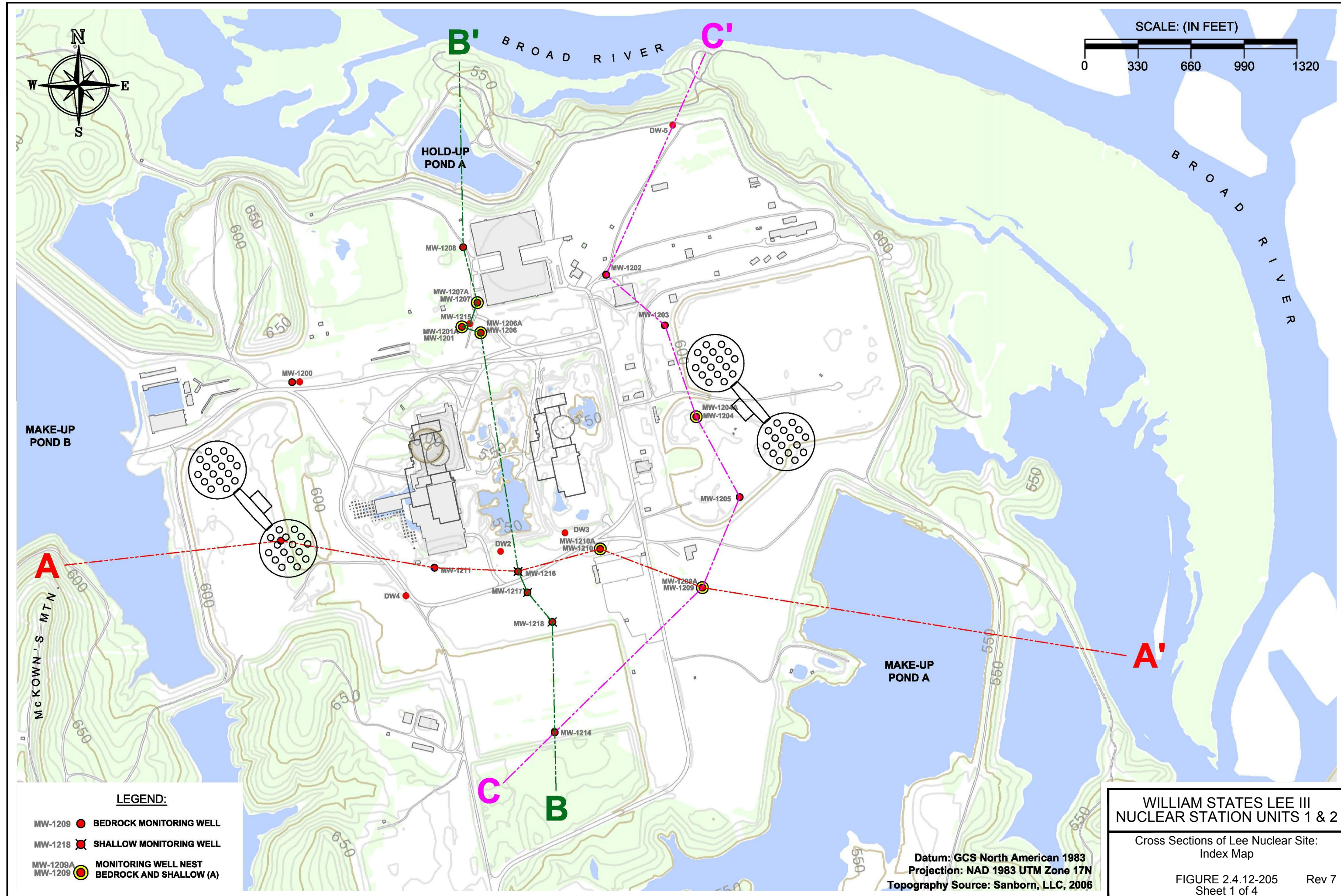


WLS  
COL 2.4-4

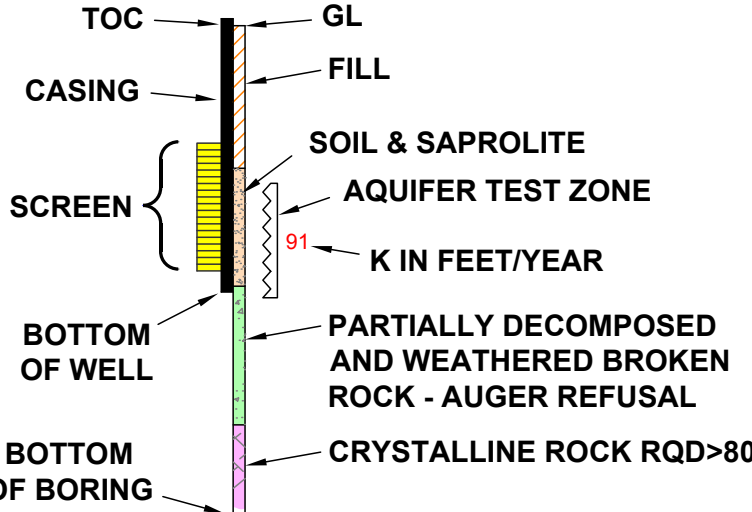




HISTORICAL TOPOGRAPHIC DATA FROM USGS BLACKSBURG SOUTH SC QUADRANGLE MAP (DATED 1971).  
HISTORICAL WATER LEVEL DATA FROM CHEROKEE PSAR AND ER

