



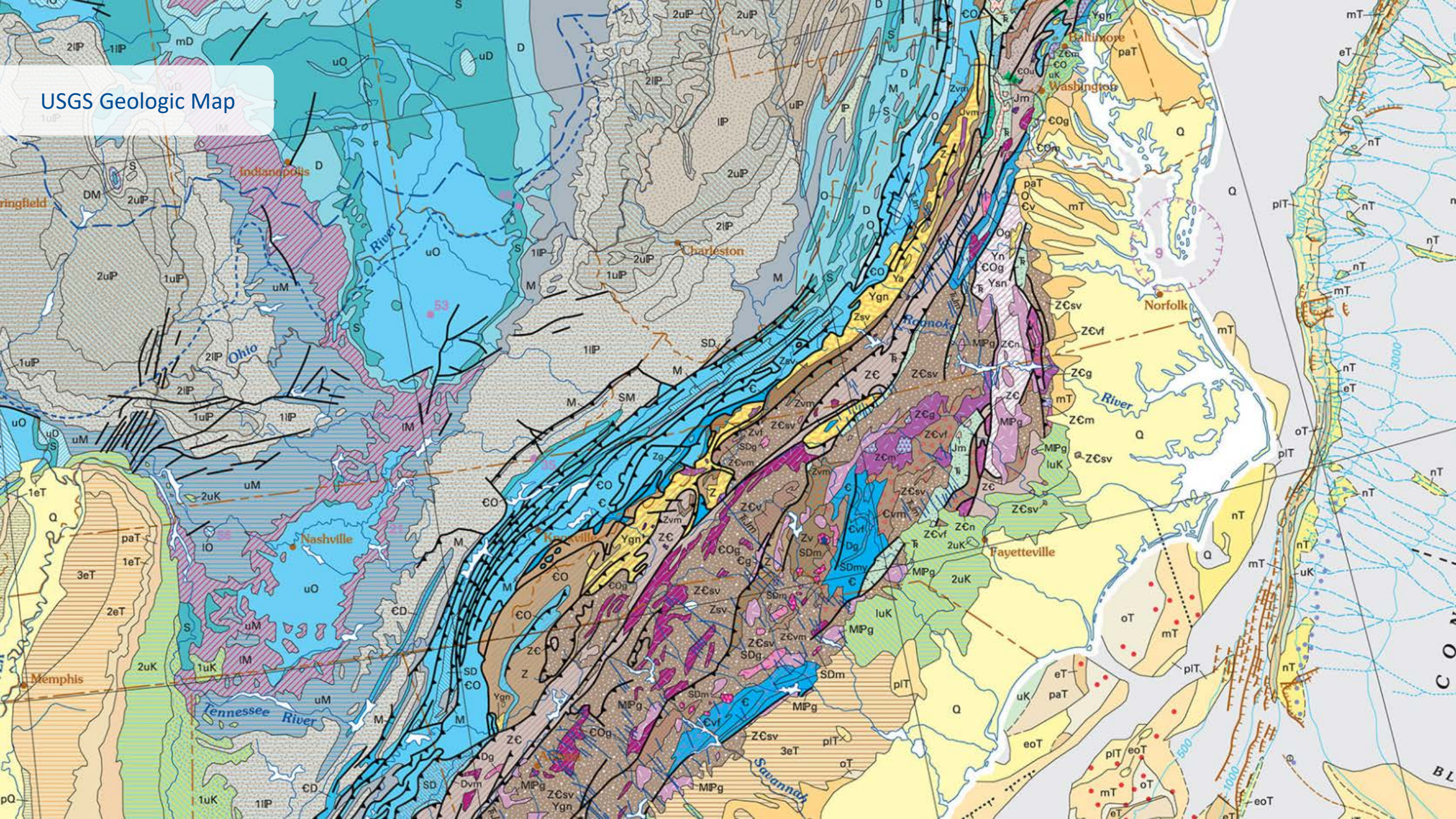
Brian Banks, PG

