

Figure 2.5-46 Low-Frequency,  $10^{-5}$  Median, Magnitude-Distance Deaggregation Using Updated Source and Ground Motion Models

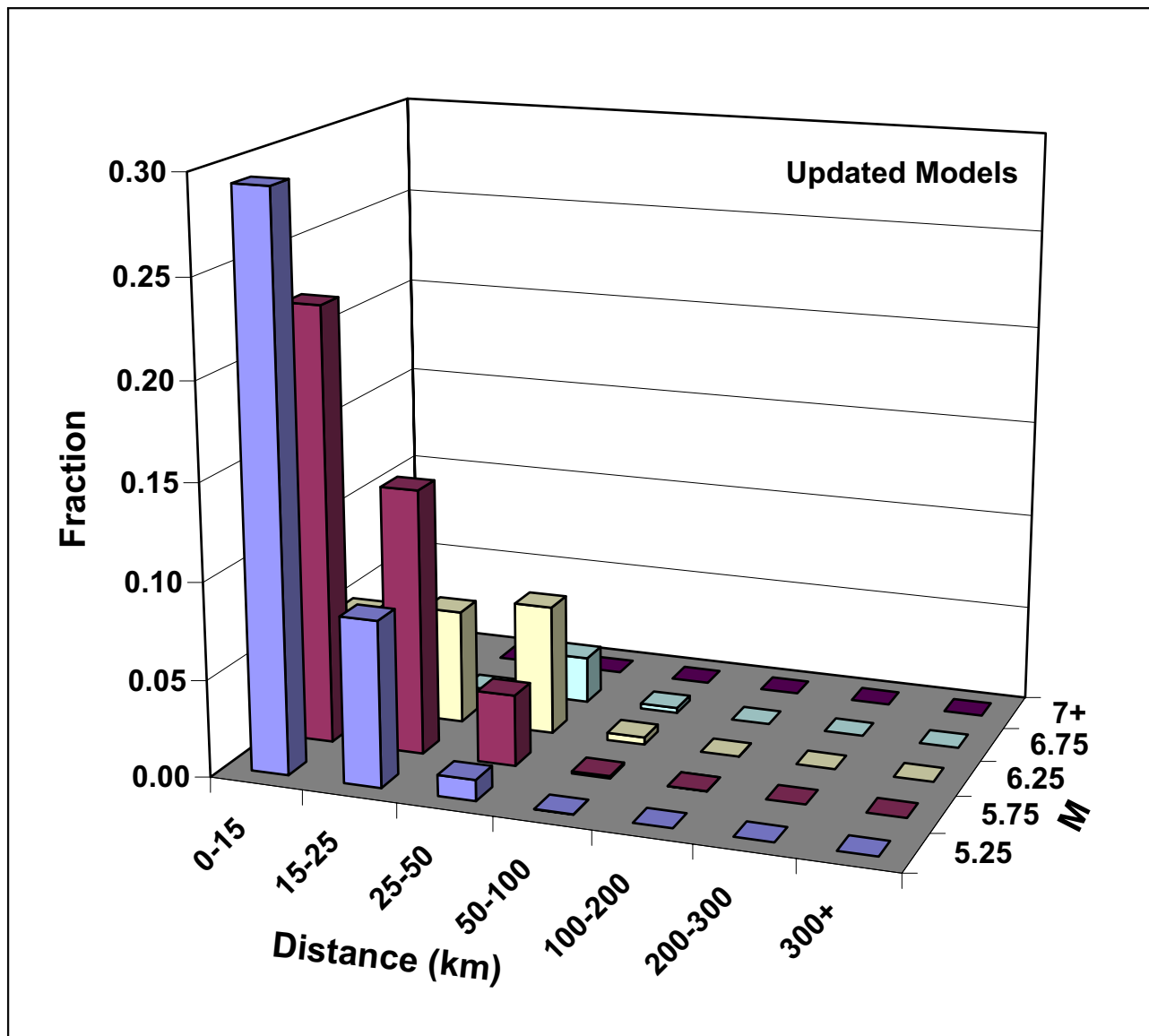


Figure 2.5-47 High-Frequency,  $10^{-5}$  Median, Magnitude-Distance Deaggregation Using Updated Source and Ground Motion Models

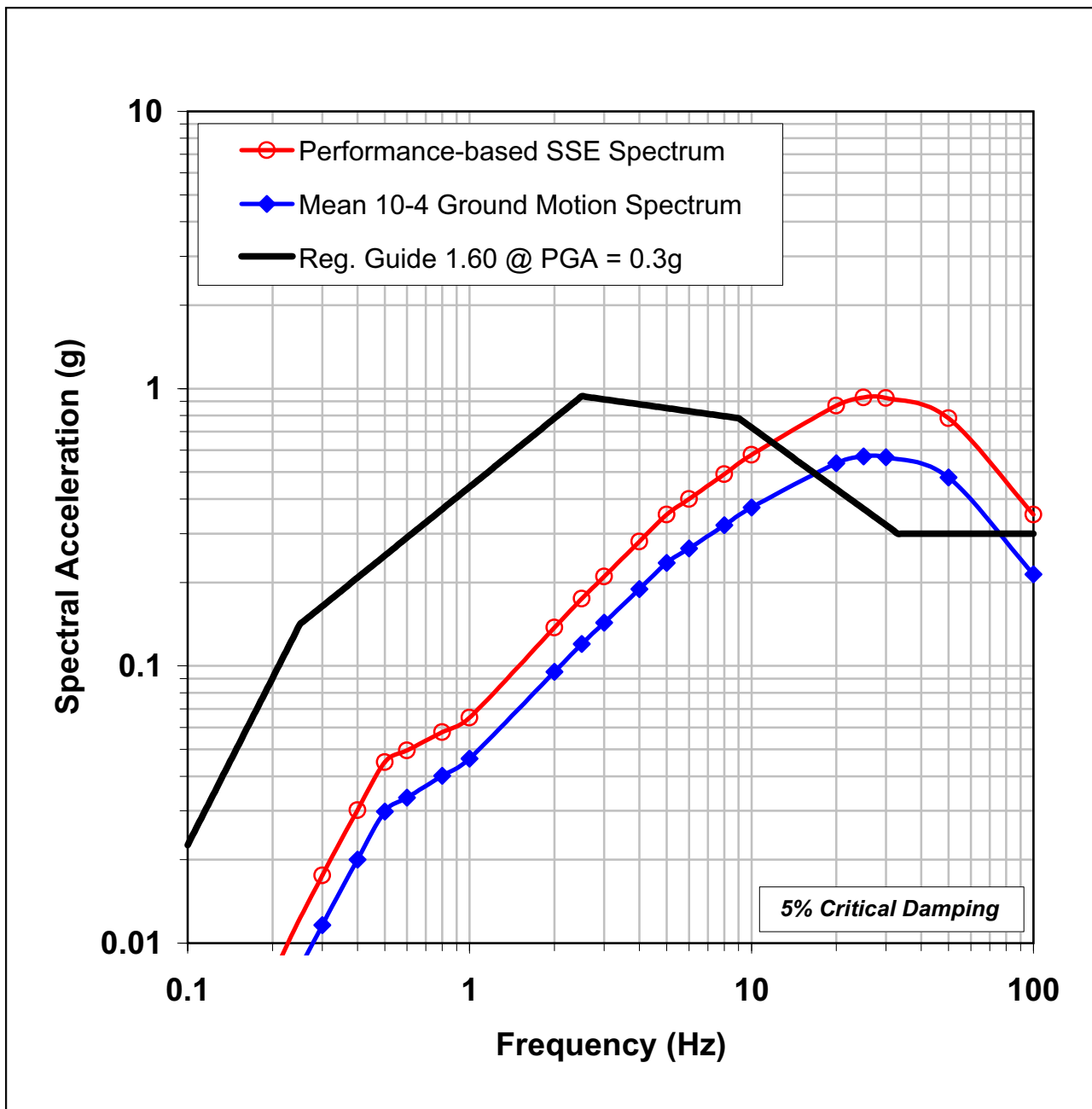


Figure 2.5-48 Selected Performance-Based Horizontal SSE Response Spectrum, As Scaled from Mean 10<sup>-4</sup> Ground Motion Spectrum, Compared to RG 1.60 Spectrum Anchored to 0.3g

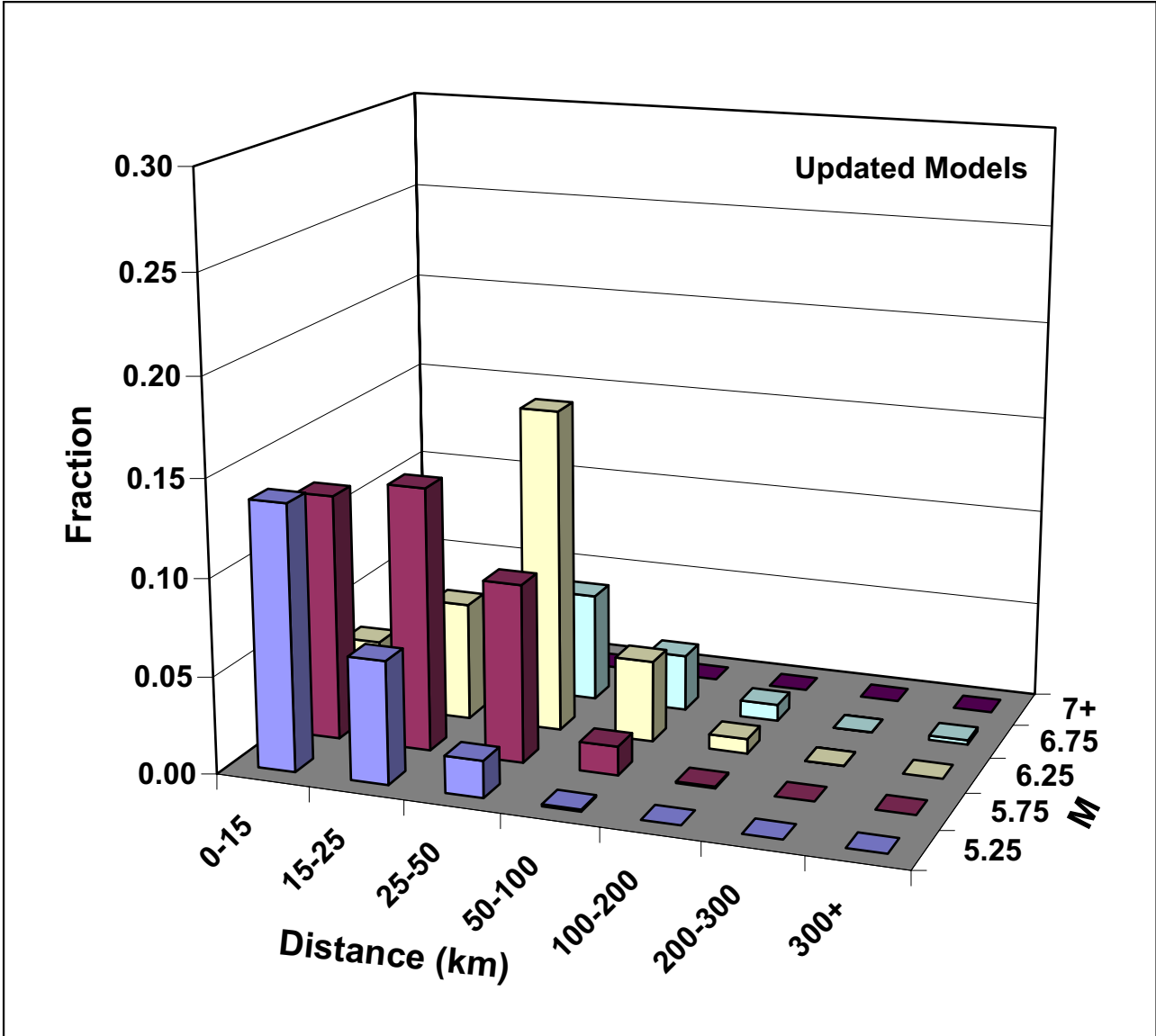
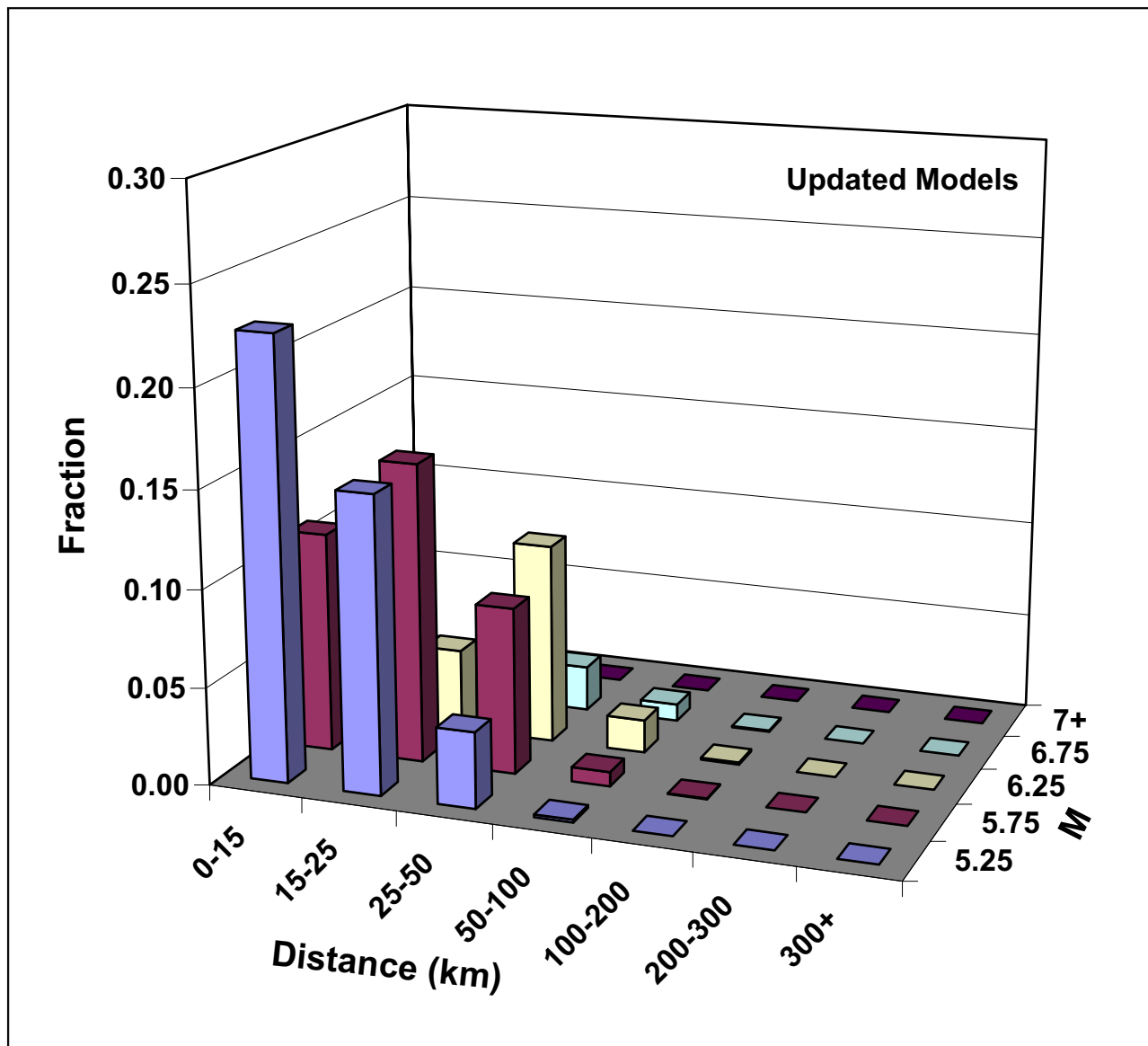


