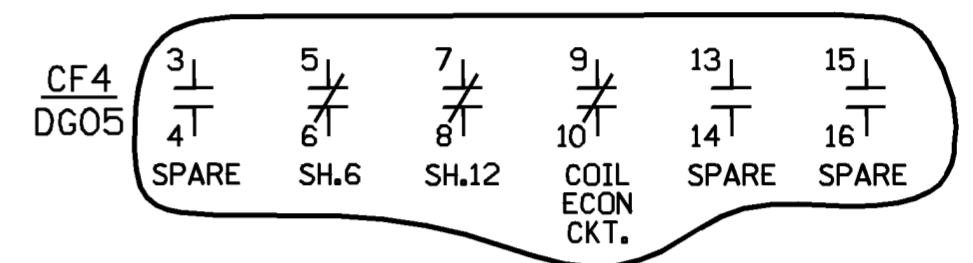
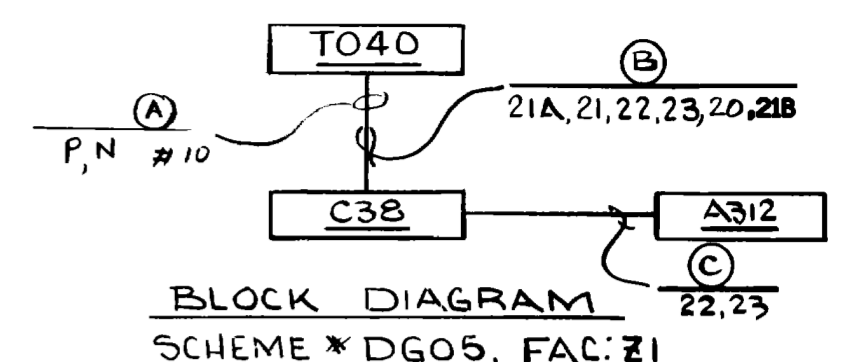
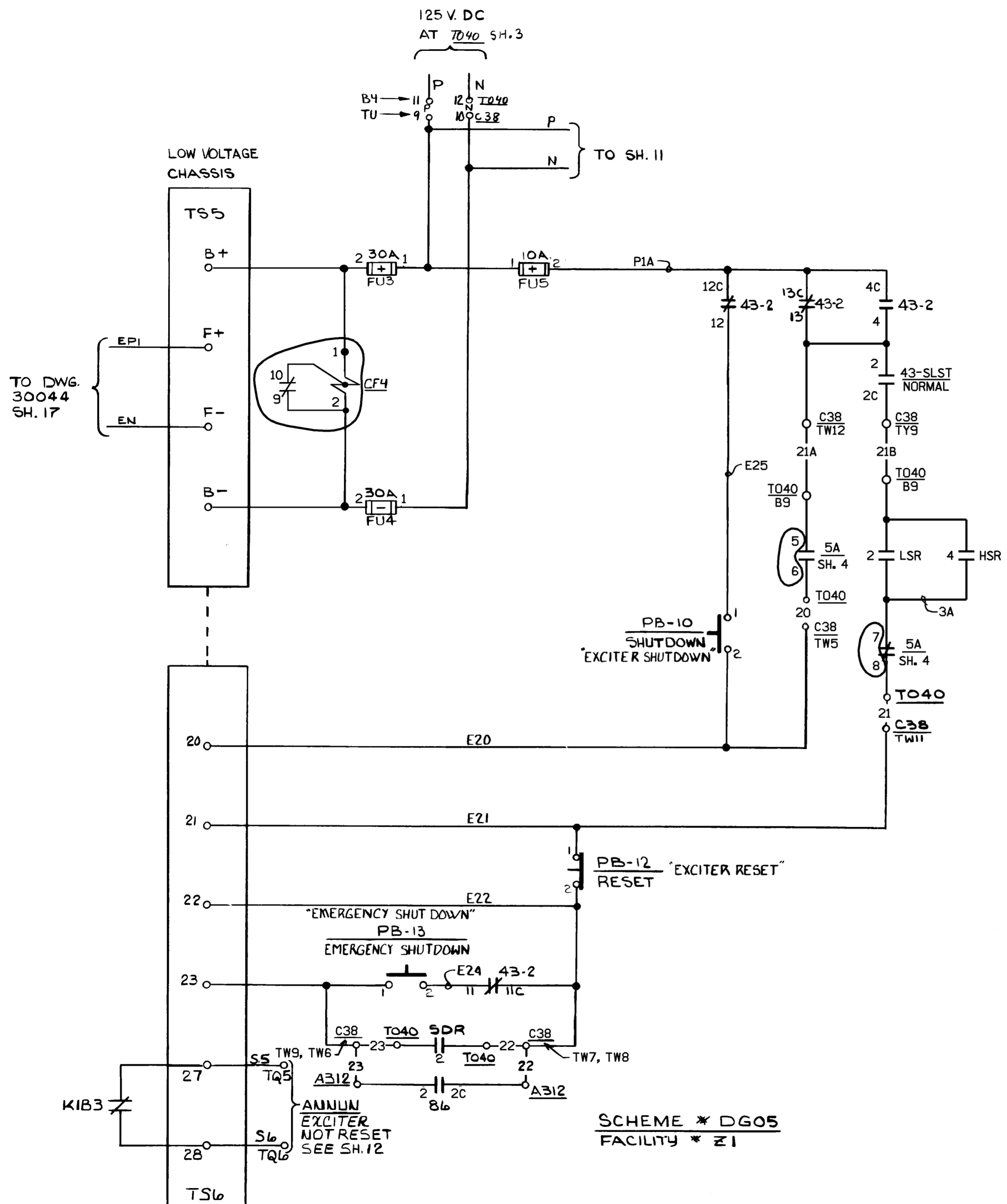
- NOTES:**
- FOR STANDARD NOTES, SYMBOLS & EQUIP. LOCATION INDEX, SEE DWG. 25203-30028.
  - FOR CONTROL SWITCH DEVELOPEMENT, SEE DWG. 32041 SH. A.
  - FOR RELAYS UPS & 43-2, SEE DWG. 32041 SHEETS 3 & 8.
  - 43-2 CONTACTS SHOWN IN THE D/G POSITION (LOCAL CONTROL).
  - OPEN FOR DROOP CLOSE FOR ISOCHRONOUS
  - GOV. EGB-13P TAG: H7AD-GOVERNOR

6	2/92	INCORP. DCN DM2-00-0025-00	JSJ	OK	OK	OK	OK	<b>NORTHEAST UTILITIES SERVICE CO.</b> <b>FOR NORTHEAST NUCLEAR ENERGY CO.</b> TITLE <b>MILLSTONE UNIT NO. 2</b> <b>DIESEL GENERATOR 15G-12U (H7A)</b> <b>GOVERNOR CONTROL</b> WATERFORD, CT.
N/A	5-25-96	INCORP. DCN DM2-S-1171-95 PER DCR M2-S-0025-96	JMM	OK	OK	OK	OK	
91-056	4	AS BUILT PER DCN-DM2-S-0141-93 & DCR-M2-S-1452-93	DK	OK	OK	OK	OK	
91-056	3	AS BUILT PER DM2-S-0637-92, DM2-S-0847-92, DM2-S-1437-92, DM2-S-1791-92, DM2-S-1993-92, DCR M2-S-0779-92	JSJ	OK	OK	OK	OK	
MF	P.A.*	NO. DATE	REVISIONS	BY	CHK	APP	APP	

**WARNING:**  
MORE THAN ONE  
LIVE CIRCUIT



Q.A.



- NOTES:**
- FOR STANDARD NOTES, SYMBOLS & EQUIP. LOCATION INDEX SEE DWG. 25203-30028.
  - BASLER INTERNAL SCHEMATIC & INTERNAL CONNECTION DIAGRAM ON 39038 SH.11.

**REF. DWG.**  
25203-39038 SH.38A

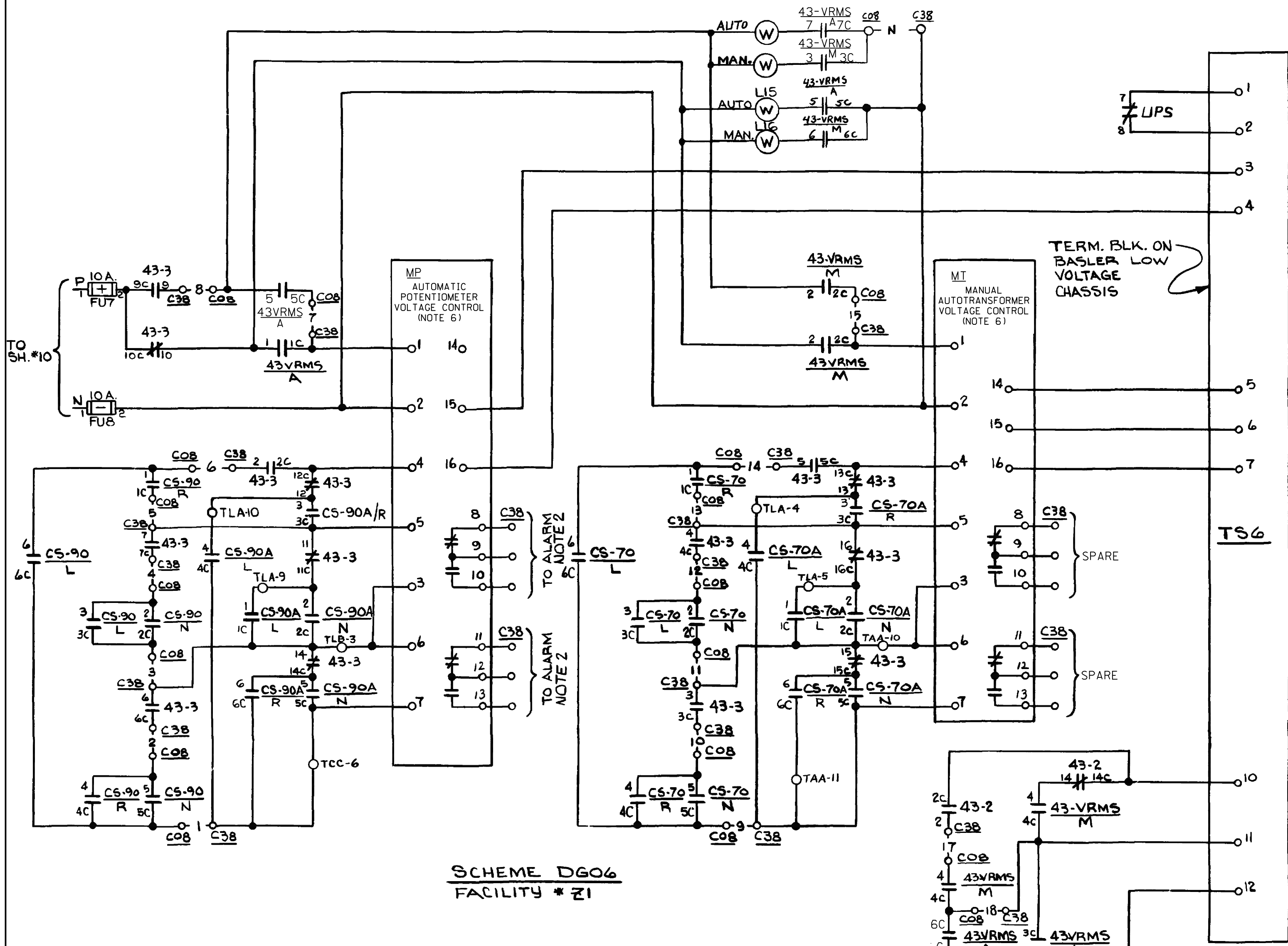
**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE MILLSTONE UNIT 2 DIESEL GENERATOR 15-12U (H7A) EXCITER CONTROL			
REVISION DESCRIPTION (SIGNATURES ON FILE)		CAD NO: C3204110.MYB	
REVISED PER DC MP2-12-01126 & DUR 13-800199		DRAWING NO: 25203-32041	
DSON JCV		SCALE: NONE	
UNLESS OTHERWISE NOTED		SH 10	

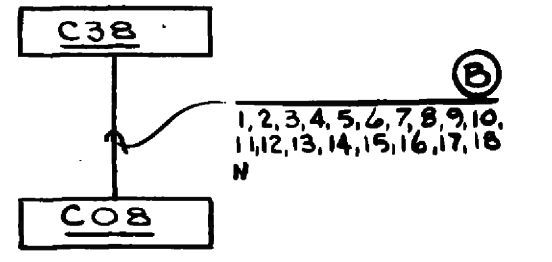
SUPERCEDES  
25203-39038  
SH.7,13

SCHEME \* DG05  
FACILITY \* Z1





**SCHEME DGO6**  
FACILITY # Z1



**BLOCK DIAGRAM**  
SCHEME # DGO6, FAC. # Z1

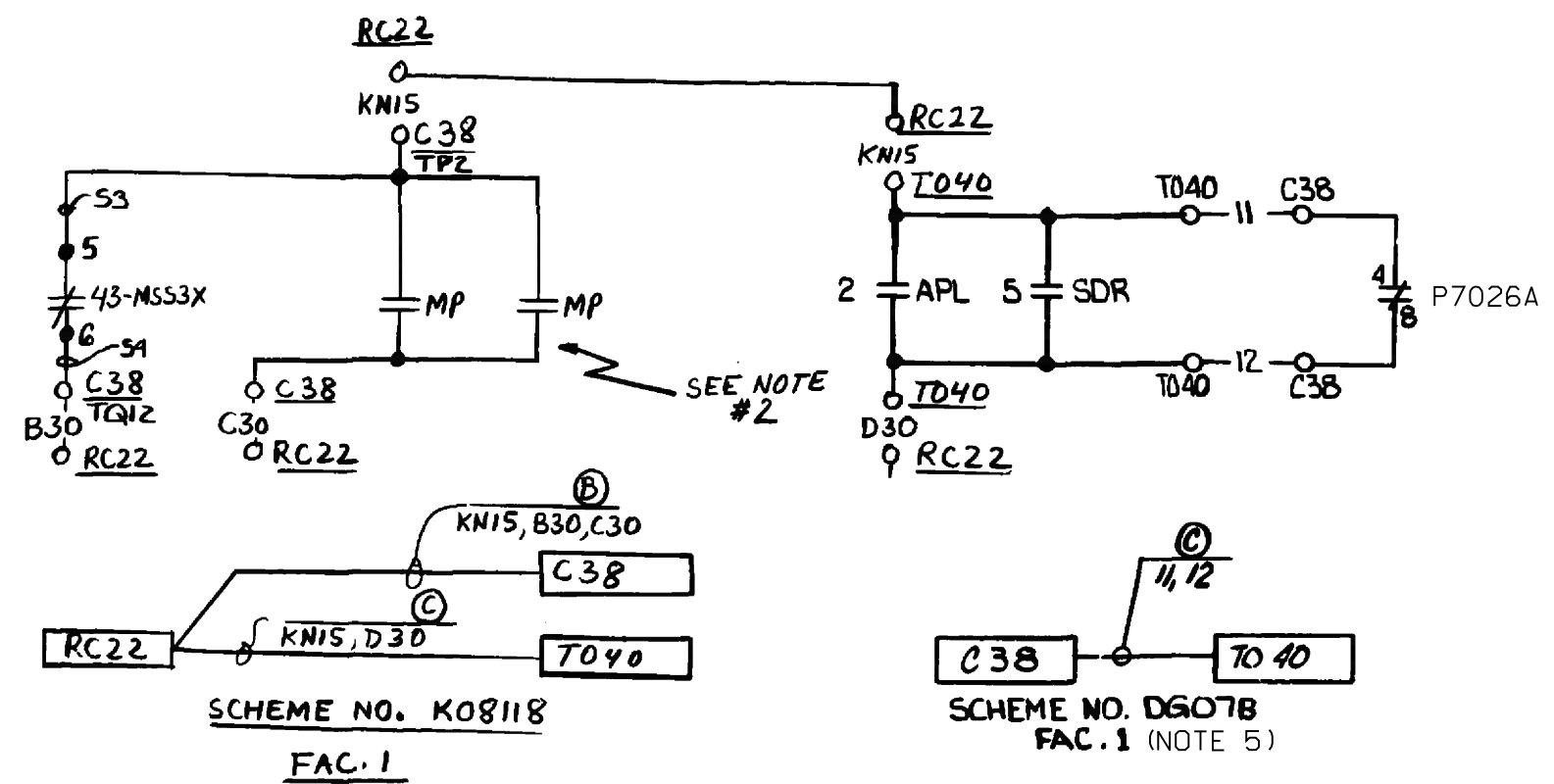
**NOTES:**

- FOR STANDARD NOTES, SYMBOLS & EQUIP LOCATION INDEX SEE DWG. 25203-3002B.
- FIELD TO SET LIMIT SWITCH FOR MP SO THAT ANY SETTING ABOVE OR BELOW THE HIGH AND LOW SETPOINTS (HIGH SETPOINT 4310 ±30 VOLTS; LOW SETPOINT 4050 ±30 VOLTS) ON BUS #A3 SHALL ALARM.
- FOR CONTROL SWITCH DEVELOPMENT SEE DWG. 32041 SH.A
- 43-3 CONTACTS SHOWN IN THE D/G POSITION (LOCAL CONTROL)
- REFERENCE LOOP DWG. 28500 SH. 759 AND SCHEMATIC DWG. 32041 SH. 13 FOR P7026A & P57026A.
- THE AUTOMATIC POTENTIOMETER (MP) AND MANUAL AUTOTRANSFORMER (MT) HAVE BEEN MODIFIED TO REMOVE THE INPUT DIODE BRIDGE.

**FSAR FIGURE**

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

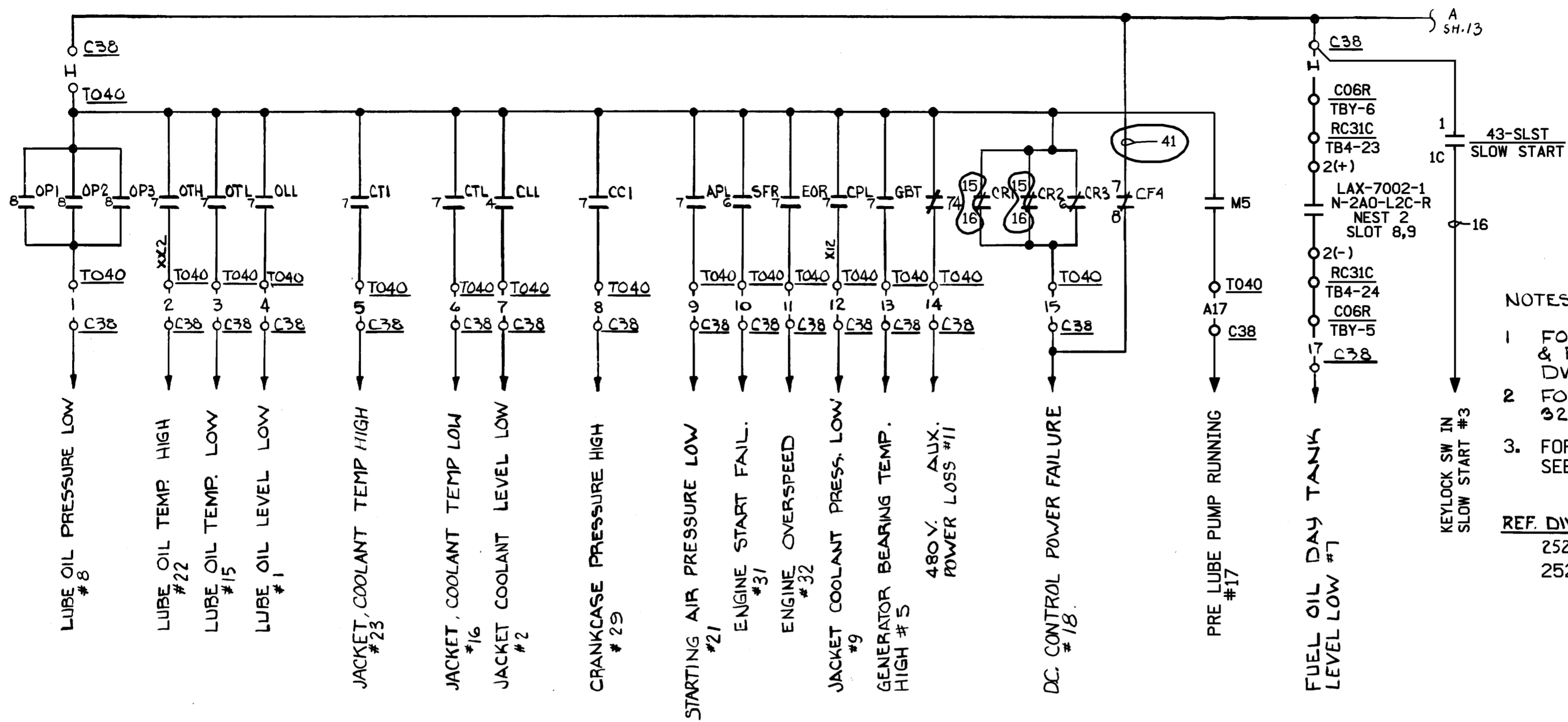
Q.A.



**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION				REVISIONS			
NO.	DATE	BY	CHK/APPR	NO.	DATE	BY	CHK/APPR

THIS DWG. SUPERSEDES  
25203-39038 SH. 8, 9

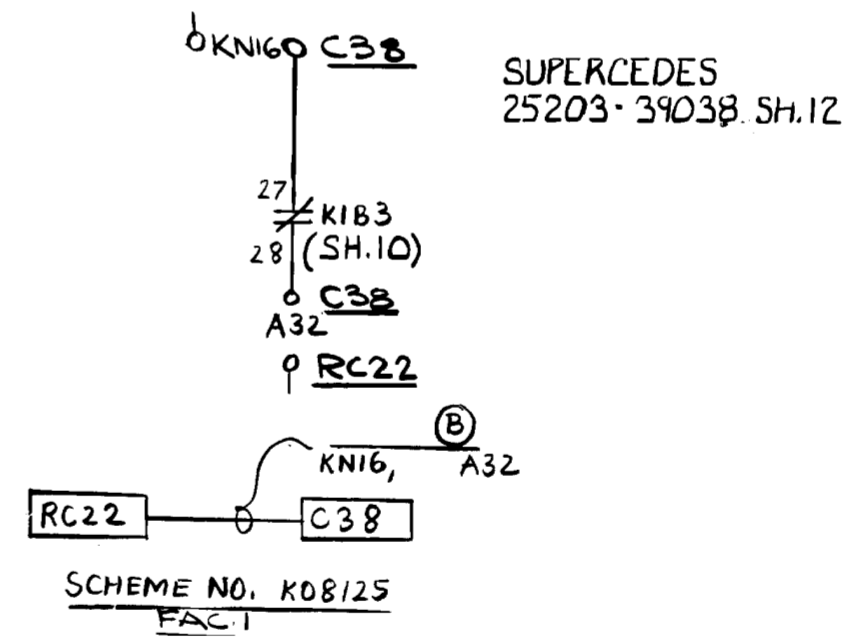


NOTES:

1. FOR STANDARD NOTES, SYMBOLS & EQUIP. LOCATION INDEX SEE DWG. 25203-30028.
2. FOR BLOCK DIAGRAM SEE DWG. 32041, SHEET 13.
3. FOR LT-7002 LOOP DIAGRAM SEE DWG. 25203-28500 SH.749.

REF. DWG.  
 25203-39038 SH.24A, 25A  
 25203-32041 SH.12

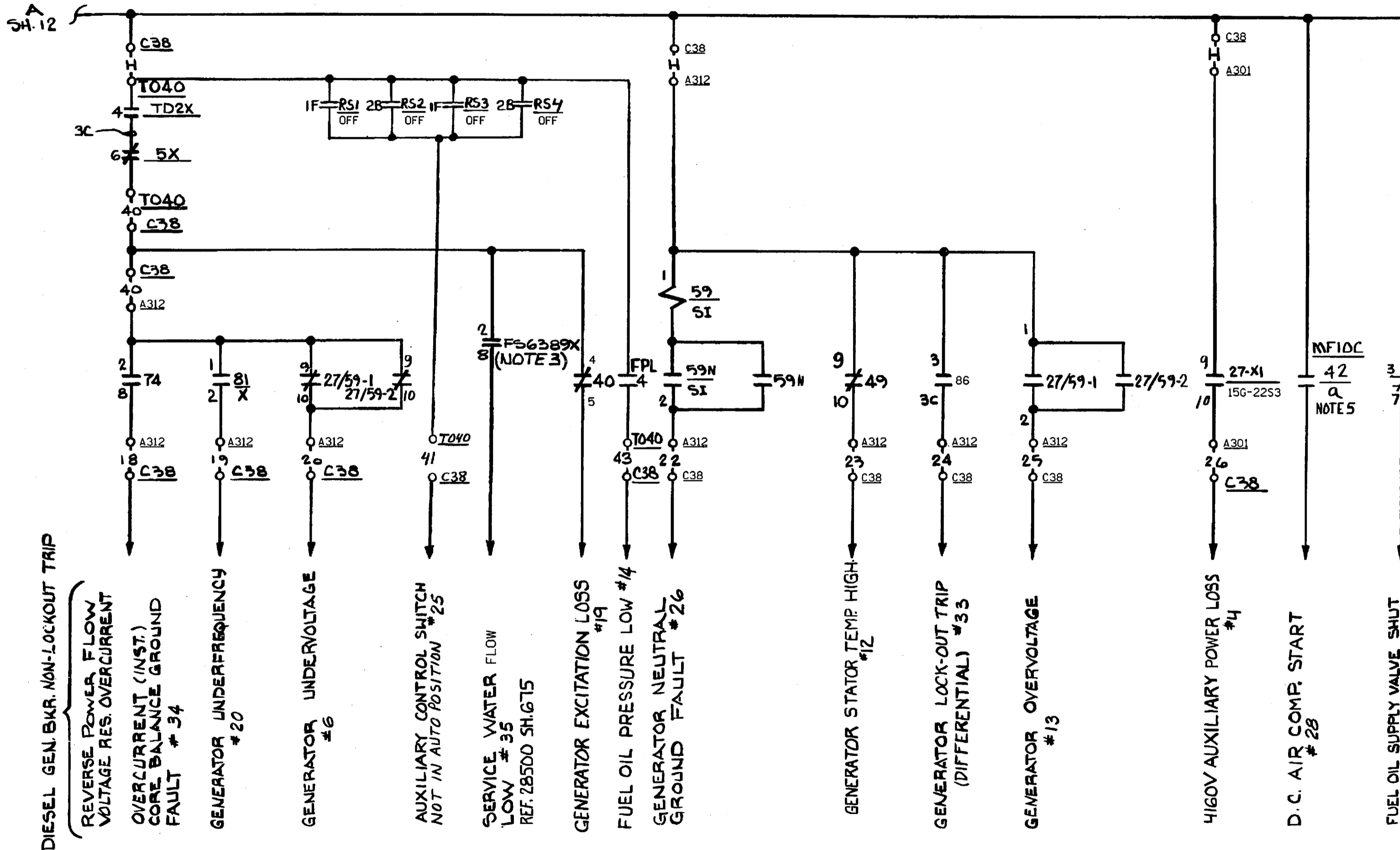
SCHEME NO. DG07  
 FACILITY \*1



**FSAR FIGURE**

SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE <b>MILLSTONE UNIT No.2          DIESEL GENERATOR 15G-12U (H7A)          LOCAL ALARMS</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER DC MP2-12-01126 & DUR 13-800199		CAD NO: C320412.MYB DRAWING NO: 25203-32041	
DSON JCV	SCALE: NONE	UNLESS OTHERWISE NOTED SH 12	REV 7



DIESEL GEN. BKR. NON-LOCKOUT TRIP

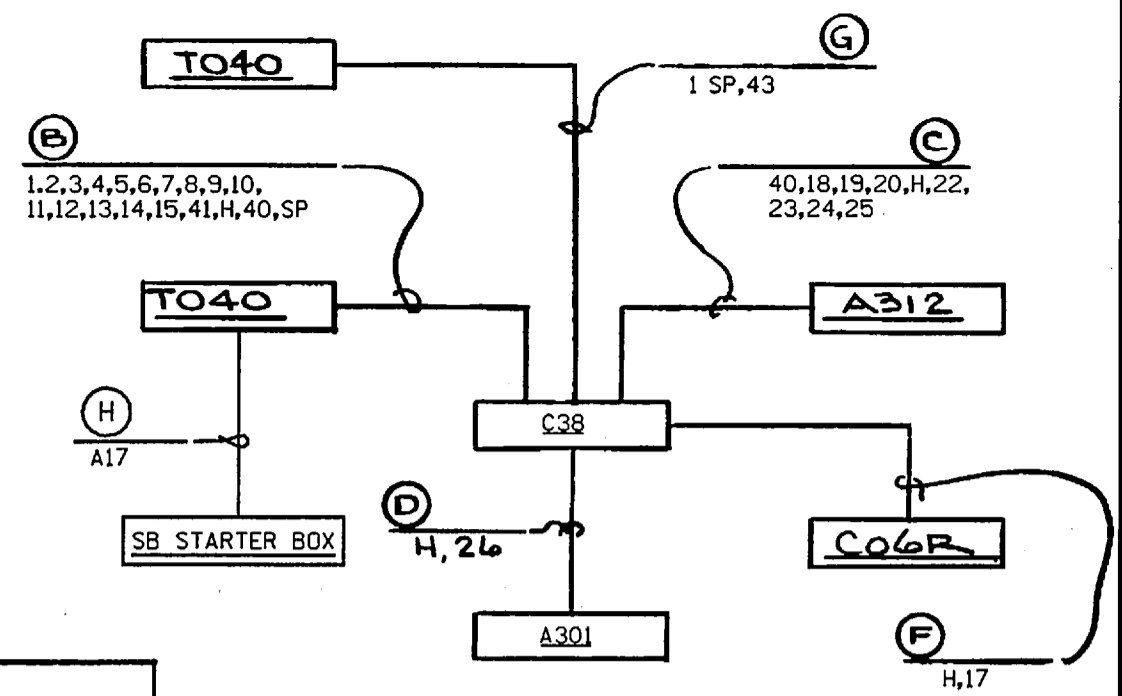
REVERSE POWER, FLOW  
 VOLTAGE RES. OVERCURRENT  
 OVERCURRENT (INST.)  
 CORE BALANCE GROUND  
 FAULT # 34  
 GENERATOR UNDERFREQUENCY  
 # 20  
 GENERATOR UNDERVOLTAGE  
 # 6

AUXILIARY CONTROL SWITCH  
 NOT IN AUTO POSITION # 25  
 SERVICE WATER FLOW  
 LOW # 35  
 REF. 28500 SH. 675

GENERATOR EXCITATION LOSS  
 # 19  
 FUEL OIL PRESSURE LOW # 14  
 GENERATOR NEUTRAL  
 GROUND FAULT # 26

GENERATOR STATOR TEMP. HIGH  
 # 12  
 GENERATOR LOCK-OUT TRIP  
 (DIFFERENTIAL) # 33  
 GENERATOR OVERVOLTAGE  
 # 13

4160V AUXILIARY POWER LOSS  
 # 4  
 D. C. AIR COMP. START  
 # 28  
 FUEL OIL SUPPLY VALVE SHUT  
 # 10

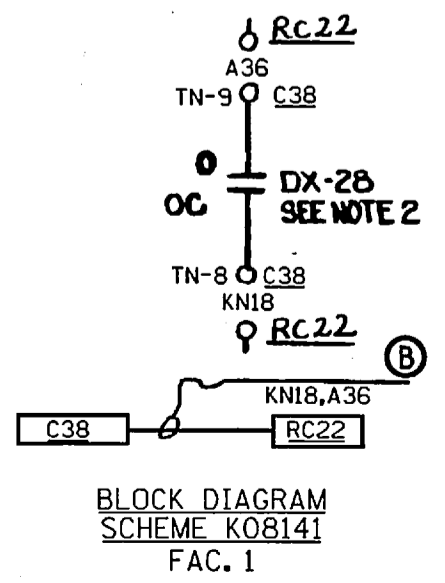


**BLOCK DIAGRAM**  
SCHEME \* DG07, FAC: 1

ENGINE	GALGE BOARD	SWITCHES
RS1	COOLANT HEATER	AUTO / OFF
RS2	COOLANT PUMP	AUTO / OFF / MAN.
RS3	LUBE OIL HEATER	AUTO / OFF
RS4	LUBE OIL PUMP	AUTO / OFF / MAN.

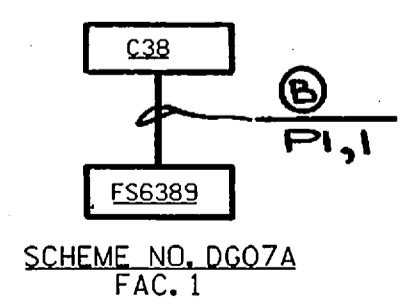
- NOTES:**
- FOR STANDARD NOTES, SYMBOLS & EQUIP. LOC. INDEX SEE DWG. 25203-30028.
  - CONTACT LOCATED AT C38 REMOTE ALARM HORN, CLOSING ON ANY LOCAL ANNUNCIATION, SEE DWG. 39038 SH. 21A
  - REFERENCE DWG 28500 SH. 675 FOR FS6389X & FS6389 LOOP DIAGRAM.
  - REFERENCE LOOP DWG. 28500 SH. 759 AND SCHEMATIC DWG. 32041 SH. 11 FOR P7026A & PS7026A.
  - MFIDC 42/a CONTACT ON SCHEME ZIDG15 ON SH. 27

**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES



BLOCK DIAGRAM  
SCHEME K08141  
FAC. 1

SCHEME No DG07  
FACILITY No 1



SUPERSEDES  
25203-31038 SH 12

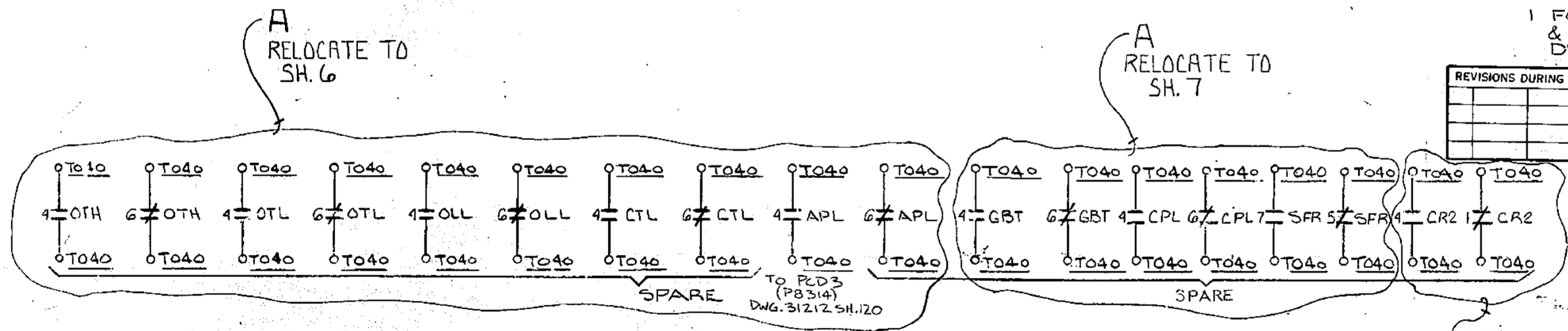
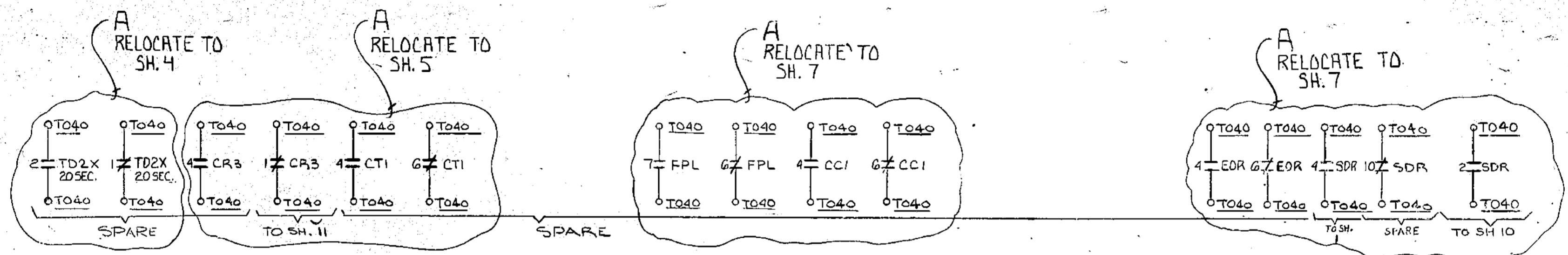
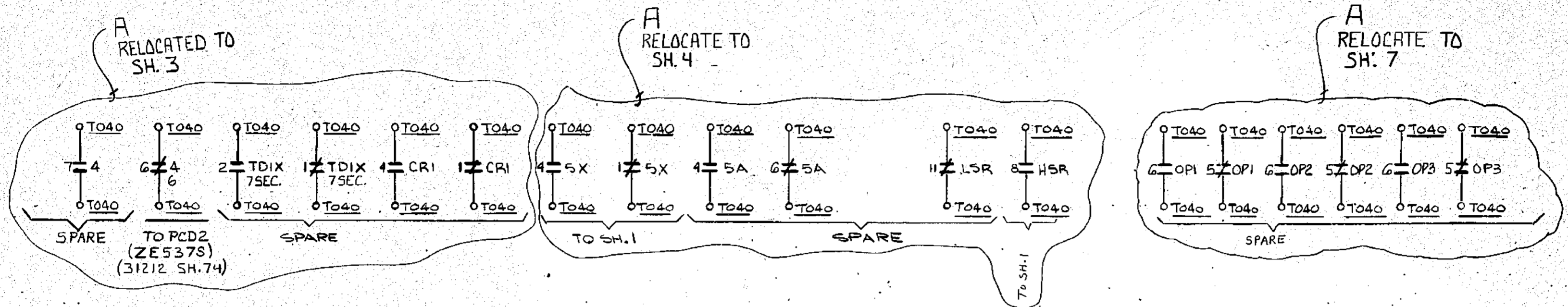
**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION		DATE		BY		CHKD.		APP.	

10	8/26	INCORP. DCN DM2-00-0150-06	DLW	JSJ	WBJ	JPP	JPP	<b>Dominion Nuclear Connecticut, Inc.</b> <b>Millstone Power Station</b> TITLE MILLSTONE UNIT 2 DIESEL GENERATOR 15G-12U (H7A) LOCAL ALARMS WATERFORD, CT.
9	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBJ	JPP	JPP		
8	8/4/99	INCORP. DCN DM2-00-2028-98	MEL	JSJ	JPP	JPP		
7	8/8/98	INCORP. DCN DM2-00-0256-97	WBZ	MM	JPP	JPP		
6	12-3-97	INCORP. DCN DM2-01-0490-97	AP	GFD	RWD	JB		
NO.	DATE	REVISIONS	BY	CHK	APP	APP		

SCALE N/A  
DWG. NO. 25203-32041 SH. 13

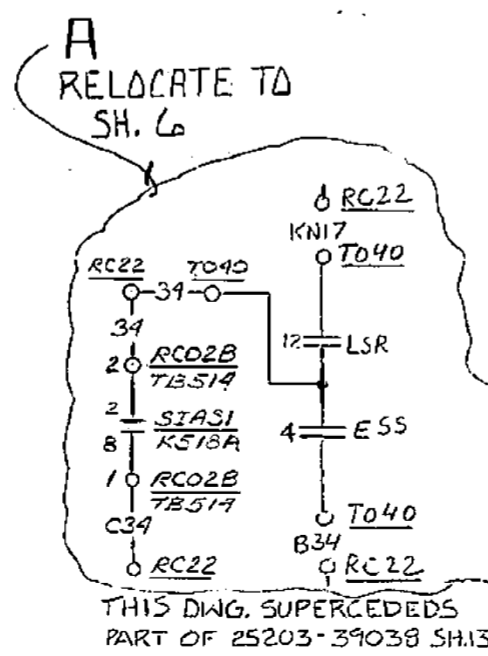
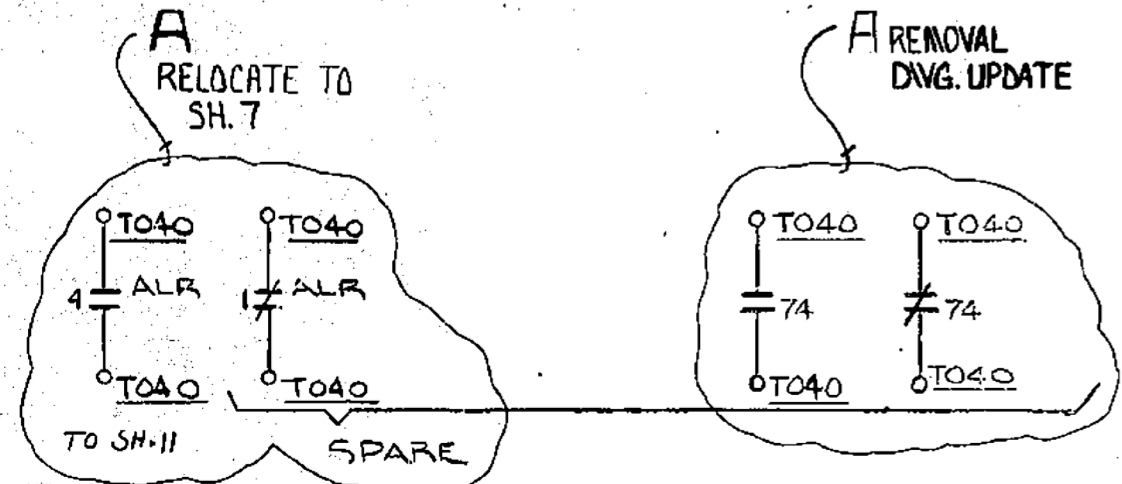
NON  
Q.A.



NOTES  
1 FOR STANDARD NOTES, SYMBOLS & EQUIP LOCATION INDEX SEE DWG. 25203-30028.

REVISIONS DURING CONSTRUCTION	

- REFERENCES
- 31055 SH. 2 TO40 CONN DIAG
  - 31114 SH. 10 RCO2B CONN DIAG
  - 39047 SH. 9 RCO2B WIRING DIAG
  - 31078 SH. 8 RC22 CONN DIAG



VOID AFTER DCN CLOSE OUT

MP2 DIESEL GEN. UPDATE (AFTER CHANGES ONLY)

REVISIONS DURING CONSTRUCTION		P.A. NO. 91-056
A	2-18-94	ISSUE PER DCN DM2-S-0141-93 SH.28

NO.	DATE	REVISION	BY	CHK	APP	P.A. NO.
91-056	7/1/91	VOID PER DCN DM2-S-0141-93 & DCN DM2-1452-93				
91-056	5/11/93	AS PER DCN DM2-S-1452-92				
91-073	5/2/93	AS PER DCN DM2-S-1452-92				

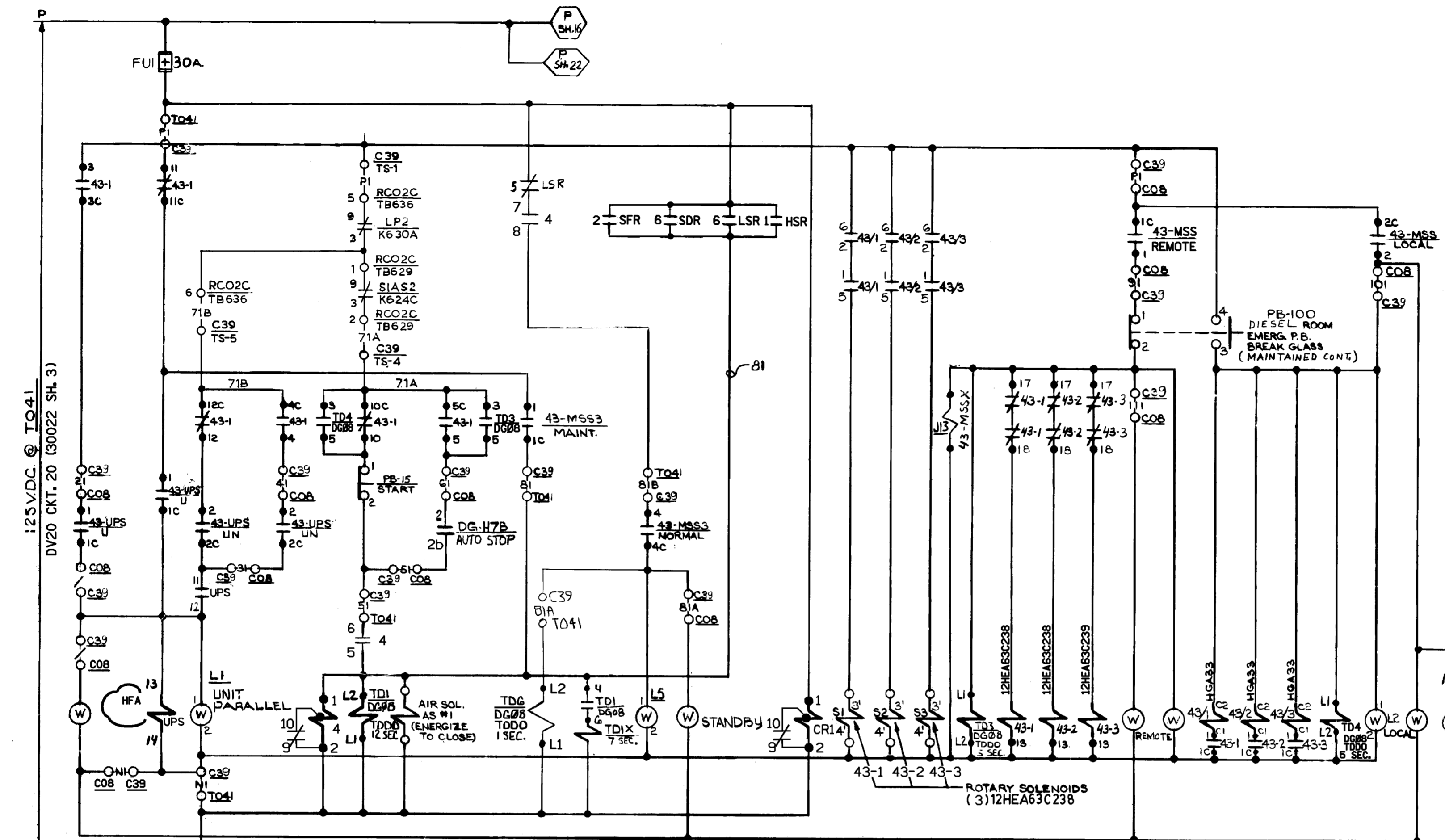
**BECHTEL CORPORATION**  
GAITHERSBURG, MARYLAND 7604

**THE MILLSTONE POINT COMPANY**  
SUBSIDIARY OF  
**NORTHEAST UTILITIES**

TITLE: MILLSTONE NUCLEAR POWER STATION-UNIT NO. 2  
DIESEL GENERATOR 15G-12U (H7A)  
ALARM & INTERLOCK CONTACTS

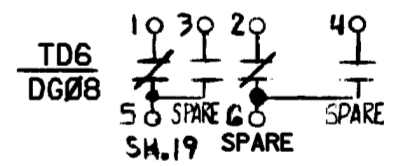
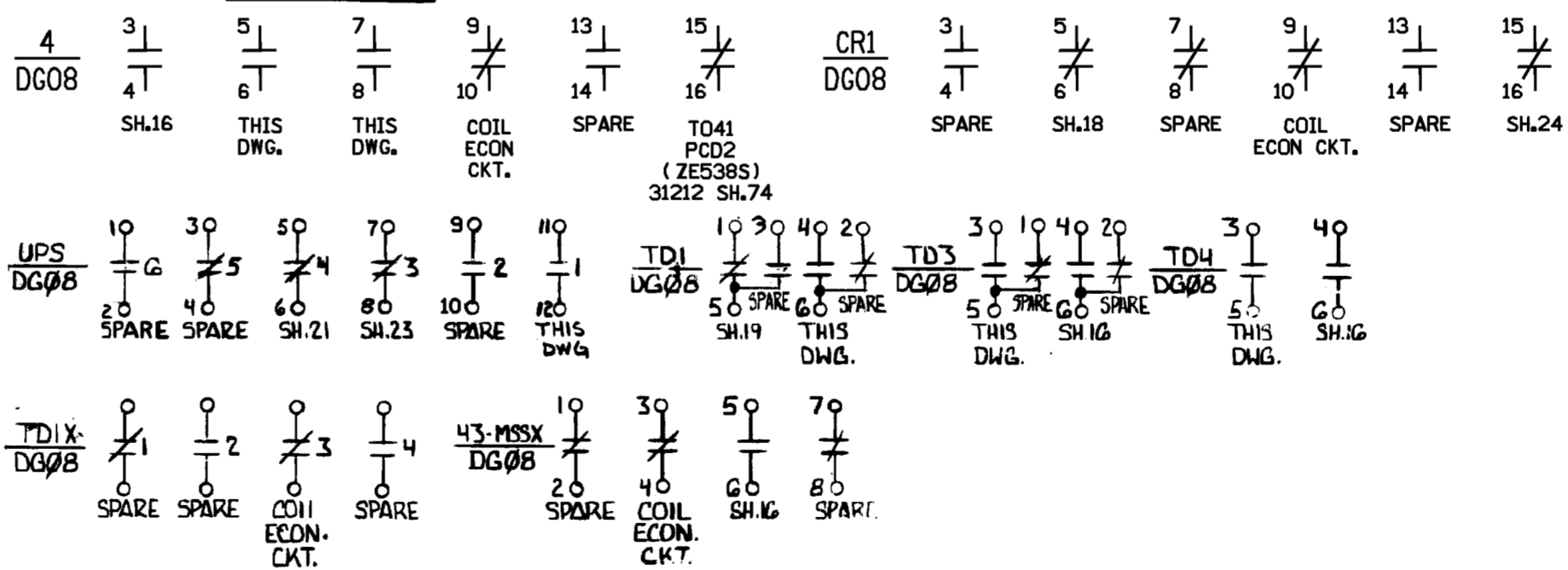
DATE: 2-2-72  
SCALE: NONE  
DWG. NO.: 25203-32041  
SH. 14

**REFERENCES:**  
 25203-31056 SH.2 - C39 CONN. DIAG.  
 25203-31115 SH.2,3 - RCO2C CONN. DIAG.  
 25203-39047 SH.14 - RCO2C WIR. DIAG.

