



City of San Pablo
Department Of Public Works
Engineering Division
1000 Gateway Avenue
San Pablo, California 94806



Proposal and Statement of Qualifications to Provide

On-Call Professional Services for Disciplines
4. Environmental
5. Geotechnical
7. Materials Testing



March 29, 2023
Proposal No. P08OAK02-00646

Ninyo & Moore

Geotechnical & Environmental Sciences Consultants

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Ninyo & Moore has been the on-call environmental and geotechnical firm for the City of El Cerrito (2002 when El Cerrito's Public Works Department was formed). During that time Ninyo & Moore performed admirable on many tasks ranging from geotechnical investigations and constructor testing to complex environmental tasks including Phase 1 and 2 reports and consultation on soil contamination at City-owned project sites. In all cases, the City was well pleased with the work done by your staff led by Peter Connolly and Kris Larsen. We found them to be responsive and practical in their advice.

*Jerry Bradshaw
City of El Cerrito*

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1 | LETTER OF INTEREST/ COVER LETTER

Ninyo & Moore



March 29, 2023
Proposal No. 08OAK02-00646

City of San Pablo
Department of Public Works
Engineering Division
1000 Gateway Avenue
San Pablo, California 94806

Subject: Proposal and Statement of Qualifications to Provide On-Call Professional Services for Disciplines Environmental; Geotechnical; and Materials Testing Services

Ninyo & Moore Geotechnical and Environmental Sciences Consultants (Ninyo & Moore) appreciates this opportunity to present our qualifications to provide geotechnical, environmental, and materials testing services to the City of San Pablo (City). We have reviewed the RFQ dated March 1, 2023, and Addendums No 1-3, and look forward to partnering with the City to provide the requested services. We believe we are extremely qualified to provide these services, and offer the City the following benefits:

Understanding of Required Services: Ninyo & Moore understands the City is seeking consultants for various disciplines including geotechnical, materials testing, and environmental for an on-call professional services agreement for capital projects and operational needs for a period of 5 years.

Similar Experience: Ninyo & Moore has provided services for a variety of contracts including City of San Pablo 2022 Rumrill Sports Complex, City and County of San Francisco On-Call Environmental, Geotechnical, and Materials Testing Services; City of Vallejo On-Call Environmental Hazardous Material Services; City of Richmond On-Call Environmental Consulting Services; City of South San Francisco On-Call Materials Testing and Special Inspection Services; and City of Alameda Environmental and Materials Testing Services.

Qualified Team: Ninyo & Moore will lead this contract from our Alameda office under the direction of Principal Geologist/Contract Manager, Mr. Brandon Wilken, PG, QSP/D. Mr. Wilken will be supported by Ms. Marlene Watson PE, GE, with 38 years of experience, who will serve as Technical Advisor/QA/QC. Additionally, Mr. Peter Connolly, PE, GE, will serve as our Geotechnical Lead; Mr. Ransom Hennefer, PE, GE, ACI, ICC who will serve as Materials Testing Lead; and Aubrey Cool, PG will serve as Environmental Lead. These credentials and their related experience will support all being completed to code, on-time and within budget.

Authorized Representative: Mr. Brandon Wilken will be the primary point-of-contact and is an authorized representative of Ninyo & Moore with the authority to negotiate on behalf of the firm, and to commit the company to the terms of the contract that would ensue as a result of this submittal.

Mr. Brandon Wilken, PG, QSP/D, Principal Geologist | Project/Contract Manager
Ninyo & Moore Geotechnical and Environmental Sciences Consultants
2020 Challenger Drive, Suite 103, Alameda, California 94501
p. 510.343.3000 ext. 15206 | bwilken@ninyoandmoore.com

Professional Services Agreement: Ninyo & Moore confirms we have reviewed the Professional Services Agreement and accept the agreement as is.

We look forward to this opportunity to work with the City.

Sincerely,
NINYO & MOORE



Brandon Wilken, PG/QSP/D
Principal Geologist | Contract/Project Manager



Marlene Watson, PE, GE
Principal Engineer | Technical Advisor/QA/QC

BSW/RH/MKW/cdw

Distribution: (1) Electronic Copy



2 | FIRM STATEMENT OF QUALIFICATIONS

Ninyo & Moore

Firm Background: Ninyo & Moore is a minority business enterprise, was established in San Diego, California on September 2, 1986. We are an "S" Corporation incorporated in the State of California on March 3, 1987. Ninyo & Moore provides geotechnical engineering, engineering geology, materials testing, special inspection, and environmental consulting services to clients in the governmental (federal, state, and local), commercial, and private sectors. The company is privately owned by Mr. Avram Ninyo, PE, GE, who directly manages the corporation and is supported by an efficient structure of technical and business-line managers.

Firm Services: Ninyo & Moore's services include geotechnical engineering; engineering geology; materials testing and inspection; construction support services; engineering design; environmental engineering; asbestos, lead-based paint and mold evaluations; regulatory compliance; hazardous waste management; soil and groundwater remediation; stormwater management; geophysical studies; value engineering; forensic studies; and expert witness testimony.

Office Locations: Ninyo & Moore has 16 offices company-wide including Alameda, San Jose, San Francisco, Sacramento, San Diego, Irvine, Fontana, and Los Angeles, California; Las Vegas, Nevada; Phoenix, Tucson, and Prescott, Arizona; Denver and Fort Collins, Colorado; Houston, Texas; and Salt Lake City, Utah.

Laboratory Capabilities: Ninyo & Moore maintains a fully equipped, in-house laboratory and offers full-service field and laboratory services for soils and aggregates, asphalt concrete, reinforced concrete, masonry, prestressed concrete, structural steel, welding, roofing, and fireproofing. field and laboratory services for geotechnical, and soils and materials testing projects. Ninyo & Moore's laboratory is supervised by a registered civil engineer, and meets the requirements of ASTM E329, ASTM C1077, ASTM D3740, and ASTM D3666. Ninyo & Moore's testing laboratories have been inspected and/or accredited by the Division of the State Architect (DSA), AASHTO, Caltrans, U.S. Army Corps of Engineers, and U.S. Department of Agriculture.

Insurance: Our firm carries professional liability insurance with coverage limits of five million dollars and general liability insurance with coverage limits of two million dollars.

Health and Safety: It is the policy of Ninyo & Moore to provide a safe and healthful work environment for all of its employees through the prevention of occupational injuries and illnesses. In keeping with this policy, Ninyo & Moore maintains a Corporate Health and Safety Program (HSP) and Management System, which is integrated into every facet of project operation. We appreciate this opportunity to submit our qualifications and we look forward to the opportunity of working with the

Extensive Experience: Ninyo & Moore has successfully completed hundreds of geotechnical, environmental, materials testing, and special inspection projects for many agencies and local municipalities. Some of these clients include (detailed experience on the following page):

- Contra Costa County
- Santa Clara County
- Alameda County
- San Mateo County
- Sonoma County
- City and County San Francisco
- City of Alameda
- City of Brentwood
- City of East Palo Alto
- City of El Cerrito
- City of Fremont
- City of Larkspur
- City of Millbrae
- City of Oakland
- City of Palo Alto
- City of Pittsburg
- City of Redwood City
- City of Richmond
- City of San Bruno
- City of San Carlos
- City of San Mateo
- City of Seaside
- City of South San Francisco
- City of Vallejo
- Town of Woodside
- Town of Los Gatos

550 EMPLOYEES
Company-wide

16 LOCATIONS
serving the Western US

36 YEARS
supporting public works clients

25 On-Call Contracts
for various Public Agencies

Client Name/Contact Name	Description of Work	Year of Completion	Key Personnel
City of San Pablo 1000 Gateway Avenue San Pablo, CA 94806 Ms. Amanda Booth Environmental Program Analyst (510) 215-3000; Amandab@Sanpabloca.gov	Ninyo & Moore prepared a 2022 Annual Cap Inspection Report (Report) for the Rumrill Sports Complex, located at 1509 Rumrill Boulevard in San Pablo, California. The site is approximately 4.5 acres in size and is located in an area of residential, commercial, and industrial land use. In 2016, Ninyo & Moore assisted the City in redeveloping the site in to the current sports complex.	2027	Brandon Wilken Aubrey Cool Bill Larkin
City of Fremont 39550 Liberty Street Fremont, CA 94537-5006 Mr. Mark Mennucci Associate Landscape Architect (510) 494-4700; mmennucci@fremont.gov	Ninyo & Moore was retained by the City of Fremont for a 3-year On-Call Geotechnical Services contract which began in 2018 with 2 one-year extensions through June, 2023.	2023	Marlene Watson Peter Connolly Ransom Hennefer Lothus Hennefer Arash Amirkhansarie Bryan Steinbrueck
City of South San Francisco 315 Maple Avenue South San Francisco, CA 94080 Mr. Matthew Ruble Senior Civil Engineer (650) 829-6670 matthew.ruble@ssf.net	Ninyo & Moore was retained by the City of South San Francisco (City) for their on-call Geotechnical Engineering and Materials Testing contract; and then recently renewed for a 3-year contract, with optional 2-year extension into 2025.	2025	Peter Connolly Brandon Wilken Aubrey Cool William Larkin Ransom Hennefer Lothus Hennefer Arash Amirkhansarie Amir Moayed Bryan Steinbrueck Joshua Muller
City of Alameda 950 W. Mall Square, Room 110 Alameda, CA 94501 Mr. Jack Dybas Project Manager II, Architect (510) 747-7900; dybas@alamedaca.gov	Ninyo & Moore is providing on-call environmental, geotechnical engineering, and construction testing services as part of an As-Needed contract.	2025	Marlene Watson Peter Connolly Brandon Wilken Aubrey Cool William Larkin Ransom Hennefer Lothus Hennefer Bryan Steinbrueck Joshua Muller
City of Richmond 4840 Wexler Peak Way Antioch, CA 94531 Mr. Yader Bermudez Public Works Director (510) 774-6300; yaderbermudez@me.com	Ninyo & Moore is providing on-call environmental, geotechnical engineering, and construction testing services for various projects for the City of Richmond.	2024	Brandon Wilken Marlene Watson Peter Connolly Aubrey Cool William Larkin Ransom Hennefer Lothus Hennefer Arash Amirkhansarie Amir Moayed Bryan Steinbrueck Joshua Muller
Town of Woodside 2955 Woodside Road Woodside, CA 94062 Mr. Sean Rose Public Works Director/Town Engineer (650) 851-6790; srose@woodsidetown.org	Ninyo & Moore performed geotechnical peer review of geotechnical investigations/reports for development projects within the Town of Woodside dealing with larger, more complex projects and projects in geologically hazardous areas.	2023	Marlene Watson Ransom Hennefer