Figure 2.5-49 Magnitude-Distance Deaggregation for Low-Frequencies (1 and 2.5 Hz) at a Mean Annual Frequency of  $5 \times 10^{-5}$  Using Updated Source and Ground Motion Models





**Figure 2.5-50 Magnitude-Distance Deaggregation for High-Frequencies (5 and 10 Hz) at a Mean Annual Frequency of  $5 \times 10^{-5}$  Using Updated Source and Ground Motion Models**

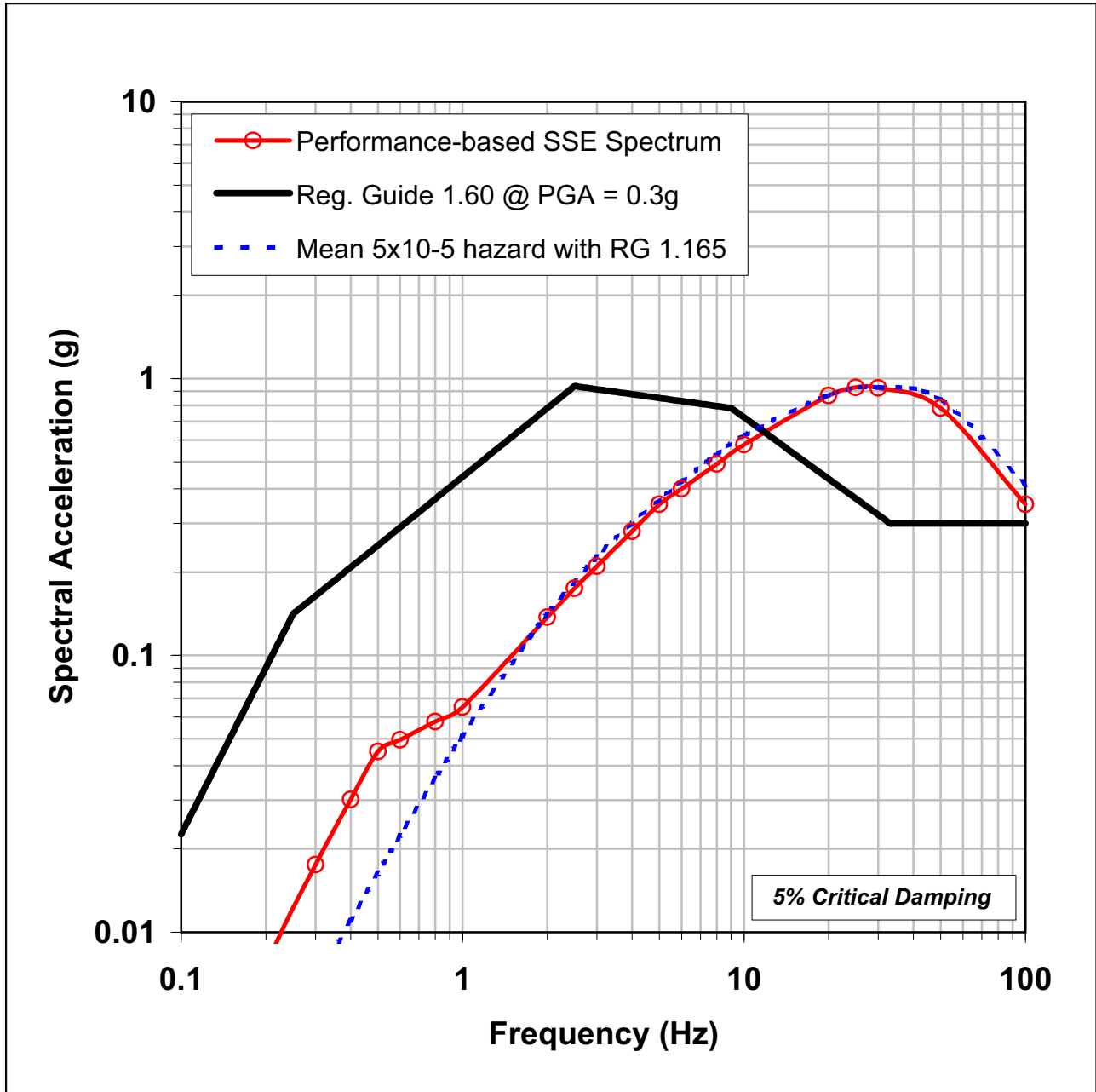


Figure 2.5-51 Horizontal Ground Motion Spectrum Calculated for Reference Probability of Mean  $5 \times 10^{-5}$ , Compared to RG 1.60 Spectrum Anchored to 0.3g and to Selected SSE Spectrum

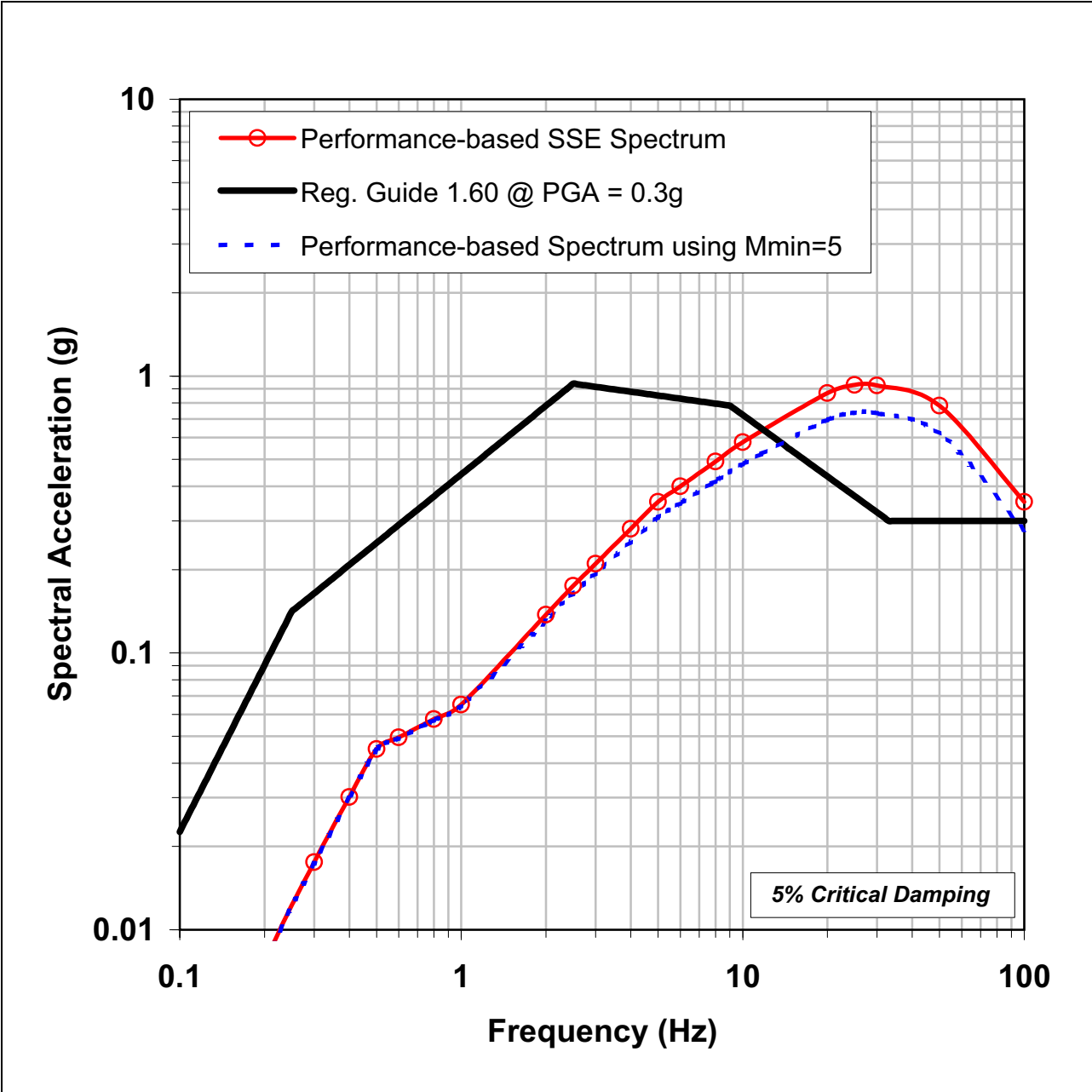


Figure 2.5-52 Sensitivity Plot of Scaled Spectrum Calculated Using Alternative Lower-Bound M of 5.0 and Scaling Factors in Table 2.5-27, Compared to RG 1.60 Spectrum Anchored to 0.3g and to Selected SSE Spectrum

