NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS

Interim Board Meeting
October 9, 2025
Virtual

1. Meeting Call to Order

2. Public Comment

3. NRS 625
Waiver Requests

4. Non-Appearance Applications for Initial Licensure

NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS EDUCATION CREDIT GUIDELINES

DEGREE	YEARS CREDIT (MAX)	YEARS ACCEPTABLE EXPERIENCE REQUIRED
Undergraduate (BS): ABET/EAC accredited	4	4
Undergraduate (BS): ABET/ETAC accredited	4	4
Undergraduate (BS Engineering): Washington Accord	4	4
Undergraduate (BS Engineering): Non-ABET/non-Washington Accord (must meet NCEES education standard, any deficiencies to be considered by board)	4	4
Undergraduate (BS Construction Management): ABET accredited	4	4
Undergraduate (BS Construction Management): Not ABET accredited but institution has ABET accredited engineering programs	4	4
Engineering Masters: US Masters with non-US BS and/or non-Washington Accord in Engineering	6	2
Engineering Doctorate: US Doctorate with non-ABET/non-Washington Accord/foreign BS+MS in Engineering	6	2

NEVADA STATE BOARD OF
PROFESSIONAL LAND SURVEYORS
EDUCATION CREDIT GUIDELINES

DEGREE	YEARS CREDIT (MAX)	YEARS ACCEPTABLE EXPERIENCE REQUIRED
Undergraduate (BS Surveying): ABET/EAC accredited	4	4
Undergraduate (BS Surveying): ABET/ETAC accredited	4	4
Undergraduate (BS Surveying): ABET/ANSAC accredited	4	4
Undergraduate (BS Surveying): non-accredited	4	4
Surveying Associates Degree + another associates degree	4	4
Surveying Masters Degree	2	2
Engineering degree with a minimum 30 surveying credits hours (must include a PLSS course)	4	4
Non-Engineering Bachelor of Science degree with a minimum 30 surveying credit hours (must include a PLSS course)	4	4
Bachelor of Arts degree with a minimum 30 surveying credits hours (must include a PLSS course)	4	4
Bachelor of Arts degree + Surveying Associates Degree	4	4
Military Specialty in Surveying + Surveying Associates Degree	4	4

Civil

NOURALDIN ALQUDSI (21-203-83)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
10/01/2025

Citizenship
Jordan

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience
6 years, 6 months

Experience under licensed engineer
3 years, 2 months

Disciplinary Action
None reported

EDUCATION

Meets NCEES Engineering Education Standard

Bachelors in Civil Engineering - Highways and Bridges
Al-Balqa' Applied University
September 2011–August 2015

Masters in Engineering Management
Indiana Institute of Technology
January 2020–October 2021

EXAMS

Fundamentals of Engineering (FE)
Indiana PE
November 2020

Principles and Practice of Engineering (PE)
Civil
Rhode Island PE
September 2025

LICENSES

Additional Licenses
None

NOURALDIN ALQUDSI (21-203-83)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

MESC Construction Management
Amman (Jordan)
Office and Planning Engineer
November 2015—December 2016

Verified by
Haya S. Saleh
haya.saleh@mesc-services.com

Experience Summary
Full-Time
Engineering: 1 year, 1 month
Experience under licensed engineer: None

TASKS

• I performed quantity take-offs for various structural and architectural components to support budget estimation and project scheduling.

• I reviewed technical design packages including architectural layouts, structural drawings, and MEP submittals to verify consistency with design intent and construction feasibility.

• I contributed to the preparation of project schedules and progress reports by aligning activity durations with quantity and material data.

• I assisted in writing technical reports to document construction progress, identify risks, and verify alignment with design documents and specifications.

REPRESENTATIVE PROJECTS

Al-Mahmodyiah Showroom – Amman, Jordan (2015–2016)
This project involved the design and construction of a luxury automotive showroom for Jaguar and Range Rover. The structure consisted of three below-grade concrete floors and two above-grade steel-framed floors. The project complied with local building codes and regulations.

During the design phase, I calculated quantity take-offs for structural and interior finishes to support budget development and project scheduling. I used these quantities to help prepare the project timeline and budget allocation for each activity. I also participated in planning discussions related to construction phasing and recommended optimal sequencing to enhance site efficiency.

During the implementation phase, I conducted weekly site visits to assess construction progress against the approved schedule. I evaluated whether ongoing tasks were on track in terms of time and budget and communicated deviations to the project team. I also prepared written progress reports to reflect actual site conditions and assist in aligning execution with project planning documents.

WORK EXPERIENCE

MESC Construction Management
Amman (Jordan)
Site Planning Engineer
September 2017—December 2019

Verified by
Haya S. Saleh
haya.saleh@mesc-services.com

Experience Summary
Full-Time
Engineering: 2 years, 3 months
Experience under licensed engineer: None

TASKS

• I monitored and tracked project budgets and supervised site engineering activities to ensure that field execution conformed to design engineering standards and specifications.

• I coordinated technical aspects of the project with stakeholders, including contractors and consultants, to ensure client requirements were met and to support smooth project execution and timely closeout.

• I made engineering-related recommendations for project improvements and assisted in preparing project schedules, technical reports, and spreadsheets to support performance tracking and planning efforts.

REPRESENTATIVE PROJECTS

Desert Highway Project – Jordan (2017–2019)
This project involved the rehabilitation and expansion of a 210 km highway connecting the northern and southern regions of Jordan. I worked on the 91 km segment managed by my firm, which included upgrading the existing roadway and constructing one additional lane in each direction.

During the design phase, I contributed to developing the phasing and safety plans to ensure compliance with client constraints and site conditions. I reviewed design documents and helped evaluate constructability to support coordination between the contractor and our engineering team. I surveyed construction quantities and prepared cost estimates for various work items, such as earthwork, pavement, and drainage. I used Primavera P6 to reflect the engineering quantities and construction sequencing into a detailed project plan and timeline.

During implementation, I served as the planning engineer and project coordinator. I tracked daily and weekly construction progress using engineering logs and site data, and I generated technical reports to evaluate productivity and schedule adherence. I worked closely with the project manager to ensure engineering materials, equipment, and resources met design and schedule requirements. I also performed document control by organizing and maintaining submittals, RFIs, and engineering correspondence to support project documentation and client communication.

NOURALDIN ALQUDSI (21-203-83)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

A&Z Engineering
Indiana (United States)
Civil Engineer Intern
January 2021—May 2021

Verified by
Nouraldin Alqudsi (Self)

Experience Summary
Part-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

• I performed detailed quantity take-offs, prepared cost estimates, and implemented cost control measures across multiple projects by applying engineering judgment to material and labor projections.

• I developed engineering design calculations and produced site layouts, grading plans, and utility plans for land development projects using AutoCAD, in accordance with company standards.

• I prepared architectural and civil design calculations, generated detailed plans and cross-sections, and verified that all design elements conformed to applicable codes and project requirements.

• I analyzed project documentation and participated in technical discussions during pre-bid and pre-construction meetings to refine engineering approaches and coordinate with multidisciplinary design teams.

REPRESENTATIVE PROJECTS

Ludwig Road Project – Fort Wayne, IN (Jan 2021 - May 2021)
This project involved the rehabilitation and construction of approximately 2 miles of roadway, including a new roundabout. The roadway consisted of two lanes in each direction and was designed to comply with City of Fort Wayne and Indiana State codes. I used AutoCAD to draft roadway features and generate cross-sections for preliminary design. I performed detailed quantity take-offs and calculated an approximate project cost for bidding purposes. My work supported early-phase cost estimation and engineering layout for city review and coordination.

Elkhart Bridge – Elkhart, IN (Jan 2021 - May 2021)
This project involved the construction of a 500-foot-long concrete and wood vehicular bridge with one lane in each direction. The bridge was designed in accordance with City of Elkhart and Indiana State codes.
I used AutoCAD to develop longitudinal and cross-sectional views of the bridge. I calculated the required steel reinforcement for the concrete elements and performed quantity take-offs to support the cost estimation for bidding. My engineering contributions helped define key structural elements and informed material procurement strategies.

WORK EXPERIENCE

SIMPOSN GUMPERTZ & HEGER (SGH)
Massachusetts (United States)
Project Consultant
March 2022—May 2025

Verified by
Philip Stephen Moser
psmoser@sgh.com

Experience Summary
Full-Time
Engineering: 3 years, 2 months
Experience under licensed engineer: 3 years, 2 months

TASKS

• I provided engineering, analysis, and design of exterior building envelope services to a diverse group of clients.
• I created architectural drawings of building enclosures to provide contractors and clients with repair and modification plans.
• I provided technical guidance, design reviews, and project engineering for a variety of fast-pacedprojects.
• I investigated existing buildings to identify deficiencies and design remedial repairs using the application of engineering principles, technical expertise, and material science.
• I leveraged industry-standard software including Revit, AutoCAD, and Bluebeam Revu.
• I prepared technical documentation and proposals for clients and prepare project budgets for bidding and construction phases.
• I conducted regular site visits to ensure compliance with drawings and specifications, while placing emphasis on construction safety and adherence to OSHA standards during
inspections.

REPRESENTATIVE PROJECTS

Project Name: Mathworks Sealant Repair Project (2022)

I worked with the team in the design phase on producing the design drawings for multiple details, producing elevations to show and illustrate the scope of work. and producing the project specifications for each type of work.

Afterward, I calculated and surveyed the quantities for each item in the project, and prepared bid documents to help the client selecting the winning contractor.

In the implementation phase, I conducted several quality controls tests, making sure the work will run as per the drawings and the specifications.

I performed site visits per the client's request to check the quality of work, answer the contractor's questions about the extent of the scope or helping them understanding the project's details.

And during the closeout phase, I helped the client to produce a punch-list for all the items on the project to help them tracking the missing work and closeout the project.

Project Name: Mercantile Wharf - Masonry Restoration Project (2023-2024)

Mercantile wharf is a historical building built in 1800's, it consists of 6 floors out of granite. I surveyed the exterior building to identify issues in the granite to recommend the repairs needed.

The building had huge number of embedded and rusty anchors, which expanded over the time and led the granite to crack at multiple locations. I also identified a big number of granite spalls and granite cracks that considered safety hazard.

I worked with the design team to produce the design drawings and specifications for the scope of work.

Also, I calculated and surveyed the quantities for repair item in the project, and prepared bid documents to help the client selecting the winning contractor.

I performed regular site visits to check the quality of work and review repair details, and prepared a comprehensive field report that summarized the contractor's progress of work and any issues I found during each site visit.

During the closeout phase, I produced a punch-list for all missing repair items that the contractor needs to take care off before demobilizing.

Project Name: Mathworks Lakeside Campus Extension (2024-Current)
I am currently working as a building envelope consultant for a new building in Natick, MA. My scope of work in 2024 is to help the architect to develop and produce building envelope design drawings and specifications for the scope of work, including:
• Four different types of curtain walls and wall cladding.
• Low-sloped roofing.
• Foundation waterproofing.
• Below-grade waterproofing.

I worked with the contractor before the construction phase to develop different details to be more thermal efficient per the current code.

I reviewed different shop drawings and coordinated the details between different trades.

My scope of work in the spring of 2025 until the project is done, is to perform several site visits to check the quality of work and inspect the work and material to ensure complying with design drawings and specifications and conduct ASTM tests for the building envelope assemblies.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
January 2017	August 2017	I was looking and interviewing for new opportunities, and I was investing my time to study for professional certifications (i.e., CAPM and EIT)

TIMOTHY CHENG (21-336-33)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/23/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
5 years, 8 months

Total Engineering Experience
5 years, 8 months

Experience under licensed engineer
5 years, 8 months

Other Experience

Disciplinary Action
None reported

EDUCATION

Bachelors in Civil Engineering (EAC)
University of California, Irvine
September 1990–June 1994

Masters in Civil Engineering
University of California, Berkeley
August 1994–December 1995

EXAMS

Principles and Practice of Engineering (PE)
Civil
Nevada
August 2025

Fundamentals of Engineering (FE)
California
April 1994

LICENSES

Additional Licenses
None

TIMOTHY CHENG (21-336-33)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Ralphs Pharmacy
California (United States)
Assistant to Pharmacy Manager
June 2001—December 2019

Verified by

Experience Summary
Full-Time
Other: (0%)
Experience under licensed surveyor: None

DESCRIPTION

TIMOTHY CHENG (21-336-33)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Safebuilt/Interwest Consulting
California (United States)
Associate Engineer
January 2020—December 2021

Verified by
Jahandar Pourkazemi
jpourkazemi@cityofperris.org

Experience Summary
Full-Time
Engineering: 1 year, 11 months
Post EAC degree: 1 year, 11 months
Experience under licensed engineer: 1 year, 11 months

TASKS

Performed the plan check on various grading projects for single story residential projects through Los Angeles County. Checked the drainage invert elevations to make sure the flows would drain away at a minimum 2% for proposed structures and 1% for underground pipes and concrete swales. Performed hydraulic and hydrology calculation checks using the rational method for 85% rainfall depths to make sure the calculations were correct. Verified the engineers were correctly using manning's equation for sch 40 and 60 corrugated pipes to handle the flows from the tributary drainage runoff areas. Performed geotechnical checks to determine soil settlement would not occur and a 90% relative compaction for over-excavations was being performed by the contractor (also checked seismic spectral analysis for potential liquefaction and potential fault lines of the proposed site). Checked engineer's cost estimates to make sure the project costs were accounted for. Checked earthwork calculations to verify that the cut and fill amount, typically in cubic feet converted to cubic yards were correct and would be feasible for the project in question. Checked lid bmp and casqa standards requirements and that they were adequately being followed on the soil erosion sheet of the plans. Checked other details critical to the approval of the final plan checks before permits were issued (e.g.: basis of bearings and benchmark were present, soils engineer's certificate, etc.).

REPRESENTATIVE PROJECTS

1.) Onsite Storm Drain Plans - Rancho Madrina, City of San Jacinto: Verified the storm drain plans for the various D-loads and sizes of RCP that were adequate to convey the storm drain flows entering and exiting the site. Also, verified that the basins were of adequate side slopes and provided access ways for operations and maintenance.
2.) As I became more experienced, added checking and verifying of HGL elevations to make sure they were within the storm drain pipes and not too high as to create internal pressure that would cause the manholes to rupture. Also verified that the Q's were within adequate tolerances so that the water would be conveyed adequately that would allow them to flow and not create still ponding.

TIMOTHY CHENG (21-336-33)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

County of San Bernardino
California (United States)
Associate Engineer
December 2021—September 2025

Verified by
Michele Marlene Martin
michele.martin@dpw.sbcounty.gov

Experience Summary
Full-Time
Engineering: 3 years, 9 months
Post EAC degree: 3 years, 9 months
Experience under licensed engineer: 3 years, 9 months

TASKS

1.) Worked on various tract & parcel maps to ascertain location of easements. Assisted design engineers to make sure parcels were within County right of way and County maintained roads.
2.) Assisted code enforcement to verify whether make-up grading plans were required if illegal grading had occurred and were greater than 100 cubic yards as per San Bernardino County Requirements.
3.) Assist in checking drainage studies to verify that offsite run-on did not severely impact the site and that on-site run-on would be adequate contained within suitable retention basins with infiltration studies analyzed for the 72 hours vector control drawdown time (72 hours for drainage studies, 48 hours for WQMP requirements).

REPRESENTATIVE PROJECTS

1.) Bear Valley Solar Project: Verifying adequacy of solar panel impervious areas to meet our 30% impervious requirement for adequate basin sizing. Currently checked the basins to verify whether infiltration studies were performed and if not, that the required detention drawdown times for vector control had been met. Verified the location of the project site that it was in our MS4 Phase 1 location for WQMP requirements. Also verified off-site hydrology analysis to ensure the off-site hydrology map followed Sb County policies (initial subarea less than 10 acres and less than 1000 feet, subsequent subareas no more than 2-3 times the previous subarea, etc.).
2.) Post Construction Measures Plan - El Centro Road, Phelan, CA: Analyzed stormwater run-off for erosion control and that the basin was able to mitigate and treat the stormwater flows so that the 'first flush' would be adequately treated before entering the County storm drain system. This is based on the MS4 Phase 2 for post construction measure plan stormwater mitigation for the County's stormwater treatment policies.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
January 1996	May 2001	I wasn't working at a job during this time. My father was supporting me.

BENJAMIN CONWAY (14-654-38)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/16/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
11 years, 3 months

Total Engineering Experience
11 years, 3 months

Experience under licensed engineer
11 years, 3 months

Disciplinary Action
None reported

EDUCATION

Bachelors in Geological Engineering (EAC)
University of Nevada, Reno
August 2010–May 2014

EXAMS

Fundamentals of Engineering (FE)
Nevada
May 2016

Principles and Practice of Engineering (PE)
Civil
Nevada
August 2025

LICENSES

Additional Licenses
None

WORK EXPERIENCE

PJC & Associates, Inc.
California (United States)
Project Engineer
June 2014—September 2025

Verified by
Patrick James Conway
pat@pjcgeotech.com

Experience Summary
Full-Time
Engineering: 11 years, 3 months
Post EAC degree: 11 years, 3 months
Experience under licensed engineer: 11 years, 3 months

TASKS

I have over 11 years of experience in the consulting geotechnical engineering industry. I am now considered almost entirely responsible for the on-time completion of my assigned geotechnical engineering projects. My reports are then submitted to my principal engineer who reviews/stamps my reports prior to being delivered. The following is an outline of my level of responsibility, work performed and decisions made for a new project:

+Prepare written proposals for geotechnical engineering projects. This includes providing scope of work, determining the subsurface exploration techniques and providing a budget for the project.

+Upon being rewarded the job, I am responsible for coordinating the subsurface exploration. This includes having the site marked for utilities, scheduling the drilling/backhoe contractor and being onsite for the subsurface exploration. If I'm not onsite personally, then I provide our project geologist with the information to perform the subsurface exploration.

+Prepare my own logs or review our geologist's borehole/test pit logs of the subsurface conditions. I will notify and make corrections as necessary.

+Based on the project, I will assign laboratory testing on the samples obtained from the exploration to evaluate the index and engineering properties of the soils.

+Using the gathered data, I will prepare full geotechnical engineering reports with the necessary recommendations and design criteria for the associated project.

+Upon receiving the project plans, I will review them and prepare geotechnical plan review letters in order to confirm the plans are in conformance with our recommendations and design criteria.

+Upon project completion, I will prepare final reports that summarize our work, including geotechnical observations and special inspection and testing services throughout the entirety of the project. This report is then reviewed by my principal engineer and submitted to the county for occupancy.

REPRESENTATIVE PROJECTS

Geotechnical Investigation - Residential Construction

August 2014. Santa Rosa, California

This project was my very first geotechnical report and consisted of constructing a new pre-fabricated residence on the subject property. I was the staff engineer in charge of performing the subsurface exploration, drafting borehole logs and obtaining soil samples for laboratory testing. I wrote the geotechnical report, with grading, foundation and drainage design criteria, to mitigate the effects of highly expansive adobe clay soils present at the site.

Rancho Cotate High School - Geologic Hazard Assessment and Multi-Use Building Construction

May 2015 to March 2017. Rohnert Park, California

For this project I was the staff engineer charged with the subsurface exploration and geologic analysis for the new multi-use

building constructed for the high school. I performed nearby fault analysis, provided historic seismicity parameters, performed a liquefaction evaluation, and analyzed other geotechnical hazards such as subsidence, stability and erosion, expansive and corrosive soils, and flooding hazards. I assisted in providing recommendations and design criteria for earthwork and grading, lime treatment of the expansive soils, appropriate foundation types and criteria, asphaltic concrete pavements and utility trench construction.

Russian River Brewery - New Production Facility

September 2016 to February 2017. Windsor, California

This project consisted of constructing a new production facility and restaurant on a vacant property for the Russian River Brewery. The facility is over 110,000 square-feet in size and is situated on a 15 acre parcel. For this project I was the project engineer who oversaw the drilling operations performed by our staff geologists. I then prepared the geotechnical investigation report where I provided earthwork and grading recommendations, foundation recommendations and design criteria, mat slab design criteria, exterior flatwork construction and site drainage provisions. I calculated the anticipated vehicle surcharge loads on the loading dock retaining walls and provided the design criteria to the structural engineer.

Mitigation of a Leaking Irrigation Reservoir

October 2020. Napa, California

This project consisted of rehabilitating an existing vineyard irrigation reservoir that was experiencing excessive leakage. I observed shallow subsurface explorations to assess the underlying soil and bedrock conditions. We determined that the leakage was caused by a poorly constructed, or non-existent clay liner for the reservoir. I prepared a geotechnical investigation report which provided grading and construction recommendations, as well as design criteria for the reservoir liner and embankments.

Landslide Repair

April 2024. Jenner, California

This project consisted of repairing a slump failure landslide that occurred adjacent to a guest house on private property. The failure occurred due to an overly-steep, unretained cut slope that became saturated during the wet season. I performed a site reconnaissance, explored the subsurface conditions with drilling equipment and performed a geotechnical analysis to produce geotechnical recommendations and design criteria for options to repair the cut slope. I performed calculations to repair the slope with an engineered retaining wall and I provided recommendations to excavate the slide material and construct an engineered fill slope via benching and keying.

Residential Foundation Stabilization

July 2025. San Francisco, California

This project consisted of stabilizing an existing residential foundation that was experiencing substantial settlement in San Francisco, California. The settlement was caused by a large nearby construction excavation, made in dune sand deposits, that resulted in the subsidence of the surrounding area. As the project engineer, I oversaw our staff geologist’s subsurface exploration and then prepared the geotechnical report. I calculated and provided the design criteria for helical piers and tie-backs to stabilize the foundation while minimizing the disturbance to the adjacent residences. I also provided mat slab design criteria to re-support the residence.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
May 2009	July 2010	This was the time period between graduating high school and beginning my Geological Engineering degree at the University of Nevada, Reno. This time period was spent out-of-state.

MATTHEW DIAZ (15-909-30)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
06/12/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years, 6 months

Total Engineering Experience
4 years, 6 months

Experience under licensed engineer
4 years, 6 months

Other Experience

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Mechanical Engineering (EAC)
Santa Clara University
September 2011–June 2015

EXAMS

Fundamentals of Engineering (FE)
California
August 2015

Principles and Practice of Engineering (PE)
Civil
Nevada
February 2025

LICENSES

Additional Licenses
None

WORK EXPERIENCE

Jazz Kitchen
California (United States)
Host
January 2016—May 2017

Verified by

Experience Summary
Full-Time
Other: (0%)
Experience under licensed surveyor: None

DESCRIPTION

MATTHEW DIAZ (15-909-30)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

J.F.Shea Construction
California (United States)
Field Engineer
May 2017—June 2020

Verified by
Matthew Diaz (Self)

Experience Summary
Full-Time
Other: (0%)
Experience under licensed surveyor: None

DESCRIPTION

MATTHEW DIAZ (15-909-30)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Farr Construction dba Resource Development Co.
Nevada (United States)
Project Engineer
September 2020—October 2022

Verified by
Christopher Jed Erb
cerb@resourcedevelopmentco.com

Experience Summary
Full-Time
Engineering: 2 years, 1 month
Post EAC degree: 2 years, 1 month
Experience under licensed engineer: 2 years, 1 month

TASKS

Create and handle RFI's, change orders, and submittals as needed to complete project.
Use AutoCAD to build pipe layouts, material takeoffs, and shop drawings.
Examine all relevant specs and drawings, understand job requirements prior to work start.
Gather quotes and proposals for material and subcontract work, perform analysis to determine most cost-efficient options.
Submit and keep all required permits up-to-date.
Create takeoffs for materials and work processes.

REPRESENTATIVE PROJECTS

Kinglet Booster Pump Station Project: Pump Station for controlling water pressure for potable water supply in Spanish Springs. This was a project with tight budget and schedule constraints. My role involved most project management duties, including handling RFI's, change orders, and submittals; managing project schedules; coordinating equipment, tools, and subs.
Montreux Lift Station Project: Lift Station improvements project including new pump, SCADA, and building improvements. My role again involved most project management duties, including handling RFI's, change orders, and submittals; managing project schedules; coordinating equipment, tools, and subs.

MATTHEW DIAZ (15-909-30)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

DOWL
Nevada (United States)
Project Engineer
December 2022—May 2025

Verified by
Gregory Michael Lyman
glyman@dowl.com

Experience Summary
Full-Time
Engineering: 2 years, 5 months
Post EAC degree: 2 years, 5 months
Experience under licensed engineer: 2 years, 5 months

TASKS

I review submittals and RFI's to ensure compliance with the contract documents.
I design site grading, underground utility layout, and site storm improvements per client requirements and site constraints.
I review site design to ensure it conforms to all applicable standards, including IFCC, City, County, ADA, NDOT, etc.
I acquire applicable permits for work, including City building permits, NDOT encroachment permits, and NDEP stormwater discharge permits.
I perform calculations for site storm and sewer design to ensure the utility sizing is adequate and the required improvements are included in the design.

REPRESENTATIVE PROJECTS

NV Cares Campus Phases 3 and 4 was an expansion and improvement of facilities for an existing homeless shelter complex in Midtown Reno, including apartments, dog shelter, parking, and detention basin. I was involved in the project from 2022-2025, from design until construction on the project completed. I put together the documentation and submitted for the building permit from the City of Reno. I put together the documentation and submitted for the encroachment permit from NDOT which was required for the storm drain connection to NDOT owned manhole and storm drain system. I designed the detention basin per City of Reno standards, and wrote the Hydrology Report to ensure the storm design was sufficient for the site, including future improvements on the neighboring site which were planned for a future project. I reviewed submittals and RFI's against the construction documents. I redesigned the site grading multiple times to ensure storm water flowed to the storm drain inlets, to ensure ADA compliance through design changes to walkways and parking lot layouts from the owner and City.

Line Dr Apartments project involves the construction of low income housing in Reno. The project is adjacent to the NV Cares Campus site, which involves close coordination between the facilities designs. I have been involved with the project from 2024-2025, from the project conception / design, and currently during construction administration. I put together the documentation and submitted for the building permit from the City of Reno. This included rewriting the hydrology report that I had written for the site for the Cares Campus project, updating the report to accurately represent the completed design, and performing the calculations to ensure the storm improvements will effectively convey the required storm events. I designed the initial grading for the site based on the architect's initial site layout, including making sure all ADA pathways were up to code, ensuring adequate flow throughout the site, and designing the storm drain system. I redesigned the sewer system on site per City requirements, including adding a bypass vault, backup storage manhole, and calculating the required pump size for the residential buildings (including future phase improvements).

South Valleys Park project is a park expansion project in South Reno. The current phase includes adding parking and drainage improvements for the existing baseball fields. Future phases include new baseball fields, a dog park, soccer fields, and channelization of existing storm runoff on site and from White's Creek. I have been involved with the project since 2024, when project design began, and the first phase of the project is currently under construction, while the second phase is in design. I participated in the City building permit acquisition, including putting together and submitting the initial permit materials, responding to several requests for revision from the City storm, fire, and site departments, and coordinating responses and design from electrical and landscaping. I designed the initial grading for the site based on the architect's initial site layout, including making sure all ADA pathways were up to code, ensuring adequate flow throughout the site, and designing the storm drain system. I performed the initial calculations for sizing the proposed onsite detention basin, including improvements from future phases, as well as wrote the initial hydrology report for the site storm design, including future phases. I participated in a major value engineering redesign for cost saving purposes to meet owner budget constraints, including redesigning the storm system and redesigning the layout to reduce curb and gutter while ensuring positive flow from added site facilities to the new detention basin. I have been responsible for all submittal and RFI review and responses during construction, as well as coordinating between the contractor, owner, and sub-consultants.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
July 2015	December 2015	After college, I took time to prepare and take the FE exam, then did some traveling before entering the workforce.

