M05-1115 SHEET 2 OF

IVXIICA & IVXIICB
SWITCHGEAR HEAT REMOVAL SYSTEM BATTERY ROOMS EXHAUST FANS.
K-2904

4350 CFM M05-1115-1 F2
4350 CFM M05-1115-1 E-2
4350 CFM M05-1115-1 C-2
4350 CFM M05-1115-1 B-2
IVX14Y
IVX 13 Y
IVX 43 Y
IVX 39 Y
IVX 19 Y
IVX 92 Y
IVX 18 Y
IVX 26 Y
IVX 25 Y
IVX 60 Y
IVX 84 Y
IVX 42 Y
IVX 86 Y
IVX 82 Y
IVX 85 Y
IVX 38 Y
IVX 31 Y
IVX 35 Y
IVX 36 Y
IVX 71 Y
IVX 33 Y
IVX 34 Y
IVX 23 Y
IVX 24 Y
IVX 70 Y
IVX 76 Y
IVX 79 Y
IVX 72 Y
IVX 45 Y
IVX 46 Y
IVX 75 Y
IVX 80 Y
IVX 81 Y
IVX 74 Y
IVX 73 Y
IVX 54 Y
IVX 49 Y
IVX 55 Y
IVX 77 Y
IVX 61 Y
IVX 78 Y
IVX 62 Y
IVX 50 Y
IVX 51 Y
IVX 52 Y
IVX 90 Y
IVX 87 Y
IVX 57 Y
IVX 83 Y
IVX 56 Y
IVX 58 Y
IVX 59YA
IVX 59YB
IVX 93 Y
IVX 95 Y
M05-1113-2 B-3 3000 CFM
M05-1115-3 C-1 600 CFM

2745 CFM B D5
380 CFM C E4
3125 CFM A C5
B E7
C E7
A E7
3125 (CFM)

DIVISION 2 INVERTER CONTROL BLDG. EL. 781'-0"
DIVISION 2 CABLE SPREAD AREA CONTROL BLDG. EL. 781'-0"
DIVISION 4 INVERTER CONTROL BLDG. EL 781'-0"
BOP BATTERY BUS (B) CONTROL BLDG. EL. 781'-0"
CENTER CABLE SPREAD AREA CONTROL BLDG. EL. 781'-0"
BOP BATTERY BUS (A) CONTROL BLDG. EL. 781'-0"
DIVISION 4 BATTERY RM. CONTROL BLDG. EL. 781'-0"
DIVISION 1 INVERTER CONT. BLDG. EL. 781'-0"
DIVISION 1 CABLE SPREAD AREA CONTROL BLDG. EL. 781'-0"
TETITAH 5G
TETITAH 5F
TETITAH 5E
COOLING UNIT SEE M05-1115-4
COOLING UNIT SEE M05-1115-4
COOLING UNIT SEE M05-1115-4

NON-SAFETY RELATED SEE NOTE 2
NON-SAFETY RELATED (SEE NOTE 2)
SAFETY RELATED
M05-1101-2 C-7
M05-1101-2 C-7
1200 CFM
2400 CFM UNIT 2 SIDE SEE NOTE 3

PDIS 6A AL
MO
IA
IVXIICA
FZ/ZL/AL 5A HSI
IB
IVXIICB
FZ/ZL/AL 5A HSI
PDIS 6B AL

100 CFM
960 CFM
1200 CFM
480 CFM
2520 CFM
3550 CFM
700 CFM
485 CFM
380 CFM
455 CFM
215 CFM

NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING, EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

NOTES:
1. THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9115 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.
2. NUCLEAR SAFETY-RELATED DUCTWORK SYSTEM IS SHOWN ON THIS P & ID. THIS CLASSIFICATION APPLIES TO DUCTWORK AND DUCTWORK ACCESSORIES (EXCEPT DAMPERS) FURNISHED FABRICATED AND INSTALLED UNDER SPECIFICATION K-2910. FOR SAFETY CLASSIFICATION OF DUCTWORK SUPPORTS, SEE SUPPORT DRAWINGS.
FOR SAFETY CLASSIFICATION OF EQUIPMENT SEE EQUIPMENT LIST.
FOR SAFETY CLASSIFICATION OF PIPING / VALVES SEE LINE/VALVE LIST.
FOR SAFETY CLASSIFICATION OF DAMPERS, SEE APPROPRIATE DAMPER LIST.
3. THIS FLOW OCCURS WHEN THERE IS A FIRE IN THE CENTRAL CABLE SPREAD AREA, CONTROL BUILDING EL. 781'-0" AND DAMPERS IVX55Y AND IVX61Y ARE CLOSED. FLOW IS EXITED TO THE UNCONTROLLED AIR SIDE, UNIT 2.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

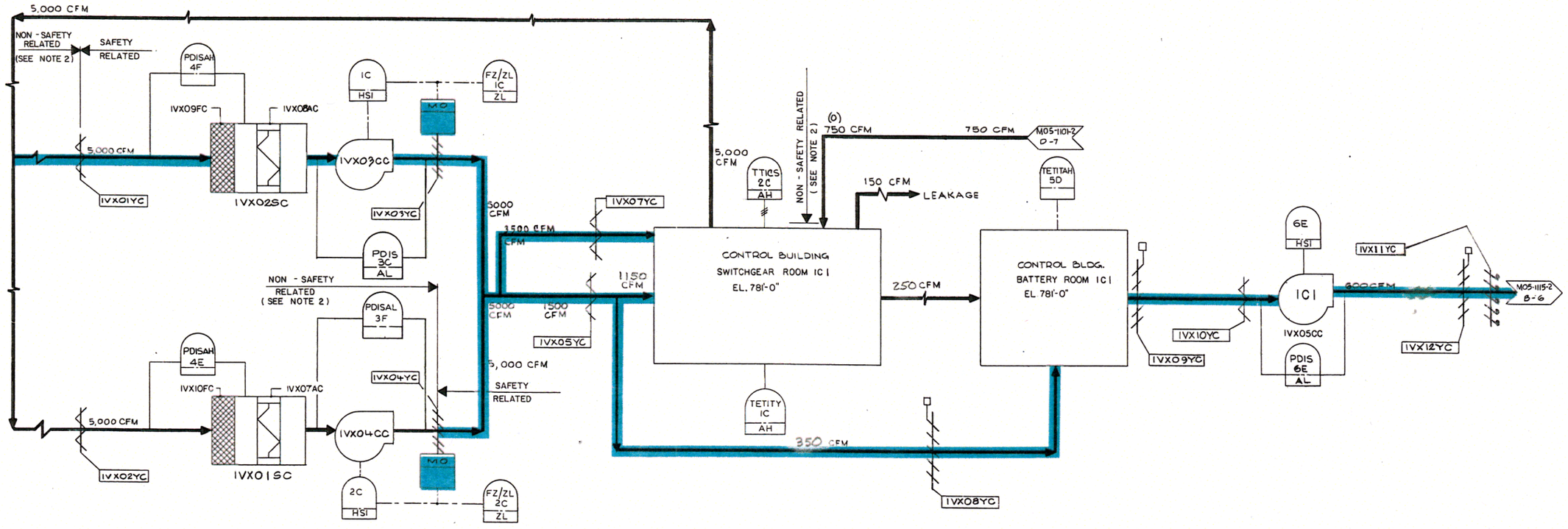
FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
ESSENTIAL SWITCHGEAR HEAT REMOVAL
SHEET 101 OF 111

1VX01SC
SWITCHGEAR HEAT REMOVAL
COIL CABINET
K-2902

1VX02SC
SWITCHGEAR HEAT REMOVAL
COIL CABINET
K-2902

1VX03CC
1VX04CC
SWITCHGEAR HEAT REMOVAL
FANS
K-2904

1VX05CC
BATTERY ROOM
EXHAUST FAN
K-2904



NOTES:

1. THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-1115-3 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.
2. NUCLEAR SAFETY-RELATED DUCTWORK SYSTEM IS SHOWN ON THIS P & ID. THIS CLASSIFICATION APPLIES TO DUCTWORK AND DUCTWORK ACCESSORIES (EXCEPT DAMPERS) FURNISHED, FABRICATED AND INSTALLED UNDER SPECIFICATION K-2910. FOR SAFETY CLASSIFICATION OF DUCTWORK SUPPORTS, SEE SUPPORT DRAWINGS.
   FOR SAFETY CLASSIFICATION OF EQUIPMENT, SEE EQUIPMENT LIST.
   FOR SAFETY CLASSIFICATION OF PIPING / VALVES SEE LINE / VALVE LIST.
   FOR SAFETY CLASSIFICATION OF DAMPERS, SEE APPROPRIATE DAMPER LIST.

NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING, EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
ESSENTIAL SWITCHGEAR HEAT REMOVAL
SHEET 102 OF 111

IVY01S
ECCS
LPCS PUMP ROOM
COIL CABINET
K-2902

IVY01C
ECCS
LPCS PUMP ROOM
SUPPLY FAN
K-2904

IVY01AA, AB
ECCS
LPCS PUMP ROOM
COOLING COIL
K-2902

IVY02C
ECCS
RHR PUMP
ROOM A
SUPPLY FAN
K-2904

IVY02S
ECCS
RHR PUMP
ROOM A
COIL CABINET
K-2902

IVY02AA, AB
ECCS
RHR PUMP ROOM A
COOLING COIL
K-2902

IVY03C
ECCS
RHR HEAT
EXCH.A ROOM
SUPPLY FAN
K-2904

IVY03S
ECCS
RHR HEAT
EXCH.A ROOM
COIL CABINET
K-2902

IVY03AA, AB
ECCS
RHR HEAT EXCH. A ROOM
COOLING COIL
K-2902

IVY04C
ECCS
RCIC
PUMP ROOM
SUPPLY FAN
K-2904

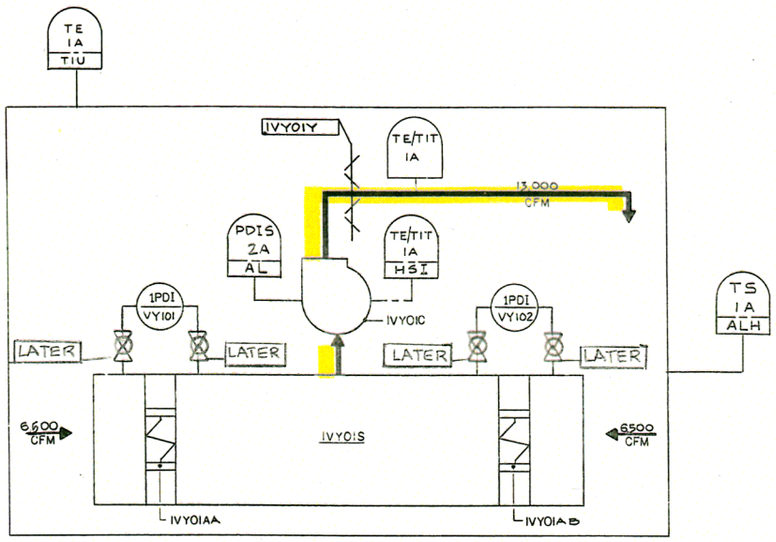
IVY04S
ECCS
RCIC
PUMP ROOM
COIL CABINET
K-2902

IVY04A
ECCS
RCIC PUMP ROOM
COOLING COIL
K-2902

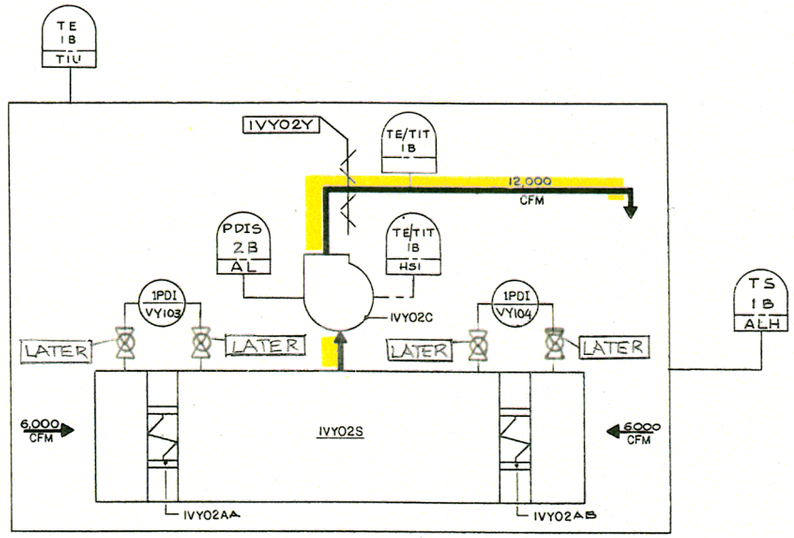
IVY05C
ECCS
RHR HEAT
EXCH.B ROOM
SUPPLY FAN
K-2904

IVY05S
ECCS
RHR HEAT
EXCH.B ROOM
COIL CABINET
K-2902

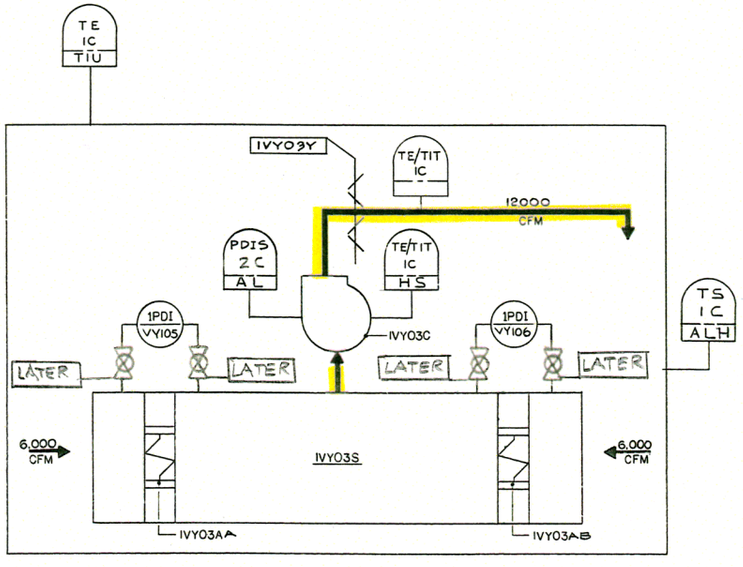
IVY05AA, AB
ECCS
RHR HEAT EXCH.B ROOM
COOLING COIL
K-2902



