

PPM Group Inc.

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September 23, 2019

Mr. Hector Gonzalez, PE Principle Civil Engineer City of Rialto Department of Public Works 335 West Rialto Avenue Rialto, California 92376

Subject: PROPOSAL / FEE SCHEDULE – Construction Management & Inspection Services Etiwanda Corridor Improvements Project | RFB No. 20-004

Dear Mr. Gonzalez,

PPM Group, Inc. is pleased to submit our proposal to provide construction management and inspection services to the City of Rialto for Etiwanda Corridor Improvements Project.

Project Understanding. PPM Group understand that the City of Rialto is requesting construction inspection for asphalt paving, curbs & gutters, ADA rams, electrical inspection, labor compliance and prevailing wage compliance services for the Etiwanda Corridor Improvement project. We understand that the work is located on Etiwanda Avenue from Maple Avenue to Pepper Avenue; Baseline Road from Maple Avenue to Pepper Avenue; Maple Avenue, Riverside, and Pepper Avenue as identified in the project location map in the Part III-Appendix. It is our understanding that the project includes roadway; temporary traffic control, Water Pollution Control, Construction Survey and Monumentation, construct curb ramps, 8" curbs, 8" curb and gutters, cross gutters, 4" thick PCC sidewalks, curb ramps, full depth AC Pavement over 12" 95% compacted native subgrade, grind and overlay existing pavement with 0.10' AC Min, adjust existing utility to grade, signing and striping. The project also includes electrical inspection. In general, electrical inspection services consists of installing a new video detection system at Etiwanda Avenue and Cactus Avenue and a new pedestrian push button and loop detectors at Etiwanda Avenue and Riverside Avenue. Labor Compliance and Prevailing Wage compliance is also required on the Etiwanda Corridor Improvements Project pursuant to California Labor Code Sections 1773

PPM Group also understands that the Engineer's Estimate for the project is \$950,000 to \$1,100,000 for a duration of 45 working days and an additional 20 working days for traffic control plan approval. It is also understood that the Bid Opening was on September 12, 2019. All work will be completed in accordance with these bid documents, the approved project drawings, the City of Rialto's Standard Specifications for Public Works Construction ("Greenbook"), 2015 Edition, including all current supplements, addenda, and revisions thereof. Contract Special Provisions, and the Standard Plans identified in Part III- Appendix; Caltrans Standard Specifications and Plans 2018 Edition; and Amended Standard Specifications – the amendments identified in Part II – Contract Special Provisions.

The Right Team. PPM Group is proposing Lawrence Taylor, Construction Inspector / Electrical. Lawrence has more than 17 years of construction inspection, electrical inspection, and civil engineering experience on various public, private and capital improvement projects for various Cities, Counties, Caltrans, and local agencies. Lawrence's experience includes ensuring ADA compliance which entails verifying various type ADA ramp compliance with ADA standards including, but not limited to verification of ramp width, longitudinal and cross slope, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, detectable warning surface width, depth, and material compliance, conforming sidewalk slopes, curb ramp surface finish, obstructions, Pedestrian Push Button height and wheelchair accessibility at a signalized intersection, surface of the roadway in front of the curb ramp, condition of the existing sidewalk and retaining curb backfill. He experience also includes paving, rehabilitation, and improvements including roadway excavation, storm drain systems; sewer systems; grinding, crack filling, asphalt concrete (AC) and Portland Cement Concrete (PCC) pavements; alleyway approaches, curb, gutters and ramps, driveway aprons, sidewalks and ADA ramp improvements projects; striping and markings, traffic signal improvements work, traffic control, landscaping and Rock Slope Protection. He is also experienced with reviewing submittals, monitoring demolitions, completing daily reports and quality calculations for payment vouchers. He is competent with Caltrans Standard Specifications, Standard Plans, Construction Manuals and Traffic Manual.

Mr. Hector Gonzalez, PE, Principle Civil Engineer City of Rialto, Department of Public Works Construction Inspection Services for Etiwanda Corridor Improvements Project | RFB No. 020-004 Page 2

Cesar Cerda is a Construction Inspection with more than 32 years of construction inspection experience. He has worked on various public and commercial projects. Cesar's experience includes field engineering on a variety of construction projects including roadway construction, emergency repair, highway rehabilitation and capital improvement projects. His experience includes, but not limited to: ensuring ADA compliance which entails verifying various type ADA ramp compliance with ADA standards including, but not limited to Pedestrian Push Button height and wheelchair accessibility at a signalized intersection, verification of ramp width, detectable warning surface width, depth, and material compliance, condition of the existing sidewalk and retaining curb backfill; conforming sidewalk slopes, curb ramp surface finish, longitudinal and cross slope, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, obstructions, surface of the roadway in front of the curb ramp. Cesar is also experience with roadway excavation, grade checking, Cold Planning and Resurfacing, Asphalt Paving (HMA and ARAM), AC Dike, curb, gutters, sidewalk, concrete pavement, drainage and sewer systems, grouted rock strip, landscaping, retaining wall, striping, signalization, **SWPPP, traffic control, and safety.** His prior responsibilities, among others, included roadway embankments, grade checking using survey stakes, hot mixed asphalt (HMA, RHMA), PCC paving, drainage structures, slope paving; MBGR installation, roadway and highway widening and improvements, removing and replacing sidewalks, curbs, gutters, driveways, ADA curb ramps, concrete foundations, mill and pave, slurry seal, erosion control and remove and replace striping, streetlights installation, traffic control and SWPPP compliance. He is competent with Caltrans Standard Specifications, Standard Plans, Construction manual and Traffic Manual.

Oscar Eftekhari, Construction Inspector has 30 years of experience in construction inspection of roadways and highways. Oscar's experience includes excavation inspection, grade checking, Portland Cement Concrete, Hot Mix Asphalt (HMA & RHMA) pavement, Asphalt dike, concrete pavement, material sampling and testing. His areas of expertise include JPCP / HMA / RSC / cold in place recycled paving, curb and gutter, sidewalks, ramps and ADA ramps, pile driving, SWPPP / WPC, and CIDH foundation. His experience includes ensuring ADA compliance which entails verifying various type ADA ramp compliance with ADA standards including, but not limited to verification of ramp width, longitudinal and cross slope, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, surface of the roadway in front of the curb ramp, detectable warning surface width, depth, and material compliance, conforming sidewalk slopes, curb ramp surface finish, obstructions, condition of the existing sidewalk and retaining curb backfill, and Pedestrian Push Button height and wheelchair accessibility at a signalized intersection. His project experience also involves drainage and sewer systems, utilities, striping, grinding, earthwork, signal and lighting work, Midwest Guardrail System (MGS), and soil nailing. He is responsible for scheduling, coordinating, facilitating and documenting various meetings with stakeholders, public officials, contractors and affected third party or businesses, utility companies and local agencies. He is also well familiar with Caltrans Standard Specifications, Standard Plans, Construction manual and Traffic Manual.

Supporting our inspectors, on as needed and part-time basis, is our Construction Manager / Resident Engineer, Fred Alipanah, PE, and Nicole Salem for Document Control / Labor Compliance tasks.

**Fred Alipanah, PE, Contraction Manager / Resident Engineer** has more than 30 years of experience in project and construction management, structural and civil engineering, and construction inspection. Fred worked for Caltrans District 7 and 8 for over 20 years.

**Nicole Salem, Document Control / Labor Compliance** has over 14 years of experience in the construction and engineering industries with expertise in contract administration, office engineering, document control, and labor compliance for transportation, public works, and infrastructure projects and in compliance with Federal, State and local agency requirements.

Mr. Hector Gonzalez, PE, Principle Civil Engineer
City of Rialto, Department of Public Works
Construction Inspection Services for Etiwanda Corridor Improvements Project | RFB No. 020-004
Page 3

**Estimated Hours**. Based on our review of the plans, project construction schedule provided, we anticipate that our inspection services will vary and not exceed an average of 8 hours per day. Below are PPM Group's estimated hours that may be needed to provide development inspection for on-site elements:

		Project Time Needed	Pre-construution Phase	Construution Phase	Post Constrcution Phase	Total Hours	Billing Rate	Total
Staff Member/Certification	Project Assignment	Project Assignment						
TBD	Construction Inspector	100%	10	340	10	360	\$ 130.00	\$ 46,800.00
Fred Alipanah, PE	Construction Manager / Resident Engineer	20%	8	40	8	56	\$ 185.00	\$ 10,360.00

Subtotal Construction Management: \$ 57,16

Subconsultants	Services	Total	
Ninyo & More	Materials Testing	\$	10,788.00
	Subtotal Subconsultants:	\$	10,788.00
	Total Cost	\$	67,948.00

#### **Limitations & Conditions:**

Construction duration is estimated at 45 working days with 3 days for pre-construction and 3 days for closeout.

Inspectors will be fully equipped with vehicles, computers, tools, and equipment required to perform their tasks.

Overtime and weekend work is not included. Overtime is to be charged at 1.5 the above rate for Inspection work only.

Cost proposal is subject to prevailing wage rates and prevailing wage rate changes for inspection.

Contractor/SB County will provide field office space and office supplies needed.

PPM Group's rates are fully inclusive of all overhead, profit, equipment, tools, supplies, reprographic cost, vehicles, travel and labor burden.

The Right Team. PPM Group's team members offers more than 37 years of experience with engineering and inspection services for Capital Improvement Projects for public works, transportation, infrastructure, land development, and building projects. Our proposed staff are cross trained, qualified, and experienced in public works projects. Our proposed inspectors have worked on various public works projects for various local agencies and cities including, but not limited to the Cities of Upland, Rialto, Rancho Cucamonga, Fontana, Moreno Valley, Whittier, Indio, Camarillo, Glendale, Carson, and South Gate; Counties of San Bernardino, Riverside and Los Angeles; and various agencies including, but not limited to Caltrans District 7 and 8, Riverside County Transportation District, Ontario International Airport Authority, and John Wayne Airport.

I look forward to presenting our project team. If you have any questions or require additional information, please contact me at 909.262.4770 or by email at mtahan@ppmgroup-inc.com.

Very truly yours.

1

Michael Tahan, CCM, Project Manger

Vice President

cc: Rima Tahan. President / CEO

## LAWRENCE TAYLOR

# Construction Inspector / Electrical Inspector

### **EDUCATION**

AS, Engineering, National Education Center, Anaheim

### **CERTIFICATIONS**

Cal OSHA 30-Hours Defensive Driving

# YEARS OF EXPERIENCE 17 Years

### **AREAS OF EXPERTISE**

- 17 Years of Construction Inspection Experience
- Roadway, Highway, Interchanges
- Pavement Management and Reconstruction

Mr. Taylor has 17 years of roadway construction inspection and electrical inspection, CADD operation and civil engineering experience. Lawrence's experience includes roadways, state highways, private and public works construction inspection of, AC and PCC paving, Cold Plane & Pave, concrete sidewalks, curbs, curb & gutters, curb ramps, storm drain systems, water and sewer lines installation, dry and wet utilities, grading, excavation, earthwork, and electrical installations, such as Traffic Signal, video Cameras, pedestrian push buttons and underground utilities. His experience also includes ensuring ADA compliance which entails verifying various type ADA ramp compliance with ADA standards including, but not limited to verification of ramp width, longitudinal and cross slope, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, surface of the roadway in front of the curb ramp, detectable warning surface width, depth, and material compliance, conforming sidewalk slopes, curb ramp surface finish, obstructions, condition of the existing sidewalk and retaining curb backfill, and Pedestrian Push Button height and wheelchair accessibility at a signalized intersection.

Lawrence experienced also includes state highways, and local street improvement construction works, including AC Paving, Cold Plane & Pave, Concrete Paving, storm drain systems, water and sewer lines installation, dry and wet utilities, excavation, grade checking, earthwork, electrical installations, and underground utilities. His experience also includes inspection of RHMA / HMA / JCPC / JPCP-RSC / grade checking, curb & gutters, curb ramp, sidewalks, Spandrel V-gutter, drainage and sewer systems, grouted rock strip, landscaping, retaining wall, striping, signalization, SWPPP, traffic control, and safety. Lawrence coordinates wet and dry utility installations for telephone, electrical, cable television, traffic signalization, gas relocations, landscape and irrigation improvements. He is experienced with Standard Specifications for Public Works Construction (Greenbook), Standard Plans for Public Works Construction, Cal/OSHA Construction Safety Orders, Standard Plans, and Special Provisions.