MASON PHILLIPS (21-552-14)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/22/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years, 4 months

Total Engineering Experience
4 years, 4 months

Experience under licensed engineer
4 years, 4 months

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Environmental Engineering (EAC)
University of Nevada, Reno
August 2017–May 2021

EXAMS

Fundamentals of Engineering (FE)
Nevada
October 2021

Principles and Practice of Engineering (PE)
Civil
Nevada
May 2023

LICENSES

Additional Licenses
None

WORK EXPERIENCE

Lumos and Associates, Inc.
Nevada (United States)
Project Coordinator
May 2021—September 2025

Verified by
Alex Jeffrey Greenblat
agreenblat@lumosinc.com

Experience Summary
Full-Time
Engineering: 4 years, 4 months
Post EAC degree: 4 years, 4 months
Experience under licensed engineer: 4 years, 4 months

TASKS

Tasks and Duties

I have worked under the civil engineering division at Lumos and Associates (Lumos) for four years and three months, in which I contributed largely to several utility and roadway design and rehabilitation projects while also extending this application to multi-use trail networks.

I initially started as a summer intern at Lumos in May of 2021 and was hired as a full-time engineering technician once the internship was completed. The following outlines my career progression at Lumos post internship, and as a full-time employee.

August 2021 – December 2022 (Job Title: Engineering Technician)
• I worked on public infrastructure projects, in which I aided in the development of conformed construction documents; transportation evaluation reports; project scope planning figures; and permitting applications. I also assisted in the design efforts (utilizing AutoCAD software) for sewer and storm drain utilities; roadway corridor grading; ADA compliance; and roadway striping.

January 2023 – December 2024 (Job Title: Project Designer)
• I led the design and production of roadway and trail rehabilitation projects; developed construction plans for new trail segments; performed drainage analysis and hydrological calculations; implemented GIS applications; corresponded on project scoping with clients; and assisted with construction management and inspection.

January 2025 – Current (Job Title: Project Coordinator)
• I currently oversee the design and plan production of utility, roadway and trail rehabilitation design projects; produce task lists and coordinate workload with staff; supervise and train engineering technicians; develop technical specifications and bid item descriptions; coordinate with clients, contractors and suppliers; and develop project proposals, budgets, and schedules.

REPRESENTATIVE PROJECTS

Representative Projects

P1) City of Reno 2022 Sewer & Street Rehabilitation Project
• August 2021 – December 2022
• Humboldt Street Neighborhood – Reno, NV
Humboldt St, Lander St, Marsh Ave, St Lawrence Ave, W Arroyo St, W Pueblo St, Wright St
• This project scope included the rehabilitation of approximately 4,300 LF of sewer main, roughly 429,000 SF of asphalt roadway, and nearly 100,000 SF of concrete alley. Additional engineering design included removal and replacement of curb and gutter; sidewalk; and concrete driveways.
• My roles on this project were focused on plan production and design assistance in which I drafted limits of improvements; set-up utility networks and profiles; assisted with pedestrian ramp and ADA grading; organized plan sheets, labels, notes and quantities; collected and produced design details; and compiled final construction documents. During construction, I reviewed submittals, attended site visits, and produced record drawings.

P2) Carson River Trail System – Phase 3 Prison Hill West (June 2023 – June 2025)
• June 2023 – June 2025
• Prison Hill – Carson City, NV
• This project scope included the design of 2.5 miles of a ten-foot wide, decomposed granite surface trail along the base of Prison Hill which connected three different existing trailheads. Significant improvements were made to the trailhead at Koontz Lane,

which included ADA crossings, access road realignment and regrading, development of trailhead parking area, and inclusion of ADA features such as parking, picnic area, and vault toilet.
• I began with walking the hillside and providing preliminary mapping of the trail alignment, drafting in the proposed trail centerline, delineating drainage areas, performing hydrological calculations of anticipated flows, and identifying locations and sizing for culverts and drainage ditches. Throughout design, I coordinated with my team to finalize the trail profile, mapped out and graded the entire trailhead parking area and access road which provided 27 standard parking stalls, two ADA parking stalls, and three horse trailer parking stalls. I attended several site visits during construction, reviewed submittals to Build America, Buy America (BABA) standards, coordinated design changes, and managed record drawing development.

P3) Tahoe City Public Utility District (TCPUD) Multi-Use Trail System Evaluation & Rehabilitation Series (May 2022 – Current)
• May 2022 – Current
• Tahoe City, CA (Outer Limits: Olympic Valley Park, Dollar Point, and Tahoma)
• The scope of this project series expands over four different projects in which the following have been achieved:
o A pavement condition evaluation and safety assessment that spans across the 23-mile multi-use trail system with the development of a 5-year Capital Improvement Program (CIP).
o The rehabilitation of TCPUD's 2.2-mile North Shore Trail with retaining wall design, trail realignments, and safety features.
o The rehabilitation of TCPUD's 2.4-mile West Shore Trail (Segments 2 & 3) with significant trail realignments, grading impacts, and tree removal.
o The kickoff of rehabilitation of TCPUD's 1.8-mile West Shore Trail (Segment 1) with several driveway crossing conflicts and site-visibility concerns.
• I have been serving on this project series since its inception in which I spent time in the field performing condition evaluations, produced several assessment reports and figures, and developed the 5-year CIP. I have played a pivotal role in the subsequent projects with emphasis on scoping, design, permitting, bidding, and construction in which I am directly interfacing with the client on all project demands.
• Throughout the development of these projects, I have served as an intermediate between design and project management. I have been developing task lists, organizing timelines, aiding the development of younger staff, coordinating and leading status meetings - internally and externally, and monitoring budget.

TREVOR PRICE (17-229-06)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/26/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
7 years, 1 month

Total Engineering Experience
7 years, 1 month

Experience under licensed engineer
4 years, 11 months

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Geological Engineering (EAC)
University of Nevada, Reno
August 2013–May 2017

EXAMS

Fundamentals of Engineering (FE)
Nevada
April 2017

Principles and Practice of Engineering (PE)
Civil
Nevada
July 2025

LICENSES

Additional Licenses
None

TREVOR PRICE (17-229-06)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

City of Sparks
Nevada (United States)
Engineering Intern
June 2017—May 2018

Verified by
Trevor Price (Self)

Experience Summary
Part-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

As an Engineering Intern, I assisted with data collection and preliminary data analysis to support engineering projects. I attended project meetings alongside licensed engineers to review progress, evaluate compliance with regulations, and discuss project coordination with managers. Field responsibilities included monitoring water levels at the Sparks Marina and conducting a citywide inventory of infrastructure assets for improved recordkeeping and maintenance planning.

REPRESENTATIVE PROJECTS

Sparks Marina
I performed weekly field measurements of water levels at the Sparks Marina during maintenance and repairs to the site's pumping equipment. This monitoring ensured that water elevations remained below thresholds that could pose a risk to public safety.

Backflow Preventer Cataloging
I conducted a complete inventory of all City-managed backflow preventers to improve internal asset records. Using Trimble GPS equipment, I collected precise location data for each unit to support accurate mapping and future maintenance planning.

Truckee River Diversion Structure
I participated in project coordination meetings with licensed City engineers and project managers regarding the construction of the Truckee River diversion structure. This project was designed to reduce flooding risks throughout the Sparks Industrial Center.

WORK EXPERIENCE

Nevada Division of Water Resources
Nevada (United States)
Staff Engineer II
July 2018—June 2023

Verified by
Shannon McDaniel
shannon@rci-nv.com

Experience Summary
Full-Time
Engineering: 4 years, 11 months
Post EAC degree: 4 years, 11 months
Experience under licensed engineer: 4 years, 11 months

TASKS

During my tenure with the Well Drilling Regulatory Section at NDWR, my workload was approximately divided 50% between well drilling related tasks and water resource related tasks.
My engineering duties included the technical review of well construction plans, specifically evaluating proposed well schematics for consistency with regulatory standards and analyzing surrounding lithology to ensure the designs fit within the real world aquifer characteristics. I regularly performed field inspections to ensure that well construction complied with state regulations and best practices. These inspections required close coordination with licensed well drillers and careful assessment of materials and methods used.
The water resources portion of my responsibilities focused on the evaluation of new water right applications and proposed changes to existing appropriations. I conducted analyses to assess basin capacity and aquifer sustainability, with particular attention to long-term trends in groundwater withdrawal and water level decline. Field duties included basin-wide groundwater level monitoring, streamflow measurements, and site visits to assess project-specific water use and efficiency.
I was responsible for organizing and leading the annual “Well Run” program—a two-week field operation involving water level and flow meter data collection across central Nevada. The data obtained during this initiative informs critical water management and policy decisions by the State Engineer. In addition, I provided technical training and oversight to junior staff within the Well Drilling Section to ensure consistency in field methods and regulatory interpretation.
Approximately 5–10% of my time was allocated to non-engineering administrative tasks, including maintaining the database of licensed well drillers and administering enforcement actions such as the issuance of demerits for regulatory noncompliance.

REPRESENTATIVE PROJECTS

As a regulator, my role required maintaining independence from project development, so I struggle to claim any level of ownership of the many projects I reviewed and oversaw for regulatory compliance. Instead, the following highlights internal projects I contributed to directly, along with key tasks I performed in my regulatory capacity.

Winnemucca Ranch Water Flow Monitoring (2018-2023, Monthly April through October)
In response to a legal dispute over water use between two ranches in North Reno, I was in charge of a Division of Water Resources effort that was court-ordered to monitor and verify flow rates across both properties. I conducted field measurements using weirs, current meters, and Parshall flumes to quantify the water entering the North Ranch and continuing to the South Ranch. I analyzed the data for accuracy to ensure compliance with judicial orders and equitable water distribution.

Basin Inventory Field Work and Aquifer Analysis (2018-2023 Annually)
To maintain reliable hydrologic data, I participated in and managed basin inventory projects. Depending on the basin, this work was conducted quarterly or annually and involved performing comprehensive flow measurements across the basin. I collected data on all permitted sources to determine the total yearly impact on the aquifer. I analyzed the collected data alongside long-term aquifer monitoring records to identify risks such as over-appropriation, declining water tables, and unsustainable withdrawal patterns.

Well Run Program – Aquifer Health Assessment (2018-2021: Participant, 2022-2023: Management and Participant)
As part of the “Well Run” program, an annual statewide field operation, I initially participated as a team member before leading the program during the final two years of my tenure. The effort deployed roughly two dozen personnel across central Nevada to collect groundwater level measurements at hundreds of sites. I conducted field work across multiple basins to measure water levels in all applicable wells. I oversaw data compilation and personally analyzed aquifer health to support long-term water management decisions by the State Engineer.

Well Site Inspections and Construction Compliance (2018-2023 Daily)

I regularly conducted well site inspections throughout Nevada to evaluate compliance with well drilling regulations. My inspections included reviewing casing and sealing materials, seal thickness and placement, and perforated interval positioning relative to surface and subsurface hydrologic features. These evaluations ensured that well construction adhered to State standards for protecting groundwater resources and preventing contamination or cross-aquifer flow. I would then compare the site visits to the final construction reports provided by the Well Driller to ensure consistency with the report and real-world inspections.

Well Driller's Report Analysis (2018-2023 Daily)
I regularly analyzed final construction of wells drilled across the state to ensure they adhered to Nevada State Construction Standards. I analyzed the lithology of the report to add to the State Engineer's understanding of surrounding aquifer characteristics. I would analyze surrounding lithology of all wells drilled in the vicinity to ensure that any requested deviation from the regulations would not contaminate or otherwise harm the aquifer.

Water Rights Analysis (2021-2023 Daily)
I reviewed Water Rights Applications for the fifteen separate hydrographic water basins that I was in charge of. I analyzed all new appropriations against the aquifer or alterations to previously appropriated water for impacts to surrounding water rights and sources. Based on these evaluations, I developed permit terms that included appropriate requirements and restrictions to ensure the protection of adjacent water resources.

TREVOR PRICE (17-229-06)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Resource Concepts, Inc.
Nevada (United States)
Water Rights Specialist
June 2023—August 2025

Verified by
Jacob Lawrence Echeverria
jake@rci-nv.com

Experience Summary
Full-Time
Engineering: 2 years, 2 months
Post EAC degree: 2 years, 2 months
Experience under licensed engineer: None

TASKS

As a Water Rights Specialist at Resource Concepts, Inc., I am extensively involved in the planning, design, and management of water right portfolios for a variety of projects. My responsibilities include analyzing site locations to determine optimal placement of diversion structures, managing water allocations and coordinating well balancing across project areas, and researching decreed water rights along with applicable regulations. I facilitate ownership transfers of water rights, track and analyze water use to evaluate well production, and make adjustments as necessary to ensure balanced operations. I review annual project development, assess irrigated acreage, and manage clients' total combined duties within their water right portfolios. My work also involves preparing and submitting required documentation to the State Engineer's Office, as well as meeting with clients and government officials to present and discuss project planning and development strategies.
Field activities include measuring surface water flow from streams and springs using equipment such as Weirs, Parshall Flumes, and Current Meters. I also assist with water right surveying under the supervision of a Licensed Engineer, determining accurate diversion structure locations and active irrigated acreage for mapping and submission to the State Engineer's Office.

REPRESENTATIVE PROJECTS

Buzzy's Ranch Water Analysis (2024 – Present)
I conducted a comprehensive analysis of water flow onto and off the "Buzzy Ranch" site on behalf of Carson City Parks, Recreation & Open Space. I did this by utilizing a Current Velocity Flow Meter to calculate total project usage. I determined whether adequate flow was available from the Mexican Ditch, supplied by the Carson River. To complete the final report, I needed to analyze real-time flow measurements as well as review historical regulation during drought years to evaluate long-term supply reliability. I developed a report that outlined all of the findings.

Albemarle U.S., Inc. – Silver Peak (2023 – Present)
I served as a lead project manager for the water rights portfolio at Albemarle's Silver Peak Lithium Mine, the only operating lithium mine in the United States. I reviewed and analyzed monthly production measurements, compiled quarterly reports for the State Engineer, and developed plugging plans for non-productive wells. I also analyzed project-wide well usage to conduct an annual balancing of the over 60 lithium brine wells. This resulted in the designing and submission of an annual set of water rights to balance the project. To achieve these goals, I developed a sophisticated Pumpage Spreadsheet that compared current well usage to historical usage and projected anticipated yearly production.

Municipal Water Right Portfolios – City of Fernley, Town of Gardnerville, Carson City Public Works, Stagecoach GID (2023 – Present)
I managed municipal water right portfolios that supported interconnected well networks drawing from both surface and groundwater sources. I conducted monthly analysis into well production to balance underground usage with surface water diversion. I reviewed all available current and historical data to balance production, prepared "Proof of Beneficial Use" applications, and allocated resources to support current and future developments. My work ensured efficient distribution of water supplies and compliance with regulatory requirements.

McEwen Mining (2023 – Present)
I provided water rights management for McEwen Mining's operations in Nevada. At the Gold Bar Mine, I tracked and analyzed monthly water production for performance monitoring and certification. For the Timberline Project, which spanned both the Little Smoky and Diamond Valley Basins, I coordinated water right acquisitions and portfolio planning. To determine adequate and proper water right acquisition, I analyzed a range of possible water sources from both basins and determined their impacts to surrounding water. I further analyzed the unique regulatory requirements each water right would be subject to.

Water Right Retirement Project (2023 – Present)

I consulted for the Water Right Retirement Program administered by the Central Nevada Regional Water Authority (CNRWA) and Humboldt River Basin Water Authority (HRBWA). I analyzed the more than two dozen basins in the program to determine a ranking of priority dependent on basin aquifer health. I verified historical beneficial use through an analysis of pumping records and aerial imagery. I conducted thorough reviews of each water right purchased, determining their active usage, ownership status, and any regulatory non-compliance that might exist.

Unnamed Project (Non-Disclosure Agreement in Place) (2024-Present)
Due to signed agreements between Resource Concepts, Inc. and this company, it will not be named in any specific manner. With that being said, its unique location makes it subject to a variety of conflicts. For each water right considered for purchase, I conducted a thorough analysis of surrounding impacts (specifically to Devil's Hole and Ash Meadows) using the USGS DV3 Groundwater Model. I reviewed expected impacts to sensitive areas over a fifty year period to determine viability of the water right for project production. I compiled reports that outlined all of my findings.

JEHOVANA RIOS MORALES (21-475-75)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/10/2025

Citizenship
Mexico

SUMMARY

Engineering Experience after EAC degree
4 years, 3 months

Total Engineering Experience
4 years, 3 months

Experience under licensed engineer
4 years, 3 months

Disciplinary Action
None reported

EDUCATION

Bachelors in Civil Engineering (EAC)
University of Nevada, Las Vegas
August 2015–May 2021

EXAMS

Fundamentals of Engineering (FE)
Nevada
March 2021

Principles and Practice of Engineering (PE)
Civil
Nevada
July 2024

LICENSES

Additional Licenses
None

JEHOVANA RIOS MORALES (21-475-75)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Westwood PS
Nevada (United States)
Graduate Engineer
June 2021—October 2024

Verified by
Tim Echeverria
Tim.Echeverria@westwoodps.com

Experience Summary
Full-Time
Engineering: 3 years, 4 months
Post EAC degree: 3 years, 4 months
Experience under licensed engineer: 3 years, 4 months

TASKS

My career at Westwood began as a member of the land development team, where I was responsible for preparing finished lot services and drafting improvement plans for residential developments. After gaining foundational experience in land development, I transitioned to the water team, focusing primarily on preparing Water Network Analysis (WNAs) for residential and commercial land development sites. Building on this expertise, I expanded my role to support the preparation of water and sewer master plans and contract documents for municipal water and wastewater infrastructure projects, which included work on lift stations, pump stations, pipelines, rate of flow control stations, and reservoirs. In my role, I was responsible for the development of engineering deliverables including contract documents, technical memorandums, water and sewer master plans, basis of design reports, and preliminary engineering reports.

My day-to-day responsibilities involved performing equipment sizing calculations, conducting extensive QA/QC reviews, and coordinating with internal design teams, external consultants, clients, and subconsultants. I utilized software tools such as FlowMaster, WaterCAD, and SewerGEMS for hydraulic modeling, and AutoCAD for drafting and design documentation. Additionally, I contributed to proposal writing and project scoping.

REPRESENTATIVE PROJECTS

CCWRD #19101, Lincoln Lift Station Rehabilitation (2023-2024)
Clark County, NV
The Lincoln Lift Station serves an 11,000-acre sewer shed, served by an 18-inch DIP force main and provides low lift and high-volume discharge of unscreened wastewater to three 84-inch transmission sewers. The lift station has reached the end of its useful service life and is being rehabilitated. In this project, I was responsible for conducting comprehensive QAQC reviews of engineering plans, specifications, and technical memorandums to ensure accuracy, compliance with applicable design standards, and alignment with project requirements. I actively monitored and documented issues and decisions. My role also involved close collaboration with the client and subconsultants to ensure all aspects of the project met permit compliance requirements. Additionally, I verified that the design adhered to established criteria, maintaining consistency with engineering best practices and regulatory expectations.

Lakemoor Lift Station #1 (2024)
Henderson, NV
The project consists of the design and construction of a sanitary sewer lift station. The site is approximately 140 feet by 140 feet. The lift station is designed to current City of Henderson (COH) requirements. For the Basis of Design Report, I prepared detailed technical memorandums for systems within the lift station. I also conducted a comprehensive review of local standards to ensure that the design adhered to local regulations.

Pinnacle at MacDonald Highlands Water Master Plan Update (2022)
Henderson, NV
Lakemoor Water and Sewer Master Plan (2024)
Henderson, NV
Eldorado Valley Water and Sewer Master Plan (2023-2024)
Henderson, NV
Villages at Tule Springs Water and Master Plan Update (2023-2024)
City of North Las Vegas, NV
Vegas Industrial Park Water and Sewer Master Plan (2023-2024)
City of North Las Vegas, NV

City of Justin Water Master Plan Update (2023-2024)
City of Justin, TX

Water Master Planning Reports
I contributed to the creation of technical documents, reports, and presentations related to hydraulic modeling studies for water systems. Utilizing WaterCAD, I performed hydraulic analyses to evaluate water supply and distribution systems connected to existing city water supply. I calculated domestic and fire flow demands in accordance with agency standards, prepared models for onsite contributions to include all pressure zones in the proposed development, and sized backbone water pipelines to ensure minimum required pressures. I collaborated closely with regulatory agencies to ensure compliance with water quality standards and regulations. Additionally, I analyzed the system to support private fire storage, incorporating flow control valves, Reduced Pressure Detector Assembly (RPDA), and pump stations. My work also included assisting in reservoir planning, conducting water pressure zone analysis, calculating storage capacity, and analyzing existing pump station capacities.

Sewer Master Planning Reports
I contributed to the creation of technical documents and reports for sewer hydraulic modeling studies. My work involved using SewerGEMS to perform hydraulic modeling and analysis, developing models to accurately reflect the behavior of the sewer system. I assessed the capacity and performance of sewer systems, identifying bottlenecks, and opportunities for optimization based on sewer contribution and peaking calculations. Additionally, I assisted in designing sewer infrastructure, including pipe sizing and lift station placement. I conducted offsite capacity analysis to determine necessary upgrades for supporting the proposed masterplan's sewer contributions. I collaborated closely with regulatory agencies to ensure compliance with wastewater regulations and permit requirements. Furthermore, I performed due diligence on as-built drawings and existing topography to evaluate potential locations for lift stations.

Richmond American Homes Finished Lot Services (2021-2022)
Las Vegas, NV
I handled plot planning and lot fit layouts for Richmond American Homes, making sure each site was laid out thoughtfully and worked seamlessly with the land’s unique features. This included detailed grading to ensure proper drainage while maximizing the usable space and meeting local regulations.

JEHOVANA RIOS MORALES (21-475-75)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Black and Veatch
Nevada (United States)
Civil Engineer 3
October 2024—September 2025

Verified by
Joshua Rosas-Marquez
RosasJ@bv.com

Experience Summary
Full-Time
Engineering: 11 months
Post EAC degree: 11 months
Experience under licensed engineer: 11 months

TASKS

In my role, I have been responsible for the development of comprehensive engineering deliverables and engineering services during construction. My day-to-day responsibilities have involved reviewing submittals and RFI's, preparing calculations, managing program details for consistency amongst all projects within a program, conducting extensive existing utility reviews, pipeline design, and coordinating with internal design teams, external consultants, and subconsultants.

REPRESENTATIVE PROJECTS

Southern Nevada Water Authority (SNWA) I Horizon Lateral Program (Phase 1) ; Las Vegas, NV I (2024 – Present)
The program includes the design of a potable water conveyance system that transports up to 375 million gallons per day, consisting of 36 miles of pipeline with diameters reaching 120 inches, as well as pumping stations, a reservoir, and flow control stations. Rice is a 42 inch open cut and trenchless pipeline and pump station within the Horizon Lateral Program. The purpose of the project is to deliver 30 MGD to a higher pressure zone reservoir. In this role, I was tasked with the design of the pipeline, which involved conducting detailed existing utility reviews to accommodate the complex alignment through a busy urban area. I performed calculations for steel pipe sizing and unwatering requirements, and I designed the interconnect valve vaults in accordance with LVVWD Engineering Design Standards.

SIDDIQ SHAIK TALUPULA MARRIMANU (23-736-73)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/29/2025

Citizenship
India

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience
6 years, 1 month

Experience under licensed engineer
6 years, 1 month

Disciplinary Action
None reported

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Civil Engineering
Osmania University
October 2012–June 2016

Masters in Structural Engineering
VIT University - Vellore
June 2017–April 2019

EXAMS

Fundamentals of Engineering (FE)
California
September 2024

Principles and Practice of Engineering (PE)
Civil
Oregon
January 2025

LICENSES

Additional Licenses
None

SIDDIQ SHAIK TALUPULA MARRIMANU (23-736-73)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

CDM Smith
Arizona (United States)
Structural Engineer 3
August 2019—September 2025

Verified by
Pooja Kalaria
KalariaPH@cdmsmith.com

Experience Summary
Full-Time
Engineering: 6 years, 1 month
Experience under licensed engineer: 6 years, 1 month

TASKS

I focus on structural design, analysis, and code compliance for steel, concrete, masonry, and aluminum structures. I design structural systems to meet project-specific criteria and verify compliance with standards such as ASCE 7, AISC 360, ACI 318, ACI 350, TMS 402, and local building codes. I calculate loads for structural components, analyze their performance under static and dynamic conditions, and confirm safety against seismic, wind, and other environmental demands.

Over the course of my career, I progressed from Structural Engineer 1 to Structural Engineer 3 by expanding my technical contributions. As a Structural Engineer 1, I performed structural calculations, checked code provisions, and assisted senior engineers and Engineers of Record by developing design deliverables. At the Structural Engineer 2 level, I designed structural components, developed conceptual design options, and coordinated directly with architects, drafters, and other disciplines to prepare accurate construction documents. As a Structural Engineer 3, I now manage complete projects from concept through completion. I design and review structural systems, produce and check design drawings, and coordinate directly with project managers, contractors, and clients to resolve technical issues and deliver final design packages.

In addition to technical work, I mentor junior engineers by reviewing their calculations, checking their drawings for accuracy and constructability, and providing guidance to strengthen their design skills. I also respond to design-related queries during construction and provide engineered solutions to ensure proper implementation in the field.

Throughout my career, I have consistently emphasized structural design, detailed analysis, quality control, and collaboration to deliver safe, efficient, and cost-effective solutions that satisfy both project needs and industry standards.

REPRESENTATIVE PROJECTS

Project: JEA Southwest WRF Expansion, Florida (2019–Sep 2025)

Scope: Designed structures for a $96M WRF expansion, including reinforced concrete headworks, BNR basin, secondary clarifiers, UV modifications, and new CMU electrical, operations, and maintenance buildings with light-gauge metal roof trusses.

Role: I designed the elevated concrete headworks structure, which supports large mechanical screens and incorporates removable aluminum cover plates. For this structure I performed a detailed load analysis to ensure safety and serviceability. I designed and detailed the aluminum framing in the dumpster area to support odor-control curtains, including member sizing and connection details. I analyzed and designed the large concrete BNR structure (240ft × 126ft × 20ft) for dead, live, fluid, soil, wind and process piping loads, and designed pipe supports, walls, and walkways. I developed comprehensive structural drawings and coordinated my design with process layouts to ensure constructability.

Project: Sister Grove Regional WRRF Phase I & II, Collin County, Texas (2019–Sep 2025)

Scope: First phase of a 16MGD wastewater treatment plant on a 934-acre greenfield site, designed to expand to 128MGD.

Role: I designed fully buried concrete structures, including primary and secondary concrete sludge pump stations and Parshall flume. I designed partially buried concrete tertiary filter structures with PEMB superstructure. I analyzed 50-ft beam spans supported on 24-inch walls with no intermediate columns and designed them as fixed-end members to ensure accurate moment transfer at beam-to-wall connections. I calculated lateral soil pressures, vehicular surcharge, and superstructure loads, integrating them into the reinforced concrete structure design. I prepared detailed structural drawings including reinforcement layouts, member sizing, and connection details, and coordinated design assumptions with the project geotechnical data.

Project: Punta Gorda WWTP Improvements, Florida (2022–2025)

Scope: Upgrade plant from 6MGD to 12MGD, adding new wastewater process and building structures; largest is a cast-in-place concrete bioreactor supported by precast piles.

