PROFESSIONAL SERVICES CONTRACT BETWEEN
THE CITY OF HUNTINGTON BEACH AND
GMU ENGINEERS AND GEOLOGISTS
FOR
ON-CALL CONSTRUCTION MATERIALS TESTING SERVICES

THIS AGREEMENT ("Agreement") is made and entered into by and between the City of Huntington Beach, a municipal corporation of the State of California, hereinafter referred to as "CITY," and, GMU ENGINEERS AND GEOLOGISTS hereinafter referred to as "CONSULTANT."

WHEREAS, CITY desires to engage the services of a consultant to perform on-call Construction Materials Testing Services; and

Pursuant to documentation on file in the office of the City Clerk, the provisions of the Huntington Beach Municipal Code, Chapter 3.03, relating to procurement of professional service contracts have been complied with; and

CONSULTANT has been selected to perform these services,

NOW, THEREFORE, it is agreed by CITY and CONSULTANT as follows:

1. SCOPE OF SERVICES

CONSULTANT shall provide all services as described in **Exhibit "A,"** which is attached hereto and incorporated into this Agreement by this reference. These services shall sometimes hereinafter be referred to as the "PROJECT."

CONSULTANT hereby designates Roger Schlierkamp who shall represent it and be its sole contact and agent in all consultations with CITY during the performance of this Agreement.

2. CITY STAFF ASSISTANCE

CITY shall assign a staff coordinator to work directly with CONSULTANT in the performance of this Agreement.

3. TERM; TIME OF PERFORMANCE

Time is of the essence of this Agreement. The services of CONSULTANT are to commence on , 2025 (the "Commencement Date"). This Agreement shall automatically terminate three (3) years from the Commencement Date, unless extended or sooner terminated as provided herein. All tasks specified in **Exhibit "A"** shall be completed no later than two (2) years from the Commencement Date. The time for performance of the tasks identified in **Exhibit "A"** are generally to be shown in **Exhibit "A."** This schedule may be amended to benefit the PROJECT if mutually agreed to in writing by CITY and CONSULTANT.

In the event the Commencement Date precedes the Effective Date, CONSULTANT shall be bound by all terms and conditions as provided herein.

4. COMPENSATION

In consideration of the performance of the services described herein, CITY agrees to pay CONSULTANT on a time and materials basis at the rates specified in **Exhibit "B,"** which is attached hereto and incorporated by reference into this Agreement, a fee, including all costs and expenses, not to exceed One Million Dollars (1,000,000.00).

5. EXTRA WORK

In the event CITY requires additional services not included in **Exhibit "A"** or changes in the scope of services described in **Exhibit "A,"** CONSULTANT will undertake such work only after receiving written authorization from CITY. Additional

compensation for such extra work shall be allowed only if the prior written approval of CITY is obtained.

6. METHOD OF PAYMENT

CONSULTANT shall be paid pursuant to the terms of **Exhibit "B."**

7. DISPOSITION OF PLANS, ESTIMATES AND OTHER DOCUMENTS

CONSULTANT agrees that title to all materials prepared hereunder, including, without limitation, all original drawings, designs, reports, both field and office notices, calculations, computer code, language, data or programs, maps, memoranda, letters and other documents, shall belong to CITY, and CONSULTANT shall turn these materials over to CITY upon expiration or termination of this Agreement or upon PROJECT completion, whichever shall occur first. These materials may be used by CITY as it sees fit.

8. HOLD HARMLESS

A. CONSULTANT hereby agrees to protect, defend, indemnify and hold harmless CITY, its officers, elected or appointed officials, employees, agents and volunteers from and against any and all claims, damages, losses, expenses, judgments, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) arising out of or in connection with CONSULTANT's (or CONSULTANT's subcontractors, if any) negligent (or alleged negligent) performance of this Agreement or its failure to comply with any of its obligations contained in this Agreement by CONSULTANT, its officers, agents or employees except such loss or damage which was caused by the sole negligence or willful misconduct of CITY. CONSULTANT will conduct all defense at its sole cost and expense and CITY shall approve selection of CONSULTANT's counsel. This indemnity shall

apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as limitation upon the amount of indemnification to be provided by CONSULTANT.

B. To the extent that CONSULTANT performs "Design Professional Services" within the meaning of Civil Code Section 2782.8, then the following Hold Harmless provision applies in place of subsection A above:

"CONSULTANT hereby agrees to protect, defend, indemnify and hold harmless CITY and its officers, elected or appointed officials, employees, agents and volunteers, from and against any and all claims, damages, losses, expenses, demands and defense costs (including, without limitation, costs and fees of litigation of every nature or liability of any kind or nature) to the extent that the claims against CONSULTANT arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of CONSULTANT. In no event shall the cost to defend charged to CONSULTANT exceed CONSULTANT's proportionate percentage of fault. However, notwithstanding the previous sentence, in the event one or more other defendants to the claims and/or litigation is unable to pay its share of defense costs due to bankruptcy or dissolution of the business, CONSULTANT shall meet and confer with CITY and other defendants regarding unpaid defense costs. The duty to indemnify, including the duty and the cost to defend, is limited as provided in California Civil Code Section 2782.8.

C. Regardless of whether subparagraph A or B applies, CITY shall be reimbursed by CONSULTANT for all costs and attorney's fees incurred by CITY in enforcing this obligation. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT.

9. PROFESSIONAL LIABILITY INSURANCE

CONSULTANT shall obtain and furnish to CITY a professional liability insurance policy covering the work performed by it hereunder. This policy shall provide coverage for CONSULTANT's professional liability in an amount not less than One Million Dollars ($1,000,000.00) per occurrence and in the aggregate. The above-mentioned insurance shall not contain a self-insured retention without the express written consent of CITY; however an insurance policy "deductible" of Ten Thousand Dollars ($10,000.00) or less is permitted. A claims-made policy shall be acceptable if the policy further provides that:

A. The policy retroactive date coincides with or precedes the initiation of the scope of work (including subsequent policies purchased as renewals or replacements).

B. CONSULTANT shall notify CITY of circumstances or incidents that might give rise to future claims.

CONSULTANT will make every effort to maintain similar insurance during the required extended period of coverage following PROJECT completion. If insurance is terminated for any reason, CONSULTANT agrees to purchase an extended reporting provision of at least two (2) years to report claims arising from work performed in connection with this Agreement.

If CONSULTANT fails or refuses to produce or maintain the insurance required by this section or fails or refuses to furnish the CITY with required proof that insurance has been procured and is in force and paid for, the CITY shall have the right, at the CITY's election, to forthwith terminate this Agreement. Such termination shall not effect Consultant's right to be paid for its time and materials expended prior to notification

of termination. CONSULTANT waives the right to receive compensation and agrees to indemnify the CITY for any work performed prior to approval of insurance by the CITY.

10. CERTIFICATE OF INSURANCE

Prior to commencing performance of the work hereunder, CONSULTANT shall furnish to CITY a certificate of insurance subject to approval of the City Attorney evidencing the foregoing insurance coverage as required by this Agreement; the certificate shall:

A. provide the name and policy number of each carrier and policy;

B. state that the policy is currently in force; and

C. shall promise that such policy shall not be suspended, voided or canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice; however, ten (10) days' prior written notice in the event of cancellation for nonpayment of premium.

CONSULTANT shall maintain the foregoing insurance coverage in force until the work under this Agreement is fully completed and accepted by CITY.

The requirement for carrying the foregoing insurance coverage shall not derogate from CONSULTANT's defense, hold harmless and indemnification obligations as set forth in this Agreement. CITY or its representative shall at all times have the right to demand the original or a copy of the policy of insurance. CONSULTANT shall pay, in a prompt and timely manner, the premiums on the insurance hereinabove required.

11. INDEPENDENT CONTRACTOR

CONSULTANT is, and shall be, acting at all times in the performance of this Agreement as an independent contractor herein and not as an employee of CITY.

CONSULTANT shall secure at its own cost and expense, and be responsible for any and all payment of all taxes, social security, state disability insurance compensation, unemployment compensation and other payroll deductions for CONSULTANT and its officers, agents and employees and all business licenses, if any, in connection with the PROJECT and/or the services to be performed hereunder.

12. TERMINATION OF AGREEMENT

All work required hereunder shall be performed in a good and workmanlike manner. CITY may terminate CONSULTANT's services hereunder at any time with or without cause, and whether or not the PROJECT is fully complete. Any termination of this Agreement by CITY shall be made in writing, notice of which shall be delivered to CONSULTANT as provided herein. In the event of termination, all finished and unfinished documents, exhibits, report, and evidence shall, at the option of CITY, become its property and shall be promptly delivered to it by CONSULTANT.

13. ASSIGNMENT AND DELEGATION

This Agreement is a personal service contract and the work hereunder shall not be assigned, delegated or subcontracted by CONSULTANT to any other person or entity without the prior express written consent of CITY. If an assignment, delegation or subcontract is approved, all approved assignees, delegates and subconsultants must satisfy the insurance requirements as set forth in Sections 9 and 10 hereinabove.

14. COPYRIGHTS/PATENTS

CITY shall own all rights to any patent or copyright on any work, item or material produced as a result of this Agreement.

15. CITY EMPLOYEES AND OFFICIALS

CONSULTANT shall employ no CITY official nor any regular CITY employee in the work performed pursuant to this Agreement. No officer or employee of CITY shall have any financial interest in this Agreement in violation of the applicable provisions of the California Government Code.

16. NOTICES

Any notices, certificates, or other communications hereunder shall be given either by personal delivery to CONSULTANT's agent (as designated in Section 1 hereinabove) or to CITY as the situation shall warrant, or by enclosing the same in a sealed envelope, postage prepaid, and depositing the same in the United States Postal Service, to the addresses specified below. CITY and CONSULTANT may designate different addresses to which subsequent notices, certificates or other communications will be sent by notifying the other party via personal delivery, a reputable overnight carrier or U. S. certified mail-return receipt requested:

TO CITY:

City of Huntington Beach
ATTN: Director of Public Works
2000 Main Street
Huntington Beach, CA 92648

TO CONSULTANT:

GMU Engineers and Geologists
ATTN: Roger Schlierkamp
30336 Esperanza
Rancho Santa Margarita, CA 92686

17. CONSENT

When CITY's consent/approval is required under this Agreement, its consent/approval for one transaction or event shall not be deemed to be a consent/approval to any subsequent occurrence of the same or any other transaction or event.

18. MODIFICATION

No waiver or modification of any language in this Agreement shall be valid unless in writing and duly executed by both parties.

19. SECTION HEADINGS

The titles, captions, section, paragraph and subject headings, and descriptive phrases at the beginning of the various sections in this Agreement are merely descriptive and are included solely for convenience of reference only and are not representative of matters included or excluded from such provisions, and do not interpret, define, limit or describe, or construe the intent of the parties or affect the construction or interpretation of any provision of this Agreement.

20. INTERPRETATION OF THIS AGREEMENT

The language of all parts of this Agreement shall in all cases be construed as a whole, according to its fair meaning, and not strictly for or against any of the parties. If any provision of this Agreement is held by an arbitrator or court of competent jurisdiction to be unenforceable, void, illegal or invalid, such holding shall not invalidate or affect the remaining covenants and provisions of this Agreement. No covenant or provision shall be deemed dependent upon any other unless so expressly provided here. As used in this Agreement, the masculine or neuter gender and singular or plural number shall be deemed to include the other whenever the context so indicates or requires. Nothing contained herein shall be construed so as to require the commission of any act contrary to law, and wherever there is any conflict between any provision contained herein and any present or future statute, law, ordinance or regulation contrary to which the parties have no right to contract, then the latter shall prevail, and the provision of this Agreement

which is hereby affected shall be curtailed and limited only to the extent necessary to bring it within the requirements of the law.

21. DUPLICATE ORIGINAL

The original of this Agreement and one or more copies hereto have been prepared and signed in counterparts as duplicate originals, each of which so executed shall, irrespective of the date of its execution and delivery, be deemed an original. Each duplicate original shall be deemed an original instrument as against any party who has signed it.

22. IMMIGRATION

CONSULTANT shall be responsible for full compliance with the immigration and naturalization laws of the United States and shall, in particular, comply with the provisions of the United States Code regarding employment verification.

23. LEGAL SERVICES SUBCONTRACTING PROHIBITED

CONSULTANT and CITY agree that CITY is not liable for payment of any subcontractor work involving legal services, and that such legal services are expressly outside the scope of services contemplated hereunder. CONSULTANT understands that pursuant to *Huntington Beach City Charter* Section 309, the City Attorney is the exclusive legal counsel for CITY; and CITY shall not be liable for payment of any legal services expenses incurred by CONSULTANT.

24. ATTORNEY'S FEES

In the event suit is brought by either party to construe, interpret and/or enforce the terms and/or provisions of this Agreement or to secure the performance hereof, each party shall bear its own attorney's fees, such that the prevailing party shall not be entitled to recover its attorney's fees from the nonprevailing party.

25. SURVIVAL

Terms and conditions of this Agreement, which by their sense and context survive the expiration or termination of this Agreement, shall so survive.

26. GOVERNING LAW

This Agreement shall be governed and construed in accordance with the laws of the State of California.

27. SIGNATORIES

Each undersigned represents and warrants that its signature hereinbelow has the power, authority and right to bind their respective parties to each of the terms of this Agreement, and shall indemnify CITY fully for any injuries or damages to CITY in the event that such authority or power is not, in fact, held by the signatory or is withdrawn.

28. ENTIRETY

The parties acknowledge and agree that they are entering into this Agreement freely and voluntarily following extensive arm's length negotiation, and that each has had the opportunity to consult with legal counsel prior to executing this Agreement. The parties also acknowledge and agree that no representations, inducements, promises, agreements or warranties, oral or otherwise, have been made by that party or anyone acting on that party's behalf, which are not embodied in this Agreement, and that that party has not executed this Agreement in reliance on any representation, inducement, promise, agreement, warranty, fact or circumstance not expressly set forth in this Agreement. This Agreement, and the attached exhibits, contain the entire agreement between the parties respecting the subject matter of this Agreement, and supersede all prior understandings and agreements whether oral or in writing between the parties respecting the subject matter hereof.

29. EFFECTIVE DATE

This Agreement shall be effective on the date of its approval by the City Attorney. This Agreement shall expire when terminated as provided herein.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their authorized officers.

