

# LEGEND

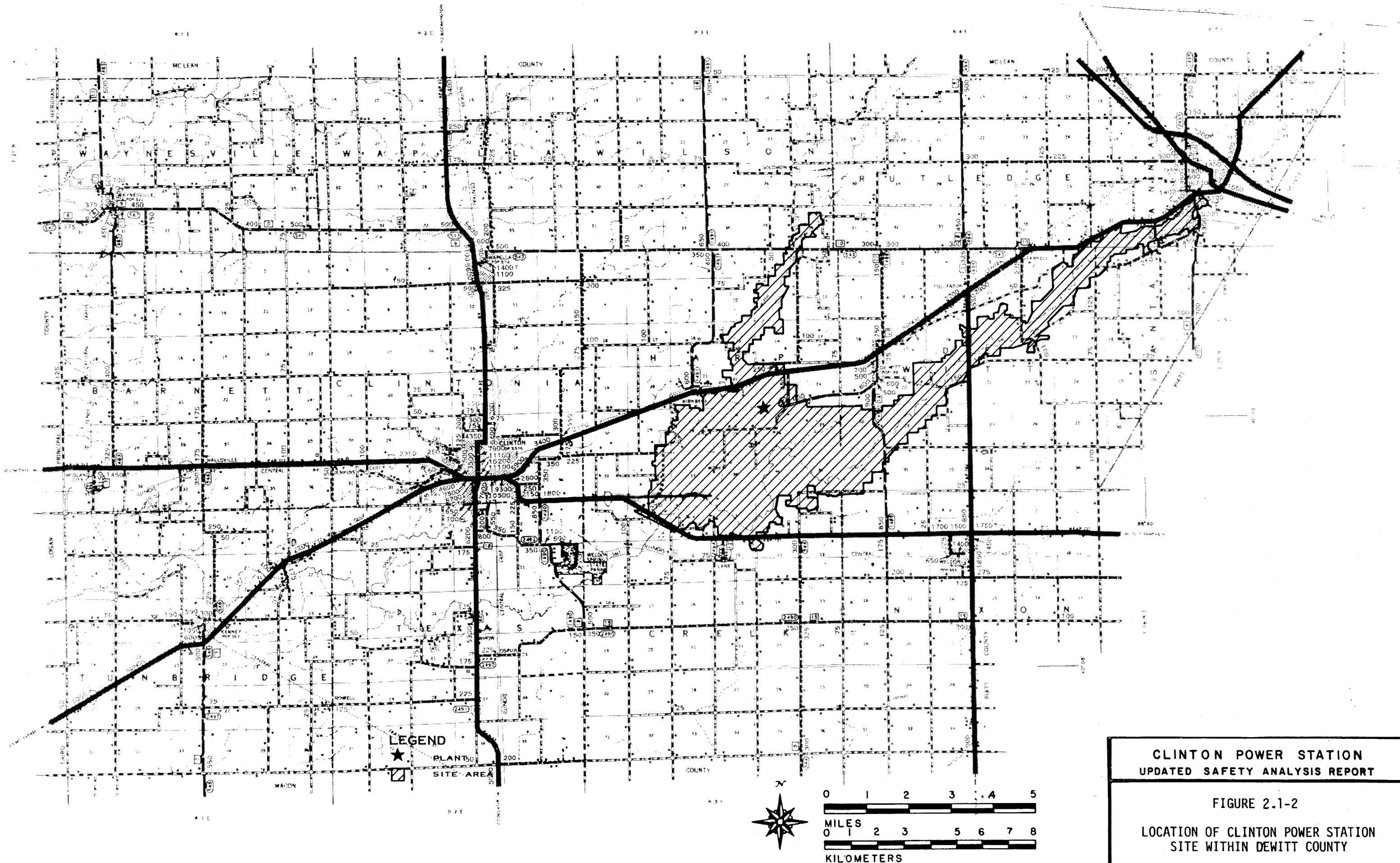
- ★ PLANT
- ▨ SITE AREA



## CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.1-1

PLANT AND SITE LOCATION

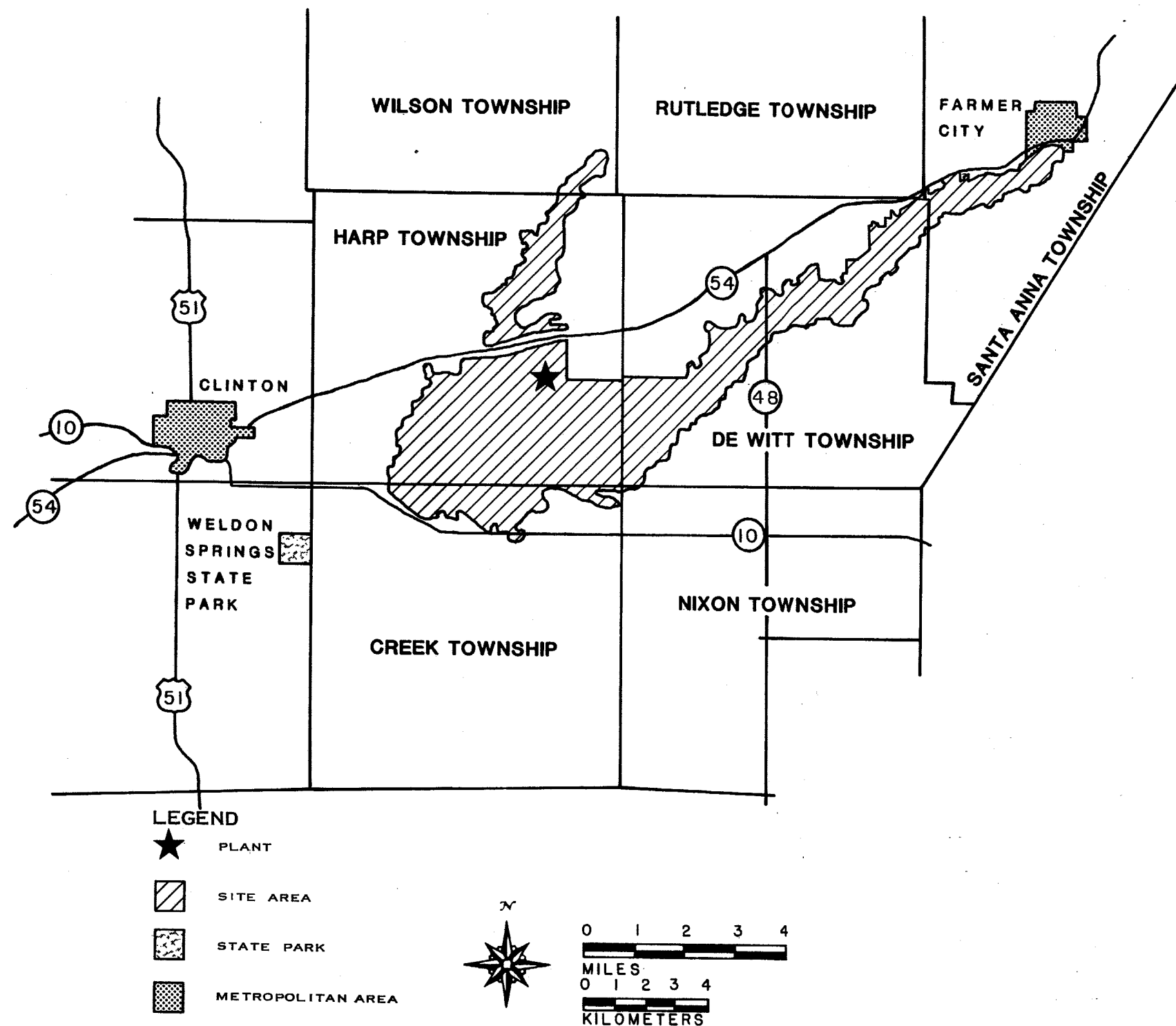


CLINTON POWER STATION  
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FIGURE 2.1-2

LOCATION OF CLINTON POWER STATION  
SITE WITHIN DEWITT COUNTY





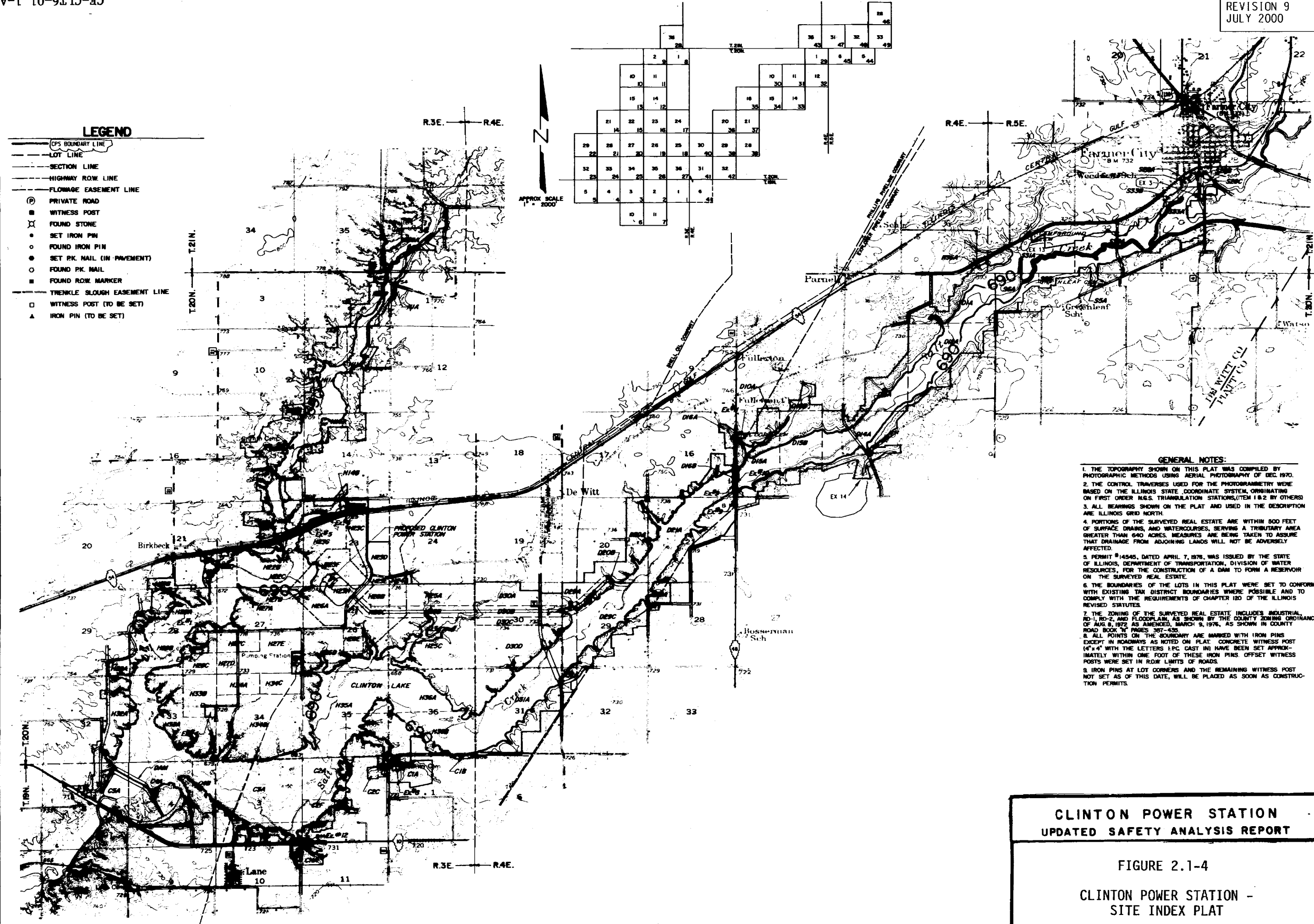
CLINTON POWER STATION  
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FIGURE 2.1-3

LOCATION OF CLINTON POWER STATION  
SITE WITHIN POLITICAL TOWNSHIPS

### LEGEND

- CPS BOUNDARY LINE  
 --- LOT LINE  
 --- SECTION LINE  
 --- HIGHWAY ROW. LINE  
 --- FLOWAGE EASEMENT LINE  
 (P) PRIVATE ROAD  
 ■ WITNESS POST  
 ✕ FOUND STONE  
 ● SET IRON PIN  
 ○ FOUND IRON PIN  
 ● SET P.K. NAIL (IN PAVEMENT)  
 ○ FOUND P.K. NAIL  
 ■ FOUND ROW. MARKER  
 --- TRENKLE SLOUGH EASEMENT LINE  
 □ WITNESS POST (TO BE SET)  
 ▲ IRON PIN (TO BE SET)



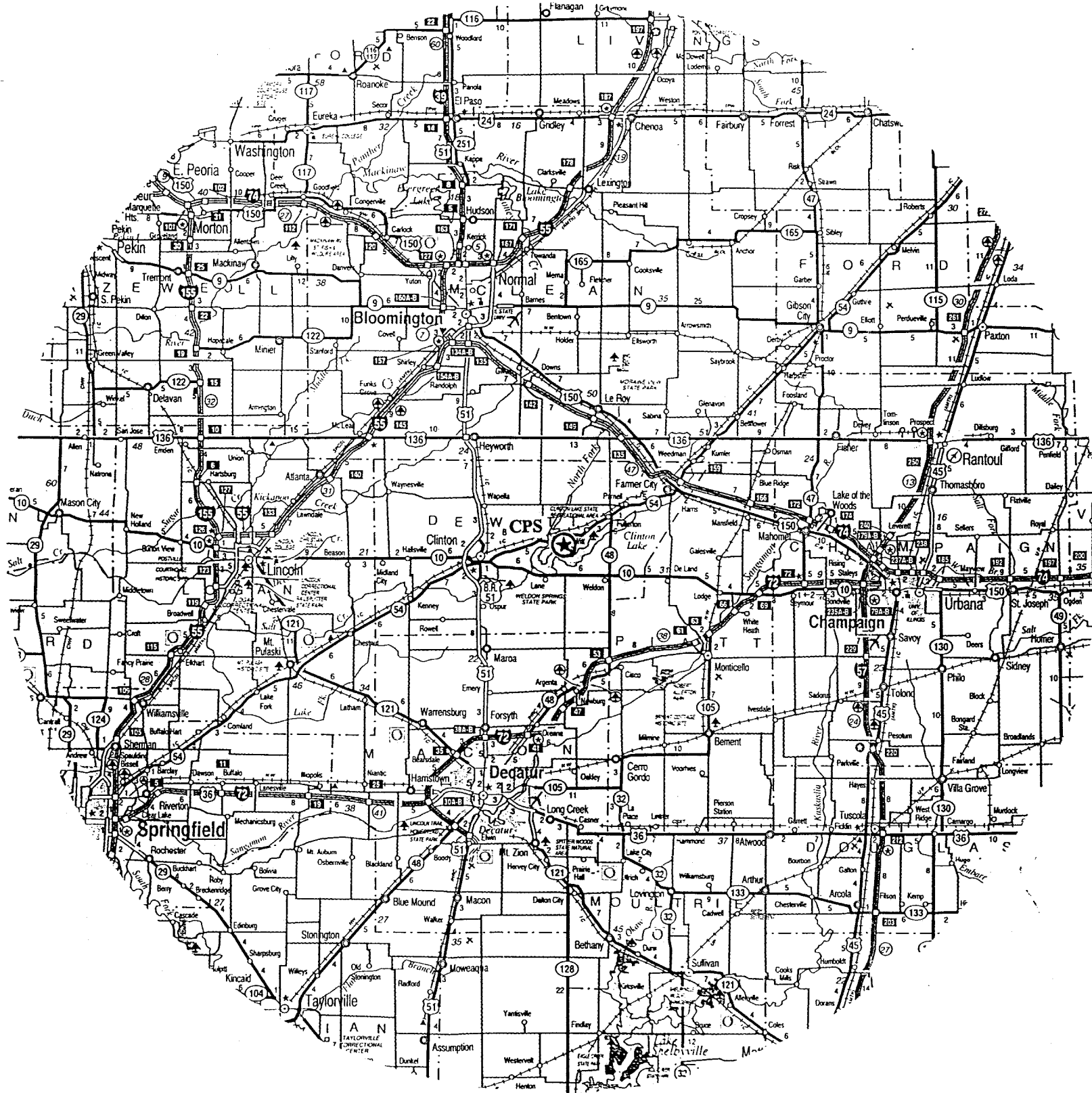
GENERAL NOTES:-

1. THE TOPOGRAPHY SHOWN ON THIS PLAN WAS COMPILED BY PHOTOGRAPHIC METHODS USING AERIAL PHOTOGRAPHY OF DEC.1970.
2. THE CONTROL TRAVERSES USED FOR THE PHOTOGRAMMETRY WERE BASED ON THE ILLINOIS STATE COORDINATE SYSTEM, ORIGINATING ON FIRST ORDER N.G.S. TRIANGULATION STATIONS,(ITEM 1 & 2 BY OTHERS)
3. ALL BEARINGS SHOWN ON THE PLAN AND USED IN THE DESCRIPTION ARE ILLINOIS GRID NORTH.
4. PORTIONS OF THE SURVEYED REAL ESTATE ARE WITHIN 500 FEET OF SURFACE DRAINS, AND WATERCOURSES, SERVING A TRIBUTARY AREA GREATER THAN 640 ACRES. MEASURES ARE BEING TAKEN TO ASSURE THAT DRAINAGE FROM ADJOINING LANDS WILL NOT BE ADVERSELY AFFECTED.
5. PERMIT #14545, DATED APRIL 7, 1978, WAS ISSUED BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, DIVISION OF WATER RESOURCES, FOR THE CONSTRUCTION OF A DAM TO FORM A RESERVOIR ON THE SURVEYED REAL ESTATE.
6. THE BOUNDARIES OF THE LOTS IN THIS PLAN WERE SET TO CONFORM WITH EXISTING TAX DISTRICT BOUNDARIES WHERE POSSIBLE AND TO COMPLY WITH THE REQUIREMENTS OF CHAPTER 120 OF THE ILLINOIS REVISED STATUTES.
7. THE ZONING OF THE SURVEYED REAL ESTATE INCLUDES INDUSTRIAL, RES. 2 AND R-1. AS SHOWN BY THE COULUMBIAN CO. ZONING ORDINANCE OF AUG. 8, 1972 AS AMENDED, MARCH 9, 1978, AS SHOWN IN COUNTY ROAD BOOK "B" PAGES 387-433.
8. ALL POINTS ON THE BOUNDARY ARE MARKED WITH IRON PINS EXCEPT IN ROADWAYS AS NOTED ON PLAN. CONCRETE WITNESS POST 54" HIGH WITH THE LETTERS L.P.C. CAST IN/ HAVE BEEN SET APPROXIMATELY WITHIN ONE FOOT OF THESE IRON PINS. OFFSET WITNESS POSTS WERE SET IN R.O.W LIMITS OF ROADS.
9. IRON PINS AT LOT CORNERS AND THE REMAINING WITNESS POST NOT SET AS OF THIS DATE, WILL BE PLACED AS SOON AS CONSTRUCTION PERMITS.

# CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.1-4

CLINTON POWER STATION -  
SITE INDEX PLAT



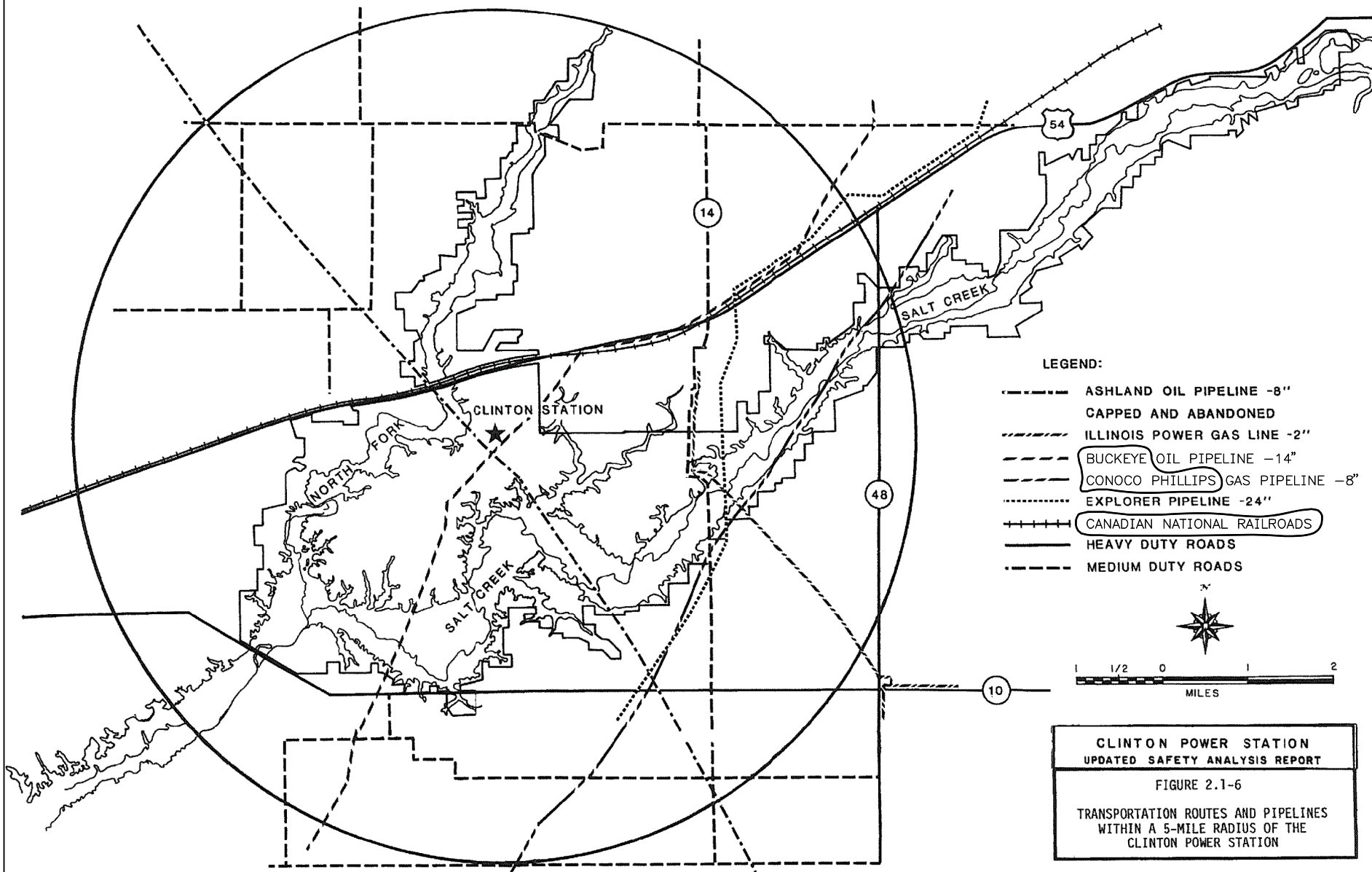
LEGEND

- ===== PRIMARY ROADS
- +++++ RAILROADS
- AMTK AMTRACK
- BLOL BLOOME LINE
- CNW CHICAGO & NORTHWESTERN
- CSXT CSX TRANSPORTATION
- IC ILLINOIS CENTRAL
- IHRC HIRAIL CORPORATION
- NW NORFOLK & WESTERN
- SPSCL SOUTHERN PACIFIC CHICAGO LINE
- TPW TOLEDO, PEORIA & WESTERN
- UP UNION PACIFIC

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FIGURE 2.1-5

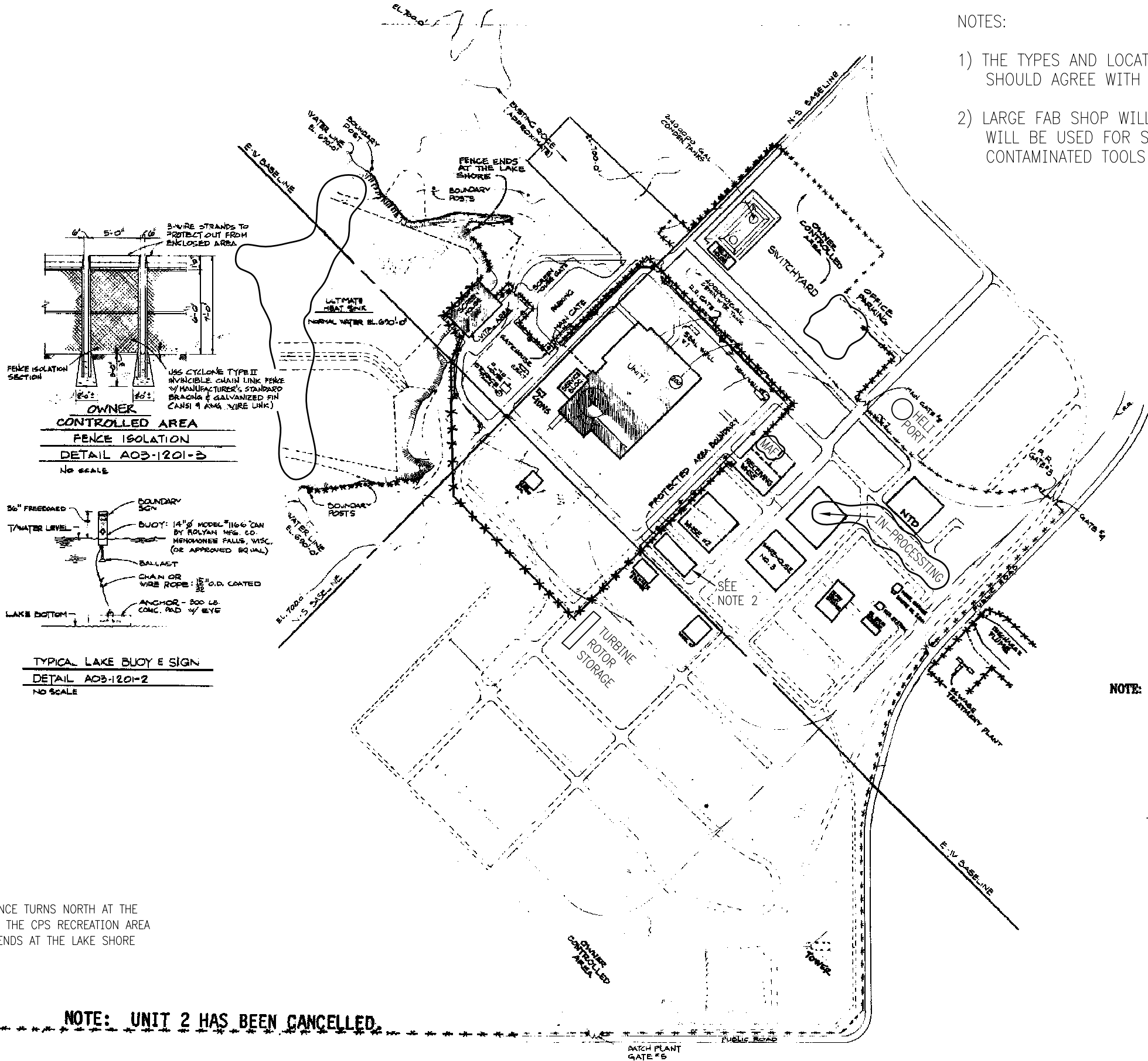
RAILROADS WITHIN A 50-MILE  
 RADIUS OF THE SITE





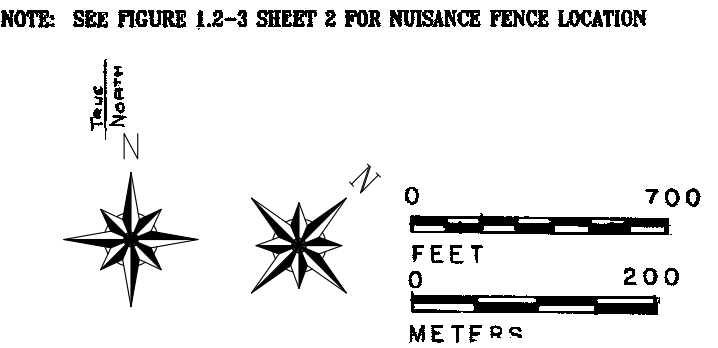
NOTES:

- 1) THE TYPES AND LOCATIONS OF GATES IN THE PROTECTED AREA SHOULD AGREE WITH DRAWING S03-1133.
- 2) LARGE FAB SHOP WILL NO LONGER BE USED AS A FAB SHOP, BUT WILL BE USED FOR STORAGE OF TURBINE DIAPHRAGMS AND CONTAMINATED TOOLS STORED IN SEA VANS.



LEGEND

---	PERMANENT PROTECTED AREA BOUNDARY FENCE
---	RESTRICTED AREA BOUNDARY
---	ELECTRICAL DUCT
---	PATROL PATH OR TEMP. ROAD
---	SLING GATE
---	SINGLE SWING GATE
---	DOUBLE SWING GATE
---	GATEHOUSE
---	TEMP. CONSTR. BLDG.
---	R.R. TRACK
---	LAKE BUOY WITH SIGN LIGHTING



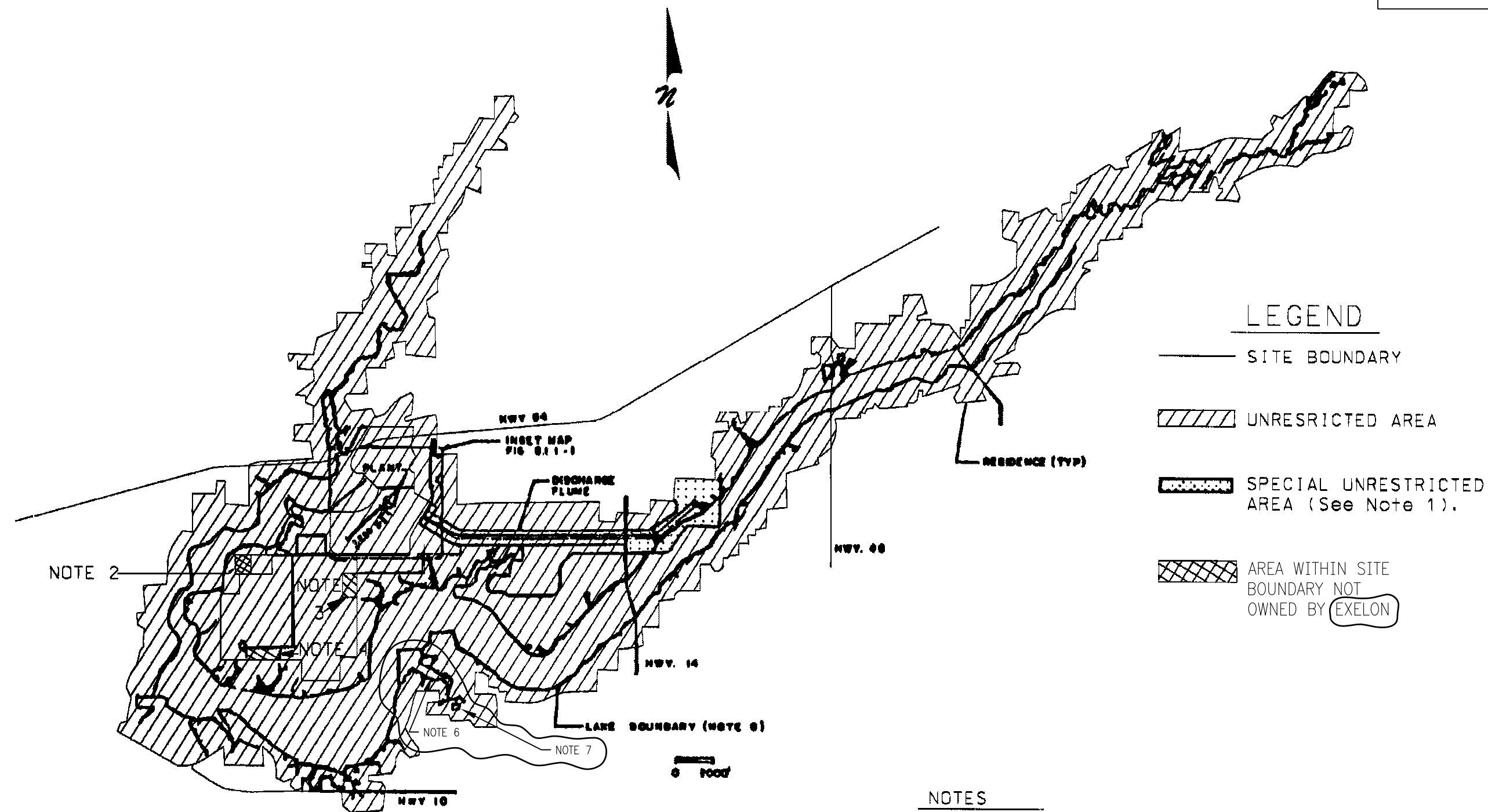
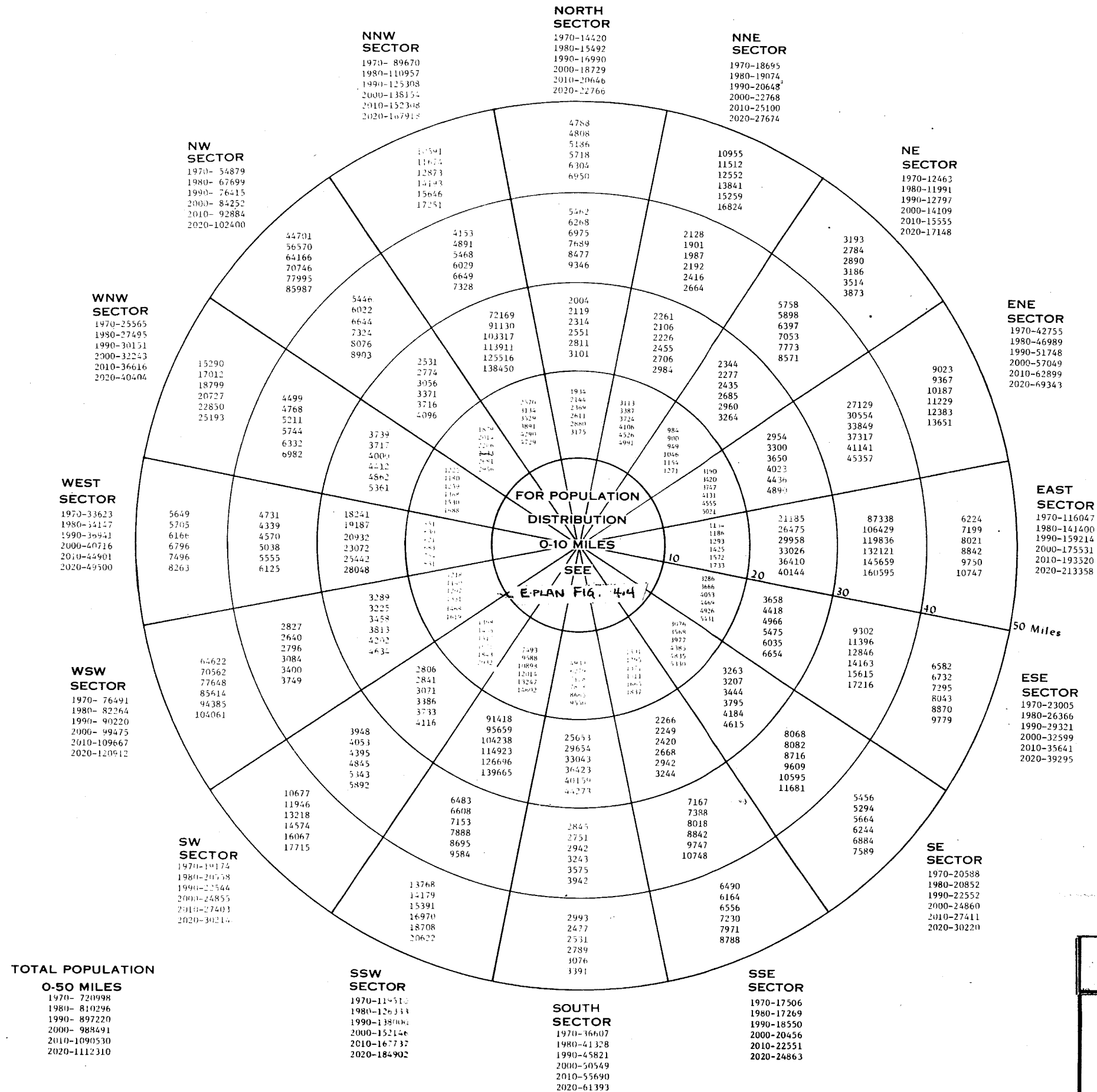
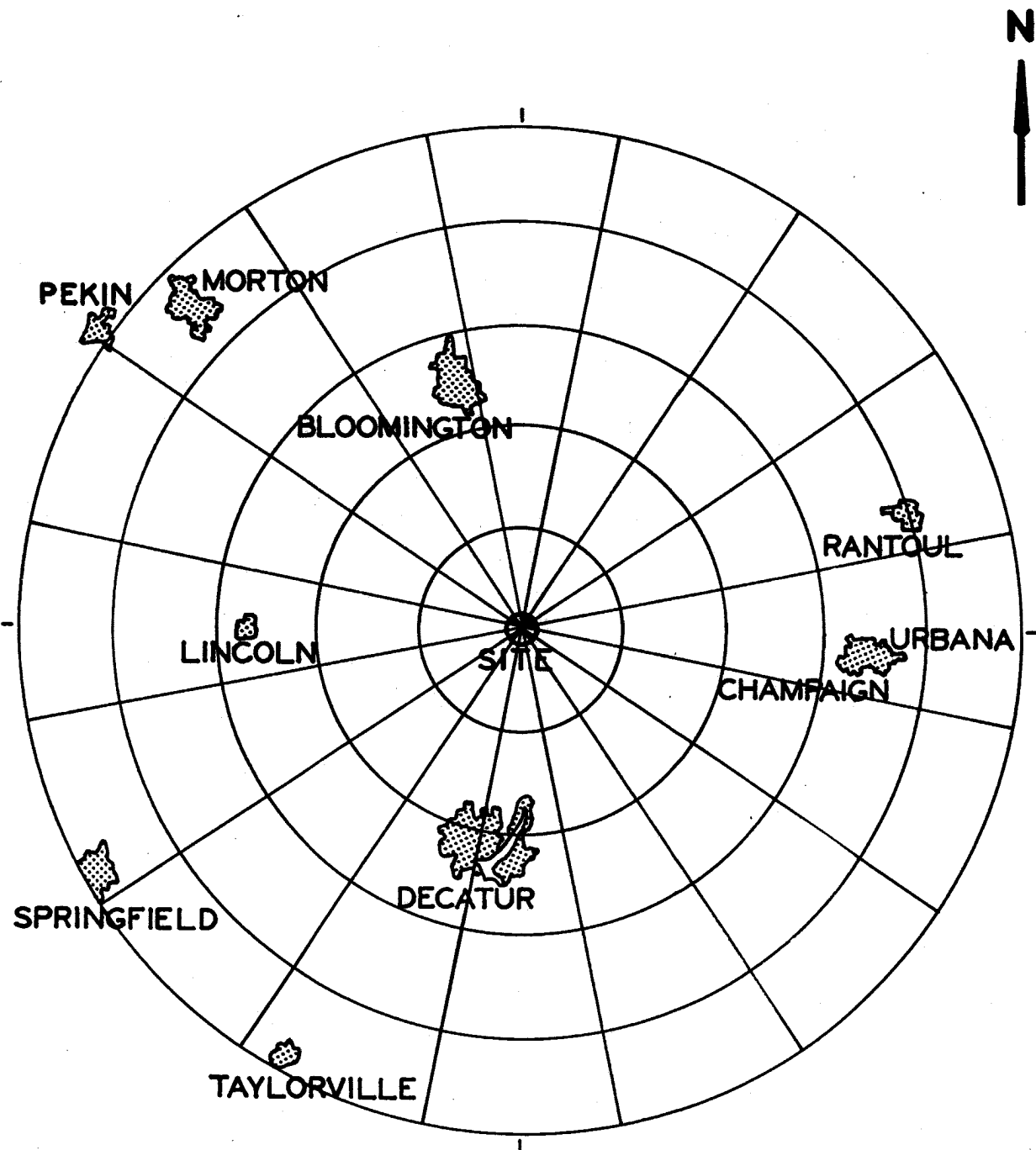


FIGURE 2.1-9  
HAS BEEN DELETED

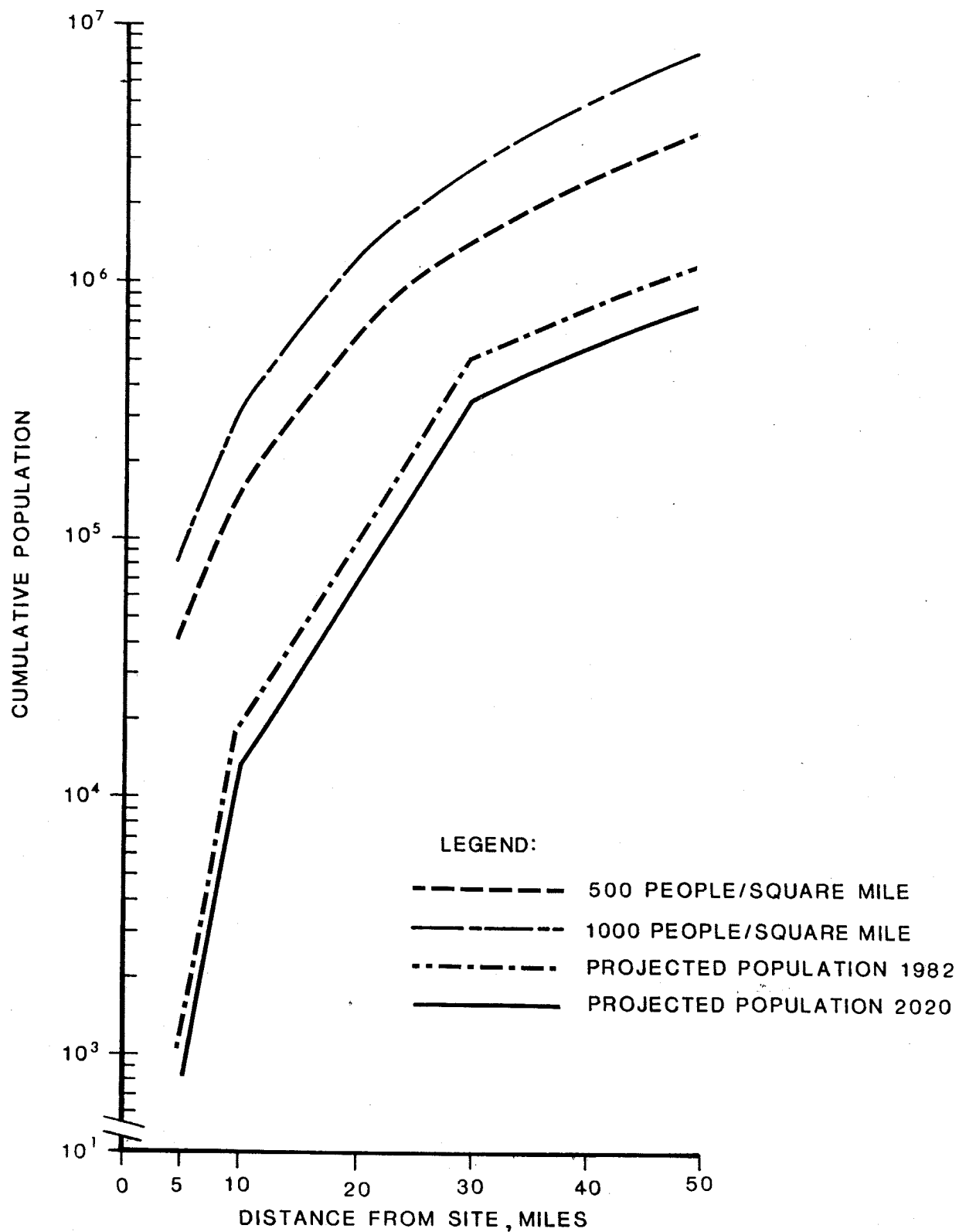






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FIGURE 2.1-11  
MAJOR CITIES WITHIN 50 MILES  
OF THE SITE



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FIGURE 2.1-12

CUMULATIVE POPULATION DISTRIBUTION



REVISION 8  
AUGUST 1999

1995  
AVERAGE DAILY  
TOTAL TRAFFIC

TRAFFIC VOLUME GROUPS

900	2400	4900	9000
0-999	1000-2499	2500-4999	5000 AND OVER

ANNUAL AVERAGE  
24-HOUR TRAFFIC VOLUMES

CLINTON POWER STATION  
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FIGURE 2.2-1

HIGHWAY TRANSPORTATION NETWORK AND  
TRAFFIC VOLUME OF DEWITT COUNTY AND  
ROUTES WITHIN 50 MILES OF THE SITE

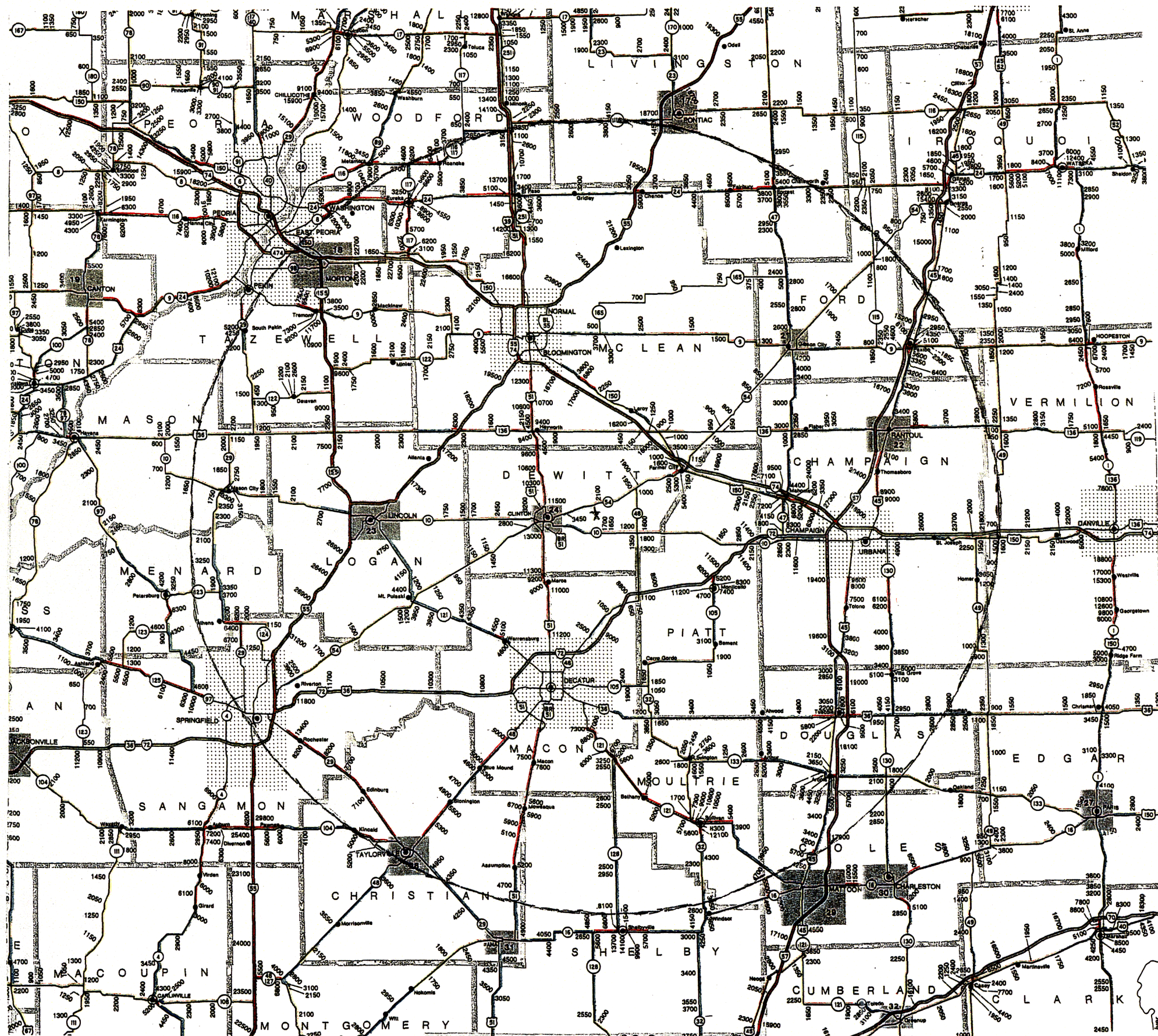
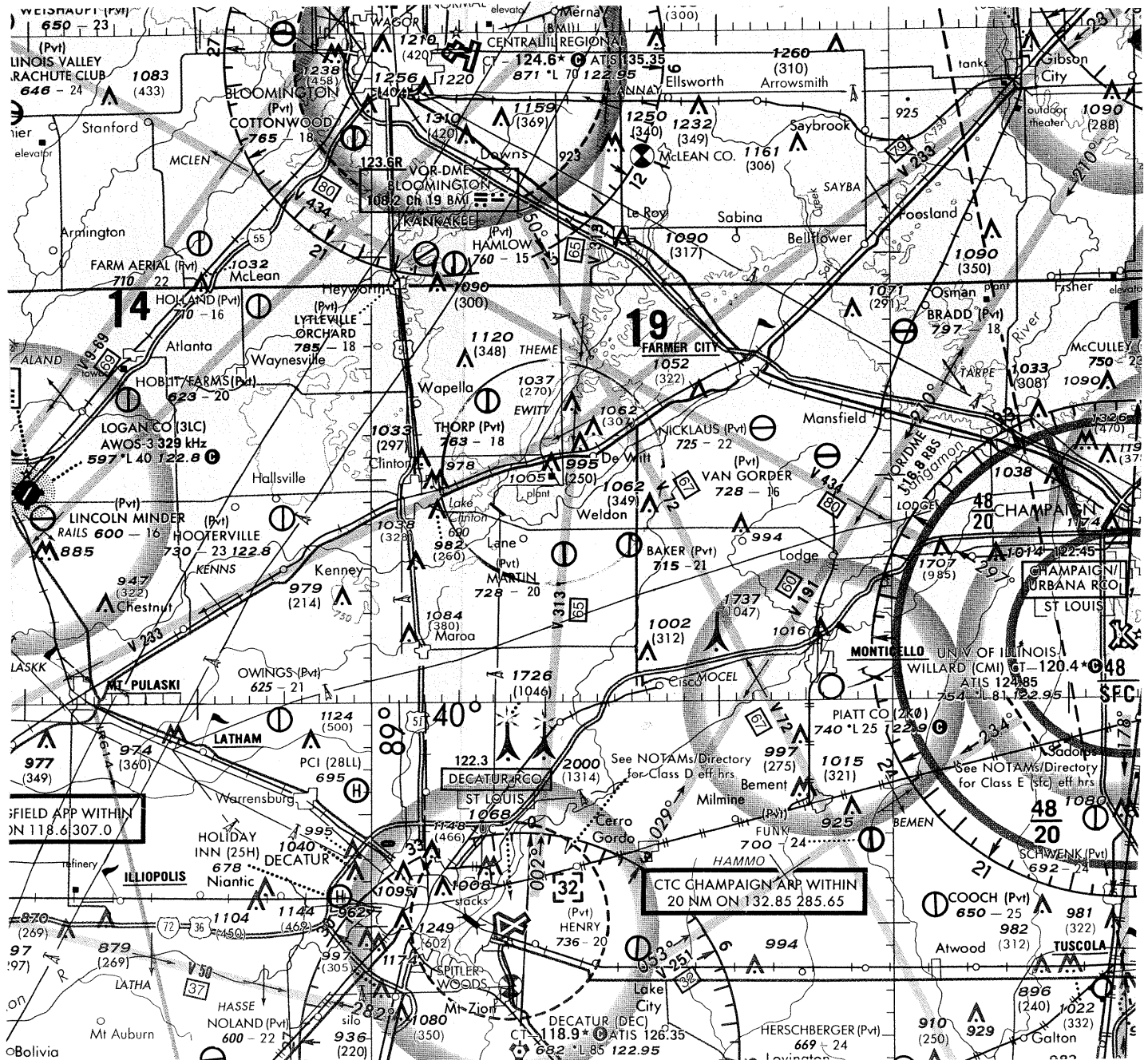




FIGURE 2.2-2  
HAS BEEN DELETED



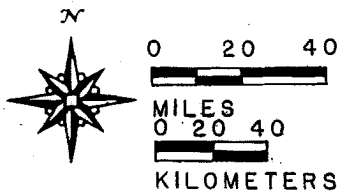
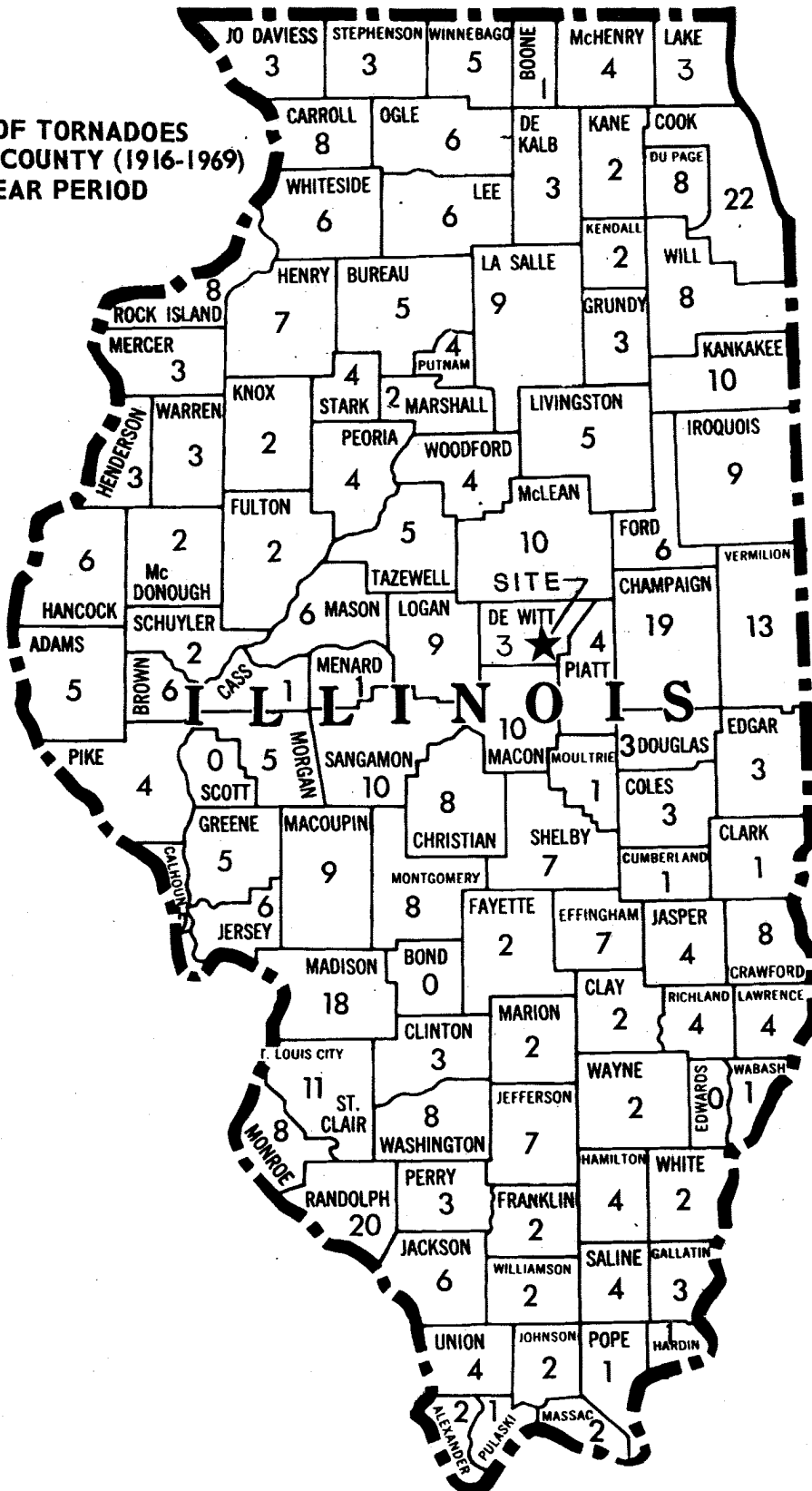


AIRPORT	DISTANCE & DIRECTION FROM STATION	LAYOUT
SPENCER (RLA)*	1.8 MILES WSW	
MARTIN (RLA)(PRIVATE)	4.5 MILES S	(1) 2000 FT. RUNWAY
THORP (RLA)(PRIVATE)	4.75 MILES NW	(2) 1800 FT. TURF RUNWAYS EAST TO WEST/NORTH TO SOUTH
BAKER (RLA)(PRIVATE)	5.0 MILES SE	(1) 2100 FT. TURF RUNWAY NORTH-SOUTH
BLOOMINGTON/NORMAL	22.5 MILES NNW	(11-29) 6500 FT. CONCRETE RUNWAY EAST TO WEST (2-20) 7000 FT. CONCRETE RUNWAY SOUTH TO NORTH
DECATUR	22.5 MILES S	(6-24) 8500 FT. CONCRETE RUNWAY NORTHEAST TO SOUTHWEST (12-30) 6800 FT. CONCRETE RUNWAY NORTHWEST TO SOUTHEAST (18-36) 5300 FT. CONCRETE RUNWAY NORTH - SOUTH

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FIGURE 2.2-4  
LOCATIONS AND LAYOUTS OF  
AIRPORTS WITHIN 5 MILES OF  
CPS AND DECATUR AND BLOOMINGTON  
AIRPORTS

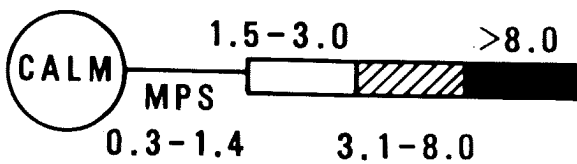
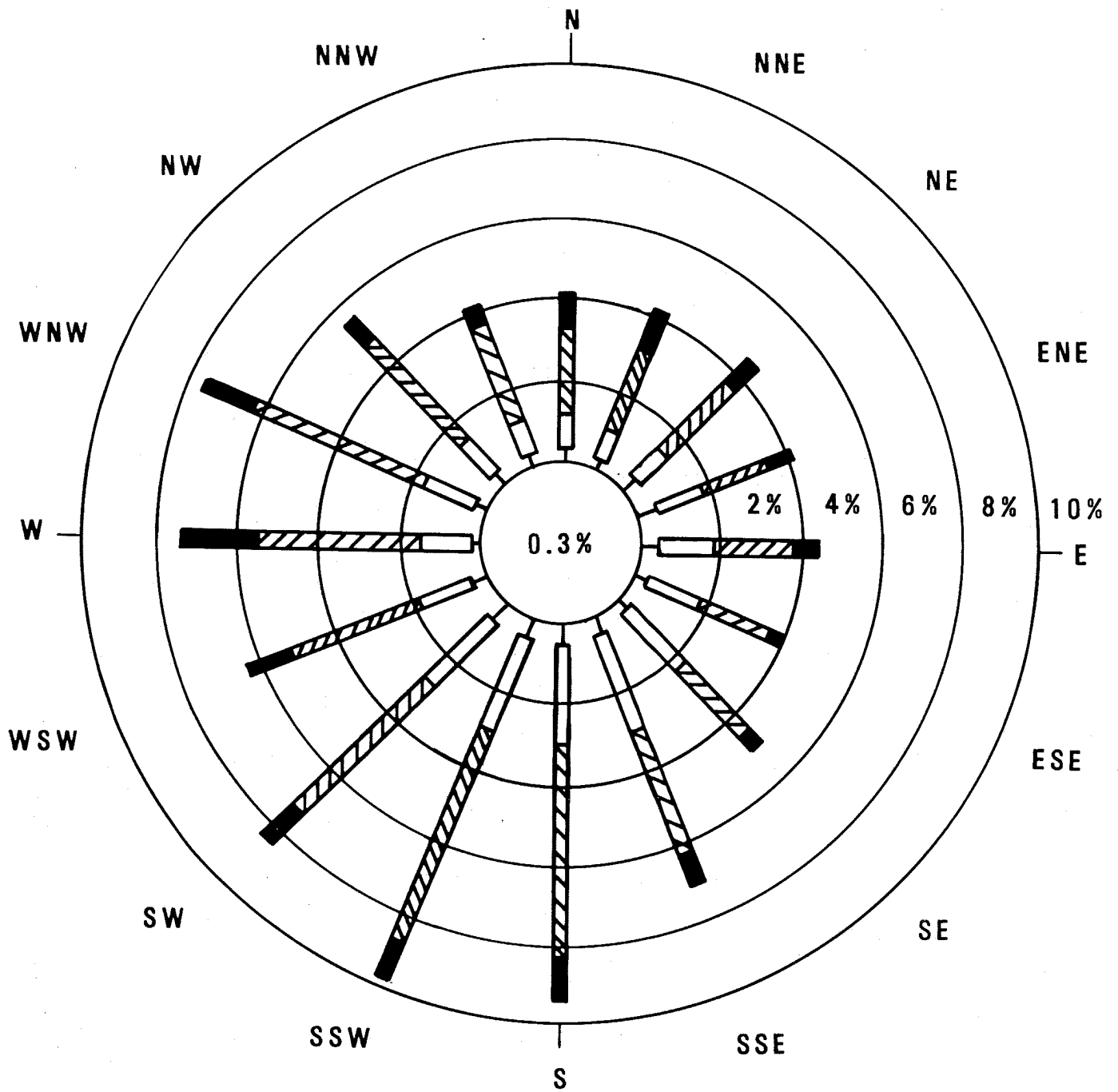
**NO. OF TORNADOES  
PER COUNTY (1916-1969)  
54 YEAR PERIOD**



**CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 2.3-1

NUMBER OF TORNADOES PER COUNTY  
(1916-1969) 54 YEAR PERIOD

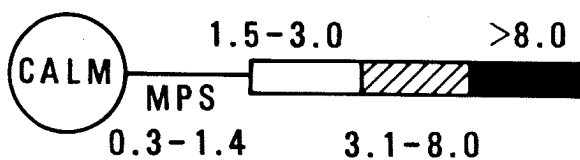
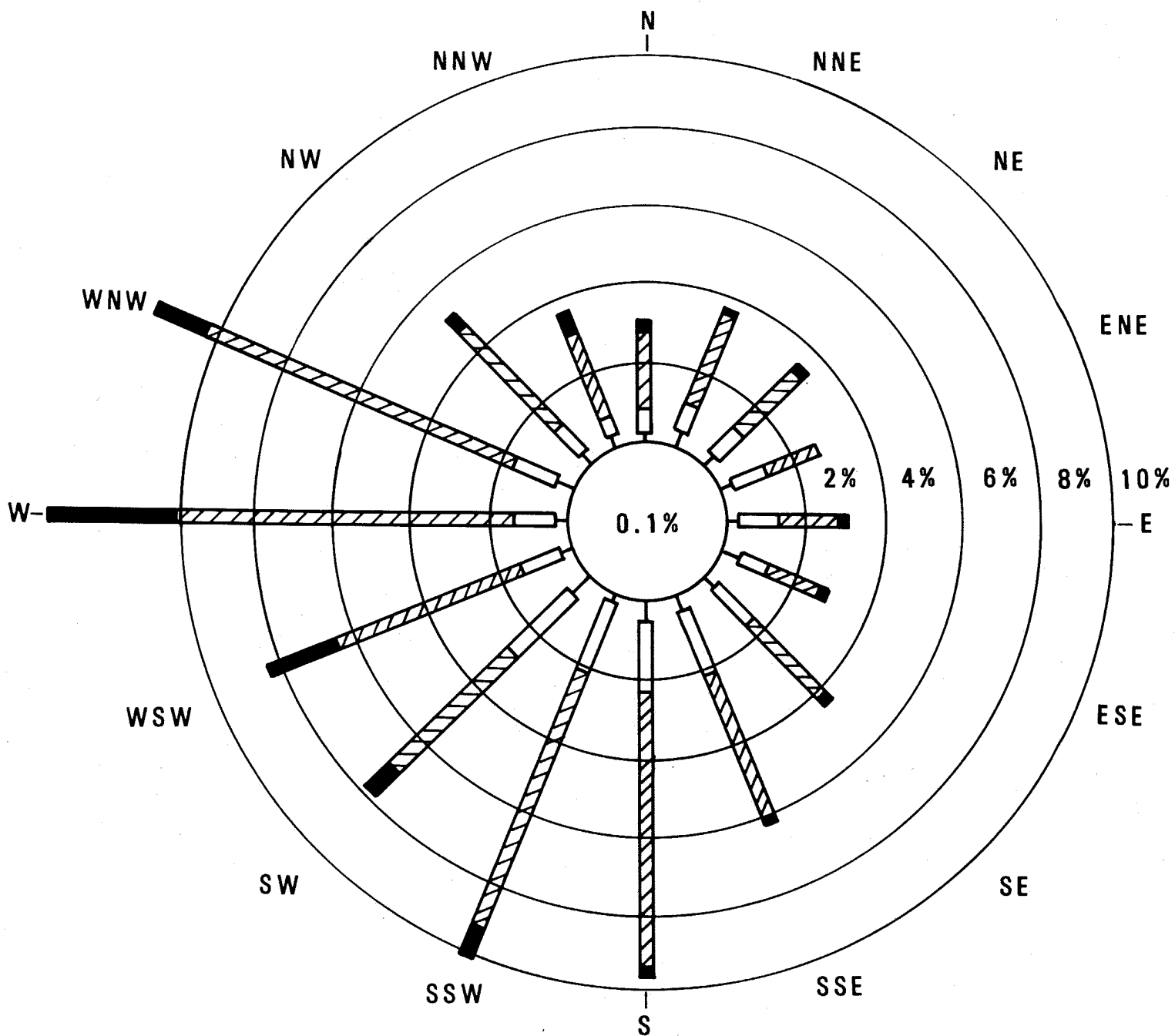


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FIGURE 2.3-2

WIND ROSE, 10 METER LEVEL, CLINTON  
POWER STATION SITE, PERIOD OF RECORD

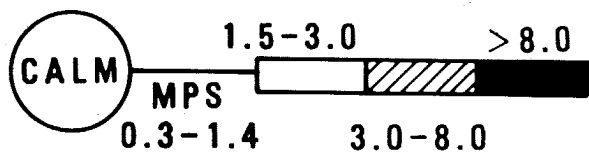
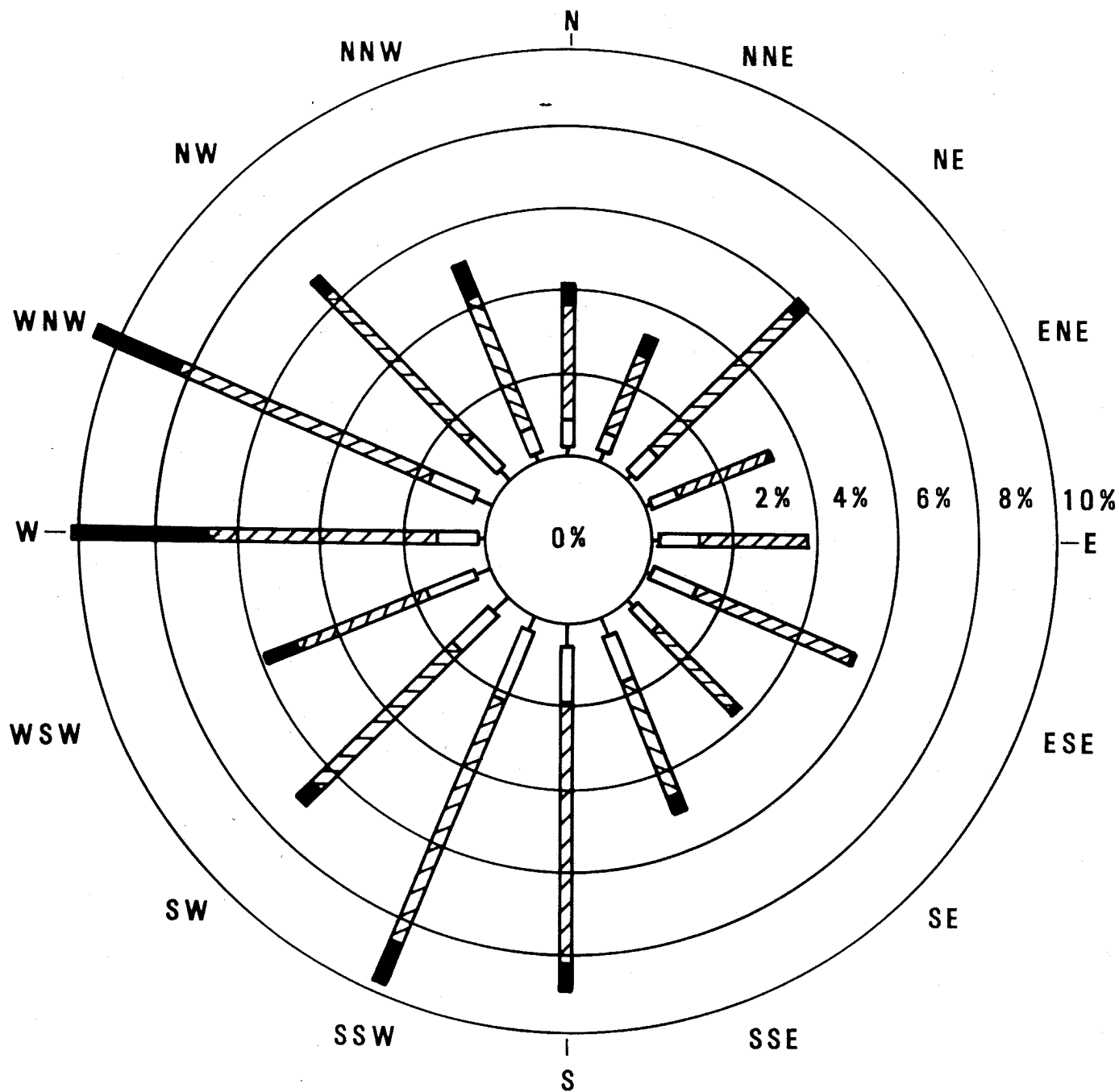




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FIGURE 2.3-3

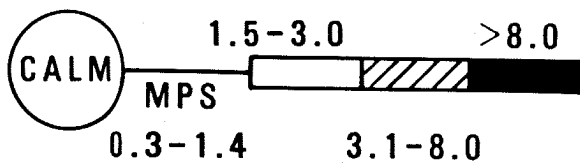
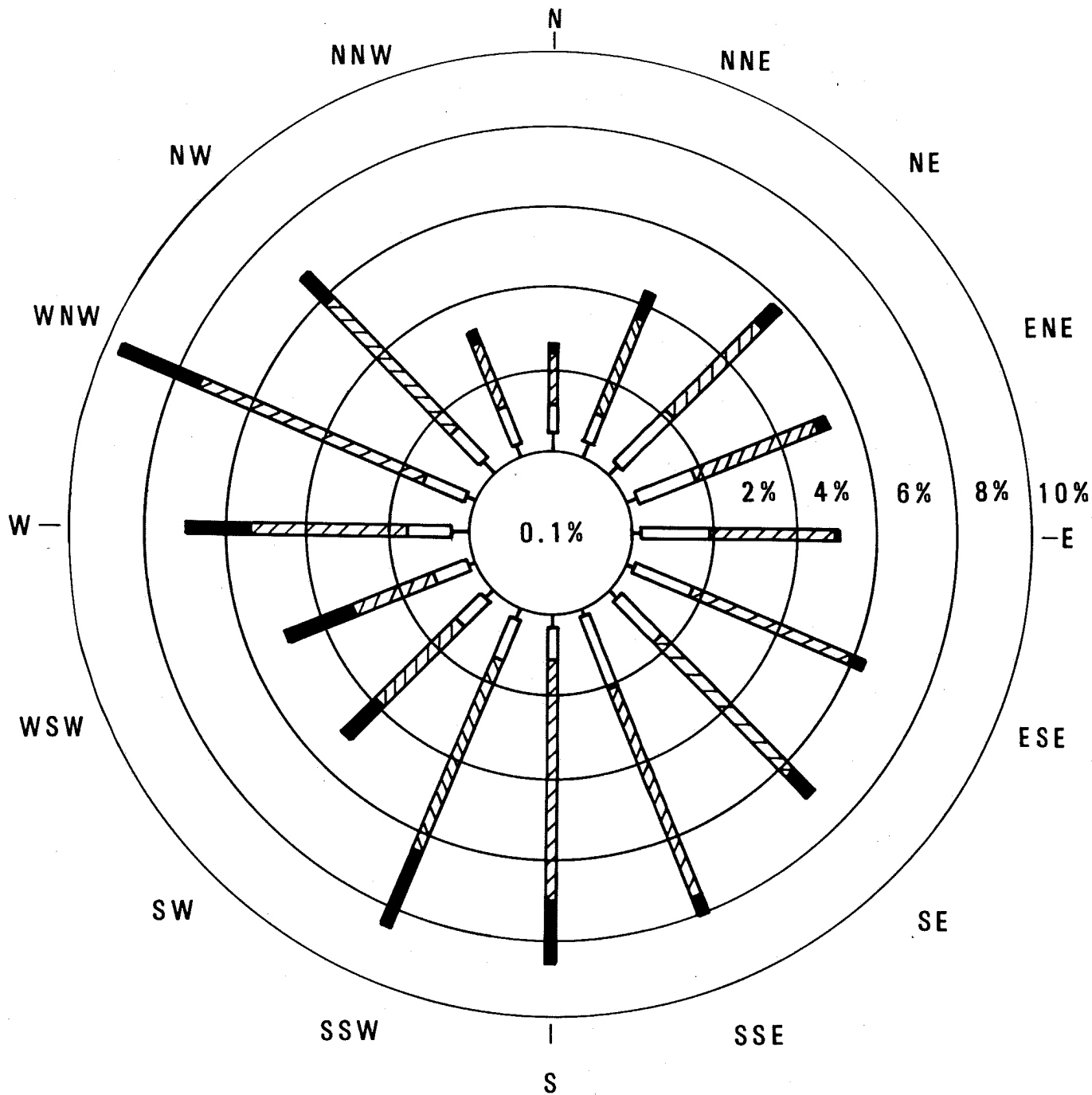
WIND ROSE, 10 METER LEVEL, CLINTON  
POWER STATION SITE, COMPOSITE JANUARY



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FIGURE 2.3-4

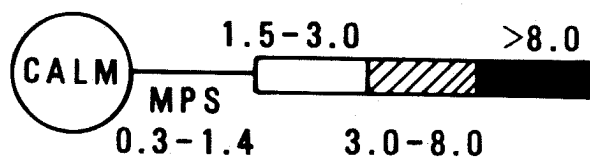
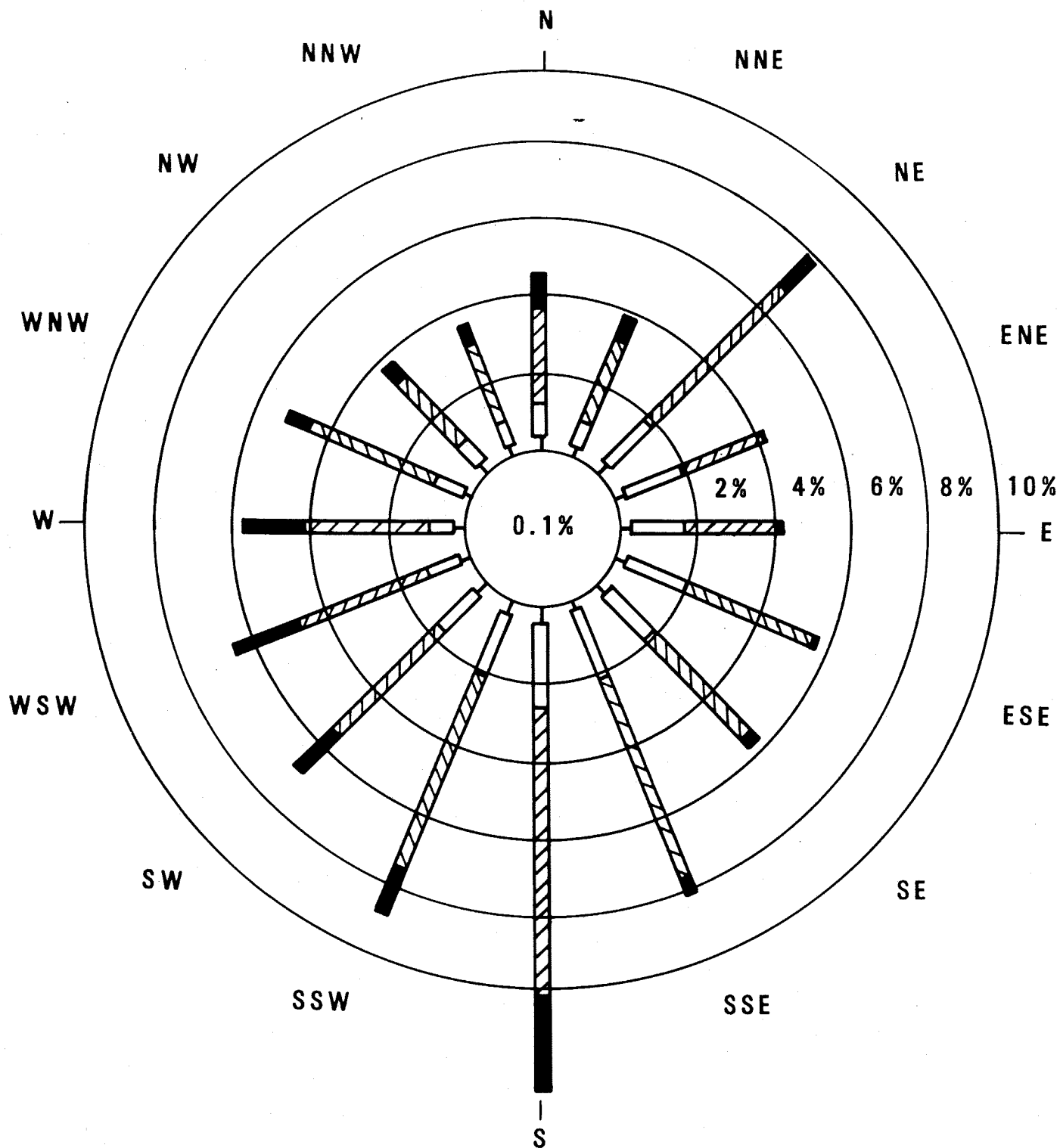
WIND ROSE, 10 METER LEVEL, CLINTON  
POWER STATION SITE, COMPOSITE FEBRUARY



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FIGURE 2.3-5

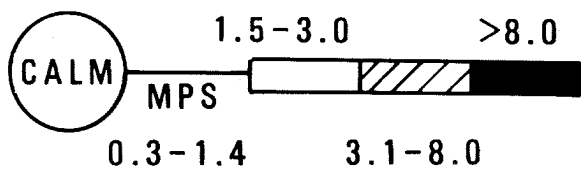
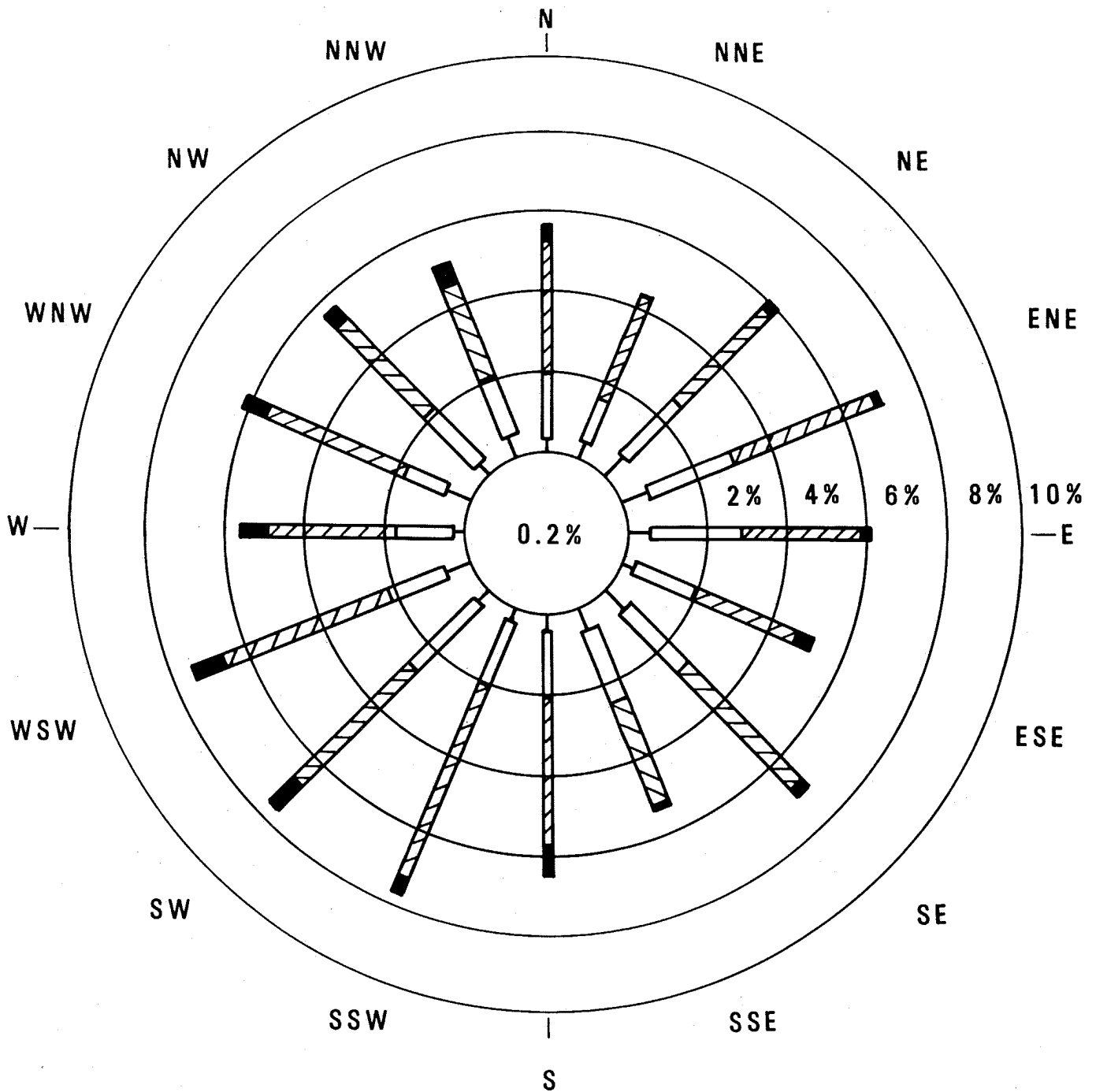
WIND ROSE, 10 METER LEVEL, CLINTON  
POWER STATION SITE, COMPOSITE MARCH



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FIGURE 2.3-6

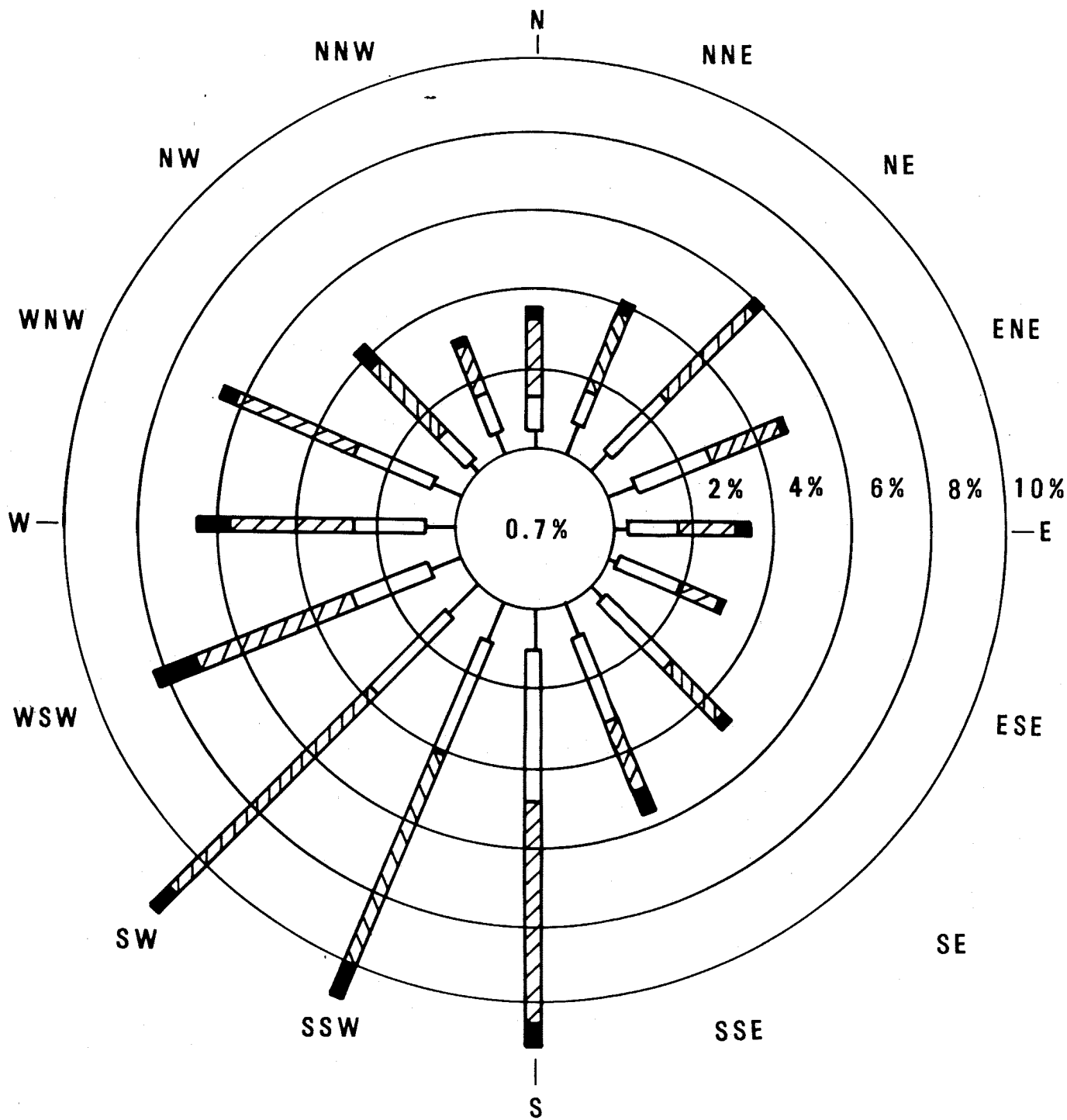
WIND ROSE, 10 METER LEVEL, CLINTON  
POWER STATION SITE, COMPOSITE APRIL



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FIGURE 2.3-7

WIND ROSE, 10 METER LEVEL, CLINTON  
POWER STATION SITE, COMPOSITE MAY

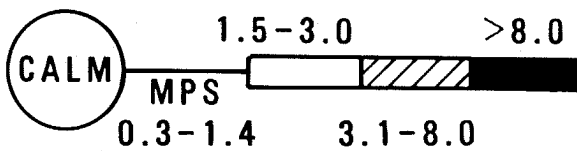
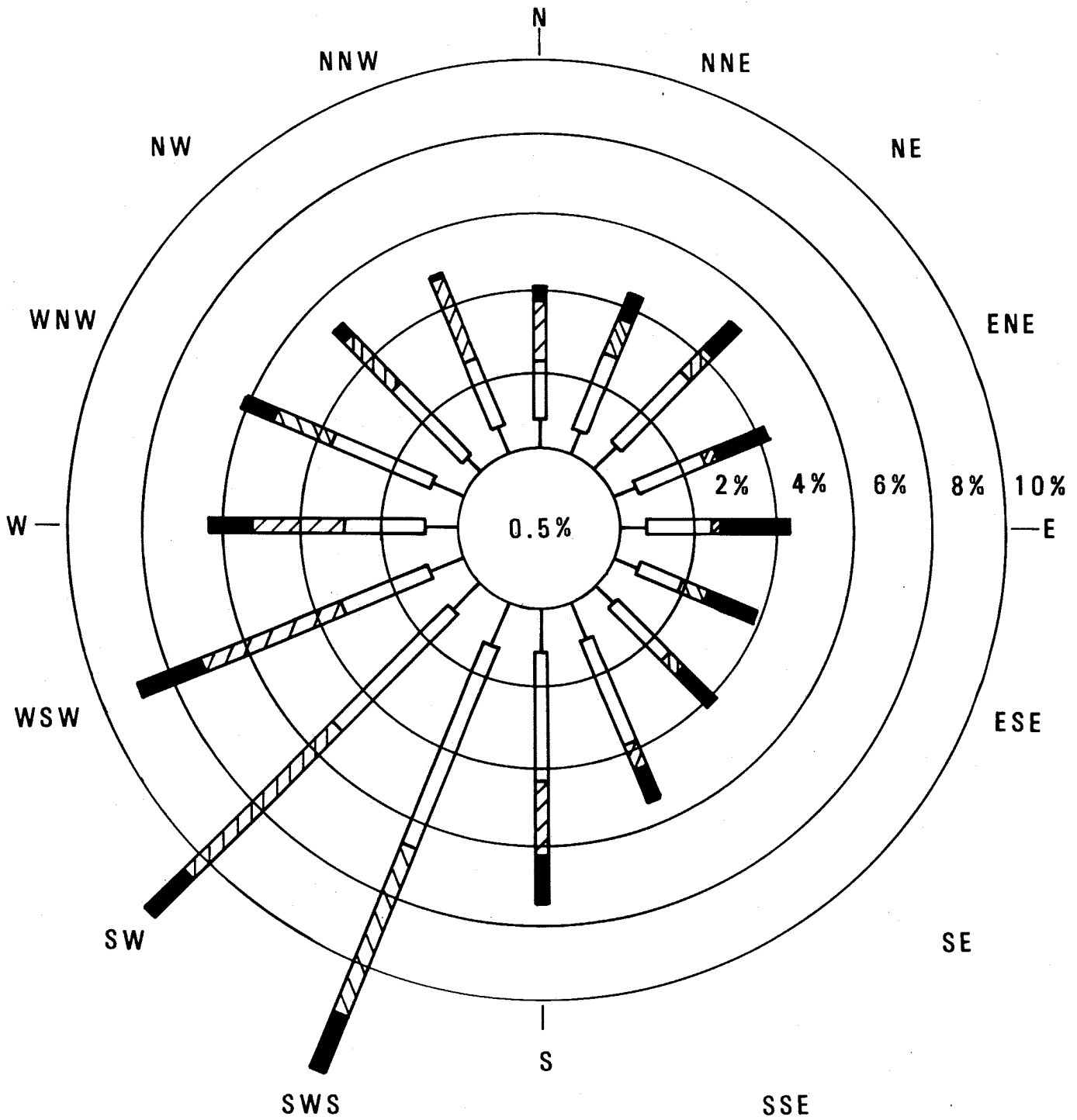


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FIGURE 2.3-8

WIND ROSE, 10 METER LEVEL, CLINTON  
POWER STATION SITE, COMPOSITE JUNE



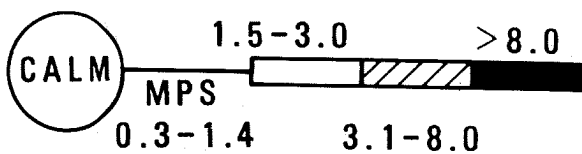
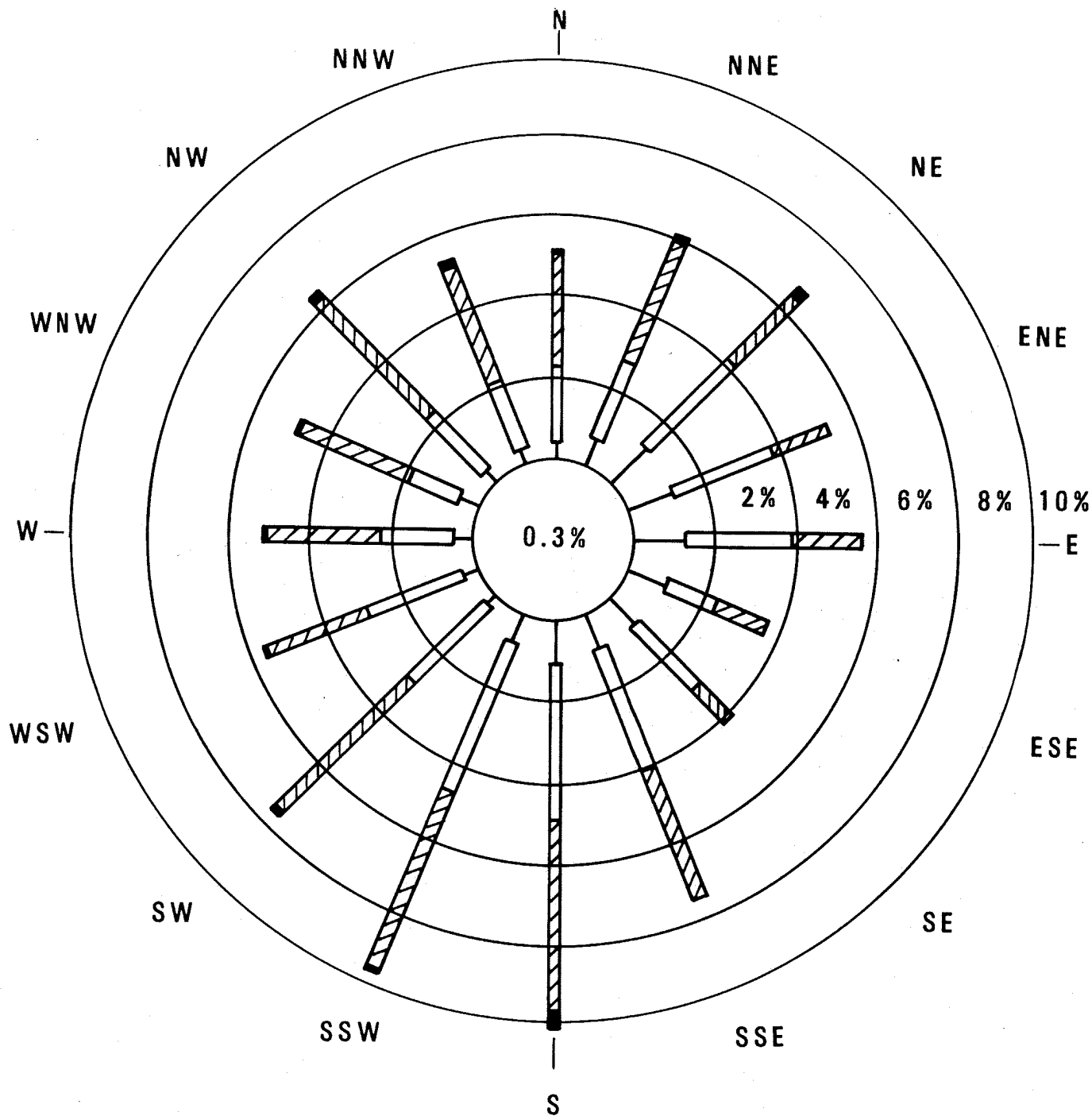


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FIGURE 2.3-9

WIND ROSE, 10 METER LEVEL, CLINTON  
POWER STATION SITE, COMPOSITE JULY

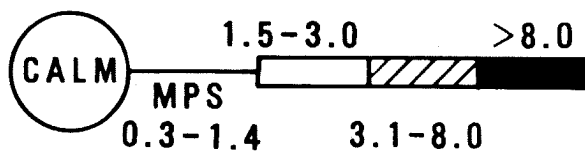
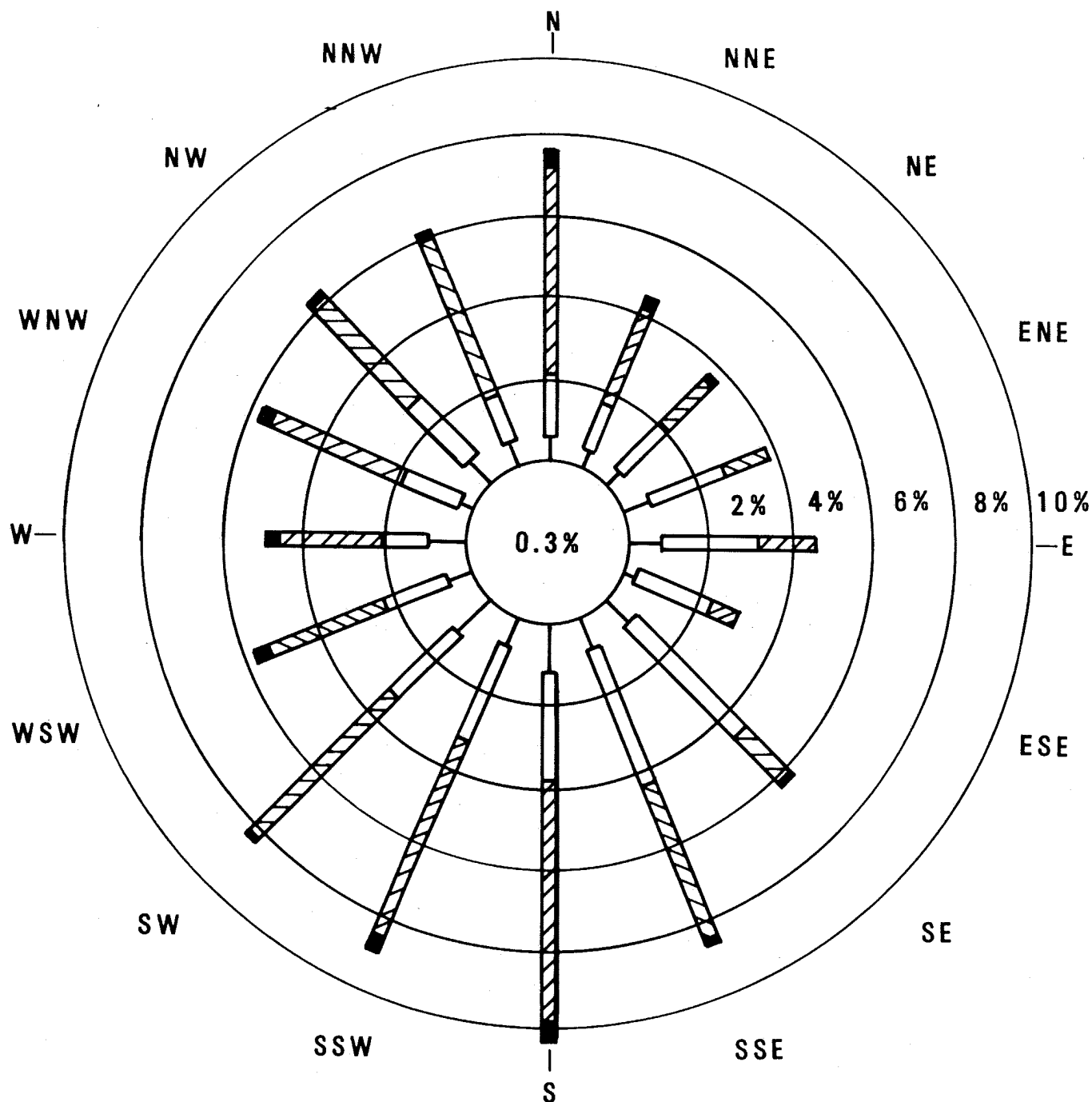




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FIGURE 2.3-11

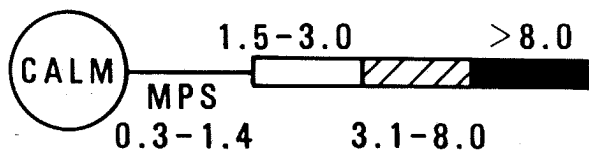
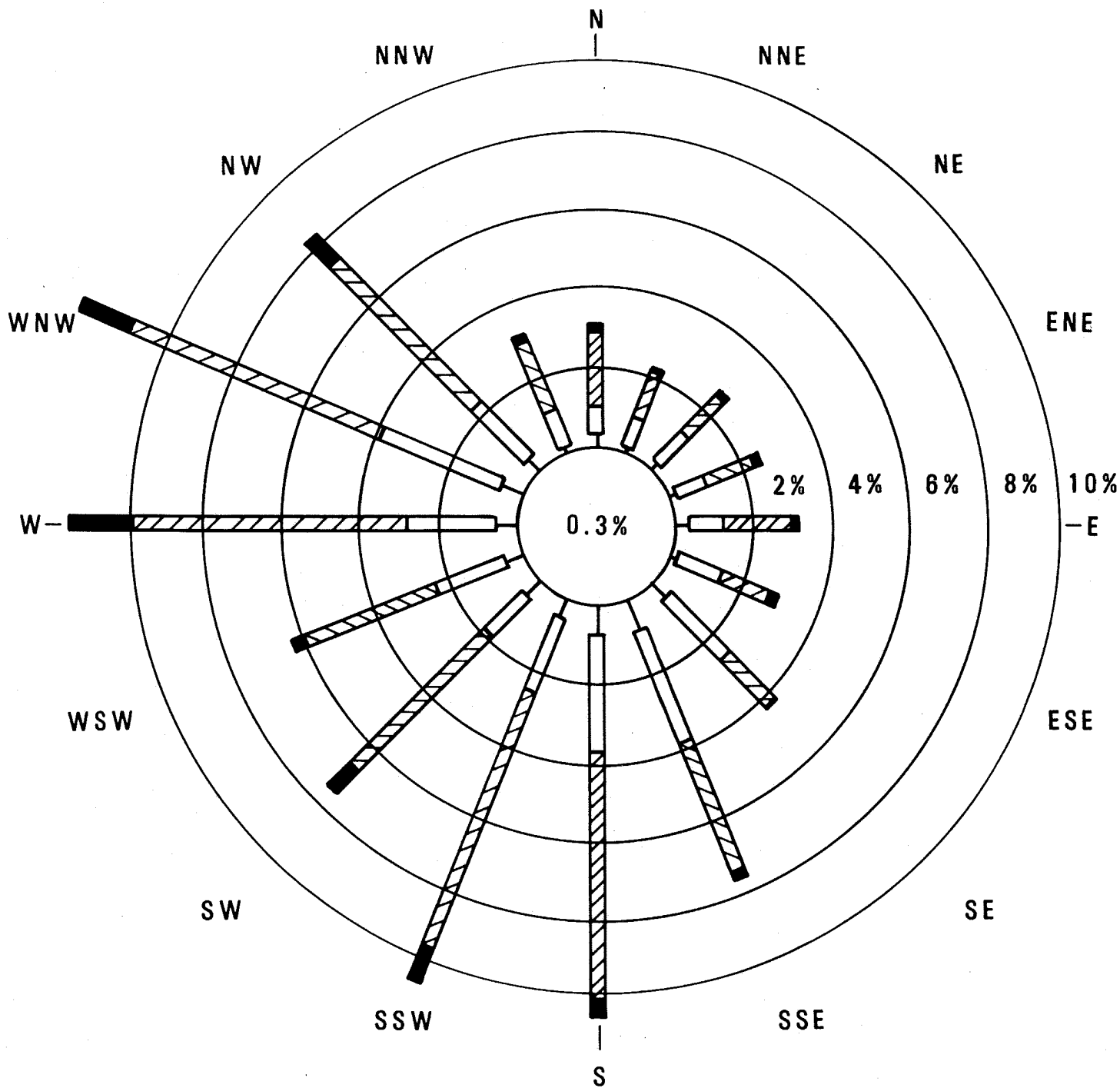
WIND ROSE, 10 METER LEVEL, CLINTON  
POWER STATION SITE, COMPOSITE SEPTEMBER



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FIGURE 2.3-12

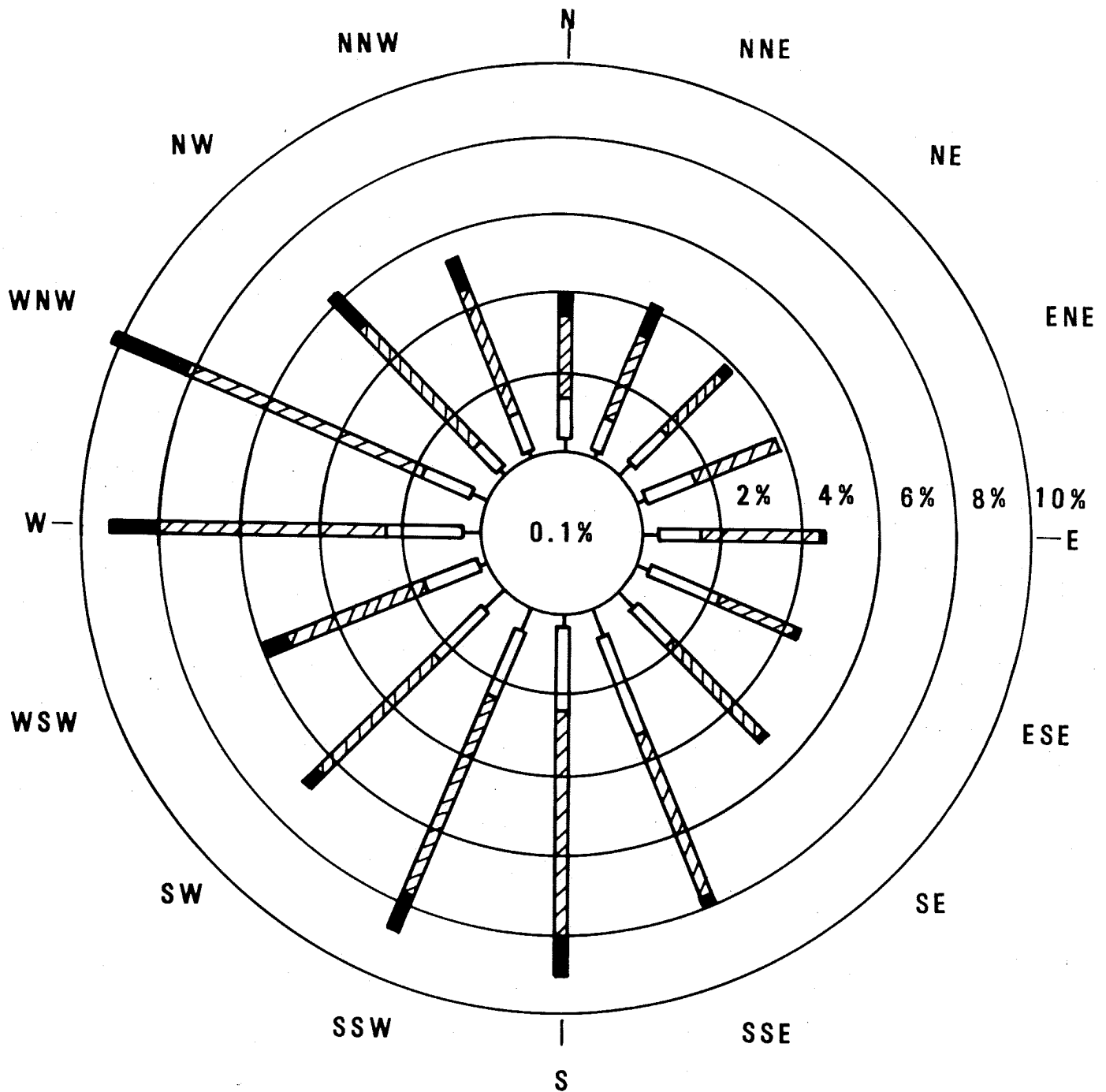
WIND ROSE, 10 METER LEVEL, CLINTON  
POWER STATION SITE, COMPOSITE OCTOBER



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FIGURE 2.3-13

WIND ROSE, 10 METER LEVEL, CLINTON  
POWER STATION SITE, COMPOSITE NOVEMBER

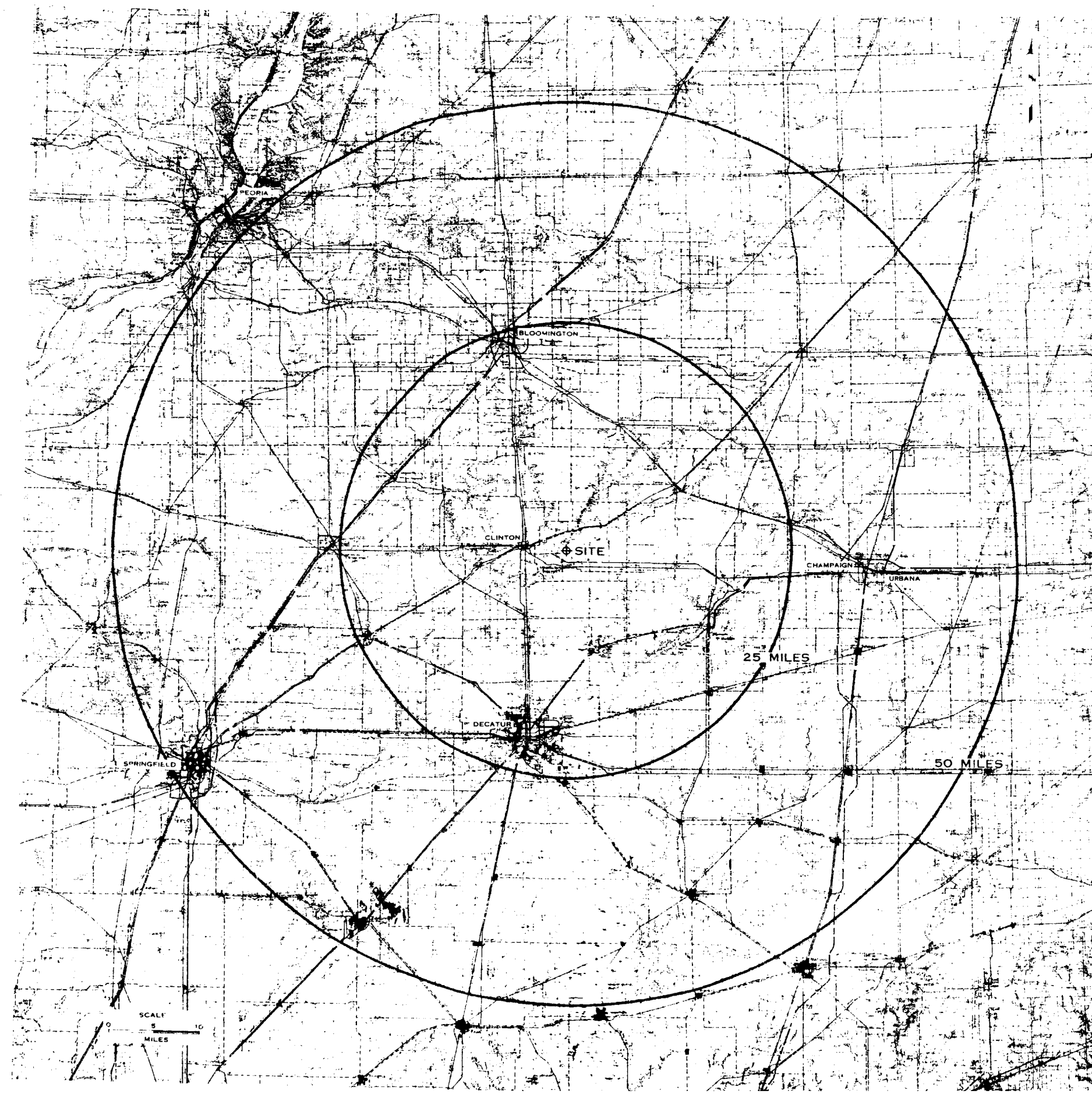


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FIGURE 2.3-14

WIND ROSE, 10 METER LEVEL, CLINTON  
POWER STATION SITE, COMPOSITE DECEMBER

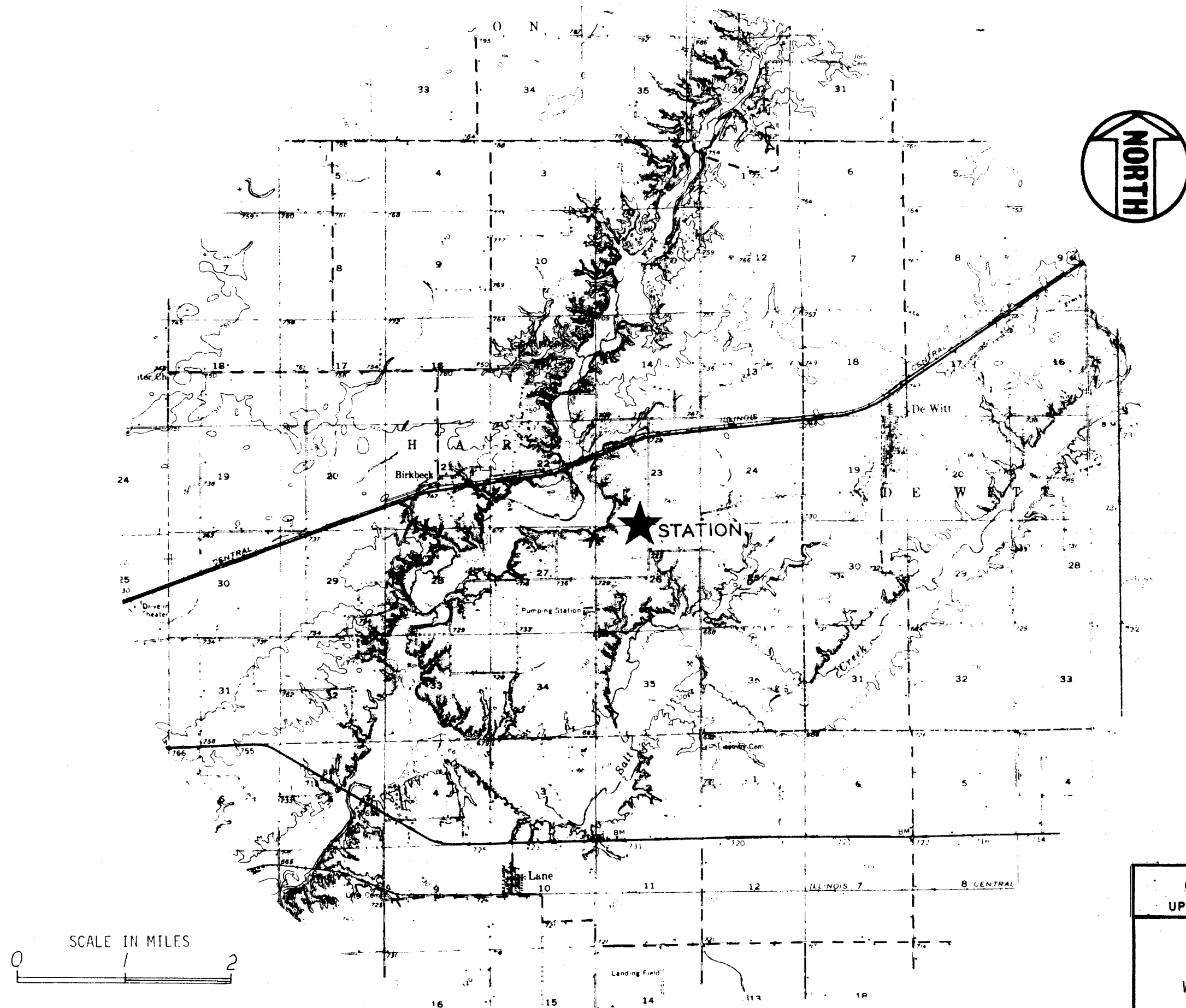




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FIGURE 2.3-15

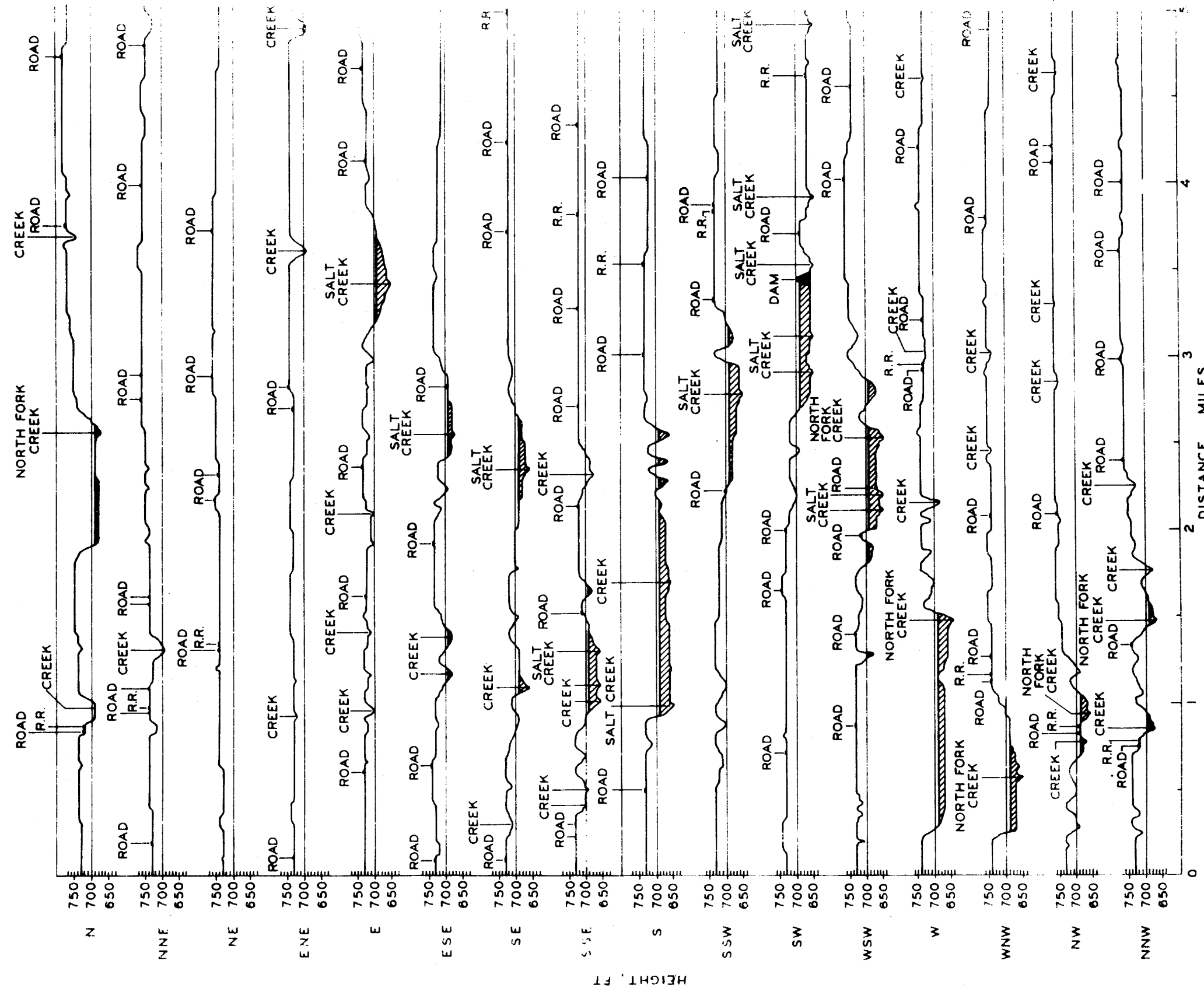
TOPOGRAPHIC MAP OF THE AREA  
WITHIN 50 MILES OF THE CLINTON  
POWER STATION SITE