Role: I designed a partially buried cast-in-place concrete bioreactor tank (162ft × 116ft × 25ft) supported on precast piles, performing extensive structural analyses to address poor soil conditions, limited pile capacities, and both downward and uplift forces. I optimized the pile layout to minimize the number of piles while maintaining safety and serviceability. I prepared comprehensive calculations for reinforcement, pile arrangements, and load transfer details, and produced detailed structural drawings for construction. I coordinated directly with the geotechnical engineer and Engineer of Record to validate soil-structure interaction assumptions, refine pile design, and ensure constructability. Additionally, I reviewed all design options to comply with ACI and ASCE standards, incorporating lessons learned from previous projects to enhance structural performance and efficiency.

Project: Pinellas Suncoast Transit Authority Clearwater Multimodal Transit Center, Clearwater, Florida (2022–Sep 2025)

Scope: Design a modern, accessible transit facility. Original concept included a large curved canopy requiring wind tunnel testing; simplified to a wave-shaped roof supported by V-shaped columns for constructability and cost efficiency.

Role: I designed the steel wave canopy for the transit center, including HSS V-shaped columns and trusses spanning up to 60ft. I analyzed multiple curved roof configurations to optimize steel tonnage while ensuring structural performance under wind, live, rain, thermal and gravity loads according to ASCE 7. I designed complex connections to safely transfer combined loads, detailing member sizing, bracing, and connection layouts. I prepared detailed structural calculations and drawings for bid and construction, documenting framing plans, member sizes, and connection details. I collaborated with subject matter experts to validate assumptions, refine connections, and confirm constructability, ensuring the final design achieved cost efficiency, preserved the intended architectural aesthetics, and met performance requirements.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
July 2016	May 2017	From July 2016 to May 2017, I dedicated myself to preparing for the Graduate Aptitude Test in Engineering (GATE), which is one of the most competitive and challenging examinations in India for admission into master's degree programs.

CREDENTIALS EVALUATION - ENGINEERING

SHAIK TALUPULA
MARRIMANU, SIDDIQ
(23-736-73)

DEGREES EVALUATED

Institution/Degree	Country	Language	Courses
Osmania University / Bachelors in Civil Engineering 10/01/2012 — 06/01/2016	India	English	43
VIT University - Vellore / Masters in Structural Engineering 06/01/2017 — 04/01/2019	India	English	3

COMPARABILITY SUMMARY

Outcome: Not Equivalent

Area	Hours	Deficiency
Math/Science	32 / 32	None
Engineering	64 / 48	None
General Education	11 / 12	Missing 1 hours
Elective/Other	33 / N/A	None

SPECIAL NOTE

The NCEES Engineering Education Standard requires 12 college semester credit hours in general education that complement the technical content of the curriculum. Courses that instill cultural values are acceptable, while routine exercises of personal craft are not.

MATH/SCIENCE

Specified Criteria Hours: 32

Course	Institution/Degree	U.S. Credits
Calculus I	Osmania University / Bachelors in Civil Engineering	3
Calculus II	Osmania University / Bachelors in Civil Engineering	3
Chemistry	Osmania University / Bachelors in Civil Engineering	4
Differential Equations	Osmania University / Bachelors in Civil Engineering	3
Engineering Geology	Osmania University / Bachelors in Civil Engineering	4
Engineering Mechanics	Osmania University / Bachelors in Civil Engineering	3
Fluid Mechanics I	Osmania University / Bachelors in Civil Engineering	4
Physics	Osmania University / Bachelors in Civil Engineering	4
Strength of Materials I	Osmania University / Bachelors in Civil Engineering	4
	Total semester credit hours earned:	**32.00**

Specified Criteria Hours: 48

Course	Institution/Degree	U.S. Credits
Advanced Reinforced Concrete Design	Osmania University / Bachelors in Civil Engineering	3
Environmental Engineering	Osmania University / Bachelors in Civil Engineering	4
Fluid Mechanics II	Osmania University / Bachelors in Civil Engineering	4
Foundation Engineering	Osmania University / Bachelors in Civil Engineering	3
Groundwater Hydrology	Osmania University / Bachelors in Civil Engineering	3
Mechanical & Electrical Engineering	Osmania University / Bachelors in Civil Engineering	3
Prestressed Concrete	Osmania University / Bachelors in Civil Engineering	3
Project	Osmania University / Bachelors in Civil Engineering	3
Reinforced Concrete	Osmania University / Bachelors in Civil Engineering	3
Soil Mechanics	Osmania University / Bachelors in Civil Engineering	4
Steel Structures	Osmania University / Bachelors in Civil Engineering	3
Strength of Materials II	Osmania University / Bachelors in Civil Engineering	3
Structural Design I	Osmania University / Bachelors in Civil Engineering	3
Structural Design II	Osmania University / Bachelors in Civil Engineering	3
Theory of Structures I	Osmania University / Bachelors in Civil Engineering	3
Theory of Structures II	Osmania University / Bachelors in Civil Engineering	3
Transportation Engineering	Osmania University / Bachelors in Civil Engineering	4
Wastewater Engineering	Osmania University / Bachelors in Civil Engineering	3
Water Resources Engineering I	Osmania University / Bachelors in Civil Engineering	3
Water Resources Engineering II	Osmania University / Bachelors in Civil Engineering	3
	Total semester credit hours earned:	**64.00**

GENERAL EDUCATION

Specified Criteria Hours: 12

Course	Institution/Degree	U.S. Credits
Business Ethics	VIT University - Vellore / Masters in Structural Engineering	1
Economics & Accounting	Osmania University / Bachelors in Civil Engineering	3
Employment & Career Preparedness	VIT University - Vellore / Masters in Structural Engineering	1
English	Osmania University / Bachelors in Civil Engineering	4
French	VIT University - Vellore / Masters in Structural Engineering	2
	Total semester credit hours earned:	**11.00**

ELECTIVE/OTHER

Specified Criteria Hours: N/A

Course	Institution/Degree	U.S. Credits
Building Drawing	Osmania University / Bachelors in Civil Engineering	1
Building Technology	Osmania University / Bachelors in Civil Engineering	3
Computer Applications	Osmania University / Bachelors in Civil Engineering	2
Computer Programming	Osmania University / Bachelors in Civil Engineering	4
Concrete Technology	Osmania University / Bachelors in Civil Engineering	4
Construction Management	Osmania University / Bachelors in Civil Engineering	3
Engineering Graphics	Osmania University / Bachelors in Civil Engineering	3
Engineering Materials	Osmania University / Bachelors in Civil Engineering	3
Seminar	Osmania University / Bachelors in Civil Engineering	1
Surveying I	Osmania University / Bachelors in Civil Engineering	4
Surveying II	Osmania University / Bachelors in Civil Engineering	4
Workshop	Osmania University / Bachelors in Civil Engineering	1
	Total semester credit hours earned:	**33.00**

Total Semester Credit Hours Earned: 140

PROCESS DESCRIPTION

All education is compared to the NCEES Engineering Education Standard

The evaluation of your academic studies has been prepared to provide engineering and surveying licensing boards with the required assessment of foreign qualifications to facilitate them in determining if you qualify for licensure examination. This is an advisory report prepared based on records received and verified by the institutions issuing the degrees or qualifications. Eligibility to take the examination is determined by the licensing boards.

This report does not include the assessment of written and oral communication skills, computer skills, the quality of laboratory or field work, and the scope of design experience, which require an onsite review. Academic records (such as transcripts and catalogs) do not document qualitative factors and practical constraints to desirable outcomes.

NCEES houses a library of reference materials from around the world. These references are used for the completion of evaluations in conjunction with the NCEES Engineering Education Standard.

Post-graduate courses are ONLY used in an evaluation if they can assist in eliminating deficiencies that may be indicated in the undergraduate program.

Official Evaluations are ONLY available to state licensing boards and international exam sites through an applicant's NCEES account.

ISABELLA VILLAFUERTE (21-648-02)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/22/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years, 1 month

Total Engineering Experience
4 years, 1 month

Experience under licensed engineer
4 years, 1 month

Disciplinary Action
None reported

EDUCATION

Non-degree
San Diego State University
August 2016–May 2018

Bachelors in Civil Engineering (EAC)
University of Nevada, Reno
August 2018–May 2021

EXAMS

Fundamentals of Engineering (FE)
Nevada
July 2021

Principles and Practice of Engineering (PE)
Civil
Nevada
October 2023

LICENSES

Additional Licenses
None

ISABELLA VILLAFUERTE (21-648-02)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Linchpin Structural Engineering
Nevada (United States)
Associate Engineer
August 2021—September 2025

Verified by
Michael James Nicklin
mick@linchpinse.com

Experience Summary
Full-Time
Engineering: 4 years, 1 month
Post EAC degree: 4 years, 1 month
Experience under licensed engineer: 4 years, 1 month

TASKS

I design structures of varying types and complexity to resist vertical and lateral loads using materials such as wood, steel, concrete, and reinforced masonry. My designs follow applicable codes including ASCE 7, IBC/CBC, and material-specific standards such as NDS, AISC, ACI, and TMS. I perform structural analysis and modeling using software such as RISA, Enercalc, and BIM tools. In unique cases where software cannot be used, I conduct detailed hand calculations. I am responsible for the full design and detailing of structural systems, ensuring code compliance and constructability. My work includes preparing structural plans, specifications, and calculations for permitting and construction. Throughout each project, I coordinate with architects, consultants, and clients from schematic design through construction. I ensure structural requirements are integrated into the overall design and that client goals are met while maintaining structural integrity. During construction, I review submittals (e.g., concrete mix designs, steel shop drawings), respond to RFIs, and perform site visits to verify compliance with design documents. I also assist in resolving field issues by working with a contractor or consultant to create alternate solutions.

I have worked at my current firm for four years. I began as a Project Engineer, working under the supervision of Senior engineers. After two years, I was promoted to Associate Engineer and began independently managing projects. In this role, I take responsibility for project planning, engineering decisions, coordination, and client communication while continuing to consult with senior staff for quality assurance and mentorship.

REPRESENTATIVE PROJECTS

Schwab Deck & Stair Addition, Truckee, CA
Dates of Design Work: September 2021 - October 2021

I was responsible for the structural design of a new wood-framed stair and deck addition to an existing residence in Truckee, CA. Using ASCE 7, IBC, and NDS, I designed the framing members, including girders, joists, and stair stringers, to resist gravity and snow loads. I also detailed all structural connections to ensure code compliance. In addition, I designed reinforced concrete footings for the deck posts, taking into account frost depth and the allowable soil bearing capacity. I prepared the structural drawings and calculations for permit submittal and coordinated with the homeowner to address layout constraints and ensure constructability.

Bordertown Casino, Reno, NV
Dates of Design Work: November 2022- February 2024

I worked on the structural design of a new casino in Reno, NV, planned for construction in two phases. The phased nature of the project required special structural considerations to maintain continuity and accommodate future expansion. I independently designed and detailed CMU shear walls, roof framing, floor framing, and foundations in accordance with applicable codes and project requirements. I coordinated closely with the architectural and MEP teams to resolve structural interfaces and ensure constructability. The project is currently in the early stages of construction. As construction progresses, I will be responsible for reviewing structural submittals, performing site visits for structural observations, and responding to RFIs to ensure compliance with the design intent.

South Center Y – Core & Shell Upgrade, South Lake Tahoe, CA Dates of Design Work: March 2023- April 2024

I was responsible for the structural design and calculations for a commercial remodel of an existing CMU warehouse in South Lake Tahoe, CA, which was converted into four tenant spaces. My work included designing new steel brace frames to provide seismic strengthening for large new wall openings, and designing three new storefront facades using custom timber trusses, beams, steel columns, and cantilevered column lateral systems. I reviewed submittals such as steel shop drawings and concrete

mix designs, performed site visits to observe structural work, and responded to unforeseen field conditions by developing revised details and plan changes. I coordinated closely with the architect and contractor to implement practical, code-compliant solutions during construction.

Morgan Residence, Reno, NV
Dates of Design Work: December 2024 - August 2025

I was responsible for the structural design and calculations for a new custom wood-framed residence in Reno, NV. My scope included sizing and detailing rafters, beams, joists, columns, retaining walls, and foundations. I designed the lateral force-resisting system using wood-sheathed shear walls and specified hold-downs, anchor bolts, and nailing patterns in accordance with code. The roof was truss-framed, and I coordinated with the truss designer to ensure proper load paths and integration with the overall structure. I also worked with the architect to resolve shear wall layout issues. The project is in the final stages of permitting, and I will perform site visits during construction to observe foundation and framing work and address any field issues.

DRAVID SABARISH VILLAVAN KOTHAI (21-702-36)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/21/2025

Citizenship
India

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience
4 years, 3 months

Experience under licensed engineer
4 years, 3 months

Other Experience

Disciplinary Action
None reported

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Civil Engineering
Anna University
July 2015–April 2019

Masters in Civil Engineering
University of Texas, Arlington
January 2020–December 2021

EXAMS

Fundamentals of Engineering (FE)
Iowa
July 2024

Principles and Practice of Engineering (PE)
Civil
California
May 2025

LICENSES

Additional Licenses
None

WORK EXPERIENCE

University Of Texas Arlington
Texas (United States)
Graduate Student Assistant
January 2020—December 2020

Verified by
Melanie Louise Sattler
sattler@uta.edu

Experience Summary
Part-Time
Engineering: 9 months (75%)
Experience under licensed engineer: 9 months

TASKS

As part of my role at the University of Texas at Arlington's (UTA) Office of Sustainability, I was involved in both engineering-based analysis and sustainability outreach and planning. Approximately 60% of my responsibilities were technical in nature, involving engineering-related research and data evaluation, while the remaining 40% included communications, education, and non-engineering sustainability work.

I was a masters student at UTA with the masters in civil engineering program (ABET)

On the technical side, I conducted research and prepared a thesis on "Carbon Footprint Assessment and Emissions Reduction Strategies for the University of Texas at Arlington" which included a solar panel feasibility study across campus rooftops, estimating energy generation potential and projecting a 6.3% reduction in campus energy emissions. I also calculated the financial and environmental benefits of tree canopy coverage, which revealed approximately $10,000 in annual energy savings. Both projects required geospatial analysis, solar modeling tools, and energy data evaluation.

Additionally, I supported UTA's reporting efforts to AASHE STARS (Sustainability Tracking, Assessment & Rating System). I gathered and organized data from multiple departments, often with limited or incomplete information, and developed accurate reports that contributed to UTA's sustainability rating.

I presented a carbon footprint analysis project at both the Texas Energy Summit (2020) and the Air and Waste Management Association (AWMA) conference (2021), helping to communicate technical findings to a broad audience.

I also worked with the City of Arlington on a field project focused on assessing the corrosion of sanitary sewer manholes across the city. I located manholes within city limits, and employed 3D scanning equipment to document their geometry and physical condition. I recorded H_2S and other gas concentrations to evaluate corrosion severity and supported lab data entry for further study. This information was essential for prioritizing infrastructure rehabilitation and long-term maintenance planning.

REPRESENTATIVE PROJECTS

During my time at the University of Texas at Arlington, I gained valuable hands-on experience through a variety of sustainability and environmental engineering projects. These experiences allowed me to develop technical skills in analysis and design, while gradually taking on more responsibility in project management and communication.

One of my key projects was conducting research and preparing a thesis on "Carbon Footprint Assessment and Emissions Reduction Strategies for the University of Texas at Arlington" which included a feasibility study on the installation of solar panels across campus rooftops in 2020-2021. I evaluated and calculated the total rooftop area and modeled potential energy output based on solar irradiance data and system efficiency. I calculated that the solar installations could reduce UTA's energy-related emissions by approximately 6.3%. This aligned closely with previous research conducted at UTA, confirming the viability of rooftop solar as a meaningful emissions reduction strategy.

In addition to solar energy, I analyzed the benefits of the campus tree canopy on energy savings in 2020-2021. Using urban forestry tools, I estimated the carbon sequestration potential and the resulting financial benefits from reduced cooling loads, calculating an annual savings of roughly $10,000. This reinforced the value of integrating green infrastructure into campus sustainability planning.

I also contributed to the preparation of AASHE STARS sustainability reports, where I collected and analyzed data from multiple departments in 2020-2021. Given that some data sources were limited or incomplete, I developed methods to estimate and calculate missing information and ensure the overall accuracy of the reports. This process improved my ability to work with

imperfect data.

In terms of outreach and professional development, I prepared and presented a poster on carbon footprint analysis at the Texas Energy Summit in 2020 and the Air and Waste Management Association conference in 2021. These opportunities enhanced my communication skills and allowed me to share UTA's sustainability efforts with industry professionals.

Additionally, I also worked with the City of Arlington on a field project focused on assessing the corrosion of sanitary sewer manholes across the city. in 2020, I located manholes within city limits, and operated 3D scanning equipment to document their geometry and physical condition. I recorded H_2S and other gas concentrations to evaluate corrosion severity and supported lab data entry for further testing. This information was essential for prioritizing infrastructure rehabilitation and long term maintenance planning.

Overall, these projects reflect a progression from technical analysis and data collection to leadership in future university design, implementation, and communication. They have equipped me with a solid foundation in environmental engineering principles and practical experience applying them to real world challenges skills

WORK EXPERIENCE

RSB Environmental
Texas (United States)
Staff Environmental Scientist
January 2021—December 2021

Verified by
Sachin Butala
butalasachin@gmail.com

Experience Summary
Full-Time
Engineering: 11 months
Experience under licensed engineer: 11 months

TASKS

In this role, I was responsible for a variety of environmental consulting tasks, with about 85% of my time spent on engineering-related work and the remaining 15% on administrative and coordination duties.

I conducted site visits for Phase I Environmental Site Assessments (ESAs) in the year 2021 and helped draft the final reports based on field observations, regulatory research, and client-provided documents. I developed Spill Prevention, Control, and Countermeasure (SPCC) plans for industrial facilities and worked on wastewater permitting and compliance by reviewing discharge information and applicable regulations.

I also created Stormwater Pollution Prevention Plans (SWPPPs) in 2021 for construction and industrial clients. This included conducting weekly site inspections to check for permit compliance and I recommended Best Management Practices (BMPs) to improve stormwater controls on the site.

In addition, I supported Property Condition Assessments (PCAs) in 2021 by attending site visits and contributing to final reports. I also helped organize and monitor a noise survey for an industrial facility, which involved collecting and analyzing on-site measurements and comparing them to relevant noise limits.

Outside of technical tasks, I assisted with organizing site data, scheduling inspections, and helping ensure reports met internal quality standards and deadlines. These responsibilities helped keep projects on track and supported the team's overall workflow.

This experience gave me practical exposure to environmental regulations, technical reporting, and fieldwork, and helped me build strong skills in both independent work and team collaboration.

REPRESENTATIVE PROJECTS

Throughout my time in RSB Environmental, I've worked on a wide range of projects that helped me build skills in fieldwork, compliance, and technical reporting. As I gained more experience, I gradually took on more responsibility, from assisting on site visits to contributing directly to report development and regulatory planning.

One of my core areas of work was preparing Phase I Environmental Site Assessments (ESAs) for both commercial and industrial properties in 2021. Initially, I assisted with site visits by taking photos, recording notes, and reviewing and analyzing historical site information. Over time, I became more involved in writing reports, identifying Recognized Environmental Conditions (RECs), spill radius calculations and compiling documentation, including regulatory records and historical Sanborn aerial images. This work gave me a solid understanding of how past land use and operations impact environmental risks on a site.

A standout project for me was the work we did at OJ Salvage Yard. I was involved from start to finish on both the SPCC (Spill Prevention, Control, and Countermeasure) and SWPPP (Stormwater Pollution Prevention Plan) development in 2021. During the initial site visit, I helped inspect and document all the storage tanks, noting their contents and volumes. I also walked the site to analyze drainage patterns and contours and identify potential outlet points for stormwater sampling. Afterward, I worked to put together the SPCC and SWPPP plans, and I contributed to the CAD drawings and design that marked tank locations and sampling points. I also collected water samples and coordinated with the lab for analysis. Based on the results, I recommended a list of Best Management Practices (BMPs) to help prevent future runoff issues. The site was brought into compliance.

Beyond that, I've done regular SWPPP inspections on construction sites in 2021, where I documented site conditions, checked BMPs, and worked with contractors to make sure the sites were staying compliant. I also helped with developing SPCC plans for other facilities, where I reviewed site info and assisted in planning for secondary containment.

I've also worked on Property Condition Assessments (PCAs) in 2021, helping to document building systems and take field notes that contributed to the final reports. Another unique experience was organizing and carrying out a noise survey at an industrial site. I helped set up equipment, collected measurements, and helped compare the results to local noise regulations.

Across all of these projects, my responsibilities grew as I gained more confidence. I moved from handling smaller support tasks to leading certain parts of fieldwork, drafting documents, and helping ensure projects stayed on schedule. These experiences gave me a good foundation in understanding how environmental compliance is applied in real-world situations, through planning, communication, and follow-ups in the field.

WORK EXPERIENCE

Weaver Consultants Group
Texas (United States)
Staff Engineer
January 2022—February 2023

Verified by
Ryne John Spicer
ryne.spicer@kimley-horn.com

Experience Summary
Full-Time
Engineering: 1 year, 1 month
Experience under licensed engineer: 1 year, 1 month

TASKS

During my time with Weaver Consultants Group in 2022-2023, I was primarily responsible for supporting landfill engineering projects, with approximately 90% of my duties involving engineering design, regulatory compliance, and technical documentation. The remaining 10% consisted of coordination tasks such as compiling reports and communicating with clients and regulatory agencies.

I drafted permit renewal and revision submittals for Title V air permits, SPCC, and SWPPP permits in accordance with EPA regulations, specifically for landfill operations in 2022. These required a desktop analysis of site conditions and regulatory updates to ensure compliance.

I designed detailed construction plans for a landfill entrance facility in 2022, including erosion and sediment control, water and sewer infrastructure, grading, construction phasing, plan and profile sheets, volume calculations, certification plans, and zoning plans. I regularly used AutoCAD Civil 3D to create digital surfaces, reference external files (Xrefs), topographic maps, isopach maps for volumes, and road alignments, which improved design accuracy and general project visualization.

In addition, I developed feasibility plans and emissions calculations aimed for reducing and assessing greenhouse gas emissions by evaluating methane offsets due to landfill vegetation in 2022.

I calculated several annual budget models and five-year landfill operation plans to estimate waste volume consumption and long-term site capacity in 2022.

My design work included hydraulic structures such as ponds and both open and closed channels, utilizing GIS and AutoCAD Civil 3D tools for layout and analysis.

I reviewed and compiled several Soil Liner Evaluation Reports (SLERs) and Geosyntetic Liner Evaluation Reports (GLERs) to support landfill Construction Quality Assurance (CQA) projects, ensuring regulatory compliance and construction oversight in 2022.

Through these tasks, I gained experience in landfill engineering, environmental permitting, and sustainable design, strengthening my technical and a little of project management skills.

REPRESENTATIVE PROJECTS

Over the course of my work on landfill projects, I've taken on more responsibilities that have helped me grow both technically and professionally. I started out assisting with basic tasks but soon became involved in bigger parts of project design, implementation, and compliance.

I calculated several aerial budget models to help clients understand landfill capacity and site longevity. These models used annual and historical topographic and fill plans combined with scale house tonnage receipts to calculate annual compaction density and effective landfill density. Using Civil 3D, I analyzed the volume consumed and estimated the remaining site life for both the entire landfill and individual cells. This information was crucial for the client to plan for future landfill expansion and cell development timelines.

A highlight of my experience was working on a landfill owned by Waste Management, where I was the CQA staff overseeing the vertical drilling of methane extraction wells over a two-week period in 2022. My role was to verify that the drilling locations matched the survey coordinates and stakes provided by the surveyor. I also closely monitored the drilling depths to ensure they didn't exceed the design, which could have damaged the landfill liner and potentially led to groundwater contamination. After drilling, I

verified that the bentonite plugs were installed properly per design. This project gave me valuable hands-on experience in field oversight and environmental protection on a landfill gas extraction project.

One of the main things I worked on was helping prepare permit renewals and calculation updates for Title V (Air Permitting), SPCC, and SWPPP permits for landfills based on any new changes onsite in 2022. This meant making sure all the paperwork was in compliance with EPA rules and reflected what was actually happening on site. Working with senior engineers, I learned how important it is to stay up to date with regulations, submittals and to be thorough with documentation.

I designed construction plans for a landfill entrance facility. I designed and recommended erosion and sediment control plans, water and sewer layouts, grading, and construction phasing in 2022. Using AutoCAD Civil 3D, I created detailed site maps, topographical surfaces, and road designs. Specifically, I designed grading surfaces for the access road to ensure proper drainage and adjusted the drainage analysis to confirm that existing channels could handle the runoff. Additionally, I graded the ramps for the scale house to make sure there was enough clearance between the ticket counter and the drivers entering the landfill. This hands-on design work helped me understand how all the pieces come together to make a project run smoothly.

Another interesting project was developing a plan to reduce greenhouse gas emissions from a landfill by considering the addition of a recycling facility in 2022, this includes calculation of emissions offsets. This gave me a chance to think about sustainability and how engineering can support greener practices.

I designed on stormwater management plans, including ponds and drainage channels, to help ensure sites remained environmentally compliant and protected from runoff issues. One notable project involved an existing detention pond on a property with natural gas extraction wells in 2022. The client wanted to evaluate the drainage capacity of the pond and its contributing drainage areas. I conducted a detailed drainage analysis, assisting a senior engineer, referencing the Louisiana drainage regulations to determine the appropriate methodology. Using GIS and AutoCAD Civil 3D, I modeled the watershed and flow paths contributing to the pond, calculated the total expected discharge for a 100-year storm event, and determined that the existing pond was undersized. We proposed an excavation plan to increase its storage volume and provided the design necessary to bring the pond into compliance with stormwater standards.

Overall, my experience has given me a solid mix of design, fieldwork, and compliance skills. I've learned how important clear communication and attention to detail are when working with engineers, clients, and regulatory agencies. It's was rewarding to see how good planning and teamwork help keep landfills safe and sustainable.

DRAVID SABARISH VILLAVAN KOTHAI (21-702-36)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Metro Waste Authority
Iowa (United States)
Solid Waste Engineer
March 2023—March 2024

Verified by

Experience Summary
Full-Time
Other: (0%)
Experience under licensed surveyor: None

DESCRIPTION

WORK EXPERIENCE

WSP, INC
California (United States)
Associate Consultant
March 2024—September 2025

Verified by
Cortney Zellman Grubbs
cortney.zellmangrubbs@wsp.com

Experience Summary
Full-Time
Engineering: 1 year, 6 months
Experience under licensed engineer: 1 year, 6 months

TASKS

During my time here at WSP as an Associate Consultant, approximately 95% of my responsibilities were engineering-related, with the remaining 5% involving administrative support and coordination tasks.

I designed, reviewed, and analyzed a wide range of landfill engineering activities, including airspace evaluations, geotechnical investigations, design calculations, and regulatory reporting in 2024 -2025. A major part of my role involved analyzing and calculating annual airspace consumption and effective density calculations for multiple landfill sites in Northern California. These reports used historical data, tonnage receipts, and surveyed topography to assess landfill performance and capacity.

I designed and drafted landfill base liner and cell design in 2024 - 2025. My tasks included calculations for pipe crushing strength, Leachate Collection and Removal Systems (LCRS), and HELP model analysis for leachate generation estimations. Using AutoCAD Civil 3D, I developed landfill cell layouts and calculated cut/fill volume estimates for both pre and post-construction phases.

I also performed geotechnical field investigations, where I conducted quarterly inclinometer readings and piezometer data collection for both landfills and mining sites. Using instruments such as the Digi-Pro inclinometer system, I calculated and reviewed horizontal displacements and track subsurface movement and compiled findings into formal reports.

In addition, I calculated and reviewed closure and post-closure cost estimates for various landfill projects and developed custom Excel templates to improve efficiency in future estimating efforts in 2024 - 2025. I also assisted in the creation of winterization plans, conducted site visits, and recommended best management practices (BMPs) to mitigate seasonal erosion risks.

