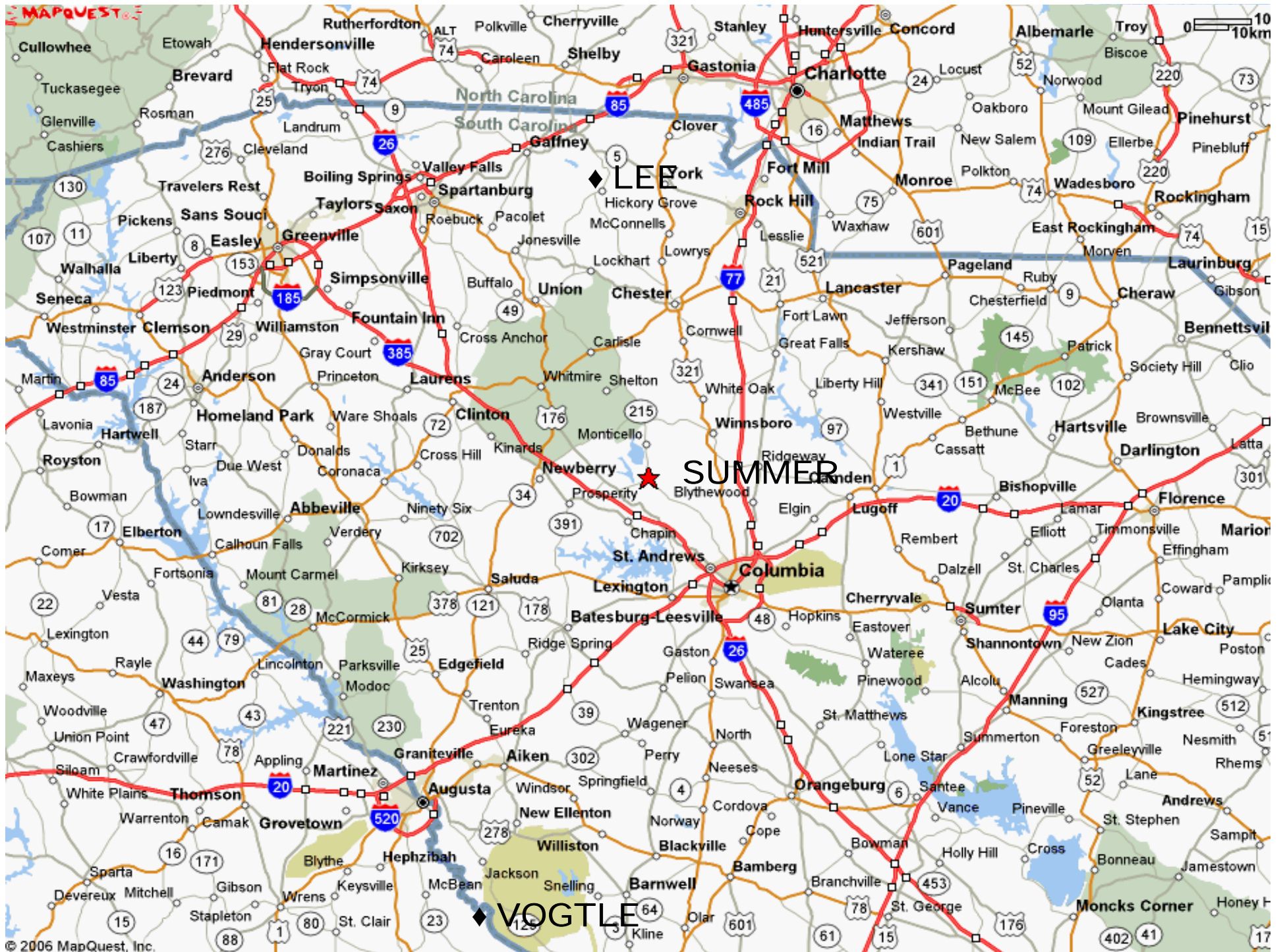


**Virgil C. Summer Nuclear Station Units 2 & 3  
(Westinghouse AP1000)**





MONTICELLO RESERVOIR

FAIRFIELD PUMPED STORAGE FACILITY

VCSNS UNIT 1

PARR RESERVOIR (BROAD RIVER)