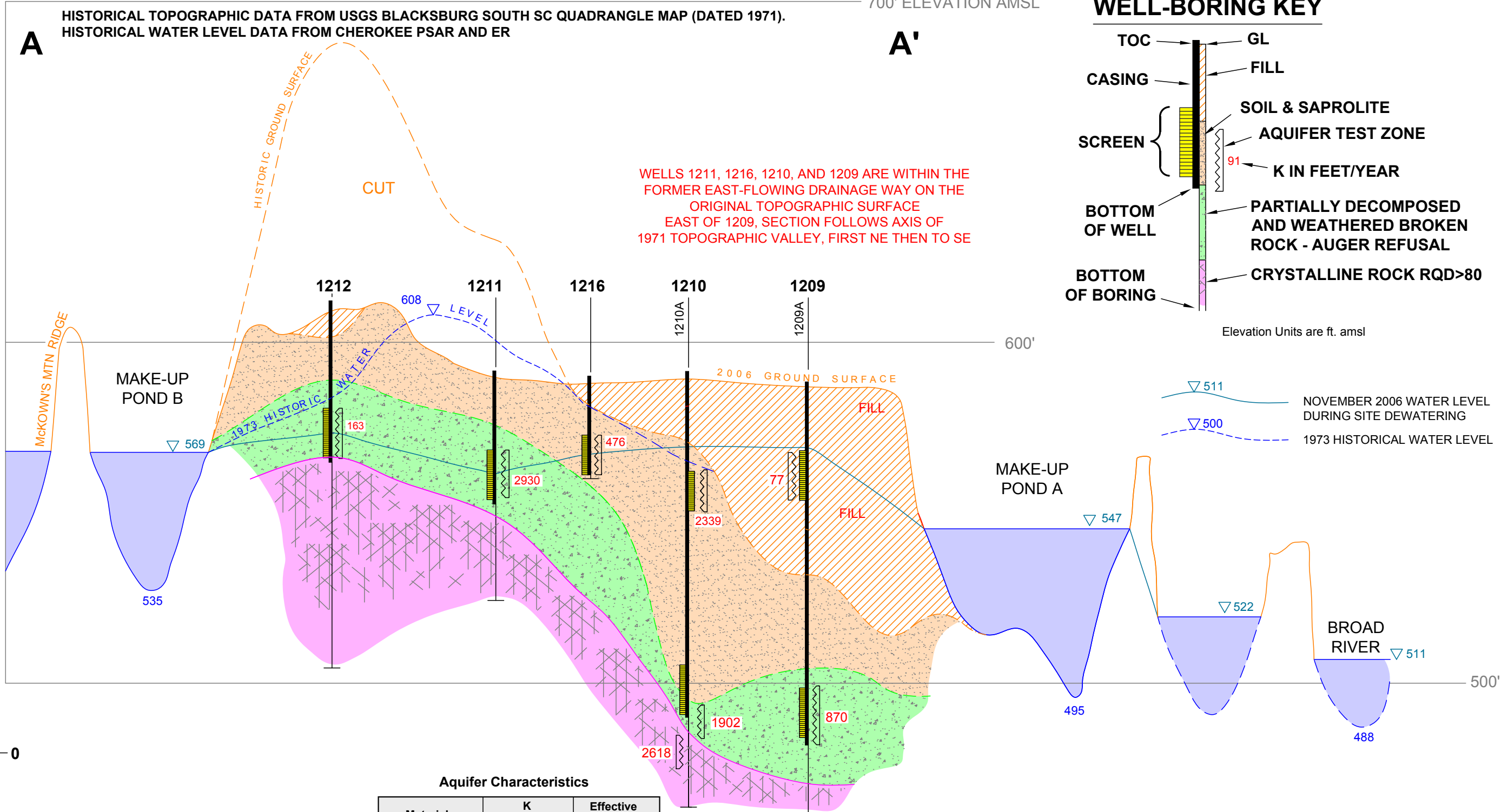
700' ELEVATION AMSL

WELL-BORING KEY



Elevation Units are ft. amsl

WELLS 1211, 1216, 1210, AND 1209 ARE WITHIN THE  
FORMER EAST-FLOWING DRAINAGE WAY ON THE  
ORIGINAL TOPOGRAPHIC SURFACE  
EAST OF 1209, SECTION FOLLOWS AXIS OF  
1971 TOPOGRAPHIC VALLEY, FIRST NE THEN TO SE



Aquifer Characteristics

| Material                 | K (cm/s)             | Effective Porosity |
|--------------------------|----------------------|--------------------|
| Fill Material            | $7.0 \times 10^{-5}$ | 9%                 |
| Soil and Saprolite       | $4.5 \times 10^{-4}$ | 20%                |
| Partially Weathered Rock | $1.4 \times 10^{-3}$ | 8%                 |

Well construction details are provided in Table 2.4.12-201.

WILLIAM STATES LEE III  
NUCLEAR STATION UNITS 1 & 2

Cross Sections of Lee Nuclear Site:  
A - A'

FIGURE 2.4.12-205      Rev 5  
Sheet 2 of 4

THIS FIGURE ILLUSTRATES GENERAL  
HYDROLOGIC CONDITIONS AT LEE  
NUCLEAR SITE.



700' ELEVATION AMSL

B

### Aquifer Characteristics

|  | Material                 | K (cm/s)             | Effective Porosity |
|--|--------------------------|----------------------|--------------------|
|  | Fill Material            | $7.0 \times 10^{-5}$ | 9%                 |
|  | Soil and Saprolite       | $4.5 \times 10^{-4}$ | 20%                |
|  | Partially Weathered Rock | $1.4 \times 10^{-3}$ | 8%                 |

Groundwater exists at the site as a single undifferentiated aquifer, comprised of soils, saprolite, PWR, and competent bedrock. For conservatism, the calculation of potential contaminant transport velocities used the slightly higher hydraulic conductivity and the lower effective porosity values of PWR.

