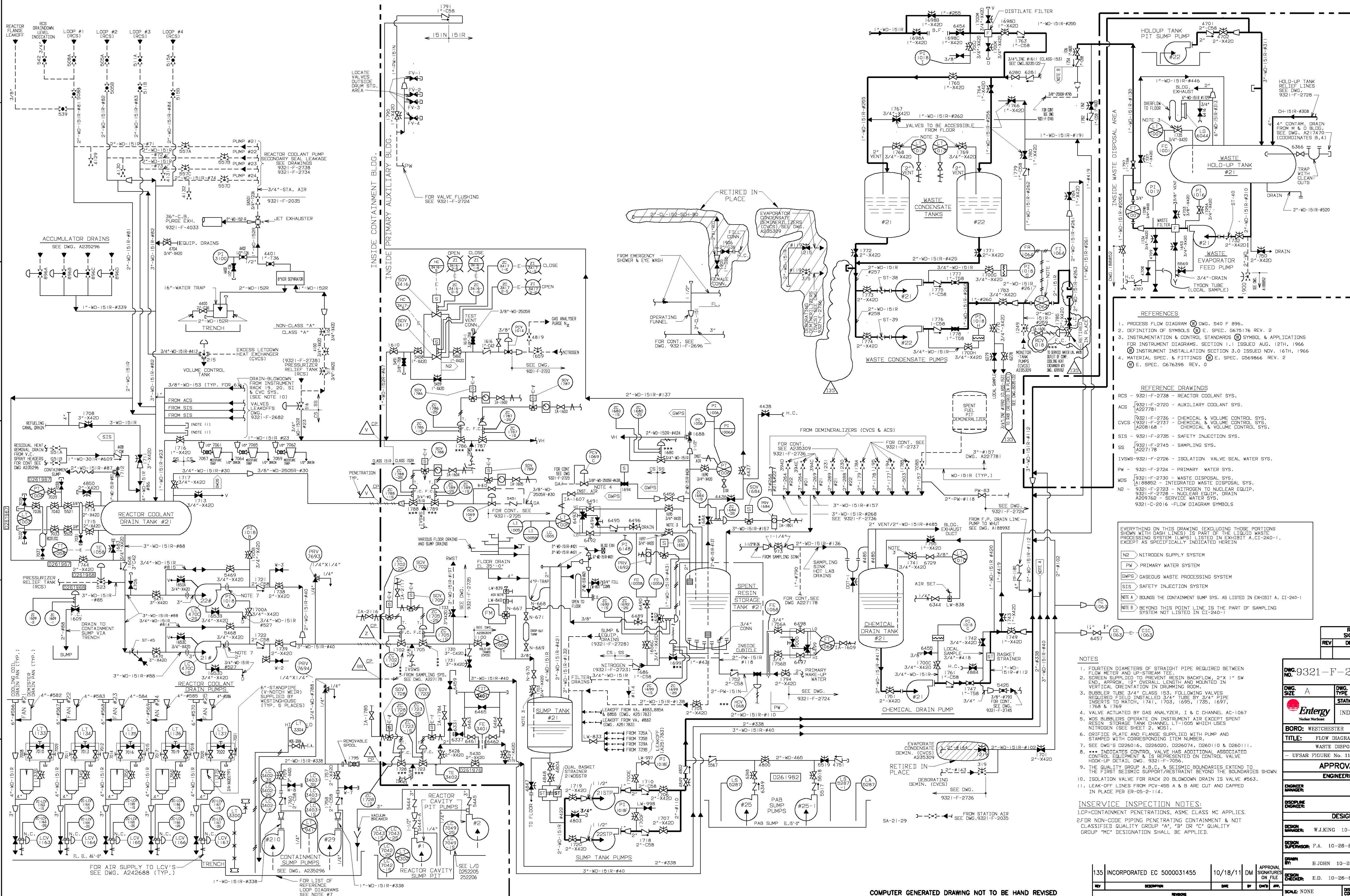

REFERENCES

1. PROCESS FLOW DIAGRAM Ⓦ DWG. 540 F 896.
2. DEFINITION OF SYMBOLS Ⓦ E. SPEC. G675176 REV. 2
3. INSTRUMENTATION & CONTROL STANDARDS Ⓦ SYMBOL & APPLICATIONS FOR INSTRUMENT DIAGRAMS. SECTION 1.1 ISSUED AUG. 12TH, 1966 Ⓦ INSTRUMENT INSTALLATION SECTION 3.0 ISSUED NOV. 16TH, 1966
4. MATERIAL SPEC. & FITTINGS Ⓦ E. SPEC. G569866 REV. 2 Ⓦ E. SPEC. G676398 REV. 0