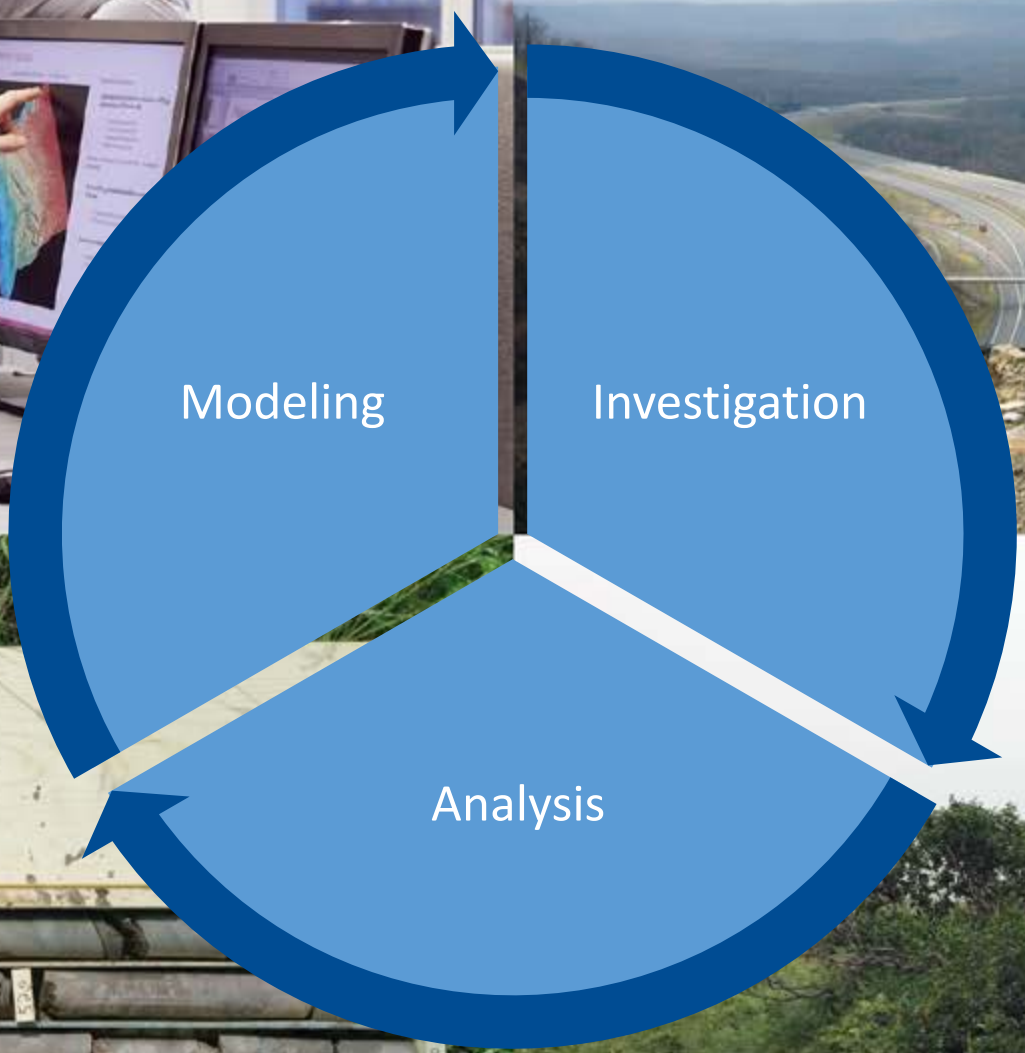
The Role of Geoscience in Infrastructure Development