### RELEVANT EXPERIENCE

### City of Whittier, Nelles at the Grove in Whittier (WUA18-027), Whittier, CA

Field Inspector. The project includes demolition of the 68 buildings and new construction of 561 homes, 189 apartments and 150,000 square feet of retail and restaurant space. Four historic buildings will be preserved. Project also includes for new neighborhood parks and open space, as well as the restoration and reuse of four buildings from the 1920s and 1930s as part of the commercial and residential areas. Responsibilities include field inspection of asphalt concrete pavement, mill and resurfacing, AC dike, electrical work, coordinating with utility companies', landscaping, irrigation, grading, traffic signals, street lights, water systems, sewer systems and traffic control, concrete drainage pools and overseeing compliance testing. Lawrence was responsible for ensuring ADA compliance which entails verifying various type ADA ramp compliance with ADA standards including, but not limited to verification of ramp width, longitudinal and cross slope, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, surface of the roadway in front of the curb ramp, conforming sidewalk slopes, curb ramp surface finish, obstructions, condition of the existing sidewalk and retaining curb backfill, detectable warning surface width, depth, and material compliance, and Pedestrian Push Button height and wheelchair accessibility at a signalized intersection. He is also responsible for ARAM / JCPC / HMA / RSC / cold foam in place recycled paving, curb, gutters, sidewalks, grade checking, concrete pavement, drainage and sewer systems, grouted rock strip, landscaping, retaining wall, striping, signalization, SWPPP, traffic control, and safety. Project Cost: \$42 Million.



Lawrence Taylor Page 2

### Ontario International Airport Authority (OIAA), On-Call Construction Management, Ontario, CA

Field Engineer / Construction Inspector. Ontario International Airport (ONT) is a medium hub airport serving about four million passengers per year and is a major air-cargo facility in Southern California. The project requires construction management and related services on a regular basis to ensure OIAA projects and various tenant projects are completed according to their design and construction specifications. The project includes removing 52 acres of parking lot located at the northwest quadrant of the airport land side and the removal of asphalt paving, fencing and electrical appurtenances; and stock piling. Responsible for inspection of the realignment of vehicle service road (VSR) in two phases, installation of security fences, utility relocation SWPPP, traffic control and safety. Responsibilities included HMA paving excavation, grade checking, demolition of concrete pavement, removal of asphalt and concrete pavement. Project Cost: Various.

### City of Carson, Wilmington / SR-405 Bridge Improvement, Carson, CA

Lead Inspector. The project entails working on the Interstate 405 and Wilmington Avenue Interchange. Administered by the City of Carson, the project modified the I-405 Freeway and Wilmington Avenue Interchange, by adding a new on-ramp, modified Wilmington Avenue roadway, sidewalks, ADA ramps, widened the 405 Freeway over the Dominguez Channel, retrofit and widen the bridge at 223rd Street, rebuilt 223rd Street roadway and intersections along Wilmington Avenue. Lawrence was responsible for placement of JPCP, joint seal, ADA compliance, striping, electrical, polyester paving, striping, roadway excavation, and daily documentation. Lawrence was responsible for inspection of JPCP, RHMA and HMA pavements curbs, gutters, sidewalk, grade checking, drainage and sewer systems, rock slope protection, landscaping, retaining wall, striping, signalization, SWPPP, traffic control, and safety. He was also responsible for ensuring ADA compliance which entails verifying various type ADA ramp compliance with ADA standards including, but not limited to verification of ramp width, longitudinal and cross slope, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, surface of the roadway in front of the curb ramp, detectable warning surface width, depth, and conforming sidewalk slopes. He ensured curb ramp surface finish, obstructions, condition of the existing sidewalk and retaining curb backfill, and Pedestrian Push Button height and wheelchair accessibility at a signalized intersection. Project Cost: \$27 Million.

### Riverside County Transportation District, Clay Street Grade Separation, Jurupa Hills, CA

Lead Inspector. Lawrence provided construction inspection services for the \$17 million Clay Street Grade Separation project, involving the construction of a grade separation for the existing at-grade crossing of Clay Street and the Union Pacific Railroad (UPRR). Clay Street consists of two 12-foot-wide lanes of travel in each direction, with a 16-foot-wide striped median and is classified by the County of Riverside as a Major Highway that connects Van Buren Boulevard and Limonite Avenue. Lawrence provided construction inspection services for the \$17 million Clay Street Grade Separation project, involving the construction of a grade separation and rebuilding Clay Street roadway, sidewalks, curb and gutter, ADA curb ramps. Lawrence ensured ADA compliance, verified various type ADA ramp compliance with ADA standards including, but not limited to verification of ramp width, surface of the roadway in front of the curb ramp, detectable warning surface width, depth, and material compliance, conforming sidewalk slopes, longitudinal and cross slope, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, condition of the existing sidewalk and retaining curb backfill, and Pedestrian Push Button height and wheelchair accessibility at a signalized intersection. In addition, he was responsible for inspection of grade checking, concrete pavement, V-gutter, AC pavement sidewalk, drainage and sewer systems, striping, signalization, SWPPP, traffic control, and safety. Project Cost: \$17 Million.

### Riverside County Transportation District, I-15 / Clinton Keith Road, Wildomar, CA

Lead Inspector. Lawrence was responsible for inspection roadway widening, utility relocation and coordination between contractors and utility companies. Responsibilities included RHMA / JPCP / HMA, grade checking, concrete pavement, sidewalk, curb & gutter, curb ramp, V-gutter, drainage and sewer systems, grouted rock blanket, landscaping, retaining wall, striping, signalization, SWPPP, traffic control, and safety. Lawrence was also responsible for ADA compliance, verifying ramp width, surface of the roadway in front of the curb ramp, surface width, depth, material and various slopes compliance and Pedestrian Push Button height and wheelchair accessibility. Project Cost: \$18 Million.



## **CESAR CERDA**

# Construction Inspector / Electrical Inspector

#### **CERTIFICATIONS**

**IBEW Local Union 11** CalOSHA 10-Hour Certification Traffic Signal and Street Lighting Journeyman – Electrical **Training Trust** National Electrical Code -**Electrical Training Trust** Conduit Bending - Electrical Training Trust Storm Water Pollution **Prevention Training** Safety Course. C3 Competent Person, Excavations, course. G2 Cal/OSHA Heat Illness Prevention. C3 Competent Person, Fall Protection

# YEARS OF EXPERIENCE

32 Years

# AREAS OF EXPERTISE

- 32 Years of Inspection Experience
- Roadway, Highway, Interchanges Experience

Mr. Cerda has more than 32 years of construction experience and is cross-trained in Civil and Electrical inspection work. He has worked as an assistant resident engineer, construction lead inspector, and General Superintendent for several large construction companies specializing in various fields including but not limited to highway widening and improvements, local street improvements, bridge widening and reconstruction, transmission pipeline construction and relocation, waste water treatment facilities, commercial construction, and development construction. Cesar is experienced with ensuring ADA compliance which entails verifying various type ADA ramp compliance with ADA standards including, but not limited to verification of ramp width, longitudinal and cross slope, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, surface of the roadway in front of the curb ramp, detectable warning surface width, depth, and material compliance, conforming sidewalk slopes, curb ramp surface finish, obstructions, condition of the existing sidewalk and retaining curb backfill, and Pedestrian Push Button height and wheelchair accessibility at a signalized intersection.

In addition, Cesar is responsible for RHMA, HMA and JPCP pavements, curb, gutters, sidewalk, grade checking, concrete pavement, curb ramp, V-gutter, drainage and sewer systems, grouted rock strip, landscaping, retaining wall, striping, signalization, video cameras, SWPPP, traffic control, and safety. His field inspection experience also includes street lights, excavation, subgrades preparation, culverts, retaining walls, soil nail walls, sound walls, and concrete pour. He is experienced with traffic control system compliance, assistant the resident engineer by preparing CCO and force account analysis.

Cesar's responsibilities include construction inspection and Quality Control, daily reports and quantities take-offs, review and monitor schedule of work, compliance with plans and specifications and certificates, shop drawings, change orders, submittals and RFI's, safety compliance, preparing and reviewing as-built plans, and preparing final punch list. His duties include verifying that contractors and sub-contractors work is in compliance with Standard Specifications and Special Provisions.

Cesar has extensive knowledge and experience verifying electrical work is in compliance with local codes and NEC, NESC and ANSI standards. He has the ability to interpret contract specifications and has extensive knowledge of the Caltrans Standard Plans and Specifications, Caltrans Construction Manual, OSHA Manual, MUTCD, Traffic Control Manual, and Green Book.

### RELEVANT EXPERIENCE

### City of Whittier, Nelles at the Grove in Whittier (WUA18-027), Whittier, CA

Field Inspector. The project includes demolition of the 68 buildings and new construction of 561 homes, 189 apartments and 150,000 square feet of retail and restaurant space. Four historic buildings will be preserved. Project also includes for new neighborhood parks and open space, as well as the restoration and reuse of four buildings from the 1920s and 1930s as part of the commercial and residential areas. Responsibilities include field inspection of electrical, dry utilities, concrete structure, structural pavement, landscaping, irrigation, asphalt concrete, grading, traffic signals, street lights, water systems, sewer systems and traffic control, concrete drainage pools and overseeing testing. He was responsible traffic control, safety, asphalt concrete pavement, sidewalk, curb & gutter, curb ramp, drainage and sewer systems, grouted rock strip, landscaping, retaining wall, striping, signalization, SWPPP, and public relations. Project Cost: \$42 Million.



Cesar Cerda Page 2

### City of Rialto, CDRE Holdings 11, LLC, PPD 2018-0021, Rialto, CA

Field Inspector responsible for construction inspection services for a 99,999 square foot industrial warehouse building and associated street paving, drainage, lighting, fencing, and landscaping. Cesar is responsible for grade checking, inspection of HMA pavement, removal and resurfacing, construction of concrete pavement, sidewalk, curb, curb & gutter, curb ramp, V-gutter, drainage and sewer system, grouted rock strip, landscaping, retaining wall, striping and verification of SWPPP implementation, traffic control, and safety. He is responsible for ADA compliance, verifying various type ADA ramp compliance with ADA standards.

### City of Rialto, Oakmont Development, Rialto, CA

Field Inspector for the Oakmont Industry Group's 156,500 square foot industrial warehouse building and associated street, sidewalk, paving, drainage, lighting, fencing, and landscaping work services on 8.01 gross acres of land located at the northwest comer of Base Line Road and Tamarind Avenue. Responsibilities includes roadway embankments, grade checking using survey stakes, hot mixed asphalt (HMA), PCC paving, drainage structures, slope paving; MBGR installation, drainage and sewer system, landscaping, retaining wall, striping and verification of SWPPP implementation. and various other items. Responsible for inspection of asphalt concrete pavement grade checking, concrete sidewalk, curb, curb & gutter, curb ramp, V-gutter, traffic control, and safety. Cesar ensures ADA compliance which entails verifying various type ADA ramp compliance with ADA standards including, but not limited to verification of ramp width, surface of the roadway in front of the curb ramp, detectable warning surface width, depth, and material compliance, conforming sidewalk slopes, curb ramp surface finish, obstructions, condition of the existing sidewalk and retaining curb backfill, longitudinal and cross slope, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, and Pedestrian Push Button height and wheelchair accessibility at a signalized intersection.

### Ontario International Airport Authority (OIAA), On-Call Construction Management, Ontario, CA

Field Engineer / Construction Inspector. Ontario International Airport (ONT) is a medium hub airport serving about four million passengers per year and is a major air-cargo facility in Southern California. The project requires construction management and related inspection services on a regular basis to ensure OIAA projects and various tenant projects are completed according to their design and construction specifications. The project includes removing 52 acres of parking lot located at the northwest quadrant of the airport land side. Responsible for inspection of asphalt, fencing and electrical appurtenances; stock piling AC and concrete removals; realigned vehicle service road (VSR) in two phases. Responsible also for the new roadway, placing base material, placing HMA and repaving part of existing VSR with AC overlays. Placing BMP's before, during and after completion to the satisfaction of the SWPPP. Project Cost: Various.

### Caltrans District 8, On-Call Construction Inspection (08A2586), Riverside County, CA

Assistant Resident Engineer / Construction & Electrical work Inspector. Project consists of 38 miles from the San Diego County border to one-mile North of the SR-91 Interchange. Responsibilities include inspection of roadway excavation, grade checking, concrete and asphalt pavement, cold plane and resurfacing with RHMA, verification of compliance testing, drainage, grouted rock strip, landscaping, striping, signalization, SWPPP, traffic control, and safety. Work also includes coordination with contractor on all closures, traffic control, and all safety aspects. Project Cost: \$10 Million.

### City of South Gate, 3069 Highway Safety Improvements, South Gate, CA

Assistant Resident Engineer / Electrical Inspector for this Citywide project in which he is inspecting 10 new traffic signal intersections that includes new sidewalk ADA handicap ramps, traffic signalization and synchronization, street lighting, under conduit placement, cross gutter and spandrel improvements, cold planning and RHMA paving, striping, local business driveways and sidewalks, raised median island with planting and irrigations. He was responsible for ensuring ADA compliance including, but not limited to verification of ramp width, detectable warning surface width, depth, and material compliance, longitudinal and cross slope, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, conforming sidewalk slopes, curb ramp surface finish, obstructions, surface of the roadway in front of the curb ramp, condition of the existing sidewalk and retaining curb backfill, and Pedestrian Push Button height and wheelchair accessibility at a signalized intersection. Cesar was responsible for ARAM / JPCP / HMA / RSC, curbs & gutters, sidewalk, grade checking, concrete pavement, and safety. Project Cost: \$4 Million.