REFERENCE DRAWINGS

RCS - 9321-F-2738 - REACTOR COOLANT SYS.
ACS {9321-F-2720 - AUXILIARY COOLANT SYS. A227781
CVCS {9321-F-2736 - CHEMICAL & VOLUME CONTROL SYS. 9321-F-2737 - CHEMICAL & VOLUME CONTROL SYS. A208168 - CHEMICAL & VOLUME CONTROL SYS.
SIS - 9321-F-2735 - SAFETY INJECTION SYS.
SS {9321-F-2745 - SAMPLING SYS. A227178
IVSWS-9321-F-2726 - ISOLATION VALVE SEAL WATER SYS.
PW - 9321-F-2724 - PRIMARY WATER SYS.
WDS {9321-F-2730 - WASTE DISPOSAL SYS. A188852 - INTEGRATED WASTE DISPOSAL SYS.
N2 - 9321-F-2723 - NITROGEN TO NUCLEAR EQUIP. 9321-F-2728 - NUCLEAR EQUIP. DRAIN A209762 - SERVICE WATER SYS. 9321-C-2016 -FLOW DIAGRAM SYMBOLS

EVERYTHING ON THIS DRAWING (EXCLUDING THOSE PORTIONS SHOWN WITH DASH LINES) IS PART OF THE LIQUID WASTE PROCESSING SYSTEM (LWPS) LISTED IN EXHIBIT A,CI-240-1, EXCEPT AS SPECIFICALLY INDICATED HEREIN

N2 NITROGEN SUPPLY SYSTEM
PW PRIMARY WATER SYSTEM
GWPS GASEOUS WASTE PROCESSING SYSTEM
SIS SAFETY INJECTION SYSTEM
NOTE A BOUNDS THE CONTAINMENT SUMP SYS. AS LISTED IN EXHIBIT A, CI-240-1
NOTE B BEYOND THIS POINT LINE IS THE PART OF SAMPLING SYSTEM NOT LISTED IN CI-240-1

NOTES

1. FOURTEEN DIAMETERS OF STRAIGHT PIPE REQUIRED BETWEEN FLOW METER AND UP-STREAM TEE.
2. SCREEN SUPPLIED TO PREVENT RESIN BACKFLOW, 2"X 1" SW END, APPROX. 12" OVERALL LENGTH AND MOUNTED IN VERTICAL OREINTATION IN DRUMMING ROOM.
3. BUBBLER TUBE 3/4" CLASS 153. FOLLOWING VALVES REQUIRED FIELD INSTALLED 3/4" TUBE BY 3/4" PIPE INSERTS TO MATCH, 1741, 1703, 1695, 1735, 1697, 1768 & 1769
4. VALVE ACTUATED BY GAS ANALYZER, I & C CHANNEL AC-1067
5. WDS BUBBLERS OPERATE ON INSTRUMENT AIR EXCEPT SPENT RESIN STORAGE TANK CHANNEL LT-1005 WHICH USES NITROGEN (SEE SHEET 2, WDS).
6. ORIFICE PLATE AND FLANGE SUPPLIED WITH PUMP AND STAMPED WITH CORRESPONDING ITEM NUMBER.
7. SEE DWG'S D226016, D226020, D226074, D260110 & D260111.
8. *** INDICATES CONTROL VALVE HAS ADDITIONAL ASSOCIATED CONTROL EQUIPMENT & IS REPRESENTED ON CONTROL VALVE HOOK-UP DETAIL DWG. 9321-F-7056.
9. THE QUALITY GROUP A,B,C, & SEISMIC BOUNDARIES EXTEND TO THE FIRST SEISMIC SUPPORT/RESTRAINT BEYOND THE BOUNDARIES SHOWN
10. ISOLATION VALVE FOR RACK 20 BLOWDOWN DRAIN IS VALVE #563.
11. LEAK-OFF LINES FROM PCV-455 A & B ARE CUT AND CAPPED IN PLACE PER ER-05-2-114.

INSERVICE INSPECTION NOTES:

1. CP=CONTAINMENT PENETRATIONS, ASME CLASS MC APPLIES.
2. FOR NON-CODE PIPING PENETRATING CONTAINMENT & NOT CLASSIFIED QUALITY GROUP "A", "B" OR "C" QUALITY GROUP "MC" DESIGNATION SHALL BE APPLIED.

REV	DESCRIPTION	DATE	BY	CHK'D	APP.
135	INCORPORATED EC 5000031455	10/18/11	DM	APPROVAL SIGNATURES ON FILE	

REVISIONS

COMPUTER GENERATED DRAWING NOT TO BE HAND REVISED

REVISION — USE .1 SIZE TEXT ONLY

REVISION SIGNATURES: REV | DES | ENG

DWG. NO. 9321-F-2719-135
DWG. SIZE A — DWG. TYPE COMPANY
STATION: INDIAN POINT
Entergy Nuclear Northeast
BORO: WESTCHESTER
TITLE: FLOW DIAGRAM WASTE DISPOSAL SYSTEM
– UFSAR FIGURE No. 11.1-1 (SHT. 1)

APPROVALS
ENGINEERING
ENGINEER MANAGER:
DISCIPLINE ENGINEER:
DESIGN
DESIGN MANAGER: W.J.KING 10-26-87
DESIGN SUPERVISOR: F.A. 10-26-87
DRAWN BY: B.JOHN 10-26-87
DESIGN CHECKER: E.D. 10-26-87
SCALE: NONE — DISCIPLINE CODE: MY