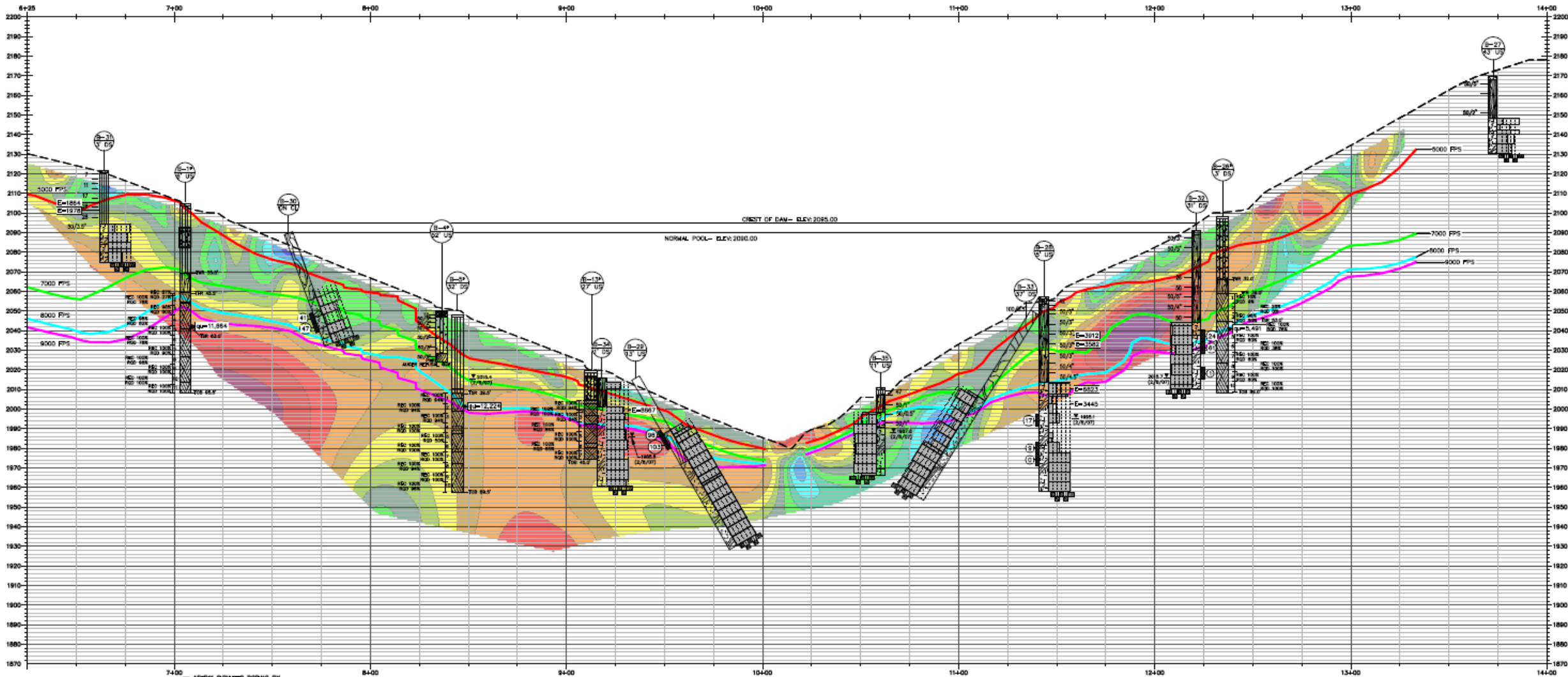


USGS Geologic Map







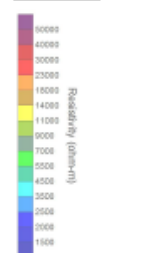


SCHNABEL LEGEND:

[Symbol]	FILL
[Symbol]	ML
[Symbol]	SM
[Symbol]	PWR
[Symbol]	GNSSS
[Symbol]	PHYLLONITE

ASTRISK BORING BY SAME PUBLISHED IN PREVIOUS REPORT.
BORING OFFSET FROM PROFILE LINE ON PLAN. US SIGNIFIES UPSTREAM, DS SIGNIFIES DOWNSTREAM.