VCSNS UNITS 2&3

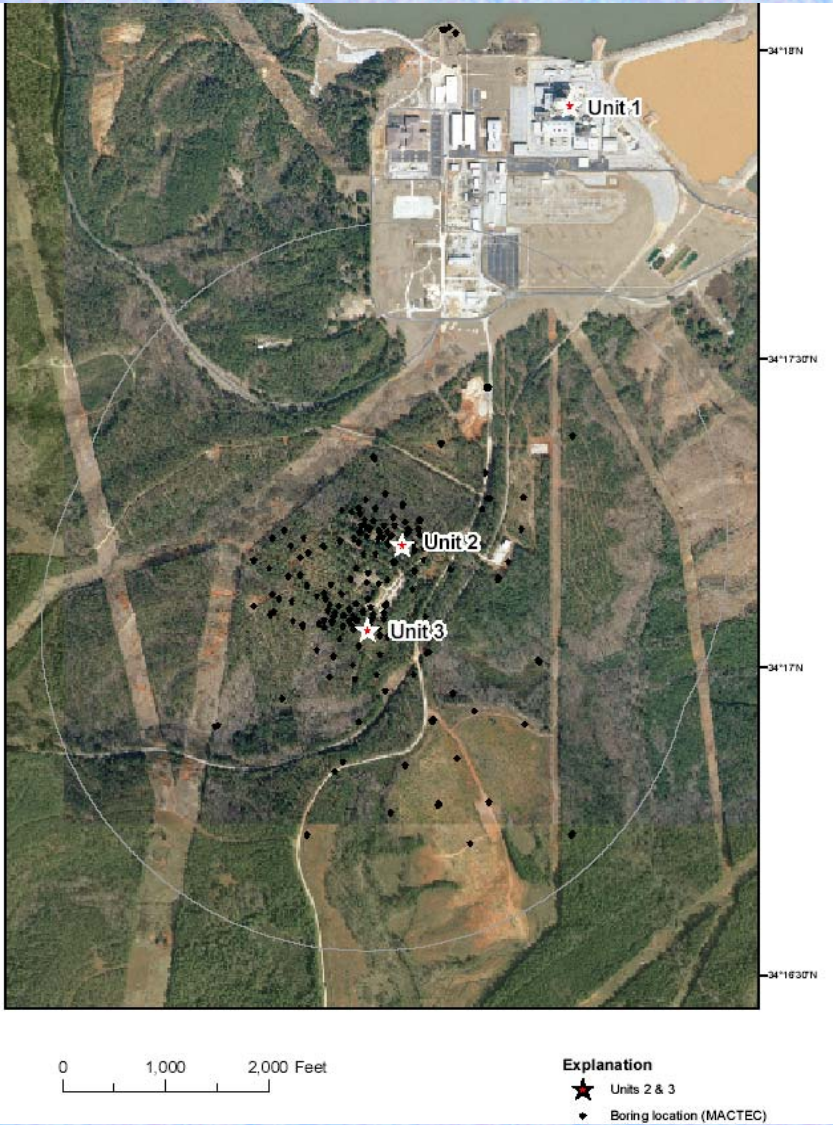
PARR

PARR SHOALS DAM

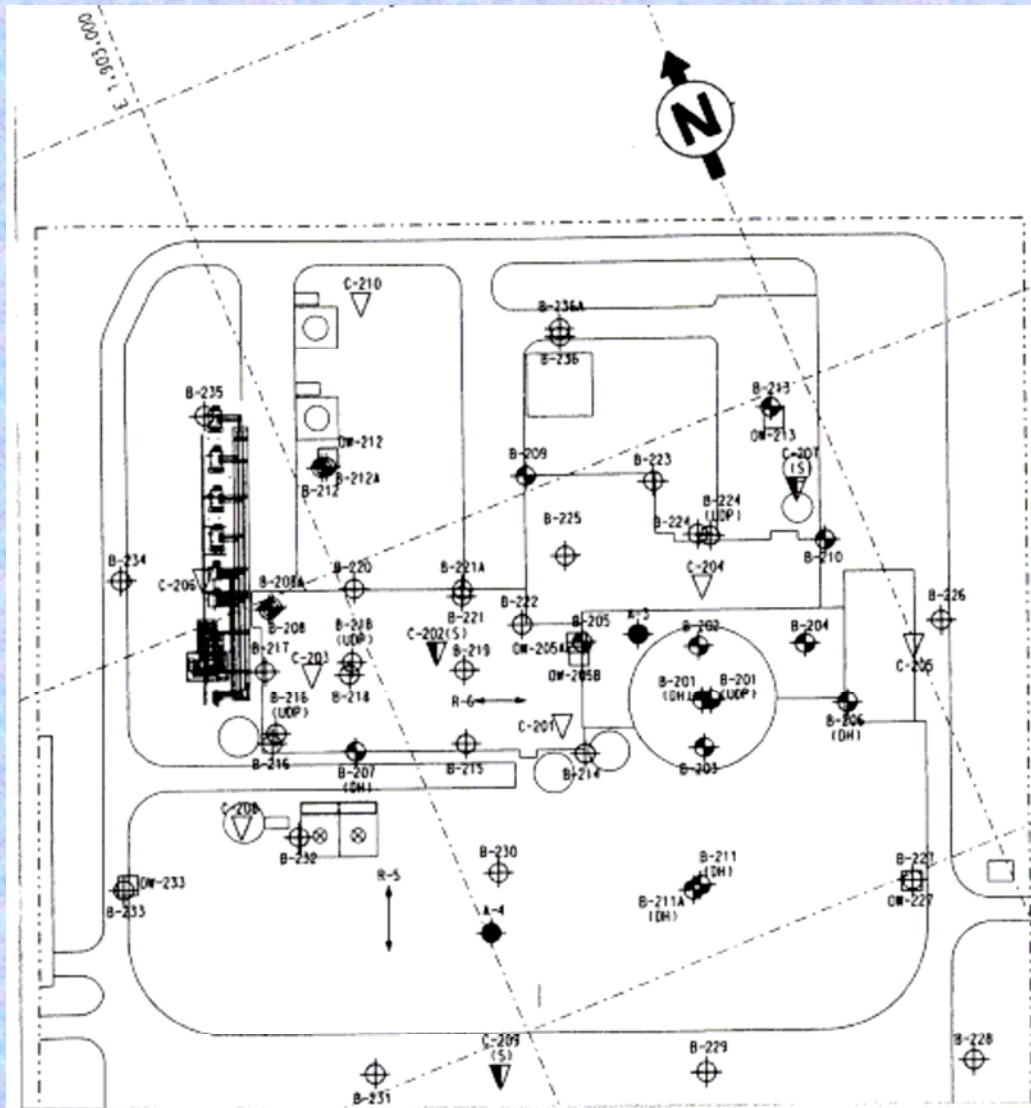