I prepared monthly, quarterly, and annual landfill gas (LFG) monitoring reports for clients, evaluating and calculating the performance and compliance status of landfill gas collection systems.

My work required a combination of technical skills, fieldwork, and analytical thinking, all of which helped deepen my understanding of landfill engineering and environmental compliance.

REPRESENTATIVE PROJECTS

During my time working on landfill and environmental engineering projects, I was involved in a range of technical tasks that contributed directly to project design, field implementation, and compliance operations. As I progressed through these projects, I took on more responsibility and developed a deeper understanding of solid waste engineering practices.

A major part of my role was calculating, and analyzing annual airspace consumption and effective density calculations for various landfills in Northern California. These analyses were used to evaluate landfill performance and estimate remaining site life of landfill. I utilized AutoCAD Civil 3D to work with annual and historical topographic surfaces, performed calculation for cut/fill, and incorporated client provided tonnage receipts to determine compaction rates and effective densities in 2024-2025.

I designed landfill cell design reports, assisting with base liner design calculations, including pipe crushing strength, HELP model simulations for leachate generation, and leachate collection and removal system (LCRS) layout and pipe sizing in 2024-2025. Using AutoCAD Civil 3D, I generated cell grading plans and calculated earthwork volumes for pre- and post-construction stage engineering estimates, contributing to the development of design packages.

In the field, I monitored quarterly inclinometer and piezometer readings at landfills and mining sites in 2024-2025. Using devices like the Digi-Pro system, I gathered subsurface displacement data to assess horizontal movements , and prepared reports with analysis and calculations to track movement trends and groundwater levels. These efforts play a key role in ongoing geotechnical

monitoring programs in these landfills and mine sites.

I was the Construction Quality Assurance (CQA) staff member overseeing the construction of double-lined landfill cells for the Western Placer Solid Waste Authority in Northern California in 2024. This involved supervising subgrade preparation, geomembrane placement, extrusion welding, and seam welding, as well as conducting vacuum box and spark testing to verify seam integrity. I prepared as-built documentation to identify panel locations and defects, managed geosynthetic clay liner and bentonite placement to ensure proper attachment, and oversaw geocomposite installation secured with zip ties following design specifications. Finally, I oversaw electrical leak detection (dipole) testing across the liner system to confirm no leaks were present. This project provided valuable hands-on experience with liner construction quality assurance and environmental protection measures.

Another key project involved in designing landfill cell design and construction documents for two Recology Inc. landfills in Northern California in 2024-2025. I designed subgrade plans, site maps, infrastructure removal drawings, and leachate collection and removal system (LCRS) layouts. I also designed subgrade certification drawings, conducted drainage analysis for the new cells, and designed landfill gas collection system (GCCS) infrastructure. Additionally, I performed HELP model analysis to estimate leachate generation and evaluated whether additional sumps were necessary to manage leachate discharge from the new cells. This work enhanced my ability to integrate hydraulic, geotechnical, and environmental systems into cohesive design packages.

I also conducted an annual post-closure inspection site visit at a monofill in Northern California under the supervision of a licensed engineer in 2024. During this visit, I inspected the mechanically stabilized earth (MSE) retaining wall, assessed erosion patterns, and evaluated the condition of drainage structures. I prepared a detailed report that included photographs in KMZ format, pinpointing areas requiring maintenance or improvement. This experience furthered my understanding of post-closure landfill maintenance and regulatory compliance.

Additionally, I estimated and calculated closure and post-closure cost for landfills and created Excel tools to improve future estimating efficiency in 2024-2025. I prepared winterization plans and conducted field visits to identify and recommended seasonal best management practices (BMPs).

I calculated and analyzed in the preparation of monthly, quarterly, and annual landfill gas (LFG) reports to help clients evaluate the performance of gas collection systems on site in 2024-2025. These reports provided insights into the performance of individual gas extraction wells by comparing methane extraction rates against the vacuum pressure supplied. Based on this data, I coordinated with field staff to identify wells that were underperforming and recommended adjustments to improve overall methane recovery efficiency. This collaborative approach helped optimize gas collection operations and ensured compliance with environmental standards.

These projects gave me hands-on experience in landfill design, stormwater management, and environmental compliance, and strengthened my technical and field-based skills in a variety of real-world applications.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
May 2019	December 2019	Was applying for US Universities, preparing and giving GRE and Tofel Exams

CREDENTIALS EVALUATION - ENGINEERING

VILLAVAN KOTHAI, DRAVID SABARISH
(21-702-36)

DEGREES EVALUATED

Institution/Degree	Country	Language	Courses
Anna University / Bachelors in Civil Engineering 07/01/2015 — 04/01/2019	India	English	50
University of Texas, Arlington / Masters in Civil Engineering 01/01/2020 — 12/01/2021	United States	English	None

COMPARABILITY SUMMARY

Outcome: Not Equivalent

Area	Hours	Deficiency
Math/Science	37 / 32	None
Engineering	79 / 48	None
General Education	8 / 12	Missing 4 hours
Elective/Other	29 / N/A	None

SPECIAL NOTE

The NCEES Engineering Education Standard requires 12 college semester credit hours in general education that complement the technical content of the curriculum. Courses that instill cultural values are acceptable, while routine exercises of personal craft are not.

MATH/SCIENCE

Specified Criteria Hours: 32

Course	Institution/Degree	U.S. Credits
Calculus I	Anna University / Bachelors in Civil Engineering	3
Calculus II	Anna University / Bachelors in Civil Engineering	3
Calculus III	Anna University / Bachelors in Civil Engineering	3
Chemistry	Anna University / Bachelors in Civil Engineering	4
Chemistry of Materials	Anna University / Bachelors in Civil Engineering	4
Engineering Geology	Anna University / Bachelors in Civil Engineering	3
Environmental Science	Anna University / Bachelors in Civil Engineering	3
Fluid Mechanics	Anna University / Bachelors in Civil Engineering	4
Physics	Anna University / Bachelors in Civil Engineering	4
Solid Mechanics	Anna University / Bachelors in Civil Engineering	3
Strength of Materials	Anna University / Bachelors in Civil Engineering	3
	Total semester credit hours earned:	**37.00**

Specified Criteria Hours: 48

Course	Institution/Degree	U.S. Credits
Civil & Mechanical Engineering	Anna University / Bachelors in Civil Engineering	2
Electrical & Electronic Engineering	Anna University / Bachelors in Civil Engineering	2
Engineering Design	Anna University / Bachelors in Civil Engineering	3
Engineering Hydrology	Anna University / Bachelors in Civil Engineering	2
Experimental Analysis & Design	Anna University / Bachelors in Civil Engineering	3
Foundation Engineering	Anna University / Bachelors in Civil Engineering	3
Highway Engineering	Anna University / Bachelors in Civil Engineering	3
Hydraulics	Anna University / Bachelors in Civil Engineering	3
Industrial Wastewater Treatment	Anna University / Bachelors in Civil Engineering	3
Masonry & Timber Engineering	Anna University / Bachelors in Civil Engineering	3
Pollution Control	Anna University / Bachelors in Civil Engineering	3
Prestressed Concrete	Anna University / Bachelors in Civil Engineering	3
Project	Anna University / Bachelors in Civil Engineering	6
Railway Engineering	Anna University / Bachelors in Civil Engineering	3
Reinforced Concrete Design	Anna University / Bachelors in Civil Engineering	3
Reinforced Concrete Structures	Anna University / Bachelors in Civil Engineering	3
Repair & Rehabilitation of Structures	Anna University / Bachelors in Civil Engineering	3
Software Engineering	Anna University / Bachelors in Civil Engineering	3
Soil Mechanics	Anna University / Bachelors in Civil Engineering	4
Solid Waste Management	Anna University / Bachelors in Civil Engineering	3
Steel Structures	Anna University / Bachelors in Civil Engineering	3
Structural Analysis	Anna University / Bachelors in Civil Engineering	3
Traffic Engineering	Anna University / Bachelors in Civil Engineering	3
Wastewater Engineering	Anna University / Bachelors in Civil Engineering	3
Water Resources Engineering	Anna University / Bachelors in Civil Engineering	3
Water Supply Engineering	Anna University / Bachelors in Civil Engineering	3
	Total semester credit hours earned:	**79.00**

GENERAL EDUCATION

Specified Criteria Hours: 12

Course	Institution/Degree	U.S. Credits
Accounting & Finance	Anna University / Bachelors in Civil Engineering	3
English	Anna University / Bachelors in Civil Engineering	3
Professional Communication	Anna University / Bachelors in Civil Engineering	2
	Total semester credit hours earned:	**8.00**

ELECTIVE/OTHER

Specified Criteria Hours: N/A

Course	Institution/Degree	U.S. Credits
Building Materials & Construction Technology	Anna University / Bachelors in Civil Engineering	3
Computer Aided Drafting	Anna University / Bachelors in Civil Engineering	1
Computer Programming	Anna University / Bachelors in Civil Engineering	4
Concrete Technology	Anna University / Bachelors in Civil Engineering	3
Engineering Graphics	Anna University / Bachelors in Civil Engineering	3
Industrial Safety	Anna University / Bachelors in Civil Engineering	3
Project Management	Anna University / Bachelors in Civil Engineering	3
Smart Materials	Anna University / Bachelors in Civil Engineering	3
Surveying	Anna University / Bachelors in Civil Engineering	5
Workshop	Anna University / Bachelors in Civil Engineering	1
	Total semester credit hours earned:	**29.00**

Total Semester Credit Hours Earned: 153

PROCESS DESCRIPTION

All education is compared to the NCEES Engineering Education Standard

The evaluation of your academic studies has been prepared to provide engineering and surveying licensing boards with the required assessment of foreign qualifications to facilitate them in determining if you qualify for licensure examination. This is an advisory report prepared based on records received and verified by the institutions issuing the degrees or qualifications. Eligibility to take the examination is determined by the licensing boards.

This report does not include the assessment of written and oral communication skills, computer skills, the quality of laboratory or field work, and the scope of design experience, which require an onsite review. Academic records (such as transcripts and catalogs) do not document qualitative factors and practical constraints to desirable outcomes.

NCEES houses a library of reference materials from around the world. These references are used for the completion of evaluations in conjunction with the NCEES Engineering Education Standard.

Post-graduate courses are ONLY used in an evaluation if they can assist in eliminating deficiencies that may be indicated in the undergraduate program.

Official Evaluations are ONLY available to state licensing boards and international exam sites through an applicant's NCEES account.

Electrical

RUSS JOHN PRADO (18-414-82)

All work experience reviewed by two licensed professionals

DISCIPLINE: ELECTRICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/10/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
7 years, 8 months

Total Engineering Experience
8 years, 2 months

Experience under licensed engineer
8 years, 2 months

Disciplinary Action
None reported

EDUCATION

Non-degree
University of Guam
August 2009–May 2012

Bachelors in Electrical Engineering (EAC)
University of Nevada, Las Vegas
August 2012–December 2017

EXAMS

Fundamentals of Engineering (FE)
Nevada
May 2023

Principles and Practice of Engineering (PE)
Electrical & Computer
Nevada
July 2025

LICENSES

Additional Licenses
None

RUSS JOHN PRADO (18-414-82)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Bureau of Reclamation - LCB
Engineering Service Office
Nevada (United States)
Electrical Engineer
June 2017—January 2021

Verified by
Brock K Owen
BOwen@usbr.gov

Experience Summary
Full-Time
Engineering: 3 years, 7 months
Post EAC degree: 3 years, 1 month
Experience under licensed engineer: 3 years, 7 months

TASKS

Engineering Intern-LCB Power Office/Engineering Services Office (Jun 2017-Jan 2018):
I was tasked with limited phases of projects involving the electrical systems and subsystems of hydroelectric power plants. I provided assistance to higher-graded engineers with both technical and market research for smaller scopes of project design. I assisted with developing cost estimates and reviewing protection relay diagrams.

Electrical Engineer-LCB Engineering Services Office (Jan 2018-Jan 2021)
My primary responsibilities included providing engineering support and drawing support to customers, primarily hydroelectric facilities within the Bureau of Reclamation's Lower Colorado Basin. I conducted site visits for system and equipment data collection and evaluated existing site conditions of electrical systems, including medium voltage switchgear, low voltage distribution panels, protection systems. I provided recommendations for system upgrades with equipment specifications. I completed facility assessments for NFPA compliance. I also provided troubleshooting support for hydroelectric equipment.

REPRESENTATIVE PROJECTS

Engineering Intern - Power Office/Engineering Services Office (Jun 2017-Jan 2018)

Davis Dam SEL-587 Upgrade (2017):
I provided drawing and engineering support to the protection engineer by reviewing and updating the logic diagram schematics and relay settings for the newly installed SEL-587 differential relay on Davis Dam's 480V emergency generator, transformer, and ATS.

Hoover Fiber Trail (2018-2019):
I developed the feasibility cost estimate to initiate the project as an engineering intern. Upon promotion to electrical engineer, I was tasked as the project lead. I developed the project scope of work and specifications for the new 3.1 mile 144-strand fiber. I managed the procurement process of the project.

Electrical Engineer - Engineering Services Office (Jan 2018-Jan 2021)

Davis Dam 4160V Switchgear Replacement Estimate (2018)
I was tasked with developing a feasibility cost estimate to replace Davis Dam's station service switchgear and transformers with 5-year and 10-year cost projections. I collected data for the existing system components(PTs, CTs, disconnects, circuit breakers, and relays), market researched material costs, compiled demolition/installation costs, contract/non-contract costs. I calculated and indexed for 5-year and 10-year projections.

Yuma Desalting Plant - Review of Operations & Maintenance (RO&M) (2018)
I was tasked with providing electrical support and writing the inspection report for the review. I participated in the field inspection to review the facility's existing conditions and the status of outstanding recommendations from the previous RO&M(2012). I reviewed the facility emergency generator SOP and provided recommendations in accordance with NEC 2017. I compiled the status of outstanding recommendations, new recommendations, inspection summaries and conclusions.

Parker Dam Warehouse Fire Protection System (2019)
I was tasked with completing an Assessment Report of Fire Protection Compliance for Parker Dam's Machine Shop and Warehouse buildings. I conducted a site visit and evaluated the floor plans and occupancy classifications for each building. I recommended that each building did not need fire alarm and automatic sprinkler systems, based on NFPA 1 & 101.

Parker Dam 480V Station Distribution Panel S-6 & S-11 Upgrades (2019)
I gathered the existing conditions for Panels S-6 & S-11, including panel capacity, upstream breaker, conduit size, conductor sizing and length, and branch loads. I conducted a load analysis and evaluated the available upstream power to develop a plan with equipment recommendations and a cost estimate to upgrade the panels. I calculated voltage drop for all the conductor runs, and sized the panel interiors and circuit breakers.

Parker Dam Generator Governor Control Repairs (2019-2020)
I was tasked with repairing the generators' governor motor control switches. I reviewed the governor SOPs and inspected the existing conditions with each governor motor control switch configured differently from the SOP. I redesigned the control switches and installed the new control switches for all of the four governors to operate their two motors in a lead-lag configuration in accordance with the SOP.

Parker Dam 208/120V UPS Panel Upgrade (2020)
I evaluated the power plant’s existing 208/120V UPS distribution system and conducted a load analysis for the 208/120V UPS distribution system. I calculated and provided equipment recommendations for an upgraded main panel, subpanel, and feeder conductors. I also provided recommendations to relocate non-critical loads and a procedure for panel replacement.

RUSS JOHN PRADO (18-414-82)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Bureau of Reclamation - Lower Colorado Dams Office
Nevada (United States)
Electrical Engineer
January 2021—August 2025

Verified by
Theresa A Saumier
TSaumier@usbr.gov

Experience Summary
Full-Time
Engineering: 4 years, 7 months
Post EAC degree: 4 years, 7 months
Experience under licensed engineer: 4 years, 7 months

TASKS

Provide electrical engineering and SCADA support for the hydroelectric facilities, specifically Hoover Dam, Davis Dam, and Parker Dam. Test and Troubleshoot equipment issues, and develop solutions and future risk mitigation plans. Analyze, calculated, and program generator alarm and trip parameters for SCADA and ICS. Design and develop electrical installation plans, equipment specifications and drawings. Prepare and conduct engineering studies.

Prepare contract solicitation documents (statement of work, contract requirements, specifications, cost estimates). Review submittals and shop drawings. Serve as Contract Officer Representative and technical contact for work contracted outside of the Bureau of Reclamation.

REPRESENTATIVE PROJECTS

Governor Oil Accumulator Tank Level Indicators and Monitoring, Parker Dam, CA (2021-2022)
Researched visual liquid level indicators with switch modules. I developed installation plans and drawings for a bolt-on oil float monitoring system onto existing governor oil accumulator tanks on four generators. Tested and analyzed oil usage rates and provided recommendations for oil level alarms and trips. Integrated monitoring system to SCADA and programmed alarms and trips.

Generator Slip Ring/Brush Carbon Dust Collectors - Parker Dam, CA (2021-2023)
Parker Dam's generating units utilize a slip ring and carbon brush system to energize rotor windings that resulted in carbon dust falling into the generator housing. I researched systems that reduced carbon buildup with applications to hydroelectric generating units. handled the procurement of Mersen's DustCollector system and developed the electrical installation plan. I integrated the systems to SCADA with remote operation and programmed alarms.

480V Station Service Transformer Load Analysis - Parker Dam, CA (2023)
I was tasked with completing a load analysis on Parker Dam's 480V Station Service Transformer. I calculated the continuous and intermittent loads of the transformer, determining peak and base loads. Categorized load priorities for load shedding purposes.

Powerplant HVAC Upgrade - Parker Dam, CA (2024)
Parker Dam was upgrading the powerplant's aging evaporative cooler to a 100-ton chiller. I was tasked with developing the electrical installation of the new HVAC system. I calculated the sizing requirements for the conductors, circuit breaker, and disconnect. I planned the conduit path utilizing some existing embedded conduit and new installation.

Hoover Dam Rough Zone Analysis - Hoover Dam, NV (2022, 2025)
With changing lake levels, the ideal operating range for Hoover Dam's generating units are also changing. This range is critical to reduce vibration and maximize equipment life. I assisted with collecting sound pressure levels and draft tube pressure levels at various megawatt generating rates. I analyzed the collected data and determined the rough zones for Units A1 in 2022 and A8 in 2025.

6.9kV Station Service Switchgear 50/51 Replacement - Parker Dam, CA (2025)
I worked on the installation plans to replace the existing Microshield Time-Overcurrent Relays on 6.9kV Switchgear with SEL-851 Relays. I revised and updated the protection logic diagrams, ladder logic diagrams for ten 15kV ABB drawout circuit breakers with the new SEL-851 components and settings. I developed the new wiring diagrams for each circuit breaker with the new relay.

Environmental

BELLA HUSTON (19-416-83)

All work experience reviewed by two licensed professionals

DISCIPLINE: ENVIRONMENTAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
10/01/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience
12 years, 2 months

Experience under licensed engineer
7 years, 2 months

Other Experience

Disciplinary Action
None reported

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Environmental Engineering Science
University of California, Berkeley
August 1991–December 1995

EXAMS

Fundamentals of Engineering (FE)
California
July 1997

Principles and Practice of Engineering (PE)
Environmental
Nevada
September 2025

LICENSES

Additional Licenses
None

BELLA HUSTON (19-416-83)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

UC Berkeley
California (United States)
B.S. Environmental Engineering
Student
August 1991—December 1995

Verified by

Experience Summary
Full-Time
Other: (0%)
Experience under licensed surveyor:
None

DESCRIPTION

WORK EXPERIENCE

Soma Environmental
California (United States)
Staff Engineer
January 1996—August 1996

Verified by
Bella Huston (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

Became employed the summer before graduation from U.C. Berkeley as a summer intern from June-August 1995, then was hired on full-time immediately after receipt of my B.S. Environmental Engineering degree in January 1996.

I performed the following:
• Prepared input files for a custom-designed client database to model groundwater conditions at a CVOC impacted site, for an oil and gas company.
• Assisted with the preparation of groundwater monitoring reports.

REPRESENTATIVE PROJECTS

Mobil Oil, San Ramon, California. As a summer intern and then a full-time staff engineer, I prepared input files for a custom-designed client database to model groundwater conditions at a CVOC impacted site and assisted with the preparation of groundwater monitoring reports.

BELLA HUSTON (19-416-83)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Baseline Environmental
California (United States)
Staff Engineer
August 1996—April 1998

Verified by
Bella Huston (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

I performed the following:
• Performed site assessment field work including UST removal oversight, soil and groundwater sampling, and door-to-door surveying
• Prepared sections of EIRs for the planning managers

REPRESENTATIVE PROJECTS

Scotts Valley Water District, Septic Tank Investigation, Scotts Valley, CA. As staff engineer, I designed a septic tank investigation project for groundwater policy assessment, including a door-to-door survey, septic additive toxicity research, field mapping, reporting, client meetings, investigations, remedial designs, and regulatory negotiations.

Hetch Hetchy Water and Power (HHWP), Policy Summary and Facility Audits, Northern California. As staff engineer, I prepared a policy summary paper on the proper disposal of PCB-contaminated oil from transformers for use by HHWP environmental management. I conducted facility audits of Rock River Lime Plant and Warnerville Switchyards and Maintenance Yards as part of a four-person, three-day on-site field team. I prepared Hazardous Materials Business Plan maps and Emergency Response Plan flow charts.

WORK EXPERIENCE

TRC
California (United States)
Senior Staff Engineer
January 1999—September 2001

Verified by
Bella Huston (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

I performed the following:
• Managed O&M of truck-mounted Dual Phase Extraction (DPE) mobile treatment systems, including local air permitting, cost estimates, staffing, scheduling, and subcontracted services (propane drops)
• Prepared groundwater monitoring and site investigation reports. Oversaw well abandonments
• Conducted site assessment field work for five Project Managers, for an oil and gas client

REPRESENTATIVE PROJECTS

Moss Landing Power Plant, Duke Energy, Moss Landing, CA. Bella was the primary author of the transmission line safety and nuisance, cultural and archaeological resources, land use, soils and hazardous materials sections, and supporting author of the visual resources, waste management, and noise sections, of the Application for Certification (99-AFC-2) to the California Energy Commission (CEC). Duke Energy proposed to construct two new electric generating units to supply an additional 1060 MW of electricity to the 230-kV transmission system and through the 230/115-kV transformer into the 115-kV system at the PG&E substation located at the site. An additional 30 MW from Units 6 and 7 was proposed to be added to the 500-kV system. Bella calculated the maximum electric and magnetic field strengths possible along the existing routes (of between 14 miles and 70 miles) for the system lines that would be affected by the proposed increased power generation. She teamed with a PG&E electrical engineer to conduct modeling and calculations. This task required extensive research, selection of subcontracted resource specialists, and interviews of plant personnel over the course of one year. The AFC was accepted.

Morro Bay Power Plant, Duke Energy, Morro Bay, CA. Bella was the primary author of the transmission line safety and nuisance, cultural and archaeological resources, land use, soils and hazardous materials sections, and supporting author of the visual resources, waste management, and noise sections, of the Application for Certification (00-AFC-12) to the CEC. Duke Energy proposed to construct and operate the proposed 1,200 MW power plant on the site of the existing (formerly PG&E-owned) power plant, for a net increase of 198 MW. She calculated the maximum electric and magnetic field strengths possible along the existing routes (of between 14 miles and 80 miles) for the system lines that would be affected by the proposed increased power generation. She teamed with a PG&E electrical engineer to conduct modeling and calculations. This task required extensive research, selection of subcontracted resource specialists, and interviews of plant personnel over the course of one year. The AFC was accepted.

U.S. Air Force / U.S. EPA, Technical Review, McClellan Air Force Base, Sacramento, CA. As senior staff engineer, I provided a third-party technical review of soil vapor extraction system O&M manuals created for the U.S. Air Force to manage the remediation system at the McClellan Air Force Base.

Level 3 Communications, Negative Declaration Assistance, Tustin, CA, I prepared negative declarations and mitigated negative declarations for several substations.

BELLA HUSTON (19-416-83)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Sigma Engineering
California (United States)
Project Engineer
January 2001—September 2001

Verified by
Bella Huston (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

I performed the following:
• Managed a small business startup office located in San Francisco
• Conducted marketing, attended bid walks, and responded to RFPs/RFQs
• Managed existing municipal and telecommunications contracts

REPRESENTATIVE PROJECTS

San Francisco International Airport, Environmental Database Management San Francisco, CA, As Project Engineer, I repaired and re-designed a Microsoft Access database for stormwater pollution prevention plan reporting and contractor performance tracking, including information on more than 3,000 sampling points and 300 contractors.

Nextel, Environmental Review, Northern and Southern California, As Project Engineer, I completed California Environmental Quality Act (CEQA)/ National Environmental Policy Act (NEPA) checklists for numerous proposed cell tower installations.

City and County of San Francisco Department of Public Works (CCSF-DPW), Contract Management, San Francisco CA, As Project Engineer, I managed an as-needed asbestos and industrial hygiene contract and performed job scoping site walks.

WORK EXPERIENCE

Cambria
California (United States)
Project Manager/Engineer
November 2001—September 2002

Verified by
Bella Huston (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

I performed the following:
• Designed a Two-Phase Extraction remediation system
• Oversaw wastewater permit compliance for a port project
• Prepared Phase I and II ESA reports
• Supervised and trained two entry-level staff field geologists in sampling techniques
• Prepared project cost estimates, feasibility reports, Work Plans and closure reports

REPRESENTATIVE PROJECTS

Industrial Site, Two-Phase Extraction System Design and Install, Merced Street Property LLC, San Leandro, CA. I prepared the bid package and management cost estimate for construction and operations and maintenance (O&M) of a two-phase extraction system at an industrial site. I selected subcontractors, designed the system as part of an engineering team, prepared the City of San Leandro Building Department permit application in coordination with the subcontractor, modified construction drawings, planned the O&M budget, scheduled construction activities, oversaw the initial extraction well construction, and managed generated waste.

East Bay Municipal Utilities District (EBMUD), Soil Sampling Plan, Northern California, Project Manager / Engineer – Designed and prepared a trench spoils sampling plan for characterization and disposal of 250,000 cubic yards of waste soils, in accordance with U.S. EPA SW-846 sampling protocol, for both the Briones and Sibley landfills.

Myers Container Corporation, Corrective Action Plan, Oakland, CA, Senior Staff Engineer – I prepared a corrective action plan for anaerobic reductive dechlorination by hydrogen release compound (HRC) injection at a chlorinated volatile organic compound (CVOC)-impacted former drum reconditioning facility. I provided oversight for the field installation of 105 injection points over a 163-foot by 124-foot area where 4,230 lbs of HRC was injected during one event. I assisted with corrective action report preparation.

Western Pacific Housing, Phase I and II ESAs, Santa Cruz, CA, Project Manager / Engineer – I prepared several Phase I/II ESAs according to ASTM protocol as due diligence for the property transfer of former agricultural (potentially pesticide-impacted) sites planned for residential use. I traveled to the sites to conduct surface soil sampling.

Commercial/Industrial Properties, Phase I Environmental Site Assessment. City of Oakland, CA. I prepared a Phase I ESA of an area encompassing 44 downtown city blocks for a sewer upgrade project with a colleague. I conducted an extensive project walk-through of the entire downtown area; cross-checked numerous dry cleaning and former service station addresses with reported addresses; and performed several file reviews at the DTSC. The task also involved high agency interaction.

UST Fund Application, Wells Fargo Bank Private Client Services, Berkeley, CA. I prepared a UST Fund reimbursement application for a site with extensive legal involvement spanning ten years. I performed a detailed file review of historic investigative reports and invoices and prepared an appeal to the Fund. The funds requested were reimbursed to the client.

