

### 3.3.3

## GIS-Based Geotechnical Engineering Document Management System

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A web-based Geotechnical Geographic Information System (GeoGIS) was developed and tested for the Alabama Department of Transportation. This web-based system stores geotechnical information about transportation projects, such as subsurface data, construction drawings, and design information. Typically, this information is in a report or plan sheet format, but raw geotechnical data can also be accommodated in the GeoGIS. The goal of this system is to provide easy access and storage for all geotechnical and subsurface structural information from across a state. Access through a secure web interface allows consultants and DOT engineers to upload documents and access information by keyword searches and interactive map selection. The web-based GeoGIS has four geotechnical layers (project, bridge, foundation, and soil boring) that can be displayed on a road map, aerial photos, or USGS 7.5 minute quadrangles. The GeoGIS is currently being populated with hundreds of historic projects consisting of multiple document types, formats, and sizes. The system is performing above expectations.