

M.T. Hall & Associates, Inc.

609 Entler Avenue, Suite 4 Chico, CA 95928 530-893-2181-www.mthallassociates.com



M.T. Hall & Associates, Inc.

Materials Testing & Inspection Services

September 12, 2023

City of Orland – Sampling & Testing Service City of Orland – Department of Public Works 815 Fourth Street Orland, CA 95963

Subject: Proposal to provide Sampling And Material Testing Service for Orland Emergency Groundwater Resources Project

M.T. Hall & Associates is excited for the opportunity to provide our proposal for Sampling And Material Testing Services for the City of Orland. MTH Geotechnical & Materials Testing Division is certified by the California Department of Transportation (Caltrans), American Association State Highway and Transportation Officials (AASHTO), State Army Corp of Engineers (USACE), and Division of State Architect (DSA) to provide field and laboratory testing, construction quality assurance, construction quality control and special inspection of infrastructure, roadways and bridge improvement projects.

MTH operates with an impressive team of engineers and highly qualified technicians to service the sampling and material testing needs for this project. MTH intends to perform all testing requirements with our team of technicians and engineers and does not intend to utilize subcontractors. All staff is readily available at the time of the project inauguration. Additionally, our facilities are located in Chico, offering an effective geographic location for servicing the projects. With over 80 years of combined experience, our staff has a comprehensive array of professional certifications, as outlined in our proposal. We are committed to providing reliable services at an economical rate without any hidden or increased fees.

Our company is highly experienced in Capital and Federal-Aid Improvements Projects within the City of Orland and its surrounding Northern California areas. MTH on-call contracts for materials testing and geotechnical engineering have included, Butte Conty Public Works, City of Live Oak, City of Chico, Tehama County, City of Corning, and The City of Oroville. MTH has also performed work for additional agencies, including Glenn County, Yuba County, Town of Paradise, Sutter County, Trinity County and The City of Orland.

M.T. Hall & Associates is prepared to fulfill all aspects of the RFP for Sampling And Material Testing, as directed by the City of Orland or their designee during the contracted term. We will ensure all materials used in construction conform and are properly tested per the City of Orland Quality Assurance Program (QAP) manual and project specifications.

Phone: 530-893-2181



This proposal includes information about our firm's qualifications/experiences, capabilities, and staff arrangement. We have provided contact information for references and our cost proposal. The following M.T. Hall & Associates proposal is a firm offer to enter a binding contract with the City of Orland in accordance with the provisions of Project.

Tom Hall will serve as the point of contact for work related to this contract. Mr. Hall is a Professional Engineer and President of M.T. Hall & Associates, with over 35 years in the industry. Should you have any questions or require additional information, please do not hesitate to contact Mr. Hall via the following contact information:

Tom Hall, PE- President 609 Entler Avenue, Suite #4 Chico, CA 95928

Cell - Phone: (530) 520-3360 Office – (530) 893-2181 Fax: (530) 893-4647

Email: tom@mthallassociates.com

Federal Tax ID Number: 46-2725027 DIR Public Works Number: 1000025222

Sincerely,

M.T. Hall & Associates, Inc.

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Tom Hall, P.E. - President



Executive Summary

Company Background

M.T. Hall & Associates, Inc. (MTH) provides over 80 years of experience in geotechnical engineering, construction quality assurance, and contractor quality control for public and private projects. MTH has performed a broad range of services for a variety of clients, including cities, counties, towns, school districts, contractors, engineers, and developers. MTH has performed pavement section designs, full depth reclamation designs for lime and cement, provided private development and municipal agencies with complete geotechnical reports for residential structures including bridges and roadways. Mr. Hall has extensive experience in design and has managed a stabilization company for eight (8) years. Our team's ten experienced and dedicated members understand what is needed to provide the county material testing.

MTH has provided our services for hundreds of projects requiring testing and observation of trench backfill, earthwork, concrete placement, and asphalt testing. These projects include a 4-mile new road segment with a bridge in Trinity County, the Eaton Road Roundabout project in Chico and the repaving of Skyway completed by Butte County in 2022. The projects required trench backfill for multiple City of Chico Nitrate projects, earthwork testing for subgrade, embankment, trench backfill, structural fill, finish aggregate base, paving, and concrete testing for bridges, including plant inspections. MTH has extensive experience in submittal review for aggregates, concrete, and hot mix asphalt. MTH laboratory performed over 3,400 tests in the last two years including over 300,000 tons of asphalt. MTH is certified and meets the staffing requirements to provide the county testing for soils, aggregate, concrete and asphalt.

The MTH laboratory and office is in Chico, California, only 30 miles from the City of Orland Public Works Office. As a local Northern California business, MTH is dedicated to maintaining our presence and reputation as a quality firm in the region. While we cover a wide range of territory, we are most passionate about serving the communities close to home.