NEW NUCLEAR DEPLOYMENT OFFICE



# Geotechnical Boring Layout



# Geotechnical Boring Layout



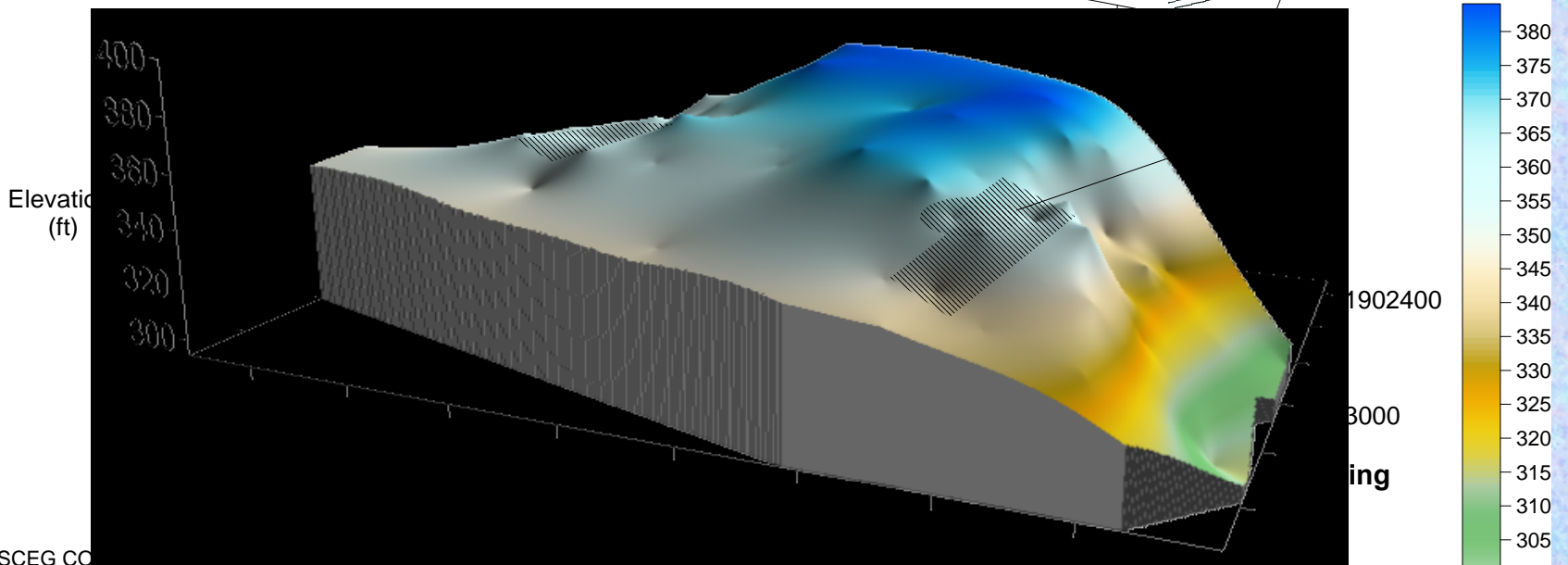
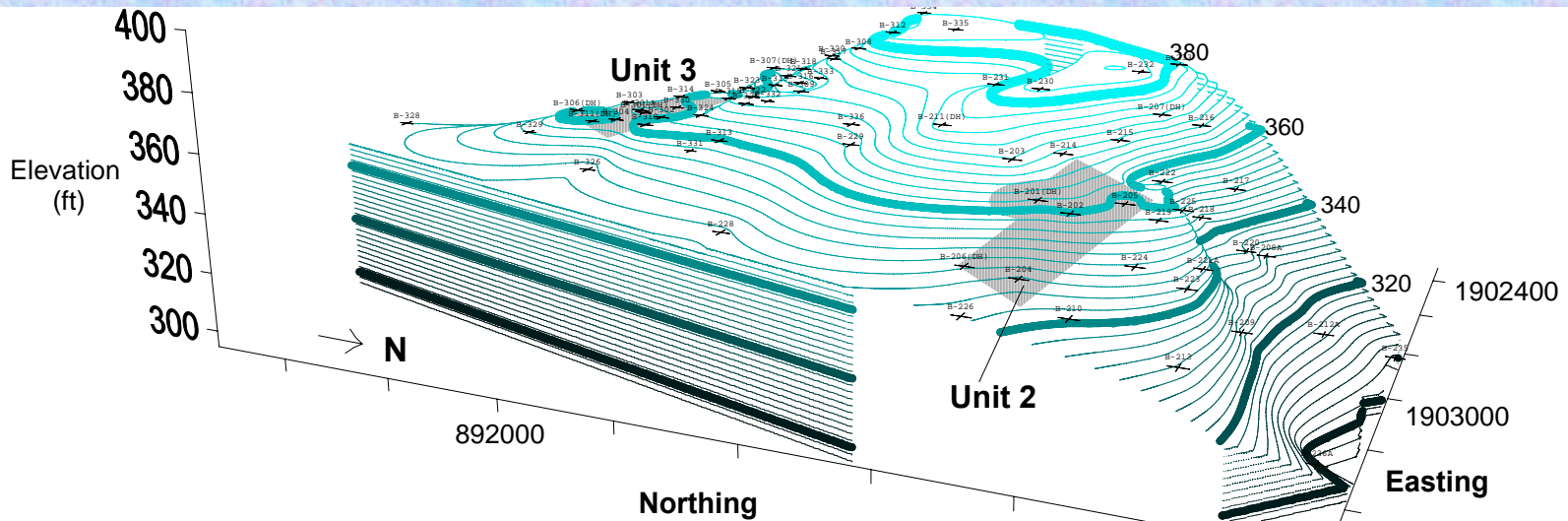
# Geotechnical Investigation Summary

