Elena Petrov

Geotechnical Engineer

elena.petrov@email.com (206) 555-0128 Seattle, WA linkedin.com/in/elenapetrov

Summary

Geotechnical engineer and Washington PE with 5 years of geotechnical engineering for buildings, bridges and retaining walls in the Puget Sound region. Plans subsurface explorations, runs geotechnical analysis in LPILE, GeoStudio and PLAXIS, and writes foundation design reports that structural engineers and permit reviewers can use without follow-up questions.

Experience

Geotechnical Engineer

04/2023 - Present

Cascade Subsurface Engineering Seattle, WA

Geotechnical and environmental consultancy with 70 staff in Seattle and Tacoma.

- Plan drilling programs of up to 14 borings and log soils in gINT for building and bridge projects.
- Analyze deep foundation capacity in LPILE for 6 mid-rise buildings, recommending pile lengths that cut steel by 9%.
- Model slope stability and seepage in GeoStudio for 3 retaining wall and embankment designs.
- Write 20 geotechnical reports a year covering seismic site class, liquefaction and foundation design.

Staff Geotechnical Engineer

06/2021 - 03/2023

Rainier Testing & Inspection Tacoma, WA

Geotechnical engineering and construction materials testing firm.

- Logged 300 borings and test pits and ran lab classification tests on soil samples.
- Built PLAXIS models of excavation shoring for 2 downtown basements, checking wall deflection against limits.
- Observed pile driving and footing subgrades on 10 projects and wrote daily field reports.
- Compiled lab and field data in Excel for settlement estimates under new embankment fills.

Education

Master of Science

06/2021

University of Washington Seattle, WA

Civil Engineering (Geotechnical Engineering)

Skills

- Geotechnical Engineering
- Geotechnical Analysis
- Foundation Design
- LPILE
- GeoStudio
- gINT
- PLAXIS
- AutoCAD
- Excel
- Technical Writing

Certificates

Professional Engineer (PE)

08/2025

Washington State Board of Registration for Professional Engineers and Land Surveyors