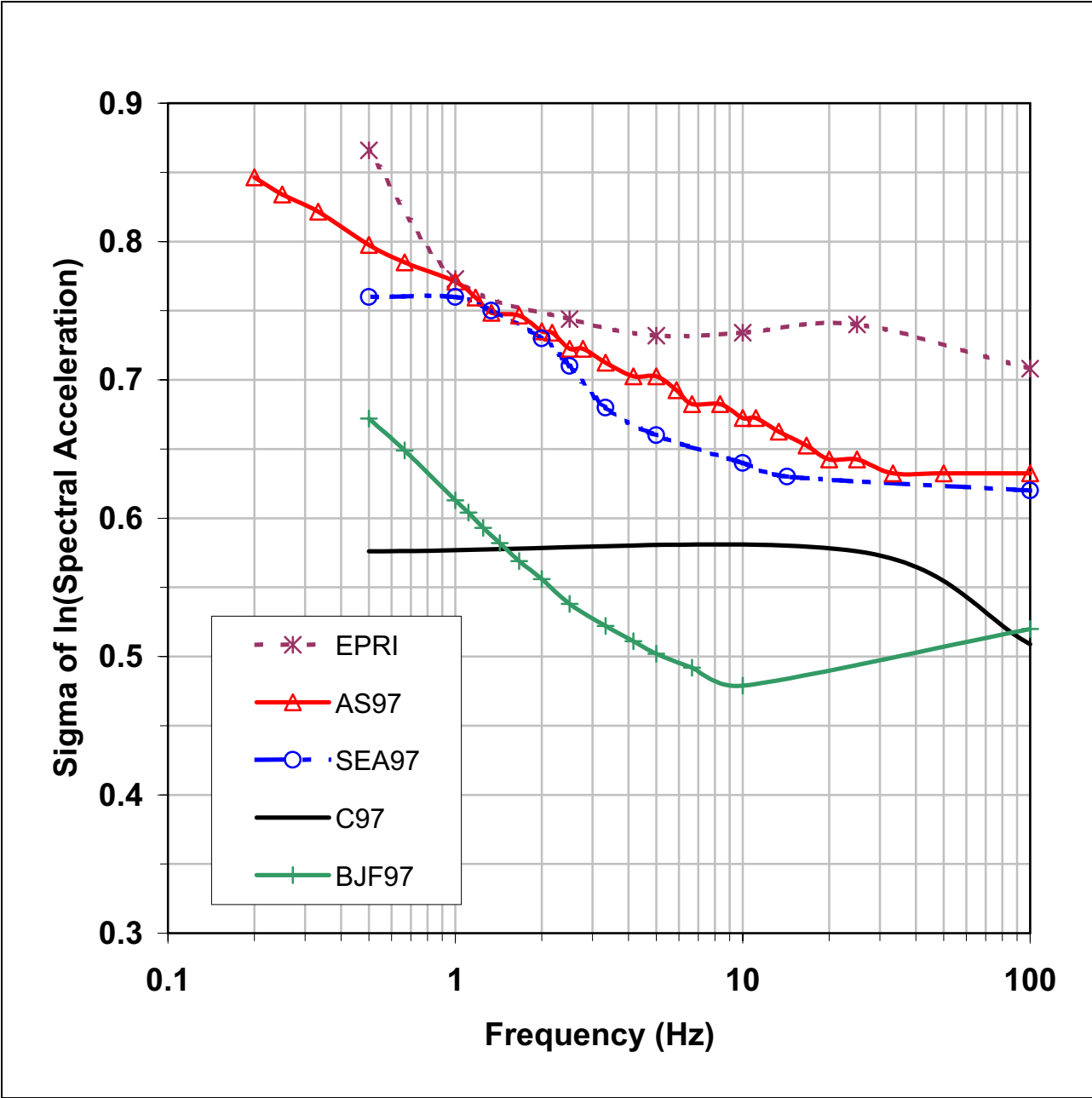


Figure 2.5-53 Comparison of Aleatory Sigmas Reported for California with Weighted Average Aleatory Sigma from EPRI Ground Motion 2003 Models for  $M = 5.5$ ,  $R_{CD} = 20$  km

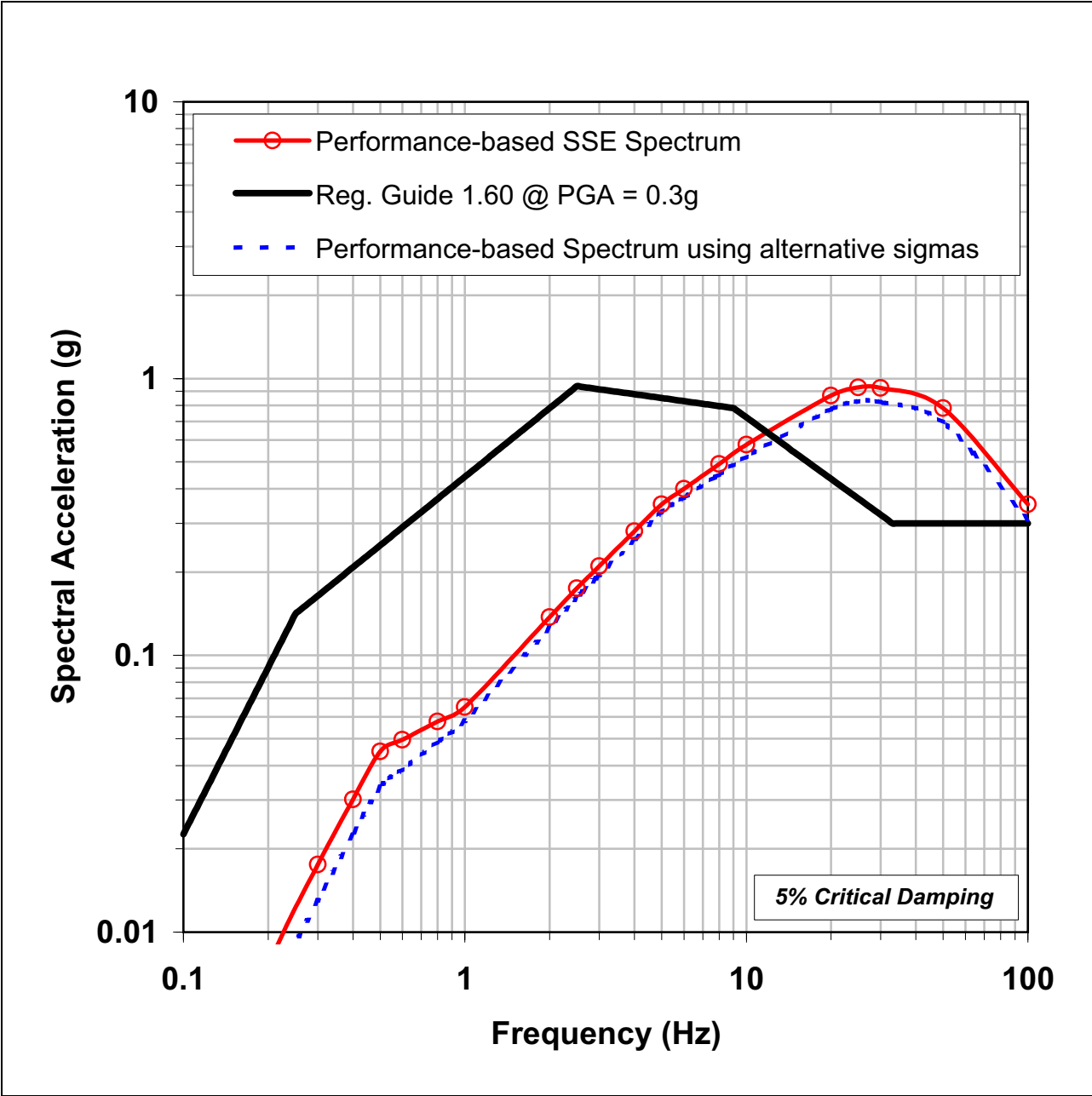


Figure 2.5-54 Sensitivity Plot of Scaled Spectrum Calculated Using Alternative Ground Motion Aleatory Uncertainties and Scaling Factors in Table 2.5-28, Compared to RG 1.60 Spectrum Anchored to 0.3g and to Selected SSE Spectrum