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FIGURE 2.3-16

TOPOGRAPHIC MAP OF THE AREA  
WITHIN 5 MILES OF THE CLINTON  
POWER STATION SITE

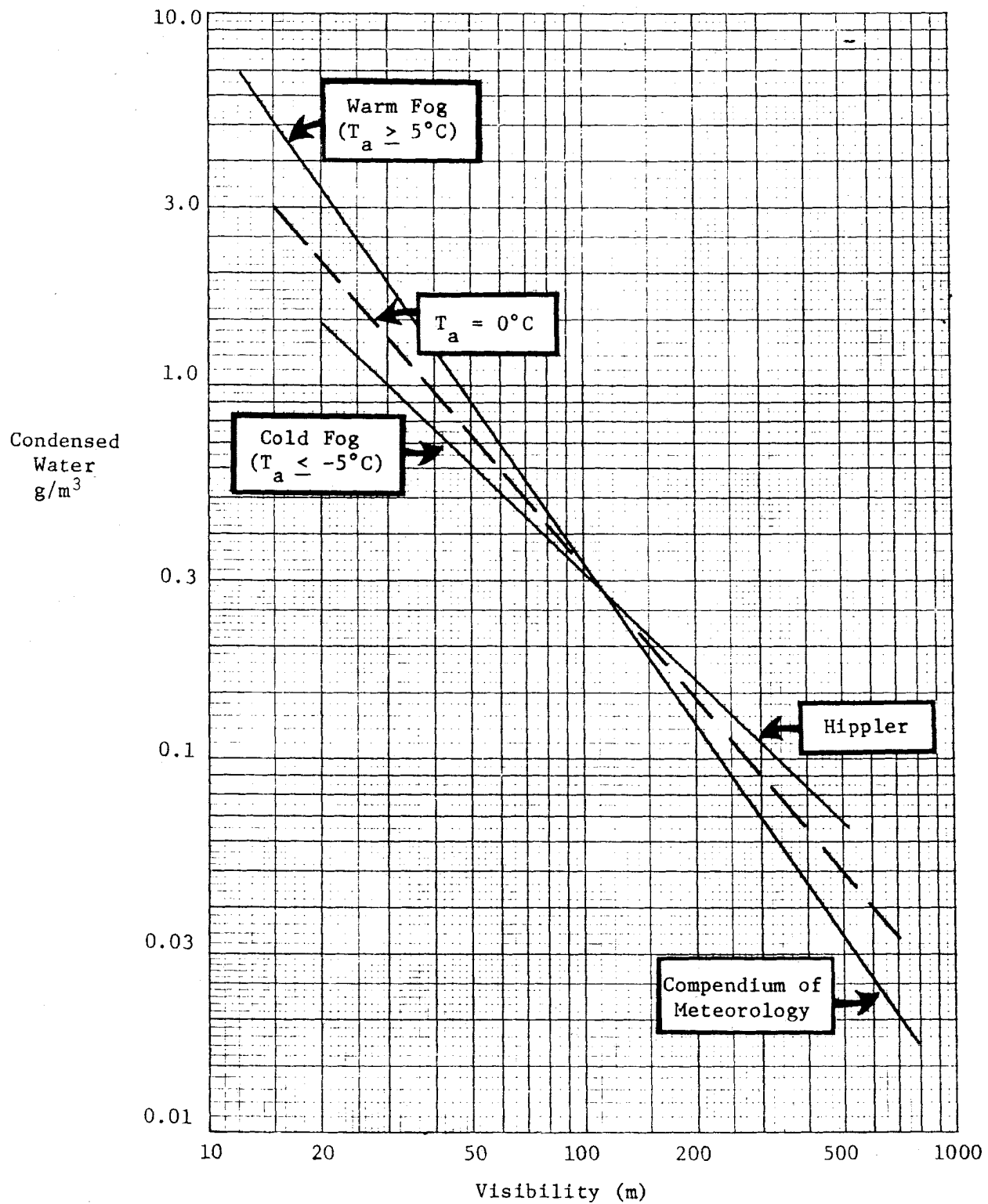


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FIGURE 2.3-17

TOPOGRAPHICAL CROSS SECTION AS A  
FUNCTION OF THE DISTANCE FROM THE  
CLINTON POWER STATION



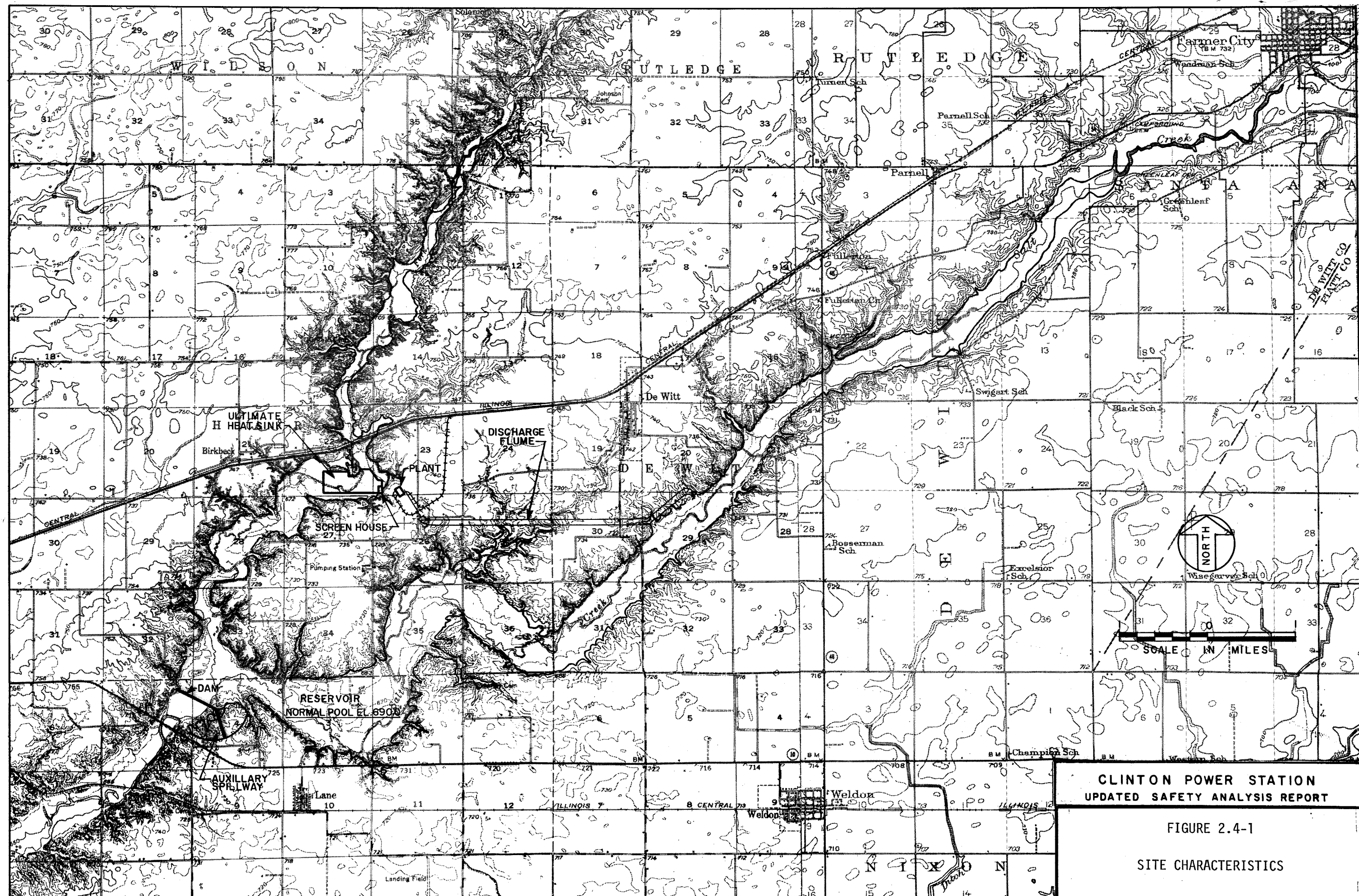


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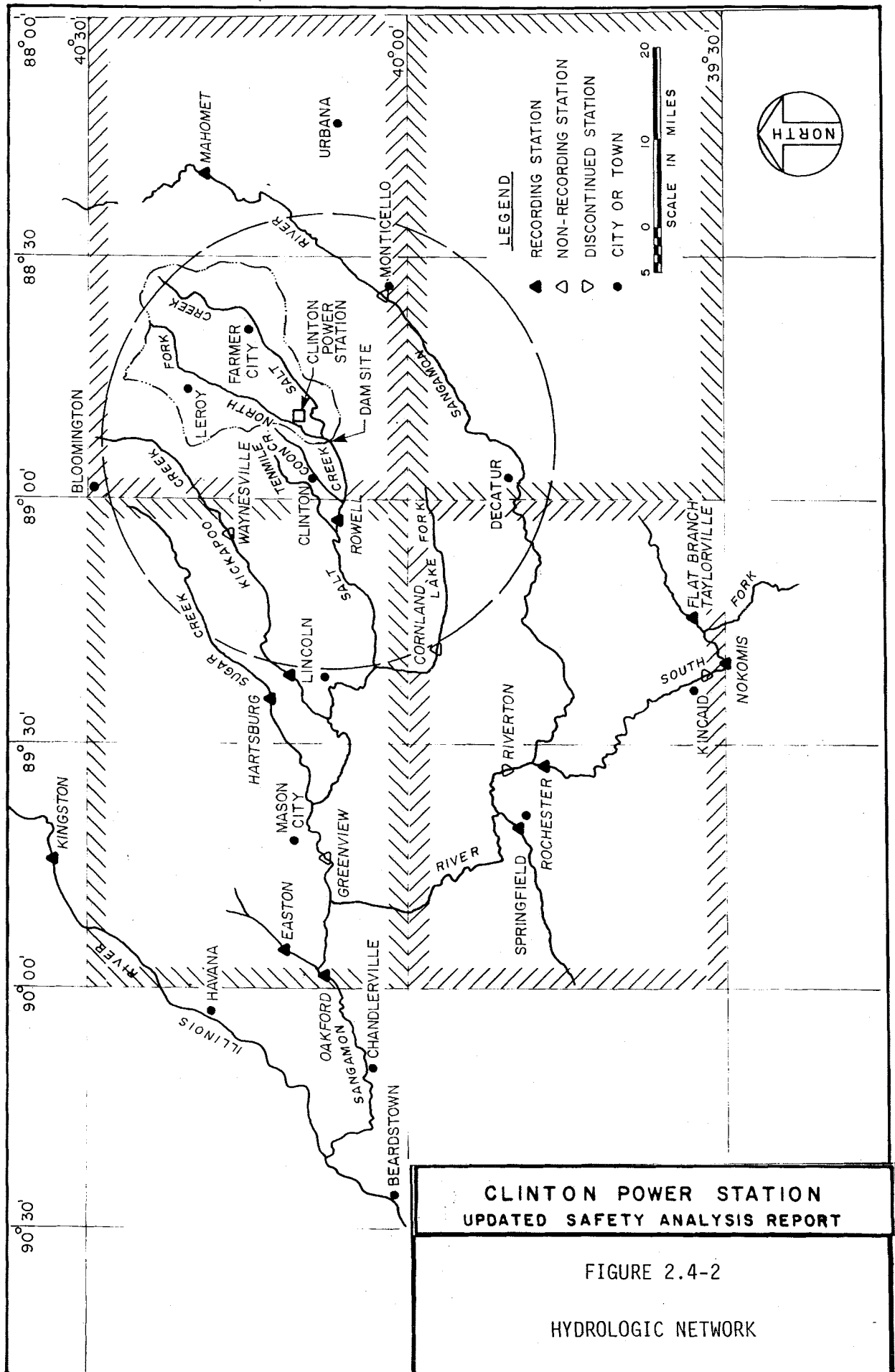
FIGURE A2.3-1

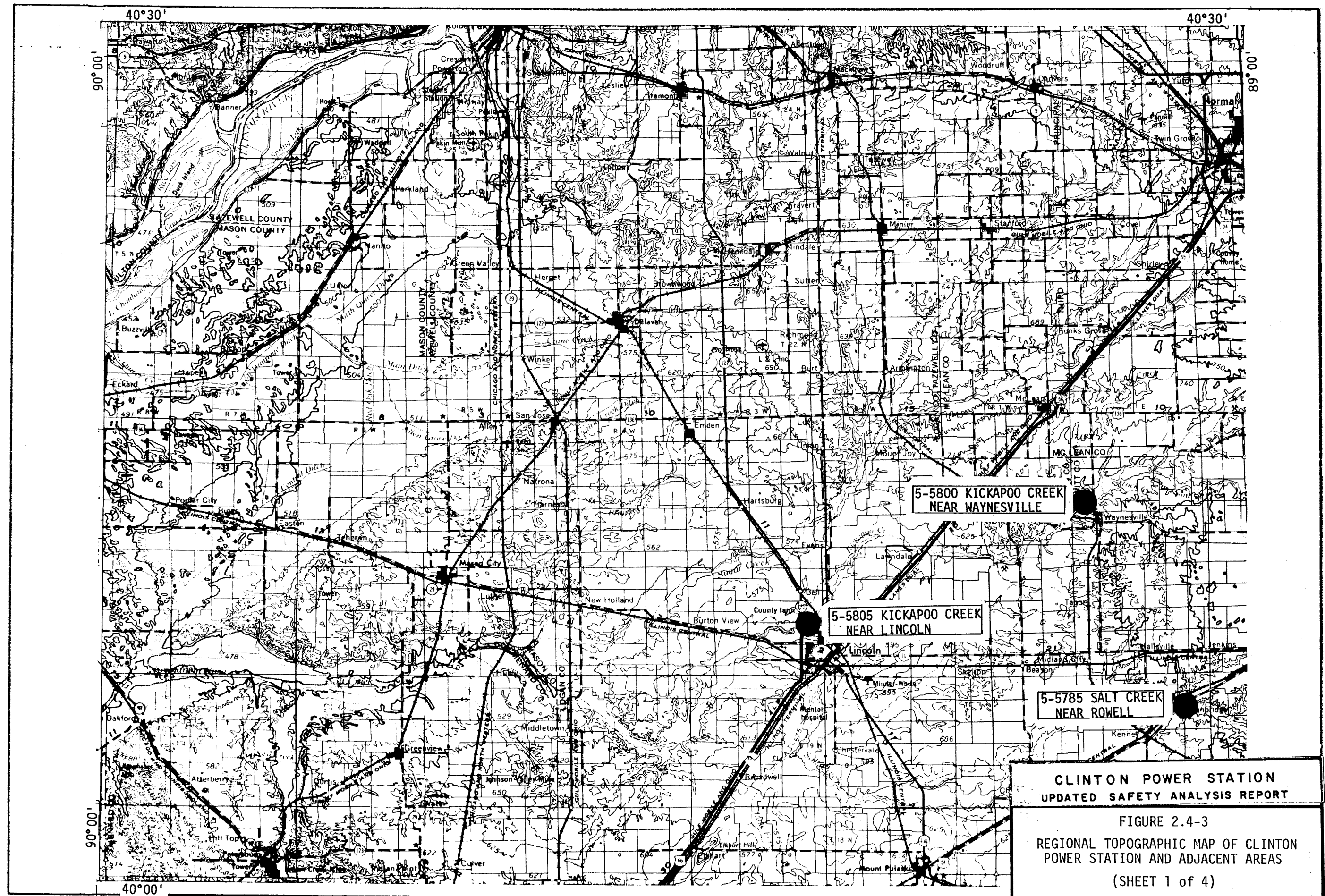
HORIZONTAL VISIBILITY AS A FUNCTION  
OF CONDENSED WATER VAPOR AND  
AMBIENT AIR TEMPERATURE

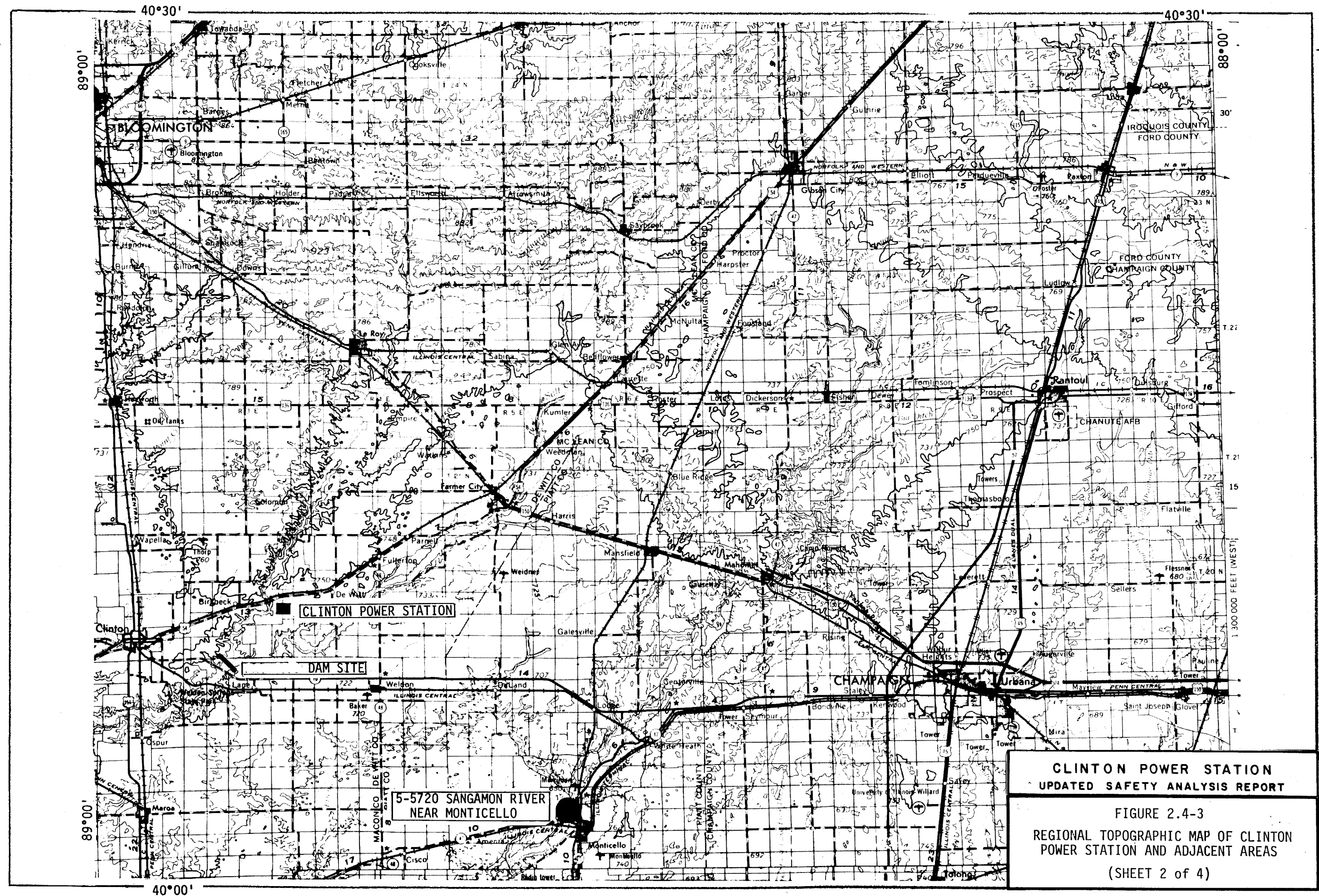








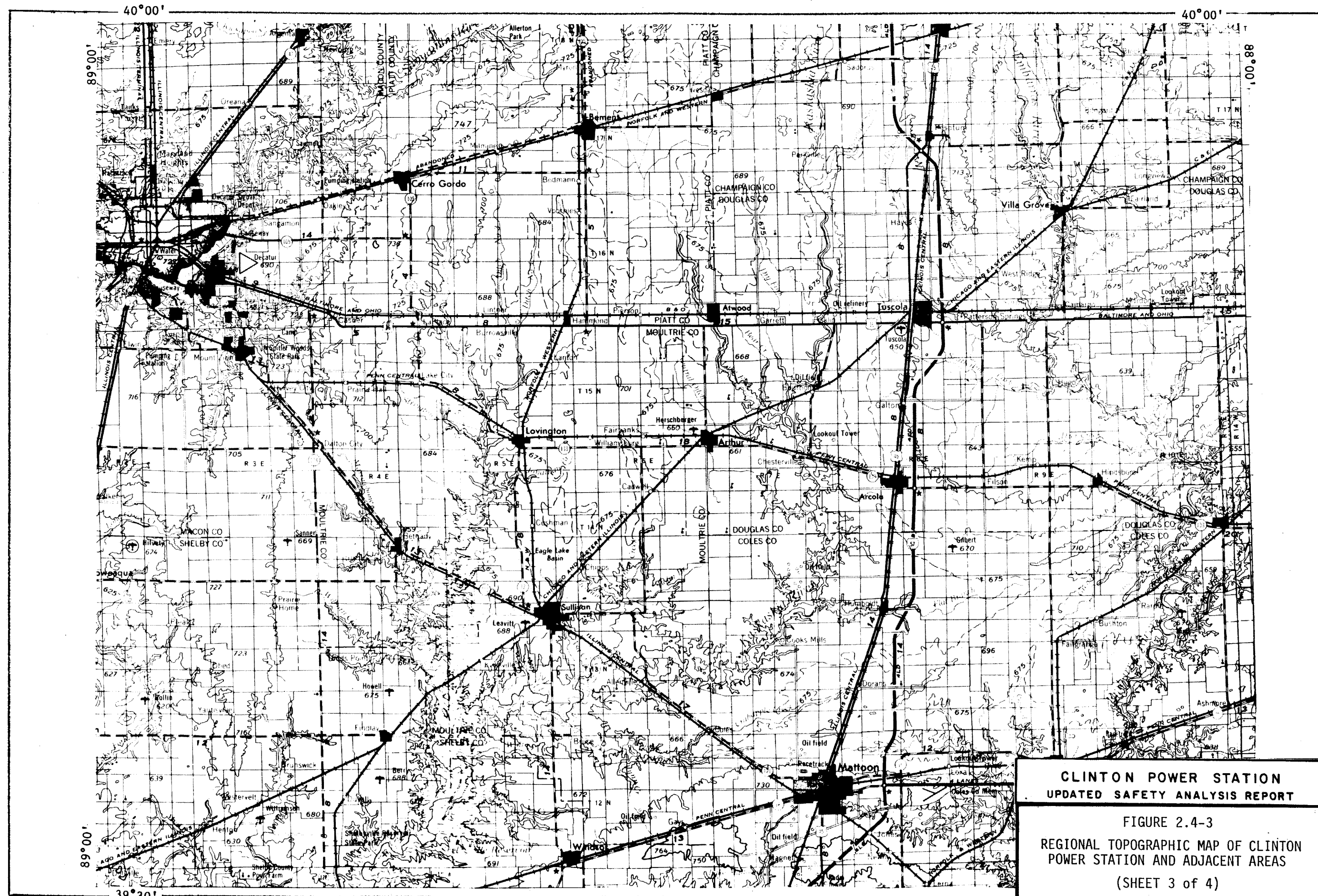




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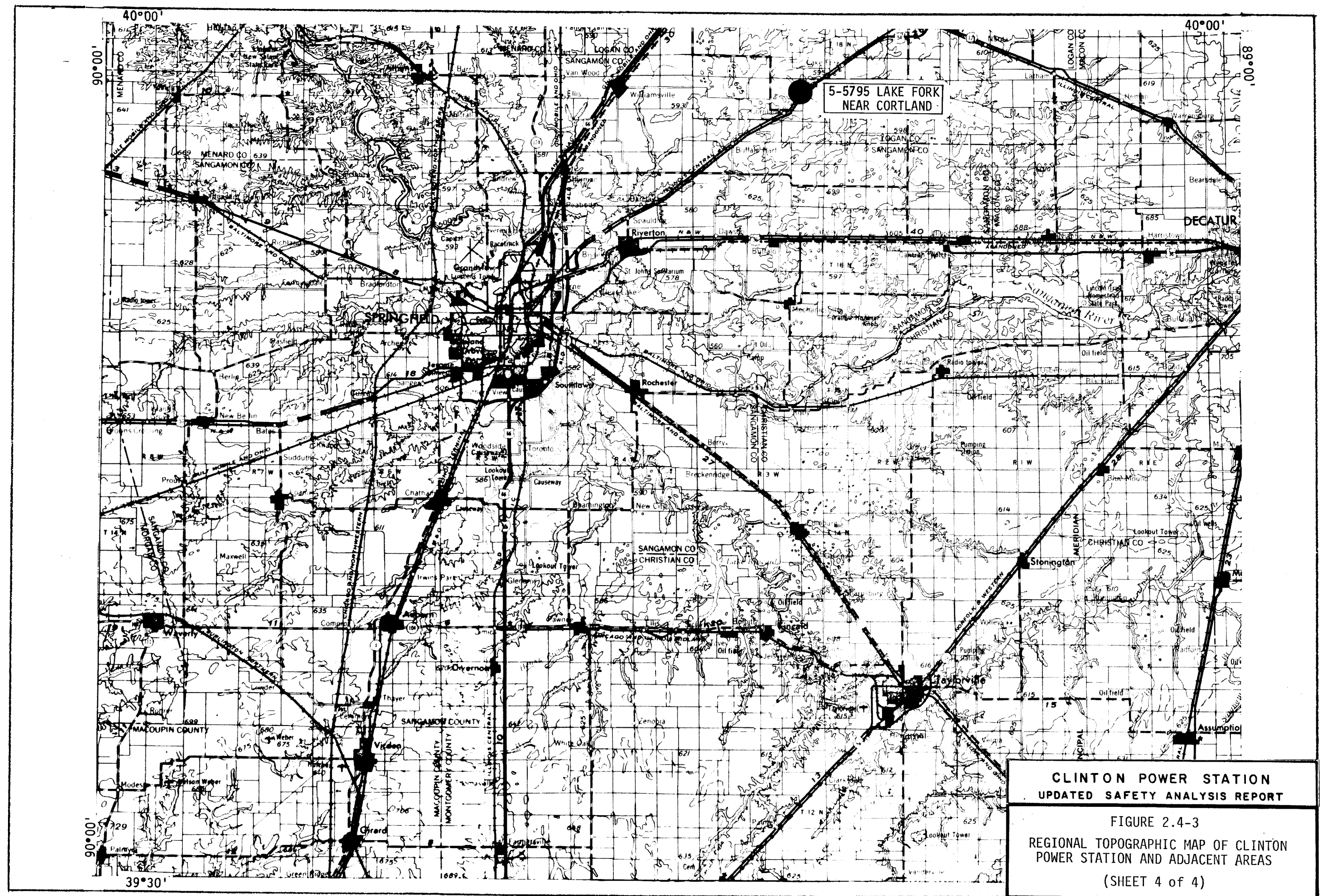
FIGURE 2.4-3  
REGIONAL TOPOGRAPHIC MAP OF CLINTON  
POWER STATION AND ADJACENT AREAS  
(SHEET 2 of 4)

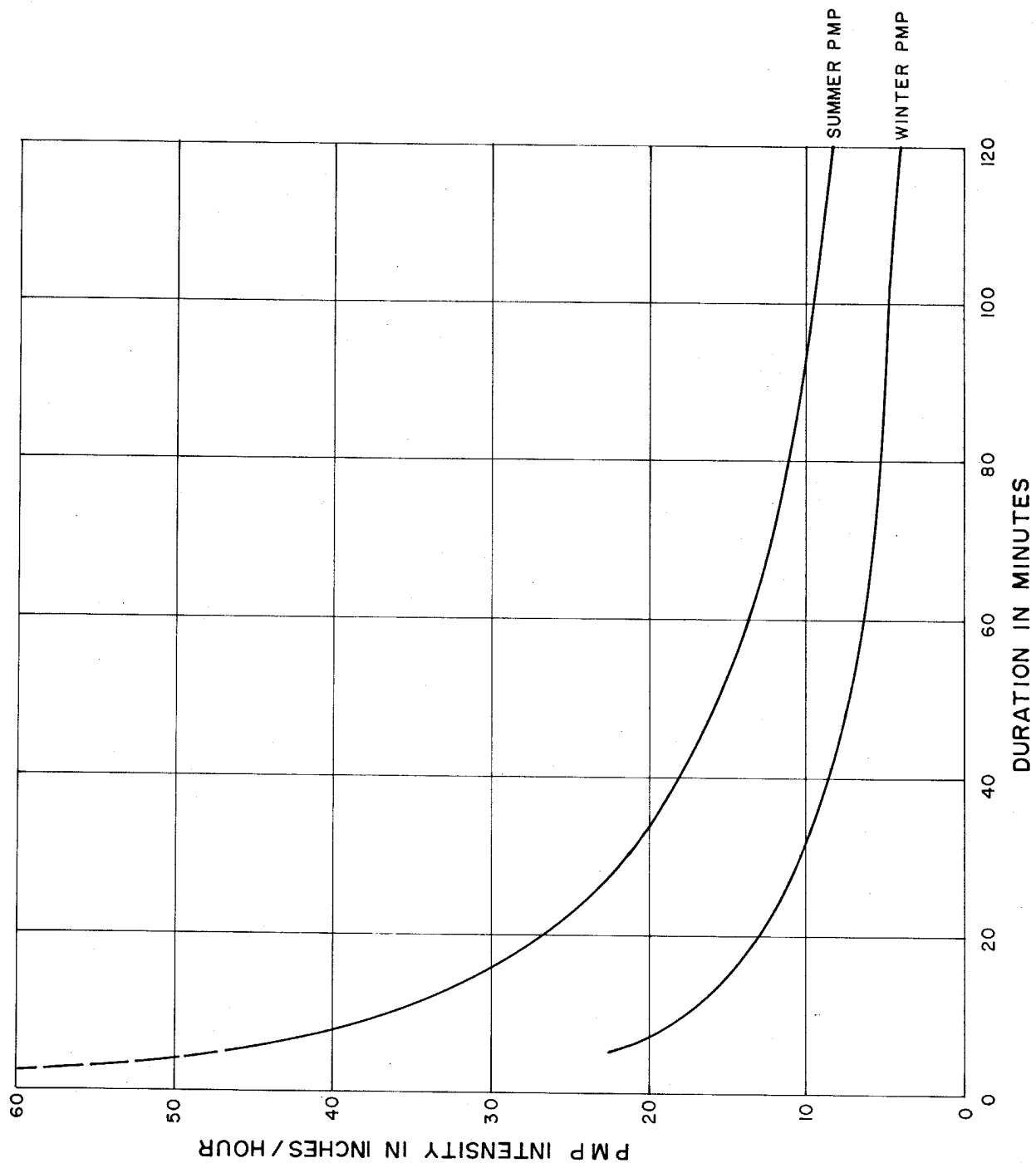




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FIGURE 2.4-3  
REGIONAL TOPOGRAPHIC MAP OF CLINTON  
POWER STATION AND ADJACENT AREAS  
(SHEET 3 of 4)



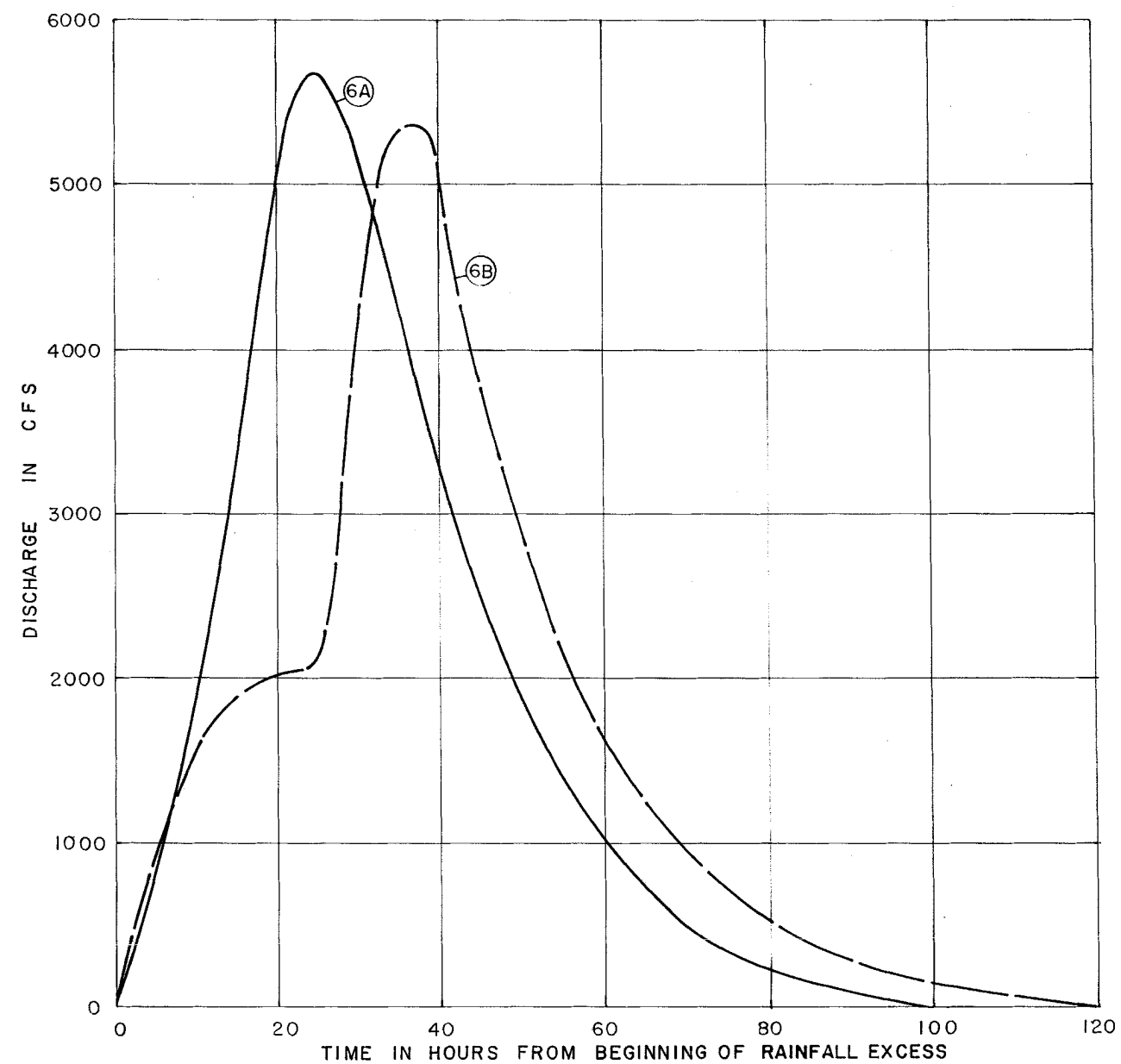


CLINTON POWER STATION  
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FIGURE 2.4-4  
SUMMER AND WINTER PMP INTENSITY  
DURATION CURVES





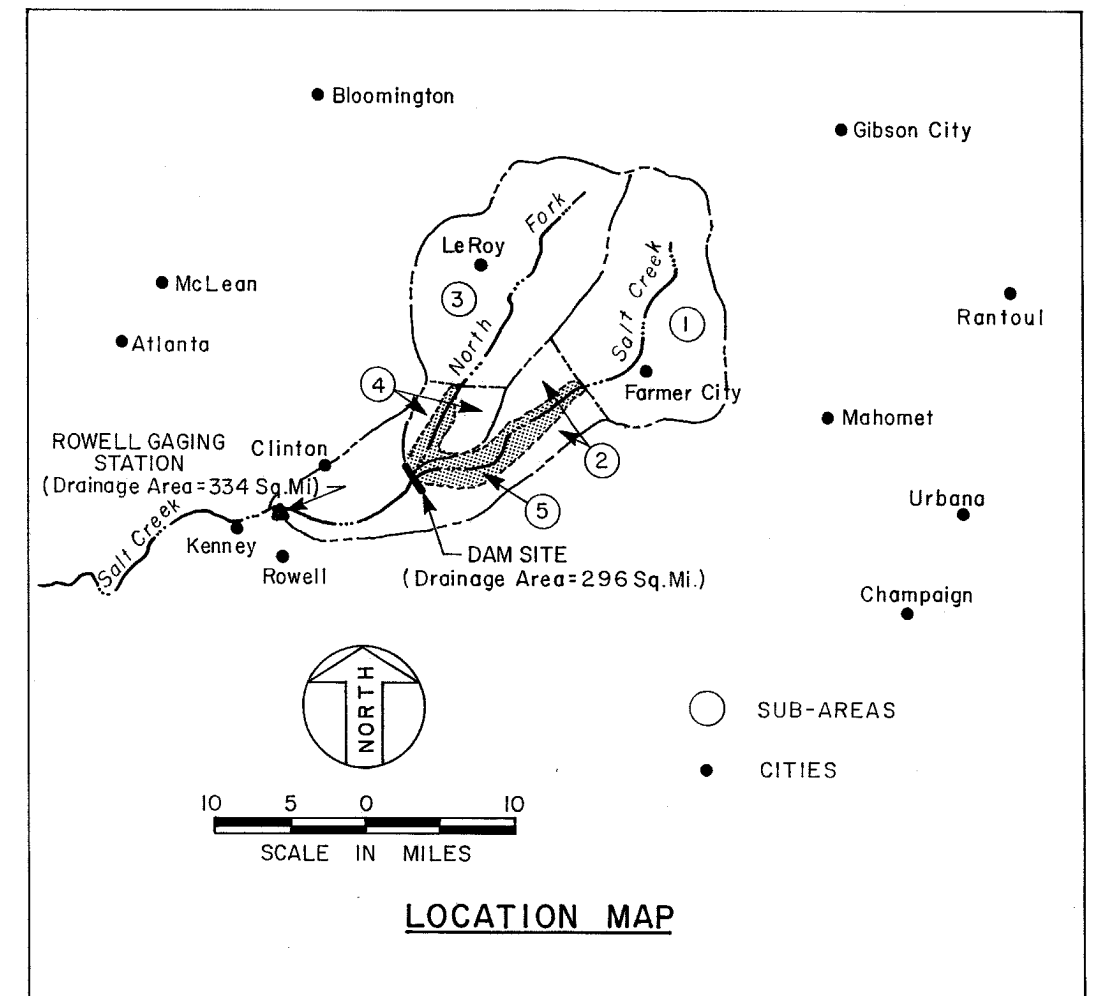
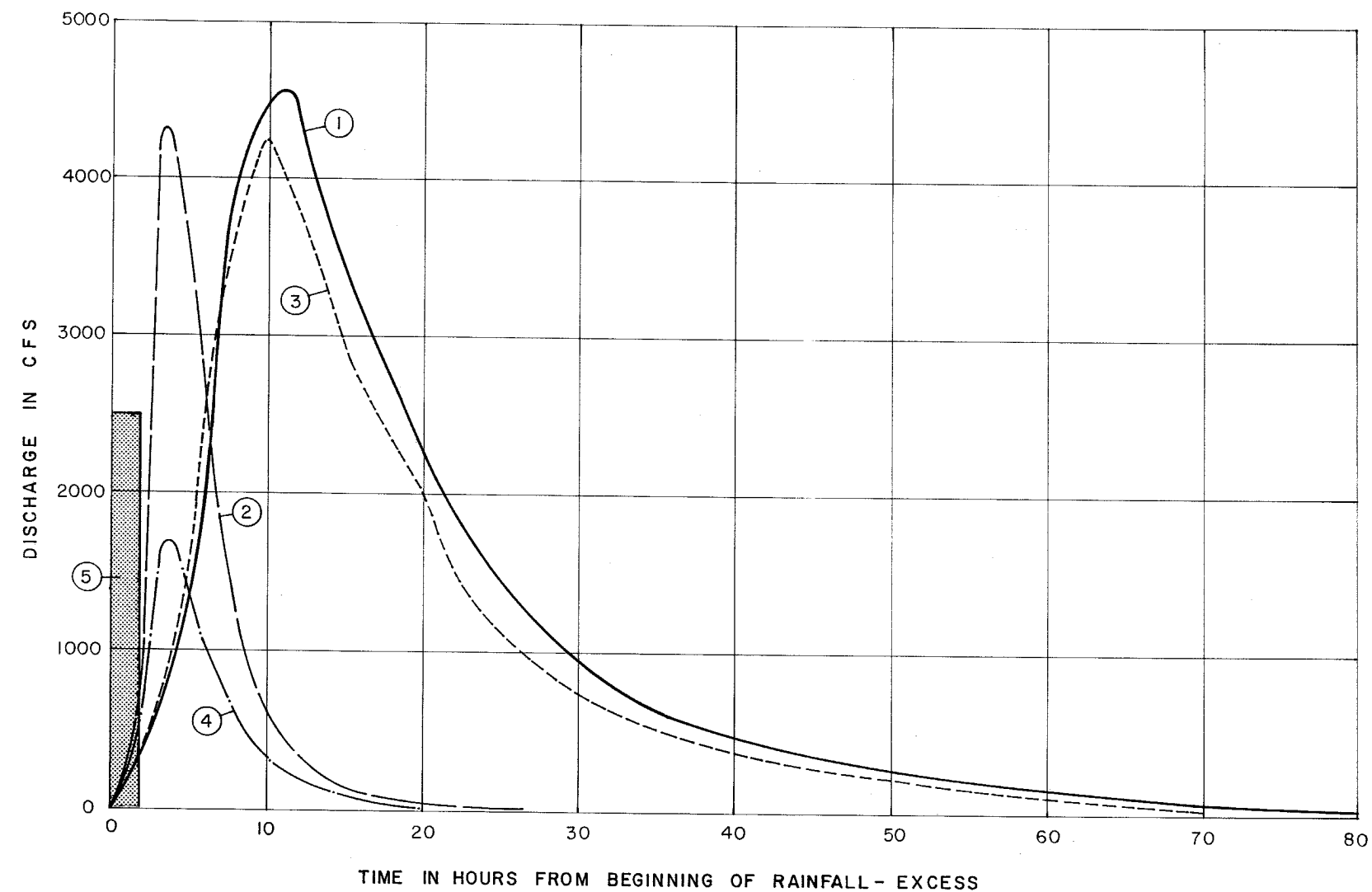


UNIT GRAPH DESIGNATION	UNIT DURATION HOURS	LOCATION	DRAINAGE AREA SQ. MILES	REMARKS
(6A)	2	DAM SITE	296	DERIVED FROM SYNTHETIC METHOD IN "UNIT HYDROGRAPHS IN ILLINOIS" BY W. D. MITCHELL
(6B)	2	DAM SITE	296	DERIVED FROM ROWELL STATION UNIT HYDROGRAPH ADJUSTED BY AREA RATIO OF 296/334 (FROM "UNIT HYDROGRAPHS IN ILLINOIS" BY W. D. MITCHELL

CLINTON POWER STATION  
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FIGURE 2.4-6

UNIT HYDROGRAPHS FOR SALT CREEK AT DAM  
SITE UNDER NATURAL RIVER CONDITIONS

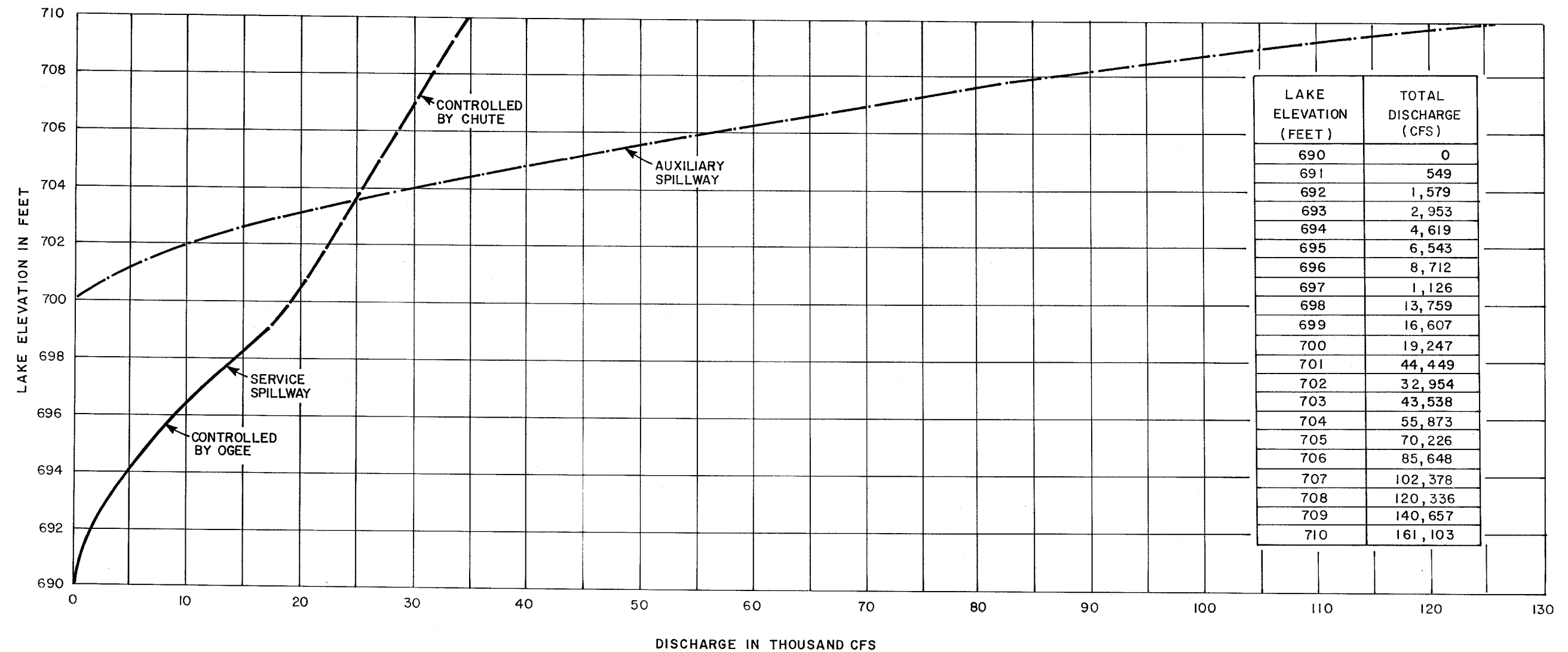


UNIT GRAPH NO.	UNIT DURATION HOURS	AREA REPRESENTED		REMARKS
		IDENTIFICATION	SQ. MI.	
①	2	SUB-AREA ①	126	BASIN ABOVE HEAD OF SALT CREEK FINGER
②	2	SUB-AREA ②	36	LOCAL AREA OF SALT CREEK FINGER
③	2	SUB-AREA ③	111	BASIN ABOVE HEAD OF NORTH FORK FINGER
④	2	SUB-AREA ④	15	LOCAL AREA OF NORTH FORK FINGER
⑤	2	SUB-AREA ⑤	8	RESERVOIR SURFACE AREA

CLINTON POWER STATION  
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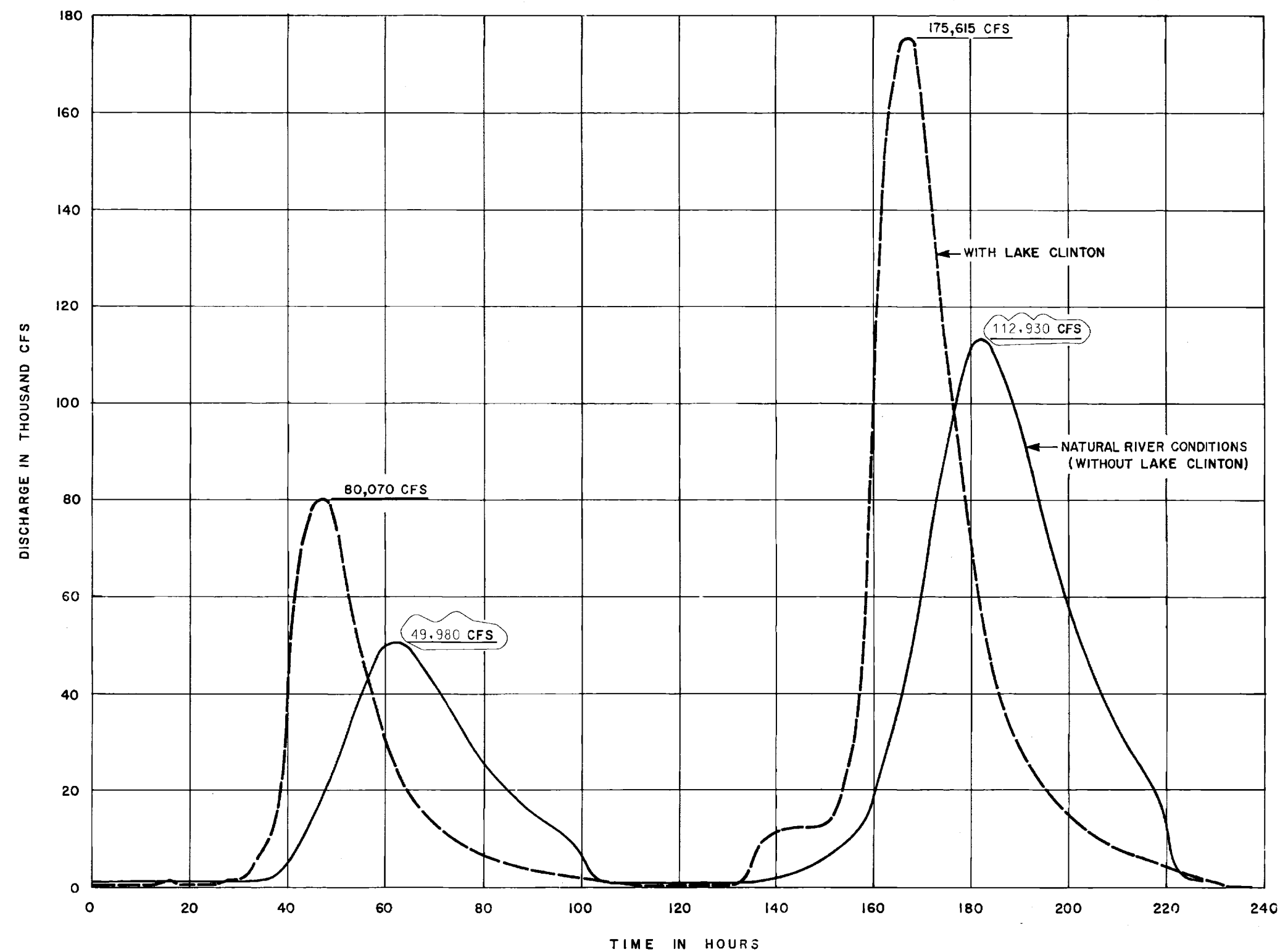
FIGURE 2.4-7

UNIT HYDROGRAPHS FOR SUB-BASIN AREAS



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FIGURE 2.4-8  
SPILLWAY RATING CURVES

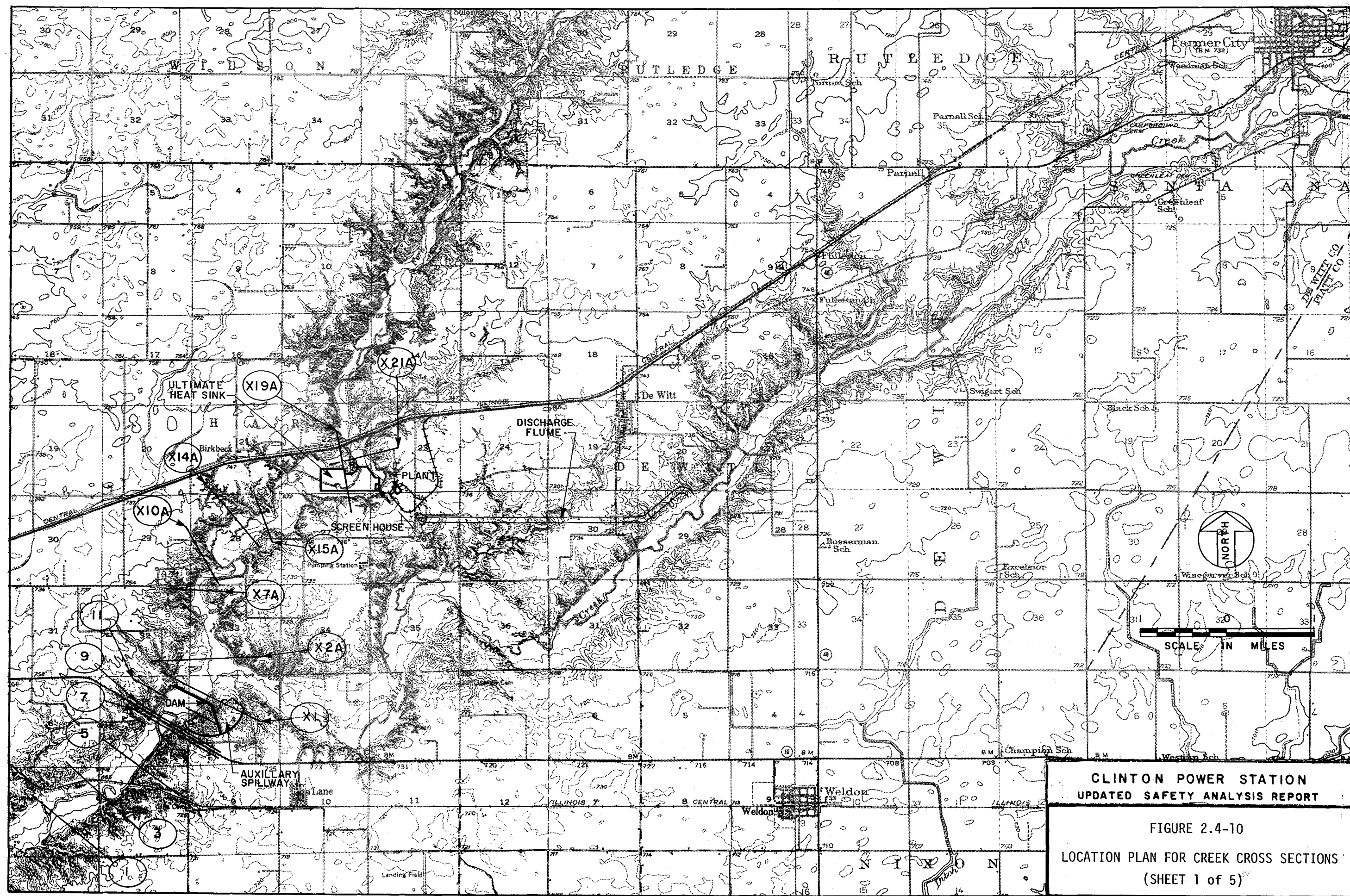


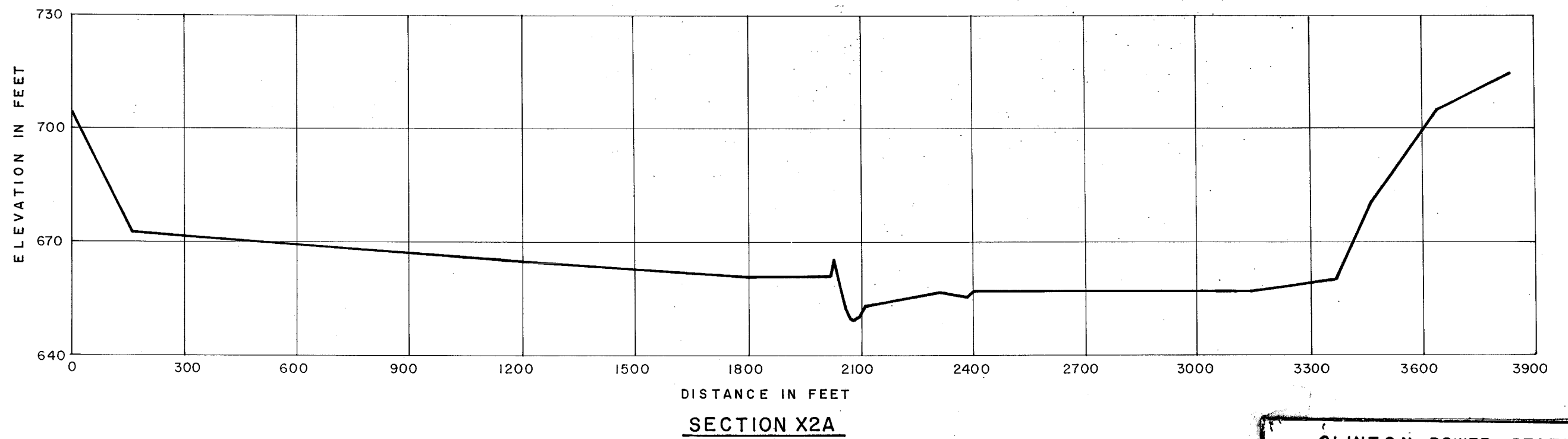
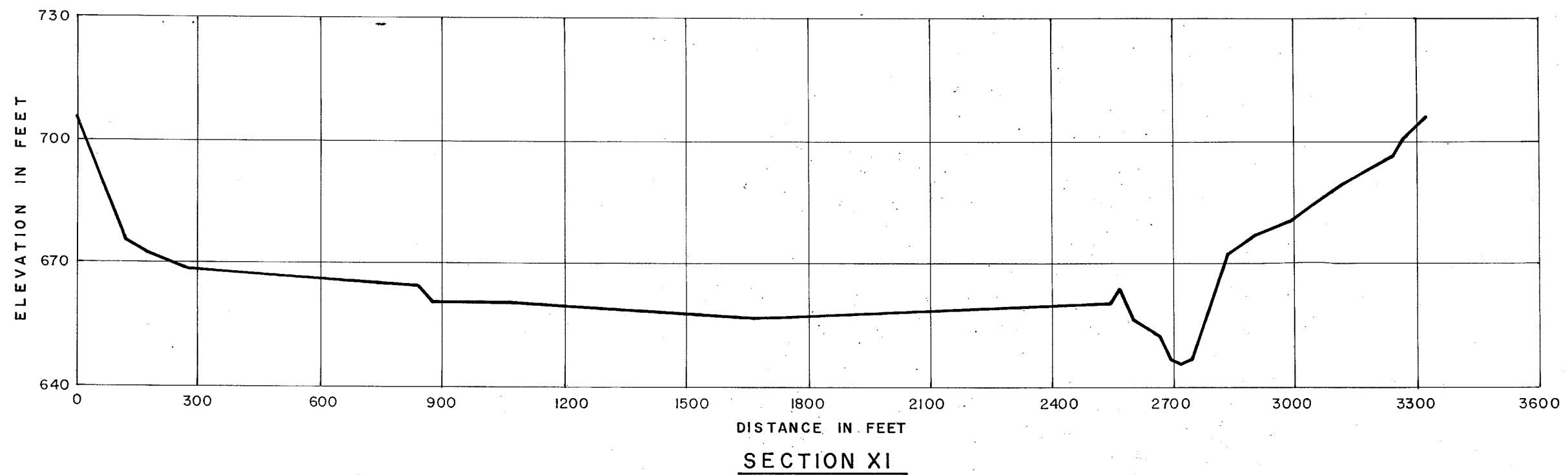
DRAINAGE AREA = 296 SQ. MILES