Wastewater Discharge Permit Compliance, Port of Oakland, Oakland, CA. I prepared the wastewater discharge permit application for submittal to East Bay Municipal Utilities District (EBMUD). After the permit was approved, I managed the bi-monthly side sewer sampling program and prepared bi-monthly reports. Additionally, I prepared sections of a Subsurface Conduit Evaluation Report.

WORK EXPERIENCE

URS
California (United States)
Environmental Engineer
February 2003—December 2003

Verified by
Bella Huston (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

I performed the following:
• Prepared project cost estimates, Work Plans for Phase II ESAs, and reports
• Reviewed groundwater monitoring and O&M reports prepared by staff field technicians

REPRESENTATIVE PROJECTS

BP/ARCO Richmond and Stockton Fuel Terminals, CA. I upgraded the existing biosparge remediation systems at two fuel terminals/bulk storage facilities in accordance with terminal-specific health and safety regulations.

BP/ARCO Service Stations, Bay Area, CA. I reviewed groundwater monitoring and O&M reports prepared by staff field technicians for various service station sites in northern California.

WORK EXPERIENCE

SAIC
California (United States)
Project Manager
December 2003—March 2006

Verified by
Bella Huston (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

I began as the In-House Consultant to Chevron Environmental Management Company, then 3 years later transferred to a Project Manager role where I managed projects in the Chevron portfolio. I performed the following:
• Consulted in-house to Chevron's portfolio of legacy pipelines at Chevron's headquarters, with increasing value from $2-$6 million in a three-year time span, which included more than 130 individual sites, and involved 15 dedicated staff
• Managed the investigation and remediation of the largest site within the portfolio of $1 million
• Managed project teams, regulatory, legal and third-party relationships as primary point-of-contact, led monthly portfolio team meetings, and was responsible for tracking action items from Project Managers
• Interfaced with the pipeline, legal, real estate, contracts, and public affairs departments of Chevron
• Contributed to two research papers: the Consistent Technical Approach and Crude Oil Study, both submitted to the CA RWQCB
• Peer reviewed each SAIC project deliverable and all Chevron communication to State, legal, and third-party entities, prior to client review and submittal
• Prepared quarterly forecast budgets using risk management and project planning and execution techniques
• Trained project managers and staff new to the portfolio, and developed and transitioned my role

REPRESENTATIVE PROJECTS

Portfolio Administration for LNAPL Impacted Sites, Chevron Environmental Management Company, Superfund (CERCLA) Property Management Group, Central Valley and San Francisco Bay, CA. I provided in-house consulting for three years in support of a legacy underground pipeline portfolio of 130 distinct projects covering approximately 800 linear miles of right-of-way, including two bulk aboveground storage tank (AST) areas, one large capacity oil reservoir, and twenty pump stations. I served as primary point of contact for all sites, to two Regional Water Quality Control Boards, the Department of Toxic Substances Control, property owners, and legal representatives. I coordinated and led two-day monthly client meetings with six Project Managers from three consulting firms to track the status of active sites. I peer-reviewed numerous soil and groundwater investigation workplans and reports from several consultants prior to agency submittal. I managed quarterly agency meetings and prepared financial projections. I managed IDW generated by investigation activities or construction near the historic pipeline and coordinated fingerprint sampling of encountered crude oil. I contributed to a technical feasibility report on remediating crude oil-impacted soil. I interfaced and coordinated with Chevron Legal, Chevron Pipeline (CPL), Chevron public, community and governmental affairs (CPCG), and the Chevron energy and technology company (CETC). I managed the waste disposal company and laboratory subcontracts for the portfolio. I created an IDW Management Standard Operating Procedure (SOP) for the portfolio and trained the subsequent in-house consultant to implement the SOP.

WORK EXPERIENCE

Delta Consultants
New Jersey (United States)
Senior Project Manager
April 2007—January 2008

Verified by
Bella Huston (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

I performed the following:
• Managed the site investigation and remediation of 20 Hess gas stations in NJ
• Supervised a small project team and office staff, including a subcontracted field team
• Consulted to an IT team regarding content design of a client-specific data management software program

REPRESENTATIVE PROJECTS

Hess Corporation, Investigation and Remediation Services, Mount Laurel, NJ, Senior Project Manager – Managed the investigation and remediation of 20 active and inactive retail service station sites in NJ. I optimized existing remediation systems, prepared Discharge Monitoring Reports and CEA Biennial Certifications, and demonstrated air permit compliance. I negotiated with the NJDEP regarding deadlines, future site activities, and groundwater sampling programs. I prepared cost proposals, and site and remedial investigation workplans.

WORK EXPERIENCE

INTEX Environmental Group, Inc.
Pennsylvania (United States)
Senior Project Engineer
January 2009—November 2009

Verified by
Bella Huston (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

I performed the following:
• Managed cost, schedule, and reporting for various soil and groundwater investigation and remediation projects
• Prepared qualifications and bid submittals in response to RFPs/RFQs
• Revised marketing materials: qualifications package, website, project descriptions, and staff resumes
• Attended conferences and meetings for business development

REPRESENTATIVE PROJECTS

ICF International, Underground Storage Tank Indemnification Fund (USTIF), Middletown, PA, Senior Project Engineer – Prepared bids for the remediation of several UST sites utilizing air sparge and soil vapor extraction (SVE) technologies. Attended pre-bid walk meetings and obtained subcontractor estimates from land surveyors, laboratories, drillers, and parts manufacturers.

Industrial Client, Sub-Slab Depressurization System, Queens, NY, Senior Project Engineer – Prepared a bid package for system construction costs, managed an asbestos evaluation and building permit subcontracts and task performance, and prepared the health and safety plan for the design and construction of a sub-slab depressurization system.

Private Oil & Gas Client, Sub-Slab Depressurization System, Pipersville, PA, Senior Project Engineer – Managed operations and maintenance (O&M) activities for a sub-slab depressurization system (SSDS) to mitigate vapor intrusion issues at an active gas station and automobile repair shop. Prepared a health and safety plan, P&IDs, and as-built drawings.

134 Castlewood Rd
Tyrone, GA 30290

WORK EXPERIENCE

IES Engineers
Pennsylvania (United States)
Senior Project Engineer
December 2009—December 2012

Verified by
Bella Huston (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

I performed the following:
• Managed Phase I/II and Pennsylvania Act 2 investigation projects and wrote associated reports
• Managed facility decommissioning projects
• Managed soil, groundwater, and mold remediation, and emergency response cleanup work
• Prepared air emissions, waste, and as-needed compliance reports
• Created input files and ran air emissions models using SCREEN and AERMOD.
• Prepared proposals, scope of work cost estimates, sampling plans, and closure estimates
• Served as managing member of the company website redevelopment and content team

REPRESENTATIVE PROJECTS

Quarry Center, LP, Site Closure, Act 2 Final Report, Haverford, PA, Project Manager – Managed the remedial investigation and closure of a 23-acre brownfield site, a former quarry. Prepared the Act 2 Final Report for closure of the site based on Residential Statewide Health Standards for submittal to the Pennsylvania Department of Environmental Protection (PADEP). Managed subcontracted field work activities which included well installation, well reconstruction, a soil vapor investigation, emergency response to a hazardous waste discovery, and waste soil management. Assisted with obtaining closure of the site's solid waste permit. Interfaced with the proposed developer, civil construction firm, legal representatives, environmental consultants for potential future tenants, and regulators from multiple divisions within the PADEP.

Morphotek, Inc., Site Closure, Act 2 Final Report, Exton, PA, Senior Project Engineer – Wrote the Act 2 Final Report for closure of the site based on Residential Statewide Health Standards for submittal to the PADEP. Performed field work for remedial activities at the 3-acre industrial site, with six personnel. Oversaw well decommissioning and prepared a groundwater well abandonment report.

Pharmaceutical Manufacturer, Phase II Environmental Site Assessment (ESA), Memphis, TN, Senior Project Engineer – Managed a Phase II ESA involving a geophysical survey, soil and groundwater investigation, and asbestos/lead-based paint survey for the closure of a pharmaceutical facility per Tennessee Department of Environment and Conservation (TDEC) standards. Prepared the Phase II ESA report.

Pharmaceutical Processing and Hazardous Waste TSDF, Closure Plan and Cost Estimate, Lonza Inc., Conshohocken, PA. Prepared a closure plan and cost estimate for the facility's RCRA Part B Permit renewal application in accordance with the 'Closure Post-Closure Plans and Financial Requirements' section. Prepared permit sections on Waste Characteristics, Procedures to Prevent Hazards, Contingency Plan, Subpart BB Equipment Leaks, Subpart CC Air Emission Standards, and Post-Closure Facility Requirements. Coordinated bond and permit management transfers to new facility owner Johnson Matthey.

Pharmaceutical Packaging Facility Decontamination and Decommissioning, McNeil Nutritionals, Clifton, NJ. Project Manager for the facility decontamination and decommissioning project. Planned, developed costing, scheduled and provided field oversight. The project involved the decontamination and demolition of production rooms, support areas and utilities, including the removal of two rooftop air handling units/chillers, an outside dust collector, and associated ductwork. Since the facility handled a respiratory sensitizer, work was performed with respiratory protection. I managed industrial hygiene staff and several subcontractors (remedial contractor, electrician, architect, and toxicologist). Performed roof inspections pre- and post-air handling unit removal and prepared the Closure Report.

Evonik Corporation, Industrial Wastewater Discharge Permitting, Chester, PA. As project engineer, I prepared an application to the Delaware River Basin Commission (DRBC) to renew the Industrial Wastewater Discharge Permit (IWTP). The IWTP discharges treated industrial wastewater effluent and stormwater from two outfalls to the Delaware River Estuary in Water Quality

Zone 4. Also prepared National Pollutant Discharge Elimination System (NPDES) renewal application for submittal to the PADEP.

Pharmaceutical Manufacturer, Plan Approval Application, King of Prussia, PA, As project engineer, I prepared the plan approval application to convert an existing Commercial / Solid / Industrial Waste Incinerator to a Hospital/Medical/Infectious Waste Incinerator and also modeled air emissions using AERMOD.

Ortho-McNeil, Emissions Statement, Raritan, NJ. As a project engineer, I prepared a NJ emissions statement using RADIUS software annually for three years, modified a synthetic minor air permit, and calculated greenhouse gas emissions.

Micron Technologies, Inc., Waste Reporting, Malven, PA. As project engineer, I prepared the Residual Waste forms (Form Rs) and the Biennial Hazardous Waste Report for submittal to the PADEP for a pharmaceutical micronizing facility. Also prepared the Form Us for a new, proposed facility.

BELLA HUSTON (19-416-83)

All work experience reviewed by two licensed professionals

134 Castlewood Rd
Tyrone, GA 30290

WORK EXPERIENCE

Environ
New Jersey (United States)
Senior Associate
December 2012—August 2013

Verified by
Bella Huston (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

I performed the following:
• Prepared ISRA Preliminary Assessment Reports.
• Prepared Site and Remedial Investigation proposals and cost estimates for ISRA sites.
• Managed field work for ISRA Site Investigations and write associated reports.
• Prepared as-needed remedial cost estimates for various technologies.
• Advised/trained staff associates in field work and report writing.

REPRESENTATIVE PROJECTS

Actavis, Inc., Preliminary Assessment/Site Investigation, Elizabeth, NJ, Senior Associate – Prepared the PAR for an approximately 70,000-ft2 active pharmaceutical facility, planned and managed the limited SI of select AOCs, prepared a limited SI report, and reviewed reports prepared by one of the site's Licensed Site Remediation Professionals (LSRPs), representing one of the environmental counterparties to the site.

Actavis, Inc., Preliminary Assessment/Site Investigation, Little Falls, NJ, Senior Associate – Prepared the PAR for an approximately 30,000-ft2 inactive pharmaceutical facility, planned and managed the SI, prepared an SI report, and reviewed reports prepared by one of the site's LSRPs, representing one of the environmental counterparties to the site.

BELLA HUSTON (19-416-83)

All work experience reviewed by two licensed professionals

134 Castlewood Rd
Tyrone, GA 30290

WORK EXPERIENCE

O'Brien & Gere Engineers, Inc.
Pennsylvania (United States)
Associate Engineer
August 2013—August 2018

Verified by
Thomas Steven Cornuet
tom.cornuet@ramboll.com

Experience Summary
Full-Time
Engineering: 5 years
Experience under licensed engineer: None

TASKS

Executed a variety of environmental engineering/scientific tasks including preparation, development and writing of component portions of technical reports, evaluation of data, and evaluation of various remedial technologies, as well as development of time and expense estimates associated with investigatory studies, evaluations, and subsurface remediation activities.

Worked with an established team of scientists, engineers and GIS/CAD designers for the investigation and remediation of soil and groundwater at active and former manufacturing sites and RCRA/CERCLA/Superfund Sites; worked with USEPA; worked with NJDEP, PADEP, and other state agencies. Directed senior staff and staff scientists/engineers in performing field tasks/sampling and field documentation as part of environmental investigation and remediation projects at multi-media waste sites. Provided detailed review of completed work products and deliverables for accuracy and completeness. Implemented and promoted health and safety requirements and guidance. Coordinated safe performance of work and appropriate safety training of the team.

Managed and led diverse project teams in the execution of projects or subtasks of moderate to high complexity, while meeting internal / external client expectations. As project manager, assumed budgetary, scheduling, and subcontractor management responsibilities. As project engineer, assumed costing, budgetary and scheduling responsibilities as directed by those in supervision.

Prepared proposals/qualifications and attended remediation conferences (e.g., Battelle) to support business development activities and stay abreast of the latest remedial technologies and issues.

When I joined OBG in 2013, I was hired as an Associate Engineer. Although my title did not change over the course my time at the firm, a few years after starting, I was assigned a supervisory role and mentored a Staff Engineer. I also became a member of OBG's internal in situ technology team.

REPRESENTATIVE PROJECTS

Private Redeveloper, Shopping Mall, Cheltenham, PA, 2016-2018. As project manager, I provided underground storage tank (UST) closure management, vapor intrusion (VI)/moisture barrier installation consulting support, and cost litigation support to a private redeveloper and their legal representatives, for an active construction project in a high traffic region. On-site groundwater was impacted with light non-aqueous phase liquid (LNAPL) from an off-site service station. I evaluated the service station consultant's conceptual site model, groundwater investigation scope, and petroleum VI investigation scope. I evaluated the consultant's remedial investigation (RI) work plan. Two unknown USTs were discovered during construction. I managed the closure of these USTs.

Consumer Products Manufacturer, Enhanced In-Situ Bioremediation (EISB), Irvington, NJ, 2015-2017. As project engineer, I prepared the Interim Remedial Measures (IRM)/Remedial Action Workplan (RAW) Addendum report for EISB of volatile organic compounds (VOCs) in groundwater, including an injection plan and ongoing performance monitoring. I evaluated commercial electron donor and aquifer buffering materials and a prior bench study to select the appropriate amendment. I calculated injection volumes of donor and evaluated commercial biostimulation products. I prepared the proposal and cost estimate for implementation. I provided oversight of bioaugmentation and biostimulation field activities and ongoing management of performance monitoring groundwater sampling.

Chemical Manufacturer, Industrial Site Recovery Act (ISRA) Site Remediation, Birmingham, NJ, 2013-2015. As project engineer, I prepared the feasibility construction cost estimate for a ZVI permeable reactive barrier constructed by various methods, including conventional trench and hydraulic fracturing. I provided oversight of subcontracted laboratory services to perform bench-scale studies on the efficacy of ZVI, activated persulfate, and aerobic biodegradation to treat site chemicals of concern (COCs) in soil and groundwater, and evaluated the study results. I evaluated in-situ chemical oxidation, in-situ thermal treatment,

phytotechnologies, groundwater pump and treat, and encapsulation, including construction of a slurry wall and RCRA cap, as possible source treatment/removal or containment/control remedial approaches. I prepared a Remedial Alternatives Analysis Report for submittal to the New Jersey Department of Environmental Protection (NJDEP) and USEPA.

Industrial Site, RI and Remedial Feasibility Evaluation, Tredegar and Owens-Illinois, Belvidere, NJ. 2014-2018. I was the project manager for the RI of a NJ ISRA plastics film manufacturing site impacted with LNAPL (mineral spirits), metals and CVOCs. I managed the groundwater assessment program, long-term residential monitoring of VI impacts, public outreach for Classification Exemption Areas (CEAs), and the LNAPL monitoring program. I performed fate and transport modeling using BIOSCREEN to modify and renew the CEA. I updated the RI Work Plan and managed the RI Report preparation. I prepared annual remediation cost estimates for funding mechanisms and performed a desktop feasibility analysis to treat LNAPL in a smear zone/silty slay layer by Soil Vapor Extraction and in-situ bioremediation.

Galaxy-Spectron CERCLA (Superfund) Site, Groundwater Collection and Treatment System, Elkton, MD, 2017-2018. As project engineer, I performed a detailed review of historic monthly and annual stream isolation / groundwater treatment system (SI/GWTS) influent and effluent flow rates, and Elkton area rainfall / precipitation in support of the 90% remedial design of a hydraulic control system for in situ thermal treatment of CVOC-impacted groundwater. I evaluated fire protection requirements (NFPA 58, ANSI 2510) and siting issues for a proposed propane tank. I was responsible for preparing the air permit equivalency for the proposed thermal oxidizer and the wastewater permit equivalency for the proposed wastewater discharges. I reviewed air and wastewater Applicable or Relevant and Appropriate Requirements for the remedial action (RA). I helped prepare the Final RA Report.

U.S. Army Corp of Engineers, Philadelphia District, Vineland Chemical Superfund Site, Temporary Air Sparge Pilot Test, Vineland, NJ, 2016-2017. As project engineer, I prepared a Pilot Test Work Plan for implementing air sparge technology to immobilize arsenic in soil, reduce dissolved arsenic concentrations in groundwater, and reduce down-gradient impacts to surface water. I designed the performance sampling plan. I assisted with project management and prepared the Final Pilot Test Report.

134 Castlewood Rd
Tyrone, GA 30290

WORK EXPERIENCE

Geosyntec Consultants, Inc.
Nevada (United States)
Senior Engineer
August 2018—October 2025

Verified by
Carrie Elizabeth McCoy
cmccoy@geosyntec.com

Experience Summary
Full-Time
Engineering: 7 years, 2 months
Experience under licensed engineer: 7 years, 2 months

TASKS

From August 2018 to present, I have been employed as a Senior Engineer at Geosyntec. I manage and provide senior technical support to environmental site and remedial investigation projects in Nevada, California, Arizona, Kentucky, and New Jersey. I am the project director for stormwater compliance and public water system compliance projects in Nevada.

I provide leadership to project team members and direct reports in work activities. I define client objectives and project requirements/constraints (including budget, regulatory, schedule, and technological constraints), define scope, organize tasks and assignments, identify and adapt technical approaches and past precedent, execute work, supervise staff, prepare deliverables, present deliverables to client, and manage projects administratively. I prepare project cost proposals and perform marketing and business development.

To execute site and remedial investigation work, I design environmental media investigations, analyze data to determine next steps (e.g, further investigation, treatability studies, pilot studies, and remedial action), prepare Conceptual Site Models (CSMs), and write technical reports that include a summary of lithological and analytical laboratory data collected and evaluated. To execute compliance projects, I review regulations, permit requirements, site inspection reports, and data. For vapor intrusion projects, I calculate carcinogenic and non-carcinogenic risk from subslab soil gas, indoor air, and outdoor air VOC data.

In 2021 I had one direct report. As of April 2024, I have two direct reports (scientists) and two indirect reports (geologists). In April 2024, I became the Las Vegas office department manager. In this role, I advise the office on fiscal performance and oversee office administration.

The percentage of environmental engineering project consulting and management I perform is approximately 70%. The percentage of time I spend on department management, staff supervision, proposal development, marketing, and business development is approximately 30%.

REPRESENTATIVE PROJECTS

1. ADEQ, Dry Cleaning Sites, RI Reports, Phoeniz, AZ. In 2018, I led a 10-person team to prepare two RI Reports for two CVOC-impacted dry cleaner sites. I reviewed historical groundwater assessments, indoor air and sub-slab soil gas assessments; and SVE system pilot testing, construction and operations data. I was the primary author of the risk assessment sections for both RI Reports. I peer-reviewed the CSM and senior-reviewed the 3D Leapfrog model of site lithology and goundwater.

2. Republic Services, Inc. (RSI), Apex Landfill NTNC Public Water System, Las Vegas, NV. From 2019 - 2024, I was the Project Manager. I provided environmental compliance assistance to RSI to assist them with meeting their NDEP-BSDW drinking water permit requirements. I updated and revised the facility's Lead and Copper and Total Coliform Sampling Plans. I advised RSI on how to address the findings form two Triennial Sanitary Survey inspections (2019 and 2022) and reviewed corrective action reports prior to submittal. I prepared two NDEP-BSDW Water Service permit applications with specifications and drawings for the installation of backflow prevention devices. I managed the quarterly review of test results and submittals of system O&M logs to SNHD. I senior-reviewed the system's O&M manual. In January 2025, I became the Project Director and oversaw the preparation of the system's lead service line inventory for submittal to NDEP. I prepared RSI for the 2025 Triennial Survey and am advising them on how to address the findings by October 2025.

3. Salt River Materials Group, Ash Landfill Harvesting, Northeast of St. Johns, AZ. From September 2019 - March 2020, I was the Project Manager for the assessment of a coal ash landfill for Class C and F ash. I prepared the drilling and sampling workplan which included drilling and logging of 28 boreholes, ash sampling, and laboratory testing of moisture content, loss on ignition, whole rock x-ray fluorescence, and particle size distribution. I reviewed test results and managed the GIS/modeling team's preparation of a 3D Leapfrog model of the ash resource. I prepared the Final Technical Report describing the fieldwork and

resource. From October 2022 - April 2023, I managed follow-on field work where 13 additional boreholes were drilled, logged and sampled; managed the 3D Leapfrog model update with this additional data; and prepared an update report.

4. Nellis Air Force Base, CERCLA PFAS Remedial Investigation (RI), Ahtna Global, LLC, Las Vegas, NV:
From May 2020 - October 2021, I was the Assistant Project Manager. I prepared the CSM and designed the PFAS soil and groundwater investigation drilling and sampling program and wrote these sections of the RI UFP-QAPP. I evaluated interim results and prepared data/graphical summaries for project scope changes. I planned and coordinated drilling and sampling field efforts (installation of groundwater monitoring wells and soil borings, soil and sediment sampling, stormwater sampling, and semi-annual groundwater sampling for PFAS).
From November 2021 - June 2025, I was the Project Manager. I managed drilling and sampling field efforts. I led the preparation of a Leapfrog 3D model of site lithology and PFAS impacts. I led the GIS, database management, and laboratory validation teams. I reviewed data to determine delineation of PFAS in soil and groundwater. I led preparation of the RI Report and response to comments documents. I updated the CSM.

5. Comprehensive Services, CERCLA Investigation and Remediation, US DOE Paducah Gaseous Diffusion Plant, Four Rivers Nuclear Partnership, LLC, Paducah, KY. From January 2022 - 2024, I revised the Draft PFAS Screening Assessment Report, which summarizes whether PFAS exists in groundwater, potable water, wastewater treatment effluent, and surface water at the facility. I provided regulatory review of the PFAS MCL rule in relation to drinking water data evaluated in the assessment. In 2025, I evaluated additional soil and water PFAS data collected in FY2025 and prepared the Draft PFAS Screening Assessment Addendum Report with conclusions regarding the existence and source of PFAS at the facility. In 2024, I prepared the Project Plan for the design of the (proposed) On Site Waste Disposal Facility (OSWDF) at this site. From 2024-2025, I prepared the Software Quality Assurance Classification Forms for over 20 engineering software programs utilized in the 30% and 60% OSWDF design.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
May 1998	December 1998	I was laid off from Baseline due to lack of work and spent this time looking for employment. I was then hired by TRC.
April 2006	March 2007	I relocated from California to New York, took time off, and worked briefly as a contractor for AIG Insurance in their environmental division before finding employment with Delta Consultants.
February 2008	December 2008	I left Delta Consultants for personal reasons and searched for a job for these 11 months, then was hired by INTEX.

Mechanical

HASSAN AMMAR (13-171-28)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/26/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
17 years, 3 months

Total Engineering Experience
17 years, 3 months

Experience under licensed engineer
5 years, 3 months

Disciplinary Action
None reported

EDUCATION

Bachelors in Electrical Engineering (EAC)
CUNY, City College
September 2003–June 2006

EXAMS

Fundamentals of Engineering (FE)
New York
October 2018

Principles and Practice of Engineering (PE)
Mechanical
New York
June 2025

LICENSES

Additional Licenses
None

HASSAN AMMAR (13-171-28)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Guth DeConzo Consulting Engineers, PC
New York (United States)
Vice President
April 2008—July 2025

Verified by
brendon J henry
bhenry@guthdeconzo.com

Experience Summary
Full-Time
Engineering: 17 years, 3 months
Post EAC degree: 17 years, 3 months
Experience under licensed engineer: 5 years, 3 months

TASKS

During my employment at Guth DeConzo Consulting Engineers as an Electrical Project Engineer. My primary duties include developing bid documentation design drawings. I have designed electrical power, lighting, telecommunication, and life safety systems and performed construction management, reviewed contractor submittals, responded to Requests for Information, and performed inspections to ensure the installation meets design requirements. I have extensive experience in Transportation facility projects including projects for American Airlines, Continental Airlines, Southwest Airlines, United Airlines. I also worked on MEP design for Lufthansa Lounge, American Express Lounges, Capital One Lounge, Cathay Pacific Lounge, and Air Canada Lounge. In addition to more than 500 separate projects for, Hudson News and more than 150 between DFA & DFS.

My personal level of responsibility included design of Electrical power, lighting, telecommunication, and life safety systems for both new build-out and renovation of existing buildings and spaces. Types of facilities projects I have worked on include design for airport renovations, concessions, offices, restaurants, residential projects, data centers, and laboratories. My project experience includes surveying existing building conditions, and design of electrical service and secondary distribution, lighting control systems, emergency power systems and fire alarm systems. My experience includes managing projects from initial schematic design with load calculations, through construction documents with short circuit and voltage drop calculations, lighting foot-candle calculations, I have also reviewed submittals and shop drawings during construction administration.

REPRESENTATIVE PROJECTS

1. American Express Lounge, LaGuardia International Airport (2019 - 2023)

The Amex Lounge (Level 4) retail build-out is part of the larger LaGuardia Airport Head House Terminal B new construction scope. The lounge is approximately 12,000 SF. The structure around the entire scope of work has an envelope constructed of concrete with internal insulation and drywall. Exterior windows consist of double-pane tinted glass.
For this Lounge my responsibilities included: Performing of electrical load calculations and voltage drop calculations for both medium and low voltage distributions feeders, branch circuiting of receptacle loads, lighting fixtures, motor, plumbing, and HVAC load based on NFPA 70. I provided Fire Alarm devices layout, specifications, sequence of operations, and riser diagram in accordance with NFPA 101. Furthermore, I produced construction documents to include power and lighting plans, details, panel schedules, equipment schedule, lighting fixture schedule and one line diagrams. I also created and maintained panel schedule indicating connected and NEC demand loads. To properly size the lounge distribution feeders, NEC demand factors were used in the electrical load calculations. I also conducted an in depth study of the NYC building code, National electrical code with NYC amendments, NYC Fire Code and generated a report of the sections that pertained to the project. To ensure the electrical systems' compatibility with building system, I attended coordination meetings architectural, structural, plumbing, fire protection, and mechanical. Prepared and supervised electrical schematic design plans. The plans included layout of electrical distribution equipment both normal and emergency in accordance with NFPA70. I provided a description of the systems and explained the design concept to the supervisor.