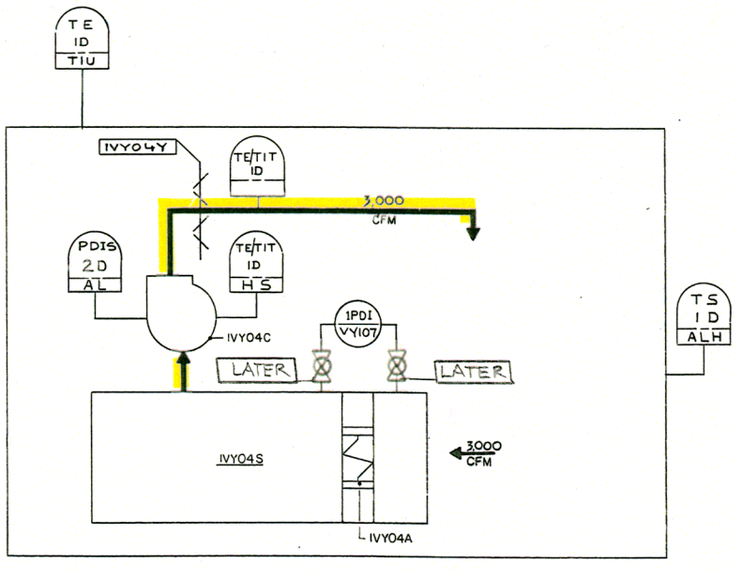
LPCS PUMP ROOM



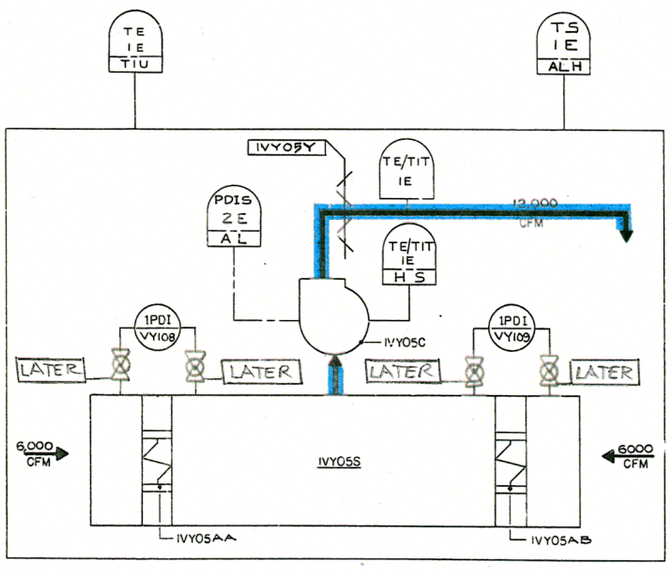
RHR PUMP A ROOM



RHR HEAT EXCHANGER A ROOM



RCIC PUMP ROOM



RHR HEAT EXCHANGER B ROOM

NOTES:
1. THE AIR FLOW FOR CABINETS WERE CALCULATED AT A DENSITY OF .075 LBS/FT.³
2. NUCLEAR SAFETY-RELATED DUCTWORK SYSTEM IS SHOWN ON THIS P&ID. THIS CLASSIFICATION APPLIES TO DUCTWORK AND DUCTWORK ACCESSORIES (EXCEPT DAMPERS) FURNISHED, FABRICATED AND INSTALLED UNDER SPECIFICATION K-2910. FOR SAFETY CLASSIFICATION OF DUCTWORK SUPPORTS, SEE SUPPORT DRAWINGS. FOR SAFETY CLASSIFICATION OF EQUIPMENT SEE EQUIPMENT LIST. FOR SAFETY CLASSIFICATION OF PIPING/VALVES, SEE LINE/VALVE LIST. FOR SAFETY CLASSIFICATION OF DAMPERS, SEE APPROPRIATE DAMPER LIST.

NOTE
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-1116 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL

NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING, EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
ECCS EQUIPMENT ROOM COOLING
(SHEET 103 OF 111)

DO NOT USE I, O, Q OR X FOR REVISION

IVY06S
ECCS
RHR PUMP
ROOM B
COIL CABINET
K-2902

IVY06C
E C C S
RHR PUMP ROOM B
SUPPLY FAN
K-2904

IVY06AA, AB
E C C S
RHR PUMP ROOM B
COOLING COILS
K-2902

IVY07C
E C C S
RHR PUMP
ROOM C
SUPPLY FAN
K-2904

IVY07S
ECCS
RHR PUMP
ROOM C
COIL CABINET
K-2902

IVY07AA, AB
ECCS
RHR PUMP ROOM C
COOLING COILS
K-2902

IVY08CA, CB
E C C S
HPCS PUMP ROOM
SUPPLY FANS A & B
K-2904

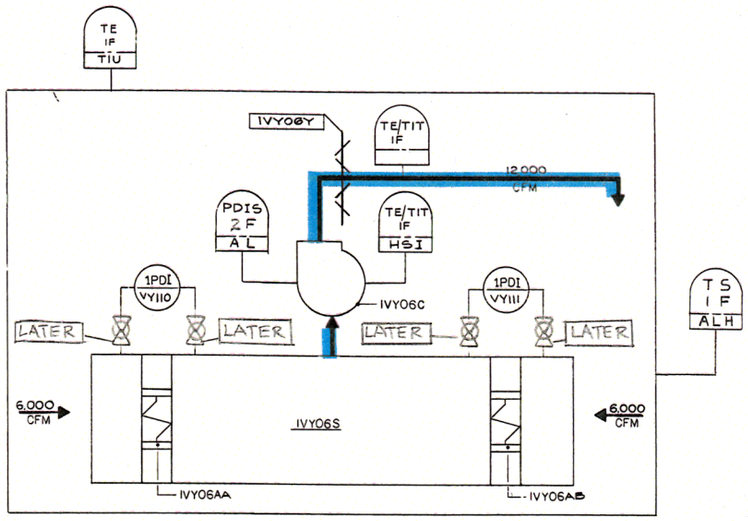
IVY08AA, AB, AC, AD
E C C S
HPCS PUMP ROOM
COOLING COILS A,B,C,D
K-2902

IVY08SA,B
ECCS
HPCS PUMP ROOM
COIL CABINETS A & B
K-2902

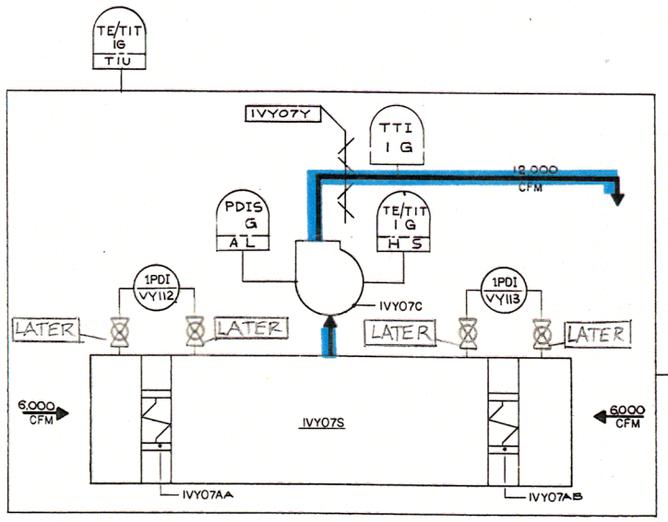
IVY09S
MSIV INBOARD ROOM
COIL CABINET
K-2902
IVY10S
MSIV OUTBOARD ROOM
COIL CABINET
K-2902

IVY09A
MSIV INBOARD ROOM
COOLING COIL
K-2902
IVY10A
MSIV OUTBOARD ROOM
COOLING COIL
K-2902

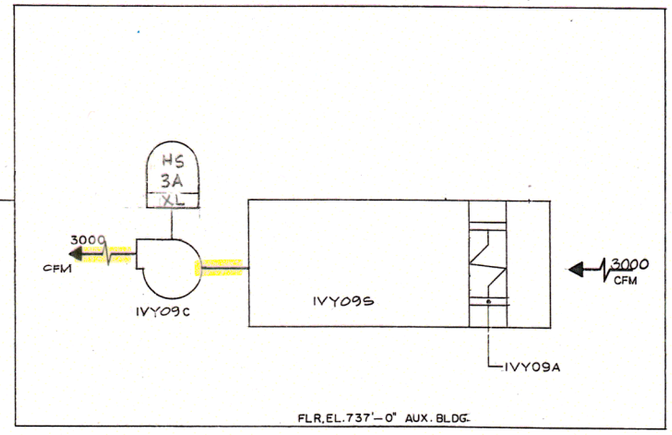
IVY09C
MSIV INBOARD ROOM
SUPPLY FAN
K-2904
IVY10C
MSIV OUTBOARD
ROOM SUPPLY FAN
K-2904