CONSULTANT,
GMU ENGINEERS AND GEOLOGISTS

By: _____

Aron Taylor
print name

ITS: *(circle one)* Chairman/President/Vice President/CEO

AND

By: _____

Michael Moscrop
print name

ITS: *(circle one)* Secretary/Chief Financial Officer/Asst. Secretary – Treasurer/President

CITY OF HUNTINGTON BEACH,
a municipal corporation of the State of California

_____
City Manager

INITIATED AND APPROVED:

_____
Director of Public Works

APPROVED AS TO FORM:

_____
City Attorney

Date 10/21/2025

RECEIVE AND FILE:

_____
City Clerk

Date _____

EXHIBIT "A"

A. STATEMENT OF WORK: (Narrative of work to be performed)

Provide on-call Construction Materials Testing Services

B. CONSULTANT'S DUTIES AND RESPONSIBILITIES:

SEE ATTACHED EXHIBIT A

C. CITY'S DUTIES AND RESPONSIBILITIES:

D. WORK PROGRAM/PROJECT SCHEDULE:

EXHIBIT A

GMU
ENGINEERS & GEOLOGISTS

City of Huntington Beach

On-Call Construction Materials Testing Services Proposal

June 13, 2025

Submitted by:
GMU Engineers and Geologists
30336 Esperanza
949-888-6513
GMU Proposal No. 25-144-00

June 13, 2025 GMU Proposal 25-144-00

City of Huntington Beach
Public Works Department
Via PlanetBids

Subject: Proposal for On-Call Construction Materials Testing Services

Dear Public Works Department:

Established in 1967, GMU Engineers and Geologists (GMU) has provided construction materials testing and pavement / geotechnical engineering services for nearly 60 years. Since 2022, we have proudly supported the City of Huntington Beach (City) with on-call consultant services. This longstanding experience enables us to efficiently and effectively deliver the scope of work described within the request for proposal.

GMU's staff includes experienced registered professionals and engineering technicians specializing in construction materials testing and geotechnical/pavement engineering. Our 45-person staff includes 9 licensed Professional and Geotechnical Engineers and 5 Certified Engineering Geologists. Principal Pavement Engineer Roger Schlierkamp specializes in providing construction materials testing and pavement design services to public agencies. GMU's engineering technicians and registered special inspectors have an average of 15 to 20 years of experience and hold multiple certifications from ACI, ICC, Caltrans, and the County of Orange. GMU's in-house testing laboratory is approved by the California Department of Transportation (Caltrans), the County of Orange, AMRL, DSA, and other public agencies.

GMU has reviewed and considered clarifications contained within Q & A No. 1.

Please do not hesitate to call if you have any questions.

Respectfully submitted,

I am authorized to bind the firm to the terms of this proposal.

Michael Moscrop, M.Sc., PE, GE
President
Principal Engineer
mmoscrop@gmugeo.com

Roger Schlierkamp, M.Sc., PE
Vice President
Principal Pavement Engineer
rschlierkamp@gmugeo.com

Lisa L. Bates, PG, CEG, QSD/QSP
Director of Municipal Geotechnical and Engineering Services
Associate Geologist
lbates@gmugeo.com

GMU is located at 30336 Esperanza, Rancho Santa Margarita, California, 92688, and our office phone number is 949-888-6513.

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REQUEST FOR PROPOSAL

VENDOR APPLICATION FORM

TYPE OF APPLICANT: ☐NEW ☒CURRENT VENDOR

Legal Contractual Name of Corporation: GMU Engineers and Geologists

Contact Person for Agreement: Michael Moscrop, President

Corporate Mailing Address: 30336 Esperanza

City, State and Zip Code: Rancho Santa Margarita, CA 92688

E-Mail Address: mmoscrop@gmugeo.com

Phone: 949-888-6513 Fax: 949-888-1380

Contact Person for Proposals: Roger Schlierkamp

Title: Vice President / Principal Pavement Engineer E-Mail Address: rschlierkamp@gmugeo.com

Business Telephone: 949-888-6513 Business Fax: 949-888-1380

Is your business: (check one)

☐NON PROFIT CORPORATION ☒FOR PROFIT CORPORATION

Is your business: (check one)

☒CORPORATION
☐INDIVIDUAL
☐PARTNERSHIP
☐LIMITED LIABILITY PARTNERSHIP
☐SOLE PROPRIETORSHIP
☐UNINCORPORATED ASSOCIATION

Names & Titles of Corporate Board Members
(Also list Names & Titles of persons with written authorization/resolution to sign contracts)

Names	Title	Phone
Aron Taylor, M.Sc., PG, CEG	CEO, Senior Principal	949-888-6513
Mike Moscrop, M.Sc., PE, GE	President, Senior Principal	949-888-6513
Roger Schlierkamp, M.Sc., PE	Vice President, Principal	949-888-6513
Greg Silver, M.Sc., PE, GE	Senior Principal, CEO Emeritus	949-888-6513

Federal Tax Identification Number: 33-0359134

City of Huntington Beach Business License Number: A314329
(If none, you must obtain a Huntington Beach Business License upon award of contract.)

City of Huntington Beach Business License Expiration Date: September 30, 2025

PRE-QUALIFICATION FORM

ON-CALL CONSTRUCTION MANAGEMENT and MATERIALS INSPECTION CONSULTING SERVICES

SERVICE CATEGORY	PROPOSING? Y/N (circle)
A. Construction Management	Yes / No
Construction Materials Testing	Yes

RA (Initial) Consultant is willing to execute the Agreement as drafted (See **Appendix B**).

RA (Initial) Consultant is able to provide the insurance as required (See **Appendix C**).

Firm Name: GMU Engineers and Geologists

Firm Address: 30336 Esperanza, Rancho Santa Margarita, CA 92688

Signature: Roger Dohlinsky Date: June 13, 2025

SERVICE CATEGORY FIRM QUALIFICATIONS

SERVICE CATEGORY – CONSTRUCTION MATERIALS TESTING

GMU is pleased to propose continued on-call services to the City of Huntington Beach per the requirements and the scope of work described in the RFP. We have a clear understanding of the City's needs and objectives based on our review of the RFP as well as our experience working on past City of Huntington Beach projects. We are well-acquainted with the nature of the work and the level of effort required to successfully support the City.

We propose to provide services for the Section B Construction Materials Testing (and Section B.1 Technical Testing Requirements) category. In addition, we have included geotechnical and pavement engineering services to offer broader engineering support beyond materials testing alone.

The following sections summarize our capabilities, highlight GMU's unique strengths, and explain how our services can benefit the City.

PAVEMENT ENGINEERING

While pavement and geotechnical engineering are often conflated, they involve fundamentally different material behaviors and performance considerations. At GMU, we treat them as distinct sub-disciplines of civil engineering, each requiring its own specialized expertise to ensure accurate analysis and effective design.

Recognizing the unique technical demands of pavement engineering and testing, GMU established a dedicated Pavement Engineering division in 2005. Since, then, it has grown into the largest in-house pavement engineering team under one roof in Southern California. Our team of specialists provides focused, advanced solutions in pavement engineering and materials testing, delivering comprehensive services that include:

- Preparing **pavement management plans**.
- Performing non-destructive pavement evaluation testing, including in-house **falling weight deflectometer (FWD)** and **ground-penetrating radar (GPR)** testing for pavement evaluation projects.

- **Pavement-materials laboratory testing** in our in-house Caltrans-certified pavement and soils laboratory. Pavement laboratory tests performed in-house by GMU include asphalt concrete mix designs for asphalt producers and quality control/quality assurance testing during construction.
- Preparation of **pavement rehabilitation plans and specifications** for pavement-focused projects.
- Pavement bid solicitation, construction management advisory, and pavement-construction materials observation and testing services.

GEOTECHNICAL ENGINEERING

GMU has nearly 60 years of experience providing geotechnical investigation and design services for both public and private sector clients. We have supported a wide range of capital improvement projects for municipalities, including civic centers, community buildings, parks, bridges, roadways, retaining walls (including segmental systems), utilities, slope grading and repair, and emergency response services such as landslide evaluation, repair design, and construction oversight. Our depth of experience and technical expertise make us well-qualified to deliver responsive and effective geotechnical solutions.

- **Geotechnical Engineering and Engineering Geology** - 5 Registered Geotechnical Engineers and 4 Certified Engineering Geologists with experience ranging from Master Planned Communities to landslides to bridges and Public Works structures to roadways to high-rise structures.
- **Structural Engineering for Retaining Structures and Shoring** - Structural and geo-structural designs for conventional retaining walls, soil nail walls, soldier pile walls, and MSE walls.
- **Soils and Materials Laboratory** - Certified by the County of Orange, Caltrans, AMRL, DSA.
- **Forensic Engineering and Expert Witness Consultation** - 35+ year history of providing forensic engineering and expert witness consultations.

- **Geotechnical Instrumentation** - 35+ year history with monitoring hillside land movement.

CONSTRUCTION MATERIALS TESTING, AND SPECIAL INSPECTION

GMU maintains a dedicated team of public works acceptance-testing (AT) technicians specializing in soils/geotechnical, pavement, and plant inspection services. Our certified technicians, inspectors, and laboratory personnel are highly experienced and fully equipped to perform the tasks outlined in the RFP's scope of work, in accordance with Caltrans procedures, the City's requirements, and the applicable Quality Assurance Program (QAP). Select certifications are attached to this proposal as Appendix B. Our construction materials testing laboratory is certified by Caltrans, County of Orange, and AMRL. Construction materials that we routinely test and/or inspect include:

Table of Construction Materials	
• Soil	• Epoxies
• Concrete	• Metal
• Masonry	• Steel reinforcement
• Aggregates	• Welds
• Asphalt mixtures and asphalt plant inspection	• Coring of asphalt

By deploying multi-certified technicians, qualified in geotechnical, pavement, and special inspection, we streamline field operations, often reducing the number of personnel needed on-site, which in turn helps lower overall project costs. Our cross-disciplined technicians/inspectors are certified by Caltrans, AMRL, ACI, and ACI.

Our **geotechnical** observation and testing capabilities include:

Geotechnical Observation and Testing	
• Grading observation	• Roadway subgrade testing
• Compaction testing	• Trench backfill testing
• Fill moisture control	• Undesirable subgrade soil mitigation
• Subdrain placement	
• Removal observations	

Our **pavement** observation and testing capabilities, conducted by Caltrans-certified technicians, include:

Pavement Observation and Testing	

• Subgrade and aggregate base material compaction
• Hot-mix asphalt placement and compaction
• In-place density of hot-mix asphalt, base, and subgrade using a nuclear gauge
• Pavement coring and testing
• Cement/emulsion content
• Mixing temperatures and time
• Mix uniformity and adequate mixing
• Aggregate storage conditions
• Segregation
• Aggregate and asphalt binder temperatures
• Continuous feeding of aggregates and proper aggregate feeder gate operation
	• In-place density of hot-mix asphalt, base, and subgrade using a nuclear gauge
	• Pavement coring and testing
	• Equipment working order verification
	• Joint construction
	• Equipment calibrations, including scales
	• Batch or drum plant inspection and testing:
	  ○ Sand equivalent
	  ○ Crushed particles
	  ○ Fine aggregate specific gravity and absorption
	  ○ LA rattler
	  ○ Fine aggregate angularity

Our **special inspection** capabilities, conducted by ICC-certified inspectors, include:

Special Inspection	
• Concrete • Reinforcing steel and embedded items • Structural steel erection welding • High strength bolting	• Post-tensioned concrete • Masonry • Drilled-in anchors • Fireproofing • Non-shrink grout

GENERAL INFORMATION ABOUT GMU

GMU is a certified Small Business Enterprise (SBE) incorporated in the State of California with nearly 60 years of experience servicing Southern California. Formerly known as Goffman, McCormick & Urban, Inc., GMU has provided on-call services to municipalities for over 25 years and is recognized for its responsiveness, innovation, accuracy, and efficient service. Our consistent performance helps reduce costs, streamline coordination,

and lower risk for our clients, earning us long-standing relationships with cities, counties, public agencies, and private developers.

GMU has received recognition from ASCE, CELSOC, and CalGeo for engineering excellence and client service. We bring extensive experience in the design and construction support of a comprehensive range of public works projects, including streetscapes, community parks, large-scale civic centers, and other infrastructure improvements. Additionally, we have provided geotechnical peer review services for various agencies for over 25 years. Our depth of project experience and proven history of responsive on-call support make GMU a strong candidate to continue serving the City's needs.

REFERENCES – PROJECT EXAMPLES AND KEY PERSONNEL

Below is a selection of notable public agency projects completed in the past 7 years that are similar to the RFP's Scope of Services. Key personnel referenced in the projects below are discussed in more detail in the Preferred Staffing section of this proposal. Resumes for key personnel are attached in Appendix A of this proposal.

City of Huntington Beach

Role:	Prime
Service:	Pavement Evaluation and Design Recommendations Services
Contact:	Mr. Joe Fuentes, Senior Civil Engineer 2000 Main Street, Huntington Beach, CA 92648 jfuentes@surfcity-hb.org; 714-536-5431
Project Name:	Hamilton Avenue (Newland Street to Magnolia Street), Heil Avenue (Goldenwest Street to Gothard Street), and Bolsa Avenue (Graham Street to Edwards Street), FY 22-23 Arterial Rehabilitation, CC-1702 Project,
Dates:	September 2022 to June 2023 (design phase) November 2024 to present (FDR mix design phase)
Key Personnel:	Roger Schlierkamp

Services Performed: GMU provided pavement evaluation services for 3 arterial street segments in Huntington Beach, California, in 2023. The project included Hamilton Avenue, Heil Avenue, and Bolsa Avenue. GMU conducted pavement corings, deflection testing with a Falling-Weight Deflectometer (FWD), and laboratory testing to develop cost-effective rehabilitation design recommendations. Deflection data identified weak pavement areas and informed overlay thickness design. Currently, GMU is developing the FDR mix design for Bolsa Avenue as the next project phase.

Special Problems or Difficulties: The pavements evaluated in this project were in "poor" to "very poor" condition, with significant pumping subgrade issues posing a challenge. Given the city's limited budget, we implemented an innovative and cost-effective design approach by recommending full-depth reclamation with cement treatment (FDR-C).