2. 133 Mulberry Street, Building Renovation, NY (2019 - 2020)

As an electrical design engineer, I produced electrical construction documents for high end presidential suites, penthouses, and sky villas. The documents included the design of electrical power and lighting plans, riser diagram, and panel schedules. To produce the documents, I conducted NEC electrical load, voltage drop, and short circuit ratings calculations.

3. Varies Retail Shops, LaGuardia International Airport - Retail (2015-2017)

The spaces ranges between 1000 SF - 4500 SF. As the electrical design engineer my duties included the design of an electrical

power distribution system for 16 retail spaces with appropriate panel board and feeder sizes, layout of the fire alarm devices in accordance NFPA 72, and electrical system coordination with the plumbing and HVAC systems.

4. WeWork Office Space – 175 Varick Street, NY (2018-2020)

As the lead electrical design engineer for this office building, I performed electrical load study based on NEC for several floors. Each floor is approximately 2,000 SF. I also included design and layout of all fire alarm devices per NFPA 72 and NFPA 101. I also trained and supervised designers to perform branch circuiting of receptacles and lighting fixtures. Furthermore, I studied the required emergency loads to properly size a new emergency generator. To properly understand the existing conditions, I surveyed the office spaces and provided appropriate design recommendations during demolition phase. I reviewed and discussed with my senior electrical supervisor the construction documents for completeness, and code compliance.

5. Lincoln Medical & Mental Health Center, Bronx, NY (2011 -2013)

Construction of a new Oncology Infusion Suite. Phased MEP renovation and expansion of a 32,400 SF space including Infusion Suite and an Optometry Suite. Project includes phased construction of a multiple bed Infusion Suite, while keeping existing suite operational during the renovation and a relocated Optometry Suite. I calculated the loads with allowed demand factors from the NEC to determine distribution equipment size, I calculated branch circuit sizes based on NEC requirements, and I designed the fire alarm based on NYC Mechanical Code, NYC Building Code, and NFPA 72 under the direct supervision of a licensed Professional Engineer.

6. COVID Testing Centers in Miami, Chicago, Boston, Philadelphia and New York airports (2020-2021)
Each Testing Center ranges between 2000SF - 2500SF. I calculated the loads with allowed demand factors from the NEC to determine distribution equipment size, I calculated branch circuit sizes based on NEC requirements, and I designed the fire alarm based on NYS Mechanical Code, NYS Building Code, and NFPA 72 under the direct supervision of a licensed Professional Engineer.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
May 1998	August 2003	I didn't have any work experience around this time. I went to QCC (CUNY) between 2000 - 2003 followed by City College between 2003 - 2006. I started my first engineering job at Guth DeConzo in 2008
July 2006	March 2008	I didn't have any engineering experience around this time. I worked in retail while I was looking for a job after graduating. I started working at Guth DeConzo Consulting Engineers in March 2008 and currently I am the VP of the company.

Hassan Ammar

Mr. Ammar is a Mechanical Engineer at Guth DeConzo Consulting Engineers with more than 17 years of engineering design experience primarily working on commercial, residential, institutional and airport projects.

Mechanical Design Experience:

1. AMEX PHL Lounge (2024-Present)

Airport & Terminal: Philadelphia International Airport (PHL) - Terminal A, West

Brief Scope:
Airport lounge expansion and renovation entailing renovation of existing lounge and extension to additional lower-level space.

Mechanical Design Description:
As a mechanical designer, I provided a comprehensive analysis of current HVAC system and existing interior/exterior cooling and heating requirements to explore the possible extent of renovation and determine remaining HVAC capacity available to integrate the new lower-level lounge. I specified additional cooling and air metering equipment, and new revised supply air distribution at both levels to better condition new proposed lounge layout. I replaced existing exhaust fan in new restrooms, added Type 2 hood for non-grease producing appliances in new lounge level kitchen and coordinated exhaust path to exterior. I provided supplemental cooling and heating solutions for main kitchen/lounge to address load peaks during heavy foot traffic. Design included high-end private showers and bathrooms with dedicated ventilation and climate control.

I performed ASHRAE compliant Load Calculations and assisted in the design of the HVAC System. I was working on mechanical design under the supervision of a senior mechanical engineer.

Key Elements in Design:

- New VAV selections
- Main Supply and return duct and branch duct distribution revisions

- New Exhaust fans
- New Type 2 kitchen hood
- Supplemental VRF systems
- Existing AHU capacity study and replacement plan

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2. JFK T5 Shake Shack & Dunkin (2022-2024)

Airport & Terminal: John F. Kennedy International Airport (JFK) - Terminal 5

Brief Scope:
New Shake Shack restaurant space adjacent to Dunkin Donuts with partially shared back of house operations.

Mechanical Design Description:
I performed ASHRAE compliant Load Calculations and designed the HVAC system. I utilized available core base building supply air with new specified VAV's to provide zone control to different areas within the restaurant space. I coordinated with client's kitchen equipment consultant to select appropriate hood, exhaust fan, and make-up air unit for cooking applications. I coordinated new roof equipment installation with existing equipment and structures of adjacent tenants. I coordinated new gas water heaters and flue exhaust. Value engineered throughout design process to utilize most efficient available kitchen equipment, reducing HVAC equipment installation costs, avoiding new penetrations and additional hoods while remaining code compliant. I provided elevated clean linear supply aesthetic for customer-facing dining areas combined with simple, cost-effective back of house supply air distribution.

I was working on mechanical design under the supervision of a senior mechanical engineer.

Key Elements in Design:

- New VAV's
- New Kitchen exhaust hood
- New Kitchen exhaust fan
- New Make-up air unit
- New Gas water heater flues

3. JFK T4 Mets Sports Bar and Bento (2023-2024)

Airport & Terminal: John F. Kennedy International Airport (JFK) - Terminal 4

Brief Scope:
Retrofit of existing Buffalo Wild Wings space into modern Mets-themed restaurant and bar.

Mechanical Design Description:
I performed ASHRAE compliant Load Calculations and designed the HVAC system. I developed effective solution using core base building supply air with specified constant volume air terminals to maintain comfortable ambient temperature throughout main dining area and bar. I renewed back of house kitchen space with new hood, exhaust fan, and dedicated back of house fan coil unit. I revised existing air distribution to provide increased airflow to more comfortably sustain high volume cooking operations.

Key Elements in Design:

- Constant volume air terminals
- New Kitchen exhaust hood
- New Kitchen exhaust fan
- New Back of house fan coil unit
- Revised supply air distribution

4. DCA Wise Guy Pizza (2024 – 2025)

Airport & Terminal: Ronald Reagan Washington National Airport (DCA)

Brief Scope:
Renovation of existing Smashburger into new pizza restaurant serving as support space for larger center pier kiosk bar in same terminal.

Mechanical Design Description:
I performed ASHRAE compliant Load Calculations and designed the HVAC system. I renewed existing VAV served by core base building supply air and coordinated installation of new pizza oven and hood while avoiding airflow concerns with existing adjacent hoods in space. As typical with airport tenant spaces, scope involved refreshing of additional back of house prep and storage spaces elsewhere in the terminal. I Included rooftop equipment installation location coordination. My design successfully integrated pizza restaurant with center pier kiosk bar while managing

distributed back of house design across multiple terminal locations. I was working on mechanical design under the supervision of a senior mechanical engineer.

Key Elements in Design:

- New VAV's
- New Pizza oven exhaust hood and fan
- Coordination with hood manufacturers for confirmation of adjacent hood installation feasibility and functionality.

5. DCA Makers Union Bar (2024 – 2025)

Airport & Terminal: Ronald Reagan Washington National Airport (DCA)

Brief Scope:
Demolition of 4 existing smaller kiosk concession spaces into one central bar serving entire central pier, serviced by Wise Guy Pizza.

Mechanical Design Description:
I performed ASHRAE compliant Load Calculations and designed the HVAC system. Due to nature of kiosk spaces in open concourses, HVAC load is not locally controlled and is typically handled by base building HVAC system. I performed due diligence study and calculations to confirm that load of larger consolidated kiosk would not exceed those of the 4 previous existing kiosks. I called for relocation of existing supplemental make-up air to better deliver air to center of pier. My design successfully consolidated multiple spaces while working within existing base building capacity without needing to add additional equipment. I was working on mechanical design under the supervision of a senior mechanical engineer.

Key Elements in Design:

- Load calculations and confirmation of low impact of new bar on overall concourse space HVAC service.
- Revised existing concourse makeup air diffuser location to better reach center of pier.

6. IAD Aslin Beer Co (2024 – 2025)

Airport & Terminal: Washington Dulles International Airport (IAD)

Brief Scope:
Tenant changeover from previously occupied local brewing company

Mechanical Design Description:
I performed ASHRAE compliant Load Calculations and designed the HVAC system. I surveyed existing kitchen equipment. I provided detailed required conditions and refurbishment for kitchen hood and exhaust system reuse. I redesigned air distribution in dining area to achieve more modern linear aesthetic while maintaining existing tenant RTU service and avoiding purchase and installation of new HVAC system. I coordinated new gas water heaters and flue exhaust. Equipment survey and reuse strategy maximized value of existing infrastructure while updating customer-facing aesthetics.

Key Elements in Design:

- Refurbished kitchen exhaust hood system
- Redesigned supply air distribution and maintained connection to existing tenant RTU
- Hot water heater flue exhaust design and coordination

7. JFK T4 Shake Shack (2023-2024)

Airport & Terminal: John F. Kennedy International Airport (JFK) - Terminal 4

Brief Scope:
Shake Shack restaurant with renewed air distribution in back-of house and cookline areas.

Mechanical Design Description:
I performed ASHRAE compliant Load Calculations and designed the HVAC system. I renewed air distribution in back-of house prep space and main cookline area. I utilized existing base building perimeter fan coil units to supplement space and reduced dedicated tenant air handling unit size and required capacity.

Key Elements in Design:

- Refurbished Base building perimeter fan coil units
- Selected new Tenant air handling unit AHU connected to base building hydronic water service and outside air.

8. JFK T1 Phase B Demo (2024-Current)

Airport & Terminal: John F. Kennedy International Airport (JFK) - Terminal 1

Brief Scope:
Complete HVAC demolition phasing and coordination for entire existing JFK Terminal 1.

Mechanical Design Description:
I coordinated phasing and scope of HVAC demolition for entire existing Terminal 1, including designating which legacy systems to demolish by level and by position downstream of larger systems. I outlined required standard mechanical demolition requirements such as refrigerant reclamation, along with quantities, locations, and tags of all HVAC systems not designated to be salvaged. I coordinated partial demolition and disconnection from existing systems of the AirTrain connector bridge, separating existing T1 departures level (to be demolished) from AirTrain platform (to remain operational).

Key Elements in Design:

- Legacy HVAC systems to be demolished and decommissioned as required
- Refrigerant-containing equipment requiring reclamation
- Coordination between disconnection point between spaces being demolished and remaining spaces.

9. Air France Offices (2024 – Current)

Airport & Terminal: JFK New Terminal 1

Brief Scope:
I coordinated design of two remote office administrative spaces for Air France operations.

Mechanical Design Description:
I performed ASHRAE compliant Load Calculations and designed the HVAC system. I developed design that tied into white box tenant spaces being delivered simultaneously by base building during design phase. I utilized base building utilities designated for tenant use and specified fan coil units to serve each office zone with local diversified controls. I coordinated installation and location of new HVAC systems within tight overhead base building duct conditions while maintaining post-fire smoke purge system functionality and compliance.

Key Elements in Design:

- High temperature chilled water-based Fan coil units
- Post-fire smoke purge system compliance
- General exhaust and outside air utility connections

10. LGA Terminal B Redevelopment – 2018 -2021

I oversaw, supervised, and managed the design of the MEP systems for over 12 tenant spaces within the new LGA terminal B including the Bowery Bay mini-mall, the Dean shops, Amex lounge and multiple restaurant spaces. All spaces were received in a whitebox condition, extensive coordination was required with the base building engineers, terminal operator, Port Authority, and various other stakeholders. Scope varied per project but all projects utilized base building air handlers with VAV's for distribution. Many projects included a fan coil unit for year round cooling within the kitchen, hood exhaust and make up air including pollution control systems and walk in fridges/ freezers.

11. EWR Terminal One Redevelopment – 2021 -2023

I performed ASHRAE compliant Load Calculations and designed the HVAC system. I oversaw, supervised, and managed the design of the MEP Systems for over 10 tenant spaces within the new EWR Terminal One primarily focusing on restaurant spaces. Many spaces included type 1 and 2 exhaust hoods requiring rooftop exhaust fans and make up air systems. All projects utilized base building air handlers for ventilation air requirements and new glycol source heat pumps for cooling. One space included a smoker in the airport concourse which required extensive coordination with the architect, equipment manufacturer, kitchen consultant and Port Authority.

12. JFK Terminal 6 Redevelopment – 2024 - Current

I performed ASHRAE compliant Load Calculations and designed the HVAC system. I oversaw, supervised, and managed the design of the MEP Systems for over 10 tenant spaces with the new JFK terminal 6 including multiple dry retail spaces, restaurant and two first class lounges. Design of all spaces commenced before receipt of white box conditions requiring extensive coordination with all stakeholders to deal with complex site conditions. Scope varied per project but utilized base building provided air through VAV boxes. Many projects included supplemental fan coil units for year round cooling, hood exhaust and make up air including pollution control.

BRIAN BIERSDORFF (16-507-76)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
10/01/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
9 years, 3 months

Total Engineering Experience
9 years, 3 months

Experience under licensed engineer
9 years, 3 months

Disciplinary Action
None reported

EDUCATION

Bachelors in Mechanical Engineering (EAC)
University of Nevada, Reno
August 2011–May 2016

EXAMS

Fundamentals of Engineering (FE)
Nevada
March 2022

Principles and Practice of Engineering (PE)
Mechanical
Nevada
August 2025

LICENSES

Additional Licenses
None

BRIAN BIERSDORFF (16-507-76)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

CR Engineering
Nevada (United States)
Project Manager
June 2016—October 2021

Verified by
Chun Lee
chun@cr-eng.com

Experience Summary
Full-Time
Engineering: 5 years, 4 months
Post EAC degree: 5 years, 4 months
Experience under licensed engineer: 5 years, 4 months

TASKS

I first started out as a designer and drafter under a project manager and worked on project specific tasks such as load calculations, duct routing and sizing, domestic cold water, hot water and hot water return routing and sizing, hydronic piping routing and sizing. From there I began doing more coordination and meetings on my own with architects, electrical/structural/civil engineers and owners on project scope and design and eventually worked my way up to be a project manager. I was responsible for managing a wide variety of projects that consisted of managing designers, drafters, administrative staff, and coordination with architects, electrical/structural/civil engineers to complete mechanical and plumbing permit and construction documents. Tasks included managing, reviewing and self performing load calculations, equipment sizing and coordination with equipment vendors, duct work sizing, pipe sizing, control wiring diagrams, book specifications, cost estimation and various other calculations and task in order to generate a complete and construct-able set of drawings and specifications. Post permit & active construction tasks included review of contractor generated submittals, RFI's, change order requests, punch lists, record drawings, commissioning. I performed site walks as necessary throughout construction to review the the installed work and progress was satisfactory and in compliance with the bid documents.

REPRESENTATIVE PROJECTS

Starbucks Roasting Facility, Carson City, NV (2016): This project included a 700,000 square foot warehouse addition to an existing Starbucks roasting plant and distribution center. I performed heating and cooling load calculations, designed mechanical ductwork layout and sizing, plumbing piping system sizing and layout and assisted in the selection of indirect gas fired and evaporative cooling makeup air units. I attended design meetings where I coordinated electrical, structural, civil and architectural elements that were affected by the mechanical and plumbing design.

Iron Workers Welding School Fontana, CA (2017): I performed the mechanical, plumbing and stand alone controls design of a welding training facility. The facility consisted of welding booths, metal shop, offices, restrooms and classrooms. I lead the design of mechanical heat pump air handlers with demand control ventilation for the classroom, welding exhaust and fume extraction for the welding areas and makeups air units for the machine shops. I also designed and coordinated the domestic plumbing systems requirements which included hot, cold, and tempered water, waste and vent, sand and oil separator and emergency safety shower equipment. I performed heating and cooling load calculations, outside air and exhaust ventilation requirements, demand control ventilation and designed the integration of a stand alone control system. I also performed construction site observations reports that detailed deviations from the bid documents and code requirements.

Sate library and archives Carson City, NV (2018-2020): I was the project manager and lead designer where I managed a team that consisted of an electrical engineer, structural engineer and architect. I implemented the design of the central plant and HVAC system replacement that consisted of modular chillers, cooling towers, variable speed pumps, condensing boilers, and 4-pipe fan coils. I lead the design team with heavy coordination to ensure project feasibility while navigating limited existing utilities and space restrictions. I also performance weekly construction meetings, answering contractor RFI’s, and generated site observations reports.

BRIAN BIERSDORFF (16-507-76)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

SGF Engineering
Nevada (United States)
Project Manager
October 2021—September 2025

Verified by
Sean Glen Frey
sfrey@sgf-eng.com

Experience Summary
Full-Time
Engineering: 3 years, 11 months
Post EAC degree: 3 years, 11 months
Experience under licensed engineer: 3 years, 11 months

TASKS

My duties involve the oversight and execution of a diverse range of commercial and residential projects in the mechanical, plumbing, and energy disciplines. This includes performing detailed load calculations and analysis, sizing ductwork and piping systems, selecting appropriate equipment to meet project requirements, control diagrams, etc. to ultimately provide a comprehensive drawing package suitable for permitting or bidding. A key aspect of the role involves coordinating closely with architects, civil engineers, electrical engineers, and structural engineers, contractors and clients to ensure seamless integration across all aspects of the projects. I'm also responsible for managing an internal design team to ensure that all deliverables are completed on schedule and meet a high standard of accuracy and feasibility.
My duties also consist of project budget analysis and cost estimation that require thorough analysis to maintain financial accuracy and feasibility. In some cases, this involves design iterations and coordination with contractors to effectively provide value engineering items to help reduce unnecessary costs while maintaining a safe, effective and efficient design that meets all applicable code requirements and client expectations.
Beyond the design phase, my duties include construction management, where my responsibility is to ensure that projects are executed in alignment with the original design specifications, code requirements and owner expectations. This involves regular site coordination, construction observation reports, generation of punch list items and problem-solving to address any discrepancies or challenges that arise during the construction process.
In an overall sense my duties are a balance of technical expertise, leadership and management, and multi-disciplinary coordination to ensure successful, high-quality, cost-effective project designs from concept through construction.

REPRESENTATIVE PROJECTS

949 Lakeshore, Incline Village, NV (2021-2022): I was the project manager where I lead the design of a variable flow refrigerant heat pump system with heat recovery, radiant heating and snowmelt system from a central boiler, and pool and spa heating of a 14,000 square foot, 3-story residence. I helped outline the various mechanical system options with the owner and ultimately helped direct them to the system type that best represented their thermal comfort expectations and budget. I managed an internal team that performed heating and cooling load calculations, detailed ductwork design and layout, hydronic piping system design and layout, and domestic plumbing design and layout, 3D modeling and clash detection. I designed and coordinated details wiring diagrams for the mechanical and hydronic system integration into a home automation system. I coordinated the mechanical and plumbing needs in coordination meetings with contractors, architects, interior designers, and structural/civil/electrical engineers. I made numerous construction site visits that helped direct the installation of the design system, followed by construction observations reports.

Clear Creek Lot 108, Clear Creek, NV (2022): I was the project manager where I lead the mechanical and hydronic design for a 7,000 square foot residence that involved the design and implementation of a variable refrigerant flow heat pump system with heat recovery and radiant heating. I managed an internal design team that performed heating and cooling load calculations, detailed ductwork design and layout, hydronic piping system design and layout, 3D modeling and clash detection. I designed and coordinated details wiring diagrams for the mechanical and hydronic system integration into a home automation system. I coordinated the mechanical and hydronic requirements in coordination meetings with contractors, architects, interior designers, and structural/civil/electrical engineers. I made numerous construction site visits that helped direct the installation of the design system, followed by construction observations reports. I also made site visits after construction was completed to help trouble shoot issues with the integration of the mechanical system and the home automation system and discovered wiring installation issues.

Zemp Residence, Reno, NV (2023): I was the project manager where I lead the mechanical and hydronic design for a 6,000 square foot residence that involved the design and implementation of variable speed mini-split air-to-air heat pumps and radiant heating and radiant cooling via air-to-water heat pumps and supplemental boiler. I managed and assisted in the design of the

domestic water heating system via the radiant boiler and indirect storage tank. I managed an internal design team that performed heating and cooling load calculations, detailed ductwork design and layout, hydronic piping system design and layout, and control system. I designed and coordinated details wiring diagrams for the mechanical and hydronic system. I coordinated the mechanical and hydronic requirements in coordination meetings with contractors, architects, interior designers, and structural/civil/electrical engineers.

Carlin Readiness Center HVAC & Water Heater Replacement (2021-2025): I was the project manager and lead consultant that implemented the HVAC and water renovation of a 7-building national guard training center. I lead the design team and subconsultants consisting of electrical engineers, structural engineers and architects. I designed the replacement of 30 water-to-water heat pumps, multiple gas fired & DX cooling packaged roof top units, evaporatively cooled and gas fired makeup air units, gas fired water heaters and ductwork and piping distribution. I lead design and coordination meetings between consultants and lead design presentation meetings with the State of Nevada and National Guard. I performed cost estimates and value engineering items to fit the project requirements within the project budget. I made construction site visits that helped direct the installation of the design system, clarify design drawings and installation processes followed by construction observations reports.

PATRICK KEVIN CUETO (17-217-25)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/27/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
5 years, 2 months

Total Engineering Experience
5 years, 2 months

Experience under licensed engineer
4 years, 6 months

Disciplinary Action
None reported

EDUCATION

Bachelors in Civil Engineering (EAC)
University of Washington
September 2011–August 2015

Masters in Architectural Engineering
Illinois Institute of Technology
August 2015–May 2019

EXAMS

Fundamentals of Engineering (FE)
Illinois PE
January 2017

Principles and Practice of Engineering (PE)
Mechanical
Nevada
January 2025

LICENSES

Additional Licenses
None

PATRICK KEVIN CUETO (17-217-25)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

ECL Engineering Consultants
Illinois (United States)
Engineering Intern
May 2016—November 2016

Verified by
Brian Early
bearly@ecl-consultants.com

Experience Summary
Full-Time
Engineering: 6 months
Post EAC degree: 6 months
Experience under licensed engineer: 6 months

TASKS

Hired initially as an engineering drafting intern, my responsibilities quickly expanded to include engineering tasks.

- Generated design documents for permitting and construction via AutoCAD from redlines and later in the internship my own work (which was backchecked by a PE) for both Mechanical and Electrical disciplines
- Performed heat load calculations via Trane TRACE 700
- Performed ASHRAE 90.1 Appendix G Energy Modeling via Trane TRACE 700
- Performed Building Envelope Performance Analyses using THERM 7.4.
- Sized and selected a variety of equipment, including Packaged Rooftop Air-Conditioners, Split-System Air Handling Equipment, 4-pipe Hydronic Air-Handling Equipment, powered rooftop and ceiling ventilators,
- Sized and Routed Sanitary Waste, Domestic CW/HW, Natural Gas, and Storm Drain piping per applicable plumbing codes (IPC and Chicago Building Code)
- Performed ductwork and pipework sizing and routing

REPRESENTATIVE PROJECTS

One Uptown Circle - a 108,000 SF mixed-use building with a restaurant, 2nd floor office space, and multifamily dwelling units on upper floors. I performed the domestic water and gravity waste design for the project. I routed gravity waste, domestic cold water, and domestic hot water piping to serve both public and apartment dwelling restrooms/kitchens. I also performed heat load calculations on Trane TRACE 700 and 2015 IMC ventilation calculations that was used by another engineer to size the HVAC systems. The heat load calculations went into simulating envelope assemblies in THERM 7.4 to determine the overall assembly performance rather than using prescriptive code minimums. These calculations were coordinated with the project energy modeler. I also performed calculations and generated documentation for the building's LEED certification related to the water efficiency credits. Finally, I generated energy code compliance documents via COMcheck for the building envelope, interior lighting, exterior lighting, and mechanical systems.

After School Matters - 36,000 SF tenant improvement in an existing building shell. I performed pre-design site exploration through multiple site visits to locate existing plumbing connections. I also coordinated the existing conditions with the architect and designed the new plumbing systems to retain as much of the existing piping as possible when connecting to the new kitchen and restroom fixtures. I also laid out fire protection sprinkler head per NFPA 13's spacing requirements in coordination with the architect's RCP layouts. I also performed heat load calculations via Trane TRACE 700 and 2015 IMC ventilation calculations.

Deerfield (Deerbrook Mall) Outlot Buildings - Small commercial building (~5,000 SF) with multiple bays for future tenants. I designed mechanical, electrical, and plumbing systems for the shells. I performed heat load calculations to size the temporary heating in the space. I also designed the temporary lighting layout (sized not to exceed the energy code maximum lighting power densities in each space), circuited the lighting and mechanical equipment, sized and laid out the switchgear per owner's sizing criteria (in compliance with NEC and IBC). For plumbing, I provided stub-outs for future tenant connections to natural gas, domestic cold water, and provided a small gas-fired water heater with recirculation for domestic hot water. These plumbing systems were also connected to prototypical bathrooms provided for each tenant. Lastly, I laid out fire suppression sprinkler head locations per NFPA 13 spacing requirements.

PATRICK KEVIN CUETO (17-217-25)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

DLR Group, Chicago
Illinois (United States)
Mechanical Engineering Intern
January 2017—May 2017

Verified by
Ruairi Barnwell
rbarnwell@dlrgroup.com

Experience Summary
Full-Time
Engineering: 4 months
Post EAC degree: 4 months
Experience under licensed engineer: None

TASKS

- Utilizing energy modeling and building simulation techniques to analyze performance on a variety of building types.
- Conducted Heat Load Calculations through Trane TRACE 700.
- Performed Fan static pressure requirement calculations and Pump head requirement calculations.
- Laying out Mechanical, Electrical, Plumbing, and Fire Protection (MEPFP) design documents in both Revit and AutoCAD.
- Evaluated the condition of existing HVAC equipment through site visits and data from ordered equipment tests.
- Commissioning and Retro-Commissioning various projects.

REPRESENTATIVE PROJECTS

Hotel Chicago Downtown, Autograph Collection - TI renovation of the 4th floor as a general refresh of the space. The 4th floor had numerous multipurpose venue spaces. I performed pre-design site exploration to locate the existing mechanical systems and determine the spatial constraints of the existing conditions. I performed heat load calculations via Trane TRACE 700 and ventilation calculations per the Chicago Building Code's requirements. I reworked the existing HVAC systems to serve the new room layouts, including rerouting and resizing ductwork, and sizing/specifying air devices.

CWD - Helmer Building / AC Marriot, Grand Rapids, MI - Complete renovation of the existing "building". Existing building was an 80s style modern shell wrapped around (3) historic buildings. Design project was to remove the facade, and split the existing buildings into two separate projects: a 5 story office high-rise with future office build-outs at each floor and an AC Marriot hotel. I performed Trane TRACE 700 heat load calculations for both projects, selected and laid out water-source heat pumps, as well as routed/sized the condenser water piping. The central plant and DOAS design were handled by another engineer on the team.

200 S Michigan Ave Boiler Burner Upgrade - Assisted with generating documentation and conducting analyses of an existing boiler. Performed a statistical analysis on operational data to determine that variations of output were due to chance rather than another undiagnosed issue.