B'

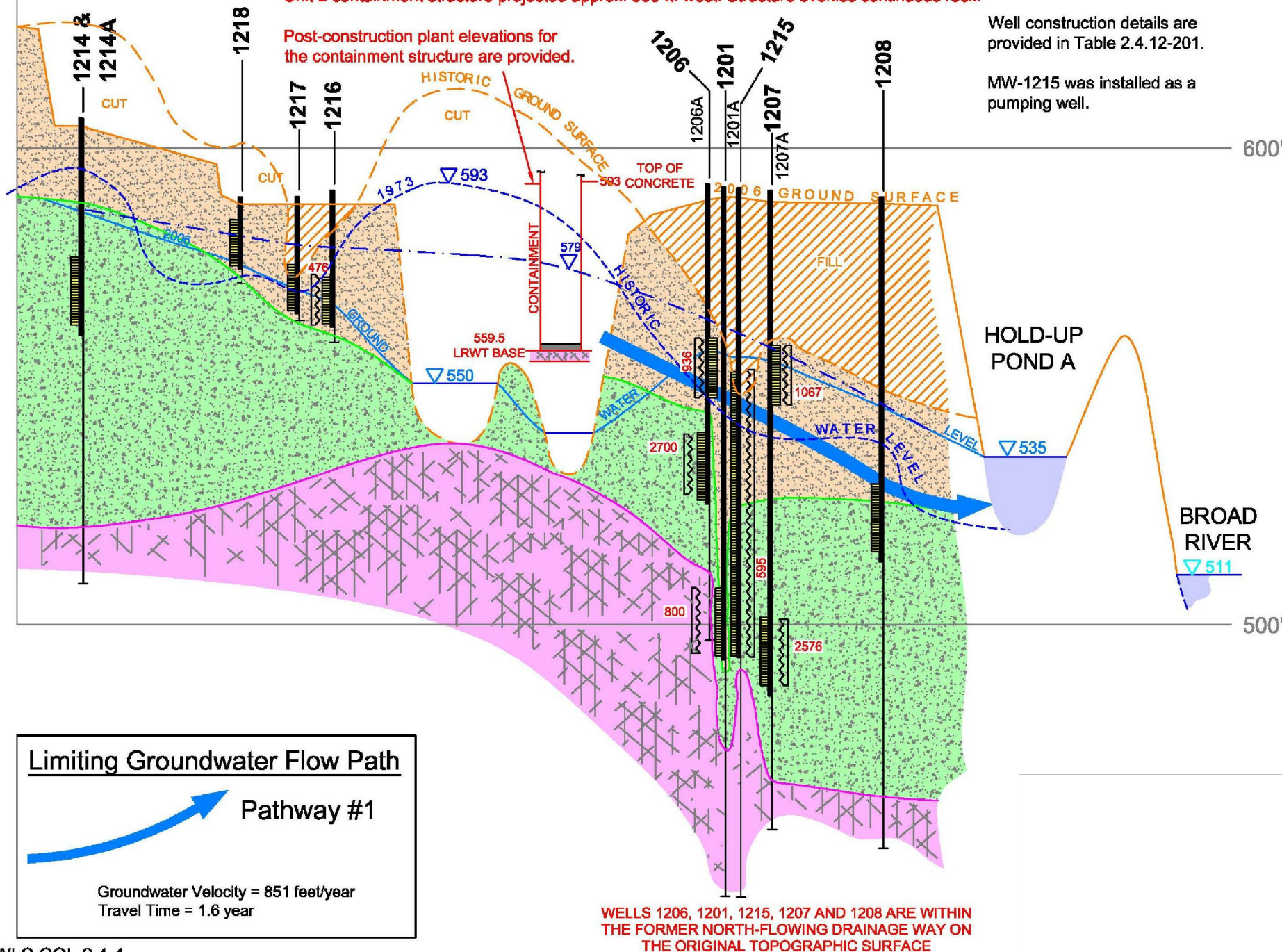
HISTORICAL TOPOGRAPHIC DATA FROM USGS BLACKSBURG SOUTH SC QUADRANGLE MAP (DATED 1971).  
HISTORICAL WATER LEVEL DATA FROM CHEROKEE PSAR AND ER

Unit 2 containment structure projected approx. 330 ft. west. Structure overlies continuous rock.