City of Garden Grove

Role:	Prime
Service:	Geotechnical and Pavement Observation and Testing Services
Contact:	Mr. Mark Uphus, Senior Civil Engineer 11222 Acacia Parkway, Garden Grove, CA 92840 marku@ggcity.org; 714-741-5191
Project Name:	2024 Arterial Streets Rehabilitation Project CP-1376000
Dates:	October 2024 to Summer of 2025
Key Personnel:	Roger Schlierkamp

Services Performed: Geotechnical Services and Pavement Observation and Testing Services for seven (7) arterial street segments, including observation, testing, and materials testing for subgrade, aggregate base, cement stabilized pulverized base, asphalt concrete, and Portland cement concrete.

Special Problems or Difficulties: During our compaction testing, we have encountered instances where test results revealed inconsistencies with expected standards. In such cases, we promptly coordinated with the contractor to communicate the discrepancies, ensuring they could address the issue in real time. This collaborative approach allowed the contractor to make necessary adjustments, such as modifying compaction methods or materials, minimizing delays, and verifying compliance with project specifications. By maintaining clear communication and a proactive stance, we resolved potential issues efficiently and upheld the quality standards of the project.

City of Chino Hills

Role:	Prime
Service:	Pavement Management System (PMS) Update
Contact:	Mr. Carl Hassel – Engineering Manager
	14000 City Center Drive, Chino Hills, California 91709
	chassel@chinohills.org; (909) 364-2817
Project Name:	City-Wide Pavement Management System Update
Dates:	2021
Key Personnel:	Roger Schlierkamp

Services Performed: GMU worked on the 2021 Pavement Management System (PMS) update for the City of Chino Hills. The last PMS update was performed in 2005 and has not been updated since then. For this project, GMU performed a major update to the inventory and re-established the city's overall pavement management program, consisting of 193 centerline miles of streets. GMU performed the following:

- Pavement distress survey following ASTM D6433
- Quality Control on the data collected
- Analysis of various funding scenarios (PCI under current funding level, maintain PCI scenario, and improve PCI scenario)
- Recommending a pavement management software for the City's pavement management system
- Training City staff on using MicroPAVER software

City of Irvine

Role:	Prime
Service:	Geotechnical Observation, Testing, and Inspection; Special Inspection, and Materials Testing Services
Contact:	Mr. Stacy DeLong, Senior Project Manager 6427 Oak Canyon, Irvine, CA 92618 SDeLong@cityofirvine.org; (949) 473-1237
Project Name:	Bommer Canyon Community Park Cattle Camp Rehabiliation (CIP 371801)
Dates:	2021 to 2023
Key Personnel:	Lisa Bates

Services Performed: Geotechnical Observation, Testing, and Inspection Services during demolition, grading, foundation excavations, backfills, paving, and construction of the park renovation improvements. Special Inspection Services were provided for footings, foundations, slabs, shade canopies, and other miscellaneous structures. These inspections consisted of reinforced concrete and masonry. Materials Testing Services were provided for all materials testing needed on the project, ranging from soil maximum density testing to concrete, grout, and mortar compression strength testing.

City of Laguna Niguel

Role:	Special Geotechnical Consultant to City Public Works
Service:	Geotechnical Engineering and Monitoring Services
Contact:	Ms. Kathy Kelley, PE, TE, Engineering Services Manager 30111 Crown Valley Parkway, Laguna Niguel, CA 92677 kkelley@cityoflagunaniguel.org; 949-362-4341
Project Name:	La Paz Road Distress; La Paz Road Traffic Realignment
Dates:	1998 to current
Key Personnel:	Lisa Bates

Services Performed: GMU's role in this project is unique, as we have provided on-call geotechnical services to the City of Laguna Niguel since the mid-1990s. In the late 1990s, distress to a portion of La Paz Road, adjacent to a County Regional Park, was observed. GMU provided monitoring services at that time, including visual observation and installation and monitoring of slope inclinometers and crack-meters. Due to distress to the roadway from fill settlement, GMU performed a geotechnical investigation and prepared an emergency repair design consisting of installation of multiple caissons to protect the roadway from the movement of the slope below within the park. Since that time, GMU has periodically provided monitoring services and repair recommendations to mitigate ongoing movement of the slope supporting the southbound lanes of the road. In 2019, an active landslide was identified within the park that is undermining the road. GMU began to provide monitoring services, including slope inclinometers and visual observation by a Certified Engineering Geologist, as well as peer review of a geotechnical design report for stabilization of the landslide by Moulton Niguel Water District. The stabilization consists of installation of two rows of tiebacks, horizontal drains, and grading to mitigate the movement of the slope. We provided geotechnical observation and testing for the recent traffic realignment project that re-established bidirectional traffic flow while avoiding the distressed portion of the road. GMU is continuing to monitor the site to evaluate whether the stabilization has arrested the movement and distress to the roadway. Later this year, it is anticipated that we will be able to provide value engineering to the City to significantly reduce the scope of the long-term repair of the road.

THE GMU DIFFERENCE – UNIQUE APPROACHES OR STRENGTHS

GMU distinguishes itself from other geotechnical firms through a unique combination of specialized expertise, innovative problem-solving, and strong commitment to client service. Our reputation is built on rapid response times, clear communication, and high-quality deliverables that address even the most complex project challenges. Unlike traditional geotechnical firms, GMU includes a dedicated Pavement Engineering Division, enabling seamless collaboration between geotechnical and pavement specialists. This integrated approach allows us to provide comprehensive, cost-effective solutions with

greater efficiency and consistency for our clients. We excel at value engineering and creative thinking, particularly on projects that require unconventional or adaptive approaches. By combining technical excellence with a client-focused mindset, GMU consistently delivers responsive, practical, and innovative results tailored to each project's specific needs.

GMU's Strengths in Providing Caltrans-Certified Field Engineering Technicians and Laboratory Testing:

- **Certified Laboratory and Experienced Field Staff:** GMU's Caltrans-certified pavement- and materials-certified laboratory provides prompt, reliable testing services to support pavement design and construction observation and testing projects. Our field and plant Engineering Technicians have an average of 15 to 20 years of experience in compaction testing, sampling, and inspections, offering the City practical and hands-on expertise to navigate complex construction projects.
- **Proven Cost Control and Invoicing Accuracy:** GMU has a strong track record of delivering services on time and within budget. This success is driven by our company-wide commitment to proactive communication and transparency, enabling us to manage costs effectively and deliver timely, accurate invoices.

GMU's Strengths in Providing Pavement Engineering Services:

- **Comprehensive In-House Pavement Engineering Department:** GMU's dedicated Pavement Engineering team supports the City through all phases of Public Works pavement projects, from pavement management planning (network-level) to project-specific evaluations and construction-phase materials testing.
- **Integrated and Cost-Effective Services:** With all pavement engineering and testing services provided in-house, GMU offers a highly efficient and cost-effective approach. Our team brings a unique ability to view projects from multiple perspectives, ensuring that recommendations are not only technically sound but also practical, implementable, and aligned with public agency budgets.

GMU's Strengths in Providing Geotechnical Services:

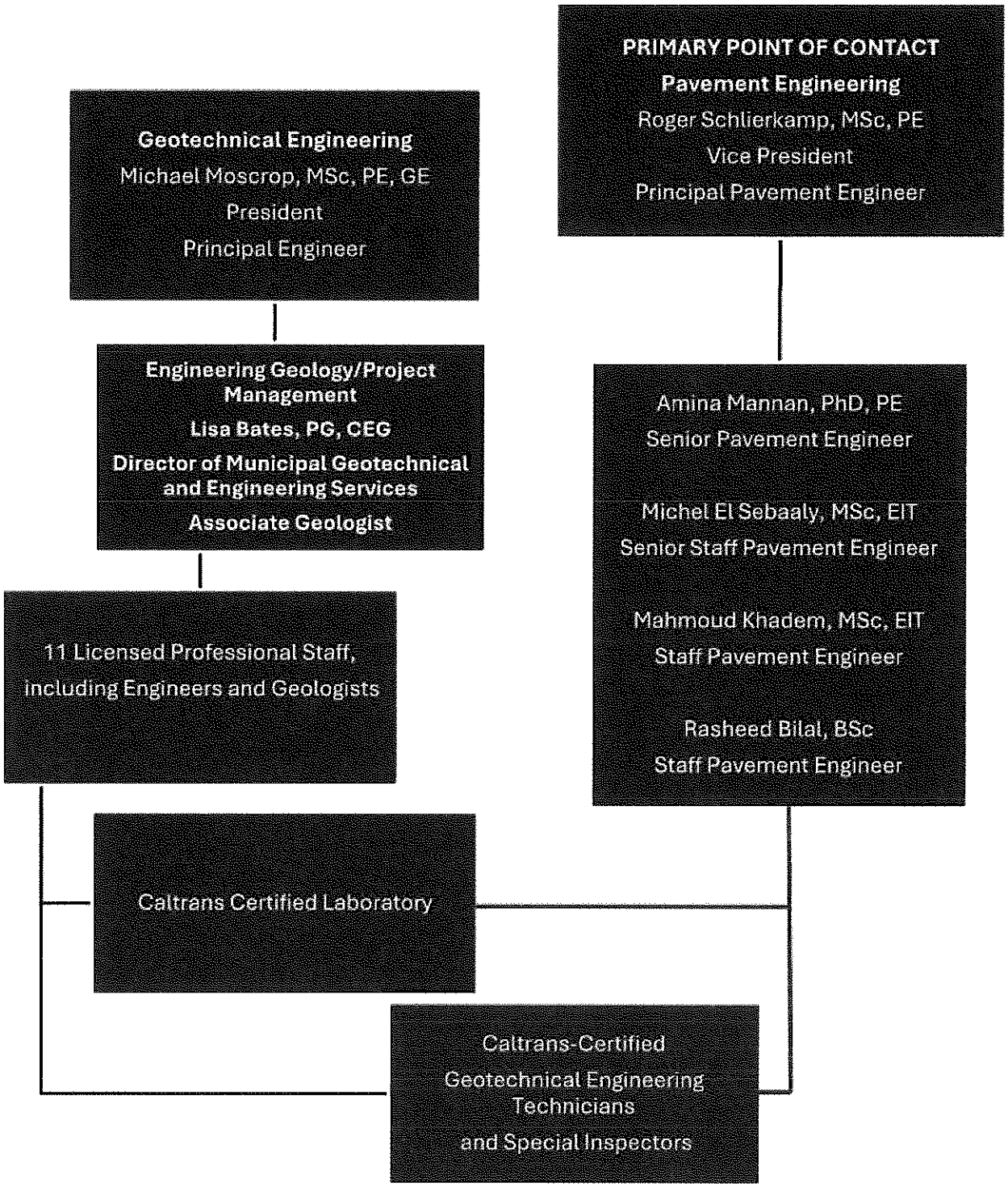
- **Extensive Municipal Experience:** GMU has provided on-call geotechnical services for numerous Cities for over 25 years, giving us in-depth knowledge and experience of municipal project workflows and how best to support City Staff throughout the project life cycle.
- **Diverse Technical Expertise:** Our team brings a broad range of specialized technical skills, enabling us to effectively deliver a wide variety of geotechnical services tailored to the unique needs of each project.
- **Collaborative and Responsive Team:** GMU's staff operates as a cohesive, well-coordinated team, prioritizing clear communication and collaboration. This approach allows for cost-effective solutions to be developed, proactive communication, and timely deliverables.

PREFERRED STAFFING

ORGANIZATIONAL CHART

The organizational chart on the following page provides additional information on GMU's supporting staff.

Resumes for key personnel listed below are attached as **Appendix B**. Resumes for supporting personnel can be provided upon request.


PRIMARY POINT OF CONTACT
Pavement Engineering
Roger Schlierkamp, MSc, PE
Vice President
Principal Pavement Engineer
Geotechnical Engineering
Michael Moscrop, MSc, PE, GE
President
Principal Engineer
Engineering Geology/Project Management
Lisa Bates, PG, CEG
Director of Municipal Geotechnical and Engineering Services
Associate Geologist
Amina Mannan, PhD, PE
Senior Pavement Engineer
Michel El Sebaaly, MSc, EIT
Senior Staff Pavement Engineer
Mahmoud Khadem, MSc, EIT
Staff Pavement Engineer
Rasheed Bilal, BSc
Staff Pavement Engineer
11 Licensed Professional Staff, including Engineers and Geologists
Caltrans Certified Laboratory
Caltrans-Certified
Geotechnical Engineering Technicians
and Special Inspectors

PROJECT TEAM

The primary point of contact will be **Roger Schlierkamp, MSc, PE,** GMU's Vice President and Principal Pavement Engineer. Roger has over 15 years of diversified pavement engineering experience. **For this contract, Roger will be the primary point of contact for construction material testing and pavement engineering services, including pavement evaluations, design, observation, testing, inspection, and mix design development.** Roger has provided pavement engineering services for Caltrans, Orange County, Los Angeles County, numerous local municipalities, and more.

Amina Mannan, Ph.D., brings 13 years of expertise in pavement engineering and 5 years in geotechnical engineering. She holds a Ph.D. and a Master's Degree in Pavement and Materials Engineering, earned from the University of New Mexico, Albuquerque, and the University of Akron, Ohio, respectively. Amina boasts a robust academic background and has contributed significantly to her field with over 40 publications in journals and conferences. Her professional services span a wide range of projects, offering specialized expertise in pavement and geotechnical engineering. In pavement engineering, Amina excels in pavement condition assessment, material testing, pavement evaluation/design, pavement condition index, specification development, and mix design projects. Furthermore, her geotechnical engineering experience encompasses site investigation, geotechnical analysis and design, foundation design, slope stability analysis, construction monitoring, and risk assessment. Amina is a licensed civil engineer in the State of Texas.

The Geotechnical Engineer providing Geotechnical Engineering will be **Mike Moscrop**, M.Sc., PE, GE, President and Principal Engineer. Mike has a Master's Degree in Civil Engineering from California State University, Long Beach, and has been employed at GMU for over 20 years. Mike has 37 years of experience working in geotechnical engineering consulting on a wide variety of projects with a diverse base of public and private clients. Mike has extensive experience in forensic engineering, pavement engineering, landslide and slope stability evaluations, investigations and repairs, debris and mudflows, commercial, industrial and retail development, transportation projects

including major roadways and bridges, residential development, geotechnical instrumentation, harbor and marine projects, groundwater studies, water infrastructure projects, etc. Mike also oversees our materials laboratory, providing general oversight, guidance, and QA/QC for the wide variety of testing we provide. Mike is former President of CalGeo and has published several peer reviewed papers.