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FIGURE 2.4-9

PROBABLE MAXIMUM FLOOD INFLOW HYDROGRAPHS

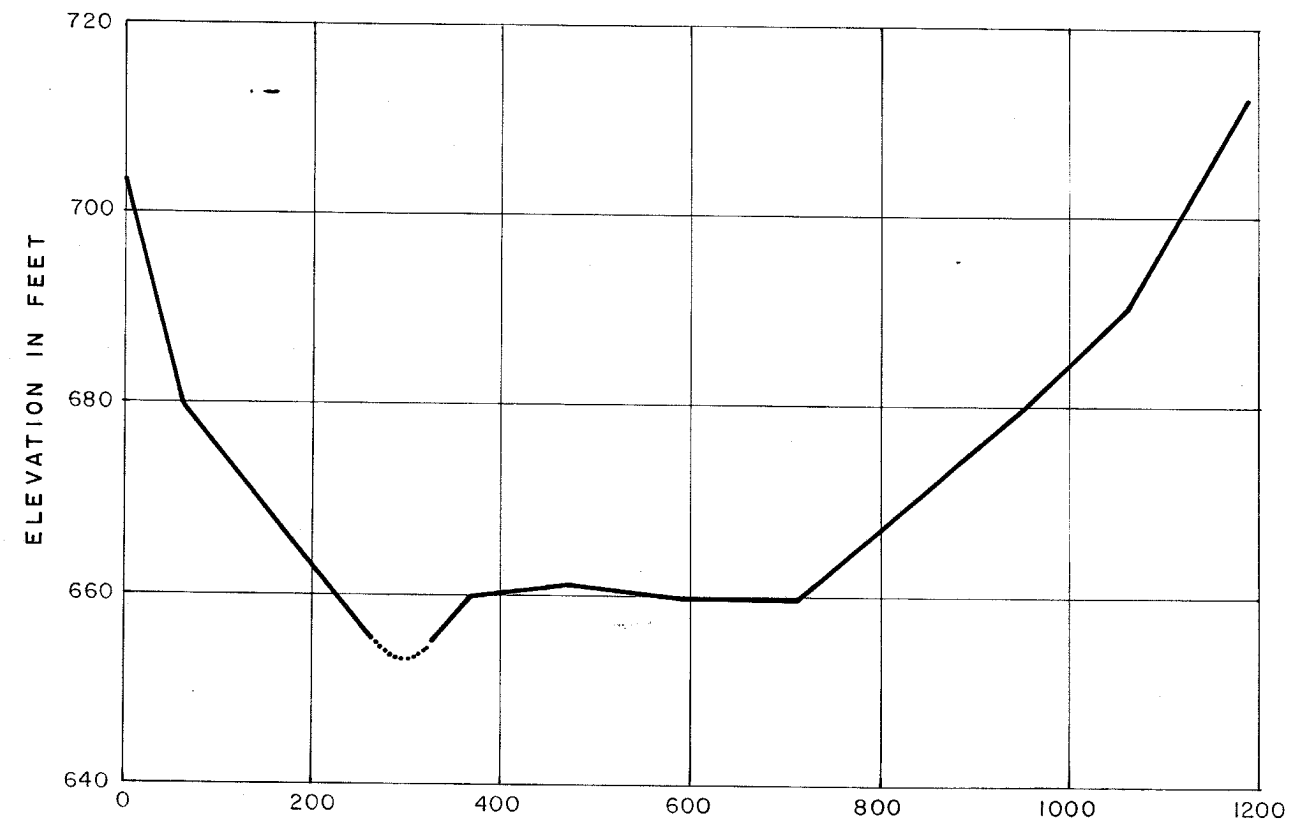




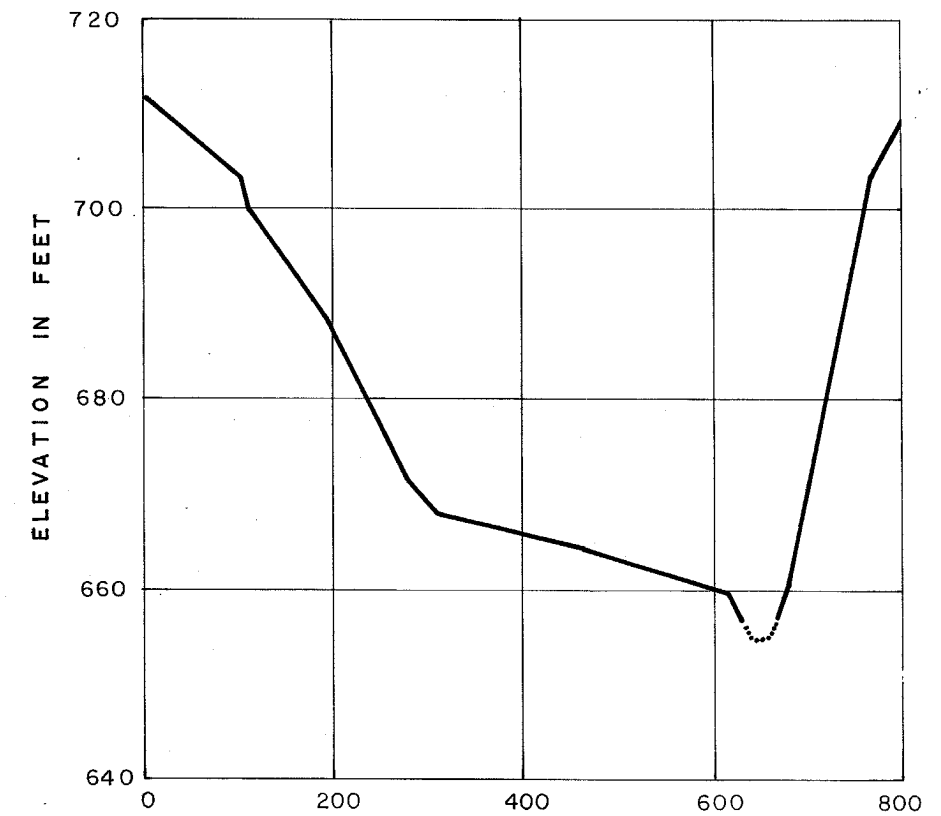
**CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 2.4-10  
LOCATION PLAN FOR CREEK CROSS SECTIONS  
(SHEET 2 of 5)

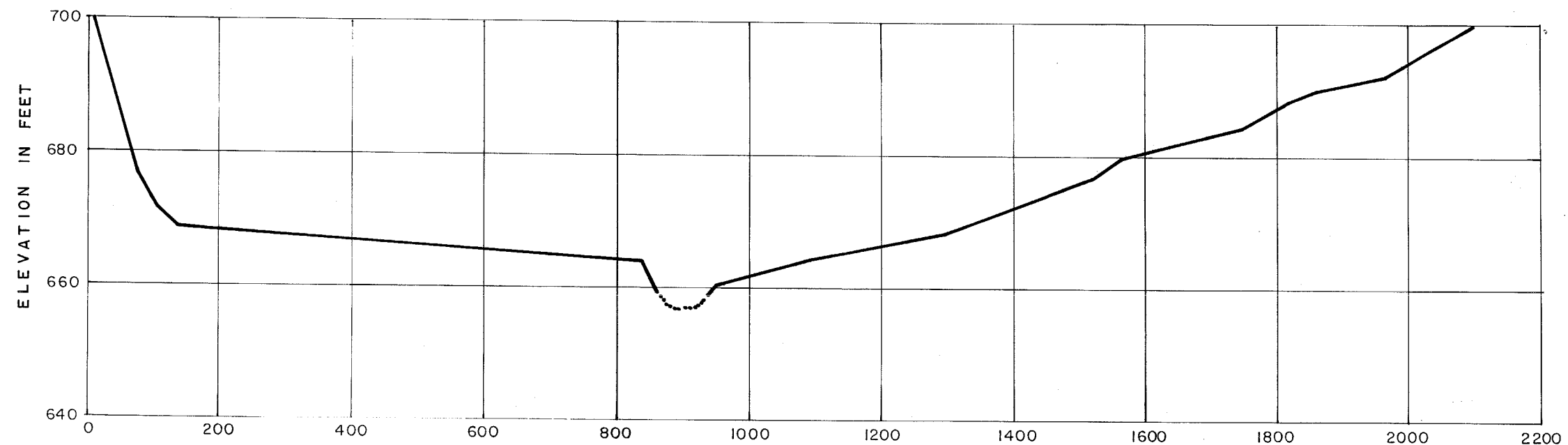




SECTION X7A



SECTION X10A

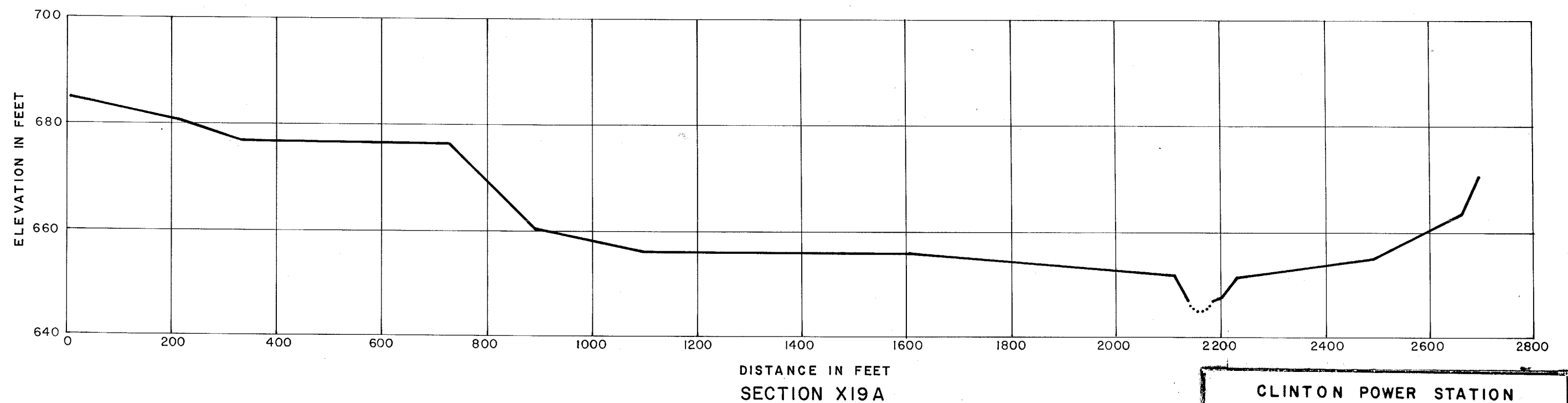
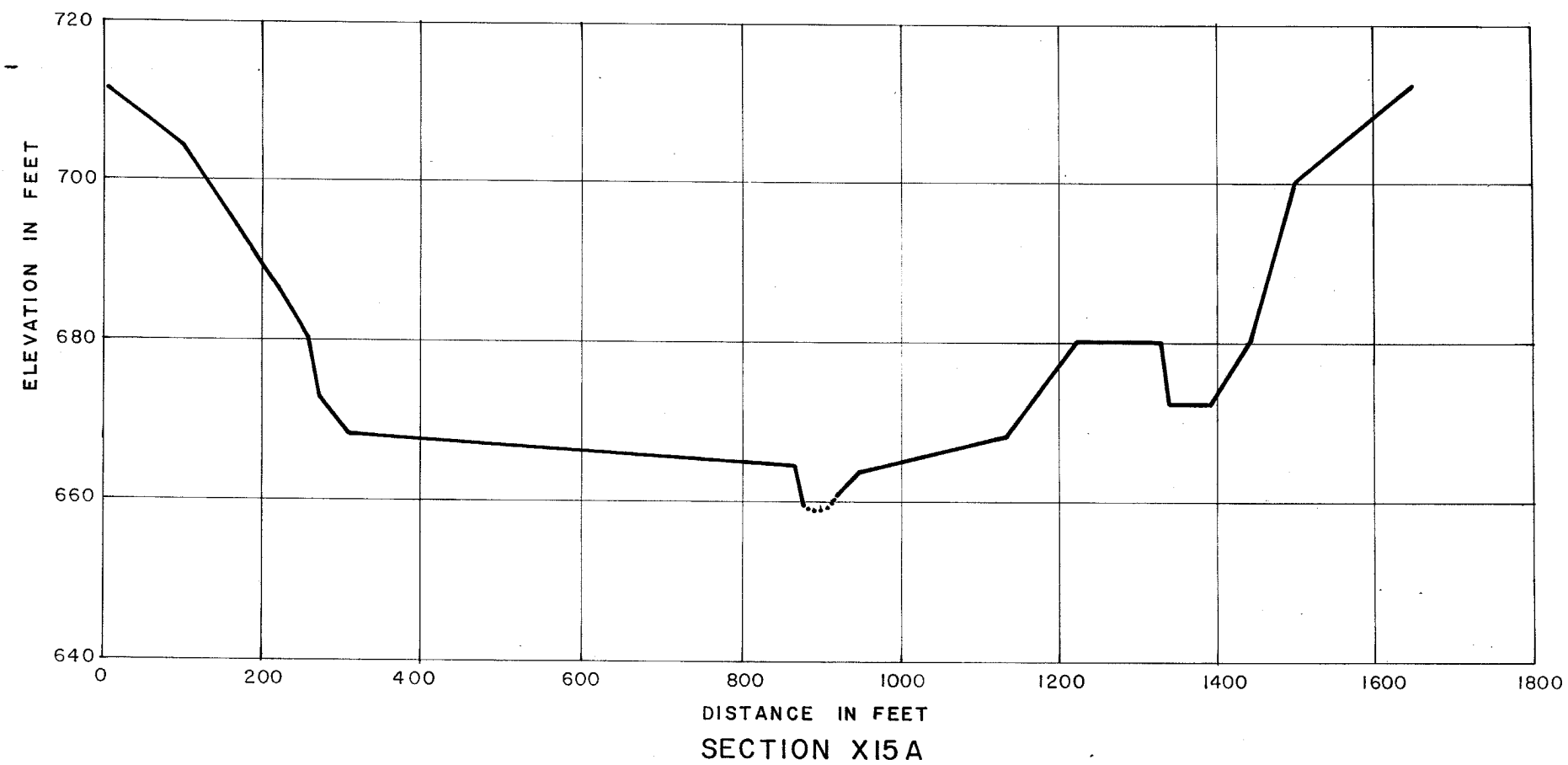


SECTION X14A

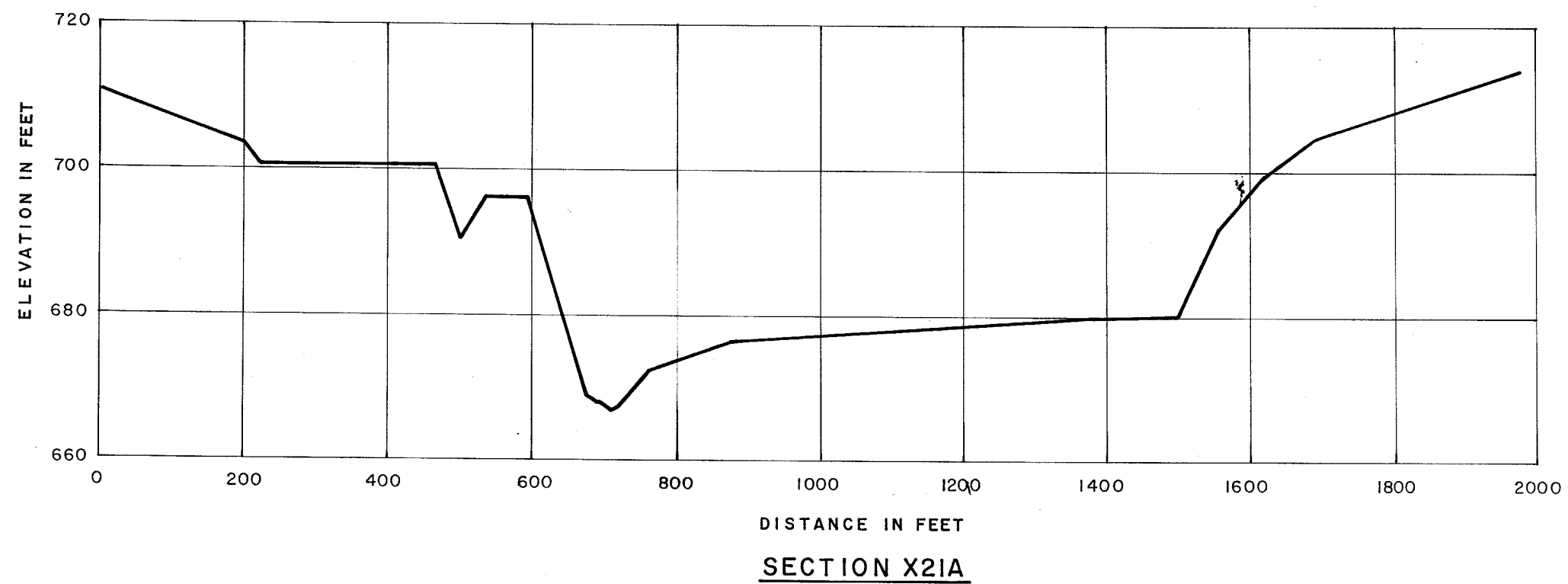
CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-10  
LOCATION PLAN FOR CREEK CROSS SECTIONS  
(SHEET 3 of 5)





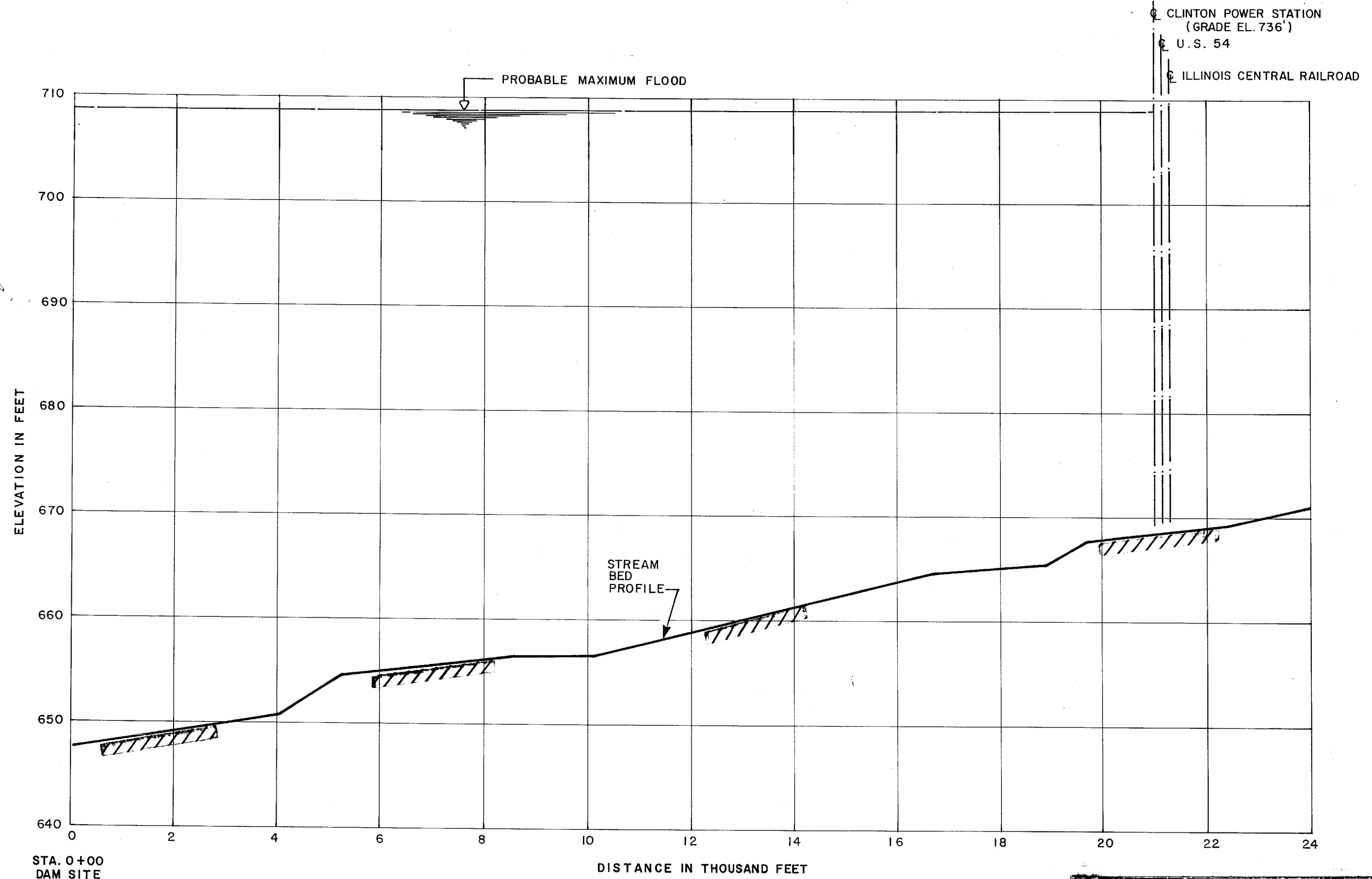
CROSS SECTION LOOKING UPSTREAM.



CROSS SECTION LOOKING UPSTREAM.

CLINTON POWER STATION  
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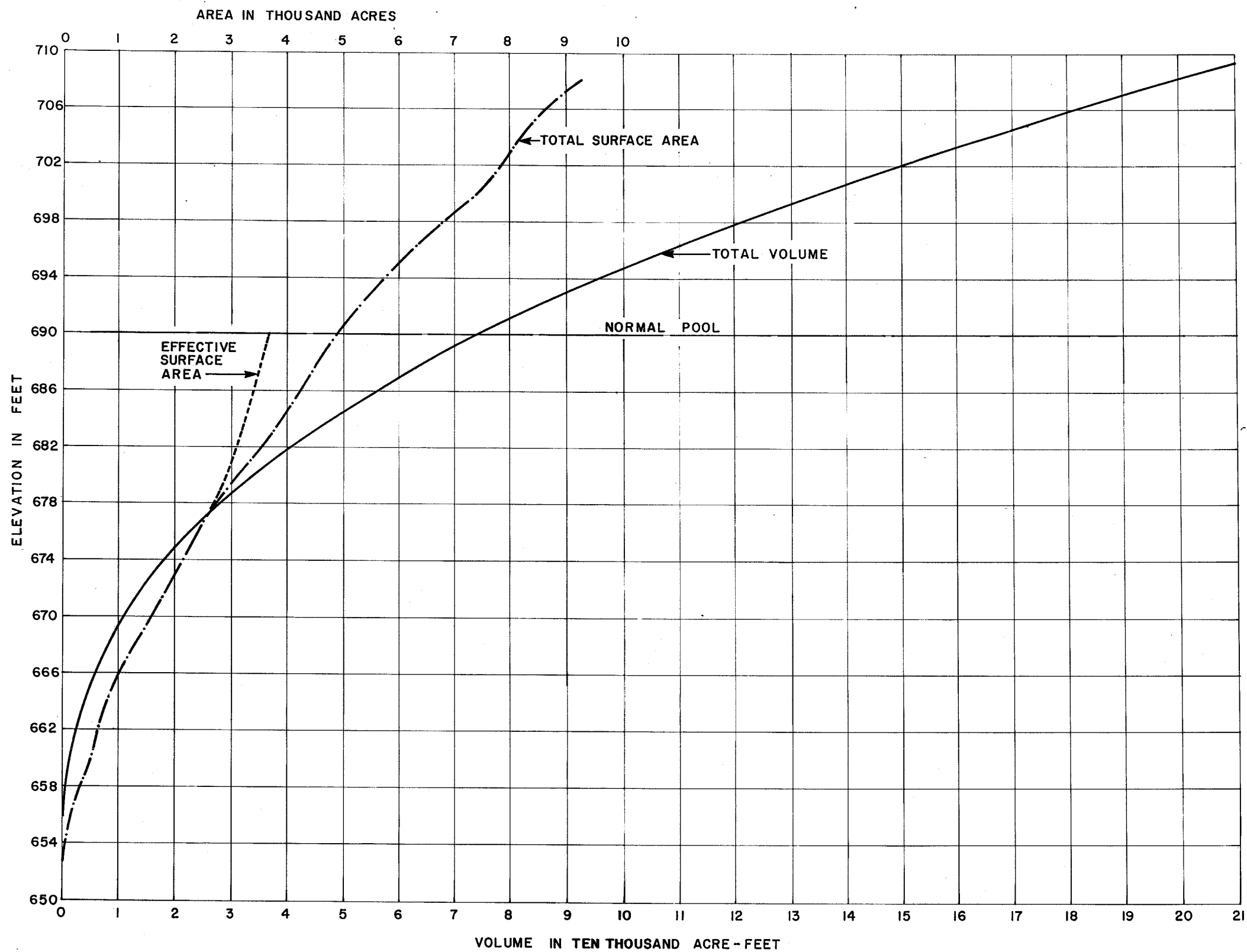
FIGURE 2.4-10  
LOCATION PLAN FOR CREEK CROSS SECTIONS  
(SHEET 5 of 5)



CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-11

WATER SURFACE PROFILE - NORTH FORK

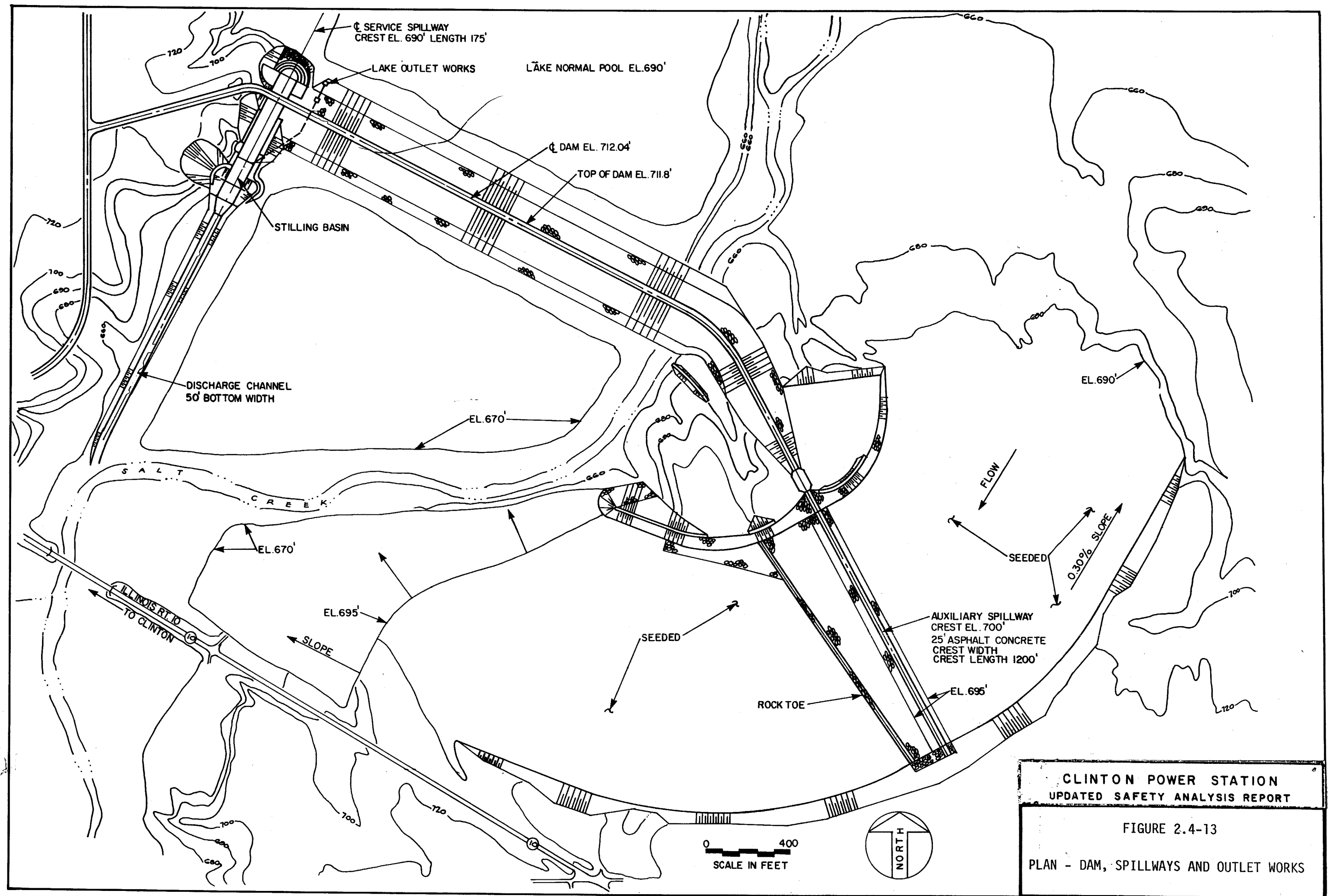


ELEVATION IN FEET	AREA IN ACRES	CAPACITY IN ACRE - FEET
680	3,100	33,900
682	3,550	40,600
684	3,930	48,000
686	4,250	56,000
688	4,520	64,800
690	4,895	74,200
692	5,210	83,600
694	5,700	95,000
696	6,140	106,300
698	6,800	120,000
700	7,380	133,300
702	7,800	149,000
704	8,180	164,300
706	8,600	182,000
708	9,260	199,200

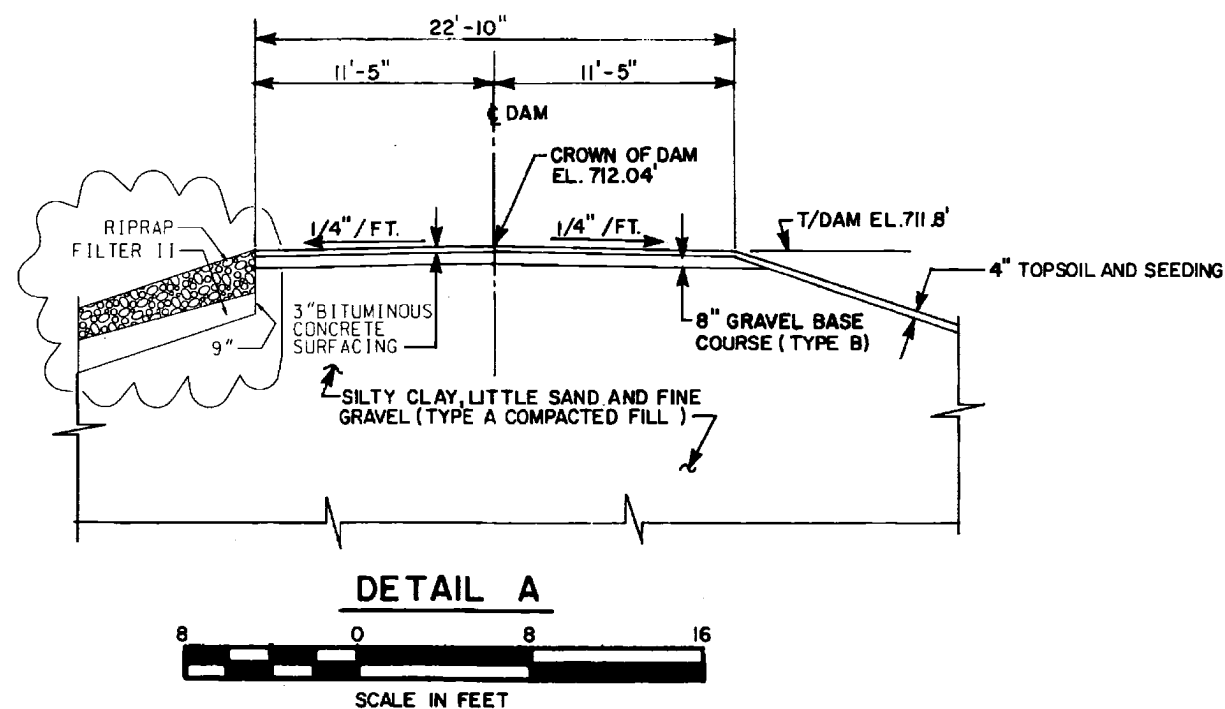
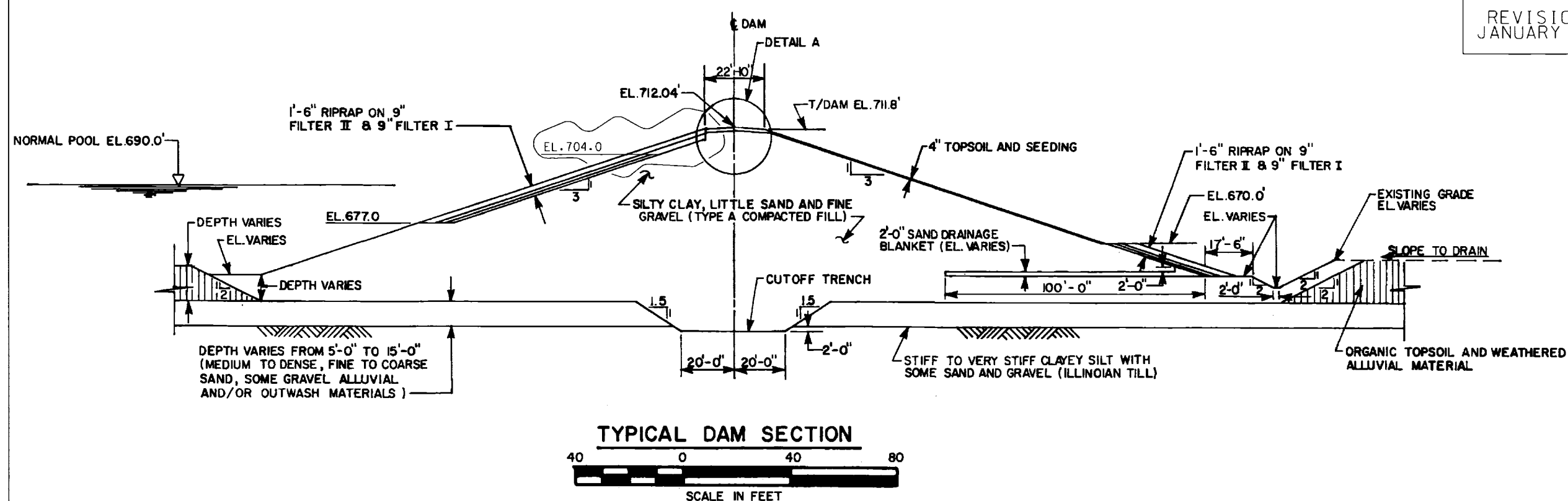
CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-12

LAKE AREA - CAPACITY CURVES



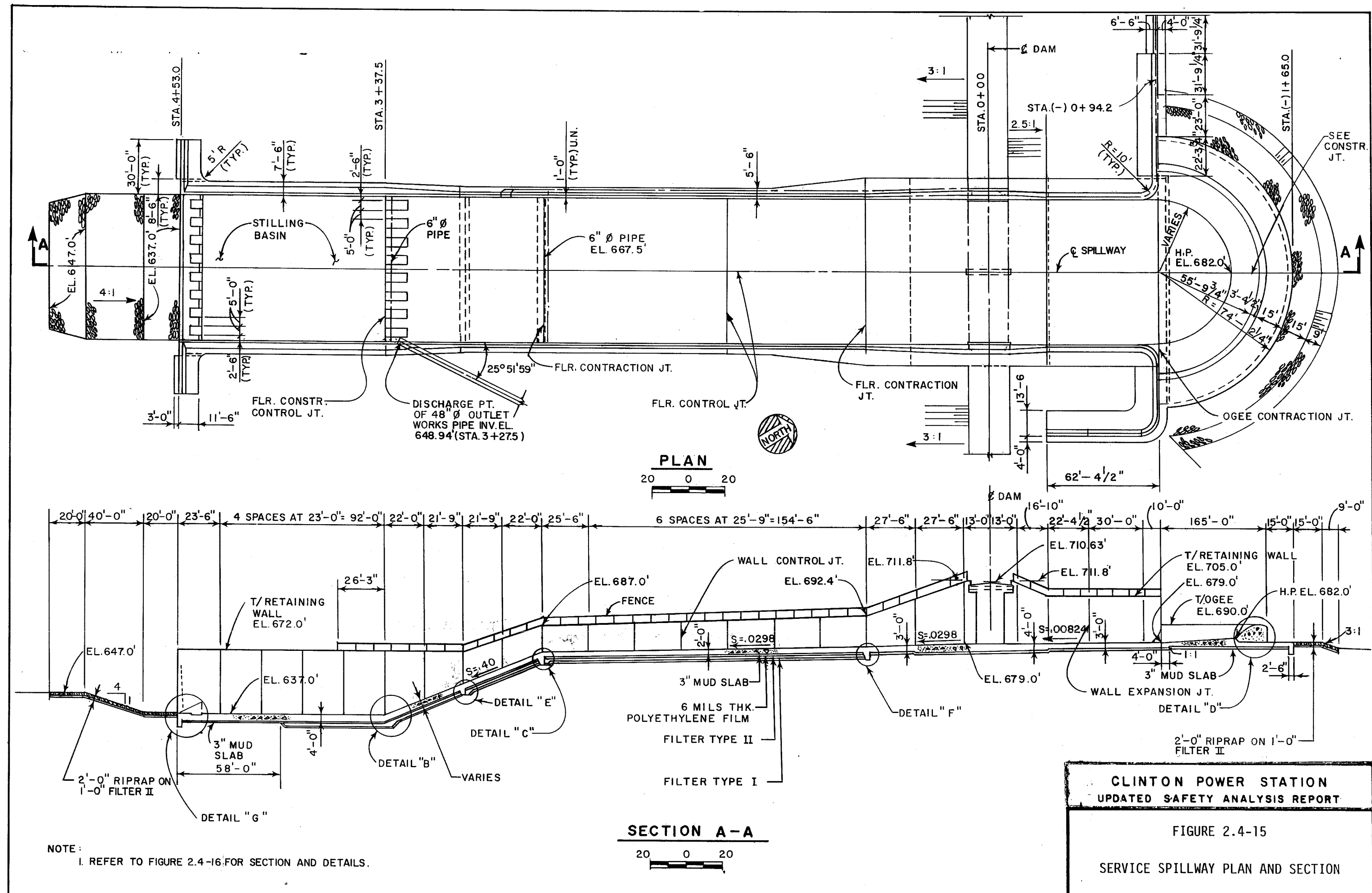
REVISION 9  
JANUARY 2001

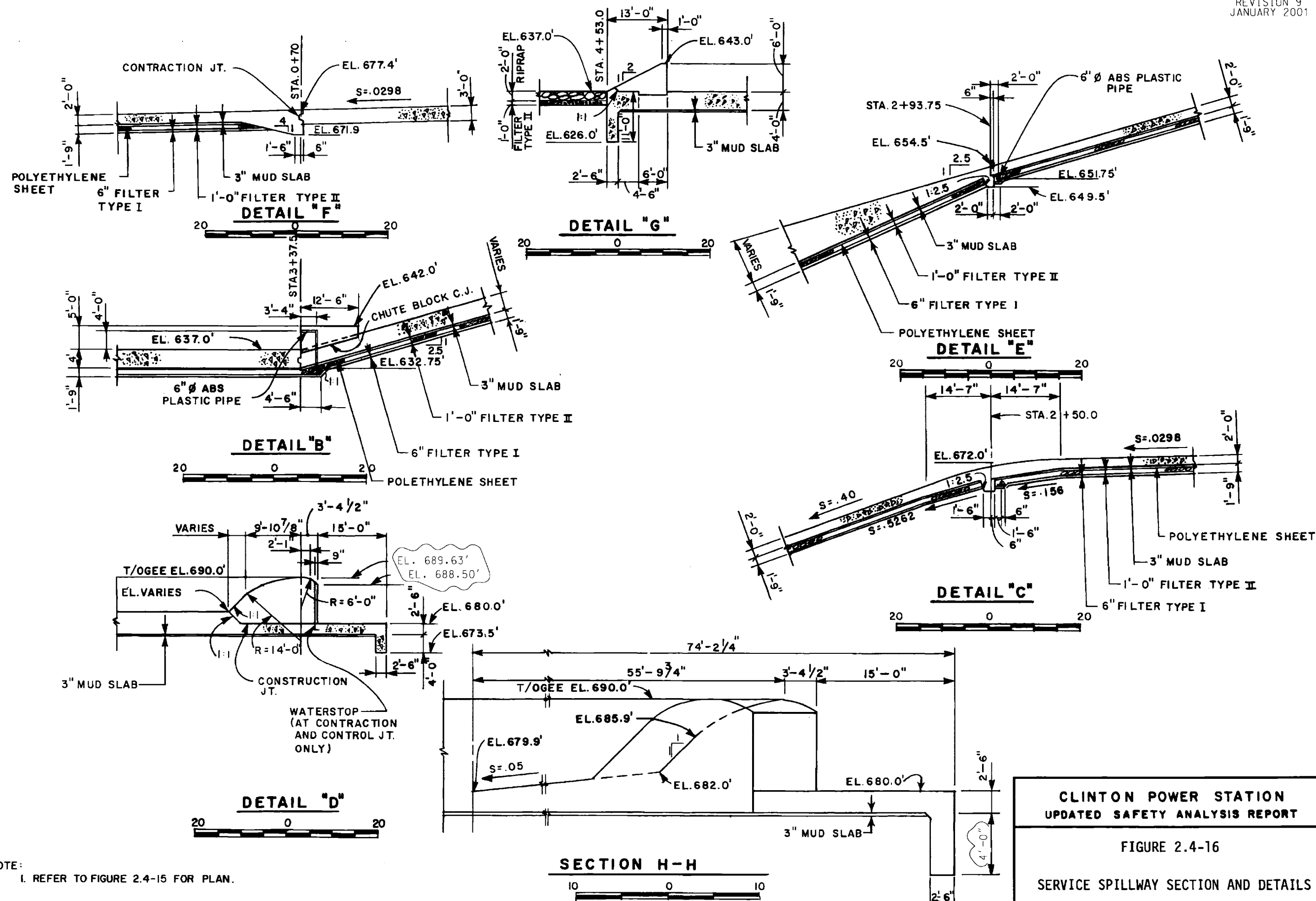


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UPDATED SAFETY ANALYSIS REPORT

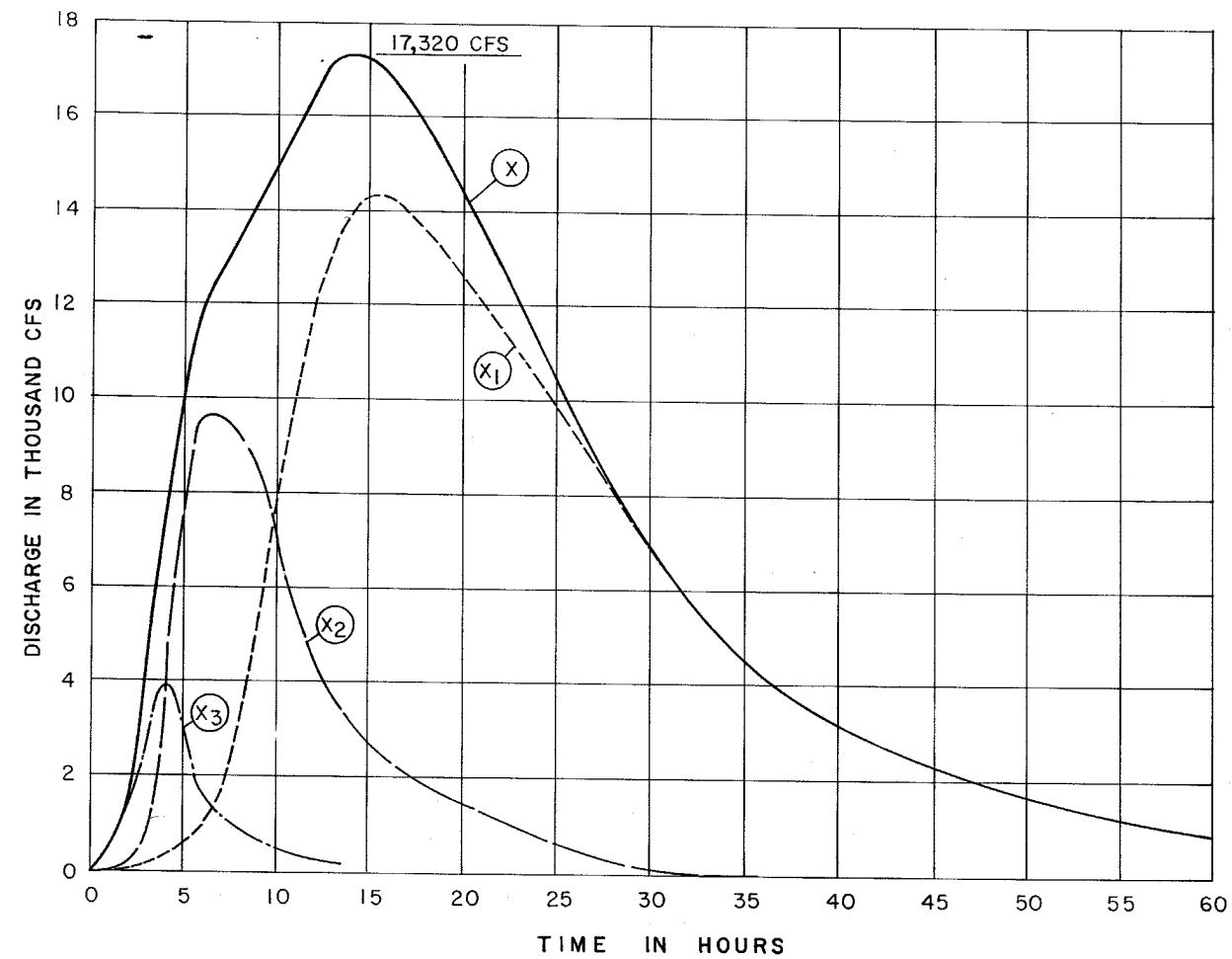
FIGURE 2.4-14

TYPICAL DAM CROSS SECTION

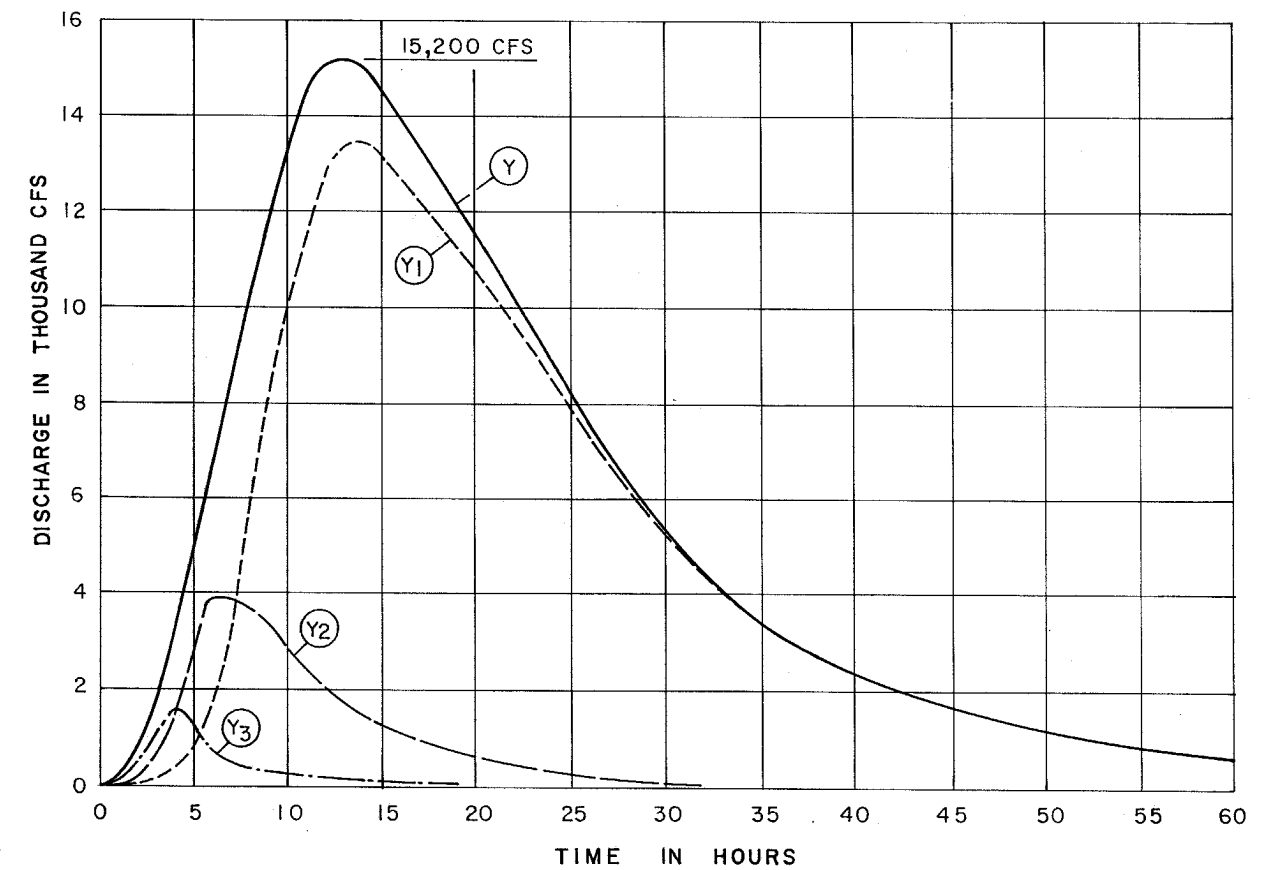








100-YEAR FLOOD HYDROGRAPHS OF  
SALT CREEK COMPONENT AREAS



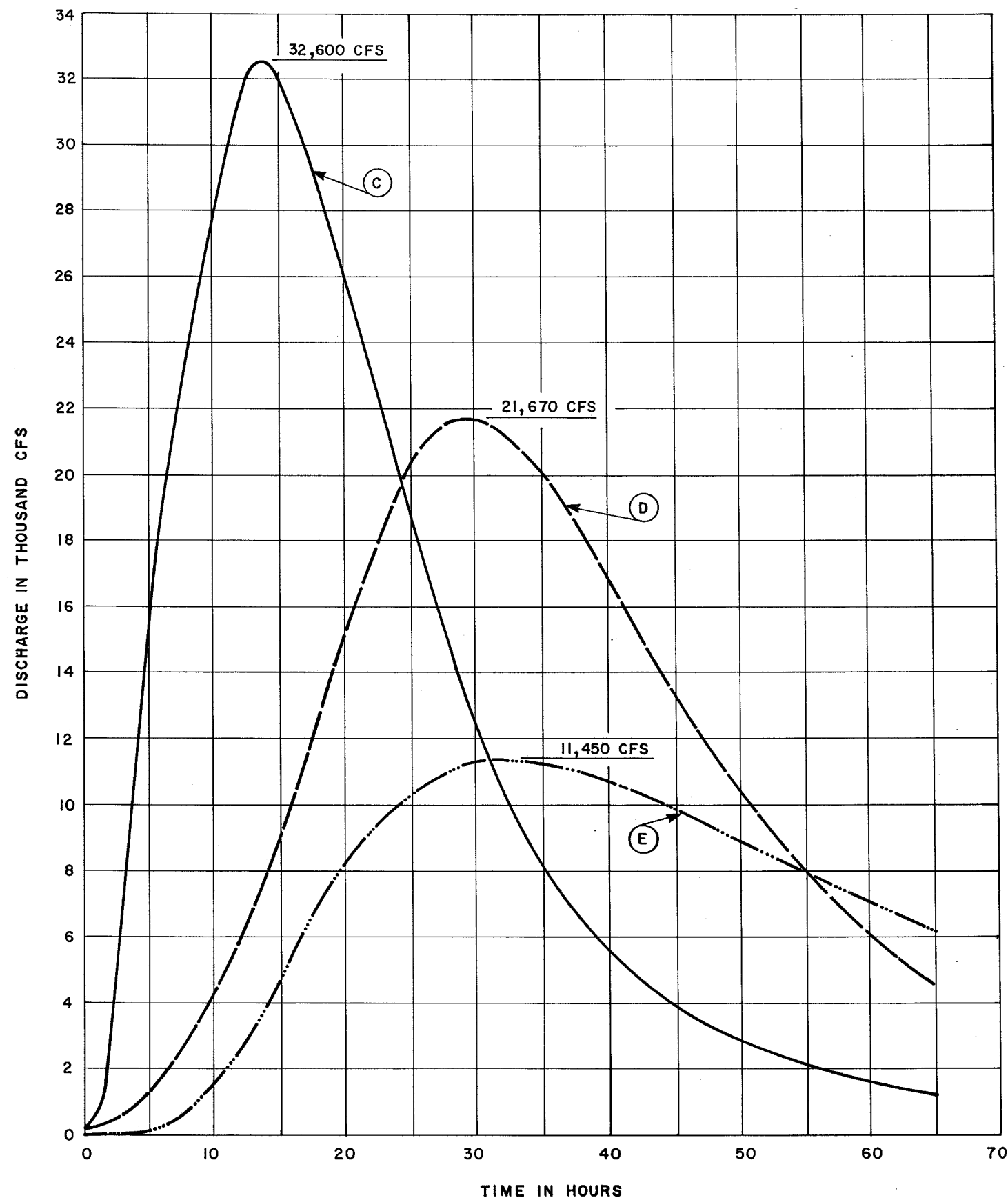
100-YEAR FLOOD HYDROGRAPHS OF  
NORTH FORK COMPONENT AREAS

HYDROGRAPH DESIGNATION	AREA REPRESENTED		UNIT HYDROGRAPH APPLIED	REMARKS
	SUB-AREA	SQ. MILES		
(X)	1,2,5(PORION)	167.5	1,2,5(PORION)	REPRESENTS TOTAL INFLOW INTO FULL RESERVOIR FROM SALT CREEK COMPONENT AREA
(X <sub>1</sub> )	1	126.0	1	REPRESENTS INFLOW AT SALT CREEK HEAD OF RESERVOIR (LAG BY 1-HOUR)
(X <sub>2</sub> )	2	36.0	2	REPRESENTS INFLOW INTO RESERVOIR FROM SALT CREEK LOCAL AREA
(X <sub>3</sub> )	5 (PORION)	5.5	5(PORION)	REPRESENTS INFLOW FROM DIRECT PRECIPITATION ON SALT CREEK PORTION OF RESERVOIR AREA
(Y)	3,4,5(PORION)	128.5	3,4,5(PORION)	REPRESENTS TOTAL INFLOW INTO FULL RESERVOIR FROM NORTH FORK COMPONENT AREA
(Y <sub>1</sub> )	3	111.0	3	REPRESENTS INFLOW AT NORTH FORK HEAD OF RESERVOIR
(Y <sub>2</sub> )	4	15.0	4	REPRESENTS INFLOW INTO RESERVOIR FROM NORTH FORK LOCAL AREA
(Y <sub>3</sub> )	5 (PORION)	2.5	5(PORION)	REPRESENTS INFLOW FROM DIRECT PRECIPITATION ON NORTH FORK PORTION OF RESERVOIR AREA

CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-17

100-YEAR FLOOD HYDROGRAPHS OF SALT CREEK  
AND NORTH FORK COMPONENT AREAS

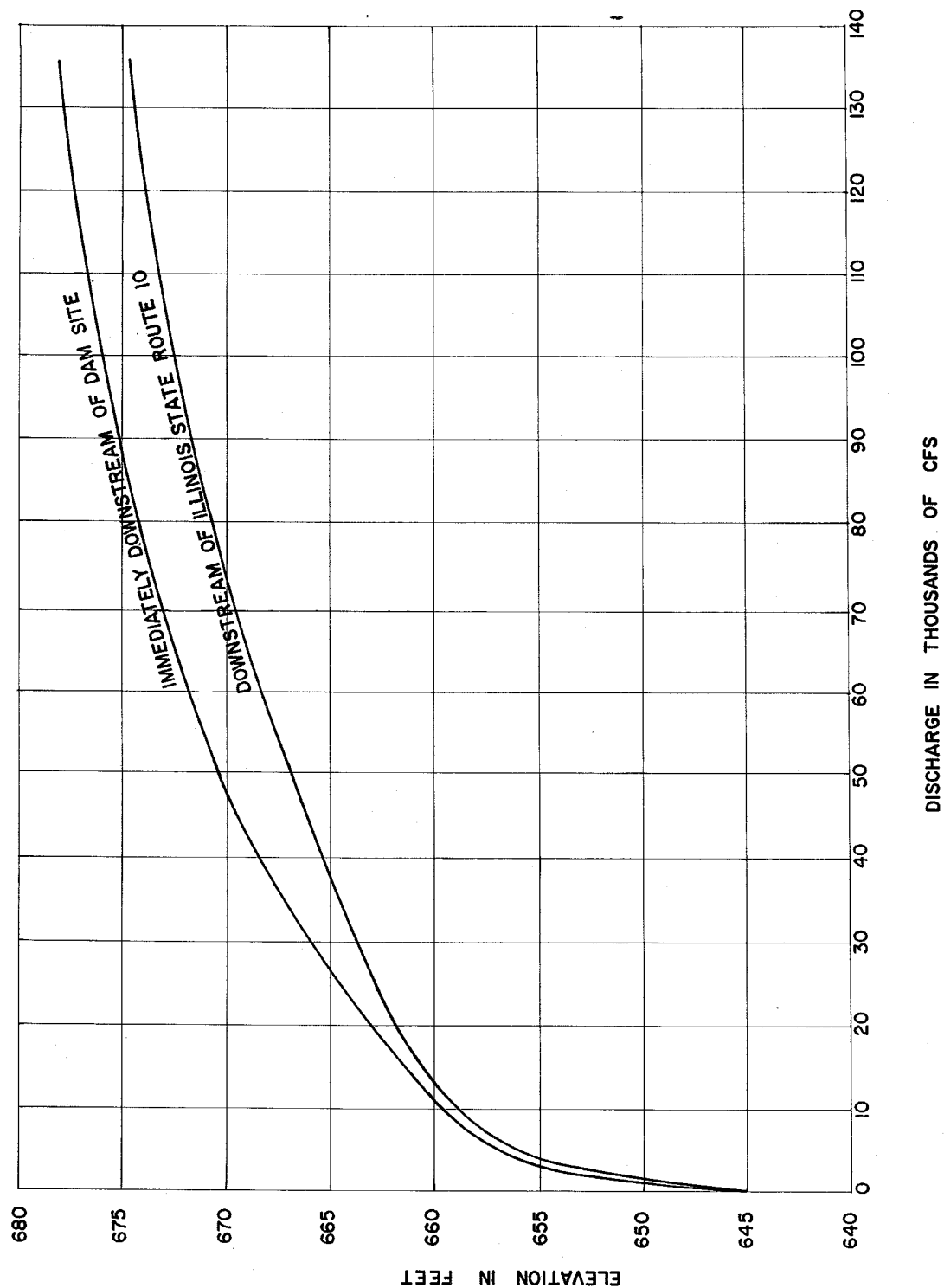


HYDROGRAPH DESIGNATION	AREA IN SQ. MILES	UNIT HYDROGRAPH APPLIED	REMARKS
(C)	296	1,2,3,4 & 5	REPRESENTS TOTAL 100-YEAR FLOOD INFLOW INTO FULL RESERVOIR
(D)	296	6 A	REPRESENTS FLOW AT DAM SITE UNDER NATURAL RIVER CONDITIONS
(E)			OUTFLOW HYDROGRAPH

CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

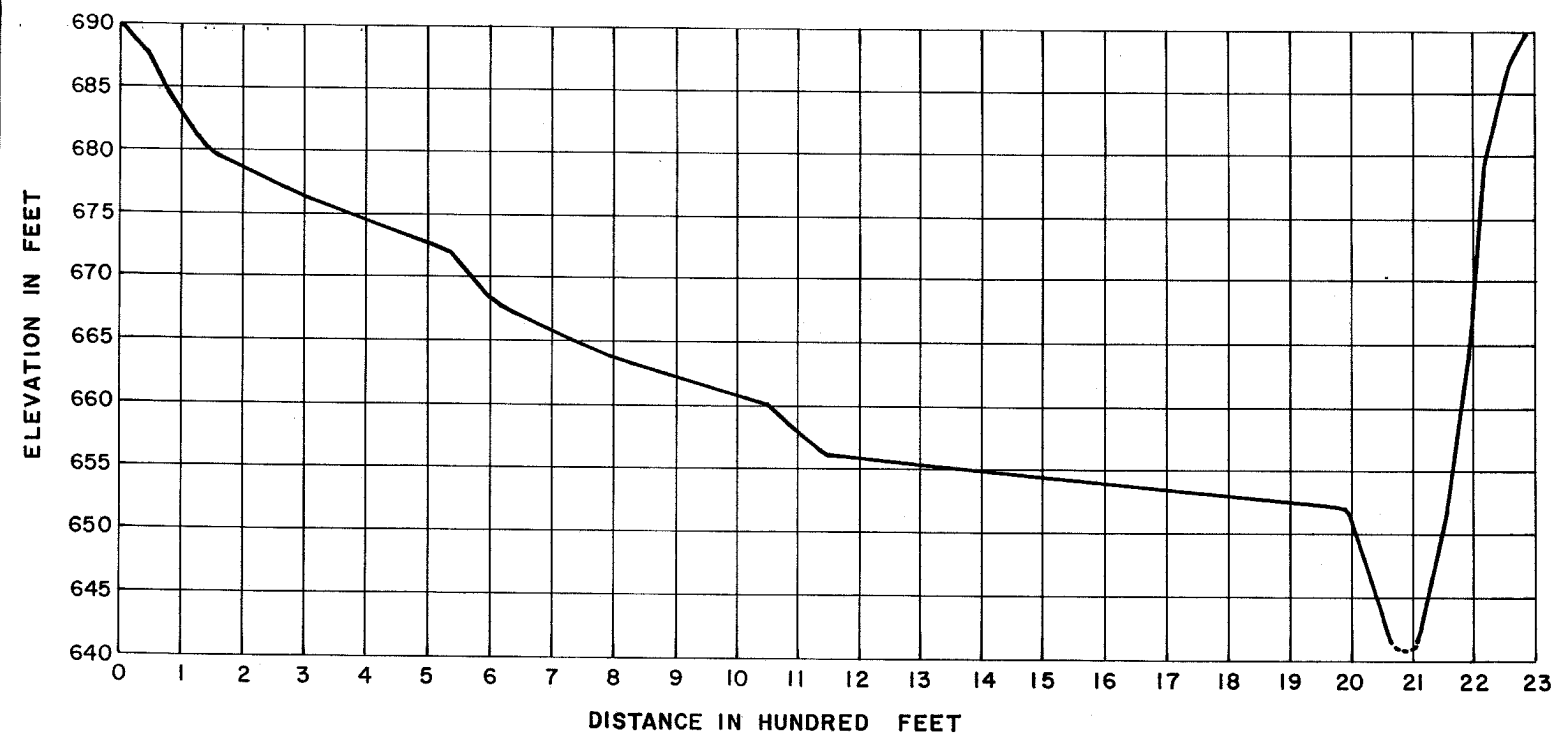
FIGURE 2.4-18

100-YEAR FLOOD HYDROGRAPHS OF LAKE  
CLINTON AND SALT CREEK AT DAM SITE

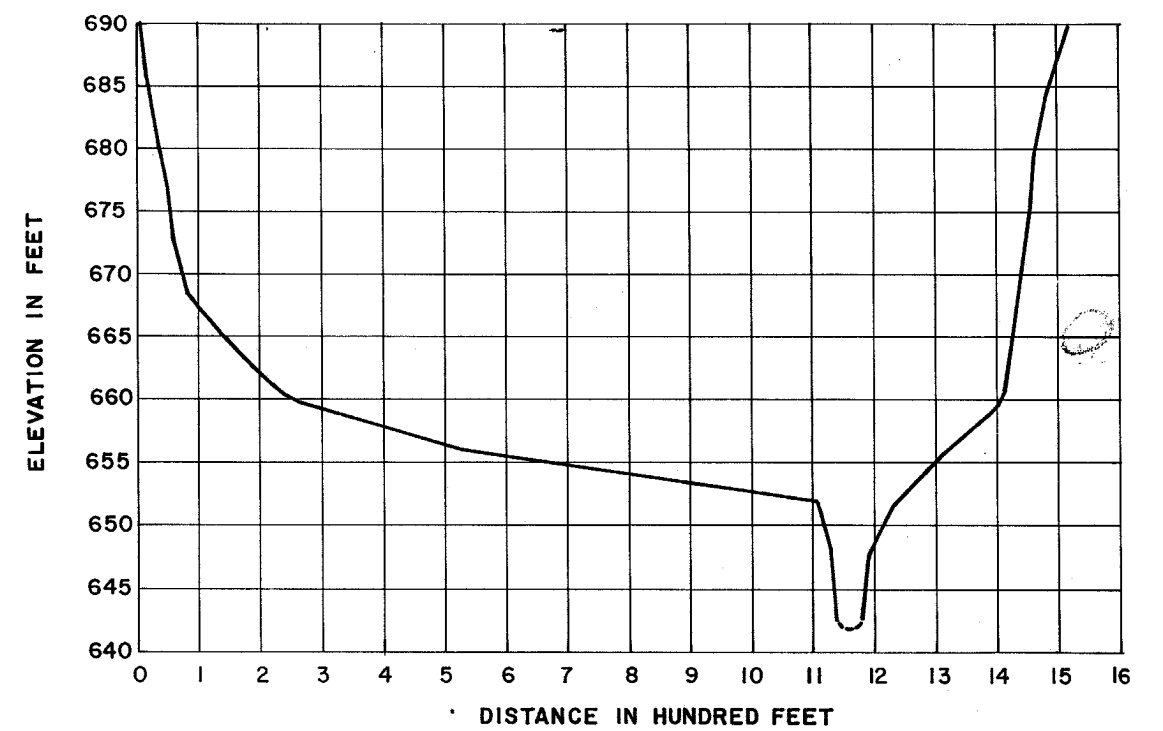


CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

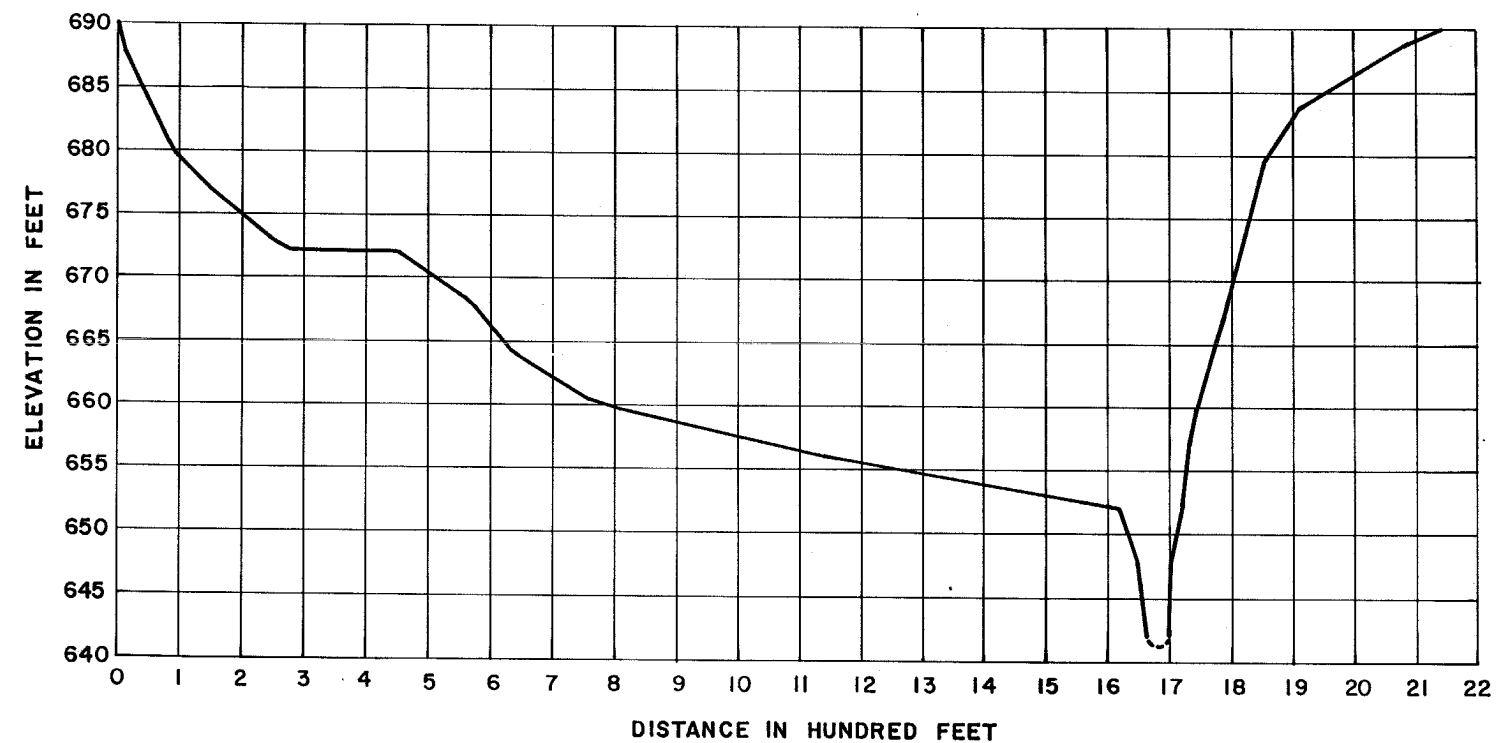
FIGURE 2.4-19  
TAILWATER RATING CURVE DOWNSTREAM  
OF DAM SITE



**CROSS SECTION 1**  
(4070 FEET DOWNSTREAM)



**CROSS SECTION 5**  
(1060 FEET DOWNSTREAM)



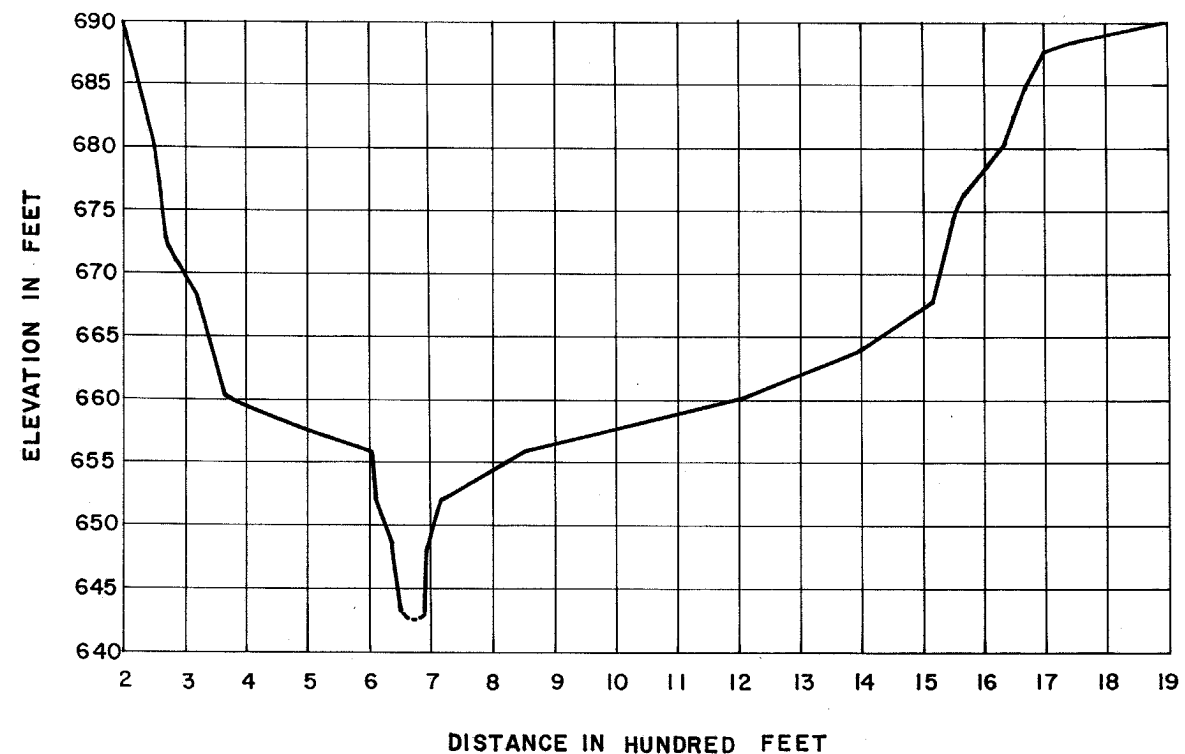
**CROSS SECTION 3**  
(2680 FEET DOWNSTREAM)

**NOTES:**

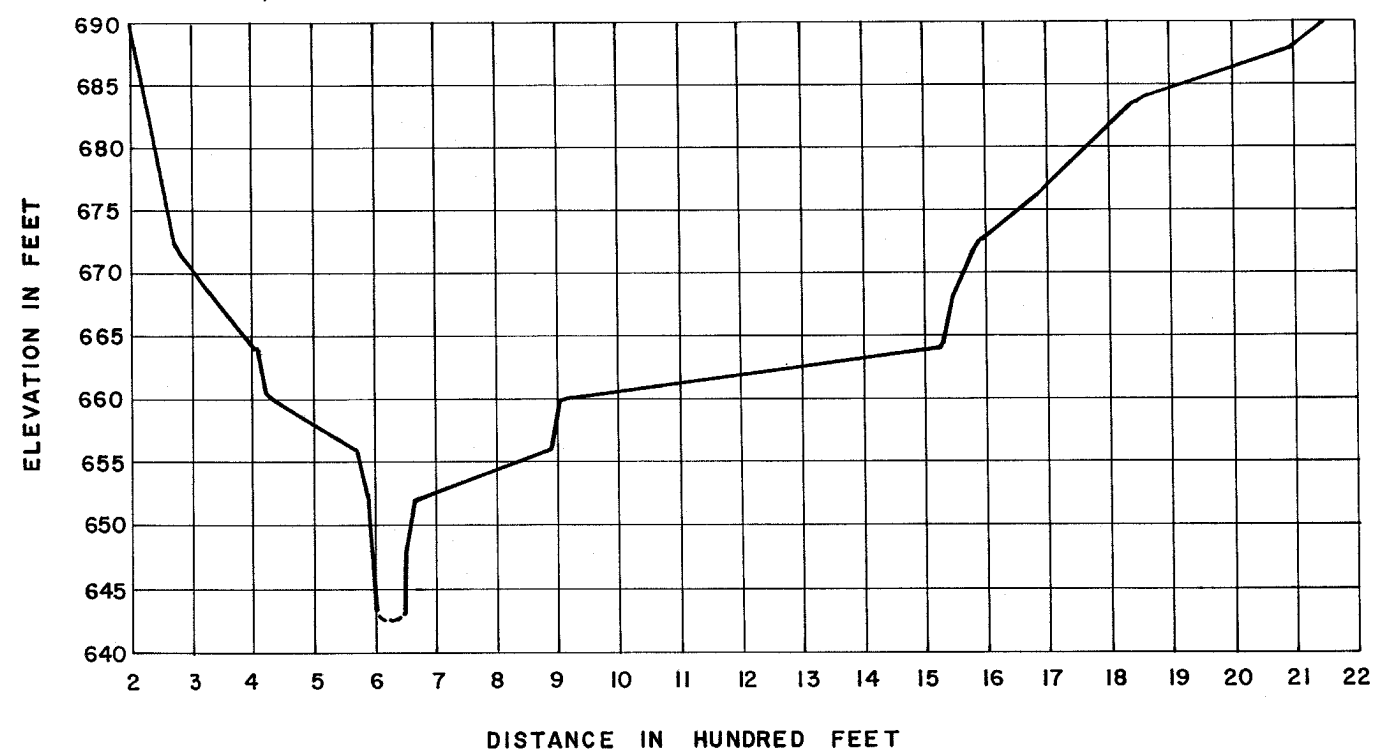
1. CROSS SECTIONS LOOKING UPSTREAM.
2. LOCATION OF CROSS SECTION IS REFERRED TO ILLINOIS STATE ROUTE 10 BRIDGE.

CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

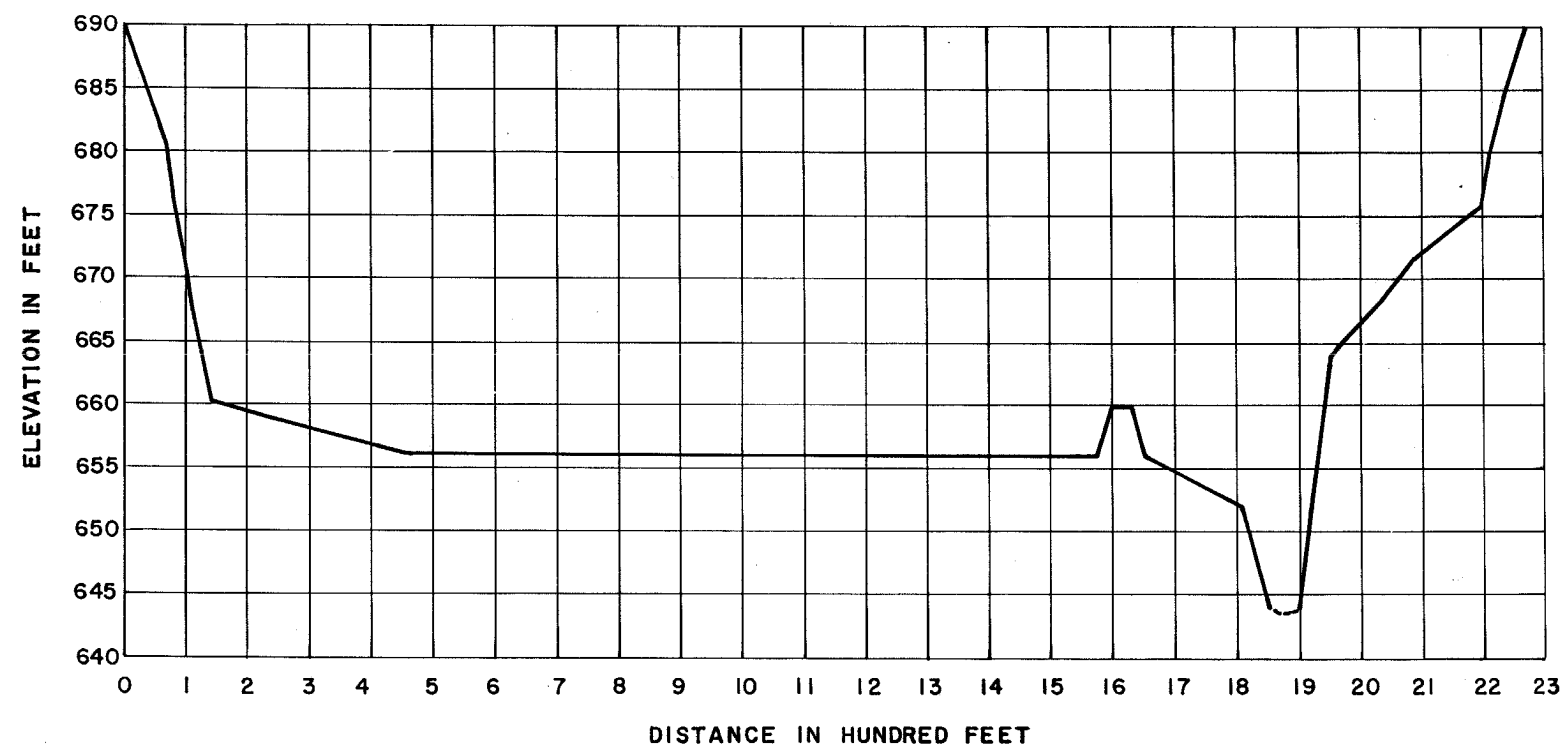
FIGURE 2.4-20  
SALT CREEK CROSS SECTIONS  
(SHEET 1 of 3)



**CROSS SECTION 7**  
( 50 FEET DOWNSTREAM )



**CROSS SECTION 9**  
( 50 FEET UPSTREAM )



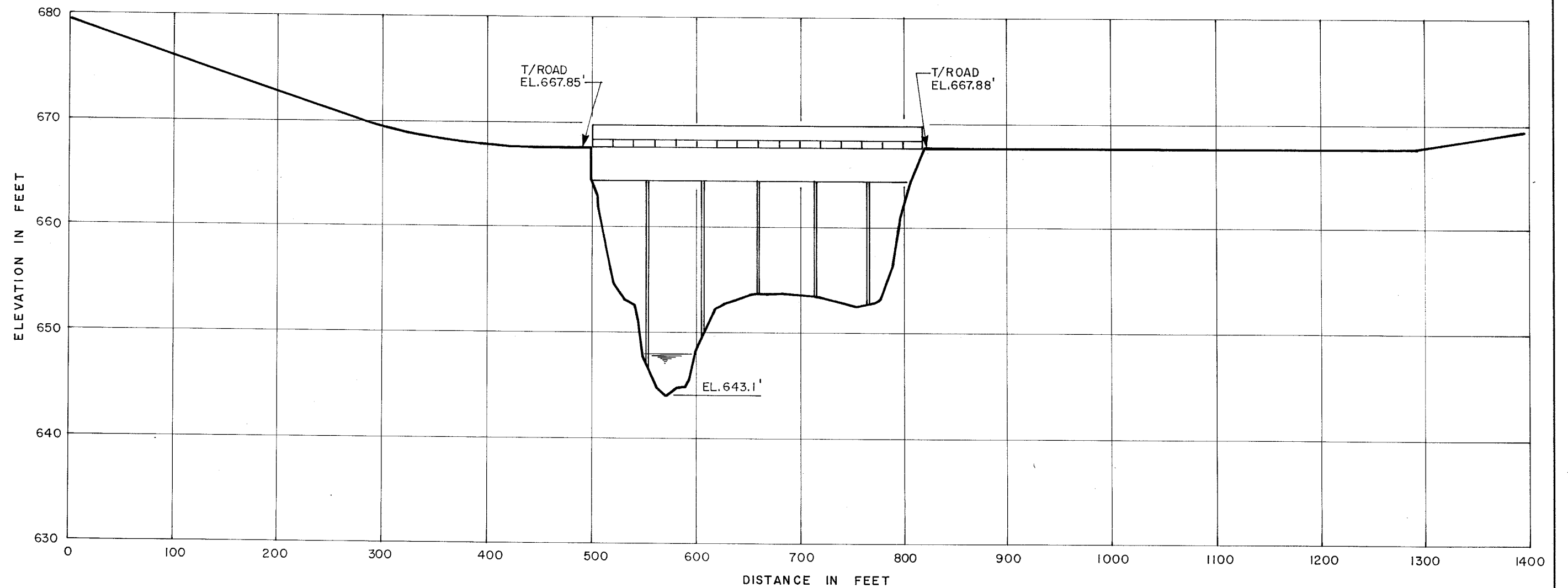
**CROSS SECTION 11**  
( 2000 FEET UPSTREAM )

**NOTES:**

1. CROSS SECTIONS LOOKING UPSTREAM.
2. LOCATION OF CROSS SECTION IS REFERRED TO ILLINOIS STATE ROUTE 10 BRIDGE.

**CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 2.4-20  
SALT CREEK CROSS SECTIONS  
(SHEET 2 of 3)



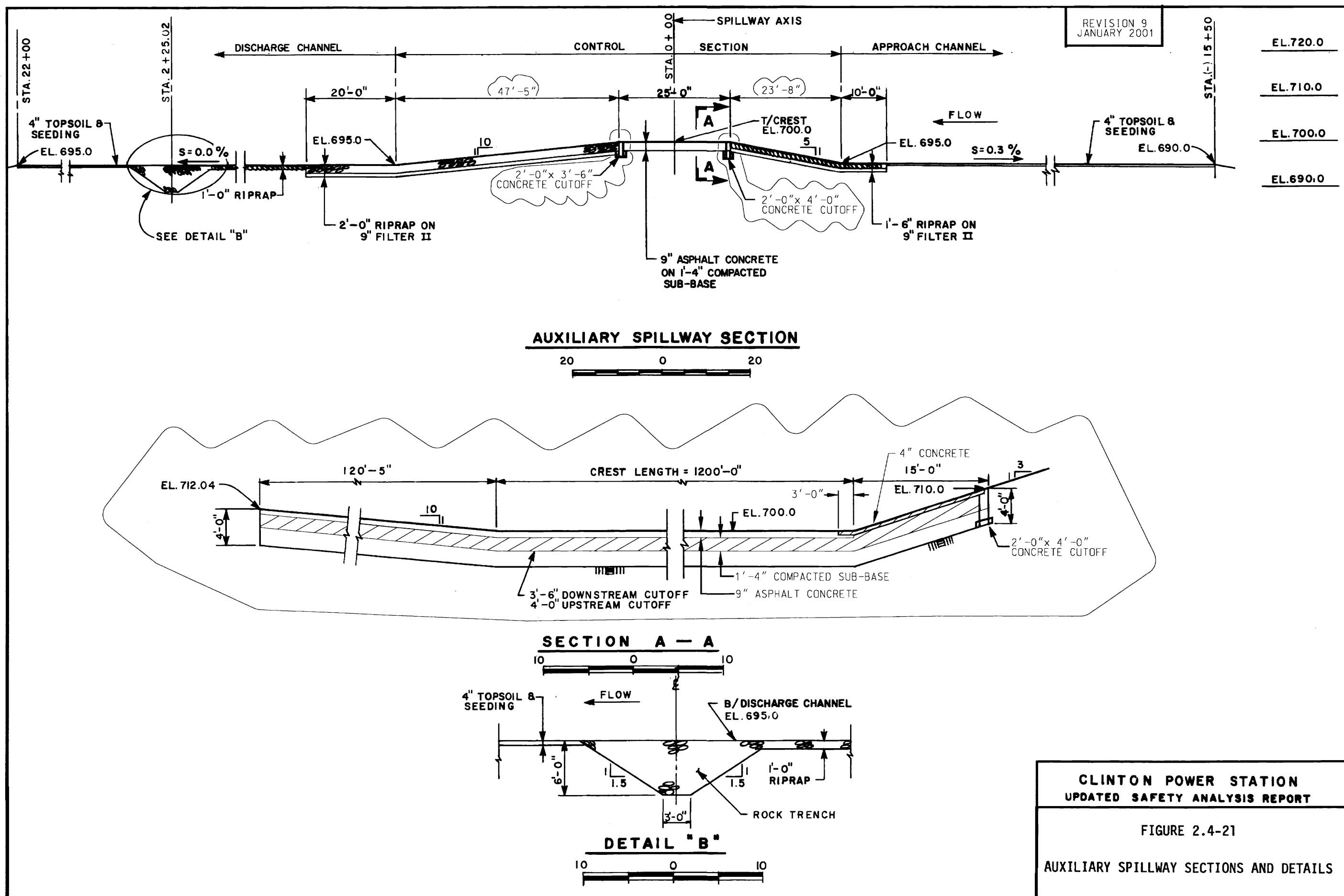
SURVEYED BY CHARLES S. DANNER,  
CONSULTING ENGINEER (9/18/72)  
CROSS SECTION LOOKING UPSTREAM.

ILLINOIS STATE ROUTE 10 BRIDGE

CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-20  
SALT CREEK CROSS SECTIONS  
(SHEET 3 of 3)

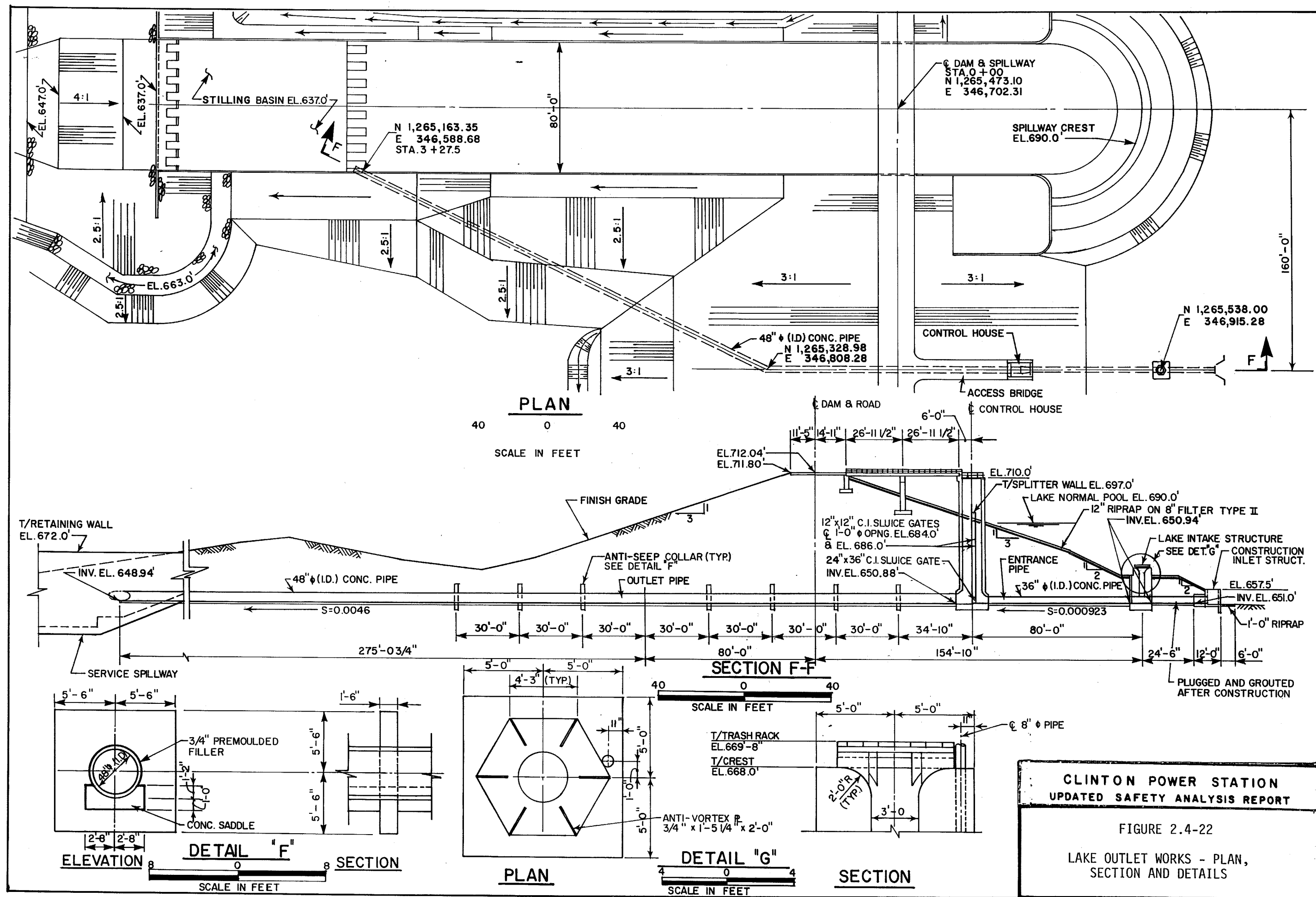


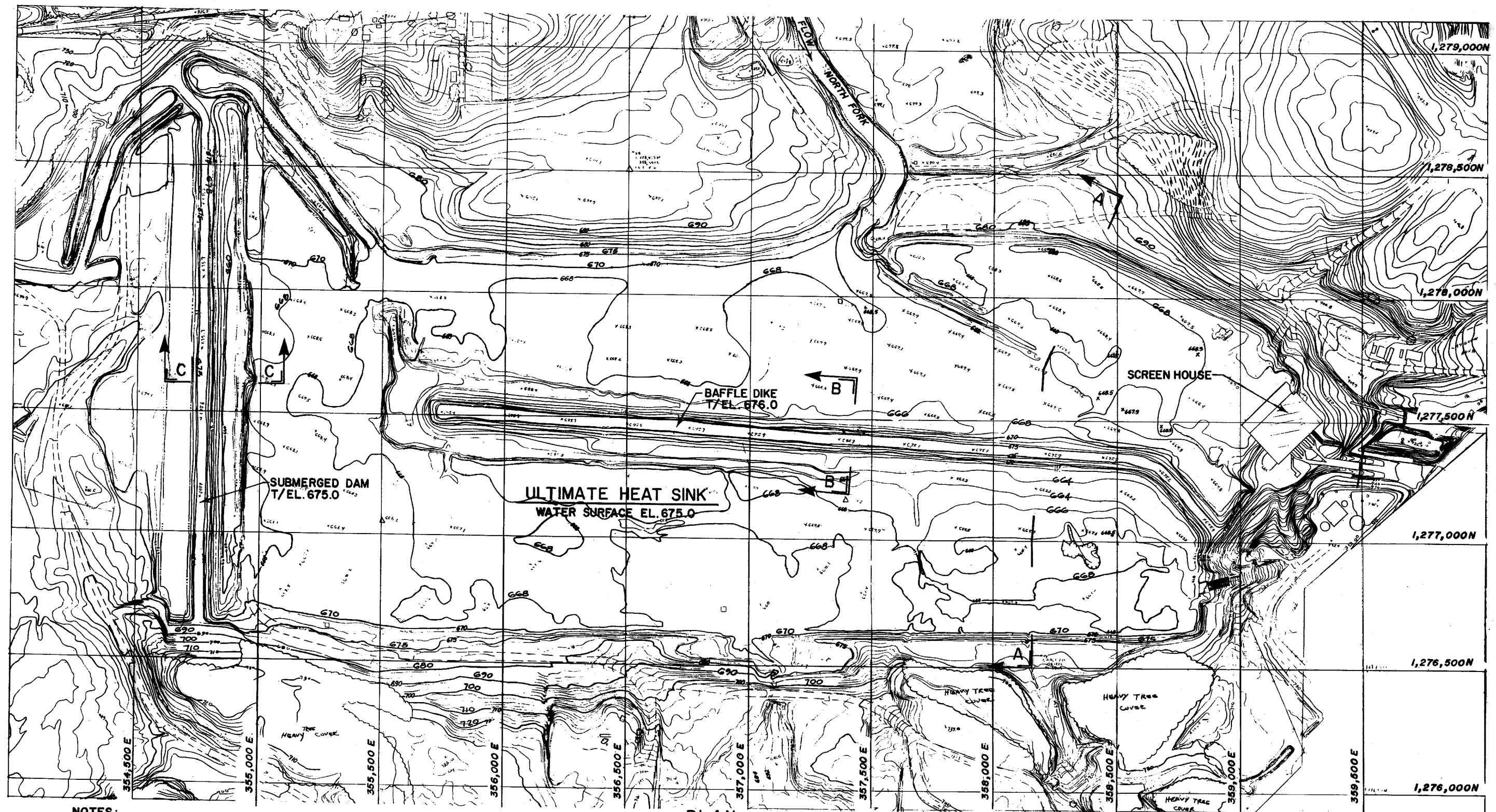


CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-21

AUXILIARY SPILLWAY SECTIONS AND DETAILS

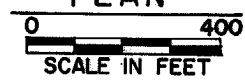




**NOTES:**

1. TOPOGRAPHIC MAP OF ULTIMATE HEAT SINK AFTER CONSTRUCTION (OCT.17,1977).
2. REFER TO FIGURE 2.4-24 FOR SECTIONS.

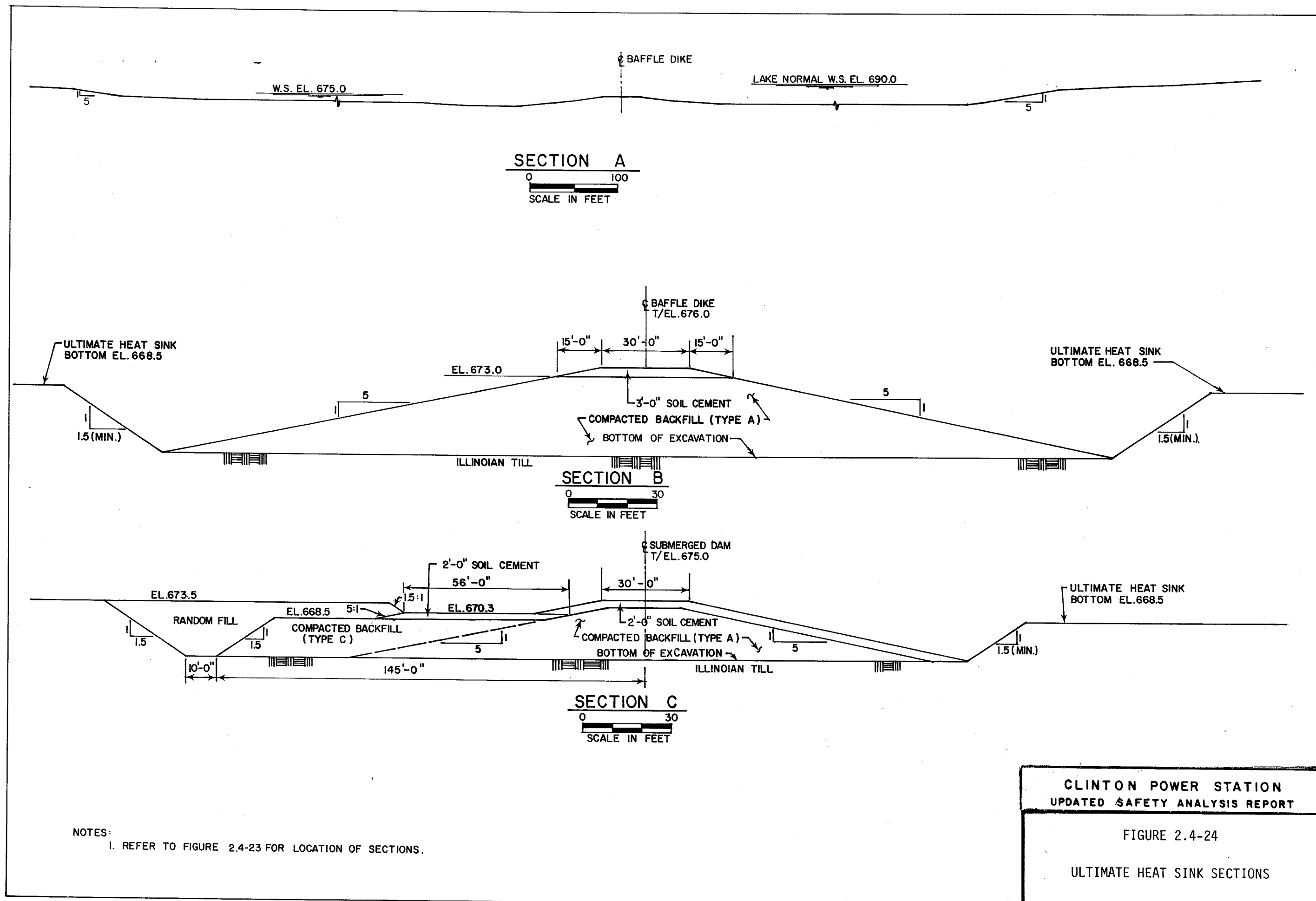
**PLAN**

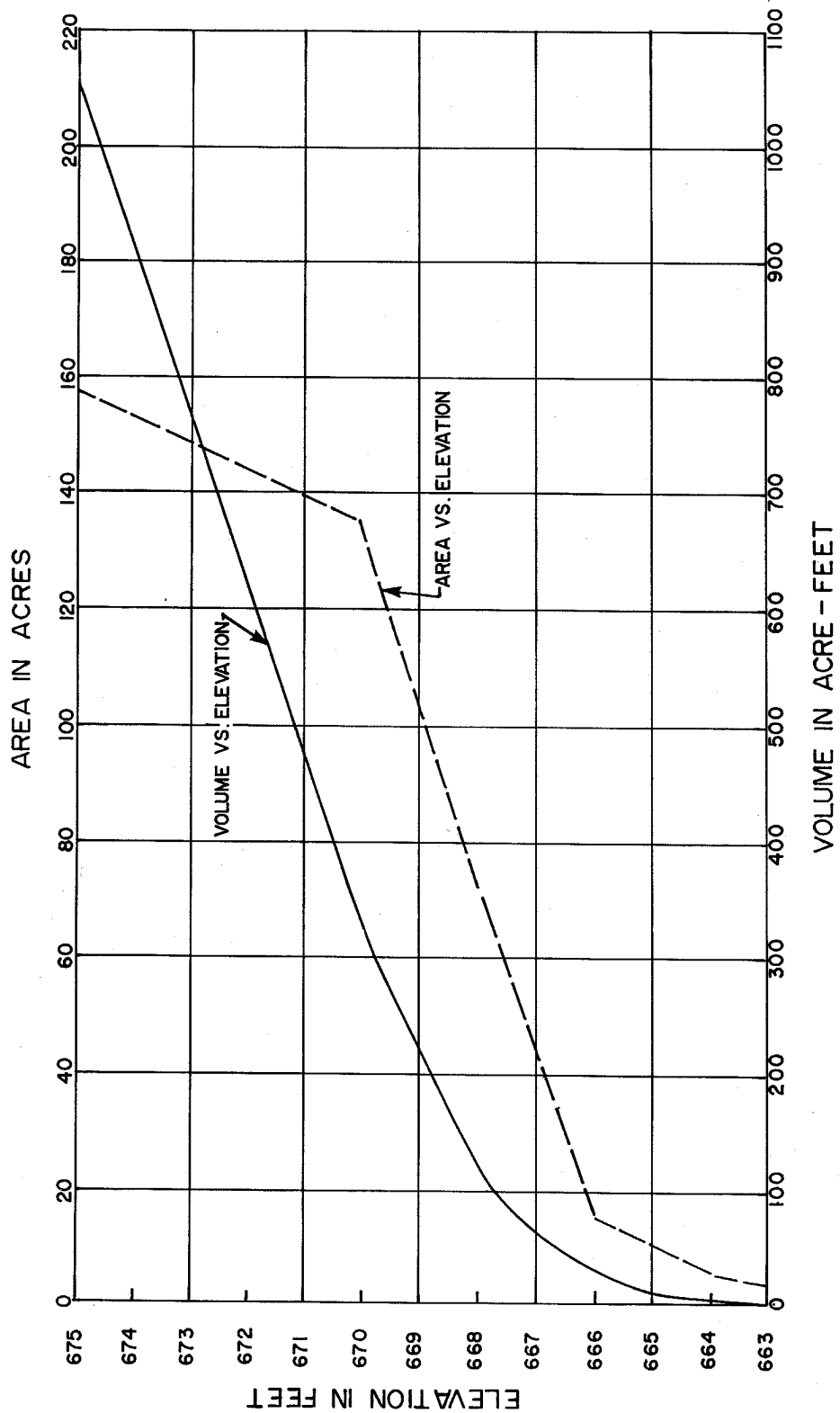


**CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT**

**FIGURE 2.4-23**

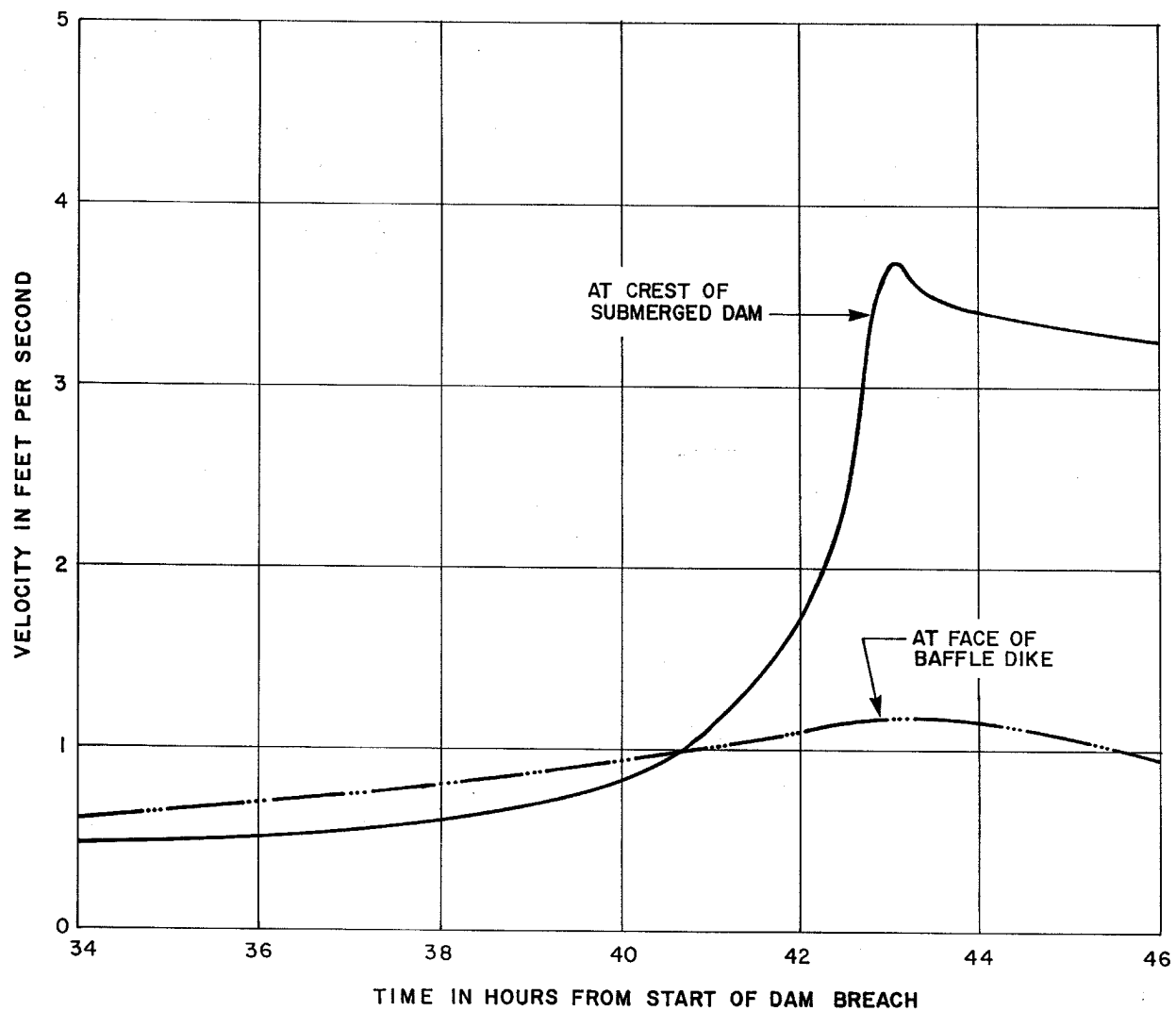
**ULTIMATE HEAT SINK PLAN**





CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-25  
AREA-CAPACITY OF SUBMERGED  
ULTIMATE HEAT SINK

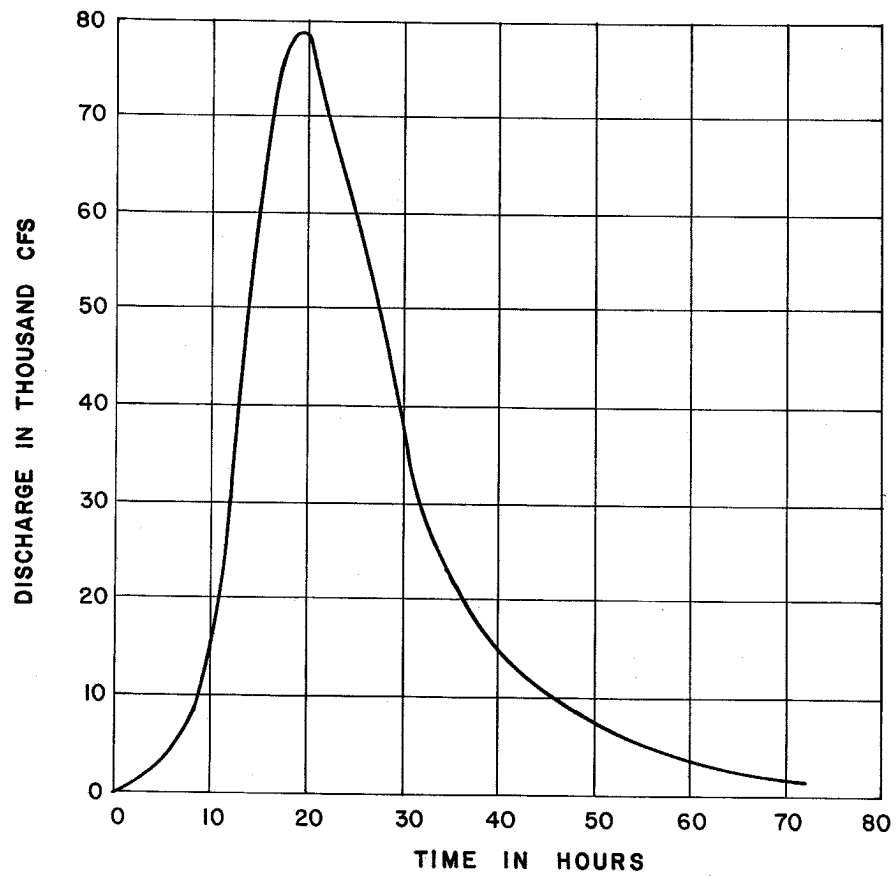


CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-26

VELOCITY PROFILE OVER SUBMERGED DAM  
AND BAFFLE DIKE OF ULTIMATE HEAT SINK

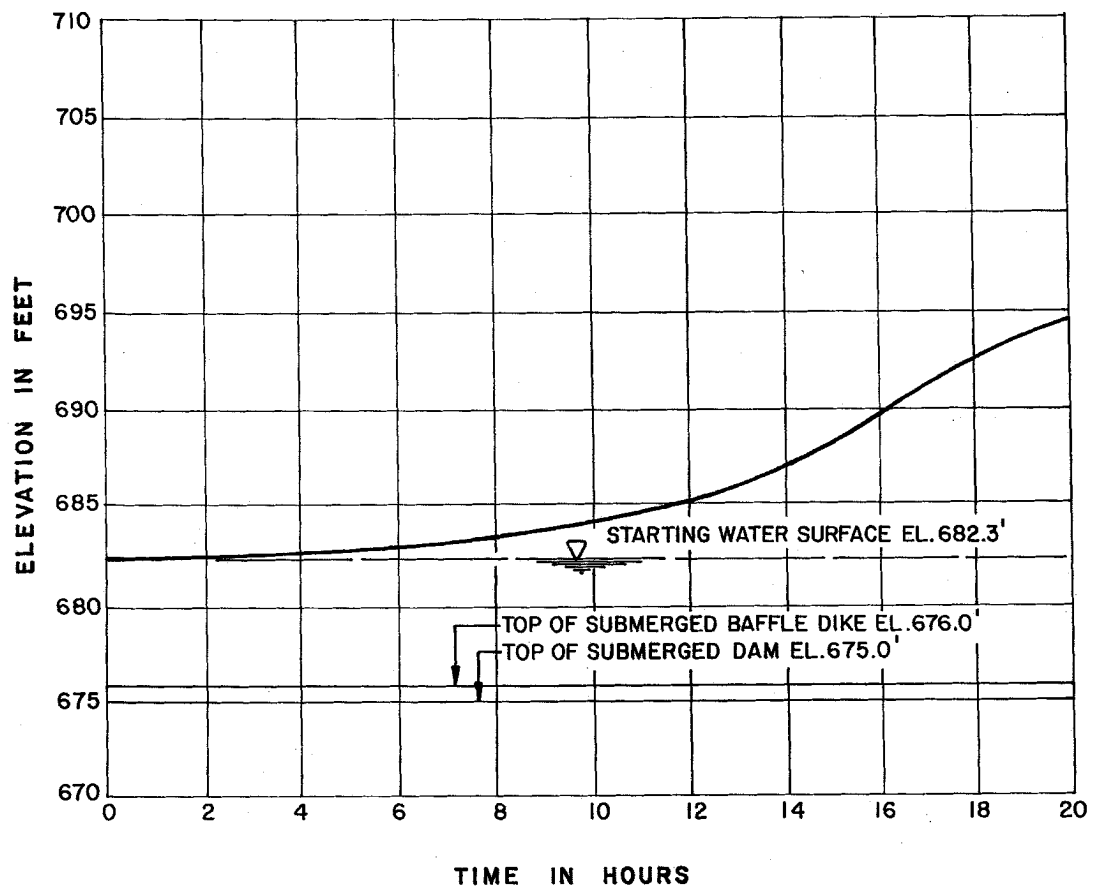




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FIGURE 2.4-27

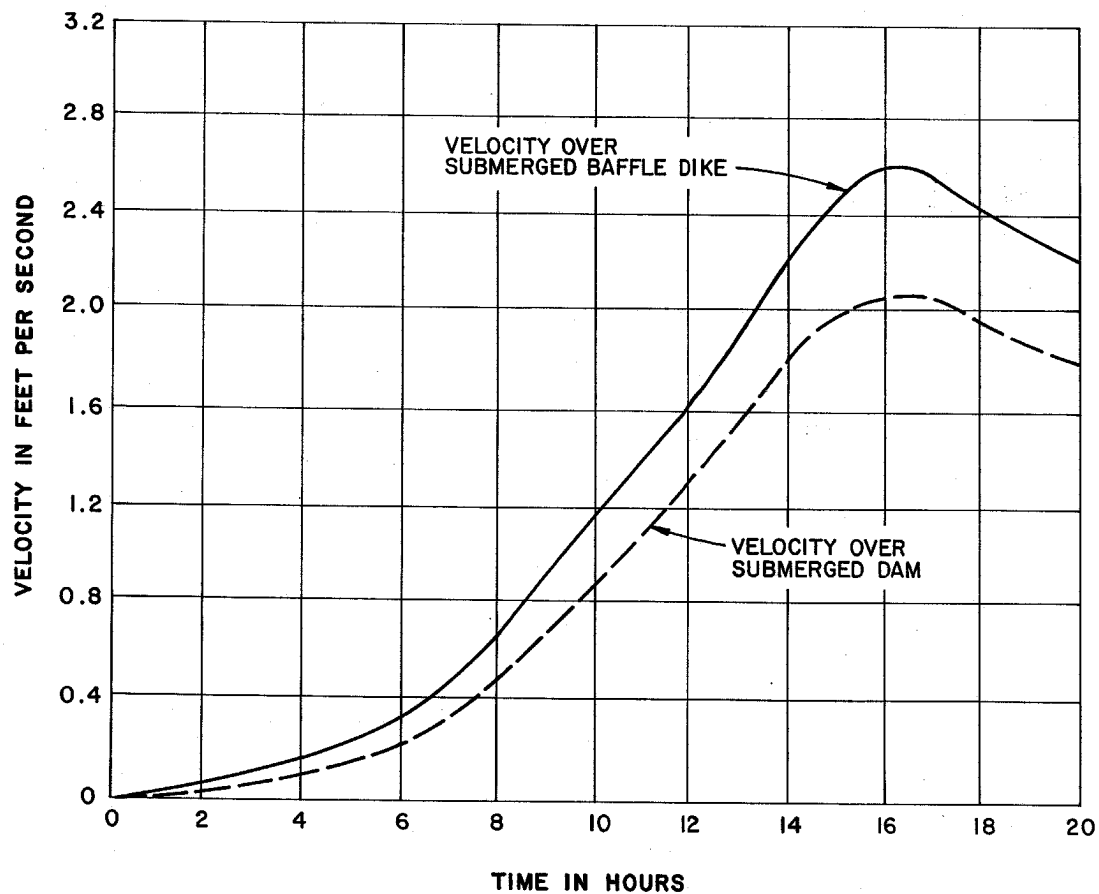
PROBABLE MAXIMUM FLOOD HYDROGRAPH  
OF NORTH FORK



CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-28

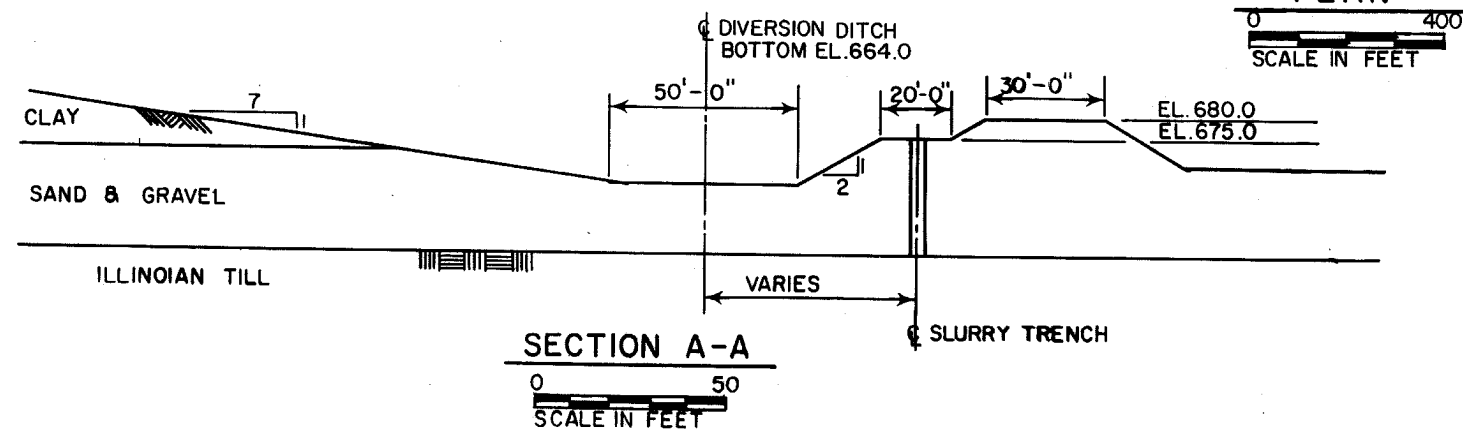
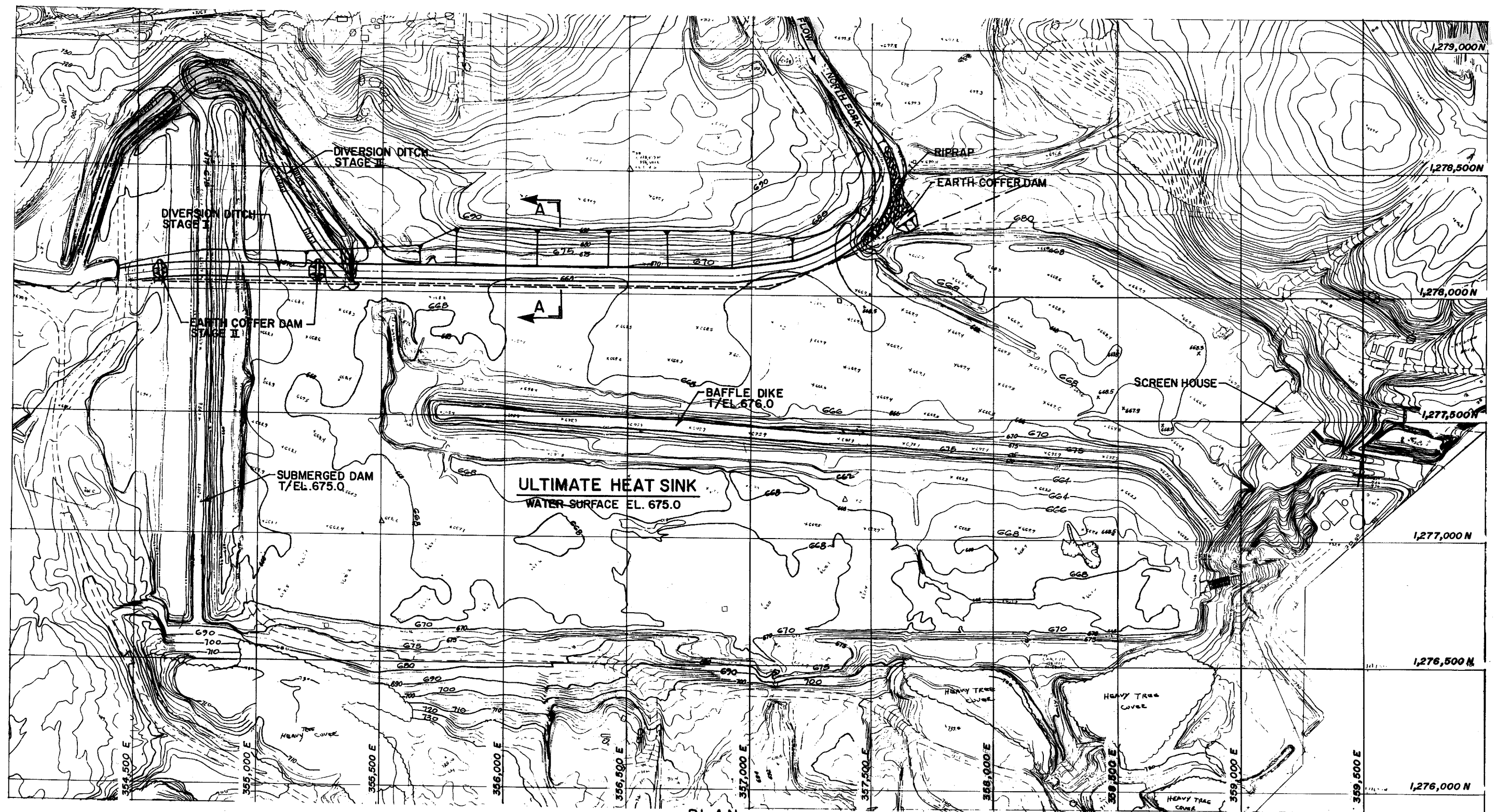
TIME VARIATION OF LAKE ELEVATION DURING  
NORTH FORK PMF AFTER 100-YEAR DROUGHT



CLINTON POWER STATION  
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FIGURE 2.4-29

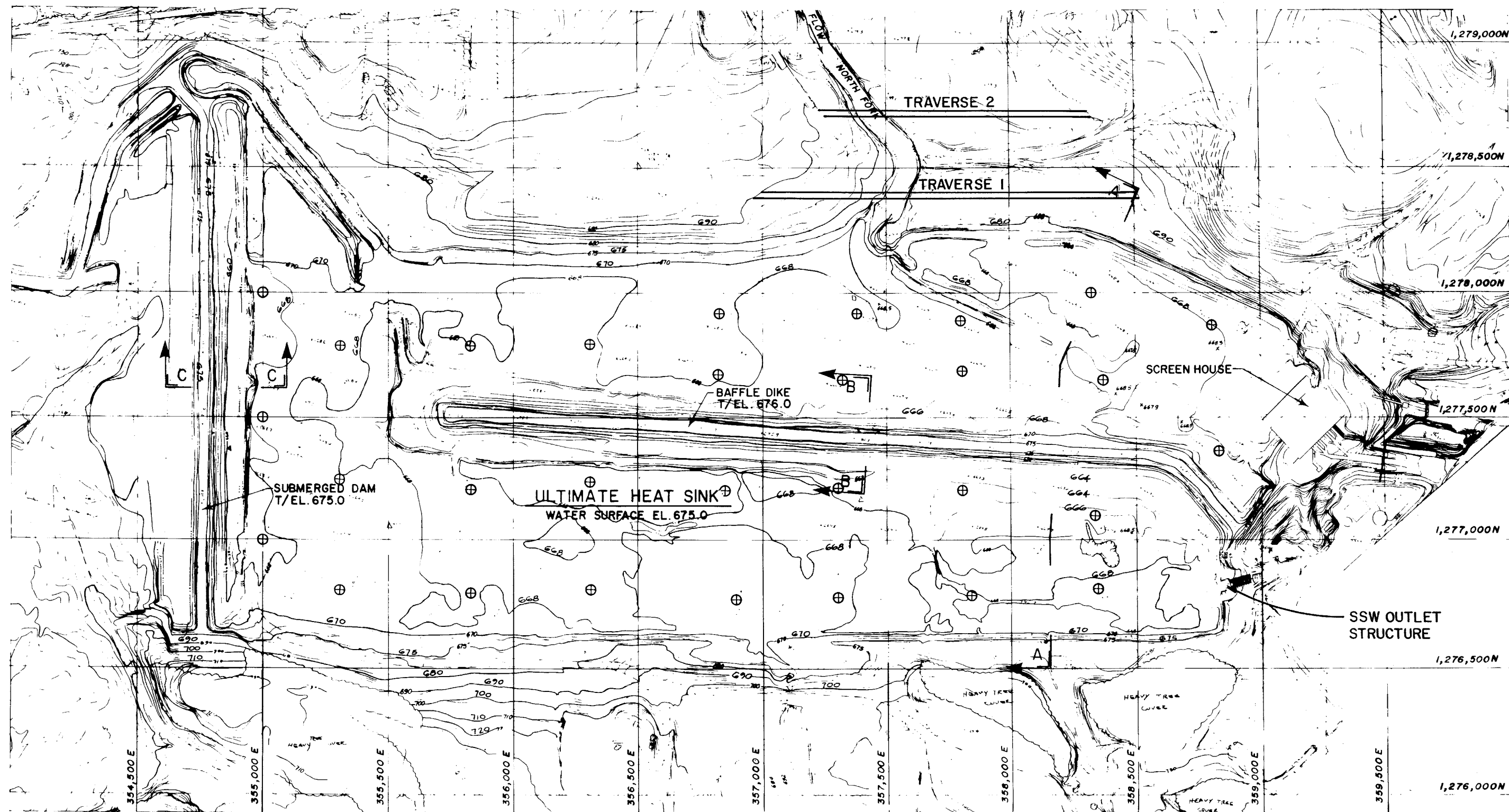
TIME VARIATION OF VELOCITY OVER SUBMERGED  
STRUCTURES DURING NORTH FORK PMF AFTER  
100-YEAR DROUGHT



CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-30

ULTIMATE HEAT SINK DIVERSION SCHEME



NOTES:

1. TOPOGRAPHIC MAP OF ULTIMATE HEAT SINK AFTER CONSTRUCTION (OCT.17,1977).
2. REFER TO FIGURE 2.4-24 FOR SECTIONS.

LEGEND:

- ⊕ MONITORING LOCATIONS
- TRAVERSE FOR SOUNDINGS IN AREA UPSTREAM OF UHS

PLAN  
0 400  
SCALE IN FEET



CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

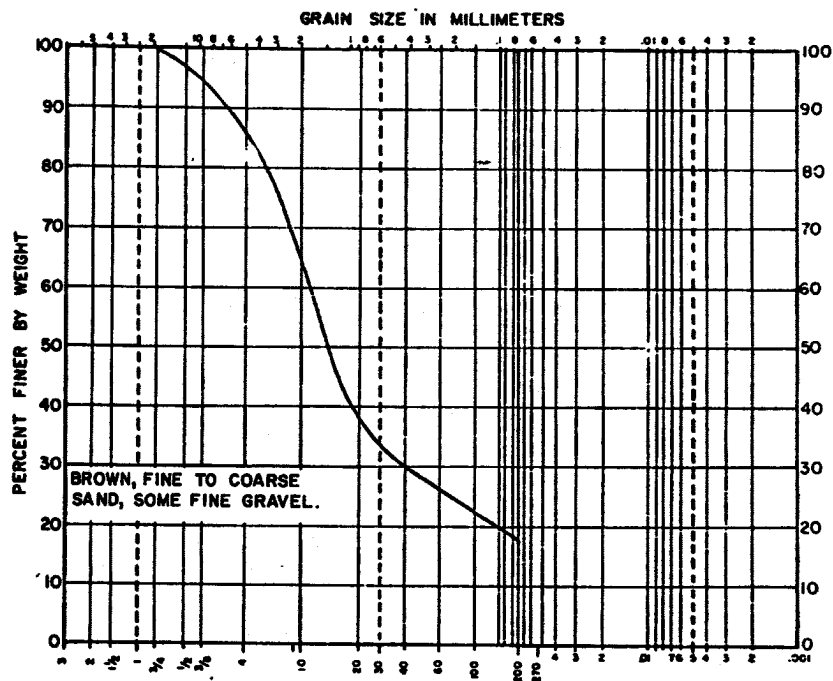
FIGURE 2.4-31

ULTIMATE HEAT SINK  
MONITORING LOCATIONS

■ CPS TEST WELL  
▼ FUNCTIONAL PIEZOMETER (AS OF 12-77)  
● NON-FUNCTIONAL PIEZOMETER (AS OF 12-77)  
--- INFERRED WATER TABLE CONTOUR, WISCONSINAN DEPOSITS

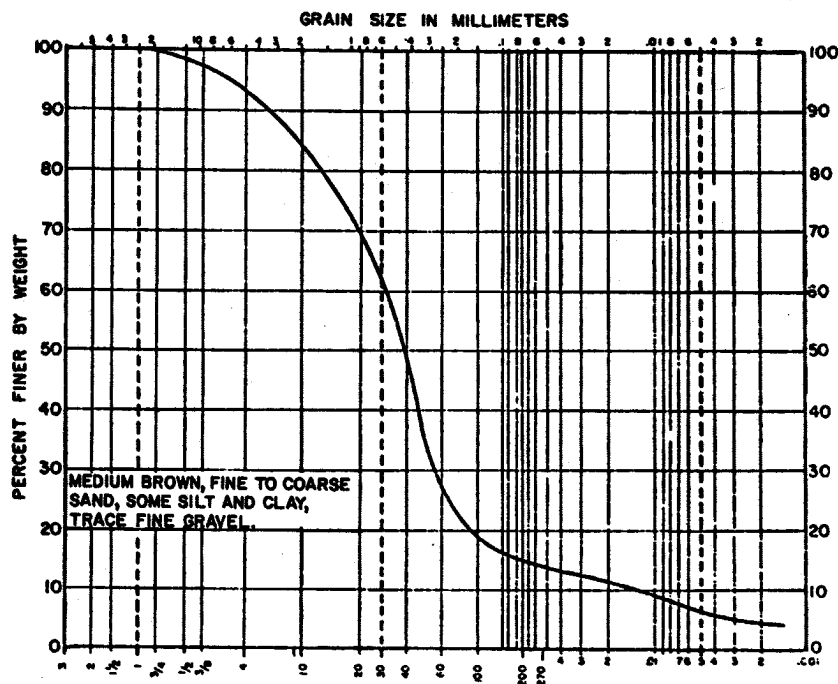
1. DATUM IS MEAN SEA LEVEL.
2. ADDITIONAL P-SERIES PIEZOMETERS ARE SHOWN ON FIGURE 2.5-16.
3. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
4. BASE MAP MODIFIED FROM USGS, 15' SERIES TOPOGRAPHIC MAP: MAROA, IL., 1957.
5. LOCATIONS OF PIEZOMETERS DW-9 THROUGH DW-17 ARE SHOWN ON FIGURE 2.5-272.

