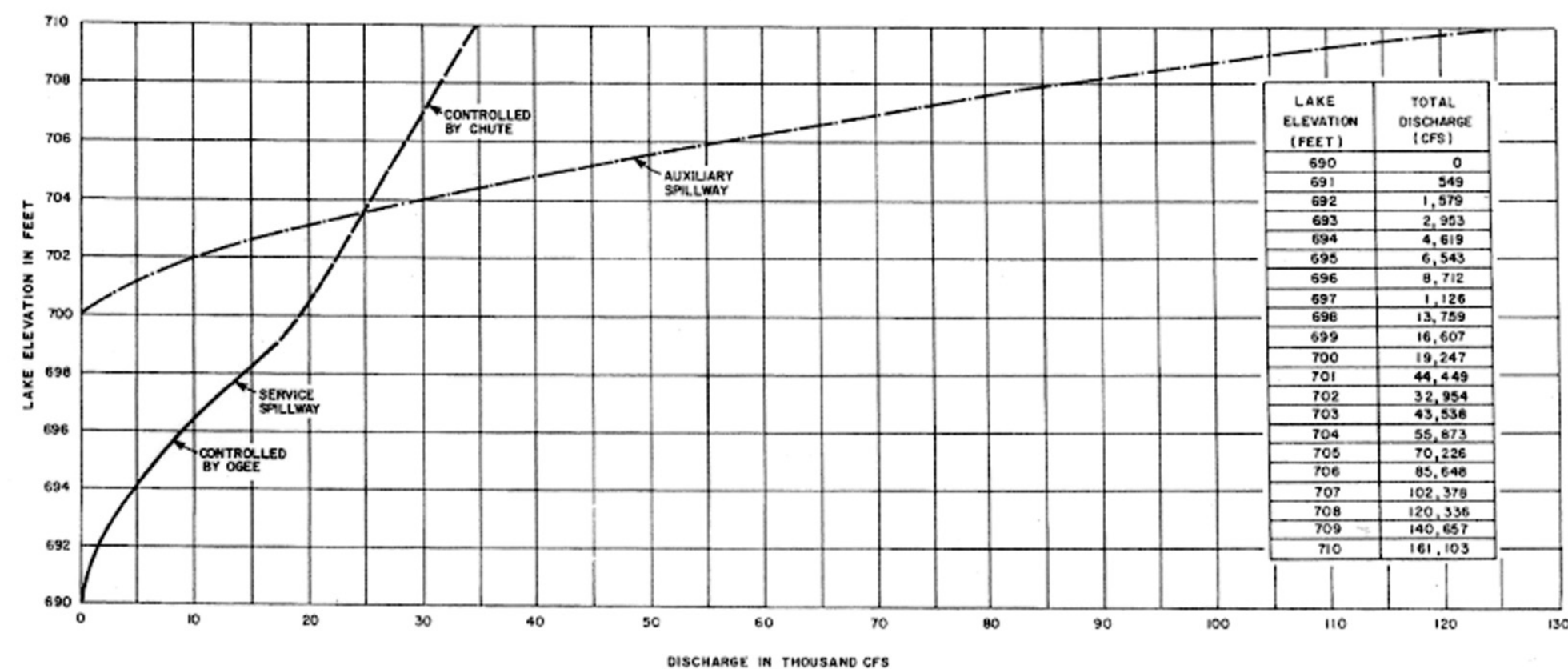


Figure 2.4-12  
Spillway Rating Curves

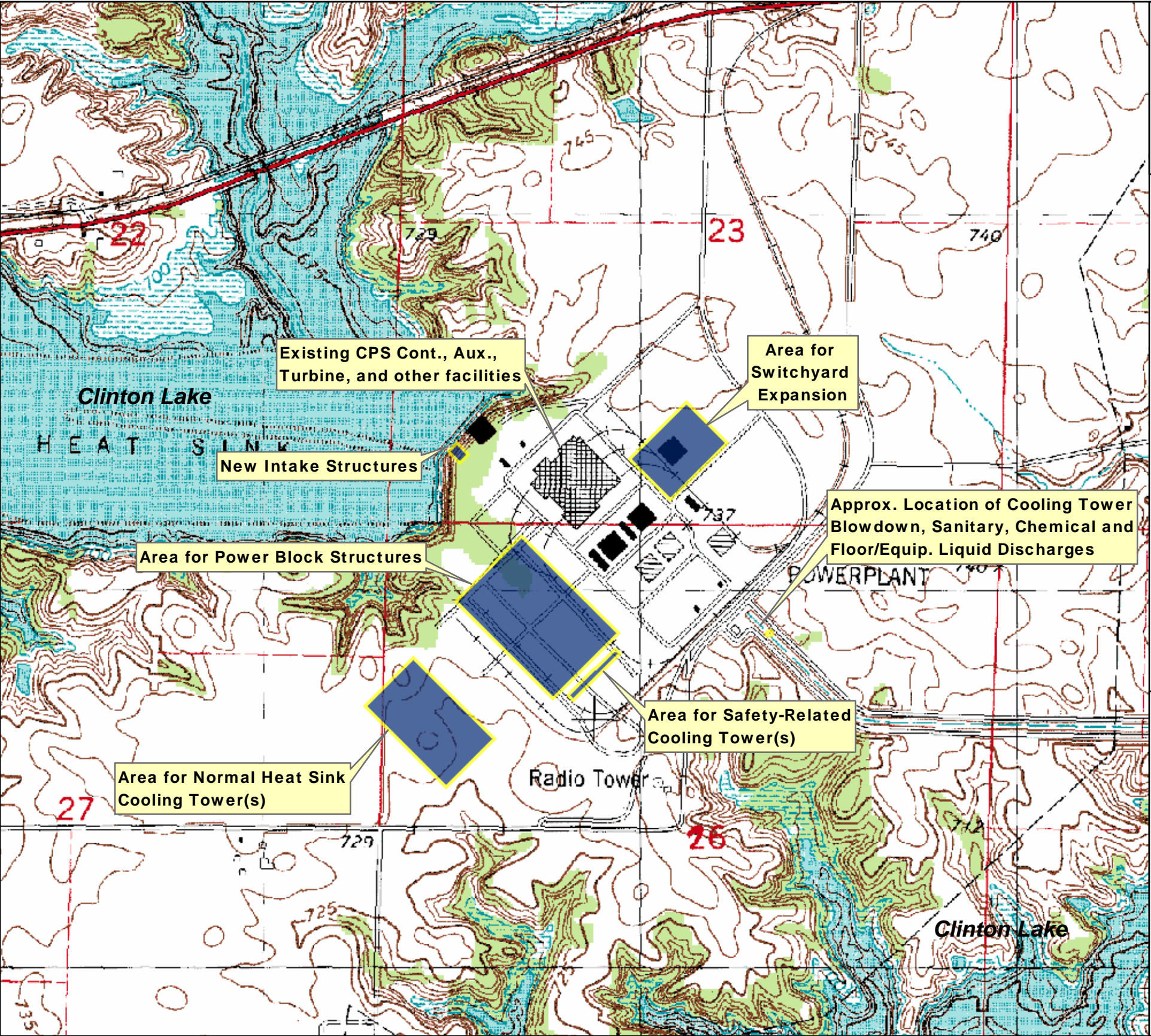
Legend



Data Source  
CPS, 2002

Not to Scale

**Figure 2.4-13**  
**Proposed Areas for**  