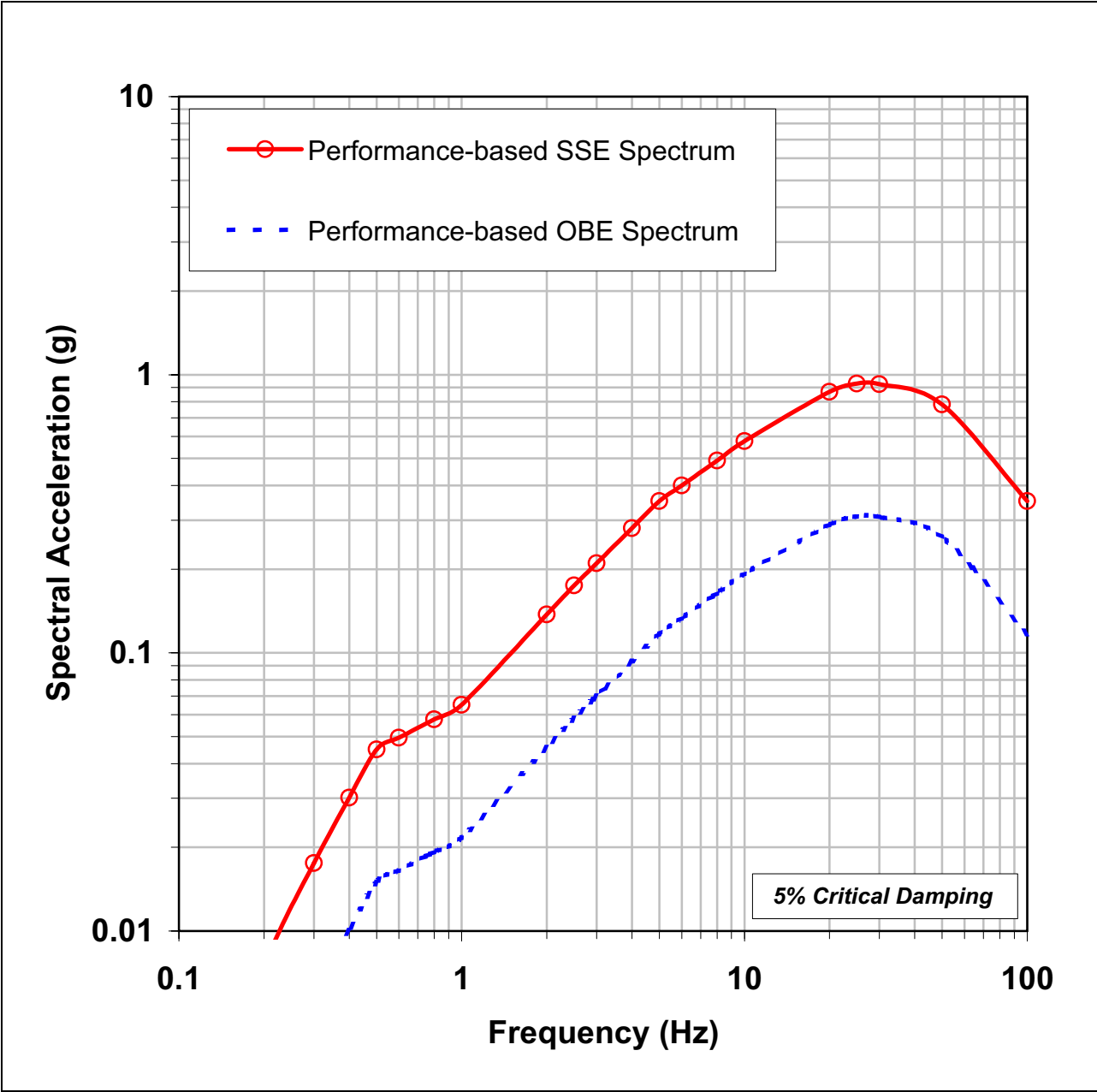
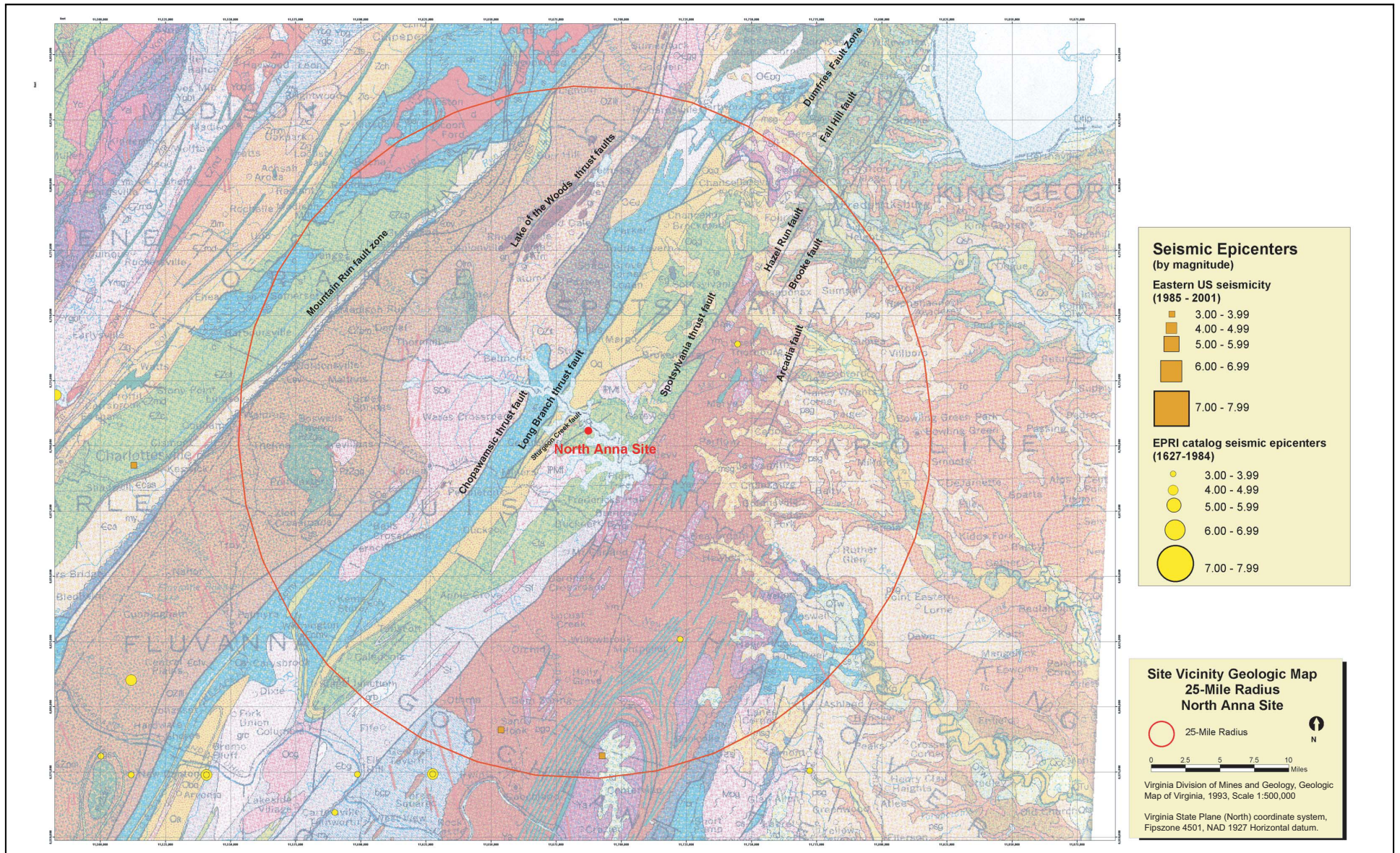
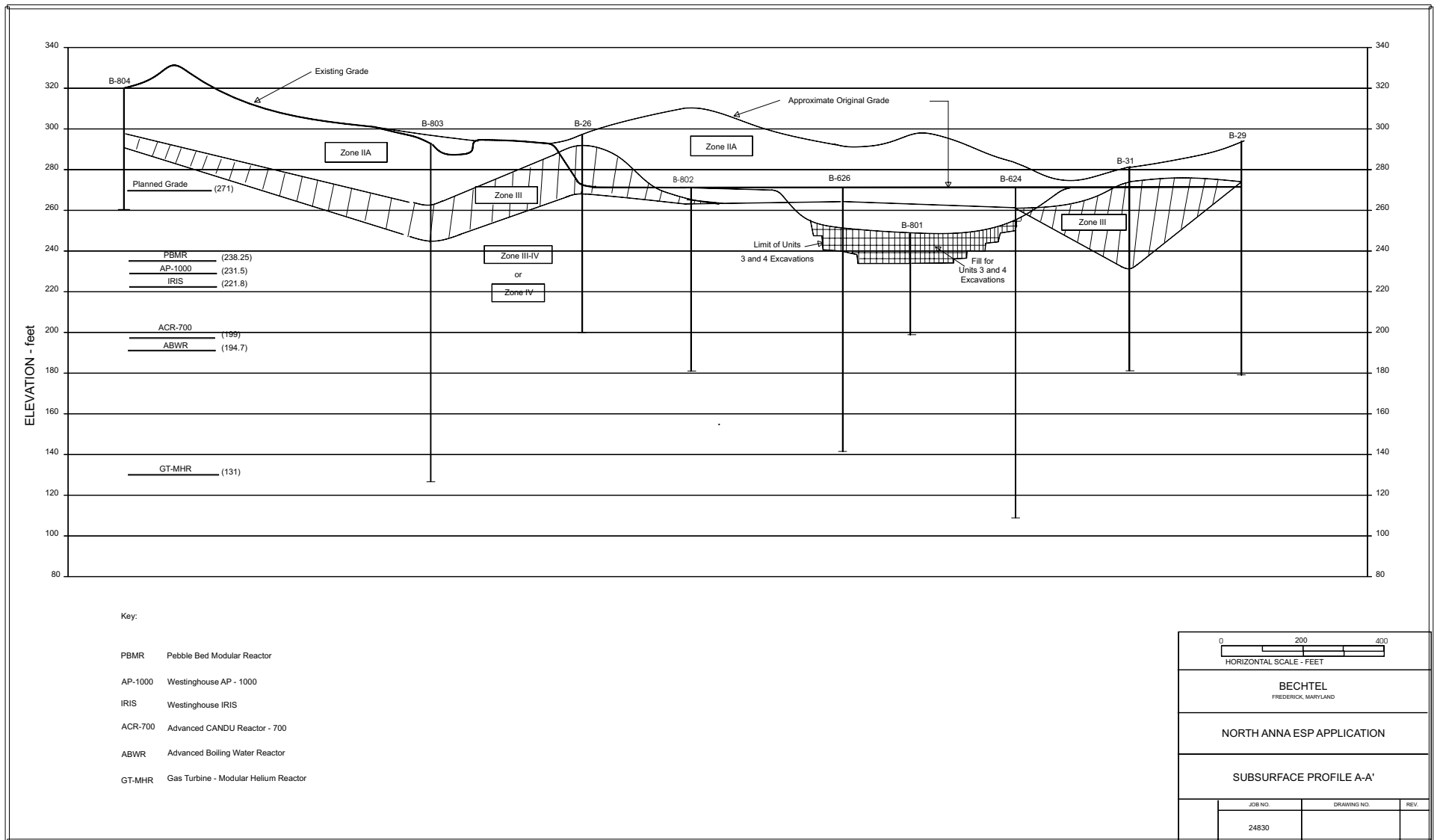


Figure 2.5-55 Horizontal SSE and OBE Response Spectra Based on Updated Models (5% of Critical Damping)