Lisa Bates, PG, CEG, QSD, QSP, is GMU's Director of Municipal Geotechnical and Engineering Services and Associate Geologist. and has over 15 years of diversified pavement engineering experience. Lisa has a Bachelor's Degree in Geological Sciences from the University of California, Santa Barbara, and has been employed at GMU for over 25 years. Lisa currently fulfills this role for City capital improvement projects and all Community Development services, as well as other agencies' projects. Lisa has provided engineering geology services to the City of Chino Hills for Public Works projects and has been the key contact for geotechnical review services to the City for the past 19 years. Lisa's responsibilities for this work will include managing and providing engineering geologic services for improvement projects, overseeing and providing geologic peer review services, and responding to any other City needs.

UNDERSTANDING AND METHODOLOGY SECTION

GMU's understanding of the Scope of Work and the City's objectives to be accomplished is demonstrated below. In addition, we have included descriptions of our innovative approaches to projects and solutions to typical City projects.

CONSTRUCTION MATERIALS TESTING AND SPECIAL INSPECTION PROJECTS

Prior to construction or paving, GMU will attend a pre-construction or pre-pave meeting with the City and Contractor where topics such as scheduling, coordination, laboratory testing requirements, expectations, contact persons, and specifications are discussed collaboratively.

Pavement-related submittals, such as asphalt concrete or Portland cement concrete mix designs, are reviewed and recommended for approval or resubmittal.

During construction, GMU will deploy Caltrans-certified field engineering technicians to provide quality assurance observation and acceptance testing services. In the field, technicians will perform compaction testing and observations related to the materials being constructed (e.g., asphalt concrete temperatures, lift thicknesses, etc.). Our technicians will also collect material samples, perform plant inspections (as needed), and verify that the work performed and materials used satisfy the project's plans and specifications from a materials testing and observation standpoint. The field engineering technicians will document the results of inspection and testing services for each project. Daily inspection reports will be prepared that summarize the tests and observations.

GMU has provided quality assurance observation and testing services on federally funded projects. These projects typically require testing and inspection services to be provided in accordance with the Caltrans Local Assistance Procedures Manual and Quality Assurance Program. GMU possesses experience with these types of detail-oriented projects and can provide these services efficiently and cost-effectively.

GMU typically requires 48 hours' notice when requesting a technician for field observation or testing services. Laboratory testing turnaround times vary depending on the test(s) being performed but typically range between 1 to 3 business days for construction quality-assurance laboratory tests (maximum density, etc.).

The material collected in the field or plant is returned to GMU's County of Orange, Caltrans, AMRL, and AASHTO-certified laboratory. Laboratory testing will be performed to test the various construction materials for specification compliance purposes.

Typical laboratory tests performed during construction include the following:

- Asphalt binder content (% AC)
- Hveem Stability (S-Value)
- Gradation (after-burn or prior to mixing)
- Maximum-density and optimum moisture content (ASTM and Caltrans)
- Core density
- Concrete Compressive Strength
- Sand Equivalent
- Wet Track Abrasion Test
- Moisture content
- Emulsion content
- R-value
- More

GMU's current on-call geotechnical services to the City meet the requirements of the City's Quality Assurance Program, and our services to be provided per this proposal will continue to meet these requirements.

PAVEMENT ENGINEERING PROJECTS

For pavement evaluation projects, an outline of our typical work plan is summarized below:

Task 1 – Document Review, Pavement Surface Condition Assessment, and Dig Alert Coordination

A document review of existing as-built drawings and previous geotechnical/pavement reports will be performed. The information gathered from this review will be considered in the analysis and development of pavement repair recommendations (i.e., existing pavement section thicknesses, date of last pavement improvement work, etc.).

GMU will perform a pavement surface condition assessment to identify the type, extent, and severity levels of the pavement distress in general accordance with ASTM D 6433.

Pavement coring locations will be marked in coordination with the City, and DigAlert (Underground Service Alert) will be notified to assess potential conflict with known underground utilities before performing pavement corings.

Task 2 – Field Exploration

GMU will obtain a no-fee encroachment permit from the City for the proposed field exploration.

Pavement corings will be performed to a maximum depth of approximately 4 feet below the top of the existing asphalt surface using an electric-powered core drill. Sampling and digging below the AC section will be performed using hand tools. The thickness of the existing asphalt concrete (AC) and aggregate base (AB), where encountered, will be recorded. Other information, such as the presence of McAdams base rock, aggregate base type, presence of paving fabric, and groundwater table, will be recorded if encountered. Bulk samples of the subgrade soil will be collected, and at select locations,

drive samples will be collected at the top approximate foot or so of the subgrade to gather in-place density and moisture information. Upon completion of the sampling, the core hole will be backfilled with soil cuttings or other suitable backfill materials and capped with asphalt concrete cold patch. Traffic control will consist of single-lane closures performed in accordance with the WATCH Manual.

Task 3 – Laboratory Testing

Laboratory testing will be conducted in our AASHTO and Caltrans-certified laboratory on the samples collected from the field investigation program. Depending on the pavement conditions, laboratory tests may include:

- R-value;
- Sieve No. 200 wash for soil classification;
- Atterberg limits for soil classification;
- Sulfate content;
- Expansion index;
- Maximum density and optimum moisture content; and
- In-place moisture/density.

Task 4 – Deflection Testing and Analysis

Non-destructive pavement deflection testing will be performed using GMU's in-house falling weight deflectometer in accordance with California Test 356. Deflection testing involves applying an impact load (simulating truck traffic) and measuring the corresponding deflection response. Generally, lower deflection readings indicate a stronger pavement section, whereas higher deflection measurements indicate a weaker pavement section. Deflection testing can also identify weak areas that visual surface inspection may not.

The data gathered from the deflection tests will be analyzed. Measured deflection readings will be compared to "tolerable" deflections to assess structural adequacy. Variables such as in-place AC pavement thickness and design traffic index are factored

into the analysis to determine the required mill-and-overlay thickness to improve structurally inadequate pavement sections to a structurally adequate condition.

Moving closure traffic control, consisting of a traffic control truck and an arrow board following the deflection testing operation, typically accompanies the deflection testing vehicle.

Task 5 – Ground Penetrating Radar Testing

To reduce the number of days of pavement corings, traffic control, and associated costs, GMU offers GPR testing. GPR testing allows significantly more data to be gathered, compared to performing corings alone while also reducing the overall cost of our field exploration program.

GMU will perform non-destructive ground-penetrating radar (GPR) testing and analysis to obtain continuous subsurface information. GPR data will capture details such as the presence and thickness of asphalt concrete and underlying aggregate base. This continuous measurement of pavement layer thickness reduces the number of cores needed. GPR testing involves emitting a series of radar waves into the pavement structure using the GSSI RoadScan 30 system. This system includes a GSSI SIR-30 radar control unit, data acquisition system, electronic wheel-mounted distance measuring instrument (DMI), GPS, and antennas of various frequencies. We propose using a 2 GHz "air horn" antenna positioned 18 inches above the ground surface, capable of scanning to a depth of approximately 1.5 to 2 feet, depending on material types. GPR testing will be conducted at traffic speeds, allowing for the collection of several miles of data in a single day.

RADAN7 software will be used to analyze the GPR data collected. The dielectric constant of each pavement structural layer will be evaluated to interpret layer types and thicknesses. The depths to the bottom of each pavement layer will be calculated based on the two-way travel time of the GPR signal and the amplitude of the reflected energy. GPR data will be calibrated by comparing computed depths to "ground-truth" coring data.

Task 6 – Pavement Engineering Analysis

Pavement engineering analysis will be performed in accordance with the Caltrans Highway Design Manual. Caltrans AC design methodology considers the relationship between the traffic index (TI), subgrade soil strength (through R-value testing), and the gravel factors of the various pavement layers, allowing us to estimate the required pavement thicknesses. We will utilize the TI provided by the Project Civil Engineer or the City for the requested design life.

Task 7 – Identification of Isolated AC Repair Locations

GMU will identify isolated AC repair locations. This task involves visually assessing each street segment to identify areas recommended for isolated AC repairs (e.g., areas showing depressions, medium- or high-severity alligator cracking, and/or areas that recorded high deflection). The locations will be marked on a map and provided to the civil design firm in CAD format to incorporate into the street improvement plans.

Task 8 – Pavement Evaluation and Improvement Recommendations Report

A report summarizing our findings, conclusions, and recommendations will be prepared. The final report will include:

- Site location map;
- Coring location map;
- Summary of information gathered from the document review;
- Select photographs of the pavement surface condition;
- A table summarizing coring locations and pavement coring information (asphalt concrete thickness, aggregate base thickness, subgrade soil type, etc.);
- Laboratory testing results;
- Falling Weight Deflectometer;
- Isolated AC pavement (AC patch) repair map, if part of the recommended pavement repair strategy;
- Conclusions regarding potential causes of pavement deterioration; and

- Pavement improvement recommendations to achieve the requested design life.

GMU will typically provide two (2) pavement improvement recommendations to provide options for the City. GMU possesses extensive experience in developing cost-effective pavement repair alternatives, including the following:

- Localized AC repairs (patches) followed by mill-and-overlay repair using conventional AC or rubberized AC pavement.
- Cold in-place (CIR) or cold central plant recycled (CCPR) asphalt concrete (AC) pavement.
- Cement stabilized pulverized base (CSPB) as part of the pavement structural section.
- Cement- or lime-stabilized soils (CSS or LSB) for subgrade stabilization and/or as part of the pavement structural section.
- Fiber-reinforced asphalt concrete (FRAC) to improve reflective cracking resistance and/or reduce required AC thickness.
- Rubberized hot-mix asphalt (RHMA or ARHM overlays).
- Geogrid/geotextiles to reduce required aggregate base thickness or to stabilize subgrade conditions.

The procedures described in Tasks 1 through 8, and our experience in design and construction of these strategies, allow us to recommend cost-effective alternative pavement repair strategies. The final report will be signed and stamped by a California registered Civil Engineer specializing in Pavement Engineering.

GEOTECHNICAL ENGINEERING PROJECTS

For geotechnical engineering projects, our work plan depends on the complexity and specific type of project. Overall, GMU's approach to any project is to assemble a project team of personnel with strengths specific to the project's needs. More specifically, our approach to a typical geotechnical investigation/design project is summarized as follows:

Task 1 – Background Document Review – review of available geotechnical and geologic reports and publications.

Task 2 – Field Exploration (if required) – Includes site reconnaissance, surface mapping, and subsurface exploration as needed to obtain geotechnical data pertinent to the site.

Task 3 – Laboratory Testing

Laboratory testing will be conducted in our AASHTO and Caltrans certified laboratory on the samples collected from the field investigation program.

Task 4 – Geotechnical Engineering Analysis

Geotechnical engineering analysis is performed using the data collected and previously available data to provide geotechnical constraints, mitigation measures, and design parameters for the proposed project

Task 5 – Geotechnical Engineering and Geology Report and Design Support

GMU will prepare a summary report of our investigation results, including exploration logs, laboratory testing results, seismicity, and design parameters for the project design team. A California-licensed Geotechnical Engineer and Certified Engineering Geologist will sign the report.

COST PROPOSAL

As required by the City in the RFP, Section 5.E, GMU's hourly rate schedule for all services and products will be submitted as a separate attachment and uploaded to Planetbids as a Cost File.

Appendix A
Resumes

ROGER W. SCHLIERKAMP, MSC, PE

Vice President, Principal Pavement Engineer

GMU PAVEMENT ENGINEERING

PROFESSION
Civil Engineer

REGISTRATION
Registered Civil Engineer C81529
State of California

EDUCATION
M.S. Civil Engineering
(Pavement/Materials Engineering),
University of Nevada, Reno
B.S. Civil Engineering
University of Nevada, Reno

PROFESSIONAL EXPERIENCE

GMU Geotechnical, Inc.
(2014 – Present)
Vice President, Principal Pavement Engineer, Rancho Santa Margarita, California

Twining, Inc.
(2011 – 2014)
Pavement Engineer
Long Beach, California

University of Nevada, Reno
(2009 – 2011)
Graduate Researcher, Pavement / Materials
Reno, Nevada

PROFESSIONAL AFFILIATIONS

- California Asphalt Pavement Association (CalAPA)
- ASCE Orange County - Engineers without Borders
- American Society of Civil Engineer (ASCE)
- AGC
- American Public Works Association (APWA)
- Santiago Canyon College – Part Time Instruction (Construction Materials)

Roger Schlierkamp leads GMU's comprehensive range of pavement engineering services, including pavement evaluations/designs, PS&E development, construction management, observation and testing, mix design development, and pavement management planning. His full-circle knowledge allows him to develop innovative, practical, and cost-effective solutions for pavement challenges.

He shares his experience and knowledge in both workshop and classroom settings, having previously taught "Construction Materials and Testing" at Santiago Canyon College. His active role in the Greenbook Committee also underscores his influence in shaping pavement construction specifications embraced by numerous agencies and projects across Southern California.

Roger possesses over 15 years of experience in pavement engineering and is a California-licensed civil engineer. A summary of his areas of expertise includes:

- Pavement engineering evaluation, structural analysis, rehabilitation design
- Pavement management planning (PMP)
- Pavement construction management advisory
- Pavement plans, specifications, and estimates
- Non-destructive testing, including falling-weight deflectometer (FWD) testing & ground-penetrating radar (GPR) testing
- Pavement smoothness testing
- Pavement mix designs, including hot-mix asphalt (HMA), rubberized hot-mix asphalt (RHMA), warm-mix asphalt (WMA) following Marshall, Hveem, and Superpave design methods, soil-stabilization, and cold recycled asphalt
- Pavement preservation strategies, including fog seals, slurry seals, scrub seals, micro-surfacing seals, and chip seals
- Pavement rehabilitation strategies, such as rubberized pavement overlays, cold recycling, full-depth reclamation, cement/lime base, and subgrade stabilization
- In-depth knowledge of various pavement construction specifications, including Caltrans, Greenbook, Airport, and Ports.
- Quality control / assurance laboratory testing expertise, including Hveem Stability, Hamburg Wheel Track, Moisture Susceptibility, Maximum Density, Wet Track Abrasion, and more.