**EGC ESP Structures**



**Legend**

 Proposed Areas for EGC ESP Facility Structures

Data Sources:  
USGS, 1979



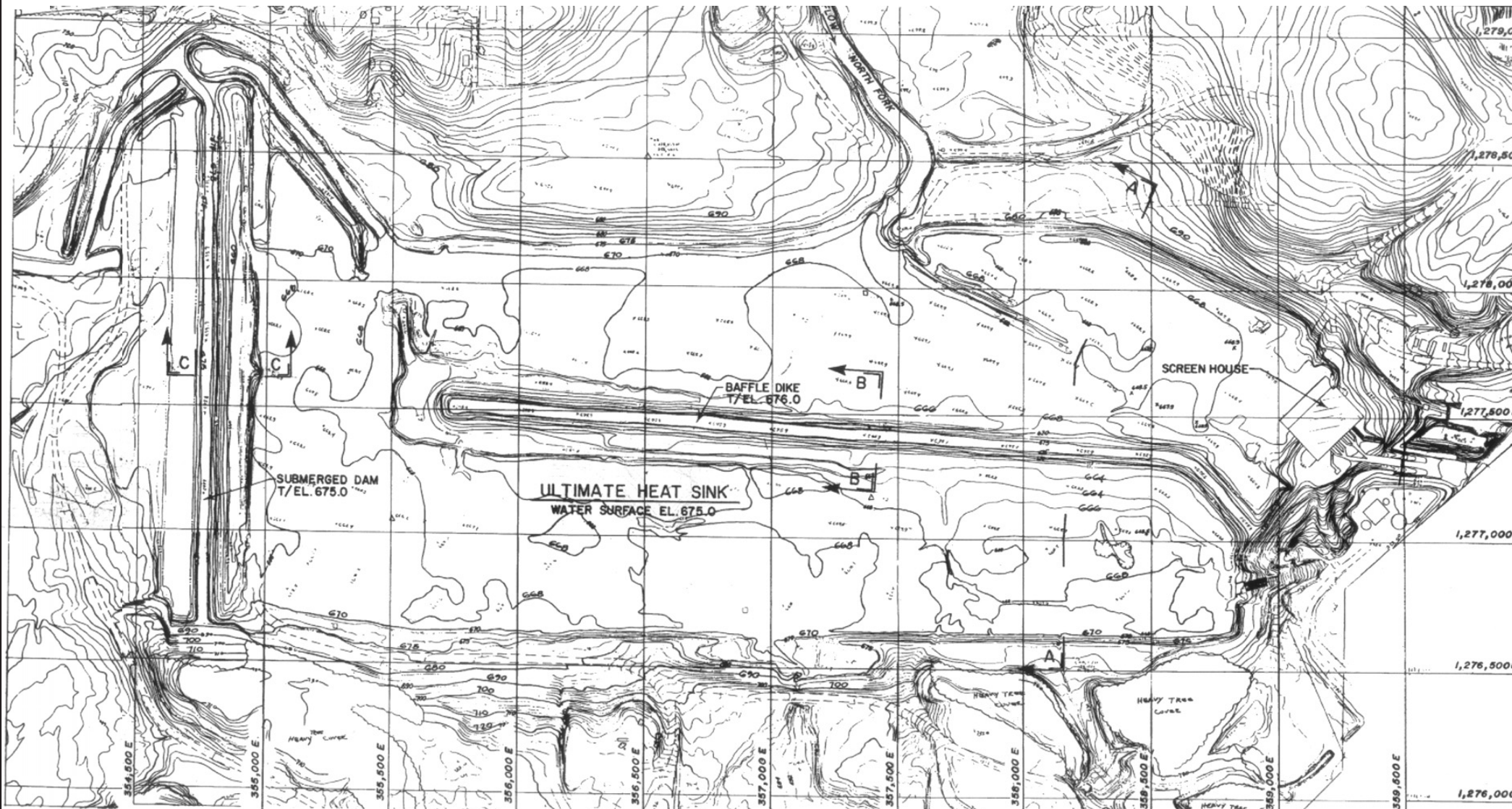


**Figure 2.4-14**  
**CPS Ultimate Heat Sink Plan**

NOTES:

1. Topographic map of ultimate heat sink after construction (Oct. 17, 1977).
2. Refer to Figure 2.4-15 for sections.

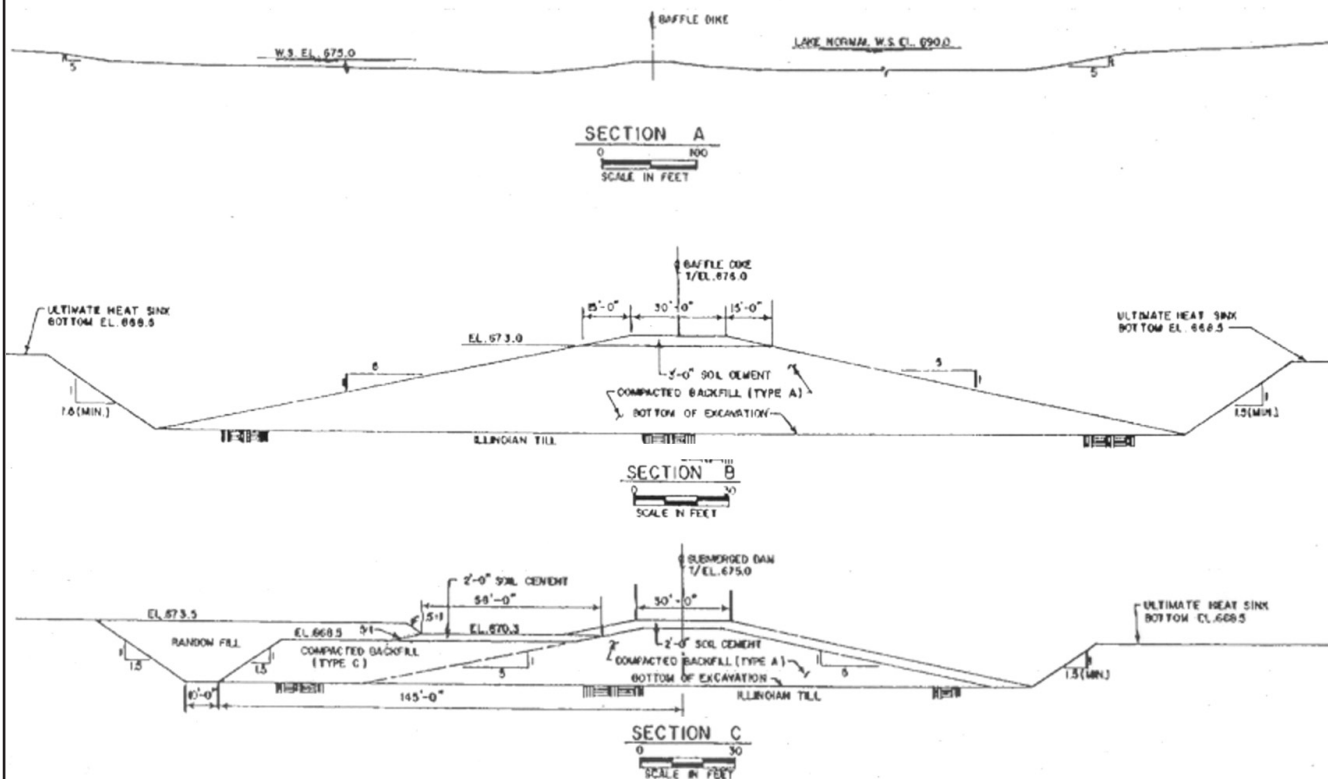
Not to Scale



NOTES:

1. Refer to Figure 2.4-14 for sections.







Not to Scale





**Figure 2.4-16**  
**Aquifers in Consolidated Rocks**  
**from Pennsylvanian to**  
**Silurian-Devonian 730-K**

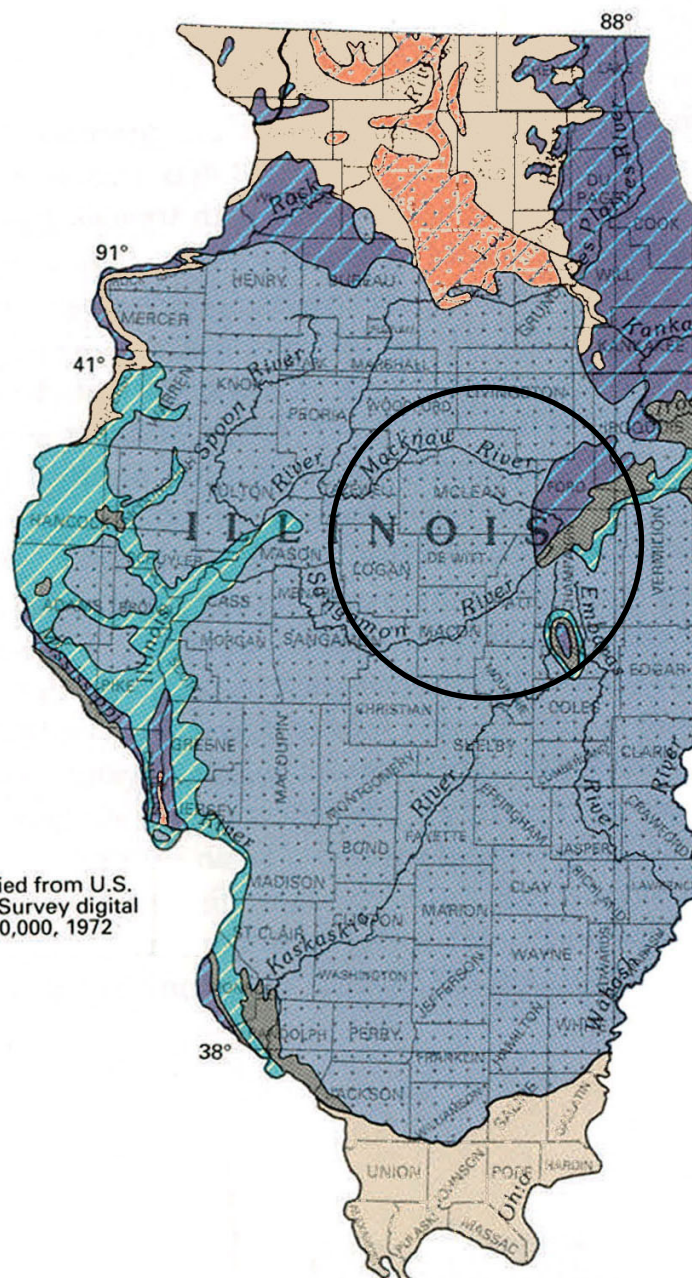
**Legend**

-  Pennsylvania aquifers - Sandstone and some limestone in rocks of Pennsylvanian age
-  Mississippian aquifers - Limestone and sandstone in rocks of Mississippian age
-  Silurian-Devonian aquifer - Dolomite and limestone in rocks of Devonian and Silurian ages
-  Not a principal aquifer
-  Cambrian-Ordovician aquifers - Sandstone and dolomite in rocks of Ordovician and Cambrian ages
-  Approximate study area (50-mi radius)