3 | STAFF STATEMENT OF QUALIFICATIONS OR RESUMES

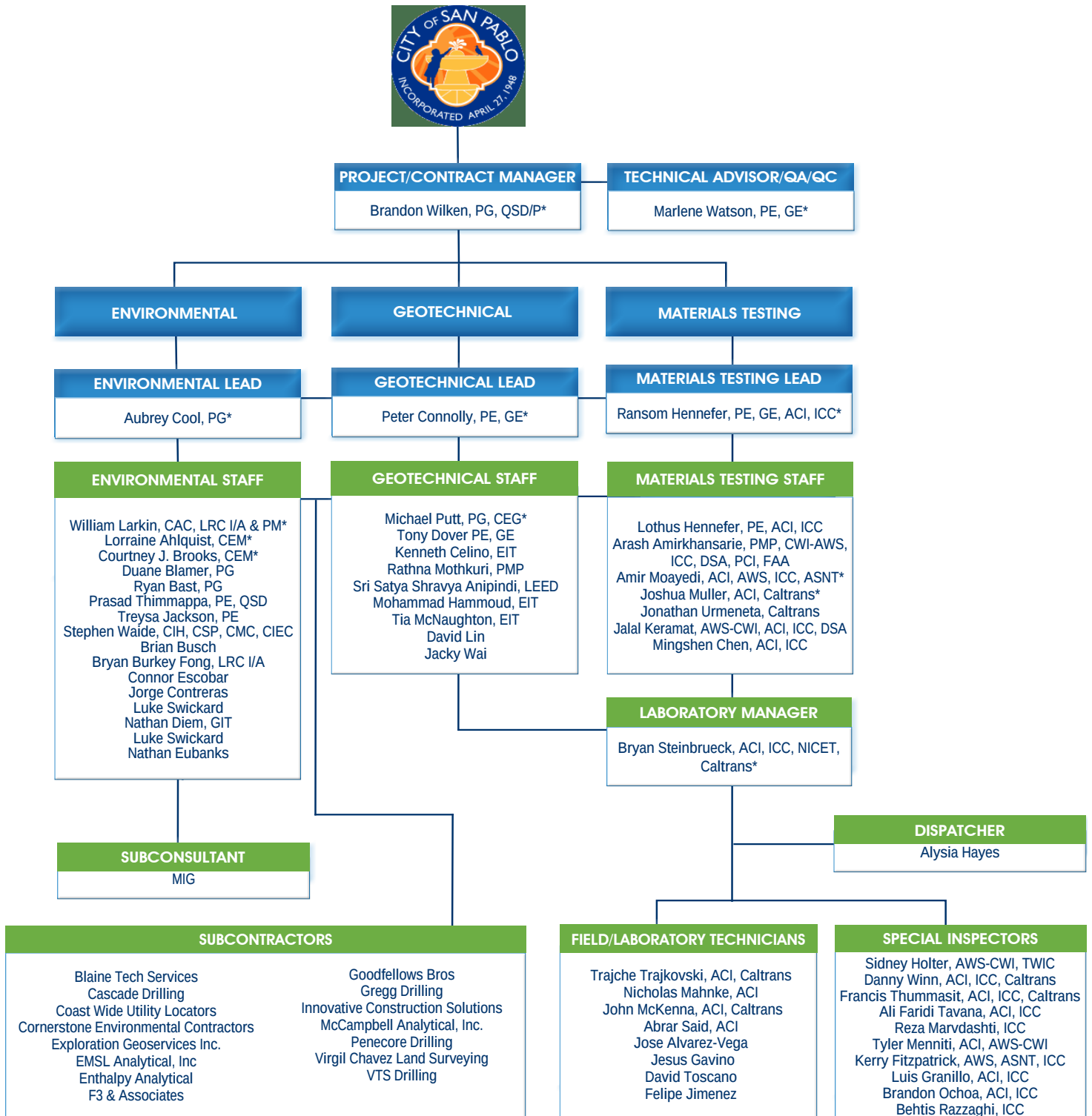
Ninyo & Moore

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STAFF STATEMENT OF QUALIFICATIONS OR RESUMES

ORGANIZATIONAL CHART

Provided below is an organization chart identifying Ninyo & Moore's proposed team for this contract.



Key Personnel/Role	Education/Licenses/Certifications
Brandon Wilken, PG, QSP/D Principal Geologist Project/Contract Manager <i>Years of Experience: 26</i>	- B.S., Geology - PG 7564 (California) - Qualified SWPPP Practitioner/Developer, QSP/D No. 28075 (California)
Marlene Watson, PE, GE Technical Advisor/QA/QC <i>Years of Experience: 38</i>	- M.S., Geotechnical Engineering - B.S., Geological Sciences - PE 54233 (California) - GE 2538 (California)
Geotechnical Services	
Peter Connolly, PE, GE Geotechnical Lead <i>Years of Experience: 25</i>	- M.E., Civil Engineering - B.S., Civil Engineering - PE 61547 (California) - GE 2707 (California)
Michael Putt, PG, CEG Geotechnical Staff <i>Years of Experience: 26</i>	- B.S., Geology - PG 7581 (California) - CEG 2341 (California)
Materials Testing Services	
Ransom Hennefer, PE, GE, ACI, ICC Materials Testing Lead <i>Years of Experience: 10</i>	- M.S., Geotechnical Engineering - B.S., Civil Engineering - B.A., Business Management Economics - PE 85603 (California) - GE 3152 (California) - ACI Concrete Field Testing Technician Grade I - ICC Certifications: Master of Special Inspection, No. 8887078
Bryan Steinbrueck ACI, ICC, NICET, Caltrans Materials Testing Staff <i>Years of Experience: 22</i>	- ACI Concrete Field Testing Technician, Grade I - ICC Spray Applied Fire Proofing Special Inspector - NICET Level II Asphalt, Level II Soils, Level II, Concrete - Caltrans Concrete Test Methods - Caltrans AASHTO Methods
Amir Moayed, ACI, AWS, ICC, ASNT Materials Testing Staff <i>Years of Experience: 27</i>	- B.S., Civil Engineering, 2001 University of Hamadan - ACI Concrete Field Testing Technician, Grade I, No. 01366930 - AWS Certified Welding Inspector, No. 20011611 - ASNT Certifications: Magnetic Particle Testing, Level 2; ASNT Ultrasonic Testing, Level 2 - ICC Certifications, No. 8470222: Master of Special Inspector; Prestressed Concrete; Reinforced Concrete; Spray-Applied Fireproofing Special Inspector; Structural Masonry; Structural Steel & Bolting; Structural Welding; Firestopping
Joshua Muller, ACI Materials Testing Staff <i>Years of Experience: 5</i>	- ACI Concrete Field Testing Technician, Grade I No. 01396589
Environmental Services	
Aubrey Cool, PG Environmental Lead <i>Years of Experience: 24</i>	- B.S., Earth Sciences - PG 7659 (California)
William Larkin, CAC, LRC I/A & PM Environmental Staff <i>Years of Experience: 28</i>	- M.P.A. - B.A., Political Science and European History - CA/DOSH Certified Asbestos Consultant, No. 99-2688 - CDPH Lead-Related Construction Inspector/Assessor, No. 1285 - CDPH Lead-Related Construction Project Monitor, No. 1284 - Sampling and Evaluating Airborne Asbestos Dust Certification, NIOSH 582
Lorraine Ahlquist, CEM Environmental Staff <i>Years of Experience: 25</i>	- M.S., Biological Sciences, 2003, Florida International University - B.S., Environmental Studies, 1999, Florida International University - A.S., Radiation Protection, 1990, Central Florida Community College - CEM 7332 (Nevada)
Courtney J. Brooks, CEM Environmental Staff <i>Years of Experience: 34</i>	- B.S., Geology, 1989, Illinois State University - M.S., Geohydrology, 2000, Illinois State University - CEM 2128 (Nevada)



Brandon S. Wilken, PG, QSP/D | Project/Contract Manager

B.S., Geology, 1996, University of Nebraska-Lincoln

PG 7564 (California) | Qualified SWPPP Practitioner/Developer, QSP/D No. 28075 (California)

Mr. Wilken has extensive experience in the environmental industry. His experience in field geophysics led him to the contaminant assessment and remediation industry, providing professional geologic services including environmental hydrogeology, stormwater compliance, site investigation, remedial planning and implementation, health risk screening, due diligence, regulatory negotiations, and litigation support. Mr. Wilken has lead investigation and remediation projects driving risk-based solutions to successfully close environmental projects and reduce client's costs. He works closely with regulators, stakeholders, and clients to negotiate effective solutions utilizing sound science, strong technical expertise, and clear communication skills. Mr.

