



Minimum Information Required in Geotechnical Report for Foundation Design for ProtekPark Solar Panel Canopies

A complete Geotechnical Investigative Report that uses testing and visual identifications of the soil layers in the affected solar canopy areas is required by ProtekPark Engineering for foundation design of its supplied structures. Basic information to be included in the report: standard penetration testing (SPT) blow counts, description of soil layers, depths of individual and unique soil layers in borings, fill or topsoil layer depth, presence of water table, frost depths, bearing capacity, and presence of collapsible soils. Borings should be performed to a minimum of 20 feet depth below ground or auger refusal and deemed refusal due to rock layer.

Further specific information required is as follows:

If sandy soil:

1. Unit weight, (lb/ft³)
2. Friction angle, ϕ (degrees)

If clay or silt:

1. Unit weight, (lb/ft³)
2. Undrained Shear Strength Value, c (lb/ft²)

If rock:

1. Unit weight, (lb/ft³)
2. Rock Quality Designation (RQD), (%)
3. Compressive strength, (psi)
4. Elastic modulus of weak rock, (E_r) if easily obtainable

This information shall be included in a Geotech Report that is prepared and sealed by a Registered Professional Engineer in the applicable jurisdiction. When requesting the report, it should be noted that shallow piers are the intended type of foundation for this structure. Any special design considerations and/or conditions should be included in the report. Signed and sealed foundation calculations cannot be provided without an appropriately signed and sealed Geotech Report.