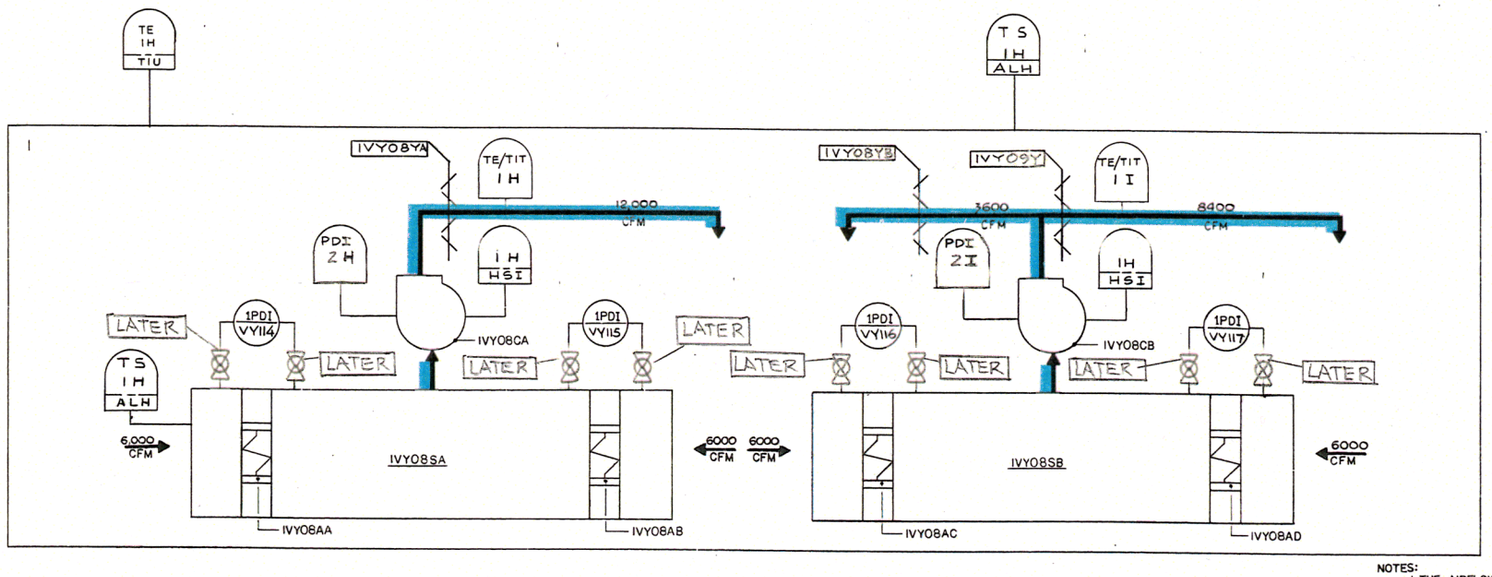
RHR PUMP B ROOM



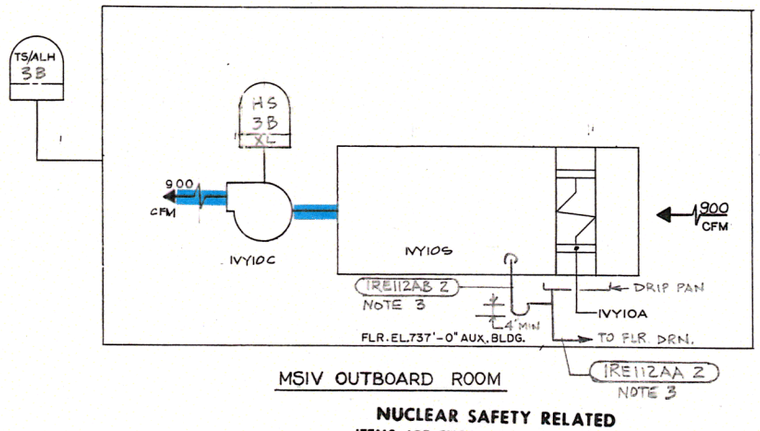
RHR PUMP C ROOM



MSIV INBOARD ROOM



HPCS PUMP ROOM



MSIV OUTBOARD ROOM

NOTES:
1. THE AIRFLOW FOR CABINETS WERE CALCULATED AT A DENSITY OF .075lbs/FT.^{3}
2. NUCLEAR SAFETY-RELATED DUCTWORK SYSTEM IS SHOWN ON THIS P&ID. THIS CLASSIFICATION APPLIES TO DUCTWORK AND DUCTWORK ACCESSORIES (EXCEPT DAMPERS) FURNISHED, FABRICATED AND INSTALLED UNDER SPECIFICATION K-2910. FOR SAFETY CLASSIFICATION OF DUCTWORK SUPPORTS, SEE SUPPORT DRAWINGS. FOR SAFETY CLASSIFICATION OF EQUIPMENT, SEE EQUIPMENT LIST. FOR SAFETY CLASSIFICATION OF PIPING/VALVES, SEE LINE/VALVE LIST. FOR SAFETY CLASSIFICATION OF DAMPERS, SEE APPROPRIATE DAMPER LIST.
3. DRAIN PIPING BY SPEC. K-2882

NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING, EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

NOTE:
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-1116 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
ECCS EQUIPMENT ROOM COOLING
(SHEET 104 OF 111)

DO NOT USE L.O. 0 OR 1 FOR REVISION

IVX06CA & IVX06CB
SWITCHGEAR HEAT REMOVAL
CONDENSING UNITS 1A & 1B
K-2905B

IVX08AA & IVX08AB
SWITCHGEAR HEAT REMOVAL
COOLING COILS 1A & 1B
K-2902

SLOPE DN. 1/8" PER FOOT

IRG02CA3/8 — IRG16MA — IRG14AA 1/2 — IRG04MA — IRG01AA 2/8 — NOTE 6 — IRG05MA — NOTE 5 — NOTE 5 — IRG01CJ 1/8 — 2 1/8"x1 1/8" RED.

TO ATM. — IRG13AA 1/8 — 2" DIA CORE DRILL THROUGH WALL — K-2882 K-2905B — 1 1/8"x5/8" RED. — IRG28AA 5/8 — IRG40AA1/8 — R SET @ 385 PSIG. — PTIC 7A — IVX06CA

IRG01MA — IRG03MA — IRG01BA2/8 — 2 1/8"x1 1/8"RED. — IRG602A — IRG30AA1 5/8 — IRG17MA — IRG31AA2 5/8 — 3/8"x1/4 RED — F.C. — 1 5/8"x1/8"RED INSERT (TYP.) — 2 1/8"x1 1/8"RED.

