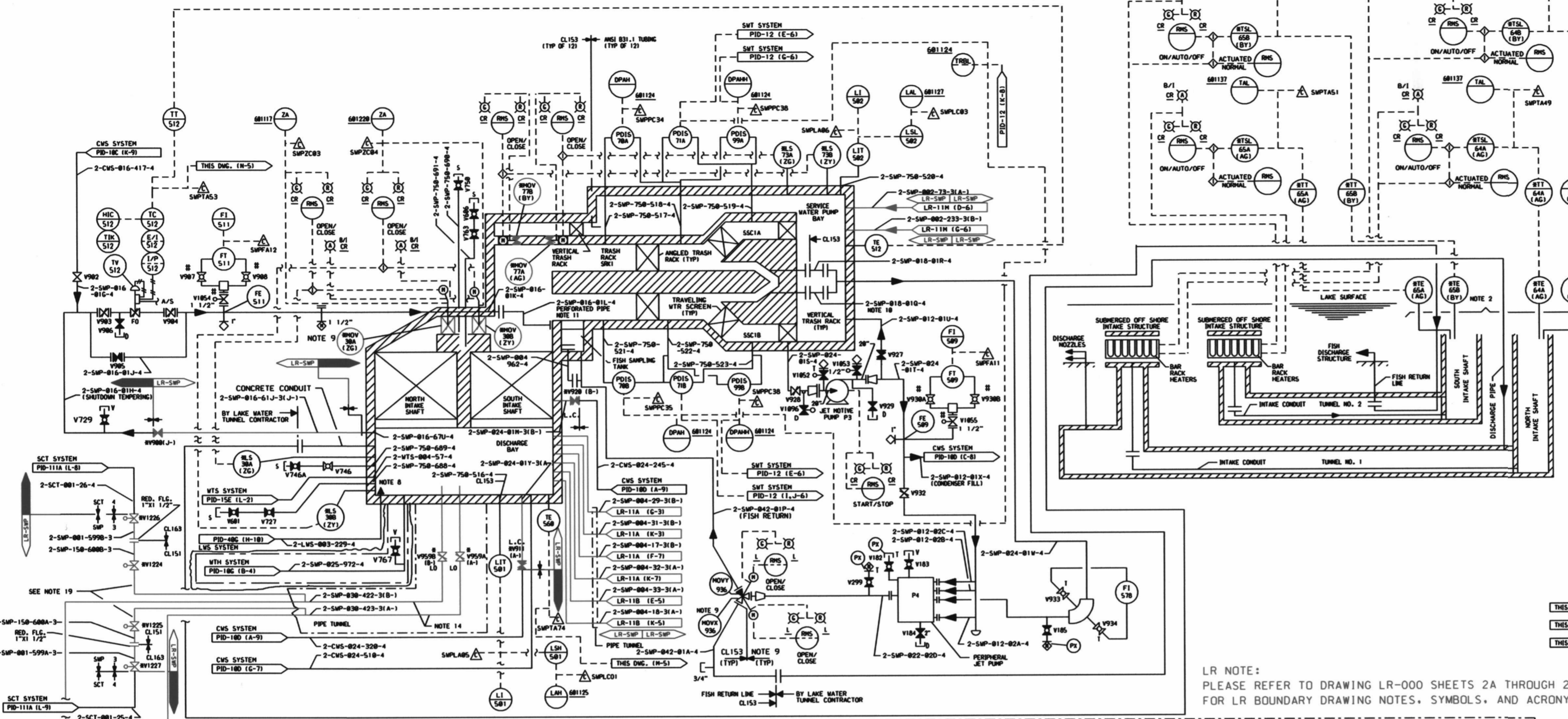


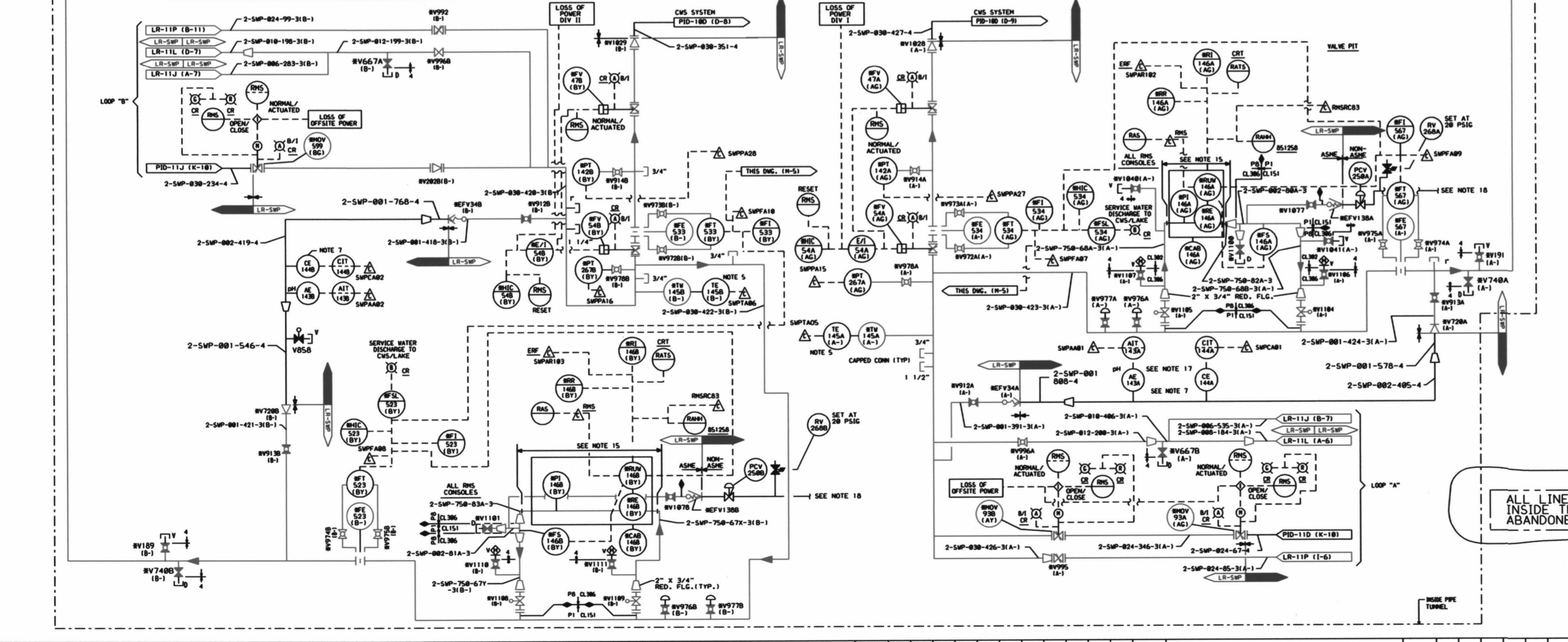
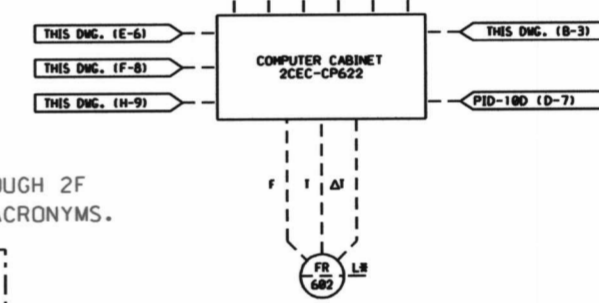
6119

