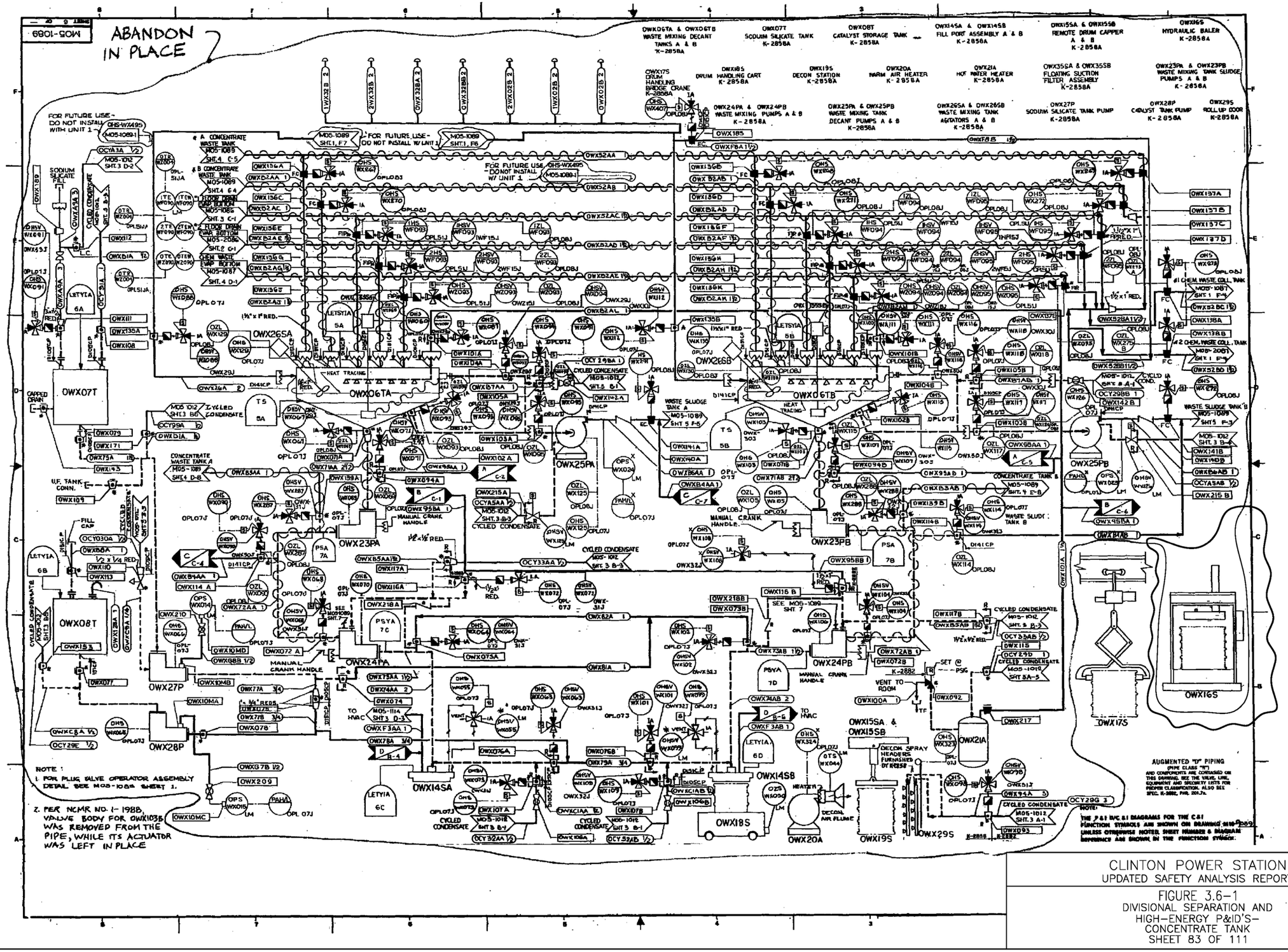
REVISION 15
JANUARY 2013



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
CONCENTRATE TANK
SHEET 83 OF 111

MO5-1102

OVC02AA,AB
CONTROL ROOM HVAC MAKE UP
AIR ELECTRIC HEATING COIL A,B
K-2900

OVC04CA,CB
CONTROL ROOM HVAC
RETURN FAN A,B
K-2904

OVC05CA,CB
CONTROL ROOM HVAC
MAKE UP AIR FAN A,B
K-2900

OVC12 XA,XB
CONTROL ROOM
HVAC RETURN
FAN SILENCER A,B
K-2910

OVC07SA,SB
CONTROL ROOM HVAC
SUPPLY AIR FILTER
PACKAGE A,B
K-2900

OVC09SA,SB
CONTROL ROOM HVAC
MAKE UP AIR FILTER
PACKAGE A,B
K-2900

REVISION 9
JANUARY 2001

NOTES:
1. 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.
2. AIR FLOWS IN PARENTHESIS ARE FOR LOOP/HIGH RADIATION MODE OPERATION.
3. DRAIN LINES MANUAL VALVES TO BE LOCATED AS CLOSE AS POSSIBLE TO THE EQUIPMENT.

NOTES:
1. THE P & I D/C & I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-0122 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.
2. DOP SAMPLE AND INJECTION MANIFOLDS ARE FABRICATED AND INSTALLED BY SPEC. K-2882.

PRIMARY MAKE-UP AIR INTAKE
STANDBY MAKE-UP AIR INTAKE
MISSILE BARRIER
EXHAUST LOUVERS
MAX. O.A.
4000 CFM F.C.
61,000 CFM
57,000 (61,000) CFM
2"X3" EXP.FLANGE
3X2 EXP.FLANGE
3X2 RED.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S
CONTROL ROOM HVAC
SHEET 84 OF 111

M05-1102 SHEET 2 OF

OVC03CA,CB
CONTROL ROOM HVAC
SUPPLY FAN A,B
K-2904

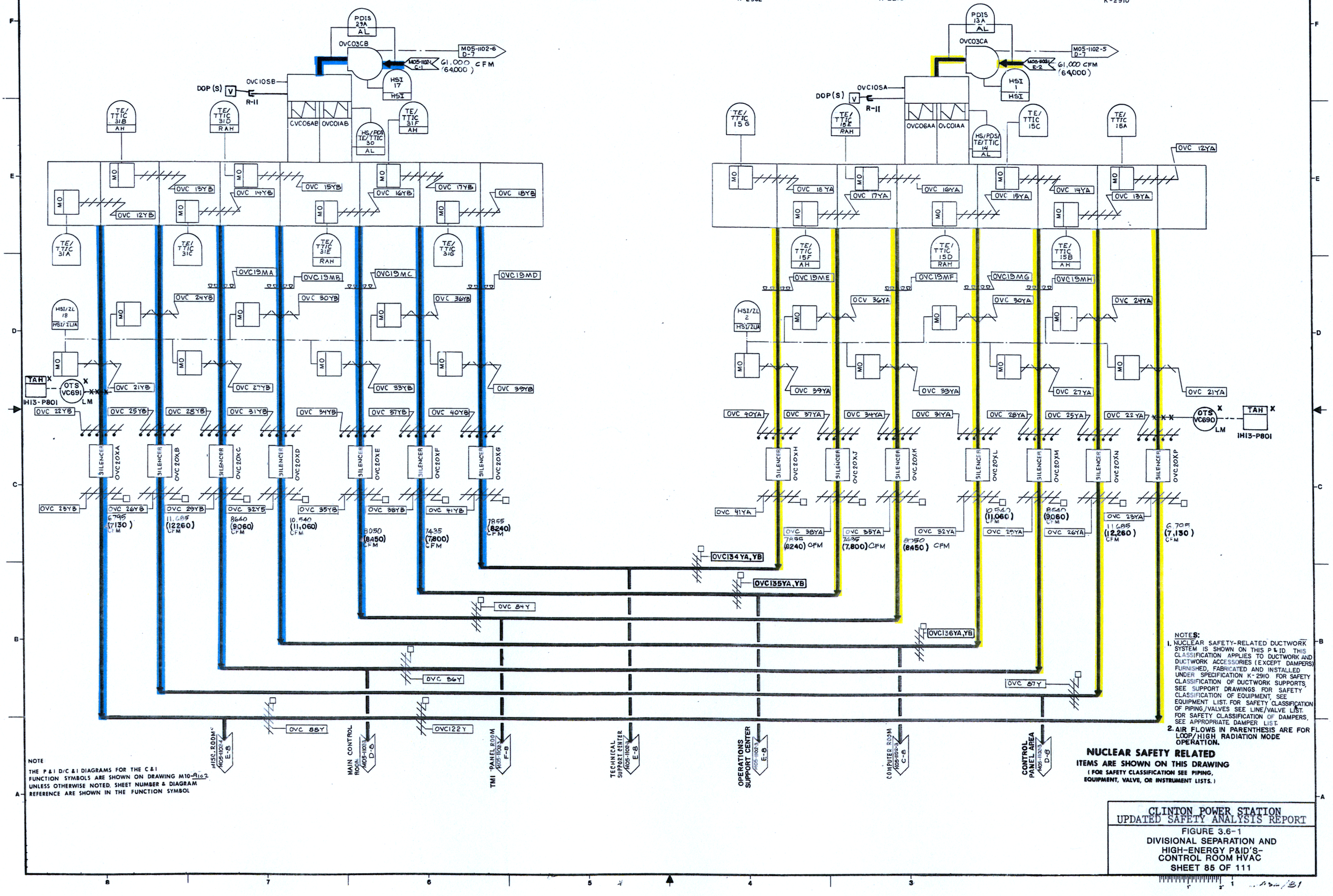
OVC01AA,AB
CONTROL ROOM HVAC
ELECTRIC HEATING COIL A,B
K-2902

OVC06AA, AB
CONTROL ROOM HVAC
COOLING COIL A,B
K-2902

OVC10SA,SB
CONTROL ROOM HVAC
AIR HANDLING UNIT A,B
K-2902

OVC 19MA, MB, MC, MD, ME, MF, MG & MH
CONTROL ROOM SYSTEM HVAC
HUMIDIFIERS
K-2910

OVC20XA, XB, XC, XD, XE, XF, XG, XH, XJ, XK, XL, XM, XN & XP
CONTROL ROOM SILENCERS
K-2910



NOTE
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9102 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL