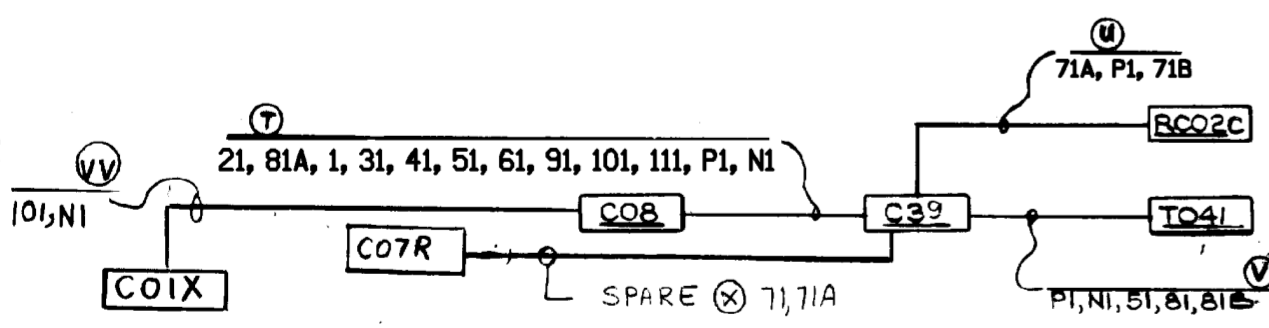


**NOMENCLATURE**  
 TDIX - AUX TDI RELAY  
 4 - START RELAY  
 TD1 - CRANKING TIME TDDO  
 AS#1 - AIR START SOL. ENERGIZE TO CLOSE  
 CR1 - CONTROL PWR CIRCUIT #1  
 L5 - DIESEL ENGINE ON STANDBY  
 L2 - DIESEL GEN. MODE LOCAL  
 43-1 - (REFERENCE 32041 SH.20)  
 43-2 - (REFERENCE 32041 SH.20)  
 43-3 - (REFERENCE 32041 SH.20)

**SCHEME No. DGOB  
 FACILITY \*Z2**



**SUPERCEDES  
 25203-39038 SH.15**



**BLOCK DIAGRAM  
 FACILITY \*Z2**

- NOTES:**  
 1. ALL DEVICES ARE ISG-13U EXCEPT AS NOTED.  
 2. FOR 43-MSS, 43-MSS3 & 43-UPS SEE SH. A.  
 3. 4 RELAY TO BE ENERGIZED INITIALLY  
 4. FOR DG47B/15G13U SEE SH. A.  
 5. FOR COIL OF 43-MSS3X SEE SH. 16.  
 6. DG REMOTE CONTROL LIGHT ON WHEN IN LOCAL.

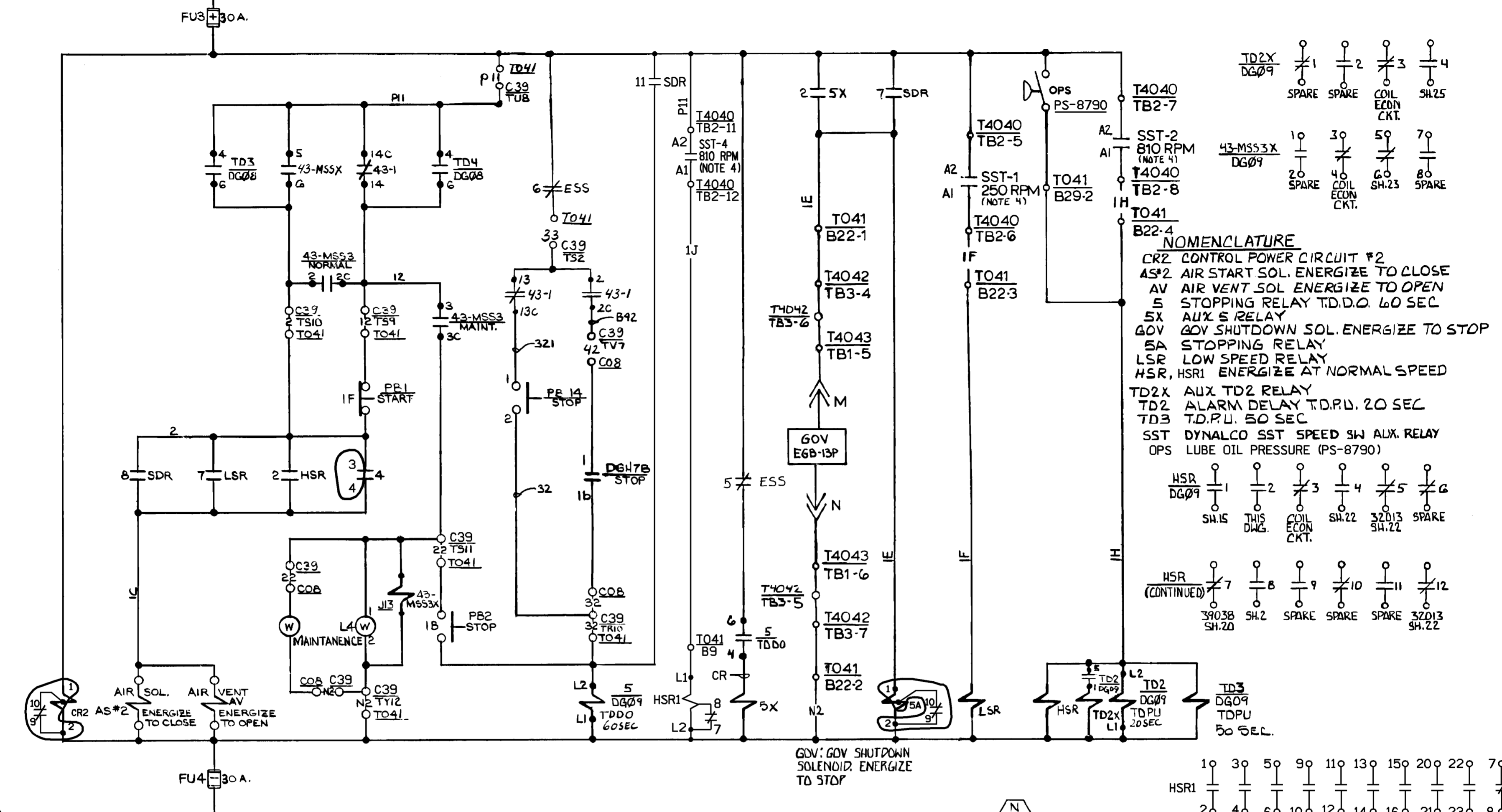
**FSAR FIGURE**

**SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES**

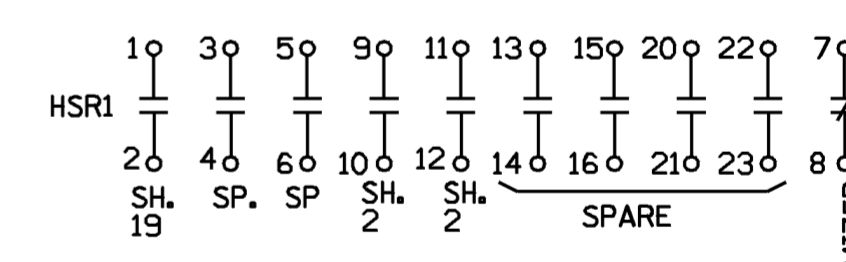
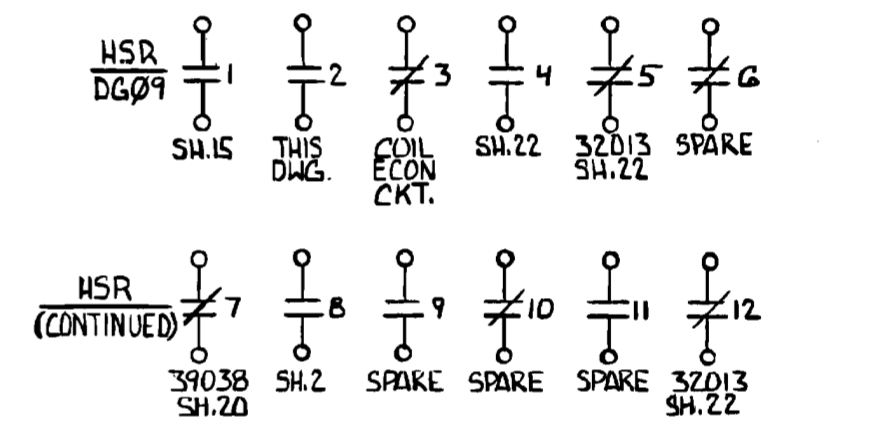
		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE: DIESEL GENERATOR 15G-13U (H7B) ENGINE CONTROL			
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C3204115.MVB		DRAWING NO: 25203-32041	
REVISED PER MSDUR 17-000175 & DUR 17-800392		REV: 16	
DSON DLW	SCALE: N/A	UNLESS OTHERWISE NOTED SH 15	

P SH.15

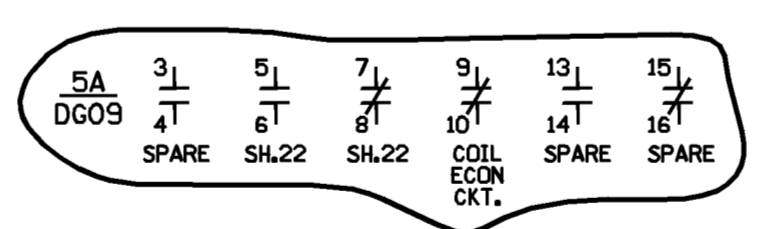
P SH.17



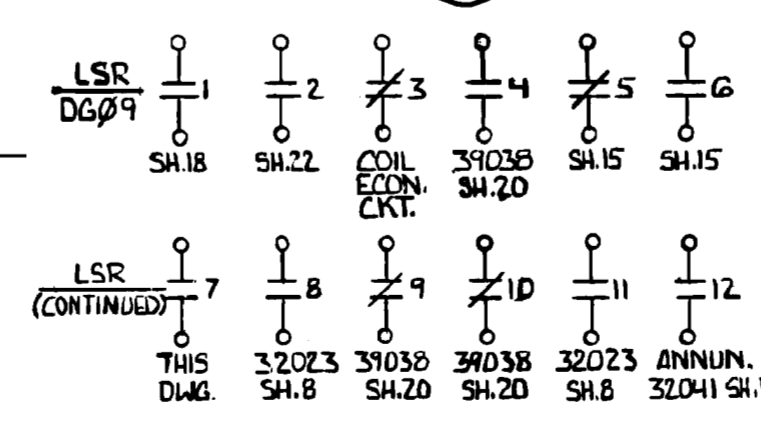
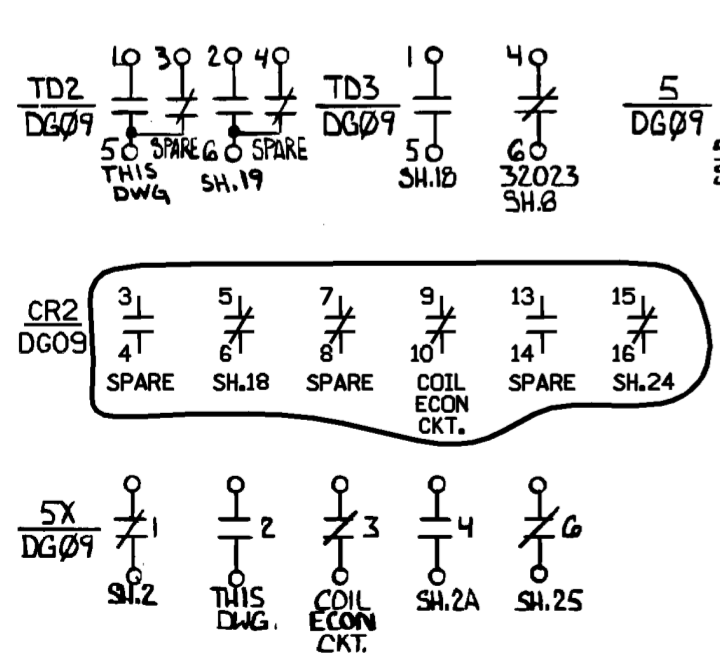
**NOMENCLATURE**  
 CR2 CONTROL POWER CIRCUIT #2  
 AS\*2 AIR START SOL. ENERGIZE TO CLOSE  
 AV AIR VENT SOL. ENERGIZE TO OPEN  
 S STOPPING RELAY T.D.D.O. 60 SEC  
 5X AUX S RELAY  
 60V 60V SHUTDOWN SOL. ENERGIZE TO STOP  
 5A STOPPING RELAY  
 LSR LOW SPEED RELAY  
 HSR, HSR1 ENERGIZE AT NORMAL SPEED  
 TD2X AUX TD2 RELAY  
 TD2 ALARM DELAY T.D.P.U. 20 SEC  
 TD3 T.D.P.U. 50 SEC  
 SST DYNALCO SST SPEED SW AUX. RELAY  
 OPS LUBE OIL PRESSURE (PS-8790)



**SCHEME NO. DGO9**  
**FACILITY #Z2**



**BLOCK DIAGRAM**  
**FACILITY #Z2**



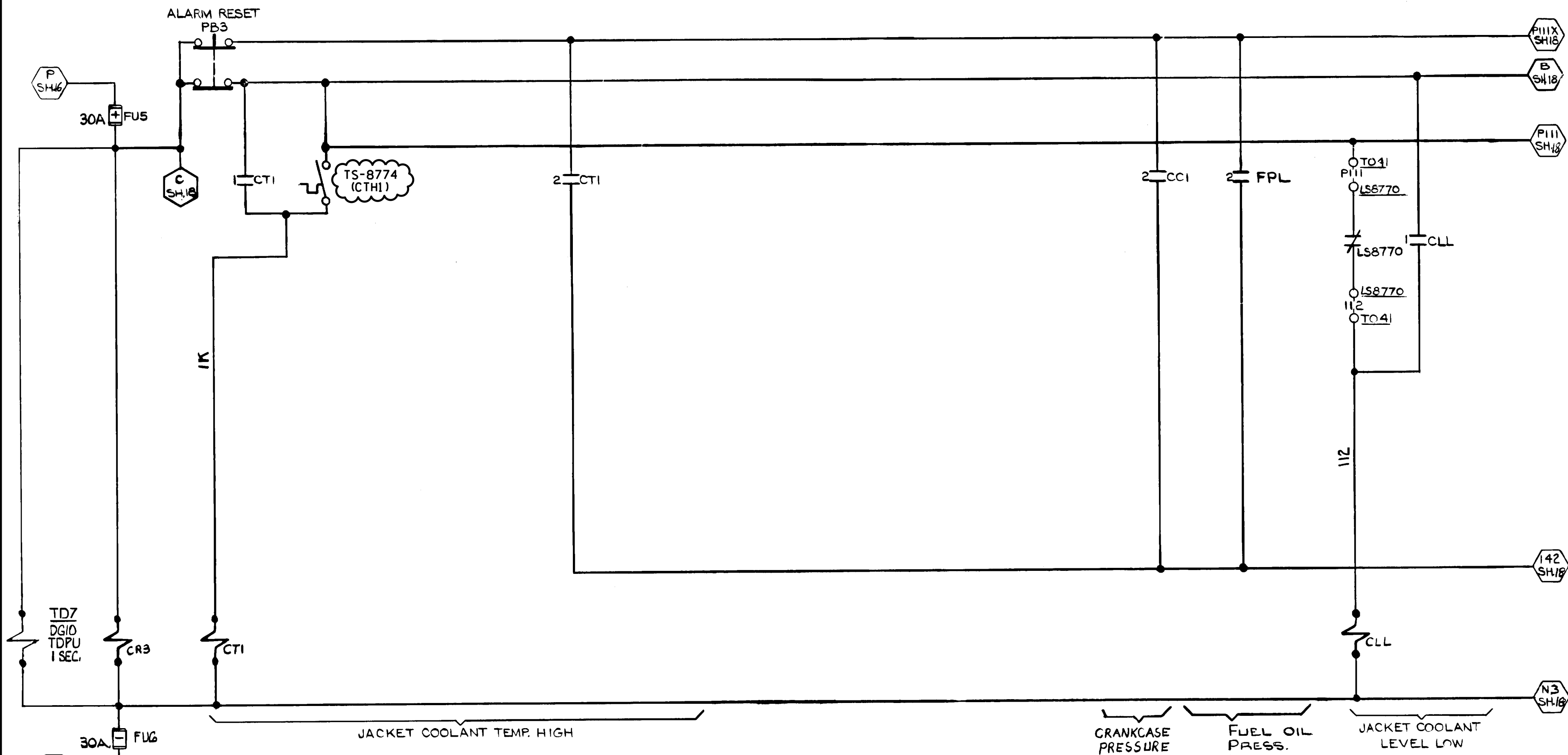
- NOTES:**  
 1. ALL DEVICES ARE 15G-13U EXCEPT AS NOTED.  
 2. FOR 43-MSS3 SEE SH. A.  
 3. FOR DGH7B/15G-13U SEE SH. A.  
 4. SST-1, SST-2, SST-4 REF. DWG 28500 SH.12.R  
 5. PS-8790 REF. DWG. 28500 SH.884.

**FSAR FIGURE**

SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES

SUPERCEDES  
 25203-39033 SH.16,9

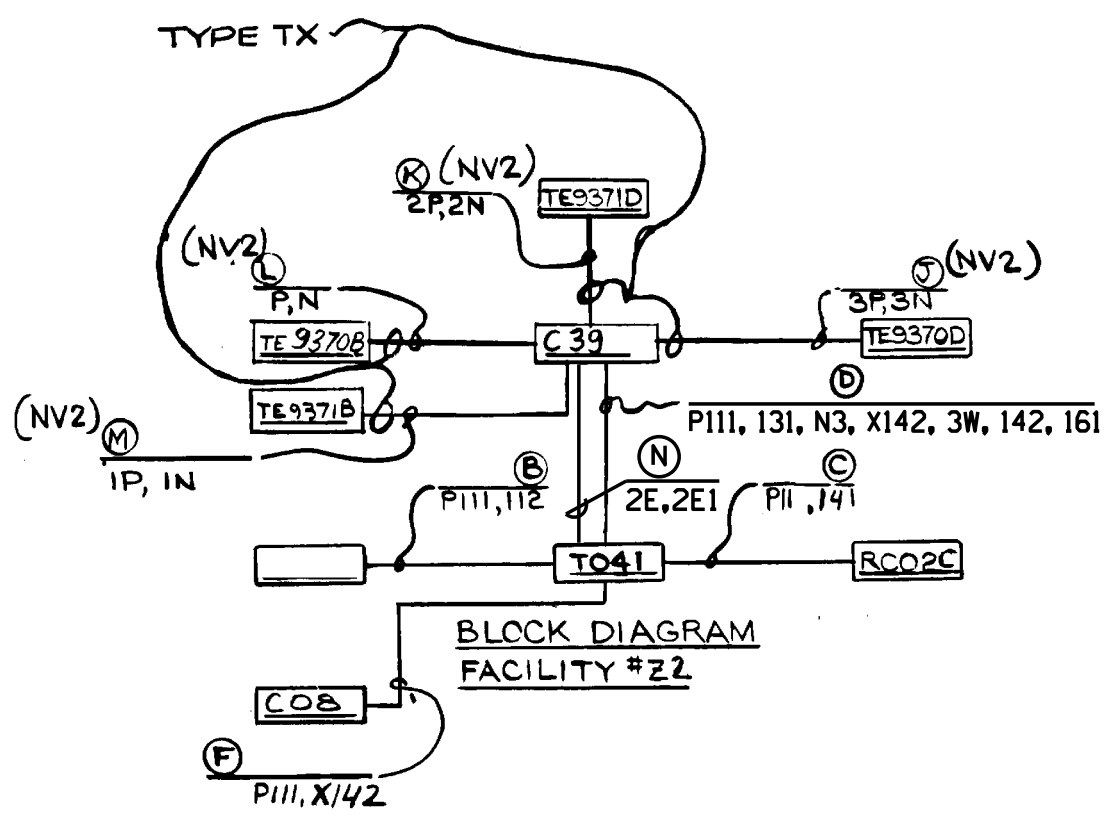
		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE <b>DIESEL GENERATOR 15G-13U (H7B)          ENGINE CONTROL</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C320416-MYB		DRAWING NO: 25203-32041	
REVISED PER DC MP2-13-01049 & DUR 14-800224		REV 12	
DSON JCV		UNLESS OTHERWISE NOTED SH 16	



SCHEME NO. DG10  
FACILITY #22

NOMENCLATURE

- CR3 CONTROL POWER CIRCUIT #3
- TD7 TDP1 SEL LUBE OIL PRES. LOW COMMON ALARM
- CT1 JACKET COOLANT TEMP. HIGH
- CLL JACKET COOLANT LEVEL LOW

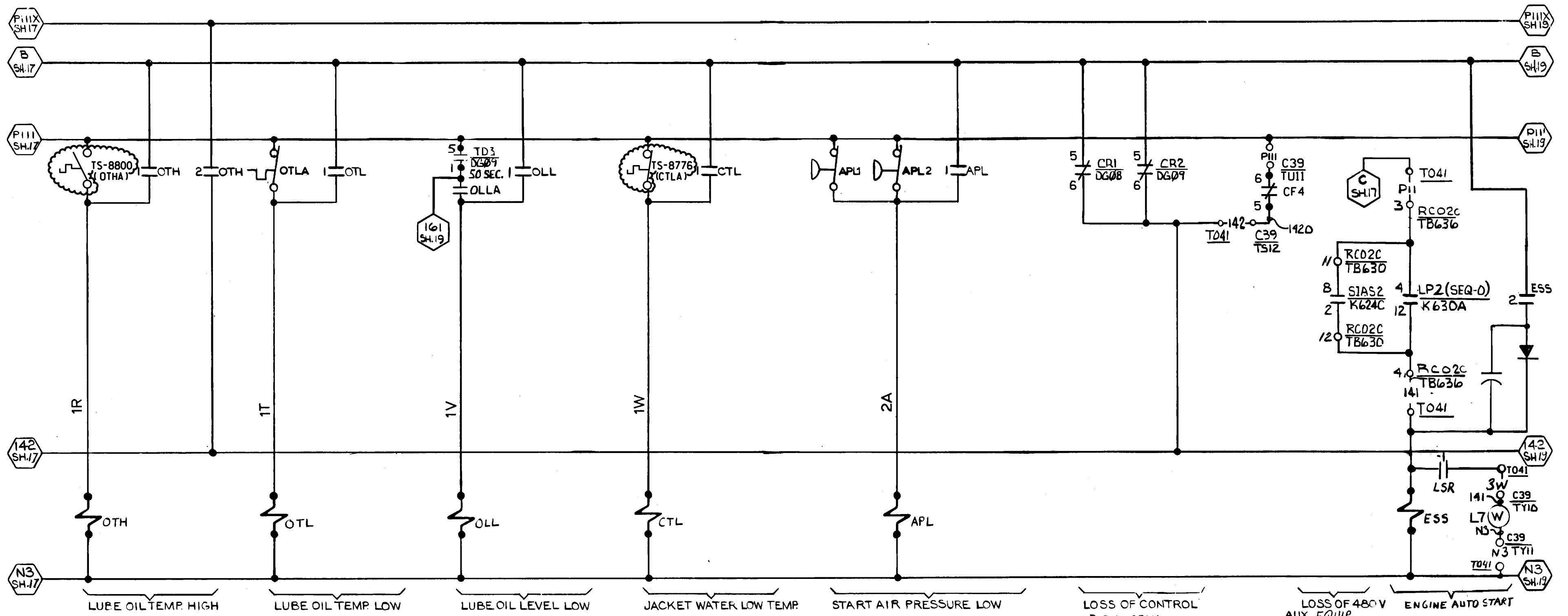


- |             |        |        |             |       |       |                       |       |       |             |              |              |                       |       |
|-------------|--------|--------|-------------|-------|-------|-----------------------|-------|-------|-------------|--------------|--------------|-----------------------|-------|
| TD7<br>DG10 | 1<br>5 | 2<br>6 | CR3<br>DG10 | 1     | 2     | 3                     | 4     | 6     | CLL<br>DG10 | 1            | 2            | 3                     | 4     |
|             | SH.19  | SH.19  |             | SP.   | SP.   | COIL<br>ECON.<br>CKT. | SP.   | SH.24 |             | THIS<br>DWG. | SP.          | COIL<br>ECON.<br>CKT. | SH.24 |
|             |        |        | CT1<br>DG10 | 1     | 2     | 3                     | 4     | 6     |             | THIS<br>DWG. | THIS<br>DWG. | COIL<br>ECON.<br>CKT. | SP.   |
|             |        |        |             | SH.24 | SH.24 | SH.24                 | SH.24 | SH.24 |             |              |              | SH.24                 | SH.24 |

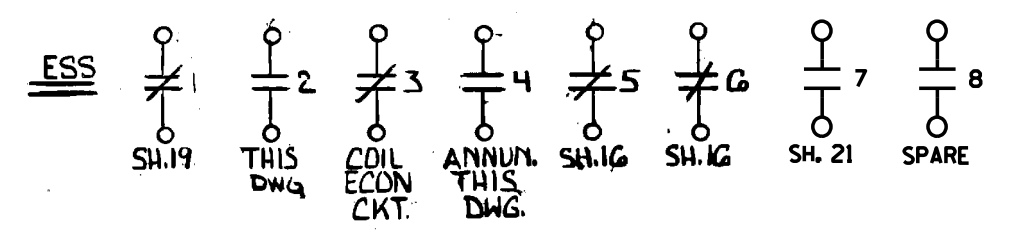
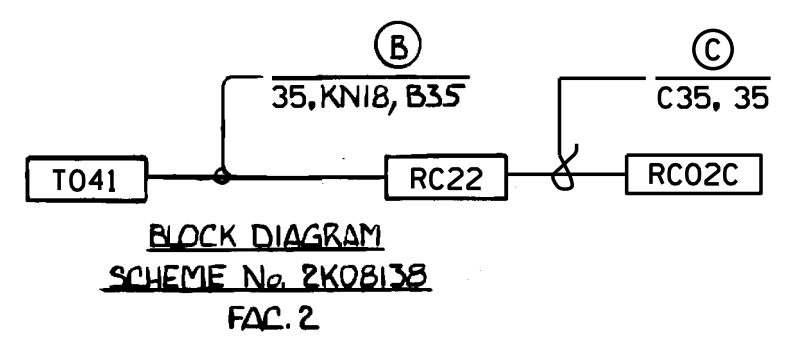
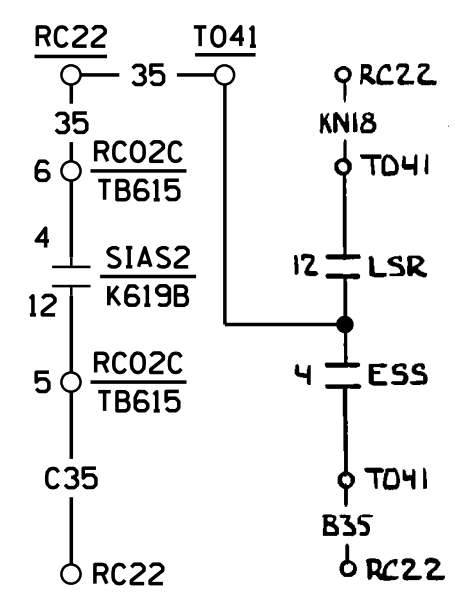
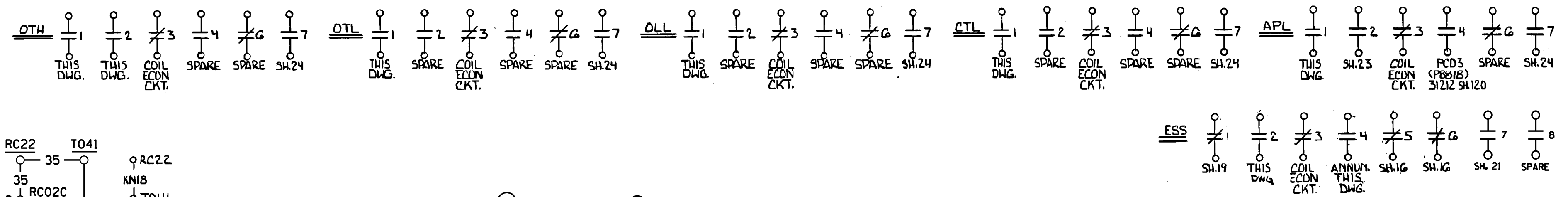
**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

REDRAWN FROM SAME  
NNECO DWG. No. REV.3  
SUPERCEDES PART OF  
25203-39038 SH.16

Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE <b>MILLSTONE UNIT 2 DIESEL GENERATOR 15G-13U (H7B) ENGINE CONTROL</b>	
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C3204117.HYB	
REVISED PER DC MP2-19-01208 & DUR 21-800137	DRAWING NO: 25203-32041
DSON JCV	SCALE: NONE
UNLESS OTHERWISE NOTED SH 17	



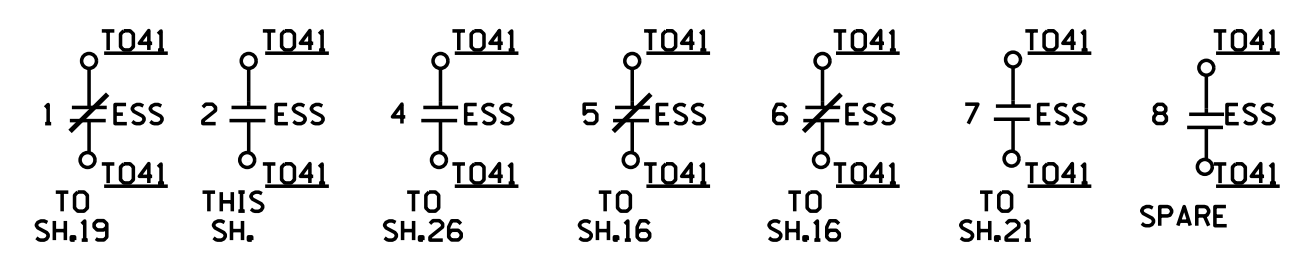
SCHEME NO. DG10  
FACILITY #22



NOTE:  
1. FOR BLOCK DIAGRAM SEE SH. 17.

**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

- REFERENCES**
- 3115 SH.2,3 RC02C CONN DIAG
  - 39047 SH.13 RC02C WIRING DIAG
  - 31055 SH.2 T041
  - 31078 SH.8 RC22

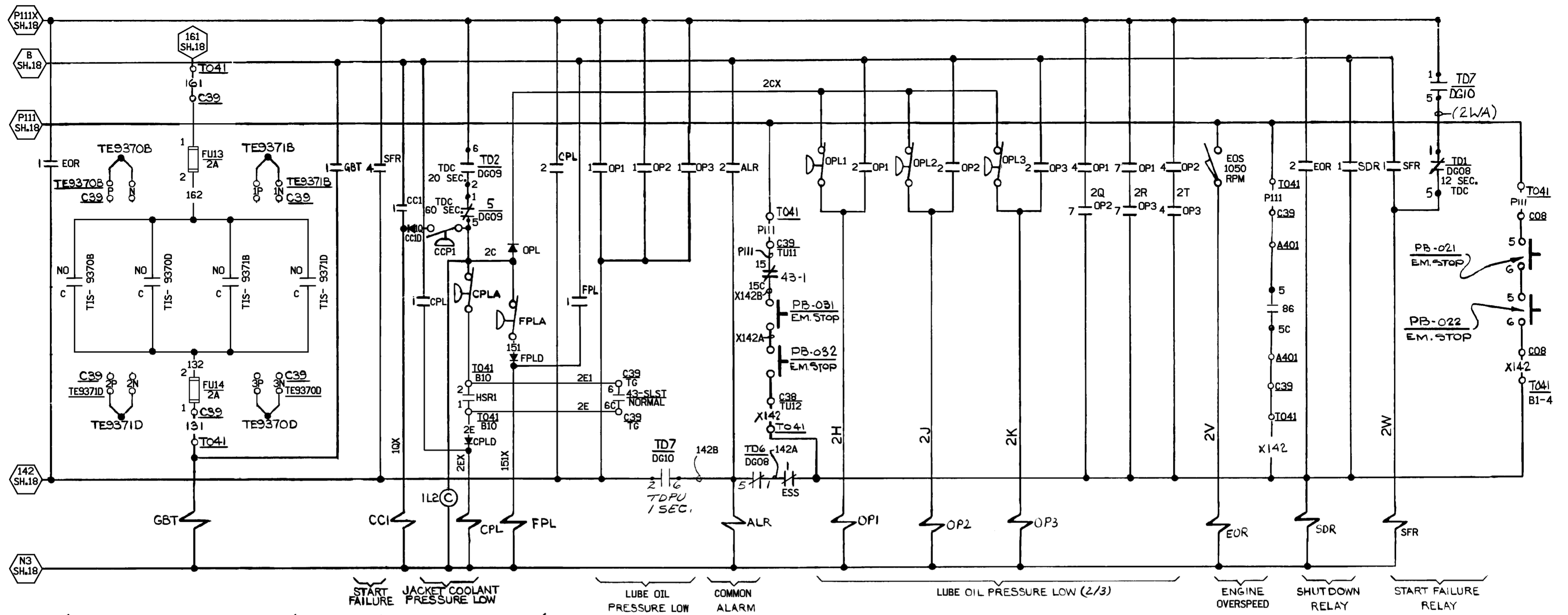


SUPERCEDES PART OF  
25203-39038 SH.16, 17.

REDRAWN FROM SAME  
NNECO DWG. No. REV.4

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE <b>MILLSTONE UNIT 2          DIESEL GENERATOR 15G-13U (H7B)          ENGINE CONTROL</b>		CAD NO: C320418-HYB	
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER DC MP2-19-01208 & DUR 21-800137		DRAWING NO: 25203-32041	
DSN JCV		SCALE: NONE	
UNLESS OTHERWISE NOTED		SH 18	





**SCHEME NO. DG10**  
**FACILITY #Z2**

- GBT** 1 THIS DWG. 2 SP. 3 COIL ECON. CKT. 4 SP. 6 SP. 7 SH.24
- ALR** 1 SP. 2 THIS DWG. 3 COIL ECON. CKT. 4 SP.
- EOR** 1 THIS DWG. 2 THIS DWG. 3 COIL ECON. CKT. 4 SP. 6 SP. 7 SH.24
- SFR** 1 THIS DWG. 2 SH.15 3 COIL ECON. CKT. 4 THIS DWG. 5 SP. 6 SH.24 7 SP.

- CCI** 1 THIS DWG. 2 SH.17 3 COIL ECON. CKT. 4 SP. 6 SP. 7 SH.24
- CPL** 1 THIS DWG. 2 THIS DWG. 3 COIL ECON. CKT. 4 SP. 6 SP. 7 SH.24
- FPL** 1 THIS DWG. 2 SH.17 3 COIL ECON. CKT. 4 SH.25 6 SP. 7 SP.
- OPI** 1 THIS DWG. 2 THIS DWG. 3 COIL ECON. CKT. 4 THIS DWG. 5 SP. 6 SP. 7 THIS DWG. 8 SH.24
- OP2** 1 THIS DWG. 2 THIS DWG. 3 COIL ECON. CKT. 4 THIS DWG. 5 SP. 6 SP. 7 THIS DWG. 8 SH.24
- OP3** 1 THIS DWG. 2 THIS DWG. 3 COIL ECON. CKT. 4 THIS DWG. 5 SP. 6 SP. 7 THIS DWG. 8 SH.24
- SDR** 1 THIS DWG. 2 SH.22 3 COIL ECON. CKT. 4 SH.2A 5 SH.23 6 SH.15 7 SH.16 8 SH.16 9 SP. 10 SP. 11 SH.16

**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

**NOTES:**  
1. FOR BLOCK DIAGRAM SEE SH.17

**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION	

SUPERSEDES  
25203-39038  
SH.17,19,9

10	4-13-04	INCORP DCN DM2-00-0479-99	DLW	WBZ	-	DED
9	2-22-02	INCORP'D DCNS DM2-01-1827-98, DM2-01,02-0085-01	MJS	REE	RSTG	MAG
8	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP
7	8/8/98	INCORP. DCN DM2-00-0120-97	WBZ	MM	JPP	JPP
6	12-3-97	INCORP. DCN(S) DM2-00-0356-97 & DM2-01-0356-97	AP	GFD	RWD	JB
NO.	DATE	REVISIONS	BY	CHK	APP	APP

BY JSJ

DATE 8-21-95

SCALE N/A

CHKD. \_\_\_\_\_

DATE \_\_\_\_\_

DWG. NO. 25203-32041 SH. 19

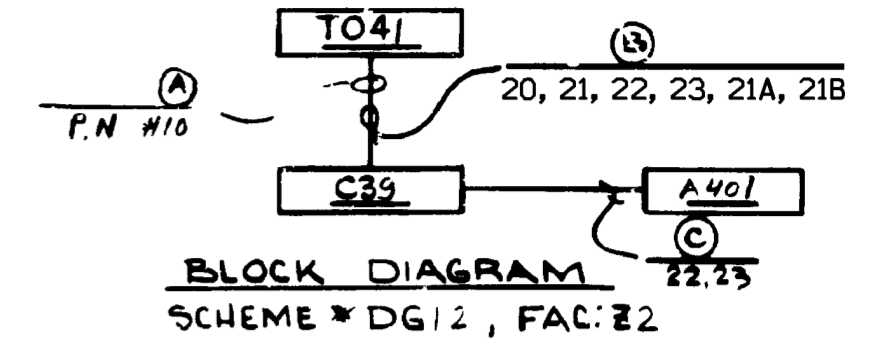
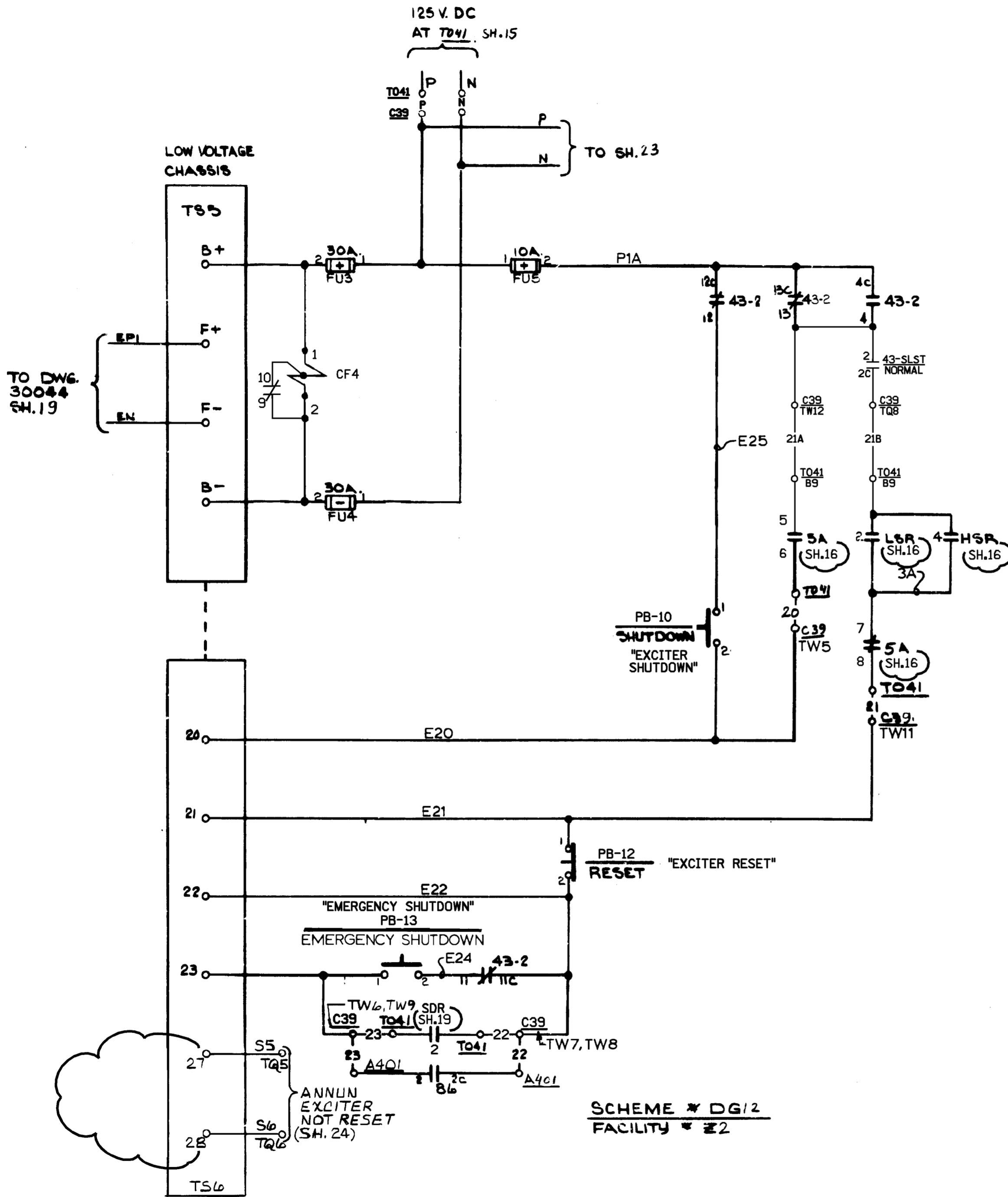
APP. \_\_\_\_\_

DATE \_\_\_\_\_

Q.A.