Phone: 530-893-2181



Qualifications

MTH is recognized by the American Association of State Highway (AASHTO), California Division of State Architects (DSA), United States Army Corps of Engineers (USACE), and California Department of Transportation (Caltrans). Our firm also meets the qualifications and requirements stated in the Caltrans Local Assistance Procedure Manual (LAPM), and we are familiar with the city's quality assurance program. Under the direction of our Professional Engineer, Mr. Tom Hall, P.E., Ross Khiabani, P.E., G.E., and Quality Control Manager, Mr. Michael Wright, our materials testers and geotechnical laboratory are capable of providing a full range of geotechnical engineering and materials testing services.

MTH has licensed, certified, and experienced personnel with over eighty years of combined experience to provide the City of Orland with a proven approach to materials testing and inspection duties on this project. Above all, we are committed to maintaining reliable working relationships with all our clients by providing direct communication and flexible scheduling that ensures quality work on time and within budget.

Relevant Project Experience

City of Chico On-Call Testing Contract

MTH worked on nine capital improvement projects, including Nitrate 3N Phase 5 Unit 1, 3S Phase 6 Hampshire Unit 5 & 6, Esplanade Road Rehabilitation, Comanche Creek Greenway Phase 2, Northwood Commons, S.R. 99 Bike Path, Park Ave. Rehabilitation, Eaton Roundabout

Since many of these projects were in construction simultaneously, MTH often utilized one technician to cover multiple jobs, which reduced standby time at the projects. MTH provided field and laboratory testing, including trench backfill, subgrade, embankment, structural fill, aggregate base, hot mix asphalt, concrete, and slurry seal.

Key MTH personnel included: Tom Hall, Richard Kuntz, Andrew Hall, and Michael Wright and Xavier Blugh

Estimated Project Budget= \$445,172 | Actual Cost= \$299,767



City of Chico On-Call Testing Contract Comanche Creek Pedestrian Bridge Foundation Design Recommendation, Completed Winter of 2016, Project No. 50282

MTH completed geotechnical services for the City of Chico for the Bicycle/Pedestrian Bridge across Comanche Creek. The Scope of Work included geotechnical investigation, geotechnical report with design parameters, and the design of abutments for an 80-foot long by 12-foot-wide pedestrian bridge.

MTH also performed lab and field testing of construction materials for structural fill, aggregate base, concrete, and HMA sampling and testing. This project was completed on time and under budget.

Key MTH personnel included: Tom Hall, Richard Kuntz, Andrew Hall, and Michael Wright

Estimated Project Testing Budget= \$34,500 | Actual Cost= \$32,950

Lance Gulch Road Connection of SR 299 and S.R. 3, Phase 1 & 2, Completed Winter of 2015, Project No. 14-Road-01 and 14-Road-02

MTH provided quality assurance testing and inspection for Trinity County (City of Weaverville, CA) as part of the Vali Cooper and Associates team. The project consisted of more than four miles of new road construction, construction of a new bridge 44' wide by 200' span, and a 10' X 10' X 50' reinforced cast-in-place box curvet. Work included nuclear density testing for soils and aggregates, concrete placement, native, import, and HMA sampling and testing. This project was completed on time and under budget.

Key MTH personnel included: Tom Hall, Richard Kuntz, Andrew Hall, and Michael Wright

Estimated Project Testing Budget= \$163,765 | Actual Cost= \$137,933.61

Butte County Ophir Road FDR-Cement Rehabilitation, Project No. 21461-2019-03

MTH work included the development of FDR-C mix design and lab and field testing of HMA. In addition, we performed quality assurance testing and inspection per Caltrans Standard Specifications and Butte County plans and specifications. The project was completed on time.

Key MTH personnel included: Tom Hall, Andrew Hall, and Phillip Grey

Estimated Project Testing Budget= Time + Materials | Actual Cost= \$32,950



Butte County Oro-Quincy Hwy Slide Repair, Project No. 553-5317-11

MTH performed the laboratory testing and field compaction testing of soils and HMA. In addition, we performed quality assurance testing and inspection per Caltrans Standard Specifications and Butte County Plans and Specifications. The project was completed on time.

Key MTH personnel included: Tom Hall, Cuauhtemoc Guitierrez

Estimated Project Testing Budget= Time + Materials | Actual Cost= \$34,730

Butte County Skyway Overlay

This overlay consisted of more than 70,000 tons of HMA ang 15,000 tons of HMA Open Grade. MTH performed field compaction testing, sampling and laboratory testing every 750 tons. Testing included oil content, Max. Theo. Density, and RAP gradations on 124 samples. HMA quality assurance testing and inspection were performed per the 2018 Caltrans Standard Specifications. This project was completed on time and within budget.

Key MTH personnel included: Tom Hall, Andrew Hall, Xavier Blugh

Estimated Project Testing Budget= Time + Material | Actual Cost= \$61,336

Caltrans & Public Works Paving Projects 2021 & 2022 Various Project Numbers

MTH performed field density testing on more than 300,000 tons of asphalt for various contractors and agencies. Our technicians spent over 250 days in the field performing sampling, density testing, and coring. Though much of this work was for the contractor as quality control, the experience our technicians gained was invaluable in providing agencies such as the Butte County with highly competent field technicians. The projects were completed on time.