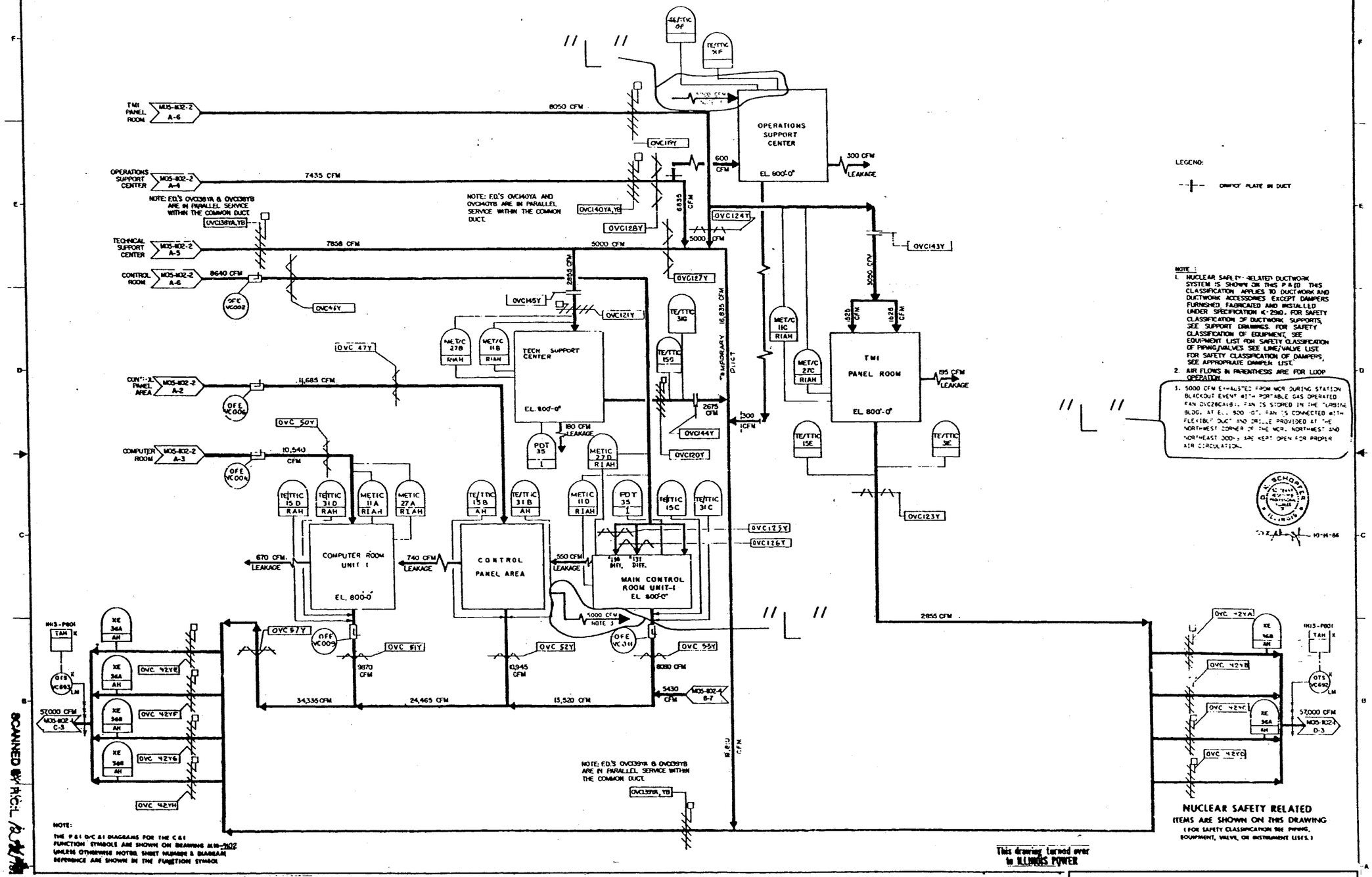
NOTES:
1. NUCLEAR SAFETY-RELATED DUCTWORK SYSTEM IS SHOWN ON THIS P & ID. THIS CLASSIFICATION APPLIES TO DUCTWORK AND DUCTWORK ACCESSORIES (EXCEPT DAMPERS) FURNISHED, FABRICATED AND INSTALLED UNDER SPECIFICATION K-2910 FOR SAFETY CLASSIFICATION OF DUCTWORK SUPPORTS, SEE SUPPORT DRAWINGS FOR SAFETY CLASSIFICATION OF EQUIPMENT, SEE EQUIPMENT LIST. FOR SAFETY CLASSIFICATION OF PIPING/VALVES SEE LINE/VALVE LIST. FOR SAFETY CLASSIFICATION OF DAMPERS, SEE APPROPRIATE DAMPER LIST.
2. AIR FLOWS IN PARENTHESIS ARE FOR LOOP/HIGH RADIATION MODE OPERATION.

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-
CONTROL ROOM HVAC
SHEET 85 OF 111

REVISION 6
03/06/95



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1

DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S- CONTROL ROOM HVAC SHEET 86 OF 111

REVISION 8
FEB. 1999

M05-1102 SHEET 4 OF

OVC11C
LOCKER ROOM
EXHAUST FAN
K-2910

OVC18CA,CB
CONTROL ROOM HVAC
EQUIPMENT ROOM
SUPPLY FAN
K-2904

OVC18SA,SB
CONTROL ROOM HVAC
EQUIPMENT ROOM
AIR HANDLING UNIT
K-2902

OVC18AA,AB
CONTROL ROOM
HVAC EQUIPMENT ROOM
COOLING COIL
K-2903

OVC 19YA
3500 CFM
OVC18AA
OVC12CA
OVC12SA
C.R. HVAC EQPT. RM. - EAST
TTISC 37A HS1

OVC18AB
OVC18CB
OVC18SB
3500 CFM
OVC 19YB
C.R. HVAC EQPT. RM. - WEST
TTISC 37B HS1

NOTE:
FIRE DAMPERS OVC032YA AND OVC032YB ARE IN PARALLEL SERVICE WITHIN THE COMMON DUCT.

OVC093Y
M05-1102 A-7
6795 CFM
OVC132YA,YB
OVC094Y
OVC095Y
OVC061Y
OVC062Y
590 CFM
1000 CFM
1925 CFM
2175 CFM
3255 CFM
3705 CFM
3080 CFM
2590 CFM
2235 CFM
195 CFM
1780 CFM
OVC116Y
OVC104Y
OFE VC018
OFE VC017
TRAIN B
TRAIN A
TIC 34G
TIC 15G
450 CFM
SHOWER ROOM
EL. 800'-0"
230 CFM (O)
230 CFM (O)

350 CFM
240 CFM
490 CFM
925 CFM
250 CFM
1080 CFM
500 CFM
355 CFM
320 CFM
10 CFM LEAKAGE
135 CFM
1100 CFM
680 CFM
70 CFM
230 CFM
EMERGENCY SUPPLIES & MISC. STORAGE EL. 800'-0"
OFFICE SUPPORT & STORAGE EL. 800'-0"
OPERATOR STAGING AREA EL. 800'-0"
KITCHEN EL. 800'-0"
OFFICE/ COMPUTER ROOM EL. 800'-0"
WEST CORRIDOR EL. 800'-0"
WORK COORDINATION EL. 800'-0"
FIELD SUPERVISION/ NRC CONSULTATION ROOM EL. 800'-0"
SHIFT MANAGER EL. 800'-0"
MEN'S TOILET (NORTH) EL. 800'-0"
WOMENS TOILET EL. 800'-0"
EAST CORRIDOR EL. 800'-0"
LOCKER ROOM EL. 800'-0"
DRYING AND SHOWER ROOMS EL. 800'-0"
20 CFM LEAKAGE
10 CFM LEAKAGE
25 CFM LEAKAGE
80 CFM LEAKAGE
10 CFM LEAKAGE
80 CFM LEAKAGE
1000 CFM
25 CFM LEAKAGE
25 CFM LEAKAGE
20 CFM LEAKAGE
15 CFM LEAKAGE
55 CFM (O)
250 CFM
70 CFM
35 CFM LEAKAGE
40 CFM (680) LEAKAGE
270 CFM (O)
230 CFM (O)
230 CFM (O)
250 CFM
500 CFM (O)
230 CFM
BLANK OFF

340 CFM
560 CFM
OVC035Y
OVC036Y
3485 CFM
4470 CFM
5430 CFM
2610 CFM
2370 CFM
1945 CFM
1470 CFM
1135 CFM
OVC105Y
DIV.1
DIV.2
TE 31A AH
TE 15A AH
OFE VC015
OVC063Y
OVC097Y
M05-1102-2 B-4

OFE VC021
OVC103Y
OVC026Y
ZL 33 HSI/ZL
ZL 33 HSI/ZL
MO
MO
ZS 33
FC
FC
OVC133Y
1000 CFM (O)
OVC070Y
OVC117Y
OVC067Y
OVC116
OVC069Y
1000 CFM (O)
M05-102 3-G
OVC101Y

SAFETY RELATED | NON-SAFETY RELATED (SEE NOTE 2)

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-2390.
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. AIR FLOWS IN PARENTHESIS ARE FOR LOOP OPERATION.

NOTES:
1. THE P&I D/C&I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9102 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.)

Sargent & Lundy Engineers SCHORER ILLINOIS 10-19-98

This drawing turned over to ILLINOIS POWER

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT
FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-CONTROL ROOM HVAC
SHEET 87 OF 111

MO5-1102 SHEET 5 OF 7

OVC12MA
CHEMICAL FEEDERS
BY I.P.C.