- CF4 3/4
- DG12 4/4
- SPARE
- 5/6
- SH.18
- 7/8
- SH.24
- 9/10
- COIL ECON CKT.
- 13/14
- SPARE
- 15/16
- SPARE

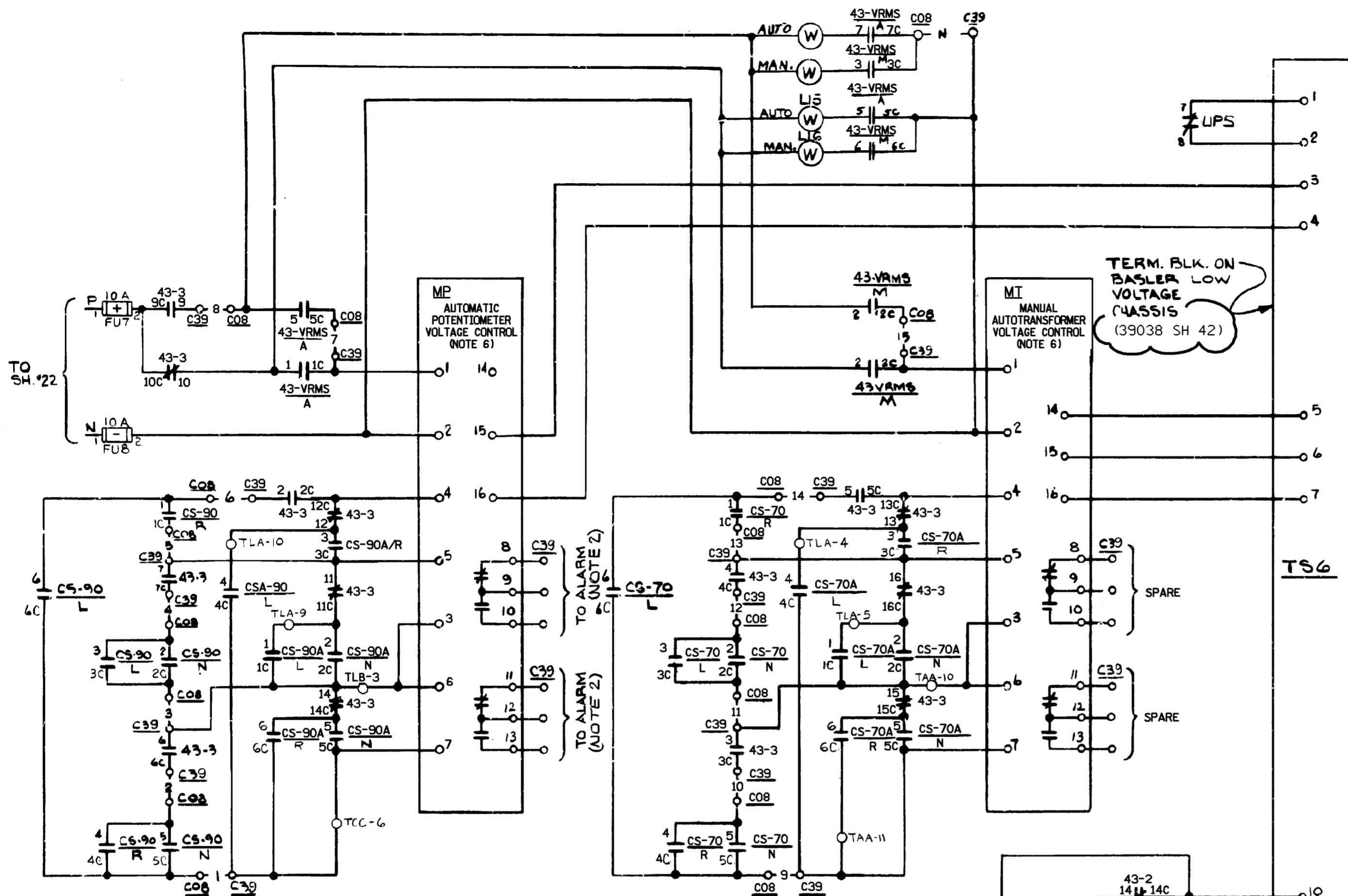
- NOTES:**
- FOR STANDARD NOTES, SYMBOLS & EQUIP. LOCATION INDEX SEE DWG 25203-30028.
  - FOR SCHEMATIC AND INTERCONNECTION DIAGRAM FOR SERIES BOOST EXCITER VOLTAGE REGULATOR SEE DWG. 25203-39038 SH. 42.

**SCHEME \* DG12  
FACILITY \* 22**

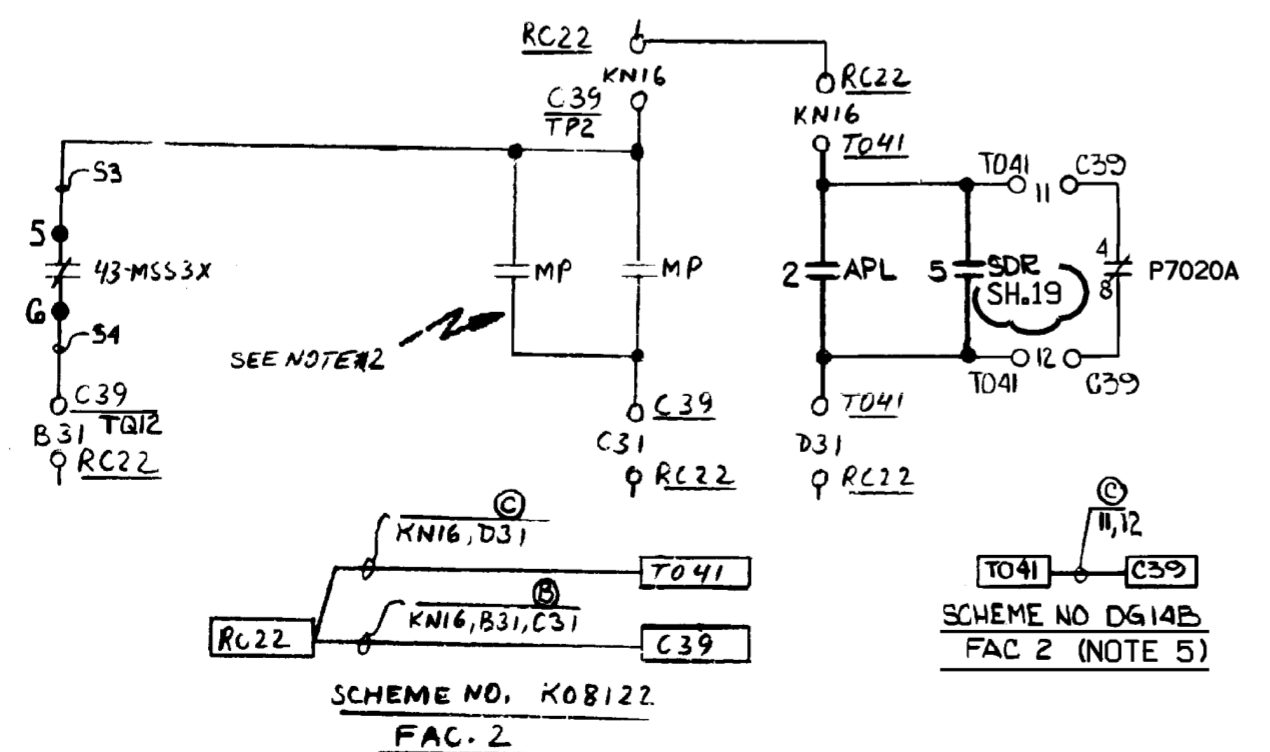
**FSAR FIGURE**

SUPERCEDES  
25203-39038 SH.7,19

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE MILLSTONE UNIT 2 DIESEL GENERATOR 15G-13U (H7B) EXCITER CONTROL		CAD NO: C3204122.HYB	
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER MSDUR 17-000093 & DUR 17-800200		DRAWING NO: 25203-32041	
DSN DLW	SCALE: N/A	UNLESS OTHERWISE NOTED SH	22

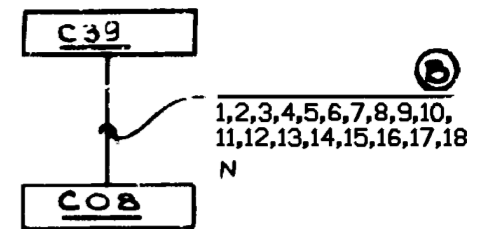


**SCHEME DG13  
FACILITY # Z2**



**SCHEME NO. K08122  
FAC. 2**

**SCHEME NO. DG14B  
FAC. 2 (NOTE 5)**



**BLOCK DIAGRAM  
SCHEME # DG13, FAC. # Z2**

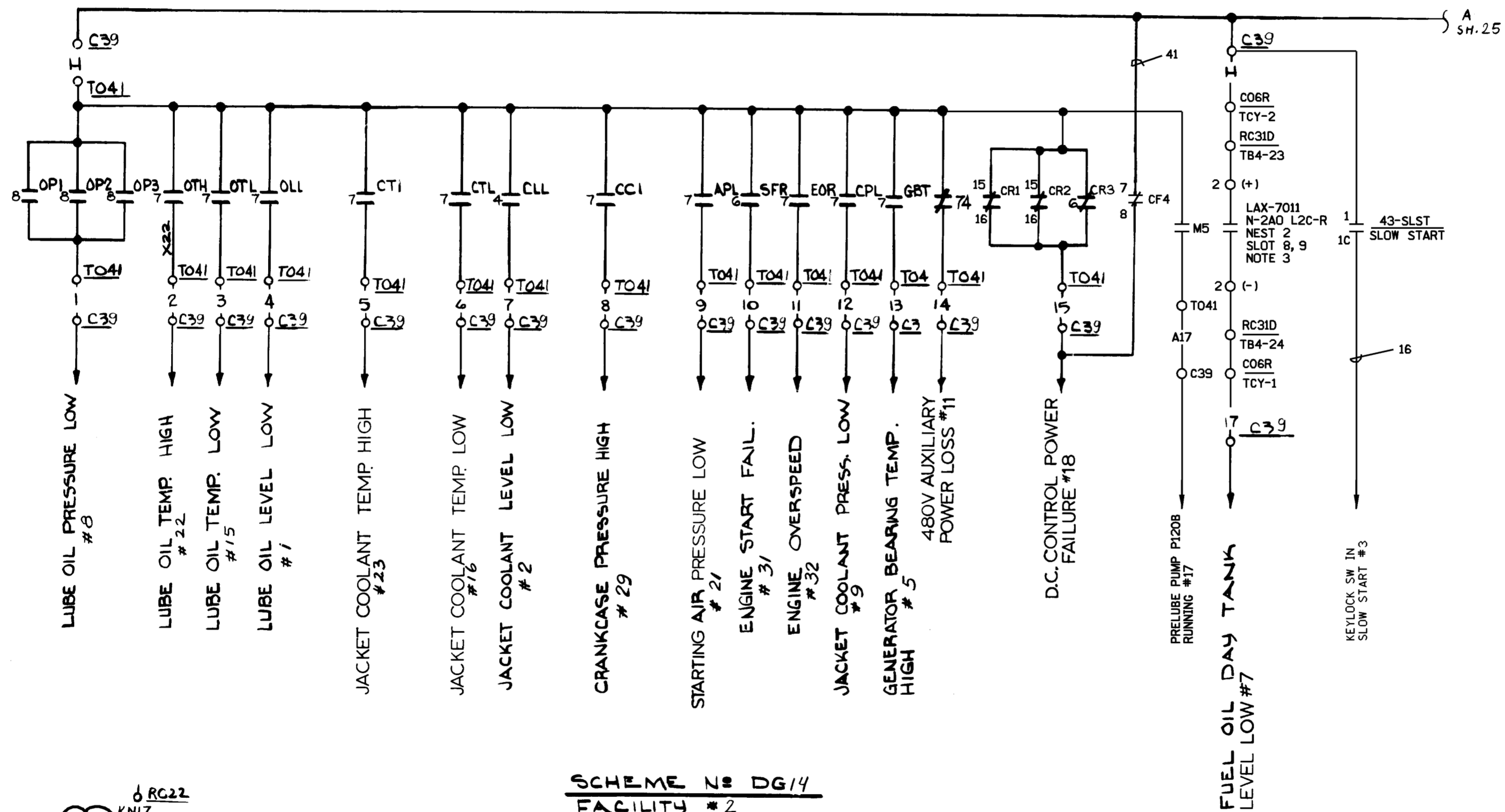
**NOTES:**

1. FOR STANDARD NOTES, SYMBOLS & EQUIP LOCATION INDEX SEE DWG. 25203-3002B.
2. FIELD TO SET LIMIT SWITCH FOR MP SO THAT ANY SETTING ABOVE OR BELOW THE HIGH AND LOW SETPOINTS (HIGH SETPOINT 4310.30 VOLTS; LOW SETPOINT 4050.30 VOLTS) ON BUS #A4 SHALL ALARM.
3. FOR CONTROL SWITCH DEVELOPMENT SEE DWG. 32041 SH. A
4. 43-3 CONTACTS SHOWN IN THE D/G POSITION. (LOCAL CONTROL)
5. REFERENCE LOOP DWG. 28500 SH. 757 AND SCHEMATIC DWG. 32041 SH. 25 FOR P7020A AND PS7020A.
6. THE AUTOMATIC POTENTIOMETER (MP) AND MANUAL AUTOTRANSFORMER (MT) HAVE BEEN MODIFIED TO REMOVE THE INPUT DIODE BRIDGE.
7. FOR SCHEMATIC AND INTERCONNECTION DIAGRAM FOR SERIES BOOST EXCITER VOLTAGE REGULATOR SEE DWG. 25203-39038 SH. 42.

**FSAR FIGURE**

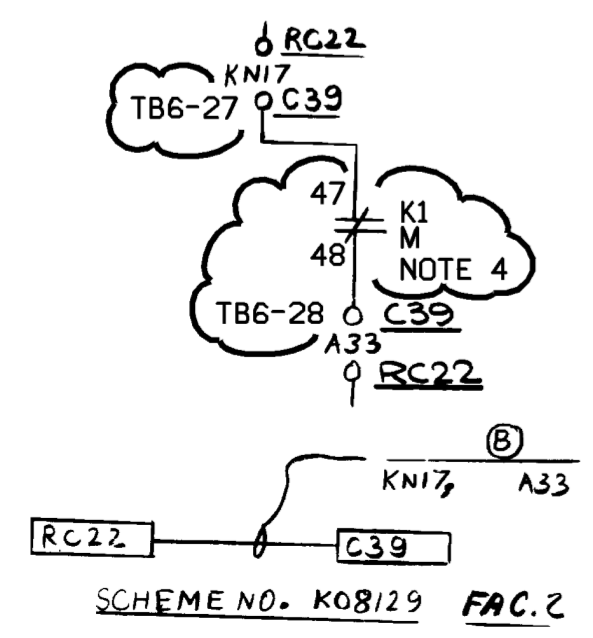
THIS DWG. SUPERCEDES 25203-39038 SH. 8,9

Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>TITLE</b> DIESEL GENERATOR 15G-13U (H7B) AUTO-MANUAL VOLTAGE CONTROL	
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER MSDUR 17-000093 & DUR 17-800200	CAD NO: C3204123.HYB DRAWING NO: 25203-32041 REV: 12
DSON DLW SCALE: N/A	UNLESS OTHERWISE NOTED SH 23



- NOTES:
- 1 FOR STANDARD NOTES, SYMBOLS & EQUIP. LOCATION INDEX SEE DWG 25203-30028.
  - 2 FOR BLOCK DIAGRAM SEE DWG 32041, SHEET 25
  - 3 REFERENCE DWG 28500 SH. 754 #755 FOR LT-7011 LOOP DIAGRAM.
  4. REFERENCE DWG. 25203-39038 SH 42.

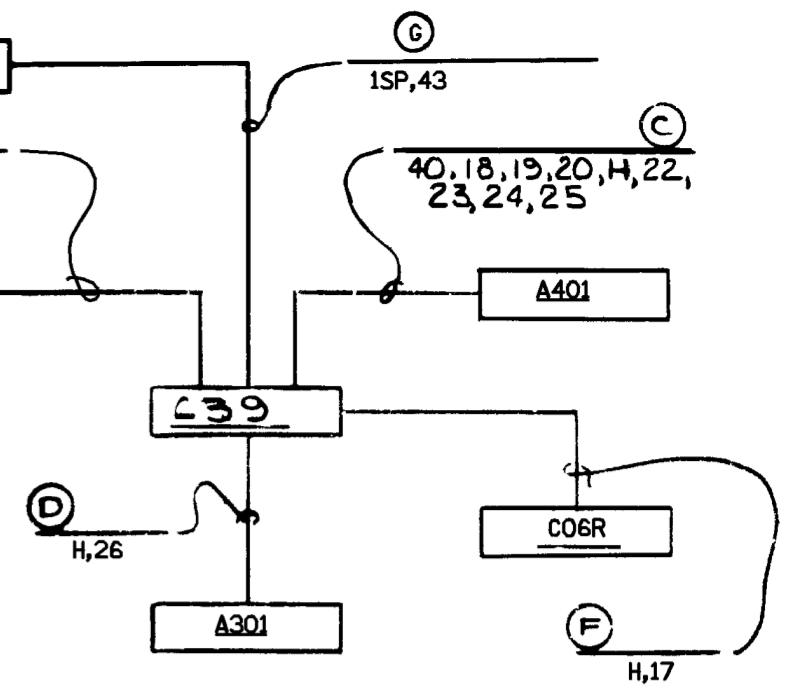
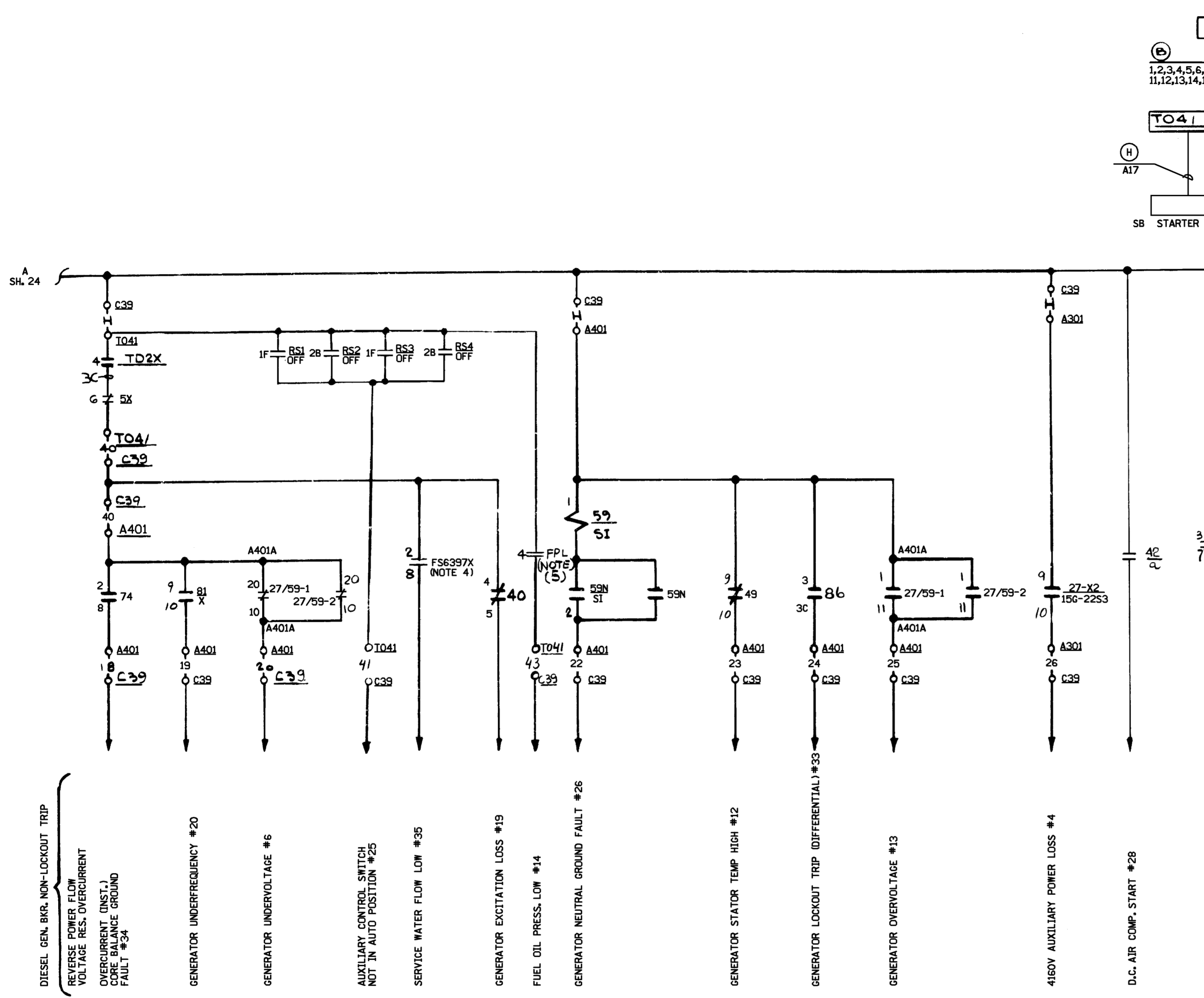
SCHEME NO. DG14  
FACILITY #2



FSAR FIGURE

SUPERCEDES PART OF  
25203-39038 SH.18

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE MILLSTONE UNIT 2 DIESEL GENERATOR 15G-13U (H7B) LOCAL ALARMS		CAD NO: C3204124.HYB	
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER MSDUR 17-000093 & DUR 17-800200		DRAWING NO: 25203-32041	
DSN DLW		SCALE: N/A	
UNLESS OTHERWISE NOTED SH		24	



DIESEL GEN. BKR. NON-LOCKOUT TRIP  
 REVERSE POWER FLOW  
 VOLTAGE RES. OVERCURRENT  
 OVERCURRENT (INST.)  
 CORE BALANCE GROUND  
 FAULT #34

GENERATOR UNDERFREQUENCY #20

GENERATOR UNDERVOLTAGE #6

AUXILIARY CONTROL SWITCH  
 NOT IN AUTO POSITION #25

SERVICE WATER FLOW LOW #35

GENERATOR EXCITATION LOSS #19

FUEL OIL PRESS. LOW #14

GENERATOR NEUTRAL GROUND FAULT #26

GENERATOR STATOR TEMP HIGH #12

GENERATOR LOCKOUT TRIP (DIFFERENTIAL) #33

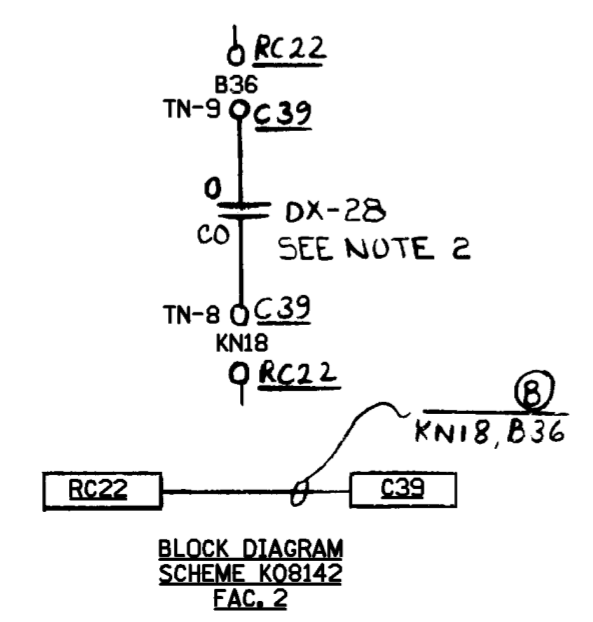
GENERATOR OVERVOLTAGE #13

4160V AUXILIARY POWER LOSS #4

D.C. AIR COMP. START #28

FUEL OIL SUPPLY VALVE SHUT #10

SCHEME NO. DG14  
 FACILITY NO. 2



**FSAR FIGURE**  
 SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES

SUPERSEDES PART OF  
 25203-39038 SH. 18

**CAD**  
 NOTE:  
 MANUAL REVISIONS TO THIS DOCUMENT  
 WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION	

NO.		DATE	REVISIONS	BY	CHK	APP	APP
7	5-25-06	INCORP. DCN DM2-00-0150-06	DLW	WBZ	-	ASK	
6	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP	
5	8/4/99	INCORP. DCN DM2-00-2028-98	MEL	JSJ	JPP	JPP	

**Dominion**      Dominion Nuclear Connecticut, Inc.  
 Millstone Power Station

TITLE      MILLSTONE UNIT 2  
 DIESEL GENERATOR 15G-13U (H7B)  
 LOCAL ALARMS  
 WATERFORD, CT.

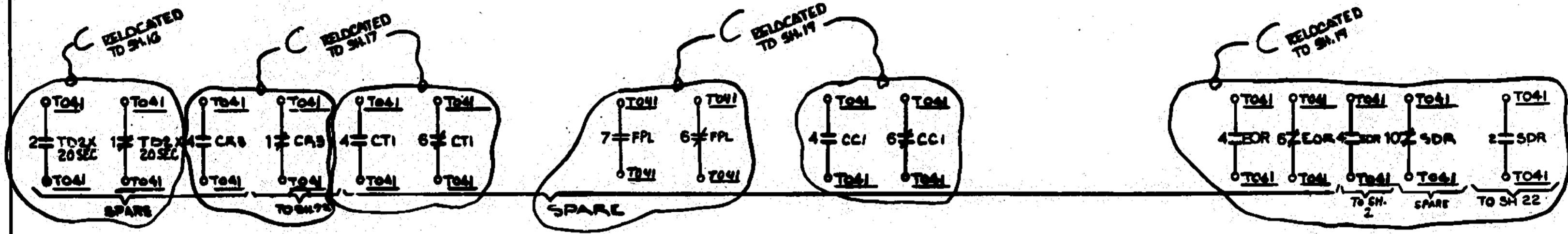
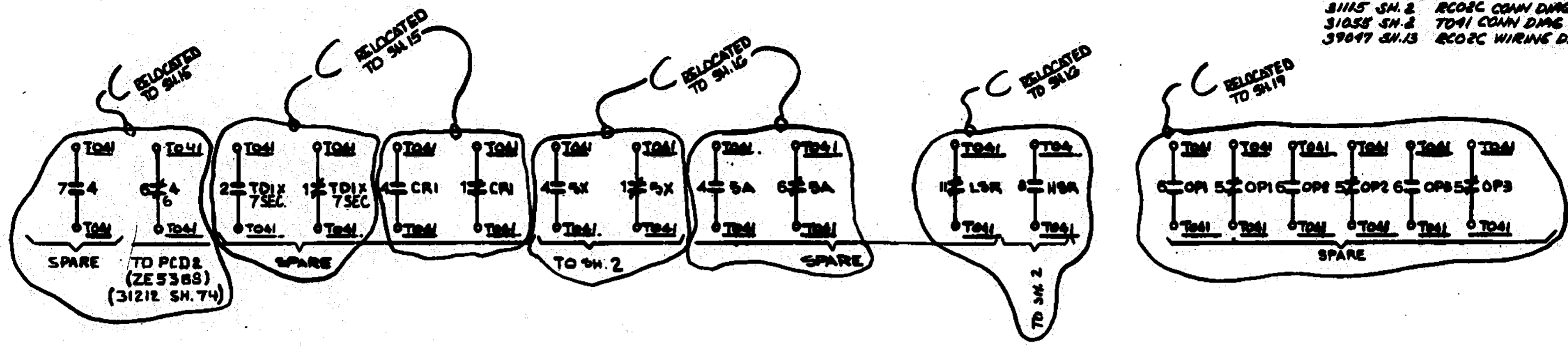
BY      JSJ      CHKD.      APP.      APP.      DATE      DATE      DATE      DATE

DATE      8-18-95      DATE      DATE      DATE      DATE

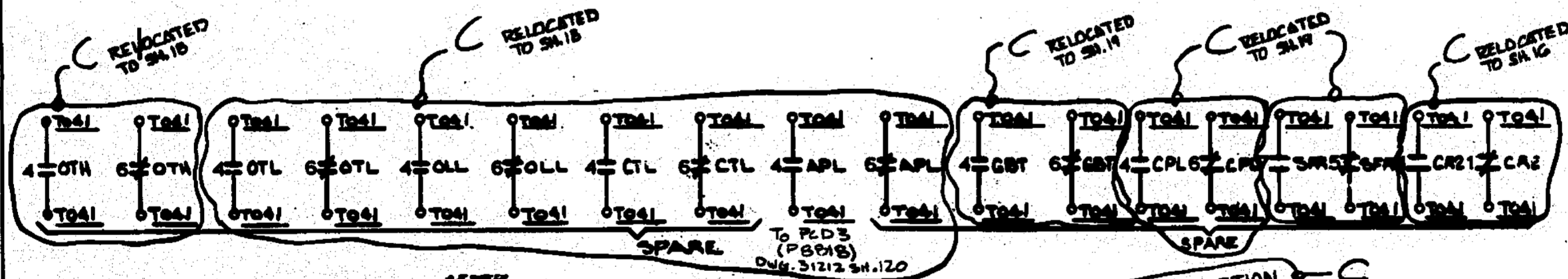
SCALE      N/A      DWG. NO.      25203-32041 SH. 25

NON  
 Q.A.

**REFERENCES**  
 31078 SH.8 RC22 COUPLER DIAG  
 31115 SH.2 RC22C COUPLER DIAG  
 31055 SH.2 TO41 COUPLER DIAG  
 39047 SH.13 RC22C WIRING DIAG



**NOTES**  
 1. FOR STANDARD NOTES, SYMBOLS & EQUIP. LOCATION INDEX SEE DWG. 25203-30028.

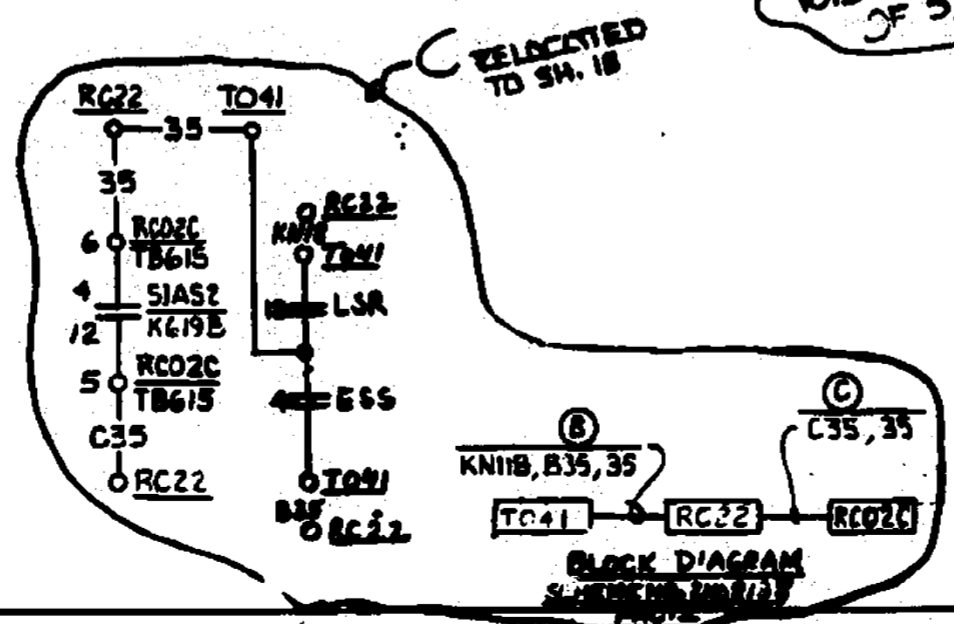
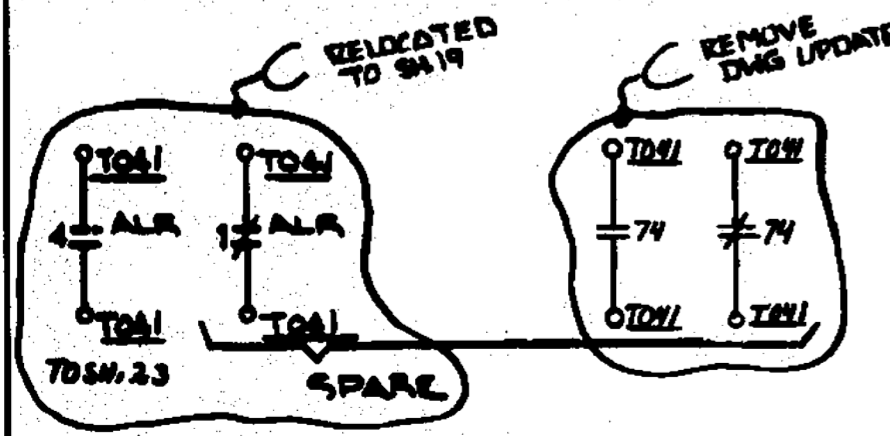


VOID AT COMPLETION OF 31 01 056

SUPERCEDES 25203-39038 SH.19

**MPS DIESEL GEN. CONT. SYS. REPLACEMENT AFTER CHANGES ONLY**

REVISIONS DURING CONSTRUCTION		PA # 91-056
B	2-1-93 DCN No. DME-5-1774-92 (REMOVAL ONLY) SH.45	JSJ
C	DCN No. DME-5-0501-93 (DUG UP L.A.E.) SH.20	JSJ



REDRAWN FROM SAME NNECO DWG. NO. REV. 5  
**CAD**  
 NOTE: MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION		PA #

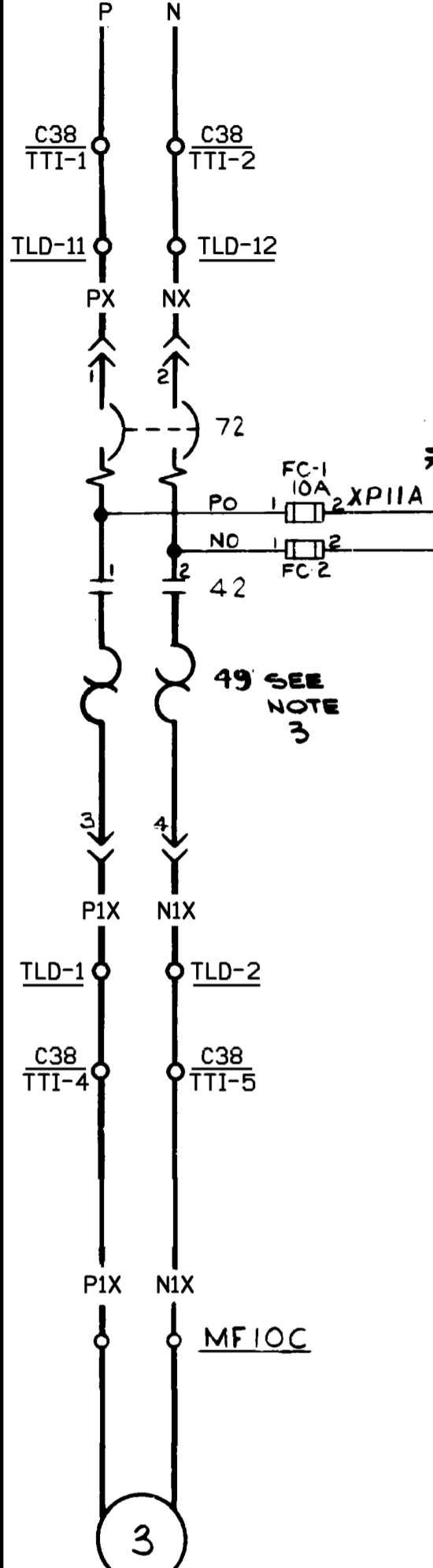
**NON Q.A.**

<b>Northeast Utilities System</b>			
FOR NORTHEAST NUCLEAR ENERGY CO.			
TITLE: MILLSTONE UNIT No.2			
DIESEL GENERATOR 15G-13U (H7B) ALARM & INTERLOCK CONTACTS WATERFORD, CT.			
BY JSJ	CHKD. ---	APP. ---	APP. ---
DATE 8-18-95	DATE ---	DATE ---	DATE ---
SCALE N/A	DWG. NO. 25203-32041 SH.26		

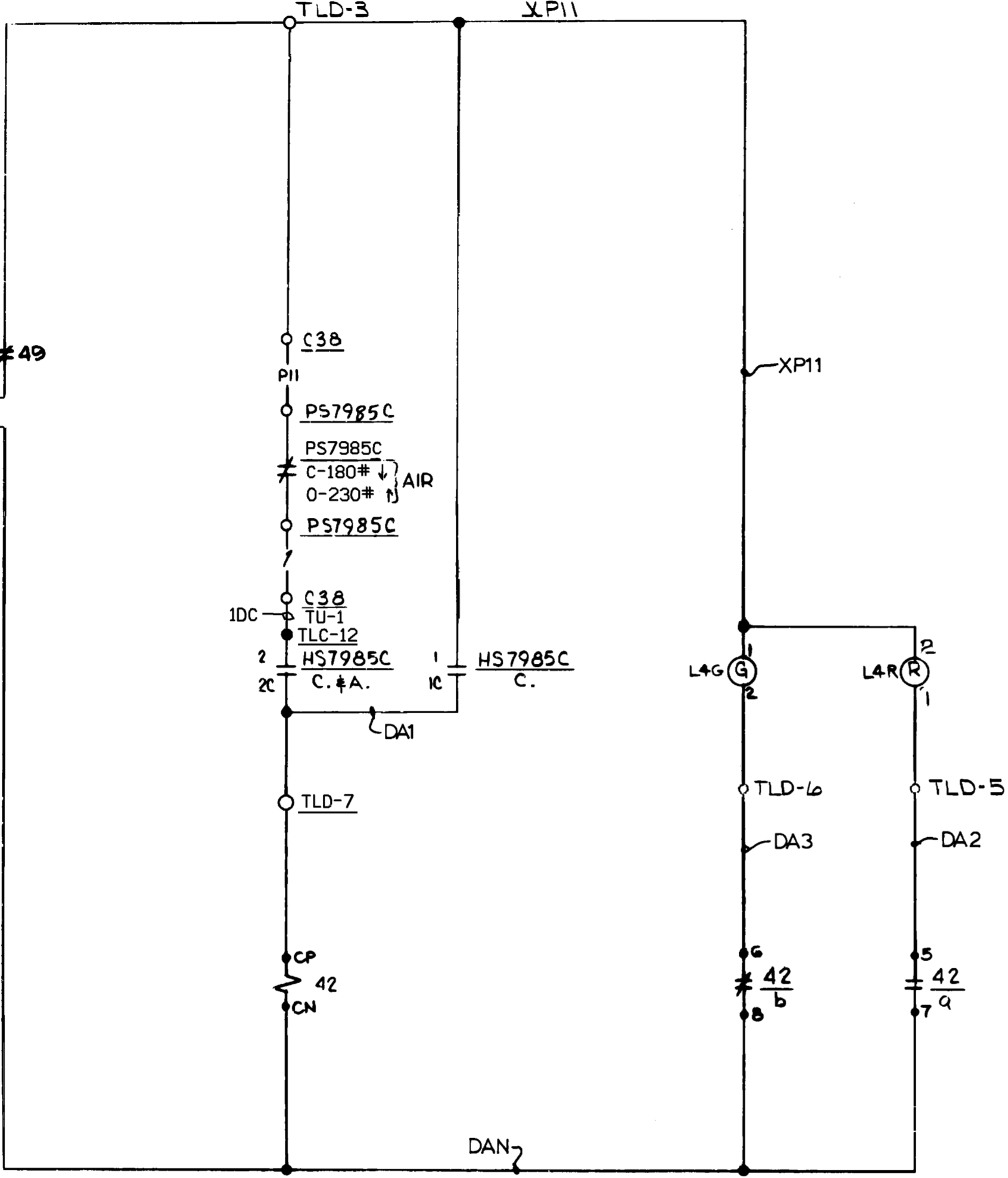
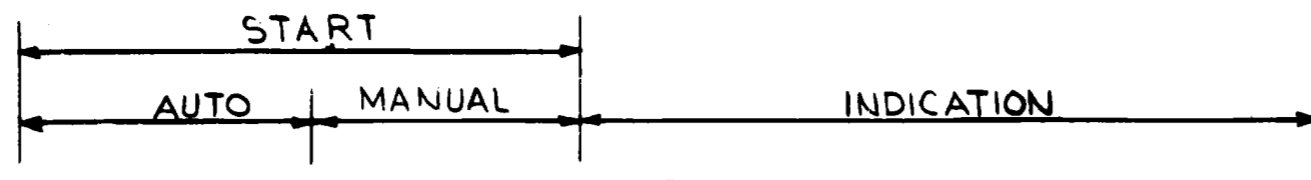
B A C



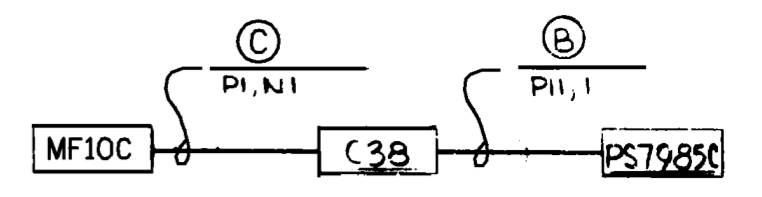
125VDC VITAL INST. SUPPLY  
AT C38 (FROM DV10)  
CKT. 15 (30022 SH. 1)



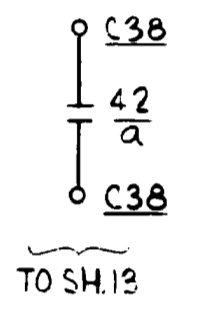
DC AIR COMPRESSOR  
MOTOR (USED IN AUTO  
START MODE)



SCHEME NO. DG15  
FACILITY NO. 1



BLOCK DIAGRAM  
FACILITY NO. 1



- NOTES:
1. FOR STANDARD NOTES, SYMBOLS, AND EQUIP. LOC. INDEX SEE DWG. 25203-32030.
  2. FOR CONTROL SWITCH DEVELOPMENT SEE DWG. 25203-32041, SH. A, FIG. 7
  3. EXISTING OVERLOAD RELAYS ARE G.E. CAT. No. CR22.8B

FSAR FIGURE

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

SUPERCEDES PART OF  
25203-32038 SH. 41

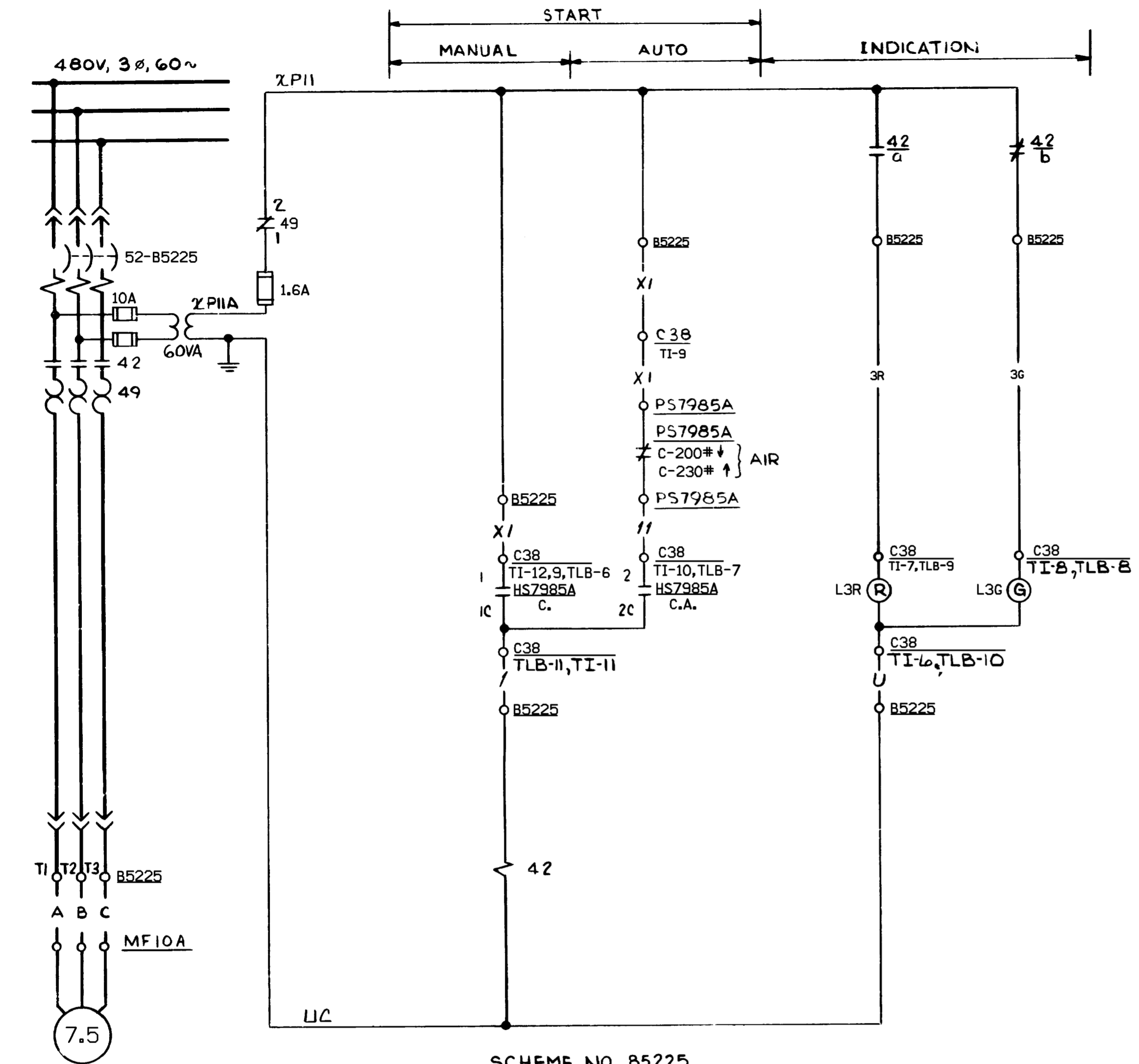
REDRAWN FROM SAME  
NNECO DWG. NO. REV. 1

NOTE: CAD  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION	

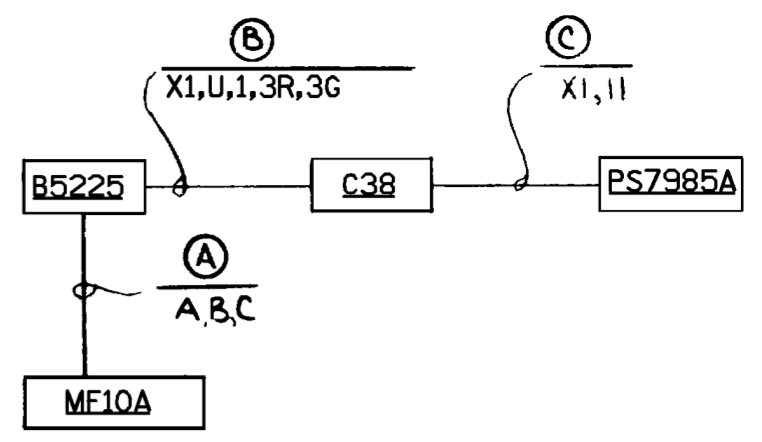
NON  
Q.A.