### LOCATIONS OF PIEZOMETERS, CPS TEST WELL, AND WATER TABLE IN SITE VICINITY



GRAVEL		SAND			SILT AND CLAY SIZES
Coarse	Fine	Coarse	Medium	Fine	

Boring No.	Sample No.	Depth	
		from	to
PH-2	1	10.0	15.0
Classification			
SM			



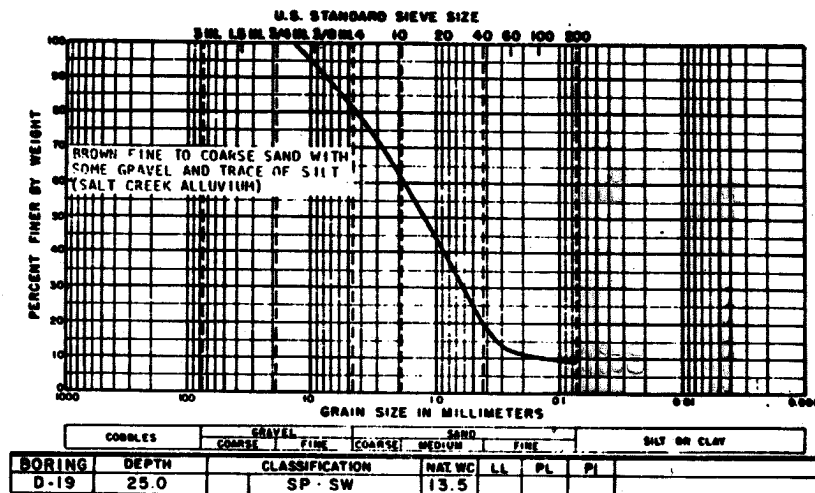
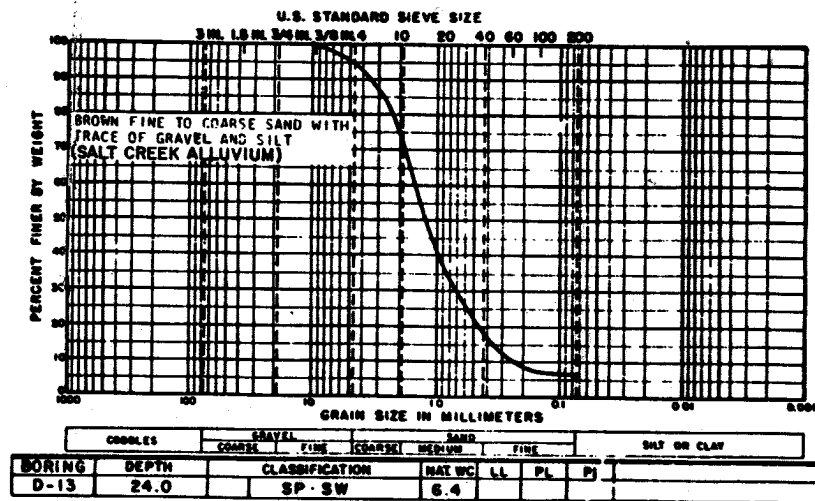
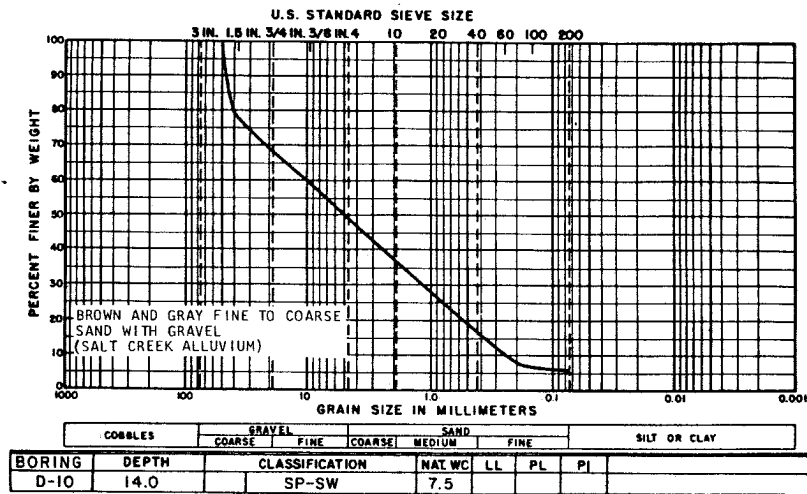
GRAVEL		SAND			SILT AND CLAY SIZES
Coarse	Fine	Coarse	Medium	Fine	

Boring No.	Sample No.	Depth	
		from	to
PH-10	1	22.0	24.0
Classification			
SM			

# CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-33

PARTICLE SIZE ANALYSES  
(BORINGS PH-2 AND PH-10)

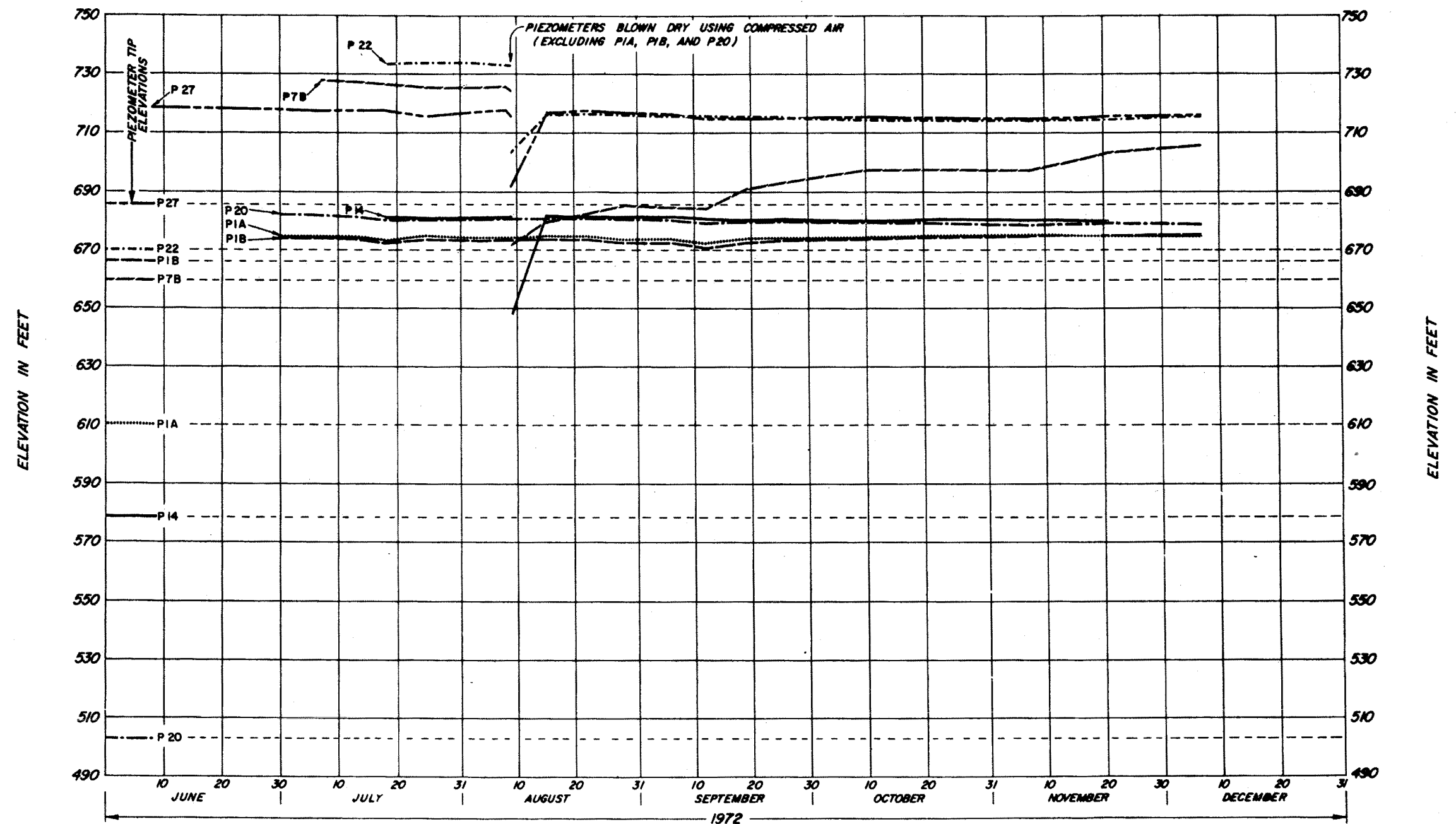


CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-34  
PARTICLE SIZE ANALYSES  
(BORINGS D-10, D-13 AND D-19)





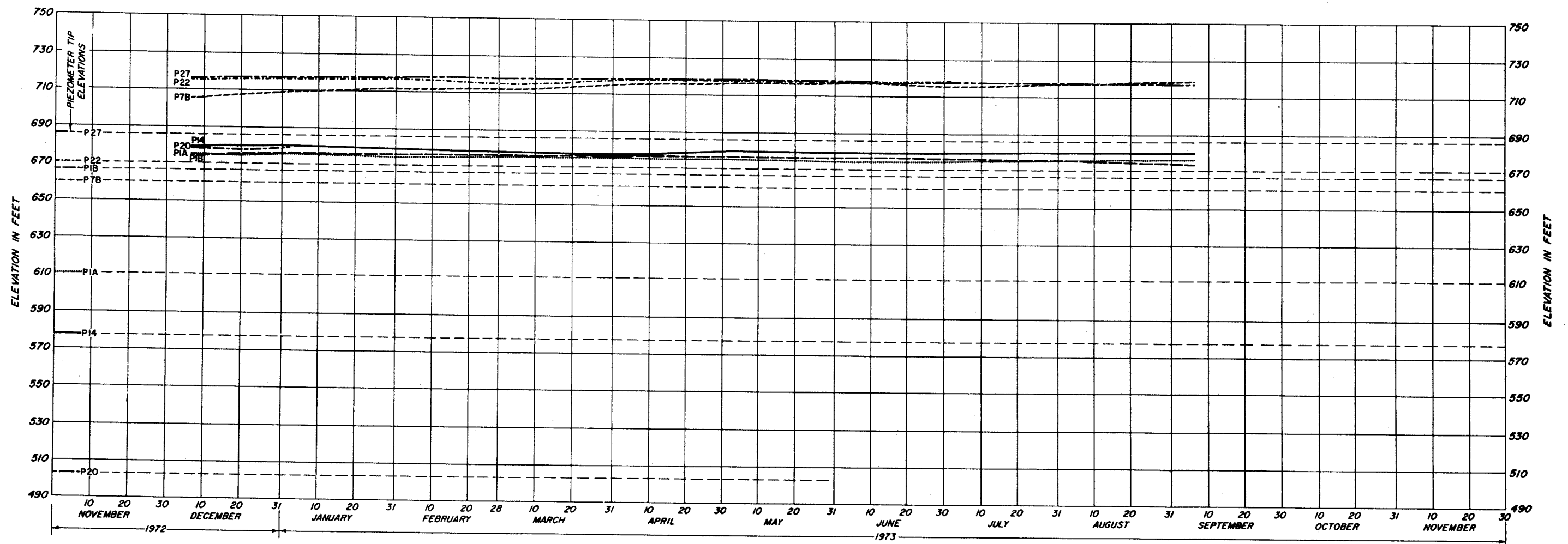


NOTES:

1. PIEZOMETERS INSTALLED IN ENCOUNTERED SAND LENSES TO INCREASE THEIR EFFICIENCY TO MEASURE FLUCTUATIONS IN GROUNDWATER LEVELS WITHIN ILLINOIAN TILL.
2. REFER TO FIGURE 2.5-16 FOR LOCATION OF PIEZOMETERS.
3. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.

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UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-36  
WATER LEVEL OBSERVATIONS, STATION SITE  
(SHEET 1 of 2)

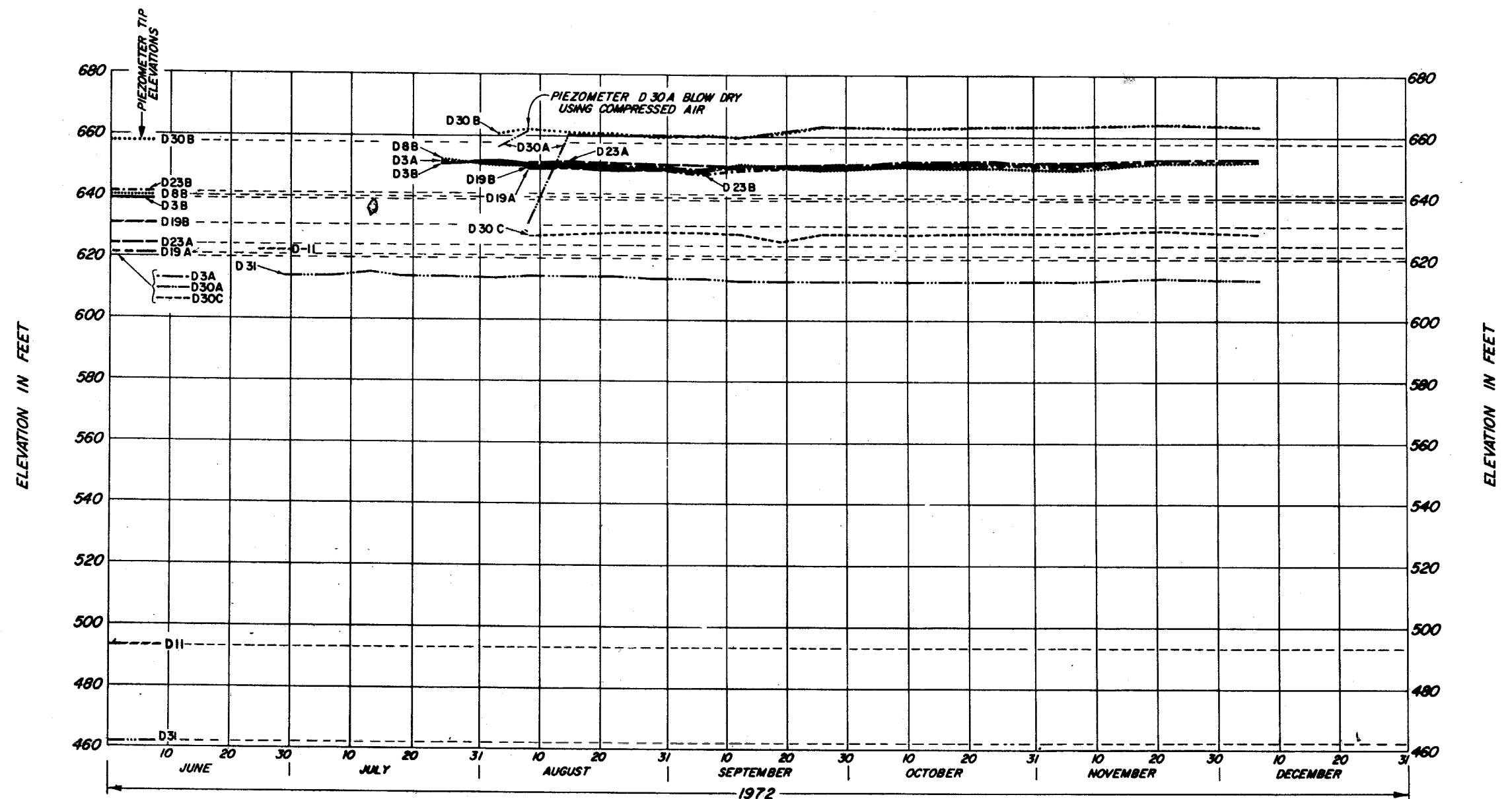


**NOTES:**

1. PIEZOMETERS INSTALLED IN ENCOUNTERED SAND LENSES TO INCREASE THEIR EFFICIENCY TO MEASURE FLUCTUATIONS IN GROUNDWATER LEVELS WITHIN ILLINOIAN TILL.
2. REFER TO FIGURE 2.5-16 FOR LOCATION OF PIEZOMETERS.
3. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.

CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-36  
WATER LEVEL OBSERVATIONS, STATION SITE  
(SHEET 2 of 2)

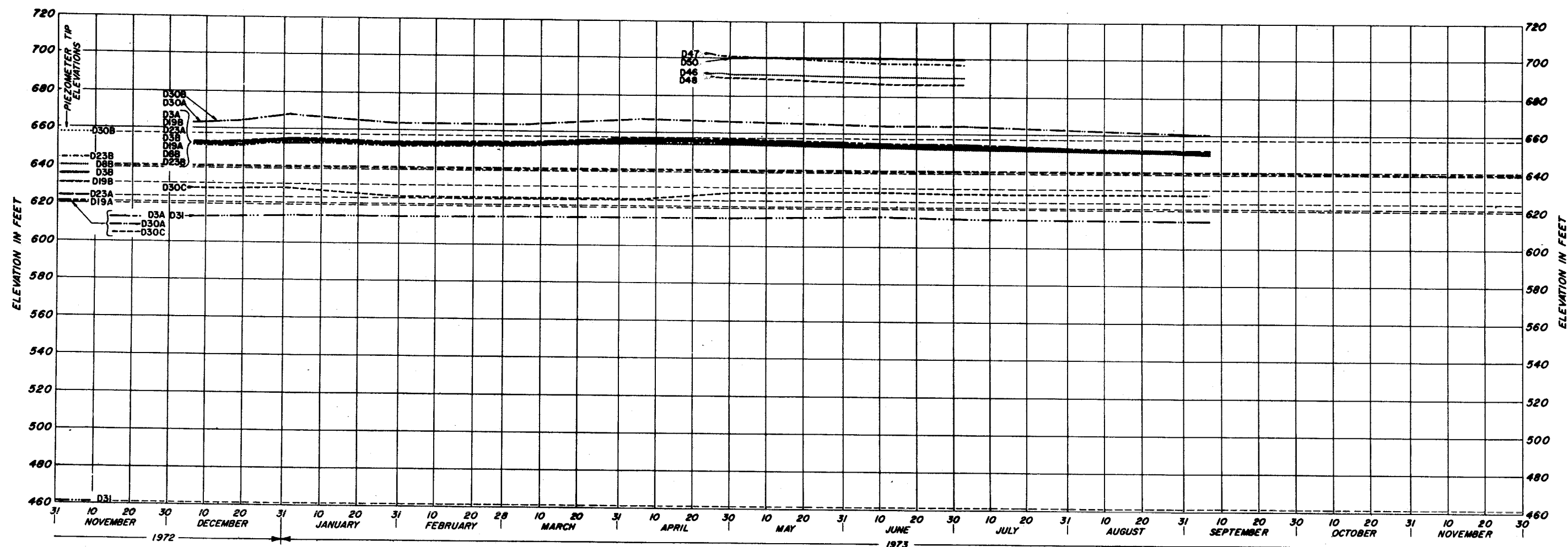


NOTES:

1. PIEZOMETERS D3A, D19A, D23A, D30A AND D30C INSTALLED IN THE ILLINOIAN TILL.
2. PIEZOMETERS D3B, D8B, D19B, D23B AND D30B INSTALLED IN THE SALT CREEK ALLUVIUM.
3. PIEZOMETERS D11 AND D31 INSTALLED WITHIN THE BEDROCK AND MAHOMET BEDROCK VALLEY DEPOSIT.
4. PIEZOMETER D11 INOPERATIVE AFTER JUNE 29, 1973 WITH WATER LEVELS BELOW ELEVATION 619.3.
5. REFER TO FIGURE 2.4-32 FOR LOCATION OF PIEZOMETERS.
6. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.

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UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-37  
WATER LEVEL OBSERVATIONS, DAM SITES  
(SHEET 1 of 2)

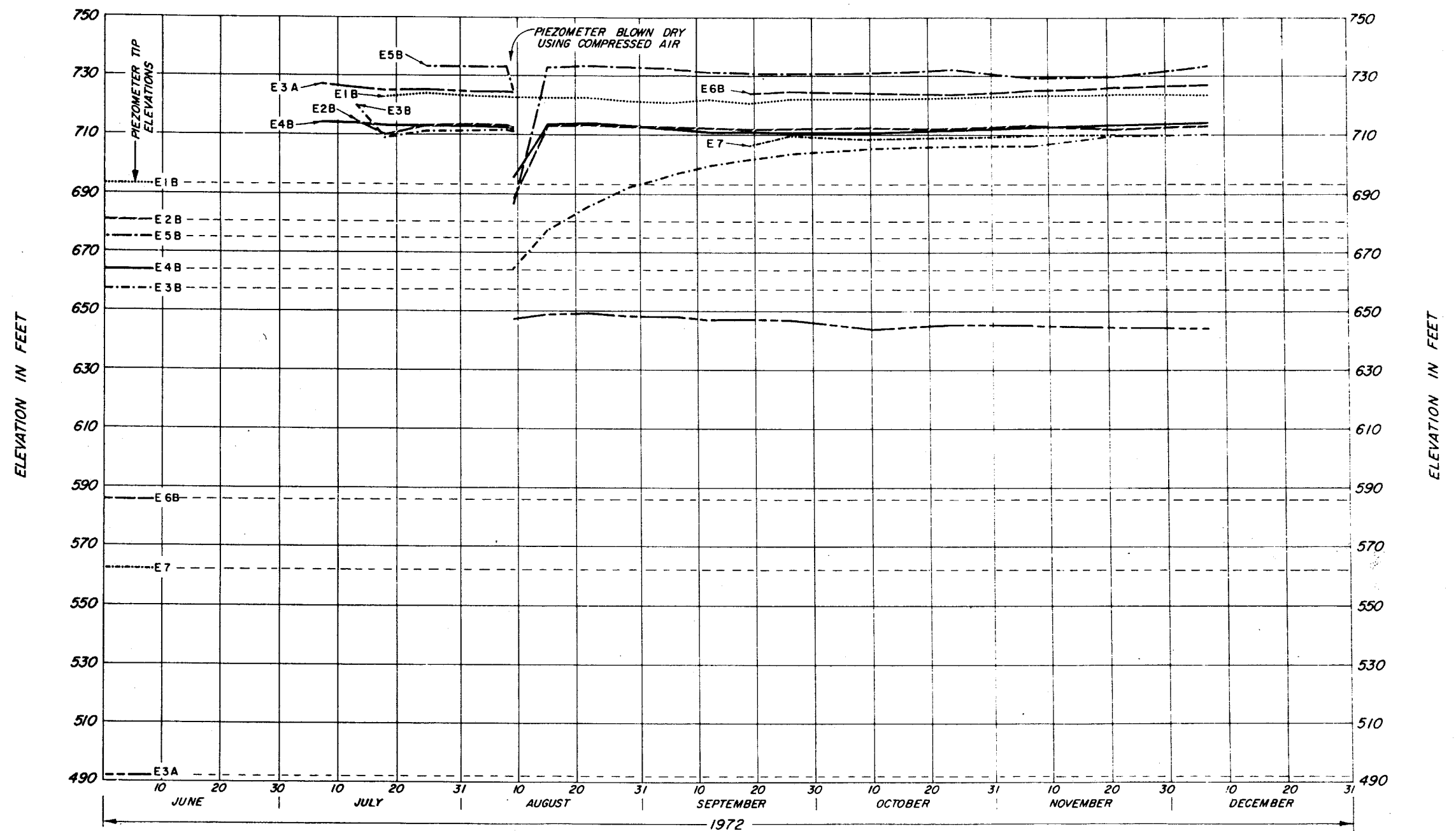


**NOTES:**

1. PIEZOMETERS D3A, D19A, D23A, D30A AND D30C INSTALLED IN THE ILLINOIAN TILL.
2. PIEZOMETERS D3B, D8B, D19B, D23B AND D30B INSTALLED IN THE SALT CREEK ALLUVIUM.
3. PIEZOMETERS D11 AND D31 INSTALLED WITHIN THE BEDROCK AND MAHOMET BEDROCK VALLEY DEPOSIT.
4. PIEZOMETER D11 INOPERATIVE AFTER JUNE 29, 1973 WITH WATER LEVELS BELOW ELEVATION 619.3.
5. REFER TO FIGURE 2.4-32 FOR LOCATION OF PIEZOMETERS.
6. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
7. PIEZOMETERS D46, D47 AND D48 INSTALLED IN WISCONSINAN AND ILLINOIAN TILL.
8. PIEZOMETER D50 INSTALLED IN THE WISCONSINAN TILL.

CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-37  
WATER LEVEL OBSERVATIONS, DAM SITES  
(SHEET 2 of 2)

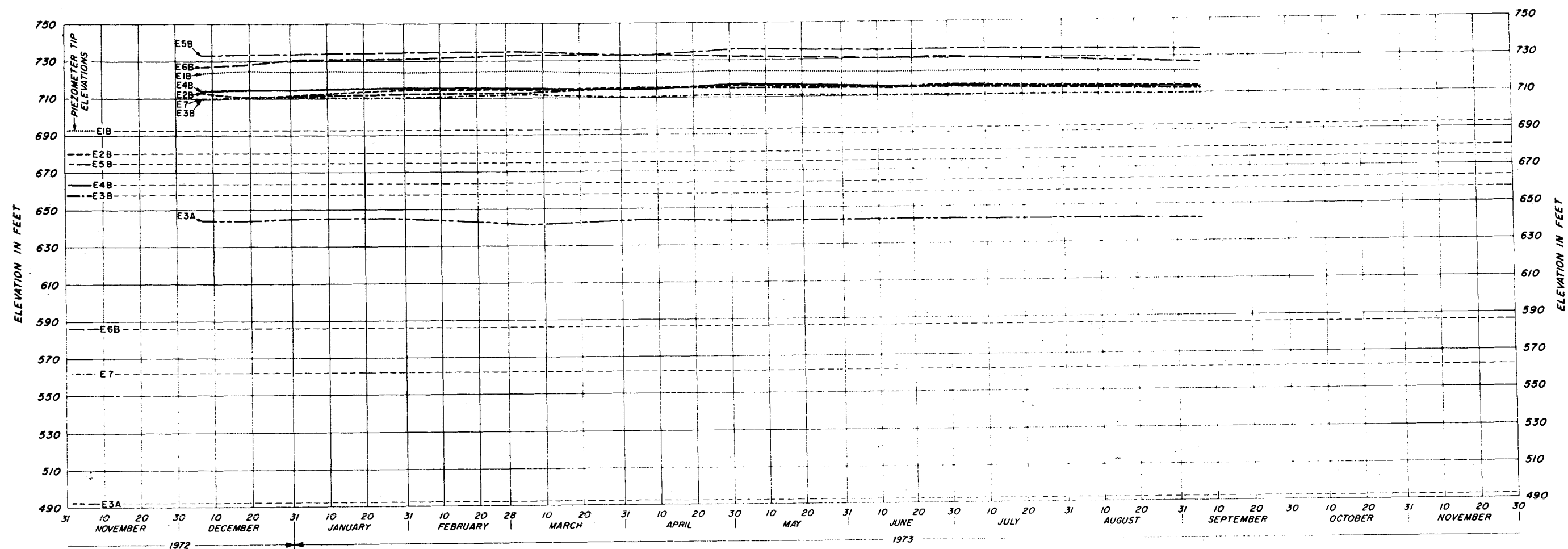


**NOTES:**

1. PIEZOMETER E1B INSTALLED IN THE WISCONSINAN TILL.
2. PIEZOMETERS E2B, E3B, E4B AND E5B INSTALLED IN THE ILLINOIAN TILL.
3. PIEZOMETER E3A INSTALLED IN THE MAHOMET BEDROCK VALLEY DEPOSIT.
4. PIEZOMETERS E6B AND E7 WERE PERFORATED OVER THEIR ENTIRE LENGTHS.
5. REFER TO FIGURE 2.4-32 FOR LOCATION OF PIEZOMETERS.

**CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 2.4-38  
WATER LEVEL OBSERVATIONS, BORINGS  
E-1B TO E-7  
(SHEET 1 of 2)



**NOTES:**

1. PIEZOMETER E1B INSTALLED IN THE WISCONSINAN TILL.
2. PIEZOMETERS E2B, E3B, E4B AND E5B INSTALLED IN THE ILLINOIAN TILL.
3. PIEZOMETER E3A INSTALLED IN THE MAHOMET BEDROCK VALLEY DEPOSIT.
4. PIEZOMETERS E6B AND E7 WERE PERFORATED OVER THEIR ENTIRE LENGTHS.
5. REFER TO FIGURE 2.4-32 FOR LOCATION OF PIEZOMETERS.

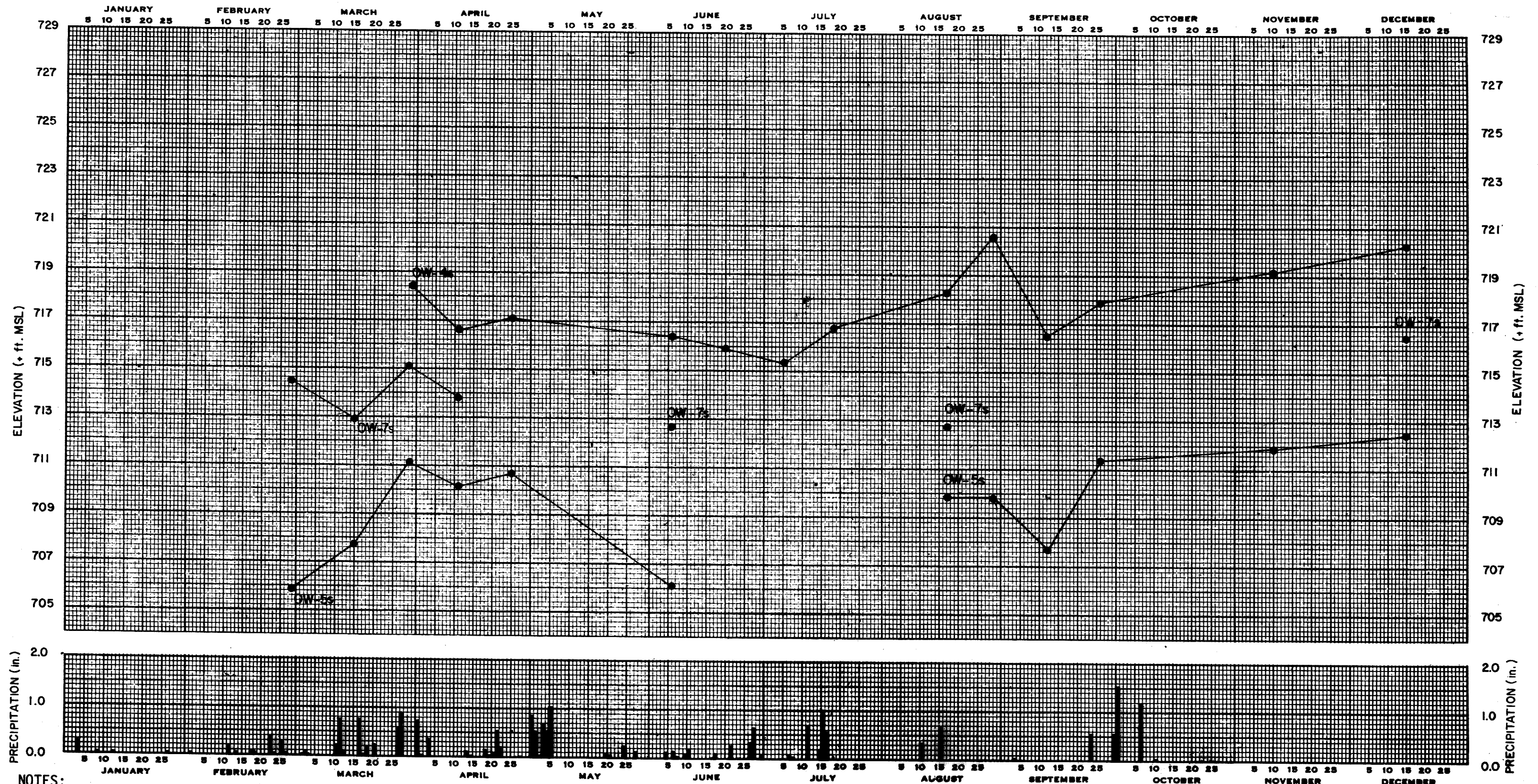
**CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 2.4-38

WATER LEVEL OBSERVATIONS, BORINGS  
E-1B TO E-7

(SHEET 2 of 2)





#### NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. ONSITE PRECIPITATION DATA ARE NOT AVAILABLE FROM JULY 19 THROUGH AUGUST 9 OR FROM OCTOBER 19 THROUGH DECEMBER 31, 1977.
4. PIEZOMETER OW-3s HAS BEEN REPORTED AS DRY SINCE INSTALLATION EXCEPT ON NOVEMBER 3, 1976, AND DECEMBER 15, 1977, WHEN GROUND-WATER LEVELS OF 728.6 AND 731.1 FT MSL, RESPECTIVELY, WERE RECORDED.

5. PIEZOMETER OW-4s WAS REPORTED AS DRY IN 1976, EXCEPT ON AUGUST 3, 1976, WHEN A GROUNDWATER LEVEL OF 718.4 FT MSL WAS RECORDED.
6. PIEZOMETERS OW-5s AND OW-7s WERE REPORTED AS DRY IN 1976.
7. RECORDED GROUNDWATER LEVELS IN INDIVIDUAL PIEZOMETERS ARE NOT SHOWN CONNECTED WHENEVER A SUBSEQUENT MEASUREMENT INDICATED THE PIEZOMETER WAS DRY.
8. PIEZOMETER OW-6s HAS BEEN REPORTED AS DRY SINCE INSTALLATION EXCEPT ON JULY 18, 1977, WHEN A GROUNDWATER LEVEL OF 736.3 FT MSL WAS RECORDED.

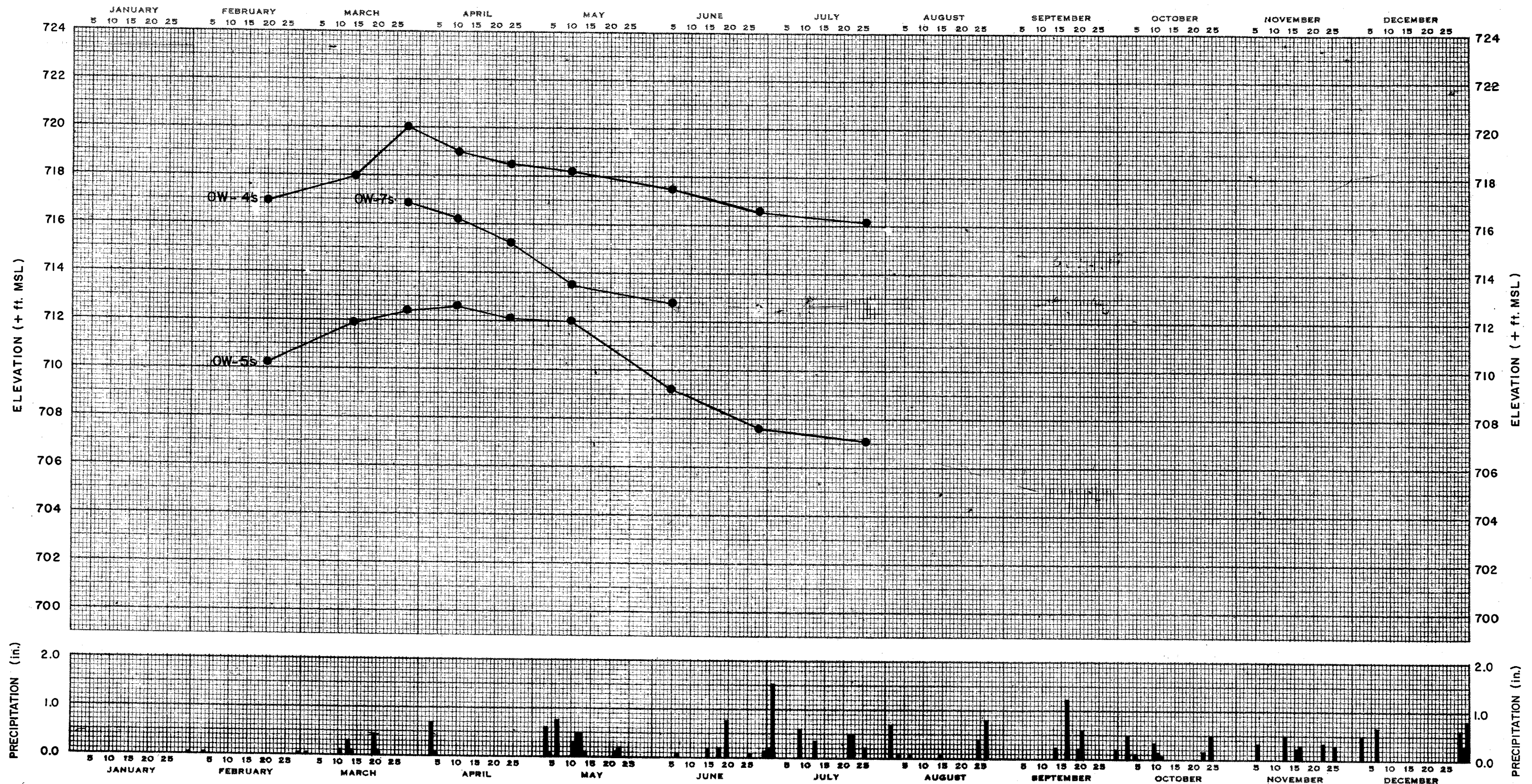
#### CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-39

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 1

(SHEET 1 of 3)





**NOTES:**

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 1 TO JANUARY 27, FEBRUARY 6 TO FEBRUARY 15, MARCH 22 TO MARCH 31, APRIL 6 TO APRIL 26, AND AUGUST 17 TO AUGUST 22.
4. NO GROUNDWATER LEVEL DATA WERE REPORTED FOR JANUARY OR FROM SEPTEMBER 15 THROUGH DECEMBER 31, 1978.
5. PIEZOMETERS OW-4s AND OW-5s WERE REPORTED DRY ON SEPTEMBER 14 1978.
6. PIEZOMETER OW-7s WAS REPORTED DRY ON FEBRUARY 20, MARCH 14, AND FROM JUNE 28 TO SEPTEMBER 14, 1978.

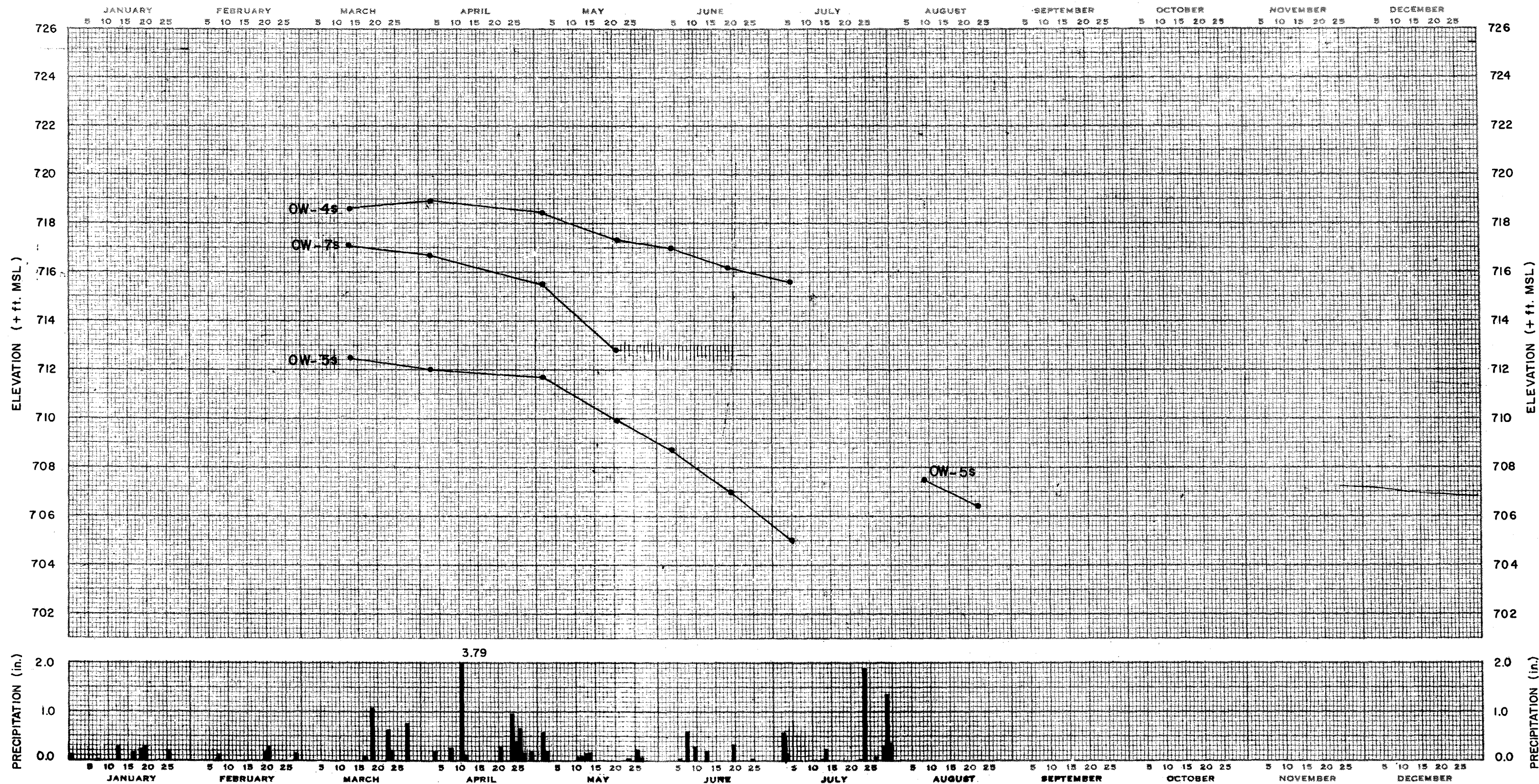
**CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 2.4-39

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 1

(SHEET 2 of 3)





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 30 AND 31, MARCH 2 THROUGH MARCH 9, MARCH 29 THROUGH APRIL 2, JULY 5 THROUGH JULY 9, 1979.
4. NO GROUND WATER LEVEL DATA WERE REPORTED FROM JANUARY 1 THROUGH MARCH 12, 1979.
5. PIEZOMETER OW-4s HAS BEEN REPORTED AS DRY FROM JULY 23, 1979.
6. PIEZOMETER OW-5s HAS BEEN REPORTED AS DRY ON JULY 23 AND FROM SEPTEMBER 6, 1979.
7. PIEZOMETER OW-7s HAS BEEN DRY FROM JUNE 4, 1979.

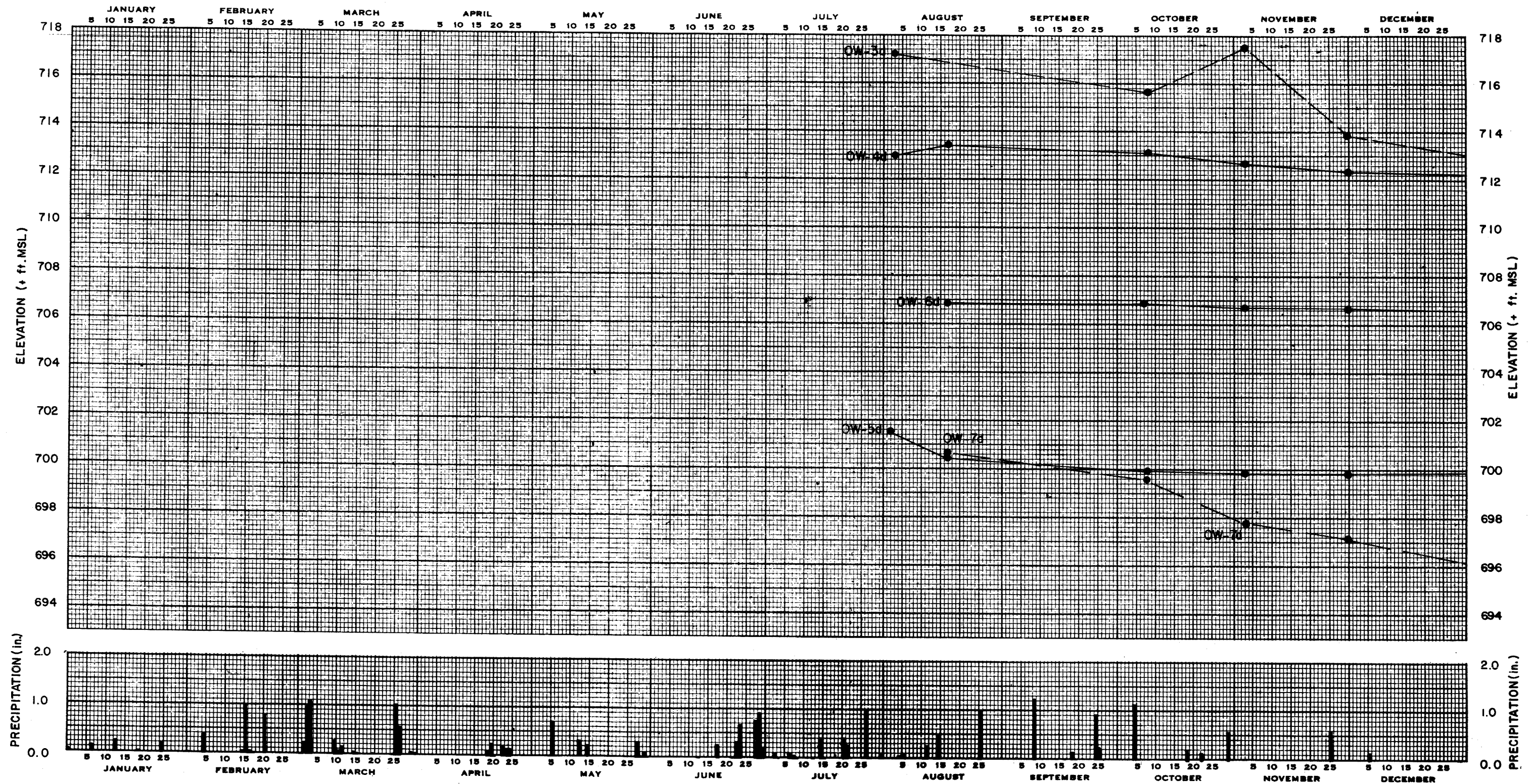
CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-39

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 1

(SHEET 3 of 3)





**NOTES:**

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE.

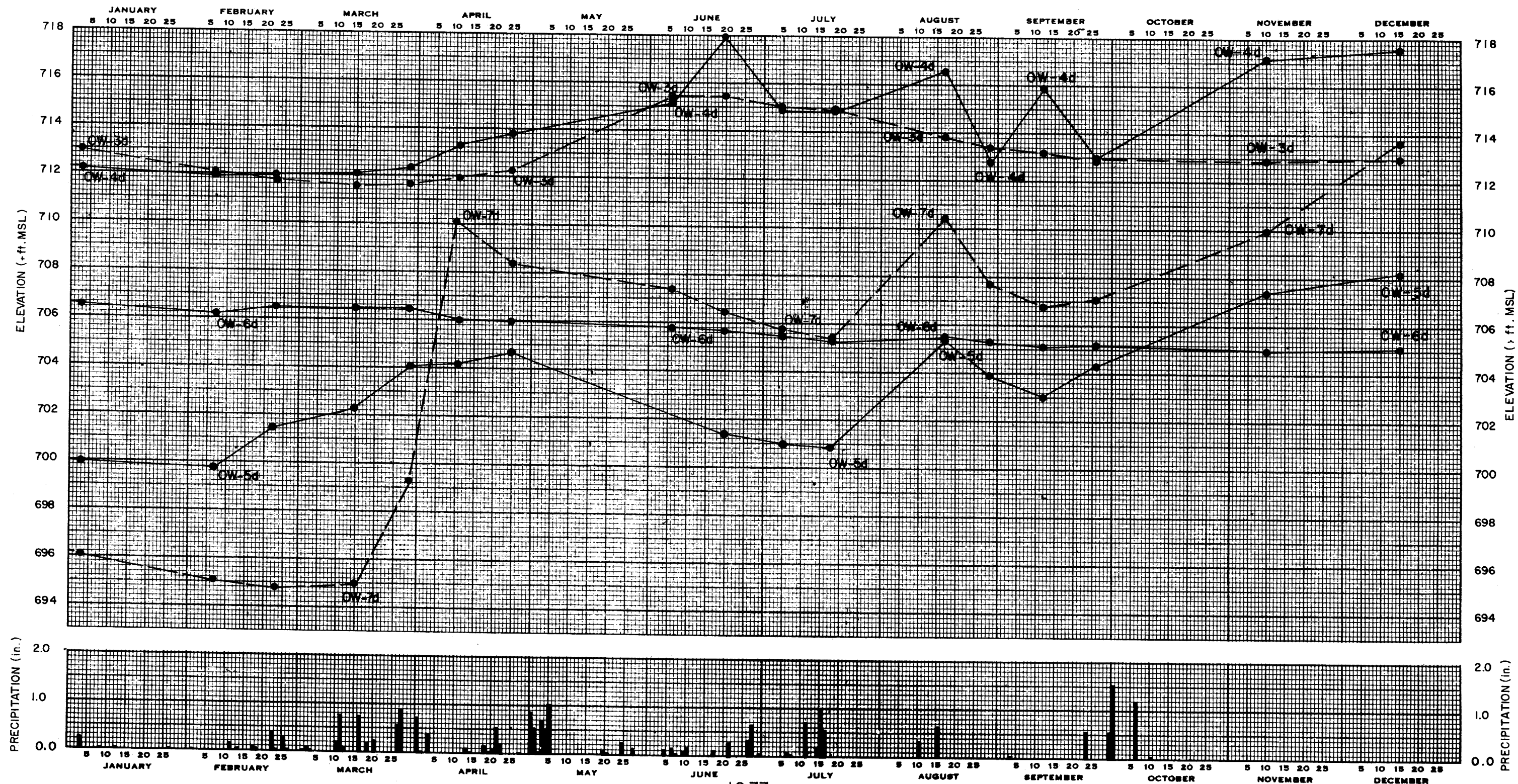
CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-40

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 2

(SHEET 1 of 4)





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. ONSITE PRECIPITATION DATA ARE NOT AVAILABLE FROM JULY 19 THROUGH AUGUST 9 OR FROM OCTOBER 19 THROUGH DECEMBER 31, 1977.

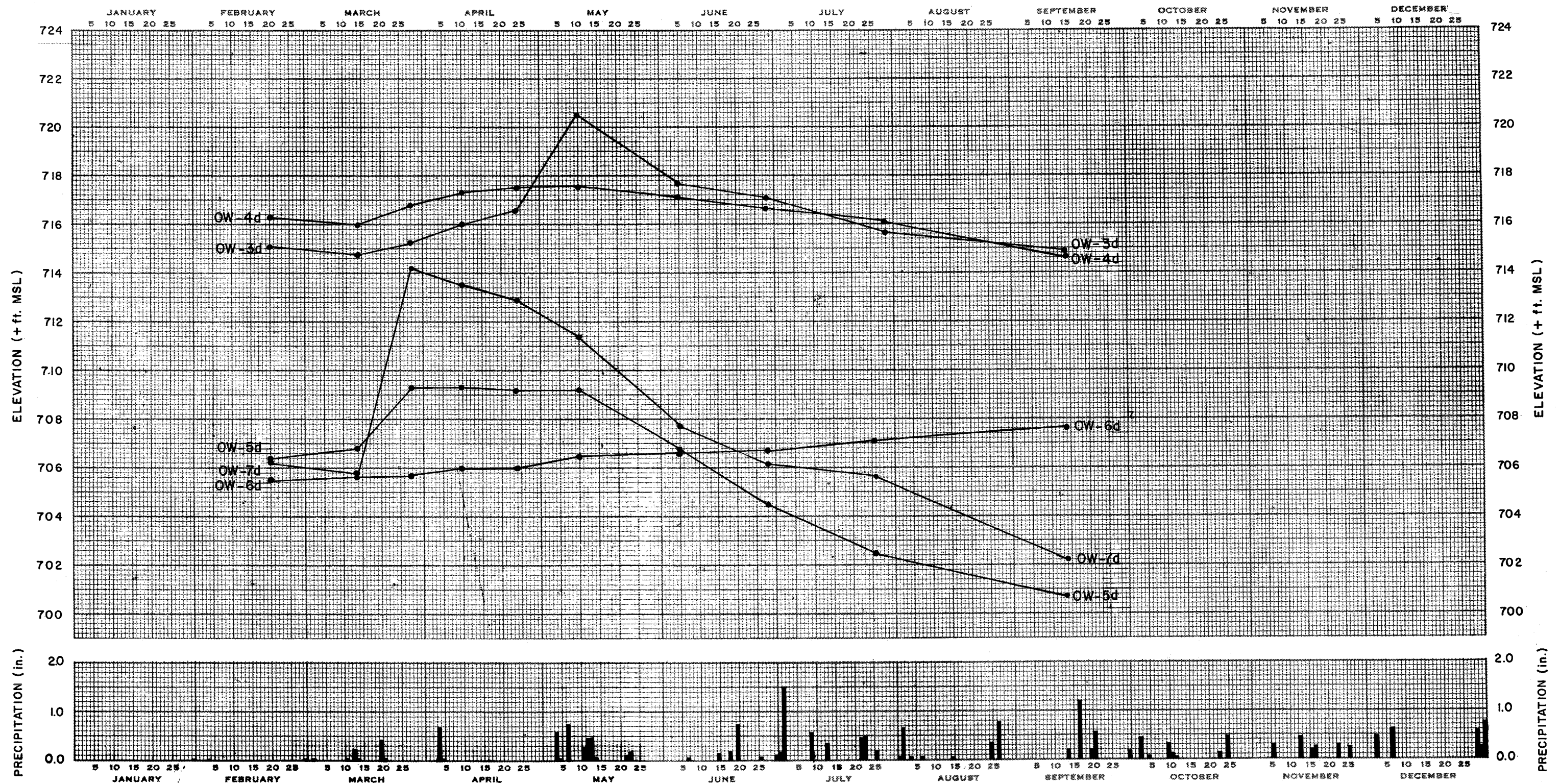
**CLINTON POWER STATION**  
**UPDATED SAFETY ANALYSIS REPORT**

FIGURE 2.4-40

GROUNDWATER LEVELS AND  
 DAILY PRECIPITATION - GROUP 2

(SHEET 2 of 4)





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 1 TO JANUARY 27, FEBRUARY 6 TO FEBRUARY 15, MARCH 22 TO MARCH 31, APRIL 6 TO APRIL 26, AND AUGUST 17 TO AUGUST 22.
4. NO GROUND WATER LEVEL DATA WERE REPORTED FOR JANUARY OR FROM SEPTEMBER 15 THROUGH DECEMBER 31, 1978.