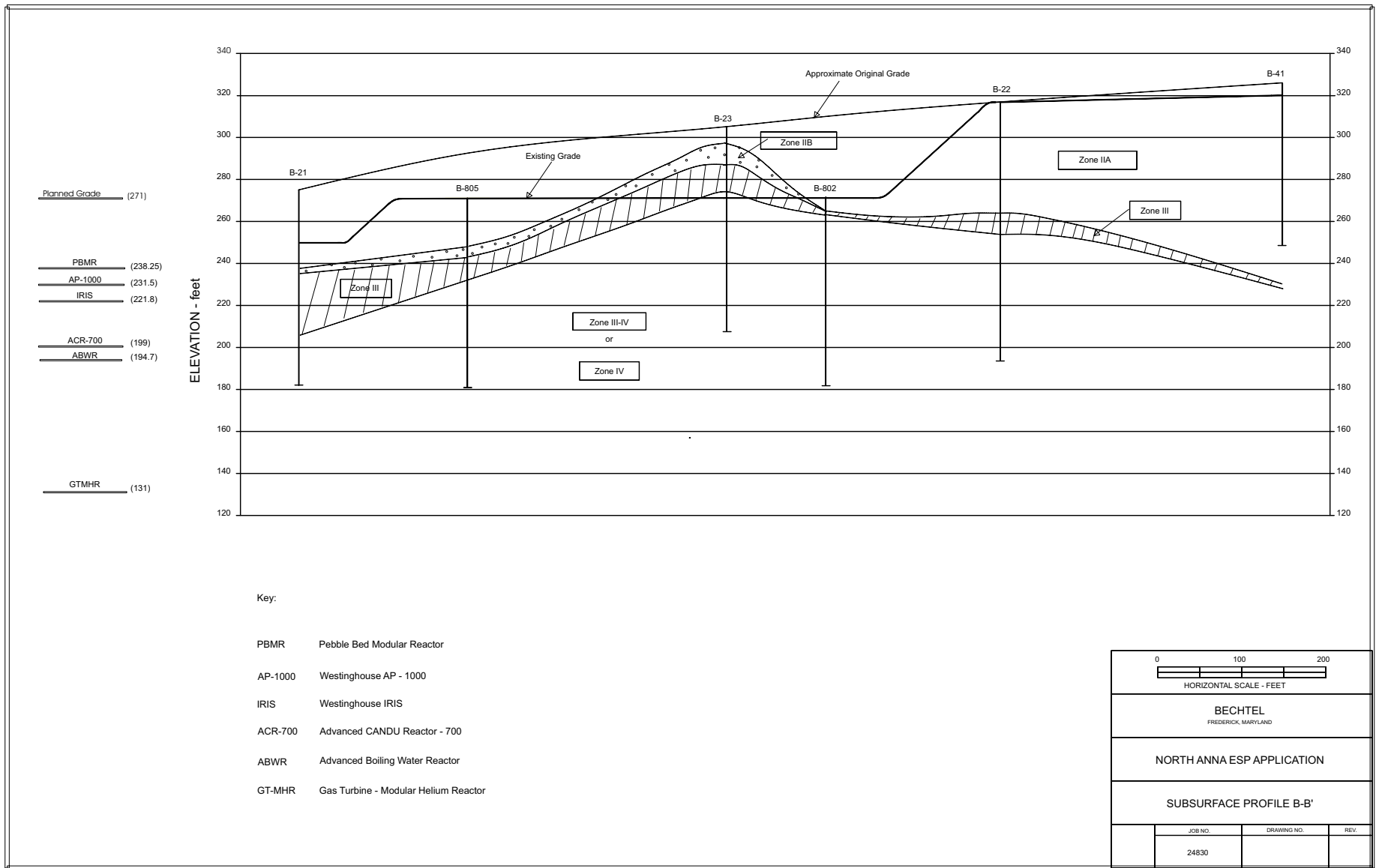




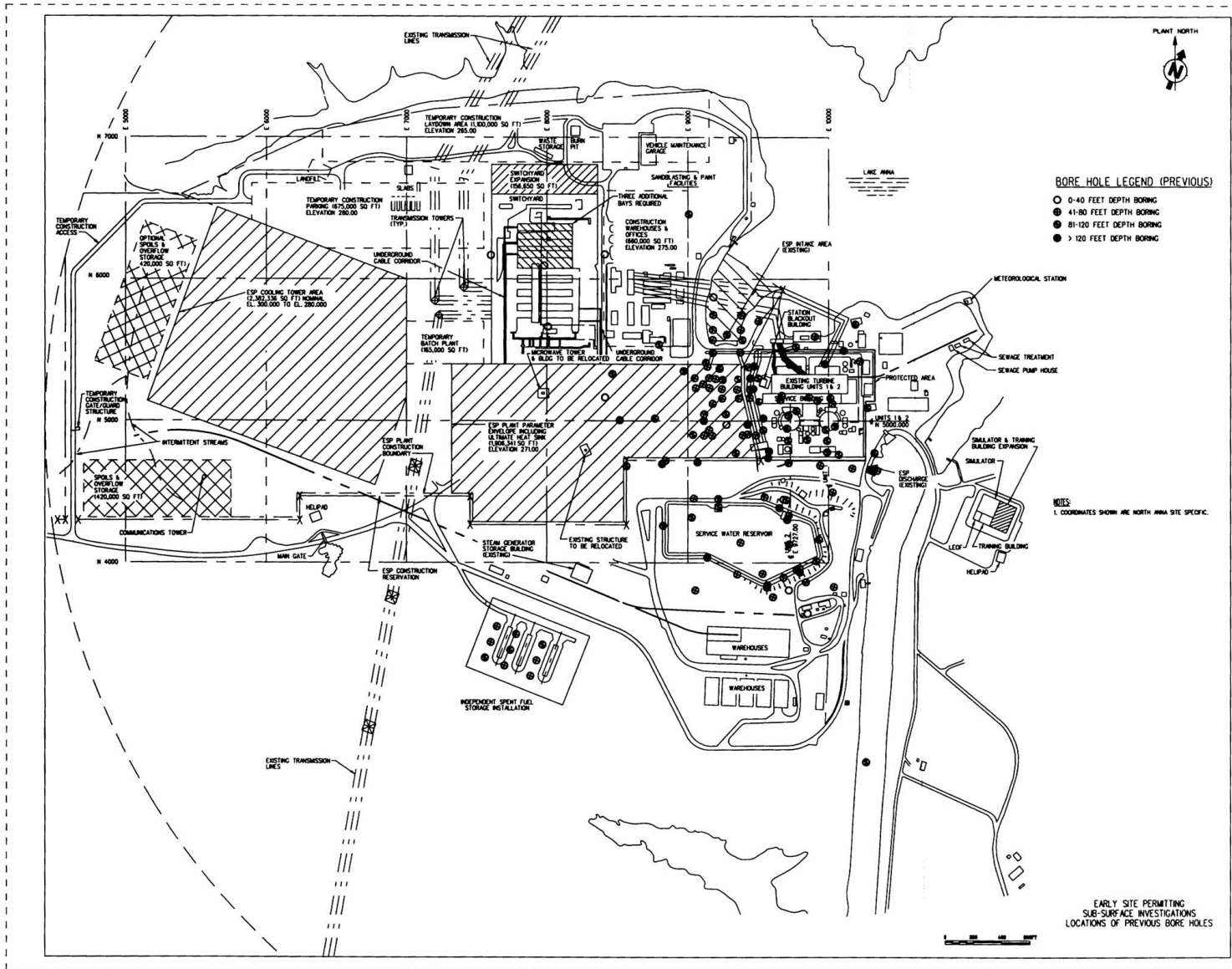
**Figure 2.5-56 Site Vicinity Geologic Map and Seismicity (25-Mile Radius)**







**Figure 2.5-58 Subsurface Profile B-B'**



**Figure 2.5-59 Locations of Previous Boreholes**

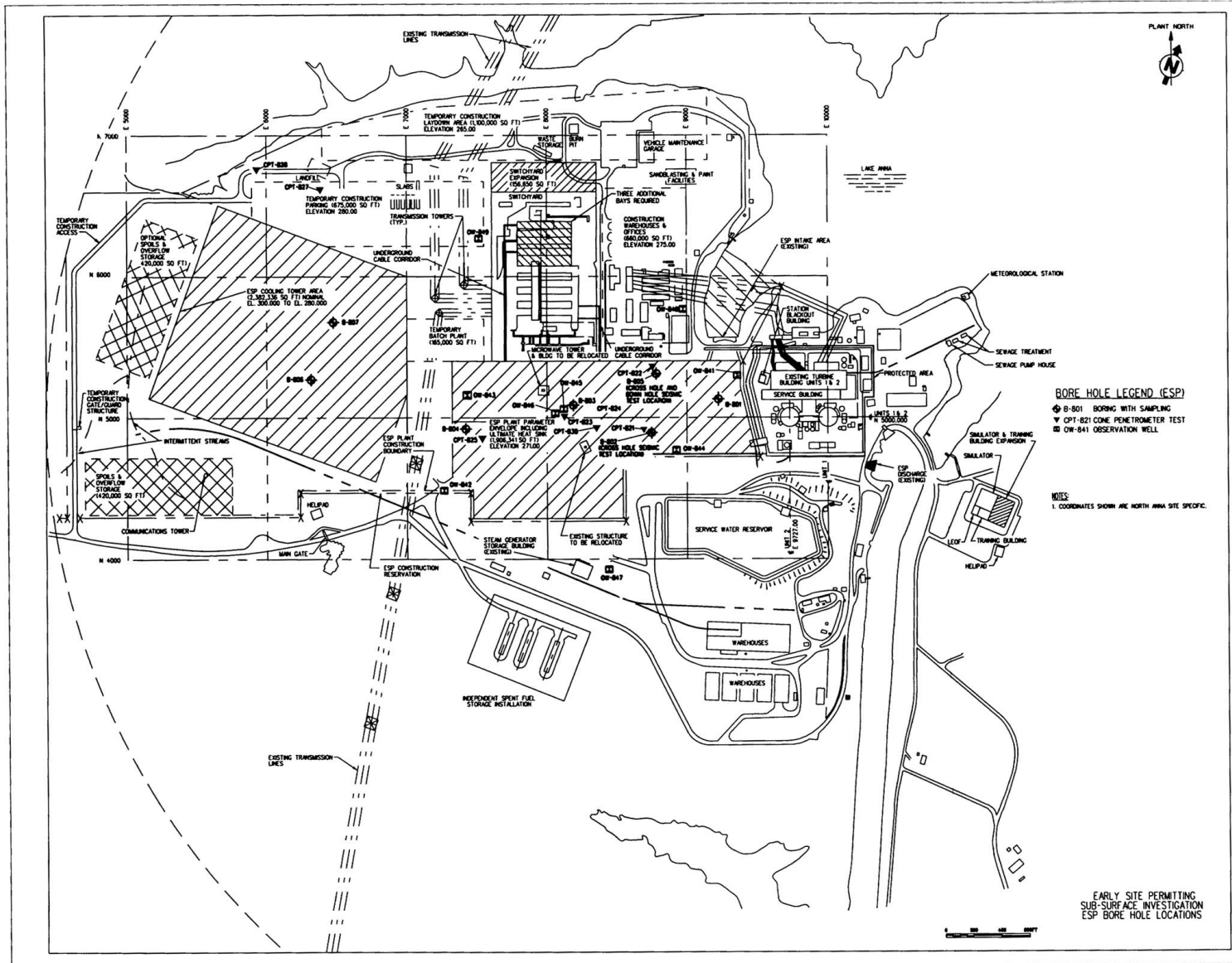
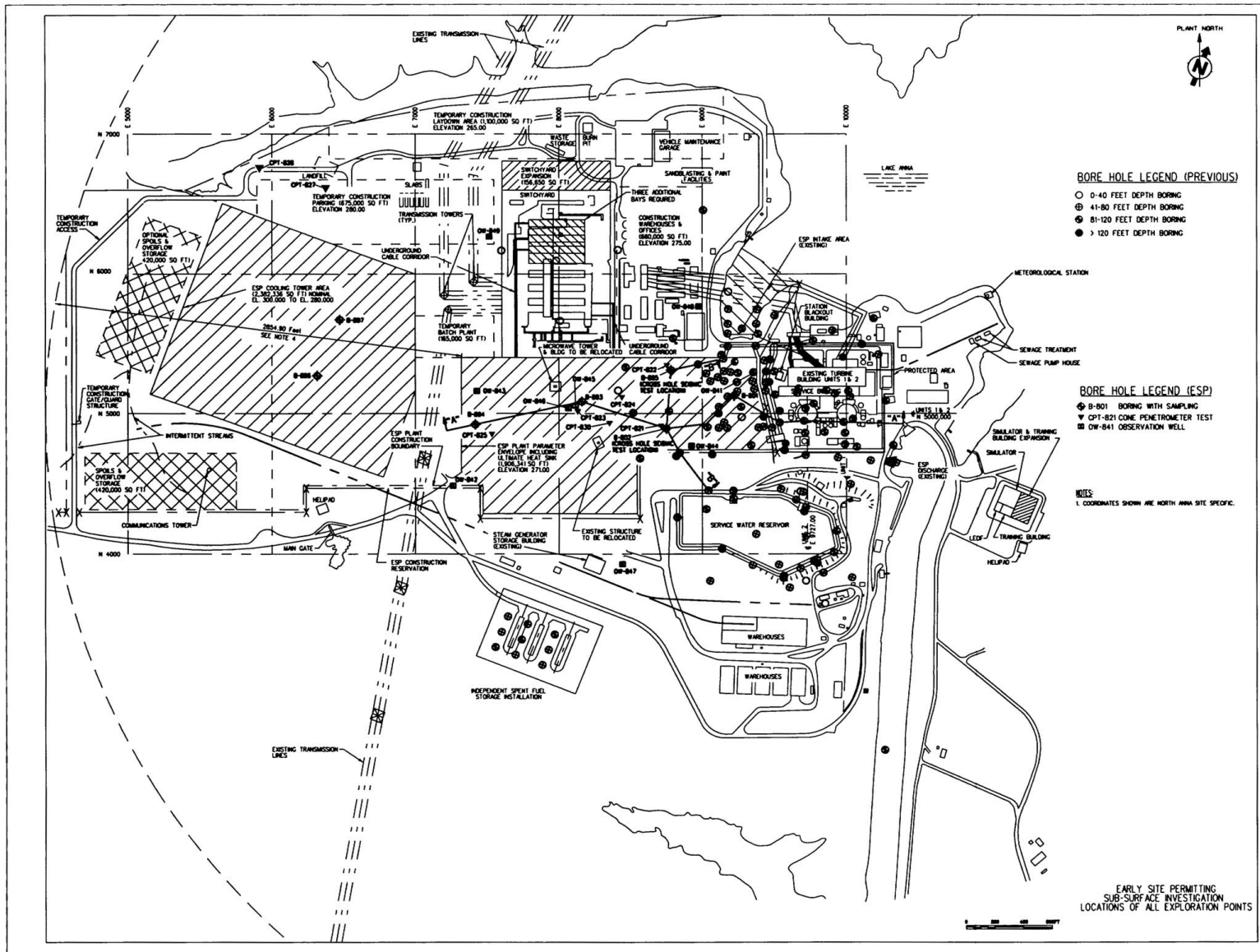
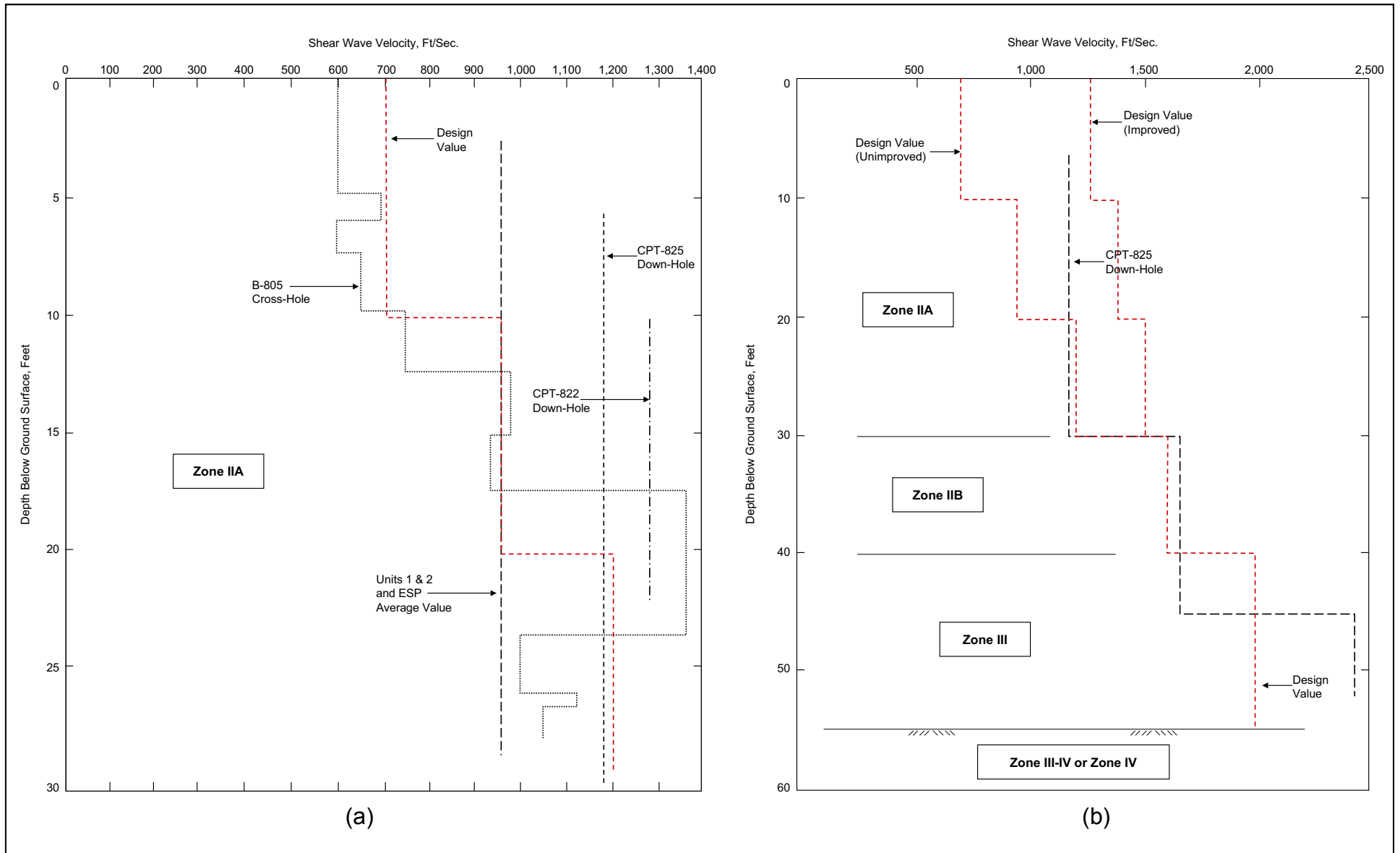