Key MTH personnel included: Tom Hall, Andrew Hall, Michael Wright, Don Thompson and Taner Gilbert

Estimated Project Testing Budget= \$1,01,840 | Actual Cost= \$813,152



2021-2022 MTH Laboratory Testing

MTH's certified laboratory has demonstrated proficiency in testing construction materials by participating in Caltrans and AASHTO reference sample programs. Below I have summarized the amount of testing completed in the last two (2) years, not including these reference programs.

CT 202- Sieve Analysis	680
CT 216- Relative Compaction of Soil	
CT 301- R-values	136
AASHTO 209- Max. Specific Gravity	238
AASHTO- Asphalt Content	408
CT 521- Compressive Strength of Cylinders	

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Scope of Service

MTH Professional Engineer Tom Hall oversees all the listed services and testing to ensure material testing meets standards set by the approved project plans. M.T. Hall & Associates understands that the scope of this contract would include, but is not limited to, the following services:

- Soil Testing
- Aggregate Testing
- Concrete Testing
- Hot Mix Asphat Testing

MTH lab and field personnel are certified by Caltrans to perform the tests specified by the RFP.

Field Capabilities

MTH can provide certified technicians for any material testing or inspection duties, including but not limited to the following:

- ICC Special Inspection in Soils, Reinforced Concrete, Structural Masonry, Structural Steel, Structural Welding, Post Tensioning and Fireproofing
- Caltrans Quality Assurance or Quality Control Testing
- Department of State Architecture (DSA) Inspections and Testing
- Asphalt Plant Quality Control Monitoring and JMF Verification
- Concrete Batch Plant Inspections and JMF Verification
- ACI Concrete Sampling and Testing
- Coring and Drilling

Lab Capabilities

MTH provides a full-service laboratory that offers the following services in ASTM, AASHTO, or Caltrans Test Methods:

Geotechnical Engineering

- Soils investigation, design, and reporting
- Pavement investigations and design



Soils/Aggregates

- Moisture Density Curve
- Plastic Index
- Sand Equivalent
- Unit Weight
- Hydrometer Analysis
- Sieve Analysis
- Absorption (Fine/Coarse)
- Cleanliness of Coarse Aggregate
- Fine Aggregate Angularly
- #200 wash

- Moisture Content
- Durability Index
- Fractured Face
- Specific Gravity (Fine/Coarse)
- Organic Impurities
- R-values
- Percentage of Crushed Particles
- Flat and Elongated Particles

Concrete

- Compressive Strength of Concrete, Grout, and Mortar
- Concrete Mix Design

Asphalt

- Asphalt Moisture Content
- Bituminous Content (Ignition)
- Aggregate/RAP Gradation
- Bulk Specific Gravity of HMA and Field Cores
- Stability
- Theoretical Maximum Specific Gravity (RICE)
- Air Voids
- HMA Mix Density

^{*}Please note that the MTH lab equipment is calibrated per AASHTO, Caltrans, and ASTM standards annually. Our calibrations are performed in-house or outsourced to Advanced Calibration and Pacific Nuclear Technologies. MTH will provide our calibration records and inspection evaluations upon request.



Statement of Commitment

MTH will maintain lab certification, technician certifications and will perform sampling and field testing services as requested by The City of Orland for soils, aggregates, hot mix asphalt and concrete for the duration of the contract.



MTH Staff

Staffing Plan

MTH is proud to provide consistent and reliable certified technicians to our clients. Of the 10 members of our staff that will be assigned to County of Butte projects, eight have been with MTH more than 5 years, and our two newest technicians, Don Thompson and Taner Gilbert joined us in (2022).

Tom Hall, Professional Engineer

Tom has over 35 years of civil engineering experience in civil site design, construction management, soil stabilization, construction inspection, and materials testing. As our Construction Service Engineer, Tom will be the primary contact for any project. He will allocate adequate resources to complete the project within the desired time frame and provide oversight and quality control. Tom will ensure the project tasks are completed competently and efficiently. Caltrans Certified Technician

Ross Khiabani, Professional Engineer, Geotechnical Engineer

Ross brings over 40 years of experience performing geotechnical engineering design and construction services. He graduated with an M.S. in Geotechnical Engineering from CSU Long Beach and has provided geotechnical investigation and analysis on a wide range of projects across California. His experience will provide valuable insight into any geotechnical scenario. Ross will deliver a sound design and innovated cost-effective solutions to upcoming projects.

Richard Kuntz, Assistant Laboratory Manager

Rick has nearly 15 years of knowledge in earthwork and concrete testing procedures. For several years, he managed the laboratory for the U.S. Bureau of Reclamations Mid-Pacific Construction Office until retiring in March 2013. He has experience coordinating multiple projects for materials testing purposes, technical review of submittals, in-house training, and performing various lab test methods in ASTM and AASHTO.