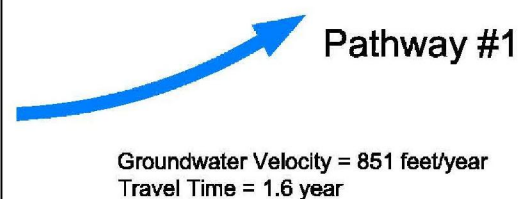
Post-construction plant elevations for the containment structure are provided.

Well construction details are provided in Table 2.4.12-201.

MW-1215 was installed as a pumping well.



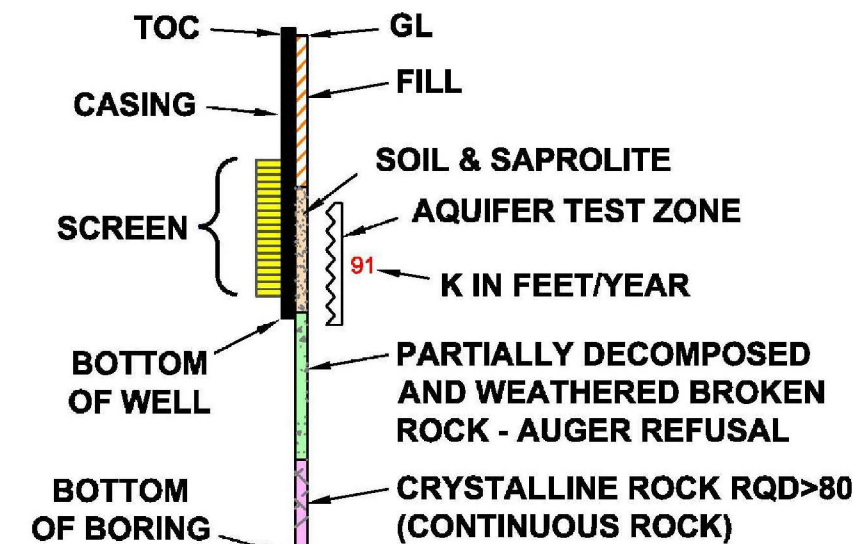
### Limiting Groundwater Flow Path



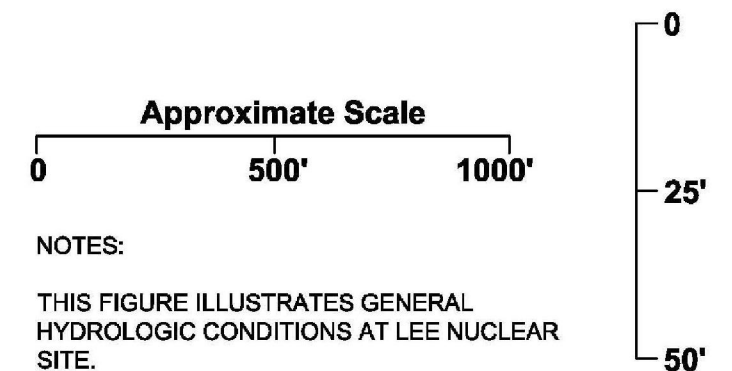
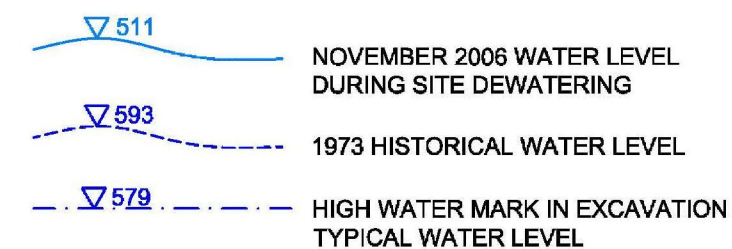
WLS COL 2.4-4

WELLS 1206, 1201, 1215, 1207 AND 1208 ARE WITHIN THE FORMER NORTH-FLOWING DRAINAGE WAY ON THE ORIGINAL TOPOGRAPHIC SURFACE

### WELL-BORING KEY



Elevation Units are ft. amsl



### NOTES:

THIS FIGURE ILLUSTRATES GENERAL HYDROLOGIC CONDITIONS AT LEE NUCLEAR SITE.