Select Pavement Evaluation and Design Projects

Annual Street Resurfacing Projects, City of San Fernando, 2020-2025

Main Street from E 228th Street to E Lomita Boulevard, City of Carson, CA, September 2024

Brookhurst Street from Ball Road to La Palma Avenue, City of Anaheim, CA, August 2024

South Serrano Ave from Nohl Ranch Road to South Weir Canyon Road Pavement Evaluation Project, City of Anaheim, CA, May 2023

Harbor Boulevard from Lincoln Avenue to North Street, City of Anaheim, CA, July 2024

Eastern Avenue from Huntington Drive to Valley Boulevard, City of Los Angeles, CA, December 2023

Camino Capistrano, City of San Juan Capistrano, CA 2016-2023

Hamilton Ave., Heil Ave., and Bolsa Ave. Pavement Evaluation Projects, City of Huntington Beach, CA, June 2023

Irvine Center Dr., Trabuco Rd., Irvine Blvd., Walnut Ave., MacArthur Blvd, and Sand Canyon Ave. Pavement Evaluation Projects, City of Irvine, CA, 2022-23

Select Quality Assurance Testing and Observation Projects

2024 Arterial Rehabilitation Project, City of Huntington Beach, 2024: Cement-Stabilized Pulverized Base and asphalt concrete paving.

Antonio Gateway Improvements Project, 2025, City of Rancho Santa Margarita, CA, 2025

Annual Citywide Street Resurfacing – FY 21-22 & FY 22-23 Projects, City of Stanton, CA, May 2022 to July 2024

Select Pavement Management Plan (PMP) Projects

City of Hermosa Beach, 2024 Citywide Pavement Management Plan Update

City of San Fernando, 2024 Citywide Pavement Management Plan Update

City of Newport Beach, Citywide Pavement Management Plan Updates for 2023, 2025, 2027 OCTA Measure M2 Funding

City of Chino Hills, CA, 2021 Citywide Pavement Management Plan Updates, 2021

Amina Mannan, Ph.D., P.E.

Senior Engineer, Pavement & Geotechnical Engineering

GMU PAVEMENT ENGINEERING

PROFESSION

Civil Engineer

REGISTRATION

Registered Civil Engineer, State of Texas

EDUCATION

Ph.D. Civil Engineering
(Pavement/Materials Engineering),
University of New Mexico, Albuquerque

M.S. Civil Engineering
(Pavement/Materials Engineering),
University of Akron, Akron, OH

B.S. Civil Engineering
Bangladesh University of Engineering and Technology, Dhaka Bangladesh

PROFESSIONAL EXPERIENCE

GMU Geotechnical, Inc.
(2023 – Present)
Senior Engineer
Rancho Santa Margarita, California

Arias & Associates, Inc.
(2018 – 2023)
Senior Pavement & Geotechnical Engineer
San Antonio, Texas

Applied Research Associates Inc.
(Feb 2018 – Sept 2018)
Pavement Condition Consultant for FDOT
Gainesville, Florida

University of New Mexico
(2012 – 2017)
Graduate Researcher, Pavement / Materials
Albuquerque, New Mexico

University of Akron
(2010 – 2012)
Graduate Researcher, Pavement / Materials
Akron, Ohio

PUBLICATIONS

Author of over 40 journal and conference publications in pavement materials and engineering

Amina is a highly experienced senior pavement and geotechnical engineer with 14 years of experience in pavement engineering and 5 years of experience in geotechnical engineering projects. Her expertise includes pavement condition assessment, material testing, pavement evaluation/design, pavement condition index, specification development, and mix design development projects. In addition, she has experience in geotechnical engineering, such as site investigation, geotechnical analysis and design, foundation design, slope stability analysis, construction monitoring, and risk assessment. Amina has had the privilege of collaborating with state and local agencies, private sector clients, and civil engineering firms, and has previously worked with several state agencies (e.g., NMDOT, FDOT, and TxDOT) on pavement and geotechnical projects. Her unique proficiency in both pavement and geotechnical engineering enables her to provide her clients with high-quality, cost-effective, and reliable solutions.

- **Advanced Non-Destructive Testing:** Proficiency in utilizing non-destructive testing methodologies such as Falling Weight Deflectometer (FWD), Ground Penetrating Radar (GPR), Laser Crack Measurement System (LCMS), and Profiler, for comprehensive pavement condition assessments.
- **Pavement Evaluation and Design:** Demonstrated expertise in employing various design methos, including Caltrans, Greenbook, AASHTO'93, FAA, AASHTOWare Pavement ME for the evaluation and design of pavements.
- **Pavement Management Plans (PMP)**: Experience in formulating PMP using the Pavement Condition Index (PCI), budget analysis and Maintenance and Rehabilitation (M&R) planning using PAVER.
- **Asphalt Mix Designs**: Proficiency in designing asphalt mixes, encompassing hot-mix asphalt (HMA) and warm-mix asphalt (WMA) with and without RAP, in accordance with Superpave mix design method.
- **Geotechnical Data and Design Recommendations**: Expertise in providing geotechnical data and design recommendations for utilities, retaining walls, and bridges based on the in-situ lab testing of soil and rock.
- **AC Laboratory Testing**: Experience in laboratory testing, including Dynamic Modulus Test, Low-Temperature Cracking Test, Beam Fatigue Test, Hamburg Wheel Tracking (HWT) Test, Moisture Induced Sensitivity Test (MIST), and more.
- **Asphalt Binder Testing**: Experience in binder testing, including Dynamic Shear Rheometer (DSR), Dynamic Mechanical Analyzer (DMA), Bending Beam Rheometers (BBR), Rotational Viscometer (RV), and more.

Select Pavement Management Plan (PMP) Projects

City of Newport Beach, Citywide Pavement Management Plan Updates for 2023, 2025, 2027: Managed the on-going, citywide pavement management plan study consisting of 205 centerline miles of streets to comply with OCTA Measure M2 funding requirements.

City of Laguna Niguel, CA, 2024 Citywide Pavement Management Plan Updates, 2020 to 2024: Pavement condition index (PCI) assessment of all city-maintained streets consisting of a total of approximately 141.5 centerline miles of streets and budget scenario analysis to help optimize the City's pavement maintenance and rehabilitation schedule and budget (approximately $2M per year typically).

City of Hermosa Beach, 2024 Citywide Pavement Management Plan Update: Managed the City's pavement management plan study consisting of 48 centerline miles of streets to comply with Los Angeles County Transportation Authority (METRO) pavement management requirements.

Select Pavement Evaluation and Design Projects – Local Municipalities and Agencies

Harbor Boulevard from Lincoln Avenue to North Street, Pavement Evaluation Project, City of Anaheim, CA, July 2024: Pavement design engineer overseeing the evaluation of the segments located in the City of Anaheim, including pavement surface condition assessment, corings, laboratory testing, analysis, and development of pavement rehabilitation recommendations.

Brookhurst Street from Ball Road to La Palma Avenue, Pavement Evaluation Project, City of Anaheim, CA, September 2024: Pavement design engineer overseeing the evaluation of the segments located in the City of Anaheim, including pavement surface condition assessment, corings, laboratory testing, analysis, and development of pavement rehabilitation recommendations.

2020 "Phase II" Citywide Pavement Evaluation Project, City of Aliso Viejo, CA, ongoing: Pavement design engineer overseeing pavement condition assessments, corings, laboratory testing, analysis, and pavement repair recommendations of arterial and residential street segments.

Annual Residential Slurry Seal FY 2024-25 Project, City of Dana Point, CA, ongoing: Pavement design engineer performing and overseeing the pavement evaluation of various residential streets, including corings, ground-penetrating radar (GPR) testing, Falling Weight Deflectometer (FWD) testing, laboratory testing, and analysis.

Seal Beach Boulevard from Westminster Boulevard to N Gate Road, City of Seal Beach, CA, March 2024: Performed pavement evaluation to develop rehabilitation repair recommendations for Seal Beach Boulevard.

Select Quality Assurance Testing and Observation Projects

Phase 3 Annual Street Resurfacing Project, City of San Fernando, CA, Ongoing: Construction management (CM) and quality assurance (QA) testing services.

2024 Asphalt Repairs and Asphalt Overlays of Various Streets, City of Mission Viejo, CA, Ongoing: Quality control and asphalt concrete observation and testing.

Cityside Fiber Micro-Trench Asphalt Restoration, City of Mission Viejo, CA, Ongoing: Quality control, field density testing, and asphalt concrete observation and testing.

MICHAEL B. MOSCROP, M.SC., PE, RGE

Vice President
Principal Geotechnical Engineer

PROFESSION
Geotechnical Engineer

REGISTRATIONS
Registered Civil Engineer,
State of California

Registered Geotechnical Engineer,
State of California

EDUCATION
M.S. Civil Engineering,
Geotechnical Engineering, California State University, Long Beach.

B.Sc. Honors, Geography, Dept. of Geographical Sciences,
Huddersfield University,
England. Thesis: *"Peat Erosion and Reservoir Sedimentation in the Southern Pennines, England."*

PROFESSIONAL AFFILIATIONS
CalGeo, ACI, ASTM, ASCE,
Portland Cement Association

Mike has 36 years of experience in a wide variety of geotechnical engineering projects. His experience includes working with residential, commercial, and industrial developers, water districts and public agencies. Mike also provides geotechnical review services for the County of Orange and various Cities. He has served as an expert witness in regard to a variety of geotechnical issues over the last 15+ years. Mike's responsibilities also include overseeing GMU's state-of-the-art, in-house, geotechnical laboratory. He has worked successfully on the following types of projects:

- Soil Cement Design and Testing
- Transportation Projects (Major Roadways and Bridges)
- Commercial, Industrial, and Retail Projects
- Master-Planned Communities
- Residential and Custom Lot Projects
- Landslide/Slope Stability Investigations & Slope Repairs
- Dredging Studies
- Harbor and Marine Projects
- Orange County Geotechnical Review Services
- Laboratory Testing Marine Samples
- Seismic Hazard Analyses
- Groundwater Studies
- Water Infrastructure Projects
- Miscellaneous Utility Projects
- Moisture Intrusion Evaluations
- Geotechnical Instrumentation
- Public Works Projects
- Various Forensic Evaluations
- Expert Witness Testimony

SELECT PROJECT EXPERIENCE

Dye Penetration and Backfill Testing, SCWD JRWSS 60" Pipeline J1R2 Emergency Repair, SCWD, Irvine, CA: Provided special inspection, geotechnical observation, and laboratory tests for this pipeline project.

JTM Vaults Upgrade, SCWD, JTM Vaults Upgrade, SCWD, Laguna Woods, CA: Performed Geotechnical design and observation, laboratory testing, welding inspection, and construction coordination for this project.

Tunnel Stabilization & Sewer Pipeline Replacement, SCWD, Laguna Beach, CA: In charge of geotechnical instrumentation and monitoring $100 million project to replace a two-mile, 65-year-old tunnel that currently houses a gravity sewer. The sewer provides wastewater service for the northern portion of Dana Point, homes along the west side of coast highway at Three Arch Bay and in South Laguna. It is buried approximately 50 feet beneath the bluff from Three Arch Bay to Aliso Beach. The tunnel located 20-30 feet from the edge of the cliffs and underneath multimillion dollar homes, sits right above the Pacific Ocean's federally protected marine life habitat. Provided Geotechnical Exploration for instrument installation. Instrumentation included inclinometers, vibration, and sound monitors. Performed pre and post construction surveys, including manometer surveys. Performed numerous distress evaluations to evaluate alleged damages from construction tunneling operations. Evaluated vibration, inclinometer & sound monitoring data and issued weekly reports of monitoring data. Met with SCWD representatives, contractor, construction manager and property owners to address complaints.

JTM J2R4 Manway Installation and Vault, SCWD, Aliso Viejo, CA: Provided Geotechnical design and observation, laboratory testing, welding inspection, and construction coordination for this project.

Bradt Reservoir Paving, Phase 2, SCWD, San Clemente, CA: Provided geotechnical observation, laboratory testing, grading, subgrade, aggregate base, and AC compaction for this project.

Geotechnial Laboratory Testing, Palos Verdes Shelf Superfund Site Pre-Design Investigation, ITSI Gilbane Co. & Jacobs Engineering, Palos Verdes, CA: Performed laboratory testing on frozen subsurface samples consisting of gradation, hydrometer, specific gravity and bulk density determination on several thousand soft marine sediment samples obtained in waters up to 200 feet in depth off the Palos Verdes Peninsula. Project ongoing.

Various Sea Wall Distress Evaluations, Various Cities/Ins. & Management Companies/ Individual Property Owners, Orange & LA County, CA: Evaluated numerous distressed and failing seawalls on Lido and Balboa Islands, adjacent waterfront areas of Newport Harbor, Huntington Harbor, Venice and Marina Del Rey. Developed repair recommendations and performed observation and testing services during repairs.

Various Dredging and Dock Improvement Evaluations, Corps of Engineers, Marina Del Rey Harbor, Dana Point Harbor, Newport Harbor, CA: Performed geotechnical exploration in marine environments from barges and ships, including Cpt & core sampling. Phi gradation testing on subsurface samples for dredging studies to satisfy Corps of Engineers requirements regarding disposal of sediments relative to dredging and dock improvements.

LISA L. BATES, PG, CEG

Associate Geologist
Director of Municipal Geotechnical and Engineering Services

PROFESSION
Engineering Geologist

REGISTRATIONS
Certified Engineering Geologist, State of California

Professional Geologist, State of California

CERTIFICATIONS
Qualified SWPPP Practitioner, State of California

Qualified SWPPP Designer, State of California

EDUCATION
B.S., Geological Sciences, University of California, Santa Barbara

Summer Field Studies, Oregon State University

AFFILIATIONS
National Association of Women In Construction, Orange County Chapter – Past Chapter President (NAWIC)

South Coast Geological Society

Lisa has over 28 years of experience in various aspects of the geotechnical field. She has worked successfully with governmental agencies, residential and commercial developers, master community planners, and homeowners' associations on both private and public works projects. She has extensive experience in a wide variety of services including: municipal geology and geotechnical engineering, hillside grading, landslide investigation and mitigation, residential and commercial development, public works projects, and forensic investigations. Ms. Bates excels at landslide and slope failure investigations and repairs and has worked with many agencies and private clients on slope issues. In addition, she has served as an expert witness for several legal matters. She is also the Consulting Geologist for several public agencies. Her goal is to provide an outstanding product to her clients in a timely and cost efficient manner, while upholding the high standards and mission of GMU. Selected project categories representative of Ms. Bates' experience are described below:

- Landslide/Slope Failure Investigation and Repair
- Construction Management
- Geotechnical Review/Consulting Services for Multiple Cities
- Public Works Projects
- Fault Studies
- Legal Consultation
- Residential/Commercial Projects
- Single Family Residential Custom Developments

Additional information and notable projects from Lisa's portfolio are summarized on the following pages.

