

A Soils Report is performed by a soils engineer and will be used to determine the type of foundation and footing needed for your new home. The Soils Report typically contains the following information:

- Geology of subsurface soils- types, layers, thickness
- Groundwater level
- Seismic considerations- Site class, Seismic Zone, Seismic Zone
- Factor “Z”, Seismic Coefficients C_a and C_v , and Near Source Factors N_a and N_v
- Foundations- recommended foundation type, maximum allowable soil bearing pressure, minimum depth to underside of footing below final grade (frost protection) and minimum foundation width.
- If drilled pier foundation is recommended - minimum pier diameter, required extension into competent soil, active equivalent fluid pressure, passive equivalent fluid pressure, skin friction.
- Recommendations for footings in close proximity to slopes.
- Maximum acceptable differential foundation settlements.
- Increase in the allowable bearing pressure for short term/transient loads (wind, seismic).
- Recommendations if groundwater is encountered.
- Basement and Retaining Walls- active lateral earth pressure, with the backslope level or backfill sloped, additional earth pressure from seismic loads, passive pressure, and friction factor. Wall backfill recommendations.
- Slab On Grade Floor recommendations- structural fill, drainage.
- Foundation perimeter drainage requirements.