1978

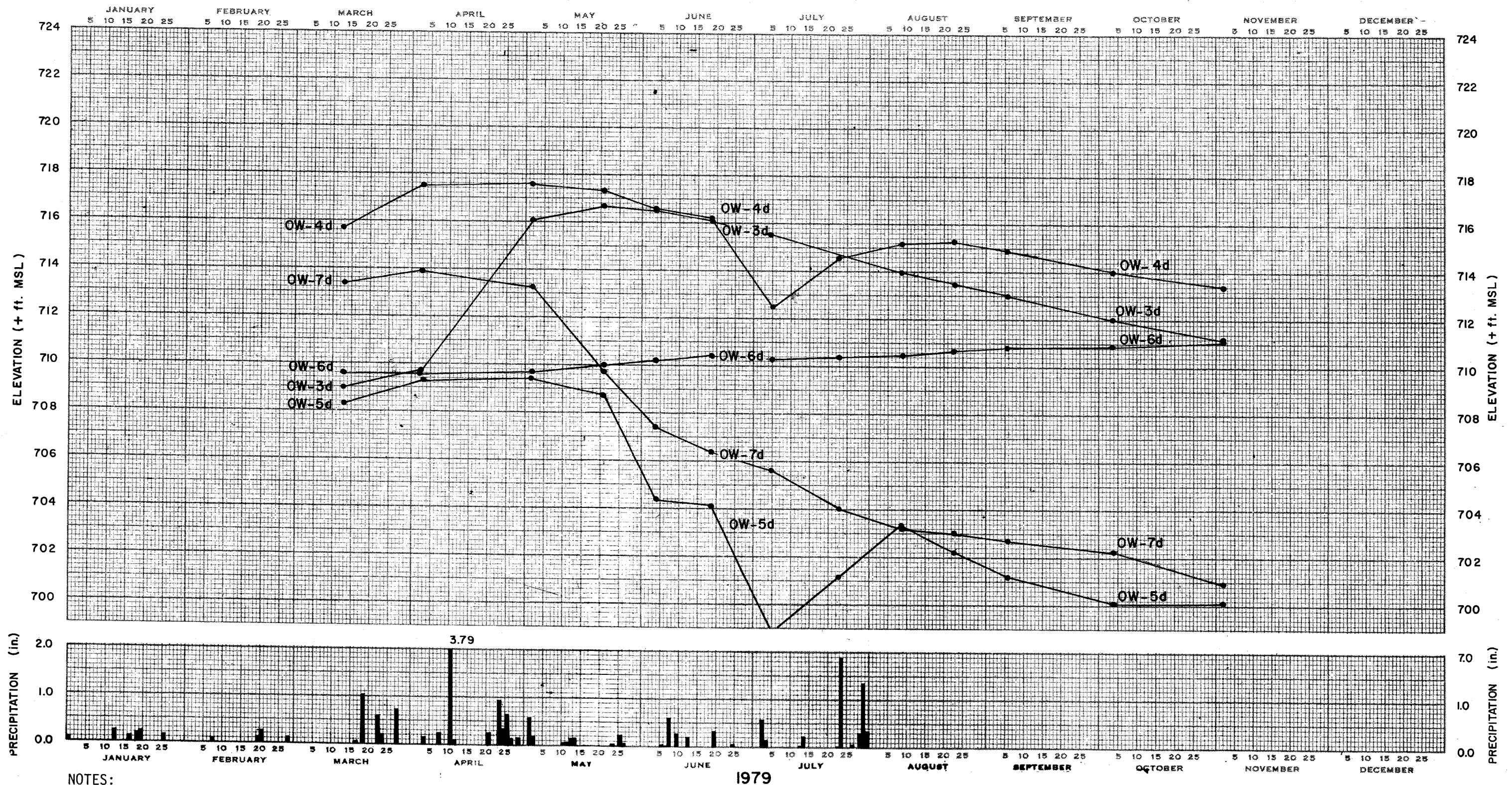
CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-40

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 2

(SHEET 3 of 4)





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 30 AND 31, MARCH 2 THROUGH MARCH 9, MARCH 29 THROUGH APRIL 2, JULY 5 THROUGH JULY 9, 1979.
4. NO GROUND WATER LEVEL DATA WERE REPORTED FROM JANUARY 1 THROUGH MARCH 12, 1979.
5. OFF-SCALE GROUND WATER LEVEL FOR PIEZOMETER OW5-d C., JULY 5, 1979 IS 698.7 FT.

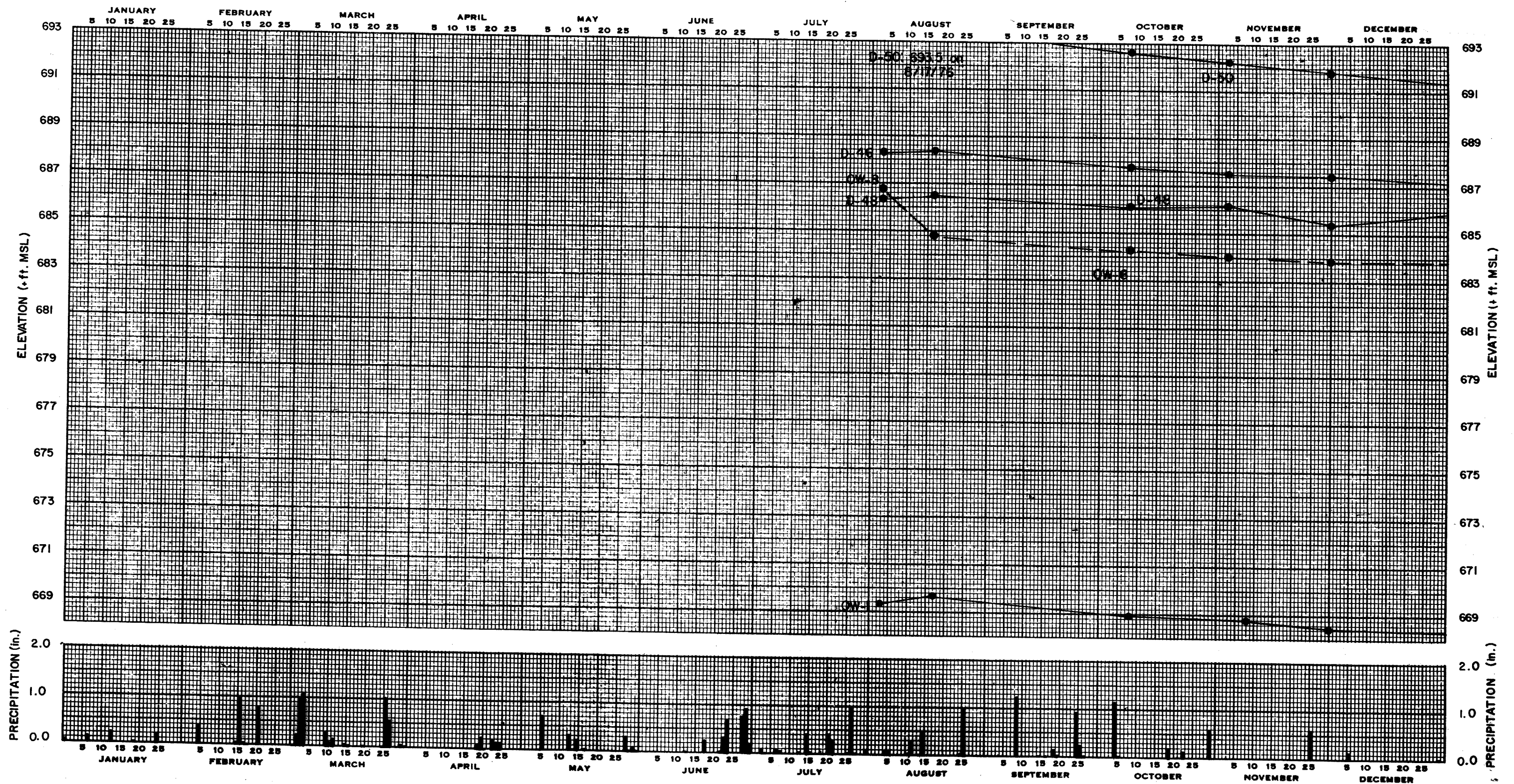
CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-40

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 2

(SHEET 4 of 4)





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE.

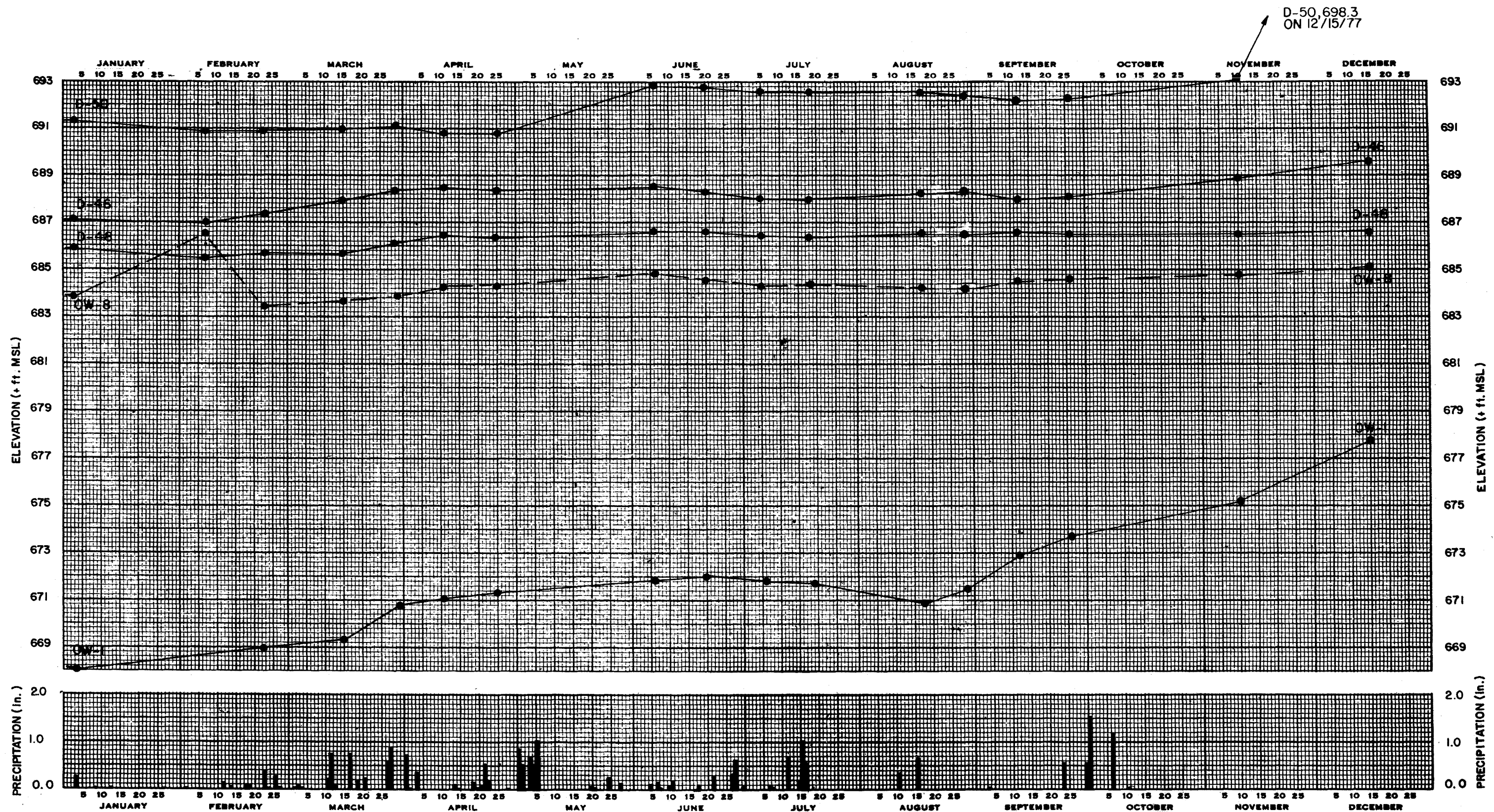
1976

CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-41

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 3  
(SHEET 1 of 4)





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. ONSITE PRECIPITATION DATA ARE NOT AVAILABLE FROM JULY 19 THROUGH AUGUST 9 OR FROM OCTOBER 19 THROUGH DECEMBER 31, 1977.

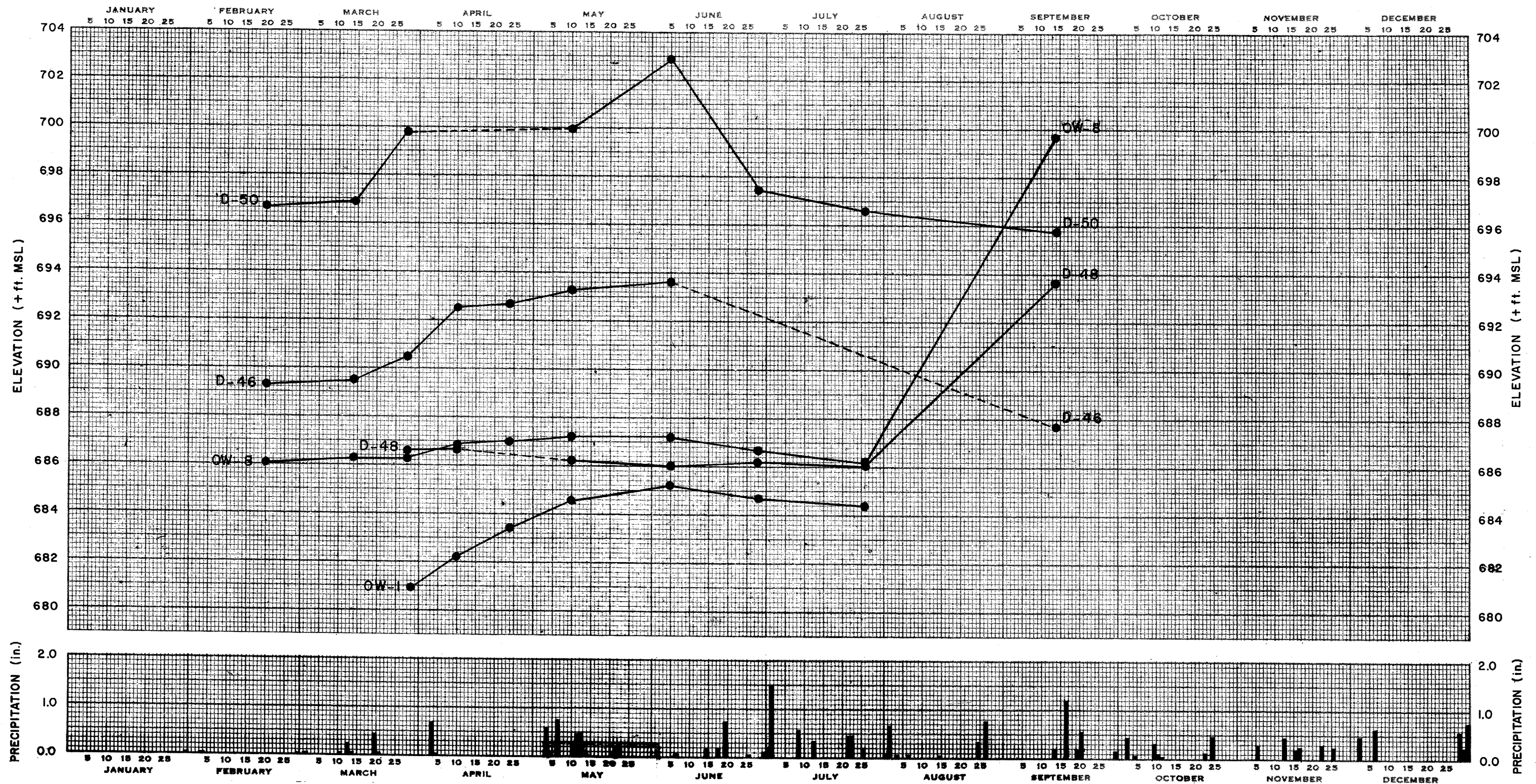
CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-41

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 3

(SHEET 2 of 4)





**NOTES:**

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 1 TO JANUARY 27, FEBRUARY 6 TO FEBRUARY 15, MARCH 22 TO MARCH 31, APRIL 6 TO APRIL 26, AND AUGUST 17 TO AUGUST 22.
4. NO GROUND WATER LEVEL DATA WERE REPORTED FOR JANUARY OR FROM SEPTEMBER 15 THROUGH DECEMBER 31, 1978.
5. DASHED LINES ARE USED FOR TIME PERIODS WHERE DATA WERE NOT REPORTED.
6. PIEZOMETER D-48 WAS FROZEN AND PIEZOMETER OW-1 WAS BURIED WITH SNOW ON FEBRUARY 20 AND MARCH 14, 1978.
7. PIEZOMETER OW-1 WAS REPORTED DRY OR CLOGGED ON SEPTEMBER 14, 1978.

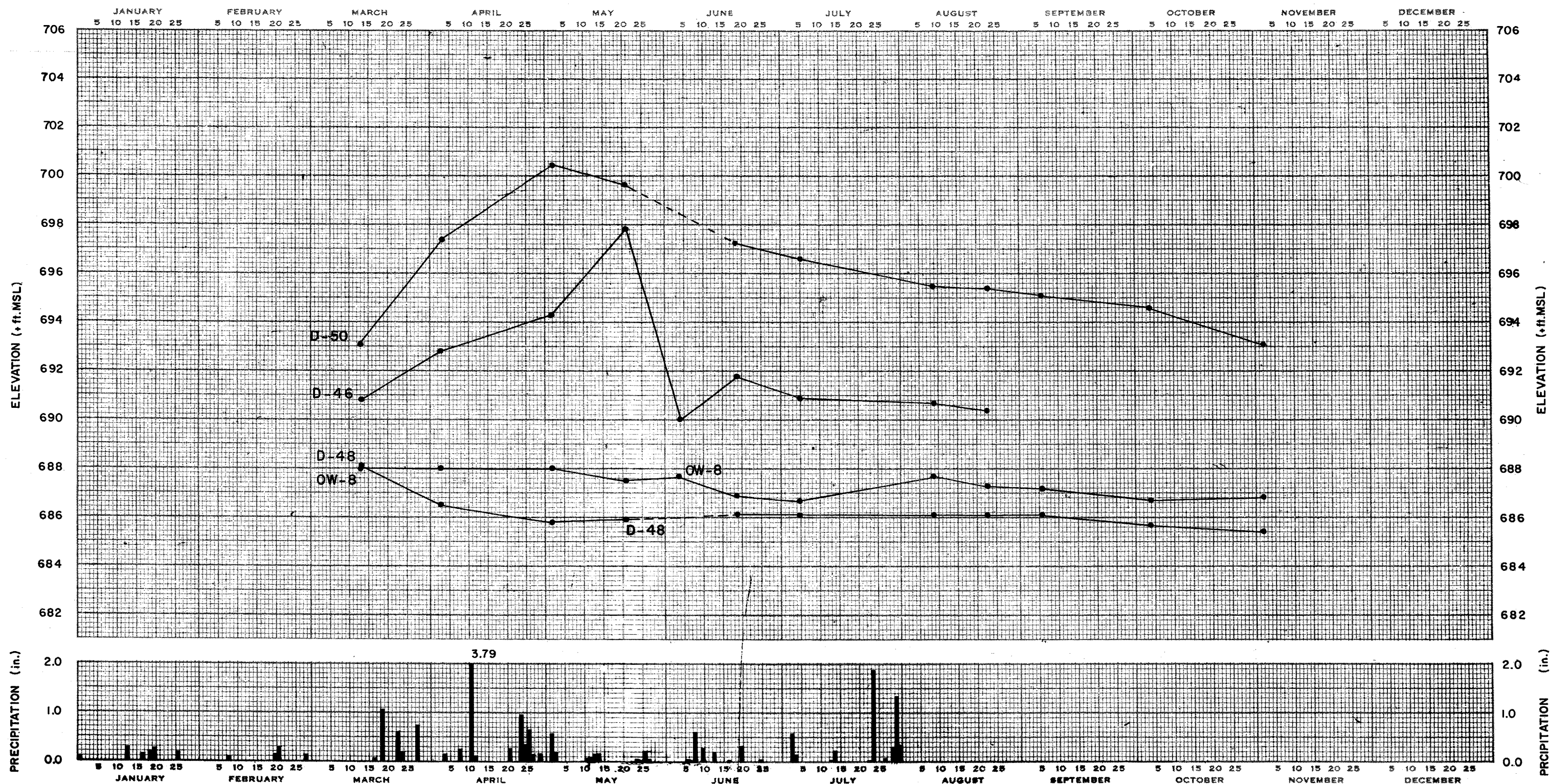
**CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 2.4-41

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 3

(SHEET 3 of 4)





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 30 AND 31, MARCH 2 THROUGH MARCH 9, MARCH 29 THROUGH APRIL 2, JULY 5 THROUGH JULY 9, 1979.
4. NO GROUND WATER LEVEL DATA WERE REPORTED FROM JANUARY 1 THROUGH MARCH 12, 1979.
5. PIEZOMETER D-46 WAS REPORTED DESTROYED AS OF SEPTEMBER 6, 1979.
6. DASHED LINES ARE USED FOR TIME PERIODS WHERE DATA WERE NOT REPORTED.
7. PIEZOMETER OW-1 HAS BEEN REPORTED DRY OR CLOGGED IN 1979.

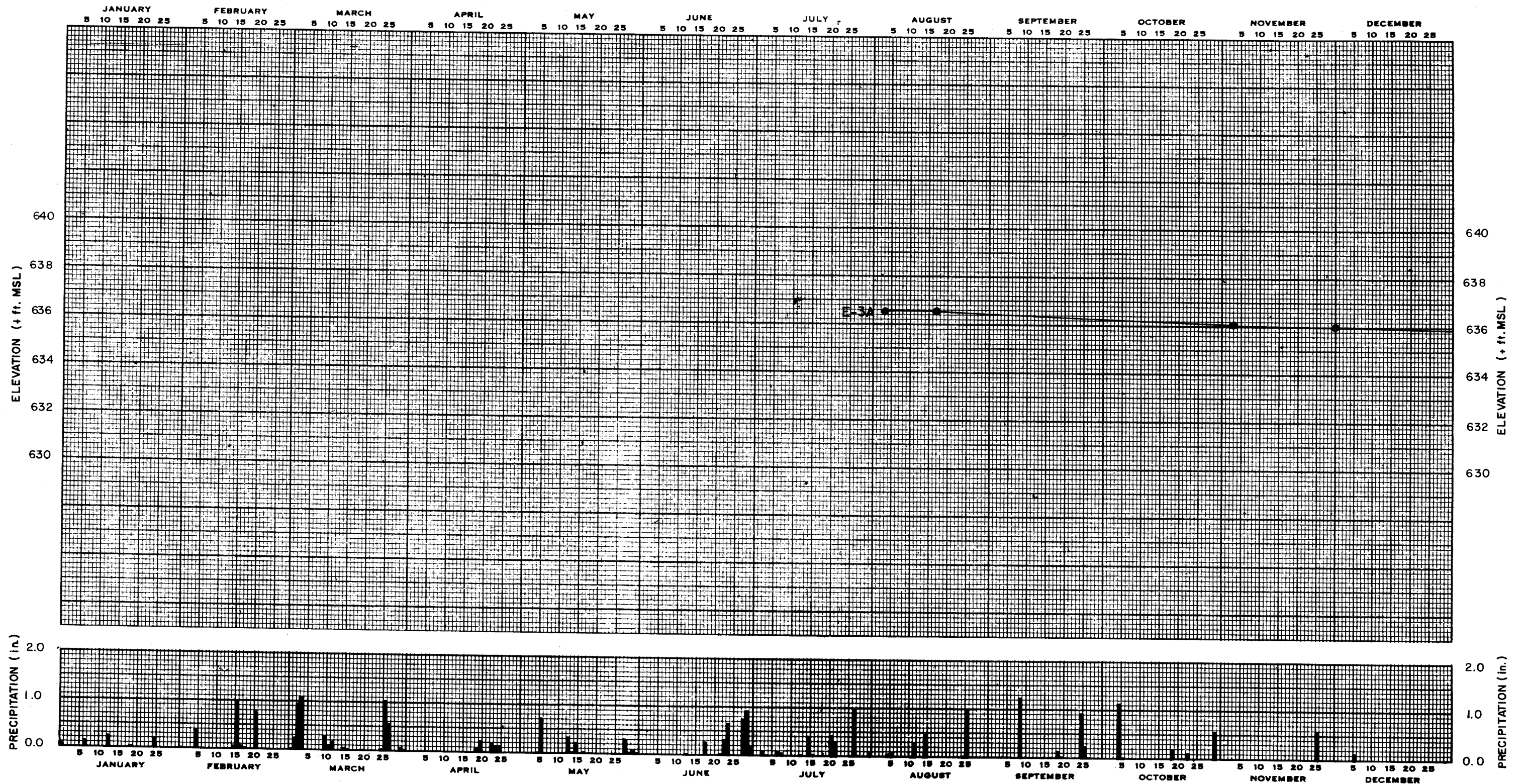
CLINTON POWER STATION  
 UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-41

GROUNDWATER LEVELS AND  
 DAILY PRECIPITATION - GROUP 3

(SHEET 4 of 4)





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE.

1976

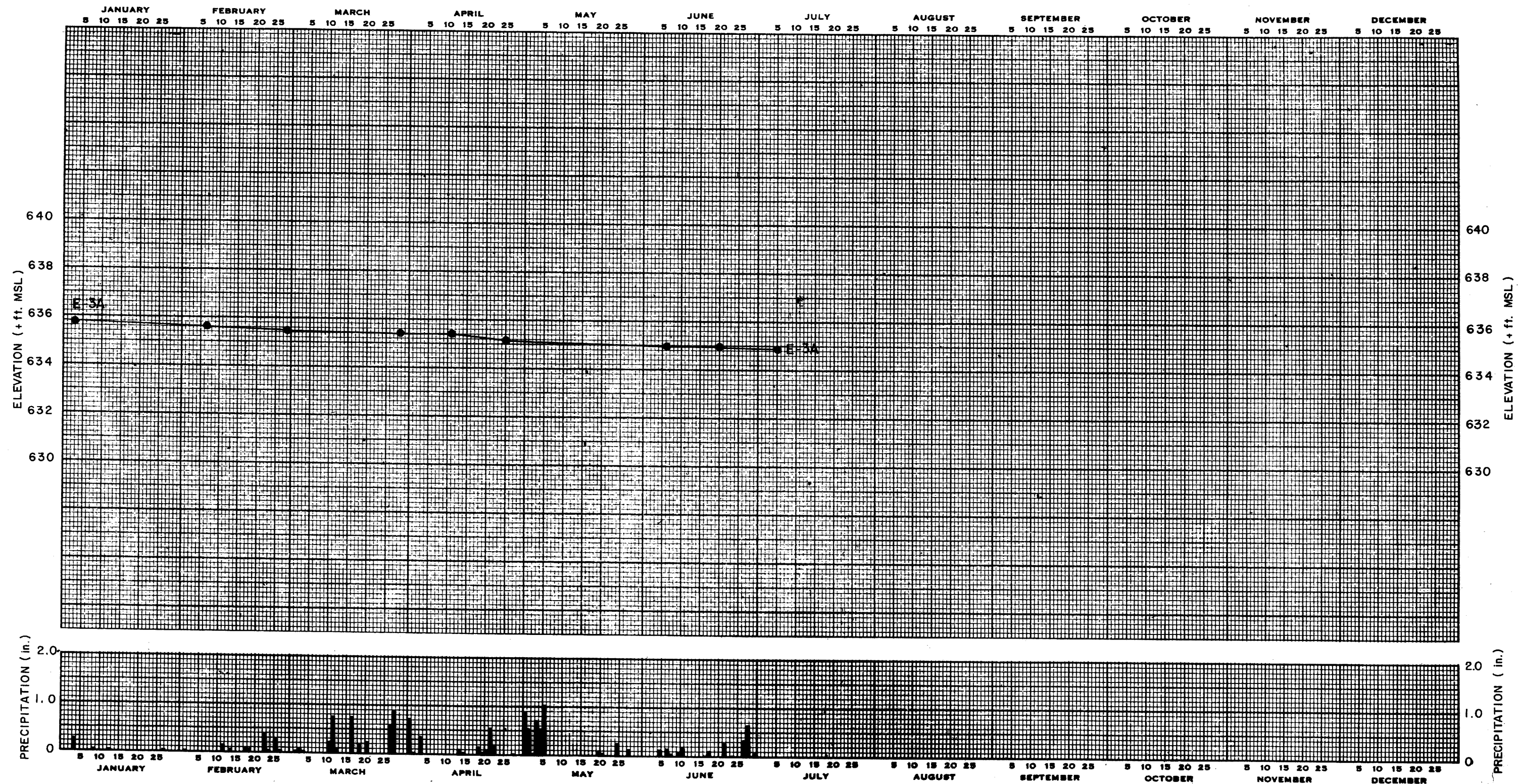
CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-42

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 4

(SHEET 1 of 4)

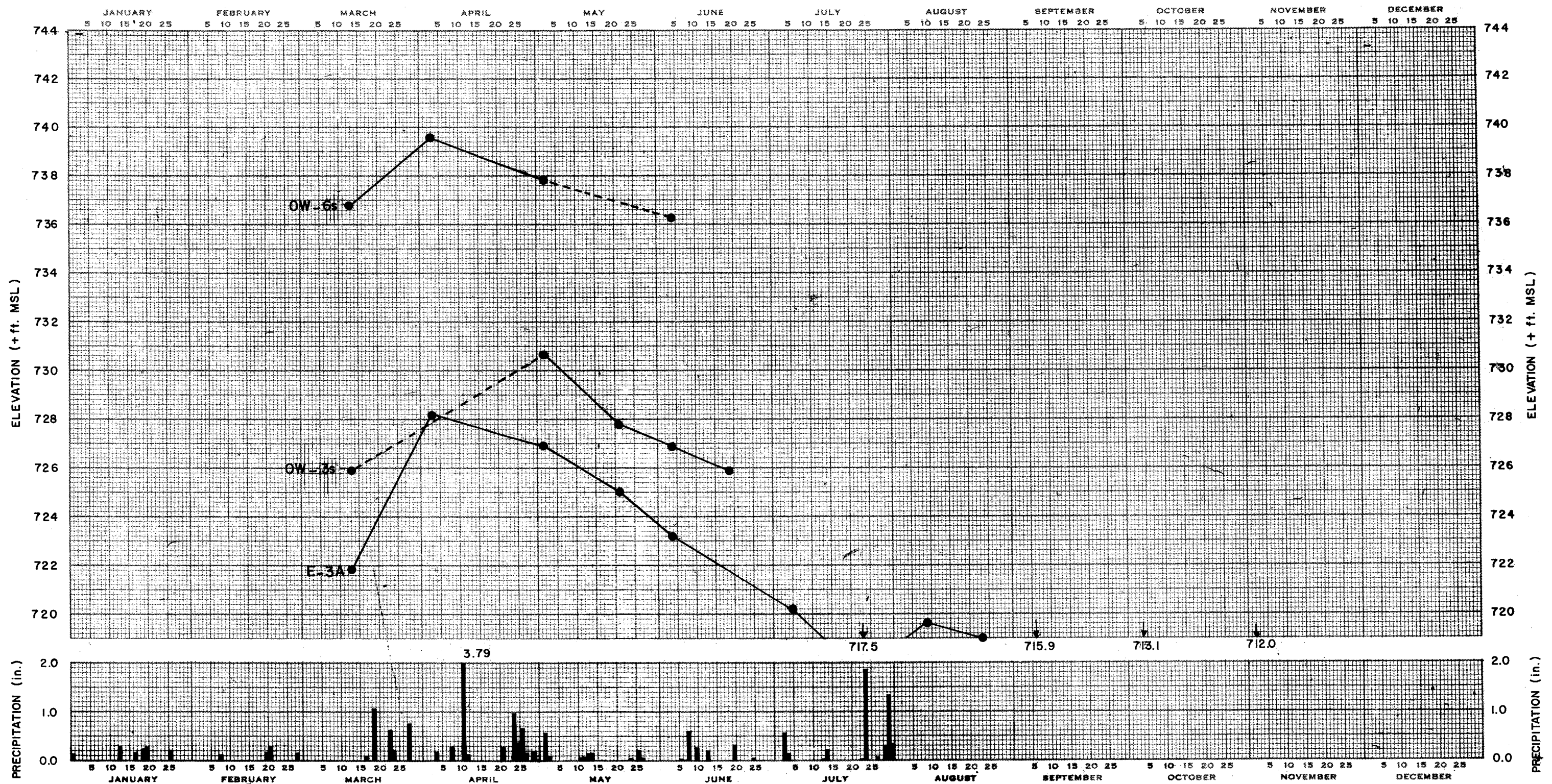




**NOTES:**

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE.
4. PIEZOMETER E-3A BECAME INOPERATIVE AFTER THE MEASUREMENT TAKEN JULY 5, 1977.





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 30 AND 31, MARCH 2 THROUGH MARCH 9, MARCH 29 THROUGH APRIL 2, JULY 5 THROUGH JULY 9, 1979.  
NO GROUND WATER LEVEL DATA WERE REPORTED FROM JANUARY 1 THROUGH MARCH 12, 1979.
4. 1979
5. DASHED LINES ARE USED FOR TIME PERIODS WHERE DATA WERE NOT RECORDED.
6. OFF-SCALE GROUND WATER LEVELS FOR PIEZOMETER E-3A ON JULY 23, SEPTEMBER 6, AND OCTOBER 4, 1979, ARE 715.5 FT., 715.9 FT., AND 713.1 FT., RESPECTIVELY.
7. PIEZOMETERS OW-3s AND OW-6s HAVE BEEN REPORTED AS DRY FROM JULY 5, 1979.

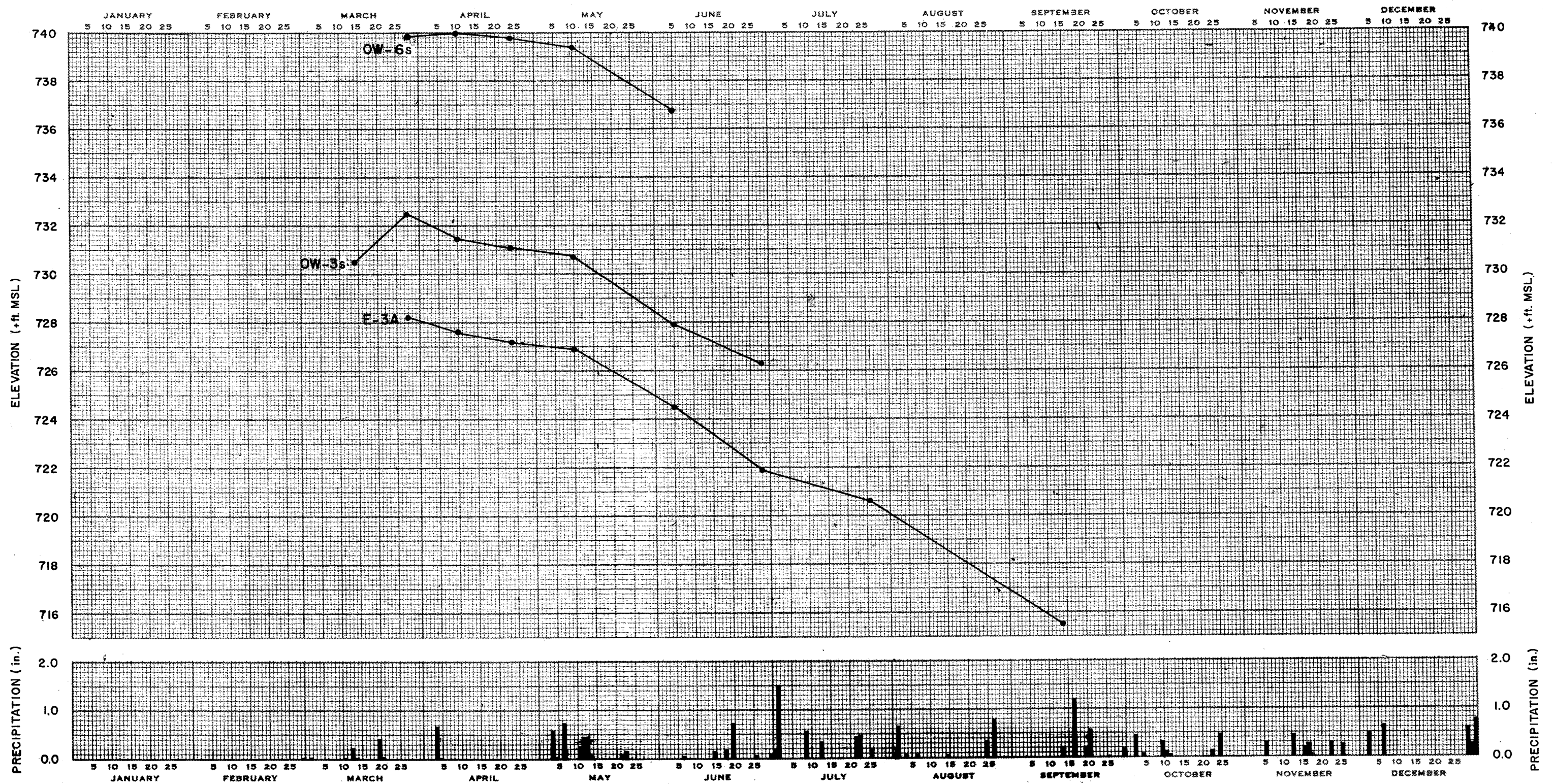
CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-42

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 4

(SHEET 3 of 4)





NOTES:

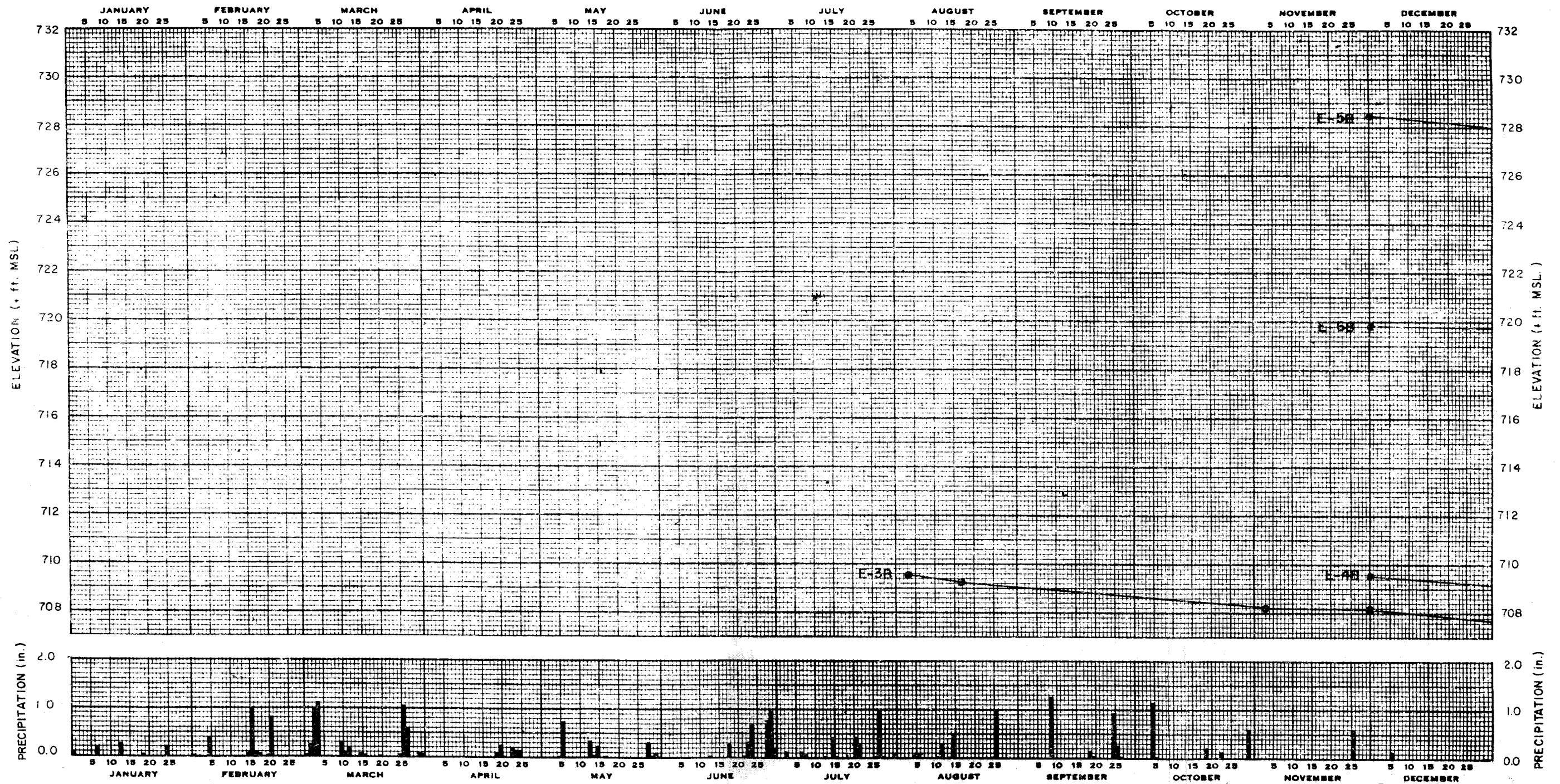
1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 1 TO JANUARY 27, FEBRUARY 6 TO FEBRUARY 15, MARCH 22 TO MARCH 31, APRIL 6 TO APRIL 26, AND AUGUST 17 TO AUGUST 22.
4. NO GROUND WATER LEVEL DATA WERE REPORTED FOR JANUARY OR FROM SEPTEMBER 15 THROUGH DECEMBER 31, 1978.
5. PIEZOMETER OW-3s WAS REPORTED DRY FEBRUARY 20 AND FROM JULY 26 THROUGH SEPTEMBER 14, 1978.
6. PIEZOMETER OW-6s WAS REPORTED DRY FEBRUARY 20, MARCH 14, AND FROM JUNE 28 THROUGH SEPTEMBER 14, 1978.
7. PIEZOMETER E-3A IS MALFUNCTIONING.

CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-42

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 4

(SHEET 4 of 4)



**NOTES:**

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE.

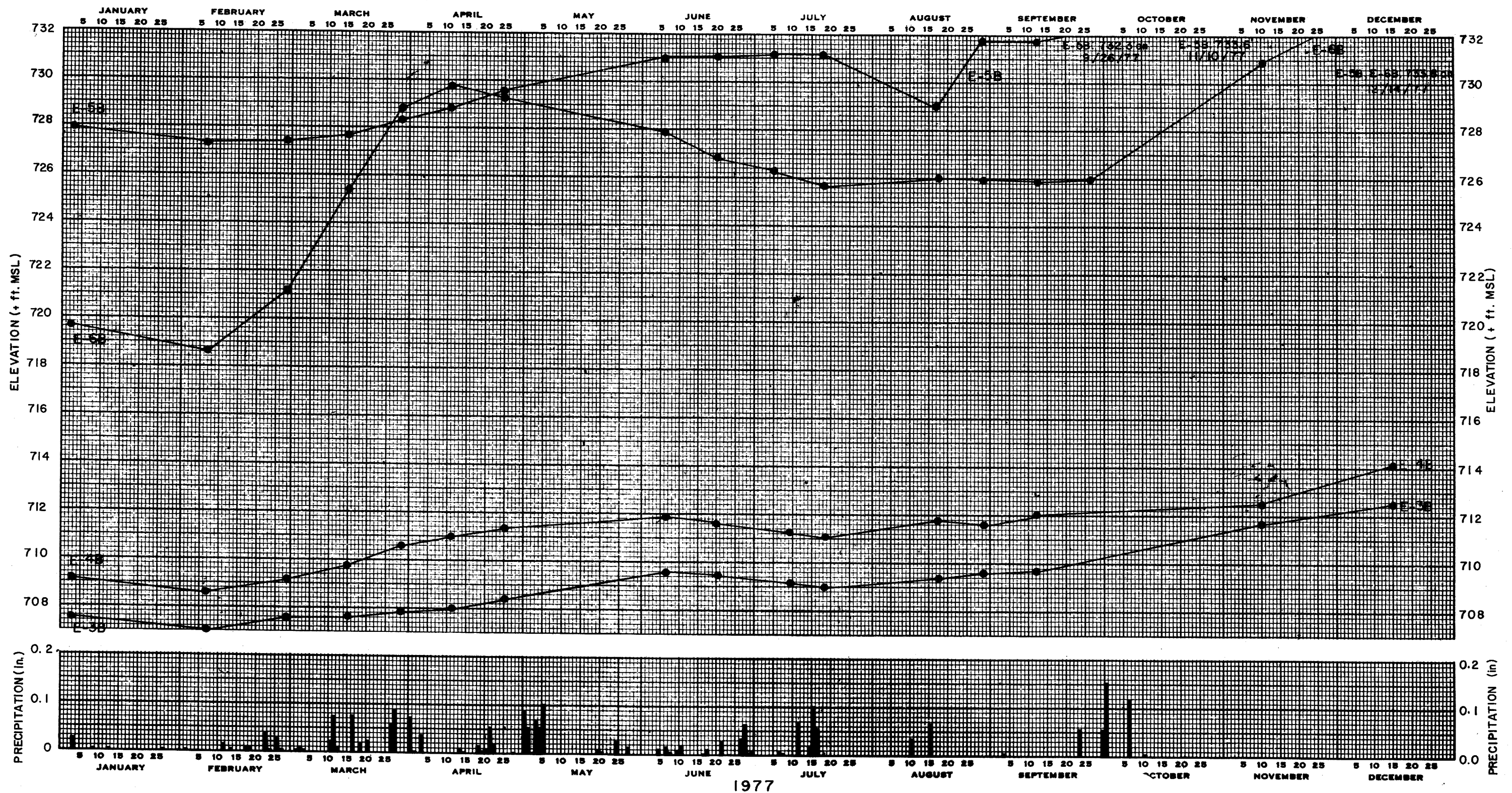
1976

CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-43

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 5  
(SHEET 1 of 4)





**NOTES:**

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. ONSITE PRECIPITATION DATA ARE NOT AVAILABLE FROM JULY 19 THROUGH AUGUST 9 OR FROM OCTOBER 19 THROUGH DECEMBER 31, 1977..

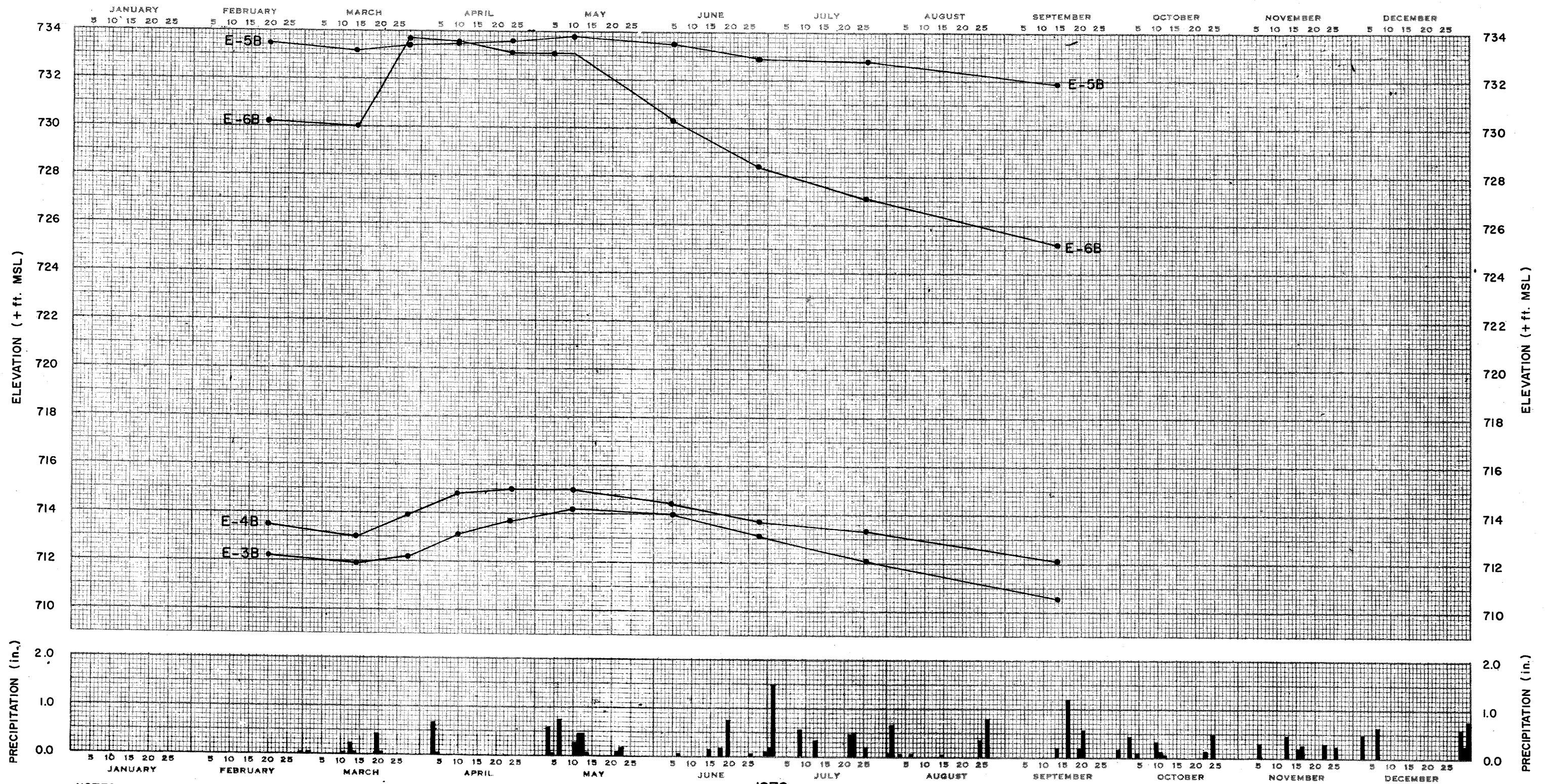
CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-43

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 5

(SHEET 2 of 4)





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 1 TO JANUARY 27, FEBRUARY 6 TO FEBRUARY 15, MARCH 22 TO MARCH 31, APRIL 6 TO APRIL 26, AND AUGUST 17 TO AUGUST 22.
4. NO GROUND WATER LEVEL DATA WERE REPORTED FOR JANUARY OR FROM SEPTEMBER 15 THROUGH DECEMBER 31, 1978.

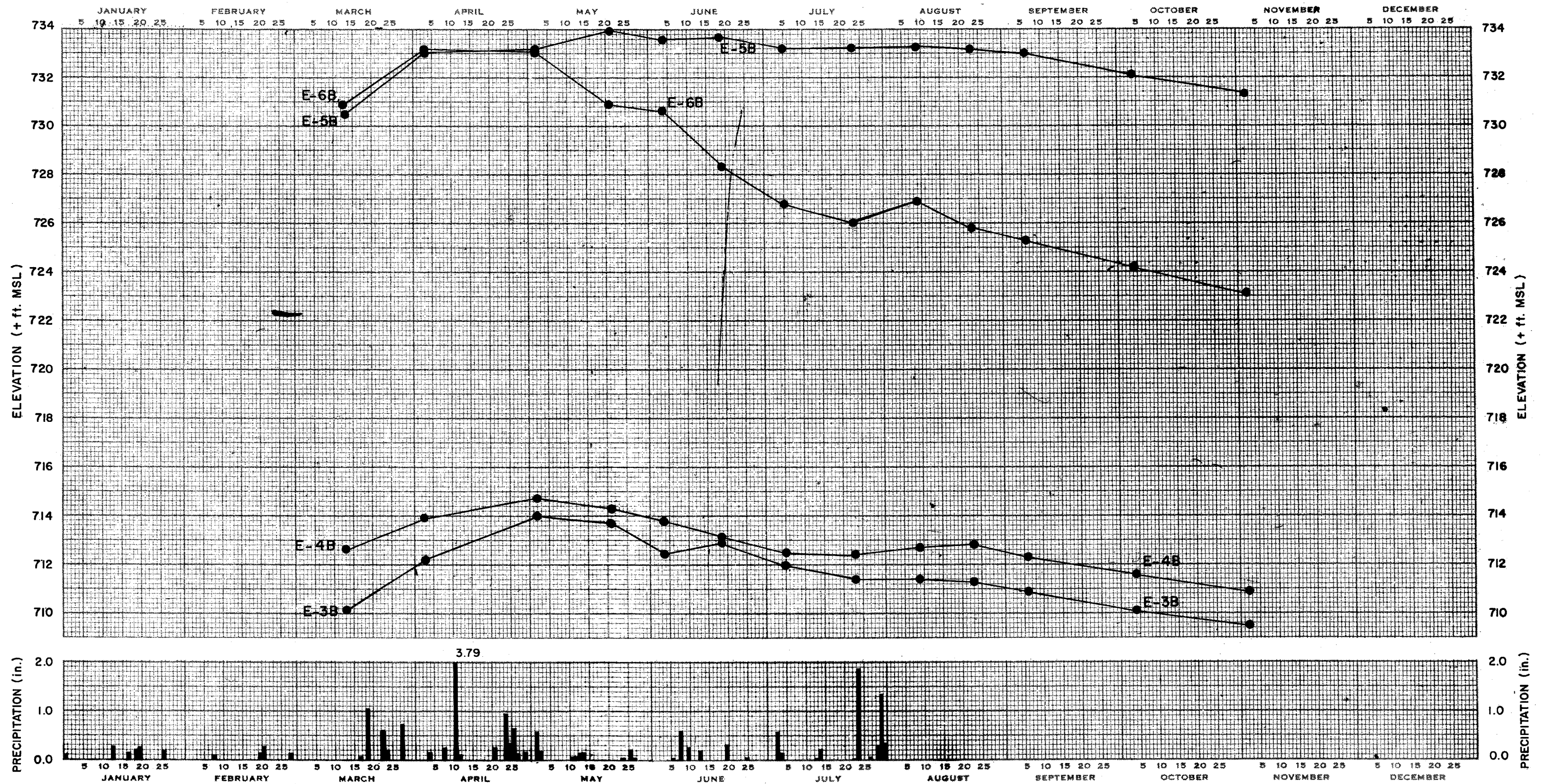
CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-43

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 5

(SHEET 3 of 4)





NOTES:

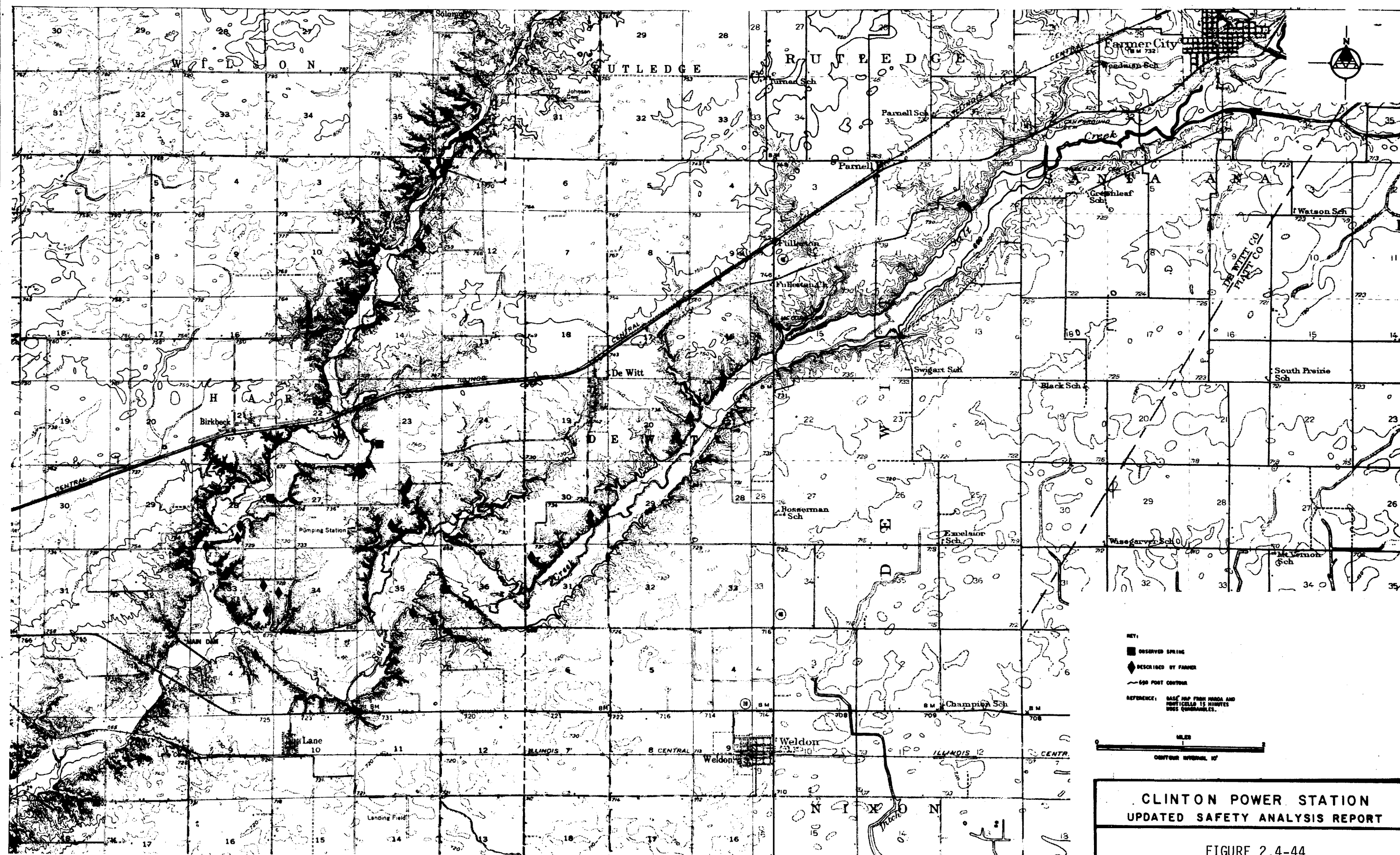
1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURE 2.4-32.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 30 AND 31, MARCH 2 THROUGH MARCH 9, MARCH 29 THROUGH APRIL 2, JULY 5 THROUGH JULY 9, 1979.
4. NO GROUND WATER LEVEL DATA WERE REPORTED FROM JANUARY 1 THROUGH MARCH 12, 1979.