OVC08PA
CONTROL ROOM HVAC
CHILLED WATER PUMP
K-2826

OVC14TA
CONTROL ROOM HVAC
COMPRESSION TANK
K-2841

OVC13CA
CONTROL ROOM HVAC
WATER CHILLER OA
K-2905B

OVC06AA
CONTROL ROOM HVAC
COOLING COIL
K-2902

OVC18AA
CONTROL ROOM HVAC
EQUIPMENT ROOM
CHILLED WATER COIL
K-2902

QUICK FILL
OVC019A
OVC020A
OVC10AA 2
OVC36AA 2
OVC018A
OVC01MA
OVC022A
OVC094A 2
SET @ 52 PSIG
OPC VC550 A
OVC099A
OVC80AA 3/4
OVC0003A
OVC80AB 1/2
OVC112A H.P. VENT
OVC102AA 3/4
OVC01AA 2
OVC28AA 18
OVC120E 3/4
OVC017A
OVC011AA 1 1/2
OVC021A
OVC024A
C106CP D100
M05-1042 SHT.5 B-4
OMC 148A 2
C107CP
OVC120A 1/4
M05-1052 SHT.1 C-7
15XH6AA 2
OVC016A
OVC120B 1/4
D-105CP C-106CP
SET @ 100 PSIG
2TEN9A 1 1/2
M05-1053 SHT24,E-4
OVC025A
2"X1" RED
OVC12AA 1
OVC026A
2TEN8A 2
OVC031A
M05-1053 SHT24,E-4
TS 10
OVC14TA
K-2841
K-2882
OVC028A
OVC16AA 3/4
OVC15AA 1
OVC027A
OVC14AA 2
C106CP
D105CP
MAKE-UP WATER
OVC643A
OVC644A
OVC34BA 1/2
OVC35BA 1/2
OVC063A
OVC064A
OVC12MA
OVC95AA 1/2
OVC645A
OVC34AA 1/2
OVC35AA 1/2
OVC030A
OVC18AA 3/4
TO DRAIN
OVC029A
OVC17AA 3/4
OVC29AA 1
OVC03JA 6
OVC014A
OVC02MA
OVC041A
6"x4" RED.
OVC08PA
HSI 4A
K-2826 K-2882
C106CP
D105CP
OVC023A
OVC033A 6
H.P.VENT
OVC114A
OVC104AA 3/4
OVC001A
D-100
C-106CP
15AB4AB 2
M05-1048 SHT-7, E-4
OVC19AA 2
OVC032A
OVC120H 1/2
OVC05CA 6
OVC007A
HIGHER THAN COOLING COIL OVC06AA
4"x3" RED
OTI VC420 X LM
OTEW VC420 LM
OTI VC422 X LM
OTEW VC422 LM
TS 10
OVC033A
OVC20AA 3/4
OVC120H 1/2
M05-1053 SHT.24,E-5
2TEM8A 1
M05-1092 SHT.1 C-7
FROM SHUTDOWN SERVICE WATER
15XK4AA 3/4
HSI 10 PSAL
OVC110AA 8
OVC115A
PC 10
REFRIGERANT LINE
VENT
1/2"x1/4" RED
CONTROL PANEL
DRAIN
VENT
OVC107AA 1/2
OVC108AA 1/4
OVC106AA 1/4
OVC109AA 1/2
LOAD LIMIT CONTROL PACKAGE
OVC116A
OVC035A
OVC034A
OVC22AA 3/4
OVC21AA 3/4
OVC100A
OVC22AC 3/4
OVC035C
OVC13CA
DRAIN
OTC VC622A LM
OTEW VC622A LM
OVC006A
8"x6" RED.
K-2905B
K-2882
C106CP
OFE VC008 LM
FISAL 4B
OVC30AA 8
OVC037A
OVC24AA 3/4
OTI VC421 X LM
OTEW VC421 LM
OVC04AA 6
H.P. VENT
OVC062A
OVC33AA 3/4
OVC061A
OVC32AA 3/4
OVC040A
OVC04BA4
OVC05BA4
OVC05AL 4
4"x3" RED.
OVC04CJ 3
OVC05BC 4
OVC04BC 4
OVC05AJ 3
OVC04CL 3
OVC05AG 3
OVC04CE 3
OVC05AE 3
OVC04CG 3
OVC05AC 3
OVC04CA 3
OVC05AA 3
OVC04CC 3
OVC013L
OVC08BC2
ITE03MA
OVC06AA (SEE NOTE2)
OVC013J
OVC088A 2
M05-1053 SHT.24 F-5
2TE M6A 2
2TE M9A 2
D105CP C-106CP
OVC002A
OVC08CC 2
OVC015A
H.P.VENT
OVC110A
OVC121A 3/4
OVC06AA 2
OVC07AA 2
H.P. VENT
OVC111A
OVC101AA 3/4
OTI VC423 X LM
OTEW VC423 LM
TIC 37A HS
OVC010A
OVC011A
F.O.
OVC009A
OVC07BA 2
OVC012A
P
OVC039A
OVC26AA 3/4
3"x2" RED.
OVC18AA
3x2 RED.
OVC008A
OVC31AA 2
OVC060A
M05-1053 SHT.24 C-3
2TEM7A 2
K-2902 K-2882
C106CP
D105CP
K-2882 K-2902

NOTES:
1. * FURNISHED WITH EQUIPMENT.
2. COOLING COIL OVC06AA IS SPLIT INTO SIX SEPARATE COILS.

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 M10-9102 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-
CONTROL ROOM HVAC
SHEET 88 OF 111

DRR-M-177-C

REV. 2 SEPT. 1990

M05-1102 SHEET 6 OF 7

OVC12MB
CHEMICAL FEEDERS
BY I.P.C.

OVC08PB
CONTROL ROOM HVAC
CHILLED WATER PUMP
K-2826

OVC14TB
CONTROL ROOM HVAC
COMPRESSION TANK
K-2841

OVC13CB
CONTROL ROOM HVAC
WATER CHILLER OB
K-2905B

OVC06AB
CONTROL ROOM HVAC
COOLING COIL
K-2902

OVC18AB
CONTROL ROOM HVAC
EQUIPMENT ROOM
CHILLED WATER COIL
K-2902

MAKE-UP WATER

OVC12MB

OVC14TB

OVC08PB

OVC13CB

OVC18AB

OVC06AB (SEE NOTE 2)

HIGHER THAN COOLING COIL OVC06AB

FROM SHUTDOWN SERVICE WATER

REFRIGERANT LINE

LOAD LIMIT CONTROL PACKAGE

QUICK FILL

H.P. VENT

SET @ 52 PSIG

SET @ 100 PSIG

TO DRAIN

NOTES:
1. * FURNISHED WITH EQUIPMENT.
2. COOLING COIL OVC06AB IS SPLIT INTO SIX SEPARATE COILS.

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 M10-9102 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

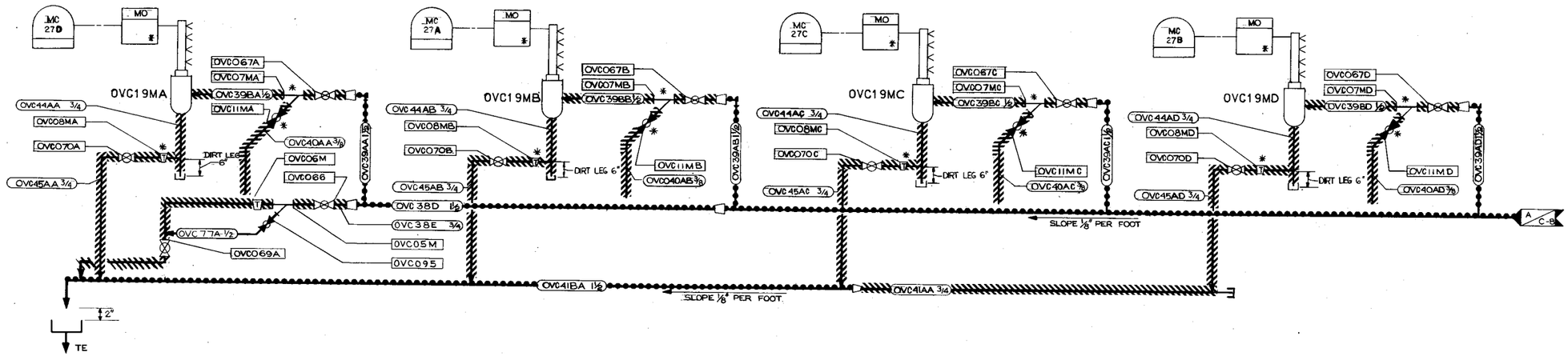
FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
CONTROL ROOM HVAC
SHEET 89 OF 111

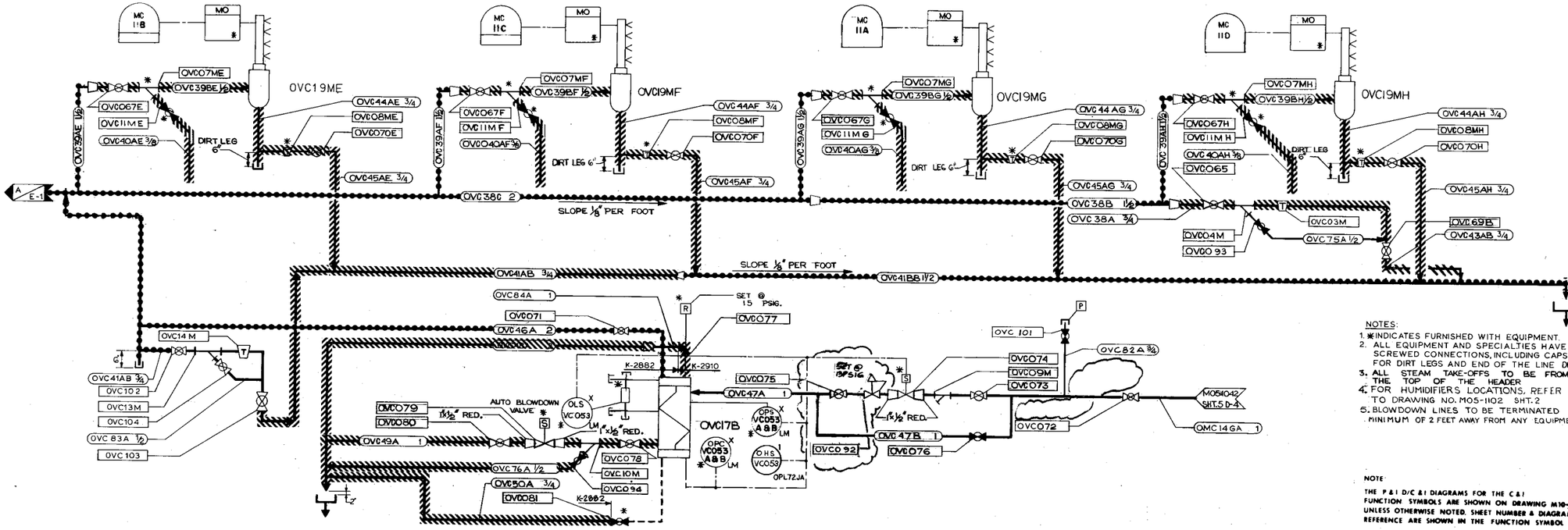
DEC-M-177-C

SHEET 7 OF 7
M05-1102
FILE ID
DATE - -
LVL. INT.