CONSULTANT TO PUBLIC AGENCIES

Lisa has over 28 years' experience working with various governing agencies, including 20 years providing geotechnical services to a variety of agency clients. These services include third-party geotechnical peer review for Entitlement, Grading, and Building permits, plan checking, geotechnical investigation and design, emergency services and landslide remediation, geotechnical monitoring, and construction observation. A chronological list of Ms. Bates' experience is described below:

- City of Rancho Santa Margarita (2008 to current)
- City of Laguna Niguel (2002 to current)
- City of Chino Hills (2002 to current)
- City of Dana Point (2008 to current)
- City of Laguna Hills (2010 to 2020, 2024 to current)
- City of Mission Viejo (2016 to current)
- City of San Clemente (2019 to current)
- City of Rolling Hills (2019 to current)
- City of Palos Verdes Estates (2019-2021)
- City of Anaheim (2021 to current)

LANDSLIDE/SLOPE FAILURE INVESTIGATION AND/OR REPAIR

Lisa's experience investigating and/or repairing landslides, slope failures, and erosion includes dozens of projects. The list below includes a selection of high-profile or complex landslide projects.

- **Hacienda Road, La Habra Heights** - City of La Habra Heights: Project included geotechnical investigation of a portion of major arterial roadway with steep natural slopes and existing distress. Project also included development of design repair plans and specifications, as well as coordination with bidders and impacted agencies. Lisa also provided construction management and geotechnical services during construction of the repair.

- **Poppy Trail Landslide, Rolling Hills** – California Joint Powers Insurance Authority: Project included geotechnical investigation and design of repair of a large landslide within a hillside residential area. Challenges included steep terrain, adjacent properties, and complex geology. Duties included geologic investigation and grading observations, project oversight, and construction management advisor services.

- **Philemon Landslide, Dana Point** – Private Developer: Project included geotechnical investigation and design of repair of a landslide impacting four residential structures. Challenges included existing residences and adjacent properties, adverse geologic structure, and poor shear strengths for onsite soils. Repair design included innovative slurry backfill of keyway excavation. Project won 2014 CalGeo Project Award and was presented at 2013 Geo-Congress in San Diego.

- **Portuguese Bend Landslide Complex, Rancho Palos Verdes** – Various Clients: Multiple projects within the ancient landslide complex included investigations of:
    - Active Portuguese Bend Landslide
    - "Parcel 4" Landslide
    - Abalone Cove Landslide

  Tasks included coordinating complex geologic field investigations with multiple drilling methodologies, analyzing data collected to prepare maps and geologic cross-sections, creation of a structure contour map of the entire landslide complex, and development of mitigation measures to stabilize the landslides.

Appendix B
Select Certifications

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

CALTRANS ACCREDITATION LABORATORY INSPECTION REPORT

Expiration Date: 2025-06-26
Inspected By: Ashley Shaw
IA No.: 68
Phone: 916-508-5964
RSP #: 104
File: Material Category 500
Laboratory: GMU Geotechnical, Incorporated
Address: 30336 Esperanza Rancho Santa Margarita CA, 92688
Lab QC Mgr.: Mike Moscrop
E-mail: mmoscrop@gmugeo.com
Telephone: 949-888-6513
Fax #.:

A certified Independent Assurance (IA) visited this laboratory on 2024-06-26

Only the equipment to be used on Caltrans Construction projects and/or local construction projects on the National Highway System was checked for qualification. At the time of Caltrans Accreditation, this laboratory had all necessary equipment to perform the test methods indicated below.

Testing personnel shall be Caltrans Qualified and possess a current Caltrans Certification Form TL-0111 or AASHTO Proficiency Form TL-0115 prior to performing any sampling or testing.

AASHTO T84	AASHTO T85	CT 105	CT 106	CT 125 ADMIX
CT 125 AGG	CT 125 AGG	CT 125 BIT	CT 125 CEM	CT 125 GEN
CT 125 HMA	CT 125 HMA	CT 201	CT 202	CT 204
CT 205	CT 206	CT 207	CT 209	CT 216
CT 217	CT 226	CT 227	CT 231	CT 234
CT 235	CT 301	CT 304	CT 308	CT 309
CT 366	CT 370	CT 375	CT 382	CT 504
CT 518	CT 533	CT 539	CT 540	CT 541
CT 556	CT 557			

A visual check was performed and documents provided as necessary for the following items:

- ✓ Facility Safety Manual
- ✓ Laboratory Procedures Manual
- ✓ Laboratory Quality Control Manual
- ✓ Proper test equipment
- ✓ Copies of current applicable test procedures
- ✓ Calibration and service documentation
- ✓ Calibration stickers affixed to test equipment (dated within the 12 months)

On 2024-06-26, this laboratory was Caltrans Qualified by:

Ashley R. Shaw
(Printed name of IA person)

Ashley R Shaw
(Signature of IA person)

Please verify lab accreditation by visiting SIAD website: https://sia.dot.ca.gov/

AASHTO ACCREDITED

CERTIFICATE OF ACCREDITATION

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AASHTO

GMU Geotechnical, Inc.

in

Rancho Santa Margarita, California, USA

has demonstrated proficiency for the testing of construction materials and has conformed to the requirements established in AASHTO R 18 and the AASHTO Accreditation policies established by the AASHTO Committee on Materials and Pavements.

The scope of accreditation can be viewed on the Directory of AASHTO Accredited Laboratories (aashtoresource.org).

Jim Tymon,
AASHTO Executive Director

Matt Linneman,
AASHTO COMP Chair

This certificate was generated on 02/04/2025 at 6:53 PM Eastern Time. Please confirm the current accreditation status of this laboratory at aashtoresource.org/aap/accreditation-directory

Scope of AASHTO Accreditation for:

GMU Geotechnical, Inc.

in Rancho Santa Margarita, California, USA

Quality Management System

Standard:		Accredited Since:
R18	Establishing and Implementing a Quality System for Construction Materials Testing Laboratories	07/02/2015
D3740 (Soil)	Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction	10/07/2019
E329 (Soil)	Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	10/07/2019

This certificate was generated on 02/04/2025 at 6:53 PM Eastern Time. Please confirm the current accreditation status of this laboratory at aashtoresource.org/aap/accreditation-directory

Scope of AASHTO Accreditation for:

GMU Geotechnical, Inc.

in Rancho Santa Margarita, California, USA

Soil

Standard:		Accredited Since:
R58	Dry Preparation of Disturbed Soil and Soil Aggregate Samples for Test	09/19/2017
T88	Particle Size Analysis of Soils by Hydrometer	07/02/2015
T89	Determining the Liquid Limit of Soils (Atterberg Limits)	07/02/2015
T90	Plastic Limit of Soils (Atterberg Limits)	07/02/2015
T99	The Moisture-Density Relations of Soils Using a 5.5 lb [2.5 kg] Rammer and a 12 in. [305 mm] Drop	09/19/2017
T100	Specific Gravity of Soils	07/02/2015
T180	Moisture-Density Relations of Soils Using a 10 lb [4.54 kg] Rammer and an 18 in. [457 mm] Drop	07/02/2015
T190	Resistance R-Value and Expansion Pressure of Compacted Soils	07/02/2015
T236	Direct Shear Test of Soils Under Consolidated Drained Conditions	07/02/2015
T265	Laboratory Determination of Moisture Content of Soils	09/19/2017
T310	In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)	07/02/2015
D421	Dry Preparation of Disturbed Soil and Soil Aggregate Samples for Test	09/19/2017
D422	Particle Size Analysis of Soils by Hydrometer	07/02/2015
D698	The Moisture-Density Relations of Soils Using a 5.5 lb [2.5 kg] Rammer and a 12 in. [305 mm] Drop	09/19/2017
D854	Specific Gravity of Soils	09/19/2017
D1557	Moisture-Density Relations of Soils Using a 10 lb [4.54 kg] Rammer and an 18 in. [457 mm] Drop	07/02/2015
D2216	Laboratory Determination of Moisture Content of Soils	09/19/2017
D2844	Resistance R-Value and Expansion Pressure of Compacted Soils	07/02/2015
D3080	Direct Shear Test of Soils Under Consolidated Drained Conditions	07/02/2015
D4318	Determining the Liquid Limit of Soils (Atterberg Limits)	07/02/2015
D4318	Plastic Limit of Soils (Atterberg Limits)	07/02/2015
D6938	In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)	07/02/2015

This certificate was generated on 02/04/2025 at 6:53 PM Eastern Time. Please confirm the current accreditation status of this laboratory at aashtoresource.org/aap/accreditation-directory

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Presents this CERTIFICATE to

John Villarraga

who is certified to perform the following tests:

Test Method	Expiration Date	IA Responsible	Associated Laboratory
CT 105	2027-01-10	Firooz Ahmad Hosainy	Lab 1
CT 106	2026-03-04	Ashley Shaw	Lab 1
CT 125 AGG	2027-01-10	Firooz Ahmad Hosainy	Lab 1
CT 201	2027-01-10	Firooz Ahmad Hosainy	Lab 1
CT 202	2027-01-10	Firooz Ahmad Hosainy	Lab 1
CT 204	2026-03-04	Ashley Shaw	Lab 1
CT 205	2027-01-10	Firooz Ahmad Hosainy	Lab 1
CT 206	2026-03-04	Ashley Shaw	Lab 1
CT 207	2026-03-04	Ashley Shaw	Lab 1
CT 209	2026-03-04	Ashley Shaw	Lab 1
CT 216	2027-01-10	Firooz Ahmad Hosainy	Lab 1
CT 217	2027-01-10	Firooz Ahmad Hosainy	Lab 1
CT 226	2027-01-10	Firooz Ahmad Hosainy	Lab 1
CT 227	2027-01-10	Firooz Ahmad Hosainy	Lab 1
CT 229	2027-01-10	Firooz Ahmad Hosainy	(No lab)
CT 234	2024-06-21	Ashley Shaw	Lab 1
CT 235	2024-06-21	Ashley Shaw	Lab 1
CT 301	2026-03-04	Ashley Shaw	Lab 1
CT 304	2026-03-04	Ashley Shaw	Lab 1
CT 308	2026-03-04	Ashley Shaw	Lab 1
CT 309	2026-03-04	Ashley Shaw	Lab 1
CT 366	2026-03-04	Ashley Shaw	Lab 1
CT 370	2026-03-04	Ashley Shaw	Lab 1

Ashley R Shaw

Certified Independent Assurance (IA)

Date issued: 03/27/2024

Technician ID: 01373

Note: This certificate is valid as long as the Technician complies with applicable requirements in Caltrans Independent Assurance Program Manual.

Please verify technician certifications by visiting the SIAD website at https://sia.dot.ca.gov/

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Presents this CERTIFICATE to

John Villarraga

who is certified to perform the following tests:

Test Method	Expiration Date	IA Responsible	Associated Laboratory
CT 382	2026-03-04	Ashley Shaw	Lab 1

Lab 1: GMU Geotechnical, Incorporated, 30336 Esperanza, Rancho Santa Margarita

No Lab: Laboratory associated with the technician is not accredited to perform the test method identified. Technicians must be associated with an accredited laboratory.

Ashley R Shaw

Certified Independent Assurance (IA)

Date issued: 03/27/2024

Technician ID: 01373

Note: This certificate is valid as long as the Technician complies with applicable requirements in Caltrans Independent Assurance Program Manual.

Please verify technician certifications by visiting the SIAD website at https://sia.dot.ca.gov/

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Presents this CERTIFICATE to

Kevin Criswell

who is certified to perform the following tests:

Test Method	Expiration Date	IA Responsible	Associated Laboratory
CT 125 AGG	2026-07-31	Ashley Shaw	Lab 1
CT 125 GEN	2026-07-31	Ashley Shaw	Lab 1
CT 125 HMA	2026-08-16	Ashley Shaw	Lab 1
CT 231	2026-07-24	Ashley Shaw	Lab 1
CT 375	2026-07-24	Ashley Shaw	Lab 1

Lab 1: GMU Geotechnical, Incorporated, 30336 Esperanza, Rancho Santa Margarita

Ashley R Shaw

Certified Independent Assurance (IA)
Date issued: 07/30/2024
Technician ID: 06284

Note: This certificate is valid as long as the Technician complies with applicable requirements in Caltrans Independent Assurance Program Manual.
Please verify technician certifications by visiting the SIAD website at https://sia.dot.ca.gov/

Verify

Verified Candidate

Search Again

Customer Name:	Account Number:
Kevin Buffington	5256771

Certifications:

Initial Certification	Current Expiration	Certificate Name
10/07/2005	09/01/2026	Spray Applied Fire Proofing Special Inspector
05/23/2006	09/01/2026	Reinforced Concrete Special Inspector
07/22/2008	09/01/2026	Structural Masonry Special Inspector
10/14/2006	09/01/2026	Prestressed Concrete Special Inspector

SIAD TL-0111: CERTIFICATION

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Presents this CERTIFICATE to

Daniel Abeyta

who is certified to perform the following tests:

Test Method	Expiration Date	IA Responsible	Associated Laboratory
CT 504	2029-10-11	Sarmad Dalal	Lab 1
CT 518	2029-10-11	Sarmad Dalal	Lab 1
CT 523.1 Section B.1 & B.2	2029-10-11	Sarmad Dalal	Lab 1
CT 539	2029-10-11	Sarmad Dalal	Lab 1
CT 540	2029-10-11	Sarmad Dalal	Lab 1
CT 543	2029-10-11	Sarmad Dalal	Lab 1
CT 556	2029-10-11	Sarmad Dalal	Lab 1
CT 557	2029-10-11	Sarmad Dalal	Lab 1

Lab 1: RMA Group - Main Laboratory, 12130 Santa Margarita Court, Rancho Cucamonga

Sarmad Dalal IA# 160

Certified Independent Assurance (IA)
Date issued: 11/06/2024
Technician ID: 06906

Note: This certificate is valid as long as the Technician complies with applicable requirements in Caltrans Independent Assurance Program Manual.