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Test Pits	4
Suspension Velocity Logging	8

# Existing Subsurface Profile (Typical)

<b>Residual Soils</b> – Reddish Soils, Typically Sandy Silts (ML) and Silty Sands (SM) with Variable Clay Content	<b>0 – 20'</b>
<b>Saprolite</b> – Completely Weathered Rock Degraded to a Soil Consistency; Soil retains relict rock structure	<b>20' – 40'</b>
<b>Partially Weathered Rock</b> – Transition Zone from Residual Soil / Saprolite to Rock	<b>40' – 45'</b>
<b>Competent Rock</b>	<b>45' – 65'</b>

# Sound Rock Surface View



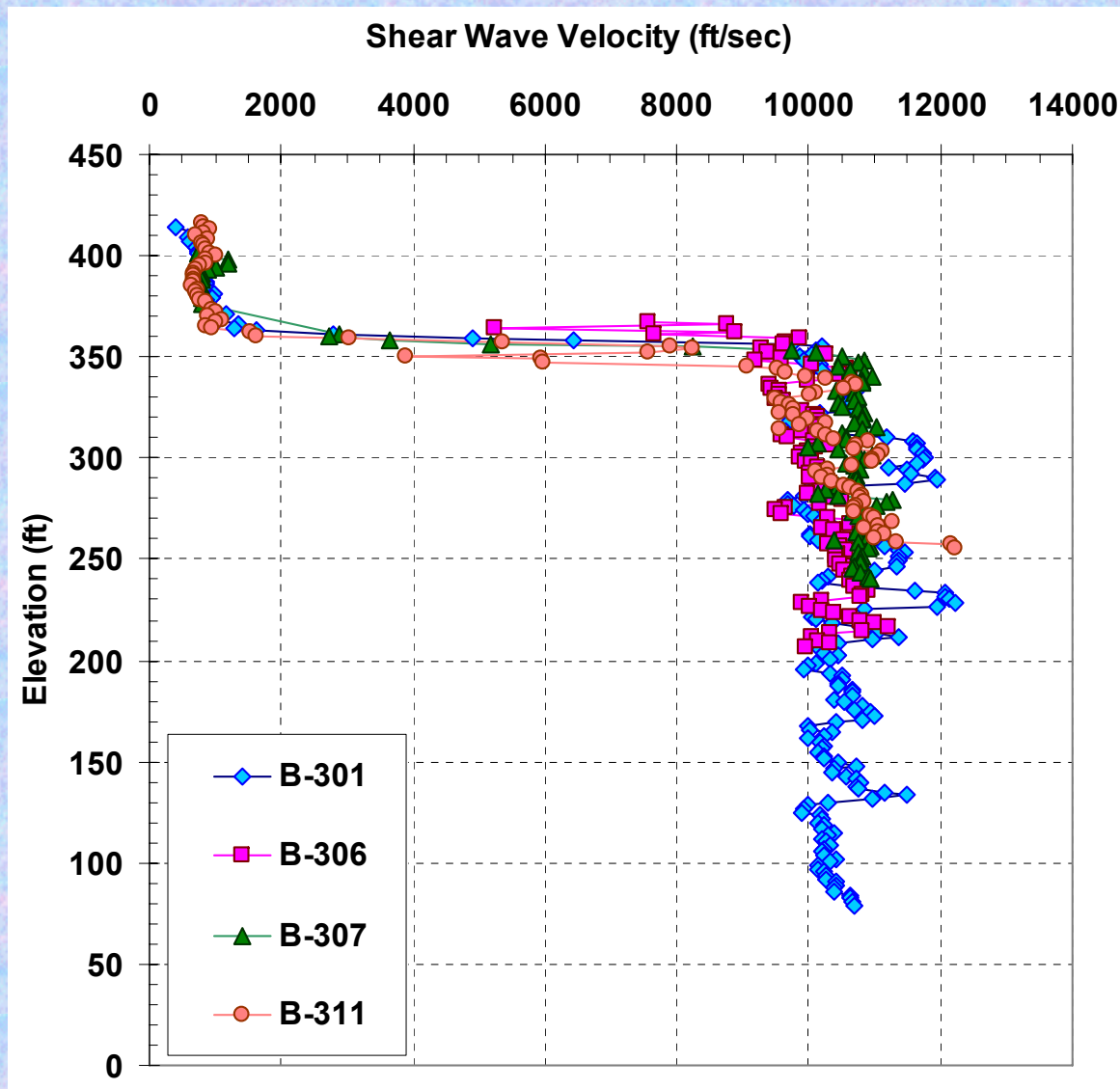
SCEG CO

Note: All coordinates are in South Carolina State Plane NAD83 and elevations use NAVD 88.