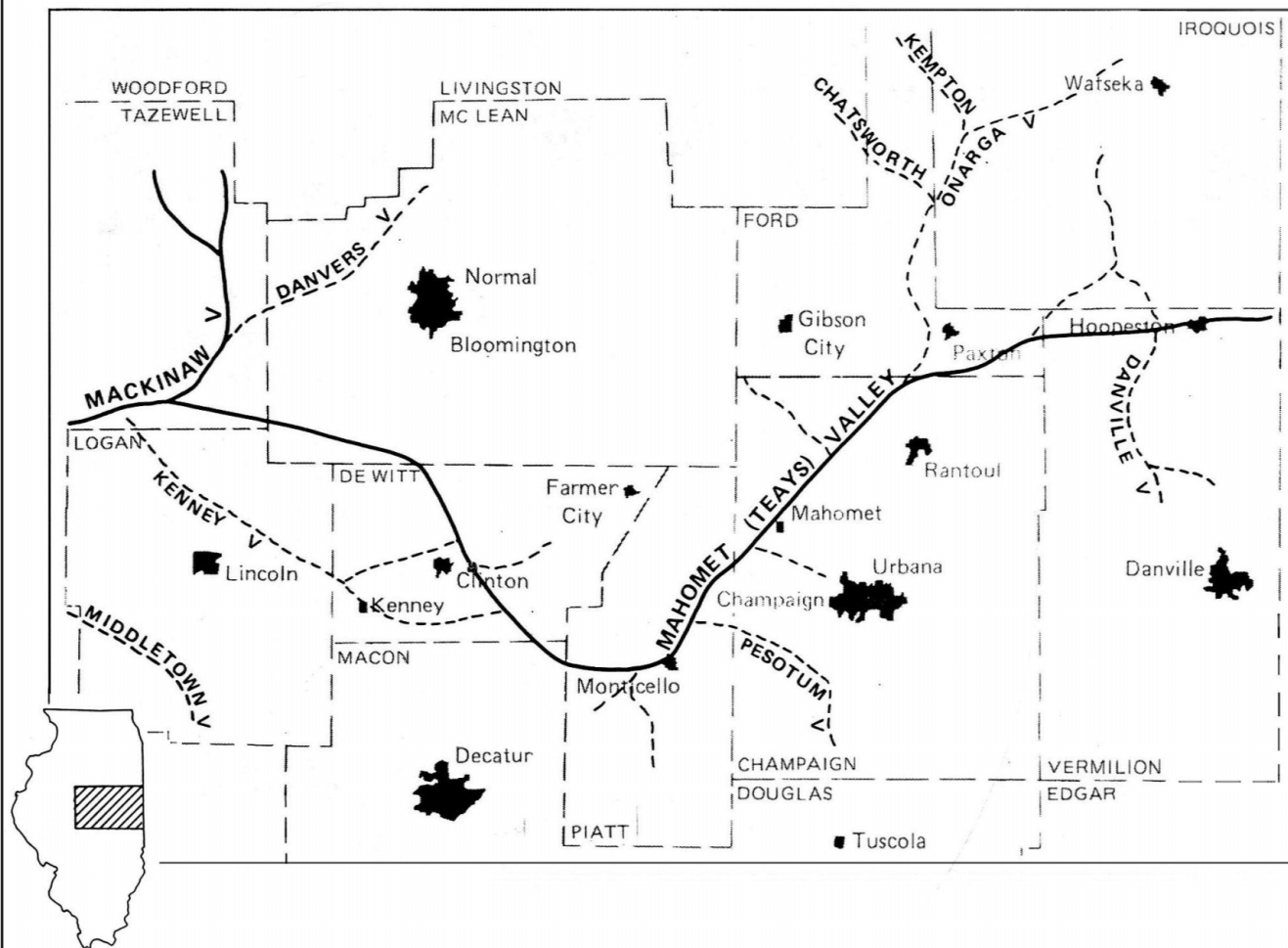
Data Source:  
USGS, 1995a



Base modified from U.S.  
Geological Survey digital  
data, 1:2,000,000, 1972