RETIRED IN PLACE

OUTSIDE GAS DECAY TANK CUBICLE
INSIDE GAS DECAY TANK CUBICLE
LARGE GAS DECAY TANKS

SMALL GAS DECAY TANKS

9321-F-2723 NITROGEN

HYDROGEN SUPPLY MANIFOLD #21

SOUTH

NORTH

REFERENCES:

1. PROCESS FLOW DIAGRAM Ⓧ DWG.540.F 897.
2. DEFINITION OF SYMBOLS SEE Ⓔ E.SPEC.067517G REV2 AND Ⓘ ION E. SPEC. 676164 REV.0.
3. INSTALLATION OF INSTRUMENTATION Ⓧ PROC. SPEC. CAP.294367.REV.1

UE&C. DWG. NO. REFERENCE DRAWINGS

9321-F-2720.....AUXILIARY COOLANT SYS. SH.1. Ⓧ 684J793
9321-F-2738.....REACTOR COOLANT SYSTEM..... Ⓘ 10E014
9321-F-2736.....CHEM.& VOLUME CONT. SYS. SH. Ⓧ 684J627
9321-F-2737.....CHEM.&VOLUME CONT SYS. SH.2 Ⓧ 541F236(SH3)
9321-F-2745.....SAMPLING SYSTEM..... Ⓧ 540F902
9321-F-2719.....WASTE DISPOSAL SYS. SH.1. Ⓧ 684J729
9321-F-2522.....SAFETY INJECTION SYSTEM..... Ⓧ 684J730
9321-F-2728.....NUCLEAR EQUIPMENT DRAINS..... Ⓧ 684J918
9321-F-2723.....NITROGEN TO NUCLEAR EQUIP... Ⓧ 684J918
9321-F-2727.....NUCLEAR EQUIPMENT VENTS.....
9321-F-2725.....AUTOMATIC GAS ANALYZER SYSTEM.....
9321-C-2016.....FLOW DIAGRAM SYMBOLS

LEGEND:

T - TRIP CLOSED ON HIGH CONTAINMENT PRESSURE.
◯ - NO'S. IN HEXAGON ARE NASH ENGR. CO. NOS.

NOTES:

2. ALL PIPING IN THIS AREA IS ONE INCH CLASS 152R UNLESS OTHERWISE NOTED.
3. VALVE ACTUATED AUTOMATICALLY BY GAS ANALYZER I & C CHANNEL NO. AC-1067.
4. ••• INDICATES CONTROL VALVE HAS ADDITIONAL ASSOCIATED CONTROL EQUIPMENT & IS REPRESENTED ON CONTROL VALVE HOOK-UP DETAIL DWG. 9321-F-7056.
   AND ZC-10398-1S ARE NOT ELECTRICALLY CONNECTED.
5. THE QUALITY GROUP A, B, C AND SEISMIC BOUNDARIES EXTEND TO THE FIRST SEISMIC SUPPORT/RESTRAINT BEYOND THE BOUNDARIES SHOWN.

NOTE:
EVERYTHING ON THIS DRAWING IS PART OF GASEOUS WASTE PROCESSING SYSTEM(GWPS). LISTED IN EXHIBIT "A" CI-240-1 EXCEPT AS SPECIFICALLY INDICATED HEREIN
H2 HYDROGEN SUPPLY TO NUCLEAR EQUIPMENT.

REV	DESCRIPTION	DATE	BY	CH'K'D	APP.
75	INCORPORATED EC-36847	05/08/12	RM		
REVISIONS					

APPROVAL SIGNATURES ON FILE

REVISION
USE .1 SIZE TEXT ONLY

THIS REVISION IS NON CLASS PER CI-240-1. UPDATED DRAWING TO SHOW RETIRED BORON RECOVERY EQUIPMENT PER CRS #199806527 RELEASED AS CONSTRUCTED
P.N. 69901-AF.
D.B./Y.J. 02/09/01

71

REVISION SIGNATURES

REV.	DES	ENG
71		G. BHALLA 02/09/2001

DWG. NO. 9321-F-2730-75
DWG. SIZE A
DWG. TYPE COMPANY
Entergy Nuclear Northeast
STATION INDIAN POINT
BORO: WESCHESTER
TITLE: **FLOW DIAGRAM WASTE DISPOSAL SYSTEM SHT. No. 2**
UFSAR FIG. No. 11.1-1 (SHT. 2)

APPROVALS

ENGINEERING

ENGINEER MANAGER:
DISCIPLINE ENGINEER:

DESIGN

DESIGN MANAGER: W.J. KING/G.C. 1-13-88
DESIGN SUPERVISOR: F.A. 1-13-88
DRAWN BY: GIBBS & HILL
DESIGN CHECKER: A.G. 1-13-88
SCALE: NONE
DISCIPLINE CODE: MY

COMPUTER GENERATED DRAWING NOT TO BE HAND REVISED