6		2-11	INCORP'D DCN DM2-01-1828-98	MJS	REE	RST	MAG	Dominion Nuclear Connecticut, Inc. Millstone Power Station TITLE MILLSTONE UNIT 2 DIESEL GENERATOR 15G-12U(H7A) STARTING AIR COMPRESSOR (DC) WATERFORD, CT. BY JMM    CHKD.    APP. DATE 6/1/94    DATE    DATE SCALE N/A    DWG. NO. 25203-32041 SH. 27
5		6-7	INCORP. DCN's DM2-00-0084-00-01 DM2-01-0084-00	DJH	JSJ	DLW	RJY	
4		2-7	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP	
3		8/4	INCORP. DCN's DM2-S-0108-94-99 DM2-00-0010-99	WBZ	JSJ	JPP	JPP	
2		3-13	INCORP. DCN DM2-S-0806-95-97 PER DCR M2-S-0121-96	JMM	RNB	JPP	JPP	
NO.	DATE	REVISIONS	BY	CHK	APP	APP		

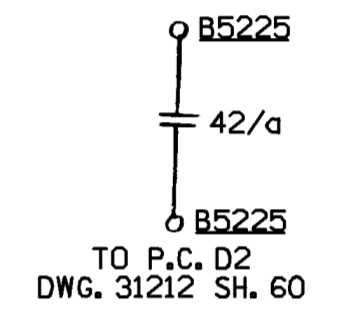


A.C. AIR COMPRESSOR MOTOR

SCHEME NO. 85225  
FACILITY NO. 1



BLOCK DIAGRAM  
FACILITY NO. 1



- NOTES:
1. FOR STANDARD NOTES, SYMBOLS AND EQUIP. LOC. INDEX SEE DWG 25203-32030
  2. FOR CONTRL SW DEVELOPMENT SEE DWG. 25203-32041 SH. A, FIG. 7.

SUPERSEDES  
25203-39038 SH. 41

REDRAWN FROM SAME  
NNECO DWG. NO. REV. 2

**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION	

NON  
Q.A.

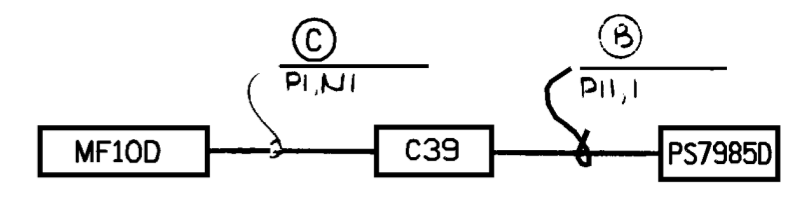
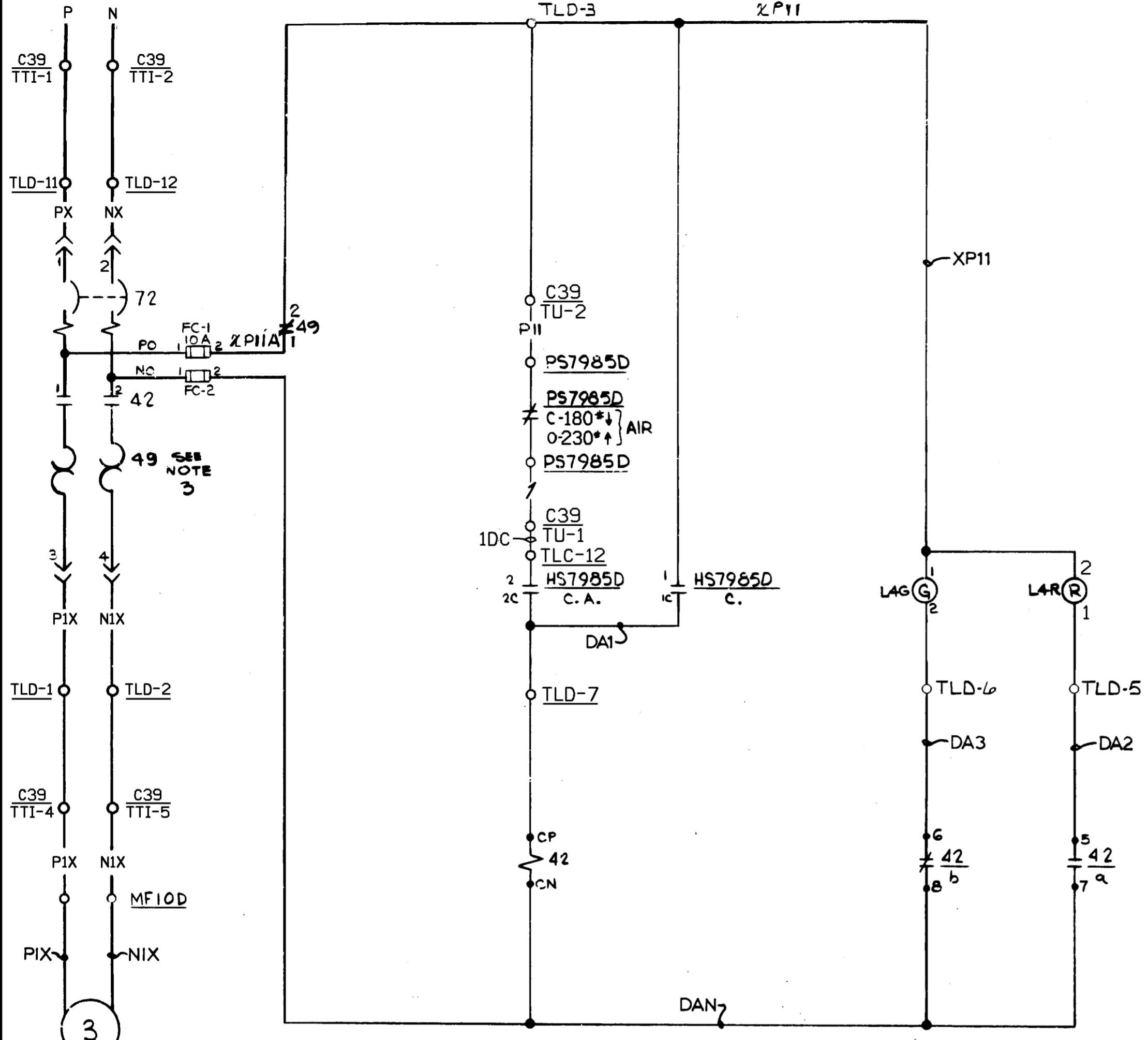
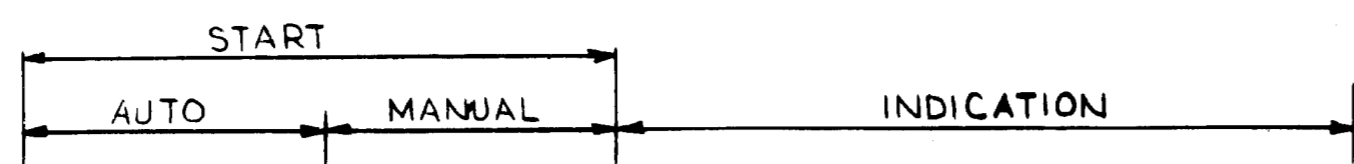
Rev	NO.	DATE	REVISIONS	BY	CHK	APP	APP	SCALE	DWG. NO.
7	3-4-02	INCORP. DCN DM2-00-0084-00, DM2-01-0084-00	ADS	GHH	TP	CAM			
6	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP			
5	8/4/99	INCORP. DCN DM2-S-0108-94	WBZ	JSJ	JPP	JPP			
4	8/8/98	INCORP. DCN DM2-00-1308-97	WBZ	MM	JPP	JPP			
N/A	12-3-97	INCORP. DCN DM2-S-1199-95	DSJ	GFD	RWD	JB			

**FSAR FIGURE**

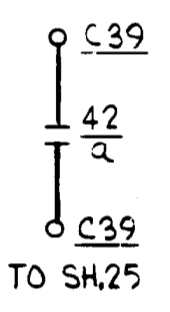
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

Dominion Nuclear Connecticut, Inc.  
 Millstone Power Station  
 TITLE: MILLSTONE UNIT 2  
 DIESEL GENERATOR 15G-12U (H7A)  
 STARTING AIR COMPRESSOR (AC)  
 WATERFORD, CT.  
 BY: DSJ    CHKD.: GFD    APP.: RWD    APP.: JB  
 DATE: 11/20/97    DATE: 12-3-97    DATE: 12-3-97    DATE: 12-3-97  
 SCALE: N/A    DWG. NO.: 25203-32041 SH. 28

125VDC VITAL INST. SUPPLY  
IN C39 FROM DV20CKT.15  
(30022 SH. 3)



BLOCK DIAGRAM  
FACILITY NO. 2



NOTES:

1. FOR STANDARD NOTES, SYMBOLS, AND EQUIP. LOC. INDEX SEE DWG. 25203-32030
2. FOR CONTROL SWITCH DEVELOPMENT SEE DWG. 25203-32041, SH. A FIG. 7.
3. EXISTING OVERLOAD RELAYS ARE G.E. CAT. No. CR22.8B

D.C. AIR COMPRESSOR  
MOTOR (USED IN AUTO  
START MODE)

SCHEME NO. DG 16  
FACILITY NO. 2

FSAR FIGURE

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

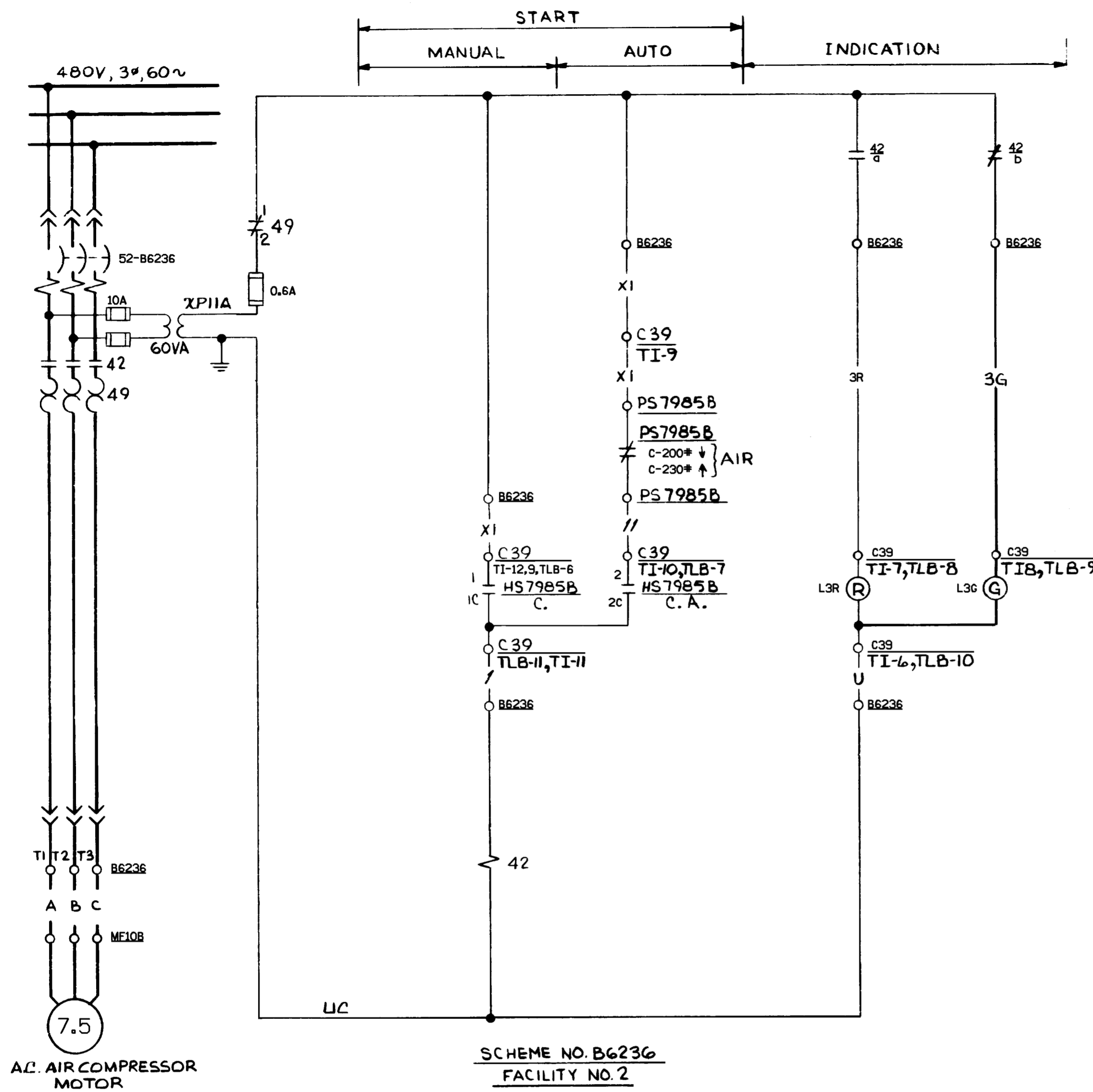
SUPERCEDES PART OF  
25203-31036 SH. 41

REDRAWN FROM SAME  
NNECO DWG. NO. REV. 1  
**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

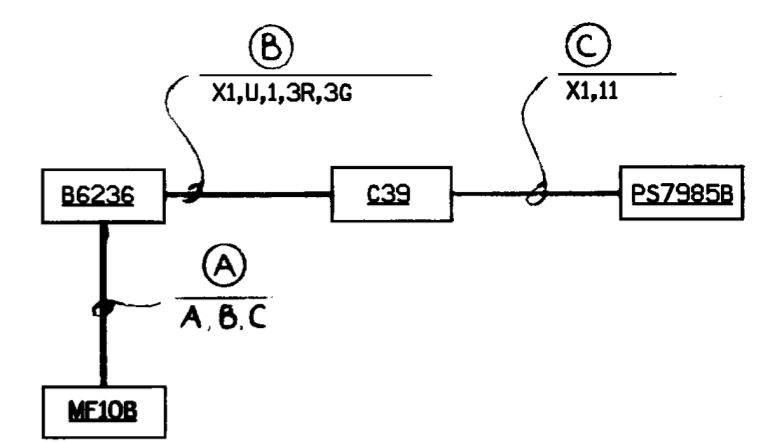
REVISIONS DURING CONSTRUCTION	

NON  
Q.A.

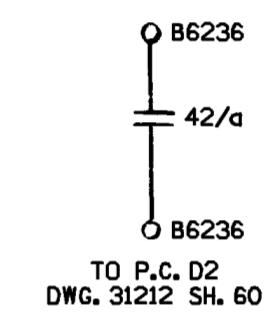
P.O.# 0203 1927		5	3-22-02	INC, DM2-00-0086-00, DM2-01-0086-00	R	J	G	H	T	C	A	Dominion Nuclear Connecticut, Inc. Millstone Power Station	
		4	2-7-00	INCRP. DCN DM2-00-0025-00	J	S	W	B	Z	J	J	MILLSTONE UNIT 2 DIESEL GENERATOR 15G-13U (H7B) STARTING AIR COMPRESSOR (DC) WATERFORD, CT.	
		3	8/4/99	INCRP. DCN & DM2-S-0108-94, DM2-00-0010-99	W	B	Z	J	S	J	J	BY JMM    CHKD.    APP.    DATE 6/2/95    DATE    DATE    DATE	
		2	3-6-97	INCRP. DCN DM2-S-1213-95 PER DCR M2-S-0123-96	J	M	M	R	N	B	J	SCALE N/A    DWG. NO. 25203-32041 SH. 29	
P.A. #	NO.	DATE	REVISIONS		BY	CHK	APP	APP					



SCHEME NO. B6236  
FACILITY NO. 2



BLOCK DIAGRAM  
FACILITY NO. 2



- NOTES:
- FOR STANDARD NOTES, SYMBOLS AND EQUIP. LOC. INDEX SEE DWG. 25203-32030.
  - FOR CONTROL SW. DEVELOPMENT SEE DWG. 25203-32041 SH. A, FIG. 7.

FSAR FIGURE  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

REDRAWN FROM SAME  
NNECO DWG. NO. REV. 2

**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

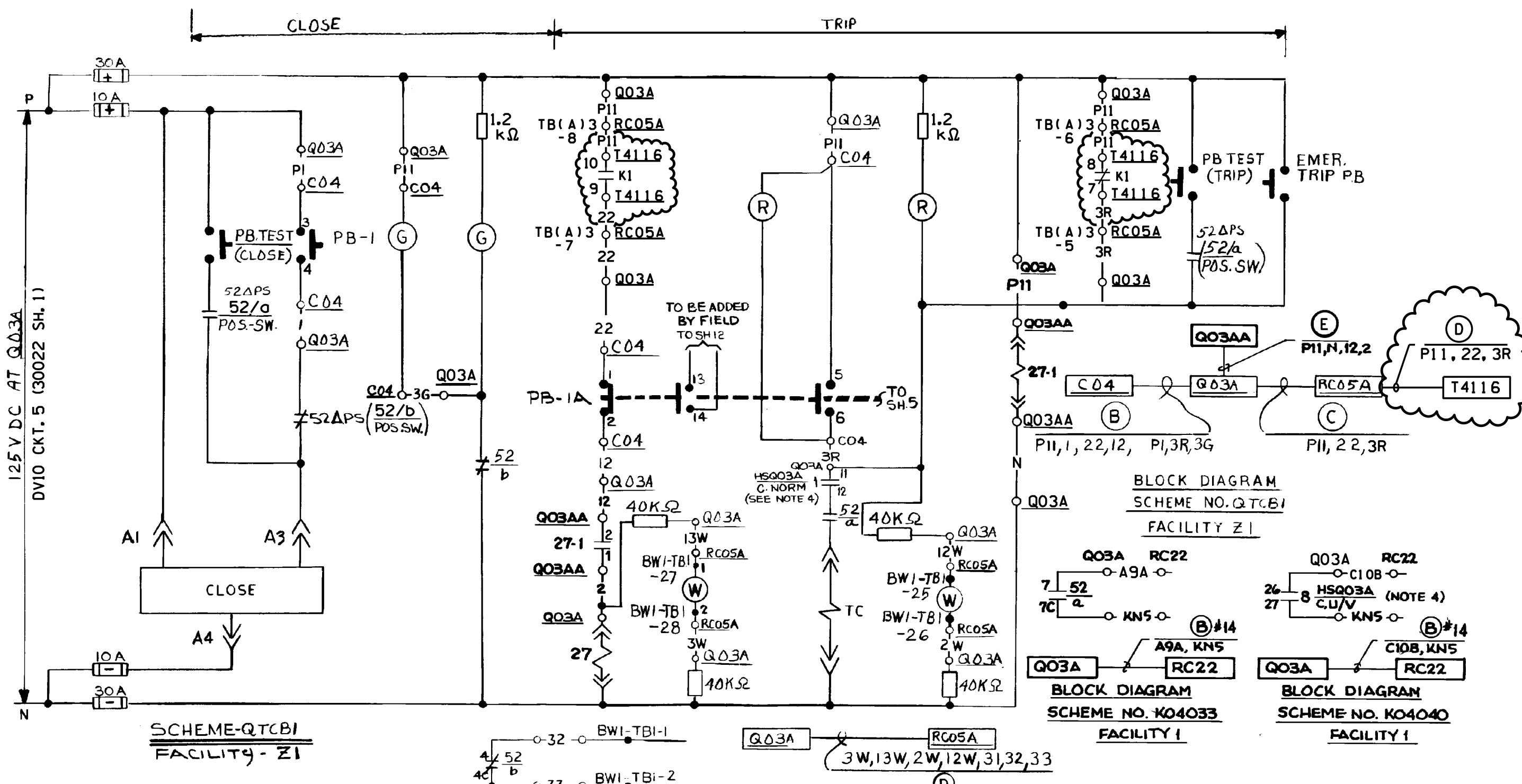
REVISIONS DURING CONSTRUCTION	

SUPERSEDES  
25203-39038 SH. 41

PO# 0203 1927	6	3-4-02	INCORP. DCN DM2-00-0086-00, DM2-01-0086-00	ADS	GHH	TP	CAM	Dominion Nuclear Connecticut, Inc. Millstone Power Station TITLE MILLSTONE UNIT 2 DIESEL GENERATOR 15G-13U (H7B) STARTING AIR COMPRESSOR (AC) WATERFORD, CT.
	5	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP	
	4	8/4/99	INCORP. DCN DM2-5-0108-94	WBZ	JSJ	JPP	JPP	
	N/A	12-3-97	INCORP. DCN DM2-S-1199-95	DSJ	GFD	RWD	JB	
NO.	DATE	REVISIONS	BY	CHK	APP	APP		

NON  
Q.A.

BY DSJ	CHKD. GFD	APP. RWD	APP. JB
DATE 11/20/97	DATE 12-3-97	DATE 12-3-97	DATE 12-3-97
SCALE N/A	DWG. NO.	25203-32041 SH. 30	



**SCHEME-QTCB1**  
**FACILITY-Z1**

**BLOCK DIAGRAM**  
**SCHEME NO. QTCB1**  
**FACILITY Z1**

**BLOCK DIAGRAM**  
**SCHEME NO. K04033**  
**FACILITY I**

**BLOCK DIAGRAM**  
**SCHEME NO. K04040**  
**FACILITY I**

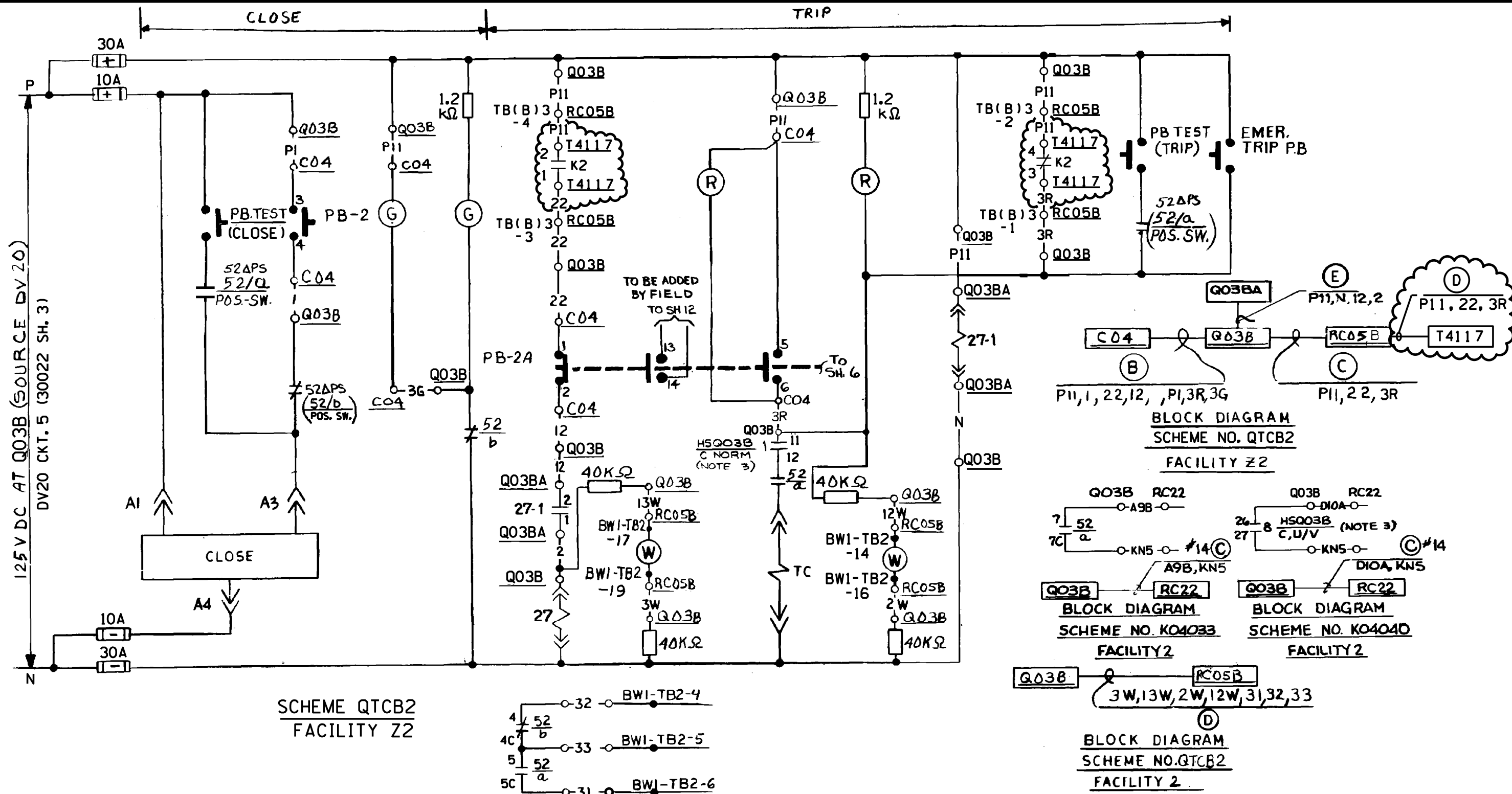
**BLOCK DIAGRAM**  
**SCHEME NO. QTCB1**  
**FACILITY I**

- NOTES:**
1. FOR NOTES, SYMBOLS & EQUIP. LOC. SEE 25203-30028.
  2. BREAKER SHOWN IN TRIPPED POSITION.
  3. FOR 'K' RELAY LOC. SEE 7604-MB06-525 (C.E. DWG. E-18767-411-013 sh. 4.) (39069 SH. 15 & 31175 SH. 393)
  4. HAND SWITCH LOCATED ON Q03A SW. GEAR. FOR H.S. DEVELOPMENT SEE -32045 sh. A, FIG. 1.

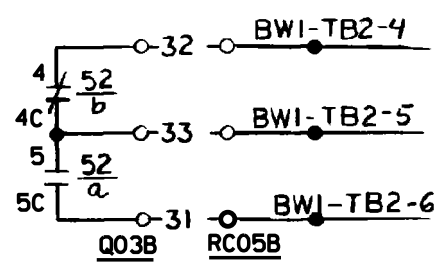
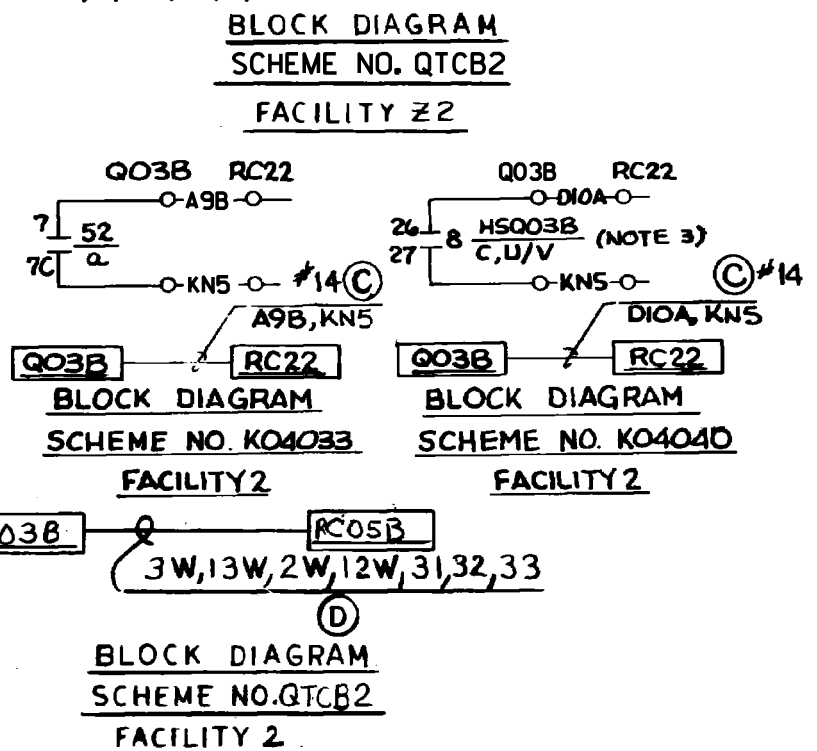
**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>TITLE</b> MILLSTONE UNIT 2 REACTOR TRIP SWITCHGEAR CIRCUIT BREAKER TCB-1			
<b>REVISION DESCRIPTION (SIGNATURES ON FILE)</b> REVISED PER DC MP2-20-01108 & DUR 21-800276		<b>CAD NO:</b> C320451.HYB <b>DRAWING NO:</b> 25203-32045 <b>REV</b> 10	
<b>DSGN</b> JCV	<b>SCALE:</b> NONE	UNLESS OTHERWISE NOTED SH 1	

MBULOG\IN\jome694  
 08-DEC-2021 10:53  
 C320451.HYB



SCHEME QTCB2  
FACILITY Z2

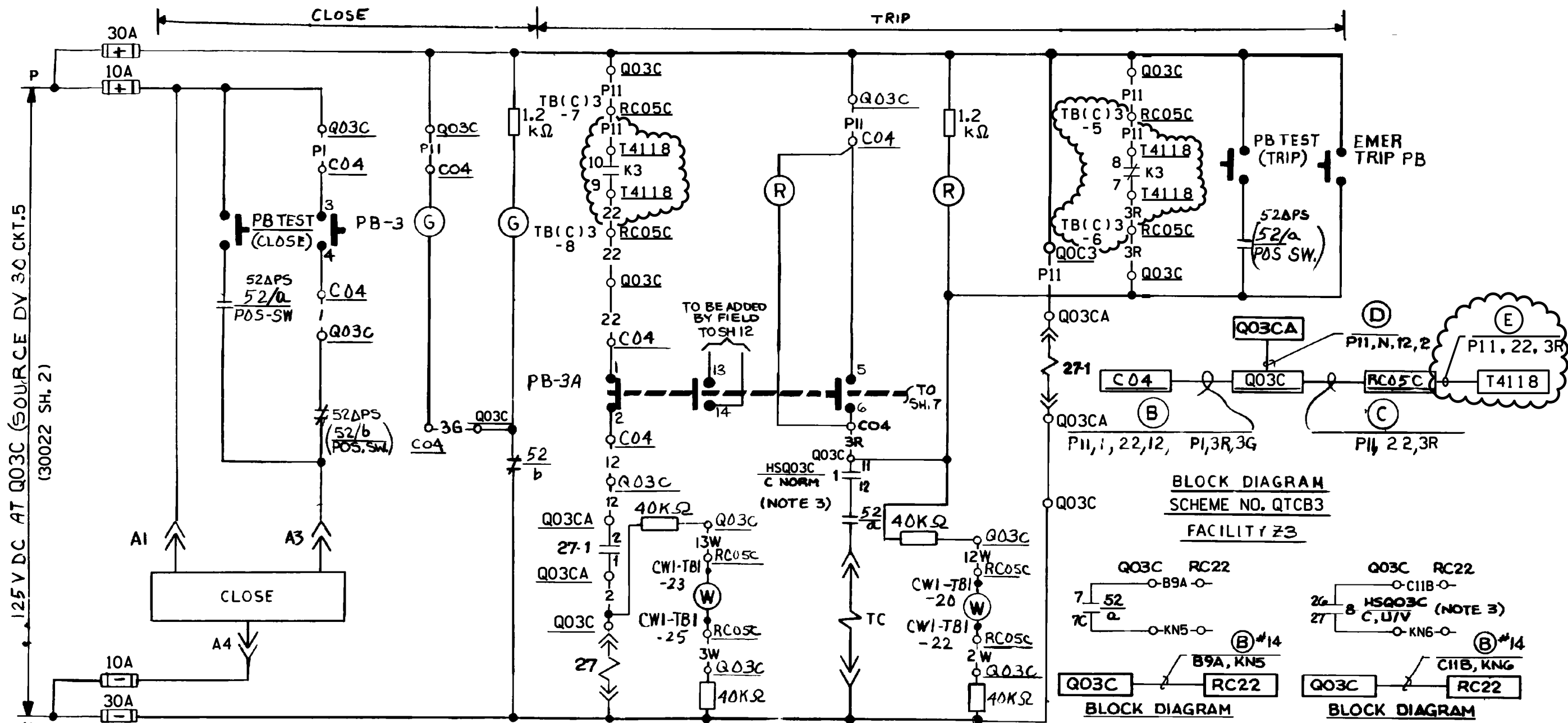


- NOTES:**
1. BREAKER SHOWN IN TRIPPED POSITION.
  2. FOR "K" RELAY LOCATION SEE DWG. 7604-M806-525 (C.E. DWG. E-18767-411-013 sh.4) (39069 SH. 15 & 31175 SH. 394)
  3. HAND SWITCH LOCATED ON Q03B SW. GR. FOR H.S. DEVELOPMENT SEE -32045 sh.A, FIG.1.

**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

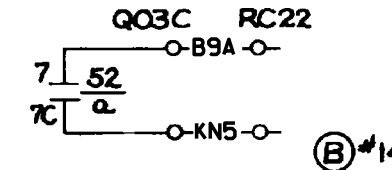
		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE <b>MILLSTONE UNIT 2          REACTOR TRIP SWITCHGEAR          CIRCUIT BREAKER TCB-2</b>		CAD NO: C320452.HYB	
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER DC MP2-20-01108 & DUR 21-800276		DRAWING NO: 25203-32045	
DSGN JCV	SCALE: NONE	UNLESS OTHERWISE NOTED	SH 2

MBULOG\IN\j\_ome694  
 08-DEC-2021 10:53  
 C320452.HYB

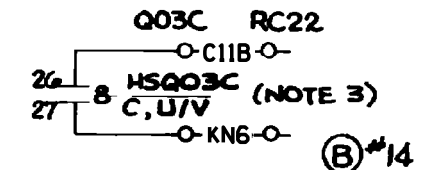


**SCHEME-QTCB3**  
FACILITY \* Z3

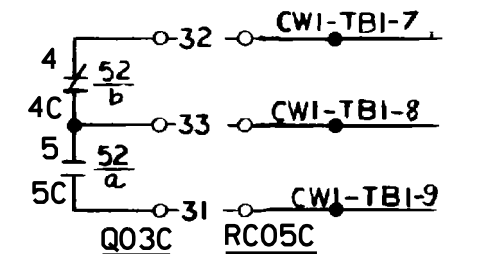
**BLOCK DIAGRAM**  
SCHEME NO. QTCB3  
FACILITY Z3



**BLOCK DIAGRAM**  
SCHEME NO K04034  
FACILITY 1



**BLOCK DIAGRAM**  
SCHEME NO K04045  
FACILITY 1



**BLOCK DIAGRAM**  
SCHEME NO. QTCB3  
FACILITY 1

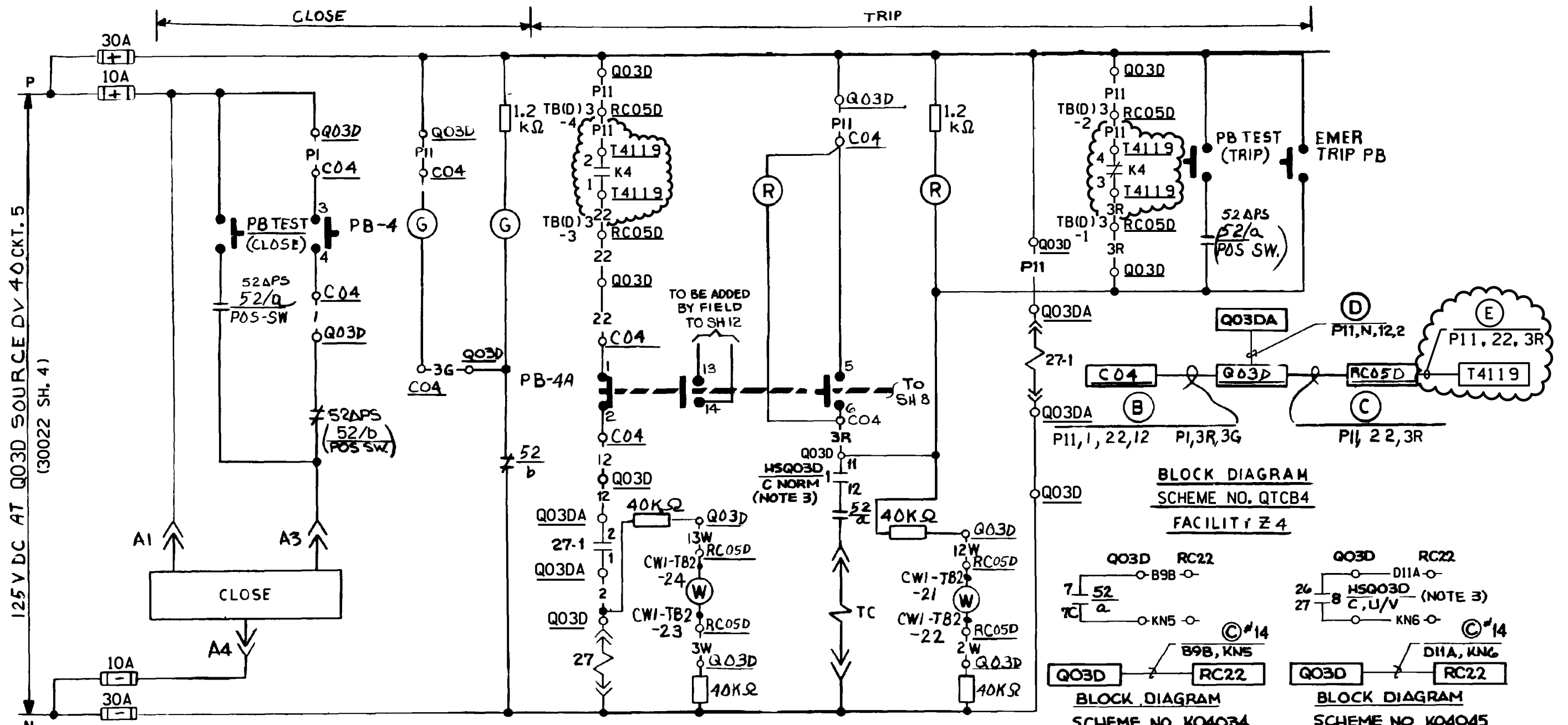
- 1 BREAKER SHOWN IN TRIPPED POSITION
- 2 FOR "K" RELAY LOCATION SEE DWG 7.04-MB06-525 (CE DWG E-18747-41-013 sh.4) (39069 SH. 15 & 31175 SH. 395)
- 3 HAND SWITCH LOCATED ON Q03C SWITCHGEAR FOR H S DEVELOPMENT (SEE -32045 sh A, FIG 1)

### FSAR FIGURE

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE <b>MILLSTONE UNIT 2          REACTOR TRIP SWITCHGEAR          CIRCUIT BREAKER TCB-3</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER DC MP2-20-01108 & DUR 21-800276		CAD NO: C320453.HYB DRAWING NO: 25203-32045	
DSGN JCV	SCALE: NONE	UNLESS OTHERWISE NOTED	SH 3

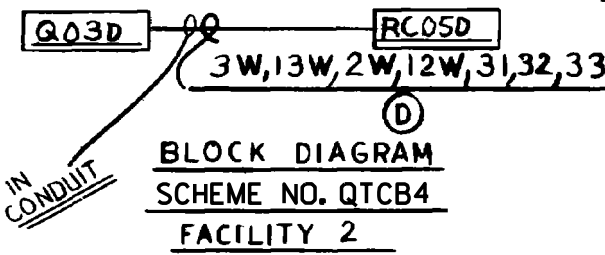
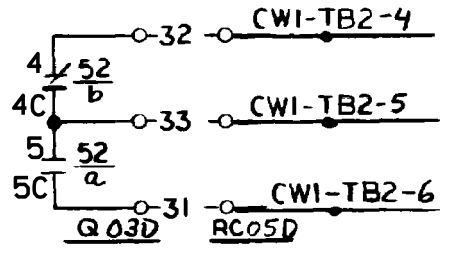
MBULOG\IN\jome694  
 08-DEC-2021 10:53  
 C320453.HYB



**SCHEME-QTCB4**  
FACILITY \*Z4

1 BREAKER SHOWN IN TRIPPED POSITION  
 2 FOR 'K'RELAY LOCATION SEE DWG 7604-M806-525  
 (CE DWG E-18767-411-013 sh.4)  
 (39069 SH. 15 & 31175 SH. 396)

3 HAND SWITCH LOCATED ON Q03D SWITCHGEAR  
 FOR HANDSWITCH DEVELOPMENT SEE -32045 sh.A FIG 1.



**BLOCK DIAGRAM**  
SCHEME NO. K04034  
FACILITY 2

**BLOCK DIAGRAM**  
SCHEME NO. K04045  
FACILITY 2

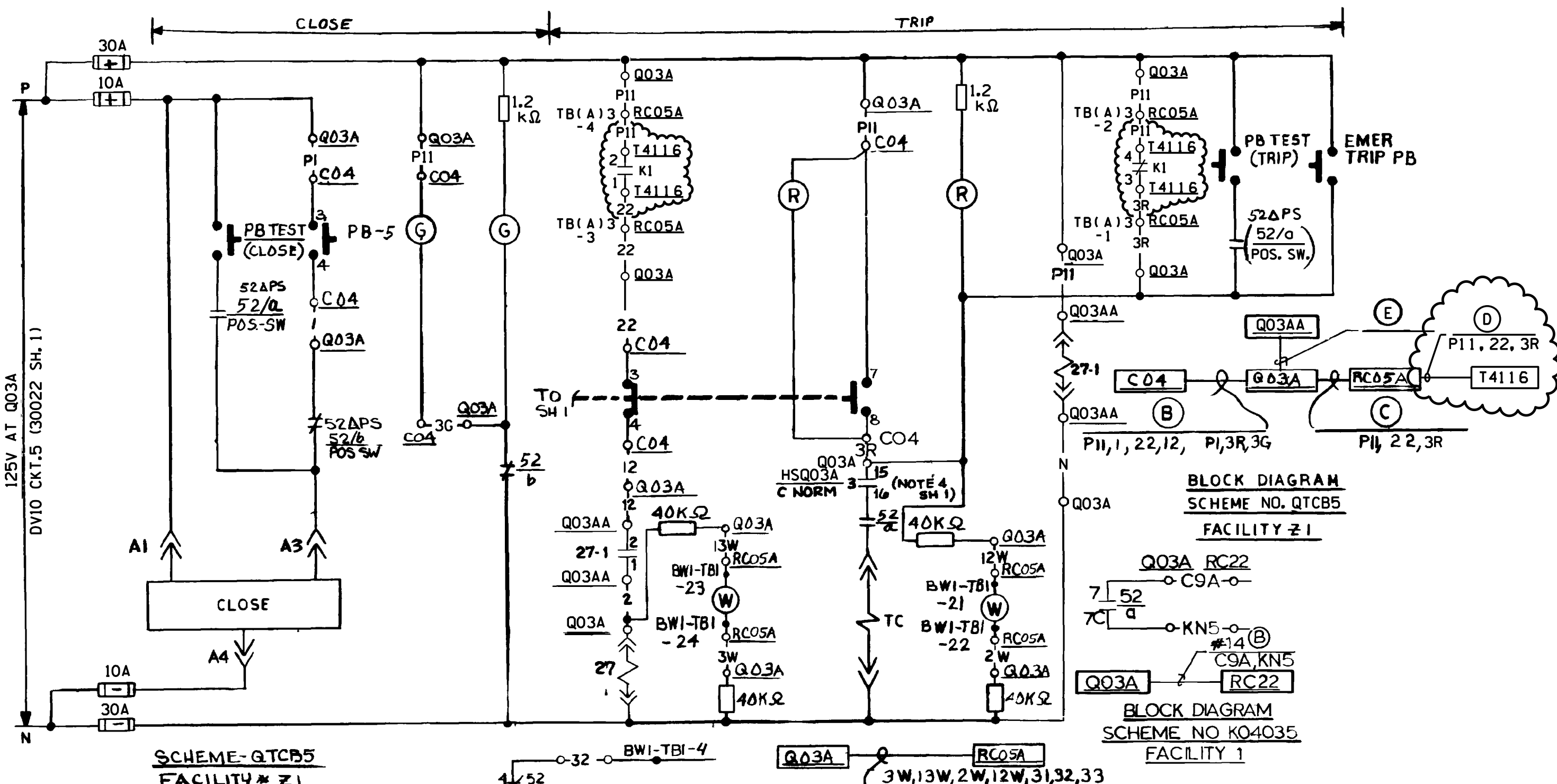
# FSAR FIGURE

SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE: MILLSTONE UNIT 2 REACTOR TRIP SWITCHGEAR CIRCUIT BREAKER TCB-4			
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER DC MP2-20-01108 & DUR 21-800276		CAD NO: C320454.HYB DRAWING NO: 25203-32045	
DESIGNED BY: JCV	SCALE: NONE	UNLESS OTHERWISE NOTED	SHEET: 4

MBULOG\IN\jome694  
 08-DEC-2021 10:53  
 C320454.HYB



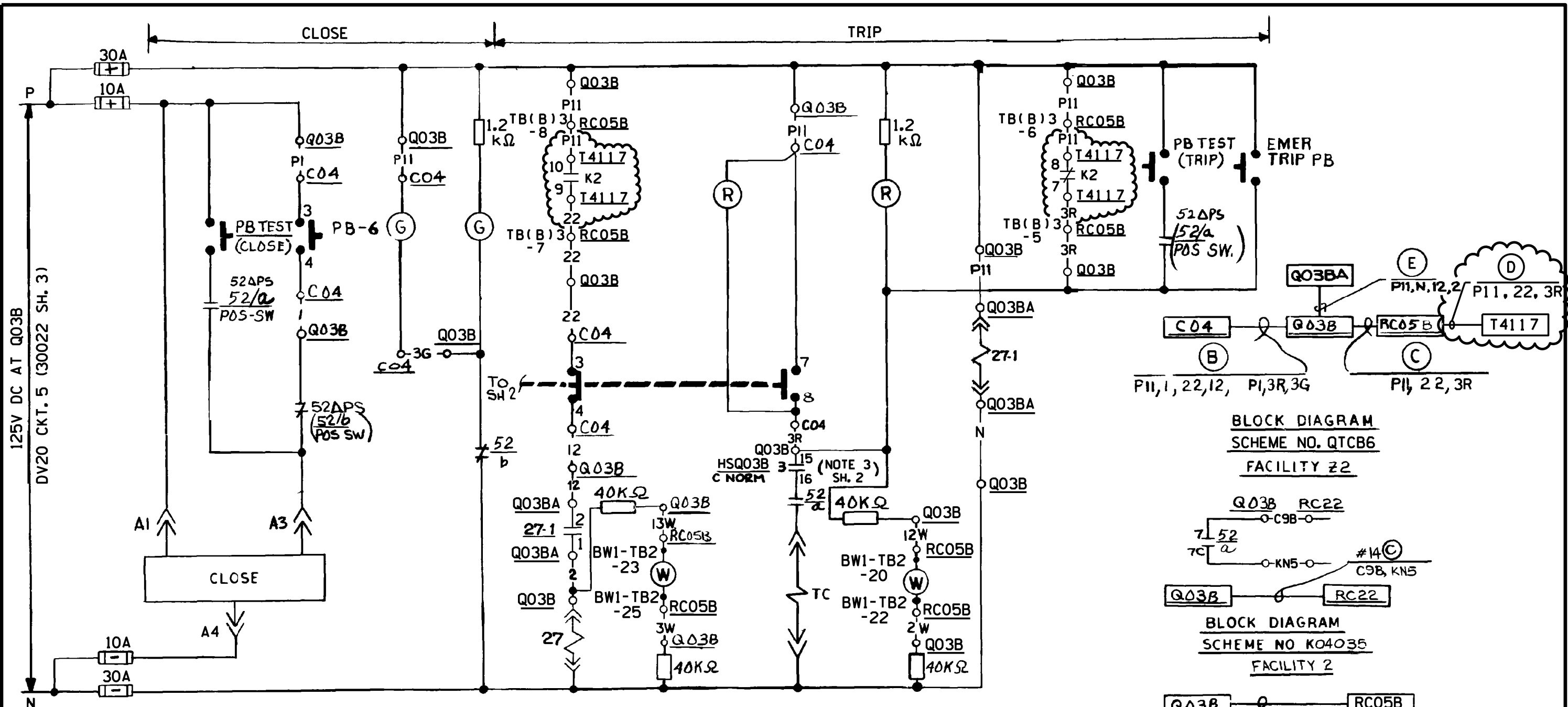


**NOTES**  
 1 BREAKER SHOWN IN TRIPPED POSITION  
 2 FOR "K" RELAY LOCATION SEE DWG 7604-M806-525 (CE DWG. E-18767-411-013 SH 4)  
 (39069 SH. 15 & 31175 SH. 393)