**Figure 2.4-17**  
**Axes of Major Bedrock**  
**in Central Illinois**



**Legend**

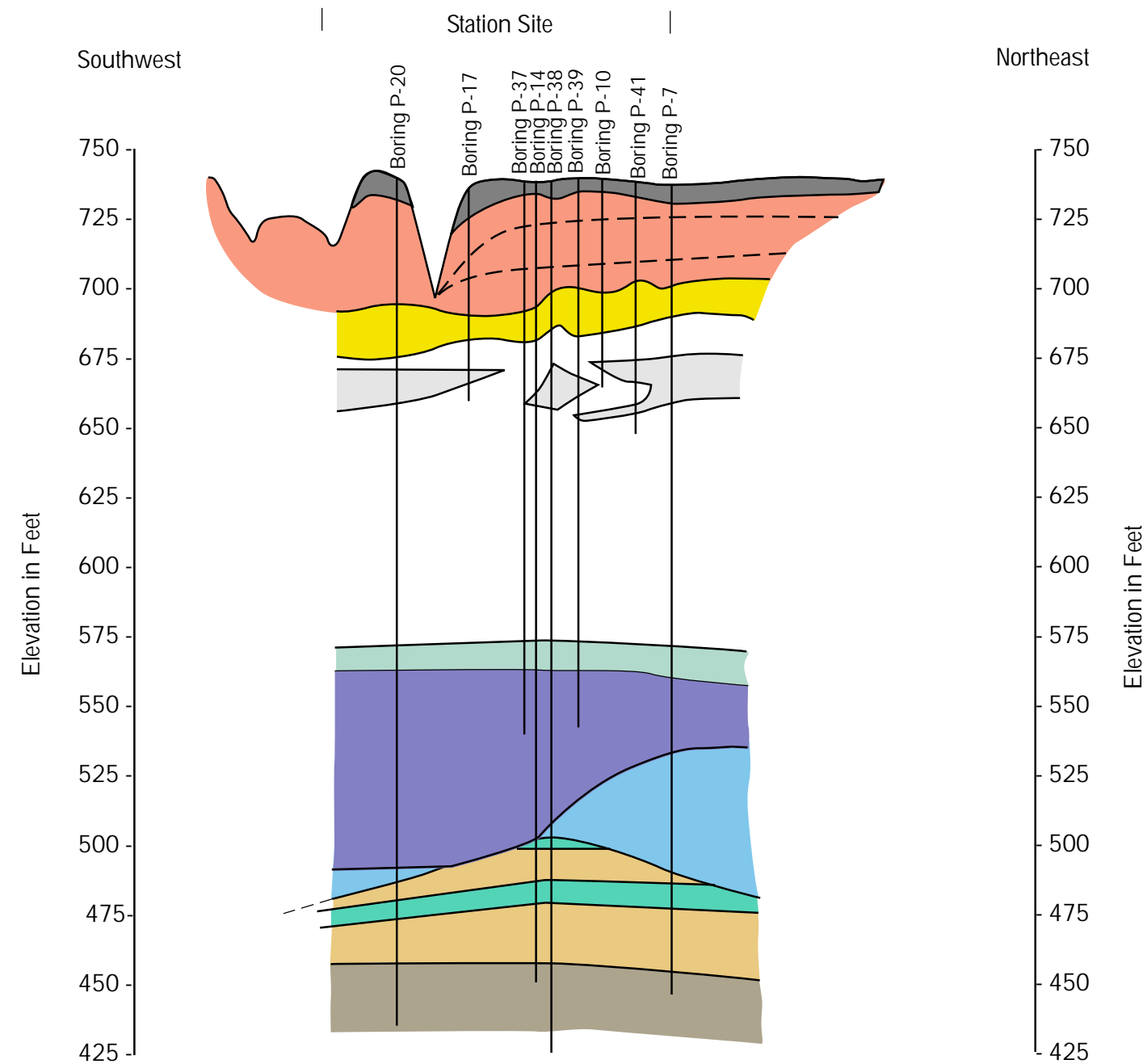
— Approximate Axis of the Bedrock Valley

