

# Boyd Ratliff, P.E.

Sr. Geotechnical Engineer

### Education

BS, Geology, Idaho State University, 2000

# Registrations/Certifications

Professional Engineer: Utah (#12952385-2202), Nevada (#018908), Idaho (#P-21553); North Carolina (#056218)

## **Experience Summary**

Mr. Ratliff has over 20 years of professional experience in the mining and municipal industries. Primary mining experience focused on slope stability, roadway designs, evaporation pond designs, geotechnical site characterization, retaining structures, plant decommissioning, and construction. Projects included geological hazard identification, access road design, slope stability, retaining structures for evaporation pond infrastructure, pond embankment design and construction, and stormwater management facilities. Boyd's municipal experience includes geotechnical investigations, highways, airports, subdivisions, commercial and municipal buildings, foundations, and retaining structures. Boyd is proficient in AutoCAD Civil 3D, Rocscience SLIDE, USACE HEC programs, Skyciv Structural programs, and MS Office.

## **Project Experience**

#### Civil and Water Resources

## SILVER PEAK PHASE 1 POND IMPROVEMENTS | NEVADA

Performed detailed embankment design for multiple concentration ponds, including slope stability and construction details. Developed Technical Specifications and Construction Quality Assurance (CQA) documents as part of the Engineering Design Change (EDC). Oversaw CQA program and prepared the Engineer of Record (EoR) Report for the Bureau of Mining Regulation and Reclamation (BMRR). (SRK)

#### **COUNTY LINE MINE | NEVADA**

Prepared the Stormwater Pollution Prevention Plan and secured approval for the Nevada Department of Transportation (NDOT) Access Permit as part of the preliminary permitting process. Designed NDOT access for County Line to meet AASHTO and NDOT roadside design and access management standards. (SRK)

#### **ROBINSON MINE | NEVADA**

Prepared As-Built document for BMRR for the Giroux Wash Tailings Storage Facility (TSF). Performed site construction reviews with contractors and mine staff, prepared weekly quantities for the EoR, and worked with construction crews on forward planning to meet operational TSF deposition benchmarks. (SRK)

## Geotechnical

#### MT. MORIAH STONE QUARRY WASTE ROCK DUMP | NEVADA

Coordinated geologic rock sampling, contracted materials testing with the University of Nevada Reno's (UNR) Geological Engineering Department, and calculated the slope stability for the quarry's waste dump. Upon completing the analysis, a findings report was issued. (Summit Engineering)

## **GRANITE CONSTRUCTION AGGREGATE PIT EXPANSION | NEVADA**

Performed slope stability analysis for a proposed pit expansion. The analysis included in-situ rock properties, stereonet analysis of rock fracture orientations, and analysis of proposed pit benches. Analysis results and recommendations were summarized in a final report. (Summit Engineering)

#### BANK OF AMERICA | NEVADA

Conducted a geotechnical site investigation. Work included logging boreholes, preparing a laboratory testing program, and analyzing the test results. (Summit Engineering

## 328 JONES, PAVEMENT DESIGN | NEVADA

Supervised the subsurface investigation of the existing pavement base and subgrade. Developed a laboratory testing program to complete the pavement design and report. (Summit Engineering)

## SILVER PEAK PONDS PHASE 1-2, SITE CHARACTERIZATION | NEVADA

Supervised the subsurface investigation for new pond development and of the existing existing ponds. Developed the drilling program and the laboratory testing program for the site characterization report. Determined slope stabilities, settlements, and technical specifications. (SRK)

# **Employment History**

CURRENT EMPLOYER TIERRA GROUP INTERNATIONAL, LTD.

Position Sr. Geotechnical Engineer

YEARS 2025 to Present

EMPLOYER FRONTIER CIVIL, LLC
POSITION Principal Engineer
YEARS 2021 to 2025

EMPLOYER SRK CONSULTING (U.S.), INC.

Position Principal Engineer
YEARS 2022 to 2025

EMPLOYER NEVADA DEPARTMENT OF TRANSPORTATION

POSITION District Engineer
YEARS 2010 to 2021

EMPLOYER CTE NEVADA

Position Engineering Manager

**YEARS** 2009 to 2010

EMPLOYER SUMMIT ENGINEERING CORP.

Position Geotechnical Department Manager

**YEARS** 2002 to 2009

EMPLOYER STANTEC CONSULTING
POSITION Engineering Technician

**YEARS** 2000 to 2002