ACI Certification Results Report

Report Print Date: 3/20/25

ACI Concrete Field Testing Technician - Grade I

Testing Session Information:

Session: 251315	Exam Date: 03/01/2025	Exam Location:	LAKE FOREST, CA
ACI Sponsoring Group:	California Southern Chap ACI		
Examiner of Record:	JOSHUA J CAVENDER		

Examinee Information

Joseph Q Huynh
4551 Champagne Court
Riverside, CA 92505

Certification ID
01323610

Status Information

Certification Status: ***CERTIFIED*** **ACI Concrete Field Testing Technician – Grade I**
Certification Issue Date: 03/01/2025 Thru 02/28/2030

Overall Results

Overall Written Examination	**PASS**
Overall Performance Examination	**PASS**

Detailed Subtest Results

To pass the written examination you must 1) score 60% or higher on each written subtest and 2) score 70% or higher on the overall written examination.
To pass the performance examination you must pass all 7 subtests in one session.

Qualification	P/F - Session	% Score
Overall Written Examination	PASS - 251315	94.55
Overall Performance Examination	PASS - 251315	100.00
Performance Subtest C1064	PASS - 251315	100.00
Performance Subtest C138	PASS - 251315	100.00
Performance Subtest C143	PASS - 251315	100.00
Performance Subtest C172	PASS - 251315	100.00
Performance Subtest C173	PASS - 251315	100.00
Performance Subtest C231	PASS - 251315	100.00
Performance Subtest C31	PASS - 251315	100.00
Written Subtest C1064	PASS - 251315	100.00
Written Subtest C138	PASS - 251315	87.50
Written Subtest C143	PASS - 251315	100.00
Written Subtest C172	PASS - 251315	87.50
Written Subtest C173	PASS - 251315	100.00
Written Subtest C231	PASS - 251315	100.00
Written Subtest C31	PASS - 251315	87.50

SIAD TL-0111: CERTIFICATION

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Presents this CERTIFICATE to

Jade Sill

who is certified to perform the following tests:

Test Method	Expiration Date	IA Responsible	Associated Laboratory
CT 125 AGG	2027-03-13	Ashley Shaw	Lab 1
CT 125 GEN	2027-03-13	Ashley Shaw	Lab 1
CT 125 HMA	2027-03-13	Ashley Shaw	Lab 1
CT 231	2026-03-04	Ashley Shaw	Lab 1
CT 375	2027-03-13	Ashley Shaw	Lab 1

Lab 1: GMU Geotechnical, Incorporated, 30336 Esperanza, Rancho Santa Margarita

Ashley R Shaw

Certified Independent Assurance (IA)

Date issued: 03/17/2025

Technician ID: 01371

Note: This certificate is valid as long as the Technician complies with applicable requirements in Caltrans Independent Assurance Program Manual.

Verify

Verified Candidate

Search Again

Customer Name:	Account Number:
Jade Sill	8361503

Certifications:

Initial Certification	Current Expiration	Certificate Name
08/11/2017	09/01/2026	Reinforced Concrete Special Inspector

EXHIBIT "B"

Payment Schedule (Hourly Payment)

A. Hourly Rate

CONSULTANT'S fees for such services shall be based upon the following hourly rate and cost schedule:

SEE ATTACHED EXHIBIT B

B. Travel. Charges for time during travel are not reimbursable

C. Billing

1. All billing shall be done monthly in fifteen (15) minute increments and matched to an appropriate breakdown of the time that was taken to perform that work and who performed it.

2. Each month's bill should include a total to date. That total should provide, at a glance, the total fees and costs incurred to date for the project.

3. A copy of memoranda, letters, reports, calculations and other documentation prepared by CONSULTANT may be required to be submitted to CITY to demonstrate progress toward completion of tasks. In the event CITY rejects or has comments on any such product, CITY shall identify specific requirements for satisfactory completion.

4. CONSULTANT shall submit to CITY an invoice for each monthly payment due. Such invoice shall:

   A) Reference this Agreement;
   B) Describe the services performed;
   C) Show the total amount of the payment due;
   D) Include a certification by a principal member of CONSULTANT's firm that the work has been performed in accordance with the provisions of this Agreement; and
   E) For all payments include an estimate of the percentage of work completed.

   Upon submission of any such invoice, if CITY is satisfied that CONSULTANT is making satisfactory progress toward completion of tasks in accordance with this Agreement, CITY shall approve the invoice, in which event payment shall be made within thirty (30) days of receipt of the invoice by CITY. Such approval shall not be unreasonably withheld. If CITY does not approve an invoice, CITY shall notify CONSULTANT in writing of the reasons for non-approval and the schedule of performance set forth in **Exhibit "A"** may at the option of CITY be suspended until the parties agree that past performance by CONSULTANT is in, or has been brought into compliance, or until this Agreement has expired or is terminated as provided herein.

5. Any billings for extra work or additional services authorized in advance and in writing by CITY shall be invoiced separately to CITY. Such invoice shall contain all of the information required above, and in addition shall list the hours expended and hourly rate charged for such time. Such invoices shall be approved by CITY if the work performed is in accordance with the extra work or additional services requested, and if CITY is satisfied that the statement of hours worked and costs incurred is accurate. Such approval shall not be unreasonably withheld. Any dispute between the parties concerning payment of such an invoice shall be treated as separate and apart from the ongoing performance of the remainder of this Agreement.

EXHIBIT B

GMU
ENGINEERS & GEOLOGISTS

2025-2029 SCHEDULE OF CHARGES
CITY OF HUNTINGTON BEACH

PROFESSIONAL SERVICES

Document Preparation and Project Services	$ 110.00/hour
CAD/GIS Design Engineer	$ 132.00/hour
Staff Engineer or Geologist	$ 175.00/hour
Senior Staff Engineer or Geologist	$ 192.00/hour
Project Engineer or Geologist	$ 215.00/hour
Senior Engineer or Geologist	$ 255.00/hour
Associate Engineer or Geologist	$ 272.00/hour
Principal/Director	$ 295.00/hour

FIELD INSPECTION & TESTING SERVICES

Staff Engineering Technician — $ 110.00/hour*
- Services provided under direct supervision of a Senior Engineering Technician

Senior Engineering Technician — $ 130.00/hour*
- Inspections for soils/grading, asphalt, concrete, batch plants, piles/caissons, etc.
- Certifications by ACI, ICC, Caltrans, local jurisdictions, etc.

Registered Special Inspector (*No 4-hour minimum*) — $ 130.00/hour*
- Certifications by ACI, ICC, Caltrans, local jurisdictions, etc.
- Reinforced concrete, Post-Tension, Masonry, Welding, Bolting, Fireproofing

Instrumentation Engineer — $ 175.00/hour
- Slope inclinometer and Piezometer monitoring
- Manometer for floor-level surveys
- Stormwater turbidity & pH meter
- Groundwater monitoring - pressure transducer, datalogger, water chemistry meter, etc.
- Pipeline video camera for drains, wells, etc.

Engineering Seismological Technician (includes 3-channel seismograph) — $ 175.00/hour
- Blast vibration monitoring
- Construction vibration & noise monitoring (pile driving, drilling, demolition, etc.)

***Notes:**

(1) Rates include vehicle, nuclear density gauge, and equipment for testing, inspection, and sampling.
(2) No 4-hour minimum charges apply, except for night work.
(3) Overtime is charged at 1.5 times the base rate. Overtime is defined as time worked on the project in excess of 8 hours per day and all time on Saturdays, Sundays, and holidays.
(4) Prevailing Wage projects, additional hourly surcharge for Field Personnel per CA Labor Code §1720, et seq. — Add $ 39.00/hour

LABORATORY TESTING SERVICES

Laboratory Testing — $ 142.00/hour
(For special materials testing and laboratory costs on a per-test basis, see GMU's Laboratory Fee Schedule)

OTHER CHARGES

Outside Services	Cost + 15%
Reimbursables & Reprographics	Cost

GMUGEOT-01 MCCOWANA

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 11/3/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER License # 0E67768 IOA Insurance Services 3636 Nobel Drive Suite 410 San Diego, CA 92122	CONTACT NAME: Erica Wilson PHONE (A/C, No, Ext): (858) 754-0063 50233 FAX (A/C, No): (619) 574-6288 E-MAIL ADDRESS: Erica.Wilson@ioausa.com
INSURED GMU Geotechnical, Inc. 30336 Esperanza Rancho Santa Margarita, CA 92688	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : RLI Insurance Company — 13056 INSURER B : Fireman's Fund Indemnity Corporation — 11380 INSURER C : INSURER D : INSURER E : INSURER F :

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR X Cont Liab/Sevr Int GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:	X	X	PSB0005783	12/31/2024	12/31/2025	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG Ded	$ 1,000,000 $ 1,000,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $ 0
A	AUTOMOBILE LIABILITY X ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [ ] HIRED AUTOS ONLY [ ] NON-OWNED AUTOS ONLY X Comp. Ded.: $1,000 X Coll. Ded.: $1,000	X	X	PSA0002105	12/31/2024	12/31/2025	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) 	$ 1,000,000 $ $ $ $
A	[ ] UMBRELLA LIAB [X] OCCUR X EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [X] RETENTION $ 0	X	X	PSE0002541	12/31/2024	12/31/2025	EACH OCCURRENCE AGGREGATE 	$ 5,000,000 $ 5,000,000 $
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y / N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	X	PSW0003341	12/31/2024	12/31/2025	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
B	Professional Liab.			USF00625424	12/31/2024	12/31/2025	Per Claim	2,000,000
B	Ded.: $50K Per Claim			USF00625424	12/31/2024	12/31/2025	Aggregate	2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Re: City of Huntington Beach 2025 On Call Materials Testing

City of Huntington Beach is Additional Insured with respect to General and Auto Liability per the attached endorsements as required by written contract. Insurance is Primary and Non-Contributory. Waiver of Subrogation applies to General Liability, Auto Liability and Workers' Compensation. Excess Liability follows form.

30 Days Notice of Cancellation with 10 Days Notice for Non-Payment of Premium in accordance with the policy provisions.

CERTIFICATE HOLDER

City of Huntington Beach
2000 Main Street
Huntington Beach, CA 92648

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

T. Kelly Horrell

Policy Number: PSB0005783
Named Insured: GMU Geotechnical, Inc.

RLI Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

RLIPack® FOR PROFESSIONALS BLANKET ADDITIONAL INSURED ENDORSEMENT

This endorsement modifies insurance provided under the following:

BUSINESSOWNERS COVERAGE FORM - SECTION II – LIABILITY

1. **C. WHO IS AN INSURED** is amended to include as an additional insured any person or organization that you agree in a contract or agreement requiring insurance to include as an additional insured on this policy, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused in whole or in part by you or those acting on your behalf:
   - **a.** In the performance of your ongoing operations;
   - **b.** In connection with premises owned by or rented to you; or
   - **c.** In connection with “your work” and included within the “product-completed operations hazard”.
2. The insurance provided to the additional insured by this endorsement is limited as follows:
   - **a.** This insurance does not apply on any basis to any person or organization for which coverage as an additional insured specifically is added by another endorsement to this policy.
   - **b.** This insurance does not apply to the rendering of or failure to render any "professional services".
   - **c.** This endorsement does not increase any of the limits of insurance stated in **D. Liability And Medical Expenses Limits of Insurance**.
3. The following is added to **SECTION III H.2. Other Insurance – COMMON POLICY CONDITIONS (BUT APPLICABLE ONLY TO SECTION II – LIABILITY)**

   However, if you specifically agree in a contract or agreement that the insurance provided to an additional insured under this policy must apply on a primary basis, or a primary and non-contributory basis, this insurance is primary to other insurance that is available to such additional insured which covers such additional insured as a named insured, and we will not share with that other insurance, provided that:
   - **a.** The "bodily injury" or "property damage" for which coverage is sought occurs after you have entered into that contract or agreement; or
   - **b.** The "personal and advertising injury" for which coverage is sought arises out of an offense committed after you have entered into that contract or agreement.
4. The following is added to **SECTION III K. 2. Transfer of Rights of Recovery Against Others to Us – COMMON POLICY CONDITIONS (BUT APPLICABLE TO ONLY TO SECTION II – LIABILITY)**

   We waive any rights of recovery we may have against any person or organization because of payments we make for "bodily injury", "property damage" or "personal and advertising injury" arising out of "your work" performed by you, or on your behalf, under a contract or agreement with that person or organization. We waive these rights only where you have agreed to do so as part of a contract or agreement with such person or organization entered into by you before the "bodily injury" or "property damage" occurs, or the "personal and advertising injury" offense is committed.

ALL OTHER TERMS AND CONDITIONS OF THIS POLICY REMAIN UNCHANGED.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

RLIPack® BUSINESS AUTO ENHANCEMENT

SCHEDULE OF COVERAGES ADDRESSED BY THIS ENDORSEMENT

A. Broad Form Named Insured
B. Employees As Insureds
C. Blanket Additional Insured
D. Blanket Waiver Of Subrogation
E. Employee Hired Autos
F. Fellow Employee Coverage
G. Auto Loan Lease Gap Coverage
H. Glass Repair – Waiver Of Deductible
I. Personal Effects Coverage
J. Hired Auto Physical Damage Coverage
K. Hired Auto Physical Damage – Loss Of Use
L. Hired Car – Worldwide Coverage
M. Temporary Transportation Expenses
N. Amended Bodily Injury Definition – Mental Anguish
O. Airbag Coverage
P. Amended Insured Contract Definition – Railroad Easement
Q. Coverage Extensions – Audio, Visual And Data Electronic Equipment Not Designed Solely For The Production Of Sound
R. Notice Of And Knowledge Of Occurrence
S. Unintentional Errors Or Omissions
T. Towing Coverage

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

A. Broad Form Named Insured

The following is added to the **SECTION II – COVERED AUTOS LIABILITY COVERAGE,** Paragraph **A.1. Who Is An Insured** Provision:

Any business entity newly acquired or formed by you during the policy period, provided you own fifty percent (50%) or more of the business entity and the business entity is not separately insured for Bus-iness Auto Coverage. Coverage is extended up to a maximum of one hundred eighty (180) days following the acquisition or formation of the business entity.

