

available data, performing engineering analyses, and preparing this summary report. This scope of work was authorized by returning a signed copy of our proposal dated June 22, 2022 and executed on July 13, 2022.

1.3 Description of Proposed Construction

We understand that a single-family residential development is planned for the site. Residences will likely be 1 to 2-stories above grade and founded on spread footings. Maximum continuous wall and column loads are anticipated to be 3,000 pounds per lineal foot and 50 pounds, respectively. If the structural loading conditions are different than we have projected, please notify us so that any appropriate modifications to our conclusions and recommendations contained herein can be made.

We also understand that pavements at the site will include an interior roadway, which we anticipate will utilize asphalt pavement. Traffic is projected to consist of mostly automobiles and light trucks, a few daily medium-weight delivery trucks, a weekly garbage truck, and an occasional fire truck.

Site development will require some earthwork in the form of minor cutting and filling. A site grading plan was not available at the time of this report, but we project that maximum cuts and fills may be on the order of 2 to 3 feet. If deeper cuts or fills are planned, CMT should be notified to provide additional recommendations, if needed.

1.4 Executive Summary

Proposed residences can be supported upon conventional spread and continuous wall foundations. The most significant geotechnical aspects regarding site development include the following:

1. Vegetation and topsoil up to about 12 to 24 inches in thickness, will require removal beneath structures;
2. Subsurface natural soils generally consist of near surface layers of Silty SAND (SM) or SILT (ML), underlain by CLAY (CL). The clay soils shown some high compressibility under additional loading;
3. Groundwater was encountered, and later measured, at this site at depths between 4.0 and 6.7 feet below the surface; and
4. Foundations and floor slabs may be placed on suitable, undisturbed natural soils or on properly placed and compacted structural fill extending to suitable, undisturbed natural soils.

CMT must assess that topsoil, undocumented fills (if encountered), debris, disturbed or unsuitable soils have been removed and that suitable soils have been encountered prior to placing site grading fills, footings, slabs, and pavements.

In the following sections, detailed discussions pertaining to the site are provided, including subsurface descriptions, geologic/seismic setting, earthwork, foundations, lateral resistance, lateral pressure, floor slabs, and pavements.