Career Education TI Buildout - A small office TI in an existing office tower. Conducted heat load calculations via Trane TRACE 700 and developed design drawings using as-builts. I relocated the existing VAV equipment as needed and redesigned the low-pressure air distribution to fit the newly proposed layout.

PATRICK KEVIN CUETO (17-217-25)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Quantum Consulting Engineers
Washington (United States)
Drafter
January 2018—May 2018

Verified by
Samson Ng
SNg@quantumce.com

Experience Summary
Full-Time
Engineering: 4 months
Post EAC degree: 4 months
Experience under licensed engineer: None

TASKS

Provided the engineering drafting work for structural engineering consulting services in a variety of sectors, from residential to new office construction.

Set up project drawings in AutoCAD using backgrounds received from the client and the office's library of standard notes, details, and specifications.

Drafted structural framing and foundation drawings in AutoCAD with input from the design engineers via "Redline" drawings.

Generated Steel Shop Drawings using Autodesk Advanced Steel using permitted engineering drawings.

Assisted with Structural Analysis services for retrofitting telecommunication mounts. Modeled structural elements in RISA 3D and applied ASCE 7-10 load criteria to perform stress analysis.

REPRESENTATIVE PROJECTS

Goldfish Swimming School Redmond T.I. - This project involved modification of the existing steel structure building to accommodate layout and HVAC equipment revisions. I conducted initial project setup in AutoCAD with the background drawings received from the architect and the company's standard cover sheet and specification drawing package. Produced structural drawings including foundation and framing plans in AutoCAD with redlines received from the design engineers. Created project specific details and schedules by modifying drawings from the company's standard detail library with input from the design engineers.

Center Plaza Building A Shop Drawings - A small improvement project to add steel framed canopies to the exterior of a building located in Federal Way, WA. Generated steel shop drawings for fabrication in Autodesk Advanced Steel. Created a 3D model of the steel frame structure using provided architectural and structural design drawings. Detailed structural connections in model. Flagged any potential issues for review by engineering team.

Verizon/T-Mobile Telecommunication Tower Evaluations (Subconsultant for Adapt Engineering) - Assisted in a survey of proposed telecommunication projects at various towers spread across Western Washington with locations as remote as Black Diamond, WA. Our scope was to determine whether the existing tower mount structures would be able to accommodate newly proposed upgrades to the existing telecommunications systems. Based on the equipment provided by the client, photographs of the existing mounts, and tower site conditions, I would perform structural analysis in RISA 3D. Loads were calculated using data from the provided equipment cutsheets and additional site-specific criteria from ASCE 7-10. I generated the geometry in RISA 3D for the tower mount structure using photographs of the existing installation and extrapolating from the dimensions of known structural elements (such as the tower diameter at the mount's height). I then evaluated the existing structures using the Allowable Stress Design method. From this, sites requiring additional structural bracing to accommodate the proposed equipment revisions were identified. For sites requiring additional bracing, I would evaluate the efficacy of several prefabricated bracing systems for retrofit in RISA 3D. The results of this work were used to provide recommendations to the client on a per-site basis. Work was conducted under Frank Unocic, a licensed PE/SE.

PATRICK KEVIN CUETO (17-217-25)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Säzän Group
Washington (United States)
Mechanical Designer
May 2018—February 2019

Verified by
Michelle Charest
mcharest@sazan.com

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

Primarily performed mechanical engineering services with some plumbing design experience.
- Performed heat load calculations via Trane TRACE 700
- Performed ASHRAE 90.1 Appendix G Energy Modeling via Trane TRACE 700
- Performed Building Envelope Performance Analyses using THERM 7.4.
- Sized and selected a variety of equipment, including Packaged Rooftop Air-Conditioners, Split-System Air Handling Equipment, 4-pipe Hydronic Air-Handling Equipment, Central chilled water and steam plants, Ductless VRF systems, and VAV Air Handling Equipment.
- Sized and Routed Sanitary Waste, Domestic CW/HW, Natural Gas, and Storm Drain piping per applicable plumbing codes (UPC and Seattle Plumbing Code)
- Performed ductwork and pipework sizing and routing
- Generated construction documents including design drawings for permitting and construction using AutoCAD and Revit
- Performed Code Analyses against relevant Mechanical and Energy Codes (IMC, Seattle Mechanical Code, IECC, Seattle Energy Code)
- Provided engineering consultation services to generate master-planning documents for future proposed work

REPRESENTATIVE PROJECTS

Joint-Base Lewis McChord SOF Tactical Equipment Maintenance Facility - performed analyses and generated SD-level design documentation to assist in producing the DD1391 document. Met with project stakeholders to determine project goals, performance requirements, and determine equipment types. Took a prototype building design and performed heat load calculations via Trane TRACE 700 and ventilation calculations via IMC requirements to size the split-system air handling equipment serving the office/back-of-house areas and the gas-fired radiant heating systems serving the open garage/vehicle maintenance areas. Provided equipment quantities and sizing information to cost estimator.

Silverdale VA Medical Clinic (Silverdale, WA) - Performed ASHRAE 90.1 Appendix G energy model calculations in Trane TRACE 700. Reviewed most current design drawings and specifications to determine building envelope performance, and used the MEP drawings to model the building HVAC, lighting, and water heating systems. Calculated baseline ventilation, lighting, and equipment loads per Appendix G guidelines. Iterated the energy model numerous times to troubleshoot errors and unexpected results.

Boeing 40-56 Building HVAC Replacement Study (Everett, WA) - I produced a master-planning document identifying the existing HVAC systems serving the 40-56 building, the deficiencies of the existing systems, and proposed a series of sweeping revisions that would modernize the building. I conducted extensive field investigations to comprehensively catalog and photograph all existing HVAC equipment (including equipment abandoned in place). I also reconciled old design and various as-built drawings found in Boeing's archives with photos/notes taken during field investigation and latest design drawings for several on-going projects within the 40-56 building. I then compiled the various climate control requirements for the various production processes throughout the building, and also took catalog of complaints and comments regarding the performance of the HVAC equipment. I also conducted Trane TRACE 700 heat load calculations as part of my analyses. From the information gathered, I recommended a general overhaul of the existing equipment and identified areas where the existing systems were insufficient to meet current demand. I worked with equipment vendors to create a general portfolio of potential equipment replacements to also estimate the resultant increase in electrical and hydronic loads. I also proposed a very rough outline for phasing the equipment replacements into the various sectors of the building, in-line with the required rework of the central chilled water, steam, and electrical utilities to support the upgrades.

WORK EXPERIENCE

PAE Consulting Engineers, Seattle
Washington (United States)
Mechanical Engineer
February 2019—February 2020

Verified by
Daniella Wahler
Daniella.Wahler@pae-engineers.com

Experience Summary
Full-Time
Engineering: 1 year
Post EAC degree: 1 year
Experience under licensed engineer: 1 year

TASKS

Primarily performed mechanical engineering services with some plumbing design experience.
- Performed heat load calculations via Trane TRACE 700
- Performed ASHRAE 90.1 Appendix G Energy Modeling via IES VE
- Performed Building Envelope Performance Analyses using THERM 7.4.
- Sized and selected a variety of equipment, including Packaged Rooftop Air-Conditioners, Split-System Air Handling Equipment, 4-pipe Hydronic Air-Handling Equipment, Central chilled water and steam plants, Ductless VRF systems, VAV Air Handling Equipment, and Energy Recovery DOAS
- Sized and Routed Sanitary Waste, Domestic CW/HW, Natural Gas, and Storm Drain piping per applicable plumbing codes (UPC and Seattle Plumbing Code)
- Sized and routed specialty piping systems (i.e. Deionized Water, process/chemical piping)
- Performed ductwork and pipework sizing and routing
- Generated construction documents including design drawings for permitting and construction using AutoCAD and Revit
- Performed Code Analyses against relevant Mechanical and Energy Codes (IMC, Seattle Mechanical Code, IECC, Seattle Energy Code)
- Performed Construction Administration tasks including answering RFIs with code, drawing, and/or specification citations.
- Minor edits to specification documents for project-specific requirements

REPRESENTATIVE PROJECTS

University of Oregon - Hayward Field Re-Design: Brand new stadium project. Performed a numerous design revisions/ASIs for the HVAC hydronic systems distributed throughout. Project design and engineering calculations had already been performed by the time of my involvement, but numerous coordination issues arose due to the expedited delivery structure of the project (i.e. the stadium was being built while the re-design was on-going). As a result, I would need to relocate/revise existing designs to better match the rapidly evolving site conditions. For example, shear walls would often be built without penetrations pre-coordinated, new amenity spaces that had not previously been designed would be introduced to the project scope, and equipment would get installed in alternative locations; these are the kinds of updates the project would receive on an almost daily basis. I would re-route and resize ductwork and pipework to accommodate new equipment locations, work with the contractor and equipment vendors to generate alternative equipment selections where installations were deemed impossible, and coordinate air device selections/locations with the architect.

University of Washington Health Sciences Education: Brand new higher-education high-rise building. I performed ventilation calculations per the Seattle Mechanical Code and several iterations of heat load calculations as the building design evolved. I sized the air-distribution systems including VAV "pinch" boxes and series-fan powered boxes with hydronic cooling/heating coils. I coordinated the division of the peak heat load between the heating provided through the air-distribution systems and the perimeter heating systems which were handled by another engineer. Generated the mechanical design in high LOD BIM that was shared with the design-build contractor for coordination.

Seattle Aquarium - Ocean Pavilion: Designed the plumbing systems for the new Ocean Pavilion building. Coordinated points of connection for sanitary waste, storm drain, and domestic water connections with the civil engineer. Routed and sized sanitary waste, storm drain, and domestic CW/HW piping per the Seattle Plumbing Code (UPC with Seattle Amendments). Located trap primers for floor drains in back-of-house spaces, provided plumbing connections to bathroom and "lab" fixtures/equipment, and provided condensate drain connections for mechanical equipment to drain into the sanitary waste systems. Coordinated the collection of groundwater into a sump and fed the collected water into the waste piping. Sump pump sizing was performed per the peak load identified by the civil engineers.

WORK EXPERIENCE

Ecotope Inc
Washington (United States)
Mechanical Project Engineer
July 2020—April 2022

Verified by
Henry Odum
henry@ecotope.com

Experience Summary
Full-Time
Engineering: 1 year, 9 months
Post EAC degree: 1 year, 9 months
Experience under licensed engineer: 1 year, 9 months

TASKS

- Performed heat load calculations via Trane TRACE 700
- Performed Building Envelope Performance Analyses using THERM 7.4.
- Sized and selected a variety of equipment, including Packaged Rooftop Air-Conditioners, Split-System Air Handling Equipment, 4-pipe Hydronic Air-Handling Equipment, Central chilled water and steam plants, Ductless VRF systems, VAV Air Handling Equipment, Energy Recovery DOAS, and Heat Pump Water Heating (for domestic hot water production)
- Sized and Routed Sanitary Waste, Domestic CW/HW, Natural Gas, and Storm Drain piping per applicable plumbing codes (UPC and Seattle Plumbing Code)
- Sized and routed specialty piping systems (i.e. Deionized Water, process/chemical piping)
- Performed ductwork and pipework sizing and routing
- Generated construction documents including design drawings for permitting and construction using AutoCAD and Revit
- Performed Code Analyses against relevant Mechanical and Energy Codes (IMC, Seattle Mechanical Code, IECC, Seattle Energy Code)
- Performed Construction Administration tasks including answering RFIs with code, drawing, and/or specification citations.
- Minor edits to specification documents for project-specific requirements

REPRESENTATIVE PROJECTS

Yesler Terrace 6.6: A high-rise low-income multifamily project for the Seattle Housing Authority. I was responsible for designing the HVAC systems. I sized and located the garage exhaust fan with CO/NOx sensing controls. I performed heat load calculations with Trane TRACE 700 to size the electric cove heaters serving the dwelling units, the split system heat pumps serving the common and amenity spaces, and exhaust fans providing ventilation cooling for emergency lighting inverter systems. I performed Seattle Mechanical Code ventilation calculations to size the initial whole-house fan systems for the dwelling units, light-duty energy recovery ventilators for the amenity spaces, and powered ventilators for all other common/public spaces. After code review revealed a local ordinance requiring HEPA filtration for all ventilation systems within a certain distance of the I-5 right-of-way, I redesigned the building ventilation systems with a semi-centralized approach. I provided centralized ERVs at every other floor to bypass the Seattle Building Code's requirements for routing ductwork within shafts when duct systems penetrate 2 or more fire-rated floor assemblies. I coordinated the duct sizing and routing in 3D and laid the air distribution out to minimize the total number of required fire dampers. I also integrated details for the ductwork through and membrane penetrations for rated assemblies to avoid ambiguity during construction. Along with the ventilation system redesign, I performed duct pressure loss calculations to ensure the ERVs were provided with enough static pressure capacity to allow for proper balancing in the field. I also designed the ventilation cooling system for the Seattle City Light electrical vault per the SCL Utility Guidelines whereby I sized the required powered ventilator, coordinated and routed the 3-hour rated ductwork with a direct opening to the building exterior, and included the SCL specified control sequence for the equipment.

Galleria - SERA Architects Office TI: An office TI within an existing high-rise building in Portland Oregon. I conducted an initial pre-design site investigation to document and photograph the existing conditions including the large central atrium/skylight and existing HVAC penetrations. The site investigation was necessary to inform the heat load calculations due to the historic nature of the building and the unique constructions present. With the information from the site investigation, I performed heat load calculations with Trane TRACE 700 to size and zone the space for VRF fan-coils. I sized and routed the ductwork through the pathways coordinated with the architect. I also laid out the refrigerant branch-circuit control boxes and routed the refrigerant piping to connect the indoor equipment to the central condensing units located on the roof.

WORK EXPERIENCE

The Greenbusch Group
Washington (United States)
Mechanical Engineer
August 2022—July 2023

Verified by
Patrick Kevin Cueto (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

- Performed heat load calculations via Carrier HAP
- Performed ASHRAE Standard 90.1 Appendix G and Seattle Energy Code Total Building Performance Energy Modeling via Carrier HAP
- Performed Building Envelope Performance Analyses using THERM 7.4.
- Sized and selected a variety of equipment, including Packaged Rooftop Air-Conditioners, Split-System Air Handling Equipment, 4-pipe Hydronic Air-Handling Equipment, Ductless VRF systems
- Sized and Routed Sanitary Waste, Domestic CW/HW, Natural Gas, and Storm Drain piping per applicable plumbing codes (UPC and Seattle Plumbing Code)
- Performed ductwork and pipework sizing and routing
- Generated construction documents including design drawings for permitting and construction using AutoCAD
- Performed Code Analyses against relevant Mechanical and Energy Codes (IMC, Seattle Mechanical Code, IECC, Seattle Energy Code)

REPRESENTATIVE PROJECTS

Alki Elementary School: Brand new Elementary School for the Seattle Public School system. I designed the plumbing systems. I routed and sized the storm drain piping, the sanitary waste piping, and the domestic cold and hot water piping. Due to the invert elevations of the nearest manhole and the requirement for a relatively large grease waste interceptor serving the commercial-grade kitchen, the sanitary waste piping routing was a critical design item. The invert elevations for the points of connection for the sanitary waste was tightly coordinated with the civil engineer as the waste piping repeatedly "changed hands" as it routed to the grease interceptor and back to the building where it rejoined the main sanitary waste lines. I met with the architect and project stakeholders and determined that sand-oil interceptors were required at the utility sinks provided at various classrooms. The plumbing design was revised midway through after a number of clarifications and supplementary instructions were provided by King County who were the AHJ presiding over the plumbing systems.

Columbia Boulevard Wastewater Treatment Plant: A small office building with a breakroom, conference room, locker rooms, restrooms, and a workshop. The mechanical and plumbing design for this project was finished by the time I was involved. I was responsible for generating an ASHRAE Standard 90.1 Appendix G compliant energy model using the evolving project design and specifications package.

Seattle Fire Station: The mechanical and plumbing design for this project was being handled by others in our team. I was responsible for generating an ASHRAE Standard 90.1 compliant energy model using the evolving project design and specifications package. I evaluated the load and energy impacts of several glazing configurations and constructions that was used to inform the final building envelope design. Of particular difficulty was correctly configuring the functionality of the heat recovery water heaters in the project as Carrier HAP only provided generic plant templates with limited ability to modify them to incorporate unique project features. After requesting information from the building occupants, additional unique features of the project (such as the dehumidification mode for the locker rooms, the frequency of firetrucks entering and leaving the heated garage, the heating water load associated with the industrial laundry equipment, the extremely high shower usage) were integrated into the energy model. The extremely high process related energy uses made it extremely difficult for the project to meet the aggressive energy efficiency goals set by the architect. The energy analyses I conducted drove the discussion for the possibility of using higher efficiency equipment, increasing the performance of the building envelope, and other energy mitigating measures.

WORK EXPERIENCE

Tesla
Texas (United States)
Mechanical Engineer
September 2023—January 2024

Verified by
Patrick Kevin Cueto (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

On-site design/construction engineering services for Tesla at the Austin, TX Gigafactory. Employment was structured as a short-term contract held under a third-party entity known as "Kelly Engineering". My employment consisted of 3/4 conducted remotely (from my living situation in Seattle) and 1/4 on site in Austin.

Work was conducted under the supervision of a local mechanical PE, Nick, for whom I do not possess direct contact information. My official supervisor, Kate Scartch, should have the contact information to verify my work was conducted under a licensed PE.

- Performed on-site investigation of existing conditions and verification of as-built conditions for chilled and hot water utilities.
- Performed construction administration tasks including answering RFIs with citations of design documents and specifications.
- Created "red-lines" to be integrated into living construction documents by other mechanical designers

REPRESENTATIVE PROJECTS

There were a number of on-going and proposed projects within the Tesla Gigafactory. I am unfortunately bound by an NDA that prevents me from going into detail as to what was being done.

My work generally revolved around the expansion of the chilled water systems and verifying the as-built conditions for the chilled water and hot water connections to equipment distributed around the factory. I would additionally answer RFIs regarding the installation of chilled water based air handling systems.

A good portion of my work involved "red-lining" revisions to the design drawings to reconcile them to as-built conditions I verified in-situ, or to correctly implement vents and drains that would allow the installing contractor to flush the piping prior to system commissioning. A key feature to the work I performed here was to ensure that the piping was laid out in such a way that would facilitate hot-tapping the already operational chilled water utilities, and to allow for easy expansion/modification of the piping distribution in the future.

PATRICK KEVIN CUETO (17-217-25)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Harris Consulting Engineers LLC
Nevada (United States)
Mechanical/Plumbing Designer
May 2024—August 2025

Verified by
Kent Thomas Bell
kbell@harrisengineers.com

Experience Summary
Full-Time
Engineering: 1 year, 3 months
Post EAC degree: 1 year, 3 months
Experience under licensed engineer: 1 year, 3 months

TASKS

- Performed heat load calculations via Carrier HAP
- Sized and selected a variety of equipment, including Packaged Rooftop Air Handling Equipment, Split-System Air Handling Equipment, 4-pipe Hydronic Air-Handling Equipment, Central chilled water plants (Air-Cooled and Water-Cooled), gas-fired boiler and hot water plants, Ductless VRF systems, VAV Air Handling Equipment, Energy Recovery DOAS
- Performed ductwork and pipework sizing and routing
- Generated construction documents including design drawings for permitting and construction using AutoCAD and Revit
- Performed Code Analyses against relevant Mechanical and Energy Codes (IMC, UMC, and IECC)
- Performed Construction Administration tasks including answering RFIs with code, drawing, and/or specification citations.
- Preparation of division 23 specification documents

REPRESENTATIVE PROJECTS

US Air Force Base Visiting Quarters and Temporary Living Facilities - Code Refresh: I am involved in the design of prototypical high-rise hotel/lodging (VQ) and low-rise multifamily (TLF) projects at the Wright-Patterson, Lackland, and Peterson AFBs. The initial design efforts for these prototypes were started in 2017 but the projects went on hold for several years and were relaunched at the time of my involvement. While the general design concepts for each of the projects were locked in at the time of the 2017 efforts, the project was essentially overhauled to accommodate the newest code cycles and the latest versions of the applicable Unified Facilities Criteria. I redesigned the rooftop ERV DOAS systems to comply with the heightened ventilation requirements which involved working with equipment vendors to generate new selections and resizing the distribution ductwork and downstream air devices. Due to the building design being "finalized", existing shaft sizes were frozen and thus the increased static pressure was a concern. I performed duct static pressure calculations to ensure the rooftop equipment were designed with sufficient static pressure capacity for proper system balancing. I reselected nearly all of the equipment laid out in the project due to newer generations being available since the 2017 design. All of this invalidated the chilled water and hot water distribution design, which I ended up having to resize. I verified the heat load calculations conducted by the engineer I inherited the project from. Due to the potential implications of A2L refrigerants, I substituted the split-systems serving electrical and telecommunication rooms at each floor with a packaged RTU with ducted air distribution. I incorporated all of these design revisions into the construction documents which included a drawing set, a design narrative, and a specifications package. Additionally, I am currently answering bid RFIs from potential contractors vetting the project.

MASON HUGHES (22-252-39)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/24/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years, 3 months

Total Engineering Experience
4 years, 3 months

Experience under licensed engineer
4 years, 3 months

Disciplinary Action
None reported

EDUCATION

Bachelors in Mechanical Engineering (EAC)
California Polytechnic State University, San Luis Obispo
September 2016–June 2021

EXAMS

Fundamentals of Engineering (FE)
California
November 2021

Principles and Practice of Engineering (PE)
Mechanical
Nevada
August 2025

LICENSES

Additional Licenses
None

MASON HUGHES (22-252-39)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Michael Baker International
Nevada (United States)
Mechanical Associate 1
June 2021—September 2025

Verified by
Alexander Gines
alex.gines@mbakerintl.com

Experience Summary
Full-Time
Engineering: 4 years, 3 months
Post EAC degree: 4 years, 3 months
Experience under licensed engineer: 4 years, 3 months

TASKS

I am responsible for the mechanical design, running calculations, production work (autoCAD and Revit), editing specifications, QC reviews, and submittal reviews.
I work as a mechanical designer to progress the mechanical portion of various projects assigned to me by a project manager.
I produce high-quality work by demonstrating strong mechanical design fundamentals along with extensive QC review of the plans my team and I develop.
In addition to mechanical design, I also engage with clients through meetings and emails to meet project needs, work with vendors to procure equipment selections, and coordinate selections with other trades.

REPRESENTATIVE PROJECTS

FRC Phase II - B472
Date of involvement: Fall 2021 - Now (In Closeout)
Scope: Federal project located at Naval Base Coronado (NBC) in San Diego. This was an energy savings project in which a large number of existing equipment on and in the building were to be replaced and redesigned with heating hot water to save energy. Equipment/Systems include air handlers, exhaust fans, chillers, steam-to-HHW heat exchangers, process systems, and many more.
My Role: I calculated HHW and CHW pump head, the supply and exhaust airflows for each space, and ran multiple static calculations to justify sizing for new "replace-in-kind" rooftop units. I reviewed mechanical submittals, RFIs, and provided responses for government reviewer comments.

ARE CP5 Leidos C&S + T.I.
Date of involvement: Summer 2021 - Summer 2025 (Complete)
Scope: New 5-level Commercial building for Leidos located in La Jolla. The C&S and T.I. portions of the project were done simultaneously as the client was still finding tenants.
My Role: I calculated the heating loads using Energypro, organized and confirmed rooftop VRF and supply/exhaust air capacities in Excel, and laid out the ductwork for the numerous VRF fan coils throughout the building (including supply air valves and exhaust air valves for outside air). I also reviewed and provided responses for submittals and RFIs during the construction admin phase.

OAS Bldgs 3, 4, & 5
Date of involvement: Spring 2023 - Summer 2025 (Complete)
Scope: 3 New core and shell life-science buildings for Alexandria located at their new "One Alexandria Square" (OAS). This project consisted of 3 new buildings with a small disconnected pavilion conference building in the center.
My Role: I calculated load summaries for the building's C&S model to ensure sufficient airflows for the T.I. design. I fully designed the pavilion space, running a dedicated Energypro calc for the heat load requirements, procuring selections to meet the load, and designing the mechanical system in Revit along with the ductwork/piping for the 3 main buildings. I also made multiple site visits to conduct punch walks and ensure proper installation of the mechanical systems.

NAS Lemoore BEQ Towers Renovation
Date of involvement: Fall 2023 - Now (Construction Admin)
Scope: Located at Naval Air Station Lemoore (California), Replace and redesign existing mechanical system in 3 existing barracks buildings (Bldg A, B, C) to match 3 other existing barracks buildings (Bldg D, E, F). Project scope indicated replace in kind, but due to a requirement for additional outside air, a full mechanical redesign was ultimately required.
My Role: I visited the site to sketch as-builts for the mechanical room which I later put together in AutoCAD. I calculated ventilation for the various fan coils in the building and designed the DOAS units with associated ductwork to each unit through

airflow and static pressure calculations. I also reviewed and provided responses to submittals and RFIs.

JESSE LOPEZ (21-660-16)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/12/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years

Total Engineering Experience
4 years

Experience under licensed engineer
4 years

Disciplinary Action
None reported

EDUCATION

Bachelors in Mechanical Engineering (EAC)
University of Nevada, Reno
August 2017–May 2021

EXAMS

Fundamentals of Engineering (FE)
Nevada
July 2022

Principles and Practice of Engineering (PE)
Mechanical
Nevada
May 2025

LICENSES

Additional Licenses
None

JESSE LOPEZ (21-660-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Automotive Test center
Nevada (United States)
Test Engineer Co-Op
May 2021—September 2021

Verified by
Stephanie Berge
hr@natc-ht.com

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer: None

TASKS

As an engineering co-op, I primarily supported the test engineering team but held direct responsibility for a portion of a corrosion testing project. I ensured testing was performed in accordance with the approved test plan, validated results for accuracy, and identified and reported any concerns related to testing procedures or design integrity. When test plan specifications were unclear or not provided, I researched applicable automotive and military specifications to guide testing procedures and ensure compliance with industry standards. I contributed to engineering decisions by escalating anomalies, suggesting corrective actions, and periodically presenting test data and findings to senior engineers for review. My work required careful attention to detail, adherence to engineering standards, and clear communication to support project progress and safety.

REPRESENTATIVE PROJECTS

Electric Vehicle Corrosion Testing
May 2021 - September 2021

I worked on a test engineering team that conducted corrosion testing for a new development electric vehicle. I performed daily visual and functional inspections making sure to detail any anomalies that presented themselves. During scheduled intervals, I operated the vehicle on the appropriate test courses ensuring consistent runs between the various driving tests. To track corrosion trends, I optimized existing spreadsheets to interpret data in a meaningful way. I communicated any major findings to the vehicle manufactures design engineers.

Vehicle Stability and Tow Point Testing
July 2021 - August 2021

I supported a test engineering team that conducted vehicle stability and tow point testing. My responsibilities included setting up data analytics instrumentation, troubleshooting and resolving instrumentation issues, and rigging up specialized test equipment for various test scenarios. I also actively monitored testing activities to identify and address potential safety concerns, contributing to both the efficiency and safety of the overall testing process.