DIFFERENCE IN VERTICAL AND HORIZONTAL SCALE RESULTS IN EXAGGERATED STRATIGRAPHIC ELEVATION CHANGES, ESPECIALLY IN AREAS OF HIGH DATA DENSITY.

POST-CONSTRUCTION SURFACE TOPOGRAPHY IS SHOWN ON APPENDIX 9.1, FIGURE 4.

WILLIAM STATES LEE III  
NUCLEAR STATION UNITS 1 & 2

Cross Sections of Lee Nuclear Site:  
B - B'

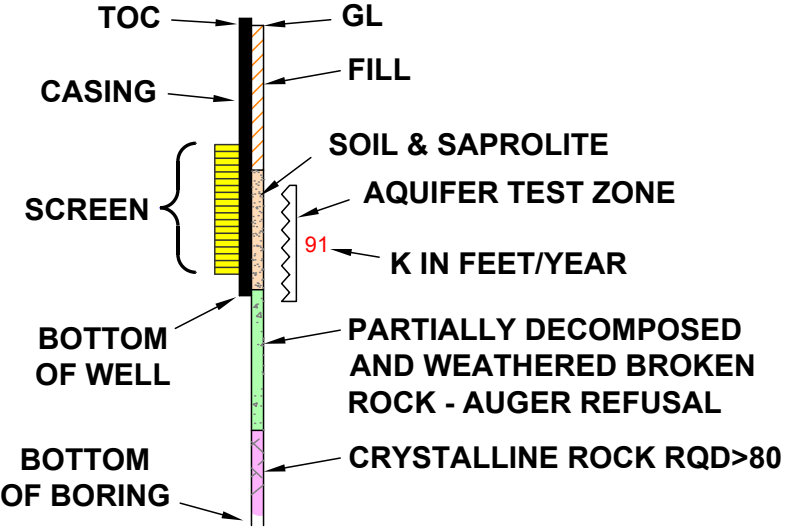
FIGURE 2.4.12-205  
Sheet 3 of 4

Rev 7



HISTORICAL TOPOGRAPHIC DATA FROM USGS BLACKSBURG SOUTH SC QUADRANGLE MAP (DATED 1971).  
HISTORICAL WATER LEVEL DATA FROM CHEROKEE PSAR AND ER