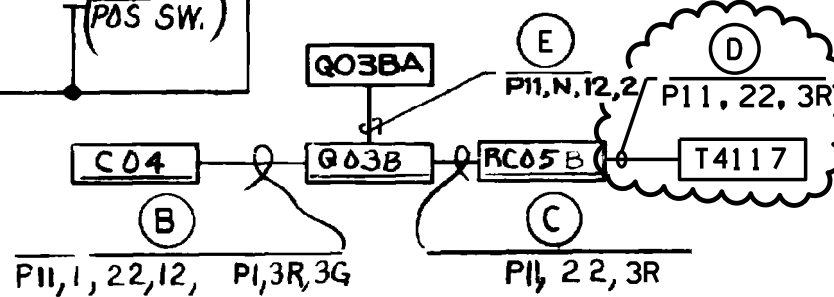
MBULOG\IN\j\_ome694  
 08-DEC-2021 10:53  
 C320455.HYB

**FSAR FIGURE**  
 SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES

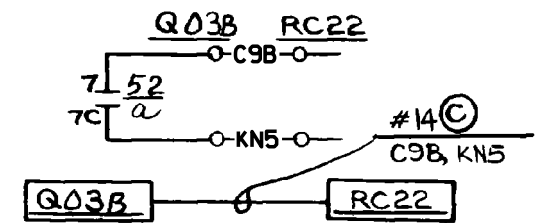
		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE <b>MILLSTONE UNIT 2          REACTOR TRIP SWITCHGEAR          CIRCUIT BREAKER TCB-5</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER DC MP2-20-01108 & DUR 21-800276		CAD NO: C320455.HYB DRAWING NO: 25203-32045	
DSGN JCV	SCALE: NONE	UNLESS OTHERWISE NOTED	SH 5



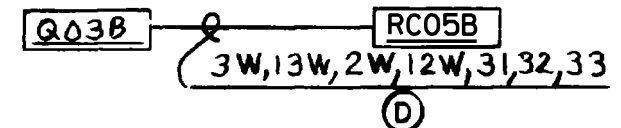
**SCHEME-QTCB6**  
FACILITY\* Z2



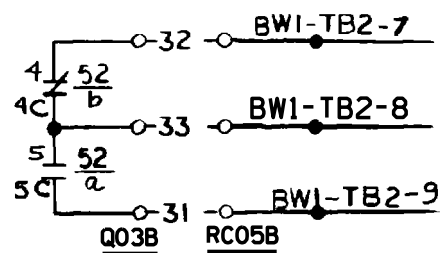
**BLOCK DIAGRAM**  
SCHEME NO. QTCB6  
FACILITY Z2



**BLOCK DIAGRAM**  
SCHEME NO. K04035  
FACILITY 2



**BLOCK DIAGRAM**  
SCHEME NO. QTCB6  
FACILITY 2



**NOTES:**

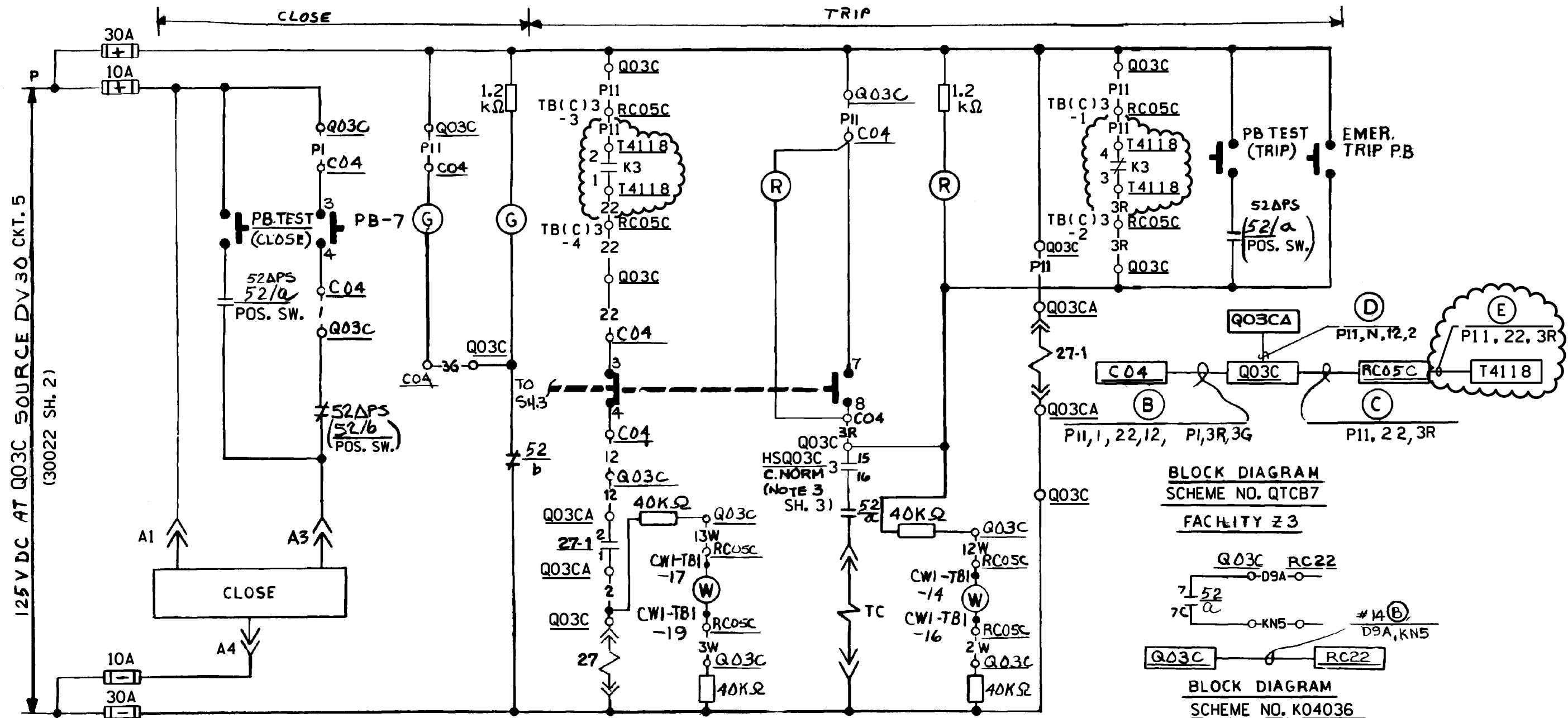
1. BREAKER SHOWN IN TRIPPED POSITION.
2. FOR "K" RELAY LOCATION SEE DWG 7604-M806-525 (CE DWG E-18767-411-013 SH4) (39069 SH. 15 & 31175 SH. 394)

**FSAR FIGURE**

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE: <b>MILLSTONE UNIT 2 REACTOR TRIP SWITCHGEAR CIRCUIT BREAKER TCB-6</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE)		CAD NO: C320456.HYB	
REVISED PER DC MP2-20-01108 & DUR 21-800276		DRAWING NO: 25203-32045	REV 10
DSGN JCV	SCALE: NONE	UNLESS OTHERWISE NOTED	SH 6

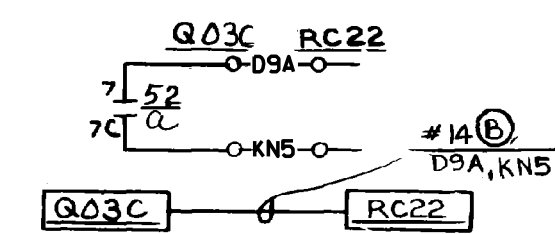
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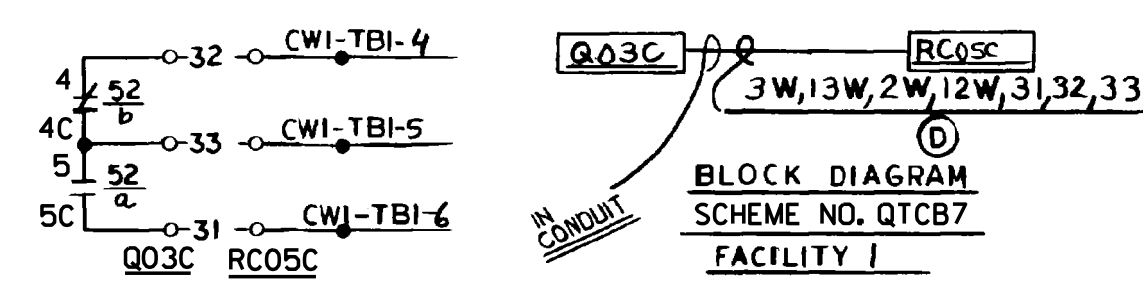
125V DC AT Q03C SOURCE DV 30 CKT. 5  
(30022 SH. 2)

**SCHEME-QTCB7**  
FACILITY Z3

**BLOCK DIAGRAM**  
SCHEME NO. QTCB7  
FACILITY Z3



**BLOCK DIAGRAM**  
SCHEME NO. K04036  
FACILITY I



**NOTES:**

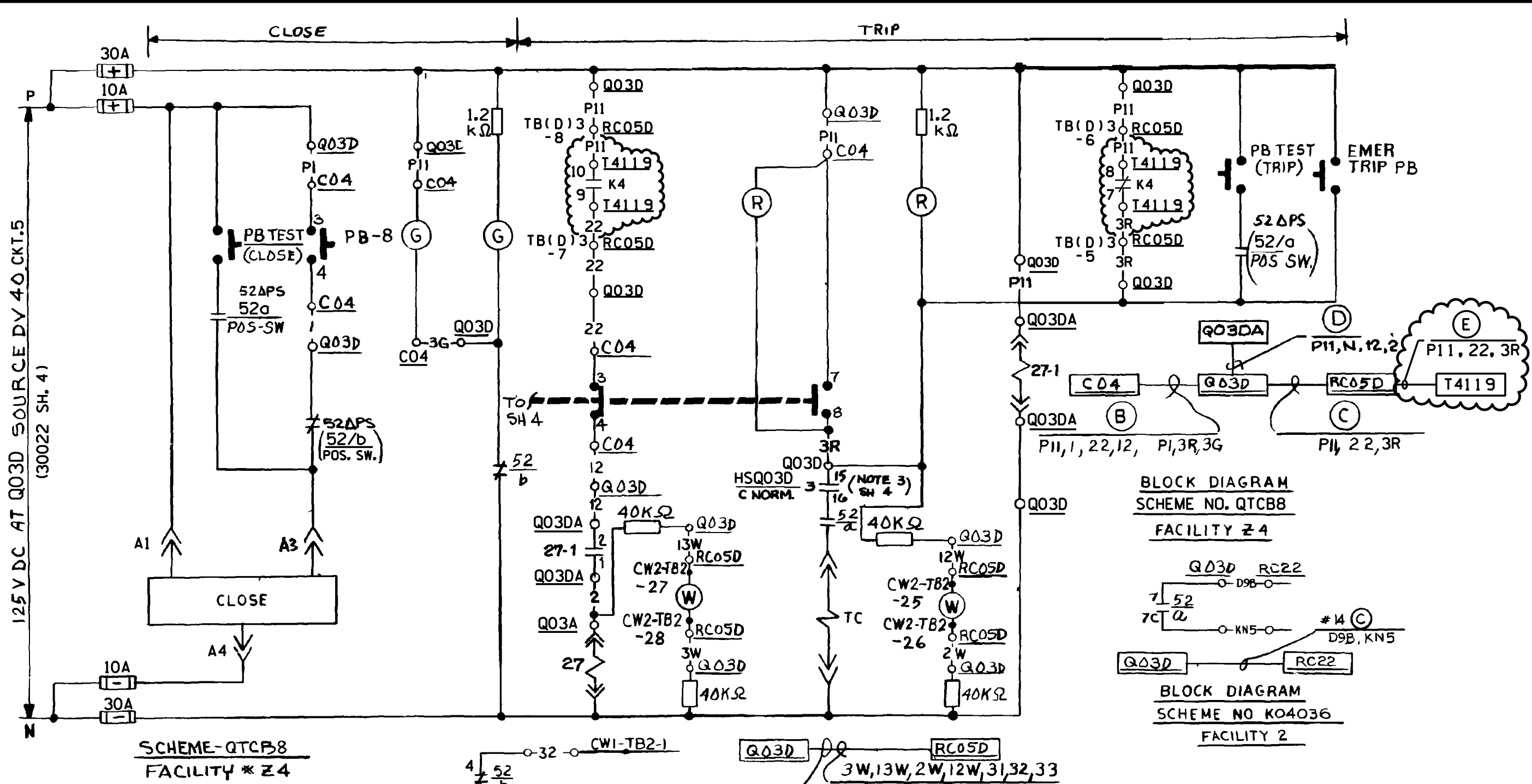
1. BREAKER SHOWN IN TRIPPED POSITION.
2. FOR "K" RELAY LOCATION SEE DWG. 7604-M806-525 (CE DWG. E-18767-411-013 SH4) (39069 SH. 15 & 31175 SH. 395)

**FSAR FIGURE**

SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
<b>TITLE</b> MILLSTONE UNIT 2 REACTOR TRIP SWITCHGEAR CIRCUIT BREAKER TCB-7			
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER DC MP2-20-01108 & DUR 21-800276		CAD NO: C320457.HYB DRAWING NO: 25203-32045	
DESGN JCV	SCALE: NONE	UNLESS OTHERWISE NOTED SH 7	REV 10

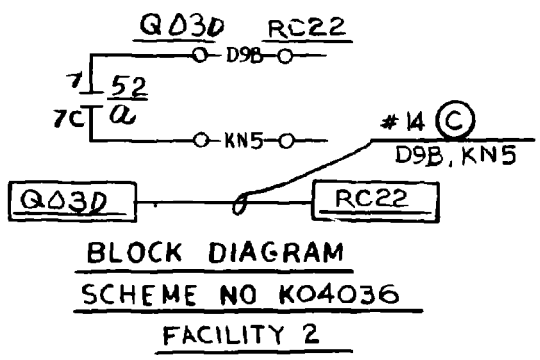
MBULOG IN \jame694  
 08-DEC-2021 10:54  
 C320457.HYB



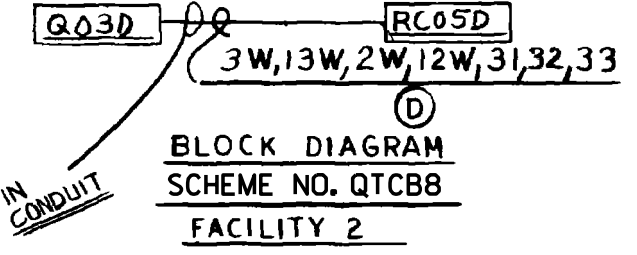
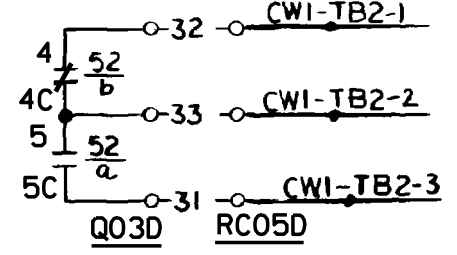
125V DC AT Q03D SOURCE DVY 40 CKT.5 (30022 SH. 4)

**SCHEME-QTCB8**  
FACILITY \* Z4

**BLOCK DIAGRAM**  
SCHEME NO. QTCB8  
FACILITY Z4



**BLOCK DIAGRAM**  
SCHEME NO K04036  
FACILITY 2



**BLOCK DIAGRAM**  
SCHEME NO. QTCB8  
FACILITY 2

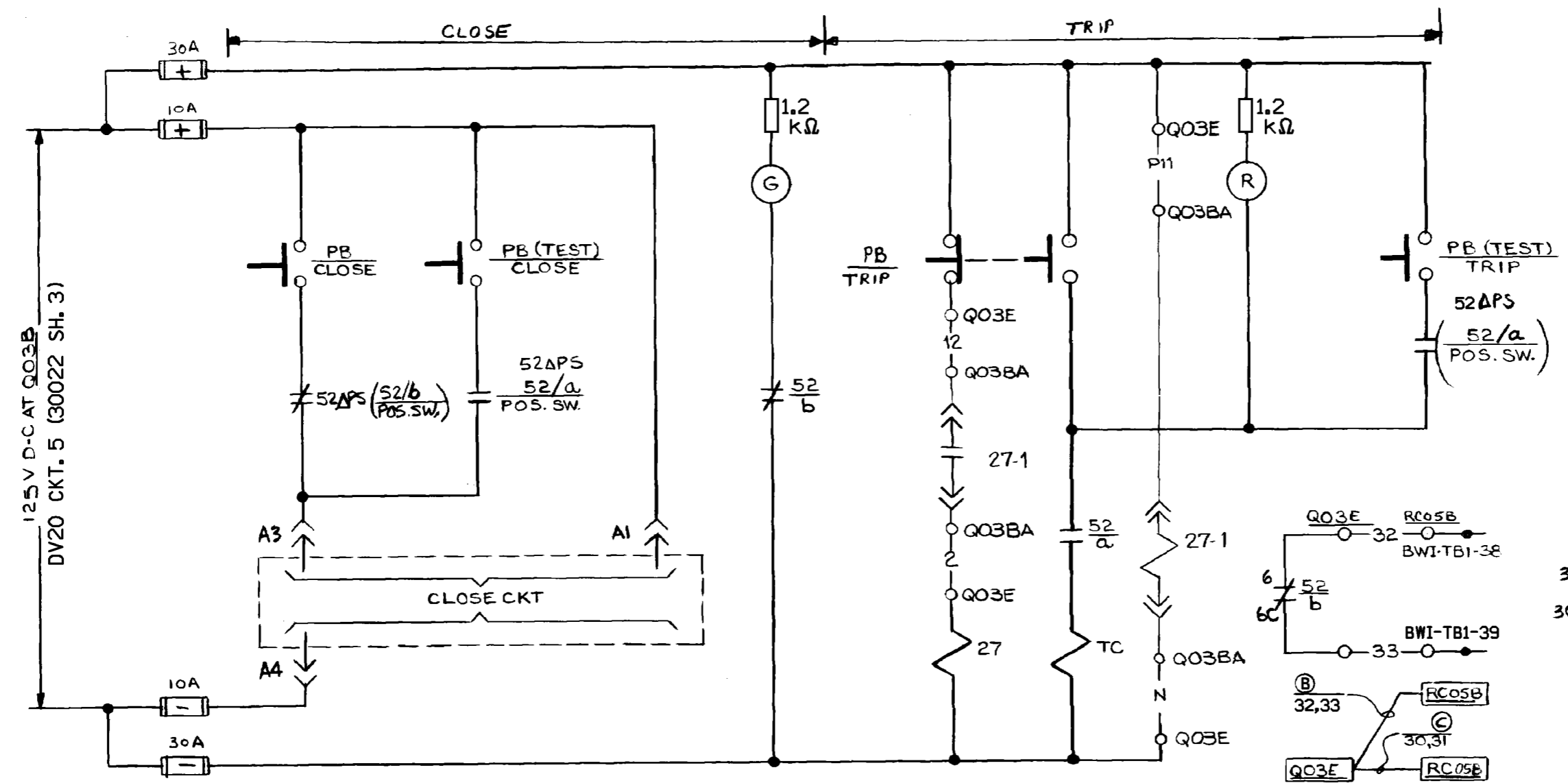
- NOTES:**
- 1 BREAKER SHOWN IN TRIPPED POSITION.
  - 2 FOR "K" RELAY LOCATION SEE DWG 7604-M806-525 (CE DWG E-18767-411-013 SH4) (39069 SH. 15 & 31175 SH. 396)

## FSAR FIGURE

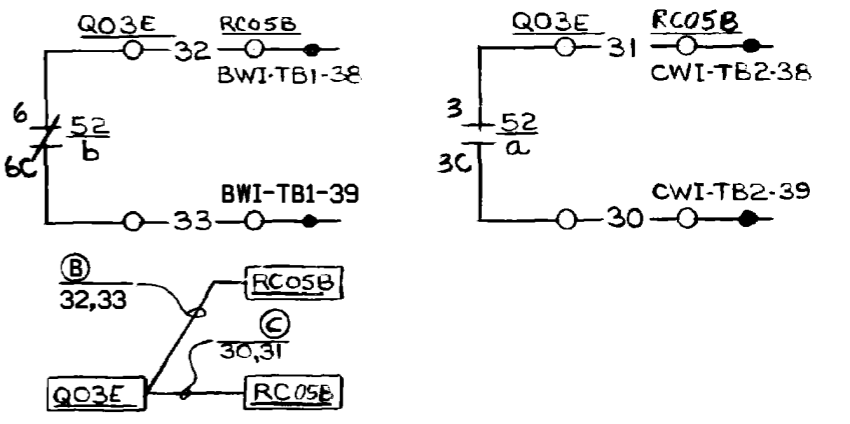
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

	Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.		
	TITLE <b>MILLSTONE UNIT 2          REACTOR TRIP SWITCHGEAR          CIRCUIT BREAKER TCB-8</b>		
REVISION DESCRIPTION (SIGNATURES ON FILE) REVISED PER DC MP2-20-01108 & DUR 21-800276		CAD NO: C320458.HYB DRAWING NO: 25203-32045	REV 10
DSGN JCV	SCALE: NONE	UNLESS OTHERWISE NOTED SH 8	

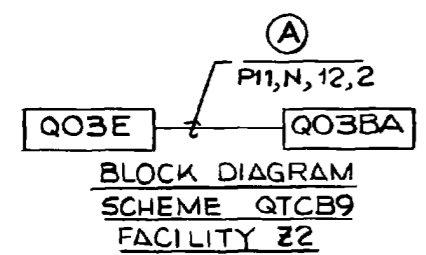
MBULOG\IN\jome694  
 08-DEC-2021 10:53  
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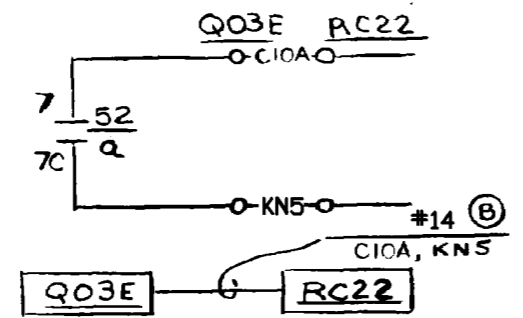
**SCHEME - QTCB9**  
**FACILITY Z2**



**BLOCK DIAGRAM**  
**SCHEME NO. QTCB9**  
**FAC: 2**



**BLOCK DIAGRAM**  
**SCHEME QTCB9**  
**FACILITY Z2**



**BLOCK DIAGRAM**  
**SCHEME K04039**  
**FACILITY 2**

- NOTE:**
- FOR STANDARD NOTES, SYMBOLS & EQUIP. LOC. INDEX SEE DWG. 25203-30028
  - BREAKER** SHOWN IN TRIPPED POSITION.

**FSAR FIGURE**

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

**Q.A.**

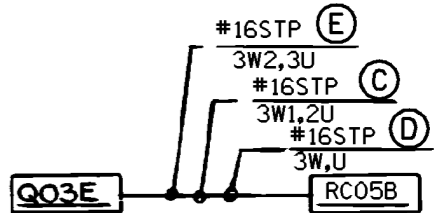
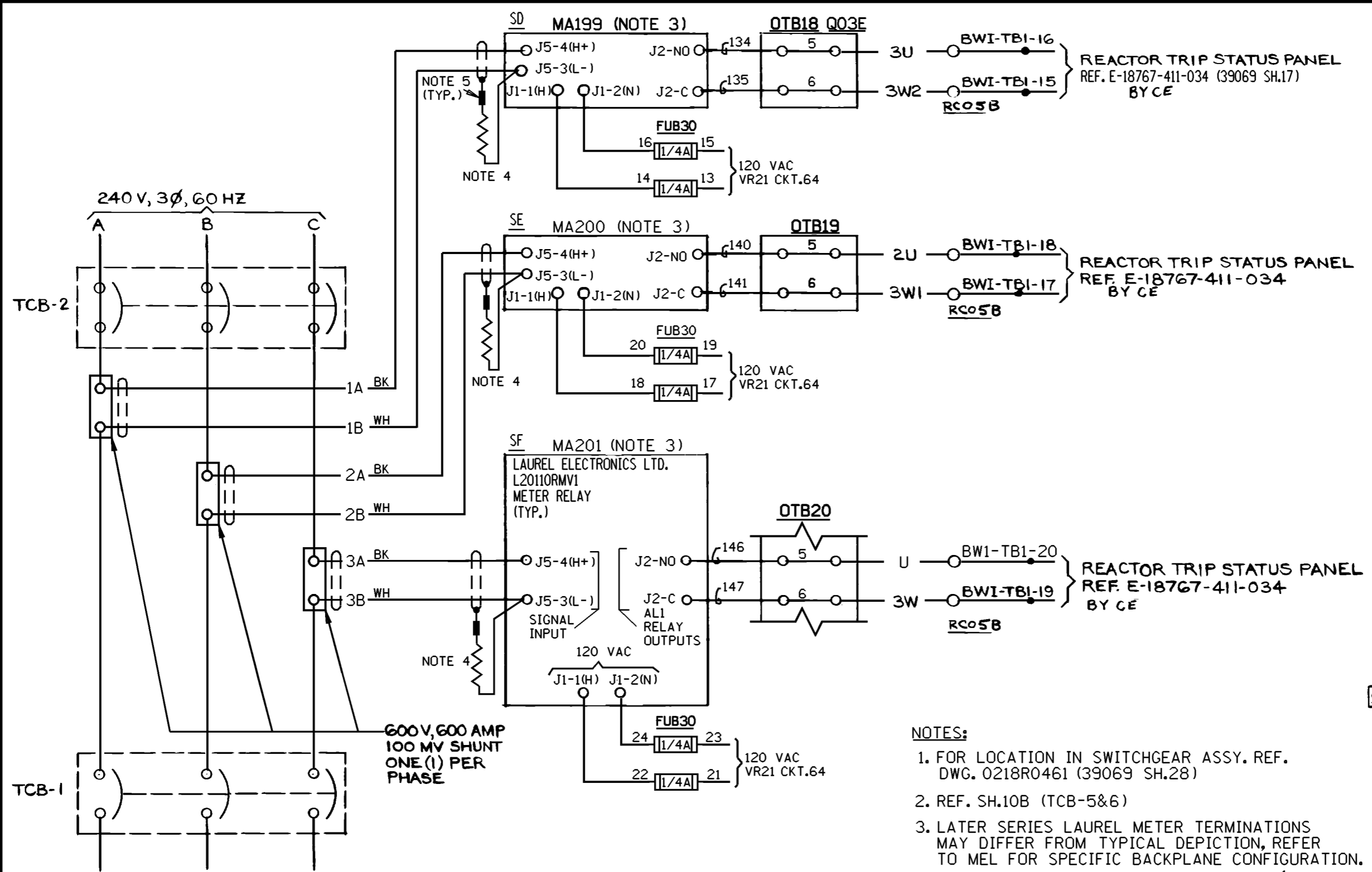
REVISIONS DURING CONSTRUCTION

NO.	DATE	REVISIONS	BY	CHK	APP	APP
9	4-28-04	INCORP. DCN DM2-00-1001-99	KBB	DLW	-	DED
8	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP
7	3-6-97	INCORP. DCN DM2-5-1213-95 PER DCR M2-S-0123-96	JMM	RNB	JPP	JPP

**CAD**  
MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED

TITLE  
**MILLSTONE UNIT 2  
REACTOR TRIP SWITCHGEAR  
BUS TIE BREAKER TCB-9  
WATERFORD, CT.**

<b>Dominion</b>		Dominion Nuclear Connecticut, Inc. Millstone Power Station		
BY <b>JMM</b>	CHKD. _____	APP. _____	APP. _____	
DATE <b>8/28/96</b>	DATE _____	DATE _____	DATE _____	
SCALE <b>N/A</b>	DWG. NO. <b>25203-32045 SH. 9</b>			



**BLOCK DIAGRAM**  
SCHEME No. QCB12  
**FAC:2**

**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

- NOTES:**
- FOR LOCATION IN SWITCHGEAR ASSY. REF. DWG. 0218R0461 (39069 SH.28)
  - REF. SH.10B (TCB-5&6)
  - LATER SERIES LAUREL METER TERMINATIONS MAY DIFFER FROM TYPICAL DEPICTION, REFER TO MEL FOR SPECIFIC BACKPLANE CONFIGURATION.
  - TWISTED PAIR SHIELD WITH 10 MEGOHM, 1/4 WATT RESISTOR DOES NOT TIE TO CABINET GROUND.
  - DENOTES FIELD SPLICE.

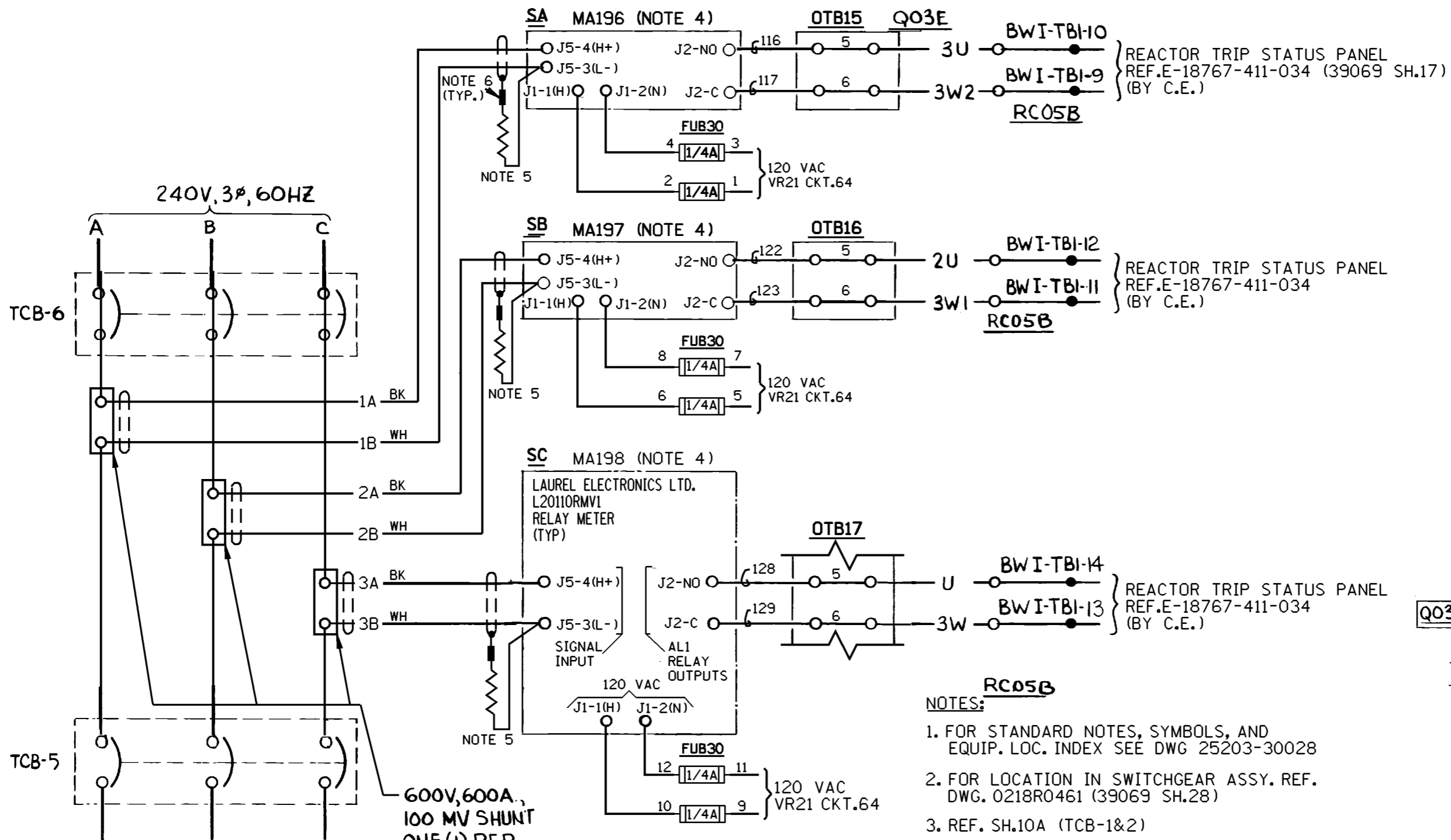
**REFERENCE DRAWINGS**

30022 SH.22	- VR21
39069 SH.46	- METER RELAY
39069 SH.50	- REMOTE CONNECTIONS
31105	- Q03 CONN. DIAG.

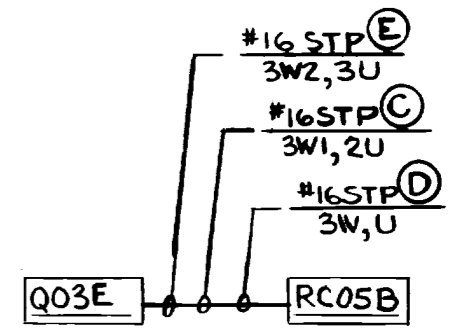
NO.	DATE	REVISIONS	BY	CHK	APP	APP
8	7-28-11	INCRP DCN DM2-04-0183-09 PER DUR 11-800309	MKN	DLW		DLW

<b>NON Q.A.</b>		<b>CAD</b> MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED		<b>Dominion</b>		Dominion Nuclear Connecticut, Inc. Millstone Power Station	
TITLE MILLSTONE UNIT No.2 <b>REACTOR TRIP SWITCHGEAR UNDERCURRENT DEVICE (TCB-1&amp;2)</b> WATERFORD, CT.				BY JSJ/JMM	CHKD. —	APP. JPP	APP. JPP
DATE 2-3-00				DATE —	DATE 2-29-00	DATE 2-29-00	DATE 2-29-00
SCALE N/A				DWG. NO. 25203-32045 SH.10A			
N/A							

REVISIONS DURING CONSTRUCTION



**SCHEME NO QCB56  
FACILITY NO 2**



**BLOCK DIAGRAM  
SCHEME NO QCB56  
FACILITY NO 2**

**FSAR FIGURE**

SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

**NOTES:**

1. FOR STANDARD NOTES, SYMBOLS, AND EQUIP. LOC. INDEX SEE DWG 25203-30028
2. FOR LOCATION IN SWITCHGEAR ASSY. REF. DWG. 0218R0461 (39069 SH.28)
3. REF. SH.10A (TCB-1&2)
4. LATER SERIES LAUREL METER TERMINATIONS MAY DIFFER FROM TYPICAL DEPICTION, REFER TO MEL FOR SPECIFIC BACKPLANE CONFIGURATION.
5. TWISTED PAIR SHIELD WITH 10 MEGOHM, 1/4 WATT RESISTOR DOES NOT TIE TO CABINET GROUND.
6. — DENOTES FIELD SPLICE.

**REFERENCE DRAWINGS**

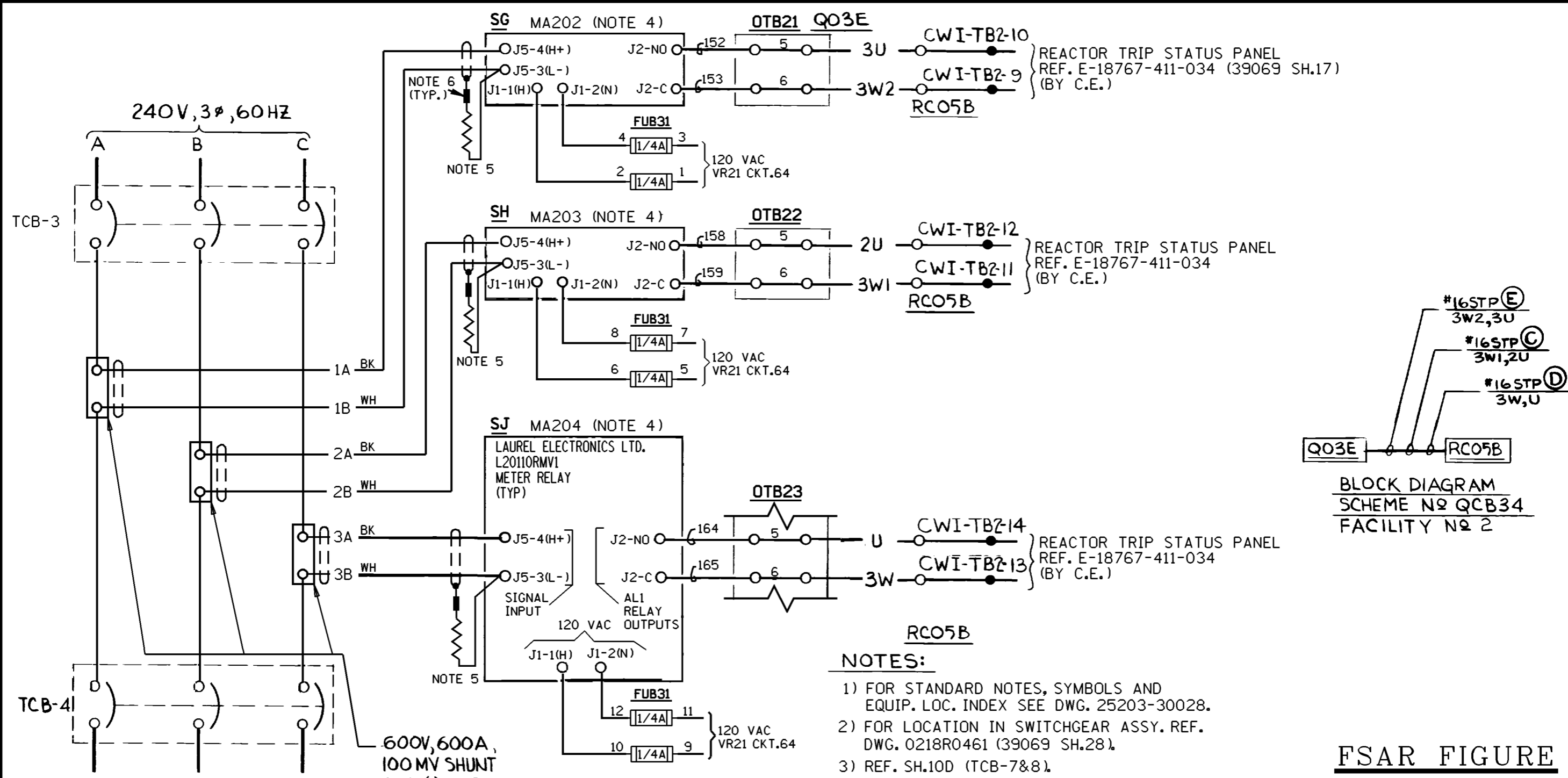
- 30022 SH.22 - VR21
- 39069 SH.45 - METER RELAY
- 39069 SH.50 - REMOTE CONNECTIONS
- 31105 - Q03 CONN. DIAG.

REVISIONS DURING CONSTRUCTION

NO.	DATE	REVISIONS	BY	CHK	APP	APP
7	7/28/11	INCORP DCN DM2-04-0183-09 PER DUR 11-800309	MKN	DLW		DLW

TITLE	<b>NON Q.A.</b>		<b>CAD</b>	
	MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED			
	MILLSTONE UNIT No.2 <b>REACTOR TRIP SWITCHGEAR UNDERCURRENT DEVICE (TCB-5&amp;6)</b> WATERFORD, CT.			

<b>Dominion Nuclear Connecticut, Inc. Millstone Power Station</b>			
BY JSJ/JMM	CHKD. —	APP. JPP	APP. JPP
DATE 2-3-00	DATE —	DATE 2-29-00	DATE 2-29-00
SCALE N/A	DWG. NO. 25203-32045 SH.10B		
N/A			



**SCHEME NO QCB34  
FACILITY NO 2**

**BLOCK DIAGRAM  
SCHEME NO QCB34  
FACILITY NO 2**

**FSAR FIGURE**

SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

**NOTES:**

- 1) FOR STANDARD NOTES, SYMBOLS AND EQUIP. LOC. INDEX SEE DWG. 25203-30028.
- 2) FOR LOCATION IN SWITCHGEAR ASSY. REF. DWG. 0218R0461 (39069 SH.28).
- 3) REF. SH.10D (TCB-7&8).
- 4) LATER SERIES LAUREL METER TERMINATIONS MAY DIFFER FROM TYPICAL DEPICTION, REFER TO MEL FOR SPECIFIC BACKPLANE CONFIGURATION.
- 5) TWISTED PAIR SHIELD WITH 10 MEGOHM, 1/4 WATT RESISTOR DOES NOT TIE TO CABINET GROUND.
- 6) — DENOTES FIELD SPLICE.

**REFERENCE DRAWINGS**

- 30022 SH.22 - VR21
- 39069 SH.47 - METER RELAY
- 39069 SH.50 - REMOTE CONNECTIONS
- 31105 - Q03 CONN. DIAG.

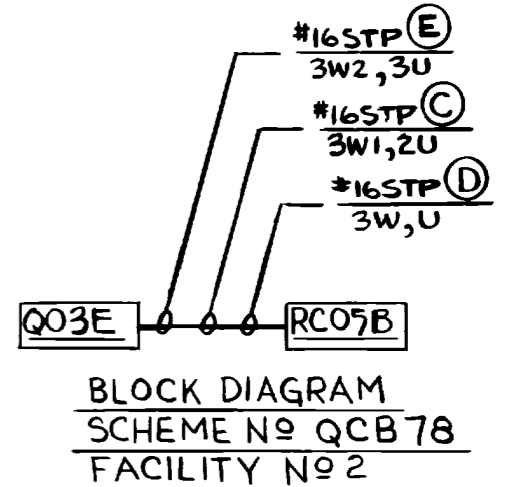
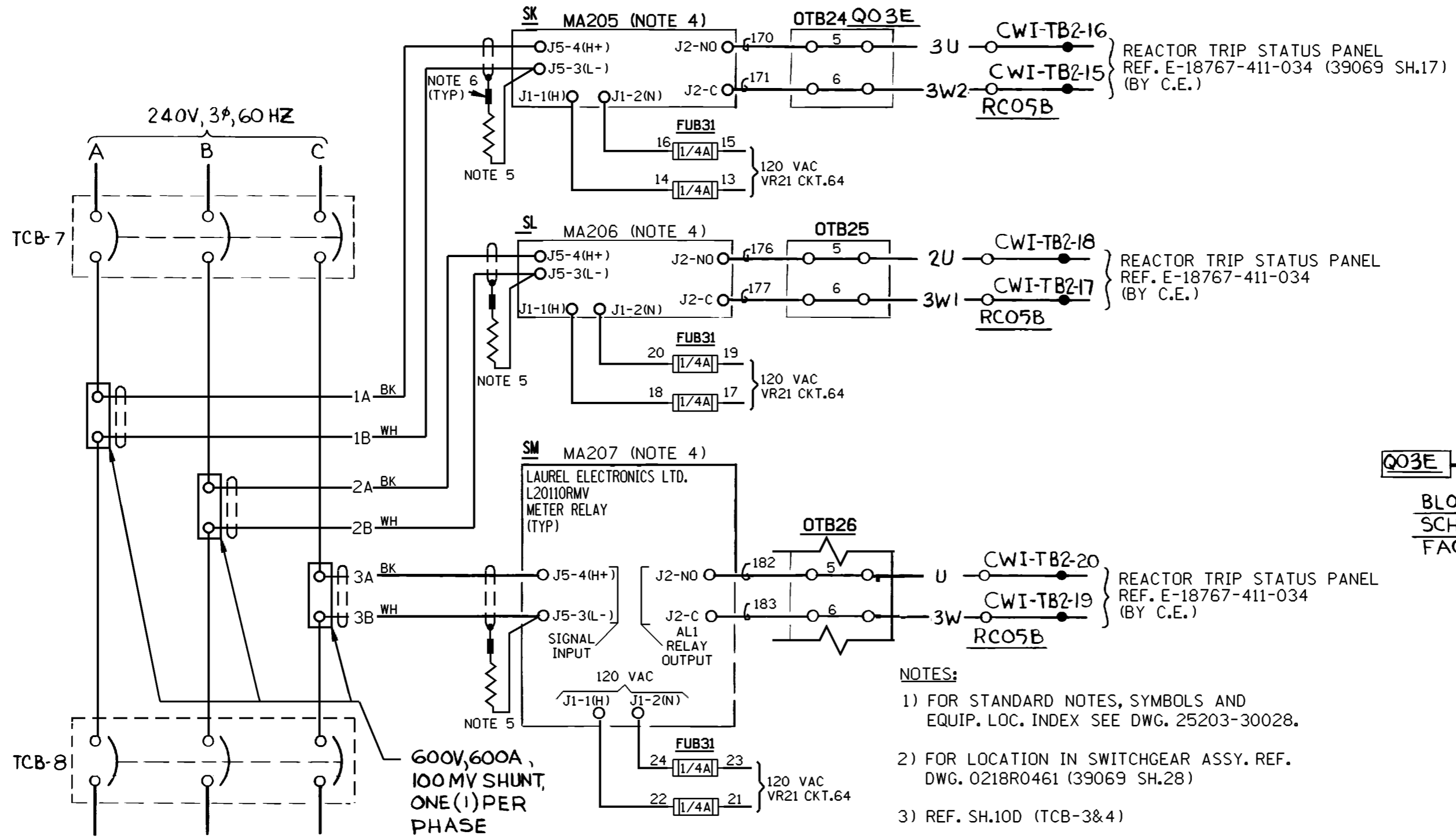
REVISIONS DURING CONSTRUCTION

NO.	DATE	REVISIONS	BY	CHK	APP	APP
7	7/28/11	INCORP DCN DM2-04-0183-09 PER DUR 11-800309	MKN	DLW		DLW

TITLE	NON Q.A.	CAD
	MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED	
MILLSTONE UNIT No.2		
REACTOR TRIP SWITCHGEAR UNDERCURRENT DEVICE (TCB-3&4)		
WATERFORD, CT.		

