12177-PID-40J-10

MARK NUMBER	VALVE DESCRIPTION	SIZE	NO. OF VALVES
AOV18A,18B	VVY81S-P-4Q	18"	2
AOV14A,14B,15A,15B, AOV18A,18B,28A, AOV28B,28A,28B, AOV197,186,189,199, AOV286,211,218, AOV213,284,458	VPW81S-H-4KQ	2"	28
AOV21B	VPS81S-H-4Q	1"	1
AOV17A,17B AOV484,488,287, AOV284,299,237	VPW81S-H-4KQ	3"	8
AOV11B	VPW81S-H-4KQ	3"	1
AOV116,229,283,289	VPW81S-H-4KQ	1-1/2"	4
SOV168	VCS81SB-VB-4Q	1-1/2"	1
V41,43B	VCV81S-J-4K	3"	2
V178,174,187, V183,625,627	VCV868-J-4K	1"	6
V177,173,207,349,619	VPW81S-HA-4K	3"	5
V176,178,177,179, V188,295,439,486,626 V634,718,932,933,934 V938,939,948,1088,931	VPW81S-H-4K	2"	28
V153,184,617,777,884 V832,833	VPS81S-H-4	1"	7
V185,186,618	VCV868-J-4K	1"	3
V187,188	VCV81S-J-4K	3"	2
V189,638	VPF81S-LA-4R	2"	2
V527,935	VPS81S-H-4	3/4"	2
V198,196,197,288, V437,628,623	VPF81S-L-4R	2"	7
V194,196,198,288	VCV868-C-4K	2"	4
V412	VCV81S-J-4K	1-1/2"	1
V426	VPT81S-G-4	1-1/2"	1
V427,428,883,884,885, V886	VCS868-J-4	1-1/2"	6
V429	VCS868-E-4	3/4"	1
V748,798	VPW81S-H-4K	3/4"	2
V438	VCV81S-K-4K	3/4"	1
V448,799	VPW81S-H-4K	1-1/2"	2
V521,524	VCW868-C-4K	3/4"	2
V629	VC131S-J-4K	3"	1
929,936,937	VPW81S-H-4J	3/4"	3
AOV31A,31B	VPW81S-H-4KQ	1"	2

NOTES:
1. ALL INSTRUMENT AND EQUIPMENT NUMBERS TO BE PREFIXED WITH "2LWS-" EXCEPT WHERE A DIFFERENT PREFIX IS SHOWN.
2. ALL INSTRUMENT, TEST, VENT, AND DRAIN CONNECTIONS TO BE 2" UNLESS OTHERWISE NOTED.
3. ALL PIPING SHALL BE CLASS 154 UNLESS OTHERWISE NOTED.
4. INSTRUMENT FLUSH CONNECTION.
5. AIR OPERATED VALVE WITH HAND WHEEL FOR MANUAL OPENING.
6. TEMPORARY STRAINER TO BE REPLACED WITH SPOOL PIPE AFTER LINE CLEANING.
7. SPARE CONNECTION FOR FUTURE USE.
8. ♦ DENOTES DISSIMILAR METAL WELD.
9. ⟷ DENOTES " LOCATE AS CLOSE AS POSSIBLE."
10. 5 DIAMETER BENDS SHALL BE UTILIZED ON PHASE SEPARATOR PIPING.
11. BRANCH CONN'S. SHALL BE LATROLETS EXCEPT FOR INSTRUMENT CONN'S.
12. LOCATE AT FIRST SET OF FLANGES UPSTREAM OF V189.
13. + DENOTES 6" MIN. SPOOL BUTT WELDED TO VALVE.
14. # DENOTES EQUIPMENT SUPPLIED BY V&S EQUIPMENT VENDOR.
15. FLOW ELEMENTS DO NOT REQUIRE 2" CONNECTION.
16. NO FLAG ''.WN ON CORRESPONDING DOCUMENT. COORDINAT.. PROVIDE INTERFACE LOCATION.

THIS DRAWING CREATED ELECTRONICALLY

SI APERTURE CARD 07-141-91

QA CAT II

ISSUE	DESCRIPTION	CHK'D	CORRECT	ISSUE	DESCRIPTION	CHK'D	CORRECT	ISSUE	DESCRIPTION	CHK'D	CORRECT	ISSUE	DESCRIPTION	CHK'D	CORRECT	ISSUE	DESCRIPTION	CHK'D	CORRECT
6	INCORPORATES ECN NO. LWS-652	JWR	MEA/TLO PFH / PSM/MS RES / PDV	5	INCORPORATES ECN NO'S. LWS-194,197,138 REF. ECN NO. LWS-624,631	CH'D	MEA/TLO JTS / RES/MS RGK / PDV	10	INCORPORATES EDC NO. 2E10026	BAL NMPC		9	INCORPORATES EDC NO. 2M30058	KAH JAM NMPC	RJM 3-29-19 UB 3-31-99	8	ISSUED FOR COMPUTER DATA BASE UPDATE ONLY	RJB BAL NMPC	RJM 7-26-96 AUJ / 2R8	7	INCORPORATES ECN NO. LWS-112	JWR	JAV/MM TLO / MM	PSM/MS PSM / CORRECT	KV

SEE DRAWING MICROFILM RECORDS FOR PRIOR ISSUES

PCT	ARCH	CIVIL	CONC	STL	L&P	INST	M.D.	P.S.	S.A.	FAC	ELEC	LTG	MAT'L
CDC													
K5B													
TSA													

PIPING & INSTRUMENTATION DIAGRAM
RADIOACTIVE LIQUID WASTE SYSTEM
NINE MILE POINT NUCLEAR STATION-UNIT 2
NIAGARA MOHAWK POWER CORPORATION
STONE & WEBSTER ENGINEERING CORPORATION
CHERRY HILL, N.J.

DRAWING NUMBER 12177-PID-40J-10

DESIGNED BY J. MCKELVIE DRAWN BY J. MCKELVIE
CHKD BY E.F.CURRAN CHKD BY E.F.CURRAN

AREAS | LEVELS | WORK PKG

930505007 9 D