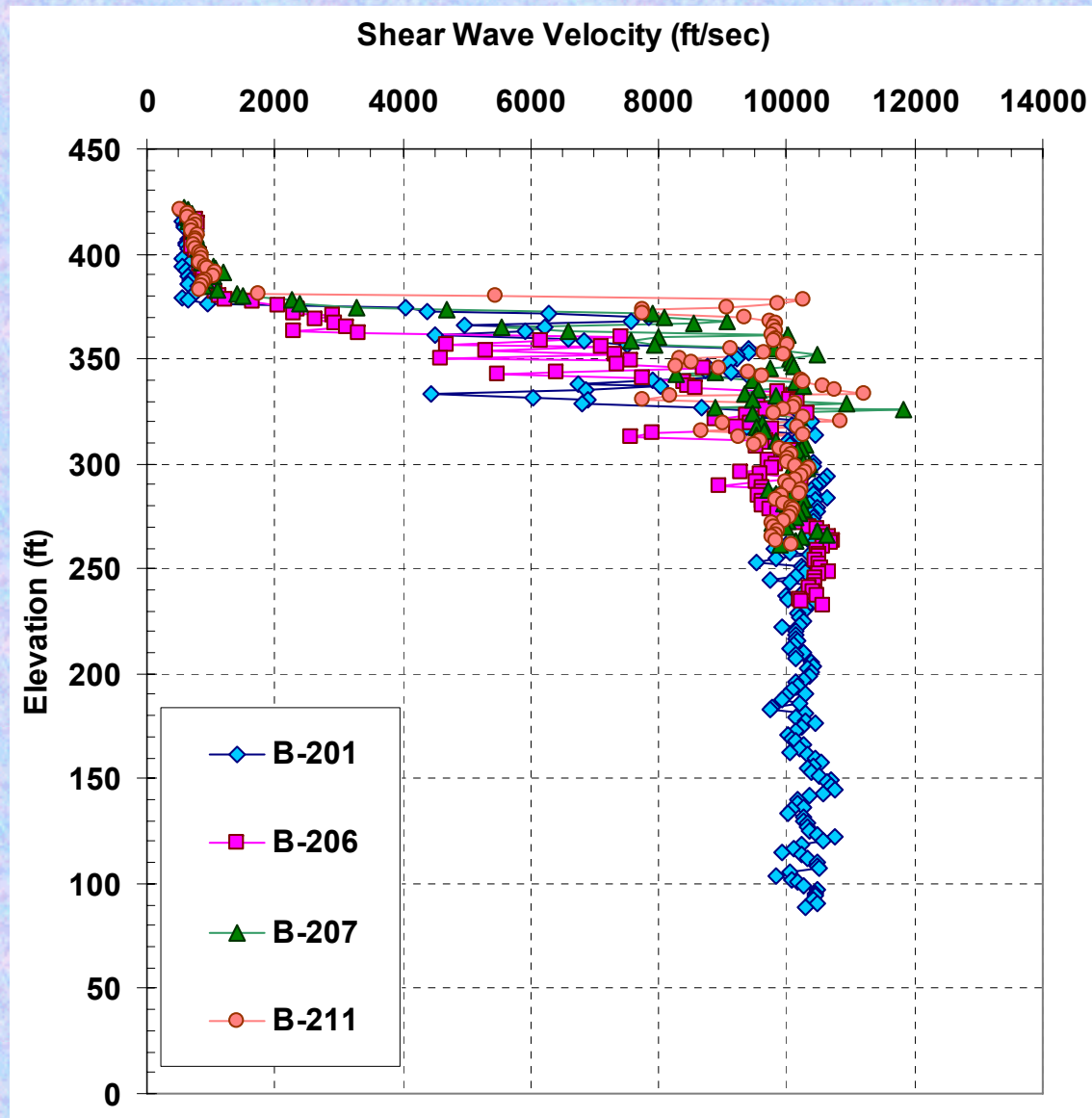
3-D View of Sound Rock Surface