# **ASGHAR "OSCAR" EFTEKHARI**

# Construction Inspector

#### **EDUCATION**

BS, Civil Engineering University of Colorado, Boulder, OC

YEARS OF EXPERIENCE 30 Years

### **AREAS OF EXPERTISE**

- 30 Years of Construction Inspection Experience
- Roadway, Highway, Interchanges & Grade Separation Experience
- Pavement Management and Reconstruction

Mr. Eftekhari has more than 30 years of experience in construction inspection of roadways and highways. His field inspection experience includes excavation inspection, grade checking, Hot Mix Asphalt (HMA), concrete pavement, material sampling and testing. His areas of expertise include JPCP / HMA/ RSC / cold foam in place recycled paving, curb and gutter, sidewalk, dike, pile driving, SWPPP/WPC, and **CIDH foundation.** He is skilled in project and document control and has maintained records per the Caltrans 63 Filing Categories. He is responsible for scheduling. coordinating, facilitating and documenting various meetings with stakeholders, public officials, contractors and affected third party or businesses, utility companies and local agencies. Oscar has verified numerous ADA ramp construction compliance which entailed verifying various type ADA ramp compliance with ADA standards including, but not limited to verification of ramp width, longitudinal and cross slope, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, surface of the roadway in front of the curb ramp, conforming sidewalk slopes, curb ramp surface finish, obstructions, condition of the existing sidewalk and retaining curb backfill, detectable warning surface width, depth, and material compliance, and Pedestrian Push Button height and wheelchair accessibility at a signalized intersection.

Oscar's duties included scheduling programs, preparing reports and estimates, analyzing costs and claims, maintaining project documentation, evaluating sites, performing traffic control, and negotiating with contractors. His responsibilities include construction inspection and Quality Control, daily reports and quantities take-offs, review and monitor schedule of work, compliance with plans and specifications and certificates, shop drawings, change orders, submittals and RFI's, safety compliance, preparing and reviewing as-built plans, and preparing final punch list. Oscar attends pre-construction and weekly construction meetings. He has extensive knowledge of the Caltrans Standard Plans and Specifications, Caltrans Construction Manual, Traffic Control Manual, City Building Codes, SWPPP (California General Permit), Green Book, Structure Construction Manual, OSHA Safety Manual, and Caltrans Safety Manual. He is also knowledgeable in various industry codes, standards and specifications including ACI, AISC, USACE and AASHTO.

### RELEVANT EXPERIENCE

### Caltrans District 8, I-10 Slab Replacement, Yucaipa, CA

Assistant Resident Engineer responsible for the I-10 Slab Replacement in San Bernardino County in Yucaipa from Live Oak Canyon Road to County Road Undercrossing Pavement Rehabilitation, Continuously Reinforced Concrete Pavement, and individual slab replacement, continuous slab replacement JPCP, grind and paving HMA and RHMA, MBGR, roadway excavation and drainage. Oscar is expert in Caltrans standard specifications, traffic manual, construction manual and AC & PCC compliance testing. Project Cost: \$33 Million.

### Caltrans District 8, I-10 Slab Replacement, Redlands, CA

Assistant Resident Engineer responsible for the I-10 Slab Replacement in Redlands from Ford Street Undercrossing to Live Oak Canyon Road Overcrossing. The project includes replacing existing (PCCP) with (RSCP) and removal of existing concrete slabs and placing JPCP and removal and replacement of AC paving, placing MBGR and Vegetation Control. Responsibilities included verification of compliance testing, surface smoothness, quantity take off, weekly statement of working days and processing monthly progress payment. Cost: \$33 Million.



Asghar "Oscar" Eftekhari Page 2

### Caltrans District 8, SR-79 Drainage Inlet Installation, Beaumont, CA

Assistant Resident Engineer responsible for SR-79 Drainage Inlet Installation in Riverside County in Beaumont at various locations from Gilman Spring Road to First Street. Responsible for excavation inspection, grade checking, Hot Mix Asphalt (HMA), concrete pavement, material sampling and testing. His areas of expertise include JPCP / HMA/ RSC / cold foam in place recycled paving, curb and gutter, sidewalk, ADA curb ramps, dike, pile driving, SWPPP/WPC, and CIDH foundation. Project included structure excavation (Culverts) backfill, alternative pipe culvert installations, steel flared end section, rock slope protection. Oscar was responsible for ensuring ADA compliance which entails verifying various type ADA ramp compliance with ADA standards including, but not limited to verification of ramp width, longitudinal and cross slope, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, conforming sidewalk slopes, curb ramp surface finish, obstructions, surface of the roadway in front of the curb ramp, condition of the existing sidewalk and retaining curb backfill, detectable warning surface width, depth, and material compliance, and Pedestrian Push Button height and wheelchair accessibility at a signalized intersection. Project Cost: \$830,000.

### Caltrans District 8, I-215 Widening and HOV Lane, San Bernardino and Riverside County, CA

Assistant Resident Engineer responsible for I-215 Widening and HOV Lane from 60 / 91 / 215 Separation to Orange Show Road, Construction Retaining Walls, Bridges and Widen Roadway with HMA. Responsible for inspecting and preparing quantity for monthly progress estimate for construction area signs, clearing and grubbing, traffic control system, roadway excavation, remove and place traffic stripe, drainage (removal and placement different types of inlets and pipes, concrete channel lining), SWPPP, MBGR, concrete barrier, HMA paving and AC dike, JPCP pavement, sidewalk and curb ramps. He ensured ADA standards of ramp width, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, surface of the roadway in front of the curb ramp, conforming sidewalk slopes, curb ramp surface finish, longitudinal and cross slope, obstructions, condition of the existing sidewalk and retaining curb backfill, detectable warning surface width, depth, and material compliance, and Pedestrian Push Button height and wheelchair accessibility at a signalized intersection. Project Cost: \$160 Million.

### Caltrans District 8, SR-210 & SR-215, San Bernardino, CA

Assistant Resident Engineer responsible for SR-210 from 0.9 KM west to 0.5 KM east of SR-210 / SR-215 Separation and on SR-215 from 0.2 KM south of Massachusetts Avenue Overcrossing to University Parkway Undercrossing. Responsible for drainage items work consist of remove inlet, remove headwall, remove pipe, remove box culvert placing APC and RCP, box culvert, headwall, various types of inlets, GLD. Responsible for excavation inspection, grade checking, Hot Mix Asphalt (HMA), concrete pavement, material sampling and testing. His areas of expertise include JPCP / HMA/ RSC / cold foam in place recycled paving, curb and gutter, sidewalk, dike, pile driving, SWPPP/WPC, and CIDH foundation. Oscar ensures ADA compliance which entails verifying various type ADA ramp compliance with ADA standards including, but not limited to verification of ramp width, longitudinal and cross slope, flare slopes, gutter slopes, road surface slope and condition, landing slopes and dimensions, surface of the roadway in front of the curb ramp, conforming sidewalk slopes, curb ramp surface finish, obstructions, condition of the existing sidewalk and retaining curb backfill, detectable warning surface width, depth, and material compliance, and Pedestrian Push Button height and wheelchair accessibility at a signalized intersection. Also responsible for curb and gutter, sidewalk, driveways, curb ramps. Worked on various concrete barrier placements, MBGR and SWPPP. Project Cost: \$110 Million.

### Caltrans District 8, SR-38 Place Centerline and Shoulder Rumble Strips, Yucaipa, CA

Assistant Resident Engineer responsible for SR-38 Place Centerline and Shoulder Rumble Strips in San Bernardino County in Yucaipa from Bryant Street to Valley of the Falls Drive. **Responsible for construction area signs, AC removal and rumble strips installation and striping operations.** Project Cost: \$270,000.

### Caltrans District 8, SR- 243 Place Centerline Rumble Strips, Idyllwild, CA

Assistant Resident Engineer responsible for SR- 243 Place Centerline Rumble Strips in Riverside County near Mountain Center and Idyllwild. Responsible for construction area signs, AC removal and rumble strips installation and striping operations. Project Cost: \$760,000.



# FRED ALIPANAH, PE

# Resident Engineer / QA/QC - Part Time

### **EDUCATION**

BS, Civil Engineering, University of Maryland Port & Harbor Engineering, Post Graduate Study, Tokyo, Japan

### **LICENSE**

CA, Professional Civil Engineer, No. C64521

### **CERTIFICATIONS**

Caltrans District 8, Resident Engineer Certificate Caltrans Headquarters, Resident Engineer Certificate Mr. Alipanah has more than 30 years of experience in project and construction management, structural and civil engineering and construction inspection. Fred worked for Caltrans District 7 and 8 for over 20 years. He is a highly regarded team leader, bringing together members of various levels of government, agencies, contractors, consultants and constituents to develop cordial relationships to bring projects to an on-time, at budget conclusion. He has the ability to work with diverse communities to ensure a project is efficiently executed from well-developed plans. He is an excellent communicator and highly respected for his technical competence and effective project execution. Fred is assigned to high-profile projects on which he administered the contract, supervised contractors and construction teams, responded to requests for information (RFIs), processed contract change orders, and performed cost estimating. He has been responsible for project coordination between owners, designers, contractors, subcontractors, suppliers and local agencies. His responsibilities have included developing workplans with project management software P3, project resourcing and updating schedules, HMA inspection and concrete inspection. His responsibilities include traffic control; drainage, water, sewer and utility inspection.

Fred is experienced with writing change orders, reviewing extra work bills, responding to RFI and NOPC's. In addition, he reviews claims, quantity take off, and processes monthly estimate. Fred reviews and analyzes critical path method (CPM) schedules, monitored safety and quality assurance programs, and provided claims resolution services. Additionally, he worked on the Atlantic City Airport Runway and provided design and capacity calculation services. He has also worked on various onshore and offshores projects. Fred is knowledgeable of the Greenbook Standard Specifications for Public Works Construction, Cal/OSHA Construction Safety Orders, Caltrans Standard Specifications and Standard Plans. Other inspection related duties included quantity tracking; pay estimate processing; writing daily and weekly progress reports; schedule review; monitoring Storm Water Pollution Prevention Plans; as-built drawing maintenance; construction material purchasing; claims avoidance/analysis; punch list monitoring; project close-out; surveying; and estimating.

### RELEVANT EXPERIENCE

### Ontario International Airport, On-Call Construction Management and Related Services, Ontario, CA

*Project Manager* responsible for coordinating construction activities for various projects, including but not limited to FedEx Building, commercial buildings, roadway widening and paving (HMA, PCCP), utility coordination and relocation, drainage systems, sewer, SWPPP, electrical, grading new ramps, frontage roads, traffic control and safety inspection reviews with daily documentation of compliance in accordance with plans and specifications. Project Cost: Various.

### Caltrans District 8, Route 215 / Barton Road Bridge Replacement Project, Grand Terrace, CA

Resident Engineer. Project consisted of replacing Barton Road Bridge, Ramp Improvement/Relocation, Construction of Retaining Walls, Sound Walls, Drainage and Sewer Systems, City Street Improvements and new Signalized Intersections. His work included Contract Administration, Construction Inspection, Staff Supervision and Training, reviewing and responding to Submittals and RFI's, negotiating and writing Change Orders, maintaining Project Budget and Schedule, coordination and meetings with Utility Companies, producing the Monthly Progress Estimate, attending DRB and Partnering meetings, coordination with local agencies, San Bernardino County Transportation Authorities, attending Town Hall meetings, local school meetings. Project Cost: \$47.4 Million.



Fred Alipanah, PE Page 2

### Caltrans District 8, Route 10 Slab Replacement Project, Various Cities in San Bernardino County, CA

Resident Engineer. This Project was on Route 10, over a stretch of 30 miles between the Los Angeles County Line and 38/10 Separation. The Project consisted of replacing more than 10,000 Concrete Slabs, Cold Plane Shoulders and Ramps, Paving with RHMA, replacing Guard Rails, Smoothness Grinding of Concrete Pavement and Electrical work on Route 10. Duties included Contract Administration, Staff Supervision and Training, determination of the Slabs to be replaced, reviewing and responding to Submittals and RFI's, negotiating and writing Change Orders, maintaining Project Budget and Schedule, producing Monthly Progress Estimate, attending DRB and Partnering meetings and responding to Contractor's claims. In addition to nightly closures on this project, there was also a 55-hour weekend closure for which he ensured provision for public safety and traffic flows to remained within expectation. Arranged for radio advertisement and public outreach. Project Cost: \$38 Million.