Dominion Nuclear Connecticut, Inc. Millstone Power Station			
BY JSJ/JMM	CHKD. —	APP. JPP	APP. JPP
DATE 2-3-00	DATE —	DATE 2-29-00	DATE 2-29-00
SCALE N/A	DWG. NO. 25203-32045 SH.10C		
N/A			





BLOCK DIAGRAM  
SCHEME No QCB78  
FACILITY No 2

- NOTES:
- 1) FOR STANDARD NOTES, SYMBOLS AND EQUIP. LOC. INDEX SEE DWG. 25203-30028.
  - 2) FOR LOCATION IN SWITCHGEAR ASSY. REF. DWG. 0218R0461 (39069 SH.28)
  - 3) REF. SH.10D (TCB-3&4)
  - 4) LATER SERIES LAUREL METER TERMINATIONS MAY DIFFER FROM TYPICAL DEPICTION, REFER TO MEL FOR SPECIFIC BACKPLANE CONFIGURATION.
  - 5) TWISTED PAIR SHIELD WITH 10 MEGOHM, 1/4 WATT RESISTOR DOES NOT TIE TO CABINET GROUND.
  - 6) — DENOTES FIELD SPLICE.

**FSAR FIGURE**  
SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

SCHEME No QCB78  
FACILITY No 2

REFERENCE DRAWINGS

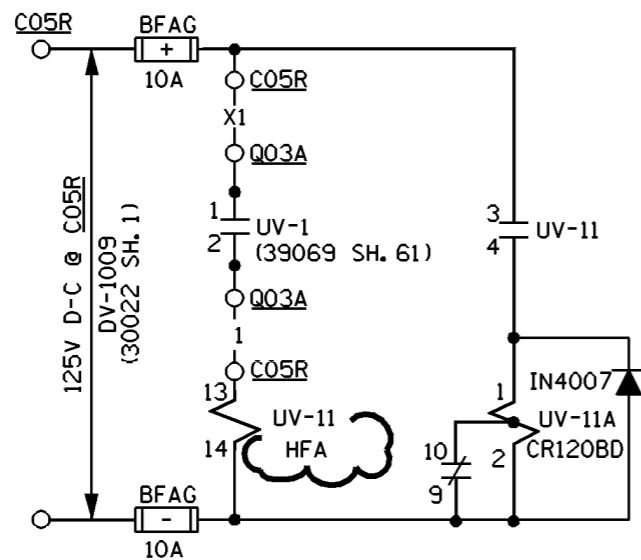
30022 SH.22	- VR21
39069 SH.48	- METER RELAY
39069 SH.50	- REMOTE CONNECTIONS
31105	- Q03 CONN. DIAG.

NO.	DATE	REVISIONS	BY	CHK	APP	APP
7	7/28/11	INCORP DCN DM2-04-0183-09 PER DUR 11-800309	MKN	DLW	DLW	

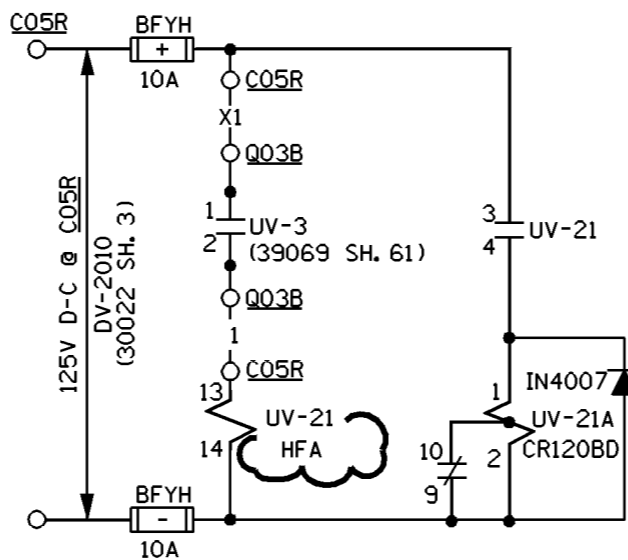
TITLE		NON Q.A.	CAD
MILLSTONE UNIT No.2		MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED	
REACTOR TRIP SWITCHGEAR UNDERCURRENT DEVICE (TCB-7&8)			
WATERFORD, CT.			

Dominion Nuclear Connecticut, Inc. Millstone Power Station			
BY JSJ/JMM	CHKD. —	APP. JPP	APP. JPP
DATE 2-3-00	DATE —	DATE 2-29-00	DATE 2-29-00
SCALE N/A	DWG. NO. 25203-32045 SH.10D		
N/A			

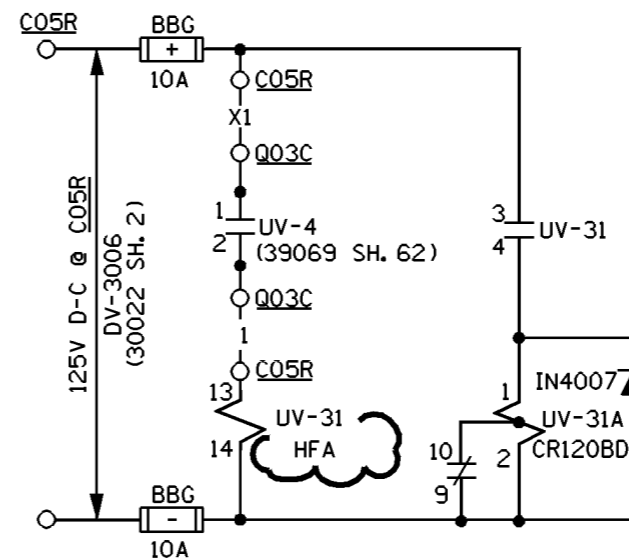
REVISIONS DURING CONSTRUCTION



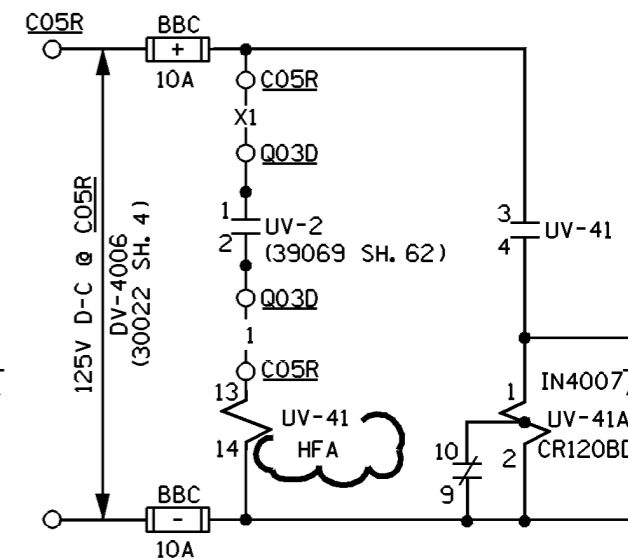
SCHEME NO. Q0271  
FACILITY NO. Z1



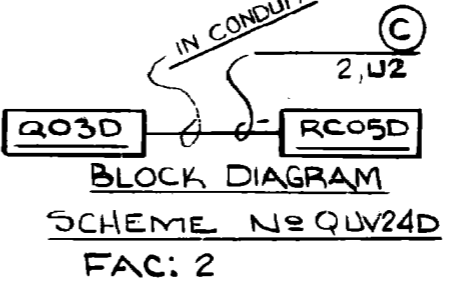
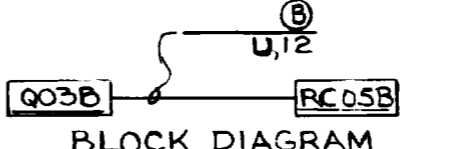
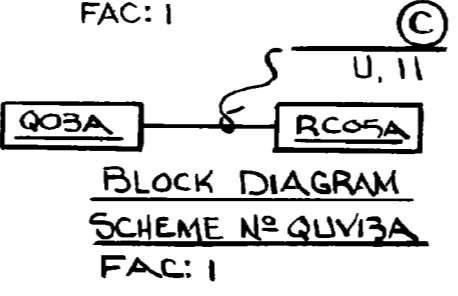
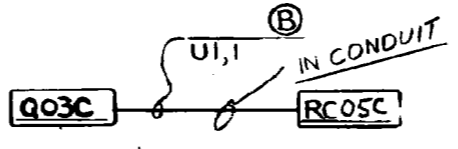
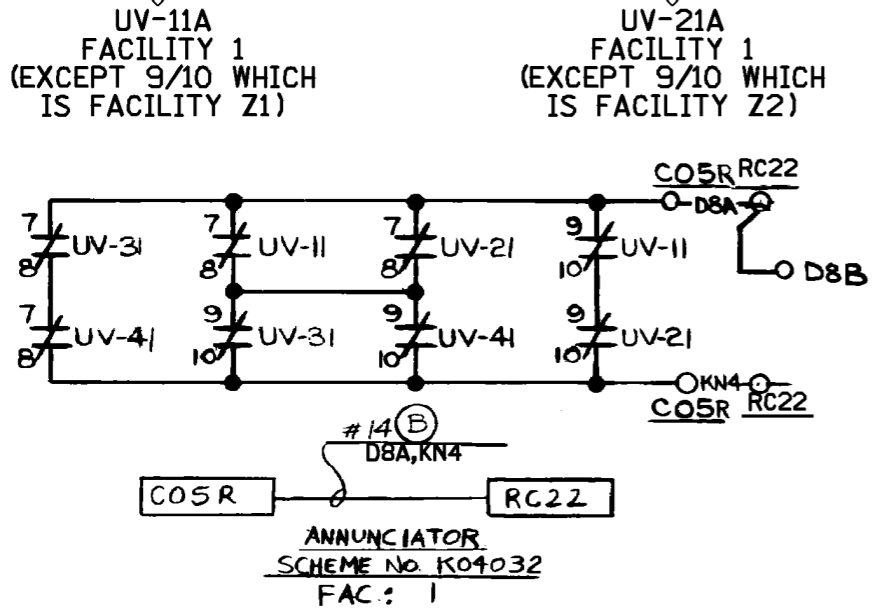
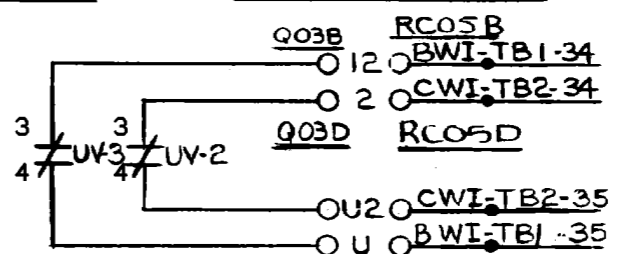
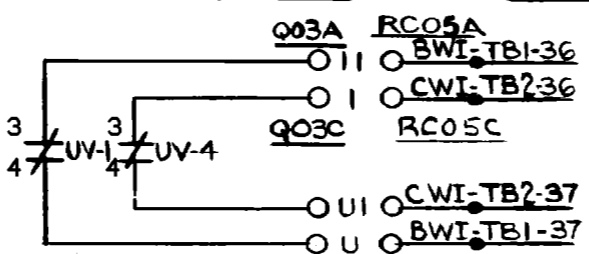
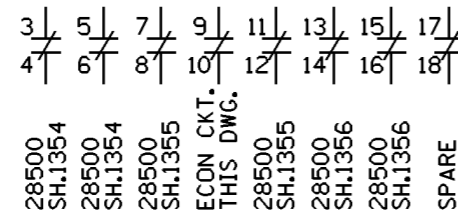
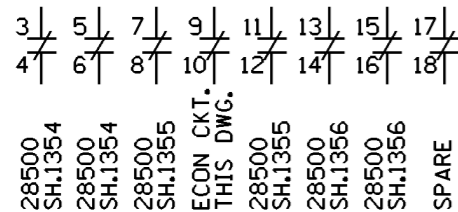
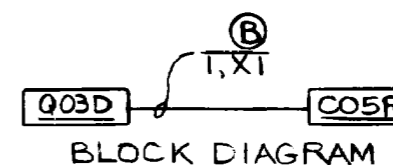
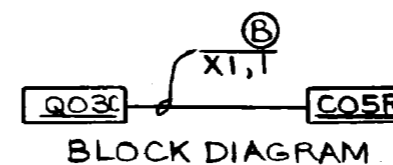
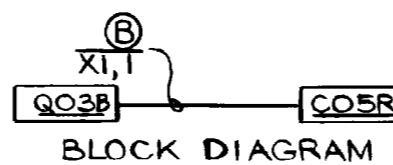
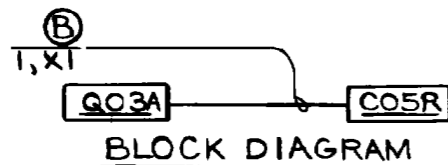
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FACILITY NO. Z2



SCHEME NO. Q0273  
FACILITY NO. Z3



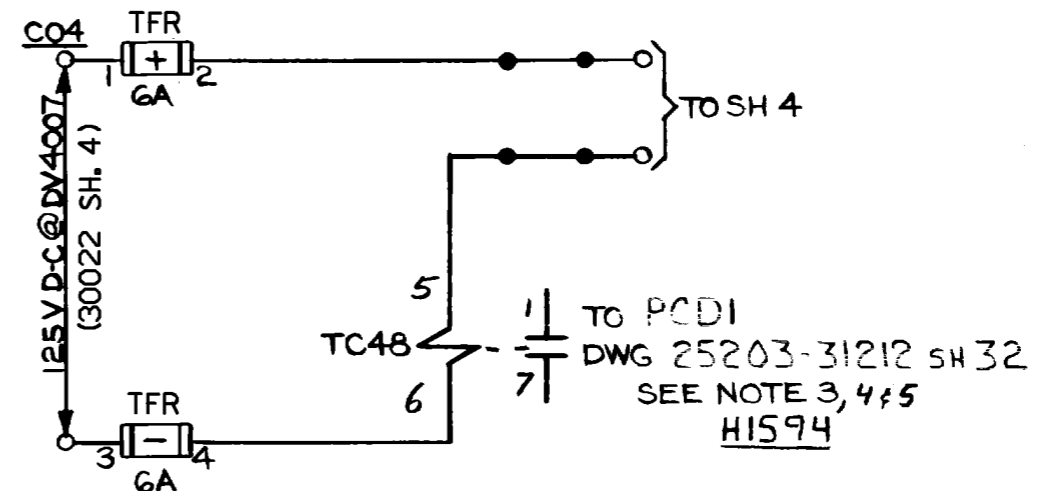
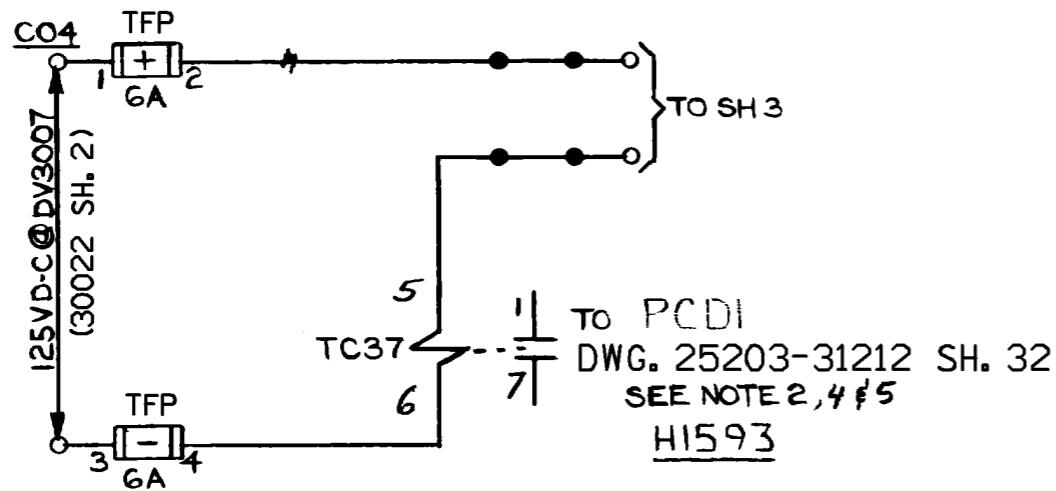
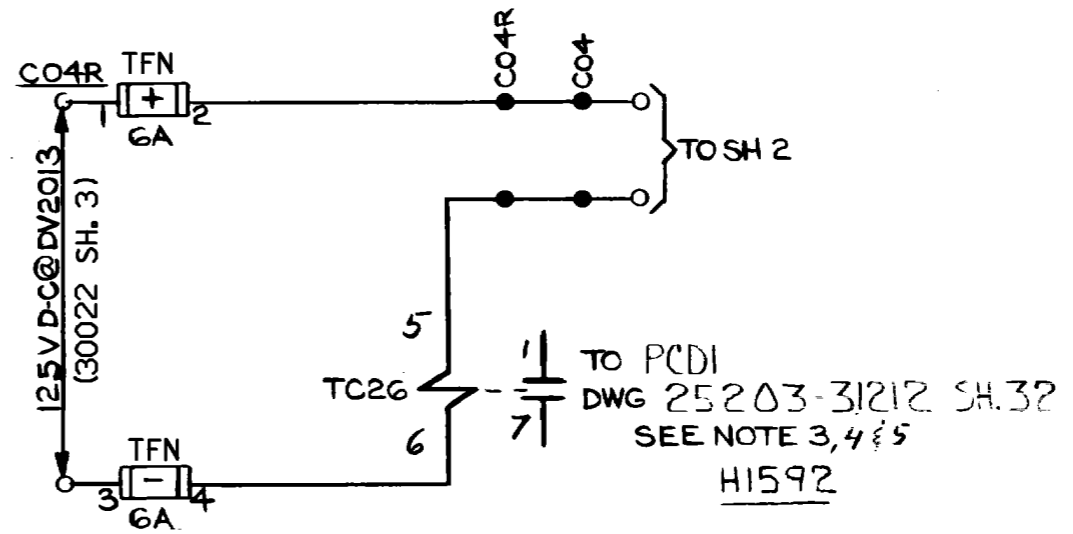
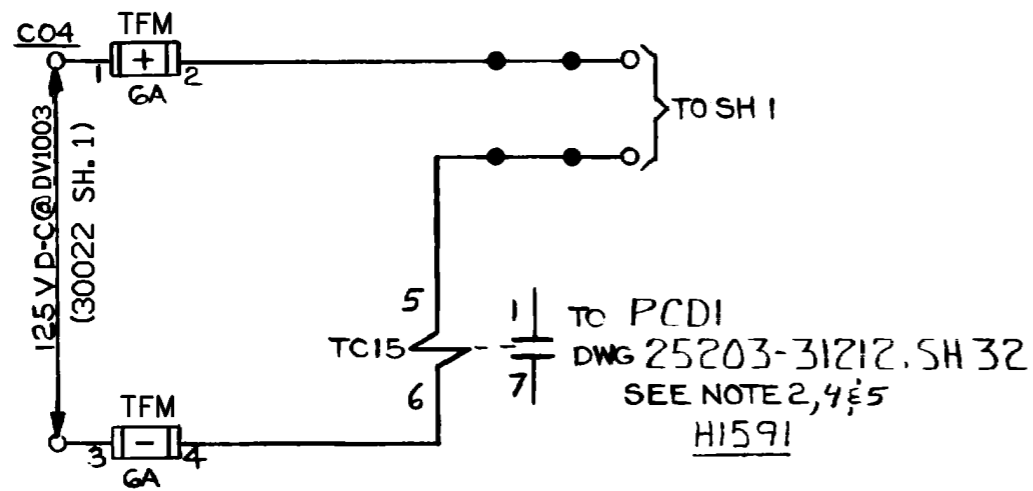
SCHEME NO. Q0274  
FACILITY NO. Z4



- NOTES:
- FOR STANDARD NOTES, SYMBOLS & EQUIP. LOC. INDEX SEE DWG. 25203-30028.
  - FOR LOCATION IN SWITCHGEAR ASSY REF. DWG E-18767-413-130.

FSAR FIGURE  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE			
UNDERVOLTAGE TRIP DEVICE & INTERLOCKS			
REVISION DESCRIPTION (SIGNATURES ON FILE)		CAD NO: C320451LHYB	
REVISED PER MSDUR 17-000175 & DUR 17-800361		DRAWING NO:	REV
		25203-32045	8
DSGN DLW	SCALE: N/A	UNLESS OTHERWISE NOTED SH 11	



**NOTES:**

1. FOR STANDARD NOTES, SYMBOLS & EQUIP. LOC. INDEX SEE DWG. 25203-30028
2. CONTACTS WIRED NV1.
3. CONTACTS WIRED NV2.
4. ALL TC RELAYS ARE 12HGAI1J52
5. REF. TO FIELD REQUISITION 7604-E-045, SH14, REV. 0 .

**FSAR FIGURE**

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

Q.A.

REVISIONS DURING CONSTRUCTION

X						
	4	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP
	NO.	DATE	REVISIONS	BY	CHK	APP

REDRAWN FROM SAME  
NNECO DWG. NO. REV. 2

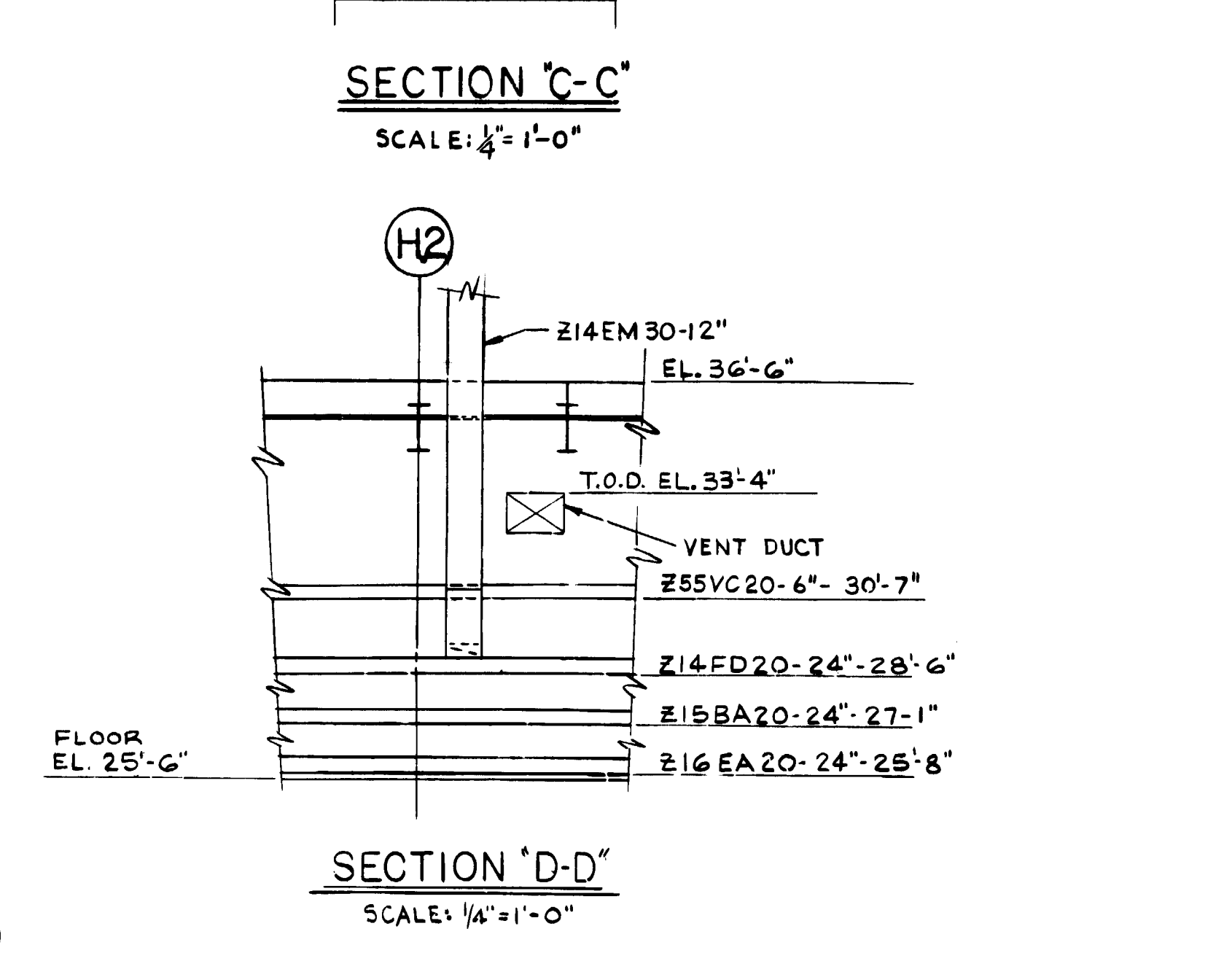
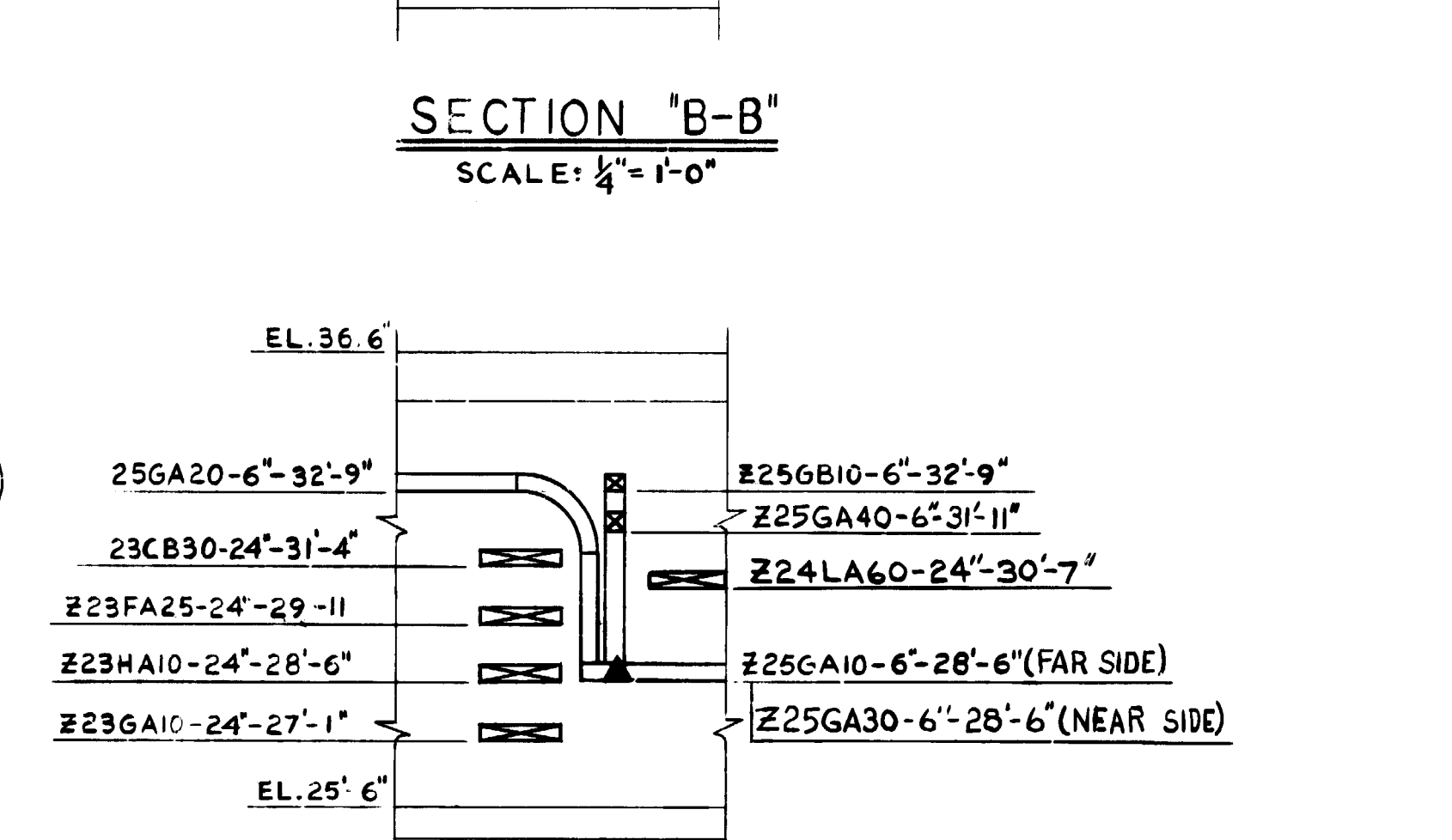
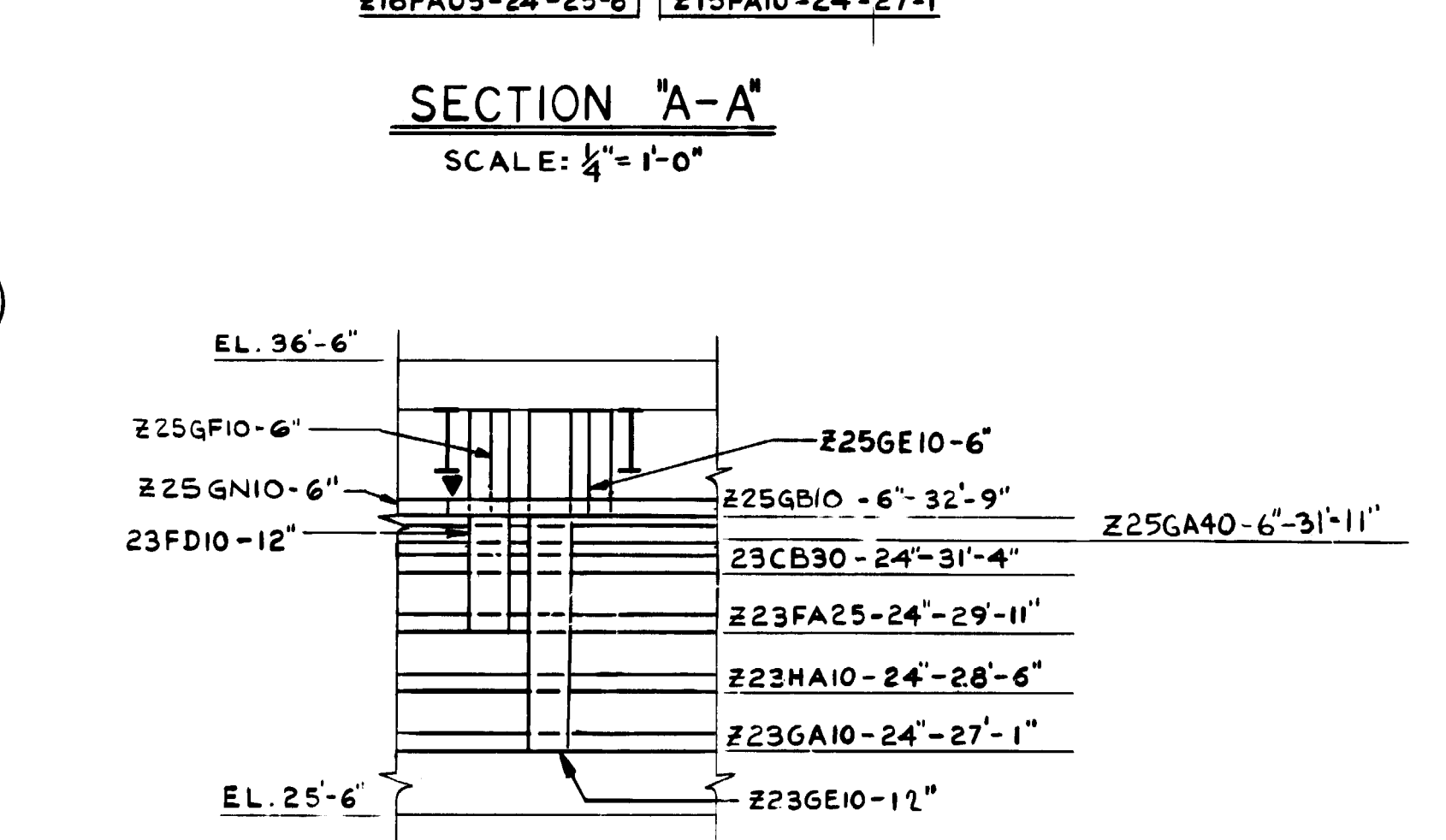
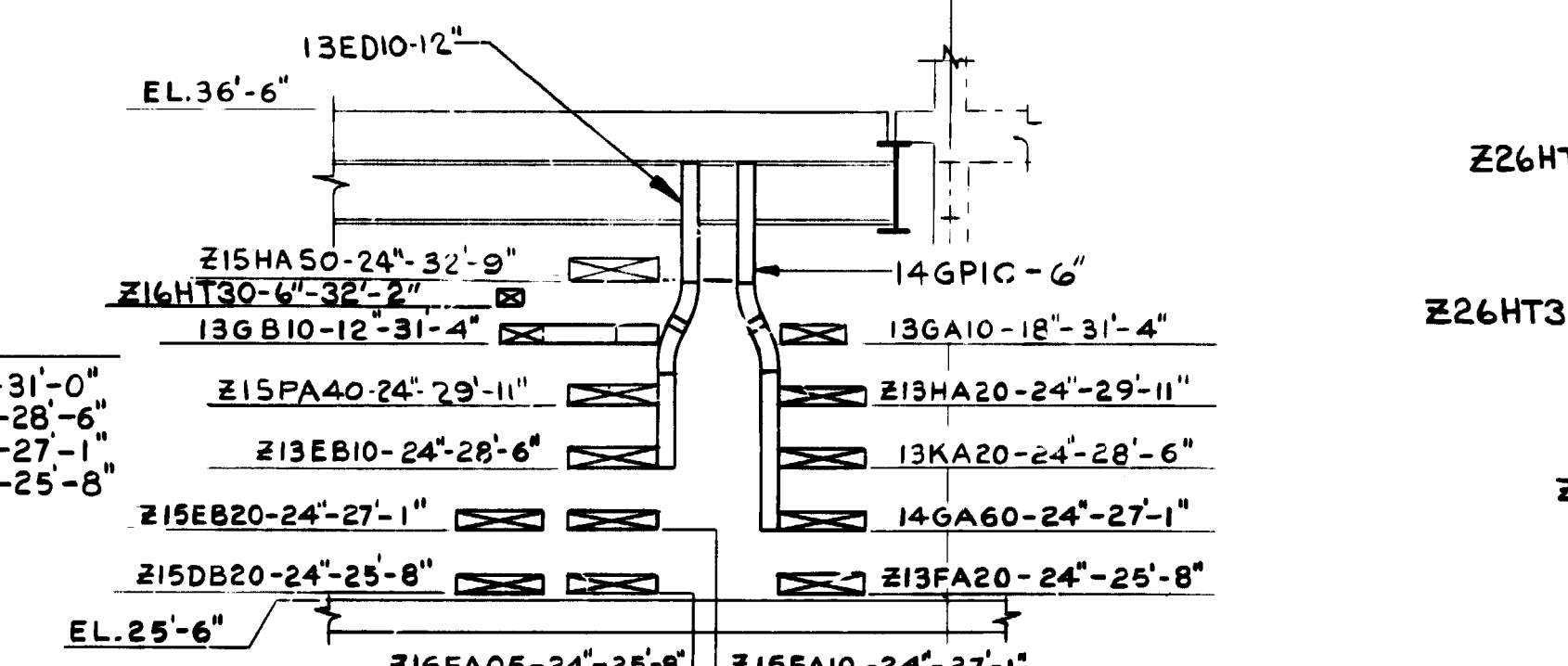
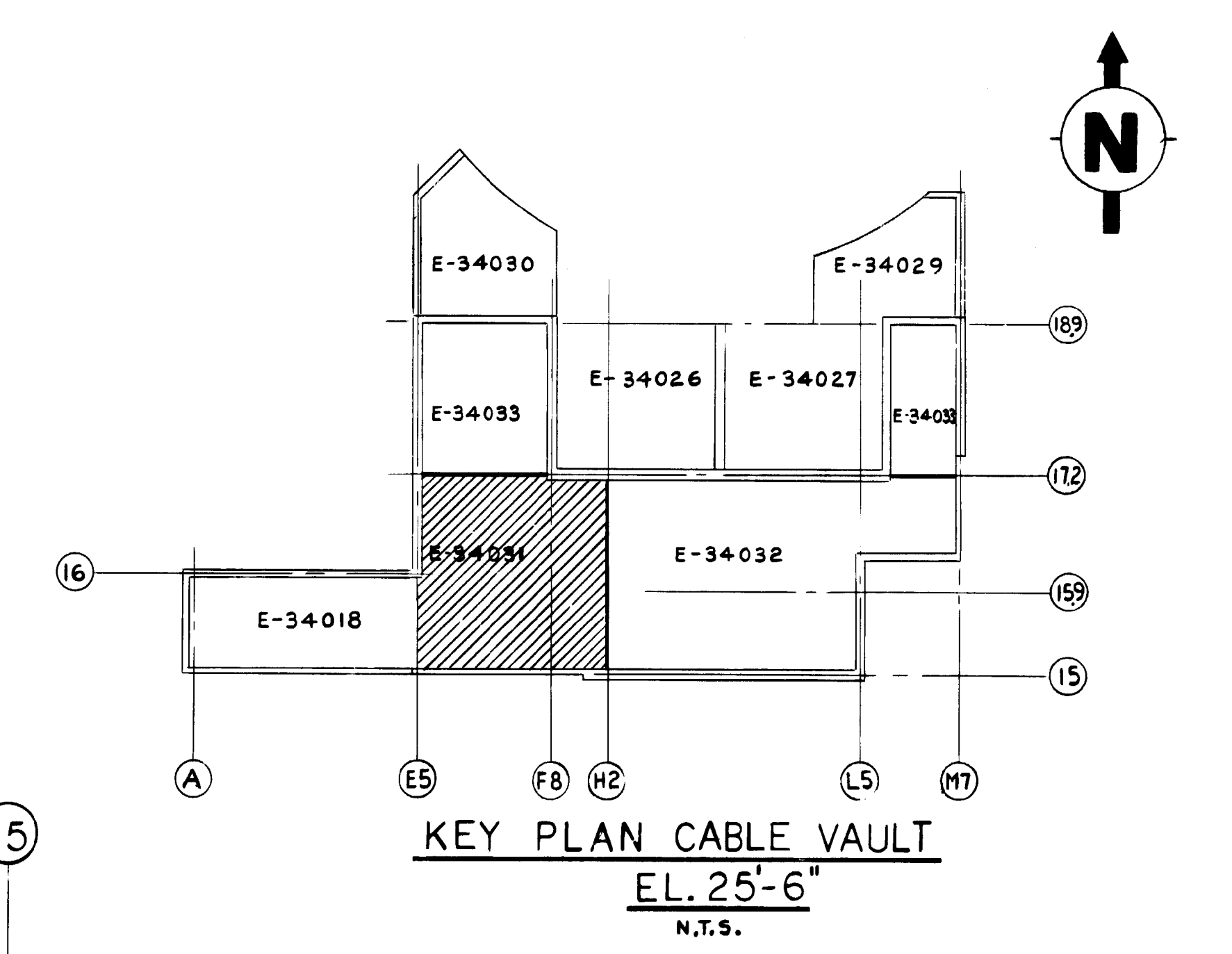
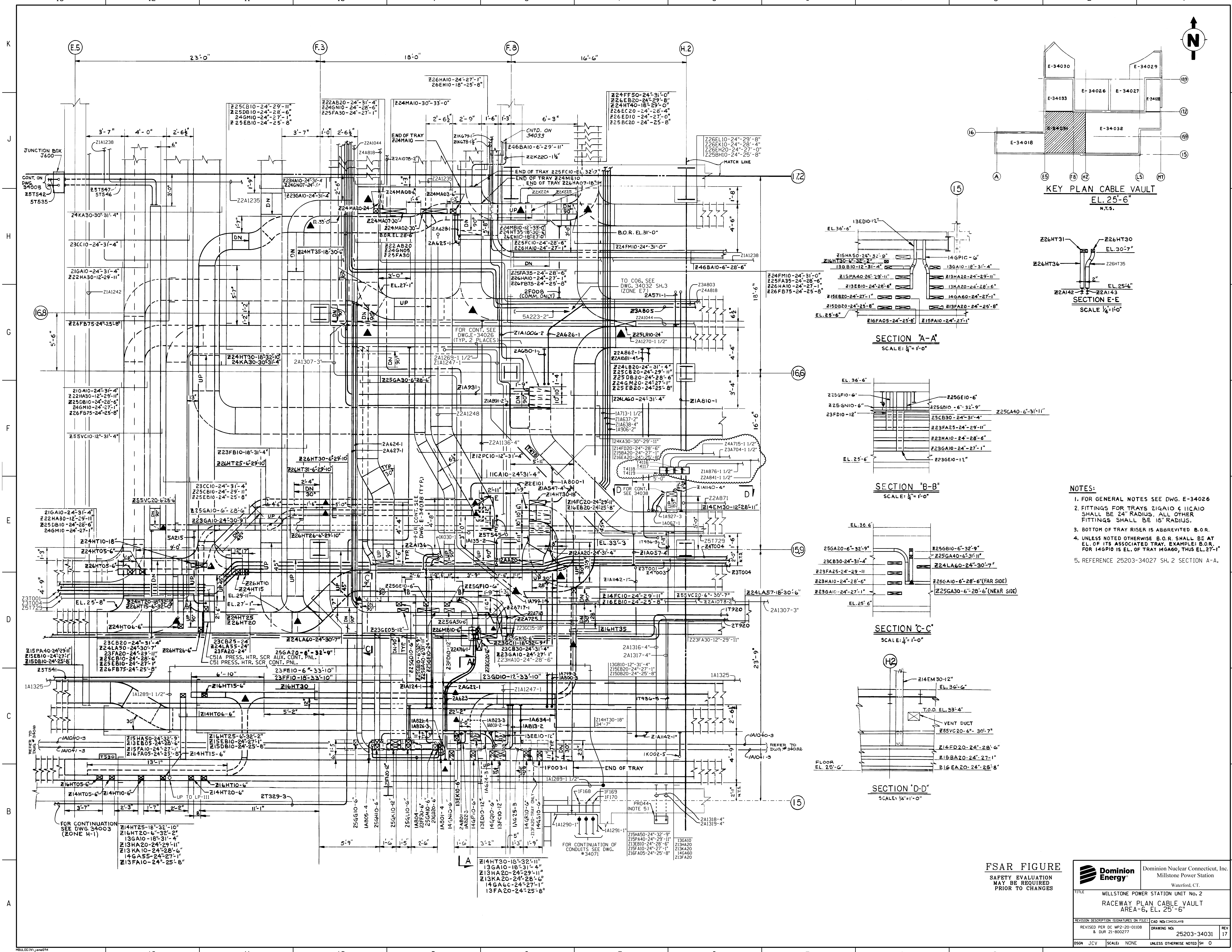
**CAD**  
MANUAL REVISIONS TO  
THIS DOCUMENT WHEN  
AS-BUILT ARE PROHIBITED



Dominion Nuclear Connecticut, Inc.  
Millstone Power Station

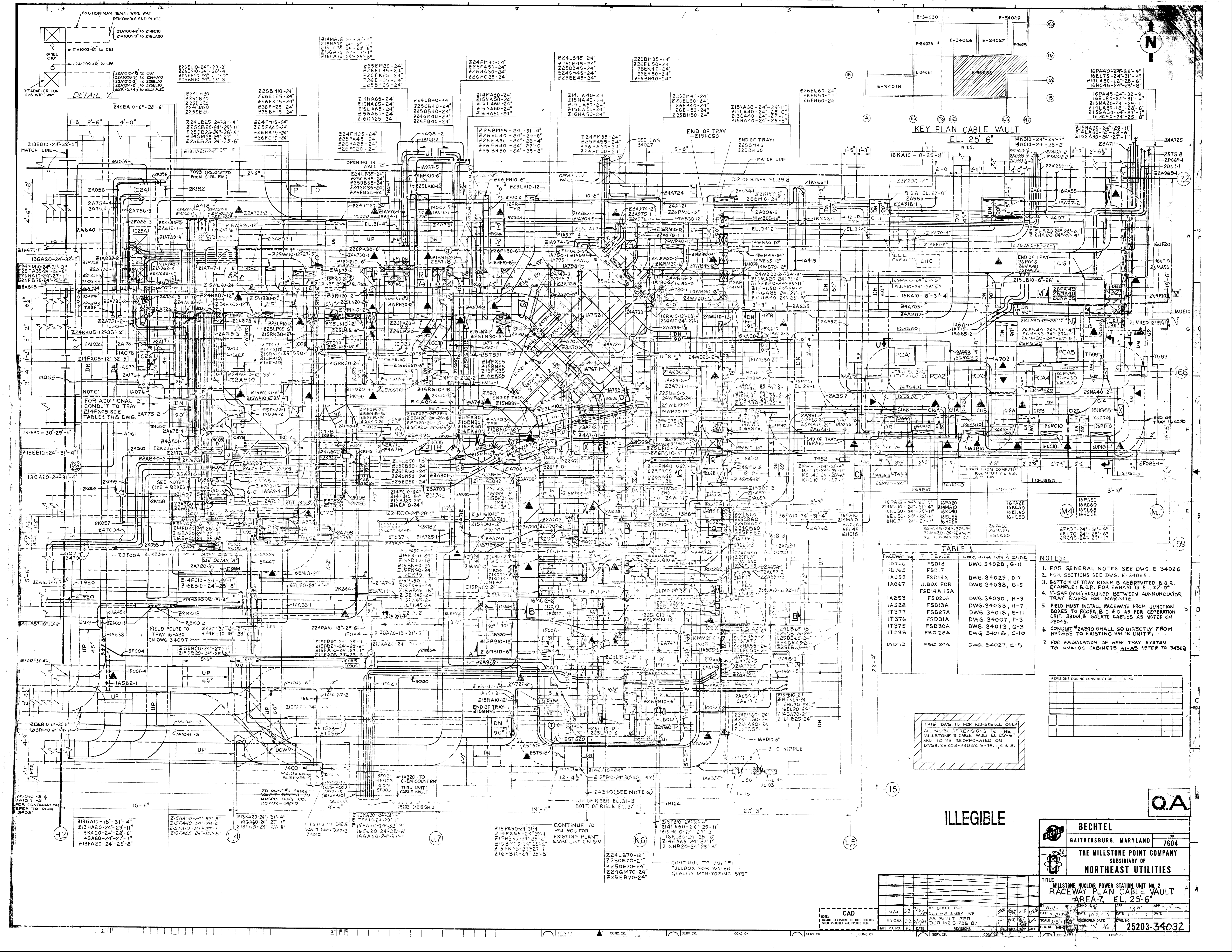
TITLE  
MILLSTONE UNIT 2  
MANUAL TRIP PUSHBUTTON  
COMPUTER INPUT  
WATERFORD, CT.