Wilken has completed projects for a wide range of clients, including county governments, major universities, colleges, school districts, oil companies, municipalities, manufacturing groups, and individual small business owners.

Project Experience

- City of San Pablo, 2022 Rumrill Sports Complex, San Pablo, California
- City of South San Francisco, 905 Linden Avenue Brownfields Redevelopment, South San Francisco, California
- Presidio Trust, Buildings 1182-1188 Environmental Services, San Francisco, California
- City of Richmond, Boorman Park, Richmond, California



Marlene Watson, PE, GE | Technical Advisor/QA/QC

M.S., Geotechnical Engineering, University of California, Berkeley

B.S., Geological Sciences, Harvard University

PE 54233 (California) | GE 2538 (California)

Ms. Watson has 38 years of geotechnical engineering experience working on a variety of projects throughout the Bay area. Her experience includes project management, coordination and supervision for all aspects of geotechnical engineering projects including field exploration, laboratory testing, engineering analyses, report preparation, plan review, and construction observation and testing. She has experience developing geotechnical recommendations for flexible/rigid/permeable pavement sections, subgrade mitigation, foundations, retaining walls, underground utilities/ structures, and slope stabilization. Ms. Watson has provided these services

for a variety of projects including City/County roadways, bridges, hospitals/medical buildings, educational facilities, pipelines, tanks, commercial and mixed-use developments, and shoreline improvements.

Project Experience

- Town of Woodside, Geotechnical Peer Review Services, Woodside, California
- City of Fremont, Old Canyon Road "Stanley" Bridge Erosion, Fremont, California
- City of Albany, Hill Erosion, Albany, California
- City of Richmond, Nicholl Park Improvements, Richmond, California



Peter C. Connolly, PE, GE | Geotechnical Lead

M.E., Civil Engineering, 1997, University of California, Berkeley

B.S., Civil Engineering, 1995, Rensselaer Polytechnic Institute, Troy, New York

PE 61547 (California) | GE 2707 (California)

Mr. Connolly has 25 years of experience managing and conducting geotechnical evaluations for governmental, commercial and airports, public facilities including parks, highways, railroads, pipelines, and bridges. He routinely performs slope stability analyses, flexible and rigid pavement and underground pipeline design, prepares and reviews geotechnical reports, develops geotechnical design parameters, and provides recommendations for shallow and deep foundations, retaining structures, in-situ ground remediation, and earthwork. In a Project Management role, he performs project administration and management, provides supervision of and technical support to staff-level engineers and geologists, and reviews laboratory results, project plans, and specifications.

Project Experience

- City of Fremont, On-Call Geotechnical Services Contract, Fremont, California
- City of South San Francisco, On-Call Materials Testing and Geotechnical Engineering Services Contract, South San Francisco, California
- City of Alameda, Cyclic Sewer Replacement Project, Alameda, California
- City of Oakland, On-Call Geotechnical Services Contract, Oakland, California


Michael Putt, PG, CEG | Geotechnical Staff

B.S., Geology, 1997, California State University, Fullerton

PG 7581 (California) | CEG 2341 (California)

Mr. Putt has extensive experience on a variety of project types, including highways, bridges, bore and jack tunneled undercrossings, hillside and flat-land mass grading projects for residential, commercial, and industrial developments, pipelines, and forensic investigations. Mr. Putt performs project administration and management, prepares and reviews geologic and geotechnical reports and provides third party review services for geotechnical reports. He conducts geologic and geotechnical field evaluations, including detailed logging of large- and small-diameter borings and trenches, and geologic evaluation/mapping. Projects have included fault hazard evaluations, landslide studies, slope stability analysis, seismic refraction studies, geologic reconnaissance studies, forensic evaluations, and construction and inspection services.

Project Experience

- City of Palo Alto, Baylands Athletic Complex Parking Lot, Palo Alto, California
- City of San Carlos, Shelford Avenue Landslide Repair, San Carlos, California
- City of Fremont, California Nursery Historical Park Fault Rupture Hazard Study, Fremont, California
- Berkeley Unified School District, Jefferson Elementary School Berkeley, California


Ransom Hennefer, PE, GE, ACI, ICC | Materials Testing Lead

M.S., Geotechnical Engineering, 2012, University of California, Berkeley

B.S., Civil Engineering, 2011, University of California, Berkeley

B.A., Business Management Economics, 2009, University of California, Santa Cruz

PE 85603 (California) | GE 3152 (California)

ACI Concrete Field Testing Technician Grade I

ICC Master of Special Inspection No. #8887078; Reinforced Concrete; Spray-Applied Fireproofing; Structural Masonry; Structural Steel & Bolting; Structural Welding Special Inspector

Mr. Hennefer has 10 years of experience conducting and managing geotechnical projects. His responsibilities include geotechnical investigations, laboratory testing, construction observation, and preparation of geotechnical reports. He is experienced in subsurface exploration, field logging and soil classification, researching of geologic background data, liquefaction and settlement analyses and report preparation.

Project Experience

- City of Alameda, On-Call Complete Streets Engineering Services, Alameda, California
- City and County of San Francisco, Moscone Center Expansion, 24 Inch Waterline, San Francisco, California
- City of South San Francisco, Fire Academy Training Tower, South San Francisco, California
- City of Oakland, Batch B Streets Pavement Improvements Project, Oakland, California


Bryan Steinbrueck, ACI, ICC, NICET, Caltrans | Materials Testing Staff/Laboratory Manager

A.S., Computer Systems Networking and Telecommunications, 2004, Brooks College

A.A., Liberal Arts and Sciences/Liberal Studies, 2000, De Anza College

ACI Concrete Strength Testing Technician, No. 01047844

ICC Spray-Applied Fireproofing Special Inspector, No. 8408634

NICET Construction Materials Testing – Asphalt, Concrete, and Soils (Level II)

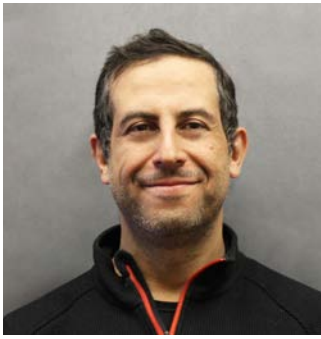
Caltrans Concrete Test Methods | Caltrans AASHTO Test Methods

Radiation (Nuclear Gauge) Safety Officer

Mr. Steinbrueck has 21 years of construction laboratory testing and materials testing experience and has held multiple AASHTO, CCRL, NICET, ACI laboratory certifications for over 10 years. With his many years of hands-on materials testing experience, he has the knowledge to efficiently and accurately complete the laboratory testing, as well as soil and aggregates testing. Projects he has provided services for include fire stations, K-12 schools, community colleges, public agencies, transportation, commercial developers and residential. He is highly proficient in performing laboratory testing per ASTM, Caltrans, AASHTO and CBC test methods. Our laboratory is DSA-certified (LEA #219).

Project Experience

- City of Fremont, Central Park Playing Fields 9 & 10, Fremont, California
- City of South San Francisco, OBAG 2 Street Rehabilitation, Materials Testing Services, South San Francisco, California
- City of Oakland, Broadway Transit and Pedestrian Safety Improvement Project, Oakland, California
- City of Richmond, Shields Reids Community Center, Richmond, California



Amir Moayed, ACI, AWS, ICC, ASNT | Materials Testing Staff

B.S., Civil Engineering, 2001 University of Hamadan

ACI Concrete Field Testing Technician, Grade I, No. 01366930

AWS Certified Welding Inspector, No. 20011611

ASNT Certifications: -Magnetic Particle Testing, Level 2; -ASNT Ultrasonic Testing, Level 2

ICC Certifications, No. 8470222: Master of Special Inspector; Prestressed Concrete; Reinforced Concrete; Spray-Applied Fireproofing Special Inspector; Structural Masonry; Structural Steel & Bolting; Structural Welding; Firestopping

IFC 3rd Party Firestop Inspector | Radiation (Nuclear Gauge) User Safety

Mr. Moayed performs inspections of the project elements including concrete, steel, masonry, spray-applied fireproofing, high-strength bolts, and welding both in the fabrication shop and at the site. He obtains or prepares representative specimens of these materials to be tested in our certified laboratory. His observations are documented in detail in inspection reports provided to the building official and utilized for final close-out of the project. Mr. Moayed maintains clear communication with the Project Manager regarding all aspects of the field operations.

Project Experience

- City of South San Francisco, Civic Center Library, Park and Recreation Site, South San Francisco, California
- City of Richmond, Civic Auditorium Ada Upgrades, Richmond, California
- City of Santa Clara, Montague Park Rehabilitation, Santa Clara, California
- County of San Mateo, Navigation Center, San Mateo, California



Joshua Muller, ACI | Materials Testing Staff

Certificate – Automotive Systems, Evergreen Valley College

ACI Concrete Field Testing Technician Grade I No. 01396589

Radiation (Nuclear Gauge) User Safety

Mr. Muller has 5 years of experience in a wide variety of construction projects performing materials testing, including concrete and geotechnical observation and testing. His projects experience includes parking garages, data centers, large-scale commercial retail development, highway/roadway, hotels, infrastructure, school districts and wastewater treatment plants.