Jaseal Ruiz, Laboratory and Field Technician

Jaseal has over 3 years of experience performing testing, inspection, and project management. He has overseen numerous Caltrans, Federal, and privately developed projects building a vast knowledge in Caltrans, AASHTO, and ASTM test methods for use in the field and laboratory. Andrew has experience in several administrative duties, including job proposal estimating, lab billing, project coordination, and final reporting. He has acquired and sustains laboratory accreditations in AMRL, Caltrans, and the Division of State Architects.

Caltrans & AASHTO Certified Technician



Don Thompson, Laboratory/ Field Technician

Don has over ten years of construction inspection and materials testing experience and has overseen Caltrans, Federal, and private development projects. He has developed considerable knowledge in Caltrans, AASHTO, and ASTM test methods for use in the laboratory and field. He has acquired and sustained field and laboratory certifications from Caltrans and ACI. Caltrans Certified Technician

Michael Wright, Laboratory/ Field Technician

Michael has over ten years of construction and construction safety experience and is starting his ninth year performing inspection and material testing. He has been on numerous Caltrans, Federal, and private development projects and has in-depth knowledge in Caltrans, AASHTO, and ASTM test methods for use in the field and lab. He has acquired and sustained field and laboratory certifications from Caltrans and ACI.

Caltrans Certified Technician

Taner Gilbert, Field Technician

Taner has spent one year in the field, gaining valuable experience in testing and inspection of material. Prior to joining MTH he worked as a construction inspector for the Town of Paradise. He has worked on multiple Caltrans, Federal and private development projects and has acquired and maintained Caltrans certifications for soil and HMA field testing and some lab testing. Caltrans Certified Technician

Xavier Blugh, Laboratory/ Field Technician

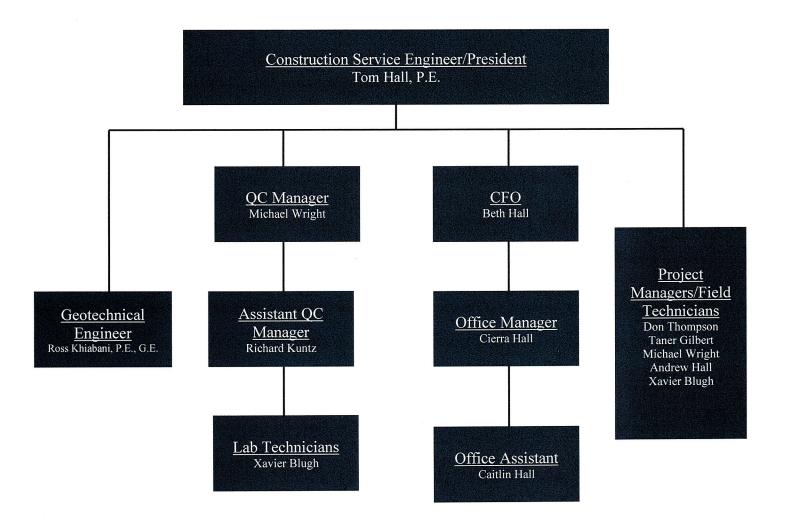
Xavier has been MTH senior laboratory technician for over 5 years. He has experience coordinating multiple projects for materials testing purposes and performing various lab test methods in ASTM and AASHTO.

Caltrans & AASHTO Certified Technician

Our team of engineers and technicians have significant experience working with public agencies and the County of Butte. We stay involved in the industry and can help guide agencies through testing changes and requirements as they arise. Our company and staff know the commitment and reliability the County of Butte requires. If given the opportunity, our team will work diligently to exceed these expectations and continue our strong working relationship with the County of Butte.



M.T. Hall Organizational Chart



Resumes



Tom Hall, P.E.

Current Position: Construction Services Engineer

tom@mthallassociates.com Cell: (530) 520-3360

RECENT QUALITY ASSURANCE PROJECTS MANAGED

- Neal Road Landfill Access Road Rehab Butte Co.
- Sterns & DeMille Road Rehab Town of Paradise
- Pearson Road Rehab Town of Paradise
- Wildwood Park Subdivision City of Chico
- Hooker Oak Subdivision City of Chico
- Oak Valley Subdivision and Infrastructure, Chico, CA
- Schill Subdivision City of Chico
- Bruce & Humboldt Road Improvements City of Chico
- Lance Gulch Road Trinity County, (Weaverville, CA)
- Hwy 32 Widening Project Phase I City of Chico
- Enloe Storm Drain Improvements City of Chico
- Hamilton City Sewer Improvements Glenn Co.
- Nitrate Unit 2S Replacement City of Chico
- Culvert 44 Replacement Glenn County (Ord Bend, CA)
- Oakdale Heights SRTS Butte Co. (Oroville, CA)
- Ord Bend Boat Launch Improvements Glenn County
- Foothill Bridge Improvements Butte Co. (Oroville, CA)
- California St. / Sutter Ave. Bike Lane Sutter Co.
- Hegan Lane Rehabilitation Butte Co. (Durham, CA)
- Garner Lane Rehabilitation Butte Co. (Chico, CA)
- Ord Ferry Rd. Bridge Approaches Butte Co.
- Skyway Road Rehabilitation Butte Co. (Magalia, CA)
- Cal Water Mainline Trench Backfill Chico, CA
- Forest Highway 171, Phases 2 3 Butte County
- 2012/2013 Chip Seal Projects Sutter, CA