0-H11-87



MARK NUMBER	VALVE DESCRIPTION	SIZE	NO. OF VALVES
NOV93A,B	VV1000-A-30	4"-8"	2
NOV77A,B	VV1000-A-30	4"-8"	2
NOV95B	VV1000-B-300	3"	1
NOV93A,B	VV1000-B-300	24"	2
NOV93B	SHIMMIE SHIMMIE CT	42"	1
NOV77B,NOV95B,NOV93A,B	VCF012-Y-4FD	3/4"	4
V933,934	VCF020-C-4	2"	1
V184	VCF020-C-4	3/4"	1
V180,181,184,185,186,187,188,189,190,191,192,193,194,195,196,197,198,199,200,201,202,203,204,205,206,207,208,209,210,211,212,213,214,215,216,217,218,219,220,221,222,223,224,225,226,227,228,229,230,231,232,233,234,235,236,237,238,239,240,241,242,243,244,245,246,247,248,249,250,251,252,253,254,255,256,257,258,259,260,261,262,263,264,265,266,267,268,269,270,271,272,273,274,275,276,277,278,279,280,281,282,283,284,285,286,287,288,289,290,291,292,293,294,295,296,297,298,299,300,301,302,303,304,305,306,307,308,309,310,311,312,313,314,315,316,317,318,319,320,321,322,323,324,325,326,327,328,329,330,331,332,333,334,335,336,337,338,339,340,341,342,343,344,345,346,347,348,349,350,351,352,353,354,355,356,357,358,359,360,361,362,363,364,365,366,367,368,369,370,371,372,373,374,375,376,377,378,379,380,381,382,383,384,385,386,387,388,389,390,391,392,393,394,395,396,397,398,399,400,401,402,403,404,405,406,407,408,409,410,411,412,413,414,415,416,417,418,419,420,421,422,423,424,425,426,427,428,429,430,431,432,433,434,435,436,437,438,439,440,441,442,443,444,445,446,447,448,449,450,451,452,453,454,455,456,457,458,459,460,461,462,463,464,465,466,467,468,469,470,471,472,473,474,475,476,477,478,479,480,481,482,483,484,485,486,487,488,489,490,491,492,493,494,495,496,497,498,499,500,501,502,503,504,505,506,507,508,509,510,511,512,513,514,515,516,517,518,519,520,521,522,523,524,525,526,527,528,529,530,531,532,533,534,535,536,537,538,539,540,541,542,543,544,545,546,547,548,549,550,551,552,553,554,555,556,557,558,559,560,561,562,563,564,565,566,567,568,569,570,571,572,573,574,575,576,577,578,579,580,581,582,583,584,585,586,587,588,589,590,591,592,593,594,595,596,597,598,599,600,601,602,603,604,605,606,607,608,609,610,611,612,613,614,615,616,617,618,619,620,621,622,623,624,625,626,627,628,629,630,631,632,633,634,635,636,637,638,639,640,641,642,643,644,645,646,647,648,649,650,651,652,653,654,655,656,657,658,659,660,661,662,663,664,665,666,667,668,669,670,671,672,673,674,675,676,677,678,679,680,681,682,683,684,685,686,687,688,689,690,691,692,693,694,695,696,697,698,699,700,701,702,703,704,705,706,707,708,709,710,711,712,713,714,715,716,717,718,719,720,721,722,723,724,725,726,727,728,729,730,731,732,733,734,735,736,737,738,739,740,741,742,743,744,745,746,747,748,749,750,751,752,753,754,755,756,757,758,759,760,761,762,763,764,765,766,767,768,769,770,771,772,773,774,775,776,777,778,779,780,781,782,783,784,785,786,787,788,789,790,791,792,793,794,795,796,797,798,799,800,801,802,803,804,805,806,807,808,809,810,811,812,813,814,815,816,817,818,819,820,821,822,823,824,825,826,827,828,829,830,831,832,833,834,835,836,837,838,839,840,841,842,843,844,845,846,847,848,849,850,851,852,853,854,855,856,857,858,859,860,861,862,863,864,865,866,867,868,869,870,871,872,873,874,875,876,877,878,879,880,881,882,883,884,885,886,887,888,889,890,891,892,893,894,895,896,897,898,899,900,901,902,903,904,905,906,907,908,909,910,911,912,913,914,915,916,917,918,919,920,921,922,923,924,925,926,927,928,929,930,931,932,933,934,935,936,937,938,939,940,941,942,943,944,945,946,947,948,949,950,951,952,953,954,955,956,957,958,959,960,961,962,963,964,965,966,967,968,969,970,971,972,973,974,975,976,977,978,979,980,981,982,983,984,985,986,987,988,989,990,991,992,993,994,995,996,997,998,999,1000			

LR NOTE:
PLEASE REFER TO DRAWING LR-000 SHEETS 2A THROUGH 2F
FOR LR BOUNDARY DRAWING NOTES, SYMBOLS, AND ACRONYMS.