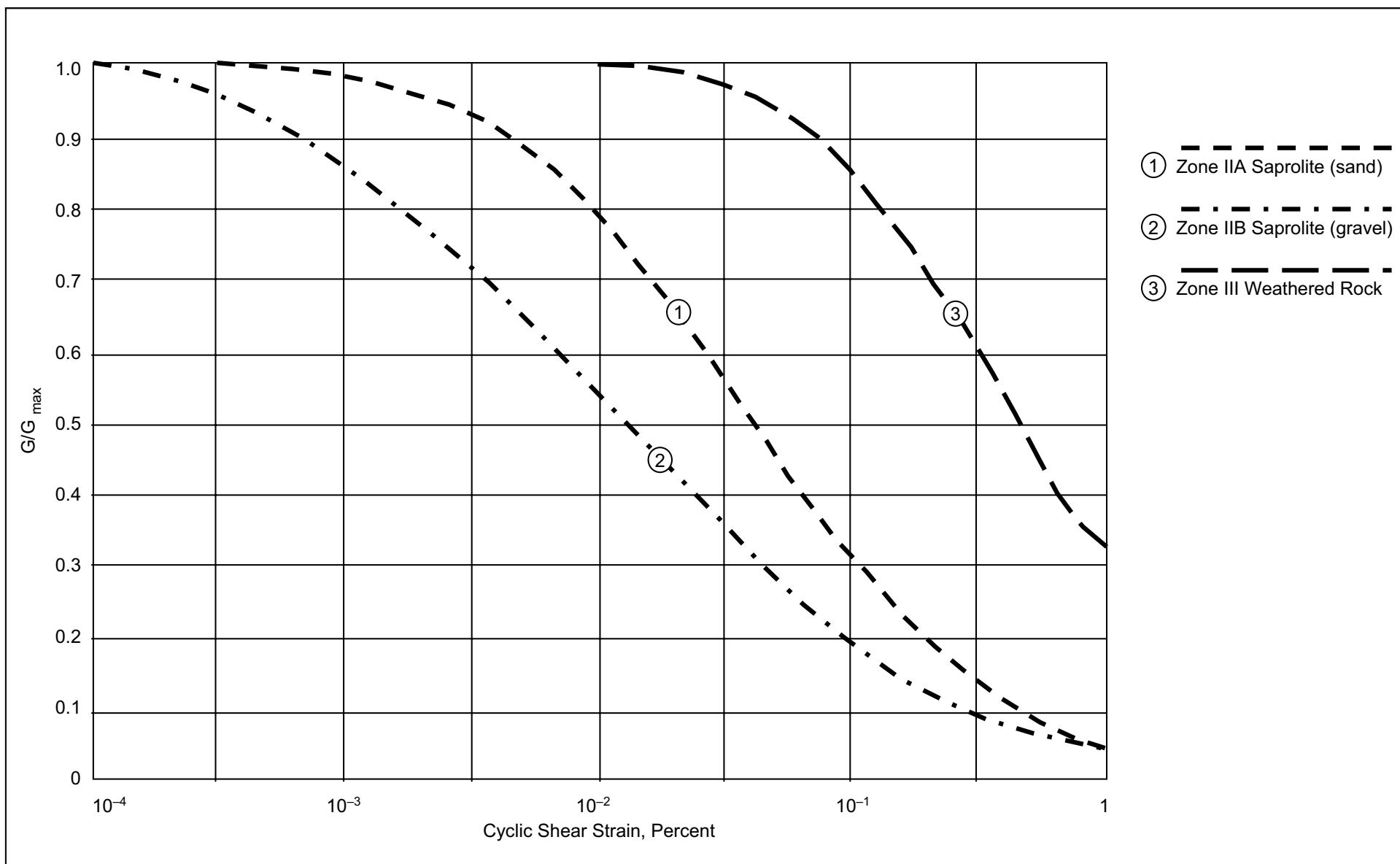
Figure 2.5-60 ESP Borehole Locations



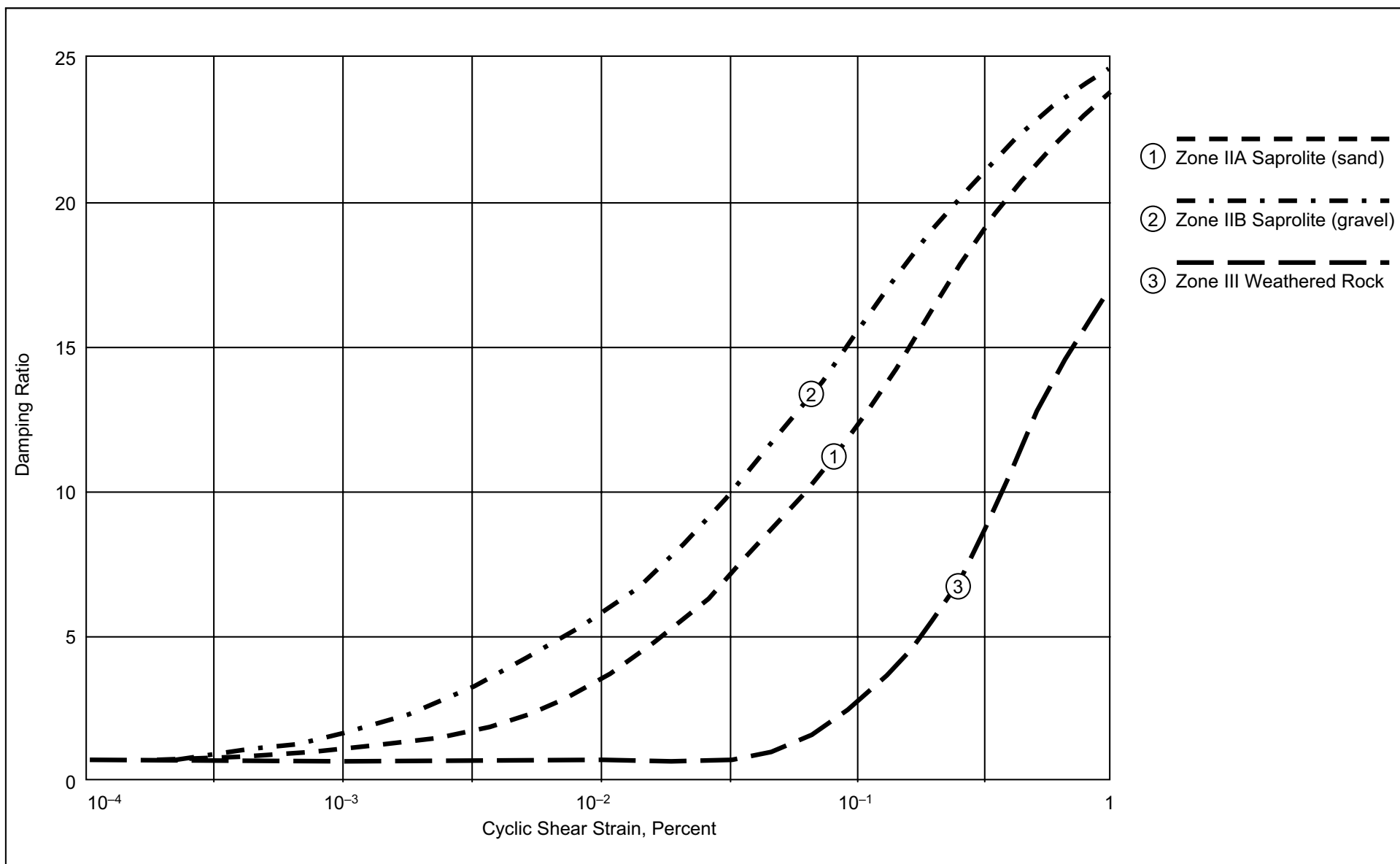
**Figure 2.5-61 Locations of All Exploration Points**