RECENT QUALITY CONTROL PROJECTS MANAGED

- Aztec Road Extension Chico, CA
- Dorsey Drive Interchange Grass Valley, CA
- Smartsville-Hammonton Road Widening Yuba County
- Butte House/Pease Road Rehab Yuba City, CA
- Powerline Road Bike/PED Improvements Yuba County
- Loma Rica Road Safety Improvements Yuba County

RECENT SPECIAL INSPECTION PROJECTS MANAGED

- Eaton Village Apartments II Chico, CA
- Creekside Landing Subdivision Chico, CA
- DWR Maintenance Garage Oroville, CA
- Currier Square Improvements Oroville, CA
- AutoZone #4095 Corning, CA
- AutoZone #4093 Gridley, CA
- Buffalo Wild Wings Chico, CA
- Noodles & Co. Chico, CA

EDUCATION

B.S. in Civil Engineering University of Nevada, Reno, 1991

PROFESSIONAL DATA

Registered Civil Engineer California — 57311

Caltrans Test Methods (See attachments)

APNGA Nuclear Gauge Safety
Certification

EMPLOYMENT HISTORY

M.T. Hall & Associates
Owner/ Construction Service
Engineer
2013-Present

Lumos & Associates, Inc. Location Principal / Construction Services Engineer 2011-2013

TECC

Owner, 2001-2011

PSR Contractors
District Manager, 1998-2001

Chemical Lime Company
Account Representative, 19951998

Lumos & Associates, Inc. Engineering in Training, 1991-1995

Lumos & Associates, Inc. Lab Technician, 1989-1991

<u>Hall's Excavating</u> Labor/Equipment Operator 1981-1989



Cuauhtemoc Gutierrez Field Supervisor/Special Inspector testinginspections@gmail.com Cell: (530) 990-3435

Cuahtemoc Gutierrez has over 20 years experience in the geotechnical and construction inspection industry. He is highly qualified in the testing of earthwork mass grading activities, roadway construction, and underground utility installation. He has performed countless special inspections on reinforced concrete, concrete placement, wood shear walls, structural masonry, and high-strength bolting. He has also performed several UT level I welding inspection on rebar, pipelines, roofing, sheet metal, and structural steel.

Relevant Project Experience

Valley High School - Elk Grove Unified School District

Performed nuclear density testing of all earthwork operations including grading and trench backfill. Performed special inspections on concrete and masonry construction.

Butte Vista School - Yuba City Unified School District

Performed observation and testing of earthwork grading. Provided special inspection for structural concrete, structural masonry, and structural load testing.

California State University of Bakersfield – Bakersfield, CAPerformed special inspections on structural masonry construction.

City of Chico – Esplanade Road Rehabilitation, SR99 Bike Path & Nitrate 3N Ph5 Unit 2 Chico, CA

Performed material sampling and density testing for soils, aggreates, HMA and concrete.

EDUCATION

Butte College – Building Inspection and Civil Engineering Oroville, CA

CSU Chico - Civil Engineering Chico, CA

CERTIFICATIONS

ICC Cert #5054440 Exp. 1/2022
Building Inspector
CRB & CCB Inspector
DSA Masonry Inspector
Master of Special Inspection
MSI Includes Structural Masonry
Reinforced Concrete
Steel & Welding
Welding
Steel & Bolting

Troxler Radiation Moisture/Density Gauge

HAZWOPPER 40-Hour Training MSHA Certified License

ACI Concrete Field Testing Tech Grade 1 #0067516 (exp. 3/25)

EMPLOYMENT HISTORY

M.T. Hall & Associates Special Inspector 2018-Present

Karzan & Associates Special Inspector/ Field Tech 2000-2018



Ross Khiabani, PE, GE

Current Position: Sr. Geotechnical Engineer Rkhianig@gmail.com

RELEVANT PROJECT EXPERIENCE

Ramada Inn Carport, Chico, CA. Report of Geotechnical investigation and design for the design of the proposed Carport construction.

Achieve Chater School, Chico, CA Geotechnical Engineering and Seismic Hazard Investogatopm, proposed relocatable classrooms.

Mariam Park Subdivision, Lots 302-304, Chico, Ca. Geotechnical investigation for the proposed subdivision project.

Montecito Place and Mariam Park Subdivisions, Chico, Ca. We performed a Geotechnical investigation and analysis for the proposed subdivision projects.

Franklin Hot Plant, Chico, CA. Geotechnical investigation and Geologic Hazard for design and construction of the proposed hot plant.

Chico Eye Center, Chico, CA. Geotechnical investigation report for design and construction of the proposed medical building development.

La Mirada High School, Norwalk-La Mirada Unified School District, La Mirada, CA. Project Manager for performing geotechnical investigation and providing services during construction of a stadium renovation project, including a reconstructed track and football field, ADA approved ramps, and associated retaining walls.