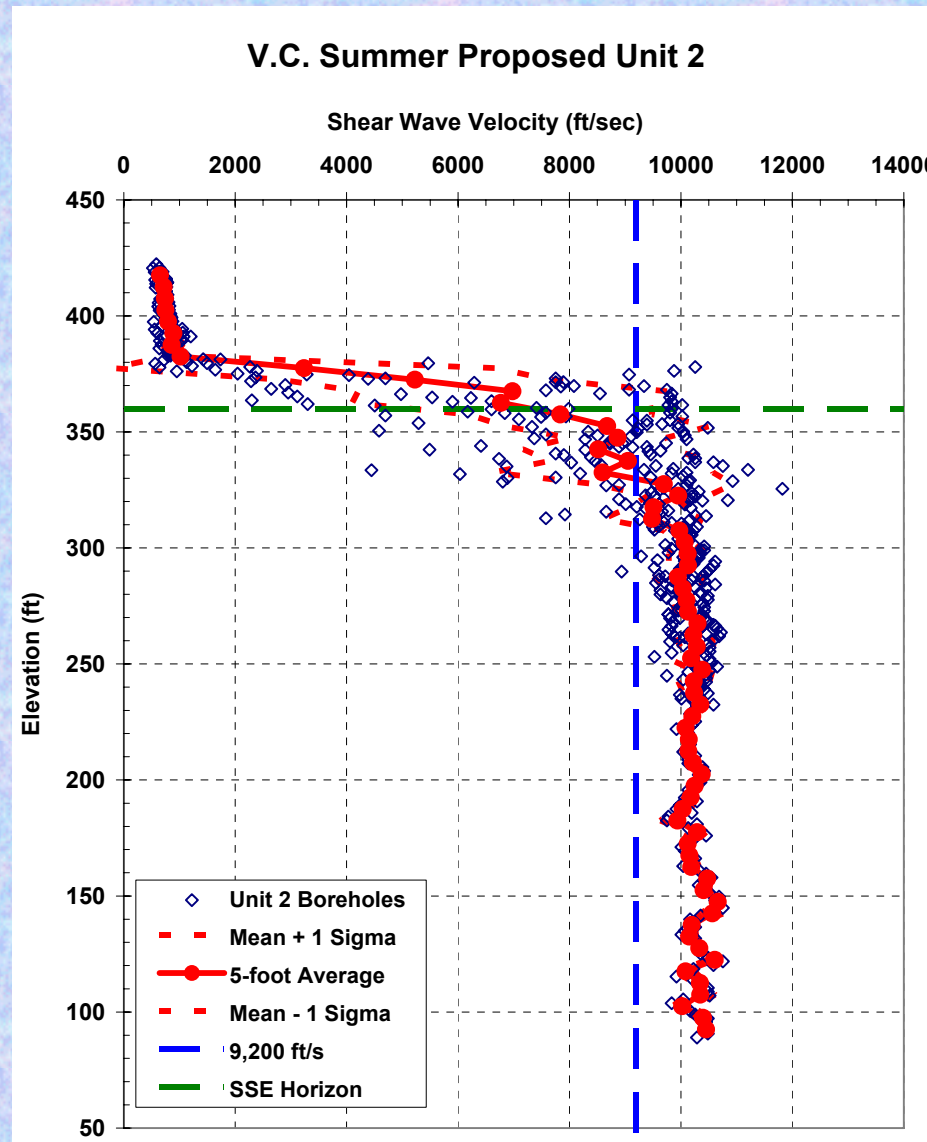
# Rock Shear Wave Velocity Unit 3 Power Block