WORK EXPERIENCE

Bently Nevada, A Baker Hughes Business
Nevada (United States)
Product Technical Owner
September 2021—September 2025

Verified by
Jonathan Buescher
jonathan.buescher@bakerhughes.com

Experience Summary
Full-Time
Engineering: 4 years
Post EAC degree: 4 years
Experience under licensed engineer: 4 years

TASKS

In my role as a Mechanical Engineer, I maintained active product lines by reviewing product-related issues, developing solutions, and implementing corrective actions. This work required addressing complex design, manufacturing, and supply chain challenges while ensuring minimal disruption to production. I led the design and testing of custom solutions for diverse customer applications, including managing quotations and lead-time estimations. A key achievement included designing, testing, and implementing a critical accessory for Bently Nevada's flagship monitoring system, tested to DNV-Maritime standards. This project demanded extensive vibration testing, detailed data analysis, and rapid problem-solving to meet stringent customer-driven requirements. I collaborated closely with cross-functional engineering and commercial teams to ensure designs consistently met or exceeded performance and quality standards. Additionally, I was responsible for creating and maintaining high-quality documentation, including revision-controlled drawings and 3D models, ensuring professional and accurate deliverables across individual components and large assemblies.
As a Product Technical Owner, I managed technical oversight for custom products, performing technical reviews on incoming inquiries to confirm feasibility and alignment with product line capabilities. I acted as the primary advisor for custom product-related documentation, design, and process issues, providing expert guidance to internal teams and customers. My responsibilities included serving as a third-party reviewer for critical design decisions, ensuring technical soundness and adherence to engineering and customer requirements. This role required balancing technical precision, customer needs, and business considerations to deliver reliable solutions.

REPRESENTATIVE PROJECTS

Miscellaneous Manufacturing Fixture Design
February 2022 - August 2022

As a newer engineer, I was tasked with various small fixture design projects to help support manufacturing or other testing efforts. I designed one fixture that was used for inspecting production parts. This required some investigation as to what points on the assembly needed to be inspected as well as determining the pass/fail criteria. The fixturing needed to be very precious so I utilized gd&t to ensure the machine shop can produce a quality part. Another fixture I designed was used to hold a small vibration shaker table. The fixture needed to be stiff to ensure it was not influencing the response as the sensor.

Custom Proximity Probe Case Design
December 2022 - February 2023

As the sole design engineer for this project, I was responsible for quoting the custom solution, designing components, and releasing the product for sale and shipment. During the quotation phase, I communicated with the customer representative to ensure requirements were clear and understood between both parties. I evaluated the proposed solution to make sure it could be designed as well as be manufacturable. I designed the customer proximity probe case and ensured all documentation followed company standards.

Design Isolation Brackets for Maritime Application
August 2023 - July 2025

I was the lead design engineer during the development of the vibration isolation brackets for the Bently Nevada Orbit 60 Monitoring system for maritime use. I designed the vibration isolation brackets to ensure the monitoring system can pass vibration testing per the DNV maritime standard. I conducted vibration testing and analyzed results to ensure the design maintained its integrity. The assembly's resonant frequency and amplification factor were very important data points to take into consideration. I also created the customer facing installation documentation to ensure components were installed correctly out in the field.

External Termination Adapter Design
October 2024 - August 2025

As the lead mechanical design engineer, I was responsible for the overmolding design, ensuring form fit and function requirements were met. I worked closely with the lead electrical engineer to ensure the PCBA design aligned with the mechanical portion of the design. I worked with our overmolding vendor to ensure my design was manufacturable from a mold tooling perspective. I provided feedback during the prototype process and ultimately produced quality parts.

ETHAN SLATER (21-140-48)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/24/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years

Total Engineering Experience
4 years

Experience under licensed engineer
4 years

Disciplinary Action
None reported

EDUCATION

Bachelors in Mechanical Engineering (EAC)
University of Nevada, Reno
August 2017–May 2021

EXAMS

Fundamentals of Engineering (FE)
Nevada
January 2021

Principles and Practice of Engineering (PE)
Mechanical
Nevada
February 2023

LICENSES

Additional Licenses
None

ETHAN SLATER (21-140-48)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Southwest Gas
Nevada (United States)
Distribution Engineer
September 2021—September 2025

Verified by
Joel Martell
joel.martell@swgas.com

Experience Summary
Full-Time
Engineering: 4 years
Post EAC degree: 4 years
Experience under licensed engineer: 4 years

TASKS

Engineer I: September 13, 2021 - September 4, 2023
I designed new gas infrastructure projects, using polyethylene (PE) pipe, to provide service to new customers within the Southwest Gas (SWG) Southern Nevada (SNV) service territory. I designed and coordinated the installation of high-pressure steel gas infrastructure projects and regulator stations to reinforce SWG distribution systems and provide gas feed to new master plan communities. I designed meter set assemblies for new customers receiving standard and elevated delivery pressure using rotary and ultrasonic meters. I performed annual relief valve capacity calculations for all relief valves in SWG SNV service territory.

Engineer II: September 4, 2023 - June 9, 2025
I designed high-pressure steel gas facilities for tap sites and gas purchase points. I supported emergency repair operations by using nodal analysis software to provide field personnel with flow data. I wrote degas and gas-up procedures for high-pressure gas pipelines utilizing Zevac equipment to minimize the amount of greenhouse gas released into the atmosphere. I redesigned the SWG SNV high-pressure steel valve details to make them more detailed and accurate. I designed and coordinated the installation and replacement of high-pressure steel gas pipelines.

Distribution Engineer: June 9, 2025 – Present
I am currently responsible for designing and coordinating the installation of new and replacement supplier tap sites and pressure limiting facilities, high-pressure distribution and transmission gas pipelines, and rupture mitigation valves. I lead a team of engineers and engineering technicians who design small and large meter set assemblies. I lead a compliance initiative to install overpressure protection on all customers in the SWG SNV service territory. I am currently planning and coordinating work for an in-line inspection (ILI) of approximately 24 miles of 24” steel pipeline that will take place in 2026.

REPRESENTATIVE PROJECTS

New Business Plastic Design
I designed 15 plastic distribution pipeline projects, varying from residential subdivisions to large services for commercial properties.
High Pressure Infrastructure (Summerlin West Master Plan Community)
I designed and coordinated the installation of multiple phases of the Summerlin West master plan community infrastructure project. This project installed approximately 5,000 feet of 8” high-pressure steel, 5,400 feet of 4” PE main, and a regulator station. I wrote the degas and gas-up procedures for this project to utilize Zevac equipment to minimize greenhouse gas emissions. I also advised field personnel on pipeline testing requirements.

Independence High Pressure Relocation
I designed and coordinated the replacement of approximately 700 feet of existing 12” high-pressure steel gas line with new 16” high-pressure steel to resolve conflicts with future sewer and storm drains that are part of a new community development (Independence). I coordinated with private and public entities to obtain the proper permits and schedule work correctly while multiple other construction projects were ongoing within SWG’s work area. I also coordinated the removal and disposal of asbestos-coated pipe per EPA and SWG environmental standards. I wrote the degas and gas-up procedures for this project to utilize Zevac equipment to minimize greenhouse gas emissions. I also advised field personnel on pipeline testing requirements amid multiple field changes.

Bullhead City Temporary LNG
I designed and coordinated the installation of a temporary liquid natural gas (LNG) supply point and a temporary regulator station to maintain feed to SWG’s customers in Bullhead City (BHC), Arizona while our only supplier in the area took their pipeline out of service to conduct a hydrotest. I coordinated with SWG System Planning to determine the maximum required load for the outage

timeframe. I coordinated with the LNG provider to ensure that the units they provided were sized appropriately. I designed the meter skid for the LNG injection point to allow for SWG to verify the amount of gas being delivered and to ensure that SWG complies with all regulations regarding overpressure protection. This design included engineering calculations to properly size a full-capacity relief valve. I coordinated the installation of a temporary regulator station to inject gas from our SGTC interstate transmission pipeline into our distribution system. This required coordination with our interstate pipeline group to ensure that all the gas was correctly accounted for. I created contingency plans to maintain service to our customers in BHC if the outage had extended past the planned dates into the heating season.

Lamb Tap
I am currently designing and coordinating the installation of a new supplier tap facility (Lamb Tap) and approximately 3.5 miles of 24” steel approach main to reinforce our existing system and supply additional feed to the area, allowing new customers to come online. For the tap facility, I have sized and coordinated the requisition of gas filters, odorizers, control valves, ILI Pig launchers, remote actuated valves, and a meter. I have also coordinated with multiple entities, including the Bureau of Land Management, the City of North Las Vegas, and the Union Pacific Railroad to obtain permits and land grants required for the installation of the tap-site and pipeline. While planning for this project, I conducted several cost analyses to determine the most efficient design options. I continue to coordinate with internal and external stakeholders to ensure the design for the site and pipeline is optimized for operation, maintenance, and future expansion, and that the project remains on track for its 2026 deadline.

Land Surveyor

JOHN HENDERSON (19-718-62)

All work experience reviewed by two licensed professionals

DISCIPLINE: LAND SURVEYING

GENERAL

Applying To
Nevada

Application Type
Initial - PS

Application Date
09/06/2025

Citizenship
United States

SUMMARY

Total Surveying Experience
12 years, 10 months

Experience under licensed surveyor
7 years, 7 months

Disciplinary Action
None reported

FS EXAM

PS EXAM

4+

EDUCATION

Bachelors in Spatial Information Systems
University of Arkansas, Monticello
September 2008–December 2010

EXAMS

Fundamentals of Surveying (FS)
Arkansas
April 2010

Principles and Practice of Surveying (PS)
Nevada
July 2025

LICENSES

Additional Licenses
None

JOHN HENDERSON (19-718-62)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Tyler Group
Arkansas (United States)
Chainman
January 2011—August 2012

Verified by
John Henderson (Self)

Experience Summary
Full-Time
Surveying: (0%)
Experience under licensed surveyor: None

TASKS

My daily tasks as a Chainman at Tyler Group began at the office where I was responsible for loading the equipment in my chief's truck as well as stock lathe, hubs, nails, paint, and any other items needed to complete the days assignment. In the field I would set up gear such as total stations, backsights and RTK base units with external radios. On construction sites I would drive hubs and write/flag lathe or nail and paint as directed by my chief. I would hold the tape with a plub bob over the hubs I drove to check distances staked radially and checked building corner squarness with the pythagorean theorem or inversing distances and solving a triangle with two sides and a theoretically 90°corner. I learned hand signals and how to stake a distance on line as well as double offset methods. During boundary searches I was responsible for recovering monuments with a magnetic detector in the vicinity indicated by my chief, flagging and driving a lathe as well as gathering witness objects with compass and pocket tape (where needed) in order to perpetuate monument location. On topo projects I set up and used RTK GPS and total station to tie utilities and other less important features to practice field to finish coding, sketch areas, and photo sites.

As a Drafter in the office at Tyler Group I plotted deeds and plats I researched at the county courthouse and plats from the personal records of my employer as well as utility, city, county, and ADOT right of way plans. Other duties included drawing plats and writing legal descriptions from field surveys performed by my chief and I or others.

REPRESENTATIVE PROJECTS

During the Conway High School renovation begining in early 2012 through the rest of my tenure at Tyler group. I used AutoCAD and provided drawings with elevation and some station offsets to calculate data points, scale and dimension staking plots, and help with data management in the office. In the field I setup gear, helped recover provided control and benchmarks, drove hubs, wrote lathe, and painted stake out points or TBMs as instructed. I would hold the end of the tape and plumb bob and assist/double check field calculations for staked hubs or line points.

I worked on a design survey for the City of Conway Arkansas Salem Street right of way project and installation of traffic circles in begining in 2011. I plotted right of way plans with individual plats of record in AutoCAD to begin the search for corner monuments, centeline monuments, and right of way monuments. Those monuments were searched and tied with total stations from control provided on the plans and NGS benchmarks. I set up backsights at these monuments and control points during the travese between and tying existing control. I paced distances between turn points and setups while running the rod with a hand bubble for level loops between said control. I assisted in adjustments of the loop and checked the book for rounding errors with a calculator. After right of way searches the focus shifted to topographic mapping. I used RTK GPS and total station to map features while learning about field to finish coding in a parking lot and along the right of way during the same project.

JOHN HENDERSON (19-718-62)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Guida Surveying
California (United States)
Party Chief
September 2012—April 2020

Verified by
Ralph William Guida IV
rguidaiv@guidainc.com

Experience Summary
Full-Time
Surveying: 7 years, 7 months
Experience under licensed surveyor: 7 years, 7 months

TASKS

I worked as a survey party chief doing pipeline and tunnel construction, ALTA/NSPS surveys, and geodetic control networks. I also got my FAA part 107 certificate and became a Remote Pilote using drones for some projects and experiments.

REPRESENTATIVE PROJECTS

I was the lead surveyor on multiple large scale PG&E pipeline replacement and hydrotesting projects contracted though Guida specifically projects in San Mateo, California in late 2012, and Montery, California along Hwy 68 from September 2014 - April 2015. These projects required control, CL staking, certification of materials placed at specified depths, meticulous measurements and record keeping, and as built red lines. On these projects I worked with contractors to provide the markings for centerline and station offsets needed, staked bore locations, and turned angles to assist welders in pipe elbow angle determination. I learned about Network RTK and Virtual Reference Station baselines while conducting the as built process. When I joined the company in 2012 I got to do these redlines by hand in the field and eventually moved to CAD with drafters.

As a remote pilot I flew sites for aerial photos and mapping. We compared topographic mapping done with ortho photos vs lidar using total station field verification according to FGDC standards on a replacement in Sacramento, California in 2017.

In 2018 I was assigned to a micro-tunnel project under Dry Creek in Sanoma County, California where I learned about setting up in a vertical shaft. I learned to tape down with a steel tape for my elevation and use a 90° eyepiece on my total station to buck in on a line, that I traversed on to the wailers at the top of the shaft.

During ALTA/ACSM (at the time, currently ALTA/NSPS) surveys, such as the one in Fremont, California in 2018, I lead crews in the field collecting static GPS observations and aerial target marking. I then traversed around the parcels while searching for boundary monuments including known right of way and centerline monuments affecting the property. After the traverse and adjustment was completed around the parcel I would map the topography or at least capture improvements on and within 5 feet of the boundary necessary to fulfill the requirements laid out and additional items requested by clients from table A.

In 2019 to spring 2020 I mapped Caltrain right of way in Burlingame, CA with a high accuracy traverse network and fixed it to state plane coordinates with static GPS. This took lots of training and planning with the railroad, keeping everyone up to date of our locations and coordinating with train passings and utility locators.

JOHN HENDERSON (19-718-62)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Mapca Surveys
Nevada (United States)
Party Chief
April 2020—July 2025

Verified by
Mickey Hatt
Hatt@mapcasurveys.com

Experience Summary
Full-Time
Surveying: 5 years, 3 months
Experience under licensed surveyor: None

TASKS

I have worked as a party chief performing boundary, heavy and light construction, ALTA/NSPS and general topographic surveys. I have also been a Remote Pilot for my duration at mapca, licensed by the FAA.

REPRESENTATIVE PROJECTS

I have integrated the drone into almost all our projects, this requires an additional amount of preplanning including flight waivers and ATC clearance. In spring of 2025 I mapped an 80 acre parcel set for a subdivision development in Minden, Nevada. Then I field verified the topography with total station from control set horizontally with RTK GPS and vertically with differential levels. Topographic mapping of hardscape civil features was collected via total station from established control.

Boundary projects including I-80 right of way survey through Sparks, NV in 2024 and Dodge Ridge Solar Farm in Wadsworth, NV in 2021. I searched for records of survey through the county and GLO plats through NV BLM websites. I used a combination of RTK and total station to establish control, tie monuments, locate improvements and possible encroachments.

On the heavy construction side during my tenure with Mapca I have surveyed apron and runway replacement projects at Reno Tahoe International Airport using high accuracy horizontal control established with traverses or RTK GPS and elevations established with differential levels of first order from the same record control monuments on the airport property. These projects required tying, staking, and checking segments from different control on 12.5ft grids for 0.01'ft slope tolerance construction.

I was the primary surveyor on a high rise steel building for the College of Business at UNR in Reno, NV. This project began in late 2022 and is slated for completion this month July 2025. On the project, grid lines and temporary bench marks were set on the ground and every level. Civil and utility construction stakes set as needed. These grids and TBMs were required to be within two hundreds of a foot consistently, basement to top floor. These measurements as well as the typical certifications for bolts were verified on site by an independent firm (Mark Thomas of Northern California).

Another project highlight was a multi year 30kv transmission line upgrade over 23 miles at a confidential location in Nye County, Nevada. This client required working in the UTM coordinate and metric systems. I led a team to established a control network with static GPS and spread local site control conventionally for road crossing and potential right of way planning topography. Construction staking was then done by RTK GPS from our established control because no elevations were needed for the building of the utility support structures.

I learned to use the Washoe county GIS for finding and recording of horizontal control and elevated bench marks. Some projects including ALTA/NSPS surveys for example Bank of America in Incline Village, Nevada in 2023. In the field I used static GPS observations and aerial targets as my horizontal control. I then traversed through the targets around the parcel while searching for boundary monuments including known right of way and centerline monuments affecting the property. One of these right of way monuments was also a vertical benchmark, I included it in my travese and held that elevation and adjusted my control based on the trigonometry of the adjusted traverse. After the traverse I mapped the topography and captured improvements on and within 5 feet of the boundary necessary to fulfill the requirements laid out and additional items requested by clients from table A. This included all sewer and drain manholes on and adjacent to the property as to establish flow onto and off said property. Safety is a big concern when working on the utilities and centerline monuments especially on a highways. I researched, planned, and installed proper signage and cones in my work area according to NDOT standards as well as had multiple trucks with proper lighting and my chairman with a "Stop/Slow" sign.

Sugar Pine Village is a planned multi unit development project in South Lake Tahoe, California with phase 1A completed in 2024 and 2A currently under construction. On this project I recovered provided control from the construction plans, field verified the horizontal and vertical on the same plans and found them to be within tolerance. A boundary and secondary control survey were

then performed to protect the intergrity of the corner monuments and horizontal control (project benchmark offsite).

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
May 2004	August 2008	I got my general education credits at UCA in my hometown of Conway, Arkansas.

ELIZABETH MASON (19-467-41)

All work experience reviewed by two licensed professionals

DISCIPLINE: LAND SURVEYING

GENERAL

Date of Birth
05/22/1997

Applying To
Nevada

Application Type
Initial - PS

Application Date
10/01/2025

Citizenship
United States

SUMMARY

Total Surveying Experience
5 years

Experience under licensed surveyor
5 years

Disciplinary Action
None reported

FS EXAM

PS EXAM

4+

EDUCATION

Bachelors in Mathematics
University of Nevada, Reno
August 2015–December 2021

Non-degree
Great Basin College
January 2022–May 2025

EXAMS

Fundamentals of Surveying (FS)
Nevada
January 2019

Principles and Practice of Surveying (PS)
Nevada
September 2025

REFERENCES

Kass Nicholas Kozloski P.S.
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David Eric Wilson P.S.
dwilson@pioneer-technical.com | (406) 570-4242

Landyn Allen Manfull P.S.
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Mark Aughtman P.S.
mark.aughtman@usda.gov | (701) 227-7835

John R Meyer P.S.
rmeyer@meyersurvey.com | (775) 786-1166

LICENSES

Additional Licenses
None

ELIZABETH MASON (19-467-41)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Meyer Surveying
Nevada (United States)
Survey Technician
May 2016—October 2018

Verified by
John Randolph Meyer
rmeyer@meyersurvey.com

Experience Summary
Part-Time
Surveying: 8 months (25%)
Experience under licensed surveyor: 8 months

TASKS

Working directly with the licensed surveyor, the survey technician would:
Perform precise and accurate field surveys utilizing Trimble automated data collectors, GPS and automated total stations. Compile survey and engineering maps, plats, and exhibits using CAD or GIS software. Research and collect county, state, and federal records and GIS datasets. Interpret and analyze collected deeds, maps, plats, and engineering plans to determine existing land boundary rights. Collaborate and coordinate with multi-disciplinary teams of professionals including planners, engineers, architects, and attorneys. Coordinate the permitting and plan approval process with various agencies and utility companies. Communicate and build relationships with diverse groups of stakeholders including owners, state and federal agencies, municipalities, DOT's, and utility companies.

REPRESENTATIVE PROJECTS

Ely Topographic Survey (Ely, NV 2016) - served as technician on a topo survey for the EPA where slag removal quantities were required for remediation; collected data points for use by engineers with survey grade GPS equipment; performed a least squares adjustment using surveying software to reduce elevation error with oversight from PLS

Liberty Utilities Monument search (Lake Tahoe Basin, 2017) - performed field searches for monuments in the Lake Tahoe Basin across five counties using a total station; calculated search coordinates based on record and found data; drafted drawings after collecting field data for utility pole upgrades, removals, and installations

ELIZABETH MASON (19-467-41)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

National Forest Service
California (United States)
Survey Technician
January 2021—January 2022

Verified by
Kass Nicholas Kozloski
kass.kozloski@usda.gov

Experience Summary
Full-Time
Surveying: 1 year
Experience under licensed surveyor: 1 year

TASKS

The Central Zone survey technician assists the Central Zone surveyor across six national forests within the Sierra Nevada Mountain Range. Their duties include: assisting in survey operations, clearing line of sight, establishing traverse points, providing distance and angular measurement, and instrument operation. Researching access to project location. Serving as principal assistant, training and directing activities of other technicians or laborers in daily activities. Assisting in reduction of survey measurement data using computer software. Assisting with research of prior survey records.

REPRESENTATIVE PROJECTS

Truckee River Hirschdale Bridge access (Truckee, CA 2021) - conducted county and internal research for a parcel of land bordering National Forest System Lands along the Truckee River; performed field searches for monumented property corners; informed the District Ranger about state and federal law pertaining to public access of navigable waters; drafted preliminary Record of Survey
Pike City Boundary Maintenance (North San Juan, CA 2021) - performed field search for monumented corners; served as party chief to seasonal technicians clearing boundary lines in preparation for posting; posted boundary according to Region 5 specifications
Stanislaus NF Boundary Maintenance (Sonora, CA 2021) - performed field search for monumented corners; served as party chief to seasonal technicians clearing boundary lines in preparation for posting; posted boundary according to Region 5 specifications
Sequoia NF Boundary Maintenance (Kernville, CA 2021) - traveled to the South Zone to assist zone surveyors with boundary maintenance on the Sequoia NF; performed field search for monumented corners; posted boundary according to Region 5 specifications

WORK EXPERIENCE

National Forest Service
Montana (United States)
Land Surveyor
February 2022—February 2025

Verified by
Mark S Aughtman
mark.aughtman@usda.gov

Experience Summary
Full-Time
Surveying: 3 years
Experience under licensed surveyor: 3 years

TASKS

Requirements included:
Professional knowledge of established surveying concepts, principles and conventional land surveying methodology; a working knowledge of pertinent federal and state land laws; and comprehensive knowledge of applicable agency policy and standards to apply methods and techniques that are well established and apply to most situations encountered in order to perform assignments of moderate difficulty.
The supervisor assigns work in terms of general instructions regarding work to be accomplished, quality and quantity expected, limitations, and suggested approaches. The incumbent independently completes recurring assignments and refers situations requiring significant deviation to the supervisor. The incumbent must exercise initiative in searching for and gathering information, analyzing data, and conducting the necessary surveying work. The incumbent receives guidance from surveying manuals, agency directives, U.S. Manual of Surveying Instructions, and applicable land laws as well as legal decisions covering ownership disputes. The incumbent exercises judgment in selecting and adapting the appropriate methods and procedures to carry out the assignment, but refers all deviations and problems not covered by instructions to the supervisor. The incumbent compiles and analyzes ownership data and conducts field surveys of limited difficulty to establish property boundaries, rights-of-way, and geodetic control for mapping and road construction. The incumbent must independently carry out field assignments of routine difficulty involving minor boundary disputes and legal complexities. The scope of the work is the execution of limited project assignments required in the Forest's land line and corner search programs as well as routine property surveys involving little controversy. Work is performed in office and field settings. Field survey work frequently involves exposure to adverse weather conditions, extremes in temperature, and hazards associated with travel over steep, rocky terrain or heavily forested areas. There are moderate risks or discomforts associated with visiting field sites that require special precautions and the use of safety equipment.

REPRESENTATIVE PROJECTS

BD1146 Selway Creek (Polaris, MT 2023) - served as party chief for a section breakdown within the Beaverhead-Deerlodge National Forest (BDNF); performed records research within the FS and at the county courthouse (Beaverhead Co.) and notified adjacent property owners; searched for relevant PLSS corners, broke down the 1/4 section, and set 1/16th corners bordering private property; marked the corners with 4'x2" angle iron posts per Region 1 specifications; discovered encroachments and reported to the District Ranger; filed Corner Recordations at Beaverhead Co. Courthouse

BD1152 Spaeth's Corner (Philipsburg, MT 2022) - served as crew technician for a section breakdown within the BDNF; performed records research within the FS and at the county courthouse (Granite Co.) and notified adjacent property owners; searched for relevant PLSS corners; broke down Sections 1 and 6 along the intersection of the 2nd Standard Parallel North and the Flint Creek Guide Meridian using parenthetical methods; monumented 27 PLSS corners bordering and within private property; discovered encroachments and reported to the District Ranger; drafted and reviewed Certificate of Survey and Corner Recordations before filing at Granite Co. Courthouse; marked ~3.8mi of boundary with 4'x2" angle iron posts and cleared trees and shrubs within 3' either side of boundary line per Region 1 specifications

Romy Lake Tract C (Alder, MT 2024) - served as CAD drafter for a Small Tracts Act property transfer from the FS to a private party; wrote legal description and prepared Certificate of Survey according to county and Region 1 specifications; filed Certificate of Survey at Madison Co. courthouse;

BD1159 MS10708 (Cardwell, MT 2024) - served as party chief for a resurvey of a Mineral Survey within the BDNF; conducted field search for MS monuments and recorded data with survey grade GPS equipment; prepared corner recordations for submittal to Madison Co.

South Tobacco Roots contracts (Butte, MT 2024) - serve as contracting officer representative (COR) for boundary contracts in the

Tobacco Root Mountains; maintain a working report with contractors to exchange materials and deliverables; inspected field work according to Region 1 specifications

ELIZABETH MASON (19-467-41)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Pioneer Technical Services
Montana (United States)
Senior Staff Professional
March 2025—July 2025

Verified by
David Eric Wilson
dwilson@pioneer-technical.com

Experience Summary
Full-Time
Surveying: 4 months
Experience under licensed surveyor: 4 months

TASKS

Requirements include:
Professional knowledge of established surveying concepts, principles and conventional land surveying methodology. The supervisor assigns work in terms of general instructions regarding work to be accomplished, quality and quantity expected, limitations, and suggested approaches. The incumbent independently completes recurring assignments and refers situations requiring significant deviation to the supervisor. The incumbent must exercise initiative in searching for and gathering information, analyzing data, and conducting the necessary surveying work. The clients vary in size and scope and jobs can include establishing or maintaining property boundaries, rights-of-way, and geodetic control for use in mapping, construction, and mining reclamation projects. Work is performed in office and field settings. Field survey work frequently involves exposure to adverse weather conditions, extremes in temperature, and hazards associated with construction sites. Office work involves drafting using AutoCAD, utilizing advanced surveying software for analyzing data, and maintaining field equipment.

REPRESENTATIVE PROJECTS

Town Pump Rail Park (Butte, MT 2025) - served as technician on a design project; set construction stakes for building designs; checked into elevations as needed on foundational helical piers
Tractor Supply Butte (Butte, MT 2025) - measured elevations on structures for as-built drawings; reviewed Certificate of Survey for submittal
CDA Trust (Kellogg, ID 2025) - performed quantity surveys for mining reclamation sites in the Silver Valley of Idaho; established and maintained control points with GPS and total stations; drafted surfaces for use by engineering teams to calculate earthwork volume removal; recorded as-built data for use by engineering teams
ARCO Anaconda and ARCO Butte (Anaconda and Butte, MT 2025) - collected as-built data for use by engineering teams for earthwork and construction; drafted surfaces for use by engineering teams in construction design for mining reclamation; staked out surface and construction data for use by construction teams

5. Public Comment

6. Adjournment