Project Experience

- City of Alameda Estuary Park Site Improvements, Alameda, California
- City of Fremont, Large Group Picnic Area Project, Fremont, California
- City and County of San Francisco, 19th Avenue Infrastructure Improvements, San Francisco, California
- City of Oakland, Citywide Pavement Resurfacing, Oakland, California



Aubrey K. Cool, PG | Environmental Lead

B.S., Earth Sciences, 1996, University of California, Santa Cruz

PG 7659 (California)

Ms. Cool has 25 years of experience in the environmental industry, specializing in project management of: soil, groundwater and soil vapor investigation; remediation; and leaking UST cases. Ms. Cool oversaw successful soil remediation to facilitate site redevelopment at a former railroad spur site in San Jose, California. She has extensive experience working under State and local regulations with agencies such as ACDEH, Santa Clara County Department of Environmental Health (SCCDEH), Alameda County Water District, City and County of San Francisco Department of Public Health, Department of Toxic Substances Control, as well as the San Francisco Bay and Central Coast RWQCBs. Currently she manages several EPA Brownfields projects, liaising with City and County representatives in Alameda and Contra Costa Counties while administering the EPA grants for the Association of Bay Area Governments. Ms. Cool has also managed soil, groundwater and landfill gas investigation cases for San Francisco Public Works and the Port of Oakland.

Project Experience

- City of San Pablo, 2022 Rumrill Sports Complex, San Pablo, California
- City and County of San Francisco, University of California, San Francisco Platform Project, San Francisco, California
- City of Alameda, Estuary Park Site Improvements, Alameda, California
- Port of Oakland, Earhart Road Sanitary Sewer, Oakland, California


William Larkin, CAC, LRC I/A & PM | Environmental Staff

M.P.A., Golden Gate University, 1994, San Francisco, California

B.A., Political Science and European History, 1984, University of California, Davis

CAC 99-2688 | CDPH LRC I/A 1285 | CDPH LRC PM 1284

Mr. Larkin has extensive experience in all aspects of asbestos and lead-based paint surveys and construction management programs, as well as environmental planning programs including transportation and city planning projects. He has participated in multi-family asbestos and lead-based paint surveys in both occupied and unoccupied buildings, aided in asbestos project design and provided project management and construction monitoring in educational, commercial, industrial, residential, and laboratory facilities. Mr. Larkin has conducted numerous environmental due diligence assessments and compliance reviews of retail, industrial, and commercial properties, as well as numerous biological/mold assessments for private and public clients. He has performed hundreds of HBMS throughout the San Francisco Bay Area and

Northern California.

Project Experience

- Marin Community College District, On-Call Industrial Hygiene Services, Marin County, California
- City of Emeryville Doyle-Hollis-Former Dutro Manufacturing Facility, Emeryville, California
- City of Albany, Buchanan Street Eastshore Highway Connection, Albany, California
- The Presidio Trust, 150 Hazardous Building Materials Projects, San Francisco, California


Lorraine Ahlquist, CEM | Environmental Staff

M.S., Biological Sciences, 2003, Florida International University

B.S., Environmental Studies, 1999, Florida International University

A.S., Radiation Protection, 1990, Central Florida Community College

CEM 7332 (Nevada) | Certification in Project Management

UCSD Geographic Information Systems Certification

Forensic Science Certification, with Specializations in Biology and Chemistry

Ms. Ahlquist has over 25 years of experience in state, federal, academia, and the private research sector. She has focused on issues related to regulatory management and research within listed areas: environmental policy (California Environmental Quality Act-CEQA and

National Environmental Policy Act-NEPA), community based natural resources management, urban planning and management (including areas of regulatory oversight), bio-diversity conservation, environmental education, Geographical Information Systems, plant, animal, and water protection, and global climate change. Her responsibilities have included the preparation and review of environmental documents such as Environmental Impact Reports, Mitigated Negative Declarations, Negative Declarations, environmental documents Addendums, Categorical Exemptions and Initial Studies under CEQA. Other federal (NEPA) transportation, military and energy projects have included the preparation, review and coordination of Environmental Impact Study, Environmental Assessments and Categorical Exclusions for Caltrans Local Assistance and Oversight, Department of Army, Bureau of Land Management, United States Forest Service, and United States Corps of Engineers as well as coordinating reviews of technical studies for state and federal compliance. She has been involved in the approval and review of Tentative Parcel Maps, Minor and Major Use Permits, Zoning ordinances, and environmental review of private land development (L-Grading permits) and coordination on public works projects.

Project Experience

- Palo Alto Downtown Parking Structure Project, City Palo Alto, California
- City of Eastvale, Limonite Gap Closure, Eastvale, California
- Monterey Bay Regional Desalination Project, Monterey Presidio Pipeline Crossing, Monterey, California
- City of Sunnyvale, Murphy Avenue Downtown Sunnyvale Redevelopment Projects, Sunnyvale, California


Courtney J. Brooks, CEM | Environmental Staff

B.S., Geology, 1989, Illinois State University

M.S., Geohydrology, 2000, Illinois State University

CEM 2128 (Nevada)

Mr. Brooks has over 28 years of consulting experience overseeing hydrogeologic and environmental investigations, managing hazardous materials and wastes, and providing EHS training programs. His professional experience includes groundwater resources exploration and development, surface hydrology, groundwater compliance and modeling, environmental impact assessment, environmental auditing, and soil and groundwater assessment and remediation in various regions of the United States, Europe, Asia and Sub-Saharan Africa.

Project Experience

- Port of Oakland Annual Groundwater Monitoring and Sampling 2022 Annual Report, Third 5-Year Review Report Former McGuire Chemical Company Leasehold 530 Water Street, Oakland, California
- San Jose State University Water Well Rehabilitation, San Jose, California
- Port of Los Angeles Conceptual Remedial Action Plan Berths 142-143, Los Angeles, California



4 | REFERENCES

Ninyo & Moore

4

REFERENCES

Ninyo & Moore's key personnel have successfully completed numerous projects for government and private industry clients, and have earned a reputation for providing quality services while working within strict schedules and budgets. The following references are for environmental, geotechnical, and materials testing disciplines.

A. Reference name, with current contact information	B. Type of project/work	C. Client type (clarifying role of private sector client, if any)	D. Size and scale of the project	E. Current status
City of Fremont 39550 Liberty Street Fremont, CA 94537-5006 Mr. Mark Mennucci Associate Landscape Architect (510) 494-4700; mmennucci@fremont.gov	Geotechnical Materials Testing and Special Inspection Services	Public Agency	40 Project Tasks	Active Contract Completion: 2023
City of South San Francisco 315 Maple Avenue South San Francisco, CA 94080 Mr. Matthew Ruble Senior Civil Engineer; (650) 829-6670; matthew.ruble@ssf.net	On-Call Environmental, Materials Testing and Special Inspection Services	Public Agency	5 Year Contract 50 Project Tasks	Active Contract Completion: 2025
City of Alameda 950 W. Mall Square, Room 110 Alameda, CA 94501 Mr. Jack Dybas Project Manager II, Architect (510) 747-7900; dybas@alamedaca.gov	On-Call Environmental, Geotechnical Engineering, and Construction Testing Services	Public Agency	4 Year Contract 70 Project Tasks	Active Contract Completion: 2025
City of Richmond 4840 Wexler Peak Way Antioch, CA 94531 Mr. Yader Bermudez Public Works Director (510) 774-6300; yaderbermudez@me.com	On-Call Environmental, Engineering, and Construction Testing Services	Public Agency	3 Year Contract 50 Project Tasks	Active Contract Completion: 2024
Town of Woodside 2955 Woodside Road Woodside, CA 94062 Mr. Sean Rose Public Works Director/Town Engineer (650) 851-6790; srose@woodsidetown.org	Geotechnical Peer Review Services	Public Agency	1 Year Contract 8 Project Tasks	Active Contract Completion: 2023

I am extremely grateful for the support Ninyo & Moore staff provides and consider their value-added contributions to be indispensable. In combination with the timely manner and professional work ethics, their effort and dedication are truly commendable. I would like to express my personal thanks and sincere appreciation for their efforts and support to the City...

- Ray Chan, PE, City of San Carlos
City Engineer

Ninyo & Moore has assisted the City of Oakland with a wide variety of projects. They have kept budgets to a minimum and have delivered a quality product. They have also demonstrated the ability to be flexible with both budgets and personnel as projects evolve. They are attentive to the City's needs and excellent at keeping lines of communication open before, during and after a project.

- Mark Gomez, City of Oakland
Supervisor, Environmental Protection & Compliance



5 | PROJECT APPROACH

Ninyo & Moore

5

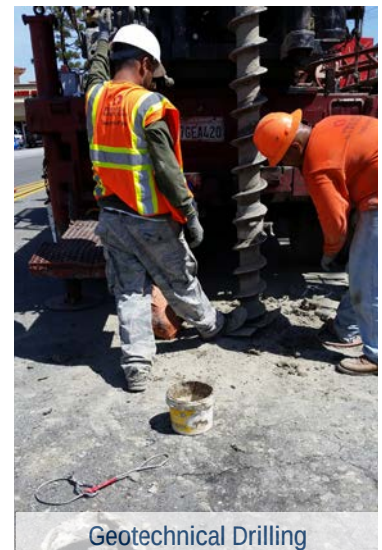
PROJECT APPROACH

APPROACH - GEOTECHNICAL ENGINEERING SERVICES

The following is a generalized breakdown of the typical phases of a project along with a brief description of the services that may be included. The actual scope of work and work product will depend on the actual nature of the projects assigned.