IRG29AA 3/8 — 3 5/8"x3 1/8" RED — 3/8"x1/4 RED — IRG14MA — 3/8"x1/4RED — IRG600A — K-2882 K-2906B — K-2905B K-2882 — IRG601A

VALVE 1SX025A — M05-1052 SHT. 4 F-5 — HSITS 7A

IRG12MA NOTE 3 — IRG013MA — IRG09AA 1/8

IRG02MA — IRG08MA — IRG06MA — F.C. — 1 1/8"x7/8 RED. — IRG06MB — IRG02MB — IRG08MB — IRG02CA3/8 — IRG11AA 2 1/8 — IRG01CL 1/8

IRG644AA 2 1/8 — 3 1/8"x2 1/8" RED — OIL TRAP — 3 5/8"x2 1/8" RED. — 3 5/8"x2 1/8" RED. — IRG10AA 1 3/8

IRG02ME — 1 1/8"x 7/8" RED. — IRG02MF — F.C. — IRG06ME — IRG08ME — 3 5/8"x2 1/8 RED. — IRG06MF — IRG08MF

IRG01CG 7/8 — 7/8"x5/8" RED — NOTE 1 — 1 1/8"x5/8" RED — IRG07ME — IRG12AA 1 1/8 — IRG39AA 1/2 — IRG15AA 5/8 — K-2882 K-2902 — NOTE 2

IRG02AG2/8

IRG01CH 7/8 — 7/8"x5/8" RED — NOTE 1 — 1 1/8"x5/8" RED — IRG12AB 1 1/8 — IRG39AB 1/2 — IRG15AB 5/8 — K-2882 K-2902 — NOTE2

IRG02AH 2/8

IRG07MA — IRG07MF

IRG01CA 7/8 — 7/8"x5/8" RED — NOTE 1 — 1 1/8"x5/8" RED — IRG12AC 1 1/8 — IRG39AC 1/2 — IRG15AC 5/8 — 1 5/8"x5/8"RED — K-2882 K-2902 — NOTE2

IRG02AA2/8

IRG07MB

IRG01CB 7/8 — 7/8"x5/8" RED — NOTE 1 — 1 1/8"x5/8" RED — IRG12AD 1 1/8 — IRG39AD 1/2 — IRG15AD 5/8 — K-2882 K-2902 — NOTE 2

IRG08AA 3 5/8 — IRG02AB2/8 — 2 1/8"x1 1/8" RED (TYPICAL) — IVX08AA

NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING, EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

NOTES:
1. 1/4 EQUALIZER LINES.
2. SIDE INLET HOT GAS BY-PASS VENTURI TYPE DISTRIBUTOR.
3. HOT GAS BY-PASS ASSEMBLY.
4. * INDICATES FURNISHED WITH EQUIPMENT.
5. VALVES ARE NORMALLY OPEN DURING START-UP AND PRE-OP. TESTING ONLY. NORMALLY CLOSED DURING NORMAL OPERATION.
6. VALVES ARE NORMALLY CLOSED DURING START-UP AND PRE-OP TESTING ONLY. NORMALLY OPEN DURING NORMAL OPERATION.

SLOPE DN. 1/8" PER FOOT

IRG02CB3/8 — IRG16MB — IRG14AB 1/2 — IRG04MB — IRG01AB2 1/8 — NOTE 6 — IRG05MB — NOTE 5 — NOTE 5 — IRG01CK 1/8 — 2 1/8"x1 1/8"REDS.

TO ATM. — IRG13AB 1/8 — IAB0815 — 2" ϕ CORE DRILL THROUGH WALL — K-2882 K-2905B — 1 1/8"x5/8" RED. — IRG28AB 5/8 — IRG 40AB1 1/8 — R SET @ 385 PSIG. — PTIC 7B — IVX06CB

IRG01MB — IRG03MB — IRG01BB2/8 — 2 1/8"x1 1/8"RED. — IRG602B — IRG30AB 1 5/8 — IRG17MB — IRG31AB 2 5/8 — 3/8"x1/4 RED — F.C. — 1 5/8"x1/8"RED INSERT(TYP.) — 2 1/8"x1 1/8"RED.

IRG29AB 3/8 — 3 5/8" x 3 1/8" RED. — 3/8"x1/4" RED. — IRG14MB — 3/8"x1/4"RED. — IRG600B — K-2882 K-2905B — K-2905B K-2882 — IRG601B

VALVE 1SX025B — M05-1052 SHT. 4 F-2 — HSITS 7B

IRG12MB NOTE 3 — IRG013MB — IRG09AB 1/8

IRG02MC — IRG08MC — IRG06MC — F.C. — 1 1/8"x7/8 REDS. — IRG06MD — IRG02MD — IRG08MD — IRG02CB3/8 — IRG11AB2/8 — IRG01CH 1/8

IRG644AB 2 1/8 — 3 1/8"x2 1/8" RED — OIL TRAP — 3 5/8"x2 1/8" RED. — 3 5/8" x 2 1/8" RED. — IRG10AB1 1/8

IRG02MG — 1 1/8"x 7/8" RED. — IRG02MH — F.C. — IRG06MG — IRG08MG — 3 5/8"x 2 1/8 RED. — IRG06MH

IRG01CE 7/8 — 7/8"x5/8" RED — NOTE 1 — 1 1/8"x5/8" RED — IRG07MG — IRG12AE 1 1/8 — IRG39AE 1/2 — IRG15AE 5/8 — K-2882 K-2902 — NOTE 2

IRG02AE2/8

IRG08MH — IRG01CF 7/8 — 7/8"x5/8" RED — NOTE 1 — 1 1/8"x5/8" RED — IRG12AF 1 1/8 — IRG39AF 1/2 — IRG15AF 5/8 — K-2882 K-2902 — NOTE2

IRG02AF2/8

IRG07MH — IRG07MC

IRG01CC 7/8 — 7/8"x5/8" RED — NOTE 1 — 1 1/8"x5/8" RED — IRG12AG 1 1/8 — IRG 39AG 1/2 — IRG15AG 5/8 — K-2882 K-2902 — NOTE2

IRG02AD2/8

IRG07MD

IRG01CD 7/8 — 7/8"x5/8" RED — NOTE 1 — 1 1/8"x5/8" RED — IRG12AH 1 1/8 — IRG 39AH 1/2 — IRG15AH 5/8 — K-2882 K-2902 — NOTE 2