### Caltrans District 8, Route 15 Rehabilitation Project, San Bernardino County, CA

Resident Engineer. This Project was on Route 15, Between 7th Street and Sierra, a stretch of 9 miles in San Bernardino County. The Project consisted of adding 36 lane miles of concrete pavement in the median and replacing more than 36 miles of existing concrete lanes. The project included 3 stages to complete the work. Stage 1, construction consisted of random slab replacement and grind existing lane 1 and 2. In Stage 2, the construction included excavation, drainage work, concrete paving and barrier work in the median, Stage 3 involved and replacement of concrete pavement in the outer two lanes, Drainage and Barrier work, Electrical work and Guard Rails work. Duties included Contract Administration, Staff Supervision and Training, Planning for weekend work, reviewing and responding to Submittals and RFI's, negotiating and writing Change Orders, maintaining Project Budget and Schedule, producing Monthly Progress Estimate, attending DRB and Partnering meetings and responding to Contractor's claims. In addition to two 10-hour work shift, day and night, there were 26 55-hour weekend closures for which he ensured provision for public safety, traffic flows to remain within expectation, arranged for radio advertisement and public outreach. Project Cost: \$84 Million.

### Caltrans District 8, Route 10 Rehabilitation, Coachella, CA

Resident Engineer. This project consisted of construction of individual slab replacement, cold plane and pave HMA shoulder, remove and reconstruct existing shoulder, Jointed Plane Concrete Pavement, Ramp Termini and remove and replace AC dike. Duties included Contract Administration, Inspection staff supervision, reviewing and responding to Submittals and RFI's, negotiating and writing Change Orders, maintaining Project Budget and Schedule, producing Monthly Progress Estimate. Project Cost: \$3.9 Million.

### Caltrans District 8, Route 111 Rehabilitation Project, Riverside County, CA

Resident Engineer. This project consisted of Cold in-place Recycling and Cold Plane and Pave with HMA (Type C). Duties included Contract Administration, directing inspection staff, reviewing and responding to Submittals and RFI's, negotiating and writing Change Orders, maintaining Project Budget and Schedule, producing Monthly Progress Estimate, Project Cost: \$1.1 Million.

### Caltrans District 8, San Bernardino County, CA

Caltrans Inspector on various improvement, rehabilitation and emergency projects throughout Riverside and San Bernardino Counties on I-10, I-15, State Routes 38, 330, 18, and 60.

### Caltrans District 7. Los Angeles, CA

*Caltrans Assistant Project Manager* for various Caltrans District 7 improvement, rehabilitation and emergency projects on State Routes 710, 405 and Schuylar Heim Bridge.

South Jersey Transportation Authority, Atlantic City Airport Runway Design, Pomona, NJ

Assistant Project Engineer. Responsible for runway design and capacity calculations services.



## **NICOLE SALEM**

# Office Engineer / Labor Compliance - Part Time

### **EDUCATION**

MBA, Business Administration University of Phoenix

BA, Public Relations: Communications, California State University, Fullerton

### YEARS OF EXPERIENCE

14 Years

Nicole Salem has 14 years of experience in the construction and engineering industries, with expertise in contract administration, labor relations and general administration relating to office engineer work. Working extensively with Caltrans, Nicole has been responsible for office engineering, labor compliance and public outreach. She is skilled in project and document control and has maintained records per the Caltrans 63 Filing Categories. She is responsible for scheduling, coordinating, facilitating and documenting various meetings with stakeholders, public officials, contractors and affected third party or businesses, utility companies and local agencies.

As an Office Engineer, she coordinates work activities through the resident engineer, inspectors, contractors and suppliers to confirm minimal contract disruption and impacts of contract compliance work. Nicole also assists with the processing of change orders and is cognizant of details to avoid potential audits. Her well-organized filing and documentation contribute to a streamlined project closeout.

As a Labor Compliance Officer, Nicole analyzed certified payrolls and fringe benefit statements, conducted contractor audits, conducted employee interviews to verify prevailing wages. Nicole evaluated adherence to applicable provisions of state labor laws; met with employers, employees and their representatives to explain labor code sections; and verified required wage adjustments were made. Nicole researches, analyzes and interprets laws and regulations on behalf of resident engineers or contractors, enabling them to address contractual questions and issues in relation to labor compliance and equal employment opportunity requirements. Nicole also enforces the new laws of SB854 and DIR monitoring. Nicole communicates effectively with agencies, unions or the Center for Contract Compliance regarding Public Record Request.

### RELEVANT EXPERIENCE

# County of Los Angeles Department of Public Works, As-Needed Labor Compliance Consultant Services, Los Angeles, CA

Labor Compliance Officer. Nicole analyzed certified payrolls and fringe benefit statements, conducted audits on contractors and interviewed employees to verify prevailing wages. Nicole evaluated adherence to applicable provisions of state labor laws; met with employers, employees and their representatives to explain labor code sections; and verified required wage adjustments were made. She researches, analyzes and interprets laws and regulations on behalf of resident engineers or contractors, enabling them to address contractual questions and issues in relation to labor compliance and equal employment opportunity requirements. She has experience with all types of funding, including Prop 84, CDBG, ARRA, State and more. Nicole also enforces the new laws of SB854 and DIR monitoring. Nicole has extensive experience working with LCP Tracker software. She was also in charge of writing source document review manual for Caltrans. *Project Cost: Various*.

### Caltrans District 7, Various Projects On-Call A&E Projects, Santa Fe Springs, CA

Office Engineer. Nicole is the Office Engineer for the Caltrans I-5 at Rosecrans project and several other projects for District 7. Her responsibilities include maintaining the Caltrans 63 categories filing system. She also collects and reviews extra work bills for payment and processing. Other duties include tracking and logging all submittals, RFIs, survey requests and material testing logs for the project. She is also responsible for inputting closures into the Lane Closure System. *Project Cost: Various*.



Nicole Salem Page 2

### City of Carson, SR-405 / Wilmington Avenue Interchange Modification, Carson, California

Office Engineer / Labor Compliance. Nicole is responsible for project documentation including processing RFIs, CCOs, correspondence and pay estimates. Nicole also attends progress meetings and produces meeting minutes. Her main task is to confirm complete, accurate and timely contract records, pertaining to construction progress, job expenditures and budget programs in accordance with State and Federal regulations and laws. The Caltrans filing methodology of 63 categories is followed on this project. Nicole also monitors labor compliance on the project, tracking federal reimbursement due to apprentice usage, and assists the Resident Engineer in preparing Contract Change Orders or necessary data for the purpose of making alterations, deviations, additions or deletions from the Contract Plans and Specifications. She prepares and updates spreadsheets to track CCO balances. *Project Cost: \$23 million*.

### Caltrans District 8, SR-215 / Barton Road Bridge Replacement, San Bernardino, CA

Office Engineer responsible for maintaining the Caltrans 63 categories filing system. She also collects and reviews extra work bills for payment and processing. Other duties include tracking and logging all Submittals, RFIs, Survey Requests and Material Testing logs for the project. She is also responsible for inputting closures into the Lane Closure System. Nicole assists the Resident Engineer with preparing and processing Contract Change Orders. Nicole also makes sure all inspector dailies and Weekly Status Sheets are sent to the Labor Compliance Department. She also tracks COZEEP for the project and ensures all tickets are sent to the appropriate Department. *Project Cost: \$47.4 Million.* 

Riverside County Transportation Department, Clinton Keith Road Interchange, Wildomar, California

Office Engineer/Labor Compliance. Nicole provided construction management and constructability review services to the Riverside County Transportation Department (RCTD) for improvements to the Clinton Keith Road interchange with Interstate 15. Nicole served as the Office Engineer on the project. The project involved widening both Clinton Keith Road and Interstate 15 at the busy interchange. Nicole maintained the project files for the project, keeping them in accordance with the Caltrans 63 Categories. She maintained submittal, RFI and material testing logs for the project. She attended weekly meetings and distributed minutes accordingly. *Project Cost:* \$18.6 Million.

Riverside County Transportation Department, Clay Street Grade Separation, Jurupa Hills, Carson, CA

Office Engineer / Labor Compliance Officer. Nicole was the Office Engineer and Labor Compliance Officer for the Clay

Street Grade Separation project. Her duties included notifying contractors of outstanding items, distributing meeting
minutes, maintaining project files and categorizing documents appropriately. She also scheduled material testing and
surveying requests, maintained logs for submittals, correspondence, RFIs, surveys, CCOs and material testing. Other
duties included reviewing extra work bills for payment, finalizing CCOs and confirming the contractor was abiding by State
and Federal prevailing wage laws. Nicole was responsible for the estimate being checked and processed for payment
monthly as well. Project Cost: \$17 Million.

### Caltrans District 7, I-5 / Rosecrans Bridge Replacement, Santa Fe Springs, CA

Labor Compliance Officer / Office Engineer for the Caltrans I-5 at Rosecrans project and several other projects for District 7. Her responsibilities include maintaining the Caltrans 63 categories filing system. She also collects and reviews extra work bills for payment and processing. Other duties include tracking and logging all Submittals, RFIs, Survey Requests and Material Testing logs for the project. She is also responsible for inputting and reviewing closures into the Lane Closure System. Nicole assists the Resident Engineer with preparing and processing Contract Change Orders. Nicole also collects and verifies quantity sheets each month to process the Pay Estimate. Estimate Summary Sheets are also produced and filed. She used CAMS, an electronic estimate program to process projects estimates. Nicole also verifies that prevailing wages are being paid on the job. Employee Interviews at the jobsite are also conducted. She completes Weekly Status and submits them along with diaries to Labor Compliance. She also coordinates Survey Requests and Material Testing Requests. Nicole also monitors SWPPP, DBE and EEO reporting. Nicole assists in the Monthly Caltrans Reporting Reports. Project Cost: \$17 Million.





September 27, 2019 Proposal No. 04-02546

Mr. Michael Tahan PPM Group, Inc. 7950 Cherry Avenue Suite 103 Fontana, California 92336

Subject: Proposal for Geotechnical and Materials Testing Services

Etiwanda Corridor Improvements Project

Rialto, California

Dear Mr. Tahan:

Ninyo & Moore is pleased to submit this proposal for geotechnical and materials testing services during construction of the Etiwanda Corridor Improvements Project in Rialto, California. Based on our discussions with you and our review of the project plans and specifications, we understand that project includes various improvements to Etiwanda Avenue, Baseline Road, Pepper Avenue and Maple Avenue. The estimated quantities of materials that may involve our services include 60 concrete curb ramps, 550 linear feet (LF) of concrete curb and gutter, 8,000 square feet (SF) of concrete cross gutter, 6,750 SF of full depth asphalt concrete (AC), 1,550 SF of AC overlay, 4,950 SF of new sidewalk, and 720 LF of retaining curb.

### SCOPE OF SERVICES

Based on our conversations with you, our understanding of the proposed construction, and our experience with similar projects, we propose to provide the following scope of services:

- Project coordination, management and technical support including review of the project geotechnical reports, plans and specifications, work scheduling and distribution of test data.
- Attendance at pre-construction meetings and as-requested field meetings.
- Field observation and testing during subgrade preparation, trench backfill, structure backfill, aggregate base placement, and during AC pavement placement. Field density testing will be performed to evaluate the Contractor's compaction operation.
- Provide timely and accurate reports of all testing and inspections.

• Laboratory testing including Proctor density, sieve analysis, sand equivalent, durability index, R-value, compression testing of concrete cylinders, Hveem stability/unit weight, and extraction/gradation on representative samples obtained in the field.

### **ASSUMPTIONS**

Based on the construction schedule described above and our project understanding, the following assumptions have been made in the preparation of our scope of services:

- Our services will be coordinated and scheduled as requested by our client or client's authorized representative.
- Our services are subject to prevailing wage requirements.
- Sampling and testing of concrete will not be requested.
- Preparation of a Final Compaction report will not be requested.
- Structural inspections will be provided by others.
- Our estimated fee does not include stand-by time or costs associated with retesting or reinspecting materials that were found not to be in compliance with the project plans or
  specifications. Our services will depend on the construction schedule and the contractor's
  operations. Hours spent that exceed those in the attached table will be billed on a time-andmaterials basis.

### **ESTIMATED FEE**

We propose to provide our services on a time-and-materials basis in accordance with the attached Schedule of Fees and Schedule of Fees for Laboratory Testing. Our estimated fee for the scope of services described herein is presented in the attached Table 1.

Ninyo & Moore appreciates the opportunity to provide services on this project and we look forward to working with you.