OVC17B
CONTROL ROOM HVAC
HUMIDIFICATION STEAM BOILER
K-2910

OVC19MA OVC19MB OVC19MC OVC19MD
OVC19ME OVC19MF OVC19MG & OVC19MH
CONTROL ROOM HUMIDIFIERS
K-2910





NOTES:
1. * INDICATES FURNISHED WITH EQUIPMENT.
2. ALL EQUIPMENT AND SPECIALTIES HAVE SCREWED CONNECTIONS, INCLUDING CAPS FOR DIRT LEGS AND END OF THE LINE DRIPS.
3. ALL STEAM TAKE-OFFS TO BE FROM THE TOP OF THE HEADER.
4. FOR HUMIDIFIERS LOCATIONS, REFER TO DRAWING NO. M05-1102 SHT. 2
5. BLOWDOWN LINES TO BE TERMINATED MINIMUM OF 2 FEET AWAY FROM ANY EQUIPMENT.

NOTE
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-1102 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-
CONTROL ROOM HVAC
SHEET 90 OF 111

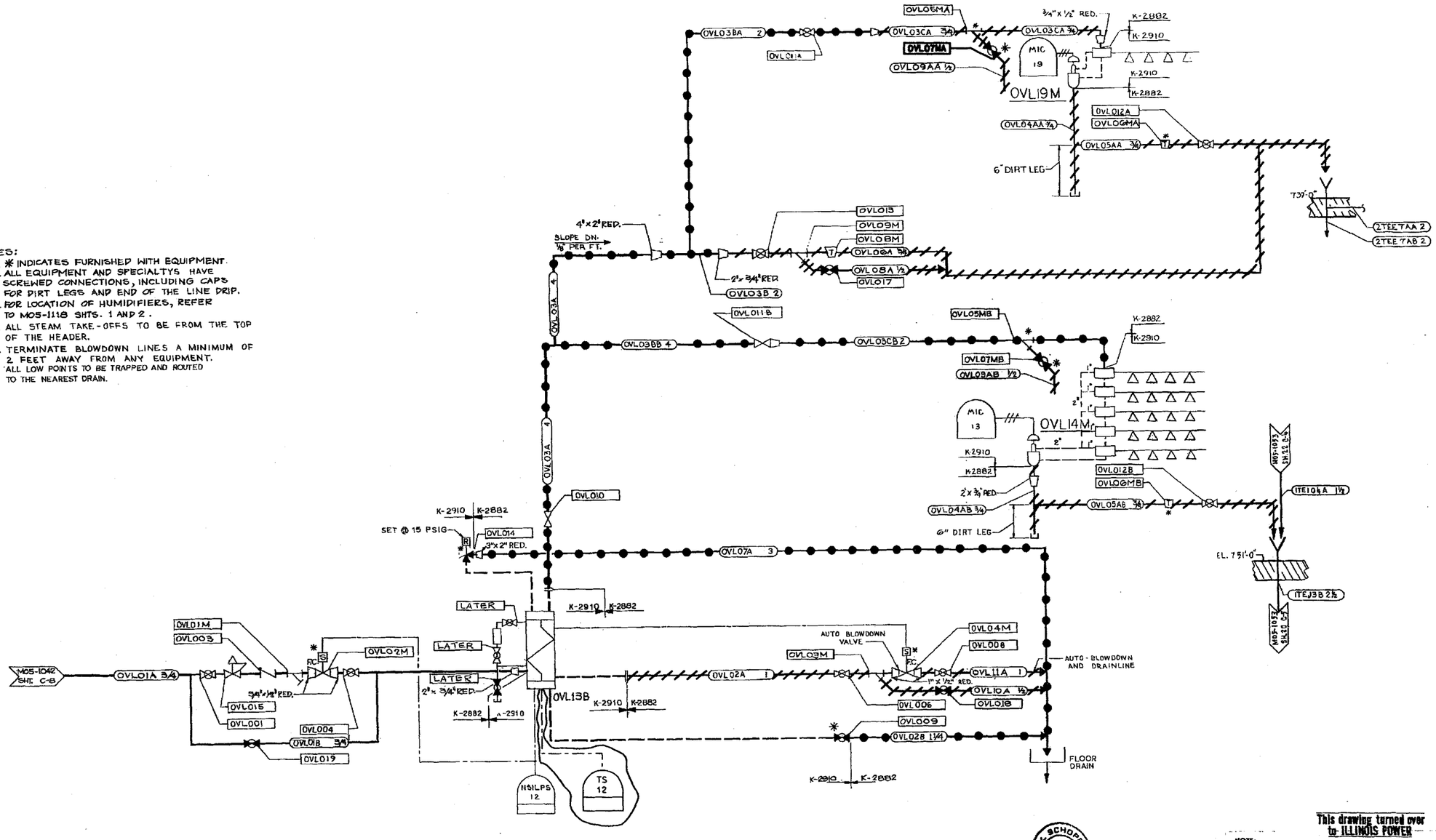
OVL13B
LABORATORY HUMIDIFICATION
STEAM BOILER
K-2910

OVL14M
LABORATORY HUMIDIFIER
K-2910

OVL19M
COUNTING ROOM HUMIDIFIER
K-2910

REVISION 8
MARCH 1998

NOTES:
1. * INDICATES FURNISHED WITH EQUIPMENT.
2. ALL EQUIPMENT AND SPECIALTYS HAVE SCREWED CONNECTIONS, INCLUDING CAPS FOR DIRT LEGS AND END OF THE LINE DRIP.
3. FOR LOCATION OF HUMIDIFIERS, REFER TO MO5-1118 SHTS. 1 AND 2.
4. ALL STEAM TAKE-OFFS TO BE FROM THE TOP OF THE HEADER.
5. TERMINATE BLOWDOWN LINES A MINIMUM OF 2 FEET AWAY FROM ANY EQUIPMENT.
6. ALL LOW POINTS TO BE TRAPPED AND ROUTED TO THE NEAREST DRAIN.



This drawing turned over to ILLINOIS POWER

NOTE:
THE P & I D/C & I DETAILS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-0116 UNLESS OTHERWISE NOTED. SHEET NUMBER & DETAIL REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

D. K. SCHOEFER 87-38457 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS
08-18-86

CLINTON POWER STATION
UPDATED SAFETY ANANLYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P& ID'S
LABORATORY AND COUNTING ROOM HVAC
SHEET 90A OF 111

M05-1103

IVD01CA, CB, CC
DIESEL GENERATOR VENT.
FANS 1A, 1B, 1C
K-2904

IVD02CA, CB, CC
DIESEL GENERATOR VENT.
OIL ROOM EXHAUST
FANS 1A, 1B, 1C
K-2904

IVD03CA, CB
DIESEL GENERATOR
MAKE-UP FAN
K-2904

IVD01S
DIESEL GENERATOR
MAKE-UP SUPPLY UNIT
K-2906

IVD04A
DIESEL GENERATOR
MAKE-UP HEATING COIL
K-2906

IVD05A
DIESEL GENERATOR
MAKE-UP COOLING COIL
K-2906

IVD26F
DIESEL GENERATOR
MAKE-UP SUPPLY AIR FILTER
K-2940

SAFETY RELATED

OUTSIDE AIR INTAKE LOUVER

MISSILE BARRIER

EXHAUST LOUVER

DIESEL GENERATOR ROOM 1A

DAY TANK ROOM 1A

OIL TANK ROOM 1A

DIESEL GENERATOR ROOM 1B

DAY TANK ROOM 1B

OIL TANK ROOM 1B

DIESEL GENERATOR ROOM 1C

DAY TANK ROOM 1C

OIL TANK ROOM 1C

NON-SAFETY RELATED (SEE NOTE 2)

FROM CO2 SYS. INITIATION

NOTES:
1. THE P&ID/FCD DIAGRAMS FOR THE CDI FUNCTION SYMBOLS ARE SHOWN ON DRAWING M05-1093 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN AS THE SHEET NUMBER DESIGNATION.
2. NUCLEAR SAFETY-RELATED SYSTEMS SHOWN IN SHADE ON THIS P&ID. THIS CLASSIFICATION APPLIES TO SYSTEMS AND SYSTEMS ACCESSORIES (EQUIPMENT ASSEMBLIES) FURNISHED, FABRICATED AND INSTALLED UNDER SPECIFICATIONS M-2004, FOR SAFETY CLASSIFICATIONS OF SYSTEMS SUPPORTS, SEE SUPPORT DRAWINGS.
FOR SAFETY CLASSIFICATION OF EQUIPMENT, SEE "EQUIPMENT LIST."
FOR SAFETY CLASSIFICATIONS OF PIPING/VALVES, SEE LINE/VALVE LIST.
FOR NON-CLASSIFICATION OF MISCELLANEOUS ACCESSORIES SEE LIST.
3. MINIMUM INTAKE AND EXHAUST AND MAXIMUM RECIRCULATION AIRFLOWS LISTED REPRESENT DESIGN AIRFLOWS REQUIRED TO MAINTAIN HEAT BALANCE TEMPERATURES AT DBA UNDER MAXIMUM DESIGN OUTSIDE AND AMBIENT CONDITIONS WITH THE DIESEL GENERATOR OPERATING AND MAXIMUM ITS DESIGN HEAT LOAD. THE OUTSIDE AIR FLOW RATES ARE ADJUSTED AS REQUIRED TO MAINTAIN THE DISCHARGE TEMPERATURE AT DBA AND MAY CHANGE COMPLETELY REFERENCE CALCULATION M05-4 AND PSE 301.