IRG08AB 3 5/8 — IRG02AD2/8 — 2 1/8" X1 1/8" RED (TYPICAL) — IVX08AB — K-2882 K-2902

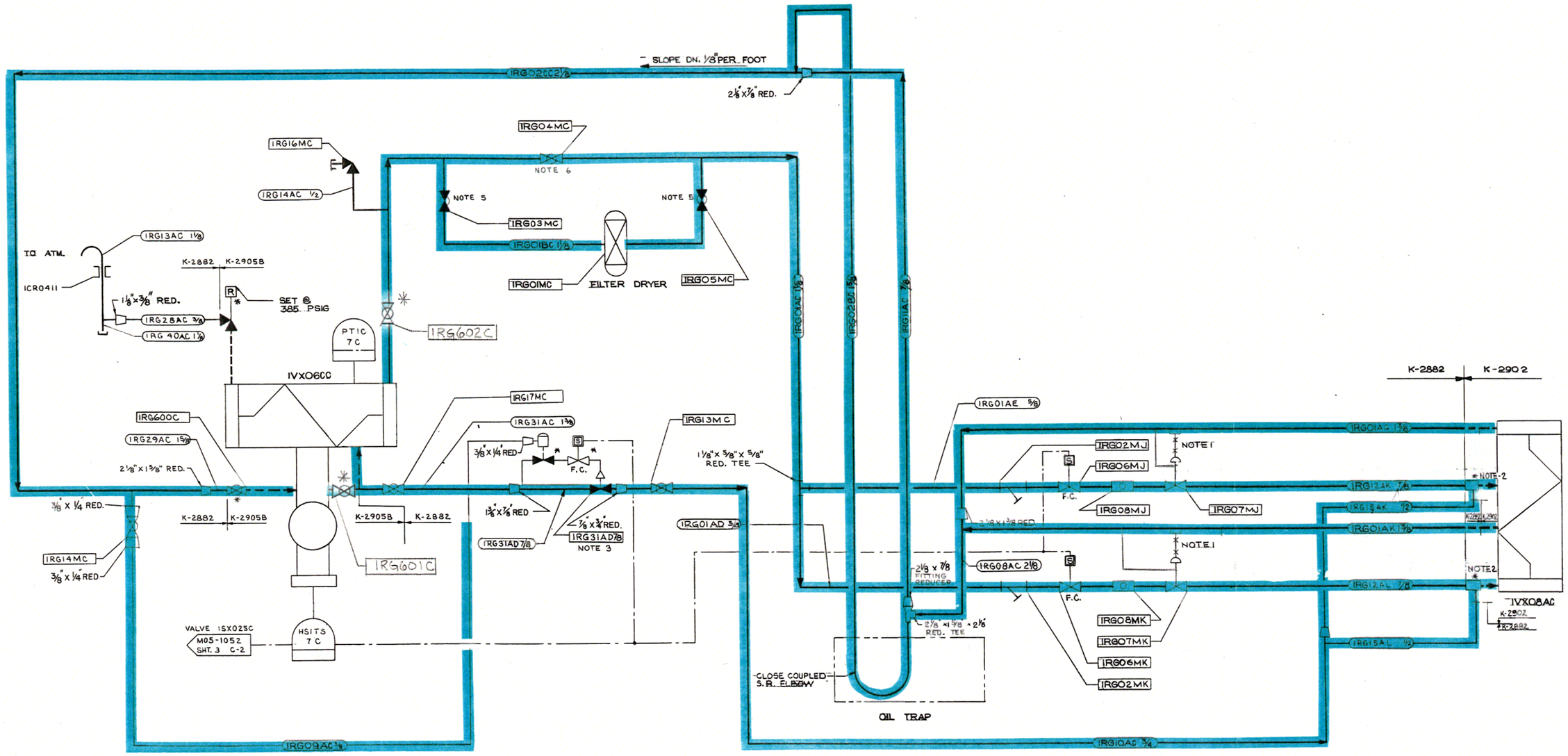
NOTE
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9115 UNLESS OTHERWISE NOTED SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
REFRIGERATION PIPING SWITCHGEAR HEAT REMOVAL
SHEET 105 OF 111

IVX06CC
SWITCHGEAR HEAT REMOVAL
CONDENSING UNIT IC
K-2905B

IVX08AC
SWITCHGEAR HEAT REMOVAL
COOLING COIL IC
K-2902



NOTES:

1. 1/4" EQUALIZER LINES
2. SIDE INLET HOT GAS BY-PASS VENTURI TYPE DISTRIBUTOR
3. HOT GAS BY-PASS ASSEMBLY
4. * INDICATES FURNISHED WITH EQUIPMENT
5. VALVES ARE NORMALLY OPEN DURING START-UP AND PRE-OP. TESTING ONLY. NORMALLY CLOSED DURING NORMAL OPERATION.
6. VALVES ARE NORMALLY CLOSED DURING START-UP AND PRE-OP TESTING ONLY. NORMALLY OPEN DURING NORMAL OPERATION.

NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING, EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

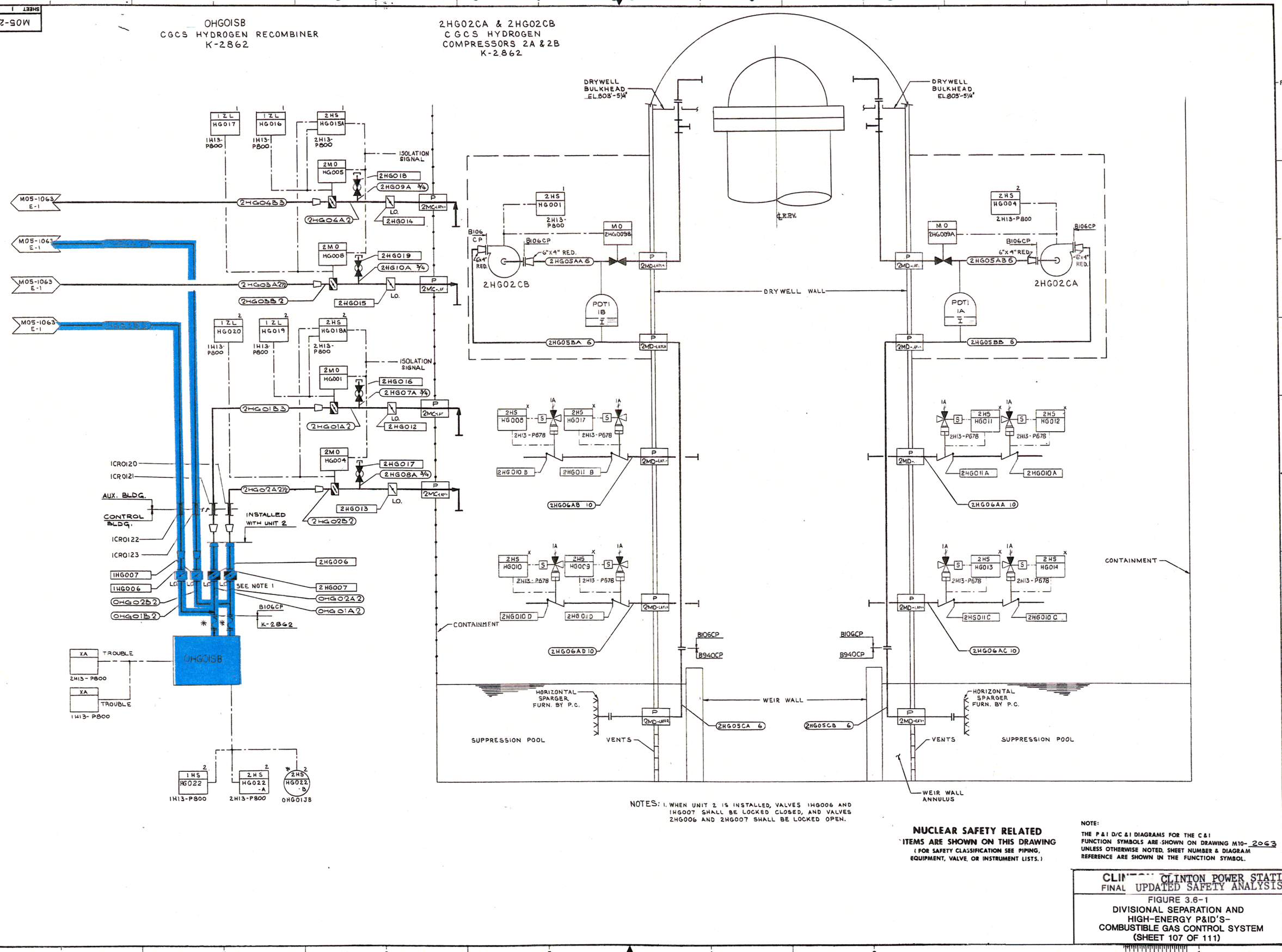
NOTE
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-0115 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
REFRIGERATION PIPING SWITCHGEAR HEAT REMOVAL
SHEET 106 OF 111

OHG01SB
CGCS HYDROGEN RECOMBINER
K-2862

2HG02CA & 2HG02CB
CGCS HYDROGEN
COMPRESSORS 2A & 2B
K-2862



NOTES: 1. WHEN UNIT 2 IS INSTALLED, VALVES 1HG006 AND 1HG007 SHALL BE LOCKED CLOSED, AND VALVES 2HG006 AND 2HG007 SHALL BE LOCKED OPEN.