Respectfully submitted,

**NINYO & MOORE** 

Alfred "Tino" Rodriguez

Principal, Construction Services

AR/rad

Attachments: Table 1 – Breakdown of Estimated Fee

Schedule of Fees

Schedule of Fees for Laboratory Testing

Distribution: (1) Addressee (via e-mail)

Table 1 - Breakdown of Estimated Fee			
Field Services			
Field Technician - Subgrade, Aggregate Base and AC	64 hours	@ \$ 92.00 /hour	\$ 5,888.00
Field Vehicle and Equipment Usage	64 hours	@ \$ 12.00 /hour	\$ 768.00
		Subtotal	\$ 6,656.00
Laboratory Analyses			
Proctor Density, ASTM D 1557	5 tests	@ \$ 200.00 /test	\$ 1,000.00
Sieve Analysis	4 tests	@ \$ 130.00 /test	\$ 520.00
Sand Equivalent	2 tests	@ \$ 110.00 /test	\$ 220.00
AC Hveem Stability and Unit Weight	2 tests	@ \$ 215.00 /test	\$ 430.00
AC Extraction, % Asphalt, Including Gradation	2 tests	@ \$ 240.00 /test	\$ 480.00
		Subtotal	\$ 2,650.00
Project Coordination and Technical Support			
Principal Engineer/Geologist/Environmental Scientist	1 hour	@ \$ 178.00 /hour	\$ 178.00
Senior Project Engineer/Geologist/Environmental Scientist	8 hours	@ \$ 163.00 /hour	\$ 1,304.00
		Subtotal	\$ 1,482.00
TOTAL ESTIMATED FEE			\$ 10,788.00

### **Schedule of Fees**

### **Hourly Charges for Personnel**

Principal Engineer/Geologist/Environmental Scientist	\$ 178
Senior Engineer/Geologist/Environmental Scientist	\$ 168
Senior Project Engineer/Geologist/Environmental Scientist	\$ 163
Project Engineer/Geologist/Environmental Scientist	\$ 156
Senior Staff Engineer/Geologist/Environmental Scientist	\$ 142
Staff Engineer/Geologist/Environmental Scientist	\$ 126
GIS Analyst	\$ 116
Field Operations Manager	\$ 112
Supervisory Technician*	\$ 98
Nondestructive Examination Technician*, UT, MT, LP	\$ 98
ACI Concrete Technician*	\$ 98
Concrete/Asphalt Batch Plant Inspector*	\$ 98
Special Inspector (Concrete, Masonry, Steel, Welding, and Fireproofing)*	\$ 98
Senior Field/Laboratory Technician*	\$ 92
Field/Laboratory Technician*	\$ 92
Technical Illustrator/CAD Operator	\$ 92
Information Specialist	\$ 78
Geotechnical/Environmental/Laboratory Assistant	\$ 76
Data Processing, Technical Editing, or Reproduction	\$ 68

### **Other Charges**

Concrete Coring Equipment (includes one technician)			
PID/FID Usage	\$	140/day	
Anchor load test equipment (includes technician)	\$	97/hr	
Hand Auger Equipment	\$	65/day	
Inclinometer Usage	\$	40/hr	
Vapor Emission Kits	\$	40/kit	
Level D Personal Protective Equipment (per person per day)	\$	30/p/d	
Rebar Locator (Pachometer)	\$	30/hr	
Nuclear Density Gauge Usage	\$	15/hr	
Field Vehicle Usage	\$	12/hr	
Direct Project Expenses Cos	st p	us 15 %	

Laboratory testing, geophysical equipment, and other special equipment provided upon request.

#### **Notes**

For field and laboratory technicians and special inspectors, regular hourly rates are charged during normal weekday construction hours. Overtime rates at 1.5 times the regular rates will be charged for work performed outside normal construction hours and all day on Saturdays. Rates at twice the regular rates will be charged for all work in excess of 12 hours in one day or on Sundays and holidays. Lead time for any requested service is 24 hours. Field Technician rates are based on a 4-hour minimum. Special inspection rates are based on a 4-hour minimum for the first 4 hours and an 8-hour minimum for hours exceeding 4 hours. Field personnel are charged portal to portal.

Invoices will be submitted monthly and are due upon receipt. A service charge of 1.0 percent per month may be charged on accounts not paid within 30 days.

The terms and conditions of providing our consulting services include our limitation of liability and indemnities as presented in Ninyo & Moore's Work Authorization and Agreement.

\*Indicates rates that are based on Prevailing Wage Determination made by the State of California, Director of Industrial Relations on a semiannual basis. Our rates will be adjusted in conjunction with the increase in the Prevailing Wage Determination during the life of the project.