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

NOTE:
AIR FLOW RATES ARE GIVEN AT STANDARD DENSITY (0.075 LB/FT³)

This drawing turned over to ILLINOIS POWER

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
DIESEL GENERATOR ROOM VENTILATION
SHEET 91 OF 111

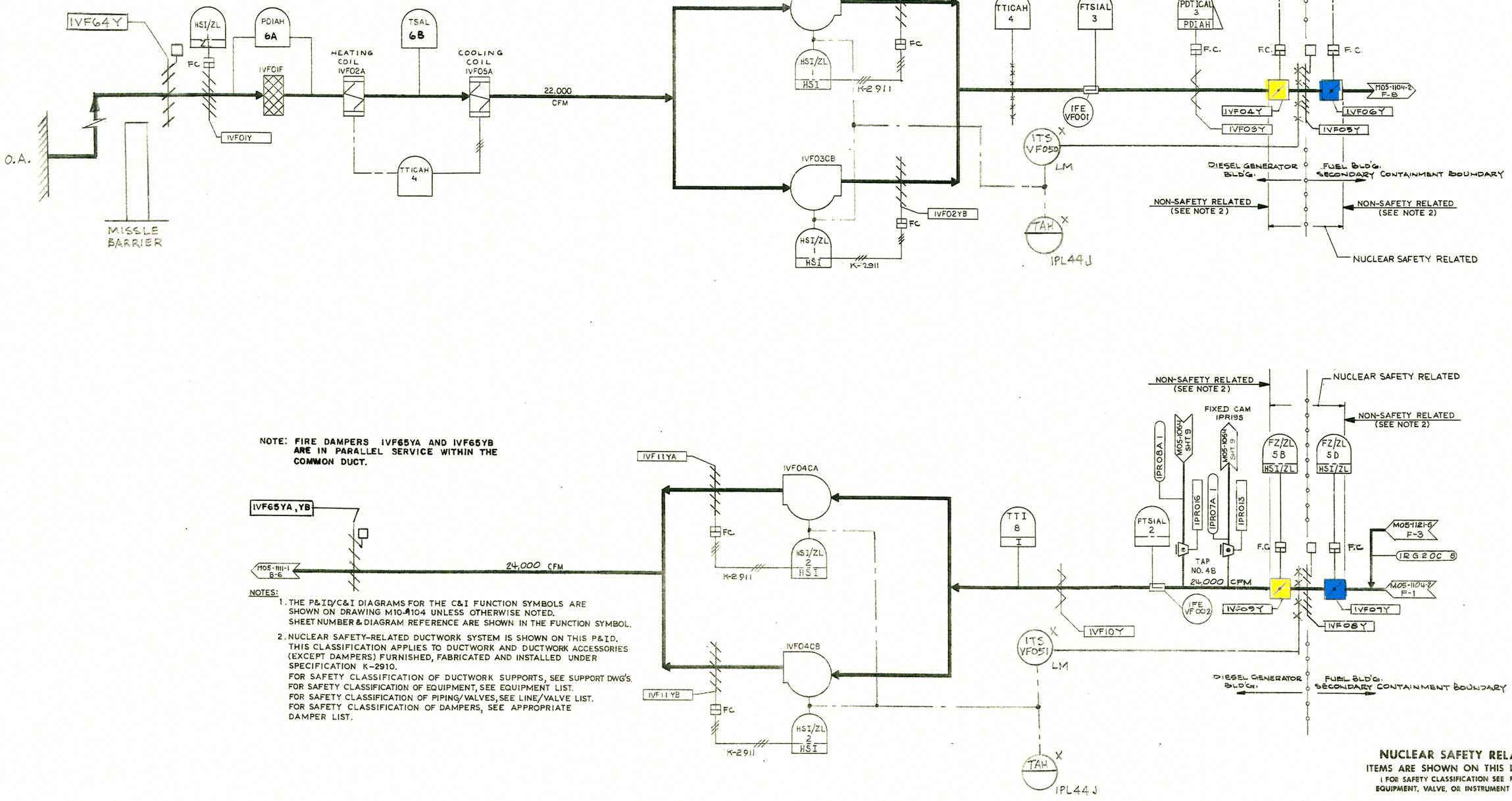
IVF01F
FUEL BLDG. VENT.
SUPPLY AIR FILTER
K-2910

IVF02A
FUEL BLDG. VENT.
SUPPLY AIR HTG. COIL
K-2908

IVF03CA,CB
FUEL BLDG. VENT.
SUPPLY AIR FANS 1A, 1B
K-2904

IVF04CA,CB
FUEL BLDG. VENT.
EXHAUS AIR FANS 1A, 1B
K-2904

IVF05A
FUEL BLDG. VENT.
SUPPLY AIR CLG. COIL
K-2906



NOTE: FIRE DAMPERS IVF65YA AND IVF65YB ARE IN PARALLEL SERVICE WITHIN THE COMMON DUCT.

NOTES:

1. THE P&ID/C&I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-1104 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 DWG'S.
   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-
FUEL BUILDING HVAC
SHEET 92 OF 111

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

REVISION 7
JUNE 1997

SHEET 1 OF
M05-1105

OVG01SA & OVG01SB
STANDBY GAS TREATMENT SYSTEM
EQUIPMENT TRAINS A & B
K-2900

OVG02CA & OVG02CB
STANDBY GAS TREATMENT SYSTEM
FANS A&B
K-2900

OVG03CA & OVG03CB
STANDBY GAS TREATMENT SYSTEM
STANDBY COOLING AIR FANS A&B
K-2900

OVG04AA & OVG04AB
STANDBY GAS TREATMENT SYSTEM
ELECTRIC HEATERS A&B
K-2900

OVG05FA & OVG05FB
STANDBY GAS TREATMENT SYSTEM
DEMISTERS A&B
K-2900

OVG06FA & OVG06FB
STANDBY GAS TREATMENT SYSTEM
PRE-FILTERS A&B
K-2900

OVG07FA & OVG07FB
STANDBY GAS TREATMENT SYSTEM
UP STREAM HEPA FILTERS A&B
K-2900

OVG08FA & OVG08FB
STANDBY GAS TREATMENT SYSTEM
CHARCOAL ADSORBERS A&B
K-2900

OVG11FA & OVG11FB
STANDBY GAS TREATMENT SYSTEM
DOWNSTREAM HEPA FILTERS A&B
K-2900

CONTROL BUILDING
PORTABLE RAD. MONITOR TAP NO. 34
PORTABLE RAD. MONITOR TAP NO. 35
COMMON STATION VENT
DIESEL GENERATOR BUILDING ROOF
FURNISHED BY K-2900 INSTALLED BY K-2910
K-2882 K-2900
K-2910
OVG01SA
OVG01SB
OVG02CA
OVG02CB
OVG03CA
OVG03CB
OVG05FA DEMISTER
OVG05FB DEMISTER
OVG04AA ELECTRIC HEATER
OVG04AB ELECTRIC HEATER
OVG06FA PRE-FILTER
OVG06FB PRE FILTER
OVG07FA HEPA FILTER
OVG07FB HEPA FILTER
OVG08FA CHARCOAL ADSORBER
OVG08FB CHARCOAL ADSORBER
OVG11FA HEPA FILTER
OVG11FB HEPA FILTER
4000 CFM
350 CFM
CONTROL BLDG. ATMOSPHERE 350 CFM WHEN FAN OVG03CA IS RUNNING
CONTROL BLDG. ATMOSPHERE 350 CFM WHEN FAN OVG03CB IS RUNNING
INSTALL WITH UNIT 1
FUTURE UNIT 2
1" x 3/4" RED.
3 x 2 RED.
5 x 2 RED.
2" ϕ NPT COUPLING (TYPICAL FOR 7)
1/2" THREAD-O-LET WITH PLUG
3/4" THREAD-O-LET WITH PLUG
CLASS 0
CLASS D
20" MIN.
2.0" MIN.
DOP (I)
DOP (S)

NOTES:
1. I- MEANS OPEN ENDED PIPE
2. WHERE INDICATED PIPING LOOPS TO BE 20" OR GREATER.
3. 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.
4. DOP SAMPLE AND INJECTION MANIFOLDS ARE FABRICATED AND INSTALLED BY SPEC K-2882.

NOTE:
THE P&I D/C&I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-0105 UNLESS 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-
STANDBY GAS TREATMENT SYSTEM
SHEET 93 OF 111

REV. 2 SEPT. 1990

M05-1105 SHEET 2 OF

CUTDOOR AIR INFILTRATION

OUTDOOR AIR INFILTRATION

CGCB ABOVE EL. 800'-0"

IVG05YA F.C. MO ZS 4 HSL/ZL

IVG26A 10 700 CFM A E-1

IVG07BA 12

600 CFM

IVG34A10

FUEL BLDG

IVG07BB12

IVG07YA

IVG05YB F.C. MO ZS 10 HSL/ZL

IVG07YB

APPROX. 2000 CFM

APPROX. 2000 CFM

IVG32A6

AUX. BLDG. INFILTRATION

IVG25A6 CGCB EL.781'-0" WEST

IVG33A 10

APPROX. 700 CFM

IVG22A10

AUX. BLDG. INFILTRATION

IVG24A4 CGCB EL.755'-0" WEST

AUX. BLDG. INFILTRATION

ACCESS AISLE EL.737'-0" WEST

IVG23A4

1700 CFM

1500 CFM

M05-1104 SHT. 2 A-8

1700 CFM FROM FUEL BLDG. SUPPLY

500 CFM AUX. BLDG. INFILTRATION

500 CFM AUX. BLDG. INFILTRATION

200 CFM AUX. BLDG. INFILTRATION

500 CFM AUX. BLDG. INFILTRATION

RWCU 'B" PUMP RM EL.737'-0" IVG17A 6

RWCU 'C" PUMP RM EL.737'-0" IVG18A 6

RADWASTE PIPE TUNNEL EL.750'-6" IVG19A 6

RWCU 'A' PUMP RM EL.737'-0" IVG20A 6

IVG07A12

IVG30A 14

IVG17YA

K-2911

IVG08AA10 MO 4 HSL/ZL F.C.