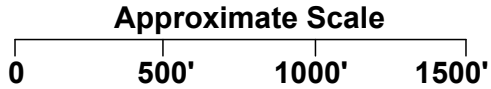
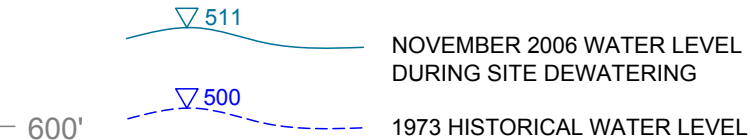
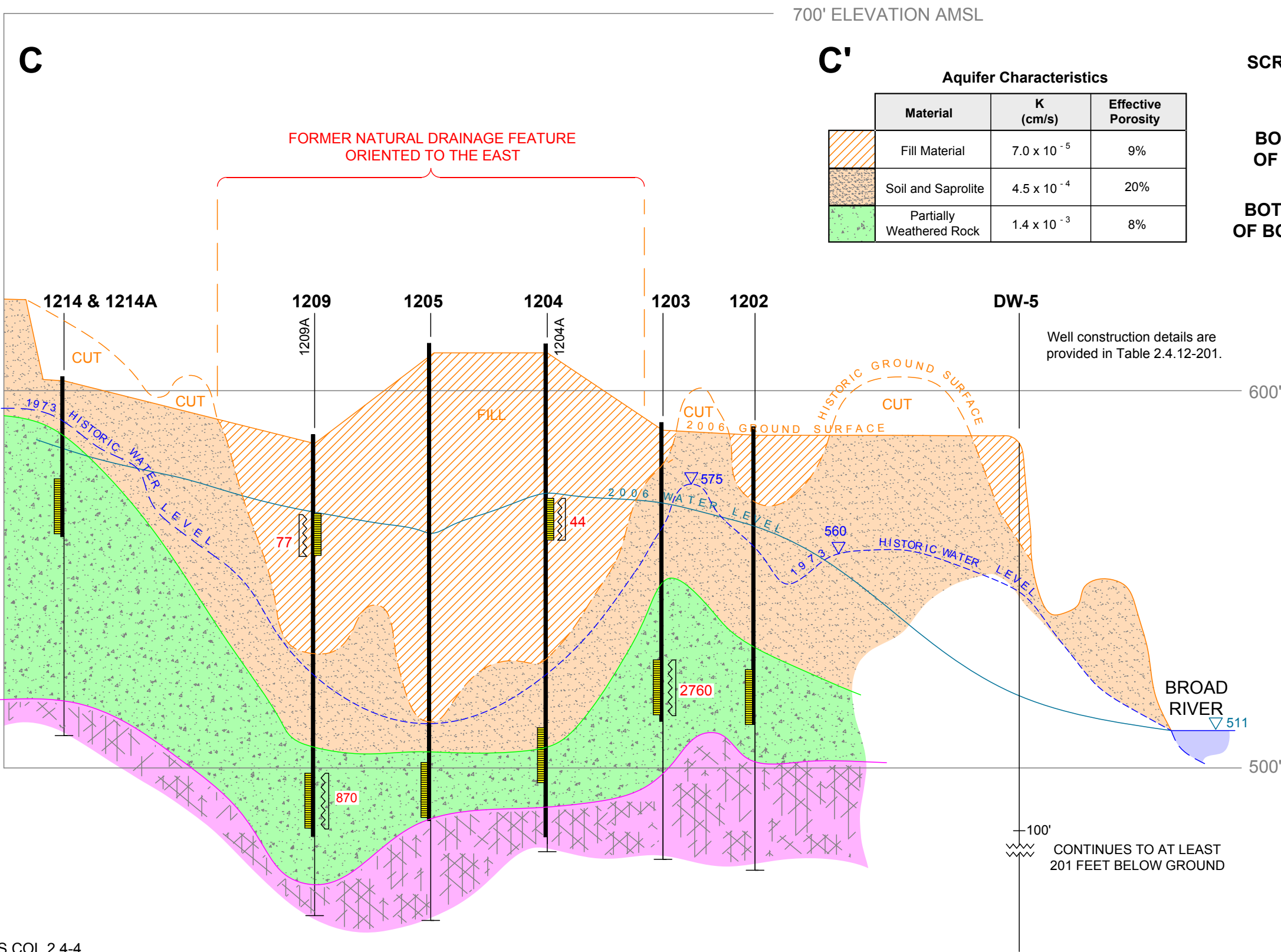
WELL-BORING KEY



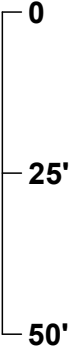
Elevation Units are ft. amsl

Aquifer Characteristics

| Material                 | K (cm/s)             | Effective Porosity |
|--------------------------|----------------------|--------------------|
| Fill Material            | $7.0 \times 10^{-5}$ | 9%                 |
| Soil and Saprolite       | $4.5 \times 10^{-4}$ | 20%                |
| Partially Weathered Rock | $1.4 \times 10^{-3}$ | 8%                 |



THIS FIGURE ILLUSTRATES GENERAL  
HYDROLOGIC CONDITIONS AT LEE  
NUCLEAR SITE.



WILLIAM STATES LEE III  
NUCLEAR STATION UNITS 1 & 2

Cross Sections of Lee Nuclear Site:  
C - C'

FIGURE 2.4.12-205      Rev 5  
Sheet 4 of 4