RhinoOne GEOTECHNICAL

Firm Overview

Introduction

Rhino One Geotechnical Engineering Consultants was founded in 2009 as an MBE/DBE* firm specializing in geotechnical engineering services. Our specialty is providing high-level geotechnical support to multi-disciplinary project teams. The firm's founding principal, Rajiv Ali, over his 15 years of previous consulting experience, has demonstrated a unique combination of technical and project management skills which have been critical to the successful completion of projects of above-average complexity. We have recently added Rick Thrall, PE, GE who has over 30 years of similar experience.

RhinoOne staff members have completed geotechnical studies and reports including a variety of project delivery methods such as conventional design-bid-build, design build (D/B), or construction manager general contractor (CMGC).

Previous clients include ODOT, WSDOT, FEMA, Oregon Department of Corrections, City of Portland, City of Vancouver, City of Salem, Multnomah County, Clackamas County, Washington County, Coos County, Tillamook County, Clark County, and Thurston County among others.

Drilled Shaft on OR-38

Our firm can perform all geotechnical engineering related tasks including project scoping, investigation, seismic hazard analysis, computer modeling, foundation analysis and design, retaining walls, landslides, and construction observation and testing services. Our staff is familiar with the appropriate design methods and criteria required by various local jurisdictions such as IBC, FHWA, WSDOT, and ODOT.

Geotechnical Services Provided

Compaction Grouting in Portland

- **Site Modeling**: *Geological reconnaissance, field exploration (drilling, test pits, CPT), seismic survey, instrumentation, infiltration testing, and laboratory testing*
- **Seismic Hazard Analysis:** *Liquefaction, lateral spreading, and site-specific response spectra*
- **Geotechnical Analysis and Design:** *Shallow and deep foundations, retaining walls, rock/soil slopes, temporary shoring, MSE walls, drainage systems, dewatering, large diameter pipes, horizontal directional drilling, value engineering, and pavements*
- **Computer Modeling:** *LPile, Shaft, Shake, Plaxis, CTShoring, GoldNail, SNail GRLWEAP, XStabl , MSEW, and AASHTOWare Darwin 3.01*
- **Construction Observation and Testing Services:** *Grading, subgrade inspections, pile driving, drilled shafts, micropiles, tiebacks, and soil nails*

Multi-Disciplinary Infrastructure Projects

The firm's founding principal and Rick Thrall has provided overall technical direction and project management for large infrastructure projects. Alternate geotechnical systems were designed for some of these projects resulting in significant cost savings. These projects include:

- **Portland – Milwaukie Light Rail – Section A**
  Portland, Oregon

Reinforced Soil Slope on OR-38

- **Bull Run Conduit Trestle System Vulnerability Reduction Study for the Portland Bureau of Water Works**
  Portland, Oregon
- **B401 Elk Creek to Hardscrabble Road D/B Project OR-38**
  (ODOT Region 3), Douglas County, Oregon
- **Sauvie Island Bridge Replacement Project**
  Multnomah County, Oregon
- **B508 Elkhead Road to Knowles Creek D/B Project, Pacific Highway 1**
  (ODOT Region 3) and OR-126 (ODOT Region 2)
  Lane and Douglas Counties, Oregon
- **Darigold Inc - New Silos**
  Portland, Washington
- **Ethanol Plant for Makad Corporation**
  Longview, Washington
- **Washington Park Sinkhole for the City of Portland Bureau of Water Works**
  Portland, Oregon
- **Resource Access Center for Housing Authority of Portland,** Portland, Oregon
- **East Pearl Building for JBH Company,** Portland, Oregon

Stone Columns on SR-500

MSE Wall Remediation in Hillsboro

Seismic Rehabilitation for Oregon State Hospital in Salem

Rapid Bridge Replacement on OR-38

Landslide in Idaho

* Washington Certification D4M9821342, Oregon Certification 6760