Huntington Beach High School, Huntington Beach, CA. Project Reviewer for the design and reconstruction of the pool complex on Huntington Beach High School campus.

Huntington Seacliff Elementary School, Huntington Beach, CA. Project Reviewer for geotechnical investigation and earthquake engineering/seismic studies; earthwork and grading; environmental consulting; and materials testing and inspection. Built in very close proximity (less than one mile) to a branch of the Newport Inglewood fault zone, this 8.3-acre site was also subject to review by the California Division of Mines and Geology (CDMG) and Division of State Architect (DSA).

Los Angeles Unified School District, Los Angeles, CA. Project Principal/Reviewer for geotechnical design studies for 30+ new school sites and classroom additions at high schools, middle and elementary schools

Mater Dei High School, Santa Ana, CA. Project Reviewer for a geotechnical investigation related to proposed campus expansion, including a further geotechnical investigation to refine liquefaction analyses and provide additional recommendations for remedial measures for academic, library, and student activities buildings sites.

Rancho Potrero Leadership Academy, Trabuco Canyon, CA. Project Manager for performing detailed geotechnical study and providing services during construction of the new facility and the new access road to develop a 338-acre County-owned property. The project team was a member of a Super A-Team contracted to the County of Orange, Public Facilities and Resources Department. The study included an extensive subsurface investigation to characterize the site conditions to address the slope stability, foundation design, and providing specifications and services during construction.

EDUCATION

MS, Geotechnical Engineering, California State University, Long Beach Geology, Pahlavi University, Iran

CERTIFICATIONS

Professional Civil Engineer, California, No. 37156 Geotechnical Engineer, California, No. 2202 Professional Civil Engineer, Nevada, No. 11256 (NA) Professional Civil Engineer, Arizona, No. 27068 (NA)

AFFILIATIONS

American Society of Civil Engineers, Member Geotechnical Engineers Association

EMPLOYMENT HISTORY

<u>Leighton & Associates</u> Sr. Geotechnical Engineer 1980-2003

Willdan Geotechnical
Sr. Geotechnical Engineer
2003- 2017

M.T. Hall & Associates Consulting Engineer 2017-Present

40 Years Experince



Michael Wright

Current Position: Field Technician michael@mthallassociates.com Cell: (530) 263-0167

RECENT QUALITY CONTROL CONSTRUCTION PROJECTS

Martis Camp Subdivision - Truckee, CA

Provided observation of mass grading operations during house pad construction. Duties included compaction testing per ASTM standards with nuclear density gauge and sampling soils for lab testing.

Teichert Construction (Martis Valley Plant) - Truckee, CA

Performed quality control lab testing and sampling duties during HMA production under the direction of Teichert QC management.

Hooker Oak Subdivison - Chico, CA

Provided observation and nuclear density testing of mass grading operations during house pad construction, utility trench backfill, sidewalk curb and gutter, and roadway construction. Performed Caltrans 375 testing with nuclear gauge during HMA placement.

Dorsey Drive Interchange - Grass Valley, CA

Performed coring operations for QC/QA standards in multiple locations during day shift and night shift duties.

Powerline Road Bike/PED Improvements - Yuba County

Performed nuclear density compaction testing for contractor quality control on native subgrade (chemically treated in roadway), aggregate base for sidewalk, curb and gutter pan, and roadway construction. Performed sampling duties at production plant during HMA placement per Caltrans test method 125 for aggregates and HMA.

Creekside Landing Subdivision - Chico, CA

Performed concrete sampling duties during lot placement. Concrete was tested for slump, temperature, and 1 set of (4) cylinders were constructed per lot.

RECENT QUALITY ASSURANCE CONSTRUCTION PROJECTS

Lance Gulch Road - Trinty County - Weaverville, CA

Performed plant sampling duties per Caltrans QA standards during HMA production at Tullis plant in Redding, CA. QA work was performed for Vali Cooper & Associates construction management.

Walerga Road - Roseville, CA

Performed plant sampling duties per Caltrans QC and field density testing for soils, aggregates and HMA. Project was a new bridge and road completed during the 2019 – 2021construction seasons.

EDUCATION

Prosser Creek Charter School Truckee, CA 2002

CERTIFICATIONS

APNGA Certified Radiation Moisture/Density Gauge

ACI Field Testing Tech Grade 1 No. 1325738

Caltrans Test Methods (See Attachments)

EMPLOYMENT HISTORY

M.T. Hall & Associates Staff Technician 2014-Present

Statewide Traffic Control 2007-2014



Richard Kuntz

Current Position: Laboratory Assistant Manager

rick@mthallassociates.com Cell: (530) 520-1399

RECENT LAB EXPERIENCE

Butte County Regional Transit Center (Aztec Rd.) - Chico, CA

Performed QC lab testing for HMA plant production using AASHTO and Caltrans test methods. Lab test included; HMA moistures, aggregate moistures, aggregate gradations, sand equivalents, oil contents, stabilities, and ignition oven correction factors.