IVG04YA

K-2911 ZS 11 ZL F.C. ZS 5 ZL

K-2882 K-2910

IVG17YB

2,000 CFM NORMAL OPERATION TO FUEL BLDG EXHAUST M05-1104 SHT 2 E-1

IVG09AB 10 N.O. F.C. MO ZS 10 HSL/ZL

IVG04YB

FROM FUEL BLDG. SUPPLY M05-1104 SHT.2 B-8

1270 CFM

IVG31A 6

APPROX 700 CFM A E-7

IVG26A 10

IVG29A6 CGCB EL.781'-0" EAST

AUX. BLDG INFILTRATION

IVG26A10

IVG28A 4 CGCB EL.762'-0" EAST

AUX. BLDG INFILTRATION

ACCESS AISLE EL.737'-0" EAST

IVG27A 4

AUX. BLDG INFILTRATION

M05-1105 SHT 1 C-8

M05-1105 SHT 1 E-8

B B-8

C B-8

IVG21AA 16

IVG07AA16

IVG21AB 16

IVG07AB 16

OVF66Y

1000 CFM

1000 CFM

315 CFM

315 CFM

515 CFM

810 CFM

200 CFM

IVF59Y

IVF61Y

IVF63Y

IVF51Y

295 CFM

M05-1070 SHT. 1, D-1

M05-1070 SHT. 1, C-1

SEE NOTE 3

165 CFM

295 CFM

IVF54Y

730 CFM

IVF52Y

IVF55Y

M05-1104 SHT. 2 B-8

APPROX. 3000 CFM B C-1 IVG07AA 16

APPROX. 3000 CFM C C-1 IVG07AB 16

HPCS PUMP RM. EL. 712'-0" IVG10A6

ACCESS AISLE EL. 712'-0" IVG11A4

RHR "C" PUMP RM. EL. 707'-6" IVG12A6

RHR "B" PUMP RM. EL. 707'-6" IVG13A6

RHR "B" HX. RM. EL. 707'-6"

CLASS 0 CLASS B 1150B 3 200 CFM

MAIN STEAM TUNNEL EL. 755'-0"

CLASS 0 CLASS B 1150A 3 100 CFM

RCIC PUMP RM. EL. 707'-6" IVG14A 6

RHR "A" HX RM. EL. 707'-6"

RHR "A" PUMP RM. EL. 707'-6" IVG15A6

LPCS PUMP RM. EL. 707'-6" IVG16A6

IVG01A14

IVG16YA F.C. ZS 11 ZL K-2911 ZS 5 ZL F.C.

IVG16YB K-2882 K-2910

IVG03A 14

M05-1104 SHT. 2F-2 2,500 CFM NORMAL OPERATION TO FUEL BUILDING EXHAUST

IVG05AB10 N.O. F.C. ZS 10 HSL/ZL MO IVG06YB

IVG05AA10 N.O. F.C. MO ZS 4 HSL/ZL IVG06YA

APPROX. 1000 CFM IVG09YB

APPROX. 1000 CFM IVG09YA

SECONDARY CONTAINMENT

NOTES:
1. I - MEANS OPEN ENDED PIPE
2. ALL PIPING ON THIS SHEET IS CLASS "0" EXCEPT OTHERWISE NOTED.
3. FLOW OCCURS ONLY DURING OPERATION OF MSIV BLOWERS

NOTE:
THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-1105E 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-
STANDBY GAS TREATMENT SYSTEM
SHEET 94 OF 111

DRE-M-347-C

M05-1106 SHEET 2 OF

IVH01CA
SSW PUMP
ROOM A
SUPPLY FAN
K-2904

IVH01AA,B
SSW PUMP
ROOM A
COOLING COILS
K-2902

IVH01CC
SSW PUMP
ROOM C
SUPPLY FAN
K-2904

IVH03A
SSW PUMP
ROOM C
COOLING COIL
K-2902

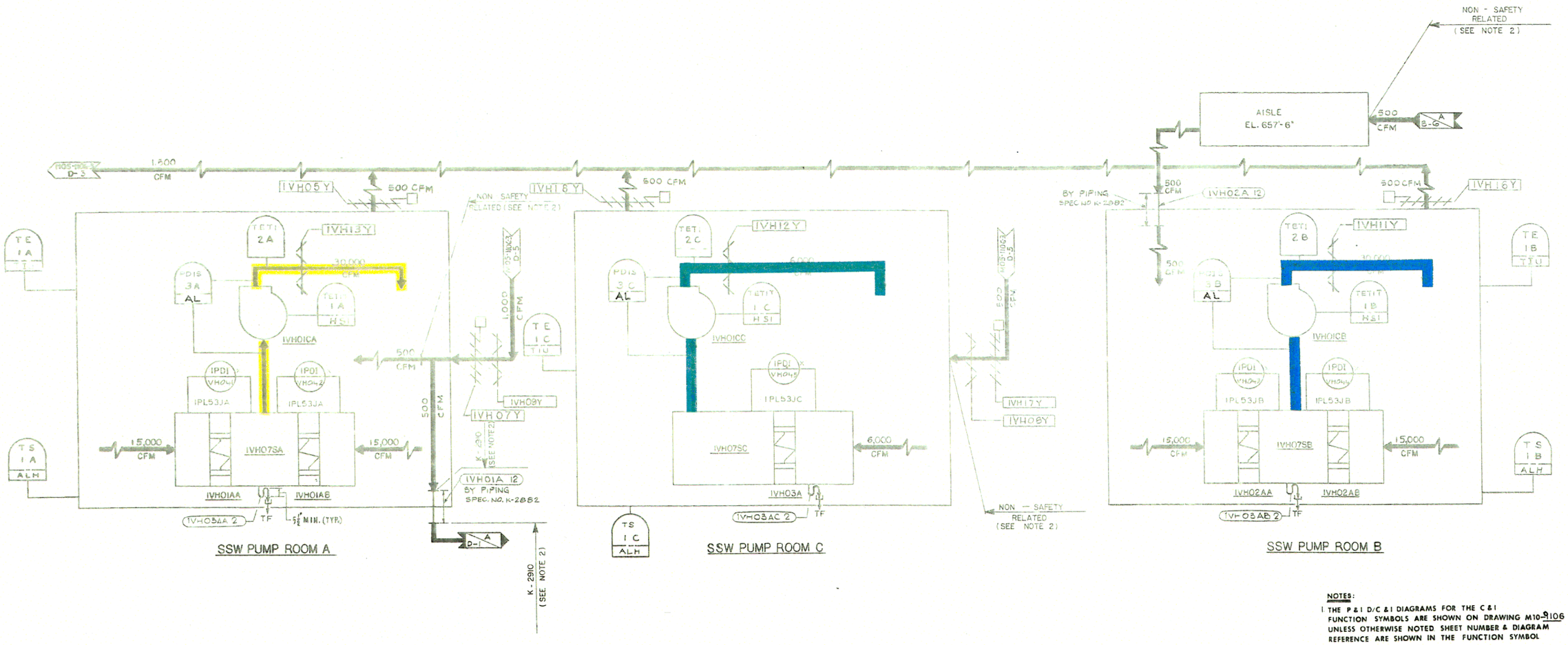
IVH07SA
SSW PUMP
ROOM A
COIL CABINET
K-2902

IVH07SB
SSW PUMP
ROOM B
COIL CABINET
K-2902

IVH07SC
SSW PUMP
ROOM C
COIL CABINET
K-2902

IVH01CB
SSW PUMP
ROOM B
SUPPLY FAN
K-2904

IVH02AA,B
SSW PUMP
ROOM B
COOLING COILS
K-2902



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 M10-9106 UNLESS OTHERWISE NOTED SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL
2. NUCLEAR SAFETY- RELATED DUCTWORK SYSTEM IS SHOWN ON THIS P & I D. 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.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
SHUTDOWN SERVICE WATER VENTILATION
SHEET 95 OF 111

**REVISION 7
DECEMBER 1996**

IVP02SA, SC
DRYWELL COOLING SYSTEM
COIL CABINETS 1A, 1C
K-2902

IVP03PA
DRYWELL CHILLED
WATER PUMP 1A
K-2825

IVP04CA
DRYWELL CHILLED WATER
CHILLER 1A
K-2905B

IVP05TA
DRYWELL CHILLED WATER
COMPRESSION TANK 1A
K-2839

IVP07MA
CHEMICAL FEEDER
BY I.P.C.

IVP08MA
CORROSION TEST RACK
(FIELD FAB.)

IVP02SE, SF
DRYWELL COOLING
SYSTEM COIL CABINETS
K-2902

IVP05TA

IVP04CA
OIL COOLER

IVP07MA

IVP02SA
EL. 723'-13/4" (AZ. 65°)

IVP02SC
EL. 767'-10" (AZ. 168°)

FUEL BLDG — CONTAINMENT BLDG — DRYWELL

TO PLANT SERVICE WATER P&ID M05-1056 SHT. 2 B-3

TO FLOOR DRAIN M05-1047 SHT 2 F-6

TO DRAIN

FLANGE FOR SPOOL REMOVAL

LOAD LIMIT CONTROL PACKAGE 12X10 RED.

FLANGE FOR SPOOL REMOVAL 12X10 RED.

MAKE-UP CONDENSATE STORAGE M05-1042 SHT. 4 C-5

M05-1109 SHT. 3 E-8

M05-1056 SHT. 2, B-4

M05-1109 SHT. 3 C-4

M05-1109 SHT. 3 E-1

M05-1109 SHT. 3 C-1

M05-1109 SHT. 3 B-1

M05-1109 SHT. 3 B-1

M05-1046 SHT 4 E8

IHS VP041 IH13-P801

IHS VP043 IH13-P801

IHS VP007 IH13-P801

IHS VP090A VP190 IH13-P800-65B

B106CP SEISMIC D100

SET @ 175 PSIG

SET @ 140 PSIG

SET @ 100 PSIG

H.P VENT

L.P DRAIN

T.C.

K-2882 K-2905B K-2882 K 2905B

K-2882 K-2905B

FROM IVP04CA E K-2905B K-2882

NOTE: 1) INSTRUMENT LOOP IS ABANDONED IN PLACE

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 M10-9109 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-
DRYWELL COOLING CHILLED WATER SYSTEM
SHEET 96 OF 111

REVISION 7
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IVP02SB, SD
DRYWELL COOLING SYSTEM
COIL CABINETS 1B, 1D
K-2902

IVP03PB
DRYWELL CHILLED
WATER PUMP 1B
K-2825

IVP04CB
DRYWELL CHILLED WATER
CHILLER 1B
K-2905B

IVP05TB
DRYWELL CHILLED WATER
COMPRESSION TANK 1B
K-2839

IVP07MB
CHEMICAL FEEDER
BY I.P.C.

IVP08MB
CORROSION TEST RACK
(FIELD FAB.)

IVP05TB

OIL COOLER
IVP04CB

IVP02SB
EL. 723'-1 3/4" (AZ. 218°)

IVP02SD
EL. 767'-10" (AZ. 219°)

FUEL BLDG. — CONTAINMENT BLDG. — DRYWELL

TO PLANT SERVICE WATER P&ID M05-1056 SHT. 2, A-3

MAKE-UP CONDENSATE STORAGE M05-1042 SHT. 4, C-5

TO FLOOR DRAIN M05-1047 SHT-2 F-4

TO DRAIN IVP630B

M05-1109 SHT. 2 E-4

M05-1056 SHT. 3, B-4

M05-1109 SHT. 2 C-4

M05-1109 SHT. 2 C-1

M05-1109 SHT. 2 F-3

M05-1109 SHT. 2 D-3

M05-1109 SHT. 2 B-1

M05-1046 SHT. 4 E-8

1H13-P800-65-B

1H13-P801

FLG. FOR SPOOL REMOVAL

LOAD LIMIT CONTROL PACKAGE 12"x10" RED.