**Figure 2.5-62 Zone IIA Shear Wave Velocity Profile (a) Full-Depth Shear Wave Velocity Profile (b)**



**Figure 2.5-63 Variation of Normalized Shear Modulus with Cycle Shear Strain**



**Figure 2.5-64 Variation of Damping Ratio with Cyclic Shear Strain**

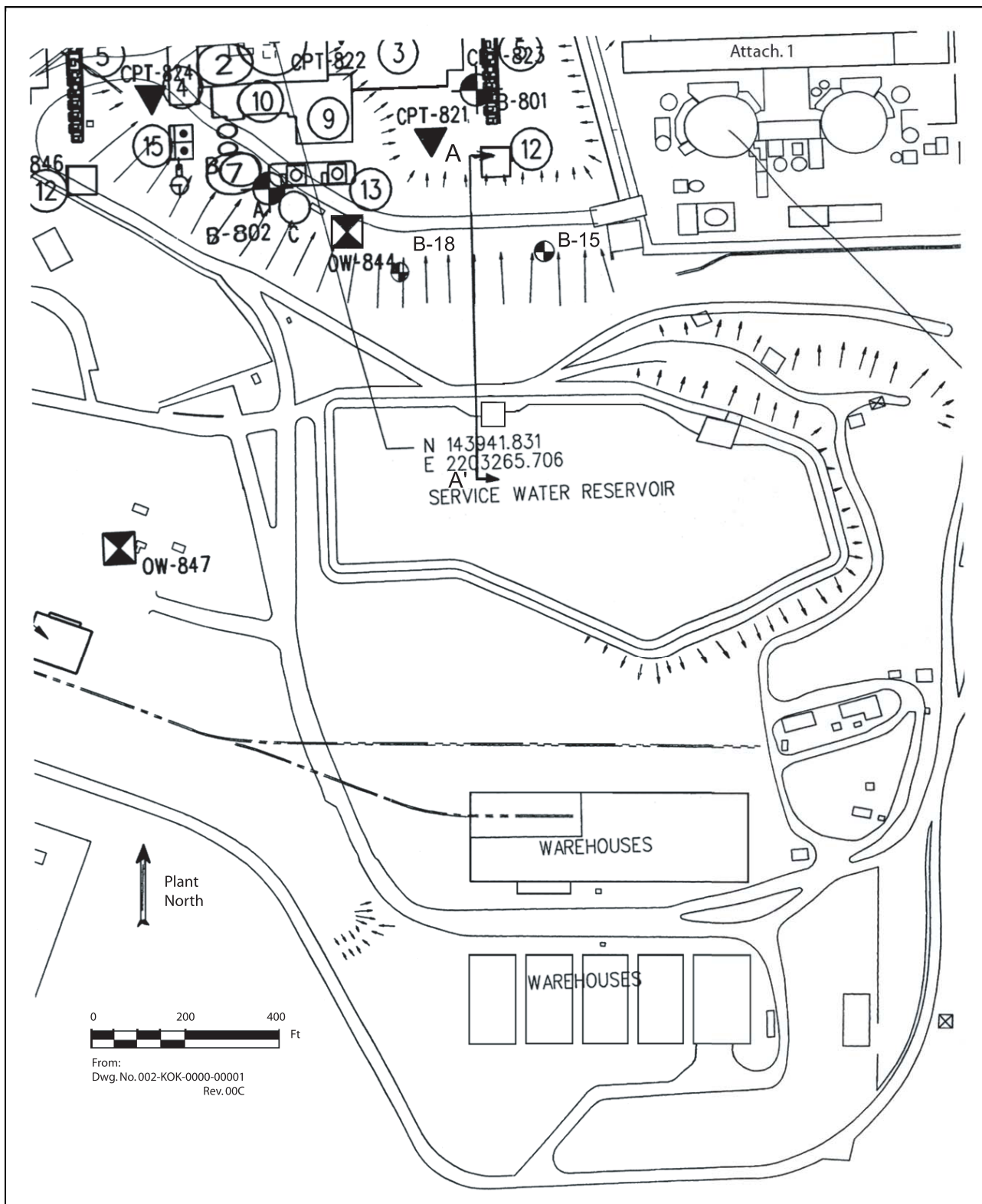
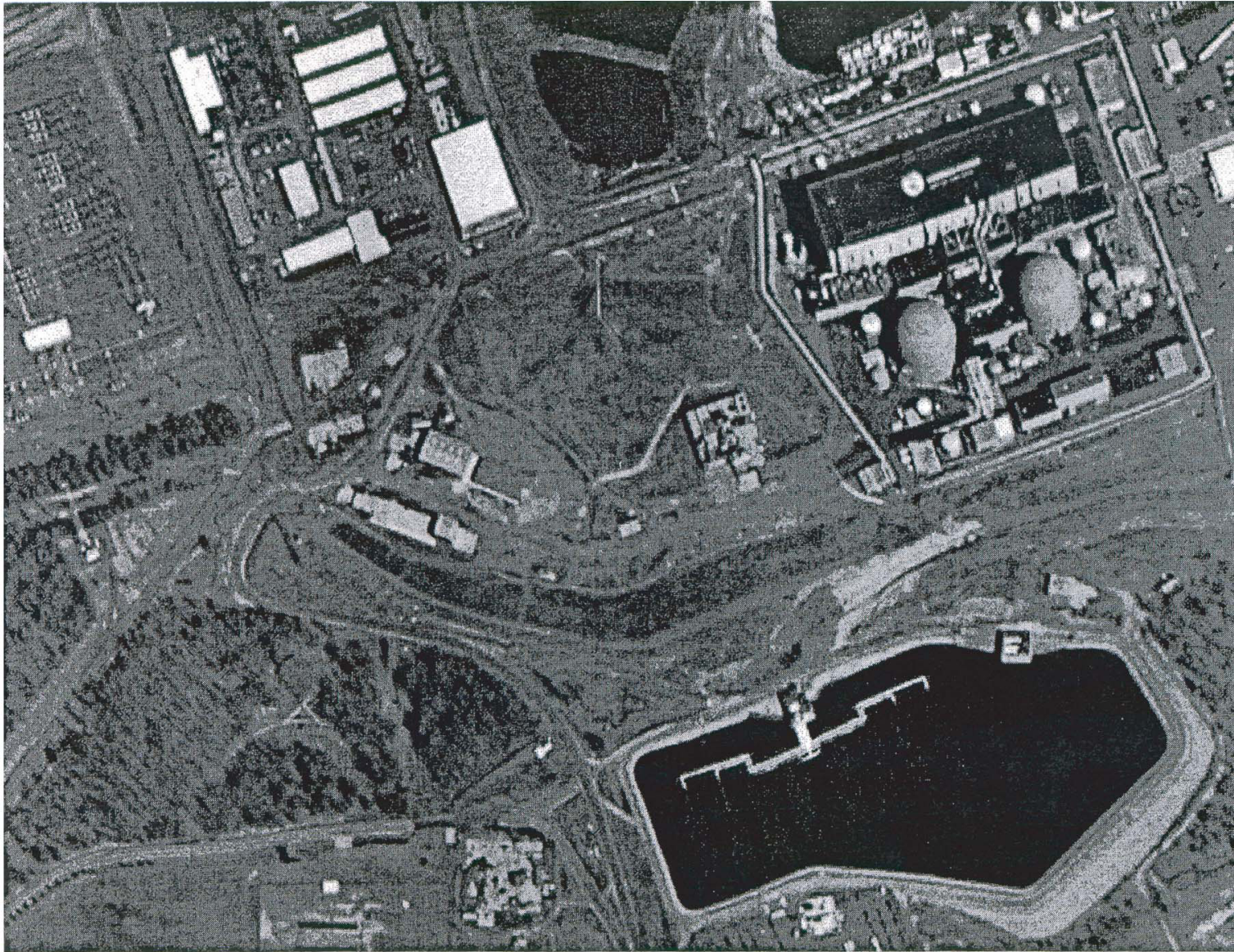