Powerline Road Bike/PED Improvements - Yuba County

Performed QC lab testing per Caltrans Method Specifications 2010. Caltrans test methods for soils, aggregate, and HMA included; in place relative compaction (CTM 216), soil moistures, aggregate moistures, aggregate gradations, sand equivalents, oil contents and ignition oven correction factors.

Mariposa Glenn Subdivision - Chico, CA

Performed lab testing for soil engineering review. Lab testing included; liquid Limits, plastic Limits, moisture-density data, soil analysis and classification.

Dorsey Drive Interchange - Grass Valley, CA

Performed QC/QA lab testing per Caltrans Standard Specifications 2010. Caltrans test methods for HMA production and asphalt core specimens included; bulk specific gravities, max theoretical densities, R.A.P. correction and analysis, air voids calculations, sand equivalents, aggregate gradations, and stabilities.

Loma Rica Road Safety Improvements - Yuba County

Performed QC lab testing per Caltrans Method Specifications 2010. Testing included Caltrans test methods in aggregates and HMA. They included; in place relative compaction (CTM 216), aggregate moistures, aggregate gradations, and sand equivalents.

RECENT QUALITY CONTROL LAB TESTING CLIENT LIST

- Franklin Construction Chico, CA
- R&R Horn Chico, CA
- Knife River Construction Chico, CA
- Butte Sand & Gravel Sutter County
- McGuire & Hester Sacramento, CA

RECENT QUALITY ASSURANCE LAB TESTING CLIENT LIST

- Butte County Public Works Oroville, CA
- City of Chico Chico, CA
- Sutter County Sutter, CA

EDUCATION

AA Degree, Civil Engineering Technology – North Dakota State School of Science, 1975

CERTIFICATIONS

OSHA Trench Safety and Standard Construction Practice Training

Troxler Certified Radiation Moisture/Density Gauge + RSO Certified

NICET Cert. No. 78650

ACI Concrete Field Testing Tech Grade 1 #00954916

Caltrans Test Methods (See attachments)

EMPLOYMENT HISTORY

M.T. Hall & Associates Lab/ Field Technician 2013-Present

(USBR) Mid Pacific Division Laboratory Supervisor 2009-2013

References

City of Chico

Contact: Brendan Ottoboni

411 Main Street Chico, CA 95928

Phone: 530-879-6901 Fax: (530) 895-8848 Email: Brendan.ottoboni@Chicocaa.gov

Associated Project: On-Call Testing, 2016-2021, MTH provided quality assurance laboratory and field density testing of roadway subgrade, aggregate base, and HMA.

Yuba City

Contact: Sam Bunton

915 8th Street

Marysville, CA 95901

Phone: 530-749-5649 Email: sbunton@co.yuba.ca.us

Associated Project: Yuba County Public Works, MTH provided quality assurance testing for the contractor on multiple projects each year. MTH performed geotechnical recommendations and testing of soils, aggregates, concrete, and HMA.

Glenn County Public Work

Contact: Nathan Mendes 777 N. Colusa Street Willows, CA 88

Phone: 530-934-6530 Fax: 530-934-6533 Email: nmendes@countyofglenn.net

Associated Project: City of Chico, MTH provided quality assurance testing and inspection for multiple projects. Work included nuclear density and laboratory testing for soils, aggregates, concrete, HMA and currently preparing an FDR-C mix Design.

City of Chico

Contact: Lane Green 411 Main Street Chico, CA 95927

Phone: 530-879-6930 Fax: 530-895-8848 Email: Lane.green@chicoca.gov

Associated Project: City of Chico, MTH provided quality assurance testing and inspection for multiple City of Chico projects. Work included geotechnical investigations, nuclear density, and laboratory testing for soils, aggregates, concrete, and HMA.

Exhibit A – Cost Proposal

ATTACHMENT A

COST PROPOSAL FORM

Key Personnel	Unit	Unit Price
Engineering/Field Technician – Standard Time (includes all common field inspection and testing including concrete, soils and asphalt)	Per hour	160.00
Engineering/Field Technician – Overtime	Per hour	195,00
Engineering/Field Technician – Saturdays	Per hour	195.00
Engineering/Field Technician – Sundays and Holidays	Per hour	220.00
Professional Engineer	Per hour	155.00
Project Manager	Per hour	145.00
Mileage	Per mile	0.60
Materials Sampling*		
Native Soils	EA	480.00
Imported Soils	EA	480.00
Asphalt Concrete	EA	480.00
*Unit price shall include time, mileage and incidental costs asso site to lab.	ciated with ma	terial transportation from
Materials Testing		
Moisture Density (ASTM D1557)	EA	230.00
Gradation (ASTM D6938)	EA	150,00
Compaction (ASTM D2487)	EA	50,00
Plasticity Index (ASTM D4318)	EA	170,00
R-Value	EA	320,00
Concrete Cylinder* – Compressive Strength of 4"x8" cylinder (Air, yield and set of 3 cylinders cast, cured and broken)	EA	410.00

^{*}Unit price shall include time, mileage and incidental costs associated with cylinder transportation from site to lab.