FROM IVP01CA

K-2882 K-2905B

K-2882 K-2905B

K-2905B K-2882

NOTE 1

NOTE 1: INSTRUMENT LOOP IS ABANDONED IN PLACE.

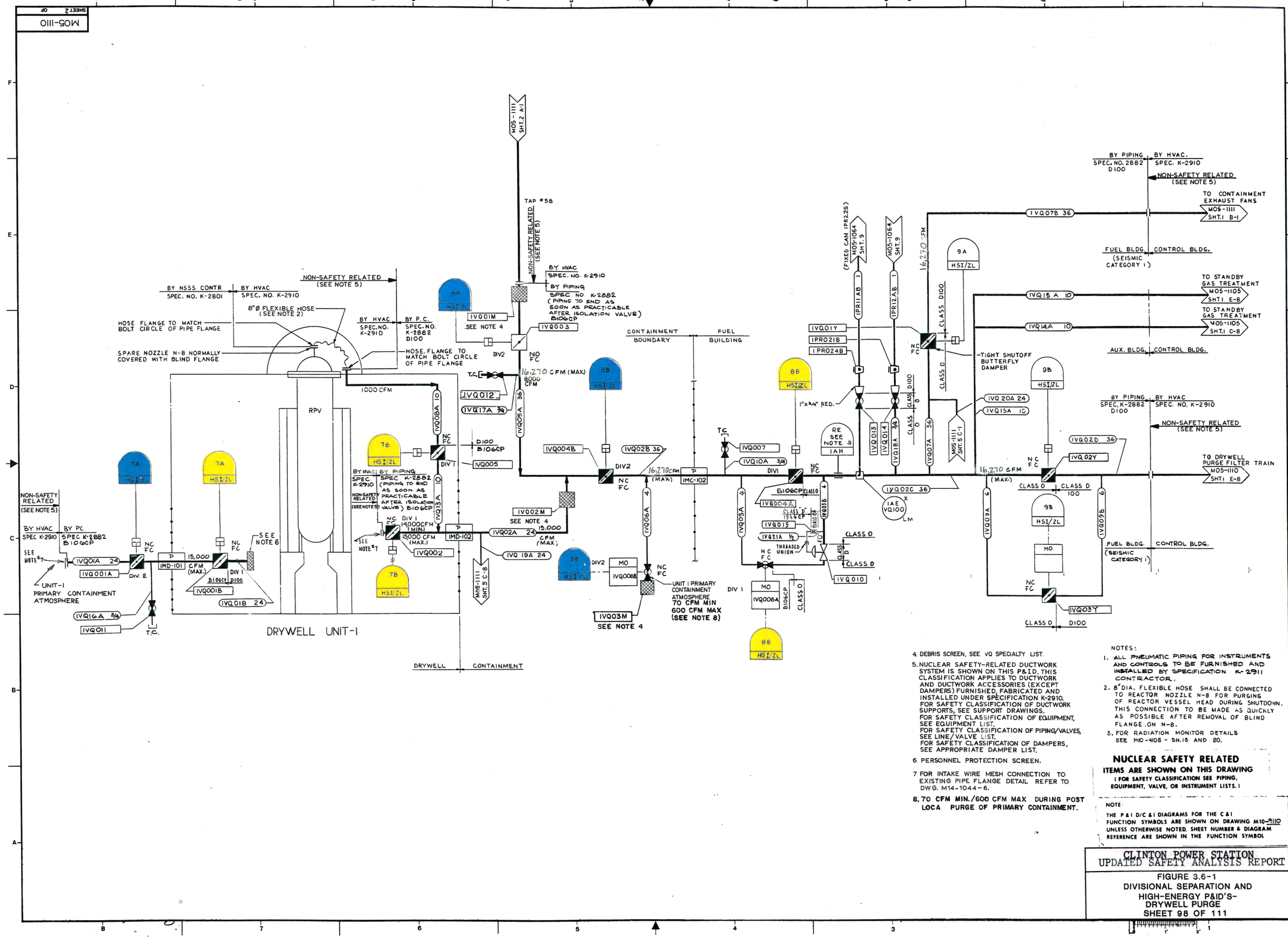
NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING, EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

NOTE:

THE P & I D/C & I DIAGRAMS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-910 S 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-
DRYWELL COOLING CHILLED WATER SYSTEM
SHEET 97 OF 111



4. DEBRIS SCREEN, SEE VQ SPECIALTY LIST.
5. 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.
6. PERSONNEL PROTECTION SCREEN.
7. FOR INTAKE WIRE MESH CONNECTION TO EXISTING PIPE FLANGE DETAIL REFER TO DWG. M14-1044-6.
8. 70 CFM MIN./600 CFM MAX DURING POST LOCA PURGE OF PRIMARY CONTAINMENT.

NOTES:
1. ALL PNEUMATIC PIPING FOR INSTRUMENTS AND CONTROLS TO BE FURNISHED AND INSTALLED BY SPECIFICATION K-2911 CONTRACTOR.
2. 8" DIA. FLEXIBLE HOSE SHALL BE CONNECTED TO REACTOR NOZZLE N-8 FOR PURGING OF REACTOR VESSEL HEAD DURING SHUTDOWN. THIS CONNECTION TO BE MADE AS QUICKLY AS POSSIBLE AFTER REMOVAL OF BLIND FLANGE ON N-8.
3. FOR RADIATION MONITOR DETAILS SEE M10-4105 - SH.15 AND 20.

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 M10-9110 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-
DRYWELL PURGE
SHEET 98 OF 111

M05-1111

REVISION 7
JUNE 1997

IVR01A
CONTAINMENT BLDG. VENT. SUPPLY AIR HEATING COIL K-2908

IVR02A
CONTAINMENT BLDG. VENT. SUPPLY AIR COOLING COIL K-2906

IVR03CA,CB
CONTAINMENT BLDG. VENT. SUPPLY FANS 1A, 1B K-2904

IVR04CA,CB
CONTAINMENT BLDG. VENT. EXHAUST FANS 1A, 1B K-2904

IVR07XA & IVR07XB
SILENCER K-2910

NOTE:
FIRE DAMPERS IVR132YA AND IVR132YB ARE IN PARALLEL SERVICE WITHIN THE COMMON DUCT.

IVR13Z-YA,YB

OUTSIDE AIR INTAKE LOUVER
1B HS1/ZL
N.C. F.C.
PDI 6B AH
IVR05F
IVR01Y
TS 6A TAL
TC 4
IVR01A
IVR02A
16270 CFM

IVR03CA
DIV. X
IA HS1/ZL
DIV. X IVR02YA
N.C. F.C.

IVR03CB
DIV. X
IA HS1/ZL
DIV. X IVR02YB
N.C. F.C.

IVR06X
TIC/AH 4
FTIS 1C FAL
IFE VR001
PDIC 5A AHL
F.D.
IVR03Y
IVR01M
¼" BLANK PLATE SEE NOTE 2
4" DIA. PLAIN END OPEN TO FUEL HANDLING BLDG. FOR POST LOCA PURGE
70 CFM MIN, 600 CFM MAX.

D100 PIPE
B106CP PIPE
IVR03
IVR07A ¾
2A HS1/ZL
BY K-2911
N.C. F.C.
DIV. 1 IVR001A
IVR01B 36
IVR 02 M DEBRIS SCREEN SEE NOTE 1
IVR01A 36 150 # FLANGES
IVR02A 4
IVR02B 4
N.C.
DIV. 1 IVR002A
MO
2C HS1/ZL

CONTAINMENT
2B HS1/ZL
BY K-2911
N.C. F.C.
DIV. 2 IVR001B
P IMC-101
IVR06A 4
N.C.
DIV. 2 IVR002B
MO
2B HS1/ZL
M05-1111-5 E-1
M05-1111-2 B1
IVR03M DEBRIS SCREEN SEE NOTE 1

FUEL BLDG. — CONTAINMENT

CONTROL BLDG. — DIESEL BLDG. — FUEL BLDG. (SECONDARY CONTAINMENT)

NON-SAFETY-RELATED (SEE NOTE 5)

BY P.C. D100 PIPE SPEC. NO. K-2882

BY HVAC SPEC. K-2910

BY P.C. (PIPING TO END AS SOON AS POSSIBLE AFTER ISOLATION VALVE) B106CP PIPE SPEC. NO. K-2882

NON-SAFETY-RELATED (SEE NOTE 5)

OFE VR500
FTY 7C
LM
OAE PR005
OAE PR013 1 LM
M05-1064 SHT.II,D-8
M05-1064-7 D8
M05-1064 SHT.II, D-1
M05-1064-7 D1

FROM CONTINUOUS CONTAINMENT PURGE EXHAUST — M05-1111 SHT 5 B-1 — IVR16 A24 8000 CFM

4200 CFM — M05-1118-2 B8 — FROM COUNTING ROOM AUX. DECON.

32660 CFM — M05-1118-1 B8 — FROM LAB. VENT. SYSTEM
20000 CFM — M05-1107-7 B5 — FROM AUX. BLDG VENT
20000 CFM — M05-1101-1 B5 — FROM AUX. BLDG. VENT.

FROM FUEL BUILDING
FROM TURBINE BUILDING
FROM CONTAINMENT BLDG. VENT.

141,070 CFM
51300 CFM — M05-1113-1 B6
89,770 CFM
73,500 CFM — M05-1114-1 B8

24000 CFM — M05-1104-1 B7 — FROM FUEL BLDG.
6400 CFM — M05-1101-1 C7 — FROM AUX. BLDG.
OCA03B 16 — M05-1018-1 F1
IGS20.C 12 — M05-1016-2 C1
SEE NOTE 4 16270 (8000) (0) CFM (CFM) (CFM) — M05-1110-1 D1 — DRYWELL PURGE

COMMON STATION HVAC STACK

TIT 3C T1
IVR07XA
16,270 CFM

DIV X IVR08YA
F.C.
IVR04CA
DIV X
3A HS1/ZL

DIV X IVR08YB
F.C.
IVR04CB
DIV X
3A HS1/ZL

16270 CFM
IVR07XB

FTIS 3B FAL
IFE VR012
IVR06Y
M05-1110-2 F1 — FROM CONTAINMENT EXHAUST PENETRATION

IVR133YA,YB,YC,YD

NOTE:
FIRE DAMPERS IVR133YA, IVR133YB, IVR133YC, AND IVR133YD ARE IN PARALLEL SERVICE WITHIN THE COMMON DUCT.