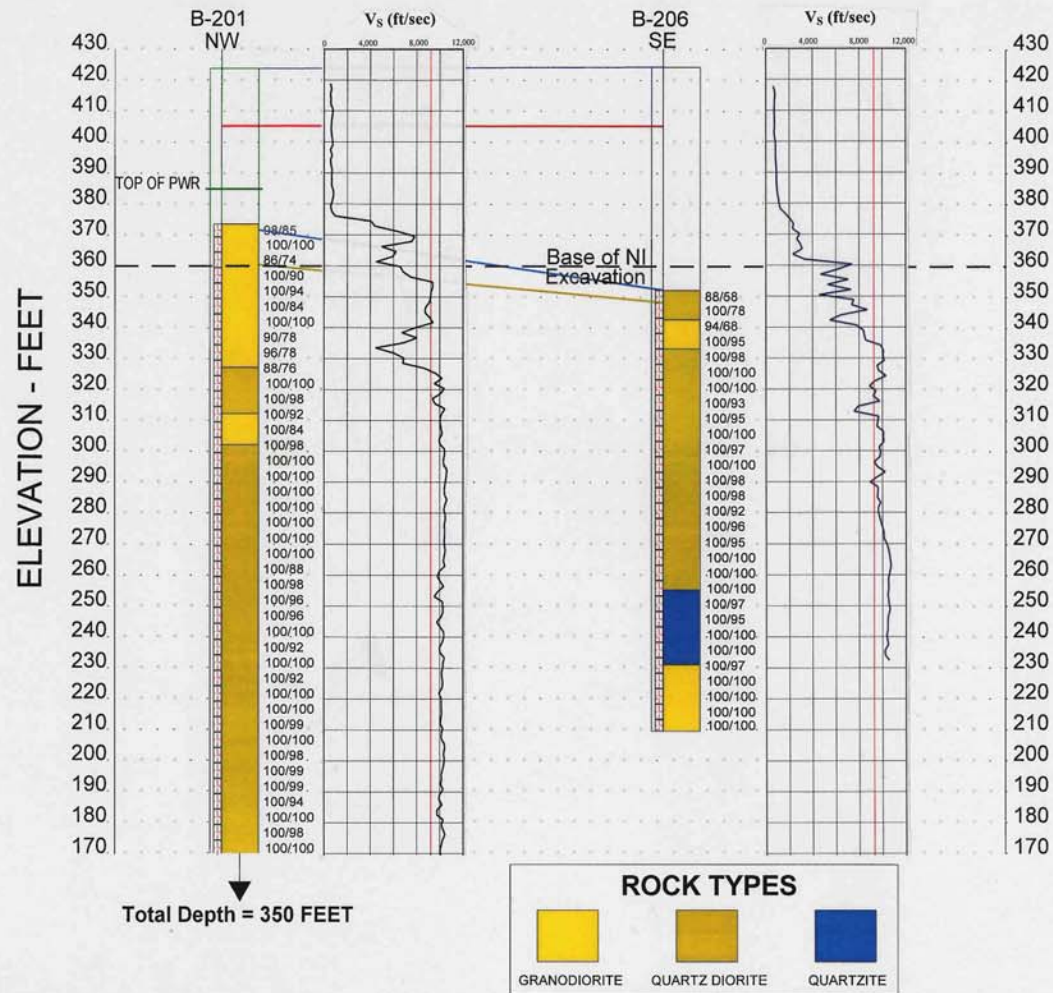
# Rock Shear Wave Velocity Unit 2 Power Block



# Average Rock Shear Wave Velocity Unit 2



# Borings B-201 and B-206



# Construction / Backfill Plans

- Establish Plant Grade at Elevation ~ 400'
- Excavate Power Block to Competent Rock at Elevation ~ 360'
- **Nuclear Island:** Place Fill Concrete Leveling Mat
- **Other Structures:** Install Engineered Backfill to Structure Foundation Level