- **Proposal Stage:** Upon receipt of the Request for Proposal (RFP) from the City we will review the documents and prepare a proposal based on our understanding of the RFP, discussions with other consultants, and City personnel. The proposal will present an understanding of the project, a clearly defined scope of services, expected deliverables, schedule, and an estimated fee.
- **Background Review:** Pertinent existing background information, such as geotechnical reports, seismic hazard maps, regional fault maps, and geologic reports and maps, will be reviewed. The information collected during this phase is crucial to developing a preliminary understanding of the site conditions so that the most appropriate exploration program can be utilized.
- **Permitting and Utility Clearance:** If subsurface exploration is required for the project, corresponding permits will be obtained and existing underground utilities will be located so that there are no conflicts with the planned subsurface excavations. Clearance of underground utilities would be conducted through Underground Service Alert and, if necessary, our geophysicists can conduct detailed surveys of the project site to locate utilities. If the exploratory excavations are going to be in the street, an encroachment permit or approved traffic control plan will need to be obtained from the City or relevant local jurisdiction. Excavations in environmentally sensitive areas would require additional permits.
- **Subsurface Exploration:** Subsurface explorations generally include the excavation, sampling, and logging of "small-diameter" borings or test pits by our registered geologists. Other means of subsurface exploration may include "large-diameter" (bucket-auger) borings, cone penetrometer testing (CPT), and engineering scale geophysical surveys such as seismic refraction, magnetic, electromagnetic, ground penetrating radar (GPR) and electrical resistivity surveys. Bulk samples and in-situ drive samples obtained during drilling will be transported to our laboratory for testing. Logs of the exploratory excavations with a site plan showing their locations are provided as part of the final report.
- **Emergency Slope Stability and Protection:** Ninyo & Moore utilizes state-of-the-art computer programs to perform slope stability analyses for both planned and existing slopes. Typically, these analyses are conducted based on laboratory tests performed on samples obtained from exploratory excavations, such as borings. If a slope is found to have an inadequate factor-of-safety (i.e. less than 1.5 for engineered slopes), Ninyo & Moore has designed stability fills and buttresses, usually with a subdrain, to improve the stability of the slope and its factor-of-safety.
- **Laboratory Testing:** For geotechnical design projects, typical laboratory tests include Atterberg limits, consolidation, direct shear, expansion index, in-situ moisture content and dry density, maximum density/optimum moisture, R-value, sieve analysis, and soil corrosivity which includes chloride and sulfate content and pH and minimum resistivity. For construction projects, typical laboratory tests include maximum density/optimum moisture, sand equivalent, and strength tests for masonry, concrete, and steel. These tests are conducted in our full service, certified laboratory located in San Jose.
- **Data Analysis and Calculations:** Following the collection of preexisting applicable project information and the acquisition of new data, our highly qualified technical staff will review, compile and analyze the data so that the appropriate design and/or construction parameters can be formulated. Ninyo & Moore uses the most up to date engineering, seismic, and geophysical software as well as industry testing standards to facilitate the analysis.
- **Reports:** The presentation of our findings is crucial to adequately convey our geotechnical information to the client and other design professionals. Depending on the needs of the City, the presentation of our findings, conclusions, and recommendations will be submitted in written reports, and/or provided electronically.

Approach Design Services



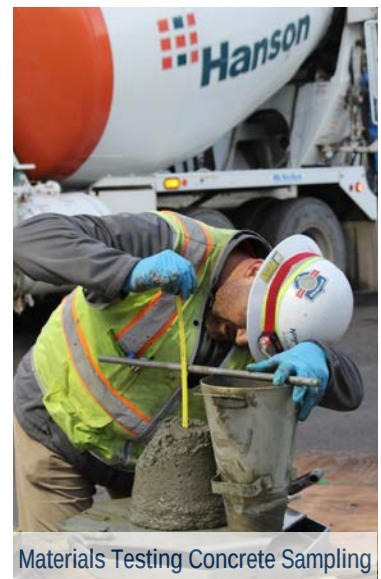
Geotechnical Drilling

APPROACH - CONSTRUCTION OBSERVATION AND SPECIAL INSPECTION SERVICES

Our soils and materials testing and inspection services may include the following, depending on the requirements of the task order assigned:

- **Project Kick-off:** Project coordination and client liaison, including scheduling of personnel to provide observation and materials testing services and meeting attendance. Review of readily available background materials pertaining to the site, including geotechnical reports, project plans, and specifications. Attendance at pre-construction and field meetings as requested by the client.
- **Field Observation, Inspection, Sampling, and Testing:** On-site soil and materials testing and inspection during construction on an as-requested basis. Our inspection services will be performed in accordance with the applicable building codes and in accordance with the project approved documents. Specifically, our soils and materials testing and inspection services may include the following:
 - Field observation and inspection during foundation construction, including observation of footing excavations, pier drilling, pile driving, as appropriate.
 - Field observation, documentation and testing during the earthwork operations. Our services will include observation and field density testing of compacted fill, including embankment fill, structure and wall backfill, utility trench backfill, subgrade, aggregate subbase, and aggregate base materials.
 - Field sampling and in-place density testing will be performed during asphalt pavement construction. Asphalt production plant inspection and sampling will be performed to evaluate conformance with project specifications. Laboratory testing of raw aggregate and completed mix samples will include sieve analysis, sand equivalent, percent asphalt, film stripping, and maximum density.
 - Field sampling and testing of concrete structures and paving during construction. Our field testing services will include sampling of concrete, and evaluating the temperature, penetration, air content, and unit weight. Concrete cylinders will be cast during concrete placement for structures and will be transported to our laboratory for compressive strength testing. Concrete beams will be cast during concrete paving and transported to our laboratory for flexural strength testing. Concrete batch plant inspection and sampling will be performed to obtain raw aggregate samples for acceptance testing and to evaluate the batch plant operation for conformance with project specifications. Laboratory testing of aggregate samples will include sieve analysis, sand equivalent, and cleanness value per the Construction Manual, Standard Specifications, and project Special Provisions.
 - Field inspection of the construction materials, both at the fabrication plant and during erection at the site by our specialty inspectors. Our inspectors are certified by International Code Council (ICC), American Welding Society (AWS), American Concrete Institute (ACI) and other agencies. Inspections may include: reinforced concrete and shotcrete, such as foundations, cast-in-place concrete structures, and miscellaneous concrete construction; inspection during fabrication of pre-stressed and post-stressed concrete; deputy inspection services during drilled-in-anchors; structural masonry, such as retaining walls, sound walls, building and site walls; structural steel welding and bolting inspection at the fabrication plant and at the site; non-destructive testing (ultrasonic) of welds at the fabrication plant and at the site; load and/or torque testing of expansion and epoxy anchor bolts and dowels; and roofing and water-proofing inspection.
- **Laboratory Testing Services:** Laboratory testing on collected construction material samples in accordance with the appropriate California Test, AASHTO, and ASTM test methods and utilizing our certified laboratories. Laboratory testing may include maximum dry density and optimum moisture content of the soils to be placed as fill or backfill; and conformance testing (including sieve analyses, sand equivalent, R-value, cleanness value and durability tests) on the proposed aggregate subbase, aggregate base, asphalt concrete, and concrete pavement. Testing will be performed at frequencies required by the project specifications.
- **Reports/Documentation:** Preparation of daily reports and other memoranda to summarize the field operations and test results. Upload documentation to Dropbox.
- **Closeout Documents:** Preparation of a final report summarizing the results of our field and laboratory test results, including final report on grading and certification of compliance.

Approach Construction Services



Materials Testing Concrete Sampling

ENVIRONMENTAL SERVICES APPROACH

California Environmental Quality Act (CEQA)

We will work closely with City staff to scope and conduct environmental analyses, including preparing CEQA documents (e.g., Notices of Exemptions, Initial Studies/Mitigated Negative Declarations [IS/MNDs], and Environmental Impact Reports [EIRs]) and technical reports, attending meetings and hearings, coordinating with project teams, and implementing noticing and outreach. Project initiation activities will involve data collection and review of material, tribal outreach, database searches, site visits, and a project kick-off meeting. See “Environmental Services and Permitting” regarding our technical analyses developed to support the CEQA analysis. We typically support Categorical Exemptions with a basic checklist demonstrating applicability of the exemption and absence of exceptions. For IS/MNDs and EIRs, our scope includes responses to comments, mitigation monitoring and reporting plans (MMRPs), and project findings. We will seek opportunities to streamline CEQA review while avoiding piecemealing. We can develop City-specific CEQA templates and protocols and train agency staff in their use to ensure consistent and efficient project environmental review, emphasizing the importance of documenting review and standardizing decision protocols, when feasible. We can also prepare National Environmental Policy Act (NEPA) documents (Categorical Exclusions, Environmental Assessments, Environmental Impact Statements), developing the format and contents consistent with federal lead agency requirements.

Environmental Services and Permitting

Phase I Environmental Site Assessments: Ninyo & Moore's scope of services for Phase I Environmental Site Assessments (ESA) is consistent with the ASTM International (ASTM) 2021 guidance (Designation Number E1527-21). The objective of the assessment is to evaluate whether past or current activities have resulted in “Recognized Environmental Conditions,” as defined in ASTM E1527 21. Ninyo & Moore's scope of services for a Phase I ESA includes: review recorded land title records and lien records for the site, supplied by the client; review ownership records for the site, if provided by the client; review readily available maps and reports pertaining to the site, which are provided by the client; conduct interviews with owners and property representatives (if available) regarding the environmental status of the site; perform a site reconnaissance to visually identify areas of possible contamination, improperly stored hazardous materials, and possible risks of contamination from activities at the site and adjacent properties; review available regulatory agency databases for the site and for properties located within a specified radius of the site; if the site and/or adjoining properties are identified on a government records search, a review of readily available state and local regulatory agency files for the site and adjoining properties will be conducted; review readily available historical documents, including aerial photographs (site and adjacent properties), Sanborn Insurance Maps (sites and available adjacent properties), Building Department Records (site only), and reverse city directories (site and available adjacent properties), as appropriate; and prepare the Phase I ESA report for the property that documents findings and provide opinions regarding possible environmental impacts at the site; and prepare an evaluation of the client's compliance with the required environmental permits and waste handling procedures for the site.