NOTE:
1 DEBRIS SCREEN SEE VR SYSTEM SPECIALTY LIST.

2 INSTALL BLANK-OFF PLATE-¼ THICK SEE VR SPECIALTY LIST.

3 NUMBERS IN PARENTHESIS INDICATE FLOW WHEN ONLY 16270 CFM SYSTEM IS OPERATING

4 16270 CFM WHEN DRYWELL PURGE FILTER UNITS ARE OPERATING AND CONTAINMENT VENT IS ON 8,000 CFM WHEN DRYWELL PURGE FILTER UNIT IS OPERATING AND CONTINUOUS CONTAINMENT PURGE IS ON. 0 CFM WHEN DRYWELL PURGE FILTER UNITS ARE NOT OPERATING.

5. 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: (CON'T.)

6. AIR FLOWS SHOWN FOR FANS IVR03CA/CB AND IVR04CA/CB MAY RESULT IN UNSTABLE FAN OPERATION. IPC HAS DETERMINED THAT THIS CONDITION IS ACCEPTABLE UNTIL AT LEAST THE FIRST OUTAGE. (REF. IPC LTR. NO. S-6083).

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

NOTE:
THE P & ID/C & I DETAILS FOR THE C & I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9111 UNLESS OTHERWISE NOTED. SHEET NUMBER & DETAIL 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-
CONTAINMENT BLDG. HVAC
SHEET 99 OF 111

DRR-M-162-C

M05-1115 SHEET 1 OF

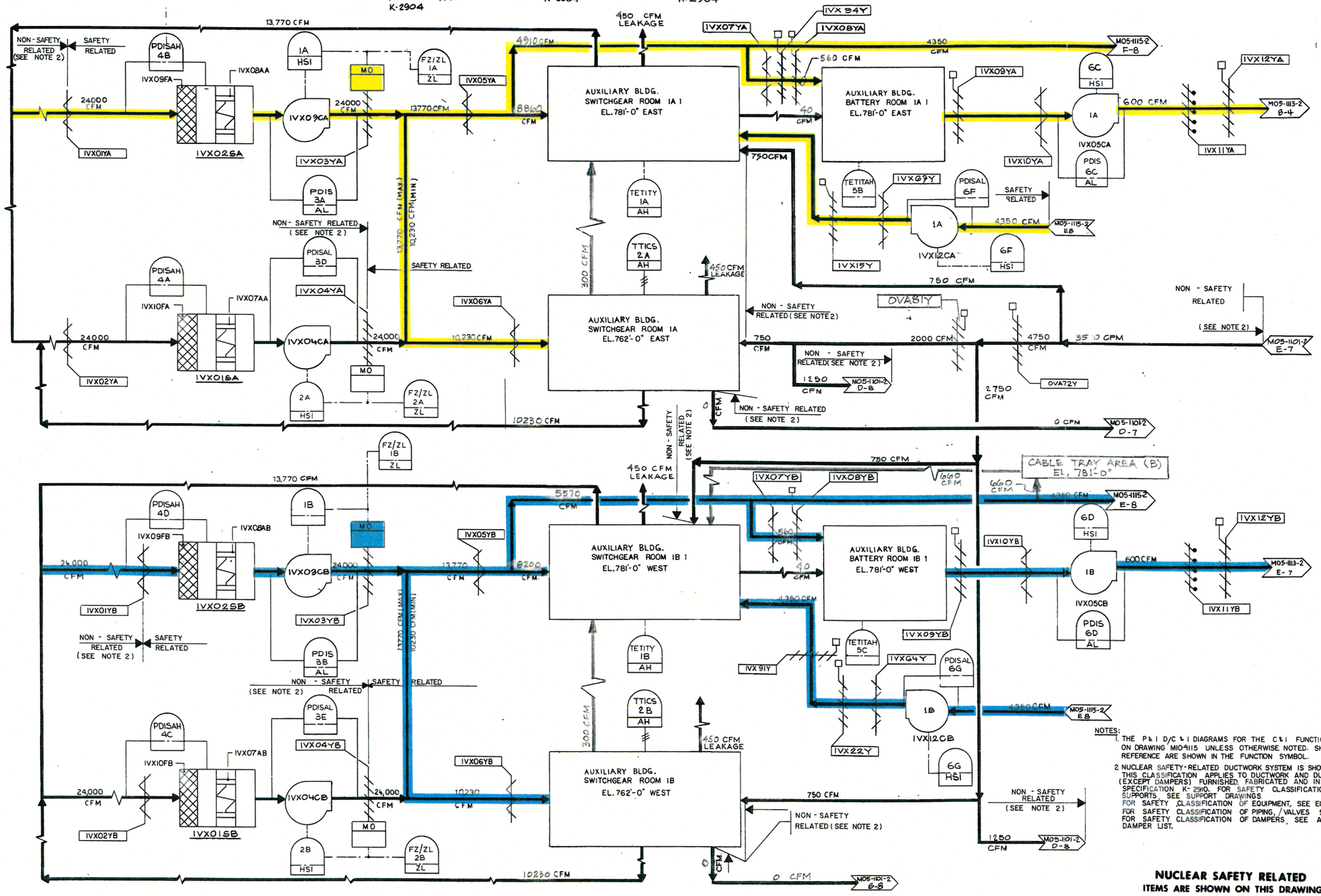
1VX01SA,SB SWITCHGEAR HEAT REMOVAL COIL CABINET K-2902

1VX02SA,SB SWITCHGEAR HEAT REMOVAL COIL CABINET K-2902

1VX03CA,CB 1VX04CA,CB SWITCHGEAR HEAT REMOVAL FAN K-2904

1VX05CA,CB BATTERY ROOM EXHAUST FAN K-2904

1VX12CA,CB SWITHGEAR HEAT REMOVAL RETURN FANS 1A & 1B K-2904



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&I D. 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.

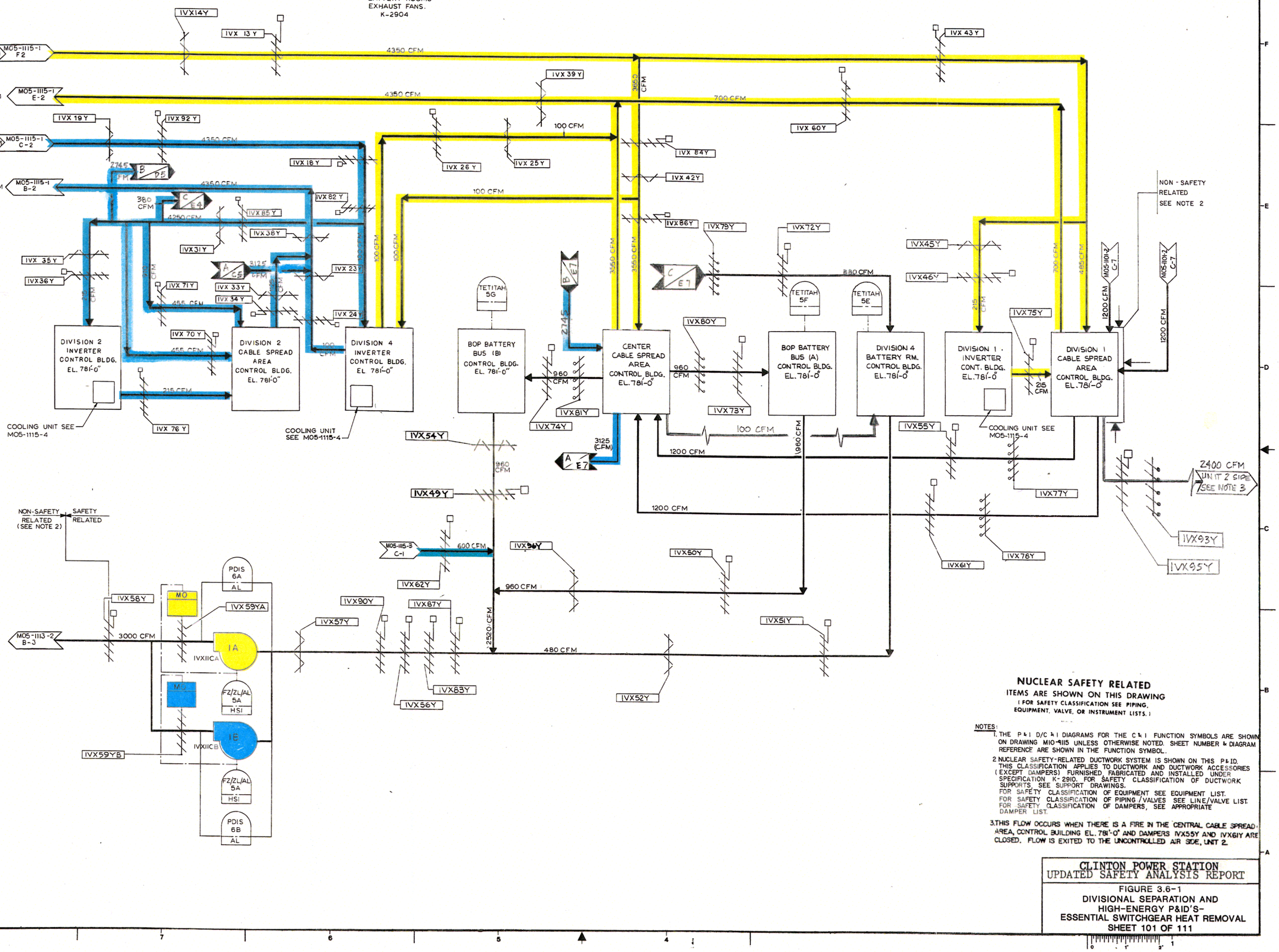
NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING, EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND HIGH-ENERGY P&ID'S-
ESSENTIAL SWITCHGEAR HEAT REMOVAL
SHEET 100 OF 111

M05-1115 SHEET 2 OF

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



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