BY JMM	CHKD. _____	APP. _____	APP. _____
DATE 8/8/96	DATE	DATE	DATE
SCALE N/A	DWG. NO. 25203-32045 SH. 12		



- NOTES:**
- FOR GENERAL NOTES SEE DWG. E-34026
  - FITTINGS FOR TRAYS Z1GA10 & I1CA10 SHALL BE 24" RADIUS. ALL OTHER FITTINGS SHALL BE 18" RADIUS.
  - BOTTOM OF TRAY RISER IS ABBREVIATED B.O.R.
  - UNLESS NOTED OTHERWISE B.O.R. SHALL BE AT EL. OF ITS ASSOCIATED TRAY. EXAMPLE: B.O.R. FOR 14GPIC IS EL. OF TRAY 14GA60, THUS EL. 27'-1"
  - REFERENCE 25203-34027 SH. 2 SECTION A-A.

<b>FSAR FIGURE</b>			Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.
SAFETY EVALUATION MAY BE REQUIRED PRIOR TO CHANGES			
MILLSTONE POWER STATION UNIT No. 2 RACEWAY PLAN CABLE VAULT AREA-6, EL. 25'-6"			
REVISION DESCRIPTION	SIGNATURES ON FILE	CAD NO: E34031.MXD	REV
REVISED PER DC MP2-20-0108 & DUP 21-900277		DRAWING NO: 25203-34031	17
DSGN JCV	SCALE: NONE	UNLESS OTHERWISE NOTED SH O	



**KEY PLAN CABLE VAULT**  
EL. 25'-6"

**TABLE 1**

FACEWAY NO.	DEVICE	DWG. LOCATION & ZONE
IA076	FSD18	DWG. 34028, G-11
IA059	FSD17	DWG. 34029, D-7
IA067	J.BOX FOR FSD14, 15A	DWG. 34038, G-5
IA253	FSD20A	DWG. 34030, H-9
IA528	FSD13A	DWG. 34038, H-7
IT377	FSD27A	DWG. 34018, E-11
IT376	FSD31A	DWG. 34007, F-3
IT375	FSD30A	DWG. 34013, G-3
IT386	FSD 28A	DWG. 34018, C-10
IA058	FSD 24A	DWG. 34027, C-5

- NOTES:**
- FOR GENERAL NOTES SEE DWG. E 34026
  - FOR SECTIONS SEE DWG. E 34035
  - BOTTOM OF TRAY RISER IS ABBREVIATED B.O.R. EXAMPLE: B.O.R. FOR 26NA10 IS EL. 27'-0"
  - 1" GAP (MIN) REQUIRED BETWEEN ANNUNCIATOR TRAY RISERS FOR MARINITE.
  - FIELD MUST INSTALL RACEWAYS FROM JUNCTION BOXES TO RCD5A, B, C & D AS PER SEPARATION CRIT. 35001, ISOLATE CABLES AS VOTED ON 32045
  - CONDUIT #24340 SHALL GO DIRECTLY FROM H9582 TO EXISTING SW IN UNIT #1
  - FOR FABRICATION OF NEW TRAY SYSTEM FOR ANALOG CABINETS A1-A3 REFER TO 34928

THIS DWG. IS FOR REFERENCE ONLY  
ALL "AS-BUILT" REVISIONS TO THE MILLSTONE E CABLE VAULT EL. 25'-6" ARE TO BE INCORPORATED ON DWGS. 25202-34032 SHTS. 1, 2 & 3.

**ILLEGIBLE**

**Q.A.**

**BECHTEL**  
GAITHERSBURG, MARYLAND

**THE MILLSTONE POINT COMPANY**  
SUBSIDIARY OF  
**NORTHEAST UTILITIES**

TITLE  
**MILLSTONE NUCLEAR POWER STATION UNIT NO. 2  
RACEWAY PLAN CABLE VAULT  
AREA-7, EL. 25'-6"**

DATE: 2/12/78  
SCALE: 3/8"=1'-0"  
DWG. NO.: 25202-34032

**CAD**

NO.	DATE	REVISIONS
N/A	3/3/78	AS BUILT PER DCR-M.S.-254-87
05	08/22/82	AS BUILT PER D.S. M.S. 735-27

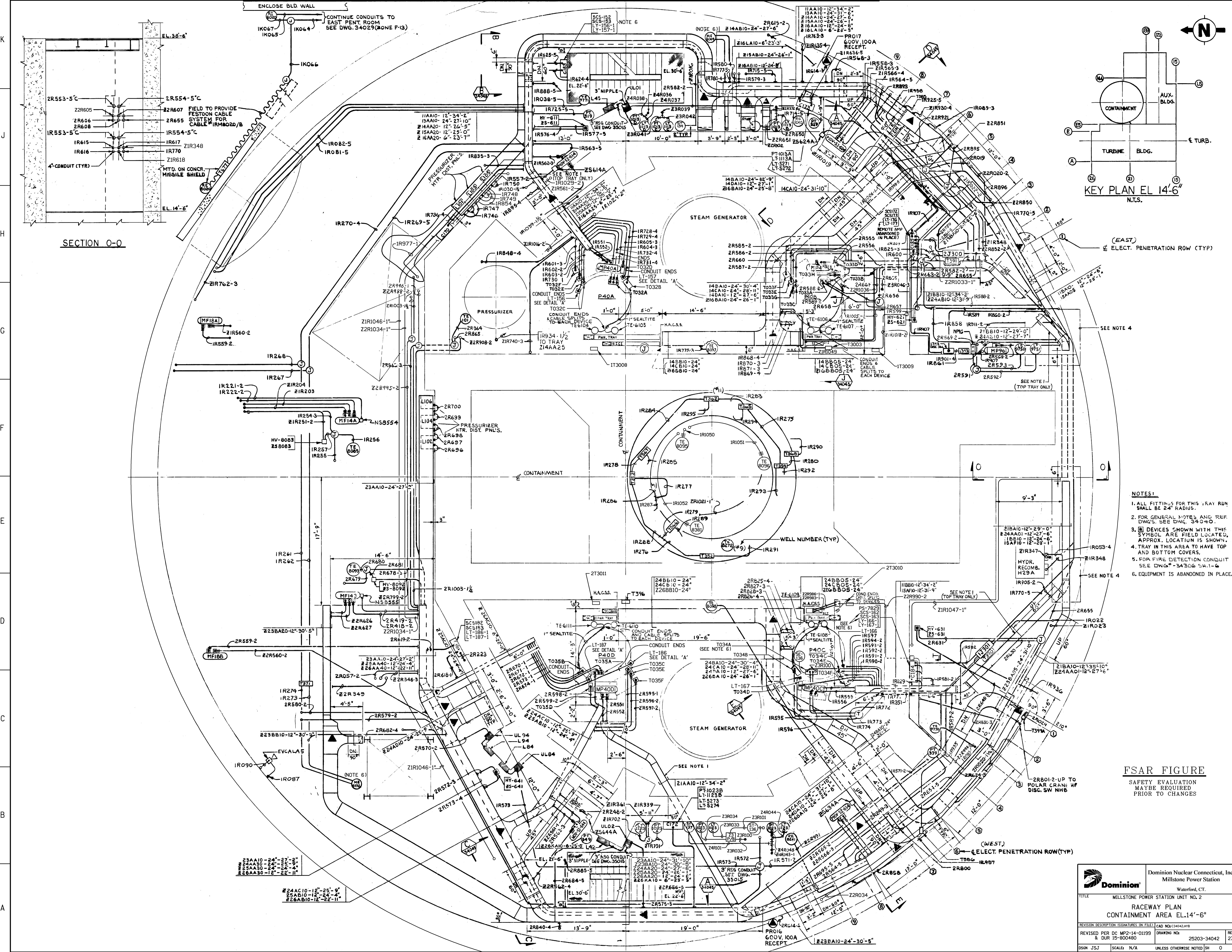
CONTINUE TO PNL 901 FOR EXISTING PLANT EVACUAT. CH SW.

CONTINUE TO UNIT #1 PULLBOX FOR WATER QUALITY MONITORING SYST.

NOTE:  
FOR ADDITIONAL CONDUIT TO TRAY CONDUIT TO TRAY Z14FX05 SEE TABLE THIS DWG. 2A775-2

Z13GA10-18'-31'-4"  
Z13HA20-24'-29'-11"  
Z13KA20-24'-28'-6"  
Z13LA20-24'-27'-11"  
Z13FA20-24'-25'-8"

Z13GA10-18'-31'-4"  
Z13HA20-24'-29'-11"  
Z13KA20-24'-28'-6"  
Z13LA20-24'-27'-11"  
Z13FA20-24'-25'-8"



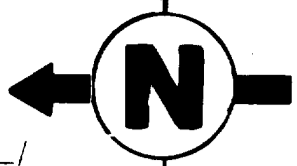
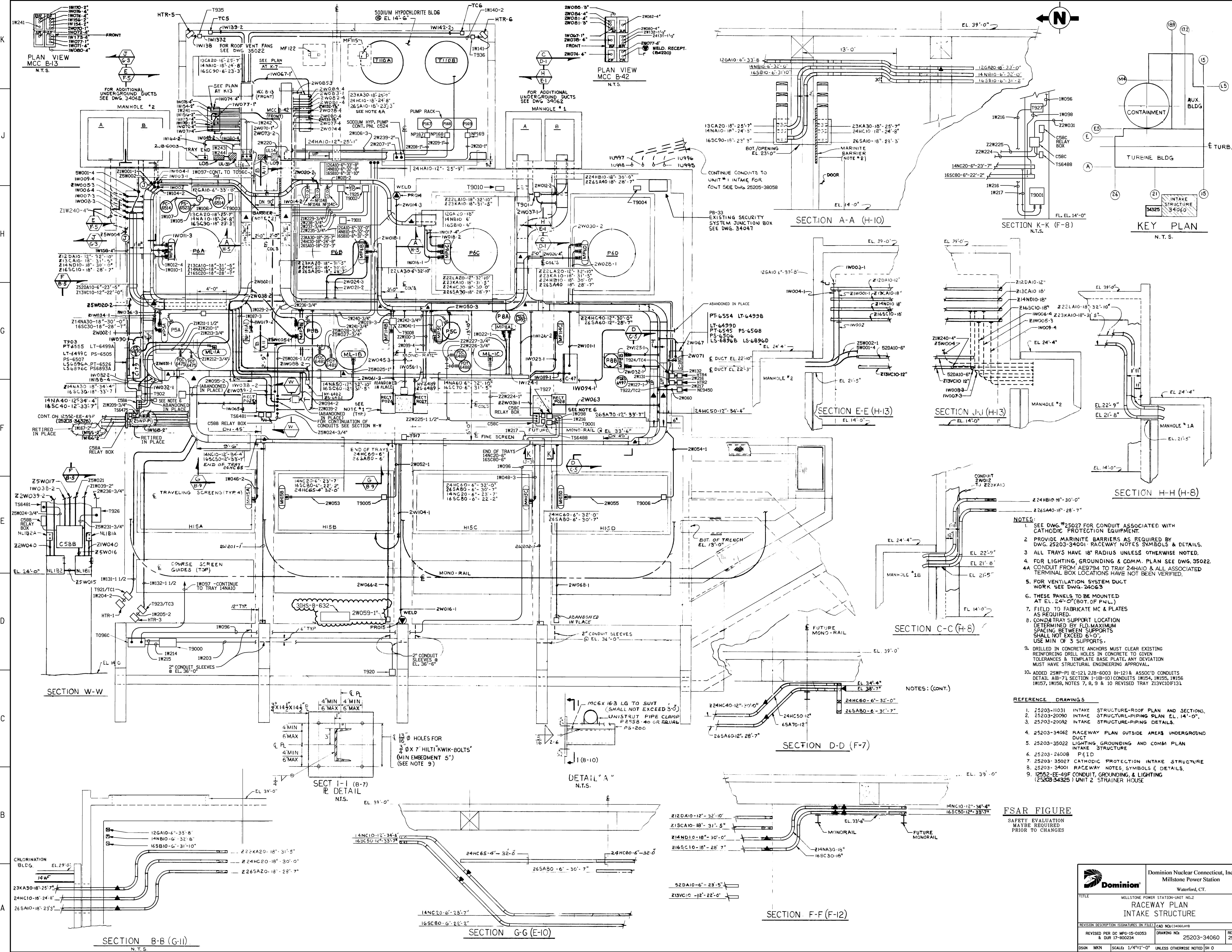
SECTION 0-0

KEY PLAN EL 14'-6"  
N.T.S.

- NOTES:
1. ALL FITTINGS FOR THIS RAY RUN SHALL BE 24" RADIUS.
  2. FOR GENERAL NOTES AND REF. DWG'S. SEE DWG. 34040.
  3. [Symbol] DEVICES SHOWN WITH THIS SYMBOL ARE FIELD LOCATED, APPROX. LOCATION IS SHOWN.
  4. TRAY IN THIS AREA TO HAVE TOP AND BOTTOM COVERS.
  5. FOR FIRE DETECTION CONDUIT SEE DWG. 34206 SA.1-G
  6. EQUIPMENT IS ABANDONED IN PLACE.

FSAR FIGURE  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE: MILLSTONE POWER STATION UNIT NO. 2 RACEWAY PLAN CONTAINMENT AREA EL.14'-6"			
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO. C34042.HWB		DRAWING NO. 25203-34042 REV 27	
REVISION PER DC MP2-14-01199 & DUR 15-600490	UNLESS OTHERWISE NOTED SH 0		



PLAN VIEW MCC B-13  
N.T.S.

PLAN VIEW MCC B-42  
N.T.S.

KEY PLAN  
N.T.S.

SECTION A-A (H-10)

SECTION K-K (F-8)  
N.T.S.

SECTION E-E (H-13)

SECTION J-J (H-13)

SECTION H-H (H-8)

SECTION C-C (H-8)

SECTION D-D (F-7)

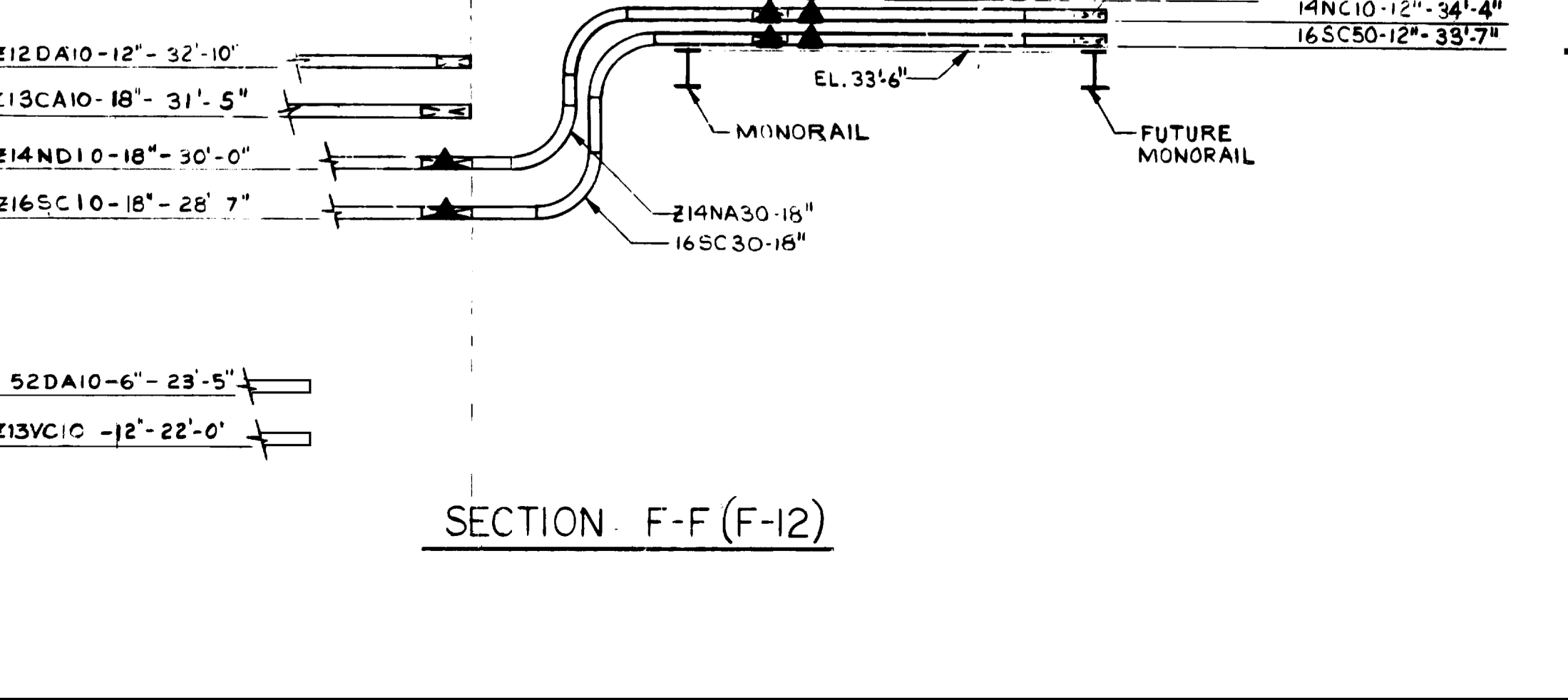
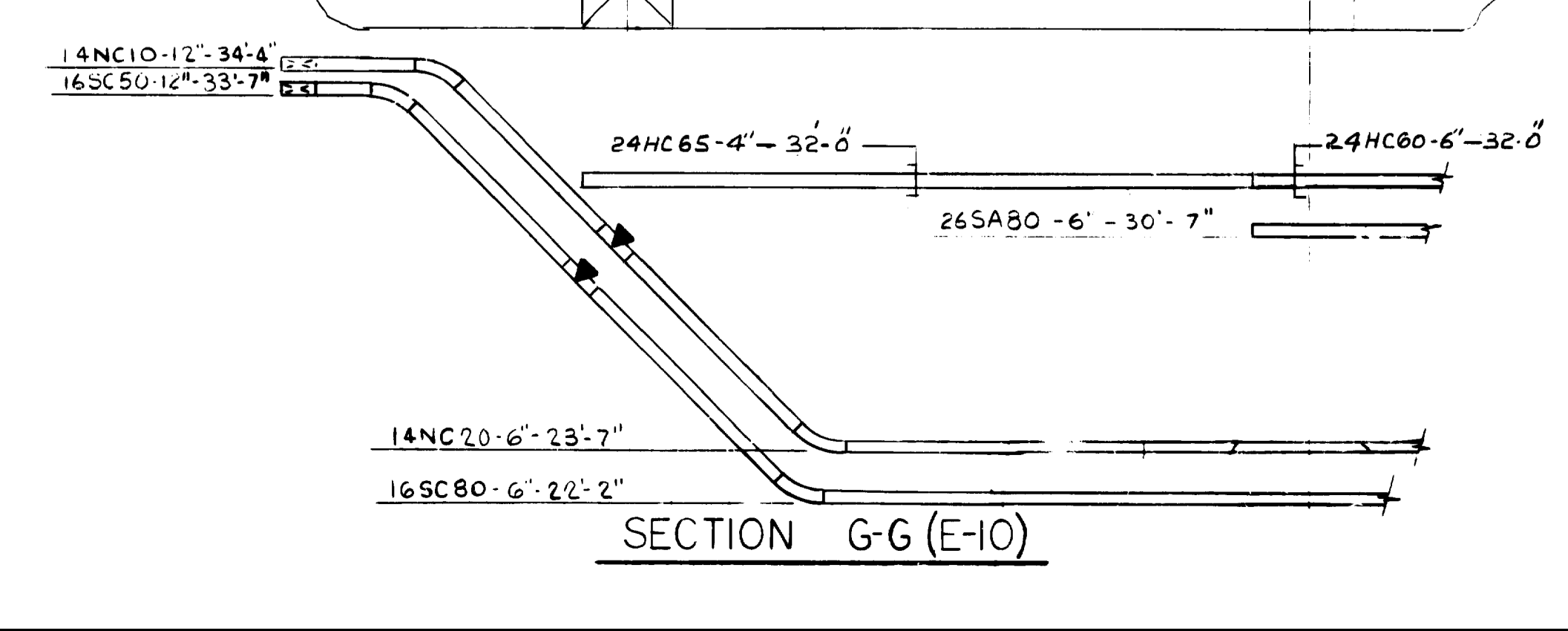
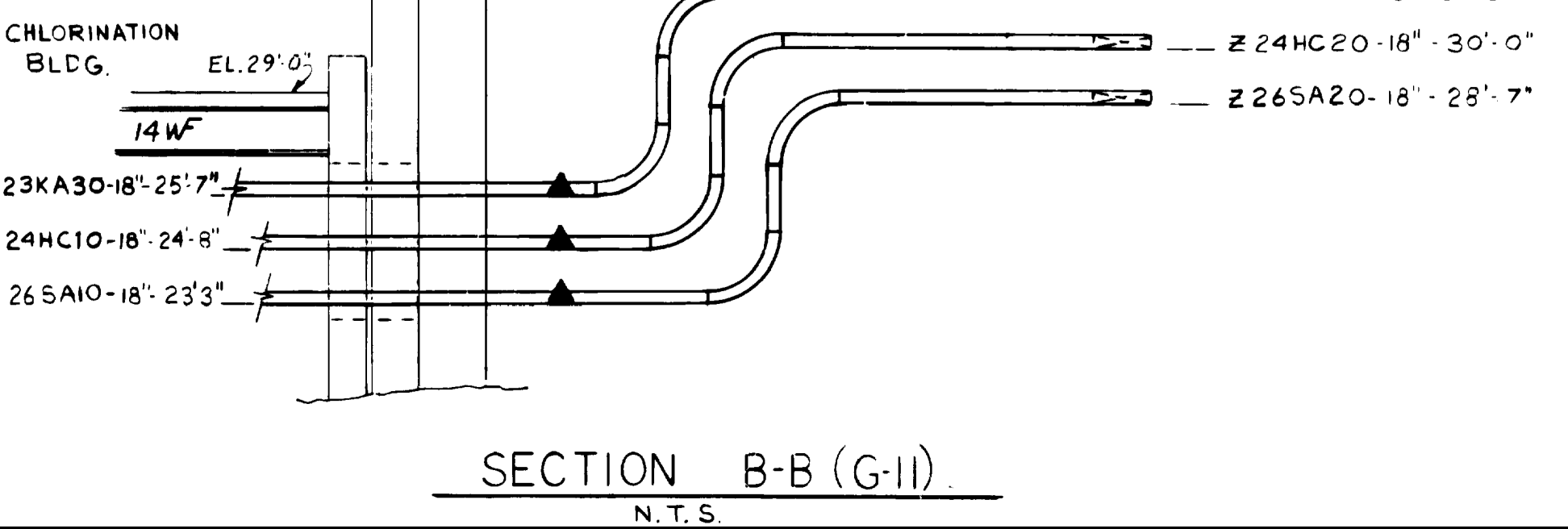
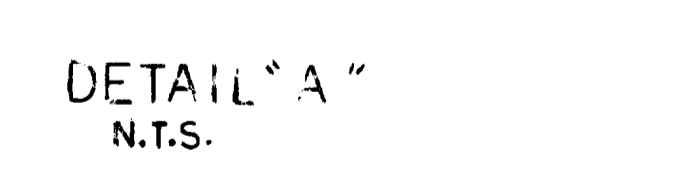
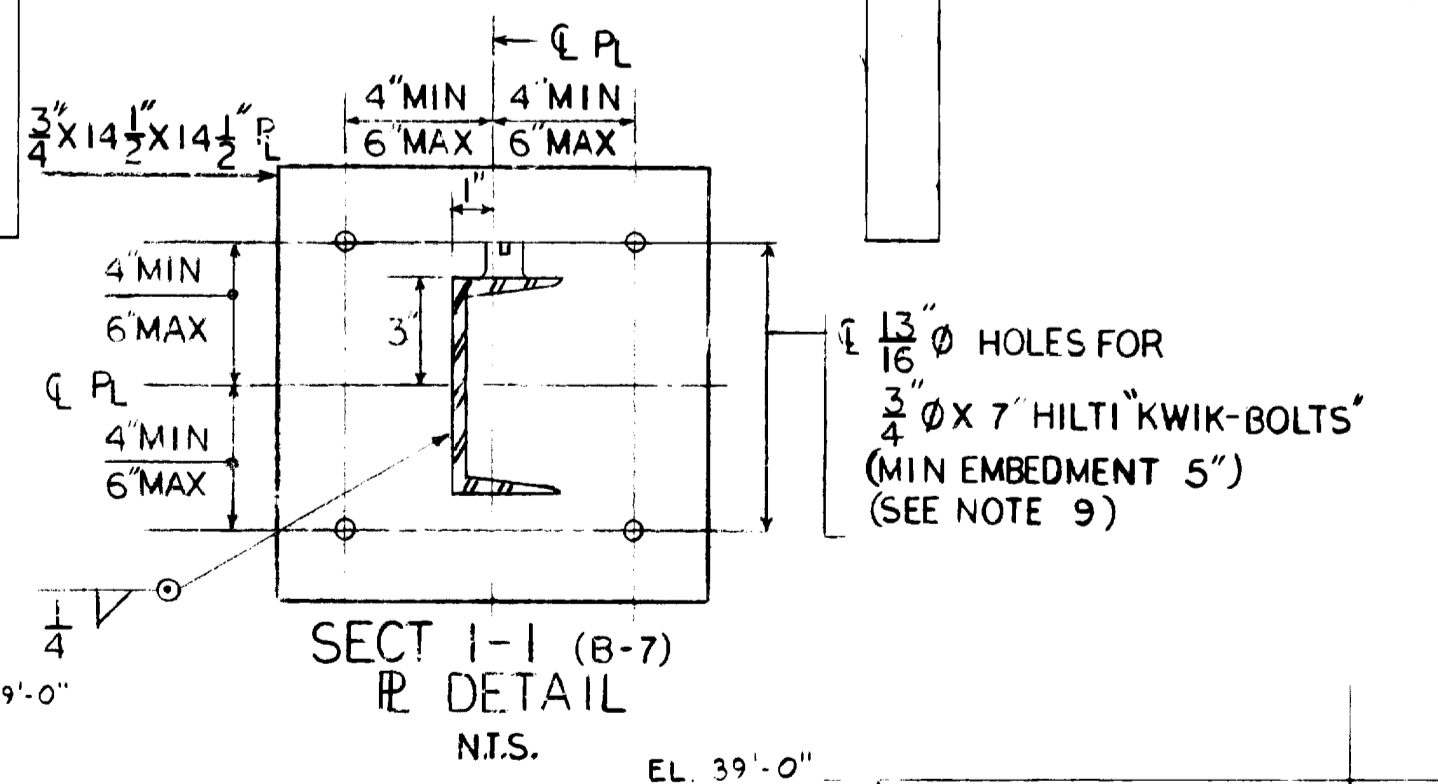
SECTION F-F (F-12)

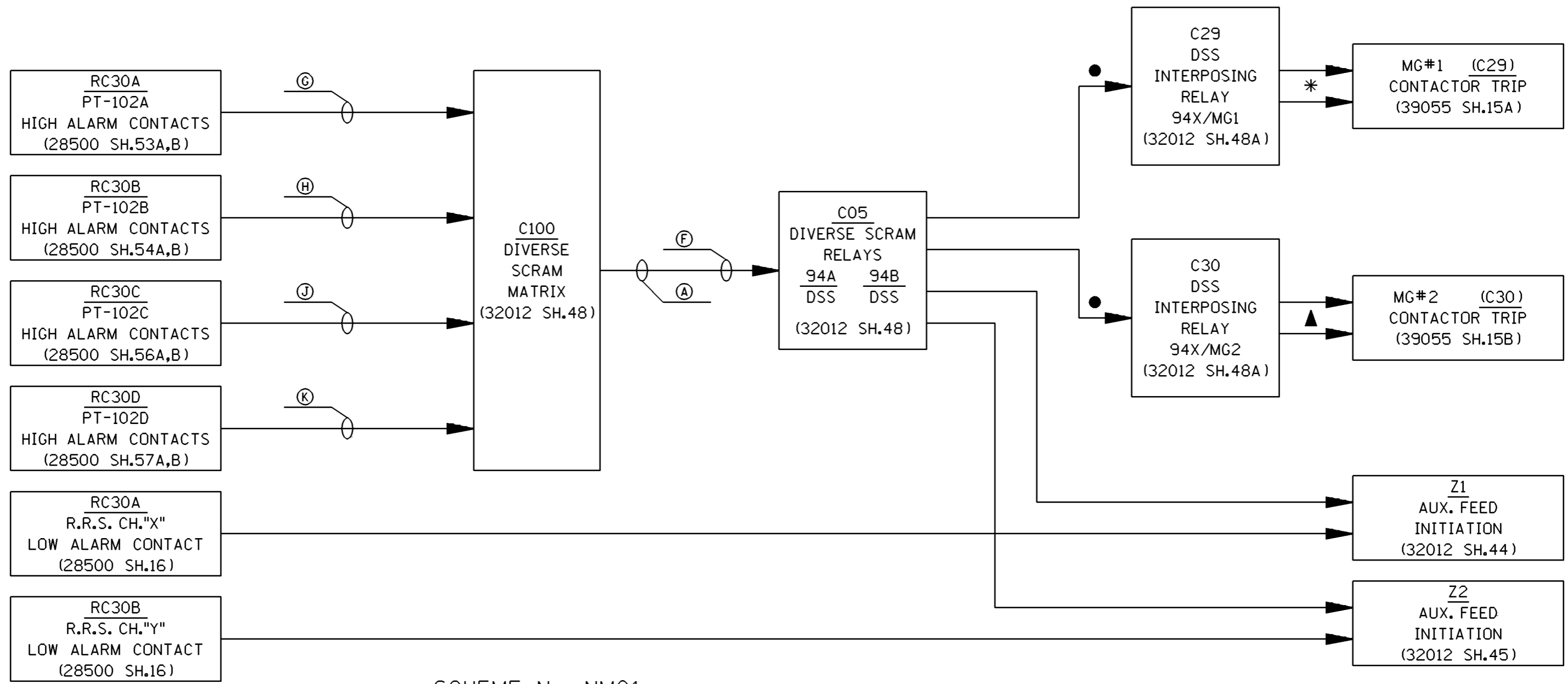
- NOTES:
- SEE DWG #25027 FOR CONDUIT ASSOCIATED WITH CATHODIC PROTECTION EQUIPMENT.
  - PROVIDE MARINITE BARRIERS AS REQUIRED BY DWG. 25203-34001 RACEWAY NOTES SYMBOLS & DETAILS.
  - ALL TRAYS HAVE 18" RADIUS UNLESS OTHERWISE NOTED.
  - FOR LIGHTING, GROUNDING & COMM. PLAN SEE DWG. 35022.
  - CONDUIT FROM AE9794 TO TRAY 24HA10 & ALL ASSOCIATED TERMINAL BOX LOCATIONS HAVE NOT BEEN VERIFIED.
  - FOR VENTILATION SYSTEM DUCT WORK SEE DWG. 24063.
  - THESE PANELS TO BE MOUNTED AT EL. 24'-0" (BOT. OF PNL.)
  - FIELD TO FABRICATE MC & PLATES AS REQUIRED.
  - CONDUIT TRAY SUPPORT LOCATION DETERMINED BY FLD. MAXIMUM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED 6'-0". USE MIN. OF 3 SUPPORTS.
  - DRILLED IN CONCRETE ANCHORS MUST CLEAR EXISTING REINFORCING DRILL HOLES IN CONCRETE TO GIVEN TOLERANCES & TEMPLATE BASE PLATE. ANY DEVIATION MUST HAVE STRUCTURAL ENGINEERING APPROVAL.
  - ADDED 25MP-P1 (E-12), 25B-6003 (H-12) & ASSOC'D CONDUITS DETAIL AIG-71 SECTION F-10 (10) CONDUITS 1W154, 1W155, 1W156, 1W157, 1W158, NOTES 7, 8, 9 & 10 REVISED TRAY 213VC10/131.

- REFERENCE DRAWINGS
- 25203-11031 INTAKE STRUCTURE-ROOF PLAN AND SECTIONS.
  - 25203-20090 INTAKE STRUCTURE-PIPING PLAN EL. 14'-0".
  - 25203-20092 INTAKE STRUCTURE-PIPING DETAILS.
  - 25203-34062 RACEWAY PLAN OUTSIDE AREAS UNDERGROUND DUCT.
  - 25203-35022 LIGHTING GROUNDING AND COMM PLAN INTAKE STRUCTURE.
  - 25203-26008 P&ID.
  - 25203-35027 CATHODIC PROTECTION INTAKE STRUCTURE.
  - 25203-34001 RACEWAY NOTES, SYMBOLS & DETAILS.
  - 12552-EE-49F CONDUIT, GROUNDING, & LIGHTING (25203-34325) UNIT 2 STRAINER HOUSE.

FSAR FIGURE  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE: MILLSTONE POWER STATION-UNIT NO.2 <b>RACEWAY PLAN</b> <b>INTAKE STRUCTURE</b>			
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C34060149B	DRAWING NO: 25203-34060	REV: 25	DSN: MKN SCALE: 1/4"=1'-0" UNLESS OTHERWISE NOTED SH O





SCHEME No. NM01  
FACILITY Z5  
(SEE NOTE 3)

**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

**NOTES:**

- \* REF. BLOCK DIAG. M-G SET No.1 37005,SH.21
- ▲ REF. BLOCK DIAG. M-G SET No.2 37005,SH.22
- REF. DWG. 32012,SH.46 FOR WIRE Nos.
- FOR ANNUNCIATOR BLOCK DIAG. 32012,SH.48
- REF. DWG. DIVERSE SCRAM 32012,SH.48A

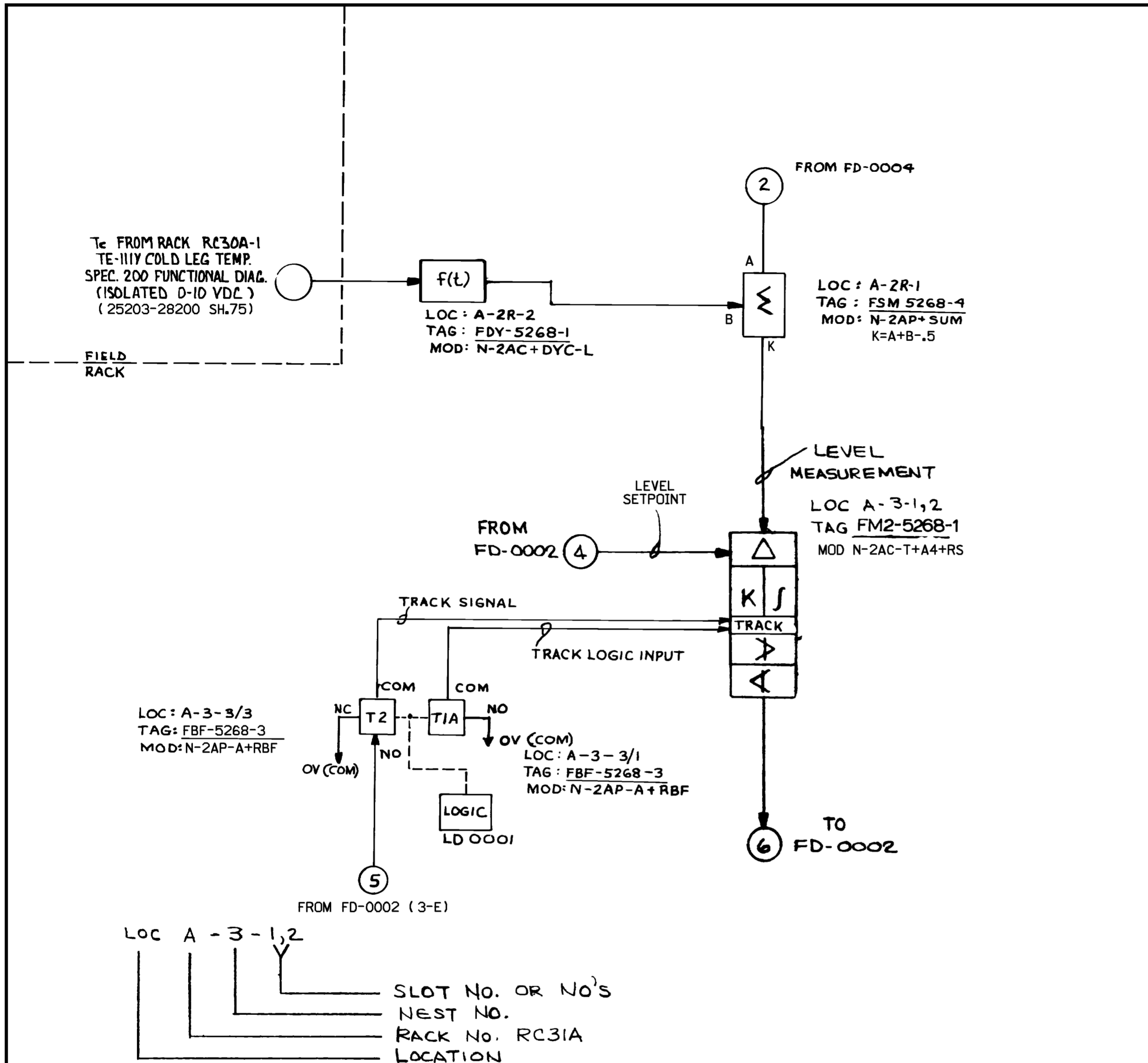
REVISIONS DURING CONSTRUCTION

X							
	4	2-7-00	INCORP. DCN DM2-00-0025-00	JSJ	WBZ	JPP	JPP
	NO.	DATE	REVISIONS	BY	CHK	APP	APP

<b>Q.A.</b>	CAD MANUAL REVISIONS TO THIS DOCUMENT WHEN AS-BUILT ARE PROHIBITED
TITLE MILLSTONE UNIT 2 BLOCK DIAGRAM DIVERSE SCRAM SYSTEM (A.T.W.S.) WATERFORD, CONNECTICUT	

<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station			
BY T.A.SWIFT	CHKD. MEL	APP. MCH	APP.
DATE 7/21/87	DATE 11-12-87	DATE 11-13-87	DATE
SCALE NONE	DWG. NO. 25203-37005 SH.105		
80-082			





**FSAR FIGURE**

SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

NON  
Q.A.

**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

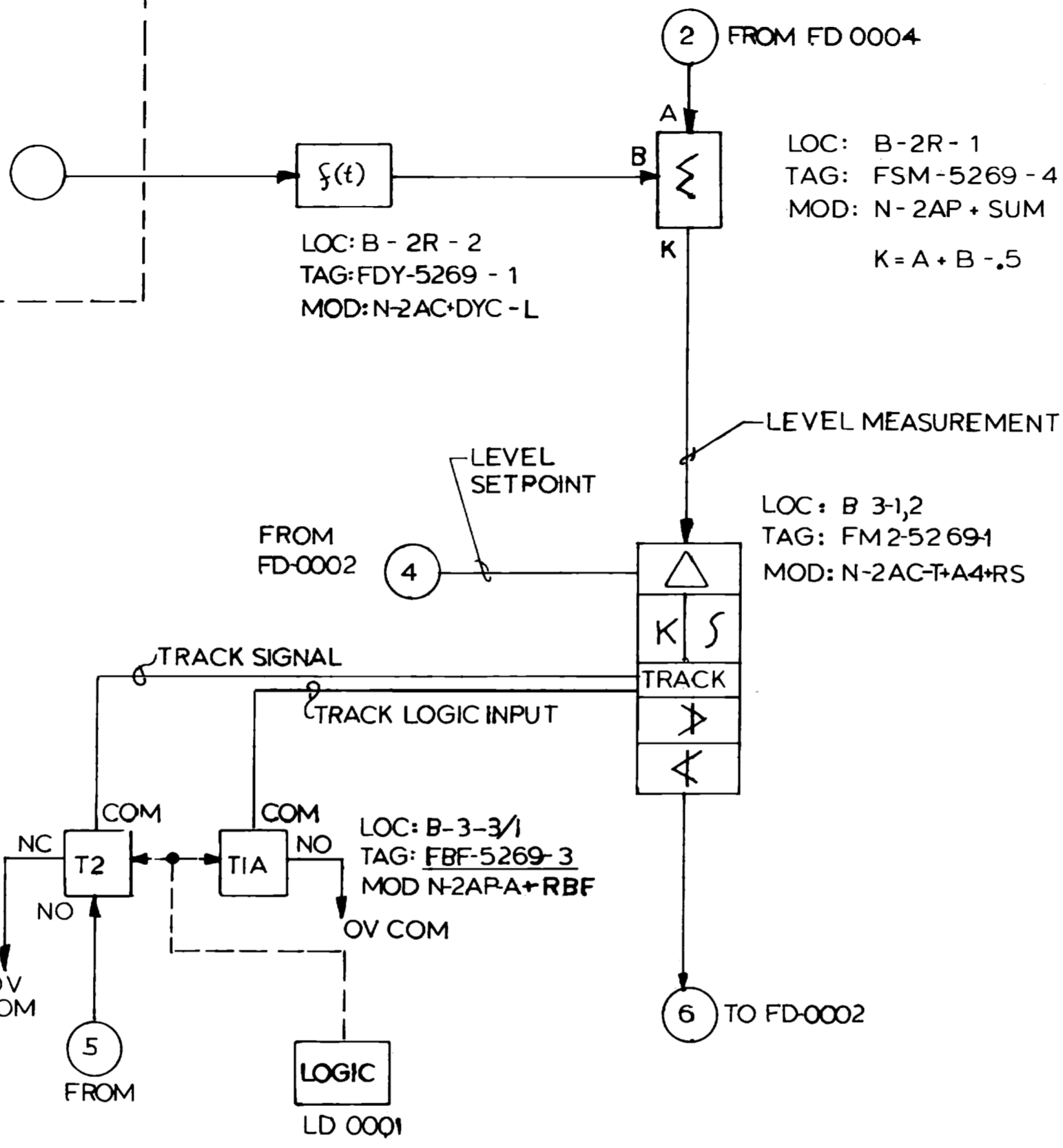
REVISIONS DURING CONSTRUCTION	

VENDOR DWG. No.  
82N56704-FD-0001 REV.3

Dominion Nuclear Connecticut, Inc. Millstone Power Station			
TITLE: MILLSTONE UNIT No.2 FEEDWATER CONTROL SYSTEM "A" SINGLE ELEMENT CONTROL FUNCTIONAL DIAGRAM WATERFORD, CT.			
BY JSJ/JMM	CHKD. —	APP. JPP	APP. JPP
DATE 2-3-00	DATE —	DATE 2-29-00	DATE 2-29-00
SCALE N/A	DWG. NO.	25203-39220 SH.7A	
NO. DATE	REVISIONS	BY	CHK APP APP

T<sub>c</sub> FROM RACK RC30B-1  
TE-121Y COLD LEG TEMP.  
SPEC. 200 FUNCTIONAL DIAG.  
(ISOLATED 0-10 VDC)  
(25203-28200 SH.99)

FIELD  
RACK



LOC: B-3-3/3  
TAG: FBF-5269-3  
MOD: N-2AP-A+RBF

LOC: B-2R-2  
TAG: FDY-5269-1  
MOD: N-2AC+DYC-L

LOC: B-2R-1  
TAG: FSM-5269-4  
MOD: N-2AP+SUM  
K = A + B - .5

LOC: B-3-1,2  
TAG: FM2-5269-1  
MOD: N-2AC-T+A4+RS

LOC: B-3-3/1  
TAG: FBF-5269-3  
MOD: N-2AP-A+RBF

LOC B-3-1,2

SLOT NO OR NO'S  
NEST NO  
RACK NO RC31B  
LOCATION

**FSAR FIGURE**  
SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

NON  
Q.A.