Phase II Environmental Site Assessments: A Phase II ESA can include several tasks as part of the scope of services. Depending on the specific site conditions and regulatory framework of the site, Ninyo & Moore's scope of services for a Phase II ESA includes: management, coordination, and meeting with the appropriate local and/or state regulatory oversight agency; review any previous environmental site assessments conducted at the site or nearby sites by other consultants; retaining and overseeing appropriate subcontractors to perform subsurface investigative work and application for related permits, as well as notification of Underground Service Alert, if necessary; conduct the field activities related to the site assessment which may include, but not necessarily be limited to installation, development, and sampling of groundwater monitoring wells; collection of shallow soil and sediment samples; collection of soil vapor samples; hand augering of shallow borings; and other similar subsurface evaluation methods. Sampling locations will be tracked per state regulatory reporting requirements (i.e., Geotracker, Envirostor, etc.); conduct the necessary sample analyses for the constituents of potential concern for the media collected, as necessary; compile, analyze, and evaluate the data for quality control/quality assurance, perform statistical analyses on the data as appropriate, and summarize the data on appropriate figures and tables; dispose of investigative derived waste based on the waste classification; prepare a peer-reviewed report including a summary of the investigative methods and field observations; data evaluation and discussion; findings; and conclusions and recommendations, as necessary; if necessary and appropriate, remedial activities may be proposed; and coordinate with the regulatory agency regarding the findings of the assessment activities and negotiate with the regulatory agency regarding the procedures necessary to move the site toward regulatory closure.

Site Remediation: Ninyo & Moore has extensive experience implementing various remedial strategies by providing in-house remediation services using our qualified and experienced staff, and management of a number of appropriate specialty subcontractors (e.g., excavation sub-contractor and waste disposal services). Some of Ninyo & Moore's recent local remediation experience consists of excavation and offsite disposal of contaminated or hazardous wastes; design, installation, and operation and maintenance of various mechanical remediation systems, including vapor mitigation systems; injection of chemicals and/or biological substrates; and recommending and implementing engineering and/or institutional controls, (e.g., soil capping and



soil management plan). On behalf of the City, we can draft simple remedial work plans, pilot test work plans, Feasibility Study/Corrective Action Plans (FS/CAP), Remedial Action Plans (RAP), Removal Action Work Plans (RAW), and Risk Assessments, and implement the work successfully on-time, in scope, and on budget. Ninyo & Moore understands the process to obtain various required permits, maintain permit compliance, and properly close out permits once they are not warranted. We are also experienced in the preparation of construction documents for bidding and assisting with contractor selection on behalf of the City. Our local team currently has remedial projects under the jurisdiction of federal, state, and local regulators. We have successfully implemented remediation, negotiated many positive outcomes, and closed several sites for our clients.

Biological Surveys: Biological resource reports/assessments start with a review of the project location, air photos, and various databases about species that could occur there, including the California Natural Diversity Database (CNDDB), the Information for Planning and Consultation (IPaC), the California Native Plant Society List of Rare and Endangered Species, CalFlora, the Manual of California Vegetation, eBird, and iNaturalist, among others. We then conduct a site visit to confirm what habitats are present. The technical report identifies habitats and species present, the regulatory setting, project impacts, avoidance and minimization measures to incorporate into the project, permitting considerations, and potential mitigation measures for significant impacts. Resource Agency Permits: When it is determined that a project will require permits from the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the Regional Water Quality Control Board, the California Department of Fish and Wildlife, and/or the Coastal Commission, we will complete a jurisdictional delineation to determine the extent of impact within each agency's jurisdiction, and what type of permit is likely to be required. We recommend that the City request attendance at a regular Interagency Meeting held by the U.S. Army Corps of Engineers to informally discuss the project with the regulatory agencies and get an initial assessment of what is needed. We will then prepare the permit applications, including biological surveys, mitigation plans, and restoration plans, and follow through until permits are issued. We will assist the City with permit review and agency negotiations.

Permit Compliance: We provide onsite monitoring to ensure compliance with the MMRP adopted for the project and for permit conditions required by regulatory agencies. Once permits are issued, our biologists can follow the project through permit compliance, including pre-construction notifications, pre-construction surveys and reports, wildlife relocation, worker education, construction monitoring, post-construction reporting, and post-construction compliance monitoring of restored areas.

Cultural/Archeological Surveys: Cultural and archeological services will be provided by Pacific Legacy. Since it was founded in 1994, Pacific Legacy has built a reputation for crafting creative solutions to complex cultural resource management issues. Over the past 28 years, we have assisted hundreds of federal, state, and local agencies as well as private developers in complying with Section 106 of the National Historic Preservation Act (NHPA), NEPA, CEQA, and historic preservation regulations. Pacific Legacy has held numerous on-call service agreements throughout California, including contracts with 10 separate Caltrans districts, the US Bureau of Land Management, the US Bureau of Reclamation, the US Forest Service, the City of Monterey, the Monterey Municipal Airport, the City and County of San Francisco, the City of Berkeley, the Santa Clara County Water District, Pacific Gas & Electric Company, Southern California Edison Company, and the San Francisco Presidio Trust, among others. Contract experience includes Phase I archaeological inventory surveys, Phase II cultural resource evaluations, and Phase III data recovery programs and sensitivity assessments as well as a variety of archaeological monitoring, mitigation, and education projects. Deliverables produced for these task orders included Archaeological Survey Reports, Historic Properties Treatment Plans, Archaeological Monitoring and Inadvertent Discovery Plans, Memoranda of Agreement, Programmatic Agreements, historic contexts, archaeological testing and data recovery reports, Construction Phase Management Plans, California and National Register evaluations, Tribal and agency consultation documents, and (EIS/EIR) chapters.

Air Quality/Greenhouse Gas Assessments and Compliance: We will provide on-call consulting services as part of the overall CEQA process or as independent services that support the City's project-specific needs. We will aid City staff with evaluating potential air quality impacts, including mass emissions estimates (e.g., CalEEMod, OFFROAD), dispersion modeling (e.g., AERMOD and CA-LINE), greenhouse gas pollutants, and health risk assessments. We will also aid City staff with compliance with potentially applicable federal, state, and regional air quality regulations, including fugitive dust control requirements, naturally occurring asbestos dust mitigation, and temporary stationary or portable equipment registrations. Finally, our team will provide technical assistance and expertise to staff regarding Federal Clean Air Act Section 112(r) and California Accidental Release Prevention Program risk management plan requirements, including RMP*Comp and ALOHA modeling for toxic endpoints, lower flammability limits, and overpressure endpoints to determine potential offsite consequences from accidental release of hazardous and flammable substances.

Noise Monitoring and Impact Assessment: Sound-level meters are used to document on-site sound levels and provide a basis for determining a project's temporary or permanent change in the existing noise environment. We model and predict the sound levels generated by construction equipment, stationary sources such as generators, and mobile sources; compares predicted levels to relevant standards; and develops mitigation to lessen or avoid substantial noise levels at sensitive receptor locations.

Transportation: When needed, we will partner with transportation consultants to provide transportation studies to assess vehicle miles travelled impacts in accordance with CEQA requirements. Although not required for CEQA analyses, our transportation experts can also provide Level of Service impact studies to address compliance with City standards.

Clean Water/MRP Compliance

The Ninyo & Moore team will review and evaluate projects for conformance with the Statewide Construction General Permit, as well as with the applicable provisions of the Municipal Regional Permit (Order No. R2-2022- 0018, NPDES Permit No. CAS612008), including C.2 Municipal Operations, C.3 New Development and Development, and C.6 Construction Site Control. Recommendations for construction and post-construction Best Management Practices, based on Contra Costa Clean Water Program design guidelines and other reference materials, will be provided.

Hazardous Materials

Hazardous Building Materials Surveys (HBMS): Ninyo & Moore's technical staff of California Division of Occupational Safety and Site Surveillance Technicians (CSSTs) is augmented by in-house California Department of Public Health (CDPH) Lead Related Construction (LRC) Project Monitor (LPM), and CDPH LRC inspector / Assessor (LI/A). Typical hazardous building materials (HBMs) addressed by Ninyo & Moore's staff include: asbestos containing material (ACM); lead based paint (LBP); polychlorinated biphenyl (PCB) light ballasts, switches and transformers; mercury-containing thermostats/switches; fluorescent light tubes; tritium exit signs; Freon™-containing refrigeration systems; and other potentially hazardous components. Upon completion of the initial survey and HBMs sampling, Ninyo & Moore's technical staff reviews laboratory analytical reports and prepares a report detailing the presence and specific location of any identified HBMs. The report will also provide recommendations for either mitigation or abatement of HBMs. If desired, Ninyo & Moore staff are also capable of preparing abatement specifications and providing abatement oversight, including clearance air sampling and required

Industrial Hygiene, Indoor Air Quality, And Microbial Assessments: Ninyo & Moore provides professional services and assessments relating to industrial hygiene, indoor air quality (IAQ), and microbial evaluations through a staff of Certified Industrial Hygienists. Industrial Hygiene samples are analyzed in laboratories, which are accredited by the American Industrial Hygiene Association. Based on analytical results, Ninyo & Moore will develop specific recommendations including exposure control strategies, remedial solutions, respiratory protection, confined space entry, and hearing conservation in compliance with federal and state Occupational Safety and Health Administration (OSHA) standards.