CLINTON POWER STATION  
 UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-43

GROUNDWATER LEVELS AND  
 DAILY PRECIPITATION - GROUP 5

(SHEET 4 of 4)



KEY:  
 ■ OBSERVED SPRING  
 ◆ DESCRIBED BY FARMER  
 --- 500 FOOT CONTOUR

REFERENCE:  
 BASE MAP FROM NOAA AND  
 PHOTOCELL 15 MINUTES  
 1955 QUADRANGLE.

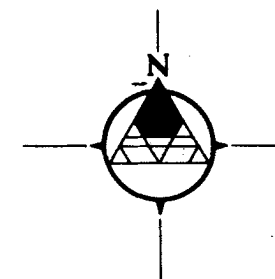
0 1 2 MILES  
 CONTOUR INTERVAL 10'

CLINTON POWER STATION  
 UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-44

SPRINGS IN THE VICINITY OF THE SITE





**LEGEND**

○ 151 NON-PRIVATE WATER WELL LOCATION  
NUMBER REFERS TO TABULATION IN  
TABLE 2.4-33.

**NOTES:**

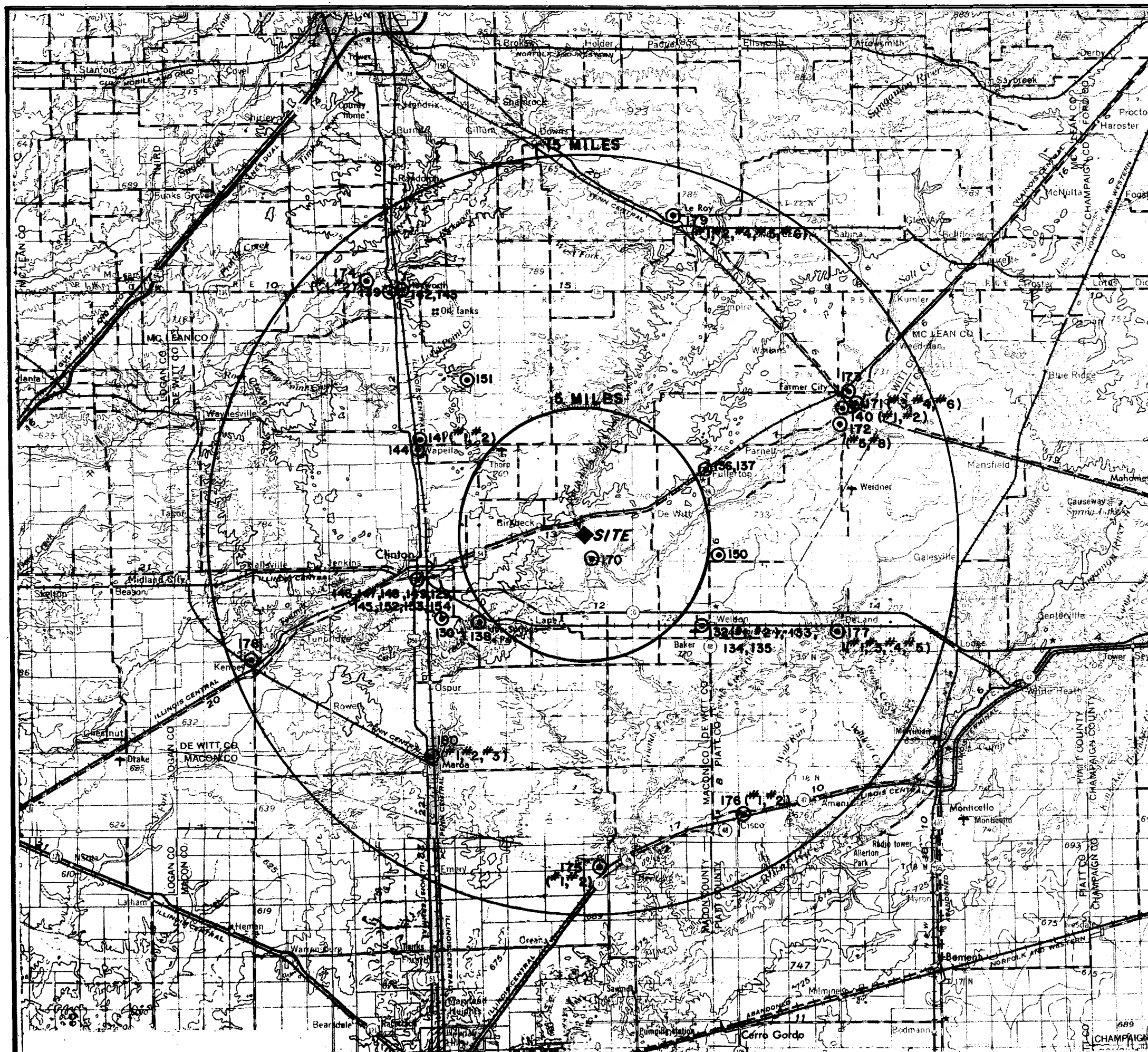
1. THE SURVEY OF NON-PRIVATE WATER WELLS WAS INITIALLY CONDUCTED BY DAMES & MOORE FOR THE PSAR. THE SURVEY WAS SUPPLEMENTED BY SARGENT & LUNDY FOR THE FSAR.
2. BASE MAP MODIFIED FROM USGS, 1:250,000 SERIES TOPOGRAPHIC MAPS: PEORIA, ILLINOIS, 1958, AND DECATUR, ILLINOIS, 1958.

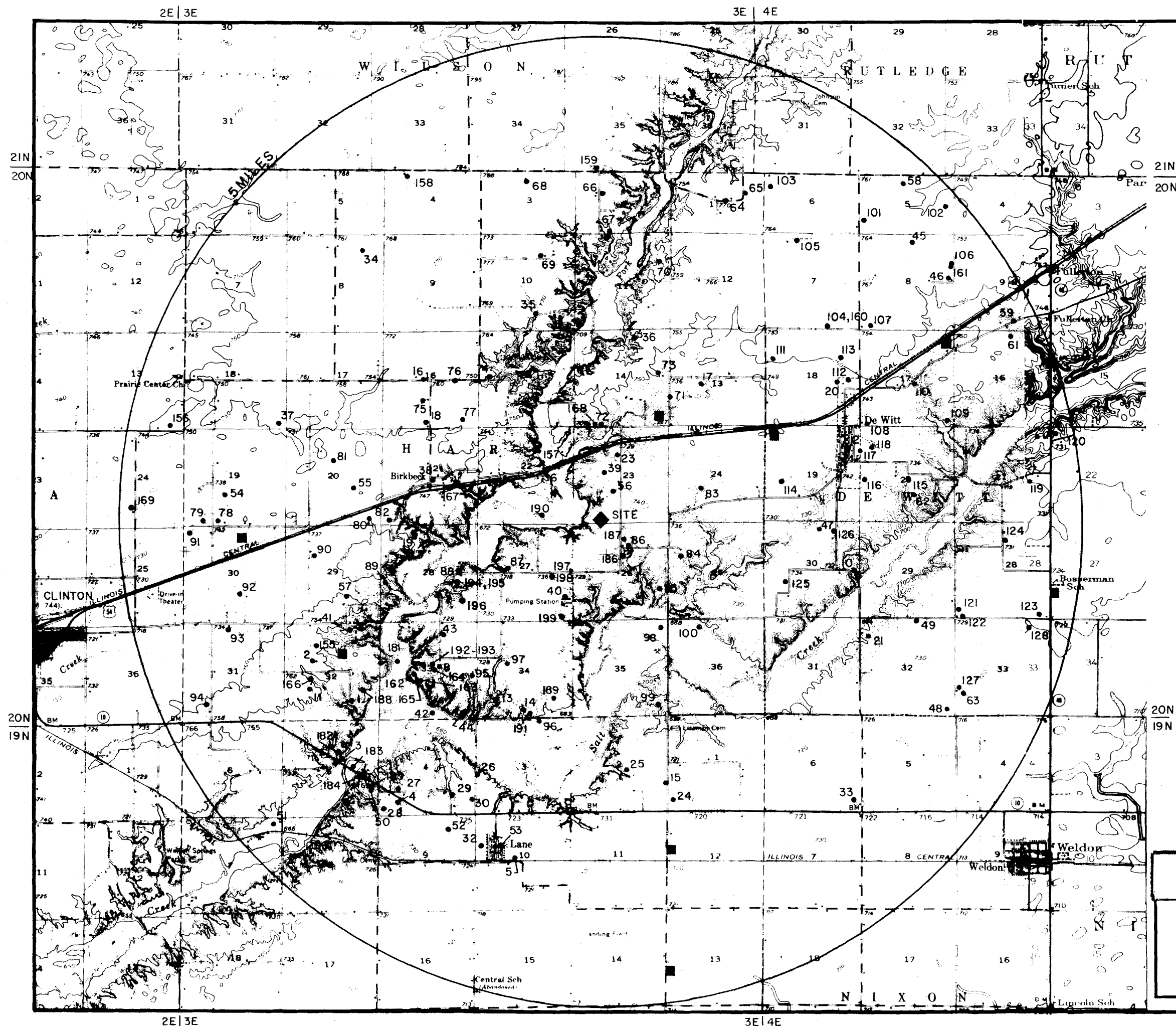


**CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 2.4-45

NON-PRIVATE WATER WELLS WITHIN  
15 MILES OF SITE



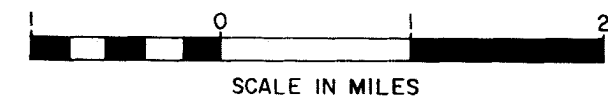


**LEGEND**

- 63 WATER WELL LOCATION NUMBER REFERS TO TABULATION IN TABLE 2.4-35
- PRIVATE WATER WELL (LOCATION KNOWN, DATA NOT AVAILABLE)

**NOTES**

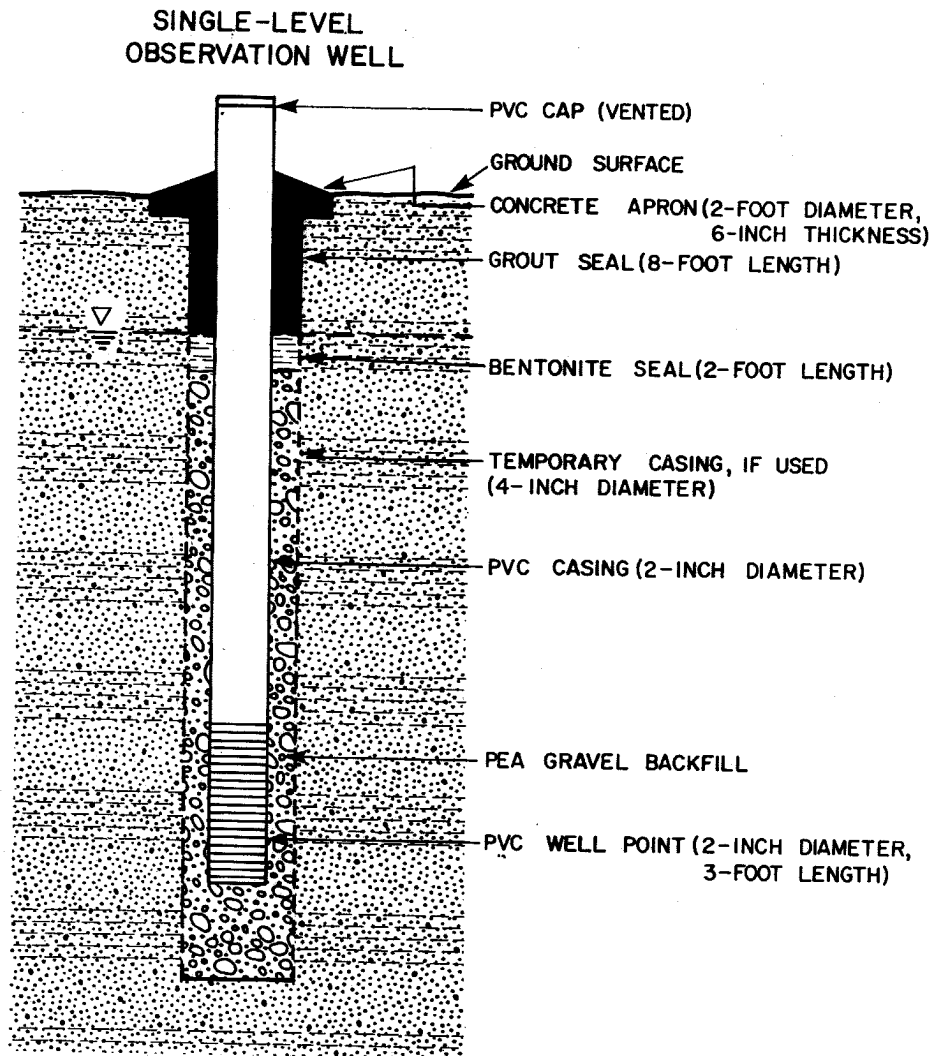
1. THE SURVEY OF WATER WELLS WAS CONDUCTED BY DAMES & MOORE FOR THE PSAR AND REVISED BY SARGENT & LUNDY FOR THE FSAR
2. BASE MAP MODIFIED FROM USGS, 15' SERIES TOPOGRAPHIC MAPS: MAROA, ILLINOIS, 1957, AND MONTICELLO, ILLINOIS, 1937



**CLINTON POWER STATION  
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FIGURE 2.4-46

WATER WELLS WITHIN 5 MILES OF SITE



NOTES:

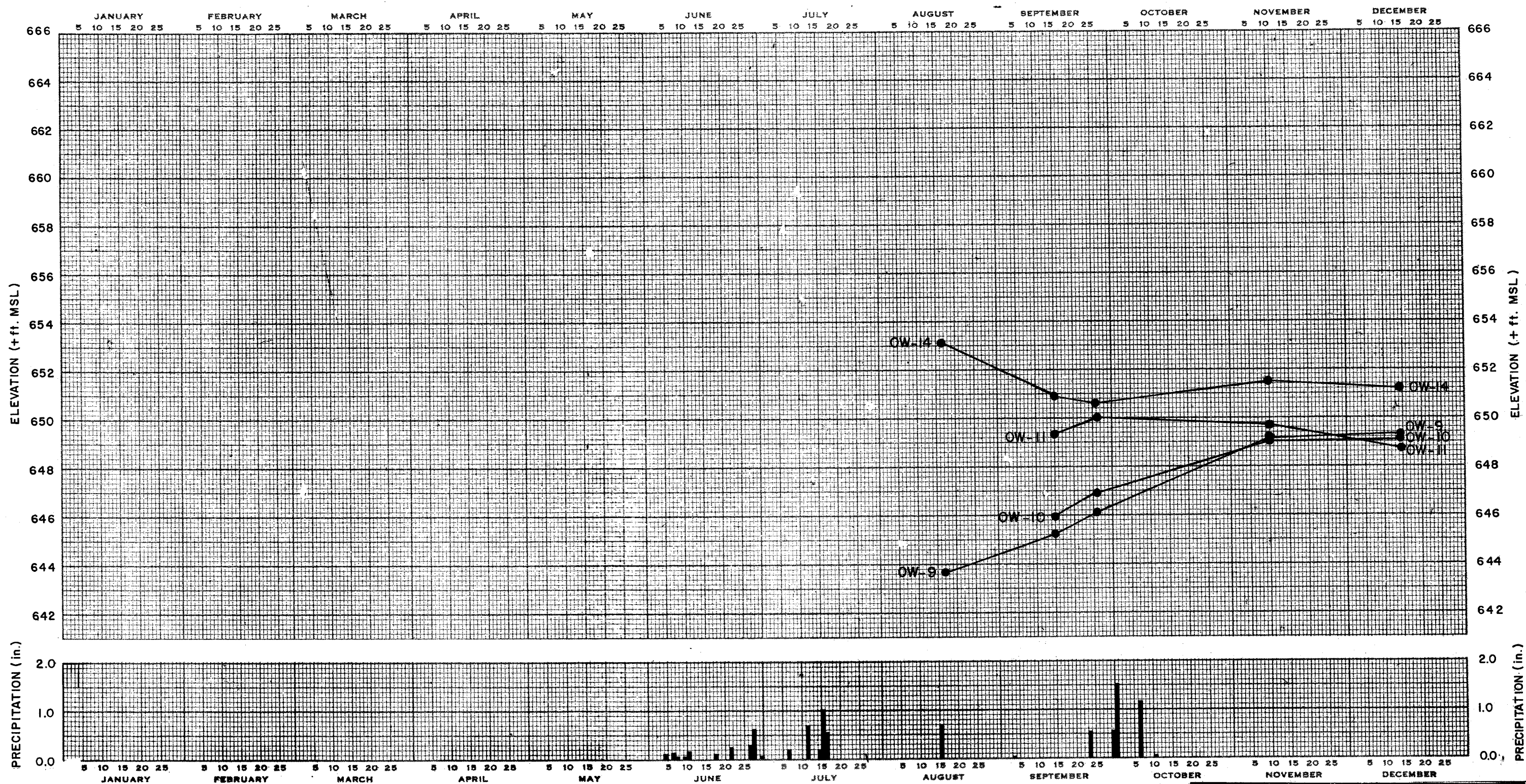
1. NOT DRAWN TO SCALE.
2. LOCATIONS OF OW-SERIES PIEZOMETERS SHOWN ON FIGURE 2.4-32 AND 2.5-272.

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FIGURE 2.4-47

TYPICAL INSTALLATION DETAILS FOR  
OW-SERIES PIEZOMETERS





1977

#### NOTES.

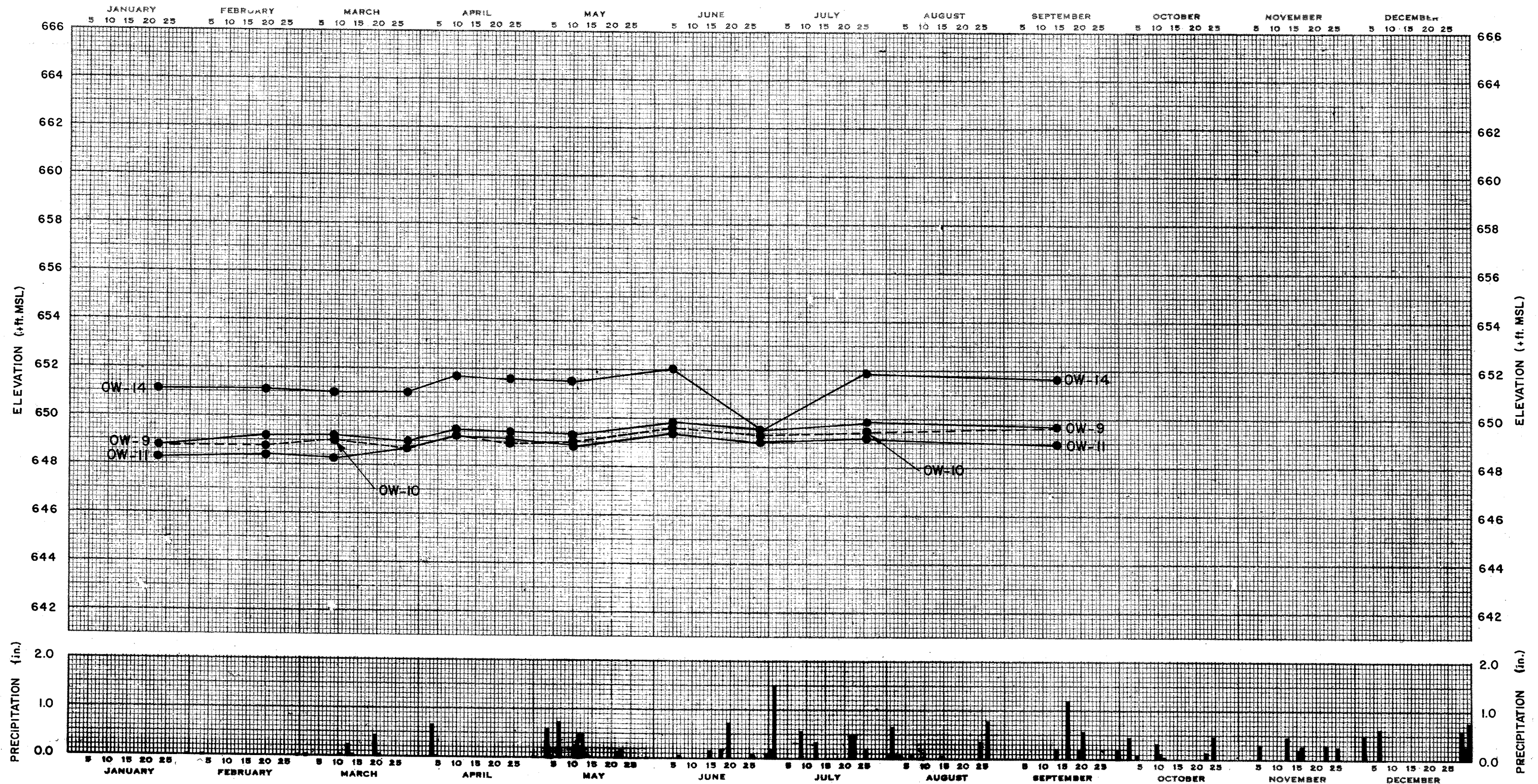
1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURES 2.4-32 AND 2.5-272.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JULY 18 TO AUGUST 10, AND OCTOBER 16 TO DECEMBER 31, 1977.

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FIGURE 2.4-48

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 6  
(SHEET 1 of 3)





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURES 2.4-32 AND 2.5-272.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 1 TO JANUARY 27, FEBRUARY 6 TO FEBRUARY 15, MARCH 22 TO MARCH 31, APRIL 6 TO APRIL 26, AND AUGUST 17 TO AUGUST 22.
4. NO GROUND WATER LEVEL DATA WERE RECORDED FROM SEPTEMBER 14 THROUGH DECEMBER 31, 1978.
5. DASHED LINE SHOWS GROUND WATER LEVEL FOR PIEZOMETER OW-10.

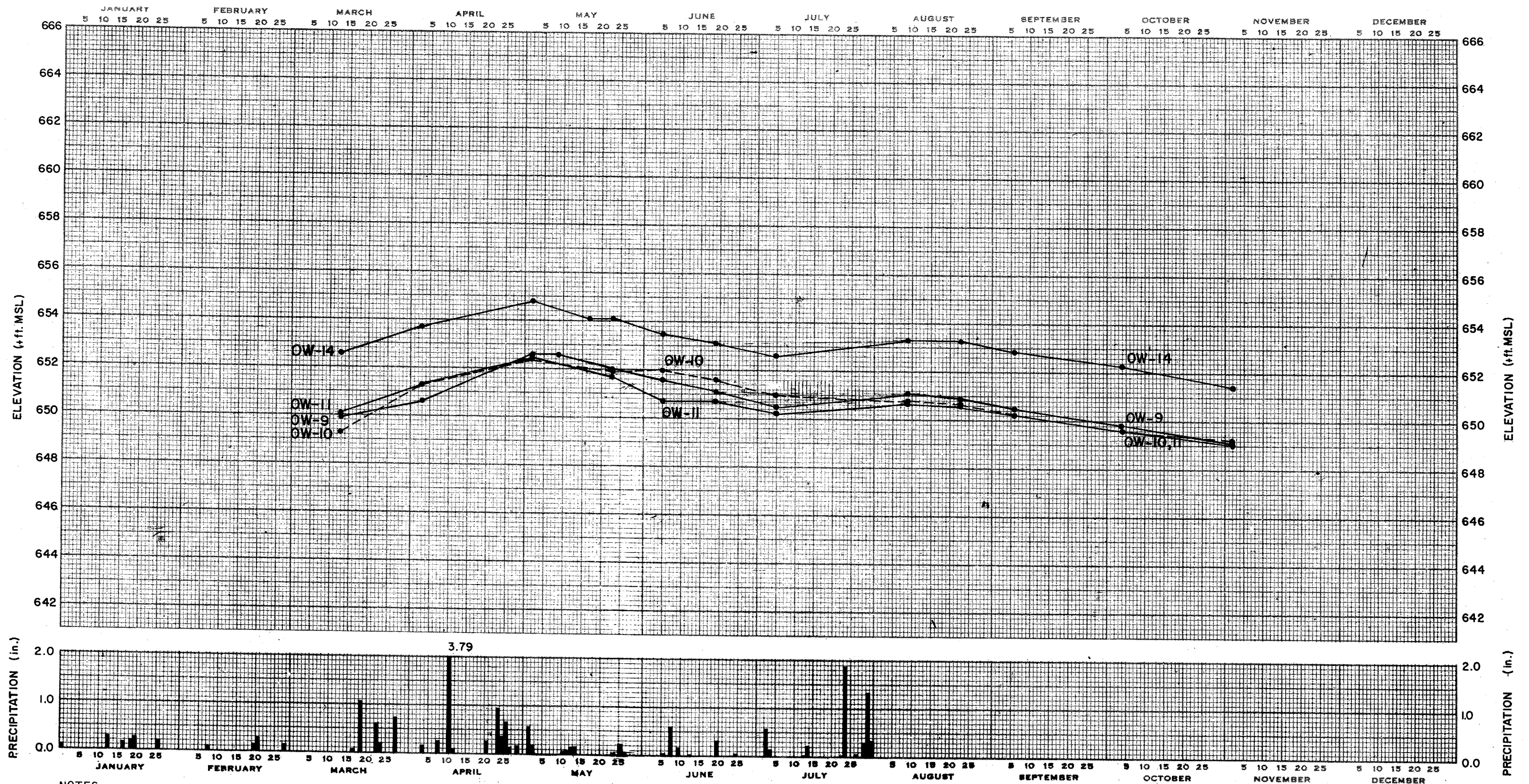
CLINTON POWER STATION  
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FIGURE 2.4-48

GROUNDWATER LEVELS AND  
 DAILY PRECIPITATION - GROUP 6

(SHEET 2 of 3)





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURES 2.4-32 AND 2.5-272.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 30 AND 31, MARCH 2 THROUGH MARCH 9, MARCH 29 THROUGH APRIL 2, JULY 5 THROUGH JULY 9, 1979.
4. THE OPERATION OF PIEZOMETERS OW-18, OW-19, AND OW-20 WAS BEGUN ON AUGUST 9, 1979.
5. DASHED LINE SHOWS GROUND WATER LEVEL FOR PIEZOMETER OW-10.

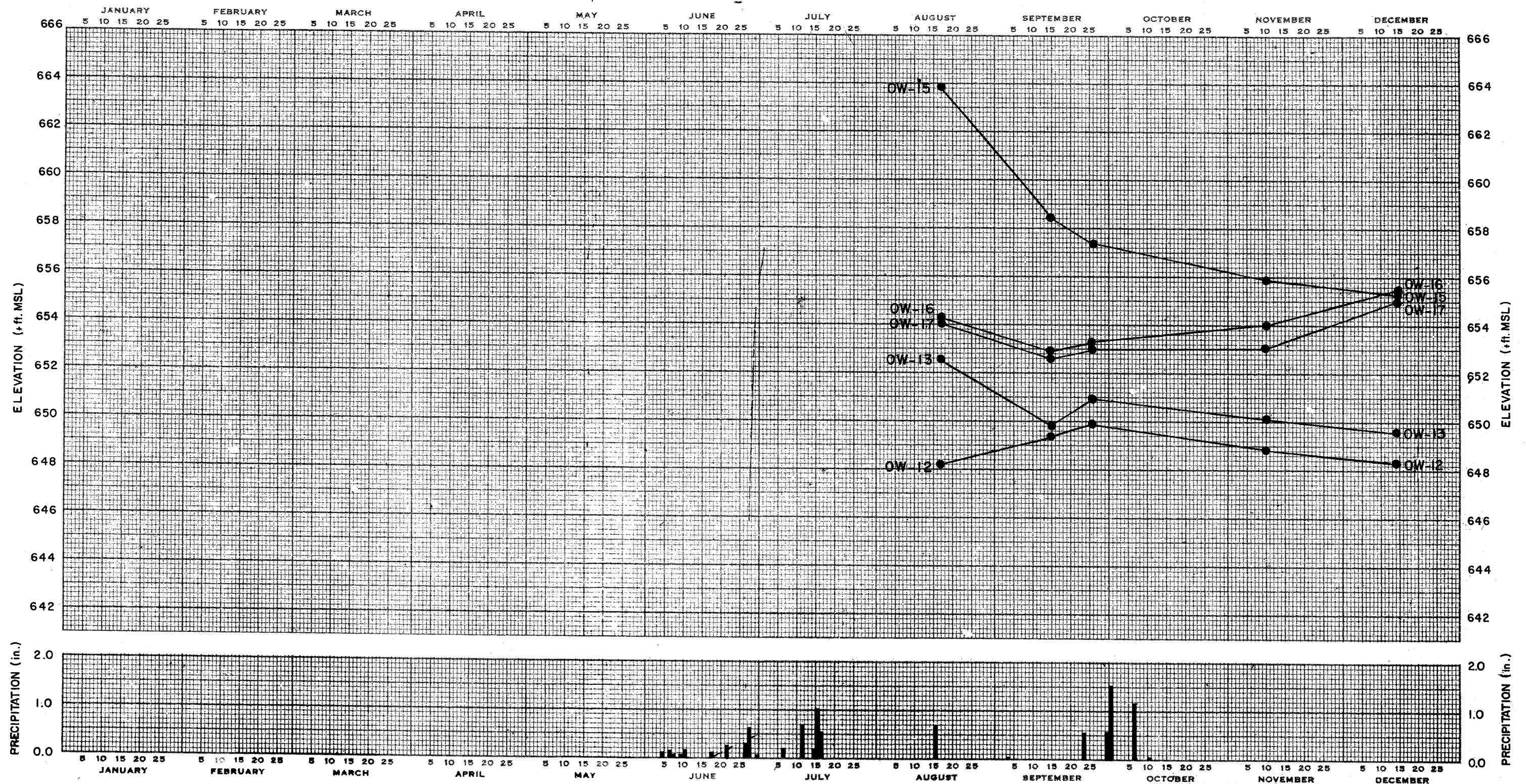
CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

FIGURE 2.4-48

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 6

(SHEET 3 of 3)

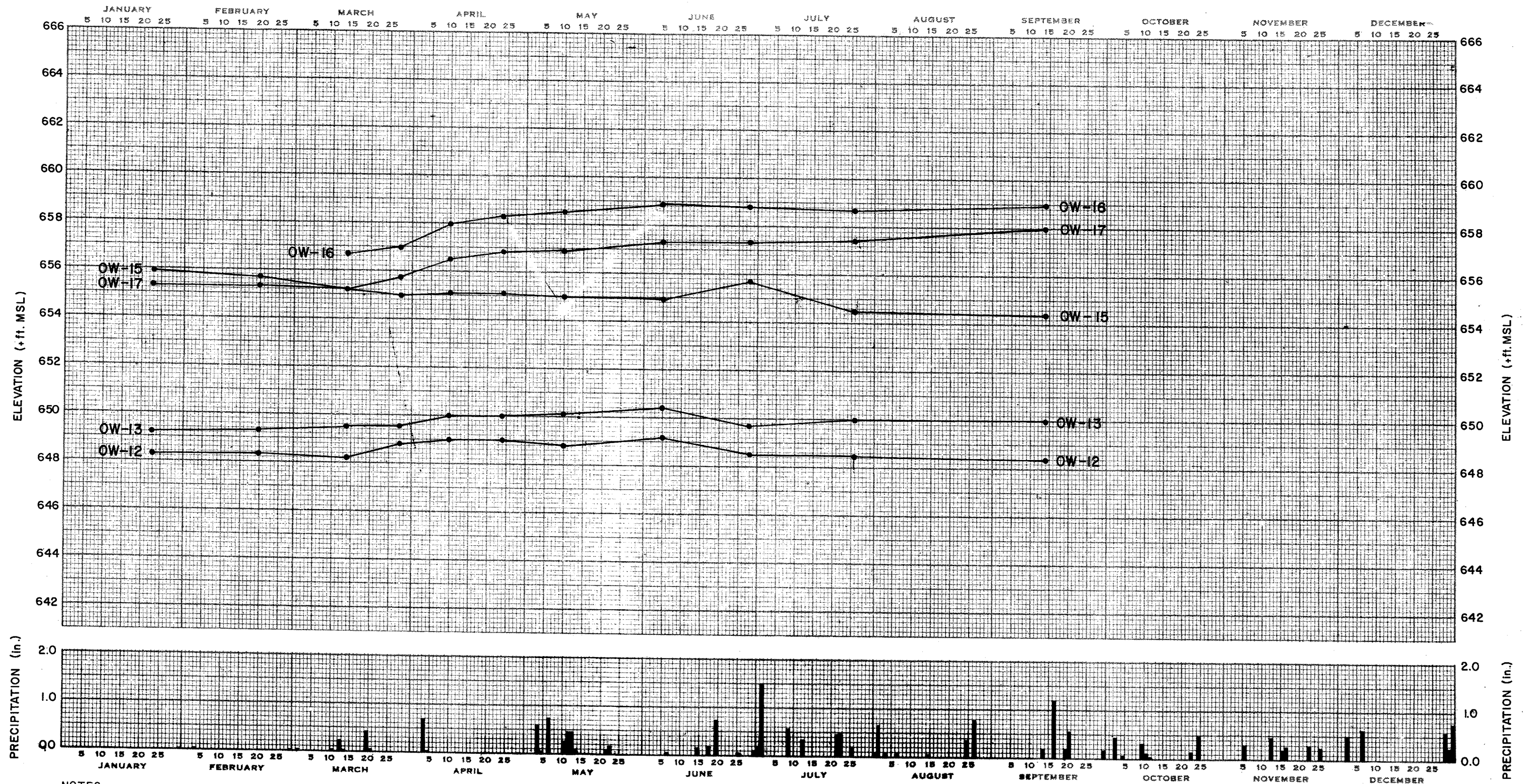




**NOTES:**

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURES 2.4-32 AND 2.5-272.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JULY 18 TO AUGUST 10, AND OCTOBER 16 TO DECEMBER 31, 1977.





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURES 2.4-32 AND 2.5-272.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 1 TO JANUARY 27, FEBRUARY 6 TO FEBRUARY 15, MARCH 22 TO MARCH 31, APRIL 6 TO APRIL 26, AND AUGUST 17 TO AUGUST 22.
4. NO GROUND WATER LEVEL DATA WERE RECORDED FROM SEPTEMBER 14 THROUGH DECEMBER 31, 1978.
5. PIEZOMETER OW-16 WAS FROZEN ON JANUARY 23, 1978.

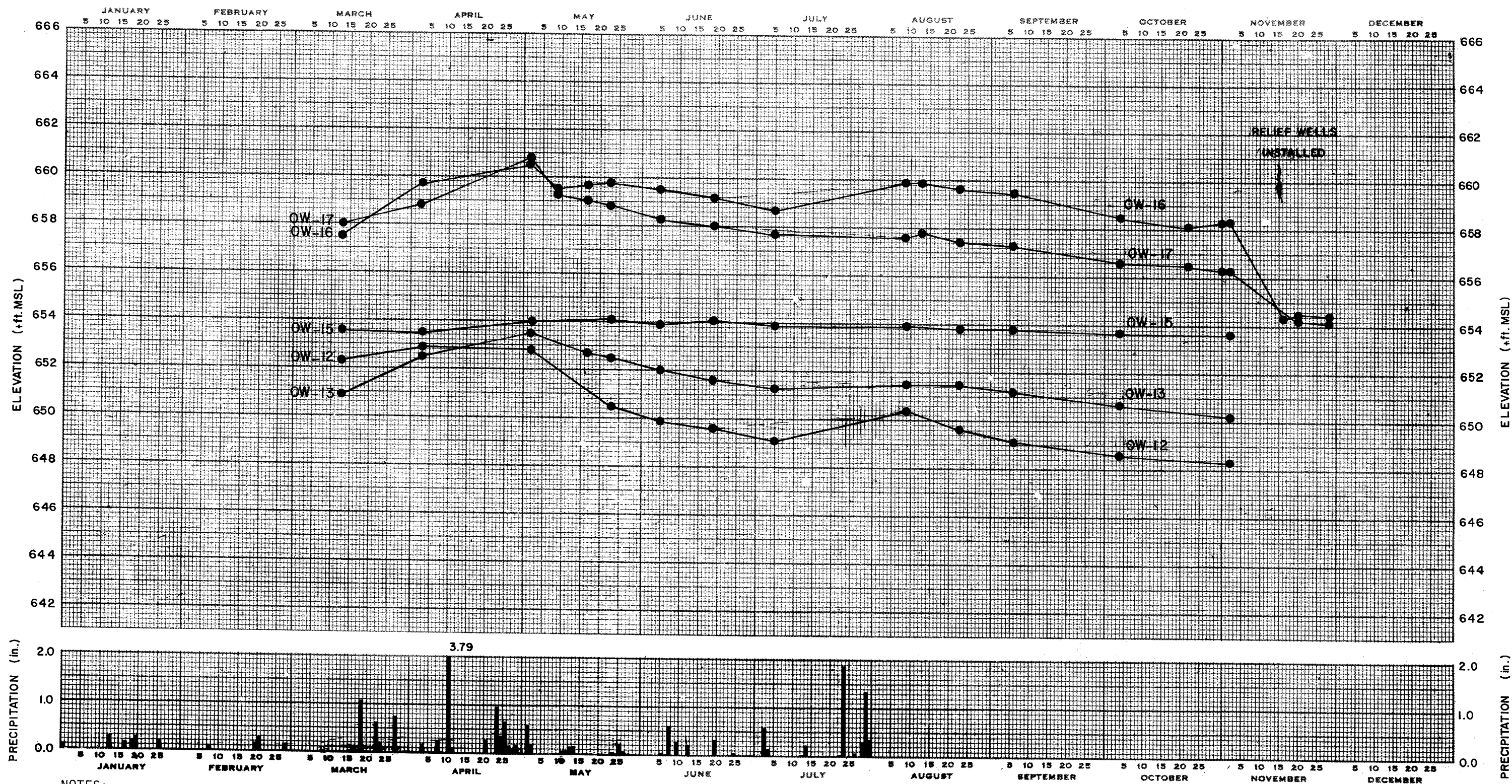
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FIGURE 2.4-49

GROUNDWATER LEVELS AND  
 DAILY PRECIPITATION - GROUP 7

(SHEET 2 of 3)





NOTES:

1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURES 2.4-32 AND 2.5-272.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 30 AND 31, MARCH 2 THROUGH MARCH 9, MARCH 29 THROUGH APRIL 2, JULY 5 THROUGH JULY 9, 1979.
4. NO GROUND WATER LEVEL DATA WERE REPORTED FROM JANUARY 1 THROUGH MARCH 12, 1979.

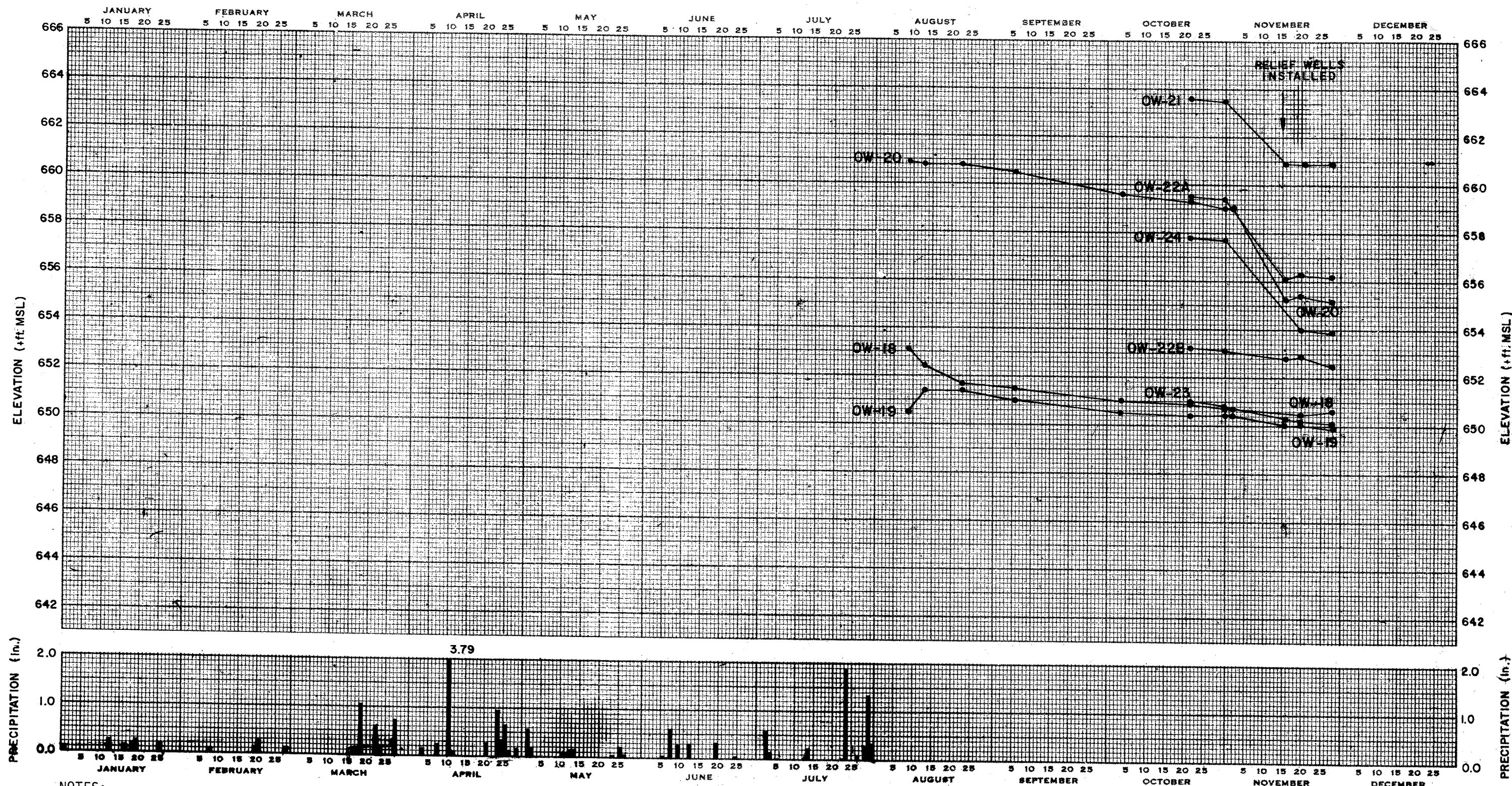
1979

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FIGURE 2.4-49

GROUNDWATER LEVELS AND  
DAILY PRECIPITATION - GROUP 7  
(SHEET 3 of 3)





NOTES:

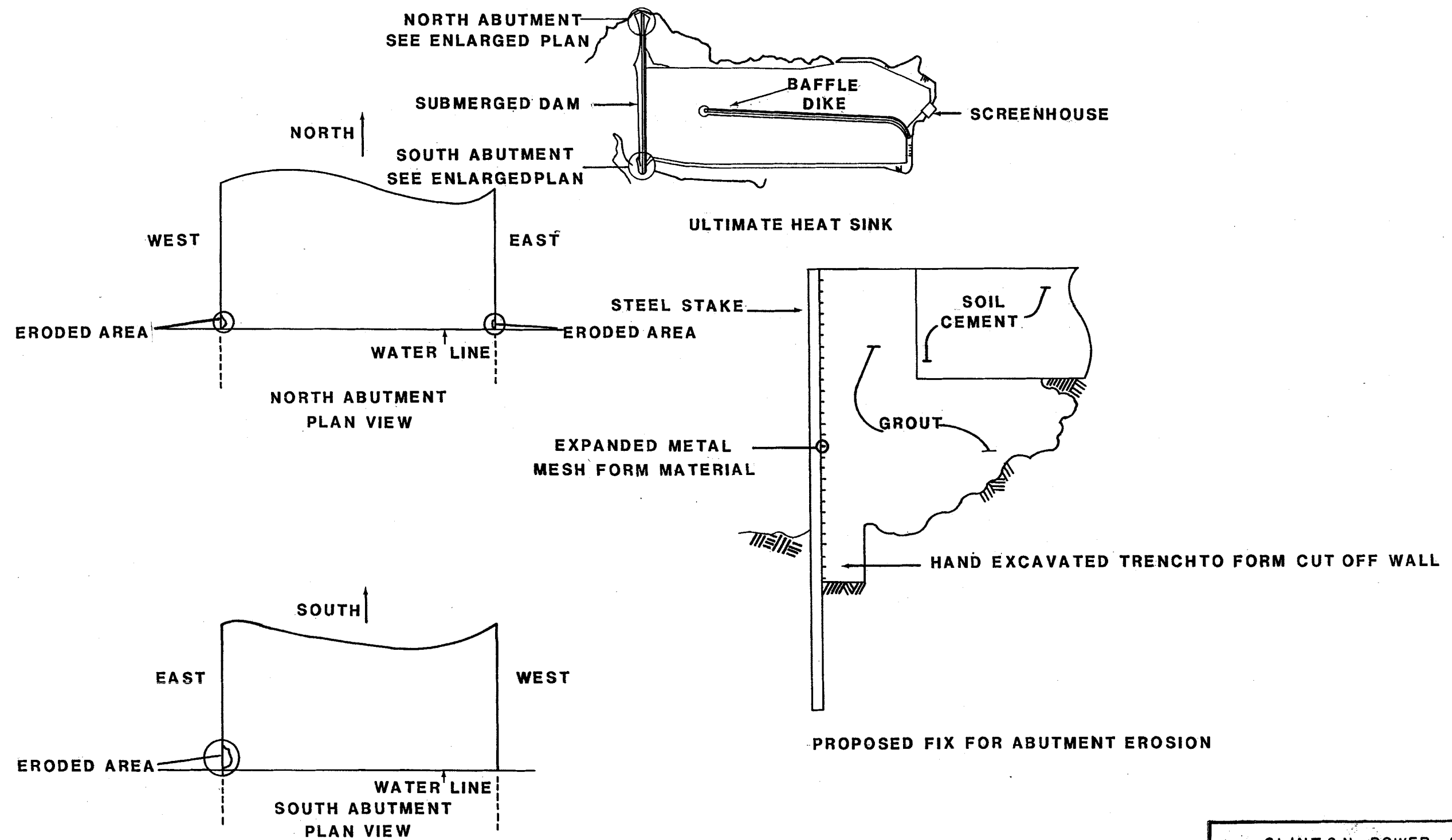
1. PIEZOMETER INSTALLATION DATA ARE LISTED IN TABLE 2.4-31.
2. PIEZOMETER LOCATIONS ARE SHOWN ON FIGURES 2.4-32 AND 2.5-272.
3. DAILY PRECIPITATION DATA ARE OBTAINED FROM AN ONSITE RAIN GAUGE. PRECIPITATION DATA ARE UNAVAILABLE FOR JANUARY 30 AND 31, MARCH 2 THROUGH MARCH 9, MARCH 29 THROUGH APRIL 2, JULY 5 THROUGH JULY 9, 1979.
4. THE OPERATION OF PIEZOMETERS OW-18, OW-19, AND OW-20 WAS BEGUN ON AUGUST 9, 1979.

1979

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FIGURE 2.4-50

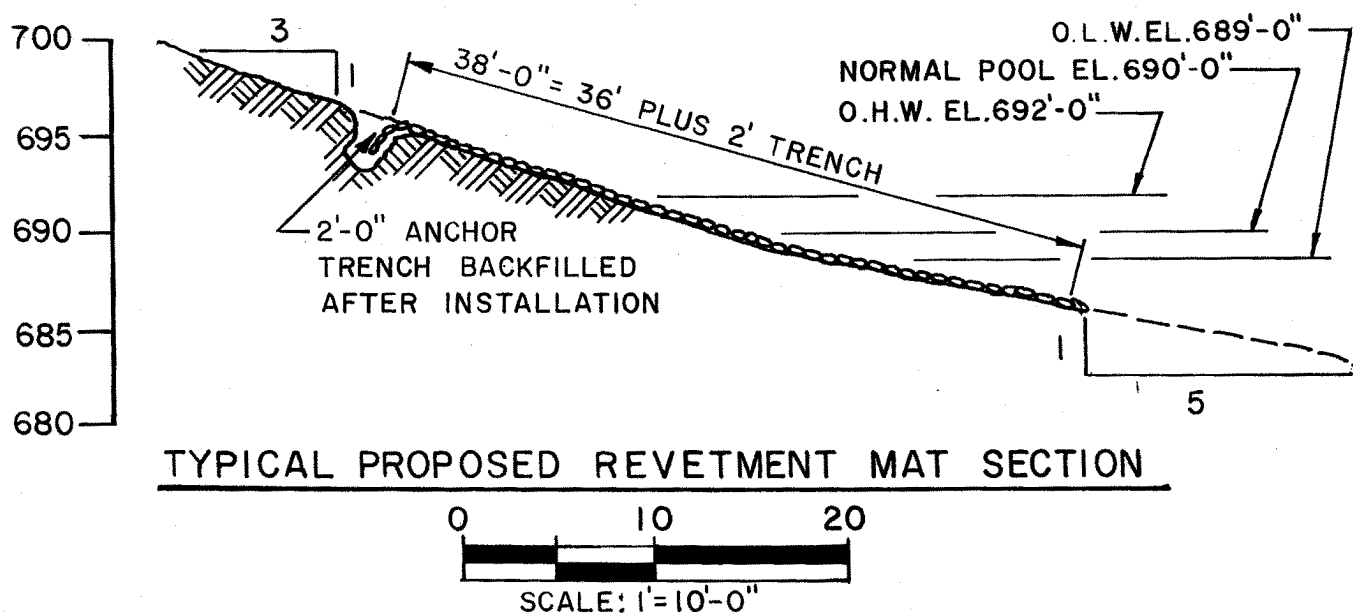
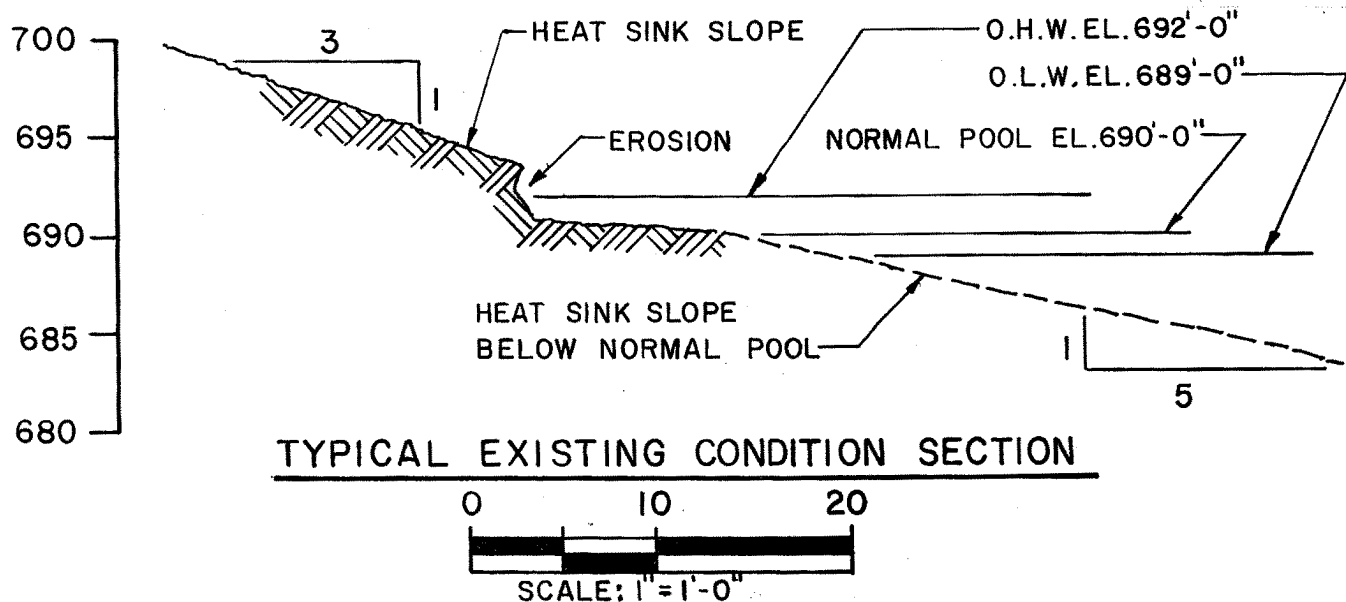
GROUNDWATER LEVELS AND  
 DAILY PRECIPITATION - GROUP 8



CLINTON POWER STATION  
UPDATED SAFETY ANALYSIS REPORT

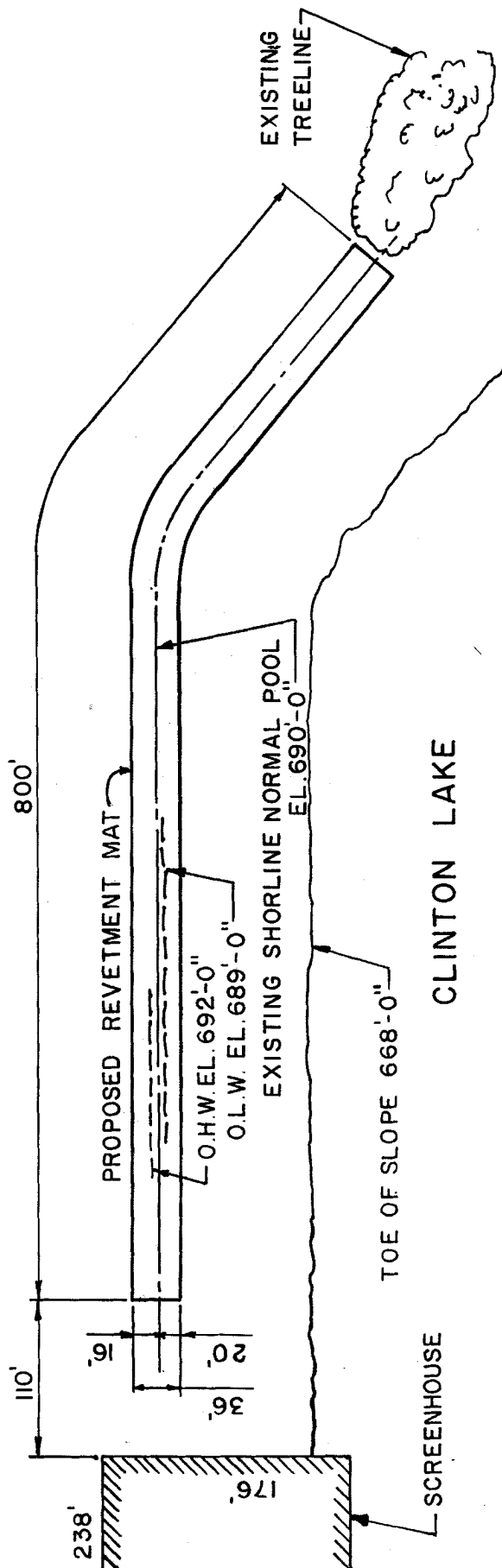
Figure 2.4-51  
(Q & R 240.5)

REPAIR OF UHS ABUTMENTS



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Figure 2.4-52  
(Q & R 240.5)  
REVETMENT MAP  
SOUTH OF SCREENHOUSE  
(SHEET 1 of 2)

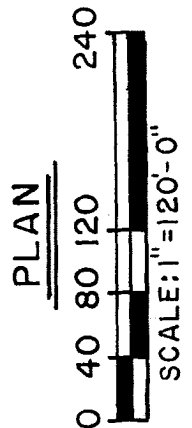
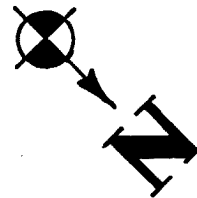


**NOTES:** 1. SLOPES SHALL BE SHAPED TO AN APPROXIMATE 3 TO 1 SLOPE USING COMMON CONSTRUCTION EQUIPMENT (DOZER & FRONT ENDLOADER)

2. APPROXIMATELY 330 CU. YDS. SANDCEMENT MORTAR WILL BE USED IN ALL REVETMENT WORK.

3. DATUM IS N.G.V.D. of 1929

4. PURPOSE IS TO ELIMINATE SOIL EROSION AND PROVIDE SURFACE FOR WAVE ACTION

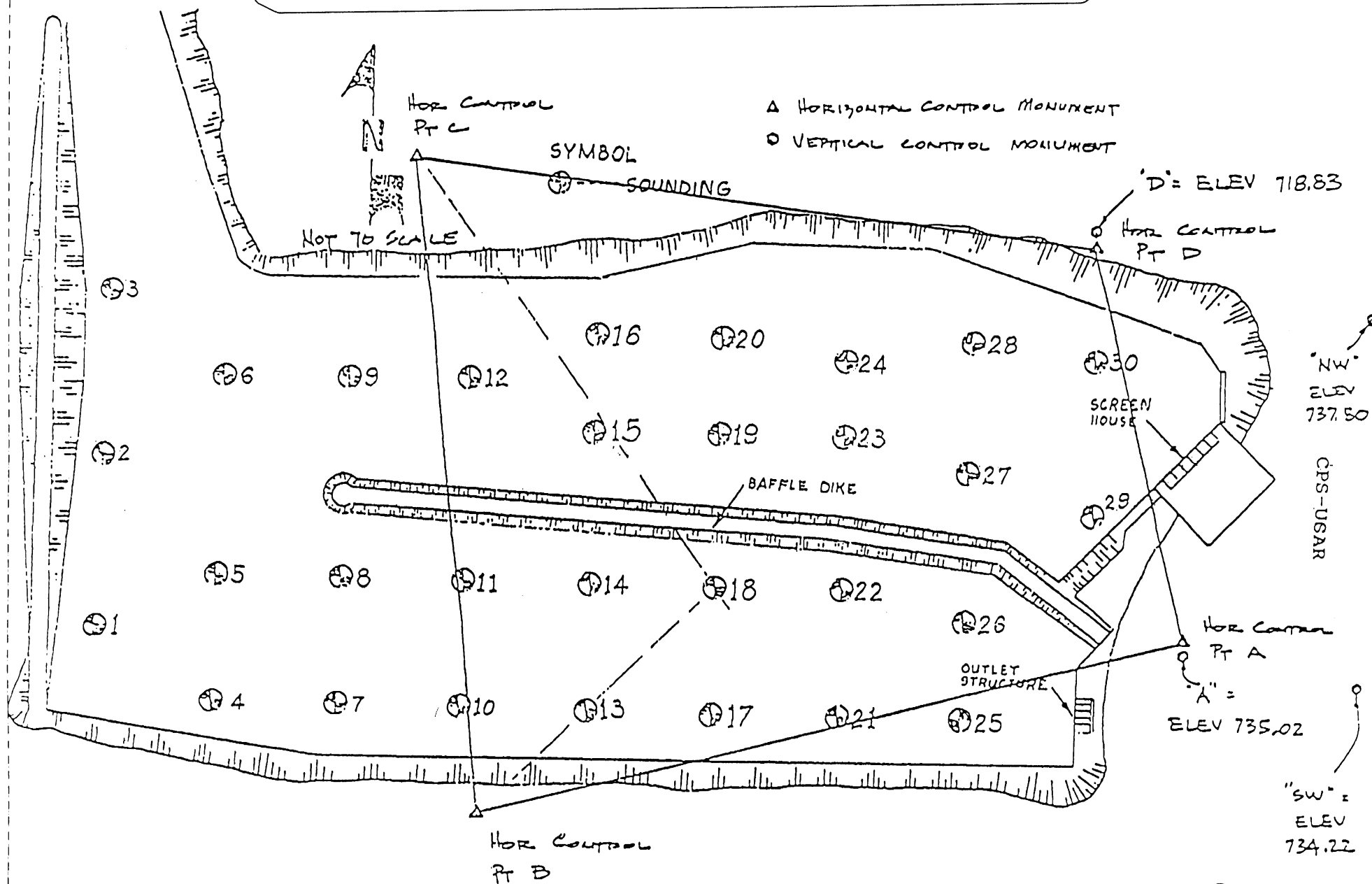


# CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

Figure 2.4-52  
(Q & R 240.5)  
REVTMENT MAP  
SOUTH OF SCREENHOUSE  
(SHEET 2 of 2)



REVISION 9  
JANUARY 2001



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FIGURE 2.4-53

LOCATIONS FOR SOUNDING SILT  
ELEVATIONS IN THE UHS