### **Schedule of Fees for Laboratory Testing**

# **Laboratory Test, Test Designation, and Price Per Test**

Alterberg Limits, D. 4318, CT 204  Compression Tests, Sx12 Cyrinder, C 39 \$ 2 5 5 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 15 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 15 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 15 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 15 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 10 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 10 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 10 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 10 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 10 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 10 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 10 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 10 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 10 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 10 Concrete Man Design, Part Field Batch, 6 cylinder, ACI \$ 2 5 10 Concrete Man Design, Part Field, ACI \$ 2 5 10 Concrete Man Design, Part Field, ACI \$ 2 5 10 Concrete Man Design, Part Field, ACI \$ 2 5 10 Concrete Man Design, Part Field, ACI \$ 2 5 10 Concrete Man Design, Part Field, ACI \$ 2 5 10 Concrete Man Design, Part Field, ACI \$ 2 5 10 Concrete Man Design, Part Field,	SOILS		CONCRETE	
Christide and Surfiels Comment. CT 417 & CT 422 \$ 175 Consolidation, 7436, CT 219 \$ 300 Consolidation - Time Rate, D. 2435, CT 219 \$ 75 Consolidation - Time Rate, D. 2435, CT 219 \$ 75 Direct Shear - Hardwider, D. 3008 \$ 275 Direct Shear - Call D. 300	Atterberg Limits, D 4318, CT 204	\$ 160	Compression Tests, 6x12 Cylinder, C 39	\$ 25
Comosidation D 2435, CT 219 \$ 300 Concrete Cores, Corpression (excludes sampling), C 42 \$ 6 (Considiation - Time Rate, D 2435, CT 219 \$ 75 \$ 350 Direct Shear - Ham Rate, D 2435, CT 219 \$ 75 \$ 350 Direct Shear - Ham Rate, D 2435, CT 219 \$ 165 Piezural Test, CT 23 \$ 60 Durability Index, CT 229 \$ 165 Piezural Test, CT 23 \$ 60 Durability Index, CT 229 \$ 165 Piezural Test, CT 523 \$ 60 Durability Index, CT 229 \$ 165 Piezural Test, CT 523 \$ 20 Durability Index, CT 229 \$ 165 Piezural Test, CT 523 \$ 20 Durability Index, CT 229 \$ 165 Piezural Test, CT 523 \$ 20 Durability Index, CT 229 \$ 165 Piezural Test, CT 523 \$ 20 Durability Index, CT 229 \$ 165 Piezural Test, CT 523 \$ 20 Durability Index, CT 229 \$ 20 Durability Index, CT 220 \$ 20 Durability,	California Bearing Ratio (CBR), D 1883	\$ 485	Concrete Mix Design Review, Job Spec	\$ 155
Consolidation — Time Rate, D 24/35, CT 219			Concrete Mix Design, per Trial Batch, 6 cylinder, ACI	\$ 825
Consolidation — Time Reite, D. 24(3), CT 219	Consolidation, D 2435, CT 219	\$ 300	Concrete Cores, Compression (excludes sampling), C 42	\$ 60
Direct Shear - Undisturbed, D3090   \$ 275   Flexural Test, C 293   \$ 60   Durability Indexs, C 729   \$ 165   Expansion Index, D 4829, IBC 18-3   \$ 180   Expansion Index ID 4829, IBC 18-3   \$ 180   Expansion	Consolidation – Time Rate, D 2435, CT 219	\$ 75		
Durabily Index, CT 229   Expansion Index, DT 229, Leganston Index, D430, Leganston Potential (Method A), D 4546   Expansion Potential (Method A), D 4546   Same Cedefabric Tensiels and Elongation 15e Lb 4632   Hydraulic Conductivity, D 5084   Same Cedefabric Tensiels, D 4632   Hydraulic Conductivity, D 5084   Same Cedefabric Tensiels, D 4632   Hydraulic Conductivity, D 5084   Same Cedefabric Tensiels, D 4632   Hydraulic Conductivity, D 5084   Same Cedefabric Tensiels, D 4632   Hydraulic Conductivity, D 5084   Same Cedefabric Tensiels, D 4632   Hydraulic Conductivity, D 5084   Same Cedefabric Tensiels, D 4632   Hydraulic Conductivity, D 5084   Same Cedefabric Tensiels, D 4632   Hydraulic Conductivity, D 5084   Same Cedefabric Tensiels, D 4632   Hydraulic Conductivity, D 5084   Same Cedefabric Tensiels, D 4632   Hydraulic Conductivity, D 5084   Same Cedefabric Tensiels, D 4632   Hydraulic Conductivity, D 5084   Same Cedefabric Tensiels, D 4642   Hydraulic Conductivity, D 5087			Flexural Test, C 78	\$ 65
Expansion Index, D 4829, IB 20 18-3	Direct Shear – Undisturbed, D 3080	\$ 275	Flexural Test, C 293	\$ 60
Expansion Index, D 4829, IB 20 18-3	Durability Index, CT 229	\$ 165	Flexural Test, CT 523	\$ 80
Geodatic Tensile and Elongation Test, D 4632   \$180   Lightweight Concrete Fill Compression, C 495   \$45	Expansion Index, D 4829, IBC 18-3	\$ 180		
Geodatic Tensile and Elongation Test, D 4632   \$180   Lightweight Concrete Fill Compression, C 495   \$45	Expansion Potential (Method A), D 4546	\$ 160	Jobsite Testing Laboratory	Quote
hydraulic Conductivity, D 5094   \$ 300   Petrograptic Analysis, C 286   \$ 1900   Hydrometer Analysis, D 422 C T 203   \$ 220   Restriance Expansion of Shrinkage Compensation   \$ 270   \$ 250   \$ 350   \$ 36	Geofabric Tensile and Elongation Test, D 4632	\$ 180	Lightweight Concrete Fill, Compression, C 495	\$ 45
Moisture, Ash, & Organic Matter of Peat/Organic Soils   \$ 120	Hydraulic Conductivity, D 5084	\$ 330		
Moisture Only, D 2716, CT 226  Moisture and Density, D 2397  \$ 45  Permeability, CH, D 2434, CT 220  \$ 255  Prototr Density D 1557, D 688, CT 216, &  Prototr Density D 1557, D 688, CT 216, &  ASPHALT CONCRETE  APPROLE TO Brokely, D 1557, D 688, CT 216, &  ASPHALT TO ROBE Concertions and \$100)  \$ 200  R-value, D 2844, CT 301  \$ 295  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Revalue, D 2844, CT 301  \$ 295  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Revalue, D 2844, CT 301  \$ 295  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 5 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 5 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 5 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 4 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 4 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 4 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 4 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 4 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 4 00  Film St	Hydrometer Analysis, D 422, CT 203	\$ 220	Restrained Expansion of Shrinkage Compensation	\$ 270
Moisture Only, D 2716, CT 226  Moisture and Density, D 2397  \$ 45  Permeability, CH, D 2434, CT 220  \$ 255  Prototr Density D 1557, D 688, CT 216, &  Prototr Density D 1557, D 688, CT 216, &  ASPHALT CONCRETE  APPROLE TO Brokely, D 1557, D 688, CT 216, &  ASPHALT TO ROBE Concertions and \$100)  \$ 200  R-value, D 2844, CT 301  \$ 295  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Revalue, D 2844, CT 301  \$ 295  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Revalue, D 2844, CT 301  \$ 295  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 2,800  Asphalt Mix Design, Caltrans (excl. Aggregate Quality)  \$ 5 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 5 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 5 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 4 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 4 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 4 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 4 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 4 00  Film Strippin, Caltrans (excl. Aggregate Quality)  \$ 4 00  Film St	Moisture, Ash, & Organic Matter of Peat/Organic Soils	\$ 120		
Permeability, CH, D 2434, CT 220   \$ 255   Prototr Density D 1557, D 808, CT 216, & S 175   ASPHALT CONCRETE				
PH and Resistivity, CT 643	Moisture and Density, D 2937	\$ 45	2x2x2 Non-Shrink Grout, C 109	\$ 45
Proctor Density D 1557, D 598, CT 216, & AASHTO T-180 (Rock corrections add \$100) \$ 200   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 28,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 20,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 20,000   Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 20,000   Asphalt Mix Design, Caltrans (excl. Aggregate, Quality) \$ 20,000   Asphalt Mix Design, Caltrans (excl. Aggregate, Quality) \$ 20,000   Asphalt Mix Design, Caltrans (excl. Aggregate, Quality) \$ 20,000   Asphalt Mix Design, Caltrans (excl. Aggregate, Quality) \$ 20,000   Asphalt Mix Design, Caltrans (excl. Aggregate, Quality) \$ 20,000   Asphalt Mix Design, Caltrans (excl.	Permeability, CH, D 2434, CT 220	\$ 255		
AshR1O T-180 (Rock corrections add \$100) \$ 200 Asphalt Mix Design, Caltrans (excl. Aggregate Quality) \$ 2,800 Revalue D 284, CT 301 \$ 295 Sand Equivalent. D 2419, CT 217 \$ 10 Sieve Analysis, D 422, CT 202 \$ 130 Sieve Analysis, D 422, CT 202 \$ 110 Specific Gravity, D 854 Sieve Analysis, 200 Wash, D 1140, CT 202 \$ 110 Heremal Resistivity (ASTM 5334, IEEE 442) \$ 800 Mariant Theoretical Unit Weight D 1560, T 246, CT 366 \$ 215 Triavial Shear, CL D, 4767, T 297 Sieve Analysis, D 4767, T 297 Sieve An	pH and Resistivity, CT 643	\$ 175	ASPHALT CONCRETE	
R-value, D 2844, CT 301   \$255   Asphalt Mix Design Review. Job Spec. \$165   Sam Equivalent D 2419, CT 217   \$10   Sieve Analysis, 200 Wash, D 1140, CT 202   \$10   Specific Gravity, D 854	Proctor Density D 1557, D 698, CT 216, &		Air Voids, T 269	\$ 50
R-value, D 2844, CT 301   \$ 295   Sand Equivalent D 2419, CT 217   \$ 110   Sieve Analysis, D 422, CT 202   \$ 130   Sieve Analysis, 200 Wash, D 1140, CT 202   \$ 130   Specific Gravity, D 854   \$ 100   Specific Gravity, D 1188   \$ 100   Specific Gravity, D 854   \$ 100   Specifi	AASHTO T-180 (Rock corrections add \$100)	\$ 200	Asphalt Mix Design, Caltrans (excl. Aggregate Quality)	\$ 2,800
Sand Equivalent, D. 2419, CT 217    \$10    Dust Proportioning, CT LP4    \$50	R-value, D 2844, CT 301	\$ 295		
Sieve Analysis, D. 4/22, CT 202   \$130   Extraction, % Asphalt, including Gradation, D. 2172, CT 382   \$240   Sieve Analysis, 200 Wash, D. 1140, CT 202   \$110   Specific Gravity, D. 854   \$100   Hveem Stability and Unit Weight, T. 245   \$240   Hveem Stability and Unit Weight, T. 245   \$240   Hveem Stability and Unit Weight, D. 2041, CT 306   \$215   Triaxial Shear, C.D. 0. 4767, T. 297 per pt   \$365   Marshall Slability, Flow and Unit Weight, T. 245   \$240   Marshall Slability, Flow and Unit Weight, T. 245   \$240   Missure Content, CT 370   \$150   Maintain Shear, U.U., Doproe pressure, D. 4767, T. 2297 per pt   \$365   Missure Content, CT 370   \$150   Missure Succeptibility and Tensile Stress Ratio, T. 238, CT 371   \$1,000   Triaxial Shear, U.U., D. 2850   \$155   Missure Succeptibility and Tensile Stress Ratio, T. 238, CT 371   \$1,000   Triaxial Shear, U.U., D. 2850   \$155   Missure Succeptibility and Tensile Stress Ratio, T. 238, CT 371   \$1,000   Triaxial Shear, U.U., D. 2850   \$150   Missure Succeptibility and Tensile Stress Ratio, T. 238, CT 371   \$1,000   Triaxial Shear, U.U., D. 2850   \$150   Missure Succeptibility and Tensile Stress Ratio, T. 238, CT 371   \$1,000   Triaxial Shear, U.U., D. 2850   \$150   Missure Succeptibility and Tensile Stress Ratio, T. 238, CT 371   \$1,000   Triaxial Shear, U.U., D. 2850   \$150   Missure Succeptibility and Tensile Stress Ratio, T. 238, CT 371   \$1,000   Triaxial Shear, U.U., D. 2850   \$150   Missure Succeptibility and Tensile Stress Ratio, T. 238, CT 371   \$1,000   Triaxial Shear, U.U., D. 2850   \$150   Missure Succeptibility and Tensile Stress Ratio, T. 238, CT 371   \$1,000   Triaxial Shear, U.U., D. 2850   \$150   Missure Succeptibility and Tensile Stress Ratio, T. 238, CT 371   \$1,000   Triaxial Shear, U.U., D. 2850   \$150   Missure Succeptibility and Tensile Stress Ratio, T. 238, CT 371   \$1,000   Triaxial Shear, U.U., D. 2850   \$150   Missure Succeptibility and Tensile Stress Ratio, T. 238, CT 371   \$1,000   Triaxial Shear, U.U., D. 2850   Triaxial Shear, U.U., D.	Sand Equivalent, D 2419, CT 217	\$ 110		
Sieve Analysis, 200 Wash, D 1140, CT 202   \$ 100	Sieve Analysis, D 422, CT 202	\$ 130	Extraction, % Asphalt, including Gradation, D 2172, CT 382	\$ 240
Specific Gravity, D 854	Sieve Analysis, 200 Wash, D 1140, CT 202	\$ 100		
Themal Resistivity (ASTM 5334, IEEE 442) \$ 880 Thaxial Shear, C.D. D 4767, T 297 Thaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt \$ 365 Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt \$ 210 Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt \$ 210 Moisture Susceptibility and Tensils Sterses Ratio, T 238, CT 371 \$ 1,000 Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt \$ 210 Moisture Susceptibility and Tensils Sterses Ratio, T 238, CT 371 \$ 1,000 Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt \$ 210 Moisture Susceptibility and Tensils Sterses Ratio, T 238, CT 371 \$ 1,000 Triaxial Shear, U.U., D 2850 Unconfined Compression, D 2166, T 208 \$ 120 Unconfined Compression, D 2166, T 208 \$ 120 Wax Density, D 1188 \$ 100  MASONRY  MASONRY  MASORY  MA			Hveem Stability and Unit Weight D 1560, T 246, CT 366	\$ 215
Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt   \$ 365	Thermal Resistivity (ASTM 5334, IEEE 442)	\$ 880	Marshall Stability, Flow and Unit Weight, T 245	\$ 240
Triaxial Shear, C.U., wb pore pressure, D 4767, T 2297 per pt   \$ 210   Moisture Susceptibility and Tensile Stress Ratio, T 238, CT 371   \$ 1,000   Triaxial Shear, LU., D 2850   \$ 155   Slurry Wet Track Abrasion, D 3910   \$ 150   Slurry Wet Track Abrasion, D 3910   Slurry Wet Track Abrasion, D 3910   Slurry Wet Track Abrasion,	Triaxial Shear, C.D, D 4767, T 297	\$ 430	Maximum Theoretical Unit Weight, D 2041, CT 309	\$ 150