Hazardous Building Materials Abatement Oversight and Closeout Reporting: Ninyo & Moore's hazardous materials abatement oversight and monitoring services generally include the following tasks and methodologies, as may be requested. Ninyo & Moore's project manager will be available 24 hours a day, 7 days a week during the construction phase of the project. HBMS scope of services includes assist City and Architects at pre-bid contractor job-walk to answer questions concerning relevant site conditions and bid specifications for abatement; responding to contract requests for information (RFIs) following the pre-bid contractor job walk; and abatement contractor selection process; participate in pre-abatement job-walk with the client and selected contractor to document pre-abatement work area conditions; prepare and provide site-specific presentations for City Staff or the public, regarding the specific abatement process and the overall scope of the abatement, if needed; conduct contractor observation during abatement activities to see that the contractor is adhering to project specifications and applicable local, state and federal regulations, and is using the appropriate engineering controls to conduct abatement in a safe and cost-effective manner; assist the City with evaluating proposed work scope changes and contractor change order requests pursuant to work scope changes; observe and document the set up and removal of work area containments and provide containment area visual inspections throughout the active abatement process. Perform pre-abatement air monitoring for base-line purposes, as well as air monitoring during and after abatement activities. Upon completion of abatement and after a final visual inspection, final clearance air sampling is conducted; prepare daily monitoring reports that document the on-site air monitoring conducted during abatement of asbestos, lead and other miscellaneous hazardous materials; provide ongoing consultation to City Project Managers and Consultants, and Architects regarding any indoor air quality-related issues such as asbestos, lead and/or general construction dust; respond to regulatory inspections/citations, spills, unforeseen conditions that threaten safety or project schedule, and other site emergencies in a manner commensurate with the situation, including emergency response protocol when necessary; and prepare final abatement Closeout Report describing abatement activities, air sample analysis results, and visual inspection results. All required contractor submittals and laboratory reports are included in the Closeout Report.

Fueling Systems/UST Removal

Ninyo & Moore provides engineering services for underground storage tank (UST)-related environmental investigations, remediation, and removal throughout the state of California. We have project principals, task managers, and project staff assigned to the contract that possess the training, experience, and knowledge to not only complete the scope of work, but to excel on problem solving, and interpreting data for even the most complex sites. Our experience on projects throughout California has greatly enhanced our knowledge of, and familiarity with, federal, state and local regulations and the submittal procedures of federal, state and local jurisdictional agencies. The Ninyo & Moore team is knowledgeable of the California State Water Resources Control Board's August 2012, Low-Threat Underground Storage Tank Closure Policy (LTCP). Our local Northern California team has removed thousands of USTs and closed hundreds of UST environmental cases utilizing the LTCP. We are familiar with the County of Marin – Waste Management Division's Certified Unified Program Agency (CUPA) procedures to permit and inspect UST removal. Our team has the experience and knowledge to cost effectively remove UST systems, while gathering the data needed to keep the site from becoming an active environmental case, when possible.

Biohazard and Homeless Encampment Cleanup

Ninyo & Moore provides professional services for biohazard and homeless encampment cleanup. Once the residents of an encampment have been removed or relocated, a procedure for removing the remaining wastes and potentially hazardous materials should be developed. A triage approach to waste removal that includes the following should be considered:

- Verify City staff, consultants, and contractors have proper training, equipment, and personal protective equipment (PPE).
- Establish site control with demarcation lines and signage that restricts access to the site.
- Develop a process to identify and store remaining personal belongs in the encampment. This process should be legally defensible, and ensure the occupants' access to their stored belongs. Some local municipalities, such as the city of Richmond, have policies on the storage of possessions.
- Identification and removal of hazardous and special wastes via specialty contractor.
- Removal of recyclables that are not owned by residents via specialty contractor.
- Removal of remaining solid wastes. In each case, the entity that will identify and remove these wastes should be determined and committed prior to initiating the abatement project.
- Should the City decide to perform a volunteer cleanup of an encampment, the volunteers should receive a health and safety briefing from a qualified individual that includes the provision and use of PPE before initiating the project.



6 | APPROACH TO SCHEDULE OF WORK

Ninyo & Moore



6

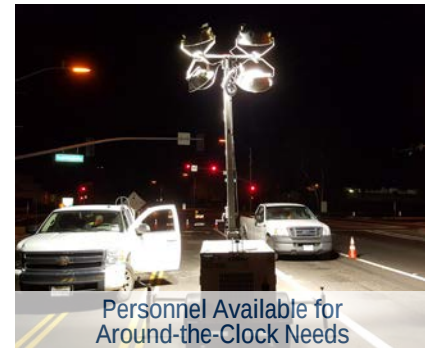
APPROACH TO SCHEDULE OF WORK

UNIQUE CAPABILITIES

Project Short Notice On-Call Services

Project delivery is successfully achieved through:

- Ninyo & Moore provides a 4-hour response time for projects in close proximity to our offices.
- Personnel can be available for weekend and/or around-the-clock efforts, as project needs dictate.
- Ninyo & Moore's field engineers and geologists, field technicians, and special inspectors are available throughout the duration of their project assignment(s).
- Twenty-four-hours-a-day, seven-days-a-week, point-of-contact telephone, cell phone, and email information is provided to the designated City project manager/representative(s).



Project Dispatching

Ninyo & Moore's field personnel are coordinated through our dispatcher using cell phones and email correspondence. Specifically, our project dispatcher:

- Manages the daily overall duties of technicians/inspectors.
- Provides clients with quality customer service and care.
- Answers client requests for technicians/inspectors.
- Assures client will have the most qualified technician/inspector to perform requested duty.
- Assigns technicians/inspectors to projects insuring they have the proper certifications required.
- Ready field files for projects when received with forms, client information, plans and specifications.



Project Software Resources

Project costs are tracked and controlled via a variety of resources including:

- Ninyo & Moore utilizes Deltek Vision to track projects in real-time and provide our clients with daily, weekly, and/or monthly progress reports, as required.
- Ninyo & Moore utilizes Sharepoint and Dropbox to provide laboratory and field reports to our clients. Kordata, a cloud-based platform provides our clients and employees with 24-hour, 7 days-a-week secure on-site and remote access to project-related reports, laboratory data, and other information. Staff can review, approve, and send results immediately using dashboards, and reports can be emailed and/or placed in a document repository of the client's preference.
- Ninyo & Moore's utilization of these tools has allowed us to become completely digital, allowing for data retrieval any time / anywhere internet access is available. They are also accessible on a variety of devices including PC, laptop computer, and iOS and Android mobile phones/tablets.



Laboratory Capabilities

Ninyo & Moore geotechnical and materials testing laboratory services include:

- Maintains a fully equipped and calibrated, local in-house laboratory that provides soil, concrete, masonry, asphalt, steel, fireproofing, and high strength bolt testing.
- Laboratory testing is overseen by a registered civil engineer, and meets the requirements of ASTM E329, ASTM C1077, ASTM D3740, and ASTM D3666.
- Our testing laboratories have been inspected and/or accredited by the AASHTO, AMRL, CCRL, ASTM, and U.S. Army Corps of Engineers.



SCHEDULE OF WORK

Schedule of Work by Service Area/Deliverable	
Tasks	Typical Project Timeline
Geotechnical Services	
Background Review	2 Weeks
Permitting and Utility Clearance	2 to 3 Weeks
Subsurface Exploration	4 Weeks
Emergency Slope Stability / Erosion Evaluation and Protection Mitigation Recommendations	48 hours (Site meeting/reconnaissance)
Laboratory Testing	4 to 5 Weeks
Data Analysis and Calculations	5 to 6 Weeks
Final Reports	6 Weeks
Materials Testing Services	
Project Kick-Off	1 Week
Mix Design and Submittal Review	2 to 3 Weeks (turn-around time with our review letter is 24 hours)
Compaction Testing	8 to 10 Weeks (Compaction testing happens during the initial first few months during construction phase when contractor is working on grading and backfilling operations for Foundations, Trench backfill, sitework or pavement)
Reports	8 to 10 Weeks (turn-around time is 24 hours with density test results and testing locations plotted on the maps)
Environmental Services	
California Environmental Quality Act	Duration Varies (Based on Scope of Work)
Environmental Services and Permitting	Duration Varies (Based on Scope of Work)
Clean Water, MRP Compliance	Duration Varies (Based on Scope of Work)
Hazardous Materials with Deliverables	4 to 6 Weeks (Timeline to completion is post receipt of analytical laboratory results. The timeline required to complete any assigned HBM investigation and survey can vary based on the size and number of facilities investigated)
Fueling Systems/UST Removal (Phase I and II, Remediation Plans & Specifications	3 to 6 Weeks (The timeline required to complete any assigned report can vary based on the size and number of areas/facilities investigated)
Biohazard and Homeless Encampment Cleanup	Duration Varies (The timeline can vary based on the size and number of facilities investigated)



7 | RATE SCHEDULE

Ninyo & Moore



Schedule of Fees**Hourly Charges for Personnel****Professional Staff**

Principal Engineer/Geologist/Environmental Scientist/Certified Industrial Hygienist	\$ 210
Senior Engineer/Geologist/Environmental Scientist	\$ 200
Senior Project Engineer/Geologist/Environmental Scientist	\$ 195
Project Engineer/Geologist/Environmental Scientist	\$ 185
Senior Staff Engineer/Geologist/Environmental Scientist	\$ 170
Staff Engineer/Geologist/Environmental Scientist	\$ 155
GIS Analyst	\$ 130
Technical Illustrator/CAD Operator	\$ 110

Field Staff

Certified Asbestos/Lead Technician	\$ 195
Field Operations Manager	\$ 130
Nondestructive Examination Technician (UT, MT, LP)	\$ 125
Supervisory Technician	\$ 120
Special Inspector (Concrete, Masonry, Structural Steel, Welding, and Fireproofing)	\$ 115
Senior Technician	\$ 110
Technician	\$ 110

Administrative Staff

Information Specialist	\$ 90
Geotechnical/Environmental/Laboratory Assistant	\$ 95
Data Processor	\$ 75

Other Charges

Concrete Coring Equipment (includes technician)	\$ 190/hr
Anchor Load Test Equipment (includes technician)	\$ 190/hr
GPR Equipment	\$ 180/hr
Inclinometer	\$ 100/hr
Hand Auger Equipment	\$ 80/hr
Rebar Locator (Pachometer)	\$ 25/hr
Vapor Emission Kit	\$ 65/kit
Nuclear Density Gauge	\$ 12/hr
X-Ray Fluorescence	\$ 70/hr
PID/FID	\$ 25/hr
Air Sampling Pump	\$ 10/hr
Field Vehicle	\$ 15/hr
Expert Witness Testimony	\$ 450/hr
Direct Expenses	Cost plus 15 %
Special equipment charges will be provided upon request.	