Figure 2.5-65 Plan View of Slope North of the SWR



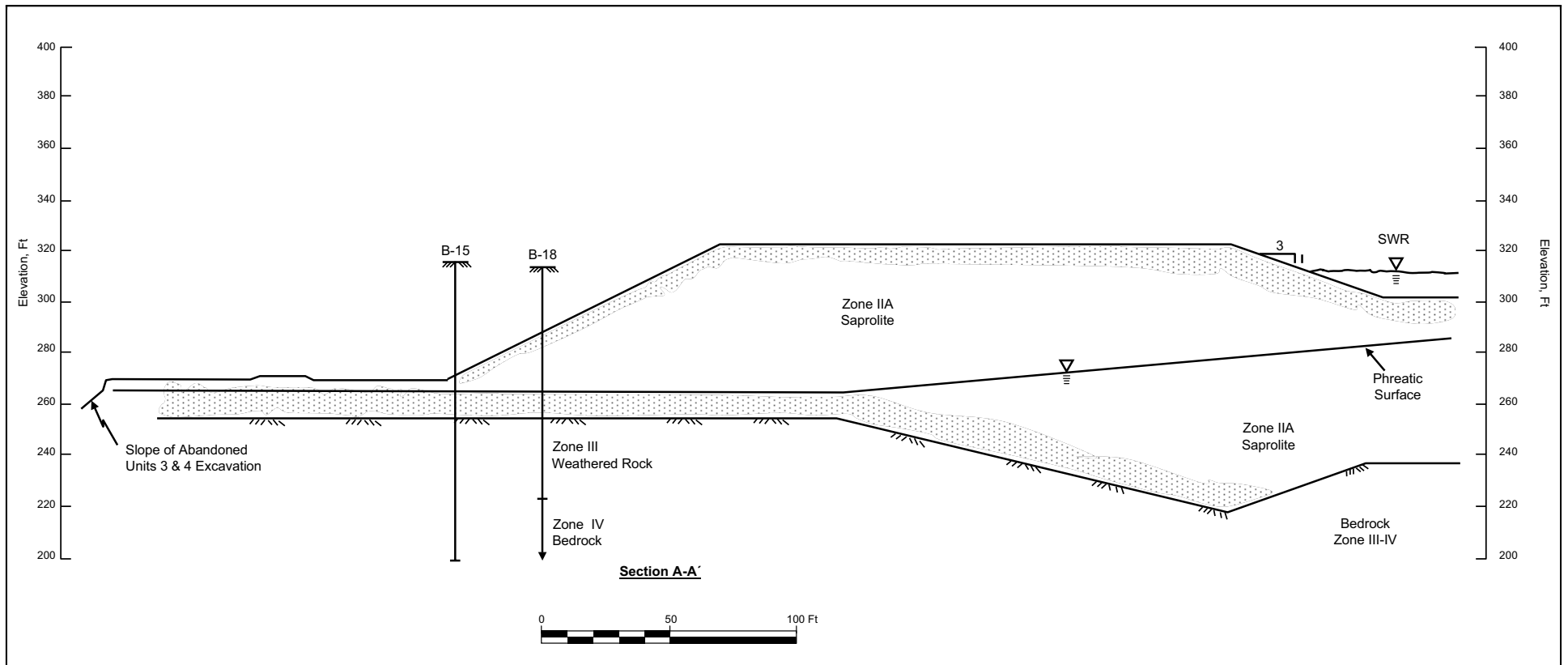


**Figure 2.5-66 Photograph of Plan View of Slope North of the SWR**

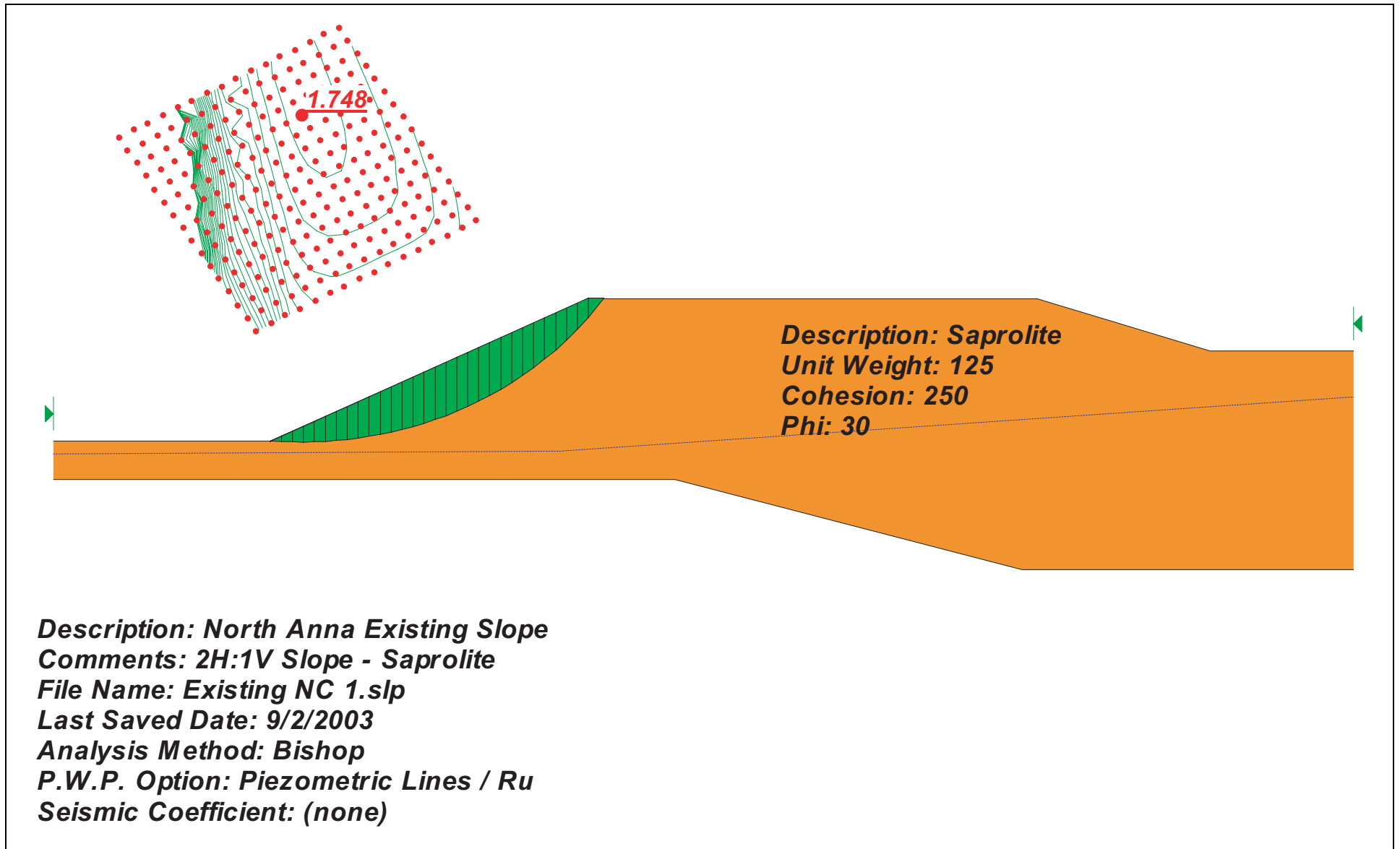




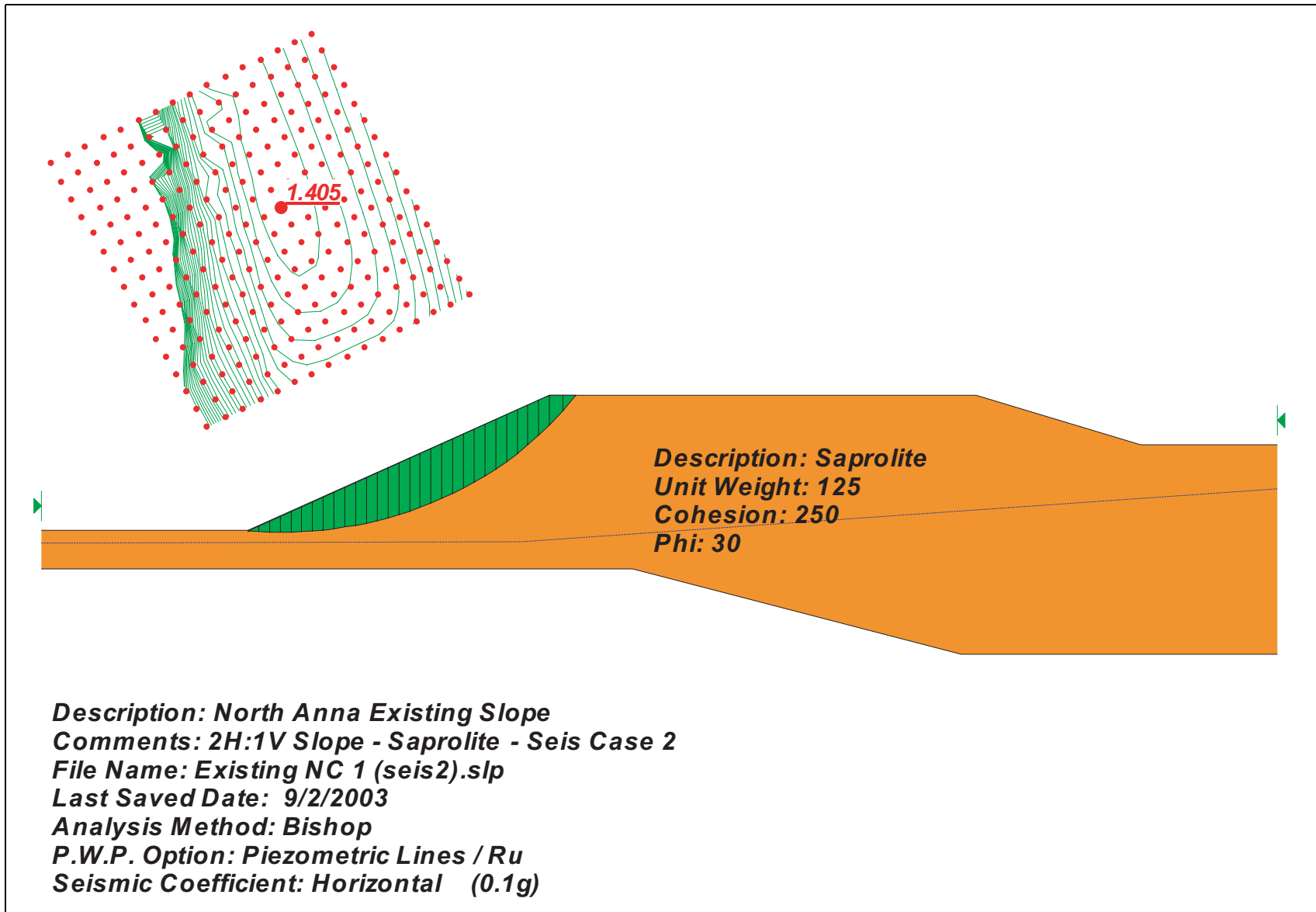
**Figure 2.5-67 Photograph of Slope North of the SWR**



**Figure 2.5-68 Cross-Section of Existing Slope North of the SWR**



**Figure 2.5-69 SLOPE/W Analysis of Long-Term Static Case**



**Figure 2.5-70 SLOPE/W Analysis of Seismic Case**



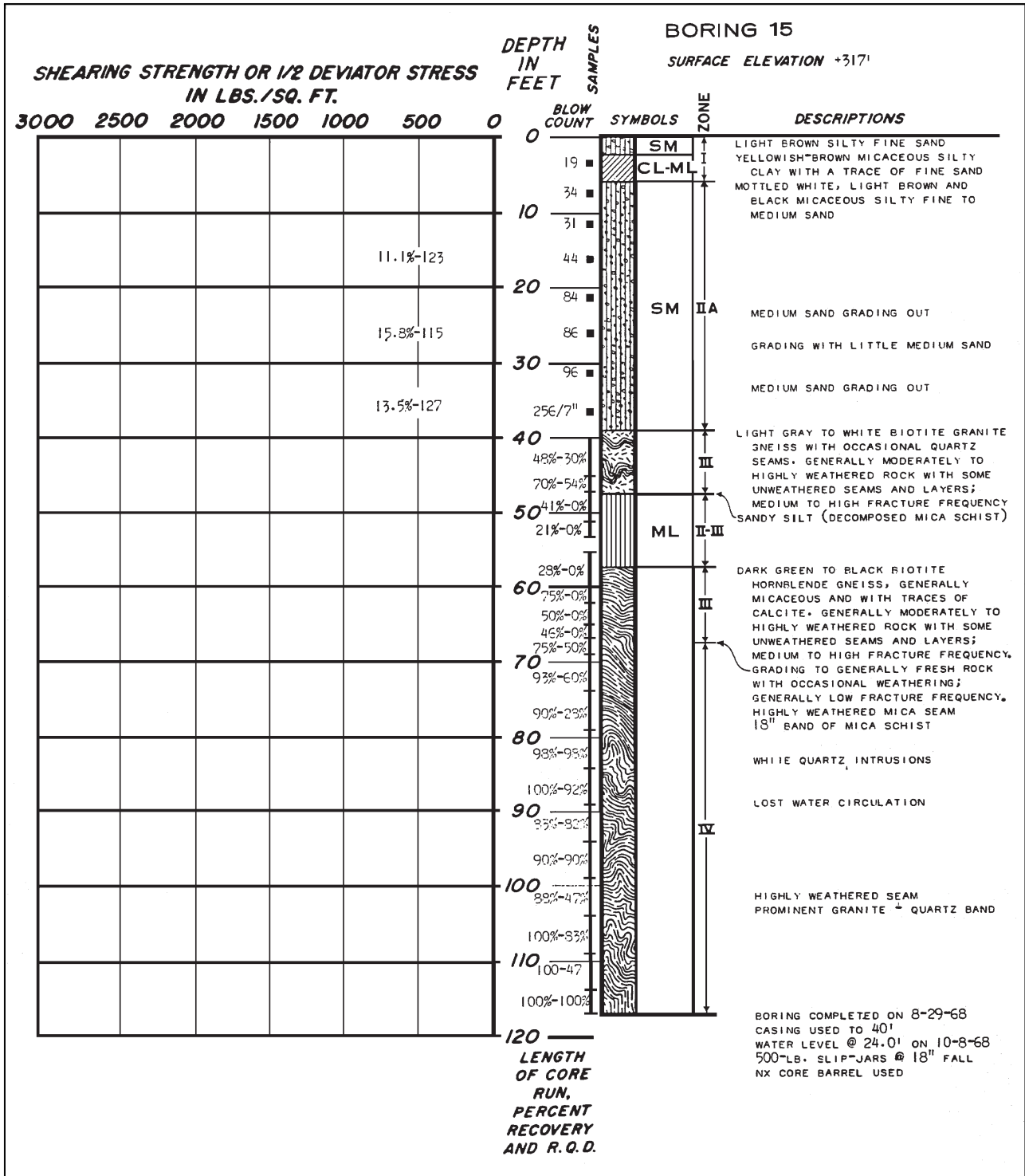


Figure 2.5-71 Log of Boring B-15

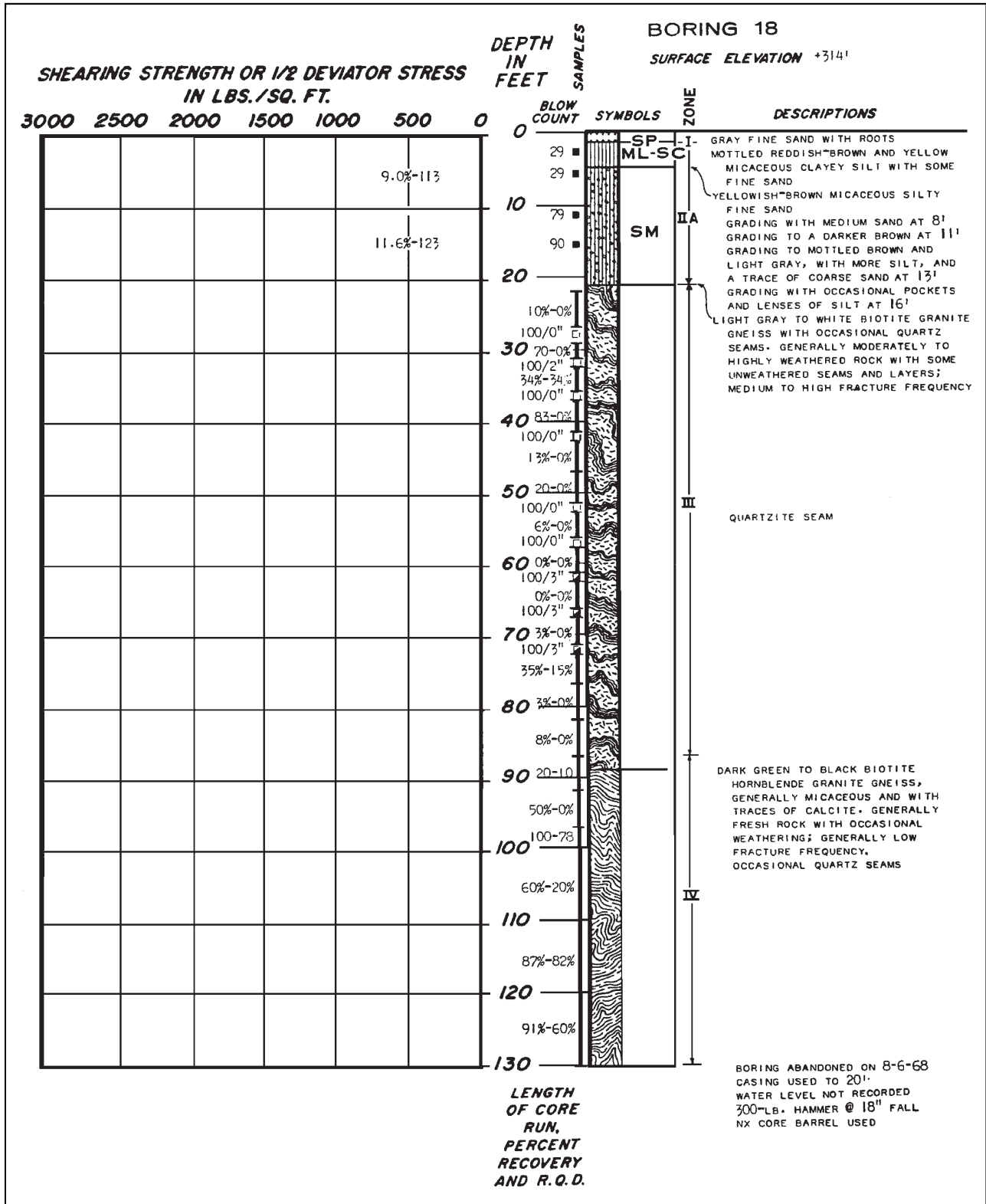


Figure 2.5-72 Log of Boring B-18