This provision does not apply to any person or organization for which coverage is excluded by endorsement.

B. Employees As Insureds

The following is added to the **SECTION II – COVERED AUTOS LIABILITY COVERAGE,** Paragraph **A.1. Who Is An Insured** Provision:

Any "employee" of yours is an "insured" while using a covered "auto" you don't own, hire or borrow in your business or your personal affairs.

C. Blanket Additional Insured

The following is added to the **SECTION II – COVERED AUTOS LIABILITY COVERAGE,** Paragraph **A.1. Who Is An Insured** Provision:

Any person or organization that you are required to include as an additional insured on this coverage form in a contract or agreement that is executed by you before the "bodily injury" or "property damage" occurs is an "insured" for liability coverage, but only for damages to which this insurance applies and only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in **SECTION II – COVERED AUTOS LIABILITY COVERAGE**.

The insurance provided to the additional insured will be on a primary and non-contributory basis to the additional insured's own business auto coverage if you are required to do so in a contract or agreement that is executed by you before the "bodily injury" or "property damage" occurs.

D. Blanket Waiver Of Subrogation

The following is added to the **SECTION IV – BUSINESS AUTO CONDITIONS, A. Loss Conditions, 5. Transfer Of Rights Of Recovery Against Others To Us**:

We waive any right of recovery we may have against any person or organization to the extent required of you by a contract executed prior to any "accident" or "loss", provided that the "accident" or "loss" arises out of the operations contemplated by such contract. The waiver applies only to the person or organization designated in such contract.

E. Employee Hired Autos

1. The following is added to the **SECTION II – COVERED AUTOS LIABILITY COVERAGE,** Paragraph **A.1. Who Is An Insured** Provision:

An "employee" of yours is an "insured" while operating an "auto" hired or rented under a contract or agreement in that "employee's" name, with your permission, while performing duties related to the conduct of your business.

2. Changes In General Conditions:

Paragraph **5.b.** of the **Other Insurance** Condition in the **BUSINESS AUTO CONDITIONS** is deleted and replaced with the following:

b. For Hired Auto Physical Damage Coverage, the following are deemed to be covered "autos" you own:

(1) Any covered "auto" you lease, hire, rent or borrow; and

(2) Any covered "auto" hired or rented by your "employee" under a contract in that individual "employee's" name, with your permission, while performing duties related to the conduct of your business. However, any "auto" that is leased, hired, rented or borrowed with a driver is not a covered "auto".

F. Fellow Employee Coverage

SECTION II – COVERED AUTOS LIABILITY COVERAGE, Exclusion B.5. does not apply if you have workers compensation insurance in-force covering all of your employees.

G. Auto Loan Lease Gap Coverage

SECTION III – PHYSICAL DAMAGE COVERAGE, C. Limit Of Insurance, is amended by the addition of the following:

In the event of a total "loss" to a covered "auto" shown in the Schedule of Declarations, we will pay any unpaid amount due on the lease or loan for a covered "auto", less:

1. The amount paid under the **PHYSICAL DAMAGE COVERAGE** section of the policy; and

2. Any:

a. Overdue lease/loan payments at the time of the "loss";

b. Financial penalties imposed under a lease for excessive use, abnormal wear and tear or high mileage.

c. Security deposits not returned by the lessor;

d. Costs for extended warranties, Credit Life Insurance, Health, Accident or Disability Insurance purchased with the loan or lease; and

e. Carry-over balances from previous loans or leases.

H. Glass Repair – Waiver Of Deductible

SECTION III – PHYSICAL DAMAGE COVERAGE, **D. Deductible** is amended by adding the following:

No deductible for a covered "auto" will apply to glass damage if the glass is repaired rather than replaced.

I. Personal Effects Coverage

The following is added to **SECTION III – PHYSICAL DAMAGE COVERAGE**, **A. Coverage, 4. Coverage Extensions**:

c. Personal Effects Coverage

In the event of a total theft loss of your covered "auto" we will pay up to $400 for "loss" to wearing apparel and other personal effects which are:

(1) Owned by an "insured"; and

(2) In or on your covered "auto";

No deductible applies to Personal Effects Coverage.

J. Hired Auto Physical Damage Coverage

The following is added to **SECTION III – PHYSICAL DAMAGE COVERAGE, A. Coverage, 4. Coverage Extensions**:

d. Hired Auto Physical Damage Coverage

If hired "autos" are covered "autos" for Liability Coverage and this policy also provides Physical Damage Coverage for an owned "auto", then the Physical Damage Coverage is extended to "autos" that you hire, rent or borrow subject to the following:

(1) The most we will pay for "loss" in any one "accident" to a hired, rented or borrowed "auto" is the lesser of:

(a) $60,000

(b) The actual cash value of the damaged or stolen property as of the time of the "loss"; or

(c) The cost of repairing or replacing the damaged or stolen property with other property of like kind and quality.

(2) An adjustment for depreciation and physical condition will be made in the event of a total "loss".

(3) If a repair or replacement results in better than like kind or quality, we will not pay for the betterment.

(4) A deductible equal to the highest Physical Damage deductible applicable to any owned auto will apply.

(5) This Coverage Extension will not apply to:

(a) Any "auto" that is hired, rented or borrowed with a driver; or

(b) Any "auto" that is hired, rented or borrowed from your "employee".

K. Hired Auto Physical Damage – Loss Of Use

The following is added to **SECTION III – PHYSICAL DAMAGE COVERAGE, A. Coverage, 4. Coverage Extensions**:

e. We will pay sums which you legally must pay to the lessor of a covered "auto" which you have leased without a driver for thirty (30) days or less for the lessor's loss of use of the covered "auto", provided:

(1) This insurance provides comprehensive, specified causes of loss or collision covered on the covered "auto";

(2) The loss of use results from the covered "auto" being damaged in an "accident" while you are leasing it.

We will pay up to a maximum limit of $1,500 for this covered extension.

L. Hired Car – Worldwide Coverage

The following is added to **SECTION II – COVERED AUTOS LIABILITY COVERAGE, A.2. Coverage Extensions**:

f. Hired Car – Worldwide Coverage

(1) We will pay all sums an "insured" legally must pay as damages because of "bodily injury" or "property damage" to which this insurance applies, caused by an "accident" which occurs outside of the United States of America, the territories and possessions of the United States of America, Puerto Rico and Canada resulting from the maintenance, or use of any covered "auto" of the private passenger type you lease, hire, rent or borrow without a driver for thirty (30) days or less.

(2) With respect to any claim made or "suit" instituted outside the United States of America, the territories and possessions of the United States of America, Puerto Rico, and Canada:

(a) You shall undertake the investigation, settlement and defense of such claims and "suits" and keep us advised of all proceedings and actions.

(b) You will not make any settlement without our consent.

(c) We will reimburse you:

(i) For the amount of damages because of liability imposed upon you by law on account of "bodily injury" or "property damage" to which this insurance applies, and

(ii) For all reasonable expenses incurred with our consent in connection with the investigation, settlement or defense of such claims or "suits". Reimbursement for expenses will be part of the Limit of Insurance for liability coverage shown in the Business Auto Coverage Declarations, and not in addition to such limits.

(3) The limit of Insurance for Liability Coverage shown in the Business Auto Coverage Declarations is the most we will reimburse you for the sum of all damages imposed on you, as set forth in paragraph **2.c.** above, and all expenses incurred by you arising out of any single "accident" or "loss".

(4) You must maintain the greater of the following primary auto liability insurance limits:

(a) Compulsory admitted insurance with limits required to be in force to satisfy the legal requirements of the jurisdiction where the accident occurs; or

(b) Insurance limits required by law and issued by a government entity or by an insurer licensed or permitted by law to do business in the jurisdiction where the "accident" occurs; or

(c) Auto liability insurance limits of at least $300,000 combined single limit or $100,000 per person/$300,000 per accident Bodily Injury, $100,000 Property Damage.

If you fail to comply with the above, this insurance is not invalidated. However, in the event of a "loss", we will pay only to the extent that we would have been liable had you so complied.

(5) The insurance provided by this coverage extension is excess over any other collectible insurance available to you whether on a primary, excess contingent or any other basis.

M. Temporary Transportation Expenses

SECTION III – PHYSICAL DAMAGE COVERAGE, **A.4. Coverage Extensions**, subparagraph **a. Transportation Expenses** is deleted and replaced by the following:

a. Transportation Expenses

(1) We will pay up to a maximum of $1,500 for temporary transportation expense incurred by you because of Physical Damage to a covered "auto".

(2) We will pay only for those covered "autos" for which you carry Comprehensive, Colli-sion or Specified Case of Loss Coverage.

(3) We will pay only for those expenses incurred by you during the period of time that begins twenty-four (24) hours after the covered "loss" and ends at the time when the covered "auto" can be reasonable repaired or replaced.

(4) This coverage does not apply while there are spare or reserve "autos" available to you for your operations.

N. Amended Bodily Injury Definition – Mental Anguish

The following is added to **SECTION V – DEFINITIONS**, **Definition C**.:

"Bodily injury" also includes mental anguish, but only when the mental anguish arises from other bodily injury, sickness or disease.

O. Airbag Coverage

The following is added to **SECTION III – PHYSICAL DAMAGE COVERAGE B. Exclusions 3.a.**:

However, this exclusion will not apply to accidental discharge of an airbag due to mechanical or electrical breakdown.

P. Amended Insured Contract Definition – Railroad Easement

SECTION V – DEFINITIONS paragraph **H.** "Insured contact" is modified as follows:

1. Paragraph **H.3.** is replaced by the following:

3. Any easement or license agreement.

2. Paragraph **H.6.a.** is deleted.

Q. Coverage Extensions – Audio, Visual And Data Electronic Equipment Not Designed Solely For The Production Of Sound

SECTION III – PHYSICAL DAMAGE COVERAGE B. Exclusions, exception paragraph **a.** to exclusion **4.c.** and **4.d.** is deleted and replaced with the following:

a. Equipment and accessories used with such equipment, except for tapes, records, discs or other electronic media device, provided such equipment is permanently installed in the covered "auto" at the time of the "loss" or is removable from the housing unit which is permanently installed in the covered "auto" at the time of the "loss", and such equipment is designed to be solely operated by use of the power from the "autos" electrical system, in or upon the covered "autos"; or

R. Notice Of And Knowledge Of Occurrence

SECTION IV – BUSINESS AUTO CONDITIONS, A.2. Duties In The Event Of Accident, Claim Suit Or Loss, subparagraph **a.** is deleted and replaced with the following:

a. In the event of "accident", claim, "suit" or "loss", you must give us or our authorized representative prompt notice of the "accident" or "loss" including:

(1) How, when and where the "accident" or "loss" occurred;

(2) The "insured's" name and address; and

(3) To the extent possible, the names and addresses of any injured person and witnesses.

Your duty to give us or our authorized representative prompt notice of the "accident" or "loss" applies only when the "accident" or "loss" is known to:

(1) You, if you are an individual;

(2) A partner if you are a partnership; or

(3) An executive officer or insurance manager, if you are a corporation.

S. Unintentional Errors Or Omissions

SECTION IV – BUSINESS AUTO CONDITIONS, **B. General Conditions; 2. Concealment Misrepresentation Or Fraud** is amended by adding the following:

The unintentional omission of, or unintentional error in, any information given by you shall not prejudice your rights under this insurance. However this provision does not affect our right to collect additional premium or exercise our right of cancellation or nonrenewal.

T. Towing Coverage

SECTION III – PHYSICAL DAMAGE COVERAGE, **A.2. Towing**, is deleted and replaced by the following:

2. We will pay up to $750 for towing and labor costs incurred each time a covered "auto" is disabled due to a covered cause of loss. However:

a. All labor must be performed at the place of disablement; and

b. If the covered auto is a private passenger type no deductible applies; and

c. If the covered auto is not of the private passenger type our obligation to pay will be reduced by a $250 deductible per disablement.

ALL OTHER TERMS AND CONDITIONS OF THIS POLICY REMAIN UNCHANGED.

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT–CALIFORNIA

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be 2 % of the California workers' compensation premium otherwise due on such remuneration.

Schedule

Person or Organization	Job Description
All persons or organizations that are party to a contract that requires you to obtain this agreement, provided you executed the contract before the loss.	Jobs performed for any person or organization that you have agreed with in a written contract to provide this agreement.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.
(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective 12/31/2024
Insured
GMU Geotechnical, Inc.

Policy No. PSW0003341
Insurance Company
RLI Insurance Company

Endorsement No.

Countersigned By _____

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

RLIPack® SCHEDULE OF UNDERLYING INSURANCE

This endorsement modifies insurance provided under the following:

COMMERCIAL EXCESS LIABILITY COVERAGE FORM

Item 4. of the declarations is amended to include:

Type of Coverage	Carrier	Eff. Date	Exp. Date	Limits
General Liability Only the Type of Coverage identified in this Schedule of Underlying Insurance by Carrier, policy number and applicable Limits are to be included.	RLI Insurance Company	12/31/2024	12/31/2025	Occurrence $ 1,000,000 Aggregate $ 2,000,000
Employee Benefits Liability Only the Type of Coverage identified in this Schedule of Underlying Insurance by Carrier, policy number and applicable Limits are to be included.	RLI Insurance Company	12/31/2024	12/31/2025	Each Employee $1,000,000 Aggregate $1,000,000
Employers' Liability Only the Type of Coverage identified in this Schedule of Underlying Insurance by Carrier, policy number and applicable Limits are to be included.	RLI Insurance Company	12/31/2024	12/31/2025	Each Accident: Statutory Limits or $1,000,000 ,whichever is greater Disease Each Employee: Statutory Limits or $1,000,000 ,whichever is greater Disease Policy Limit: Statutory Limits or $1,000,000 ,whichever is greater
Business Auto Liability Only the Type of Coverage identified in this Schedule of Underlying Insurance by Carrier, policy	RLI Insurance Company	12/31/2024	12/31/2025	Each Accident $1,000,000

ALL OTHER TERMS AND CONDITIONS OF THIS POLICY REMAIN UNCHANGED.