NUCLEAR SAFETY RELATED ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING, EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

NOTE:
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-2063 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
FINAL UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
COMBUSTIBLE GAS CONTROL SYSTEM
(SHEET 107 OF 111)

M05-2086

2WF13A HEATER VENT GAS COOLER K-2859

2WF07A HEATER K-2859

2WF06P RECIRC. PUMP K-2859

2WF08D VAPOR BODY K-2859

2WF12PA & B "2 FL DR EVAP. BOTTOMS. PUMP K-2859

NOTES:
1. SUPPLIED BY K-2859 AND INSTALLED BY <-2882
2. DENOTES "CAMFLEX" VALVE WITH DIAPHRAGM OPERATOR.
3. DENOTES RAM TYPE VALVE. FOR DETAIL OF THE OPERATOR ASSEMBLY SEE M05-1085 SHT. 1.
4. CAPS SHOULD BE INSTALLED A MAX. OF 2 IN. FROM VALVE OR LINE.

2WF07A

2WF08D

2WF12PA

2WF12PB

FROM 2TE-WF071 — M05-2086-2
FROM 2TE-WF054 — M05-2086-3
FROM 2TE-WF060 — M05-2086-3
FROM 2TE-WF068 — M05-2086-3

TO 2TR-WF004 M05-2086-3

TO 2TR-WF017 M05-2086

TO 2TR-WF004 M05-2086-3

CONCENTRATE WASTE TANK M05-1089 SHT 4 E-8

WASTE MIXING TANK M05-1089 SHT 6 E-7

RADWASTE BLDG. EQUIP. DRAIN TANK M05-1053 SHT 6 B-2

RADWASTE EVAP. HEADER M05-1086 SHT. 2 A-3

CHEM. WASTE COLL. TANK M05-1054 SHT 19 C-5

PROCES SAMPLE PANEL OPL 33J A M05-1045 SHT. 1 F-5

M05-1045 SHT. 1 FLUSH LINE

CHEM. WASTE COLL. TANK M05-1054 SHT 19 D-4

AUGMENTED "D" PIPING
PIPE CLASS "B1"
AND COMPONENTS ARE CONTAINED ON THIS DRAWING SEE THE VALVE, LINE, EQUIPMENT AND SPECIALTY LISTS FOR PROPER CLASSIFICATION. ALSO SEE SPEC. M-2082, PAR. 201.7h.

NOTE:
THE P&I D/C&I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-4086 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

4086

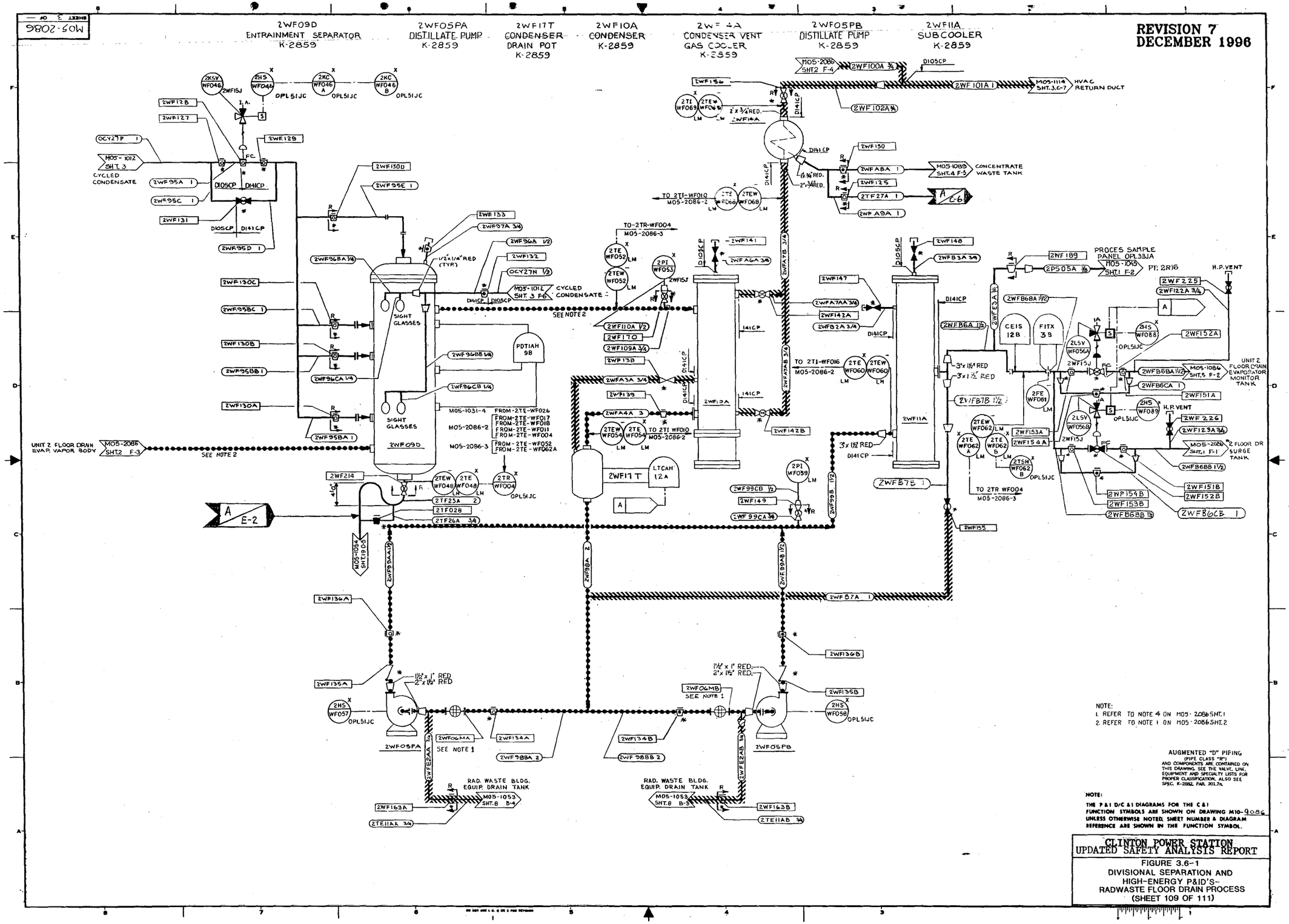
CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
RADWASTE FLOOR DRAIN PROCESS
(SHEET 108 OF 111)

M05-2086 SHEET 3 OF —

REVISION 7
DECEMBER 1996

2WF09D ENTRAINMENT SEPARATOR K-2859 | 2WF05PA DISTILLATE PUMP K-2859 | 2WF17T CONDENSER DRAIN POT K-2859 | 2WF10A CONDENSER K-2859 | 2WF14A CONDENSER VENT GAS COOLER K-2859 | 2WF05PB DISTILLATE PUMP K-2859 | 2WF11A SUBCOOLER K-2859



NOTE:
1. REFER TO NOTE 4 ON M05-2086 SHT. 1
2. REFER TO NOTE 1 ON M05-2086 SHT. 2

AUGMENTED "D" PIPING (PIPE CLASS "B") AND COMPONENTS ARE CONTAINED ON THIS DRAWING. SEE THE VALVE, LINE, EQUIPMENT AND SPECIALTY LISTS FOR PROPER CLASSIFICATION. ALSO SEE SPEC. K-2882, PAR. 201.7a.