- NOTES:
1. ALL INSTRUMENT AND EQUIPMENT NUMBERS TO BE PREFIXED WITH "25MP" EXCEPT WHERE A DIFFERENT PREFIX IS SHOWN. AN ASTERISK (*) WILL REPLACE THE MARK 1-1 IN THE PREFIX FOR EQUIPMENT INSTRUMENTS WHICH ARE A PART OF NUCLEAR SAFETY FEATURES SYSTEM.
 2. TEMPERATURE ELEMENTS LOCATED IN 2" STILL WELLS WERE NOTED.
 3. ALL PIPING IS CLASS 151 UNLESS SHOWN OTHERWISE.
 4. ALL PRESSURE, DRAIN, VENT, SAMPLE FLOW AND CAPPED CONNECTIONS ARE 3/4" LEVEL SWITCH AND THERMOWELL ARE 1" UNLESS SHOWN OTHERWISE.
 5. TEMP CONNECTIONS TE145A AND TE145B ARE 1/4".
 6. FOR DETAILS OF PIPING DESIGN FOR THERMOWELL CONNECTIONS SEE DESIGN DIVISION STANDARD 12177-K-001-1.
 7. 25MP-CE144A & B ARE EACH TO BE INSTALLED IN A RUN END OF A TEE, FACING THE DIRECTION OF FLOW. FLOW TO BE FROM OPPOSITE RUN END AND THROUGH BRANCH OF TEE.
 8. LIQUID DISCHARGE TO DISCHARGE INTO MAIN FLOW STREAM.
 9. THIS IS A "T" TYPE MOTOR OPERATED SHIMMIE GATE VALVE. FLOW IS NORMALLY TO THE LAKE EXCEPT DURING BRIEF PERIODS OF FISH SAMPLING. FLOW IS POSITIONED WITH THE MOTOR OPERATORS. THE VALVE FLANGE MATERIAL IS ASTM A 516.
 10. REMOVABLE SECTION OF PIPE FOR CLEANING.
 11. PERFORMED THERMING PIPE TO HAVE 2 ROWS OF 40 1" DIA HOLES SPACED AT 4-1/2" C.C. IN THE DOWNSTREAM DIRECTION, ONE ROW IN THE HORIZONTAL PLANE AND ONE ROW 30 DEGREES UPWARD FROM THE HORIZONTAL.
 12. VALVES 25MP-1102, 299, 933, AND 934 REMAIN CLOSED DURING NORMAL OPERATION AND ARE REMOVED FOR TESTING PURPOSES ONLY.
 13. TRAVELING WATER SCREEN SHOWN ON PID-12 SERIES.
 14. LINES 25MP-030-422-31B-1 AND 25MP-030-422-31A-1 TERMINATE IN THE DISCHARGE BAY AT EL. 279'-7".
 15. THE RADIATION MONITOR VENDOR WILL SUPPLY 3/4" STAINLESS STEEL CONNECTION TO 25MP-030-422-31A-1.
 16. B DENOTES EQUIPMENT SUPPLIED BY AMMARBAR VENDOR.
 17. 25MP-AE143A,B AND 25MP-CE144A,B ARE ABANDONED IN PLACE, DE-COMMISSIONED, AND HAVE COMPUTER POINTS DELETED.
 18. ENVIRONMENTAL SAMPLE TAPS REMOVED AND VALVES 25MPV1877 AND 25MPV1876 CLOSED, REMAINING PIPING ABANDONED IN PLACE.
 19. SPECIALLY MADE QUILL DESIGN (SEE DRAWING EP-980A FOR DETAILS).

ALL LINES & EQUIPMENT
INSIDE THIS BOUNDARY ARE
ABANDONED IN PLACE.

NON-SAFETY RELATED
QUALITY RELATED
SAFETY RELATED
(REF. SAR FIG. 9.2-1h & ISPT-11H)

Constellation Energy Group NINE MILE POINT NUCLEAR STATION UNIT 2 - SCRIBA, N.Y.

PIPING & INSTRUMENTATION DIAGRAM
SERVICE WATER SYSTEM

NO.	REV	DATE	DESCRIPTION OF REVISION	M.O.	DFT	DES	CHWD	ENG	ELEC	MECH	STR	NO.	REV	DATE	DESCRIPTION OF REVISION	M.O.	DFT	DES	CHWD	ENG	ELEC	MECH	STR