Note: Personnel, sampling and testing not shown in the Cost Proposal Form above shall be approved by the City prior to beginning work and shall be in accordance with the Consultants proposed standard rate schedule.



City of Orland — Sampling & Material Testing Service

Administration		Hourly Rate		
Geotechnical Engineer	\$210.00			
Project Engineer / Geologist	\$180.00			
Construction Service Engineer		\$155.00		
Project Manager	\$145.00			
Clerical Staff	\$30.00			
Personnel		Hourly Rate		
Field Technician/Field Technician (OT)		\$100.00/\$150.00		
ICC Special Inspector	\$130.00/\$190.00			
Field Technician (Prevailing Wage/PW (OT))	\$160.00/\$195.00			
ICC Special Inspector (Prevailing Wage/PW (OT))		\$180.00/\$230.00		
Soil/Aggregate	Standard	Each Unit		
Compaction Method A, B, or C (6-inch mold)	ASTM D1557	\$230.00		
Specific Gravity & Absorption – Coarse Aggregates	ASTM C127	\$125.00		
Specific Gravity & Absorption – Fine Aggregates	ASTM C128	\$125.00		
Specific Gravity of Soil	ASTM D854	\$125.00		
Organic Impurities	ASTM D2974	\$95.00		
Sodium Sulfate Soundness (per cycle)	ASTM C88	\$175.00		
Density (Unit Weight) of Soil	ASTM D7263	\$95.00		
Atterberg Limits	ASTM D4318	\$170.00		
Expansion Index	ASTM D4829	\$260.00		
LA Abrasion	ASTM C535	\$250.00		
Direct Shear (3 point)	ASTM D3080	\$975.00		
Consolidation (8 loads + 1 rebound)	ASTM D2435	\$1,050.00		
Clay Lumps / Friable Parts	ASTM C142	\$135.00		
Hydrometer Analysis	ASTM D422	\$195.00		
In Place Density and Moisture by Drive Cylinder	ASTM D2937	\$80.00		
Unconfined Compressive Strength of Cohesive Soils	ASTM D2166	\$90.00		
Unconfined Compressive Strength of Treated Soils	ASTM D5102	\$90.00		
Sieve Analysis with -200 wash	ASTM C136	\$150.00		
Sieve Analysis -200 wash	ASTM D1140	\$110.00		
Triaxial Compressive Strength (3 point)	ASTM D4767	\$975.00		
California Bearing Ratio (CBR)	ASTM D1883	\$1,110.00		
Soil Corrosion Evaluation (pH, Resistivity, Sulfate, Chloride)		\$200.00		
Concrete Testing	Standard	Per Unit		
Compressive Strength Concrete Cylinders	CT 521	\$30.00		
Compressive Strength Concrete Cores	ASTM C42	\$30.00		
Flexural Strength of Concrete	ASTM C78	\$175.00		
Masonry Testing	Standard	Per Unit		
Compressive Strength Grout	ASTM C140	\$30.00		
Compressive Strength Mortar	ASTM C780	\$30.00		
Compressive Strength Masonry Prisms	ASTM C1314	\$250.00		
CMU Strength, Unit Weight, Absorption	ASTM C140	\$390.00		

Steel Testing	Standard	Per Unit
Reinforcing Steel Tensile Test, Up to #7	ASTM A615	\$230.00
Reinforcing Steel Tensile Test, #8 to #14	ASTM A615	\$275.00
California Test Methods (CTM) Soils/Agg.	Standard	Per Unit
Analysis of Fine and Coarse Aggregates	CTM 202	\$150.00
Percentage of Crushed Particles	CTM 205	\$130.00
Specific Gravity/Absorption Coarse Aggregates	CTM 206	\$130.00
Specific Gravity/Absorption Fine Aggregates	CTM 207	\$120.00
Unit Weight of Aggregate	CTM 212	\$80.00
Relative Compaction of Soils and Aggregates	CTM 216	\$80.00
Sand Equivalent	CTM 217	\$150.00
Soil and Aggregate Moisture	CTM 226	\$30.00
Cleanness Value	CTM 227	\$160.00
Durability Index	CTM 229	\$195.00
Uncompacted Void Content of Fine Aggregates	CTM 234	\$110.00
Flat and Elongated Particle Measurement	CTM 235	\$110.00
R-Value	CTM 301	\$320.00
California Test Methods (CTM) HMA	Standard	Per Unit
Bulk Specific Gravity of Field-Compacted Core, Method A	CTM 308	\$70.00
Bulk Specific Gravity of Lab-Compacted Cores, (set of 3)	CTM 308	\$210.00
Max Theoretical Density	AASHTO T-209	\$120.00
Stabilometer Value	CTM 366	\$340.00
HMA Moisture	CTM 370	\$30.00
Asphalt Content by Ignition Oven	AASHTO T-308	\$170.00
Voids Filled in Mineral Aggregate	LP-2	\$40.00
Voids Filled in Asphalt	LP-3	\$40.00
Dust Proportion	LP-4	\$40.00
Rap Correction Factor		\$600.00
Binder Content Correction Factor		\$600.00
	Per Day	\$120.00