NOTE:
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9086 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
RADWASTE FLOOR DRAIN PROCESS
(SHEET 109 OF 111)

REVISION 7
DECEMBER 1996

HYDRAULIC CONTROL UNIT (TYPICAL - 145)

CONTROL ROD DRIVE (TYPICAL 145)

FLOW CONTROL STATION

TABULATION OF INSTRUMENTATION LOCATED ON INSTRUMENT PANELS 1C11-P501 AND 1C11-P502 (PANELS PROVIDED BY OTHERS)

PANEL #	INSTRU. #
1C11-P501	FT-1C11-N008
	PT-1C11-N005
	FT-1C11-N007A
	FT-1C11-N007B
	FT-1C11-N007C
	FT-1C11-N007D
	PDT-1C11-N008
	FT-1C11-N009
	PDT-1C11-N011
	PT-1C11-N052
1C11-P502	FI-1C11-R005A
	FI-1C11-R005B
	FI-1C11-R005C
	FI-1C11-R005D
	FI-1C11-R004 ★
	PDI-1C11-R005
	PI-1C11-R006A ★
	PI-1C11-R006B ★
	PI-1C11-R006C ★
	PI-1C11-R006D ★
	PI-1C11-R007
	PDI-1C11-R009
	PI-1C11-R010
	PI-1C11-R012
	PI-1C11-R013
	PI-1C11-R015
	PI-1C11-R016 ★
	FI-1C11-R019
	FK-1C11-R009A
	FK-1C11-R009B
	FY-1C11-K001

NOTE:
★ THESE INSTRUMENTS SHALL BE PROVIDED WITH HIGH POINT VENT VALVES ABOVE INSTRU. PANEL.

LINE IDENTIFICATION

NOTATION	MATERIAL	CLASSIFICATION	SCHEDULE	SEISMIC
CBB	SA-312 TP304L	SECT III CL-2	80	CL 1
CBD	SA-312 TP 304	B31-1	80	NON-SEISMIC
CCA	SA-106 GR B	SECT III CL-2	100	CL-1
CCB	SA-106 GR B	SECT. III CL-2	160	CL-1
JUDD	COPPER	B31-1	B-88 Type K	NON-SEISMIC
CCC	SA-106 GR B	SECT. III CL-2	80	CL-1

* DENOTES MOG COMPONENTS FURNISHED WITH ASSOCIATED PIPING SYSTEM BY RCI.

NOTE:
1- FOUR PRESSURE REDUCING ORIFICES TO BE FURNISHED BY OTHERS & INSTALLED BY RCI IN SERIES. MINIMIZE STRAIGHT PIPE LENGTH BETWEEN EACH ORIFICE.

FINAL AS-BUILT DRAWING

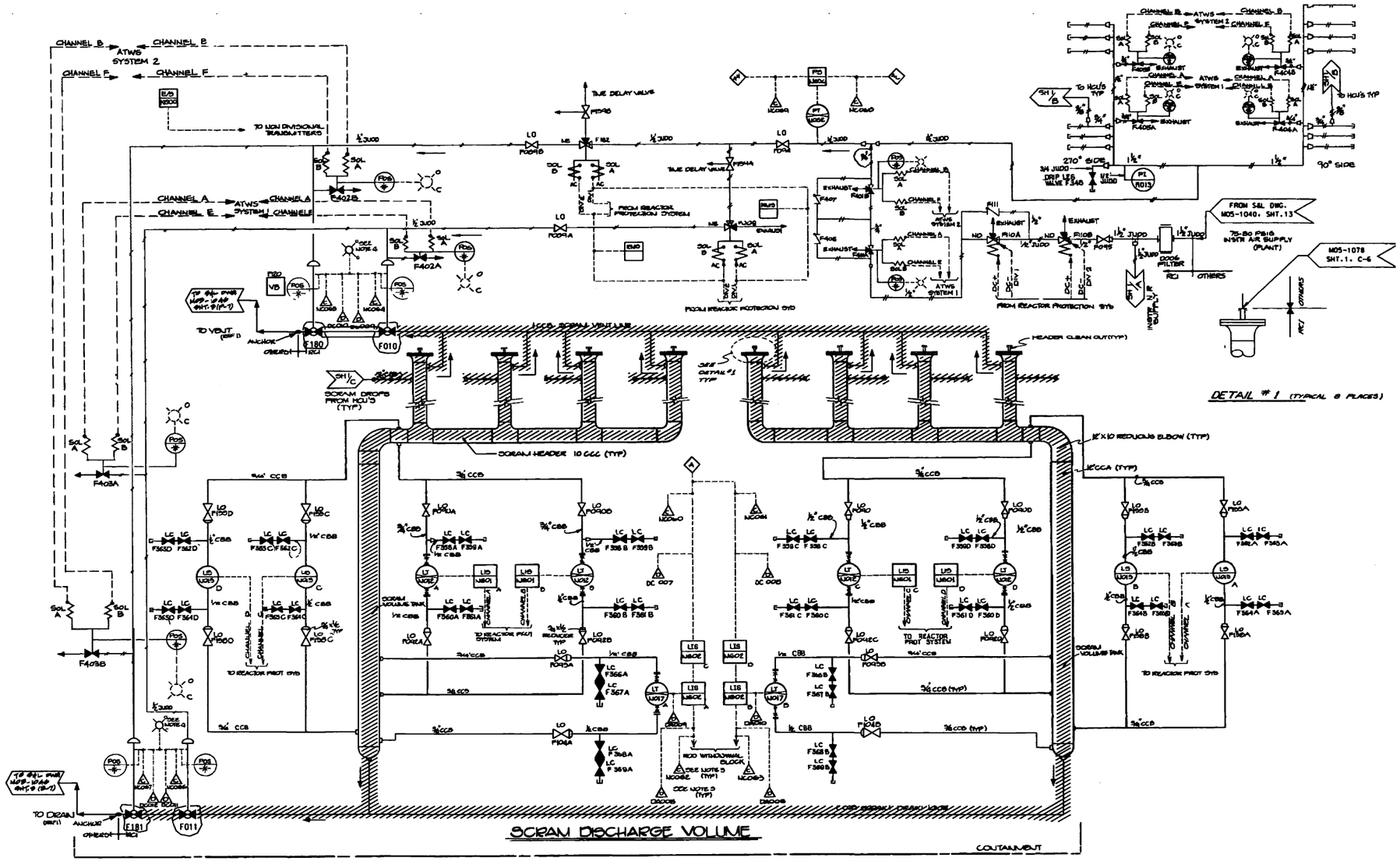
This drawing has incorporated all applicable NCRs, NCRs and redlines reports to reflect acceptability between the as-built and the original condition.

Engr. Manager/Supervisor Date — Engr. / Const. Manager Date

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
CONTROL ROD DRIVE SYSTEM
(SHEET 110 OF 111)

REVISION 9
JANUARY 2001



NOTES:
1. LEVEL TRANSMITTERS ON THE SCRAM DISCHARGE VOLUME WILL BE THE FILLED CAPILLARY TYPE
2. REMOVE LINED VALVES ONLY WHEN COIL MUST BE DEENERGIZED TO PREVENT SCRAM, AS WHEN IN THE BOTTOM LEAD OR WATER IN THE TOP LEADS
3. HEAVY ELECTRICAL SIGNALS REPRESENT A TRIP TO THE SCRAM SOLENOIDS. CONTROL ROOM ALARM WITH MUCLEAR BOILER CONTROL SYSTEM
4. ARROWS OPEN WHEN BOTH VALVES ARE ENERGIZED AND CLOSE WHEN EITHER VALVE IS CLOSED.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-CONTROL ROD DRIVE SYSTEM
SHEET 111 OF 111