Notes

For field and laboratory technicians and special inspectors, overtime rates at 1.5 times the regular rates will be charged for work performed in excess of 8 hours in one day Monday through Friday and all day on Saturday. Rates at twice the regular rates will be charged for all work in excess of 12 hours in one day, all day Sunday and on holidays.

Field technician and special inspection hours are charged at a 4-hour minimum, and 8-hour minimum for hours exceeding 4 hours.

Invoices are payable upon receipt. A service charge of 1.5 percent per month may be charged on accounts not paid within 30 days.

Our rates will be adjusted in conjunction with the increase in the Prevailing Wage Determination during the life of the project, as applicable.

The terms and conditions are included in Ninyo & Moore's Work Authorization and Agreement form.

Schedule of Fees for Laboratory Testing

SOILS

Atterberg Limits, D 4318, CT 204	\$ 170
California Bearing Ratio (CBR), D 1883	\$ 550
Chloride and Sulfate Content, CT 417 & CT 422	\$ 175
Consolidation, D 2435, CT 219	\$ 300
Consolidation, Hydro-Collapse only, D 2435	\$ 150
Consolidation – Time Rate, D 2435, CT 219	\$ 200
Direct Shear – Remolded, D 3080	\$ 350
Direct Shear – Undisturbed, D 3080	\$ 300
Durability Index, CT 229	\$ 175
Expansion Index, D 4829, IBC 18-3	\$ 190
Expansion Potential (Method A), D 4546	\$ 170
Geofabric Tensile and Elongation Test, D 4632	\$ 200
Hydraulic Conductivity, D 5084	\$ 350
Hydrometer Analysis, D 6913, CT 203	\$ 220
Moisture, Ash, & Organic Matter of Peat/Organic Soils	\$ 120
Moisture Only, D 2216, CT 226	\$ 35
Moisture and Density, D 2937	\$ 45
Permeability, CH, D 2434, CT 220	\$ 300
pH and Resistivity, CT 643	\$ 175
Proctor Density D1557, D 698, CT 216, AASHTO T-180	\$ 220
Proctor Density with Rock Correction D 1557	\$ 340
R-value, D 2844, CT 301	\$ 375
Sand Equivalent, D 2419, CT 217	\$ 125
Sieve Analysis, D 6913, CT 202	\$ 145
Sieve Analysis, 200 Wash, D 1140, CT 202	\$ 100
Specific Gravity, D 854	\$ 125
Thermal Resistivity (ASTM 5334, IEEE 442)	\$ 925
Triaxial Shear, C.D, D 4767, T 297	\$ 550
Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt	\$ 450
Triaxial Shear, C.U., w/o pore pressure, D 4767, T 2297 per pt	\$ 350
Triaxial Shear, U.U., D 2850	\$ 250
Unconfined Compression, D 2166, T 208	\$ 180

MASONRY

Brick Absorption, 24-hour submersion, 5-hr boiling, 7-day, C 67	\$ 70
Brick Compression Test, C 67	\$ 55
Brick Efflorescence, C 67	\$ 55
Brick Modulus of Rupture, C 67	\$ 50
Brick Moisture as received, C 67	\$ 45
Brick Saturation Coefficient, C 67	\$ 60
Concrete Block Compression Test, 8x8x16, C 140	\$ 70
Concrete Block Conformance Package, C 90	\$ 500
Concrete Block Linear Shrinkage, C 426	\$ 200
Concrete Block Unit Weight and Absorption, C 140	\$ 70
Cores, Compression or Shear Bond, CA Code	\$ 70
Masonry Grout, 3x3x6 prism compression, C 39	\$ 45
Masonry Mortar, 2x2 cube compression, C 109	\$ 35
Masonry Prism, half size, compression, C 1019	\$ 120
Masonry Prism, Full size, compression, C 1019	\$ 200

REINFORCING AND STRUCTURAL STEEL

Chemical Analysis, A 36, A 615	\$ 135
Fireproofing Density Test, UBC 7-6	\$ 90
Hardness Test, Rockwell, A 370	\$ 80
High Strength Bolt, Nut & Washer Conformance, per assembly, A 325	\$ 150
Mechanically Spliced Reinforcing Tensile Test, ACI	\$ 175
Pre-Stress Strand (7 wire), A 416	\$ 170
Reinforcing Tensile or Bend up to No. 11, A 615 & A 706	\$ 75
Structural Steel Tensile Test: Up to 200,000 lbs., A 370	\$ 90
Welded Reinforcing Tensile Test: Up to No. 11 bars, ACI	\$ 80

CONCRETE

Compression Tests, 6x12 Cylinder, C 39	\$ 35
Concrete Mix Design Review, Job Spec	\$ 300
Concrete Mix Design, per Trial Batch, 6 cylinder, ACI	\$ 850
Concrete Cores, Compression (excludes sampling), C 42	\$ 120
Drying Shrinkage, C 157	\$ 400
Flexural Test, C 78	\$ 85
Flexural Test, C 293	\$ 85
Flexural Test, CT 523	\$ 95
Gunite/Shotcrete, Panels, 3 cut cores per panel and test, ACI	\$ 275
Lightweight Concrete Fill, Compression, C 495	\$ 80
Petrographic Analysis, C 856	\$ 2,000
Restrained Expansion of Shrinkage Compensation	\$ 450
Splitting Tensile Strength, C 496	\$ 100
3x6 Grout, (CLSM), C 39	\$ 55
2x2x2 Non-Shrink Grout, C 109	\$ 55

ASPHALT

Air Voids, T 269	\$ 85
Asphalt Mix Design, Caltrans (incl. Aggregate Quality)	\$ 4,500
Asphalt Mix Design Review, Job Spec	\$ 180
Dust Proportioning, CT LP-4	\$ 85
Extraction, % Asphalt, including Gradation, D 2172, CT 382	\$ 250
Extraction, % Asphalt without Gradation, D 2172, CT 382	\$ 150
Film Stripping, CT 302	\$ 120
Hveem Stability and Unit Weight D 1560, T 246, CT 366	\$ 225
Marshall Stability, Flow and Unit Weight, T 245	\$ 240
Maximum Theoretical Unit Weight, D 2041, CT 309	\$ 150
Moisture Content, CT 370	\$ 95
Moisture Susceptibility and Tensile Stress Ratio, T 238, CT 371	\$ 1,000
Slurry Wet Track Abrasion, D 3910	\$ 150
Superpave, Asphalt Mix Verification (incl. Aggregate Quality)	\$ 4,900
Superpave, Gyro Unit Wt., T 312	\$ 100
Superpave, Hamburg Wheel, 20,000 passes, T 324	\$ 1,000
Unit Weight sample or core, D 2726, CT 308	\$ 100
Voids in Mineral Aggregate, (VMA) CT LP-2	\$ 90
Voids filled with Asphalt, (VFA) CT LP-3	\$ 90
Wax Density, D 1188	\$ 140

AGGREGATES

Clay Lumps and Friable Particles, C 142	\$ 180
Cleaness Value, CT 227	\$ 180
Crushed Particles, CT 205	\$ 175
Durability, Coarse or Fine, CT 229	\$ 205
Fine Aggregate Angularity, ASTM C 1252, T 304, CT 234	\$ 180
Flat and Elongated Particle, D 4791	\$ 220
Lightweight Particles, C 123	\$ 180
Los Angeles Abrasion, C 131 or C 535	\$ 200
Material Finer than No. 200 Sieve by Washing, C 117	\$ 90
Organic Impurities, C 40	\$ 90
Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260	\$ 1,250
Potential Alkali Reactivity, Mortar Bar Method, Fine, C 1260	\$ 950
Potential Reactivity of Aggregate (Chemical Method), C 289	\$ 475
Sand Equivalent, T 176, CT 217	\$ 125
Sieve Analysis, Coarse Aggregate, T 27, C 136	\$ 120
Sieve Analysis, Fine Aggregate (including wash), T 27, C 136	\$ 145
Sodium Sulfate Soundness, C 88	\$ 450
Specific Gravity and Absorption, Coarse, C 127, CT 206	\$ 115
Specific Gravity and Absorption, Fine, C 128, CT 207	\$ 175

ROOFING

Roofing Tile Absorption, (set of 5), C 67	\$ 250
Roofing Tile Strength Test, (set of 5), C 67	\$ 250

Special preparation of standard test specimens will be charged at the technician's hourly rate.
Ninyo & Moore is accredited to perform the AASHTO equivalent of many ASTM test procedures.



Ninyo & Moore

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