Data Source:  
Kempton, 1991



N  
Not to Scale

Site Safety Analysis Report for  
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**Figure 2.4-18**  
**Near Site Cross Section of  
Hydrogeologic Units  
and Piezometric Surfaces**



- NOTES:
1. Groundwater Levels indicated on the subsurface section were obtained by interpolating between borings with piezometers. Information on actual groundwater levels exist only at boring locations with piezometers. It is possible that groundwater levels between borings with piezometers may vary from those indicated.
  2. The depth and thickness of soil and rock strata indicated on the subsurface section were obtained by interpolating between borings. Information on actual soil and rock conditions exist only at boring locations. It is possible that soil and rock conditions may vary from those indicated.
  3. The discussion in the text is necessary for proper understanding of the nature of the subsurface materials
  4. Elevations refer to the USGS Datum.

Legend	
Quaternary	Wisconsinan
	Sangamonian
	Illinoian
	Yar-Mouthian
Pennsylvanian	Kansan

	LOESS - Brown to mottled brown and gray clayey silt or silty clay with trace fine sand; Weathered
	WISCONSINAN GLACIAL TILL - Brownish-gray to gray clayey silt or silty clay with sand and gravel; Contains irregular and discontinuous lenses of sand and silt throughout (glacial outwash and possibly local lacustrine deposits)
	INTERGLACIAL ZONE - Includes dark gray to gray organic clayey silt or silty clay (colluvial soils), greenish to bluish-gray clayey silt with sand and gravel (reworked Illinoian Glacial Till)
	ILLINOIAN GLACIAL TILL - Brownish-gray to gray clayey silt with sand and gravel to very sandy silt or silty sand with some clay and gravel
	Interbedded outwash deposits in upper horizons
	LACUSTRINE DEPOSIT - Brownish-gray to black and gray clayey silt to silt, organic in zones; Includes greenish to bluish-gray clayey silt with sand and gravel (reworked and weathered pre-Illinoian Glacial Till); Assignment to Yarmouthian Glacial Stage is tentative
	PRE-ILLINOIAN GLACIAL TILL - Grayish-brown to brown silty clay and clayey silt with some sand and gravel; Brown color and relatively high clay content is characteristic; Tentatively assigned to Kansan Glacial Stage on the basis of clay analysis by Illinois State Geological Survey
	PRE-ILLINOIAN ALLUVIAL & LACUSTRINE DEPOSIT - Consists of grayish-brown, brown, and green clayey silt and silty clay with sand and some gravel (reworked glacial till) and gray to brown clayey silt with organic debris (lacustrine or low energy alluvial deposit); Included as part of the Mahomet bedrock deposit in areas where it is underlain by sandy outwash deposits
BEDROCK - Interbedded layers of limestone, shale, and siltstone assigned to the McLeansboro Group, Modesto Formation on the basis of spore analysis of the coal encountered in boring B-31	
	LIMESTONE - Greenish-gray, gray and brown, fine to coarsely crystalline, silty, thin bedded to massive, numerous shale partings in zones, fossiliferous.
	SHALE - Gray to dark gray shale, carcoraceous to calcareous; clayey in zones, expansive, slickensides; occasional concretion
	SILTSTONE - Light gray siltstone, micaceous, fine sandy, cross-bedded in zones; occasional interbedded layer of silty sandstone