Triaxial Shear, C.U., wb pore pressure, D 4767, T 2297 per pt   \$ 210   Moisture Susceptibility and Tensile Stress Ratio, T 238, CT 371   \$ 1,000   Triaxial Shear, LU., D 2850   \$ 155   Slurry Wet Track Abrasion, D 3910   \$ 150   Slurry Wet Track Abrasion, D 3910   Slurry Wet Track Abrasion, D 3910   Slurry Wet Track Abrasion,			Moisture Content, CT 370	\$ 85
Triaxal Shear, U.U., D 2850	Triaxial Shear, C.U., w/o pore pressure, D 4767, T 2297 per pt	\$ 210	Moisture Susceptibility and Tensile Stress Ratio, T 238, CT 371	\$ 1,000
Wax Density, D 1188         \$ 100         SuperPave, Gyratory Unit Wt., T 312         \$ 75           MASONRY         SuperPave, Hamburg Wheel, 20,000 passes, T 324         \$ 1,000           Brick Absorption, 24-hour submersion, C 67         \$ 50         Store of Compression Services of C 7         \$ 50           Brick Absorption, 7-day, C 67         \$ 60         Voids in Mineral Aggregate, (VMA) CT LP-2         \$ 50           Brick Efforescence, C 67         \$ 50         AGGREGATES           Brick Efforescence, C 67         \$ 50         AGGREGATES           Brick Efforescence, C 67         \$ 50         Clay Lumps and Friable Particles, C 142         \$ 160           Brick Moisture as received, C 67         \$ 45         Cleanness Value, CT 227         \$ 160           Brick Saturation Coefficient, C 67         \$ 45         Cleanness Value, CT 227         \$ 160           Concrete Block Compression Test, 8x8x16, C 140         \$ 65         Fine Aggregate Angularity, ASTM C 1252, T 304, CT 234         \$ 180           Concrete Block Linear Shrinkage, C 426         \$ 135         Flat and Elongated Particle, D 4791         \$ 220           Concrete Block Unit Weight and Absorption, C 140         \$ 60         Los Angeles Abrasion, C 131 or C 535         \$ 200           Cores, Compression or Shear Bond, CA Code         \$ 60         Masonry Forus, haif size, compression, C 1019	Triaxial Shear, U.U., D 2850	\$ 155	Slurry Wet Track Abrasion, D 3910	\$ 150
Wax Density, D 1188         \$ 100         SuperPave, Gyratory Unit Wt., T 312         \$ 75           MASONRY         SuperPave, Hamburg Wheel, 20,000 passes, T 324         \$ 1,000           Brick Absorption, 24-hour submersion, C 67         \$ 50         Store of Compression Services of C 7         \$ 50           Brick Absorption, 7-day, C 67         \$ 60         Voids in Mineral Aggregate, (VMA) CT LP-2         \$ 50           Brick Efforescence, C 67         \$ 50         AGGREGATES           Brick Efforescence, C 67         \$ 50         AGGREGATES           Brick Efforescence, C 67         \$ 50         Clay Lumps and Friable Particles, C 142         \$ 160           Brick Moisture as received, C 67         \$ 45         Cleanness Value, CT 227         \$ 160           Brick Saturation Coefficient, C 67         \$ 45         Cleanness Value, CT 227         \$ 160           Concrete Block Compression Test, 8x8x16, C 140         \$ 65         Fine Aggregate Angularity, ASTM C 1252, T 304, CT 234         \$ 180           Concrete Block Linear Shrinkage, C 426         \$ 135         Flat and Elongated Particle, D 4791         \$ 220           Concrete Block Unit Weight and Absorption, C 140         \$ 60         Los Angeles Abrasion, C 131 or C 535         \$ 200           Cores, Compression or Shear Bond, CA Code         \$ 60         Masonry Forus, haif size, compression, C 1019	Unconfined Compression, D 2166, T 208	\$ 120	SuperPave, Asphalt Mix Verification (incl. Aggregate Quality)	\$ 5,200
Unit Weight sample or core, D 2726, CT 308   \$ 100	Wax Density, D 1188	\$ 100	SuperPave, Gyratory Unit Wt., T 312	\$ 75
Brick Absorption, 24-hour submersion, C 67         \$ 50           Brick Absorption, 7-4a-y, C 67         \$ 50           Brick Absorption, 7-bour boiling, C 67         \$ 65           Brick Compression Test, C 67         \$ 50           Brick Compression Test, C 67         \$ 50           Brick Efflorescence, C 67         \$ 50           Brick Modulus of Rupture, C 67         \$ 45           Brick Modulus of Rupture, C 67         \$ 40           Brick Modulus of Rupture, C 67         \$ 45           Cleanness Value, CT 227         \$ 160           Brick Saturation Coefficient, C 67         \$ 55           Brick Saturation Coefficient, C 67         \$ 55           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Linear Shrinkage, C 426         \$ 135           Concrete Block Unit Weight and Absorption, C 140         \$ 60           Core, Compression or Shear Bond, CA Code         \$ 60           Masonry Firsm, half size, compression, C 109         \$ 35           Masonry Firsm, half size, compression, C 109         \$ 120				
Brick Absorption, 5-hour boiling, C 67         \$ 60           Brick Absorption, 7-day, C 67         \$ 65           Brick Compression Test, C 67         \$ 50           Brick Modulus of Rupture, C 67         \$ 50           Brick Modulus of Rupture, C 67         \$ 45           Brick Modulus of Rupture, C 67         \$ 45           Brick Modulus of Rupture, C 67         \$ 45           Brick Staturation Coefficient, C 67         \$ 55           Brick Staturation Coefficient, C 67         \$ 55           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Compression, C 8x8x16, C 140         \$ 65           Concrete Block Linear Shrinkage, C 426         \$ 135           Concrete Block Linear Shrinkage, C 426         \$ 135           Concrete Block Unit Weight and Absorption, C 140         \$ 60           Cores, Compression or Shear Bond, CA Code         \$ 60           Masonry Grout, 3x3x6 prism compression, C 199         \$ 35           Masonry Mortar, 2x4 cylinder compression, C 1019         \$ 120           Masonry Prism, half size, compression, C 1019         \$ 120           Masonry Prism, Full size, compression, C 1019         \$ 120           Potential Alkali Reactivity, Mortar Bar Method, Fine, C 1260         \$ 130           Fireproofing Density Test, UBC 7-6         \$ 6	MASONRY		Unit Weight sample or core, D 2726, CT 308	\$ 100
Brick Absorption, 7-day, C 67         \$ 65           Brick Efforescence, C 67         \$ 50           Brick Efforescence, C 67         \$ 50           Brick Modulus of Rupture, C 67         \$ 45           Brick Modulus of Rupture, C 67         \$ 45           Brick Moisture as received, C 67         \$ 40           Brick Saturation Coefficient, C 67         \$ 55           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Linear Shrinkage, C 26         \$ 135           Concrete Block Unit Weight and Absorption, C 140         \$ 60           Correcte Block Unit Weight and Absorption, C 140         \$ 60           Masonry Frout, 3x3x6 prism compression, C 39         \$ 35           Masonry Mortar, 2x4 cylinder compression, C 39         \$ 35           Masonry Mortar, 2x4 cylinder compression, C 39         \$ 35           Masonry Mortar, 2x4 cylinder compression, C 39 </td <td></td> <td></td> <td>Voids in Mineral Aggregate, (VMA) CT LP-2</td> <td>\$ 50</td>			Voids in Mineral Aggregate, (VMA) CT LP-2	\$ 50
Brick Absorption, 7-day, C 67         \$ 65           Brick Efforescence, C 67         \$ 50           Brick Efforescence, C 67         \$ 50           Brick Modulus of Rupture, C 67         \$ 45           Brick Modulus of Rupture, C 67         \$ 45           Brick Moisture as received, C 67         \$ 40           Brick Saturation Coefficient, C 67         \$ 55           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Compression Test, 8x8x16, C 140         \$ 65           Concrete Block Linear Shrinkage, C 26         \$ 135           Concrete Block Unit Weight and Absorption, C 140         \$ 60           Correcte Block Unit Weight and Absorption, C 140         \$ 60           Masonry Frout, 3x3x6 prism compression, C 39         \$ 35           Masonry Mortar, 2x4 cylinder compression, C 39         \$ 35           Masonry Mortar, 2x4 cylinder compression, C 39         \$ 35           Masonry Mortar, 2x4 cylinder compression, C 39 </td <td>Brick Absorption, 5-hour boiling, C 67</td> <td>\$ 60</td> <td>Voids filled with Asphalt, (VFA) CT LP-3</td> <td>\$ 50</td>	Brick Absorption, 5-hour boiling, C 67	\$ 60	Voids filled with Asphalt, (VFA) CT LP-3	\$ 50
Brick Efflorescence, C 67         \$ 50         Clay Lumps and Friable Particles, C 142         \$ 160           Brick Modulus of Rupture, C 67         \$ 45         Cleanness Value, CT 227         \$ 160           Brick Moisture as received, C 67         \$ 40         Crushed Particles, CT 205         \$ 160           Brick Saturation Coefficient, C 67         \$ 55         Durability, Coarse or Fine, CT 229         \$ 195           Concrete Block Compression Test, 8x8x16, C 140         \$ 65         Fine Aggregate Angularity, ASTM C 1252, T 304, CT 234         \$ 180           Concrete Block Linear Shrinkage, C 426         \$ 135         Lightweight Particles, C 123         \$ 180           Concrete Block Unit Weight and Absorption, C 140         \$ 60         Los Angeles Abrasion, C 131 or C 535         \$ 200           Cores, Compression or Shear Bond, CA Code         \$ 60         Material Finer than No. 200 Sieve by Washing, C 117         \$ 75           Masonry Grout, 3x3x6 prism compression, C 109         \$ 35         Organic Impurities, C 40         \$ 80           Masonry Prism, half size, compression, C 1019         \$ 120         Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260         \$ 125           Masonry Prism, Full size, compression, C 1019         \$ 185         Potential Reactivity, Mortar Bar Method, Fine, C 1286         \$ 125           Reinforcing Density Test, UBC 7-6         \$ 60	Brick Absorption, 7-day, C 67	\$ 65		
Brick Modulus of Rupture, C 67	Brick Compression Test, C 67	\$ 50	AGGREGATES	
Brick Modulus of Rupture, C 67	Brick Efflorescence, C 67	\$ 50	Clay Lumps and Friable Particles, C 142	\$ 160
Brick Moisture as received, C 67         \$ 40         Crushed Particles, CT 205         \$ 165           Brick Saturation Coefficient, C 67         \$ 55         Durability, Coarse or Fine, CT 229         \$ 195           Concrete Block Compression Test, 8x8x16, C 140         \$ 65         Fine Aggregate Angularity, ASTM C 1252, T 304, CT 234         \$ 180           Concrete Block Conformance Package, C 90         \$ 485         Flat and Elongated Particle, D 4791         \$ 220           Concrete Block Linear Shrinkage, C 426         \$ 135         Lightweight Particles, C 123         \$ 180           Concrete Block Unit Weight and Absorption, C 140         \$ 60         Los Angeles Abrasion, C 131 or C 535         \$ 200           Cores, Compression or Shear Bond, CA Code         \$ 60         Material Finer than No. 200 Sieve by Washing, C 117         \$ 75           Masonry Grout, 3x3x6 prism compression, C 109         \$ 35         Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260         \$ 950           Masonry Prism, half size, compression, C 1019         \$ 120         Potential Alkali Reactivity, Mortar Bar Method, Fine, C 1260         \$ 1,250           Masonry Prism, Full size, compression, C 1019         \$ 185         Potential Alkali Reactivity, Mortar Bar Method, Fine, C 1260         \$ 1,250           Masonry Prism, Full size, compression, C 1019         \$ 185         Potential Alkali Reactivity, Mortar Bar Method, Fine, C 1260			Cleanness Value, CT 227	\$ 160
Brick Saturation Coefficient, C 67	Brick Moisture as received, C 67	\$ 40		
Concrete Block Compression Test, 8x8x16, C 140 \$ 65 Concrete Block Conformance Package, C 90 \$ 485 Filat and Elongated Particle, D 4791 \$ 220 Concrete Block Linear Shrinkage, C 426 \$ 135 Lightweight Particles, C 123 \$ 180 Concrete Block Unit Weight and Absorption, C 140 \$ 60 Los Angeles Abrasion, C 131 or C 535 \$ 200 Cores, Compression or Shear Bond, CA Code \$ 60 Material Finer than No. 200 Sieve by Washing, C 117 \$ 75 Masonry Grout, 3x3x6 prism compression, C 109 \$ 35 Organic Impurities, C 40 \$ 80 Masonry Prism, Full size, compression, C 1019 \$ 120 Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260 \$ 950 Masonry Prism, Full size, compression, C 1019 \$ 185 Potential Alkali Reactivity of Aggregate (Chemical Method), C 289 \$ 450 Sand Equivalent, T 176, CT 217 \$ 110 REINFORCING AND STRUCTURAL STEEL Chemical Analysis, A 36, A 615 \$ 135 Sieve Analysis, Coarse Aggregate, T 27, C 136 \$ 115 Sieve Analysis, Coarse Aggregate (including wash), T 27, C 136 \$ 130 Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150 ROOFING ROOFING Tile Strength Bolt, Nut & Washer Conformance, per assembly, A 325 \$ 130 Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150 ROOFING ROOFING Tile Strength Test, Up to 200,000 lbs. (machining extra), A 370 \$ 80			Durability, Coarse or Fine, CT 229	\$ 195
Concrete Block Conformance Package, C 90 \$ 485   Flat and Elongated Particle, D 4791 \$ 220   Concrete Block Linear Shrinkage, C 426 \$ 135   Lightweight Particles, C 123 \$ 180   Concrete Block Unit Weight and Absorption, C 140 \$ 60   Los Angeles Abrasion, C 131 or C 535 \$ 200   Cores, Compression or Shear Bond, CA Code \$ 60   Material Finer than No. 200 Sieve by Washing, C 117 \$ 75   Organic Impurities, C 40 \$ 80   Masonry Mortar, 2x4 cylinder compression, C 109 \$ 35   Organic Impurities, C 40 \$ 950   Masonry Prism, half size, compression, C 1019 \$ 120   Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260 \$ 950   Masonry Prism, Full size, compression, C 1019 \$ 185   Potential Reactivity, Mortar Bar Method, Fine, C 1260 \$ 1,250   Masonry Prism, Full size, compression, C 1019 \$ 185   Potential Reactivity of Aggregate (Chemical Method), C 289 \$ 450   Sand Equivalent, T 176, CT 217 \$ 110   Sieve Analysis, Coarse Aggregate, T 27, C 136 \$ 115   Sieve Analysis, Fine Aggregate (including wash), T 27, C 136 \$ 130   High Strength Bolt, Nut & Washer Conformance, per assembly, A 325. \$ 130   Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150   Pre-Stress Strand (7 wire), A 416 \$ 170   Roofing Tile Absorption, (set of 5), C 67 \$ 210   Reinforcing Tensile or Bend up to No. 11, A 615 & A 706 \$ 55   Structural Steel Tensile Test: Up to 200,000 lbs. (machining extra), A 370 \$ 80	Concrete Block Compression Test, 8x8x16, C 140	\$ 65	Fine Aggregate Angularity, ASTM C 1252, T 304, CT 234	\$ 180