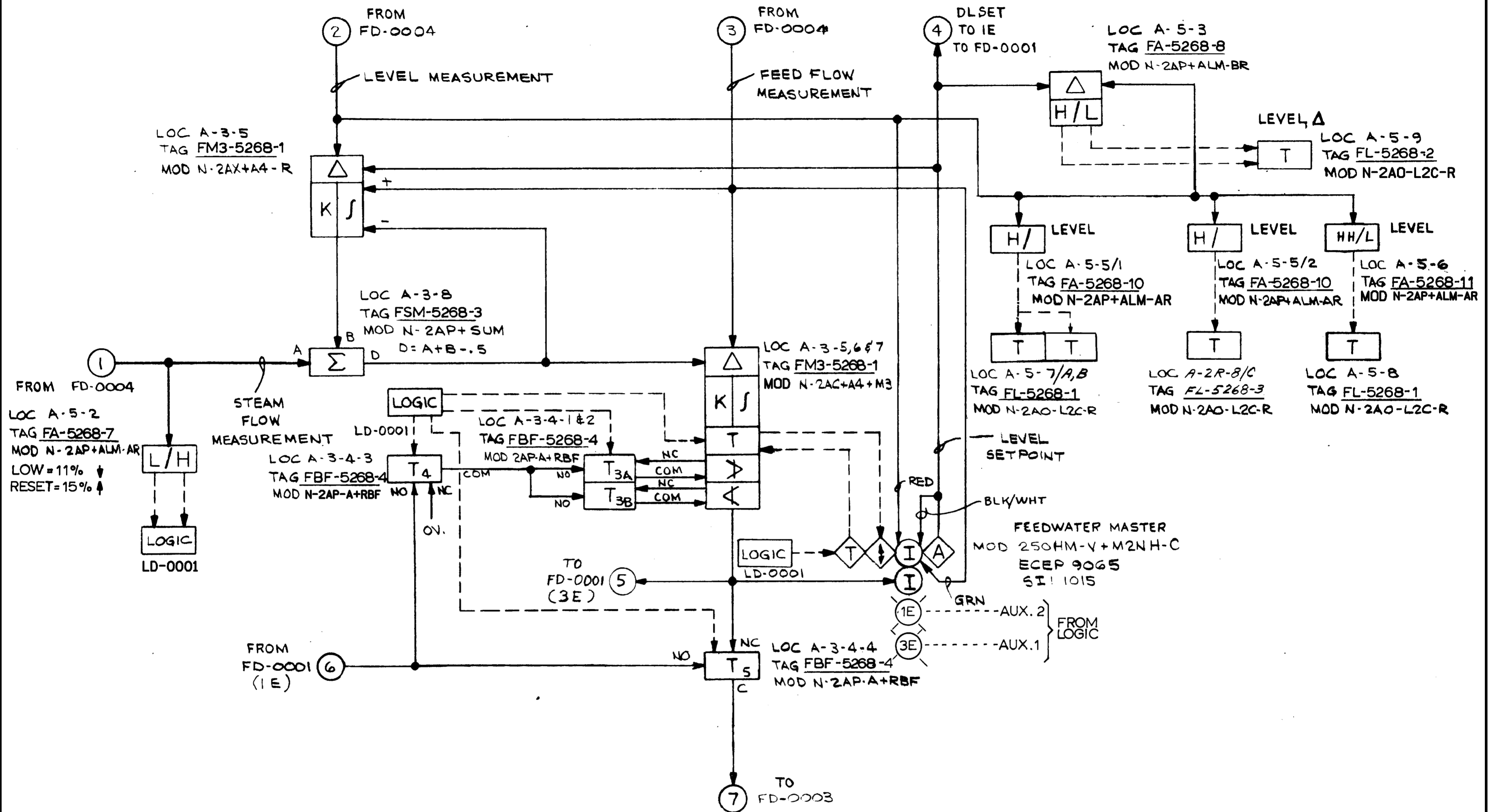
**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION	

VENDOR DWG. No.  
82N56704-FD-0001

BY JSJ/JMM		CHKD. —	APP. JPP	APP. JPP
DATE 2-3-00	DATE —	DATE 2-29-00	DATE 2-29-00	DATE 2-29-00
SCALE N/A	DWG. NO.	25203-39220 SH.7B		
N/A				

**Dominion** Dominion Nuclear Connecticut, Inc.  
Millstone Power Station  
MILLSTONE UNIT No.2  
FEEDWATER CONTROL SYSTEM "B" SINGLE  
ELEMENT CONTROL FUNCTIONAL DIAGRAM  
WATERFORD, CT.



**FSAR FIGURE**

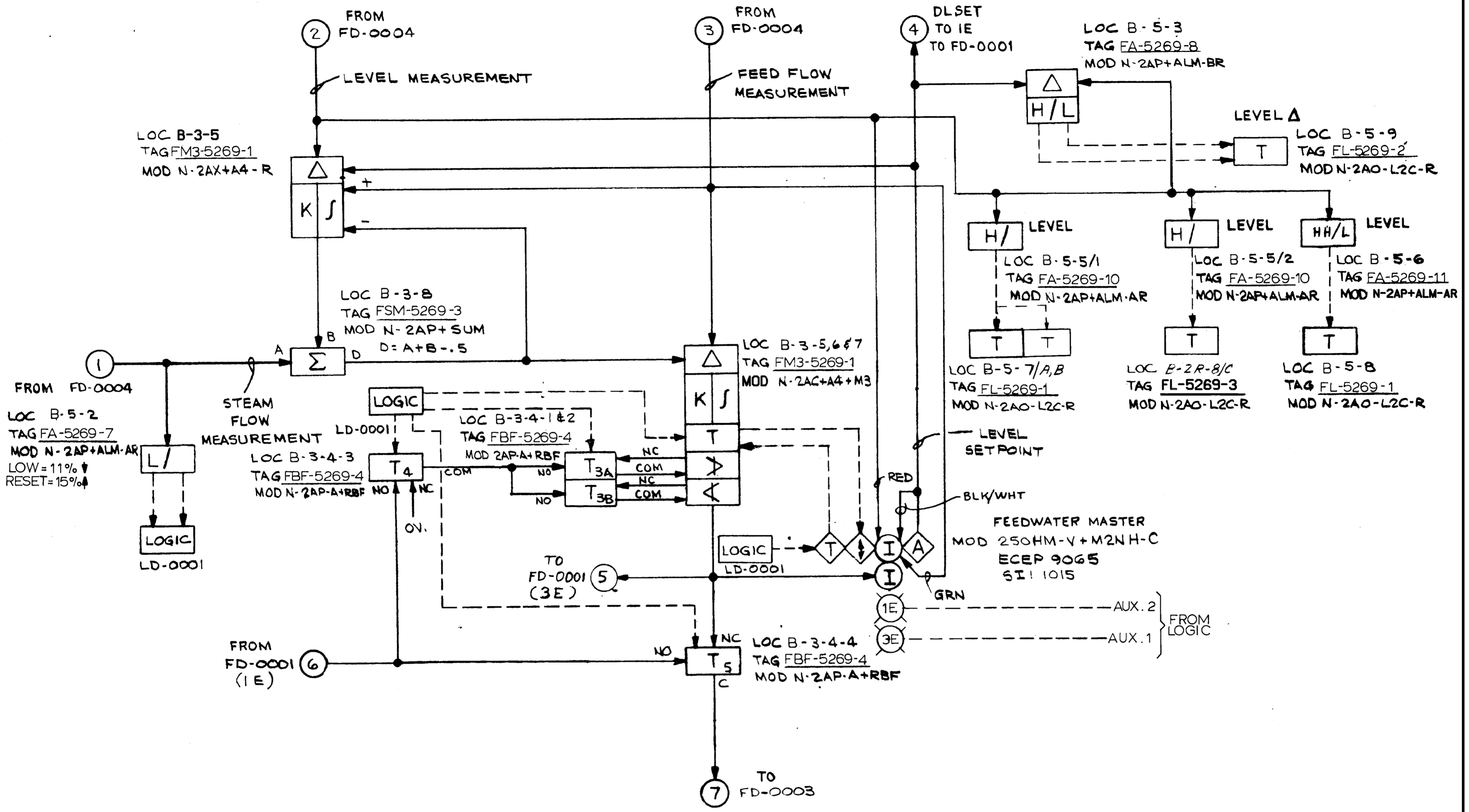
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

NON  
Q.A.

**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION	

		Dominion Nuclear Connecticut, Inc. Millstone Power Station	
		TITLE MILLSTONE UNIT 2 FEEDWATER CONTROL SYSTEM "A" THREE ELEMENT CONTROL FUNCTIONAL CONTROL WATERFORD, CT.	
BY JMM DATE 5-2-95	CHKD. _____ DATE _____	APP. _____ DATE _____	APP. _____ DATE _____
NO. DATE REVISIONS	BY CHK APP APP	SCALE N/A DWG. NO.	25203-39220 SH. 8A



**FSAR FIGURE**

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

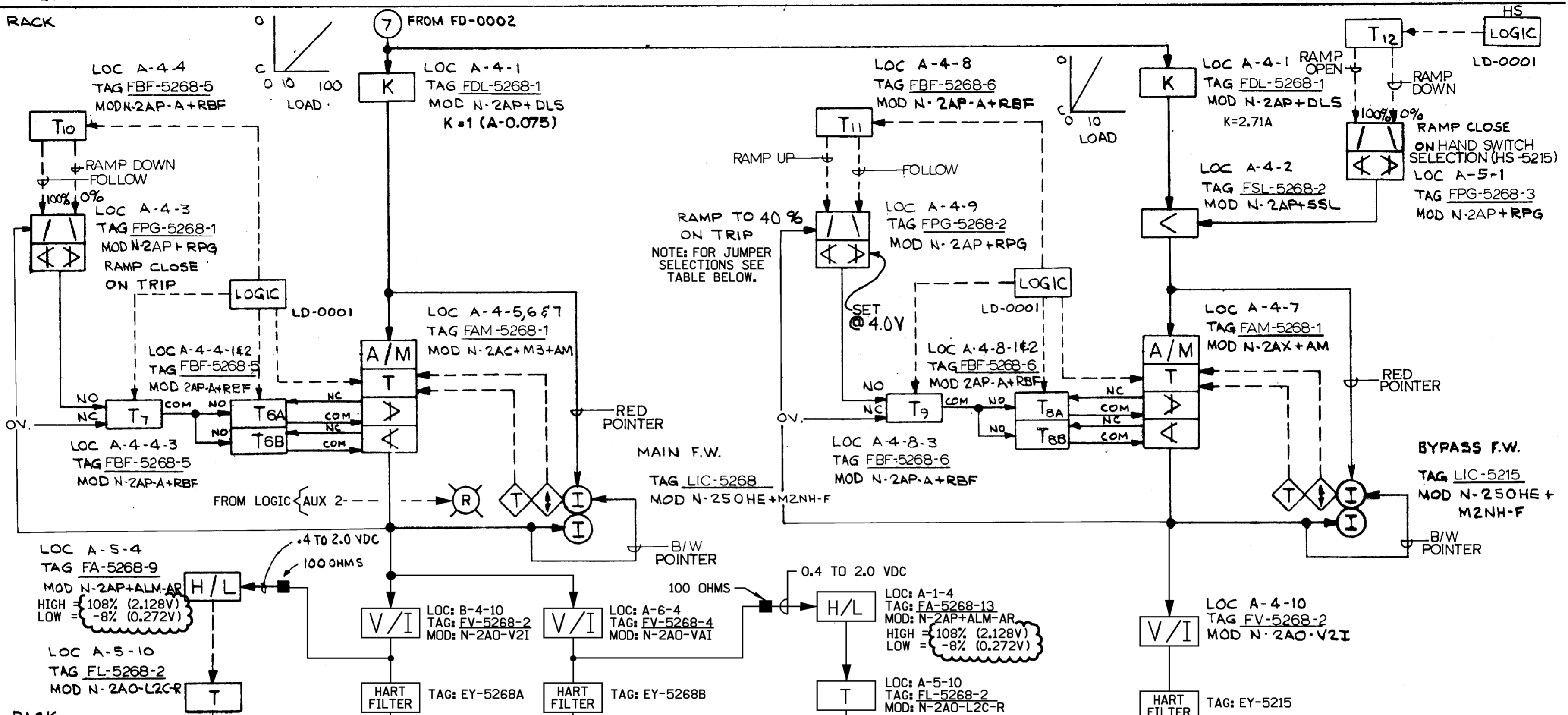
**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION	

		Dominion Nuclear Connecticut, Inc. Millstone Power Station	
		TITLE MILLSTONE UNIT 2 FEEDWATER CONTROL SYSTEM "B" THREE ELEMENT CONTROL FUNCTIONAL CONTROL WATERFORD, CT.	
BY JMM DATE 5-2-95 SCALE N/A	CHKD. _____ DATE _____ DWG. NO. 25203-39220 SH. 8B	INCORP. DCN DM2-00-0025-00 JSM WBZ JPP JPP	INCORP. DCN DM2-S-0321-94 PER DCR M2-S-0277-94 JMM MM DME JPP JPP
NO. DATE	REVISIONS	BY	CHK APP APP

FIELD

RACK



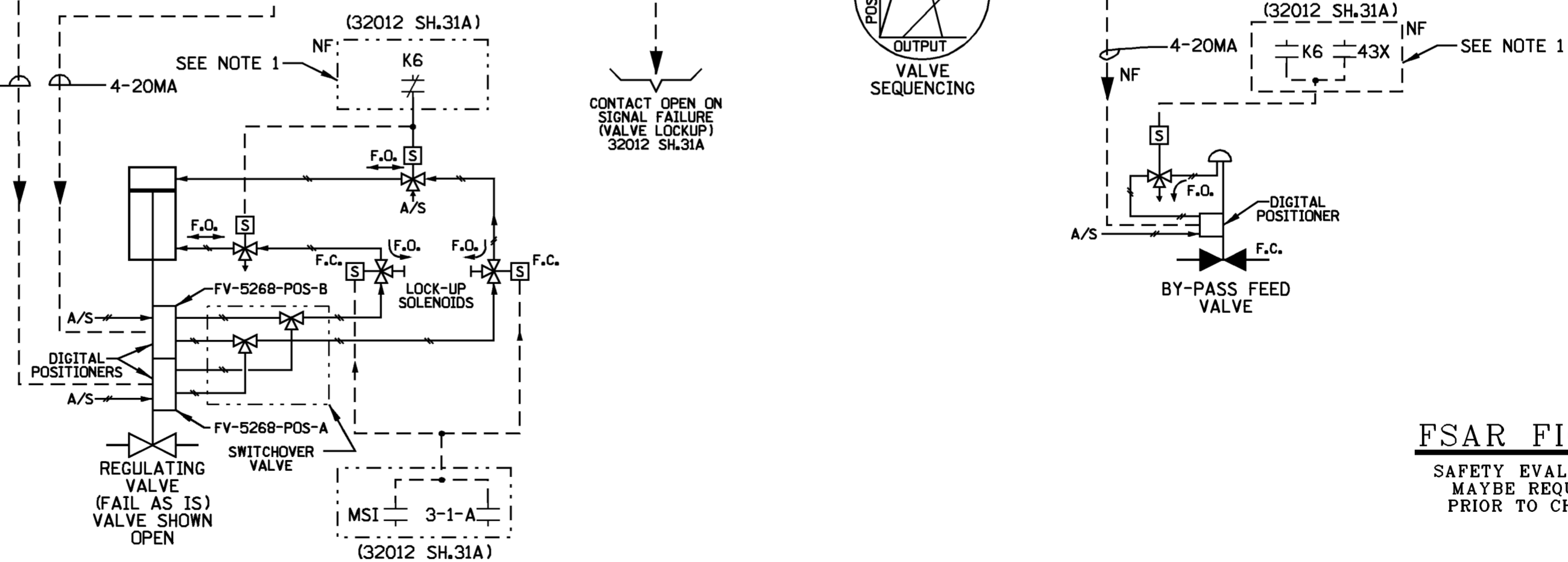
RACK

FIELD

CONTACT OPEN ON SIGNAL FAILURE (VALVE LOCKUP) 32012 SH.31A

CONTACT OPEN ON SIGNAL FAILURE (VALVE LOCKUP) 32012 SH.31A

FPG-5268-2 (JUMPER SELECTION)			
JUMPER	FUNCTION		POSITION
J1	RAMP 1 UP OR DOWN:	RAMP UP RAMP DOWN	P1 TO P3 P1 TO P2
J2	RAMP 2 UP OR DOWN:	RAMP UP RAMP DOWN	P4 TO P5 P4 TO P6
J3	RAMP 1 RATE ADJUSTMENT:	INTERNAL EXTERNAL	P7 TO P8 P7 TO P9
J4	RAMP 2 RATE ADJUSTMENT:	INTERNAL EXTERNAL	P10 TO P11 P10 TO P12
J5	RAMP 1 RATE MULTIPLIER:	X1 X10 X100	P13 TO P16 P13 TO P15 P13 TO P14
J6	RAMP 2 RATE MULTIPLIER	X1 X10 X100	P17 TO P20 P17 TO P19 P17 TO P18
J7	OUTPUT RANGE SELECT:	RANGE 1 RANGE 2	P21 TO P23 P22 TO P23
J8	HIGH-LIMIT ADJUSTMENT:	INTERNAL EXTERNAL	P24 TO P26 P24 TO P25
J9	LOW-LIMIT ADJUSTMENT:	INTERNAL EXTERNAL	P27 TO P28 P27 TO P29
J10	POWER SUPPLY FAULT RECOVERY:	ACTIVE INACTIVE	P30 TO P31 P31 TO P32



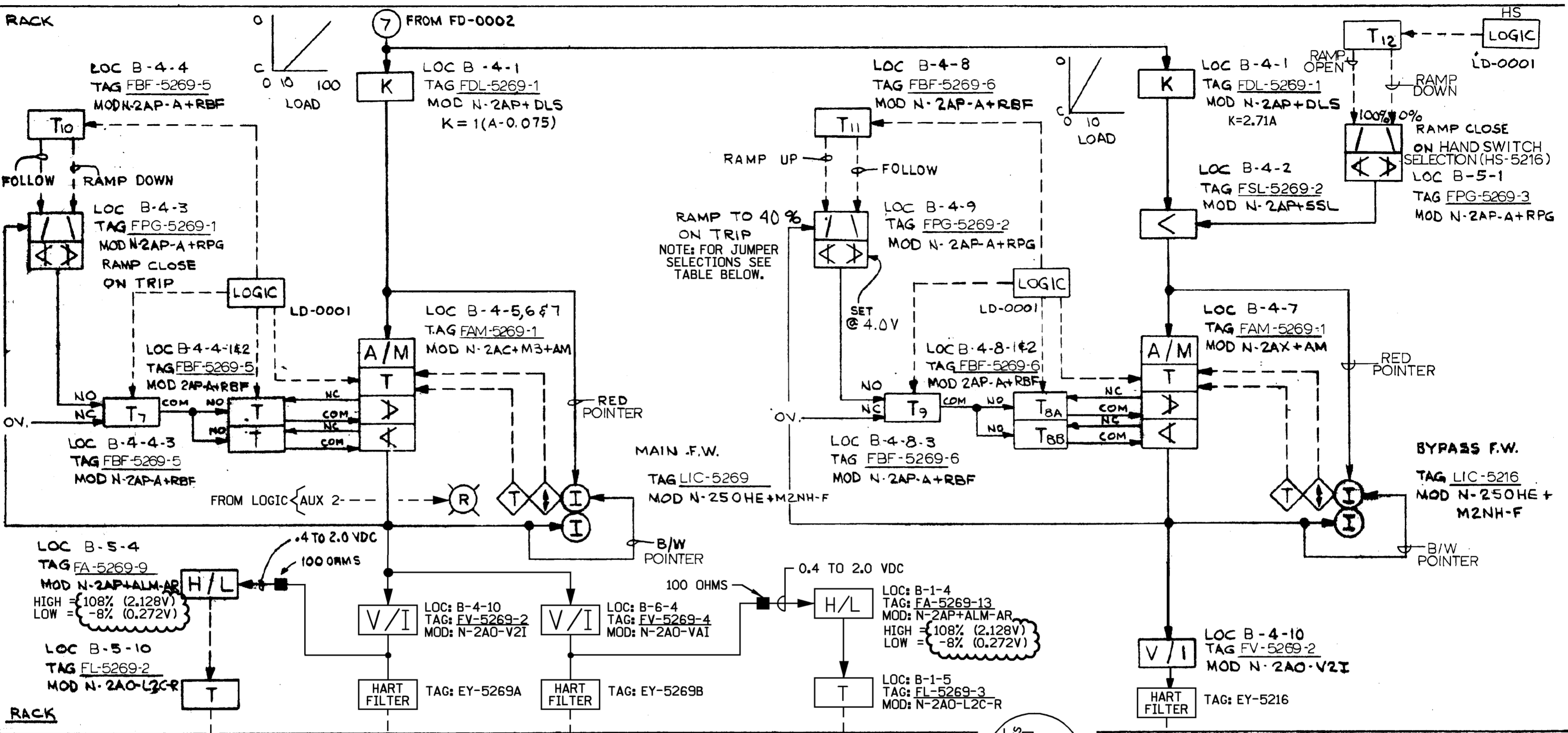
**NOTE:**  
1. EXISTING CUSTOMER CURRENT FAIL TO SYSTEM. UPON RECEIPT OF MSI SIGNAL, MAIN FEED VALVE AND BYPASS FEED VALVE SIGNAL IS DRIVEN LOW BY GROUNDING THE INPUT TO FV-5268-2.

**FSAR FIGURE**  
SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

		Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
TITLE: MILLSTONE UNIT No.2 FEEDWATER CONTROL SYSTEM "A" AUTO/MANUAL VALVE CONTROL FUNCTIONAL DIAGRAM WATERFORD, CT.			
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C392209A.HYB			
REVISED PER DC MP2-17-01045 & DUR 17-800226	DRAWING NO: 25203-39220	REV: 8	UNLESS OTHERWISE NOTED SH 9A
DSON JCV	SCALE: NONE	FOXBORO DWG. No. 82N56704 FD 0003 REV.03 CUST. ORDER No. 818040	

FIELD

RACK

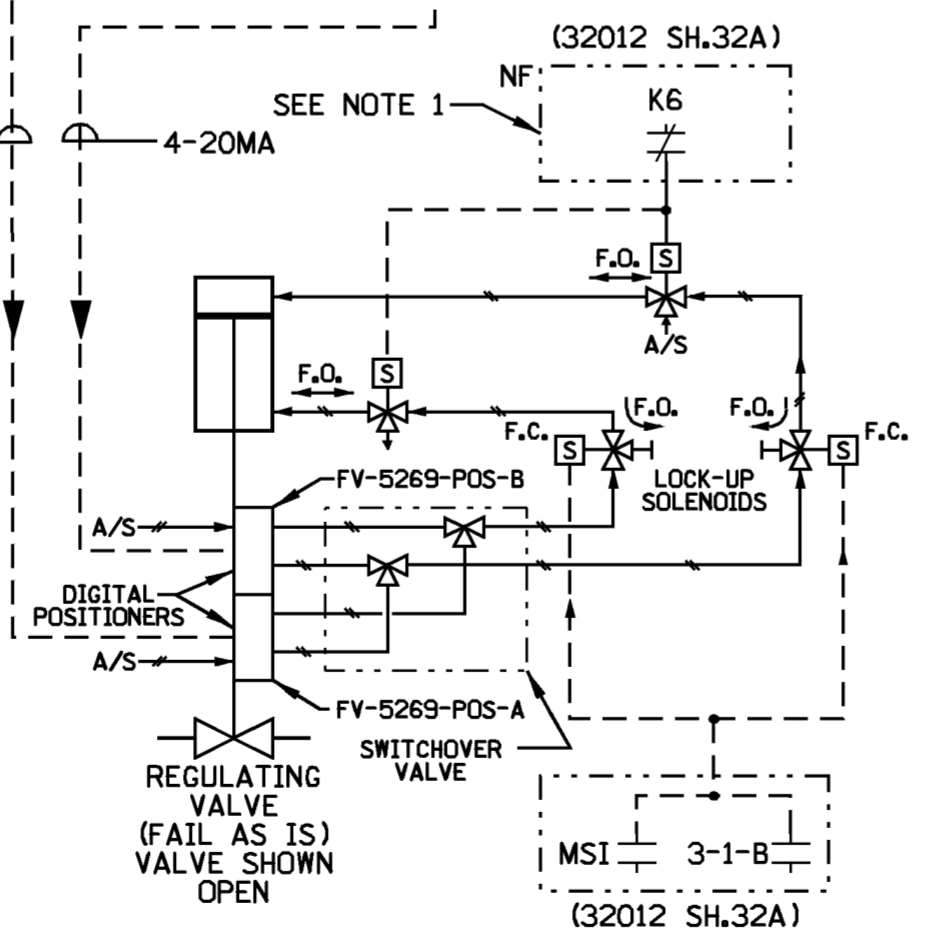


RACK

FIELD

FPG-5269-2 (JUMPER SELECTION)

JUMPER	FUNCTION	POSITION
J1	RAMP 1 UP OR DOWN:	RAMP UP RAMP DOWN P1 TO P3 P1 TO P2
J2	RAMP 2 UP OR DOWN:	RAMP UP RAMP DOWN P4 TO P5 P4 TO P6
J3	RAMP 1 RATE ADJUSTMENT:	INTERNAL EXTERNAL P7 TO P8 P7 TO P9
J4	RAMP 2 RATE ADJUSTMENT:	INTERNAL EXTERNAL P10 TO P11 P10 TO P12
J5	RAMP 1 RATE MULTIPLIER:	X1 X10 X100 P13 TO P16 P13 TO P15 P13 TO P14
J6	RAMP 2 RATE MULTIPLIER	X1 X10 X100 P17 TO P20 P17 TO P19 P17 TO P18
J7	OUTPUT RANGE SELECT:	RANGE 1 RANGE 2 P21 TO P23 P22 TO P23
J8	HIGH-LIMIT ADJUSTMENT:	INTERNAL EXTERNAL P24 TO P26 P24 TO P25
J9	LOW-LIMIT ADJUSTMENT:	INTERNAL EXTERNAL P27 TO P28 P27 TO P29
J10	POWER SUPPLY FAULT RECOVERY:	ACTIVE INACTIVE P30 TO P31 P31 TO P32



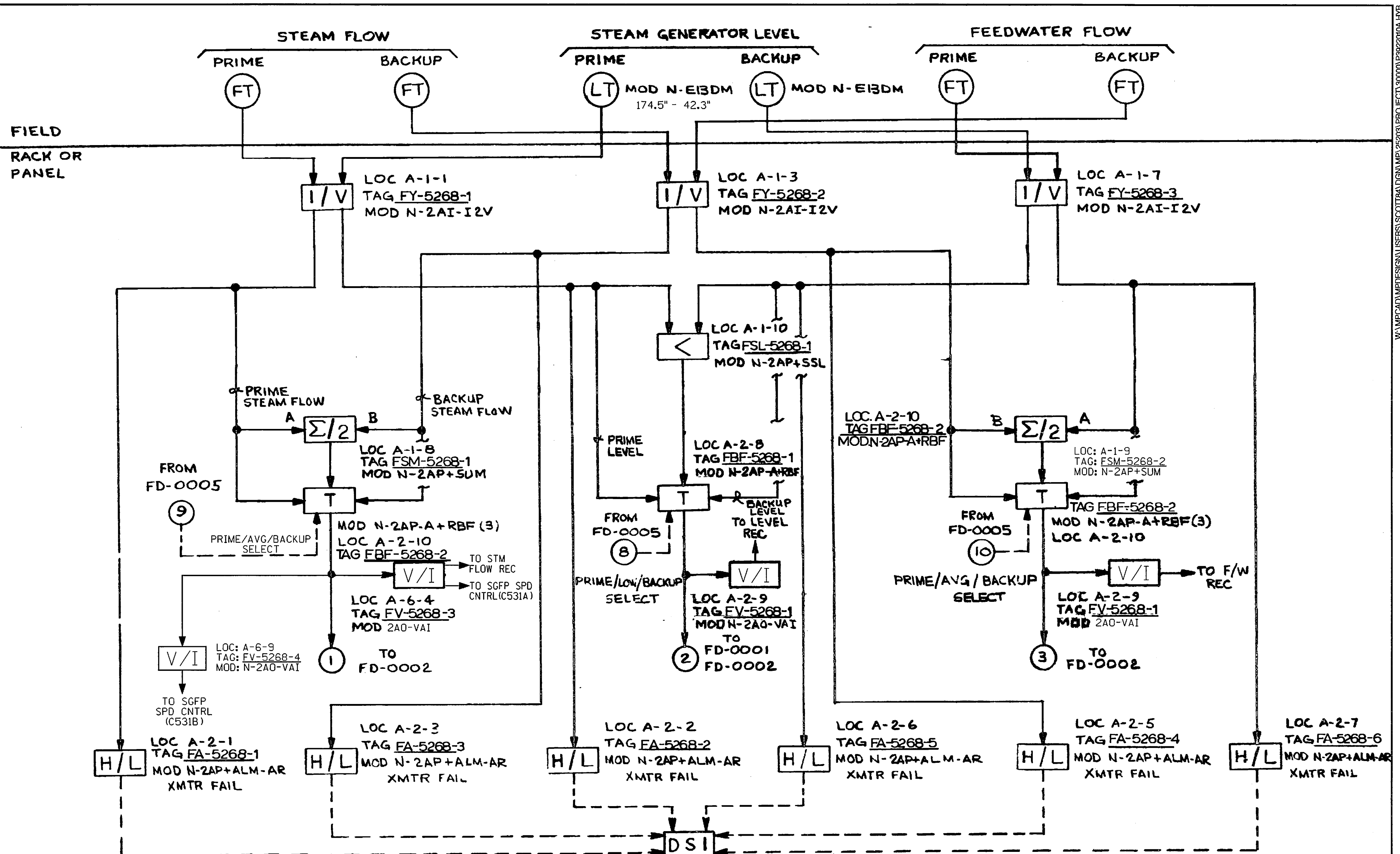
NOTE:  
 1. EXISTING CUSTOMER CURRENT FAIL TO SYSTEM. UPON RECEIPT OF MSI SIGNAL OR HIGH STEAM GEN. LEVEL SIGNAL, THE REG. VALVE SOV'S ENERGIZE TO RAPIDLY CLOSE THE VALVE WHEREAS THE BYPASS VALVE SOV IS DEENERGIZED TO CLOSE THE VALVE.

FOXBORO DWG. No. 82N56704 FD 0003 REV.03  
 CUST. ORDER No. 818040

**FSAR FIGURE**  
 SAFETY EVALUATION  
 MAYBE REQUIRED  
 PRIOR TO CHANGES

	Dominion Nuclear Connecticut, Inc. Millstone Power Station Waterford, CT.	
	TITLE MILLSTONE UNIT No. 2 FEEDWATER CONTROL SYSTEM "B" AUTO/MANUAL VALVE CONTROL FUNCTIONAL DIAGRAM WATERFORD, CT.	
REVISION DESCRIPTION (SIGNATURES ON FILE) CAD NO: C3922098.HYB		
REVISED PER DC MP2-17-01045 & DUR 17-800226	DRAWING NO: 25203-39220	REV 8
DSON JCV	SCALE: NONE	UNLESS OTHERWISE NOTED SH 9B

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**FSAR FIGURE**

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

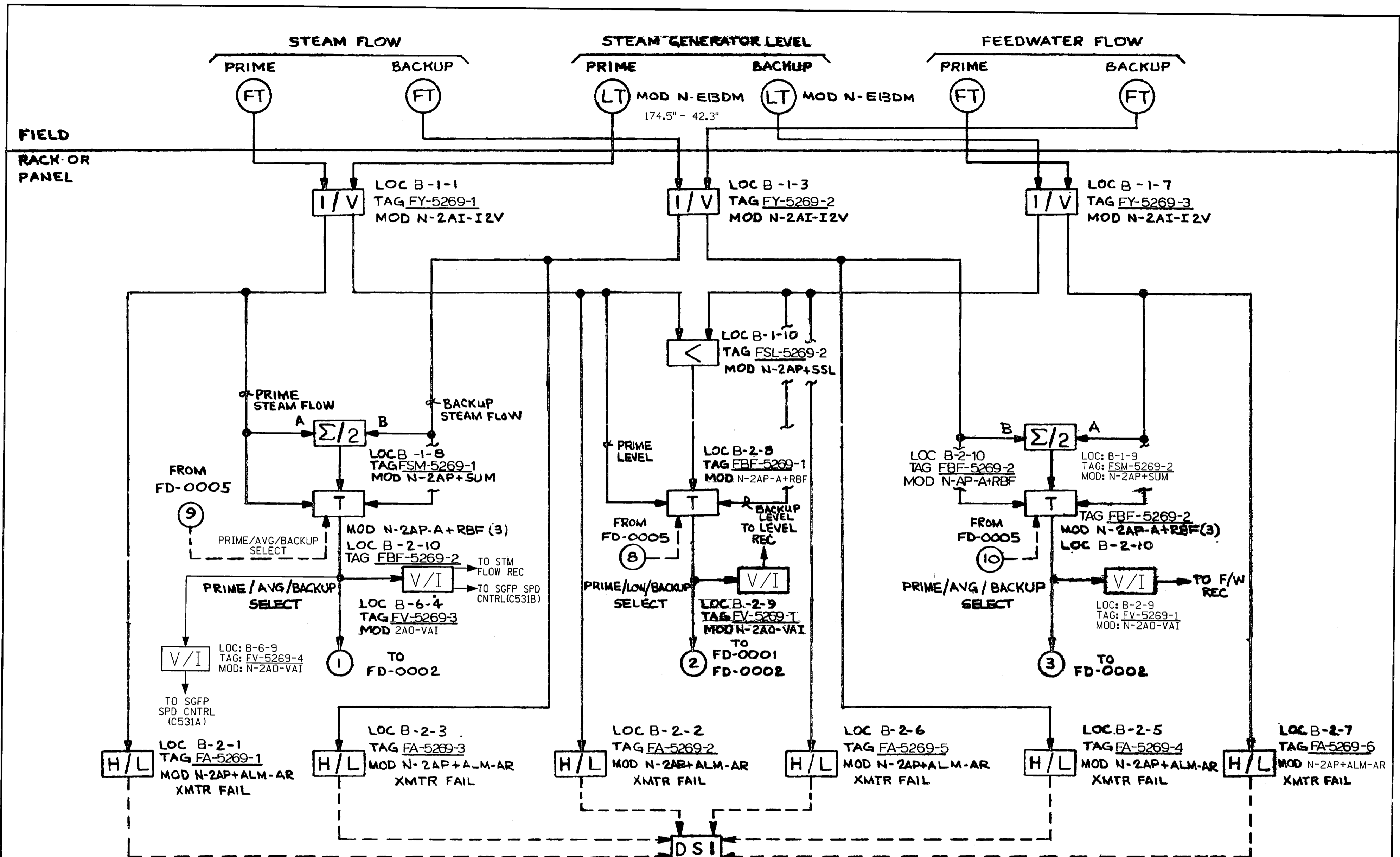
REVISIONS DURING CONSTRUCTION			
NO.	DATE	BY	APP.

NON  
Q.A.

		<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station	
TITLE: MILLSTONE UNIT NO. 2 FEEDWATER CONTROL SYSTEM "A" FUNCTIONAL DIAGRAM WATERFORD, CT			
BY: DMINELLA/JSJ	CHKD.	APP.	APP.
DATE: 11-20-99	DATE	DATE	DATE
SCALE: 1/4"	DWG. NO.	25203-39220 SH. 10A	

FOXBORO DWG. NO.  
82N56704FD0004

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**FSAR FIGURE**

SAFETY EVALUATION  
MAYBE REQUIRED  
PRIOR TO CHANGES

**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

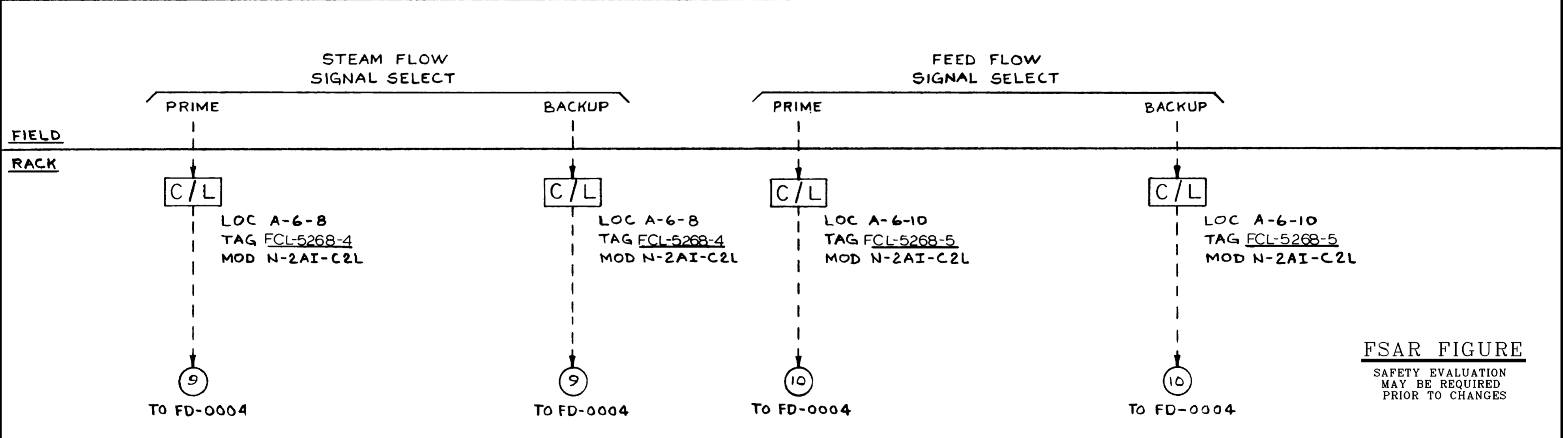
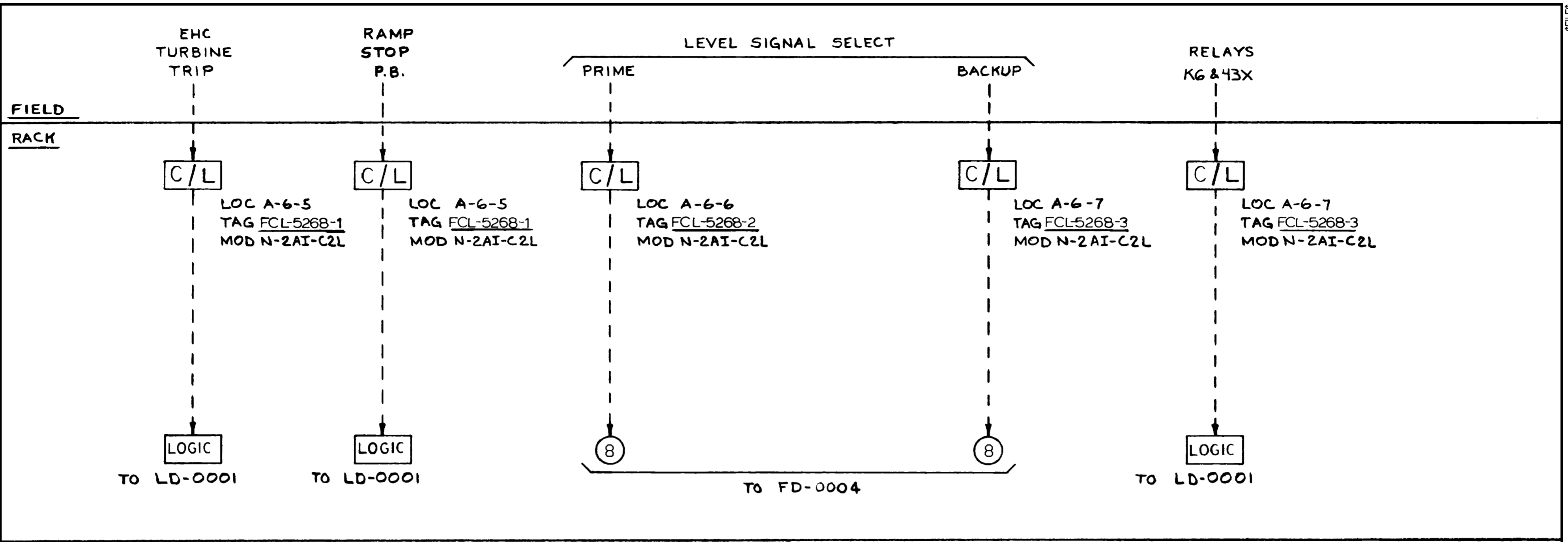
REVISIONS DURING CONSTRUCTION	
NO.	DATE

NON  
Q.A.

		<b>Dominion Nuclear Connecticut, Inc.</b> Millstone Power Station	
TITLE: MILLSTONE UNIT NO. 2 FEEDWATER CONTROL SYSTEM "B" FUNCTIONAL DIAGRAM WATERFORD, CT			
BY: D. MINELLA/JSJ	CHKD.	APP.	APP.
DATE: 11-20-99	DATE	DATE	DATE
SCALE: 1/1	DWG. NO.	25203-39220 SH. 10B	

FOXBORO DWG. NO.  
82N56704FD0004





**FSAR FIGURE**

SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

NON  
Q.A.

**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION	

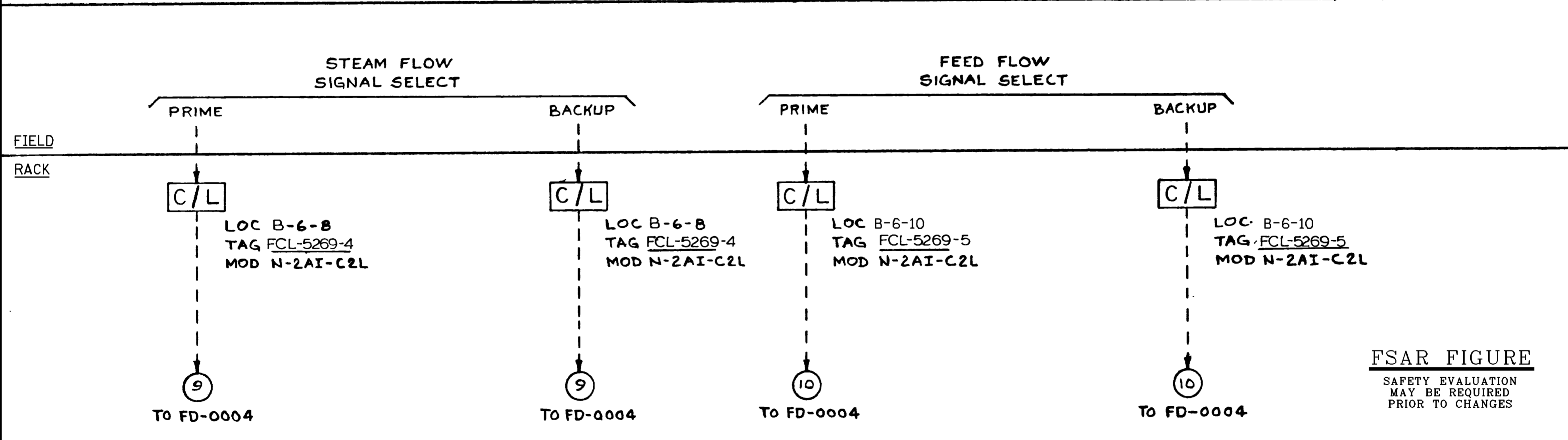
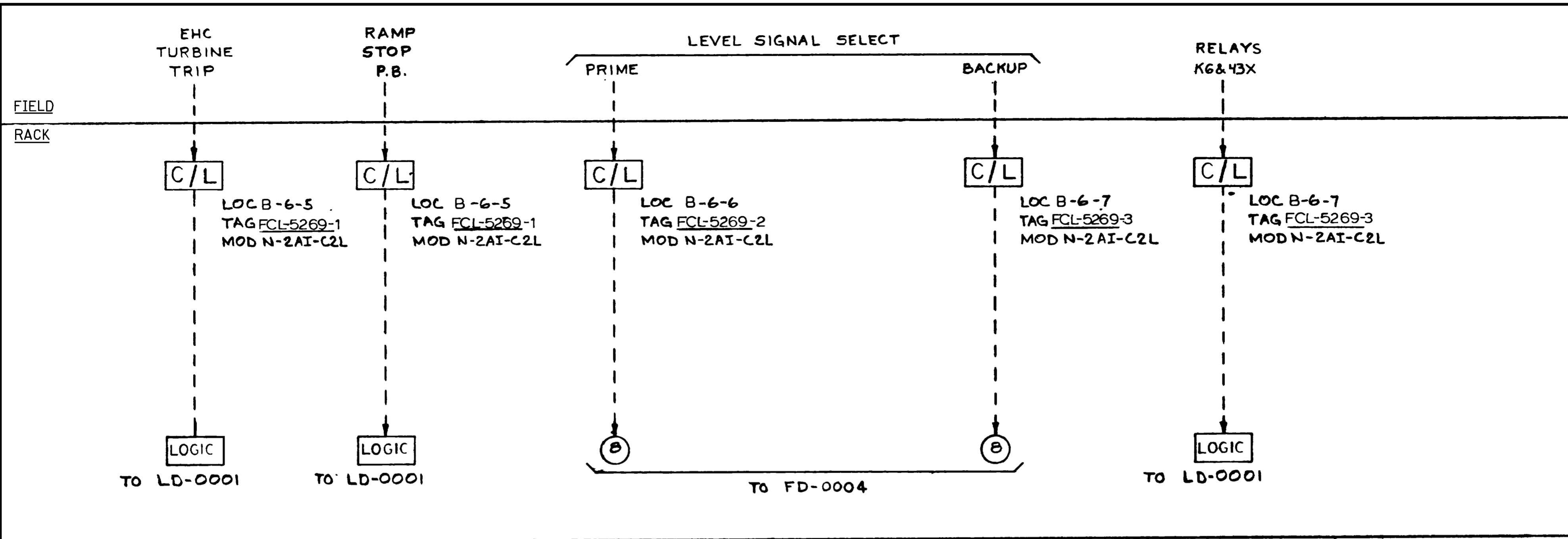
VENDOR DWG. No.  
82N56704-FD-0005 REV.2

3		2-29-00		INCORP. DCN DM2-00-0025-00		JSJ		WBZ		JPP		JPP	
NO.	DATE	REVISIONS	BY	CHK	APP	APP	APP	APP	APP	APP	APP	APP	APP
SCALE N/A		DWG. NO.		25203-39220 SH.11A									

**Dominion** Dominion Nuclear Connecticut, Inc.  
Millstone Power Station

TITLE MILLSTONE UNIT No.2  
FEEDWATER CONTROL SYSTEM "A"  
FUNCTIONAL DIAGRAM  
WATERFORD, CT.

BY JSJ/JMM CHKD. — APP. JPP APP. JPP  
DATE 2-3-00 DATE — DATE 2-29-00 DATE 2-29-00



**FSAR FIGURE**  
SAFETY EVALUATION  
MAY BE REQUIRED  
PRIOR TO CHANGES

NON  
Q.A.

**CAD**  
NOTE:  
MANUAL REVISIONS TO THIS DOCUMENT  
WHEN AS-BUILT ARE PROHIBITED.

REVISIONS DURING CONSTRUCTION	

VENDOR DWG. No.  
82N56704-FD-0005 REV.2

BY JSJ/JMM		CHKD. —	APP. JPP	APP. JPP
DATE 2-3-00	DATE 2-3-00	DATE 2-29-00	DATE 2-29-00	DATE 2-29-00
SCALE N/A	DWG. NO. 25203-39220 SH.11B			
NO. DATE	REVISIONS	BY	CHK	APP

**Dominion** Dominion Nuclear Connecticut, Inc.  
Millstone Power Station  
TITLE MILLSTONE UNIT No.2  
FEEDWATER CONTROL SYSTEM "B"  
FUNCTIONAL DIAGRAM  
WATERFORD, CT.