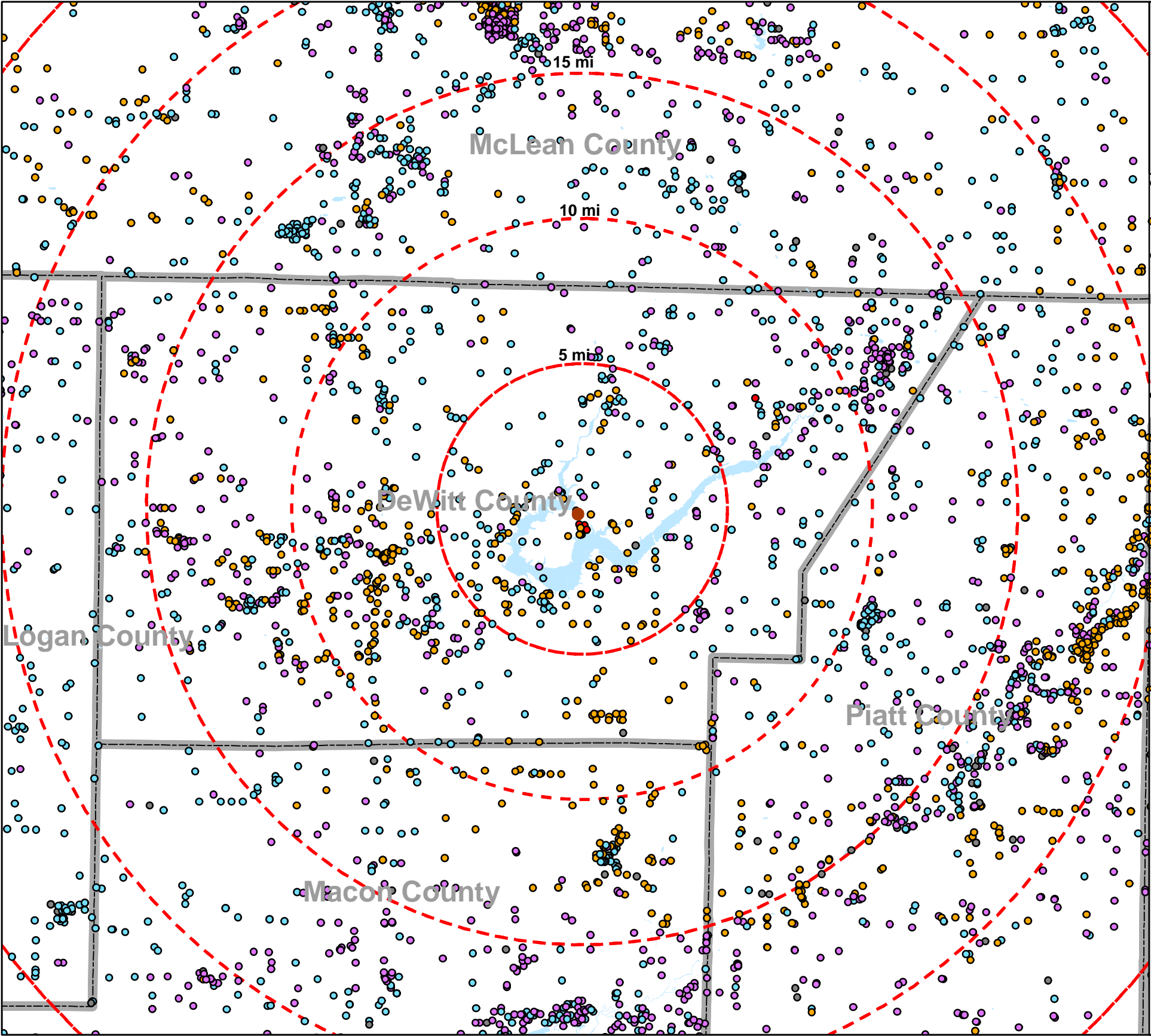
Data Source:  
CPS, 2002

Not to Scale



Site Safety Analysis Report for  
the EGC Early Site Permit

**Figure 2.4-19**  
**Wells Within a**  
**15-mi Radius of the Site**



**Legend**

- EGC ESP Site
- Site Buffer: 5-mi Radius from Site
- Water: Lakes and Rivers
- County Boundary

**Well Locations - Total Depth (ft)**

- 0
- < 100
- 100 - 200
- 200 - 400
- > 400

Data Sources:  
ISGS, 2002  
U.S. Census Bureau, 2000  
U.S. Census Bureau, 2002