Concrete Block Unit Weight and Absorption, C 140 \$ 60 Los Angeles Abrasion, C 131 or C 535 \$ 200 Cores, Compression or Shear Bond, CA Code \$ 60 Material Finer than No. 200 Sieve by Washing, C 117 \$ 75 Masonry Grout, 3x3x6 prism compression, C 39 \$ 35 Organic Impurities, C 40 \$ 80 Masonry Mortar, 2x4 cylinder compression, C 109 \$ 35 Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260 \$ 950 Masonry Prism, half size, compression, C 1019 \$ 120 Potential Alkali Reactivity of Aggregate (Chemical Method), C 289 \$ 450 Masonry Prism, Full size, compression, C 1019 \$ 185 Potential Reactivity of Aggregate (Chemical Method), C 289 \$ 450 Sand Equivalent, T 176, CT 217 \$ 110 REINFORCING AND STRUCTURAL STEEL Sieve Analysis, Coarse Aggregate, T 27, C 136 \$ 135 Fireproofing Density Test, UBC 7-6 \$ 60 Sodium Sulfate Soundness, C 88 \$ 450 Hardness Test, Rockwell, A 370 \$ 70 Specific Gravity and Absorption, Coarse, C 127, CT 206 \$ 100 High Strength Bolt, Nut & Washer Conformance, per assembly, A 325 \$ 130 Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150 Roofing Tile Absorption, (set of 5), C 67 \$ 210 Reinforcing Tensile or Bend up to No. 11, A 615 & A 706 \$ 55 Structural Steel Tensile Test: Up to 200,000 lbs. (machining extra), A 370 \$ 80	Concrete Block Conformance Package, C 90	\$ 485		
Concrete Block Unit Weight and Absorption, C 140 \$ 60 Los Angeles Abrasion, C 131 or C 535 \$ 200 Cores, Compression or Shear Bond, CA Code \$ 60 Material Finer than No. 200 Sieve by Washing, C 117 \$ 75 Masonry Grout, 3x3x6 prism compression, C 39 \$ 35 Organic Impurities, C 40 \$ 80 Masonry Mortar, 2x4 cylinder compression, C 109 \$ 35 Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260 \$ 950 Masonry Prism, half size, compression, C 1019 \$ 120 Potential Alkali Reactivity of Aggregate (Chemical Method), C 289 \$ 450 Masonry Prism, Full size, compression, C 1019 \$ 185 Potential Reactivity of Aggregate (Chemical Method), C 289 \$ 450 Sand Equivalent, T 176, CT 217 \$ 110 REINFORCING AND STRUCTURAL STEEL Sieve Analysis, Coarse Aggregate, T 27, C 136 \$ 135 Fireproofing Density Test, UBC 7-6 \$ 60 Sodium Sulfate Soundness, C 88 \$ 450 Hardness Test, Rockwell, A 370 \$ 70 Specific Gravity and Absorption, Coarse, C 127, CT 206 \$ 100 High Strength Bolt, Nut & Washer Conformance, per assembly, A 325 \$ 130 Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150 Roofing Tile Absorption, (set of 5), C 67 \$ 210 Reinforcing Tensile or Bend up to No. 11, A 615 & A 706 \$ 55 Structural Steel Tensile Test: Up to 200,000 lbs. (machining extra), A 370 \$ 80	Concrete Block Linear Shrinkage, C 426	\$ 135	Lightweight Particles, C 123	\$ 180
Cores, Compression or Shear Bond, CA Code \$ 60 Material Finer than No. 200 Sieve by Washing, C 117 \$ 75 Masonry Grout, 3x3x6 prism compression, C 39 \$ 35 Organic Impurities, C 40 \$ 80 Masonry Mortar, 2x4 cylinder compression, C 109 \$ 35 Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260 \$ 950 Masonry Prism, half size, compression, C 1019 \$ 120 Potential Alkali Reactivity, Mortar Bar Method, Fine, C 1260 \$ 1,250 Masonry Prism, Full size, compression, C 1019 \$ 185 Potential Reactivity of Aggregate (Chemical Method), C 289 \$ 450 Sand Equivalent, T 176, CT 217 \$ 110 REINFORCING AND STRUCTURAL STEEL Sieve Analysis, Coarse Aggregate, T 27, C 136 \$ 115 Chemical Analysis, A 36, A 615 \$ 135 Sieve Analysis, Coarse Aggregate (including wash), T 27, C 136 \$ 130 Fireproofing Density Test, UBC 7-6 \$ 60 Sodium Sulfate Soundness, C 88 \$ 450 Hardness Test, Rockwell, A 370 \$ 70 Specific Gravity and Absorption, Coarse, C 127, CT 206 \$ 100 Figh Strength Bolt, Nut & Washer Conformance, per assembly, A 325 \$ 130 Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150 ROOFING	Concrete Block Unit Weight and Absorption, C 140	\$ 60	Los Angeles Abrasion, C 131 or C 535	\$ 200
Masonry Grout, 3x3x6 prism compression, C 39 \$ 35 Organic Impurities, C 40 \$ 80 Masonry Mortar, 2x4 cylinder compression, C 109 \$ 35 Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260 \$ 950 Masonry Prism, half size, compression, C 1019 \$ 120 Potential Alkali Reactivity, Mortar Bar Method, Fine, C 1260 \$ 1,250 Masonry Prism, Full size, compression, C 1019 \$ 185 Potential Reactivity of Aggregate (Chemical Method), C 289 \$ 450 Sand Equivalent, T 176, CT 217 \$ 110 REINFORCING AND STRUCTURAL STEEL Sieve Analysis, Coarse Aggregate, T 27, C 136 \$ 115 Sieve Analysis, Coarse Aggregate, T 27, C 136 \$ 115 Sieve Analysis, Fine Aggregate (including wash), T 27, C 136 \$ 130 Fireproofing Density Test, UBC 7-6 \$ 60 Sodium Sulfate Soundness, C 88 \$ 450 Hardness Test, Rockwell, A 370 \$ 70 Specific Gravity and Absorption, Coarse, C 127, CT 206 \$ 100 Specific Gravity and Absorption, Fine, C 128, CT 207 \$ 160 Pore-Stress Strand (7 wire), A 416 \$ 170 Roofing Tile Absorption, (set of 5), C 67 \$ 210 Structural Steel Tensile Test: Up to 200,000 lbs. (machining extra), A 370 \$ 80	Cores, Compression or Shear Bond, CA Code	\$ 60	Material Finer than No. 200 Sieve by Washing, C 117	\$ 75
Masonry Prism, half size, compression, C 1019 \$ 120 Potential Alkali Reactivity, Mortar Bar Method, Fine, C 1260 \$ 1,250 Masonry Prism, Full size, compression, C 1019 \$ 185 Potential Reactivity of Aggregate (Chemical Method), C 289 \$ 450 Sand Equivalent, T 176, CT 217 \$ 110 Sieve Analysis, C 36, A 615 \$ 135 Sieve Analysis, Coarse Aggregate, T 27, C 136 \$ 135 Fireproofing Density Test, UBC 7-6 \$ 60 Sodium Sulfate Soundness, C 88 \$ 450 Sodium Sulfate Soundness, C 88 \$ 450 Specific Gravity and Absorption, Coarse, C 127, CT 206 \$ 100 Specific Gravity and Absorption, Fine, C 128, CT 207 \$ 160 Specific Gravity and Absorption, Fi				
Masonry Prism, Full size, compression, C 1019 \$ 185 Potential Reactivity of Aggregate (Chemical Method), C 289 \$ 450 Sand Equivalent, T 176, CT 217 \$ 110 Sieve Analysis, A 36, A 615 \$ 135 Sieve Analysis, Coarse Aggregate, T 27, C 136 \$ 135 Fireproofing Density Test, UBC 7-6 \$ 60 Sodium Sulfate Soundness, C 88 \$ 450 Hardness Test, Rockwell, A 370 \$ 70 Specific Gravity and Absorption, Coarse, C 127, CT 206 \$ 100 High Strength Bolt, Nut & Washer Conformance, per assembly, A 325 \$ 130 Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150 ROOFING	Masonry Mortar, 2x4 cylinder compression, C 109	\$	Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260	\$ 950
Masonry Prism, Full size, compression, C 1019 \$ 185 Potential Reactivity of Aggregate (Chemical Method), C 289 \$ 450 Sand Equivalent, T 176, CT 217 \$ 110 Sieve Analysis, A 36, A 615 \$ 135 Sieve Analysis, Coarse Aggregate, T 27, C 136 \$ 135 Fireproofing Density Test, UBC 7-6 \$ 60 Sodium Sulfate Soundness, C 88 \$ 450 Hardness Test, Rockwell, A 370 \$ 70 Specific Gravity and Absorption, Coarse, C 127, CT 206 \$ 100 High Strength Bolt, Nut & Washer Conformance, per assembly, A 325 \$ 130 Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150 ROOFING	Masonry Prism, half size, compression, C 1019	\$ 120	Potential Alkali Reactivity, Mortar Bar Method, Fine, C 1260	\$ 1,250
REINFORCING AND STRUCTURAL STEEL  Chemical Analysis, A 36, A 615  Fireproofing Density Test, UBC 7-6  Hardness Test, Rockwell, A 370  High Strength Bolt, Nut & Washer Conformance, per assembly, A 325  Mechanically Spliced Reinforcing Tensile Test, ACI  Pre-Stress Strand (7 wire), A 416  Reinforcing Tensile or Bend up to No. 11, A 615 & A 706  Structural Steel Tensile Test: Up to 200,000 lbs. (machining extra), A 370  Sand Equivalent, T 176, CT 217  Sieve Analysis, Coarse Aggregate, T 27, C 136  Sieve Analysis, Fine Aggregate (including wash), T 27, C 136  Sieve Analysis, Fine Aggregate (including wash), T 27, C 136  Sieve Analysis, Fine Aggregate (including wash), T 27, C 136  Sieve Analysis, Coarse Aggregate, T 27, C 13			Potential Reactivity of Aggregate (Chemical Method), C 289	\$ 450
REINFORCING AND STRUCTURAL STEEL  Chemical Analysis, A 36, A 615  Sieve Analysis, Coarse Aggregate, T 27, C 136  Sieve Analysis, Fine Aggregate (including wash), T 27, C 136  Sieve Analysis, Fine Aggregate (including wash), T 27, C 136  Sieve Analysis, Fine Aggregate (including wash), T 27, C 136  Sieve Analysis, Fine Aggregate (including wash), T 27, C 136  Sieve Analysis, Fine Aggregate, T 27, C 136  Sieve Analysis, Coarse Aggregate, T 27, C 126  Sodium Sulfate Soundness, C 8  Specific Gravity and Absorption, Coarse, C 127, CT 206  Specific Gravity and Absorption, Coarse, C 127, CT 206  Specific Gravity and Absorption, Coarse, C 127, CT 206  Specific Gravity and Absorption, Fine, C 128, CT 207  Specific Gravity and Absorption, Fine, C 128, CT 207  Specific Gravity and Absorption, Fine, C 128, CT 207  Specific Gravity and Absorption, Fine, C 128, CT 207  Specific Gravity and Absorption, Fine, C 128, CT 207  Specific Gravity and Absorption, Fine, C 12	• •		Sand Equivalent, T 176, CT 217	\$ 110
Fireproofing Density Test, UBC 7-6 \$ 60 Sodium Sulfate Soundness, C 88 \$ 450 Hardness Test, Rockwell, A 370 \$ 70 Specific Gravity and Absorption, Coarse, C 127, CT 206 \$ 100 High Strength Bolt, Nut & Washer Conformance, per assembly, A 325 \$ 130 Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150 Pre-Stress Strand (7 wire), A 416 \$ 170 Roofing Tile Absorption, (set of 5), C 67 \$ 210 Reinforcing Tensile or Bend up to No. 11, A 615 & A 706 \$ 55 Structural Steel Tensile Test: Up to 200,000 lbs. (machining extra), A 370 \$ 80	REINFORCING AND STRUCTURAL STEEL		Sieve Analysis, Coarse Aggregate, T 27, C 136	\$ 115
Fireproofing Density Test, UBC 7-6 \$ 60 Sodium Sulfate Soundness, C 88 \$ 450 Hardness Test, Rockwell, A 370 \$ 70 Specific Gravity and Absorption, Coarse, C 127, CT 206 \$ 100 High Strength Bolt, Nut & Washer Conformance, per assembly, A 325 \$ 130 Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150 Pre-Stress Strand (7 wire), A 416 \$ 170 Roofing Tile Absorption, (set of 5), C 67 \$ 210 Reinforcing Tensile or Bend up to No. 11, A 615 & A 706 \$ 55 Structural Steel Tensile Test: Up to 200,000 lbs. (machining extra), A 370 \$ 80		\$ 135	Sieve Analysis, Fine Aggregate (including wash), T 27, C 136	\$ 130
Hardness Test, Rockwell, A 370 \$ 70 Specific Gravity and Absorption, Coarse, C 127, CT 206 \$ 100 High Strength Bolt, Nut & Washer Conformance, per assembly, A 325 \$ 130 Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150 ROOFING  Pre-Stress Strand (7 wire), A 416 \$ 170 Roofing Tile Absorption, (set of 5), C 67 \$ 210 Reinforcing Tensile or Bend up to No. 11, A 615 & A 706 \$ 55 Roofing Tile Strength Test, (set of 5), C 67 \$ 210 Structural Steel Tensile Test: Up to 200,000 lbs. (machining extra), A 370 \$ 80			Sodium Sulfate Soundness, C 88	\$ 450
High Strength Bolt, Nut & Washer Conformance, per assembly, A 325 \$ 130  Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150  Pre-Stress Strand (7 wire), A 416 \$ 170  Reinforcing Tensile or Bend up to No. 11, A 615 & A 706 \$ 55  Specific Gravity and Absorption, Fine, C 128, CT 207 \$ 160  ROOFING  ROOFING  Roofing Tile Absorption, (set of 5), C 67 \$ 210  Roofing Tile Strength Test, (set of 5), C 67 \$ 210  Structural Steel Tensile Test: Up to 200,000 lbs. (machining extra), A 370 \$ 80	Hardness Test, Rockwell, A 370		Specific Gravity and Absorption, Coarse, C 127, CT 206	\$ 100
per assembly, A 325 \$ 130  Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150  Pre-Stress Strand (7 wire), A 416 \$ 170  Reinforcing Tensile or Bend up to No. 11, A 615 & A 706 \$ 55  Structural Steel Tensile Test: Up to 200,000 lbs.  (machining extra), A 370 \$ 80	High Strength Bolt, Nut & Washer Conformance,		Specific Gravity and Absorption, Fine, C 128, CT 207	\$ 160
Mechanically Spliced Reinforcing Tensile Test, ACI \$ 150 ROOFING  Pre-Stress Strand (7 wire), A 416 \$ 170 Roofing Tile Absorption, (set of 5), C 67 \$ 210  Reinforcing Tensile or Bend up to No. 11, A 615 & A 706 \$ 55 Roofing Tile Strength Test, (set of 5), C 67 \$ 210  Structural Steel Tensile Test: Up to 200,000 lbs.  (machining extra), A 370 \$ 80	per assembly, A 325	\$ 130		
Pre-Stress Strand (7 wire), A 416. \$ 170 Roofing Tile Absorption, (set of 5), C 67 \$ 210 Reinforcing Tensile or Bend up to No. 11, A 615 & A 706. \$ 55 Roofing Tile Strength Test, (set of 5), C 67 \$ 210 Structural Steel Tensile Test: Up to 200,000 lbs. (machining extra), A 370. \$ 80			ROOFING	
Reinforcing Tensile or Bend up to No. 11, A 615 & A 706 \$ 55 Roofing Tile Strength Test, (set of 5), C 67 \$ 210 Structural Steel Tensile Test: Up to 200,000 lbs.  (machining extra), A 370 \$ 80				\$ 210
Structural Steel Tensile Test: Up to 200,000 lbs. (machining extra), A 370 \$80	Reinforcing Tensile or Bend up to No. 11, A 615 & A 706	\$ 55		
(machining extra), A 370\$ 80				
	(machining extra), A 370	80		
	Welded Reinforcing Tensile Test: Up to No. 11 bars, ACI	\$ 60		

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.