GEOPHYSICS LEGEND



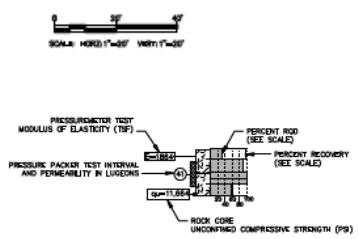
S&ME LEGEND

GEOLOGIC LEGEND BELOW AND BORINGS B-1, B-5 AND B-28 OBTAINED FROM SAME DRAWING - 2 SECTION A-A.dwg

KEY TO BORING LOG

[Symbol]	TOPSOIL	[Symbol]	ORGANIC	[Symbol]	SILTY SAND	[Symbol]	CORED ROCK
[Symbol]	GRAVEL	[Symbol]	SANDY	[Symbol]	CLAYEY SAND	[Symbol]	SANDY SILT
[Symbol]	SAND	[Symbol]	SILTY	[Symbol]	CLAYEY SILT	[Symbol]	SANDY CLAY
[Symbol]	SILT	[Symbol]	CLAYEY	[Symbol]	SILTY CLAY	[Symbol]	PARTIALLY WEATHERED ROCK
[Symbol]	CLAY						

CENTER LINE OF DAM PROFILE



GEOPHYSICS NOTES:

- INTERPRETED ROCK SURFACE BASED ON A COMPRESSION WAVE VELOCITY OF 8000 FEET/SEC. THIS VELOCITY CORRELATES BEST TO HIGH RES AND RECOVERY ALONG THE PROPOSED DAM CENTERLINE.
- DISPLAYED RESISTIVITIES ON THE SOUTHERN ABUTMENT ARE OF LOW CONFIDENCE DUE TO HIGH CONTACT RESISTANCES IN THE FIELD AND A HIGH INVERSION RMS ERROR.

NOTES:

- A DESCRIPTION OF THE STRATUM DESIGNATIONS, CLASSIFICATIONS SYSTEMS, AND TERMINOLOGY IS PROVIDED IN THE BODY OF THE GEOLOGY REPORT.
- WATER LEVELS INDICATED ARE ONLY ESTIMATES FROM AVAILABLE DATA AND MAY VARY WITH PRECIPITATION, POROSITY OF THE SOIL, SITE TOPOGRAPHY, ETC.
- THIS PROFILE WAS DEVELOPED BY INTERPOLATION BETWEEN WIDELY SPACED BORINGS. ONLY AT THE BORING LOCATIONS SHOULD IT BE CONSIDERED AS AN APPROXIMATE REPRESENTATION AND THEN ONLY TO THE DEGREE IMPLIED BY THE NOTES ON THE BORING LOGS.
- LOCATION OF THE PROFILE IS SHOWN ON DRAWING XX
- THE BORING DATA AND INTERPRETATIONS OF THE STRATIGRAPHY DERIVED ON THE DRAWING ARE NOT PART OF THE CONTRACT DOCUMENTS AND ARE PROVIDED ONLY FOR THE CONVENIENCE OF THE BIDDERS. THIS INFORMATION IS NOT TO BE RELIED UPON AS A WARRANTY OF ACTUAL SUBSURFACE CONDITIONS. THE ACTUAL USABILITY OF THE SUBSURFACE MATERIALS, THE CHARACTER OF THE SUBSURFACE CONDITIONS AND THE GRADE OF SUITABLE FOUNDATION MATERIAL (OR FILL SUB GRADES) MUST BE EVALUATED BY THE GEOTECHNICAL ENGINEER IN THE FIELD DURING CONSTRUCTION BY THE ADDITIONAL TESTING AND/OR OBSERVATION OF EXPOSED FOUNDATION MATERIALS.

FOR PRELIMINARY COST ESTIMATING PURPOSES ONLY, NOT FOR CONSTRUCTION OR BIDDING.









Thank You

Brian K. Banks, PG, Principal

301-417-2400 / bbanks@schnabel-eng.com

